Report on the RF Testing of:

KYOCERA Corporation
Mobile Phone, Model: KB46
FCC ID: JOYKB46

In accordance with FCC Part15 Subpart C

Japan

Add value.
Inspire trust.

Prepared for: KYOCERA Corporation
Yokohama Office 2-1-1 Kagahara, Tsuzuki-ku
Yokohama-shi, Kanagawa, Japan
Phone: +81-45-943-6253 Fax: +81-45-943-6314

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Document Number: JPD-TR-19108-0

SIGNATURE			
NAME	**JOB TITLE**	**RESPONSIBLE FOR**	**ISSUE DATE**
Hiroaki Suzuki	Deputy Manager of RF Group	Approved Signatory	04 JUL 2019

Signatures in this approval box have checked this document in line with the requirements of TÜV SÜD Japan Ltd. document control rules.

EXECUTIVE SUMMARY
A sample(s) of this product was tested and found to be compliant with FCC Part15 Subpart C.

NVLAP TESTING
NVLAP LAB CODE 200306-0

ilac-MRA

ACCREDIATION
This test report must not be used by the client to claim product certification, approval, or endorsement by NVLAP, NIST, or any agency of the U.S. government.

TÜV SÜD Japan Ltd.
Yonezawa Testing Center
5-4149-7 Hachimanpara,
Yonezawa-shi, Yamagata,
992-1128 Japan

Phone: +81 (0) 238 28 2881
Fax: +81 (0) 238 28 2888
www.tuv-sud.jp

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1 Summary of Test

1.1 Modification history of the test report

Document Number	Modification History	Issue Date
JPD-TR-19108-0	First Issue	Refer to the cover page

1.2 Standards

CFR47 FCC Part 15 Subpart C

1.3 Test methods

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

1.4 Deviation from standards

None

1.5 List of applied test(s) of the EUT

Test item section	Test item	Condition	Result	Remark
15.247(a)(2)	DTS Bandwidth / Occupied Bandwidth (99%)	Conducted	PASS	-
15.247(b)(3)	Maximum conducted (average) output power	Conducted	PASS	-
15.247(d)	Band Edge Compliance of RF Conducted Emissions	Conducted	PASS	-
15.247(d) 15.205 15.209	Spurious Emissions	Conducted Radiated	PASS	-
15.247(d) 15.205 15.209	Restricted Bands of Operation	Radiated	PASS	-
15.247(e)	Transmitter Power Spectral Density	Conducted	PASS	-
15.207	AC Power Line Conducted Emissions	Conducted	PASS	-

1.6 Test information

None

1.7 Test set up

Table-top

1.8 Test period

22-May-2019 - 11-June-2019

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2 Equipment Under Test

2.1 EUT information

Applicant	KYOCERA Corporation
	Yokohama Office 2-1-1 Kagahara, Tsuzuki-ku Yokohama-shi, Kanagawa, Japan
	Phone: +81-45-943-6253 Fax: +81-45-943-6314
Equipment Under Test (EUT)	Mobile Phone
Model number	KB46
Serial number	N/A
Trade name	Kyocera
Number of sample(s)	1
EUT condition	Pre-Production
Power rating	Battery: DC 3.8 V
Size	(W) 78.2 × (D) 151.5 × (H) 17.4 mm
Environment	Indoor and Outdoor use
Terminal limitation	-20˚C to 60˚C
Hardware Version	DMT2
Software Version	V0.030PR
Firmware Version	Not applicable
RF Specification	
Protocol	IEEE802.11b, IEEE802.11g, IEEE802.11n (HT20),
Frequency range	IEEE802.11b /11g/11n (HT20): 2412 MHz-2462 MHz
Number of RF Channels	11 Channels
Modulation type	IEEE802.11b: DSSS (DBPSK, DQPSK, CCK) IEEE802.11g /11n (HT20): OFDM (BPSK, QPSK, 16QAM, 64QAM)
Data rate	IEEE802.11b: 1, 2, 5.5, 11Mbps IEEE802.11g: 6, 9, 12, 18, 24, 36, 48, 54Mbps IEEE802.11n (HT20 LGI): 6.5, 13, 19.5, 26, 39, 52, 58.5, 65Mbps IEEE802.11n (HT20 SGI): 7.2, 14.4, 21.7, 28.9, 43.3, 57.8, 65, 72.2Mbps
Channel separation	5 MHz
Output power	60.674 mW (IEEE802.11b) 34.119 mW (IEEE802.11g) 34.198 mW (IEEE802.11n: HT20)
Antenna type	Internal antenna
Antenna gain	1.0 dBi

Japan

2.2 Modification to the EUT

The table below details modifications made to the EUT during the test project.

Modification State	Description of Modification	Modification fitted by	Date of Modification
Model: KB46, Serial Number: N/A			
0	As supplied by the applicant	Not Applicable	Not Applicable

2.3 Variation of family model(s)

2.3.1 List of family model(s)

Not applicable

2.3.2 Reason for selection of EUT

Not applicable

2.4 Operating channels and frequencies

Channel	Frequency [MHz]
1	2412
2	2417
3	2422
4	2427
5	2432
6	2437
7	2442
8	2447
9	2452
10	2457
11	2462

Japan

2.5 Description of test mode

The EUT had been tested under operating condition.
There are three channels have been tested as following:

Tested Channel [11b, 11g, 11n(HT20)]	Frequency [MHz]
Low	2412
Middle	2437
High	2462

The pre-test has been conducted to determine the worst-case mode from all possible combinations between available modulations, data rates.

Tested Channel	Modulation Type	Data Rate
Low, Middle, High	IEEE802.11b: DSSS	1Mbps
Low, Middle, High	IEEE802.11g: OFDM	6Mbps
Low, Middle, High	IEEE802.11n (HT20 LGI): OFDM	MCS0 (6.5Mbps)

The field strength of spurious emissions was measured at each position of all three axis X, Y and Z to compare the level, and the maximum noise.
The worst emission was found in X-axis and the worst case recorded.
Pre-scan has been conducted to determine the worst-case mode from all possible combinations between available modulations, data rates and antenna ports.

2.6 Operating flow

- Tx mode

i) Test program setup to the DM tool
ii) Select a Test mode
[IEEE802.11b, IEEE802.11g, IEEE802.11n (HT20)]
Operating frequency: Channel Low: 2412MHz, Channel Middle: 2437MHz, Channel High: 2462MHz
iii) Start test mode

- Rx mode

i) Test program setup to the DM tool
ii) Select a Test mode
[IEEE802.11b, IEEE802.11g, IEEE802.11n (HT20)]
Operating frequency: Channel Low: 2412MHz, Channel Middle: 2437MHz, Channel High: 2462MHz
iii) Start test mode

Japan

3 Configuration of Equipment

Numbers assigned to equipment on the diagram in “3.3 System configuration” correspond to the list in “3.1 Equipment used” and “3.2 Cable(s) used”.
Cabling and setup(s) were taken into consideration and test data was taken under worse case condition.

3.1 Equipment used

No.	Equipment	Company	Model No.	Serial No.	FCC ID/DoC	Comment
1	Mobile Phone	KYOCERA	KB46	N/A	JOYKB46	EUT
2	AC Adapter	KDDI	0301PQA	N/A	N/A	*

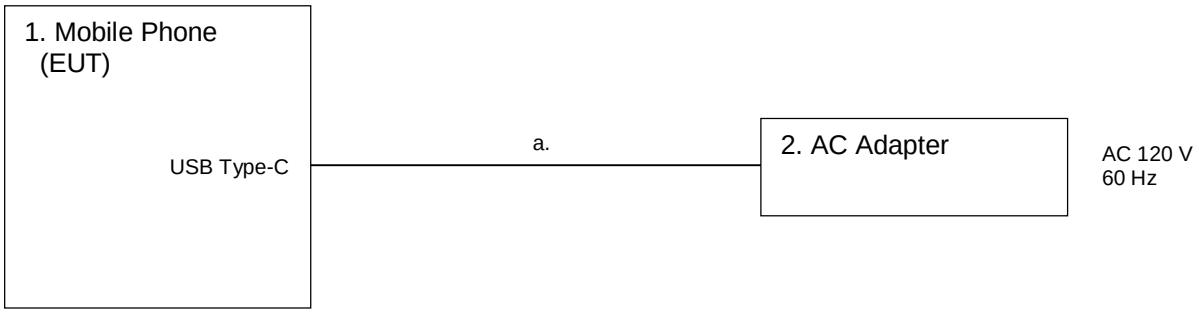
*:AC power line Conducted Emission Test.

3.2 Cable(s) used

No.	Equipment	Length[m]	Shield	Connector	Comment
a	USB cable (for AC Adapter)	1.0	Yes	Metal	*

*:AC power line Conducted Emission Test.

3.3 System configuration



Japan

4 Test Result

4.1 DTS Bandwidth / Occupied Bandwidth (99%)

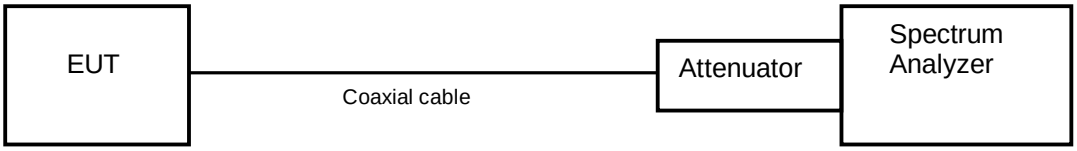
4.1.1 Measurement procedure

[FCC 15.247(a)(2), KDB 558074 D01 v05r02, Section 8.2]

The bandwidth at 6dB down from the highest inband spectral density is measured with a spectrum analyzer connected to the antenna terminal, while EUT is operating in transmission mode at the appropriate center frequency.

The spectrum analyzer is set to;
a) RBW = 100kHz.
b) VBW ≥ 3 x RBW.
c) Sweep time = auto-couple.
d) Detector = peak.
e) Trace mode = max hold.

- Test configuration



4.1.2 Limit

The minimum permissible 6 dB bandwidth is 500 kHz.

Japan

4.1.3 Measurement result

Date : 29-May-2019
Temperature : 23.4 [˚C]
Humidity : 51.4 [%]
Test place : Shielded room No.4

Test engineer : Tadahiro Seino

Channel	DTS Bandwidth [MHz]		
	IEEE802.11b	IEEE802.11g	IEEE802.11n (HT20)
Low	7.591	15.436	15.328
Middle	8.055	15.380	15.776
High	7.588	15.682	15.480

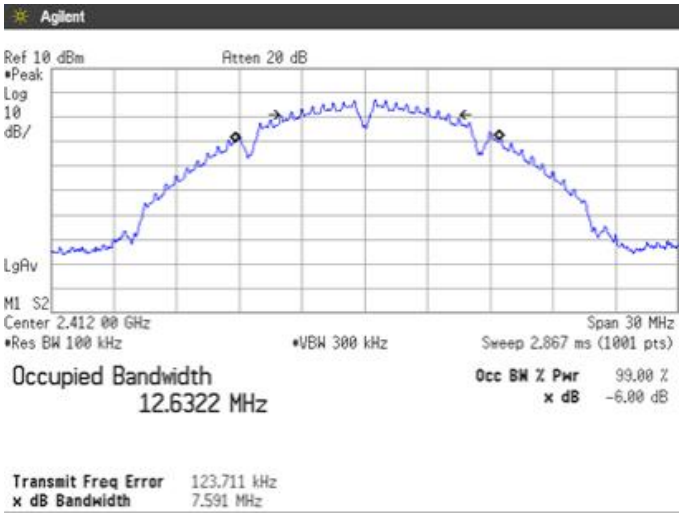
Channel	Occupied Bandwidth (99%) [MHz]		
	IEEE802.11b	IEEE802.11g	IEEE802.11n (HT20)
Low	12.632	16.437	17.628
Middle	12.741	16.476	17.672
High	12.657	16.461	17.639

Japan

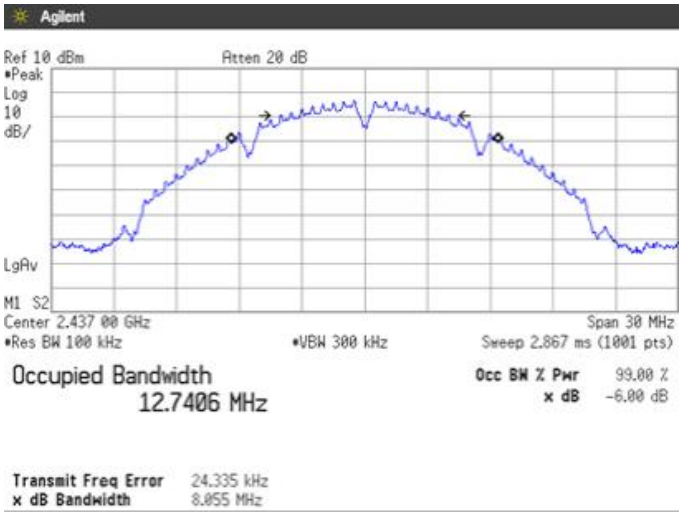
4.1.4 Trace data

[IEEE802.11b]

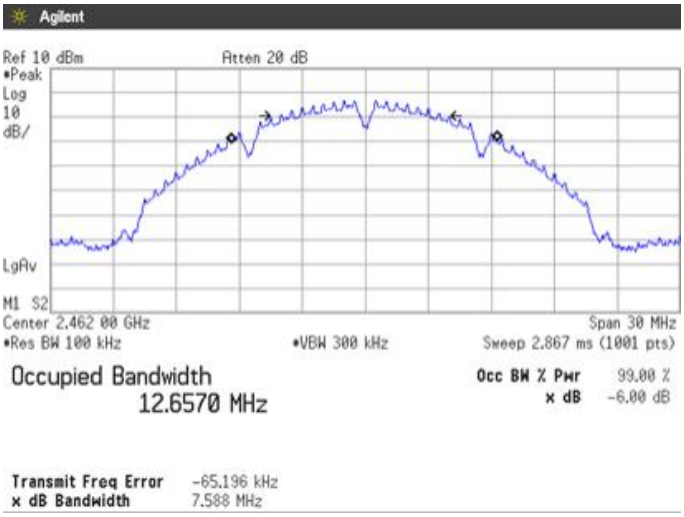
Channel Low



Channel Middle



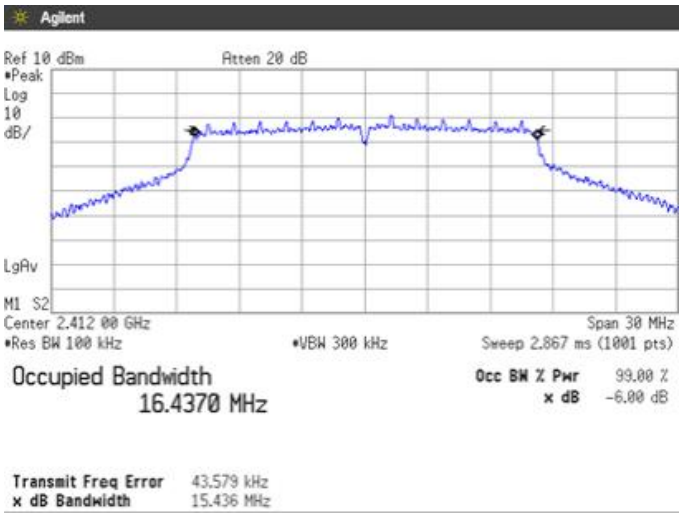
Channel High



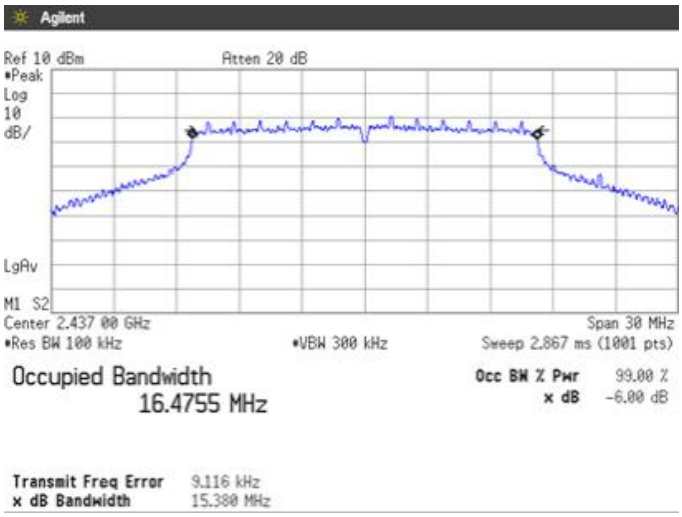
Japan

[IEEE802.11g]

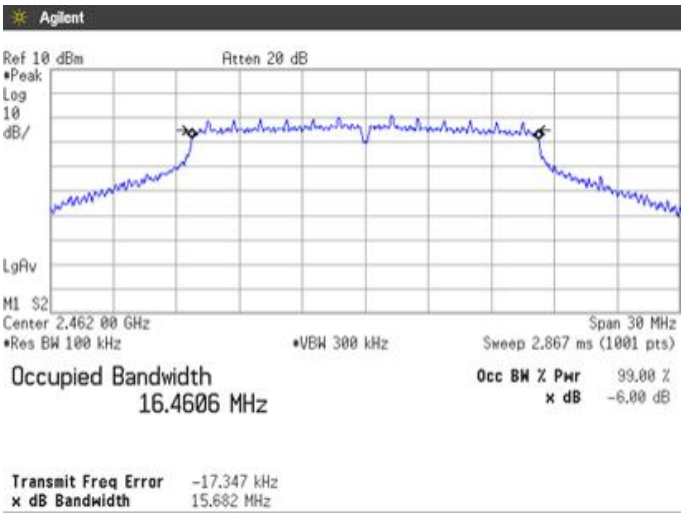
Channel Low



Channel Middle



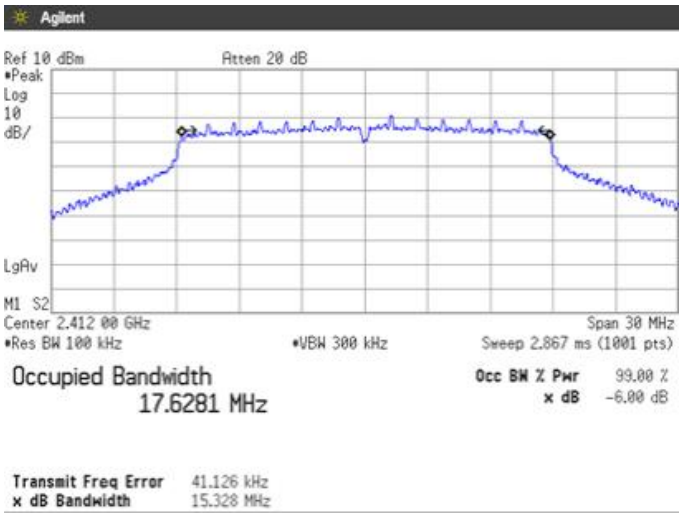
Channel High



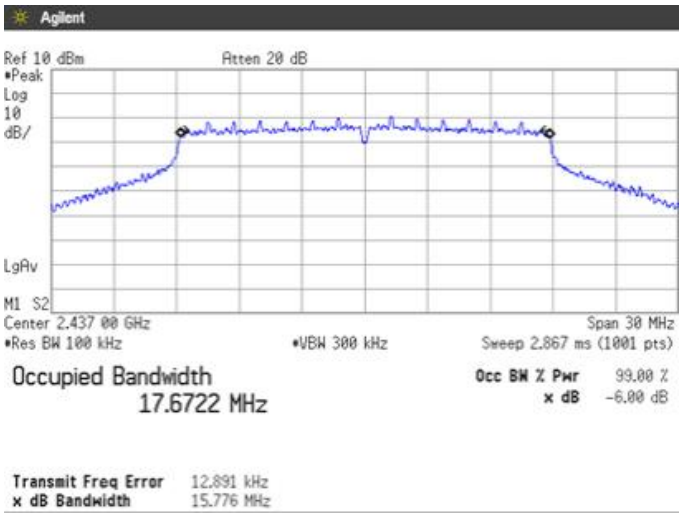
Japan

[IEEE802.11n (HT20)]

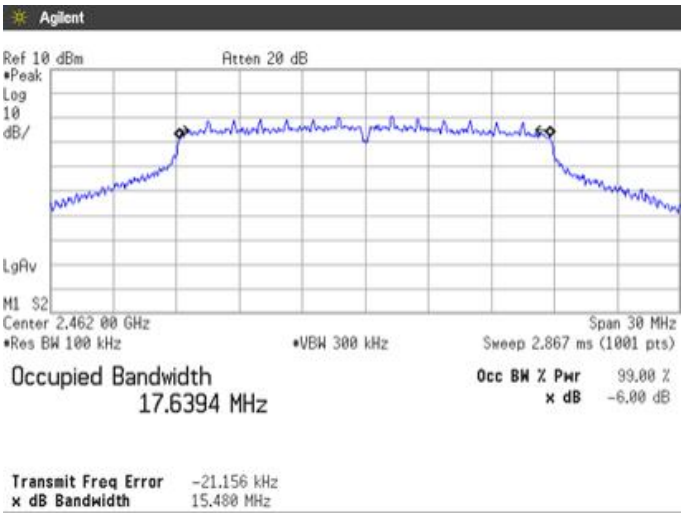
Channel Low



Channel Middle



Channel High



Japan

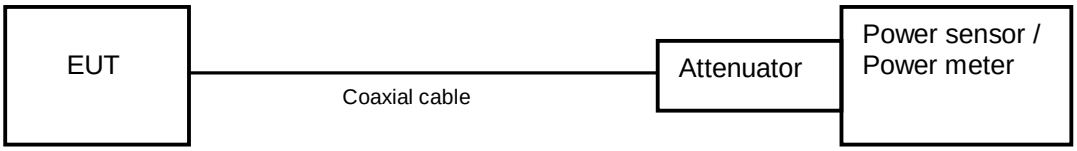
4.2 Maximum Conducted Output Power

4.2.1 Measurement procedure

[FCC 15.247(b)(3), KDB 558074 D01 v05r02, Section 8.3.1.3]

The peak power is measured with a power sensor connected to the antenna terminal, while EUT is operating in transmission mode at the appropriate center frequency.

- Test configuration



4.2.2 Limit

1 W (1000 mW) or less

Japan

4.2.3 Measurement result

Date : 29-May-2019
Temperature : 23.4 [˚C]
Humidity : 51.4 [%]
Test place : Shielded room No.4

Test engineer : Tadahiro Seino

[IEEE802.11b]
Battery Full

Channel	Center Frequency (MHz)	Reading (dBm)	Factor (dB)	Level (dBm)	Output Power (mW)	Limit (mW)	Result
Low	2412	7.11	10.63	17.74	59.425	≦1000	PASS
Middle	2437	7.20	10.63	17.74	59.425	≦1000	PASS
High	2462	7.20	10.63	17.74	59.425	≦1000	PASS

[IEEE802.11g]
Battery Full

Channel	Center Frequency (MHz)	Reading (dBm)	Factor (dB)	Level (dBm)	Output Power (mW)	Limit (mW)	Result
Low	2412	4.70	10.63	15.33	34.119	≦1000	PASS
Middle	2437	4.44	10.63	15.33	34.119	≦1000	PASS
High	2462	4.65	10.63	15.33	34.119	≦1000	PASS

[IEEE802.11n (HT20)]
Battery Full

Channel	Center Frequency (MHz)	Reading (dBm)	Factor (dB)	Level (dBm)	Output Power (mW)	Limit (mW)	Result
Low	2412	4.54	10.63	15.17	32.585	≦1000	PASS
Middle	2437	4.50	10.63	15.17	32.585	≦1000	PASS
High	2462	4.71	10.63	15.17	32.585	≦1000	PASS

Calculation;
Reading (dBm) + Factor (dB) = Level (dBm)
10logP = Level (dBm)
$P = 10^{(\text{Maximum Peak Output Power} / 10)}$ (mW)

Japan

4.3 Band Edge Compliance of RF Conducted Emissions

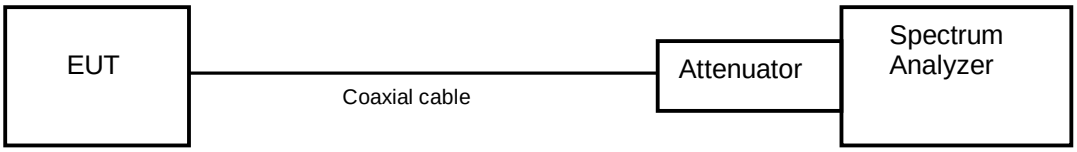
4.3.1 Measurement procedure

[FCC 15.247(d), KDB 558074 D01 v05r02, Section 8.5]

The Band Edge is measured with a spectrum analyzer connected to the antenna terminal, while EUT is operating in transmission mode at the appropriate center frequency.

The spectrum analyzer is set to;
a) Span = Arbitrary setting. (Setting suitable for measurement.)
b) RBW = 100kHz.
c) VBW ≥ 3 x RBW
d) Sweep time = auto-couple.
e) Detector = peak.
f) Trace mode = max hold.

- Test configuration



4.3.2 Limit

In any 100 kHz bandwidth outside the frequency band the radio frequency power that is produced by the intentional radiator shall be at least 20 dB below that in the 100 kHz bandwidth within the band that contains the highest level of the desired power.

Japan

4.3.3 Measurement result

Date : 29-May-2019
Temperature : 23.4 [˚C]
Humidity : 51.4 [%]
Test place : Shielded room No.4

Test engineer : Tadahiro Seino

[IEEE802.11b]

Channel	Frequency (MHz)	RF Power Level (dBm)	Band-edge Frequency (MHz)	Band-edge Level (dBm)	Difference Level (dBm)	Limit (dBm)	Result
Low	2412.00	-3.58	2399.92	-61.69	58.11	At least 20dB below from peak of RF	PASS
High	2462.00	-3.30	2483.58	-67.44	64.14	At least 20dB below from peak of RF	PASS

[IEEE802.11g]

Channel	Frequency (MHz)	RF Power Level (dBm)	Band-edge Frequency (MHz)	Band-edge Level (dBm)	Difference Level (dBm)	Limit (dBm)	Result
Low	2412.00	-9.16	2399.76	-41.66	32.50	At least 20dB below from peak of RF	PASS
High	2462.00	-9.40	2483.82	-66.52	57.12	At least 20dB below from peak of RF	PASS

[IEEE802.11n (HT20)]

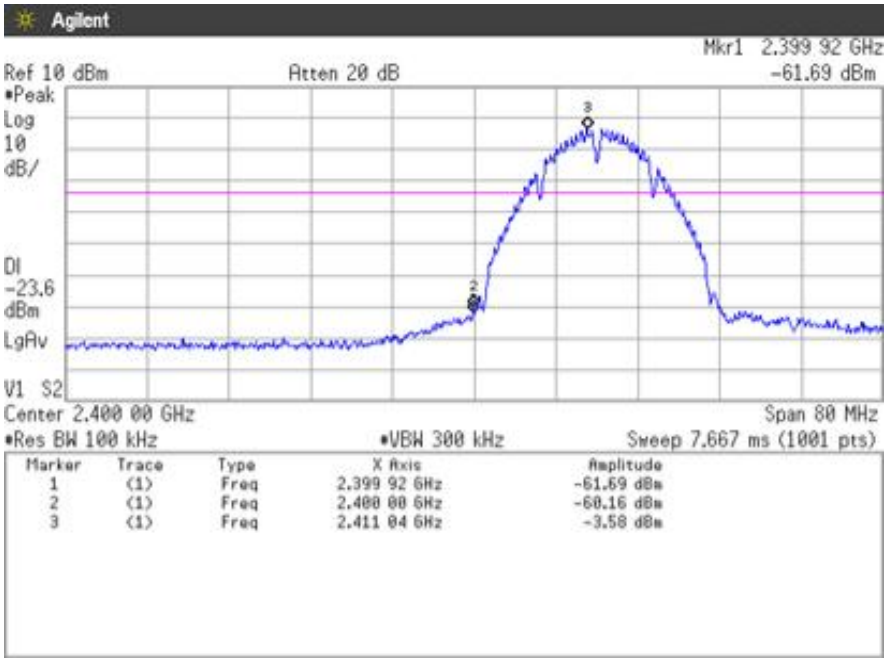
Channel	Frequency (MHz)	RF Power Level (dBm)	Band-edge Frequency (MHz)	Band-edge Level (dBm)	Difference Level (dBm)	Limit (dBm)	Result
Low	2412.00	-9.33	2399.76	-40.72	31.39	At least 20dB below from peak of RF	PASS
High	2462.00	-9.20	2483.90	-64.42	55.22	At least 20dB below from peak of RF	PASS

Japan

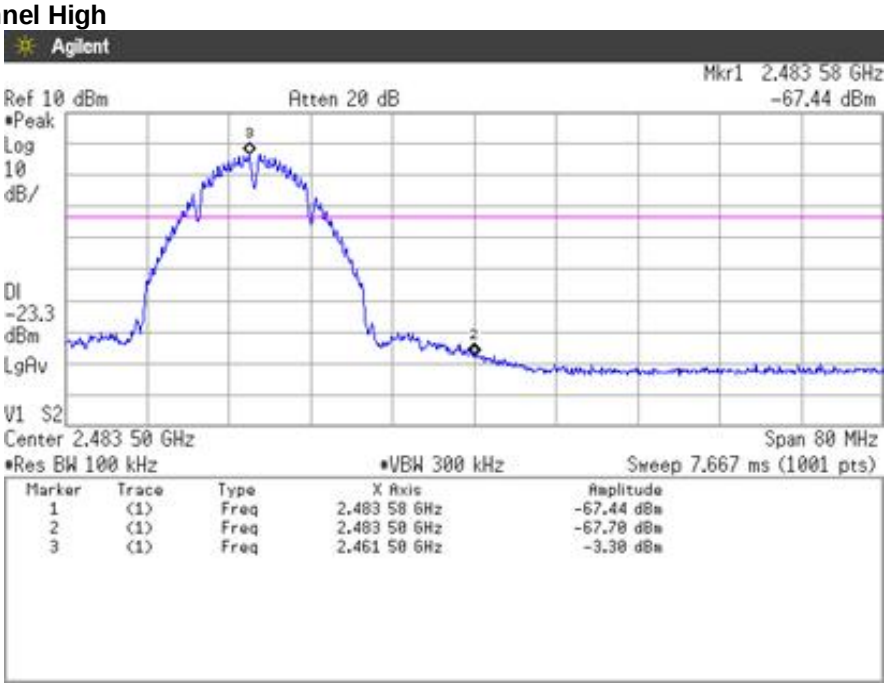
4.3.4 Trace data

[IEEE802.11b]

Channel Low



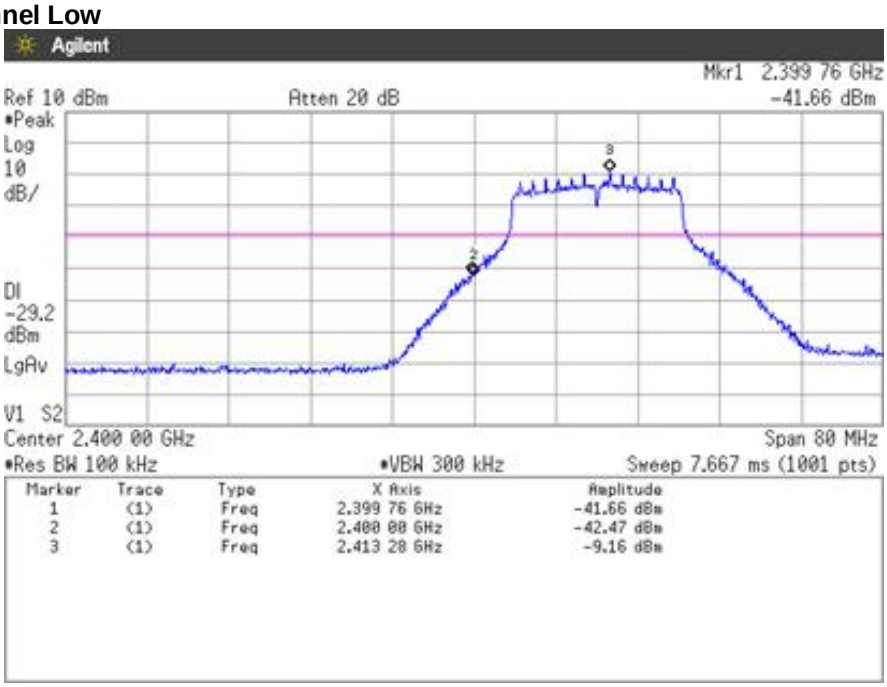
Channel High



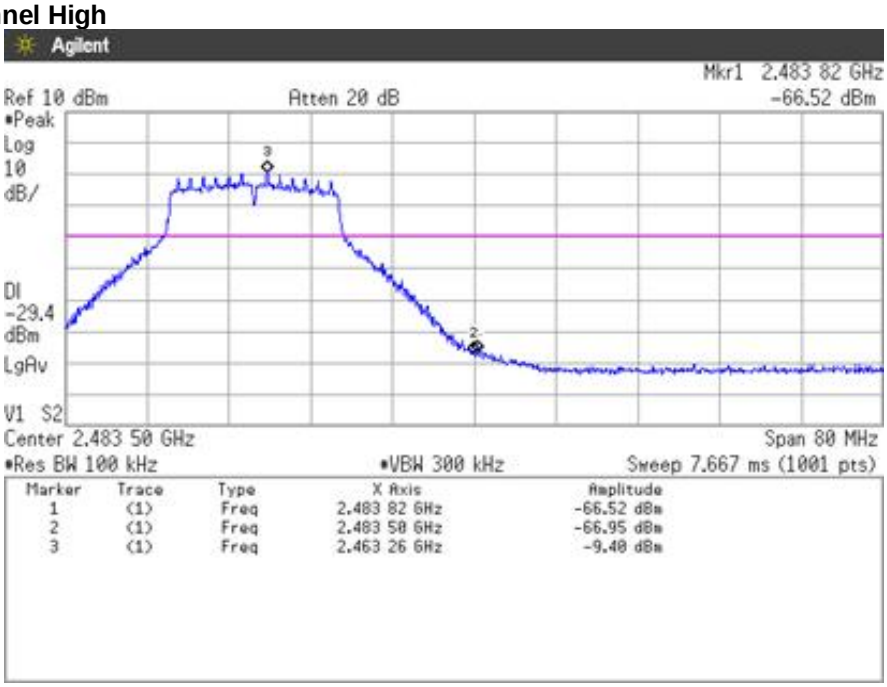
Japan

[IEEE802.11g]

Channel Low



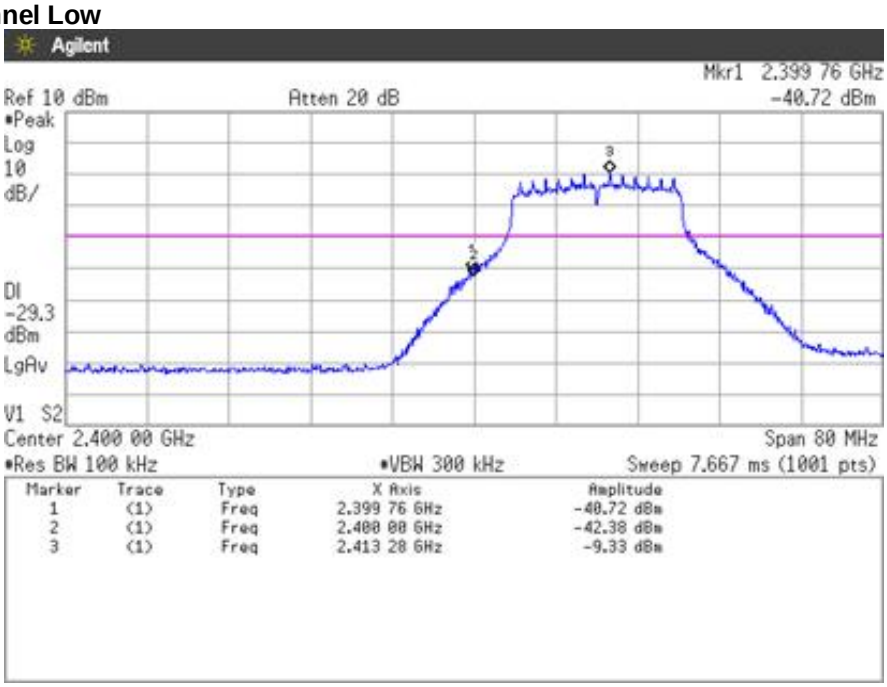
Channel High



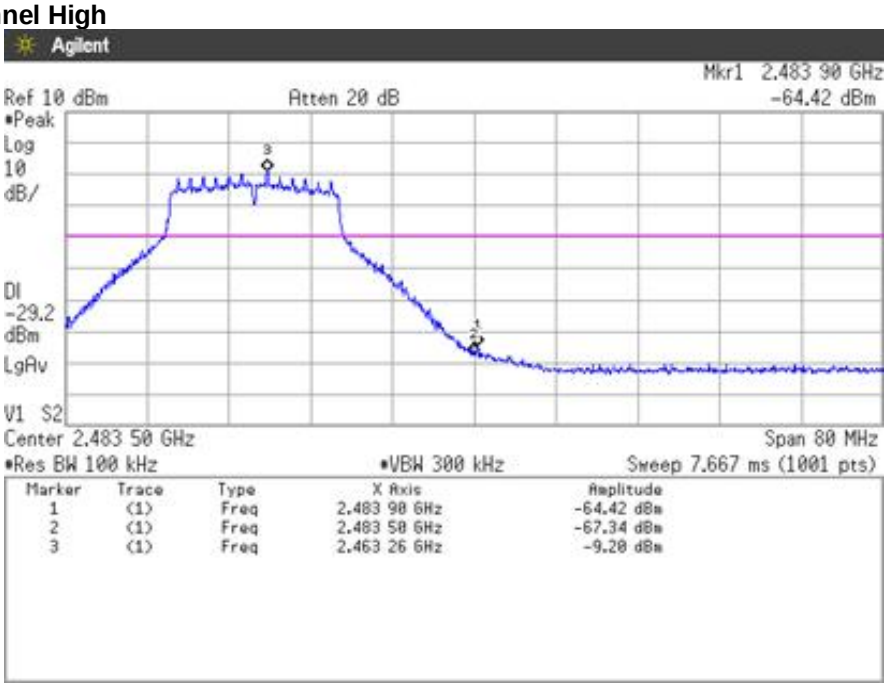
Japan

[IEEE802.11n (HT20)]

Channel Low



Channel High



4.4 Spurious emissions - Conducted -

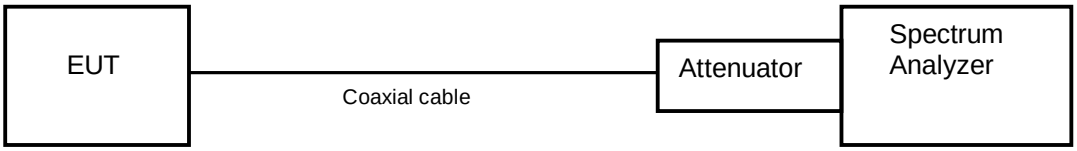
4.4.1 Measurement procedure

[FCC 15.247(d), KDB 558074 D01 v05r02, Section 8.5]

The spurious emissions (Conducted) are measured with a spectrum analyzer connected to the antenna terminal, while EUT is operating in transmission mode at the appropriate center frequency.

The spectrum analyzer is set to;
a) Span = wide enough to fully capture the emission being measured.
b) RBW = 100 kHz.
c) VBW ≥ RBW.
d) Sweep time = auto-couple.
e) Detector = peak.
f) Trace mode = max hold.

- Test configuration



4.4.2 Limit

In any 100 kHz bandwidth outside the frequency band the radio frequency power that is produced by the intentional radiator shall be at least 20 dB below that in the 100 kHz bandwidth within the band that contains the highest level of the desired power.

Japan

4.4.3 Measurement result

Date : 29-May-2019
Temperature : 23.4 [˚C]
Humidity : 51.4 [%] Test engineer :
Test place : Shielded room No.4 Tadahiro Seino

[IEEE802.11b、IEEE802.11g、IEEE802.11n (HT20)]

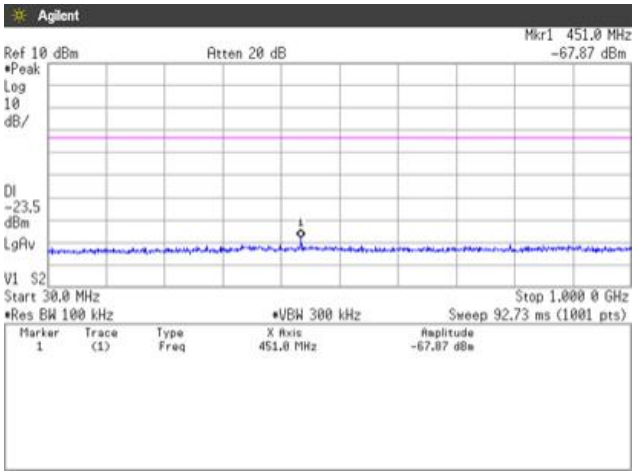
Channel	Frequency [MHz]	Limit [dB]	Results Chart	Result
Low	2412	At least 20dB below from peak of RF	See the trace Data	PASS
Middle	2437	At least 20dB below from peak of RF	See the trace Data	PASS
High	2462	At least 20dB below from peak of RF	See the trace Data	PASS

4.4.4 Trace data

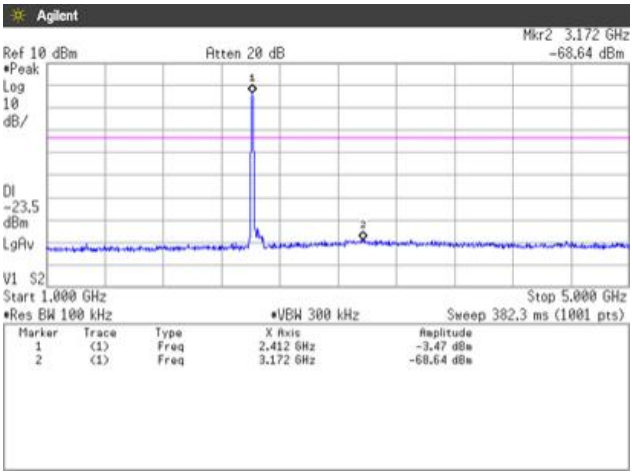
[IEEE802.11b]

Channel Low

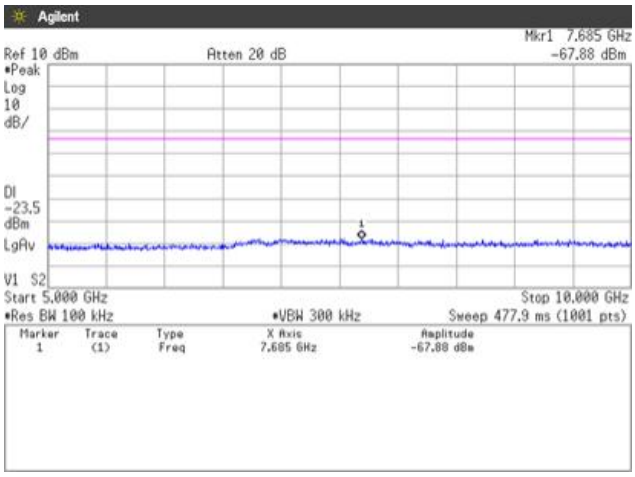
30MHz-1GHz



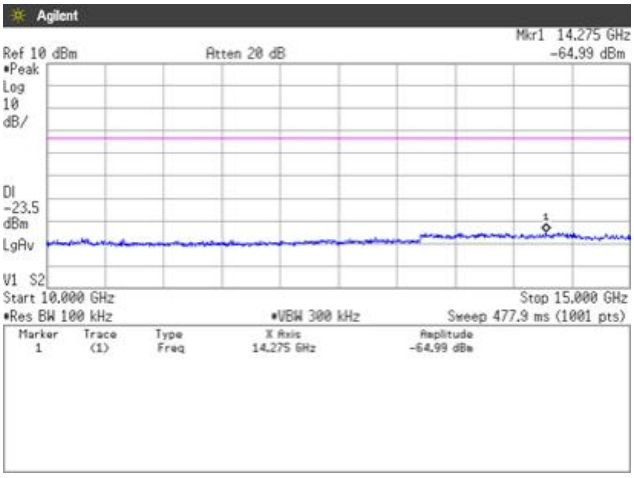
1GHz-5GHz



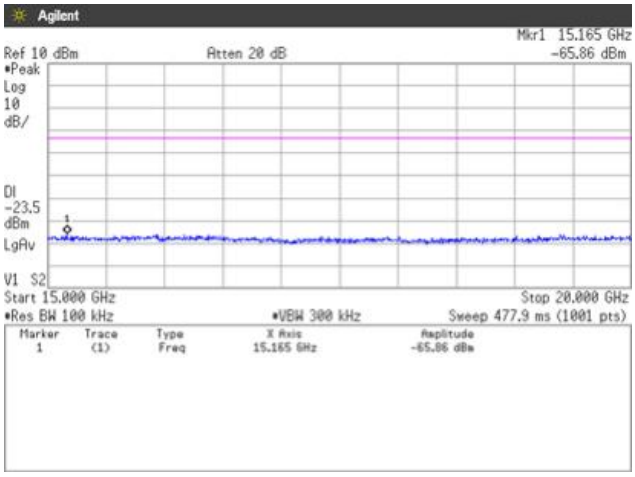
5GHz-10GHz



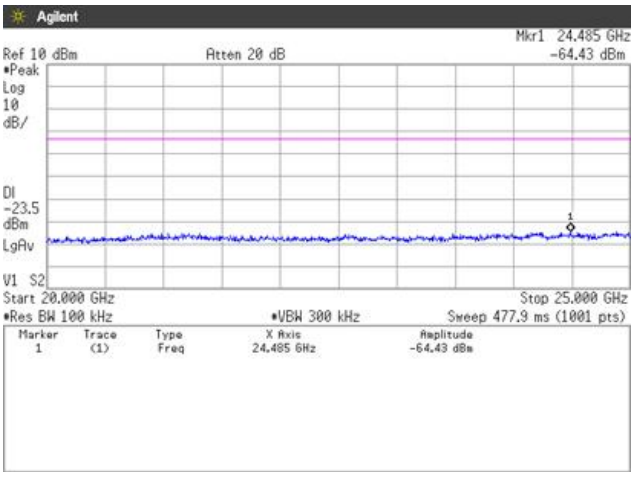
10GHz-15GHz



15GHz-20GHz

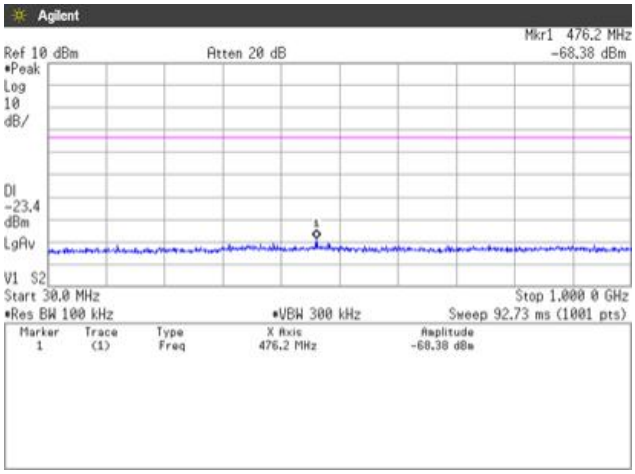


20GHz-25GHz

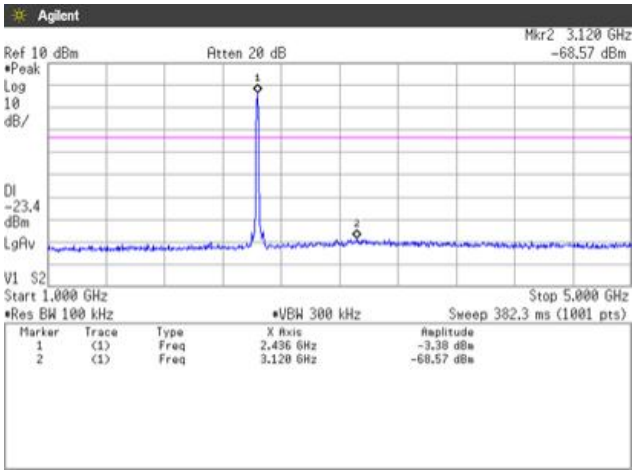


Channel Middle

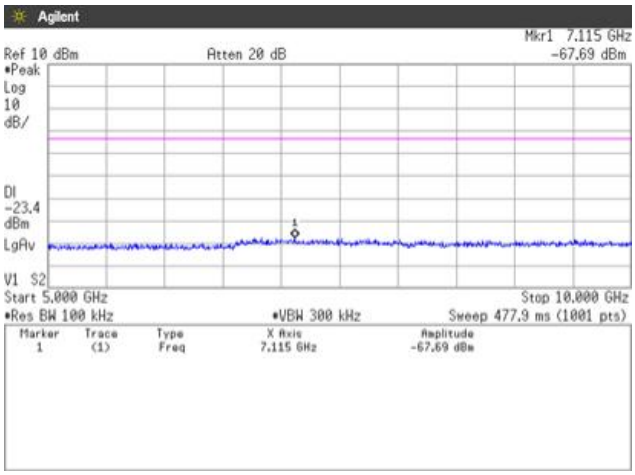
30MHz-1GHz



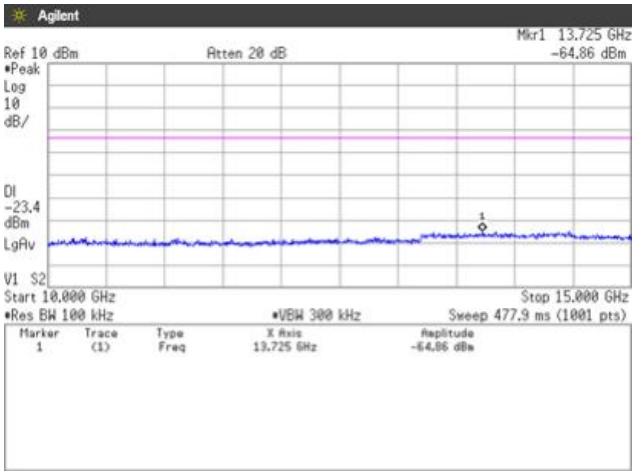
1GHz-5GHz



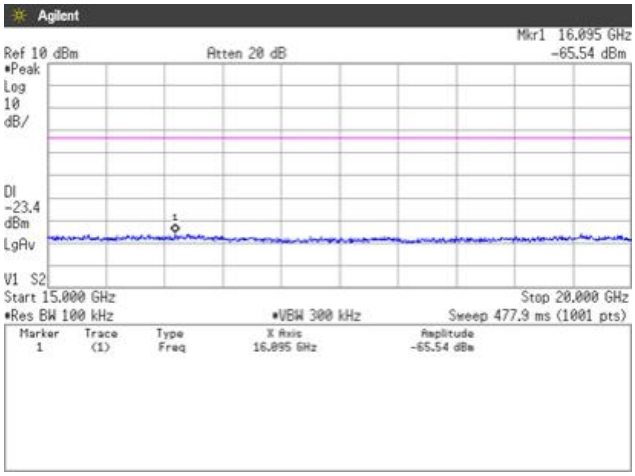
5GHz-10GHz



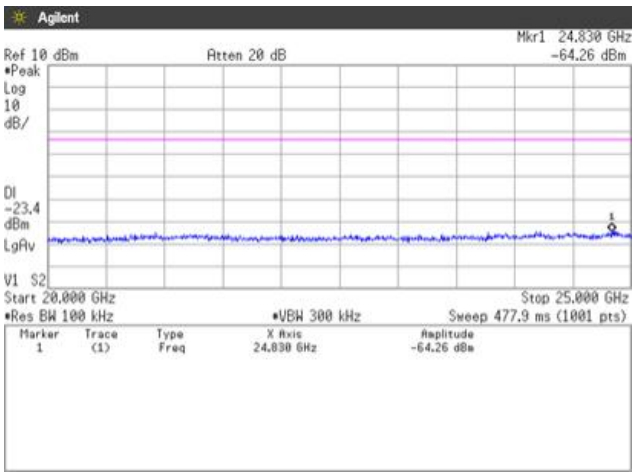
10GHz-15GHz



15GHz-20GHz

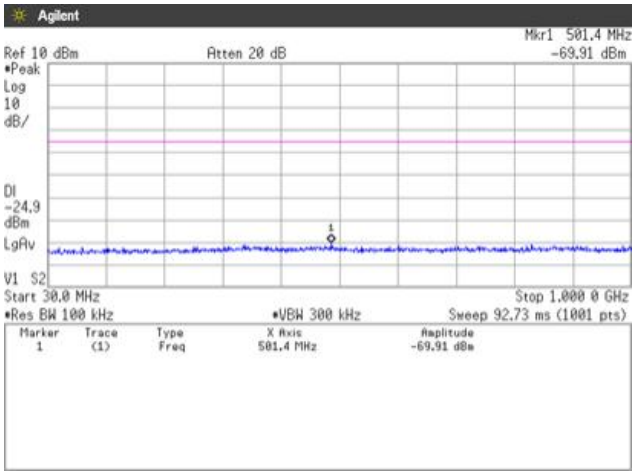


20GHz-25GHz

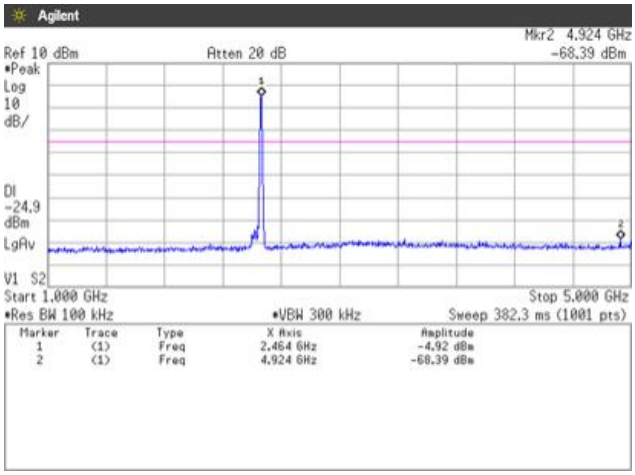


Channel High

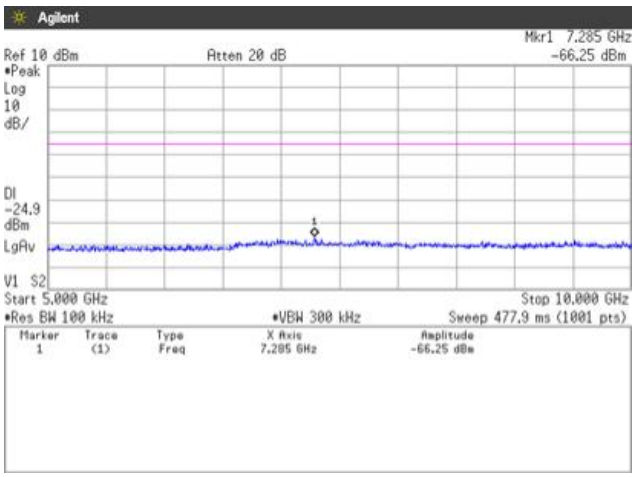
30MHz-1GHz



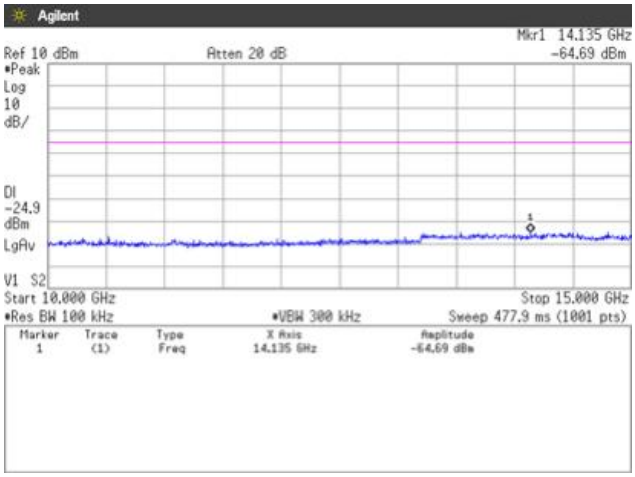
1GHz-5GHz



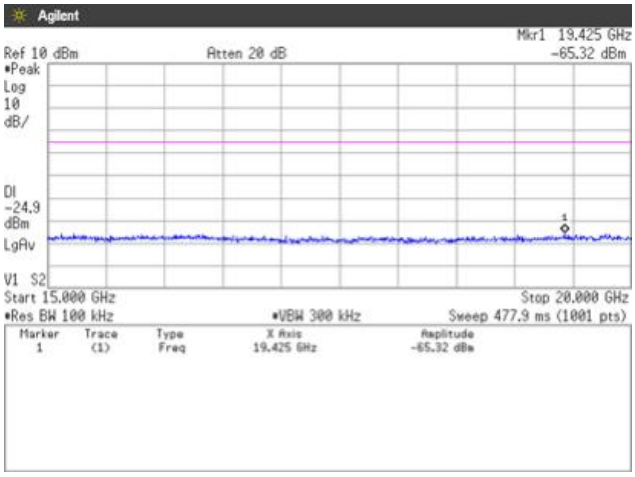
5GHz-10GHz



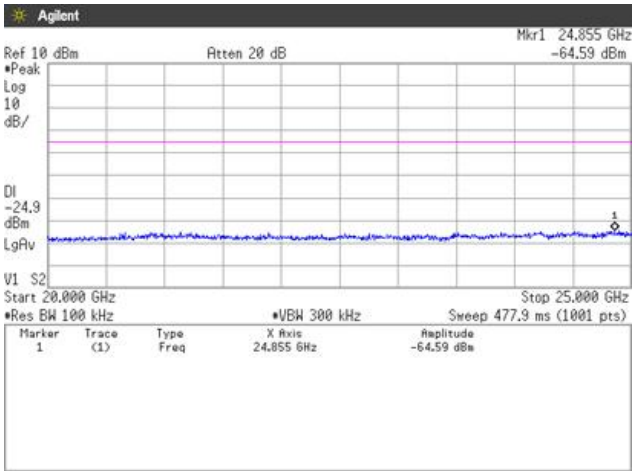
10GHz-15GHz



15GHz-20GHz



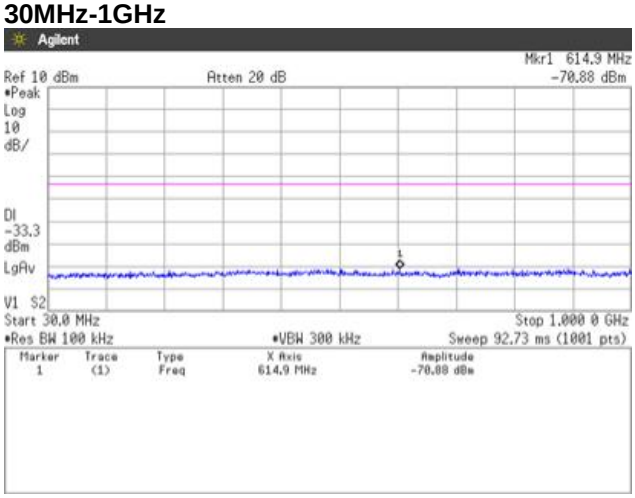
20GHz-25GHz



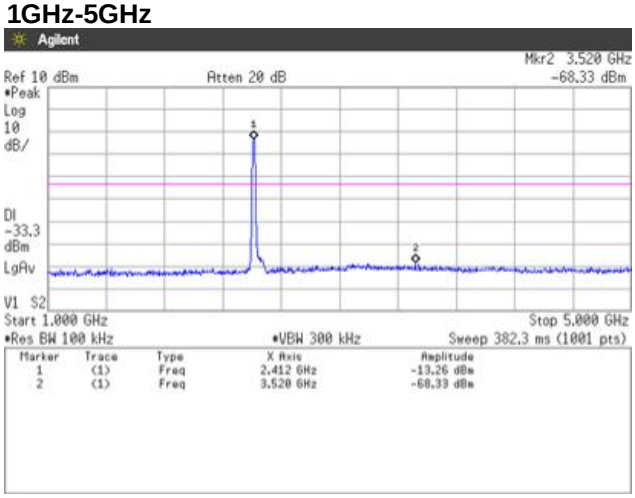
Japan

[IEEE802.11g]
Channel Low

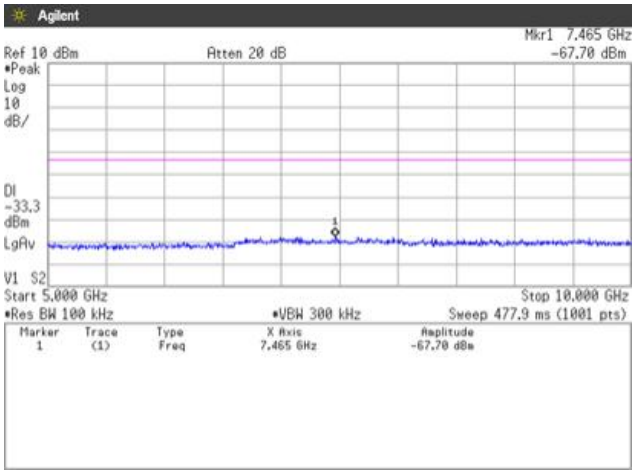
30MHz-1GHz



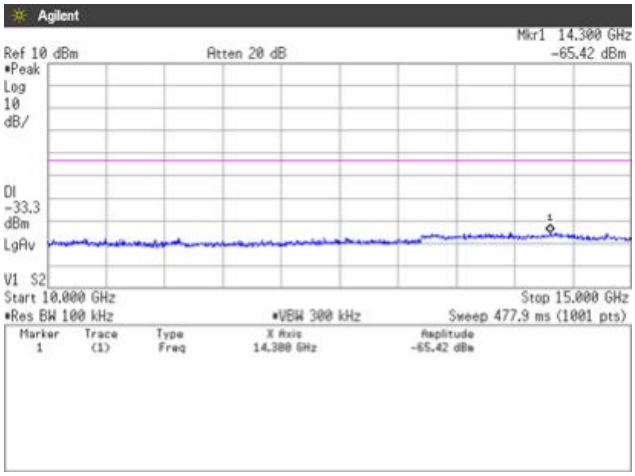
1GHz-5GHz



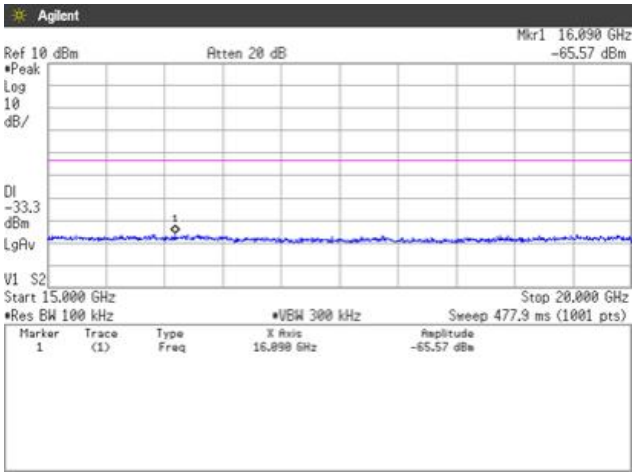
5GHz-10GHz



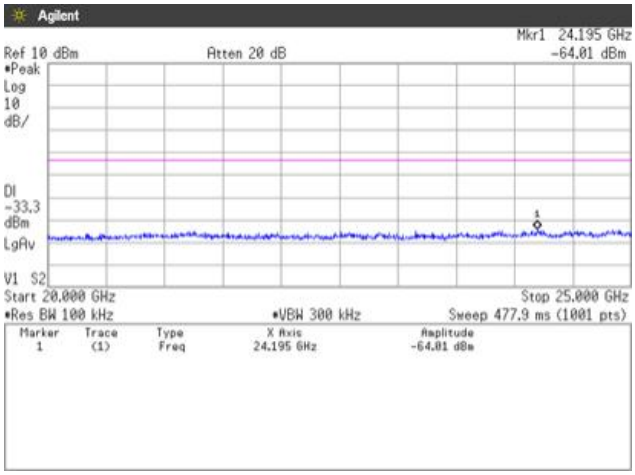
10GHz-15GHz



15GHz-20GHz

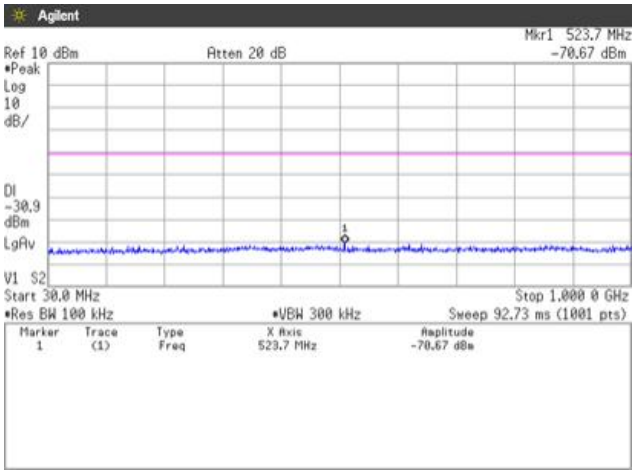


20GHz-25GHz

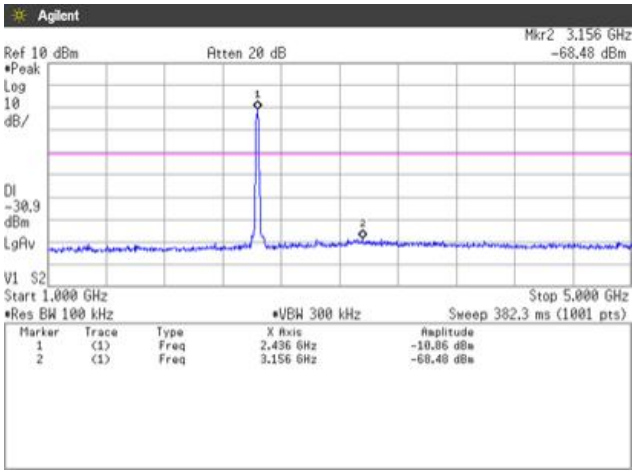


Channel Middle

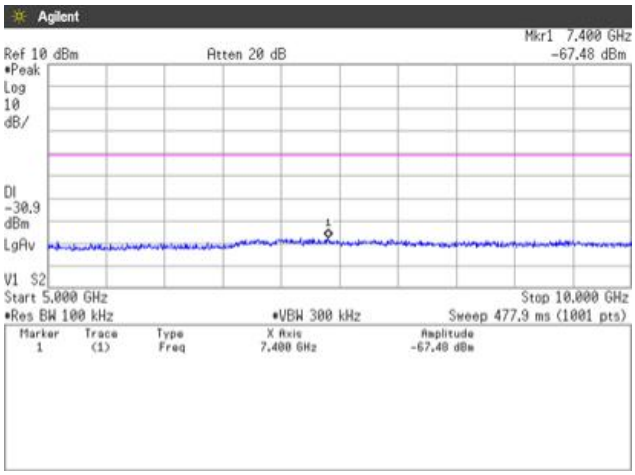
30MHz-1GHz



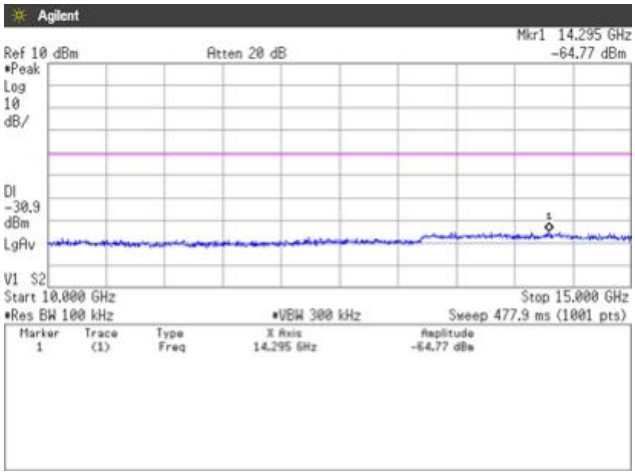
1GHz-5GHz



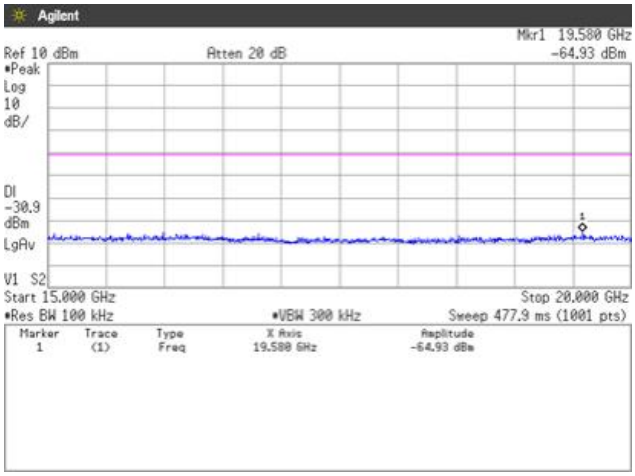
5GHz-10GHz



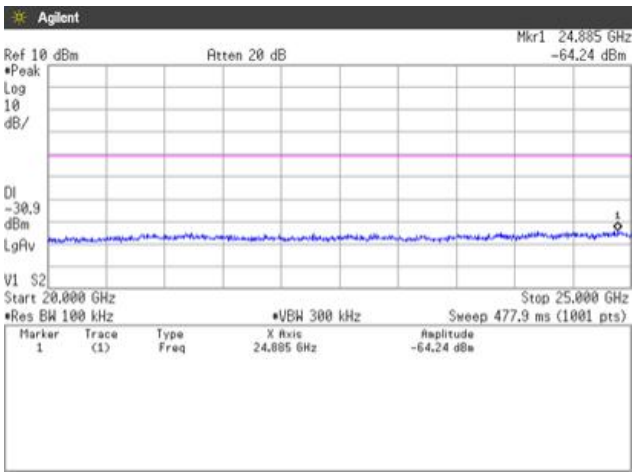
10GHz-15GHz



15GHz-20GHz

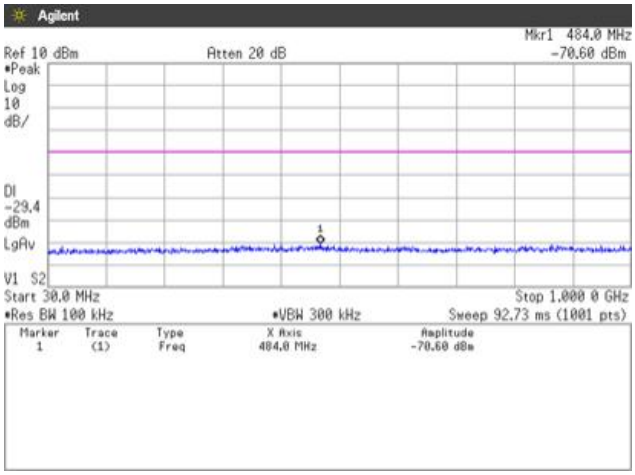


20GHz-25GHz

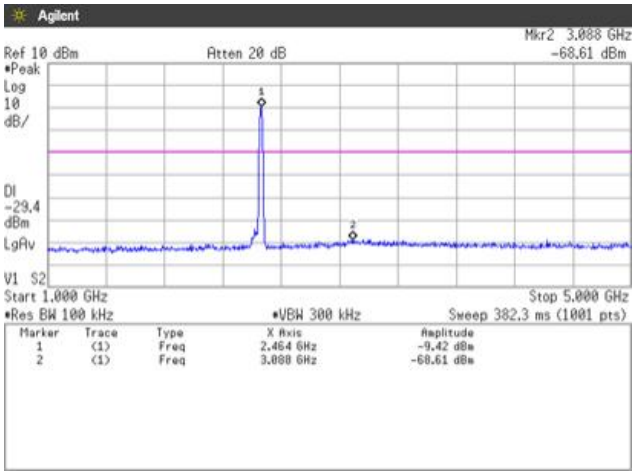


Channel High

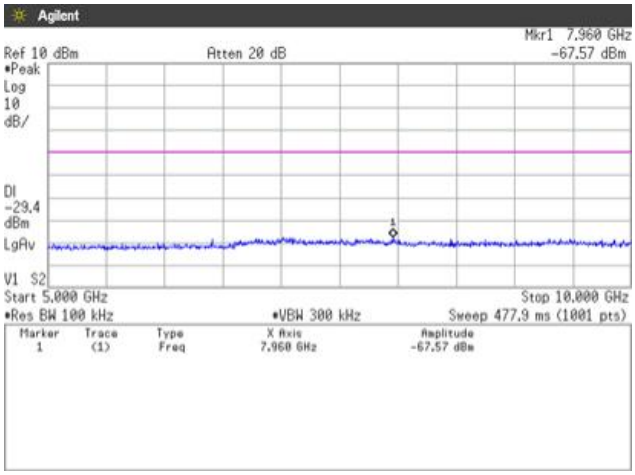
30MHz-1GHz



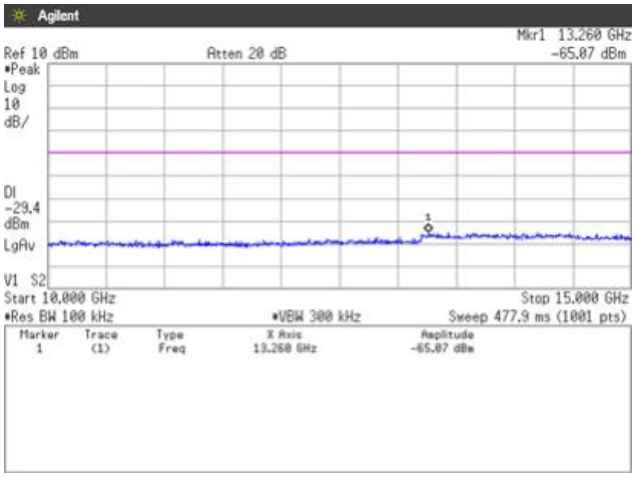
1GHz-5GHz



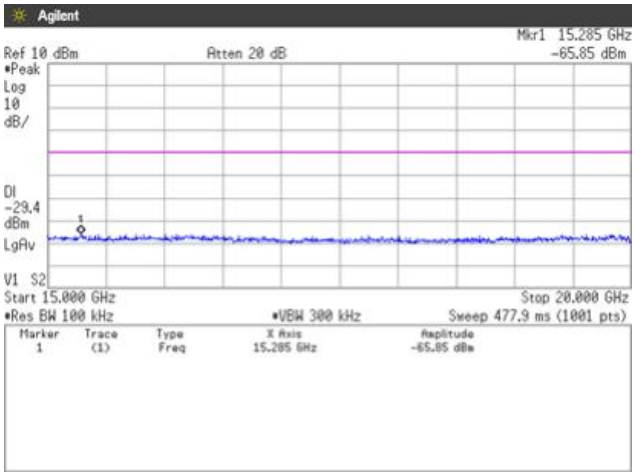
5GHz-10GHz



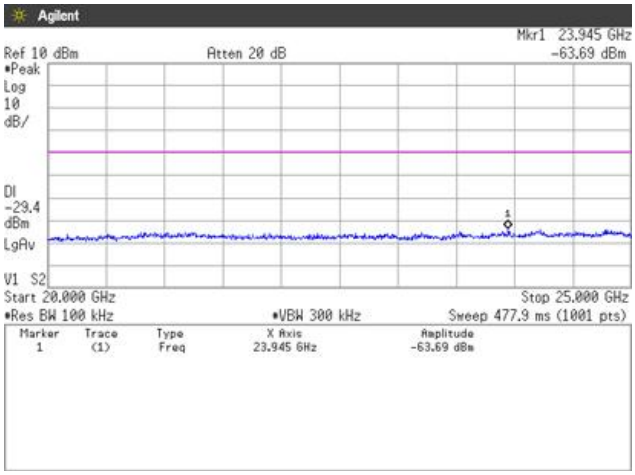
10GHz-15GHz



15GHz-20GHz



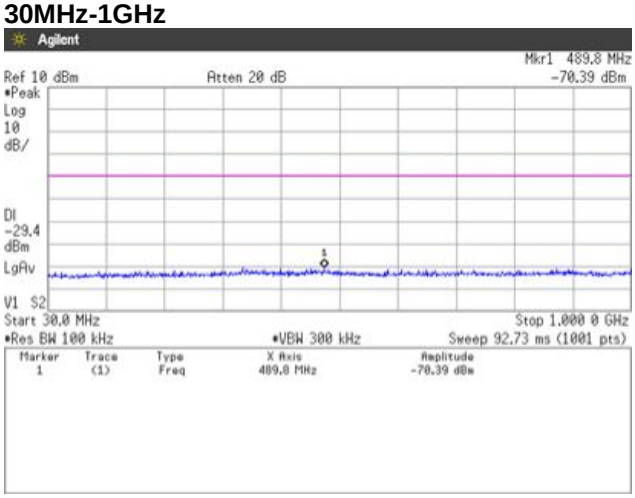
20GHz-25GHz



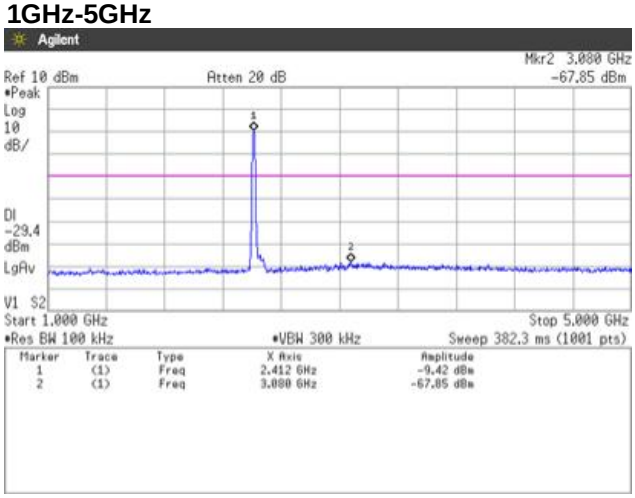
[IEEE802.11n (HT20)]

Channel Low

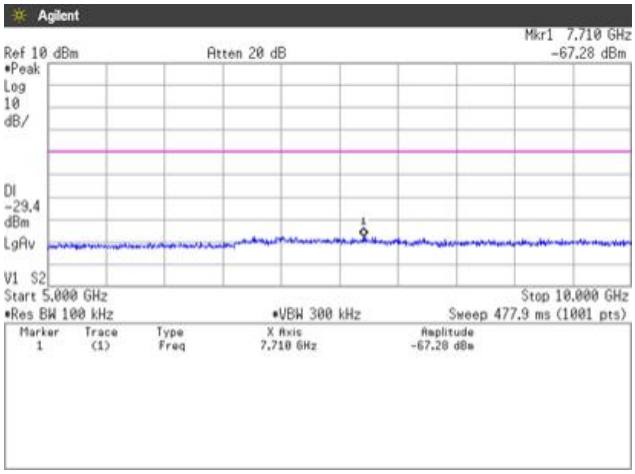
30MHz-1GHz



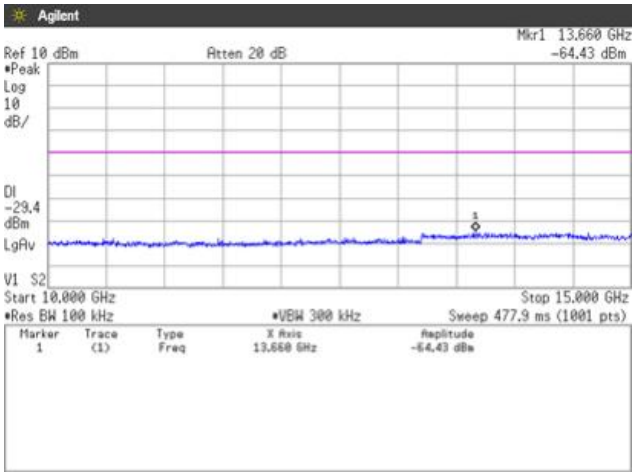
1GHz-5GHz



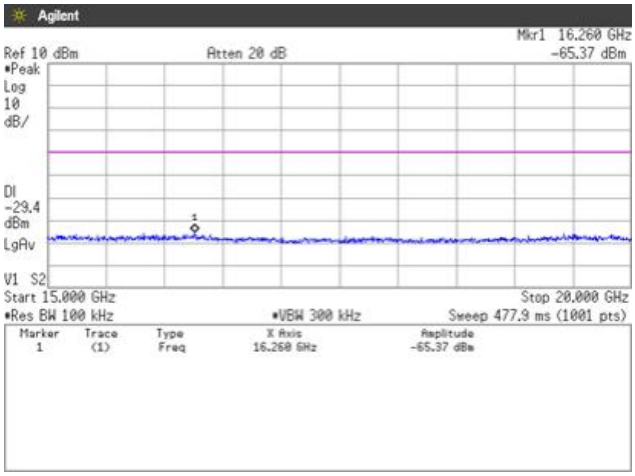
5GHz-10GHz



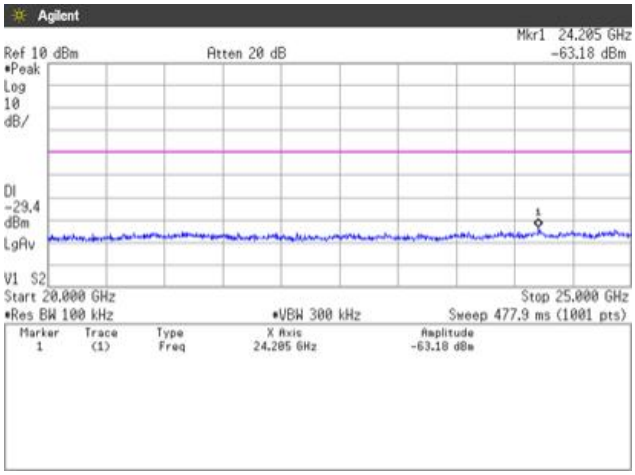
10GHz-15GHz



15GHz-20GHz

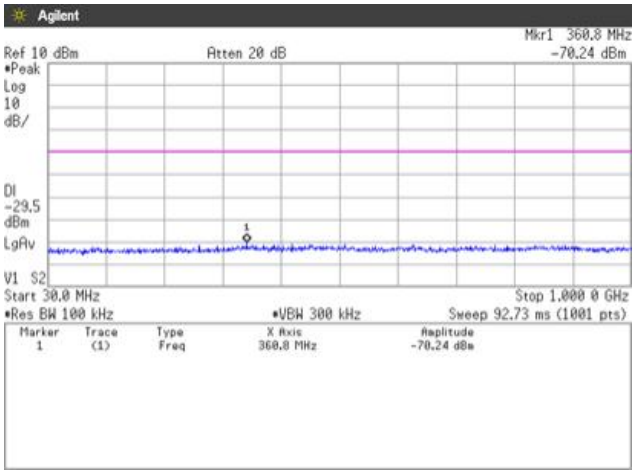


20GHz-25GHz

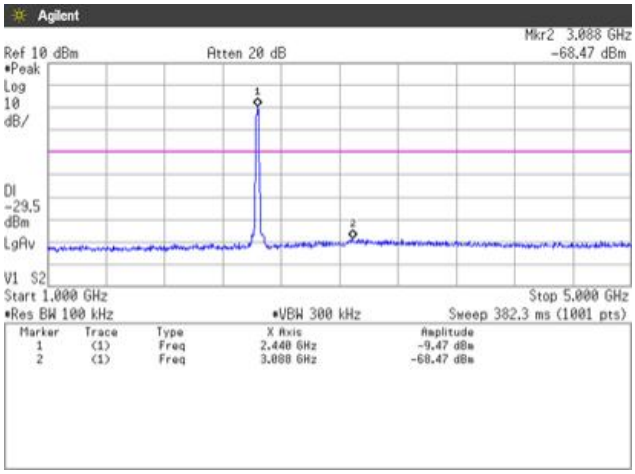


Channel Middle

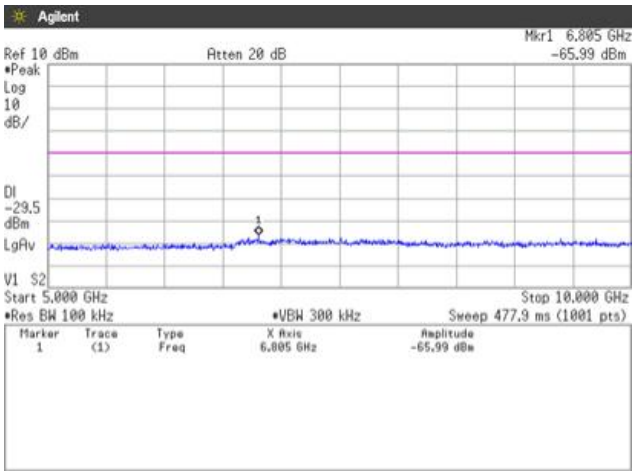
30MHz-1GHz



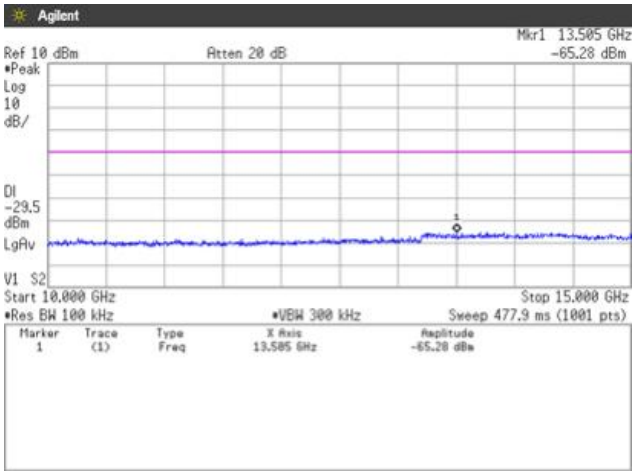
1GHz-5GHz



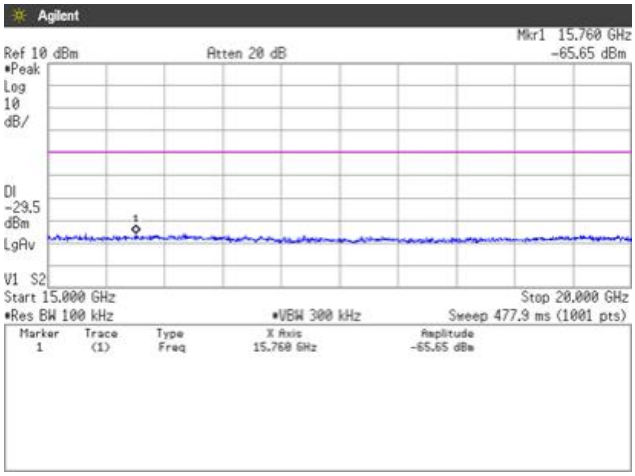
5GHz-10GHz



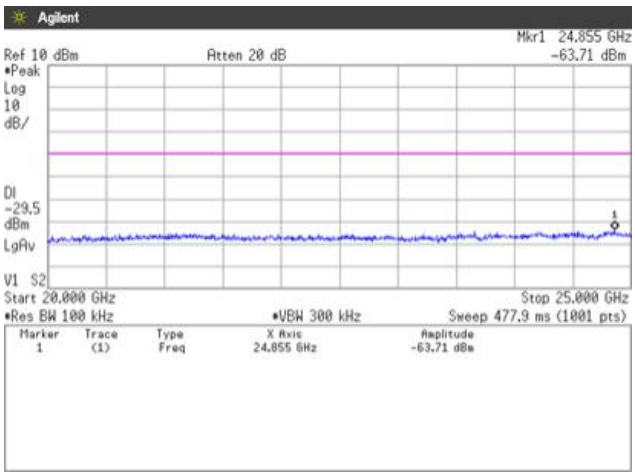
10GHz-15GHz



15GHz-20GHz

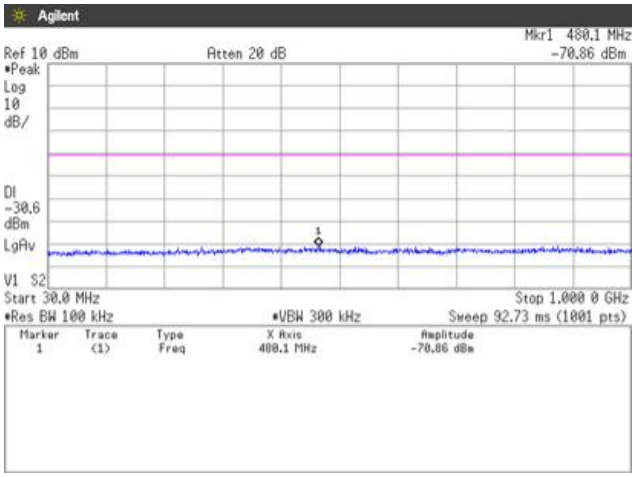


20GHz-25GHz

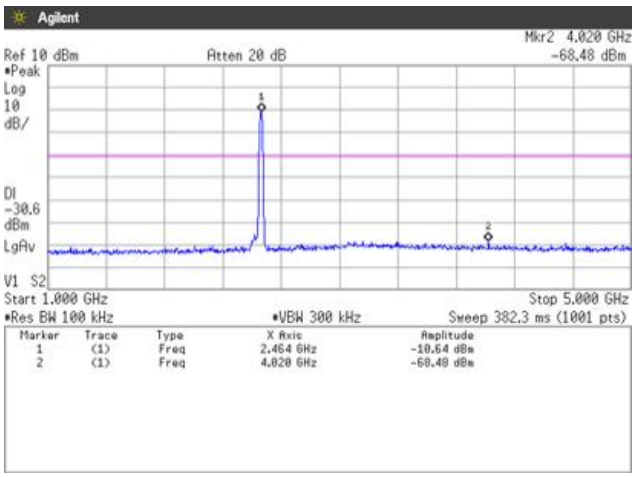


Channel High

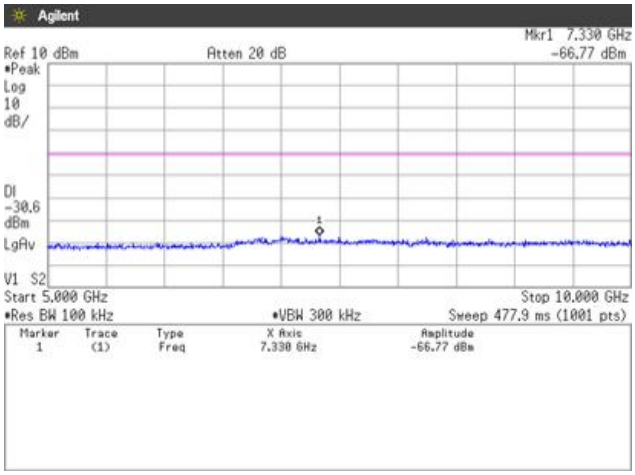
30MHz-1GHz



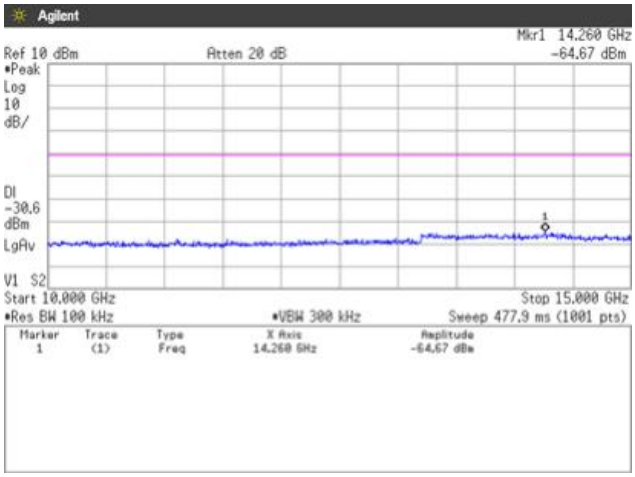
1GHz-5GHz



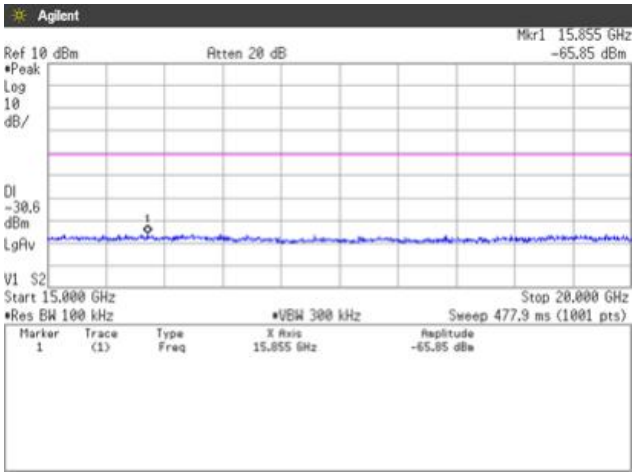
5GHz-10GHz



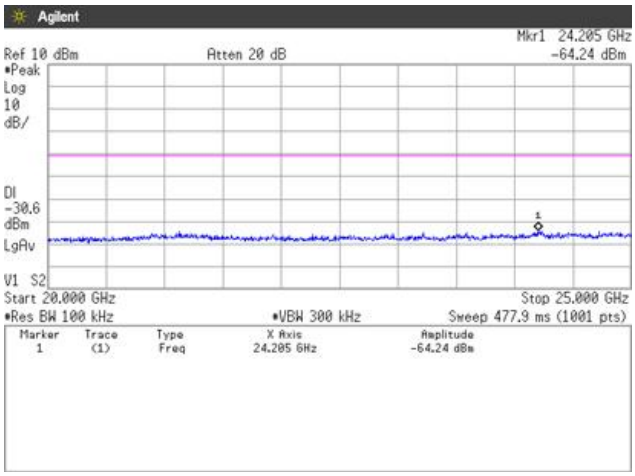
10GHz-15GHz



15GHz-20GHz



20GHz-25GHz



Japan

4.5 Spurious Emissions - Radiated -

4.5.1 Measurement procedure

[FCC 15.247(d), 15.205, 15.209, KDB 558074 D01 v05r02, Section 8.6]

Test was applied by following conditions.

Test method	:	ANSI C63.10
Frequency range	:	9 kHz to 25 GHz
Test place	:	3m Semi-anechoic chamber
EUT was placed on	:	Styrofoam table / (W) 1.0 × (D) 1.0 × (H) 0.8 m (below 1 GHz) Styrofoam table / (W) 0.6 × (D) 0.6 ×(H)1.5 m (above 1 GHz)
Antenna distance	:	3 m
Test receiver setting		Below 1 GHz
- Detector	:	Average (9 kHz-90 kHz, 110 kHz-490 kHz), Quasi-peak
- Bandwidth	:	200 Hz, 120 kHz
Spectrum analyzer setting		Above 1 GHz
- Peak	:	RBW=1 MHz, VBW=3 MHz, Span=0 Hz, Sweep=auto
- Average	:	11b: RBW=1 MHz, VBW=3kHz, Span=0 Hz, Sweep=auto Display mode=Linear 11g, n: RBW=1 MHz, VBW=1kHz, Span=0 Hz, Sweep=auto Display mode=Linear

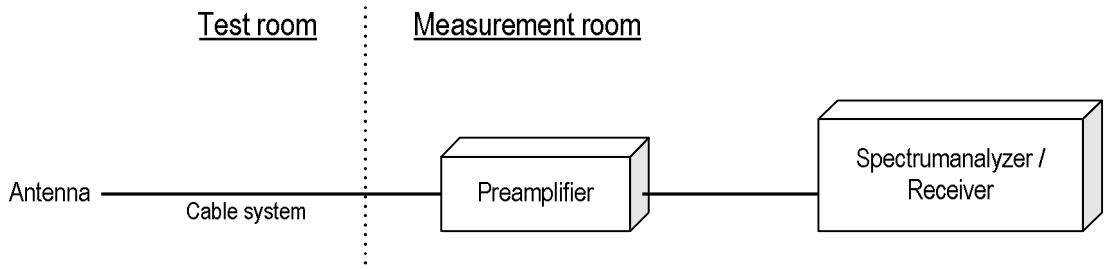
Average Measurement Setting [VBW]

Mode	Duty Cycle (%)	T_{on} (us)	T_{off} (us)	$1/T_{on}$ (kHz)	Determined VBW Setting
IEEE802.11b	91.62	940	86	1.064	3kHz
IEEE802.11g	92.68	1342	106	0.745	1kHz
IEEE802.11n(HT20)	92.24	1260	106	0.794	1kHz

Although these tests were performed other than open area test site, adequate comparison measurements
were confirmed against 30 m open are 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 937606.

Radiated emission measurements are performed at 3m distance with the broadband antenna (Loop antenna, Biconical antenna, Log periodic antenna and Double ridged guide antenna). The antenna is positioned both the horizontal and vertical planes of polarization and height is varied 1m to 4m and stopped at height producing the maximum emission. As for the Loop antenna, it is positioned with its plane vertical, and the center of the Loop antenna is 1m above the ground plane.
The EUT is Placed on a turntable, which is 0.8m/1.5m above ground plane. The turntable shall be rotated for 360 degrees to determine the position of maximum emission level. The test results represent the worst case emission for each emission with manipulating the EUT, support equipment, interconnecting cables and varying the mode of operation. Sufficient time for the EUT, support equipment, and test equipment are allowed in order for them to warm up to their normal operating condition.

- Test configuration



4.5.2 Calculation method

[9 kHz to 150 kHz]
Emission level = Reading + (Ant factor + Cable system loss)
Margin = Limit – Emission level

[150 kHz to 25 GHz]
Emission level = Reading + (Ant factor + Cable system loss - Amp. Gain)
Margin = Limit – Emission level

Example:
Limit @ 4824.0 MHz : 74.0 dBuV/m (Peak Limit)
S.A Reading = 49.5 dBuV Cable system loss = 8.4 dB
Result = 49.5 + 8.4 = 45.1 dBuV/m
Margin = 74.0 - 45.1 = 16.1 dB

4.5.3 Limit

Frequency [MHz]	Field strength		Distance [m]
	[uV/m]	[dBuV/m]	
0.009-0.490	2400 / F [kHz]	20logE [uV/m]	300
0.490-1.705	24000 / F [kHz]	20logE [uV/m]	30
1.705-30	30	29.5	30
30-88	100	40.0	3
88-216	150	43.5	3
216-960	200	46.0	3
Above 960	500	54.0	3

Note:
1. The lower limit shall apply at the transition frequencies.
2. Emission level [dBuV/m] = 20log Emission [uV/m]
3. As shown in 15.35(b), for frequencies above 1000 MHz, the field strength limits are based on average detector, however, the peak field strength of any emission shall not exceed the maximum permitted average limits, specified above by more than 20 dB under any condition modulation.

Japan

4.5.4 Test data

Date	:	22 May-2019			
Temperature	:	20.2 [˚C]			
Humidity	:	50.2 [%]	Test engineer	:	
Test place	:	3m Semi-anechoic chamber			Tadahiro Seino

Date	:	23 May-2019			
Temperature	:	20.1 [˚C]			
Humidity	:	42.1 [%]	Test engineer	:	
Test place	:	3m Semi-anechoic chamber			Tadahiro Seino

Date	:	27 May-2019			
Temperature	:	20.7 [˚C]			
Humidity	:	52.7 [%]	Test engineer	:	
Test place	:	3m Semi-anechoic chamber			Tadahiro Seino

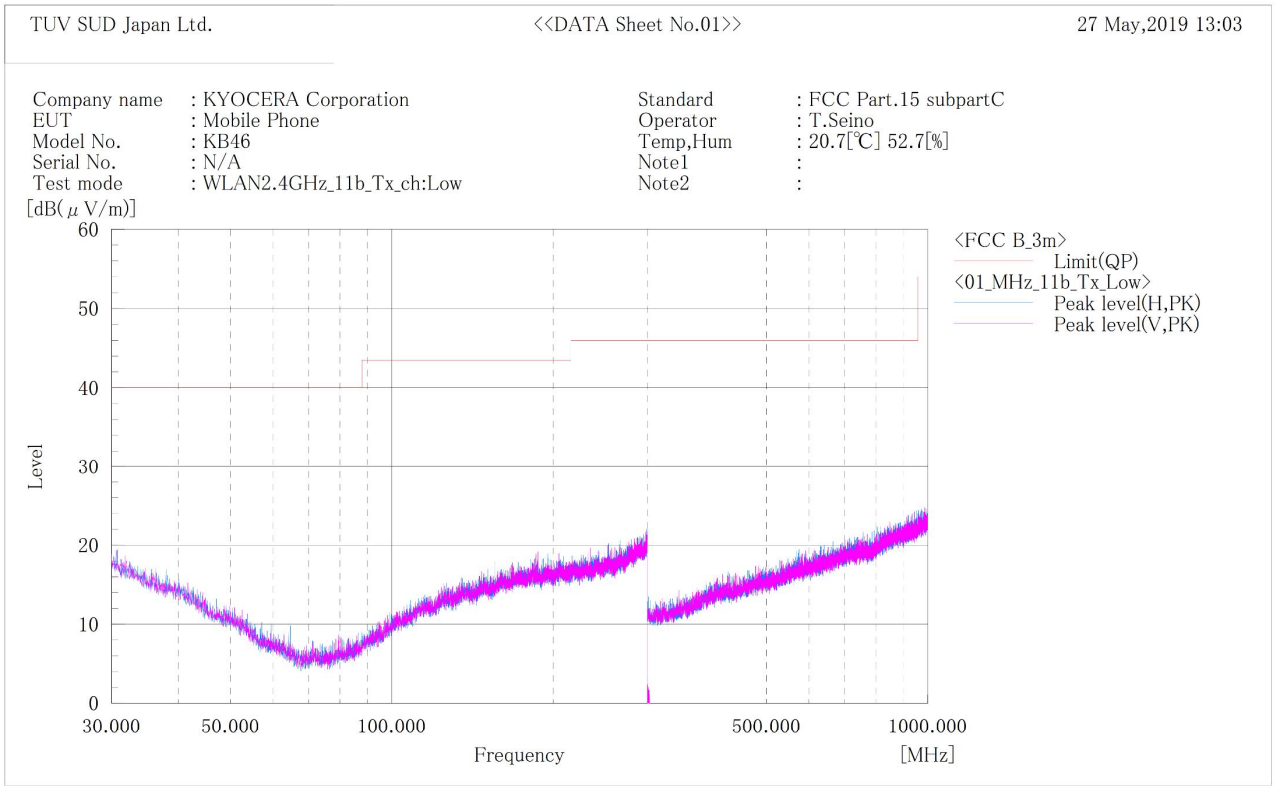
Date	:	28 May-2019			
Temperature	:	21.7 [˚C]			
Humidity	:	47.6 [%]	Test engineer	:	
Test place	:	3m Semi-anechoic chamber			Tadahiro Seino

Japan

4.5.4.1 Transmission mode - With camera

[11b]
Channel Low
BELOW 1GHz

******* RADIATED EMISSION *******
[3m Semi-anechoic chamber]



Final Result

No.	Frequency [MHz]	(P)	c.f [dB(1/m)]	Height [cm]	Angle [°]

Note:
1. Emission Level (Margin) = Limit - [Reading + Factor (Antenna + Cable – Amp)]
2. No emission were detected in frequency range 9kHz to 1000MHz at the 3 meters distance.

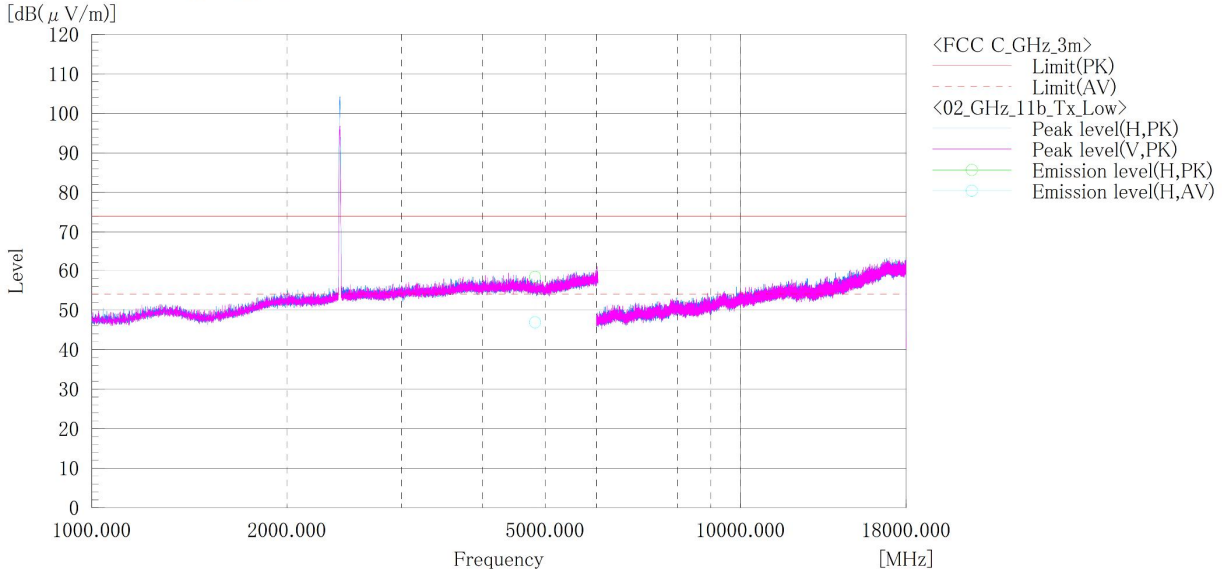
Japan

[11b]
Channel Low
ABOVE 1GHz

******* RADIATED EMISSION *******
[3m Semi-anechoic chamber]

TUV SUD Japan Ltd. <<DATA Sheet No.02>> 22 May,2019 17:10

Company name	: KYOCERA Corporation	Standard	: FCC Part.15 subpart C
EUT	: Mobile Phone	Operator	: T.Seino
Model No.	: KB46	Temp,Hum,Atm	: 20.2[℃] 50.2[%]
Serial No.	: N/A	Note1	:
Test mode	: WLAN2.4GHz_11b_Tx_ch:Low	Note2	:



Final Result

No.	Frequency	(P)	Reading PK	Reading AV	c.f	Result PK	Result AV	Limit PK	Limit AV	Margin PK	Margin AV	Height	Angle
	[MHz]		[dB(μV)]	[dB(μV)]	[dB(1/m)]	[dB(μV/m)]	[dB(μV/m)]	[dB(μV/m)]	[dB(μV/m)]	[dB]	[dB]	[cm]	[°]
1	4824.000	H	48.3	36.8	10.1	58.4	46.9	74.0	54.0	15.6	7.1	166.0	0.0

Note:
1. Emission Level (Margin) = Limit - [Reading + Factor (Antenna + Cable – Amp)]
2. No emission were detected in frequency range 18GHz to 25GHz at the 3 meters distance.

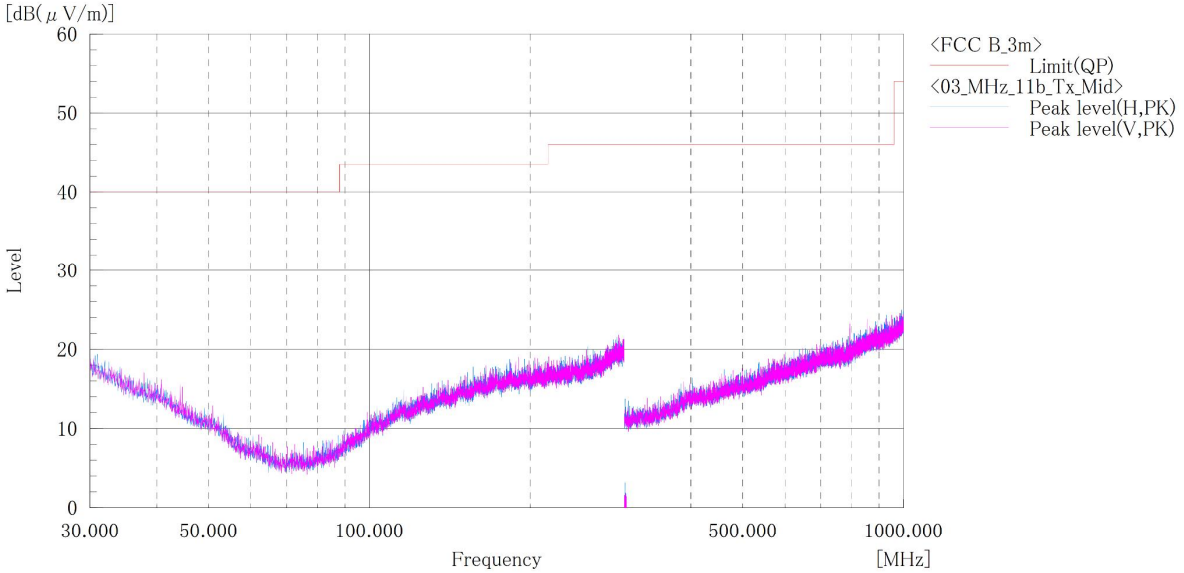
Japan

[11b]
Channel Middle
BELOW 1GHz

******* RADIATED EMISSION *******
[3m Semi-anechoic chamber]

TUV SUD Japan Ltd. <<DATA Sheet No.03>> 27 May,2019 13:30

Company name	: KYOCERA Corporation	Standard	: FCC Part.15 subpartC
EUT	: Mobile Phone	Operator	: T.Seino
Model No.	: KB46	Temp,Hum	: 20.7[℃] 52.7[%]
Serial No.	: N/A	Note1	:
Test mode	: WLAN2.4GHz_11b_Tx_ch:Mid	Note2	:



Final Result

No.	Frequency [MHz]	(P)	c.f [dB(1/m)]	Height [cm]	Angle [°]

Note:
1. Emission Level (Margin) = Limit - [Reading + Factor (Antenna + Cable – Amp)]
2. No emission were detected in frequency range 9kHz to 1000MHz at the 3 meters distance.

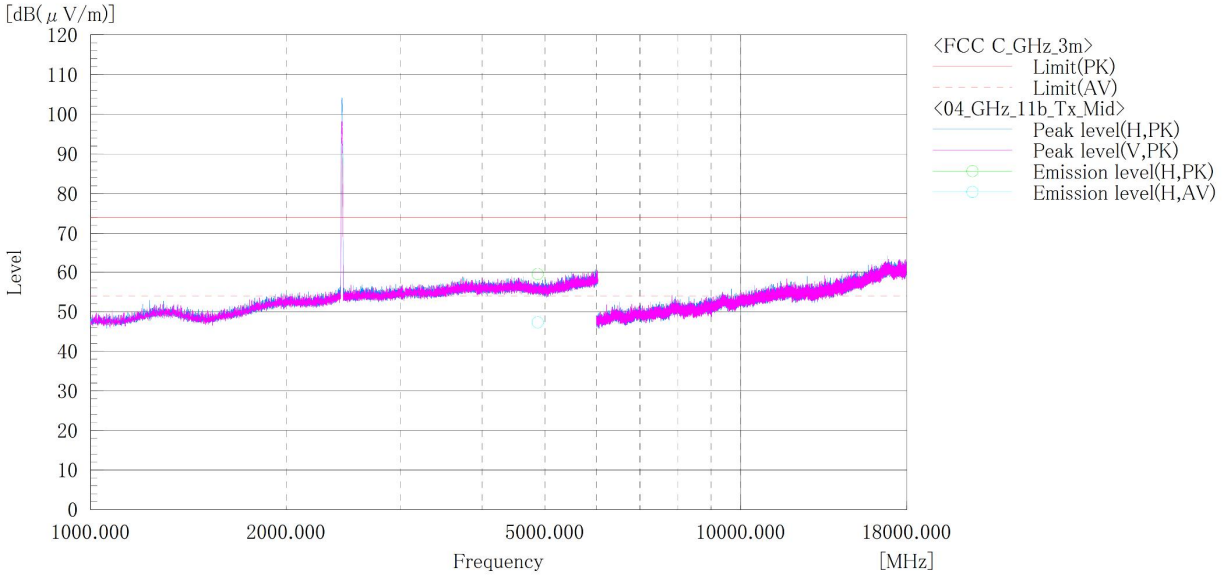
Japan

[11b]
Channel Middle
ABOVE 1GHz

******* RADIATED EMISSION *******
[3m Semi-anechoic chamber]

TUV SUD Japan Ltd. <<DATA Sheet No.04>> 23 May,2019 08:47

Company name	: KYOCERA Corporation	Standard	: FCC Part.15 subpart C
EUT	: Mobile Phone	Operator	: T.Seino
Model No.	: KB46	Temp,Hum,Atm	: 20.1[℃] 42.1[%]
Serial No.	: N/A	Note1	:
Test mode	: WLAN2.4GHz_11b_Tx_ch:Mid	Note2	:



Final Result

No.	Frequency	(P)	Reading PK	Reading AV	c.f	Result PK	Result AV	Limit PK	Limit AV	Margin PK	Margin AV	Height	Angle
	[MHz]		[dB(μV)]	[dB(μV)]	[dB(1/m)]	[dB(μV/m)]	[dB(μV/m)]	[dB(μV/m)]	[dB(μV/m)]	[dB]	[dB]	[cm]	[°]
1	4874.000	H	49.2	37.0	10.3	59.5	47.3	74.0	54.0	14.5	6.7	125.0	0.0

Note:
1. Emission Level (Margin) = Limit - [Reading + Factor (Antenna + Cable – Amp)]
2. No emission were detected in frequency range 18GHz to 25GHz at the 3 meters distance.

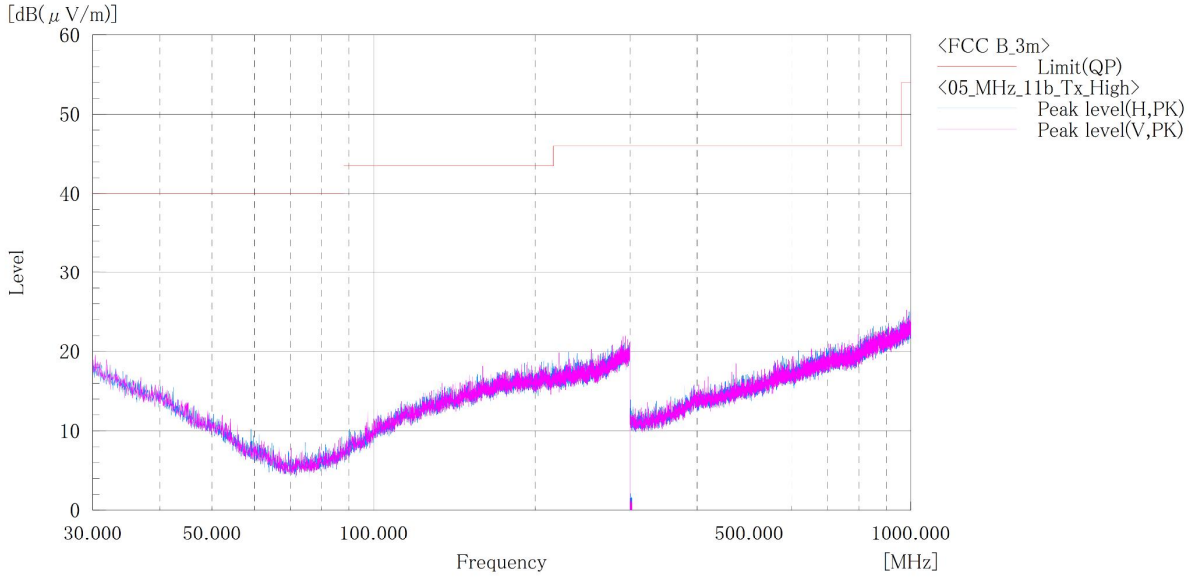
Japan

[11b]
Channel High
BELOW 1GHz

******* RADIATED EMISSION *******
[3m Semi-anechoic chamber]

TUV SUD Japan Ltd. <<DATA Sheet No.05>> 27 May,2019 14:02

Company name	: KYOCERA Corporation	Standard	: FCC Part.15 subpartC
EUT	: Mobile Phone	Operator	: T.Seino
Model No.	: KB46	Temp,Hum	: 20.7[℃] 52.7[%]
Serial No.	: N/A	Note1	:
Test mode	: WLAN2.4GHz_11b_Tx_ch:High	Note2	:



Final Result

No.	Frequency [MHz]	(P)	c.f [dB(1/m)]	Height [cm]	Angle [°]

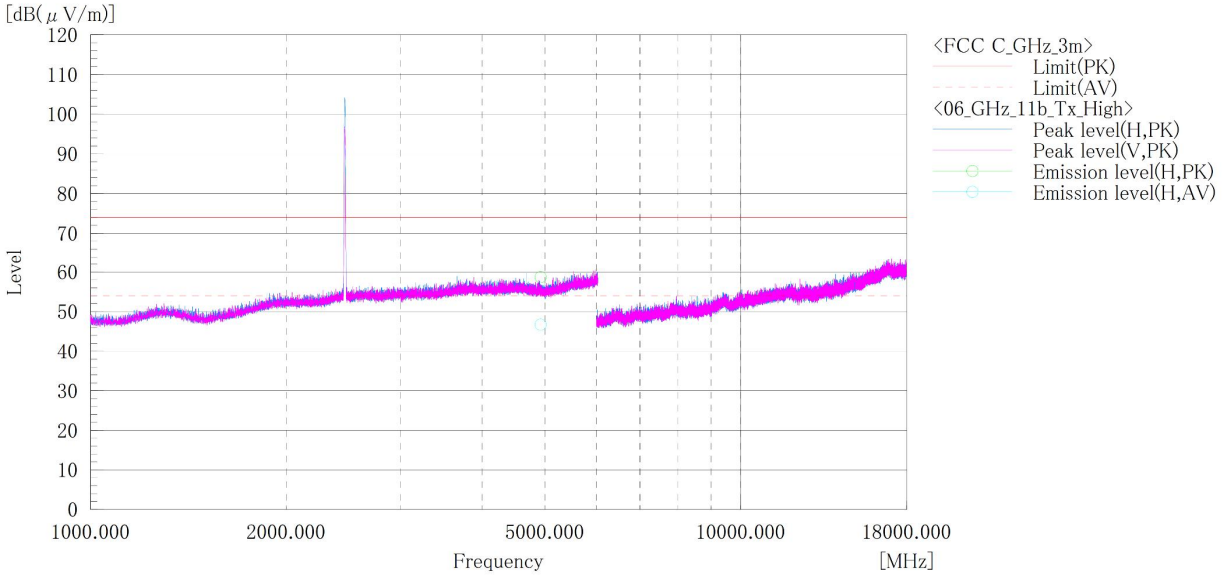
Note:
1. Emission Level (Margin) = Limit - [Reading + Factor (Antenna + Cable – Amp)]
2. No emission were detected in frequency range 9kHz to 1000MHz at the 3 meters distance.

[11b]
Channel High
ABOVE 1GHz

******* RADIATED EMISSION *******
[3m Semi-anechoic chamber]

TUV SUD Japan Ltd. <<DATA Sheet No.06>> 23 May,2019 09:29

Company name	: KYOCERA Corporation	Standard	: FCC Part.15 subpart C
EUT	: Mobile Phone	Operator	: T.Seino
Model No.	: KB46	Temp,Hum,Atm	: 20.1[℃] 42.1[%]
Serial No.	: N/A	Note1	:
Test mode	: WLAN2.4GHz_11b_Tx_ch:High	Note2	:



Final Result

No.	Frequency	(P)	Reading PK	Reading AV	c.f	Result PK	Result AV	Limit PK	Limit AV	Margin PK	Margin AV	Height	Angle
	[MHz]		[dB(μV)]	[dB(μV)]	[dB(1/m)]	[dB(μV/m)]	[dB(μV/m)]	[dB(μV/m)]	[dB(μV/m)]	[dB]	[dB]	[cm]	[°]
1	4924.000	H	48.3	36.3	10.4	58.7	46.7	74.0	54.0	15.3	7.3	145.0	10.0

Note:
1. Emission Level (Margin) = Limit - [Reading + Factor (Antenna + Cable – Amp)]
2. No emission were detected in frequency range 18GHz to 25GHz at the 3 meters distance.

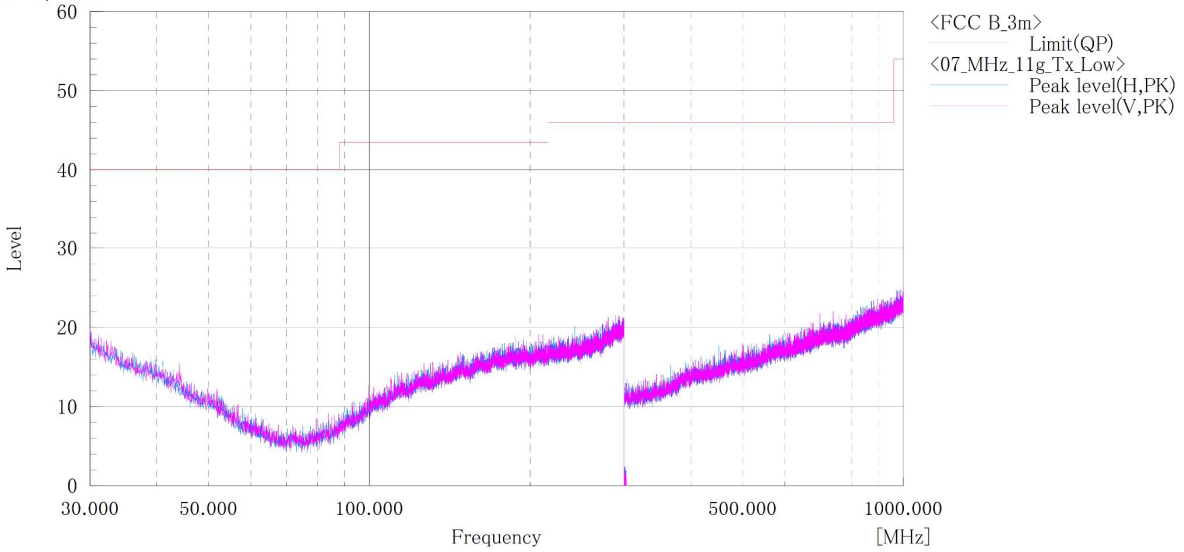
Japan

[11g]
Channel Low
BELOW 1GHz

******* RADIATED EMISSION *******
[3m Semi-anechoic chamber]

TUV SUD Japan Ltd. <<DATA Sheet No.07>> 27 May,2019 14:28

Company name	: KYOCERA Corporation	Standard	: FCC Part.15 subpartC
EUT	: Mobile Phone	Operator	: T.Seino
Model No.	: KB46	Temp,Hum	: 20.7[℃] 52.7[%]
Serial No.	: N/A	Note1	:
Test mode	: WLAN2.4GHz11g_Tx_ch:Low	Note2	:



Final Result

No.	Frequency [MHz]	(P)	c.f [dB(1/m)]	Height [cm]	Angle [°]

Note:
1. Emission Level (Margin) = Limit - [Reading + Factor (Antenna + Cable – Amp)]
2. No emission were detected in frequency range 9kHz to 1000MHz at the 3 meters distance.

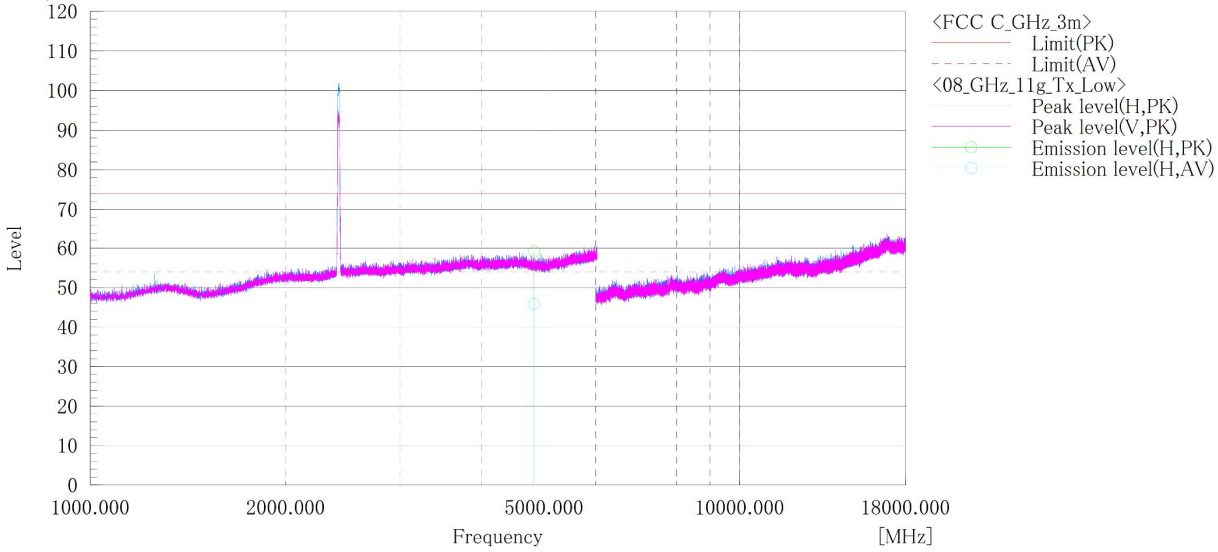
Japan

[11g]
Channel Low
ABOVE 1GHz

******* RADIATED EMISSION *******
[3m Semi-anechoic chamber]

TUV SUD Japan Ltd. <<DATA Sheet No.08>> 23 May,2019 10:10

Company name	: KYOCERA Corporation	Standard	: FCC Part.15 subpart C
EUT	: Mobile Phone	Operator	: T.Seino
Model No.	: KB46	Temp,Hum,Atm	: 20.1[℃] 42.1[%]
Serial No.	: N/A	Note1	:
Test mode	: WLAN2.4GHz_11g_Tx_ch:Low	Note2	:



Final Result

No.	Frequency	(P)	Reading PK	Reading AV	c.f	Result PK	Result AV	Limit PK	Limit AV	Margin PK	Margin AV	Height	Angle
	[MHz]		[dB(μV)]	[dB(μV)]	[dB(1/m)]	[dB(μV/m)]	[dB(μV/m)]	[dB(μV/m)]	[dB(μV/m)]	[dB]	[dB]	[cm]	[°]
1	4824.000	H	49.0	35.8	10.1	59.1	45.9	74.0	54.0	14.9	8.1	144.0	24.0

Note:
1. Emission Level (Margin) = Limit - [Reading + Factor (Antenna + Cable – Amp)]
2. No emission were detected in frequency range 18GHz to 25GHz at the 3 meters distance.

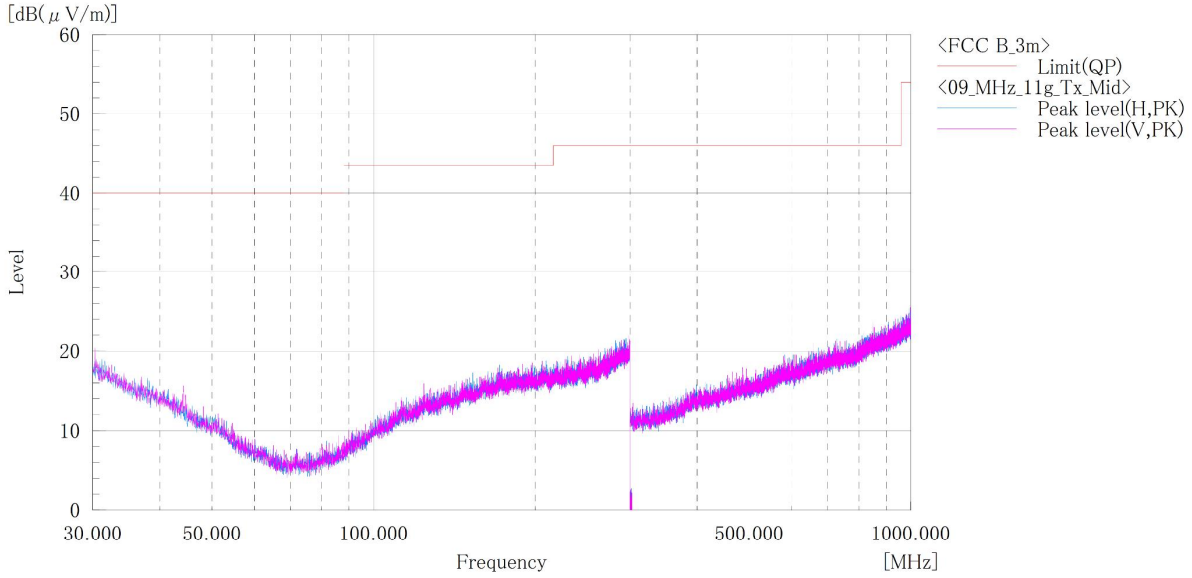
Japan

[11g]
Channel Middle
BELOW 1GHz

******* RADIATED EMISSION *******
[3m Semi-anechoic chamber]

TUV SUD Japan Ltd. <<DATA Sheet No.09>> 27 May,2019 15:03

Company name	: KYOCERA Corporation	Standard	: FCC Part.15 subpartC
EUT	: Mobile Phone	Operator	: T.Seino
Model No.	: KB46	Temp,Hum	: 20.7[℃] 52.7[%]
Serial No.	: N/A	Note1	:
Test mode	: WLAN2.4GHz_11g_Tx_ch:Mid	Note2	:



Final Result

No.	Frequency [MHz]	(P)	c.f [dB(1/m)]	Height [cm]	Angle [°]

Note:
1. Emission Level (Margin) = Limit - [Reading + Factor (Antenna + Cable – Amp)]
2. No emission were detected in frequency range 9kHz to 1000MHz at the 3 meters distance.

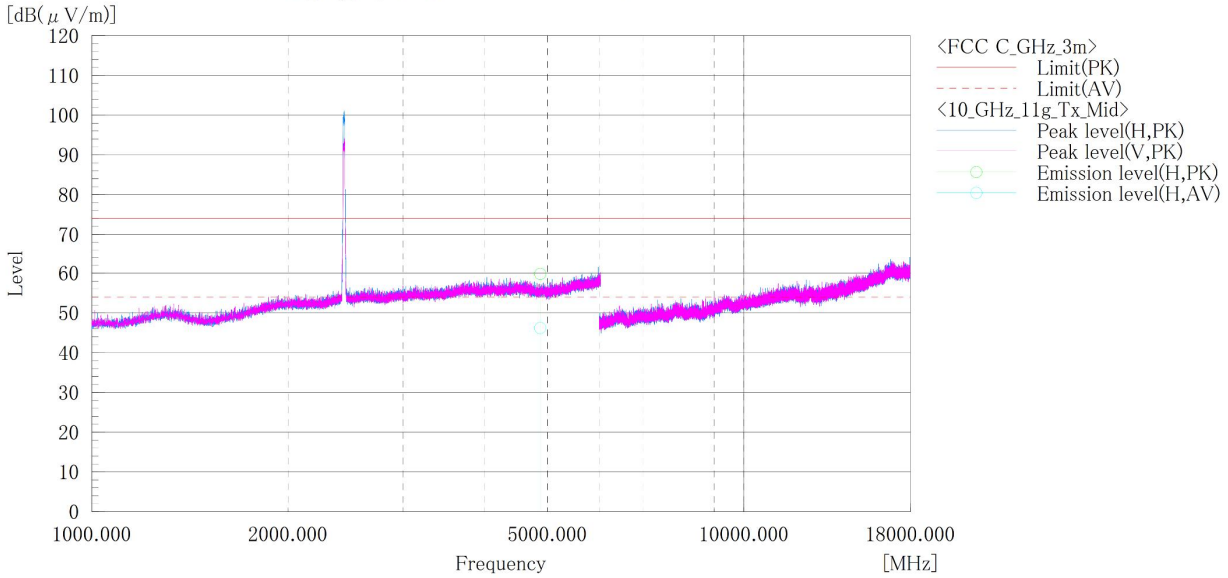
Japan

[11g]
Channel Middle
ABOVE 1GHz

******* RADIATED EMISSION *******
[3m Semi-anechoic chamber]

TUV SUD Japan Ltd. <<DATA Sheet No.10>> 23 May,2019 11:13

Company name	: KYOCERA Corporation	Standard	: FCC Part.15 subpart C
EUT	: Mobile Phone	Operator	: T.Seino
Model No.	: KB46	Temp,Hum,Atm	: 20.1[℃] 42.1[%]
Serial No.	: N/A	Note1	:
Test mode	: WLAN2.4GHz_11g_Tx_ch:Mid	Note2	:



Final Result

No.	Frequency	(P)	Reading PK	Reading AV	c.f	Result PK	Result AV	Limit PK	Limit AV	Margin PK	Margin AV	Height	Angle
	[MHz]		[dB(μV)]	[dB(μV)]	[dB(1/m)]	[dB(μV/m)]	[dB(μV/m)]	[dB(μV/m)]	[dB(μV/m)]	[dB]	[dB]	[cm]	[°]
1	4874.000	H	49.5	35.9	10.3	59.8	46.2	74.0	54.0	14.2	7.8	137.0	12.0

Note:
1. Emission Level (Margin) = Limit - [Reading + Factor (Antenna + Cable – Amp)]
2. No emission were detected in frequency range 18GHz to 25GHz at the 3 meters distance.

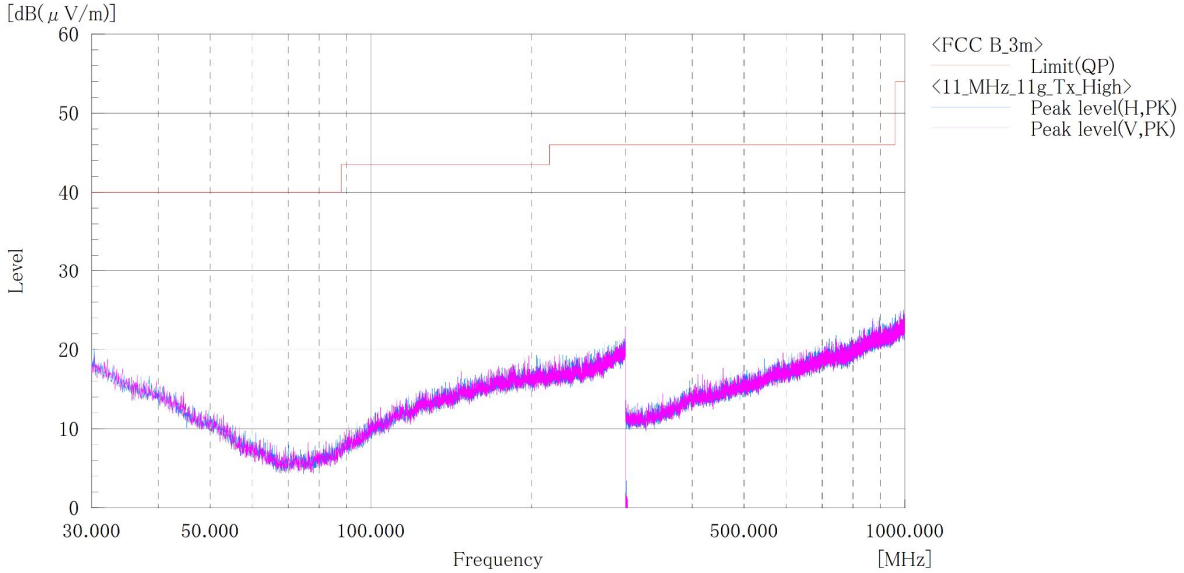
Japan

[11g]
Channel High
BELOW 1GHz

******* RADIATED EMISSION *******
[3m Semi-anechoic chamber]

TUV SUD Japan Ltd. <<DATA Sheet No.11>> 27 May,2019 15:50

Company name	: KYOCERA Corporation	Standard	: FCC Part.15 subpartC
EUT	: Mobile Phone	Operator	: T.Seino
Model No.	: KB46	Temp,Hum	: 20.7[℃] 52.7[%]
Serial No.	: N/A	Note1	:
Test mode	: WLAN2.4GHz_11g_Tx_ch:High	Note2	:



Final Result

No.	Frequency [MHz]	(P)	c.f [dB(1/m)]	Height [cm]	Angle [°]

Note:
1. Emission Level (Margin) = Limit - [Reading + Factor (Antenna + Cable – Amp)]
2. No emission were detected in frequency range 9kHz to 1000MHz at the 3 meters distance.

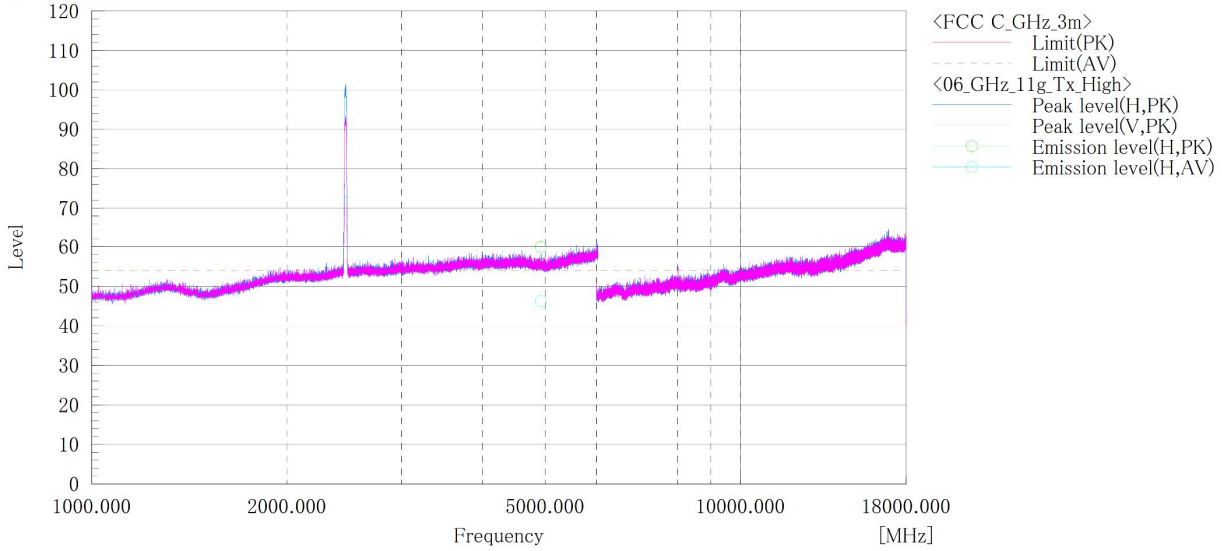
Japan

[11g]
Channel High
ABOVE 1GHz

******* RADIATED EMISSION *******
[3m Semi-anechoic chamber]

TUV SUD Japan Ltd. <<DATA Sheet No.06>> 23 May,2019 11:47

Company name	: KYOCERA Corporation	Standard	: FCC Part.15 subpart C
EUT	: Mobile Phone	Operator	: T.Seino
Model No.	: KB46	Temp,Hum,Atm	: 20.1[℃] 42.1[%]
Serial No.	: N/A	Note1	:
Test mode	: WLAN2.4GHz_11g_Tx_ch:High	Note2	:



Final Result

No.	Frequency	(P)	Reading PK	Reading AV	c.f	Result PK	Result AV	Limit PK	Limit AV	Margin PK	Margin AV	Height	Angle
	[MHz]		[dB(μV)]	[dB(μV)]	[dB(1/m)]	[dB(μV/m)]	[dB(μV/m)]	[dB(μV/m)]	[dB(μV/m)]	[dB]	[dB]	[cm]	[°]
1	4924.000	H	49.5	35.8	10.4	59.9	46.2	74.0	54.0	14.1	7.8	137.0	22.0

Note:
1. Emission Level (Margin) = Limit - [Reading + Factor (Antenna + Cable – Amp)]
2. No emission were detected in frequency range 18GHz to 25GHz at the 3 meters distance.

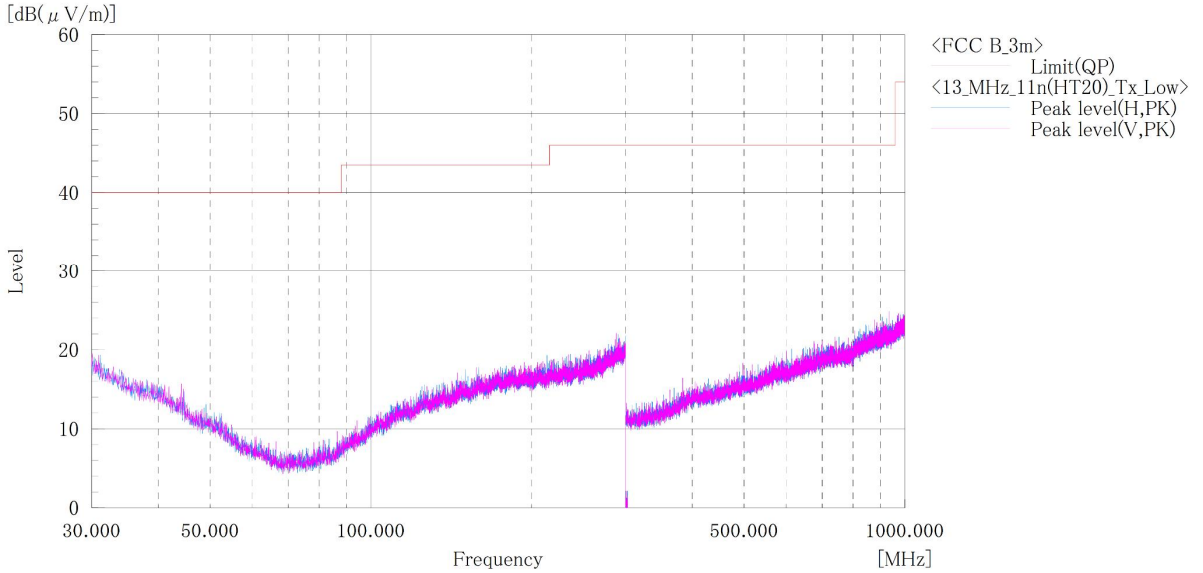
Japan

[11n(HT20)]
Channel Low
BELOW 1GHz

******* RADIATED EMISSION *******
[3m Semi-anechoic chamber]

TUV SUD Japan Ltd. <<DATA Sheet No.13>> 27 May,2019 16:22

Company name	: KYOCERA Corporation	Standard	: FCC Part.15 subpartC
EUT	: Mobile Phone	Operator	: T.Seino
Model No.	: KB46	Temp,Hum	: 20.7[℃] 52.7[%]
Serial No.	: N/A	Note1	:
Test mode	: WLAN2.4GHz_11n(HT20)_Tx_ch:Low	Note2	:



Final Result

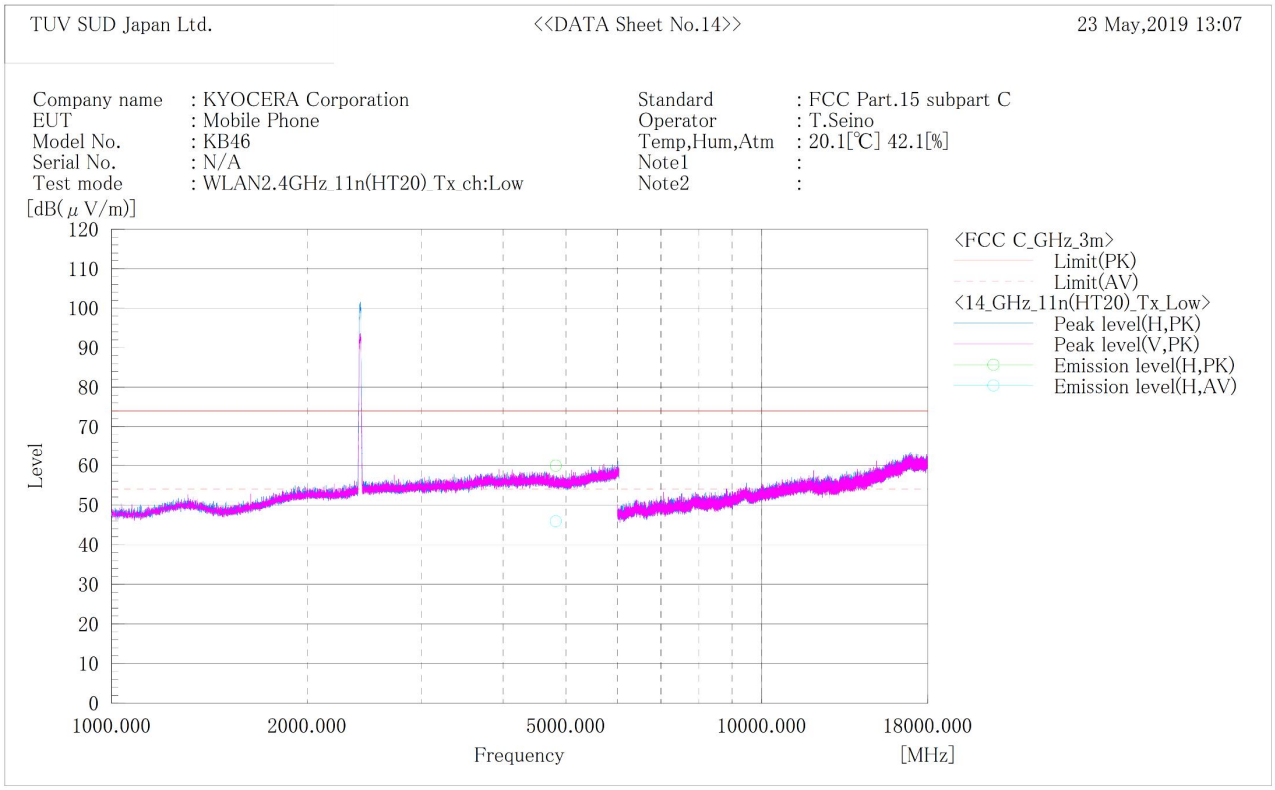
No.	Frequency [MHz]	(P)	c.f [dB(1/m)]	Height [cm]	Angle [°]

Note:
1. Emission Level (Margin) = Limit - [Reading + Factor (Antenna + Cable – Amp)]
2. No emission were detected in frequency range 9kHz to 1000MHz at the 3 meters distance.

Japan

[11n(HT20)]
Channel Low
ABOVE 1GHz

******* RADIATED EMISSION *******
[3m Semi-anechoic chamber]



Final Result

No.	Frequency	(P)	Reading PK	Reading AV	c.f	Result PK	Result AV	Limit PK	Limit AV	Margin PK	Margin AV	Height	Angle
	[MHz]		[dB(μV)]	[dB(μV)]	[dB(1/m)]	[dB(μV/m)]	[dB(μV/m)]	[dB(μV/m)]	[dB(μV/m)]	[dB]	[dB]	[cm]	[°]
1	4824.000	H	49.8	35.8	10.1	59.9	45.9	74.0	54.0	14.1	8.1	135.0	0.0

Note:
1. Emission Level (Margin) = Limit - [Reading + Factor (Antenna + Cable – Amp)]
2. No emission were detected in frequency range 18GHz to 25GHz at the 3 meters distance.

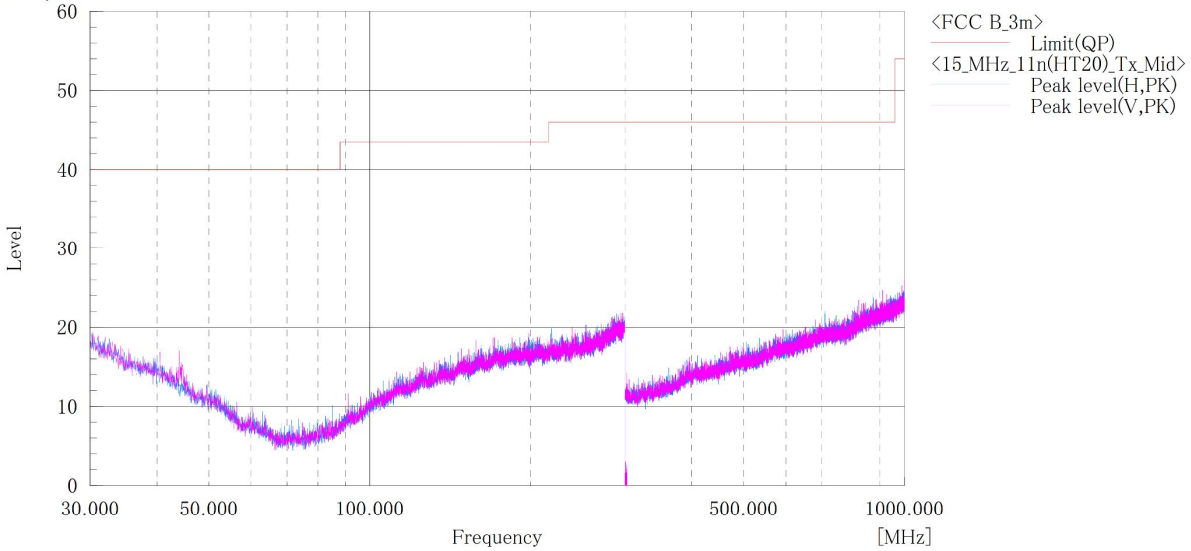
Japan

[11n(HT20)]
Channel Middle
BELOW 1GHz

******* RADIATED EMISSION *******
[3m Semi-anechoic chamber]

TUV SUD Japan Ltd. <<DATA Sheet No.15>> 28 May,2019 08:44

Company name	: KYOCERA Corporation	Standard	: FCC Part.15 subpartC
EUT	: Mobile Phone	Operator	: T.Seino
Model No.	: KB46	Temp,Hum	: 21.7[℃] 47.6[%]
Serial No.	: N/A	Note1	:
Test mode	: WLAN2.4GHz_11n(HT20)_Tx_ch:Mid	Note2	:



Final Result

No.	Frequency [MHz]	(P)	c.f [dB(1/m)]	Height [cm]	Angle [°]

Note:
1. Emission Level (Margin) = Limit - [Reading + Factor (Antenna + Cable – Amp)]
2. No emission were detected in frequency range 9kHz to 1000MHz at the 3 meters distance.

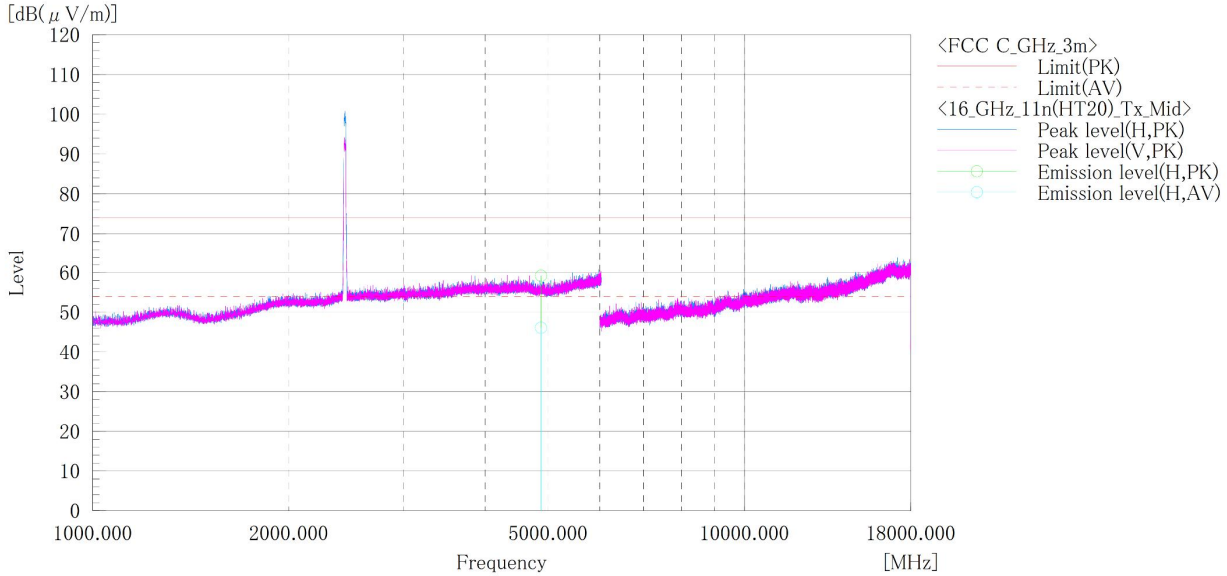
Japan

[11n(HT20)]
Channel Middle
ABOVE 1GHz

******* RADIATED EMISSION *******
[3m Semi-anechoic chamber]

TUV SUD Japan Ltd. <<DATA Sheet No.16>> 23 May,2019 14:20

Company name	: KYOCERA Corporation	Standard	: FCC Part.15 subpart C
EUT	: Mobile Phone	Operator	: T.Seino
Model No.	: KB46	Temp,Hum,Atm	: 20.1[℃] 42.1[%]
Serial No.	: N/A	Note1	:
Test mode	: WLAN2.4GHz 11n(HT20) Tx ch:Mid	Note2	:



Final Result

No.	Frequency	(P)	Reading PK	Reading AV	c.f	Result PK	Result AV	Limit PK	Limit AV	Margin PK	Margin AV	Height	Angle
	[MHz]		[dB(μV)]	[dB(μV)]	[dB(1/m)]	[dB(μV/m)]	[dB(μV/m)]	[dB(μV/m)]	[dB(μV/m)]	[dB]	[dB]	[cm]	[°]
1	4874.000	H	48.9	35.8	10.3	59.2	46.1	74.0	54.0	14.8	7.9	128.0	21.0

Note:
1. Emission Level (Margin) = Limit - [Reading + Factor (Antenna + Cable – Amp)]
2. No emission were detected in frequency range 18GHz to 25GHz at the 3 meters distance.

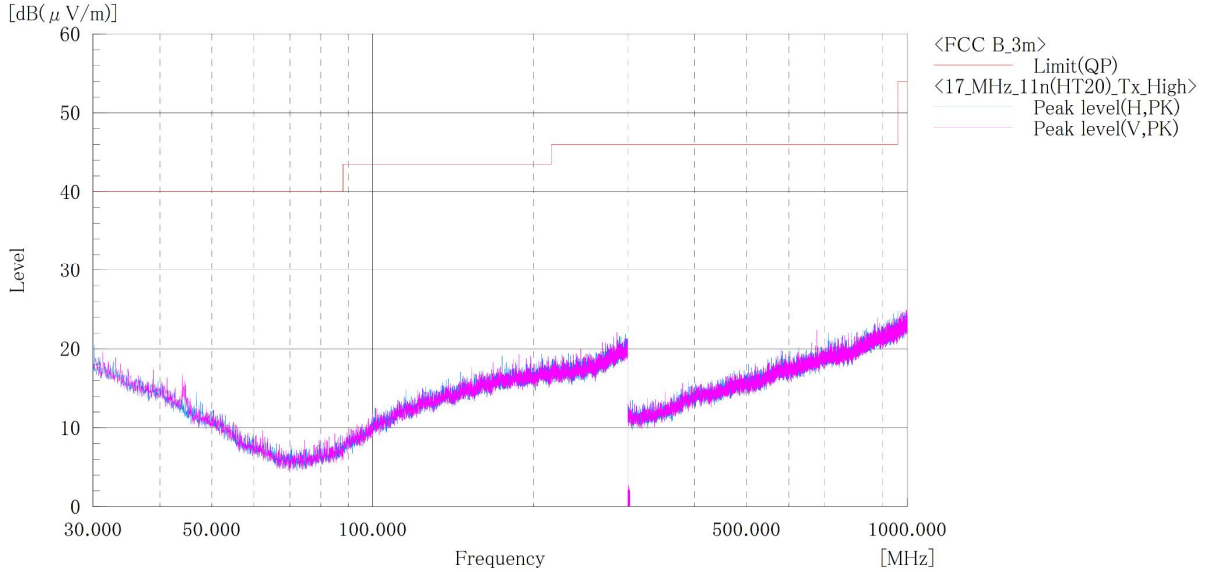
Japan

[11n(HT20)]
Channel High
BELOW 1GHz

******* RADIATED EMISSION *******
[3m Semi-anechoic chamber]

TUV SUD Japan Ltd. <<DATA Sheet No.17>> 28 May,2019 09:09

Company name	: KYOCERA Corporation	Standard	: FCC Part.15 subpartC
EUT	: Mobile Phone	Operator	: T.Seino
Model No.	: KB46	Temp,Hum	: 21.7[℃] 47.6[%]
Serial No.	: N/A	Note1	:
Test mode	: WLAN2.4GHz_11n(HT20)_Tx_ch:High	Note2	:



Final Result

No.	Frequency [MHz]	(P)	c.f [dB(1/m)]	Height [cm]	Angle [°]

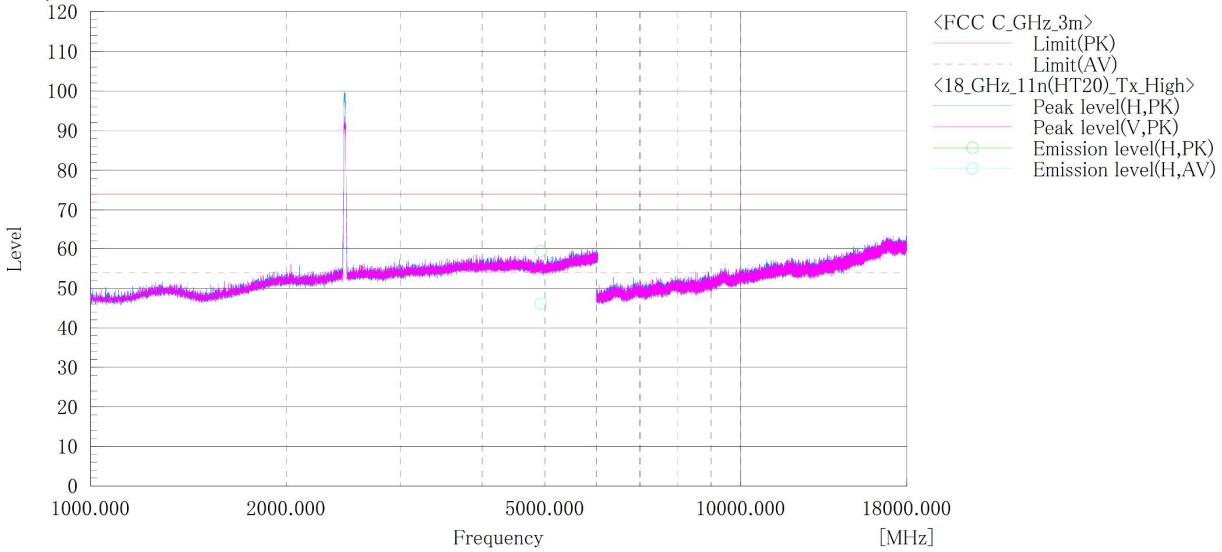
Note:
1. Emission Level (Margin) = Limit - [Reading + Factor (Antenna + Cable – Amp)]
2. No emission were detected in frequency range 9kHz to 1000MHz at the 3 meters distance.

[11n(HT20)]
Channel High
ABOVE 1GHz

******* RADIATED EMISSION *******
[3m Semi-anechoic chamber]

TUV SUD Japan Ltd. <<DATA Sheet No.18>> 23 May,2019 14:30

Company name	: KYOCERA Corporation	Standard	: FCC Part.15 subpart C
EUT	: Mobile Phone	Operator	: T.Seino
Model No.	: KB46	Temp,Hum,Atm	: 20.1[℃] 42.1[%]
Serial No.	: N/A	Note1	:
Test mode	: WLAN2.4GHz_11n(HT20)_Tx_ch:High	Note2	:



Final Result

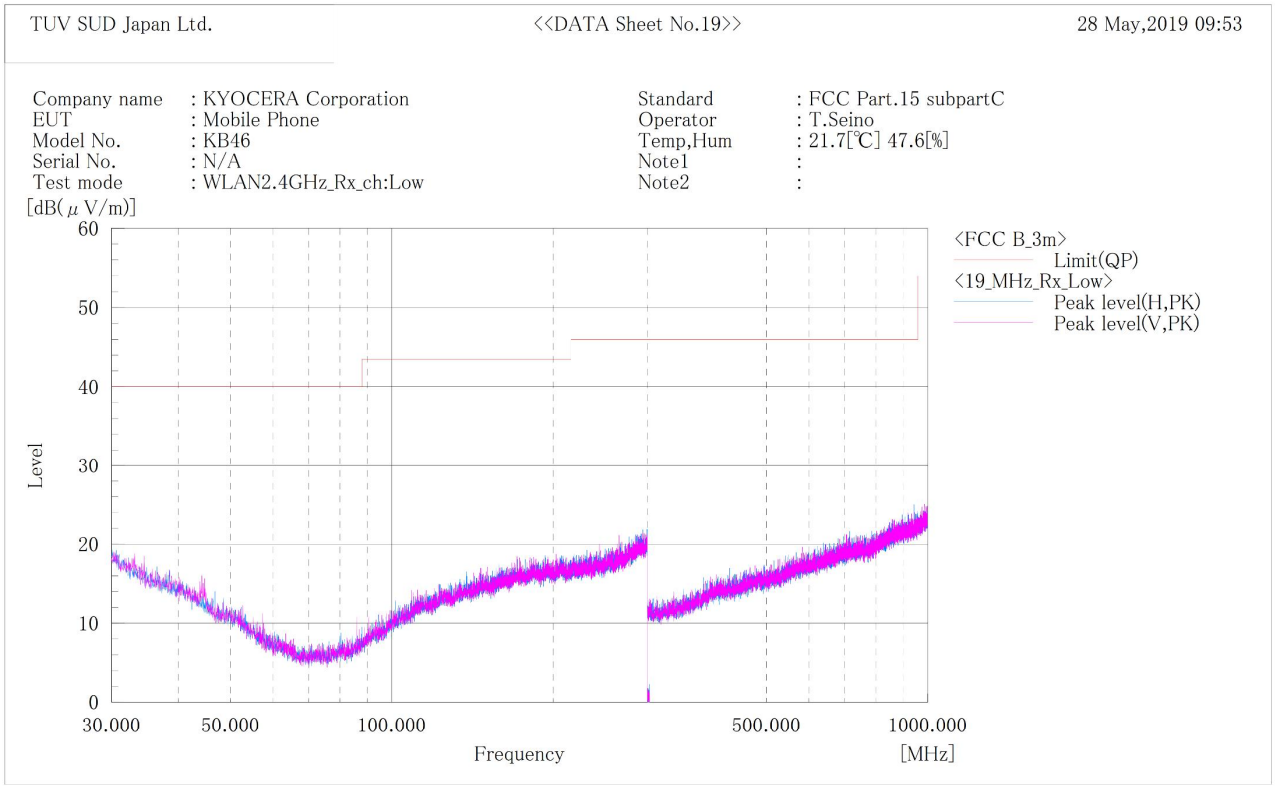
No.	Frequency	(P)	Reading PK	Reading AV	c.f	Result PK	Result AV	Limit PK	Limit AV	Margin PK	Margin AV	Height	Angle
	[MHz]		[dB(μV)]	[dB(μV)]	[dB(1/m)]	[dB(μV/m)]	[dB(μV/m)]	[dB(μV/m)]	[dB(μV/m)]	[dB]	[dB]	[cm]	[°]
1	4924.000	H	49.0	35.7	10.4	59.4	46.1	74.0	54.0	14.6	7.9	130.0	11.0

Note:
1. Emission Level (Margin) = Limit - [Reading + Factor (Antenna + Cable – Amp)]
2. No emission were detected in frequency range 18GHz to 25GHz at the 3 meters distance.

4.5.4.2 Receive mode

Channel Low
BELOW 1GHz

******* RADIATED EMISSION *******
[3m Semi-anechoic chamber]



Final Result

No.	Frequency [MHz]	(P)	c.f [dB(1/m)]	Height [cm]	Angle [°]

Note:
1. Emission Level (Margin) = Limit - [Reading + Factor (Antenna + Cable – Amp)]
2. No emission were detected in frequency range 9kHz to 1000MHz and 1GHz to 25GHz at the 3 meters distance.

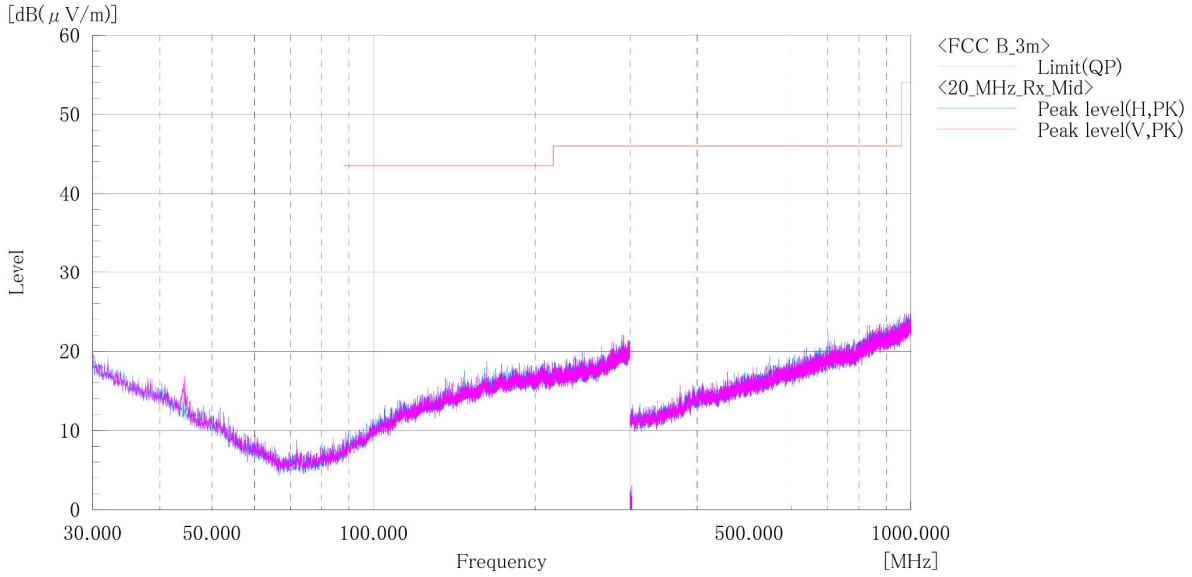
Japan

Channel Middle
BELOW 1GHz

******* RADIATED EMISSION *******
[3m Semi-anechoic chamber]

TUV SUD Japan Ltd. <<DATA Sheet No.20>> 28 May,2019 10:25

Company name	: KYOCERA Corporation	Standard	: FCC Part.15 subpartC
EUT	: Mobile Phone	Operator	: T.Seino
Model No.	: KB46	Temp,Hum	: 21.7[℃] 47.6[%]
Serial No.	: N/A	Note1	:
Test mode	: WLAN2.4GHz_Rx_ch:Mid	Note2	:



Final Result

No.	Frequency [MHz]	(P)	c.f [dB(1/m)]	Height [cm]	Angle [°]

Note:
1. Emission Level (Margin) = Limit - [Reading + Factor (Antenna + Cable – Amp)]
2. No emission were detected in frequency range 9kHz to 1000MHz and 1GHz to 25GHz at the 3 meters distance.

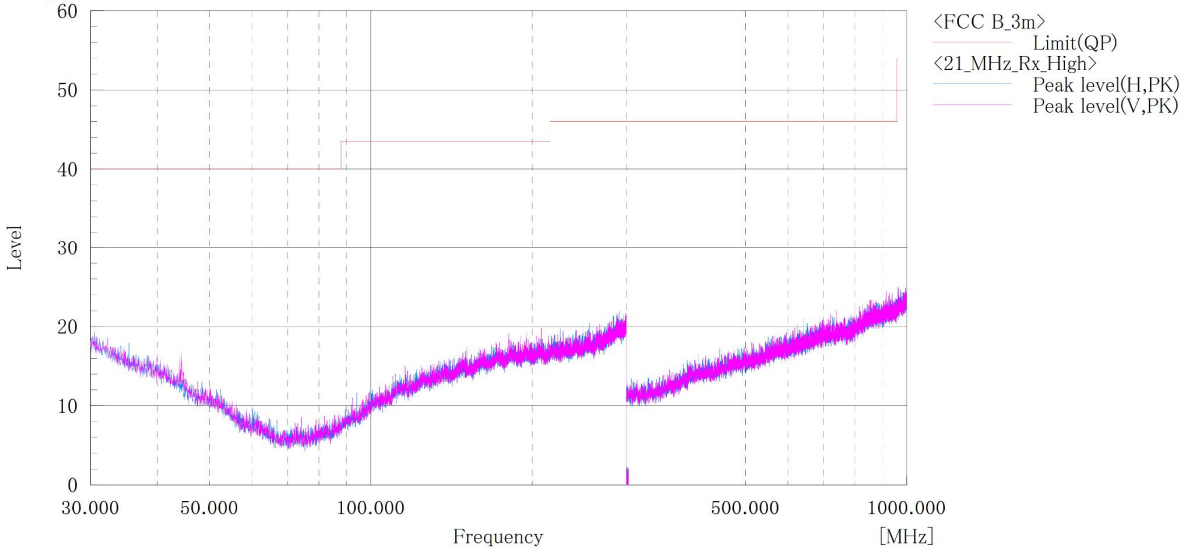
Japan

Channel High
BELOW 1GHz

******* RADIATED EMISSION *******
[3m Semi-anechoic chamber]

TUV SUD Japan Ltd. <<DATA Sheet No.21>> 28 May,2019 11:03

Company name	: KYOCERA Corporation	Standard	: FCC Part.15 subpartC
EUT	: Mobile Phone	Operator	: T.Seino
Model No.	: KB46	Temp,Hum	: 21.7[℃] 47.6[%]
Serial No.	: N/A	Note1	:
Test mode	: WLAN2.4GHz_Rx_ch:High	Note2	:



Final Result

No.	Frequency [MHz]	(P)	c.f [dB(1/m)]	Height [cm]	Angle [°]

Note:
1. Emission Level (Margin) = Limit - [Reading + Factor (Antenna + Cable – Amp)]
2. No emission were detected in frequency range 9kHz to 1000MHz and 1GHz to 25GHz at the 3 meters distance.