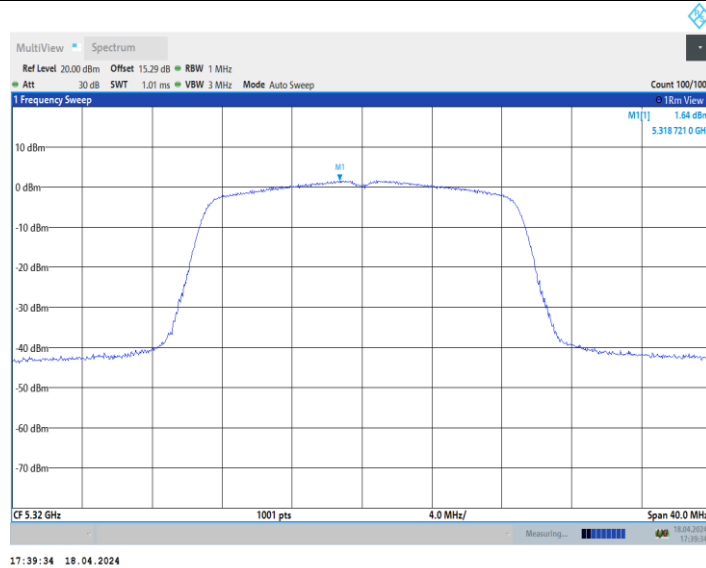
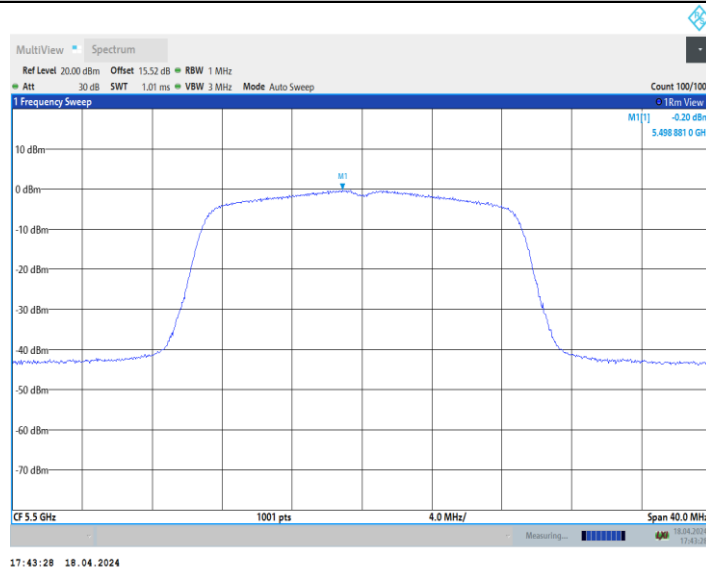


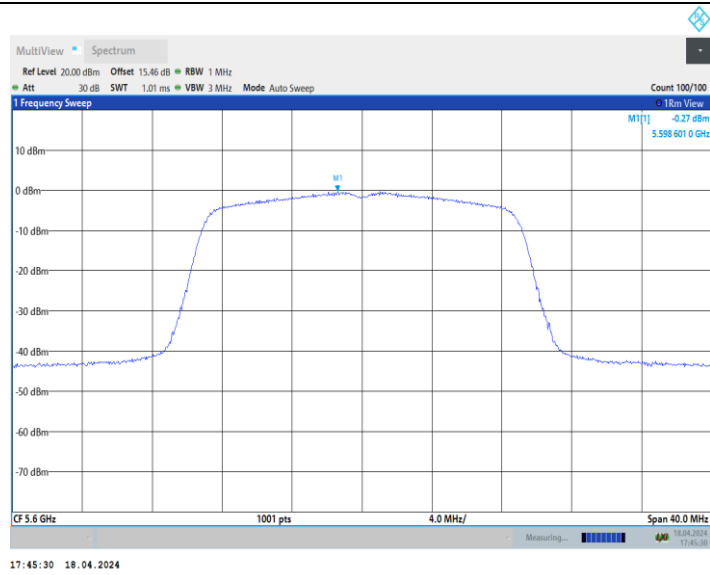
11N20SISO\_Ant1\_5320



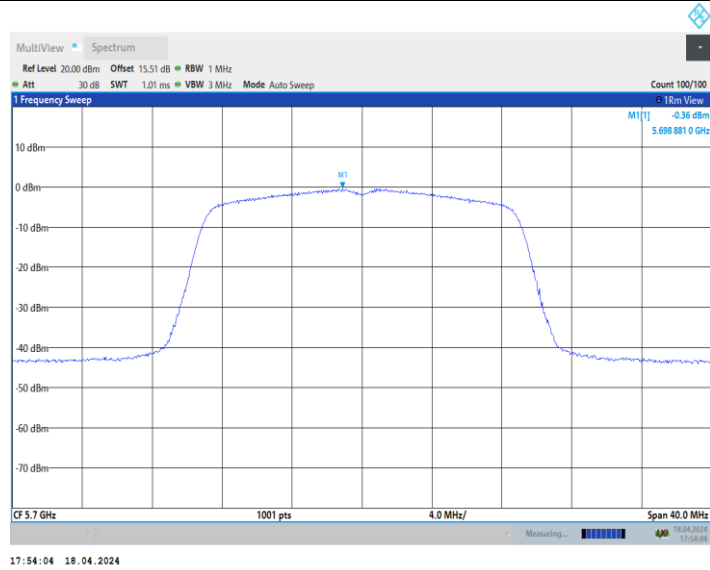
11N20SISO\_Ant1\_5500



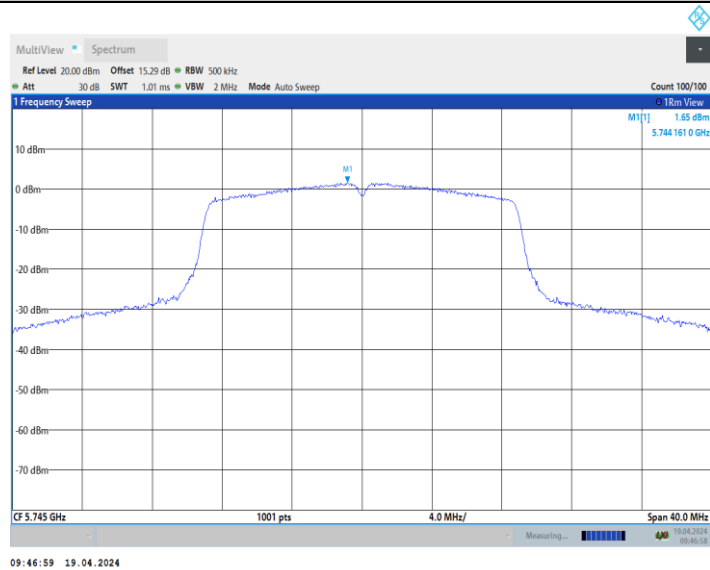
11N20SISO\_Ant1\_5600



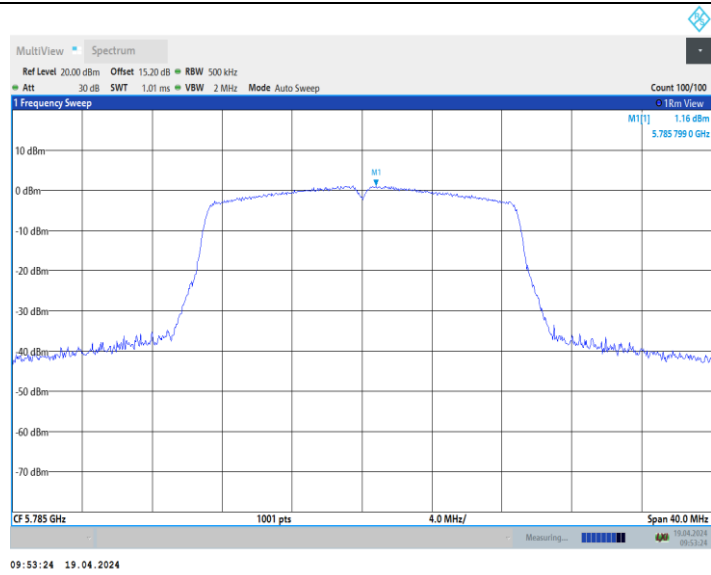
11N20SISO\_Ant1\_5700



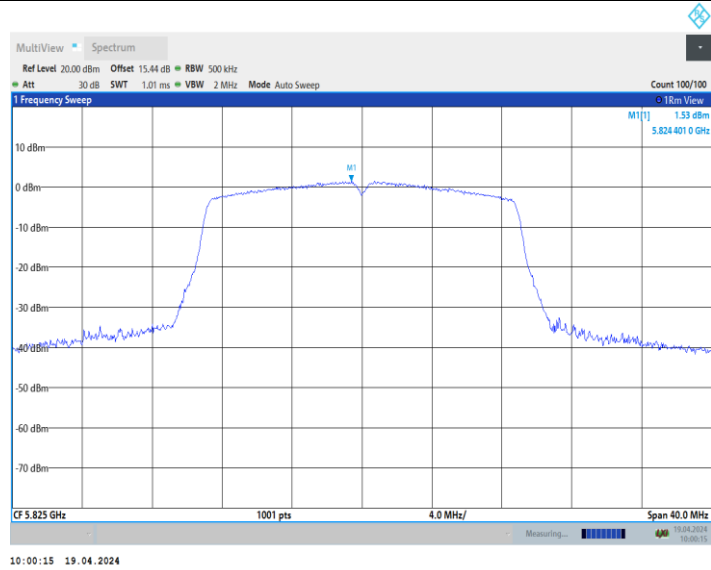
11N20SISO\_Ant1\_5745



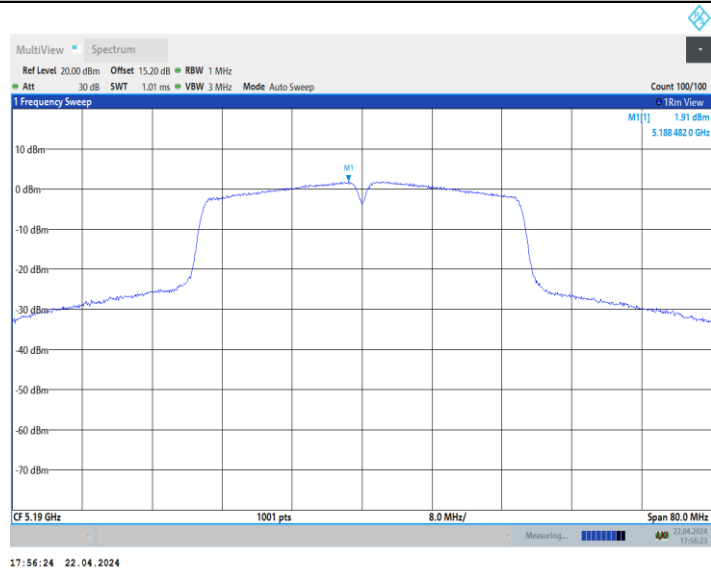
11N20SISO\_Ant1\_5785



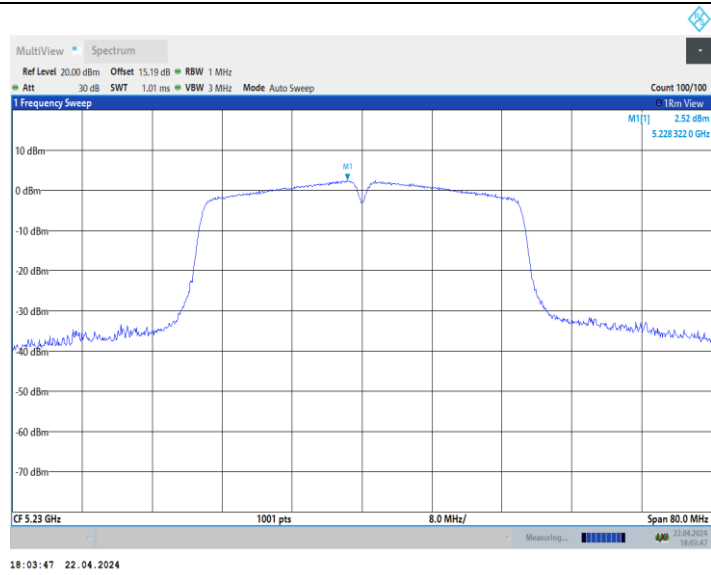
11N20SISO\_Ant1\_5825



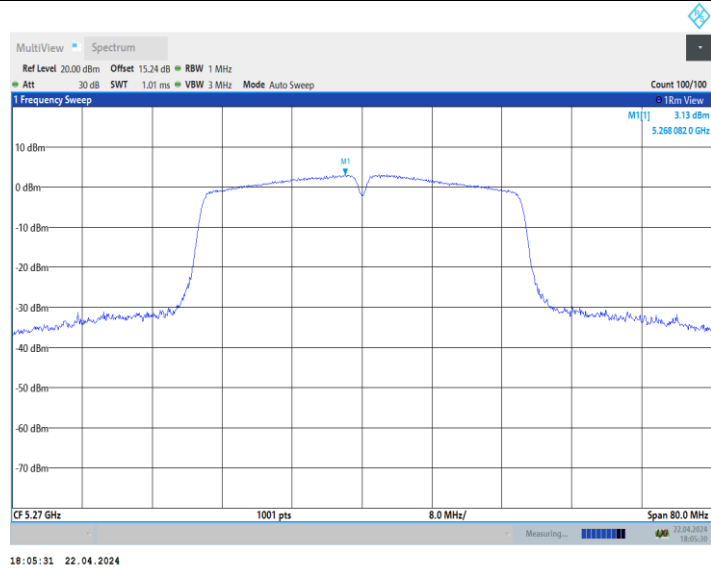
11N40SISO\_Ant1\_5190



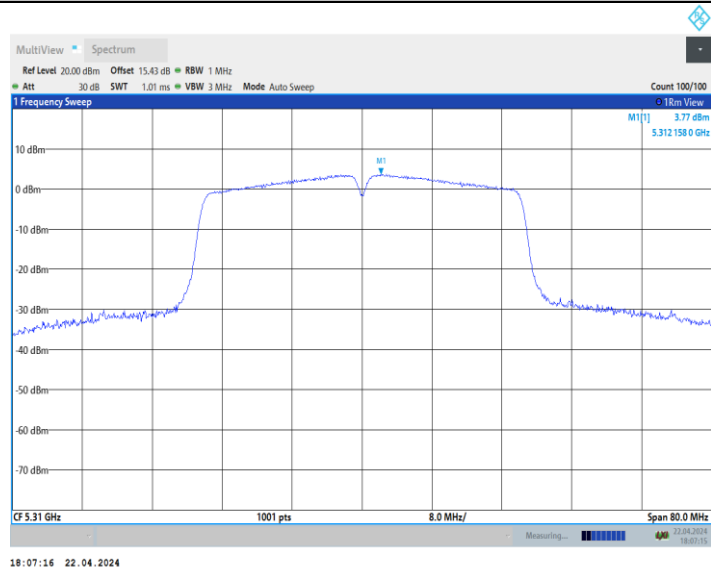
11N40SISO\_Ant1\_5230



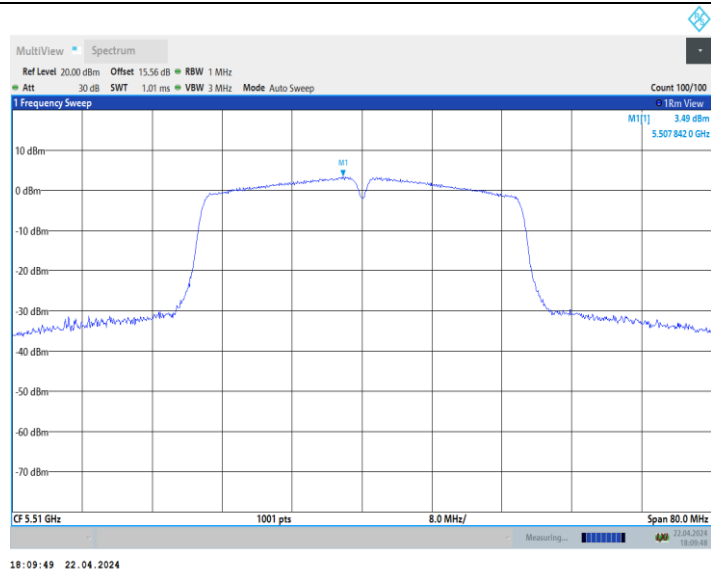
11N40SISO\_Ant1\_5270



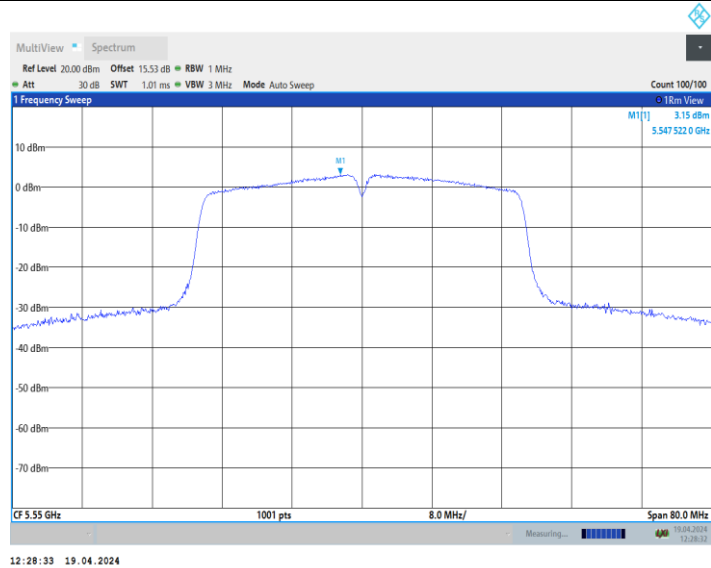
11N40SISO\_Ant1\_5310



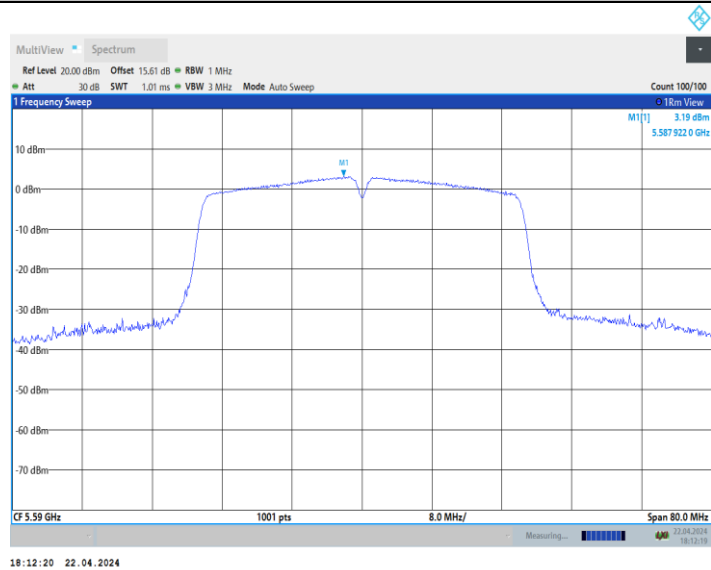
11N40SISO\_Ant1\_5510



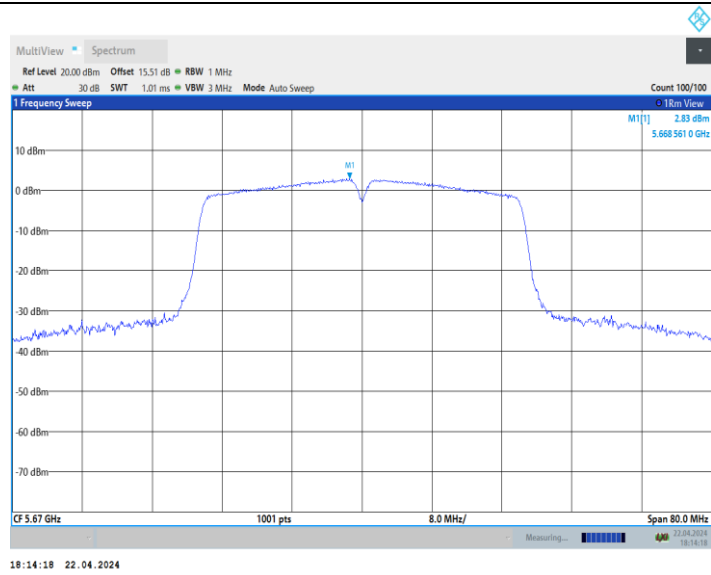
11N40SISO\_Ant1\_5550



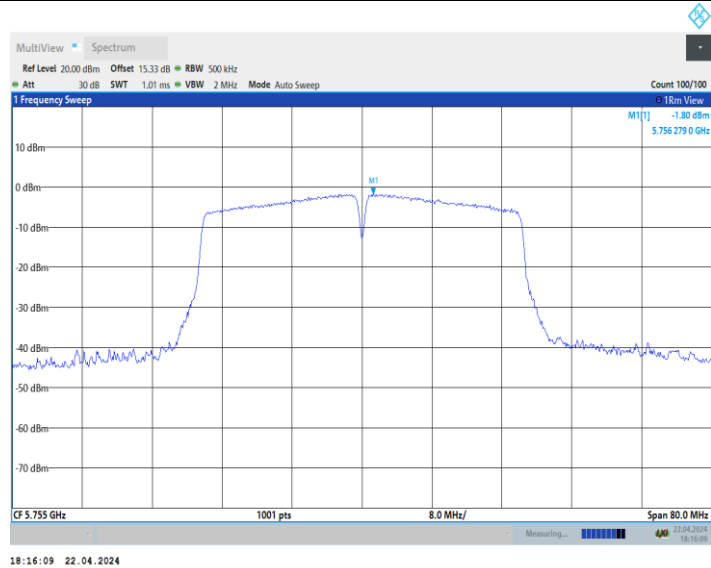
11N40SISO\_Ant1\_5590



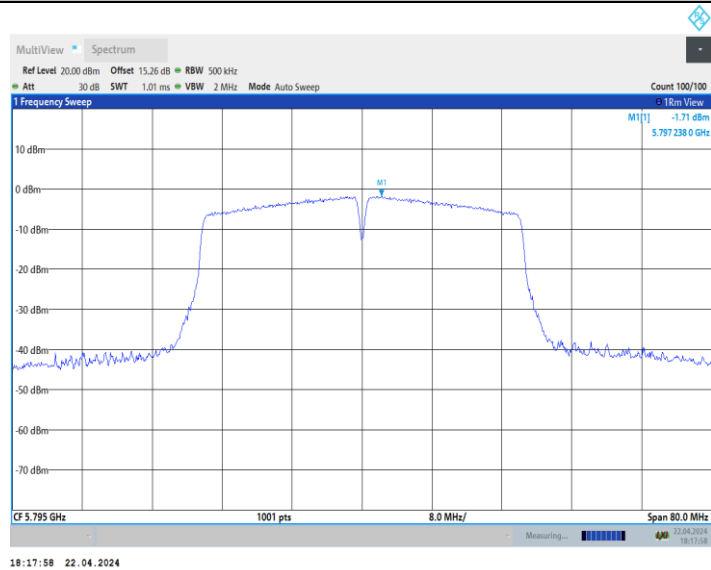
11N40SISO\_Ant1\_5670



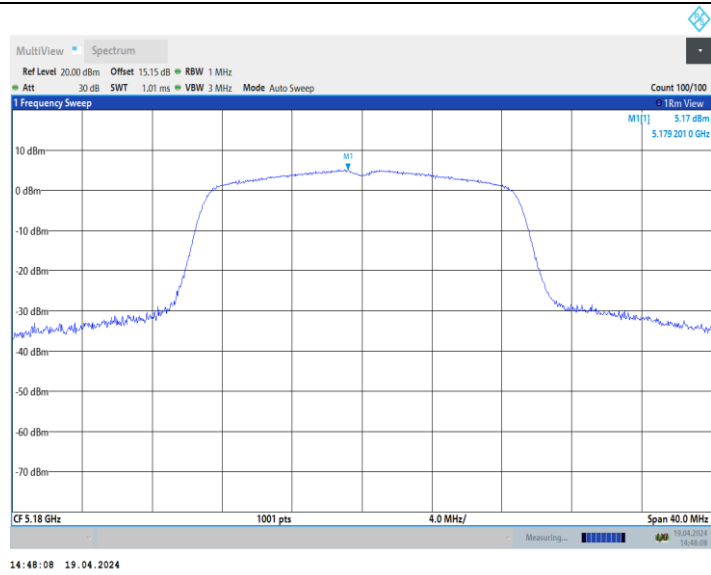
11N40SISO\_Ant1\_5755



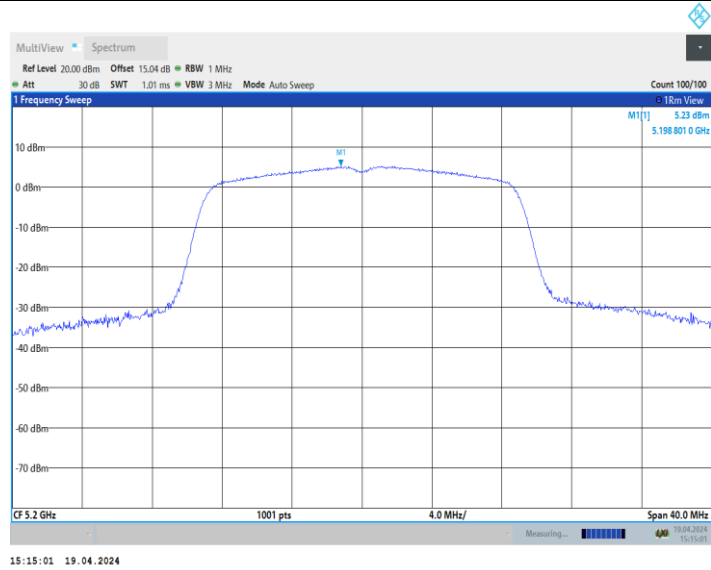
11N40SISO\_Ant1\_5795



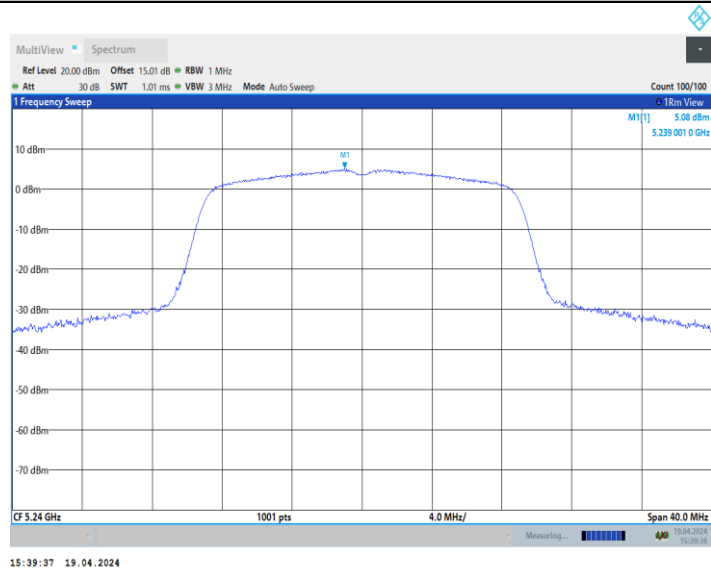
11AC20SISO\_Ant1\_5180



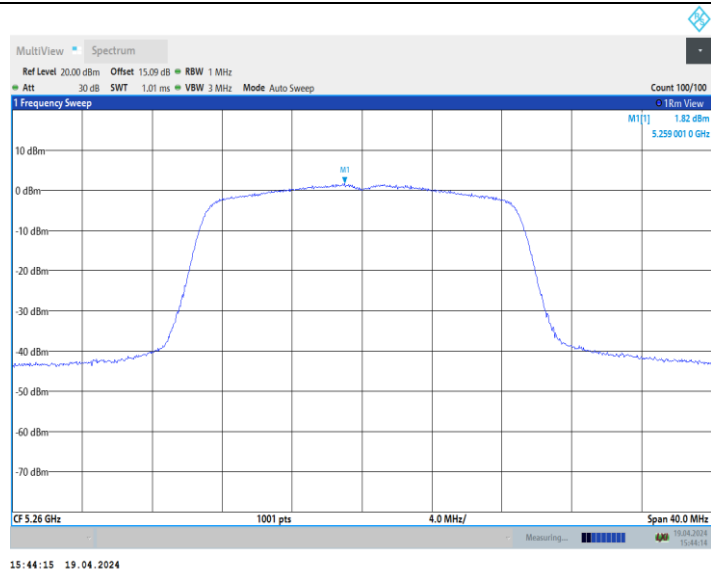
11AC20SISO\_Ant1\_5200



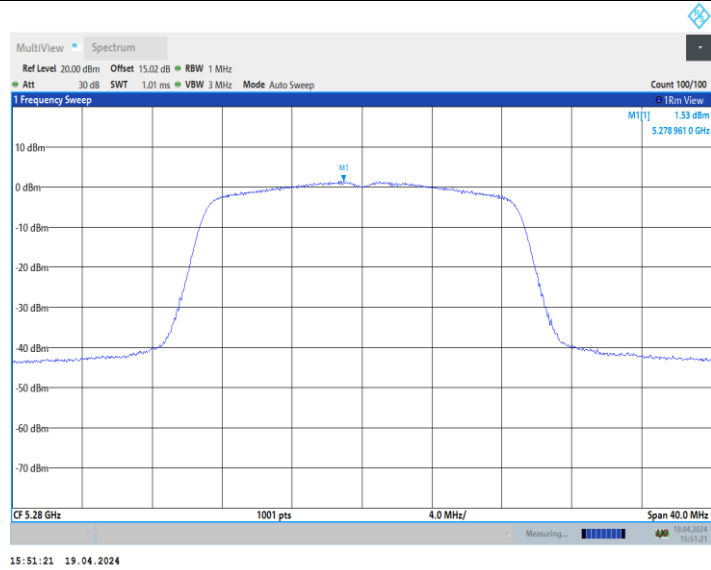
11AC20SISO\_Ant1\_5240



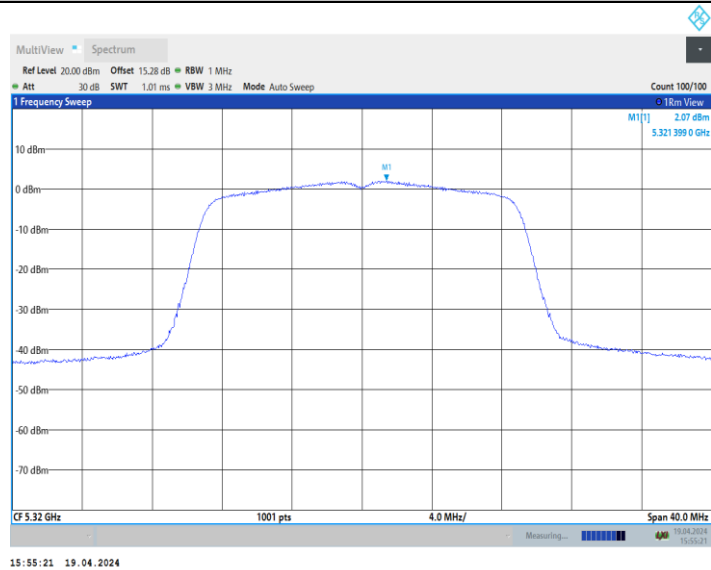
11AC20SISO\_Ant1\_5260



11AC20SISO\_Ant1\_5280

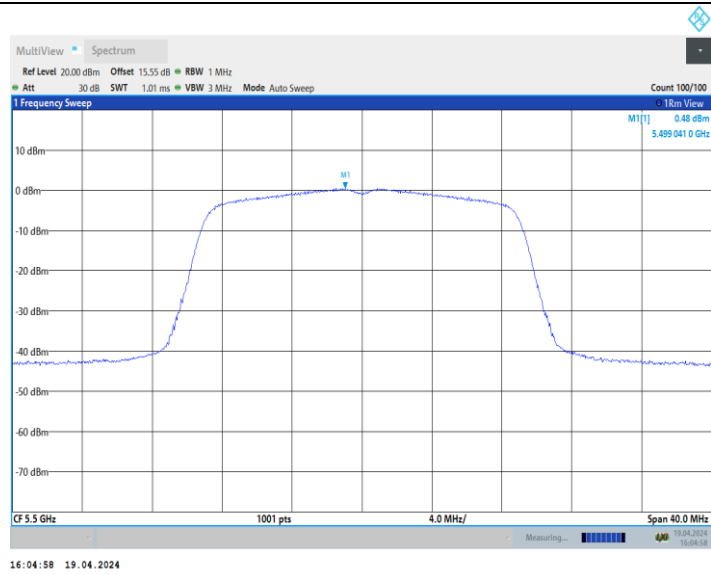


11AC20SISO\_Ant1\_5320

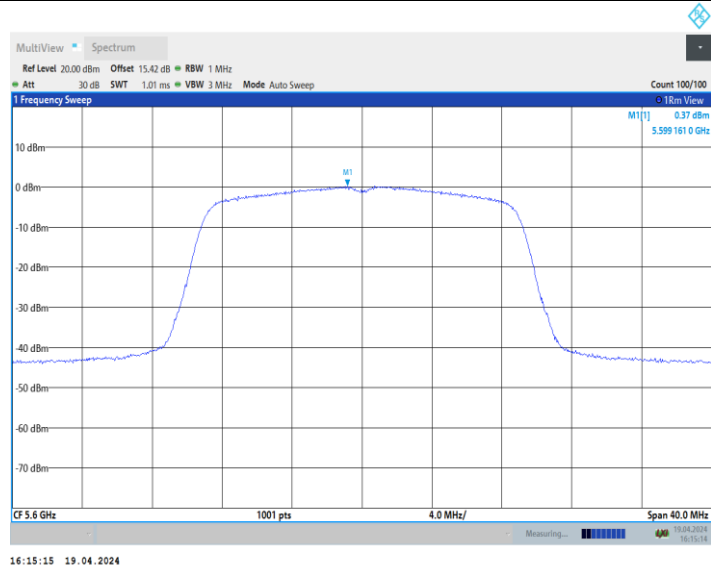


11AC20SISO\_Ant1\_5500

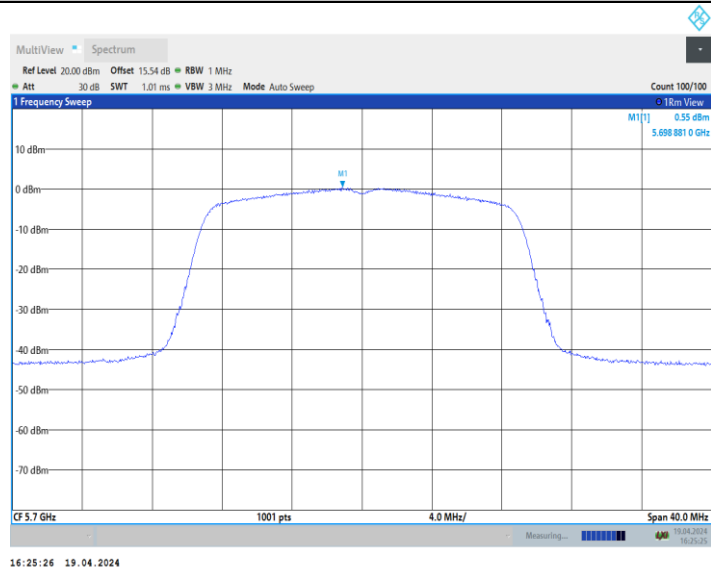




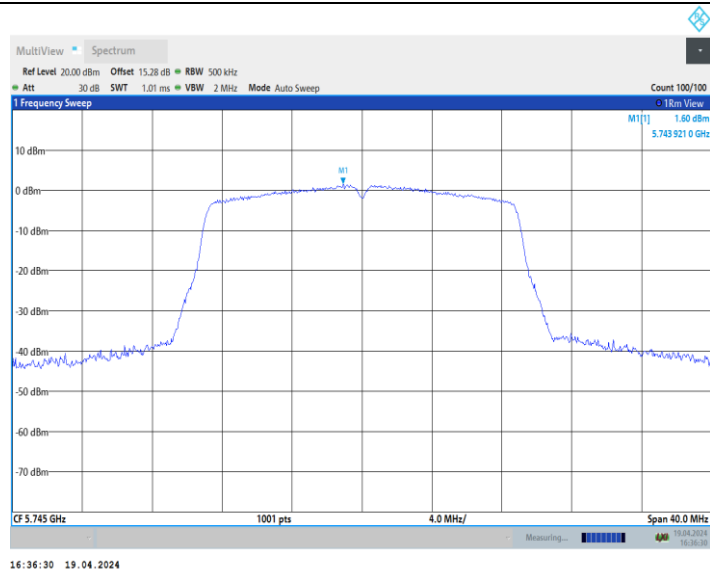
11AC20SISO\_Ant1\_5600



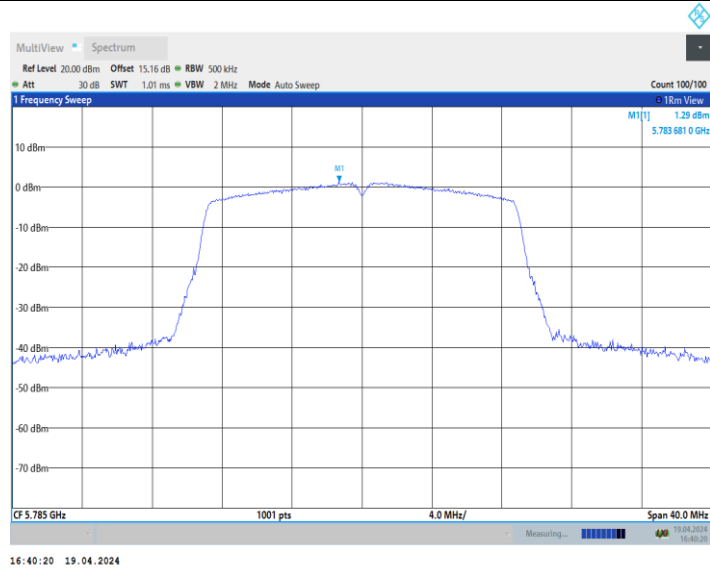
11AC20SISO\_Ant1\_5700



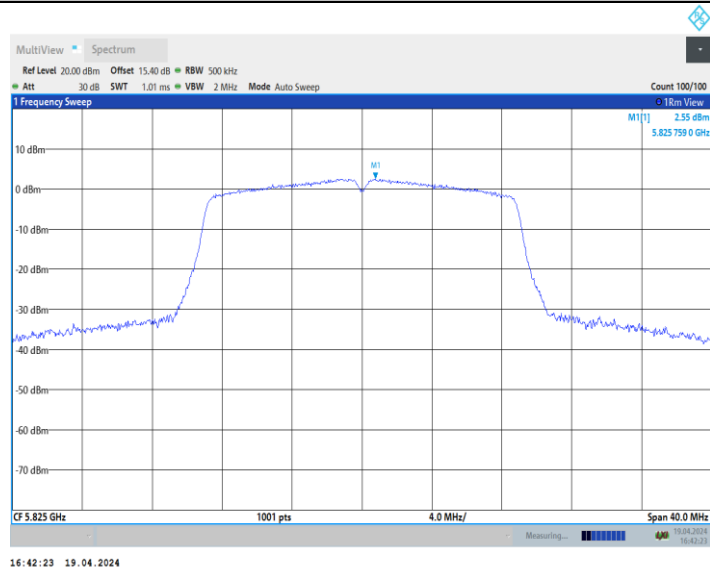
11AC20SISO\_Ant1\_5745



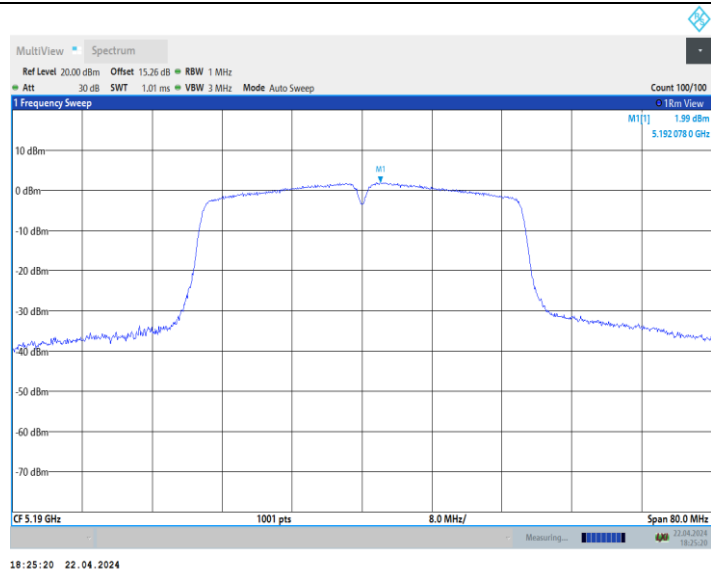
11AC20SISO\_Ant1\_5785



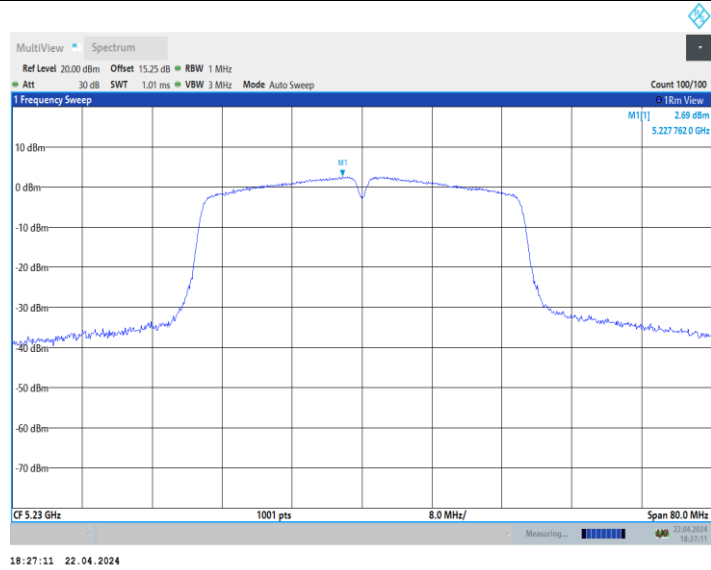
11AC20SISO\_Ant1\_5825



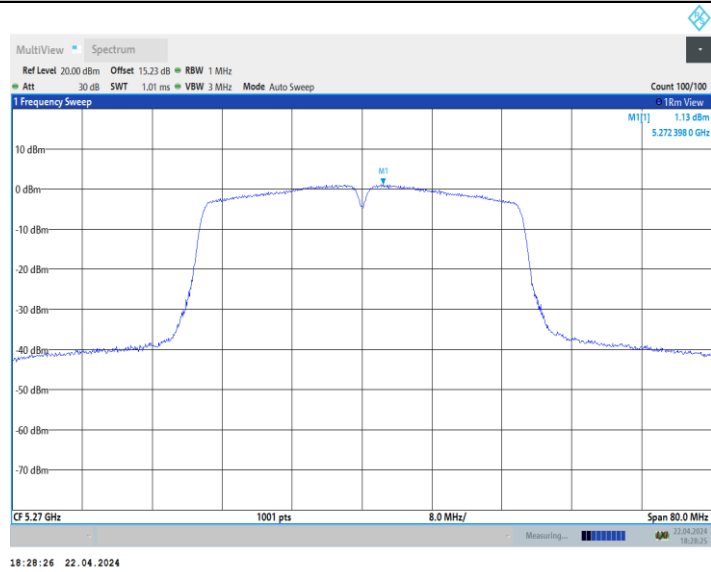
11AC40SISO\_Ant1\_5190



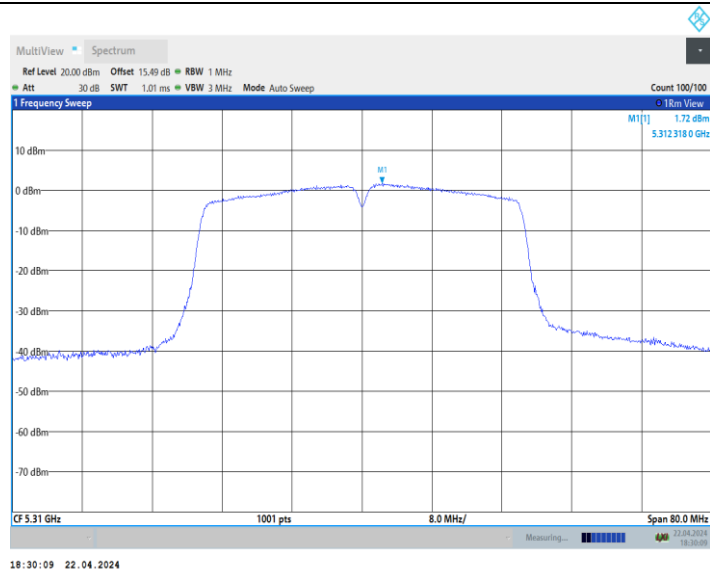
11AC40SISO\_Ant1\_5230



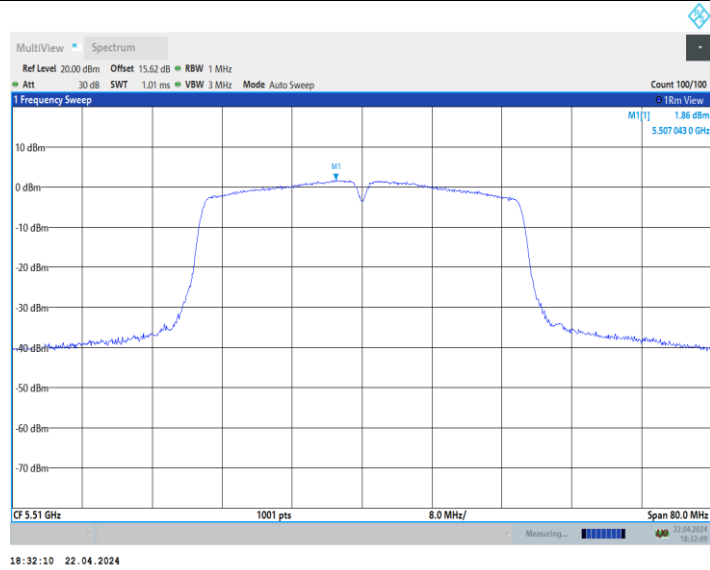
11AC40SISO\_Ant1\_5270



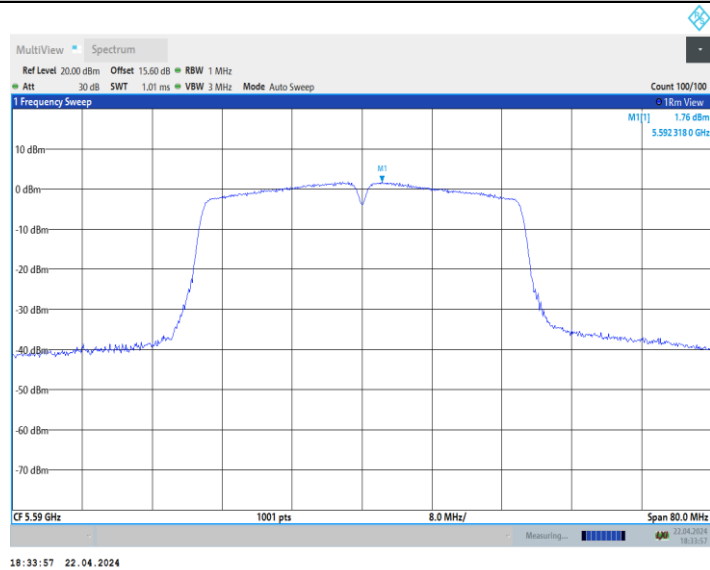
11AC40SISO\_Ant1\_5310



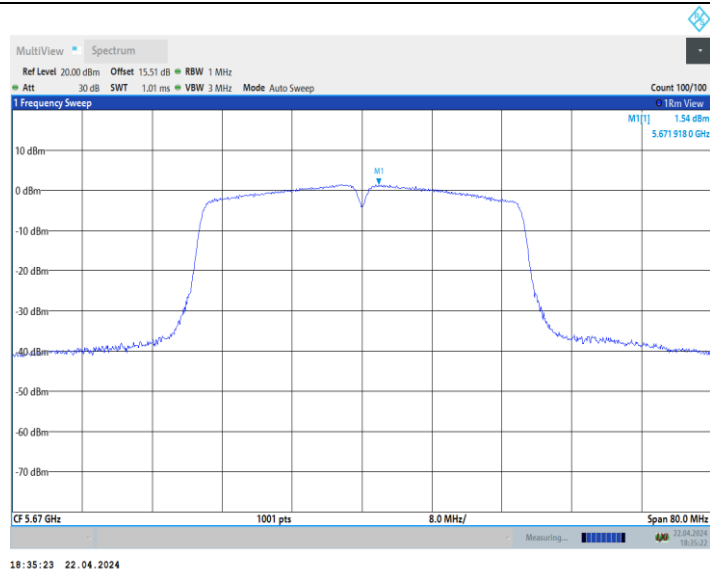
11AC40SISO\_Ant1\_5510



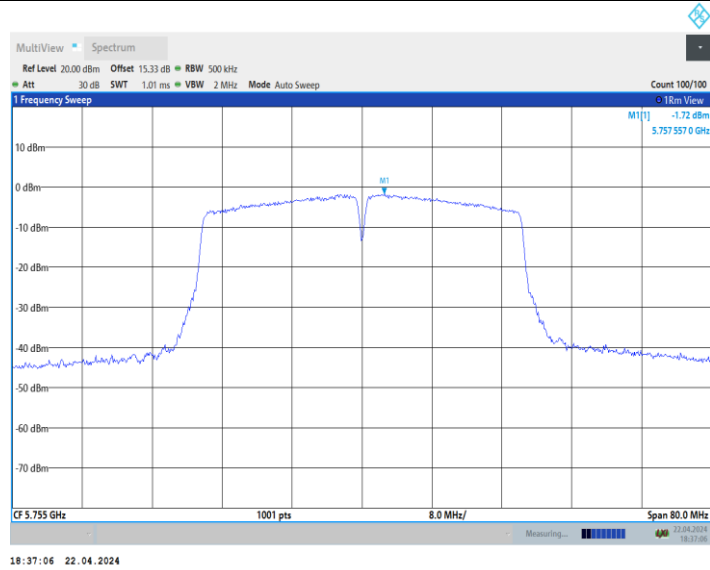
11AC40SISO\_Ant1\_5590



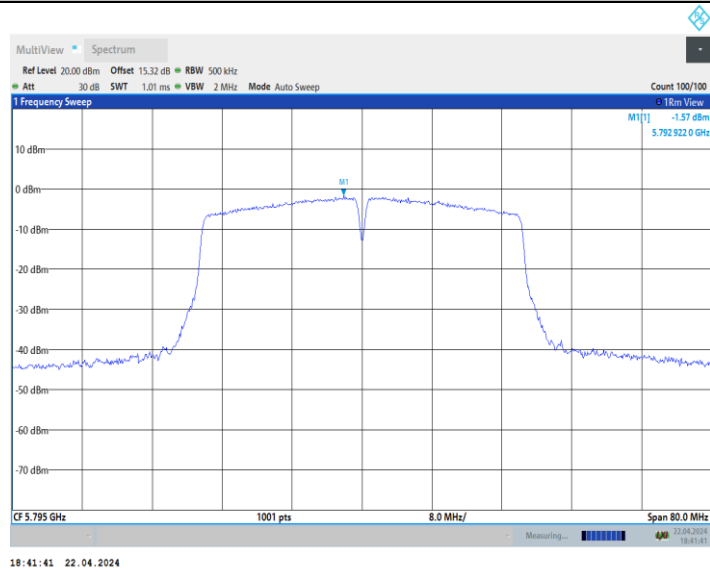
11AC40SISO\_Ant1\_5670



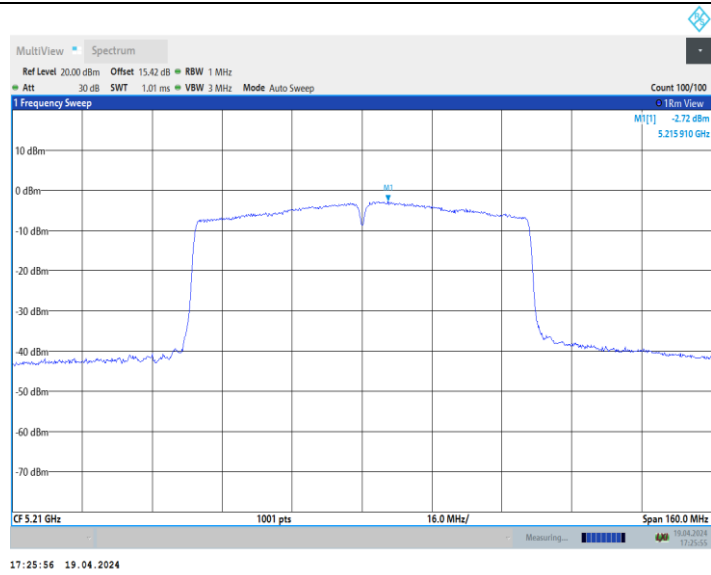
11AC40SISO\_Ant1\_5755



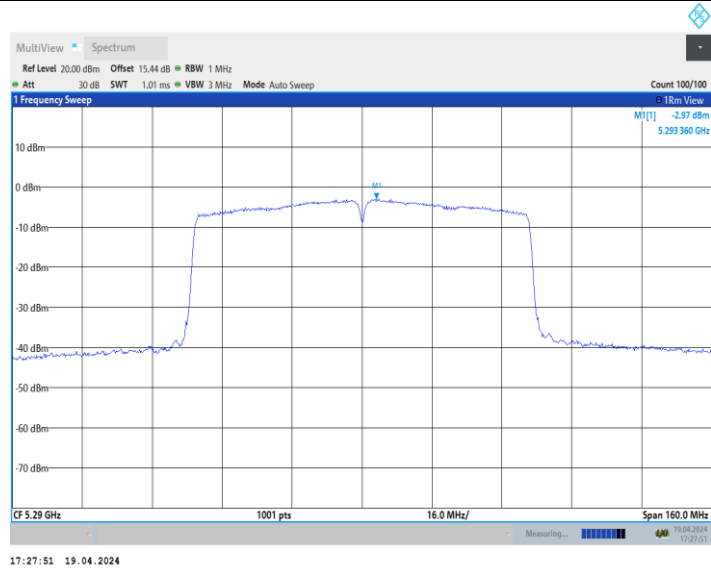
11AC40SISO\_Ant1\_5795



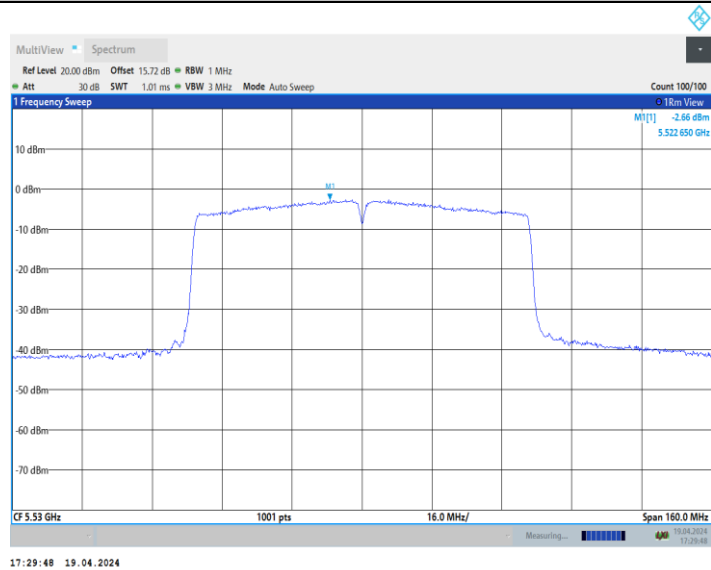
11AC80SISO\_Ant1\_5210



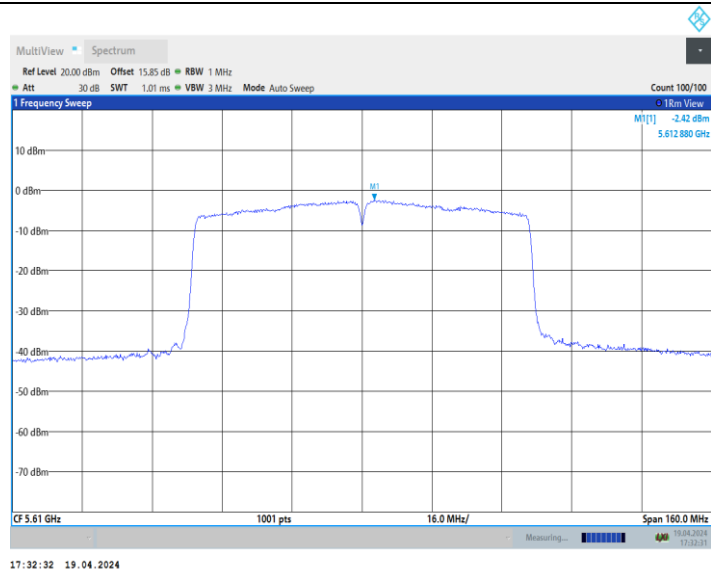
11AC80SISO\_Ant1\_5290



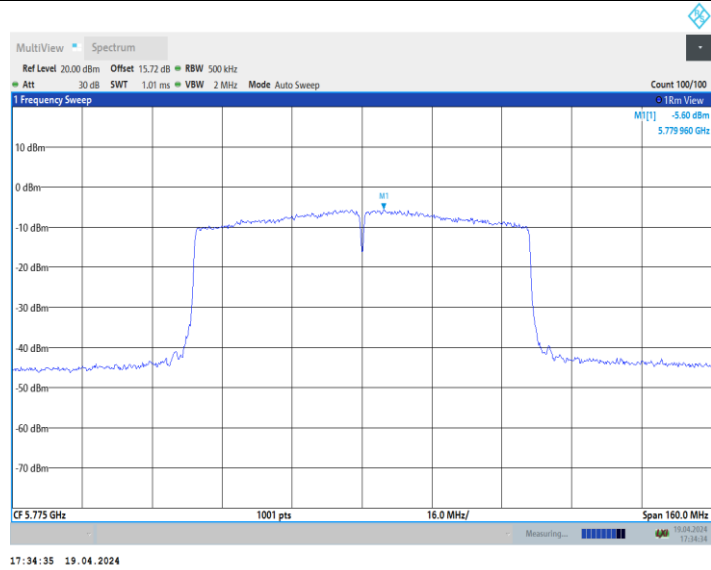
11AC80SISO\_Ant1\_5530



11AC80SISO\_Ant1\_5610



11AC80SISO\_Ant1\_5775



## 10. RADIATED BANDEGE 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: Antenna Factor + Cable Loss + Read Level - Preamp Factor = 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  $f < 1$  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 9 Radiated Emission Test Data 9k Hz-30MHz

Frequency (MHz)	Cable Loss +preamp (dB)	Antenna Factor (dB)	Reading (dB $\mu$ V/m)	Level (dB $\mu$ V/m)	Polarity (Horizontal/Vertical)	Limit (dB $\mu$ V/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.

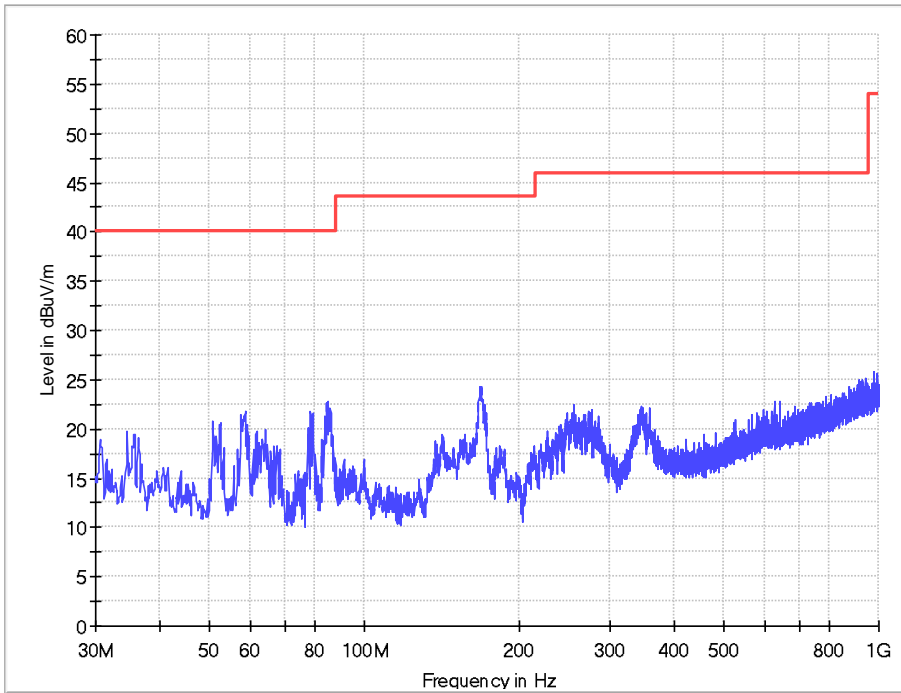
Table 10 Radiated Emission Test Data 30MHz-1GHz

Frequency (MHz)	Cable Loss +preamp (dB)	Antenna Factor (dB)	Reading (dB $\mu$ V/m)	Level (dB $\mu$ V/m)	Polarity (Horizontal/Vertical)	Limit (dB $\mu$ V/m)	Margin (dB)	Note
33.987	0.7	12.3	14.4	27.4	Vertical	40.0	12.6	QP
38.514	0.7	12.3	10.6	23.6	Vertical	40.0	16.4	QP
51.016	0.8	13.3	12.0	26.1	Vertical	40.0	13.9	QP
58.237	0.8	13.0	13.8	27.6	Vertical	40.0	12.4	QP
78.607	1.0	7.8	16.7	25.5	Vertical	40.0	14.5	QP
84.966	0.9	8.5	21.3	30.7	Vertical	40.0	9.3	QP
50.693	0.8	13.3	4.5	18.6	Horizontal	40.0	21.4	QP
58.668	0.8	13.0	4.9	18.7	Horizontal	40.0	21.3	QP
64.165	0.9	12.7	4.5	18.1	Horizontal	40.0	21.9	QP
78.607	1.0	7.8	11.0	19.8	Horizontal	40.0	20.2	QP
84.858	0.9	8.5	11.3	20.7	Horizontal	40.0	19.3	QP
168.386	1.5	8.7	11.7	21.9	Horizontal	43.5	21.6	QP

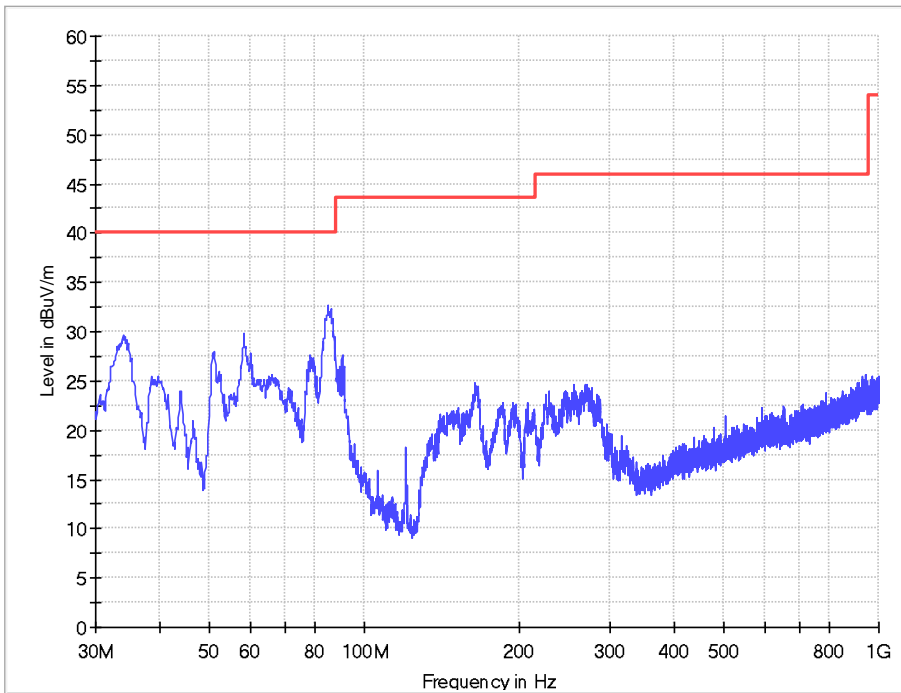
Remark: Emission level (dB $\mu$ V)=Read Value(dB $\mu$ V/m) + Antenna Factor(dB)+ Cable Loss +preamp(dB)

30MHz-1GHz

Horizontal



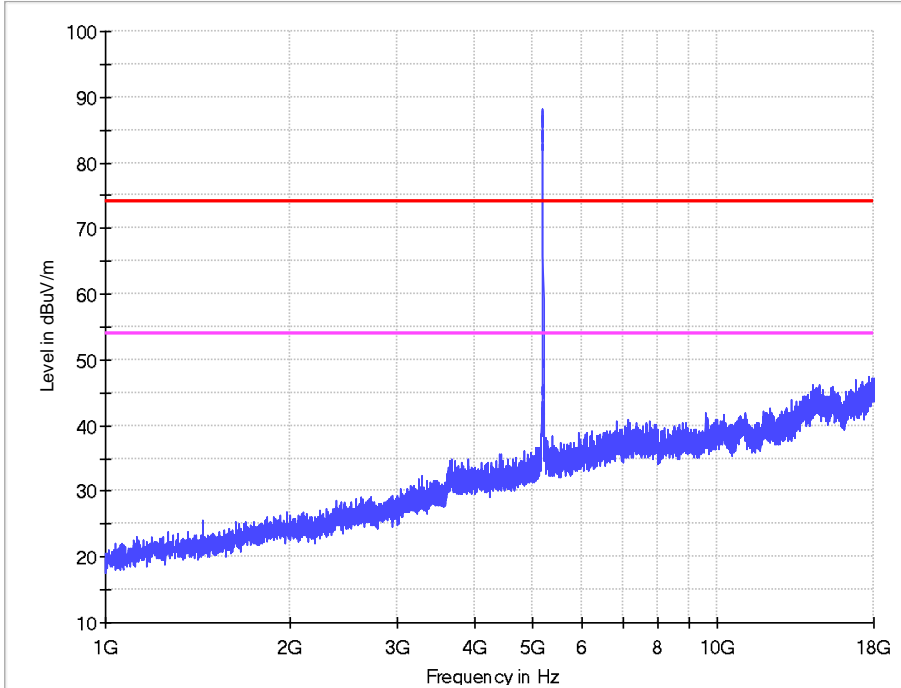
Vertical



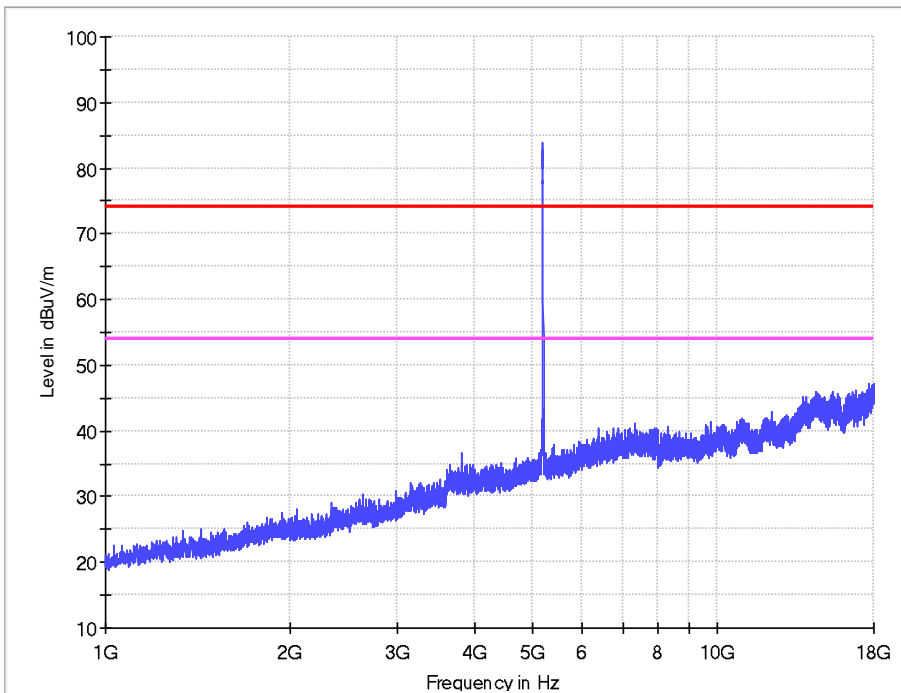
1-18G

11a IN THE 5.2GHz BAND  
CH36

Horizontal



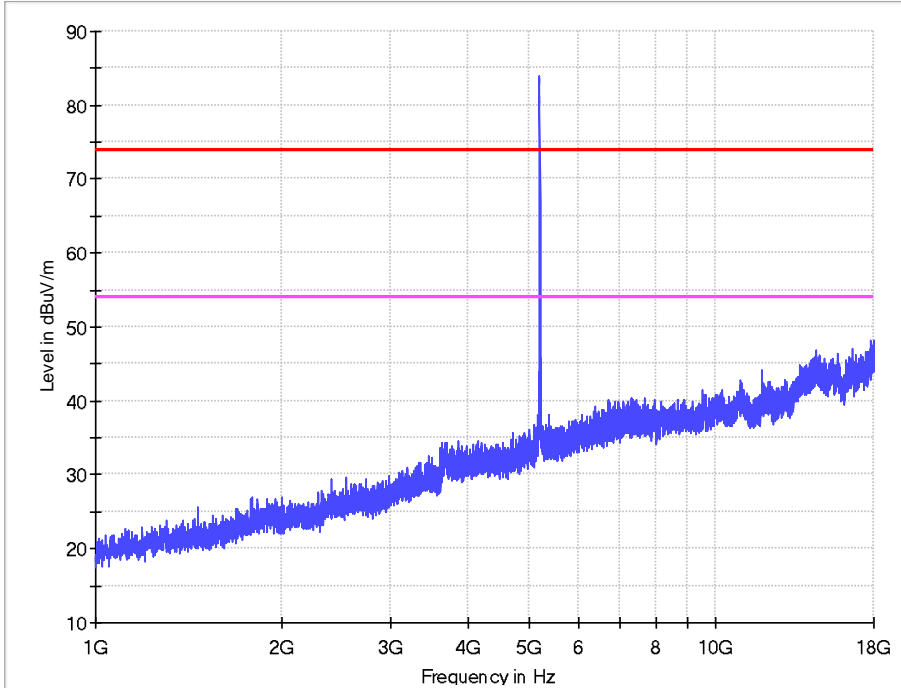
Vertical



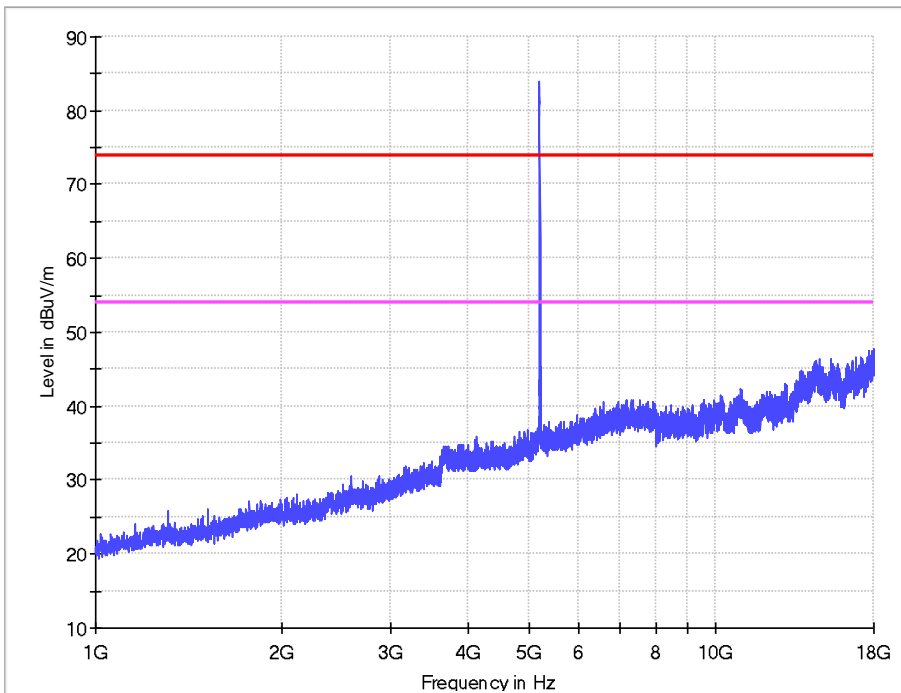
1-18G

11a IN THE 5.2GHz BAND  
CH40

Horizontal



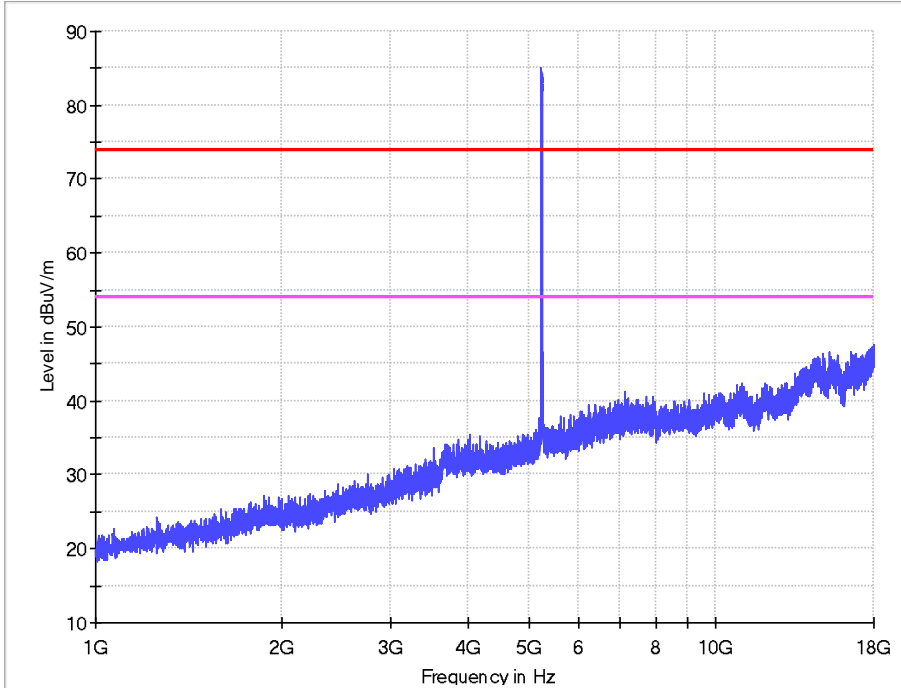
Vertical



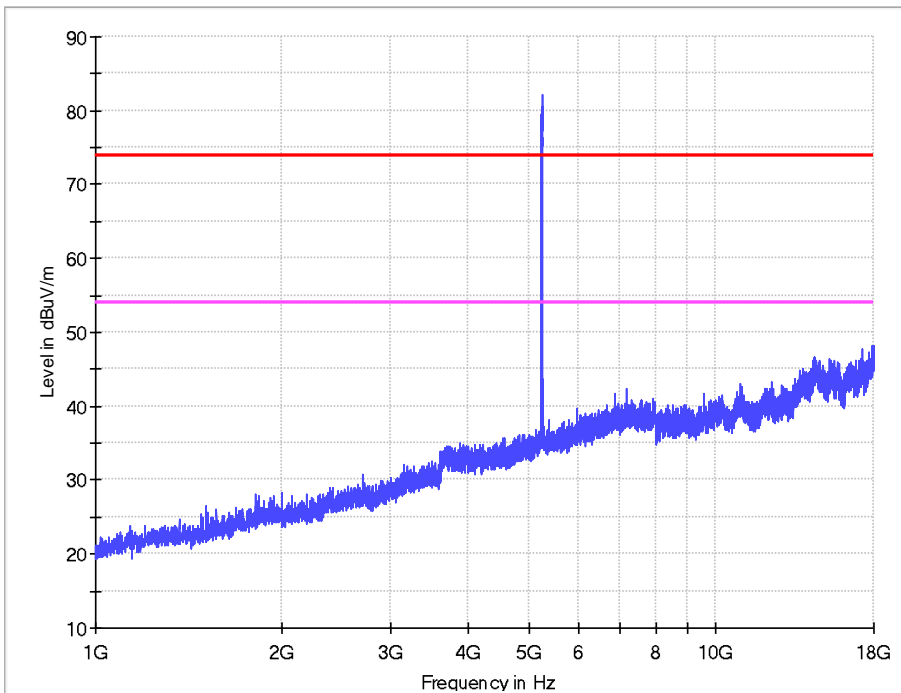
1-18G

11a IN THE 5.2GHz BAND  
CH48

Horizontal



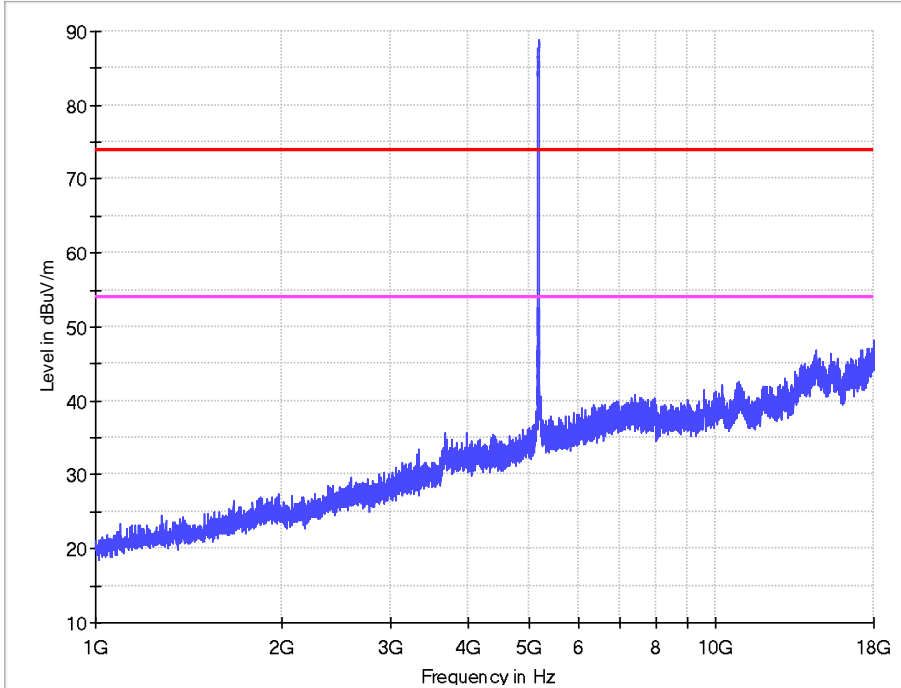
Vertical



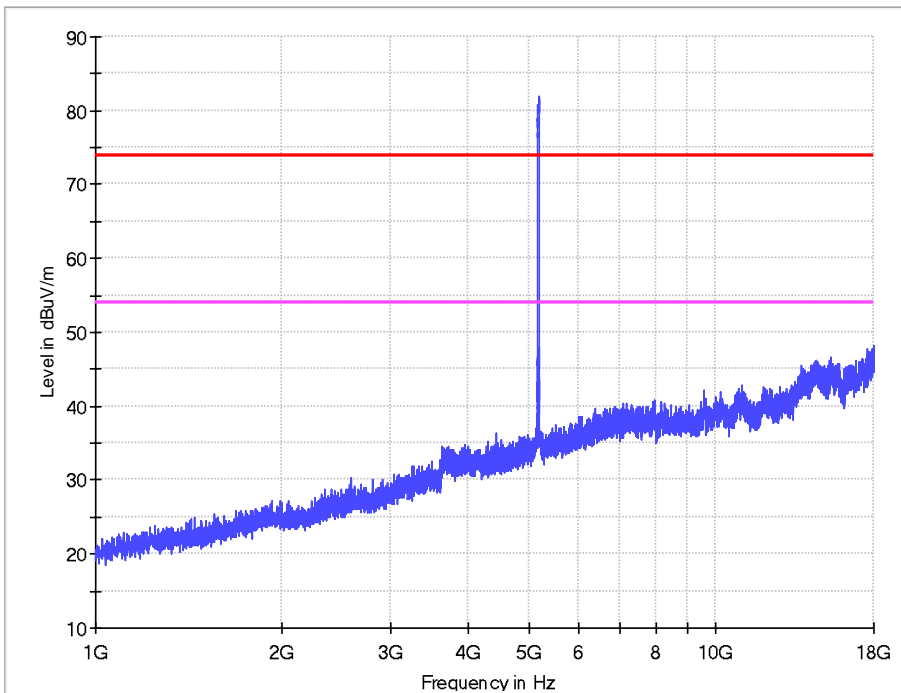
1-18G

11n HT20 IN THE 5.2GHz BAND  
CH36

Horizontal



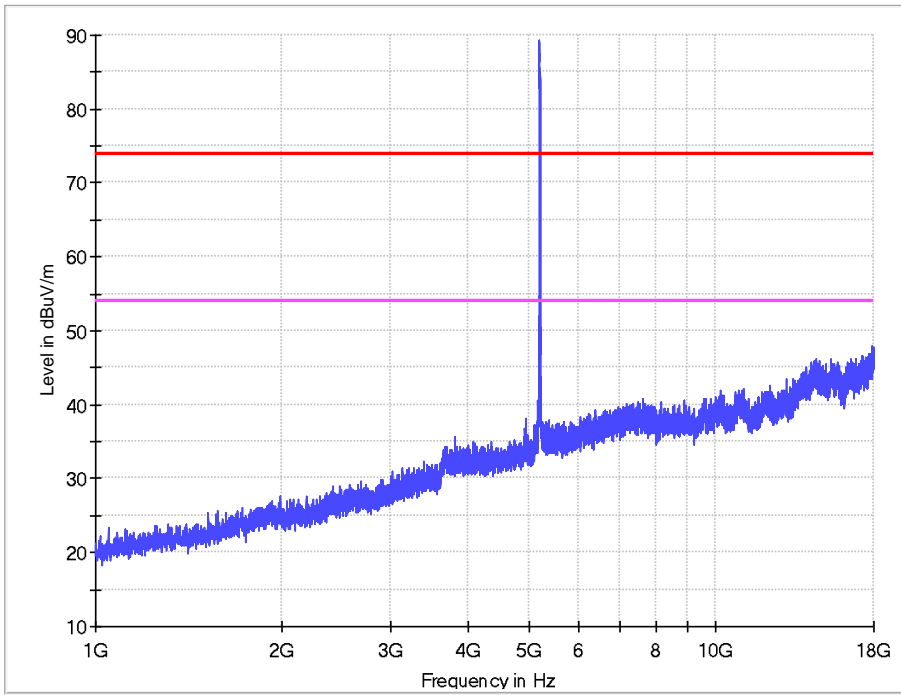
Vertical



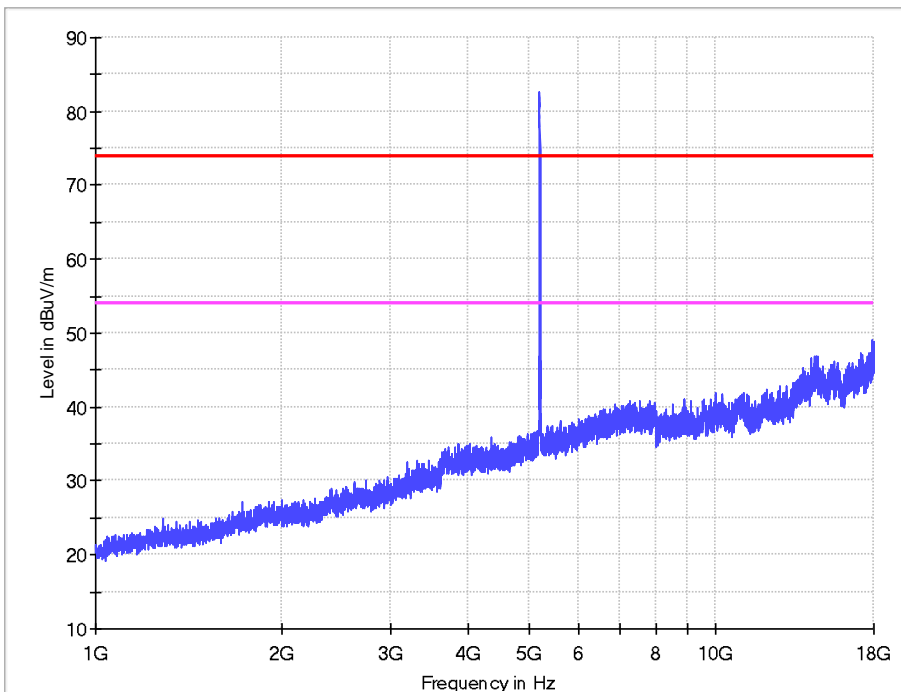
1-18G

11n HT20 IN THE 5.2GHz BAND  
CH40

Horizontal



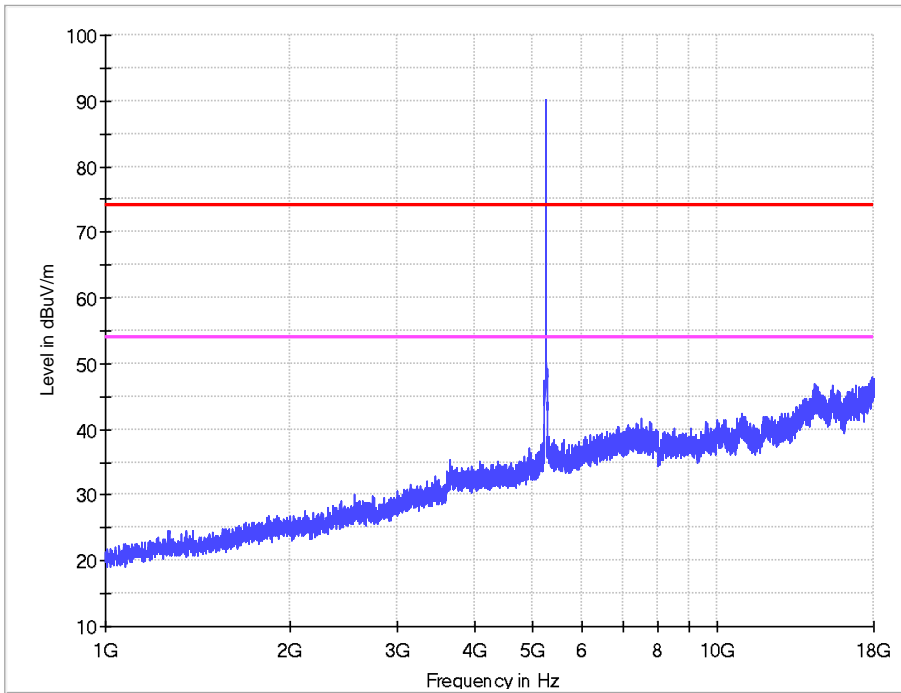
Vertical



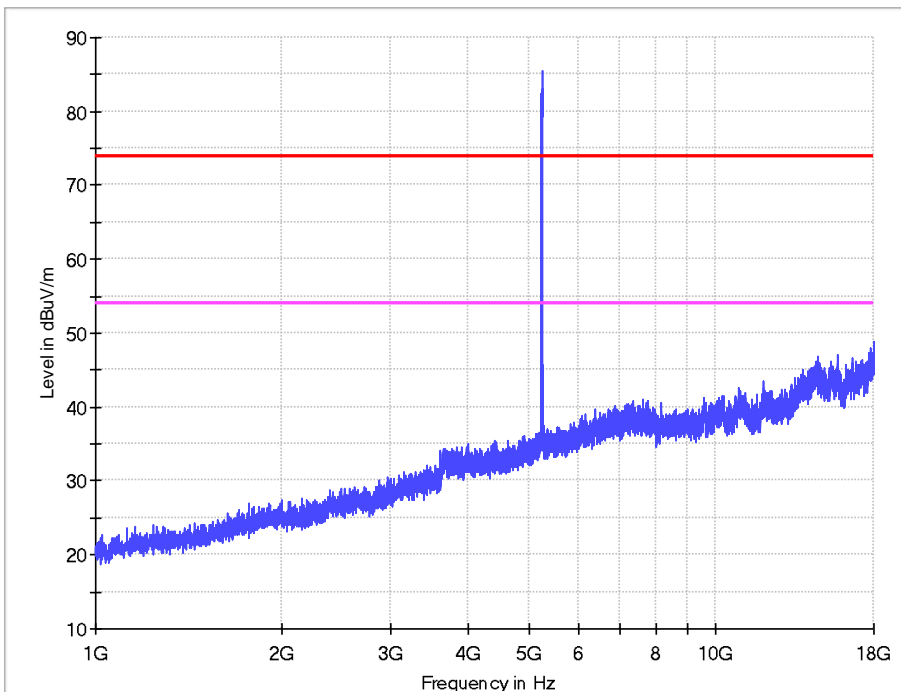
1-18G

11n HT20 IN THE 5.2GHz BAND  
CH48

Horizontal



Vertical

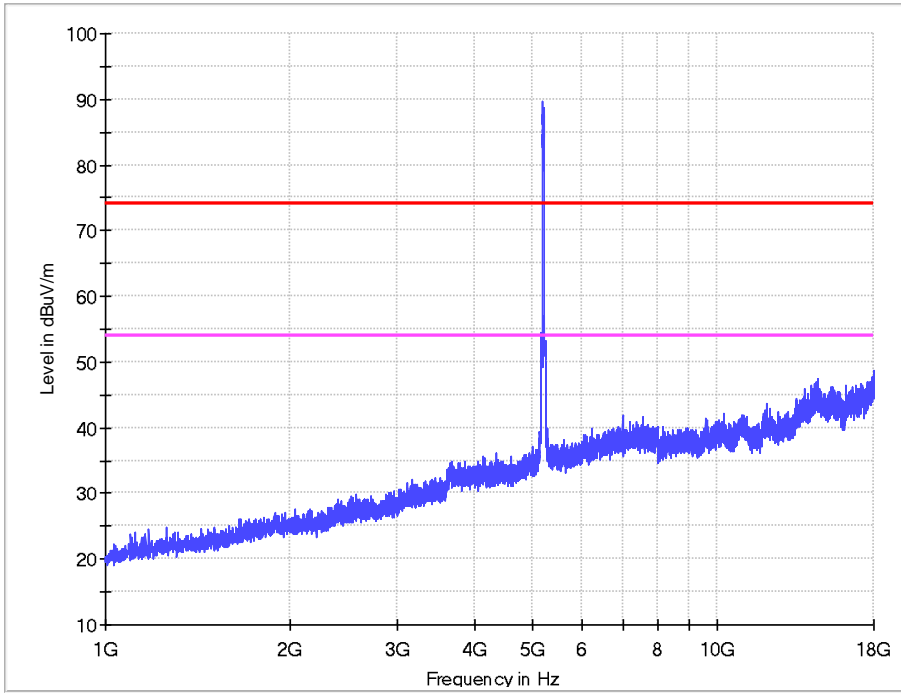




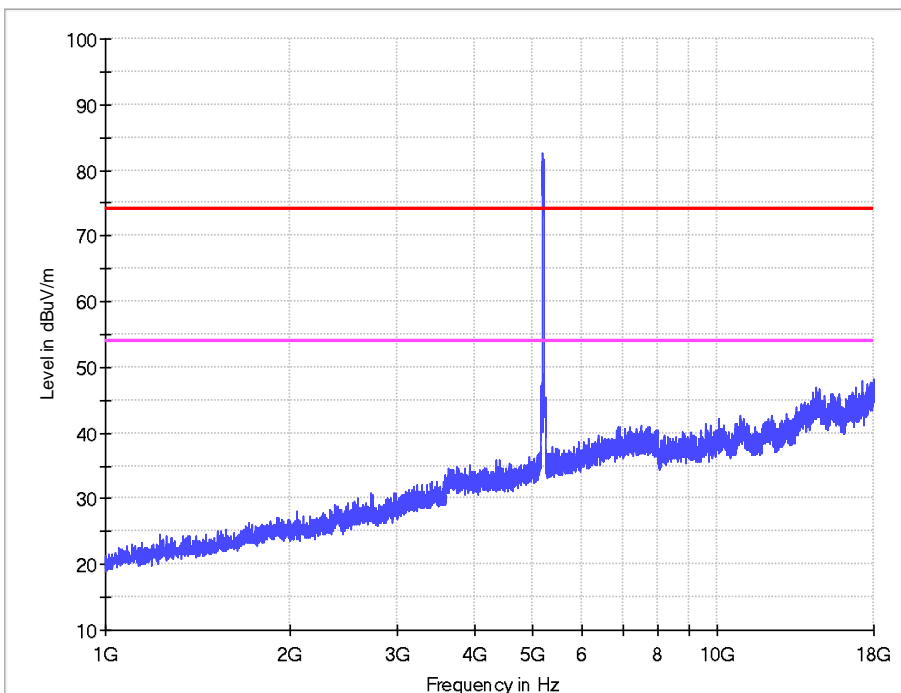
1-18G

11n HT40 IN THE 5.2GHz BAND  
CH38

Horizontal



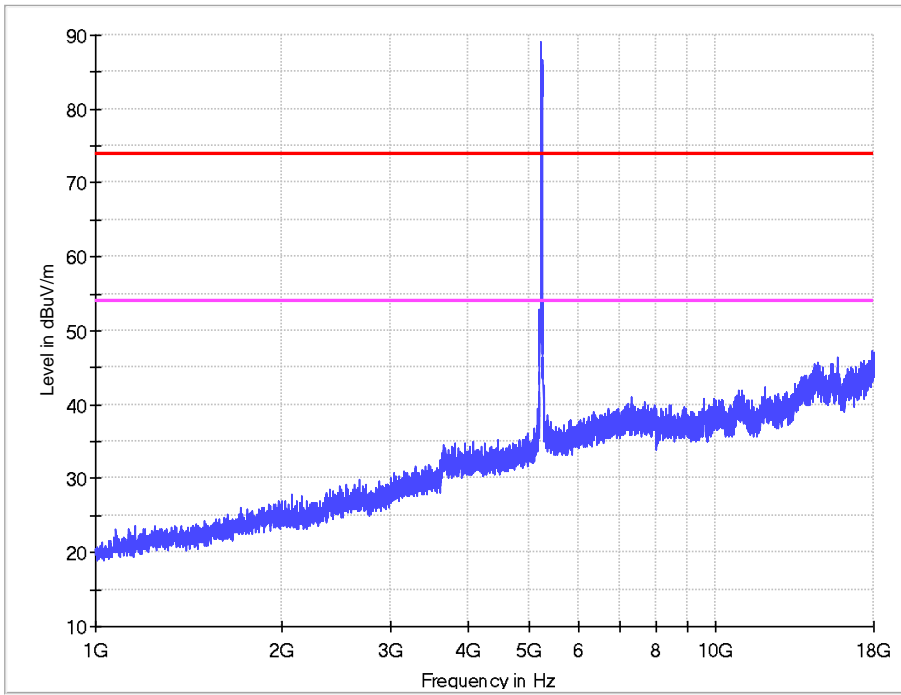
Vertical



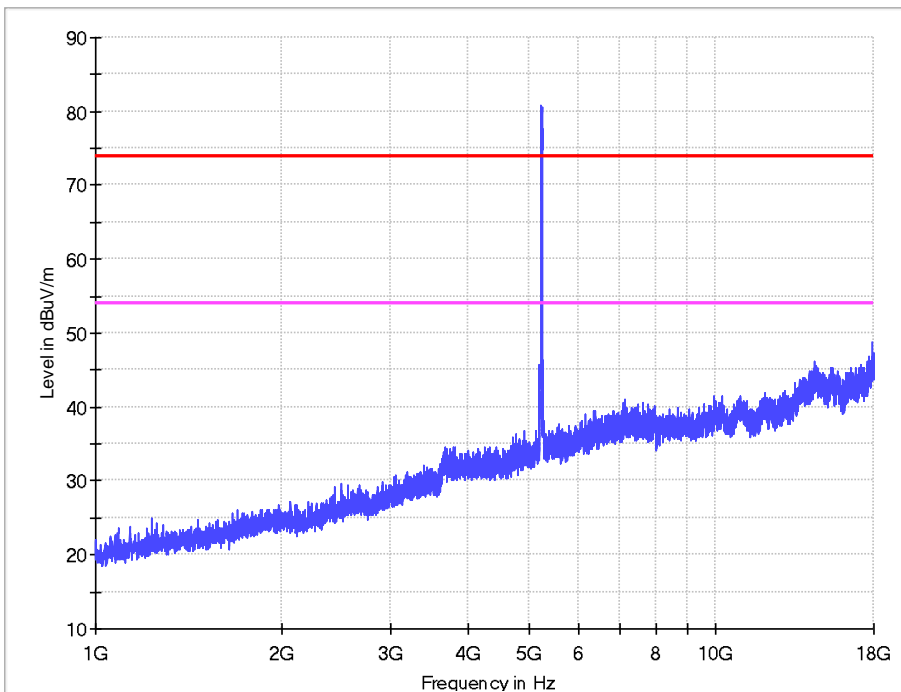
1-18G

11n HT40 IN THE 5.2GHz BAND  
CH46

Horizontal



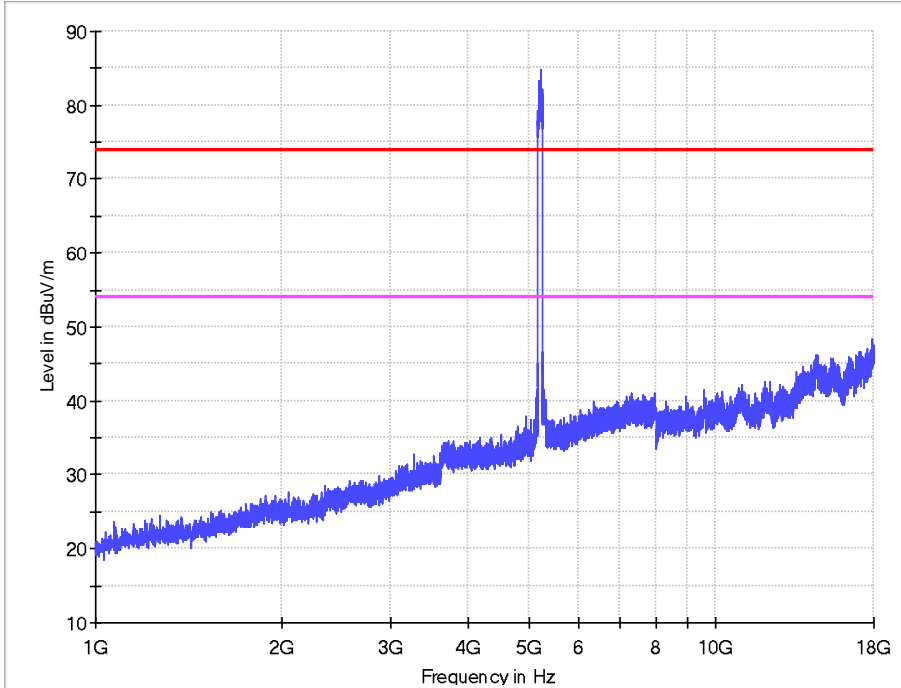
Vertical



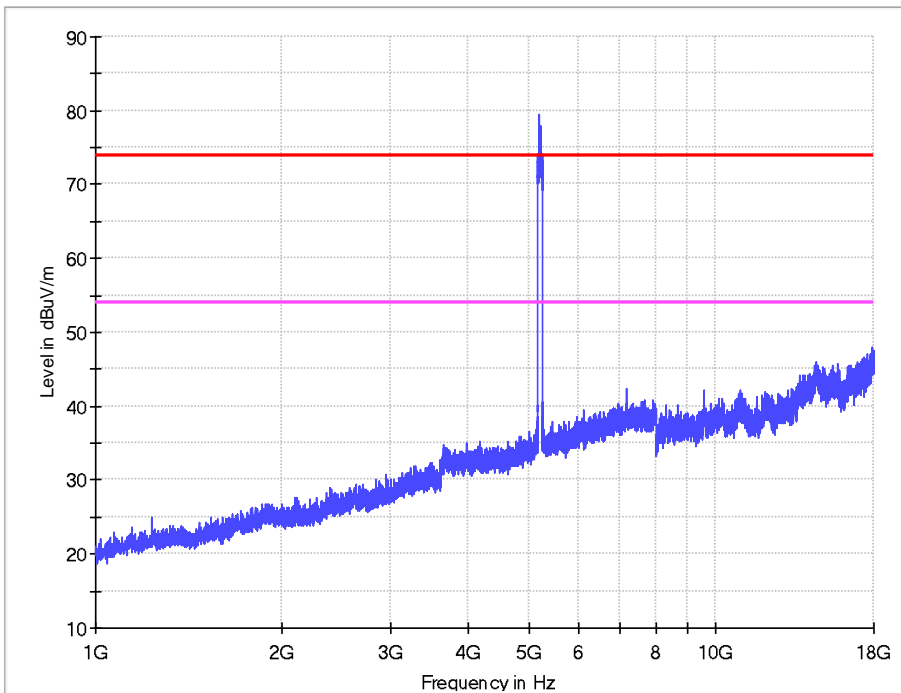
1-18G

11ac VHT80 IN THE 5.2GHZ BAND  
CH42

Horizontal



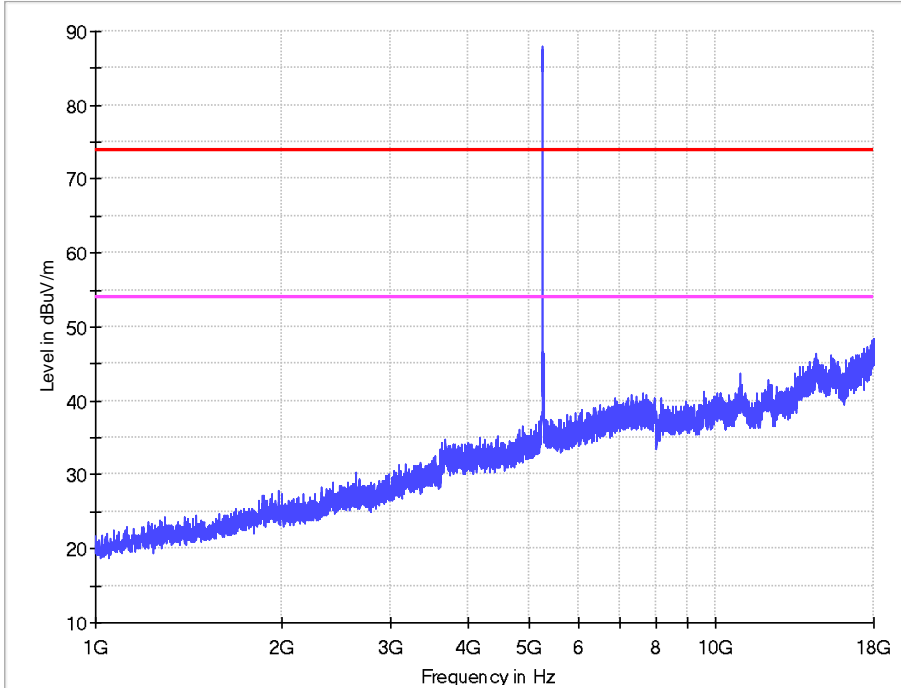
Vertical



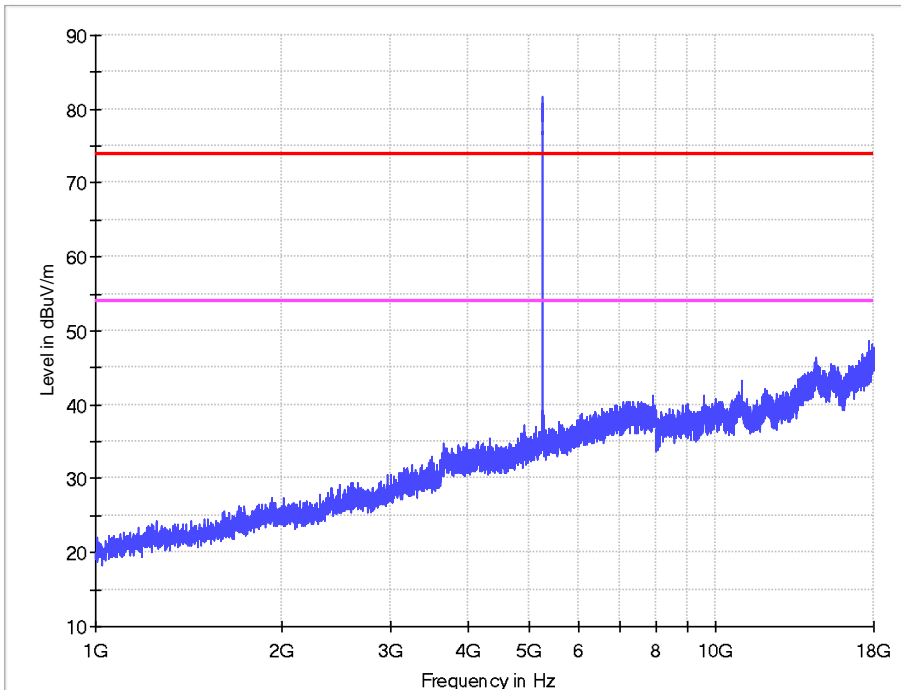
1-18G

11a IN THE 5.3GHz BAND  
CH52

Horizontal



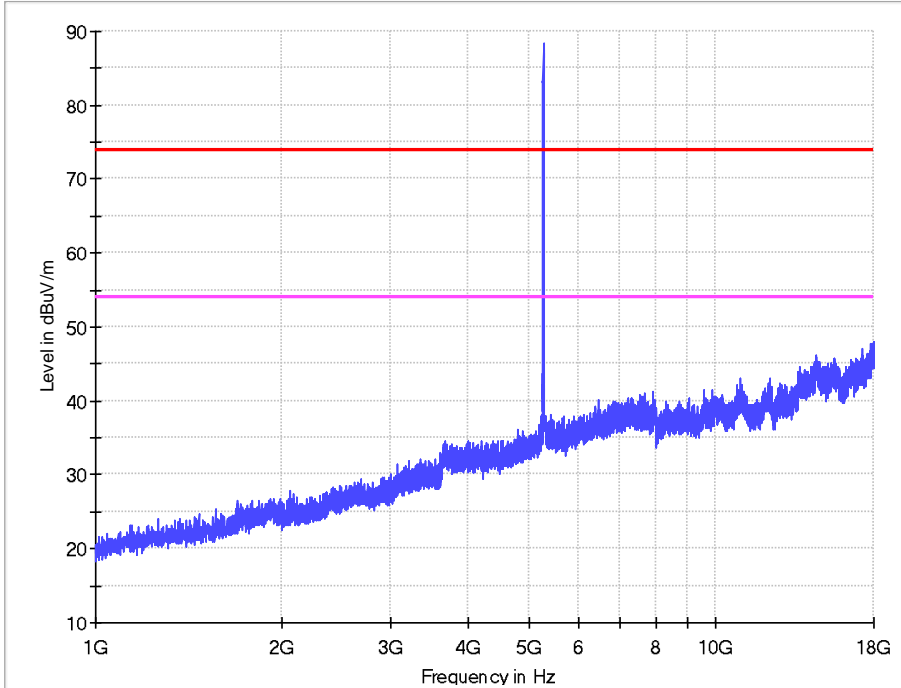
Vertical



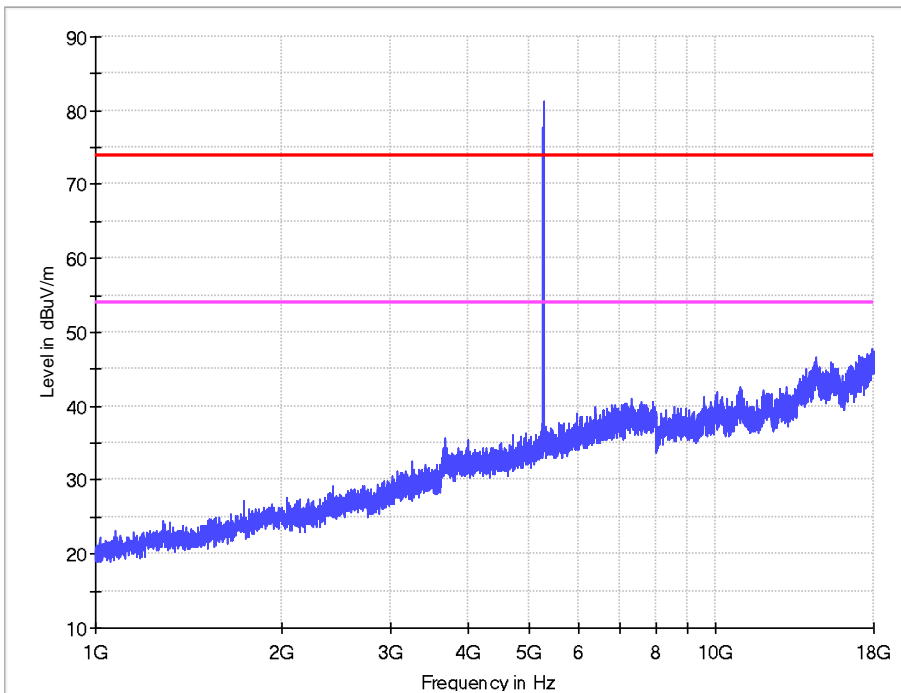
1-18G

11a IN THE 5.3GHz BAND  
CH56

Horizontal



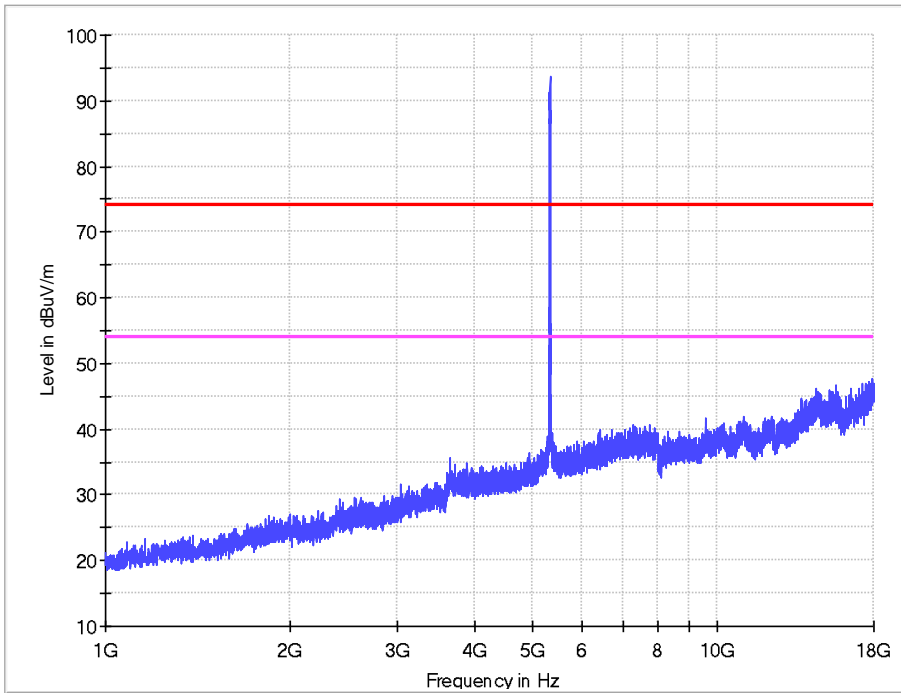
Vertical



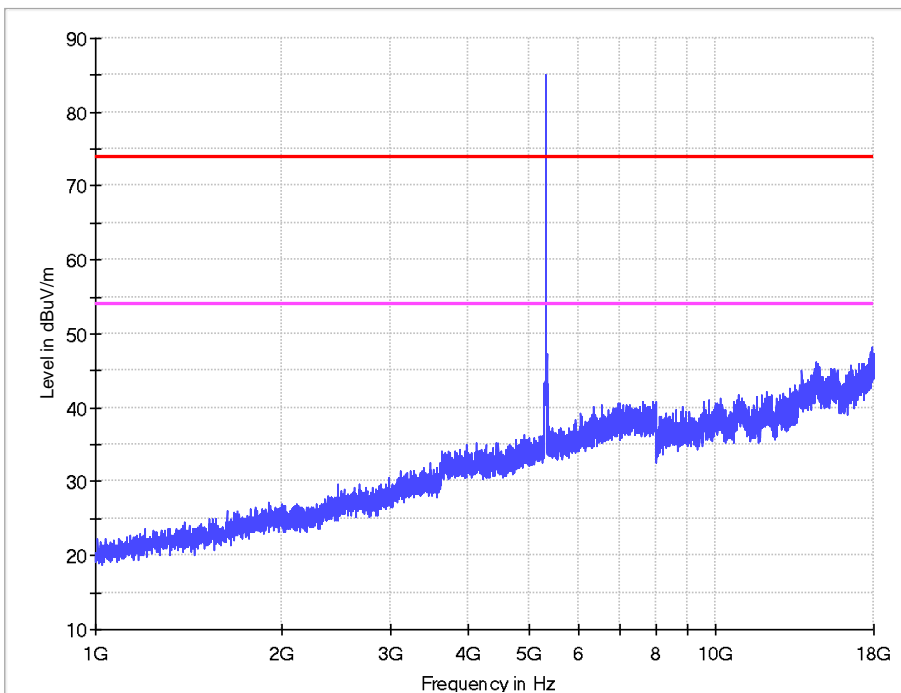
1-18G

11a IN THE 5.3GHz BAND  
CH64

Horizontal



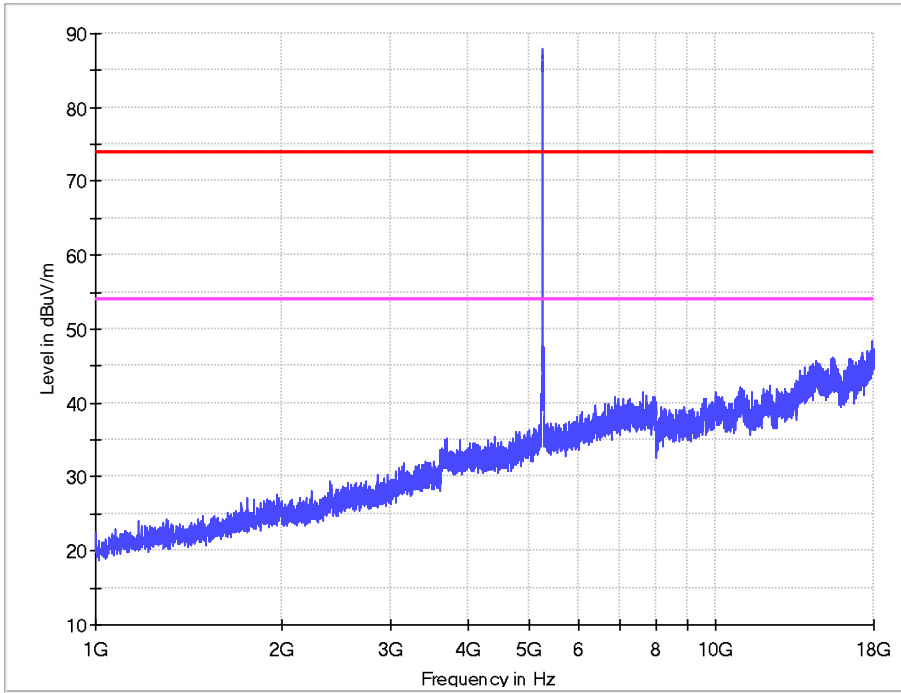
Vertical



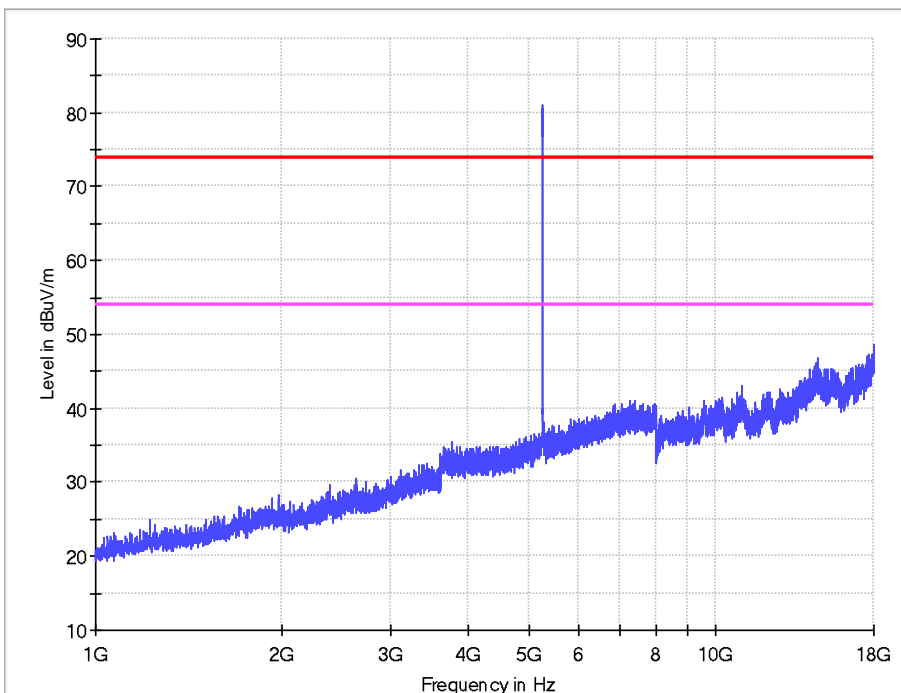
1-18G

11n HT20 IN THE 5.3GHz BAND  
CH52

Horizontal



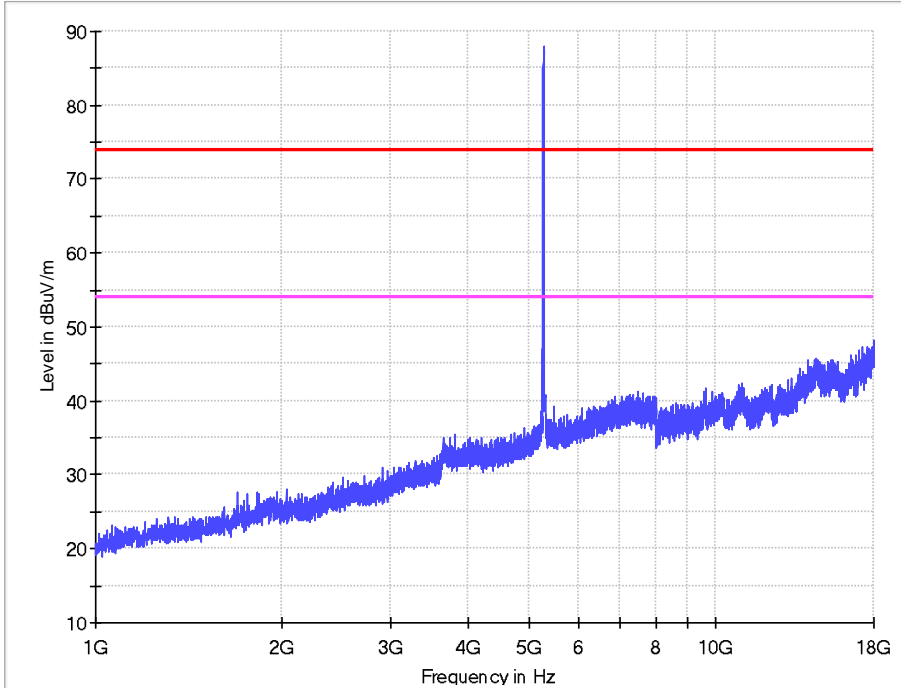
Vertical



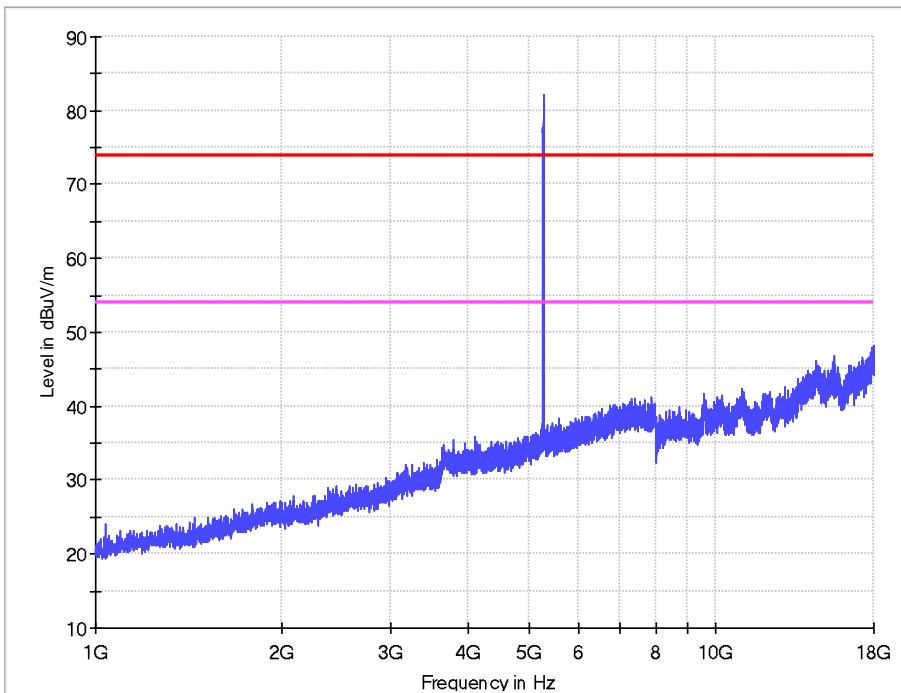
1-18G

11n HT20 IN THE 5.3GHz BAND  
CH56

Horizontal



Vertical

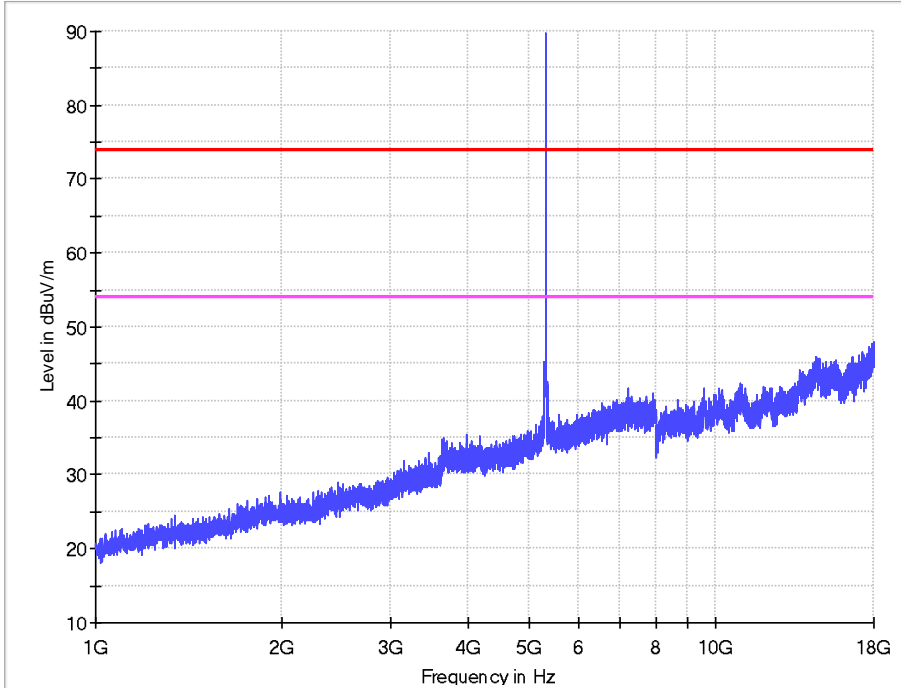




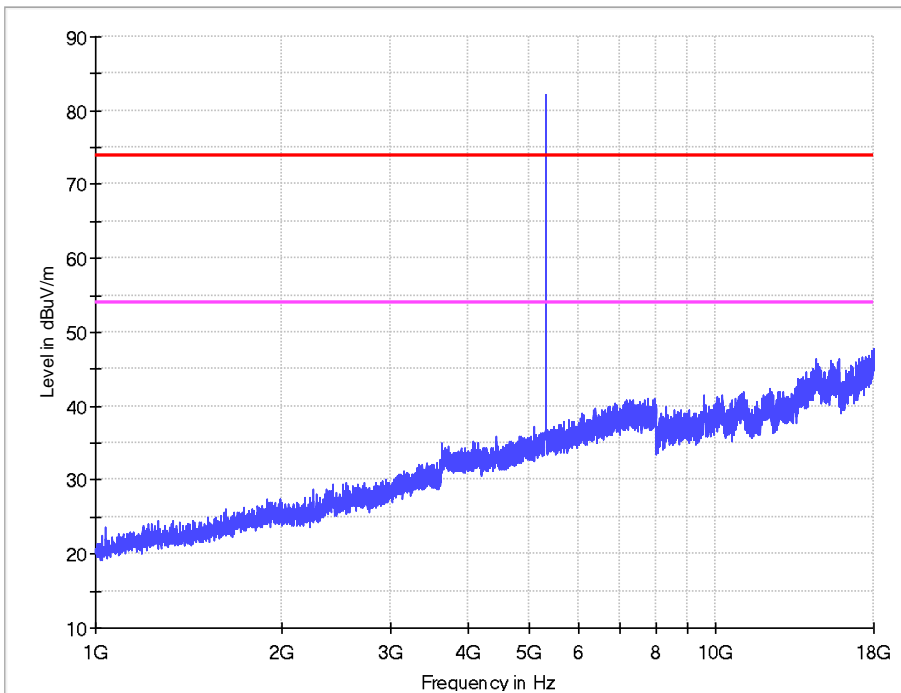
1-18G

11n HT20 IN THE 5.3GHz BAND  
CH64

Horizontal



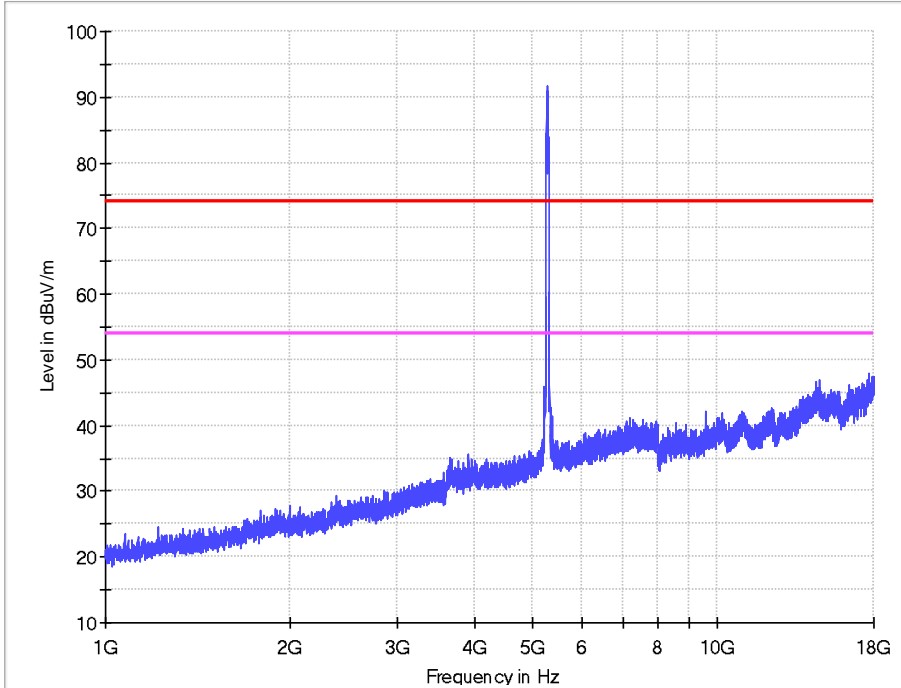
Vertical



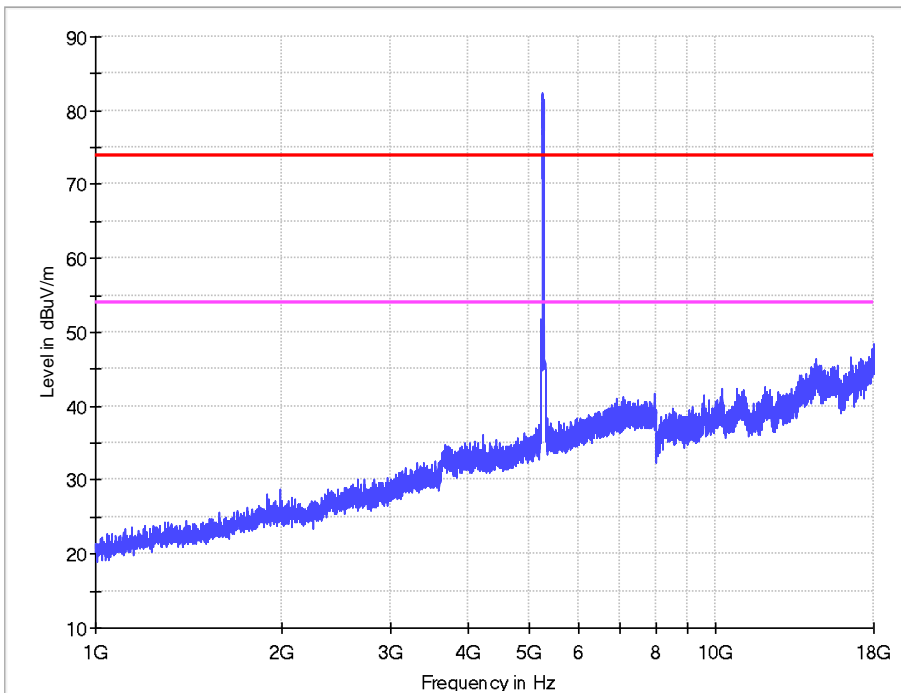
1-18G

11n HT40 IN THE 5.3GHz BAND  
CH54

Horizontal



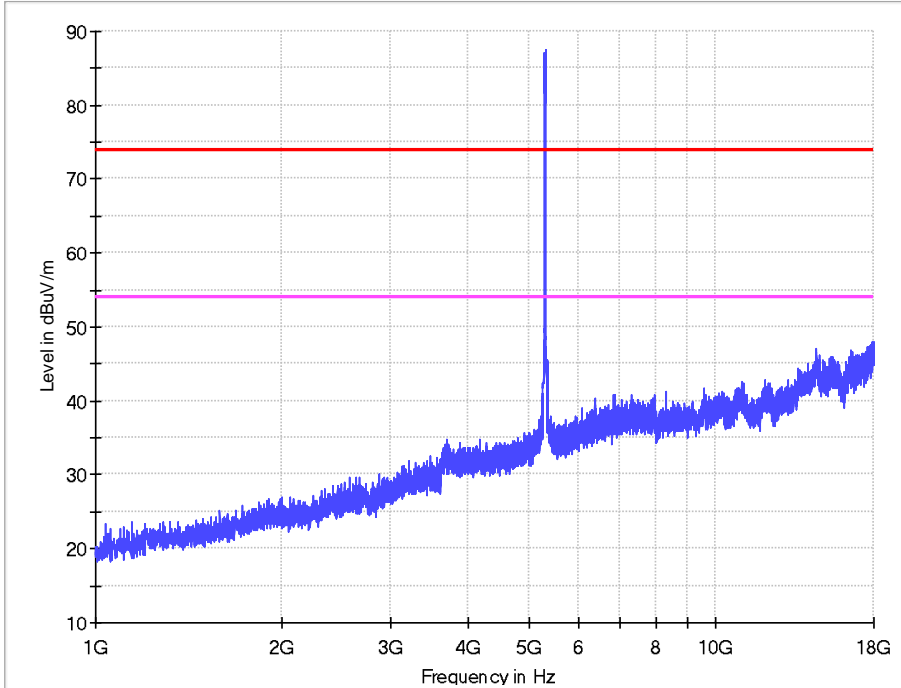
Vertical



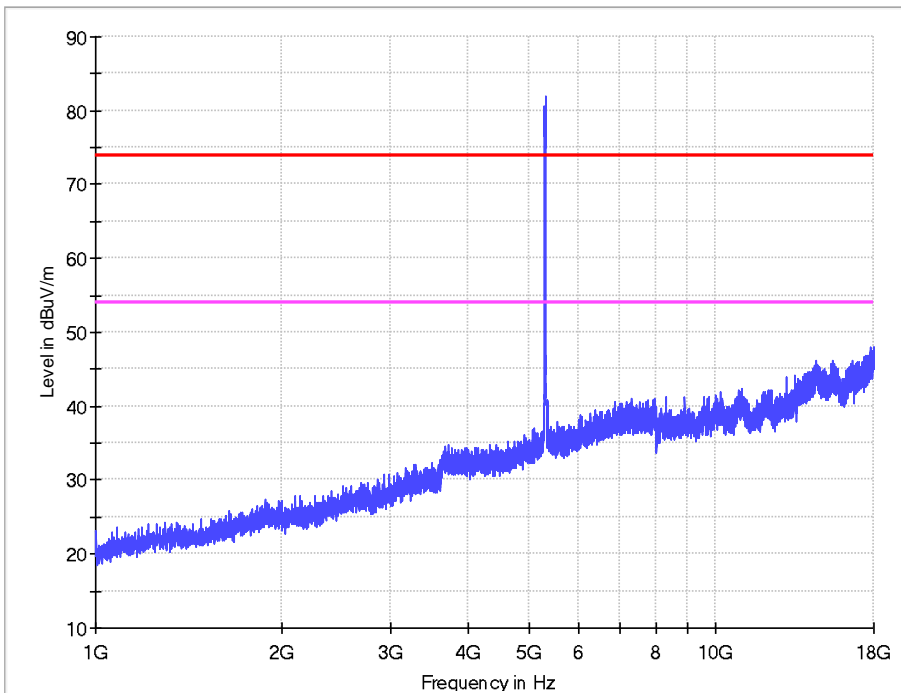
1-18G

11n HT40 IN THE 5.3GHz BAND  
CH62

Horizontal



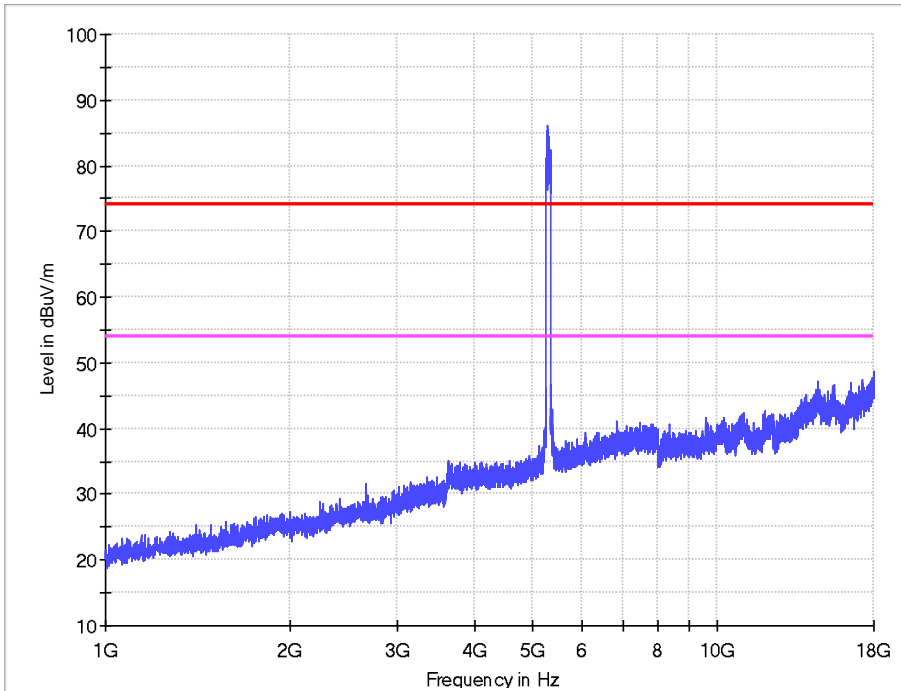
Vertical



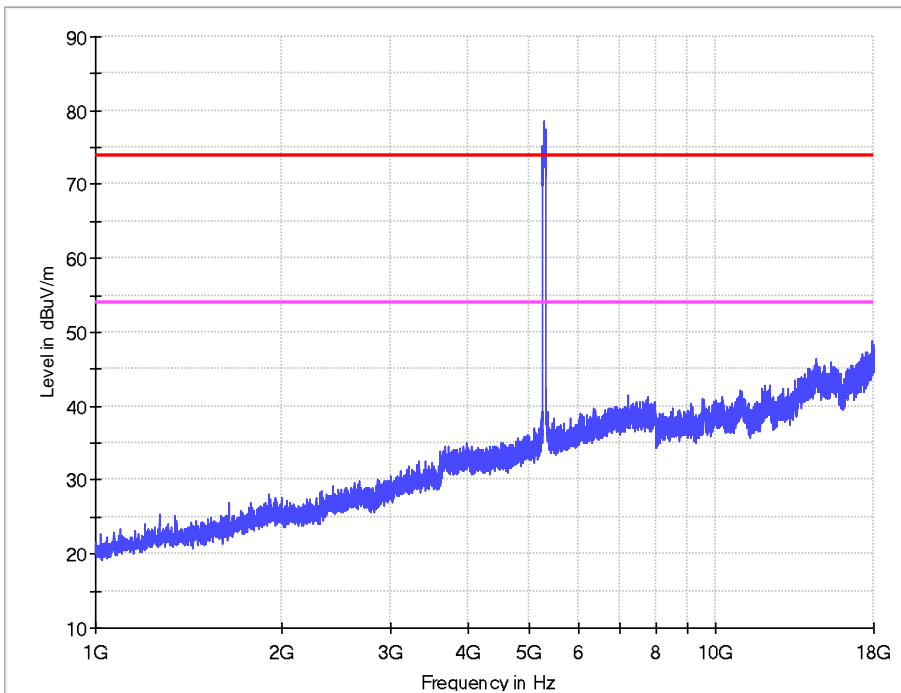
1-18G

11ac VHT80 IN THE 5.3GHz BAND  
CH58

Horizontal



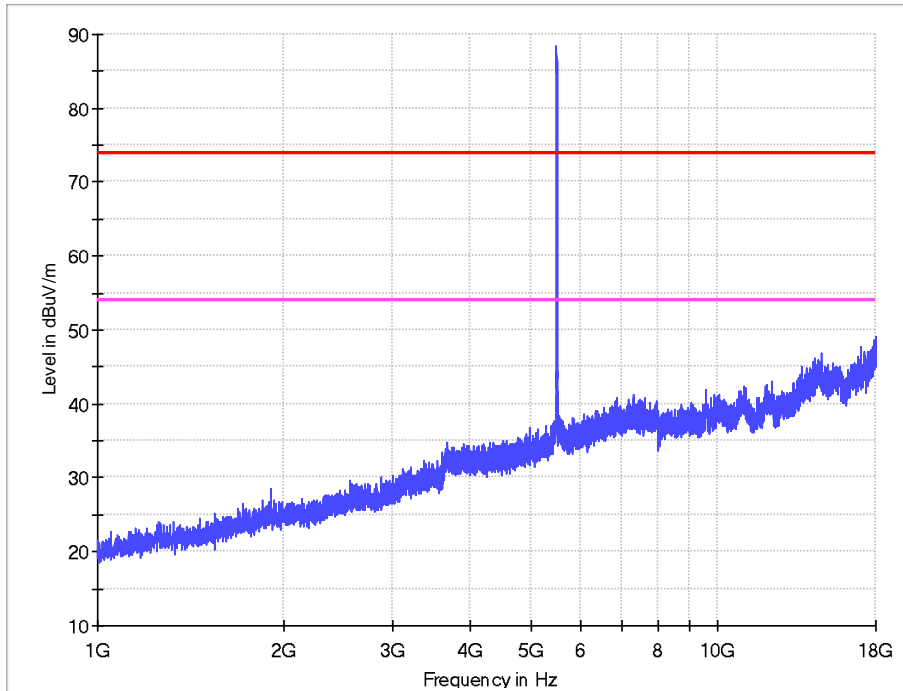
Vertical



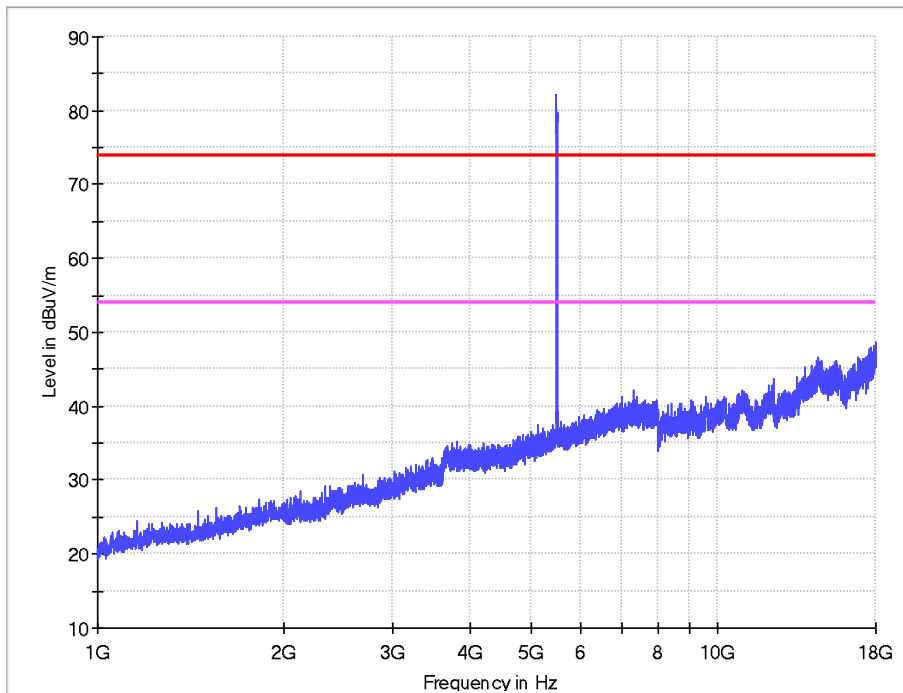
1-18G

11a IN THE 5.6GHz BAND  
CH100

Horizontal



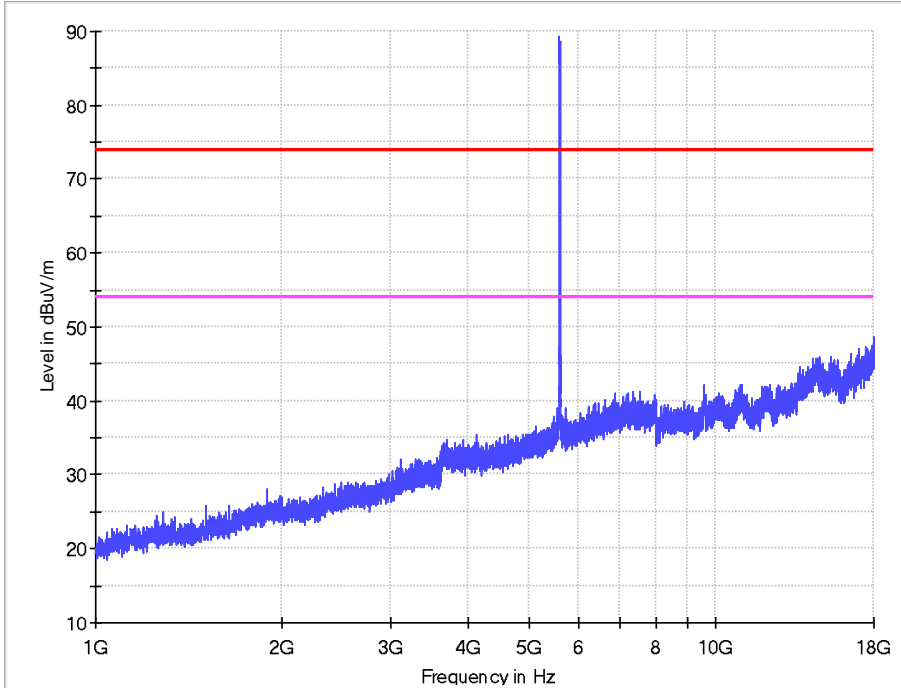
Vertical



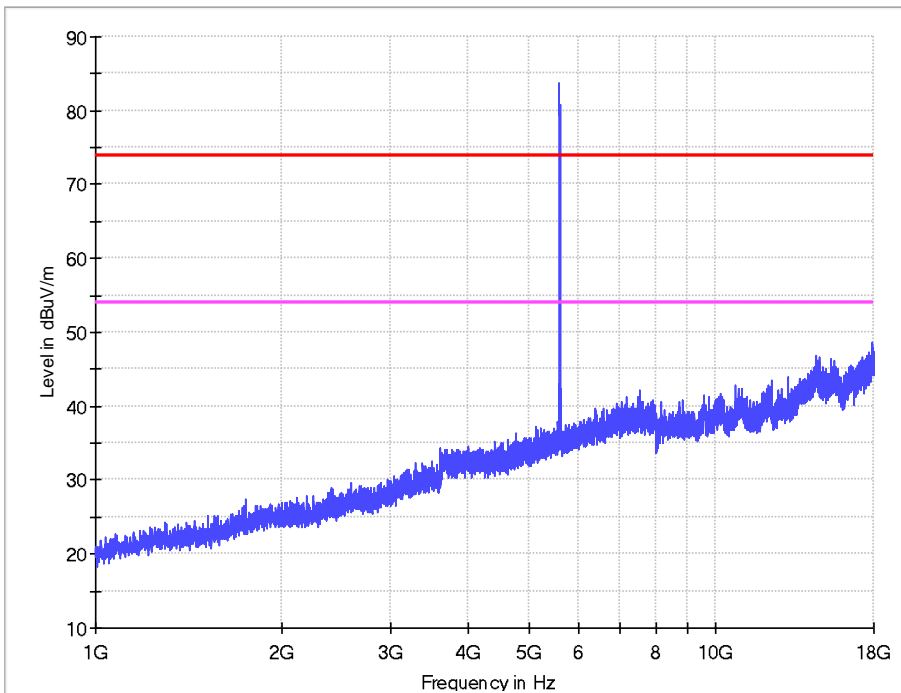
1-18G

11a IN THE 5.6GHz BAND  
CH120

Horizontal



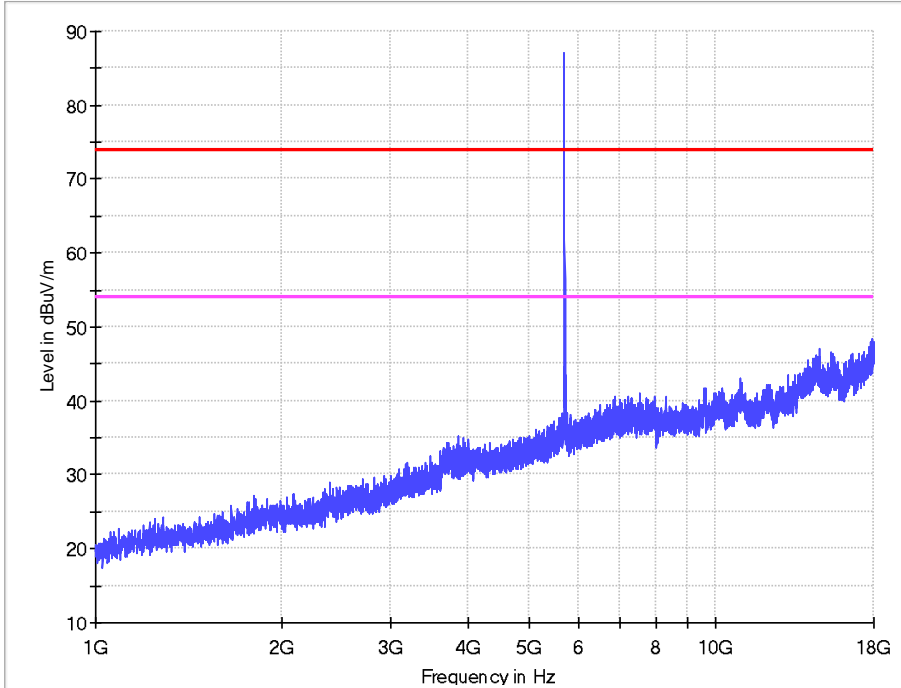
Vertical



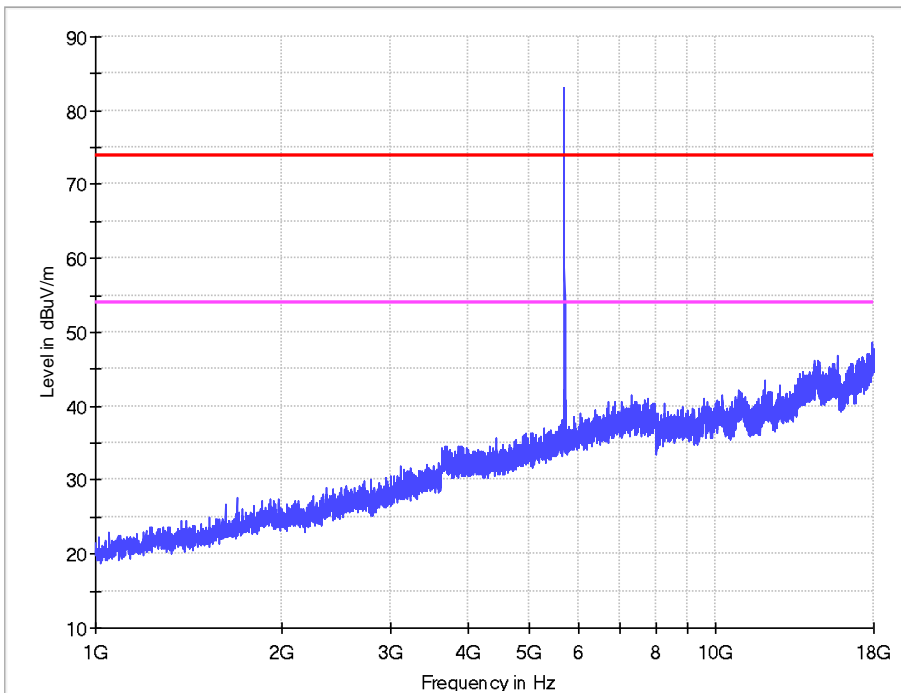
1-18G

11a IN THE 5.6GHz BAND  
CH140

Horizontal



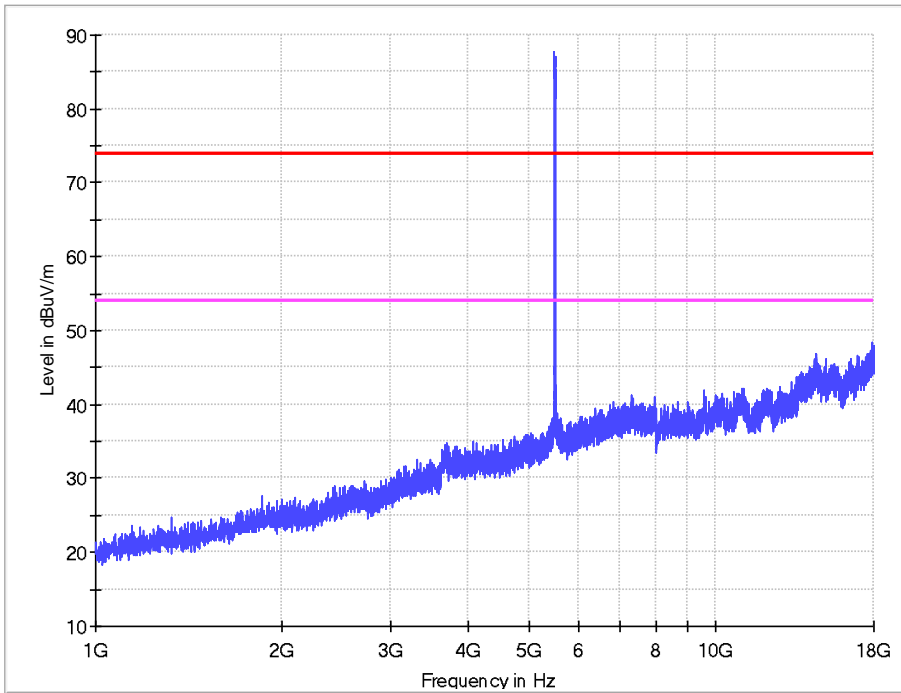
Vertical



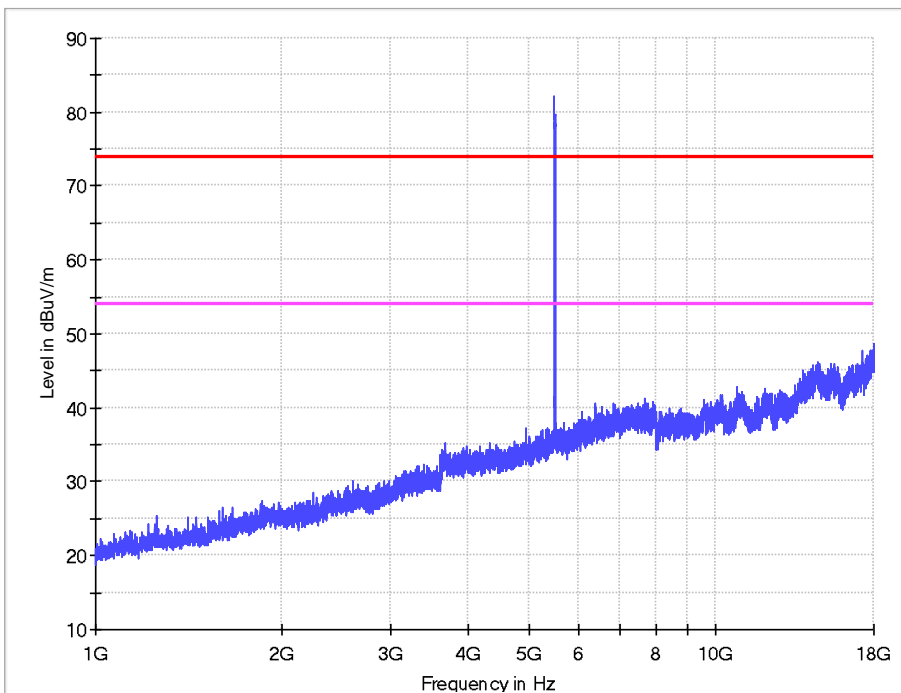
1-18G

11n HT20 IN THE 5.6GHz BAND  
CH100

Horizontal



Vertical

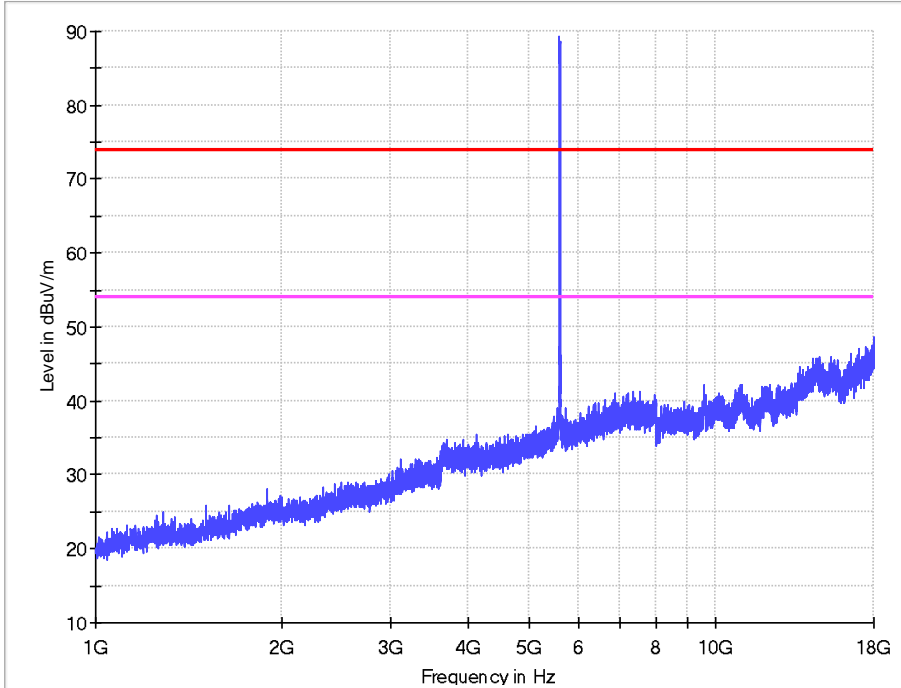




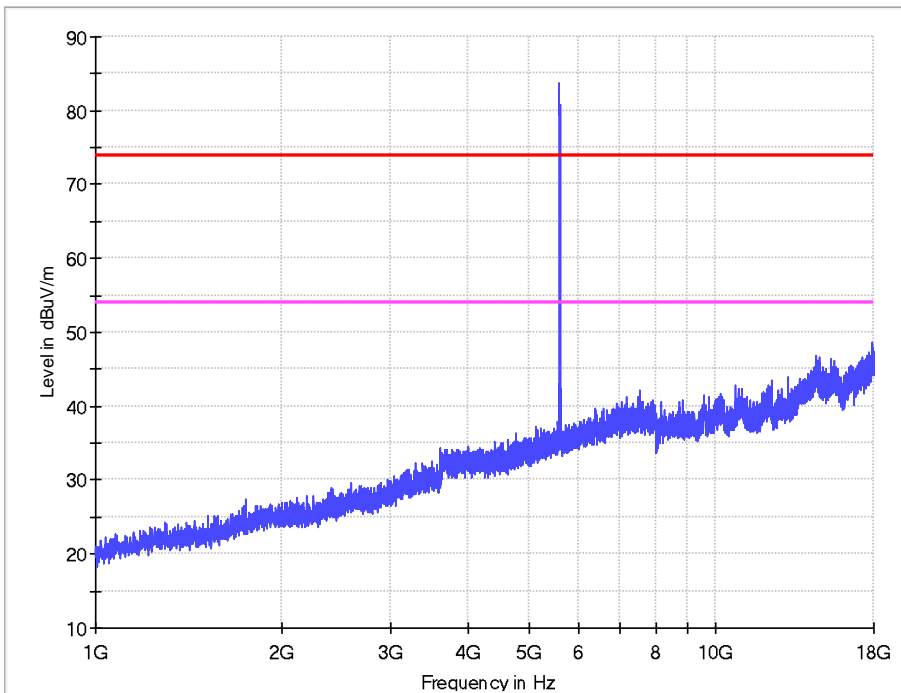
1-18G

11n HT20 IN THE 5.6GHz BAND  
CH120

Horizontal



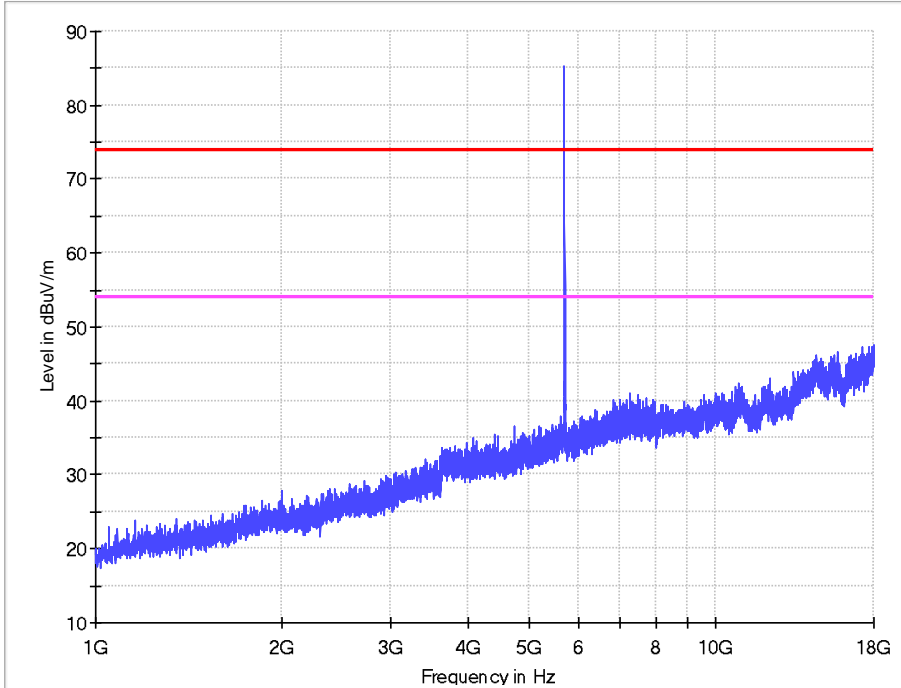
Vertical



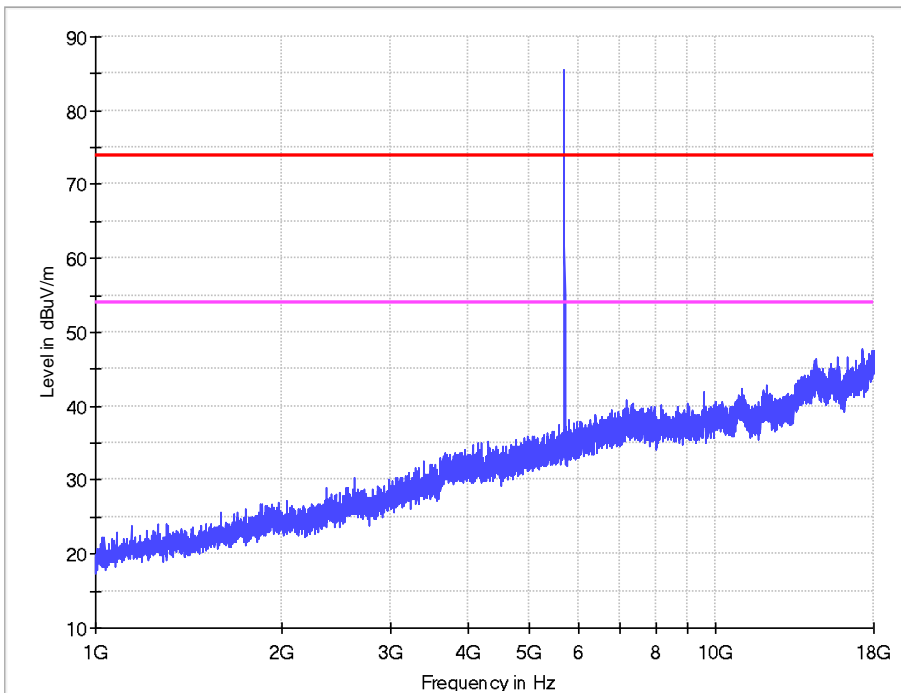
1-18G

11n HT20 IN THE 5.6GHz BAND  
CH140

Horizontal



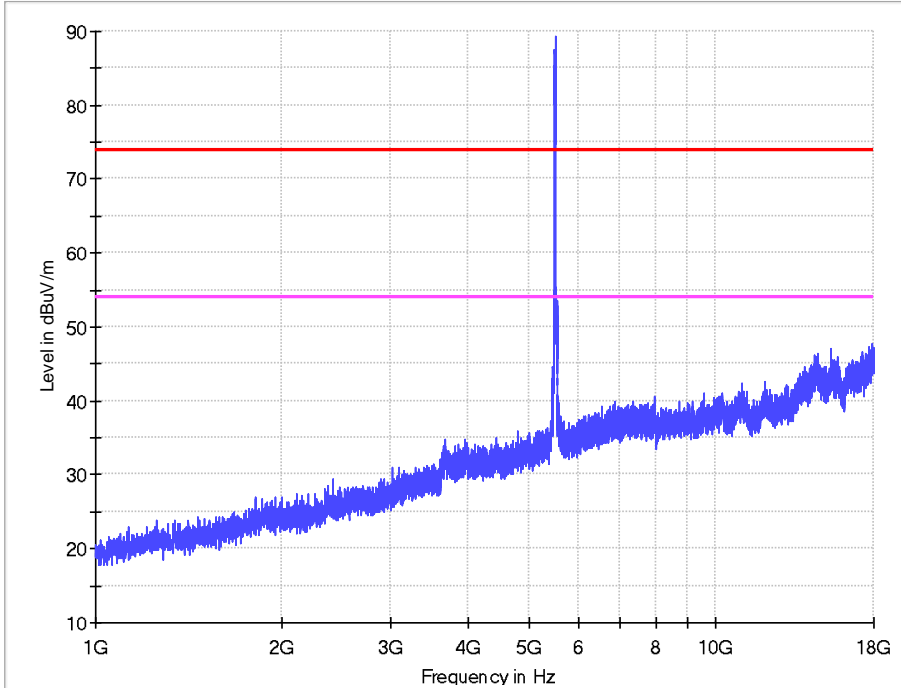
Vertical



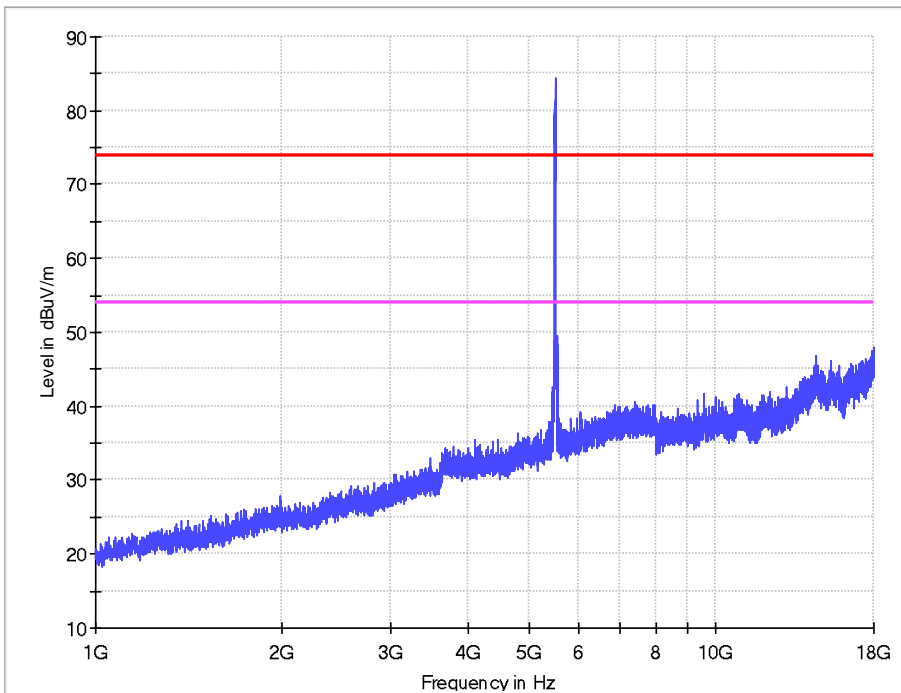
1-18G

11n HT40 IN THE 5.6GHz BAND  
CH102

Horizontal



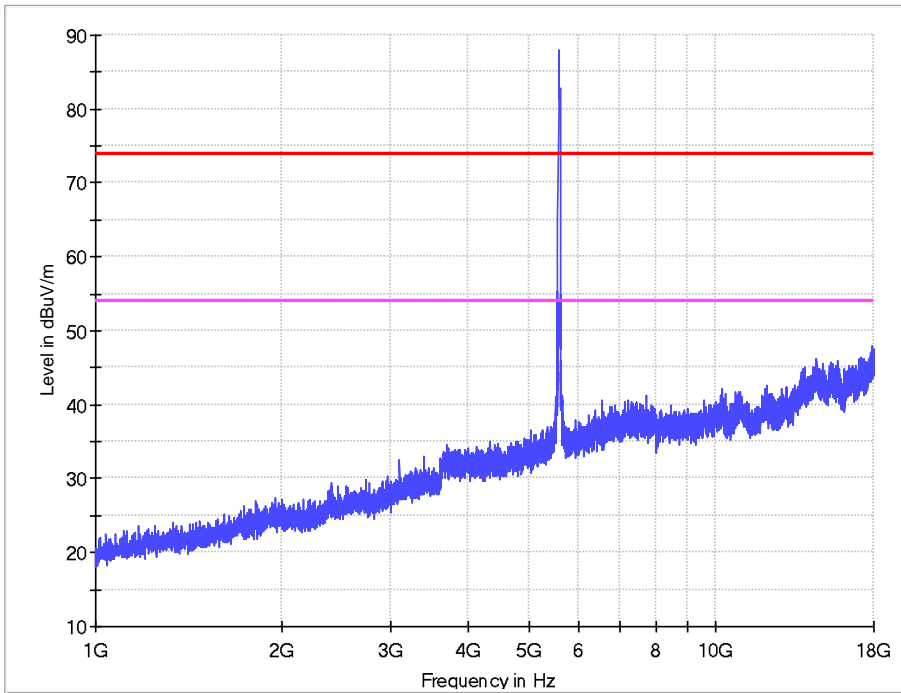
Vertical



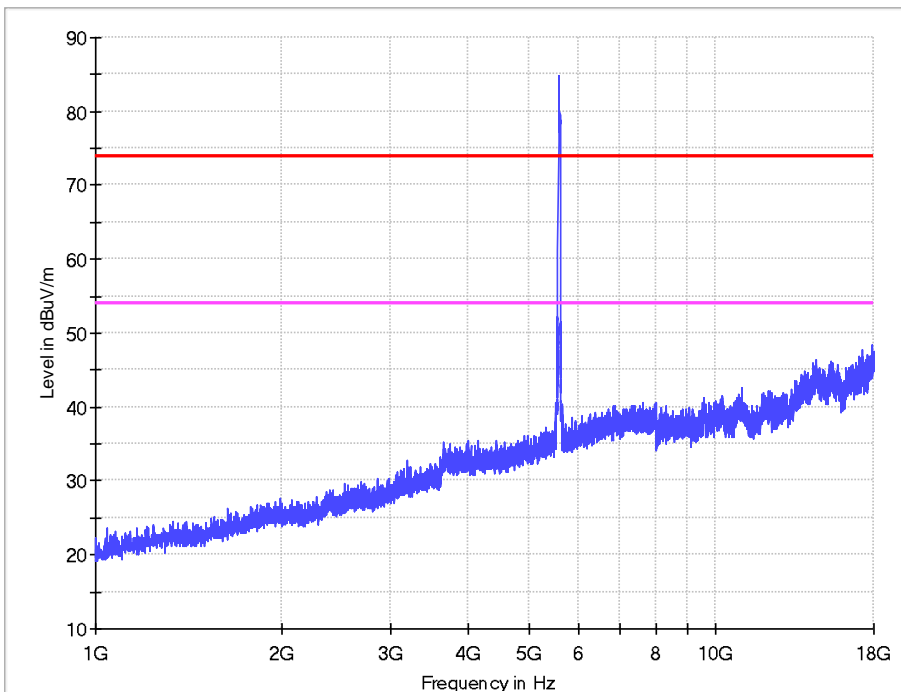
1-18G

11n HT40 IN THE 5.6GHz BAND  
CH118

Horizontal



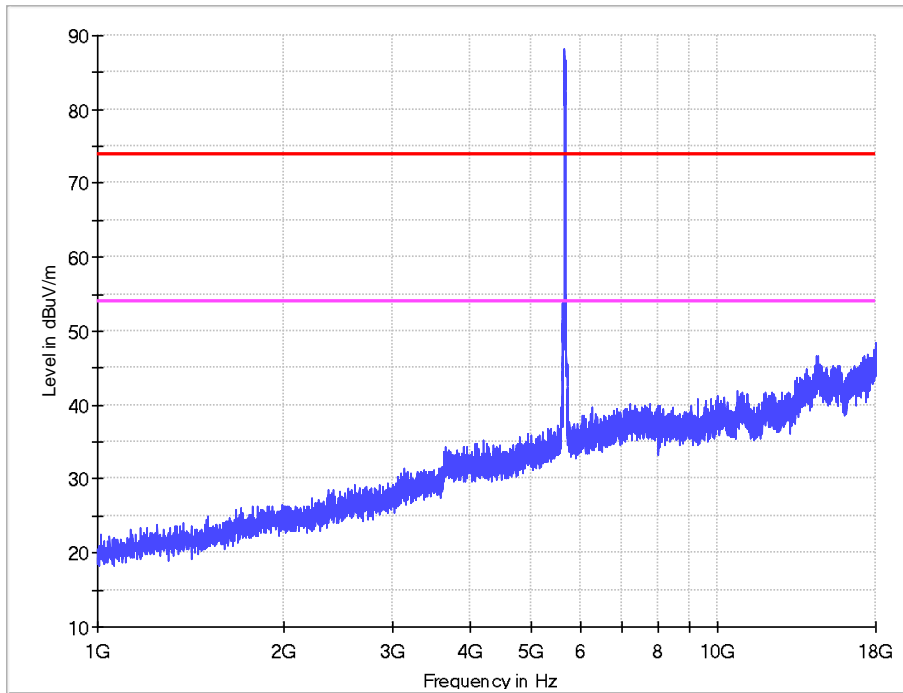
Vertical



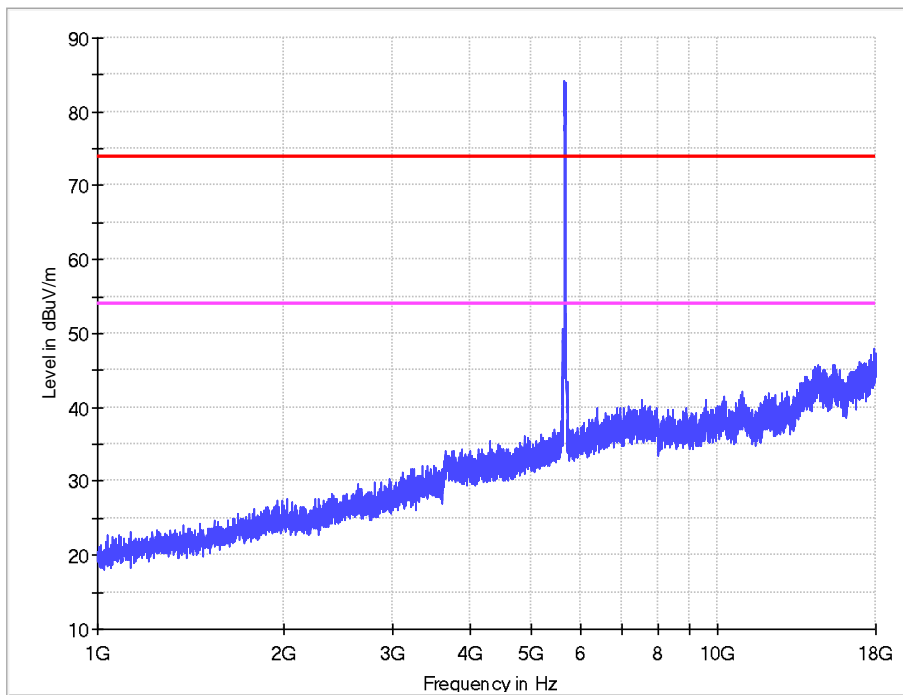
1-18G

# 11n HT40 IN THE 5.6GHz BAND CH134

## Horizontal



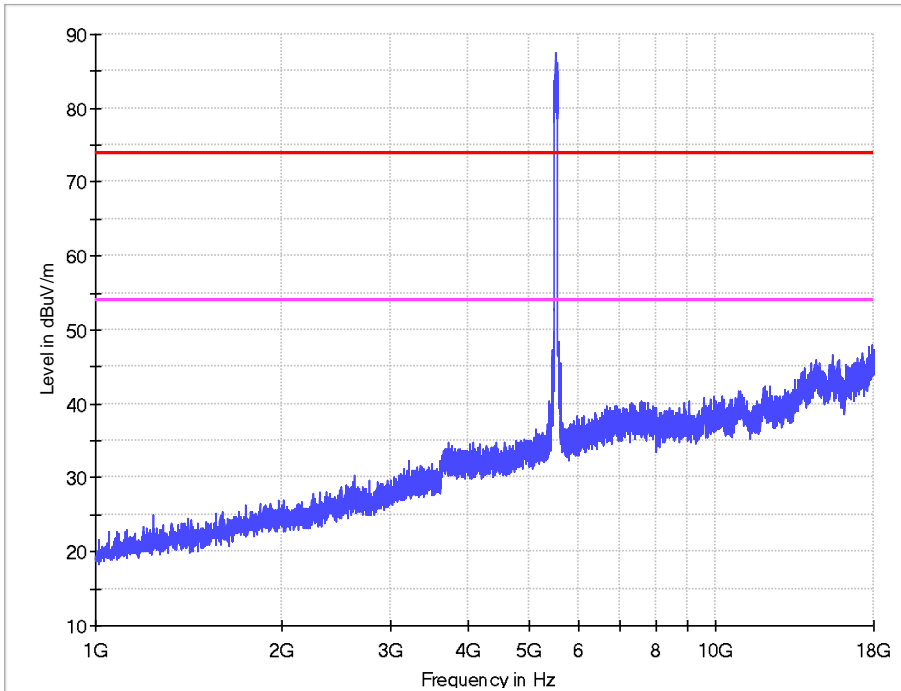
## Vertical



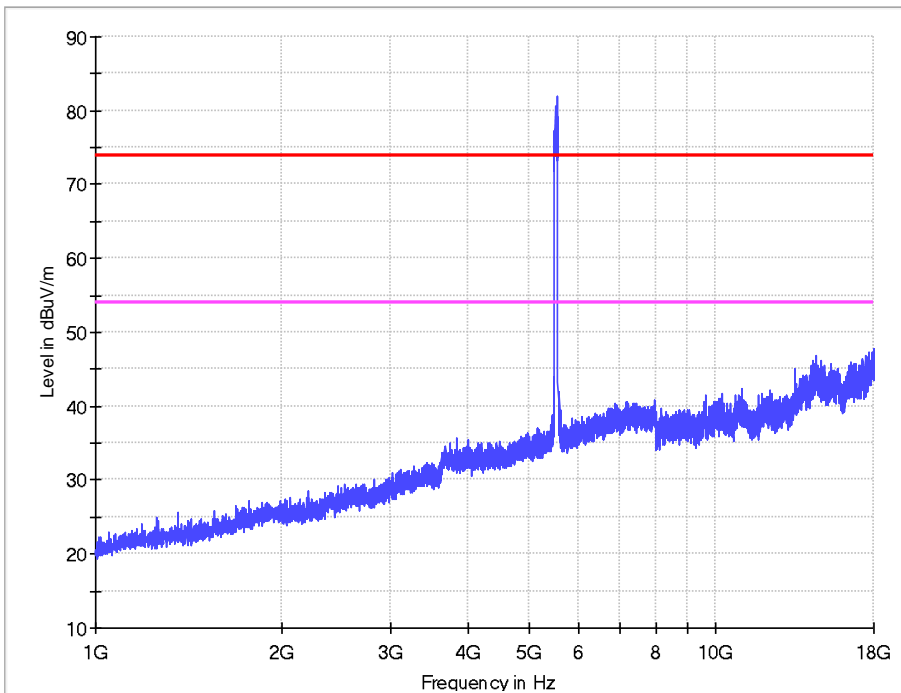
1-18G

11ac VHT80 IN THE 5.6GHz BAND  
CH106

Horizontal



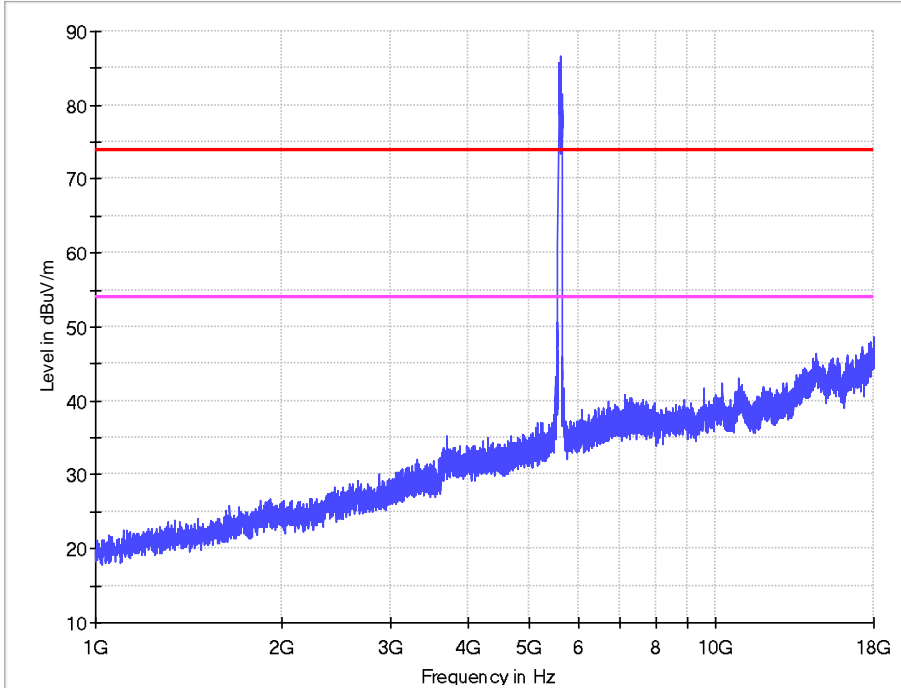
Vertical



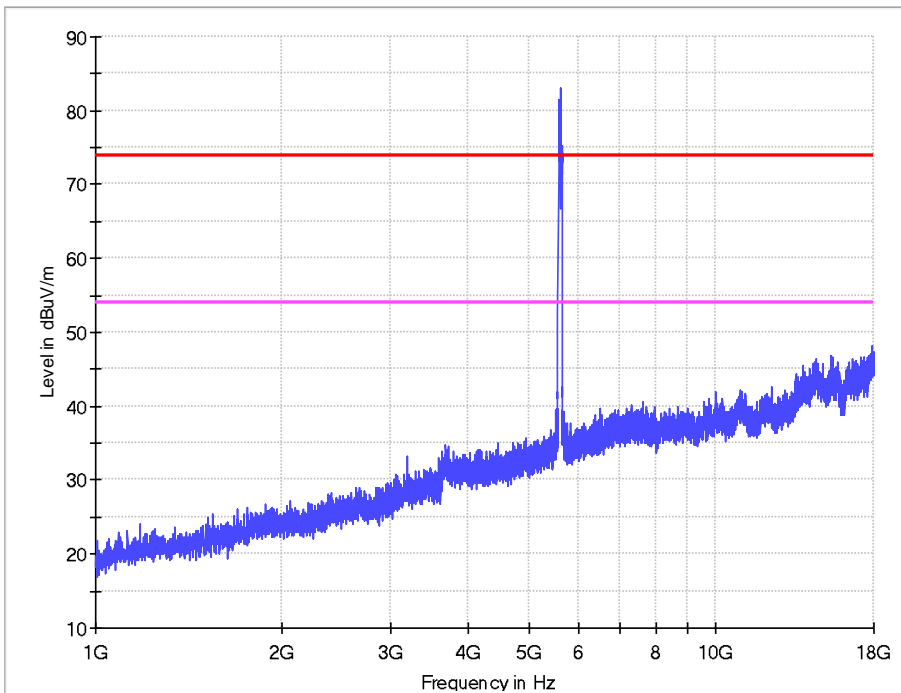
1-18G

11ac VHT80 IN THE 5.6GHz BAND  
CH122

Horizontal



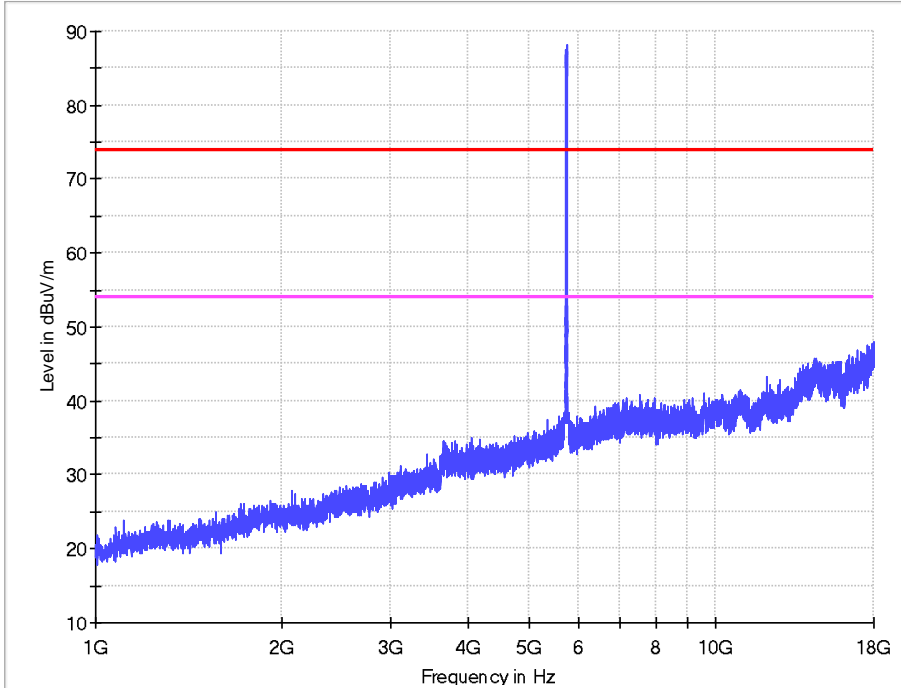
Vertical



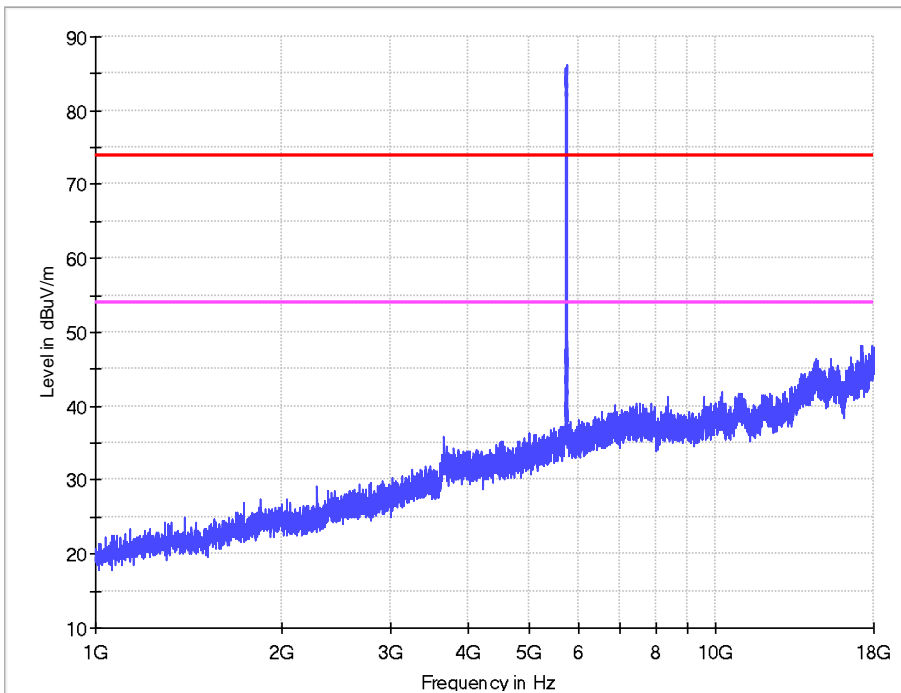
1-18G

11a IN THE 5.8GHz BAND  
CH149

Horizontal



Vertical

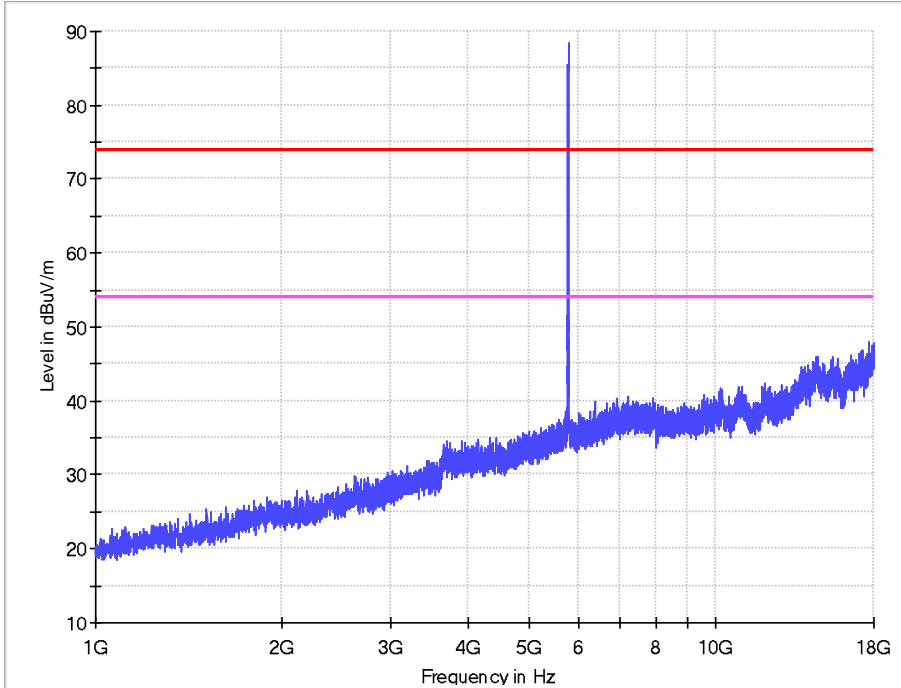




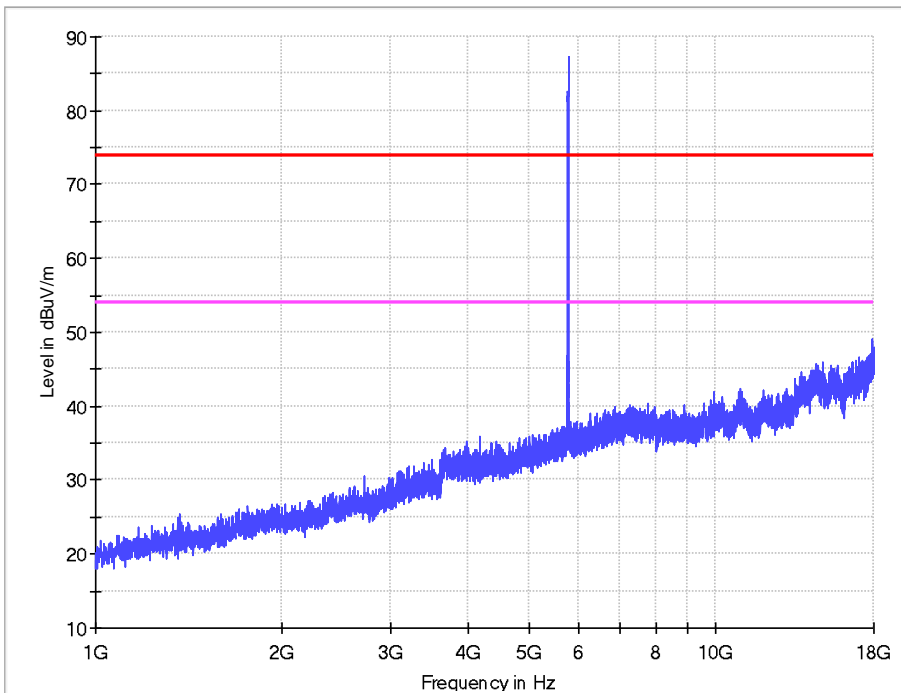
1-18G

11a IN THE 5.8GHz BAND  
CH157

Horizontal



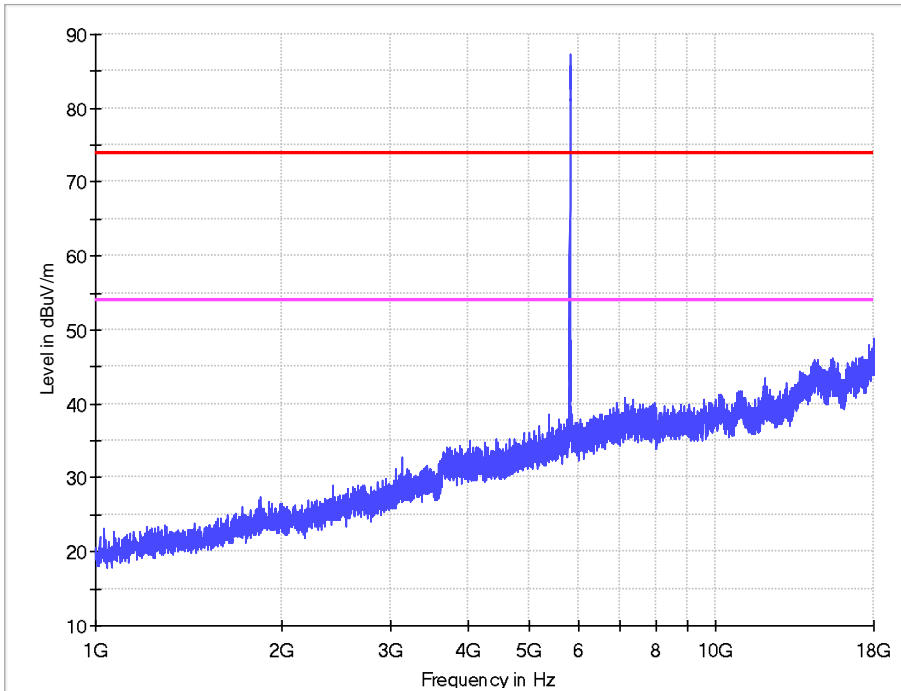
Vertical



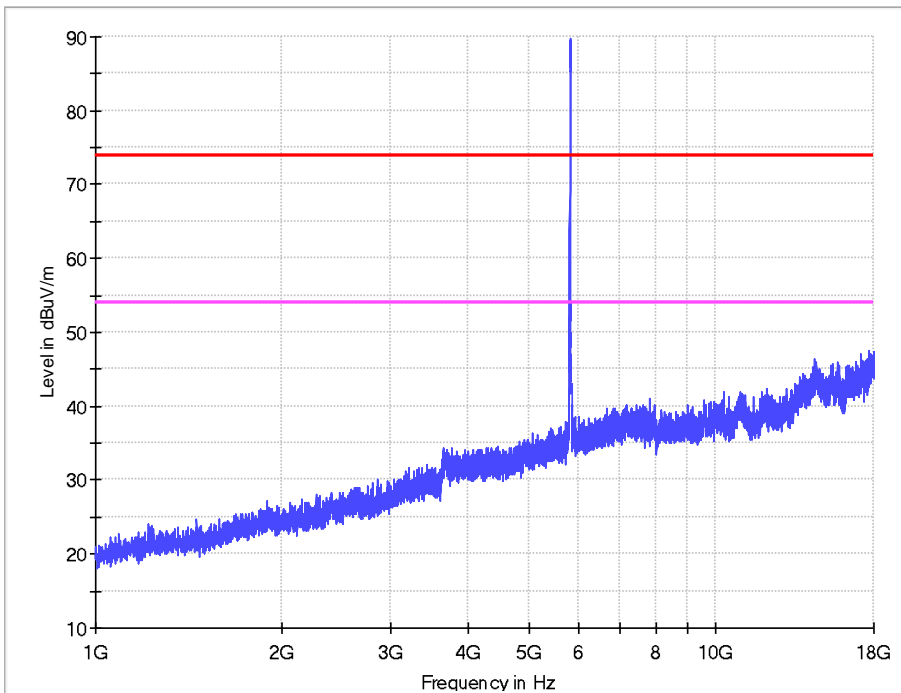
1-18G

11a IN THE 5.8GHz BAND  
CH165

Horizontal



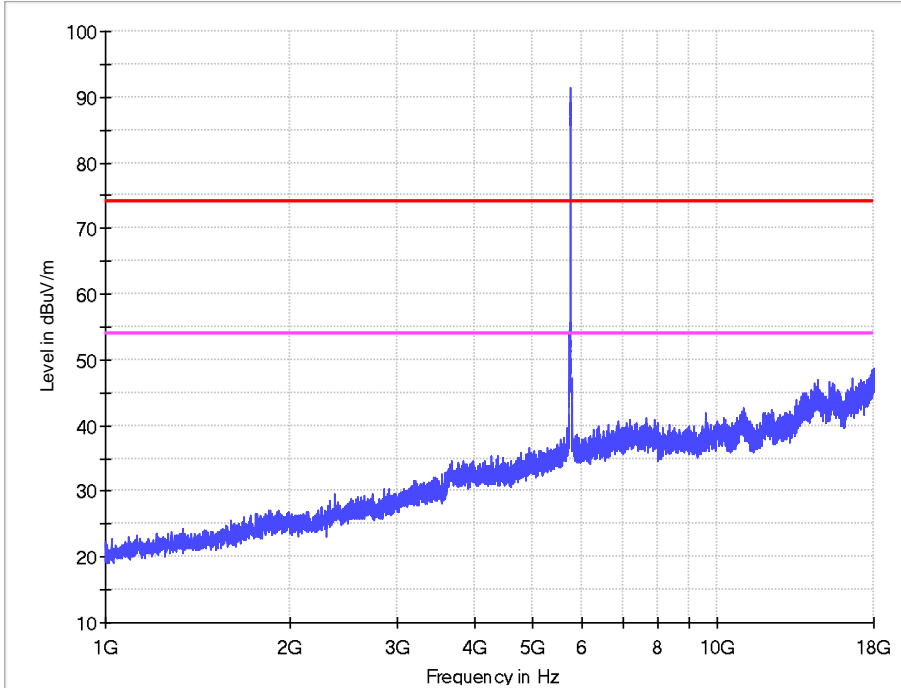
Vertical



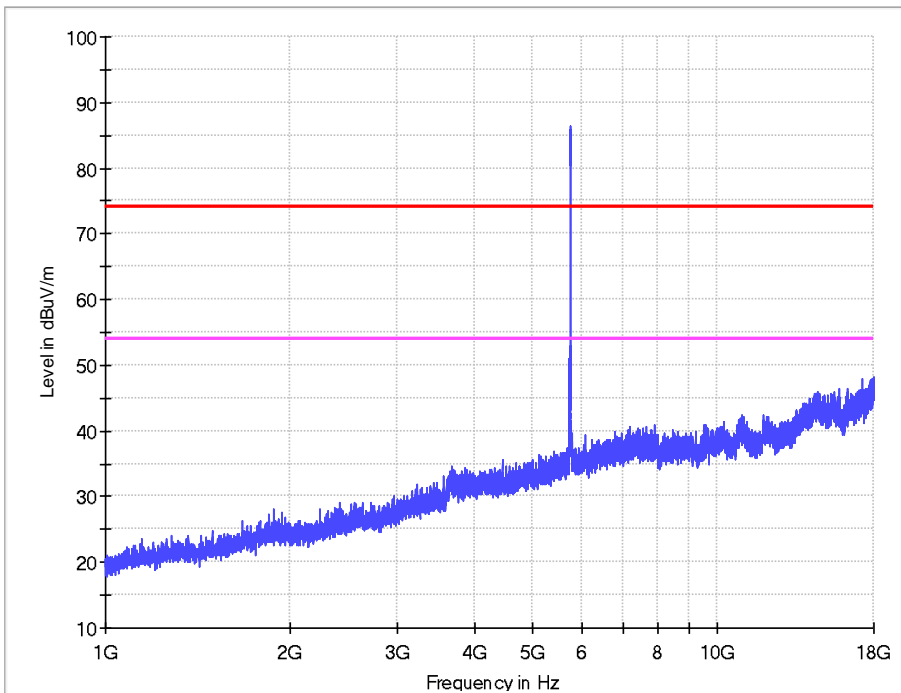
1-18G

11n HT20 IN THE 5.8GHz BAND  
CH149

Horizontal



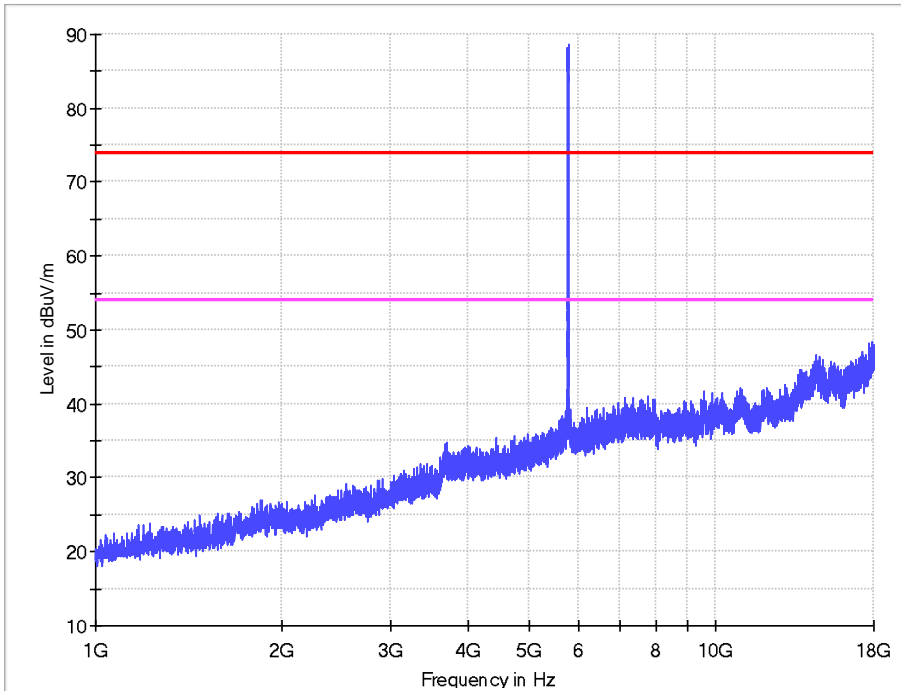
Vertical



1-18G

11n HT20 IN THE 5.8GHz BAND  
CH157

Horizontal



Vertical

