

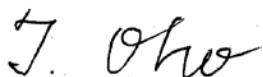
RADIO TEST REPORT

(for Bluetooth classic)

Project No. : JB-Z0425
Client : Sony Corporation
Address : 1-7-1 Konan Minato-ku Tokyo, 108-0075 Japan
Type of Equipment : Linear PCM Recorder
Model No. : PCM-A10
FCC ID : AK8PCMA10
Regulation Applied : 47 CFR Part 15 Subpart C
Final Judgment : **Passed**
Sample Receipt : June 4, 2018
Testing : June 11, 2018 - June 25, 2018
Reported : June 26, 2018

Reported by :

Approved Signatory :



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**Sony Global Manufacturing & Operations Corporation EMC/RF Test Laboratory, Main Lab.**

A2LA Cert. #3203.01

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Note

- ☒-indicates that the listed condition, standard or equipment is applicable for this report.
☐-indicates that the listed condition, standard or equipment is not applicable for this report.

1. General Information

1.1. Description of Equipment Under Test (EUT)

General specification

Test Sample Condition : ☐ Prototype ☒ Pre-production ☐ Mass-production
Type of Equipment : Linear PCM Recorder
Trade Name : SONY
Model No. : PCM-A10
Serial No. : 0314001, 0314002, 0314005
Power Rating : DC 3.7V (The EUT was supplied with the power from built-in battery)

Similar model(s) to be covered by this report

Model No. : None

Radio specification

Function of the Equipment : Transceiver
Operating Frequency : 2402 - 2480MHz
Modulation Type : FHSS (GFSK, $\pi/4$ DQPSK, 8DPSK)
Channel Spacing : 1MHz
Channel Bandwidth : 1MHz
Number of channels : 79
Antenna Type : Pattern antenna
Antenna connector Type : None
Antenna Gain : 0.5 dBi
Operating Temperature : +5 to +35 deg.C

1.2. Summary of Test Result

Test Item	Worst Margin	Test Frequency band	Results
AC Power-line Conducted Emissions	27.7 dB (QP) 0.205 MHz N	150 kHz - 30 MHz	Complied
20dB Bandwidth	Refer to the test data	Carrier	Complied
Carrier Frequency Separation	Refer to the test data	Carrier	Complied
Number of Hopping Frequencies	Refer to the test data	Carrier	Complied
Time of Occupancy (Dwell Time)	Refer to the test data	Carrier	Complied
Maximum Peak Conducted Output Power	21.30 dB	Carrier	Complied
Radiated Spurious Emissions	3.5 dB (AV) 4803.987 MHz Vertical	9 kHz - 25 GHz (excluding carrier and band edge)	Complied
Conducted Spurious Emissions for Band Edge *1	24.67 dB 2400.00 MHz	Carrier band edge	Complied

*1: Conducted Spurious Emission was tested for the only frequencies in the non-restricted carrier band edges, since the spurious emissions in other non-restricted band were complied with Radiated Spurious Emission measurement.

Other requirements

Part 15.31(e) Supply voltage requirement

: Complied (The EUT was tested with a new battery)

Part 15.203 / 212 Antenna requirement

: Complied (The EUT has an internal antenna which cannot be replaced by users)

1.3. Tested Methodology

Test Standard : 47 CFR Part15 Subpart C Section 15.207 / 15.247

Test Method : ANSI C63.10 - 2013
DA 00-705 (March 30, 2000)

Test Condition

AC Power-line Conducted Emissions

Dimensions of the EUT table : 0.8m height, 2m width and 1m depth.

Radiated Spurious Emissions

Test Distance : ☒ 3 m ☐ 10m (9kHz - 30 MHz)
☒ 3 m ☐ 10m (30 - 1000 MHz)
☒ 3 m (1 - 25 GHz)

Dimensions of the EUT table : 0.8m (below 1GHz) or 1.5m (above 1GHz) height, 2m width and 1m depth.

1.4. Measurement Procedures

We performed the measurements in accordance with NV3-12, available upon the request.

- ☒ No deviation
☐ Deviation from the above procedure

The summary of the above procedure is mentioned below

Antenna-port Conducted Measurements

1. Antenna-port of the EUT was connected to the power sensor (Maximum peak conducted output power) or spectrum analyzer. (other test items).
2. For each EUT operation mode, the Antenna-port Conducted Measurements were measured with spectrum analyzer.

Test Item	Detector	RBW
* Antenna-port Conducted Measurements		
20dB Bandwidth	Peak	30 kHz
Carrier Frequency Separation	Peak	100 kHz
Number of Hopping Frequencies	Peak	100 kHz
Time of Occupancy (Dwell Time)	Peak	1 MHz
Maximum Peak Conducted Output Power	Peak	N/A
Conducted Spurious Emissions for Band Edge	Peak	100 kHz

AC Power-line Conducted Emissions

1. The non-conductive table (EUT table) made of (☒ FRP, ☐ wood, ☐ other non-conductive material) was placed 0.4 m from its rear to the vertical reference ground plane.
2. The EUT was placed on the center of tabletop and its rear was flush with the rear of the table, connected through a LISN to the input power mains.
3. The LISN was placed in 80 cm from the nearest part of the EUT chassis.
4. The excess length of the AC cable between the EUT and the LISN receptacle, or an adaptor or extension cable connected to and measured with LISN, was folded back and forth at the center of the lead to form a bundle not exceeding 40 cm in length.
5. The connection of the all other equipment to the second LISN was performed. The second LISN was terminated with a 50-ohm terminator.
6. Interconnecting cables that hang closer than 40 cm to the horizontal reference ground plane was folded back and forth forming a bundle 30 to 40 cm long, hanging approximately in the middle between the horizontal reference ground plane and the tabletop.
7. Find the worst mode and arrangement of the EUT according to the follows;
 - Connecting all peripherals and change the position of peripherals and cables.
 - Changing the all test operation modes of the EUT.
 - On every condition, exploring the highest emissions with the spectrum analyzer.
(150kHz - 30MHz, peak detector, RBW: 10 kHz)
8. On the worst condition of the EUT found in above, choose the 6 highest emissions on the spectrum data. The final measurements carried out on these emissions with EMI test receiver.
(quasi-peak and average detector, RBW: 9 kHz)

Radiated Spurious Emissions

1. The non-conductive table (EUT table) made of (☐ FRP, ☒ Styrene Foam, ☐ other non-conductive material) was placed in the center of the turntable.
2. The EUT was placed on the center of the tabletop.
3. The test antenna was placed away from the EUT at test distance.
4. The limits were compensated the distance factor with follows;

$$9 \text{ kHz} - 490 \text{ kHz [Limit at 3m]} = [\text{Limit at 300m}] + 40\log(300[\text{m}] / 3[\text{m}])$$

$$490 \text{ kHz} - 30 \text{ MHz [Limit at 3m]} = [\text{Limit at 30m}] + 40\log(30[\text{m}] / 3[\text{m}])$$
5. Find the worst arrangement of the EUT according to follows;
 - Rotating the turntable and/or scanning the antenna.
 - On every condition, exploring the highest emissions with the spectrum analyzer.
(9 kHz - 25 GHz, peak detector)
6. On the worst arrangement of the EUT found in above, choose the three highest harmonics or spurious emissions on the spectrum data.(*excluding carrier band edges)
 The final measurements of all test operating modes carried out on these emissions as follows;

The test antenna and the turntable were performed with follows;

	9kHz - 30MHz	30MHz - 1000MHz	1 GHz- 25 GHz
Antenna	Loop Antenna	Bi-conical Antenna, Log-periodic Antenna	Horn Antenna
Antenna scanning range	1m, Vertical, 360 degrees	1 - 4m, Horizontal and Vertical	1 - 4m *, Horizontal and Vertical
Turntable rotating range	360 degrees	360 degrees	360 degrees

*: Final measurements are performed keeping the antenna in the "cone of radiation" from EUT area and pointed at the area both in azimuth and elevation, with polarization oriented for maximum response.

Instruments settings were carried out with follows;

	9 kHz - 90 kHz 110 kHz - 490 kHz	90 kHz- 110 kHz 490 kHz - 30 MHz	30 MHz - 1000 MHz	1 GHz- 25 GHz
Detector	Peak / Average	Quasi-peak	Quasi-peak	Peak / Average
RBW	9 kHz (6 dB) *1	9 kHz (6 dB) *1	120 kHz (6 dB)	1 MHz (6 dB)
VBW	N/A	N/A	N/A	3 MHz (for peak) 10 Hz (for average)
Instrument	EMI test receiver	EMI test receiver	EMI test receiver	Spectrum analyzer

*1: When the measurement frequencies below 150 kHz, RBW: 200 Hz was used.

7. If the final measurement result exceeded the limit(FCC 15.209(a)) in non-restricted band(excluding carrier band edges), the measurement is carried out additionally and compared with the limit (-20dBc) with follows;

Measurement points

- Fundamental Frequency
- Frequency that exceeded the limit in non-restricted band (excluding carrier band edges)

	9 kHz - 150 kHz	150 kHz - 30MHz	above 30MHz
Detector	Peak	Peak	Peak
RBW	3 dB RBW: 300 Hz *	3 dB RBW: 10 kHz *	3 dB RBW: 100 kHz
Instrument	Spectrum analyzer	Spectrum analyzer	Spectrum analyzer

*: Correction factor of RBW was compensated to a measurement result by the following formula.

$$\text{C.F. of RBW [dB]} = 10 * \log(100\text{kHz} / \text{used RBW})$$

8. Although these tests were performed other than open field area test site, adequate comparison measurements were confirmed against 30 m open field area test site. Therefore sufficient tests were made to demonstrate that the alternative site produces results that correlate with the ones of tests made in an open field based on KDB 414788 D01.

1.5. Test Facility

Address of Test Facility

Test Facility Name : Sony Global Manufacturing & Operations Corporation
EMC/RF Test Laboratory, Main Lab.
Address : Kisarazu Site 8-4 Shiomi Kisarazu-shi, Chiba, 292-0834 Japan
Phone : +81 438 37 2750

AC Power-line Conducted Emissions

Shielded Room

☒ 4th Site ☐ EMC Site

Radiated Spurious Emission

Semi-Anechoic chamber

☐ 4th Site ☒ EMC Site

Antenna-port Conducted Measurements *

Shielded Room

☒ 4th Site SR1

*Note: This item contains the following

- 20dB Bandwidth
- Carrier Frequency Separation
- Number of Hopping Frequencies
- Time of Occupancy (Dwell Time)
- Maximum Peak Conducted Output Power
- Conducted Spurious Emissions for Band Edge

A2LA Accreditation for Test Facility

The above test facility has been fully reported to A2LA and accepted as follows:

A2LA Certificate No. : 3203.01
Cert. Validated Date : 31 Oct 2019

1.6. Uncertainty

Test Item	Frequency	4th Site SR1
Conducted Output Power	1 - 6GHz	± 0.84 dB
Conducted Spurious Emissions	1 - 6GHz	± 0.89 dB

Test Item	Frequency	Distance	4th Site	EMC Site
AC Power-line Conducted Emissions	150kHz - 30MHz	-	± 3.34 dB	± 3.35 dB
Radiated Emissions	9 kHz - 30 MHz	3m	± 2.59 dB	± 3.12 dB
	30 - 300 MHz	3m	± 4.18 dB	± 5.26 dB
	300 - 1000 MHz	3m	± 4.04 dB	± 4.37 dB
	1 - 6 GHz	3m	± 4.63 dB	± 4.90 dB
	6 - 18 GHz	3m	± 5.31 dB	± 5.50 dB
	18 - 26.5 GHz	3m	± 5.78 dB	± 5.63 dB

2. System Test Configuration

2.1. Validation

The system was configured for testing in a typical (as a customer would normally use it).

The tests were conducted with the worst case modes as follows.

2.2. Test Operating Conditions

The tests have been carried out the following conditions.

Test Items	Operating Mode *1	Packet type *2,3	Test Channels
AC Power-line Conducted Emissions *4	BDR	DH5	2402MHz
Carrier Frequency Separation, Number of Hopping Frequencies, Time of Occupancy (Dwell Time)	BDR	DH5	Hopping ON
	EDR	3DH5	
20dB Bandwidth, Maximum Peak Conducted Output Power, Radiated Spurious Emissions	BDR	DH5	2402MHz, 2441MHz, 2480MHz
	EDR	2DH5 3DH5	
Conducted Spurious Emissions for Band Edge	BDR	DH5	2402MHz
	EDR	3DH5	

Note:

*1: Inquiry mode was not performed based on the result of pre-compliance testing.

*2: The worst packet type has been decided based on the result of maximum duty cycle and pre-compliance testing in the actual product specification.

*3: Packet type for EDR has been decided based on the result of Maximum Peak Conducted Output Power.

*4: The test was performed with the representative mode that had been found as the worst emissions while exploratory testing.

The Software for Operating Mode

Name : nmobile_icx0471

Version : 0.80.00

Special accessories needed for connecting the EUT to achieve compliance:

Item	Manufacturer	Model No.	Serial No.	Remark
-	-	-	-	-

2.3. EUT Modifications

☒ No equipment modification to achieve compliance to the standard levels was done during the tests.

☐ Equipment was modified to achieve compliance to the standard level as below.

Responsible Party Signature

Typed/ Print Name :

Responsible Party :

Position :

Date :

2.4. Configuration of Tested System

Antenna-port Conducted Measurements

The equipment under test (EUT)

Symbol	Item	Manufacturer	Model No.	Serial No.
A-1	Linear PCM Recorder	SONY	PCM-A10	0304001

Support equipment for operation

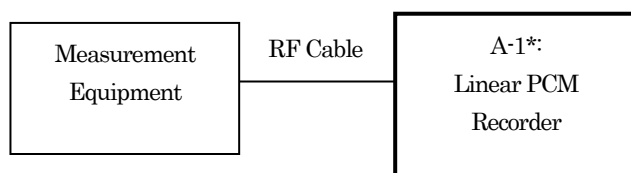
Symbol	Item	Manufacturer	Model No.	Serial No.
-	-	-	-	-

Type of cable

Symbol	Description	Identification (Manufacturer etc.)	Shielded YES / NO	Ferrite Core	Length (m)	Bundled
-	-	-	-	-	-	-

System configuration

*: EUT



AC Power-line Conducted Emissions and Radiated Spurious Emissions Measurement

The equipment under test (EUT)

Symbol	Item	Manufacturer	Model No.	Serial No.
A-2	Linear PCM Recorder	SONY	PCM-A10	0304005

Support equipment for operation

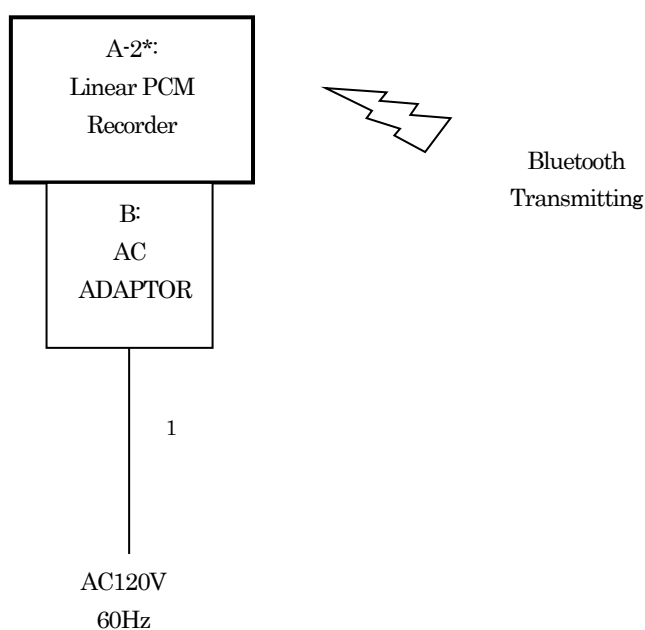
Symbol	Item	Manufacturer	Model No.	Serial No.
B	AC ADAPTOR	SONY	AC-UD20	13026000126

Type of cable

Symbol	Description	Identification (Manufacturer etc.)	Shielded YES / NO	Ferrite Core	Length (m)	Bundled
1	AC Extension Cable	-	NO	NO	0.8	-

System configuration

*: EUT



Radiated Spurious Emissions Measurement

The equipment under test (EUT)

Symbol	Item	Manufacturer	Model No.	Serial No.
A-3	Linear PCM Recorder	SONY	PCM-A10	0314002

Support equipment for operation

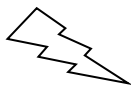
Symbol	Item	Manufacturer	Model No.	Serial No.
-	-	-	-	-

Type of cable

Symbol	Description	Identification (Manufacturer etc.)	Shielded YES / NO	Ferrite Core	Length (m)	Bundled
-	-	-	-	-	-	-

System configuration

*: EUT

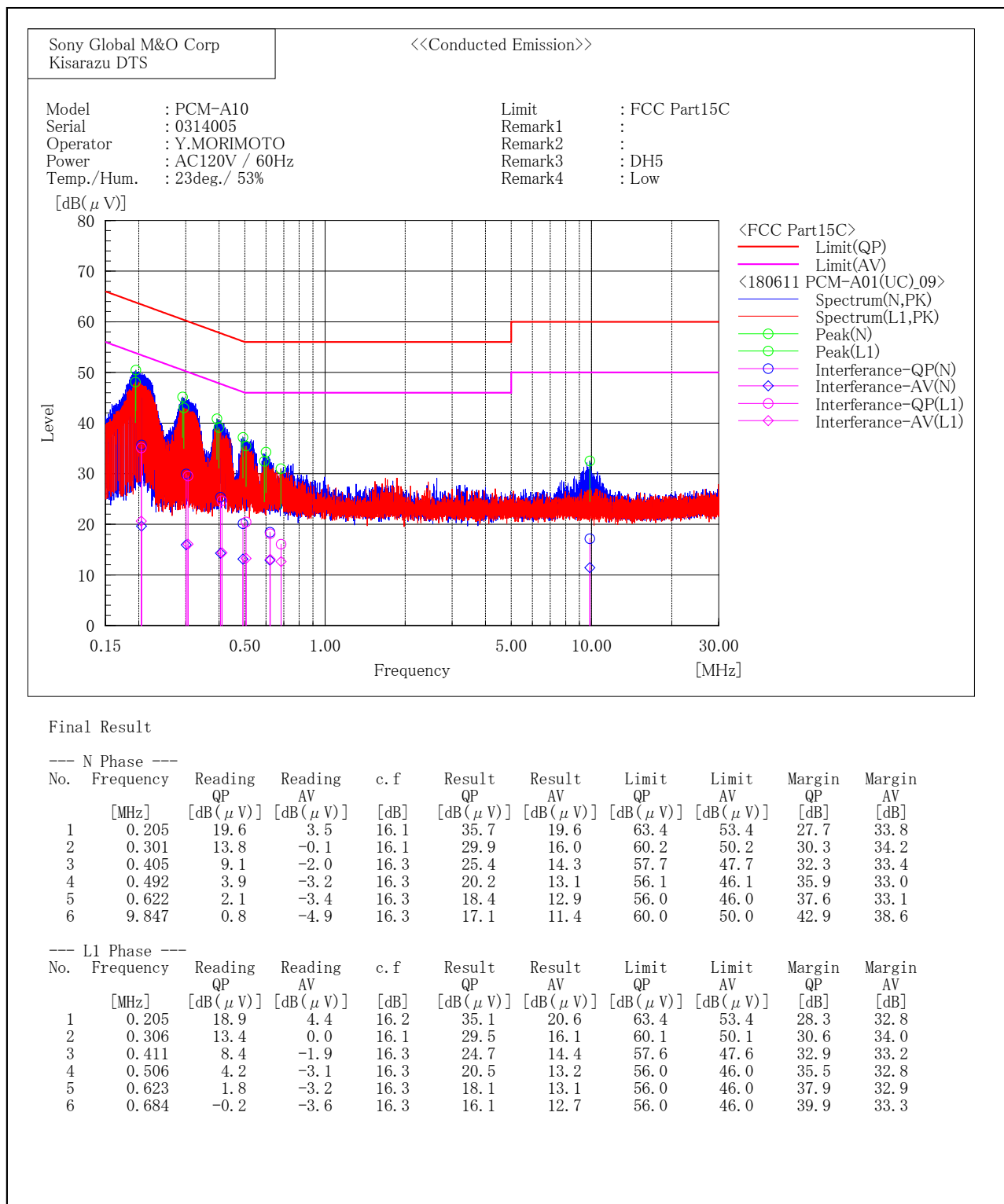
Bluetooth
Transmitting

A-3*:
Linear PCM
Recorder

3. Test Data

3.1. AC Power-line Conducted Emissions

1) Date of measurement : June 11, 2018
[BDR(DH5)/2402MHz]



3.2. 20dB Bandwidth

- 1) Ambient temperature : 23.4 deg.C
- 2) Relative humidity : 65.0 %
- 3) Date of measurement : June 15, 2018
- 4) Measured by : M.KOUGA
- 5) Operating mode : Transmitting mode

Mode		Channel [MHz]	Result [MHz]	Limit [MHz]
BDR	DH5	2402	0.953	-
		2441	0.953	-
		2480	0.953	-
EDR	3DH5	2402	1.290	-
		2441	1.275	-
		2480	1.277	-

[BDR / 2402MHz]



[BDR / 2441MHz]



[BDR / 2480MHz]



[EDR / 2402MHz]



[EDR / 2441MHz]



[EDR / 2480MHz]

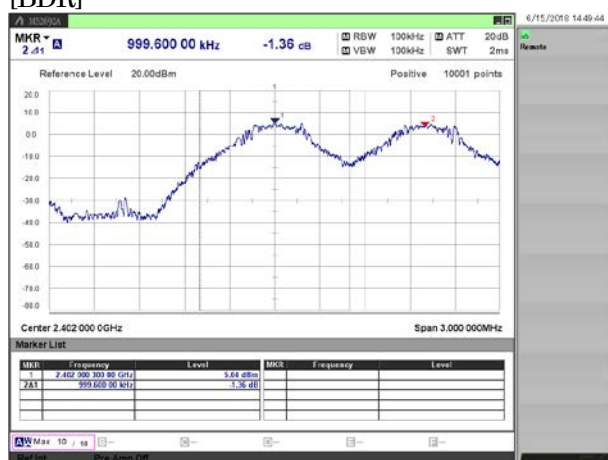


3.3. Carrier Frequency Separation

- 1) Ambient temperature : 23.4 deg.C
- 2) Relative humidity : 65.0 %
- 3) Date of measurement : June 15, 2018
- 4) Measured by : M.KOUGA
- 5) Operating mode : Transmitting mode

Mode		Reading [kHz]	Limit [kHz]
BDR	DH5	999.6	≥ 635.6
EDR	3DH5	1011.6	≥ 860.0

[BDR]



[EDR]

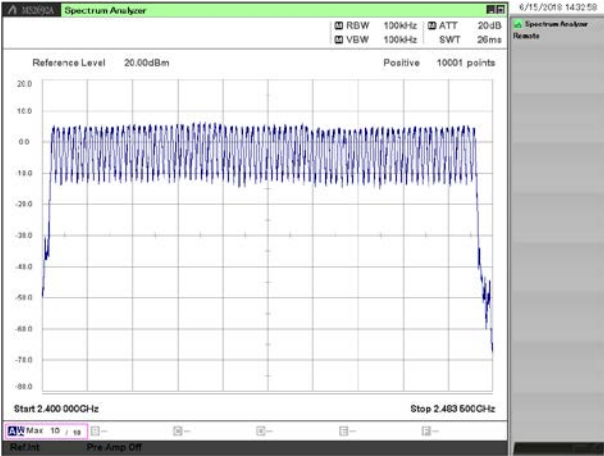


3.4. Number of Hopping Frequencies

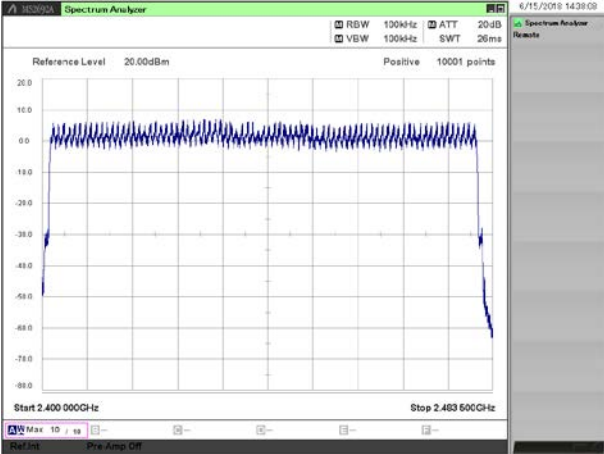
- 1) Ambient temperature : 23.4 deg.C
- 2) Relative humidity : 65.0 %
- 3) Date of measurement : June 15, 2018
- 4) Measured by : M.KOUGA
- 5) Operating mode : Transmitting mode

Mode		Number [channel]	Limit [channel]
BDR	DH5	79	≥ 15
EDR	3DH5	79	≥ 15

[BDR]



[EDR]

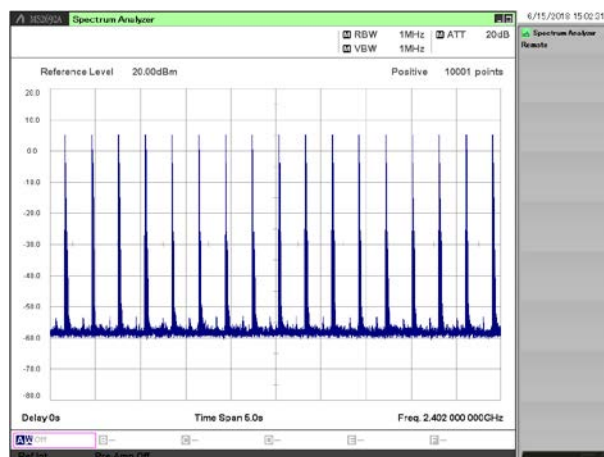
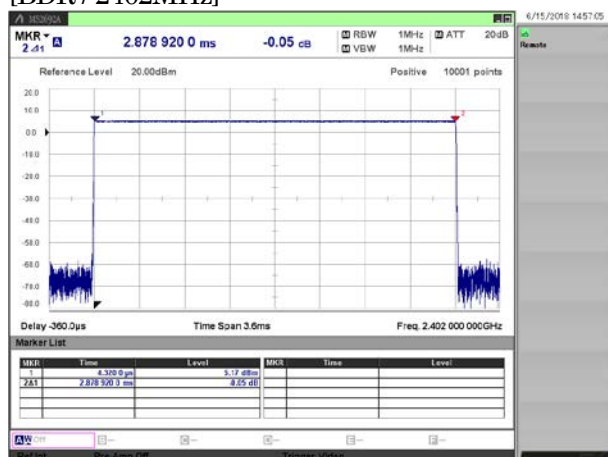


3.5. Time of Occupancy (Dwell Time)

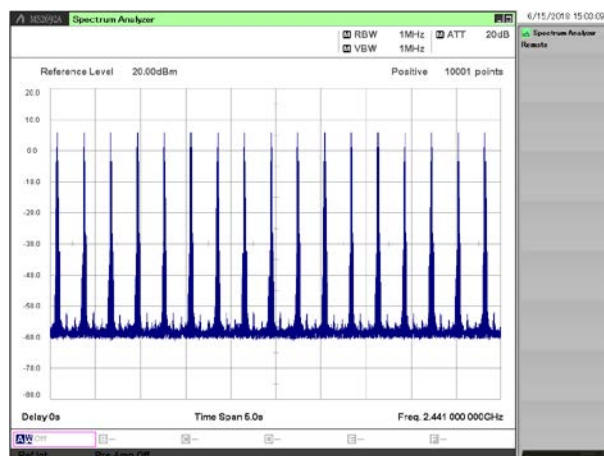
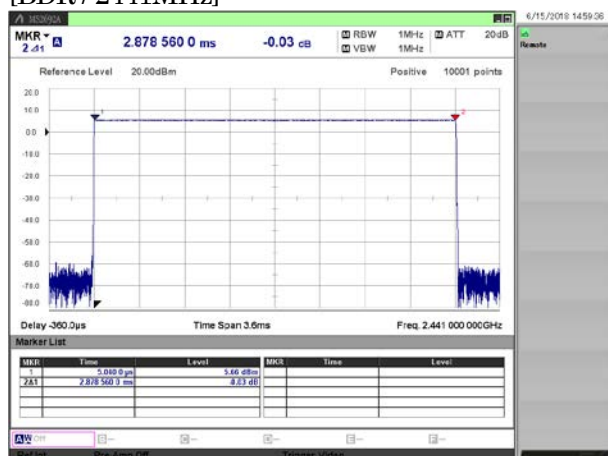
- 1) Ambient temperature : 23.4 deg.C
- 2) Relative humidity : 65.0 %
- 3) Date of measurement : June 15, 2018
- 4) Measured by : M.KOUGA
- 5) Operating mode : Transmitting mode

Mode		Channel [MHz]	Dwell Time [msec]	Cycle [time]	Result [msec]	Limit [msec]
BDR	DH5	2402	2.88	17.0	309.3	≤ 400.0
		2441	2.88	17.0	309.3	≤ 400.0
		2480	2.88	17.0	309.3	≤ 400.0
EDR	3DH5	2402	2.89	17.0	310.8	≤ 400.0
		2441	2.89	17.0	310.8	≤ 400.0
		2480	2.89	17.0	310.8	≤ 400.0

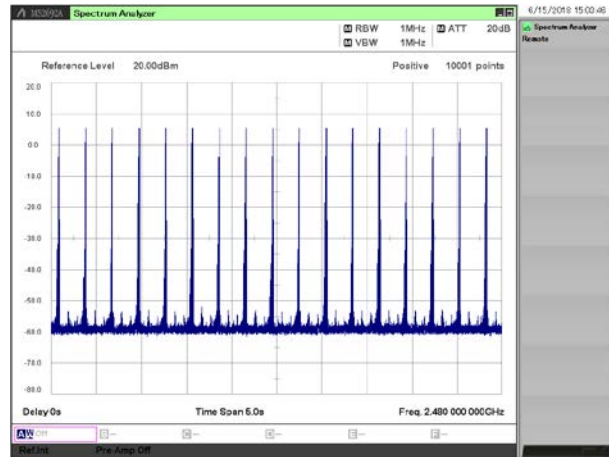
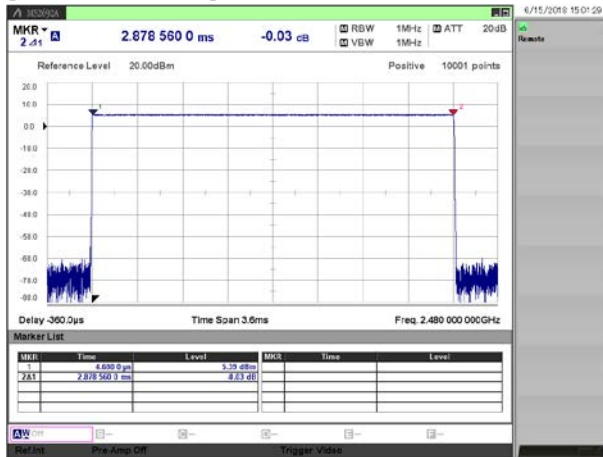
[BDR / 2402MHz]



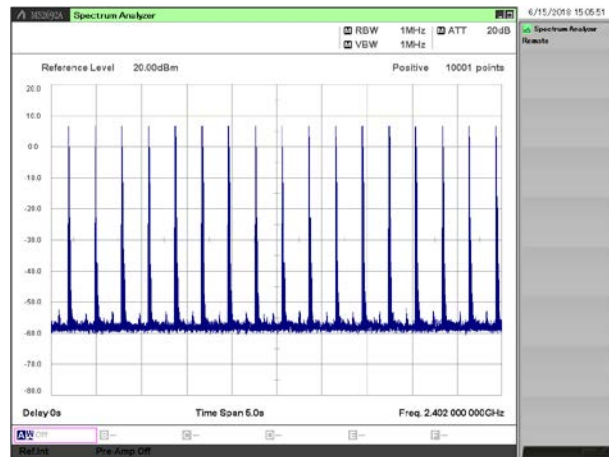
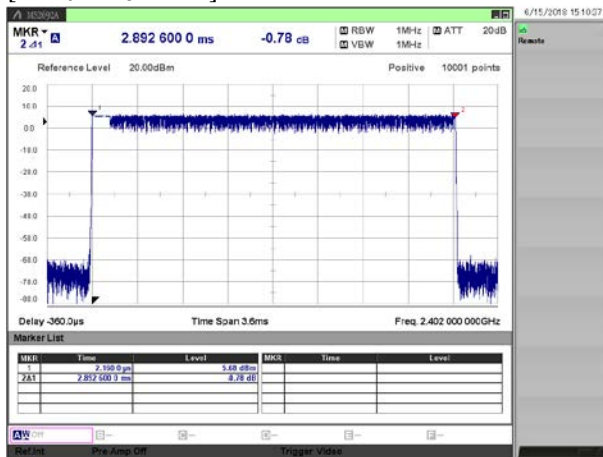
[BDR / 2441MHz]



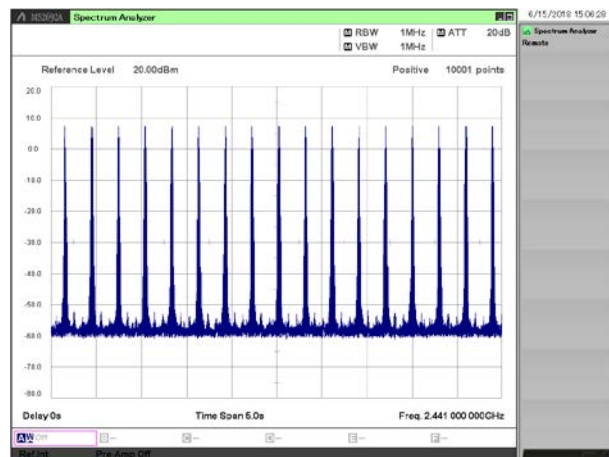
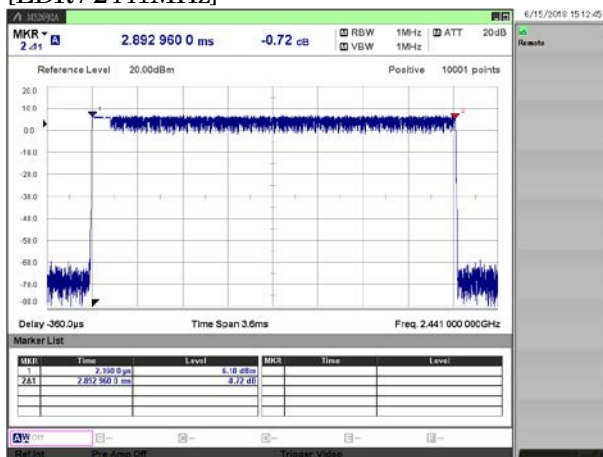
[BDR / 2480MHz]



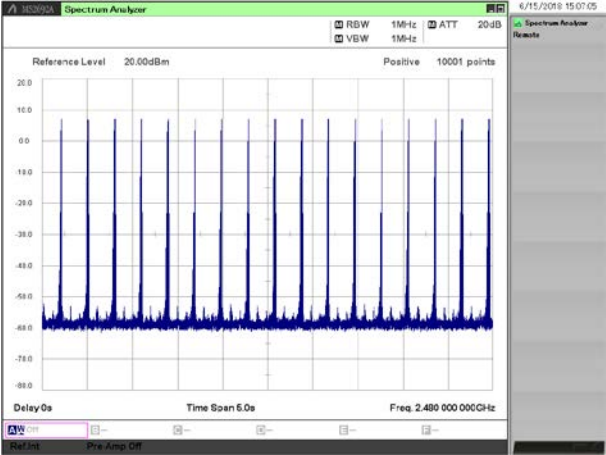
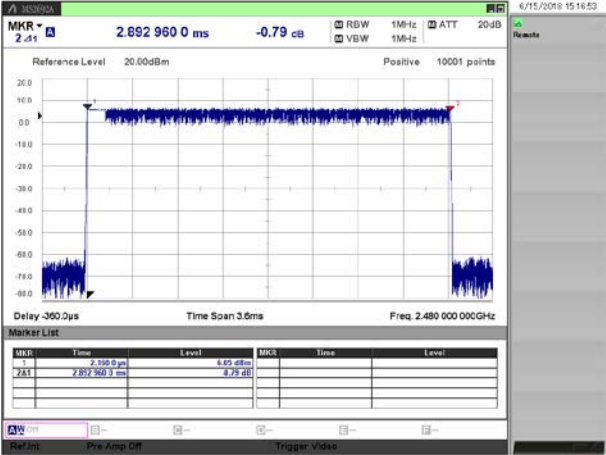
[EDR / 2402MHz]



[EDR / 2441MHz]



[EDR / 2480MHz]



3.6. Maximum Peak Conducted Output Power

- 1) Ambient temperature : 23.6 deg.C
- 2) Relative humidity : 53.0 %
- 3) Date of measurement : June 14, 2018
- 4) Measured by : M.KOUGA
- 5) Operating mode : Transmitting mode

Peak Conducted Output Power

Mode		Channel [MHz]	Reading(PK) [dBm]	C.F. [dB]	Result(PK) [dBm]	Result(PK) [W]	Limit [dBm]	Limit [W]	Margin [dB]
BDR	DH5	2402	6.30	0.59	6.89	0.00489	30.0	1.0	23.11
		2441	6.36	0.59	6.95	0.00495	30.0	1.0	23.05
		2480	6.27	0.59	6.86	0.00485	30.0	1.0	23.14
EDR	2DH5	2402	7.62	0.59	8.21	0.00662	30.0	1.0	21.79
		2441	7.76	0.59	8.35	0.00684	30.0	1.0	21.65
		2480	7.77	0.59	8.36	0.00685	30.0	1.0	21.64
	3DH5	2402	7.94	0.59	8.53	0.00713	30.0	1.0	21.47
		2441	8.11	0.59	8.70	0.00741	30.0	1.0	21.30
		2480	8.11	0.59	8.70	0.00741	30.0	1.0	21.30

Average Conducted Output Power (for SAR measurement)

Mode		Channel [MHz]	Reading(AV) [dBm]	C.F. [dB]	Duty Factor [dB]	Result(AV) [dBm]	Result(AV) [W]
BDR	DH5	2402	4.70	0.59	1.15	6.44	0.00441
		2441	4.79	0.59	1.15	6.53	0.00450
		2480	4.73	0.59	1.15	6.47	0.00444
EDR	2DH5	2402	4.32	0.59	1.13	6.04	0.00402
		2441	4.47	0.59	1.13	6.19	0.00416
		2480	4.48	0.59	1.13	6.20	0.00417
	3DH5	2402	4.29	0.59	1.13	6.01	0.00399
		2441	4.45	0.59	1.13	6.17	0.00414
		2480	4.47	0.59	1.13	6.19	0.00416

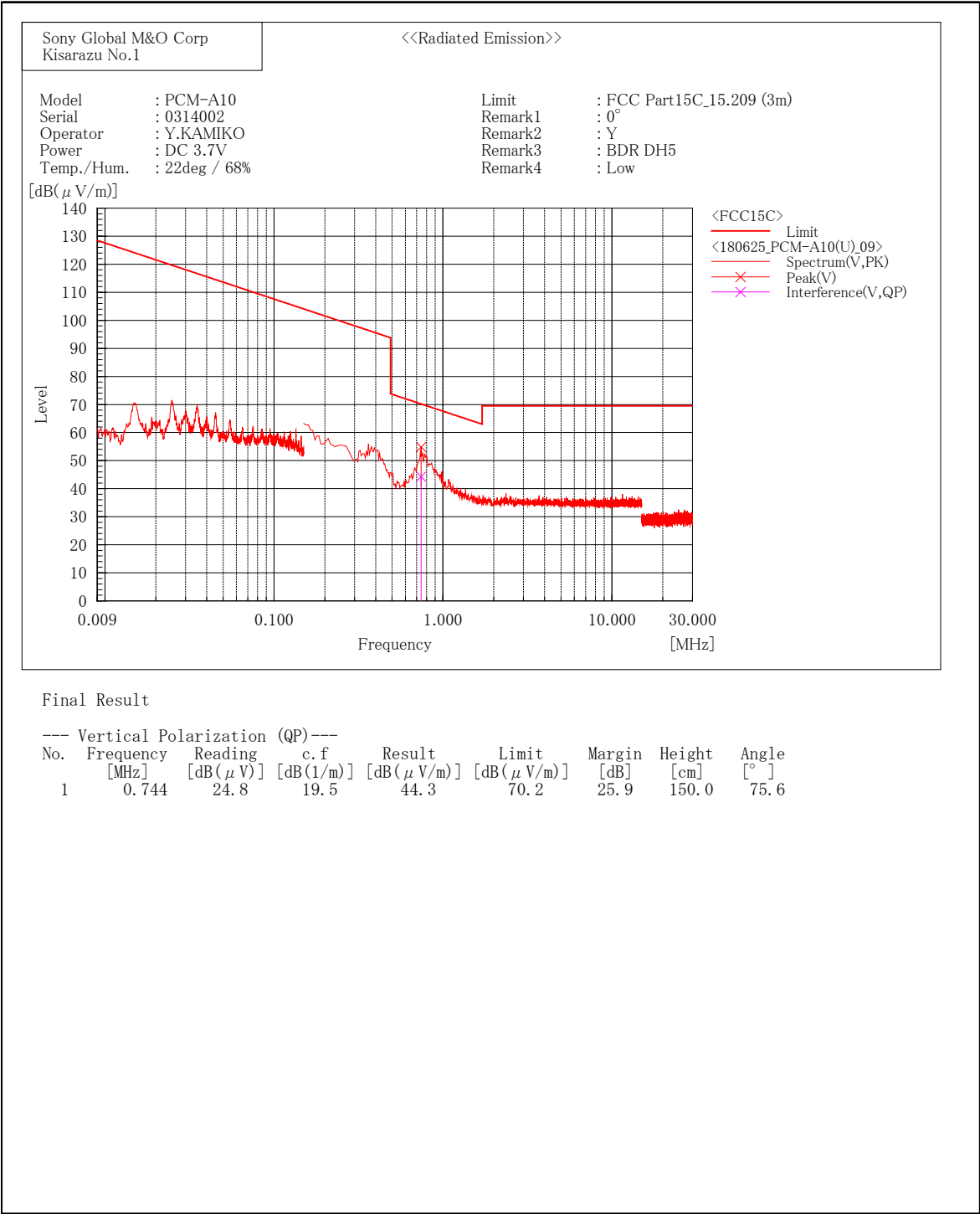
Duty Cycle check

Mode		Channel [MHz]	T(on+off) [msec]	T(on) [msec]	Duty Cycle [%]
BDR	DH1	2441	1.250	0.376	30.08
	DH3	2441	2.500	1.631	65.24
	DH5	2441	3.750	2.878	76.75
EDR	2DH1	2441	1.250	0.391	31.31
	2DH3	2441	2.500	1.644	65.76
	2DH5	2441	3.750	2.891	77.11
	3DH1	2441	1.250	0.391	31.31
	3DH3	2441	2.500	1.642	65.68
	3DH5	2441	3.750	2.892	77.13

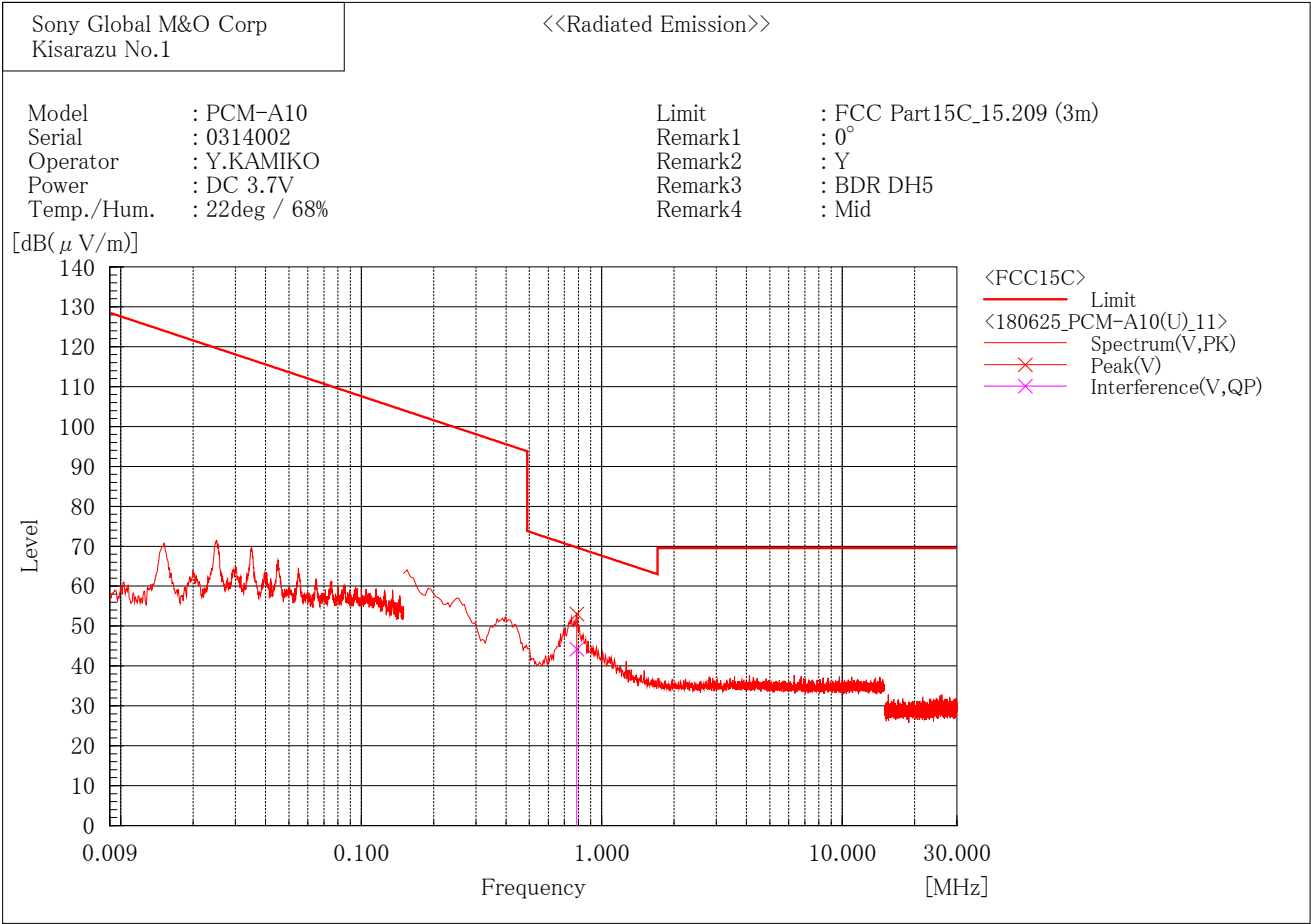
3.7. Radiated Spurious Emissions

1) Date of measurement			
9kHz - 30MHz	: June 25, 2018	(all mode)	
30MHz - 1000MHz	: June 25, 2018	(all mode)	
1GHz - 6GHz	: June 14, 2018	(all mode)	June 14, 2018 (band edge plot data)
6GHz - 18GHz	: June 16, 2018	(all mode)	
18GHz - 25GHz	: June 18, 2018	(all mode)	

9 kHz - 30 MHz
[BDR(DH5)/2402MHz]



[BDR(DH5)/2441MHz]



Final Result

--- Vertical Polarization (QP)---

No.	Frequency [MHz]	Reading [dB(μ V)]	c.f [dB(1/m)]	Result [dB(μ V/m)]	Limit [dB(μ V/m)]	Margin [dB]	Height [cm]	Angle [°]
1	0.789	24.7	19.5	44.2	69.7	25.5	150.0	225.4

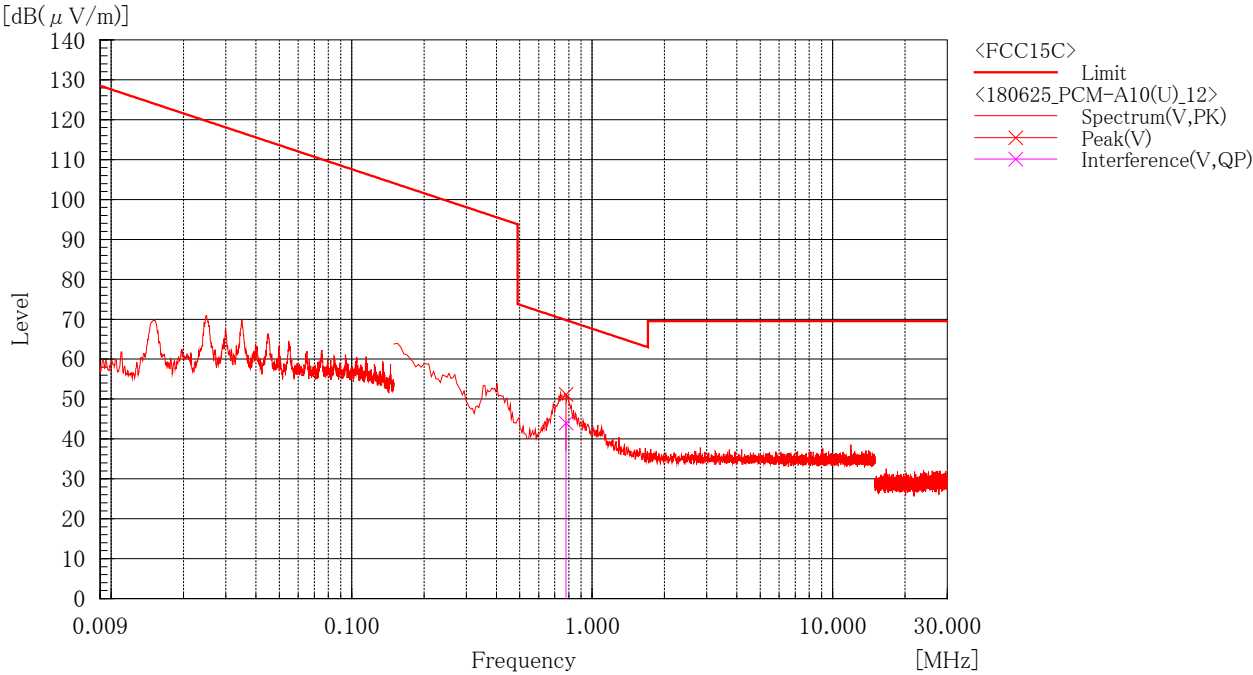
[BDR(DH5)/2480MHz]

Sony Global M&O Corp
Kisarazu No.1

<<Radiated Emission>>

Model : PCM-A10
Serial : 0314002
Operator : Y.KAMIKO
Power : DC 3.7V
Temp./Hum. : 22deg / 68%

Limit : FCC Part15C_15.209 (3m)
Remark1 : 0°
Remark2 : Y
Remark3 : BDR DH5
Remark4 : High

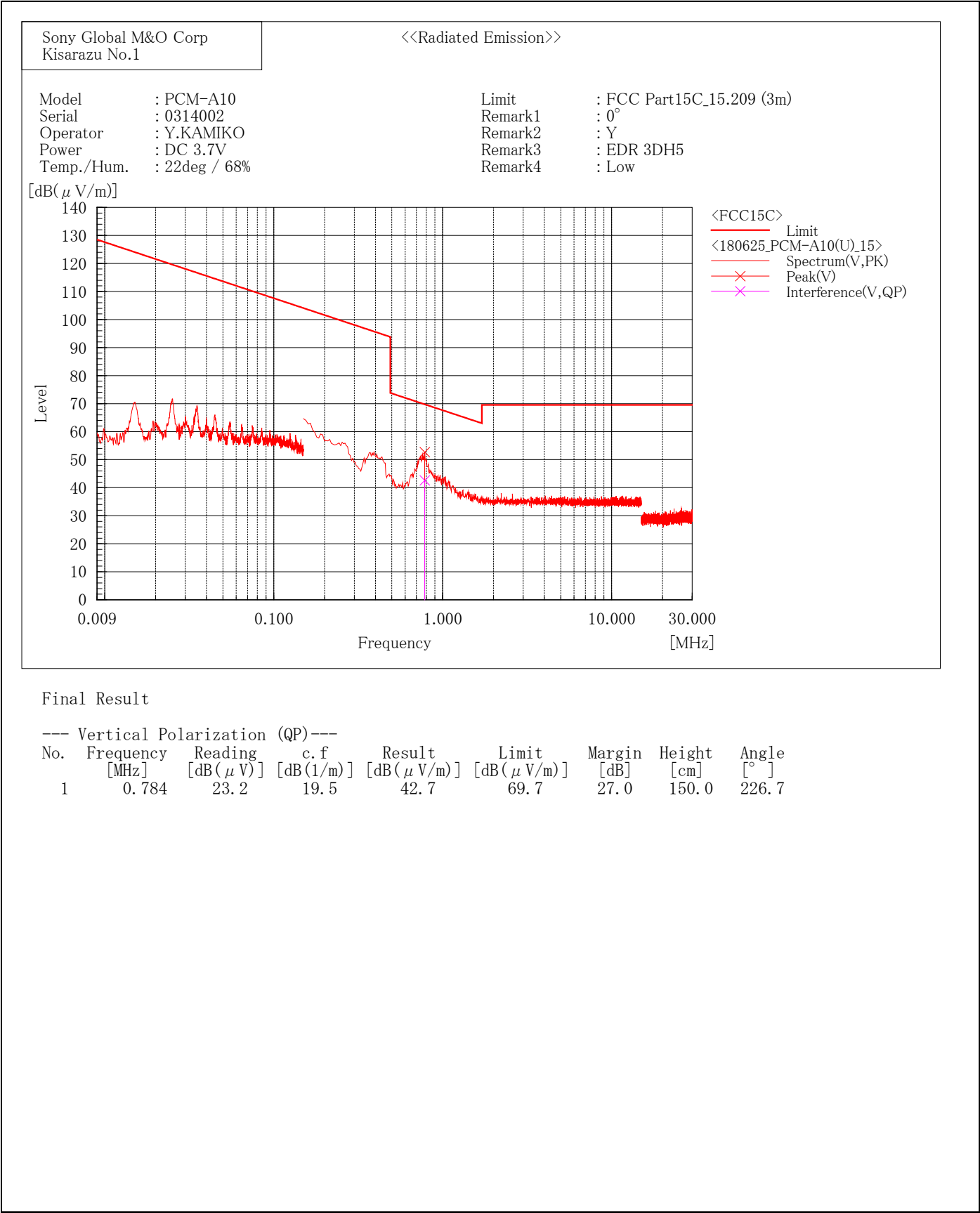


Final Result

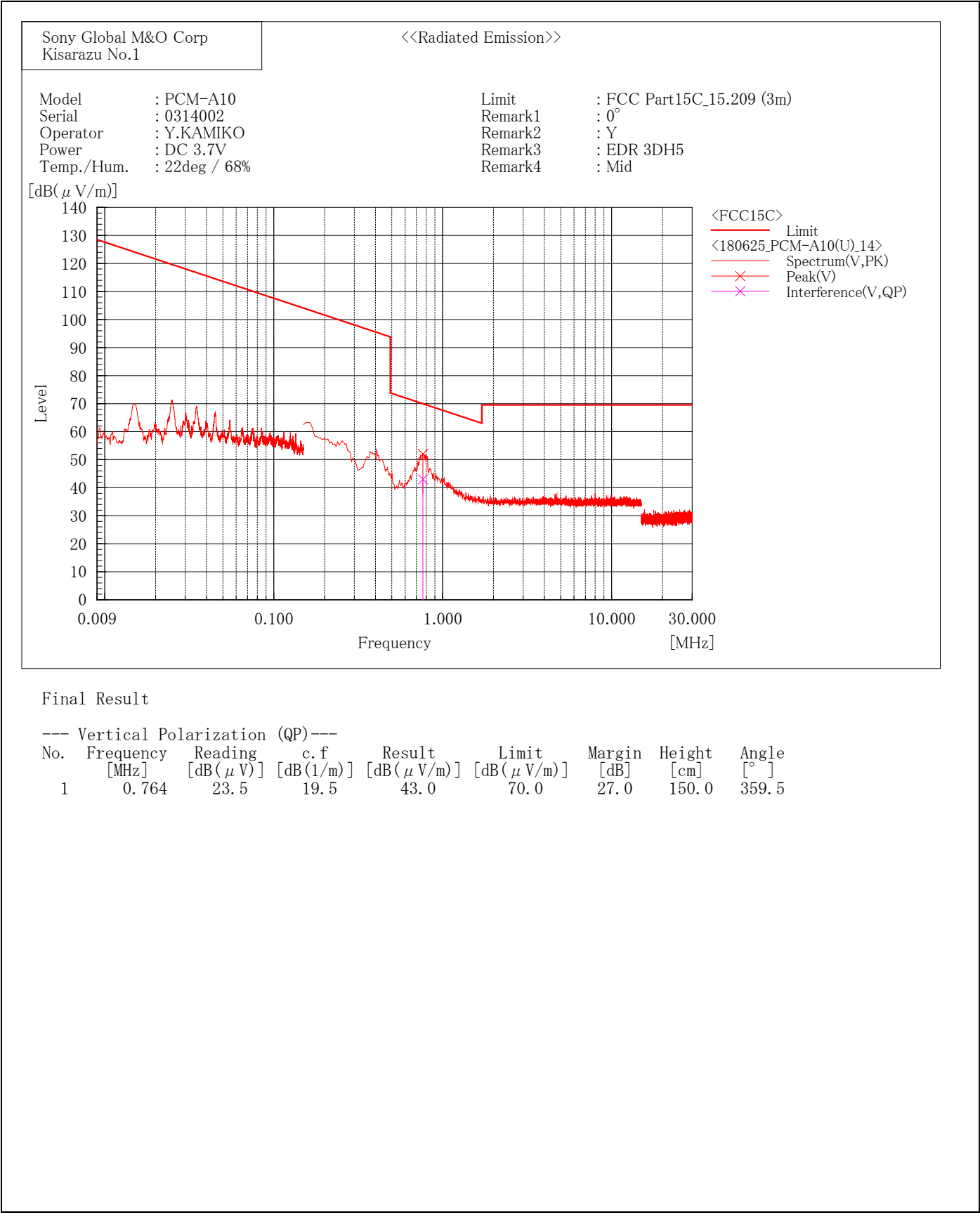
--- Vertical Polarization (QP)---

No.	Frequency [MHz]	Reading [dB(μV)]	c.f [dB(1/m)]	Result [dB(μV/m)]	Limit [dB(μV/m)]	Margin [dB]	Height [cm]	Angle [°]
1	0.779	24.5	19.5	44.0	69.8	25.8	150.0	188.6

[EDR(3DH5)/2402MHz]



[EDR(3DH5)/2441MHz]



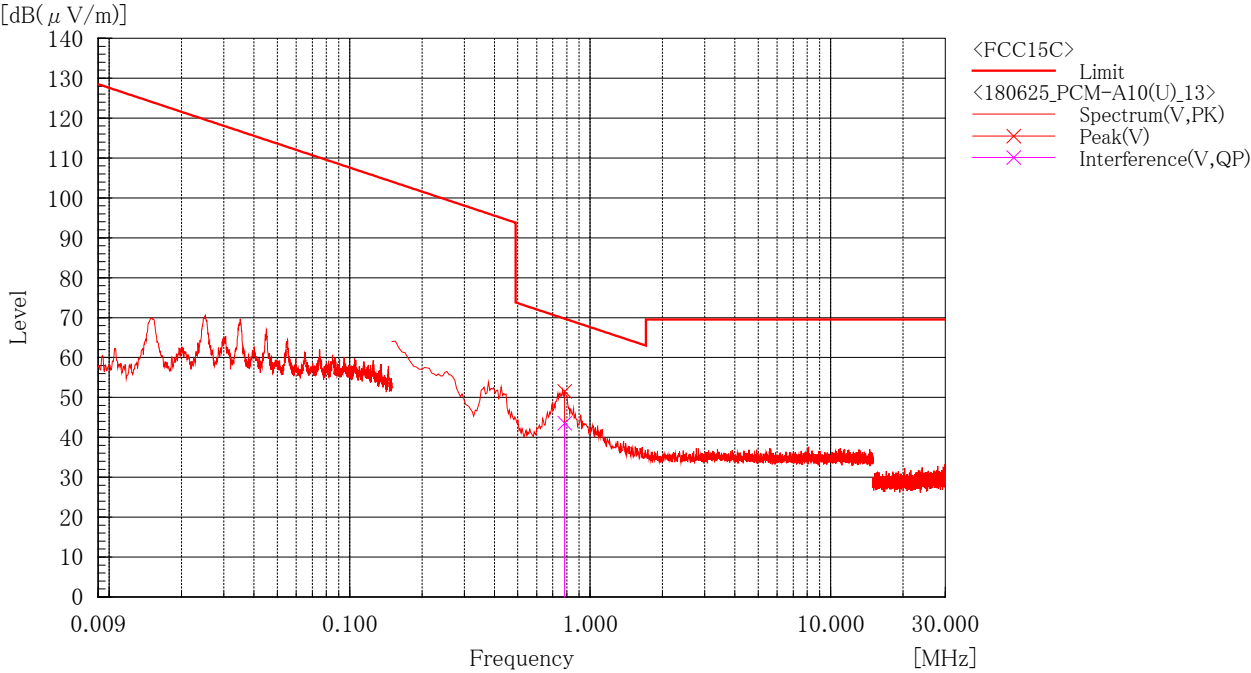
[EDR(3DH5)/2480MHz]

Sony Global M&O Corp
Kisarazu No.1

<<Radiated Emission>>

Model : PCM-A10
Serial : 0314002
Operator : Y.KAMIKO
Power : DC 3.7V
Temp./Hum. : 22deg / 68%

Limit : FCC Part15C_15.209 (3m)
Remark1 : 0°
Remark2 : Y
Remark3 : EDR 3DH5
Remark4 : High



Final Result

--- Vertical Polarization (QP)---

No.	Frequency [MHz]	Reading [dB(μV)]	c.f [dB(1/m)]	Result [dB(μV/m)]	Limit [dB(μV/m)]	Margin [dB]	Height [cm]	Angle [°]
1	0.784	24.0	19.5	43.5	69.7	26.2	150.0	80.6

30 MHz - 1000 MHz

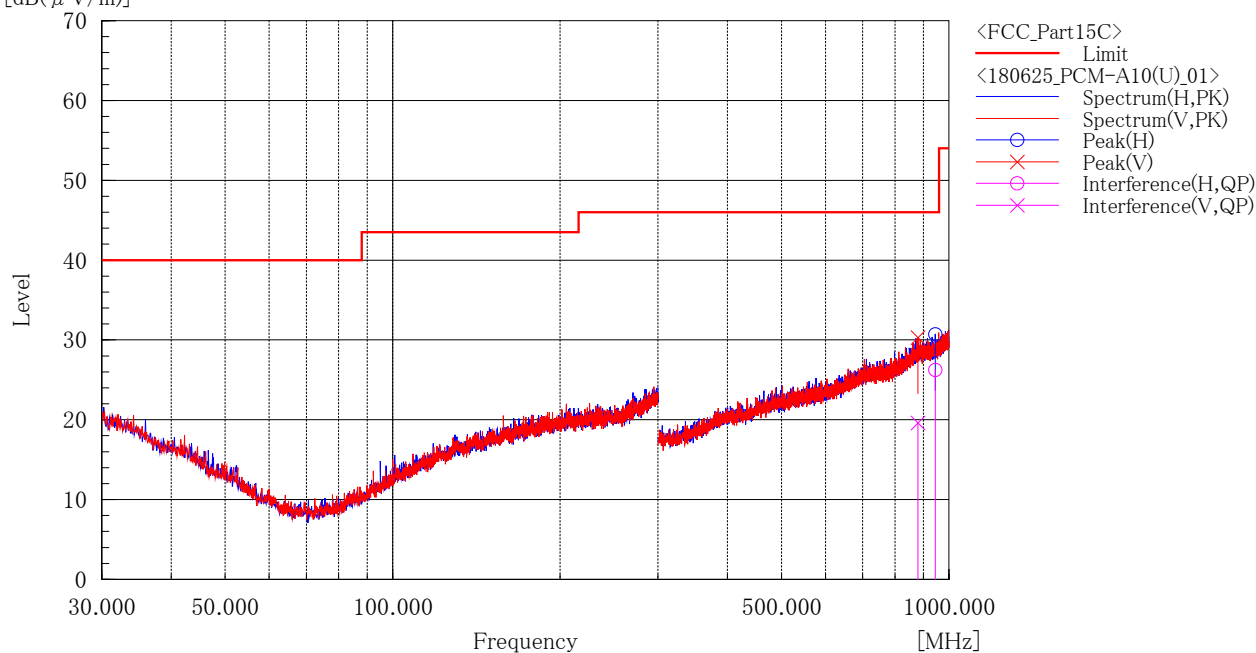
[BDR(DH5)/2402MHz]

Sony Global M&O Corp
Kisarazu No.1

<<Radiated Emission>>

Model : PCM-A10
 Serial : 0314002
 Operator : Y.KAMIKO
 Power : DC 3.7V
 Temp./Hum. : 23deg / 68%

Limit : FCC Part15C 15.209(a) 3m
 Remark1 :
 Remark2 : X
 Remark3 : BDR DH5
 Remark4 : Low

[dB(μ V/m)]

Final Result

--- Horizontal Polarization (QP)---

No.	Frequency [MHz]	Reading [dB(μ V)]	c.f [dB(1/m)]	Result [dB(μ V/m)]	Limit [dB(μ V/m)]	Margin [dB]	Height [cm]	Angle [°]
1	945.167	25.1	1.1	26.2	46.0	19.8	143.6	311.0

--- Vertical Polarization (QP)---

No.	Frequency [MHz]	Reading [dB(μ V)]	c.f [dB(1/m)]	Result [dB(μ V/m)]	Limit [dB(μ V/m)]	Margin [dB]	Height [cm]	Angle [°]
1	879.833	19.5	0.1	19.6	46.0	26.4	313.6	113.7

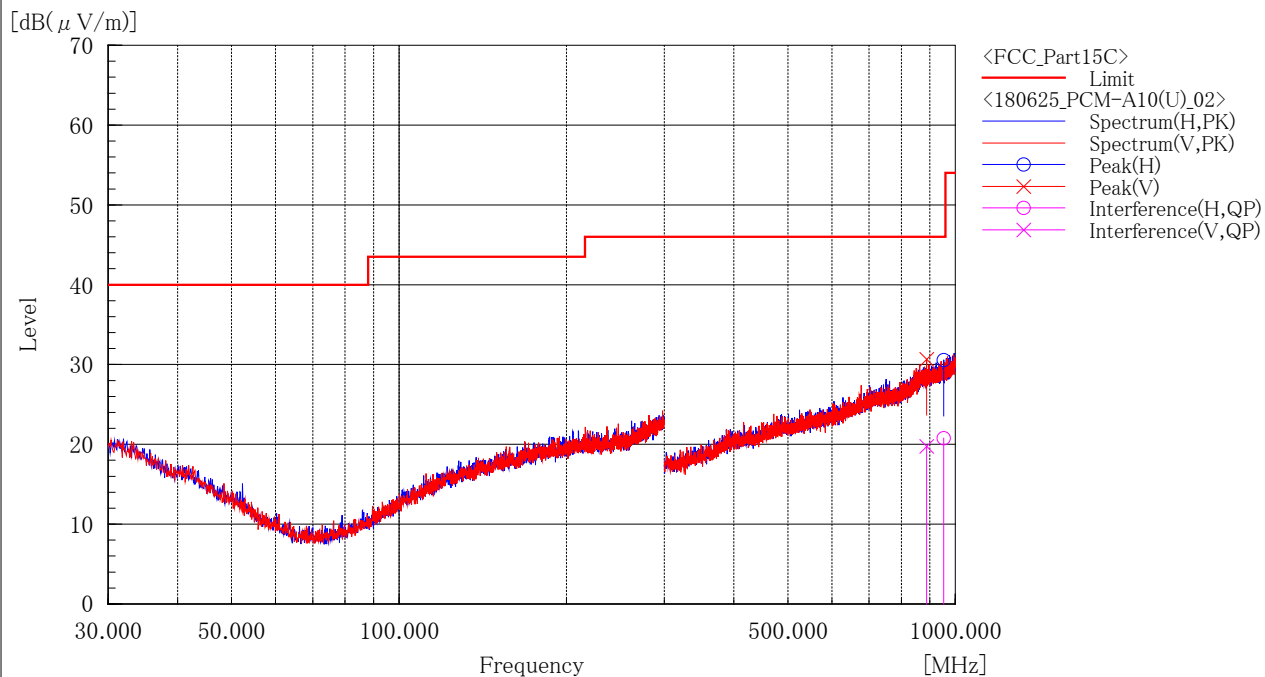
[BDR(DH5)/2441MHz]

Sony Global M&O Corp
Kisarazu No.1

<<Radiated Emission>>

Model : PCM-A10
 Serial : 0314002
 Operator : Y.KAMIKO
 Power : DC 3.7V
 Temp./Hum. : 23deg / 68%

Limit : FCC Part15C 15.209(a) 3m
 Remark1 :
 Remark2 : X
 Remark3 : BDR DH5
 Remark4 : Mid



Final Result

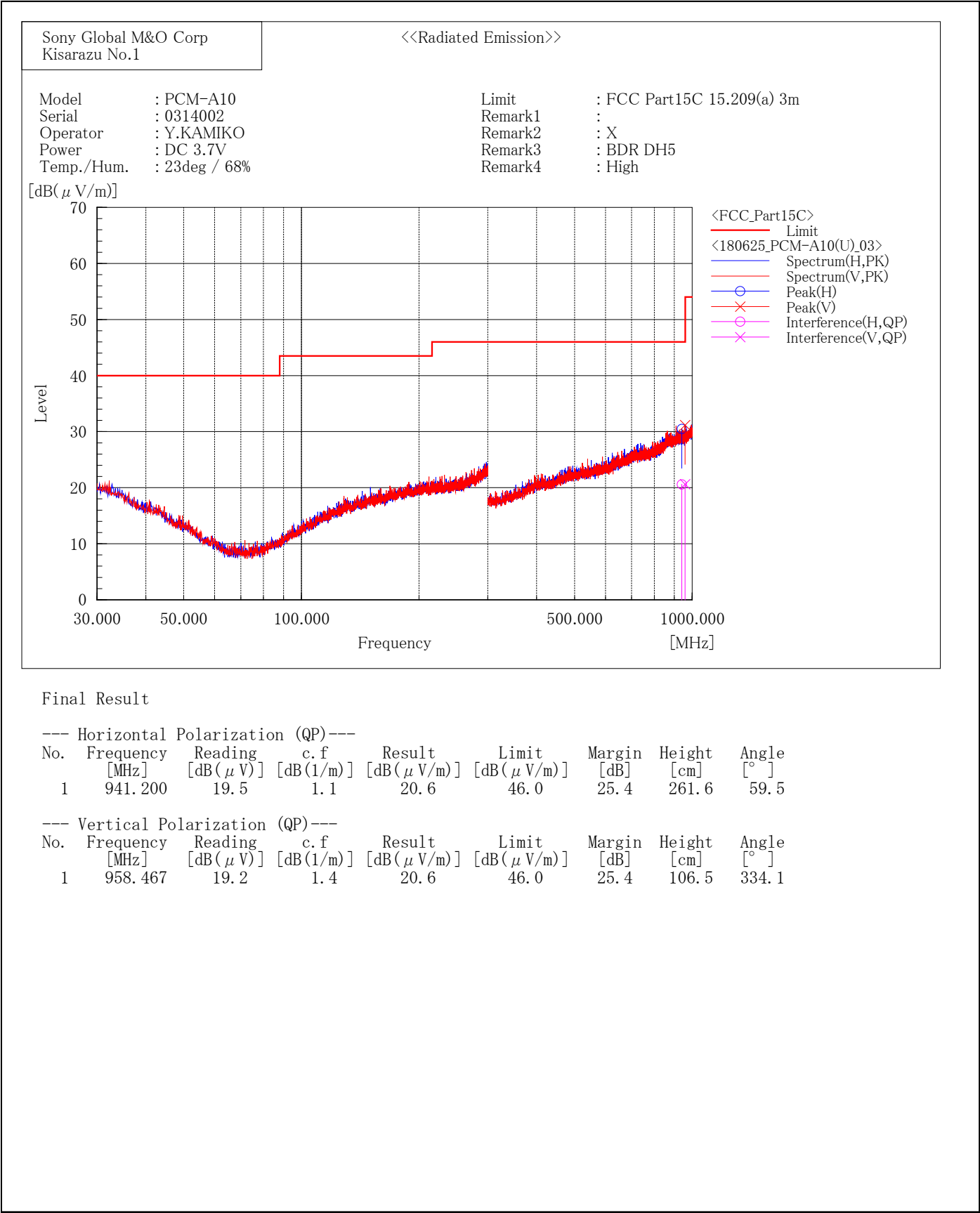
--- Horizontal Polarization (QP)---

No.	Frequency [MHz]	Reading [dB(μ V)]	c. f [dB(1/m)]	Result [dB(μ V/m)]	Limit [dB(μ V/m)]	Margin [dB]	Height [cm]	Angle [°]
1	953.100	19.5	1.3	20.8	46.0	25.2	100.0	123.5

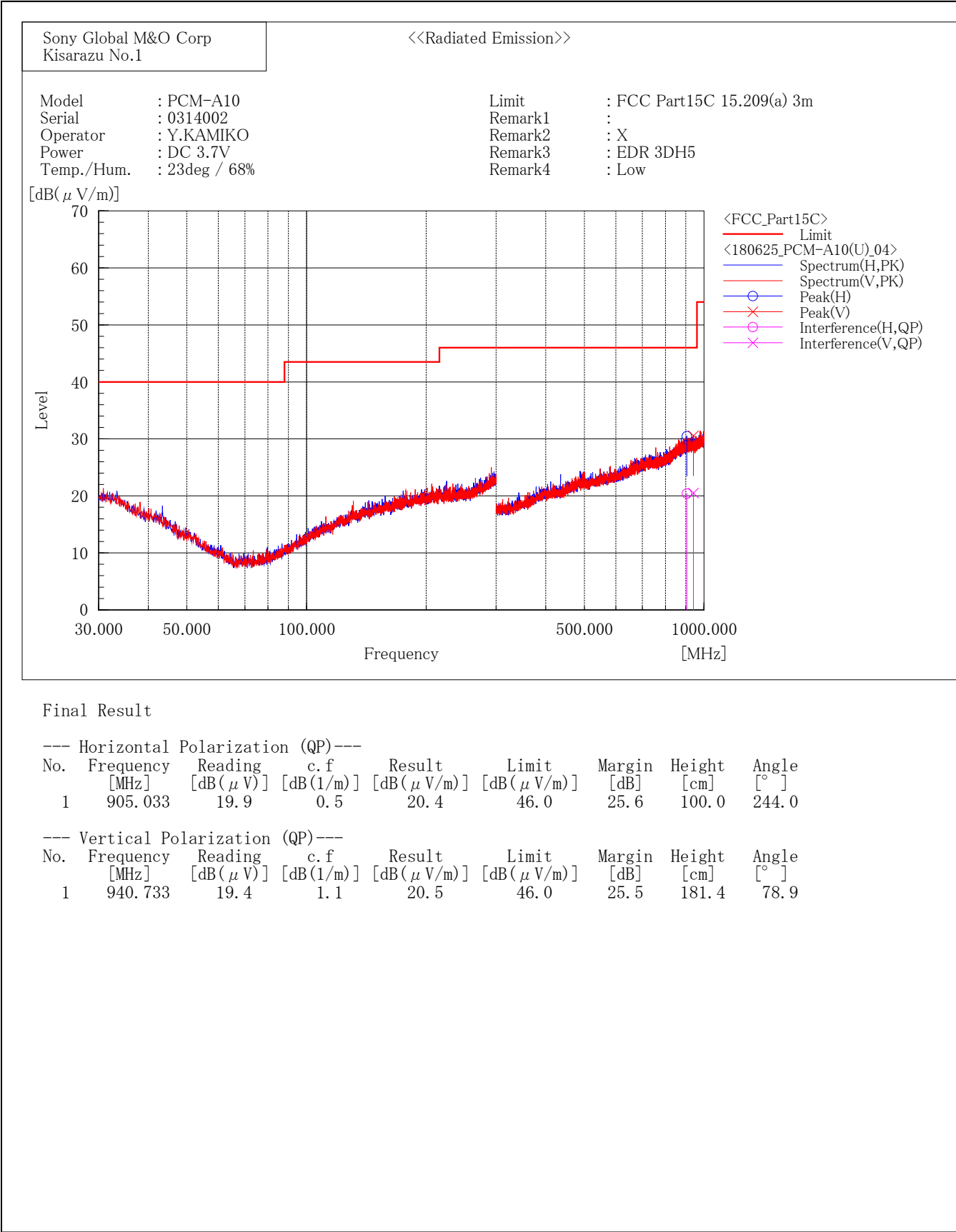
--- Vertical Polarization (QP)---

No.	Frequency [MHz]	Reading [dB(μ V)]	c. f [dB(1/m)]	Result [dB(μ V/m)]	Limit [dB(μ V/m)]	Margin [dB]	Height [cm]	Angle [°]
1	887.767	19.5	0.3	19.8	46.0	26.2	154.9	277.8

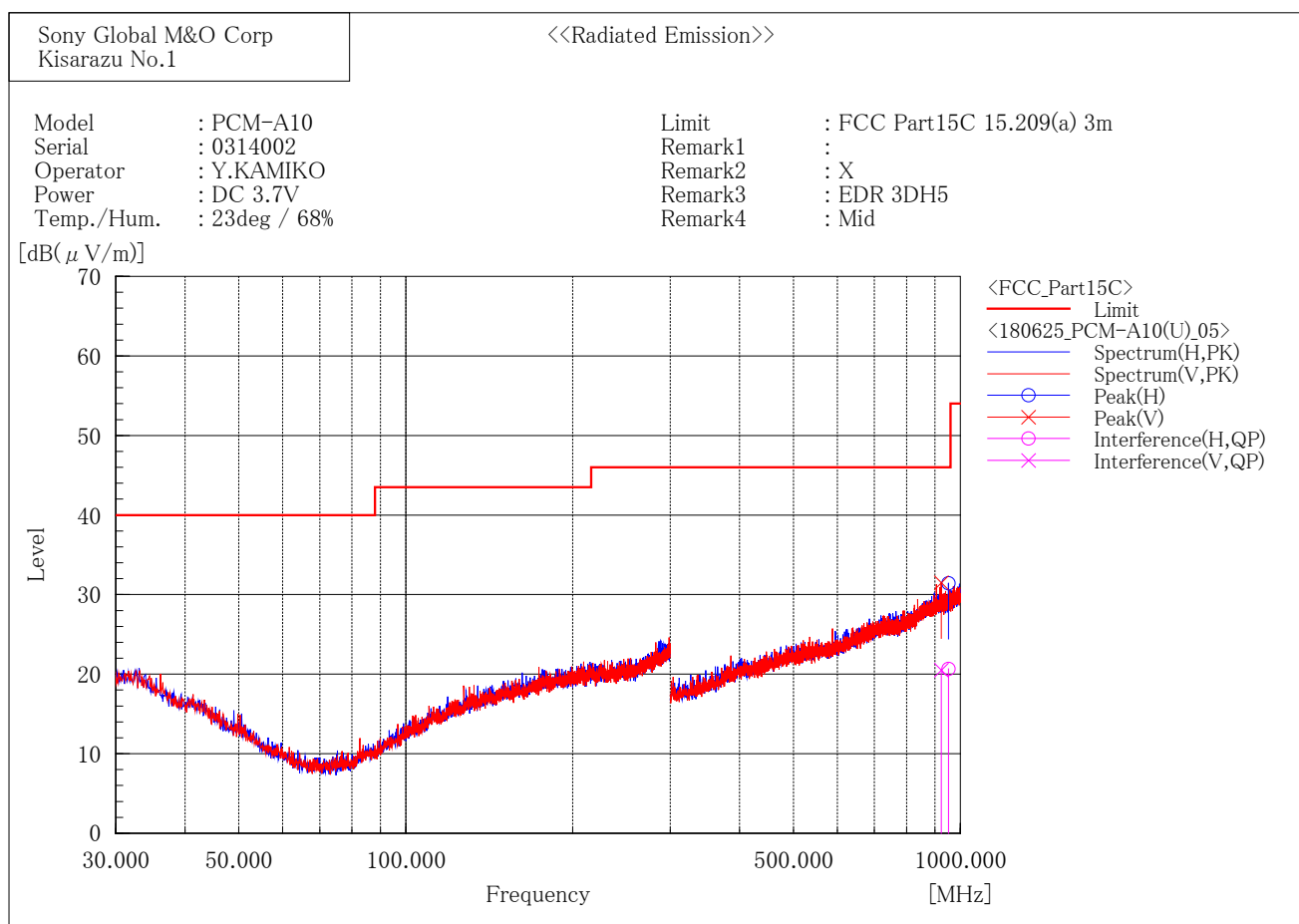
[BDR(DH5)/2480MHz]



[EDR(3DH5)/2402MHz]



[EDR(3DH5)/2441MHz]



Final Result

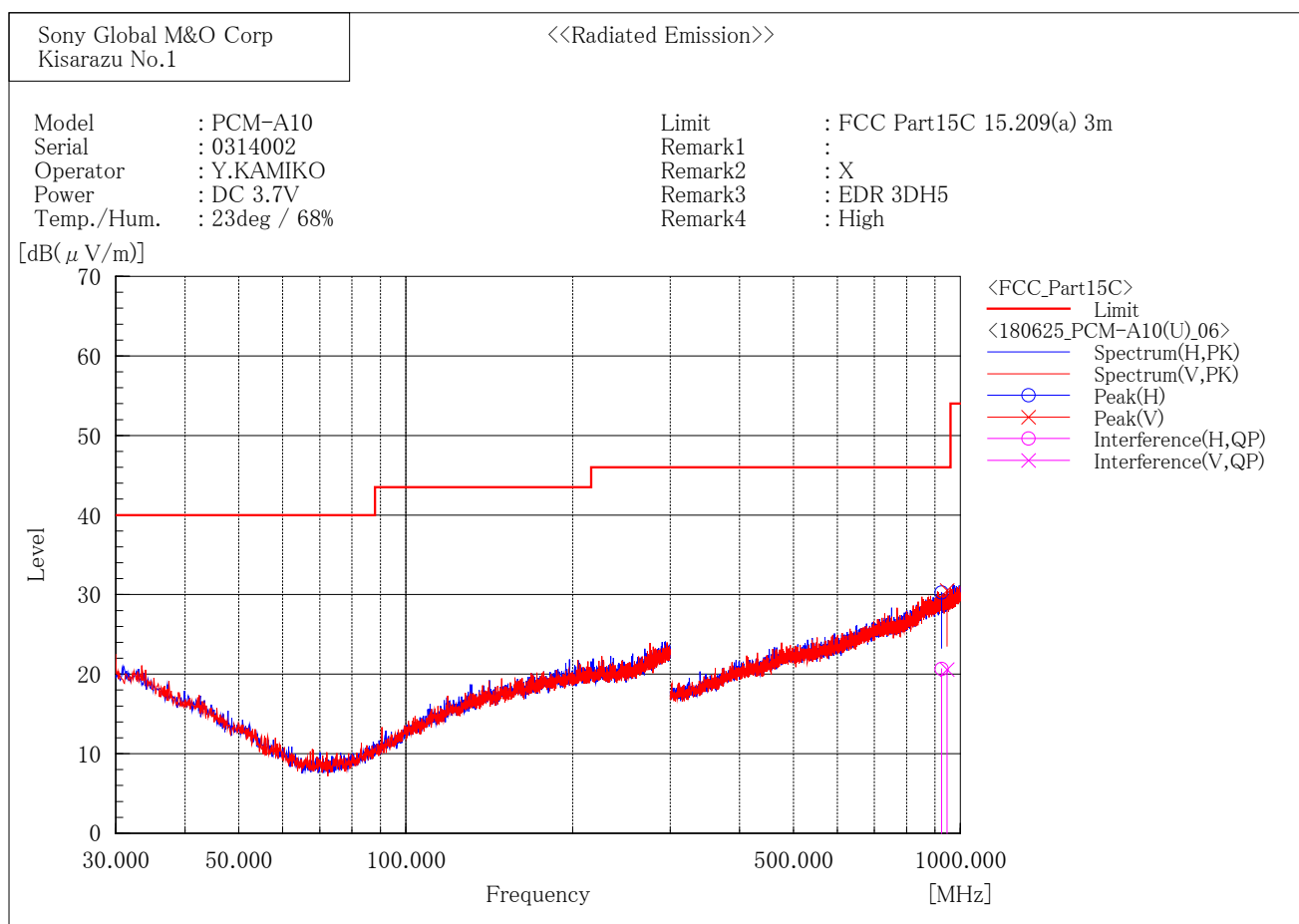
--- Horizontal Polarization (QP)---

No.	Frequency [MHz]	Reading [dB(μV)]	c.f [dB(1/m)]	Result [dB(μV/m)]	Limit [dB(μV/m)]	Margin [dB]	Height [cm]	Angle [°]
1	951.933	19.5	1.2	20.7	46.0	25.3	220.2	203.8

--- Vertical Polarization (QP)---

No.	Frequency [MHz]	Reading [dB(μV)]	c.f [dB(1/m)]	Result [dB(μV/m)]	Limit [dB(μV/m)]	Margin [dB]	Height [cm]	Angle [°]
1	923.933	19.7	0.8	20.5	46.0	25.5	131.4	309.0

[EDR(3DH5)/2480MHz]



Final Result

--- Horizontal Polarization (QP)---

No.	Frequency [MHz]	Reading [dB(μV)]	c.f [dB(1/m)]	Result [dB(μV/m)]	Limit [dB(μV/m)]	Margin [dB]	Height [cm]	Angle [°]
1	924.633	19.9	0.8	20.7	46.0	25.3	254.6	206.9

--- Vertical Polarization (QP)---

No.	Frequency [MHz]	Reading [dB(μV)]	c.f [dB(1/m)]	Result [dB(μV/m)]	Limit [dB(μV/m)]	Margin [dB]	Height [cm]	Angle [°]
1	946.333	19.5	1.1	20.6	46.0	25.4	367.8	334.8

1GHz - 6 GHz

[BDR(DH5)/2402MHz]

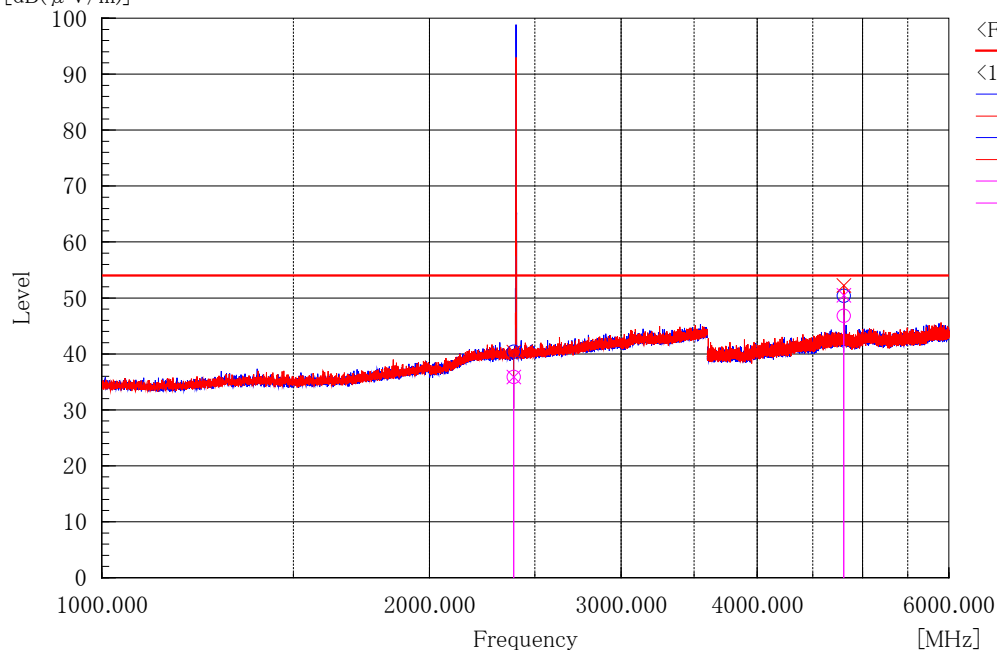
Sony Global M&O Corp
Kisarazu TEC No.1

<<Radiated Emission>>

Model : PCM-A10
 Serial : 0314002
 Operator : Y.KAMIKO
 Power : DC 3.7V
 Temp./Hum. : 23deg / 66%

Limit : FCC Part15C 15.209(a) 3m
 Remark1 :
 Remark2 : X
 Remark3 : BDR DH5
 Remark4 : Low

[dB(μV/m)]



Final Result

--- Horizontal Polarization (AV)---

No.	Frequency [MHz]	Reading [dB(μV)]	c.f [dB(1/m)]	Result [dB(μV/m)]	Limit [dB(μV/m)]	Margin [dB]	Height [cm]	Angle [°]
1	2390.000	34.4	1.5	35.9	54.0	18.1	185.0	202.3
2	4803.978	35.8	11.0	46.8	54.0	7.2	357.0	206.3

--- Vertical Polarization (AV)---

No.	Frequency [MHz]	Reading [dB(μV)]	c.f [dB(1/m)]	Result [dB(μV/m)]	Limit [dB(μV/m)]	Margin [dB]	Height [cm]	Angle [°]
1	2390.000	34.4	1.5	35.9	54.0	18.1	371.7	60.0
2	4803.987	39.5	11.0	50.5	54.0	3.5	343.0	325.8

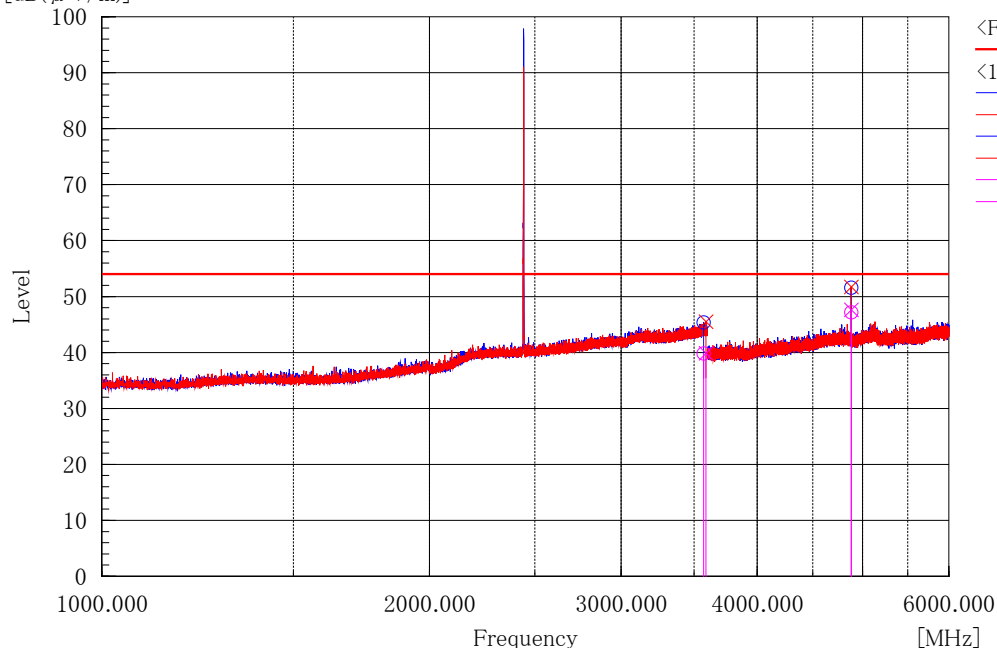
[BDR(DH5)/2441MHz]

Sony Global M&O Corp
Kisarazu TEC No.1

<<Radiated Emission>>

Model : PCM-A10
Serial : 0314002
Operator : Y.KAMIKO
Power : DC 3.7V
Temp./Hum. : 23deg / 66%Limit : FCC Part15C 15.209(a) 3m
Remark1 :
Remark2 : X
Remark3 : BDR DH5
Remark4 : Mid

[dB(μV/m)]



Final Result

--- Horizontal Polarization (AV)---

No.	Frequency [MHz]	Reading [dB(μV)]	c.f [dB(1/m)]	Result [dB(μV/m)]	Limit [dB(μV/m)]	Margin [dB]	Height [cm]	Angle [°]
1	3572.890	34.2	5.6	39.8	54.0	14.2	293.9	299.6
2	4882.018	36.5	10.7	47.2	54.0	6.8	431.0	213.9

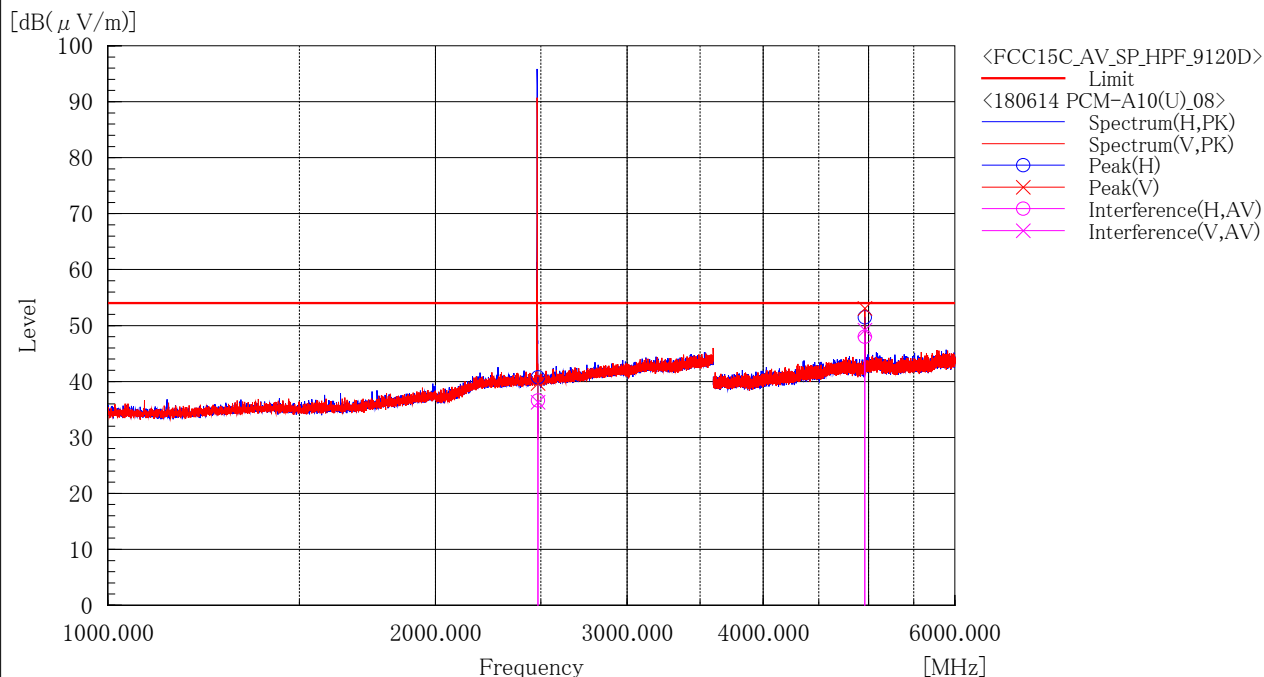
--- Vertical Polarization (AV)---

No.	Frequency [MHz]	Reading [dB(μV)]	c.f [dB(1/m)]	Result [dB(μV/m)]	Limit [dB(μV/m)]	Margin [dB]	Height [cm]	Angle [°]
1	3588.511	34.2	5.7	39.9	54.0	14.1	201.6	202.5
2	4882.022	36.9	10.7	47.6	54.0	6.4	337.8	337.4

[BDR(DH5)/2480MHz]

Sony Global M&O Corp
Kisarazu TEC No.1

<<Radiated Emission>>

Model : PCM-A10
Serial : 0314002
Operator : Y.KAMIKO
Power : DC 3.7V
Temp./Hum. : 23deg / 66%Limit : FCC Part15C 15.209(a) 3m
Remark1 :
Remark2 : X
Remark3 : BDR DH5
Remark4 : High

Final Result

--- Horizontal Polarization (AV)---

No.	Frequency [MHz]	Reading [dB(μV)]	c.f [dB(1/m)]	Result [dB(μV/m)]	Limit [dB(μV/m)]	Margin [dB]	Height [cm]	Angle [°]
1	2483.500	34.7	1.9	36.6	54.0	17.4	100.0	284.4
2	4959.995	37.0	11.0	48.0	54.0	6.0	381.5	218.6

--- Vertical Polarization (AV)---

No.	Frequency [MHz]	Reading [dB(μV)]	c.f [dB(1/m)]	Result [dB(μV/m)]	Limit [dB(μV/m)]	Margin [dB]	Height [cm]	Angle [°]
1	2483.500	34.4	1.9	36.3	54.0	17.7	293.0	257.5
2	4960.005	38.2	11.0	49.2	54.0	4.8	287.0	338.1

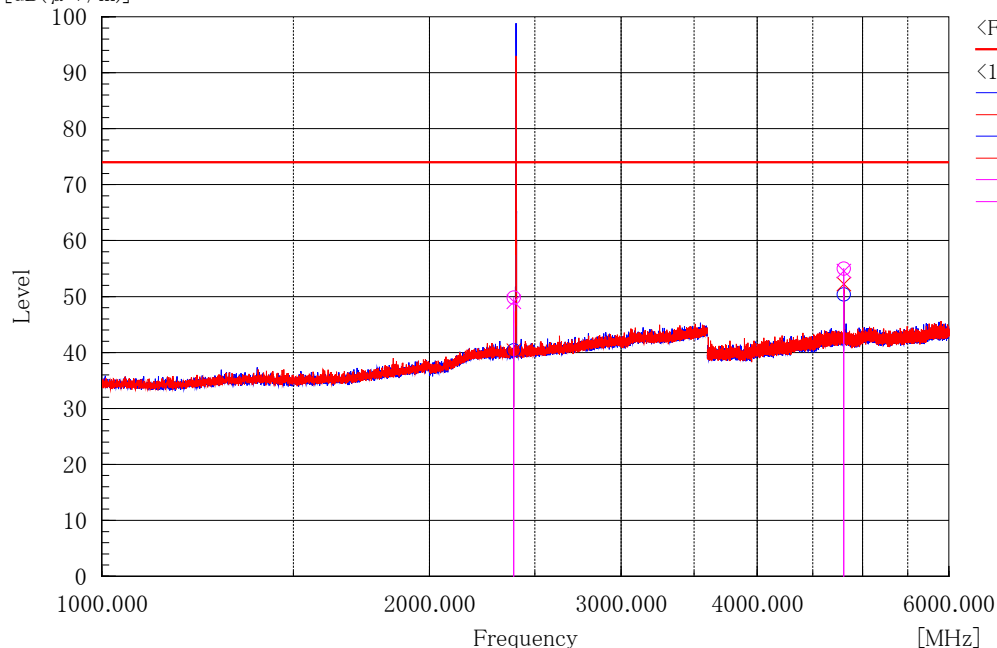
[BDR(DH5)/2402MHz]

Sony Global M&O Corp
Kisarazu TEC No.1

<<Radiated Emission>>

Model : PCM-A10
Serial : 0314002
Operator : Y.KAMIKO
Power : DC 3.7V
Temp./Hum. : 23deg / 66%Limit : FCC Part15C 15.209(a) 3m
Remark1 :
Remark2 : X
Remark3 : BDR DH5
Remark4 : Low

[dB(μV/m)]



Final Result

--- Horizontal Polarization (PK)---

No.	Frequency [MHz]	Reading [dB(μV)]	c.f [dB(1/m)]	Result [dB(μV/m)]	Limit [dB(μV/m)]	Margin [dB]	Height [cm]	Angle [°]
1	2390.000	48.3	1.5	49.8	74.0	24.2	185.0	204.2
2	4804.472	44.0	11.0	55.0	74.0	19.0	366.0	217.2

--- Vertical Polarization (PK)---

No.	Frequency [MHz]	Reading [dB(μV)]	c.f [dB(1/m)]	Result [dB(μV/m)]	Limit [dB(μV/m)]	Margin [dB]	Height [cm]	Angle [°]
1	2390.000	47.6	1.5	49.1	74.0	24.9	377.6	60.9
2	4804.432	43.6	11.0	54.6	74.0	19.4	343.7	327.5

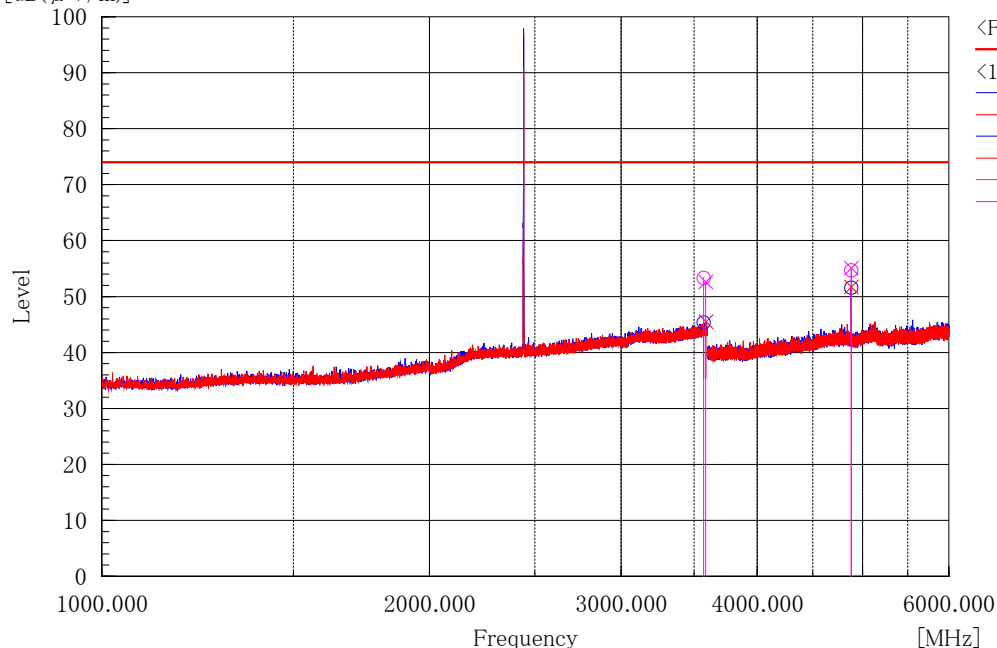
[BDR(DH5)/2441MHz]

Sony Global M&O Corp
Kisarazu TEC No.1

<<Radiated Emission>>

Model : PCM-A10
Serial : 0314002
Operator : Y.KAMIKO
Power : DC 3.7V
Temp./Hum. : 23deg / 66%Limit : FCC Part15C 15.209(a) 3m
Remark1 :
Remark2 : X
Remark3 : BDR DH5
Remark4 : Mid

[dB(μV/m)]



Final Result

--- Horizontal Polarization (PK)---

No.	Frequency [MHz]	Reading [dB(μV)]	c.f [dB(1/m)]	Result [dB(μV/m)]	Limit [dB(μV/m)]	Margin [dB]	Height [cm]	Angle [°]
1	3572.580	47.7	5.6	53.3	74.0	20.7	293.9	299.6
2	4881.829	44.0	10.7	54.7	74.0	19.3	431.0	218.3

--- Vertical Polarization (PK)---

No.	Frequency [MHz]	Reading [dB(μV)]	c.f [dB(1/m)]	Result [dB(μV/m)]	Limit [dB(μV/m)]	Margin [dB]	Height [cm]	Angle [°]
1	3588.249	46.9	5.7	52.6	74.0	21.4	201.6	204.4
2	4882.147	44.4	10.7	55.1	74.0	18.9	339.7	338.2

[BDR(DH5)/2480MHz]

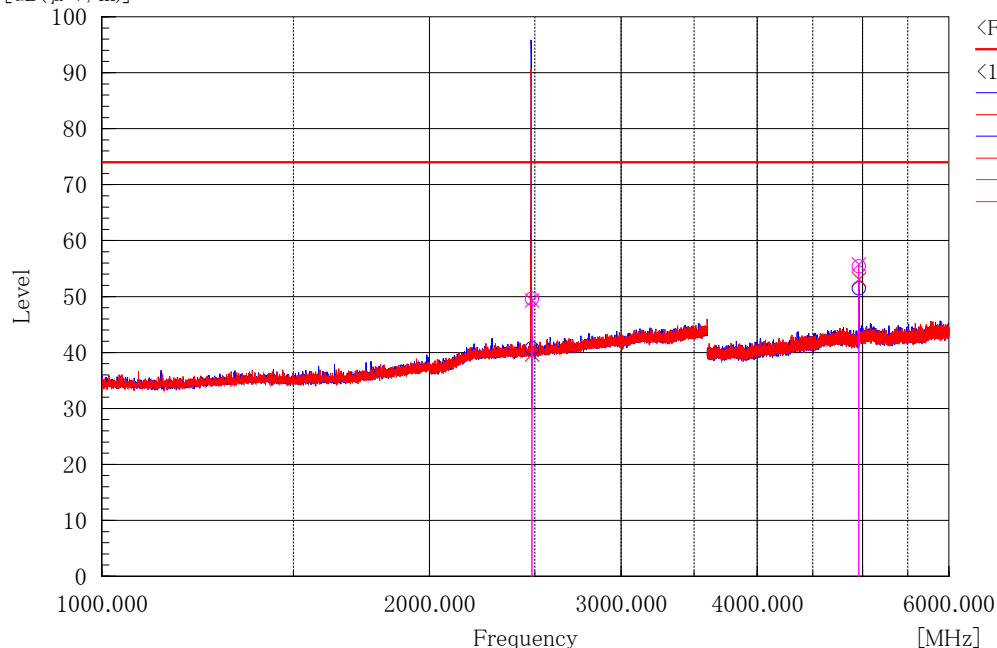
Sony Global M&O Corp
Kisarazu TEC No.1

<<Radiated Emission>>

Model : PCM-A10
 Serial : 0314002
 Operator : Y.KAMIKO
 Power : DC 3.7V
 Temp./Hum. : 23deg / 66%

Limit : FCC Part15C 15.209(a) 3m
 Remark1 :
 Remark2 : X
 Remark3 : BDR DH5
 Remark4 : High

[dB(μV/m)]



Final Result

--- Horizontal Polarization (PK)---

No.	Frequency [MHz]	Reading [dB(μV)]	c.f [dB(1/m)]	Result [dB(μV/m)]	Limit [dB(μV/m)]	Margin [dB]	Height [cm]	Angle [°]
1	2483.500	47.7	1.9	49.6	74.0	24.4	100.0	282.4
2	4959.847	44.4	11.0	55.4	74.0	18.6	381.5	218.6

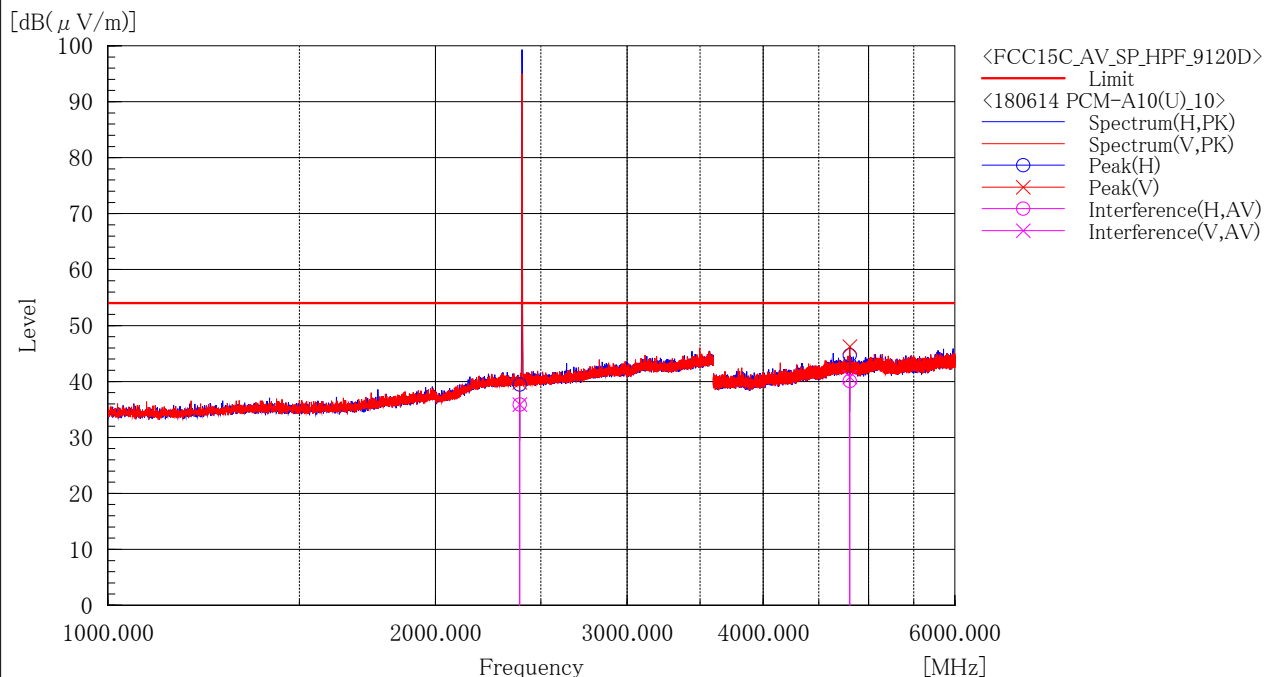
--- Vertical Polarization (PK)---

No.	Frequency [MHz]	Reading [dB(μV)]	c.f [dB(1/m)]	Result [dB(μV/m)]	Limit [dB(μV/m)]	Margin [dB]	Height [cm]	Angle [°]
1	2483.500	47.4	1.9	49.3	74.0	24.7	298.7	259.9
2	4960.236	44.8	11.0	55.8	74.0	18.2	285.0	333.1

[EDR(3DH5)/2402MHz]

Sony Global M&O Corp
Kisarazu TEC No.1

<<Radiated Emission>>

Model : PCM-A10
Serial : 0314002
Operator : Y.KAMIKO
Power : DC 3.7V
Temp./Hum. : 23deg / 66%Limit : FCC Part15C 15.209(a) 3m
Remark1 :
Remark2 : X
Remark3 : EDR 3DH5
Remark4 : Low

Final Result

--- Horizontal Polarization (AV)---

No.	Frequency [MHz]	Reading [dB(μV)]	c.f [dB(1/m)]	Result [dB(μV/m)]	Limit [dB(μV/m)]	Margin [dB]	Height [cm]	Angle [°]
1	2390.000	34.4	1.5	35.9	54.0	18.1	100.3	331.3
2	4803.996	29.1	11.0	40.1	54.0	13.9	402.0	219.4

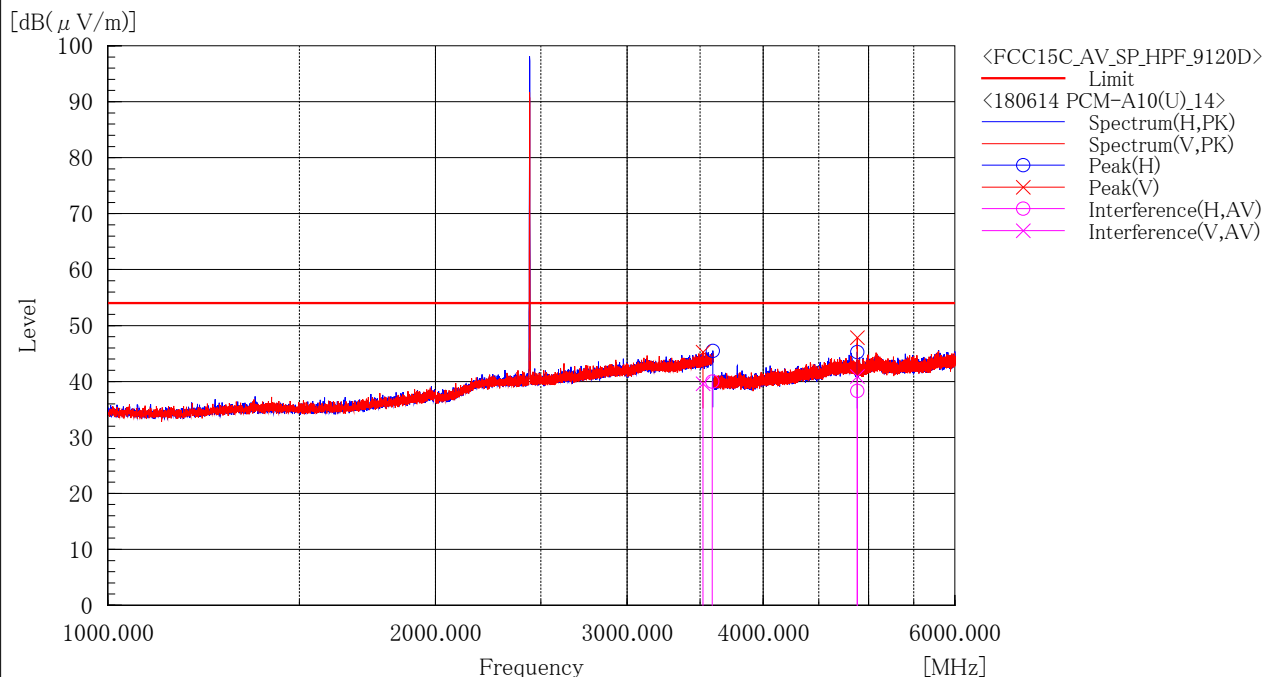
--- Vertical Polarization (AV)---

No.	Frequency [MHz]	Reading [dB(μV)]	c.f [dB(1/m)]	Result [dB(μV/m)]	Limit [dB(μV/m)]	Margin [dB]	Height [cm]	Angle [°]
1	2390.000	34.4	1.5	35.9	54.0	18.1	149.0	165.4
2	4804.045	29.8	11.0	40.8	54.0	13.2	236.0	300.9

[EDR(3DH5)/2441MHz]

Sony Global M&O Corp
Kisarazu TEC No.1

<<Radiated Emission>>

Model : PCM-A10
Serial : 0314002
Operator : Y.KAMIKO
Power : DC 3.7V
Temp./Hum. : 23deg / 66%Limit : FCC Part15C 15.209(a) 3m
Remark1 :
Remark2 : X
Remark3 : EDR 3DH5
Remark4 : Mid

Final Result

--- Horizontal Polarization (AV)---

No.	Frequency [MHz]	Reading [dB(μV)]	c.f [dB(1/m)]	Result [dB(μV/m)]	Limit [dB(μV/m)]	Margin [dB]	Height [cm]	Angle [°]
1	3592.570	34.3	5.7	40.0	54.0	14.0	268.7	174.5
2	4882.009	27.6	10.7	38.3	54.0	15.7	168.0	240.5

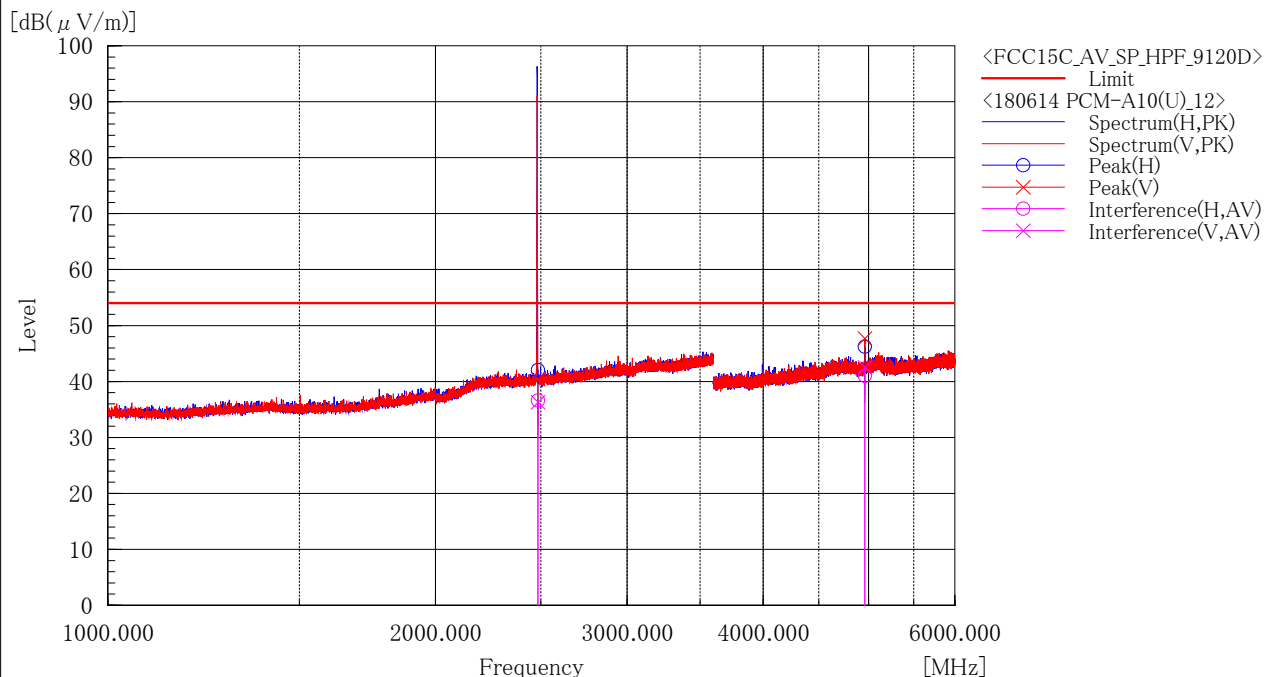
--- Vertical Polarization (AV)---

No.	Frequency [MHz]	Reading [dB(μV)]	c.f [dB(1/m)]	Result [dB(μV/m)]	Limit [dB(μV/m)]	Margin [dB]	Height [cm]	Angle [°]
1	3521.436	34.3	5.3	39.6	54.0	14.4	164.0	312.7
2	4881.970	30.2	10.7	40.9	54.0	13.1	270.9	341.8

[EDR(3DH5)/2480MHz]

Sony Global M&O Corp
Kisarazu TEC No.1

<<Radiated Emission>>

Model : PCM-A10
Serial : 0314002
Operator : Y.KAMIKO
Power : DC 3.7V
Temp./Hum. : 23deg / 66%Limit : FCC Part15C 15.209(a) 3m
Remark1 :
Remark2 : X
Remark3 : EDR 3DH5
Remark4 : High

Final Result

--- Horizontal Polarization (AV)---

No.	Frequency [MHz]	Reading [dB(μV)]	c.f [dB(1/m)]	Result [dB(μV/m)]	Limit [dB(μV/m)]	Margin [dB]	Height [cm]	Angle [°]
1	2483.500	34.7	1.9	36.6	54.0	17.4	101.0	43.8
2	4959.924	30.0	11.0	41.0	54.0	13.0	421.4	215.1

--- Vertical Polarization (AV)---

No.	Frequency [MHz]	Reading [dB(μV)]	c.f [dB(1/m)]	Result [dB(μV/m)]	Limit [dB(μV/m)]	Margin [dB]	Height [cm]	Angle [°]
1	2483.500	34.4	1.9	36.3	54.0	17.7	307.6	55.7
2	4959.984	31.5	11.0	42.5	54.0	11.5	319.1	339.5

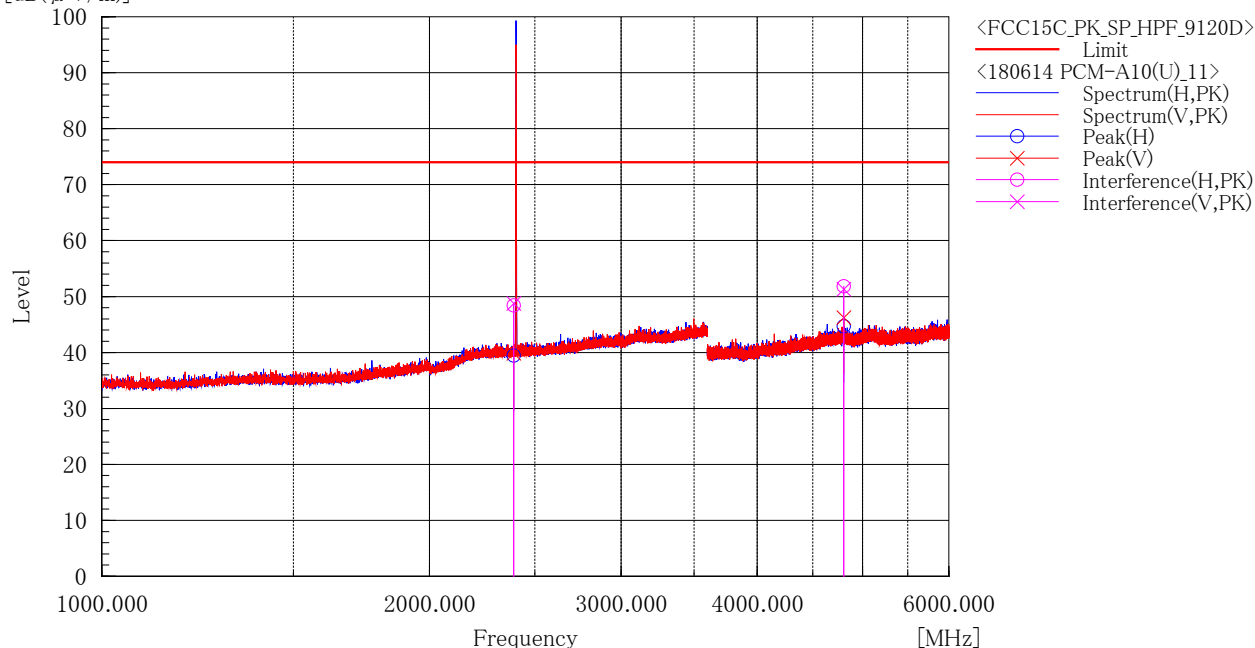
[EDR(3DH5)/2402MHz]

Sony Global M&O Corp
Kisarazu TEC No.1

<<Radiated Emission>>

Model : PCM-A10
Serial : 0314002
Operator : Y.KAMIKO
Power : DC 3.7V
Temp./Hum. : 23deg / 66%Limit : FCC Part15C 15.209(a) 3m
Remark1 :
Remark2 : X
Remark3 : EDR 3DH5
Remark4 : Low

[dB(μV/m)]



Final Result

--- Horizontal Polarization (PK)---

No.	Frequency [MHz]	Reading [dB(μV)]	c.f [dB(1/m)]	Result [dB(μV/m)]	Limit [dB(μV/m)]	Margin [dB]	Height [cm]	Angle [°]
1	2390.000	46.9	1.5	48.4	74.0	25.6	100.3	336.4
2	4804.505	40.8	11.0	51.8	74.0	22.2	402.0	219.4

--- Vertical Polarization (PK)---

No.	Frequency [MHz]	Reading [dB(μV)]	c.f [dB(1/m)]	Result [dB(μV/m)]	Limit [dB(μV/m)]	Margin [dB]	Height [cm]	Angle [°]
1	2390.000	47.3	1.5	48.8	74.0	25.2	157.3	178.5
2	4804.066	40.3	11.0	51.3	74.0	22.7	231.5	314.0

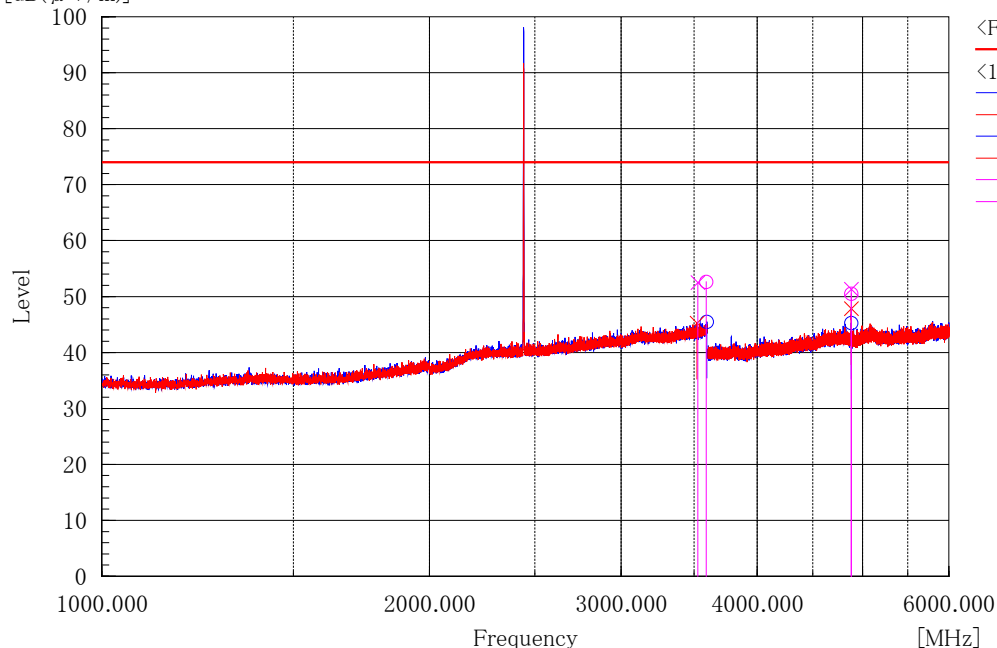
[EDR(3DH5)/2441MHz]

Sony Global M&O Corp
Kisarazu TEC No.1

<<Radiated Emission>>

Model : PCM-A10
Serial : 0314002
Operator : Y.KAMIKO
Power : DC 3.7V
Temp./Hum. : 23deg / 66%Limit : FCC Part15C 15.209(a) 3m
Remark1 :
Remark2 : X
Remark3 : EDR 3DH5
Remark4 : Mid

[dB(μV/m)]



Final Result

--- Horizontal Polarization (PK)---

No.	Frequency [MHz]	Reading [dB(μV)]	c.f [dB(1/m)]	Result [dB(μV/m)]	Limit [dB(μV/m)]	Margin [dB]	Height [cm]	Angle [°]
1	3592.550	46.9	5.7	52.6	74.0	21.4	268.7	187.5
2	4882.226	39.8	10.7	50.5	74.0	23.5	168.0	240.5

--- Vertical Polarization (PK)---

No.	Frequency [MHz]	Reading [dB(μV)]	c.f [dB(1/m)]	Result [dB(μV/m)]	Limit [dB(μV/m)]	Margin [dB]	Height [cm]	Angle [°]
1	3528.433	47.1	5.4	52.5	74.0	21.5	162.1	318.2
2	4881.949	40.6	10.7	51.3	74.0	22.7	276.0	351.7

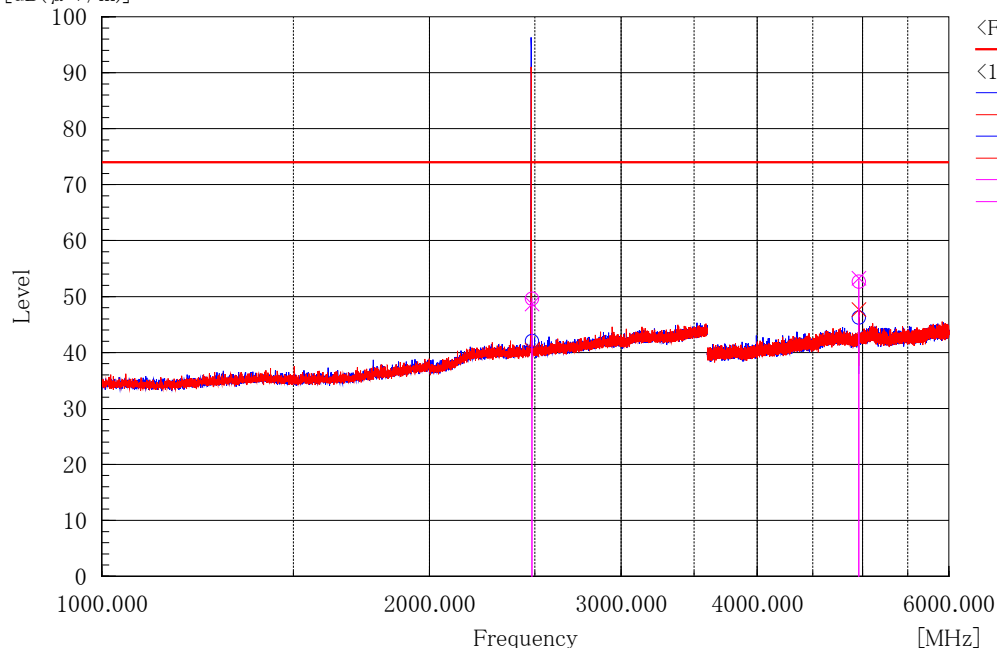
[EDR(3DH5)/2480MHz]

Sony Global M&O Corp
Kisarazu TEC No.1

<<Radiated Emission>>

Model : PCM-A10
Serial : 0314002
Operator : Y.KAMIKO
Power : DC 3.7V
Temp./Hum. : 23deg / 66%Limit : FCC Part15C 15.209(a) 3m
Remark1 :
Remark2 : X
Remark3 : EDR 3DH5
Remark4 : High

[dB(μV/m)]



Final Result

--- Horizontal Polarization (PK)---

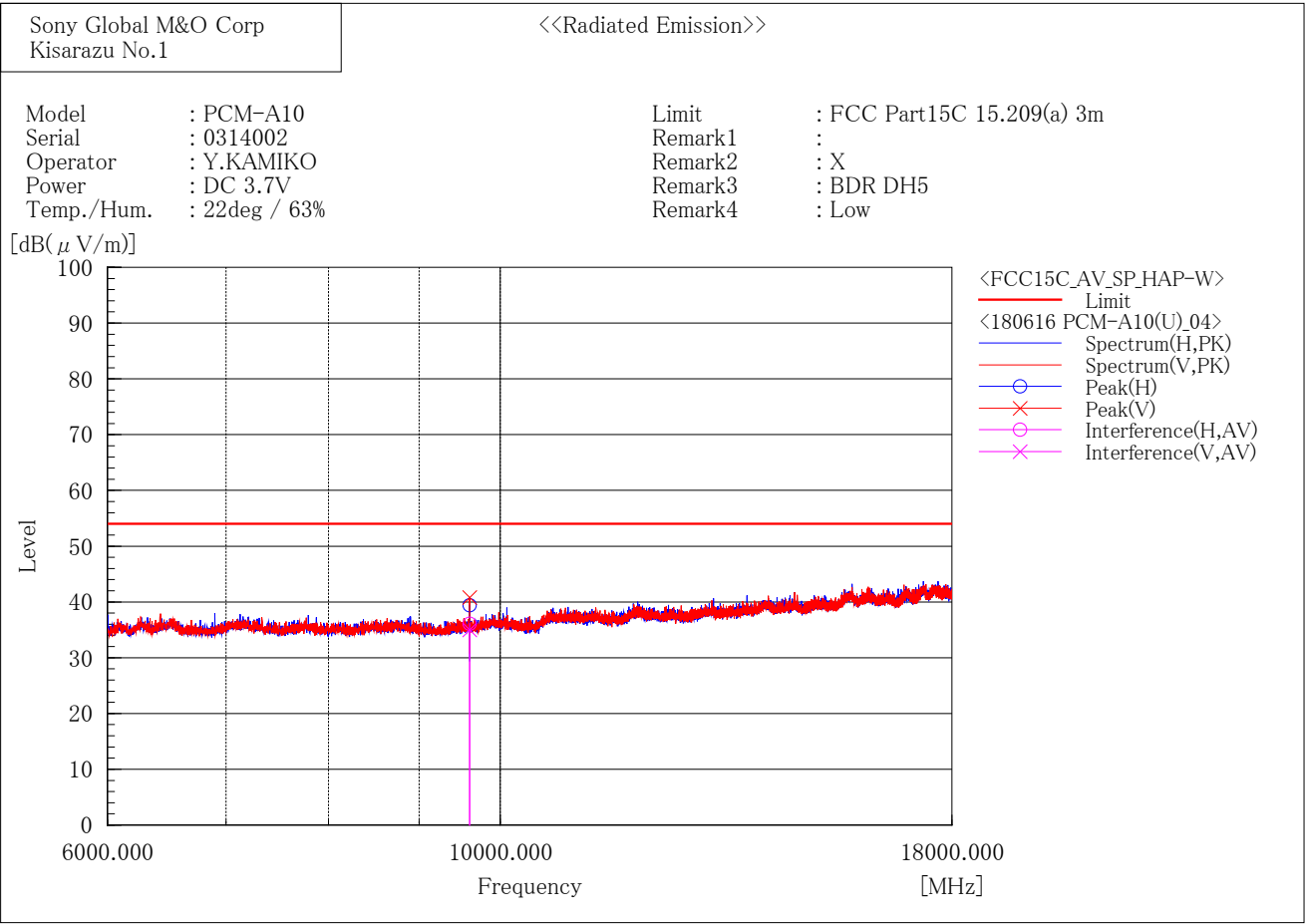
No.	Frequency [MHz]	Reading [dB(μV)]	c.f [dB(1/m)]	Result [dB(μV/m)]	Limit [dB(μV/m)]	Margin [dB]	Height [cm]	Angle [°]
1	2483.500	47.7	1.9	49.6	74.0	24.4	107.0	59.4
2	4959.536	41.7	11.0	52.7	74.0	21.3	421.4	215.1

--- Vertical Polarization (PK)---

No.	Frequency [MHz]	Reading [dB(μV)]	c.f [dB(1/m)]	Result [dB(μV/m)]	Limit [dB(μV/m)]	Margin [dB]	Height [cm]	Angle [°]
1	2483.500	46.8	1.9	48.7	74.0	25.3	311.4	66.5
2	4959.515	42.3	11.0	53.3	74.0	20.7	318.0	345.5

6 GHz - 18 GHz

[BDR(DH5)/2402MHz]



Final Result

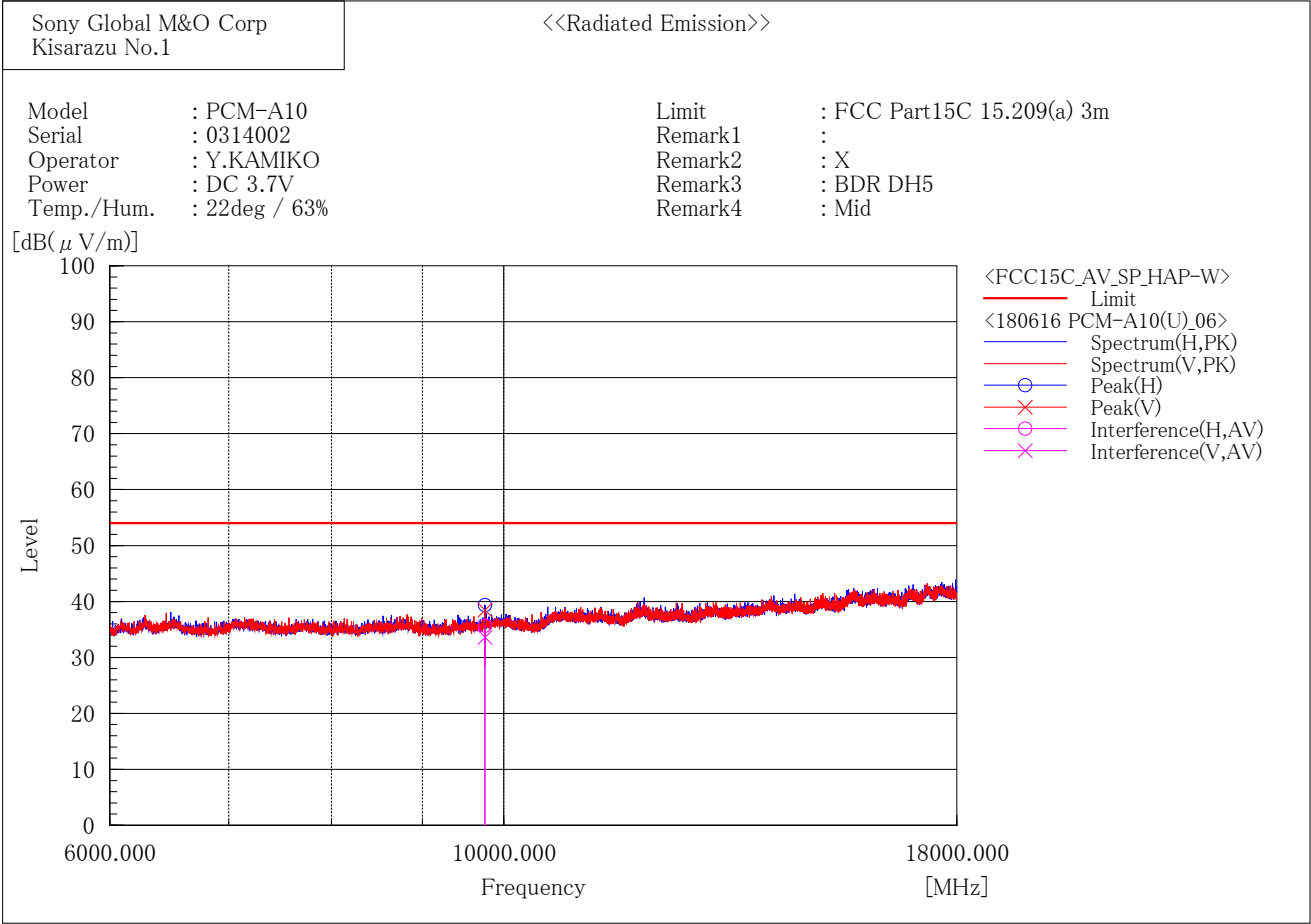
--- Horizontal Polarization (AV) ---

No.	Frequency [MHz]	Reading [dB(μV)]	c. f [dB(1/m)]	Result [dB(μV/m)]	Limit [dB(μV/m)]	Margin [dB]	Height [cm]	Angle [°]
1	9609.990	42.8	-6.7	36.1	54.0	17.9	100.0	268.8

--- Vertical Polarization (AV) ---

No.	Frequency [MHz]	Reading [dB(μV)]	c. f [dB(1/m)]	Result [dB(μV/m)]	Limit [dB(μV/m)]	Margin [dB]	Height [cm]	Angle [°]
1	9609.953	41.7	-6.7	35.0	54.0	19.0	147.0	12.9

[BDR(DH5)/2441MHz]



Final Result

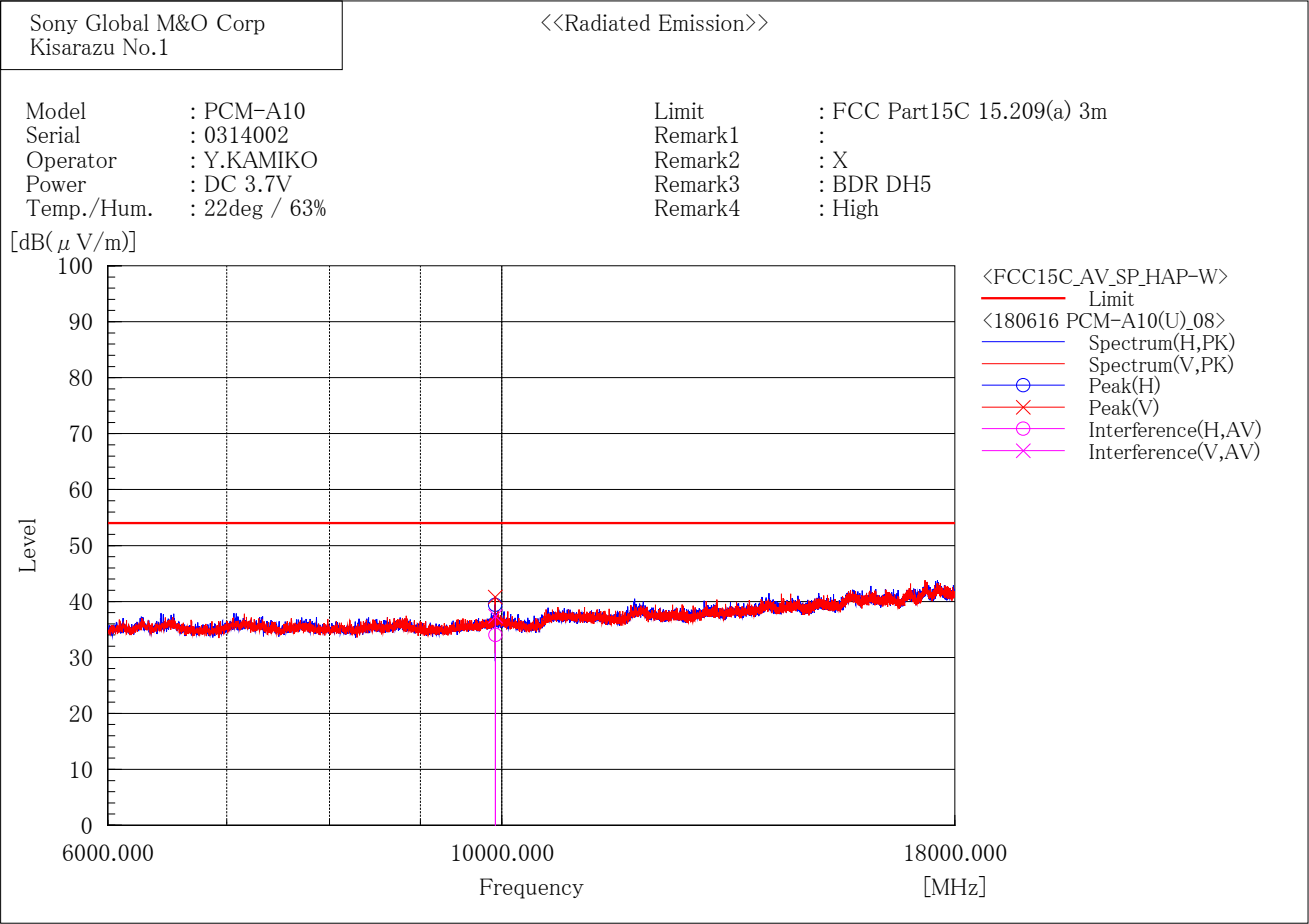
--- Horizontal Polarization (AV)---

No.	Frequency [MHz]	Reading [dB(μV)]	c.f [dB(1/m)]	Result [dB(μV/m)]	Limit [dB(μV/m)]	Margin [dB]	Height [cm]	Angle [°]
1	9762.001	41.8	-6.1	35.7	54.0	18.3	100.0	271.5

--- Vertical Polarization (AV)---

No.	Frequency [MHz]	Reading [dB(μV)]	c.f [dB(1/m)]	Result [dB(μV/m)]	Limit [dB(μV/m)]	Margin [dB]	Height [cm]	Angle [°]
1	9761.967	39.7	-6.1	33.6	54.0	20.4	217.0	140.2

[BDR(DH5)/2480MHz]



Final Result

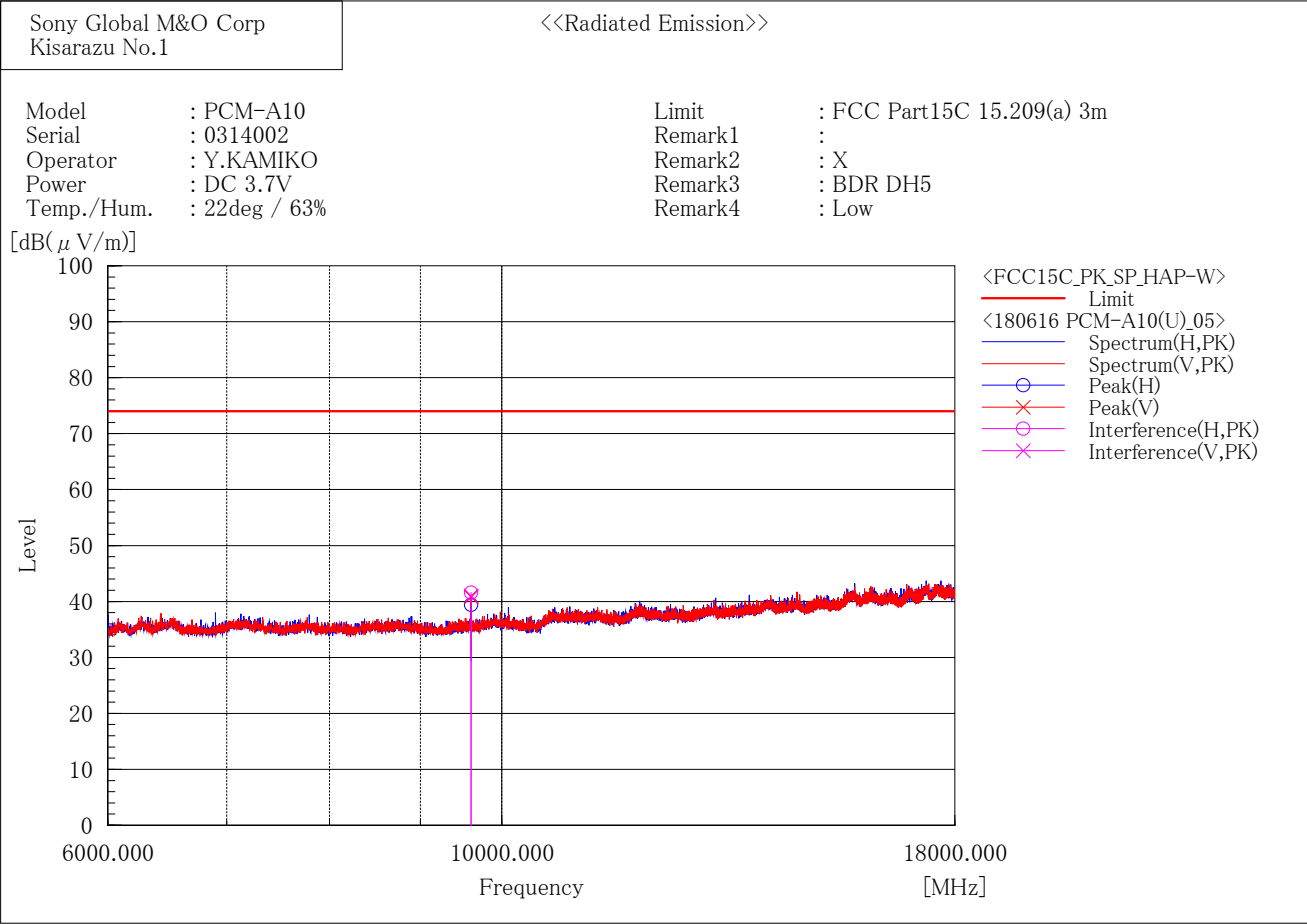
--- Horizontal Polarization (AV)---

No.	Frequency [MHz]	Reading [dB(μ V)]	c.f [dB(1/m)]	Result [dB(μ V/m)]	Limit [dB(μ V/m)]	Margin [dB]	Height [cm]	Angle [°]
1	9917.971	39.2	-5.2	34.0	54.0	20.0	100.0	7.8

--- Vertical Polarization (AV)---

No.	Frequency [MHz]	Reading [dB(μ V)]	c.f [dB(1/m)]	Result [dB(μ V/m)]	Limit [dB(μ V/m)]	Margin [dB]	Height [cm]	Angle [°]
1	9917.990	42.6	-5.2	37.4	54.0	16.6	234.0	166.7

[BDR(DH5)/2402MHz]



Final Result

--- Horizontal Polarization (PK)---

No.	Frequency [MHz]	Reading [dB(μ V)]	c.f [dB(1/m)]	Result [dB(μ V/m)]	Limit [dB(μ V/m)]	Margin [dB]	Height [cm]	Angle [°]
1	9610.175	48.3	-6.7	41.6	74.0	32.4	101.0	273.0

--- Vertical Polarization (PK)---

No.	Frequency [MHz]	Reading [dB(μ V)]	c.f [dB(1/m)]	Result [dB(μ V/m)]	Limit [dB(μ V/m)]	Margin [dB]	Height [cm]	Angle [°]
1	9609.891	47.7	-6.7	41.0	74.0	33.0	159.0	13.2

[BDR(DH5)/2441MHz]

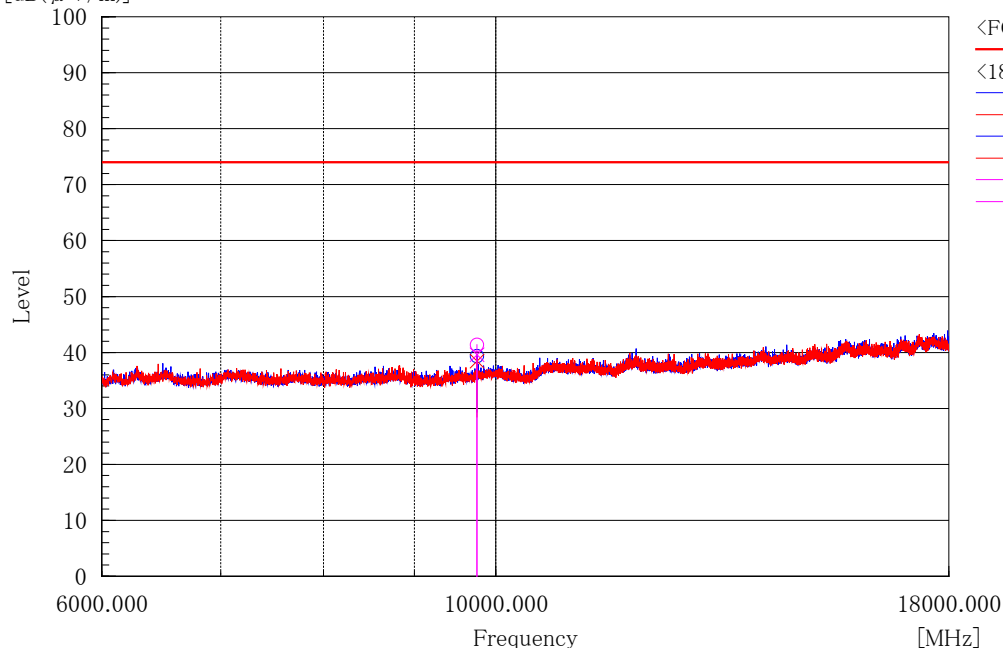
Sony Global M&O Corp
Kisarazu No.1

<<Radiated Emission>>

Model : PCM-A10
 Serial : 0314002
 Operator : Y.KAMIKO
 Power : DC 3.7V
 Temp./Hum. : 22deg / 63%

Limit : FCC Part15C 15.209(a) 3m
 Remark1 :
 Remark2 : X
 Remark3 : BDR DH5
 Remark4 : Mid

[dB(μV/m)]



Final Result

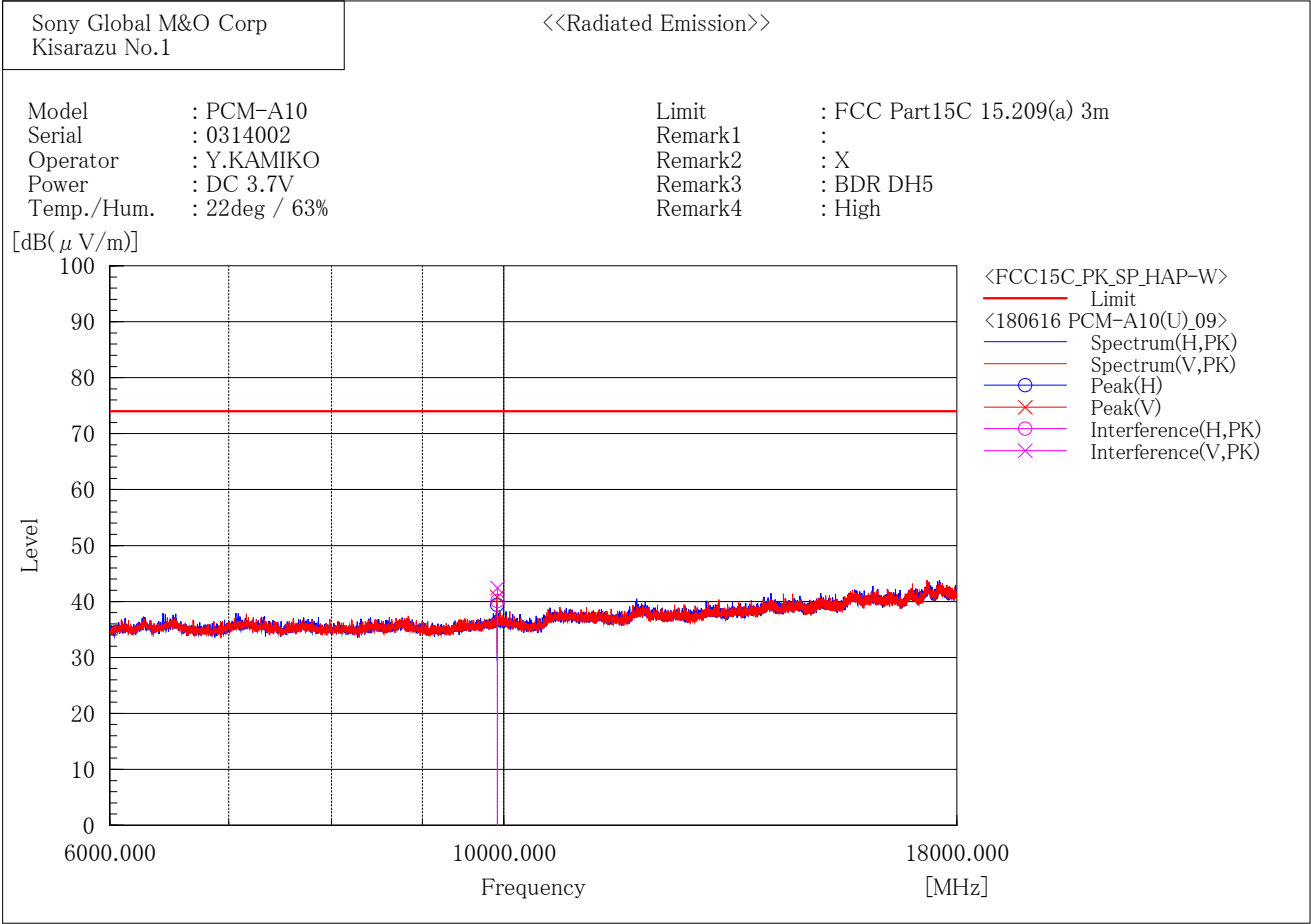
--- Horizontal Polarization (PK)---

No.	Frequency [MHz]	Reading [dB(μV)]	c.f [dB(1/m)]	Result [dB(μV/m)]	Limit [dB(μV/m)]	Margin [dB]	Height [cm]	Angle [°]
1	9762.234	47.5	-6.1	41.4	74.0	32.6	110.6	270.7

--- Vertical Polarization (PK)---

No.	Frequency [MHz]	Reading [dB(μV)]	c.f [dB(1/m)]	Result [dB(μV/m)]	Limit [dB(μV/m)]	Margin [dB]	Height [cm]	Angle [°]
1	9761.962	45.7	-6.1	39.6	74.0	34.4	214.0	141.4

[BDR(DH5)/2480MHz]



[EDR(3DH5)/2402MHz]

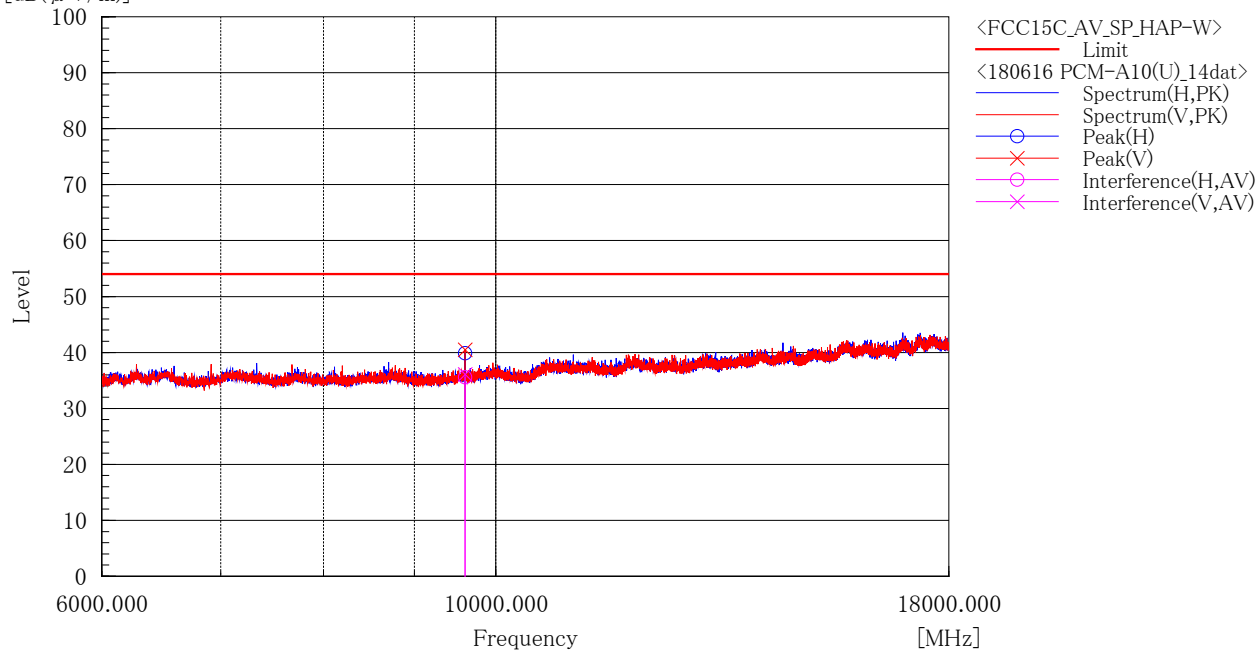
Sony Global M&O Corp
Kisarazu No.1

<<Radiated Emission>>

Model : PCM-A10
 Serial : 0314002
 Operator : Y.KAMIKO
 Power : DC 3.7V
 Temp./Hum. : 22deg / 63%

Limit : FCC Part15C 15.209(a) 3m
 Remark1 :
 Remark2 : X
 Remark3 : EDR 3DH5
 Remark4 : Low

[dB(μV/m)]



Final Result

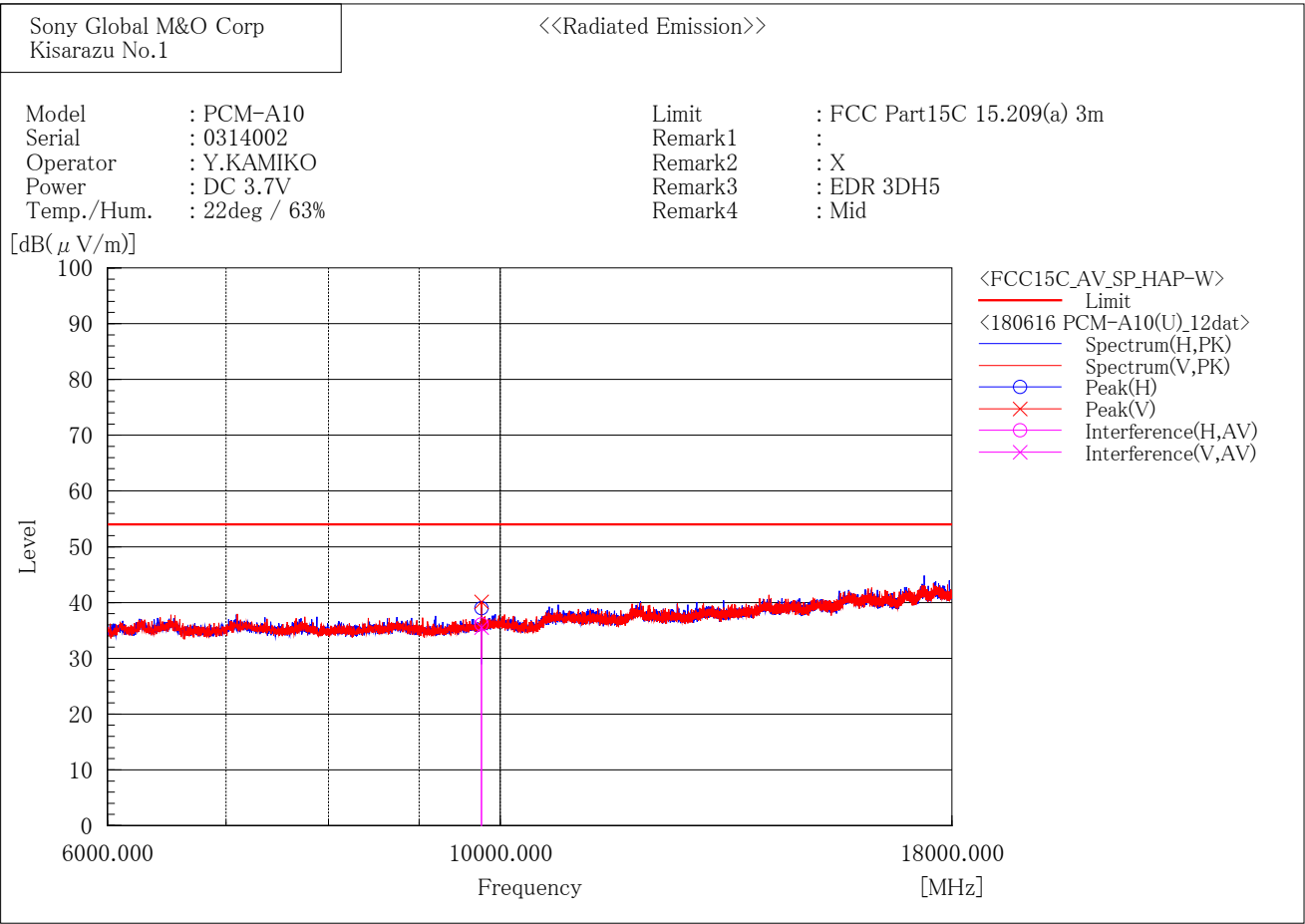
--- Horizontal Polarization (AV)---

No.	Frequency [MHz]	Reading [dB(μV)]	c.f [dB(1/m)]	Result [dB(μV/m)]	Limit [dB(μV/m)]	Margin [dB]	Height [cm]	Angle [°]
1	9610.013	42.3	-6.7	35.6	54.0	18.4	103.0	269.7

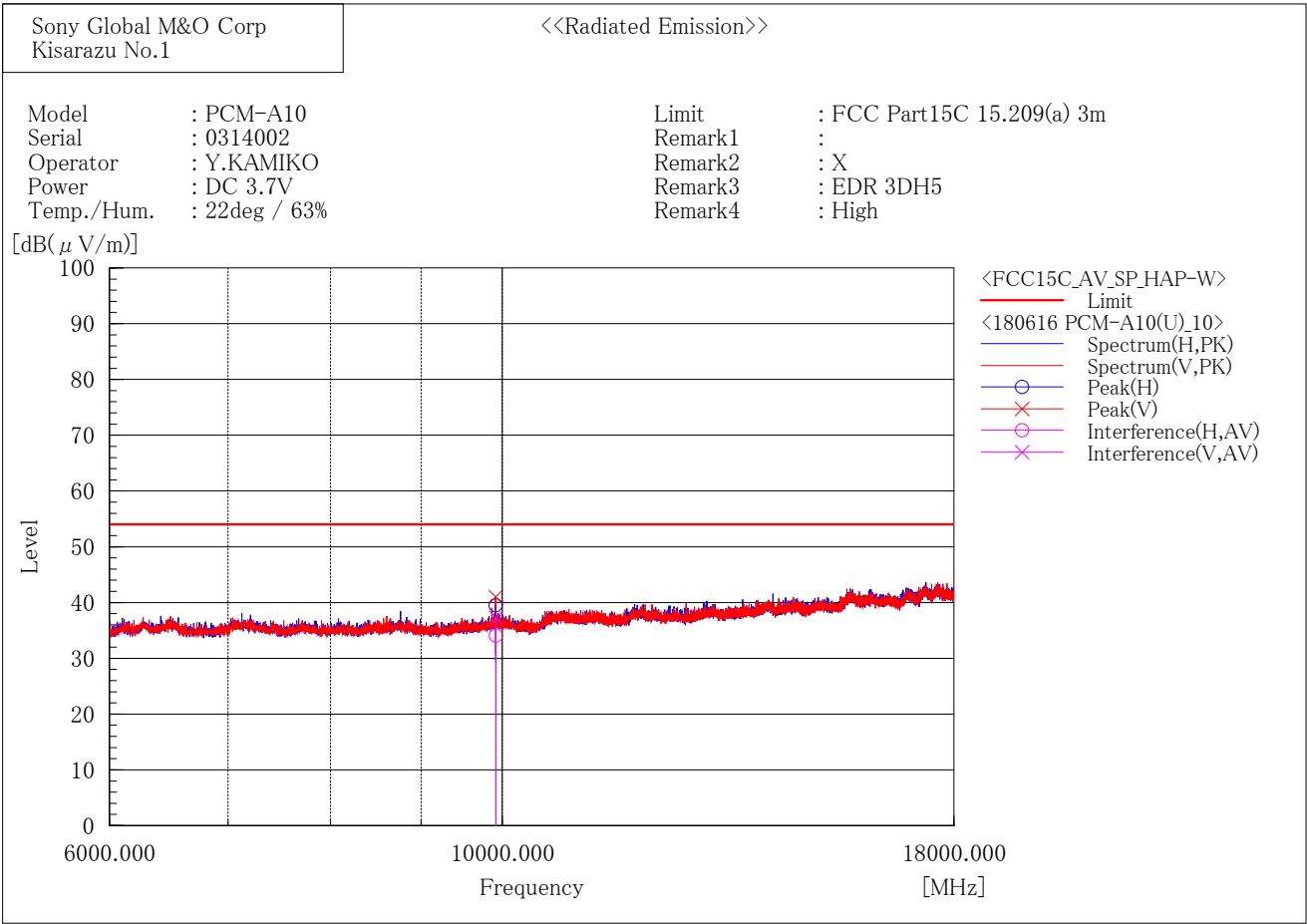
--- Vertical Polarization (AV)---

No.	Frequency [MHz]	Reading [dB(μV)]	c.f [dB(1/m)]	Result [dB(μV/m)]	Limit [dB(μV/m)]	Margin [dB]	Height [cm]	Angle [°]
1	9609.971	42.8	-6.7	36.1	54.0	17.9	101.1	270.5

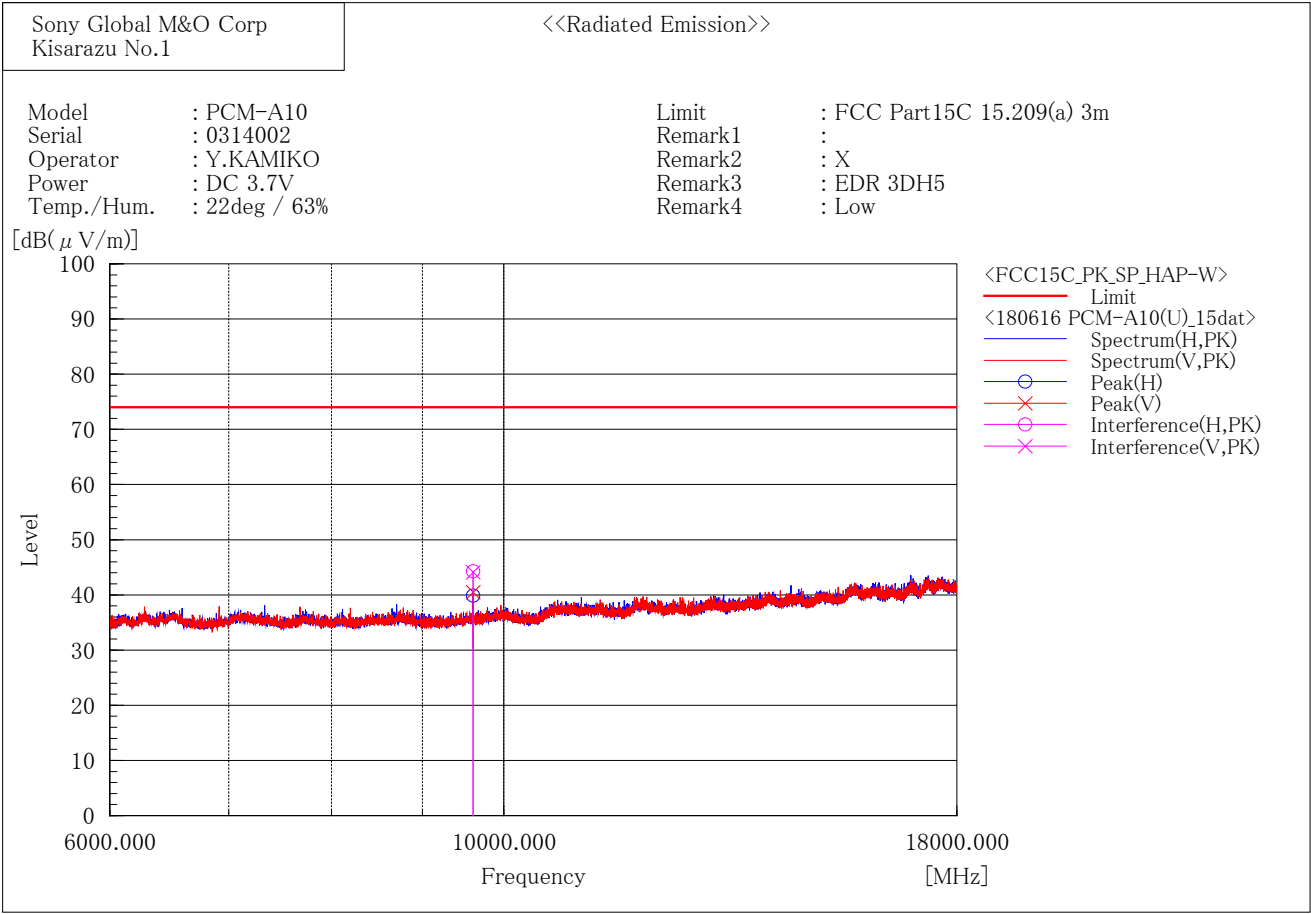
[EDR(3DH5)/2441MHz]



[EDR(3DH5)/2480MHz]



[EDR(3DH5)/2402MHz]



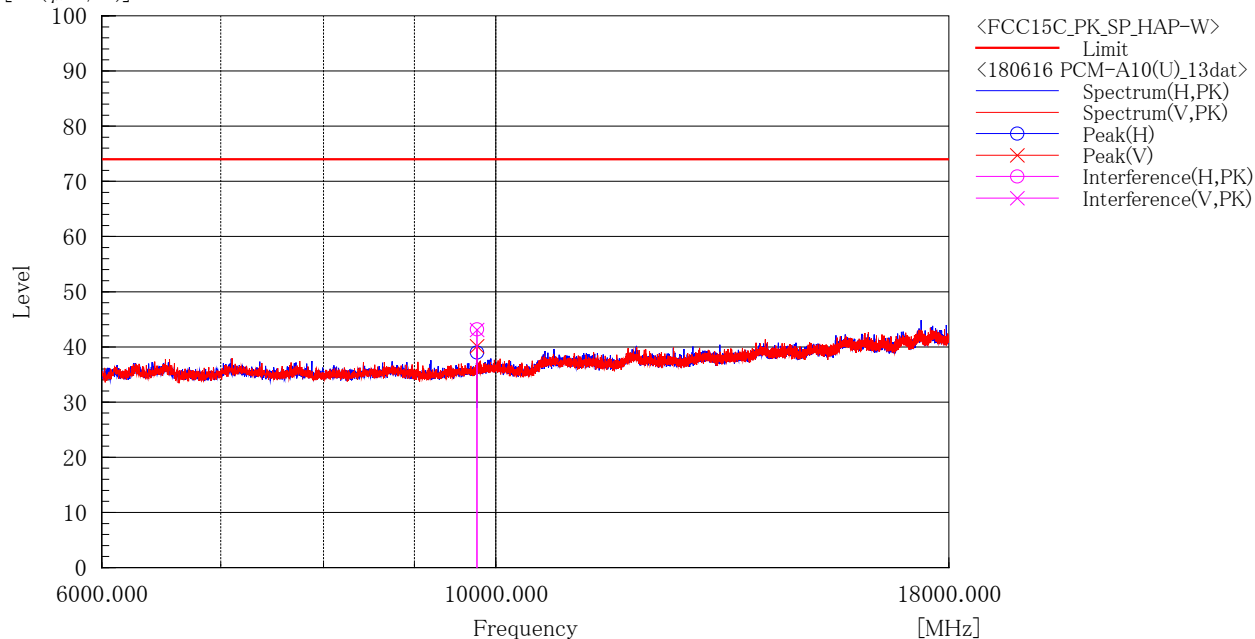
[EDR(3DH5)/2441MHz]

Sony Global M&O Corp
Kisarazu No.1

<<Radiated Emission>>

Model : PCM-A10
 Serial : 0314002
 Operator : Y.KAMIKO
 Power : DC 3.7V
 Temp./Hum. : 22deg / 63%

Limit : FCC Part15C 15.209(a) 3m
 Remark1 :
 Remark2 : X
 Remark3 : EDR 3DH5
 Remark4 : Mid

[dB(μ V/m)]

Final Result

--- Horizontal Polarization (PK)---

No.	Frequency [MHz]	Reading [dB(μ V)]	c. f [dB(1/m)]	Result [dB(μ V/m)]	Limit [dB(μ V/m)]	Margin [dB]	Height [cm]	Angle [°]
1	9762.166	49.3	-6.1	43.2	74.0	30.8	109.0	272.3

--- Vertical Polarization (PK)---

No.	Frequency [MHz]	Reading [dB(μ V)]	c. f [dB(1/m)]	Result [dB(μ V/m)]	Limit [dB(μ V/m)]	Margin [dB]	Height [cm]	Angle [°]
1	9762.158	49.2	-6.1	43.1	74.0	30.9	189.0	11.1

[EDR(3DH5)/2480MHz]

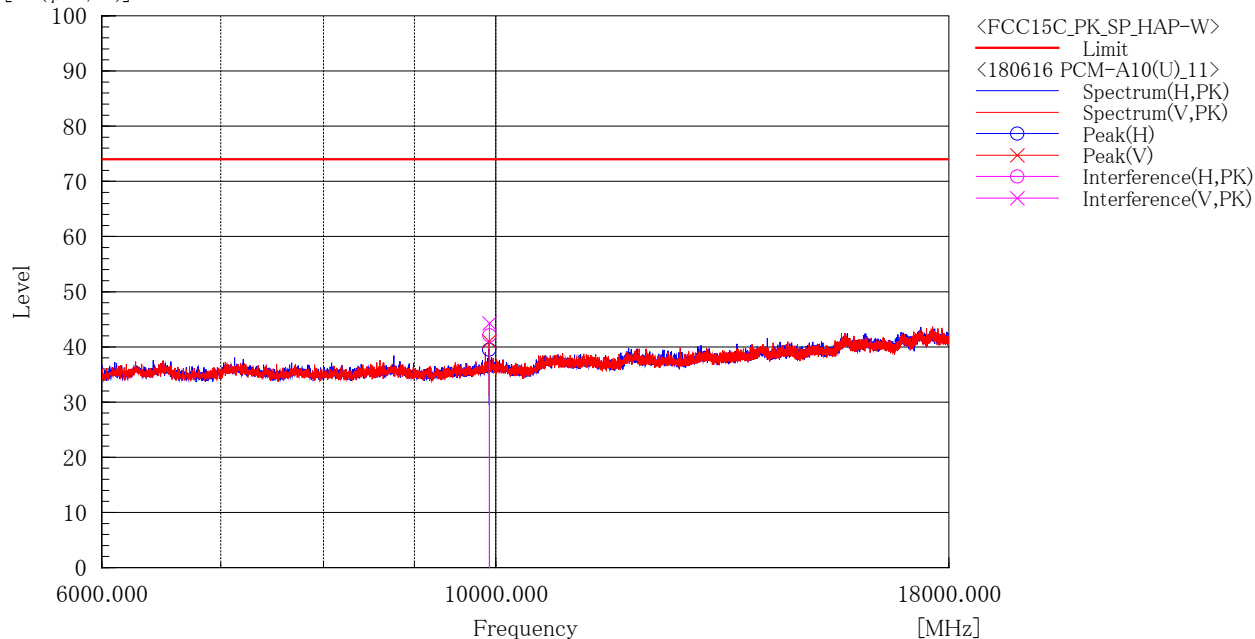
Sony Global M&O Corp
Kisarazu No.1

<<Radiated Emission>>

Model : PCM-A10
 Serial : 0314002
 Operator : Y.KAMIKO
 Power : DC 3.7V
 Temp./Hum. : 22deg / 63%

Limit : FCC Part15C 15.209(a) 3m
 Remark1 :
 Remark2 : X
 Remark3 : EDR 3DH5
 Remark4 : High

[dB(μV/m)]



Final Result

--- Horizontal Polarization (PK)---

No.	Frequency [MHz]	Reading [dB(μV)]	c.f [dB(1/m)]	Result [dB(μV/m)]	Limit [dB(μV/m)]	Margin [dB]	Height [cm]	Angle [°]
1	9917.968	47.3	-5.2	42.1	74.0	31.9	152.0	210.4

--- Vertical Polarization (PK)---

No.	Frequency [MHz]	Reading [dB(μV)]	c.f [dB(1/m)]	Result [dB(μV/m)]	Limit [dB(μV/m)]	Margin [dB]	Height [cm]	Angle [°]
1	9917.736	49.5	-5.2	44.3	74.0	29.7	246.0	169.2

18 GHz - 25 GHz

[BDR(DH5)/2402MHz]

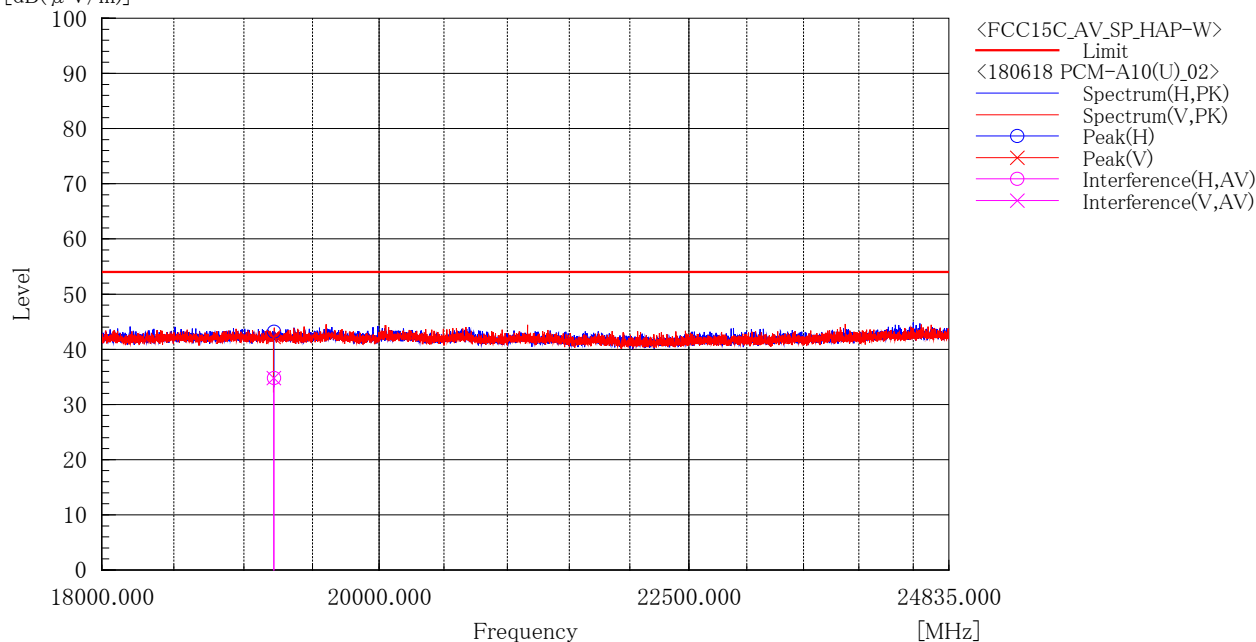
Sony Global M&O Corp
Kisarazu No.1

<<Radiated Emission>>

Model : PCM-A10
 Serial : 0314002
 Operator : Y.MORIMOTO
 Power : DC 3.7V
 Temp./Hum. : 22deg / 65%

Limit : FCC Part15C 15.209(a) 3m
 Remark1 :
 Remark2 : X
 Remark3 : BDR DH5
 Remark4 : Low

[dB(μV/m)]



Final Result

--- Horizontal Polarization (AV)---

No.	Frequency [MHz]	Reading [dB(μV)]	c.f [dB(1/m)]	Result [dB(μV/m)]	Limit [dB(μV/m)]	Margin [dB]	Height [cm]	Angle [°]
1	19217.388	29.4	5.4	34.8	54.0	19.2	131.6	215.0

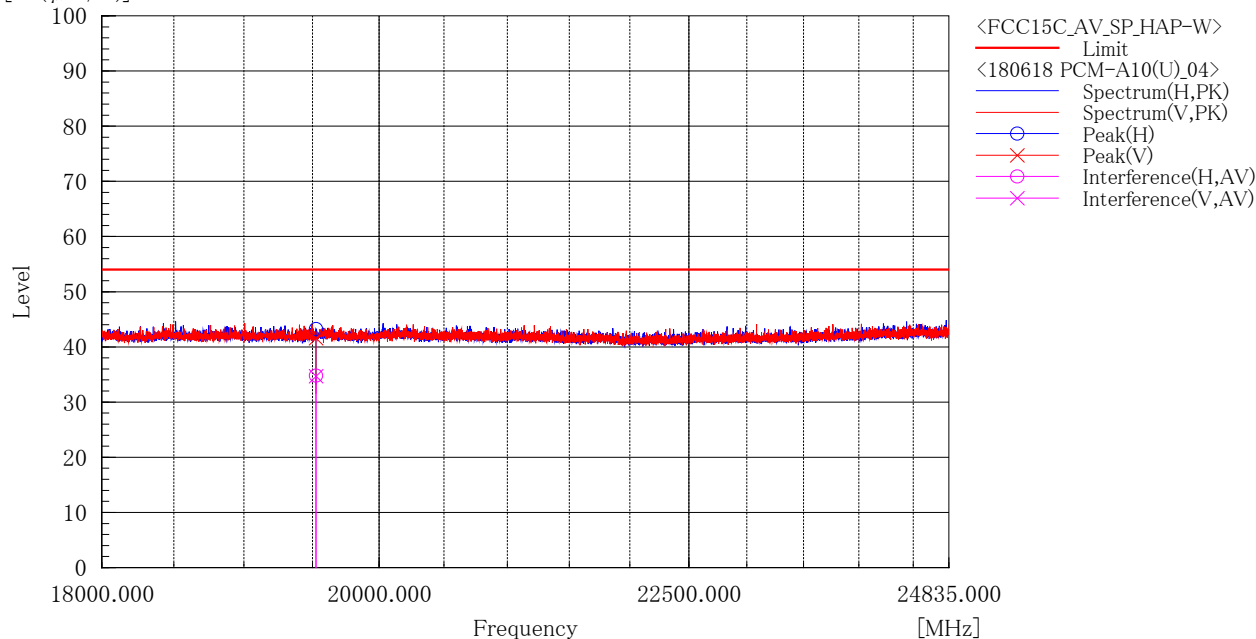
--- Vertical Polarization (AV)---

No.	Frequency [MHz]	Reading [dB(μV)]	c.f [dB(1/m)]	Result [dB(μV/m)]	Limit [dB(μV/m)]	Margin [dB]	Height [cm]	Angle [°]
1	19215.492	29.4	5.4	34.8	54.0	19.2	133.7	311.4

[BDR(DH5)/2441MHz]

Sony Global M&O Corp
Kisarazu No.1

<<Radiated Emission>>

Model : PCM-A10
Serial : 0314002
Operator : Y.MORIMOTO
Power : DC 3.7V
Temp./Hum. : 22deg / 65%Limit : FCC Part15C 15.209(a) 3m
Remark1 :
Remark2 : X
Remark3 : BDR DH5
Remark4 : Mid[dB(μ V/m)]

Final Result

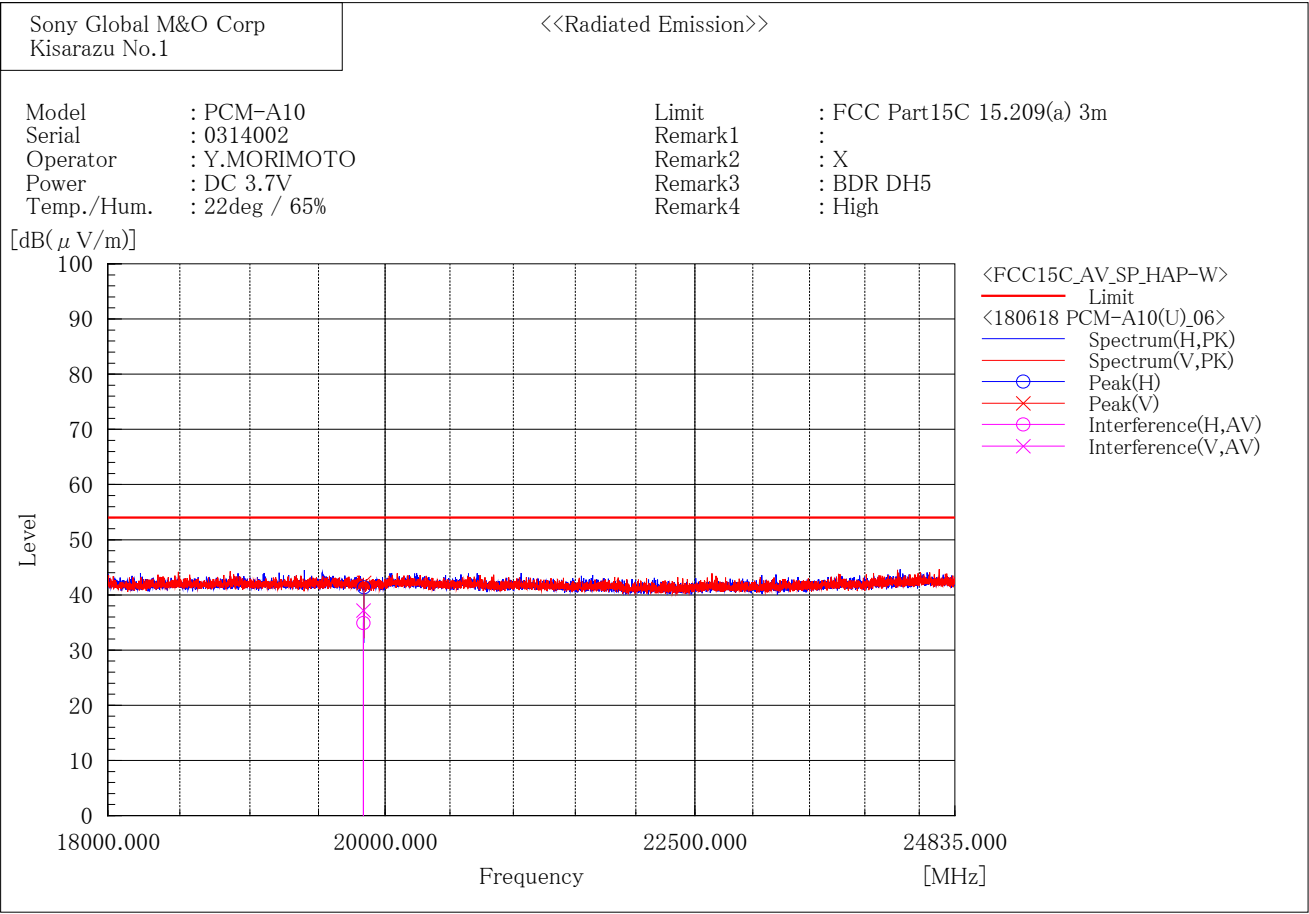
--- Horizontal Polarization (AV)---

No.	Frequency [MHz]	Reading [dB(μ V)]	c.f [dB(1/m)]	Result [dB(μ V/m)]	Limit [dB(μ V/m)]	Margin [dB]	Height [cm]	Angle [°]
1	19527.238	29.3	5.5	34.8	54.0	19.2	408.8	60.4

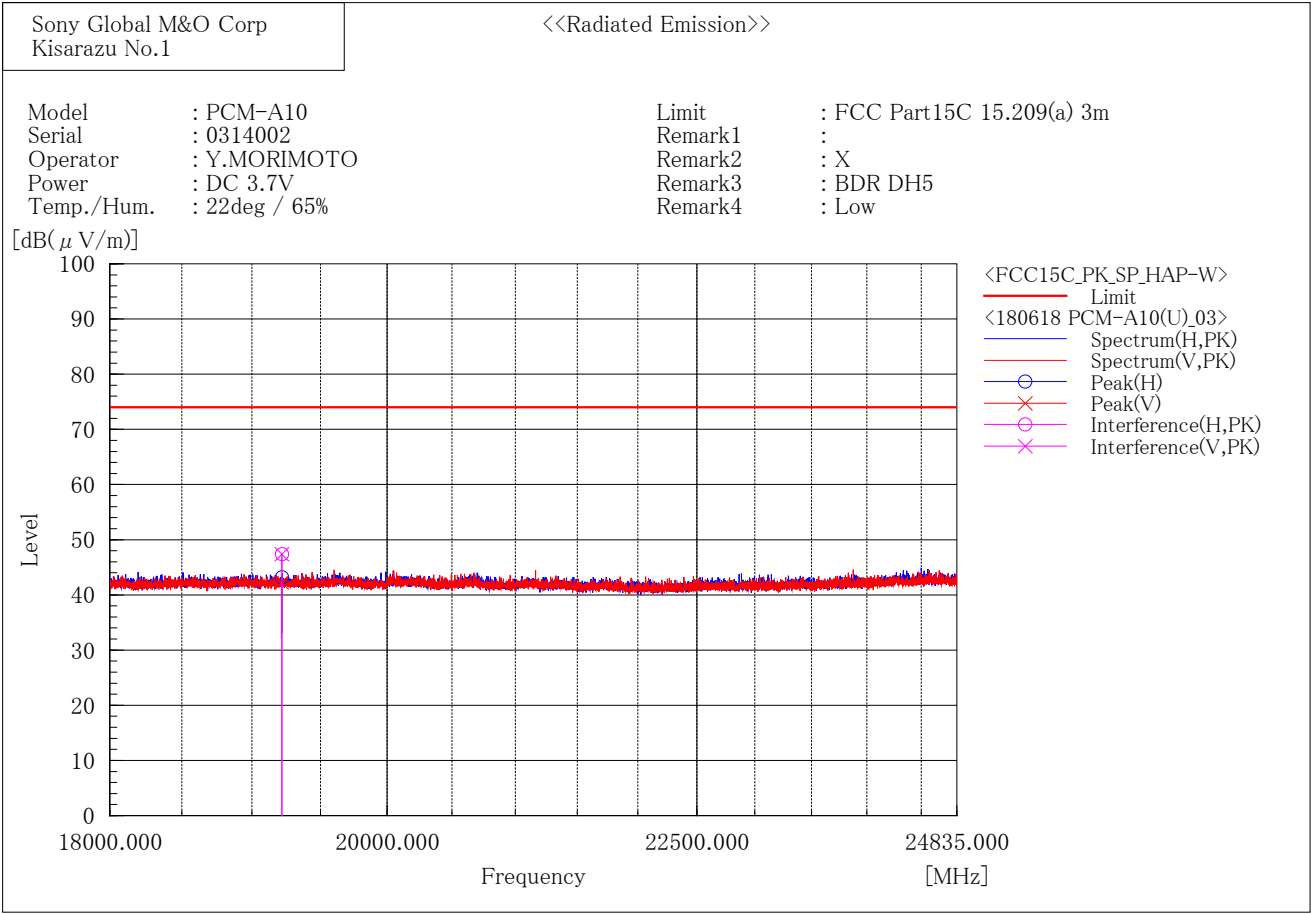
--- Vertical Polarization (AV)---

No.	Frequency [MHz]	Reading [dB(μ V)]	c.f [dB(1/m)]	Result [dB(μ V/m)]	Limit [dB(μ V/m)]	Margin [dB]	Height [cm]	Angle [°]
1	19526.914	29.2	5.5	34.7	54.0	19.3	120.4	176.7

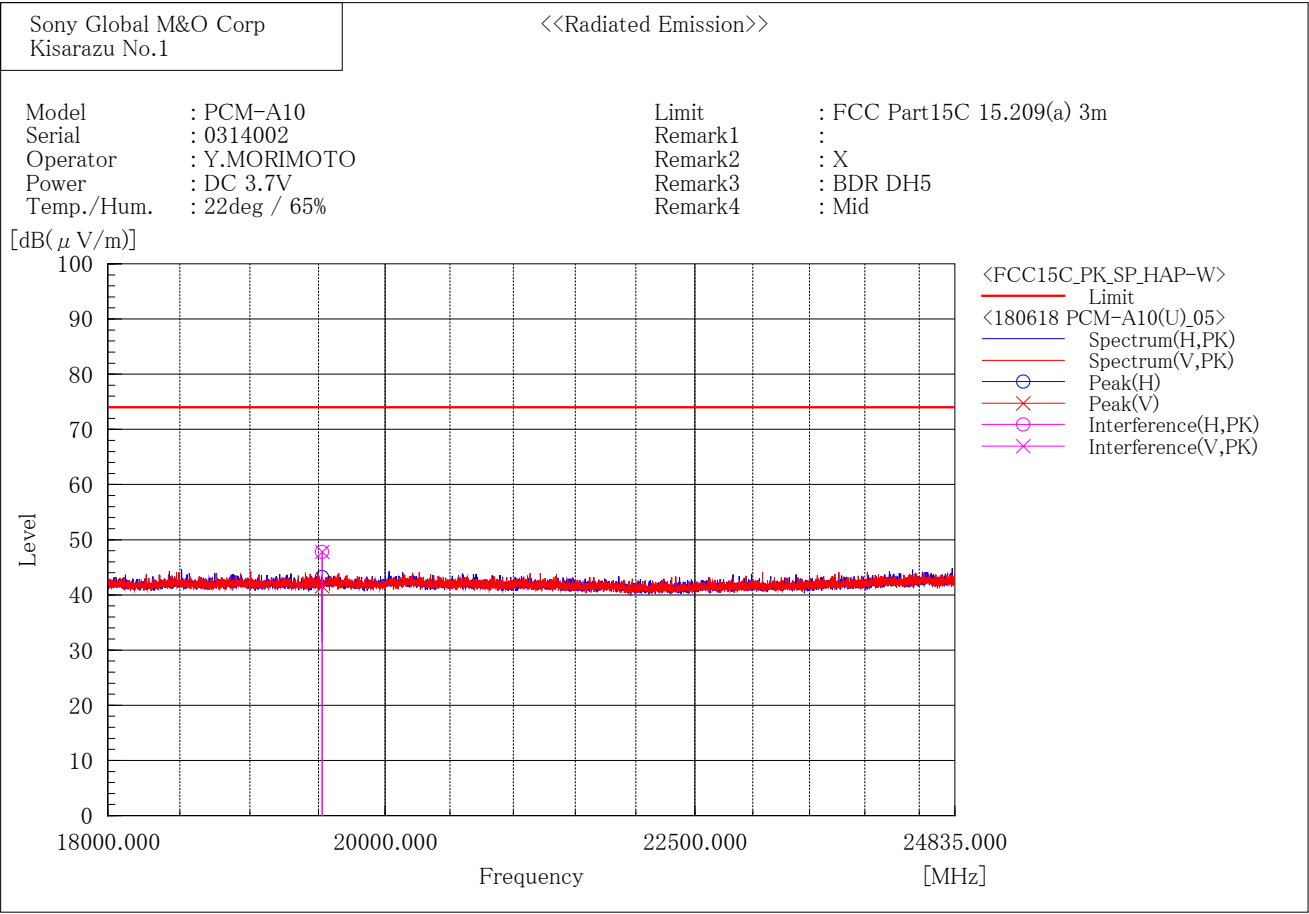
[BDR(DH5)/2480MHz]



[BDR(DH5)/2402MHz]



[BDR(DH5)/2441MHz]



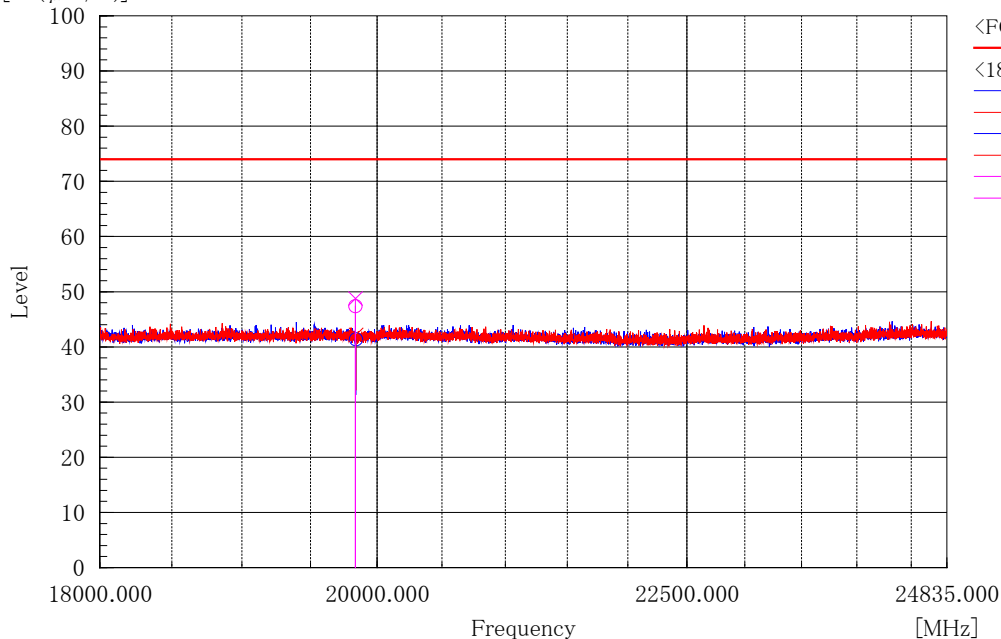
[BDR(DH5)/2480MHz]

Sony Global M&O Corp
Kisarazu No.1

<<Radiated Emission>>

Model : PCM-A10
 Serial : 0314002
 Operator : Y.MORIMOTO
 Power : DC 3.7V
 Temp./Hum. : 22deg / 65%

Limit : FCC Part15C 15.209(a) 3m
 Remark1 :
 Remark2 : X
 Remark3 : BDR DH5
 Remark4 : High

[dB(μ V/m)]

Final Result

--- Horizontal Polarization (PK)---

No.	Frequency [MHz]	Reading [dB(μ V)]	c. f [dB(1/m)]	Result [dB(μ V/m)]	Limit [dB(μ V/m)]	Margin [dB]	Height [cm]	Angle [°]
1	19835.706	41.9	5.5	47.4	74.0	26.6	431.8	56.4

--- Vertical Polarization (PK)---

No.	Frequency [MHz]	Reading [dB(μ V)]	c. f [dB(1/m)]	Result [dB(μ V/m)]	Limit [dB(μ V/m)]	Margin [dB]	Height [cm]	Angle [°]
1	19836.478	43.3	5.5	48.8	74.0	25.2	104.4	251.0

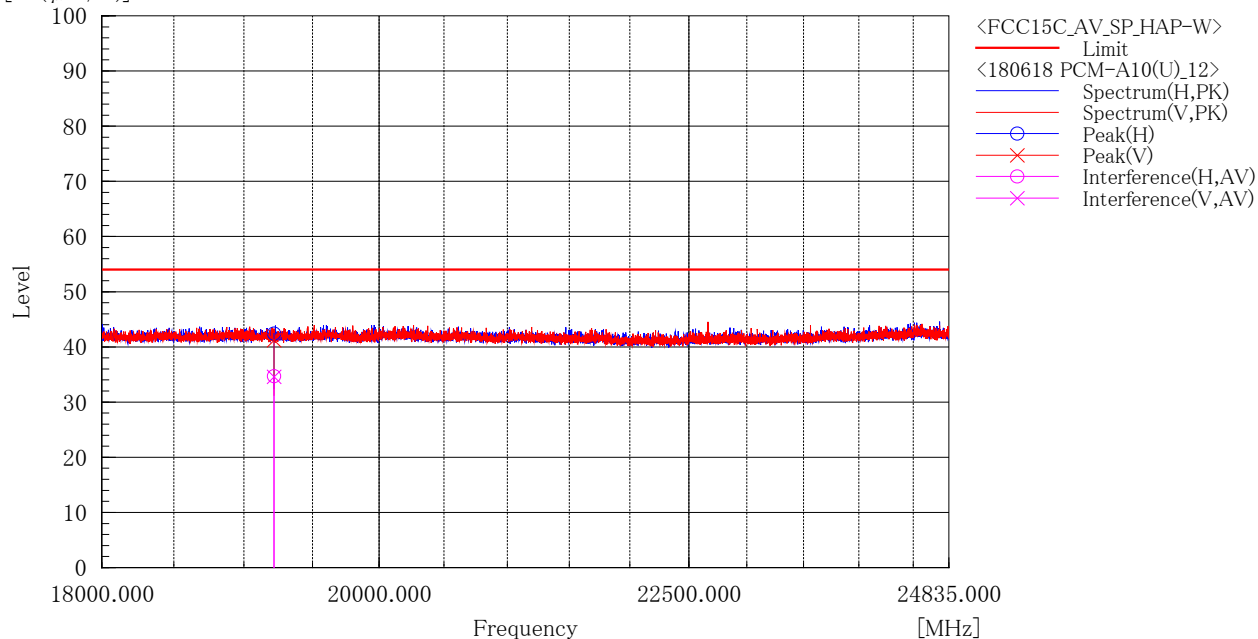
[EDR(3DH5)/2402MHz]

Sony Global M&O Corp
Kisarazu No.1

<<Radiated Emission>>

Model : PCM-A10
 Serial : 0314002
 Operator : Y.MORIMOTO
 Power : DC 3.7V
 Temp./Hum. : 22deg / 65%

Limit : FCC Part15C 15.209(a) 3m
 Remark1 :
 Remark2 : X
 Remark3 : EDR 3DH5
 Remark4 : Low

[dB(μ V/m)]

Final Result

--- Horizontal Polarization (AV)---

No.	Frequency [MHz]	Reading [dB(μ V)]	c. f [dB(1/m)]	Result [dB(μ V/m)]	Limit [dB(μ V/m)]	Margin [dB]	Height [cm]	Angle [°]
1	19217.690	29.3	5.4	34.7	54.0	19.3	261.8	315.2

--- Vertical Polarization (AV)---

No.	Frequency [MHz]	Reading [dB(μ V)]	c. f [dB(1/m)]	Result [dB(μ V/m)]	Limit [dB(μ V/m)]	Margin [dB]	Height [cm]	Angle [°]
1	19217.346	29.2	5.4	34.6	54.0	19.4	231.9	359.2

[EDR(3DH5)/2441MHz]

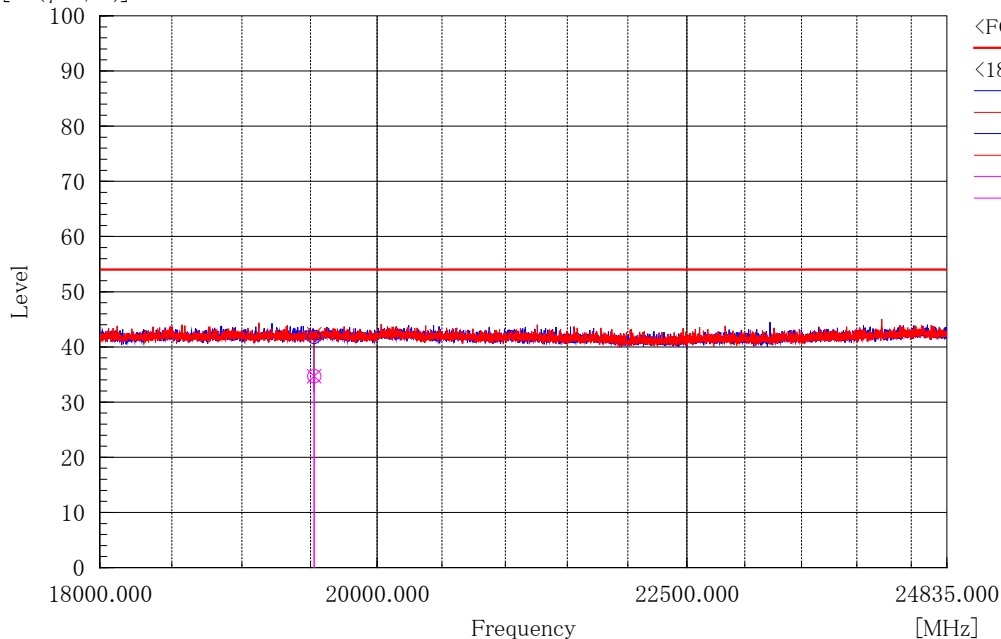
Sony Global M&O Corp
Kisarazu No.1

<<Radiated Emission>>

Model : PCM-A10
 Serial : 0314002
 Operator : Y.MORIMOTO
 Power : DC 3.7V
 Temp./Hum. : 22deg / 65%

Limit : FCC Part15C 15.209(a) 3m
 Remark1 :
 Remark2 : X
 Remark3 : EDR 3DH5
 Remark4 : Mid

[dB(μV/m)]



Final Result

--- Horizontal Polarization (AV)---

No.	Frequency [MHz]	Reading [dB(μV)]	c.f [dB(1/m)]	Result [dB(μV/m)]	Limit [dB(μV/m)]	Margin [dB]	Height [cm]	Angle [°]
1	19527.882	29.2	5.5	34.7	54.0	19.3	117.1	16.8

--- Vertical Polarization (AV)---

No.	Frequency [MHz]	Reading [dB(μV)]	c.f [dB(1/m)]	Result [dB(μV/m)]	Limit [dB(μV/m)]	Margin [dB]	Height [cm]	Angle [°]
1	19527.418	29.2	5.5	34.7	54.0	19.3	407.1	82.6

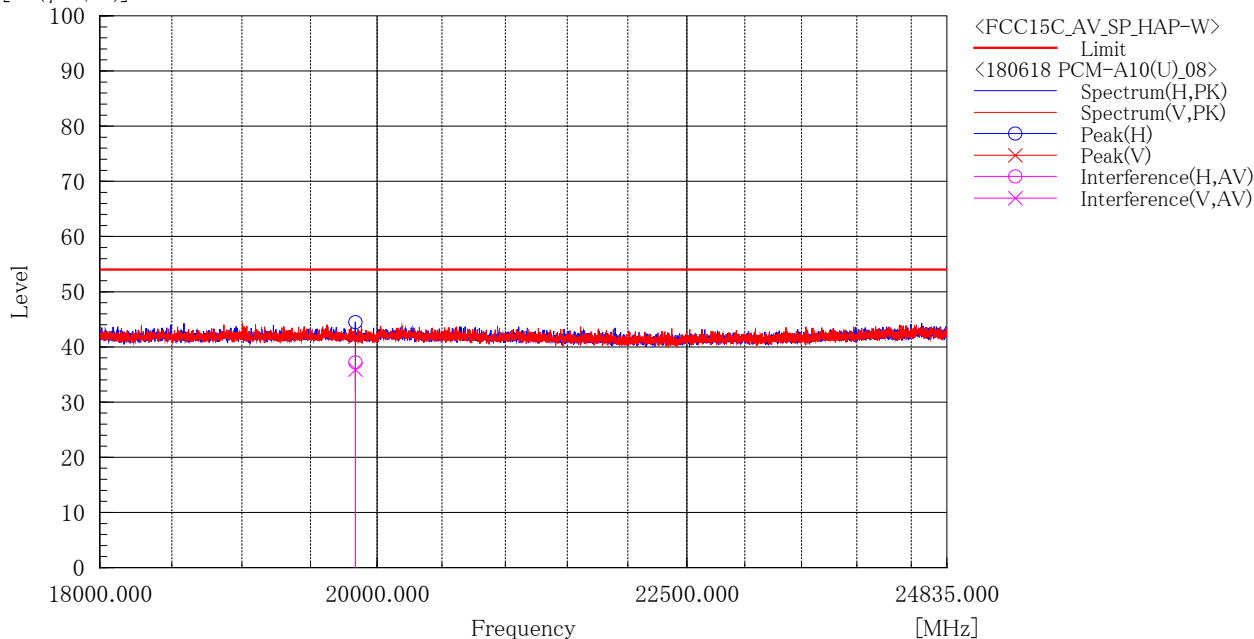
[EDR(3DH5)/2480MHz]

Sony Global M&O Corp
Kisarazu No.1

<<Radiated Emission>>

Model : PCM-A10
 Serial : 0314002
 Operator : Y.MORIMOTO
 Power : DC 3.7V
 Temp./Hum. : 22deg / 65%

Limit : FCC Part15C 15.209(a) 3m
 Remark1 :
 Remark2 : X
 Remark3 : EDR 3DH5
 Remark4 : High

[dB(μ V/m)]

Final Result

--- Horizontal Polarization (AV)---

No.	Frequency [MHz]	Reading [dB(μ V)]	c.f [dB(1/m)]	Result [dB(μ V/m)]	Limit [dB(μ V/m)]	Margin [dB]	Height [cm]	Angle [°]
1	19835.990	31.7	5.5	37.2	54.0	16.8	312.5	297.5

--- Vertical Polarization (AV)---

No.	Frequency [MHz]	Reading [dB(μ V)]	c.f [dB(1/m)]	Result [dB(μ V/m)]	Limit [dB(μ V/m)]	Margin [dB]	Height [cm]	Angle [°]
1	19835.950	30.4	5.5	35.9	54.0	18.1	100.0	258.6

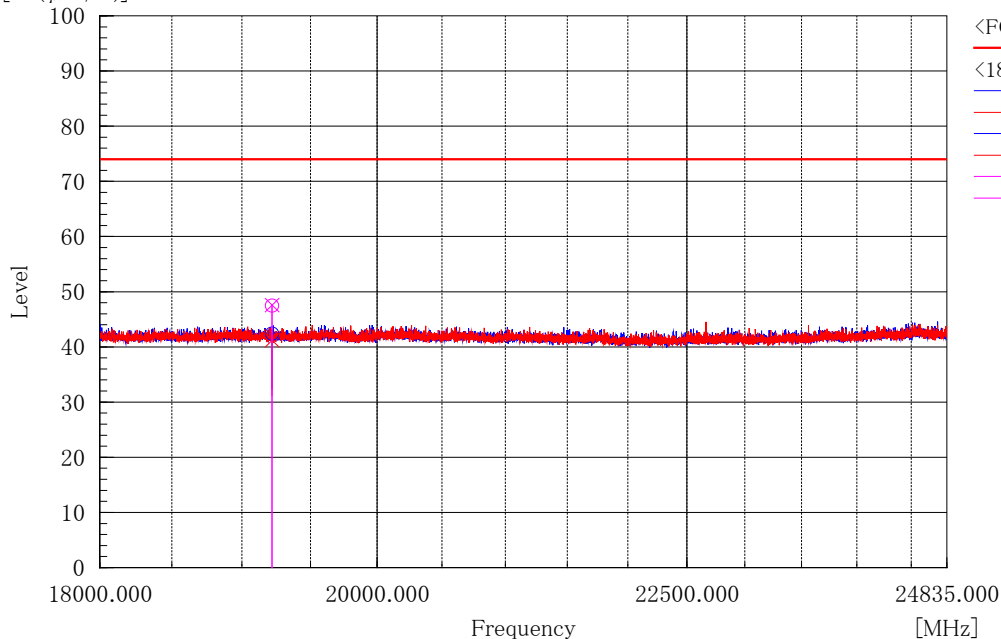
[EDR(3DH5)/2402MHz]

Sony Global M&O Corp
Kisarazu No.1

<<Radiated Emission>>

Model : PCM-A10
 Serial : 0314002
 Operator : Y.MORIMOTO
 Power : DC 3.7V
 Temp./Hum. : 22deg / 65%

Limit : FCC Part15C 15.209(a) 3m
 Remark1 :
 Remark2 : X
 Remark3 : EDR 3DH5
 Remark4 : Low

[dB(μ V/m)]

Final Result

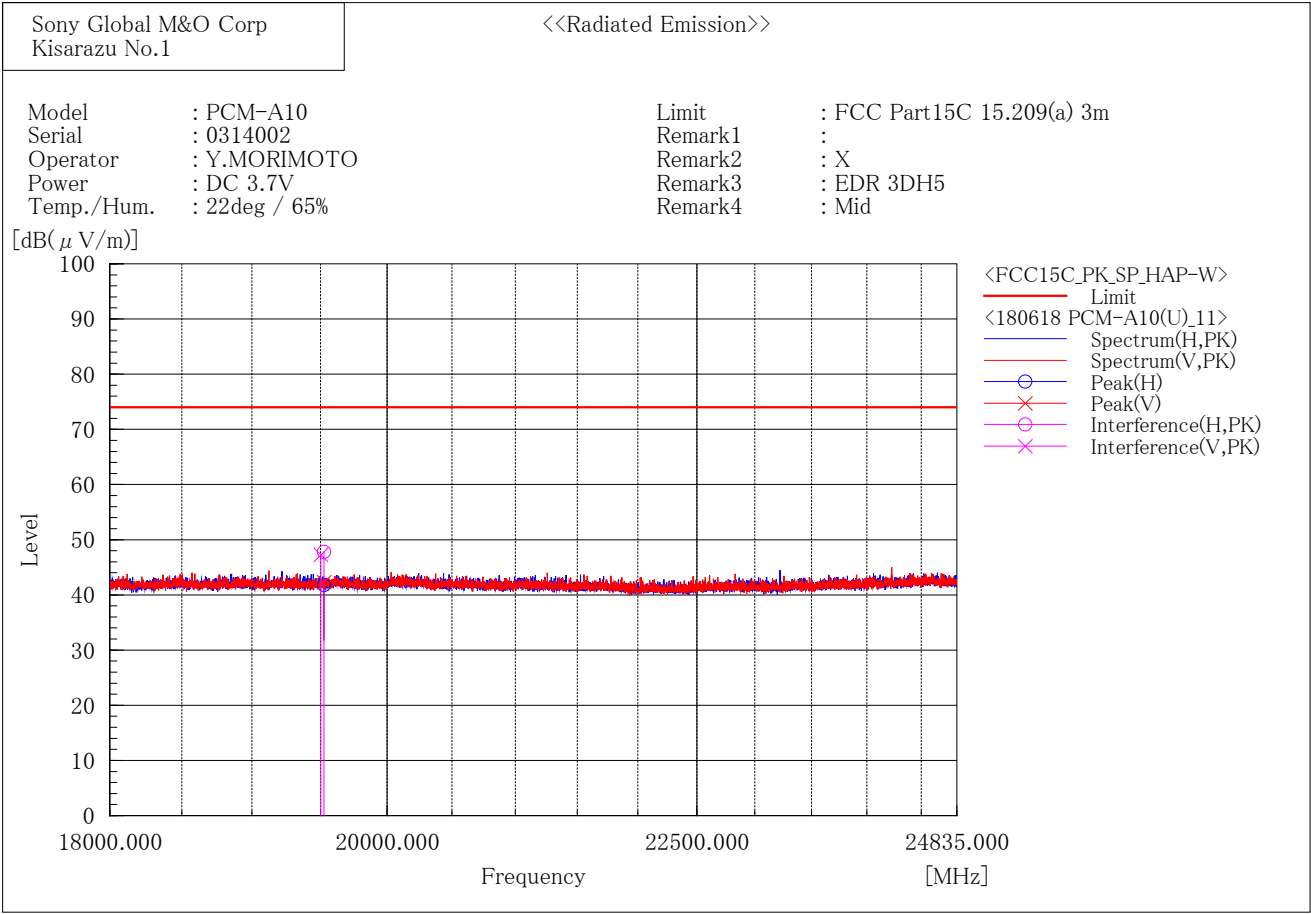
--- Horizontal Polarization (PK)---

No.	Frequency [MHz]	Reading [dB(μ V)]	c. f [dB(1/m)]	Result [dB(μ V/m)]	Limit [dB(μ V/m)]	Margin [dB]	Height [cm]	Angle [°]
1	19217.276	42.1	5.4	47.5	74.0	26.5	261.8	317.2

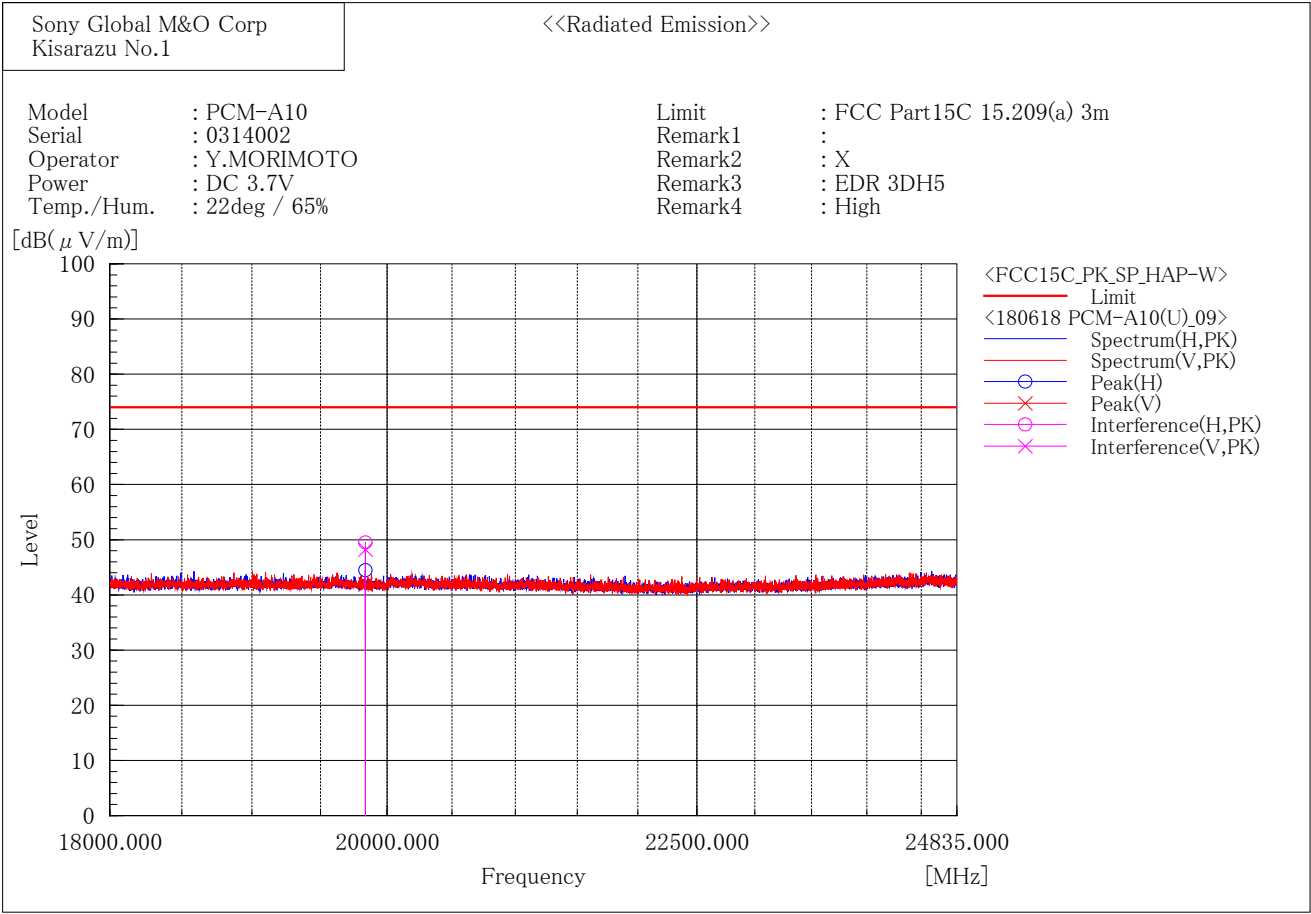
--- Vertical Polarization (PK)---

No.	Frequency [MHz]	Reading [dB(μ V)]	c. f [dB(1/m)]	Result [dB(μ V/m)]	Limit [dB(μ V/m)]	Margin [dB]	Height [cm]	Angle [°]
1	19216.896	42.2	5.4	47.6	74.0	26.4	231.9	359.2

[EDR(3DH5)/2441MHz]



[EDR(3DH5)/2480MHz]



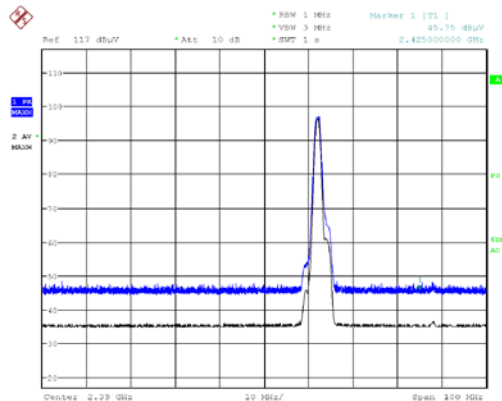
2.4GHz Restricted-Band Edge (Plot data)

These plot data show peak (trace blue) and average (trace black) spectrum for worst case emissions in the restricted-band edges. (Restricted band edges: below 2390MHz and above 2483.5MHz)

The result of the final radiated emissions measurement refers in previous pages.

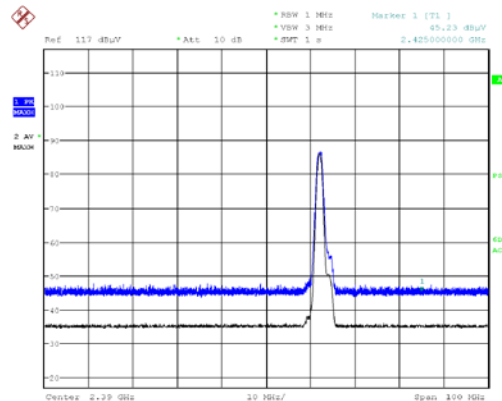
[BDR / 2402MHz]

Horizontal



Date: 14 JUN 2018 21:54:49

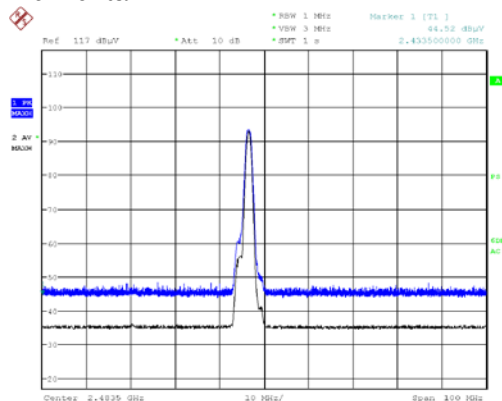
Vertical



Date: 14 JUN 2018 21:57:58

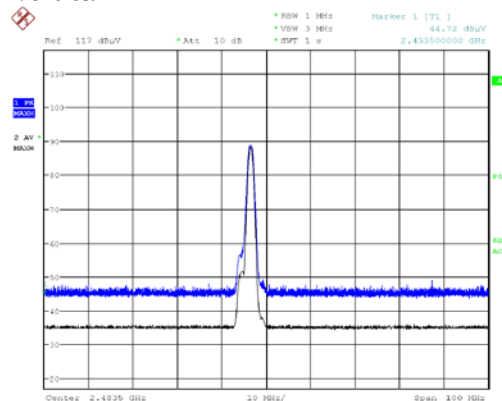
[BDR / 2480MHz]

Horizontal



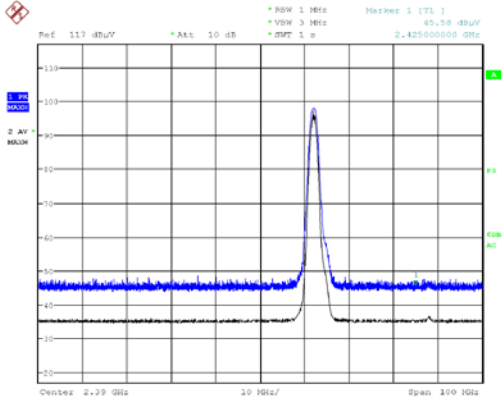
Date: 15 JUN 2018 00:24:13

Vertical

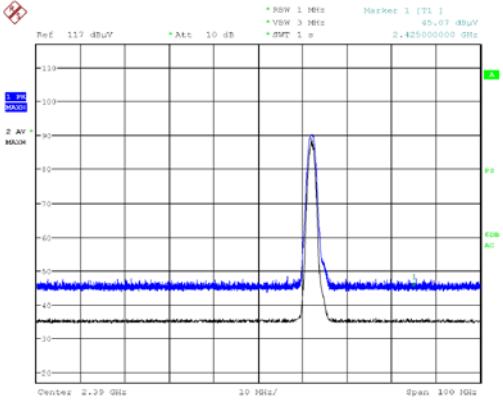


Date: 15 JUN 2018 00:06:59

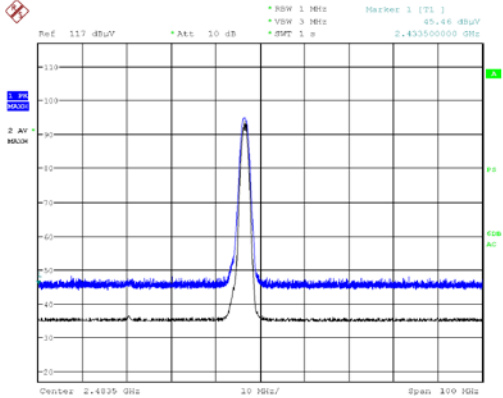
[EDR / 2402MHz]
Horizontal



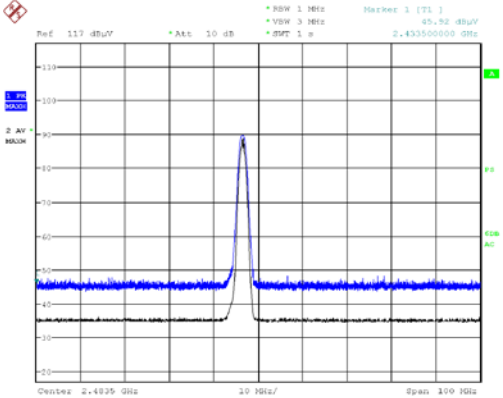
Vertical



[EDR / 2480MHz]
Horizontal



Vertical

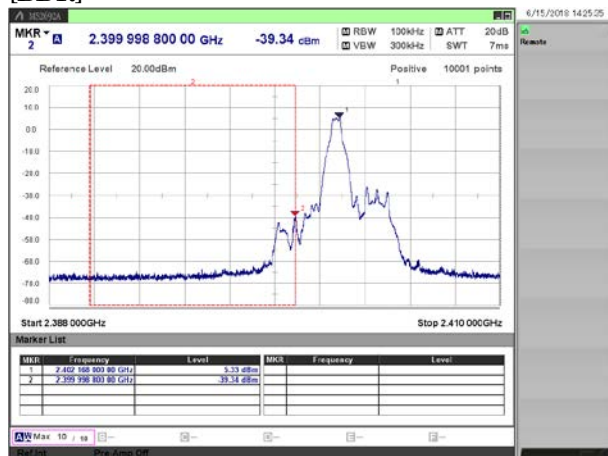


3.8. Conducted Spurious Emissions for Band Edge

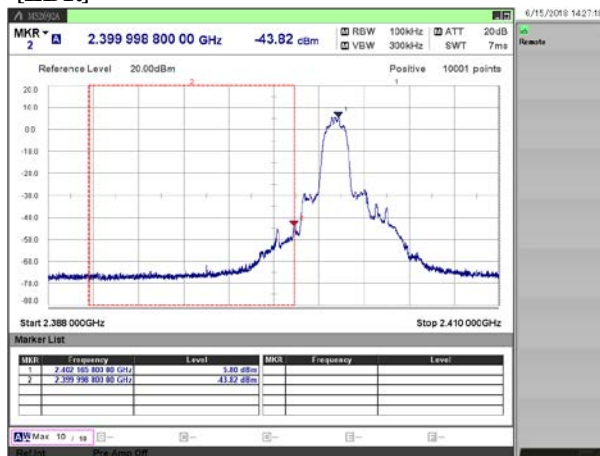
- 1) Ambient temperature : 23.4 deg.C
- 2) Relative humidity : 65.0 %
- 3) Date of measurement : June 15, 2018
- 4) Measured by : M.KOUGA
- 5) Operating mode : Transmitting mode

Mode		Channel [MHz]	Frequency [MHz]	Reading(PK) [dBm]	C.F. [dB]	Result(PK) [dBm]	Limit [dBm]	Margin [dB]
BDR	DH5	2402	2402.17	5.33	0.59	5.92	-	-
			2400.00	-39.34	0.59	-38.75	-14.1	24.67
EDR	3DH5	2402	2402.17	5.80	0.59	6.39	-	-
			2400.00	-43.82	0.59	-43.23	-13.6	29.62

[BDR]



[EDR]



4. Method of Calculation

4.1. AC Power-line Conducted Emissions Measurement

Method of calculation : Software
 The Software for Calculation Name : EP5/ CE
 Version : Ver5.0.0

$$\text{Test Result [dBuV]} = \text{Meter Reading [dBuV]} + \text{C.F. [dB]}$$

Notes :

- (a) Meter Reading : Reading of the EMI test receiver.
- (b) C.F. : System Loss + Correction Factor of LISN

4.2. Time of Occupancy (Dwell Time) Measurement

Method of calculation : Software
 The Software for Calculation Name : SW-308
 Version : Ver.3.3

$$\text{Test Result [msec]} = \text{Dwell Time [msec]} * \text{Cycle [time]} * 31.6 [\text{sec}] / \text{Sweep Time [sec]}$$

Notes :

- (a) Dwell Time : Transmission duration of 1 hopping.
- (b) Cycle : Number of hopping appearances on the spectrum analyzer.
 (The average of 5 measurements if it is random hopping equipment)
- (c) 31.6 : $0.4 [\text{sec}] * \text{Number of Hopping Frequencies(79)}$
- (d) Sweep Time : Sweep time settings on the spectrum analyzer.

4.3. Maximum Peak Conducted Output Power Measurement

Method of calculation : Software
 The Software for Calculation Name : SW-308
 Version : Ver.3.3

$$\text{Test Result [dBm]} = \text{Meter Reading [dBm]} + \text{C.F. [dB]}$$

$$\text{Duty Cycle [\%]} = \text{Tx ON Time} / (\text{Tx ON Time} + \text{Tx OFF Time}) * 100$$

Notes :

- (a) Meter Reading : Reading of the spectrum analyzer.
- (b) C.F. : System Cable Loss + EUT Cable Loss

4.4. Radiated Spurious Emission Measurement

Method of calculation : Software
The Software for Calculation Name : V-Scan
 Version : Ver.4.0.30

Test Result [dBuV/m] = Meter Reading [dBuV] + C.F. [dB/m]

Notes :

- (a) Meter Reading : Reading of the EMI test receiver or spectrum analyzer.
(b) C.F. : ☒ Antenna Factor (including Balun Loss) + System GainLoss
 : ☐ Antenna Factor (including Balun Loss) + System GainLoss + 20 log (3 m/ 10 m)

4.5. Conducted Spurious Emission for Band Edge Measurement

Method of calculation : Software
The Software for Calculation Name : SW-308
 Version : Ver.3.3

Test Result [dBm] = Meter Reading [dBm] + C.F. [dB]

Notes :

- (a) Meter Reading : Reading of the spectrum analyzer.
(b) C.F. : System Cable Loss + EUT Cable Loss

5. List of Test Equipment

All test results are traceable to the national and/or international standards.

5.1. AC Power-line Conducted Emissions

4th Site Shielded Room

	Ctrl.#	Equipment	Model No.	Serial No.	Manufacturer	Cal.Int.	Last Cal.
x	-	Shield Room	-	-	TDK	-	-
x	M0575	EMI Receiver	ESCI	100161	Rohde & Schwarz	12	18.04.18
-	M0109	EMI Receiver	ESI7	100051	Rohde & Schwarz	12	18.04.13
x	CS0043	4th Site CE Cable SYSTEM	-	-	EMC/RF Test Lab.	12	18.06.01
x	M0664	6dB Attenuator	6806.01A	N/A	HUBER+SUHNER AG	12	18.06.01
x	M0619	HIGH FREQUENCY FUSE	MP612A	N/A	Anritsu	12	18.06.01
-	M0026	LISN	KNW-407	8-541-1	Kyoritsu	12	17.07.24
-	M0420	LISN	ESH3-Z5	829996/008	Rohde & Schwarz	12	17.08.04
x	M0514	LISN (for EUT)	ENV216	100424	Rohde & Schwarz	12	18.04.17
-	M0152	50 ohm Terminator	CT-01	N/A	TME	12	17.12.01
-	M0158	50 ohm Terminator	T1302	N/A	Stack	12	17.12.04
x	M0690	Thermometer	AD-5640A	201304	AND	12	17.11.14

5.2. Antenna-port Conducted Measurements

4th Site Shielded Room 1

	Ctrl.#	Equipment	Model No.	Serial No.	Manufacturer	Cal.Int.	Last Cal.
x	-	Shield Room	B83117-B2432-T161	P26428	Albatross Project	-	-
x	W0100	Spectrum Analyzer	MS2692A	6201338954	Anritsu	12	18.04.24
x	W0006	Power Meter	N1911A	MY50000295	Keysight Technologies	12	17.10.03
x	W0007	Power Sensor	N1922A	MY50180022	Keysight Technologies	12	17.10.04
-	W0029	10dB Attenuator	8493C	76549	Keysight Technologies	12	17.08.03
x	WC0005	RF Cable	SUCOFLEX 102	34287	HUBER + SUHNER	12	17.08.03
x	M0720	Thermometer	TH-321	140044	AS ONE	12	17.06.09

5.3. Radiated Spurious Emissions

EMC Site 3m Semi-Anechoic Chamber

	Ctrl.#	Equipment	Model No.	Serial No.	Manufacturer	Cal.Int.	Last Cal.
x	M0115	Semi-Anechoic Chamber	-	7D1-8A11	Otsuka Science	12	18.06.02
x	M0686	EMI Receiver	N9038A	MY52260113	Keysight Technologies	12	17.11.20
x	M0562	EMI Receiver	ESU26	100068	Rohde & Schwarz	12	17.06.29
x	A0073	Loop Antenna	HFH2-Z2	100171	Rohde & Schwarz	12	17.11.01
x	A0089	Biconical Antenna	BBA9106	VHA91032835	Schwarzbeck	12	17.12.15
x	A0088	Log periodic Antenna	UHALP9108A1	0649	Schwarzbeck	12	17.12.15
x	A0064	Horn Antenna	BBHA9120D	746	Schwarzbeck	12	17.11.18
x	A0078	Horn Antenna	HAP06-18W	00000070	TOYO Corporation	12	17.11.18
x	A0058	Horn Antenna	HAP18-26W	00000016	TOYO Corporation	12	17.12.01
x	CS0017	N-RE Cable SYSTEM 1	-	-	EMC/RF Test Lab.	12	17.11.17
x	CS0018	N-RE Cable SYSTEM 2	-	-	EMC/RF Test Lab.	12	17.11.17
x	CS0045	N-3m EMF Cable SYSTEM	-	-	EMC/RF Test Lab.	12	17.11.17
x	CS0074/0075	N-RE Cable SYSTEM 4	-	-	EMC/RF Test Lab.	12	17.11.17
x	M0126	Step Attenuator	8494H	3837M01144	Keysight Technologies	12	18.06.02
x	M0752	Pre Amplifier	310N	320621	SONOMA INSTRUMENT	12	17.11.17
x	M0128	3dB Attenuator	8491A	53541	Keysight Technologies	12	17.11.17
x	M0609	3dB Attenuator	8491B	MY39265960	Keysight Technologies	12	17.11.17
x	M0737	GHz Filter Box	FB-G1	001	Sony Global M&O	12	17.11.17
x	M0687	Thermo Meter	AD-5640A	201301	A&D	12	17.10.06

About calibration interval

Valid until the end of the month listed in "Cal. Int." column.