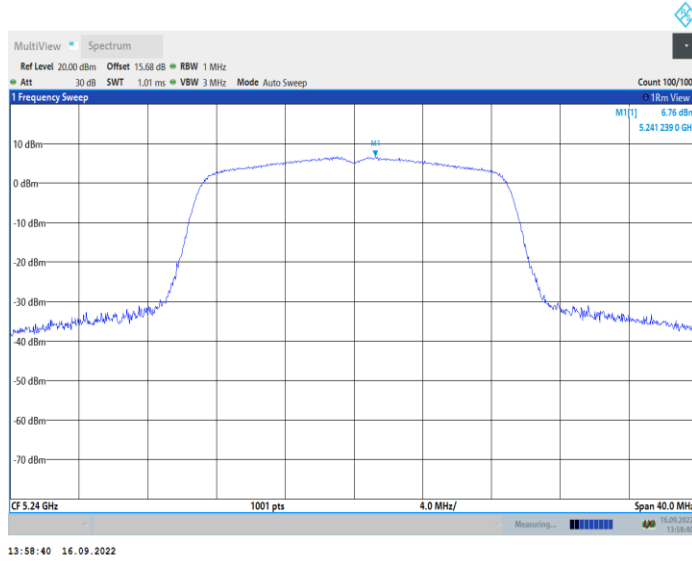
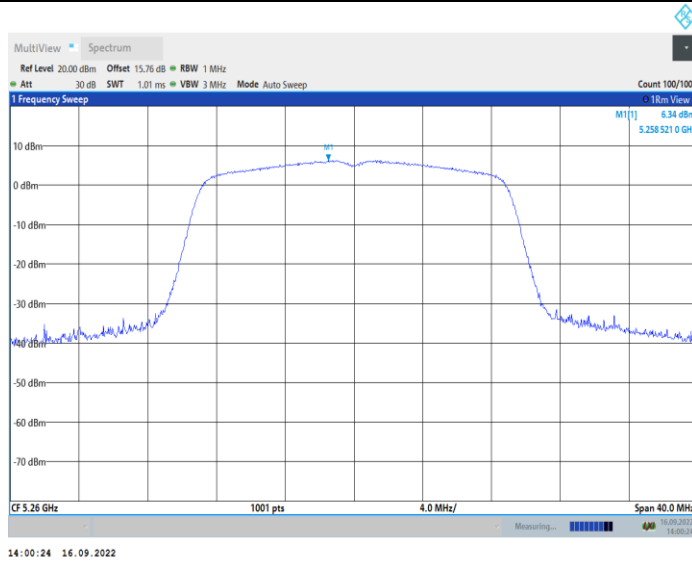


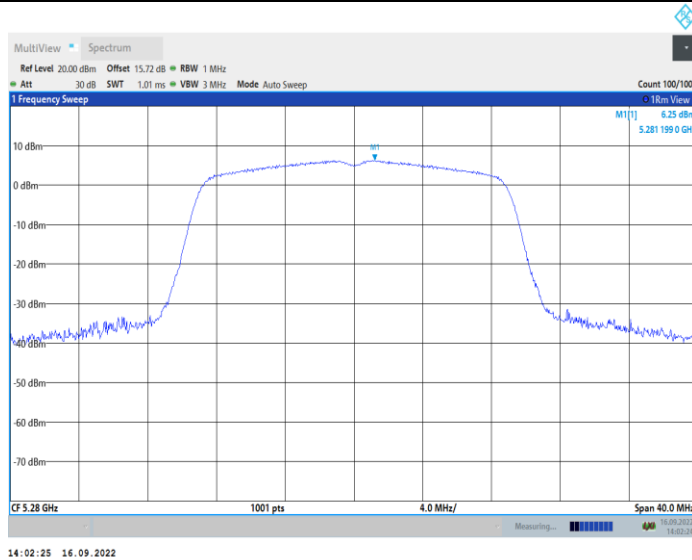
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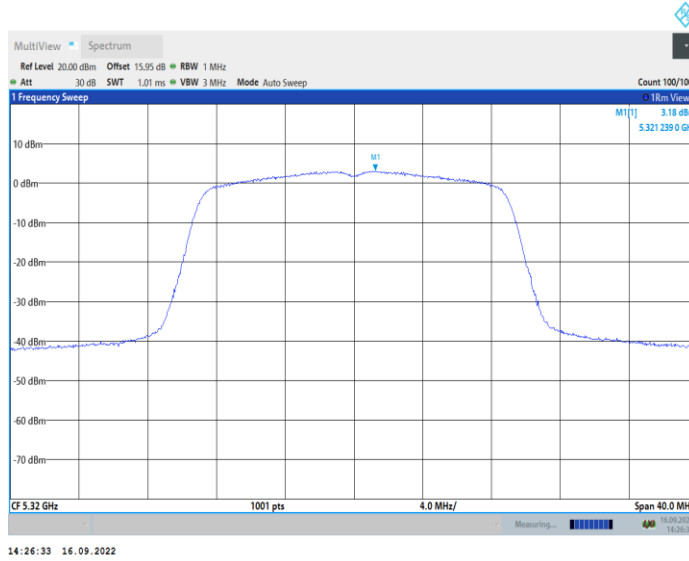
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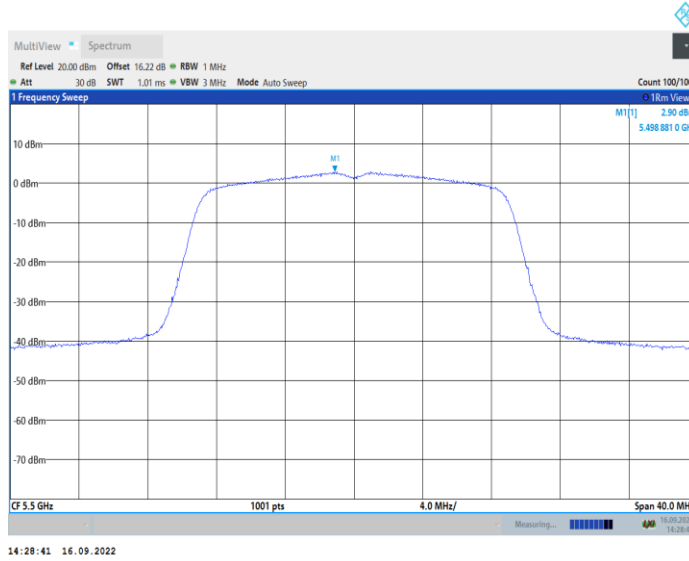
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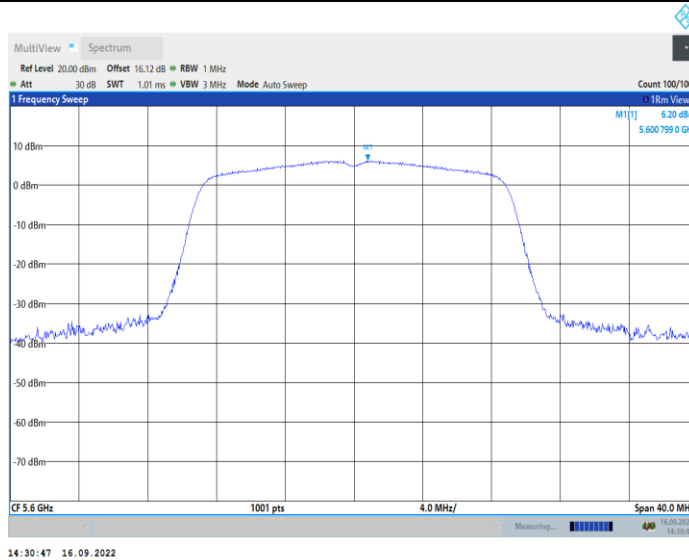
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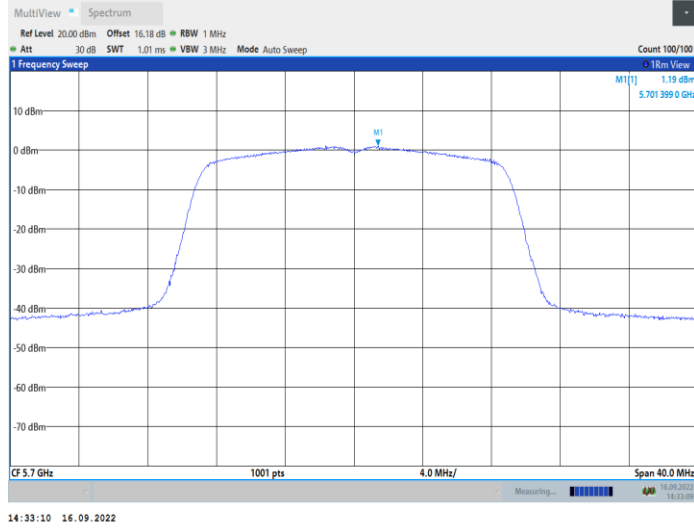
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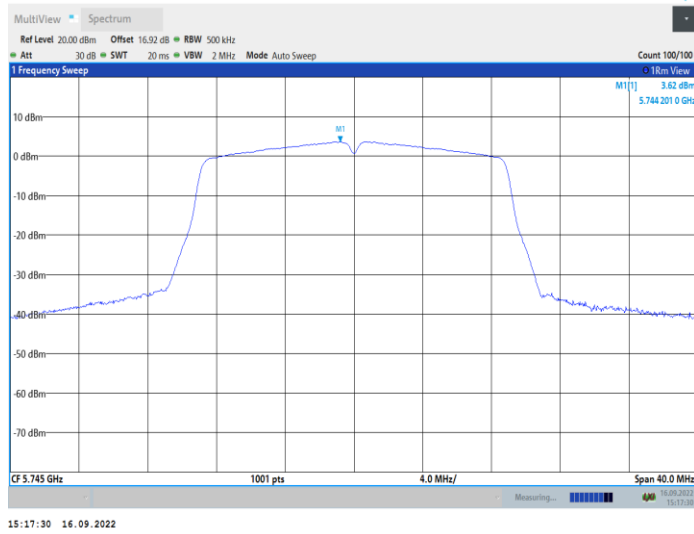
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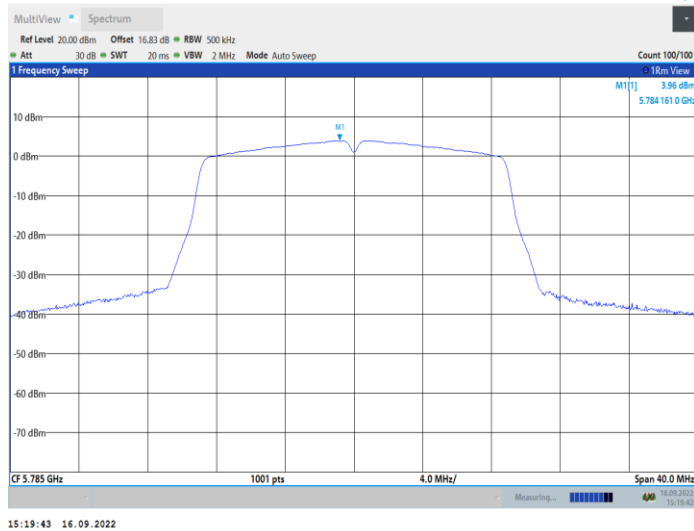
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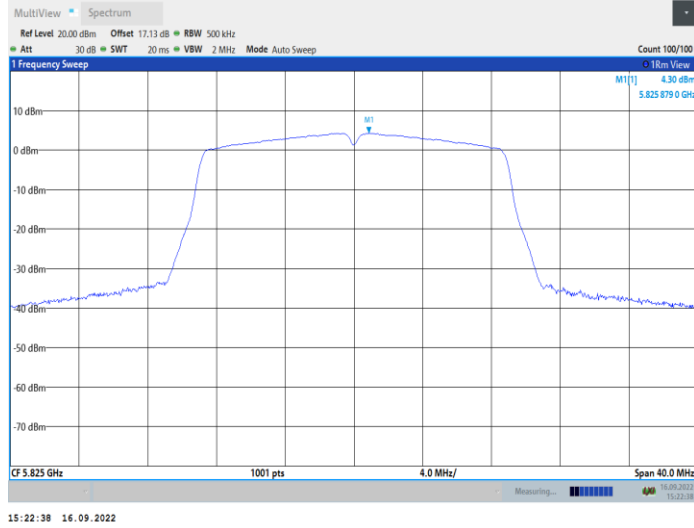
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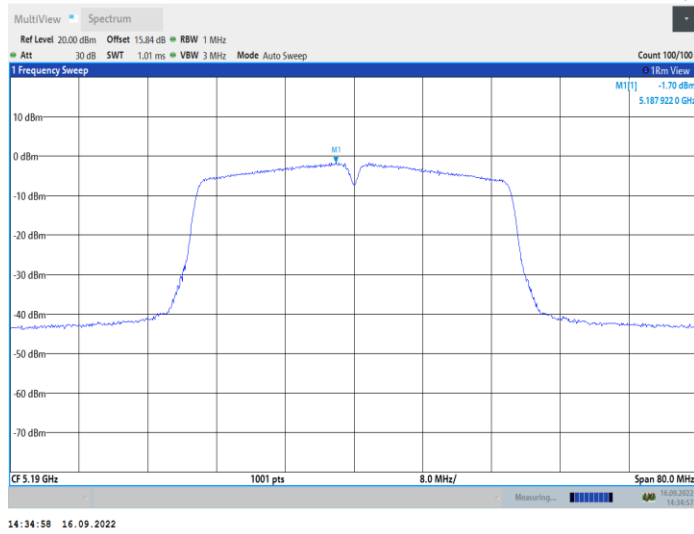
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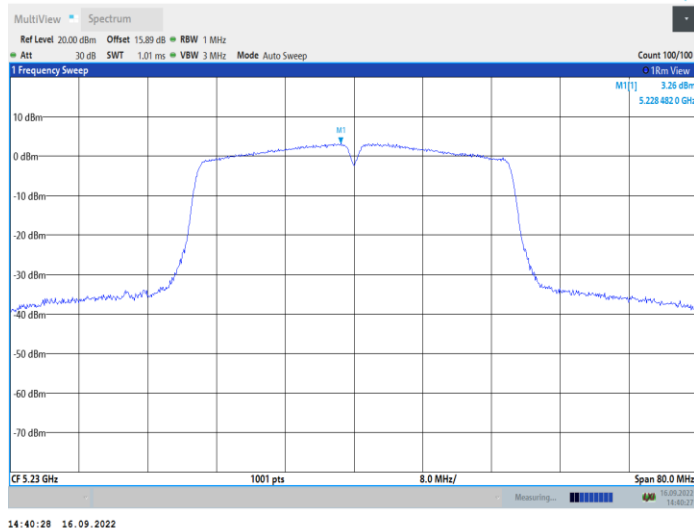
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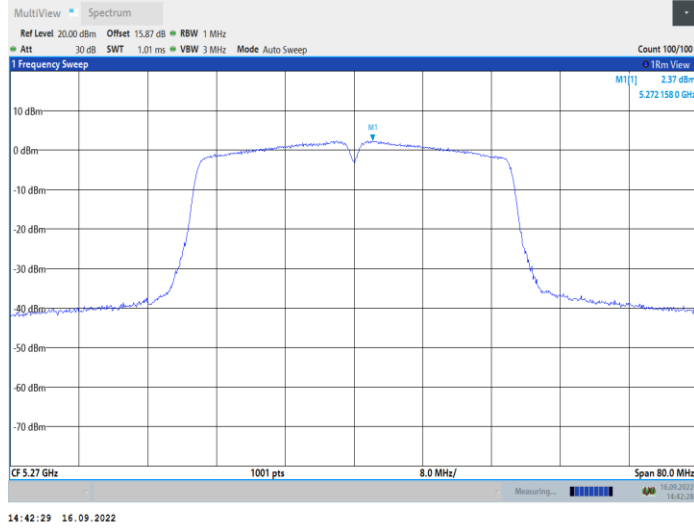
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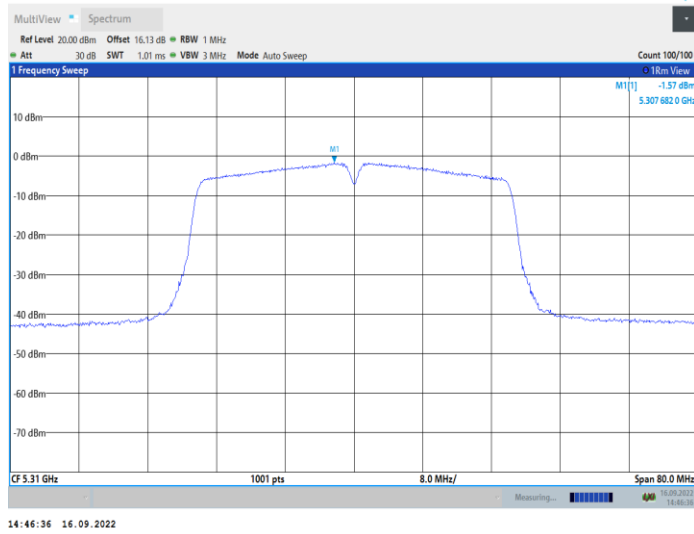
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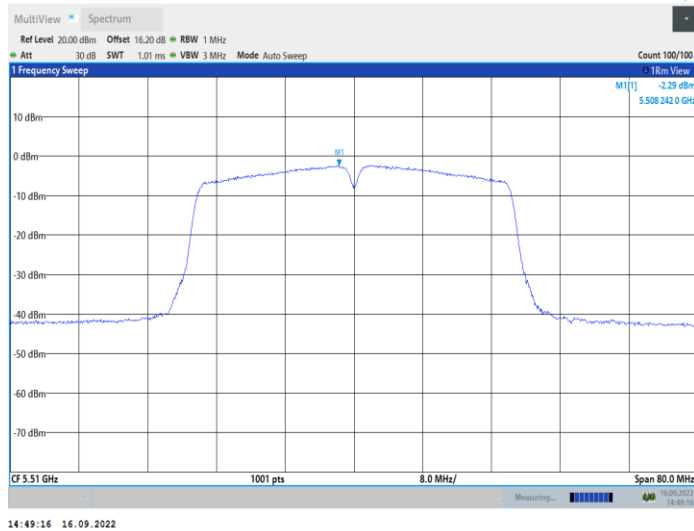
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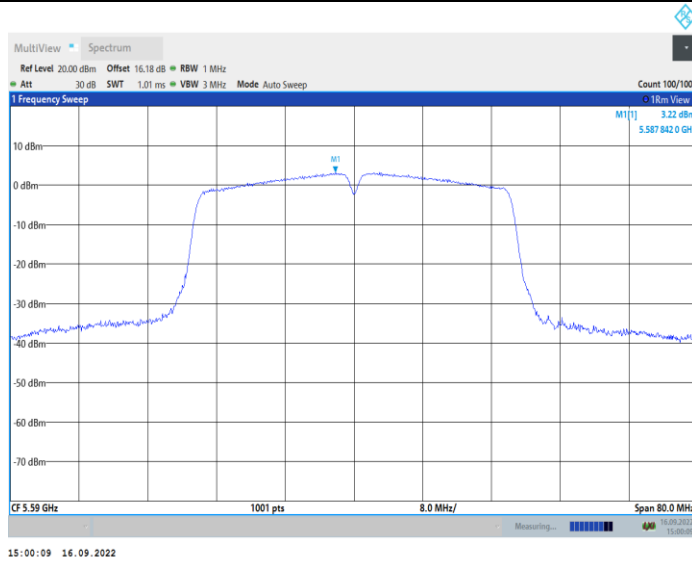
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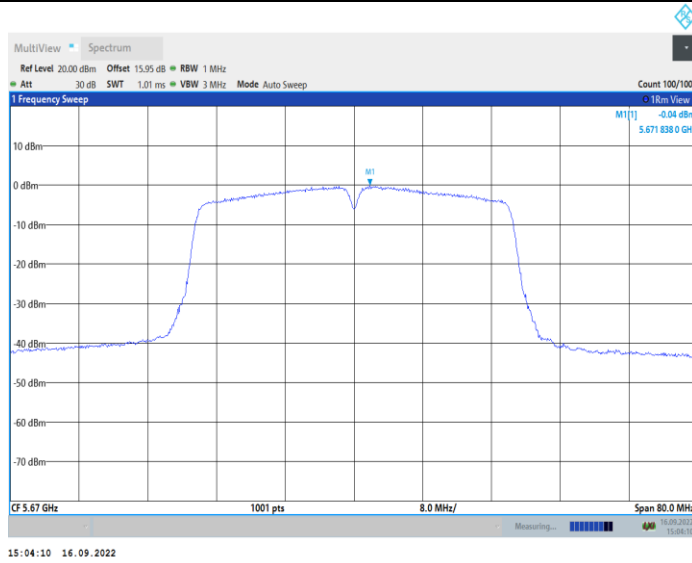
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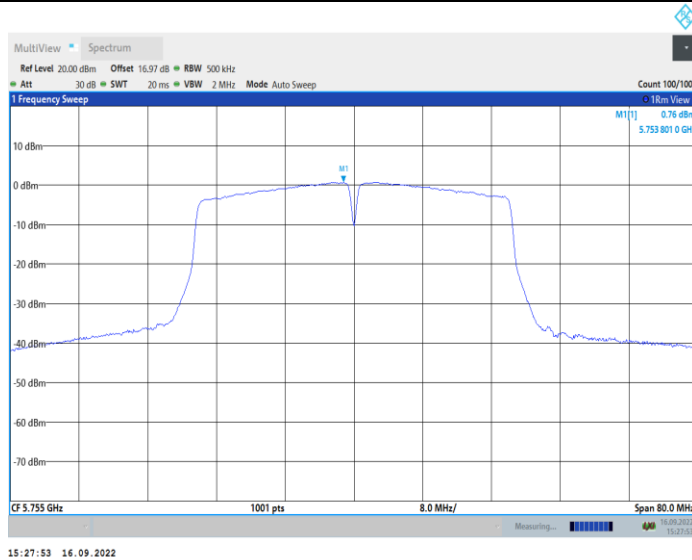
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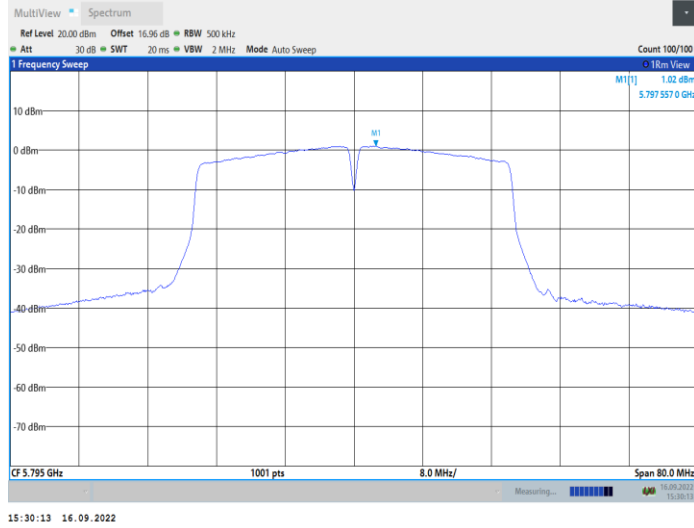
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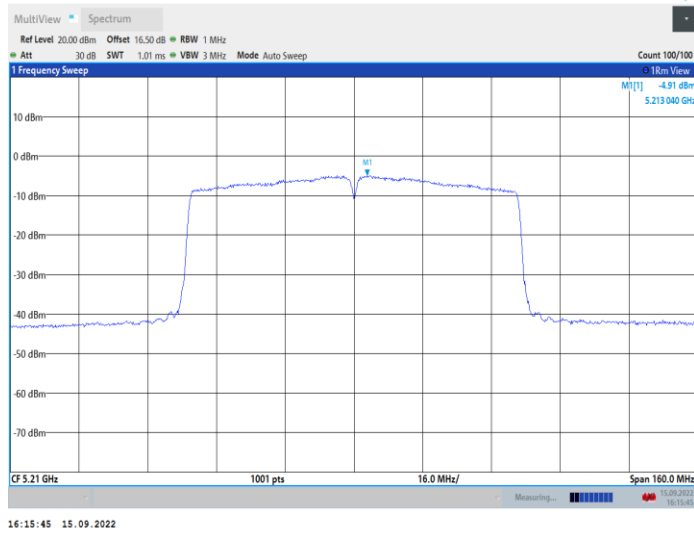
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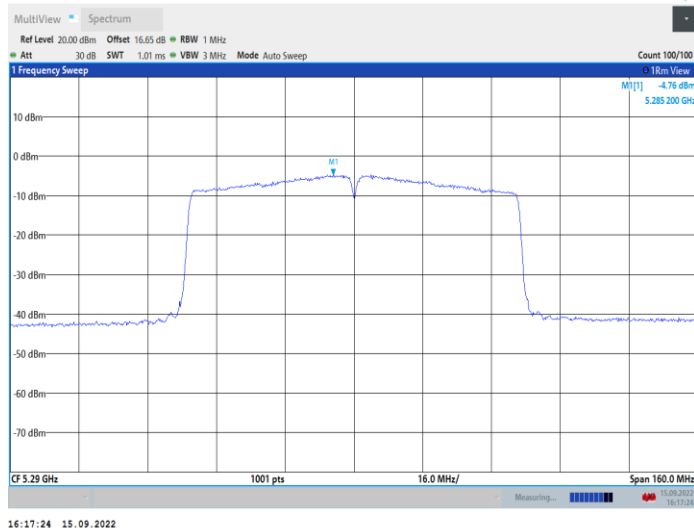
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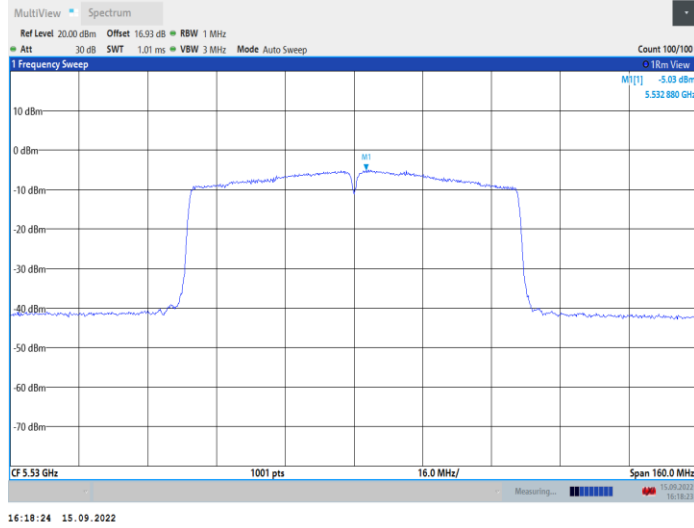
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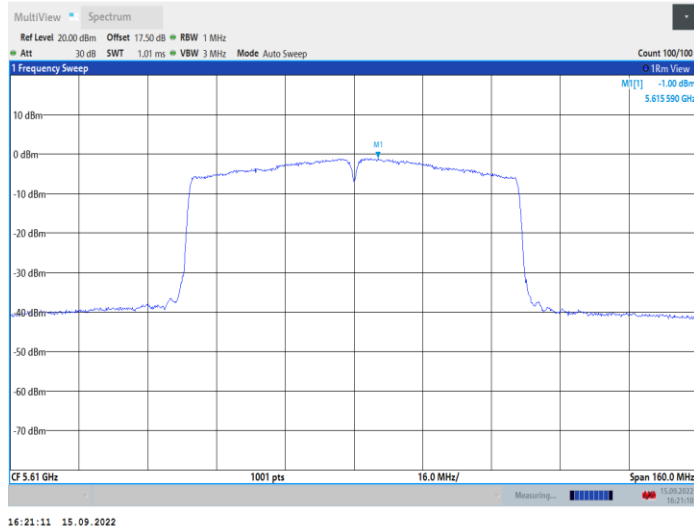
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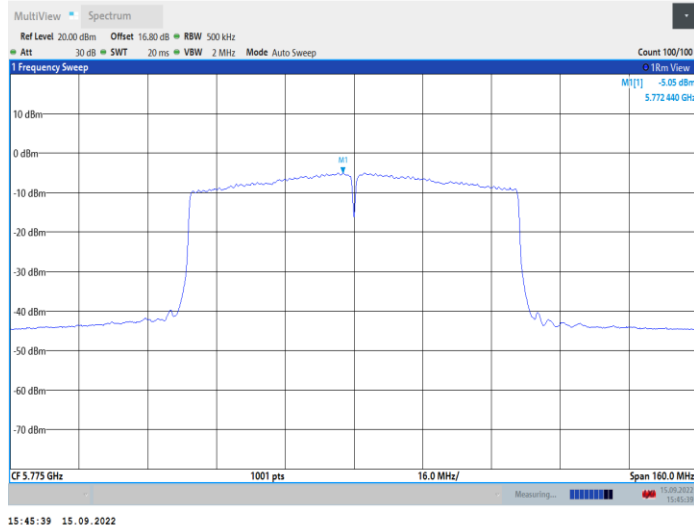
11AC80SISO_Ant1_5530



11AC80SISO_Ant1_5610



11AC80SISO_Ant1_5775



10. RADIATED BANDEDGE AND SPURIOUS MEASUREMENT

10.1. LIMITS OF Radiated Bandedge and Spurious Measurement

FCC Part 15.205 and 15.209

Frequency Range (MHz)	Field Strength Limit (uV/m) at 3 m	Field Strength Limit (dBuV/m) at 3 m
30 - 88	100	40
88 - 216	150	43.5
216 - 960	200	46
Above 960	500	54

FCC Part 15.407(b)

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.

10.2. TEST PROCEDURE

1. The testing follows the guidelines in ANSI C63.10-2013.
2. The EUT was arranged to its worst case and then tune the antenna tower (from 1 m to 4 m) and turntable (from 0 degree to 360 degrees) to find the maximum reading. A pre-amp and a high pass filter are used for the test in order to get better signal level.
3. For measurement below 1GHz, the EUT was placed on a turntable with 0.8 meter, above ground. For measurement above 1 GHz, test at FAR, the EUT is placed on a non-conductive table, which is 1.5 meter above ground.
4. The EUT was set 3 meters from the interference receiving antenna, which was mounted on the top of a variable height antenna tower.
5. Corrected Reading: $\text{Antenna Factor} + \text{Cable Loss} + \text{Read Level} - \text{Preamp Factor} = \text{Level}$
6. For measurement below 1GHz, If the emission level of the EUT measured by the peak detector is 3 dB lower than the applicable limit, the peak emission level will be reported. Otherwise, the emission measurement will be repeated using the quasi-peak detector and reported.
7. Use the following spectrum analyzer settings:
 - (1) Span shall wide enough to fully capture the emission being measured;
 - (2) Set RBW=100 kHz for $f < 1 \text{ GHz}$; VBW \geq RBW; Sweep = auto; Detector

function = peak; Trace = max hold;
 (3) Set RBW = 1 MHz, VBW= 3MHz for f > 1 GHz for peak measurement.
 Set RBW = 1 MHz, and VBW= 1/T (on time) for average measurement.

10.3.TEST DATA

9 kHz-30MHz

The low frequency, which started from 9 kHz to 30MHz, was pre-scanned and the result which was 20dB lower than the limit line per 15.31(o) was not reported.

Table 13 Radiated Emission Test Data 9k Hz-30MHz

Frequency (MHz)	Cable Loss +preamp (dB)	Antenna Factor (dB)	Reading (dBµV/m)	Level (dBµV/m)	Polarity (Horizontal/Vertical)	Limit (dBµV/m)	Margin (dB)	Note
--	--	--	--	--	--	--	--	--
--	--	--	--	--	--	--	--	--
--	--	--	--	--	--	--	--	--
--	--	--	--	--	--	--	--	--
--	--	--	--	--	--	--	--	--
--	--	--	--	--	--	--	--	--
--	--	--	--	--	--	--	--	--
--	--	--	--	--	--	--	--	--
--	--	--	--	--	--	--	--	--

30MHz-1GHz

Worst case is shown below for 30MHz-1GHz only.

The emissions don't show in following result tables are more than 20dB below the limits.

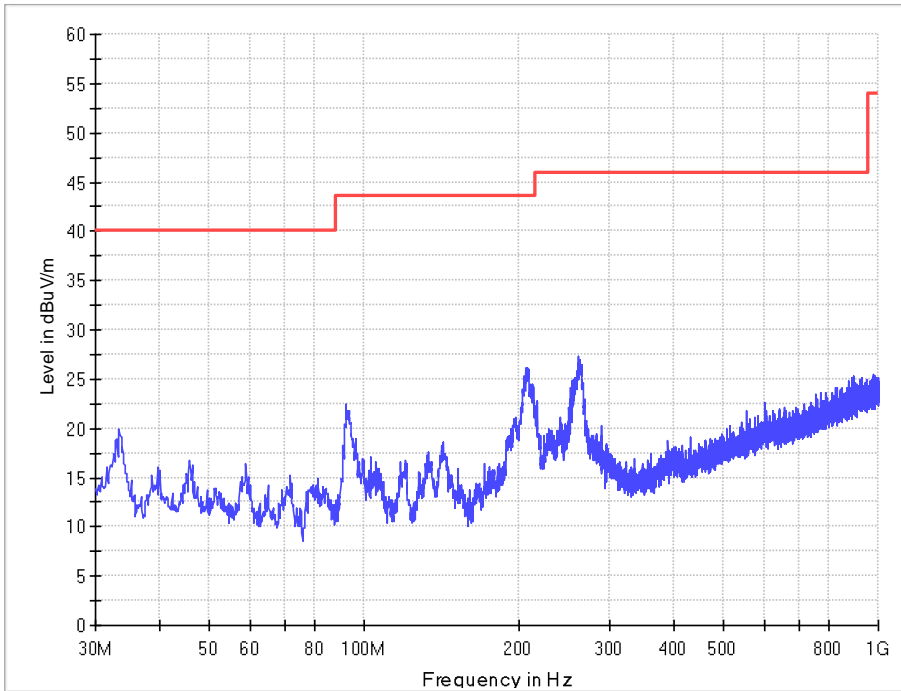
Table 14 Radiated Emission Test Data 30MHz-1GHz

Frequency (MHz)	Cable Loss +preamp (dB)	Antenna Factor (dB)	Reading (dBµV/m)	Level (dBµV/m)	Polarity (Horizontal/Vertical)	Limit (dBµV/m)	Margin (dB)	Note
33.274	0.7	12.3	4.6	17.6	Horizontal	40	22.4	QP
45.641	0.8	13.6	0.5	14.9	Horizontal	40	25.1	QP
92.201	1.1	11.9	7.8	20.8	Horizontal	43.5	22.7	QP
196.840	1.7	10.6	7.3	19.6	Horizontal	43.5	23.9	QP
206.662	1.7	10.6	11.3	23.6	Horizontal	43.5	19.9	QP
260.739	1.9	12.1	10.8	24.8	Horizontal	46	21.2	QP
33.153	0.7	12.3	20.5	33.5	Vertical	40	6.5	QP
45.641	0.8	13.6	10.1	24.5	Vertical	40	15.5	QP
57.524	0.8	13.0	14.8	28.6	Vertical	40	11.4	QP
78.379	1.1	7.8	15.6	24.5	Vertical	40	15.5	QP
84.563	0.9	8.5	18.4	27.8	Vertical	40	12.2	QP
93.293	1.1	11.9	15.1	28.1	Vertical	43.5	15.4	QP

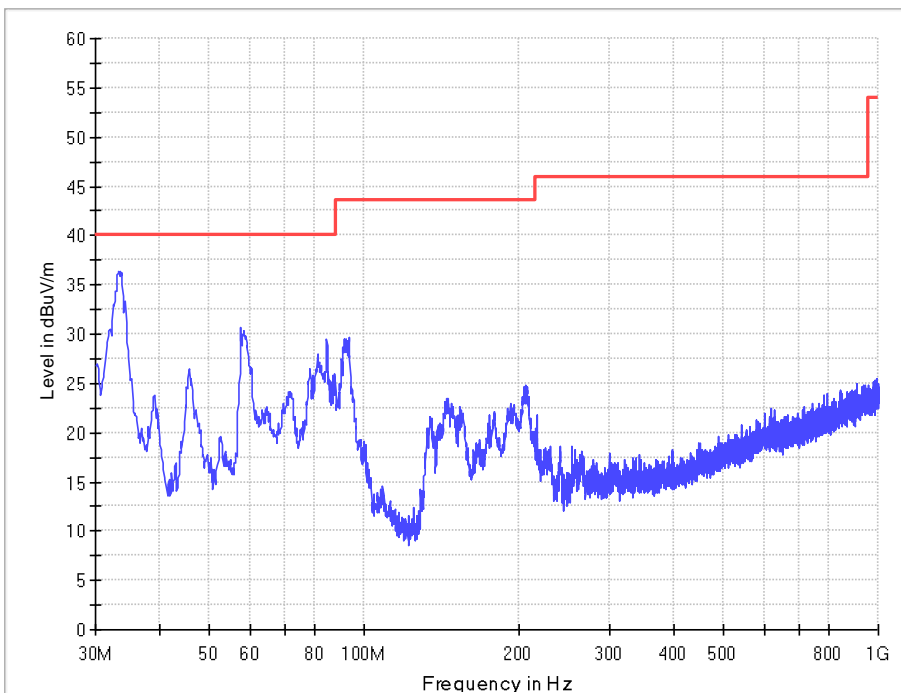
Remark: Emission level (dBµV)=Read Value(dBµV/m) + Antenna Factor(dB)+ Cable Loss +preamp(dB)

30MHz-1GHz

Horizontal

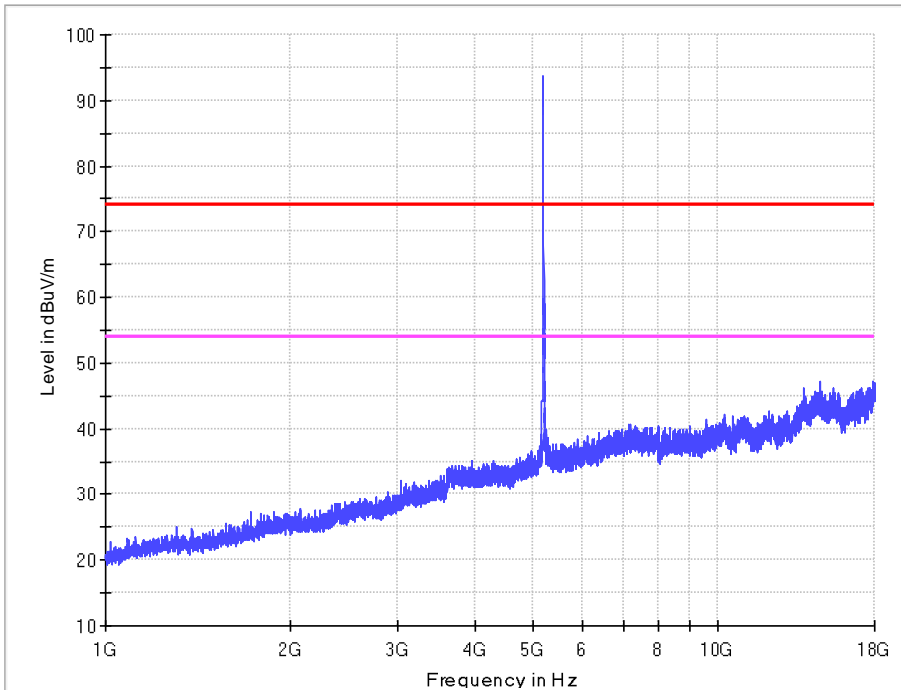


Vertical

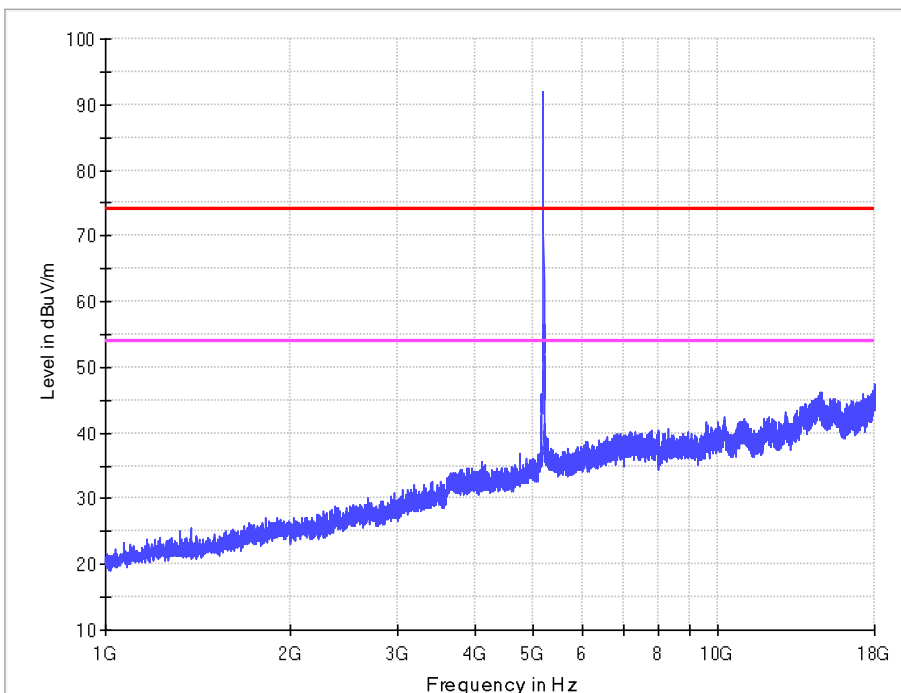


1-18G
11a IN THE 5.2GHz BAND
CH36

Horizontal



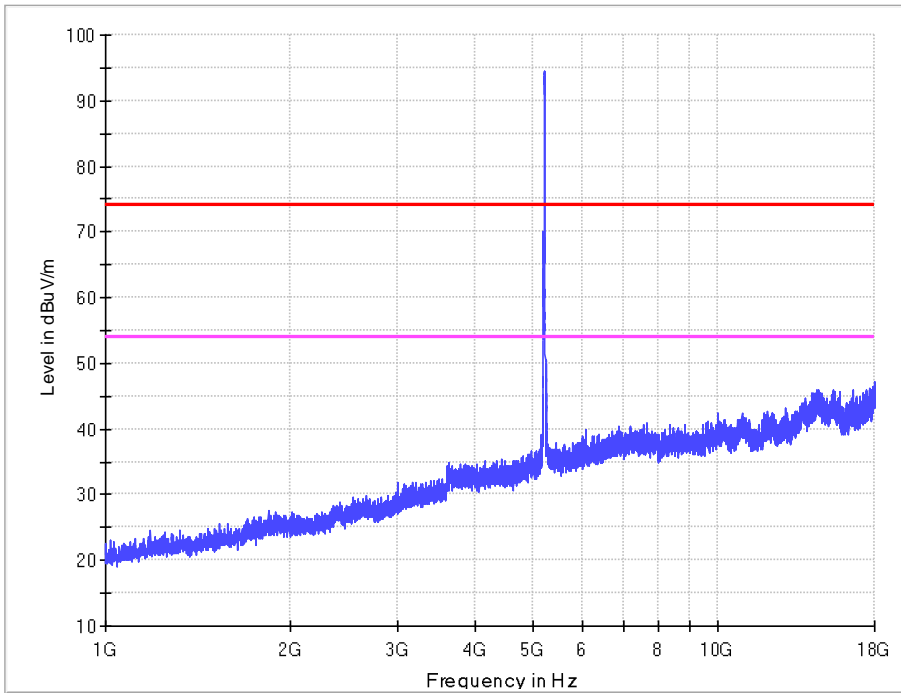
Vertical



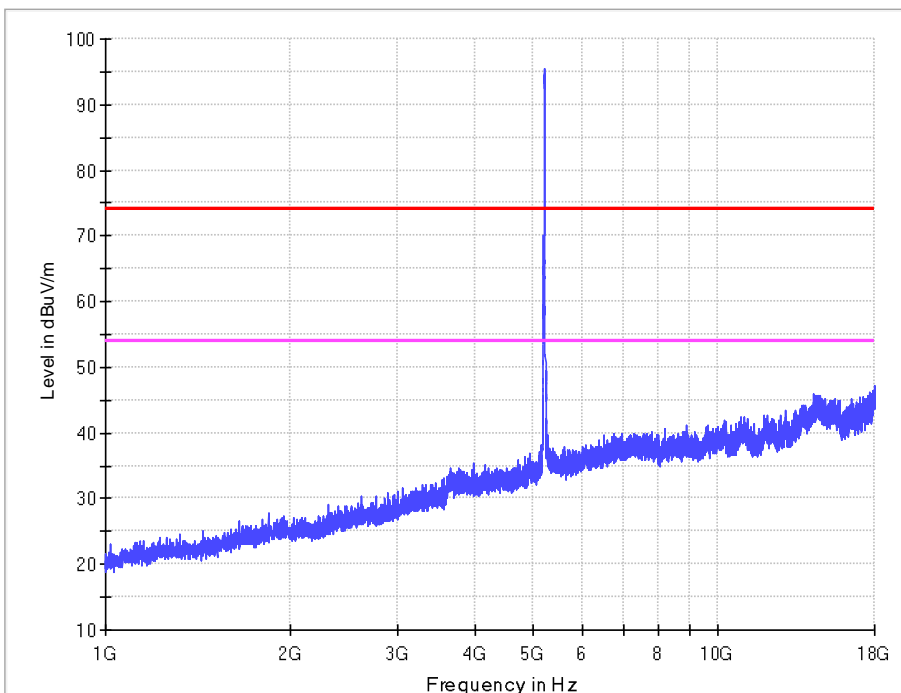
1-18G

11a IN THE 5.2GHZ BAND
CH40

Horizontal



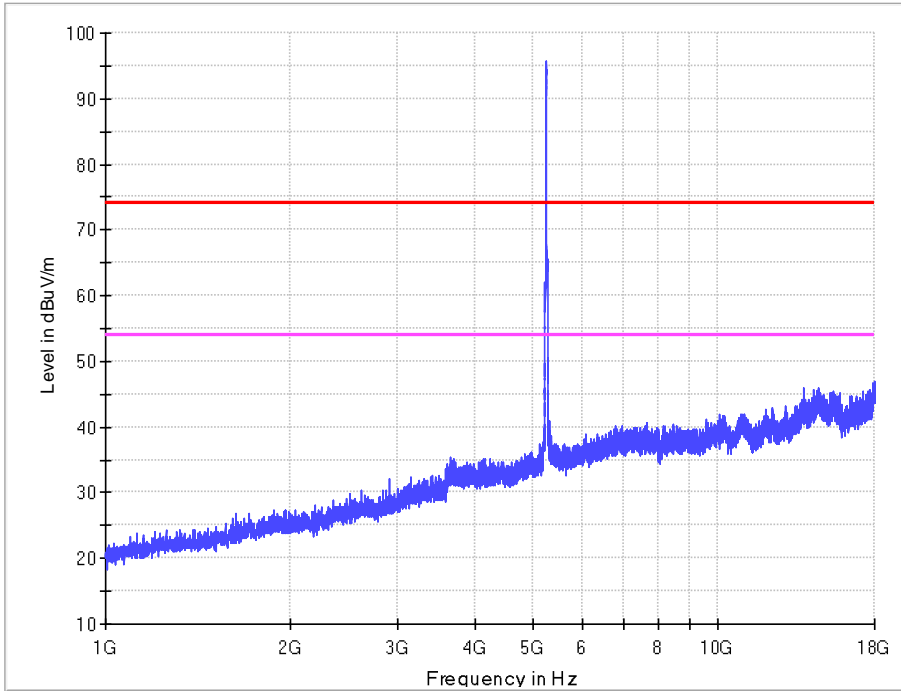
Vertical



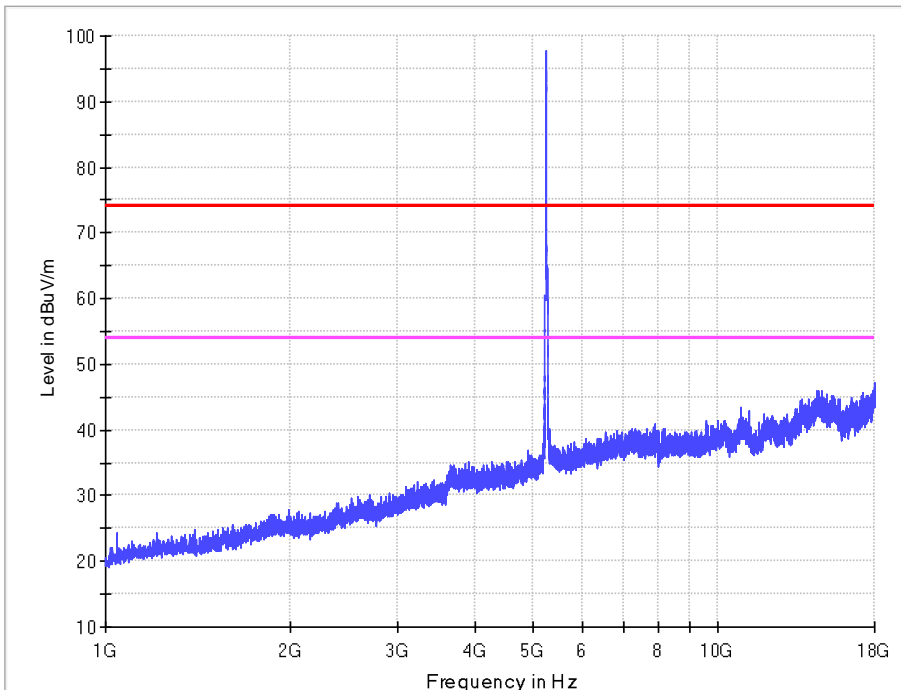
1-18G

11a IN THE 5.2GHZ BAND
CH48

Horizontal



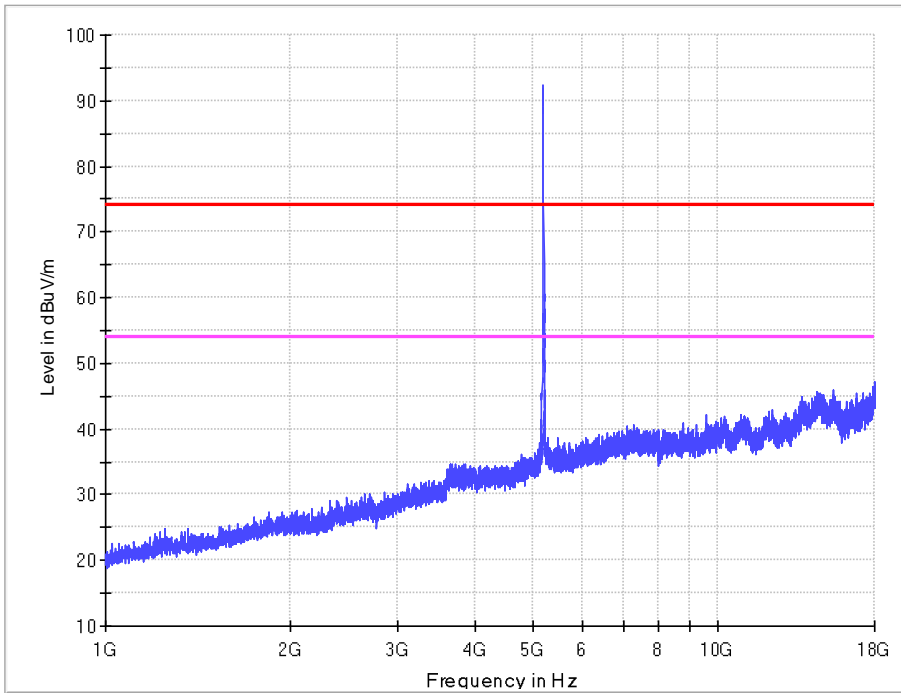
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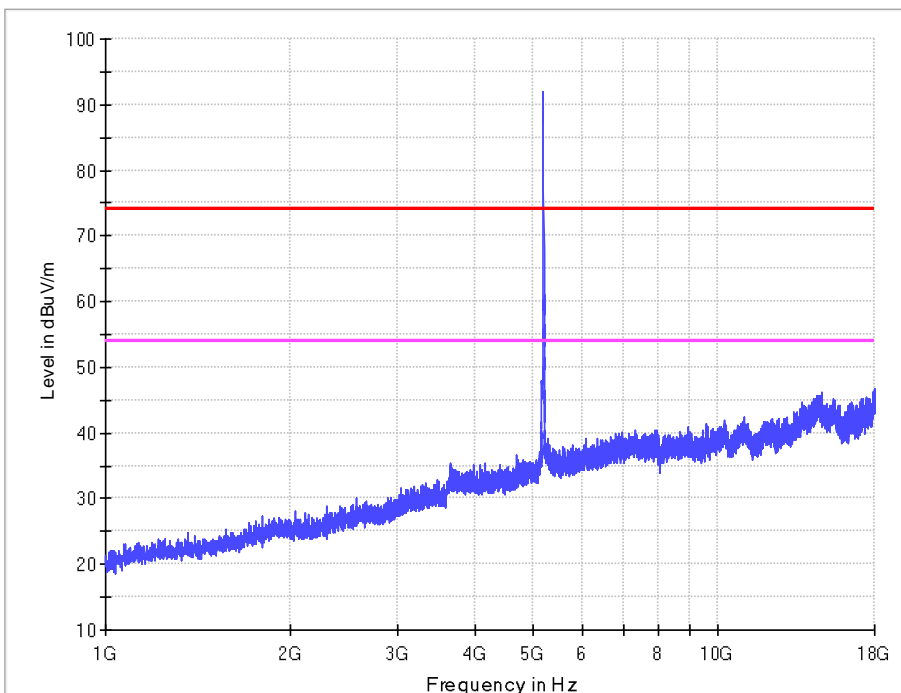
1-18G

11n HT20 IN THE 5.2GHz BAND
CH36

Horizontal



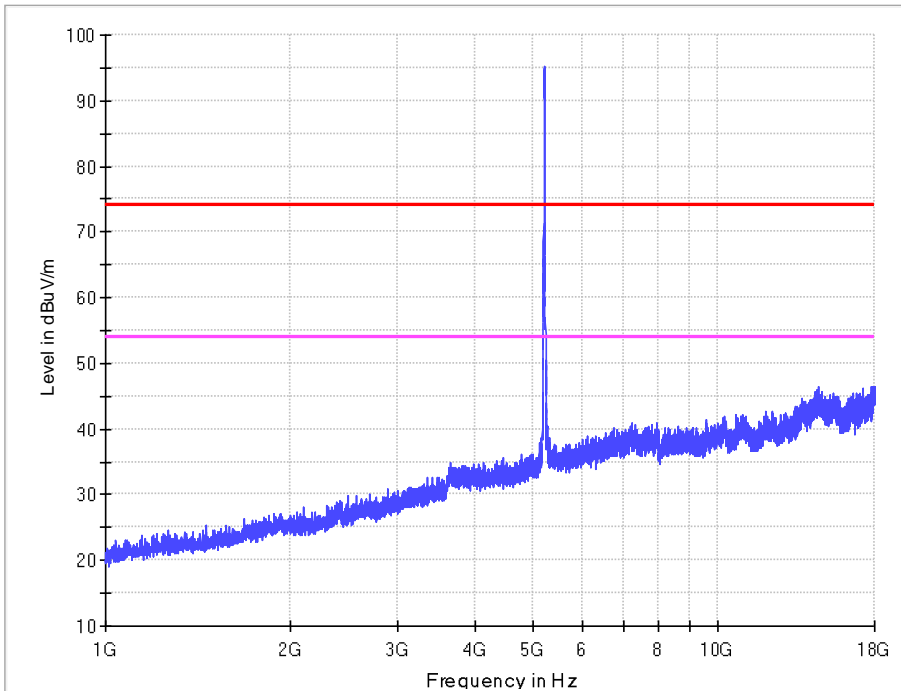
Vertical



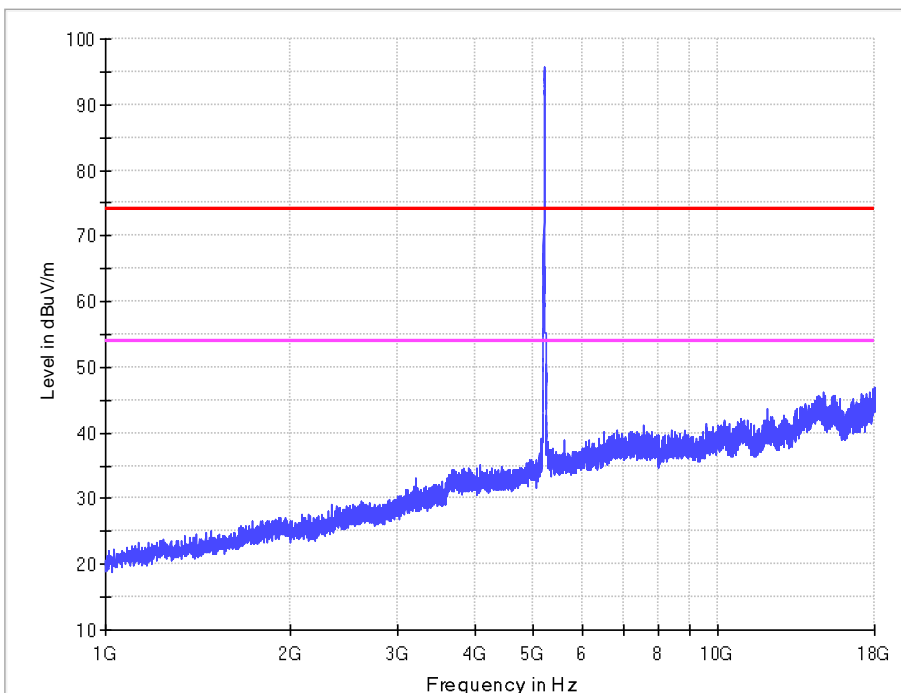
1-18G

11n HT20 IN THE 5.2GHz BAND
CH40

Horizontal



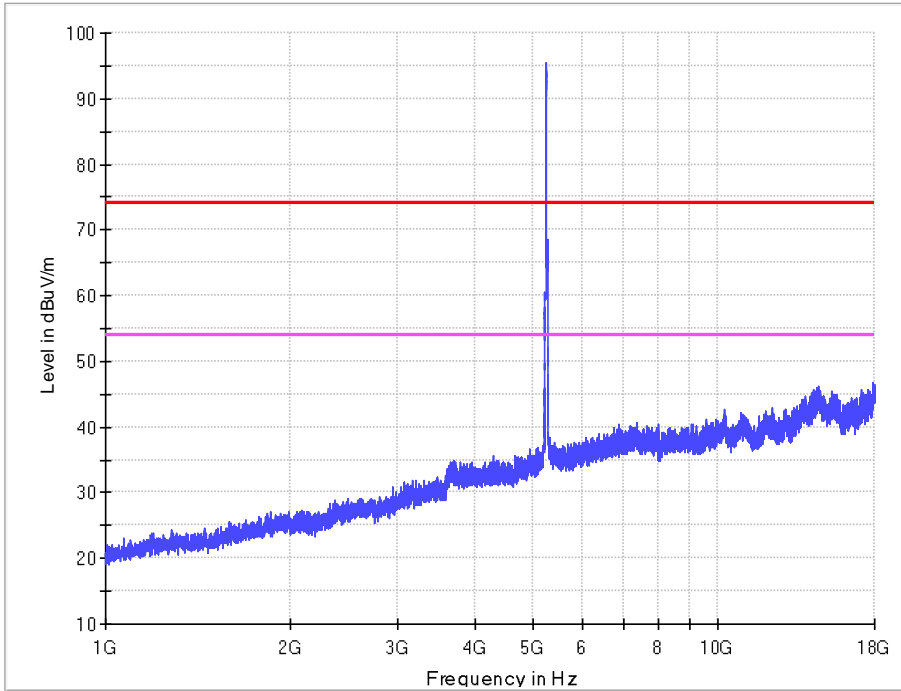
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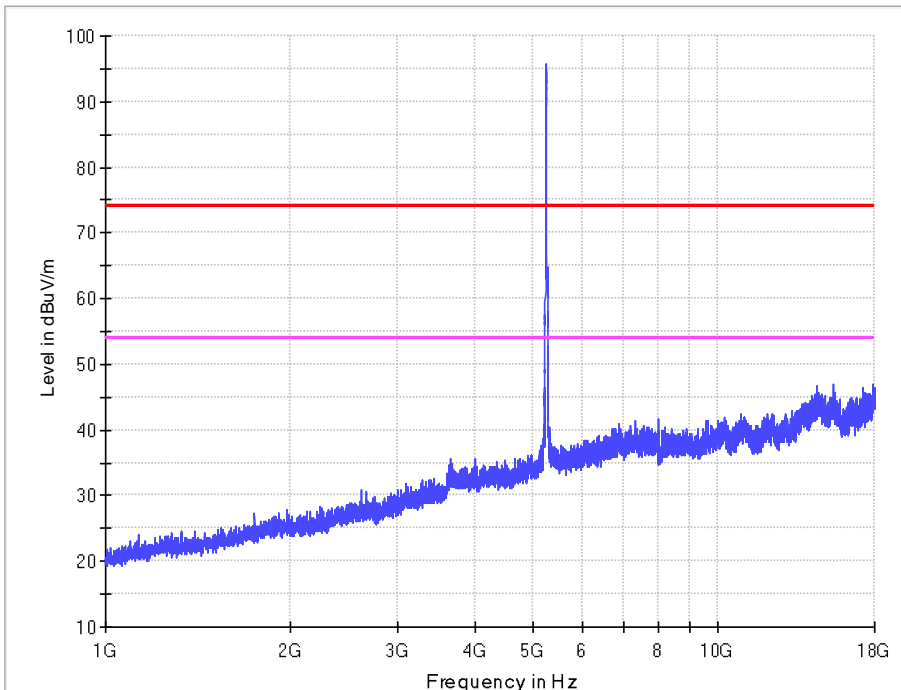
1-18G

11n HT20 IN THE 5.2GHz BAND
CH48

Horizontal



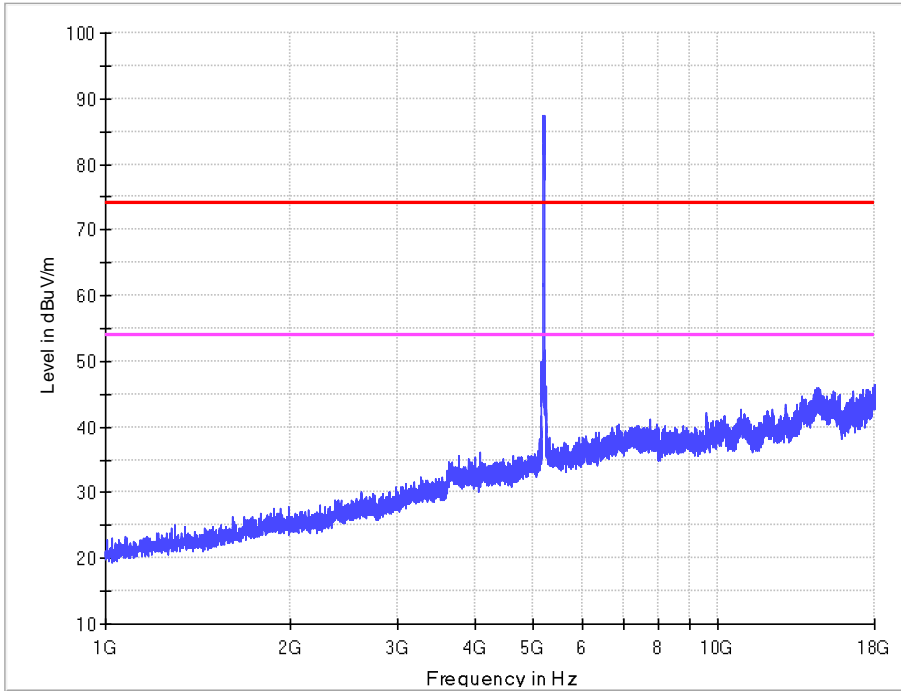
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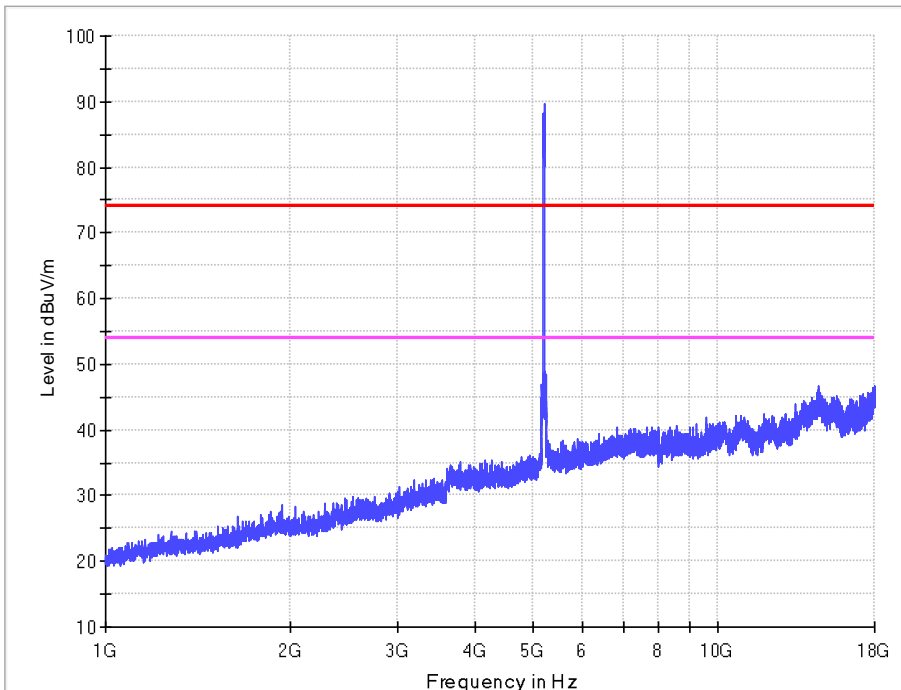
1-18G

11n HT40 IN THE 5.2GHz BAND
CH38

Horizontal



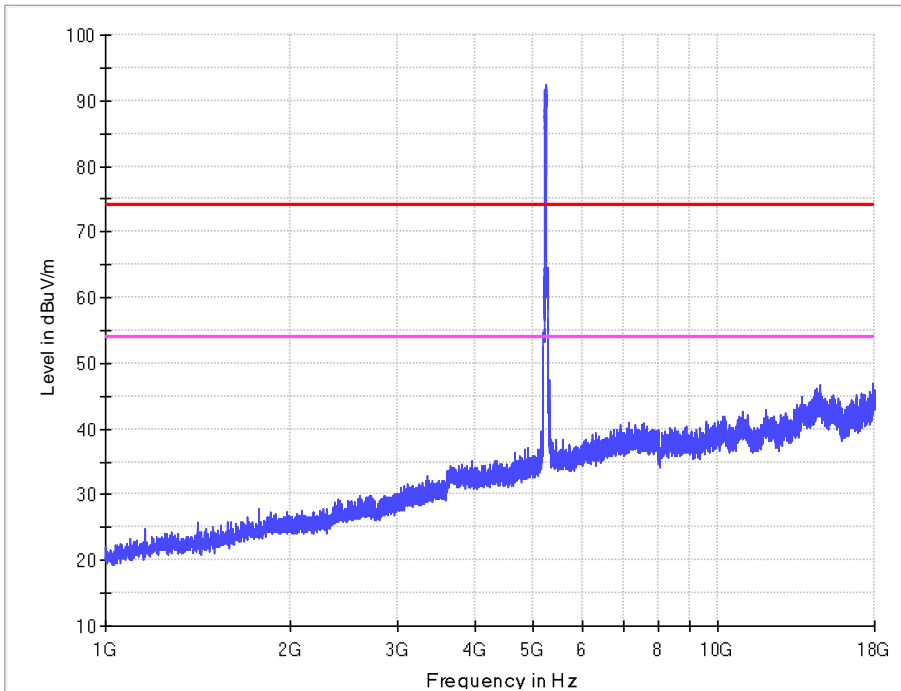
Vertical



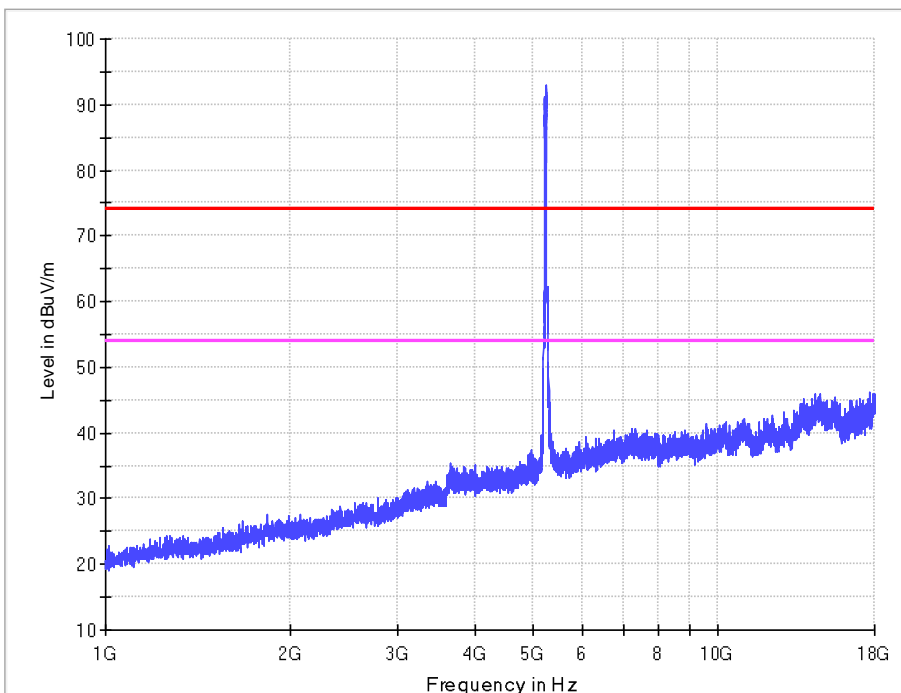
1-18G

11n HT40 IN THE 5.2GHz BAND
CH46

Horizontal



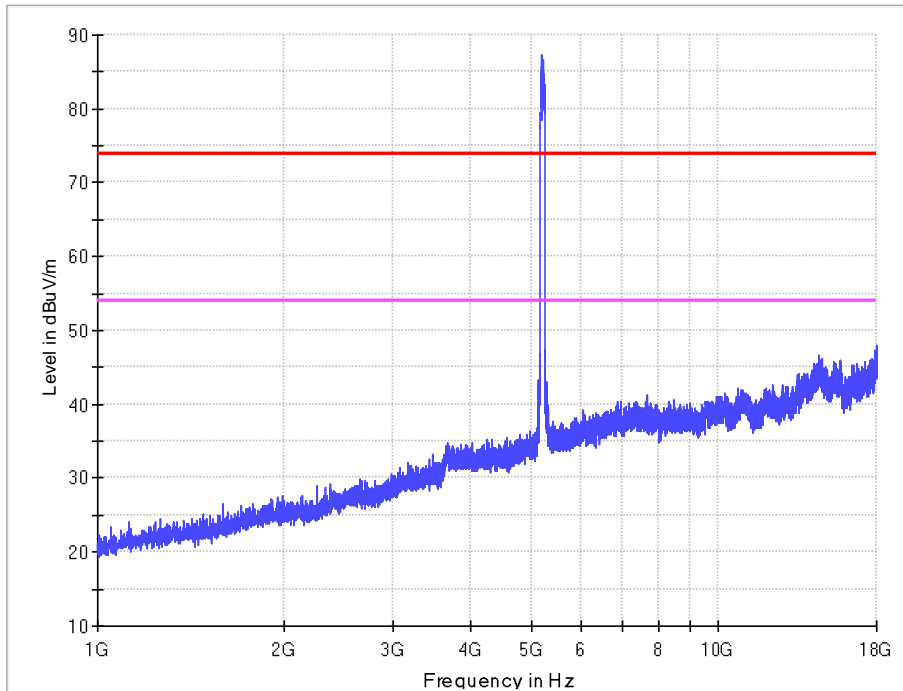
Vertical



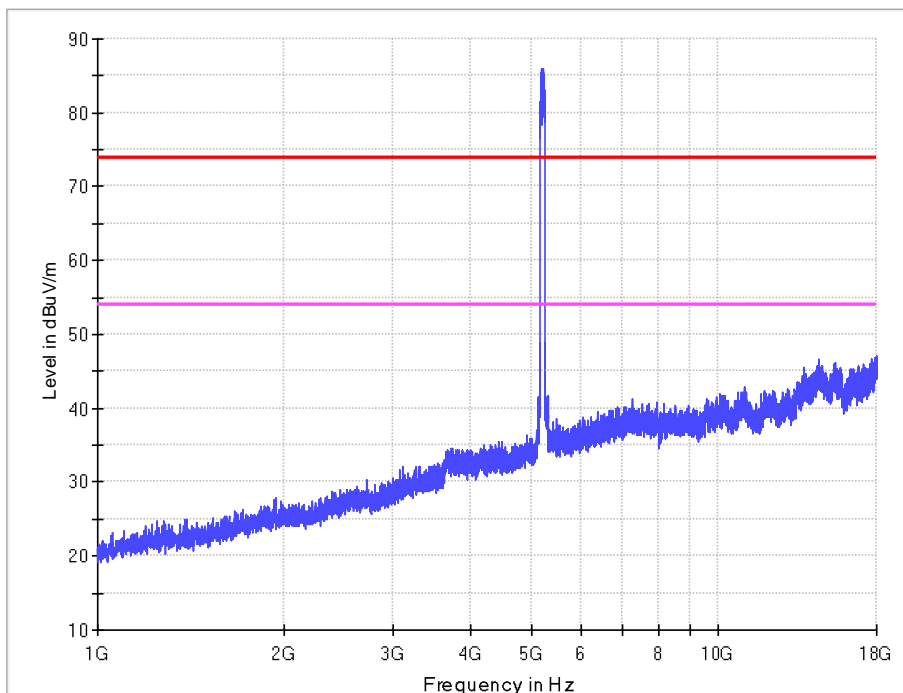
1-18G

11ac VHT80 IN THE 5.2GHz BAND
CH42

Horizontal



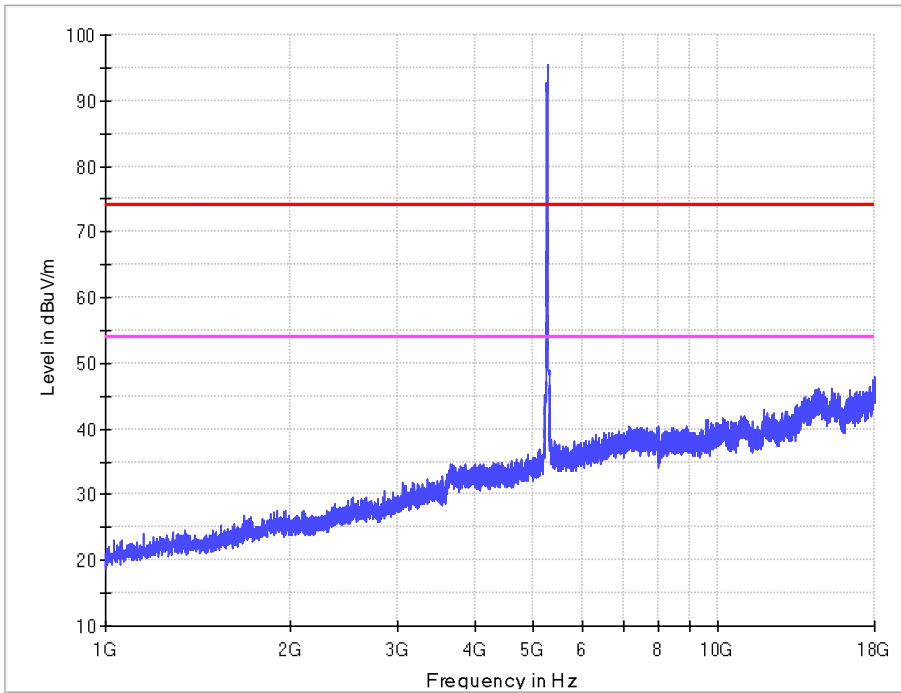
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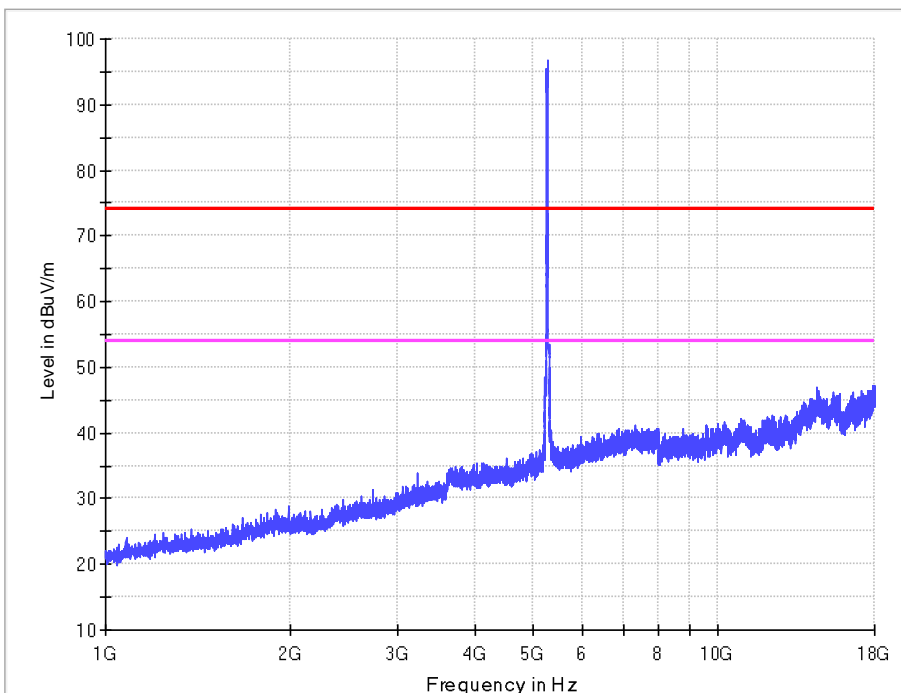
1-18G

11a IN THE 5.3GHz BAND
CH52

Horizontal



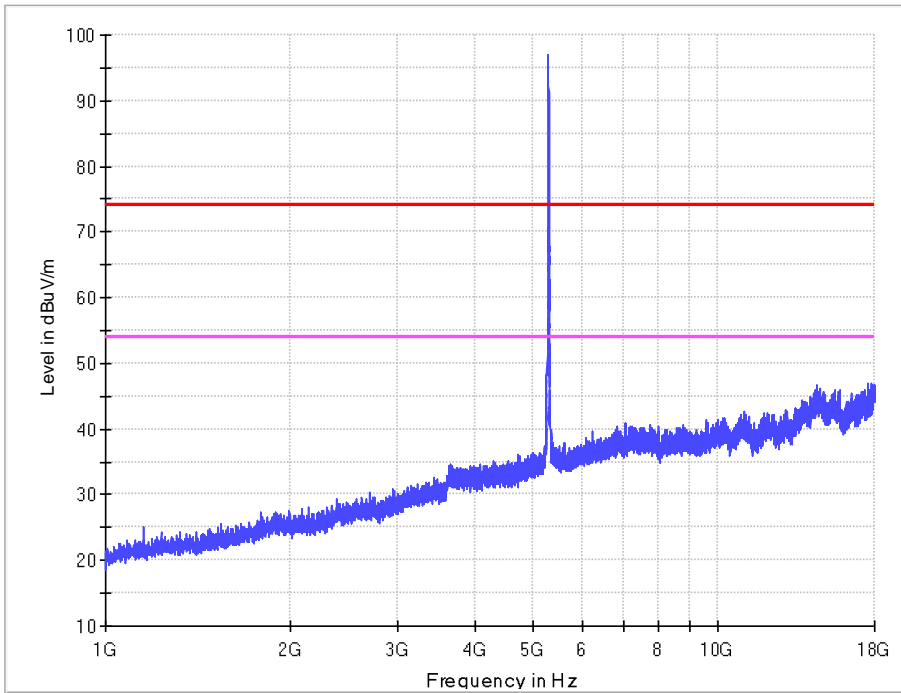
Vertical



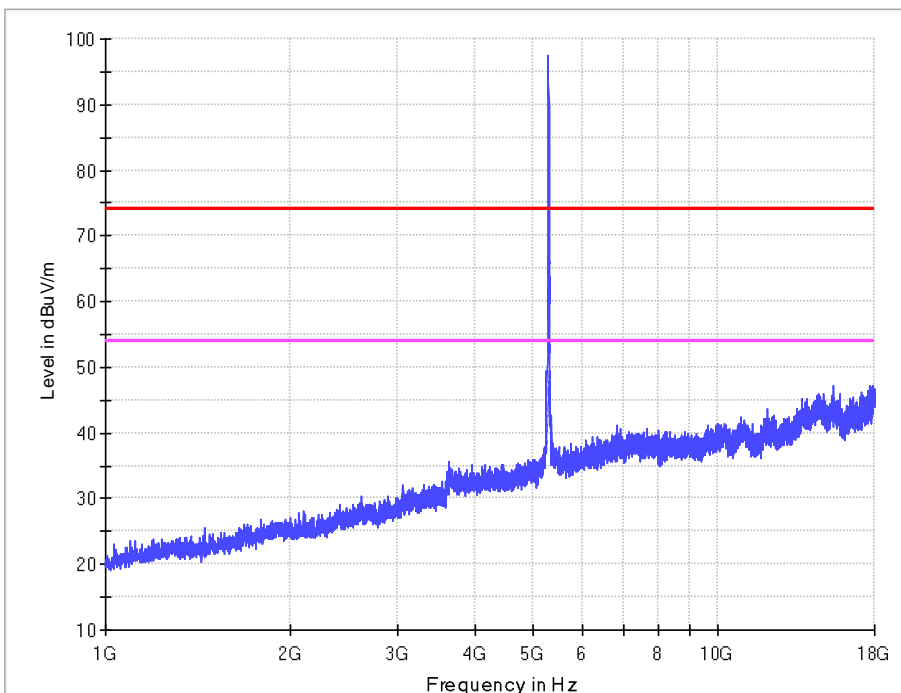
1-18G

11a IN THE 5.3GHZ BAND
CH56

Horizontal



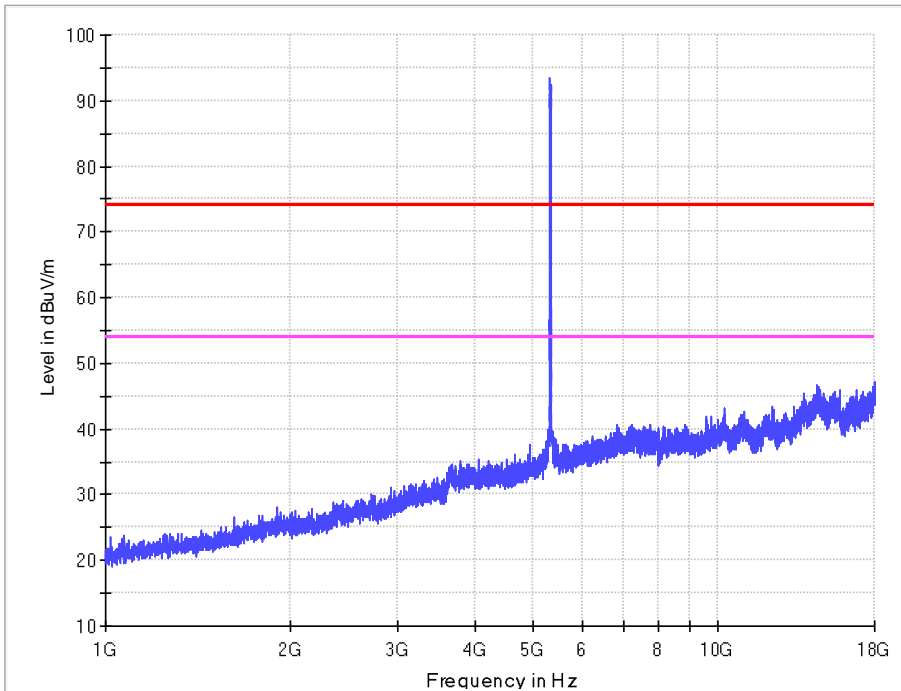
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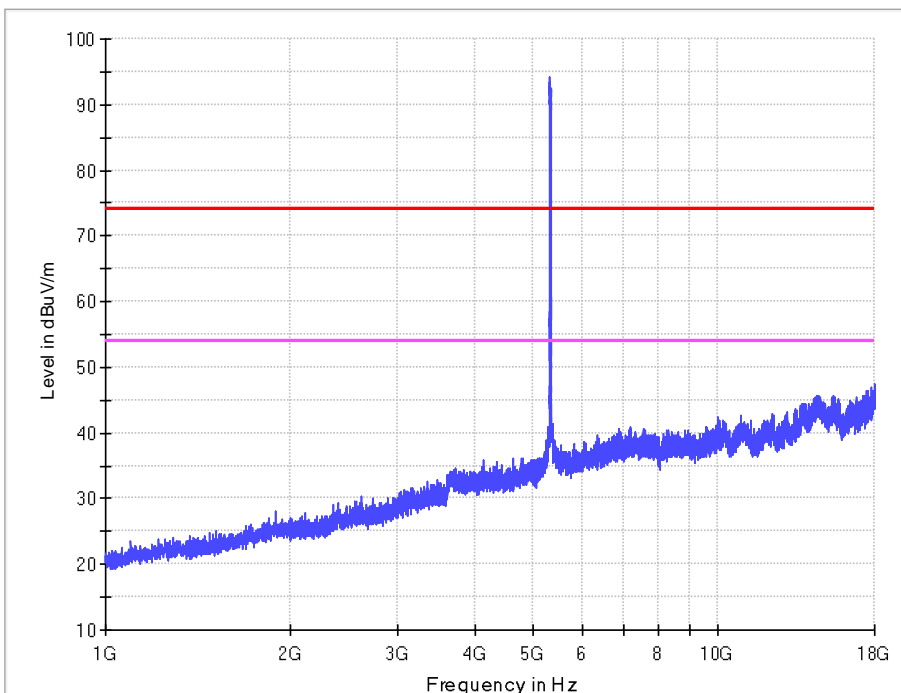
1-18G

11a IN THE 5.3GHz BAND
CH64

Horizontal



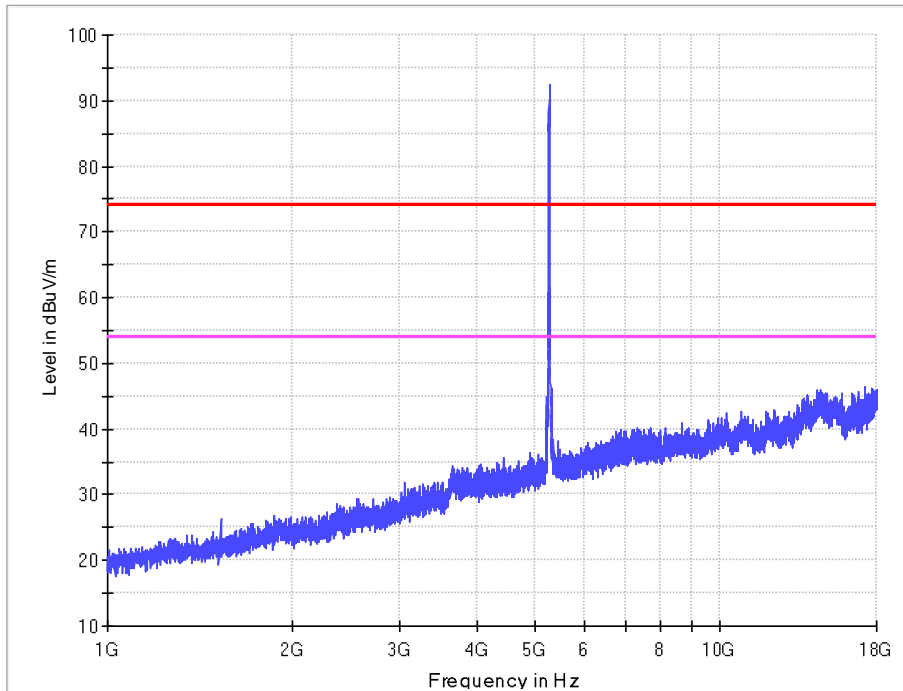
Vertical



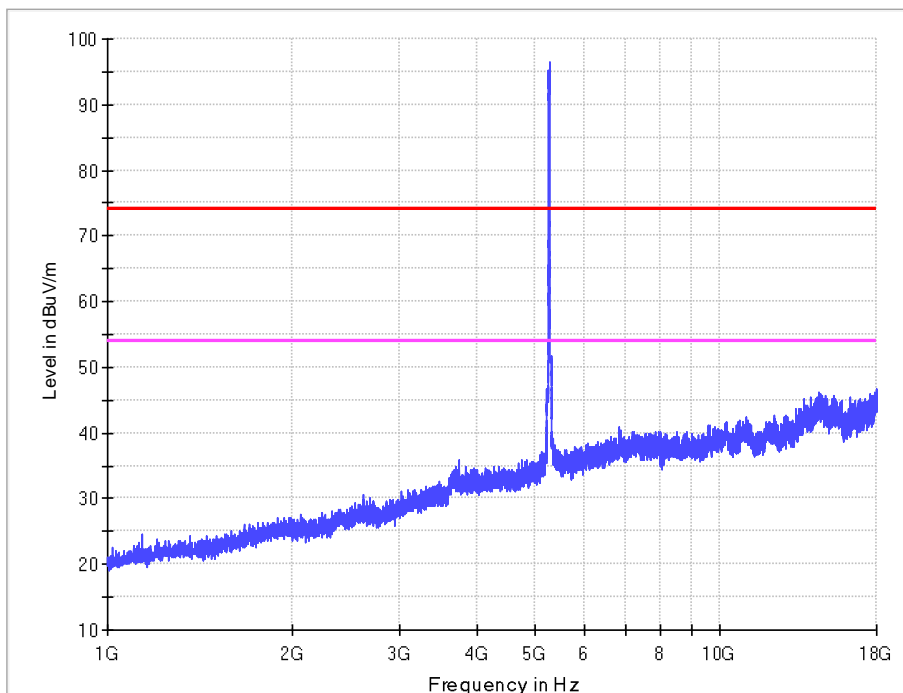
1-18G

11n HT20 IN THE 5.3GHz BAND
CH52

Horizontal



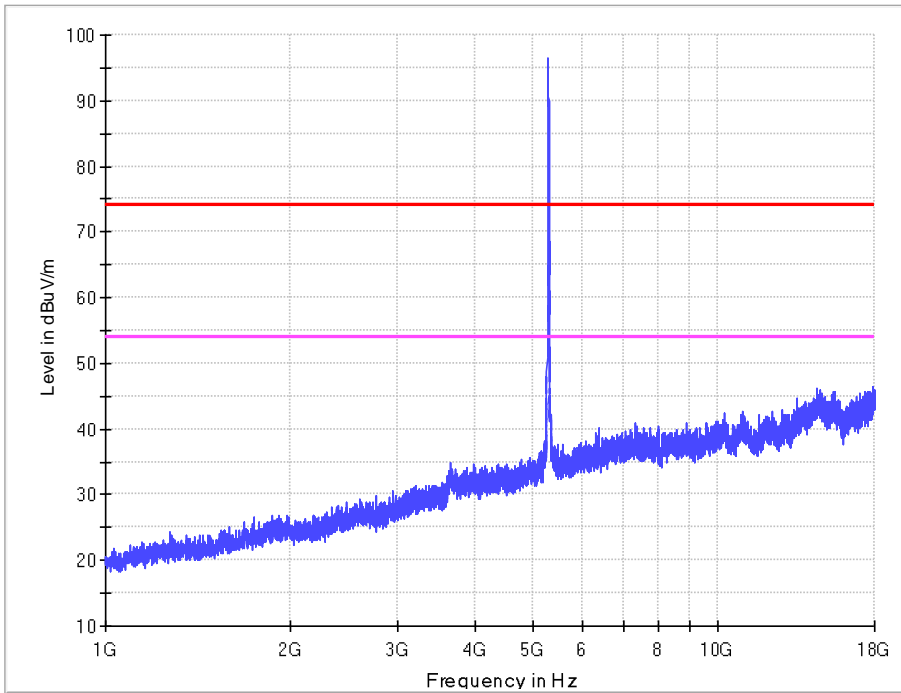
Vertical



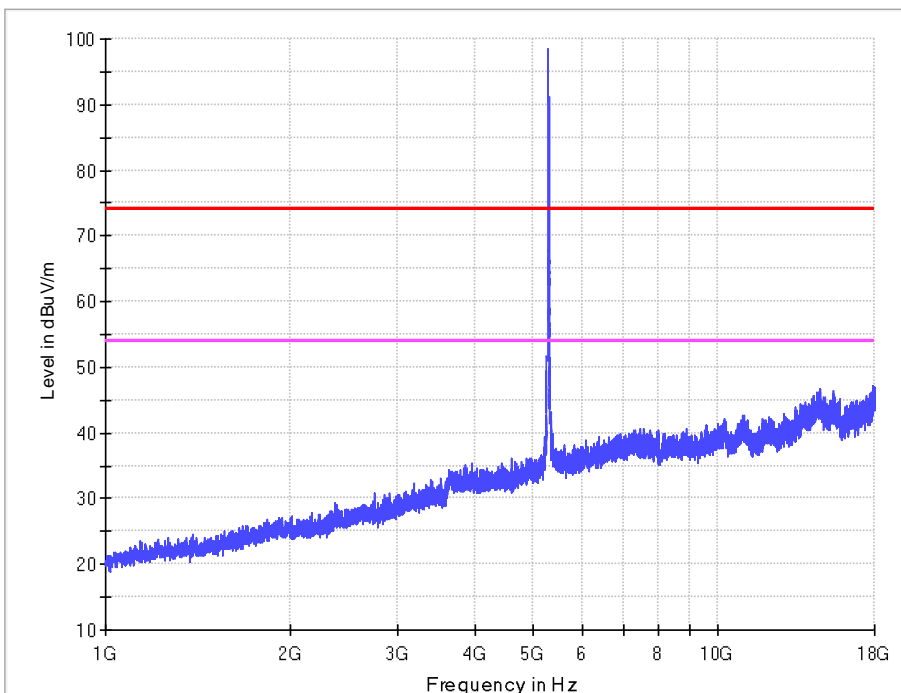
1-18G

11n HT20 IN THE 5.3GHz BAND
CH56

Horizontal



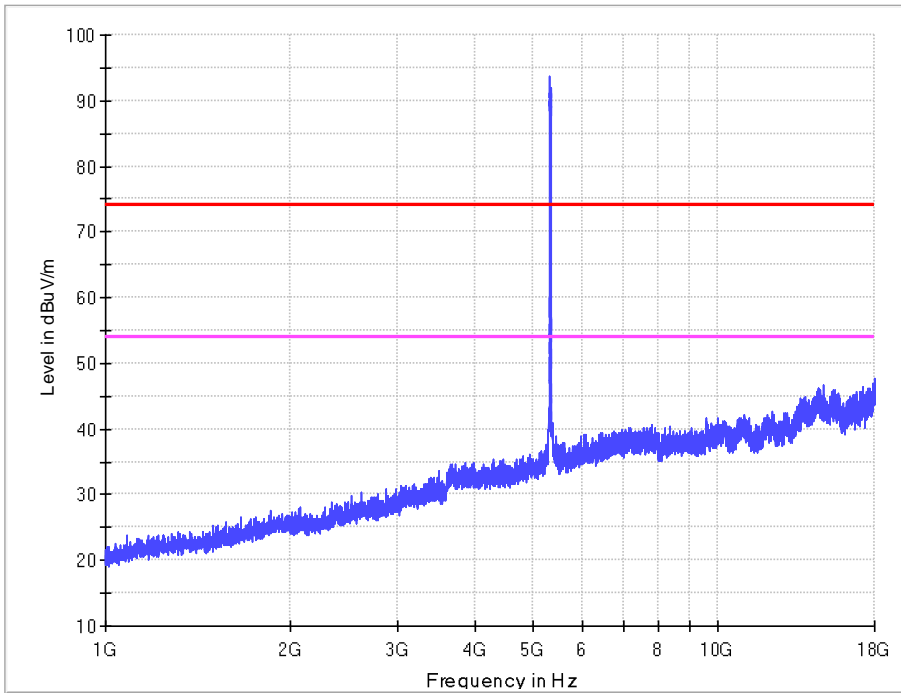
Vertical



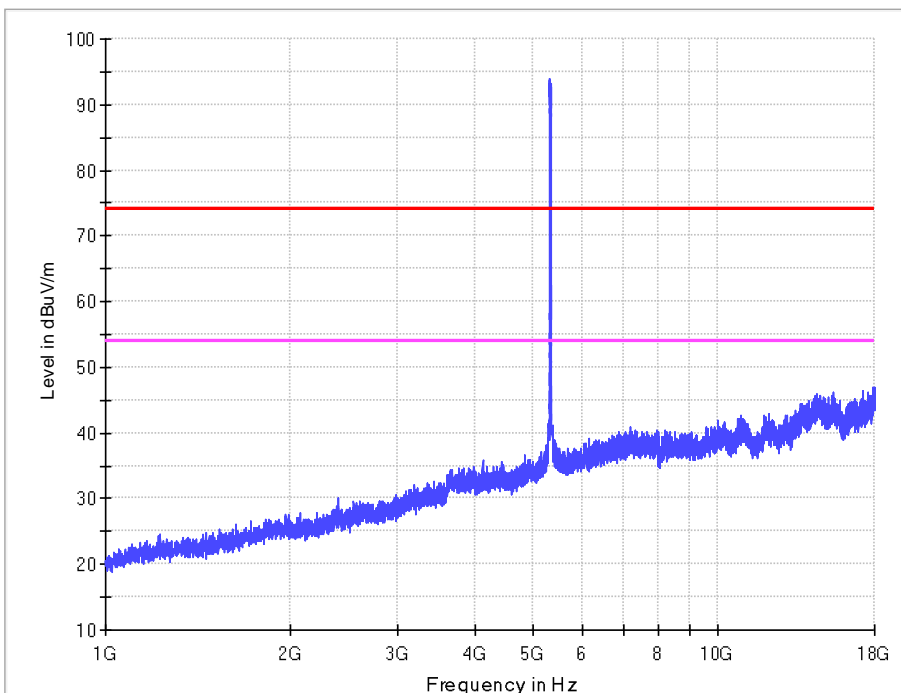
1-18G

11n HT20 IN THE 5.3GHz BAND
CH64

Horizontal



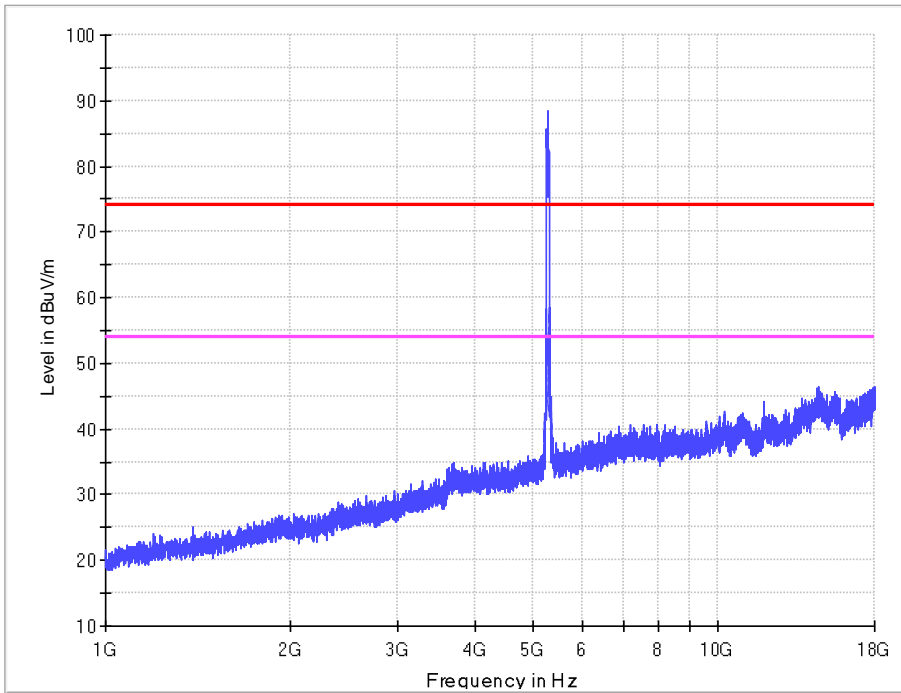
Vertical



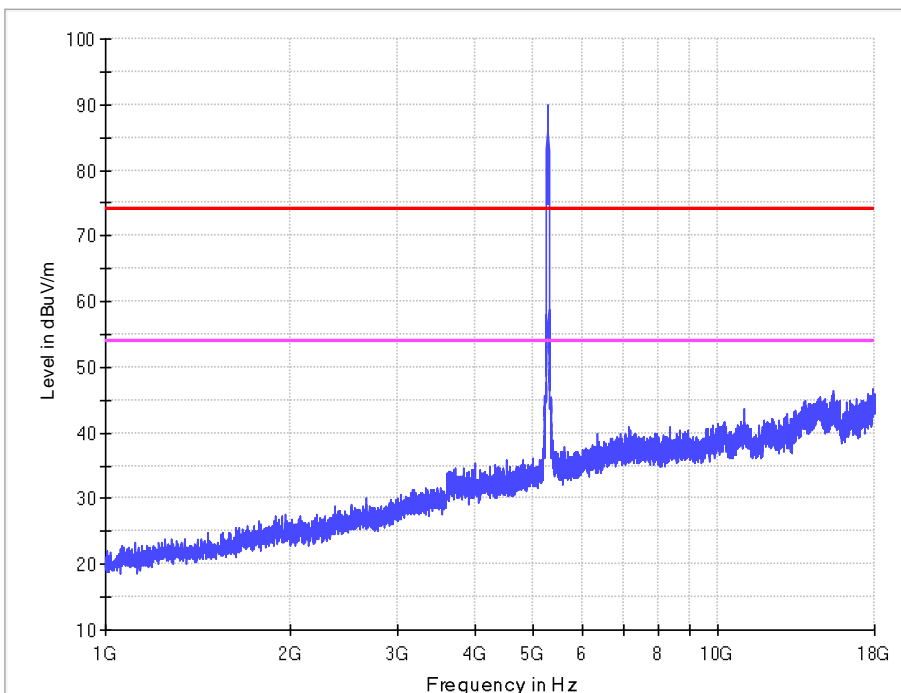
1-18G

11n HT40 IN THE 5.3GHz BAND
CH54

Horizontal



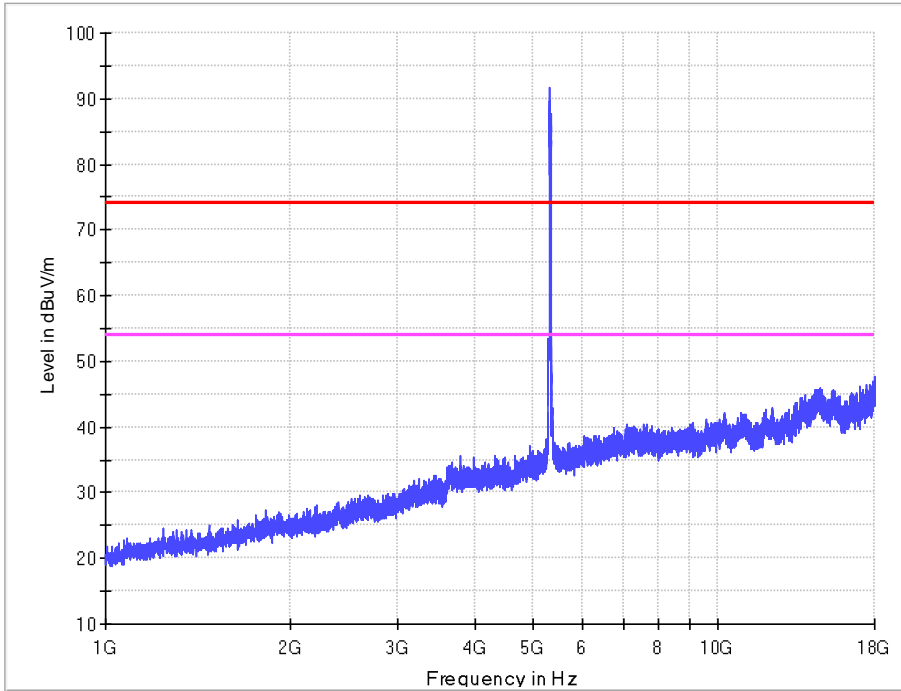
Vertical



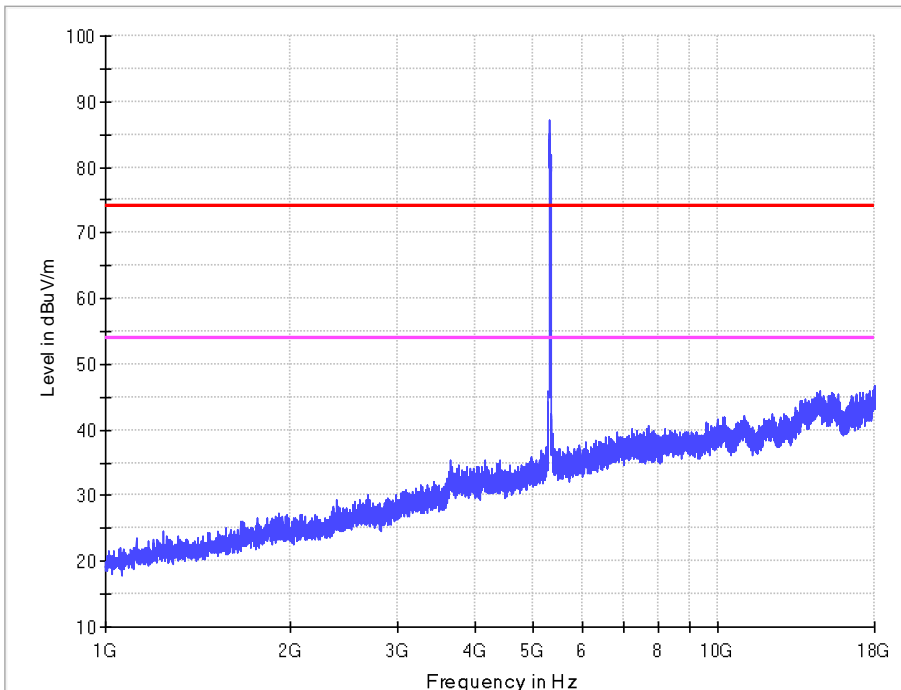
1-18G

11n HT40 IN THE 5.3GHz BAND
CH62

Horizontal



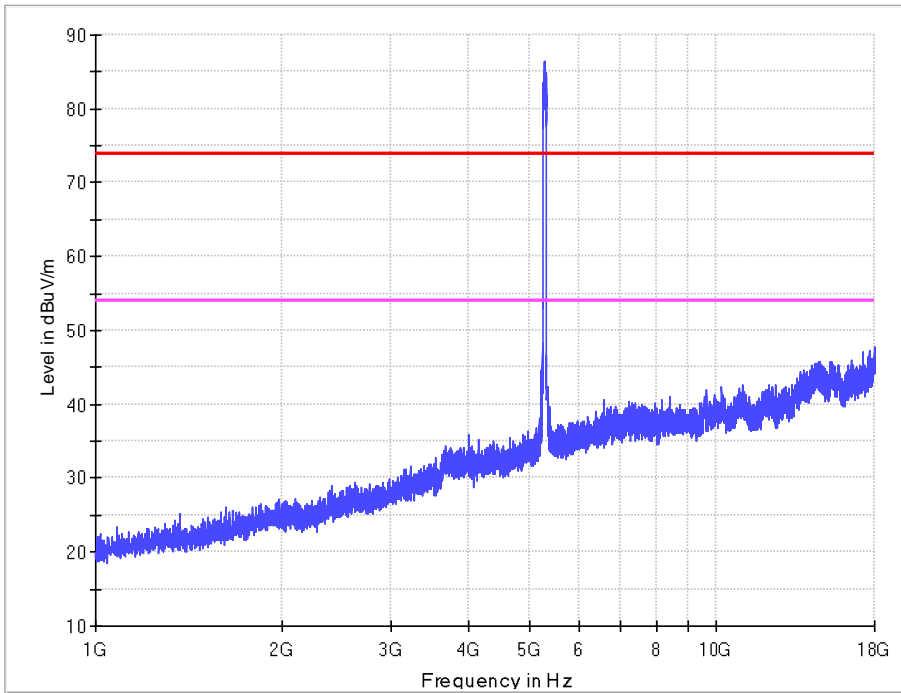
Vertical



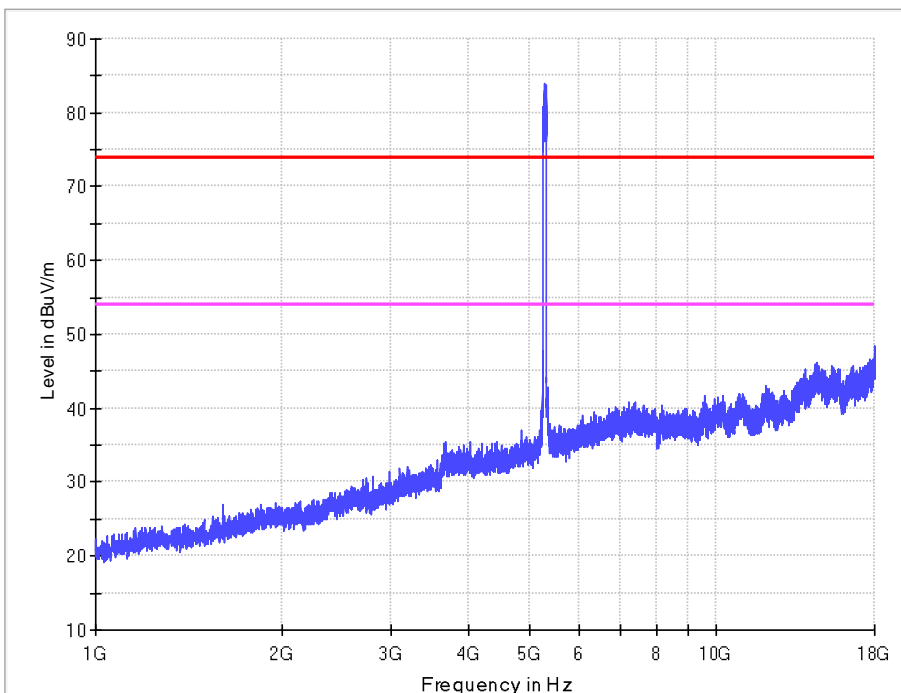
1-18G

11ac VHT80 IN THE 5.3GHz BAND
CH58

Horizontal



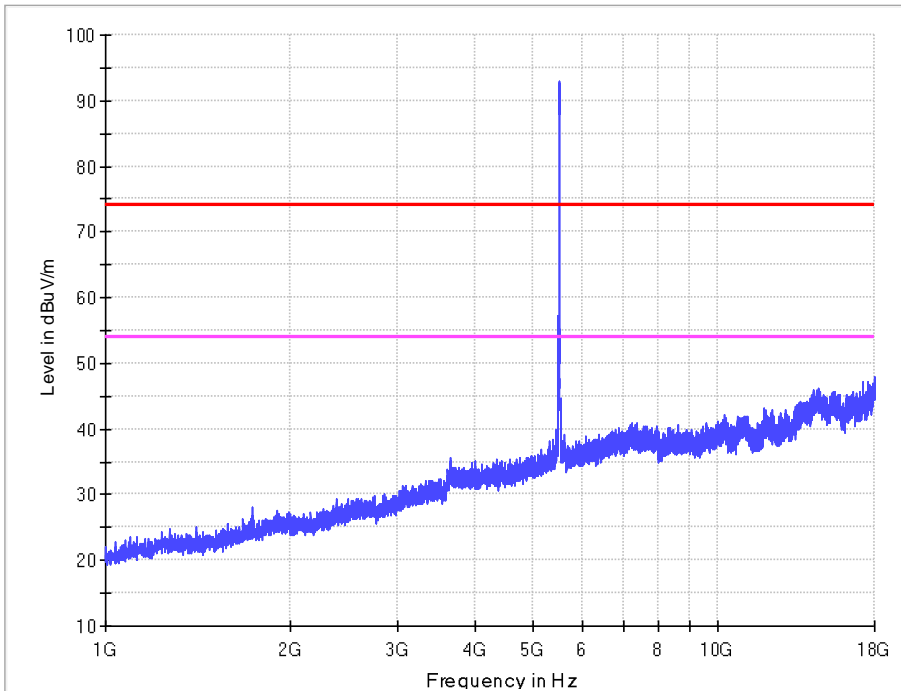
Vertical



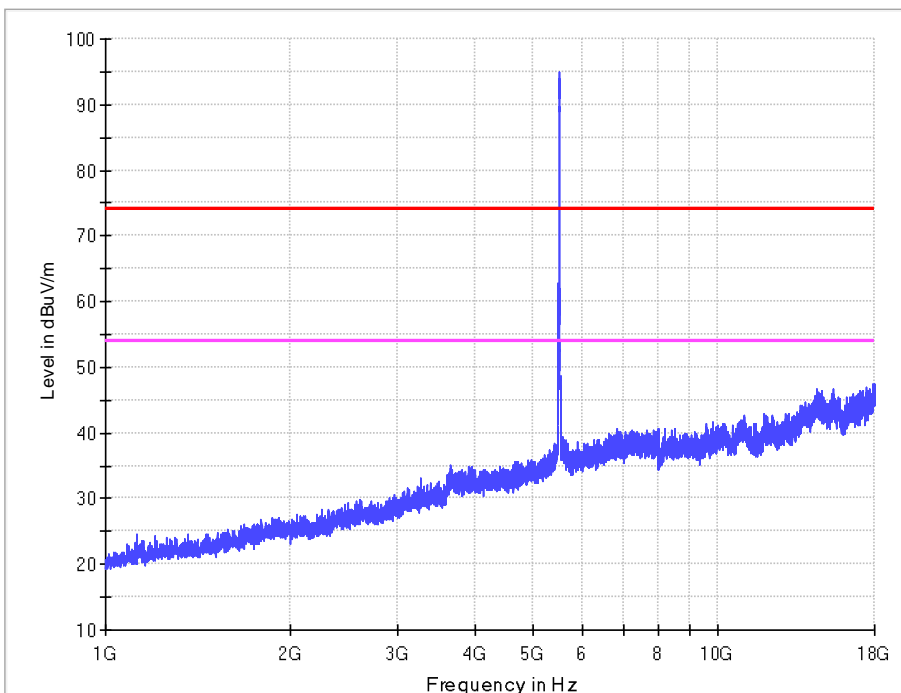
1-18G

11a IN THE 5.6GHz BAND
CH100

Horizontal



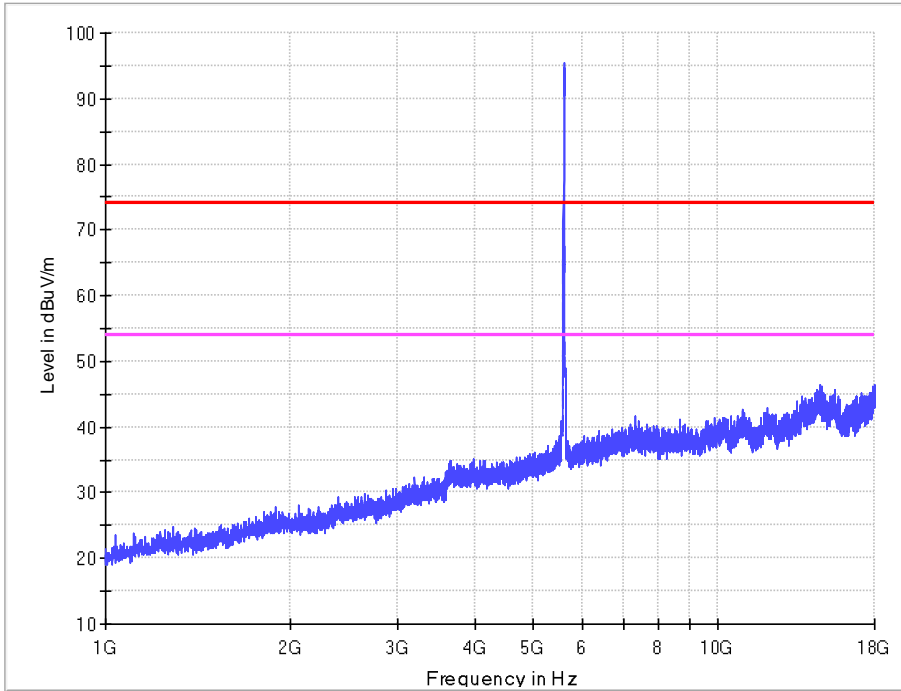
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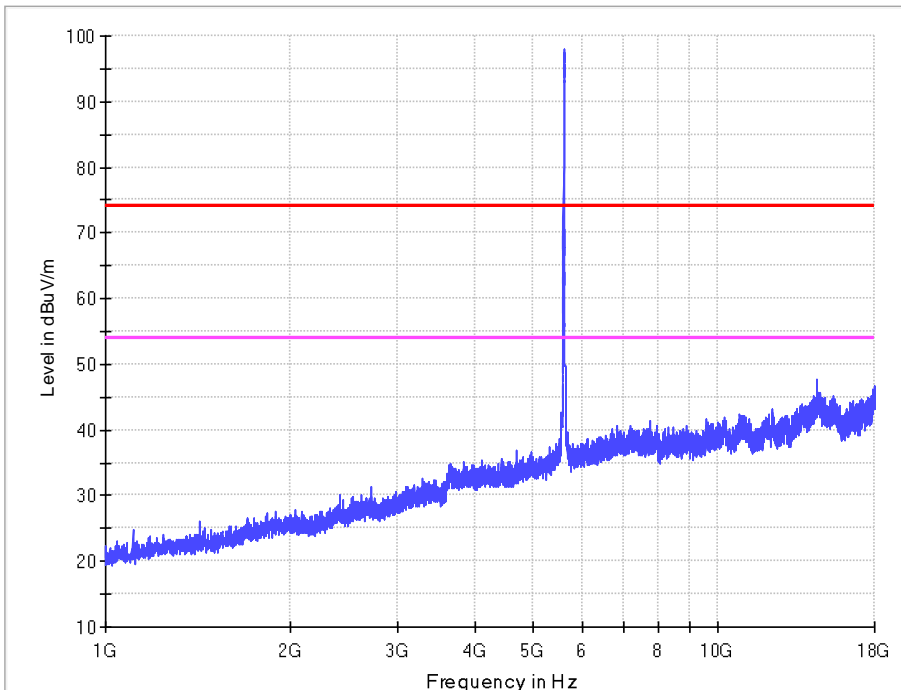
1-18G

11a IN THE 5.6GHz BAND
CH120

Horizontal



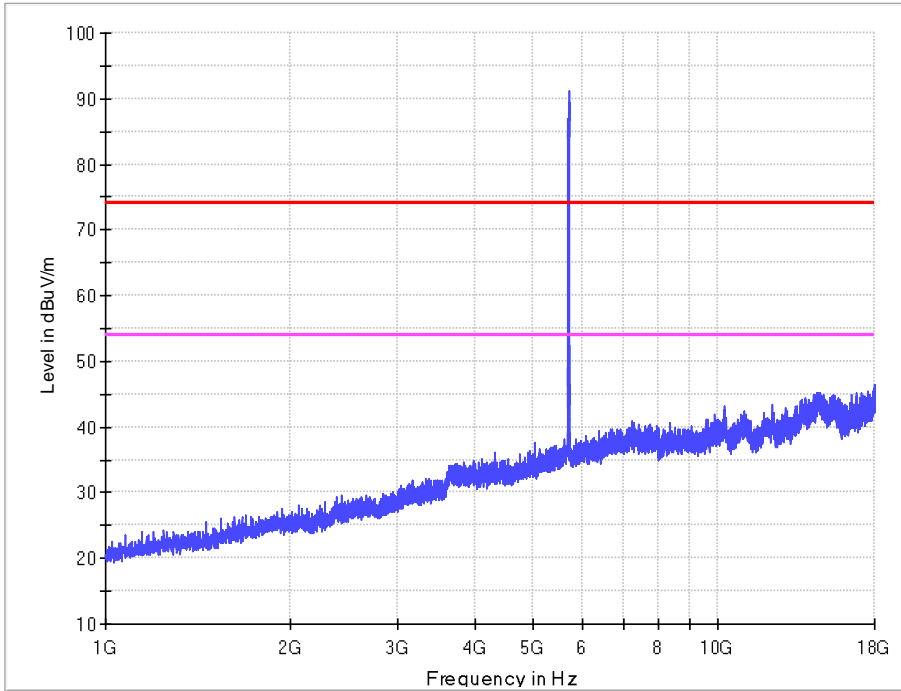
Vertical



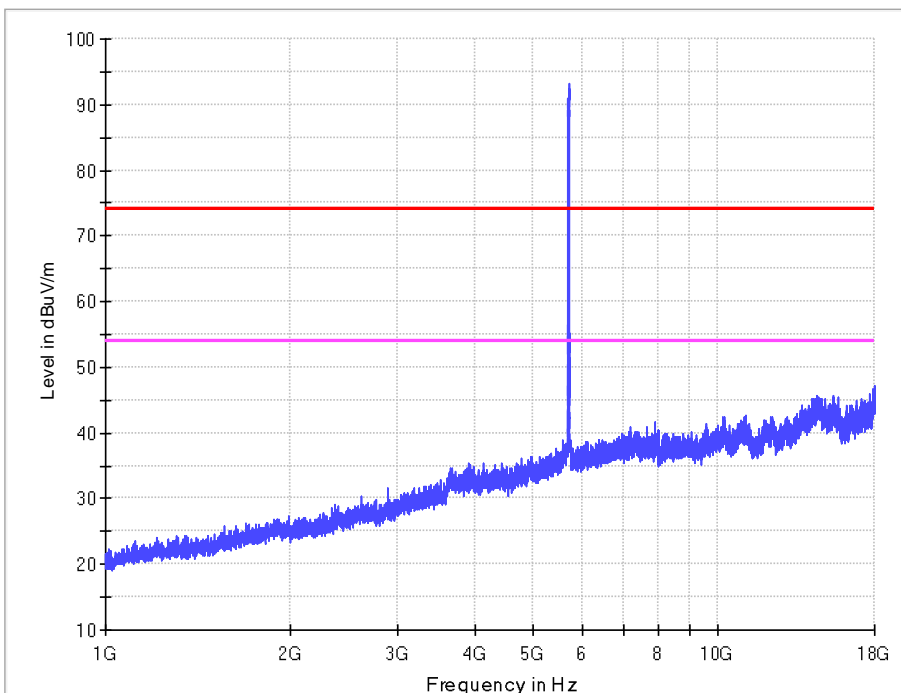
1-18G

11a IN THE 5.6GHz BAND
CH140

Horizontal



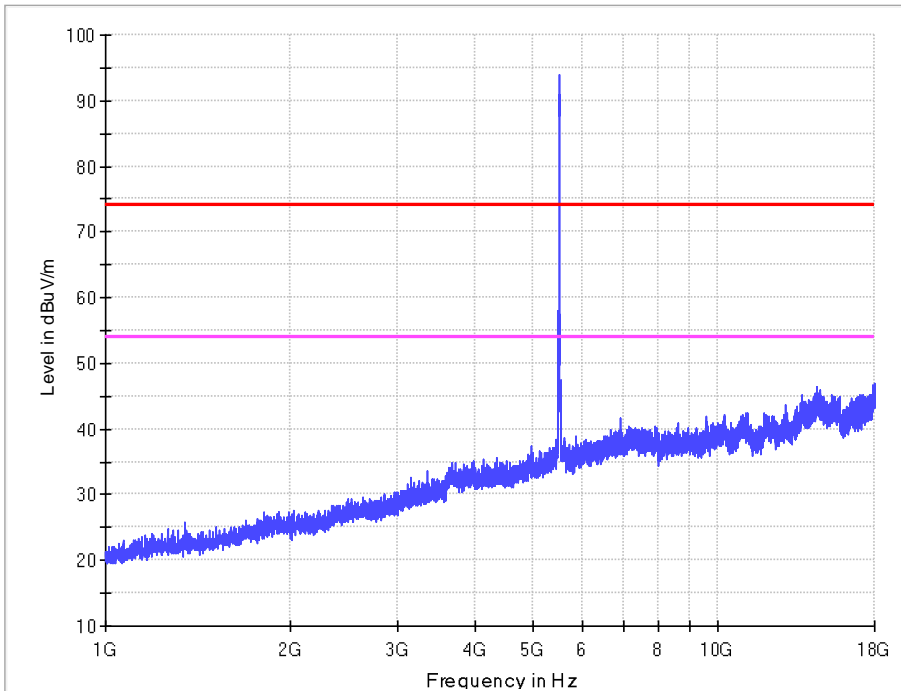
Vertical



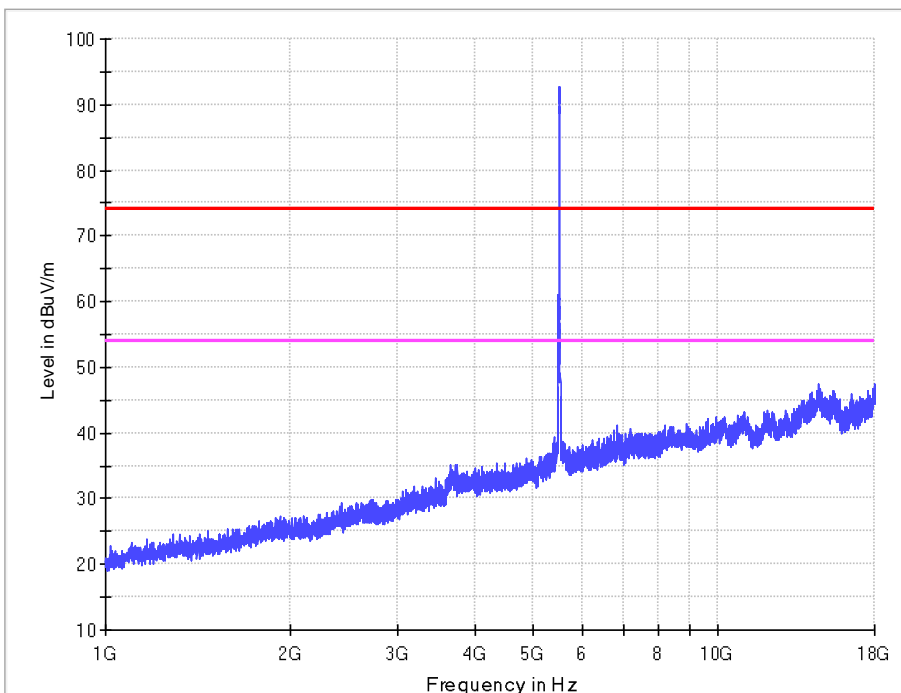
1-18G

11n HT20 IN THE 5.6GHz BAND
CH100

Horizontal



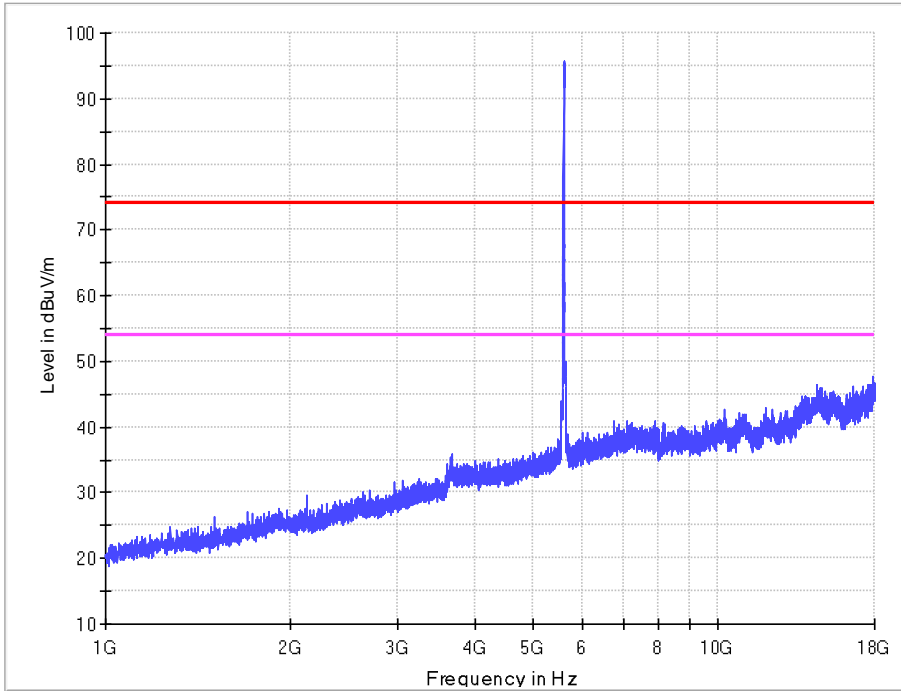
Vertical



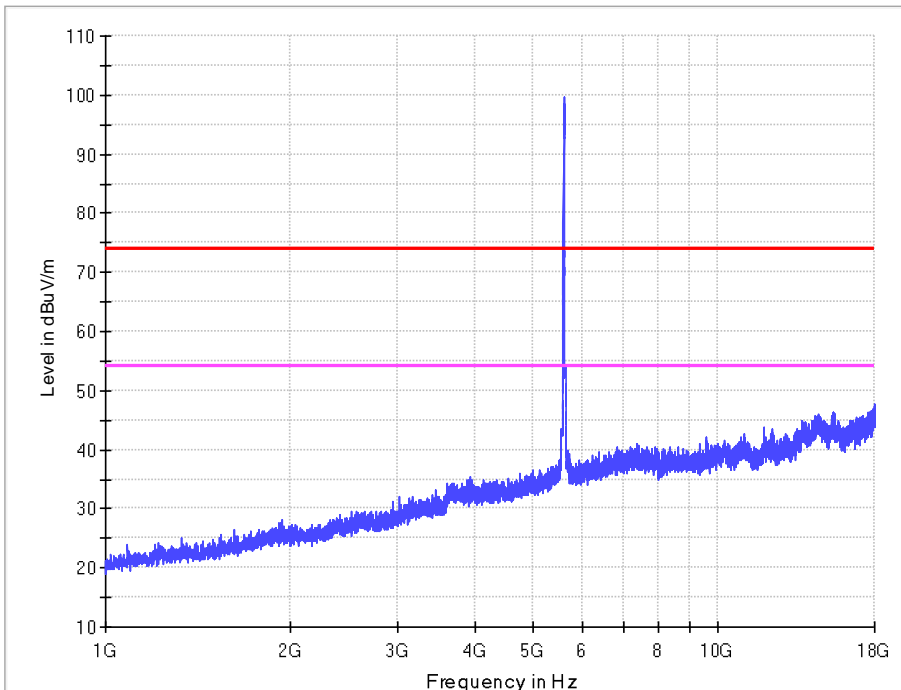
1-18G

11n HT20 IN THE 5.6GHz BAND
CH120

Horizontal



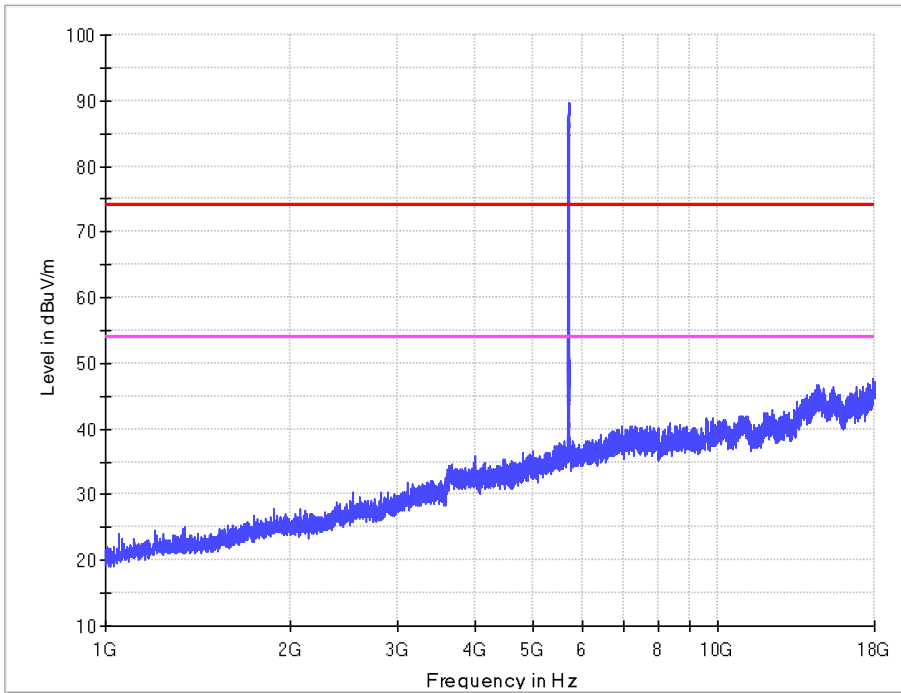
Vertical



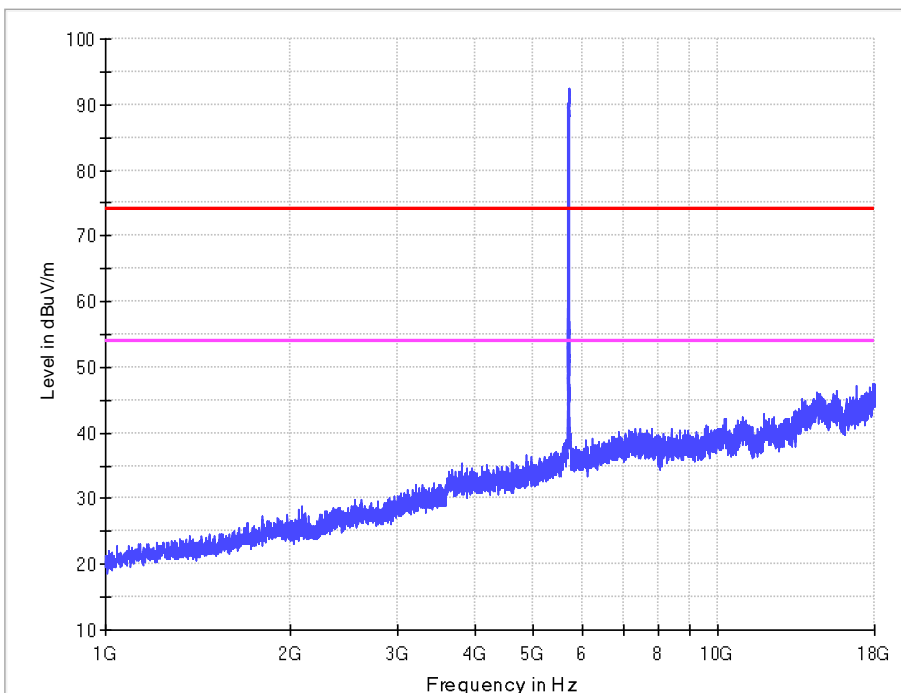
1-18G

11n HT20 IN THE 5.6GHz BAND
CH140

Horizontal



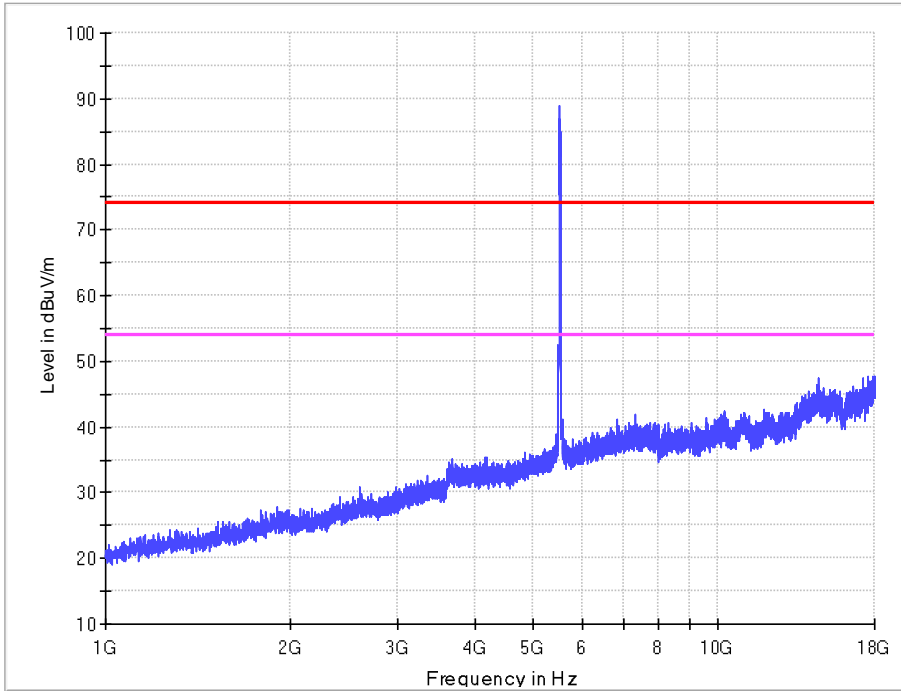
Vertical



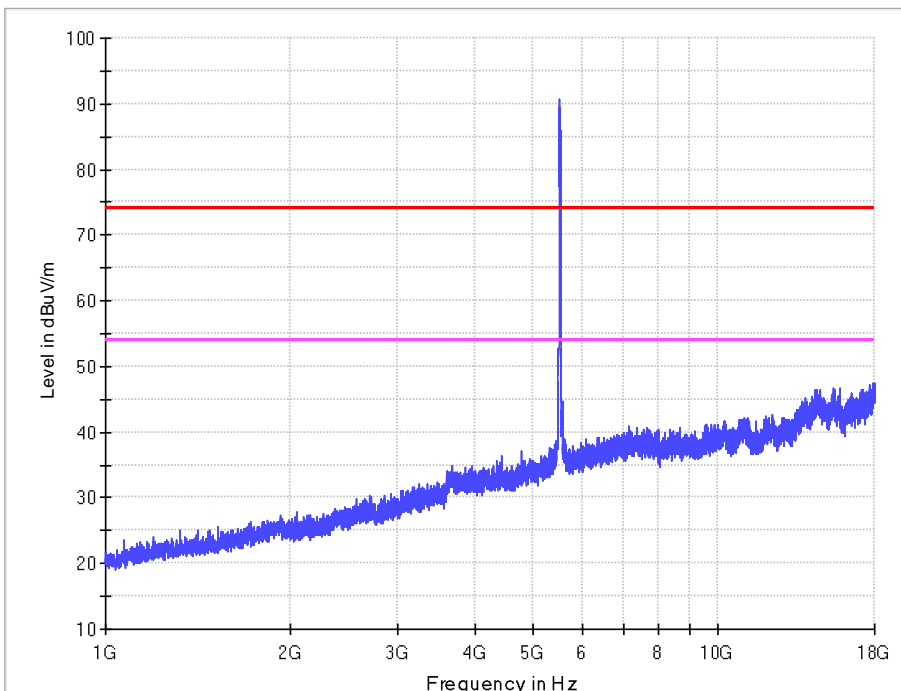
1-18G

11n HT40 IN THE 5.6GHz BAND
CH102

Horizontal



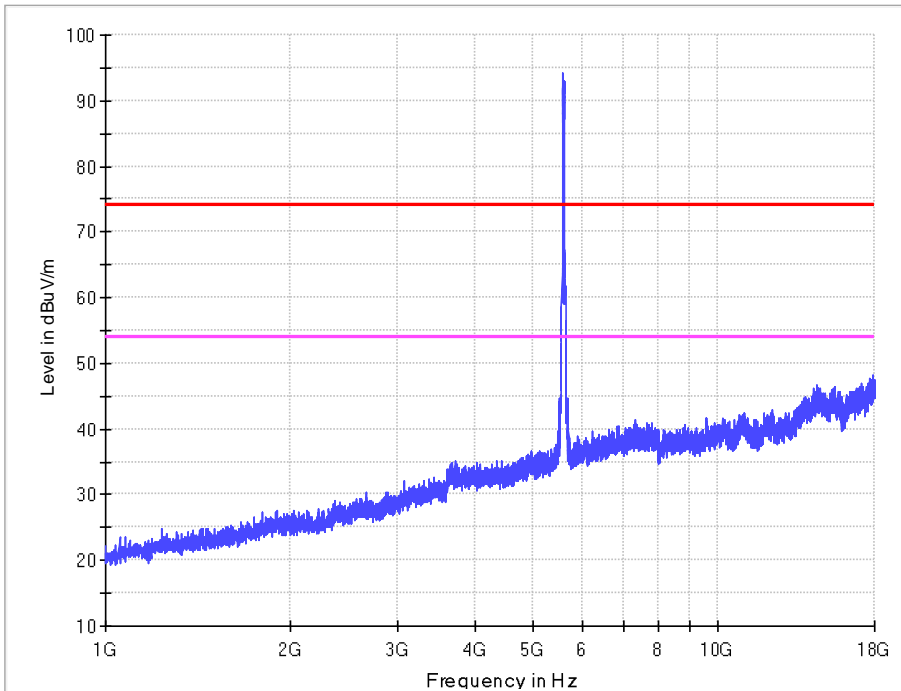
Vertical



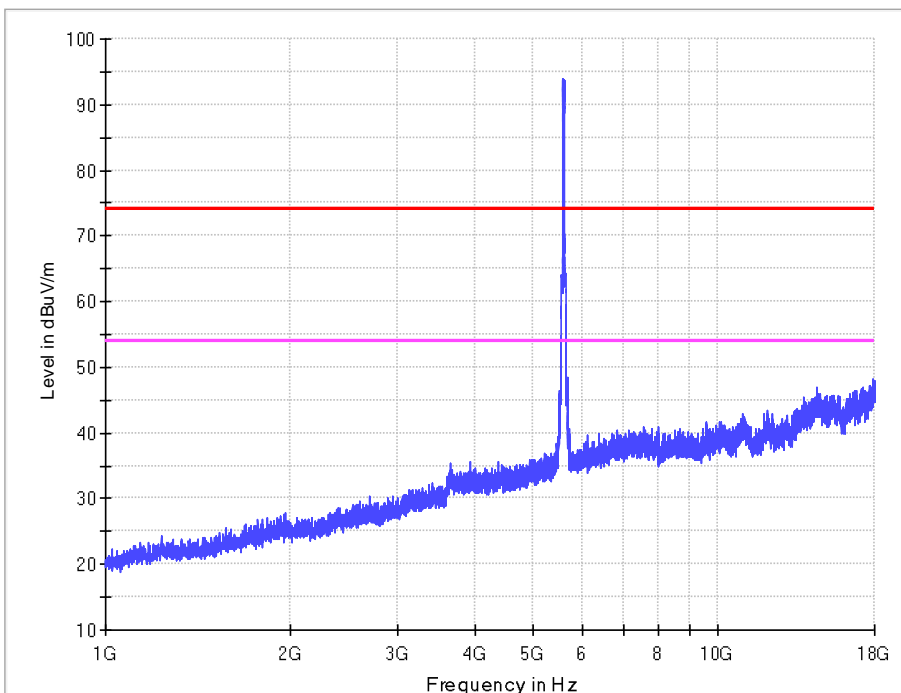
1-18G

11n HT40 IN THE 5.6GHz BAND
CH118

Horizontal



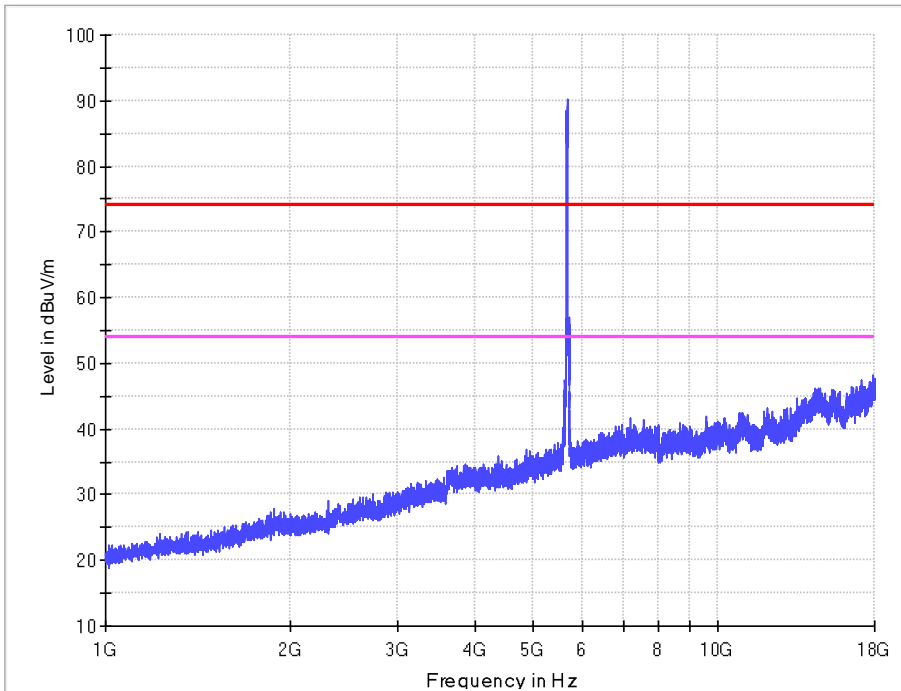
Vertical



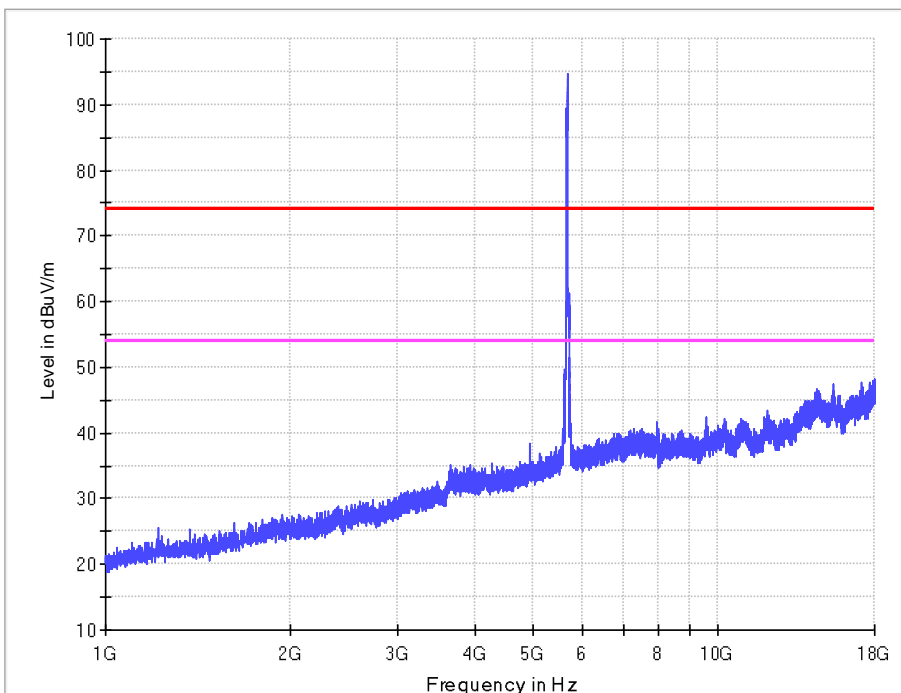
1-18G

11n HT40 IN THE 5.6GHz BAND
CH134

Horizontal



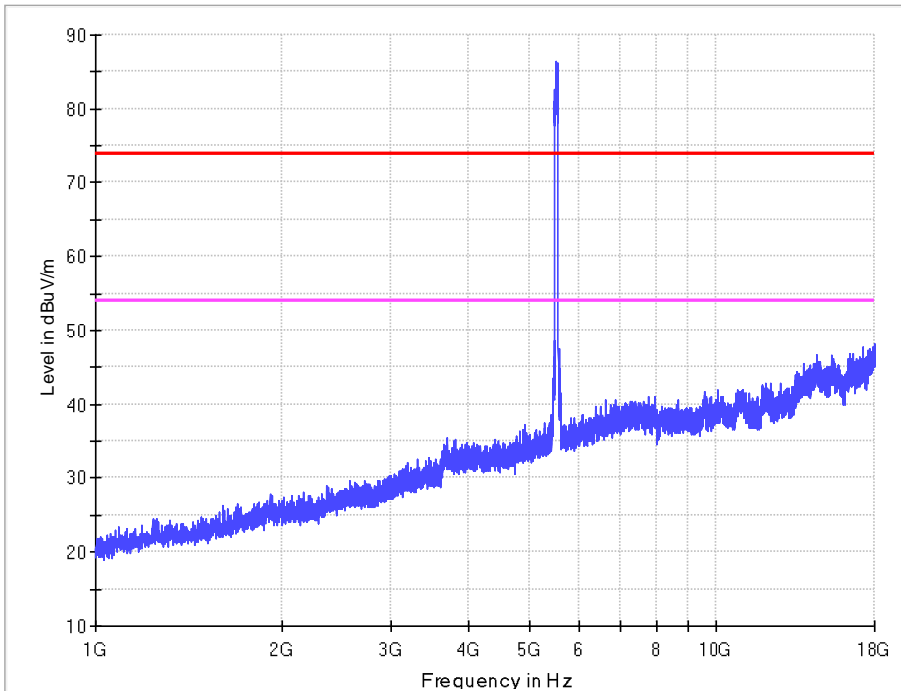
Vertical



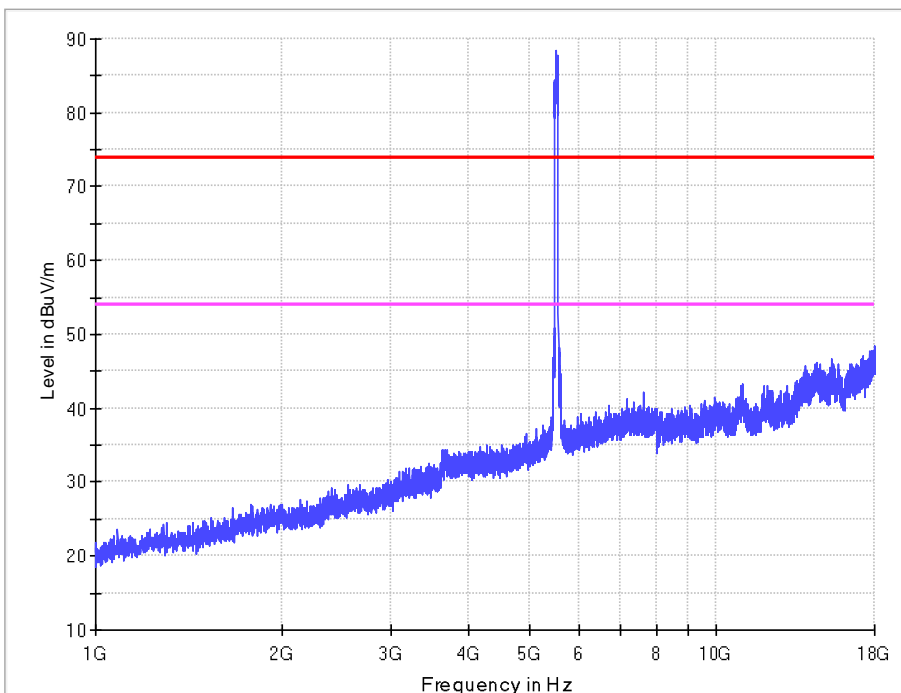
1-18G

11ac VHT80 IN THE 5.6GHz BAND
CH106

Horizontal



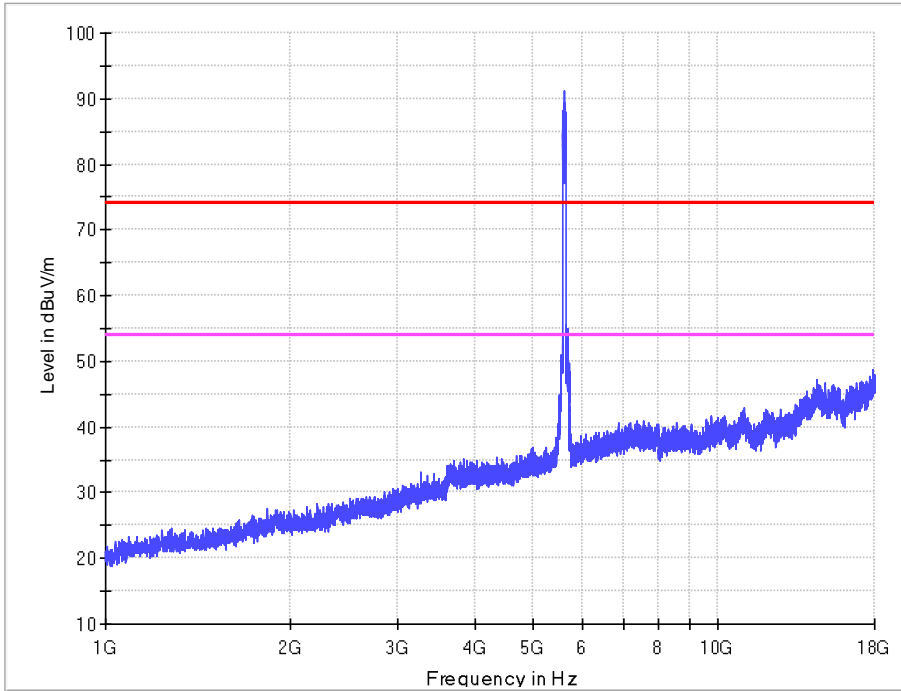
Vertical



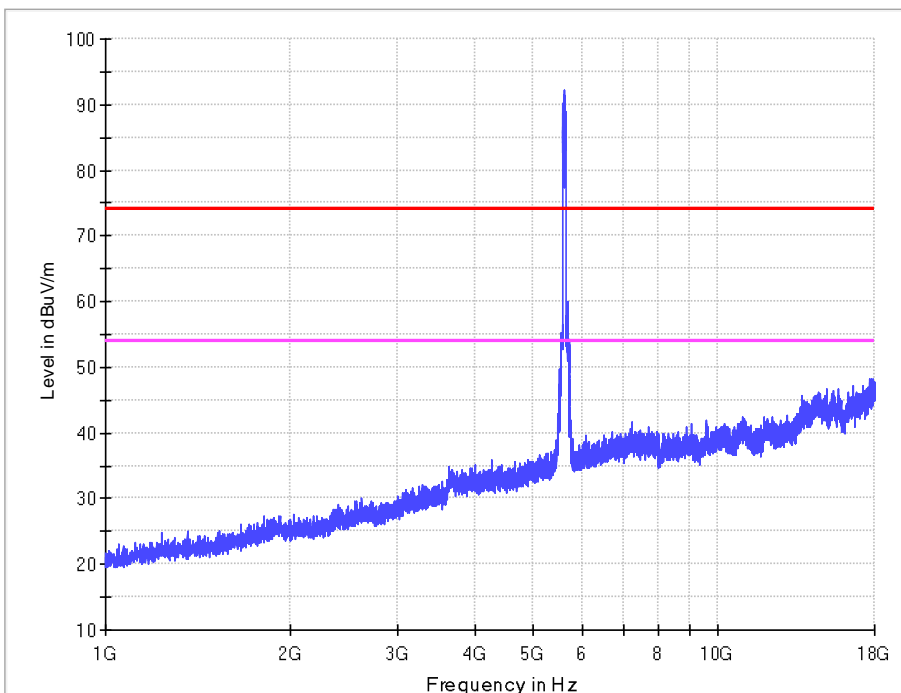
1-18G

11ac VHT80 IN THE 5.6GHz BAND
CH122

Horizontal



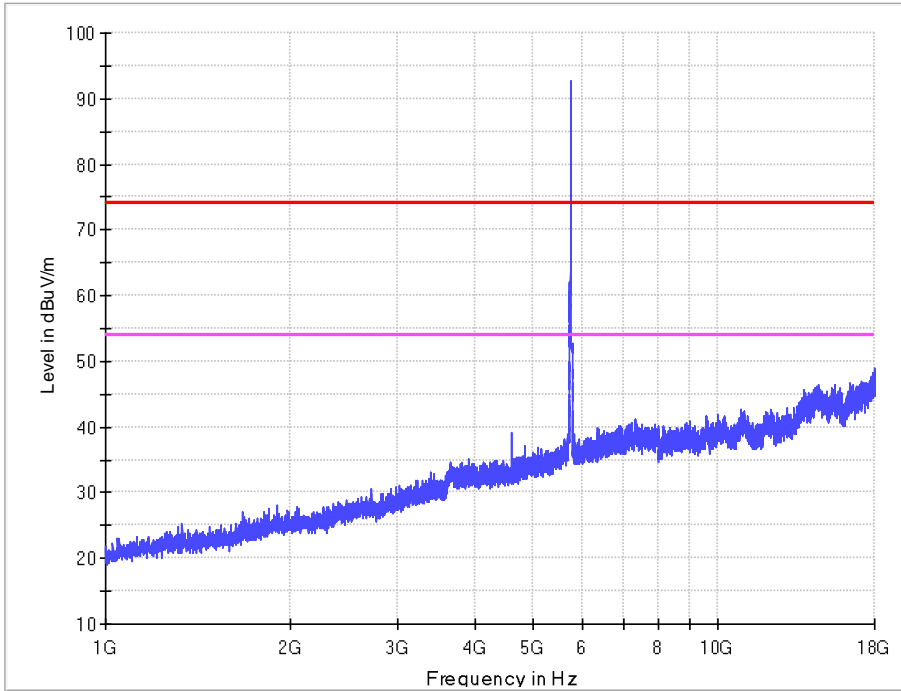
Vertical



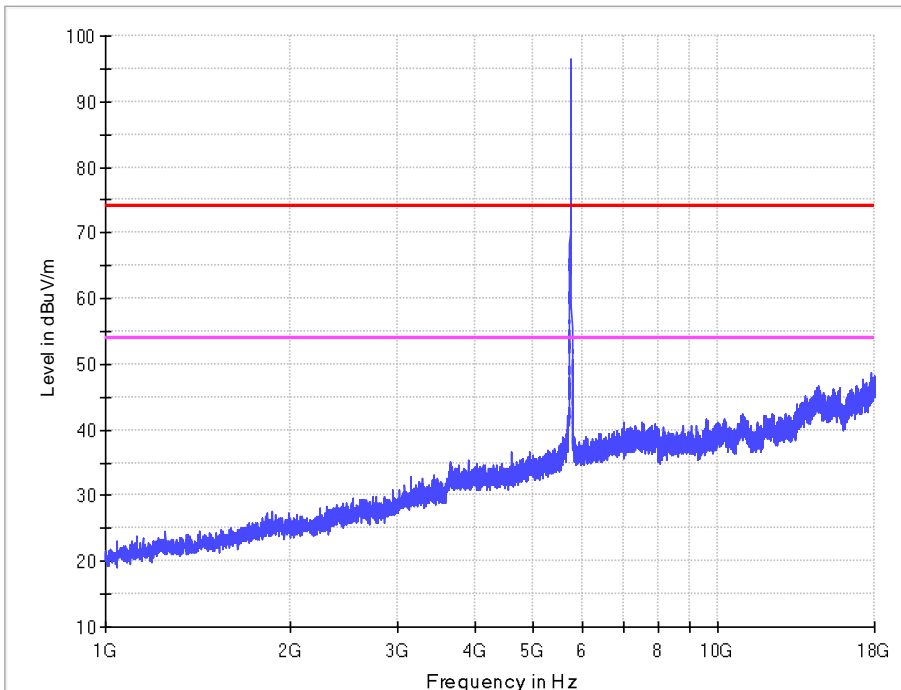
1-18G

11a IN THE 5.8GHz BAND
CH149

Horizontal



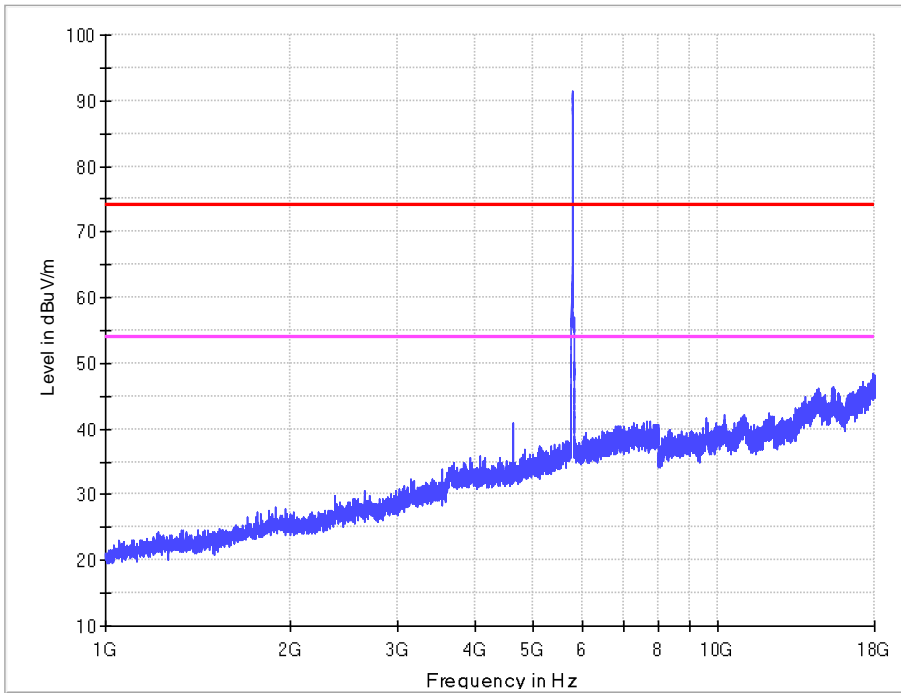
Vertical



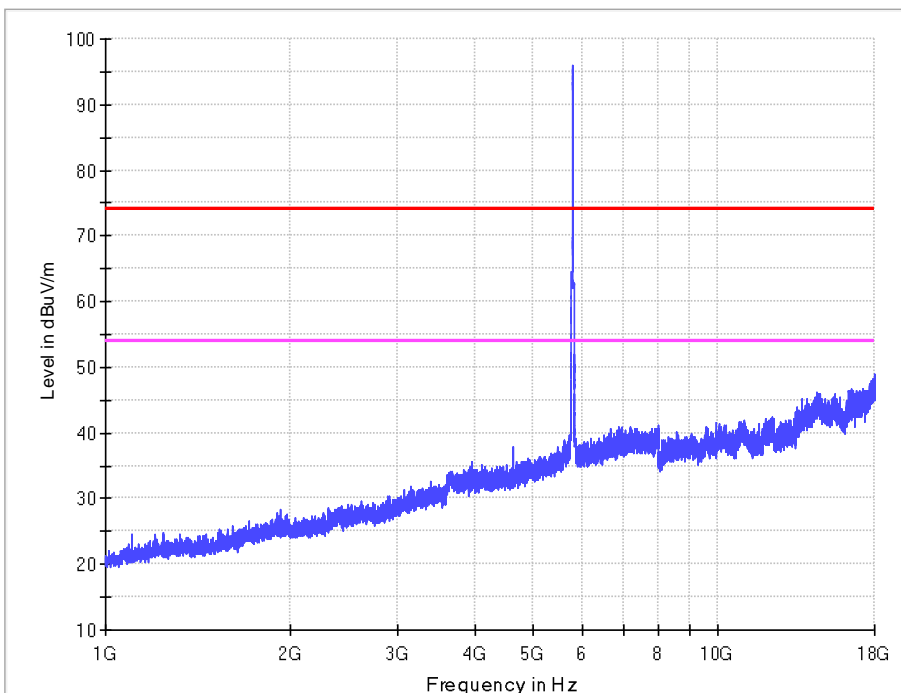
1-18G

11a IN THE 5.8GHz BAND
CH157

Horizontal



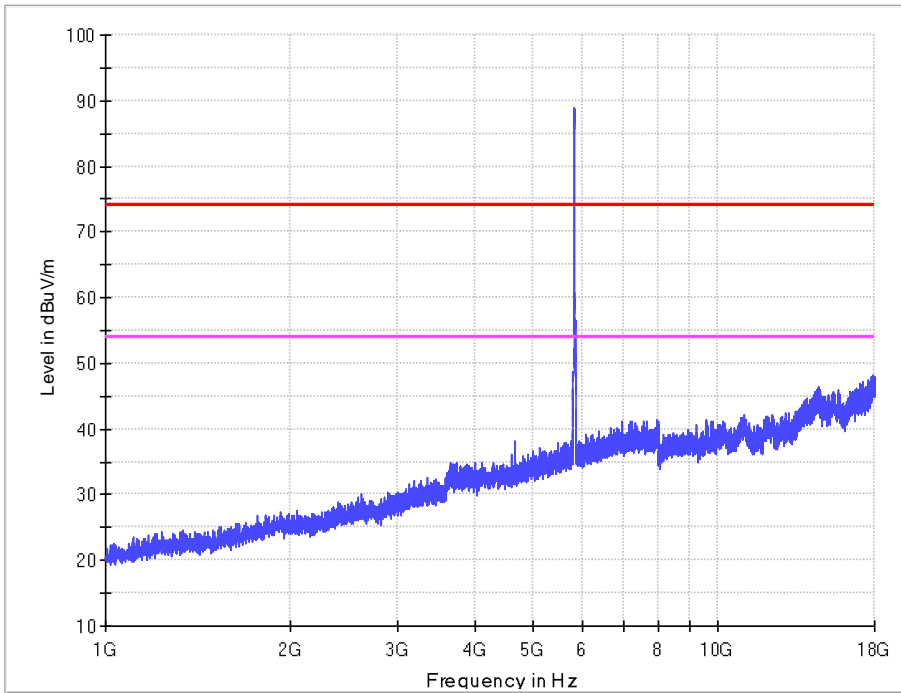
Vertical



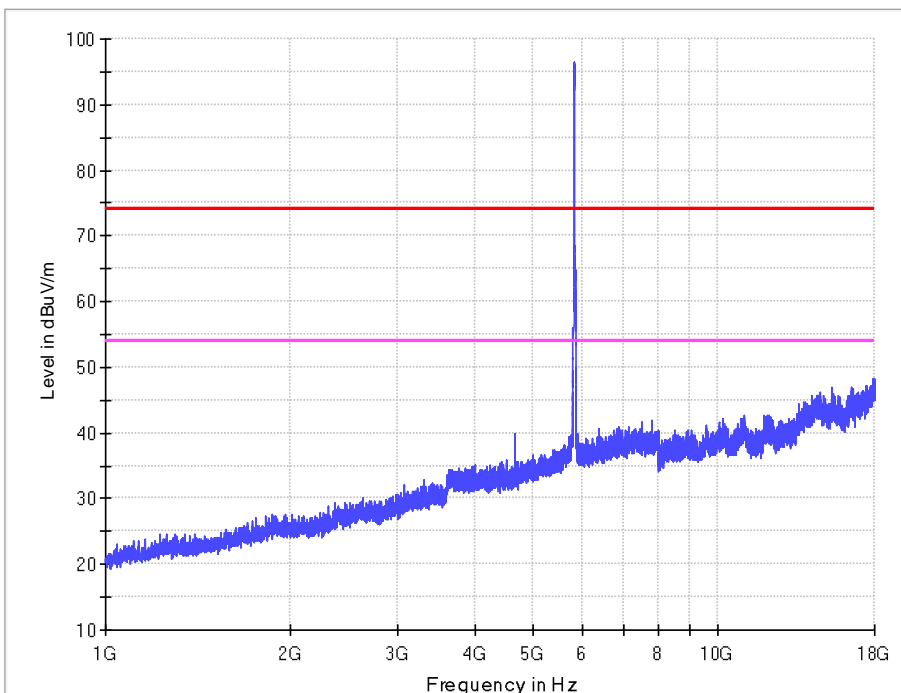
1-18G

11a IN THE 5.8GHz BAND
CH165

Horizontal



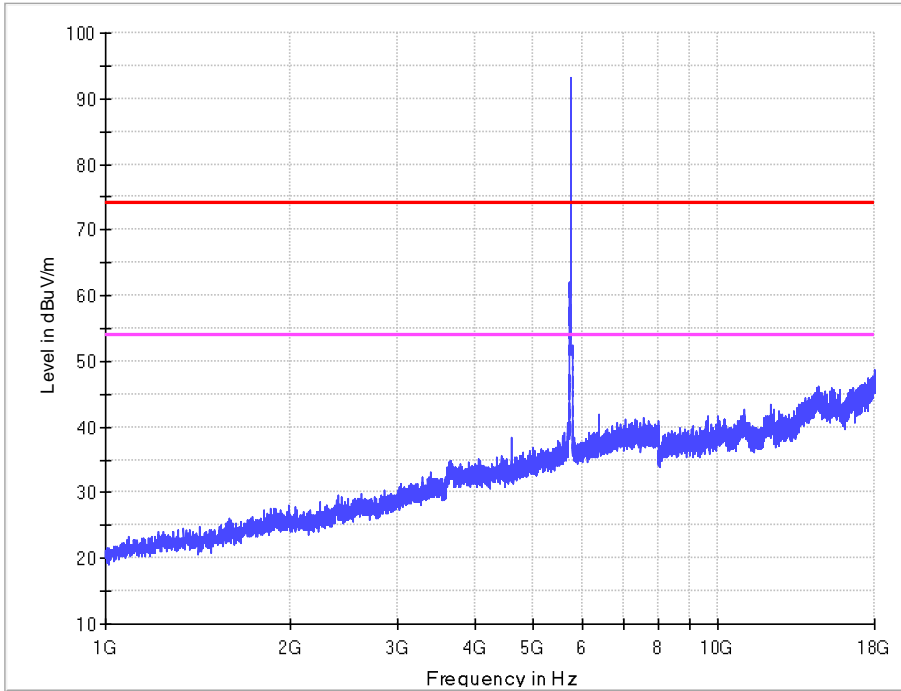
Vertical



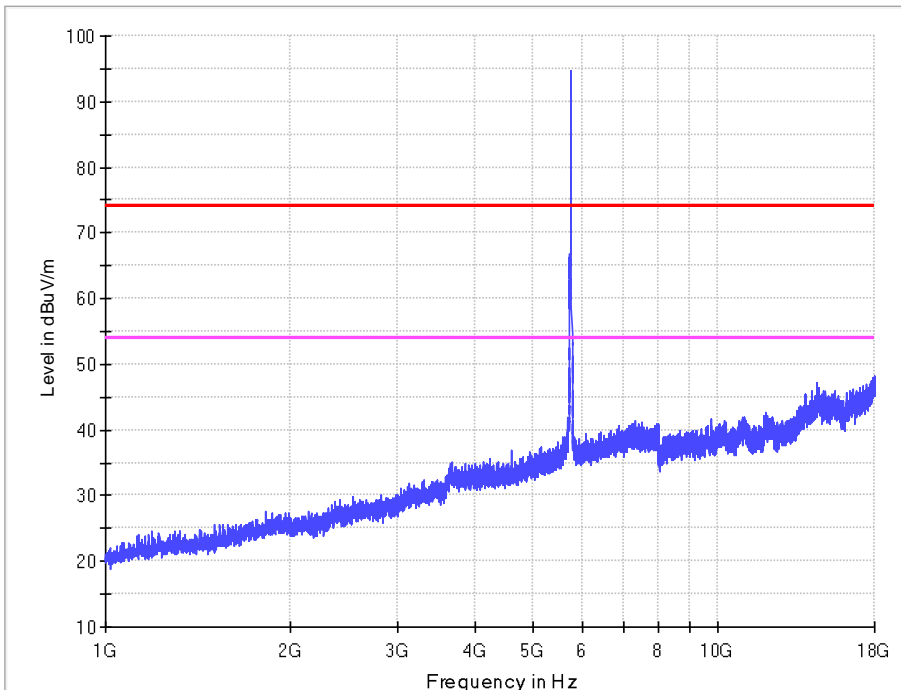
1-18G

11n HT20 IN THE 5.8GHz BAND
CH149

Horizontal



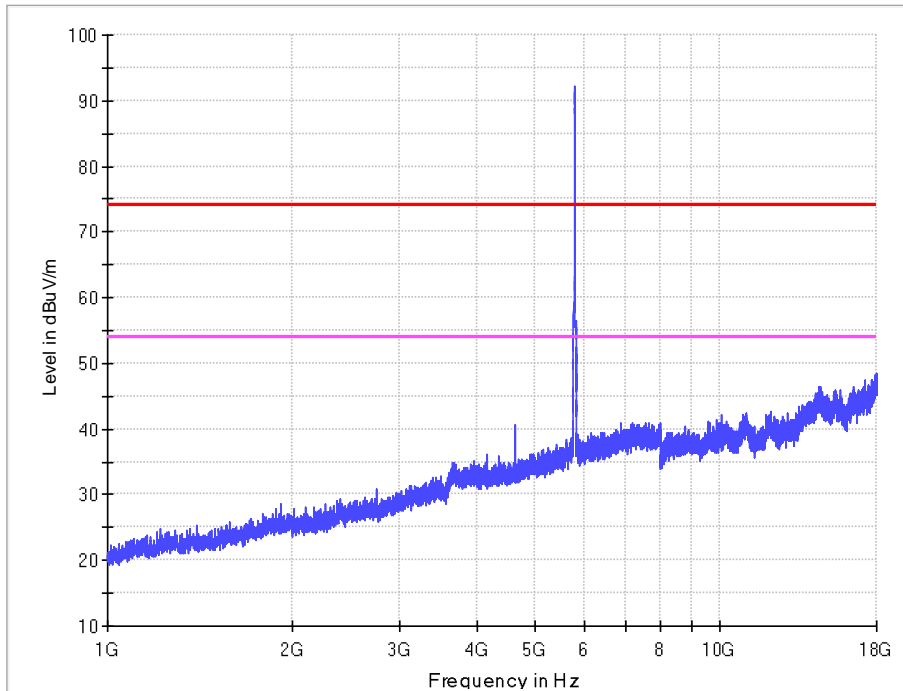
Vertical



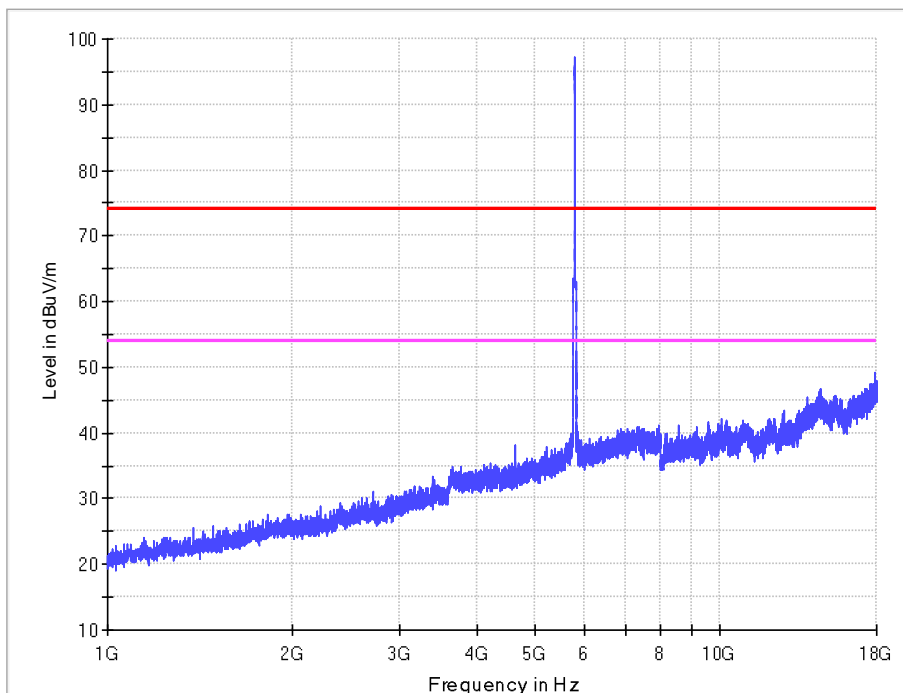
1-18G

11n HT20 IN THE 5.8GHz BAND
CH157

Horizontal



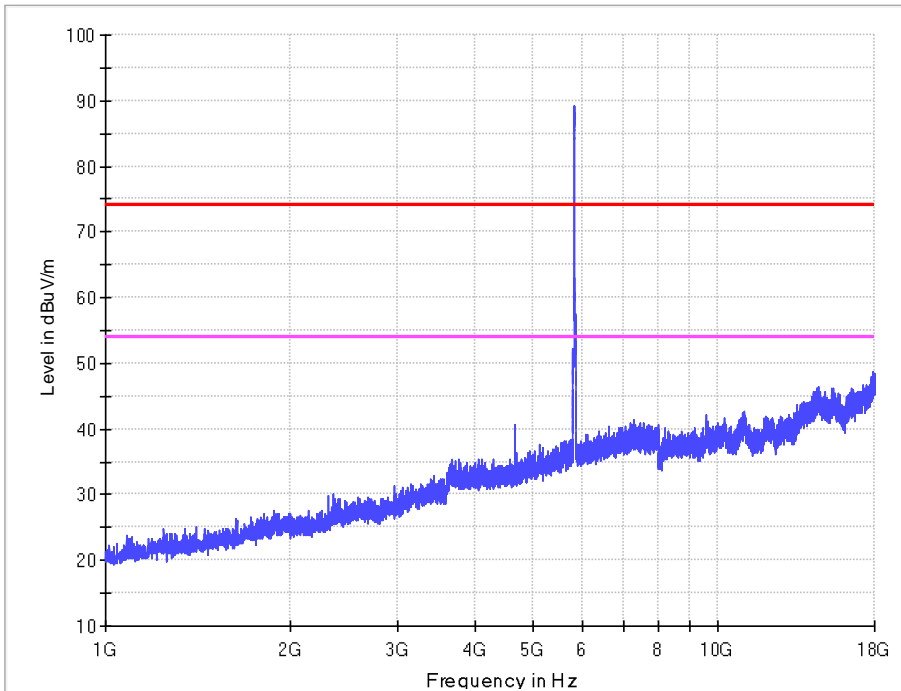
Vertical



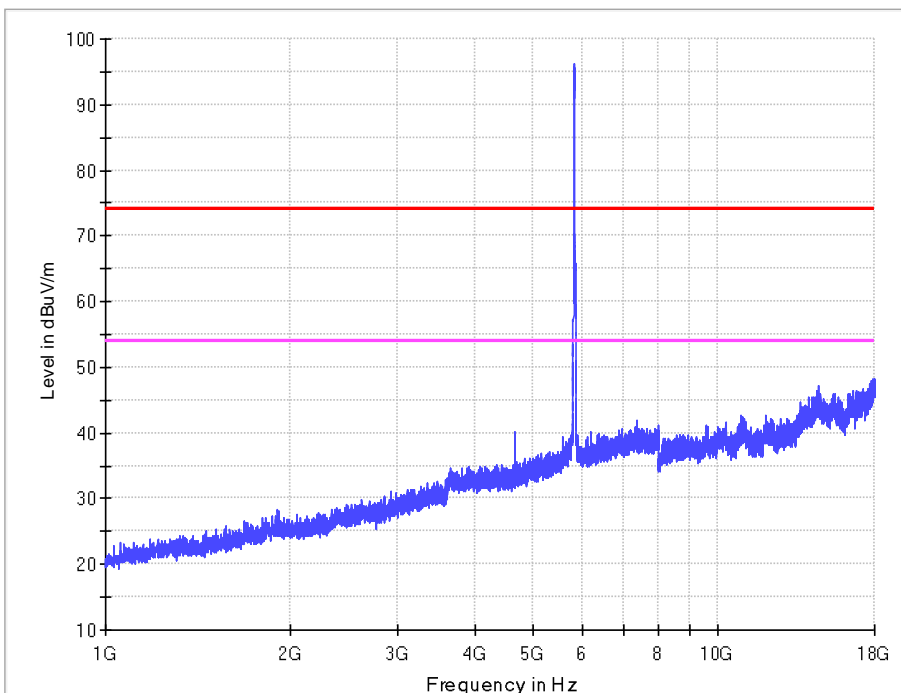
1-18G

11n HT20 IN THE 5.8GHz BAND
CH165

Horizontal



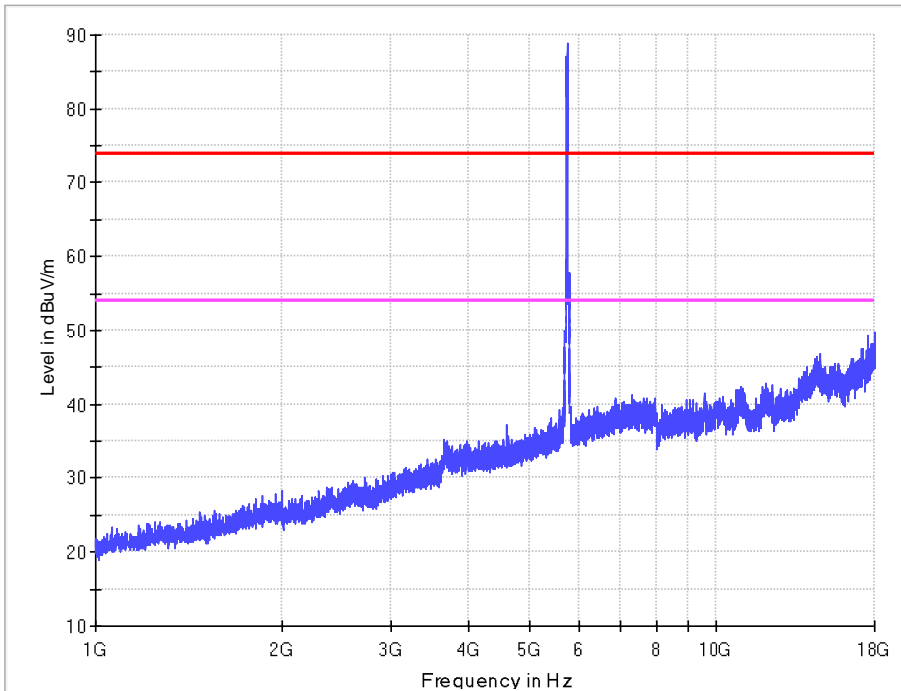
Vertical



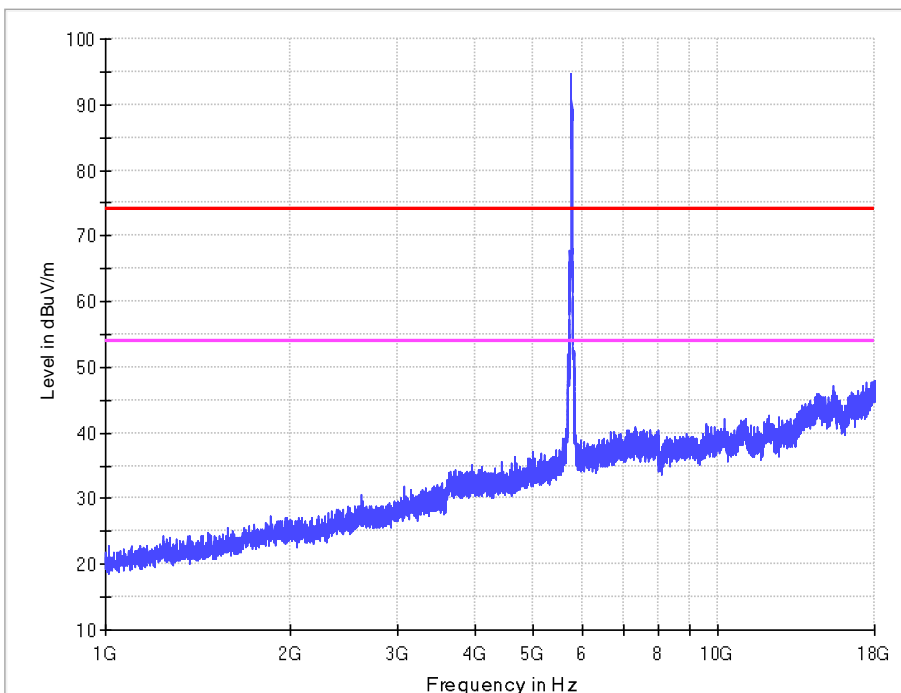
1-18G

11n HT40 IN THE 5.8GHz BAND
CH151

Horizontal



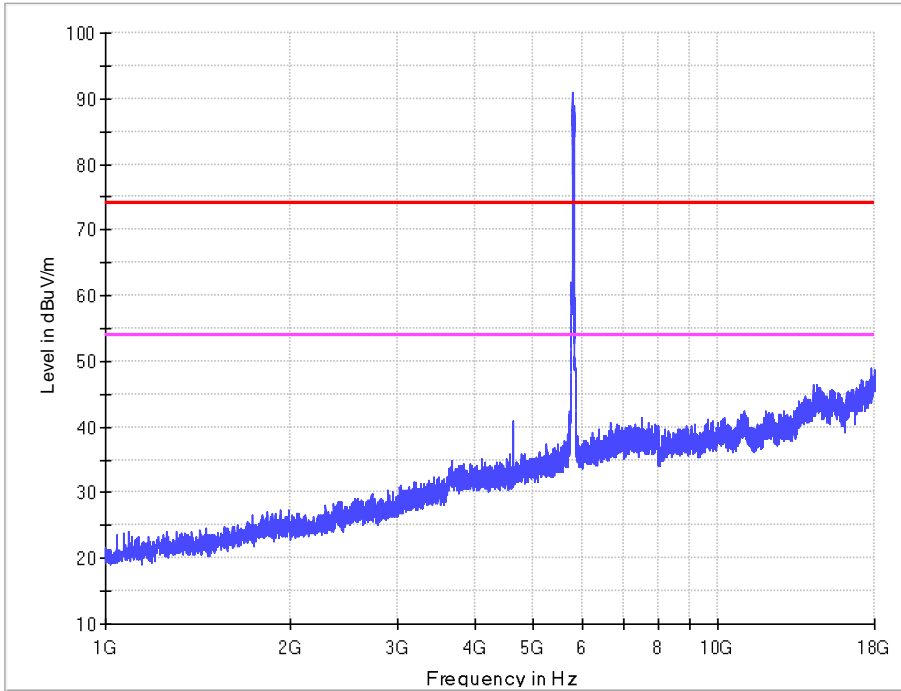
Vertical



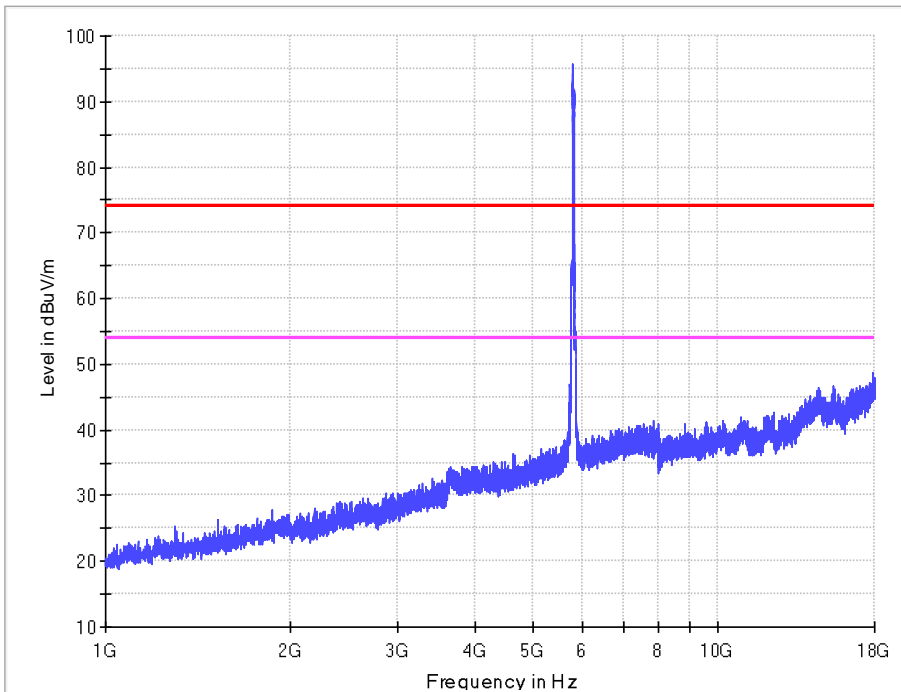
1-18G

11n HT40 IN THE 5.8GHz BAND
CH159

Horizontal



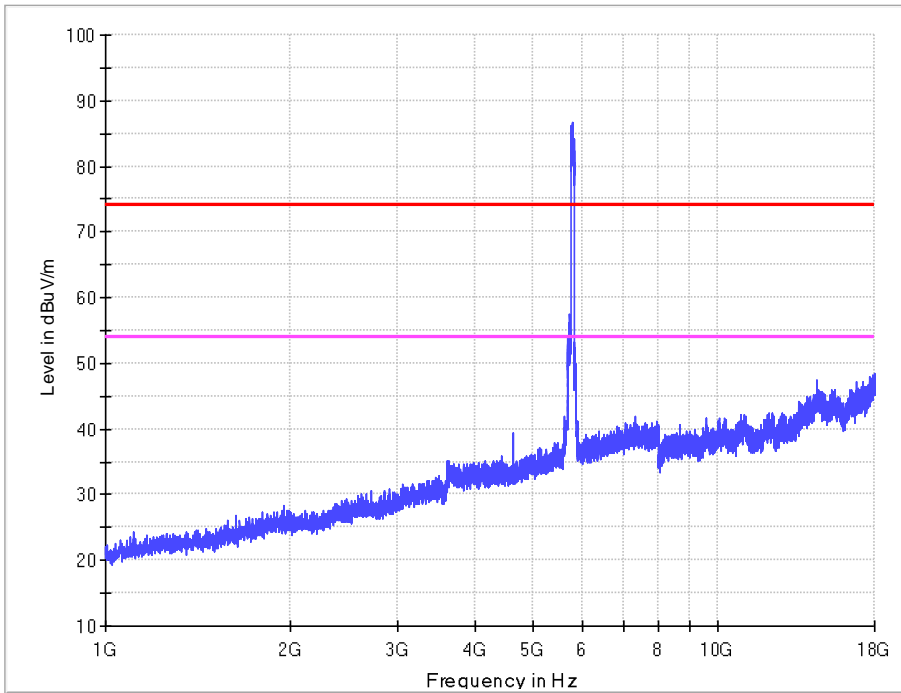
Vertical



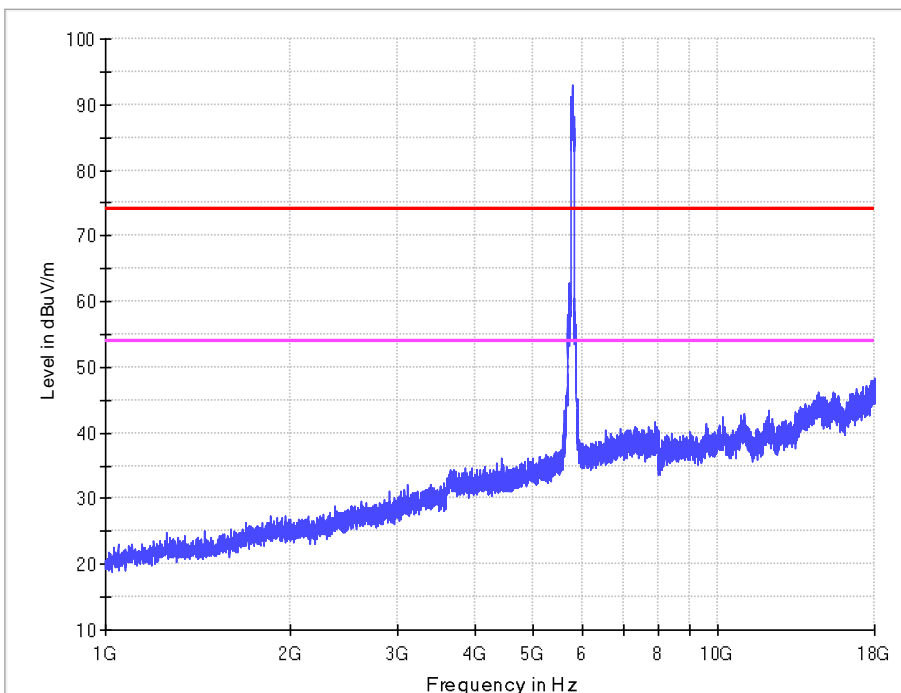
1-18G

11ac VHT80 IN THE 5.8GHz BAND
CH155

Horizontal

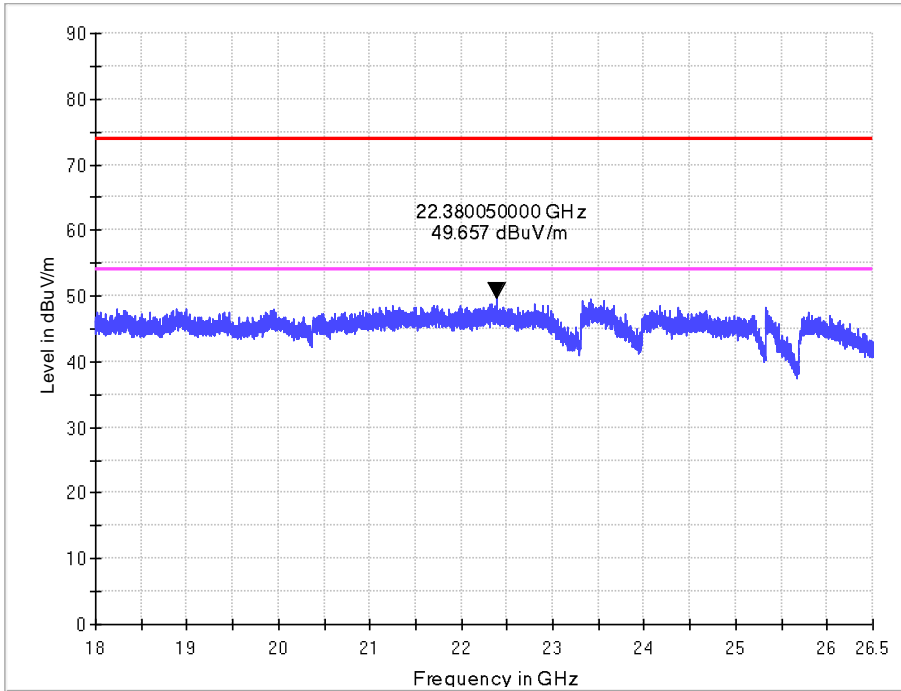


Vertical

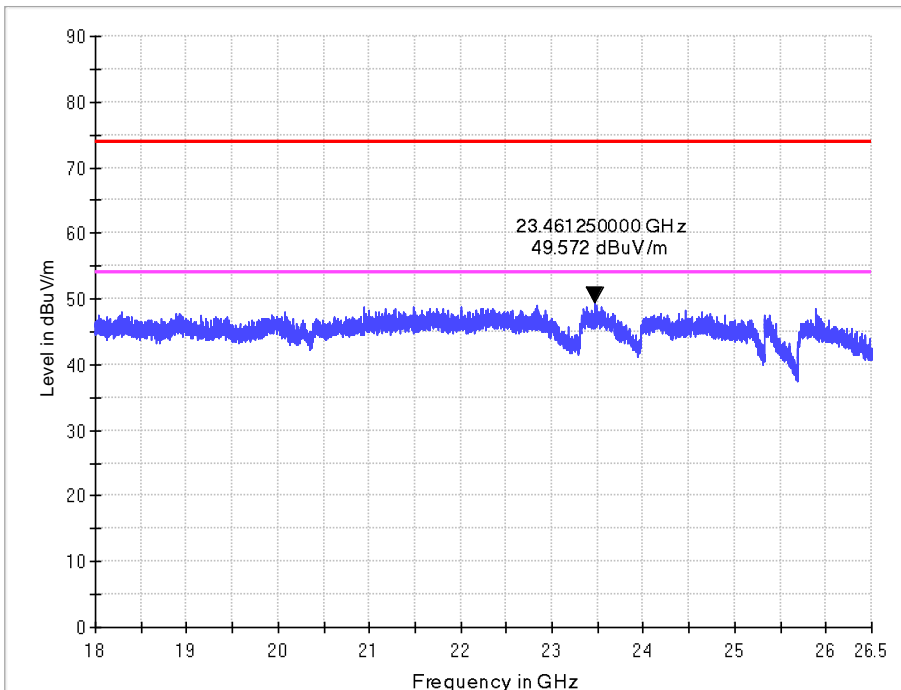


18GHz - 26.5GHz

(Worst Case)
Horizontal

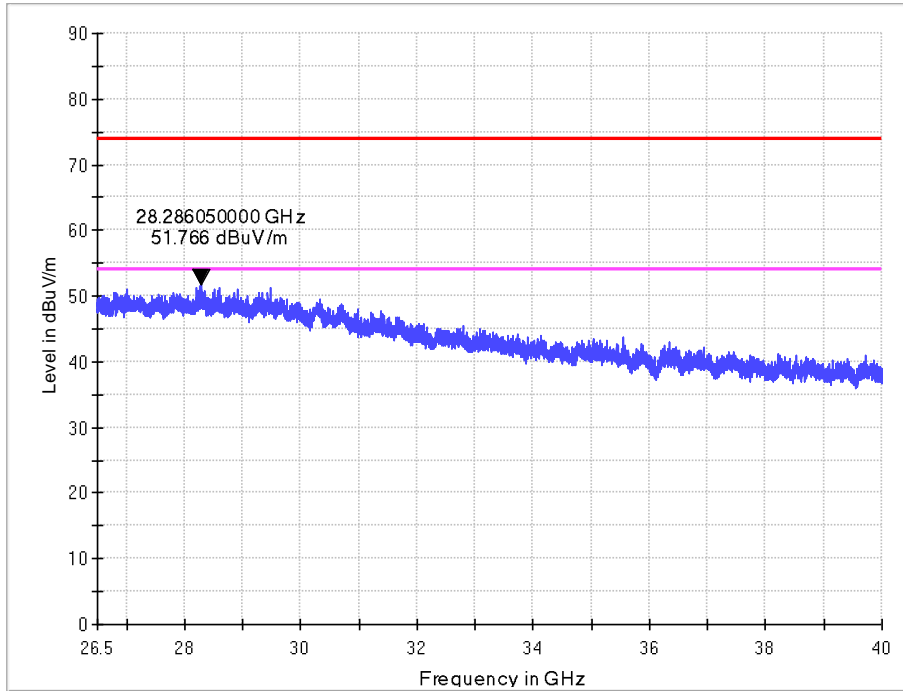


Vertical

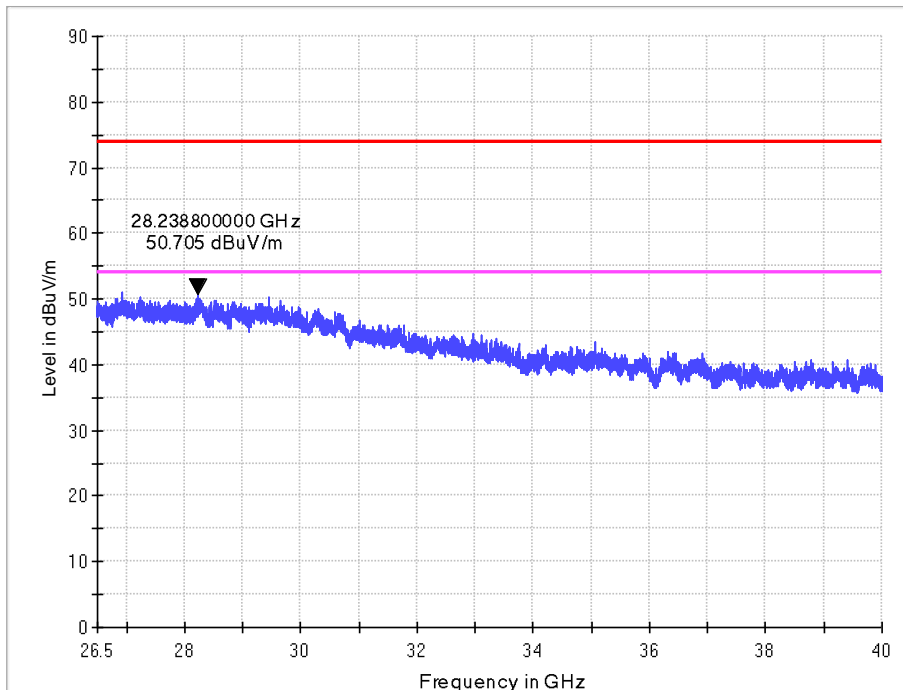


26.5 GHz - 40GHz

(Worst Case)
Horizontals



Vertical



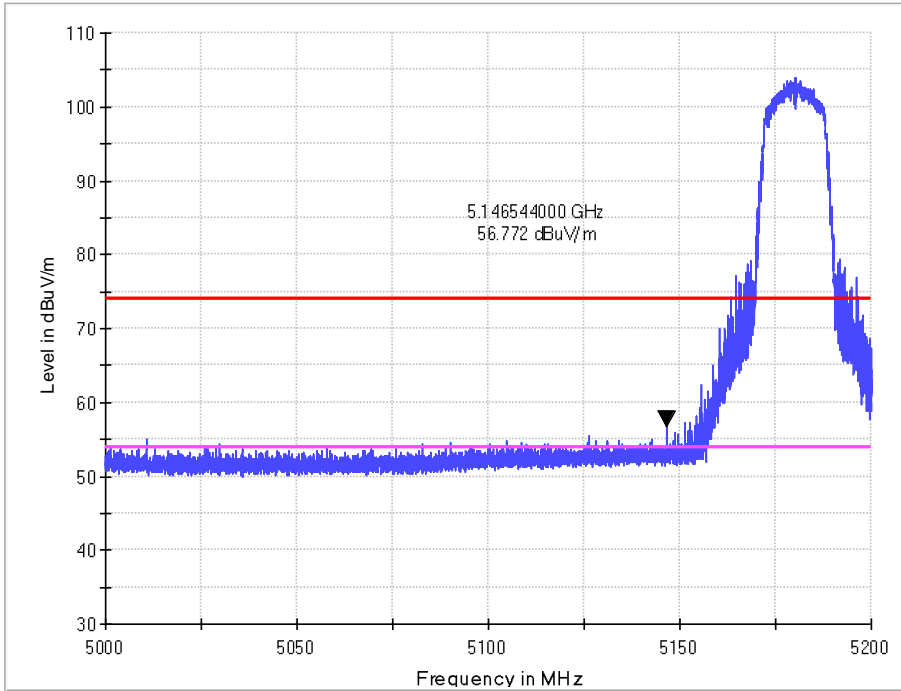
Band edge

11a IN THE 5.2GHz BAND

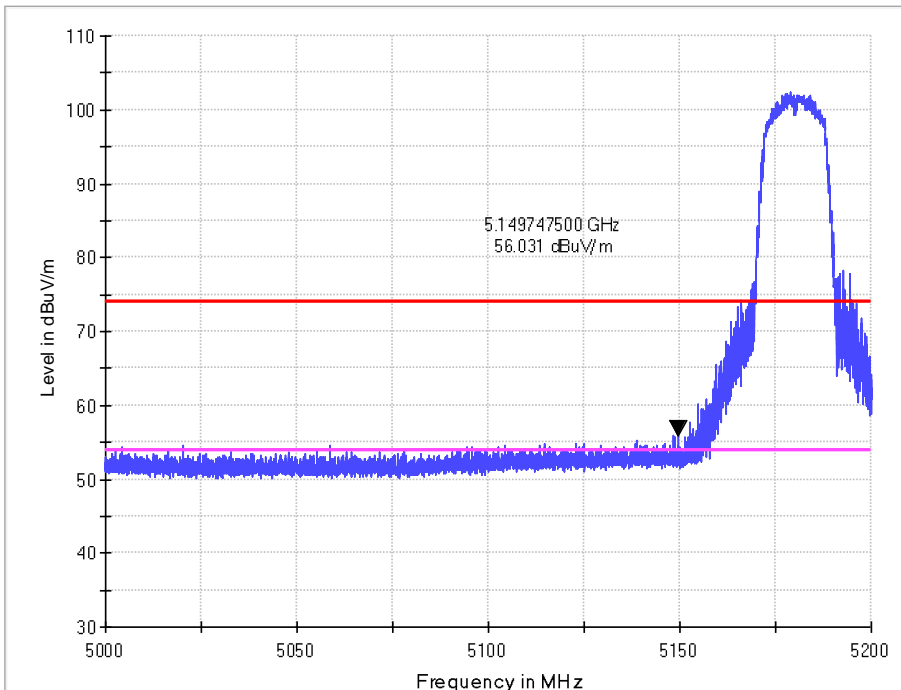
CH36

PK

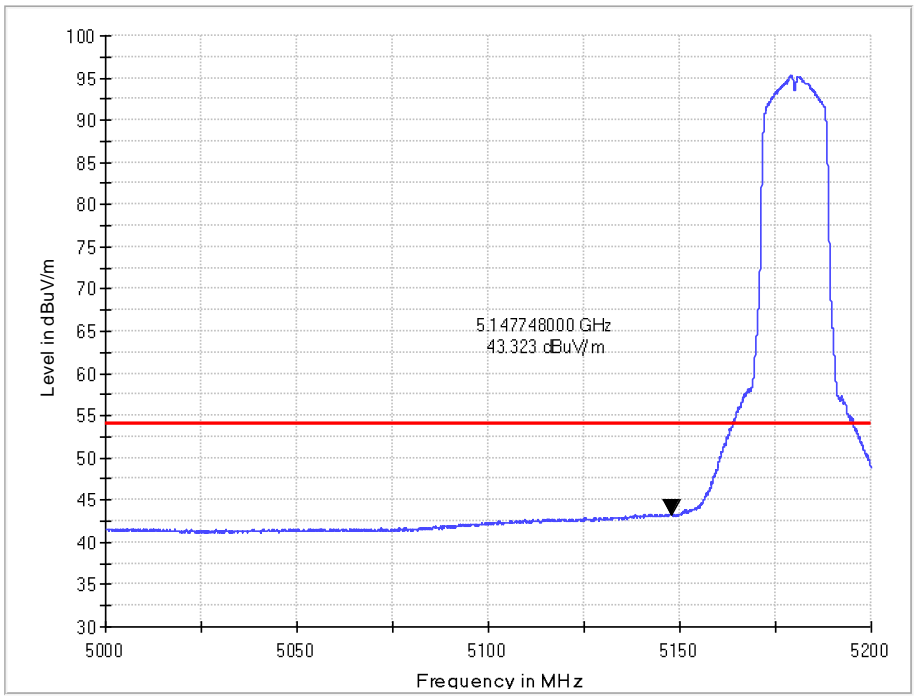
Horizontal



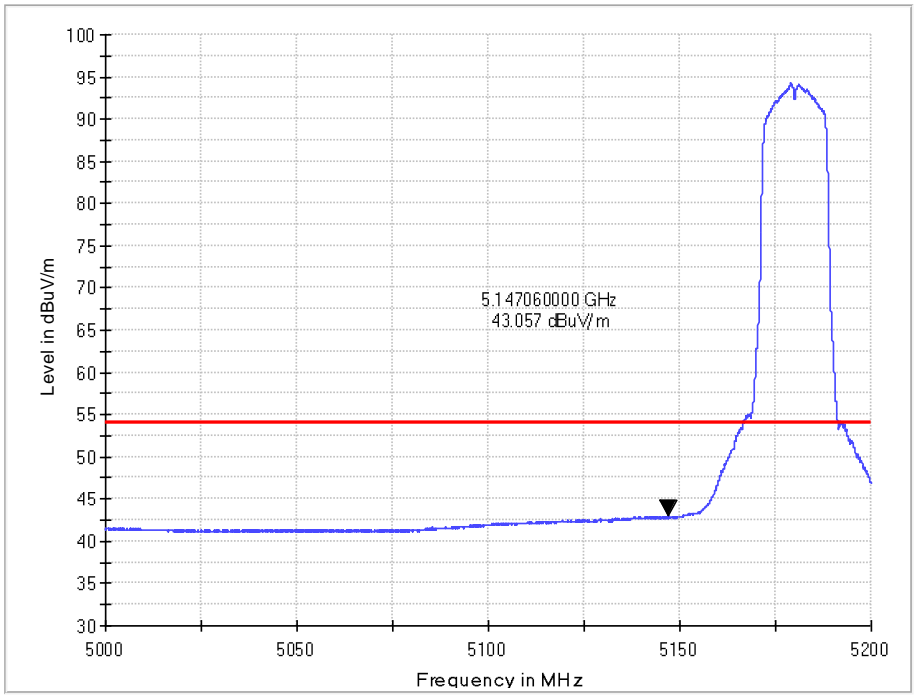
Vertical



AV
Horizontal



Vertical



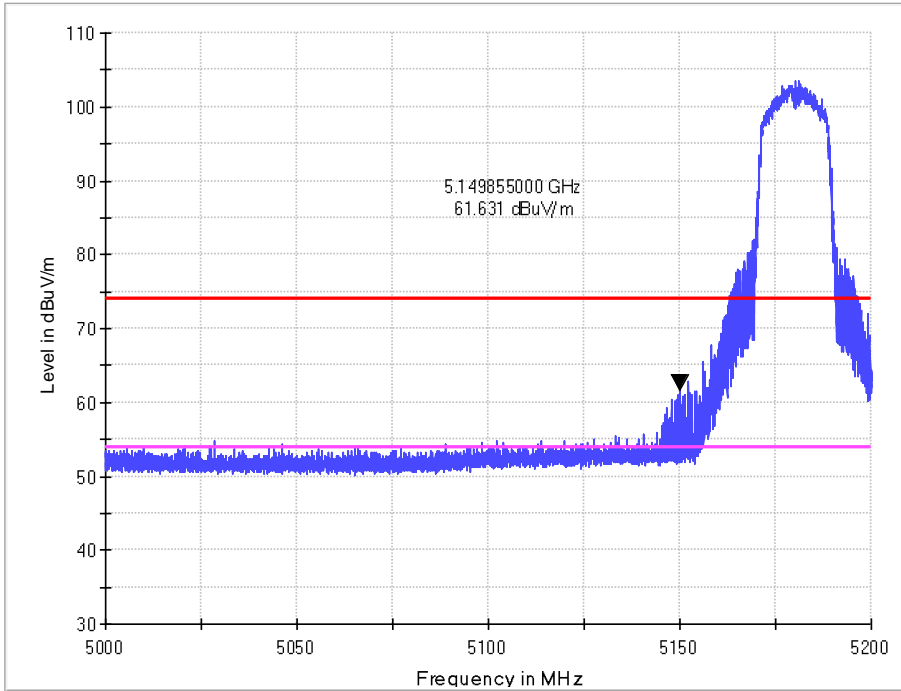
Band edge

11n HT20 IN THE 5.2GHz BAND

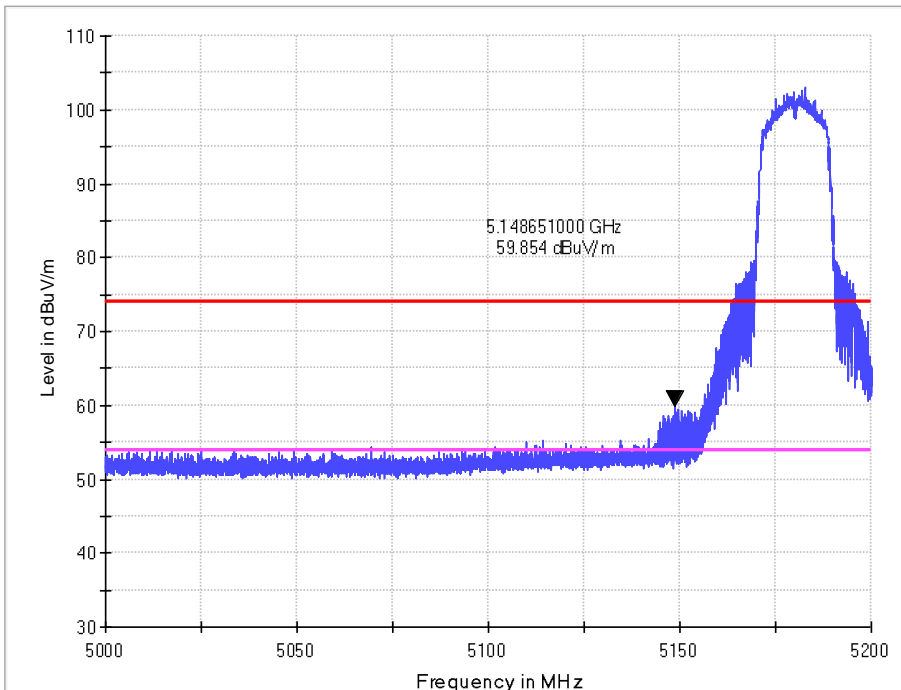
CH36

PK

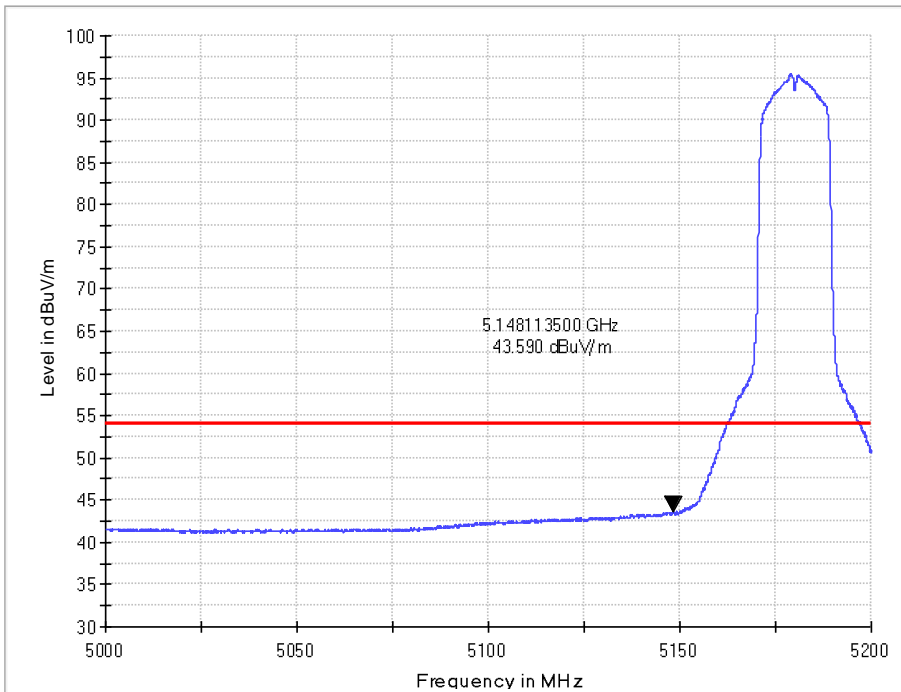
Horizontal



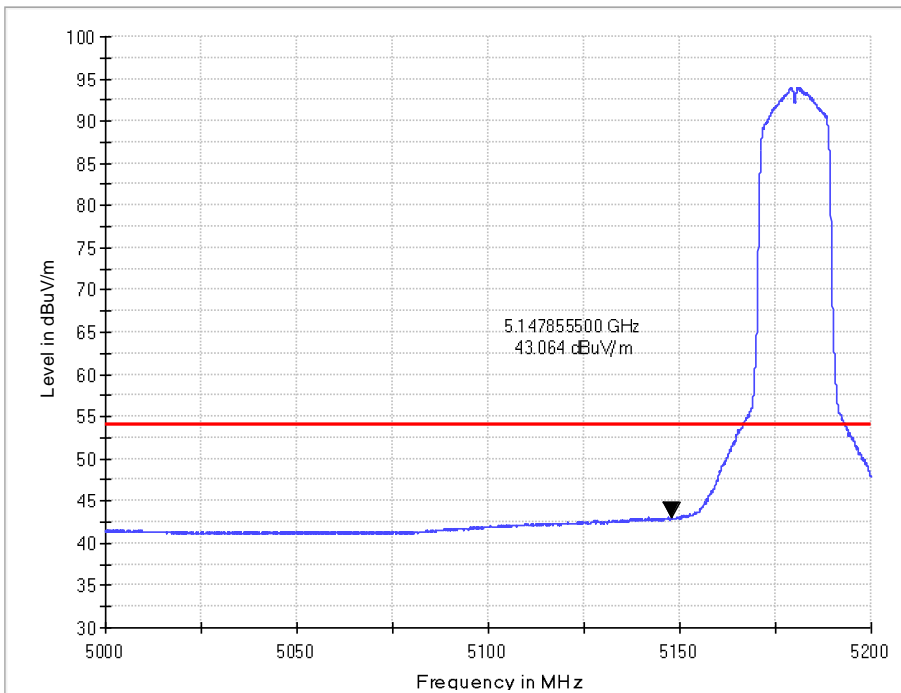
Vertical



AV
Horizontal

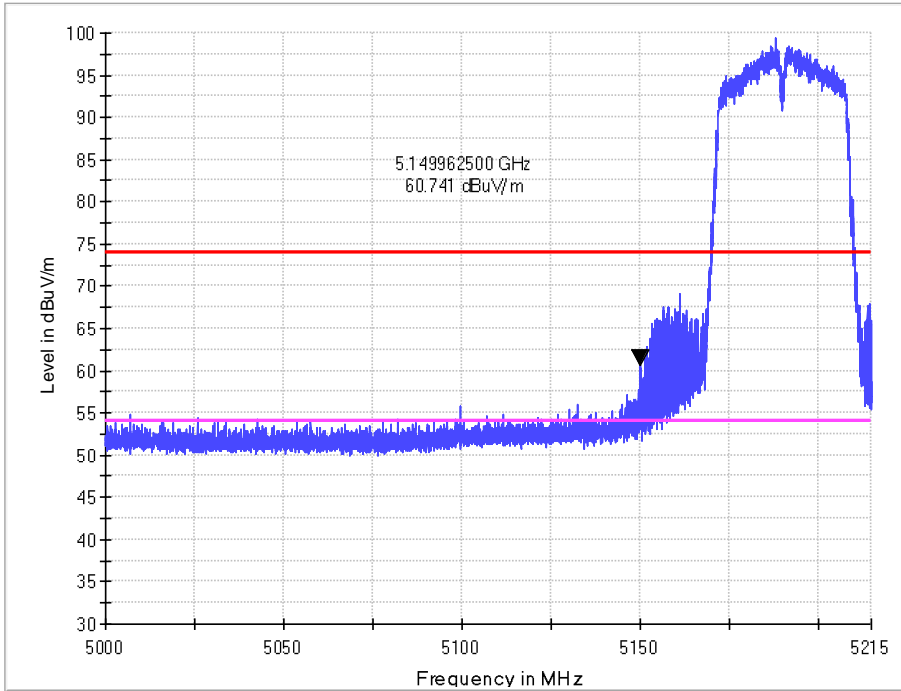


Vertical

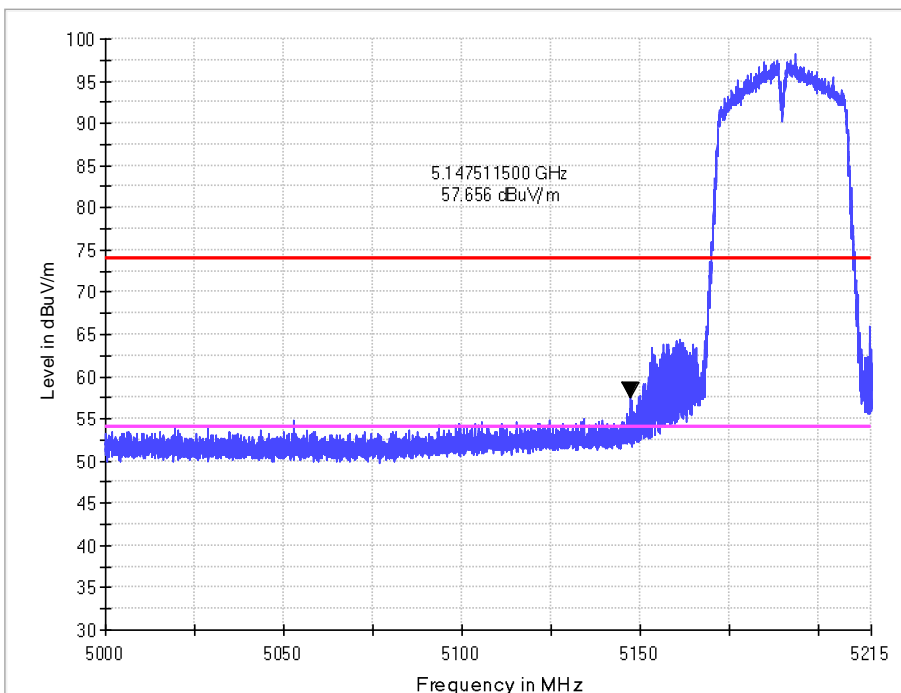


Band edge

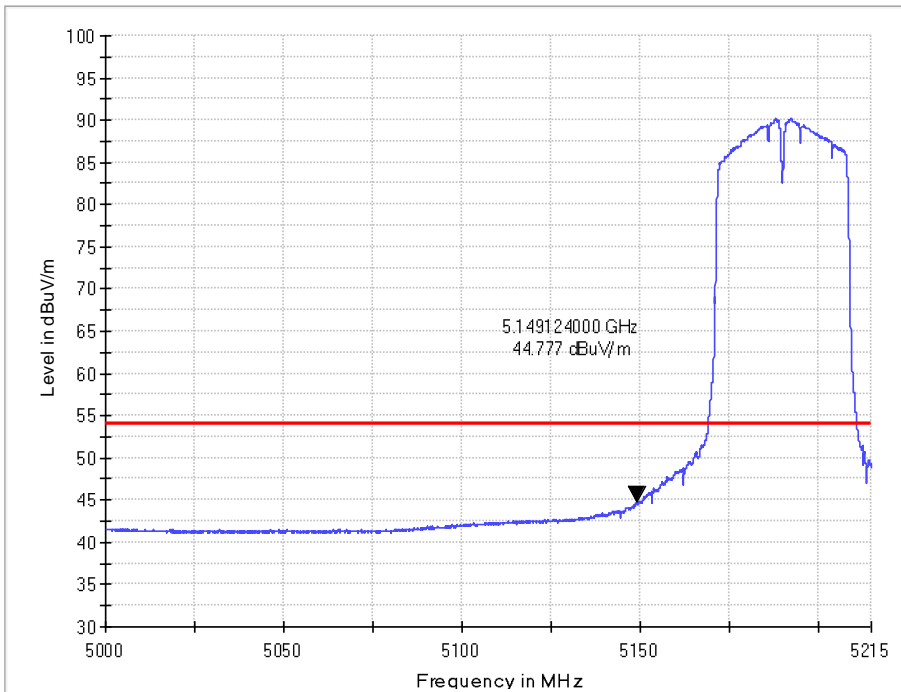
11n HT40 IN THE 5.2GHz BAND
CH38
PK
Horizontal



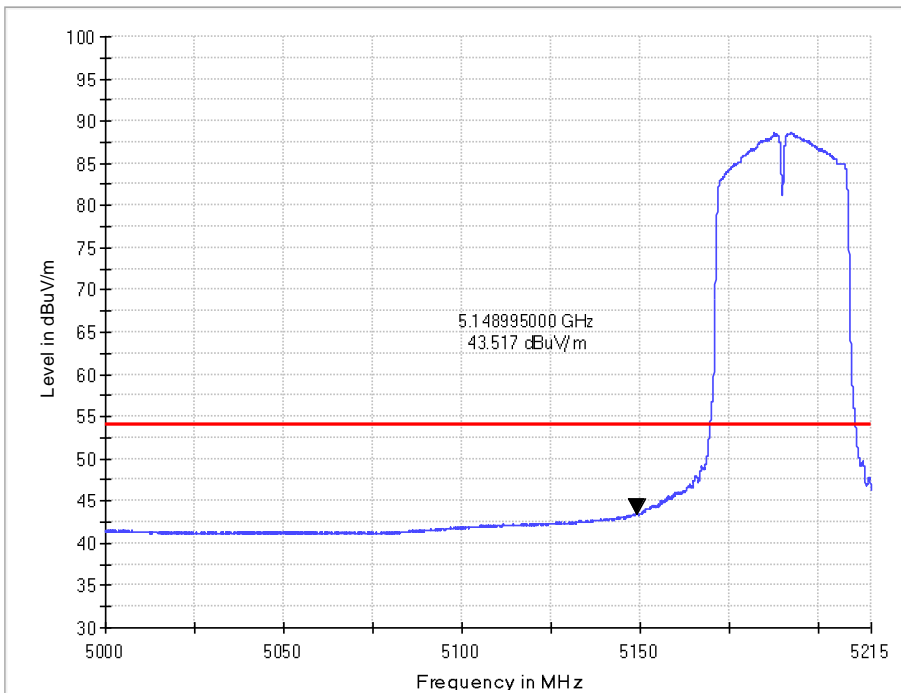
Vertical



AV
Horizontal

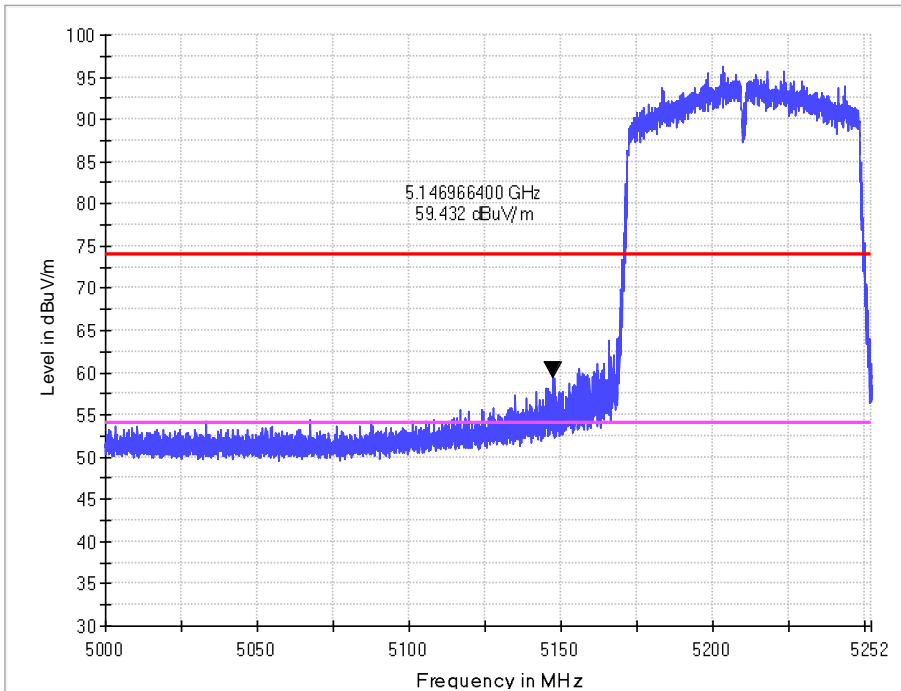


Vertical

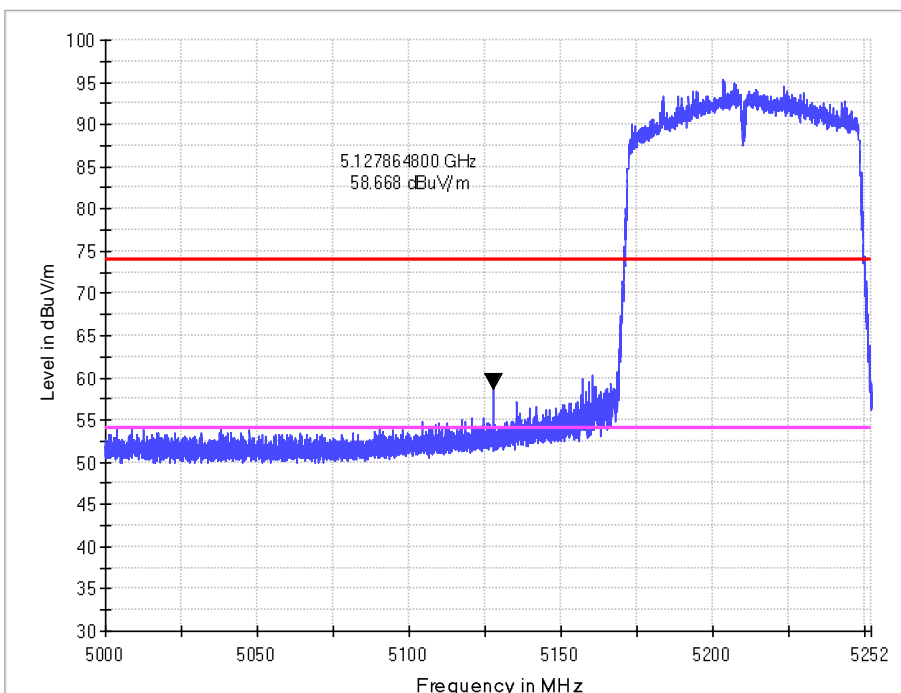


Band edge

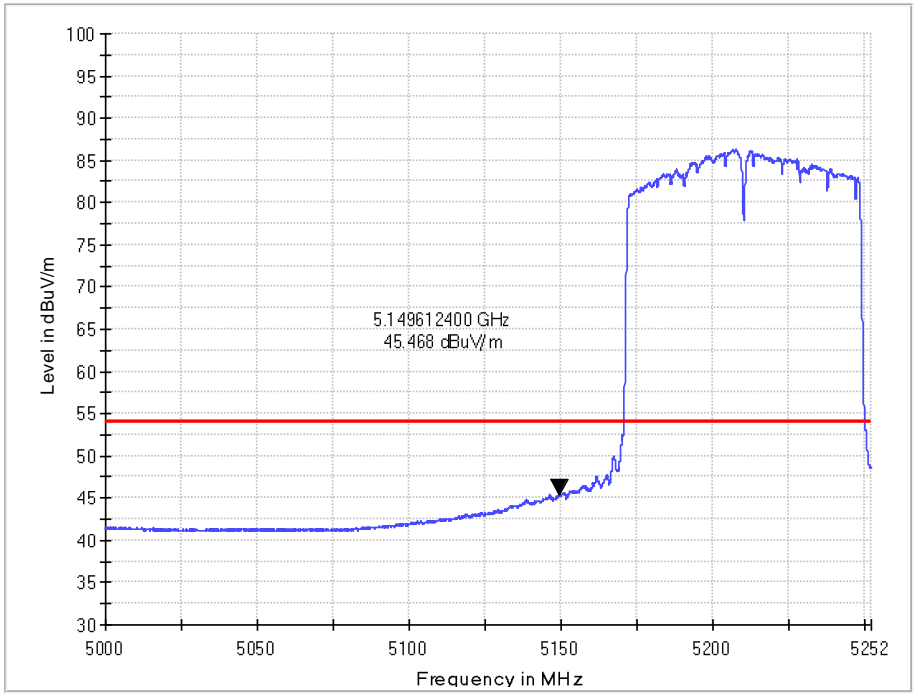
11ac VHT80 IN THE 5.2GHz BAND
CH42
PK
Horizontal



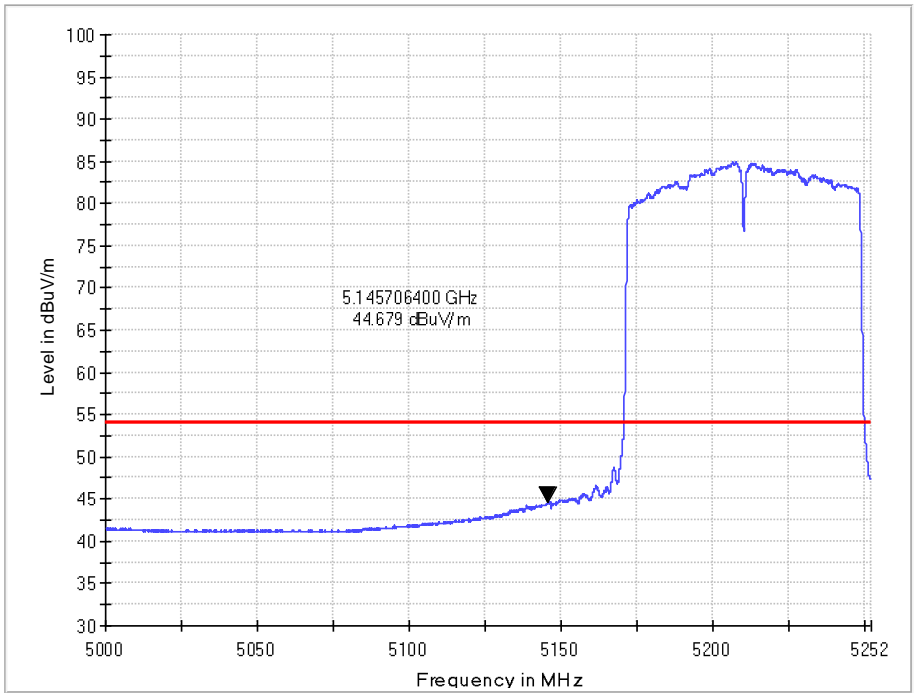
Vertical



AV
Horizontal



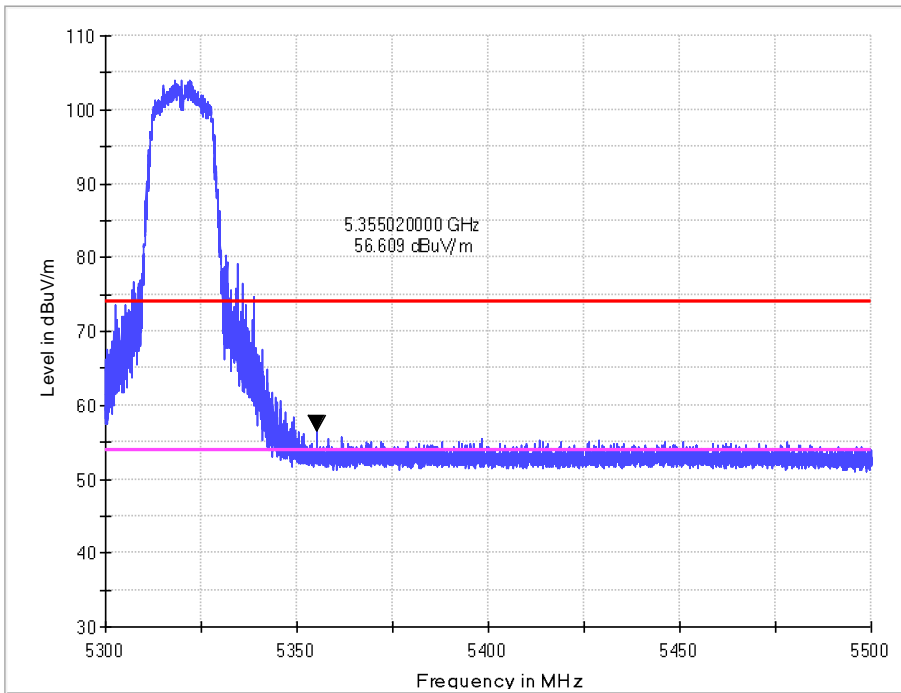
Vertical



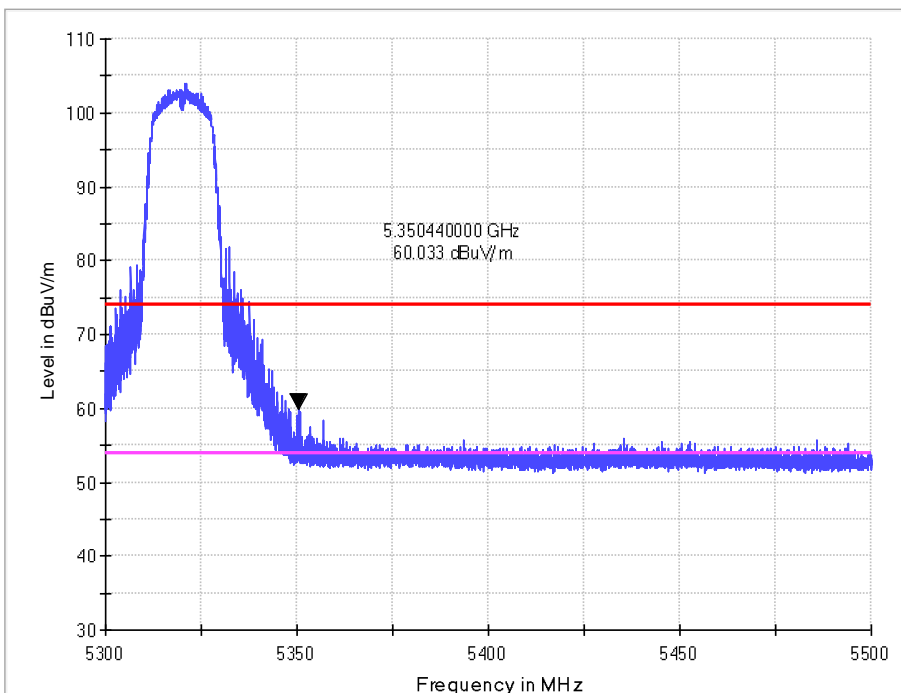
Band edge

11a IN THE 5.3GHz BAND
CH64

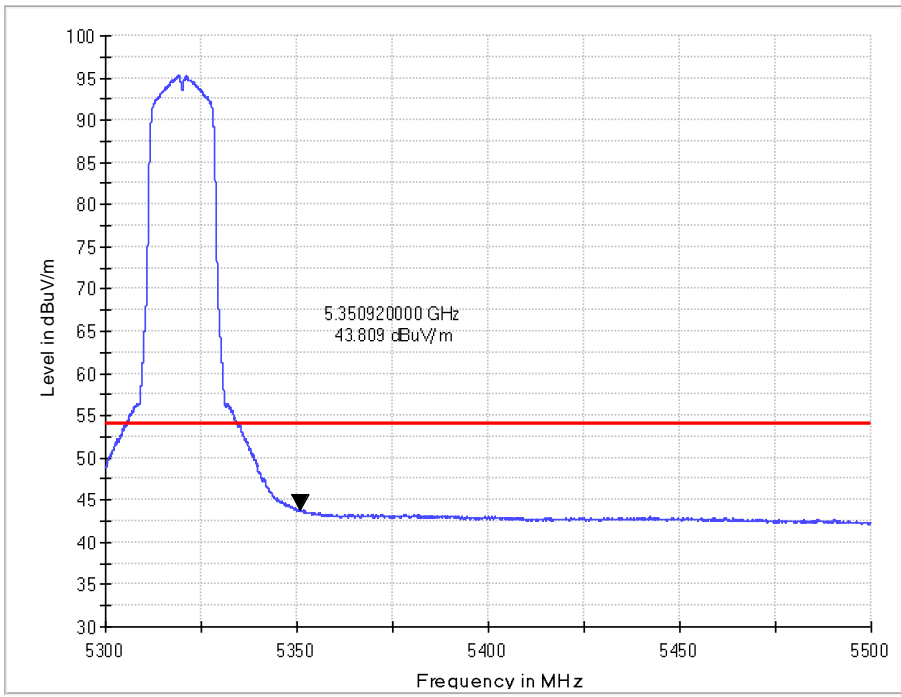
PK
Horizontal



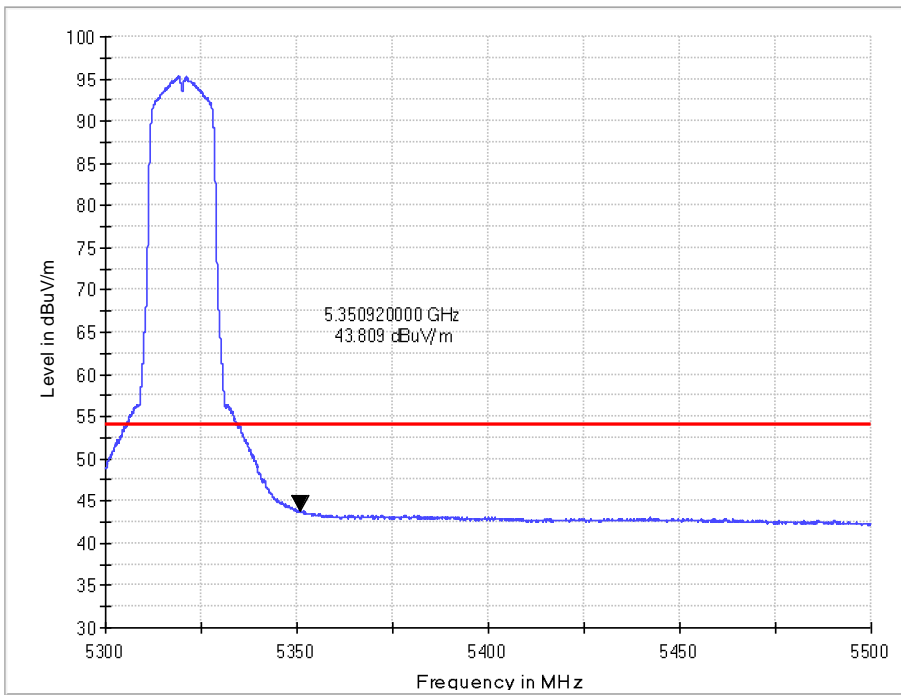
Vertical



AV
Horizontal



Vertical



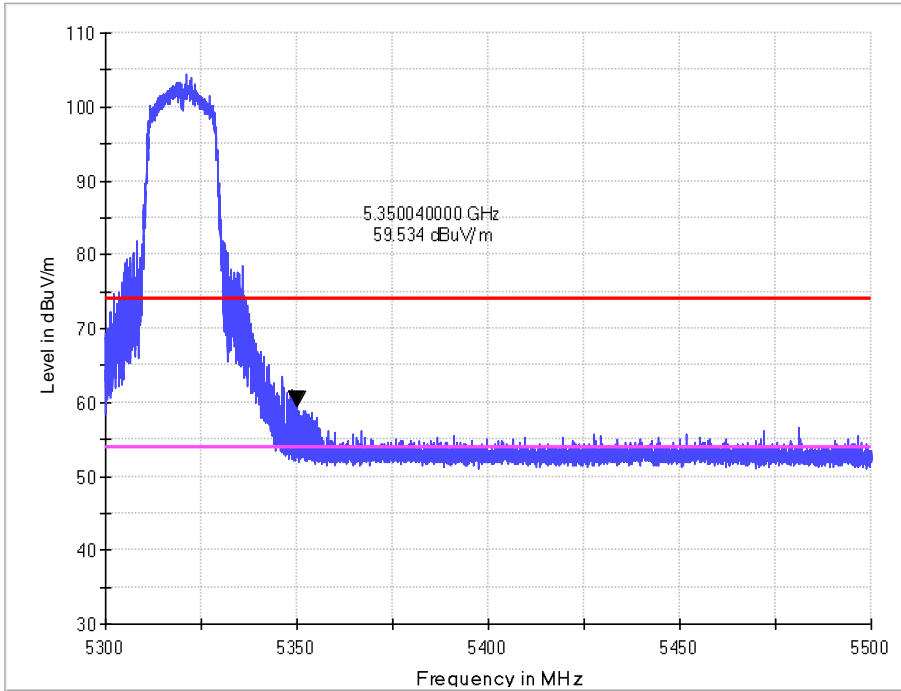
Band edge

11n HT20 IN THE 5.3GHz BAND

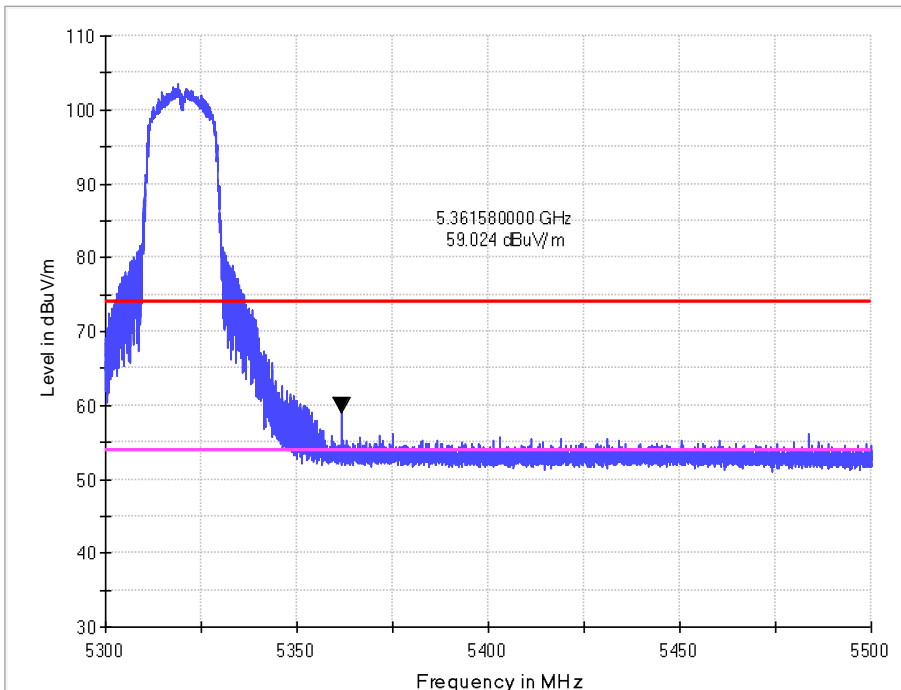
CH64

PK

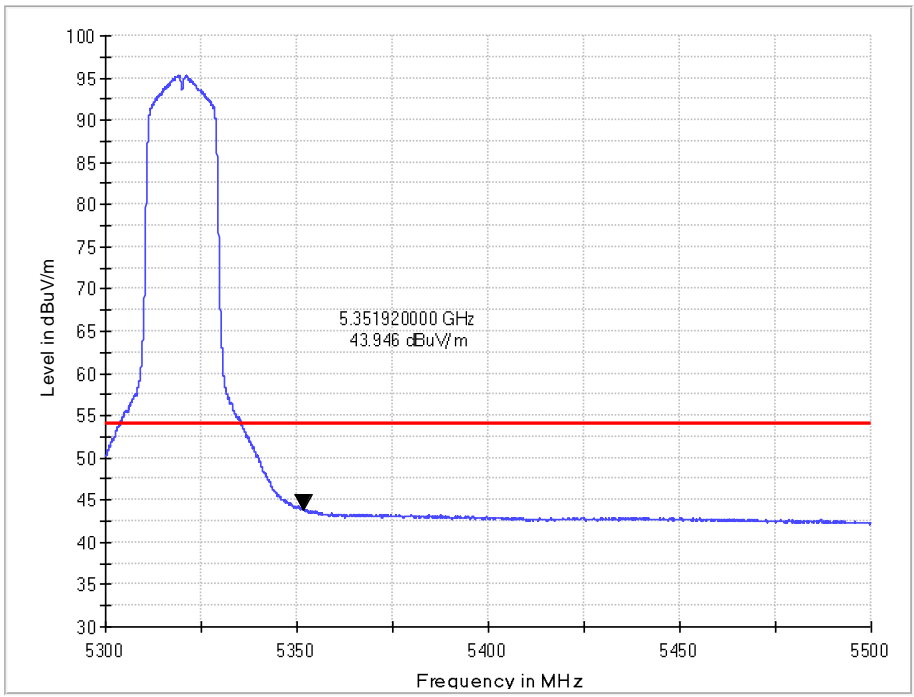
Horizontal



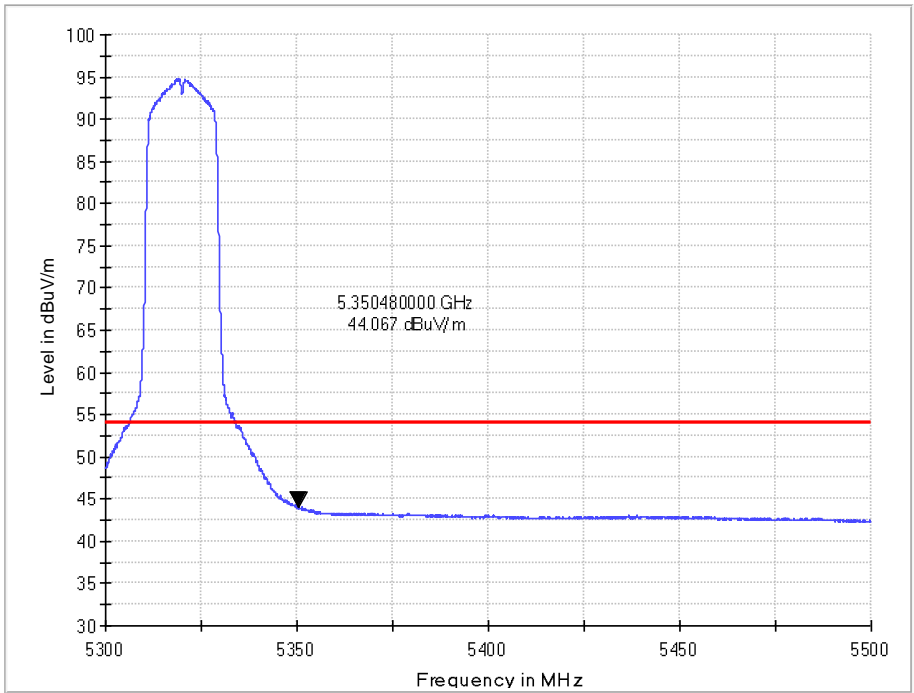
Vertical



AV
Horizontal



Vertical



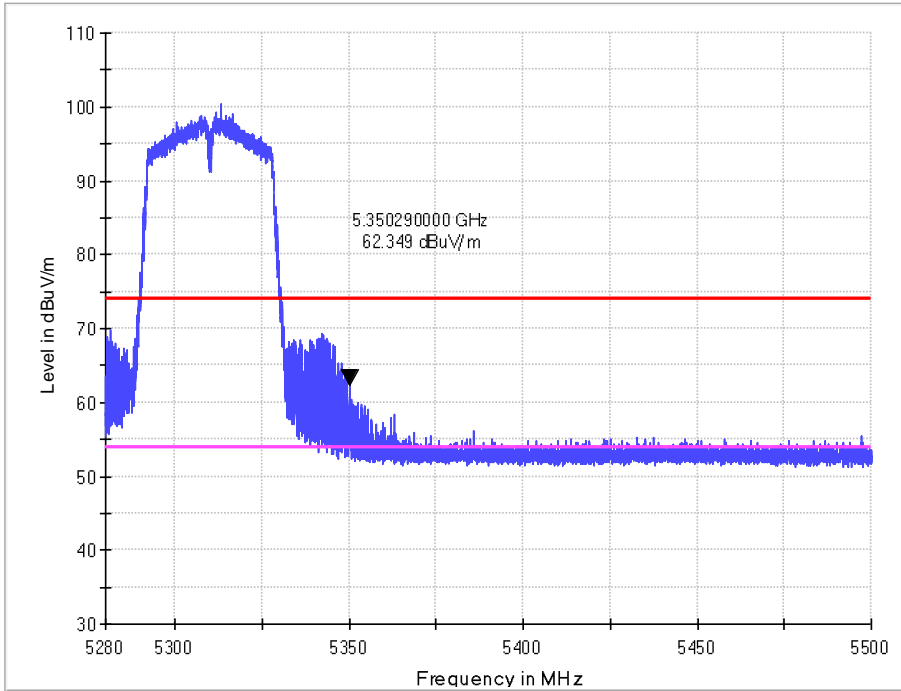
Band edge

11n HT40 IN THE 5.3GHz BAND

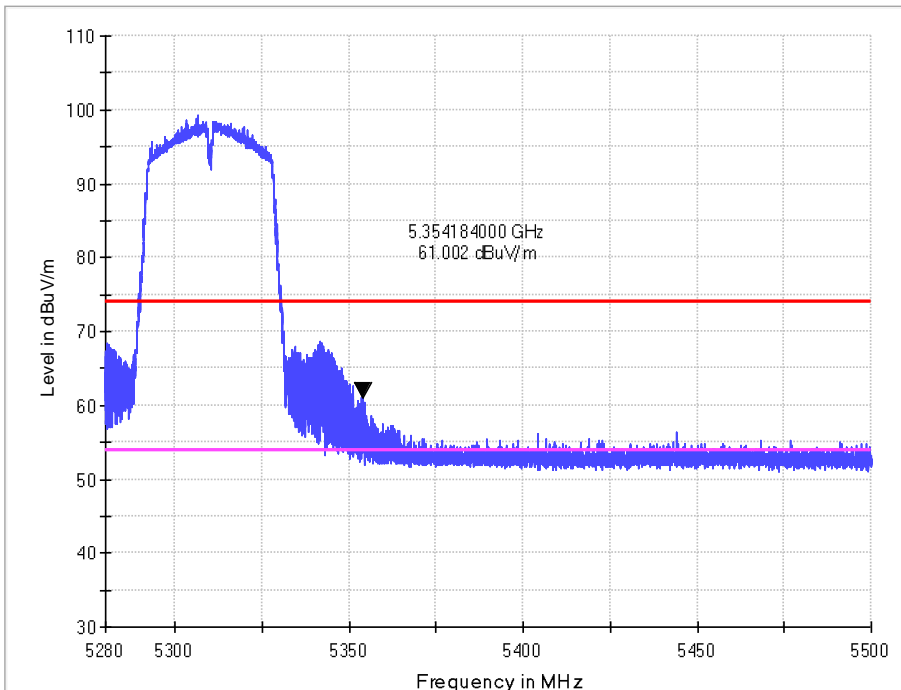
CH62

PK

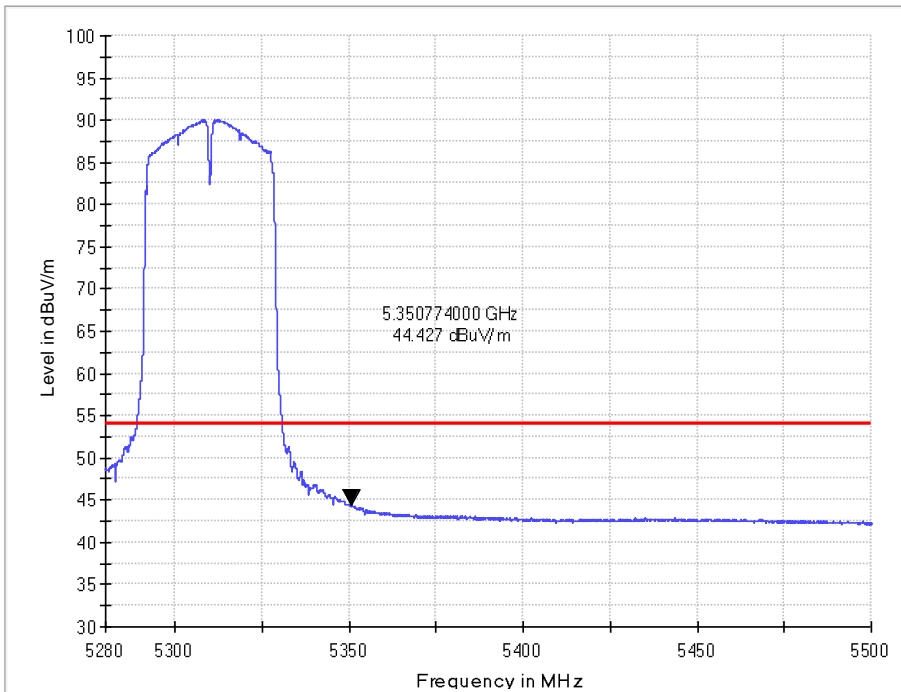
Horizontal



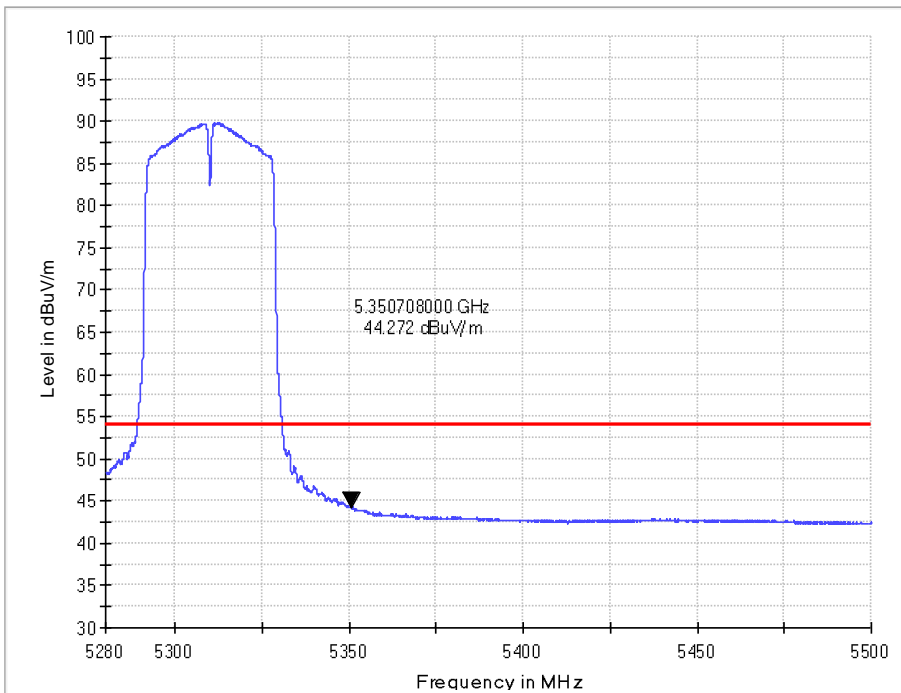
Vertical



AV
Horizontal



Vertical



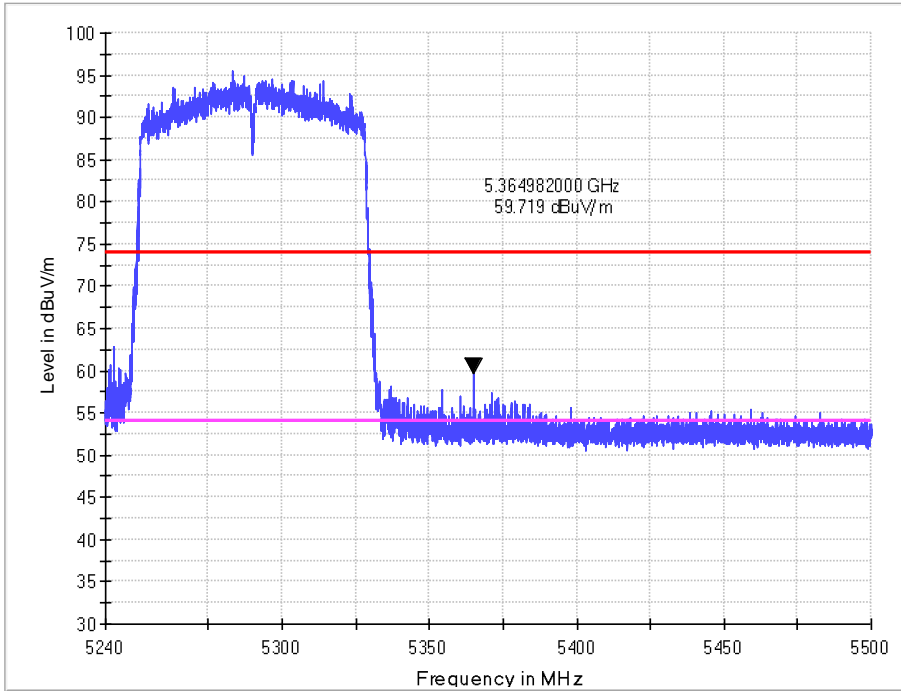
Band edge

11ac VHT80 IN THE 5.3GHz BAND

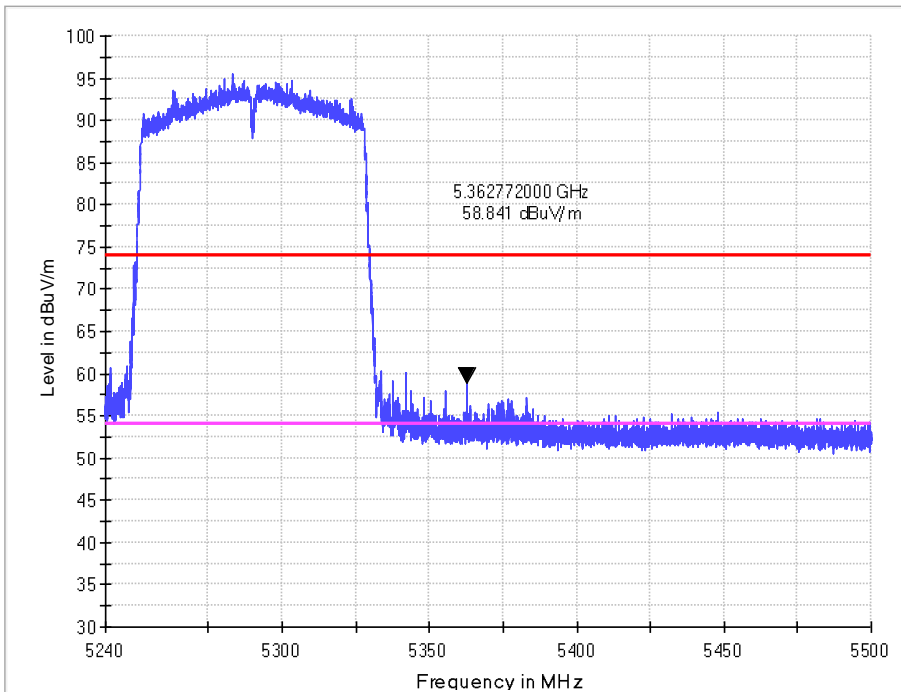
CH58

PK

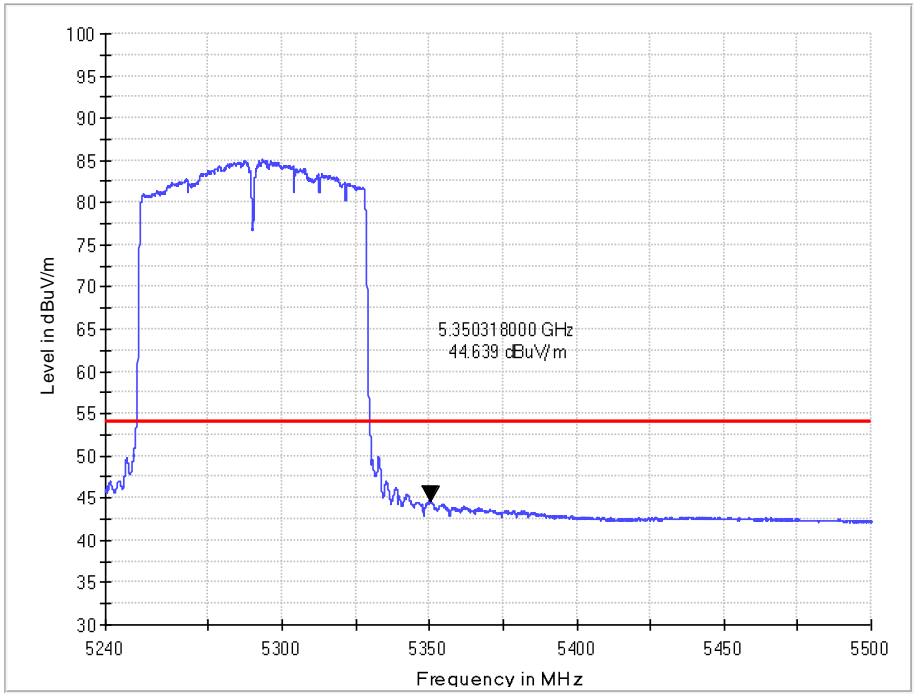
Horizontal



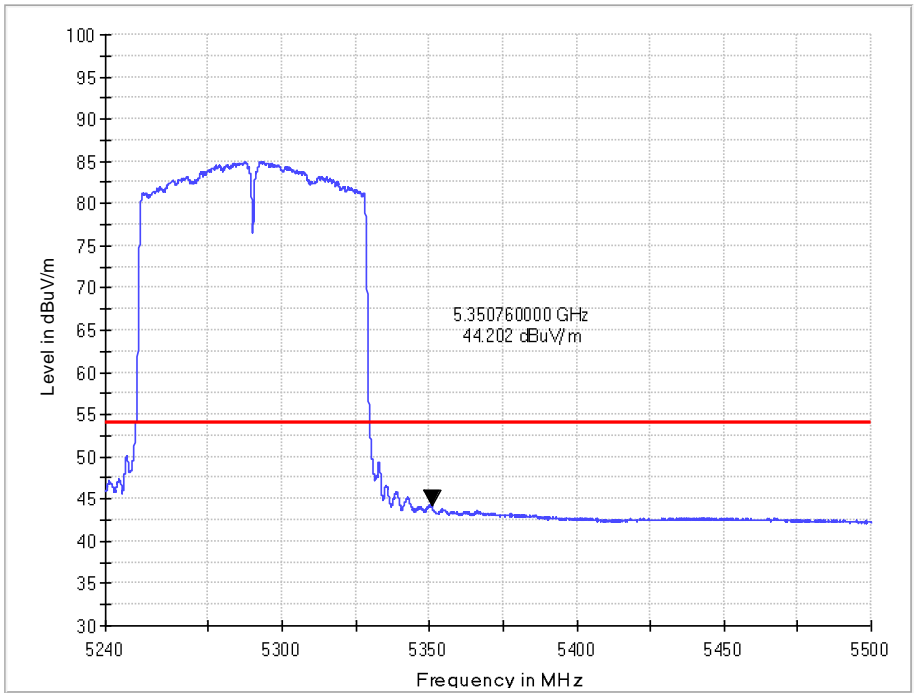
Vertical



AV
Horizontal



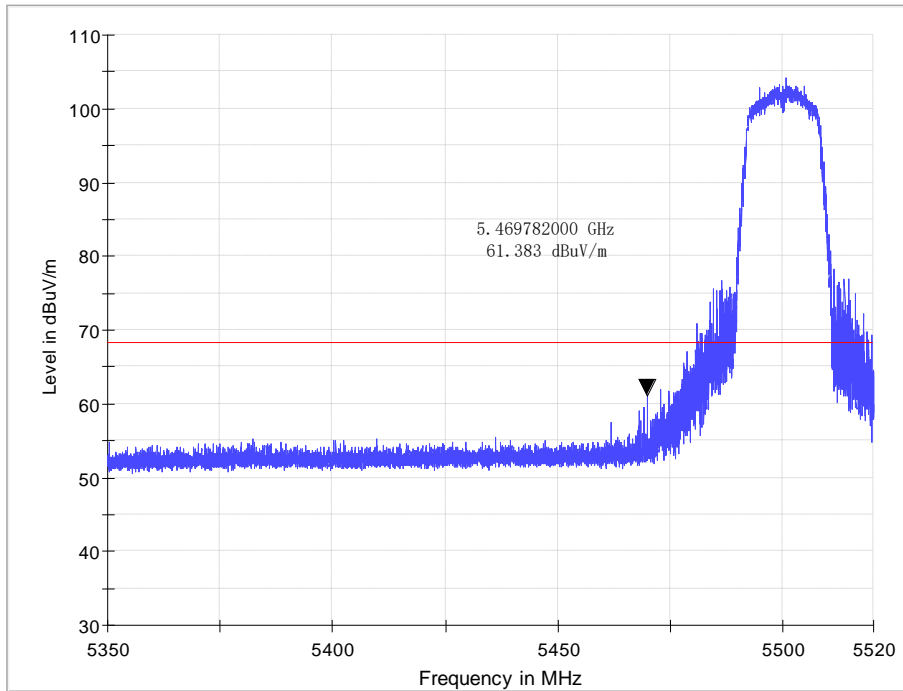
Vertical



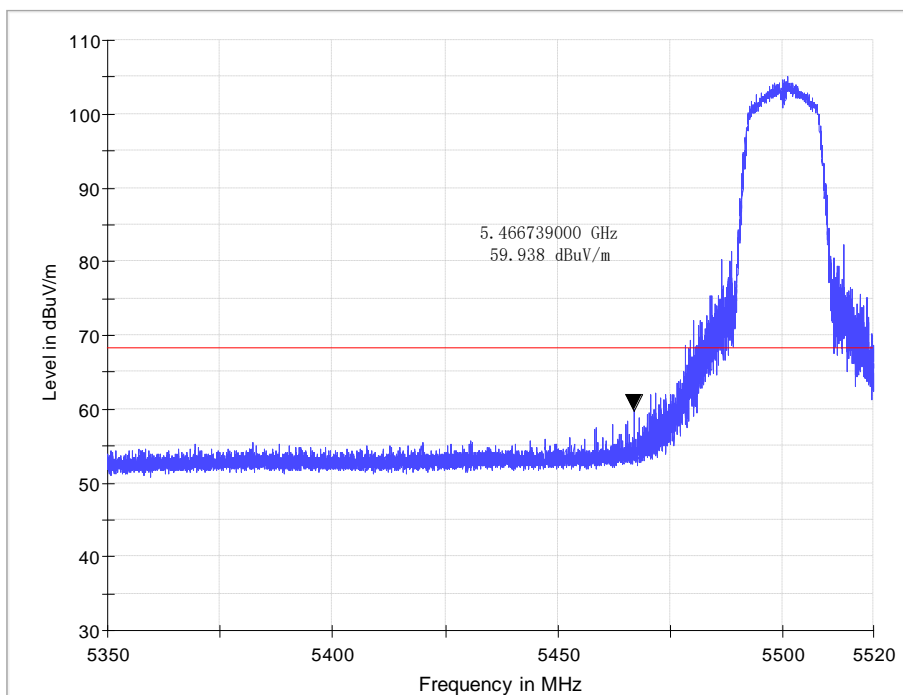
Band edge

11a IN THE 5.6GHz BAND
CH100

Horizontal



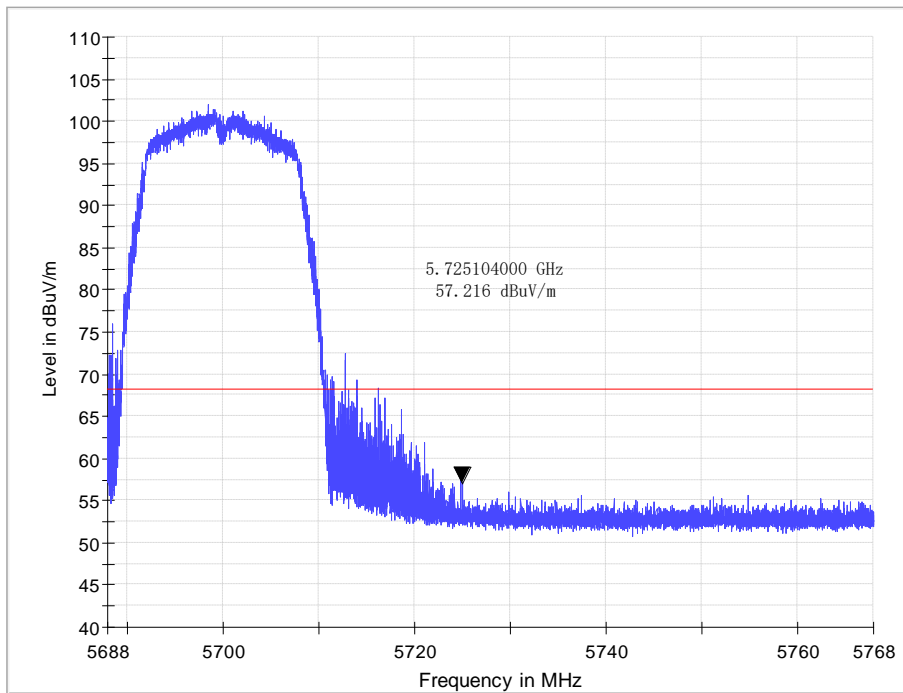
Vertical



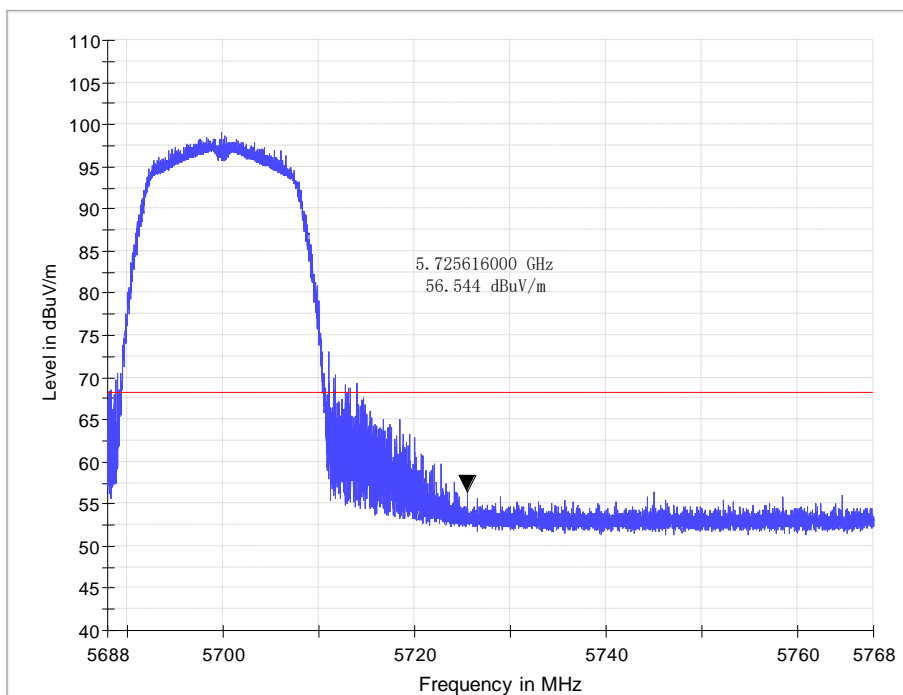
Band edge

11a IN THE 5.6GHz BAND
CH140

Horizontal



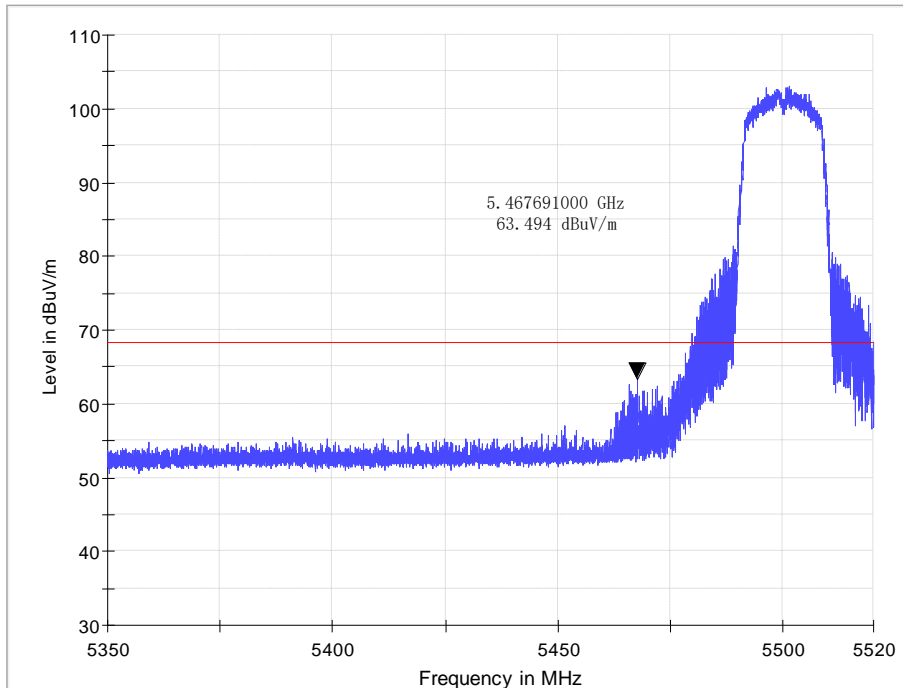
Vertical



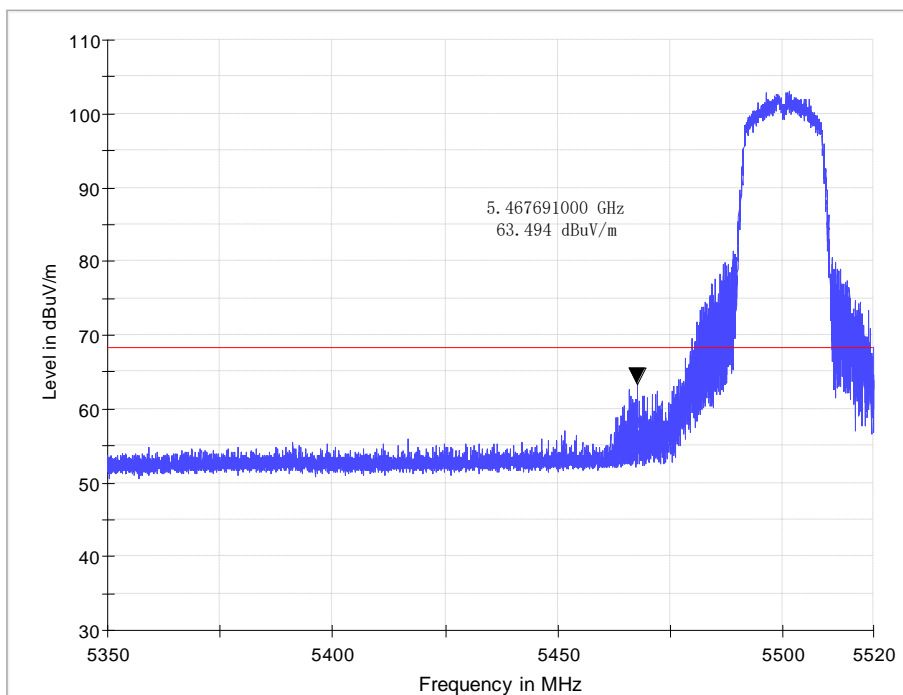
Band edge

11n HT20 IN THE 5.6GHz BAND
CH100

Horizontal



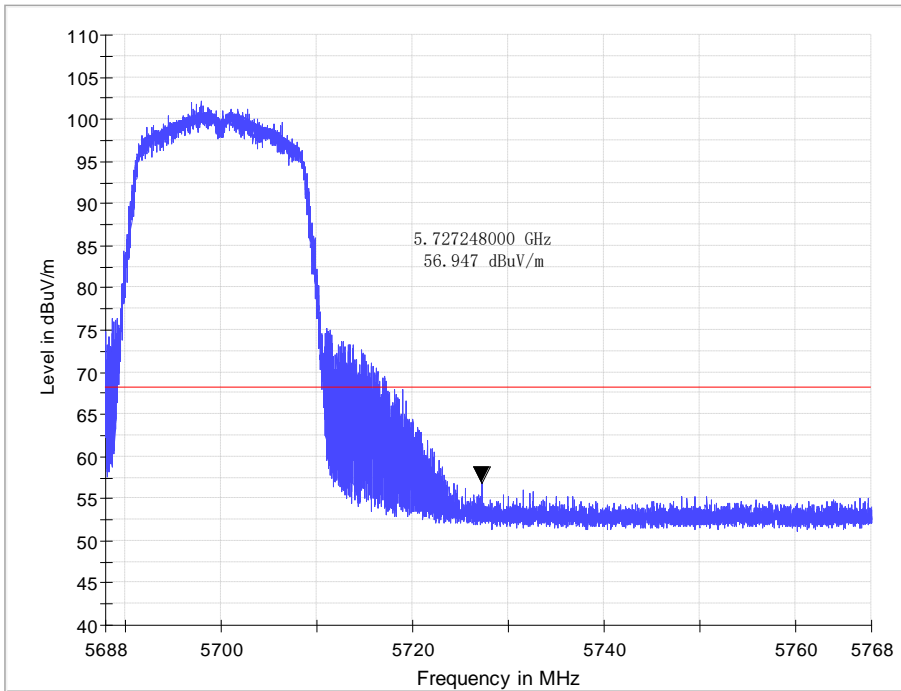
Vertical



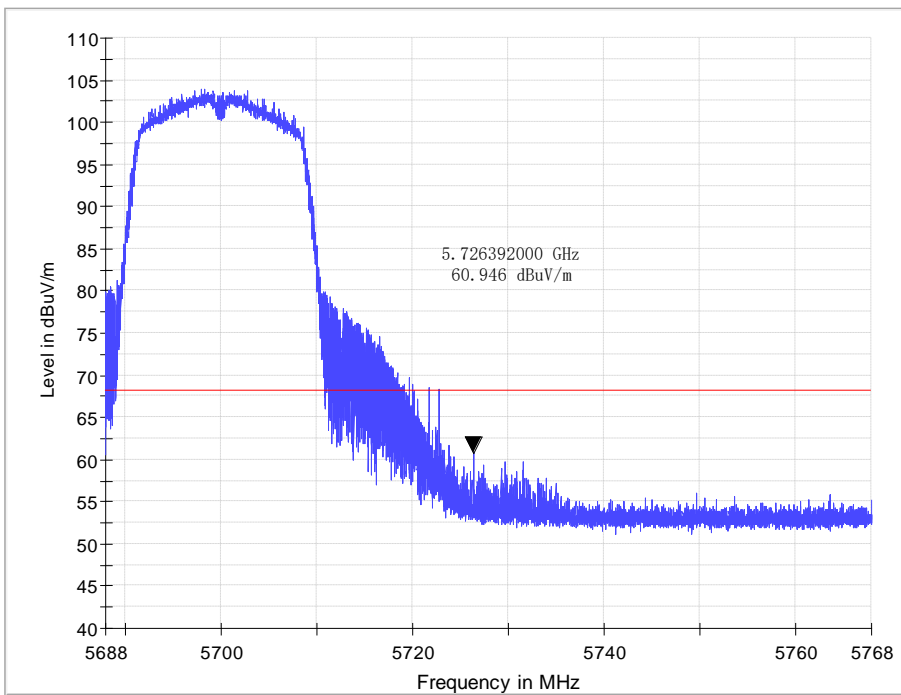
Band edge

11n HT20 IN THE 5.6GHz BAND
CH140

Horizontal



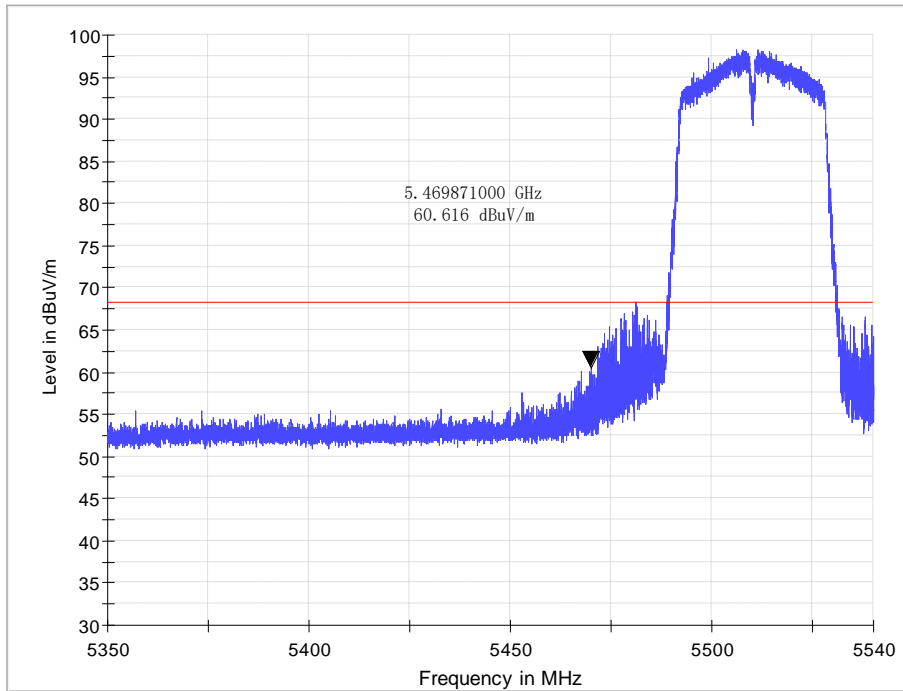
Vertical



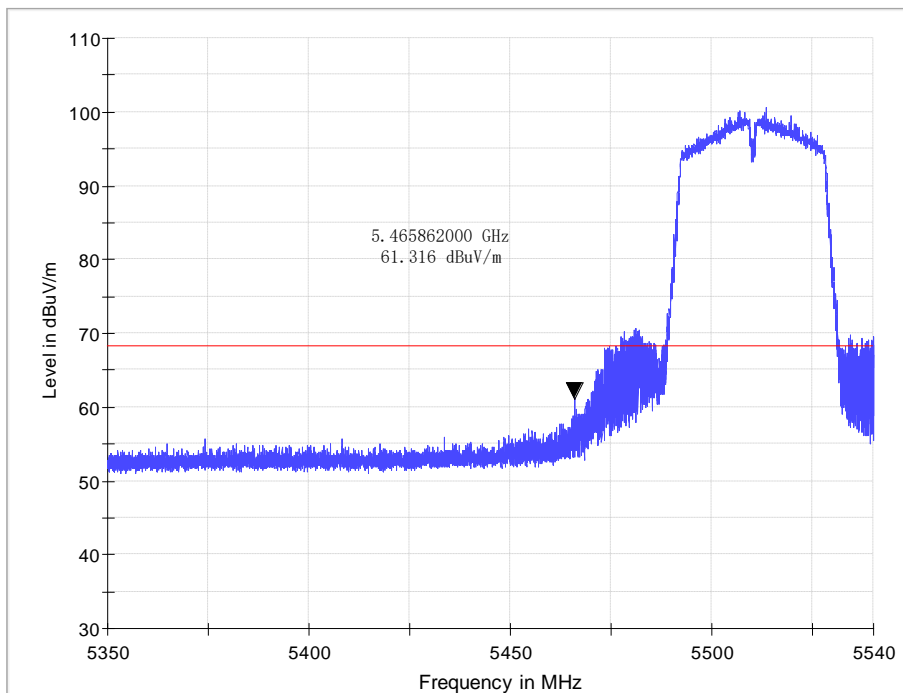
Band edge

11n HT40 IN THE 5.6GHz BAND
CH102

Horizontal



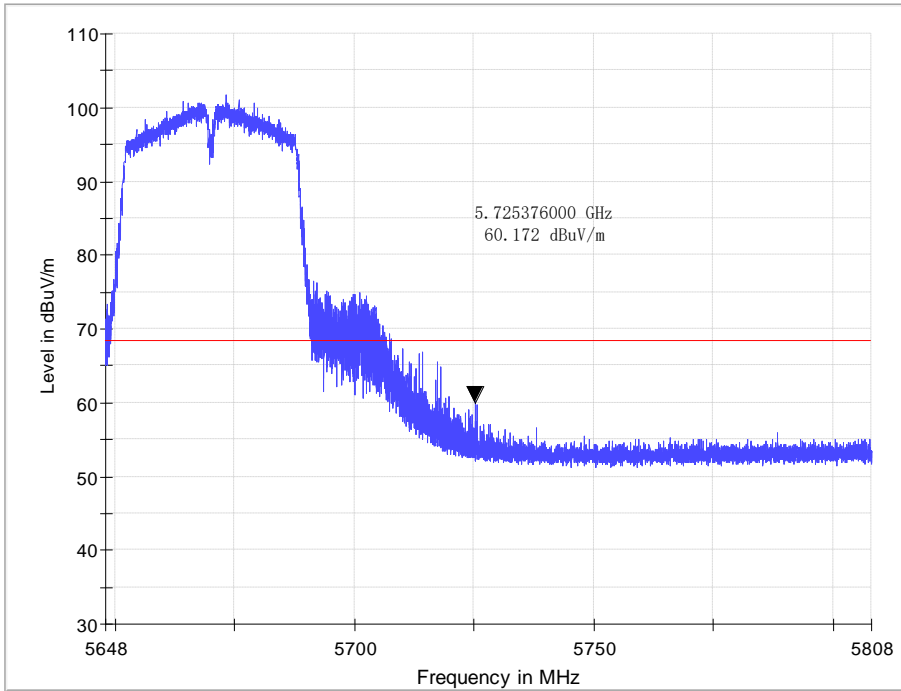
Vertical



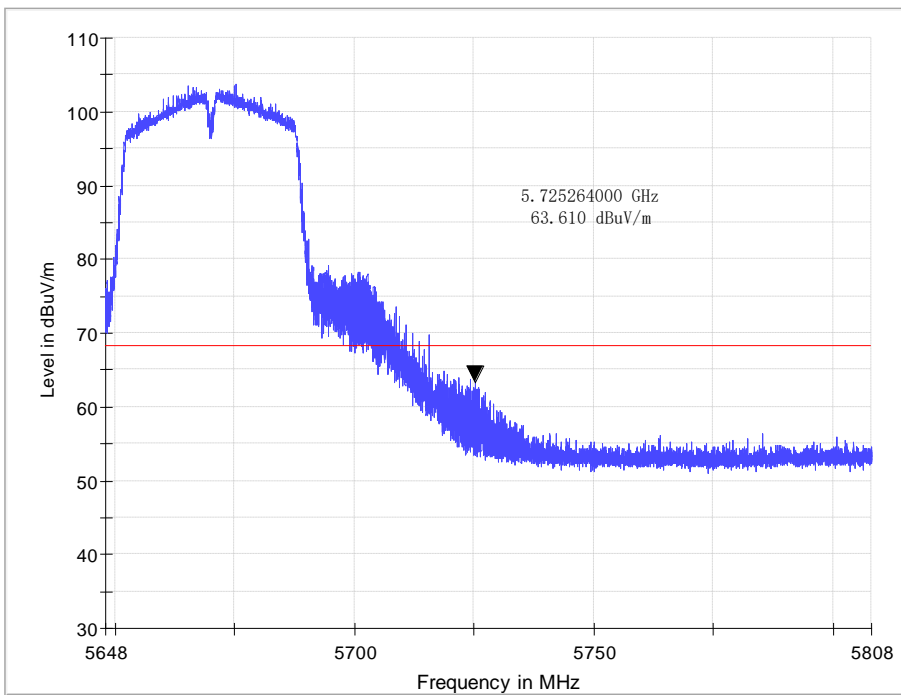
Band edge

11n HT40 IN THE 5.6GHz BAND
CH134

Horizontal



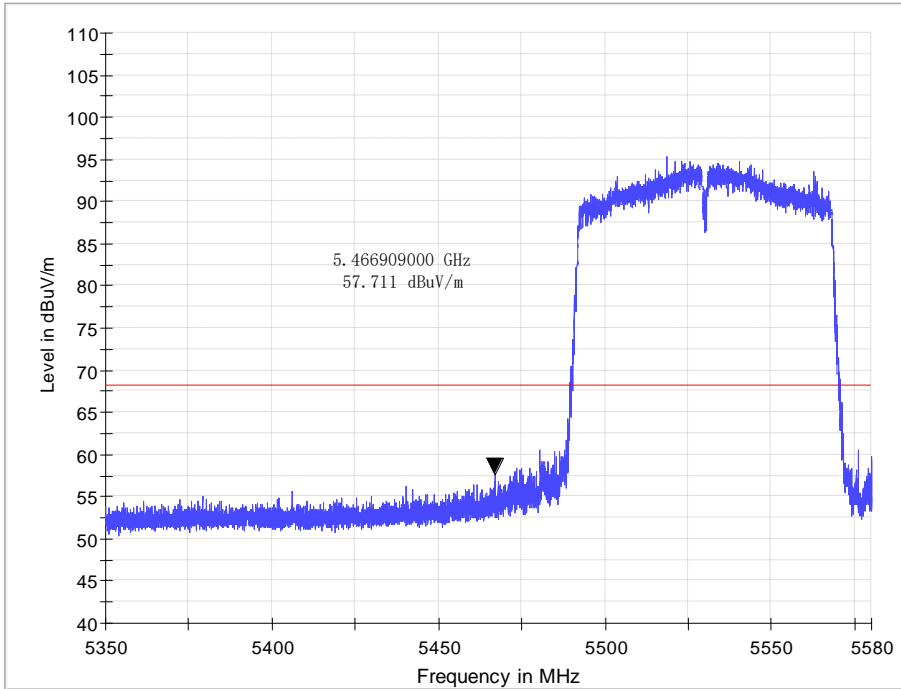
Vertical



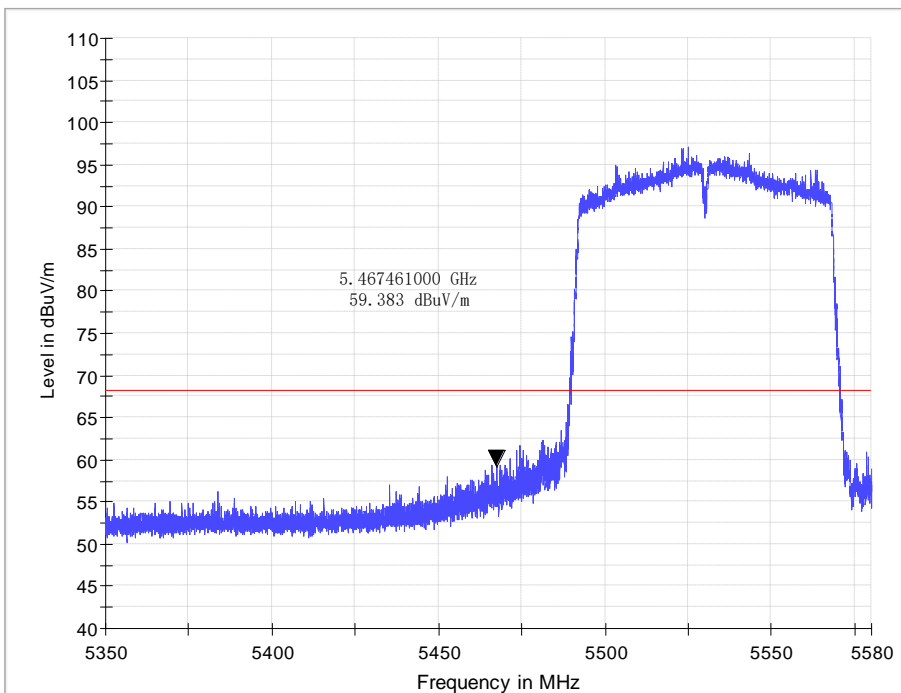
Band edge

11ac VHT80 IN THE 5.6GHz BAND
CH106

Horizontal



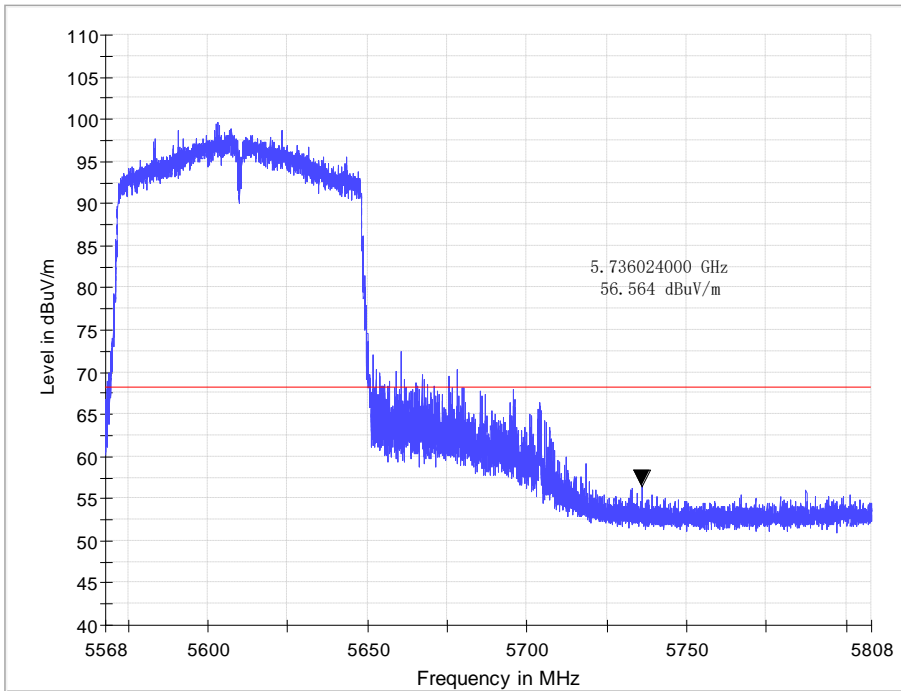
Vertical



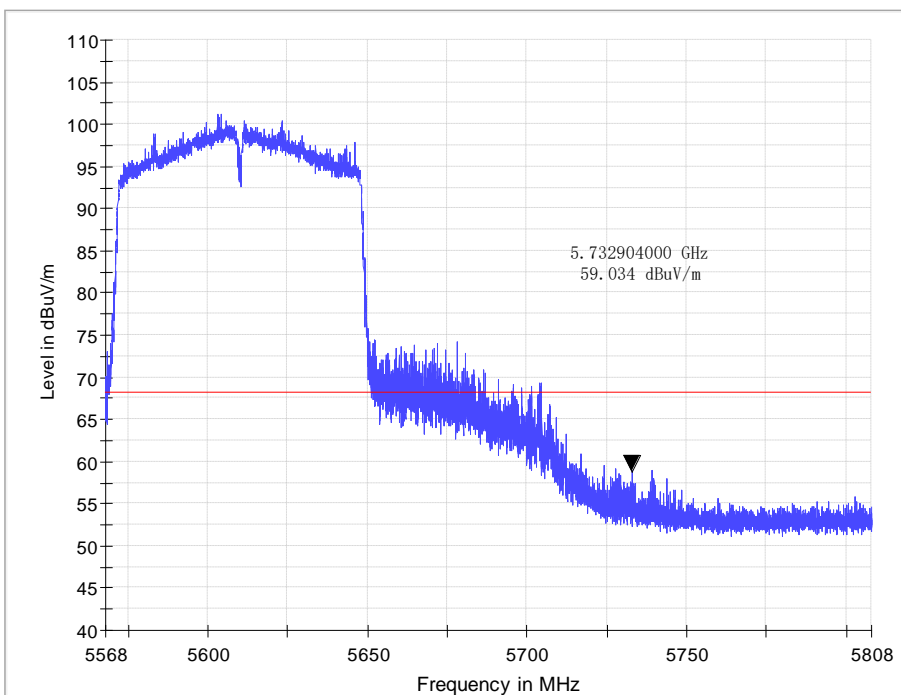
Band edge

11ac VHT80 IN THE 5.6GHz BAND
CH122

Horizontal



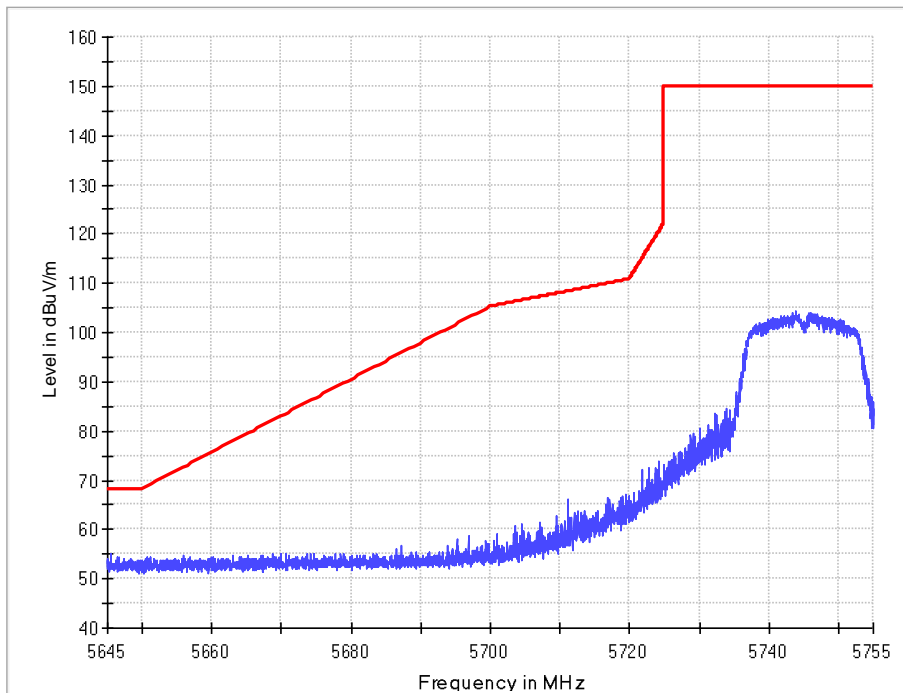
Vertical



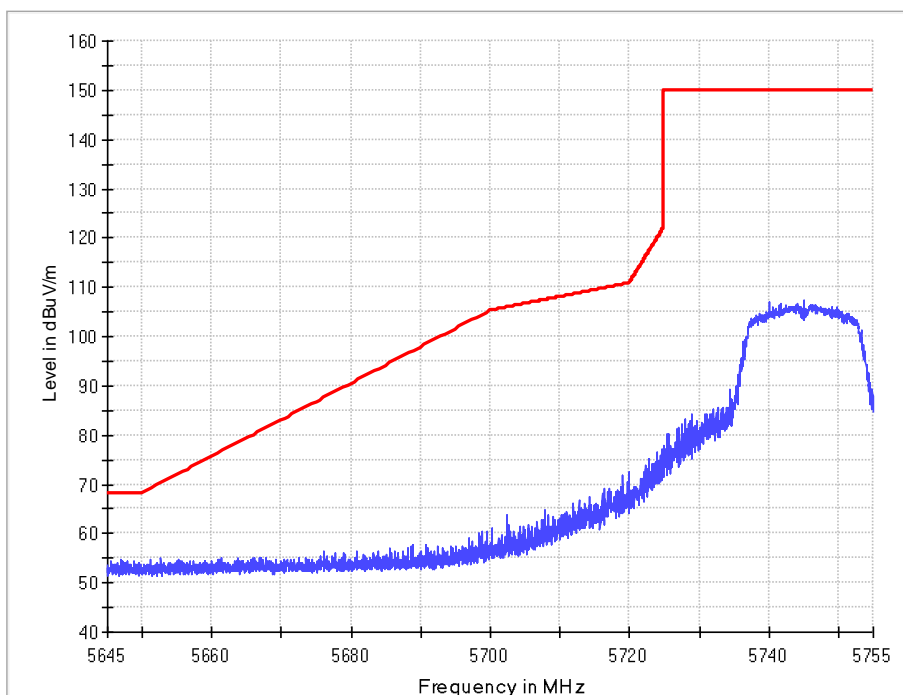
Band edge

11a IN THE 5.8GHz BAND
CH149

Horizontal



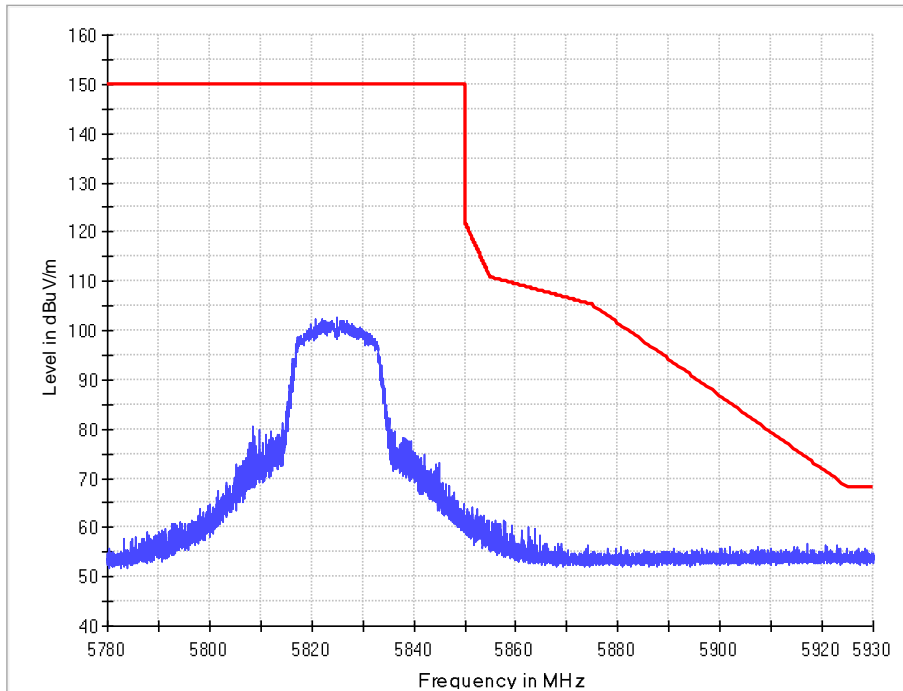
Vertical



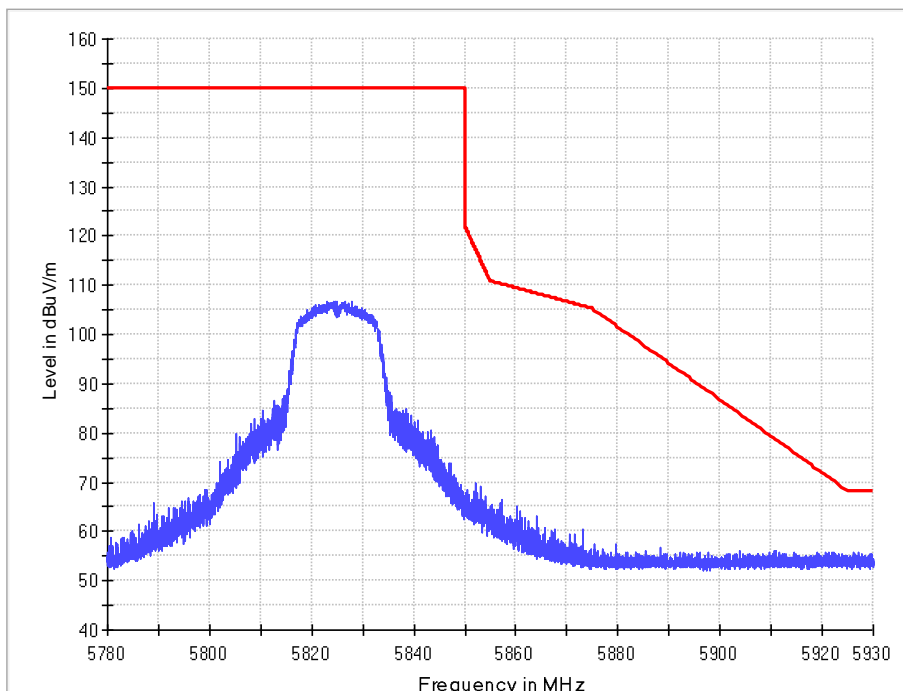
Band edge

11a IN THE 5.8GHz BAND
CH165

Horizontal



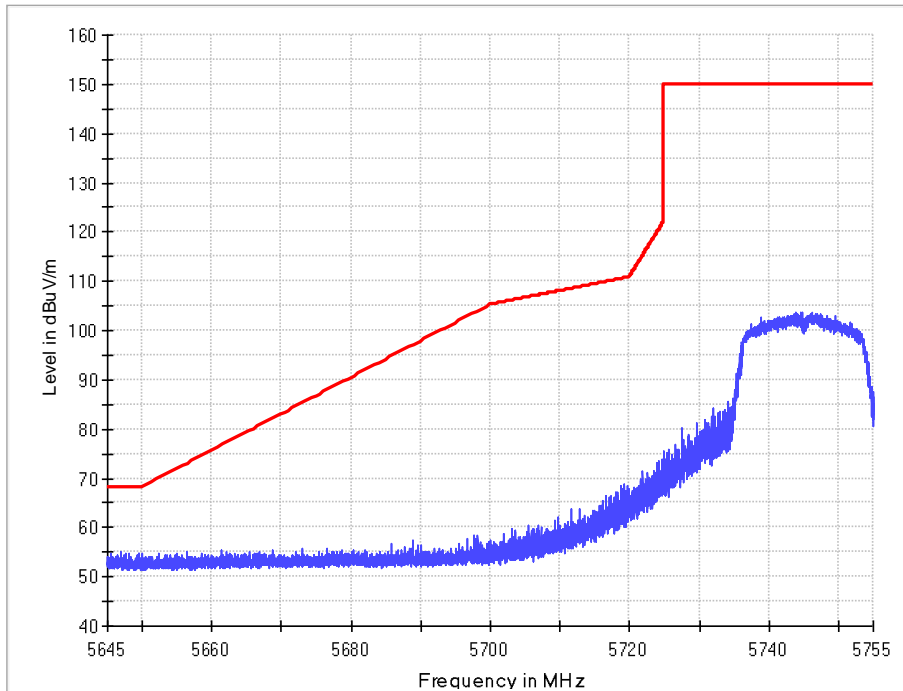
Vertical



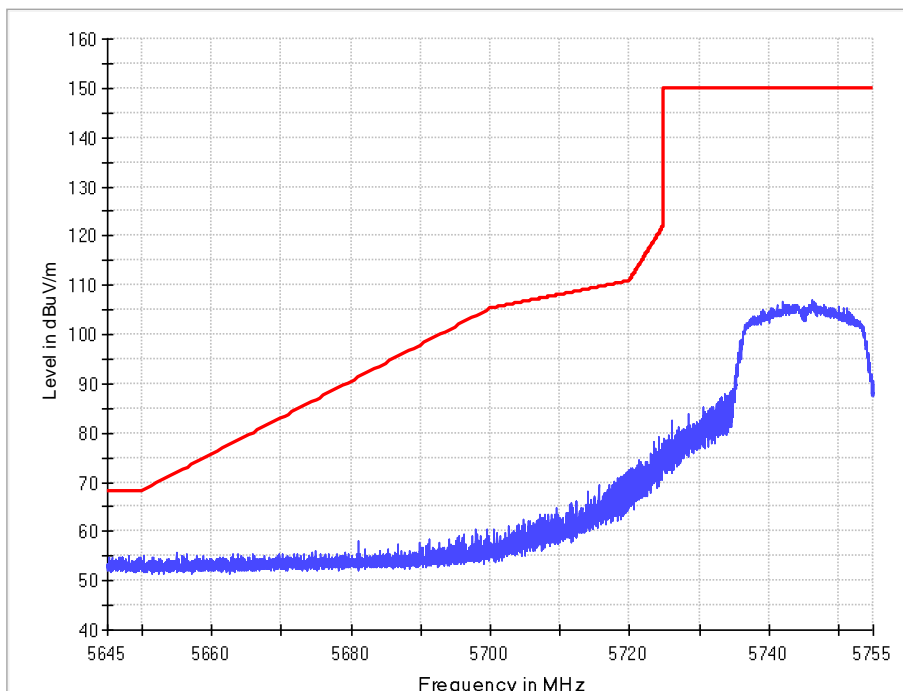
Band edge

11n HT20 IN THE 5.8GHz BAND
CH149

Horizontal



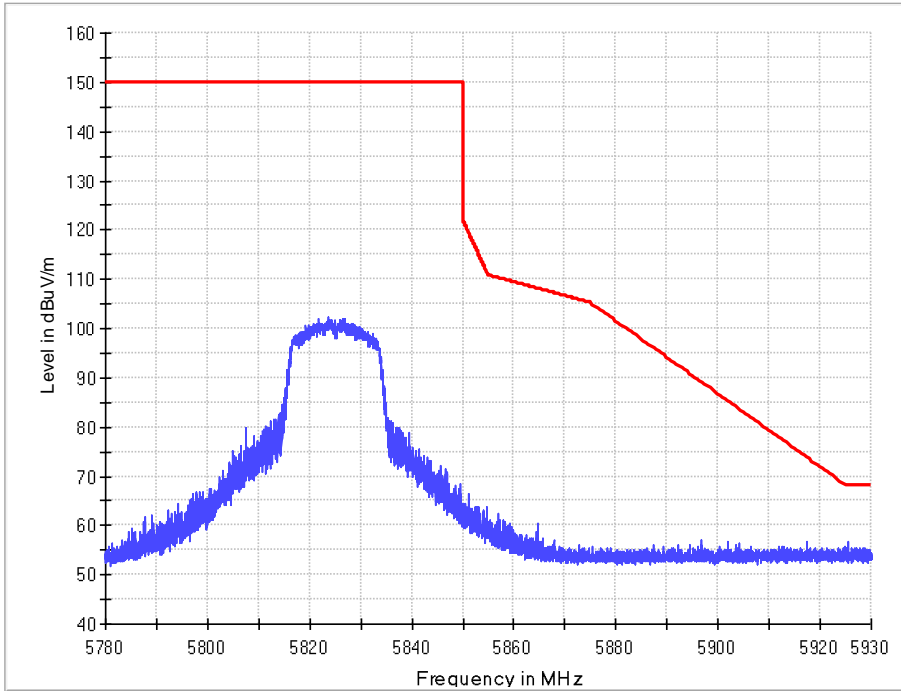
Vertical



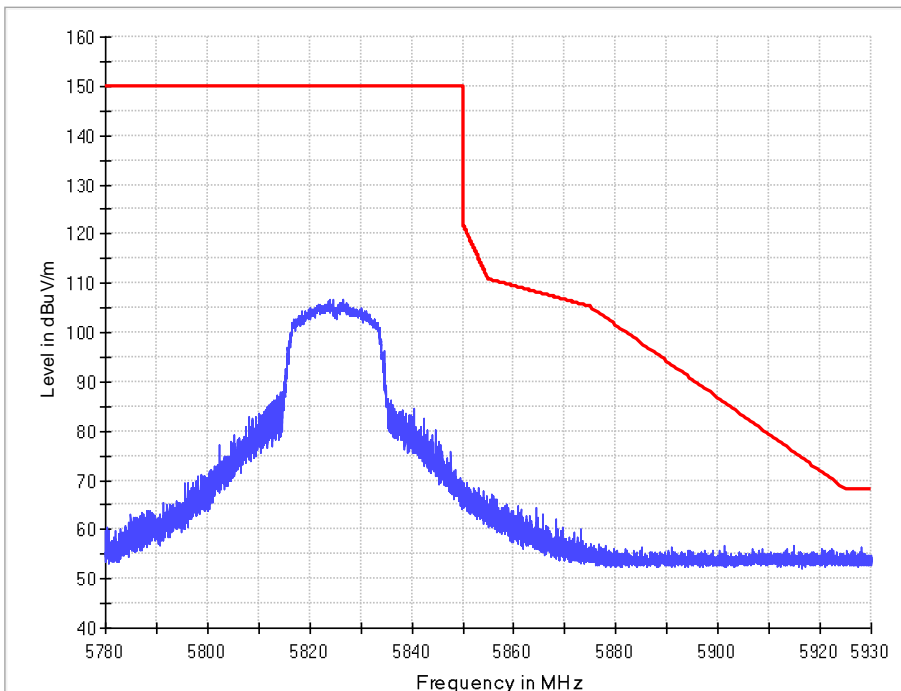
Band edge

11n HT20 IN THE 5.8GHz BAND
CH165

Horizontal



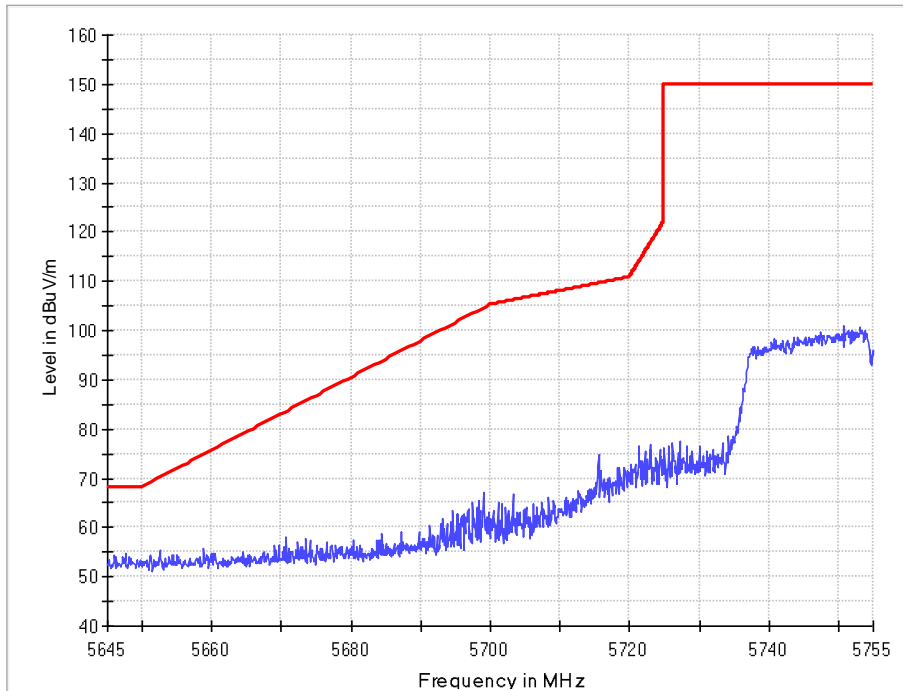
Vertical



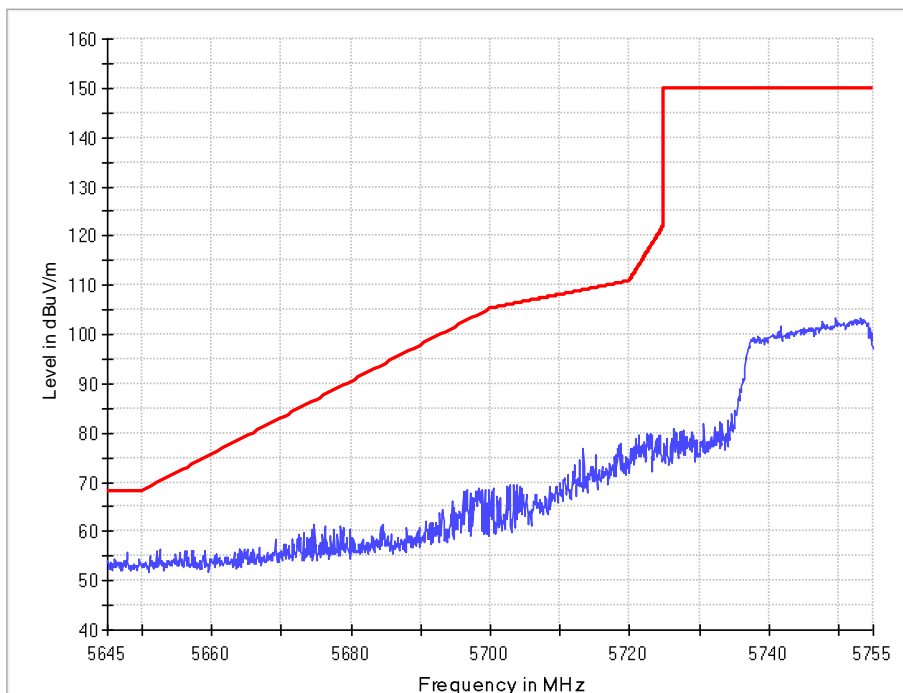
Band edge

11n HT40 IN THE 5.8GHz BAND
CH151

Horizontal



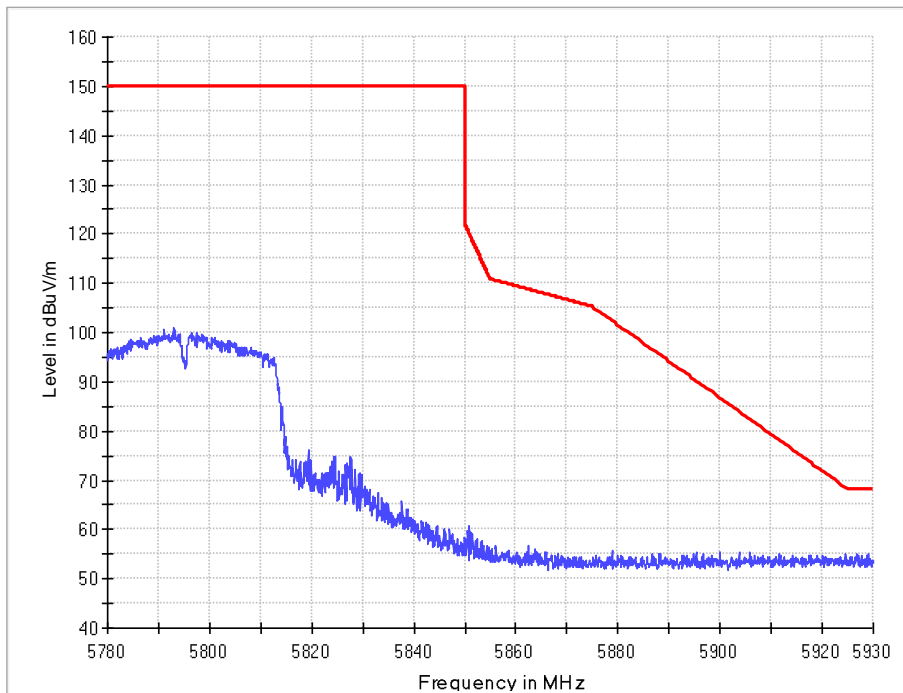
Vertical



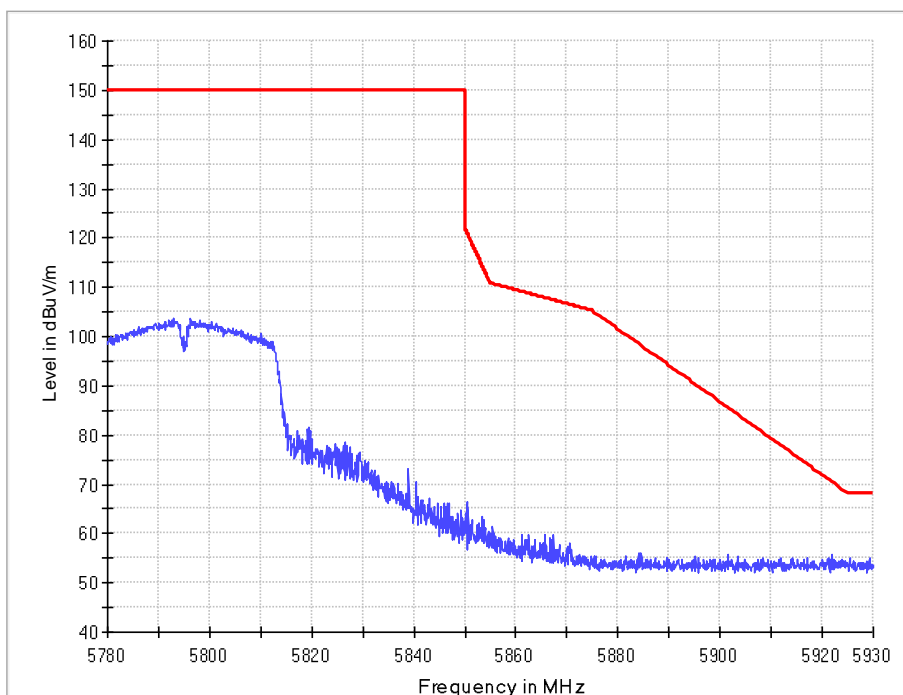
Band edge

11n HT40 IN THE 5.8GHz BAND
CH159

Horizontal



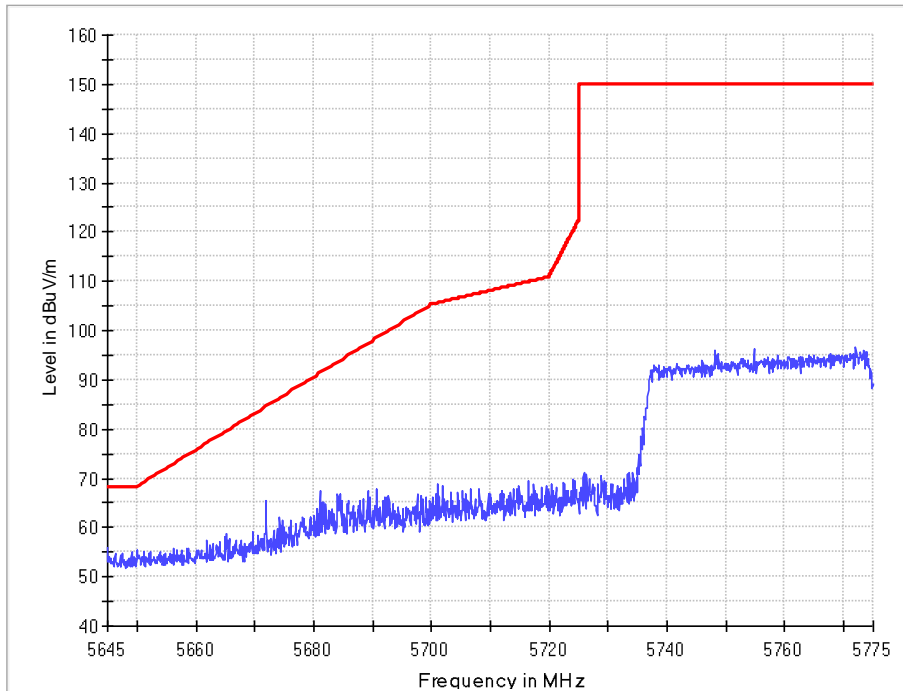
Vertical



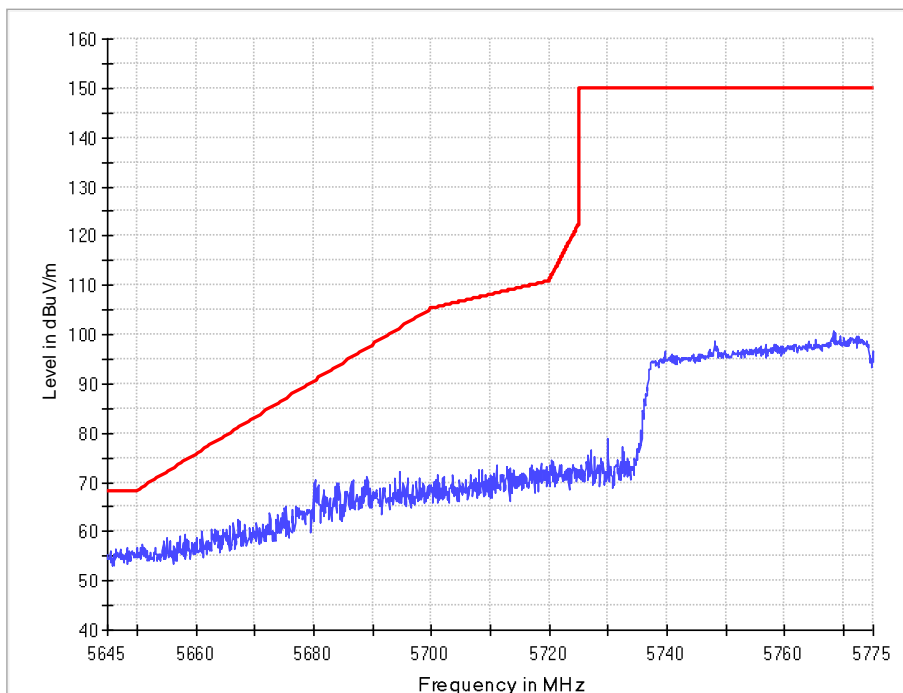
Band edge

11ac VHT80 IN THE 5.8GHz BAND
CH155

Horizontal



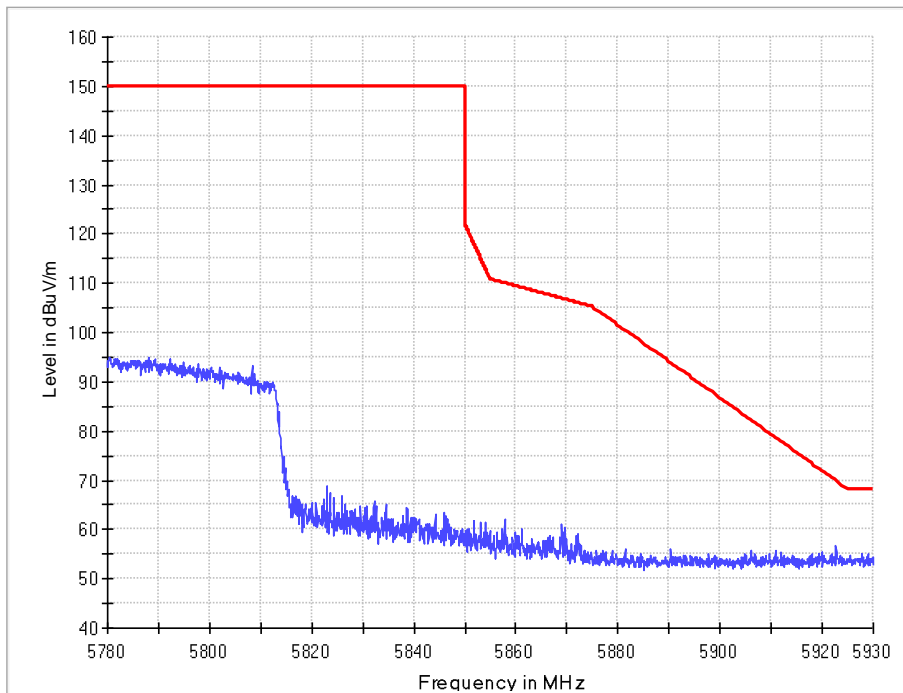
Vertical



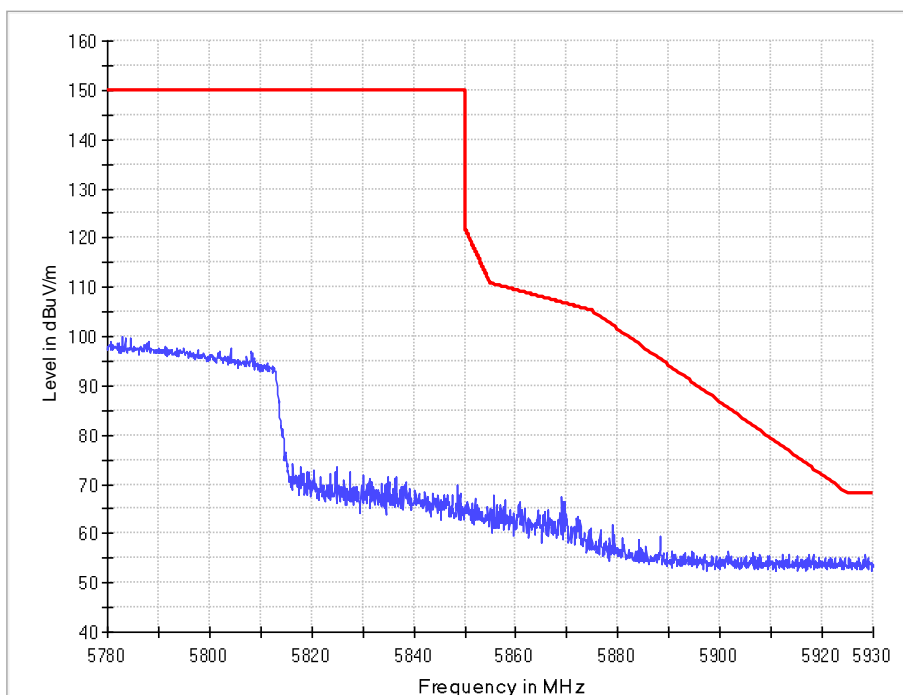
Band edge

11ac VHT80 IN THE 5.8GHz BAND
CH155

Horizontal



Vertical



11. CONDUCTED EMISSION TEST FOR AC POWER PORT

MEASUREMENT

11.1. Test Standard and Limit

Test Standard
FCC Part 15 15.207
Test Limit

Table 15 Conducted Disturbance Test Limit

Frequency	Maximum RF Line Voltage (dB μ V)	
	Quasi-peak Level	Average Level
150kHz~500kHz	66 ~ 56 *	56 ~ 46 *
500kHz~5MHz	56	46
5MHz~30MHz	60	50

* Decreasing linearly with logarithm of the frequency

* The lower limit shall apply at the transition frequency.

11.2. Test Procedure

The EUT is put on a table of non-conducting material that is 80cm high. The vertical conducting wall of shielding is located 40cm to the rear of the EUT. The power line of the EUT is connected to the AC mains through a Artificial Mains Network (A.M.N.). A EMI test receiver (R&S Test Receiver ESCS30) is used to test the emissions from both sides of AC line. According to the requirements of ANSI C63.10-2013. Conducted emissions from the EUT measured in the frequency range between 0.15 MHz and 30MHz using CISPR Quasi-Peak and average detector mode.

The bandwidth of EMI test receiver is set at 9 kHz.

11.3. Test Arrangement

The arrangement of the equipment is installed to meet the standards and operating in a manner, which tends to maximize its emission characteristics in a normal application. The detailed information refers to test picture.

11.4. Test Data

The emissions don't show in below are too low against the limits. Refer to the test curves.