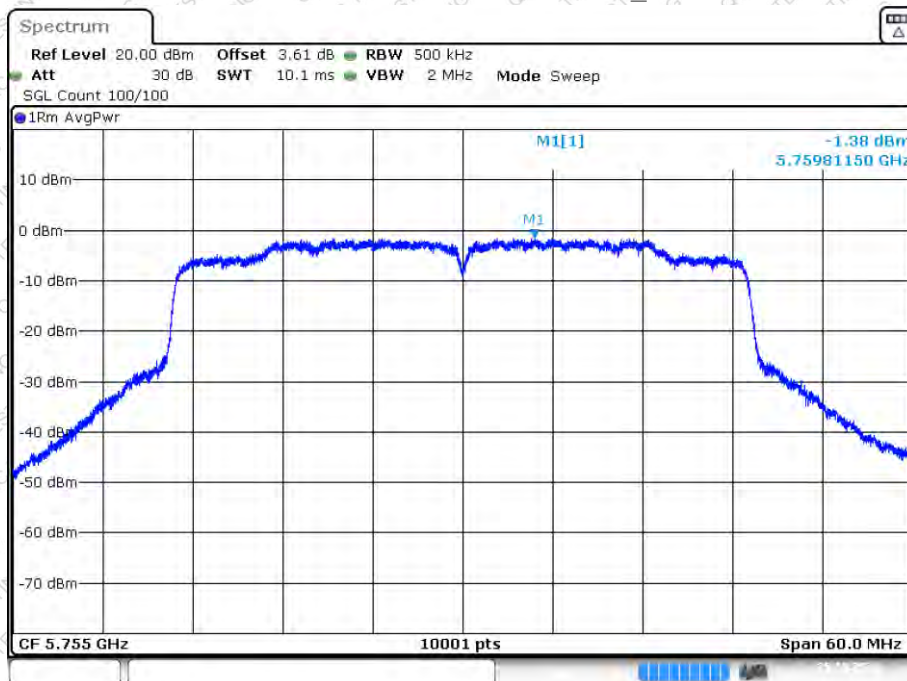


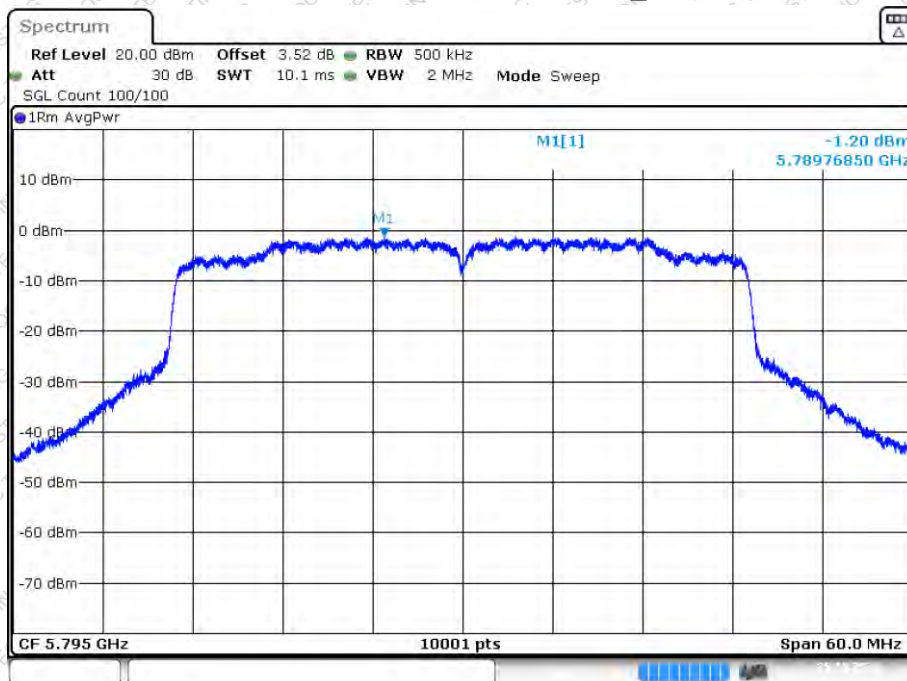


PSD NVNT ax40 5755MHz Ant1_SISO



Date: 25.OCT.2024 11:15:49

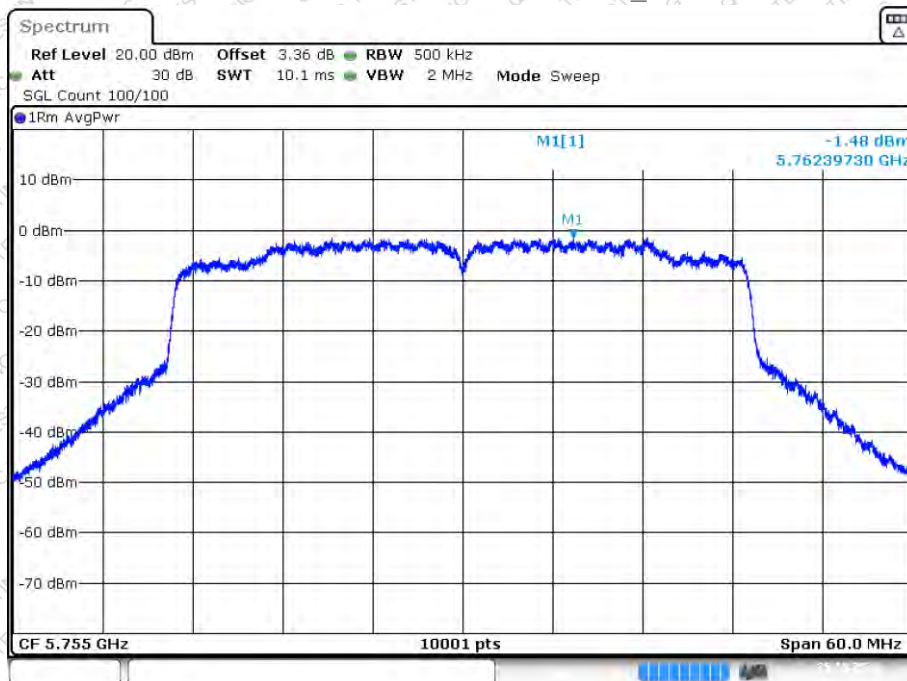
PSD NVNT ax40 5795MHz Ant1_SISO



Date: 25.OCT.2024 11:17:00

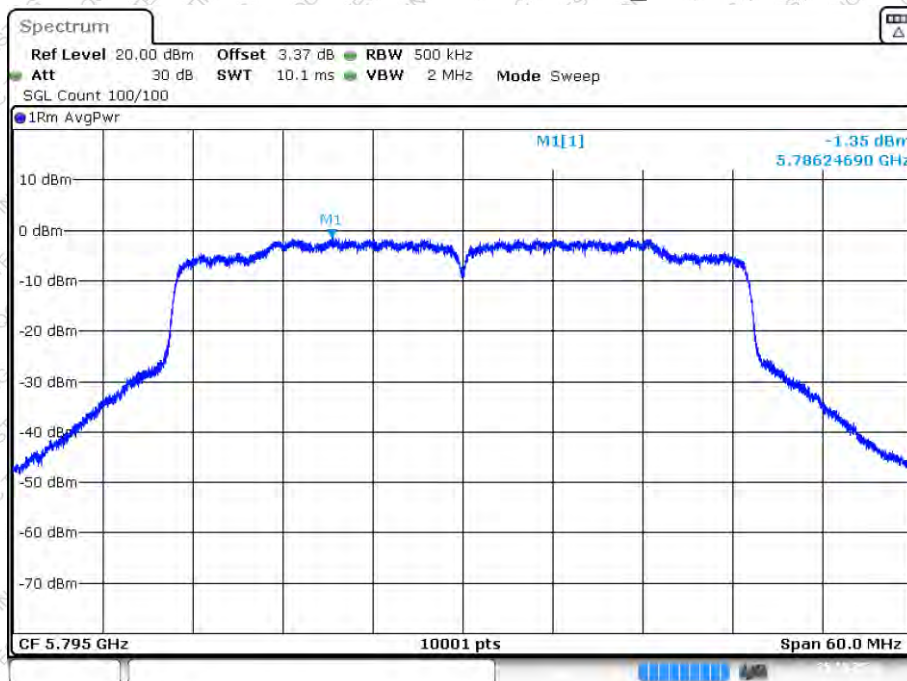


PSD NVNT ax40 5755MHz Ant2_SISO



Date: 25.OCT.2024 14:02:30

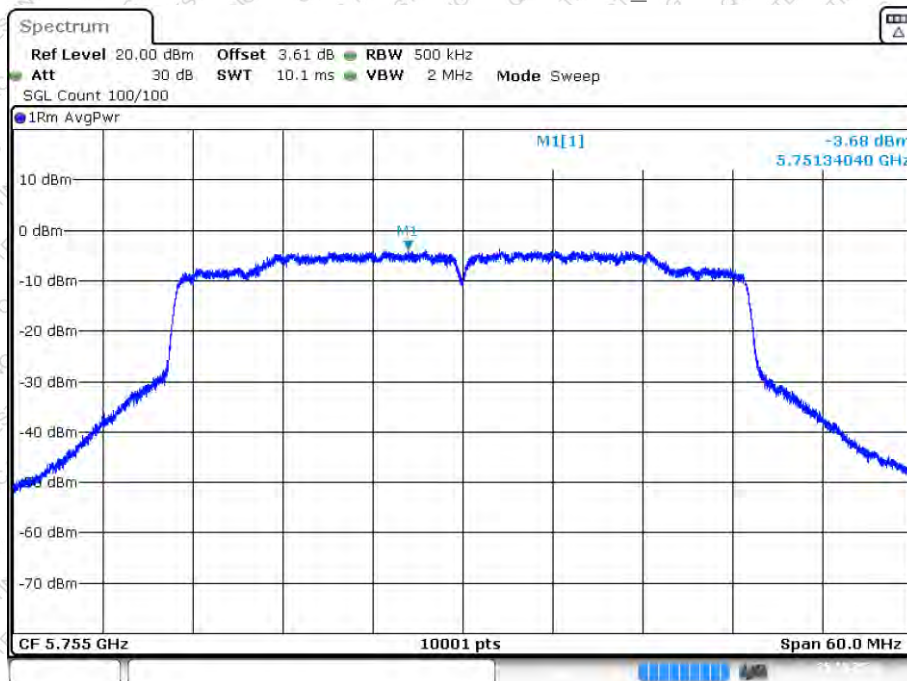
PSD NVNT ax40 5795MHz Ant2_SISO



Date: 25.OCT.2024 14:03:59

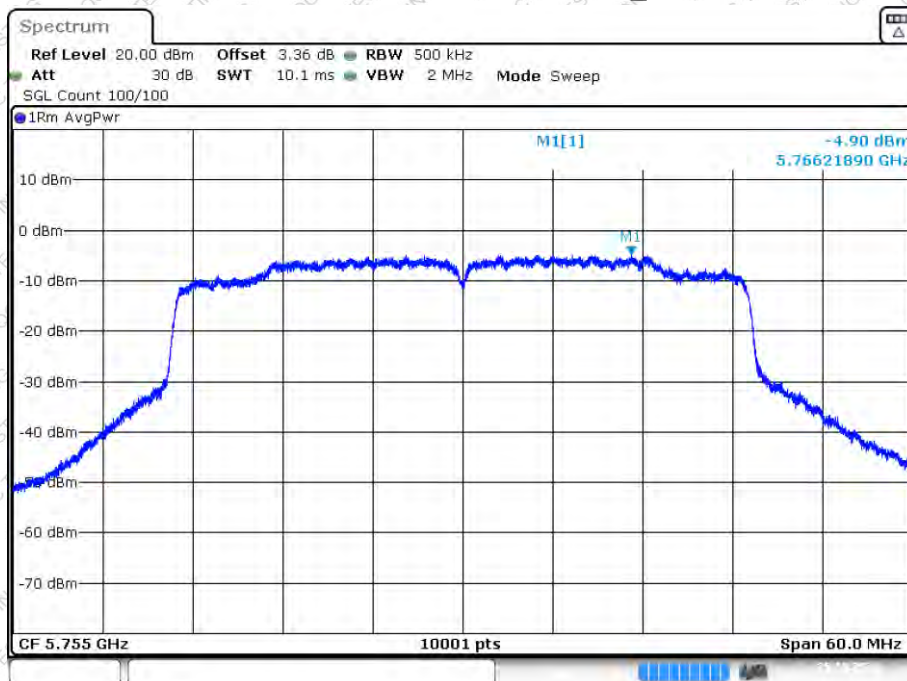


PSD NVNT ax40 5755MHz Ant1_MIMO



Date: 25.OCT.2024 15:04:27

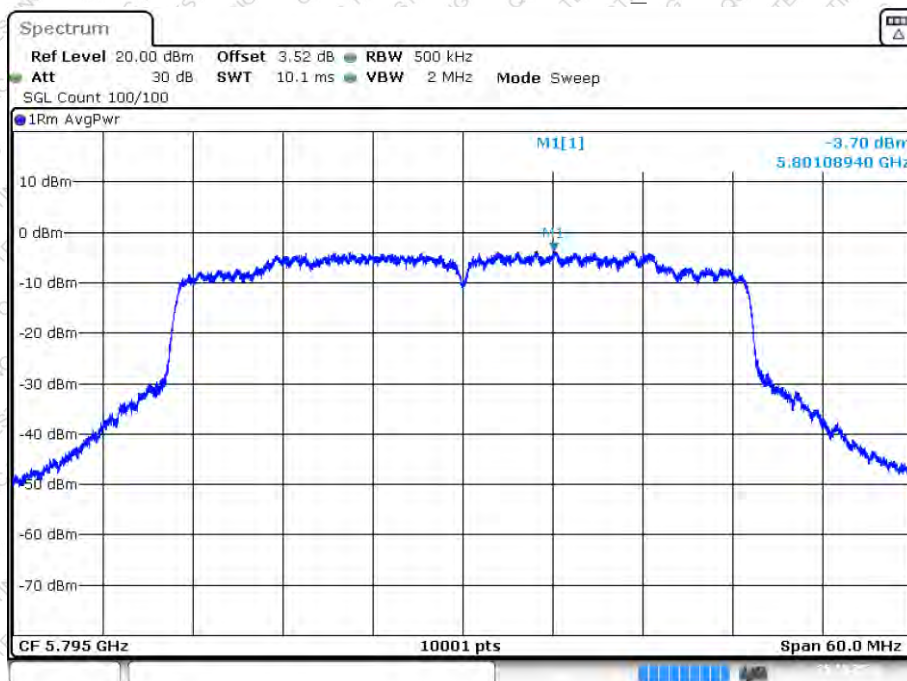
PSD NVNT ax40 5755MHz Ant2_MIMO



Date: 25.OCT.2024 15:04:31

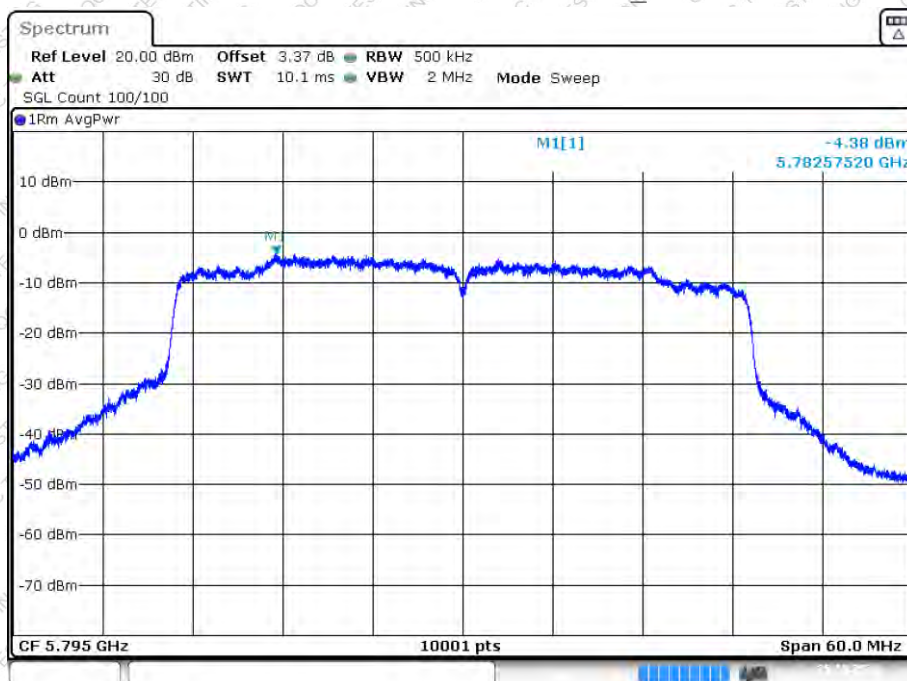


PSD NVNT ax40 5795MHz Ant1_MIMO



Date: 25.OCT.2024 15:07:38

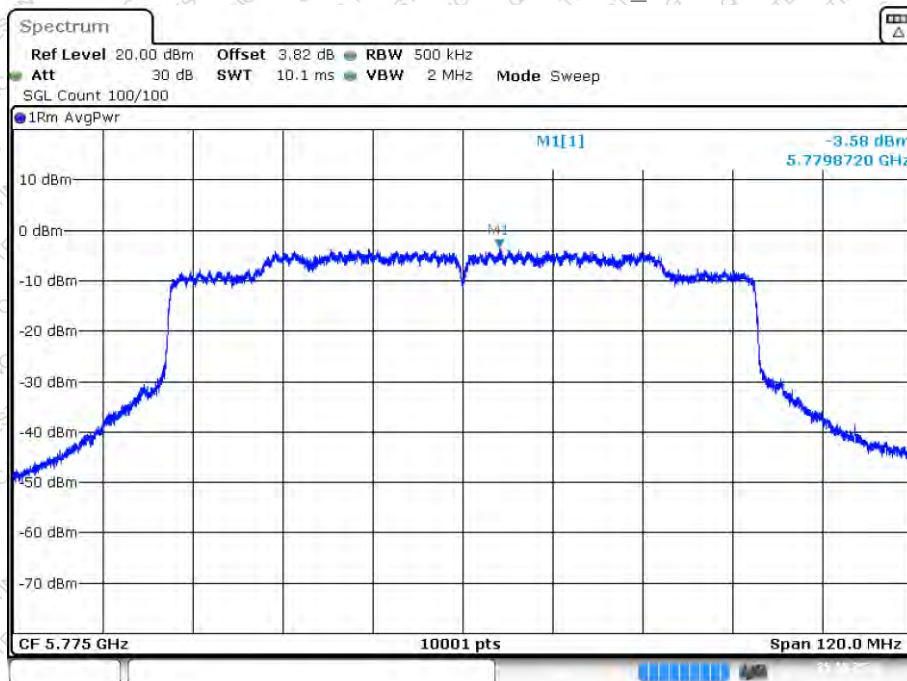
PSD NVNT ax40 5795MHz Ant2_MIMO



Date: 25.OCT.2024 15:07:42

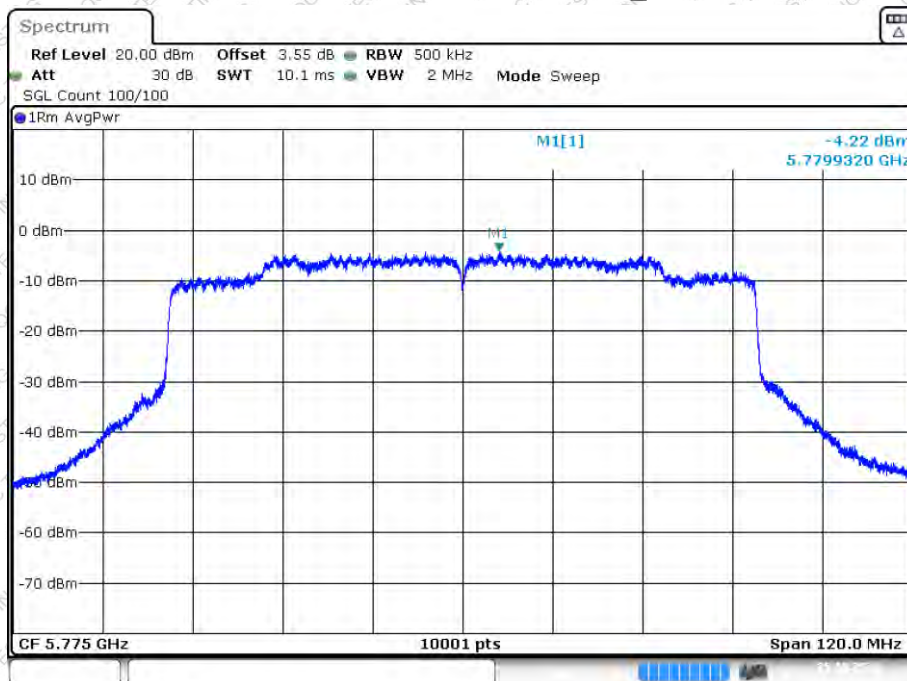


PSD NVNT ax80 5775MHz Ant1_SISO



Date: 25.OCT.2024 11:20:03

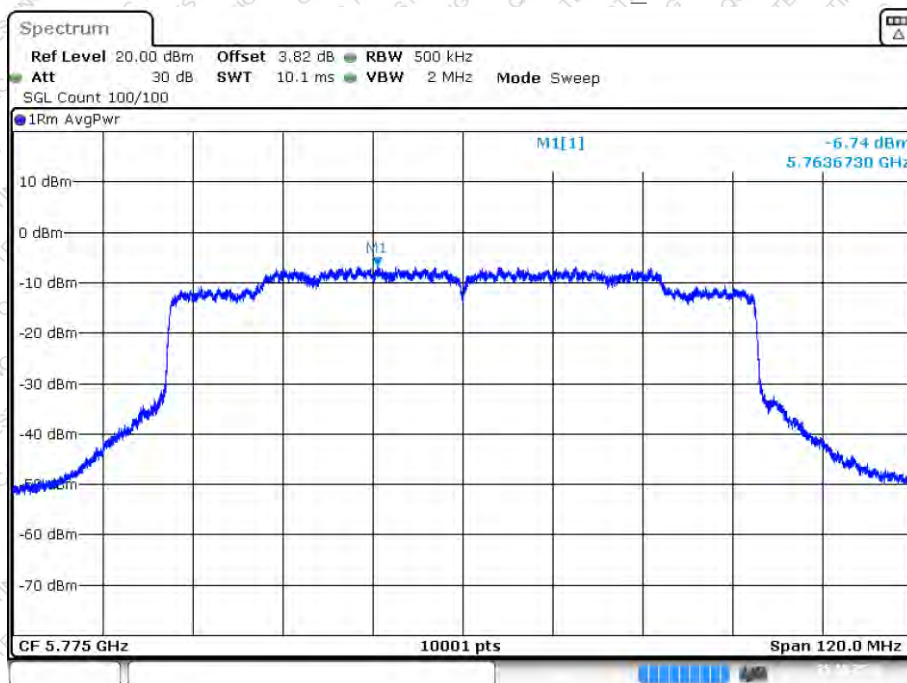
PSD NVNT ax80 5775MHz Ant2_SISO



Date: 25.OCT.2024 14:07:42

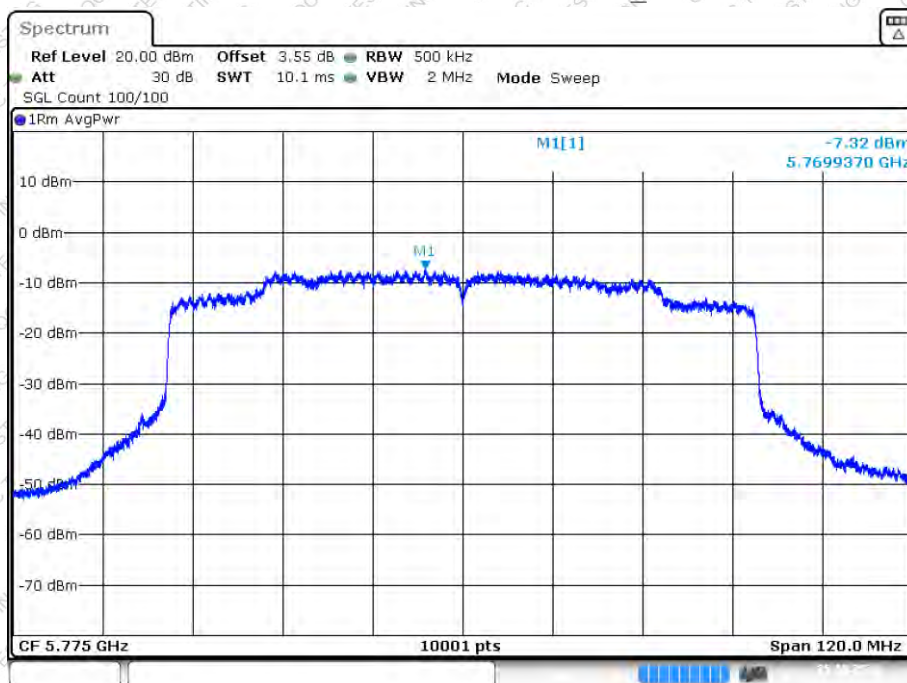


PSD NVNT ax80 5775MHz Ant1_MIMO



Date: 25.OCT.2024 15:11:33

PSD NVNT ax80 5775MHz Ant2_MIMO



Date: 25.OCT.2024 15:11:37

9. Band Edge Radiated Emission Method:

9.1 Applicable Standard

FCC Part15 C Section 15.209 / 15.205/ 15.407(b)

9.2 Limit

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

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

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

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

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

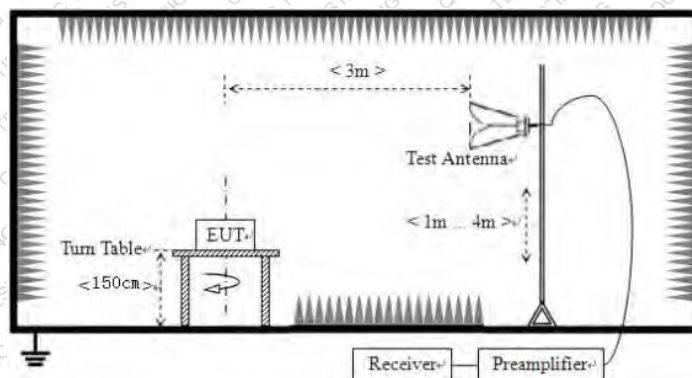
9.3 EMI Test Receiver Setup

Frequency	RBW	VBW	IF B/W	Measurement
30 MHz – 1000 MHz	100 kHz	300 kHz	120 kHz	QP
Above 1 GHz	1 MHz	3 MHz	/	Peak
	1 MHz	10 Hz Note 1	/	Average
1MHz	1MHz	> 1/T Note 2	/	Average

Note 1: when duty cycle is no less than 98%

Note 2: when duty cycle is less than 98%

9.4 Test setup



9.5 Test Procedure

- The EUT was placed on the top of a rotating table 1.5 m above the ground at a 3 meter camber. The table was rotated 360 degrees to determine the position of the highest radiation.
- The EUT was set 3 meters away from the interference-receiving antenna, which was mounted on the top of a variable-height antenna tower.
- The antenna height 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.
- 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 from 0 degrees to 360 degrees to find the maximum reading.

- e. The test-receiver system was set to Peak Detect Function and Specified Bandwidth with Maximum Hold Mode.
- f. If the emission level of the EUT in peak mode was 10dB lower than the limit specified, then testing could be stopped and the peak values of the EUT would be reported. Otherwise the emissions that did not have 10dB margin would be re-tested one by one using peak, quasi-peak or average method as specified and then reported in a data sheet.

9.6 Test Data

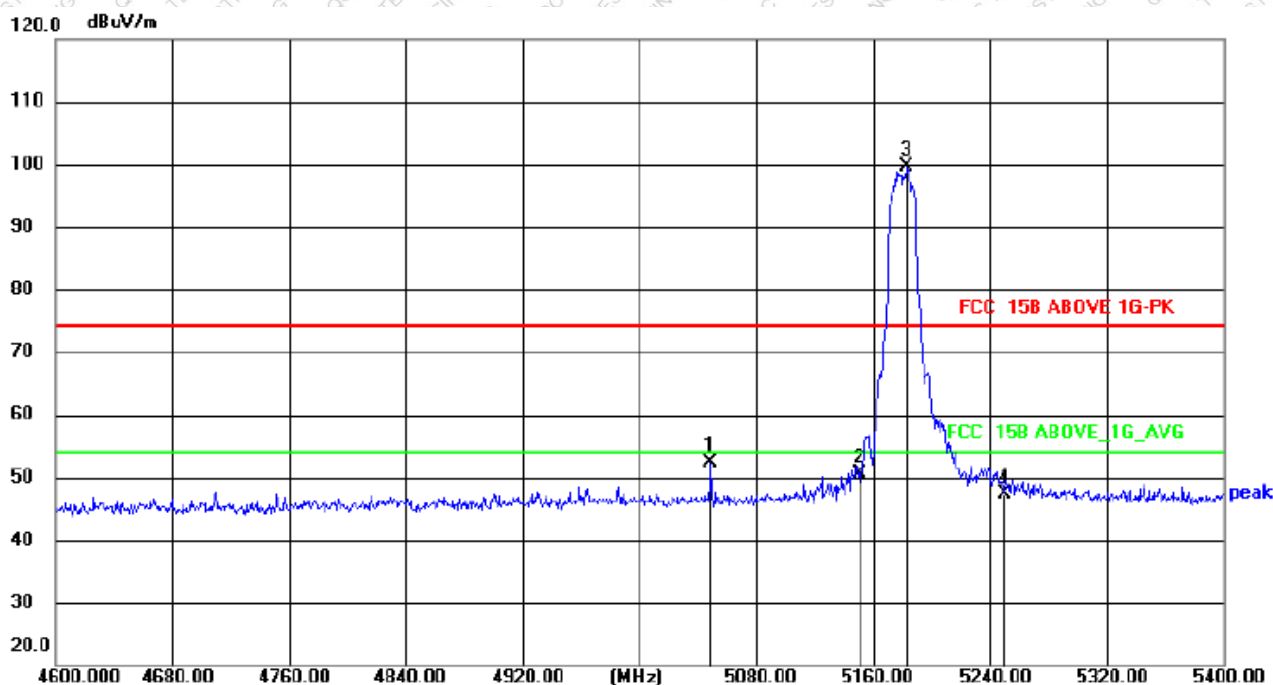
Temperature	26 °C	Humidity	54%
ATM Pressure	101.1kPa	Antenna Gain	Ant1: 0.67dBi Ant2: 0.67dBi
Test by	LBi Li	Test result	PASS

Test Voltage: AC 120V/60Hz

Pre-scan all test modes, found worst case at 802.11ac_MIMO mode bandwidth is 20MHz, and so only show the test result of 802.11ac_MIMO mode.

Measurement Data:

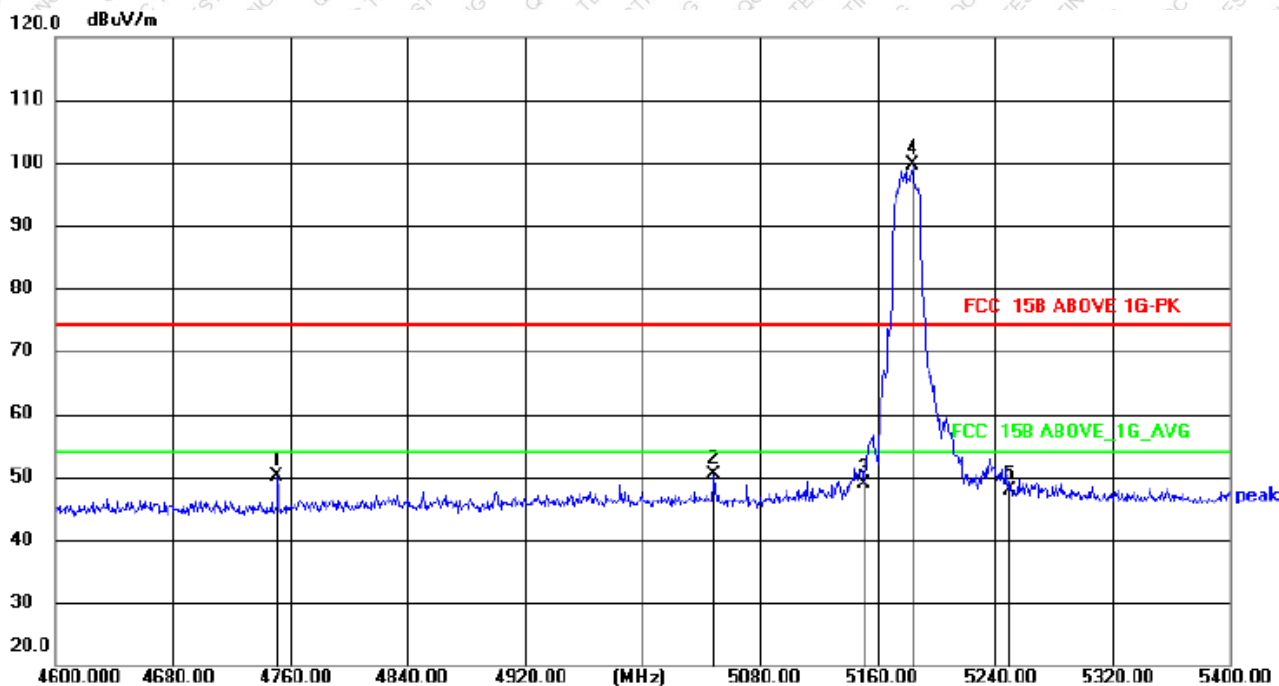
11ac_MIMO 5180MHz – Horizontal



No.	Frequency (MHz)	Reading (dBuV)	Factor (dB/m)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Detector
1	5048.800	57.51	-5.18	52.33	68.23	15.90	peak
2	5150.000	55.56	-4.93	50.63	68.23	17.60	peak
3 *	5183.200	104.59	-4.85	99.74	/	/	/
4	5250.000	52.18	-4.68	47.50	68.23	20.73	peak



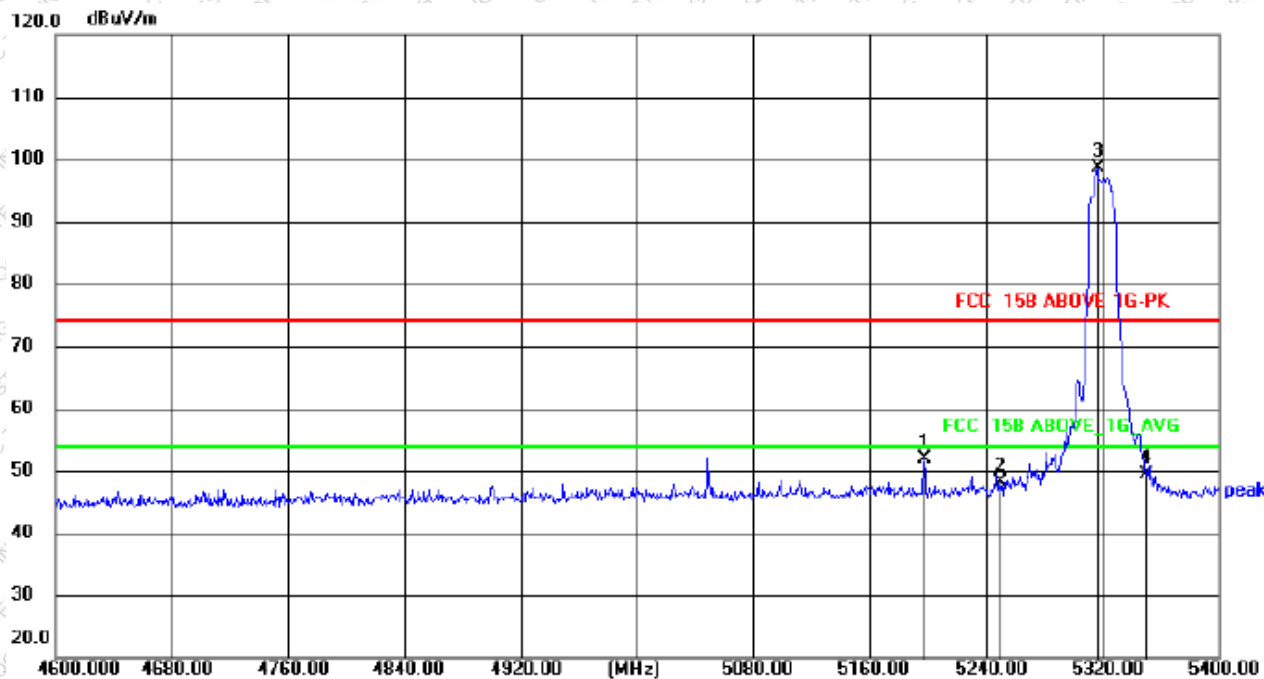
11ac_MIMO 5180MHz – Vertical



No.	Frequency (MHz)	Reading (dBuV)	Factor (dB/m)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Detector
1	4751.200	56.21	-6.16	50.05	68.23	18.18	peak
2	5048.800	55.45	-5.18	50.27	68.23	17.96	peak
3	5150.000	53.76	-4.93	48.83	68.23	19.40	peak
4 *	5184.000	104.47	-4.85	99.62	/	/	peak
5	5250.000	52.58	-4.68	47.90	68.23	20.33	peak



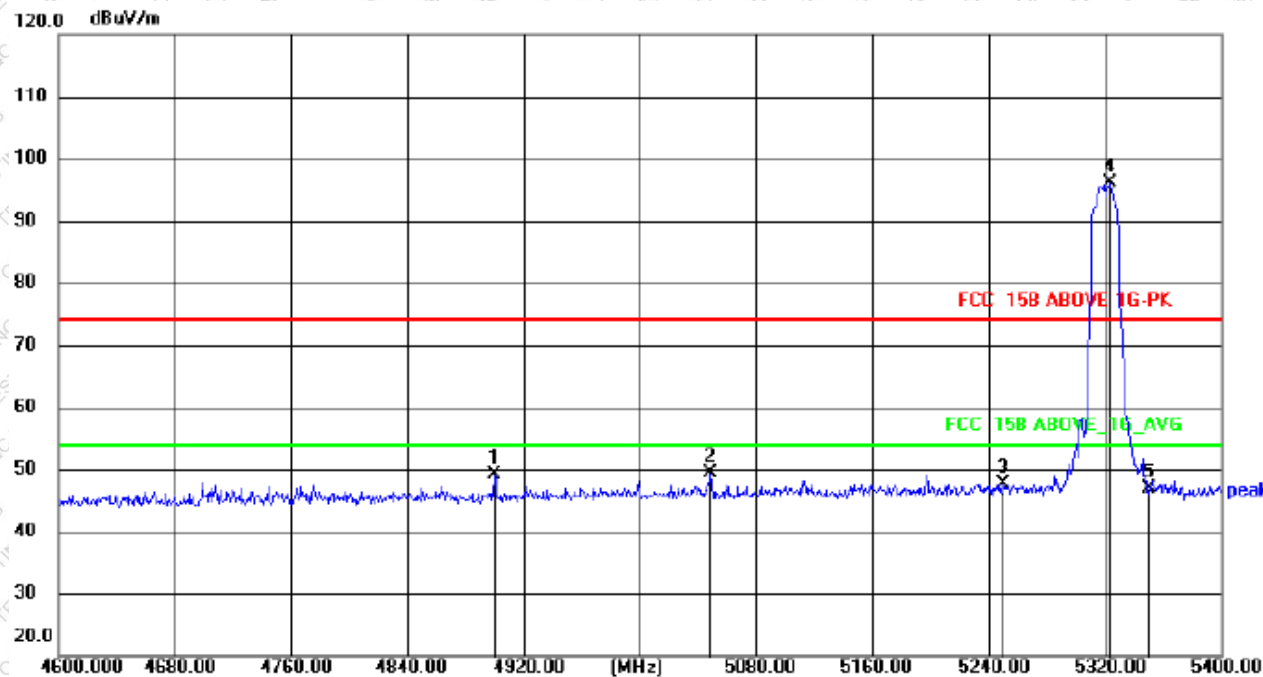
11ac_MIMO 5320MHz – Horizontal



No.	Frequency (MHz)	Reading (dBuV)	Factor (dB/m)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Detector
1	5197.600	56.64	-4.80	51.84	74.00	22.16	peak
2	5250.000	52.74	-4.68	48.06	74.00	25.94	peak
3 *	5316.800	103.20	-4.50	98.70	/	/	peak
4	5350.000	53.74	-4.42	49.32	74.00	24.68	peak



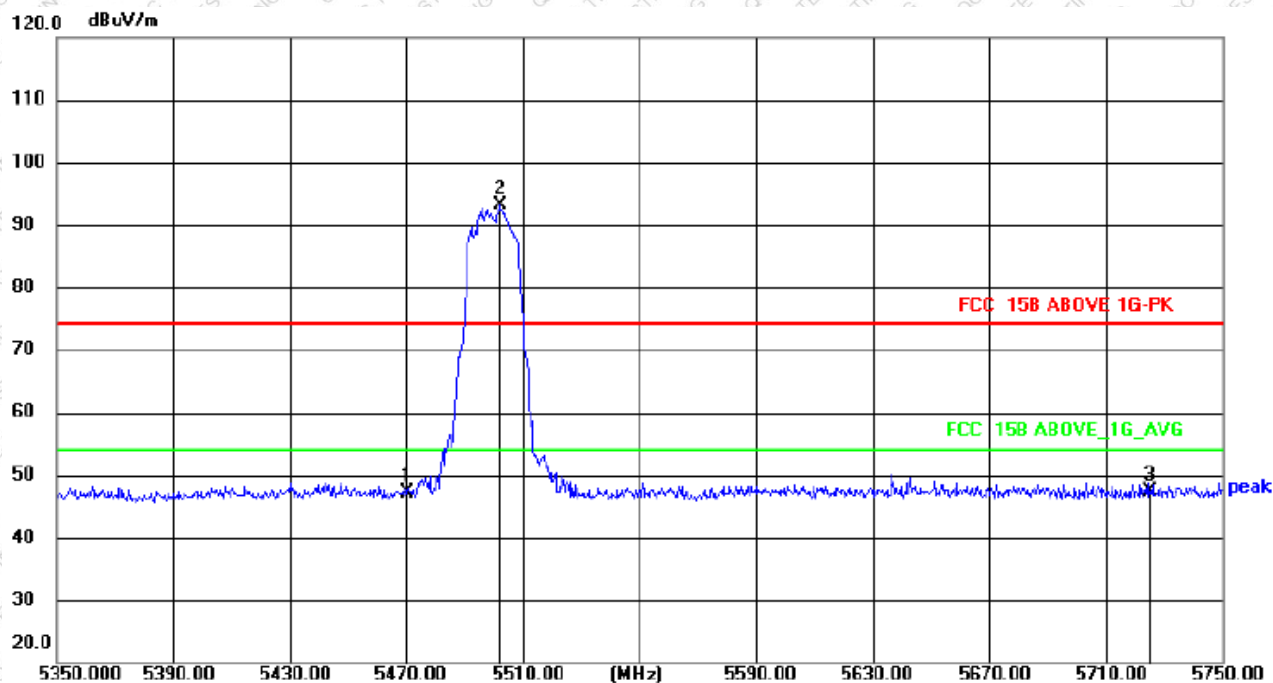
11ac_MIMO 5320MHz – Vertical



No.	Frequency (MHz)	Reading (dBuV)	Factor (dB/m)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Detector
1	4900.000	54.72	-5.65	49.07	74.00	24.93	peak
2	5048.800	54.57	-5.18	49.39	74.00	24.61	peak
3	5250.000	52.22	-4.68	47.54	74.00	26.46	peak
4 *	5323.200	100.70	-4.49	96.21	/	/	peak
5	5350.000	51.40	-4.42	46.98	74.00	27.02	peak



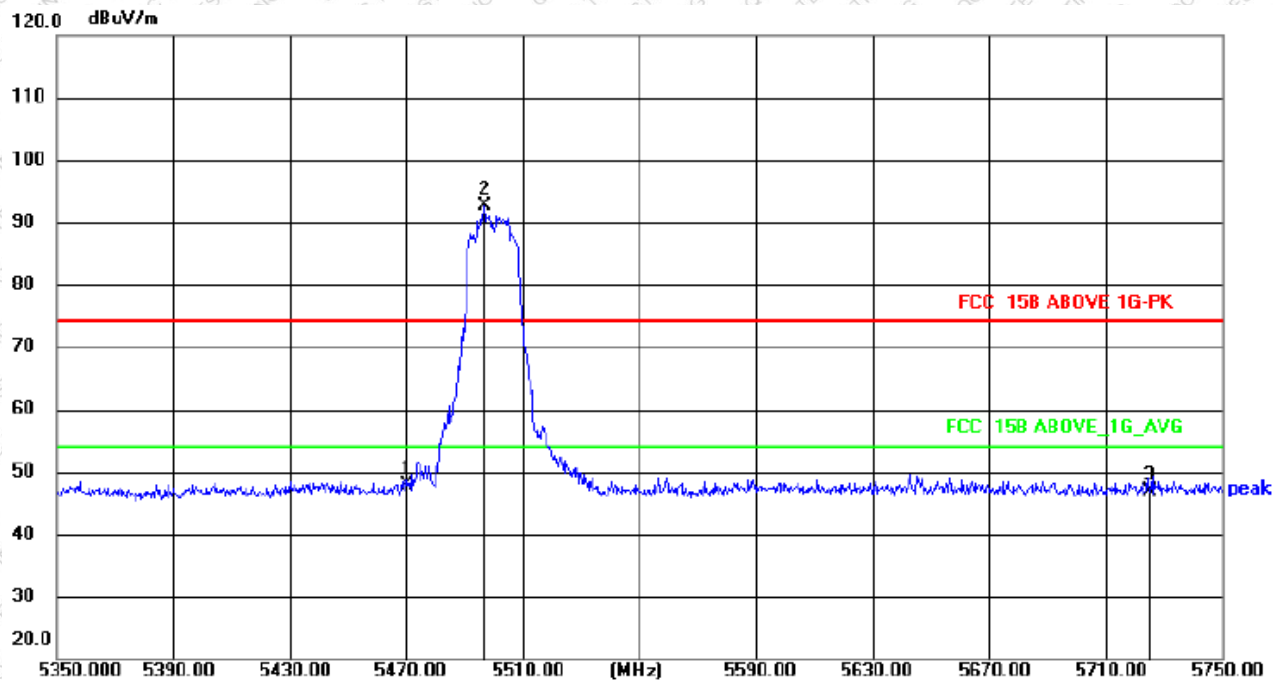
11n20_MIMO 5500MHz – Horizontal



No.	Frequency (MHz)	Reading (dBuV)	Factor (dB/m)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Detector
1	5470.000	51.27	-4.11	47.16	68.23	21.07	peak
2 *	5502.000	97.15	-4.04	93.11	/	/	peak
3	5725.000	51.20	-3.87	47.33	68.23	20.90	peak



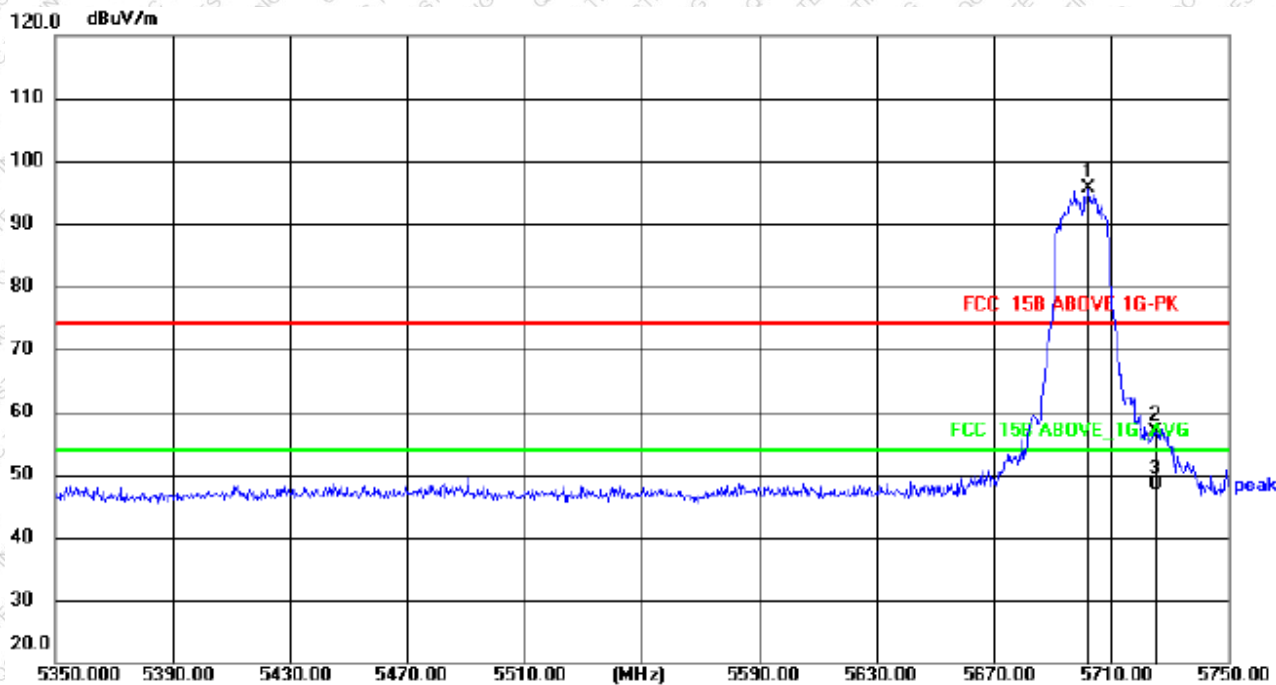
11n20_MIMO 5500MHz – Vertical



No.	Frequency (MHz)	Reading (dBuV)	Factor (dB/m)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Detector
1	5470.000	51.88	-4.11	47.77	68.23	20.46	peak
2 *	5496.800	96.74	-4.05	92.69	/	/	peak
3	5725.000	50.86	-3.87	46.99	68.23	21.24	peak



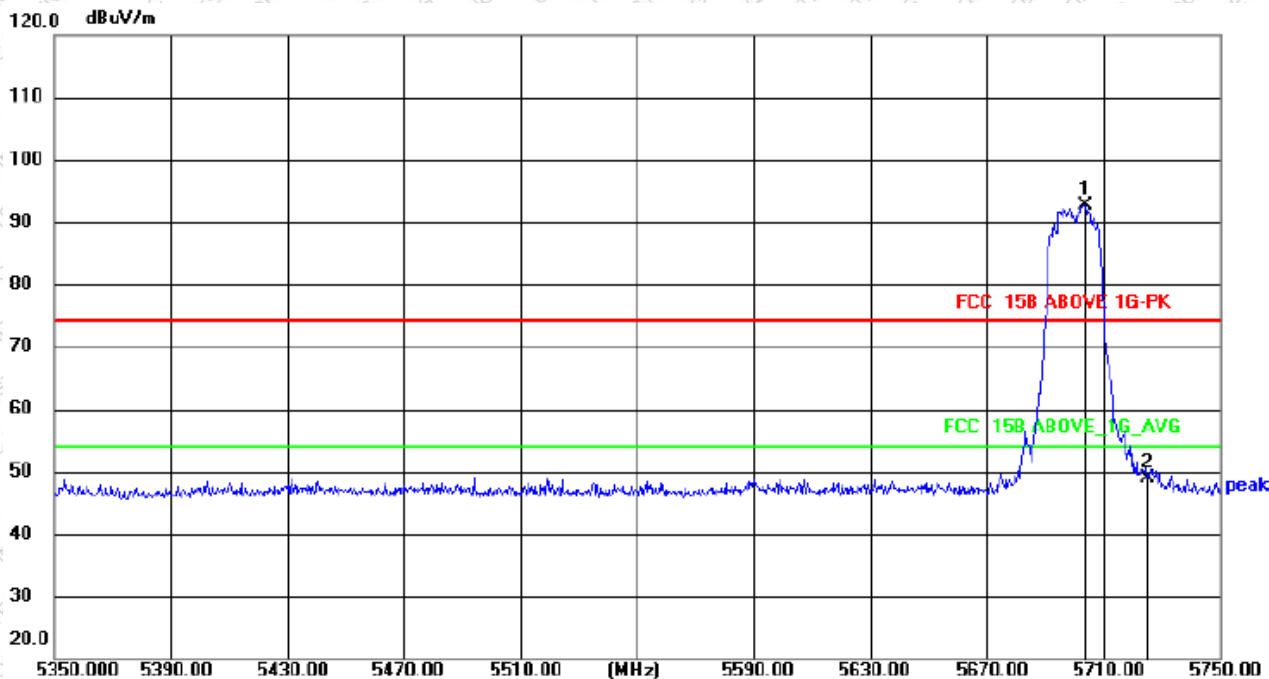
11n20_MIMO 5700MHz – Horizontal



No.	Frequency (MHz)	Reading (dBuV)	Factor (dB/m)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Detector
1 *	5702.400	99.61	-3.89	95.72	74.00	-21.72	peak
2	5725.000	60.77	-3.87	56.90	74.00	17.10	peak
3	5725.000	52.29	-3.87	48.42	54.00	5.58	AVG



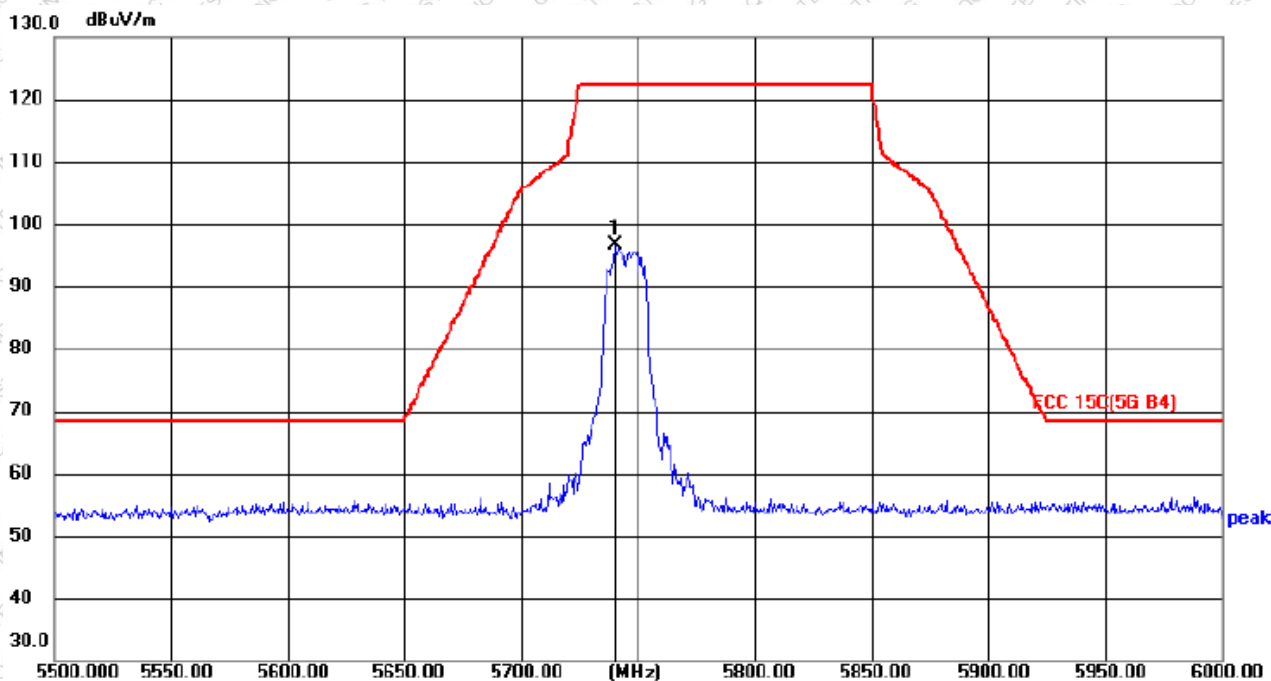
11n20_MIMO 5700Hz – Vertical



No.	Frequency (MHz)	Reading (dBuV)	Factor (dB/m)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Detector
1 *	5703.600	96.61	-3.89	92.72	/	/	peak
2	5725.000	52.77	-3.87	48.90	68.23	19.33	peak



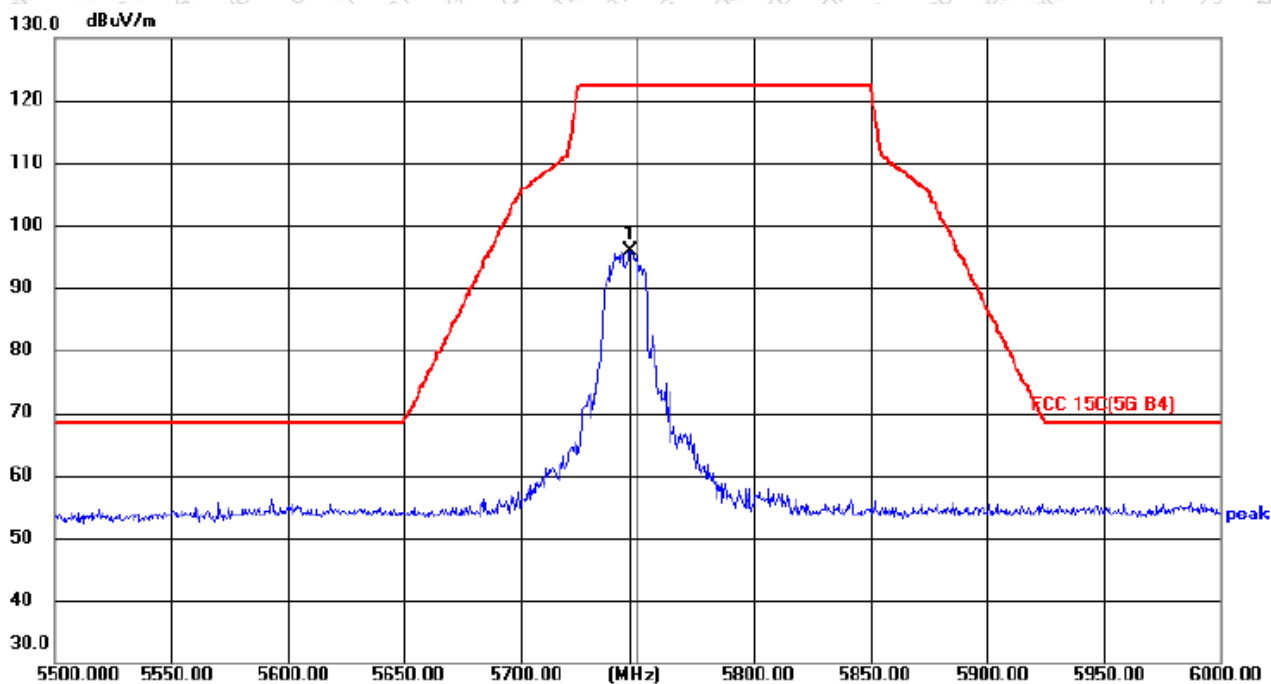
11n20_MIMO 5745MHz – Horizontal



No.	Frequency (MHz)	Reading (dBuV)	Factor (dB/m)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Detector
1 *	5740.500	89.68	6.83	96.51	/	/	peak



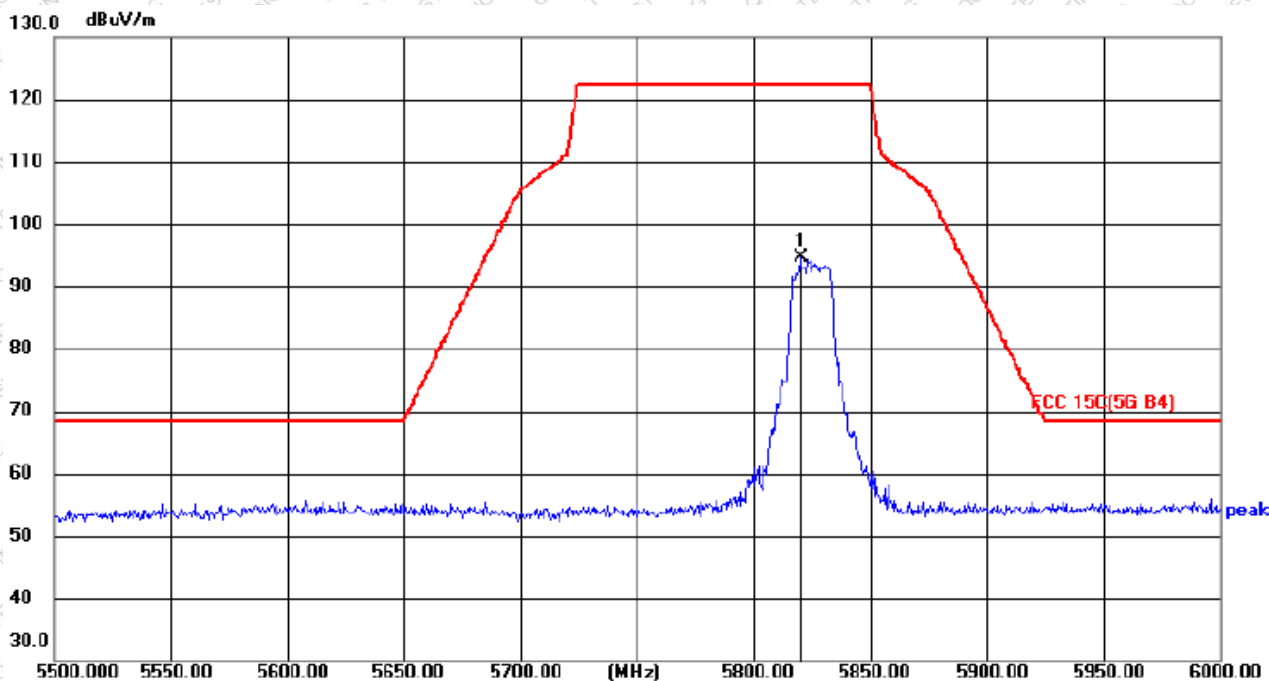
11n20_MIMO 5745Hz – Vertical



No.	Frequency (MHz)	Reading (dBuV)	Factor (dB/m)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Detector
1 *	5747.333	89.07	6.88	95.95	/	/	peak



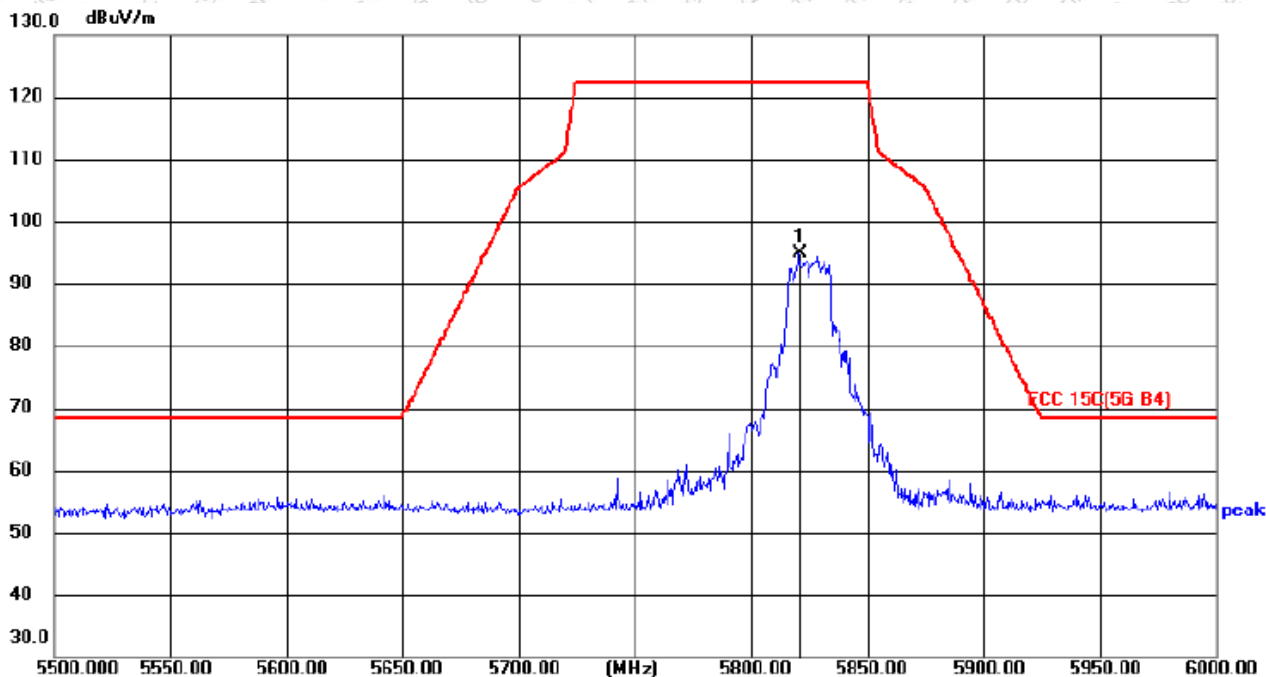
11n20_MIMO 5825MHz – Horizontal



No.	Frequency (MHz)	Reading (dBuV)	Factor (dB/m)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Detector
1 *	5820.333	87.29	7.26	94.55	/	/	peak



11n20_MIMO 5825Hz – Vertical



No.	Frequency (MHz)	Reading (dBuV)	Factor (dB/m)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Detector
1 *	5820.667	87.74	7.26	95.00	/	/	peak

Remark:

1. According to KDB 789033 D02v02r01 section G) 1) d), for measurements above 1000 MHz @3m distance, the limit of field strength is computed as follows:

$$E[\text{dBuV/m}] = \text{EIRP}[\text{dBm}] + 95.2;$$

$$E[\text{dBuV/m}] = -27 + 95.2 = 68.2\text{dBuV/m.}$$

$$E[\text{dBuV/m}] = 10 + 95.2 = 105.2\text{dBuV/m.}$$

$$E[\text{dBuV/m}] = 15.6 + 95.2 = 110.8\text{dBuV/m.}$$

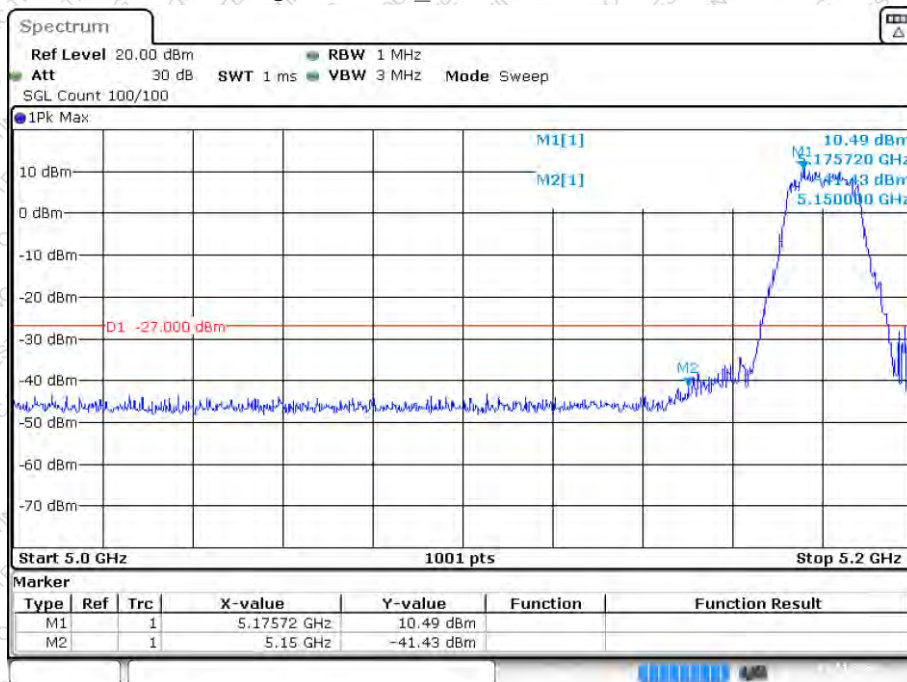
$$E[\text{dBuV/m}] = 27 + 95.2 = 122.2\text{dBuV/m}$$

2. For MIMO devices refer to KDB Publication 662911 D01.

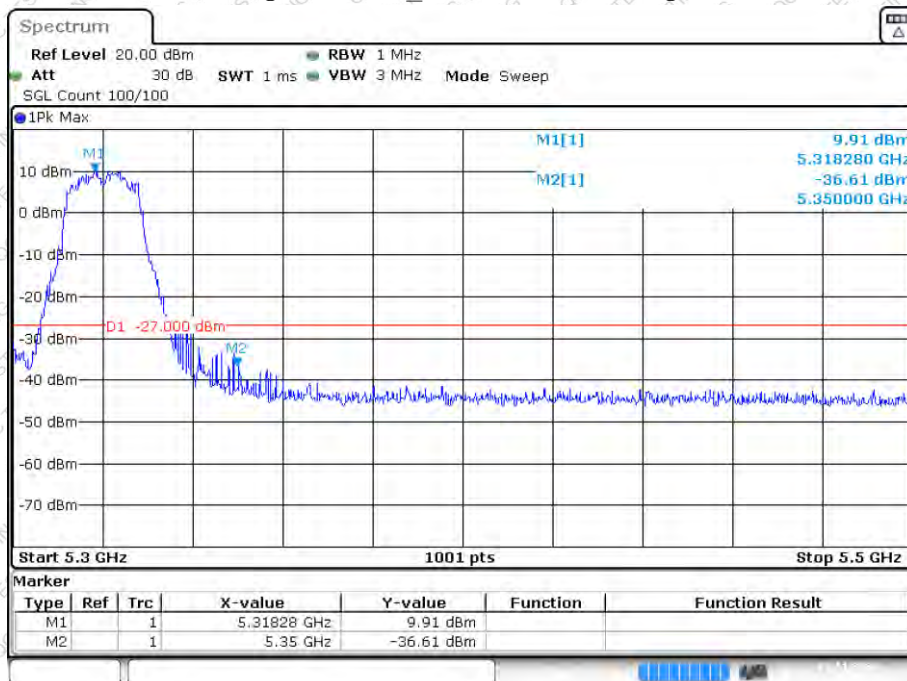


Conducted Emission Method:

Band Edge NVNT a_SISO 5180MHz Low Ant1

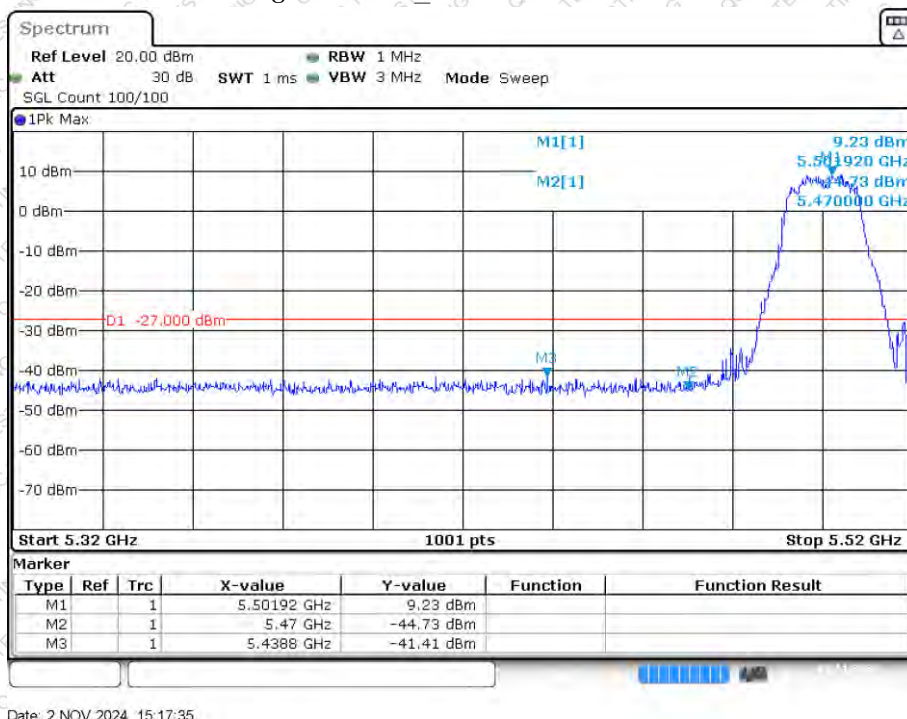


Band Edge NVNT a_SISO 5320MHz High Ant1

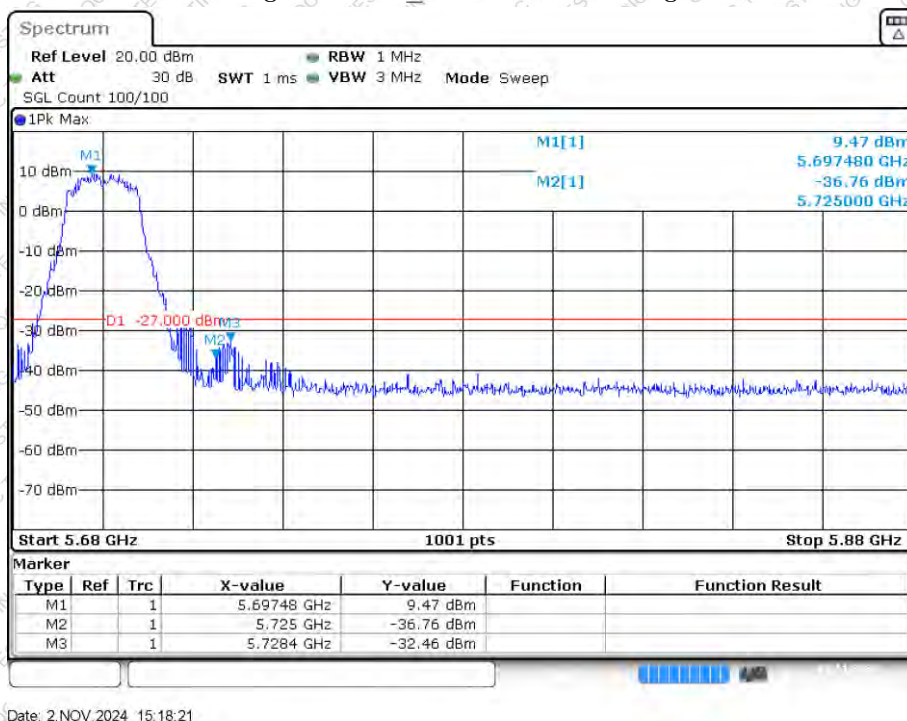




Band Edge NVNT a_SISO 5500MHz Low Ant1

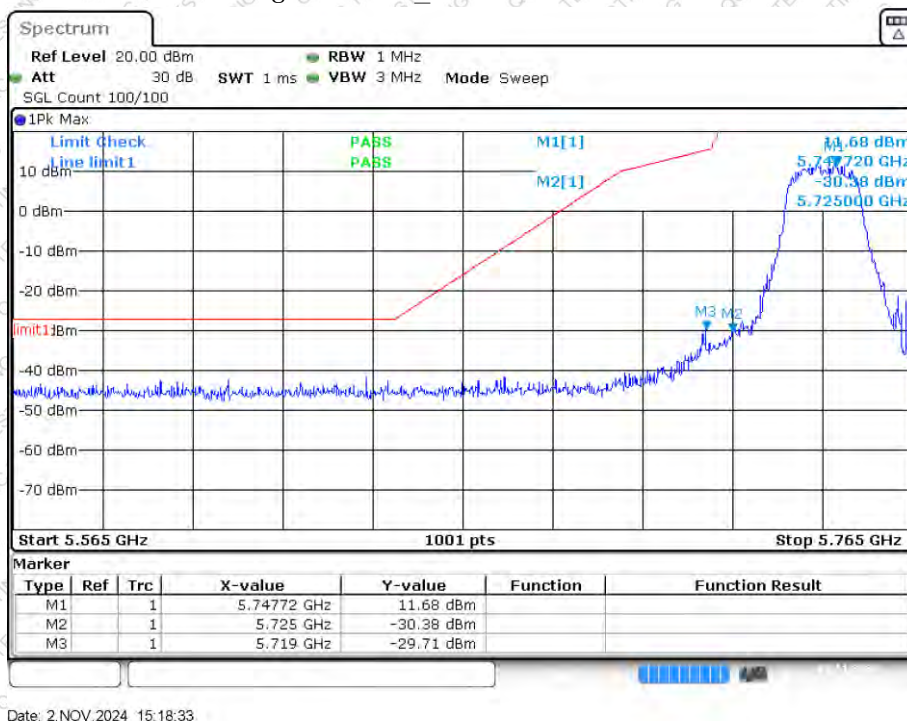


Band Edge NVNT a_SISO 5700MHz High Ant1

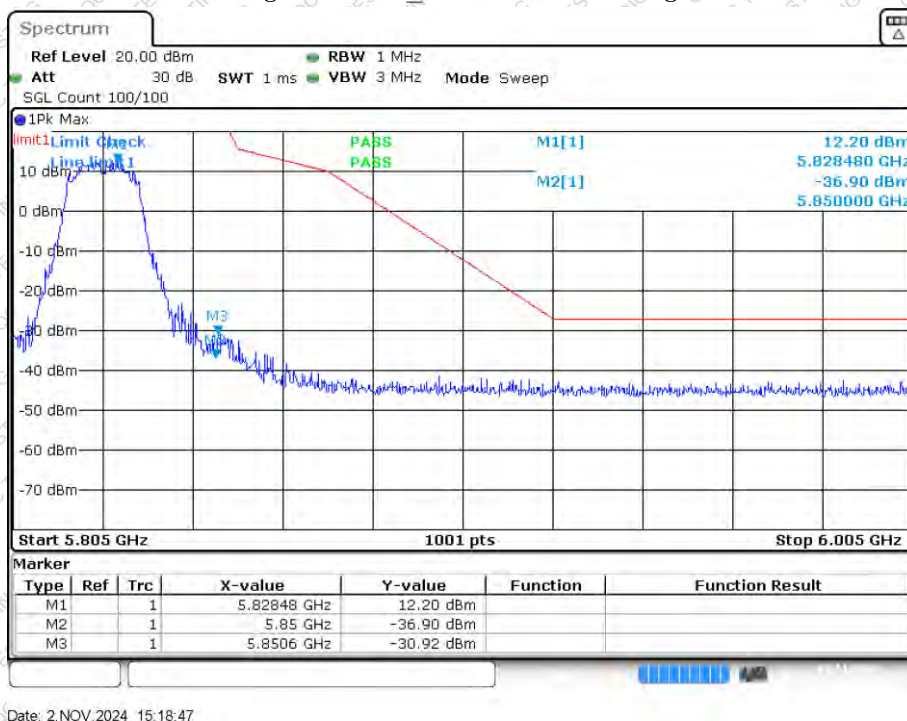




Band Edge NVNT a_SISO 5745MHz Low Ant1

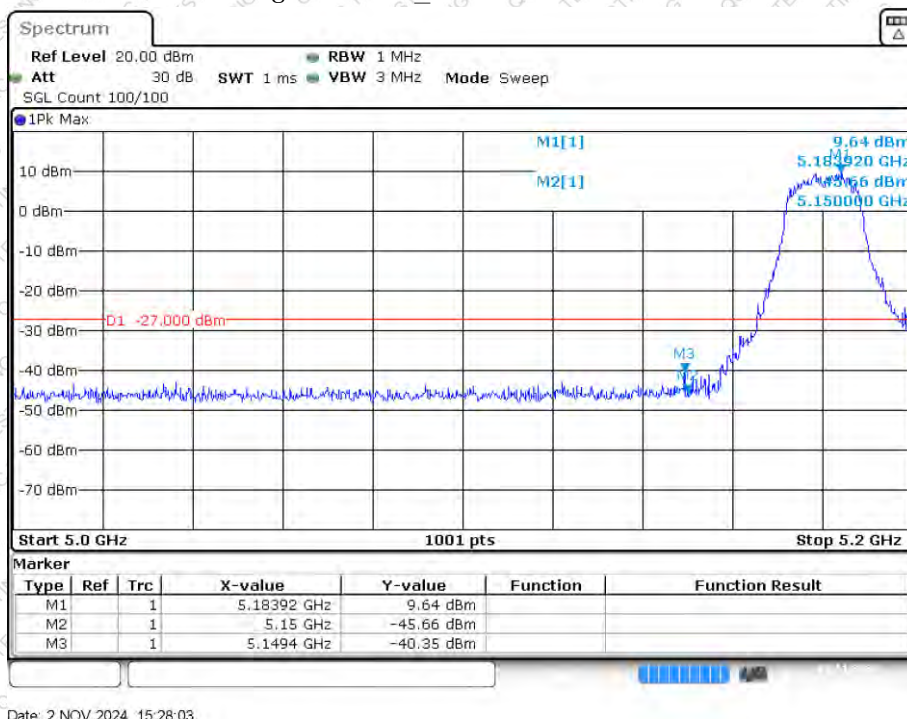


Band Edge NVNT a_SISO 5825MHz High Ant1

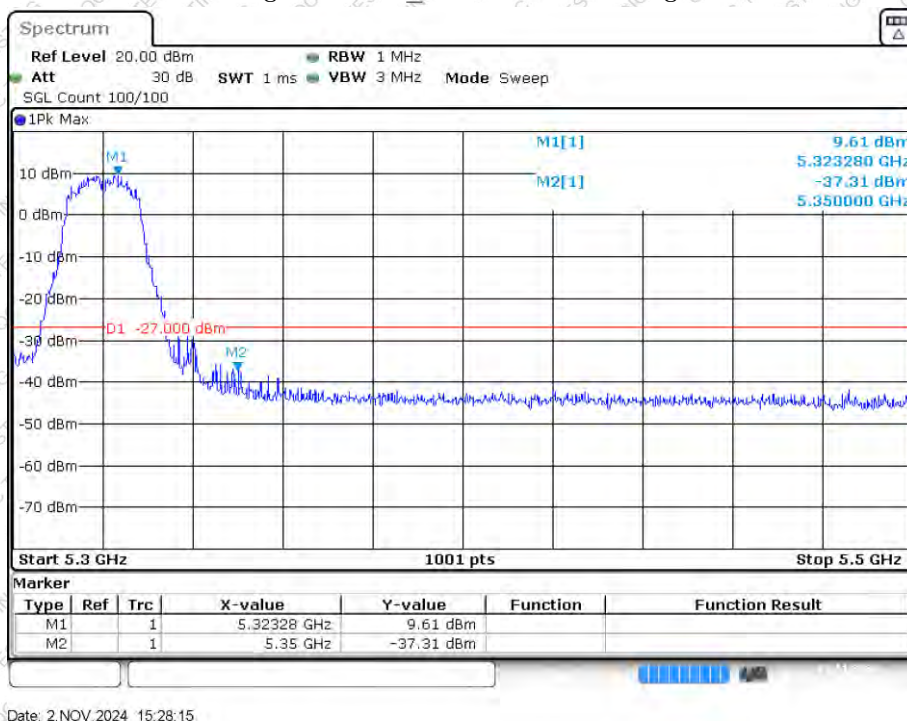




Band Edge NVNT a_SISO 5180MHz Low Ant2

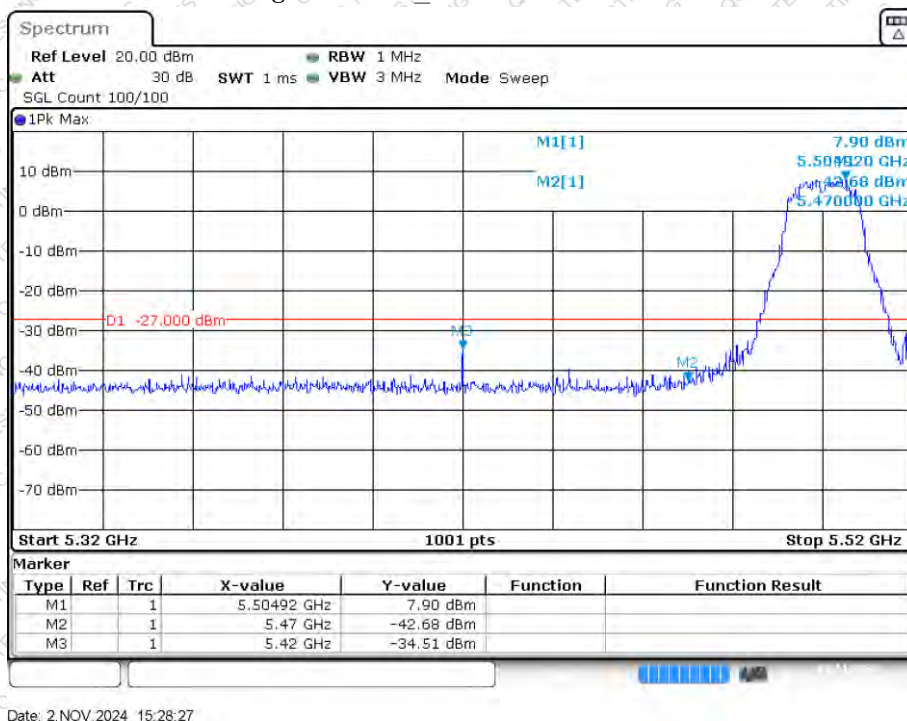


Band Edge NVNT a_SISO 5320MHz High Ant2

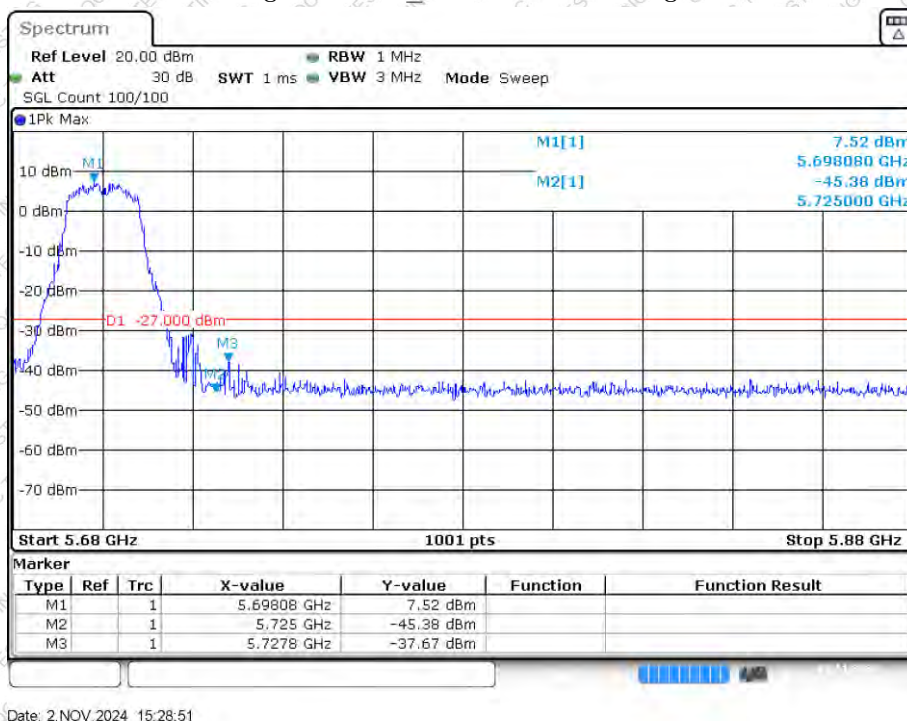




Band Edge NVNT a_SISO 5500MHz Low Ant2

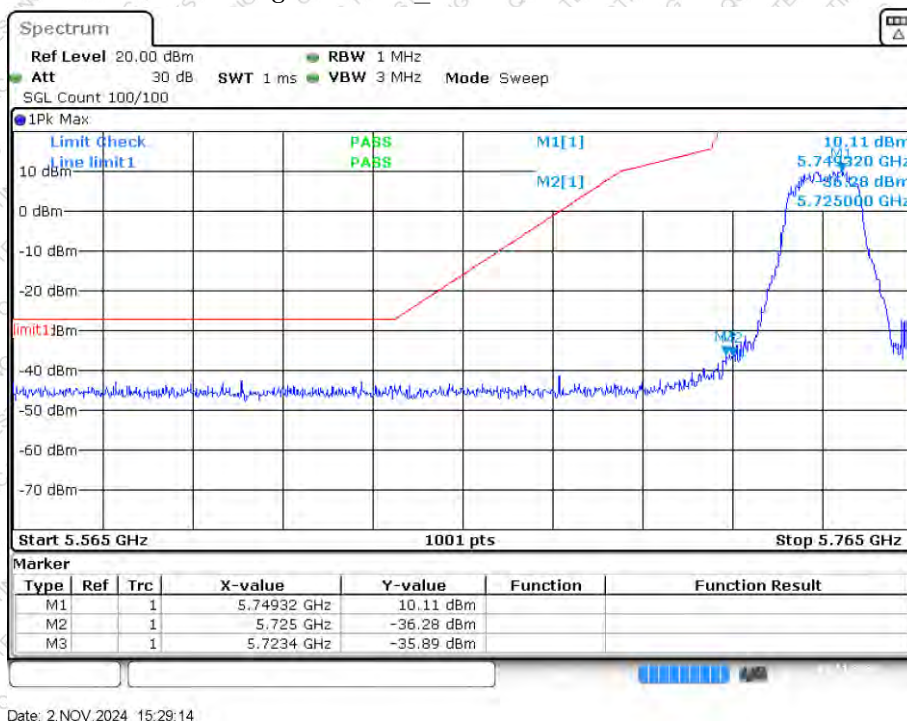


Band Edge NVNT a_SISO 5700MHz High Ant2

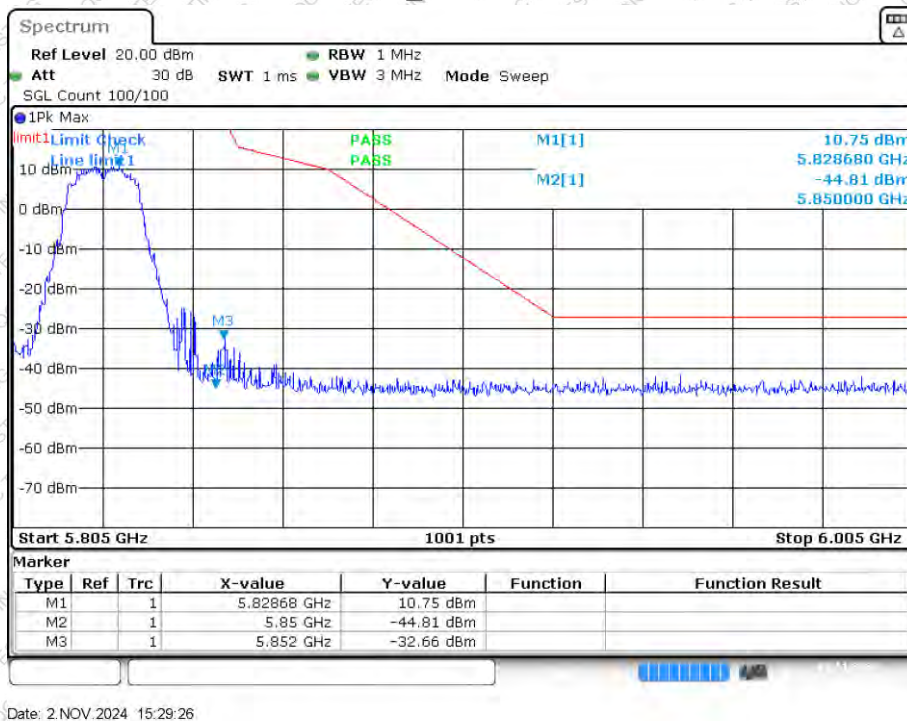




Band Edge NVNT a_SISO 5745MHz Low Ant2

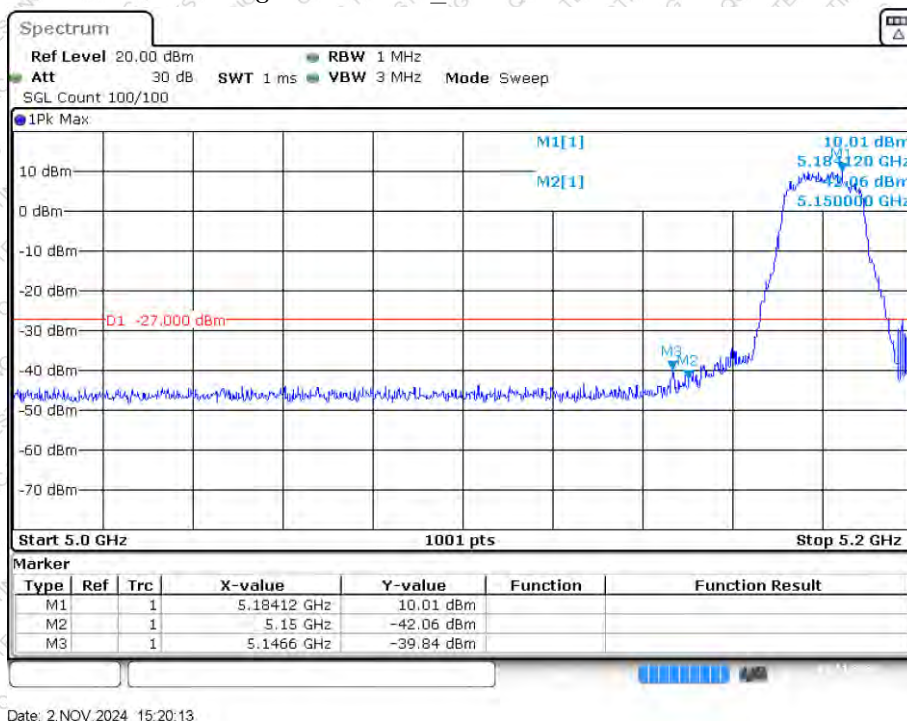


Band Edge NVNT a_SISO 5825MHz High Ant2

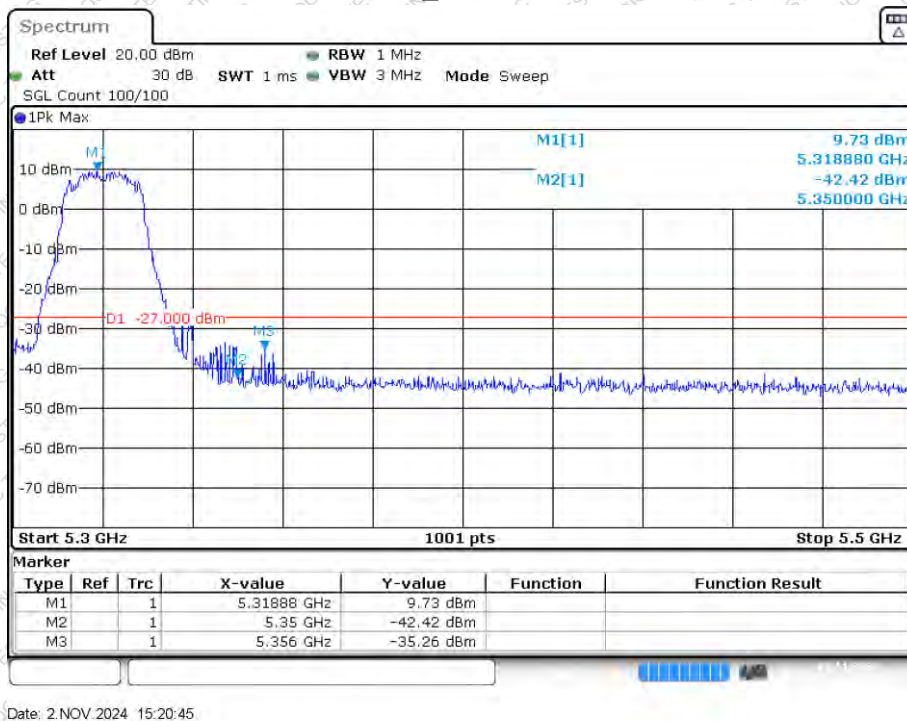




Band Edge NVNT n20_SISO 5180MHz Low Ant1

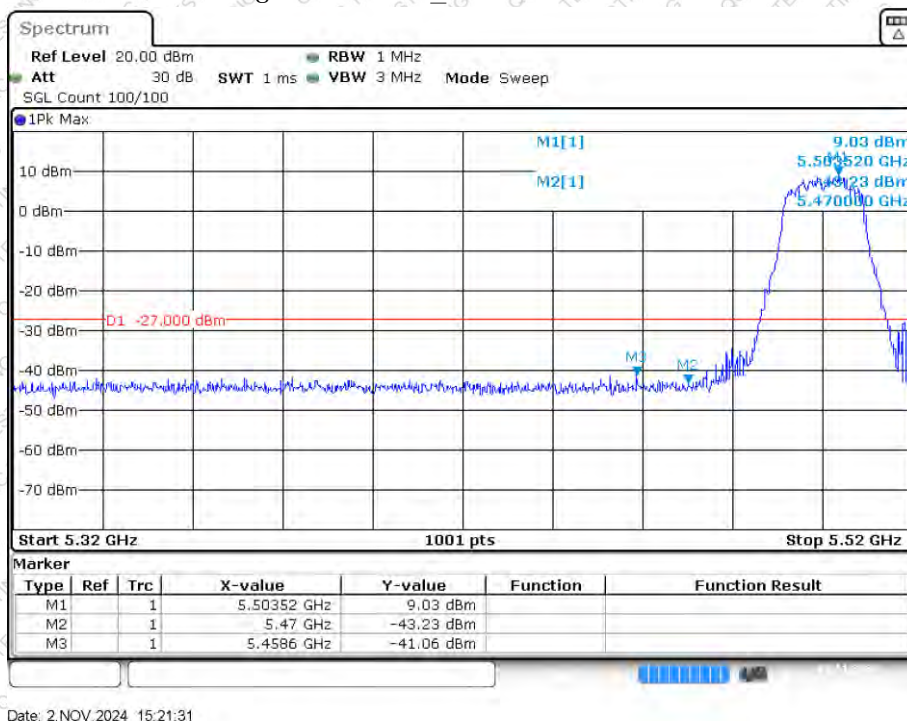


Band Edge NVNT n20_SISO 5320MHz High Ant1

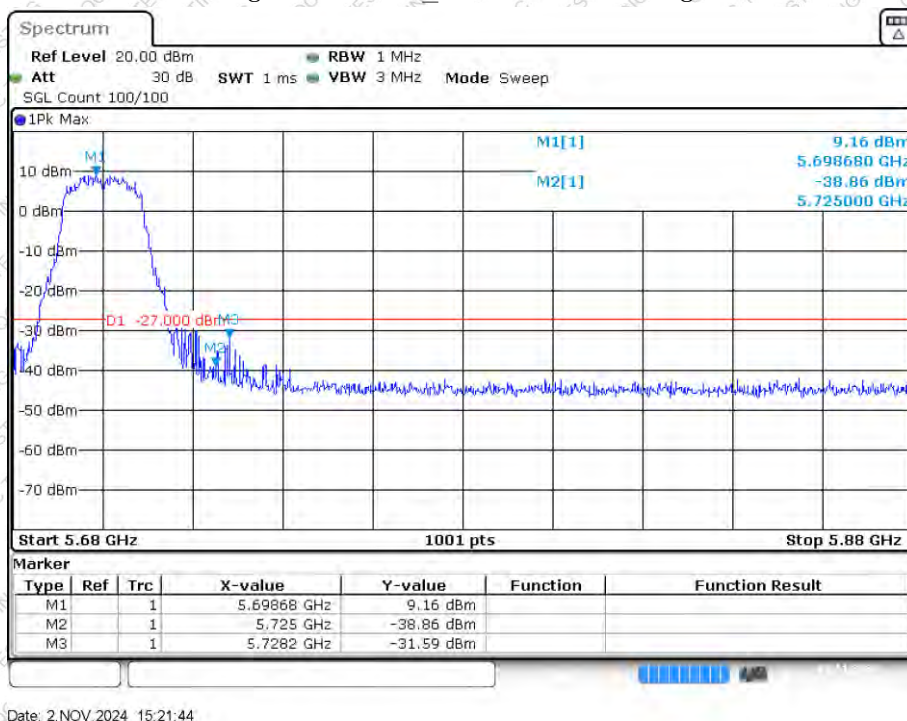




Band Edge NVNT n20_SISO 5500MHz Low Ant1

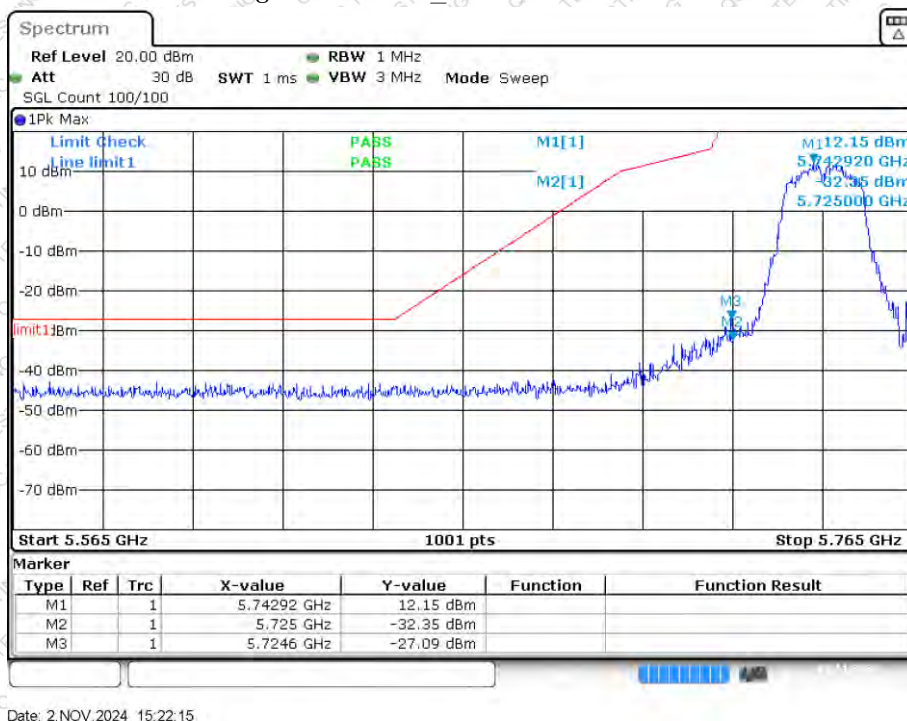


Band Edge NVNT n20_SISO 5700MHz High Ant1

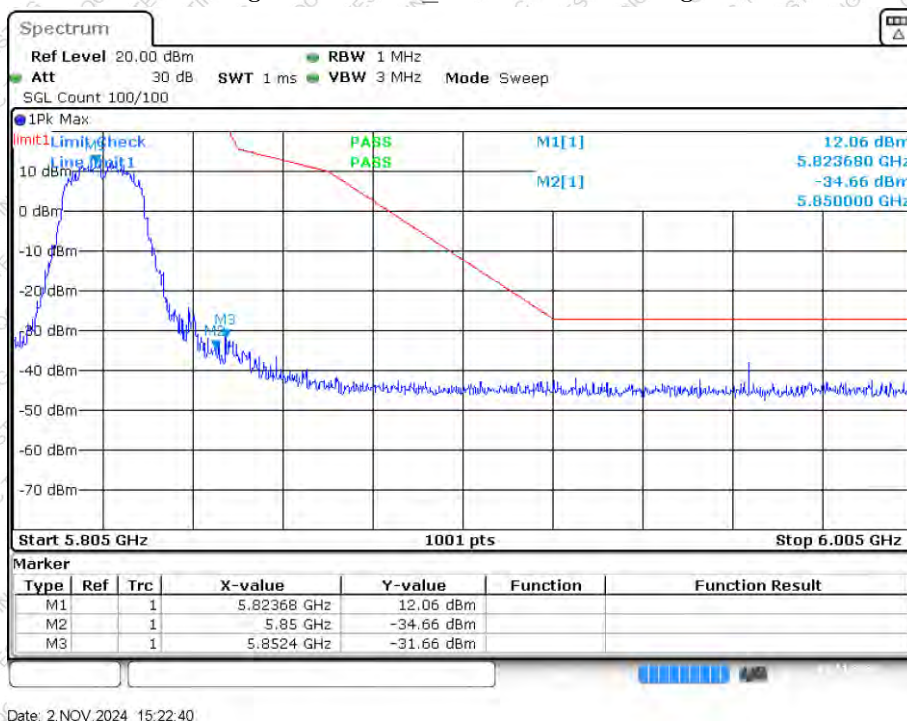




Band Edge NVNT n20_SISO 5745MHz Low Ant1

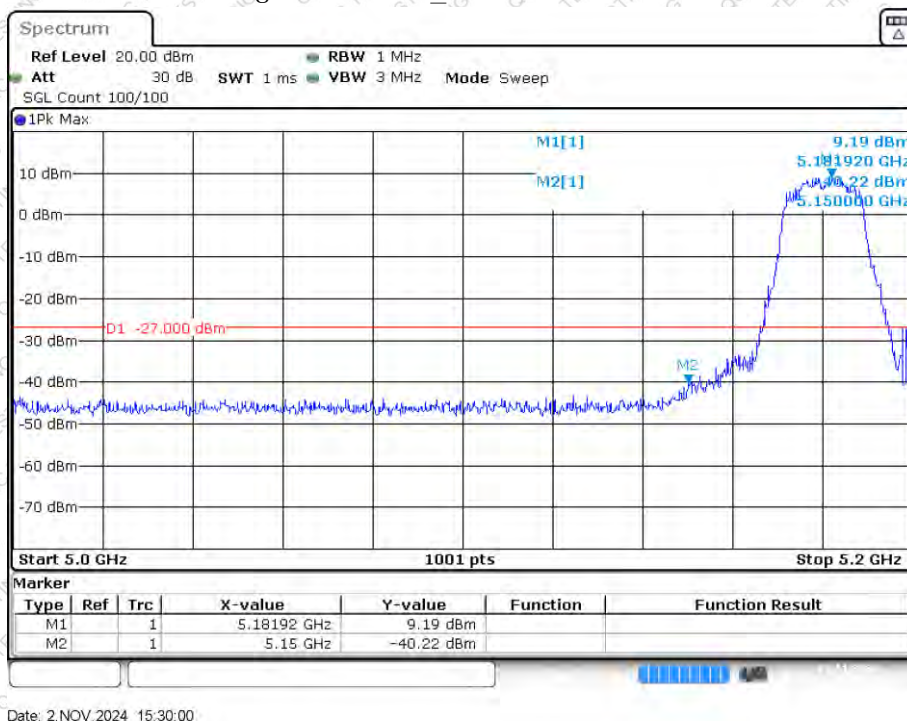


Band Edge NVNT n20_SISO 5825MHz High Ant1

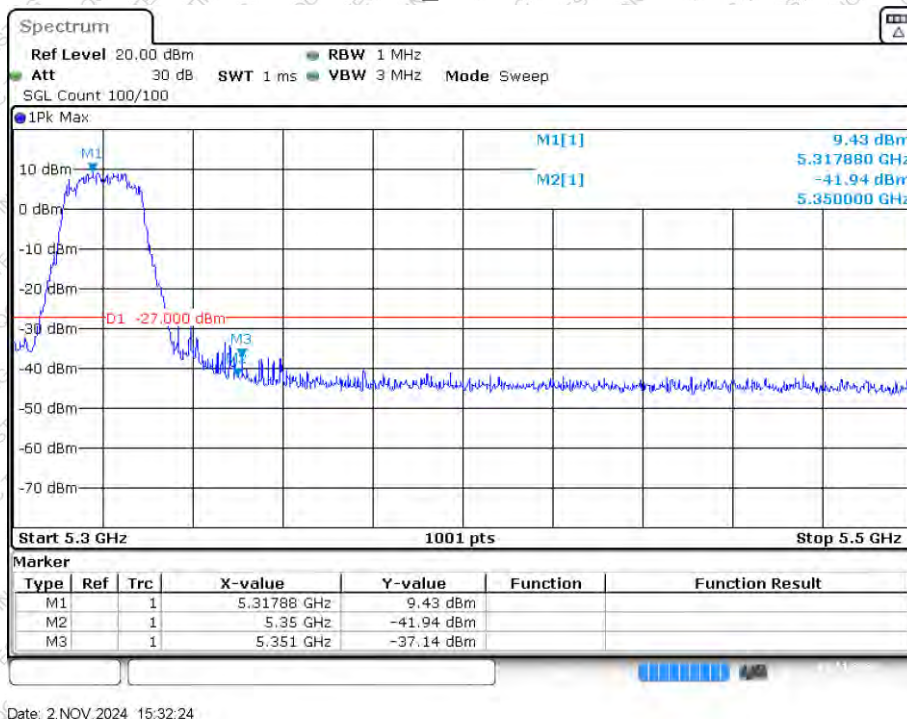




Band Edge NVNT n20_SISO 5180MHz Low Ant2

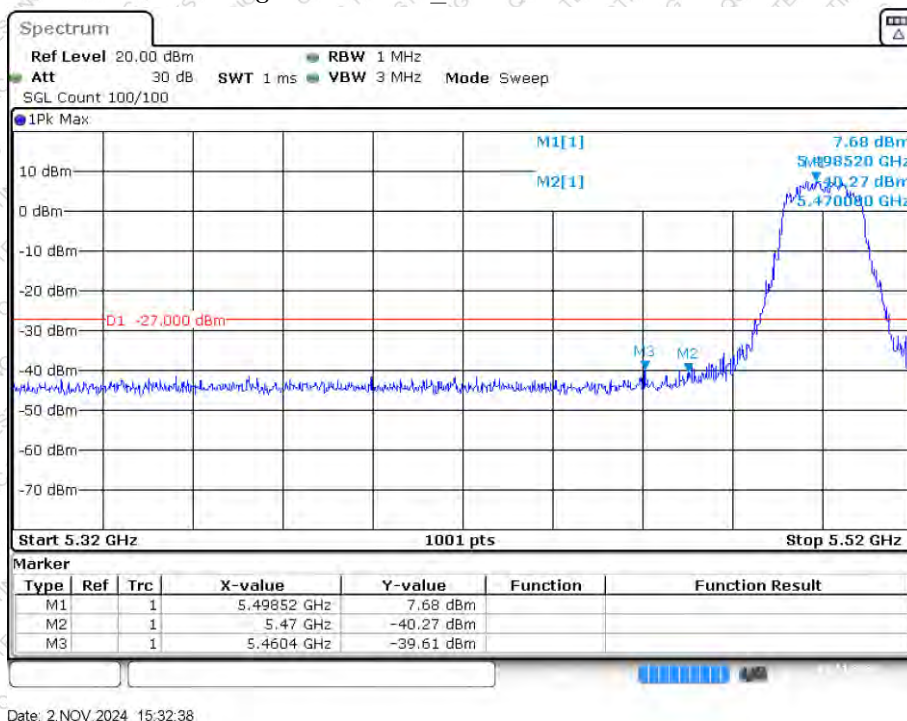


Band Edge NVNT n20_SISO 5320MHz High Ant2

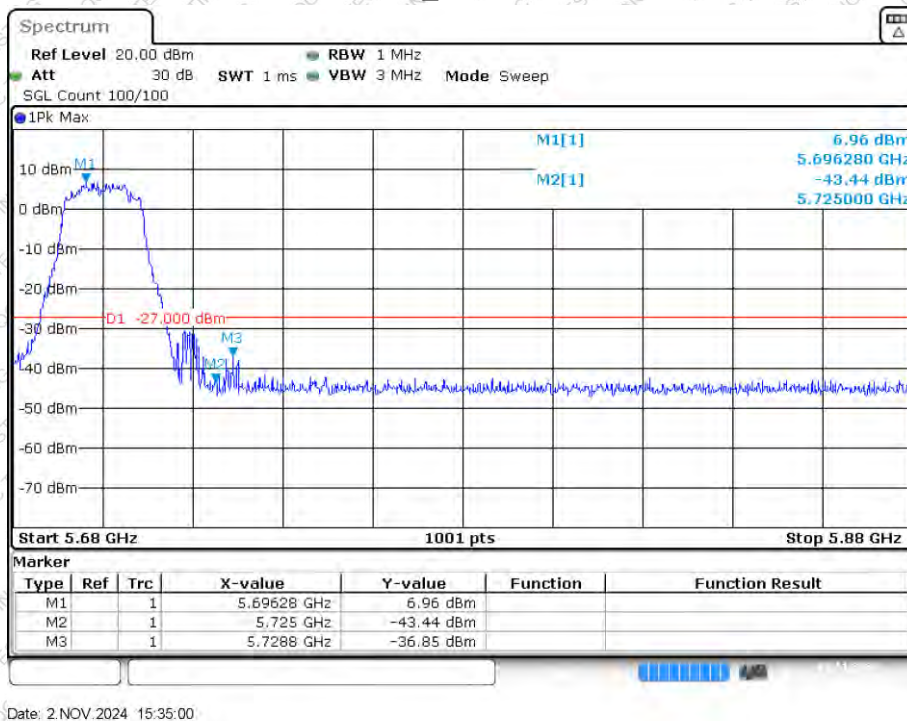




Band Edge NVNT n20_SISO 5500MHz Low Ant2

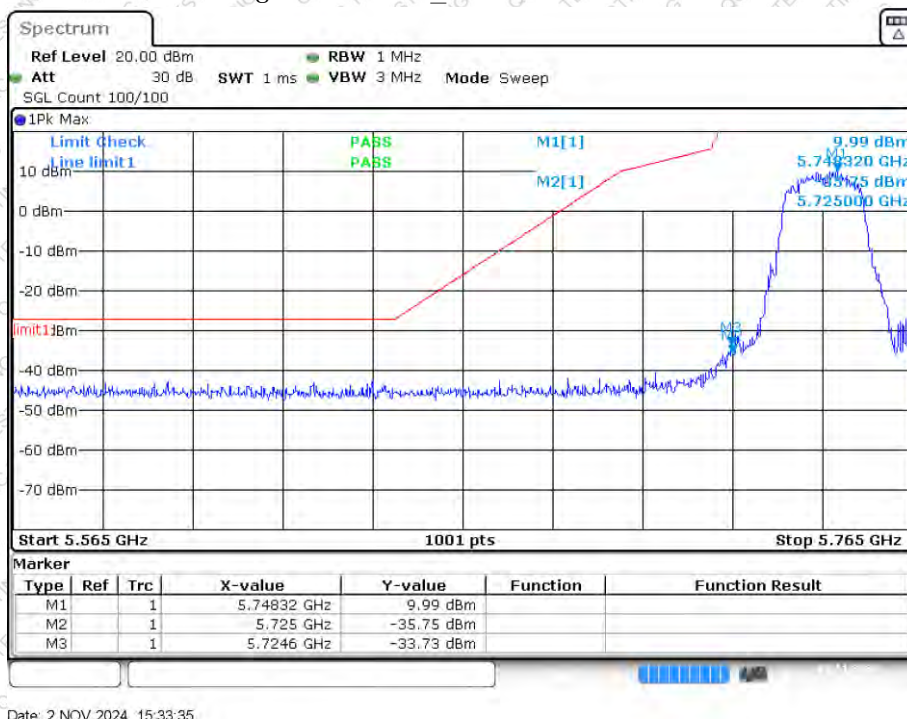


Band Edge NVNT n20_SISO 5700MHz High Ant2





Band Edge NVNT n20_SISO 5745MHz Low Ant2

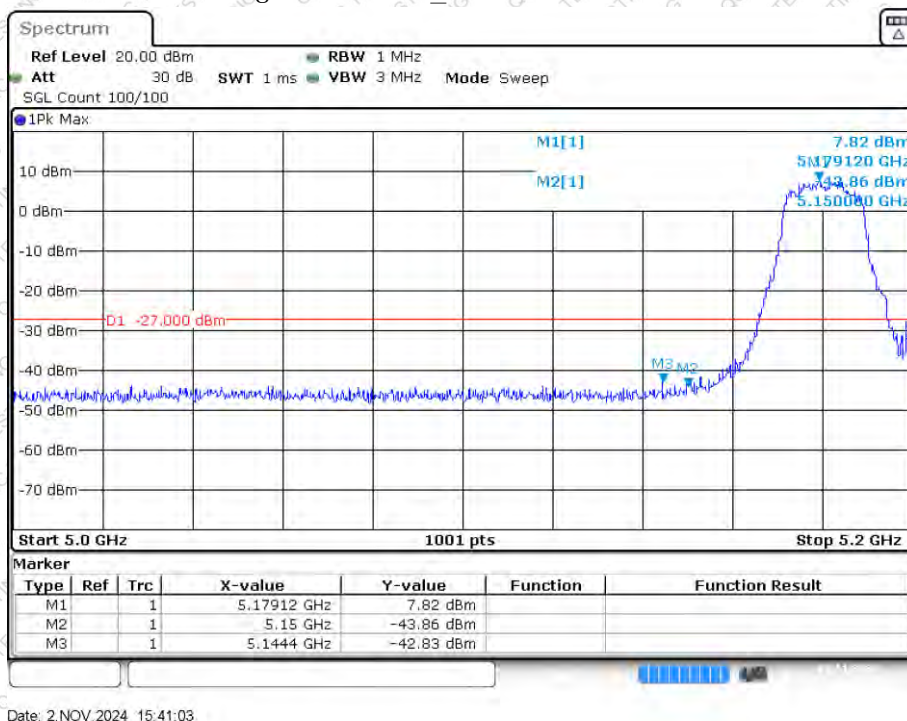


Band Edge NVNT n20_SISO 5825MHz High Ant2

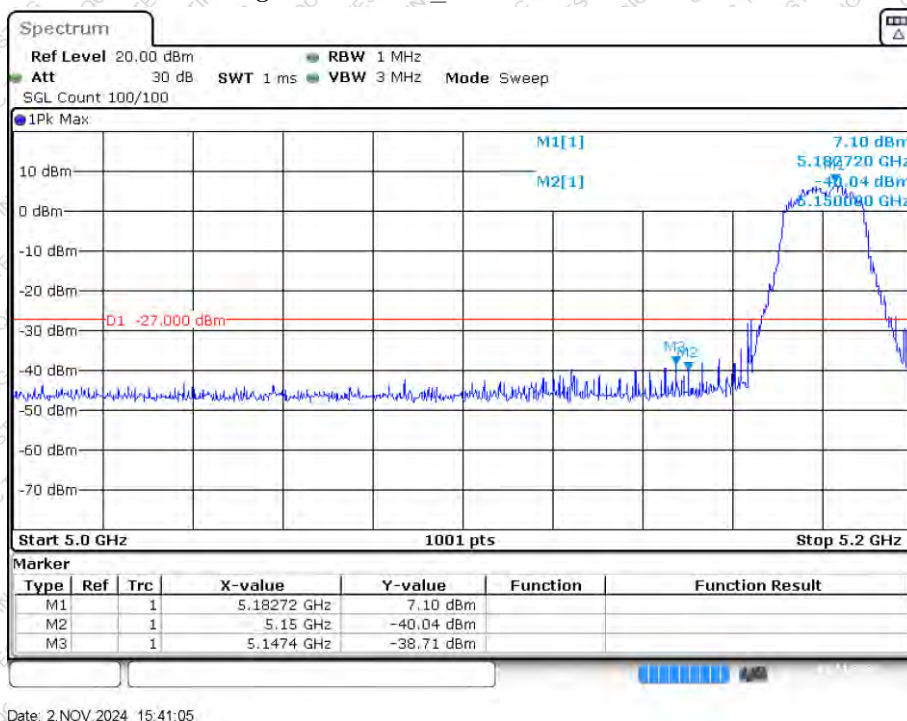




Band Edge NVNT n20_SISO 5180MHz Low Ant1

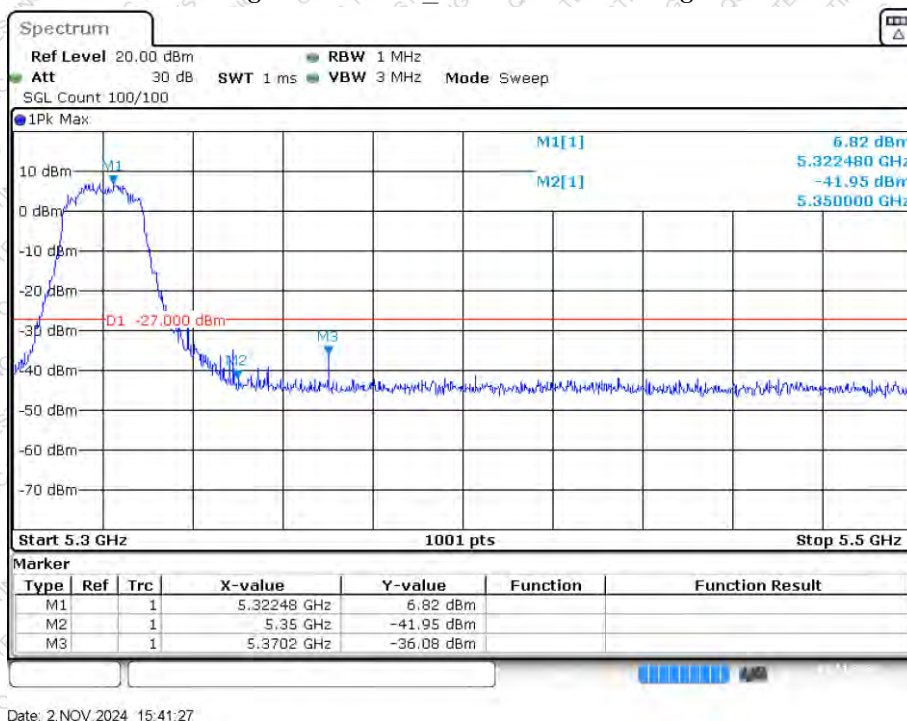


Band Edge NVNT n20_SISO 5180MHz Low Ant2

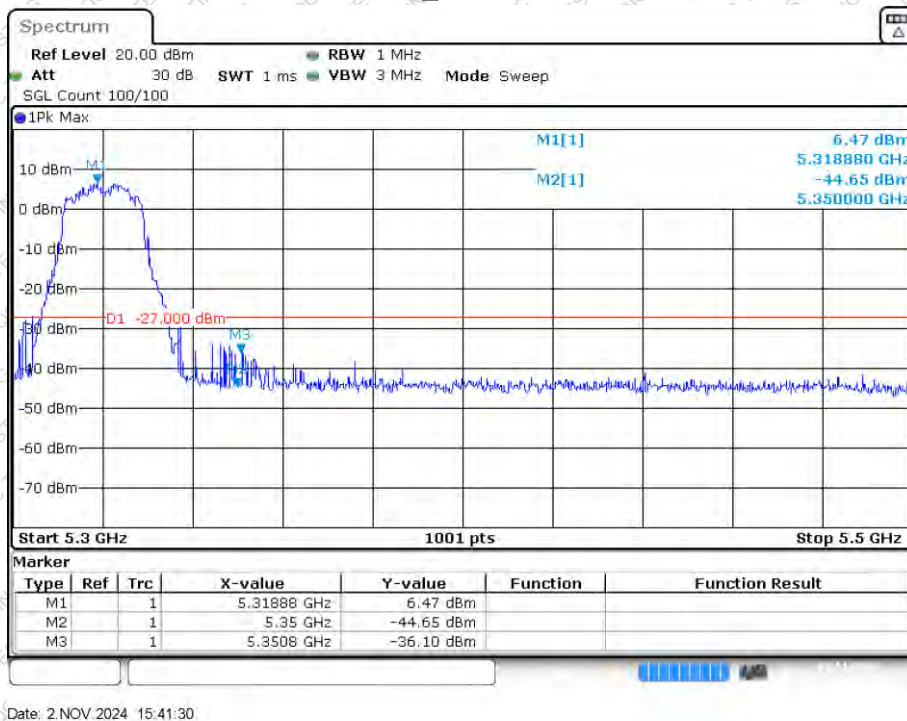




Band Edge NVNT n20_MIMO 5320MHz High Ant1

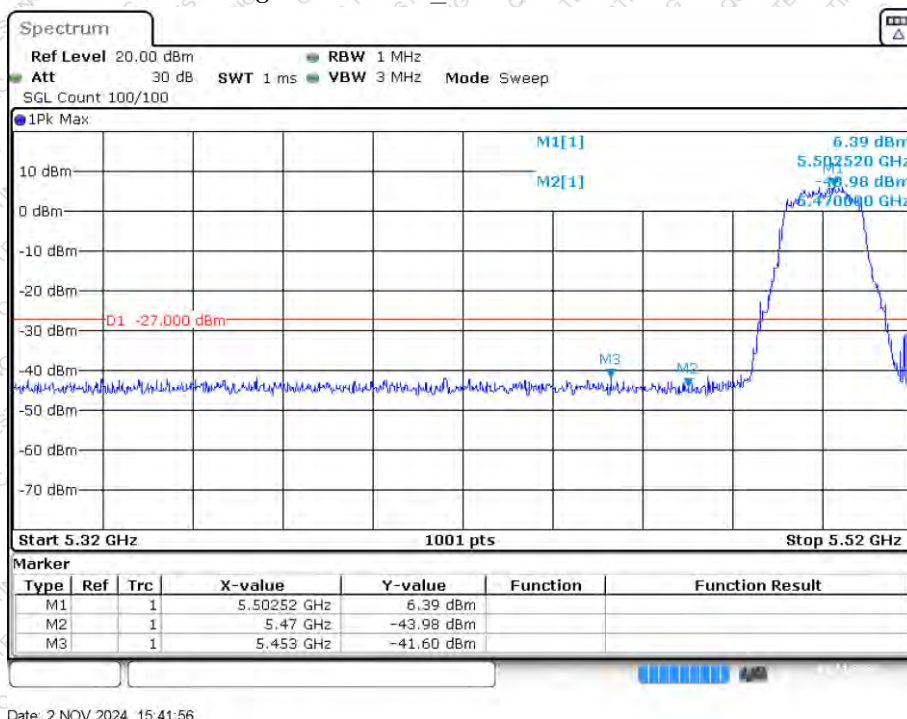


Band Edge NVNT n20_MIMO 5320MHz High Ant2

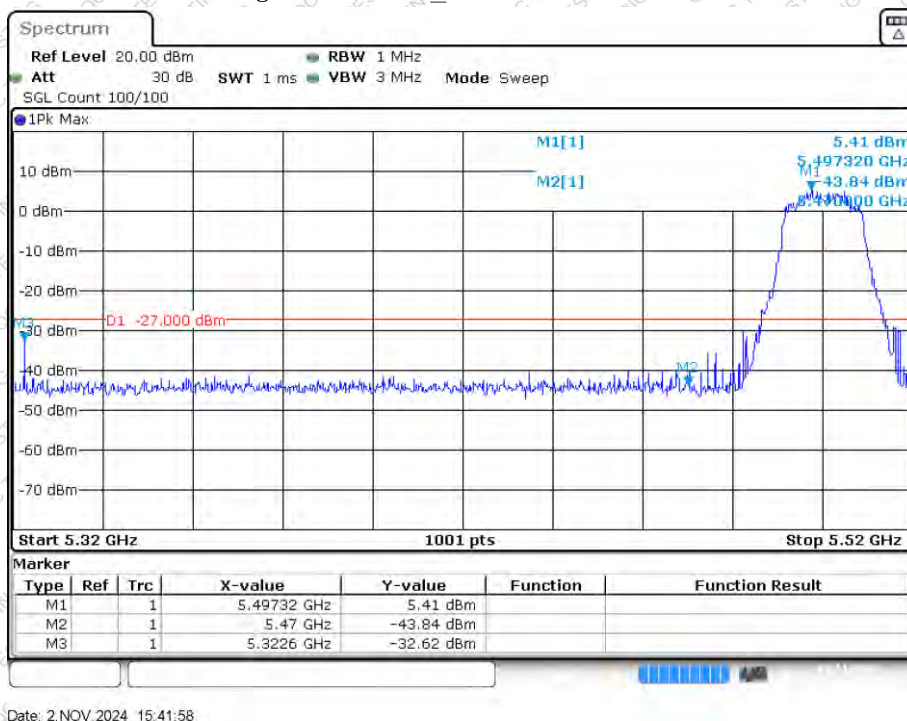




Band Edge NVNT n20_MIMO 5500MHz Low Ant1

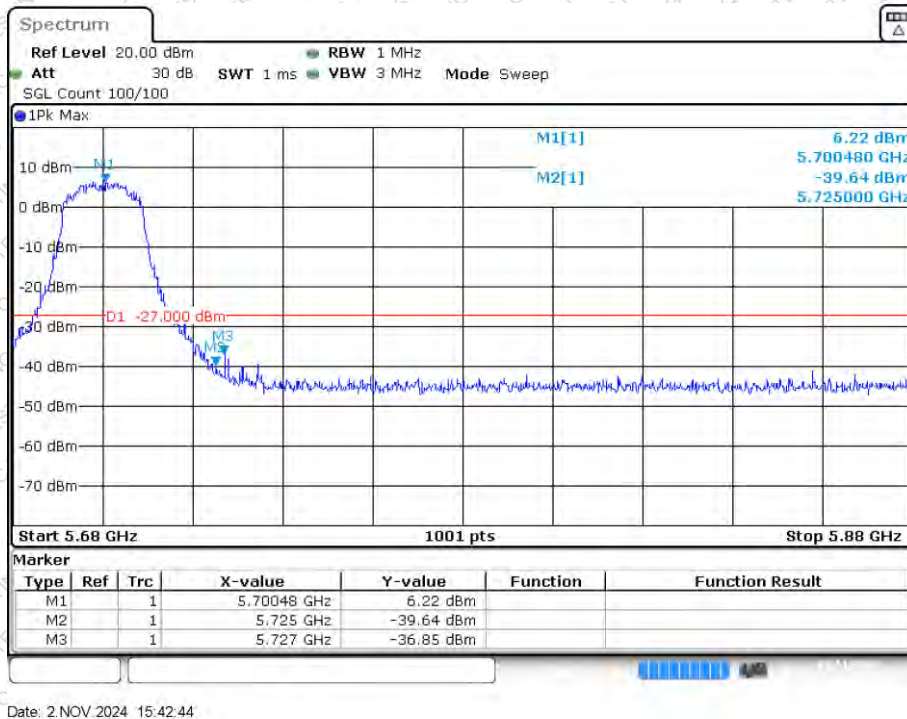


Band Edge NVNT n20_MIMO 5500MHz Low Ant2

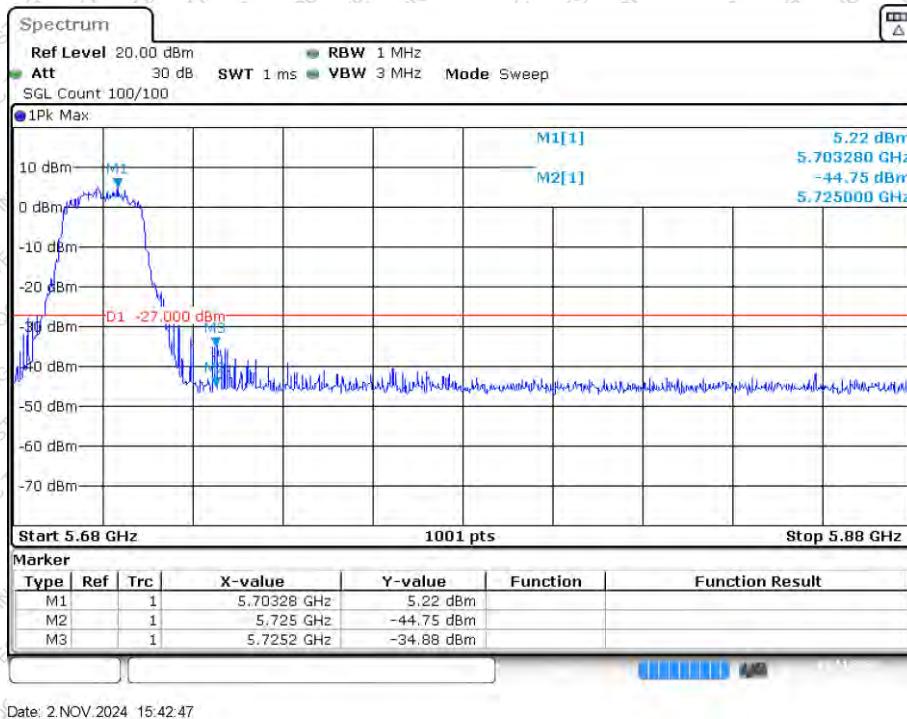




Band Edge NVNT n20_MIMO 5700MHz High Ant1

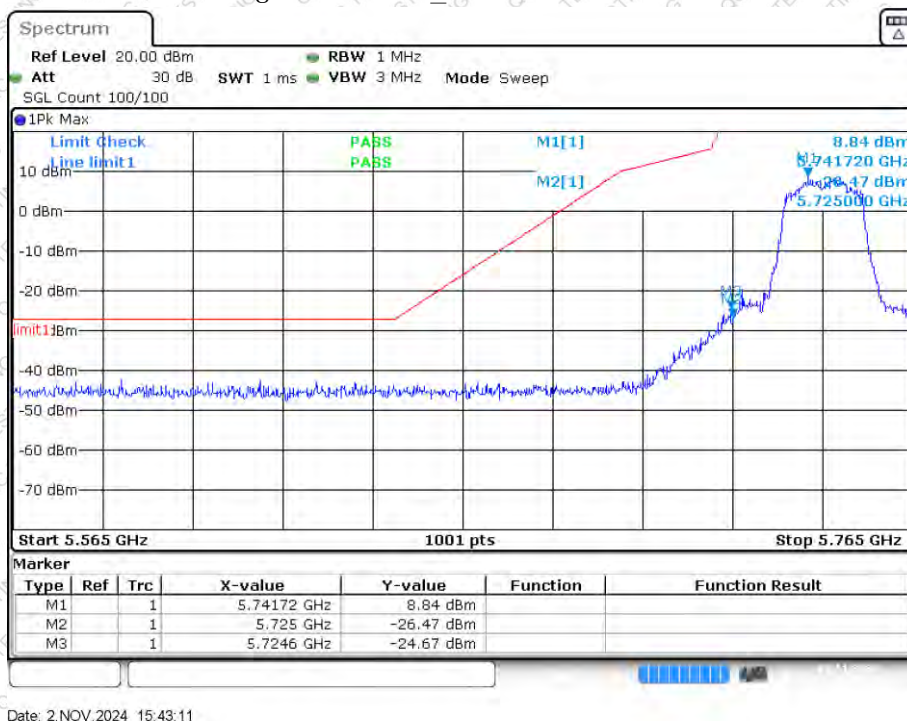


Band Edge NVNT n20_MIMO 5700MHz High Ant2

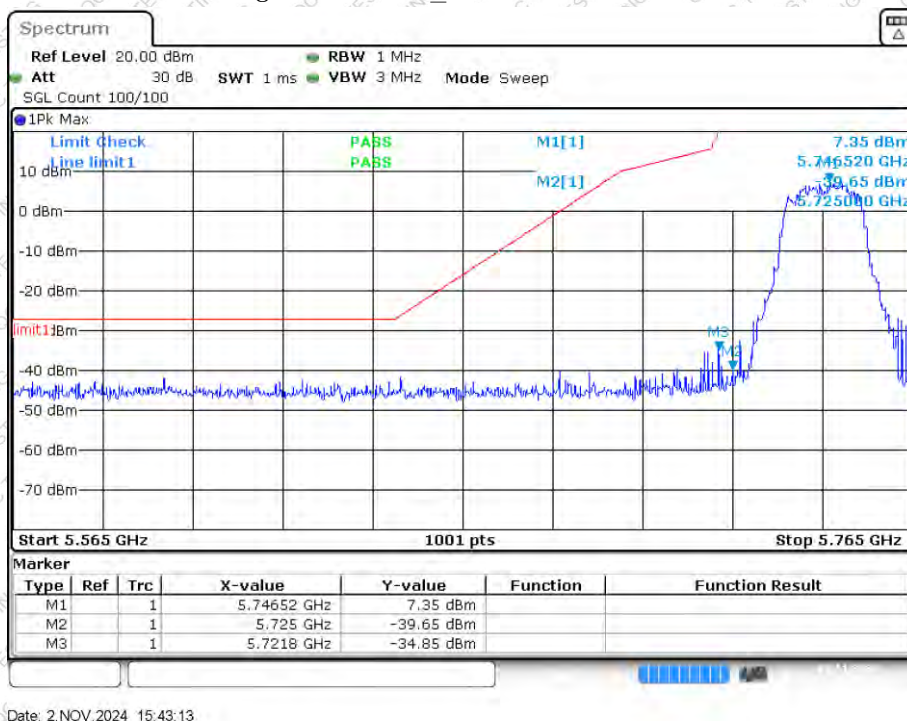




Band Edge NVNT n20_MIMO 5745MHz Low Ant1

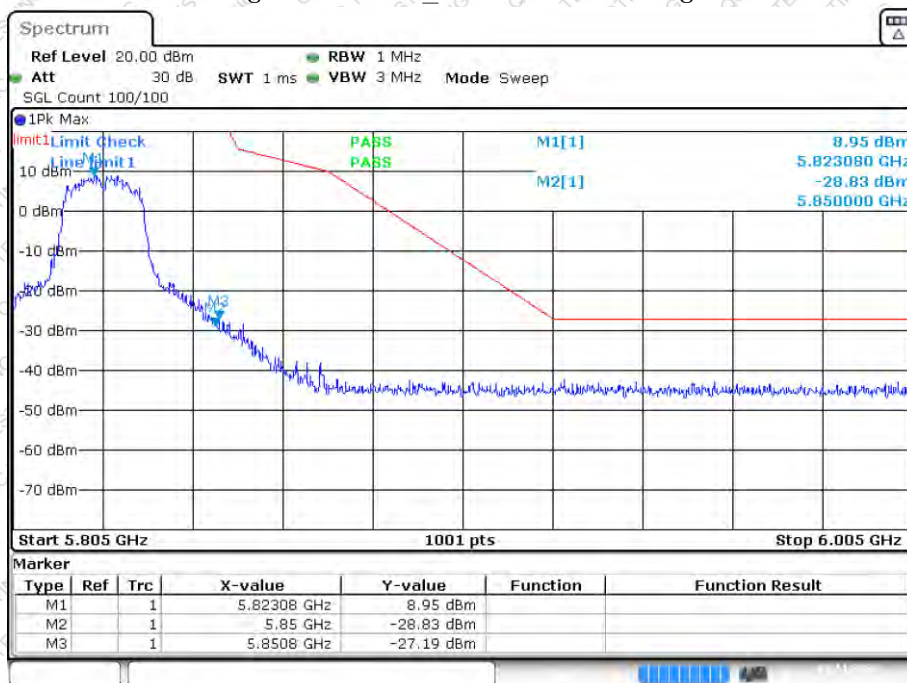


Band Edge NVNT n20_MIMO 5745MHz Low Ant2





Band Edge NVNT n20_MIMO 5825MHz High Ant1



Date: 2 NOV. 2024 15:43:49

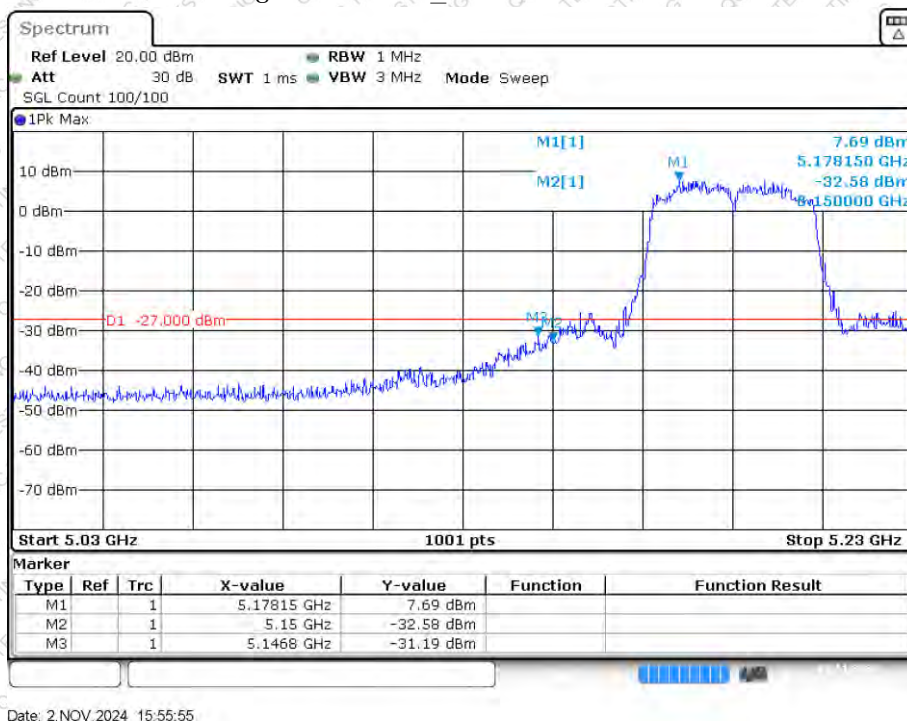
Band Edge NVNT n20_MIMO 5825MHz High Ant2



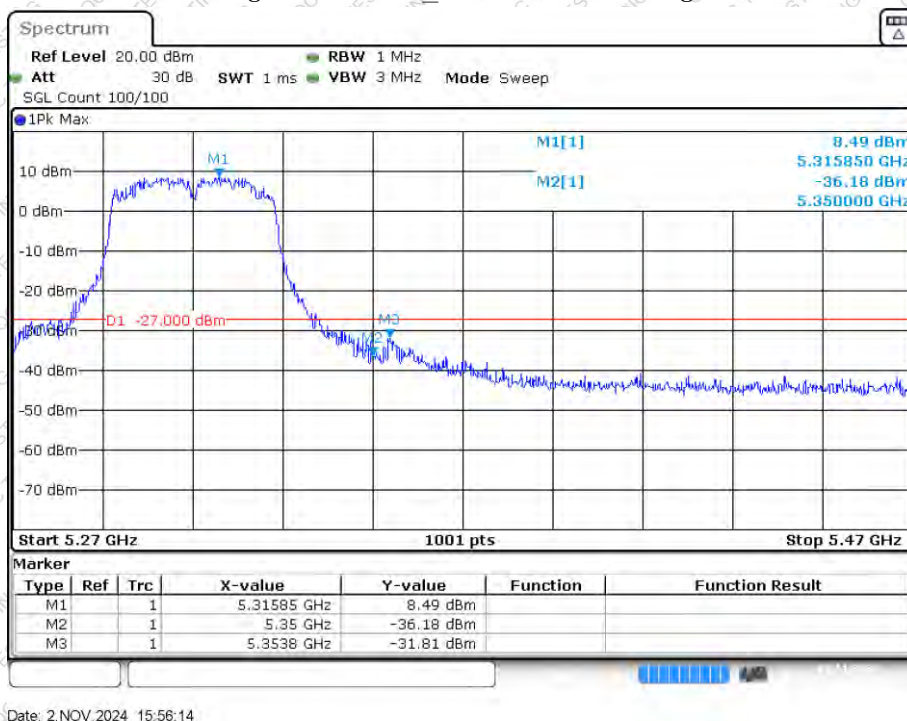
Date: 2 NOV. 2024 15:43:52



Band Edge NVNT n40_SISO 5190MHz Low Ant1

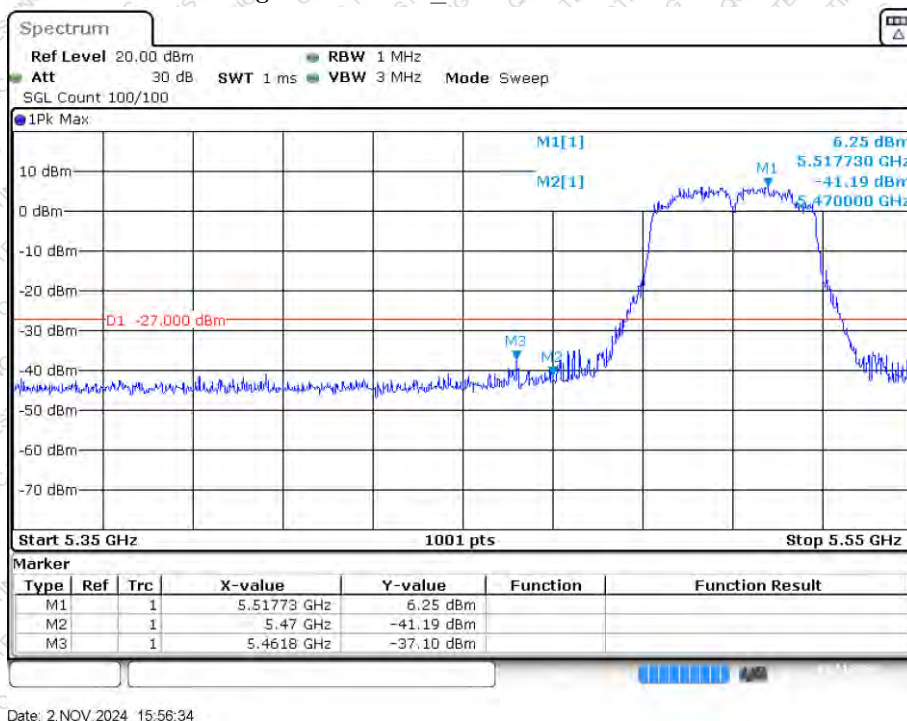


Band Edge NVNT n40_SISO 5310MHz High Ant1

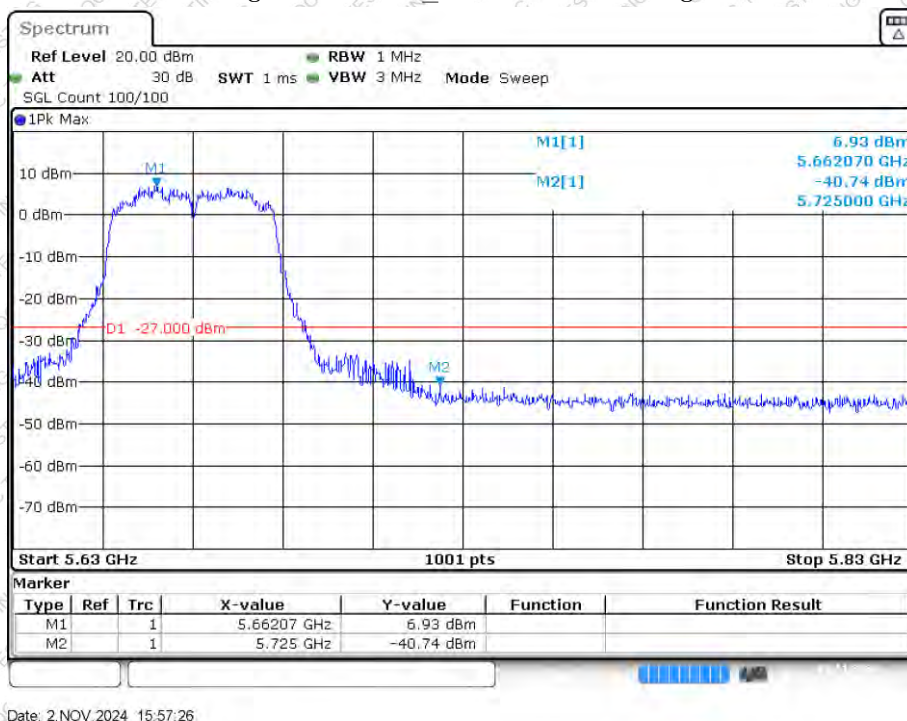




Band Edge NVNT n40_SISO 5510MHz Low Ant1

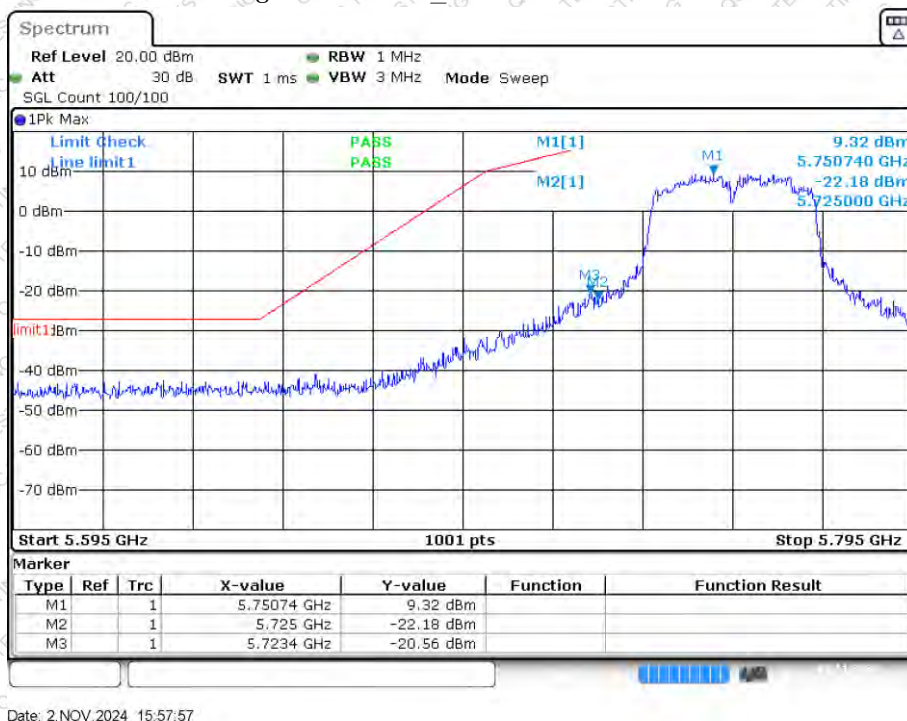


Band Edge NVNT n40_SISO 5670MHz High Ant1

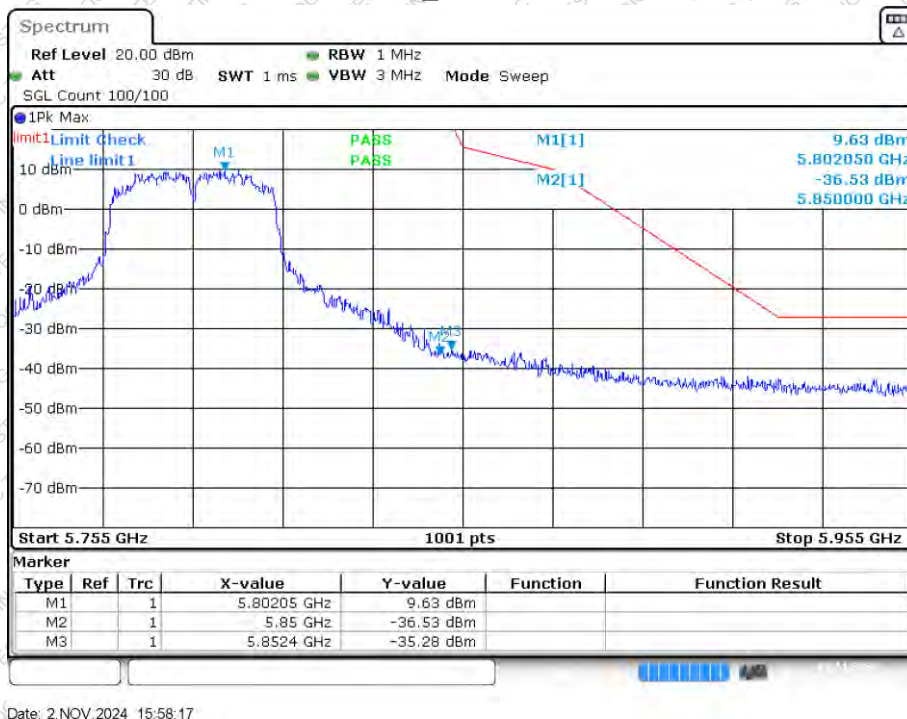




Band Edge NVNT n40_SISO 5755MHz Low Ant1

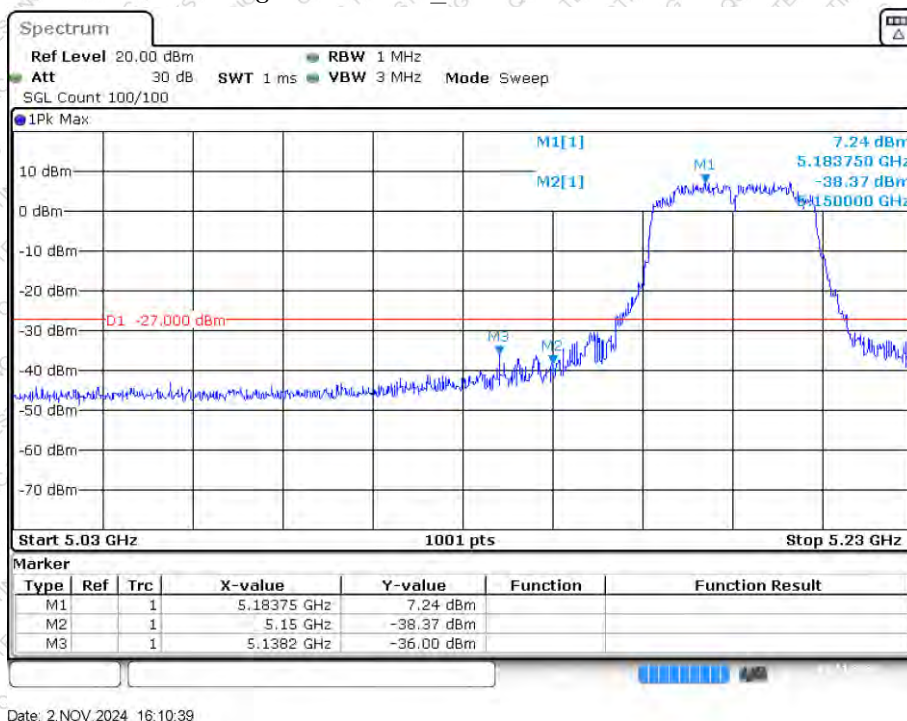


Band Edge NVNT n40_SISO 5795MHz High Ant1

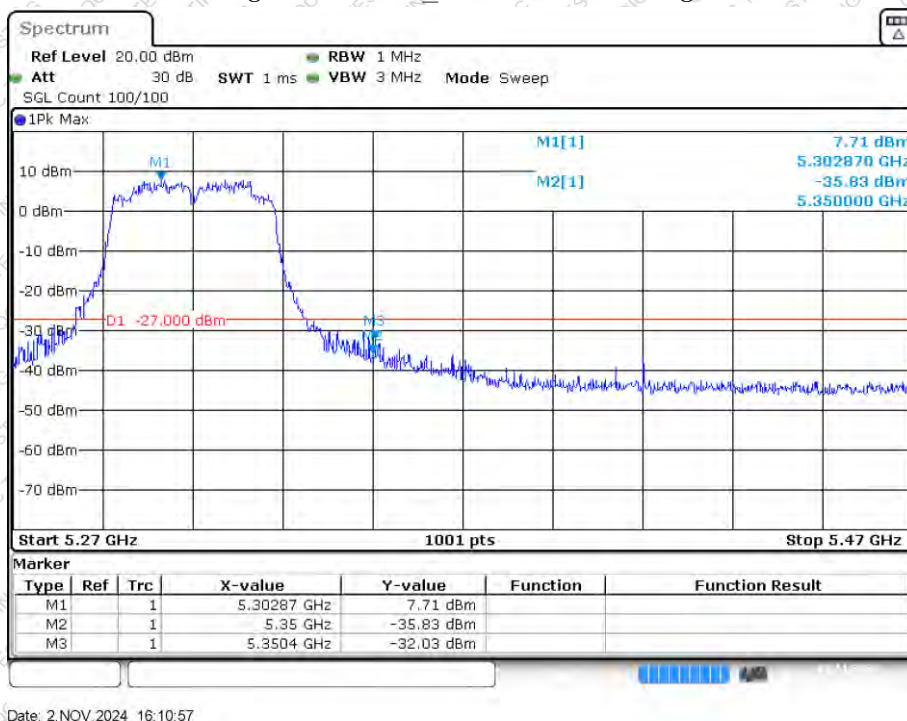




Band Edge NVNT n40_SISO 5190MHz Low Ant2

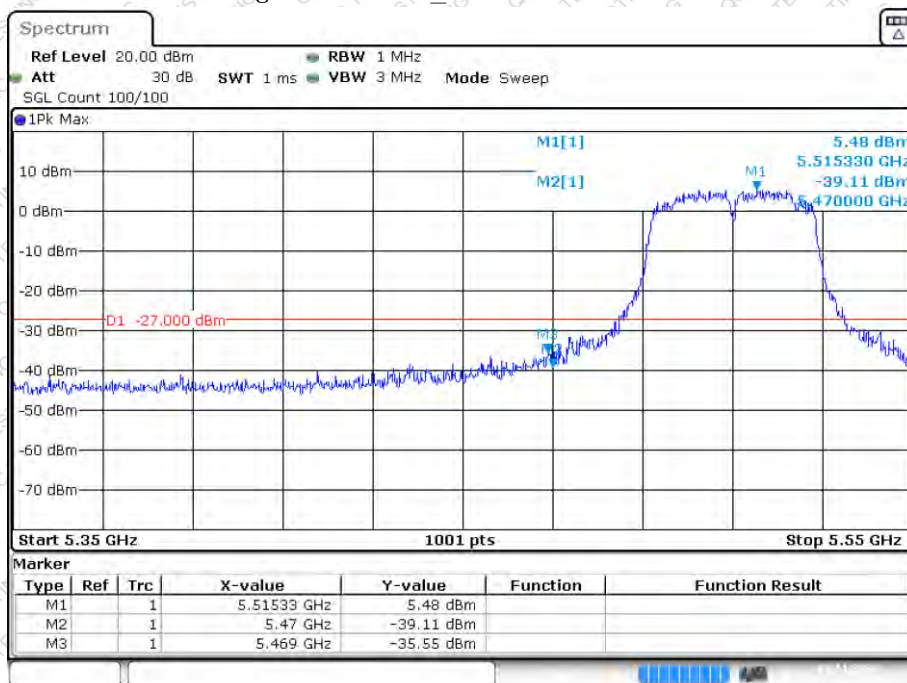


Band Edge NVNT n40_SISO 5310MHz High Ant2





Band Edge NVNT n40_SISO 5510MHz Low Ant2



Date: 2 NOV 2024 16:11:08

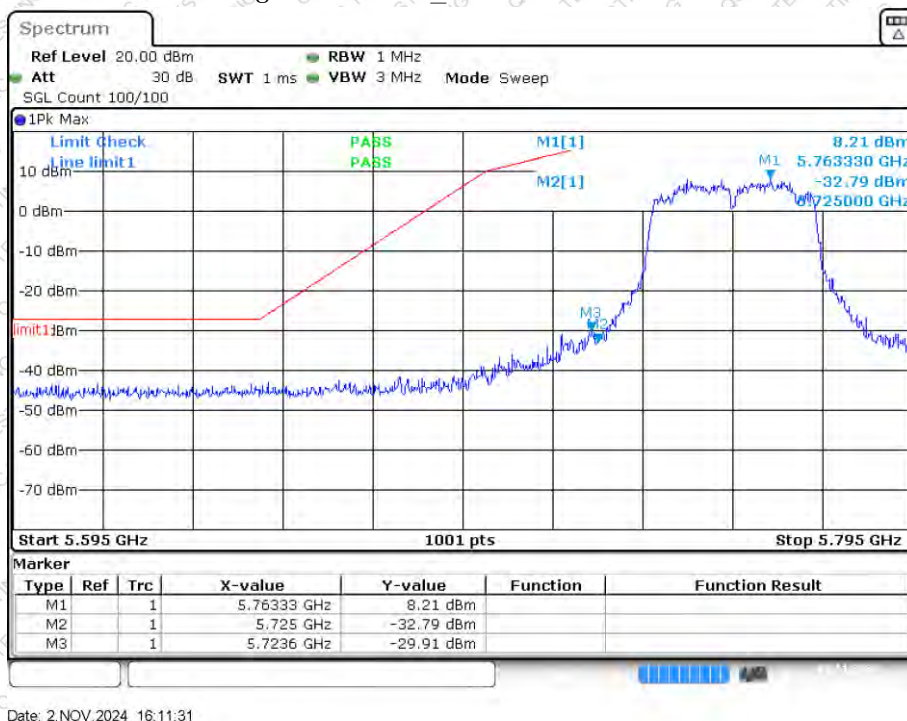
Band Edge NVNT n40_SISO 5670MHz High Ant2



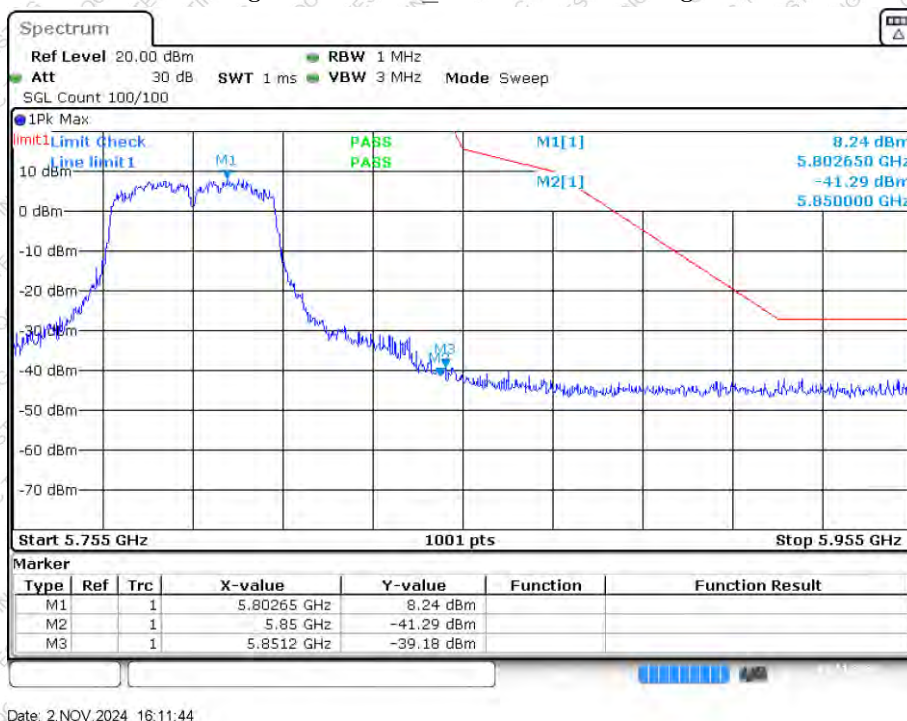
Date: 2 NOV 2024 16:11:20



Band Edge NVNT n40_SISO 5755MHz Low Ant2

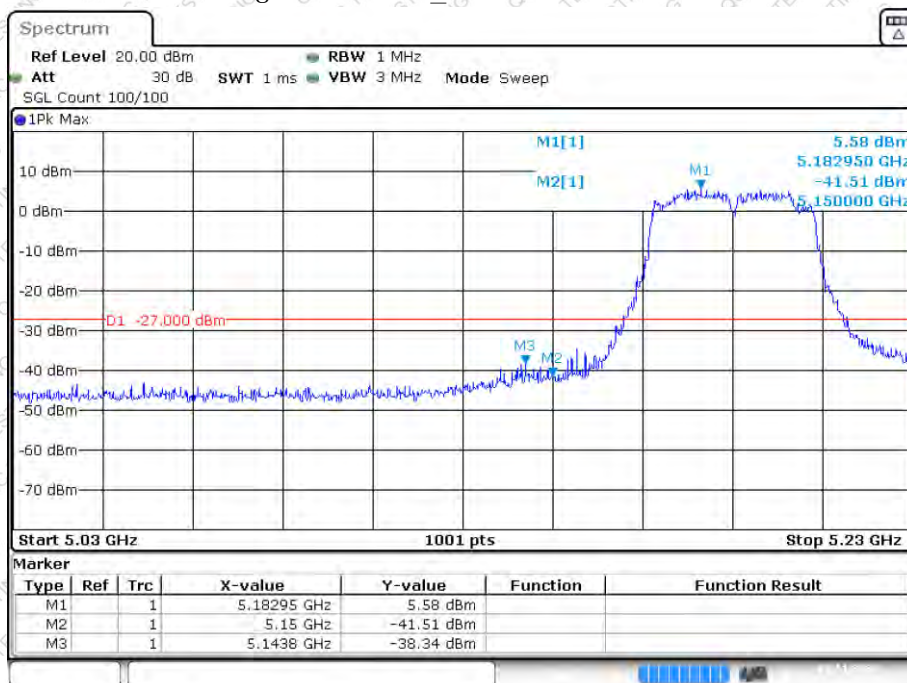


Band Edge NVNT n40_SISO 5795MHz High Ant2



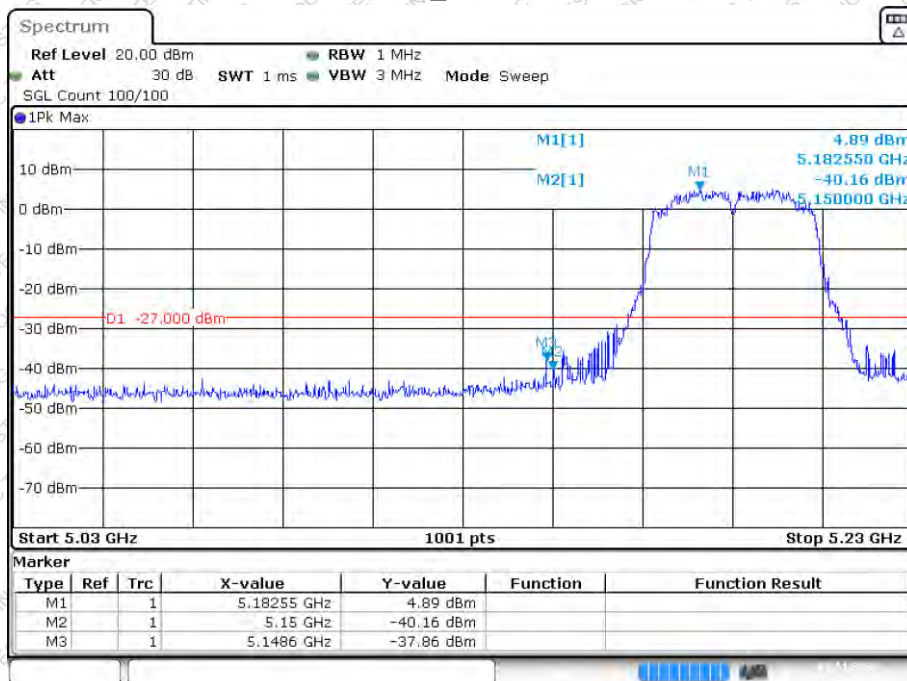


Band Edge NVNT n40_MIMO 5190MHz Low Ant1



Date: 2 NOV 2024 16:17:54

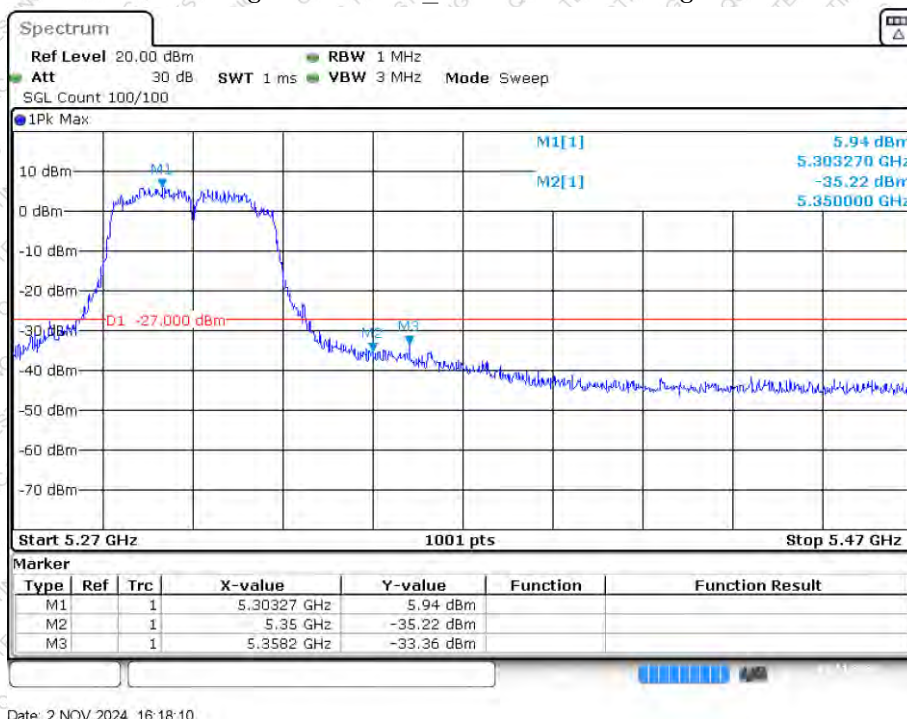
Band Edge NVNT n40_MIMO 5190MHz Low Ant2



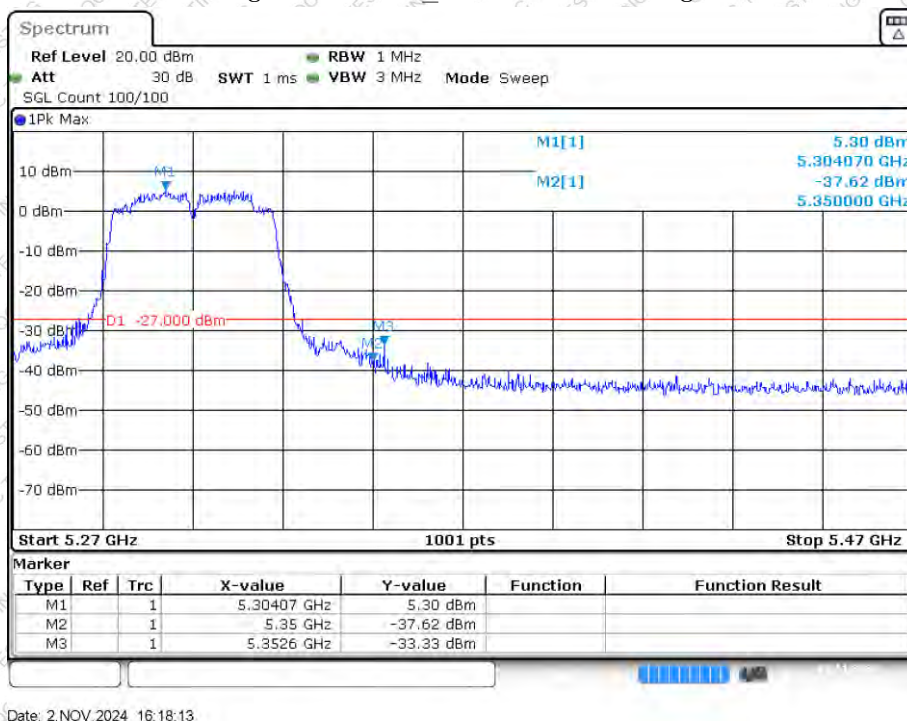
Date: 2 NOV 2024 16:17:57



Band Edge NVNT n40_MIMO 5310MHz High Ant1

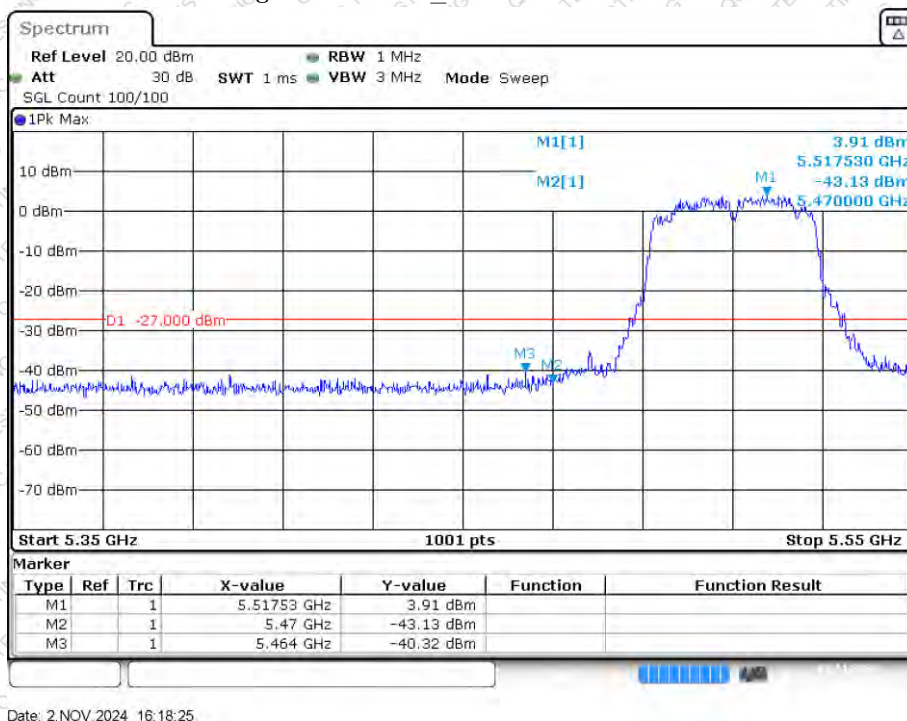


Band Edge NVNT n40_MIMO 5310MHz High Ant2

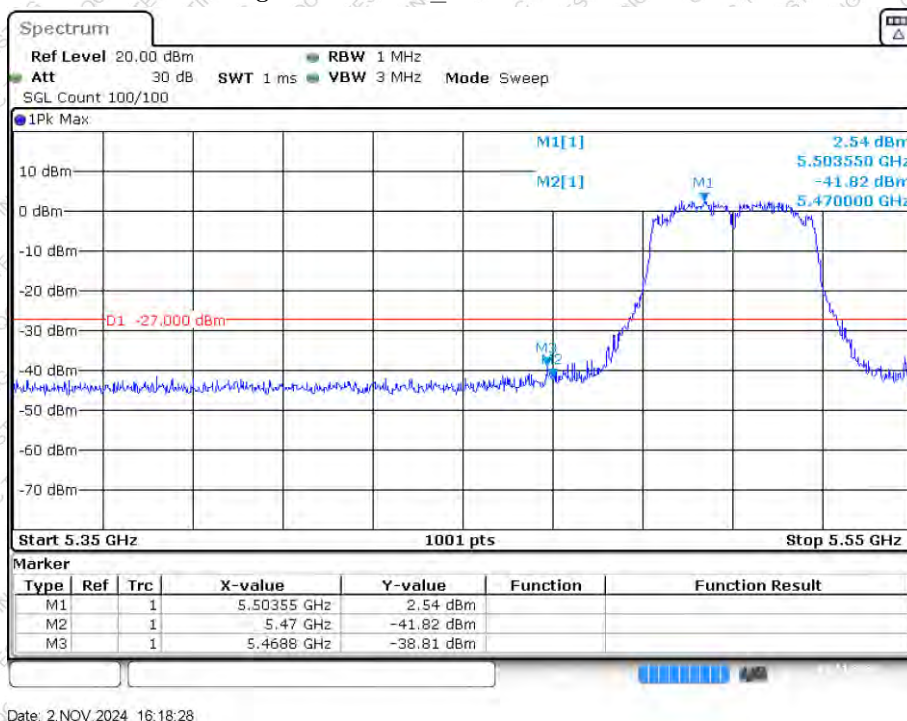




Band Edge NVNT n40_MIMO 5510MHz Low Ant1

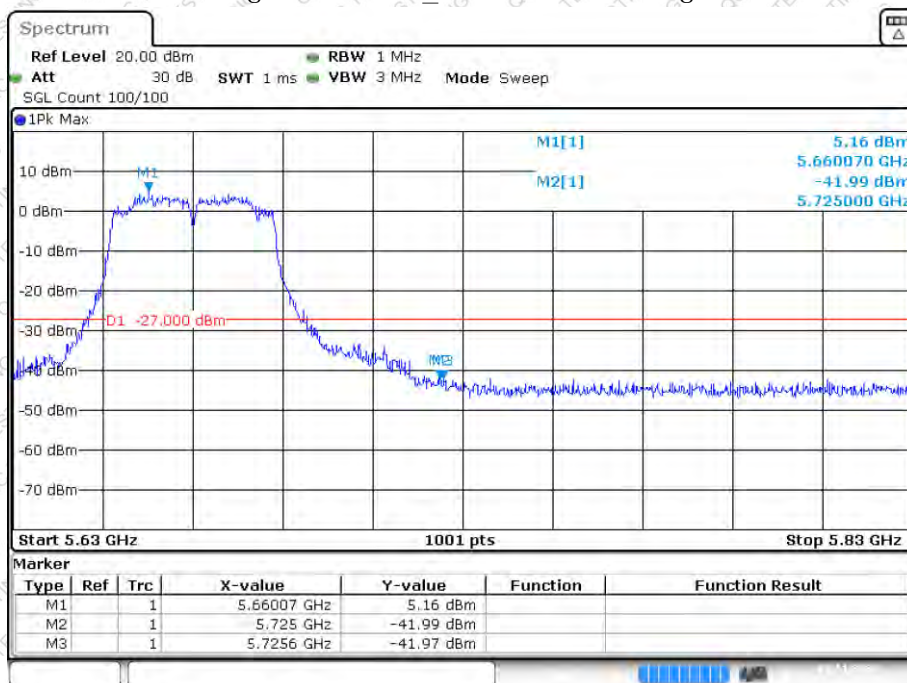


Band Edge NVNT n40_MIMO 5510MHz Low Ant2





Band Edge NVNT n40_MIMO 5670MHz High Ant1



Date: 2 NOV 2024 16:18:43

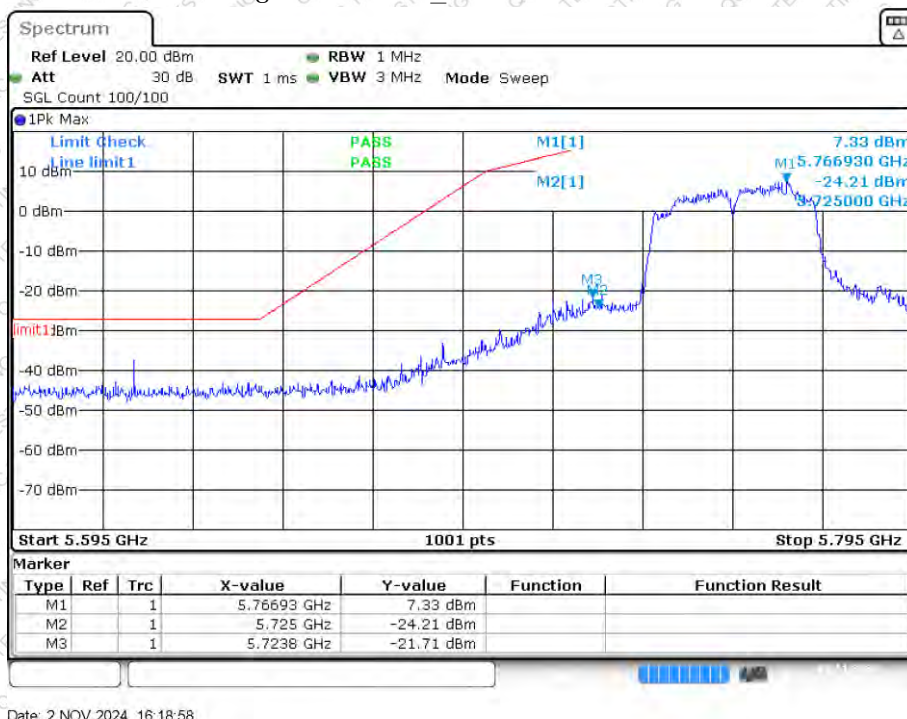
Band Edge NVNT n40_MIMO 5670MHz High Ant2



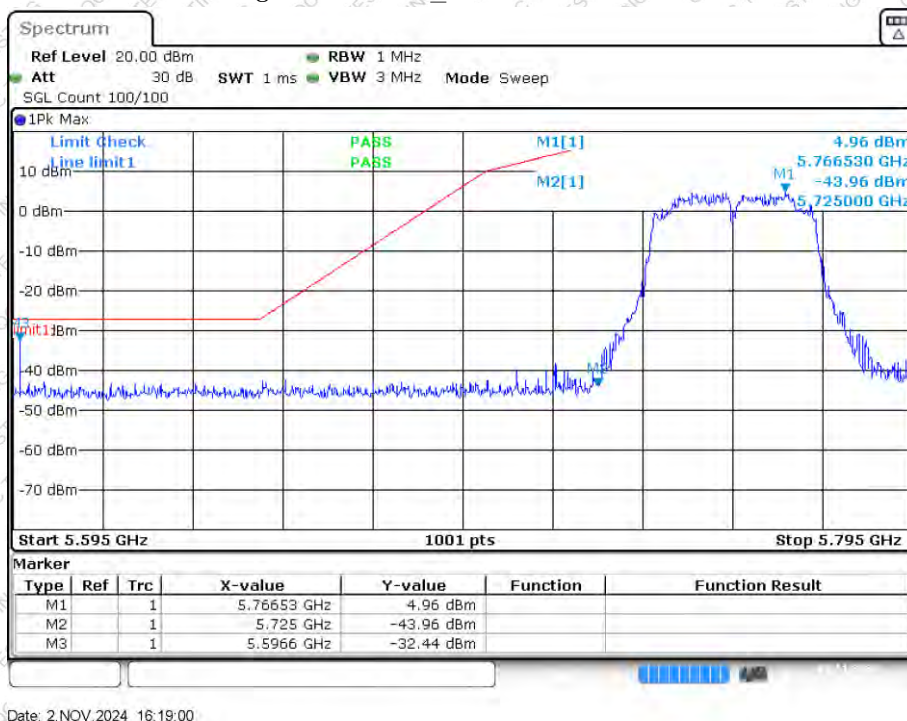
Date: 2 NOV 2024 16:18:46



Band Edge NVNT n40_MIMO 5755MHz Low Ant1

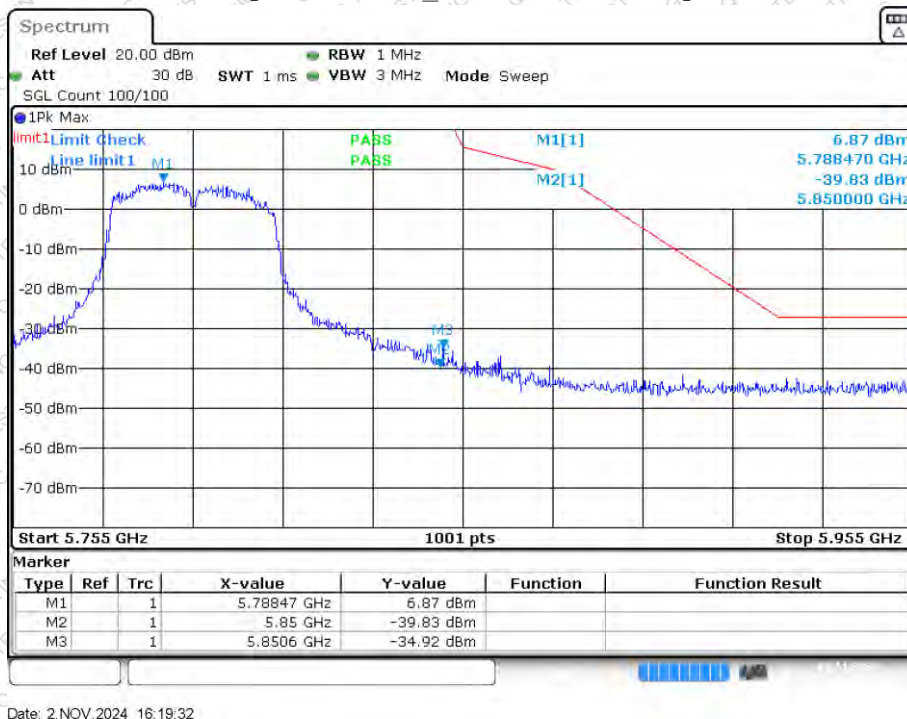


Band Edge NVNT n40_MIMO 5755MHz Low Ant2

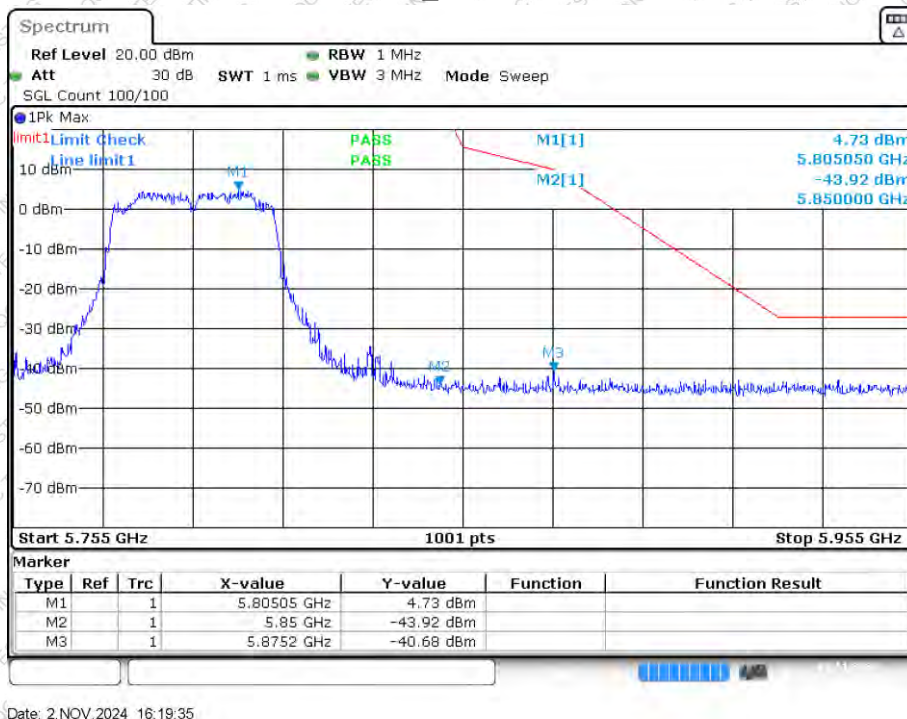




Band Edge NVNT n40_MIMO 5795MHz High Ant1

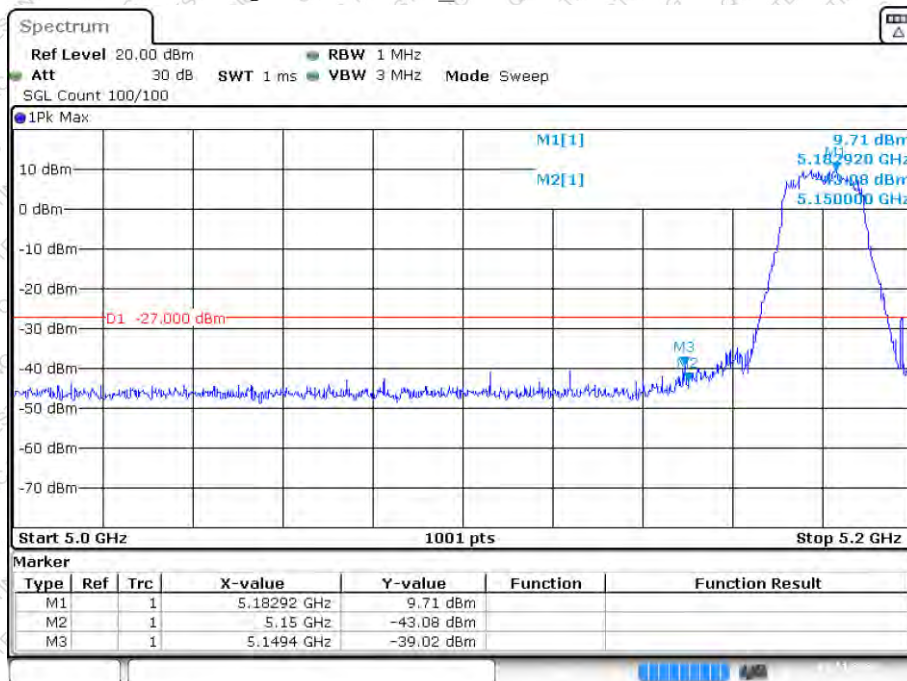


Band Edge NVNT n40_MIMO 5795MHz High Ant2

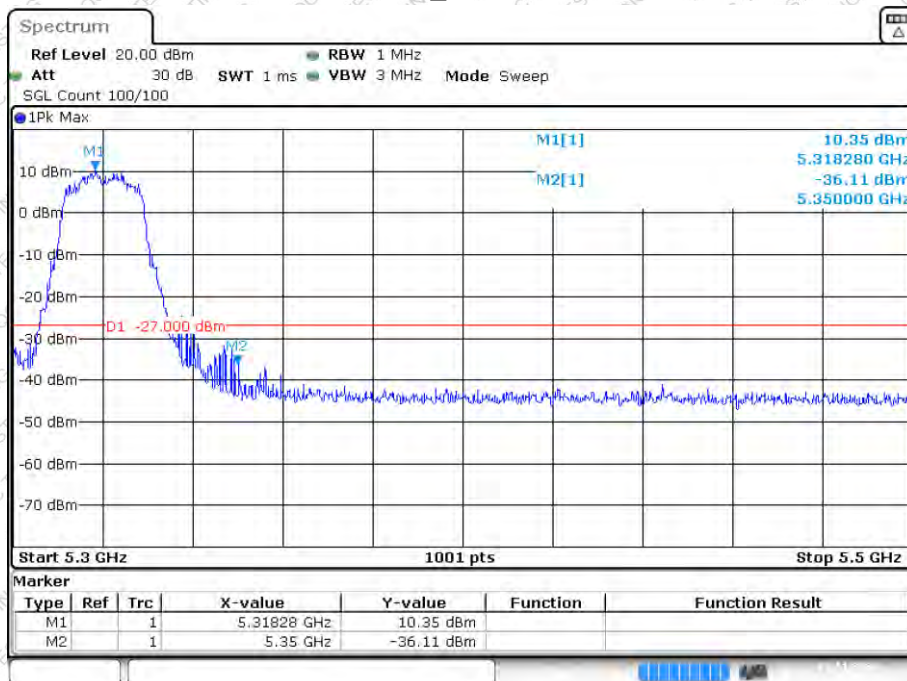




Band Edge NVNT ac20_SISO 5180MHz Low Ant1

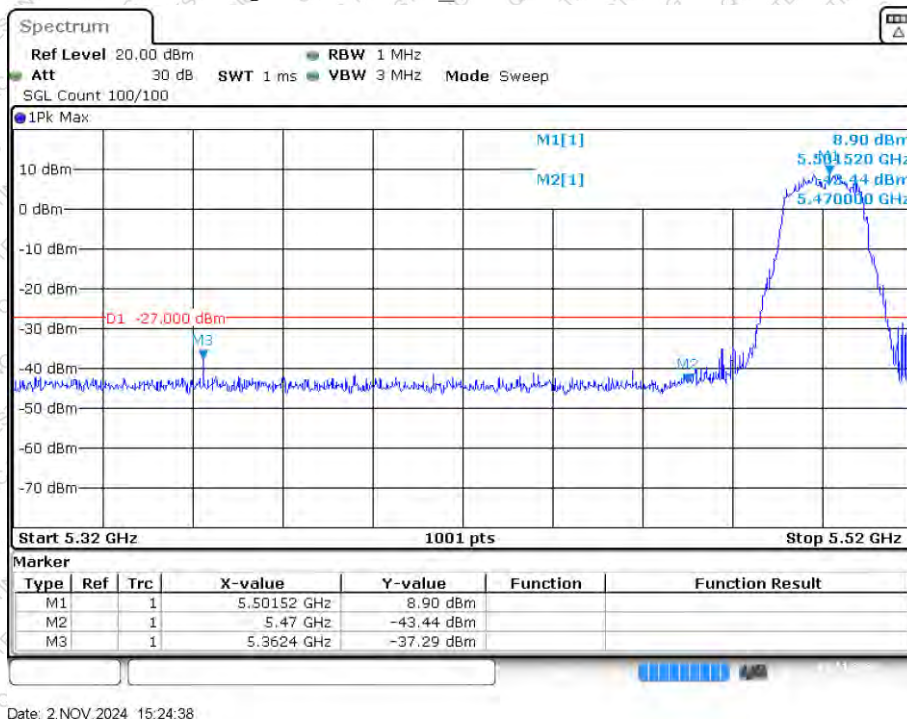


Band Edge NVNT ac20_SISO 5320MHz High Ant1





Band Edge NVNT ac20_SISO 5500MHz Low Ant1



Band Edge NVNT ac20_SISO 5700MHz High Ant1

