

FCC - TEST REPORT

Report Number : **6891025007201** Date of Issue: 2025-08-15

Models : **pro7HC, my8, pro8, pro4plus, FitStop**

Product Type : Vibrating Exercise Plate

Applicant : Performance Health Systems UK Ltd

Address : FORA, 20 Eastbourne Terrace London, Greater London,
W26LG, UNITED KINGDOM

Manufacturer : Performance Health Systems UK Ltd

Address : FORA, 20 Eastbourne Terrace London, Greater London,
W26LG, UNITED KINGDOM

Factory : Performance Health Systems China Limited

Address : Section 1, 6th Floor, Building A, Block D-XB-02-02-04-02,
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Guangdong, PEOPLE'S REPUBLIC OF CHINA

Test Result : ☒ **Positive** ☐ **Negative**

Total pages including
Appendices : **188**

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2 Details about the Test Laboratory

Details about the Test Laboratory

Test Site 1

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Telephone: 86 755 8828 6998

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FCC Registration No.: 514049

FCC Designation Number: CN5009

3 Description of the Equipment Under Test

Product:	Vibrating Exercise Plate
Model no.:	pro7HC, my8, pro8, pro4plus, FitStop
FCC ID:	2AF6VM8P8
Options and accessories:	NIL
Ratings:	120VAC, 50/60Hz, 220W (for pro7HC and pro8), 180W (for my8, pro4plus and FitStop), Class I
RF Transmission Frequency:	5180MHz-5825MHz for 802.11a/n_HT20/ac_VHT20 5190MHz-5795MHz for 802.11n_HT40/ac_VHT40 5210MHz-5775MHz for 802.11ac_VHT80
No. of Operated Channel:	25 channels for 802.11a/n_HT20/ac_VHT20; 12 channels for 802.11n_HT40/ac_VHT40 6 channels for 802.11ac_VHT80
Modulation:	DSSS, OFDM for RLAN
Antenna Type:	1 x Multilayer ceramic antenna
Antenna Gain:	8.22 dBi max for U-NII-1 band 7.49 dBi max for U-NII-2A band 6.01 dBi max for U-NII-2C band 6.39 dBi max for U-NII-3 band
Description of the EUT:	This Equipment Under Test is a Vibrating Exercise Plate with 2.4GHz WLAN, 5GHz RLAN, 13.56MHz RFID and Bluetooth BLE functions.
Remark:	This report is only for 5GHz RLAN.

NOTE 1:

The above EUT's information is declared by manufacturer. Please refer to the specifications or user's manual for more detailed description.

NOTE 2:

All models have same structure, main control board, UBD board, flitter board, power board and hall board.

Models pro7HC and pro8 are the same, except the model name.

Models my8, pro4plus and FitStop are the same, except the model name.

Models pro7HC and my8 have different Side panel board, Motor type and dimension, others are the same.

Unless otherwise specified, the full RF tests were applied on model pro8, other models were deemed to fulfil the relevant test requirements without further testing.

4 Summary of Test Standards

Test Standards	
FCC Part 15 Subpart E, 10-1-2024 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
KDB 905462 D03 Client Without DFS New Rules v01r02
ANSI C63.10-2020, American National Standard of Procedures for Compliance Testing of Unlicensed Wireless Devices

5 Summary of Test Results

Technical Requirements			
FCC Part 15 Subpart E, 10-1-2024 Edition			
Test Condition	Test Result		
	Pass	Fail	N/A
15.207 Conducted Emission AC Power Port	☒	☐	☐
15.407(a) (e) Emission bandwidth	☒	☐	☐
15.407(a) Maximum Conducted Output Power	☒	☐	☐
15.407(a) Maximum Power Spectral Density	☒	☐	☐
15.407(b) Unwanted Emissions	☒	☐	☐
15.407(g) Frequencies Stability	☒	☐	☐
15.407(h) Dynamic Frequency Selection (DFS) ^a	☒	☐	☐
15.203 Antenna Requirement ^b	☒	☐	☐

Remark: ^a The EUT is Clients Device without Radar Detection.

Remark: ^b The EUT uses a Multilayer ceramic antenna, the antenna gain is 8.22 dBi max for U-NII-1 band, 7.49 dBi max for U-NII-2A band, 6.01 dBi max for U-NII-2C band and 6.39 dBi max for U-NII-3 bandfor 5GHz RLAN. In accordance with §15.203, it is considered sufficiently to comply with the provisions of this section.

6 General Remarks

The conducted emissions and RF tests of pro8 were tested with AC mains input, and the input voltage is 120VAC/60Hz.

This submittal(s) (test report) is intended for FCC ID: 2AF6VM8P8, complies with Section 15.203, 15.205, 15.207, 15.209, 15.407 of the FCC Part 15, Subpart E.

SUMMARY:

All tests according to the regulations cited on page 6 were:

■ - Performed

□ - **Not** Performed

The Equipment Under Test

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

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

Sample Received Date: 2025-07-18

Testing Start Date: 2025-07-22

Testing End Date: 2025-08-12

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

Reviewed by:

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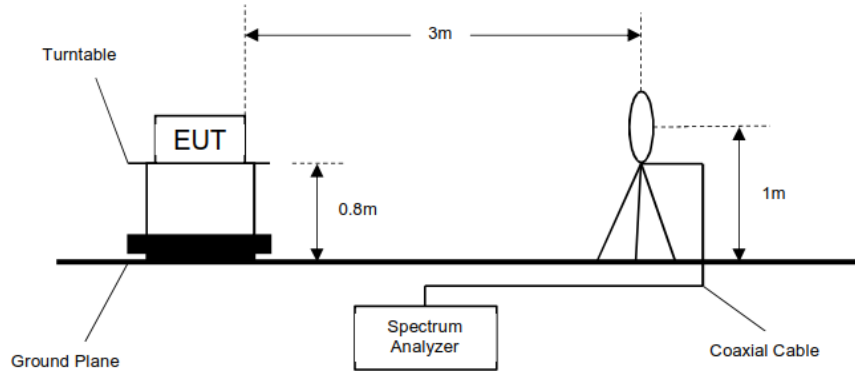


Carry Cai
Test Engineer

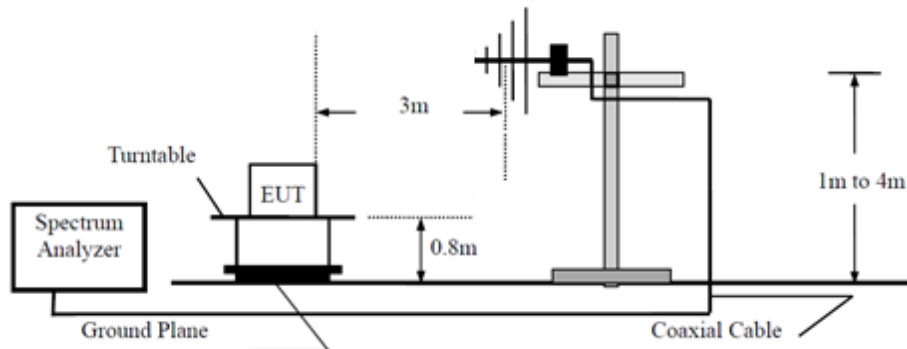
7 Test Setups

7.1 Radiated Test Setups

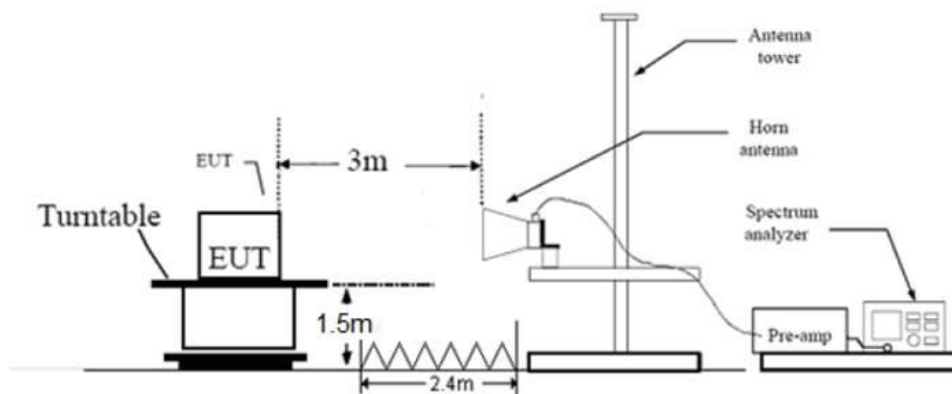
9kHz - 30MHz



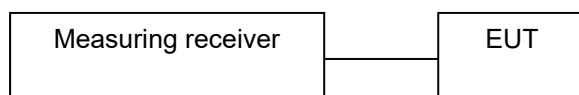
30MHz - 1000MHz



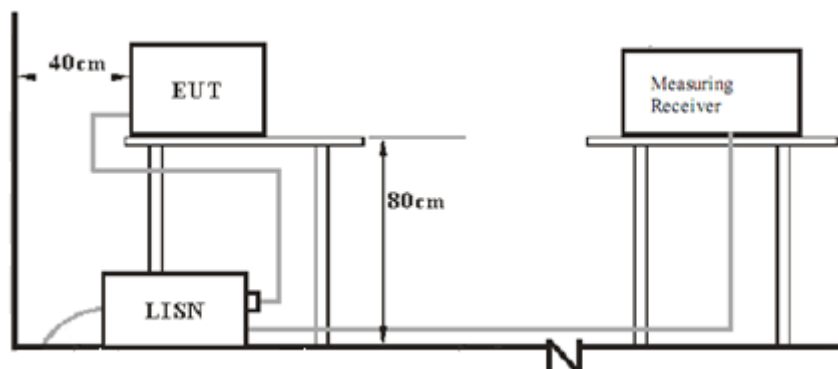
Above 1GHz



7.2 Conducted RF Test Setups



7.3 AC Power Line Conducted Emission Test Setups



8. Systems Test Configuration

Auxiliary Equipment Used during Test:

DESCRIPTION	MANUFACTURER	MODEL NO.	S/N
LAPTOP	LENOVO	X240	L34015282

Test software information:

Test Software Version	PuTTY release 0.78	
Mode	Setting TX Power	Data Rate
802.11a	13	11g 6 Mbps
802.11n HT20	13	MCS0 6.5 Mbps
802.11n HT40	11	MCS0 13.5 Mbps(40MHz)
802.11ac VHT20	12	11ac MCS0 NGI 6.5 Mbps(20MHz),
802.11ac VHT40	11	11ac MCS0 NGI 13.5 Mbps(40MHz)
802.11ac VHT80	10	11ac MCS0 NGI 29.3 Mbps(80MHz)

The system was configured to channel:

Test Mode	Channel (MHz)		
802.11a, 802.11n HT20 802.11ac VHT20	5G WIFI-Band 1		
	CH36 (5180MHz)	CH40 (5200MHz)	CH48 (5240MHz)
	5G WIFI-Band 2		
	CH52 (5260MHz)	CH56 (5280MHz)	CH64 (5320MHz)
	5G WIFI-Band 3		
	CH100 (5500MHz)	CH116 (5580MHz)	CH140 (5700MHz)
	CH144 (5720MHz)		
	5G WIFI-Band 4		
	CH149 (5745MHz)	CH157(5785MHz)	CH165 (5825MHz)

Test Mode	Channel (MHz)	
802.11n HT40 802.11ac VHT40	5G WIFI-Band 1	
	CH38(5190MHz)	CH46 (5230MHz)
	5G WIFI-Band 2	
	CH54(5270MHz)	CH62(5310MHz)
	5G WIFI-Band 3	
	CH102(5510MHz)	CH110(5550MHz)
	CH 142 (5710MHz)	CH134(5670MHz)
	5G WIFI-Band 4	
	CH151(5755MHz)	CH159(5795MHz)

Test Mode	Channel (MHz)	
802.11ac VHT80	5G WIFI-Band 1	
	CH42(5210MHz)	
	5G WIFI-Band 2	
	CH58(5290MHz)	
	5G WIFI-Band 3	
	CH106(5530MHz)	CH138(5690MHz)
	5G WIFI-Band 4	
	CH155(5775MHz)	

9 Technical Requirement

9.1 Conducted Emission

Test Method

1. The EUT was placed 0.4 meter from the conducting wall of the shielding room was kept at least 80 centimeters from any other grounded conducting surface.
2. Connect EUT to the power mains through a line impedance stabilization network (LISN).
3. All the support units are connecting to the other LISN.
4. The LISN provides 50 ohm coupling impedance for the measuring instrument.
5. Both sides of AC line were checked for maximum conducted interference.
6. The frequency range from 150 kHz to 30 MHz was searched.
7. Set the test-receiver system to Peak Detect Function and specified bandwidth (IF Bandwidth = 9kHz) with Maximum Hold Mode. Then measurement is also conducted by Average Detector and Quasi-Peak Detector Function respectively

Limit

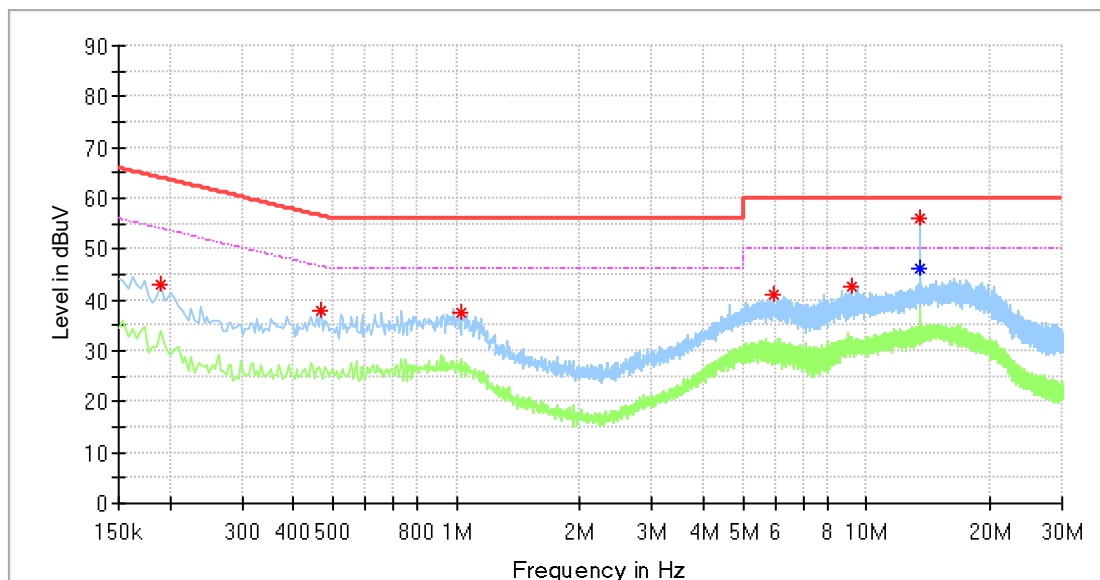
According to §15.207, conducted emissions limit as below:

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 : Vibrating Exercise Plate
M/N : pro8
Operating Condition : RLAN communication mode
Test Specification : Power Line, Live
Comment : AC 120V/60Hz



Critical_Freqs

Frequency (MHz)	MaxPeak (dBuV)	Average (dBuV)	Limit (dBuV)	Margin (dB)	Line	Corr. (dB)
0.190000	43.09	---	64.04	20.95	L1	10.02
0.466000	37.70	---	56.58	18.88	L1	10.04
1.022000	37.54	---	56.00	18.46	L1	10.05
5.966000	41.04	---	60.00	18.96	L1	10.17
9.174000	42.54	---	60.00	17.46	L1	10.48
13.562000	---	46.30	50.00	3.70	L1	10.45
13.562000	56.20	---	60.00	3.80	L1	10.45

Remark:

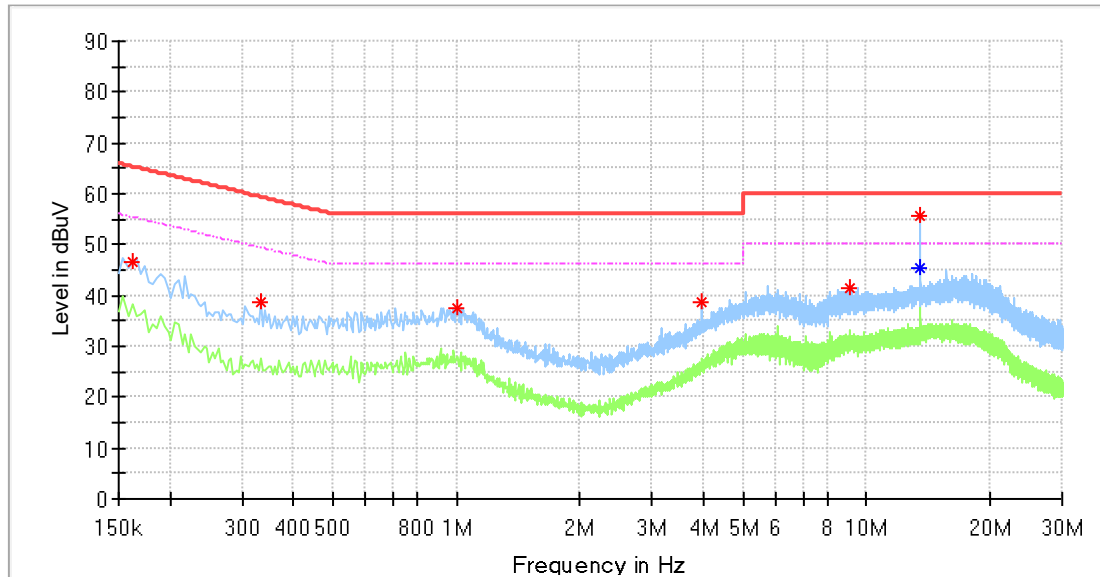
Level=Reading Level + Correction Factor

Correction Factor=Cable Loss + LISN Factor

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

Conducted Emission

Product Type : Vibrating Exercise Plate
 M/N : pro8
 Operating Condition : RLAN communication mode
 Test Specification : Power Line, Neutral
 Comment : AC 120V/60Hz



Critical_Freqs

Frequency (MHz)	MaxPeak (dBuV)	Average (dBuV)	Limit (dBuV)	Margin (dB)	Line	Corr. (dB)
0.162000	46.75	---	65.36	18.61	N	10.11
0.334000	38.77	---	59.35	20.58	N	10.05
1.002000	37.67	---	56.00	18.33	N	10.05
3.970000	38.68	---	56.00	17.32	N	10.16
9.110000	41.34	---	60.00	18.66	N	10.57
13.562000	55.70	---	60.00	4.30	N	10.56

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

1. Set RBW = approximately 1% of the emission bandwidth.
2. Set the VBW > RBW.
3. Detector = Peak.
4. Trace mode = max hold.
5. 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

1. Set center frequency to the nominal EUT channel center frequency
2. Set RBW = 100KHz
3. Set the video bandwidth (VBW) $\geq 3 \times$ RBW
4. Detector = Peak.
5. Trace mode = max hold.
6. Sweep = Sweep = No faster than coupled (auto) time.
7. Allow the trace to stabilize.
8. 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.
9. Record the results in the test report.

Limit: $\geq 500\text{KHz}$

3. Test Method of 99% Bandwidth

1. Set center frequency to the nominal EUT channel center frequency
2. Set span = 1.5 times to 5.0 times the OBW.
3. Set RBW = 1 % to 5 % of the OBW
4. Set VBW ≥ 3 RBW
5. Trace mode = max hold.
6. Sweep = auto couple.
7. Allow the trace to stabilize.
8. Use the 99 % power bandwidth function of the instrument.
9. Record the results in the test report.

Limit: No limit

Test Result: Pass

See Appendix A1&A2&A3 for test data.

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 12.2 in C63.10-2013.

(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. If transmitting antennas of directional gain greater than 6 dBi are used, the maximum conducted output power shall be reduced by the amount in dB that the directional gain of the antenna exceeds 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. If transmitting antennas of directional gain greater than 6 dBi are used, the maximum conducted output power shall be reduced by the amount in dB that the directional gain of the antenna exceeds 6 dBi.

For the band 5.725-5.85 GHz, the maximum conducted output power over the frequency band of operation shall not exceed 1 W. If transmitting antennas of directional gain greater than 6 dBi are used, the maximum conducted output power shall be reduced by the amount in dB that the directional gain of the antenna exceeds 6 dBi.

Note:

1. Maximum Conducted Output Power = Conducted Output Power + Correction Factor
2. Since the antenna gain in the 5.15-5.25 GHz band is 8.22 dBi, then the maximum conducted output power limit shall be reduced $8.22 \text{ dBi} - 6 \text{ dBi} = 2.22 \text{ dB}$.
3. Since the antenna gain in the 5.25-5.35 GHz band is 7.49 dBi, then the maximum conducted output power limit shall be reduced $7.49 \text{ dBi} - 6 \text{ dBi} = 1.49 \text{ dB}$.
4. Since the antenna gain in the 5.47-5.725 GHz band is 6.01 dBi, then the maximum conducted output power limit shall be reduced $6.01 \text{ dBi} - 6 \text{ dBi} = 0.01 \text{ dB}$.
5. Since the antenna gain in the 5.725-5.85 GHz band is 6.39 dBi, then the maximum conducted output power limit shall be reduced $6.39 \text{ dBi} - 6 \text{ dBi} = 0.39 \text{ dB}$.

Test Result: Pass

See Appendix B for test data.

9.4 Maximum Power Spectral Density

Test Method (Method SA-2 in C63.10-2013)

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. (trace averaging across on and off times of the EUT transmissions, followed by duty cycle correction).

1. Measure the duty cycle.
2. Set span to encompass the entire emission bandwidth (EBW) of the signal.
3. Set RBW = 1 MHz.
4. Set VBW $\geq$ 3 MHz.
5. Number of points in sweep $\geq$ 2 Span / RBW.
6. Sweep time = auto.
7. Detector = RMS
8. Trace average at least 100 traces in power averaging mode.
9. Add $10 \log(1/x)$, where x is the duty cycle, to the measured power in order to compute the average power during the actual transmission times. For example, add $10 \log(1/0.25) = 6$ dB if the duty cycle is 25 percent.

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: Pass

See Appendix C for test data.

9.5 Unwanted Emissions

Transmitting Spurious Emission Test Result as below:

Radiated Spurious Emission Test Method:

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:
 - 1) Procedure for Unwanted Emissions Measurements Below 1000 MHz
 - RBW = 120 kHz
 - VBW = 300 kHz
 - Detector = Peak
 - Trace mode = max hold
 - 2) For Above 1GHz:
 Procedure for Peak Unwanted Emissions Measurements Above 1000 MHz
 - RBW = 1 MHz
 - VBW $\geq$ 3 MHz
 - Detector = Peak
 - Sweep time = auto
 - Trace mode = max hold
 - 3) Procedures for Average Unwanted Emissions Measurements above 1000 MHz
 - a) RBW = 1 MHz.
 - b) VBW $\geq$ [3 $\times$ RBW].
 - c) Detector = Power averaging (rms), if [span / (# of points in sweep)] $\leq$ RBW / 2.
 Satisfying this condition can require increasing the number of points in the sweep or reducing the span. If the condition is not satisfied, then the detector mode shall be set to peak.
 - d) Averaging type = power (i.e., rms) (As an alternative, the detector and averaging type may be set for linear voltage averaging. Some instruments require linear display mode to use linear voltage averaging. Log or dB averaging shall not be used.)
 - e) Sweep time = auto.
 - f) Perform a trace average of at least 100 traces if the transmission is continuous. If the transmission is not continuous, then the number of traces shall be increased by a factor of 1 / D, where D 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—then rather than turning ON and OFF with the transmit cycle, at least 100 traces shall be averaged.)
 - g) If tests are performed with the EUT transmitting at a duty cycle less than 98%, then a correction factor shall be added to the measurement results prior to comparing with the

emission limit, 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:

(1) If power averaging (rms) mode was used in the preceding step e), then the correction factor is $[10 \log (1 / D)]$, where D is the duty cycle. For example, if the transmit duty cycle was 50%, then 3 dB shall be added to the measured emission levels.

(2) If linear voltage averaging mode was used in the preceding step e), then the correction factor is $[20 \log (1 / D)]$, where D is the duty cycle. For example, if the transmit duty cycle was 50%, then 6 dB shall 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, then no duty cycle correction is required for that emission.

Limit

The radio emission outside the operating frequency band 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. Radiated emissions which fall in the restricted bands, as defined in section 15.205, must comply with the radiated emission limits specified in section 15.209.

Frequency MHz	Field Strength uV/m	Field Strength dBμV/m	Detector
30-88	100	40	QP
88-216	150	43.5	QP
216-960	200	46	QP
960-1000	500	54	QP
Above 1000	500	54	AV
Above 1000	5000	74	PK

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 (9), Unwanted emissions below 1 GHz must comply with the general field strength limits set forth in §15.209.

According to part 15.407b (10), 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:

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

Spurious radiated emissions for transmitter

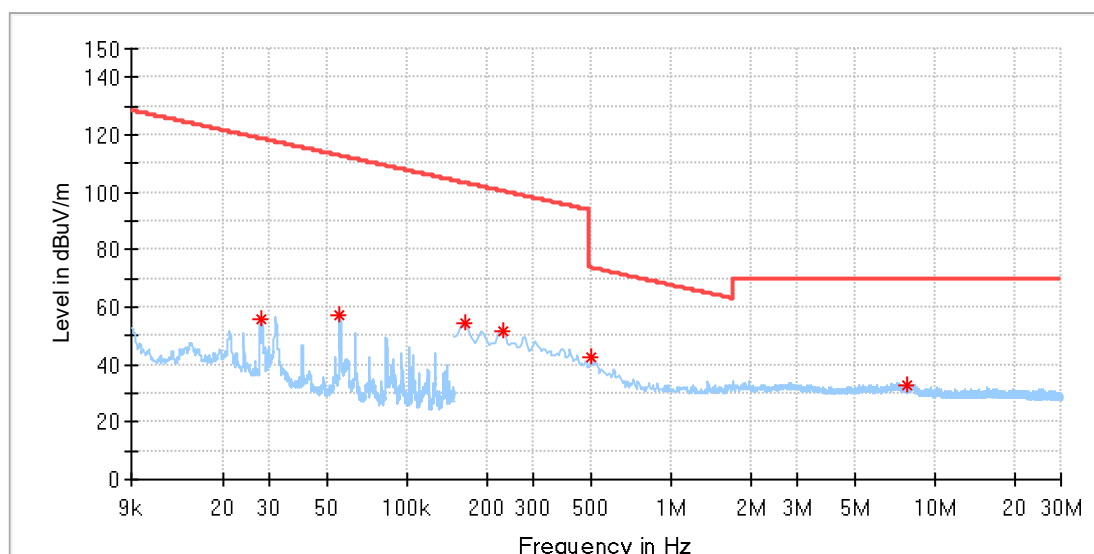
According to C63.10, if the peak (or quasi-peak) measured value complies with the average limit, it is unnecessary to perform an average measurement, so AV emission value did not show in below table if the peak value complies with average limit.

The test results for testing range of “9kHz to 40 GHz” showed as below is the WORST CASE (802.11a) for all test modes and channels.

Transmitting spurious emission test result as below:

Spurious radiated emissions for transmitter (9kHz to 30MHz)

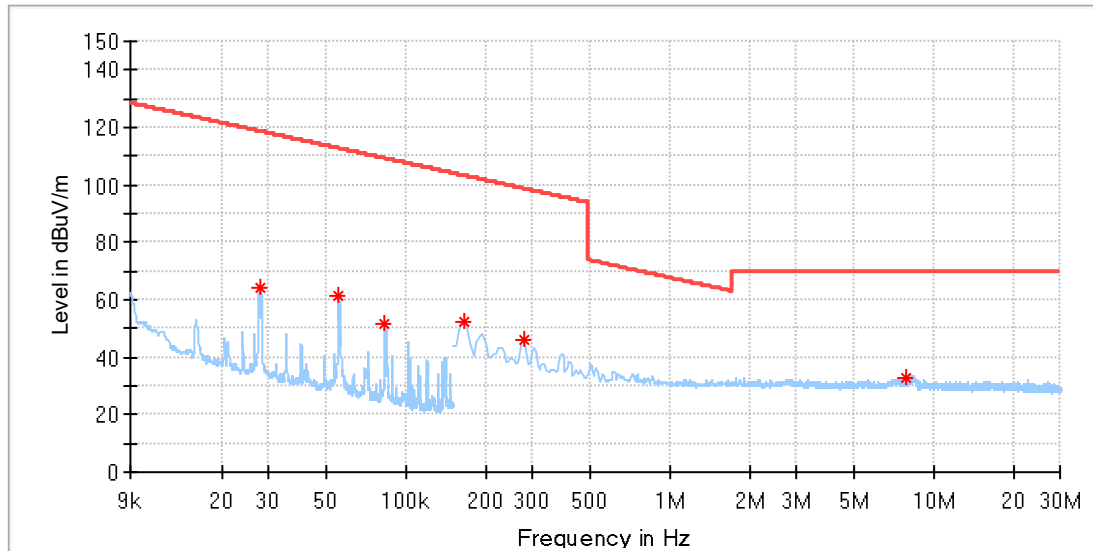
802.11a Modulation 5180MHz Test Result (worst case)



Critical Freqs

Frequency (MHz)	MaxPeak (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Pol	Azimuth (deg)	Corr. (dB/m)
0.028176	55.82	118.59	62.77	H	17.0	19.88
0.055436	57.40	112.72	55.32	H	24.0	19.92
0.164925	54.48	103.25	48.77	H	88.0	19.89
0.229600	51.75	100.38	48.63	H	235.0	19.88
0.498250	42.43	73.66	31.23	H	244.0	19.89
7.826425	32.45	69.50	37.05	H	359.0	20.20

802.11a Modulation 5180MHz Test Result (worst case)

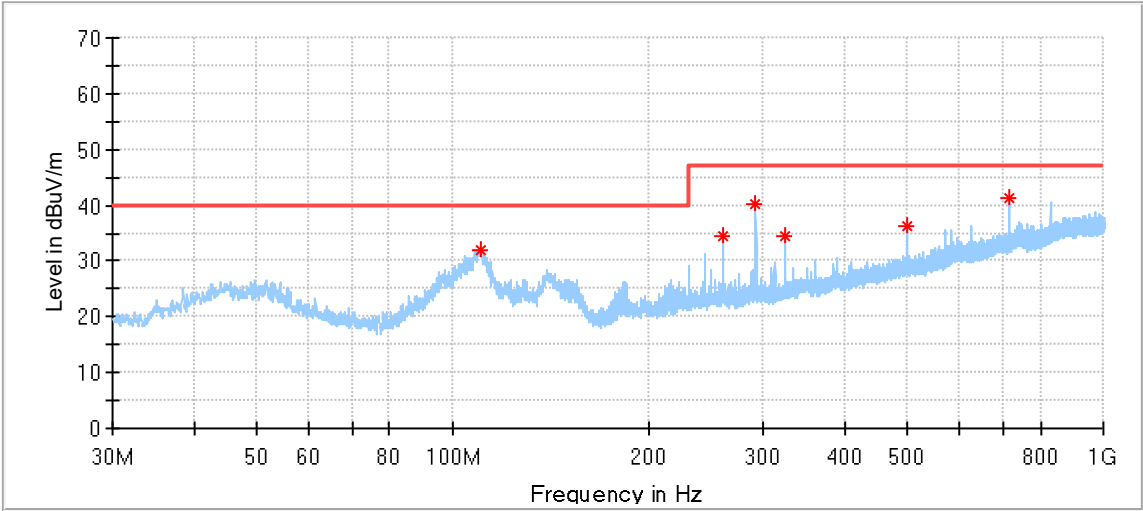


Critical_Freqs

Frequency (MHz)	MaxPeak (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Pol	Azimuth (deg)	Corr. (dB/m)	Corr. (dB)
0.027800	64.30	118.71	54.41	V	21.0	19.88	---
0.055389	61.09	112.73	51.64	V	251.0	19.92	---
0.083213	51.43	109.19	57.76	V	114.0	19.92	---
0.164925	52.63	103.25	50.62	V	44.0	19.89	---
0.279350	46.20	98.68	52.48	V	358.0	19.90	---
7.841350	32.49	69.50	37.01	V	0.0	20.20	---

Spurious radiated emissions for transmitter (30MHz to 1GHz)

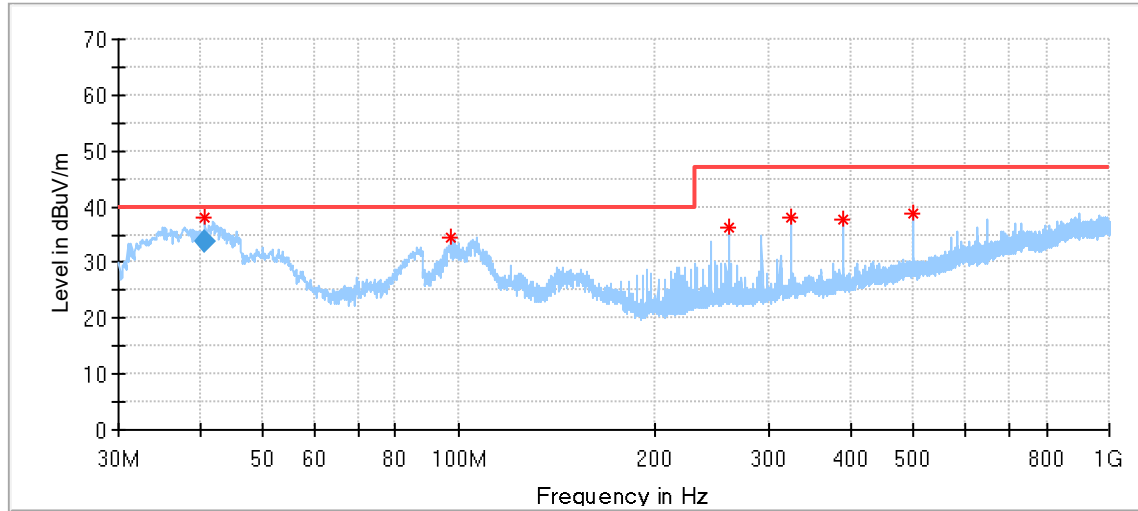
802.11a Modulation 5180MHz Test Result (worst case)



Critical_Freqs

Frequency (MHz)	MaxPeak (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Height (cm)	Pol	Azimuth (deg)	Corr. (dB/m)
110.725556	32.05	40.00	7.95	100.0	H	220.0	15.28
259.997778	34.53	47.00	12.47	100.0	H	251.0	18.05
292.492778	40.30	47.00	6.70	100.0	H	133.0	18.32
324.987778	34.37	47.00	12.63	100.0	H	291.0	19.26
499.965000	36.13	47.00	10.87	200.0	H	194.0	23.03
715.035556	41.37	47.00	5.63	100.0	H	204.0	26.46

802.11a Modulation 5180MHz Test Result (worst case)



Critical_Freqs

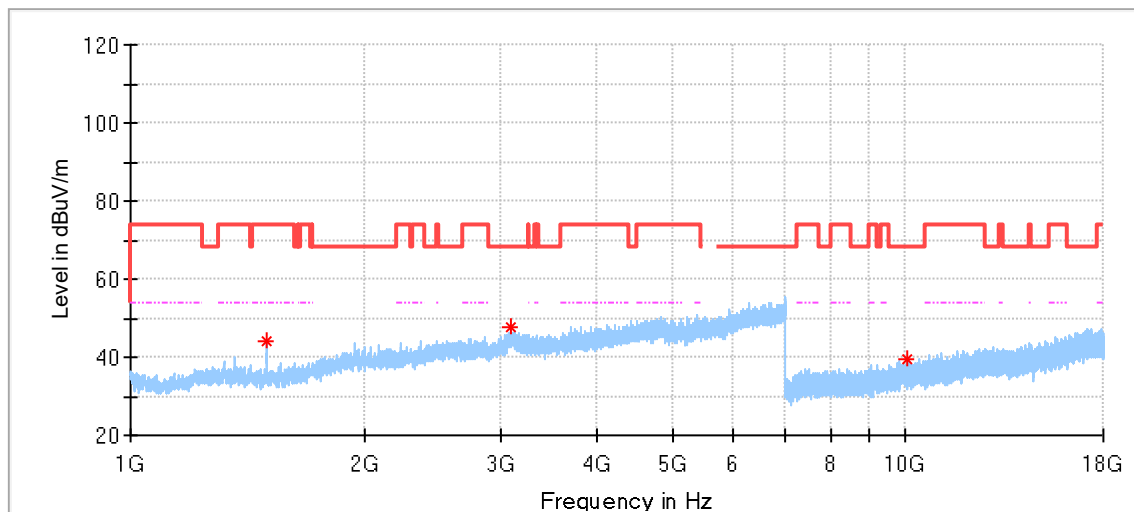
Frequency (MHz)	MaxPeak (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Height (cm)	Pol	Azimuth (deg)	Corr. (dB/m)
40.670000	38.14	40.00	1.86	100.0	V	118.0	17.25
97.253333	34.48	40.00	5.52	100.0	V	53.0	15.28
259.997778	36.36	47.00	10.64	200.0	V	181.0	18.05
324.987778	38.01	47.00	8.99	100.0	V	182.0	19.26
390.031667	37.83	47.00	9.17	100.0	V	0.0	20.94
500.018889	38.81	47.00	8.19	100.0	V	213.0	23.03

Final_Result

Frequency (MHz)	QuasiPeak (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Height (cm)	Pol	Azimuth (deg)	Corr. (dB/m)
40.670000	33.77	40.00	6.23	100.0	V	118.0	17.25

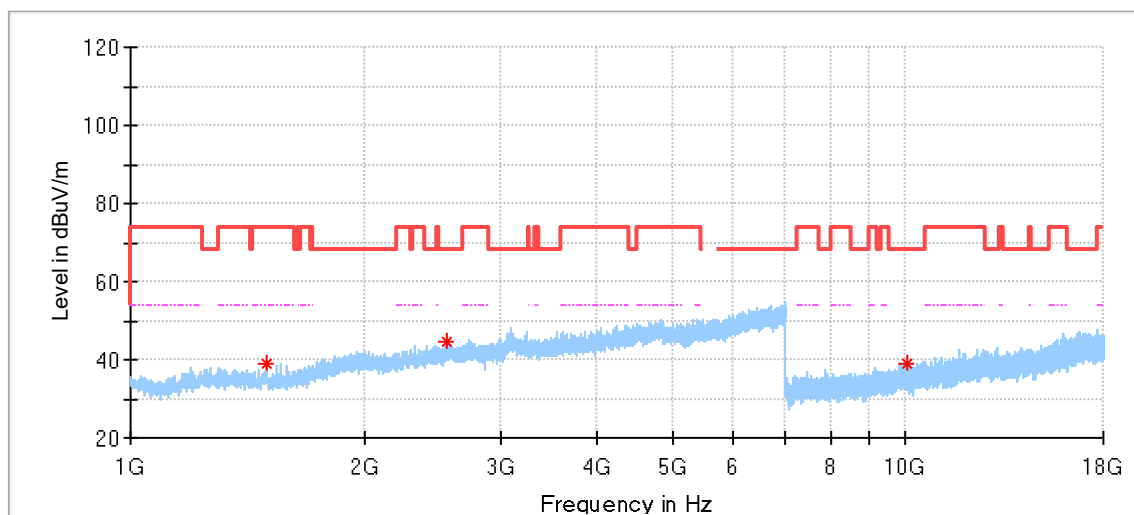
Spurious radiated emissions for transmitter (1GHz to 18GHz)

802.11a Modulation 5180MHz Test Result



Critical_Freqs

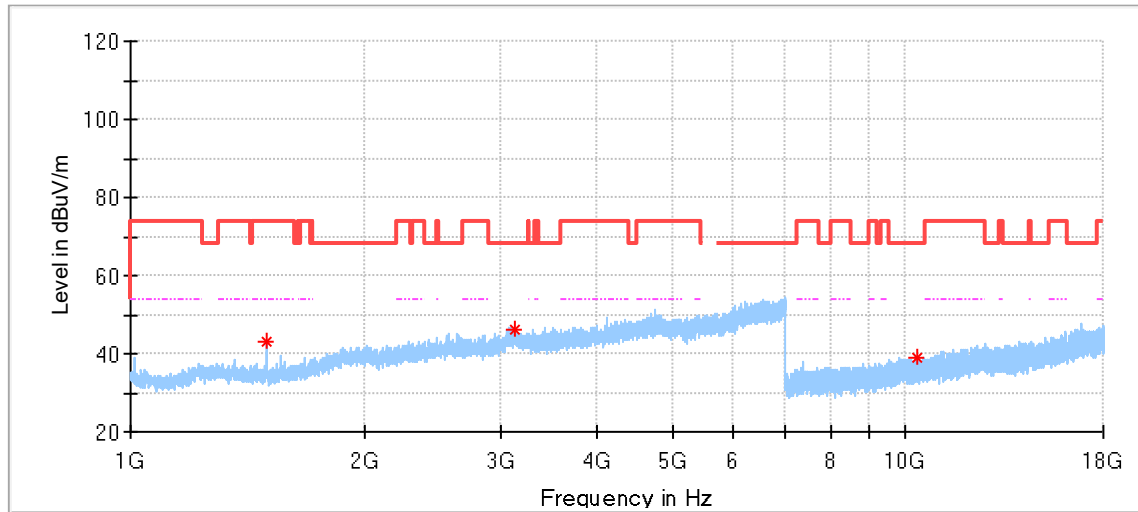
Frequency (MHz)	MaxPeak (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Height (cm)	Pol	Azimuth (deg)	Corr. (dB/m)
1500.000000	43.99	74.00	30.01	150.0	H	68.0	-7.51
3088.500000	47.88	68.20	20.32	150.0	H	139.0	2.47
10064.500000	39.37	68.20	28.83	150.0	H	113.0	13.09



Critical_Freqs

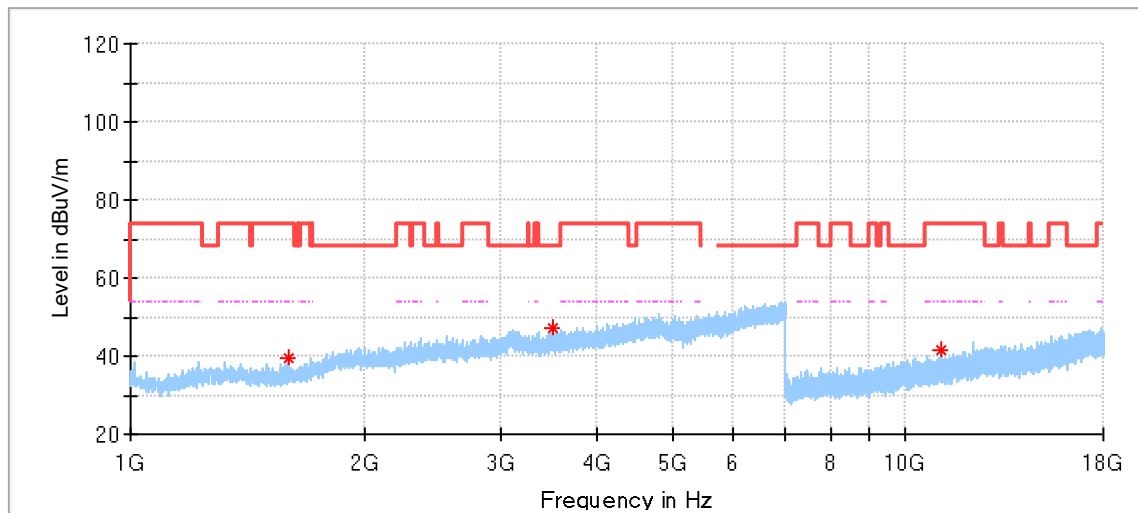
Frequency (MHz)	MaxPeak (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Height (cm)	Pol	Azimuth (deg)	Corr. (dB/m)
1500.000000	39.05	74.00	34.95	150.0	V	78.0	-7.51
2555.500000	44.51	68.20	23.69	150.0	V	25.0	-0.60
10034.000000	38.96	68.20	29.24	150.0	V	57.0	13.08

802.11a Modulation 5200MHz Test Result



Critical_Freqs

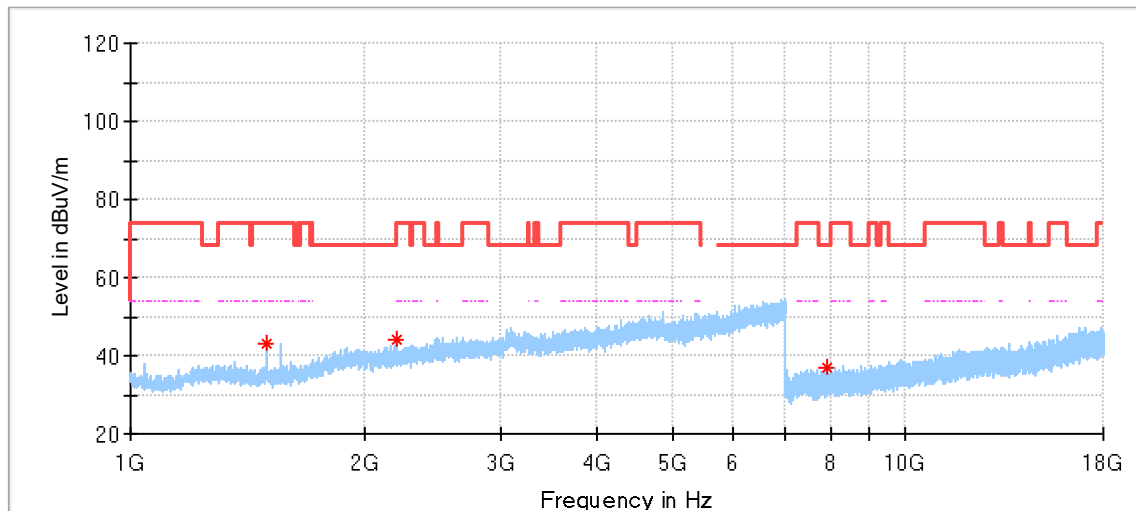
Frequency (MHz)	MaxPeak (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Height (cm)	Pol	Azimuth (deg)	Corr. (dB/m)
1500.000000	43.05	74.00	30.95	150.0	H	78.0	-7.51
3126.000000	46.41	68.20	21.79	150.0	H	0.0	2.07
10372.500000	38.95	68.20	29.25	150.0	H	275.0	13.36



Critical_Freqs

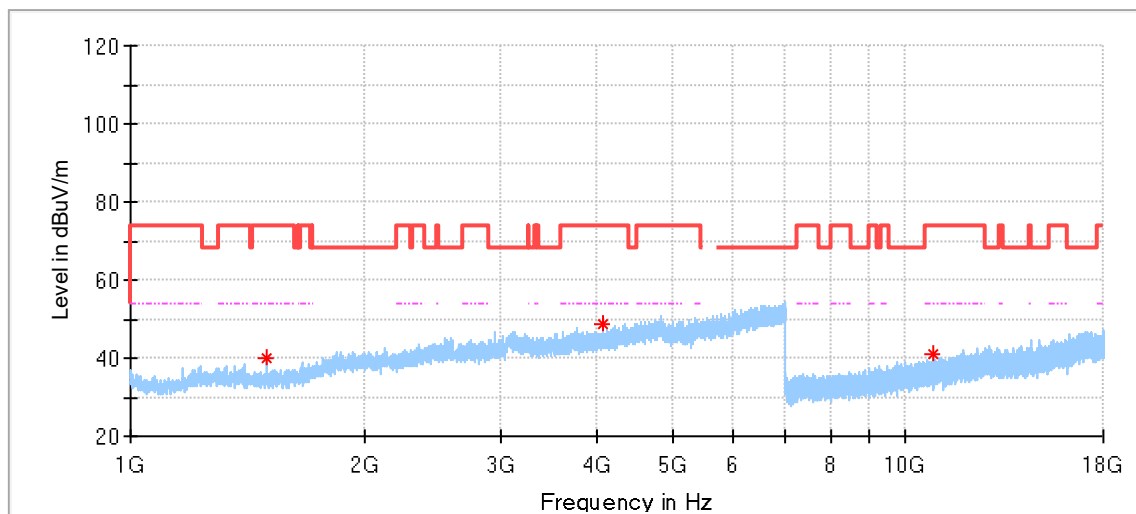
Frequency (MHz)	MaxPeak (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Height (cm)	Pol	Azimuth (deg)	Corr. (dB/m)
1596.000000	39.28	74.00	34.72	150.0	V	102.0	-7.12
3504.500000	46.99	68.20	21.21	150.0	V	75.0	1.95
11148.500000	41.54	74.00	32.46	150.0	V	243.0	14.58

802.11a Modulation 5240MHz Test Result



Critical Freqs

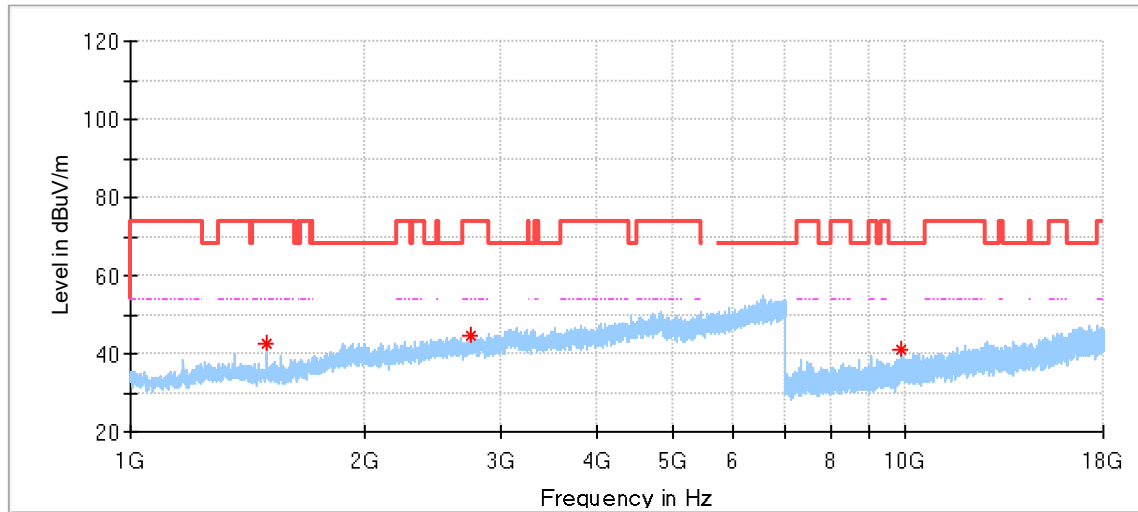
Frequency (MHz)	MaxPeak (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Height (cm)	Pol	Azimuth (deg)	Corr. (dB/m)
1500.000000	43.32	74.00	30.68	150.0	H	356.0	-7.51
2210.500000	44.05	74.00	29.95	150.0	H	38.0	-2.45
7906.000000	37.15	68.20	31.05	150.0	H	359.0	9.82



Critical Freqs

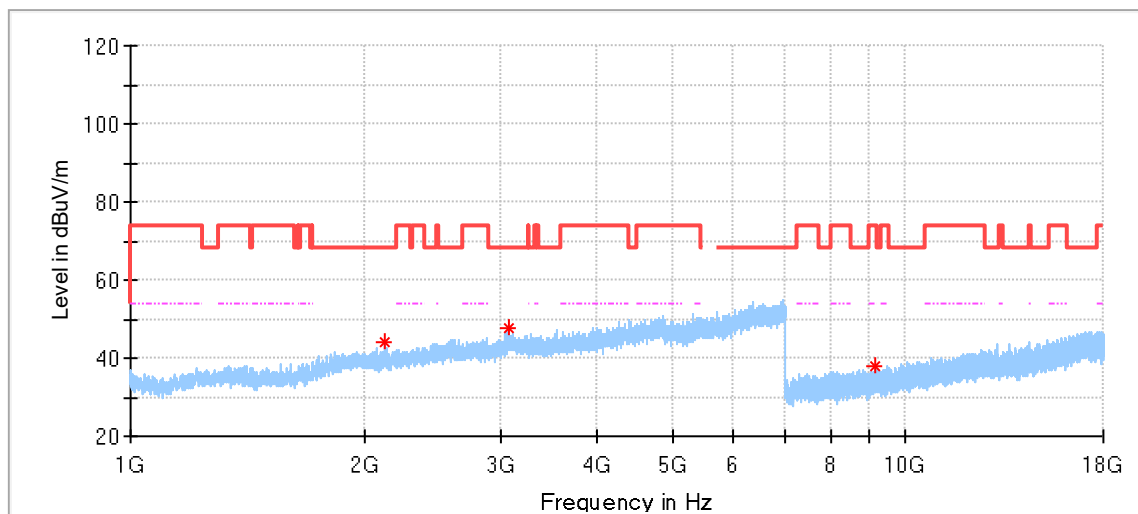
Frequency (MHz)	MaxPeak (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Height (cm)	Pol	Azimuth (deg)	Corr. (dB/m)
1500.500000	39.89	74.00	34.11	150.0	V	118.0	-7.51
4073.500000	48.76	74.00	25.24	150.0	V	91.0	3.09
10882.500000	41.02	74.00	32.98	150.0	V	172.0	13.69

802.11a Modulation 5260MHz Test Result



Critical Freqs

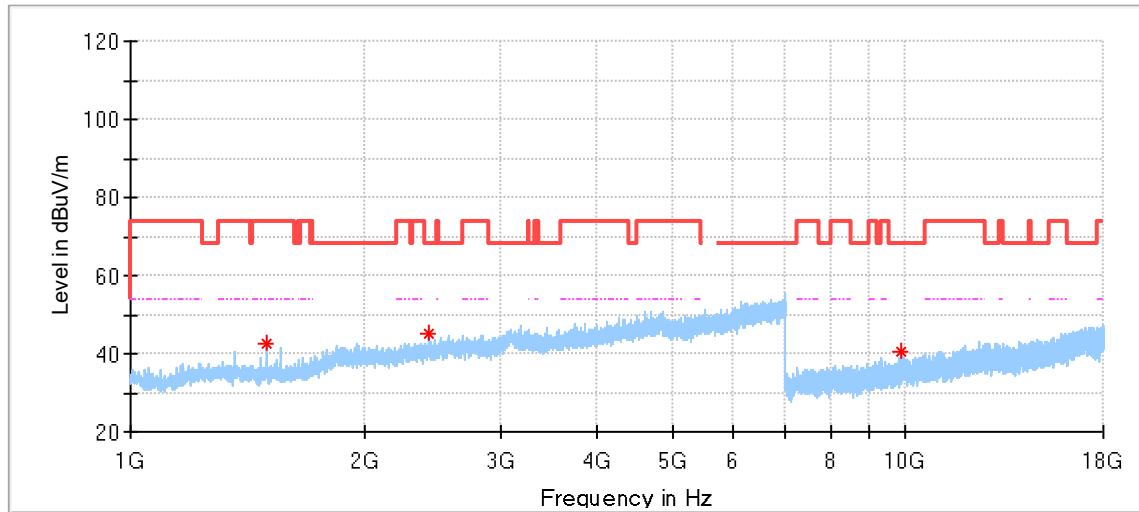
Frequency (MHz)	MaxPeak (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Height (cm)	Pol	Azimuth (deg)	Corr. (dB/m)
1500.500000	42.38	74.00	31.62	150.0	H	52.0	-7.51
2743.000000	44.85	74.00	29.15	150.0	H	356.0	-0.60
9882.000000	41.09	68.20	27.11	150.0	H	190.0	13.02



Critical Freqs

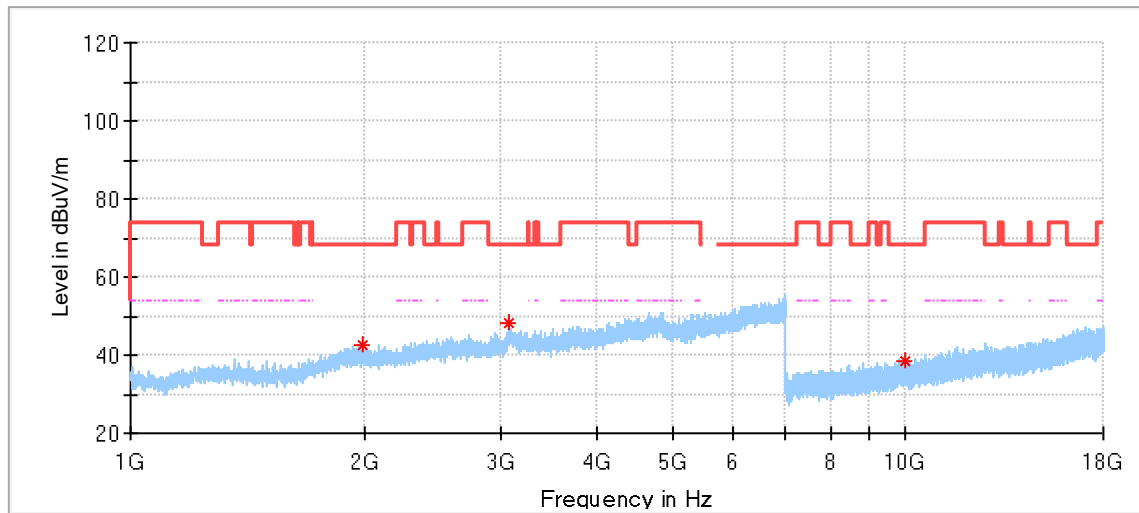
Frequency (MHz)	MaxPeak (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Height (cm)	Pol	Azimuth (deg)	Corr. (dB/m)
2127.000000	44.05	68.20	24.15	150.0	V	345.0	-2.78
3074.500000	47.60	68.20	20.60	150.0	V	328.0	2.07
9114.500000	38.05	74.00	35.95	150.0	V	190.0	11.93

802.11a Modulation 5280MHz Test Result



Critical Freqs

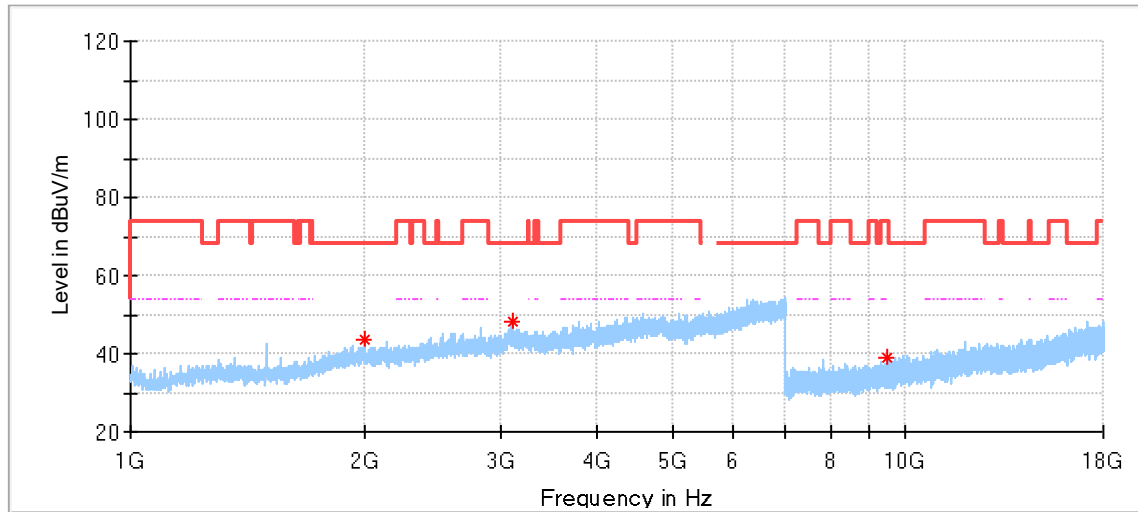
Frequency (MHz)	MaxPeak (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Height (cm)	Pol	Azimuth (deg)	Corr. (dB/m)
1500.500000	42.79	74.00	31.21	150.0	H	65.0	-7.51
2431.500000	45.14	68.20	23.06	150.0	H	47.0	-0.94
9866.500000	40.42	68.20	27.78	150.0	H	30.0	13.01



Critical Freqs

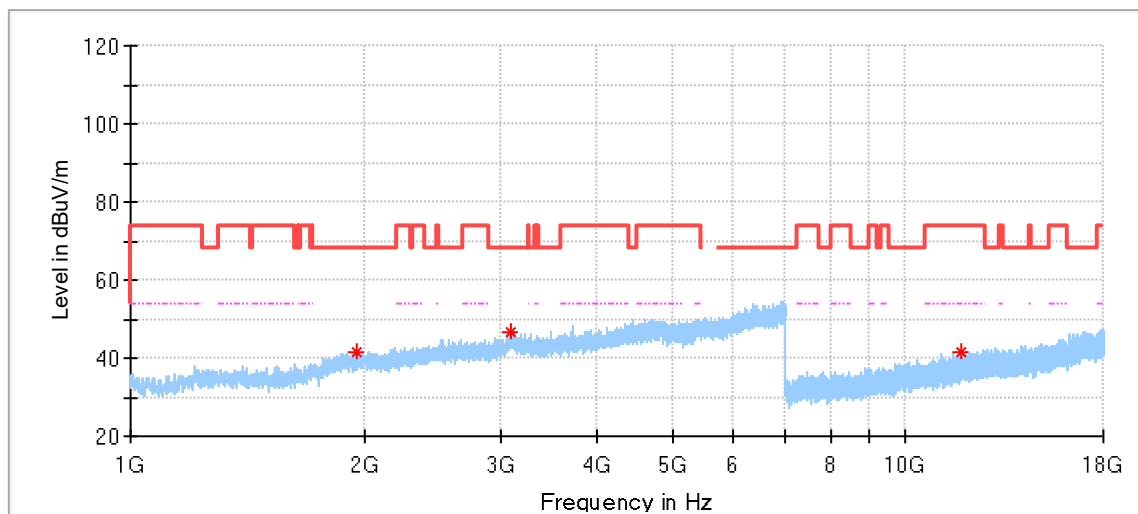
Frequency (MHz)	MaxPeak (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Height (cm)	Pol	Azimuth (deg)	Corr. (dB/m)
1990.000000	42.69	68.20	25.51	150.0	V	221.0	-2.54
3072.500000	47.97	68.20	20.23	150.0	V	150.0	2.00
9971.500000	38.68	68.20	29.52	150.0	V	218.0	13.02

802.11a Modulation 5320MHz Test Result



Critical Freqs

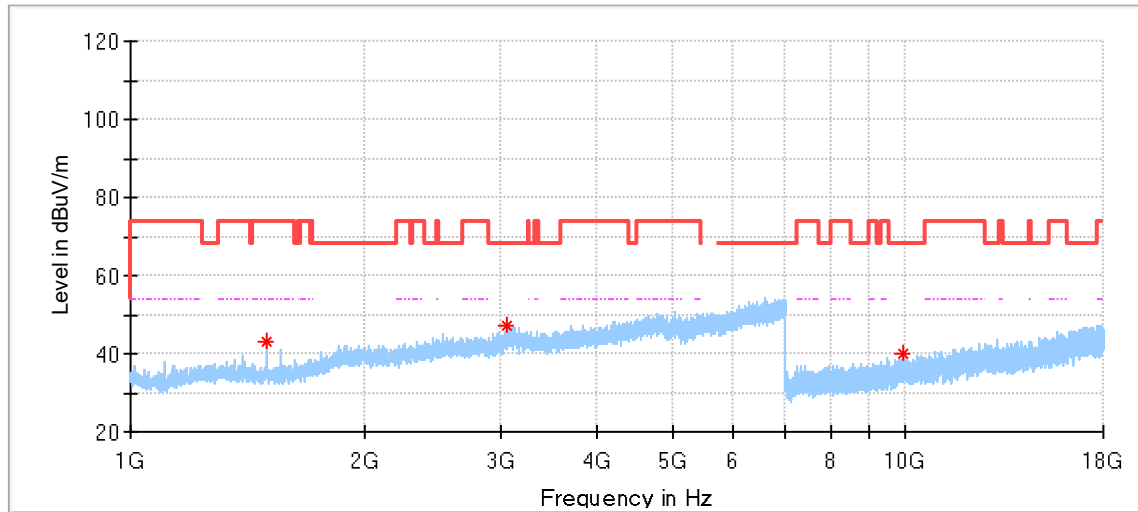
Frequency (MHz)	MaxPeak (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Height (cm)	Pol	Azimuth (deg)	Corr. (dB/m)
2000.000000	43.51	68.20	24.69	150.0	H	270.0	-2.63
3110.000000	48.01	68.20	20.19	150.0	H	332.0	2.44
9487.500000	39.12	74.00	34.88	150.0	H	350.0	12.46



Critical Freqs

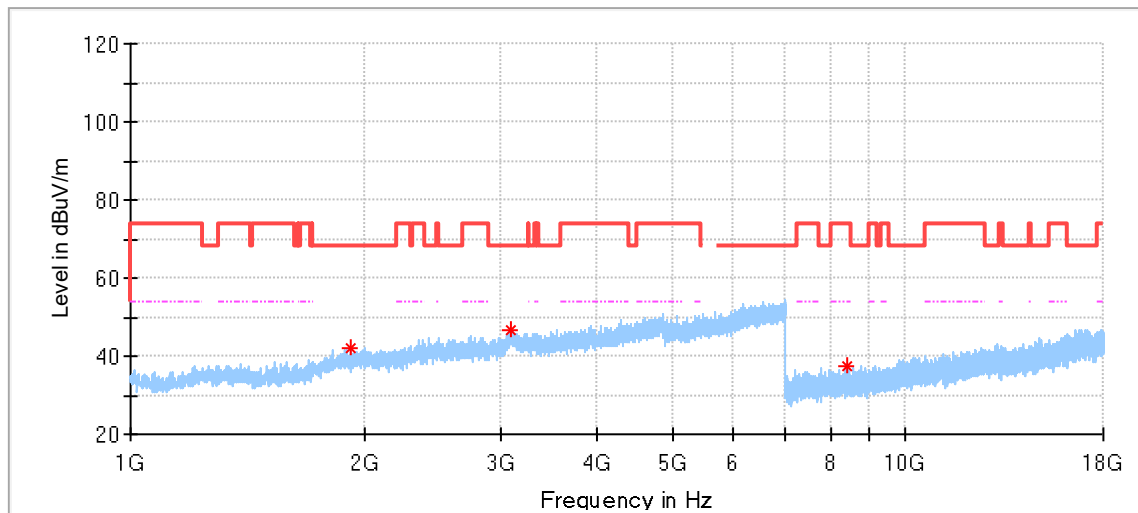
Frequency (MHz)	MaxPeak (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Height (cm)	Pol	Azimuth (deg)	Corr. (dB/m)
1964.000000	41.63	68.20	26.57	150.0	V	157.0	-2.63
3094.500000	46.84	68.20	21.36	150.0	V	104.0	2.63
11801.500000	41.28	74.00	32.72	150.0	V	113.0	15.94

802.11a Modulation 5500MHz Test Result



Critical_Freqs

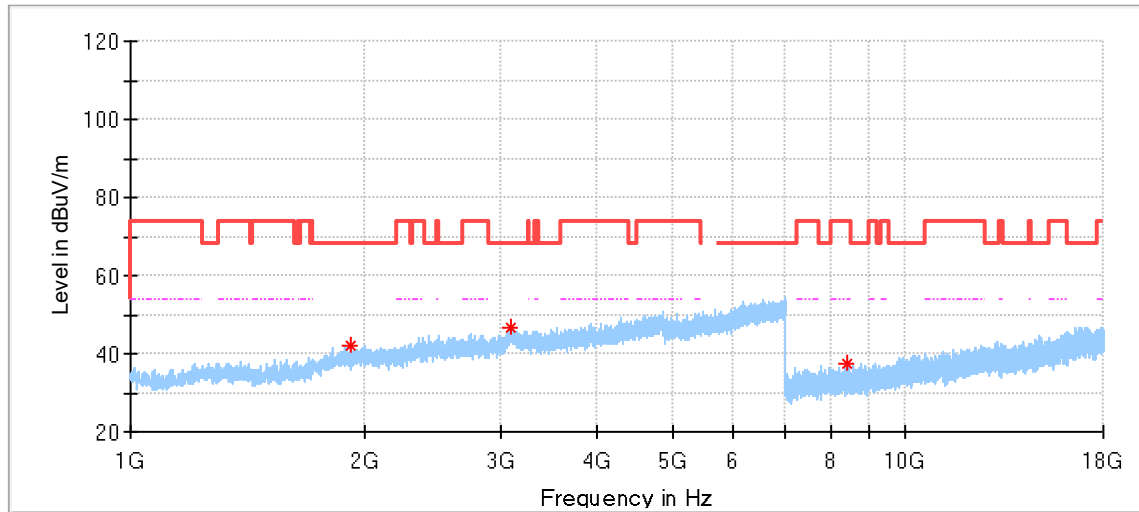
Frequency (MHz)	MaxPeak (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Height (cm)	Pol	Azimuth (deg)	Corr. (dB/m)
1500.000000	43.08	74.00	30.92	150.0	H	77.0	-7.51
3068.000000	47.14	68.20	21.06	150.0	H	59.0	1.84
9924.000000	39.97	68.20	28.23	150.0	H	323.0	13.03



Critical_Freqs

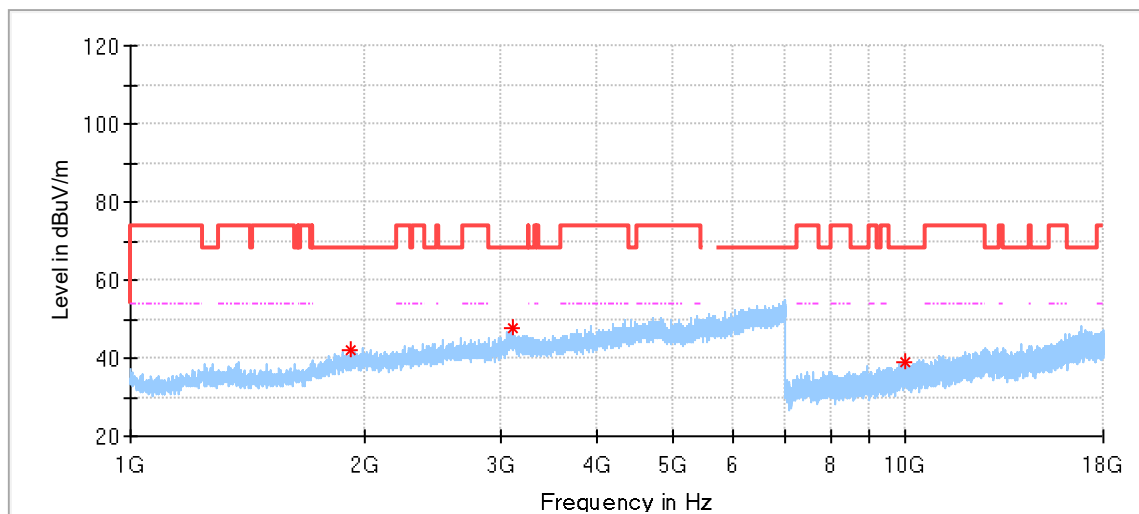
Frequency (MHz)	MaxPeak (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Height (cm)	Pol	Azimuth (deg)	Corr. (dB/m)
1921.000000	42.30	68.20	25.90	150.0	V	227.0	-3.07
3098.500000	46.50	68.20	21.70	150.0	V	93.0	2.73
8384.000000	37.62	74.00	36.38	150.0	V	164.0	10.61

802.11a Modulation 5580MHz Test Result



Critical Freqs

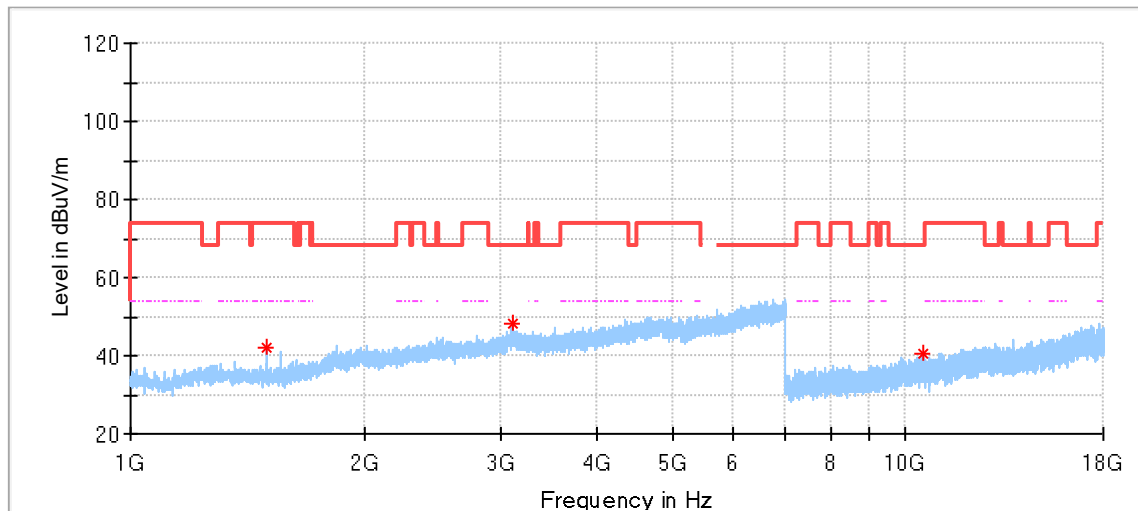
Frequency (MHz)	MaxPeak (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Height (cm)	Pol	Azimuth (deg)	Corr. (dB/m)
1921.000000	42.30	68.20	25.90	150.0	V	227.0	-3.07
3098.500000	46.50	68.20	21.70	150.0	V	93.0	2.73
8384.000000	37.62	74.00	36.38	150.0	V	164.0	10.61



Critical Freqs

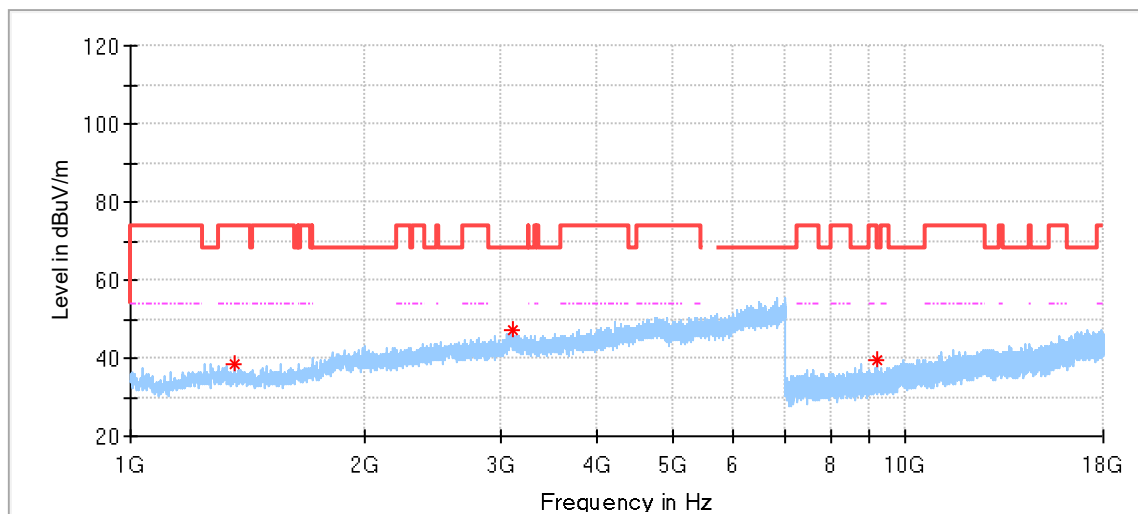
Frequency (MHz)	MaxPeak (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Height (cm)	Pol	Azimuth (deg)	Corr. (dB/m)
1924.500000	42.12	68.20	26.08	150.0	V	194.0	-3.04
3113.000000	47.49	68.20	20.71	150.0	V	351.0	2.37
9988.000000	38.99	68.20	29.21	150.0	V	29.0	13.04

802.11a Modulation 5700MHz Test Result



Critical Freqs

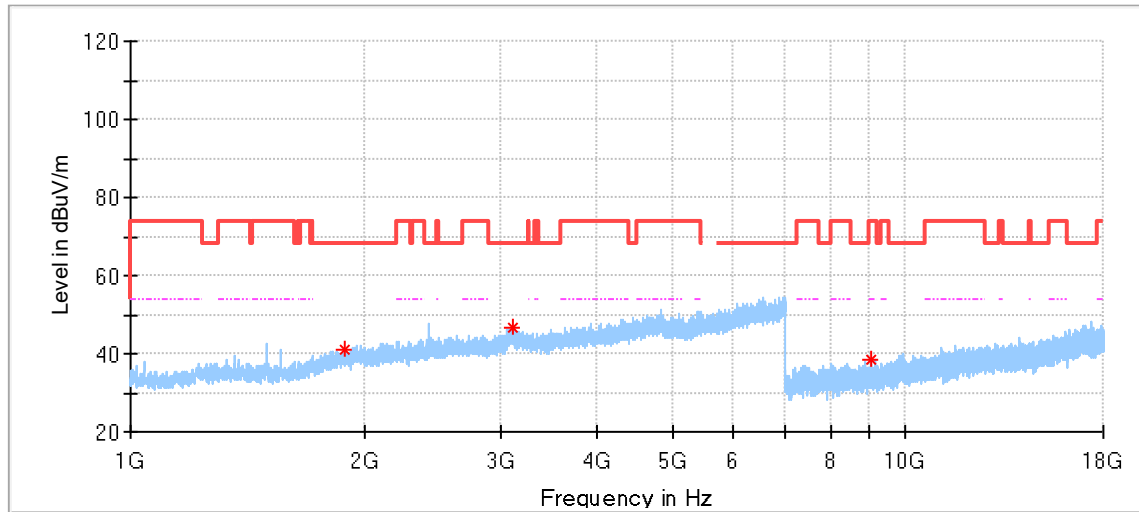
Frequency (MHz)	MaxPeak (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Height (cm)	Pol	Azimuth (deg)	Corr. (dB/m)
1500.000000	42.16	74.00	31.84	150.0	H	356.0	-7.51
3120.500000	48.12	68.20	20.08	150.0	H	318.0	2.20
10544.000000	40.40	68.20	27.80	150.0	H	57.0	13.34



Critical Freqs

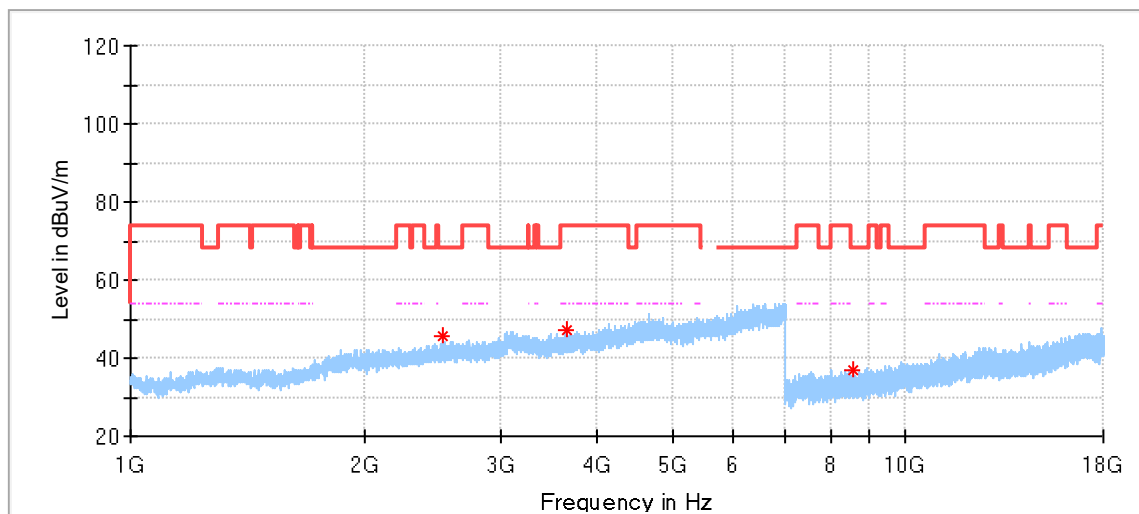
Frequency (MHz)	MaxPeak (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Height (cm)	Pol	Azimuth (deg)	Corr. (dB/m)
1365.000000	38.21	74.00	35.79	150.0	V	4.0	-7.12
3114.000000	47.15	68.20	21.05	150.0	V	138.0	2.35
9184.000000	39.36	74.00	34.64	150.0	V	29.0	11.98

802.11a Modulation 5745MHz Test Result



Critical Freqs

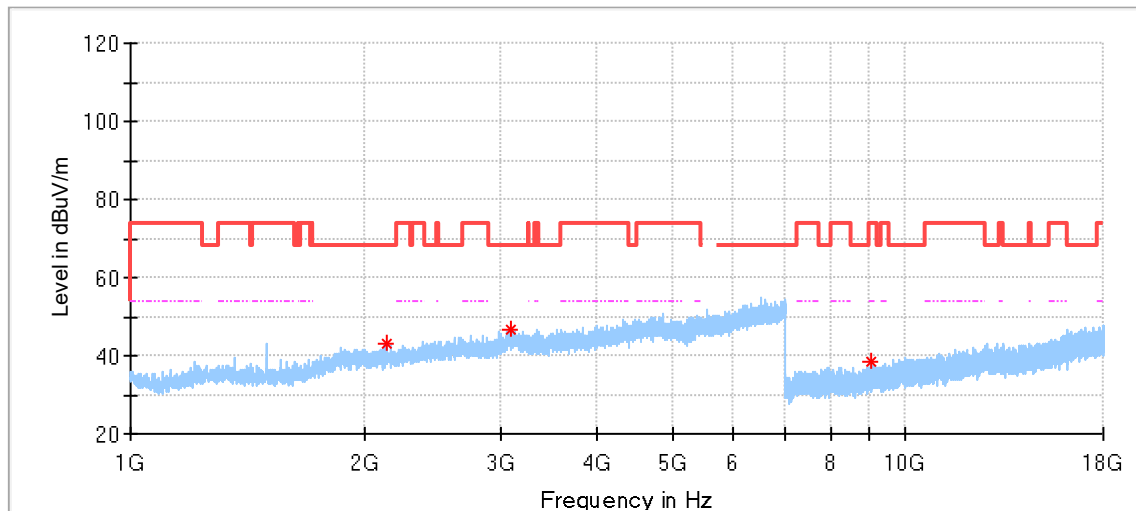
Frequency (MHz)	MaxPeak (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Height (cm)	Pol	Azimuth (deg)	Corr. (dB/m)
1890.500000	40.97	68.20	27.23	150.0	H	336.0	-3.11
3117.000000	46.47	68.20	21.73	150.0	H	20.0	2.28
9015.000000	38.71	74.00	35.29	150.0	H	85.0	11.73



Critical Freqs

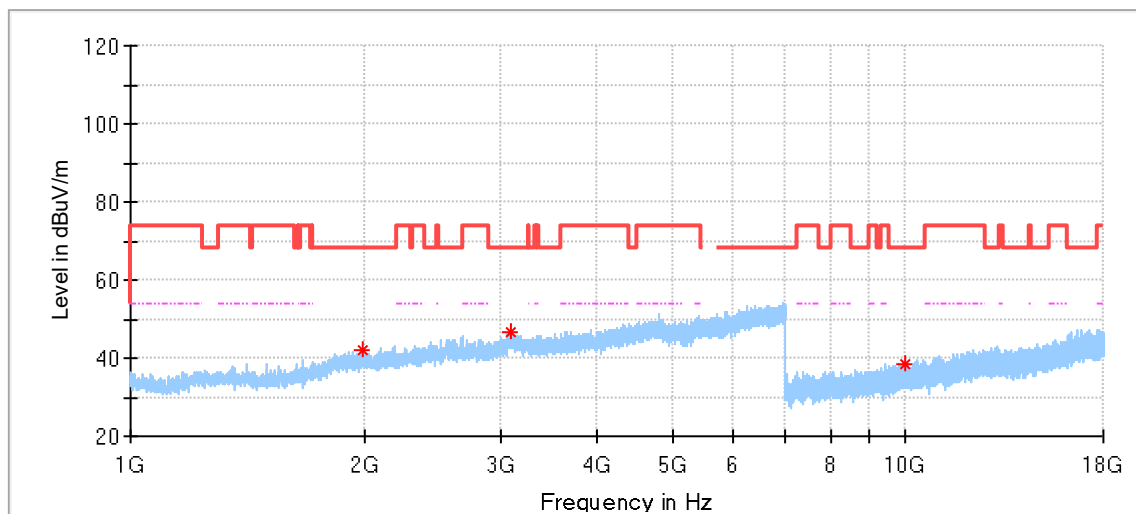
Frequency (MHz)	MaxPeak (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Height (cm)	Pol	Azimuth (deg)	Corr. (dB/m)
2534.500000	45.74	68.20	22.46	150.0	V	300.0	-0.74
3660.000000	47.42	74.00	26.58	150.0	V	300.0	2.17
8549.500000	36.80	68.20	31.40	150.0	V	218.0	10.80

802.11a Modulation 5785MHz Test Result



Critical Freqs

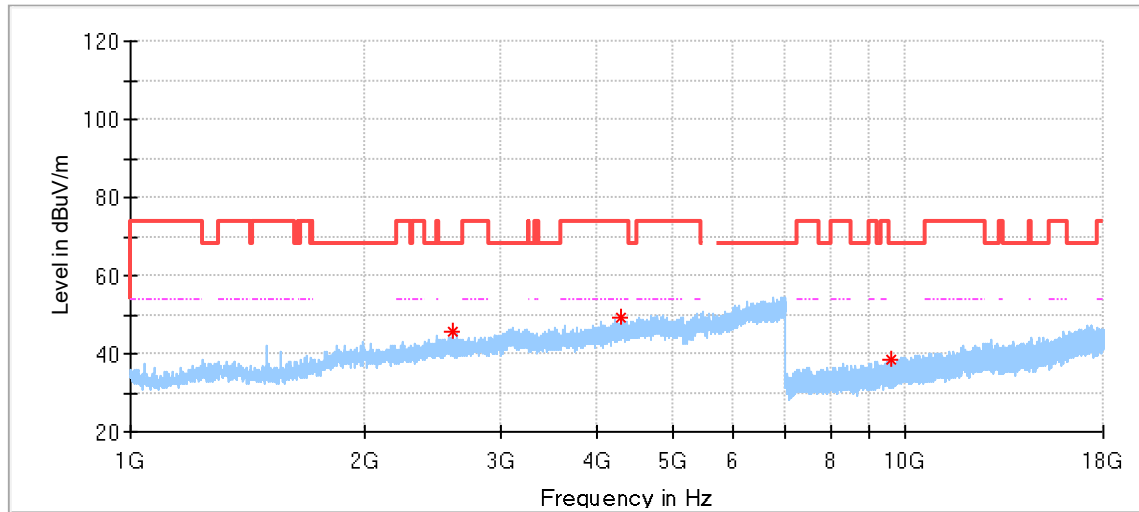
Frequency (MHz)	MaxPeak (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Height (cm)	Pol	Azimuth (deg)	Corr. (dB/m)
2136.000000	43.30	68.20	24.90	150.0	H	288.0	-2.76
3103.000000	46.43	68.20	21.77	150.0	H	354.0	2.67
9045.000000	38.23	74.00	35.77	150.0	H	350.0	11.76



Critical Freqs

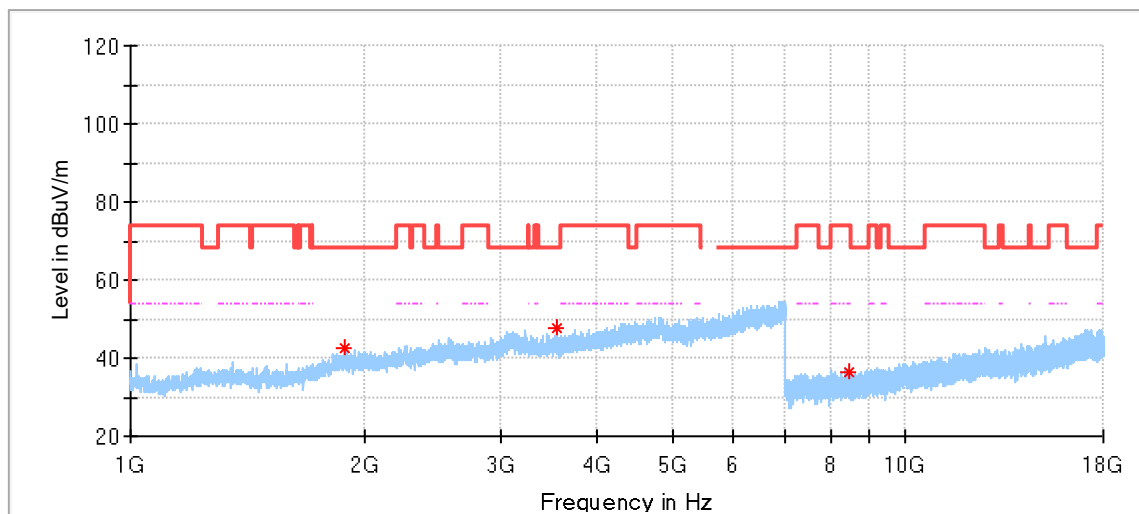
Frequency (MHz)	MaxPeak (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Height (cm)	Pol	Azimuth (deg)	Corr. (dB/m)
1990.500000	41.96	68.20	26.24	150.0	V	291.0	-2.54
3091.000000	46.79	68.20	21.41	150.0	V	175.0	2.53
9980.000000	38.68	68.20	29.52	150.0	V	350.0	13.03

802.11a Modulation 5825MHz Test Result



Critical Freqs

Frequency (MHz)	MaxPeak (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Height (cm)	Pol	Azimuth (deg)	Corr. (dB/m)
2601.000000	45.39	68.20	22.81	150.0	H	114.0	-0.51
4301.000000	49.46	74.00	24.54	150.0	H	185.0	4.01
9608.500000	38.33	68.20	29.87	150.0	H	164.0	12.59

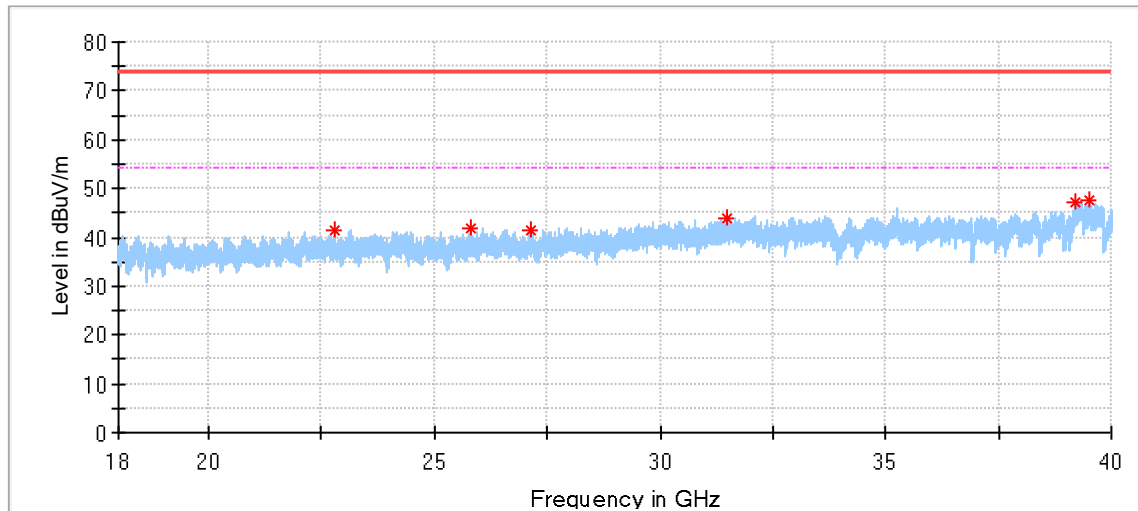


Critical Freqs

Frequency (MHz)	MaxPeak (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Height (cm)	Pol	Azimuth (deg)	Corr. (dB/m)
1886.500000	42.34	68.20	25.86	150.0	V	123.0	-3.15
3557.000000	47.87	68.20	20.33	150.0	V	132.0	1.75
8477.000000	36.65	74.00	37.35	150.0	V	88.0	10.71

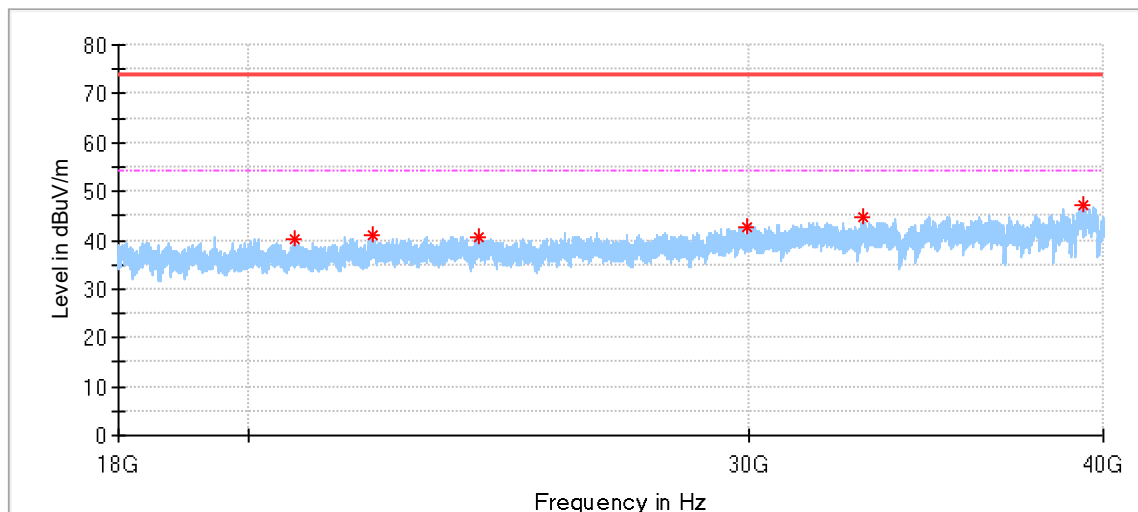
Spurious radiated emissions for transmitter (18GHz to 40GHz)

802.11a Modulation 5180MHz Test Result (worst case)



Critical_Freqs

Frequency (MHz)	MaxPeak (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Height (cm)	Pol	Azimuth (deg)	Corr. (dB/m)
22787.750000	41.50	74.00	32.50	150.0	H	274.0	-0.76
25818.937500	41.94	74.00	32.06	150.0	H	0.0	0.87
27130.687500	41.63	74.00	32.37	150.0	H	4.0	0.55
31504.562500	43.72	74.00	30.28	150.0	H	152.0	1.52
39203.875000	47.36	74.00	26.64	150.0	H	4.0	4.42
39516.000000	47.52	74.00	26.48	150.0	H	4.0	6.10



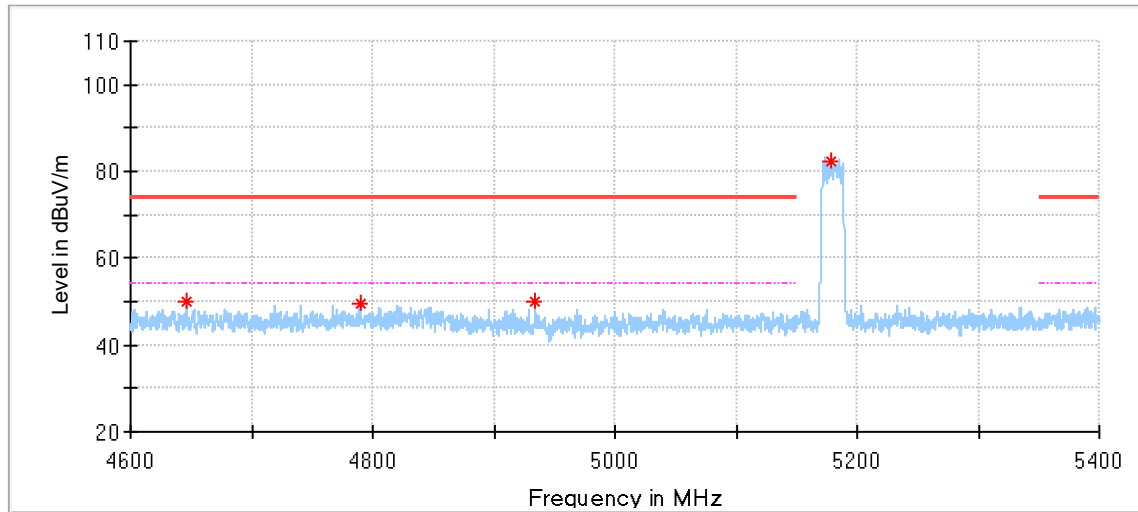
Critical_Freqs

Frequency (MHz)	MaxPeak (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Height (cm)	Pol	Azimuth (deg)	Corr. (dB/m)
20750.687500	40.32	74.00	33.68	150.0	V	330.0	-2.71
22133.250000	41.12	74.00	32.88	150.0	V	87.0	-1.23
24121.500000	40.58	74.00	33.42	150.0	V	356.0	-0.18
29968.000000	42.53	74.00	31.47	150.0	V	180.0	0.79
32937.312500	44.70	74.00	29.30	150.0	V	274.0	1.10
39332.437500	47.26	74.00	26.74	150.0	V	0.0	5.21

Remark:

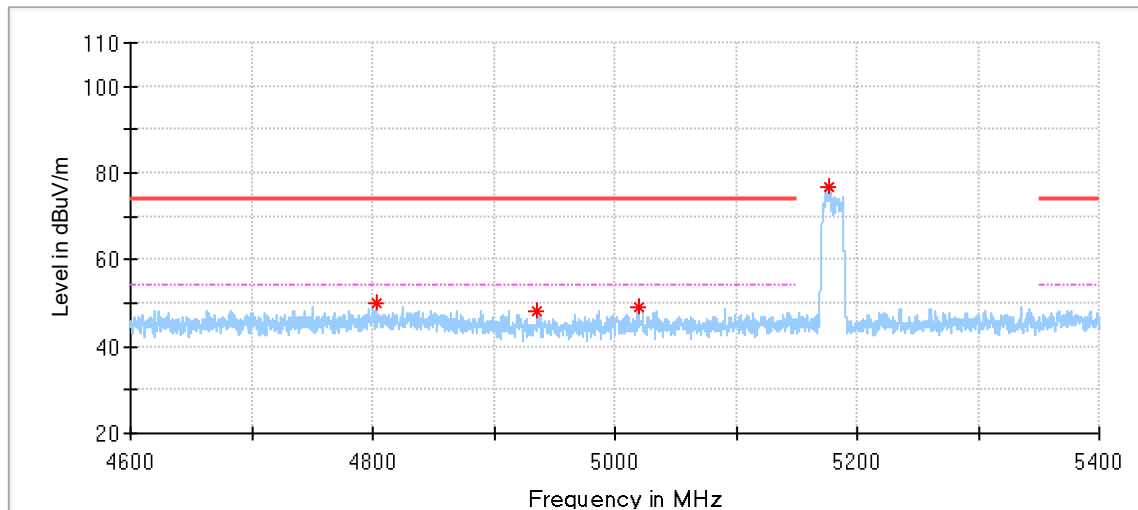
- (1) Level= Reading Level + Correction Factor
- (2) Above 1GHz: Corrector factor = Antenna Factor + Cable Loss- Amplifier Gain
Below 1GHz: Corrector factor = Antenna Factor + Cable Loss
(The Reading Level is recorded by software which is not shown in the sheet)

802.11a Modulation 5180MHz Restricted bandwidth test result



Critical Freqs

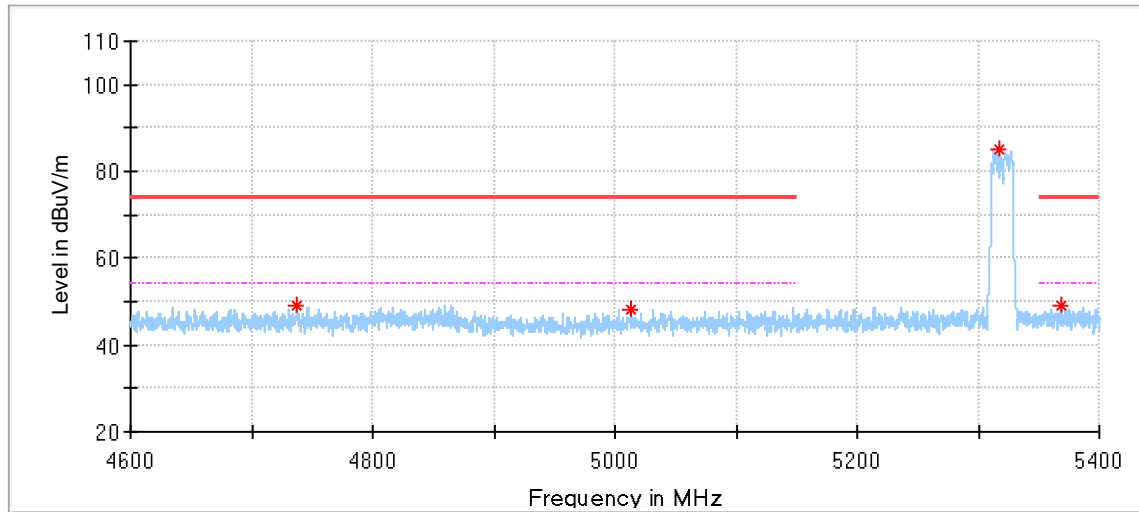
Frequency (MHz)	MaxPeak (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Height (cm)	Pol	Azimuth (deg)	Corr. (dB/m)
4646.400000	49.84	74.00	24.16	150.0	H	282.0	4.45
4789.333333	49.38	74.00	24.62	150.0	H	131.0	4.83
4934.200000	49.92	74.00	24.08	150.0	H	81.0	5.13
5178.333333	82.49	---	---	150.0	H	125.0	5.75



Critical Freqs

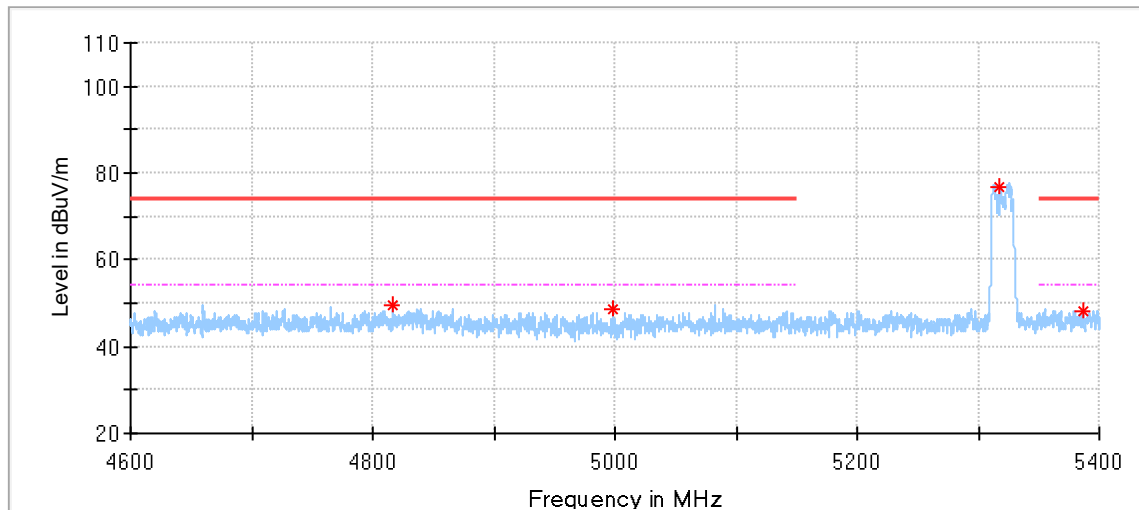
Frequency (MHz)	MaxPeak (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Height (cm)	Pol	Azimuth (deg)	Corr. (dB/m)
4803.000000	49.79	74.00	24.21	150.0	V	356.0	4.87
4935.400000	48.35	74.00	25.65	150.0	V	302.0	5.12
5019.133333	48.92	74.00	25.08	150.0	V	330.0	4.99
5177.533333	76.71	---	---	150.0	V	212.0	5.76

802.11a Modulation 5320MHz Restricted bandwidth test result



Critical Freqs

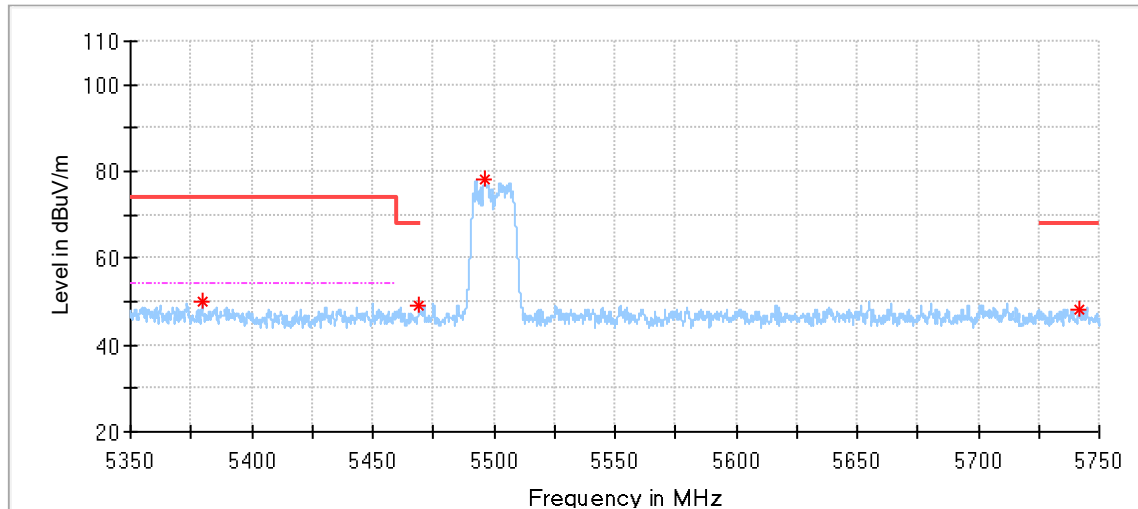
Frequency (MHz)	MaxPeak (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Height (cm)	Pol	Azimuth (deg)	Corr. (dB/m)
4736.933333	49.28	74.00	24.72	150.0	H	351.0	4.68
5013.333333	48.34	74.00	25.66	150.0	H	279.0	4.94
5316.600000	85.14	---	---	150.0	H	133.0	5.93
5368.866667	48.93	74.00	25.07	150.0	H	200.0	6.33



Critical Freqs

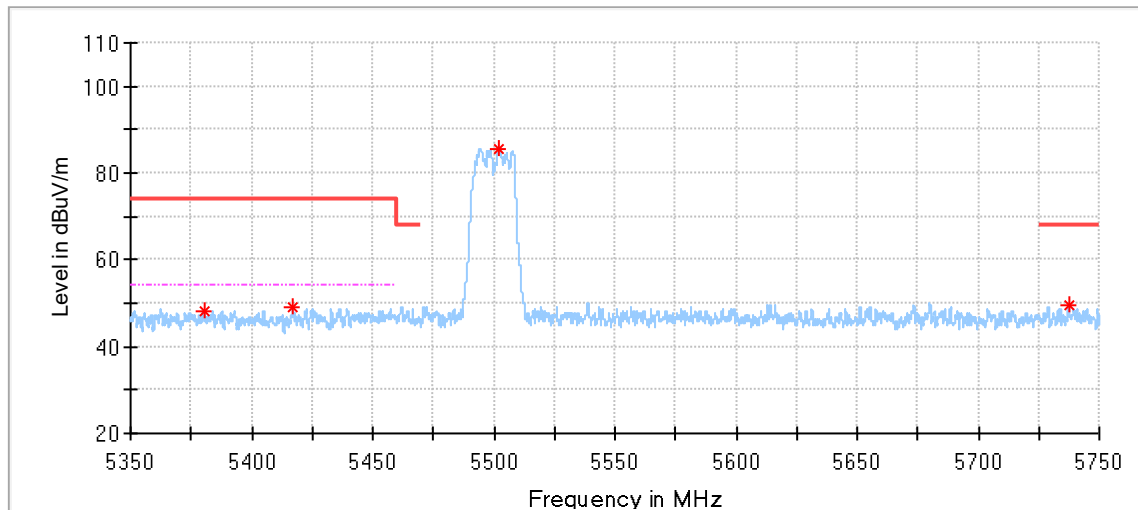
Frequency (MHz)	MaxPeak (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Height (cm)	Pol	Azimuth (deg)	Corr. (dB/m)
4816.733333	49.64	74.00	24.36	150.0	V	15.0	4.91
4998.400000	48.44	74.00	25.56	150.0	V	331.0	4.94
5317.933333	76.54	---	---	150.0	V	9.0	5.93
5386.400000	48.37	74.00	25.63	150.0	V	92.0	6.39

802.11a Modulation 5500MHz Restricted bandwidth test result



Critical Freqs

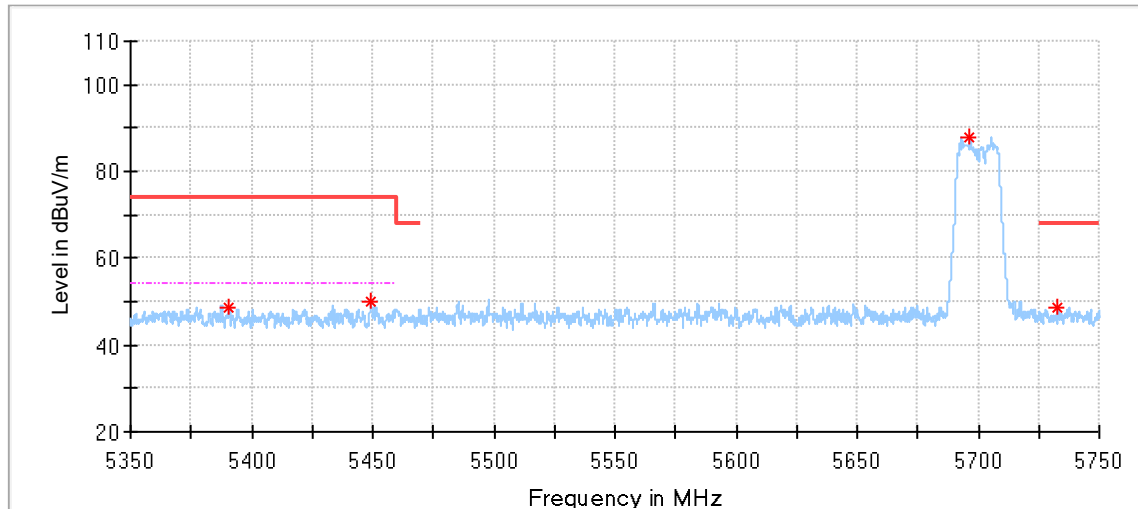
Frequency (MHz)	MaxPeak (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Height (cm)	Pol	Azimuth (deg)	Corr. (dB/m)
5379.733333	49.88	74.00	24.12	150.0	V	0.0	6.38
5469.000000	49.15	68.20	19.05	150.0	V	359.0	6.31
5496.166667	78.10	---	---	150.0	V	354.0	6.54
5741.966667	48.20	68.20	20.00	150.0	V	311.0	6.58



Critical Freqs

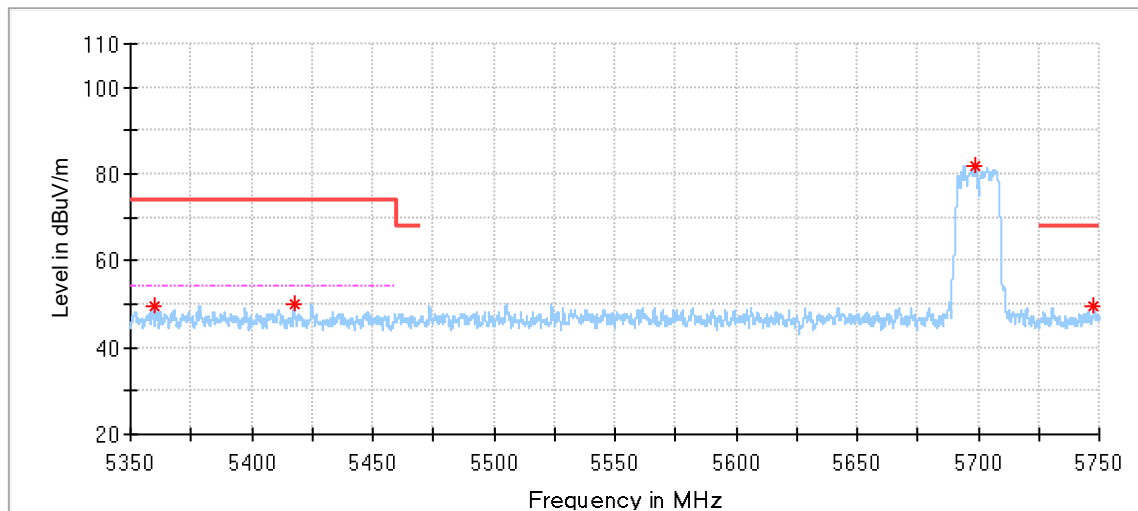
Frequency (MHz)	MaxPeak (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Height (cm)	Pol	Azimuth (deg)	Corr. (dB/m)
5380.166667	48.16	74.00	25.84	150.0	H	91.0	6.38
5416.966667	49.14	74.00	24.86	150.0	H	0.0	6.36
5502.366667	85.37	---	---	150.0	H	136.0	6.64
5737.433333	49.66	68.20	18.54	150.0	H	179.0	6.57

802.11a Modulation 5700MHz Restricted bandwidth test result



Critical Freqs

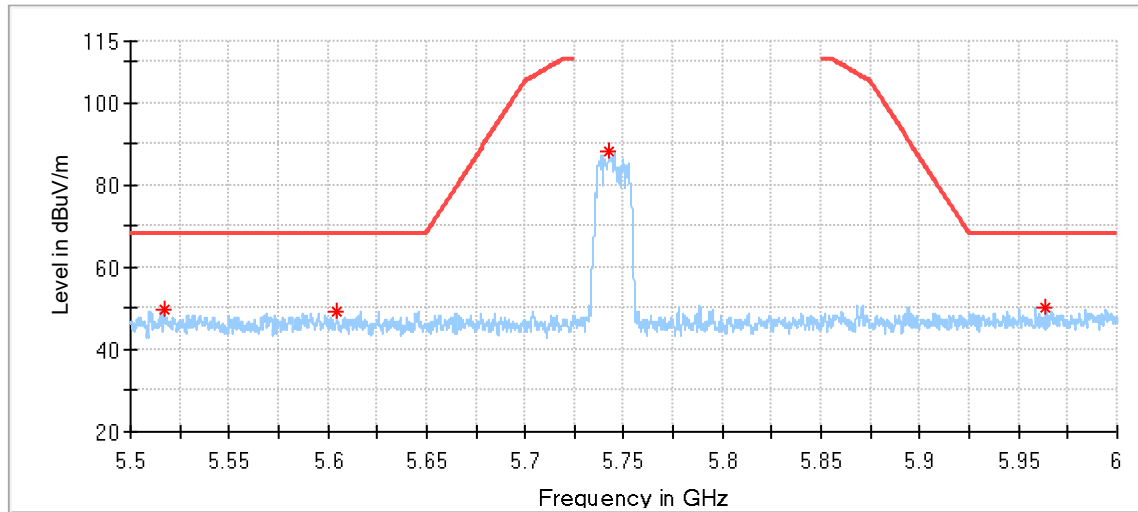
Frequency (MHz)	MaxPeak (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Height (cm)	Pol	Azimuth (deg)	Corr. (dB/m)
5390.800000	48.62	74.00	25.38	150.0	H	236.0	6.39
5449.133333	49.95	74.00	24.05	150.0	H	277.0	6.33
5696.600000	87.69	---	---	150.0	H	127.0	6.52
5732.833333	48.75	68.20	19.45	150.0	H	120.0	6.57



Critical Freqs

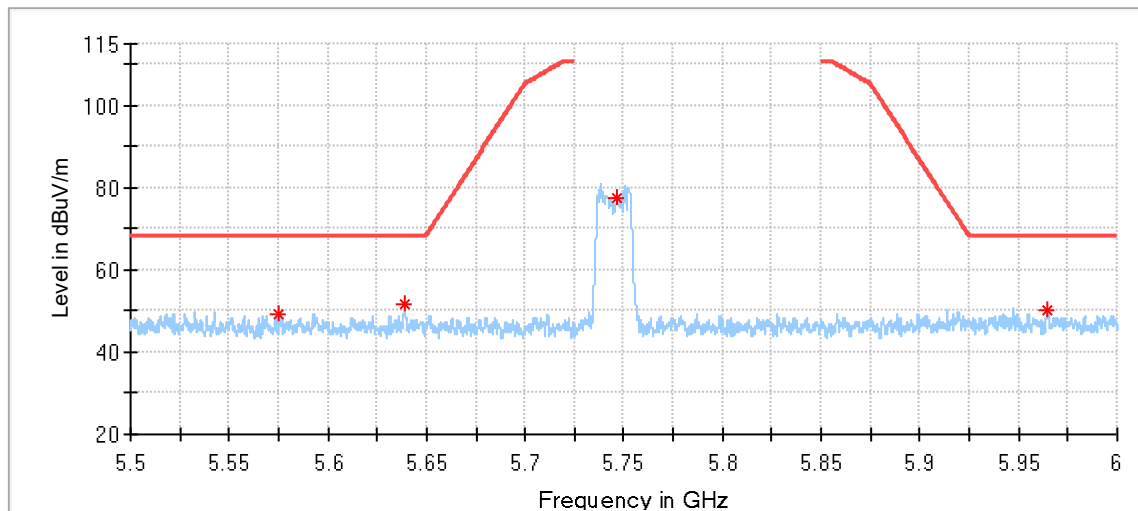
Frequency (MHz)	MaxPeak (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Height (cm)	Pol	Azimuth (deg)	Corr. (dB/m)
5360.300000	49.41	74.00	24.59	150.0	V	222.0	6.25
5417.533333	50.22	74.00	23.78	150.0	V	77.0	6.36
5698.566667	81.64	---	---	150.0	V	330.0	6.53
5747.833333	49.37	68.20	18.83	150.0	V	235.0	6.58

802.11a Modulation 5745MHz Restricted bandwidth test result



Critical Freqs

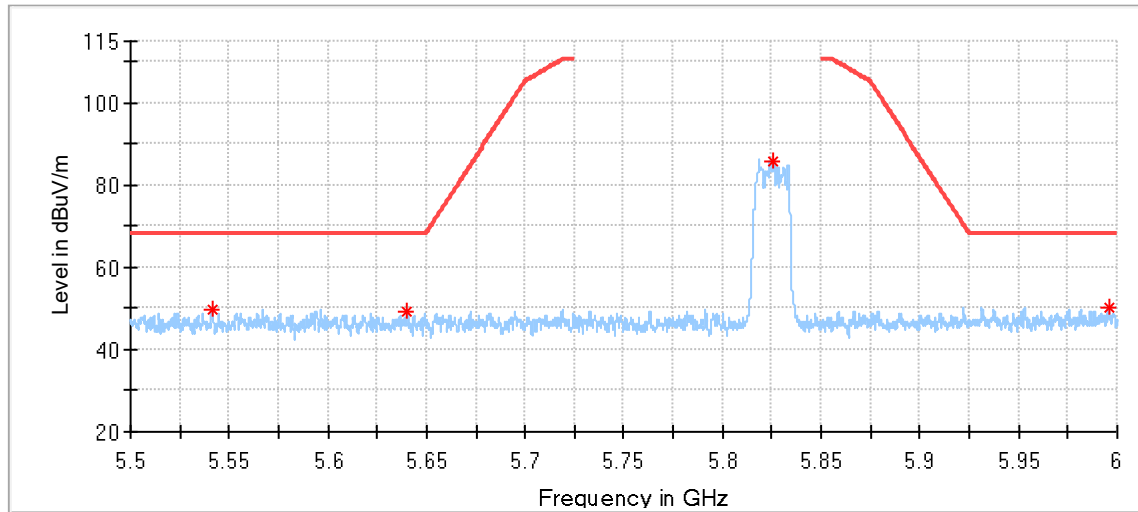
Frequency (MHz)	MaxPeak (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Height (cm)	Pol	Azimuth (deg)	Corr. (dB/m)
5516.916667	49.73	68.20	18.47	150.0	H	18.0	6.86
5604.416667	49.17	68.20	19.03	150.0	H	305.0	6.17
5742.500000	88.12	---	---	150.0	H	123.0	6.58
5963.916667	50.38	68.20	17.82	150.0	H	247.0	7.39



Critical Freqs

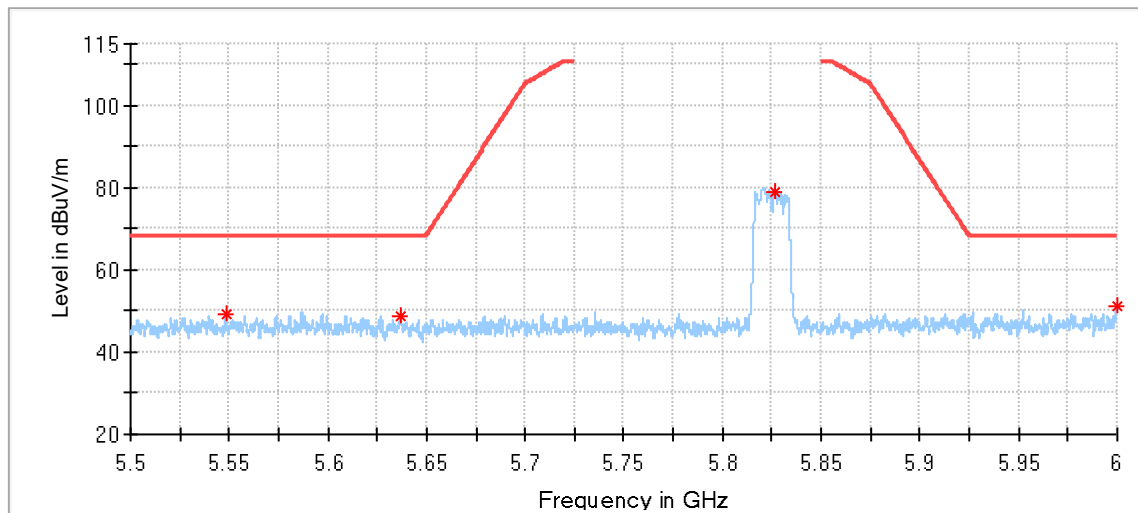
Frequency (MHz)	MaxPeak (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Height (cm)	Pol	Azimuth (deg)	Corr. (dB/m)
5575.208333	49.17	68.20	19.03	150.0	V	209.0	6.43
5638.958333	51.58	68.20	16.62	150.0	V	152.0	6.36
5746.916667	77.52	---	---	150.0	V	330.0	6.58
5964.875000	49.99	68.20	18.21	150.0	V	324.0	7.40

802.11a Modulation 5825MHz Restricted bandwidth test result



Critical Freqs

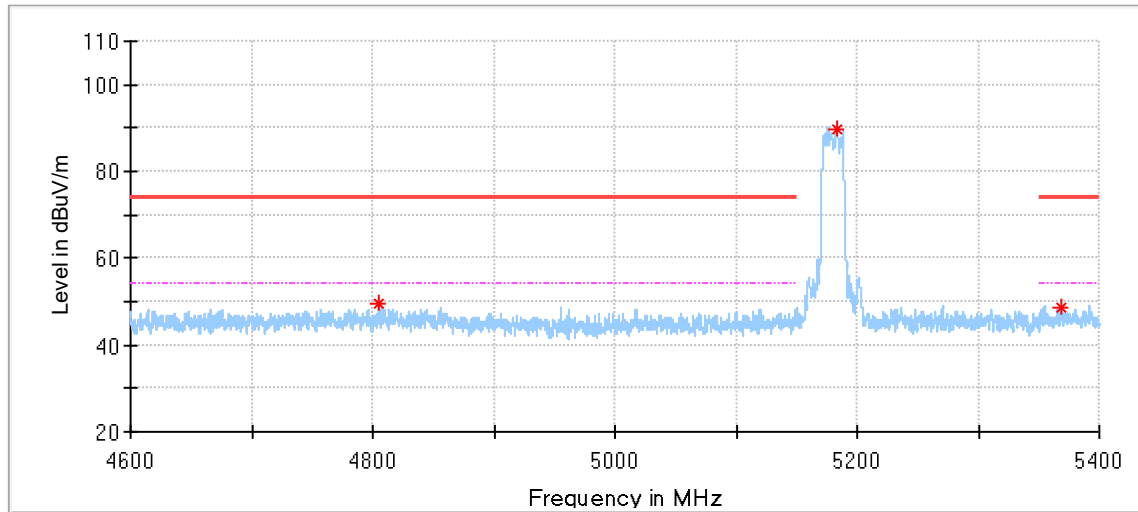
Frequency (MHz)	MaxPeak (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Height (cm)	Pol	Azimuth (deg)	Corr. (dB/m)
5541.208333	49.52	68.20	18.68	150.0	H	113.0	7.07
5640.250000	49.43	68.20	18.77	150.0	H	218.0	6.37
5825.958333	85.93	---	---	150.0	H	145.0	6.65
5995.583333	50.24	68.20	17.96	150.0	H	195.0	7.77



Critical Freqs

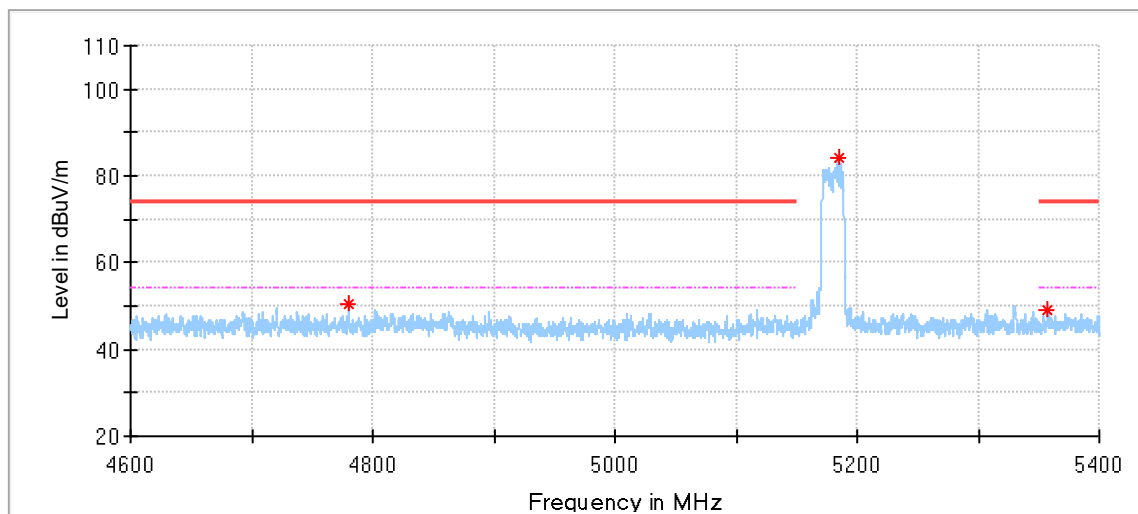
Frequency (MHz)	MaxPeak (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Height (cm)	Pol	Azimuth (deg)	Corr. (dB/m)
5548.291667	49.21	68.20	18.99	150.0	V	217.0	6.93
5636.625000	48.56	68.20	19.64	150.0	V	63.0	6.35
5826.416667	79.15	---	---	150.0	V	0.0	6.66
5999.791667	51.21	68.20	16.99	150.0	V	195.0	7.76

802.11ac VHT20 Modulation 5180MHz Restricted bandwidth test result



Critical Freqs

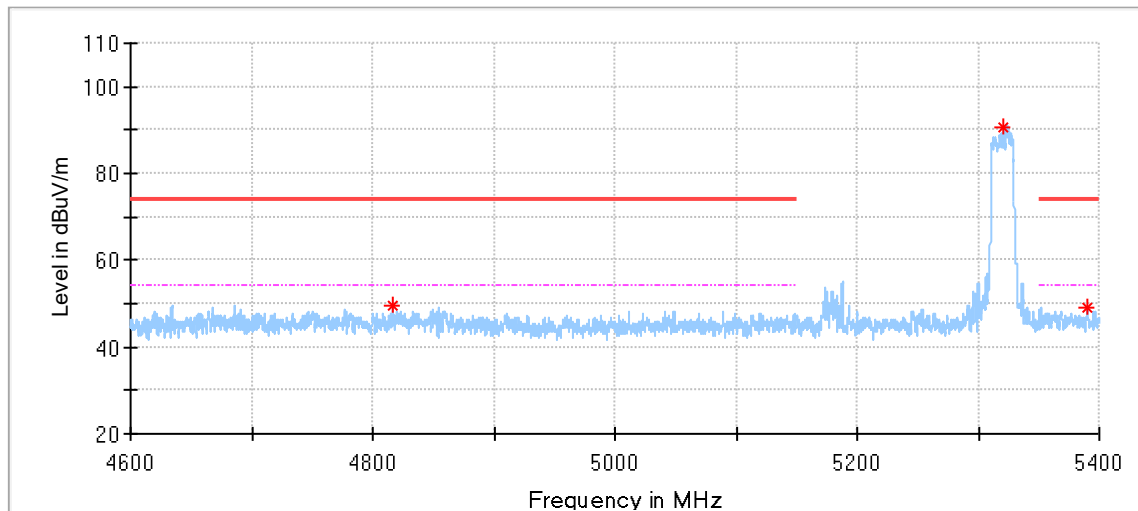
Frequency (MHz)	MaxPeak (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Height (cm)	Pol	Azimuth (deg)	Corr. (dB/m)
4804.933333	49.72	74.00	24.28	150.0	H	100.0	4.87
5183.400000	89.92	---	---	150.0	H	100.0	5.72
5368.466667	48.50	74.00	25.50	150.0	H	72.0	6.33



Critical Freqs

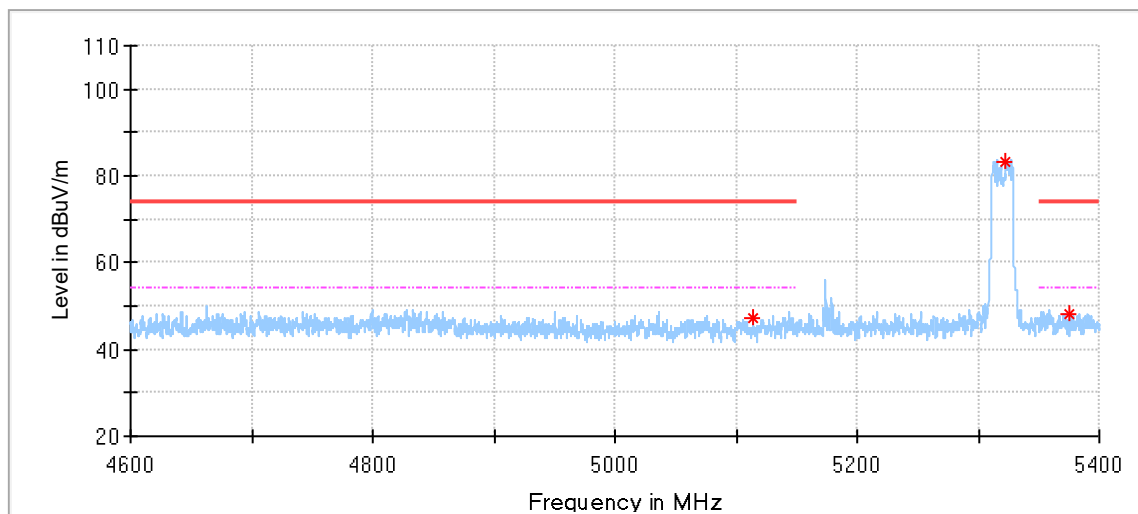
Frequency (MHz)	MaxPeak (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Height (cm)	Pol	Azimuth (deg)	Corr. (dB/m)
4780.333333	50.69	74.00	23.31	150.0	V	4.0	4.80
5185.333333	84.08	---	---	150.0	V	172.0	5.71
5357.666667	48.86	74.00	25.14	150.0	V	307.0	6.22

802.11ac VHT20 Modulation 5320MHz Restricted bandwidth test result



Critical Freqs

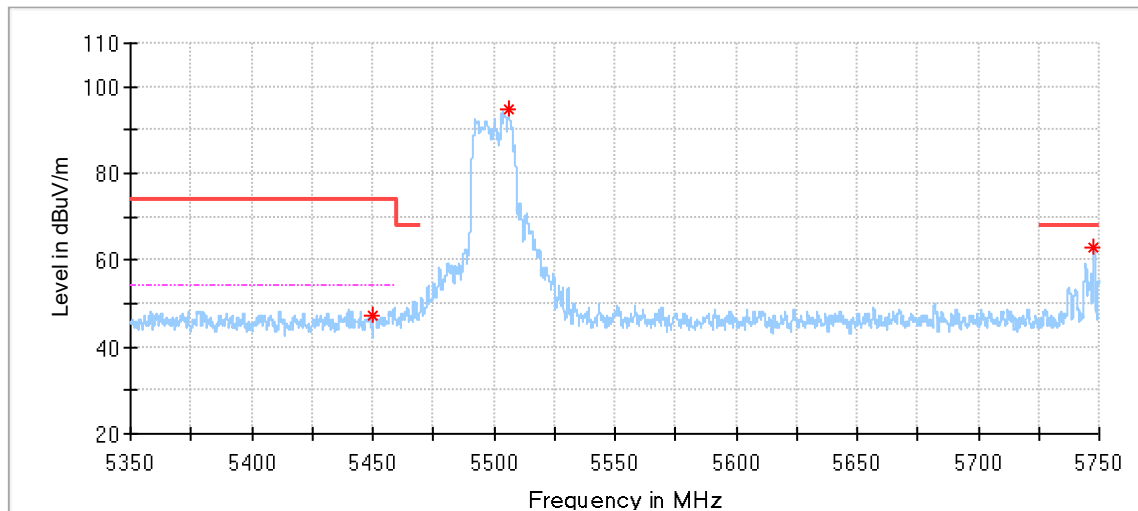
Frequency (MHz)	MaxPeak (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Height (cm)	Pol	Azimuth (deg)	Corr. (dB/m)
4817.000000	49.52	74.00	24.48	150.0	H	225.0	4.91
5321.400000	90.70	---	---	150.0	H	115.0	5.93
5389.866667	49.04	74.00	24.96	150.0	H	297.0	6.39



Critical Freqs

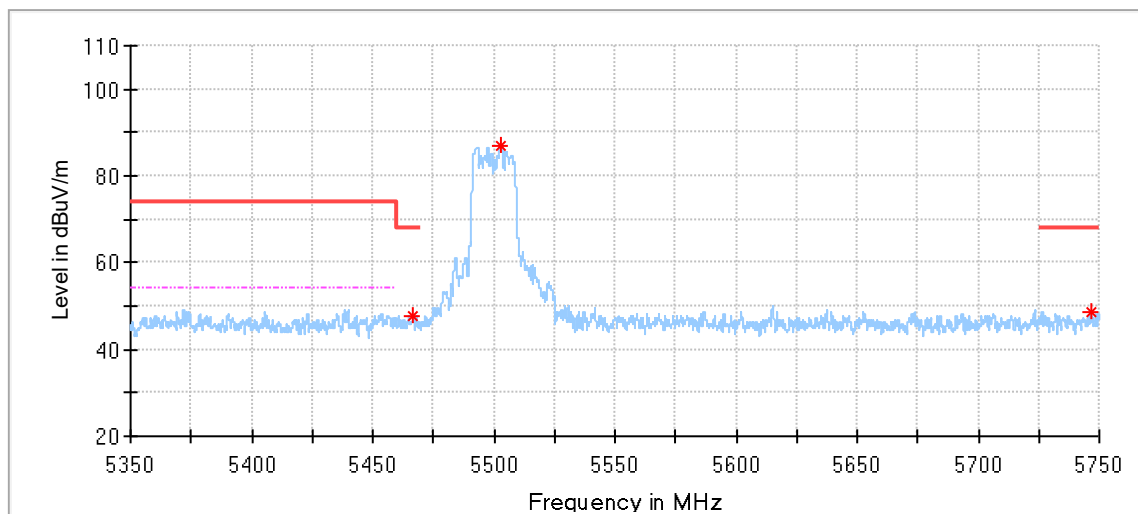
Frequency (MHz)	MaxPeak (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Height (cm)	Pol	Azimuth (deg)	Corr. (dB/m)
5113.933333	47.28	74.00	26.72	150.0	V	155.0	5.53
5322.733333	83.44	---	---	150.0	V	260.0	5.94
5375.666667	48.22	74.00	25.78	150.0	V	166.0	6.38

802.11ac VHT20 Modulation 5500MHz Restricted bandwidth test result



Critical Freqs

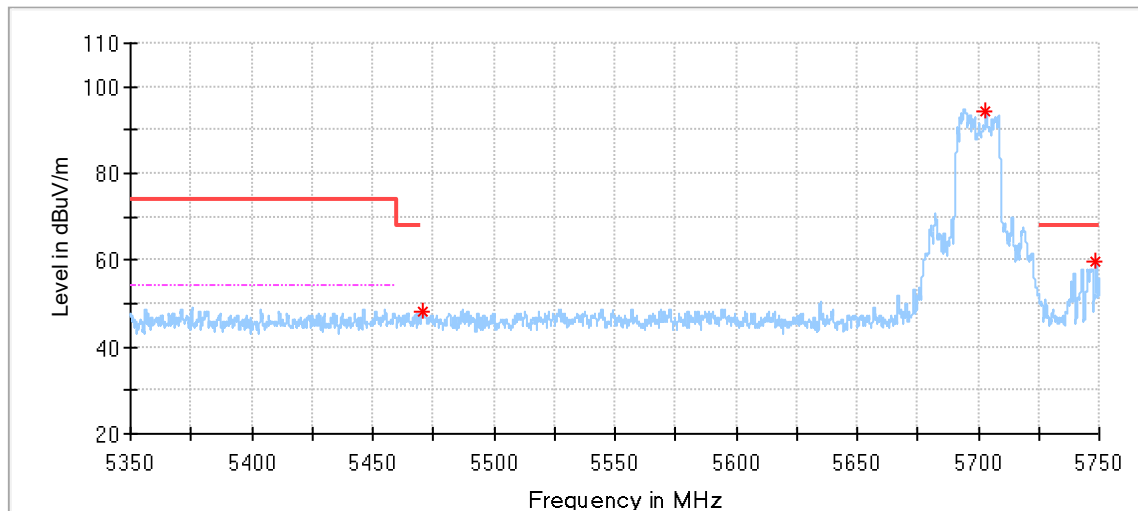
Frequency (MHz)	MaxPeak (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Height (cm)	Pol	Azimuth (deg)	Corr. (dB/m)
5450.200000	47.31	74.00	26.69	150.0	H	105.0	6.32
5506.100000	94.82	---	---	150.0	H	116.0	6.70
5747.900000	63.04	68.20	5.16	150.0	H	286.0	6.58



Critical Freqs

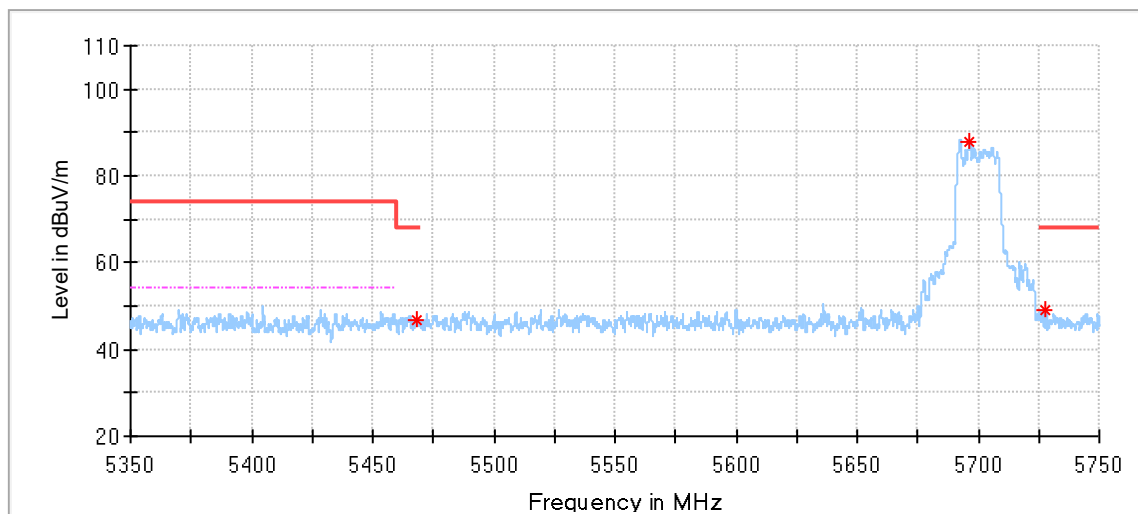
Frequency (MHz)	MaxPeak (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Height (cm)	Pol	Azimuth (deg)	Corr. (dB/m)
5466.800000	47.77	68.20	20.43	150.0	V	107.0	6.31
5502.700000	87.03	---	---	150.0	V	301.0	6.64
5746.800000	48.54	68.20	19.66	150.0	V	325.0	6.58

802.11ac VHT20 Modulation 5700MHz Restricted bandwidth test result



Critical Freqs

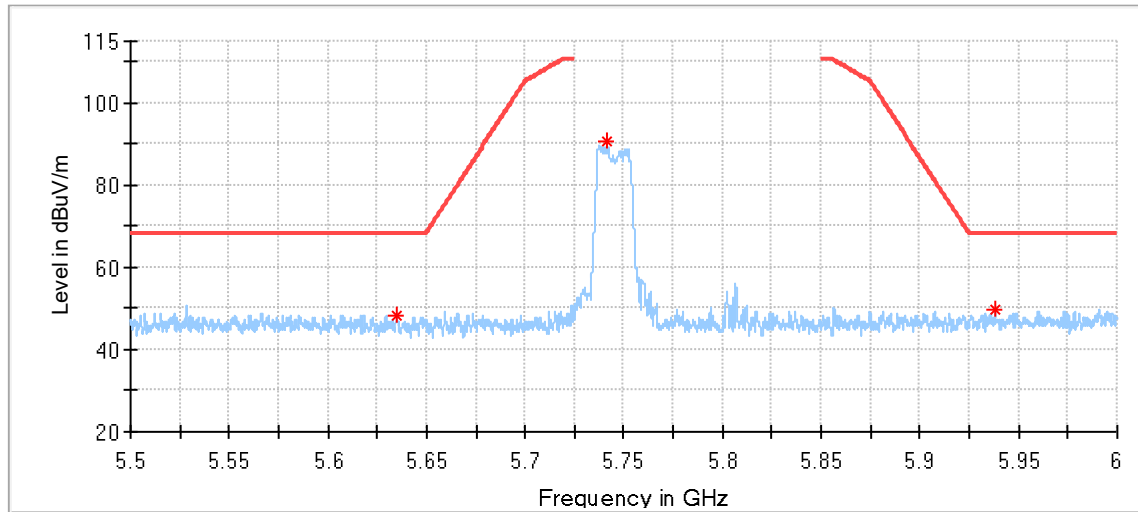
Frequency (MHz)	MaxPeak (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Height (cm)	Pol	Azimuth (deg)	Corr. (dB/m)
5470.766667	48.34	---	---	150.0	H	1.0	6.31
5703.233333	94.44	---	---	150.0	H	103.0	6.54
5748.666667	59.54	68.20	8.66	150.0	H	0.0	6.58



Critical Freqs

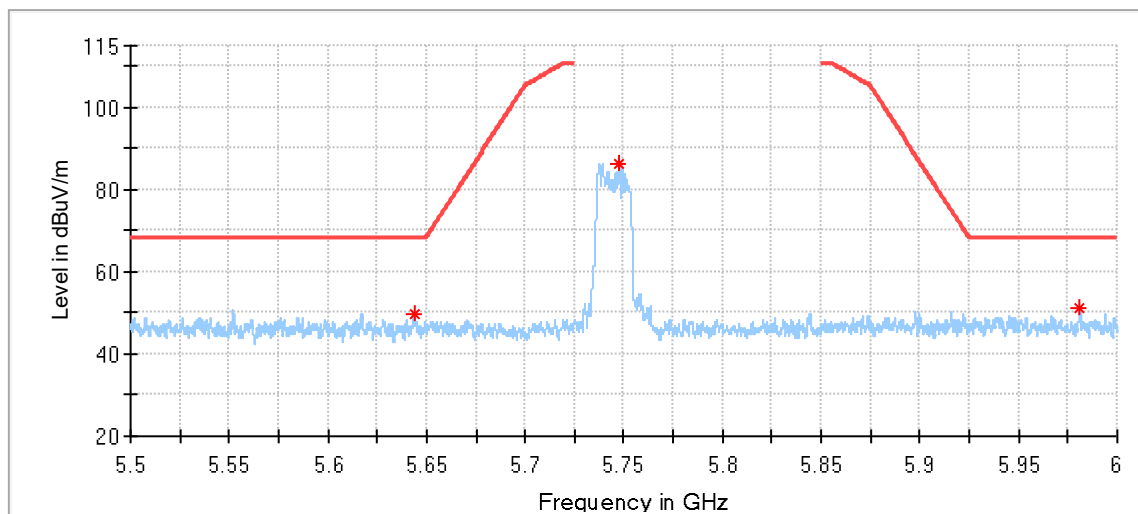
Frequency (MHz)	MaxPeak (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Height (cm)	Pol	Azimuth (deg)	Corr. (dB/m)
5467.900000	46.70	68.20	21.50	150.0	V	138.0	6.31
5696.600000	87.64	---	---	150.0	V	235.0	6.52
5727.966667	49.04	68.20	19.16	150.0	V	46.0	6.56

802.11ac VHT20 Modulation 5745MHz Restricted bandwidth test result



Critical Freqs

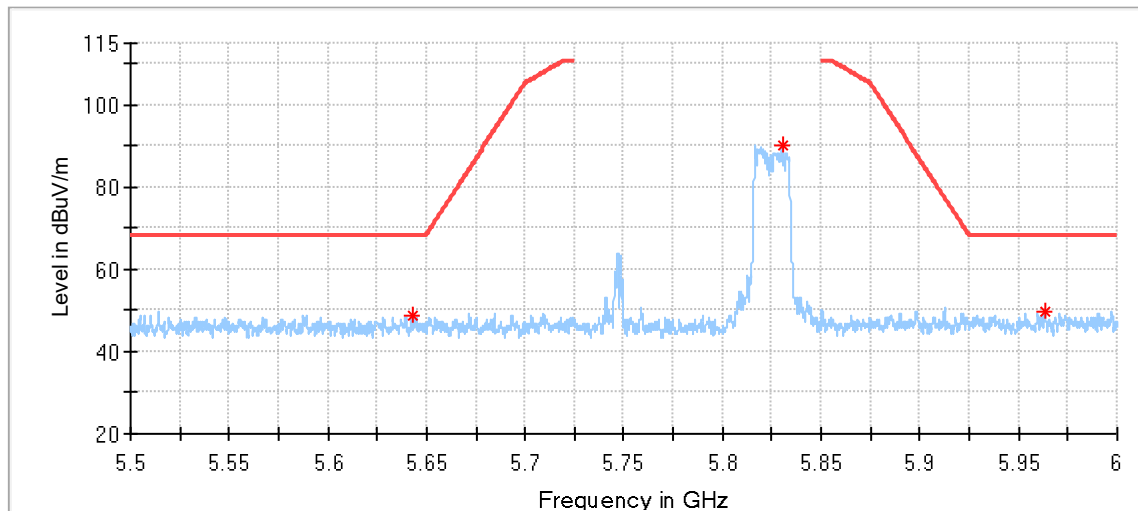
Frequency (MHz)	MaxPeak (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Height (cm)	Pol	Azimuth (deg)	Corr. (dB/m)
5634.958333	48.49	68.20	19.71	150.0	H	161.0	6.34
5741.291667	90.56	---	---	150.0	H	96.0	6.57
5938.000000	49.49	68.20	18.71	150.0	H	19.0	7.10



Critical Freqs

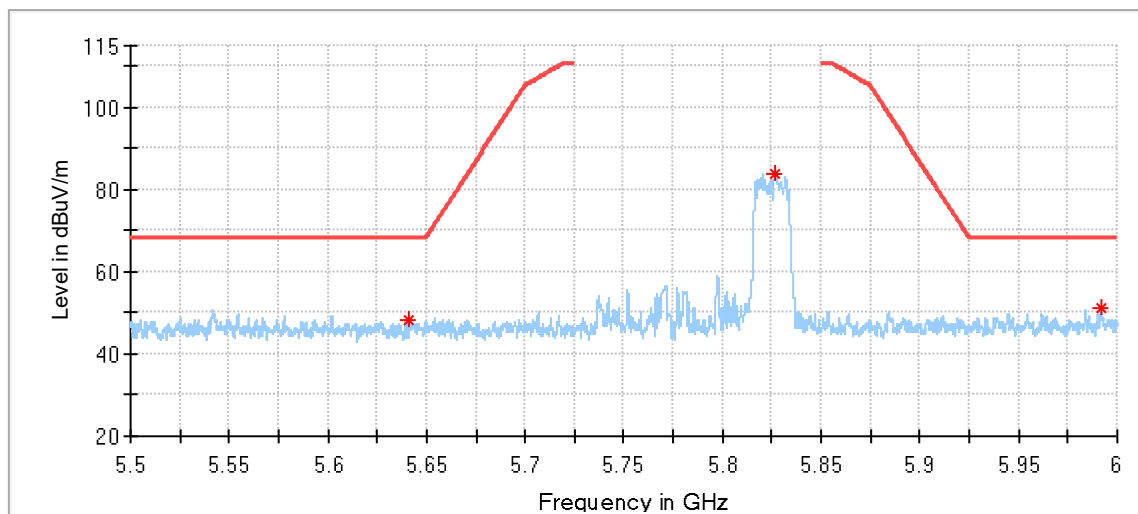
Frequency (MHz)	MaxPeak (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Height (cm)	Pol	Azimuth (deg)	Corr. (dB/m)
5643.625000	49.91	68.20	18.29	150.0	V	198.0	6.38
5747.458333	86.42	---	---	150.0	V	286.0	6.58
5981.000000	51.02	68.20	17.18	150.0	V	0.0	7.59

802.11ac VHT20 Modulation 5825MHz Restricted bandwidth test result



Critical Freqs

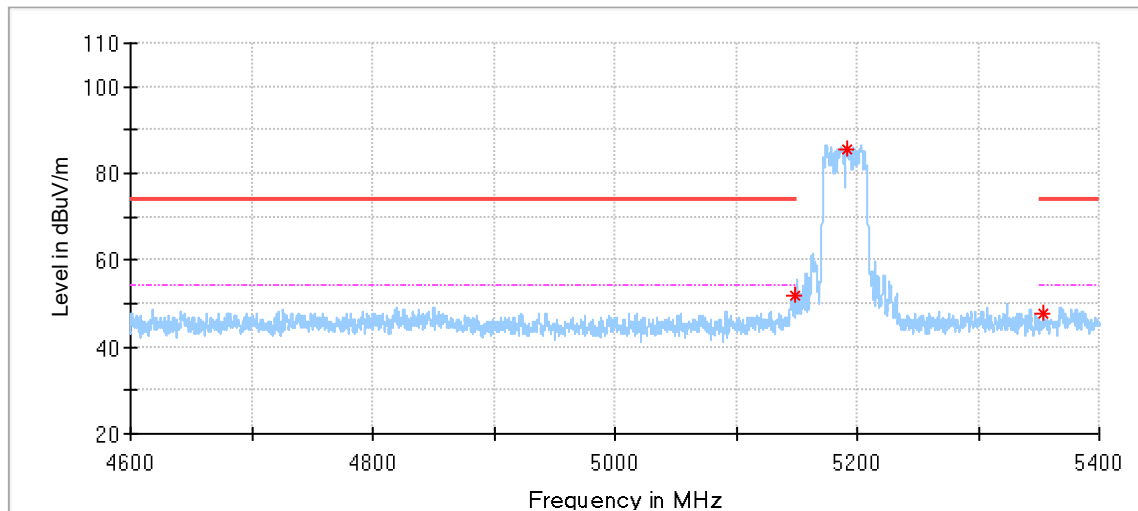
Frequency (MHz)	MaxPeak (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Height (cm)	Pol	Azimuth (deg)	Corr. (dB/m)
5642.541667	48.84	68.20	19.36	150.0	H	0.0	6.38
5830.166667	90.24	---	---	150.0	H	113.0	6.70
5963.250000	49.74	68.20	18.46	150.0	H	135.0	7.38



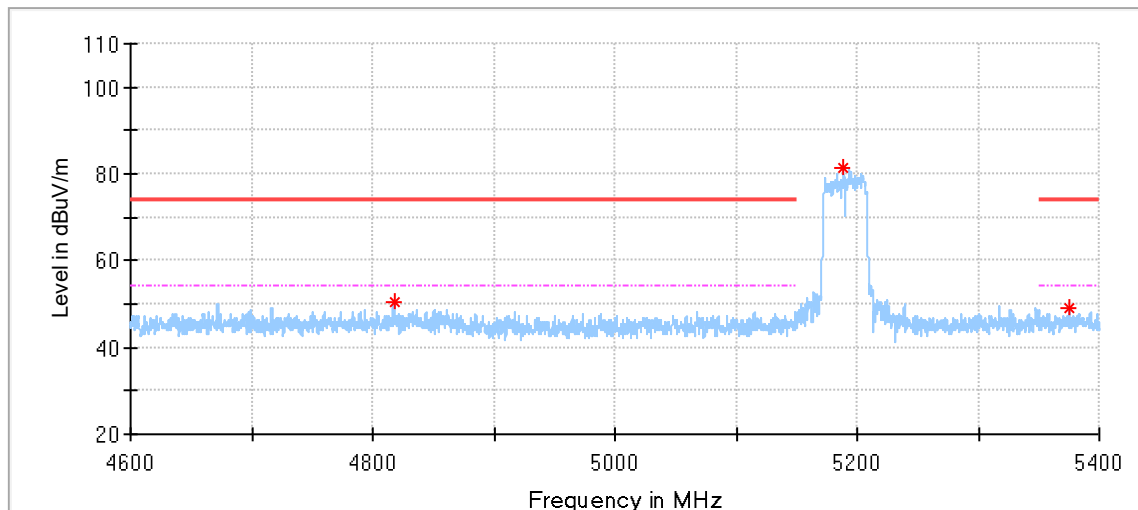
Critical Freqs

Frequency (MHz)	MaxPeak (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Height (cm)	Pol	Azimuth (deg)	Corr. (dB/m)
5641.458333	48.46	68.20	19.74	150.0	V	75.0	6.37
5827.041667	84.03	---	---	150.0	V	291.0	6.66
5991.833333	51.08	68.20	17.12	150.0	V	170.0	7.72

802.11ac VHT40 Modulation 5190MHz Restricted bandwidth test result

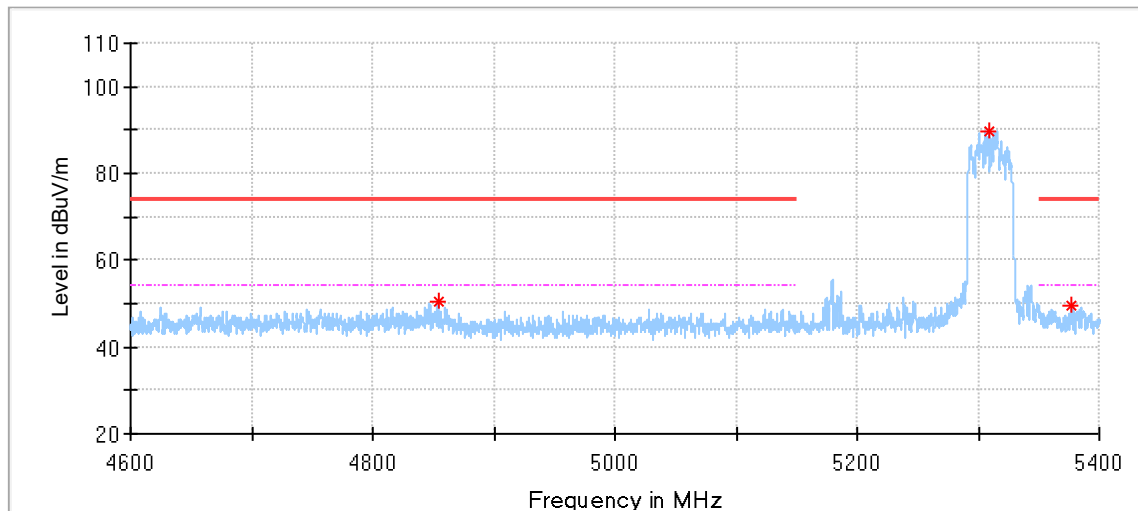
**Critical_Freqs**

Frequency (MHz)	MaxPeak (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Height (cm)	Pol	Azimuth (deg)	Corr. (dB/m)
5149.466667	51.63	74.00	22.37	150.0	H	121.0	5.72
5190.933333	85.57	---	---	150.0	H	93.0	5.67
5353.600000	47.65	74.00	26.35	150.0	H	225.0	6.18

**Critical_Freqs**

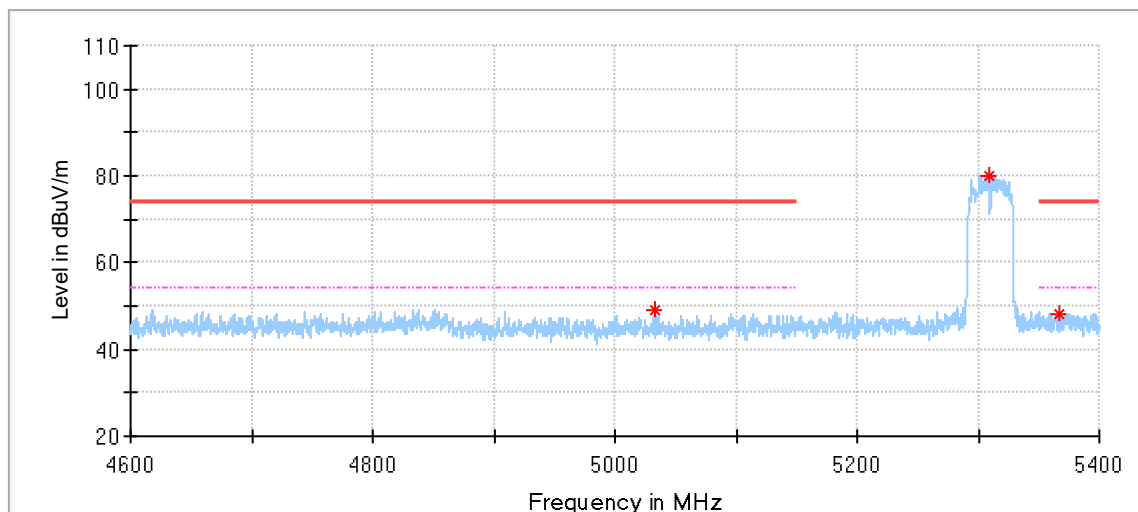
Frequency (MHz)	MaxPeak (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Height (cm)	Pol	Azimuth (deg)	Corr. (dB/m)
4817.666667	50.46	74.00	23.54	150.0	V	3.0	4.91
5189.000000	81.35	---	---	150.0	V	28.0	5.69
5375.333333	48.98	74.00	25.02	150.0	V	206.0	6.38

802.11ac VHT40 Modulation 5310MHz Restricted bandwidth test result



Critical_Freqs

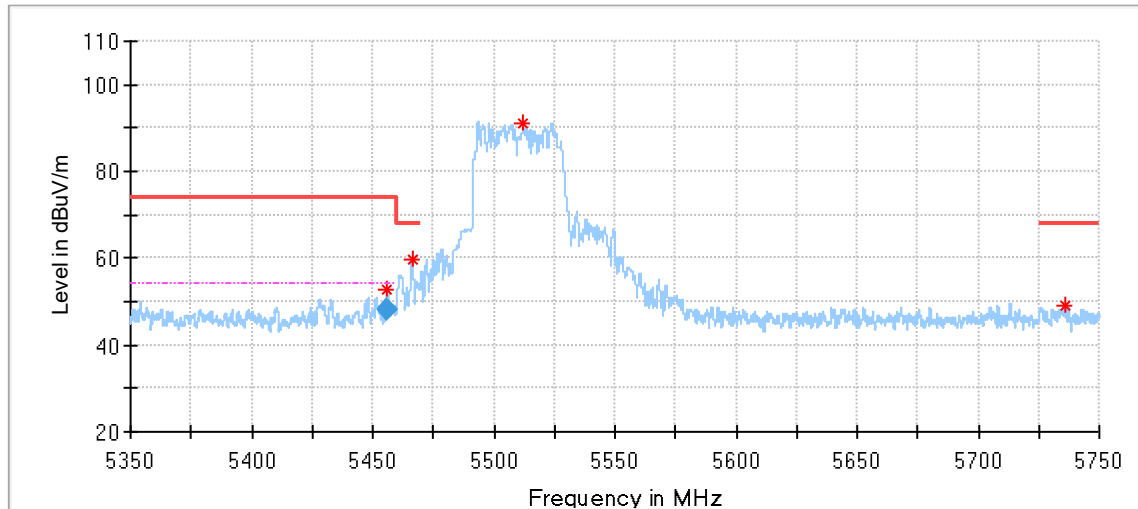
Frequency (MHz)	MaxPeak (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Height (cm)	Pol	Azimuth (deg)	Corr. (dB/m)
4853.733333	50.31	74.00	23.69	150.0	H	240.0	4.92
5309.000000	89.57	---	---	150.0	H	108.0	5.93
5377.666667	49.44	74.00	24.56	150.0	H	3.0	6.38



Critical_Freqs

Frequency (MHz)	MaxPeak (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Height (cm)	Pol	Azimuth (deg)	Corr. (dB/m)
5032.733333	49.21	74.00	24.79	150.0	V	91.0	5.09
5309.000000	80.16	---	---	150.0	V	284.0	5.93
5366.733333	48.27	74.00	25.73	150.0	V	201.0	6.31

802.11ac VHT40 Modulation 5510MHz Restricted bandwidth test result

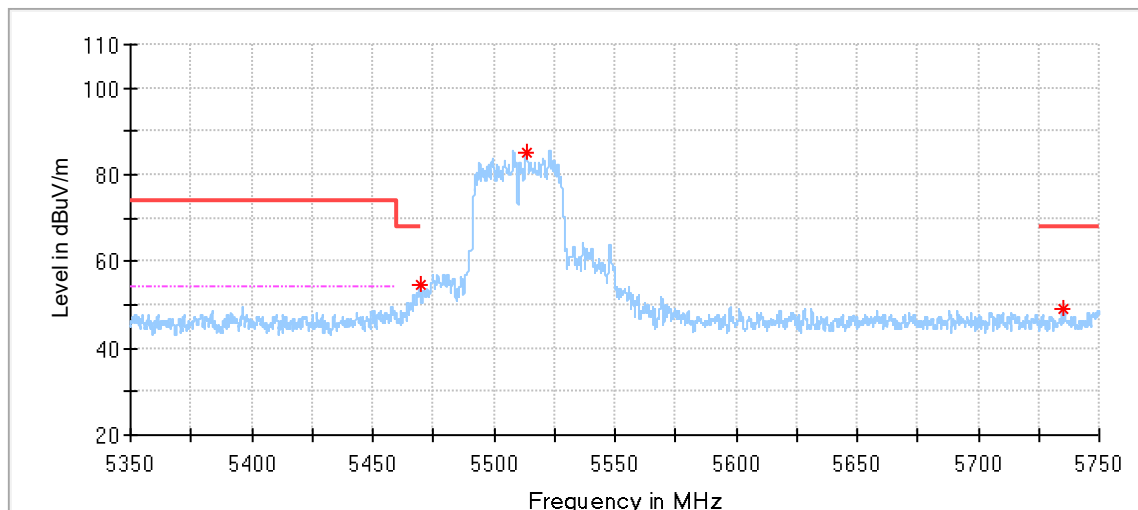


Critical_Freqs

Frequency (MHz)	MaxPeak (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Height (cm)	Pol	Azimuth (deg)	Corr. (dB/m)
5455.800000	52.97	74.00	21.03	150.0	H	122.0	6.32
5466.266667	59.52	68.20	8.68	150.0	H	122.0	6.31
5512.133333	91.16	---	---	150.0	H	99.0	6.79
5735.733333	49.17	68.20	19.03	150.0	H	209.0	6.57

Final_Result

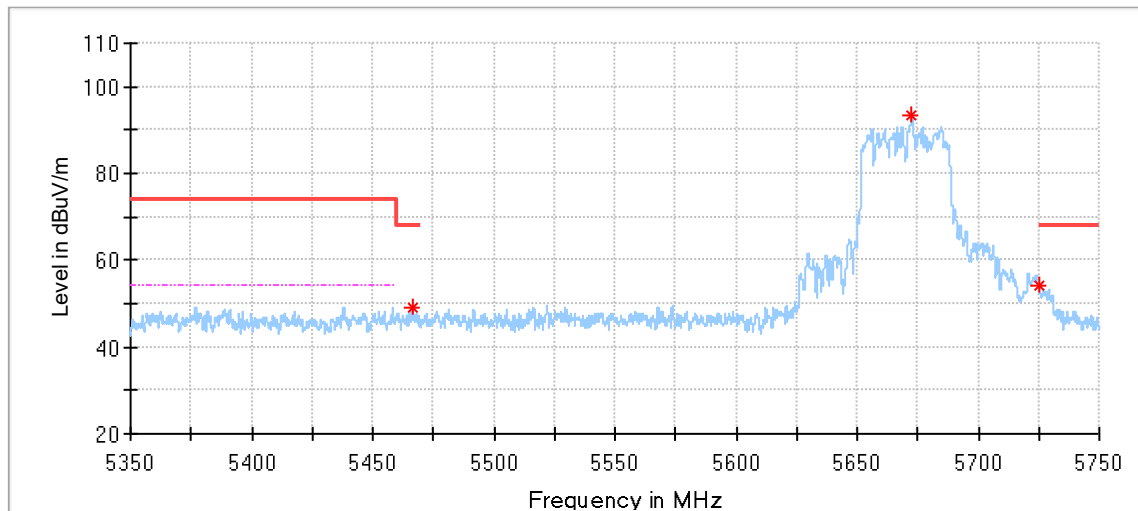
Frequency (MHz)	Average (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Height (cm)	Pol	Azimuth (deg)	Corr. (dB/m)
5455.800000	48.25	54.00	5.75	150.0	H	122.0	6.32



Critical_Freqs

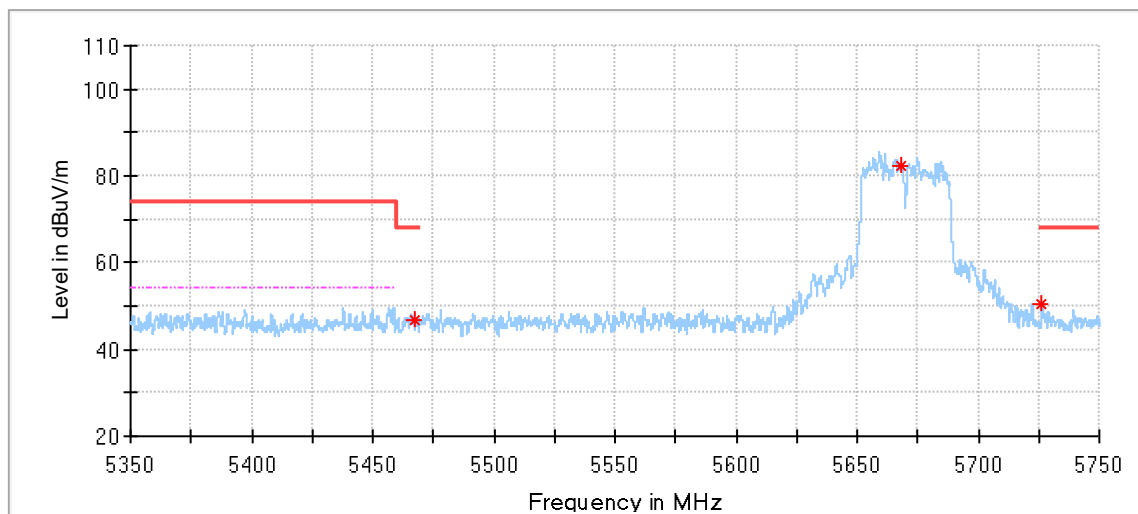
Frequency (MHz)	MaxPeak (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Height (cm)	Pol	Azimuth (deg)	Corr. (dB/m)
5469.566667	54.54	68.20	13.66	150.0	V	347.0	6.31
5513.433333	85.00	---	---	150.0	V	295.0	6.81
5734.800000	49.14	68.20	19.06	150.0	V	303.0	6.57

802.11ac VHT40 Modulation 5670MHz Restricted bandwidth test result



Critical Freqs

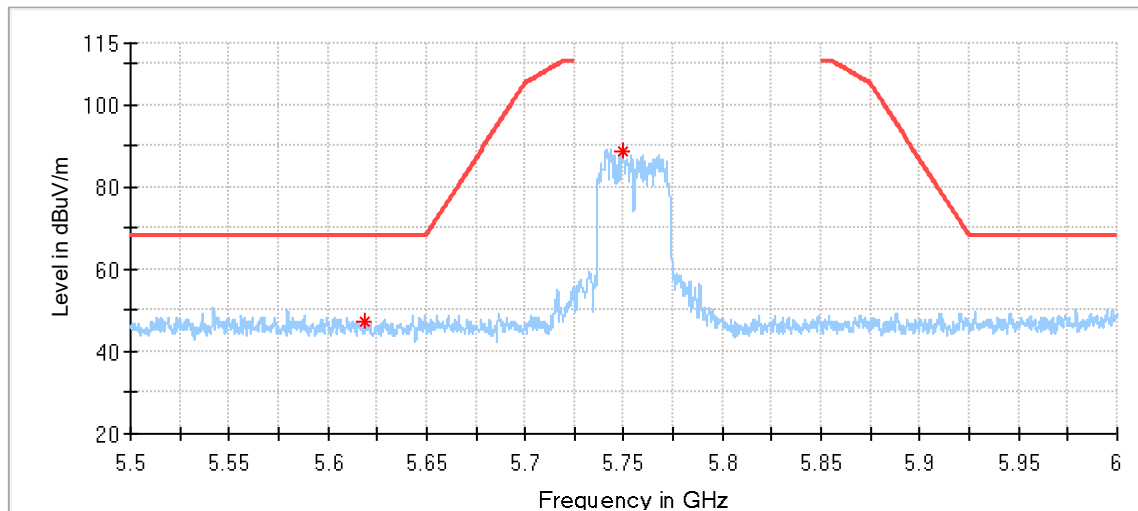
Frequency (MHz)	MaxPeak (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Height (cm)	Pol	Azimuth (deg)	Corr. (dB/m)
5466.200000	49.19	68.20	19.01	150.0	H	347.0	6.31
5672.466667	93.21	---	---	150.0	H	114.0	6.47
5725.000000	54.27	68.20	13.93	150.0	H	122.0	6.56



Critical Freqs

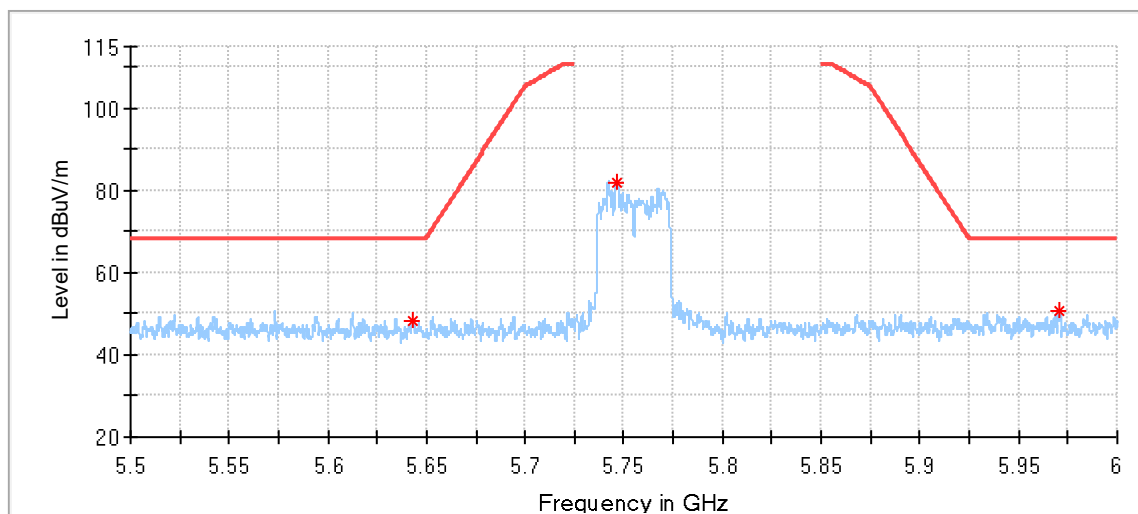
Frequency (MHz)	MaxPeak (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Height (cm)	Pol	Azimuth (deg)	Corr. (dB/m)
5467.733333	46.57	68.20	21.63	150.0	V	290.0	6.31
5668.333333	82.53	---	---	150.0	V	355.0	6.46
5726.433333	50.48	68.20	17.72	150.0	V	314.0	6.56

802.11ac VHT40 Modulation 5755MHz Restricted bandwidth test result



Critical_Freqs

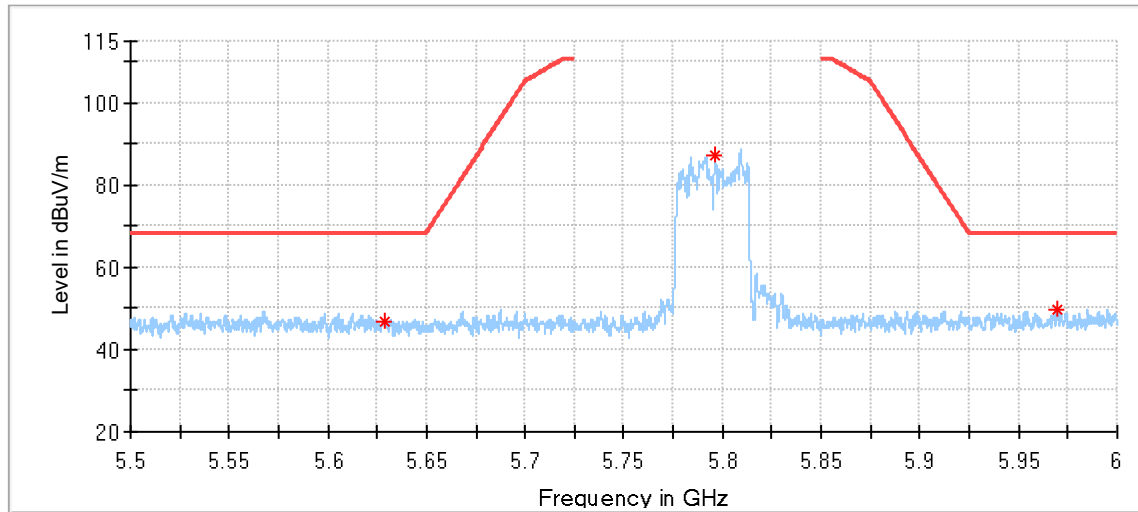
Frequency (MHz)	MaxPeak (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Height (cm)	Pol	Azimuth (deg)	Corr. (dB/m)
5619.125000	47.31	68.20	20.89	150.0	H	146.0	6.25
5749.291667	88.67	---	---	150.0	H	102.0	6.58



Critical_Freqs

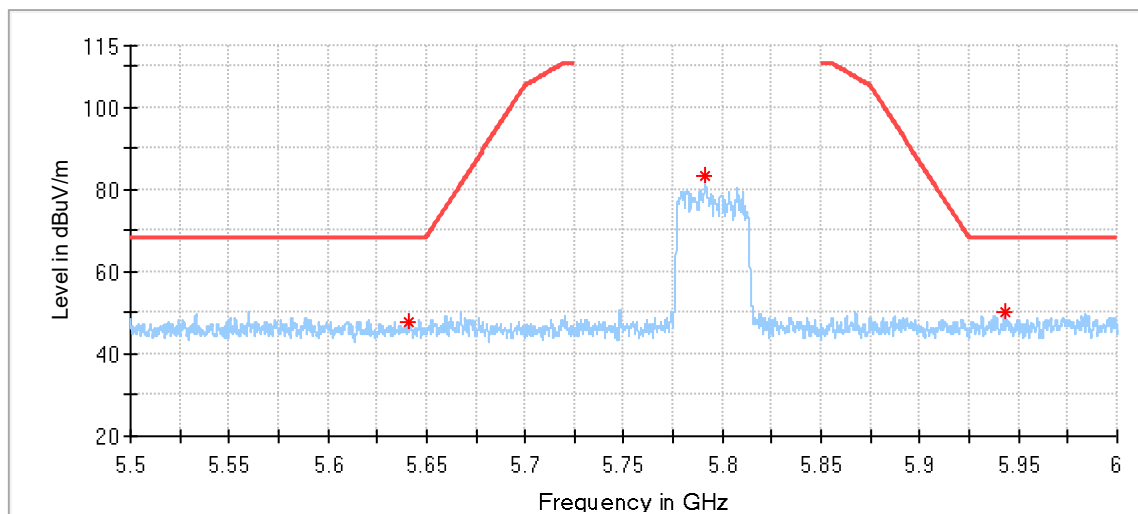
Frequency (MHz)	MaxPeak (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Height (cm)	Pol	Azimuth (deg)	Corr. (dB/m)
5642.791667	48.29	68.20	19.91	150.0	V	0.0	6.38
5746.583333	81.72	---	---	150.0	V	315.0	6.58
5970.250000	50.72	68.20	17.48	150.0	V	222.0	7.46

802.11ac VHT40 Modulation 5795MHz Restricted bandwidth test result



Critical Freqs

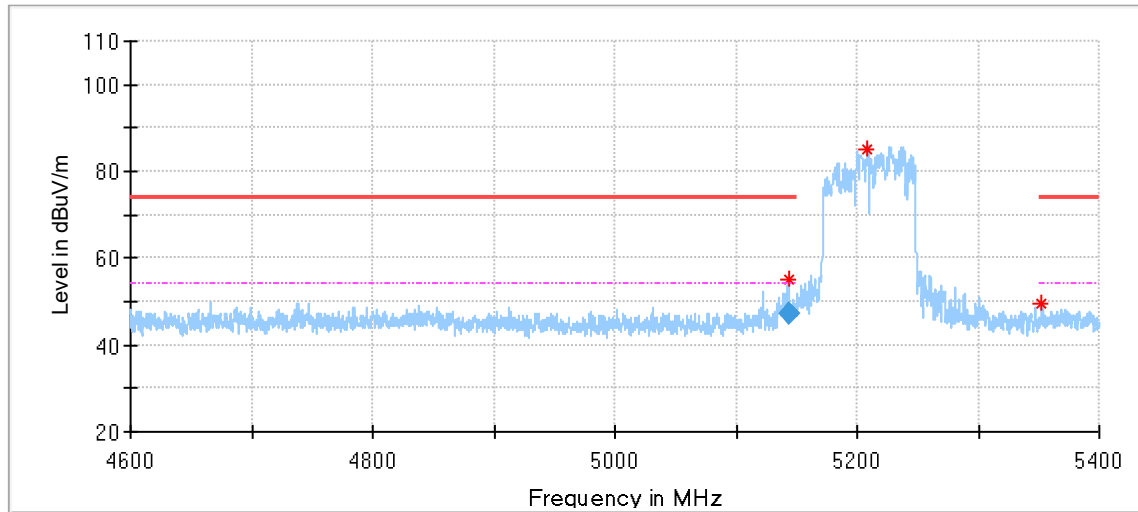
Frequency (MHz)	MaxPeak (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Height (cm)	Pol	Azimuth (deg)	Corr. (dB/m)
5629.291667	46.96	68.20	21.24	150.0	H	346.0	6.31
5796.208333	87.27	---	---	150.0	H	104.0	6.54
5969.125000	49.82	68.20	18.38	150.0	H	324.0	7.45



Critical Freqs

Frequency (MHz)	MaxPeak (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Height (cm)	Pol	Azimuth (deg)	Corr. (dB/m)
5641.458333	47.64	68.20	20.56	150.0	V	141.0	6.37
5791.000000	83.21	---	---	150.0	V	199.0	6.55
5942.875000	50.18	68.20	18.02	150.0	V	86.0	7.14

802.11ac VHT80 Modulation 5210MHz Restricted bandwidth test result

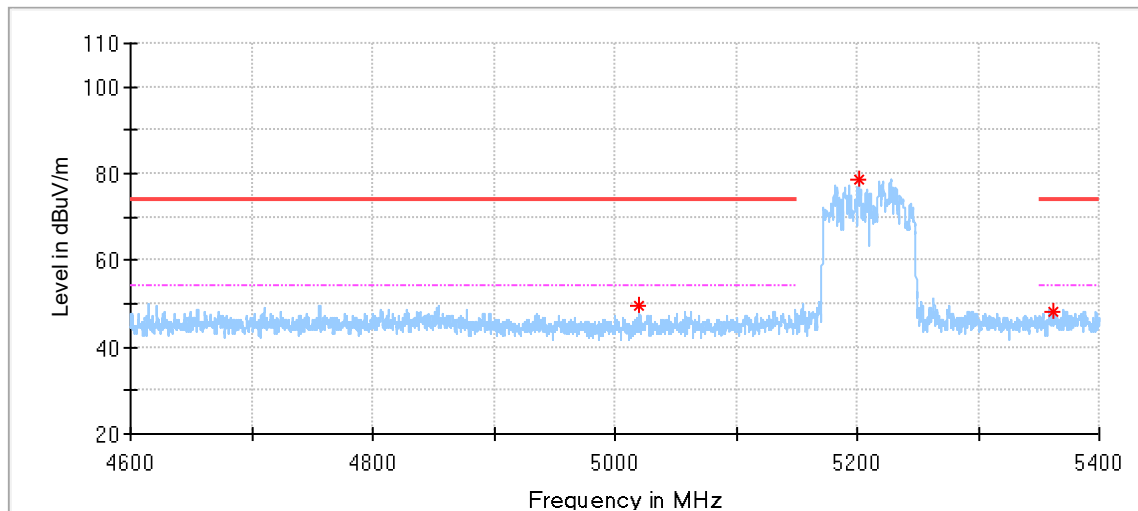


Critical_Freqs

Frequency (MHz)	MaxPeak (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Height (cm)	Pol	Azimuth (deg)	Corr. (dB/m)
5143.333333	54.86	74.00	19.14	150.0	H	104.0	5.69
5208.800000	85.15	---	---	150.0	H	121.0	5.57
5352.533333	49.62	74.00	24.38	150.0	H	132.0	6.17

Final_Result

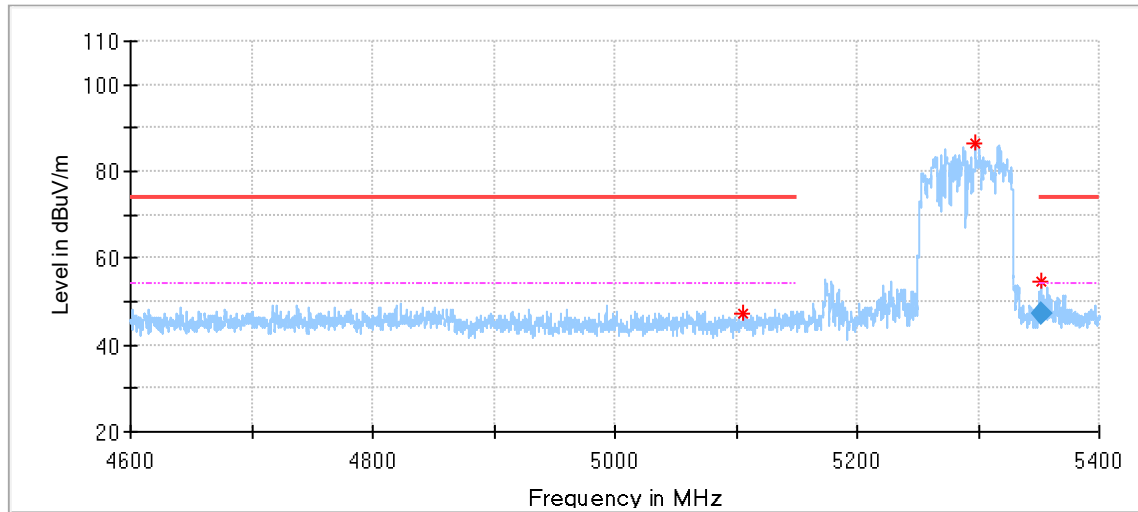
Frequency (MHz)	Average (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Height (cm)	Pol	Azimuth (deg)	Corr. (dB/m)
5143.333333	47.07	54.00	6.93	150.0	H	104.0	5.69



Critical_Freqs

Frequency (MHz)	MaxPeak (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Height (cm)	Pol	Azimuth (deg)	Corr. (dB/m)
5020.200000	49.42	74.00	24.58	150.0	V	99.0	5.00
5201.866667	78.45	---	---	150.0	V	192.0	5.61
5362.000000	47.96	74.00	26.04	150.0	V	71.0	6.26

802.11ac VHT80 Modulation 5290MHz Restricted bandwidth test result

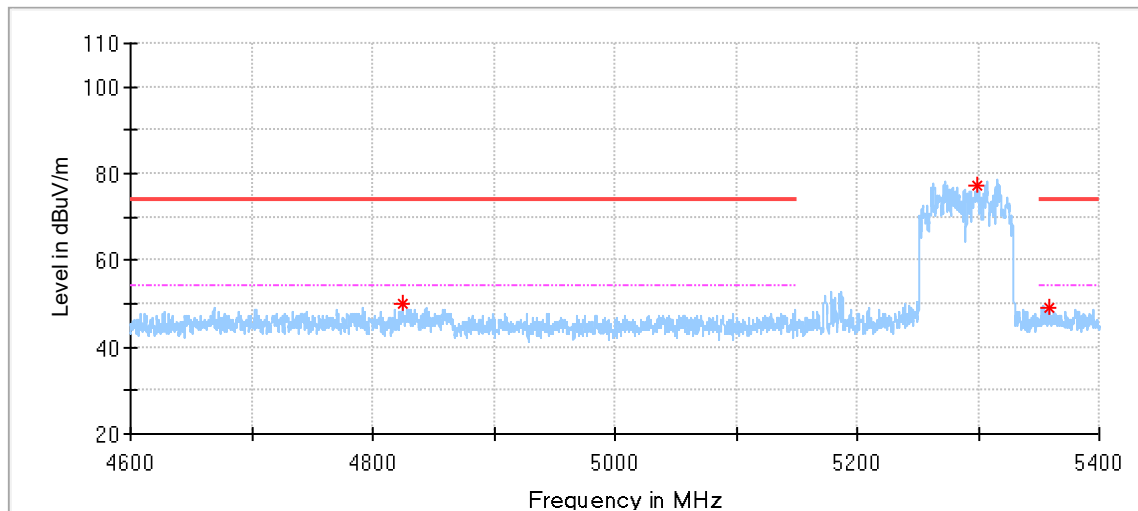


Critical_Freqs

Frequency (MHz)	MaxPeak (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Height (cm)	Pol	Azimuth (deg)	Corr. (dB/m)
5105.733333	47.44	74.00	26.56	150.0	H	80.0	5.51
5297.800000	86.31	---	---	150.0	H	124.0	5.94
5352.133333	54.75	74.00	19.25	150.0	H	113.0	6.17

Final_Result

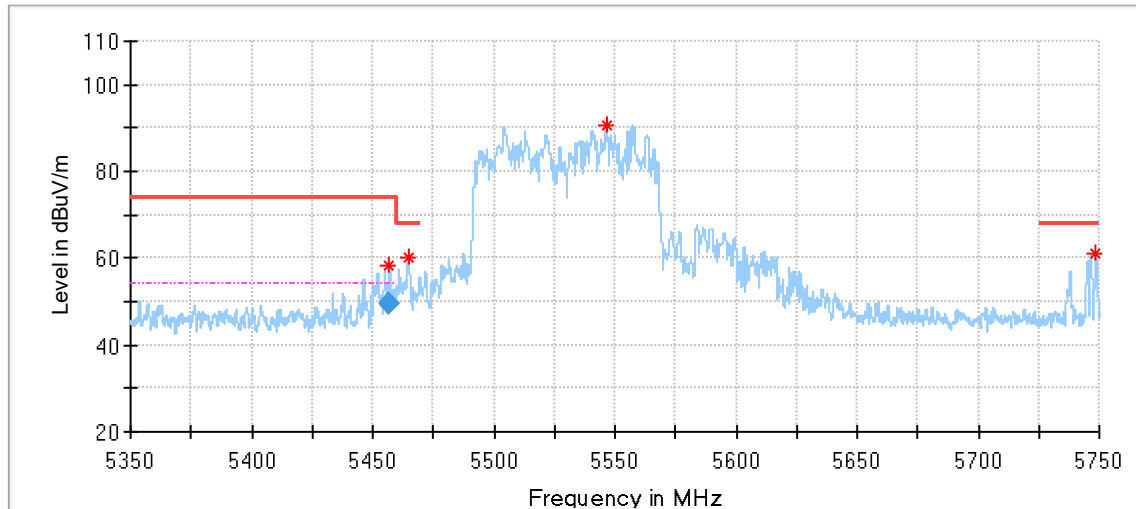
Frequency (MHz)	Average (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Height (cm)	Pol	Azimuth (deg)	Corr. (dB/m)
5352.133333	47.13	54.00	6.87	150.0	H	113.0	6.17



Critical_Freqs

Frequency (MHz)	MaxPeak (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Height (cm)	Pol	Azimuth (deg)	Corr. (dB/m)
4824.866667	50.01	74.00	23.99	150.0	V	113.0	4.91
5299.200000	77.39	---	---	150.0	V	19.0	5.94
5358.333333	48.88	74.00	25.12	150.0	V	261.0	6.23

802.11ac VHT80 Modulation 5530MHz Restricted bandwidth test result

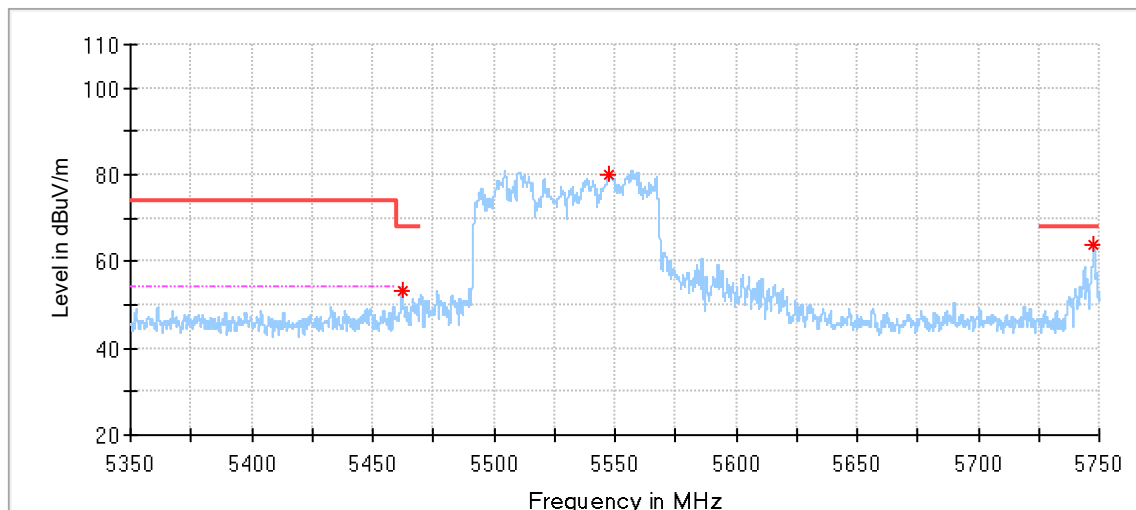


Critical_Freqs

Frequency (MHz)	MaxPeak (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Height (cm)	Pol	Azimuth (deg)	Corr. (dB/m)
5456.933333	58.20	74.00	15.80	150.0	H	103.0	6.32
5464.666667	60.22	68.20	7.98	150.0	H	103.0	6.31
5546.366667	90.68	---	---	150.0	H	93.0	6.97
5748.600000	60.86	68.20	7.34	150.0	H	312.0	6.58

Final_Result

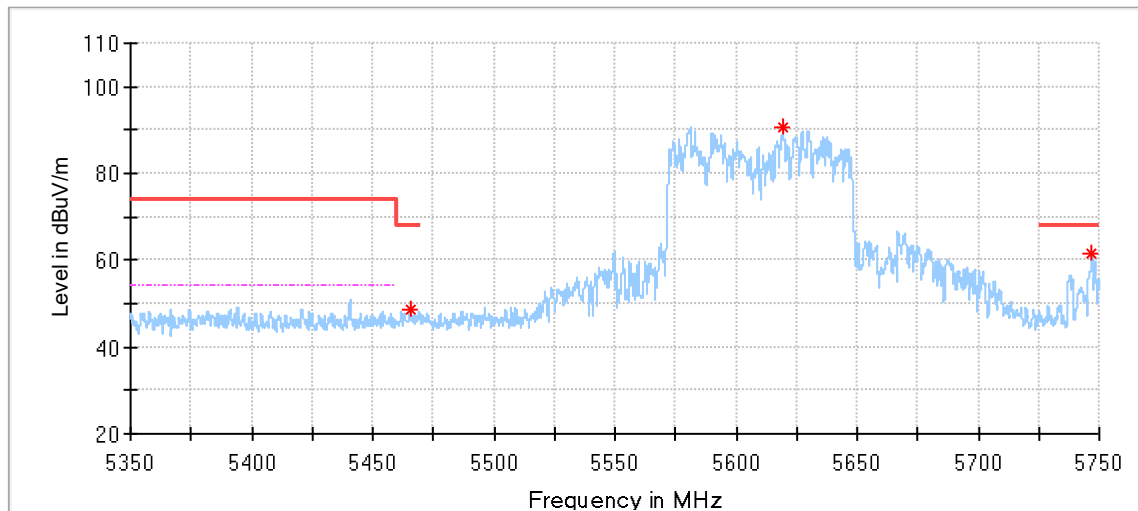
Frequency (MHz)	Average (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Height (cm)	Pol	Azimuth (deg)	Corr. (dB/m)
5456.933333	49.68	54.00	4.32	150.0	H	103.0	6.32



Critical_Freqs

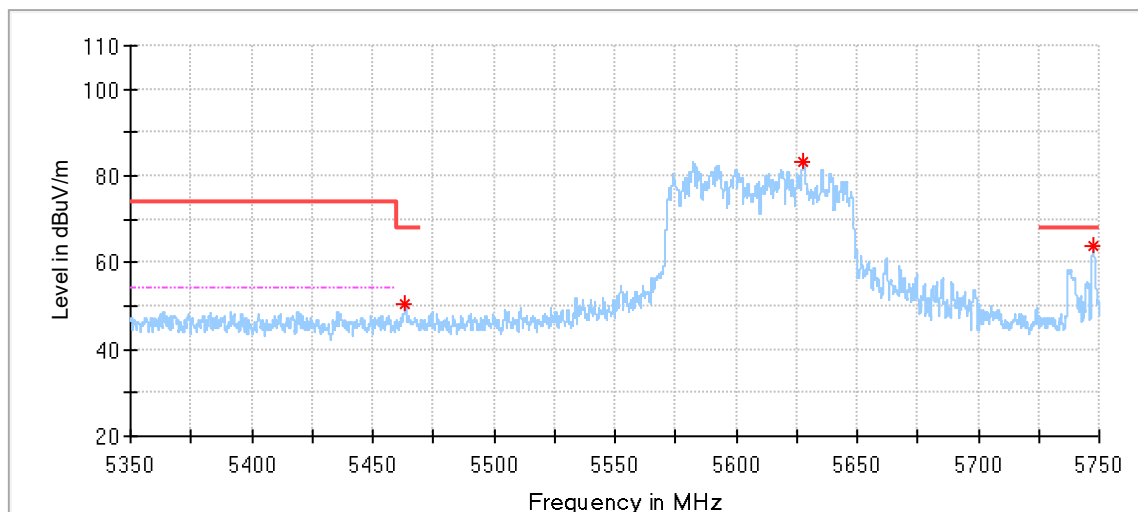
Frequency (MHz)	MaxPeak (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Height (cm)	Pol	Azimuth (deg)	Corr. (dB/m)
5462.166667	53.39	68.20	14.81	150.0	V	352.0	6.31
5547.333333	80.15	---	---	150.0	V	226.0	6.95
5747.766667	64.00	68.20	4.20	150.0	V	18.0	6.58

802.11ac VHT80 Modulation 5610MHz Restricted bandwidth test result



Critical_Freqs

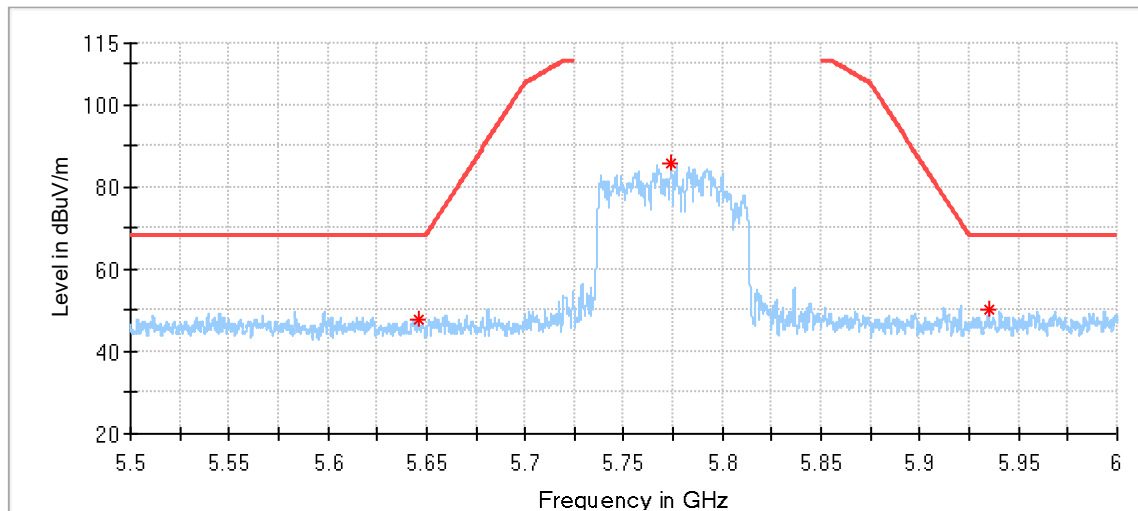
Frequency (MHz)	MaxPeak (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Height (cm)	Pol	Azimuth (deg)	Corr. (dB/m)
5465.800000	48.39	68.20	19.81	150.0	H	0.0	6.31
5619.366667	90.64	---	---	150.0	H	108.0	6.26
5747.000000	61.37	68.20	6.83	150.0	H	294.0	6.58



Critical_Freqs

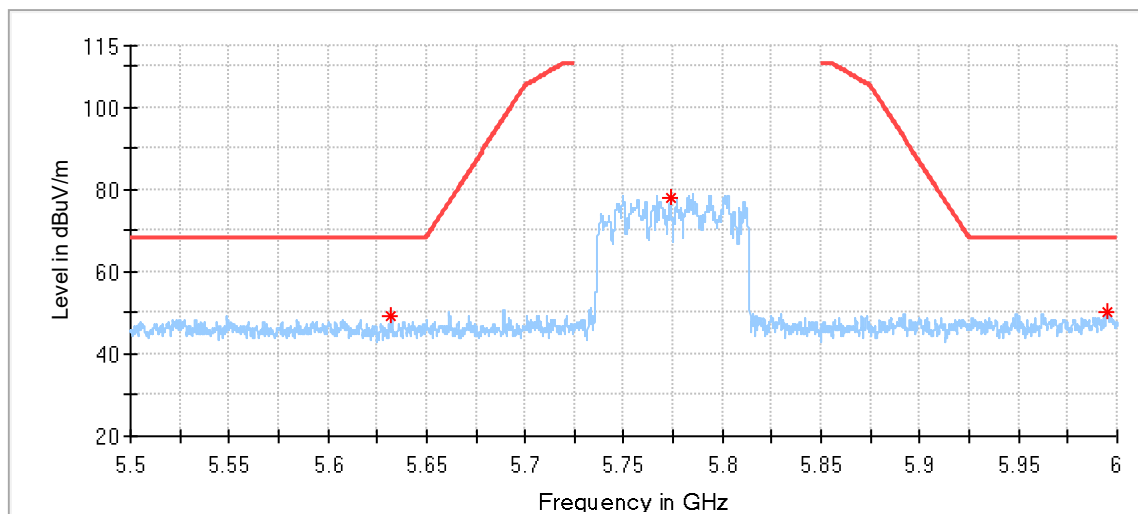
Frequency (MHz)	MaxPeak (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Height (cm)	Pol	Azimuth (deg)	Corr. (dB/m)
5463.600000	50.41	68.20	17.79	150.0	V	180.0	6.31
5627.900000	83.03	---	---	150.0	V	336.0	6.30
5747.500000	63.91	68.20	4.29	150.0	V	19.0	6.58

802.11ac VHT80 Modulation 5775MHz Restricted bandwidth test result



Critical Freqs

Frequency (MHz)	MaxPeak (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Height (cm)	Pol	Azimuth (deg)	Corr. (dB/m)
5645.916667	47.73	68.20	20.47	150.0	H	213.0	6.40
5773.791667	86.00	---	---	150.0	H	102.0	6.57
5934.916667	50.08	68.20	18.12	150.0	H	253.0	7.08



Critical Freqs

Frequency (MHz)	MaxPeak (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Height (cm)	Pol	Azimuth (deg)	Corr. (dB/m)
5632.208333	49.32	68.20	18.88	150.0	V	112.0	6.32
5773.583333	77.94	---	---	150.0	V	290.0	6.58
5995.166667	50.31	68.20	17.89	150.0	V	68.0	7.76

Remark:

- Corrected Amplitude = Read level + Corrector factor
Above 1GHz: Corrector factor = Antenna Factor + Cable Loss- Amplifier Gain.
(The Reading Level is recorded by software which is not shown in the sheet)
- We test all modes and only the worst case recorded in the report.

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 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.

For transmitters operating in the 5.25-5.35 GHz band: All emissions outside the band 5250-5350 MHz shall not exceed -27 dBm/MHz e.i.r.p.

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 -27 dBm/MHz e.i.r.p.

For transmitters operating in the 5.725-5.85 GHz band: shall have e.i.r.p. of unwanted emissions comply with the following:

- a) 27 dBm/MHz at frequencies from the band edges decreasing linearly to 15.6 dBm/MHz at 5 MHz above or below the band edges;
- b) 15.6 dBm/MHz at 5 MHz above or below the band edges decreasing linearly to 10 dBm/MHz at 25 MHz above or below the band edges;
- c) 10 dBm/MHz at 25 MHz above or below the band edges decreasing linearly to -27 dBm/MHz at 75 MHz above or below the band edges; and
- d) -27 dBm/MHz at frequencies more than 75 MHz above or below the band edges.

Test Result: Pass

See Appendix D for test data.

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. The EUT was placed inside the environmental test chamber.
2. Set center frequency of the channel under test.
3. Test the OBW and record the frequency of the left and right frequency point.
4. Repeat the test at temperature specified by manufacture as below by not more than 10 °C step by normal voltage.
5. Repeat the test at 85% and 115% of the nominal supply voltage as below under normal temperature (+15 °C to +25 °C).

User manual temperature is 10°C to 40°C, normal Temperature is +20°C.

Limit:

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 user's manual.

Test Results (All conditions and all modes were performed, only list Worst-Case in the report)

Remark: NV is normal Voltage: 120Vac, HV is High Voltage: 138Vac, LV is Low Voltage: 102Vac, NT is normal Temperature: +20°C.

Test Result: Pass

See Appendix D for test data.

9.7 Dynamic Frequency Selection (DFS)

Mode of Operation:

Parameters of EUT	
Frequency	5250-5350MHz 5470-5600MHz 5650-5725MHz
Operational Mode	☐ Master ☒ Client without Radar Detection ☐ Client with Radar Detection
Modulation	OFDM
Channel Bandwidth	20MHz, 40MHz, 80MHz

Working Modes and required Test Items

The manufacturer shall whether the EUT is capable of operating as a master and a client. If the EUT is capable of operating in more than one operating mode then each operating mode shall be tested separately.

Table 1: Applicability of DFS Requirements Prior to Use of a Channel

Requirement	Operational Mode		
	Master	Client Without Radar Detection	Client With Radar Detection
<i>Non-Occupancy Period</i>	Yes	Not required	Yes
<i>DFS Detection Threshold</i>	Yes	Not required	Yes
<i>Channel Availability Check Time</i>	Yes	Not required	Not required
<i>U-NII Detection Bandwidth</i>	Yes	Not required	Yes

Table 2: Applicability of DFS requirements during normal operation

Requirement	Operational Mode	
	Master Device or Client with Radar Detection	Client Without Radar Detection
<i>DFS Detection Threshold</i>	Yes	Not required
<i>Channel Closing Transmission Time</i>	Yes	Yes
<i>Channel Move Time</i>	Yes	Yes
<i>U-NII Detection Bandwidth</i>	Yes	Not required

Additional requirements for devices with multiple bandwidth modes	Master Device or Client with Radar Detection	Client Without Radar Detection
<i>U-NII Detection Bandwidth and Statistical Performance Check</i>	All BW modes must be tested	Not required
<i>Channel Move Time and Channel Closing Transmission Time</i>	Test using widest BW mode available	Test using the widest BW mode available for the link
<i>All other tests</i>	Any single BW mode	Not required
Note: Frequencies selected for statistical performance check (Section 7.8.4) should include several frequencies within the radar detection bandwidth and frequencies near the edge of the radar detection bandwidth. For 802.11 devices it is suggested to select frequencies in each of the bonded 20 MHz channels and the channel center frequency.		

Requirement:

Per KDB 905462 D02 v02 the following are the requirements for client Devices:

- a) A Client Device will not transmit before having received appropriate control signals from a Master Device.
- b) A Client Device will stop all its transmissions whenever instructed by a Master Device to which it is associated and will meet the Channel Move Time and Channel Closing Transmission Time requirements. The Client Device will not resume any transmissions until it has again received control signals from a Master Device.
- c) If a Client Device is performing In-Service Monitoring and detects a Radar Waveform above the DFS Detection Threshold, it will inform the Master Device. This is equivalent to the Master Device detecting the Radar Waveform and d) through f) of section 5.1.1 apply.
- d) Irrespective of Client Device or Master Device detection the Channel Move Time and Channel Closing Transmission Time requirements remain the same.
- e) The client test frequency must be monitored to ensure no transmission of any type has occurred for 30 minutes. Note: If the client moves with the master, the device is considered compliant if nothing appears in the client non-occupancy period test. For devices that shut down (rather than moving channels), no beacons should appear.

Table 3: DFS Response Requirement Values

Parameter	Value
<i>Non-occupancy period</i>	Minimum 30 minutes
<i>Channel Availability Check Time</i>	60 seconds
<i>Channel Move Time</i>	10 seconds See Note 1.
<i>Channel Closing Transmission Time</i>	200 milliseconds + an aggregate of 60 milliseconds over remaining 10 second period. See Notes 1 and 2.
<i>U-NII Detection Bandwidth</i>	Minimum 100% of the U-NII 99% transmission power bandwidth. See Note 3.

Note 1: *Channel Move Time* and the *Channel Closing Transmission Time* should be performed with Radar Type 0. The measurement timing begins at the end of the Radar Type 0 burst.

Note 2: The *Channel Closing Transmission Time* is comprised of 200 milliseconds starting at the beginning of the *Channel Move Time* plus any additional intermittent control signals required to facilitate a *Channel* move (an aggregate of 60 milliseconds) during the remainder of the 10 second period. The aggregate duration of control signals will not count quiet periods in between transmissions.

Note 3: During the *U-NII Detection Bandwidth* detection test, radar type 0 should be used. For each frequency step the minimum percentage of detection is 90 percent. Measurements are performed with no data traffic.

DFS Detection Thresholds Values

Table 4 below provides the DFS Detection Thresholds for Master Devices as well as Client Devices incorporating In-Service Monitoring.

Table 4: DFS Detection Thresholds for Master Devices and Client Devices with Radar Detection

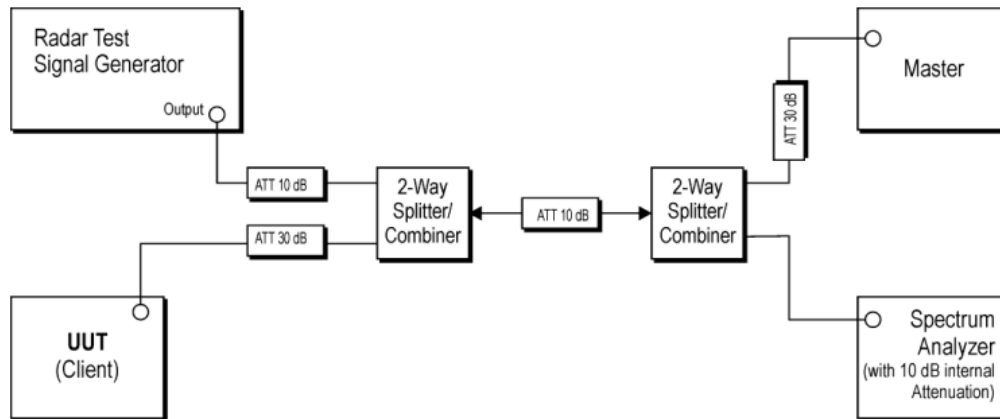
Maximum Transmit Power	Value (See Notes 1, 2, and 3)
EIRP $\geq$ 200 milliwatt	-64 dBm
EIRP $<$ 200 milliwatt and power spectral density $<$ 10 dBm/MHz	-62 dBm
EIRP $<$ 200 milliwatt that do not meet the power spectral density requirement	-64 dBm
Note 1: This is the level at the input of the receiver assuming a 0 dBi receive antenna. Note 2: Throughout these test procedures an additional 1 dB has been added to the amplitude of the test transmission waveforms to account for variations in measurement equipment. This will ensure that the test signal is at or above the detection threshold level to trigger a DFS response. Note 3: EIRP is based on the highest antenna gain. For MIMO devices refer to KDB Publication 662911 D01.	

Test Procedure

The FCC KDB 905462 D02 v02 describes a radiated test setup and a conducted test setup. A conducted test setup was used for this testing. Figure 1 shows the typical test setup. One channel selected between 5260 and 5350 MHz is chosen for the testing.

Figure 1. Test Setup for DFS

Setup for client with injection at the master.



Channel Closing Transmission Time, Channel Move Time and Non-Occupancy Period.

Block Diagram of test setup test procedure.

- (1) The Radar Pulse generator is setup to provide a pulse at frequency that the master and client are operating, A type 0 radar pulse is used for the testing.
- (2) The vector signal generator is adjusted to provide the radar burst (18 pulses) at the level of approximately -62dBm at the antenna of the master device.
- (3) A trigger is provided from the pulse generator to the DFS monitoring system in order to capture the traffic and the occurrence of the radar pulse.
- (4) The Client Device (EUT) is set up per the diagram in Figure 1 and communications between the Master device and the Client is established.
- (5) Iperf software is used to properly load the test channel.
- (6) The real time spectrum analyzer is set to record a 16sec window to any transmissions occurring up to and after 10sec.
- (7) The system is again setup and the monitoring time is shortened in order to capture the Channel Closing Transmission Time. This time is measured to ensure that the Client ceases transmission within 200ms and the aggregate of emissions occurring after 200ms up to 10 sec do not exceed 60ms.
(Note: the channel may be different since the Master and Client have changed channels due to the detection of e initial radar pulse.)
- (8) After the initial radar burst the channel is monitored for 30 minutes to ensure no transmissions or beacons occur. A second monitoring setup is used to verify that the Master and Client have both moved to different channels.

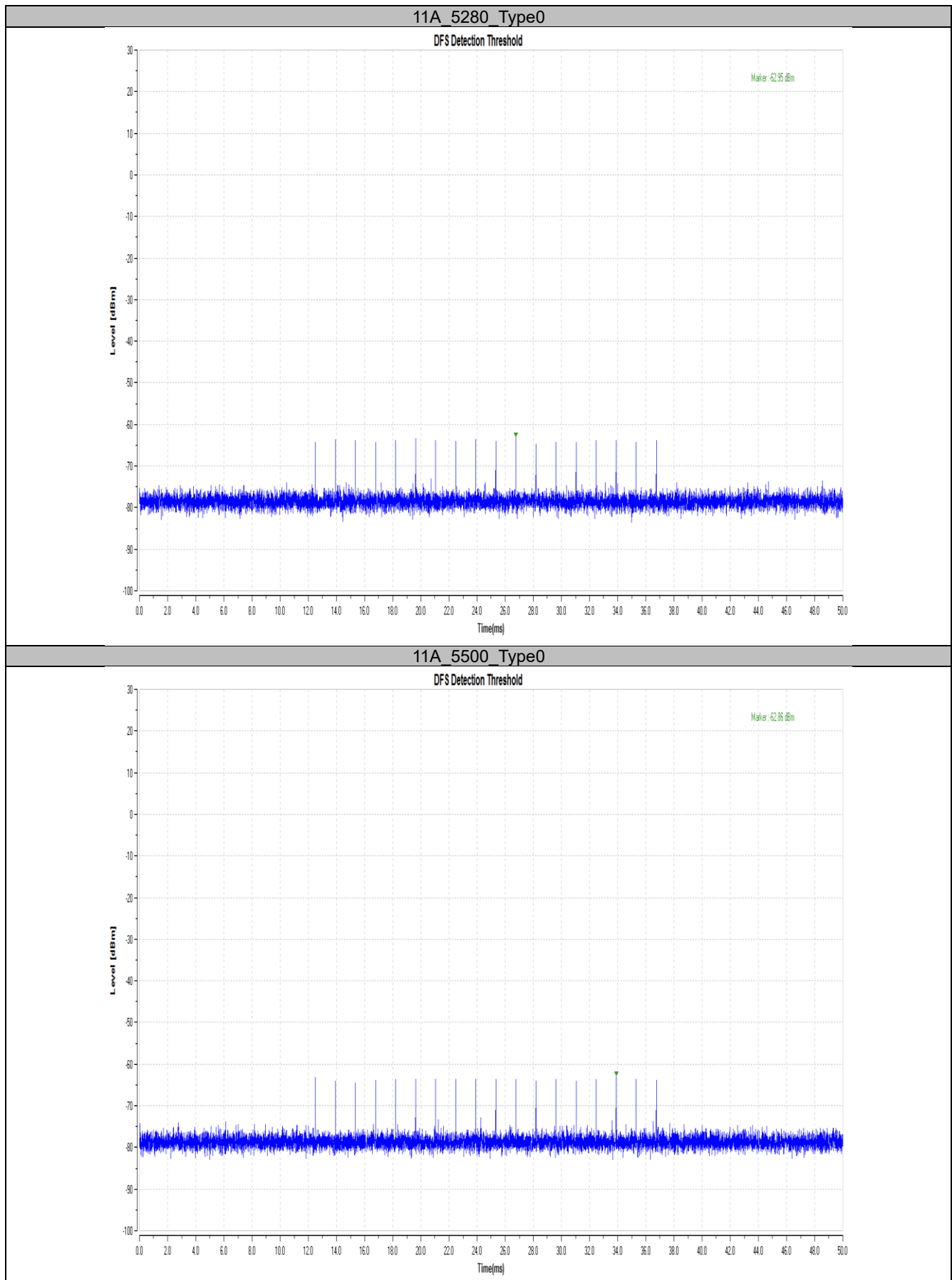
Test Result

Clause	Test Parameter	Remarks	Pass/Fail
15.407	DFS Detection Threshold	Not Applicable	N/A
15.407	Channel Availability Check time	Not Applicable	N/A
15.407	Channel Move time	Applicable	Pass
15.407	Channel Closing Transmission time	Applicable	Pass
15.407	Non-occupancy Period	Not Applicable	N/A
15.407	Uniform Spreading	Not Applicable	N/A
15.407	U-NII Detection Bandwidth	Not Applicable	N/A

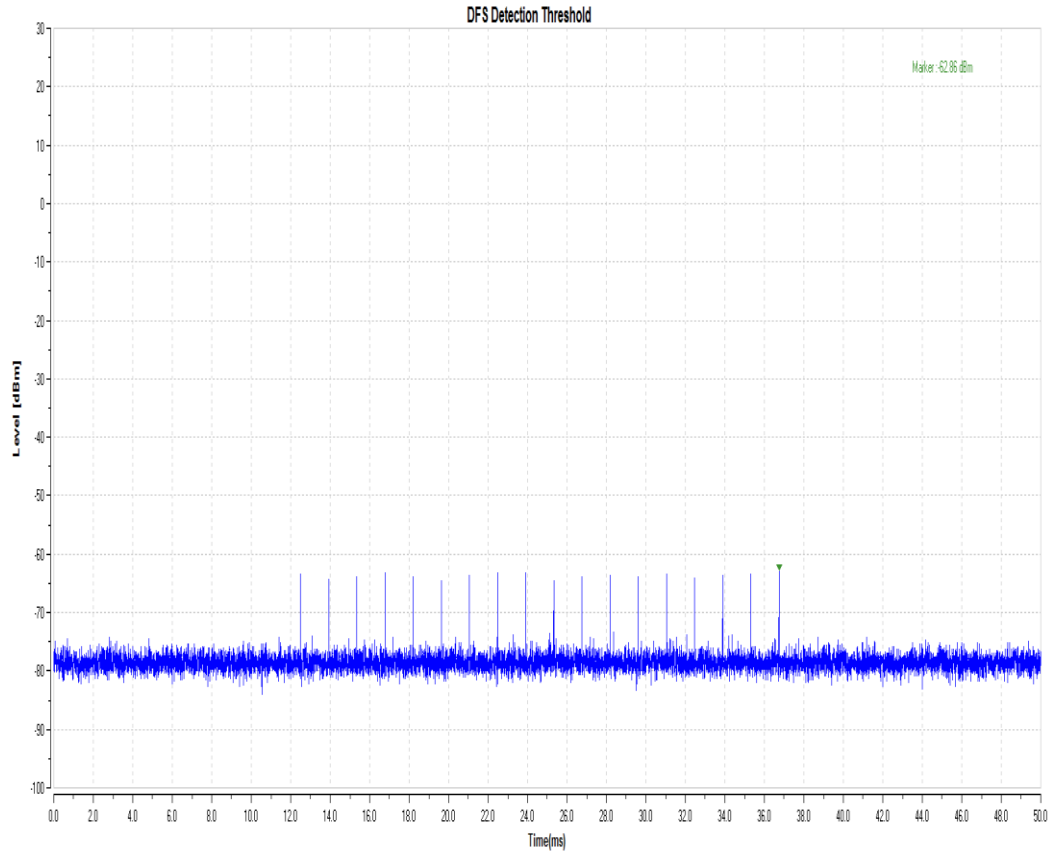
Channel Move Time and Channel Closing Transmission Time:

Test Mode	Channel[MHz]	CCT[ms]	Limit[ms]	CMT[ms]	Limit[ms]	Verdict
11A	5280	214.62	260	866.02	10000	PASS
	5500	224.51	260	814.85	10000	PASS
11N40SISO	5270	223.65	260	963.63	10000	PASS
	5510	211.61	260	807.97	10000	PASS
11AC80SISO	5290	217.63	260	772.71	10000	PASS
	5530	223.65	260	877.2	10000	PASS

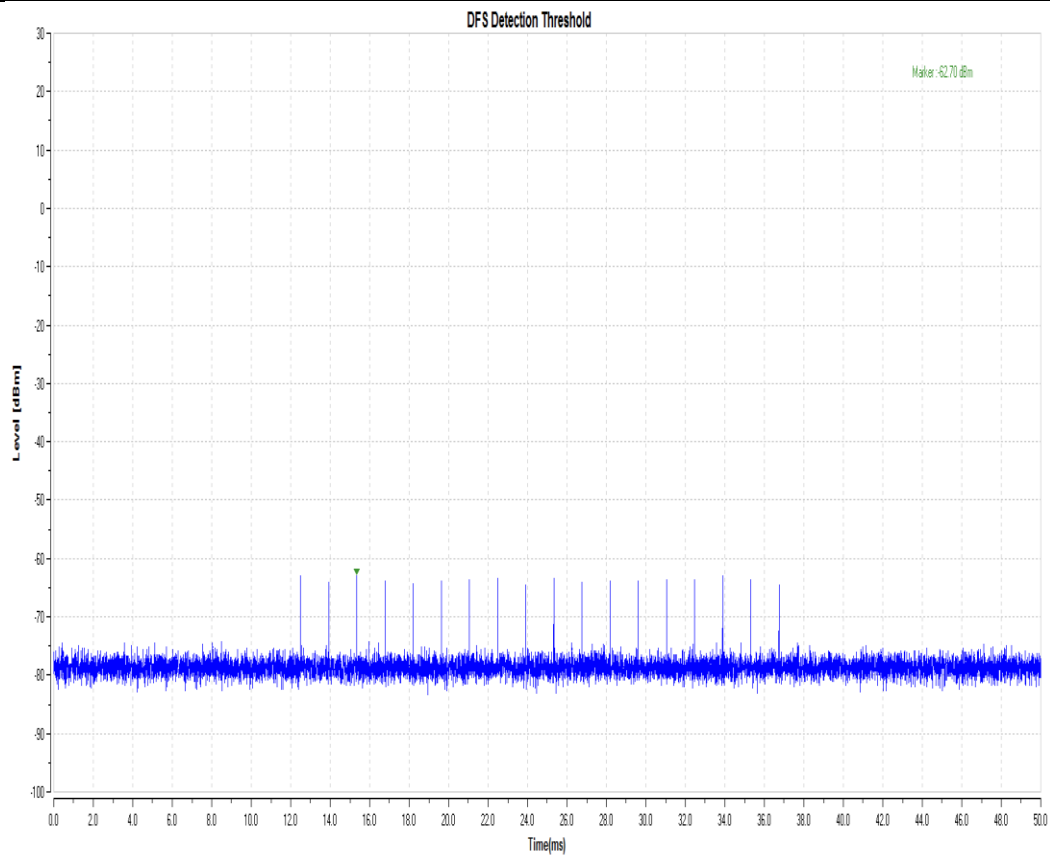
Test Graphs



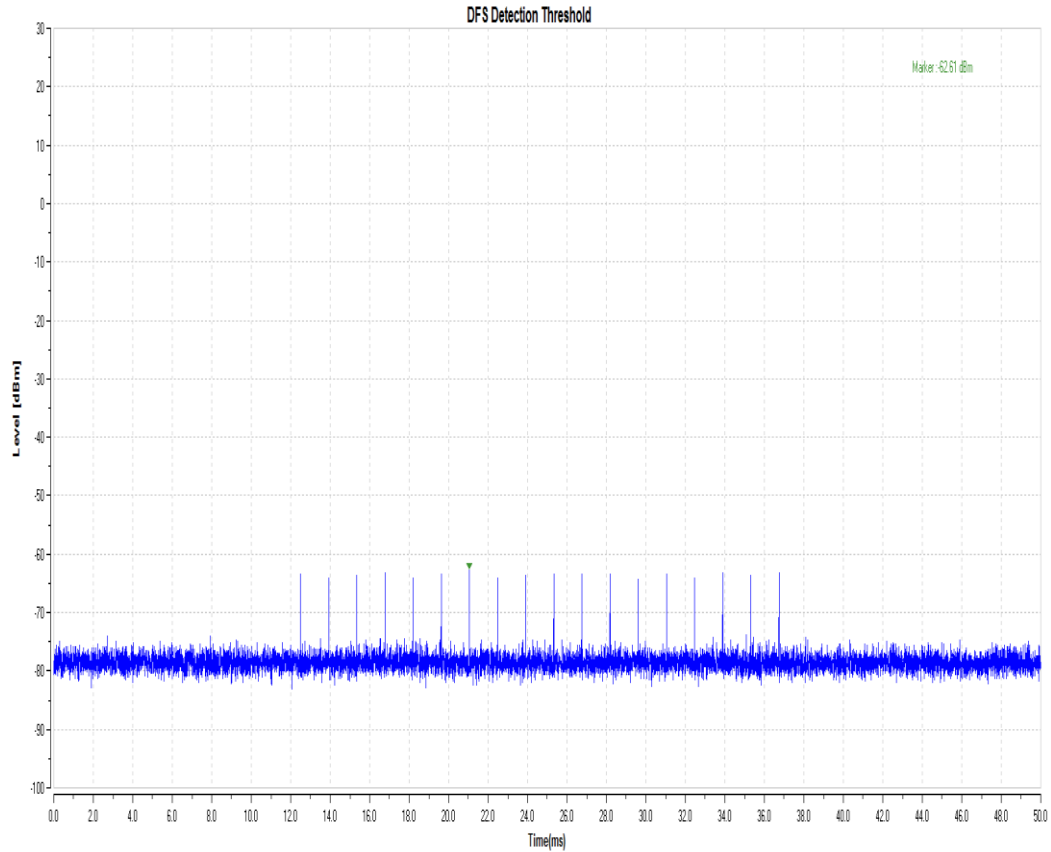
11N40SISO_5270_Type0



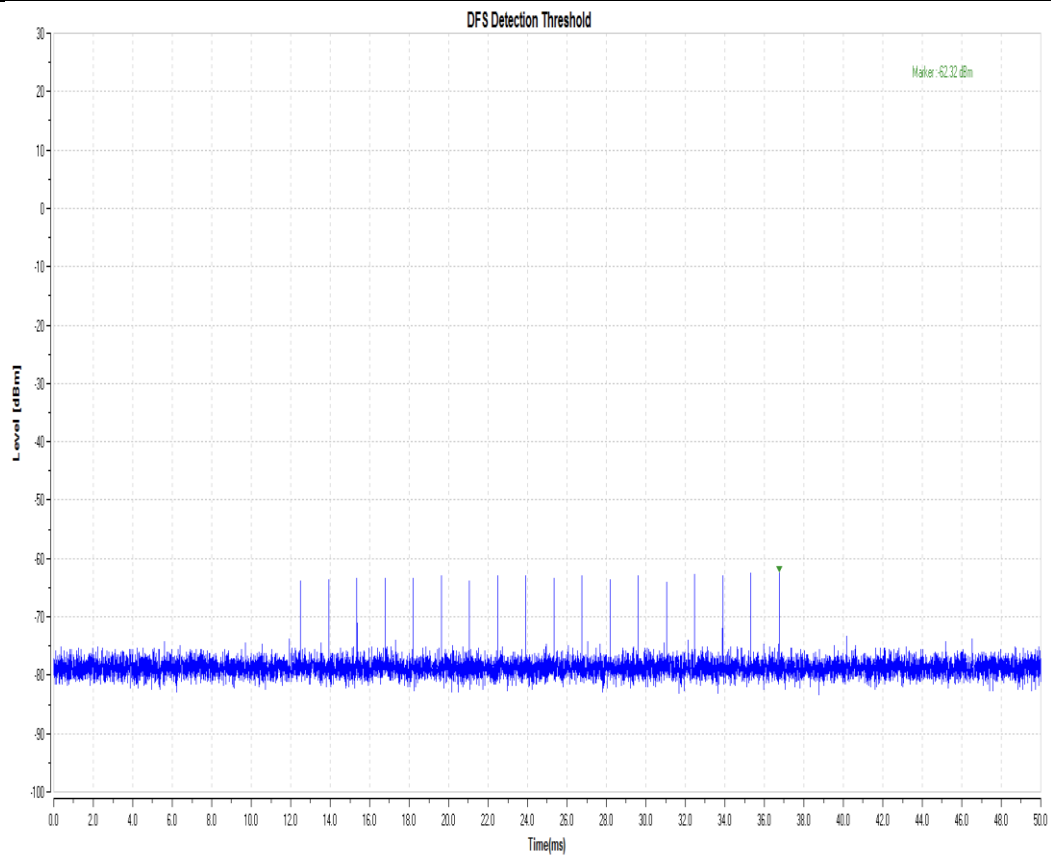
11N40SISO_5510_Type0

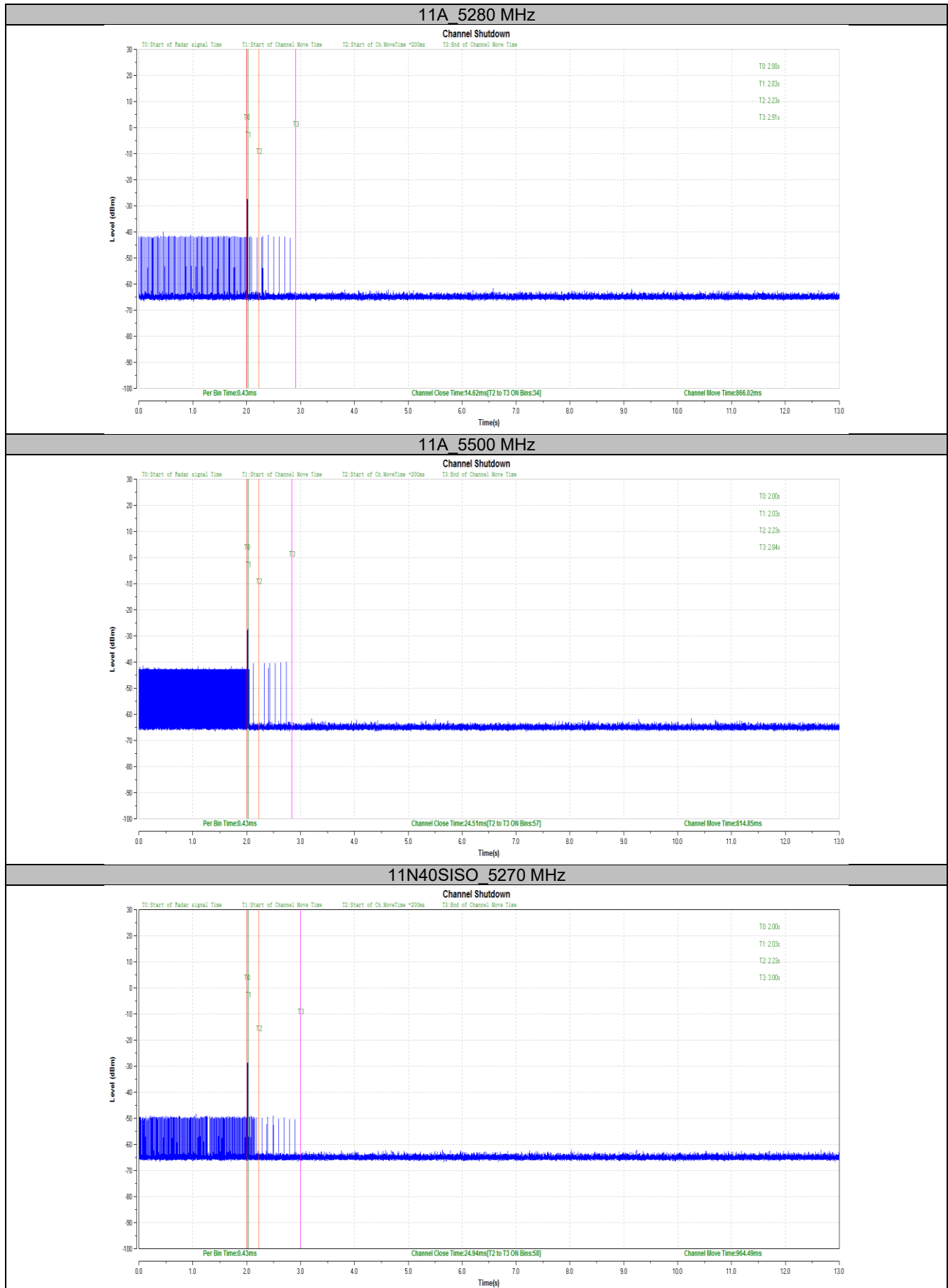


11AC80SISO_5290_Type0

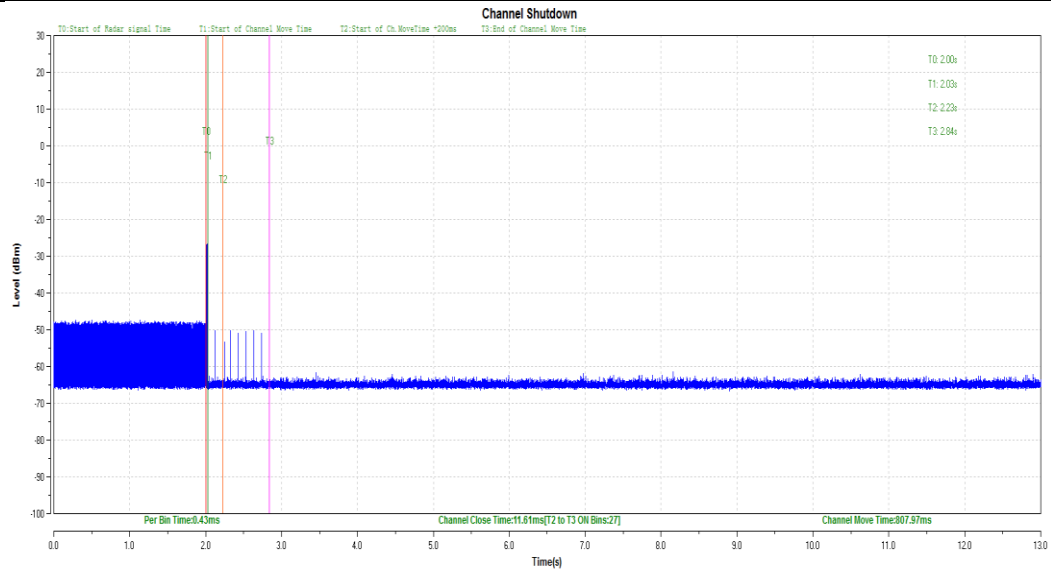


11AC80SISO_5530_Type0

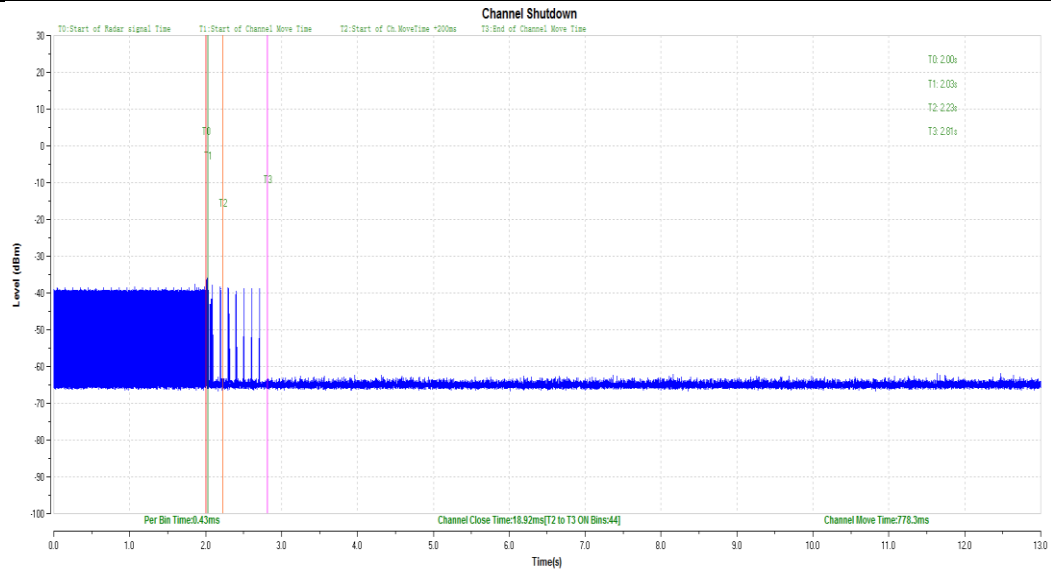




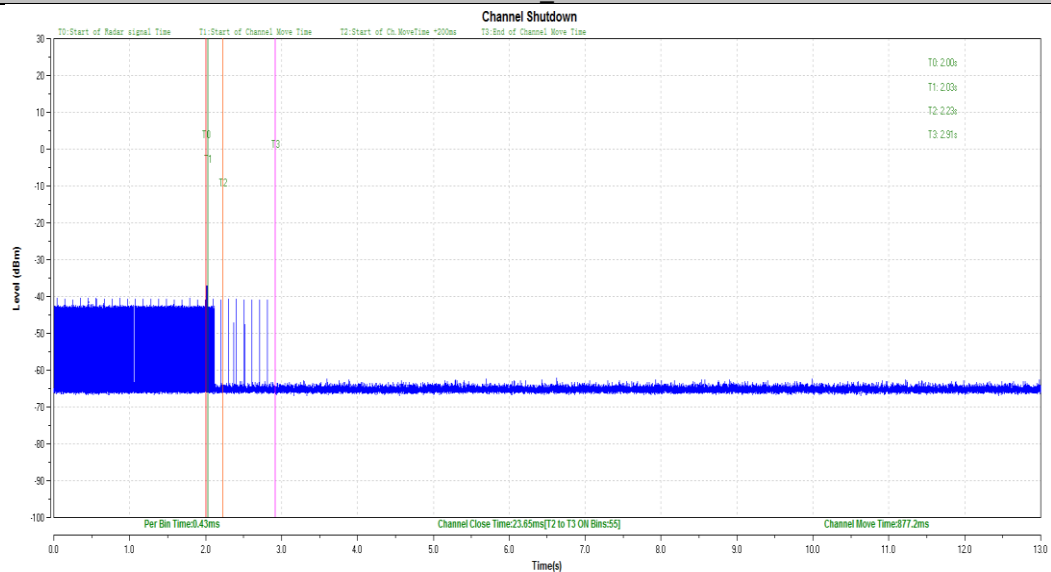
11N40SISO_5510 MHz



11AC80SISO_5290 MHz



11AC80SISO_5530 MHz

**Test Result: 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	68-4-74-14-001	101782	1	2026-4-25
LISN	Rohde & Schwarz	ENV432	68-4-87-16-001	101318	1	2026-4-25
Attenuator	Shanghai Huaxiang	TS2-26-3	68-4-81-16-003	080928189	1	2026-4-19
Cable	OUQIAO	RG142	68-4-90-19-005-A20	----	----	----
Test software	Rohde & Schwarz	EMC32	68-4-90-19-005-A01	Version10.35.0 2	N/A	N/A
Shielding Room	TDK	CSR #2	68-4-90-19-005	----	3	2027-10-07

Radiated Emission Test, SAC-3 #1

Description	Manufacturer	Model no.	Equipment ID	Serial no.	Cal interval (year)	Cal. due date
EMI Test Receiver	Rohde & Schwarz	ESR 7	68-4-74-19-001	102176	1	2026-4-25
Loop Antenna	Rohde & Schwarz	HFH2-Z2	68-4-80-14-006	100398	1	2026-7-17
Cable	HUBER-SUHNER	RG214	68-4-90-14-001-A21	----	----	----
3m Semi-anechoic chamber	TDK	9X6X6	68-4-90-14-001	----	3	2026-10-25
Test software	Rohde & Schwarz	EMC32	68-4-90-14-001-A10	Version10.35.0 2	N/A	N/A

Radiated Emission Test, SAC-3 #2

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	2026-4-25
Trilog Super Broadband Test Antenna	Schwarzbeck	VULB 9162	68-4-80-19-003	284	1	2026-2-11
Attenuator	Mini-circuits	UNAT-6+	68-4-81-21-002	15542	1	2026-4-19
Cable	OUQIAO	18DLB5-NMNM-7000	68-4-90-19-006-A22	----	----	----
Wave Guide Antenna	ETS	3117	68-4-80-19-001	00218954	1	2026-3-10
Pre-amplifier	Rohde & Schwarz	SCU 18F	68-4-29-19-001	100745	1	2026-4-19
Pre-amplifier	Rohde & Schwarz	SCU 18F	68-4-29-19-003	100747	1	2026-4-19
Sideband Horn Antenna	Q-PAR	QWH-SL-18-40-K-SG	68-4-80-14-008	12827	1	2026-6-19
Pre-amplifier	Rohde & Schwarz	SCU 40A	68-4-29-14-002	100432	1	2026-7-7
Cable	JUNFLON	MWX241	68-4-90-19-006-A21	----	----	----
3m Semi-anechoic chamber	TDK	SAC-3 #2	68-4-90-19-006	----	3	2026-10-25
Test software	Rohde & Schwarz	EMC32	68-4-90-19-006-A01	Version10.35.0 2	N/A	N/A

RF Conducted Test

Description	Manufacturer	Model no.	Equipment ID	Serial no.	Cal interval (year)	Cal. due date
Signal Analyzer	Rohde & Schwarz	FSV40	68-4-74-14-004	101030	1	2026-4-18
RF Meas. and Switch Matrix Unit	TST PASS	TSCB3023R 2	68-4-93-23-001	2811685c	1	2026-4-18
Cable	JUNFLON	J12J103539	68-4-90-19-003-A20	----	----	----
Cable	JUNFLON	J12J103539	68-4-90-19-003-A21	----	----	----
Cable	JUNFLON	J12J103539	68-4-90-19-003-A22	----	----	----
Test software	TST PASS	TST PASS	68-4-93-23-001-A03	Version 2.0	N/A	N/A
Test software	Tonscend	JS1120-3	68-4-74-14-006-A13	Version 2.6.77.0518	N/A	N/A
Shielding Room	TDK	TS8997	68-4-90-19-003	----	3	2027-10-07

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 in shielding room (68-4-90-19-004) 150kHz-30MHz (for test using AMN ENV432)	3.26dB
Uncertainty for Radiated Emission in 3m chamber (68-4-90-14-001) 9kHz-30MHz	4.69dB
Uncertainty for Radiated Emission in new 3m chamber (68-4-90-19-006) 30MHz-1000MHz	Horizontal: 4.79dB; Vertical: 5.86dB
Uncertainty for Radiated Emission in new 3m chamber (68-4-90-19-006) 1000MHz-18000MHz	Horizontal: 5.37dB; Vertical: 5.37dB
Uncertainty for Radiated Emission in new 3m chamber (68-4-90-19-006) above 18000MHz	Horizontal: 3.14dB; Vertical: 3.12dB
Uncertainty for Conducted RF test with TS 8997	RF Power Conducted: 1.31dB Frequency test involved: 0.6×10^{-8} or 1%

Measurement Uncertainty Decision Rule:

Determination of conformity with the specification limits is based on the decision rule according to IEC Guide 115: 2023, clause 4.3.3 and 4.3.4.