



May 2005

Forms for DVD Format Verification of DVD-R Video Format Recorder

Form 1U to 38U Version 1.3

Notice:

- *These Forms will be revised on occasion for improvement or Version-up of the related Test Specification.*
- *The latest Forms shall be used to fill up the necessary information for application to Verification Lab, according to the related Test Specification.*
- *You can fill up the shaded space in every Form.*
- *"Adobe® Acrobat®" will be necessary for making your own files.*

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Exemption: None will be liable for any damages from use of this document.

Preliminary Information for DVD Format Verification

Application No. (Lab use)	:	
Application date (mm. dd, yyyy)	:	
Lab receipt date (mm. dd, yyyy)	:	
Lab name	:	

DVD-R Video Format Recorder described below is for DVD Format Verification of the First Production Model.

Product type:	TV System	Class	Adaptable recording speed		
			SL disc		DL disc
	<input type="checkbox"/> 525/60 <input type="checkbox"/> 625/50	<input type="checkbox"/> Class 0	<input type="checkbox"/> 1x only <input type="checkbox"/> 4x max. <input type="checkbox"/> 6x max.	<input type="checkbox"/> 8x max. <input type="checkbox"/> 12x max. <input type="checkbox"/> 16x max.	<input type="checkbox"/> 2x only <input type="checkbox"/> 4x max.

Product name	Model number	Note (Power supply etc.)
Remarks:		

DVD-R Video Format Recorder described above will be applied for DVD Format Verification by the following applicant.

Name of applicant	
Title of applicant	
Company & Factory name	
Factory address	
Phone number	
Fax number	
E-mail	

Applicant's Signature:

Test Information of DVD Format Verification

DVD Format Verification Lab record (Verification Lab use only)

- Name of Verification Lab : _____
- Name of inspector : _____
- Application date : _____
- Date of test completed : _____
- Verification number : _____

Information of applicant

- Applicant's name : _____
- Company name : _____
- Company address : _____
- Phone number : _____
- Fax number : _____

DVD-R Video Format Recorder details

- Brand/Trade name : _____
- Model number : _____
- Class : ☐ Class 0
- Supporting Disc(Read/Write) : ☐ DVD-RAM ☐ DVD-R for General ☐ DVD-R for DL ☐ DVD-RW
- Supporting Disc (Read) : ☐ DVD-RAM ☐ DVD-R for General ☐ DVD-R for DL ☐ DVD-RW
☐ DVD-ROM
- Supporting TV system : ☐ 525/60 TV ☐ 625/50 TV
- Recordable speed (SL disc*) : ☐ 1x ☐ 2x ☐ 4x ☐ 6x ☐ 8x ☐ 12x ☐ 16x
- Recordable speed (DL disc*) : ☐ 2x ☐ 4x

* Note: SL disc means DVD-R disc for General, and DL disc means DVD-R Disc for Dual Layer.

Test results of 1x-speed Recording characteristics for SL disc

(Test Tools: GRBTD-001 and DVD-R measuring system (Playback))

Class-B Lab.*1	Items*2		Specification	Measurement		Judgment (Lab use)
				Applicant	Lab	
2.1.7 Operational signals						
	2.1.7.1 High Frequency (HF) signal					
O	Jitter	R = 25 mm	< 8.0 %			
		R = 40 mm				
		R = 55 mm				
	Modulation amplitude					
O	I ₁₄ /I _{14H}	R = 25 mm	0.60 min.			
		R = 40 mm				
		R = 55 mm				
O	I ₃ /I ₁₄	R = 25 mm	0.15 min.			
		R = 40 mm				
		R = 55 mm				
	(I _{14Hmax.} - I _{14Hmin.})/I _{14Hmax.}					
O	Within one revolution (PUH with PBS)	R = 25 mm	0.15 max.			
		R = 40 mm				
		R = 55 mm				
O	Within one disc (PUH with PBS)		0.33 max.			
	Within one revolution (PUH without PBS)*3	R = 25 mm	0.10 max.			
		R = 40 mm				
		R = 55 mm				
	Within one disc (PUH without PBS)*3		0.20 max.			
O	Signal asymmetry	R = 25 mm	-0.05 to 0.15			
		R = 40 mm				
		R = 55 mm				
O	Track crossing signal	R = 25 mm	0.10 min.			
		R = 40 mm				
		R = 55 mm				

*1: The measurement items at Class-B Lab are marked with O.

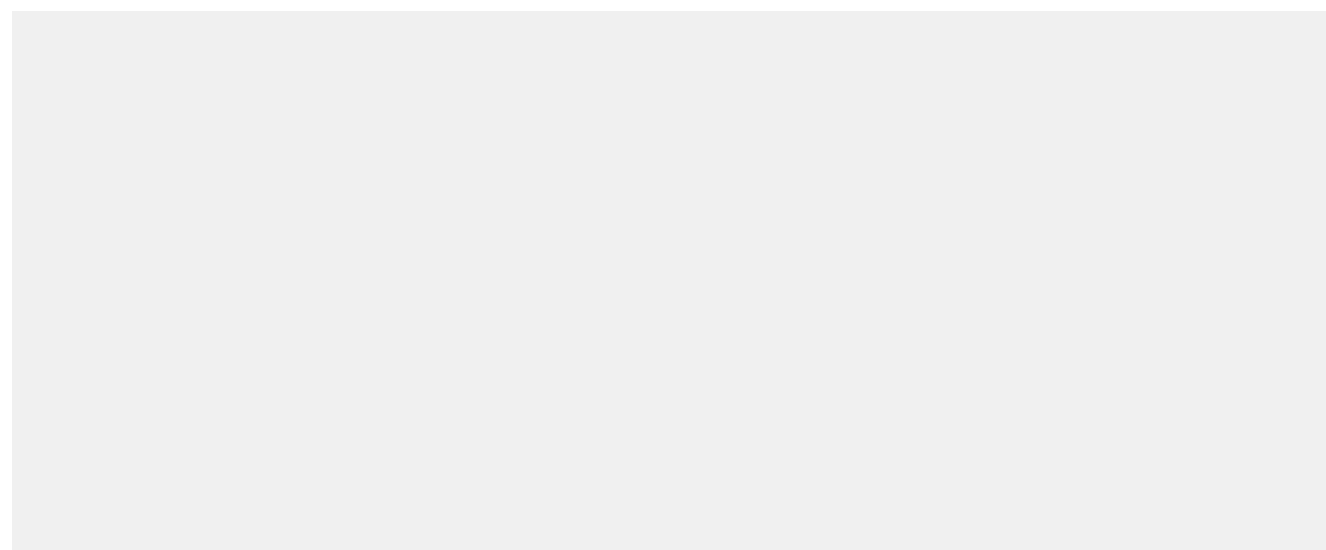
*2: Refer to DVD Specifications for Recordable Disc for General Part 1: Ver. 2.0

*3: Class-A Lab will check these values when required.

Class-B Lab.*1	Items*2		Specification	Measurement		Judgment (Lab use)
				Applicant	Lab	
	2.1.7.2 Servo signal					
	Differential phase tracking error signal					
O	Amplitude ($\overline{\Delta t}/T$ at 0.1 μm radial offset)	R = 25 mm	0.5 to 1.1			
		R = 40 mm				
		R = 55 mm				
O	Asymmetry	R = 25 mm	0.2 max.			
		R = 40 mm				
		R = 55 mm				
O	Tangential push-pull signal	R = 25 mm	0.9 max.			
		R = 40 mm				
		R = 55 mm				
	2.1.7.3 Wobble Signal					
O	Wobble Signal (RBW = 1 kHz)	R = 25 mm	> 31 dB			
		R = 40 mm				
		R = 55 mm				
	2.1.7.4 Defects					
O	PI errors in any consecutive 8 ECC blocks	R = 25 mm	≤ 280			
		R = 40 mm				
		R = 55 mm				

*1: The measurement items at Class-B Lab are marked with O.

*2: Refer to DVD Specifications for Recordable Disc for General Part 1: Ver. 2.0.



Test result of 1x-speed Linking characteristics for SL disc

(Test Tools: GRBTD-001 and DVD-R measuring system (Playback))

Items	OK	NG	Comment
Test result of Applicant	<input type="checkbox"/>	<input type="checkbox"/>	
Test result of Verification Lab	<input type="checkbox"/>	<input type="checkbox"/>	

Note: This test is only for the Recorder for SL (1x only). Other Recorder for SL ($\geq 4x$ max) need not execute this test.

Test results of 1x-speed Information data in Lead-in and RMA for SL disc

(Test Tools: GRBTD-001 and DVD-R measuring system (Playback) or Information Area Verifier)

3.4.1.2 R-Physical format information zone *1

Item	Applicant	Lab		Judgment
Physical format information (BP 0-3) (Hex)		<input type="checkbox"/> OK	<input type="checkbox"/> NG	

4.3.2.1 Table 4.3.2.1-1 Unique ID Field *1

Item		Applicant	Lab		Judgment
Drive manufacturer ID *2 (Hex or ASCII)	BP 0-15		<input type="checkbox"/> OK	<input type="checkbox"/> NG	
	BP 16-31				
Serial Number *2 (ASCII)	BP 40-55		<input type="checkbox"/> OK	<input type="checkbox"/> NG	
Model Number *2 (ASCII)	BP 64-79		<input type="checkbox"/> OK	<input type="checkbox"/> NG	
Unique Disc ID *3 (Refer to Table 4.3.2.1-2)	BP 88-91 (Hex)		<input type="checkbox"/> OK	<input type="checkbox"/> NG	
	BP 92-105 (ASCII)				

4.3.2.2.1 RMD Field0 *1

Item		Applicant	Lab		Judgment
RMD format (Hex)	BP 0-1		<input type="checkbox"/> OK	<input type="checkbox"/> NG	
Disc status (Hex)	BP 2		<input type="checkbox"/> OK	<input type="checkbox"/> NG	
Copy of Pre-pit Information (Hex)	BP 22-32		<input type="checkbox"/> OK	<input type="checkbox"/> NG	
	BP 33-36				
	BP 55-60				

*1: Refer to DVD Specifications for Recordable Disc for General Part 1: Ver. 2.1.

*2: The test of these items can be substituted by checking the same items in RMD Field1.

*3: The test of this item can be substituted by checking the same item in RMD Field0.

4.3.2.2.2 RMD Field1 (check only #1 area) *1

Item	Applicant	Lab		Judgment
1 st field of Write Strategy code (Hex)		<input type="checkbox"/> OK	<input type="checkbox"/> NG	
Recording Power (Hex)		<input type="checkbox"/> OK	<input type="checkbox"/> NG	
Time Stamp (Hex)		<input type="checkbox"/> OK	<input type="checkbox"/> NG	
Power calibration address (Hex)		<input type="checkbox"/> OK	<input type="checkbox"/> NG	
Running OPC information (Hex)		<input type="checkbox"/> OK	<input type="checkbox"/> NG	
2 nd field of Write Strategy code (Hex)		<input type="checkbox"/> OK	<input type="checkbox"/> NG	
DSV (Hex)		<input type="checkbox"/> OK	<input type="checkbox"/> NG	

*1: Refer to DVD Specifications for Recordable Disc for General Part 1: Ver. 2.1.

Test result of Reading characteristics for SL disc

(Test Tool: GRSTD-101 and/or GRSTD-101P)

Items	OK	NG	Comment
Test result of Applicant	<input type="checkbox"/>	<input type="checkbox"/>	
Test result of Verification Lab	<input type="checkbox"/>	<input type="checkbox"/>	

Test results of 4x-speed Recording characteristics for SL disc

(Test Tools: GRBTD-021 and DVD-R measuring system (Playback))

Class-B Lab. *1	Items *2		Specification	Measurement		Judgment (Lab use)
				Applicant	Lab	
2.1.7 Operational signals						
	2.1.7.1 High Frequency (HF) signal					
O	Jitter	R = 25 mm	< 8.0 %			
		R = 40 mm				
		R = 55 mm				
	Modulated amplitude					
O	I ₁₄ /I _{14H}	R = 25 mm	0.60 min.			
		R = 40 mm				
		R = 55 mm				
O	I ₃ /I ₁₄	R = 25 mm	0.15 min.			
		R = 40 mm				
		R = 55 mm				
	(I _{14Hmax.} – I _{14Hmin.})/I _{14Hmax.}					
O	Within one revolution (PUH with PBS)	R = 25 mm	0.15 max.			
		R = 40 mm				
		R = 55 mm				
O	Within one disc (PUH with PBS)		0.33 max.			
	Within one revolution (PUH without PBS)*3	R = 25 mm	0.10 max.			
		R = 40 mm				
		R = 55 mm				
	Within one disc (PUH without PBS) *3		0.20 max.			
O	Signal asymmetry	R = 25 mm	–0.05 to 0.15			
		R = 40 mm				
		R = 55 mm				
O	Track crossing signal	R = 25 mm	0.10 min.			
		R = 40 mm				
		R = 55 mm				

*1: The measurement items at Class-B Lab are marked with O.

*2: Refer to DVD Specifications for Recordable Disc for General Part 1: Ver. 2.1.

*3: Class-A Lab will check these values when required.

Class-B Lab. *1	Items *2		Specification	Measurement		Judgment (Lab use)
				Applicant	Lab	
	2.1.7.2 Servo signal					
	Differential phase tracking error signal					
O	Amplitude ($\overline{\Delta t}/T$ at 0.1μm radial offset)	R = 25 mm	0.5 to 1.1			
		R = 40 mm				
		R = 55 mm				
O	Asymmetry	R = 25 mm	0.2 max.			
		R = 40 mm				
		R = 55 mm				
O	Tangential push-pull signal	R = 25 mm	0.9 max.			
		R = 40 mm				
		R = 55 mm				
	2.1.7.3 Wobble signal					
O	CNR of the Wobble signal (RBW=1kHz)	R = 25 mm	> 31dB			
		R = 40 mm				
		R = 55 mm				
	2.1.7.4 Defects					
O	PI errors in any consecutive 8 ECC blocks	R = 25 mm	≤ 280			
		R = 40 mm				
		R = 55 mm				

*1: The measurement items at Class-B Lab are marked with O.

*2: Refer to DVD Specifications for Recordable Disc for General Part 1: Ver. 2.1.

The condition that the Recorder uses “4x-speed”;

Test result of 4x-speed Linking characteristic for SL disc

(Test Tools: GRBTD-021 and DVD-R measuring system (Playback))

Items	OK	NG	Comment
Test result of Applicant	<input type="checkbox"/>	<input type="checkbox"/>	
Test result of Verification Lab	<input type="checkbox"/>	<input type="checkbox"/>	

Note: This test shall be performed under the condition that the Recorder uses 4x-speed, described in **Form 7U**.

Test results of 4x-speed Information data in Lead-in and RMA for SL disc

(Test Tools: GRBTD-021 and DVD-R measuring system (Playback) or Information Area Verifier)

3.4.1.2 R-Physical format information zone *1

Item	Applicant	Lab		Judgment
Physical format information (BP 0-3) (Hex)		<input type="checkbox"/> OK	<input type="checkbox"/> NG	

4.3.2.1 Table 4.3.2.1-1 Unique ID Field *1

Item		Applicant	Lab		Judgment
Drive manufacturer ID (Hex or ASCII) *2	BP 0-15		<input type="checkbox"/> OK	<input type="checkbox"/> NG	
	BP 16-31				
Serial Number (ASCII) *2	BP 40-55		<input type="checkbox"/> OK	<input type="checkbox"/> NG	
Model Number (ASCII) *2	BP 64-79		<input type="checkbox"/> OK	<input type="checkbox"/> NG	
Unique Disc ID *3 (Refer to Table 4.3.2.1-2)	BP 88-91 (Hex)		<input type="checkbox"/> OK	<input type="checkbox"/> NG	
	BP 92-105 (ASCII)				

3.2.1 RMD Field0 (refer to Optional Specifications) *4

Item		Applicant	Lab		Judgment
RMD Format (Hex)	BP 0-1		<input type="checkbox"/> OK	<input type="checkbox"/> NG	
Disc status (Hex)	BP 2		<input type="checkbox"/> OK	<input type="checkbox"/> NG	
Copy of Pre-pit Information (Hex)	BP 79-80		<input type="checkbox"/> OK	<input type="checkbox"/> NG	
	BP 81-84		<input type="checkbox"/> OK	<input type="checkbox"/> NG	
	BP 87-92		<input type="checkbox"/> OK	<input type="checkbox"/> NG	
	BP 95-100		<input type="checkbox"/> OK	<input type="checkbox"/> NG	

*1: Refer to DVD Specifications for Recordable Disc for General Part 1: Ver. 2.1.

*2: The test of these items can be substituted by checking the same items in RMD Field1.

*3: The test of this item can be substituted by checking the same item in RMD Field0.

*4: Refer to Optional Specifications 4x-speed DVD-R Rev. 1.0.

3.2.2 RMD Field1 (check only #1 area) (refer to Optional Specifications)

Item*1		Applicant	Lab		Judgment
Time stamp for 4x-speed recording (Hex)	BP 576-583		<input type="checkbox"/> OK	<input type="checkbox"/> NG	
1 st field of 4x-speed Write Strategy code (Hex)	BP 584-587		<input type="checkbox"/> OK	<input type="checkbox"/> NG	
2 nd field of 4x-speed Write Strategy code (Hex)	BP 588-593		<input type="checkbox"/> OK	<input type="checkbox"/> NG	
3 rd field of 4x-speed Write Strategy code (Hex)	BP 594-599		<input type="checkbox"/> OK	<input type="checkbox"/> NG	
Recording power for 4x-speed recording (Hex)	BP 600-603		<input type="checkbox"/> OK	<input type="checkbox"/> NG	
Power calibration address for 4x-speed recording (Hex)	BP 604-607		<input type="checkbox"/> OK	<input type="checkbox"/> NG	
Running OPC information for 4x-speed recording (Hex)	BP 608-631		<input type="checkbox"/> OK	<input type="checkbox"/> NG	
Strategy Type for 4x-speed recording (Hex)	BP 632		<input type="checkbox"/> OK	<input type="checkbox"/> NG	

*1: Refer to Optional Specifications 4x-speed DVD-R Rev. 1.0.

Test results of 6x-speed Recording characteristics for SL disc

(Test Tools: GRBTD-031 and DVD-R measuring system (Playback))

Class-B Lab. *1	Items *2		Specification	Measurement		Judgment (Lab use)
				Applicant	Lab	
2.1.7 Operational signals						
	2.1.7.1 High Frequency (HF) signal					
O	Jitter	R = 25 mm	< 8.0 %			
		R = 40 mm				
		R = 55 mm				
	Modulated amplitude					
O	I ₁₄ /I _{14H}	R = 25 mm	0.60 min.			
		R = 40 mm				
		R = 55 mm				
O	I ₃ /I ₁₄	R = 25 mm	0.15 min.			
		R = 40 mm				
		R = 55 mm				
	(I _{14Hmax.} – I _{14Hmin.})/I _{14Hmax.}					
O	Within one revolution (PUH with PBS)	R = 25 mm	0.15 max.			
		R = 40 mm				
		R = 55 mm				
O	Within one disc (PUH with PBS)		0.33 max.			
	Within one revolution (PUH without PBS)*3	R = 25 mm	0.10 max.			
		R = 40 mm				
		R = 55 mm				
	Within one disc (PUH without PBS) *3		0.20 max.			
O	Signal asymmetry	R = 25 mm	– 0.05 to 0.15			
		R = 40 mm				
		R = 55 mm				
O	Track crossing signal	R = 25 mm	0.10 min.			
		R = 40 mm				
		R = 55 mm				

*1: The measurement items at Class-B Lab are marked with O.

*2: Refer to DVD Specifications for Recordable Disc for General Part 1: Ver. 2.1.

*3: Class-A Lab will check these values when required.

Class-B Lab. *1	Items *2		Specification	Measurement		Judgment (Lab use)
				Applicant	Lab	
	2.1.7.2 Servo signal					
	Differential phase tracking error signal					
O	Amplitude ($\overline{\Delta t}/T$ at 0.1μm radial offset)	R = 25 mm	0.5 to 1.1			
		R = 40 mm				
		R = 55 mm				
O	Asymmetry	R = 25 mm	0.2 max.			
		R = 40 mm				
		R = 55 mm				
O	Tangential push-pull signal	R = 25 mm	0.9 max.			
		R = 40 mm				
		R = 55 mm				
	2.1.7.3 Wobble signal					
O	CNR of the Wobble signal (RBW=1kHz)	R = 25 mm	> 31dB			
		R = 40 mm				
		R = 55 mm				
	2.1.7.4 Defects					
O	PI errors in any consecutive 8 ECC blocks	R = 25 mm	≤ 280			
		R = 40 mm				
		R = 55 mm				

*1: The measurement items at Class-B Lab are marked with O.

*2: Refer to DVD Specifications for Recordable Disc for General Part 1: Ver. 2.1.

The condition that the Recorder uses “6x-speed”;

Test result of 6x-speed Linking characteristic for SL disc

(Test Tools: GRBTD-031 and DVD-R measuring system (Playback))

Items	OK	NG	Comment
Test result of Applicant	<input type="checkbox"/>	<input type="checkbox"/>	
Test result of Verification Lab	<input type="checkbox"/>	<input type="checkbox"/>	

Note: This test shall be performed under the condition that the Recorder uses 6x-speed, described in **Form 10U**.

Test results of 6x-speed Information data in Lead-in and RMA for SL disc

(Test Tools: GRBTD-031 and DVD-R measuring system (Playback) or Information Area Verifier)

3.4.1.2 R-Physical format information zone *1

Item	Applicant	Lab		Judgment
Physical format information (BP 0-3) (Hex)		<input type="checkbox"/> OK	<input type="checkbox"/> NG	

4.3.2.1 Table 4.3.2.1-1 Unique ID Field *1

Item		Applicant	Lab		Judgment
Drive manufacturer ID (Hex or ASCII) *2	BP 0-15		<input type="checkbox"/> OK	<input type="checkbox"/> NG	
	BP 16-31				
Serial Number (ASCII) *2	BP 40-55		<input type="checkbox"/> OK	<input type="checkbox"/> NG	
Model Number (ASCII) *2	BP 64-79		<input type="checkbox"/> OK	<input type="checkbox"/> NG	
Unique Disc ID *3 (Refer to Table 4.3.2.1-2)	BP 88-91 (Hex)		<input type="checkbox"/> OK	<input type="checkbox"/> NG	
	BP 92-105 (ASCII)				

*1: Refer to DVD Specifications for Recordable Disc for General Part 1: Ver. 2.1.

*2: The test of these items can be substituted by checking the same items in RMD Field1.

*3: The test of this item can be substituted by checking the same item in RMD Field0.

4.2.1 RMD Field1 (check only #1 area) (refer to Optional Specifications) *1

Item		Applicant	Lab		Judgment
Time stamp for 6x-speed recording (Hex)	BP 1024-1031		<input type="checkbox"/> OK	<input type="checkbox"/> NG	
1 st field of 6x-speed Write Strategy code (Hex)	BP 1032-1035		<input type="checkbox"/> OK	<input type="checkbox"/> NG	
2 nd field of 6x-speed Write Strategy code (Hex)	BP 1036-1041		<input type="checkbox"/> OK	<input type="checkbox"/> NG	
3 rd field of 6x-speed Write Strategy code (Hex)	BP 1042-1047		<input type="checkbox"/> OK	<input type="checkbox"/> NG	
Recording power for 6x-speed recording (Hex)	BP 1048-1051		<input type="checkbox"/> OK	<input type="checkbox"/> NG	
Power calibration address for 6x-speed recording (Hex)	BP 1052-1055		<input type="checkbox"/> OK	<input type="checkbox"/> NG	
Running OPC information for 6x-speed recording (Hex)	BP 1056-1079		<input type="checkbox"/> OK	<input type="checkbox"/> NG	

*1: Refer to Optional Specifications 6x-speed DVD-R Rev. 2.0.

Test results of 8x-speed Recording characteristics for SL disc

(Test Tools: GRBTD-031 and DVD-R measuring system (Playback))

Class-B Lab. *1	Items *2		Specification	Measurement		Judgment (Lab use)
				Applicant	Lab	
2.1.7 Operational signals						
	2.1.7.1 High Frequency (HF) signal					
○	Jitter	R = 40 mm	< 8.0 %			
		R = 55 mm				
	Modulated amplitude					
○	I ₁₄ /I _{14H}	R = 40 mm	0.60 min.			
		R = 55 mm				
○	I ₃ /I ₁₄	R = 40 mm	0.15 min.			
		R = 55 mm				
	(I _{14Hmax.} - I _{14Hmin.})/I _{14Hmax.}					
○	Within one revolution (PUH with PBS)	R = 40 mm	0.15 max.			
		R = 55 mm				
○	Within one disc (PUH with PBS)		0.33 max.			
	Within one revolution (PUH without PBS)*3	R = 40 mm	0.10 max.			
		R = 55 mm				
	Within one disc (PUH without PBS) *3		0.20 max.			
○	Signal asymmetry	R = 40 mm	- 0.05 to 0.15			
		R = 55 mm				
○	Track crossing signal	R = 40 mm	0.10 min.			
		R = 55 mm				

*1: The measurement items at Class-B Lab are marked with O.

*2: Refer to DVD Specifications for Recordable Disc for General Part 1: Ver. 2.1.

*3: Class-A Lab will check these values when required.

Class-B Lab. *1	Items *2	Specification	Measurement		Judgment (Lab use)	
			Applicant	Lab		
	2.1.7.2 Servo signal					
	Differential phase tracking error signal					
○	Amplitude ($\overline{\Delta t}/T$ at 0.1μm radial offset)	R = 40 mm	0.5 to 1.1			
		R = 55 mm				
○	Asymmetry	R = 40 mm	0.2 max.			
		R = 55 mm				
○	Tangential push-pull signal	R = 40 mm	0.9 max.			
		R = 55 mm				
	2.1.7.3 Wobble signal					
○	CNR of the Wobble signal (RBW=1kHz)	R = 40 mm	> 31 dB			
		R = 55 mm				
	2.1.7.4 Defects					
○	PI errors in any consecutive 8 ECC blocks	R = 40 mm	≤ 280			
		R = 55 mm				

*1: The measurement items at Class-B Lab are marked with O.

*2: Refer to DVD Specifications for Recordable Disc for General Part 1: Ver. 2.1.

The condition that the Recorder uses “8x-speed”;

Test result of 8x-speed Linking characteristic for SL disc

(Test Tools: GRBTD-031 and DVD-R measuring system (Playback))

Items	OK	NG	Comment
Test result of Applicant	<input type="checkbox"/>	<input type="checkbox"/>	
Test result of Verification Lab	<input type="checkbox"/>	<input type="checkbox"/>	

Note: This test shall be performed under the condition that the Recorder uses 8x-speed, described in **Form 13U**.

Test results of 8x-speed Information data in Lead-in and RMA for SL disc

(Test Tools: GRBTD-031 and DVD-R measuring system (Playback) or Information Area Verifier)

3.4.1.2 R-Physical format information zone *1

Item	Applicant	Lab		Judgment
Physical format information (BP 0-3) (Hex)		<input type="checkbox"/> OK	<input type="checkbox"/> NG	

4.3.2.1 Table 4.3.2.1-1 Unique ID Field *1

Item		Applicant	Lab		Judgment
Drive manufacturer ID (Hex or ASCII) *2	BP 0-15		<input type="checkbox"/> OK	<input type="checkbox"/> NG	
	BP 16-31				
Serial Number (ASCII) *2	BP 40-55		<input type="checkbox"/> OK	<input type="checkbox"/> NG	
Model Number (ASCII) *2	BP 64-79		<input type="checkbox"/> OK	<input type="checkbox"/> NG	
Unique Disc ID *3 (Refer to Table 4.3.2.1-2)	BP 88-91 (Hex)		<input type="checkbox"/> OK	<input type="checkbox"/> NG	
	BP 92-105 (ASCII)				

*1: Refer to DVD Specifications for Recordable Disc for General Part 1: Ver. 2.1.

*2: The test of these items can be substituted by checking the same items in RMD Field1.

*3: The test of this item can be substituted by checking the same item in RMD Field0.

4.2.1 RMD Field1 (check only #1 area) (refer to Optional Specifications) *1

Item		Applicant	Lab		Judgment
Time stamp for 8x-speed recording (Hex)	BP 1088-1095		<input type="checkbox"/> OK	<input type="checkbox"/> NG	
1 st field of 8x-speed Write Strategy code (Hex)	BP 1096-1099		<input type="checkbox"/> OK	<input type="checkbox"/> NG	
2 nd field of 8x-speed Write Strategy code (Hex)	BP 1100-1105		<input type="checkbox"/> OK	<input type="checkbox"/> NG	
3 rd field of 8x-speed Write Strategy code (Hex)	BP 1106-1111		<input type="checkbox"/> OK	<input type="checkbox"/> NG	
Recording power for 8x-speed recording (Hex)	BP 1112-1115		<input type="checkbox"/> OK	<input type="checkbox"/> NG	
Power calibration address for 8x-speed recording (Hex)	BP 1116-1119		<input type="checkbox"/> OK	<input type="checkbox"/> NG	
Running OPC information for 8x-speed recording (Hex)	BP 1120-1143		<input type="checkbox"/> OK	<input type="checkbox"/> NG	

*1: Refer to Optional Specifications 8x-speed DVD-R Rev. 3.0.

Test results of 12x-speed Recording characteristics for SL disc

(Test Tools: GRBTD-041 and DVD-R measuring system (Playback))

Class-B Lab. *1	Items *2		Specification	Measurement		Judgment (Lab use)
				Applicant	Lab	
2.1.7 Operational signals						
	2.1.7.1 High Frequency (HF) signal					
O	Jitter	R = 40 mm	< 8.0 %			
		R = 55 mm				
	Modulated amplitude					
O	I ₁₄ /I _{14H}	R = 40 mm	0.60 min.			
		R = 55 mm				
O	I ₃ /I ₁₄	R = 40 mm	0.15 min.			
		R = 55 mm				
	(I _{14H} max. – I _{14H} min.)/I _{14H} max.					
O	Within one revolution (PUH with PBS)	R = 40 mm	0.15 max.			
		R = 55 mm				
O	Within one disc (PUH with PBS)		0.33 max.			
	Within one revolution (PUH without PBS)*3	R = 40 mm	0.10 max.			
		R = 55 mm				
	Within one disc (PUH without PBS) *3		0.20 max.			
O	Signal asymmetry	R = 40 mm	– 0.05 to 0.15			
		R = 55 mm				
O	Track crossing signal	R = 40 mm	0.10 min.			
		R = 55 mm				

*1: The measurement items at Class-B Lab are marked with O.

*2: Refer to DVD Specifications for Recordable Disc for General Part 1: Ver. 2.1.

*3: Class-A Lab will check these values when required.

Class-B Lab. *1	Items *2	Specification	Measurement		Judgment (Lab use)	
			Applicant	Lab		
	2.1.7.2 Servo signal					
	Differential phase tracking error signal					
○	Amplitude ($\overline{\Delta t}/T$ at 0.1μm radial offset)	R = 40 mm	0.5 to 1.1			
		R = 55 mm				
○	Asymmetry	R = 40 mm	0.2 max.			
		R = 55 mm				
○	Tangential push-pull signal	R = 40 mm	0.9 max.			
		R = 55 mm				
	2.1.7.3 Wobble signal					
○	CNR of the Wobble signal (RBW=1kHz)	R = 40 mm	> 31 dB			
		R = 55 mm				
	2.1.7.4 Defects					
○	PI errors in any consecutive 8 ECC blocks	R = 40 mm	≤ 280			
		R = 55 mm				

*1: The measurement items at Class-B Lab are marked with O.

*2: Refer to DVD Specifications for Recordable Disc for General Part 1: Ver. 2.1.

The condition that the Recorder uses “12x-speed”;

Test result of 12x-speed Linking characteristic for SL disc

(Test Tools: GRBTD-041 and DVD-R measuring system (Playback))

Items	OK	NG	Comment
Test result of Applicant	<input type="checkbox"/>	<input type="checkbox"/>	
Test result of Verification Lab	<input type="checkbox"/>	<input type="checkbox"/>	

Note: This test shall be performed under the condition that the Recorder uses 12x-speed, described in **Form 16U**.

Test results of 12x-speed Information data in Lead-in and RMA for SL disc

(Test Tools: GRBTD-041 and DVD-R measuring system (Playback) or Information Area Verifier)

3.4.1.2 R-Physical format information zone *1

Item	Applicant	Lab		Judgment
Physical format information (BP 0-3) (Hex)		<input type="checkbox"/> OK	<input type="checkbox"/> NG	

4.3.2.1 Table 4.3.2.1-1 Unique ID Field *1

Item		Applicant	Lab		Judgment
Drive manufacturer ID (Hex or ASCII) *2	BP 0-15		<input type="checkbox"/> OK	<input type="checkbox"/> NG	
	BP 16-31				
Serial Number (ASCII) *2	BP 40-55		<input type="checkbox"/> OK	<input type="checkbox"/> NG	
Model Number (ASCII) *2	BP 64-79		<input type="checkbox"/> OK	<input type="checkbox"/> NG	
Unique Disc ID *3 (Refer to Table 4.3.2.1-2)	BP 88-91 (Hex)		<input type="checkbox"/> OK	<input type="checkbox"/> NG	
	BP 92-105 (ASCII)				

*1: Refer to DVD Specifications for Recordable Disc for General Part 1: Ver. 2.1.

*2: The test of these items can be substituted by checking the same items in RMD Field1.

*3: The test of this item can be substituted by checking the same item in RMD Field0.

4.2.1 RMD Field1 (check only #1 area) (refer to Optional Specifications) *1

Item		Applicant	Lab		Judgment
Time stamp for 12x-speed recording (Hex)	BP 1536-1543		<input type="checkbox"/> OK	<input type="checkbox"/> NG	
1 st field of 12x-speed Write Strategy code (Hex)	BP 1544-1547		<input type="checkbox"/> OK	<input type="checkbox"/> NG	
2 nd field of 12x-speed Write Strategy code (Hex)	BP 1548-1553		<input type="checkbox"/> OK	<input type="checkbox"/> NG	
3 rd field of 12x-speed Write Strategy code (Hex)	BP 1554-1559		<input type="checkbox"/> OK	<input type="checkbox"/> NG	
Recording power for 12x-speed recording (Hex)	BP 1560-1563		<input type="checkbox"/> OK	<input type="checkbox"/> NG	
Power calibration address for 12x-speed recording (Hex)	BP 1564-1567		<input type="checkbox"/> OK	<input type="checkbox"/> NG	
Running OPC information for 12x-speed recording (Hex)	BP 1568-1591		<input type="checkbox"/> OK	<input type="checkbox"/> NG	

*1: Refer to Optional Specifications 12x-speed DVD-R Rev. 5.0.

Test results of 16x-speed Recording characteristics for SL disc

(Test Tools: GRBTD-041 and DVD-R measuring system (Playback))

Class-B Lab. *1	Items *2		Specification	Measurement		Judgment (Lab use)
				Applicant	Lab	
2.1.7 Operational signals						
	2.1.7.1 High Frequency (HF) signal					
O	Jitter	R = 55 mm	< 8.0 %			
	Modulated amplitude					
O	I ₁₄ /I _{14H}	R = 55 mm	0.60 min.			
O	I ₃ /I ₁₄	R = 55 mm	0.15 min.			
	(I _{14H} max. – I _{14H} min.)/I _{14H} max.					
O	Within one revolution (PUH with PBS)	R = 55 mm	0.15 max.			
O	Within one disc (PUH with PBS)		0.33 max.			
	Within one revolution (PUH without PBS)*3	R = 55 mm	0.10 max.			
	Within one disc (PUH without PBS) *3		0.20 max.			
O	Signal asymmetry	R = 55 mm	– 0.05 to 0.15			
O	Track crossing signal	R = 55 mm	0.10 min.			
	2.1.7.2 Servo signal					
	Differential phase tracking error signal					
O	Amplitude ($\Delta t/T$ at 0.1μm radial offset)	R = 55 mm	0.5 to 1.1			
O	Asymmetry	R = 55 mm	0.2 max.			
O	Tangential push-pull signal	R = 55 mm	0.9 max.			
	2.1.7.3 Wobble signal					
O	CNR of the Wobble signal (RBW=1kHz)	R = 55 mm	> 31 dB			
	2.1.7.4 Defects					
O	PI errors in any consecutive 8 ECC blocks	R = 55 mm	≤ 280			

*1: The measurement items at Class-B Lab are marked with O.

*2: Refer to DVD Specifications for Recordable Disc for General Part 1: Ver. 2.1.

*3: Class-A Lab will check these values when required.

The condition that the Recorder uses “16x-speed”;

Test result of 16x-speed Linking characteristic for SL disc

(Test Tools: GRBTD-041 and DVD-R measuring system (Playback))

Items	OK	NG	Comment
Test result of Applicant	<input type="checkbox"/>	<input type="checkbox"/>	
Test result of Verification Lab	<input type="checkbox"/>	<input type="checkbox"/>	

Note: This test shall be performed under the condition that the Recorder uses 16x-speed, described in **Form 19U**.

Test results of 16x-speed Information data in Lead-in and RMA for SL disc

(Test Tools: GRBTD-041 and DVD-R measuring system (Playback) or Information Area Verifier)

3.4.1.2 R-Physical format information zone *1

Item	Applicant	Lab		Judgment
Physical format information (BP 0-3) (Hex)		<input type="checkbox"/> OK	<input type="checkbox"/> NG	

4.3.2.1 Table 4.3.2.1-1 Unique ID Field *1

Item		Applicant	Lab		Judgment
Drive manufacturer ID (Hex or ASCII) *2	BP 0-15		<input type="checkbox"/> OK	<input type="checkbox"/> NG	
	BP 16-31				
Serial Number (ASCII) *2	BP 40-55		<input type="checkbox"/> OK	<input type="checkbox"/> NG	
Model Number (ASCII) *2	BP 64-79		<input type="checkbox"/> OK	<input type="checkbox"/> NG	
Unique Disc ID *3 (Refer to Table 4.3.2.1-2)	BP 88-91 (Hex)		<input type="checkbox"/> OK	<input type="checkbox"/> NG	
	BP 92-105 (ASCII)				

*1: Refer to DVD Specifications for Recordable Disc for General Part 1: Ver. 2.1.

*2: The test of these items can be substituted by checking the same items in RMD Field1.

*3: The test of this item can be substituted by checking the same item in RMD Field0.

4.2.1 RMD Field1 (check only #1 area) (refer to Optional Specifications) *1

Item		Applicant	Lab		Judgment
Time stamp for 16x-speed recording (Hex)	BP 1600-1607		<input type="checkbox"/> OK	<input type="checkbox"/> NG	
1 st field of 16x-speed Write Strategy code (Hex)	BP 1608-1611		<input type="checkbox"/> OK	<input type="checkbox"/> NG	
2 nd field of 16x-speed Write Strategy code (Hex)	BP 1612-1617		<input type="checkbox"/> OK	<input type="checkbox"/> NG	
3 rd field of 16x-speed Write Strategy code (Hex)	BP 1618-1623		<input type="checkbox"/> OK	<input type="checkbox"/> NG	
Recording power for 16x-speed recording (Hex)	BP 1624-1627		<input type="checkbox"/> OK	<input type="checkbox"/> NG	
Power calibration address for 16x-speed recording (Hex)	BP 1628-1631		<input type="checkbox"/> OK	<input type="checkbox"/> NG	
Running OPC information for 16x-speed recording (Hex)	BP 1632-1655		<input type="checkbox"/> OK	<input type="checkbox"/> NG	

*1: Refer to Optional Specifications 16x-speed DVD-R Rev. 6.0.

Test results of 2x-speed Recording characteristics for DL disc

(Test Tools: BT-D-001-DL and DVD-R measuring system (Playback))

Class-B Lab. *1	Items *2		Specification	Measurement		Judgment (Lab use)
				Applicant	Lab	
Layer 0						
2.1.7 Operational signals						
	2.1.7.1 High Frequency (HF) signal					
O	Jitter	R = 25 mm	< 8.0 %			
		R = 40 mm				
		R = 55 mm				
	Modulated amplitude					
O	I ₁₄ /I _{14H}	R = 25 mm	0.60 min.			
		R = 40 mm				
		R = 55 mm				
O	I ₃ /I ₁₄	R = 25 mm	0.20 min.			
		R = 40 mm				
		R = 55 mm				
	(I _{14Hmax.} – I _{14Hmin.})/I _{14Hmax.}					
O	Within one revolution (PUH with PBS)	R = 25 mm	0.15 max.			
		R = 40 mm				
		R = 55 mm				
O	Within one disc (PUH with PBS)		0.33 max.			
	Within one revolution (PUH without PBS)*3	R = 25 mm	0.10 max.			
		R = 40 mm				
		R = 55 mm				
	Within one disc (PUH without PBS) *3		0.20 max.			
O	Signal asymmetry	R = 25 mm	–0.05 to 0.15			
		R = 40 mm				
		R = 55 mm				
O	Track crossing signal	R = 25 mm	0.10 min.			
		R = 40 mm				
		R = 55 mm				

*1: The measurement items at Class-B Lab are marked with O.

*2: Refer to DVD Specifications for Recordable Disc for Dual Layer Ver. 3.0.

*3: Class-A Lab will check these values when required.

Class-B Lab. *1	Items *2	Specification	Measurement		Judgment (Lab use)
			Applicant	Lab	
Layer 0					
	2.1.7.2 Servo signal				
	Differential phase tracking error signal				
O	Amplitude ($\overline{\Delta t}/T$ at 0.1μm radial offset)	R = 25 mm	0.5 to 1.1		
		R = 40 mm			
		R = 55 mm			
O	Asymmetry	R = 25 mm	0.2 max.		
		R = 40 mm			
		R = 55 mm			
O	Tangential push-pull signal	R = 25 mm	0.9 max.		
		R = 40 mm			
		R = 55 mm			
	2.1.7.3 Wobble signal				
O	CNR of the Wobble signal (RBW=1kHz)	R = 25 mm	> 31 dB		
		R = 40 mm			
		R = 55 mm			
	2.1.7.4 Defects				
O	PI errors in any consecutive 8 ECC blocks	R = 25 mm	≤ 280		
		R = 40 mm			
		R = 55 mm			

*1: The measurement items at Class-B Lab are marked with O.

*2: Refer to DVD Specifications for Recordable Disc for Dual Layer Ver. 3.0.

The condition that the Recorder uses “2x-speed” (in case of the Recorder for DL (4x max));

Class-B Lab. *1	Items *2		Specification	Measurement		Judgment (Lab use)
				Applicant	Lab	
Layer 1						
2.1.7 Operational signals						
	2.1.7.1 High Frequency (HF) signal					
O	Jitter	R = 25 mm	< 8.0 %			
		R = 40 mm			*4	
		R = 55 mm			*4	
	Modulated amplitude					
O	I ₁₄ /I _{14H}	R = 25 mm	0.60 min.			
		R = 40 mm			*4	
		R = 55 mm			*4	
O	I ₃ /I ₁₄	R = 25 mm	0.20 min.			
		R = 40 mm			*4	
		R = 55 mm			*4	
	(I _{14H} max. – I _{14H} min.)/I _{14H} max.					
O	Within one revolution (PUH with PBS)	R = 25 mm	0.15 max.			
		R = 40 mm			*4	
		R = 55 mm			*4	
O	Within one disc (PUH with PBS)		0.33 max.		*4	
	Within one revolution (PUH without PBS)*3	R = 25 mm	0.10 max.			
		R = 40 mm			*4	
		R = 55 mm			*4	
	Within one disc (PUH without PBS) *3		0.20 max.		*4	
O	Signal asymmetry	R = 25 mm	–0.05 to 0.15			
		R = 40 mm			*4	
		R = 55 mm			*4	
O	Track crossing signal	R = 25 mm	0.10 min.			
		R = 40 mm			*4	
		R = 55 mm			*4	

*1: The measurement items at Class-B Lab are marked with O.

*2: Refer to DVD Specifications for Recordable Disc for Dual Layer Ver. 3.0.

*3: Class-A Lab will check these values when required.

*4: In case of the Recorder for DL (4x max), Licensee submits these data and Class-A Lab checks the data.
Class-A Lab will not measure these parameters in general.

Class-B Lab. *1	Items *2	Specification	Measurement		Judgment (Lab use)
			Applicant	Lab	
Layer 1					
	2.1.7.2 Servo signal				
	Differential phase tracking error signal				
○	Amplitude ($\overline{\Delta t}/T$ at 0.1μm radial offset)	R = 25 mm	0.5 to 1.1		
		R = 40 mm		*3	
		R = 55 mm		*3	
○	Asymmetry	R = 25 mm	0.2 max.		
		R = 40 mm		*3	
		R = 55 mm		*3	
○	Tangential push-pull signal	R = 25 mm	0.9 max.		
		R = 40 mm		*3	
		R = 55 mm		*3	
	2.1.7.3 Wobble signal				
○	CNR of the Wobble signal (RBW=1kHz)	R = 25 mm	> 31 dB		
		R = 40 mm		*3	
		R = 55 mm		*3	
	2.1.7.4 Defects				
○	PI errors in any consecutive 8 ECC blocks	R = 25 mm	≤ 280		
		R = 40 mm		*3	
		R = 55 mm		*3	

*1: The measurement items at Class-B Lab are marked with O.

*2: Refer to DVD Specifications for Recordable Disc for Dual Layer Ver. 3.0.

*3: In case of the Recorder for DL (4x max), Licensee submits these data and Class-A Lab checks the data.

Class-A Lab will not measure these parameters in general.

The condition that the Recorder uses “2x-speed” (in case of the Recorder for DL (4x max));

Test result of 2x-speed Linking characteristic for DL disc

(Test Tools: GRBTD-001-DL and DVD-R measuring system (Playback))

Items	OK	NG	Comment
Test result of Applicant	<input type="checkbox"/>	<input type="checkbox"/>	
Test result of Verification Lab	<input type="checkbox"/>	<input type="checkbox"/>	

Note: This test is only for the Recorder for DL (2x only). The Recorder for DL (4x max) need not execute this test.

Test results of 2x-speed Information data in Lead-in and RMA for DL disc

(Test Tools: GRBTD-001-DL and DVD-R measuring system (Playback))

3.4.1.2 R-Physical format information zone *1

Item	Applicant	Lab		Judgment
Physical format information (BP 0-3) (Hex)		<input type="checkbox"/> OK	<input type="checkbox"/> NG	

4.3.2.1.1 Table 4.3.2.1.1-1 Unique ID Field *1

Item		Applicant	Lab		Judgment
Drive manufacturer ID (Hex or ASCII) *2	BP 0-15		<input type="checkbox"/> OK	<input type="checkbox"/> NG	
	BP 16-31				
Serial Number (ASCII) *2	BP 40-55		<input type="checkbox"/> OK	<input type="checkbox"/> NG	
Model Number (ASCII) *2	BP 64-79		<input type="checkbox"/> OK	<input type="checkbox"/> NG	
Unique Disc ID *3 (Refer to Table 4.3.2.1-2)	BP 88-91 (Hex)		<input type="checkbox"/> OK	<input type="checkbox"/> NG	
	BP 92-105 (ASCII)				

4.3.2.2.1.1 Format1 RMD Field0 or 4.3.2.2.2.1 Format4 RMD Field0 *1

Item		Applicant	Lab		Judgment
RMD Format (Hex)	BP 0-1		<input type="checkbox"/> OK	<input type="checkbox"/> NG	
Disc status (Hex)	BP 2		<input type="checkbox"/> OK	<input type="checkbox"/> NG	
Copy of Pre-pit Information (Hex)	BP 22-32		<input type="checkbox"/> OK	<input type="checkbox"/> NG	
	BP 33-35				

*1: Refer to DVD Specifications for Recordable Disc for Dual Layer Part 1: Ver.3.0

*2: The test of these items can be substituted by checking the same items in RMD Field1.

*3: The test of this item can be substituted by checking the same item in RMD Field0.

4.3.2.2.1.2 Format1 RMD Field1 or 4.3.2.2.2.2 Format4 RMD Field1 (check only #1 area) *1

Item		Applicant	Lab		Judgment
2x –speed Write Strategy code for Layer 0(Hex)	BP 64-79		<input type="checkbox"/> OK	<input type="checkbox"/> NG	
Recording power (Hex)	BP 80-83		<input type="checkbox"/> OK	<input type="checkbox"/> NG	
Time Stamp (Hex)	BP 84-91		<input type="checkbox"/> OK	<input type="checkbox"/> NG	
Power calibration address (Hex)	BP 92-95		<input type="checkbox"/> OK	<input type="checkbox"/> NG	
Running OPC information (Hex)	BP 96-107		<input type="checkbox"/> OK	<input type="checkbox"/> NG	
2x-speed Write Strategy code for Layer 1 (Hex)	BP 108-123		<input type="checkbox"/> OK	<input type="checkbox"/> NG	
DSV (Hex)	BP 124-125		<input type="checkbox"/> OK	<input type="checkbox"/> NG	

*1: Refer to DVD Specifications for Recordable Disc for Dual Layer Part 1: Ver.3.0.

Test result of Reading characteristics for DL disc

(Test Tool: GRSTD-101-DL and/or GRSTD-101P-DL)

Items	OK	NG	Comment
Test result of Applicant	<input type="checkbox"/>	<input type="checkbox"/>	
Test result of Verification Lab	<input type="checkbox"/>	<input type="checkbox"/>	

Test results of 4x-speed Recording characteristics for DL disc

(Test Tools: GRBTD-001-DL and DVD-R measuring system (Playback))

Class-B Lab. *1	Items *2		Specification	Measurement		Judgment (Lab use)
				Applicant	Lab	
Layer 0						
2.1.7 Operational signals						
	2.1.7.1 High Frequency (HF) signal					
O	Jitter	R = 25 mm	< 8.0 %			
		R = 40 mm			*4	
		R = 55 mm			*4	
	Modulated amplitude					
O	I ₁₄ /I _{14H}	R = 25 mm	0.60 min.			
		R = 40 mm			*4	
		R = 55 mm			*4	
O	I ₃ /I ₁₄	R = 25 mm	0.20 min.			
		R = 40 mm			*4	
		R = 55 mm			*4	
	(I _{14H} max. – I _{14H} min.)/I _{14H} max.					
O	Within one revolution (PUH with PBS)	R = 25 mm	0.15 max.			
		R = 40 mm			*4	
		R = 55 mm			*4	
O	Within one disc (PUH with PBS)		0.33 max.		*4	
	Within one revolution (PUH without PBS)*3	R = 25 mm	0.10 max.			
		R = 40 mm			*4	
		R = 55 mm			*4	
	Within one disc (PUH without PBS) *3		0.20 max.		*4	
O	Signal asymmetry	R = 25 mm	–0.05 to 0.15			
		R = 40 mm			*4	
		R = 55 mm			*4	
O	Track crossing signal	R = 25 mm	0.10 min.			
		R = 40 mm			*4	
		R = 55 mm			*4	

*1: The measurement items at Class-B Lab are marked with O.

*2: Refer to DVD Specifications for Recordable Disc for Dual Layer Part 1: Ver. 3.0.

*3: Class-A Lab will check these values when required.

*4: Licensee submits these data and Class-A Lab checks the data. Class-A Lab will not measure these parameters in general.

Class-B Lab. *1	Items *2	Specification	Measurement		Judgment (Lab use)
			Applicant	Lab	
Layer 0					
	2.1.7.2 Servo signal				
	Differential phase tracking error signal				
○	Amplitude ($\overline{\Delta t}/T$ at 0.1μm radial offset)	R = 25 mm	0.5 to 1.1		
		R = 40 mm		*3	
		R = 55 mm		*3	
○	Asymmetry	R = 25 mm	0.2 max.		
		R = 40 mm		*3	
		R = 55 mm		*3	
○	Tangential push-pull signal	R = 25 mm	0.9 max.		
		R = 40 mm		*3	
		R = 55 mm		*3	
	2.1.7.3 Wobble signal				
○	CNR of the Wobble signal (RBW=1kHz)	R = 25 mm	> 31 dB		
		R = 40 mm		*3	
		R = 55 mm		*3	
	2.1.7.4 Defects				
○	PI errors in any consecutive 8 ECC blocks	R = 25 mm	≤ 280		
		R = 40 mm		*3	
		R = 55 mm		*3	

*1: The measurement items at Class-B Lab are marked with O.

*2: Refer to DVD Specifications for Recordable Disc for Dual Layer Part 1: Ver. 3.0.

*3: Licensee submits these data and Class-A Lab checks the data. Class-A Lab will not measure these parameters in general.

The condition that the Recorder uses “4x-speed”;

Class-B Lab. *1	Items *2		Specification	Measurement		Judgment (Lab use)
				Applicant	Lab	
Layer 1						
2.1.7 Operational signals						
	2.1.7.1 High Frequency (HF) signal					
O	Jitter	R = 25 mm R = 40 mm R = 55 mm	< 8.0 %			
	Modulated amplitude					
O	I ₁₄ /I _{14H}	R = 25 mm R = 40 mm R = 55 mm	0.60 min.			
O	I ₃ /I ₁₄	R = 25 mm R = 40 mm R = 55 mm	0.20 min.			
	(I _{14H} max. – I _{14H} min.)/I _{14H} max.					
O	Within one revolution (PUH with PBS)	R = 25 mm R = 40 mm R = 55 mm	0.15 max.			
O	Within one disc (PUH with PBS)		0.33 max.			
	Within one revolution (PUH without PBS)*3	R = 25 mm R = 40 mm R = 55 mm	0.10 max.			
	Within one disc (PUH without PBS) *3		0.20 max.			
O	Signal asymmetry	R = 25 mm R = 40 mm R = 55 mm	–0.05 to 0.15			
O	Track crossing signal	R = 25 mm R = 40 mm R = 55 mm	0.10 min.			

*1: The measurement items at Class-B Lab are marked with O.

*2: Refer to DVD Specifications for Recordable Disc for Dual Layer Ver.3.0.

*3: Class-A Lab will check these values when required.

Class-B Lab. *1	Items *2	Specification	Measurement		Judgment (Lab use)
			Applicant	Lab	
Layer 1					
	2.1.7.2 Servo signal				
	Differential phase tracking error signal				
O	Amplitude ($\overline{\Delta t}/T$ at 0.1μm radial offset)	R = 25 mm	0.5 to 1.1		
		R = 40 mm			
		R = 55 mm			
O	Asymmetry	R = 25 mm	0.2 max.		
		R = 40 mm			
		R = 55 mm			
O	Tangential push-pull signal	R = 25 mm	0.9 max.		
		R = 40 mm			
		R = 55 mm			
	2.1.7.3 Wobble signal				
O	CNR of the Wobble signal (RBW=1kHz)	R = 25 mm	> 31 dB		
		R = 40 mm			
		R = 55 mm			
	2.1.7.4 Defects				
O	PI errors in any consecutive 8 ECC blocks	R = 25 mm	≤ 280		
		R = 40 mm			
		R = 55 mm			

*1: The measurement items at Class-B Lab are marked with O.

*2: Refer to DVD Specifications for Recordable Disc for Dual Layer Ver. 3.0.

The condition that the Recorder uses “4x-speed”;

Test result of 4x-speed Linking characteristic for DL disc

(Test Tools: GRBTD-001-DL and DVD-R measuring system (Playback))

Items	OK	NG	Comment
Test result of Applicant	<input type="checkbox"/>	<input type="checkbox"/>	
Test result of Verification Lab	<input type="checkbox"/>	<input type="checkbox"/>	

Note: This test shall be performed under the condition that the Recorder uses 4x-speed, described in **Form 26U**.

Test results of 4x-speed Information data in Lead-in and RMA for DL disc

(Test Tools: GRBTD-001-DL and DVD-R measuring system (Playback))

3.4.1.2 R-Physical format information zone *1

Item	Applicant	Lab		Judgment
Physical format information (BP 0-3) (Hex)		<input type="checkbox"/> OK	<input type="checkbox"/> NG	

4.3.2.1.1 Table 4.3.2.1.1-1 Unique ID Field *1

Item		Applicant	Lab		Judgment
Drive manufacturer ID (Hex or ASCII) *2	BP 0-15		<input type="checkbox"/> OK	<input type="checkbox"/> NG	
	BP 16-31				
Serial Number (ASCII) *2	BP 40-55		<input type="checkbox"/> OK	<input type="checkbox"/> NG	
Model Number (ASCII) *2	BP 64-79		<input type="checkbox"/> OK	<input type="checkbox"/> NG	
Unique Disc ID *3 (Refer to Table 4.3.2.1-2)	BP 88-91 (Hex)		<input type="checkbox"/> OK	<input type="checkbox"/> NG	
	BP 92-105 (ASCII)				

4.3.2.2.1.1 Format1 RMD Field0 or 4.3.2.2.2.1 Format4 RMD Field0 *1

Item		Applicant	Lab		Judgment
RMD Format (Hex)	BP 0-1		<input type="checkbox"/> OK	<input type="checkbox"/> NG	
Disc status (Hex)	BP 2		<input type="checkbox"/> OK	<input type="checkbox"/> NG	
Copy of Pre-pit Information (Hex)	BP 22-32		<input type="checkbox"/> OK	<input type="checkbox"/> NG	
	BP 33-36				

*1: Refer to DVD Specifications for Recordable Disc for Dual Layer Part 1: Ver.3.0

*2: The test of these items can be substituted by checking the same items in RMD Field1.

*3: The test of this item can be substituted by checking the same item in RMD Field0.

4.1.2 Format1 RMD Field1 or Format4 RMD Field1 (check only #1 area) *1

Item		Applicant	Lab		Judgment
4x-speed Write Strategy code for Layer 0 (Hex)	BP 512-527		<input type="checkbox"/> OK	<input type="checkbox"/> NG	
4x-speed Write Strategy code for Layer 1 (Hex)	BP 528-543		<input type="checkbox"/> OK	<input type="checkbox"/> NG	
Recording Power for 4x-speed recording	BP 544-547		<input type="checkbox"/> OK	<input type="checkbox"/> NG	
Time stamp for 4x-speed recording	BP 548-555		<input type="checkbox"/> OK	<input type="checkbox"/> NG	
Power calibration address for 4x-speed recording	BP 556-559		<input type="checkbox"/> OK	<input type="checkbox"/> NG	
Running OPC information (Hex)	BP 560-571		<input type="checkbox"/> OK	<input type="checkbox"/> NG	

*1: Refer to Optional Specifications 4x-speed DVD-R for DL Rev. 1.0.

Test results of Recording capability

(Test Tools: GRBTD-001 and/or GRBTD-001-DL or equivalent DVD-R disc, DVD Video Verifier and File System Verifier)

Sequence No.	Check Item		Operation Nomination	Note	Applicant		Lab	
					OK	NG	OK	NG
R1	Create Title Menu	One page		(Logical structure) If Multi-page Menu is possible, this check item can be omitted.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
R2		Multi page		(Logical structure)	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
R3	Create VTS Menu	One page		(Logical structure) If Multi-page Menu is possible, this check item can be omitted.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
R4		Multi page		(Logical structure)	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
R5	Create Firlst_Play_PGC			(Logical structure)	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
R6	Create One PGC Title			(Logical structure)	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
R7	Create Multi PGC Title			(Logical structure)	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
R8	Create a Title with Max Video bit-rate			(Condition) A VOB with Maximum bit-rate Video is created.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
R9	Create a Title with Max Audio bit-rate			(Condition) A VOB with maximum bit-rate Audio is created.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
R10	Create a Title with Line21 data			(Condition) A Title with Line21 data is created.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
R11	Create two or more Titles			(Logical structure)	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
R12	Create TXTDT_MG			(Logical structure)	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

Sequence No.	Check Item	Operation Nomination	Note	Applicant		Lab	
				OK	NG	OK	NG
R13	Pause on/off in recording			<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
R14	Add chapter mark			<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
R15	Delete a Title			<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
R16	Delete and add a Title			<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
R17	Create Titles on only layer 0 (DVD-R for DL)			<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
R18	Create Titles on layer 0 and layer 1 (DVD-R for DL)			<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
R19				<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
R20				<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
R21				<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
R22				<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
R23				<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

Check Item	Note	Applicant		Lab	
		OK	NG	OK	NG
Test result by Verifiers	- Syntax check by DVD Video Verifier and File System Verifier. - Verification is finished with no error.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

Test result of Test Stream Disc

(Test Tool: TDL-0002)

No	Test category	Check item	Title Play	Expected result/Check point	Note	Applicant		Lab	
						OK	NG	OK	NG
1	LPCM Audio	24bit 48kHz stereo	1	1 kHz audio signal is played back. (Audio specification is described on the screen)		<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
2		24bit 48kHz monaural	2		ACH0 shall be presented.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
3		16bit 96kHz stereo	3			<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
4	AC-3 Audio	384kbps 3/2(5ch)	5	1 kHz audio signal is played back. (Audio specification is described on the screen)	Downmix permitted	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
5	Video	2-3 pull down	9	A series of outdoor scenes is played back with BGM.	Film Material	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
6		Long time VBR	11	Scenes following a castle scene are played back.	5 minutes	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
7		Low bit-rate	12	A castle scene is played back.	VBR(max=2.5Mbps, ave=2Mbps, min=0.7Mbps)	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
8		Variable GOP size	19	A castle scene is played back.		<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
9	Sub-pictures	CHG_COLCON	17	Change color correctly.	Not for checking synchronization with the music.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
10		Position & size	18	Wipe, position and scroll (described by messages on the screen)		<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
11		1440bit per line & Full display size	21	Characters "0/1 Line 1440bit" and dotted lines are played back		<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
12		Maximum size 52kB-SPU	22	Characters "52k spu" and stripes are played back		<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
13		Simple DCSQ	25	Characters "DCSQ test" are played back and blink for once		<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
14		Line end alignment	27	Characters "Line end alignment" and lines are played back		<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
15		Over display size	28	Characters "over size" characters are played back and scroll up		<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
16		Various run length	29	Characters "run-length" characters and various dotted lines are played back		<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
17		Display every frame	30	Time codes are played back and renewal every frame		<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
18		Maximum size of DCSQ	31	Characters "MAX dcs" are played back and blinking until 00:02:28		<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
19		Maximum SPU bit rate	33	Characters "MAX RATE" are played back		<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
20		contrast 7	38	An animation and partially transparent Sub-pictures are played back		<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

No	Test category	Check item	Title Play	Expected result/Check point	Note	Applicant		Lab	
						OK	NG	OK	NG
21	System	Max bit-rate	13	A castle scene is played back.	VBR video (ave=9.56Mbps) +Audio(384kbps)	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
22		Slide show	14	Five slides are played back with 5-second intervals. (Four slides except for No.4 have black frame.)	5 Still pictures with AC-3 Audio	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
23		Maximum streams	39	An animation and 32 streams of Sub-pictures("SP_Stream No. Unit No.") and 8 streams of audios are played back		<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
24	General Presentation	Audio & Video & Sub-picture	36	Color bars and Sub-pictures (combinations of fade and wipe) and 1kHz tone are played back		<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
25			40	Scenes of forest video and Sub-pictures (combinations of fade and wipe) and music are played back		<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

Test result of Navigation Files Test Disc Vol. 1

(Test Tool: DVD-NF002)

No.	Test category/ Check item	User operations for the testing	Expected result /Check point	TT N	VT SN	PG CN	How to reach the testing	Applicant		Lab	
								OK	NG	OK	NG
1	Sub-pictures and highlights/ Selection of SP and HL	Change the display mode. Video_Presentation_Mode_Change()	SPST and HLI are correctly selected depending on the display mode.	19	2	4	<TM>: Presentation Test(1): Wide	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
2	Pan-scan (1) / Movie with Pan-scan vectors	Set the display mode to Pan-scan. Video_Presentation_Mode_Change()	Picture display shifts correctly.	4	2	1	<TM>: Presentation Test (1): Wide: Movie	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
3	Pan-scan (2) / Still pictures with Pan-scan vectors			22	2	3	<TM>: Presentation Test(1): Wide: Still pictures	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
4	Sub-pictures (1) / Select from 32 streams	Menu_Call(Root) and Sub-picture_Stream_Change()	The specified SP stream is displayed.	23	1	61	<TM>: Presentation Test (1): SP Selection: Select from 32 streams <NOTE> SP Menu in the VTSM_DOM is available.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
5	Sub-pictures (2) / Forced Display	Toggle SP display ON/OFF.	Playback as specified in the attached document	6	1	15	<TM>: Presentation Test (1): SP Selection: Forced Display	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
6	Sub-pictures (3) / Select SP based on the display mode	Video_Presentation_Mode_Change()	The SP corresponding to the display mode is to be displayed	21	2	2	<TM>: Presentation Test (1) : SP Selection: Display Aspect Ratio & Display Mode: Start playback	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
7	Audio Selections / Select from 8 Streams	Audio_Stream_Change()	Specified audio stream can be presented. Presented audio stream can be changed.	7	1	25	<TM>: Presentation Test(1): Audio Selection <NOTE> Audio Menu in the VTSM_DOM is available.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
8	Simple Seamless / Decode correctly at VOB boundary		Playback seamlessly	24	1	39	<TM>: Presentation Test(2): Simple Seamless Playback <NOTE> Seamless connections exist at 00:00:05:00 and 00:00:10:00.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
9	Seamless Multi-angle/ Seamless Angle Change	Angle_Change()	Seamless Angle Change works properly. Cell transitions are presented seamlessly.	25	1	41	<TM>: Presentation Test(2): Seamless Multi Angle <NOTE> Angle Menu in the VTSM_DOM is available.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

No.	Test category/ Check item	User operations for the testing	Expected result /Check point	TT N	VT SN	PG CN	How to reach the testing	Applicant		Lab	
								OK	NG	OK	NG
10	Non-Seamless Multi-angle / Non-seamless Angle Change	Angle_Change()	Non-seamless Angle Change works properly. Cell transitions are presented seamlessly.	26	1	43	<TM>: Presentation Test(2): Non-seamless Multi Angle <NOTE> Angle Menu in the VTSM_DOM is available.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
11	Parental Control (1) / Change Parental level temporarily (SPRM#13 and SetTmpPML)	Parental_Level_ Select()	Display and change the current Parental Level.	27	1	47	<TM>: Presentation Test(2): Parental Control: Current Parental Level <NOTE> Player option	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
12	Parental Control (2)/ PGC Parental Block And Seamless presentation		The PGC is correctly selected and is played back seamlessly.	27	1	48- 55	<TM>: Presentation Test(2): Parental Control: Start playback <NOTE> Playback of PGCs other than Level #8 is player option.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
13	Parental Control (3)/ Audio gap in interleaved block and Seamless presentation		Audio gaps are processed correctly.	27	1	48- 55	(The same as above) <NOTE> Check the digital audio I/F if it is equipped.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
14	Still Pictures /Cell Still and VOB Still	Still_Off()	Test Stills at Cell boundary and every VOB.	28	1	45	<TM>: Presentation Test(2): Still Pictures	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
15	Linear Title Play / PTT_Play (), NextPG_Search(), PrevPG_Search(), PTT_Search(), Forward_Scan() and Backward_Scan()	UOPs specified at left	Works as specified in the attached document and the Book.	10	1	24, 29	<TM>: Navigation Test(1) : Linear Title Play: Start testing <NOTE> PTT_Play(), PTT_Search(), Forward_Scan() and Backward_Scan() are player option.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
16	Title Play / Title_Play()	Title_Play()	Select titles correctly	9	1	28	<TM>: Navigation Test(1) : Title Search <NOTE> Menu name "Title Search" should have been "Title Play".	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
17	Chapter Search / JumpVTS_PTT from the PTT Menu		Playback from the specified PTT	10	1	29	<TM>: Navigation Test(1): Chapter Search <NOTE> PTT Menu in the VTSM is available.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
18	Time Search Time_Search()	Time_Search()	Playback from the specified time	31	1	58	<TM>: Navigation Test(1): Time Search <NOTE> Player option	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

No.	Test category/ Check item	User operations for the testing	Expected result /Check point	TT N	VT SN	PG CN	How to reach the testing	Applicant		Lab	
								OK	NG	OK	NG
19	Part of Title Access / Calling JumpVTS_PTT in TT_DOM		The navi- command works correctly	34	4	2-5	<TM>: Navigation Test(2): Navigation Basic Function: Control of VTS Unit	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
20	PGC Playback Control (1) / Repeated presentation of PGs in a PGC		Number of the repetition is correct.	34	4	8	<TM>: Navigation Test(2): Navigation Basic Function: Control of PGC Unit: Loop: Start <NOTE> The same movie is presented 2 times.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
21	PGC Playback Control (2) / Random playback		Random play as specified in the Book	34	4	10	<TM>: Navigation Test(2): Navigation Basic Function: Control of PGC Unit: Random: Start	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
22	PGC Playback Control (3)/ Shuffle playback		Shuffle play as specified in the Book	34	4	12	<TM>: Navigation Test(2): Navigation Basic Function: Control of PGC Unit: Shuffle: Start	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
23	PGC Playback Control (4)/ PGC Still		PGC Still works correctly	34	4	14	<TM>: Navigation Test(2): Navigation Basic Function: Control of PGC Unit: Still: Start	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
24	Navigation between PGCs / NextPGC, PrevPGC, NextPG, PrevPG, NextC, PrevC		Works as specified in the attached document and the Book.	34	4	17- 19	<TM>: Navigation Test(2): Navigation Basic Function: Control of Program Unit: Start	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
25	Navigation between PGs /NextPG_Search() and PrevPG_Search()	NextPG_Search() and PrevPG_Search()		34	4	17- 19		<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
26	Cell Still / Cell Still and Still time value		Cell Still works correctly	34	4	21	<TM>: Navigation Test(2): Navigation Basic Function: Control of Cell Unit: Start	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
27	Highlight (1)/ Forcedly selected button		Forcedly button selection works correctly	34	4	24	<TM>: Navigation Test(2) : Navigation Basic Function: Control of PCI Unit: Forcedly Select Button: Start	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

No.	Test category/ Check item	User operations for the testing	Expected result /Check point	TT N	VT SN	PG CN	How to reach the testing	Applicant		Lab	
								OK	NG	OK	NG
28	Highlight (2)/ Button Operations	Upper_Button_Select(), Lower_Button_select(), Left_Button_Select(), Right_Button_select() and Button_Select_and_Activate()	Button operations work correctly	34	4	26-35	<TM>: Navigation Test(2) :Navigation Basic Function: Control of PCI Unit: Button Selection and Action with selection key or 10-key: Start <NOTE> Button_Select_and_Activate() is player option.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
29	Highlight (3)/ Forcedly action button(specified)		Forcedly action as specified in the Book	34	4	39-48	<TM>: Navigation Test(2): Navigation Basic Function: Control of PCI Unit: Forcedly Action Button: Button Number: Start	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
30	Highlight (4)/ Forcedly action button (lastly selected)			34	4	49-58	<TM>: Navigation Test(2): Navigation Basic Function: Control of PCI Unit: Forcedly Action Button: Selected Button: Start	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
31	Linear title control (1)/ PrevPG_Search() and NextPG_Search()	Prev_PG_Search() and NextPG_Search()	Works as specified in the attached document and the Book.	35	4	60-62	<TM>: Navigation Test(2): User Operation Control: Static Linear Title	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
32	Linear title control (2)/ PrevPGC, NextPGC, PrevPG, NextPG, PrevC and NextC			35	4	60-62		<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
33	Nonlinear title control (1)/ Prev_PG_Search() and NextPG_Search()	Prev_PG_Search() and NextPG_Search()		35	4	63-65	<TM>: Navigation Test(2): User Operation Control: Static Non-linear Title	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
34	Nonlinear title control (2)/ PrevPGC, NextPGC, PrevPG, NextPG, PrevC and NextC			35	4	63-65		<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
35	Title with branch structure (1)/ Prev_PG_Search() and NextPG_Search()	Prev_PG_Search() and NextPG_Search()		35	4	66-74	<TM>: Navigation Test(2): User Operation Control: Simple Branch Title	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
36	Title with branch structure (2)/ PrevPGC and NextPGC			35	4	66-74		<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

No.	Test category/ Check item	User operations for the testing	Expected result /Check point	TT N	VT SN	PG CN	How to reach the testing	Applicant		Lab	
								OK	NG	OK	NG
37	GPRM in register mode / Operations of General parameters (in case of normal, overflow and underflow)		The general parameters work as specified in the Book.	36	4	77-79	<TM>: Navigation Test(2): Navigation Commands and Navigation Parameters: Calculate GPRMs:*	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
38	Navi-commands and GPRM / Compare Instructions		Works as specified in the attached document and the Book.	36	4	83-82	<TM>: Navigation Test(2): Navigation Commands and Navigation Parameters: Compare Instruction	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
39	Navigation Timer / PGC branch by Navigation Timer			36	4	85-94	<TM>: Navigation Test(2): Navigation Commands and Navigation Parameters: System Timer: Start	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
40	Command execution order / GoTo Instruction			36	4	96-98	<TM>: Navigation Test(2): Navigation Commands and Navigation Parameters: Change the Execution Order of Commands: Start	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

Test result of Navigation Files Test Disc Vol. 2

(Test Tool: DVD-NF100 or NF150)

No.	Test category / Check item	User Operations for the testing	Expected result/ Check point	TT N	VT SN	PG CN	How to reach the testing Note	Applicant		Lab	
								OK	NG	OK	NG
1	UOP Blocking (1) / Audio_Stream_Change(): UOP20 and Sub-picture_Stream_Change(): UOP21	Audio_Stream_Change(): UOP20 and Sub-picture_Stream_Change(): UOP21	The UOPs are prohibited during the specified periods.	15	15	2	<Title Menu>UOP Blocking Test: AST/SPST Change	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
2	UOP Blocking (2) / Angle_Change(): UOP22	Angle_Change(): UOP22	The UOP is prohibited during the specified periods.	5	5	2	<TM>UOP Blocking Test: Angle Change	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
3	UOP Blocking (3) / UOP17	Assigned user operations to UOP17	The display is kept unchangeable against any button operations before the forced activation.	6	6	2	<TM>UOP Blocking Test: Buttons <NOTE>Button_Select_and_Activate() is player option.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
4	UOP Blocking (4) / Various UOPs and Access Restriction	Assigned user operations to UOP3/4/5/6/7/8/9/10/11/12/13/14/15/18/19	The UOPs are prohibited during the specified periods. Cell access is restricted for the specified operations.	7	7	1	<TM>UOP Blocking Test: UOP <NOTE> See the Book for the optional user operations.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
5	UOP Blocking (5) / Title_Play(): UOP2	Title_Play(): UOP2	The UOP is prohibited during the PGC.	18	18	2	<TM>UOP Blocking Test: Title_Play <NOTE> Title_Play in TT_DOM is player option.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
6	UOP Blocking (6) / Time_Play() and Time_Search(): UOP0	Time_Play() and Time_Search(): UOP0		19	19	1	<TM>UOP Blocking Test: Time_Play <NOTE> Time_Play and Time_Search() are player option.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
7	UOP Blocking (7) / PTT_Play() and PTT_Search(): UOP1	PTT_Play() and PTT_Search(): UOP1		20	20	2	<TM>UOP Blocking Test: PTT_Play <NOTE> PTT_Play and PTT_Search() are player option.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

No.	Test category / Check item	User Operations for the testing	Expected result/ Check point	TT N	VT SN	PG CN	How to reach the testing Note	Applicant		Lab	
								OK	NG	OK	NG
8	Highlight (1) / Display Mode and Button Color	Video _ Presentaion_ Mode_Change() and Assigned user operations to UOP17	Select SPST/HLI (position and color) correctly	17	17	2	<TM>Highlight: Display Mode&Button Colors <NOTE> Button_Select_and_ Activate() and Video_Presentation_ Mode_Change() in TT_DOM are player option.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
9	Highlight (2) / Highlight Change	Assigned user operations to UOP17 and Sub-picture_ Stream_Change()	HLIs are correctly processed as described in the attached document.	8	8	2	<TM>Highlight: Highlight Change	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
10	Cell Playback (1) / VOBU Still	Still_Off()	Test Stills at the every VOB in the Cell.	9	9	2	<TM>Cell: VOBU Still	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
11	Cell Playback (2) / Navigation Timer	Pause_On(), Menu_Call(Title) and Resume()	Timer counts as specified in the Book.	10	10	2-3	<TM>Cell Test: Navigation Timer <NOTE> Pause_On() and Menu_Call (Title) in TT_DOM are player option.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
12	Cell Playback (3) / VOBU Still and Navi-Timer	Still_Off()	Timer counts even in VOB Stills.	11	11	2-3	<TM>Cell Test: VOBU Still & Navi-Timer	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
13	Angle Blocks (1) / Consecutive Angle Blocks in an Interleaved Block (Seamless Angle Change)	PrevPG_Search(), NextPG_Search(), Forward_Scan(), Backward_Scan() and Angle_Change()	Playback correctly even at the Cell/PG boundaries	12	12	2	<TM>Angle Test: Seamless Multi Angle <NOTE> Forward_Scan() and Backward_Scan() are player option.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
14	Angle Blocks (2) / Consecutive Angle Blocks in an Interleaved Block (Non-Seamless Angle Change)	PrevPG_Search(), NextPG_Search(), Forward_Scan(), Backward_Scan() and Angle_Change()	Playback correctly even at the Cell/PG boundaries	13	13	2	<TM>Angle Test: Non-Seamless Multi Angle <NOTE> Forward_Scan() and Backward_Scan() are player option.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
15	E-STD Boundary / Sub-picture display at E-STD boundary		SPs correctly display immediately before and after the E-STD boundary	14	14	2	<TM>Special Test: E-STD Boundary	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

No.	Test category / Check item	User Operations for the testing	Expected result/ Check point	TT N	VT SN	PG CN	How to reach the testing Note	Applicant		Lab	
								OK	NG	OK	NG
16	Parental / Parental Blocks in TT_DOM/ VTSM_DOM	Parental_Level_Select()	Playback as specified in the attached document	3	3	2-4	<TM>Parental Check <NOTE> player option	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
17	Navigation Commands (1) / Link Commands in Sequential PGC	Select one of six menu items		2	2	1	<TM>Navigation Command Test: Link Command(1) <NOTE> Execution of the LinkNoLink affects only HL position in the immediately succeeding menu display.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
18	Navigation Commands (2) / LinkTopPG / LinkPTTN in Random PGC			2	2	2,7	<TM>Navigation Command Test: Link Command(2)/(3) <NOTE> Same PG is repeatedly presented when LinkTopPG. PGs are randomly selected when LinkPTTN.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
19	Navigation Commands (3) / Compare Commands		OK button is selected.	2	2	5	<TM>Navigation Command Test: Compare Command	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
20	Navigation Commands (4) / Composite Commands		Playback as specified in the attached document	2	2	6	<TM>Navigation Command Test: Composite Command	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
21	Random/Shuffle / Repeating PG playback more than the number of PGs in the PGC		Random/Shuffle play as specified in the Book	2	2	3,4	<TM>Navigation Command Test: Random Play/Shuffle Play	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
22	Domain Transitions / Transitions among Stop/ VMGM/ VTSM/ TT/ FP	Select menu items, Menu_Call(Title), Menu_Call(Root) and Resume()	Transitions as specified in the attached document	-	-	-	<TM>Transition Test	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
23	Layer change	Layer change test within a title	Layer change will be performed in 5 sec.	24	24	12	DVD-NF150 <TM>Special Test: Layer Change	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

Test result of PAL Test Stream Disc

(Test Tool: LVP00.06)

No.	Test category	Check item	Title Play	Expected result/Check point	Note	Applicant		Lab	
						OK	NG	OK	NG
1	MPEG 1 Audio	Low average VBR	1	Video still with stereo movie sound. Check on uninterrupted sound reproduction. Note: sound quality is poor.		<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
2		High average VBR	2	Video still with stereo movie sound. Check on uninterrupted sound reproduction.		<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
3		VBR (low/high switching)	3	Video still with stereo movie sound. Check on uninterrupted sound reproduction. Note: sound quality is poor.		<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
4	MPEG 2 Audio	VBR, base stream only	4	Video still with 5 channel movie sound. Check on uninterrupted sound reproduction. Note: sound quality is poor.		<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
5		VBR, base and extension stream	5	Video still with 5 channel movie sound. Check on uninterrupted sound reproduction.		<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
6		VBR, base stream only	6	Video still with 5+1 channel aeroplane sound. Check on uninterrupted sound reproduction. Note: sound quality is poor.		<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
7		VBR, base and extension stream	7	Video still with 5+1 channel aeroplane sound. Check on uninterrupted sound reproduction.		<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
8		7 channel extension, low VBR,	8	Video still with 7+1 channel sound of crashing train. Check on uninterrupted sound reproduction. Note: sound quality is poor.		<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
9		7 channel extension, high VBR	9	Video still with 7+1 channel sound of crashing train. Check on uninterrupted sound reproduction.		<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
10		7 channel extension, VBR (low/high switching)	10			<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
11		7 channel extension, low VBR, 7ch Matrix=1	11	Video still with 7+1 channel aeroplane sound. Check on uninterrupted sound reproduction. Note: sound quality is poor.		<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
12		7 channel extension, high VBR, 7ch Matrix=1	12	Video still with 7+1 channel aeroplane sound. Check on uninterrupted sound reproduction.		<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

No.	Test category	Check item	Title Play	Expected result/Check point	Note	Applicant		Lab	
						OK	NG	OK	NG
13	MPEG 1 Video	MPEG 1 maximum CBR, various GOP structures	13	Video without sound.		<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
14		MPEG 1 VBR	14	Check on uninterrupted video playback.		<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
15		VBR, 4:3	15			<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
16	MPEG 2 Video	VBR, 16:9, letterbox only	16	Wide screen video without sound. Check on letterbox display on 4:3 TV (independent of player settings).		<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
17		CBR, with 704×576 picture size	17	Video without sound. Check on uninterrupted video playback.		<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
18		VBR, with 704×576 picture size, letterbox only	18	Wide screen video without sound. Check on letterbox display on 4:3 TV (independent of player settings).		<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
19		VBR, with 352×576 picture size	19	Video without sound.		<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
20		VBR, with 352×288 picture size	20	Check on uninterrupted video playback and that video is full screen on 4:3 TV.		<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
21		VBR, with Pan & Scan	21	Wide screen video without sound. Check on stable letterbox or panning with sine wave pattern on 4:3 TV (depending on player settings)		<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
22	Video, Audio and System	VBR Video + 6×VBR multichannel audio	22	Moving colours test pattern with 6 audio streams with 1 kHz sine waves and digital silence. Check on uninterrupted video and switching between multichannel audio streams. Warning: decoding stream 0 and 3 are at 0 dB!		<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
23		VBR Video + AC-3 and MPEG	23	Moving colours test pattern with MPEG1 stereo and AC-3 stereo 1 kHz sine wave test signals. Check on uninterrupted video and switching between audio streams of different type. Warning: audio signals are at 0 dB!		<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
24	MPEG 2 Video	Gaps between video streams	24	Video and 5+1 ch. audio. Check on 1 s freeze frame after 1.40 s, 3.36 s and 5.80 s, audio continues.		<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
25	MPEG 2 Still + Audio	10×MPEG still + 1×MPEG 2 Audio (base + ext)	25	Video stills with 7+1 ch. audio. Check on perfect display of still pictures with different time intervals between them (3×0.40 s, 2×0.80 s, 2×3.00 s and 2×5.00 s).		<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
26	MPEG 2 Video+ Audio	1×MPEG Video + 8×MPEG Audio	26	Video with 8 audio streams. Check on uninterrupted display and availability of 8 audio streams with different content and/or coding. Note: sound quality of some streams is poor.		<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

No.	Test category	Check item	Title Play	Expected result/Check point	Note	Applicant		Lab	
						OK	NG	OK	NG
27	Audio+ Video	AV synchronization	27	Video with stereo sound. Check on synchronization between video and audio.		<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
28	MPEG 2 Audio	Long time VBR (5.0ch)	28	Video with 5 ch. sound. Check on uninterrupted display during long time VBR audio and video decoding.		<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
29	MPEG 2 Video	High bitrate	29	Video without sound. Check on uninterrupted video play back.		<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
30		Pan & Scan vectors	30	Video without sound. Check on uninterrupted video play back while panning is active (if letterbox is not selected) on 4:3 TV.		<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
31		Peak to peak bitrate changes (0 to 9.8Mbps)	31	Video without sound. Check on uninterrupted video play back during steep bitrate changes.		<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
32	MPEG 2 Audio	Multichannel with and without extension stream	32	Video still with violin music. Check on uninterrupted audio in decoding stream 1 (no extension stream) and stream 2 (with extension stream).		<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
33		Multichannel with and without extension stream	33	Video still with jazz music. Check on uninterrupted audio in decoding stream 1 (no extension stream) and stream 2 (with extension stream).		<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
34		Multichannel with and without extension stream	34	Video still with saxophone music. Check on uninterrupted audio in decoding stream 1 (no extension stream) and stream 2 (with extension stream).		<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
35	LPCM Audio	48 kHz, 24 bits, 2 channels	35	Video still with stereo sound. Check on uninterrupted audio.		<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
36		48 kHz, 24 bits, sample, 1 channel	36	Video still with stereo sound. Check on uninterrupted audio.		<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
37		96 kHz, 16 bits, sample, 2 channels	37	Video still with stereo sound. Check on uninterrupted audio.		<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
38	Audio and System	Video with 8 MPEG Audio streams	38	Video with stereo sound. Check on availability of the 8 streams.		<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
39	Audio & Video	A/V Synchronization	39	Video with stereo sound. Check on synchronization.		<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
40	Video & Audio	Typical	40	Video with stereo sound. Check on uninterrupted video and audio for typical bitrates.		<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
41	Sub-picture	FSTA_DSP	41	Video with stereo sound and Sub-pictures. Check on forced display of SPU#0 (05'-15') and SPU#2 (35'-45'). When subtitles are enabled on player SPU#1 (20'-30') and SPU#3 (50'-60') are also displayed.		<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

No.	Test category	Check item	Title Play	Expected result/Check point	Note	Applicant		Lab	
						OK	NG	OK	NG
42	Video	Variable bitrate	42	Video with stereo sound. Check on uninterrupted display of video.		<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
43	Video & System	Low bitrate	43	Video with stereo sound. Check on uninterrupted display of video. Low picture quality is caused by low bitrate.		<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
44	Video & System	Max bitrate	44	Video with stereo sound. Check on uninterrupted display of video.		<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
45	System	Slide show	45	Still pictures with stereo sound. Check on still picture handling. Five stills are displayed. The black borders are intentional.		<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
46	Sub-picture & System	32 SP Stream	46	Video with stereo sound and Sub-pictures. Check on Sub-picture stream selection. The stream number will be displayed shortly after selecting the stream.		<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
47	Sub-picture	Complex Pixel Data (1440 bit/lime PXD)	47	Video with stereo sound and Sub-picture overlay. Check on stable overlay pattern on the top of the screen.		<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
48		CHG_COLCON	48	Video with stereo sound and Sub-picture overlay. Check on Karaoke text overlay with wipe.		<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
49		Position & size	49	Video with stereo sound and Sub-picture overlay. Check on Sub-picture wipe, position and scroll function.		<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
50	Video	Variable GOP size	50	Video with stereo sound. Check on uninterrupted display of video.		<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

Test result of PAL Multichannel Test Disc

(Test Tool: LVP08.01)

No.	Test category	Check item	Title Play	Expected result/Check point	Note	Applicant		Lab	
						OK	NG	OK	NG
1	MPEG 2 Multi-ch	Stereo Configuration Test	1	Sound in the correct channels and in the right phase. Color of the sound is the same in all channels.		<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
2		Configuration test for 6 ch	2			<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
3		Configuration test for 8 ch	3			<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
4		Constant bitrate (CBR)	4	Check on uninterrupted sound reproduction. The correct number of channels is decoded. Note: Some tracks have poor sound quality.		<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
5		Variable bitrate (VBR)	5			<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
6		Small extension frames	6	Check on uninterrupted sound reproduction. The correct number of channels is decoded.		<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
7		Extreme VBR	7			<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
8		Dematrix procedures	8			<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
9		Dynamic range control	9	Check the different sound reproduction of the five audio tracks in DRC mode.		<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
10		High bitrates, 1 Audio stream (7.1 ch)	10	Check on uninterrupted video play back and sound reproduction in all four chapters.		<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
11		High bitrates, 8 Audio stream (7.1 ch)	11	Check on uninterrupted video play back and sound reproduction of all eight tracks in both chapters.		<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
12		A/V synchronization	12	Check on synchronization between video and audio		<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

Test result of PAL Navigation Files Test Disc Vol. 1

(Test Tool: DVD-NF200)

No.	Test category/ Check item	User Operations for the testing	Expected result/ Check point	TT N	VT SN	PG CN	How to reach the testing	Applicant		Lab	
								OK	NG	OK	NG
1	—	—	—	—	—	—	—	—	—	—	—
2	—	—	—	—	—	—	—	—	—	—	—
3	—	—	—	—	—	—	—	—	—	—	—
4	Sub-pictures (1) / Select from 32 streams	Menu_Call(Root) and Sub-picture_ Stream_Change()	The specified SP stream is displayed.	23	1	61	<TM>: Presentation Test (1): SP Selection: Select from 32 streams <NOTE> SP Menu in the VTSM_DOM is available.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
5	Sub-pictures (2) / Forced Display	Toggle SP display ON/OFF.	Playback as specified in the attached document	6	1	15	<TM>: Presentation Test (1): SP Selection: Forced Display	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
6	—	—	—	—	—	—	—	—	—	—	—
7	Audio Selections / Select from 8 Streams	Audio_Stream_ Change()	Specified audio stream can be presented. Presented audio stream can be changed.	7	1	25	<TM>: Presentation Test(1): Audio Selection <NOTE> Audio Menu in the VTSM_DOM is available.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
8	Simple Seamless / Decode correctly at VOB Boundary		Playback seamlessly	24	1	39	<TM>: Presentation Test(2): Simple Seamless Playback <NOTE> Seamless connections exist at 00:00:05:00 and 00:00:10:00.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
9	Seamless Multi-angle/ Seamless Angle Change	Angle_Change()	Seamless Angle Change works properly. Cell transitions are presented seamlessly.	25	1	41	<TM>: Presentation Test(2): Seamless Multi Angle <NOTE> Angle Menu in the VTSM_DOM is available.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
10	Non-Seamless Multi -angle / Non-seamless Angle Change		Non-seamless Angle Change works properly. Cell transitions are presented seamlessly.	26	1	43	<TM>: Presentation Test(2): Non-seamless Multi Angle <NOTE>Angle Menu in the VTSM_DOM is available.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

No.	Test category/ Check item	User Operations for the testing	Expected result/ Check point	TT N	VT SN	PG CN	How to reach the testing	Applicant		Lab	
								OK	NG	OK	NG
11	Parental Control (1) / Change Parental level temporarily (SPRM#13 and SetTmpPML)	Parental Level_ Select()	Display and change the current Parental Level.	27	1	47	<TM>: Presentation Test(2): Parental Control: Current Parental Level <NOTE> Player option	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
12	Parental Control (1)/ PGC Parental Block and Seamless presentation		The PGC is correctly selected and is played back seamlessly.	27	1	48- 55	<TM>: Presentation Test(2): Parental Control: Start playback <NOTE> Playback of PGCs other than Level #8 is player option.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
13	Parental Control (2)/ Audio gap in interleaved block and Seamless presentation		Audio gaps are processed correctly.	27	1	48- 55	(The same as above) <NOTE> Check the digital audio I/F if it is equipped.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
14	Still Pictures / Cell Still and VOB Still	Still_Off()	Test Stills at Cell boundary and every VOB.	29	1	45	<TM>: Presentation Test(2): Still Pictures	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
15	Linear Title Play / PTT_Play(), NextPG_Search(), PrevPG_Search(), PTT_Search(), Forward_Scan() and Backward_Scan()	UOPs specified at left	Works as specified in the attached document and the Book.	10	1	24, 29	<TM>: Navigation Test(1): Linear Title Play: Start testing <NOTE> PTT_Play(), PTT_Search(), Forward_Scan() and Backward_Scan() are player option.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
16	Title Play / Title_Play()	Title_Play()	Select titles correctly	9	1	28	<TM>: Navigation Test(1): Title Search <NOTE> Menu name "Title Search" should have been "Title Play".	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
17	Chapter Search / JumpVTS_PTT from the PTT Menu		Playback from the specified PTT	12	1	31	<TM>: Navigation Test(1): Chapter Search <NOTE> PTT Menu in the VTSM is available.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
18	Time Search Time_Search()	Time_Search()	Playback from the specified time	31	1	58	<TM>: Navigation Test(1): Time Search <NOTE> Player option	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
19	Part of Title Access / Calling JumpVTS_PTT in TT_DOM		The navi command works correctly	34	4	2-5	<TM>: Navigation Test(2): Navigation Basic Function: Control of VTS Unit	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

No.	Test category/ Check item	User Operations for the testing	Expected result/ Check point	TT N	VT SN	PG CN	How to reach the testing	Applicant		Lab	
								OK	NG	OK	NG
20	PGC Playback Control (1) / Repeated presentation of PGs in a PGC		Number of the repetition is correct.	34	4	8	<TM>: Navigation Test(2): Navigation Basic Function: Control of PGCI Unit: Loop: Start <NOTE> The same movie is presented 2 times.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
21	PGC Playback Control (2) / Random playback		Random play as specified in the Book	34	4	10	<TM>: Navigation Test(2): Navigation Basic Function: Control of PGCI Unit: Random: Start	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
22	PGC Playback Control (3) / Shuffle playback		Shuffle play as specified in the Book	34	4	12	<TM>: Navigation Test(2): Navigation Basic Function: Control of PGCI Unit: Shuffle: Start	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
23	PGC Playback Control (4)/ PGC Still		PGC Still works correctly	34	4	14	<TM>: Navigation Test(2): Navigation Basic Function: Control of PGCI Unit: Still: Start	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
24	Navigation between PGCs / NextPGC, PrevPGC, NextPG, PrevPG, NextC, PrevC		Works as specified in the attached document and the Book.	34	4	17-19	<TM>: Navigation Test(2): Navigation Basic Function: Control of Program Unit: Start	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
25	Navigation between PGs /NextPG_Search() and PrevPG_Search()	NextPG_Search() and PrevPG_Search()		34	4	17-19	<TM>: Navigation Test(2): Navigation Basic Function: Control of Program Unit: Start	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
26	Cell Still / Cell Still and Still time value		Cell Still works correctly	34	4	21	<TM>: Navigation Test(2): Navigation Basic Function: Control of Cell Unit: Start	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
27	Highlight (1)/ Forcedly selected button		Forcedly button selection works correctly	34	4	24	<TM>: Navigation Test(2): Navigation Basic Function: Control of PCI Unit: Forcedly Select Button: Start	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

No.	Test category/ Check item	User Operations for the testing	Expected result/ Check point	TT N	VT SN	PG CN	How to reach the testing	Applicant		Lab	
								OK	NG	OK	NG
28	Highlight (2)/ Button Operations	Upper_Button_ Select(), Lower_Button_ select(), Left_Button_ Select(), Right_Button_ select() and Button_Select_and _Activate()	Button operations work correctly	34	4	26- 35	<TM>: Navigation Test(2): Navigation Basic Function: Control of PCI Unit: Button Selection and Action with selection key or 10-key:Start <NOTE> Button_ Select_and_Activate() is player option.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
29	Highlight (3)/ Forcedly action button(specified)		Forcedly action as specified in the Book	34	4	39- 48	<TM>: Navigation Test(2): Navigation Basic Function: Control of PCI Unit: Forcedly Action Button: Button Number: Start	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
30	Highlight (4)/ Forcedly action button (lastly selected)			34	4	49- 58	<TM>: Navigation Test(2): Navigation Basic Function: Control of PCI Unit: Forcedly Action Button: Start	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
31	Linear title control (1) / PrevPG_Search() and NextPG_Search()	Prev_PG_Search() and NextPG_Search()	Works as specified in the attached document and the Book.	35	4	60- 62	<TM>: Navigation Test(2): User Operation Control: Static Linear Title	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
32	Linear title control (2) / PrevPGC, NextPGC, PrevPG, NextPG, PrevC and NextC			35	4	60- 62		<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
33	Nonlinear title control (1) / Prev_PG_Search() and NextPG_Search()	Prev_PG_Search() and NextPG_Search()		35	4	63- 65	<TM>: Navigation Test(2): User Operation Control: Static Non-linear Title	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
34	Nonlinear title control (2) / PrevPGC, NextPGC, PrevPG, NextPG, PrevC and NextC			35	4	63- 65		<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
35	Title with branch structure (1) / Prev_PG_Search() and NextPG_Search()	Prev_PG_Search() and NextPG_Search()		35	4	66- 74	<TM>: Navigation Test(2): User Operation Control: Simple Branch Title	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
36	Title with branch structure (2) / PrevPGC and NextPGC			35	4	66- 74		<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

No.	Test category/ Check item	User Operations for the testing	Expected result/ Check point	TT N	VT SN	PG CN	How to reach the testing	Applicant		Lab	
								OK	NG	OK	NG
37	GPRM in register mode / Operations of General parameters (in case of normal, overflow and underflow)		The general parameters work as specified in the Book	36	4	77-79	<TM>: Navigation Test(2): Navigation Commands and Navigation Parameters: Calculate GPRMs: *	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
38	Navi commands and GPRM / Compare Instructions		Works as specified in the attached document and the Book	36	4	83-82	<TM>: Navigation Test(2): Navigation Commands and Navigation Parameters: Compare Instruction	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
39	Navigation Timer / PGC branch by Navigation Timer			36	4	85-94	<TM>: Navigation Test(2): Navigation Commands and Navigation Parameters: System Timer: Start	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
40	Command execution order / GoTo Instruction			36	4	96-98	<TM>: Navigation Test(2): Navigation Commands and Navigation Parameters: Change the Execution Order of Commands: Start	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

Test result of PAL Navigation Files Test Disc Vol. 2

(Test Tool: DVD-NF250)

No.	Test category / Check item	User Operations for the testing	Expected result/ Check point	TT N	VT SN	PG CN	How to reach the testing Note	Applicant		Lab	
								OK	NG	OK	NG
1	UOP Blocking (1) / Audio_Stream_Change(): UOP20 and Sub-picture_Stream_Change(): UOP21	Audio_Stream_Change(): UOP20 and Sub-picture_Stream_Change(): UOP21	The UOPs are prohibited during the specified periods.	15	15	2	<Title Menu>UOP Blocking Test: AST/SPST Change	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
2	UOP Blocking (2) / Angle_Change(): UOP22	Angle_Change(): UOP22	The UOP is prohibited during the specified periods.	5	5	2	<TM>UOP Blocking Test: Angle Change	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
3	UOP Blocking (3) / UOP17	Assigned user operations to UOP17	The display is kept unchangeable against any button operations before the forced activation.	6	6	2	<TM>UOP Blocking Test: Buttons <NOTE>Button_Select_and_Activate() is player option.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
4	UOP Blocking (4) / Various UOPs and Access Restriction	Assigned user operations to UOP3/4/5/6/7/8/9/10/11/12/13/14/15/18/19	The UOPs are prohibited during the specified periods. Cell access is restricted for the specified operations.	7	7	1	<TM>UOP Blocking Test: UOP <NOTE> See the Book for the optional user operations.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
5	UOP Blocking (5) / Title_Play(): UOP2	Title_Play(): UOP2	The UOP is prohibited during the PGC.	18	18	2	<TM>UOP Blocking Test: Title_Play <NOTE> Title_Play in TT_DOM is player option.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
6	UOP Blocking (6) / Time_Play() and Time_Search(): UOP0	Time_Play() and Time_Search(): UOP0		19	19	1	<TM>UOP Blocking Test: Time_Play <NOTE> Time_Play and Time_Search() are player option.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
7	UOP Blocking (7) / PTT_Play() and PTT_Search(): UOP1	PTT_Play() and PTT_Search(): UOP1		20	20	2	<TM>UOP Blocking Test: PTT_Play <NOTE> PTT_Play and PTT_Search() are player option.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

No.	Test category / Check item	User Operations for the testing	Expected result/ Check point	TT N	VT SN	PG CN	How to reach the testing Note	Applicant		Lab	
								OK	NG	OK	NG
8	Highlight (1) / Display Mode and Button Color	Video _ Presentaion_ Mode_Change() and Assigned user operations to UOP17	Select SPST/HLI(position and color) correctly	17	17	2	<TM>Highlight: Display Mode & Button Colors <NOTE> Button_ Select_and_Activate() and Video_ Presentation_Mode_ Change() in TT_DOM are player option.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
9	Highlight (2) / Highlight Change	Assigned user operations to UOP17 and Sub- picture_Stream_ Change()	HLIs are correctly processed as described in the attached document.	8	8	2	<TM>Highlight: Highlight Change	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
10	Cell Playback (1) / VOBU Still	Still_Off()	Test Stills at the every VOBUs in the Cell.	9	9	2	<TM>Cell: VOBUs Still	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
11	Cell Playback (2) / Navigation Timer	Pause_On(), Menu_Call (Title) and Resume()	Timer counts as specified in the Book.	10	10	2-3	<TM>Cell Test: Navigation Timer <NOTE> Pause_On() and Menu_Call (Title) in TT_DOM are player option.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
12	Cell Playback (3) / VOBU Still and Navi Timer	Still_Off()	Timer counts even in VOBUs Stills.	11	11	2-3	<TM>Cell Test: VOBU Still & Navi Timer	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
13	Angle Blocks (1) / Consecutive Angle Blocks in an Interleaved Block (Seamless Angle Change)	PrevPG_Search(), NextPG_Search(), Forward_Scan(), Backward_Scan() and Angle_Change()	Playback correctly even at the Cell/PG boundaries	12	12	2	<TM>Angle Test: Seamless Multi Angle <NOTE> Forward_Scan() and Backward_Scan() are player option.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
14	Angle Blocks (2) / Consecutive Angle Blocks in an Interleaved Block (Non-Seamless Angle Change)			13	13	2	<TM>Angle Test: Non-Seamless Multi Angle <NOTE> Forward_Scan() and Backward_Scan() are player option.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
15	E-STD Boundary / Sub-Picture display at E-STD boundary		SPs correctly display immediately before and after the E-STD boundary	14	14	2	<TM>Special Test: E-STD Boundary	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

No.	Test category / Check item	User Operations for the testing	Expected result/ Check point	TT N	VT SN	PG CN	How to reach the testing Note	Applicant		Lab	
								OK	NG	OK	NG
16	Parental / Parental Blocks in TT_DOM/ VTSM_DOM	Parental_Level_ Select()	Playback as specified in the attached document	3	3	2-4	<TM>Parental Check <NOTE> player option	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
17	Navigation Commands (1) /Link Commands in Sequential PGC	Select one of six menu items		2	2	1	<TM>Navigation Command Test: Link Command(1) <NOTE> Execution of the LinkNoLink affects only HL position in the immediately succeeding menu display.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
18	Navigation Commands (2) / LinkTopPG / LinkPTTN in Random PGC			2	2	2,7	<TM>Navigation Command Test: Link Command(2)/(3) <NOTE> Same PG is repeatedly presented when LinkTopPG. PGs are randomly selected when LinkPTTN.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
19	Navigation Commands (3) / Compare Commands		OK button is selected.	2	2	5	<TM>Navigation Command Test: Compare Command	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
20	Navigation Commands (4) / Composite Commands		Playback as specified in the attached document	2	2	6	<TM>Navigation Command Test: Composite Command	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
21	Random/ Shuffle / Repeating PG playback more than the number of PGs in the PGC		Random/Shuffle play as specified in the Book	2	2	3,4	<TM>Navigation Command Test: Random Play/Shuffle Play	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
22	Domain Transitions/ Transitions among Stop/ VMGM/ VTSM/ TT/ FP	Select menu items, Menu_Call(Title), Menu_Call(Root) and Resume()	Transitions as specified in the attached document	-	-	-	<TM>Transition Test	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

Test result of ADP_TY and ADP_ID check

(Test Tools: GRBTD-001 and/or GRBTD-001-DL or equivalent DVD-R disc and ADP_TY & ID Verifier)

Items	Applicant		Lab	
	OK	NG	OK	NG
Test result of ADP_TY in CPR_MAI in Data area	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Test result of ADP_ID in VMGI_MAT	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Test result of VOB_UADP_ID in every DSI_GI	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>



Confirmation of DVD Format Verification

The following product is confirmed that it is on the strength of DVD Specifications for Recordable Disc for General Part 1 (Ver. 2.1) ☐ and/or DVD Specifications for Recordable Disc for Dual layer Part 1 (Ver. 3.0), corresponding Optional Specifications for high speed recording, Part 2 (Ver. 2.1) and DVD Specifications for Read-Only Disc Part 3 (Ver. 1.1) by DVD Format Verification Laboratory of the Company:

	TV System	Class	Adaptable recording speed	
			SL disc	DL disc
Product type:	<input type="checkbox"/> 525/60	<input type="checkbox"/> Class 0	<input type="checkbox"/> 1x only	<input type="checkbox"/> 8x max.
	<input type="checkbox"/> 625/50		<input type="checkbox"/> 4x max.	<input type="checkbox"/> 12x max.
	<input type="checkbox"/> 6x max.		<input type="checkbox"/> 16x max.	<input type="checkbox"/> 2x only <input type="checkbox"/> 4x max.
Product name:				
Model number:				
Application number:				
Date of application (mm. dd, yyyy):				
Applicant: Name:				
Company name:				
Address:				
Tel:			Fax:	
Date of issue (mm. dd, yyyy):				
Confirmed by: Signature:				
Name:				
Lab name				
Address:				
Tel:			Fax:	

Attachment: 1) Test result: **Form 2U** and

Forms listed on **Table 3.2-3 and 3.2-4** according to the conditions of products.

2) Others:

Note: (1) The purpose of DVD Format Verification is to promote and enhance compatibility of DVD Product for DVD Industry based upon the minimum common specification requirements.

(2) The "Confirmation of DVD Format Verification", however, shall not be considered to guarantee the quality of product and the compatibility with a specific DVD disc or player/recorder.

(3) Information in this report shall be treated as confidential under the Non Disclosure Agreement executed between the applicant and DVD Format Verification Laboratory dated (mm. dd, yyyy) _____.