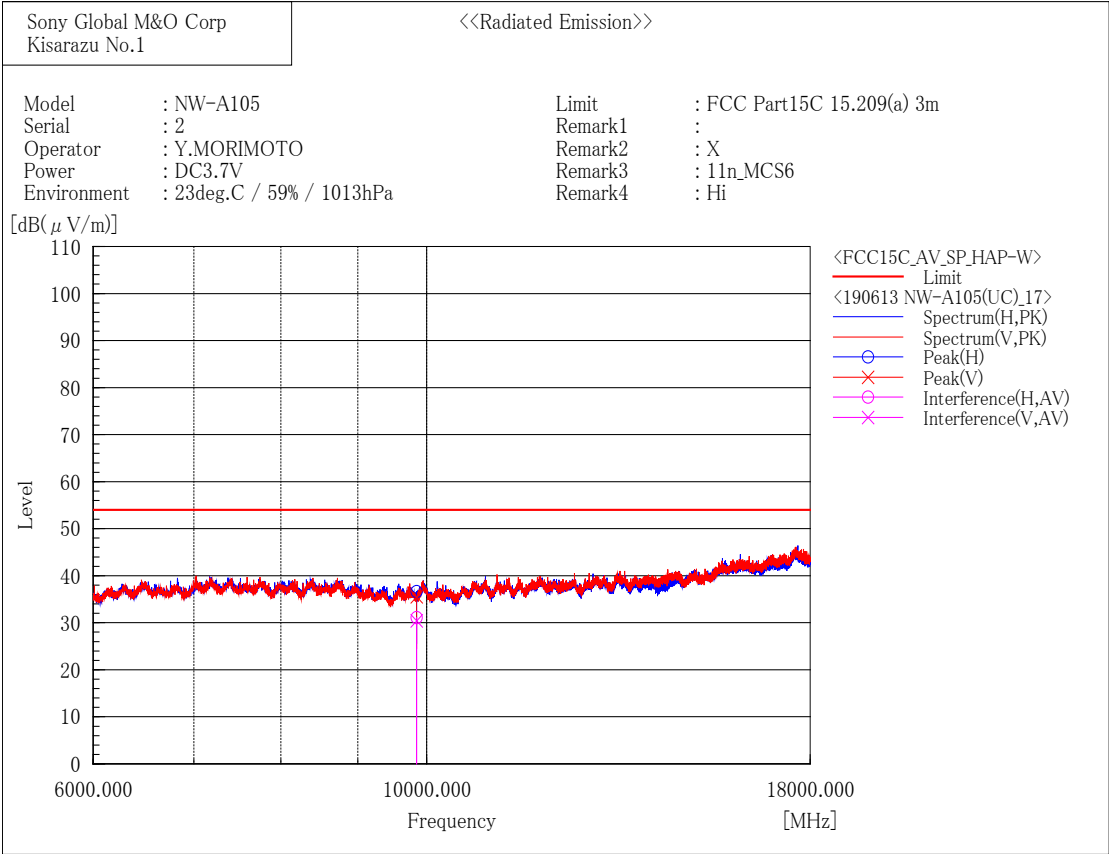


[802.11n (HT20)/ 2462 MHz]



Final Result

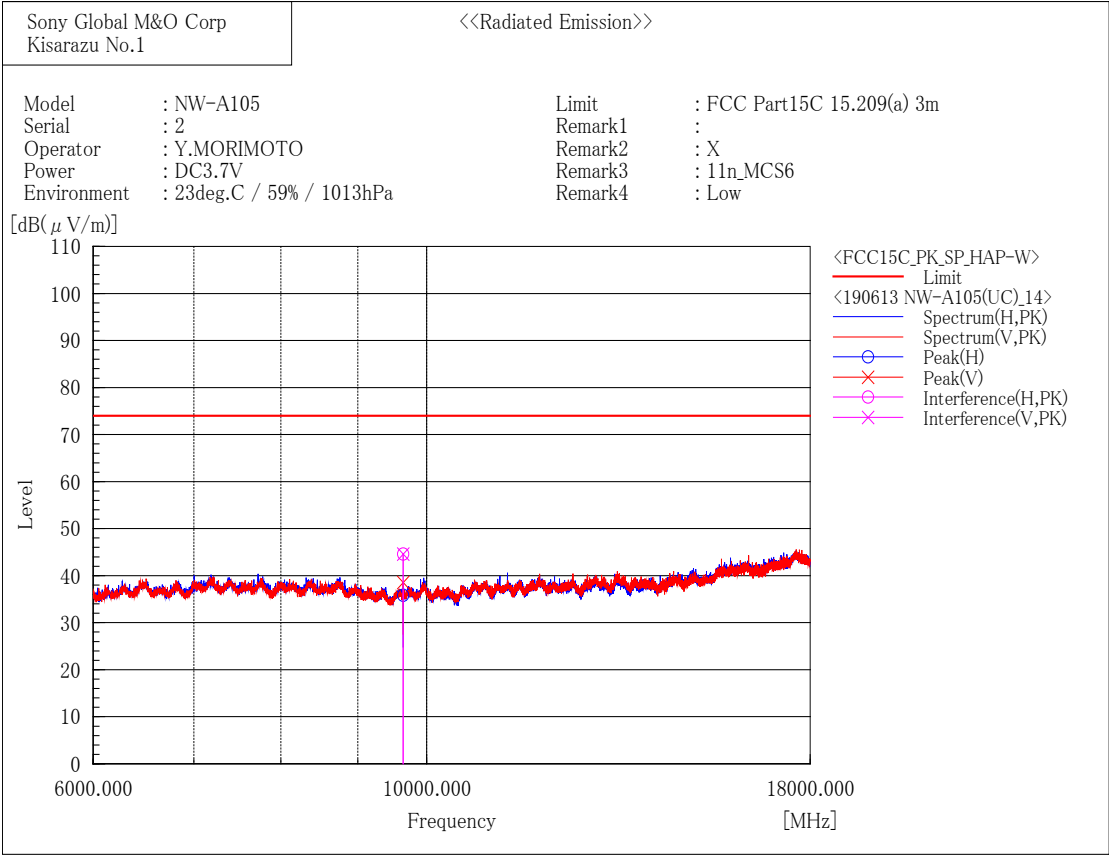
--- Horizontal Polarization (AV)---

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	9848.000	36.2	-5.1	31.1	54.0	22.9	100.0	100.1

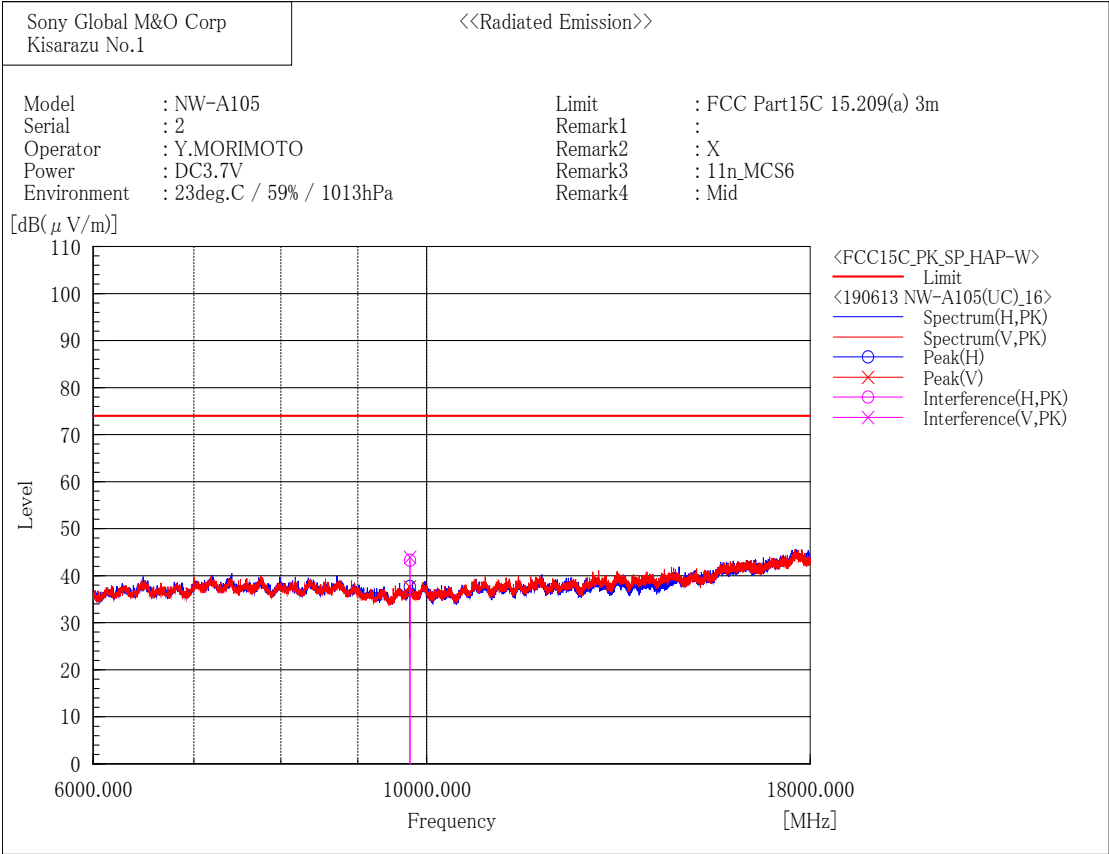
--- Vertical Polarization (AV)---

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	9848.000	35.5	-5.1	30.4	54.0	23.6	387.3	3.9

[802.11n (HT20)/ 2412 MHz]



[802.11n (HT20)/ 2437 MHz]



Final Result

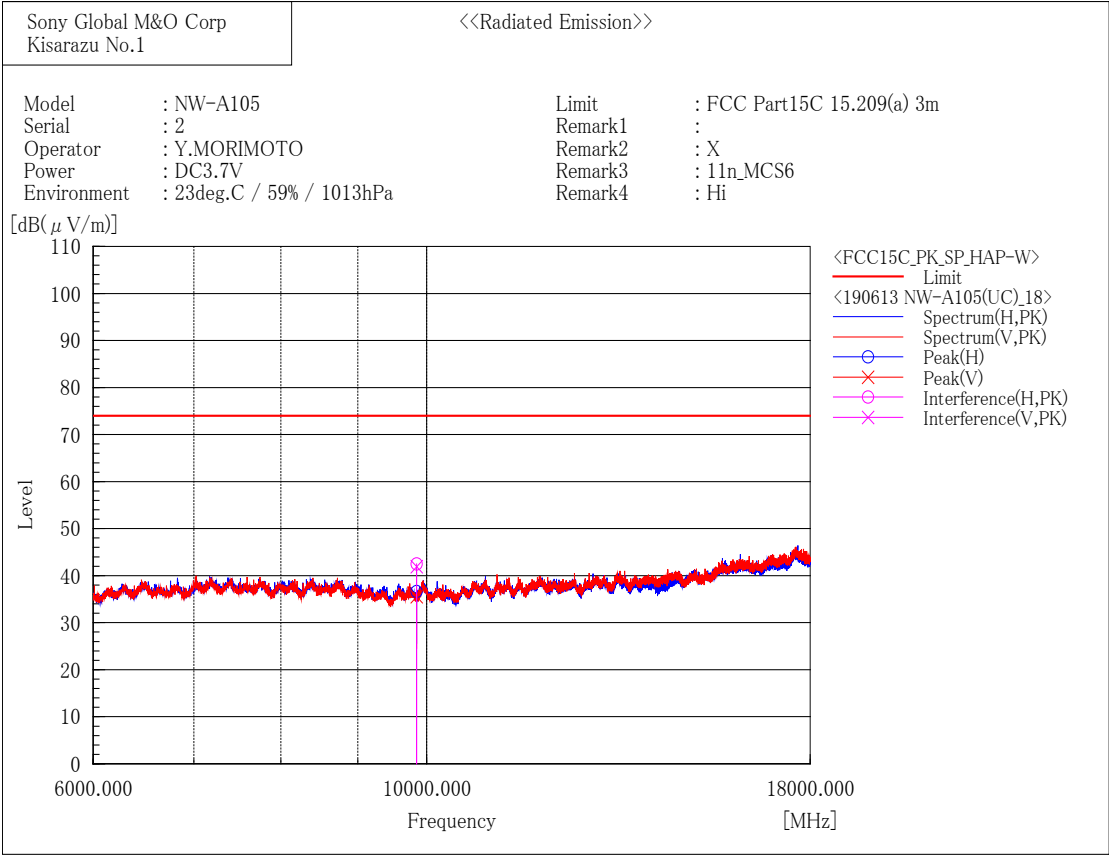
--- Horizontal Polarization (PK)---

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	9748.000	48.8	-5.5	43.3	74.0	30.7	122.0	82.8

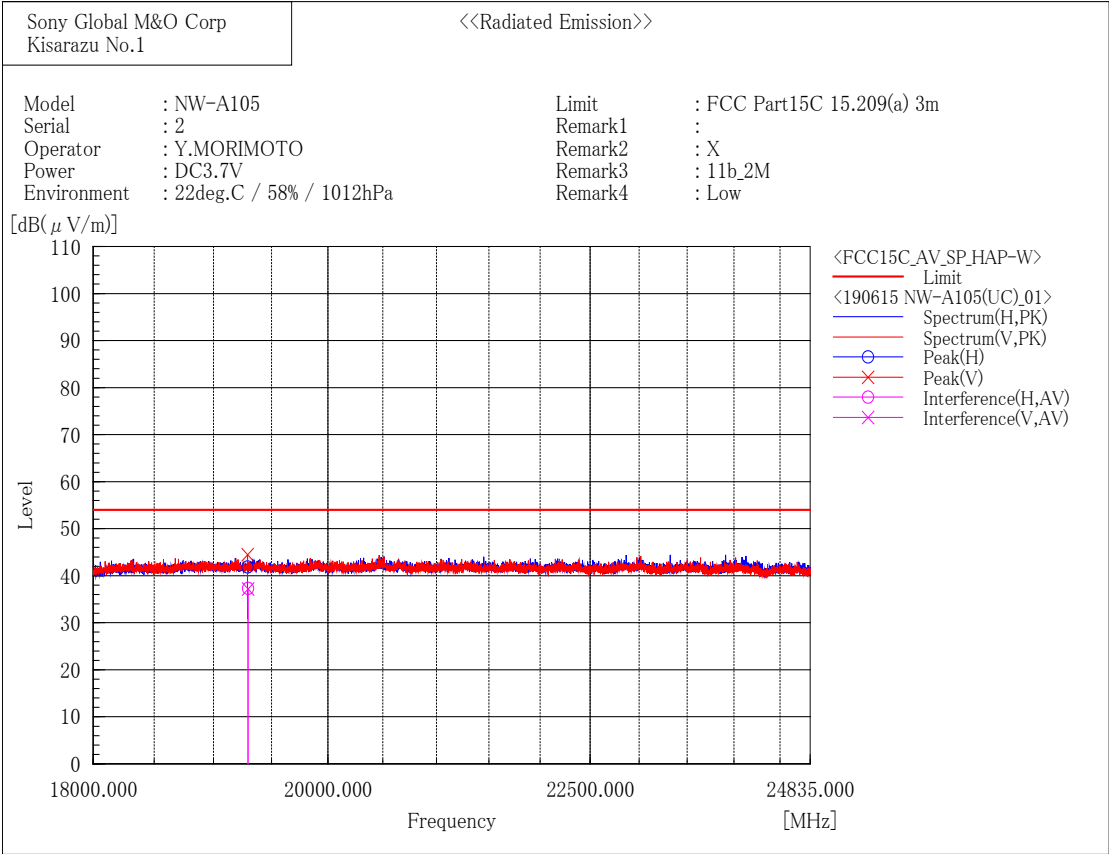
--- Vertical Polarization (PK)---

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	9748.000	49.4	-5.5	43.9	74.0	30.1	135.2	146.8

[802.11n (HT20)/ 2462 MHz]



18 GHz to 26.5 GHz
[802.11b/ 2412 MHz]



Final Result

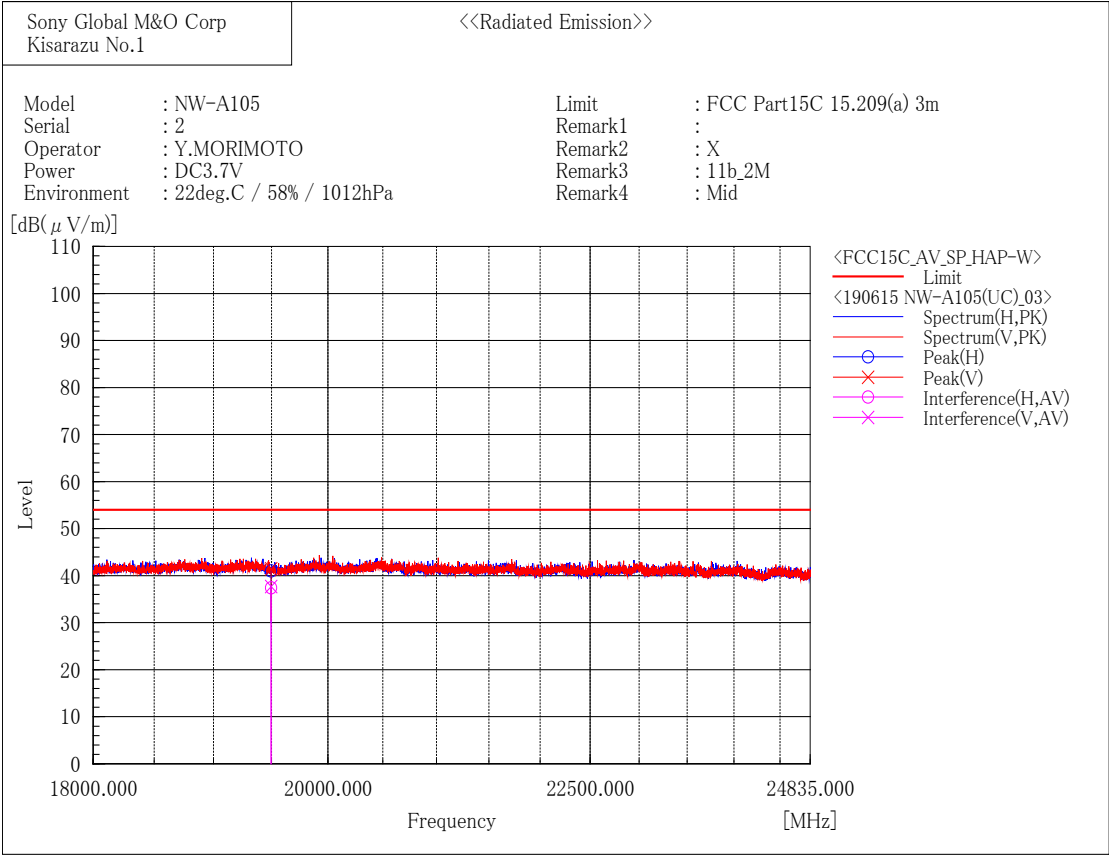
--- Horizontal Polarization (AV)---

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	19296.000	45.8	-8.5	37.3	54.0	16.7	118.7	116.9

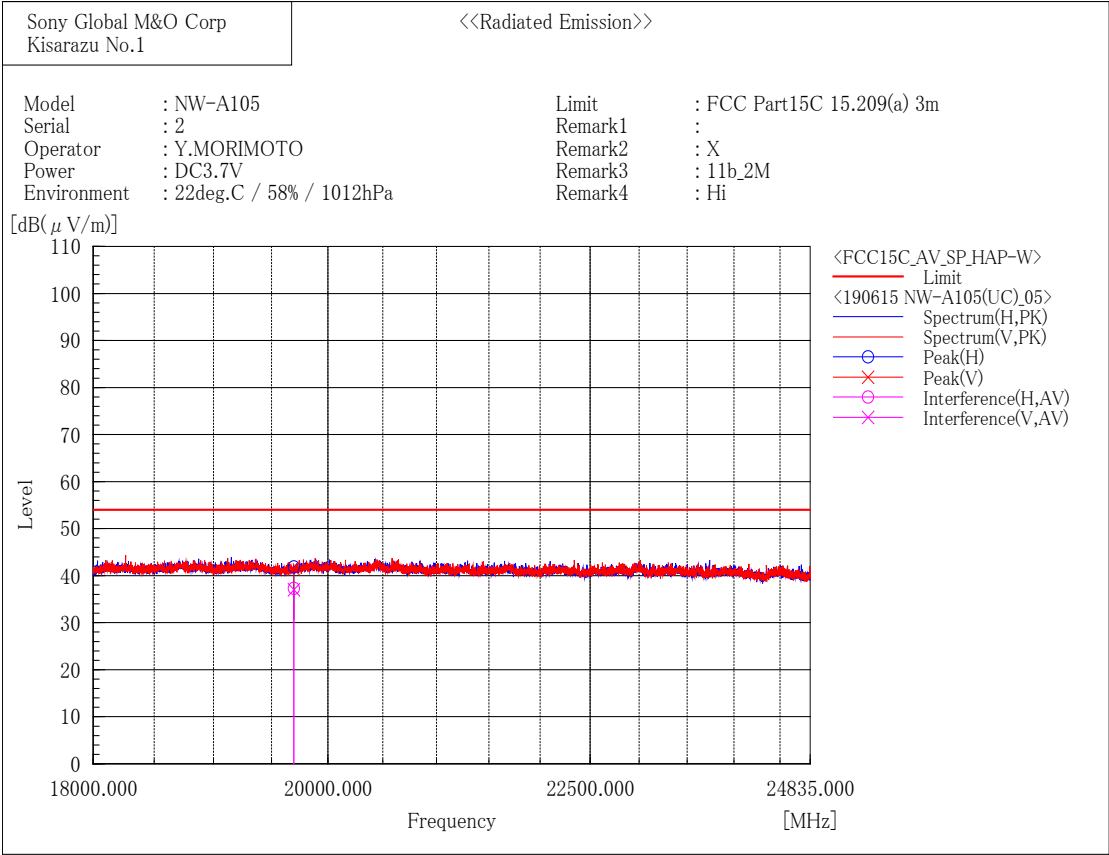
--- Vertical Polarization (AV)---

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	19296.000	45.7	-8.5	37.2	54.0	16.8	117.9	25.5

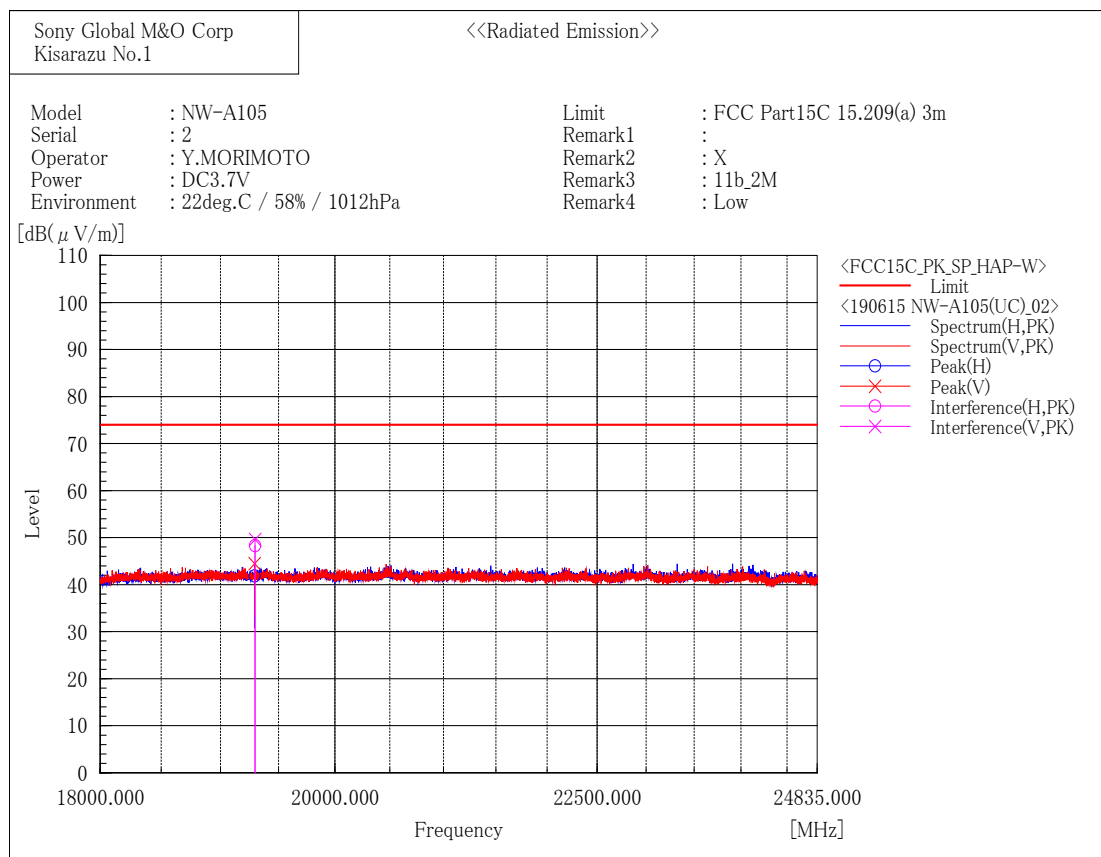
[802.11b/ 2437 MHz]



[802.11b/ 2462 MHz]



[802.11b/ 2412 MHz]



Final Result

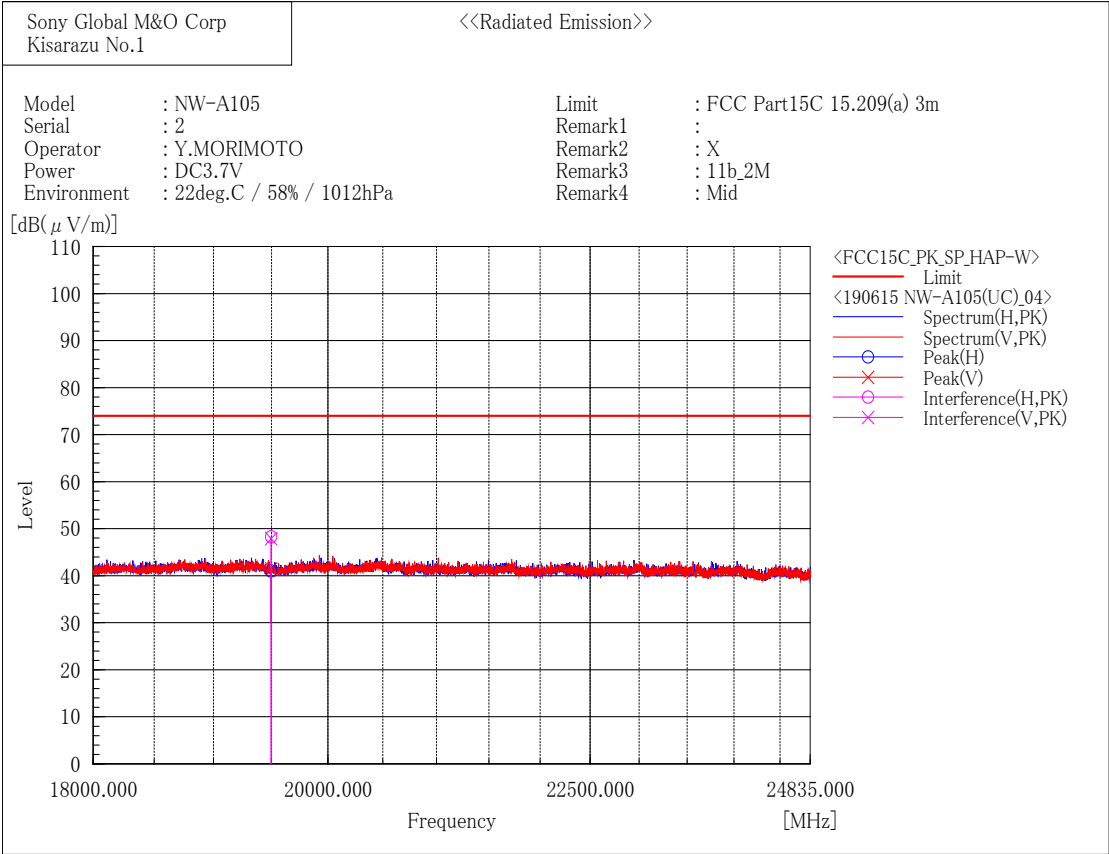
--- Horizontal Polarization (PK)---

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	19296.000	56.8	-8.5	48.3	74.0	25.7	118.7	116.9

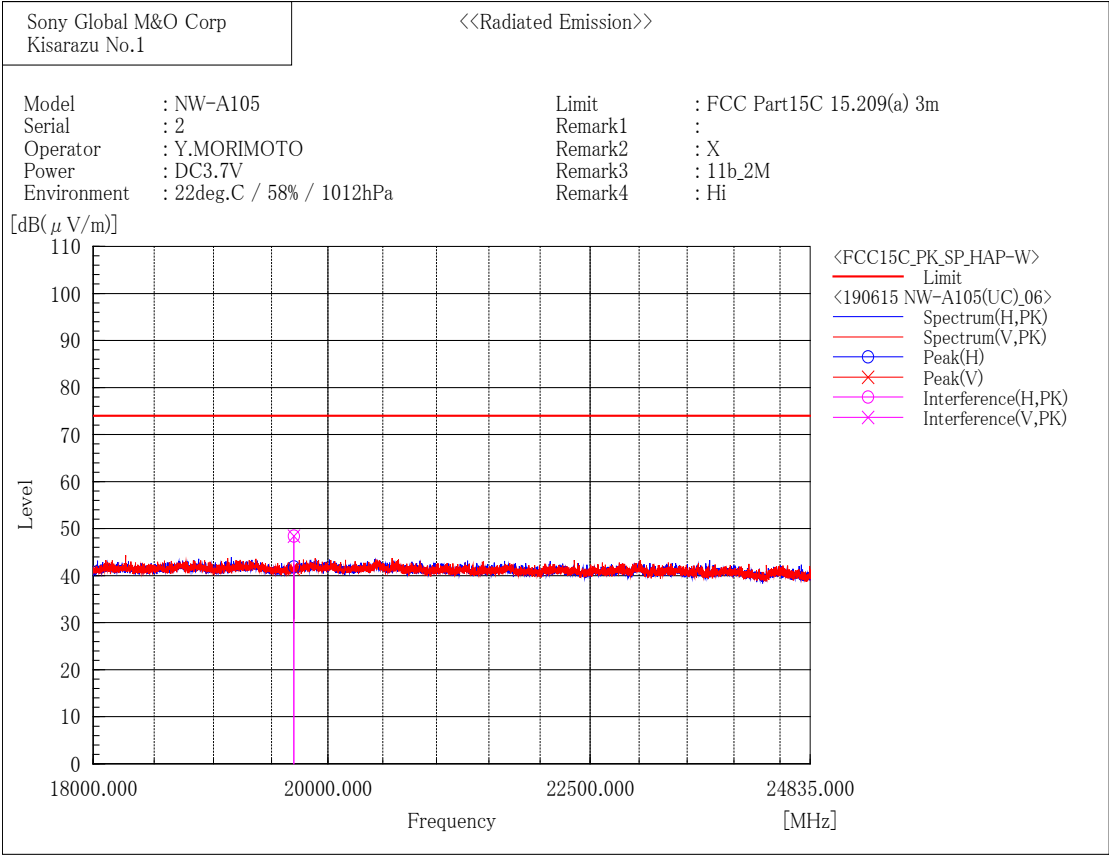
--- Vertical Polarization (PK)---

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	19296.000	58.1	-8.5	49.6	74.0	24.4	117.9	27.6

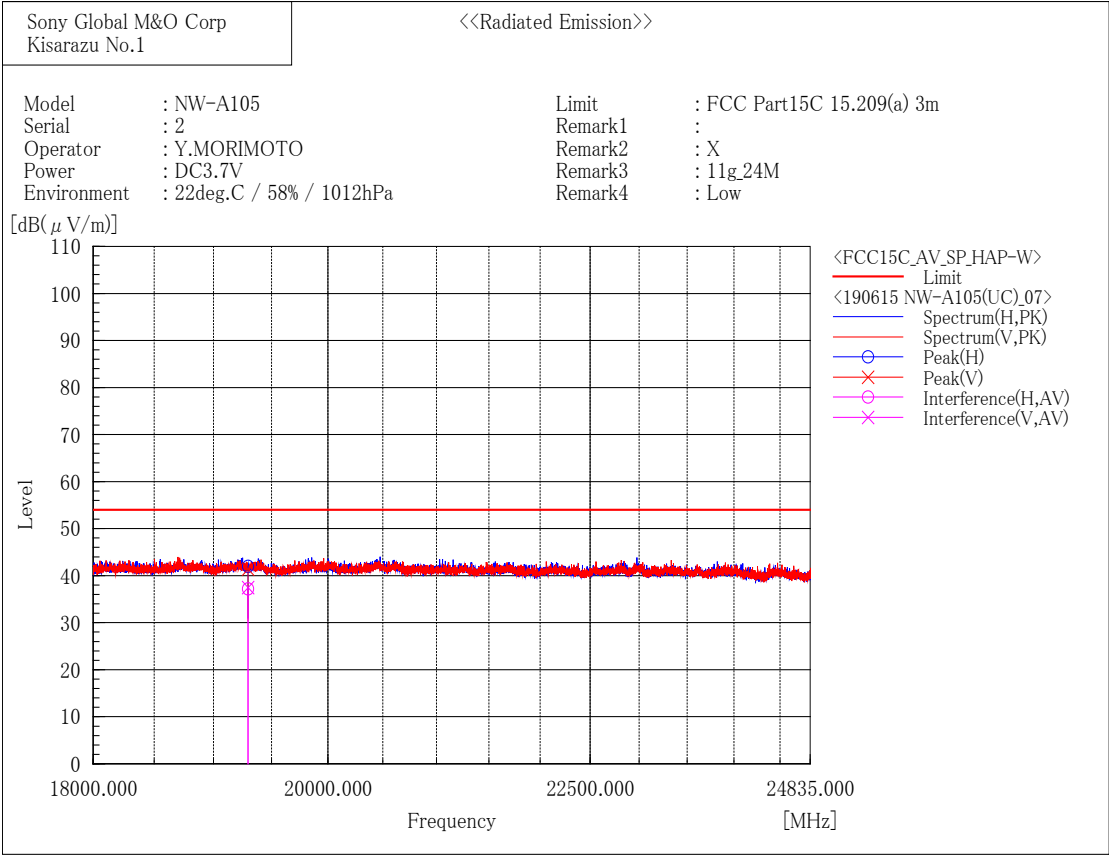
[802.11b/ 2437 MHz]



[802.11b/ 2462 MHz]



[802.11g/ 2412 MHz]



Final Result

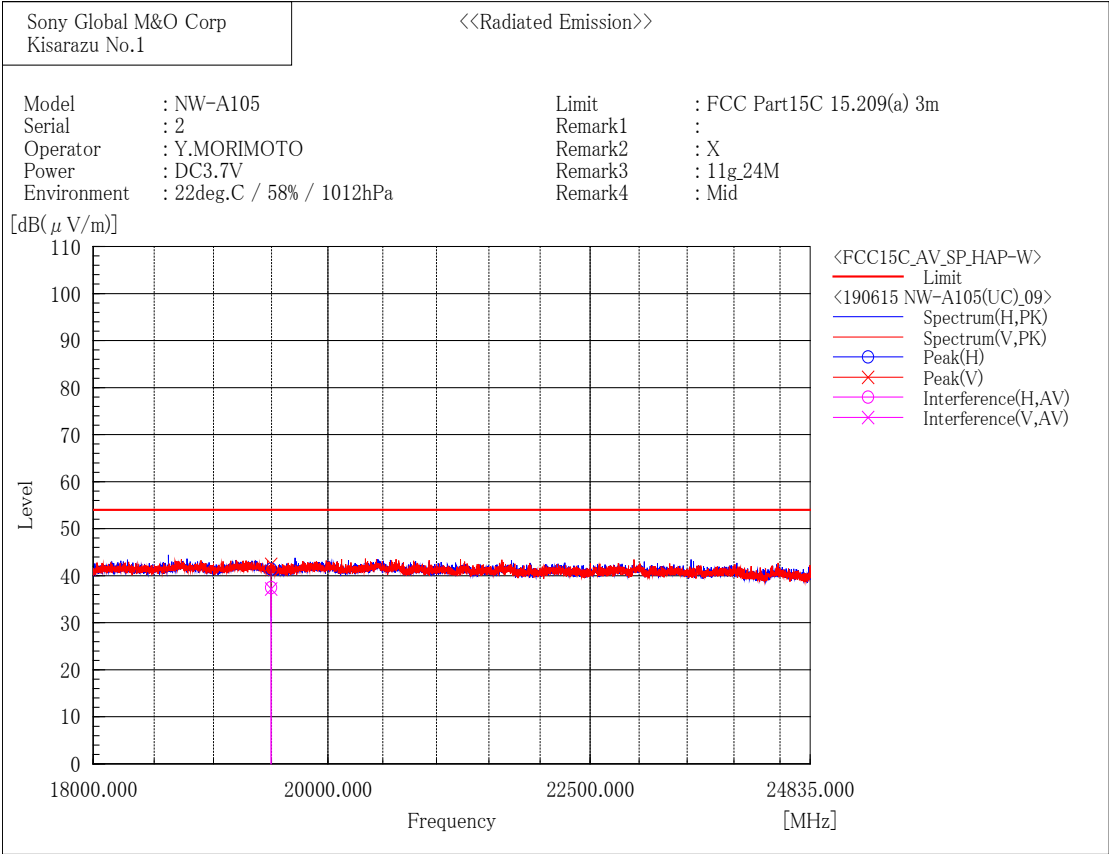
--- Horizontal Polarization (AV)---

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	19296.000	45.7	-8.5	37.2	54.0	16.8	236.4	286.5

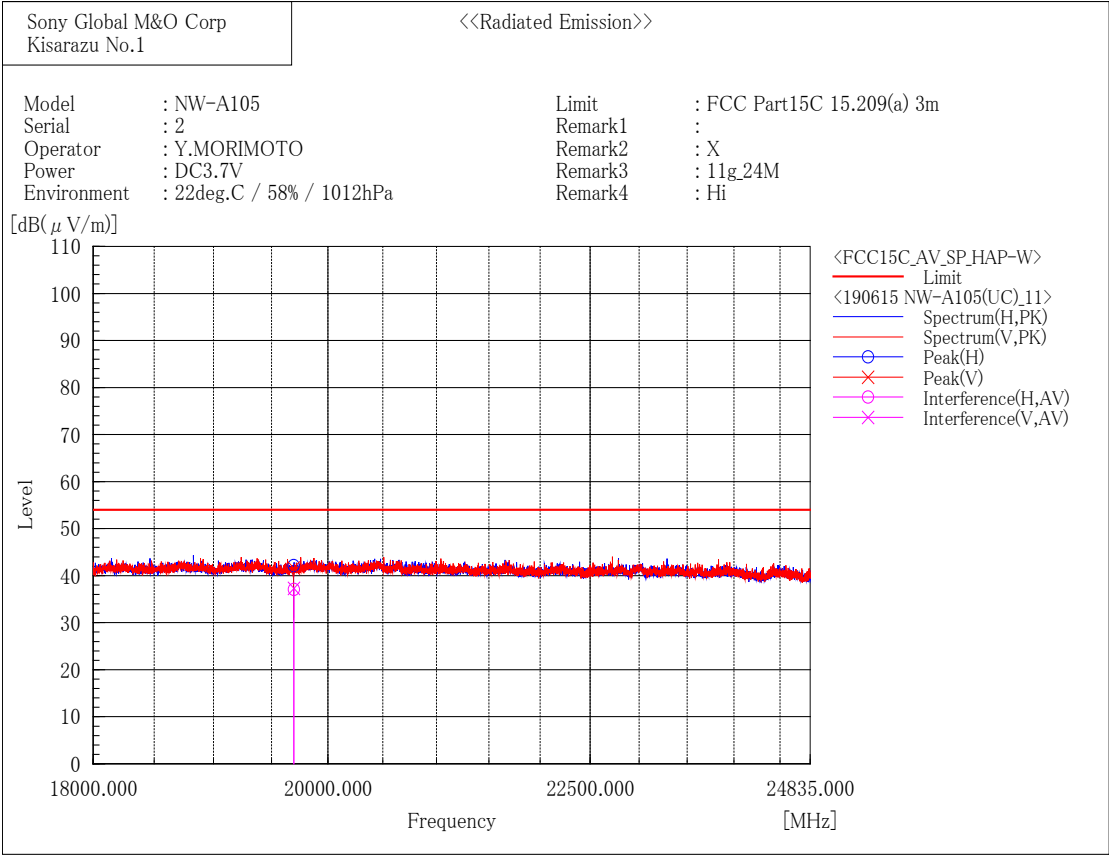
--- Vertical Polarization (AV)---

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	19296.000	46.0	-8.5	37.5	54.0	16.5	139.9	138.2

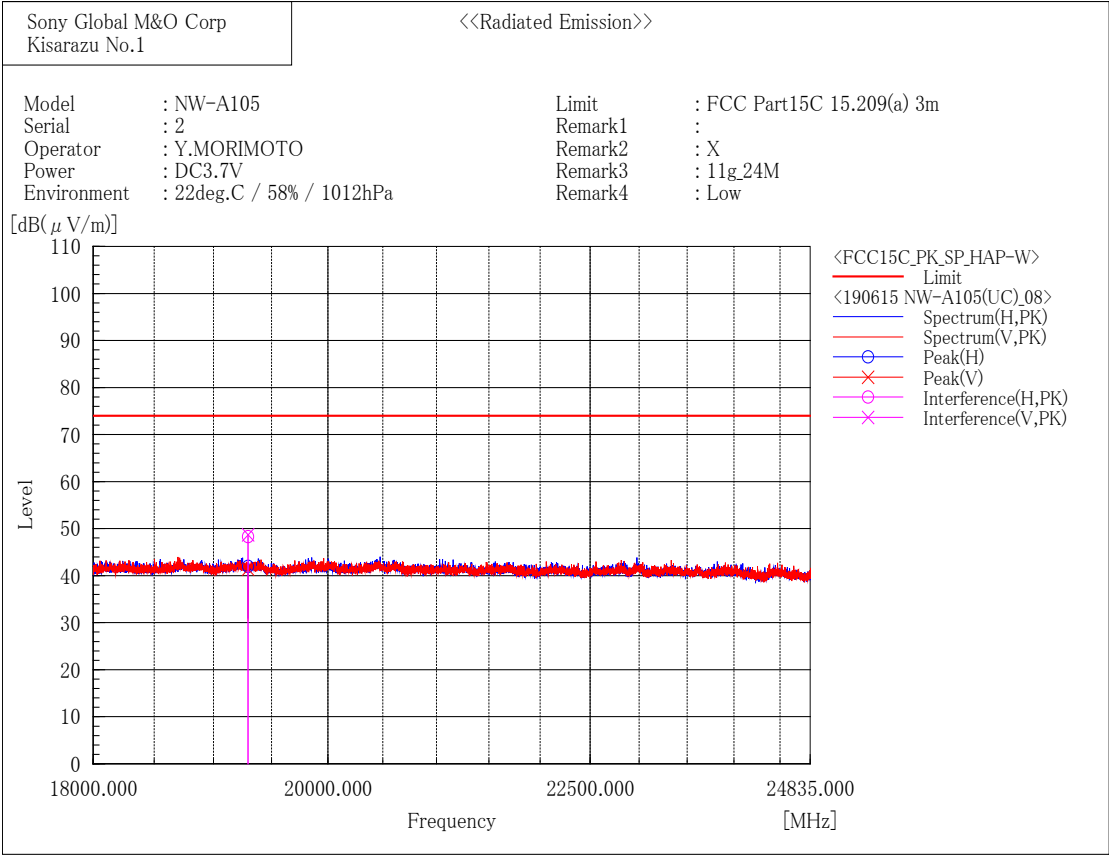
[802.11g/ 2437 MHz]



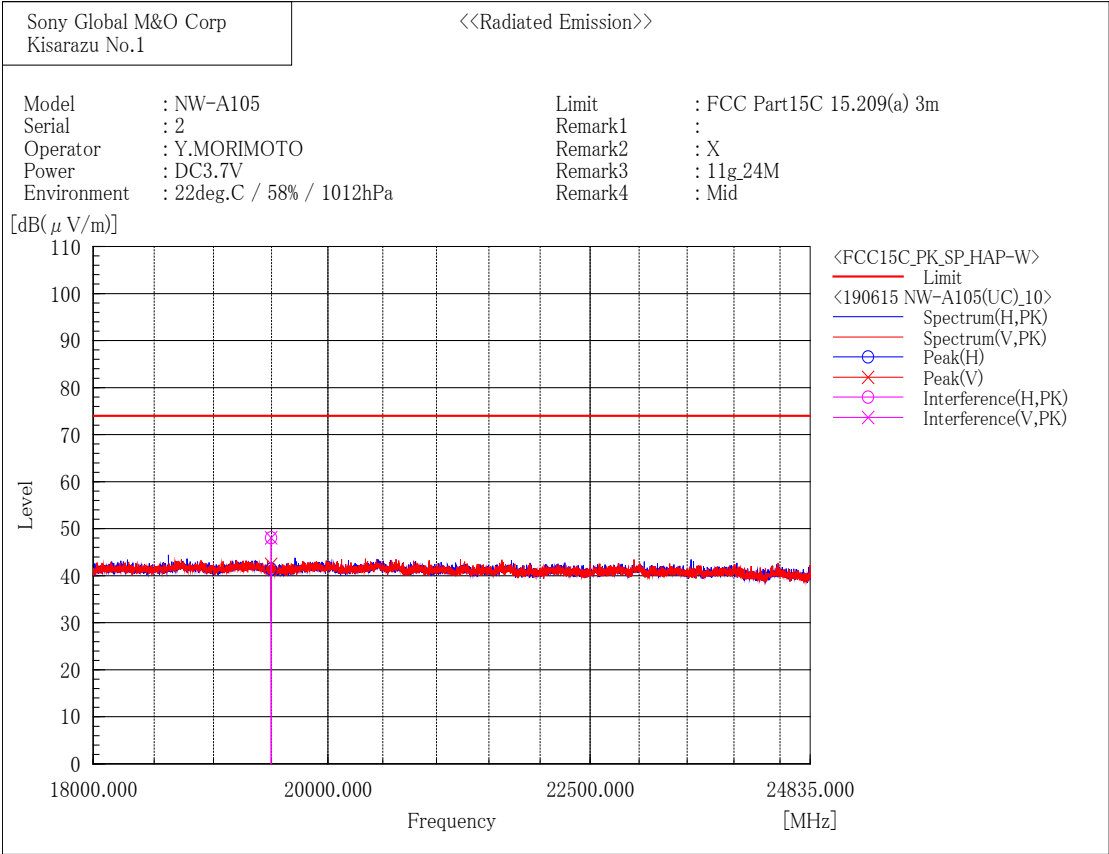
[802.11g/ 2462 MHz]



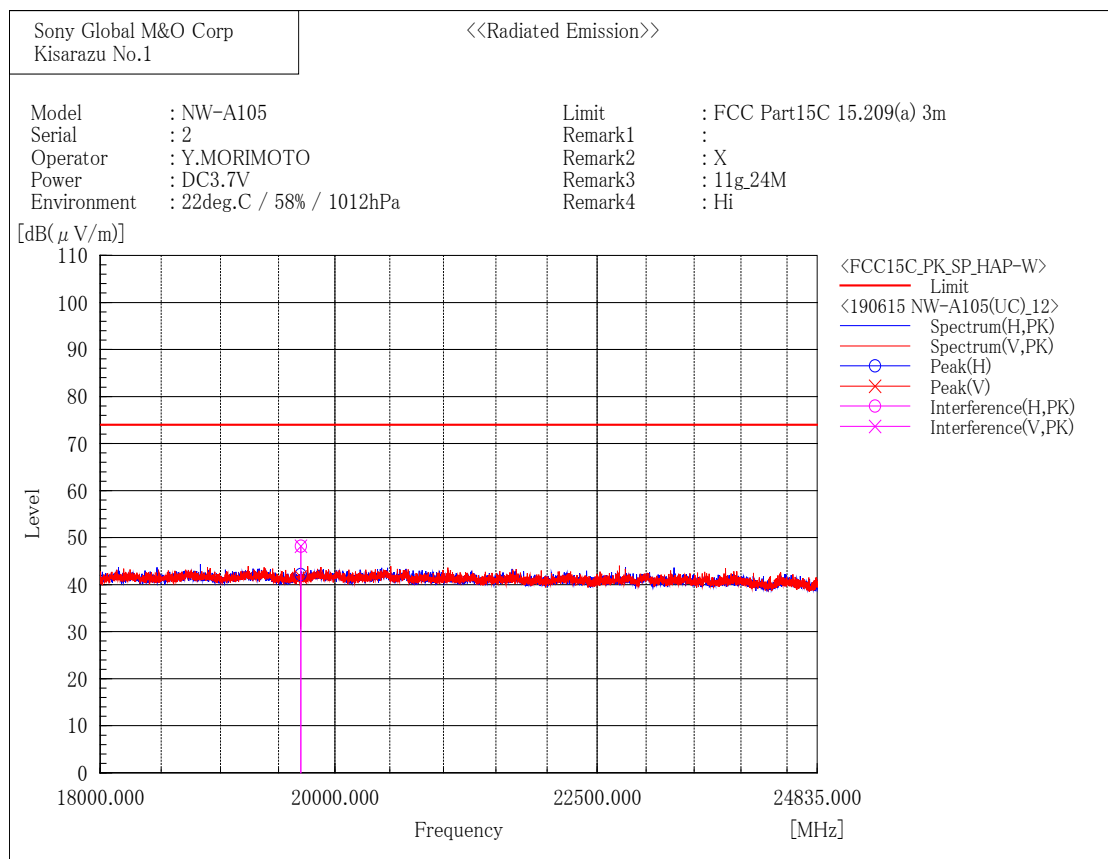
[802.11g/ 2412 MHz]



[802.11g/ 2437 MHz]



[802.11g/ 2462 MHz]



Final Result

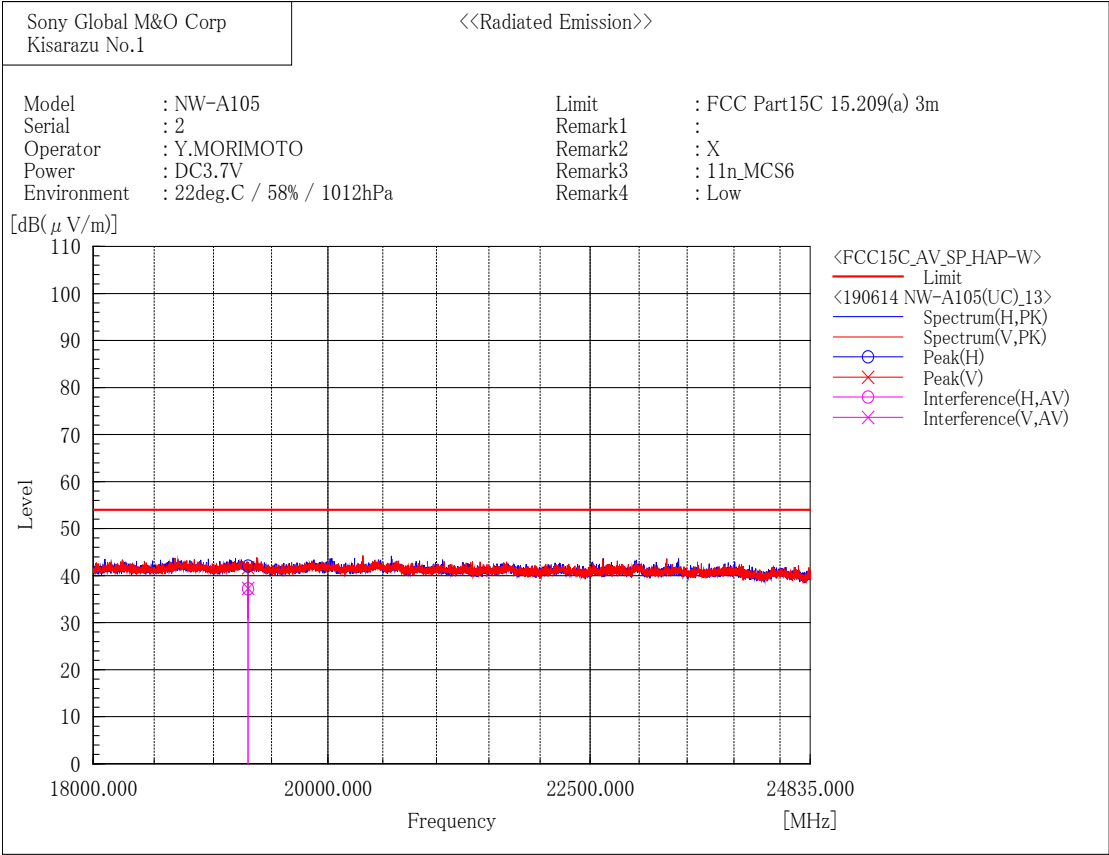
--- Horizontal Polarization (PK)---

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	19696.000	56.7	-8.5	48.2	74.0	25.8	273.1	0.3

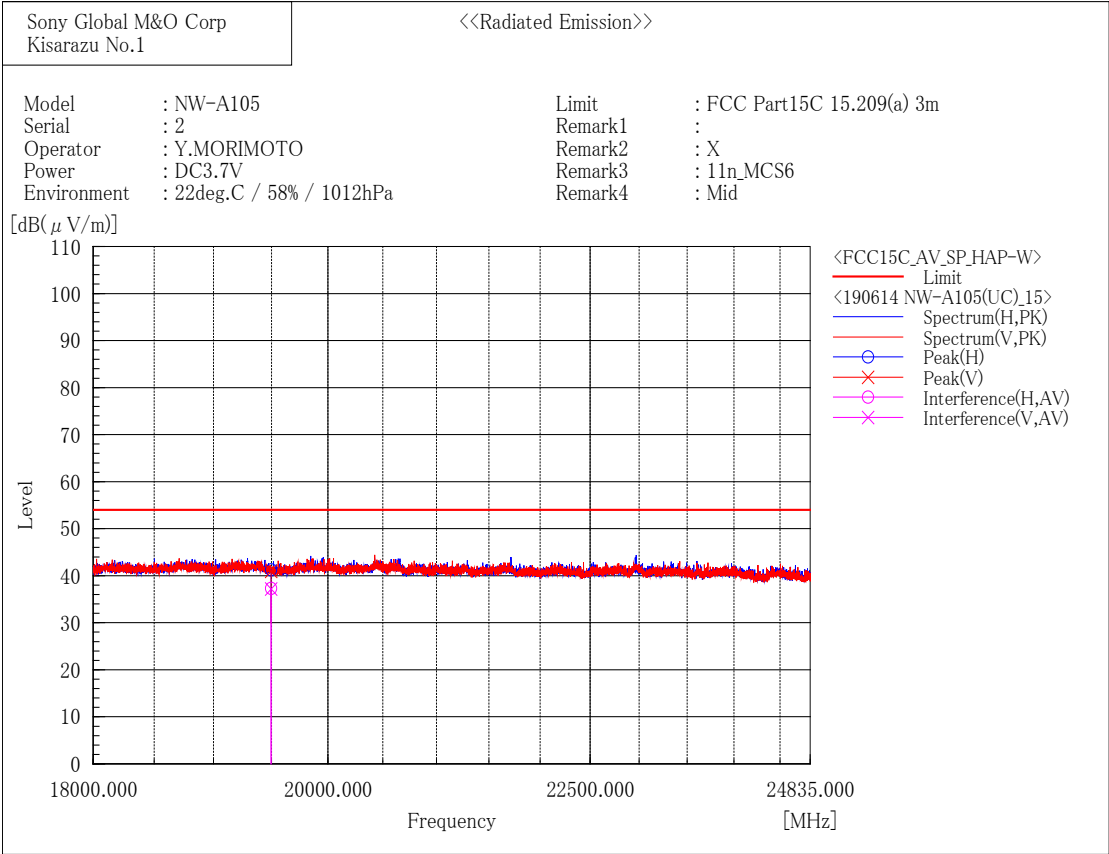
--- Vertical Polarization (PK)---

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	19696.000	56.7	-8.5	48.2	74.0	25.8	204.8	305.1

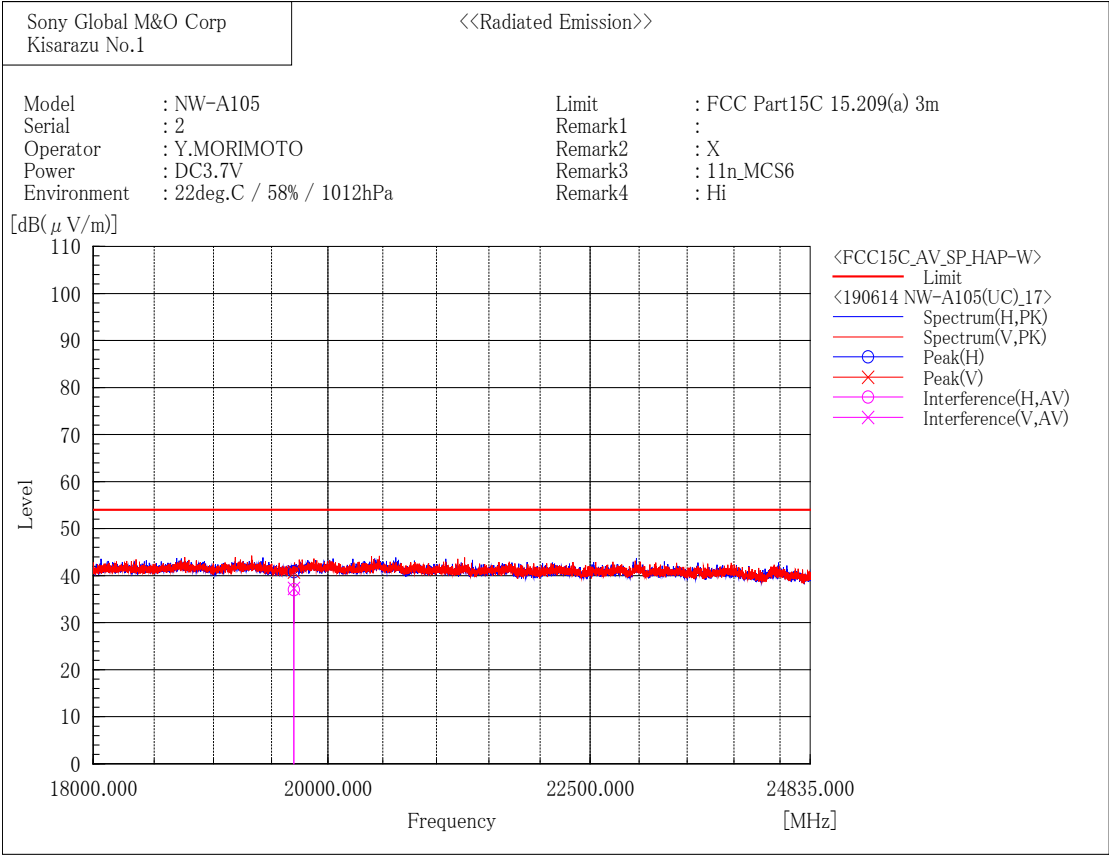
[802.11n (HT20)/ 2412 MHz]



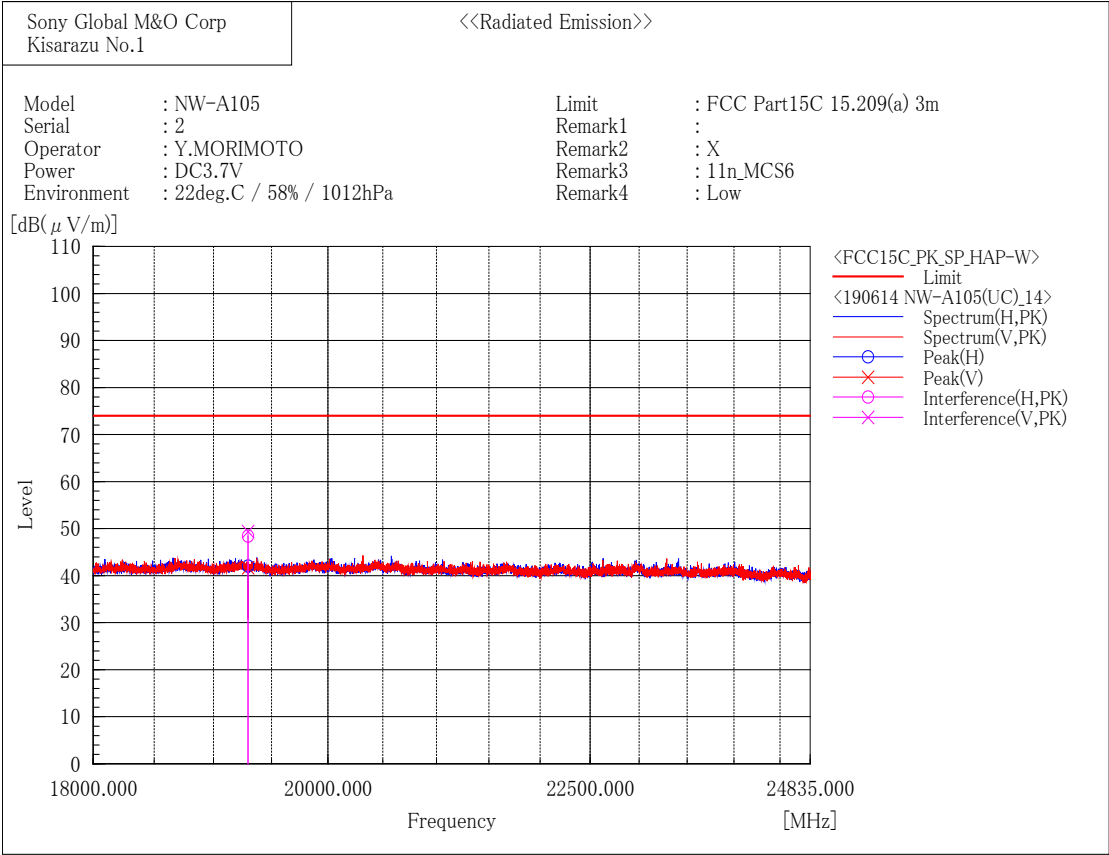
[802.11n (HT20)/ 2437 MHz]



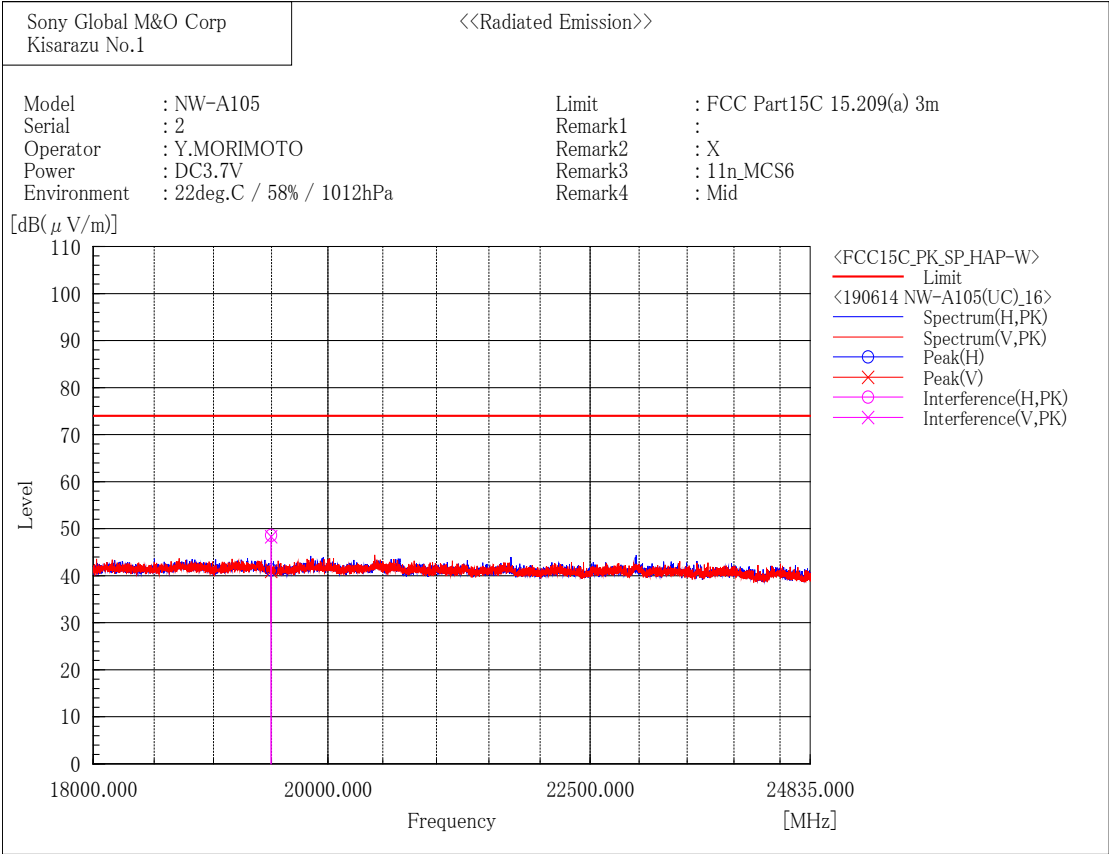
[802.11n (HT20)/ 2462 MHz]



[802.11n (HT20)/ 2412 MHz]



[802.11n (HT20)/ 2437 MHz]



Final Result

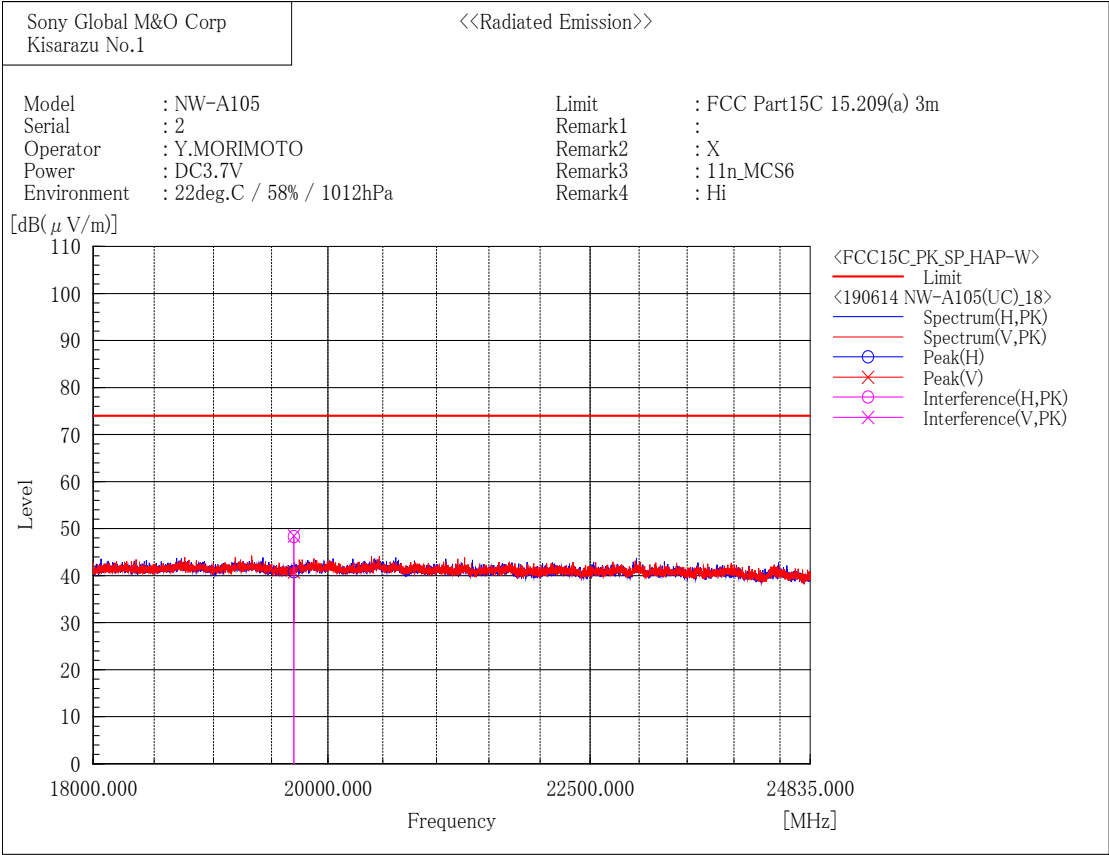
--- Horizontal Polarization (PK)---

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	19496.000	57.2	-8.6	48.6	74.0	25.4	137.6	79.3

--- 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	19496.000	56.9	-8.6	48.3	74.0	25.7	326.5	58.3

[802.11n (HT20)/ 2462 MHz]



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	19696.000	56.8	-8.5	48.3	74.0	25.7	394.9	52.9

--- 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	19696.000	57.0	-8.5	48.5	74.0	25.5	230.9	355.0

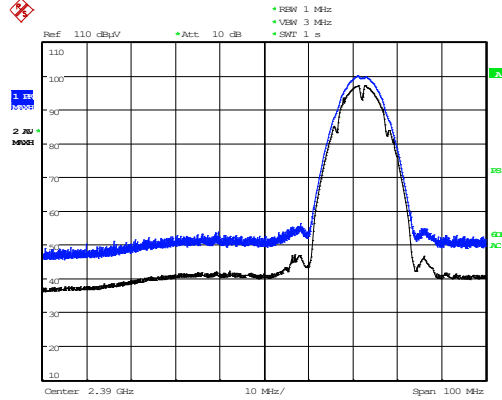
2.4 GHz Restricted-Band Edge (Plot data)

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.

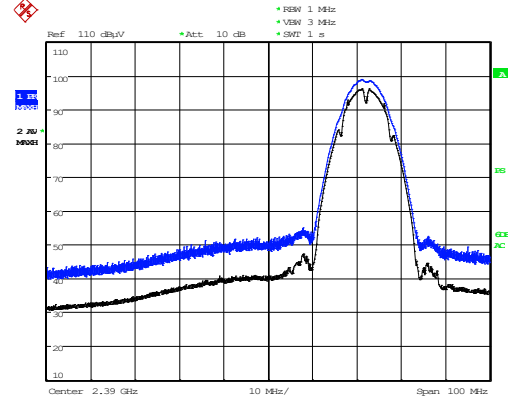
[802.11b/ 2412 MHz]

Horizontal



Date: 12.JUN.2019 16:04:20

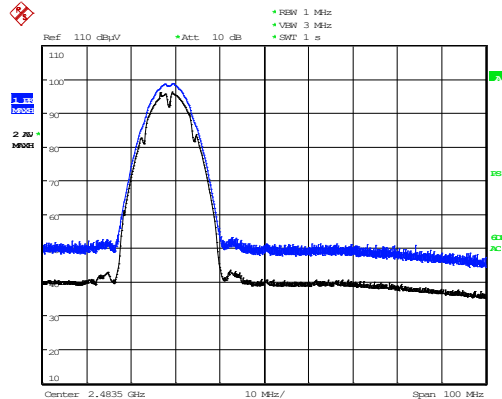
Vertical



Date: 12.JUN.2019 16:16:39

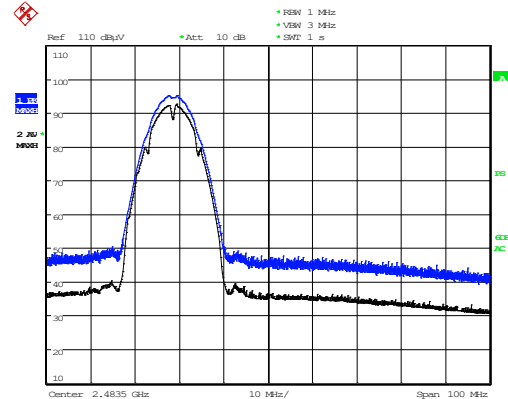
[802.11b/ 2462 MHz]

Horizontal



Date: 12.JUN.2019 18:36:30

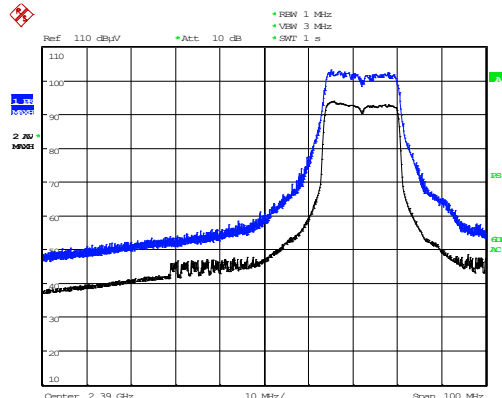
Vertical



Date: 12.JUN.2019 18:28:29

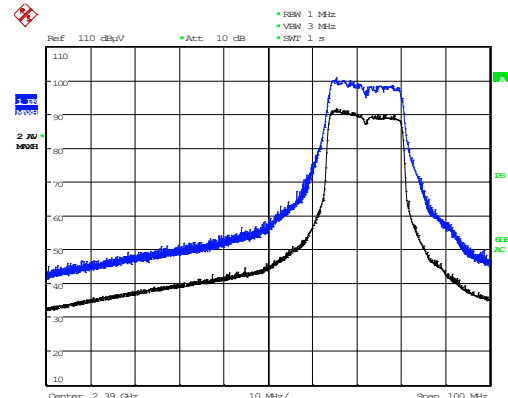
[802.11g/ 2412 MHz]

Horizontal



Date: 13.JUN.2019 11:30:50

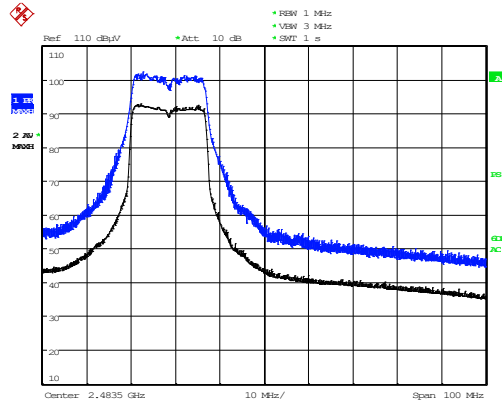
Vertical



Date: 13.JUN.2019 11:19:08

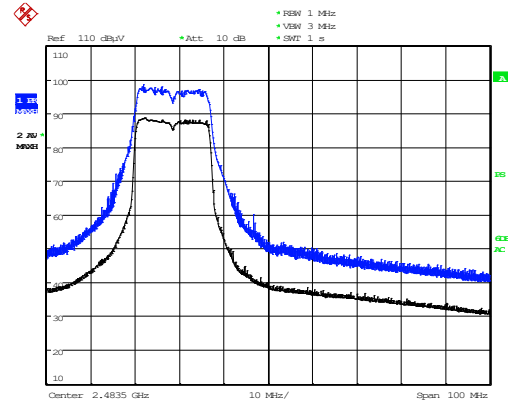
[802.11g/ 2462 MHz]

Horizontal



Date: 13.JUN.2019 14:12:54

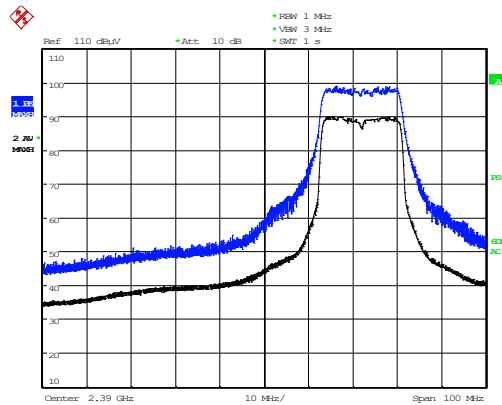
Vertical



Date: 13.JUN.2019 14:22:41

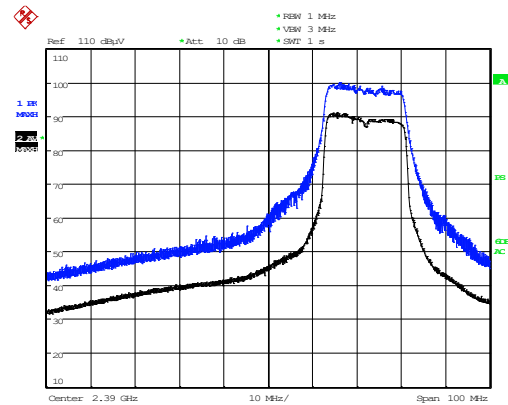
[802.11n (HT20)/ 2412 MHz]

Horizontal



Date: 13.JUN.2019 21:53:53

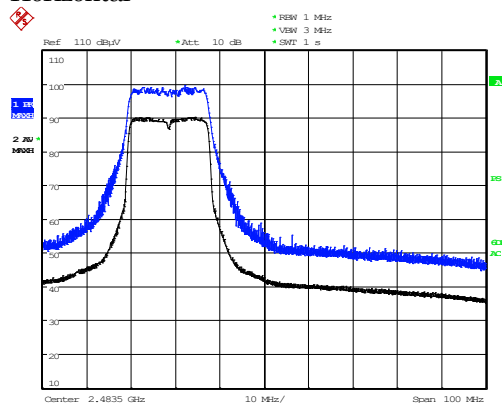
Vertical



Date: 13.JUN.2019 21:52:31

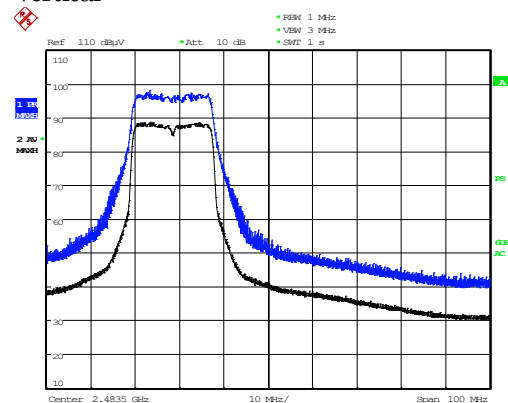
[802.11n (HT20)/ 2462 MHz]

Horizontal



Date: 14.JUN.2019 00:49:40

Vertical



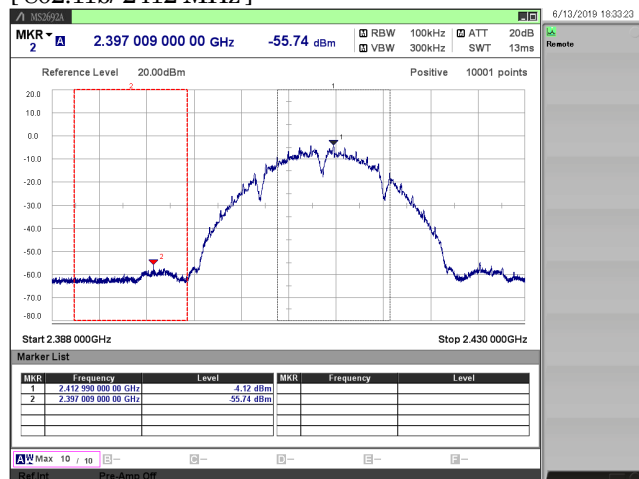
Date: 14.JUN.2019 00:51:16

3.6. Conducted Spurious Emissions for Band Edge

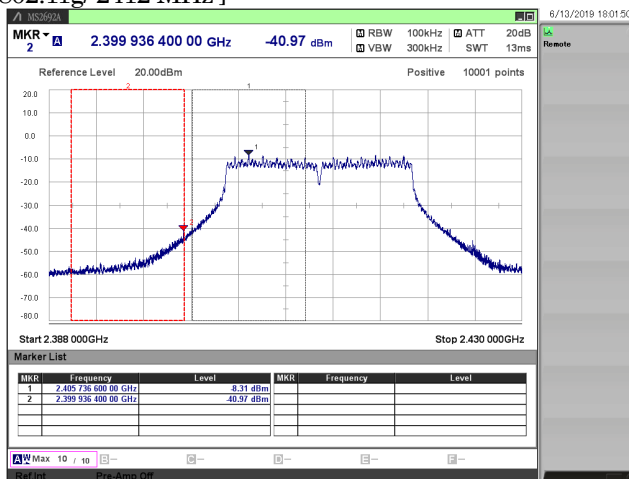
- 1) Ambient temperature : 21.3 deg.C
- 2) Relative humidity : 52.8 %
- 3) Date of measurement : June 13, 2019
- 4) Measured by : H.WAKI
- 5) Operating mode : Transmitting mode

Mode	Rate [Mbps]	Channel [MHz]	Frequency [MHz]	Reading(PK) [dBm]	C.F. [dB]	Result [dBm]	Limit [dBm]	Margin [dB]
11b	2	2412	2412.99	-4.12	10.86	6.74	-	-
			2397.01	-55.74	10.86	-44.88	-13.26	31.62
11g	24	2412	2405.74	-8.31	10.86	2.55	-	-
			2399.94	-40.97	10.86	-30.11	-17.45	12.66
11n (HT20)	MCS6	2412	2405.74	-8.36	10.86	2.50	-	-
			2399.90	-41.52	10.86	-30.66	-17.50	13.16

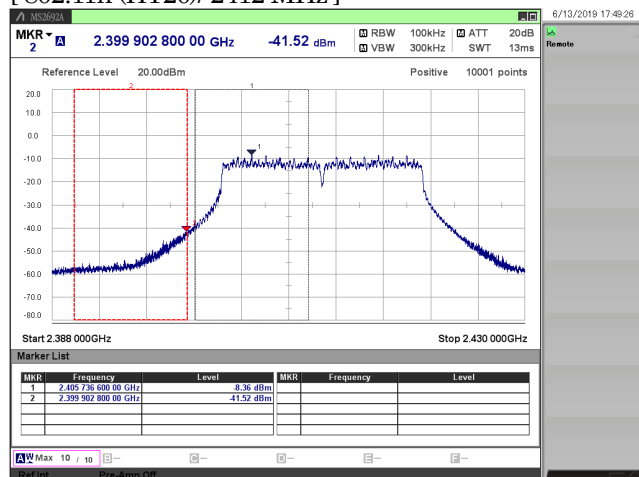
[802.11b/ 2412 MHz]



[802.11g/ 2412 MHz]



[802.11n (HT20)/ 2412 MHz]



4. Method of Calculation

4.1. AC Power-line Conducted Emissions

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

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

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

4.2. Maximum Conducted Output Power

Method of calculation : Software
Software Name : SW-0302
Software Version : Ver.4

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

4.3. Power Spectral Density

Method of calculation : Software
Software Name : SW-0302
Software Version : Ver.4

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

4.4. 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)

4.5. Conducted Spurious Emissions for Band Edge

Method of calculation : Software
Software Name : SW-0302
Software Version : Ver.4

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. AC Power-line Conducted Emissions

	Ctrl.#	Equipment	Model No.	Serial No.	Manufacturer	Cal.Interval	Last Cal.
x	CS0015	EMC-CE Cable System 1	-	-	-	12 months	18.11.04
x	M0663	6dB Attenuator	6806.01A	-	HUBER+SUHNER	12 months	18.11.04
x	M0569	HIGH FREQUENCY FUSE	MP612A	-	Anritsu	12 months	18.11.04
x	M0130	RF Selector	NS4902SR	109001	Toyo Corporation	12 months	18.11.04
x	M0605	LISNAMN	ENV216	101305	Rohde & Schwarz	12 months	18.10.01
x	M5062	Scientific Ambient Monitor	0560 6220	39515563/802	testo	12 months	18.07.17
x	M0515	EMI Receiver	ESCI	100606	Rohde & Schwarz	12 months	18.10.01
x	M5080	Temperature Meter	608-H2	41476135	testo	12 months	18.10.18

5.2. 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	W0101	Signal Analyzer	MS2692A	6201338955	Anritsu	12 months	19.05.09
x	W0110	10dB Attenuator	6610-SK-50-1	0002	Huber + Suhner	12 months	18.09.01
-	W0100	Spectrum Analyzer	MS2692A	6201338954	Anritsu	12 months	19.05.09
x	W0006	Power Meter	N1911A	MY50000295	Keysight Technologies	12 months	18.10.06
x	W0007	Power Sensor	N1922A	MY50180022	Keysight Technologies	12 months	18.10.06
x	W0029	10dB Attenuator	8493C	76549	Keysight 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
x	WC0004	RF Cable	SUCOFLEX 102	34288/2	HUBER + SUHNER	12 months	18.09.01
-	WC0005	RF Cable	SUCOFLEX 102	34287/2	HUBER + SUHNER	12 months	18.09.01
-	WC0006	RF Cable	SUCOFLEX 102	34289/2	HUBER + SUHNER	12 months	18.09.01
-	WC0007	RF Cable	SUCOFLEX 102	34286/2	HUBER + SUHNER	12 months	18.09.01
x	M0720	Thermometer	TH-321	140036	AS ONE	12 months	18.07.20

5.3. 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	Log periodic 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
-	A0058	Horn Antenna	HAP18-26W	00000016	Toyo Corporation	12 months	18.12.01
x	RA5002	Horn Antenna	HAP18-26W	00000011	Toyo Corporation	12 months	19.05.14
x	CS0017	N-RE Cable System 1	-	-	-	12 months	18.11.04
x	CS0018	N-RE Cable System 2	-	-	-	12 months	18.11.04
x	CS0045	N-3m EMF Cable System	-	-	-	12 months	18.11.04
x	CS0074/0075	N-RE Cable SYSTEM 4	-	-	-	12 months	18.11.04
x	M0126	Step Attenuator	8494H	3837M01144	Agilent Technologies	12 months	18.11.04
x	M0752	Pre Amplifier	310N	320621	SONOMA INSTRUMENT	12 months	18.11.04
x	M0128	3dB Attenuator	8491A	53541	Agilent Technologies	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
x	M5062	Scientific Ambient Monitor	0560 6220	39515563/802	testo	12 months	18.07.17

About calibration interval

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