



FCC- TEST REPORT

Report Number : **68.950.21.0546.01** Date of Issue: 2021-09-08

Model : **PG915420U, PG912696U, PG911040U, PG912689U, PG915697, PG918520, PG916045, PG918537, PG911040, PG918506, PG918544, PG912696, PG912689, PG915420**

FCC ID : 2AKMJ-PG915420

Product Type : PEBBLE GEAR™ 7" KIDS TABLET

Applicant : SNAKEBYTE ASIA Ltd.

Address : Unit 907-908, 9th/F, Lu Plaza 2 Wing Yip Street, Kwun Tong,
Hong Kong

Manufacturer : SNAKEBYTE ASIA Ltd.

Address : Unit 907-908, 9th/F, Lu Plaza 2 Wing Yip Street, Kwun Tong,
Hong Kong

Test Result : **Positive** **Negative**

Total pages including Appendices : 59

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2 Details about the Test Laboratory

Details about the Test Laboratory

Test Site 1

Company name: TÜV SÜD Certification and Testing (China) Co., Ltd. Shenzhen Branch
Building 12&13, Zhiheng Wisdomland Business Park,
Nantou Checkpoint Road 2, Nanshan District,
Shenzhen City, 518052,
P. R. China

FCC Designation Number: CN5009

FCC Registration No.: 514049

Telephone: 86 755 8828 6998
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3 Description of the Equipment Under Test

Product:	PEBBLE GEAR™ 7" KIDS TABLET
Model no.:	PG915420U, PG912696U, PG911040U, PG912689U, PG915697, PG918520, PG916045, PG918537, PG911040, PG918506, PG918544, PG912696, PG912689, PG915420
FCC ID:	2AKMJ-PG915420
Rating:	3.7VDC, 2700mAh, (Supplied by Rechargeable Li-ion Battery) or 5VDC (Supplied by external adapter for Charging rechargeable battery)
RF Transmission Frequency:	5180MHz – 5240MHz, 5745MHz – 5825MHz for 5GHzWIFI
Modulation:	802.11a: BPSK, QPSK, 16QAM, 64QAM
Antenna Type:	Internal antenna
Antenna Gain:	5GHz: 2.92dBi Max for Band1, 3.49dBi Max for Band4
Description of the EUT:	The equipment supports Bluetooth Low Energy/Bluetooth BR+EDR /WIFI functions. The TX and RX range is 2402MHz-2480MHz for Bluetooth, 2412MHz – 2462MHz for 2.4GHzWIFI, 5180MHz – 5240MHz, 5745MHz – 5825MHz for 5GHzWIFI

4 Summary of Test Standards

Test Standards	
FCC Part 15 Subpart E, October 1, 2020 Edition	PART 15 - RADIO FREQUENCY DEVICES Subpart E - Unlicensed National Information Infrastructure Devices

Test Method:

KDB 789033 D02 General UNII Test Procedures New Rules v02r01

KDB 905462 D02 UNII DFS Compliance Procedures New Rules v02

ANSI C63.10-2013, American National Standard for Testing Unlicensed Wireless Devices

5 Summary of Test Results

Technical Requirements			
FCC Part 15 Subpart E			
Test Condition	Test Result		
	Pass	Fail	N/A
15.207 Conducted Emission AC Power Port	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
15.407(e) Emission bandwidth	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
15.407(a) Maximum Conducted Output Power	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
15.407(a) Maximum Power Spectral Density	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
15.407(b)(1), 15.407(b)(2), 15.407(b)(3), 15.407(b)(4), 15.407(b)(8), 15.407(b)(9), 15.209 Unwanted Emissions	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
15.407(g) Frequencies Stability	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
15.407(h)* Dynamic Frequency Selection (DFS).	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
15.203 Antenna Requirement	<input checked="" type="checkbox"/> See note 1	<input type="checkbox"/>	<input type="checkbox"/>

Remark: The EUT operate as Clients Device without Radar Detection,

Note 1: The EUT uses an Internal antenna, which gain is 2.92dBi Max for Band1, 3.49dBi Max for Band4 for 5GHz. It is considered sufficiently to comply with the provisions of this section.

Note 2: * The EUT only support 5180MHz – 5240MHz, 5745MHz – 5825MHz, which is out of DFS band

6 General Remarks

Remarks

This submittal(s) (test report) is intended for FCC ID: 2AKMJ-PG915420, complies with Section 15.207, 15.203, 15.407 of the FCC Part 15, Subpart E.

The Equipment Under Test (EUT) is TABLET with Bluetooth Low Energy/Bluetooth BDR+EDR/WIFI functions.

The difference among all models is only model name.

Unless otherwise specified the model PG915420 was chosen as the representative model to perform full tests, and others model was deemed to fulfil relevant RF requirements without further testing.

This report is for the 5GHz Wi-Fi.

SUMMARY:

All tests according to the regulations cited on page 5 were

■ - Performed

□ - **Not** Performed

The Equipment Under Test

■ - **Fulfills** the general approval requirements.

□ - **Does not** fulfill the general approval requirements.

Sample Received Date: 2021-08-17

Testing Start Date: 2021-08-17

Testing End Date: 2021-09-06

- TÜV SÜD Certification and Testing (China) Co., Ltd. Shenzhen Branch –

Reviewed by:

Prepared by:

Tested by:






John Zhi
Project Manager

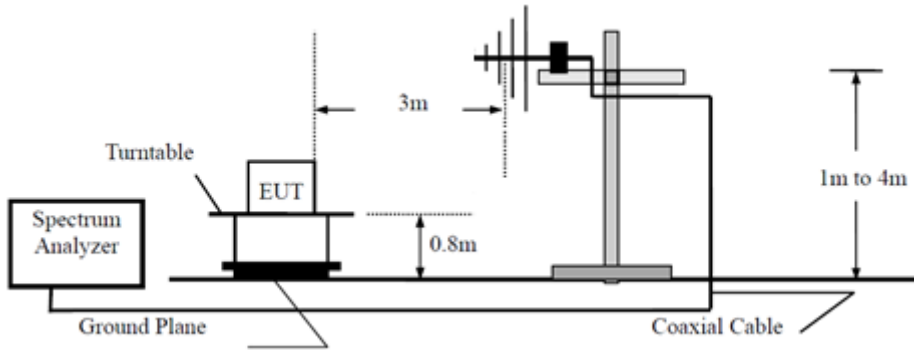
Joe Gu
Project Engineer

Carry Cai
Test Engineer

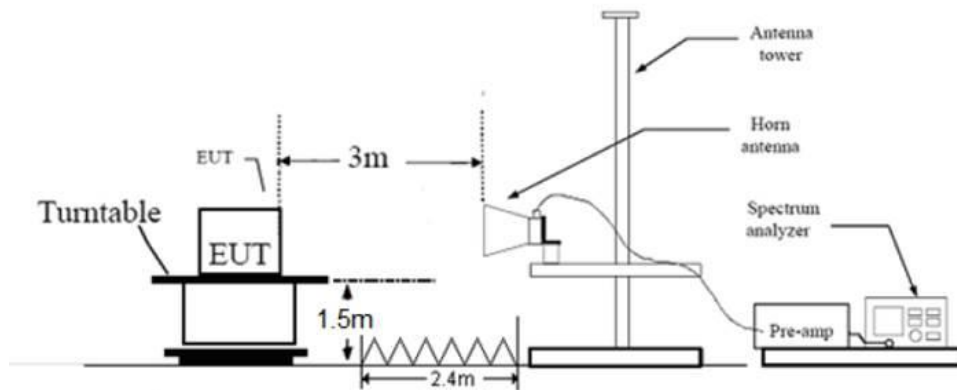
7 Test setups

7.1 Radiated test setups

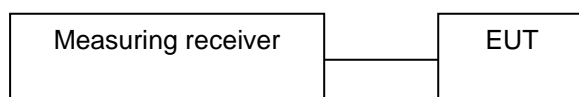
Below 1GHz



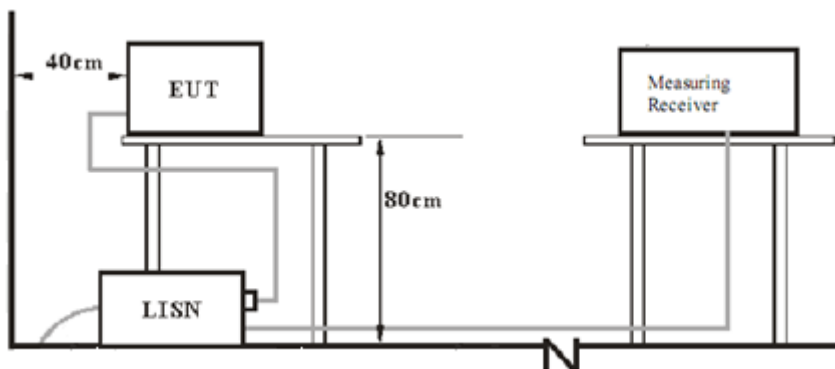
Above 1GHz



7.2 Conducted RF test setups



7.3 AC Power Line Conducted Emission test setups



8. Systems test configuration

Auxiliary Equipment Used during Test:

Name	Model	Manufacturer	S/N	Cal Due Date
Notebook	X220	Lenovo	--	--
Adaptor	A1357	Apple	--	--

The system was configured to channel:

Test Mode	Channel (MHz)		
802.11a	5G WIFI-Band 1		
	CH36 (5180MHz)	CH40 (5200MHz)	CH48 (5240MHz)
	5G WIFI-Band 4		
	CH149 (5745MHz),	CH157(5785MHz)	CH165 (5825MHz)

9 Technical Requirement

9.1 Conducted Emission

Test Method

1. The EUT was placed on a table, which is 0.8m above ground plane
2. The power line of the EUT is connected to the AC mains through a Artificial Mains Network (A.M.N.).
3. Maximum procedure was performed to ensure EUT compliance
4. A EMI test receiver is used to test the emissions from both sides of AC line

Limit

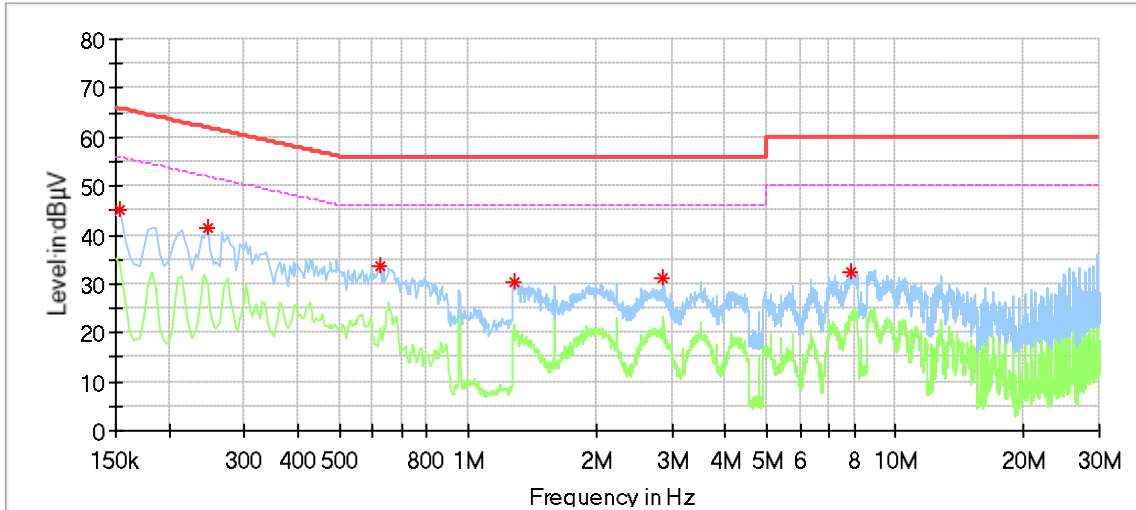
According to §15.207, conducted emissions limit as below:

Frequency MHz	QP Limit dB μ V	AV Limit dB μ V
0.150-0.500	66-56*	56-46*
0.500-5	56	46
5-30	60	50

Remark: "*" Decreasing linearly with logarithm of the frequency

Conducted Emission

Product Type : PEBBLE GEAR™ 7" KIDS TABLET
 M/N : PG915420
 Operating Condition : Charging + Transmit
 Test Specification : Power Line, Live
 Comment : AC 120V/60Hz (External adapter)



Frequency (MHz)	MaxPeak (dBµV)	Average (dBµV)	Limit (dBµV)	Margin (dB)	Line	Corr. (dB)
0.154000	45.17	---	65.78	20.61	L1	9.25
0.246000	41.45	---	61.89	20.44	L1	9.23
0.626000	33.67	---	56.00	22.33	L1	9.20
1.278000	30.52	---	56.00	25.48	L1	9.21
2.866000	31.34	---	56.00	24.66	L1	9.25
7.862000	32.29	---	60.00	27.71	L1	9.37

Remark :

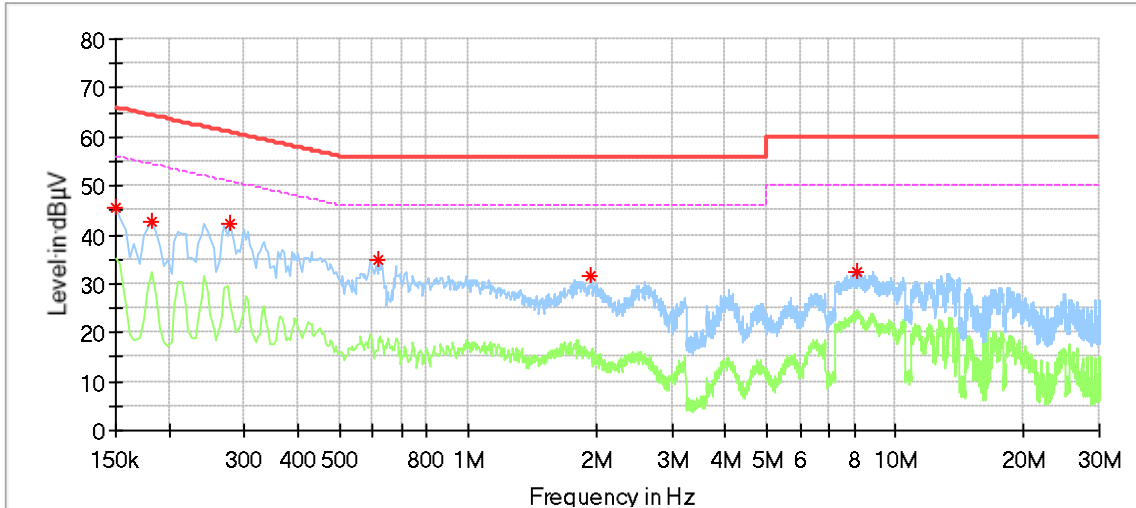
Level=Reading Level + Correction Factor

Correction Factor=Cable Loss + LISN Factor

(The Reading Level is recorded by software which is not shown in the sheet)

Conducted Emission

Product Type : PEBBLE GEAR™ 7" KIDS TABLET
 M/N : PG915420
 Operating Condition : Charging + Transmit
 Test Specification : Power Line, Live
 Comment : AC 120V/60Hz (External adapter)



Frequency (MHz)	MaxPeak (dBµV)	Average (dBµV)	Limit (dBµV)	Margin (dB)	Line	Corr. (dB)
0.150000	45.40	---	66.00	20.60	N	9.40
0.182000	42.60	---	64.39	21.79	N	9.40
0.278000	42.23	---	60.88	18.64	N	9.39
0.618000	34.82	---	56.00	21.18	N	9.39
1.942000	31.62	---	56.00	24.39	N	9.41
8.134000	32.50	---	60.00	27.50	N	9.58

Remark :

Level=Reading Level + Correction Factor

Correction Factor=Cable Loss + LISN Factor

(The Reading Level is recorded by software which is not shown in the sheet)

9.2 Emission bandwidth

The EUT was placed on 0.8m height table, the RF output of EUT was connected to the test receiver by RF cable. The path loss was compensated to the results for each measurement.

1、 Test Method of 26dB Bandwidth

According to C63.10

- a) Set RBW = approximately 1% of the emission bandwidth.
- b) Set the VBW > RBW.
- c) Detector = Peak.
- d) Trace mode = max hold.
- e) Measure the maximum width of the emission that is 26 dB down from the maximum of the emission. Compare this with the RBW setting of the analyzer. Readjust RBW and repeat measurement as needed until the RBW/EBW ratio is approximately 1%.

Limit: No limit

2、 Test Method of 6dB Bandwidth

According to C63.10

- a) Set RBW = 100KHz
- b) Set the video bandwidth (VBW) $\geq 3 \times$ RBW
- c) Detector = Peak.
- d) Trace mode = max hold.
- e) Sweep = auto couple.
- f) Allow the trace to stabilize.
- g) Measure the maximum width of the emission that is constrained by the frequencies associated with the two outermost amplitude points (upper and lower frequencies) that are attenuated by 6 dB relative to the maximum level measured in the fundamental emission.

Limit: ≥ 500 KHz

3、 Test Method of 99% Bandwidth

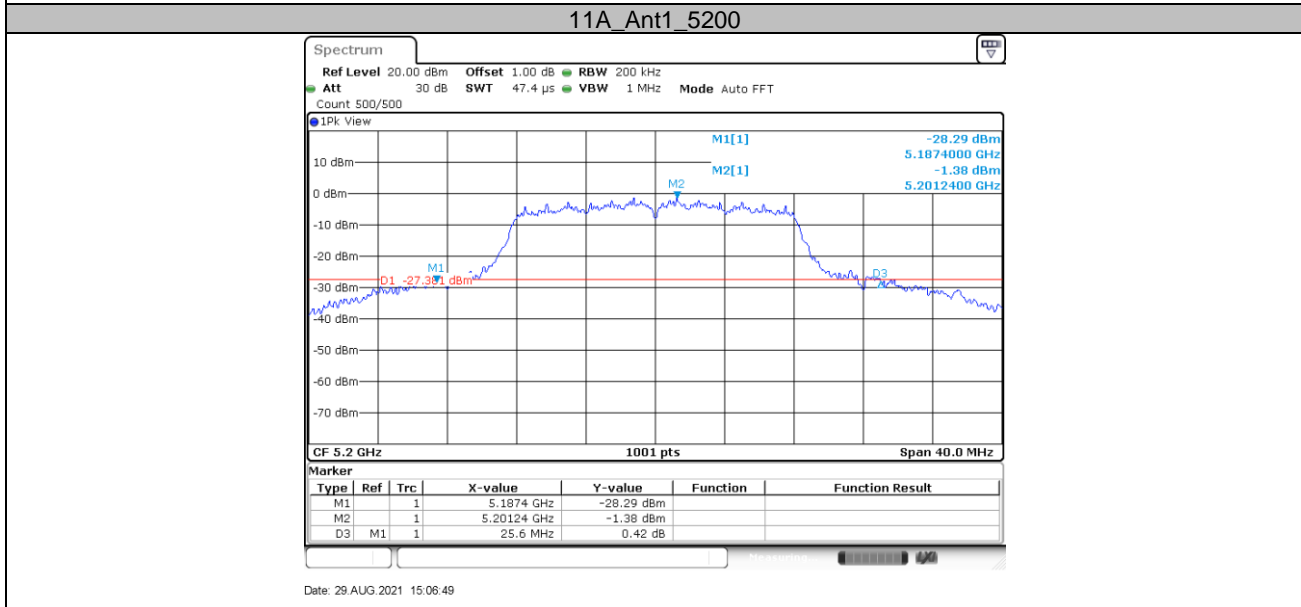
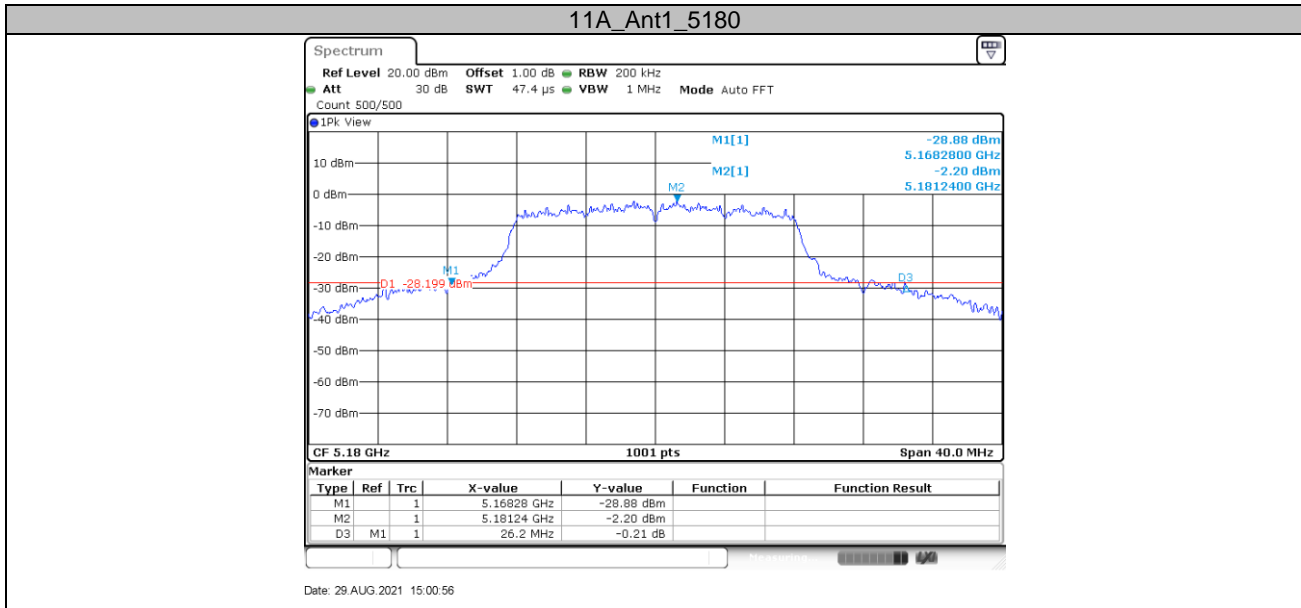
According to C63.10

- a) Set center frequency to the nominal EUT channel center frequency
- b) Set span = 1.5 times to 5.0 times the OBW.
- c) Set RBW = 1 % to 5 % of the OBW
- d) Set VBW $\geq 3 \cdot$ RBW
- e) Video averaging is not permitted. Where practical, a sample detection and single sweep mode shall be used. Otherwise, peak detection and max hold mode (until the trace stabilizes) shall be used.
- f) Use the 99 % power bandwidth function of the instrument (if available).
- g) If the instrument does not have a 99 % power bandwidth function, the trace data points are recovered and directly summed in power units. The recovered amplitude data points, beginning at the lowest frequency, are placed in a running sum until 0.5 % of the total is reached; that frequency is recorded as the lower frequency. The process is repeated until 99.5 % of the total is reached; that frequency is recorded as the upper frequency. The 99% occupied bandwidth is the difference between these two frequencies.

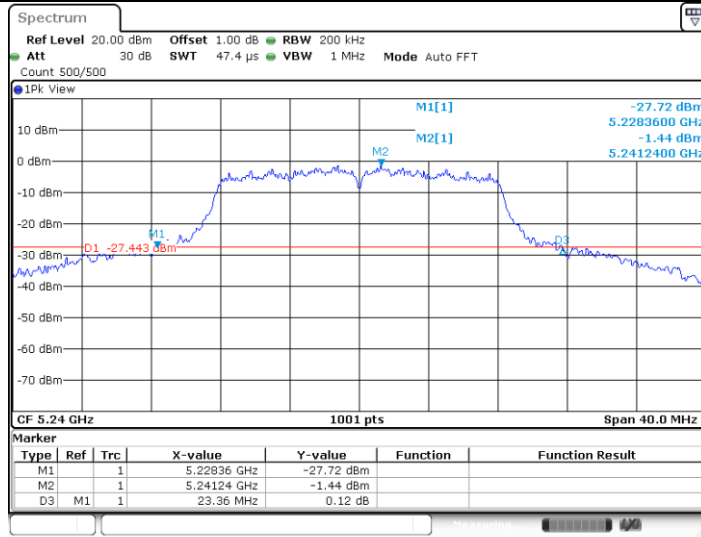
Limit: No limit

26dB Bandwidth Test result:

TestMode	Antenna	Channel [MHz]	26db EBW [MHz]	FL[MHz]	FH[MHz]	Limit[MHz]	Verdict
11A	Ant1	5180	26.200	5168.280	5194.480	---	PASS
		5200	25.600	5187.400	5213.000	---	PASS
		5240	23.360	5228.360	5251.720	---	PASS
		5745	19.640	5735.120	5754.760	---	PASS
		5785	19.920	5775.080	5795.000	---	PASS
		5825	19.560	5815.200	5834.760	---	PASS

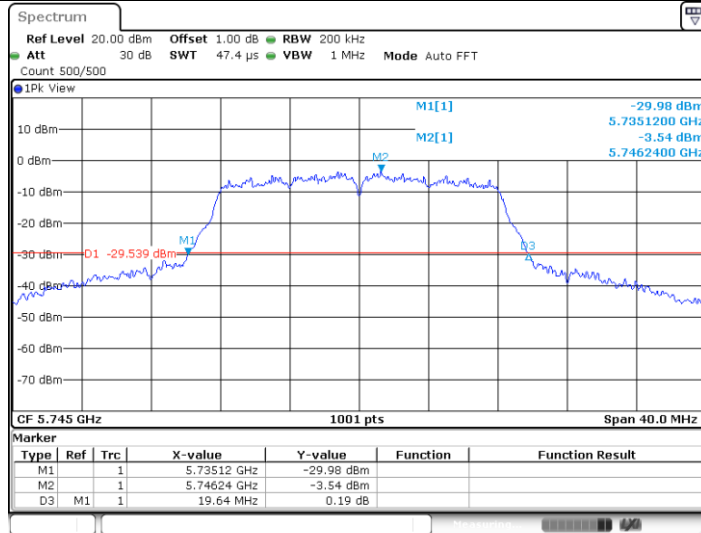


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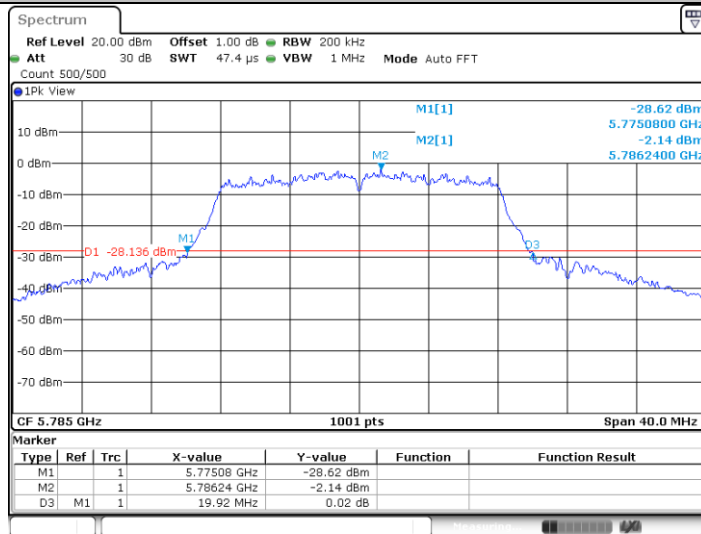
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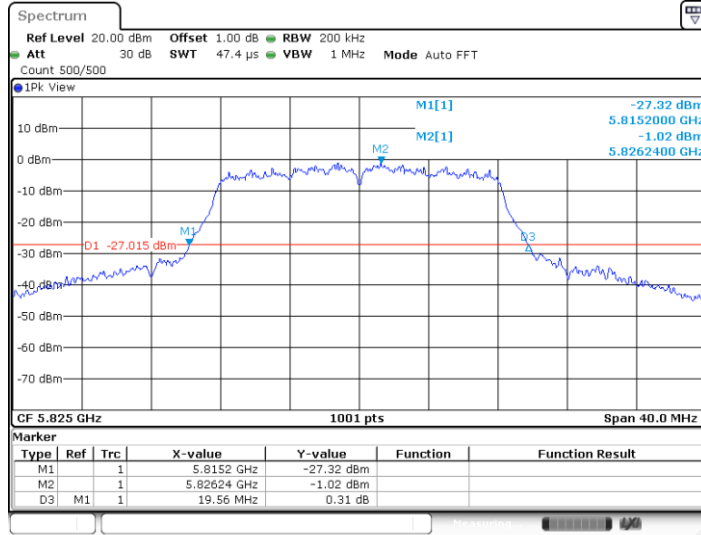
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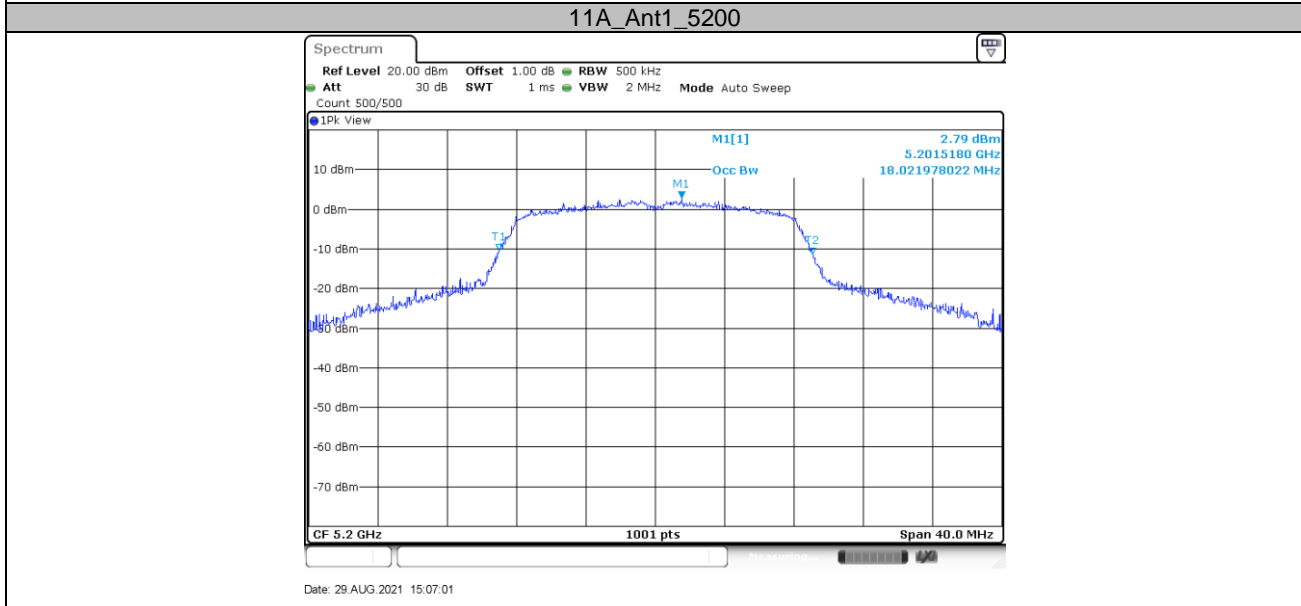
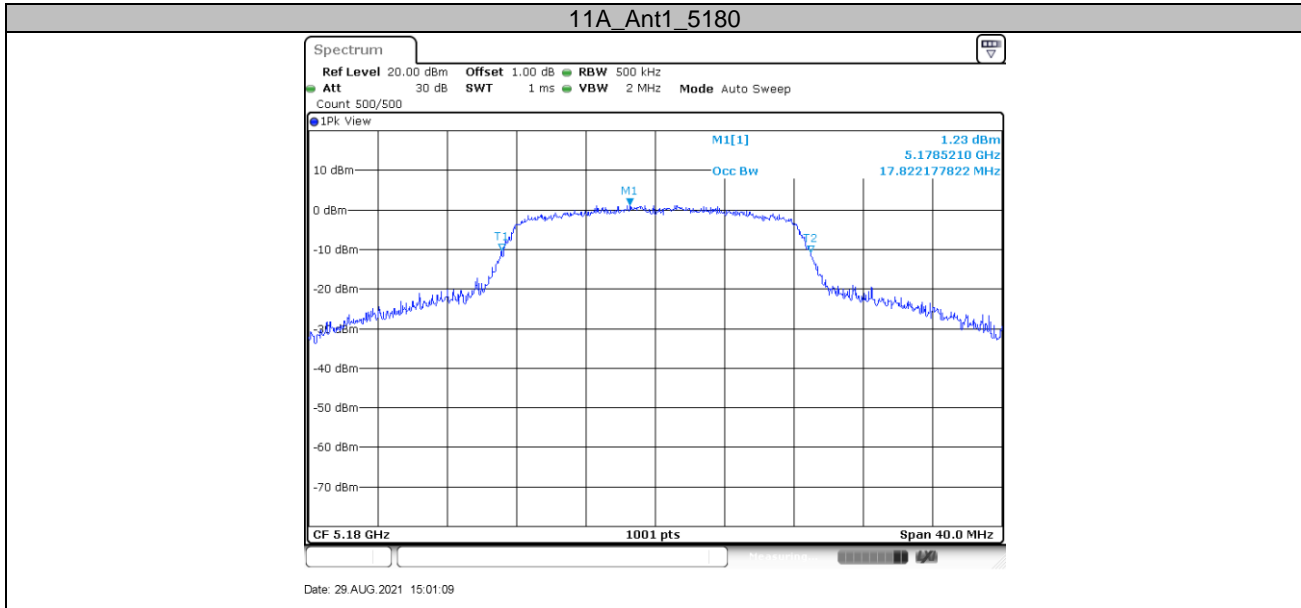
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11A_Ant1_5825

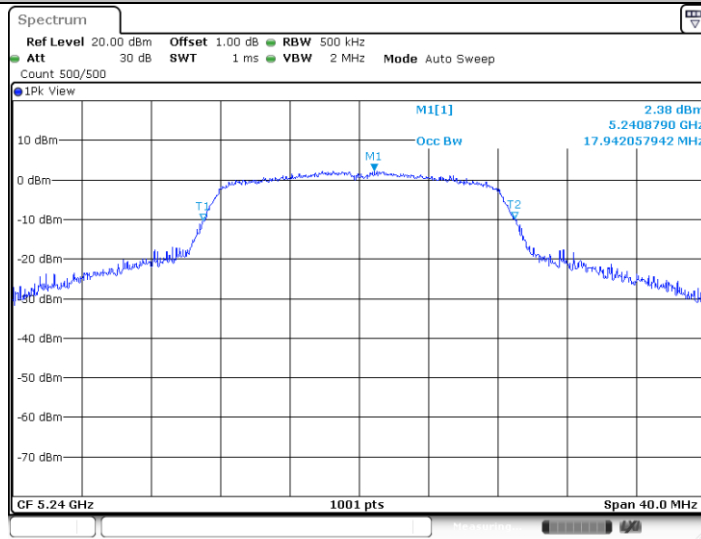


99% Bandwidth Test Result

TestMode	Antenna	Channel [MHz]	OCB [MHz]	FL[MHz]	FH[MHz]	Limit[MHz]	Verdict
11A	Ant1	5180	17.822	5171.129	5188.951	---	PASS
		5200	18.022	5191.009	5209.031	---	PASS
		5240	17.942	5231.009	5248.951	---	PASS
		5745	17.303	5736.329	5753.631	---	PASS
		5785	17.383	5776.369	5793.751	---	PASS
		5825	17.303	5816.369	5833.671	---	PASS

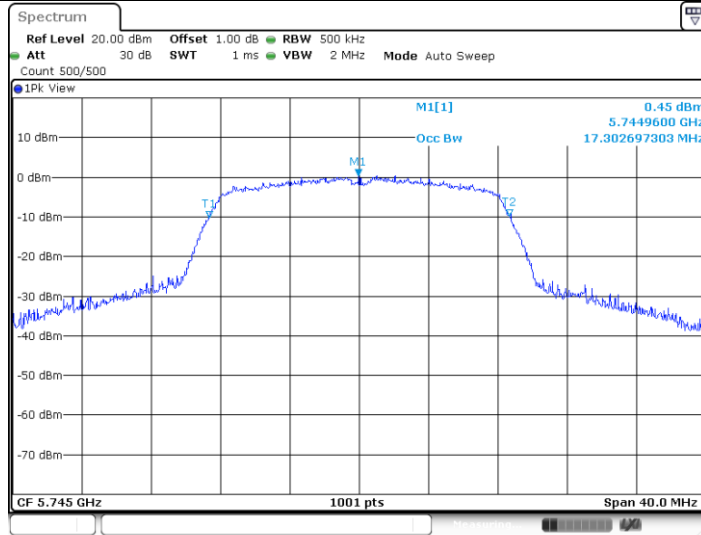


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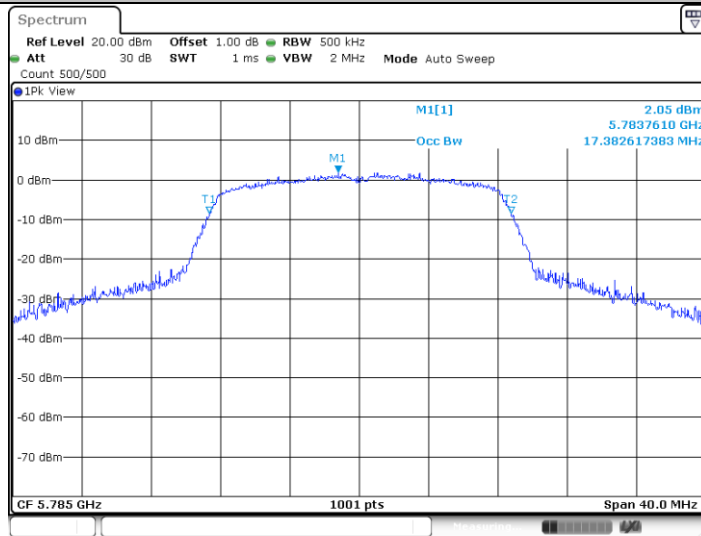
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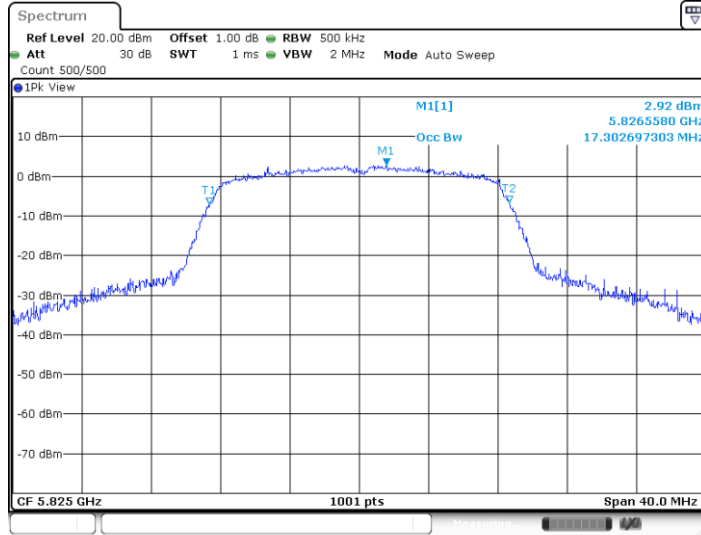
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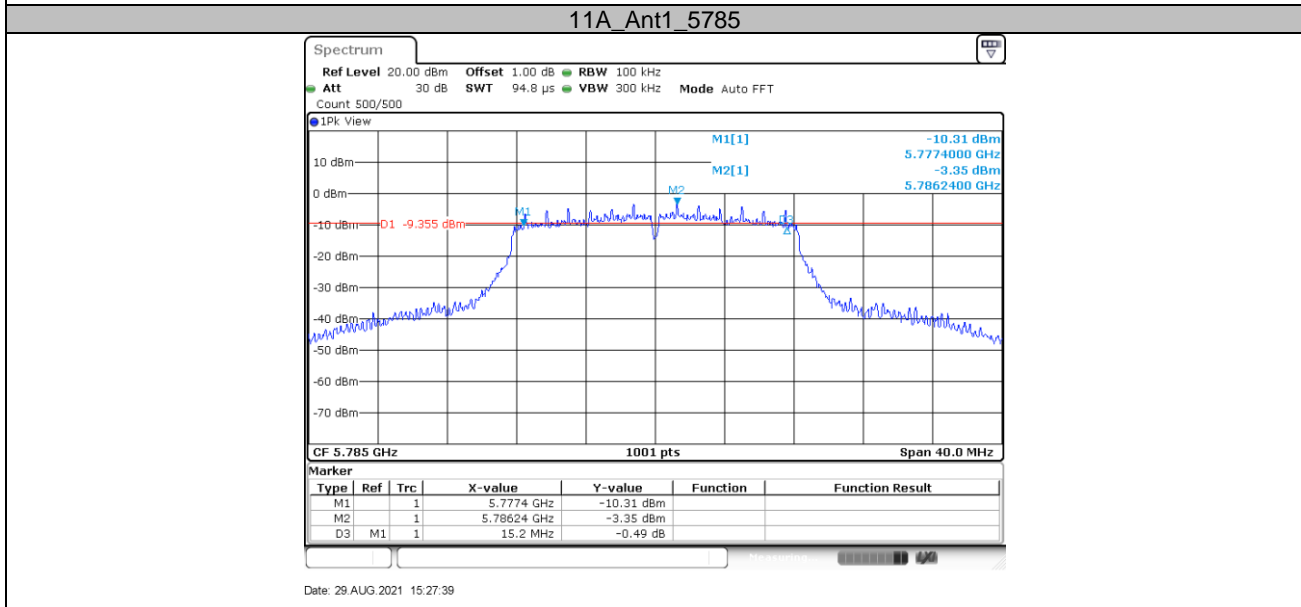
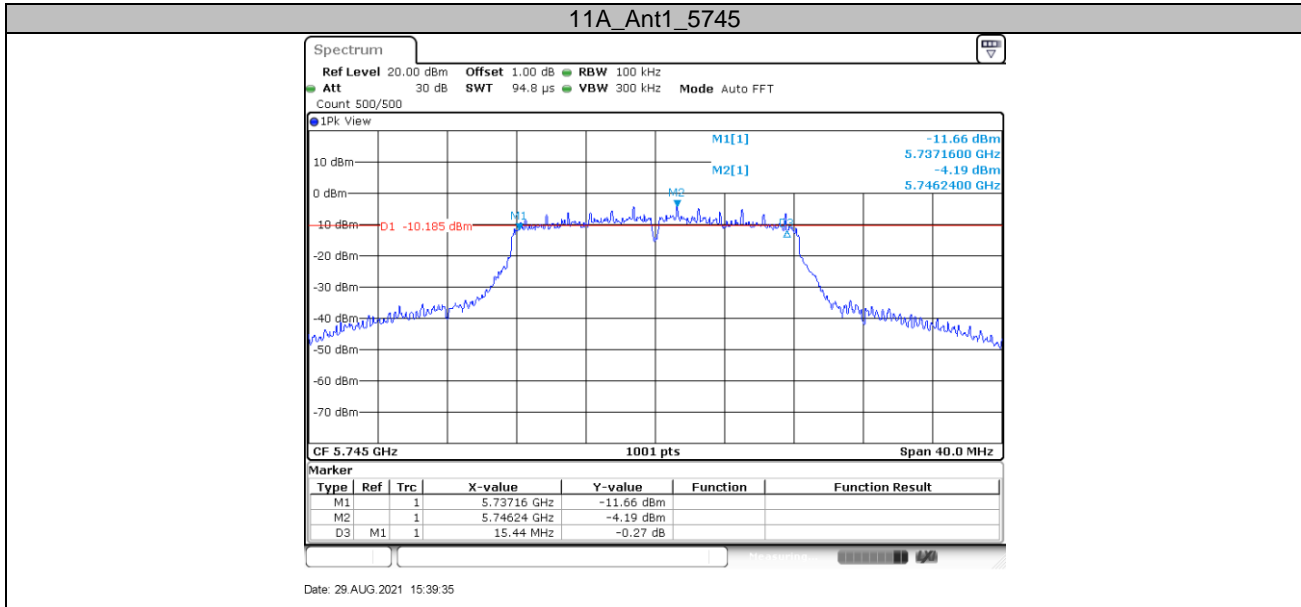
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11A_Ant1_5825



6dB Bandwidth Test Result

TestMode	Antenna	Channel [MHz]	6db EBW [MHz]	FL[MHz]	FH[MHz]	Limit[MHz]	Verdict
11A	Ant1	5745	15.440	5737.160	5752.600	0.5	PASS
		5785	15.200	5777.400	5792.600	0.5	PASS



9.3 Maximum conducted output power

Test Method

According to C63.10, the EUT was placed on 0.8m height table, the RF output of EUT was connected to the test power meter by RF cable. The path loss was compensated to the results for each measurement.

(1) Measurements may be performed using a wideband RF power meter with a thermocouple detector or equivalent if all of the following conditions are satisfied: The EUT is configured to transmit continuously or to transmit with a consistent duty cycle. At all times when the EUT is transmitting, it must be transmitting at its maximum power control level.

The integration period of the power meter exceeds the repetition period of the transmitted signal by at least a factor of five.

(2) If the transmitter does not transmit continuously, measure the duty cycle, x , of the transmitter output signal as described in II.B.

(3) Measure the average power of the transmitter. This measurement is an average over both the on and off periods of the transmitter.

(4) Adjust the measurement in dBm by adding $10 \log (1/x)$ where x is the duty cycle (e.g., $10 \log (1/0.25)$ if the duty cycle is 25%).

Limits:

For client devices in the 5.15-5.25 GHz band, the maximum conducted output power over the frequency band of operation shall not exceed 250 mW provided the maximum antenna gain does not exceed 6 dBi.

For the 5.25-5.35 GHz and 5.47-5.725 GHz bands, the maximum conducted output power over the frequency bands of operation shall not exceed the lesser of 250 mW or $11 \text{ dBm} + 10 \log B$, where B is the 26dB emission bandwidth in megahertz.

For the band 5.725-5.85 GHz, the maximum conducted output power over the frequency band of operation shall not exceed 1 W.

IEEE 802.11a modulation Test Result

Band	Channel	Frequency (MHz)	Max Conducted Power (dBm)	Max Conducted Power Limit (dBm)
5.2G Band	Low	5180	9.7	24
	Middle	5200	8.3	24
	High	5240	10.6	24
5.8G Band	Low	5745	8.3	30
	Middle	5785	10.7	30
	High	5825	10.9	30

9.4 Maximum power spectral density

Test Method

According to C63.10 The EUT was placed on 0.8m height table, the RF output of EUT was connected to the test receiver by RF cable. The path loss was compensated to the results for each measurement.

1. Create an average power spectrum for the EUT operating mode being tested by following the instructions in II.E.2. for measuring maximum conducted output power using a spectrum analyzer or EMI receiver: select the Masterpropriate test method (SA-1, SA-2, SA-3, or alternatives to each) and Masterply it up to, but not including, the step labeled, "Compute power..." (This procedure is required even if the maximum conducted output power measurement was performed using a power meter, method PM.)
 2. Use the peak search function on the instrument to find the peak of the spectrum and record its value.
 3. Make the following adjustments to the peak value of the spectrum, if Masterlicable:
 - a) If Method SA-2 or SA-2 Alternative was used, add $10 \log(1/x)$, where x is the duty cycle, to the peak of the spectrum.
 - b) If Method SA-3 Alternative was used and the linear mode was used in II.E.2.g)(viii), add 1 dB to the final result to compensate for the difference between linear averaging and power averaging.
 4. The result is the Maximum PSD over 1 MHz reference bandwidth.
 5. For devices operating in the bands 5.15–5.25 GHz, 5.25–5.35 GHz, and 5.47–5.725 GHz, the preceding procedures make use of 1 MHz RBW to satisfy directly the 1 MHz reference bandwidth specified in Section 15.407(a)(5). For devices operating in the band 5.725–5.85 GHz, the rules specify a measurement bandwidth of 500 kHz. Many spectrum analyzers do not have 500 kHz RBW, thus a narrower RBW may need to be used. The rules permit the use of RBWs less than 1 MHz, or 500 kHz, "provided that the measured power is integrated over the full reference bandwidth" to show the total power over the specified measurement bandwidth (i.e., 1 MHz, or 500 kHz). If measurements are performed using a reduced resolution bandwidth (< 1 MHz, or < 500 kHz) and integrated over 1 MHz, or 500 kHz bandwidth, the following adjustments to the procedures Masterply:
 - a) Set $RBW \geq 1/T$, where T is defined in II.B.I.a).
 - b) Set $VBW \geq 3$ RBW.
 - c) If measurement bandwidth of Maximum PSD is specified in 500 kHz, add $10 \log(500 \text{ kHz}/RBW)$ to the measured result, whereas RBW (< 500 kHz) is the reduced resolution bandwidth of the spectrum analyzer set during measurement.
 - d) If measurement bandwidth of Maximum PSD is specified in 1 MHz, add $10 \log(1 \text{ MHz}/RBW)$ to the measured result, whereas RBW (< 1 MHz) is the reduced resolution bandwidth of spectrum analyzer set during measurement.
 - e) Care must be taken to ensure that the measurements are performed during a period of continuous transmission or are corrected upward for duty cycle.
- Note: As a practical matter, it is recommended to use reduced RBW of 100 kHz for the II.F.5.c) and II.F.5.d), since RBW=100 kHz is available on nearly all spectrum analyzers.

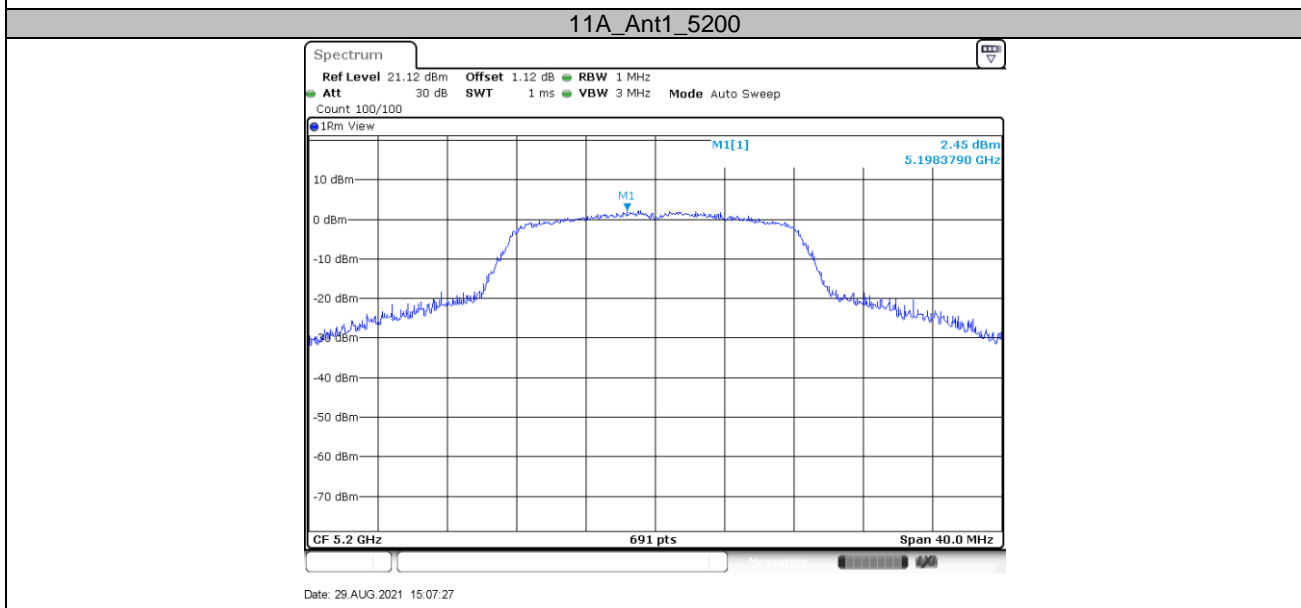
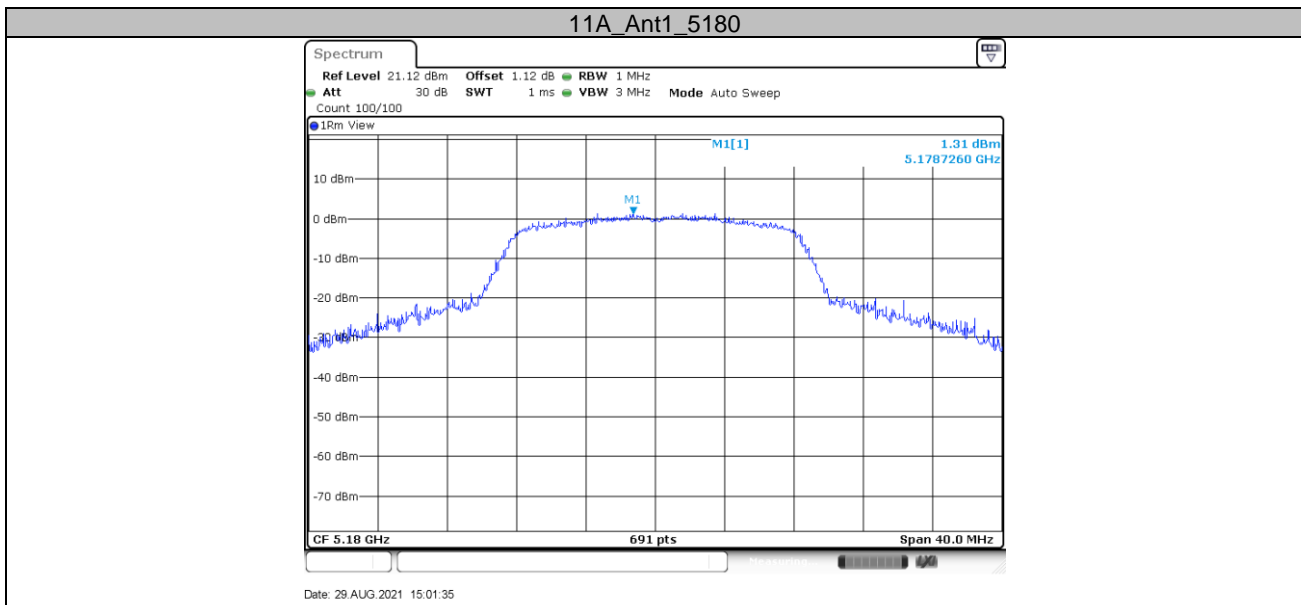
Limit:

The maximum power spectral density shall not exceed 11dBm for the 5.15-5.25GHz, 5.25-5.35GHz, 5.47-5.725 GHz Band in any 1 megahertz band.

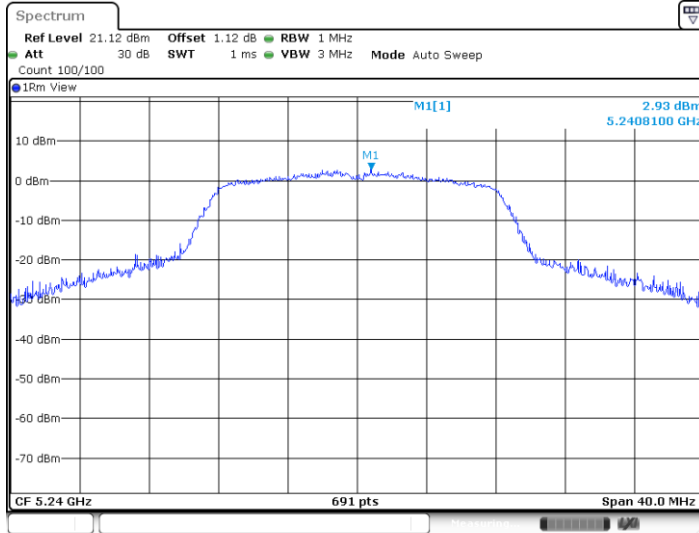
For the band 5.725-5.85 GHz, the maximum power spectral density shall not exceed 30 dBm in any 500kHz band.

Test Result

TestMode	Antenna	Channel(MHz)	Result(dBm/MHz)	Limit(dBm/MHz)	Verdict
11A	Ant1	5180	1.31	<=11	PASS
		5200	2.45	<=11	PASS
		5240	2.93	<=11	PASS
		5745	-0.92	<=30	PASS
		5785	1.02	<=30	PASS
		5825	1.85	<=30	PASS

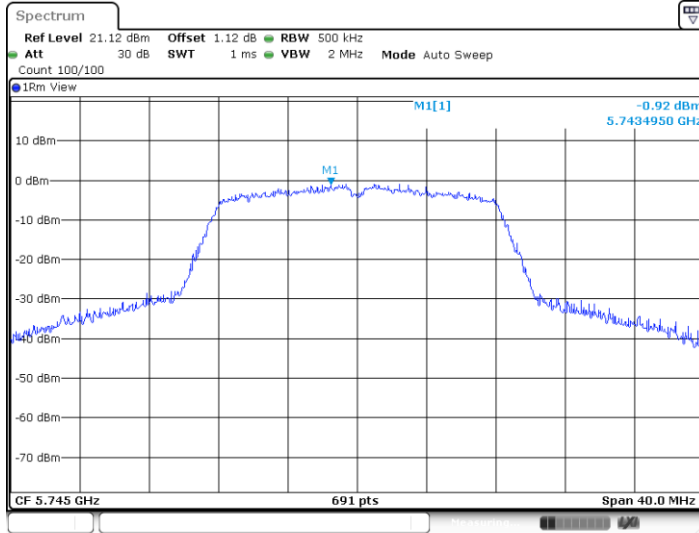


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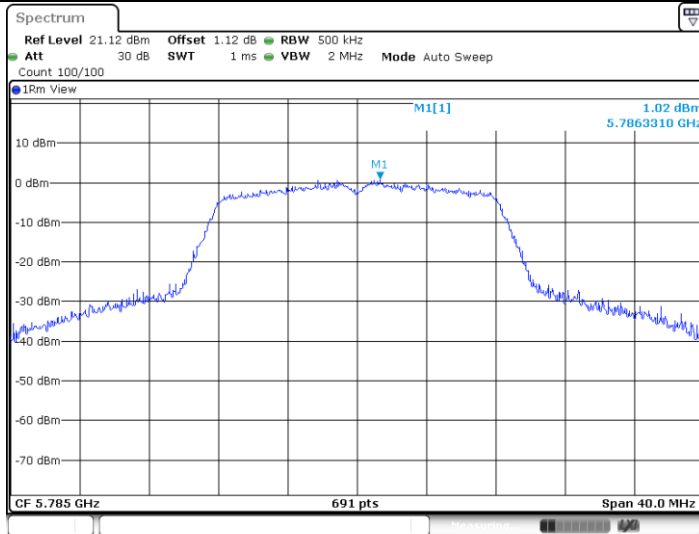
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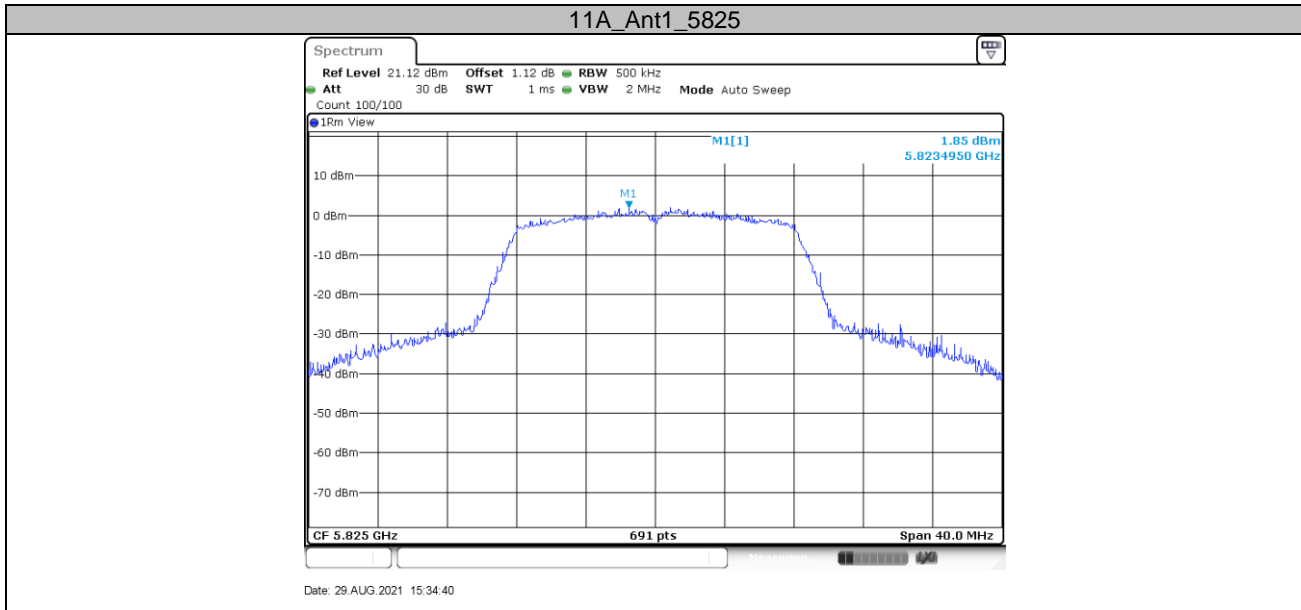


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11A_Ant1_5785



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9.5 Unwanted emissions

Transmitting spurious emission test result as below:

Test Method:

Radiated Mode:

1. The EUT was placed on a turn table which is 1.5m above ground plane for above 1GHz and 0.8m above ground for below 1GHz at 3meter chamber room for test. The table was rotated 360 degrees to determine the position of the highest radiation.
2. The EUT was set 3 meters away from the interference – receiving antenna, which was mounted on the top of a variable – height antenna tower.
3. The height of antenna is varied from one meter to four meters above the ground to determine the maximum value of the field strength. Both horizontal and vertical polarizations of the antenna are set to make the measurement.
4. For each suspected emission, the EUT was arranged to its worst case and then the antenna was tuned to heights from 1 meter to 4 meters and the rotatable table was turned
5. Use the following spectrum analyzer settings According to C63.10:
 For Below 1GHz
 Use the following spectrum analyzer settings:
 Span = wide enough to capture the peak level of the in-band emission and all spurious
 RBW = 100 KHz to 120KHz, VBW \geq RBW for peak measurement, Sweep = auto, Detector function = peak, Trace = max hold. For Peak unwanted emissions
 For Above 1GHz:
 Span = wide enough to capture the peak level of the in-band emission and all spurious
 RBW = 1MHz, VBW \geq RBW for peak measurement, Sweep = auto, Detector function = peak, Trace = max hold.
 Procedures for Average Unwanted Emissions Measurements above 1000 MHz
 a) Follow the requirements in II.G.3. “General Requirements for Unwanted Emissions Measurements.”
 b) Average emission levels shall be measured using one of the following two methods. c) Method AD (Average Detection): Primary method
 (i) RBW = 1 MHz.
 (ii) VBW \geq 3 MHz.
 (iii) Detector = power averaging (rms), if span/(# of points in sweep) \leq RBW/2. Satisfying this condition may require increasing the number of points in the sweep or reducing the span. If the condition is not satisfied, the detector mode shall be set to peak. As an alternative, the detector and averaging type may be set for linear voltage averaging. Some instruments require linear display mode in order to use linear voltage averaging. Log or dB averaging shall not be used.
 (v) Sweep time = auto.
 (vi) Perform a trace average of at least 100 traces if the transmission is continuous. If the transmission is not continuous, the number of traces shall be increased by a factor of 1/x, where x is the duty cycle. For example, with 50% duty cycle, at least 200 traces shall be averaged. (If a specific emission is demonstrated to be

continuous—i.e., 100% duty cycle—rather than turning on and off with the transmit cycle, at least 100 traces shall be averaged.)

(vii) If tests are performed with the EUT transmitting at a duty cycle less than 98%, a correction factor shall be added to the measurement results prior to comparing to the emission limit in order to compute the emission level that would have been measured had the test been performed at 100% duty cycle. The correction factor is computed as follows:

If power averaging (rms) mode was used in II.G.6.c)(iv), the correction factor is $10 \log (1/x)$, where x is the duty cycle. For example, if the transmit duty cycle was 50%, then 3 dB must be added to the measured emission levels. If linear voltage averaging mode was used in II.G.6.c)(iv), the correction factor is $20 \log (1/x)$, where x is the duty cycle. For example, if the transmit duty cycle was 50%, then 6 dB must be added to the measured emission levels. If a specific emission is demonstrated to be continuous (100% duty cycle) rather than turning on and off with the transmit cycle, no duty cycle correction is required for that emission.

Limit

According to part 15.407b (1) (2) (3) (4)

For transmitters operating in the 5.15-5.25 GHz band: All emissions outside of the 5.15-5.35 GHz band shall not exceed an e.i.r.p. of -27 dBm/MHz.

For transmitters operating in the 5.25-5.35 GHz band: All emissions outside of the 5.15-5.35 GHz band shall not exceed an e.i.r.p. of -27 dBm/MHz.

For transmitters operating in the 5.47-5.725 GHz band: All emissions outside of the 5.47-5.725 GHz band shall not exceed an e.i.r.p. of -27 dBm/MHz.

For transmitters operating in the 5.725-5.85 GHz band: All emissions shall be limited to a level of -27 dBm/MHz at 75 MHz or more above or below the band edge increasing linearly to 10 dBm/MHz at 25 MHz above or below the band edge, and from 25 MHz above or below the band edge increasing linearly to a level of 15.6 dBm/MHz at 5 MHz above or below the band edge, and from 5 MHz above or below the band edge increasing linearly to a level of 27 dBm/MHz at the band edge.

According to part 15.407b (8), Unwanted emissions below 1 GHz must comply with the general field strength limits set forth in §15.209.

According to part 15.407b (9), The provisions of §15.205 apply to intentional radiators operating under this section.

Note: According to C63.10, the Conversion Factors between E[dBμV/m] and EIRP[dBm] as below:

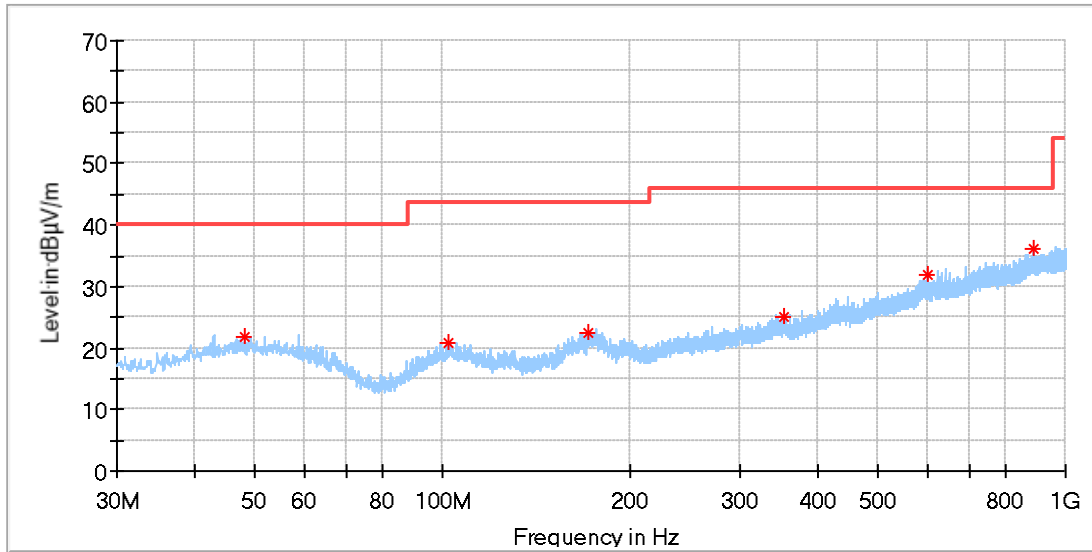
$$E[\text{dB}\mu\text{V}/\text{m}] = \text{EIRP}[\text{dBm}] + 95.2, \text{ for } d = 3 \text{ meters.}$$

According to C63.10, if the peak (or quasi-peak) measured value complies with the average limit, it is unnecessary to perform an average measurement, so AV emission value did not show in below table if the peak value complies with average limit.

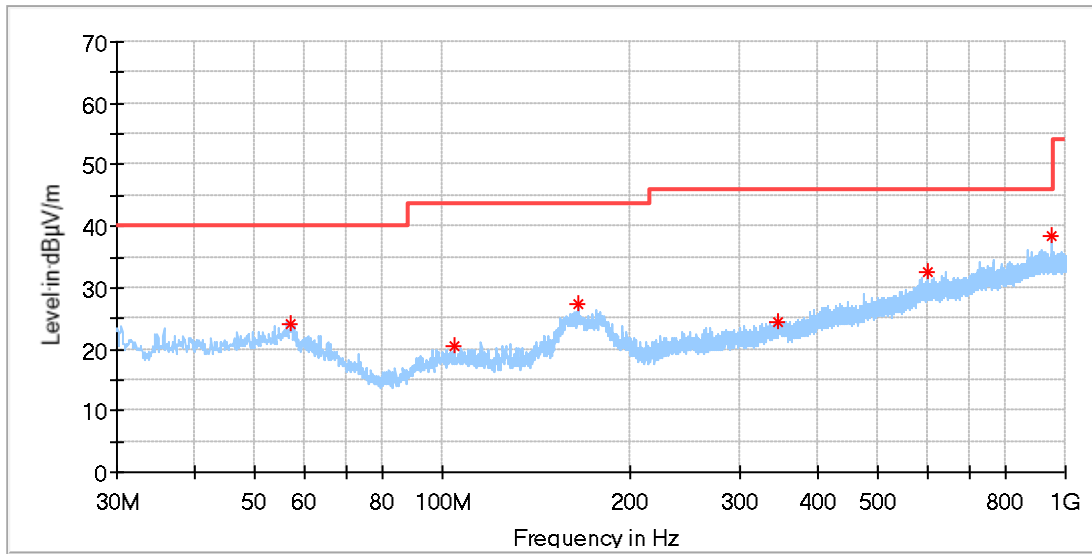
Radiated Mode:

Transmitting spurious emission test result as below:

Below 1G:



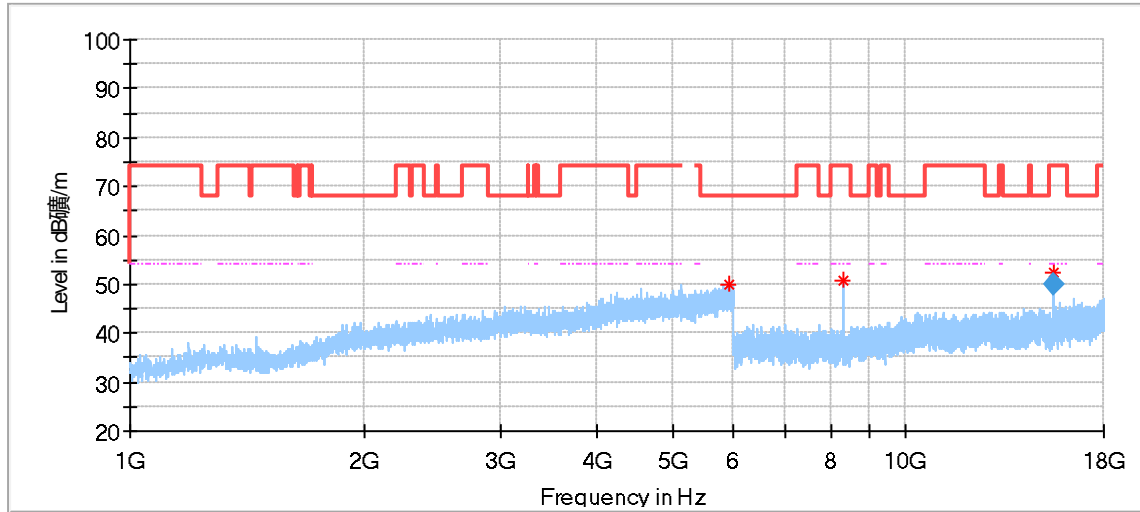
Frequency (MHz)	MaxPeak (dBµV/m)	Limit (dBµV/m)	Margin (dB)	Height (cm)	Pol	Azimuth (deg)	Corr. (dB/m)
48.066250	21.93	40.00	18.07	100.0	H	355.0	18.03
102.083125	20.76	43.50	22.74	200.0	H	0.0	16.62
170.831875	22.49	43.50	21.01	200.0	H	38.0	13.77
352.403750	25.17	46.00	20.83	100.0	H	0.0	20.83
601.026875	31.88	46.00	14.12	100.0	H	163.0	25.83
887.722500	36.06	46.00	9.94	100.0	H	139.0	29.47



Frequency (MHz)	MaxPeak (dBµV/m)	Limit (dBµV/m)	Margin (dB)	Height (cm)	Pol	Azimuth (deg)	Corr. (dB/m)
56.917500	24.15	40.00	15.85	100.0	V	0.0	17.69
104.326250	20.35	43.50	23.15	200.0	V	0.0	16.60
164.708750	27.29	43.50	16.21	100.0	V	134.0	13.61
345.310625	24.57	46.00	21.43	200.0	V	0.0	20.58
602.845625	32.45	46.00	13.55	100.0	V	209.0	25.85
948.590000	38.46	46.00	7.54	100.0	V	5.0	29.94

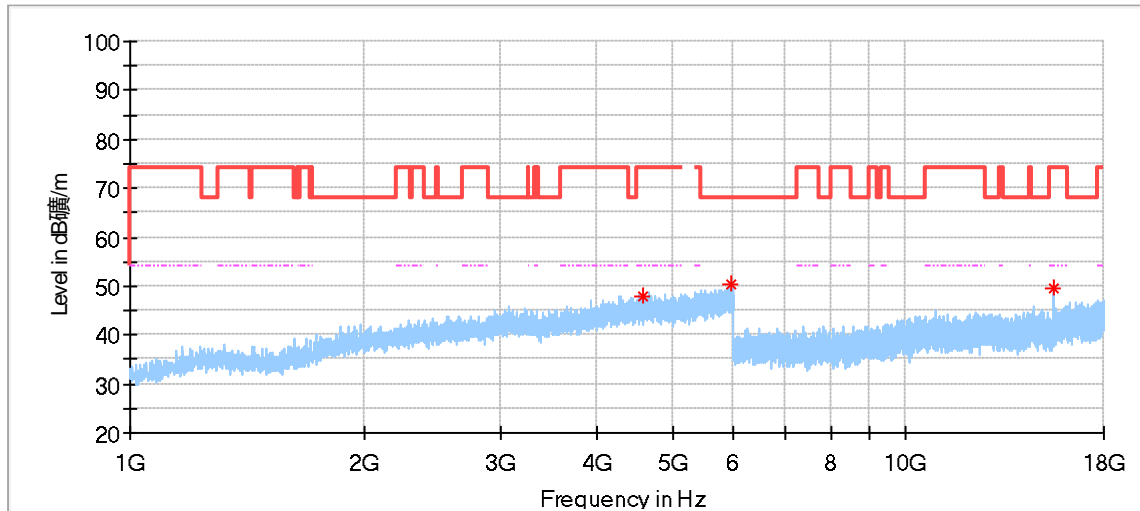
Remark: The emissions above the limit are fundamental working frequencies.

802.11A Modulation 5180MHz Test Result

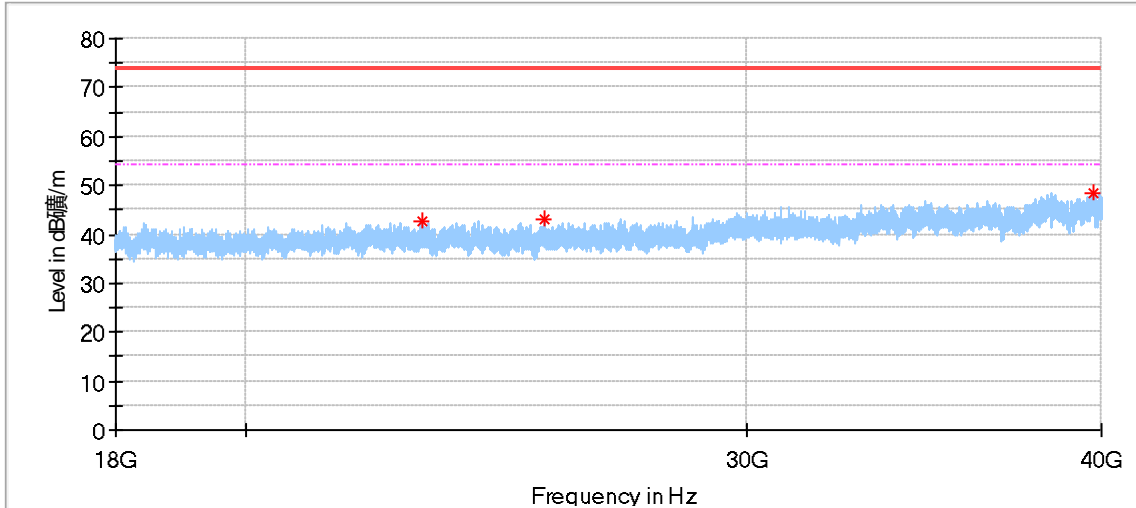


Frequency (MHz)	MaxPeak (dBµV/m)	Limit (dBµV/m)	Margin (dB)	Height (cm)	Pol	Azimuth (deg)	Corr. (dB/m)
5924.500000	49.99	68.20	18.21	150.0	H	246.0	6.55
8288.000000	50.70	74.00	23.30	150.0	H	106.0	8.25
15533.000000	52.39	74.00	21.61	150.0	H	78.0	14.10

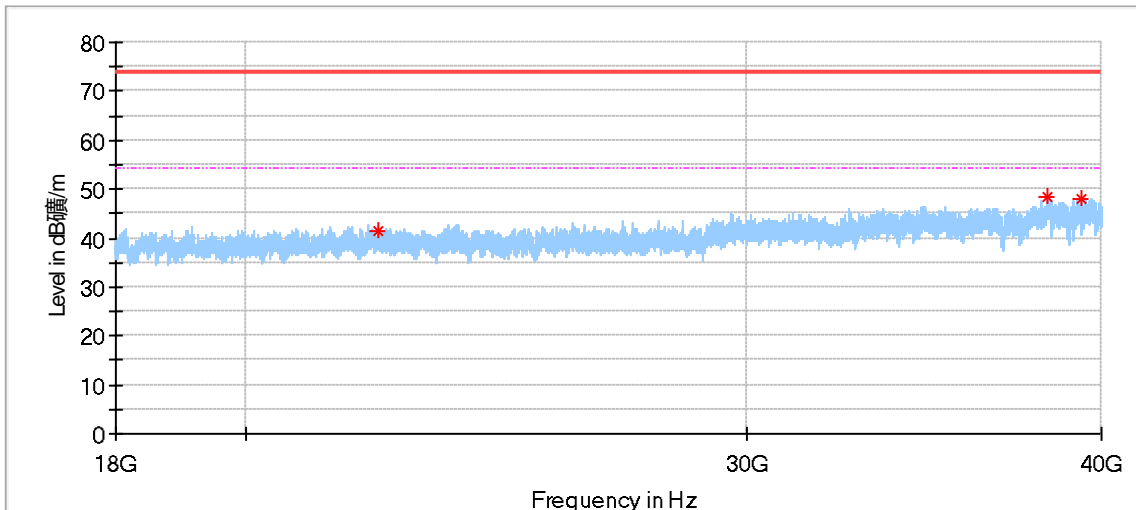
Frequency (MHz)	Average (dBµV/m)	Limit (dBµV/m)	Margin (dB)	Height (cm)	Pol	Azimuth (deg)	Corr. (dB/m)
15533.000000	49.79	54.00	4.21	150.0	H	78.0	14.10



Frequency (MHz)	MaxPeak (dBµV/m)	Limit (dBµV/m)	Margin (dB)	Height (cm)	Pol	Azimuth (deg)	Corr. (dB/m)
4582.500000	47.77	74.00	26.23	150.0	V	80.0	3.93
5968.500000	50.33	68.20	17.87	150.0	V	97.0	6.63
15544.500000	49.59	74.00	24.41	150.0	V	244.0	14.15

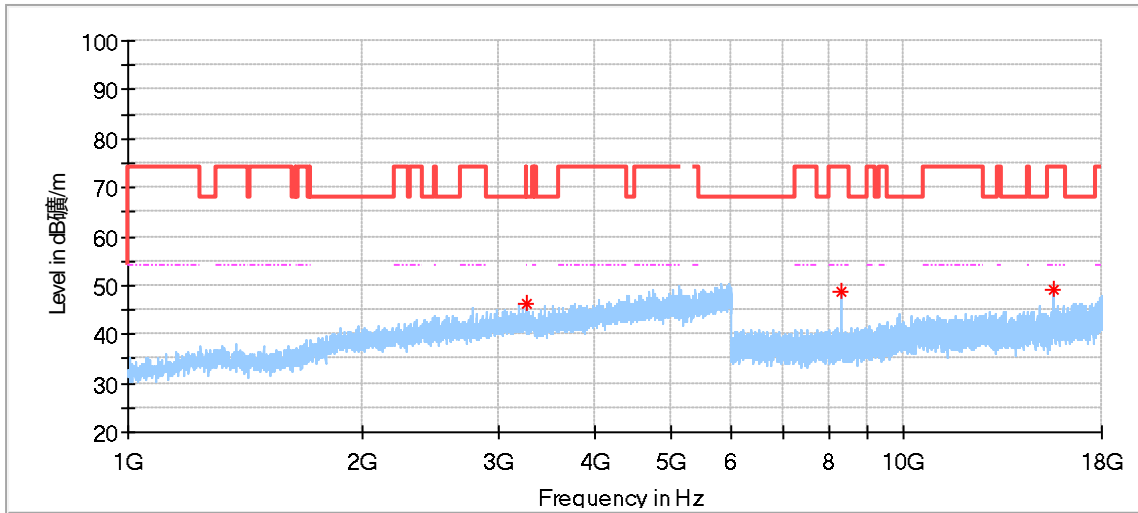


Frequency (MHz)	MaxPeak (dBµV/m)	Limit (dBµV/m)	Margin (dB)	Height (cm)	Pol	Azimuth (deg)	Corr. (dB/m)
23063.437500	42.85	74.00	31.15	150.0	H	356.0	0.53
25479.312500	42.99	74.00	31.01	150.0	H	249.0	1.46
39722.937500	48.50	74.00	25.50	150.0	H	249.0	7.65

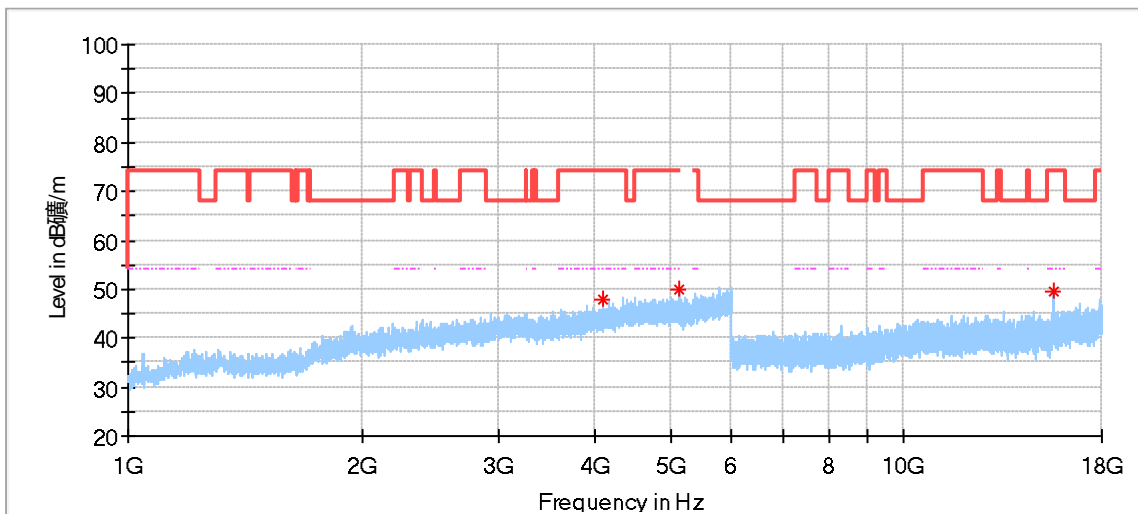


Frequency (MHz)	MaxPeak (dBµV/m)	Limit (dBµV/m)	Margin (dB)	Height (cm)	Pol	Azimuth (deg)	Corr. (dB/m)
22277.625000	41.38	74.00	32.62	150.0	V	312.0	0.31
38257.187500	48.45	74.00	25.55	150.0	V	126.0	6.24
39355.125000	47.92	74.00	26.08	150.0	V	141.0	6.32

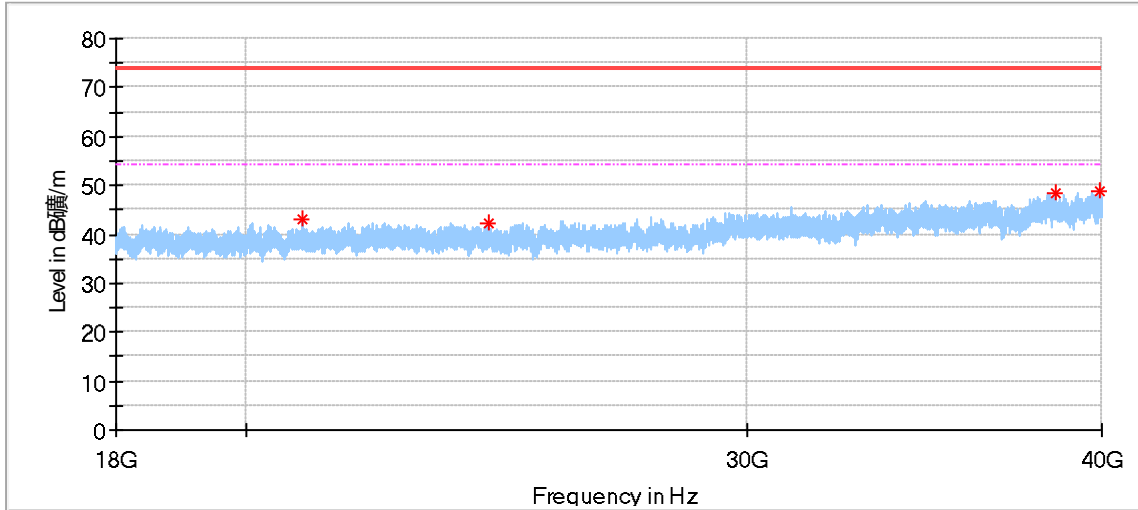
802.11A Modulation 5200MHz Test Result



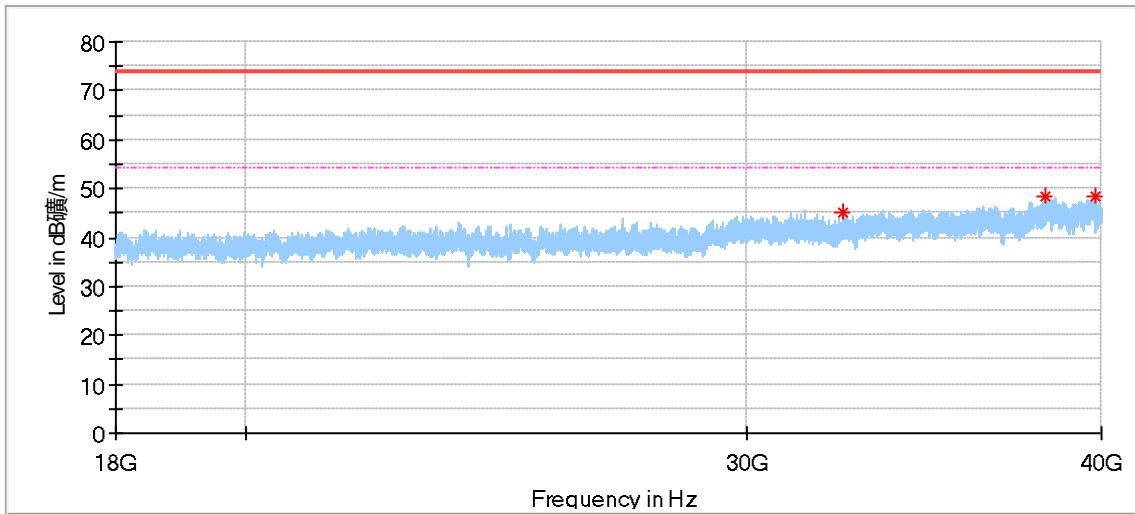
Frequency (MHz)	MaxPeak (dBµV/m)	Limit (dBµV/m)	Margin (dB)	Height (cm)	Pol	Azimuth (deg)	Corr. (dB/m)
3256.500000	46.20	68.20	22.00	150.0	H	133.0	0.36
8320.000000	48.72	74.00	25.28	150.0	H	105.0	8.26
15602.000000	49.31	74.00	24.69	150.0	H	74.0	14.40



Frequency (MHz)	MaxPeak (dBµV/m)	Limit (dBµV/m)	Margin (dB)	Height (cm)	Pol	Azimuth (deg)	Corr. (dB/m)
4105.500000	47.84	74.00	26.16	150.0	V	148.0	2.60
5123.000000	49.98	74.00	24.02	150.0	V	9.0	5.29
15595.000000	49.64	74.00	24.36	150.0	V	240.0	14.37

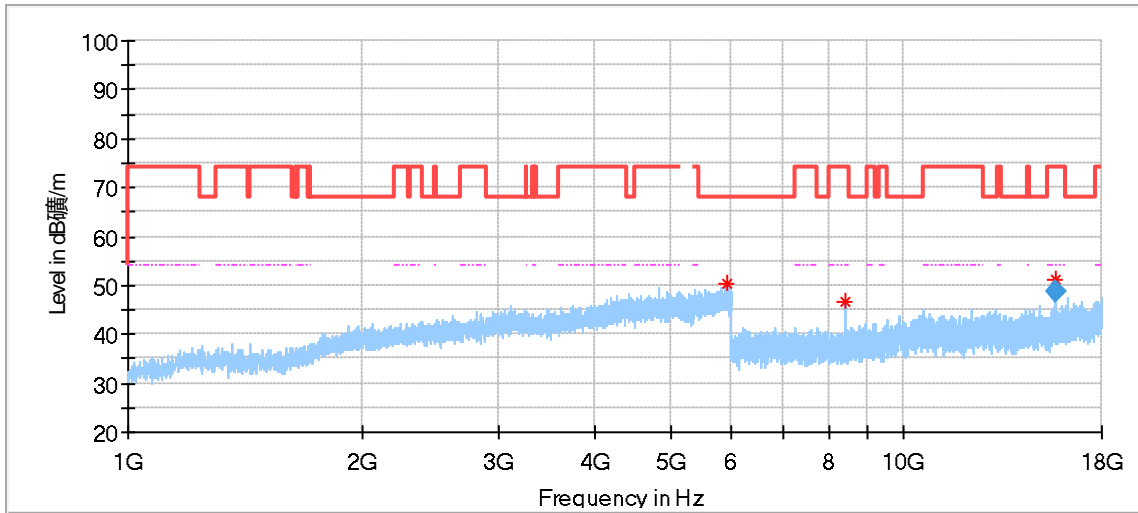


Frequency (MHz)	MaxPeak (dBµV/m)	Limit (dBµV/m)	Margin (dB)	Height (cm)	Pol	Azimuth (deg)	Corr. (dB/m)
20940.437500	42.93	74.00	31.07	150.0	H	31.0	-0.77
24338.750000	42.34	74.00	31.66	150.0	H	0.0	0.55
38513.625000	48.52	74.00	25.48	150.0	H	357.0	6.51
39941.562500	48.89	74.00	25.11	150.0	H	323.0	8.05



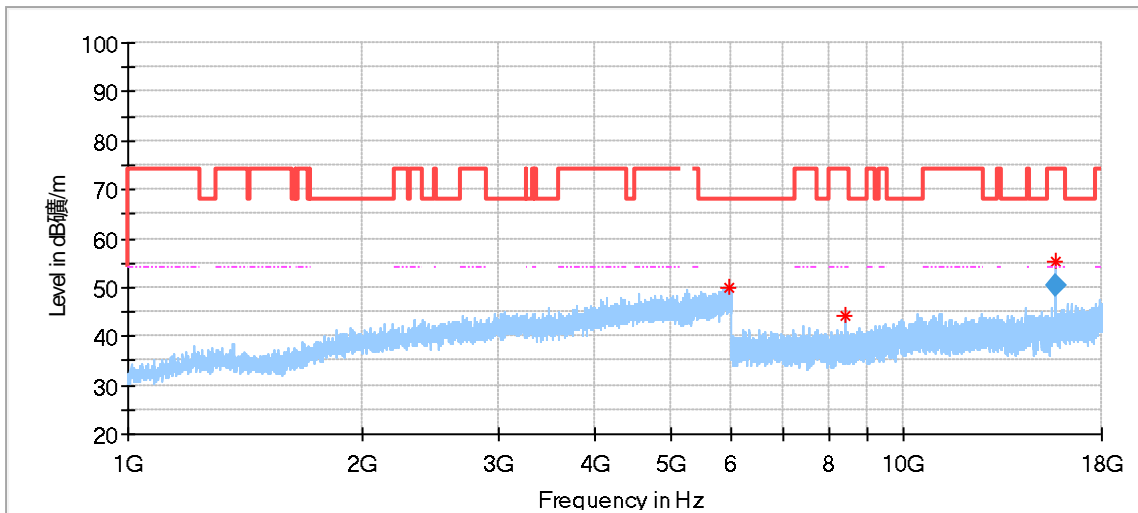
Frequency (MHz)	MaxPeak (dBµV/m)	Limit (dBµV/m)	Margin (dB)	Height (cm)	Pol	Azimuth (deg)	Corr. (dB/m)
32454.000000	45.25	74.00	28.75	150.0	V	127.0	1.94
38210.437500	48.57	74.00	25.43	150.0	V	93.0	6.03
39774.500000	48.45	74.00	25.55	150.0	V	1.0	7.83

802.11A Modulation 5240MHz Test Result



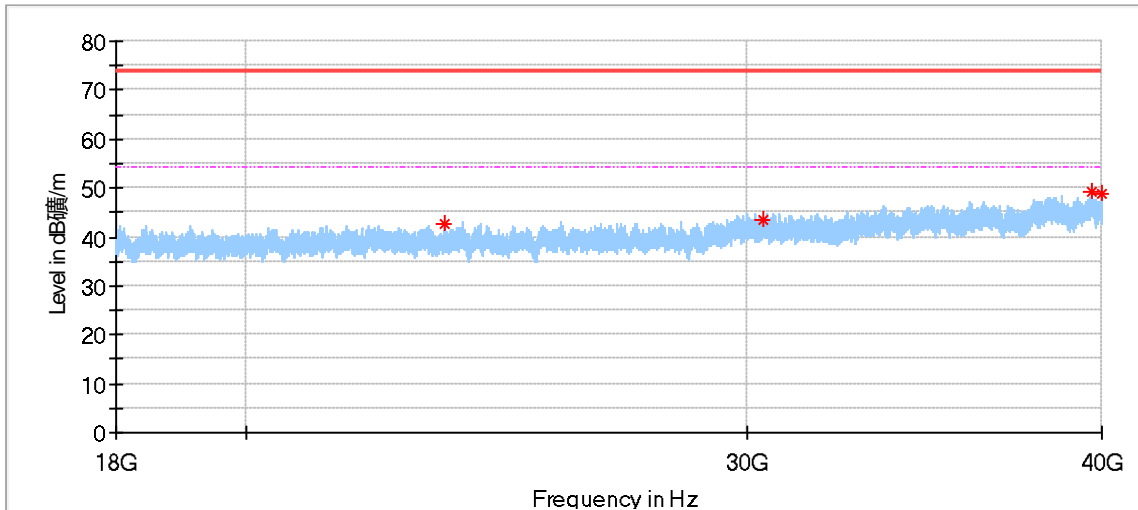
Frequency (MHz)	MaxPeak (dBµV/m)	Limit (dBµV/m)	Margin (dB)	Height (cm)	Pol	Azimuth (deg)	Corr. (dB/m)
5926.000000	50.47	68.20	17.73	150.0	H	0.0	6.55
8384.500000	46.61	74.00	27.39	150.0	H	102.0	8.05
15714.000000	51.28	74.00	22.72	150.0	H	157.0	14.75

Frequency (MHz)	Average (dBµV/m)	Limit (dBµV/m)	Margin (dB)	Height (cm)	Pol	Azimuth (deg)	Corr. (dB/m)
15714.000000	48.76	54.00	5.24	150.0	H	157.0	14.75

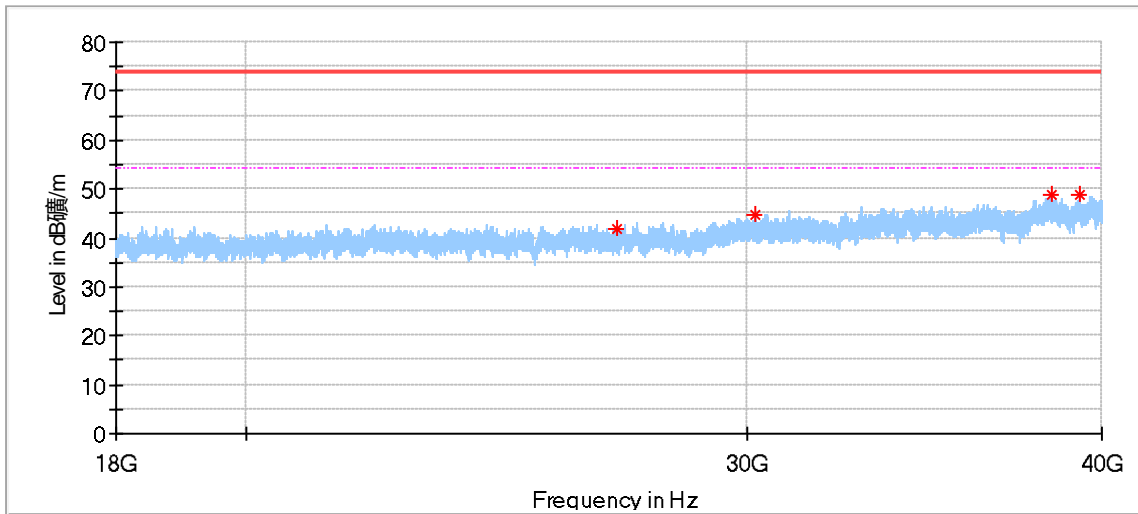


Frequency (MHz)	MaxPeak (dBµV/m)	Limit (dBµV/m)	Margin (dB)	Height (cm)	Pol	Azimuth (deg)	Corr. (dB/m)
5941.500000	49.88	68.20	18.32	150.0	V	67.0	6.54
8384.000000	44.31	74.00	29.69	150.0	V	102.0	8.05
15725.500000	55.19	74.00	18.81	150.0	V	47.0	14.79

Frequency (MHz)	Average (dBµV/m)	Limit (dBµV/m)	Margin (dB)	Height (cm)	Pol	Azimuth (deg)	Corr. (dB/m)
15725.500000	50.20	54.00	3.80	150.0	V	47.0	14.79

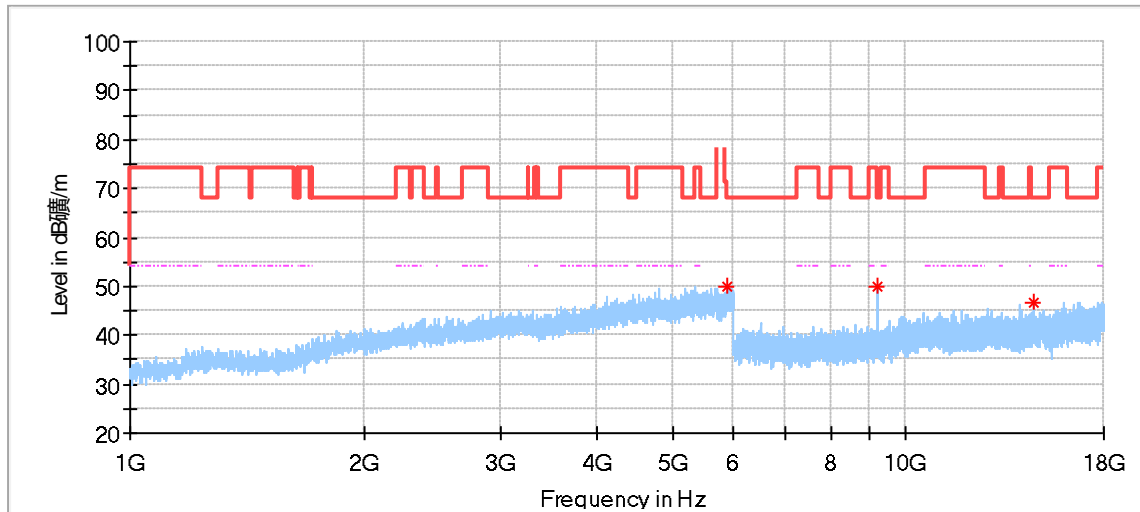


Frequency (MHz)	MaxPeak (dBµV/m)	Limit (dBµV/m)	Margin (dB)	Height (cm)	Pol	Azimuth (deg)	Corr. (dB/m)
23500.687500	42.71	74.00	31.29	150.0	H	58.0	0.22
30391.500000	43.49	74.00	30.51	150.0	H	278.0	2.07
39665.875000	49.39	74.00	24.61	150.0	H	356.0	7.51
39996.562500	48.80	74.00	25.20	150.0	H	229.0	7.86

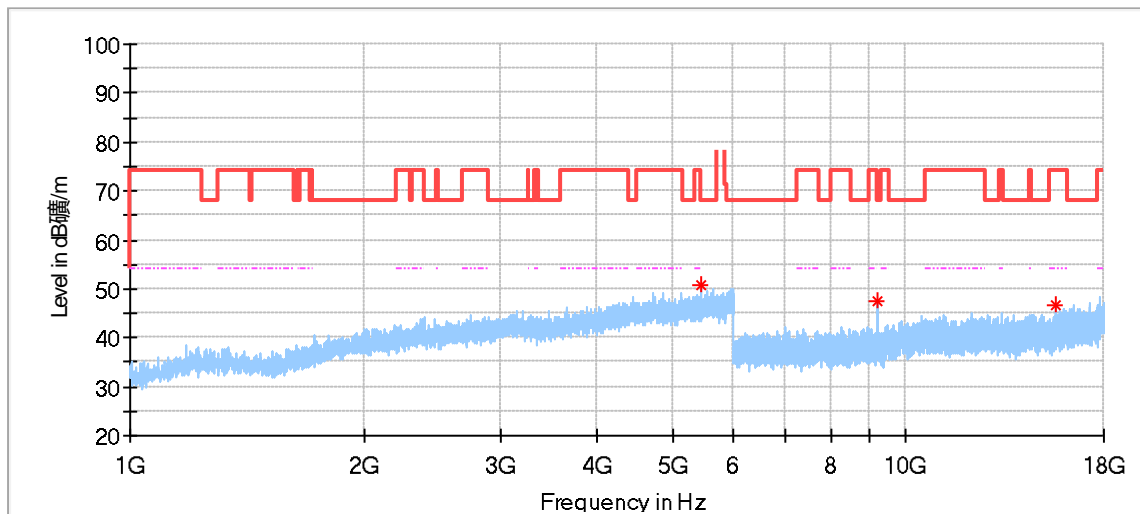


Frequency (MHz)	MaxPeak (dBµV/m)	Limit (dBµV/m)	Margin (dB)	Height (cm)	Pol	Azimuth (deg)	Corr. (dB/m)
26987.687500	41.67	74.00	32.33	150.0	V	251.0	1.63
30196.250000	44.56	74.00	29.44	150.0	V	0.0	2.09
38400.875000	49.02	74.00	24.98	150.0	V	126.0	6.57
39278.812500	48.62	74.00	25.38	150.0	V	126.0	6.04

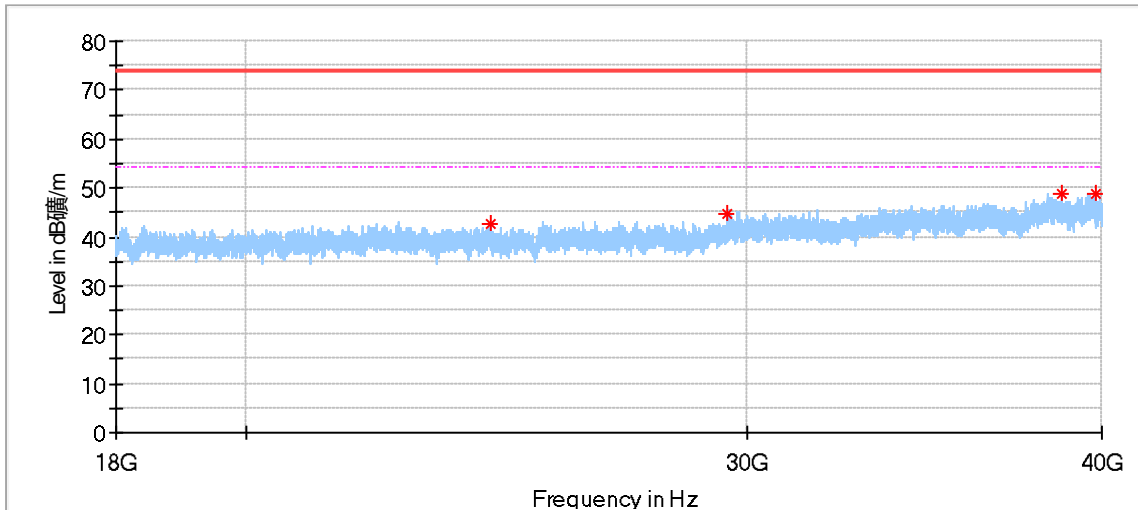
802.11A Modulation 5745MHz Test Result



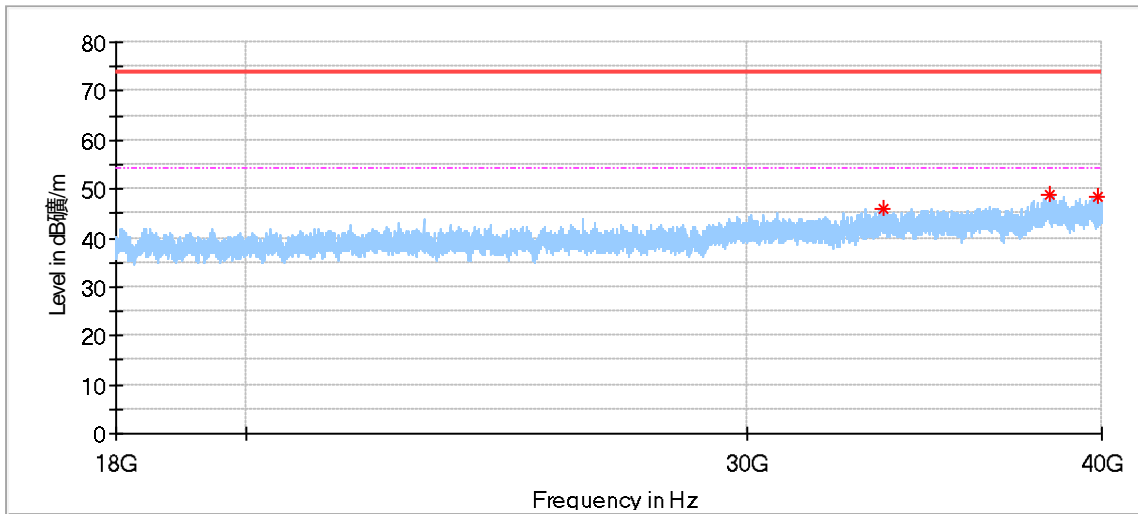
Frequency (MHz)	MaxPeak (dBµV/m)	Limit (dBµV/m)	Margin (dB)	Height (cm)	Pol	Azimuth (deg)	Corr. (dB/m)
5898.000000	49.83	68.20	18.37	150.0	H	9.0	6.62
9192.500000	50.06	74.00	23.94	150.0	H	106.0	8.93
14588.500000	46.65	68.20	21.55	150.0	H	330.0	12.94



Frequency (MHz)	MaxPeak (dBµV/m)	Limit (dBµV/m)	Margin (dB)	Height (cm)	Pol	Azimuth (deg)	Corr. (dB/m)
5461.000000	50.59	68.20	17.61	150.0	V	96.0	5.70
9192.000000	47.48	74.00	26.52	150.0	V	88.0	8.93
15574.000000	46.58	74.00	27.42	150.0	V	254.0	14.29

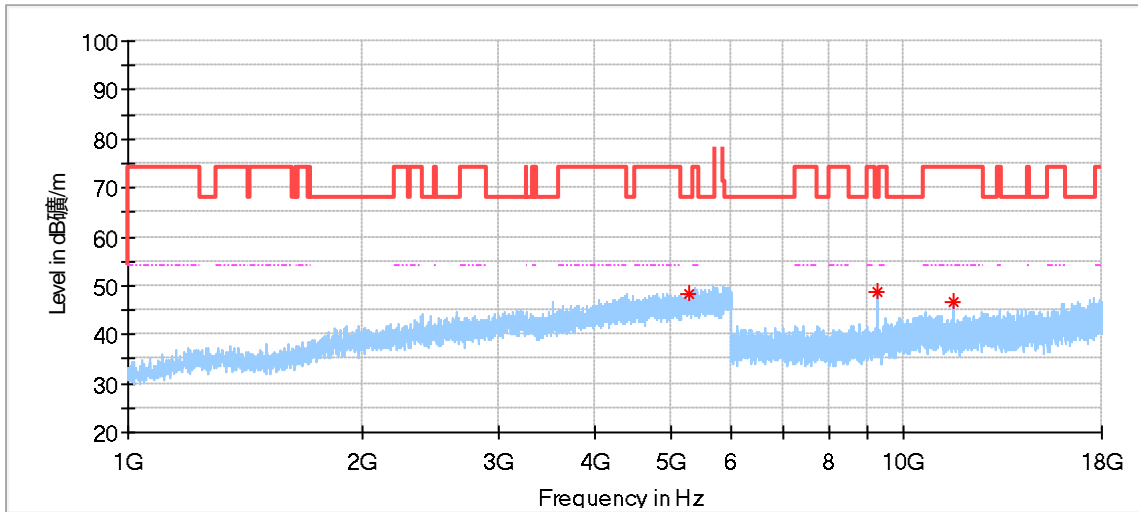


Frequency (MHz)	MaxPeak (dBµV/m)	Limit (dBµV/m)	Margin (dB)	Height (cm)	Pol	Azimuth (deg)	Corr. (dB/m)
24372.437500	42.83	74.00	31.17	150.0	H	339.0	0.57
29541.750000	44.84	74.00	29.16	150.0	H	233.0	1.72
38702.687500	48.79	74.00	25.21	150.0	H	248.0	5.85
39808.187500	48.92	74.00	25.08	150.0	H	351.0	7.95

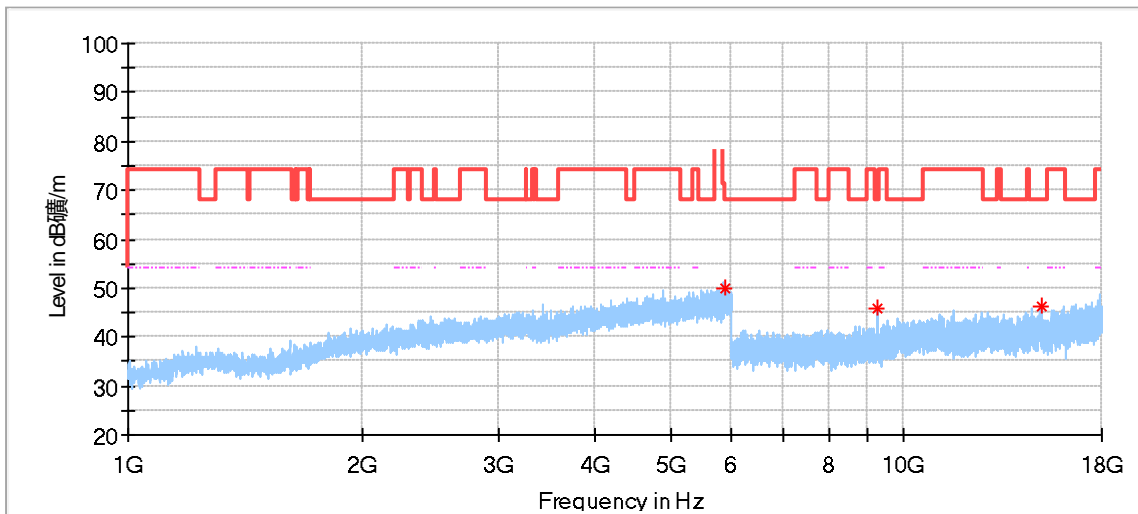


Frequency (MHz)	MaxPeak (dBµV/m)	Limit (dBµV/m)	Margin (dB)	Height (cm)	Pol	Azimuth (deg)	Corr. (dB/m)
33523.062500	46.13	74.00	27.87	150.0	V	264.0	2.82
38366.500000	48.89	74.00	25.11	150.0	V	329.0	6.54
39896.875000	48.35	74.00	25.65	150.0	V	127.0	8.18

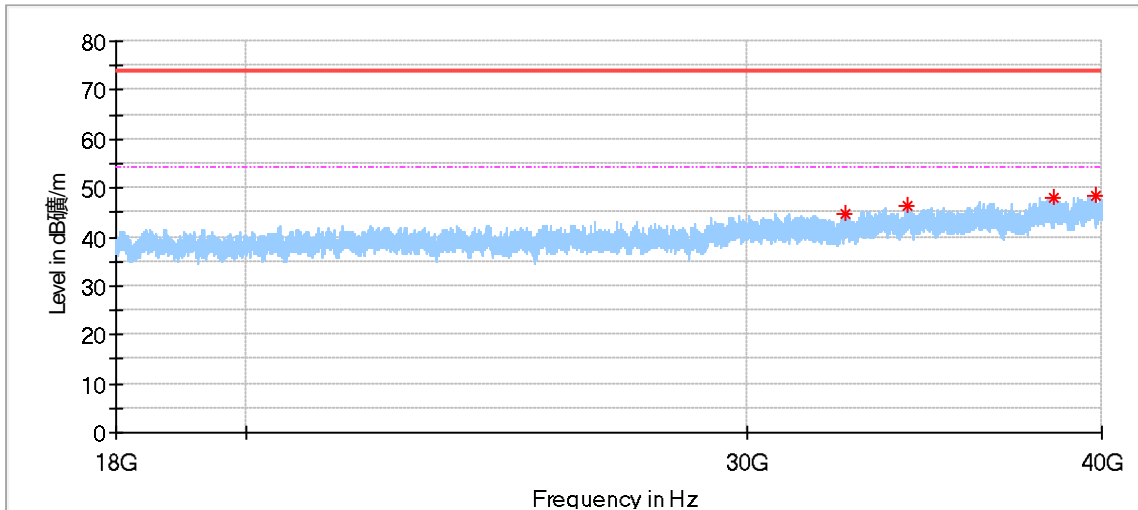
802.11A Modulation 5785MHz Test Result



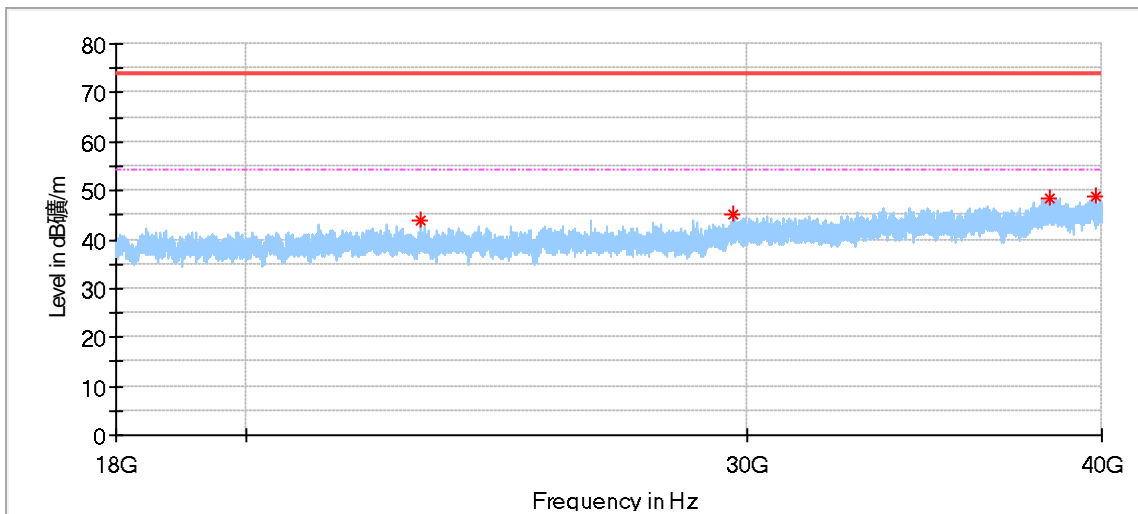
Frequency (MHz)	MaxPeak (dBµV/m)	Limit (dBµV/m)	Margin (dB)	Height (cm)	Pol	Azimuth (deg)	Corr. (dB/m)
5293.000000	48.42	68.20	19.78	150.0	H	358.0	5.41
9256.000000	48.54	68.20	19.66	150.0	H	133.0	8.95
11564.000000	46.75	74.00	27.25	150.0	H	272.0	11.04



Frequency (MHz)	MaxPeak (dBµV/m)	Limit (dBµV/m)	Margin (dB)	Height (cm)	Pol	Azimuth (deg)	Corr. (dB/m)
5887.500000	50.12	68.20	18.08	150.0	V	41.0	6.64
9256.000000	45.99	68.20	22.21	150.0	V	102.0	8.95
15056.500000	46.46	68.20	21.74	150.0	V	356.0	13.34

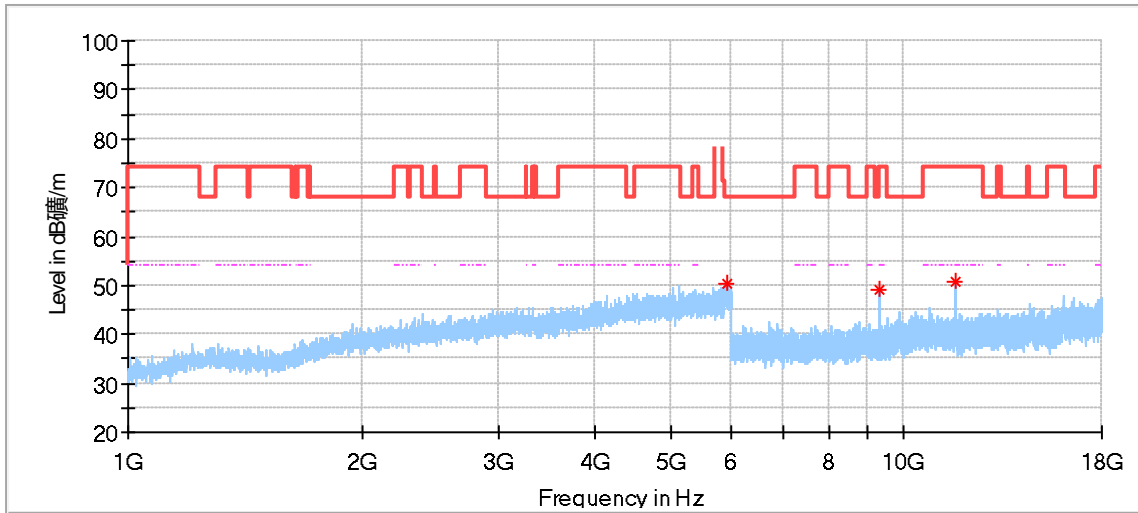


Frequency (MHz)	MaxPeak (dBµV/m)	Limit (dBµV/m)	Margin (dB)	Height (cm)	Pol	Azimuth (deg)	Corr. (dB/m)
32504.187500	44.58	74.00	29.42	150.0	H	32.0	1.92
34187.875000	46.29	74.00	27.71	150.0	H	345.0	3.40
38481.312500	48.02	74.00	25.98	150.0	H	264.0	6.57
39795.812500	48.48	74.00	25.52	150.0	H	345.0	7.91

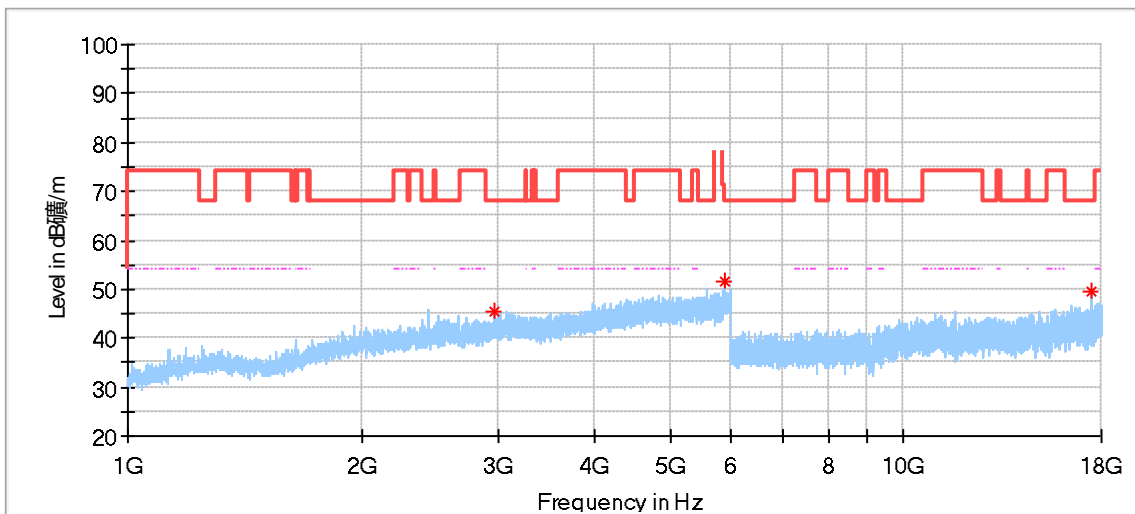


Frequency (MHz)	MaxPeak (dBµV/m)	Limit (dBµV/m)	Margin (dB)	Height (cm)	Pol	Azimuth (deg)	Corr. (dB/m)
23022.187500	43.72	74.00	30.28	150.0	V	0.0	0.48
29664.125000	45.04	74.00	28.96	150.0	V	141.0	1.92
38336.250000	48.55	74.00	25.45	150.0	V	279.0	6.51
39814.375000	48.87	74.00	25.13	150.0	V	339.0	7.97

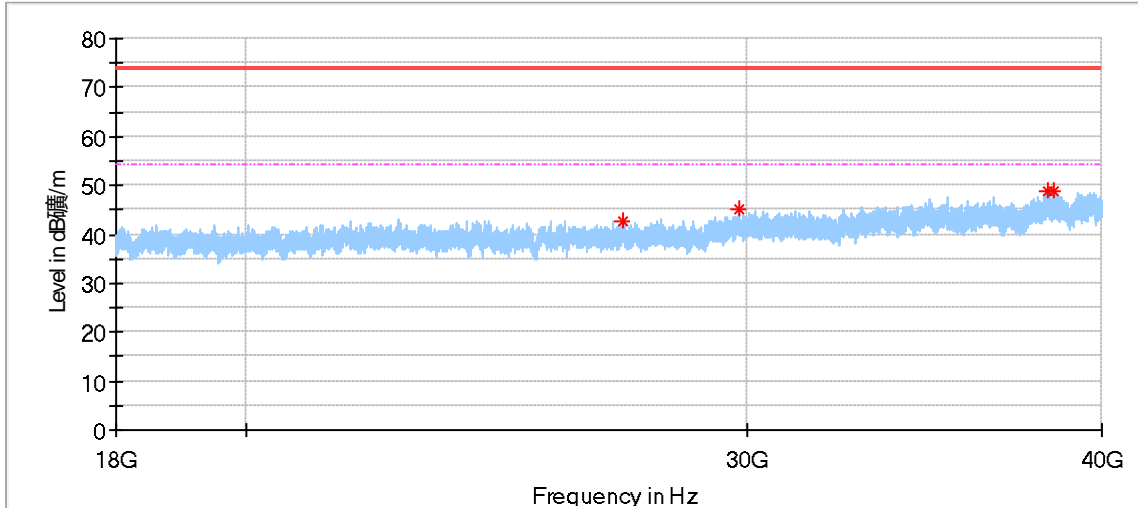
802.11A Modulation 5825MHz Test Result



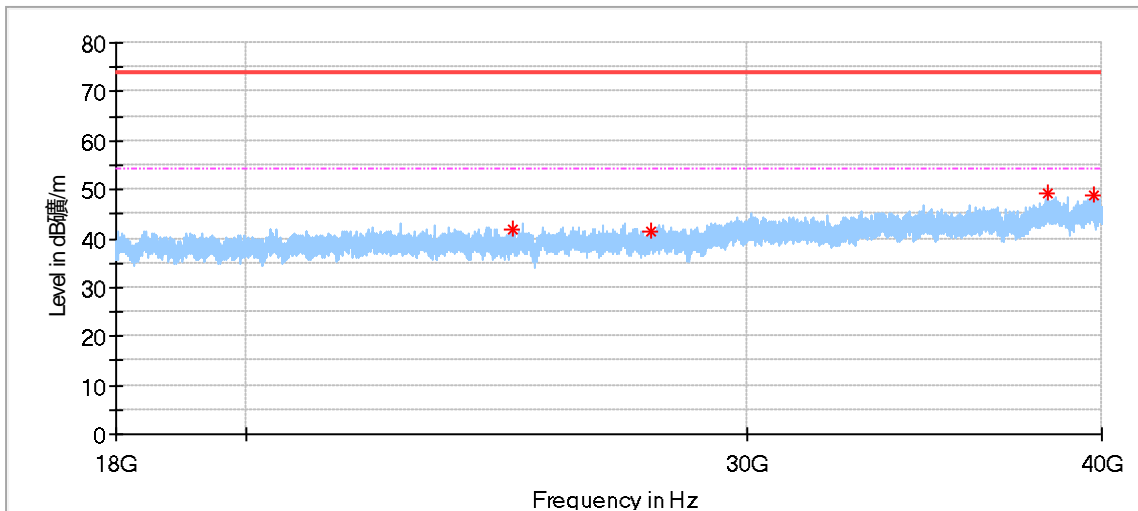
Frequency (MHz)	MaxPeak (dBµV/m)	Limit (dBµV/m)	Margin (dB)	Height (cm)	Pol	Azimuth (deg)	Corr. (dB/m)
5913.000000	50.26	68.20	17.94	150.0	H	4.0	6.58
9320.000000	49.03	74.00	24.97	150.0	H	105.0	8.95
11653.500000	50.76	74.00	23.24	150.0	H	300.0	11.09



Frequency (MHz)	MaxPeak (dBµV/m)	Limit (dBµV/m)	Margin (dB)	Height (cm)	Pol	Azimuth (deg)	Corr. (dB/m)
2977.500000	45.45	68.20	22.75	150.0	V	66.0	-0.38
5883.000000	51.76	68.20	16.44	150.0	V	14.0	6.65
17461.500000	49.49	68.20	18.71	150.0	V	30.0	17.79



Frequency (MHz)	MaxPeak (dBµV/m)	Limit (dBµV/m)	Margin (dB)	Height (cm)	Pol	Azimuth (deg)	Corr. (dB/m)
27118.312500	42.76	74.00	31.24	150.0	H	65.0	1.60
29811.937500	45.17	74.00	28.83	150.0	H	187.0	2.00
38266.812500	48.81	74.00	25.19	150.0	H	248.0	6.29
38464.812500	48.77	74.00	25.23	150.0	H	187.0	6.57



Frequency (MHz)	MaxPeak (dBµV/m)	Limit (dBµV/m)	Margin (dB)	Height (cm)	Pol	Azimuth (deg)	Corr. (dB/m)
24832.375000	42.00	74.00	32.00	150.0	V	0.0	0.86
27766.625000	41.57	74.00	32.43	150.0	V	295.0	1.40
38287.437500	49.03	74.00	24.97	150.0	V	46.0	6.39
39757.312500	49.02	74.00	24.98	150.0	V	138.0	7.77

Remark:

1. Corrected Amplitude = Read level + Corrector factor

Above 1GHz: Corrector factor = Antenna Factor + Cable Loss- Amplifier Gain.

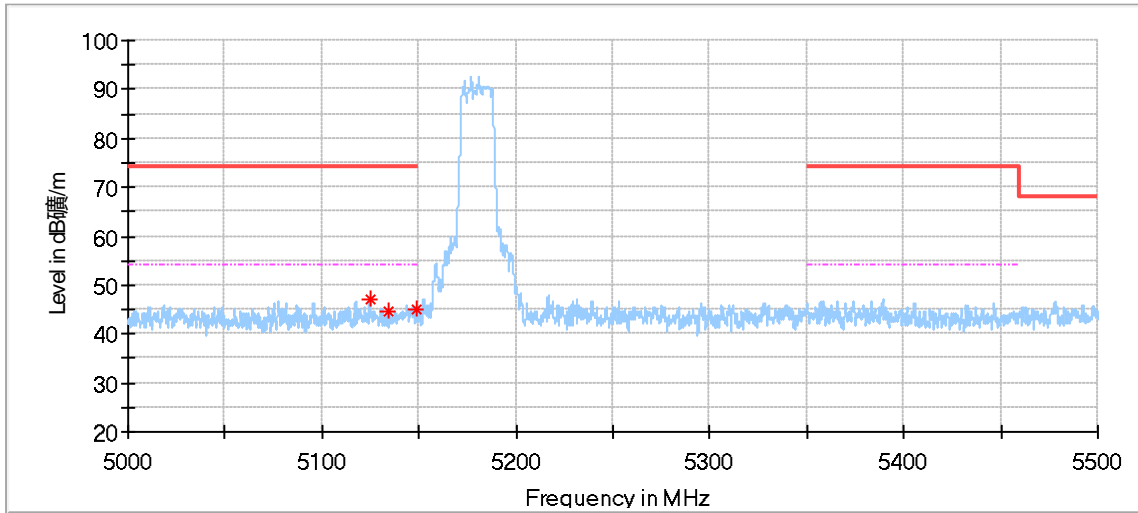
Below 1GHz: Corrector factor = Antenna Factor + Cable Loss.

(The Reading Level is recorded by software which is not shown in the sheet)

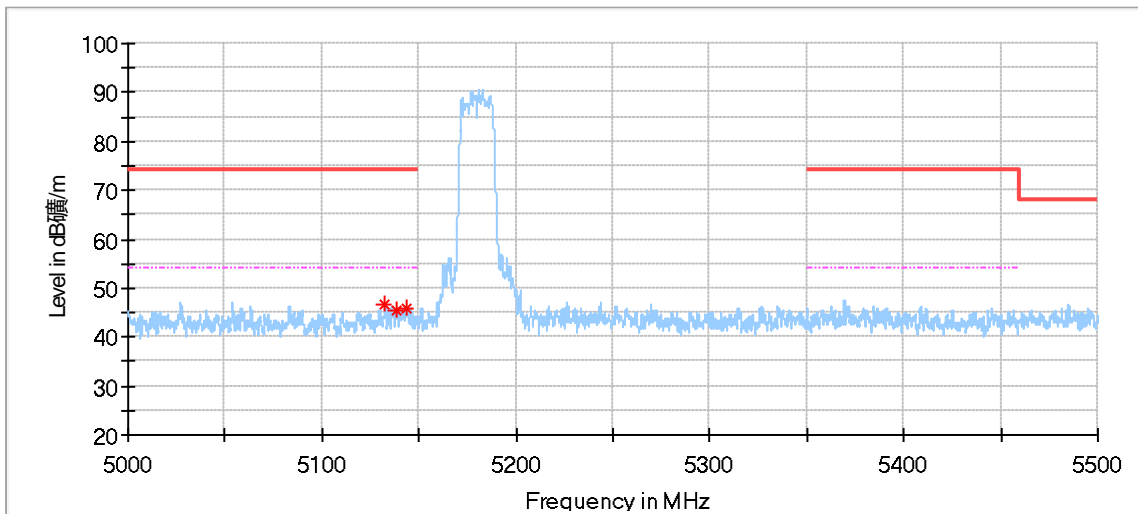
2. Data of measurement within this frequency range shown "--" in the table above means the reading of emissions are the noise floor or attenuated more than 10dB below the permissible limits or the field strength is too small to be measured.

Band edge test result:

802.11A Modulation 5180MHz Test Result

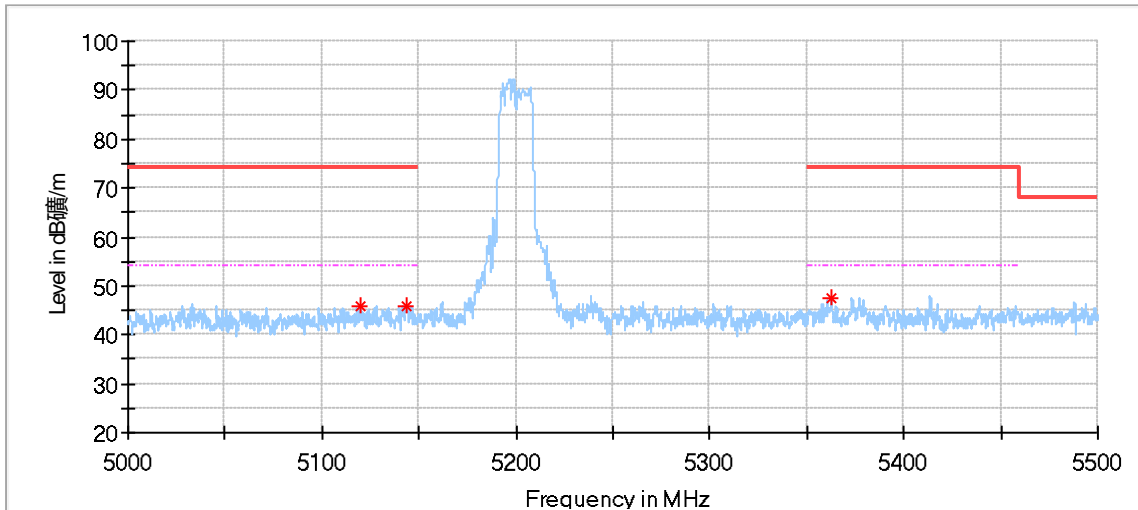


Frequency (MHz)	MaxPeak (dBµV/m)	Limit (dBµV/m)	Margin (dB)	Height (cm)	Pol	Azimuth (deg)	Corr. (dB/m)
5124.700000	47.04	74.00	26.96	150.0	H	91.0	3.62
5134.650000	44.52	74.00	29.48	150.0	H	25.0	3.57
5148.850000	44.84	74.00	29.16	150.0	H	344.0	3.51

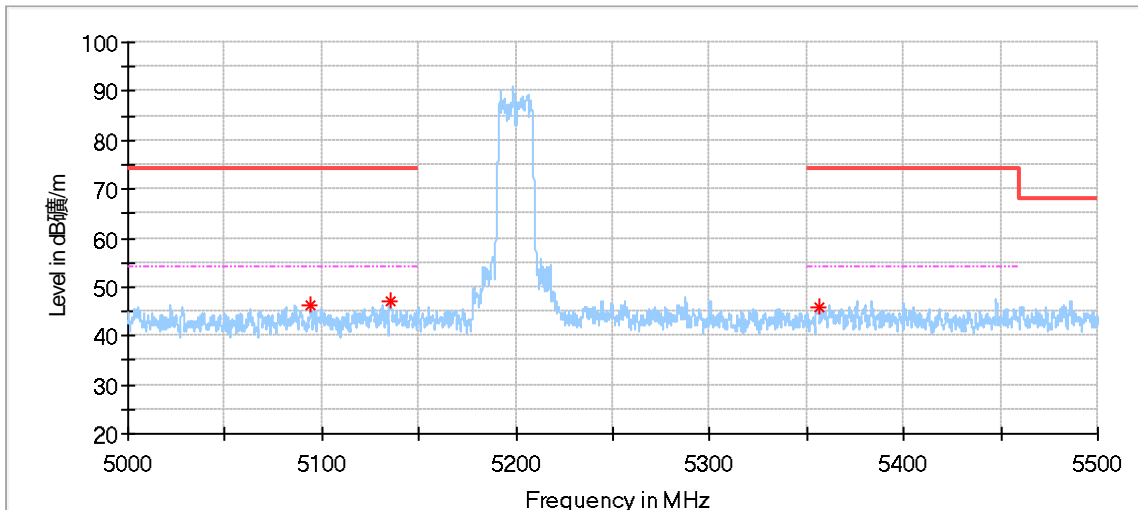


Frequency (MHz)	MaxPeak (dBµV/m)	Limit (dBµV/m)	Margin (dB)	Height (cm)	Pol	Azimuth (deg)	Corr. (dB/m)
5132.400000	46.56	74.00	27.44	150.0	V	0.0	3.58
5138.300000	45.29	74.00	28.71	150.0	V	0.0	3.56
5143.450000	45.91	74.00	28.09	150.0	V	36.0	3.53

802.11A Modulation 5200MHz Test Result

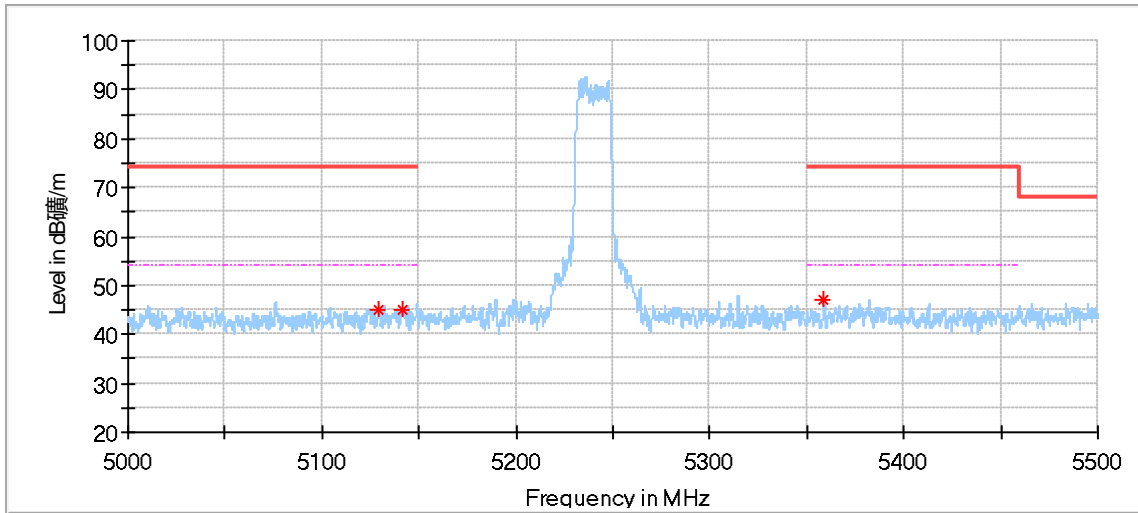


Frequency (MHz)	MaxPeak (dBµV/m)	Limit (dBµV/m)	Margin (dB)	Height (cm)	Pol	Azimuth (deg)	Corr. (dB/m)
5119.750000	45.91	74.00	28.09	150.0	H	208.0	3.64
5143.150000	45.79	74.00	28.21	150.0	H	10.0	3.54
5362.550000	47.29	74.00	26.71	150.0	H	242.0	3.90

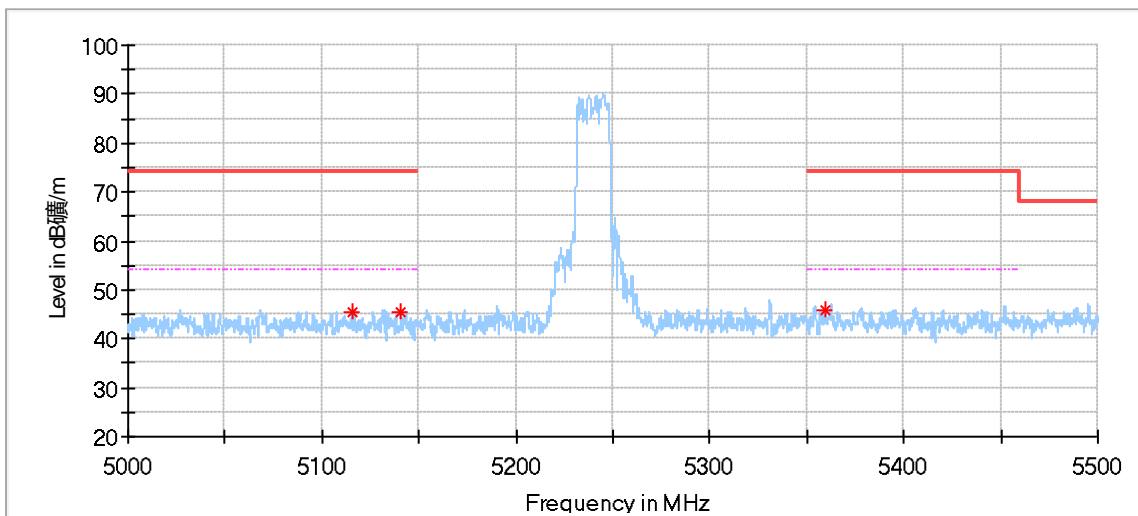


Frequency (MHz)	MaxPeak (dBµV/m)	Limit (dBµV/m)	Margin (dB)	Height (cm)	Pol	Azimuth (deg)	Corr. (dB/m)
5094.300000	46.24	74.00	27.76	150.0	V	298.0	3.48
5134.950000	46.91	74.00	27.09	150.0	V	259.0	3.57
5356.250000	45.83	74.00	28.17	150.0	V	127.0	3.90

802.11A Modulation 5240MHz Test Result

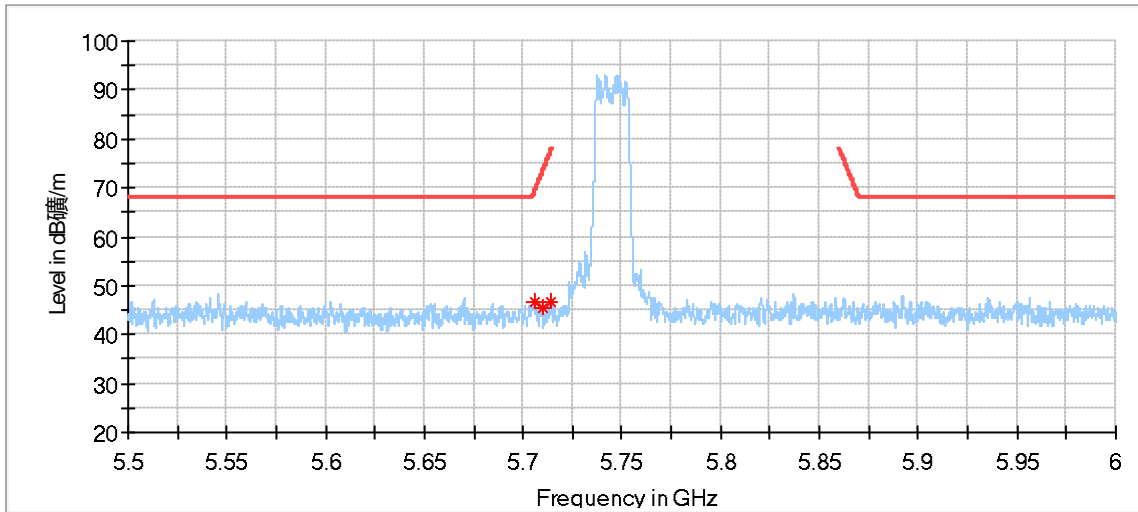


Frequency (MHz)	MaxPeak (dBµV/m)	Limit (dBµV/m)	Margin (dB)	Height (cm)	Pol	Azimuth (deg)	Corr. (dB/m)
5129.250000	45.02	74.00	28.98	150.0	H	335.0	3.60
5141.050000	45.06	74.00	28.94	150.0	H	313.0	3.55
5358.650000	46.90	74.00	27.10	150.0	H	244.0	3.90

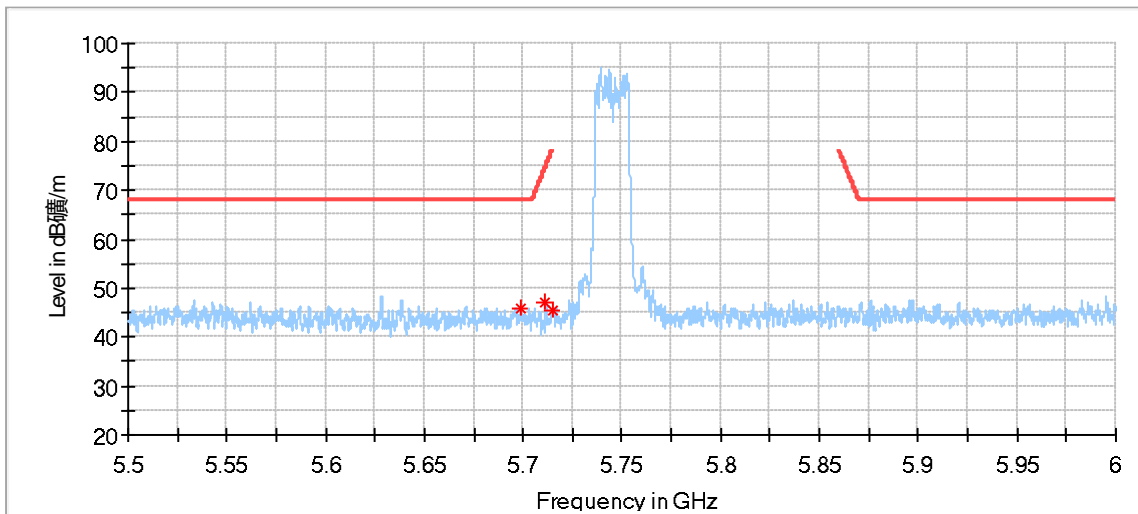


Frequency (MHz)	MaxPeak (dBµV/m)	Limit (dBµV/m)	Margin (dB)	Height (cm)	Pol	Azimuth (deg)	Corr. (dB/m)
5115.600000	45.42	74.00	28.58	150.0	V	40.0	3.66
5140.900000	45.25	74.00	28.75	150.0	V	213.0	3.55
5359.000000	45.86	74.00	28.14	150.0	V	275.0	3.90

802.11A Modulation 5745MHz Test Result

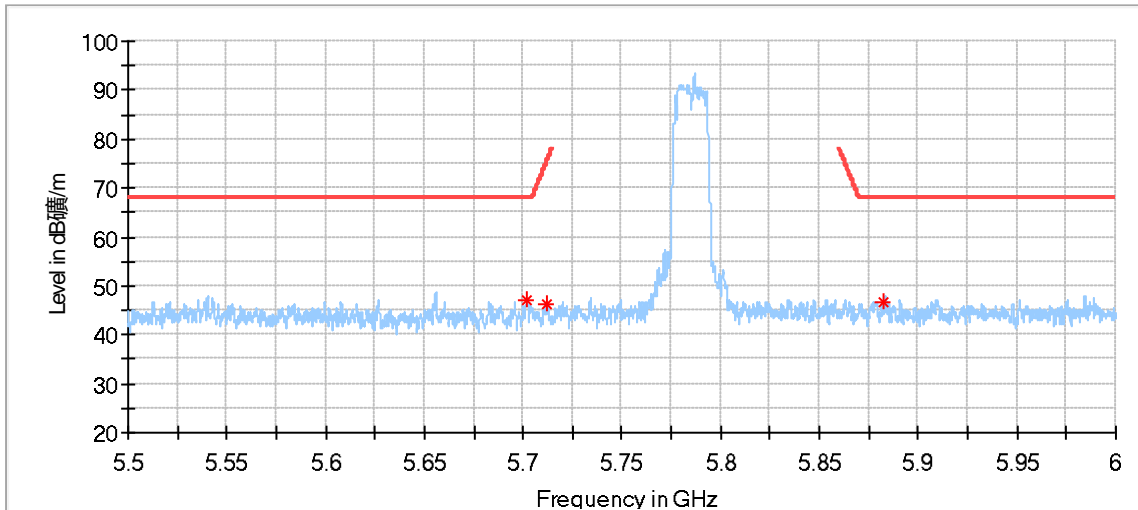


Frequency (MHz)	MaxPeak (dBµV/m)	Limit (dBµV/m)	Margin (dB)	Height (cm)	Pol	Azimuth (deg)	Corr. (dB/m)
5705.500000	46.61	68.70	22.09	150.0	H	195.0	4.17
5709.750000	45.41	72.95	27.54	150.0	H	121.0	4.17
5714.250000	46.83	77.45	30.62	150.0	H	332.0	4.18

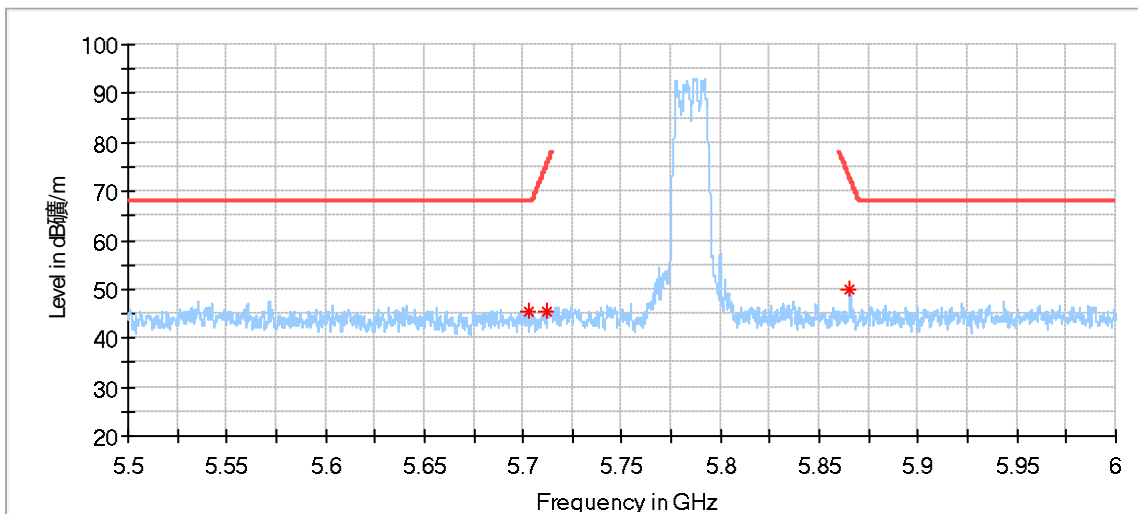


Frequency (MHz)	MaxPeak (dBµV/m)	Limit (dBµV/m)	Margin (dB)	Height (cm)	Pol	Azimuth (deg)	Corr. (dB/m)
5698.650000	45.76	68.20	22.44	150.0	V	159.0	4.14
5711.450000	47.13	74.65	27.52	150.0	V	27.0	4.18
5714.900000	45.47	78.10	32.63	150.0	V	15.0	4.18

802.11A Modulation 5785MHz Test Result

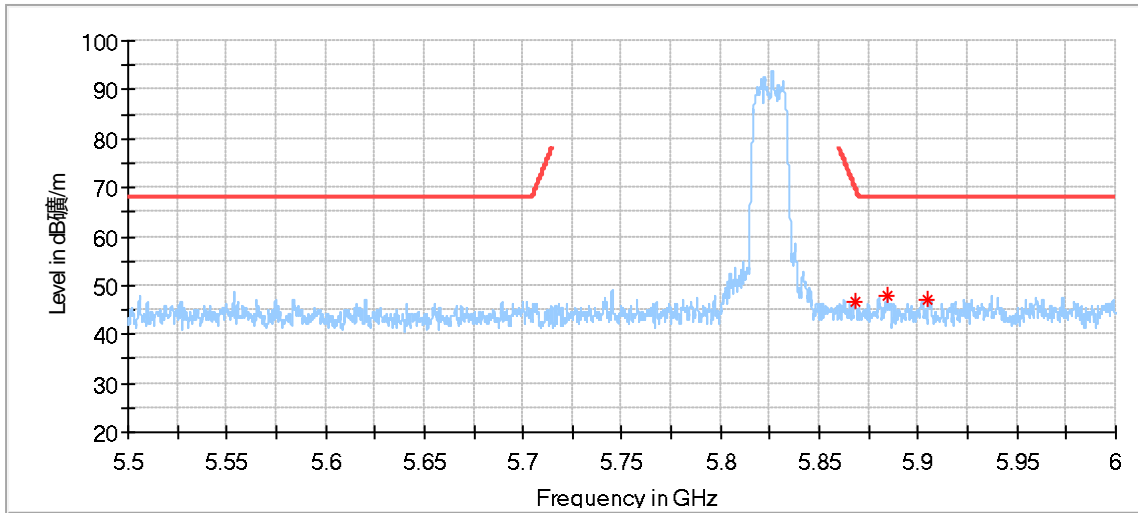


Frequency (MHz)	MaxPeak (dBµV/m)	Limit (dBµV/m)	Margin (dB)	Height (cm)	Pol	Azimuth (deg)	Corr. (dB/m)
5701.950000	46.91	68.20	21.29	150.0	H	16.0	4.16
5712.100000	46.45	75.30	28.85	150.0	H	291.0	4.18
5882.100000	46.81	68.20	21.39	150.0	H	200.0	4.74

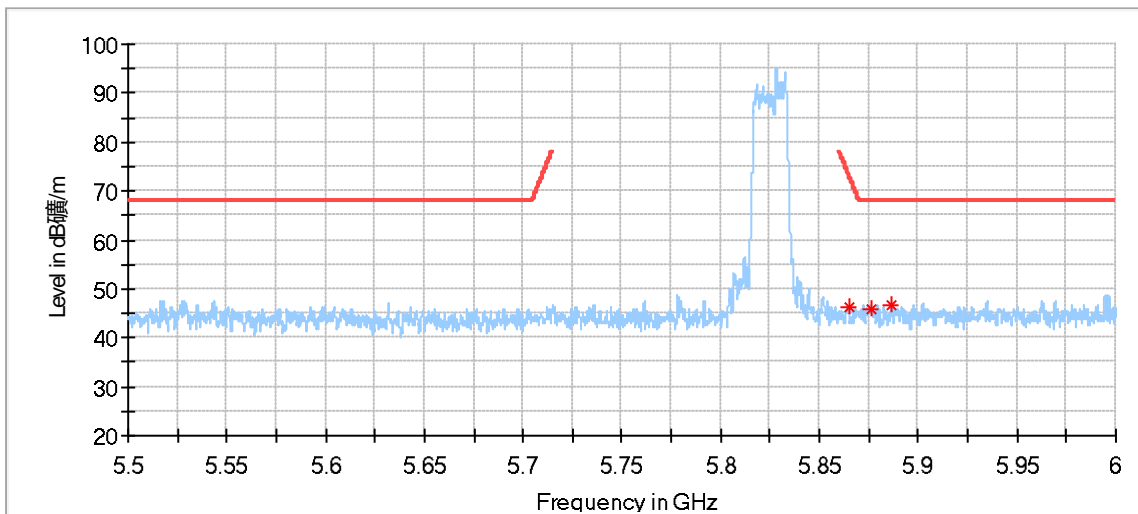


Frequency (MHz)	MaxPeak (dBµV/m)	Limit (dBµV/m)	Margin (dB)	Height (cm)	Pol	Azimuth (deg)	Corr. (dB/m)	Corr. (dB)
5702.450000	45.50	68.20	22.70	150.0	V	25.0	4.16	---
5712.350000	45.47	75.55	30.08	150.0	V	348.0	4.18	---
5865.500000	49.84	72.70	22.86	150.0	V	283.0	4.72	---

802.11A Modulation 5825MHz Test Result



Frequency (MHz)	MaxPeak (dBµV/m)	Limit (dBµV/m)	Margin (dB)	Height (cm)	Pol	Azimuth (deg)	Corr. (dB/m)
5868.400000	46.78	69.80	23.02	150.0	H	261.0	4.72
5884.200000	47.85	68.20	20.35	150.0	H	143.0	4.74
5904.950000	47.18	68.20	21.02	150.0	H	150.0	4.71



Frequency (MHz)	MaxPeak (dBµV/m)	Limit (dBµV/m)	Margin (dB)	Height (cm)	Pol	Azimuth (deg)	Corr. (dB/m)
5864.700000	46.07	73.50	27.43	150.0	V	276.0	4.72
5876.550000	46.02	68.20	22.18	150.0	V	233.0	4.74
5886.650000	46.48	68.20	21.72	150.0	V	156.0	4.73

Remark:

1. Corrected Amplitude = Read level + Corrector factor

Above 1GHz: Corrector factor = Antenna Factor + Cable Loss- Amplifier Gain.

Below 1GHz: Corrector factor = Antenna Factor + Cable Loss.

(The Reading Level is recorded by software which is not shown in the sheet)

3. Data of measurement within this frequency range shown "--" in the table above means the reading of emissions are the noise floor or attenuated more than 10dB below the permissible limits or the field strength is too small to be measured.

Conducted Spurious Emission Test Method:

According to KBD789033 D02

1. The EUT was placed on 0.8m height table, the RF output of EUT was connected to the test receiver by RF cable. The path loss was compensated to the results for each measurement.

2. For transmitters with operating frequencies in the band 5150-5250 MHz, all emissions outside the band 5150-5350 MHz shall not exceed -27 dBm/MHz e.i.r.p. Any unwanted emissions that fall into the band 5250-5350 MHz shall be attenuated below the channel power by at least 26 dB, when measured using a resolution bandwidth between 1 and 5% of the occupied bandwidth (i.e. 99% bandwidth), above 5250 MHz. The 26 dB bandwidth may fall into the 5250-5350 MHz band; however, if the occupied bandwidth also falls within the 5250-5350 MHz band, the transmission is considered as intentional and the devices shall comply with all requirements in the band 5250-5350 MHz including implementing dynamic frequency selection (DFS) and TPC, on the portion of the emission that resides in the 5250-5350 MHz band.

- a) Set RBW \geq between 1 and 5% of the occupied bandwidth (i.e. 99% bandwidth)
- b) Set VBW \geq 3 RBW.

Limits:

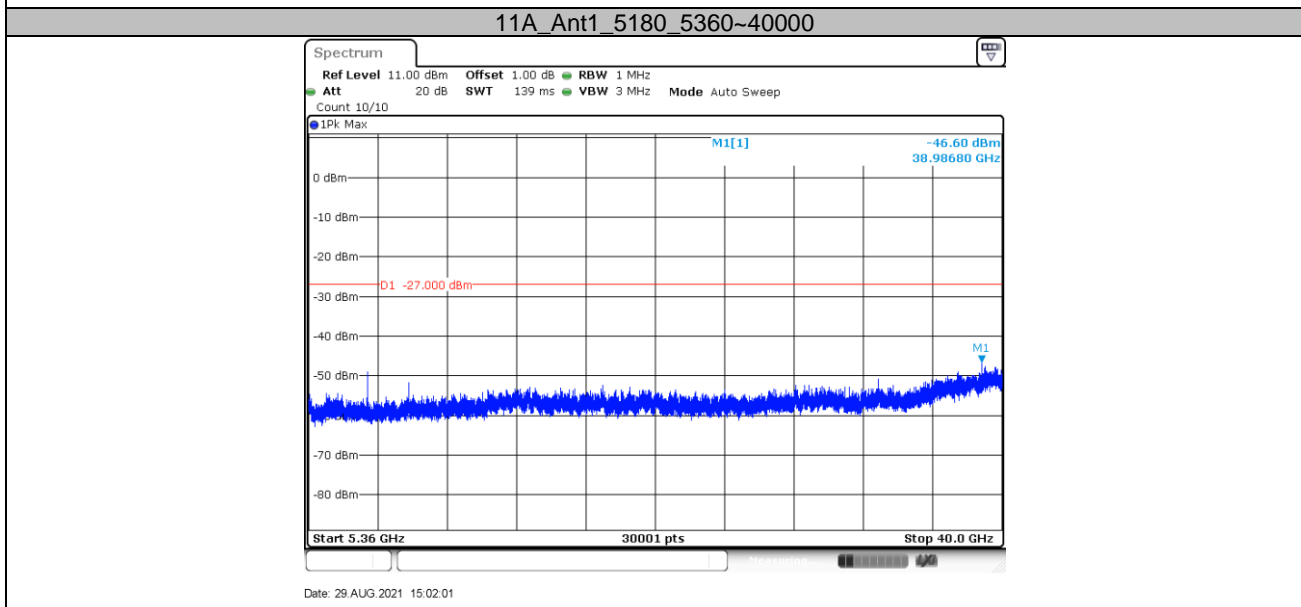
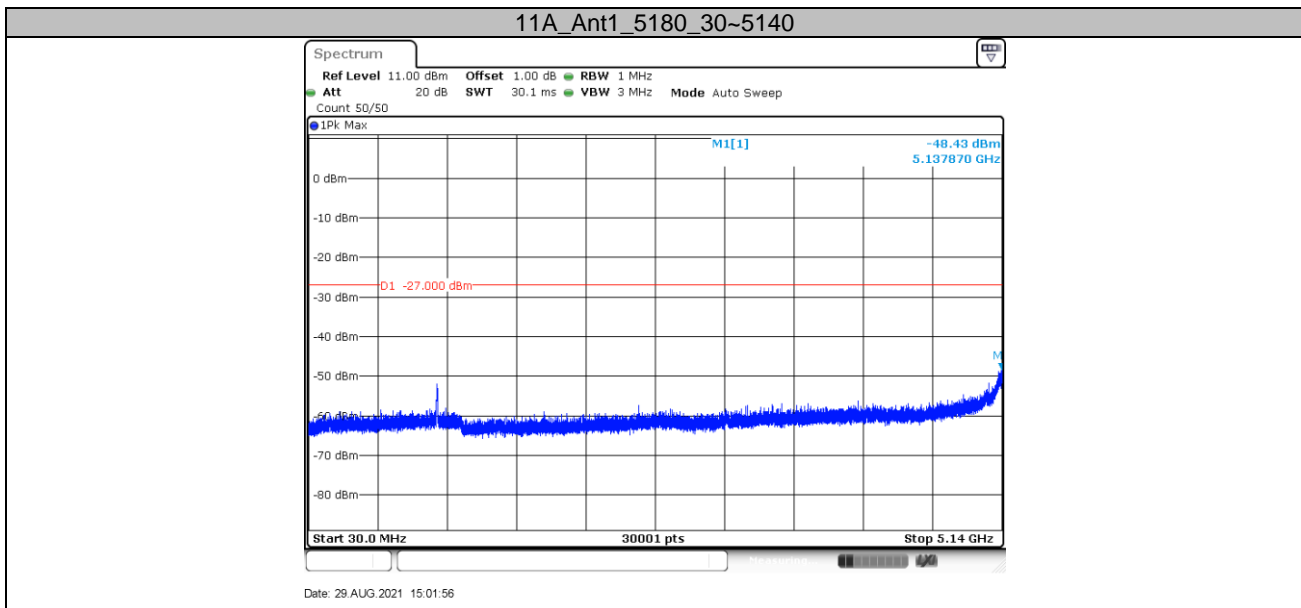
For transmitters operating in the 5.15-5.25 GHz band: All emissions outside of the 5.15-5.35 GHz band shall not exceed an e.i.r.p. of -27 dBm/MHz.

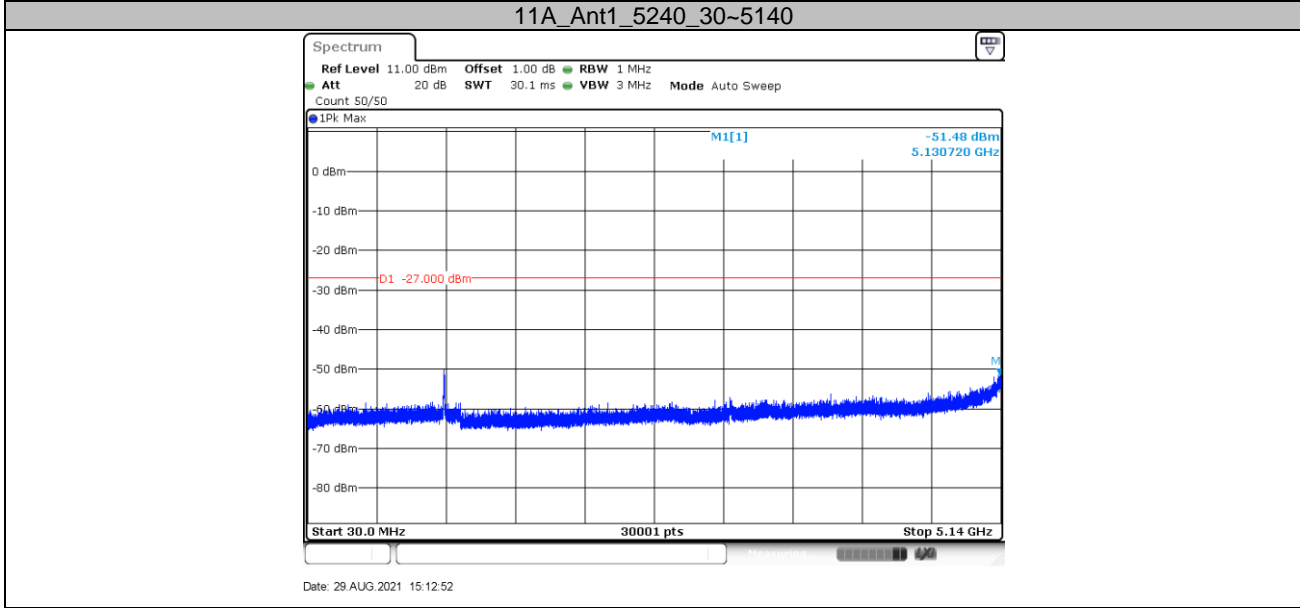
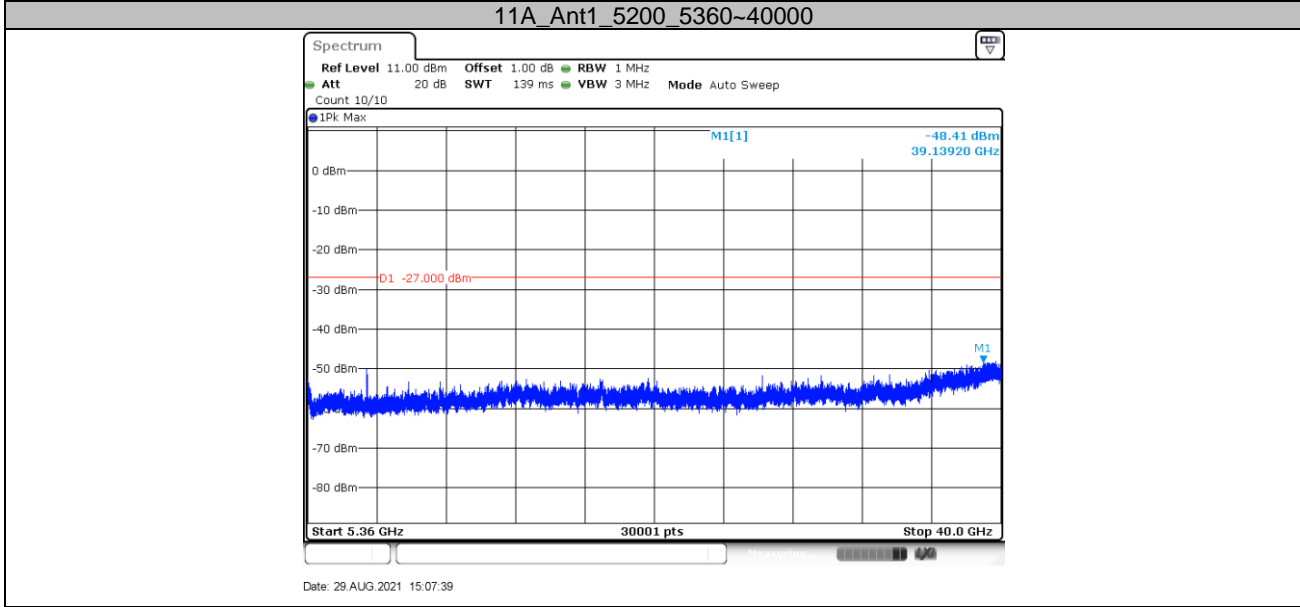
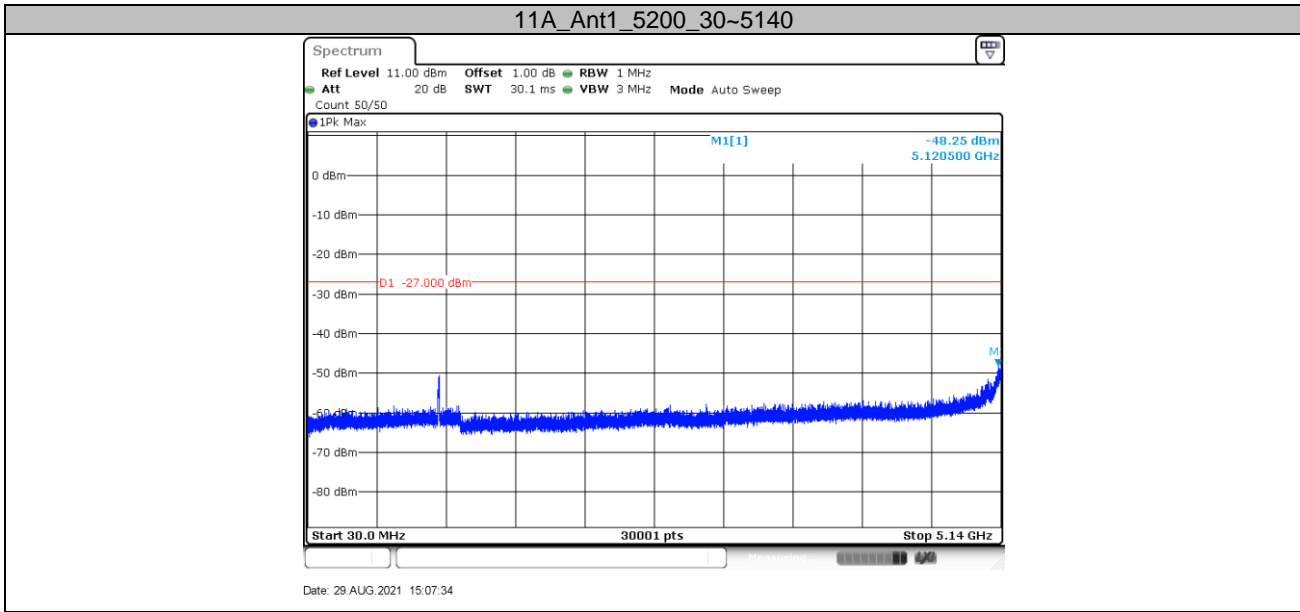
For transmitters operating in the 5.25-5.35 GHz band: All emissions outside of the 5.15-5.35 GHz band shall not exceed an e.i.r.p. of -27 dBm/MHz.

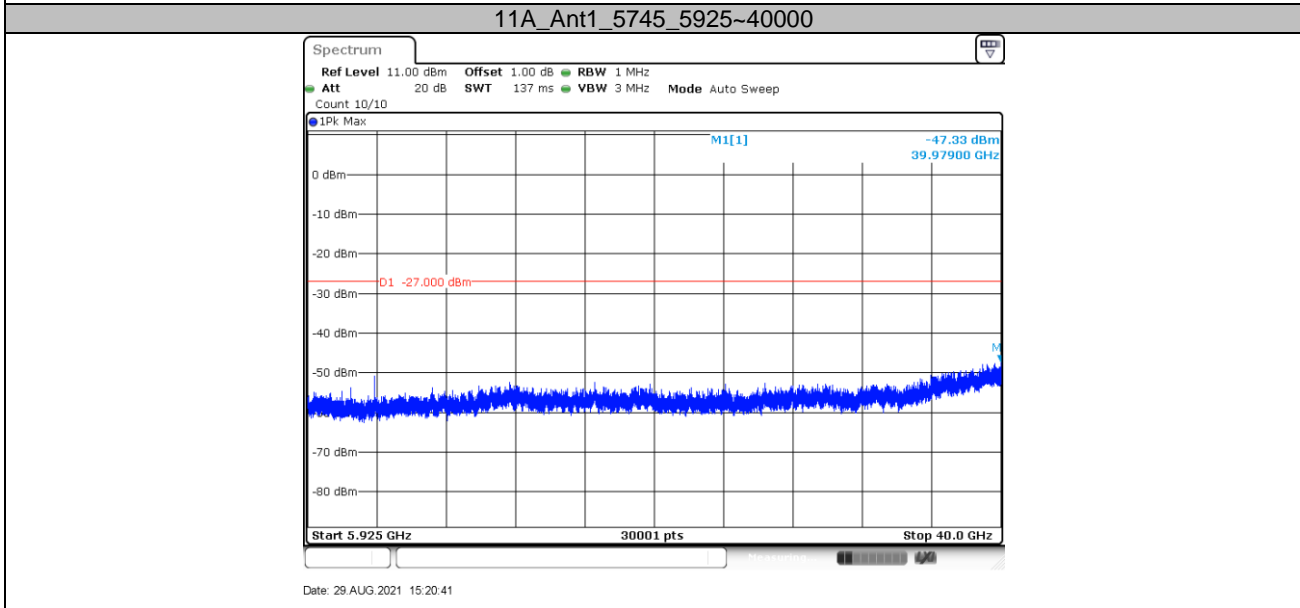
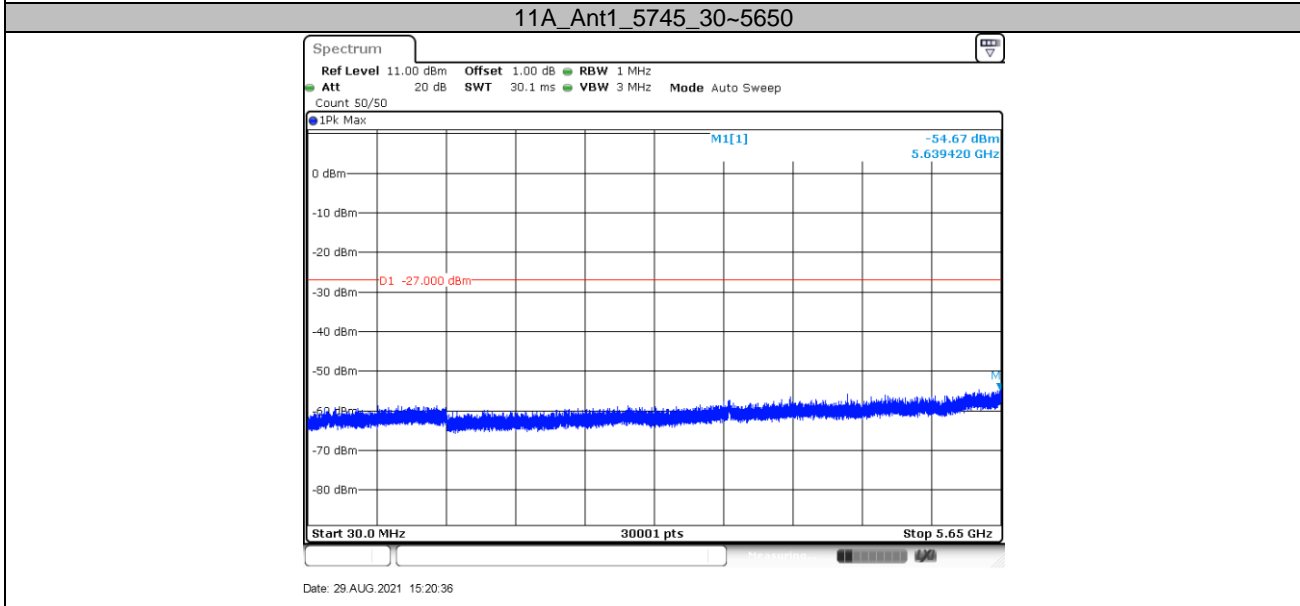
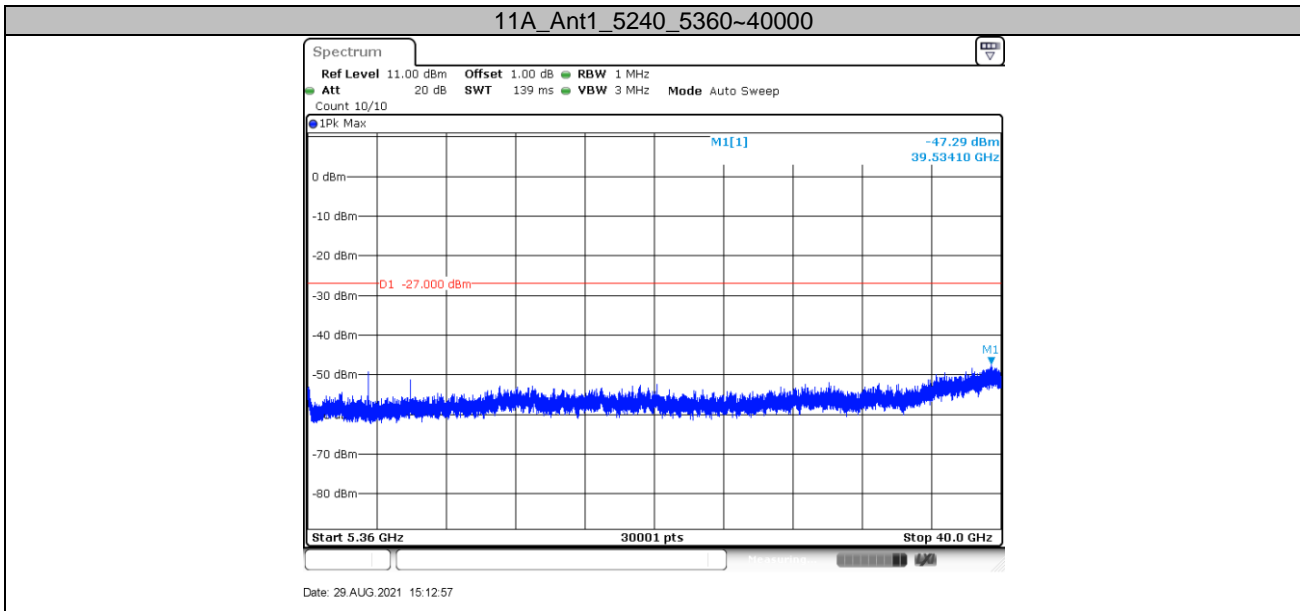
For transmitters operating in the 5.47-5.725 GHz band: All emissions outside of the 5.47-5.725 GHz band shall not exceed an e.i.r.p. of -27 dBm/MHz.

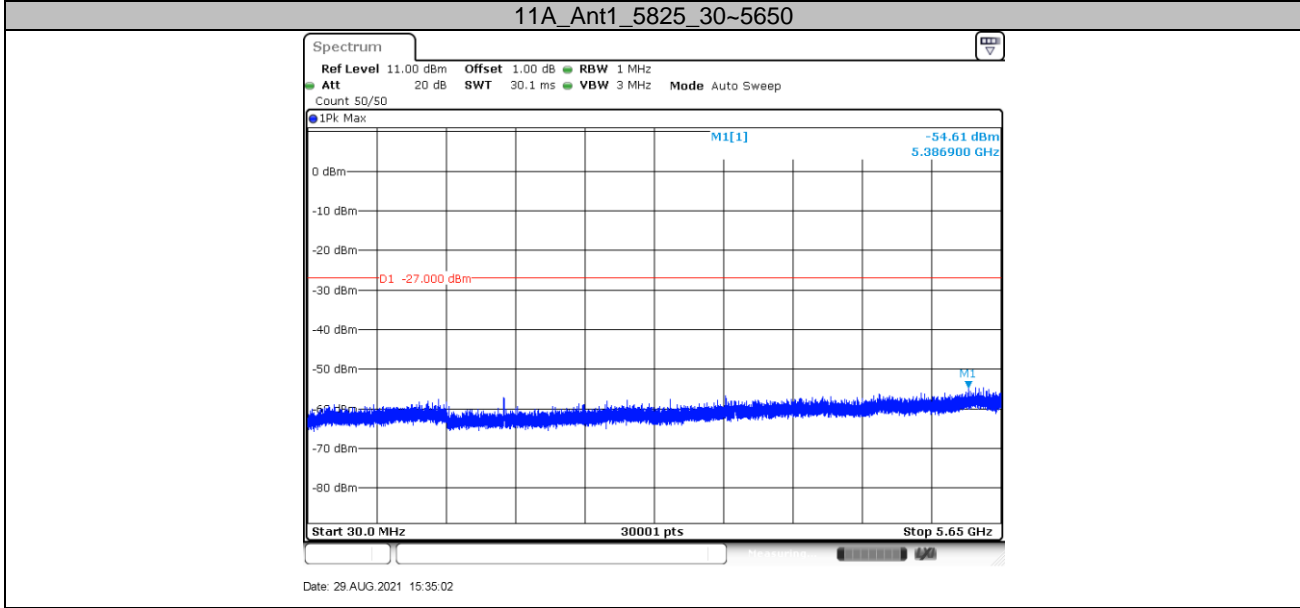
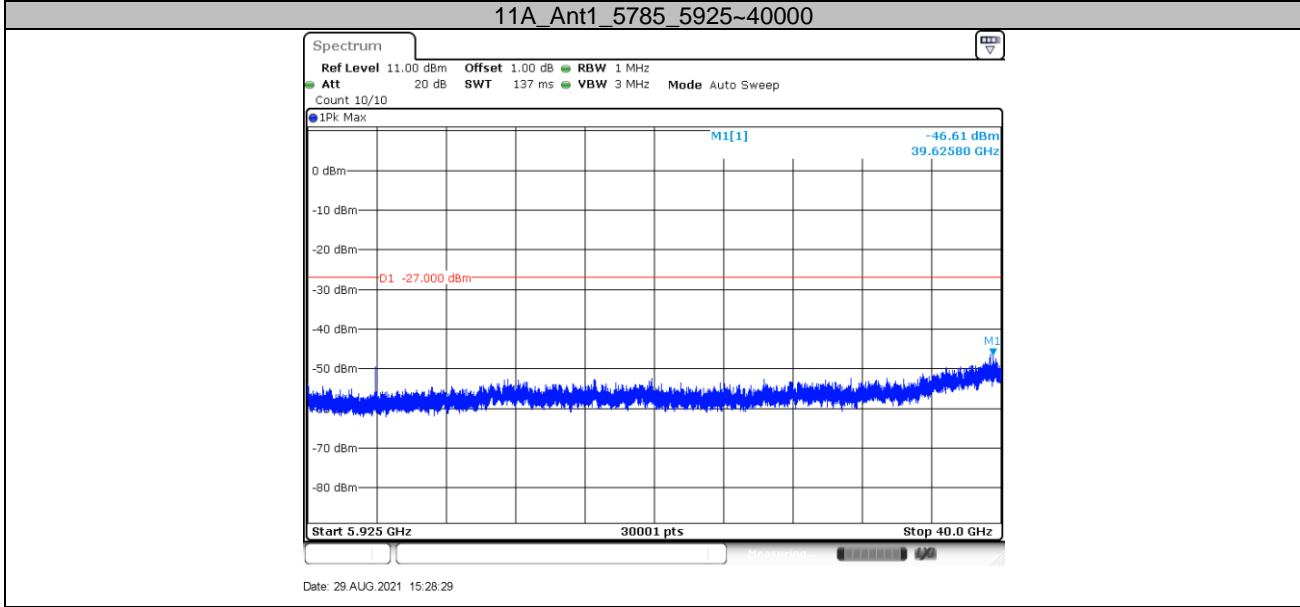
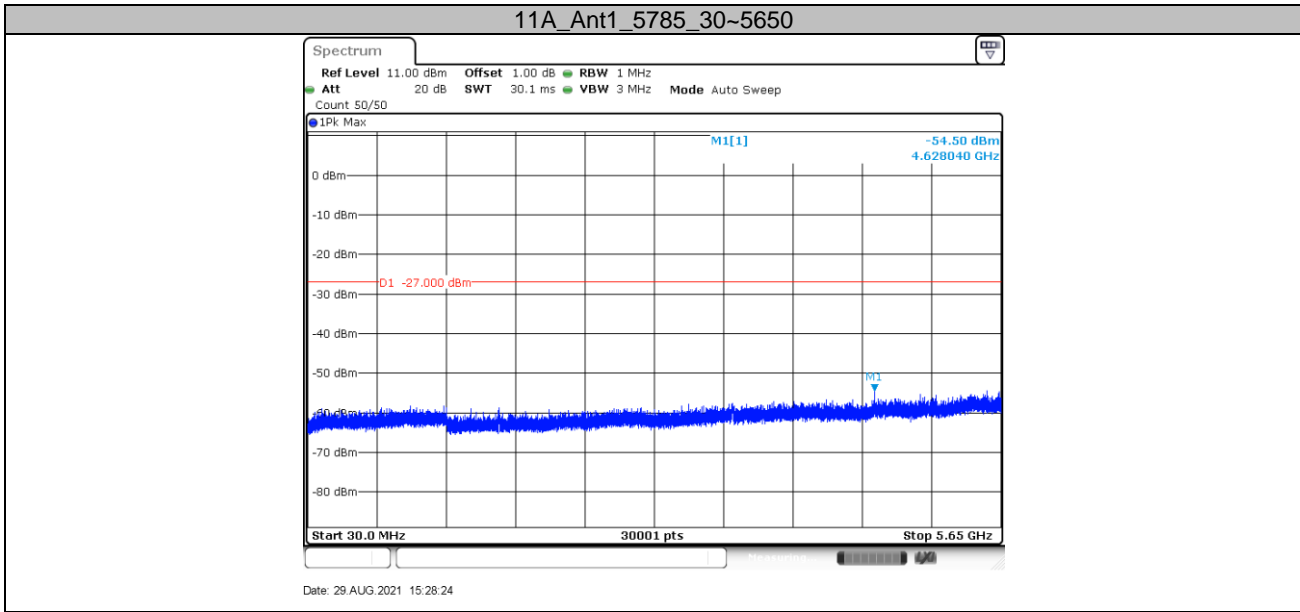
For transmitters operating in the 5.725-5.85 GHz band: All emissions shall be limited to a level of -27 dBm/MHz at 75 MHz or more above or below the band edge increasing linearly to 10 dBm/MHz at 25 MHz above or below the band edge, and from 25 MHz above or below the band edge increasing linearly to a level of 15.6 dBm/MHz at 5 MHz above or below the band edge, and from 5 MHz above or below the band edge increasing linearly to a level of 27 dBm/MHz at the band edge.

TestMode	Channel(MHz)	FreqRange(MHz)	Max. Fre(MHz)	Max. Level(dBm/MHz)	Limit(dBm/MHz)	Verdict
11A	5180	30~5140	30~5140	-48.43	<=-27	PASS
		5360~40000	5360~40000	-46.6	<=-27	PASS
	5200	30~5140	30~5140	-48.25	<=-27	PASS
		5360~40000	5360~40000	-48.41	<=-27	PASS
	5240	30~5140	30~5140	-51.48	<=-27	PASS
		5360~40000	5360~40000	-47.29	<=-27	PASS
	5745	30~5650	30~5650	-54.67	<=-27	PASS
		5925~40000	5925~40000	-47.33	<=-27	PASS
	5785	30~5650	30~5650	-54.5	<=-27	PASS
		5925~40000	5925~40000	-46.61	<=-27	PASS
	5825	30~5650	30~5650	-54.61	<=-27	PASS
		5925~40000	5925~40000	-47.88	<=-27	PASS

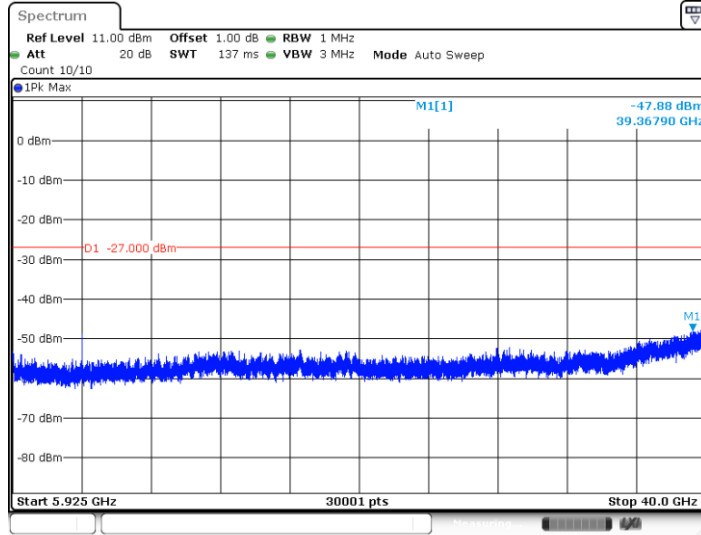






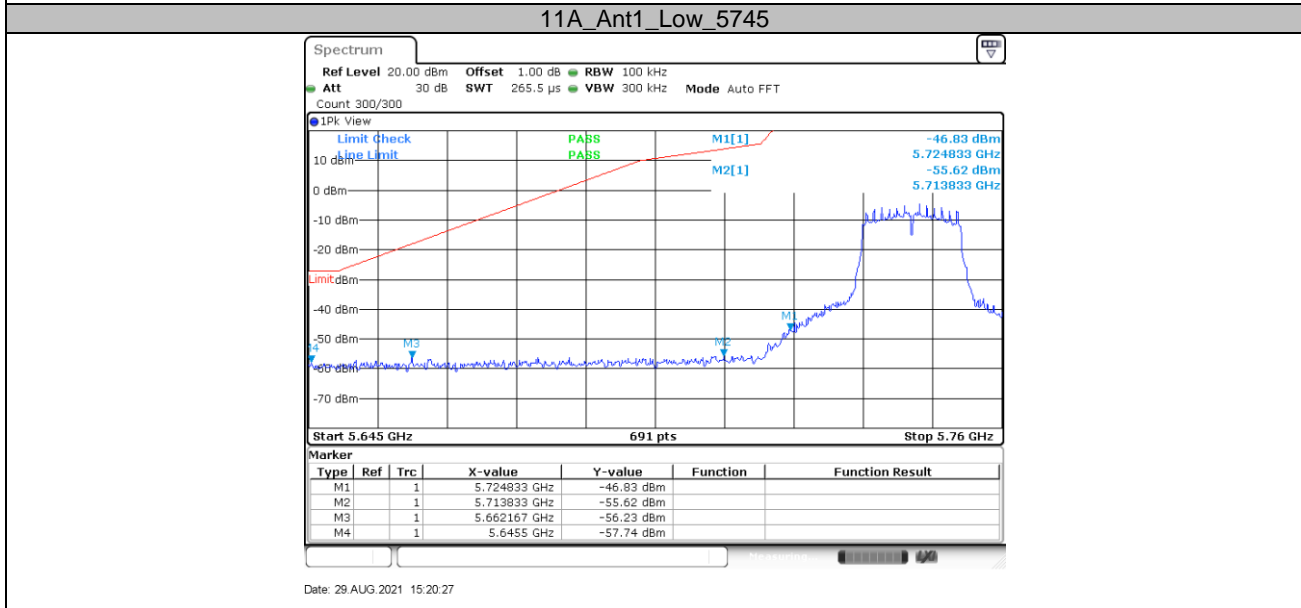
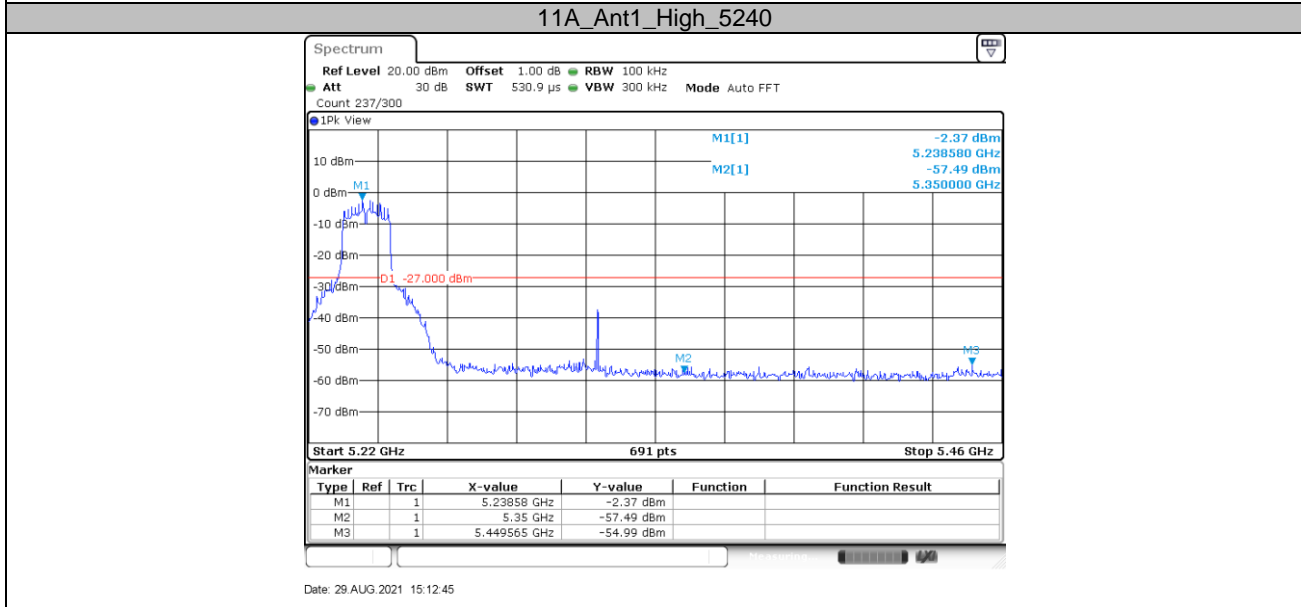
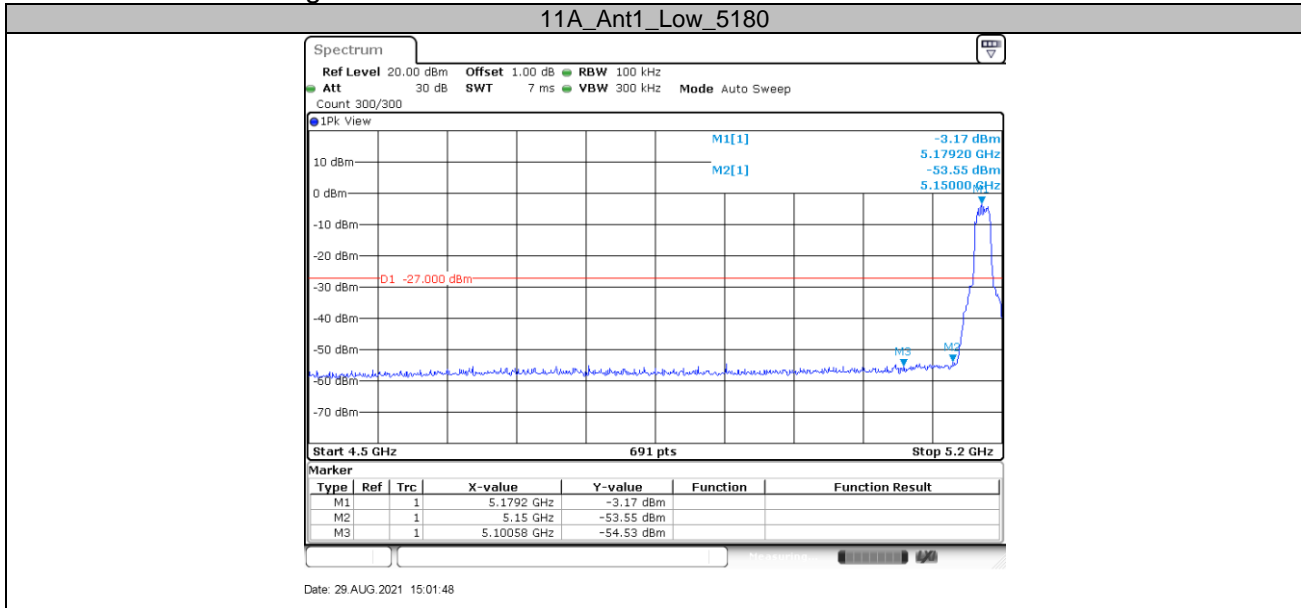


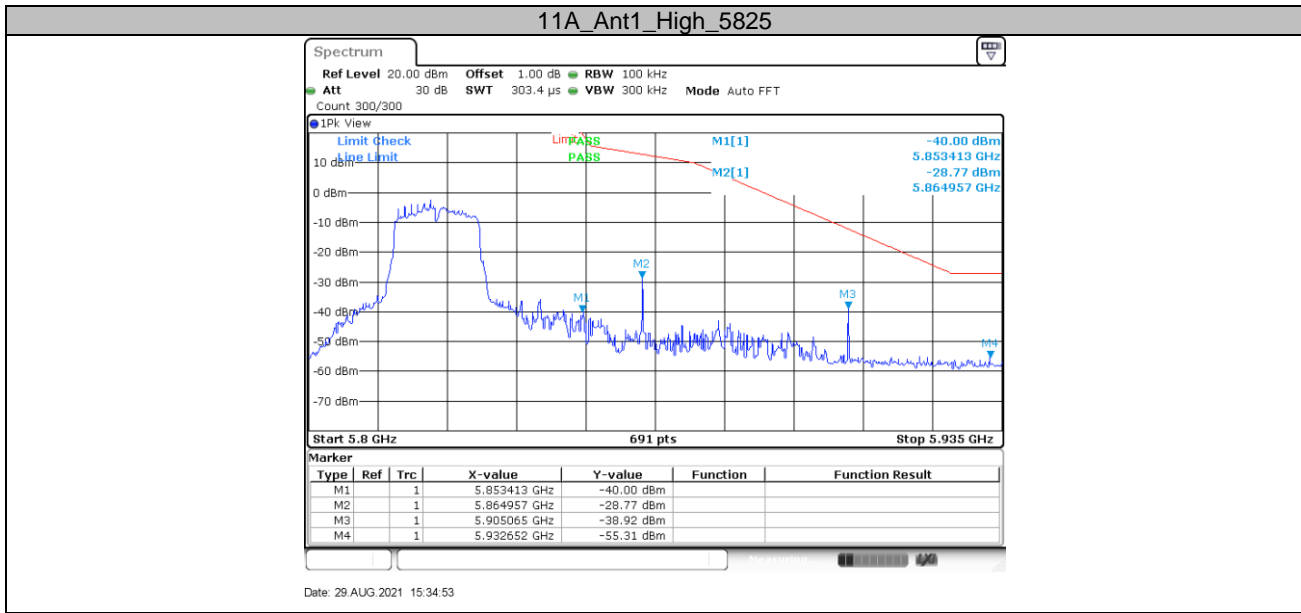
11A_Ant1_5825_5925~40000



Date: 29 AUG 2021 15:35:07

Test result of band edge as below:





9.6 Frequencies Stability

Test Method

1. The EUT was placed on 0.8m height table, the RF output of EUT was connected to the test receiver by RF cable. The path loss was compensated to the results for each measurement.
2. Set Centre Frequency of the channel under test.
3. Set Detector PEAK
4. Set RBW: 10KHz, VBW: 3RBW
5. Set Span: Encompass the entire emissions bandwidth (EBW) of the signal.
6. Allow the trace to stabilize, find the peak value of the power envelope and record the frequency, then calculated the frequency drift.

The test extreme voltage is to change the primary supply voltage from 85 to 115 percent of the nominal value.

User manual temperature is 0°C to +35°C, normal Temperature is +20°C.

Manufacturers of U-NII devices are responsible for ensuring frequency stability such that an emission is maintained within the band of operation under all conditions of normal operation as specified in the users manual.

Remark: NV is normal Voltage: 3.7Vdc, HV is High Voltage: 4.255Vdc, LV is Low Voltage: 3.034Vdc, NT is normal Temperature: +20°C.

Voltage							
TestMode	Antenna	Channel	Voltage [Vdc]	Temperature (°C)	Deviation (Hz)	Deviation (ppm)	Verdict
11A	Ant1	5180	NV	NT	-8000	-1.544402	PASS
			LV	NT	-8000	-1.544402	PASS
			HV	NT	-8000	-1.544402	PASS
		5200	NV	NT	-8000	-1.538462	PASS
			LV	NT	-8000	-1.538462	PASS
			HV	NT	-8000	-1.538462	PASS
		5240	NV	NT	-8000	-1.526718	PASS
			LV	NT	-8000	-1.526718	PASS
			HV	NT	-8000	-1.526718	PASS
		5745	NV	NT	-9000	-1.56658	PASS
			LV	NT	-9000	-1.56658	PASS
			HV	NT	-9000	-1.56658	PASS
		5785	NV	NT	-9000	-1.555748	PASS
			LV	NT	-9000	-1.555748	PASS
			HV	NT	-9000	-1.555748	PASS
5825	NV	NT	-9000	-1.545064	PASS		
	LV	NT	-9000	-1.545064	PASS		
	HV	NT	-9000	-1.545064	PASS		



Temperature							
TestMode	Antenna	Channel	Voltage [Vdc]	Temperature (°C)	Deviation (Hz)	Deviation (ppm)	Verdict
11A	Ant1	5180	NV	10	-8000	-1.544402	PASS
			NV	20	-8000	-1.544402	PASS
			NV	35	-8000	-1.544402	PASS
		5200	NV	0	-8000	-1.538462	PASS
			NV	10	-8000	-1.538462	PASS
			NV	20	-8000	-1.538462	PASS
		5240	NV	35	-8000	-1.538462	PASS
			NV	0	-8000	-1.526718	PASS
			NV	10	-8000	-1.526718	PASS
		5240	NV	20	-8000	-1.526718	PASS
			NV	35	-8000	-1.526718	PASS
			NV	0	-9000	-1.56658	PASS
		5745	NV	10	-9000	-1.56658	PASS
			NV	20	-9000	-1.56658	PASS
			NV	35	-9000	-1.56658	PASS
		5785	NV	0	-9000	-1.555748	PASS
			NV	10	-9000	-1.555748	PASS
			NV	20	-9000	-1.555748	PASS
		5785	NV	35	-9000	-1.555748	PASS
			NV	0	-9000	-1.545064	PASS
			NV	10	-9000	-1.545064	PASS
		5825	NV	20	-9000	-1.545064	PASS
			NV	35	-9000	-1.545064	PASS
			NV	0	-9000	-1.545064	PASS

10 Test Equipment List

Conducted Emission Test

Description	Manufacturer	Model no.	Equipment ID	Serial no.	cal interval (year)	cal. due date
EMI Test Receiver	Rohde & Schwarz	ESR 3	68-4-74-19-002	102590	1	2022-6-4
LISN	Rohde & Schwarz	ENV216	68-4-87-19-001	102472	1	2022-6-5
Attenuator	Shanghai Huaxiang	TS2-26-3	68-4-81-16-003	080928189	1	2022-6-3
Test software	Rohde & Schwarz	EMC32	68-4-90-19-005-A01	Version10.35.02	N/A	N/A
Shielding Room	TDK	CSR #2	68-4-90-19-005	----	1	2022-11-07

Radiated Emission Test

Description	Manufacturer	Model no.	Equipment ID	Serial no.	cal interval (year)	cal. due date
EMI Test Receiver	Rohde & Schwarz	ESR 26	68-4-74-14-002	101269	1	2022-6-4
Trilog Super Broadband Test Antenna	Schwarzbeck	VULB 9162	68-4-80-19-003	284	1	2022-2-2
Wave Guide Antenna	ETS	3117	68-4-80-19-001	00218954	1	2022-5-24
Pre-amplifier	Rohde & Schwarz	SCU 18F	68-4-29-19-001	100745	1	2021-10-25
Pre-amplifier	Rohde & Schwarz	SCU 08F2	68-4-29-19-004	08400018	1	2021-10-25
Sideband Horn Antenna	Q-PAR	QWH-SL-18-40-K-SG	68-4-80-14-008	12827	1	2022-7-21
Pre-amplifier	Rohde & Schwarz	SCU 40A	68-4-29-14-002	100432	1	2022-7-27
3m Semi-anechoic chamber	TDK	SAC-3 #2	68-4-90-19-006	----	3	2022-12-29
Test software	Rohde & Schwarz	EMC32	68-4-90-19-006-A01	Version10.35.02	N/A	N/A

RF conducted test

DESCRIPTION	MANUFACTURE R	MODEL NO.	EQUIPMENT ID	SERIAL NO.	CAL INTERVAL (YEAR)	CAL. DUE DATE
Signal Analyzer	Rohde & Schwarz	FSV40	68-4-74-14-004	101030	1	2022-6-3
RF Switch Module	Rohde & Schwarz	OSP120/OS P-B157	68-4-93-14-003	101226/100851	1	2022-6-3
Power Splitter	Weinschel	1580	68-4-85-14-001	SC319	1	2022-6-3
Test software	Rohde & Schwarz	EMC32	68-4-48-14-003-A10	Version 10.60.10	N/A	N/A
Test software	Tonscend	System for BT/WIFI	68-4-74-14-006-A13	Version 2.6.77.0518	N/A	N/A
Shielding Room	TDK	TS8997	68-4-90-19-003	----	1	2022-11-07

11 System Measurement Uncertainty

For a 95% confidence level, the measurement expanded uncertainties for defined systems, in accordance with the recommendations of ISO 17025 were:

System Measurement Uncertainty	
Test Items	Extended Uncertainty
Uncertainty for Conducted Emission 150kHz-30MHz (for test using AMN ENV432 or ENV4200)	3.62dB
Uncertainty for Radiated Spurious Emission 25MHz-3000MHz	Horizontal: 4.81dB; Vertical: 4.89dB;
Uncertainty for Radiated Spurious Emission 3000MHz-18000MHz	Horizontal: 4.69dB; Vertical: 4.68dB;
Uncertainty for Radiated Spurious Emission 18000MHz-40000MHz	Horizontal: 4.89dB; Vertical: 4.87dB;
Uncertainty for Conducted RF test	RF Power Conducted: 1.16dB Frequency test involved: 0.6×10^{-7} or 1%

---THE END OF REPORT---