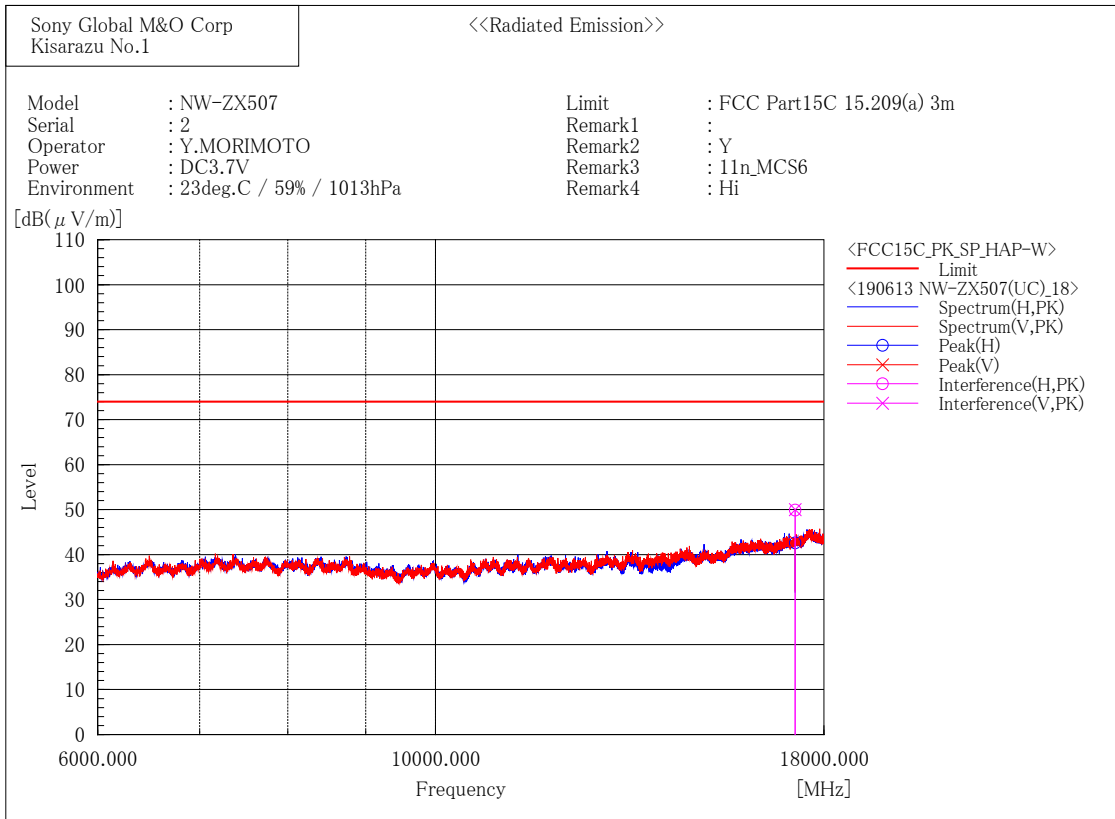


[802.11n (HT20)/ 2462 MHz]



Final Result

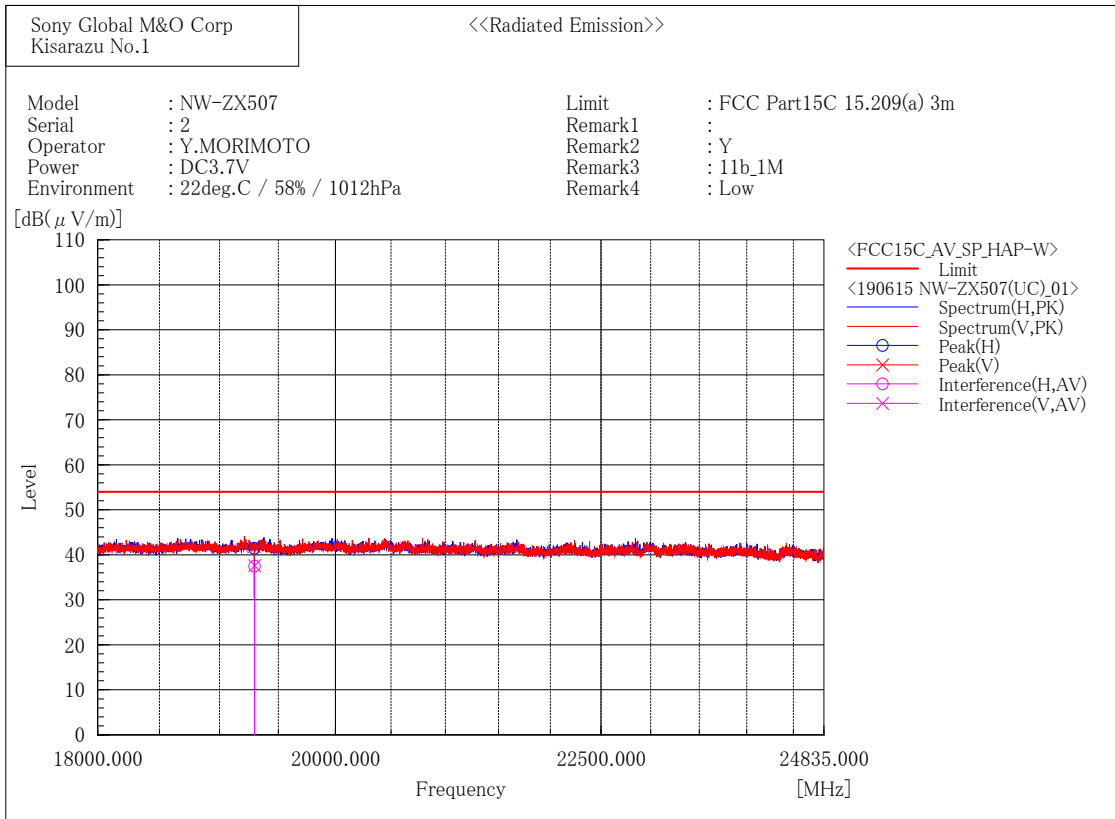
--- Horizontal Polarization (PK)---

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	17234.000	45.2	4.7	49.9	74.0	24.1	226.5	137.4

--- 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	17234.000	45.3	4.7	50.0	74.0	24.0	152.6	18.1

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



Final Result

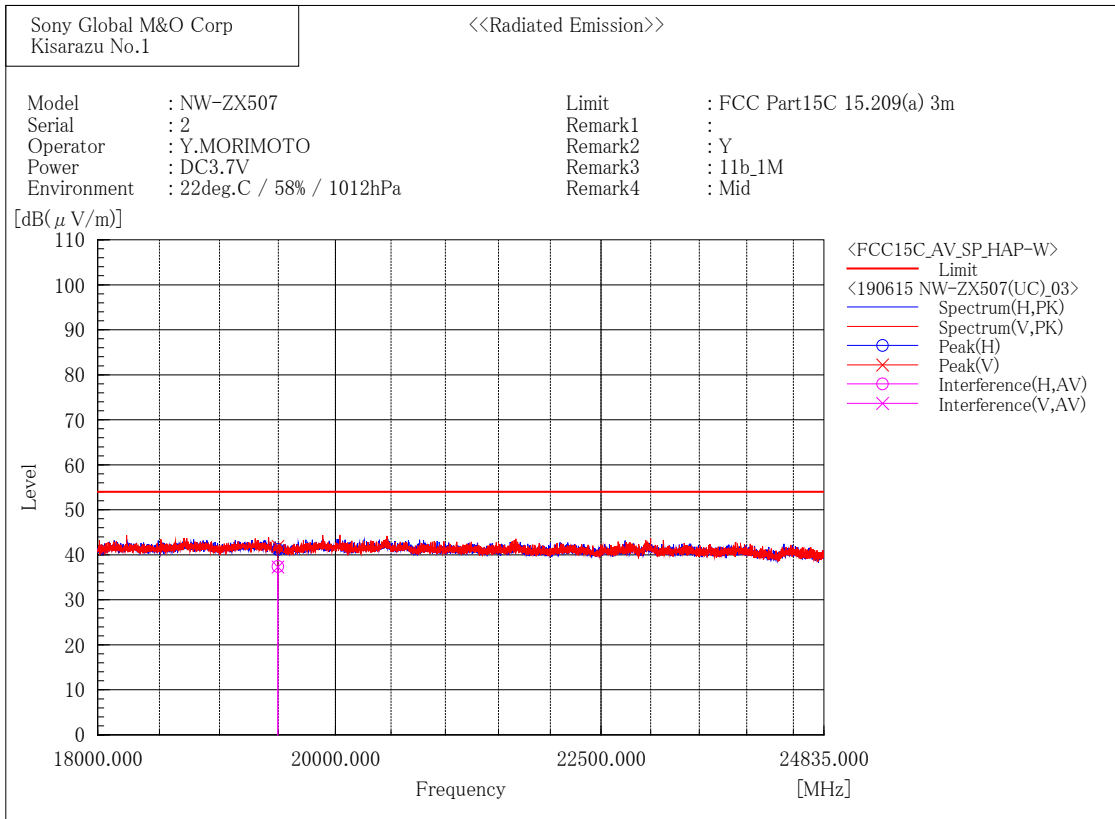
--- Horizontal Polarization (AV)---

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	46.0	-8.5	37.5	54.0	16.5	138.4	242.2

--- 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	19296.000	46.1	-8.5	37.6	54.0	16.4	320.0	240.1

[802.11b/ 2437 MHz]



Final Result

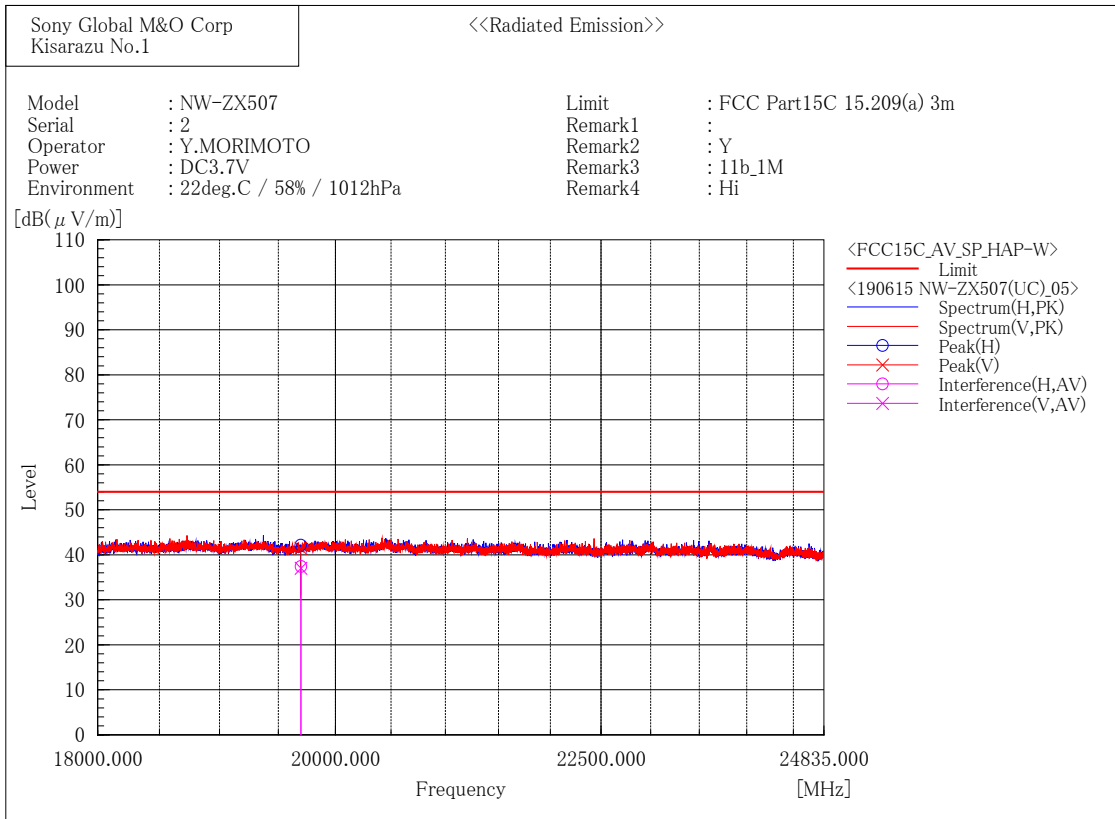
--- Horizontal Polarization (AV)---

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	19496.000	46.0	-8.6	37.4	54.0	16.6	314.6	153.9

--- 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	19496.000	45.9	-8.6	37.3	54.0	16.7	131.3	141.2

[802.11b/ 2462 MHz]



Final Result

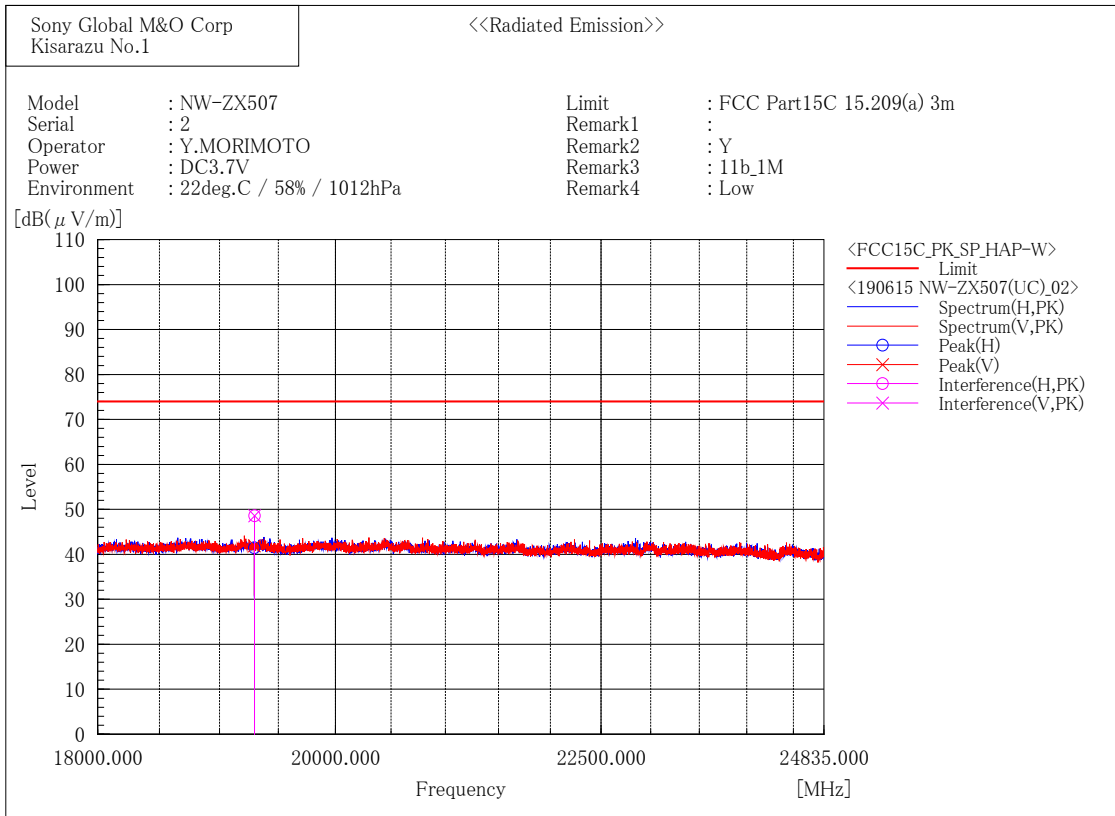
--- Horizontal Polarization (AV)---

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	19696.000	45.9	-8.5	37.4	54.0	16.6	376.4	327.4

--- 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	19696.000	45.5	-8.5	37.0	54.0	17.0	100.0	117.4

[802.11b/ 2412 MHz]



Final Result

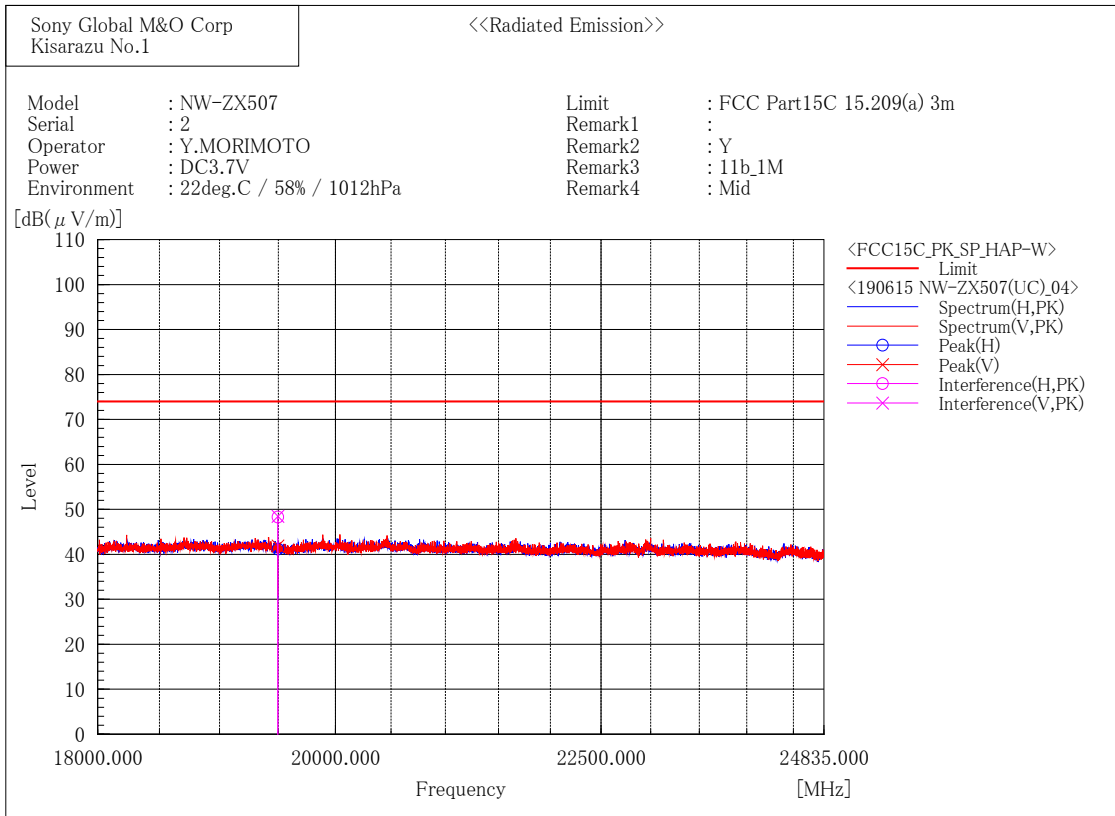
--- Horizontal Polarization (PK)---

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	19296.000	57.1	-8.5	48.6	74.0	25.4	138.4	241.3

--- 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	19296.000	57.1	-8.5	48.6	74.0	25.4	320.0	240.1

[802.11b/ 2437 MHz]



Final Result

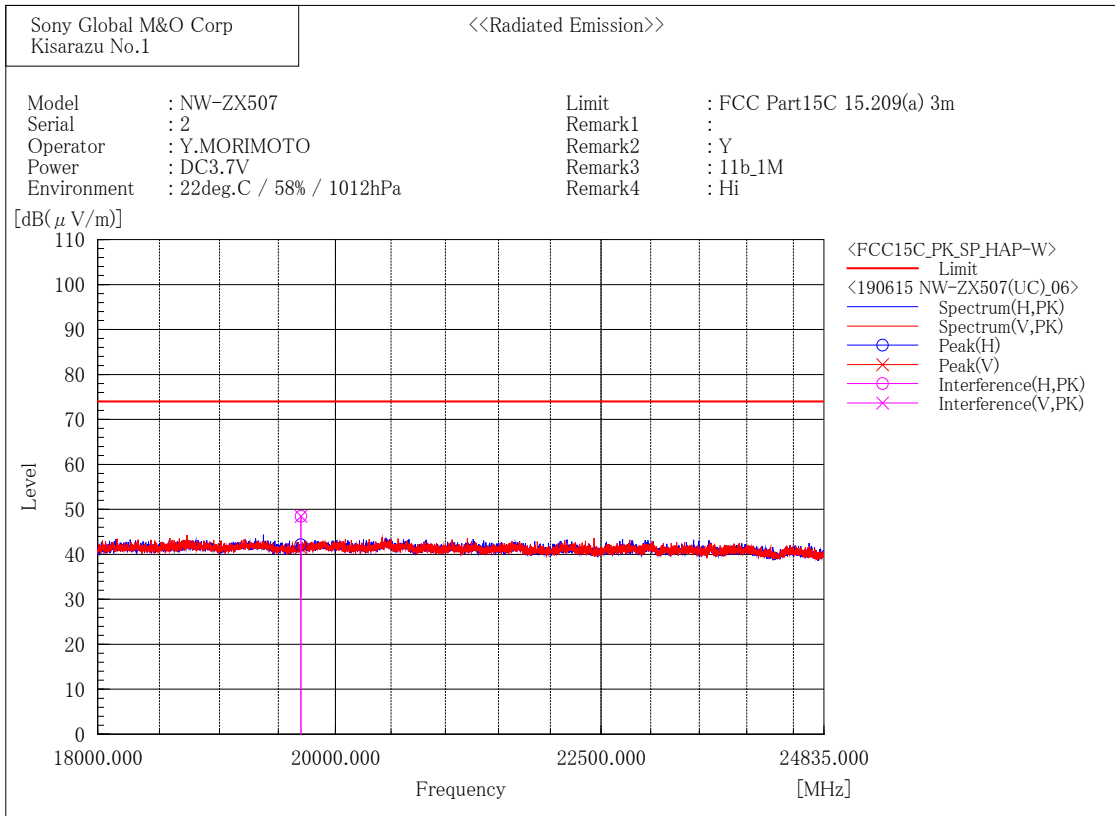
--- Horizontal Polarization (PK)---

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	56.9	-8.6	48.3	74.0	25.7	314.6	153.9

--- 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	19496.000	57.1	-8.6	48.5	74.0	25.5	131.3	143.0

[802.11b/ 2462 MHz]



Final Result

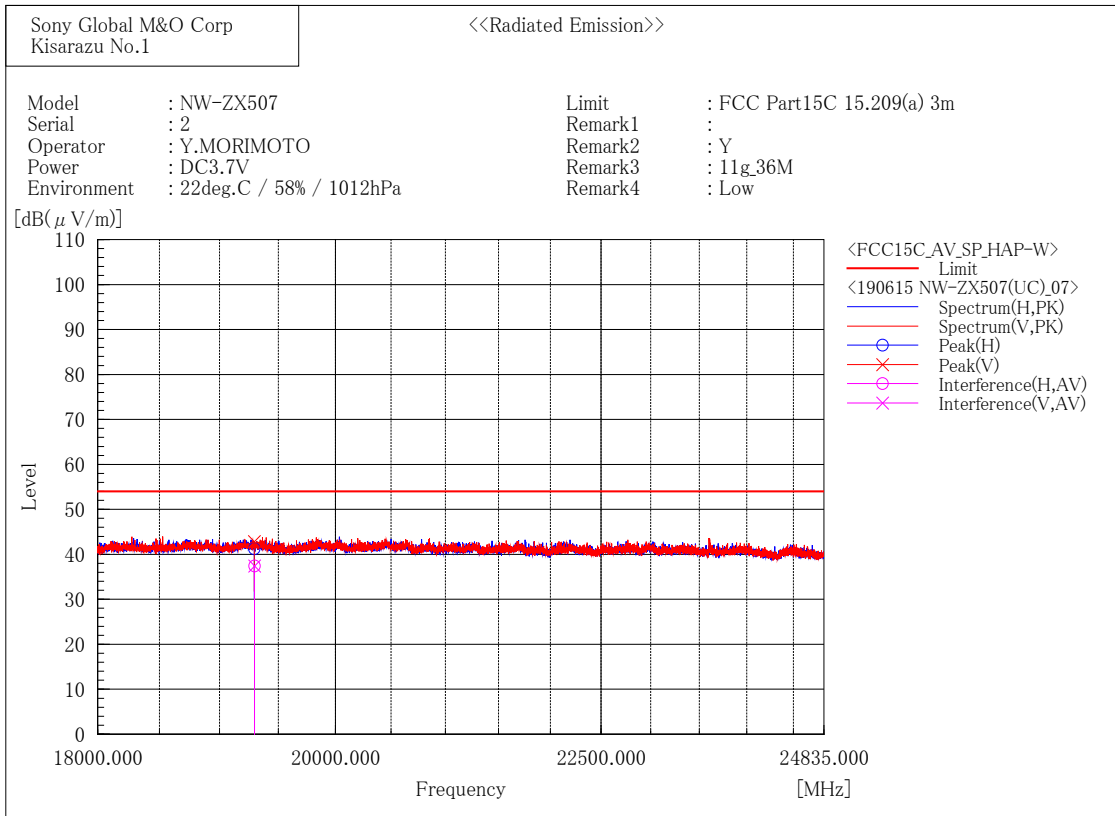
--- Horizontal Polarization (PK)---

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	57.0	-8.5	48.5	74.0	25.5	376.4	329.5

--- 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	19696.000	57.0	-8.5	48.5	74.0	25.5	100.0	117.4

[802.11g/ 2412 MHz]



Final Result

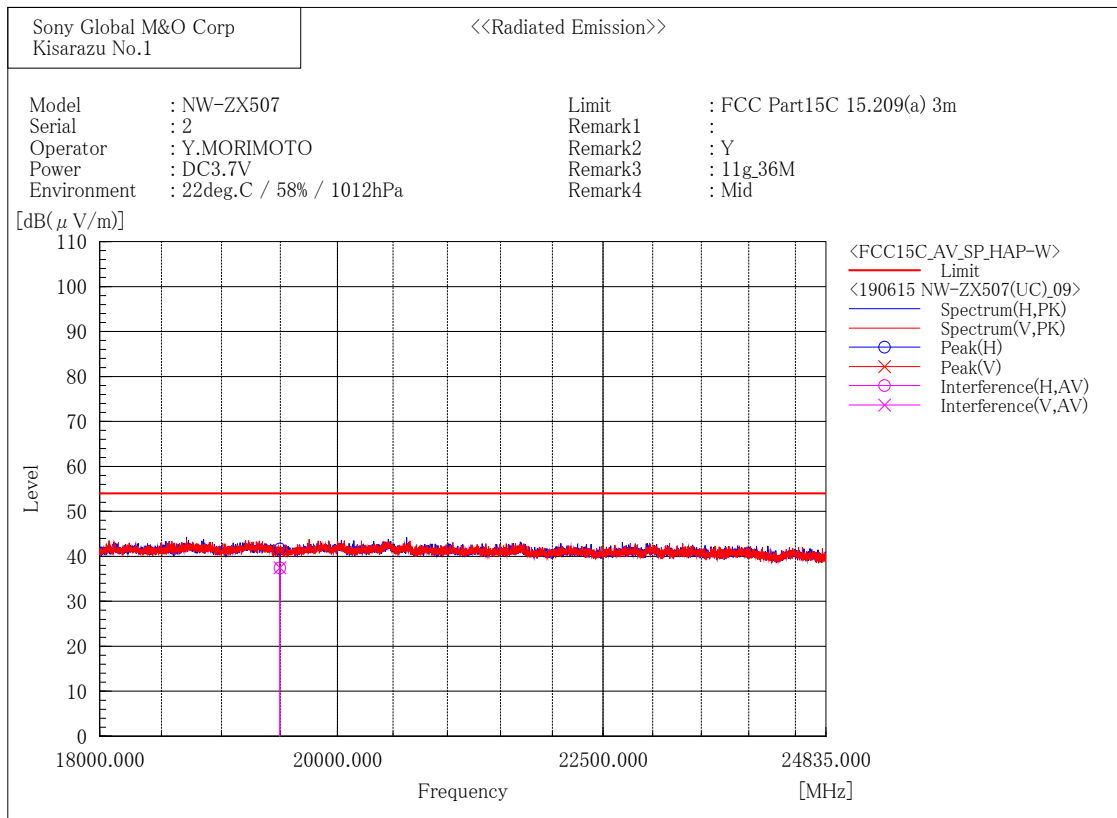
--- Horizontal Polarization (AV)---

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	45.9	-8.5	37.4	54.0	16.6	228.9	48.1

--- 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	19296.000	45.9	-8.5	37.4	54.0	16.6	126.1	100.1

[802.11g/ 2437 MHz]



Final Result

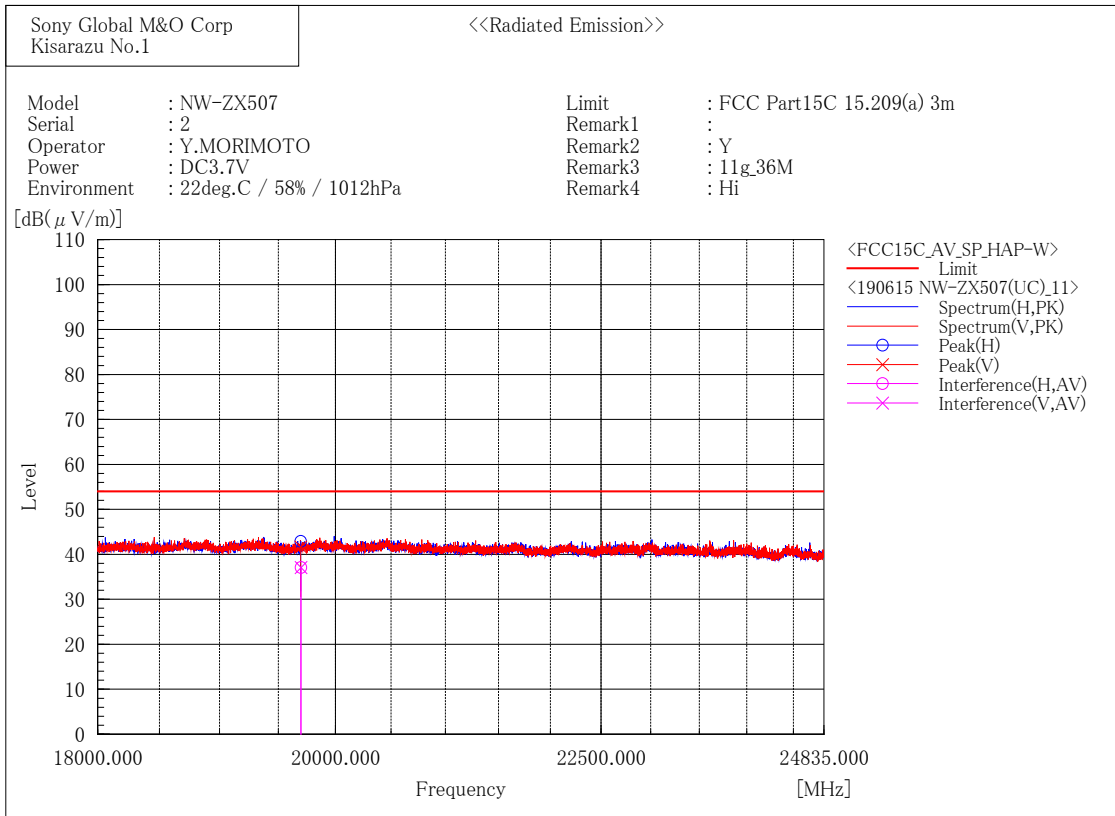
--- Horizontal Polarization (AV)---

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	19496.000	46.0	-8.6	37.4	54.0	16.6	207.3	245.2

--- 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	19496.000	46.1	-8.6	37.5	54.0	16.5	197.3	343.8

[802.11g/ 2462 MHz]



Final Result

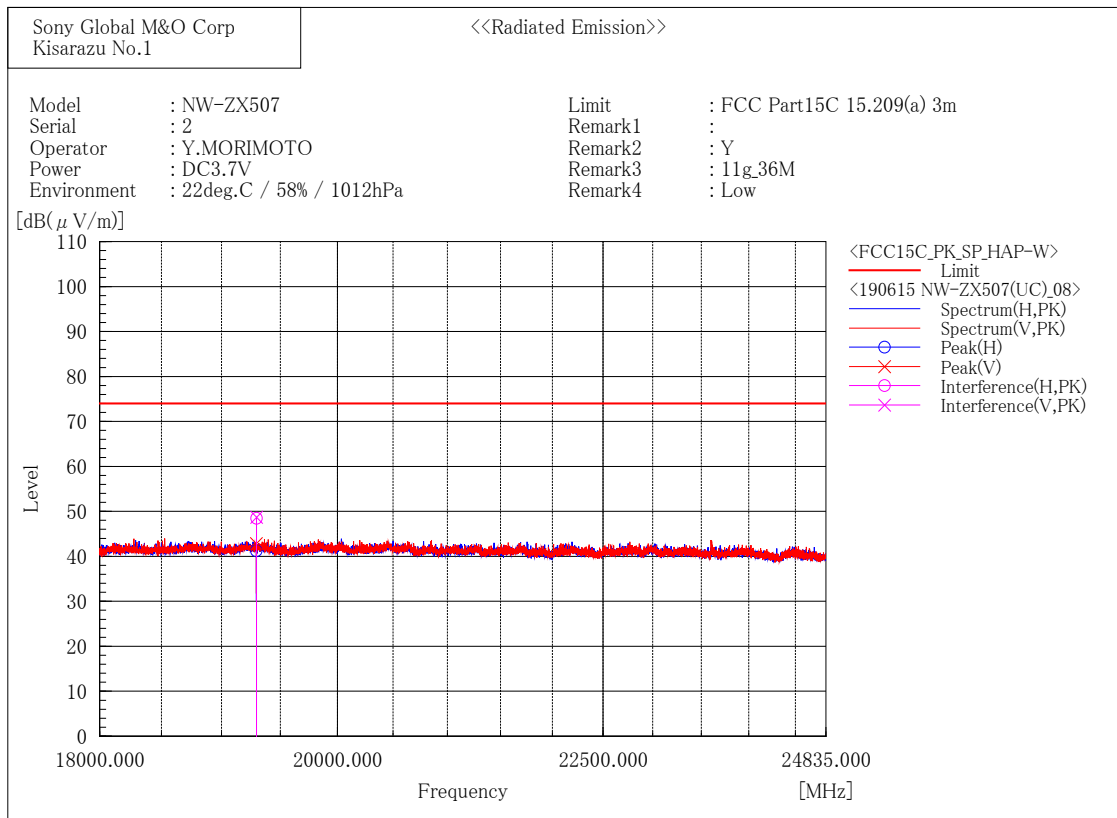
--- Horizontal Polarization (AV)---

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	19696.000	45.6	-8.5	37.1	54.0	16.9	175.0	249.0

--- 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	19696.000	45.6	-8.5	37.1	54.0	16.9	202.6	334.2

[802.11g/ 2412 MHz]



Final Result

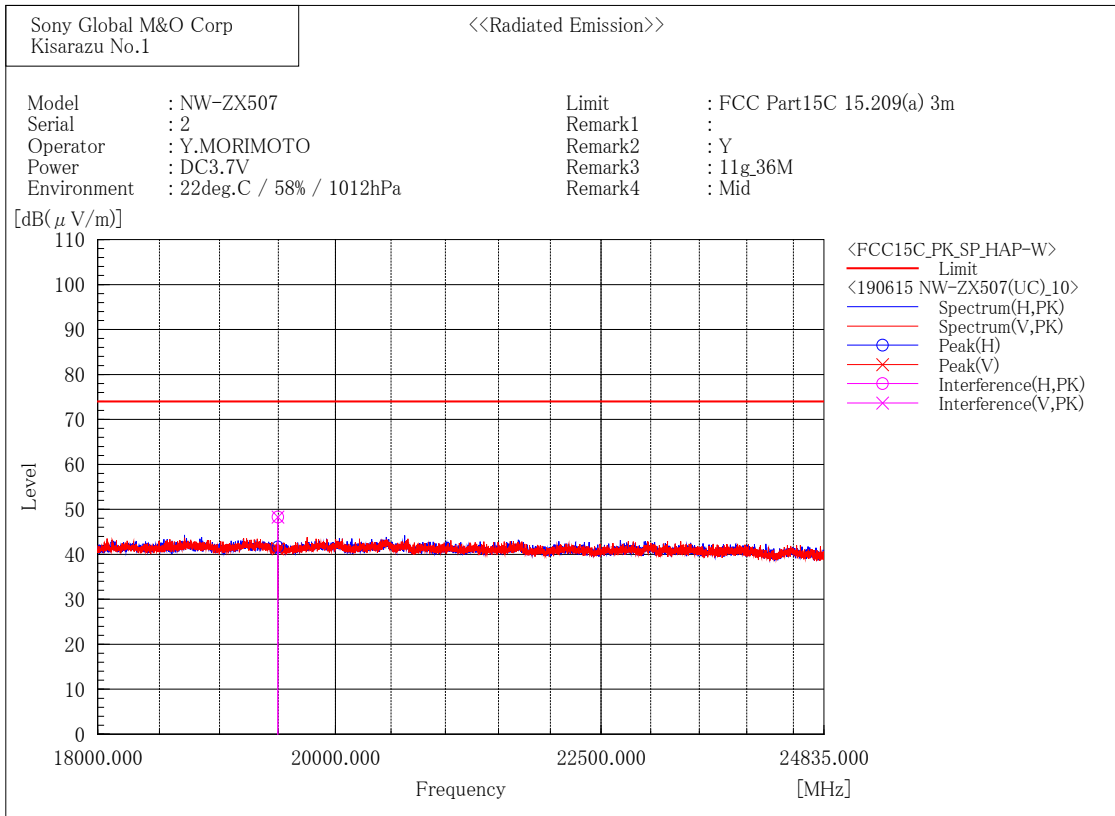
--- Horizontal Polarization (PK)---

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	19296.000	57.0	-8.5	48.5	74.0	25.5	228.9	48.1

--- 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	19296.000	57.2	-8.5	48.7	74.0	25.3	126.1	98.0

[802.11g/ 2437 MHz]



Final Result

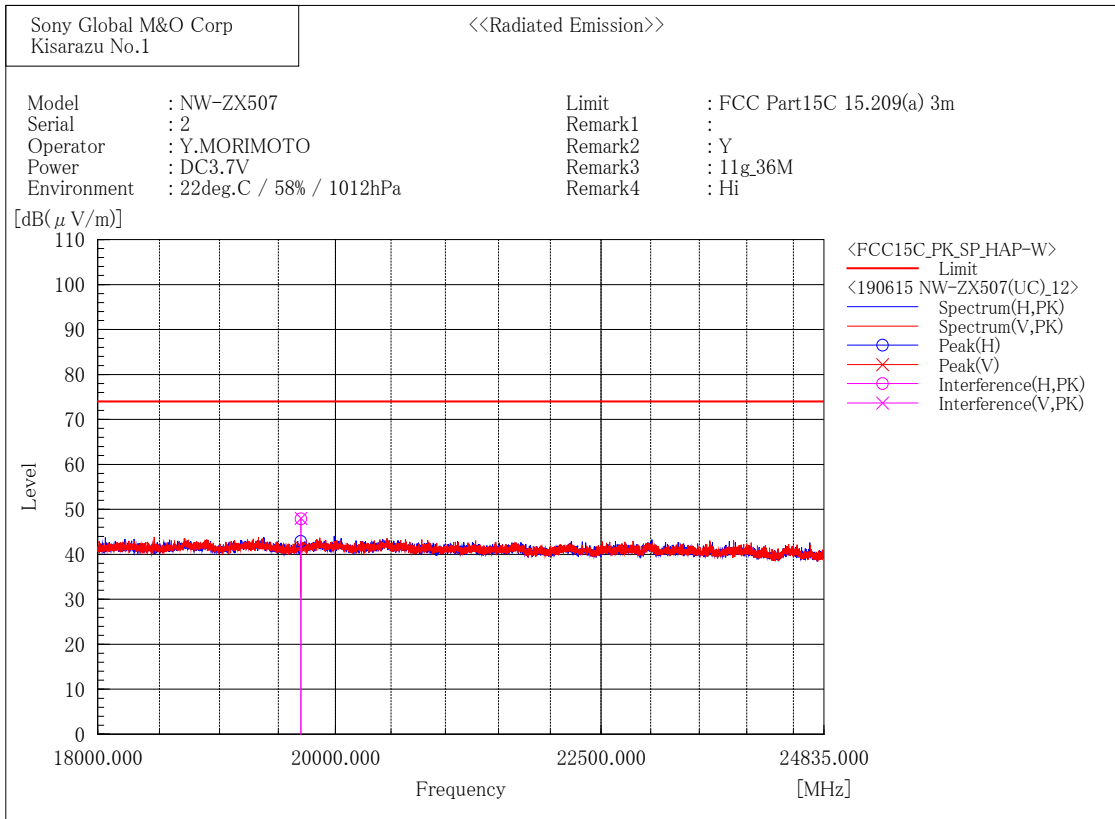
--- Horizontal Polarization (PK)---

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	56.9	-8.6	48.3	74.0	25.7	207.3	247.3

--- 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	197.3	343.8

[802.11g/ 2462 MHz]



Final Result

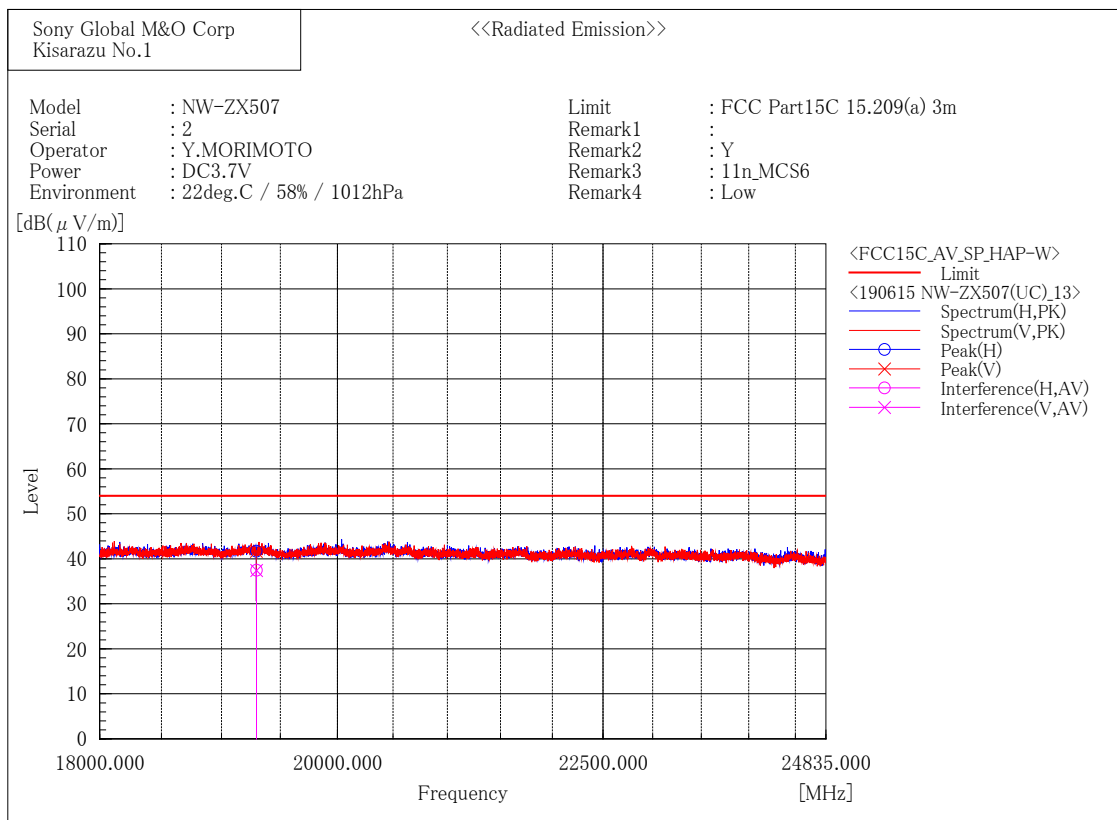
--- Horizontal Polarization (PK)---

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	56.4	-8.5	47.9	74.0	26.1	175.0	249.0

--- 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	19696.000	56.5	-8.5	48.0	74.0	26.0	202.6	332.2

[802.11n (HT20)/ 2412 MHz]



Final Result

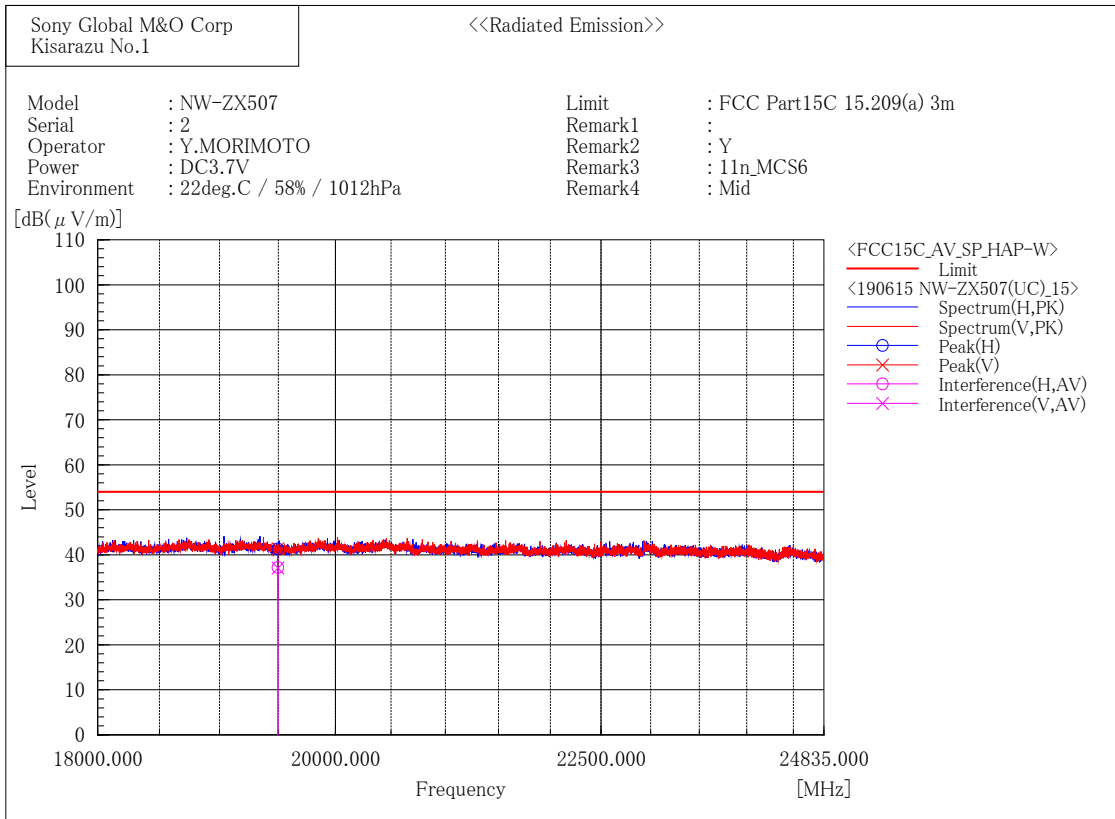
--- Horizontal Polarization (AV)---

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	46.0	-8.5	37.5	54.0	16.5	131.9	160.8

--- 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	19296.000	45.9	-8.5	37.4	54.0	16.6	136.5	139.6

[802.11n (HT20)/ 2437 MHz]



Final Result

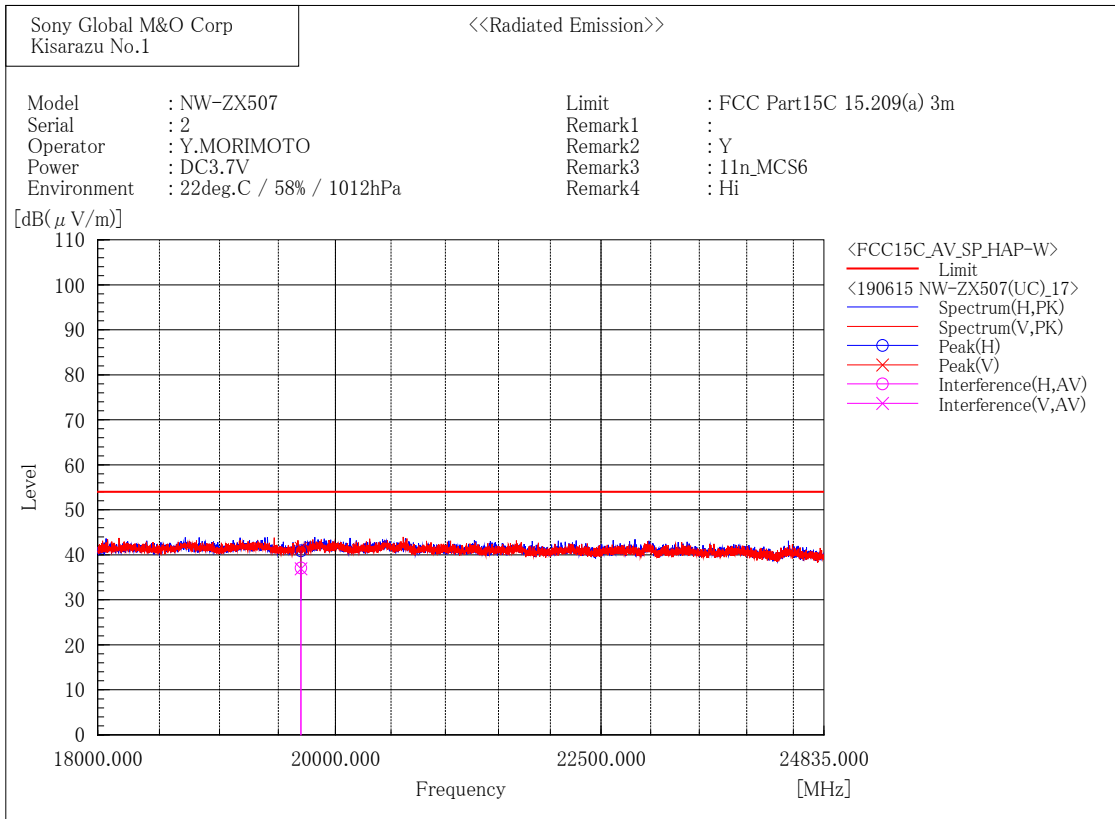
--- Horizontal Polarization (AV)---

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	19496.000	45.8	-8.6	37.2	54.0	16.8	347.4	307.3

--- 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	19496.000	45.7	-8.6	37.1	54.0	16.9	280.8	262.8

[802.11n (HT20)/ 2462 MHz]



Final Result

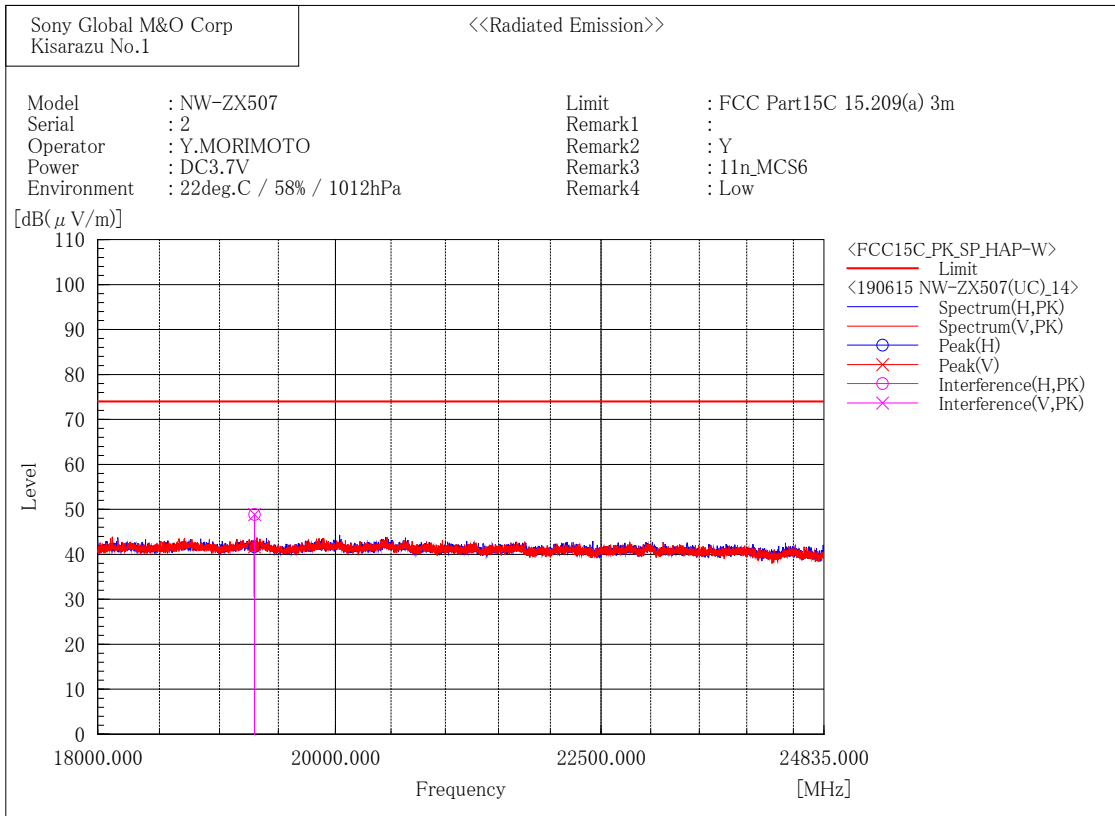
--- Horizontal Polarization (AV)---

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	19696.000	45.6	-8.5	37.1	54.0	16.9	350.1	177.5

--- 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	19696.000	45.4	-8.5	36.9	54.0	17.1	228.9	339.2

[802.11n (HT20)/ 2412 MHz]



Final Result

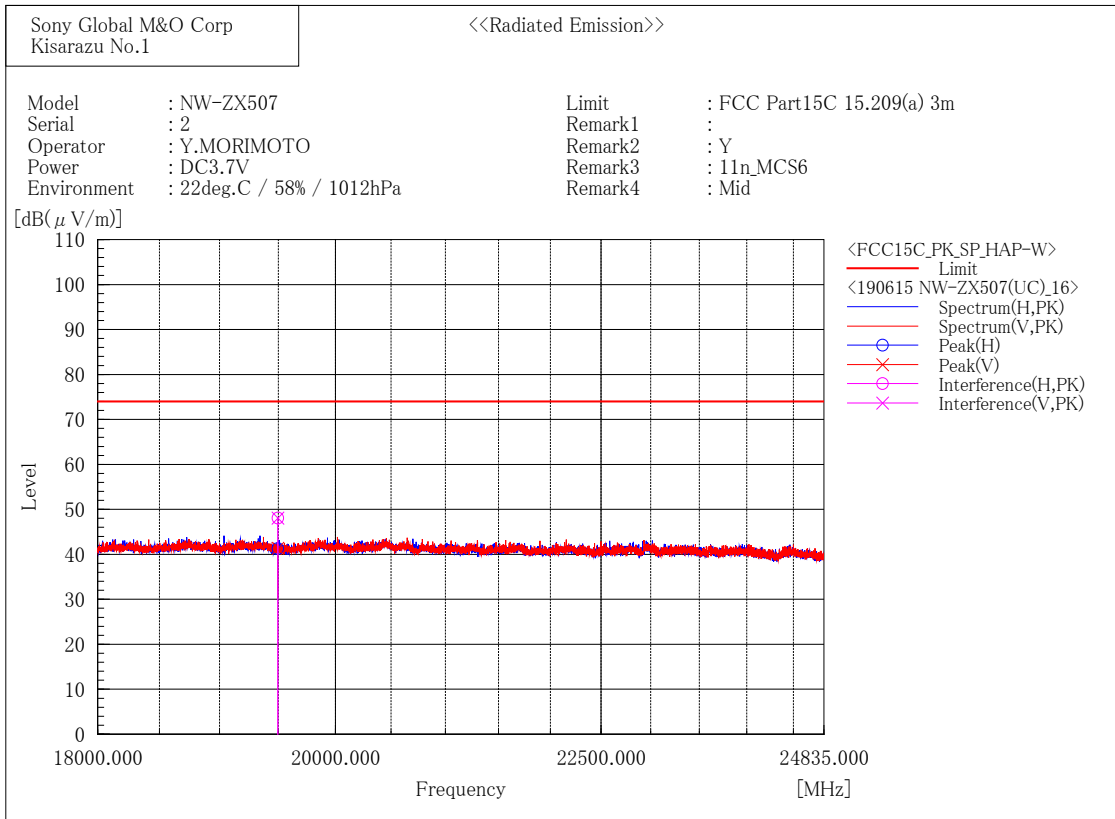
--- Horizontal Polarization (PK)---

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	19296.000	57.4	-8.5	48.9	74.0	25.1	131.9	158.8

--- 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	19296.000	57.4	-8.5	48.9	74.0	25.1	136.5	139.6

[802.11n (HT20)/ 2437 MHz]



Final Result

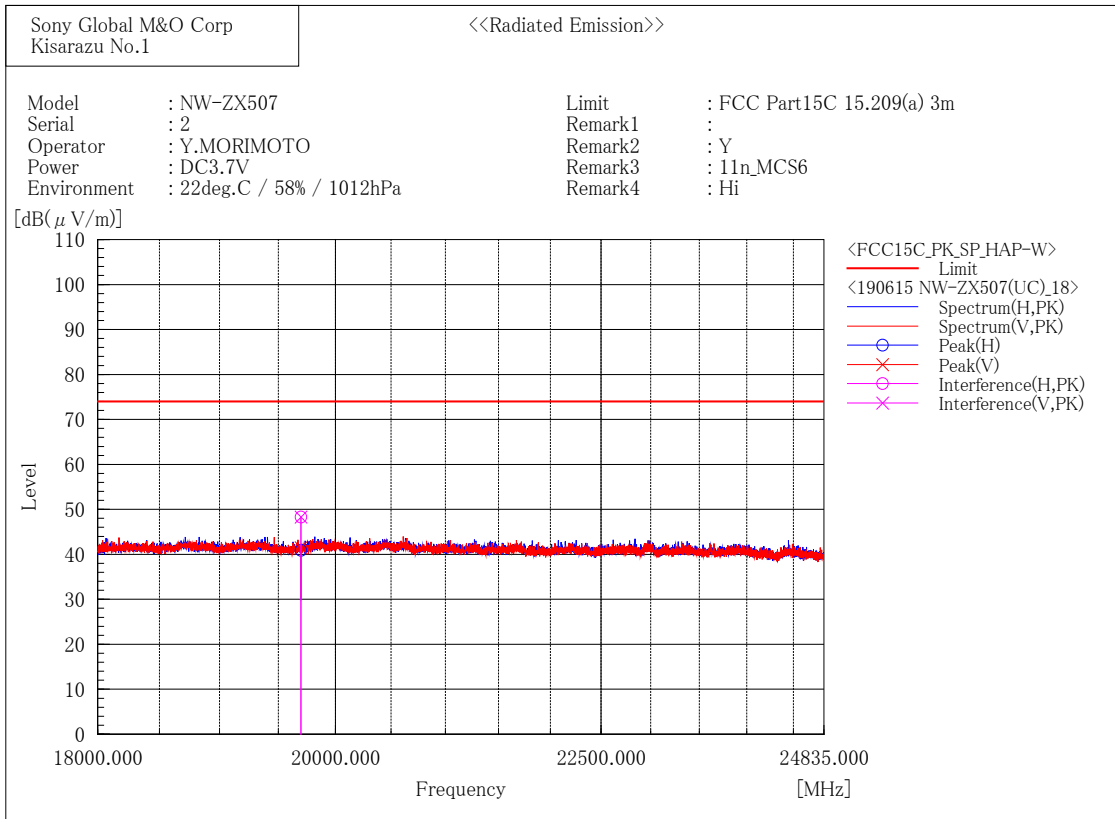
--- Horizontal Polarization (PK)---

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	56.7	-8.6	48.1	74.0	25.9	347.4	307.3

--- 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	56.7	-8.6	48.1	74.0	25.9	280.8	264.8

[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	350.1	179.5

--- 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	19696.000	56.8	-8.5	48.3	74.0	25.7	228.9	339.2

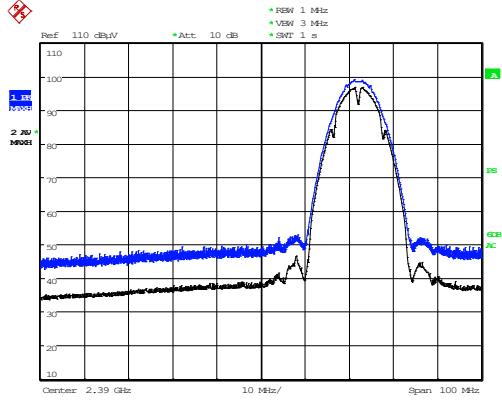
2.4 GHz Restricted-Band Edge (Plot data)

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.

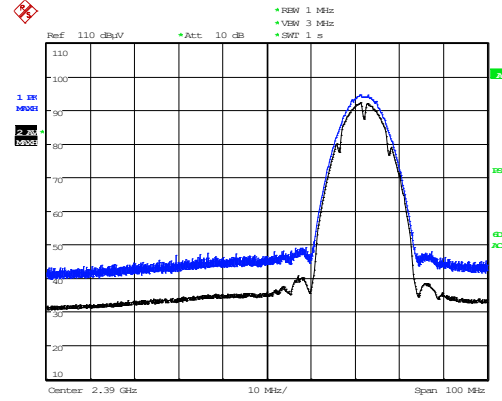
[802.11b/ 2412 MHz]

Horizontal



Date: 12.JUN.2019 17:18:16

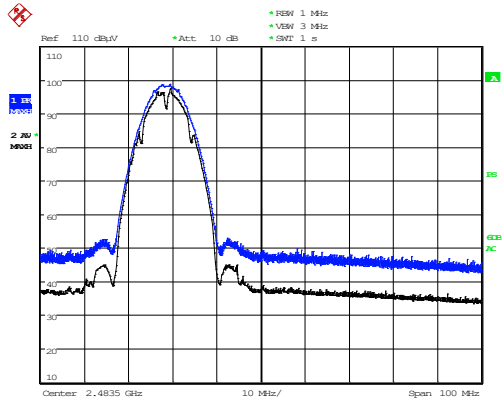
Vertical



Date: 12.JUN.2019 17:35:59

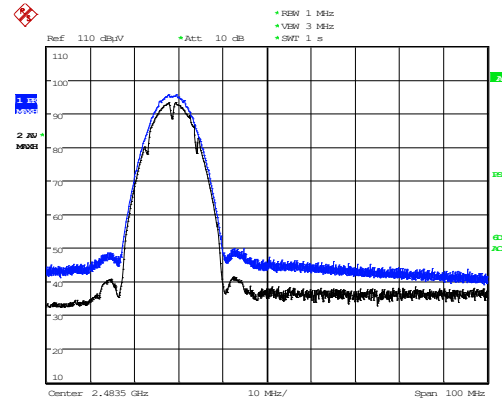
[802.11b/ 2462 MHz]

Horizontal



Date: 12.JUN.2019 19:27:36

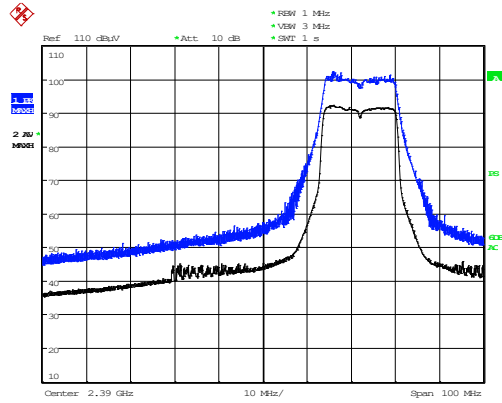
Vertical



Date: 12.JUN.2019 19:42:20

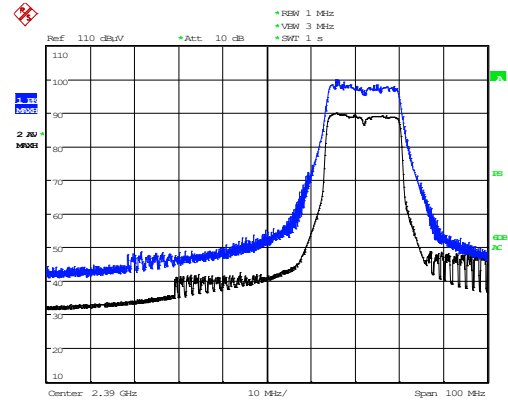
[802.11g/ 2412 MHz]

Horizontal



Date: 13.JUN.2019 12:31:07

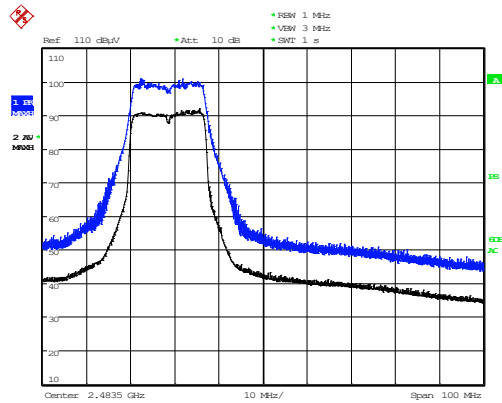
Vertical



Date: 13.JUN.2019 12:39:01

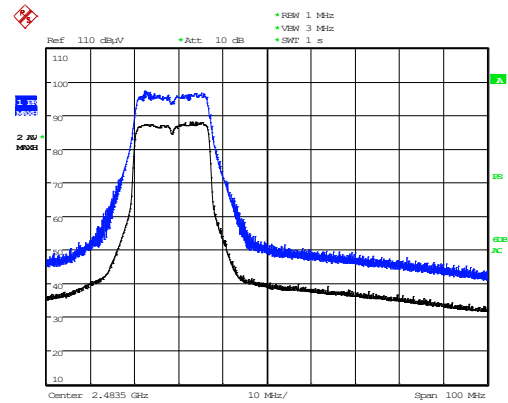
[802.11g/ 2462 MHz]

Horizontal



Date: 13.JUN.2019 15:18:17

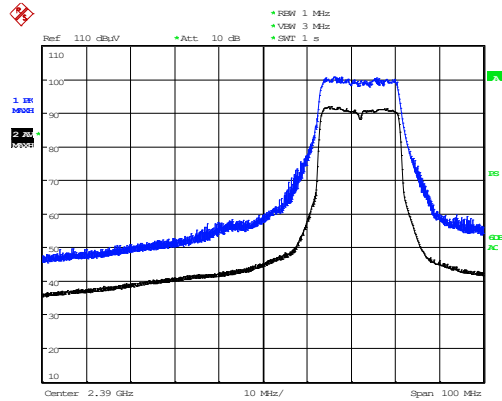
Vertical



Date: 13.JUN.2019 15:27:15

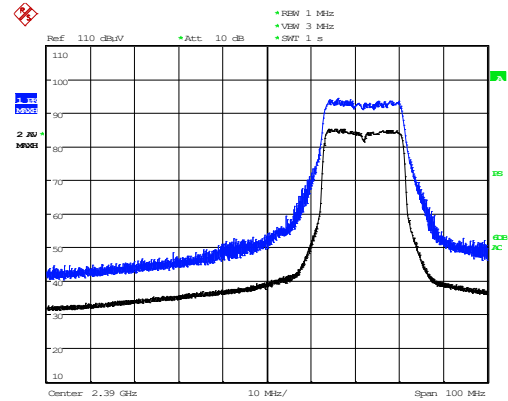
[802.11n (HT20)/ 2412 MHz]

Horizontal



Date: 13.JUN.2019 19:19:50

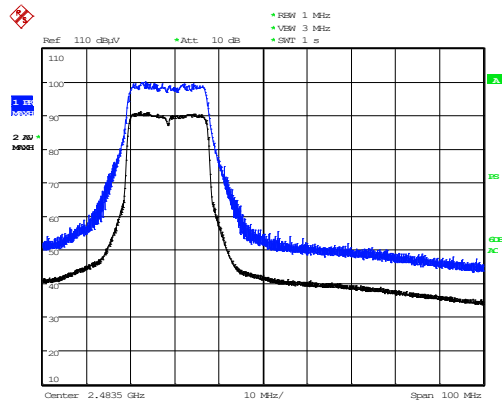
Vertical



Date: 13.JUN.2019 19:22:06

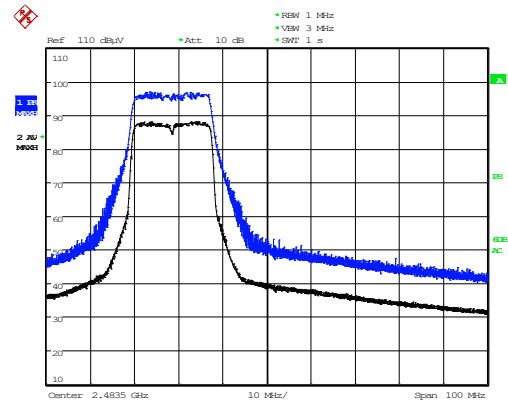
[802.11n (HT20)/ 2462 MHz]

Horizontal



Date: 14.JUN.2019 01:14:26

Vertical

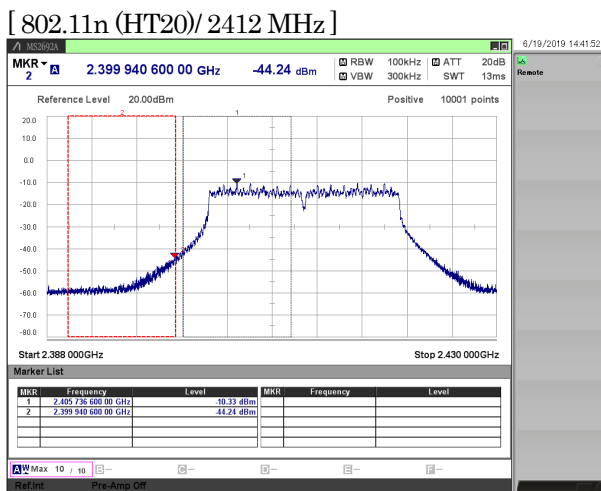
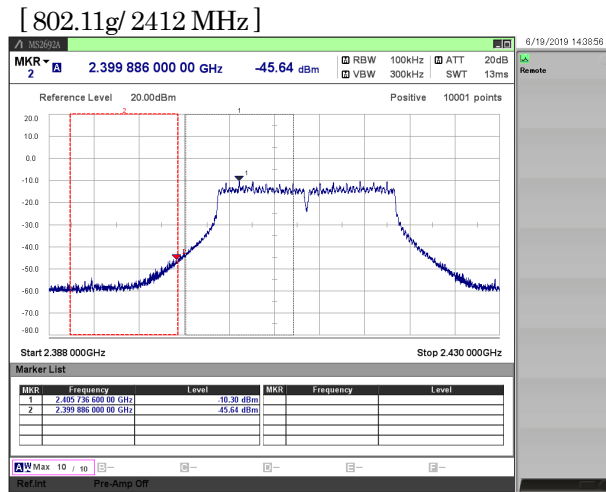
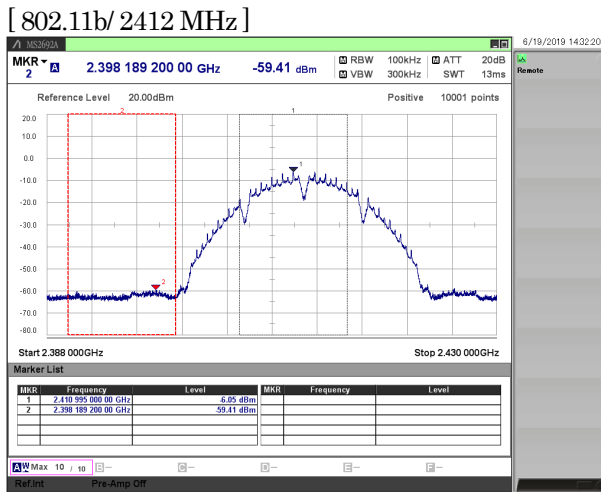


Date: 14.JUN.2019 01:12:02

3.6. Conducted Spurious Emissions for Band Edge

- 1) Ambient temperature : 21.5 deg.C
- 2) Relative humidity : 52.5 %
- 3) Date of measurement : June 19, 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	1	2412	2411.00	-6.05	10.98	4.93	-	-
			2398.19	-59.41	10.98	-48.43	-15.07	33.36
11g	36	2412	2405.74	-10.30	10.98	0.68	-	-
			2399.89	-45.64	10.98	-34.66	-19.32	15.34
11n (HT20)	MCS6	2412	2405.74	-10.33	10.98	0.65	-	-
			2399.94	-44.24	10.98	-33.26	-19.35	13.91



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	LISN/AMN	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	W0100	Spectrum Analyzer	MS2692A	6201338954	Anritsu	12 months	19.05.19
x	W0101	Signal Analyzer	MS2692A	6201338955	Anritsu	12 months	19.05.19
x	W0110	10dB Attenuator	6610-SK-50-1	0002	Huber + Suhner	12 months	18.09.01
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
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	-	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	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	RA5002	Horn Antenna	HAP18-26W	00000011	Toyo Corporation	12 months	19.05.14

About calibration interval

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