RADIO TEST REPORT

(for Bluetooth Low Energy)

Project No.	:	JB-Z0597-A
Client	:	Sony Corporation
Client's Address	:	1-7-1 Konan Minato-ku Tokyo, 108-0075 Japan
Product Name	:	Wireless Noise Canceling Stereo Headset
Model No.	:	WI-1000XM2
FCC ID	:	AK8WI1000XM2
Test Standard	:	47 CFR Part 15 Subpart C
Sample Receipt Date	:	June 25, 2019
Test Date	:	July 8, 2019 to July 23, 2019
Original Report Date	:	July 26, 2019
Amend Report Date	:	August 5, 2019
Test Result	:	Complied

Notice :

** These test results relate only to the items (combination equipment, test configuration, operation condition etc.) tested.*
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** All test results are traceable to the national and / or international standards.*
** The testing in which "Non-accreditation" is displayed is outside the accreditation scopes in Sony Global Manufacturing & Operations Corporation EMC/ RF Test Laboratory.*
** This report replaces and supersedes all previous versions. Refer to Revision History on the following page.*

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TABLE OF CONTENTS

1. General Information 3
- 1.1. Description of Equipment Under Test (EUT) 3
- 1.2. Summary of Test Result 3
- 1.3. Tested Methodology 4
- 1.4. Measurement Procedures 4
- 1.5. Test Location 6
- 1.6. Uncertainty 6

2. Test Specification 7
- 2.1. Validation 7
- 2.2. Operating Condition 7
- 2.3. Special Accessories 7
- 2.4. EUT Modifications 7
- 2.5. Configuration of EUT System 8
- 2.6. View of Measurement Facility 9

3. Test Data 10
- 3.1. 6dB Bandwidth 10
- 3.2. Maximum Peak Conducted Output Power 12
- 3.3. Power Spectral Density 13
- 3.4. Radiated Spurious Emissions 15
- 3.5. Conducted Spurious Emissions for Band Edge 56

4. Method of Calculation 57
- 4.1. Maximum Peak Conducted Output Power 57
- 4.2. Power Spectral Density 57
- 4.3. Radiated Spurious Emissions 57
- 4.4. Conducted Spurious Emissions for Band Edge 57

5. List of Test Equipment 58
- 5.1. Antenna-port Conducted Measurements 58
- 5.2. Radiated Spurious Emissions 58

6. Photographs of test setup 59
- 6.1. Antenna-port Conducted Measurements Photo(s) 59
- 6.2. Radiated Spurious Emissions Photo(s) 60

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.

Revision History

Revision	Date	Overview	Page
JB-Z0597 (Original)	July 26, 2019	-	-
JB-Z0597-A	August 5, 2019	Add description procedures and measurement facility drawings for spurious emission.	P5, 9

1. General Information

1.1. Description of Equipment Under Test (EUT)

General Specification

Test Sample Condition : ☐ Prototype ☒ Pre-production ☐ Mass-production
Product Name : Wireless Noise Canceling Stereo Headset
Trade Name : SONY
Model No. : WI-1000XM2
Serial No. : 195, 216, 220
Power Rating of the EUT : DC 3.7 V (The EUT was supplied with the power from the 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 - 2480 MHz
Modulation Type : GFSK
Channel Spacing : 2 MHz
Channel Bandwidth : 1 MHz / 2 MHz
Number of channels : 40
Antenna Type : Inverted-F Antenna
Antenna Connector Type : None
Antenna Gain : 4.1 dBi
Operating Temperature : +0 to +40 deg.C

1.2. Summary of Test Result

Test Item	Test Method	Worst Margin	Results	Note
AC Power-line Conducted Emissions	-	-	N/A	*2
6dB Bandwidth	Conducted	Refer to the test data	Complied	-
Maximum Peak Conducted Output Power	Conducted	27.29 dB	Complied	-
Power Spectral Density	Conducted	6.09 dB	Complied	-
Radiated Spurious Emissions	Radiated	9.4 dB (AV) 3505.746 MHz Vertical	Complied	-
Conducted Spurious Emissions for Band Edge	Conducted	11.80 dB 2400.00 MHz	Complied	*1

Note
*1: Conducted Spurious Emissions measurement 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 Emissions measurement.
*2: This item was not applied to the EUT since its transmission is stopped when the battery is being charged via USB port from the AC power devices.

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
Test Method : ANSI C63.10 - 2013
KDB 558074 D01 15.247 Meas Guidance v05r02

Test Condition

Radiated Spurious Emissions

Test Distance : ☒ 3 m ☐ 10m (9 kHz to 30 MHz)
☒ 3 m ☐ 10m (30 MHz to 1000 MHz)
☒ 3 m (1 GHz to 26.5 GHz)

Dimensions of the EUT table : 0.8 m (below 1 GHz) or 1.5 m (above 1 GHz) height, 1.5m width and 1 m depth.
Dimensions of validated test volume : 2 m diameter, 3 m top height, 0.5 m bottom height.

1.4. Measurement Procedures

We performed the measurements in accordance with NV3-06, 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 the spectrum analyzer. (other test items).
2. For each EUT operation mode, the Antenna-port Conducted Measurements were measured with the power sensor or the spectrum analyzer.

Test Item Antenna-port Conducted Measurements	Detector	RBW
6dB Bandwidth	Peak	100 kHz
Maximum Peak Conducted Output Power	Peak	-
Power Spectral Density	Peak	100 kHz
Conducted Spurious Emissions for Band Edge	Peak	100 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 kHz to 490 kHz [Limit at 3 m] = [Limit at 300 m] + 40log (300[m] / 3[m])
   490 kHz to 30 MHz [Limit at 3 m] = [Limit at 30 m] + 40log (30[m] / 3[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 to 26.5 GHz, peak detector)

6. On the worst arrangement of the EUT found in above, choose the six 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;

	9 kHz to 30 MHz	30 MHz to 1000 MHz	1 GHz to 26.5 GHz
Antenna	Loop Antenna	Bi-conical Antenna, Log-periodic Antenna	Horn Antenna
Antenna scanning range	1 m, Vertical, 360 degrees	1 m to 4 m, Horizontal and Vertical	1 m to 4 m *, Horizontal and Vertical
Turntable rotating range	360 degrees	360 degrees	360 degrees

*: When the measurement frequencies above 1 GHz, 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 to 90 kHz 110 kHz to 490 kHz	90 kHz to 110 kHz 490 kHz to 30 MHz	30 MHz to 1000 MHz	1 GHz to 26.5 GHz
Detector	Peak / Average	Quasi-peak	Quasi-peak	Peak / Average
RBW	200 Hz (6 dB) or 9 kHz (6 dB) *1	200 Hz (6 dB) or 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 kHz (for average) *2
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.
*2: VBW setting (for average) was higher than 1/T. (T is the minimum transmission duration)

7. If the final measurement result exceeded the limit in non-restricted band(excluding carrier band edges), the measurement is carried out additionally with follows;

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

	9 kHz to 150 kHz	150 kHz to 30 MHz	30 MHz to 26.5 GHz
Detector	Peak	Peak	Peak
RBW	300 Hz (6 dB) *	10 kHz (6 dB) *	100 kHz (6 dB)
Instrument	Spectrum analyzer	Spectrum analyzer	Spectrum analyzer

*: Correction factor of RBW was compensated to a measurement result by the following formula.
C.F. of RBW [dB] = 10*log (100 kHz / used RBW)

8. If the final average measurement result exceeded the limit in the authorized band edge, the integration method is carried out with follows;

	2.4835 GHz to 2.4855 GHz
Detector	Peak
RBW	100 kHz (6 dB)
Instrument	Spectrum analyzer
Function	Channel Power (integration BW : 1 MHz)

9. Although these tests for below 30MHz 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.
   Further these test for above 1GHz were performed test site complied with CISPR 16-1-4.
   In the case of EUT size smaller than the validated test volume, the antenna position is adjusted such that the distance between the EUT and the antenna reference point is identical to the 3m used for the S-VSWR validation measurements.
   These method based on clause 7.3.1 of CISPR16-1-4 Edition 4, therefore correcting distance factor is not applied.

1.5. Test Location

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

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

Antenna-port Conducted Measurements
Shielded Room
☒ 4th Site SR1

Radiated Spurious Emissions
Semi-Anechoic chamber
☐ 4th Site ☒ EMC Site

1.6. Uncertainty

Test Item	Frequency	4th Site SR1
Maximum Conducted Output Power	1 GHz to 6 GHz	± 0.84 dB
Power Spectral Density, Conducted Spurious Emissions	below 6 GHz	± 1.25 dB

Test Item	Frequency	Distance	4th Site	EMC Site
AC Power-line Conducted Emissions	150 kHz to 30 MHz	-	± 3.34 dB	± 3.35 dB
Radiated Emissions	9 kHz to 30 MHz	3m	± 2.60 dB	± 3.13 dB
	30 MHz to 1000 MHz	3m	± 4.96 dB	± 5.26 dB
	1 GHz to 18 GHz	3m	± 5.22 dB	± 5.50 dB
	18 GHz to 26.5 GHz	3m	± 5.36 dB	± 5.63 dB

2. Test Specification

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. Operating Condition

The tests have been carried out the following conditions.
[Transmitting mode]

Test Items	Test Channels	Data Rate
Radiated Spurious Emissions (below 1GHz) *1	2402 MHz	1 Mbps
6dB Bandwidth, Maximum Conducted Output Power, Power Spectral Density, Radiated Spurious Emissions (above 1GHz)	2402 MHz 2440 MHz 2480 MHz	1 Mbps 2 Mbps
Conducted Spurious Emissions for Band Edge	2402 MHz	1 Mbps 2 Mbps

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

<u>The Software for Operating Mode</u>

Software Name : Combo Tool
Software Version : W1746

2.3. Special Accessories

Special accessories needed for connecting the EUT to achieve compliance:

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

2.4. 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 :

2.5. Configuration of EUT System

Antenna-port Conducted Measurements

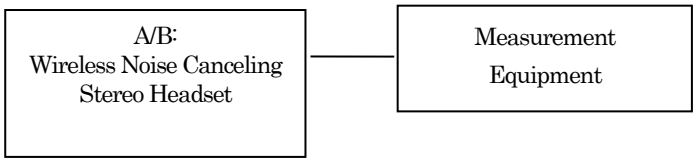
[EUT and Associated Equipment (AE)]

Symbol	EUT/ AE	Item	Manufacturer	Model No.	Serial No.
A	EUT	Wireless Noise Canceling Stereo Headset	SONY	WI-1000XM2	216 (for Maximum Conducted Output Power)
B	EUT	Wireless Noise Canceling Stereo Headset	SONY	WI-1000XM2	220 (for others)

[Type of Cable]

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

[Connecting Diagram]



Radiated Spurious Emissions

[EUT and Associated Equipment (AE)]

Symbol	EUT/ AE	Item	Manufacturer	Model No.	Serial No.
A	EUT	Wireless Noise Canceling Stereo Headset	SONY	WI-1000XM2	195

[Type of Cable]

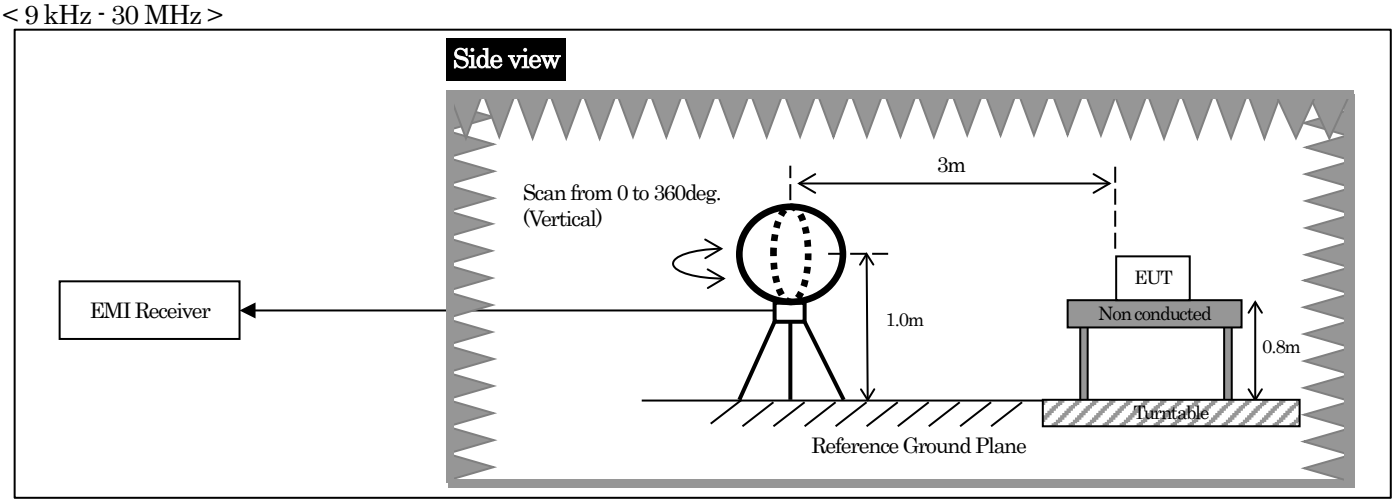
Symbol	Description	Identification (Manufacturer etc.)	Shielded Yes / No	Ferrite Core	Length (m)	Bundled
-	-	-	-	-	-	-

[Connecting Diagram]

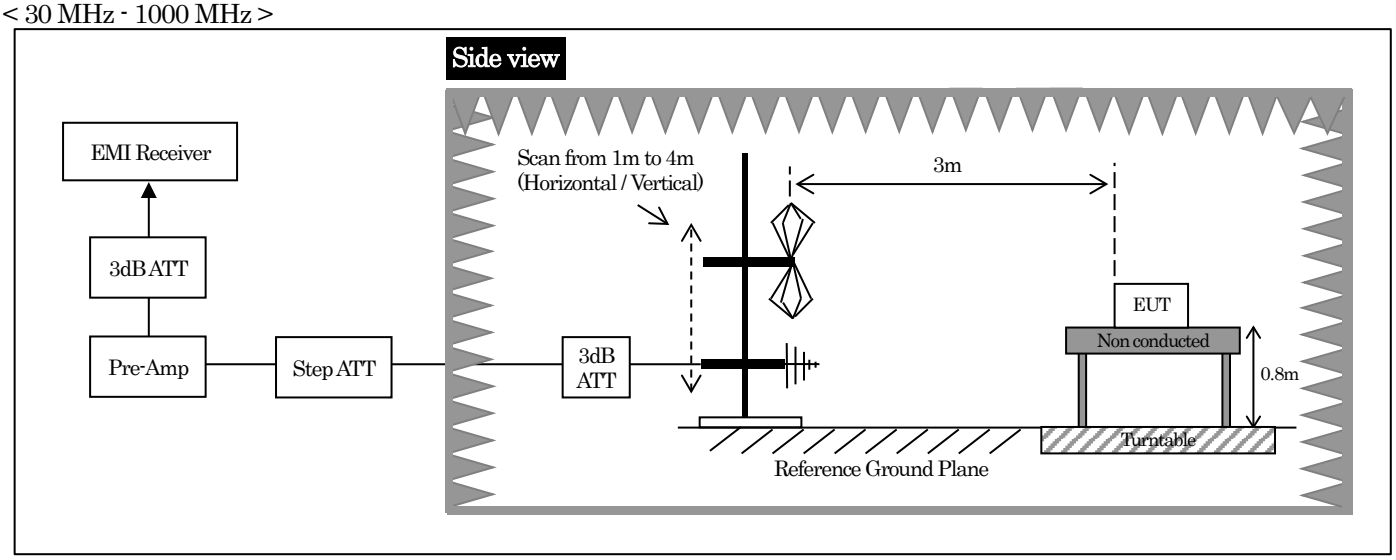
2.6. View of Measurement Facility

<u>Radiated spurious emissions</u>

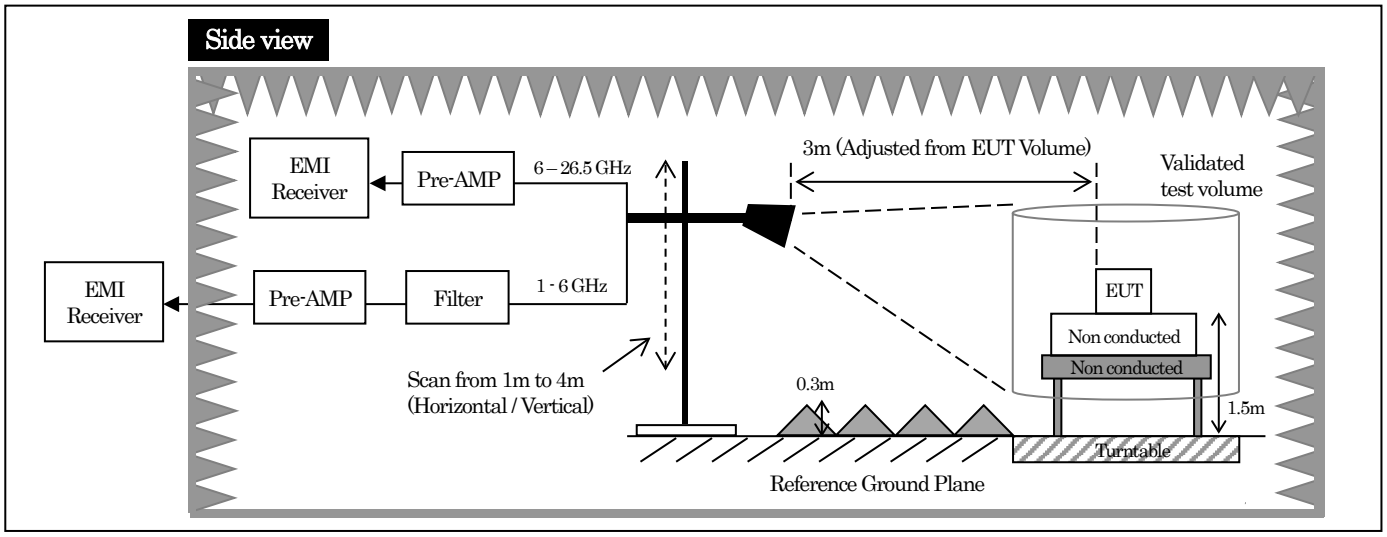
< 9 kHz - 30 MHz >



< 30 MHz - 1000 MHz >



< 1 GHz - 26.5 GHz >



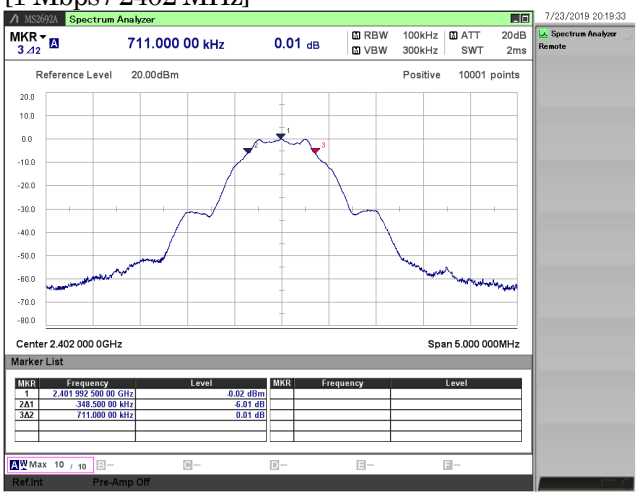
3. Test Data

3.1. 6dB Bandwidth

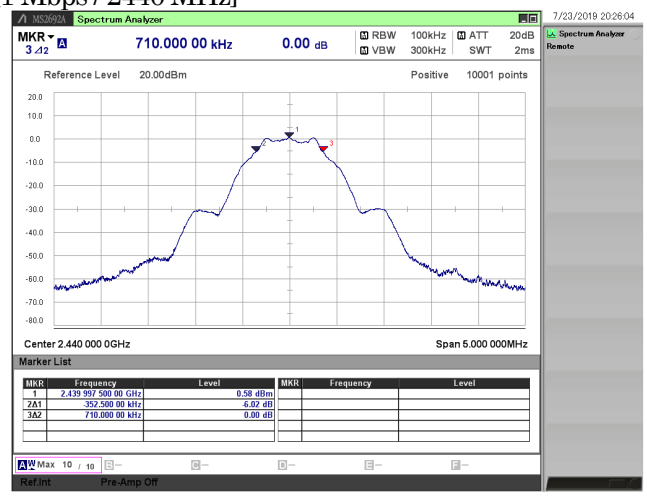
1) Ambient temperature : 20.0 deg.C
2) Relative humidity : 71.3 %
3) Date of measurement : July 23, 2019
4) Measured by : M.KOUGA
5) Operating mode : Transmitting mode

Mode	Rate [Mbps]	Channel [MHz]	Result [MHz]	Limit [MHz]
BLE	1	2402	0.711	0.5
		2440	0.710	0.5
		2480	0.709	0.5
	2	2402	1.252	0.5
		2440	1.251	0.5
		2480	1.254	0.5

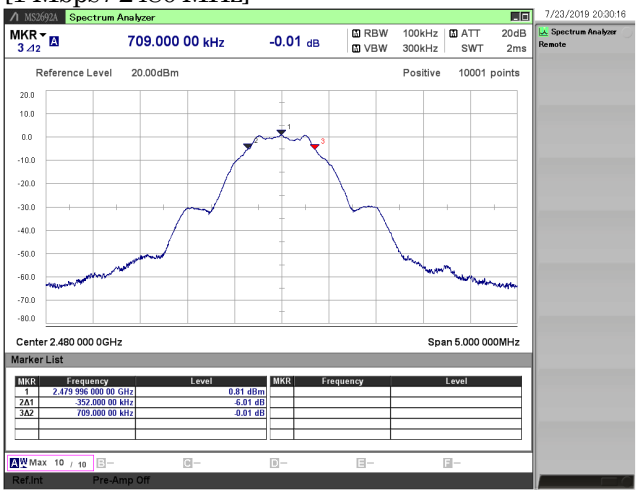
[1 Mbps / 2402 MHz]



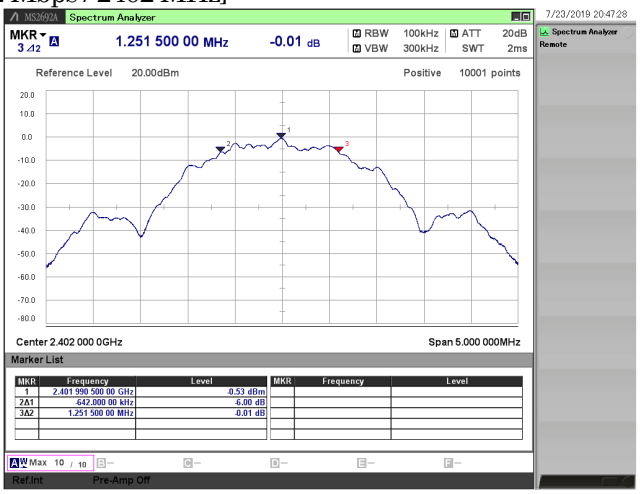
[1 Mbps / 2440 MHz]



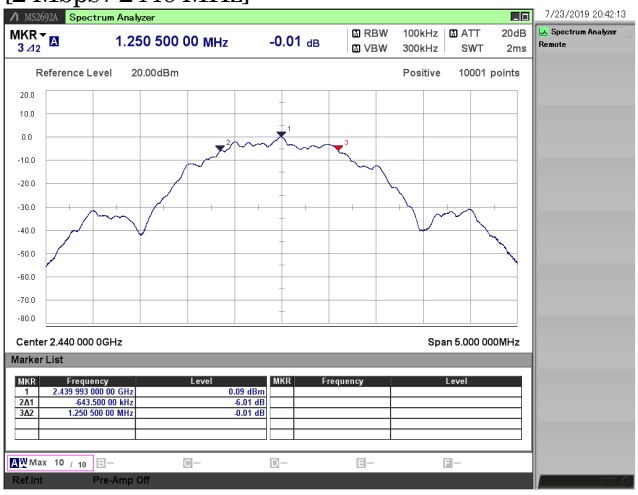
[1 Mbps / 2480 MHz]



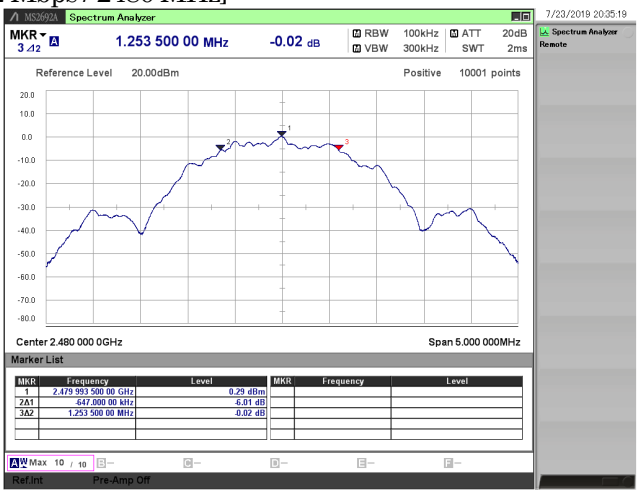
[2 Mbps / 2402 MHz]



[2 Mbps / 2440 MHz]



[2 Mbps / 2480 MHz]



3.2. Maximum Peak Conducted Output Power

1) Ambient temperature : 21.7 deg.C
2) Relative humidity : 51.3 %
3) Date of measurement : July 8, 2019
4) Measured by : M.KOUGA
5) Operating mode : Transmitting mode

Maximum Peak Conducted Output Power

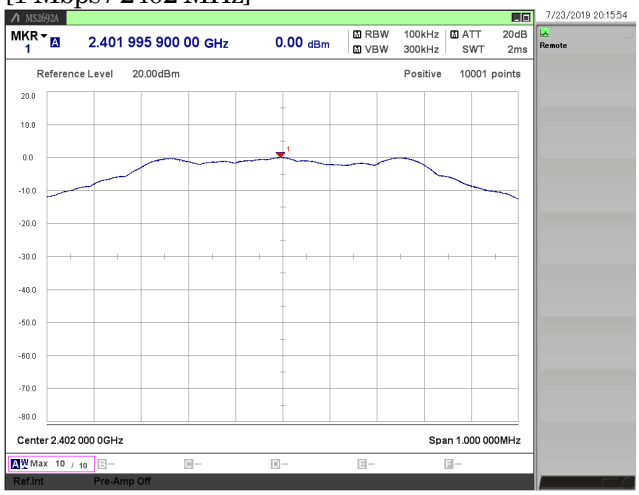
Mode	Rate [Mbps]	Channel [MHz]	Reading(PK) [dBm]	C.F. [dB]	Result(PK) [dBm]	Result(PK) [W]	Limit [dBm]	Margin [dB]
BLE	1	2402	-8.72	10.83	2.11	0.00163	30.0	27.89
		2440	-8.35	10.83	2.48	0.00177	30.0	27.52
		2480	-8.12	10.83	2.71	0.00187	30.0	27.29
	2	2402	-8.69	10.83	2.14	0.00164	30.0	27.86
		2440	-8.34	10.83	2.49	0.00177	30.0	27.51
		2480	-8.15	10.83	2.68	0.00185	30.0	27.32

3.3. Power Spectral Density

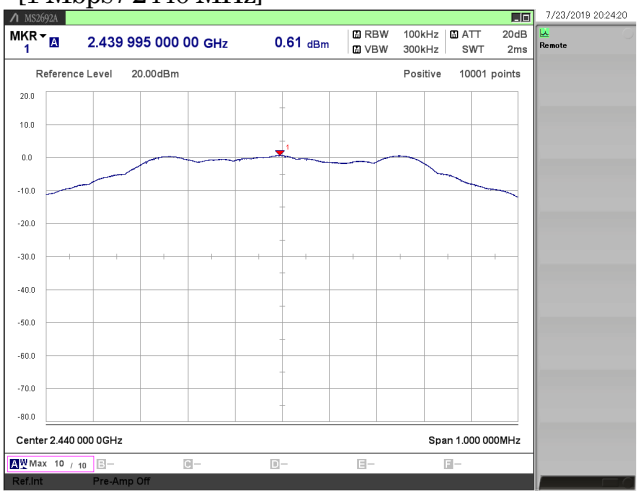
1) Ambient temperature : 20.0 deg.C
2) Relative humidity : 71.3 %
3) Date of measurement : July 23, 2019
4) Measured by : M.KOUGA
5) Operating mode : Transmitting mode

Mode	Rate [Mbps]	Channel [MHz]	Reading(PK) [dBm]	C.F. [dB]	Result(PK) [dBm]	Limit [dBm]	Margin [dB]
BLE	1	2402	0.00	1.10	1.10	8.0	6.90
		2440	0.61	1.10	1.71	8.0	6.29
		2480	0.81	1.10	1.91	8.0	6.09
	2	2402	-0.51	1.10	0.59	8.0	7.41
		2440	0.11	1.10	1.21	8.0	6.79
		2480	0.33	1.10	1.43	8.0	6.57

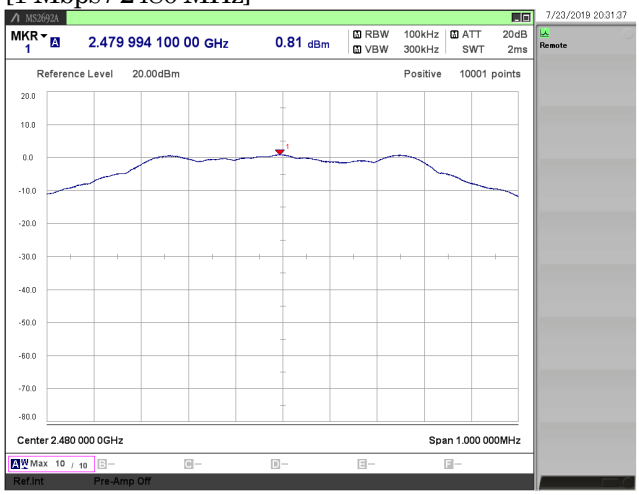
[1 Mbps / 2402 MHz]



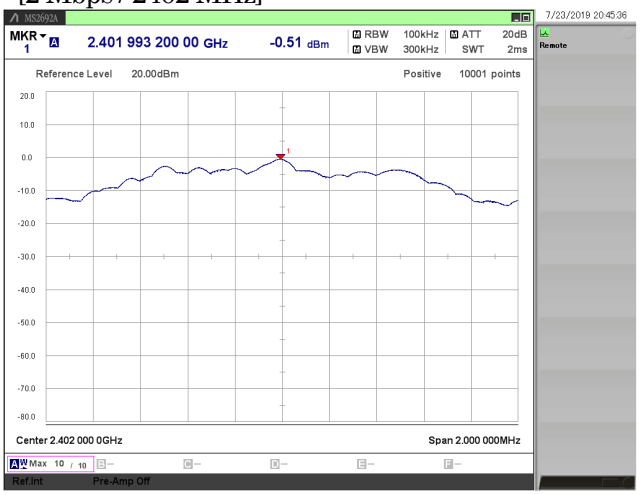
[1 Mbps / 2440 MHz]



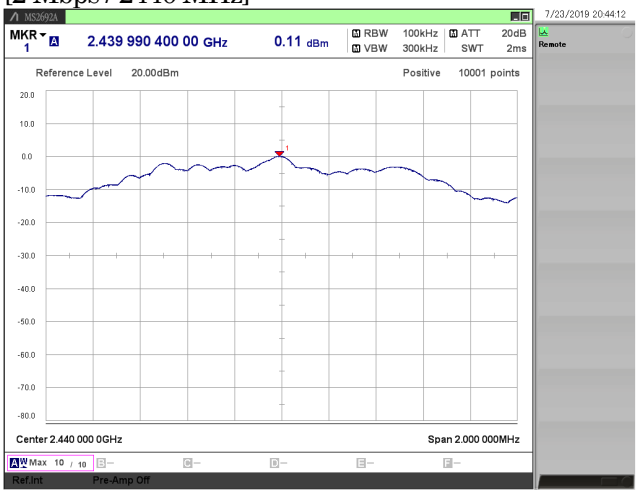
[1 Mbps / 2480 MHz]



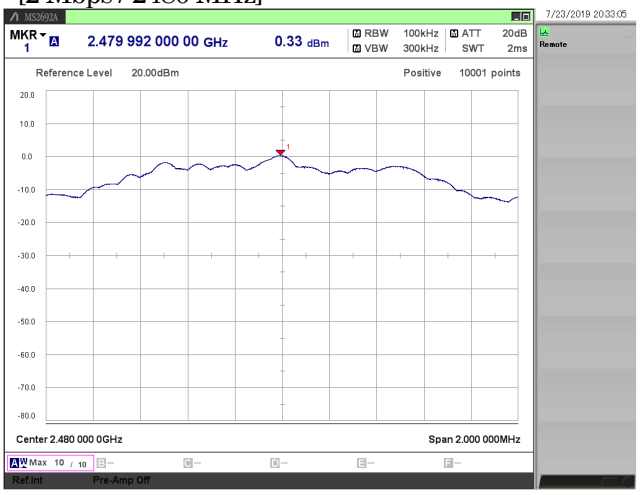
[2 Mbps / 2402 MHz]



[2 Mbps / 2440 MHz]



[2 Mbps / 2480 MHz]



3.4. Radiated Spurious Emissions

1) Date of measurement

9 kHz to 30 MHz	: July 15, 2019	
30 MHz to 1000 MHz	: July 15, 2019	
1 GHz to 6 GHz	: July 11, 2019 to July 12, 2019	July 12, 2019 to July 13, 2019 (band edge plot data)
6 GHz to 18 GHz	: July 17,2019 to July 18, 2019	
18 GHz to 26.5 GHz	: July 17, 2019	

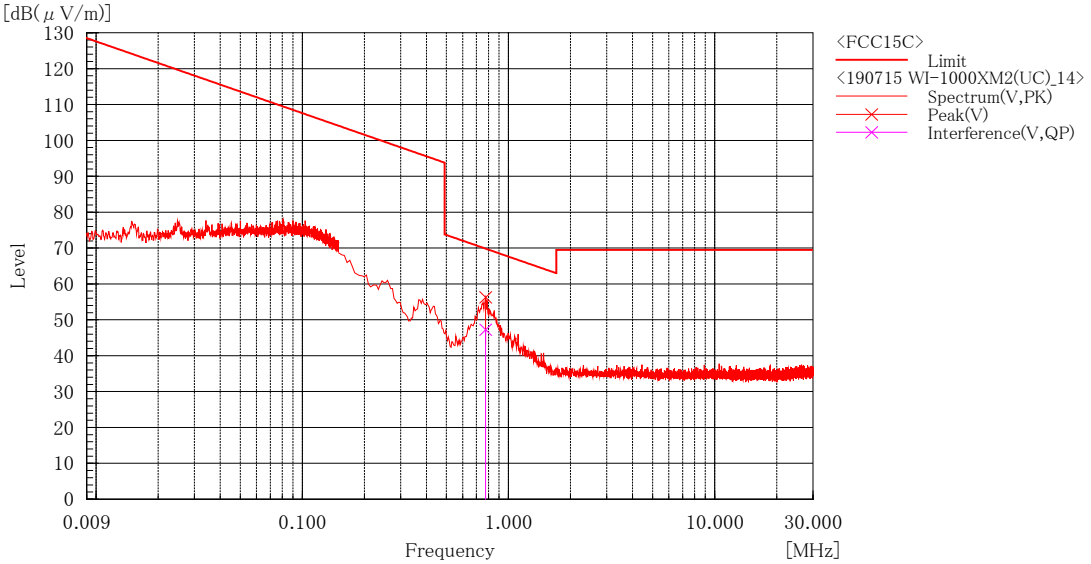
The test data is mentioned as follows.

9 kHz to 30 MHz
[1 Mbps / 2402 MHz]

Sony Global M&O Corp
Kisarazu No.1

<<Radiated Emission>>

Model	: WI-1000XM2	Limit	: FCC Part15C_15.209 (3m)
Serial	: 195	Remark1	: 0°
Operator	: T.NAKAMURA	Remark2	: X
Power	: DC 3.7V	Remark3	: 1M
Environment	: 23deg.C / 78% / 1010hPa	Remark4	: Low



Final Result

--- Vertical Polarization (QP)---

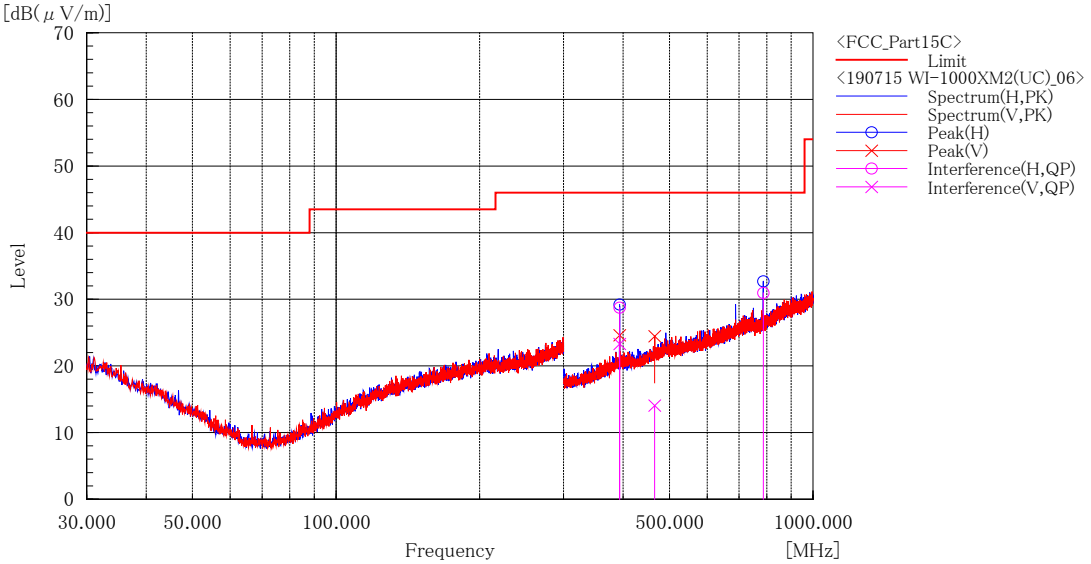
No.	Frequency [MHz]	Reading [dB(μV)]	c.f [dB(1/m)]	Result [dB(μV/m)]	Limit [dB(μV/m)]	Margin [dB]	Height [cm]	Angle [°]
1	0.775	27.6	19.7	47.3	69.8	22.5	100.0	325.6

30 MHz to 1000 MHz
[1 Mbps / 2402 MHz]

Sony Global M&O Corp
Kisarazu No.1

<<Radiated Emission>>

Model	: WI-1000XM2	Limit	: FCC Part15C 15.209(a) 3m
Serial	: 195	Remark1	:
Operator	: T.NAKAMURA	Remark2	: X
Power	: DC 3.7V	Remark3	: 1M
Environment	: 23deg.C / 78% / 1010hPa	Remark4	: Low



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	393.222	36.1	-7.3	28.8	46.0	17.2	100.0	203.1
2	786.442	32.9	-1.9	31.0	46.0	15.0	107.4	92.4

--- Vertical Polarization (QP)---

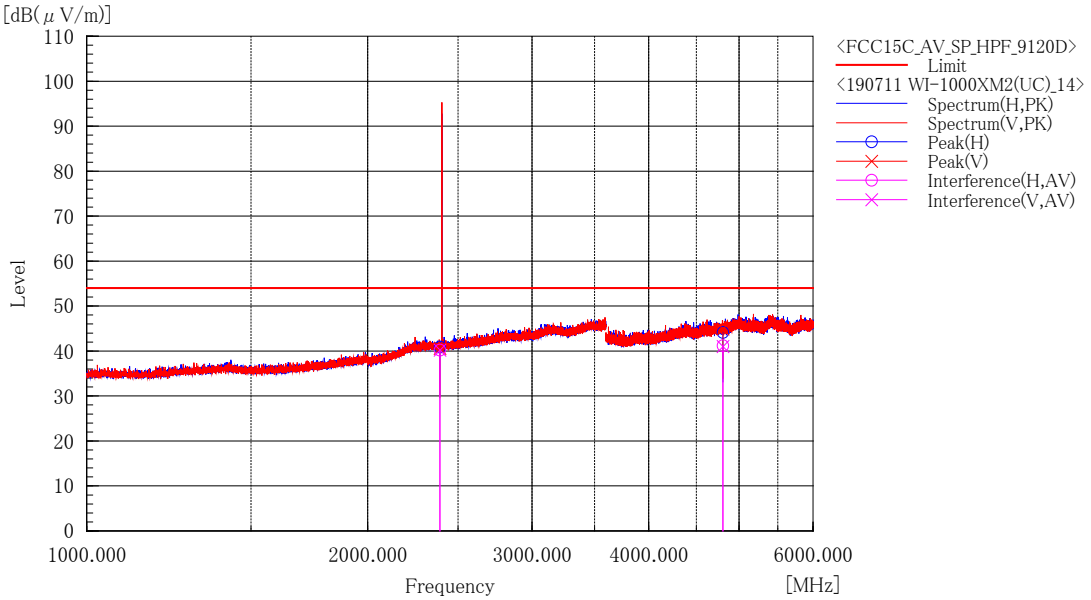
No.	Frequency [MHz]	Reading [dB(μV)]	c.f [dB(1/m)]	Result [dB(μV/m)]	Limit [dB(μV/m)]	Margin [dB]	Height [cm]	Angle [°]
1	393.221	30.6	-7.3	23.3	46.0	22.7	162.7	100.8
2	465.607	20.0	-5.9	14.1	46.0	31.9	248.0	225.6

1 GHz to 6 GHz
[1 Mbps / 2402 MHz]

Sony Global M&O Corp
Kisarazu TEC No.1

<<Radiated Emission>>

Model	: WI-1000XM2	Limit	: FCC Part15C 15.209(a) 3m
Serial	: 195	Remark1	:
Operator	: Y.MORIMOTO	Remark2	: Y
Power	: DC 3.7V	Remark3	: 1M
Environment	: 24deg.C / 55% / 1017hPa	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	37.5	2.7	40.2	54.0	13.8	166.7	282.5
2	4804.000	30.3	10.9	41.2	54.0	12.8	148.7	162.0

--- Vertical Polarization (AV)---

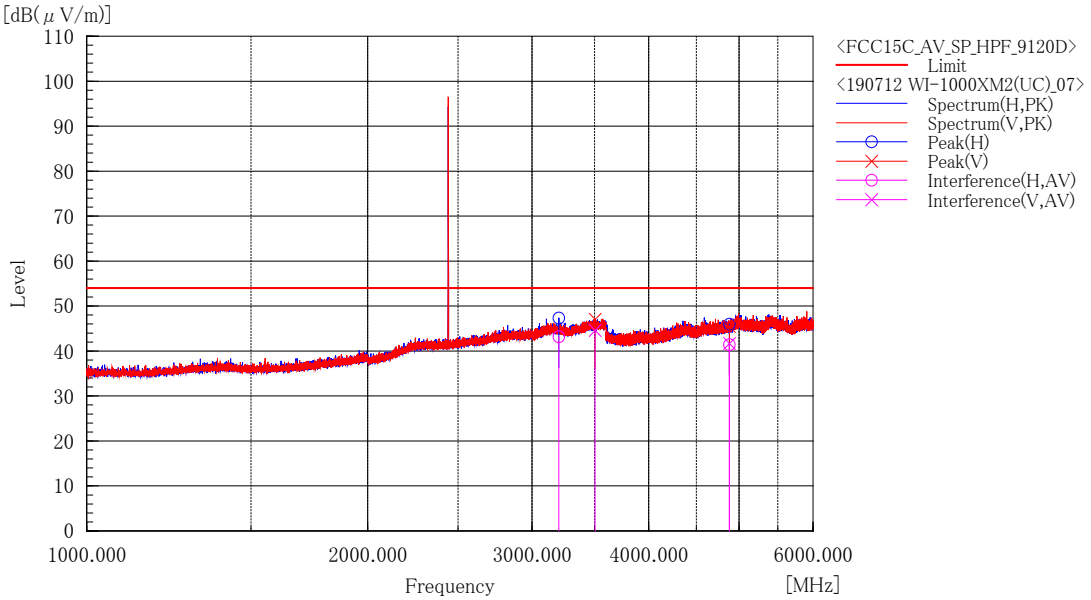
No.	Frequency [MHz]	Reading [dB(μV)]	c.f [dB(1/m)]	Result [dB(μV/m)]	Limit [dB(μV/m)]	Margin [dB]	Height [cm]	Angle [°]
1	2390.000	37.5	2.7	40.2	54.0	13.8	100.0	43.5
2	4804.000	30.1	10.9	41.0	54.0	13.0	134.1	298.9

[1 Mbps / 2440 MHz]

Sony Global M&O Corp
Kisarazu TEC No.1

<<Radiated Emission>>

Model	: WI-1000XM2	Limit	: FCC Part15C 15.209(a) 3m
Serial	: 195	Remark1	:
Operator	: Y.MORIMOTO	Remark2	: Y
Power	: DC 3.7V	Remark3	: 1M
Environment	: 24deg.C / 55% / 1017hPa	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	3204.874	37.3	5.9	43.2	54.0	10.8	120.7	239.7
2	4880.000	30.4	11.0	41.4	54.0	12.6	144.3	225.6

--- Vertical Polarization (AV)---

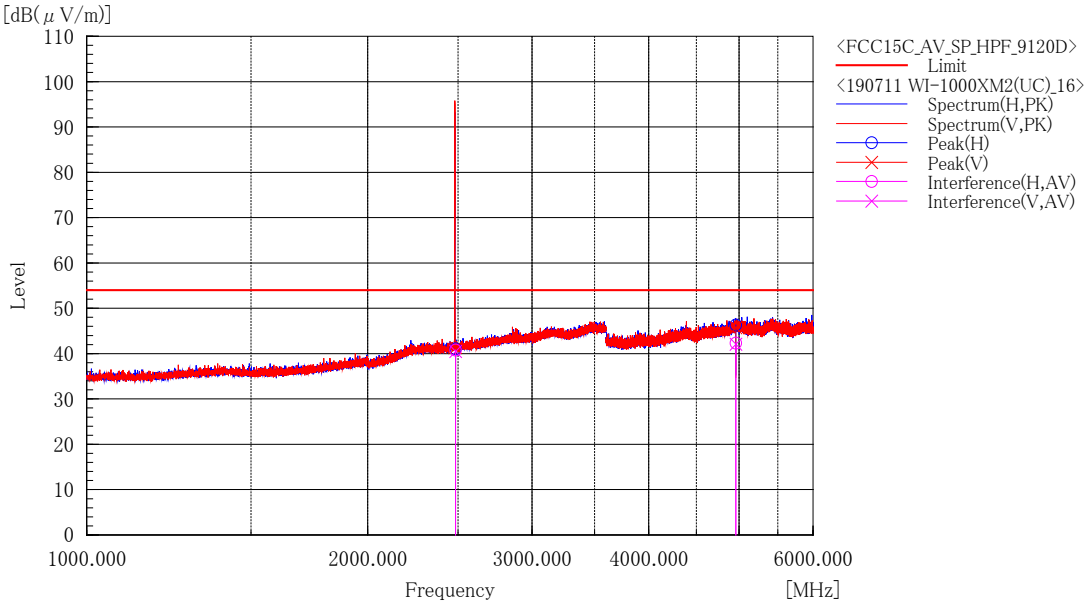
No.	Frequency [MHz]	Reading [dB(μV)]	c.f [dB(1/m)]	Result [dB(μV/m)]	Limit [dB(μV/m)]	Margin [dB]	Height [cm]	Angle [°]
1	3505.746	37.7	6.9	44.6	54.0	9.4	240.1	55.0
2	4880.000	30.7	11.0	41.7	54.0	12.3	165.6	146.1

[1 Mbps / 2480 MHz]

Sony Global M&O Corp
Kisarazu TEC No.1

<<Radiated Emission>>

Model	: WI-1000XM2	Limit	: FCC Part15C 15.209(a) 3m
Serial	: 195	Remark1	:
Operator	: Y.MORIMOTO	Remark2	: Y
Power	: DC 3.7V	Remark3	: 1M
Environment	: 24deg.C / 55% / 1017hPa	Remark4	: Hi



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	37.7	3.1	40.8	54.0	13.2	230.0	107.0
2	4960.000	31.0	11.3	42.3	54.0	11.7	171.8	160.9

--- Vertical Polarization (AV)---

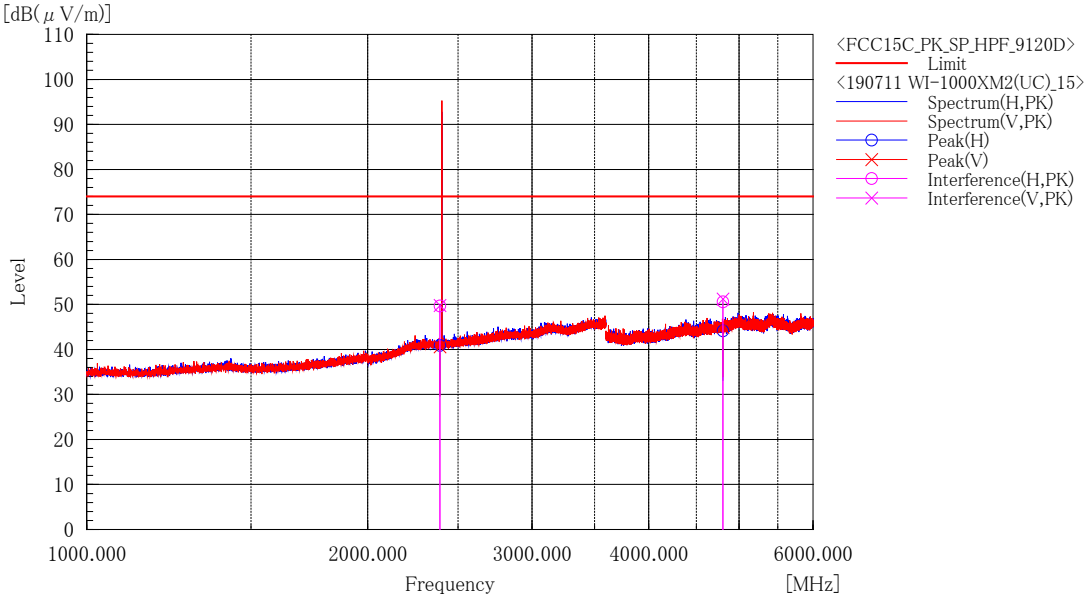
No.	Frequency [MHz]	Reading [dB(μV)]	c.f [dB(1/m)]	Result [dB(μV/m)]	Limit [dB(μV/m)]	Margin [dB]	Height [cm]	Angle [°]
1	2483.500	37.4	3.1	40.5	54.0	13.5	100.0	72.0
2	4960.000	30.8	11.3	42.1	54.0	11.9	206.5	325.0

[1 Mbps / 2402 MHz]

Sony Global M&O Corp
Kisarazu TEC No.1

<<Radiated Emission>>

Model	: WI-1000XM2	Limit	: FCC Part15C 15.209(a) 3m
Serial	: 195	Remark1	:
Operator	: Y.MORIMOTO	Remark2	: Y
Power	: DC 3.7V	Remark3	: 1M
Environment	: 24deg.C / 55% / 1017hPa	Remark4	: Low



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	47.0	2.7	49.7	74.0	24.3	166.7	280.6
2	4804.000	39.7	10.9	50.6	74.0	23.4	148.7	162.0

--- Vertical Polarization (PK)---

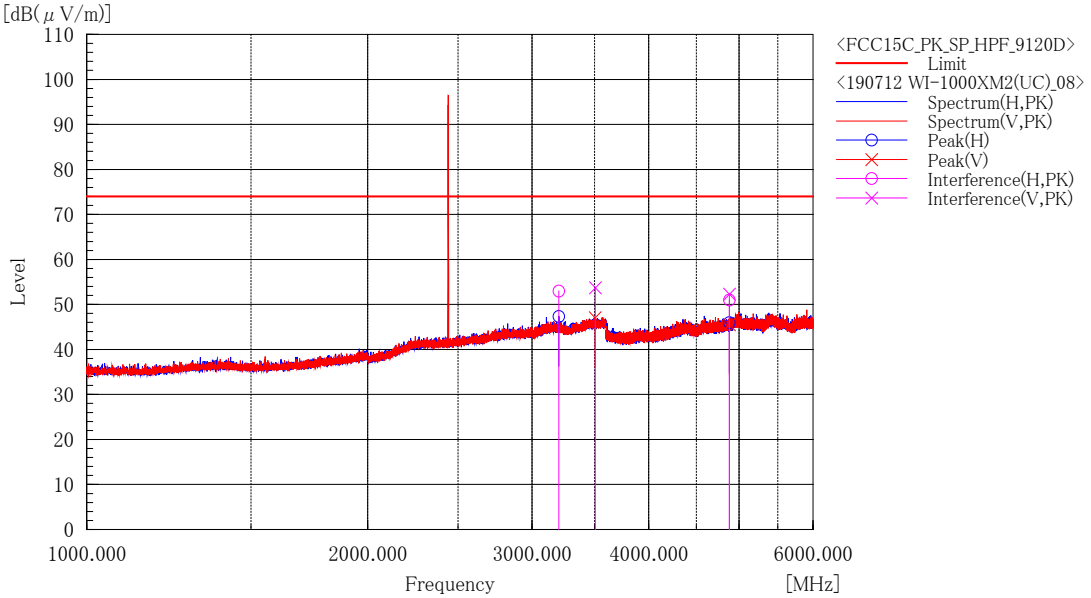
No.	Frequency [MHz]	Reading [dB(μV)]	c.f [dB(1/m)]	Result [dB(μV/m)]	Limit [dB(μV/m)]	Margin [dB]	Height [cm]	Angle [°]
1	2390.000	47.1	2.7	49.8	74.0	24.2	100.0	41.6
2	4804.000	40.3	10.9	51.2	74.0	22.8	134.1	300.9

[1 Mbps / 2440 MHz]

Sony Global M&O Corp
Kisarazu TEC No.1

<<Radiated Emission>>

Model	: WI-1000XM2	Limit	: FCC Part15C 15.209(a) 3m
Serial	: 195	Remark1	:
Operator	: Y.MORIMOTO	Remark2	: Y
Power	: DC 3.7V	Remark3	: 1M
Environment	: 24deg.C / 55% / 1017hPa	Remark4	: Mid



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	3205.595	47.1	5.9	53.0	74.0	21.0	120.7	237.8
2	4880.000	40.0	11.0	51.0	74.0	23.0	144.3	225.6

--- Vertical Polarization (PK)---

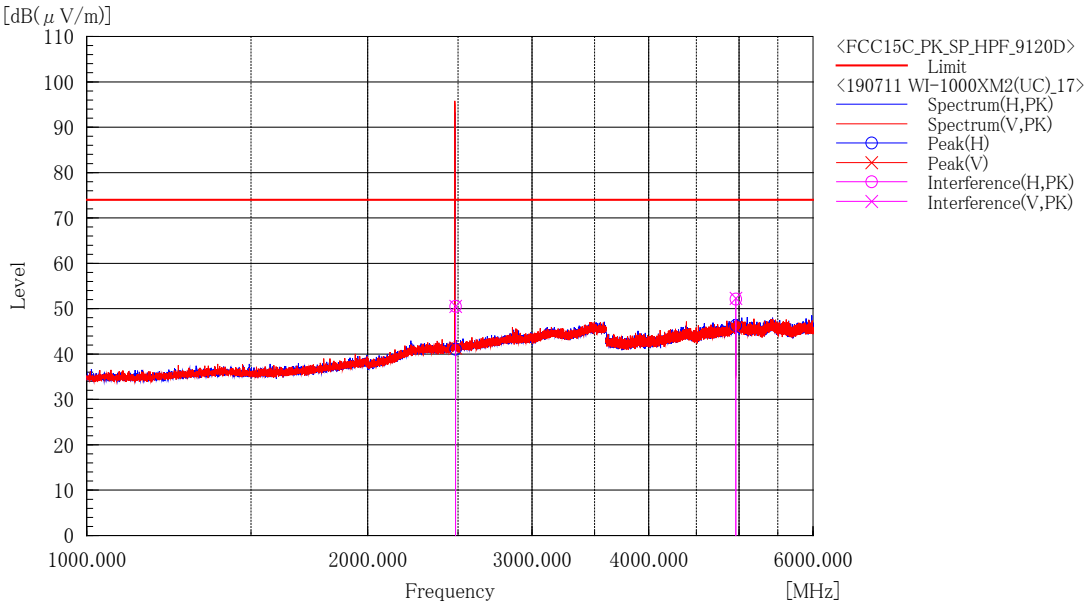
No.	Frequency [MHz]	Reading [dB(μV)]	c.f [dB(1/m)]	Result [dB(μV/m)]	Limit [dB(μV/m)]	Margin [dB]	Height [cm]	Angle [°]
1	3506.598	46.7	7.0	53.7	74.0	20.3	240.1	53.1
2	4880.000	41.3	11.0	52.3	74.0	21.7	165.6	144.0

[1 Mbps / 2480 MHz]

Sony Global M&O Corp
Kisarazu TEC No.1

<<Radiated Emission>>

Model	: WI-1000XM2	Limit	: FCC Part15C 15.209(a) 3m
Serial	: 195	Remark1	:
Operator	: Y.MORIMOTO	Remark2	: Y
Power	: DC 3.7V	Remark3	: 1M
Environment	: 24deg.C / 55% / 1017hPa	Remark4	: Hi



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	47.4	3.1	50.5	74.0	23.5	230.0	109.1
2	4960.000	40.8	11.3	52.1	74.0	21.9	171.8	163.0

--- Vertical Polarization (PK)---

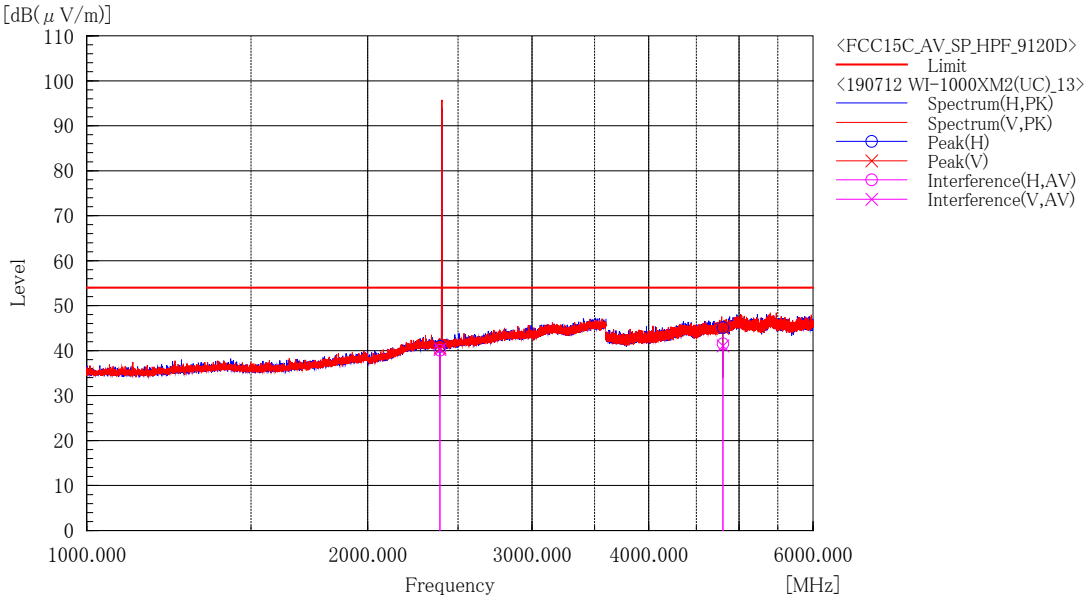
No.	Frequency [MHz]	Reading [dB(μV)]	c.f [dB(1/m)]	Result [dB(μV/m)]	Limit [dB(μV/m)]	Margin [dB]	Height [cm]	Angle [°]
1	2483.500	47.4	3.1	50.5	74.0	23.5	100.0	72.1
2	4960.000	41.0	11.3	52.3	74.0	21.7	206.5	326.9

[2 Mbps / 2402 MHz]

Sony Global M&O Corp
Kisarazu TEC No.1

<<Radiated Emission>>

Model	: WI-1000XM2	Limit	: FCC Part15C 15.209(a) 3m
Serial	: 195	Remark1	:
Operator	: Y.MORIMOTO	Remark2	: Y
Power	: DC 3.7V	Remark3	: 2M
Environment	: 24deg.C / 55% / 1017hPa	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	37.4	2.7	40.1	54.0	13.9	112.7	126.0
2	4804.000	30.6	10.9	41.5	54.0	12.5	197.2	348.6

--- Vertical Polarization (AV)---

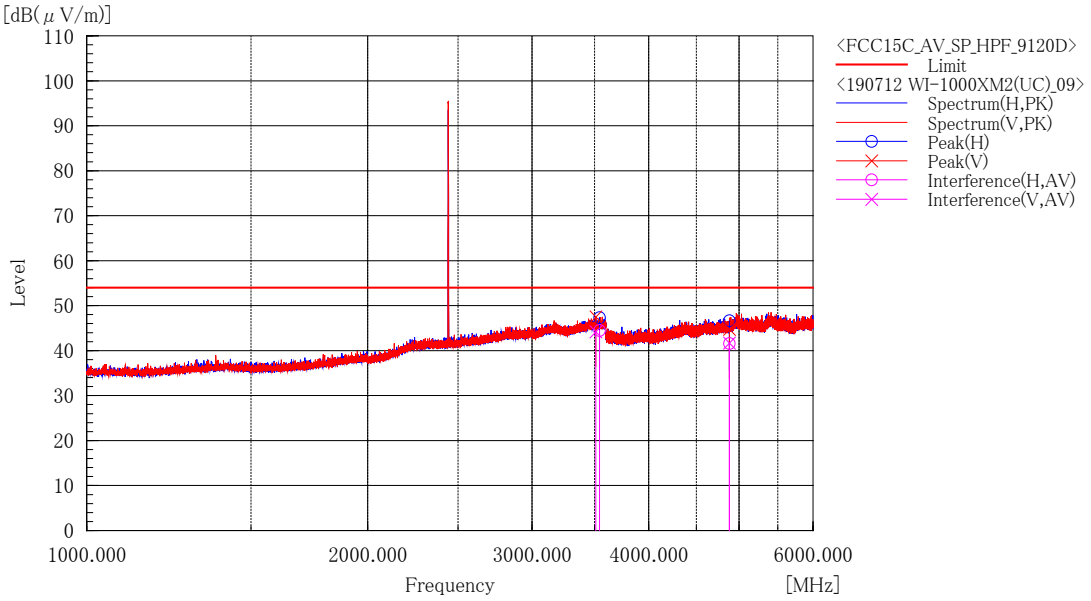
No.	Frequency [MHz]	Reading [dB(μV)]	c.f [dB(1/m)]	Result [dB(μV/m)]	Limit [dB(μV/m)]	Margin [dB]	Height [cm]	Angle [°]
1	2390.000	37.6	2.7	40.3	54.0	13.7	170.2	117.7
2	4804.000	30.2	10.9	41.1	54.0	12.9	117.0	313.4

[2 Mbps / 2440 MHz]

Sony Global M&O Corp
Kisarazu TEC No.1

<<Radiated Emission>>

Model	: WI-1000XM2	Limit	: FCC Part15C 15.209(a) 3m
Serial	: 195	Remark1	:
Operator	: Y.MORIMOTO	Remark2	: Y
Power	: DC 3.7V	Remark3	: 2M
Environment	: 24deg.C / 55% / 1017hPa	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	3543.622	37.3	7.2	44.5	54.0	9.5	201.0	44.0
2	4880.000	30.6	11.0	41.6	54.0	12.4	431.0	78.5

--- Vertical Polarization (AV)---

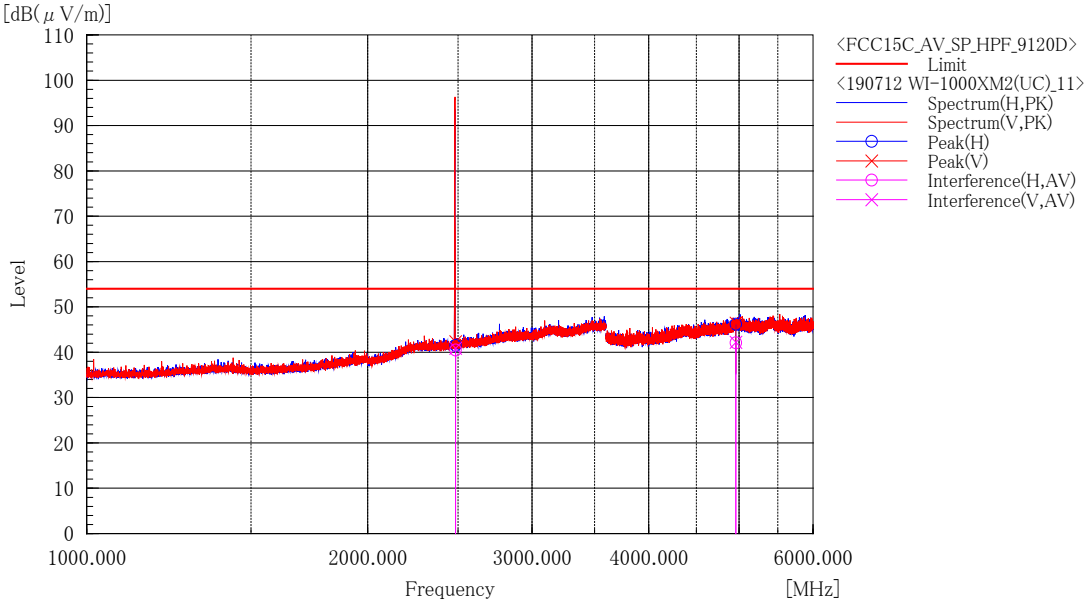
No.	Frequency [MHz]	Reading [dB(μV)]	c.f [dB(1/m)]	Result [dB(μV/m)]	Limit [dB(μV/m)]	Margin [dB]	Height [cm]	Angle [°]
1	3511.341	37.2	7.0	44.2	54.0	9.8	250.4	122.0
2	4880.000	30.7	11.0	41.7	54.0	12.3	173.5	52.7

[2 Mbps / 2480 MHz]

Sony Global M&O Corp
Kisarazu TEC No.1

<<Radiated Emission>>

Model	: WI-1000XM2	Limit	: FCC Part15C 15.209(a) 3m
Serial	: 195	Remark1	:
Operator	: Y.MORIMOTO	Remark2	: Y
Power	: DC 3.7V	Remark3	: 2M
Environment	: 24deg.C / 55% / 1017hPa	Remark4	: Hi



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	37.4	3.1	40.5	54.0	13.5	173.0	96.0
2	4960.000	30.8	11.3	42.1	54.0	11.9	286.6	103.5

--- Vertical Polarization (AV)---

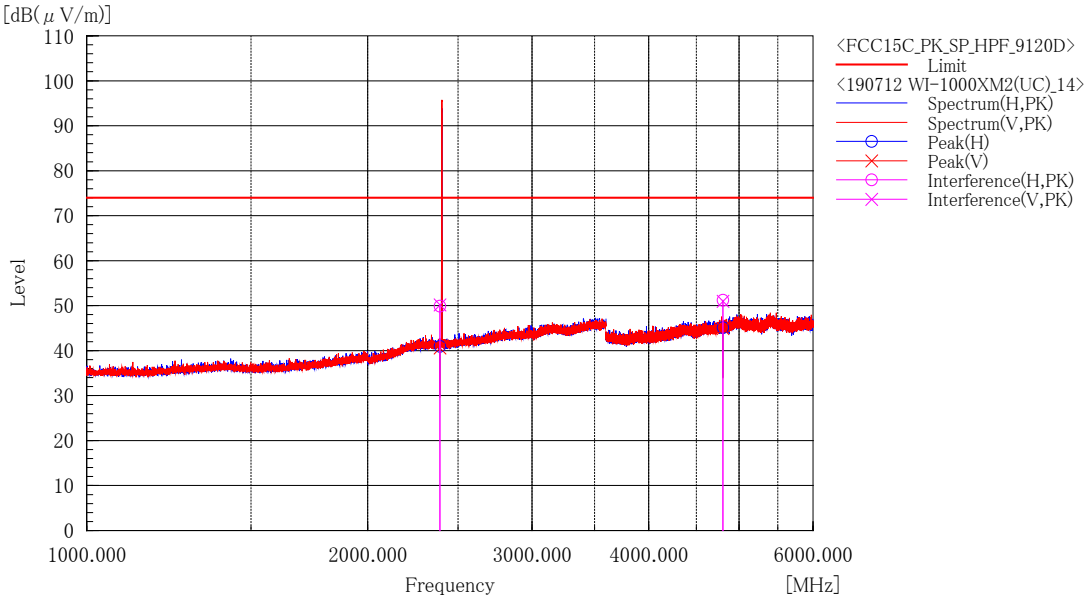
No.	Frequency [MHz]	Reading [dB(μV)]	c.f [dB(1/m)]	Result [dB(μV/m)]	Limit [dB(μV/m)]	Margin [dB]	Height [cm]	Angle [°]
1	2483.500	37.8	3.1	40.9	54.0	13.1	100.0	115.0
2	4960.000	30.9	11.3	42.2	54.0	11.8	214.2	244.3

[2 Mbps / 2402 MHz]

Sony Global M&O Corp
Kisarazu TEC No.1

<<Radiated Emission>>

Model	: WI-1000XM2	Limit	: FCC Part15C 15.209(a) 3m
Serial	: 195	Remark1	:
Operator	: Y.MORIMOTO	Remark2	: Y
Power	: DC 3.7V	Remark3	: 2M
Environment	: 24deg.C / 55% / 1017hPa	Remark4	: Low



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	47.2	2.7	49.9	74.0	24.1	112.7	124.4
2	4804.000	40.3	10.9	51.2	74.0	22.8	197.2	350.7

--- Vertical Polarization (PK)---

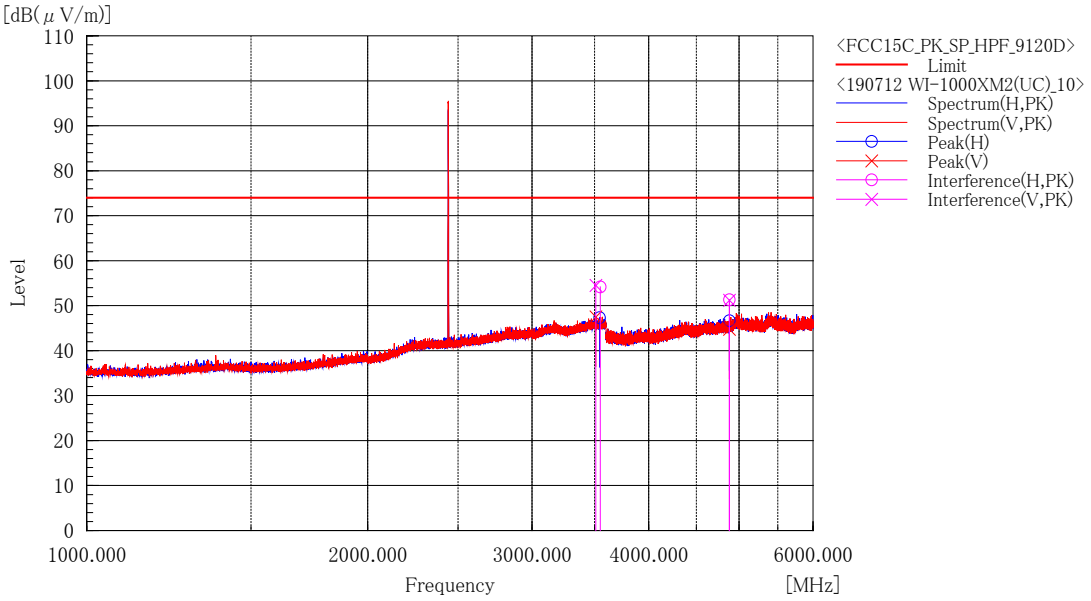
No.	Frequency [MHz]	Reading [dB(μV)]	c.f [dB(1/m)]	Result [dB(μV/m)]	Limit [dB(μV/m)]	Margin [dB]	Height [cm]	Angle [°]
1	2390.000	47.5	2.7	50.2	74.0	23.8	170.2	115.6
2	4804.000	40.1	10.9	51.0	74.0	23.0	117.0	313.4

[2 Mbps / 2440 MHz]

Sony Global M&O Corp
Kisarazu TEC No.1

<<Radiated Emission>>

Model	: WI-1000XM2	Limit	: FCC Part15C 15.209(a) 3m
Serial	: 195	Remark1	:
Operator	: Y.MORIMOTO	Remark2	: Y
Power	: DC 3.7V	Remark3	: 2M
Environment	: 24deg.C / 55% / 1017hPa	Remark4	: Mid



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	3550.404	47.0	7.2	54.2	74.0	19.8	201.0	43.9
2	4880.000	40.3	11.0	51.3	74.0	22.7	431.0	76.5

--- Vertical Polarization (PK)---

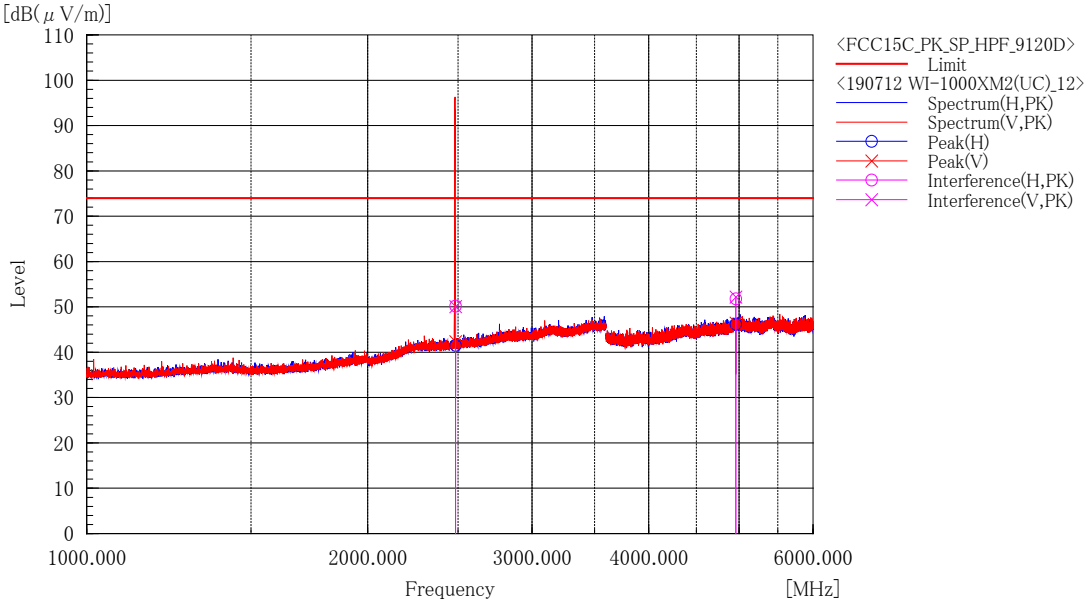
No.	Frequency [MHz]	Reading [dB(μV)]	c.f [dB(1/m)]	Result [dB(μV/m)]	Limit [dB(μV/m)]	Margin [dB]	Height [cm]	Angle [°]
1	3512.189	47.5	7.0	54.5	74.0	19.5	250.4	120.0
2	4880.000	40.2	11.0	51.2	74.0	22.8	173.5	54.7

[2 Mbps / 2480 MHz]

Sony Global M&O Corp
Kisarazu TEC No.1

<<Radiated Emission>>

Model	: WI-1000XM2	Limit	: FCC Part15C 15.209(a) 3m
Serial	: 195	Remark1	:
Operator	: Y.MORIMOTO	Remark2	: Y
Power	: DC 3.7V	Remark3	: 2M
Environment	: 24deg.C / 55% / 1017hPa	Remark4	: Hi



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	47.1	3.1	50.2	74.0	23.8	173.0	97.6
2	4960.000	40.5	11.3	51.8	74.0	22.2	286.6	103.5

--- Vertical Polarization (PK)---

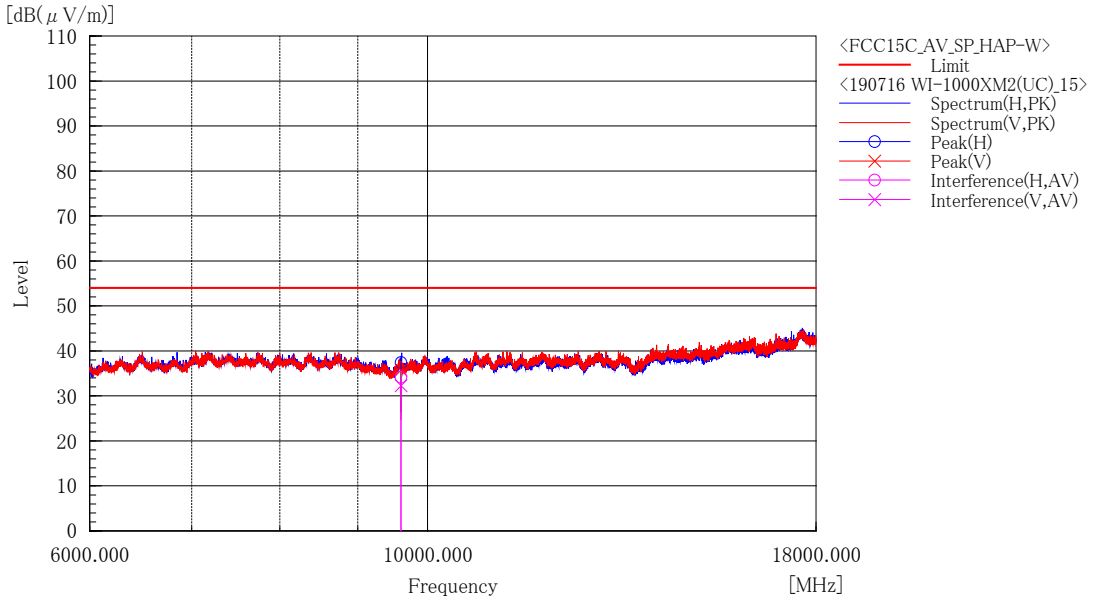
No.	Frequency [MHz]	Reading [dB(μV)]	c.f [dB(1/m)]	Result [dB(μV/m)]	Limit [dB(μV/m)]	Margin [dB]	Height [cm]	Angle [°]
1	2483.500	47.0	3.1	50.1	74.0	23.9	100.0	113.1
2	4960.000	40.9	11.3	52.2	74.0	21.8	214.2	242.4

6 GHz to 18 GHz
[1 Mbps / 2402 MHz]

Sony Global M&O Corp
Kisarazu No.1

<<Radiated Emission>>

Model	: WI-1000XM2	Limit	: FCC Part15C 15.209(a) 3m
Serial	: 195	Remark1	:
Operator	: Y.MORIMOTO	Remark2	: Y
Power	: DC 3.7V	Remark3	: 1M
Environment	: 23deg.C / 70% / 1012hPa	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	9608.000	40.2	-6.0	34.2	54.0	19.8	339.3	186.3

--- Vertical Polarization (AV)---

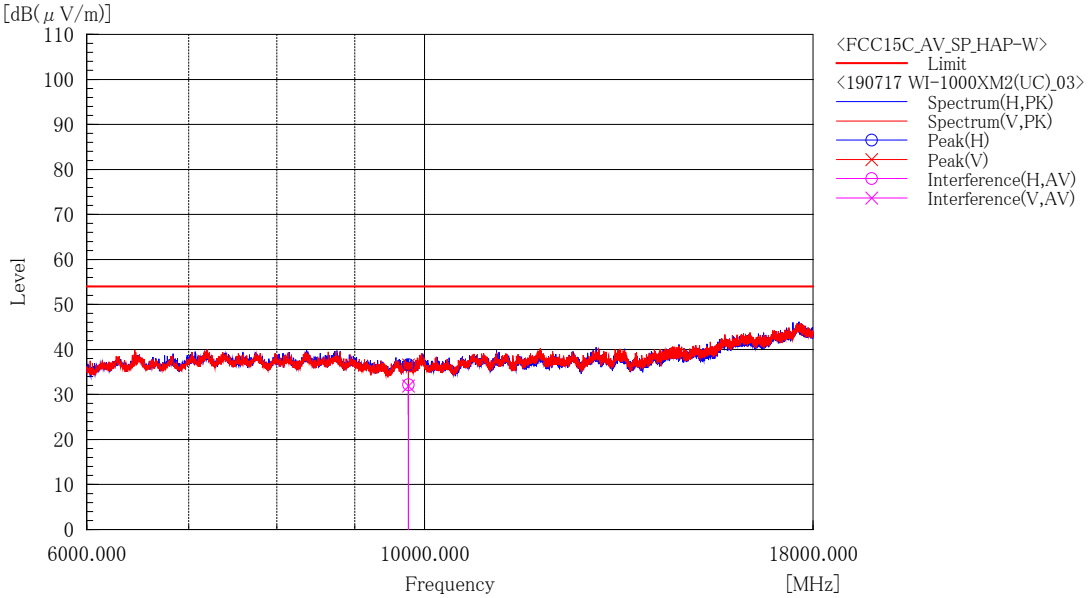
No.	Frequency [MHz]	Reading [dB(μV)]	c.f [dB(1/m)]	Result [dB(μV/m)]	Limit [dB(μV/m)]	Margin [dB]	Height [cm]	Angle [°]
1	9608.000	38.3	-6.0	32.3	54.0	21.7	371.3	257.5

[1 Mbps / 2440 MHz]

Sony Global M&O Corp
Kisarazu No.1

<<Radiated Emission>>

Model	: WI-1000XM2	Limit	: FCC Part15C 15.209(a) 3m
Serial	: 195	Remark1	:
Operator	: Y.MORIMOTO	Remark2	: Y
Power	: DC 3.7V	Remark3	: 1M
Environment	: 24deg.C / 68% / 1012hPa	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	9760.000	37.7	-5.5	32.2	54.0	21.8	199.1	4.5

--- Vertical Polarization (AV)---

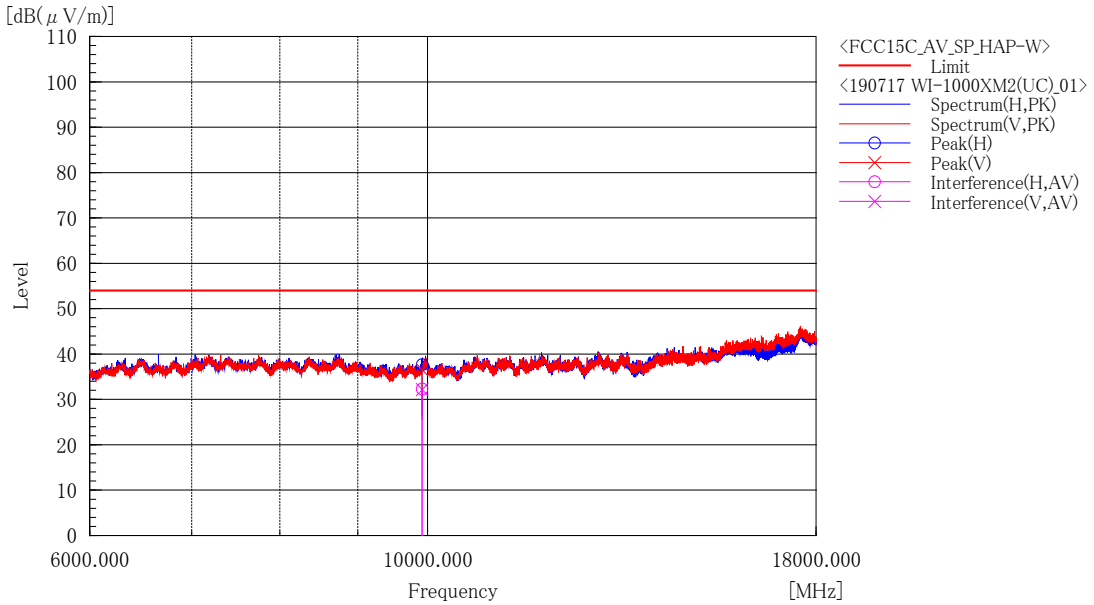
No.	Frequency [MHz]	Reading [dB(μV)]	c.f [dB(1/m)]	Result [dB(μV/m)]	Limit [dB(μV/m)]	Margin [dB]	Height [cm]	Angle [°]
1	9760.000	37.4	-5.5	31.9	54.0	22.1	133.3	330.0

[1 Mbps / 2480 MHz]

Sony Global M&O Corp
Kisarazu No.1

<<Radiated Emission>>

Model	: WI-1000XM2	Limit	: FCC Part15C 15.209(a) 3m
Serial	: 195	Remark1	:
Operator	: Y.MORIMOTO	Remark2	: Y
Power	: DC 3.7V	Remark3	: 1M
Environment	: 24deg.C / 68% / 1012hPa	Remark4	: Hi



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	9920.000	37.1	-4.8	32.3	54.0	21.7	179.6	152.1

--- Vertical Polarization (AV)---

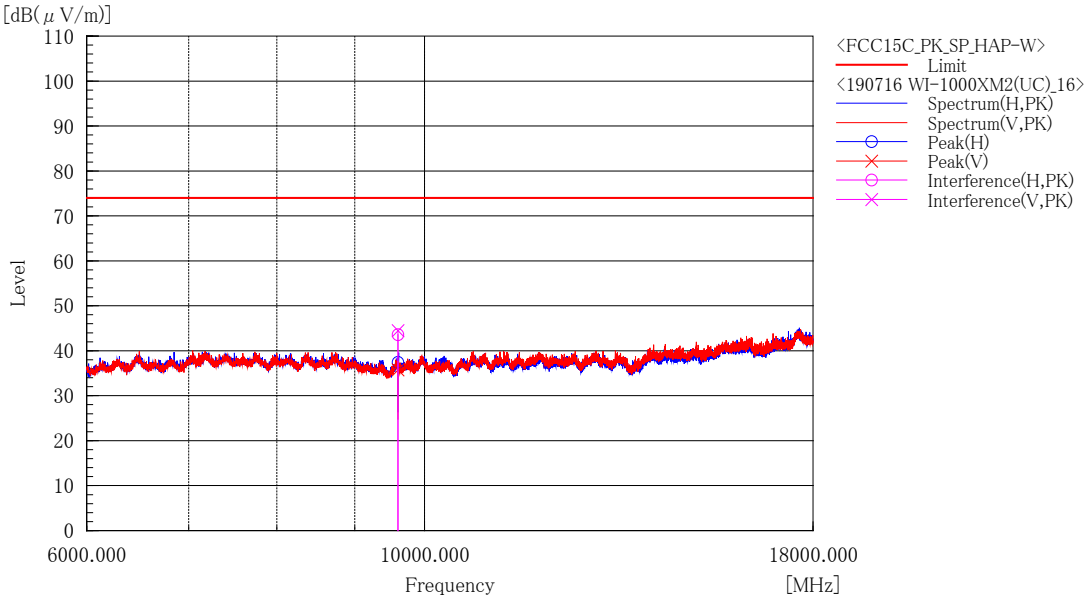
No.	Frequency [MHz]	Reading [dB(μV)]	c.f [dB(1/m)]	Result [dB(μV/m)]	Limit [dB(μV/m)]	Margin [dB]	Height [cm]	Angle [°]
1	9920.000	37.0	-4.8	32.2	54.0	21.8	131.2	154.1

[1 Mbps / 2402 MHz]

Sony Global M&O Corp
Kisarazu No.1

<<Radiated Emission>>

Model	: WI-1000XM2	Limit	: FCC Part15C 15.209(a) 3m
Serial	: 195	Remark1	:
Operator	: Y.MORIMOTO	Remark2	: Y
Power	: DC 3.7V	Remark3	: 1M
Environment	: 23deg.C / 70% / 1012hPa	Remark4	: Low



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	9608.000	49.6	-6.0	43.6	74.0	30.3	339.3	188.4

--- Vertical Polarization (PK)---

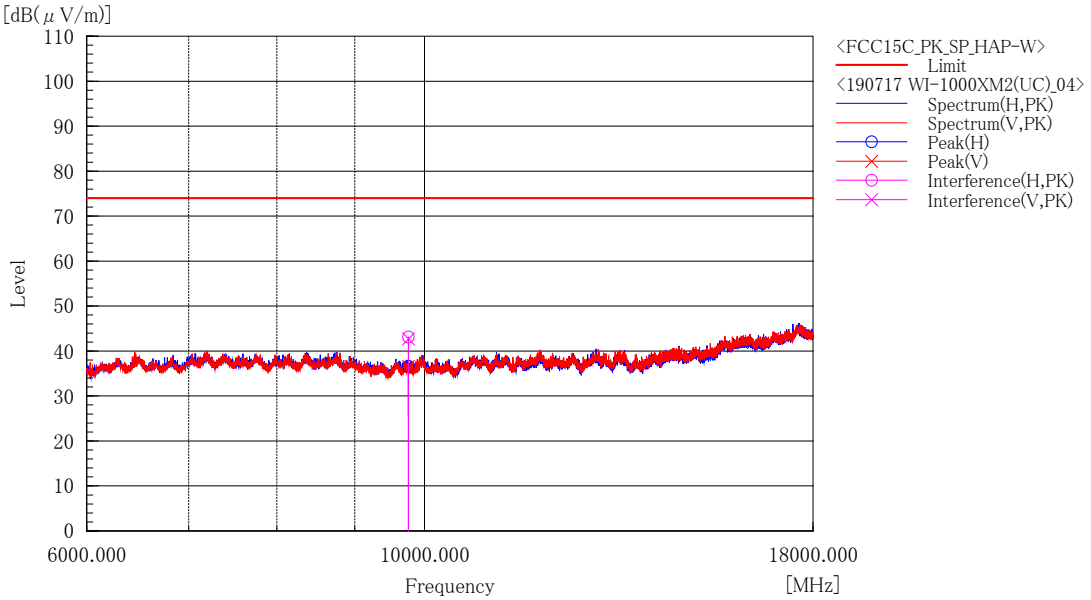
No.	Frequency [MHz]	Reading [dB(μV)]	c.f [dB(1/m)]	Result [dB(μV/m)]	Limit [dB(μV/m)]	Margin [dB]	Height [cm]	Angle [°]
1	9608.000	50.5	-6.0	44.5	74.0	29.5	371.3	255.6

[1 Mbps / 2440 MHz]

Sony Global M&O Corp
Kisarazu No.1

<<Radiated Emission>>

Model	: WI-1000XM2	Limit	: FCC Part15C 15.209(a) 3m
Serial	: 195	Remark1	:
Operator	: Y.MORIMOTO	Remark2	: Y
Power	: DC 3.7V	Remark3	: 1M
Environment	: 24deg.C / 68% / 1012hPa	Remark4	: Mid



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	9760.000	48.6	-5.5	43.1	74.0	30.9	199.1	2.5

--- Vertical Polarization (PK)---

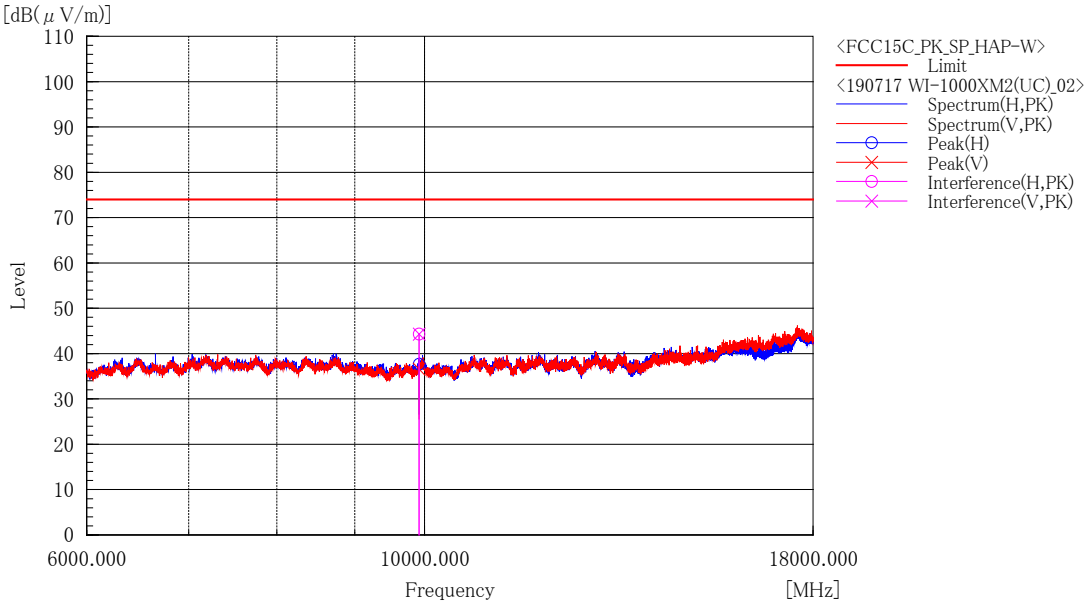
No.	Frequency [MHz]	Reading [dB(μV)]	c.f [dB(1/m)]	Result [dB(μV/m)]	Limit [dB(μV/m)]	Margin [dB]	Height [cm]	Angle [°]
1	9760.000	48.2	-5.5	42.7	74.0	31.3	133.3	330.0

[1 Mbps / 2480 MHz]

Sony Global M&O Corp
Kisarazu No.1

<<Radiated Emission>>

Model	: WI-1000XM2	Limit	: FCC Part15C 15.209(a) 3m
Serial	: 195	Remark1	:
Operator	: Y.MORIMOTO	Remark2	: Y
Power	: DC 3.7V	Remark3	: 1M
Environment	: 24deg.C / 68% / 1012hPa	Remark4	: Hi



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	9920.000	49.1	-4.8	44.3	74.0	29.7	179.6	152.1

--- Vertical Polarization (PK)---

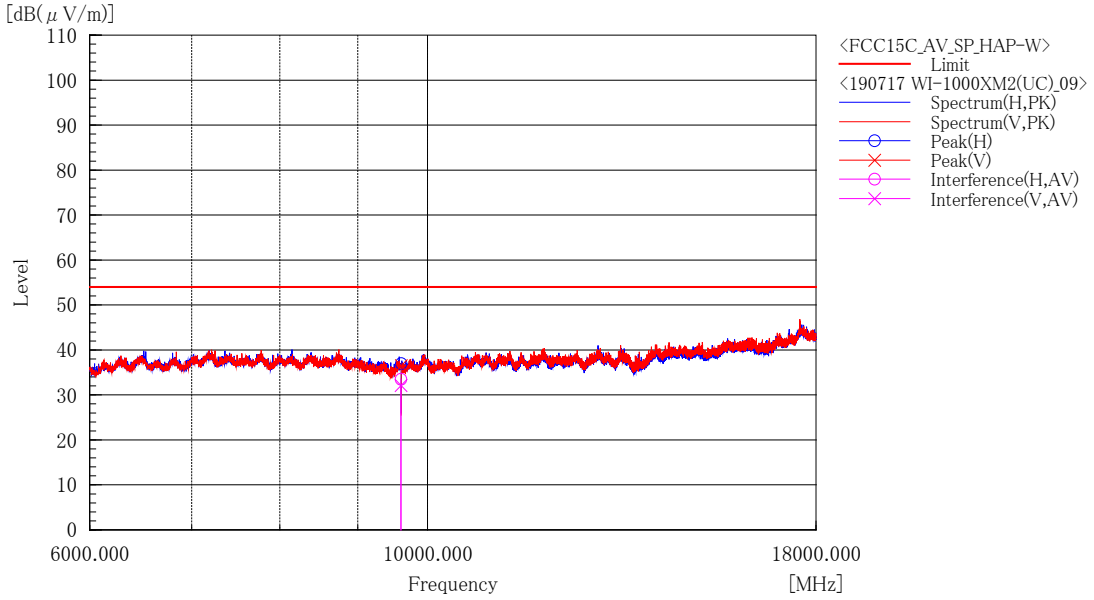
No.	Frequency [MHz]	Reading [dB(μV)]	c.f [dB(1/m)]	Result [dB(μV/m)]	Limit [dB(μV/m)]	Margin [dB]	Height [cm]	Angle [°]
1	9920.000	49.1	-4.8	44.3	74.0	29.7	131.2	152.1

[2 Mbps / 2402 MHz]

Sony Global M&O Corp
Kisarazu No.1

<<Radiated Emission>>

Model	: WI-1000XM2	Limit	: FCC Part15C 15.209(a) 3m
Serial	: 195	Remark1	:
Operator	: Y.MORIMOTO	Remark2	: Y
Power	: DC 3.7V	Remark3	: 2M
Environment	: 24deg.C / 68% / 1012hPa	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	9608.000	39.5	-6.0	33.5	54.0	20.5	381.7	126.7

--- Vertical Polarization (AV)---

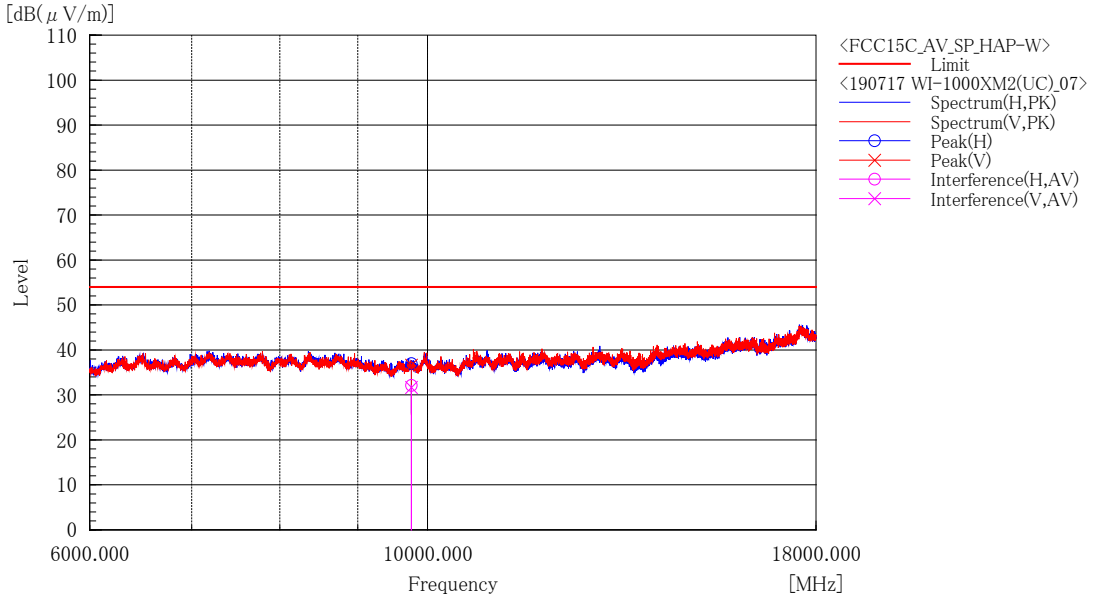
No.	Frequency [MHz]	Reading [dB(μV)]	c.f [dB(1/m)]	Result [dB(μV/m)]	Limit [dB(μV/m)]	Margin [dB]	Height [cm]	Angle [°]
1	9608.000	38.1	-6.0	32.1	54.0	21.9	238.9	144.7

[2 Mbps / 2440 MHz]

Sony Global M&O Corp
Kisarazu No.1

<<Radiated Emission>>

Model	: WI-1000XM2	Limit	: FCC Part15C 15.209(a) 3m
Serial	: 195	Remark1	:
Operator	: Y.MORIMOTO	Remark2	: Y
Power	: DC 3.7V	Remark3	: 2M
Environment	: 24deg.C / 68% / 1012hPa	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	9760.000	37.6	-5.5	32.1	54.0	21.9	351.2	288.4

--- Vertical Polarization (AV)---

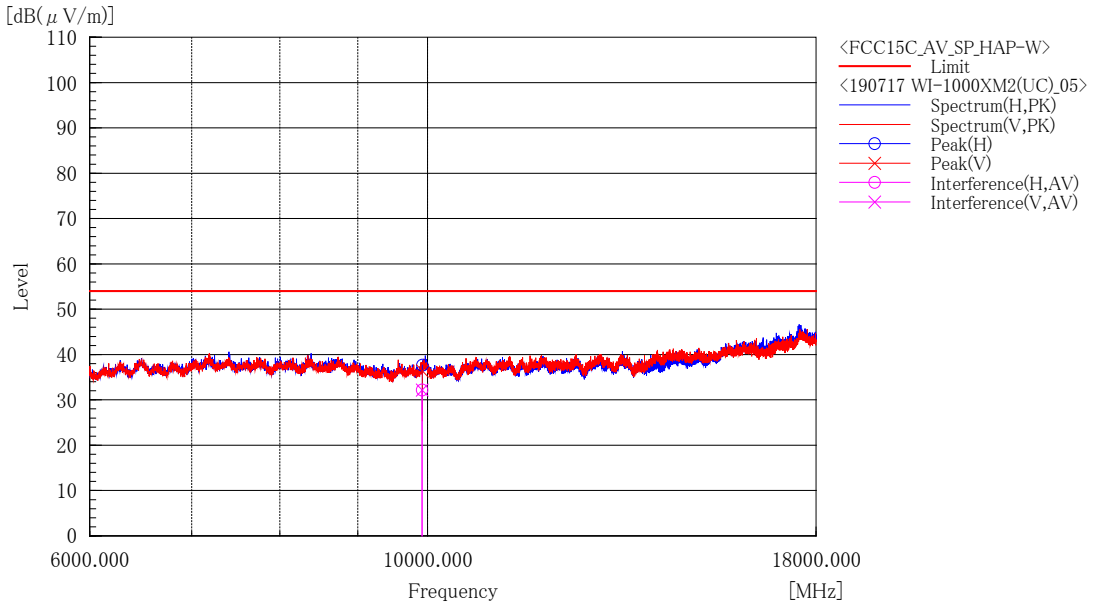
No.	Frequency [MHz]	Reading [dB(μV)]	c.f [dB(1/m)]	Result [dB(μV/m)]	Limit [dB(μV/m)]	Margin [dB]	Height [cm]	Angle [°]
1	9760.000	37.2	-5.5	31.7	54.0	22.2	125.1	160.2

[2 Mbps / 2480 MHz]

Sony Global M&O Corp
Kisarazu No.1

<<Radiated Emission>>

Model	: WI-1000XM2	Limit	: FCC Part15C 15.209(a) 3m
Serial	: 195	Remark1	:
Operator	: Y.MORIMOTO	Remark2	: Y
Power	: DC 3.7V	Remark3	: 2M
Environment	: 24deg.C / 68% / 1012hPa	Remark4	: Hi



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	9920.000	37.0	-4.8	32.2	54.0	21.8	118.2	95.8

--- Vertical Polarization (AV)---

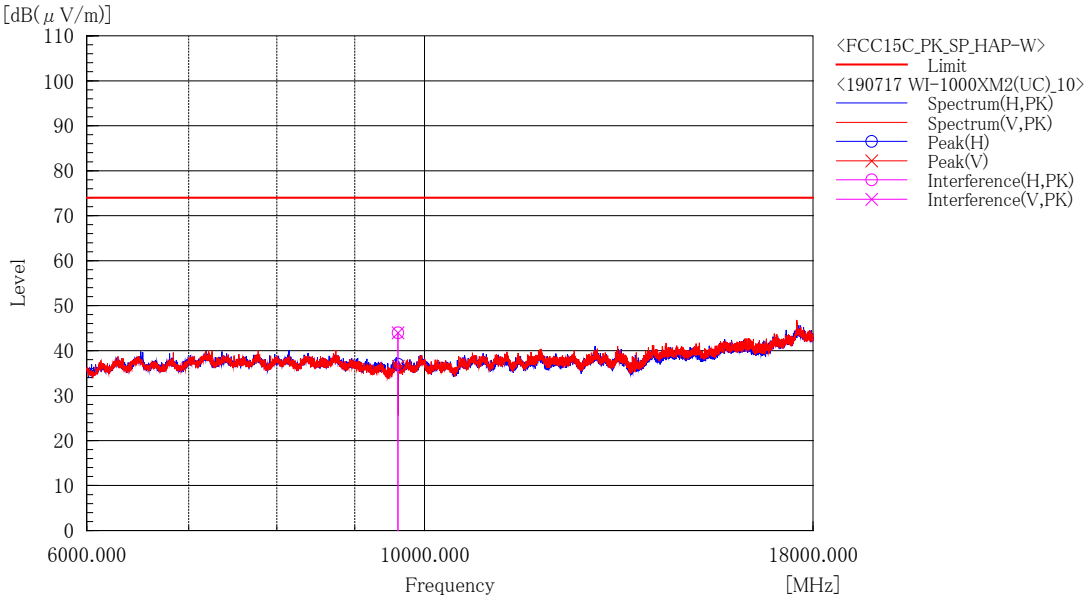
No.	Frequency [MHz]	Reading [dB(μV)]	c.f [dB(1/m)]	Result [dB(μV/m)]	Limit [dB(μV/m)]	Margin [dB]	Height [cm]	Angle [°]
1	9920.000	37.0	-4.8	32.2	54.0	21.8	193.7	178.0

[2 Mbps / 2402 MHz]

Sony Global M&O Corp
Kisarazu No.1

<<Radiated Emission>>

Model	: WI-1000XM2	Limit	: FCC Part15C 15.209(a) 3m
Serial	: 195	Remark1	:
Operator	: Y.MORIMOTO	Remark2	: Y
Power	: DC 3.7V	Remark3	: 2M
Environment	: 24deg.C / 68% / 1012hPa	Remark4	: Low



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	9608.000	50.0	-6.0	44.0	74.0	30.0	381.7	126.7

--- Vertical Polarization (PK)---

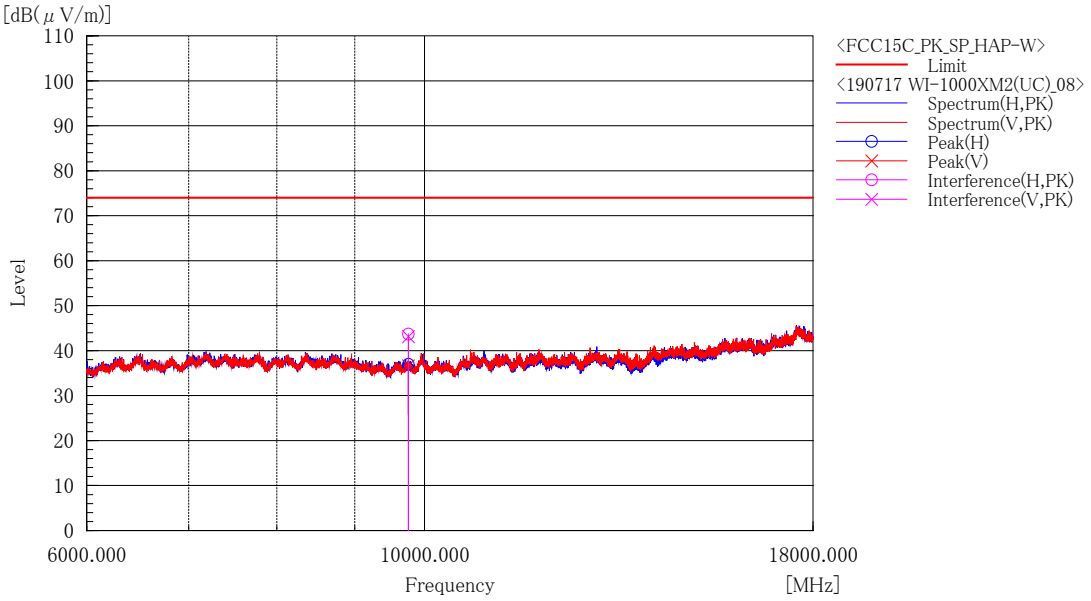
No.	Frequency [MHz]	Reading [dB(μV)]	c.f [dB(1/m)]	Result [dB(μV/m)]	Limit [dB(μV/m)]	Margin [dB]	Height [cm]	Angle [°]
1	9608.000	50.0	-6.0	44.0	74.0	30.0	238.9	142.8

[2 Mbps / 2440 MHz]

Sony Global M&O Corp
Kisarazu No.1

<<Radiated Emission>>

Model	: WI-1000XM2	Limit	: FCC Part15C 15.209(a) 3m
Serial	: 195	Remark1	:
Operator	: Y.MORIMOTO	Remark2	: Y
Power	: DC 3.7V	Remark3	: 2M
Environment	: 24deg.C / 68% / 1012hPa	Remark4	: Mid



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	9760.000	49.2	-5.5	43.7	74.0	30.2	351.2	286.4

--- Vertical Polarization (PK)---

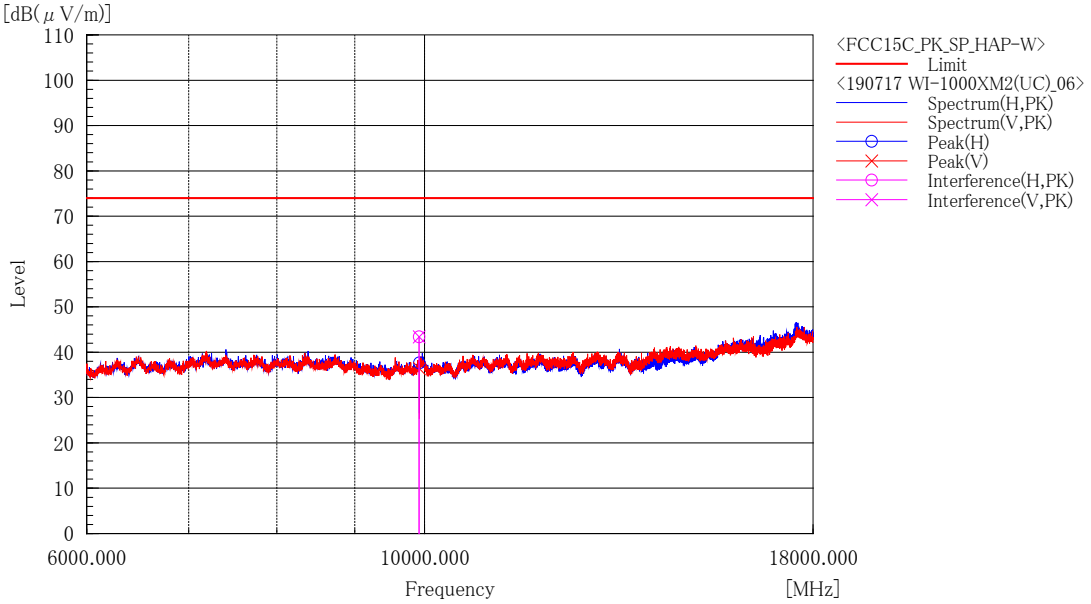
No.	Frequency [MHz]	Reading [dB(μV)]	c.f [dB(1/m)]	Result [dB(μV/m)]	Limit [dB(μV/m)]	Margin [dB]	Height [cm]	Angle [°]
1	9760.000	48.6	-5.5	43.1	74.0	30.8	125.1	160.2

[2 Mbps / 2480 MHz]

Sony Global M&O Corp
Kisarazu No.1

<<Radiated Emission>>

Model	: WI-1000XM2	Limit	: FCC Part15C 15.209(a) 3m
Serial	: 195	Remark1	:
Operator	: Y.MORIMOTO	Remark2	: Y
Power	: DC 3.7V	Remark3	: 2M
Environment	: 24deg.C / 68% / 1012hPa	Remark4	: Hi



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	9920.000	48.2	-4.8	43.4	74.0	30.5	118.2	95.8

--- Vertical Polarization (PK)---

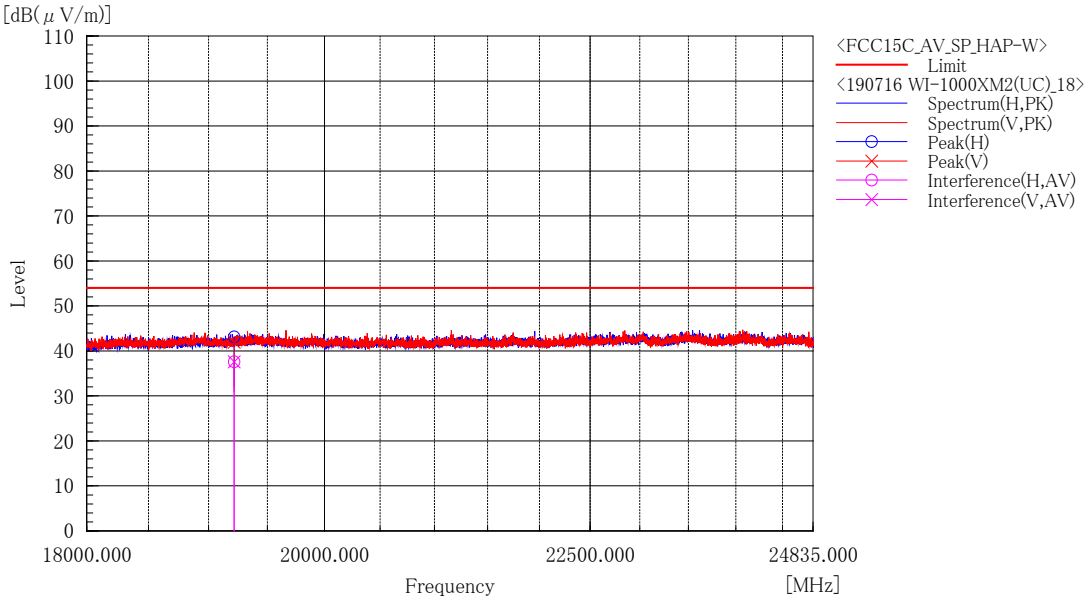
No.	Frequency [MHz]	Reading [dB(μV)]	c.f [dB(1/m)]	Result [dB(μV/m)]	Limit [dB(μV/m)]	Margin [dB]	Height [cm]	Angle [°]
1	9920.000	48.2	-4.8	43.4	74.0	30.5	193.7	175.9

18 GHz to 26.5 GHz
[1 Mbps / 2402 MHz]

Sony Global M&O Corp
Kisarazu No.1

<<Radiated Emission>>

Model	: WI-1000XM2	Limit	: FCC Part15C 15.209(a) 3m
Serial	: 195	Remark1	:
Operator	: Y.MORIMOTO	Remark2	: Y
Power	: DC 3.7V	Remark3	: 1M
Environment	: 23deg.C / 70% / 1012hPa	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	19216.000	38.4	-0.8	37.6	54.0	16.4	127.3	298.2

--- Vertical Polarization (AV)---

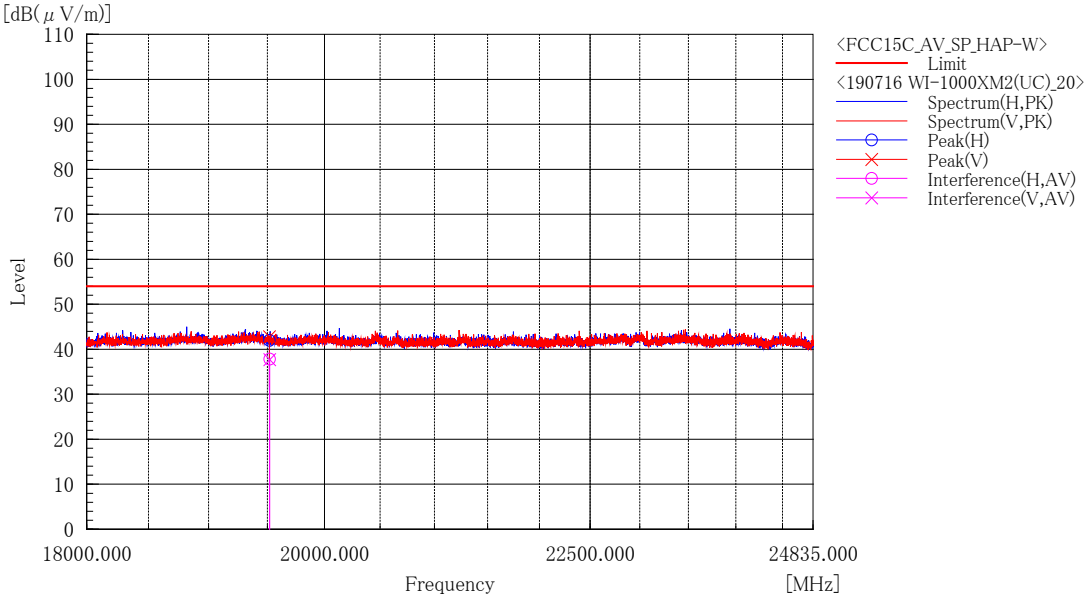
No.	Frequency [MHz]	Reading [dB(μV)]	c.f [dB(1/m)]	Result [dB(μV/m)]	Limit [dB(μV/m)]	Margin [dB]	Height [cm]	Angle [°]
1	19216.000	38.4	-0.8	37.6	54.0	16.4	280.0	247.5

[1 Mbps / 2440 MHz]

Sony Global M&O Corp
Kisarazu No.1

<<Radiated Emission>>

Model	: WI-1000XM2	Limit	: FCC Part15C 15.209(a) 3m
Serial	: 195	Remark1	:
Operator	: Y.MORIMOTO	Remark2	: Y
Power	: DC 3.7V	Remark3	: 1M
Environment	: 23deg.C / 70% / 1012hPa	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	19520.000	38.6	-0.8	37.8	54.0	16.2	102.2	123.6

--- Vertical Polarization (AV)---

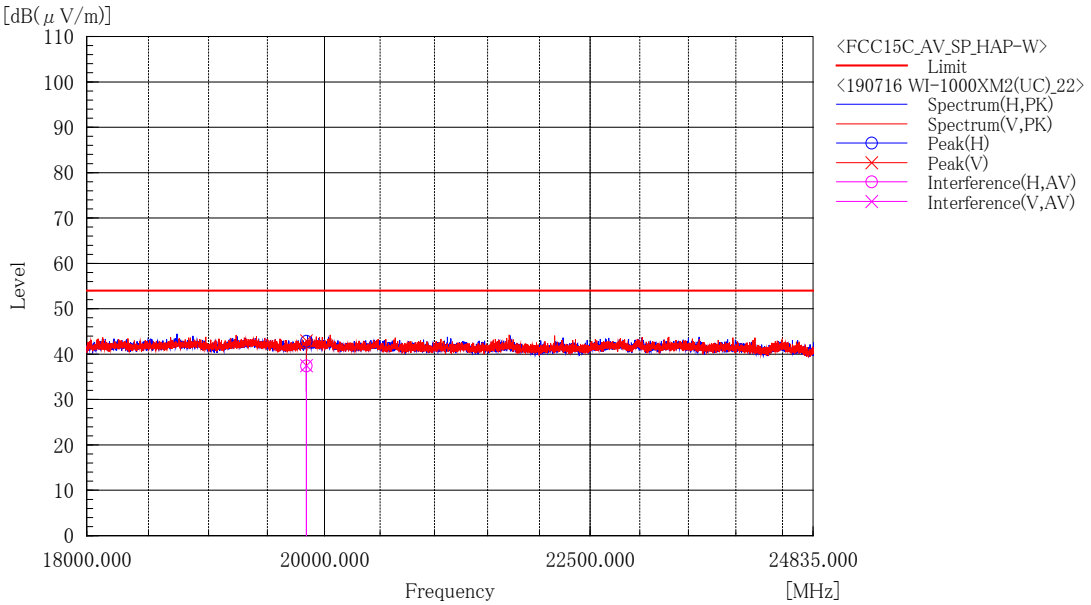
No.	Frequency [MHz]	Reading [dB(μV)]	c.f [dB(1/m)]	Result [dB(μV/m)]	Limit [dB(μV/m)]	Margin [dB]	Height [cm]	Angle [°]
1	19520.000	38.5	-0.8	37.7	54.0	16.3	115.9	302.6

[1 Mbps / 2480 MHz]

Sony Global M&O Corp
Kisarazu No.1

<<Radiated Emission>>

Model	: WI-1000XM2	Limit	: FCC Part15C 15.209(a) 3m
Serial	: 195	Remark1	:
Operator	: Y.MORIMOTO	Remark2	: Y
Power	: DC 3.7V	Remark3	: 1M
Environment	: 23deg.C / 70% / 1012hPa	Remark4	: Hi



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	19840.000	38.3	-0.9	37.4	54.0	16.6	181.5	213.2

--- Vertical Polarization (AV)---

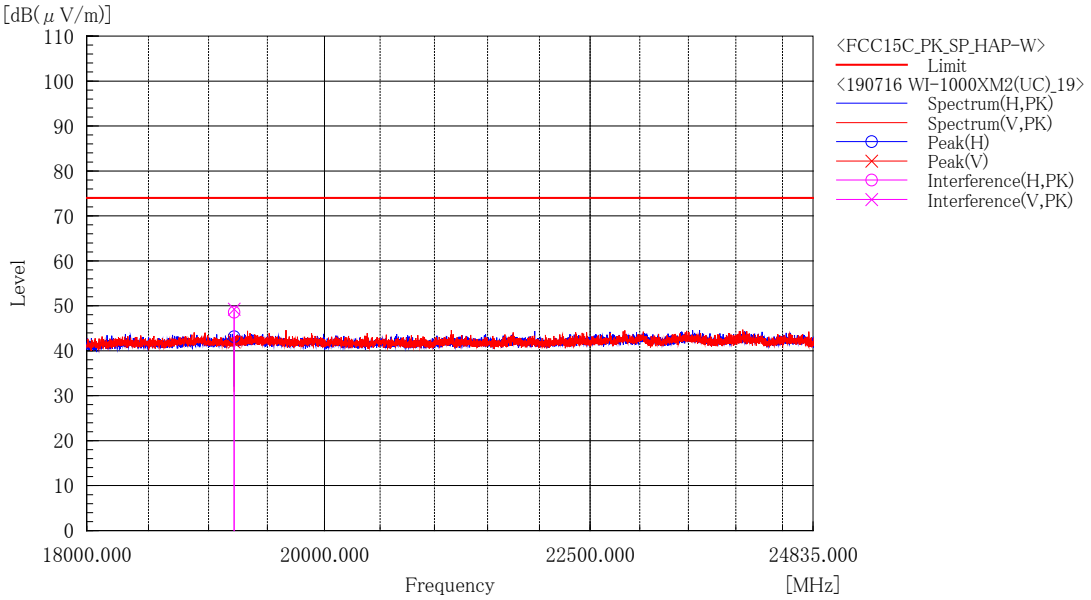
No.	Frequency [MHz]	Reading [dB(μV)]	c.f [dB(1/m)]	Result [dB(μV/m)]	Limit [dB(μV/m)]	Margin [dB]	Height [cm]	Angle [°]
1	19840.000	38.4	-0.9	37.5	54.0	16.5	166.1	33.8

[1 Mbps / 2402 MHz]

Sony Global M&O Corp
Kisarazu No.1

<<Radiated Emission>>

Model	: WI-1000XM2	Limit	: FCC Part15C 15.209(a) 3m
Serial	: 195	Remark1	:
Operator	: Y.MORIMOTO	Remark2	: Y
Power	: DC 3.7V	Remark3	: 1M
Environment	: 23deg.C / 70% / 1012hPa	Remark4	: Low



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	19216.000	49.4	-0.8	48.6	74.0	25.4	127.3	298.2

--- Vertical Polarization (PK)---

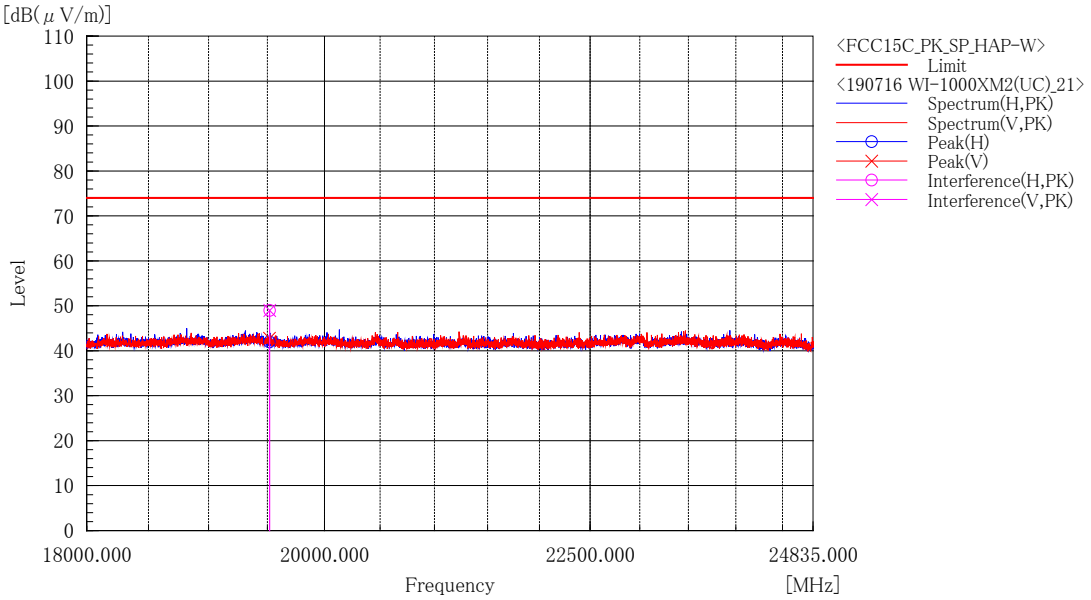
No.	Frequency [MHz]	Reading [dB(μV)]	c.f [dB(1/m)]	Result [dB(μV/m)]	Limit [dB(μV/m)]	Margin [dB]	Height [cm]	Angle [°]
1	19216.000	50.1	-0.8	49.3	74.0	24.7	280.0	249.6

[1 Mbps / 2440 MHz]

Sony Global M&O Corp
Kisarazu No.1

<<Radiated Emission>>

Model	: WI-1000XM2	Limit	: FCC Part15C 15.209(a) 3m
Serial	: 195	Remark1	:
Operator	: Y.MORIMOTO	Remark2	: Y
Power	: DC 3.7V	Remark3	: 1M
Environment	: 23deg.C / 70% / 1012hPa	Remark4	: Mid



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	19520.000	49.8	-0.8	49.0	74.0	25.0	102.2	121.7

--- Vertical Polarization (PK)---

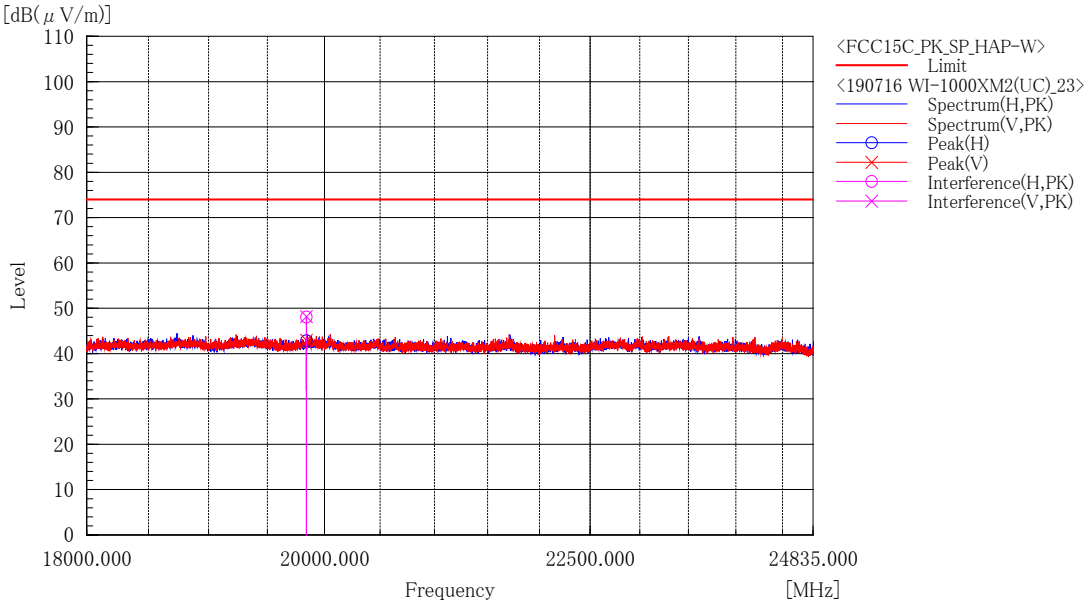
No.	Frequency [MHz]	Reading [dB(μV)]	c.f [dB(1/m)]	Result [dB(μV/m)]	Limit [dB(μV/m)]	Margin [dB]	Height [cm]	Angle [°]
1	19520.000	49.8	-0.8	49.0	74.0	25.0	115.9	302.6

[1 Mbps / 2480 MHz]

Sony Global M&O Corp
Kisarazu No.1

<<Radiated Emission>>

Model	: WI-1000XM2	Limit	: FCC Part15C 15.209(a) 3m
Serial	: 195	Remark1	:
Operator	: Y.MORIMOTO	Remark2	: Y
Power	: DC 3.7V	Remark3	: 1M
Environment	: 23deg.C / 70% / 1012hPa	Remark4	: Hi



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	19840.000	49.0	-0.9	48.1	74.0	25.9	181.5	213.2

--- Vertical Polarization (PK)---

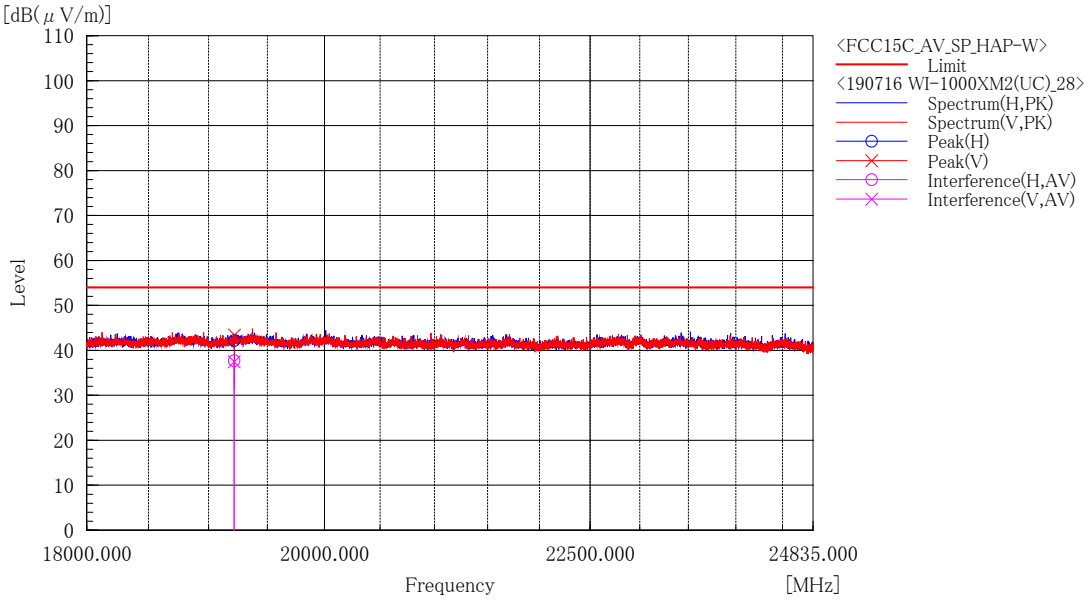
No.	Frequency [MHz]	Reading [dB(μV)]	c.f [dB(1/m)]	Result [dB(μV/m)]	Limit [dB(μV/m)]	Margin [dB]	Height [cm]	Angle [°]
1	19840.000	49.1	-0.9	48.2	74.0	25.8	166.1	35.9

[2 Mbps / 2402 MHz]

Sony Global M&O Corp
Kisarazu No.1

<<Radiated Emission>>

Model	: WI-1000XM2	Limit	: FCC Part15C 15.209(a) 3m
Serial	: 195	Remark1	:
Operator	: Y.MORIMOTO	Remark2	: Y
Power	: DC 3.7V	Remark3	: 2M
Environment	: 23deg.C / 70% / 1012hPa	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	19216.000	38.5	-0.8	37.7	54.0	16.3	375.8	70.9

--- Vertical Polarization (AV)---

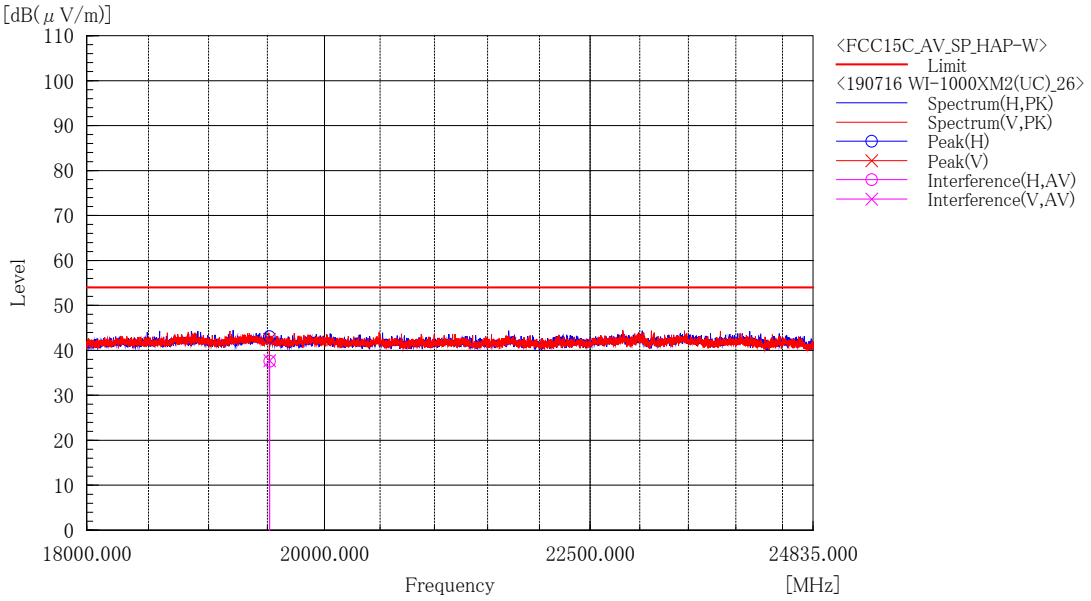
No.	Frequency [MHz]	Reading [dB(μV)]	c.f [dB(1/m)]	Result [dB(μV/m)]	Limit [dB(μV/m)]	Margin [dB]	Height [cm]	Angle [°]
1	19216.000	38.3	-0.8	37.5	54.0	16.5	277.9	188.3

[2 Mbps / 2440 MHz]

Sony Global M&O Corp
Kisarazu No.1

<<Radiated Emission>>

Model	: WI-1000XM2	Limit	: FCC Part15C 15.209(a) 3m
Serial	: 195	Remark1	:
Operator	: Y.MORIMOTO	Remark2	: Y
Power	: DC 3.7V	Remark3	: 2M
Environment	: 23deg.C / 70% / 1012hPa	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	19520.000	38.4	-0.8	37.6	54.0	16.4	145.1	349.2

--- Vertical Polarization (AV)---

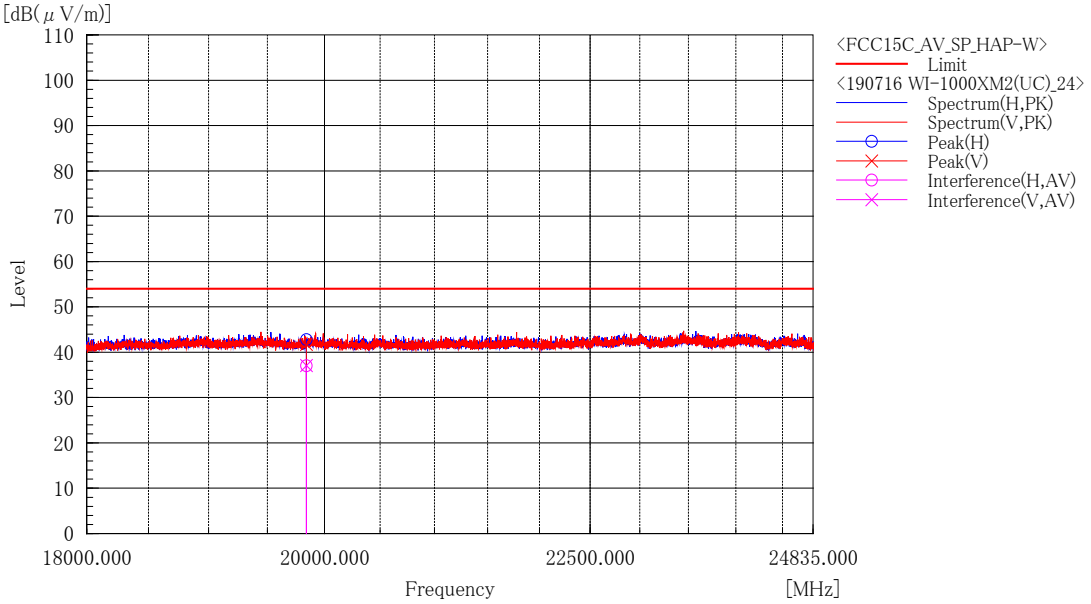
No.	Frequency [MHz]	Reading [dB(μV)]	c.f [dB(1/m)]	Result [dB(μV/m)]	Limit [dB(μV/m)]	Margin [dB]	Height [cm]	Angle [°]
1	19520.000	38.5	-0.8	37.7	54.0	16.3	271.9	105.6

[2 Mbps / 2480 MHz]

Sony Global M&O Corp
Kisarazu No.1

<<Radiated Emission>>

Model	: WI-1000XM2	Limit	: FCC Part15C 15.209(a) 3m
Serial	: 195	Remark1	:
Operator	: Y.MORIMOTO	Remark2	: Y
Power	: DC 3.7V	Remark3	: 2M
Environment	: 23deg.C / 70% / 1012hPa	Remark4	: Hi



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	19840.000	37.9	-0.9	37.0	54.0	17.0	420.4	313.1

--- Vertical Polarization (AV)---

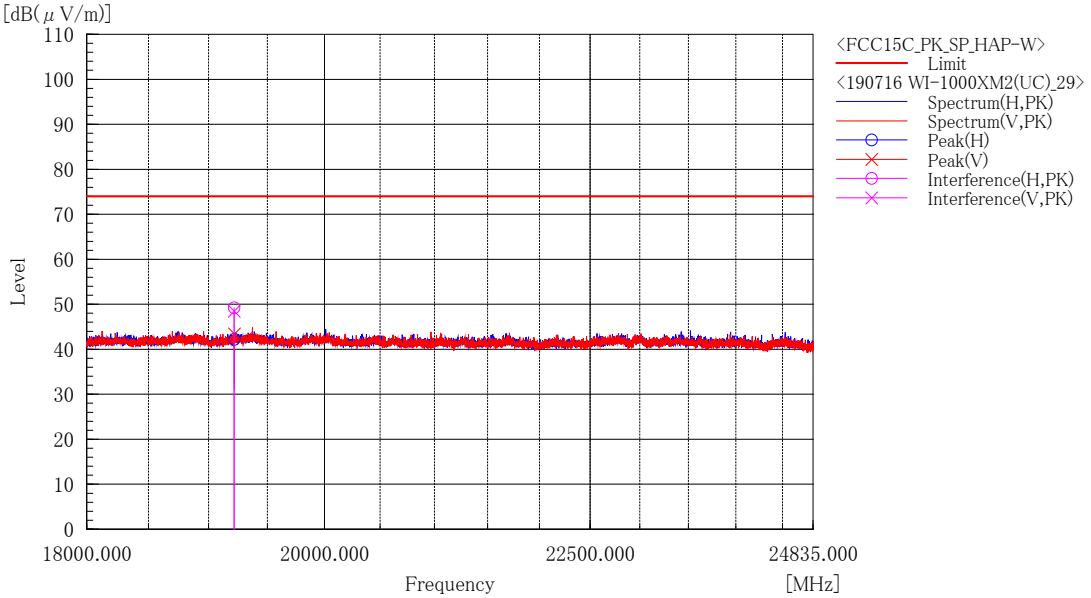
No.	Frequency [MHz]	Reading [dB(μV)]	c.f [dB(1/m)]	Result [dB(μV/m)]	Limit [dB(μV/m)]	Margin [dB]	Height [cm]	Angle [°]
1	19840.000	38.0	-0.9	37.1	54.0	16.9	257.3	336.2

[2 Mbps / 2402 MHz]

Sony Global M&O Corp
Kisarazu No.1

<<Radiated Emission>>

Model	: WI-1000XM2	Limit	: FCC Part15C 15.209(a) 3m
Serial	: 195	Remark1	:
Operator	: Y.MORIMOTO	Remark2	: Y
Power	: DC 3.7V	Remark3	: 2M
Environment	: 23deg.C / 70% / 1012hPa	Remark4	: Low



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	19216.000	50.0	-0.8	49.2	74.0	24.8	375.8	72.8

--- Vertical Polarization (PK)---

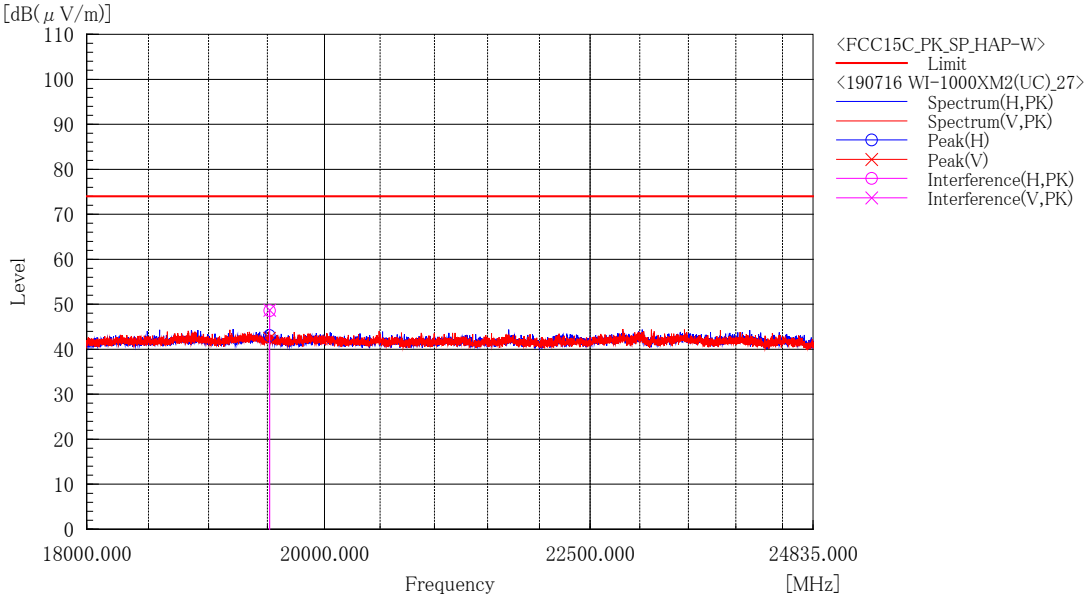
No.	Frequency [MHz]	Reading [dB(μV)]	c.f [dB(1/m)]	Result [dB(μV/m)]	Limit [dB(μV/m)]	Margin [dB]	Height [cm]	Angle [°]
1	19216.000	49.3	-0.8	48.5	74.0	25.5	277.9	188.3

[2 Mbps / 2440 MHz]

Sony Global M&O Corp
Kisarazu No.1

<<Radiated Emission>>

Model	: WI-1000XM2	Limit	: FCC Part15C 15.209(a) 3m
Serial	: 195	Remark1	:
Operator	: Y.MORIMOTO	Remark2	: Y
Power	: DC 3.7V	Remark3	: 2M
Environment	: 23deg.C / 70% / 1012hPa	Remark4	: Mid



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	19520.000	49.4	-0.8	48.6	74.0	25.4	145.1	349.2

--- Vertical Polarization (PK)---

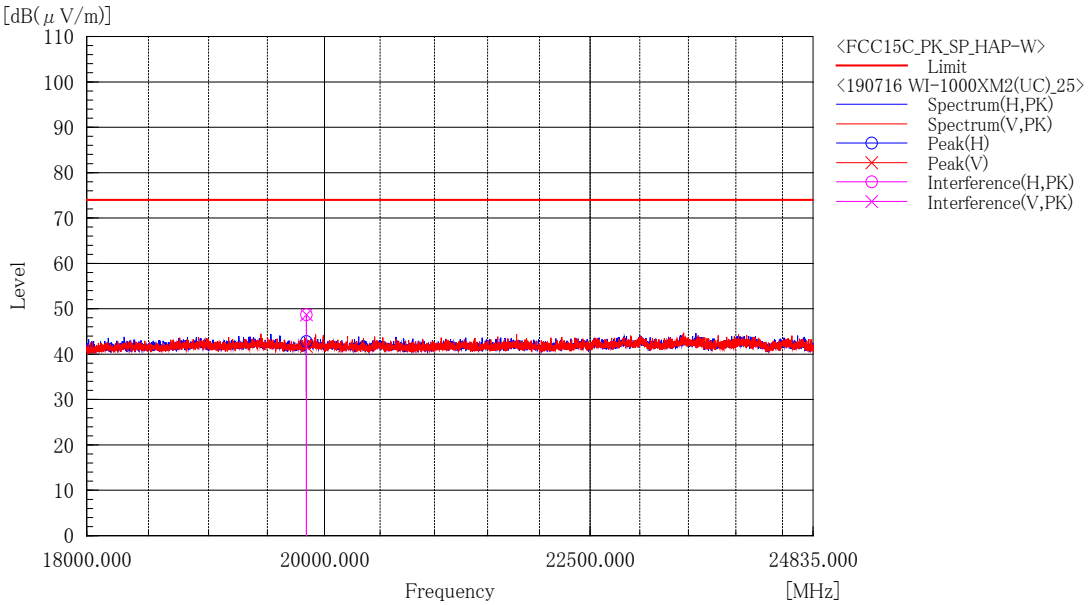
No.	Frequency [MHz]	Reading [dB(μV)]	c.f [dB(1/m)]	Result [dB(μV/m)]	Limit [dB(μV/m)]	Margin [dB]	Height [cm]	Angle [°]
1	19520.000	49.5	-0.8	48.7	74.0	25.3	271.9	103.5

[2 Mbps / 2480 MHz]

Sony Global M&O Corp
Kisarazu No.1

<<Radiated Emission>>

Model	: WI-1000XM2	Limit	: FCC Part15C 15.209(a) 3m
Serial	: 195	Remark1	:
Operator	: Y.MORIMOTO	Remark2	: Y
Power	: DC 3.7V	Remark3	: 2M
Environment	: 23deg.C / 70% / 1012hPa	Remark4	: Hi



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	19840.000	49.6	-0.9	48.7	74.0	25.3	420.4	315.0

--- Vertical Polarization (PK)---

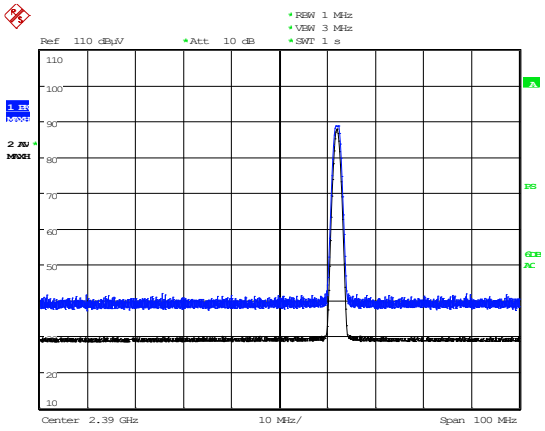
No.	Frequency [MHz]	Reading [dB(μV)]	c.f [dB(1/m)]	Result [dB(μV/m)]	Limit [dB(μV/m)]	Margin [dB]	Height [cm]	Angle [°]
1	19840.000	49.6	-0.9	48.7	74.0	25.3	257.3	336.2

2.4 GHz 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 2390 MHz and above 2483.5 MHz)
The result of the final radiated spurious emissions measurement refers in previous pages.

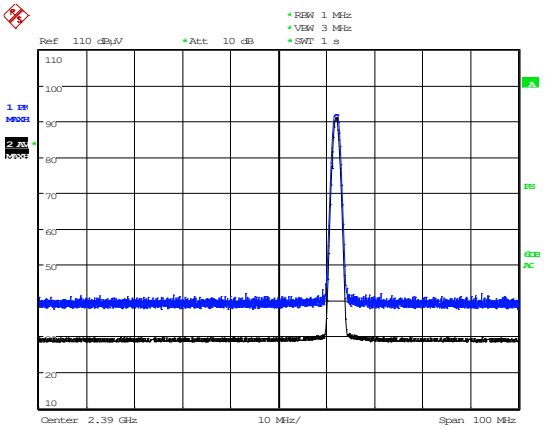
[1 Mbps / 2402 MHz]

Horizontal



Date: 12.JUL.2019 04:54:32

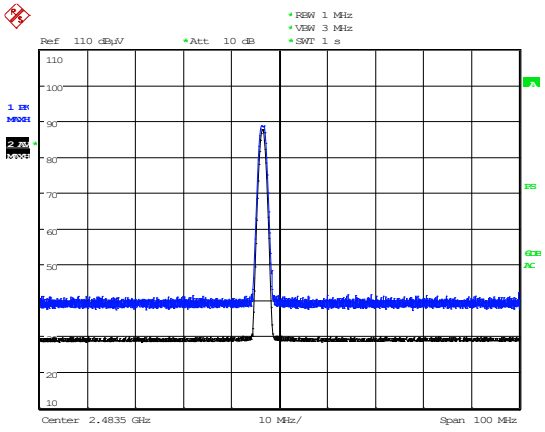
Vertical



Date: 12.JUL.2019 04:53:10

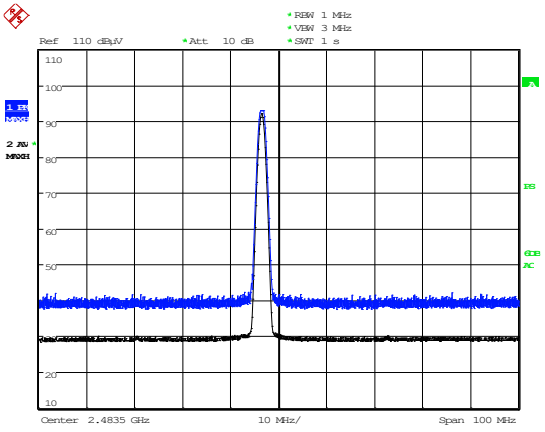
[1 Mbps / 2480 MHz]

Horizontal



Date: 12.JUL.2019 05:39:50

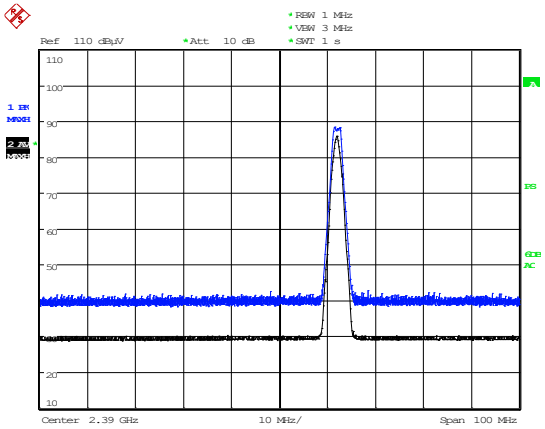
Vertical



Date: 12.JUL.2019 05:41:01

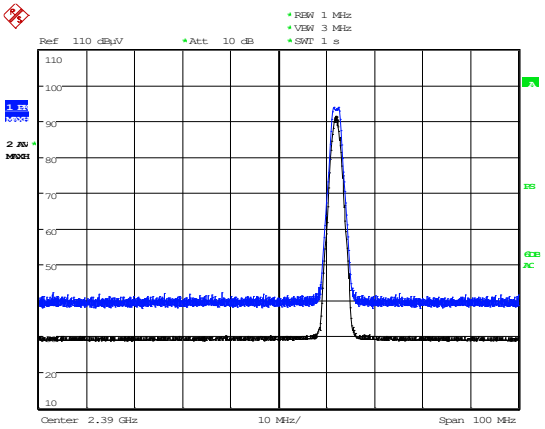
[2 Mbps / 2402 MHz]

Horizontal



Date: 13.JUL.2019 01:09:17

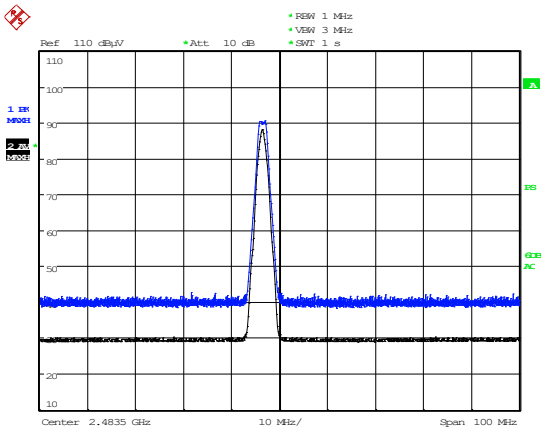
Vertical



Date: 13.JUL.2019 01:10:51

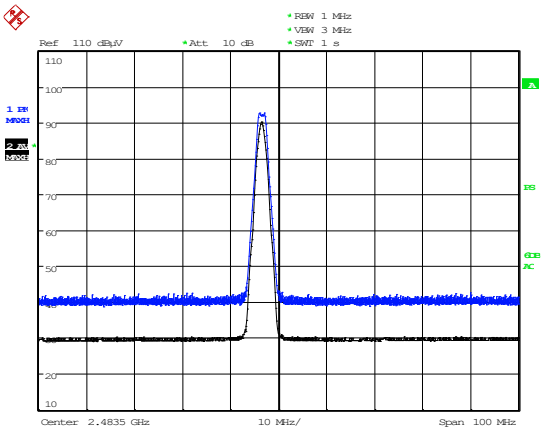
[2 Mbps / 2440 MHz]

Horizontal



Date: 13.JUL.2019 00:19:23

Vertical



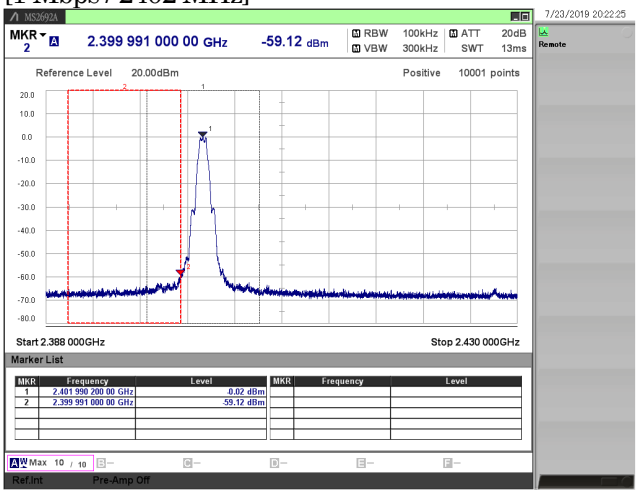
Date: 13.JUL.2019 00:15:32

3.5. Conducted Spurious Emissions for Band Edge

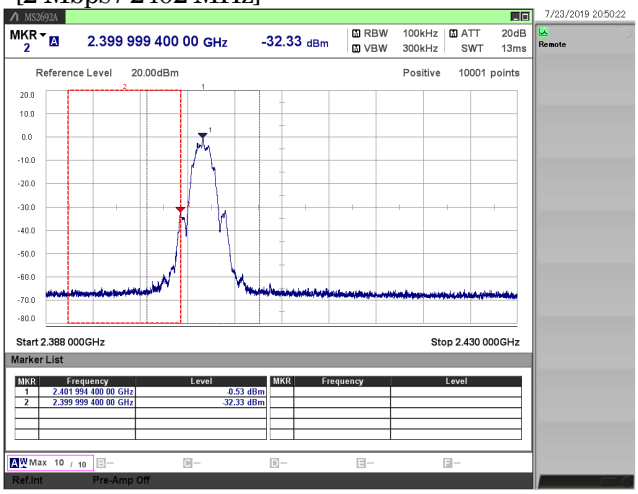
1) Ambient temperature : 20.0 deg.C
2) Relative humidity : 71.3 %
3) Date of measurement : July 23, 2019
4) Measured by : M.KOUGA
5) Operating mode : Transmitting mode

Mode	Rate [Mbps]	Channel [MHz]	Frequency [MHz]	Reading(PK) [dBm]	C.F. [dB]	Result [dBm]	Limit [dBm]	Margin [dB]
BLE	1	2402	2401.99	-0.02	1.10	1.08	-	-
			2399.99	-59.12	1.10	-58.02	-18.9	39.10
	2	2402	2401.99	-0.53	1.10	0.57	-	-
			2400.00	-32.33	1.10	-31.23	-19.4	11.80

[1 Mbps / 2402 MHz]



[2 Mbps / 2402 MHz]



4. Method of Calculation

4.1. Maximum Peak Conducted Output Power

Method of calculation : Software
Software Name : SW-0316
Software Version : Ver.2

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

Note (a) Meter Reading : Reading of the power meter
(b) C.F. : System Cable Loss + EUT Cable Loss

4.2. Power Spectral Density

Method of calculation : Software
Software Name : SW-0316
Software Version : Ver.2

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

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

4.3. Radiated Spurious Emissions

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

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

Note (a) Meter Reading : Reading of the EMI test receiver or the 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)

4.4. Conducted Spurious Emissions for Band Edge

Method of calculation : Software
Software Name : SW-0316
Software Version : Ver.2

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

Note (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. Antenna-port Conducted Measurements

	Ctrl.#	Equipment	Model No.	Serial No.	Manufacturer	Cal.Interval	Last Cal.
-	W0140	Spectrum Analyzer	FSU26	200717	Rohde & Schwarz	12 months	18.09.01
x	W0100	Spectrum Analyzer	MS2692A	6201338954	Anritsu	12 months	19.05.09
x	W0006	Power Meter	N1911A	MY50000295	Agilent Technologies	12 months	18.10.06
x	W0007	Power Sensor	N1922A	MY50180022	Agilent Technologies	12 months	18.10.06
x	W0029	10dB Attenuator	8493C	76549	Agilent Technologies	12 months	18.09.01
-	WC0002	RF Cable	SUCOFLEX 102	34124/2	HUBER + SUHNER	12 months	18.09.01
	WC0003	RF Cable	SUCOFLEX 102	34127/2	HUBER + SUHNER	12 months	18.09.01
-	WC0004	RF Cable	SUCOFLEX 102	34288/2	HUBER + SUHNER	12 months	18.09.01
x	WC0005	RF Cable	SUCOFLEX 102	34287/2	HUBER + SUHNER	12 months	18.09.01
x	WC0006	RF Cable	SUCOFLEX 102	34289/2	HUBER + SUHNER	12 months	18.09.01
x	WC0007	RF Cable	SUCOFLEX 102	34286/2	HUBER + SUHNER	12 months	18.09.01
x	M0719	Thermo Meter	TH-321	140053	AS ONE	12 months	19.05.20
-	M0720	Thermometer	TH-321	140036	AS ONE	12 months	18.07.20

5.2. Radiated Spurious Emissions

	Ctrl.#	Equipment	Model No.	Serial No.	Manufacturer	Cal.Interval	Last Cal.
x	M0486	EMI Receiver	ESU40	100050	Rohde & Schwarz	12 months	18.10.01
x	M0686	EMI Receiver	N9038A	MY52260113	Agilent Technologies	12 months	18.11.13
x	A0073	Loop Antenna	HFH2-Z2	100171	Rohde & Schwarz	12 months	18.12.10
x	A0089	Biconical Antenna	BBA9106	VHA91032835	Schwarzbeck	12 months	18.12.03
x	A0088	Logperiodic Antenna	UHALP9108A1	0649	Schwarzbeck	12 months	18.12.03
x	A0064	Horn Antenna	BBHA9120D	746	Schwarzbeck	12 months	18.11.04
x	A0078	Horn Antenna	HAP06-18W	00000070	Toyo Corporation	12 months	18.11.04
x	A0058	Horn Antenna Pre-Amplifier Assembly	HAP18-26W	00000016	Toyo Corporation	12 months	18.12.01
x	CS0017	EMC-RE Cable System 1	-	-	-	12 months	18.11.04
x	CS0018	EMC-RE Cable System 2	-	-	-	12 months	18.11.04
x	CS0045	EMC-3m EMF Cable	-	-	-	12 months	18.11.04
x	CS0074/0075	N-RE Cable SYSTEM 4	-	-	-	12 months	18.11.04
x	M0126	Attenuator(11dB)	8494H	3837M01144	Agilent	12 months	18.11.04
x	M0752	Pre Amplifier	310N	320621	SONOMA INSTRUMENT	12 months	18.11.04
x	M0128	Attenuator(3dB)	8491A	53451	Agilent	12 months	18.11.04
x	M0609	3dB Attenuator	8491B	MY39265960	Agilent Technologies	12 months	18.11.04
x	M0737	GHz Filter Box	FB-G1	001	Sony EMCS	12 months	18.11.04
x	M5079	Temperature Meter	608-H2	41475953	testo	12 months	18.10.18
-	M5062	Scientific Ambient Monitor	0560 6220	39515563/802	testo	12 months	18.07.17
x	M5061	Scientific Ambient Monitor	0560 6220	39515471/801	testo	12 months	18.07.10

About calibration interval

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