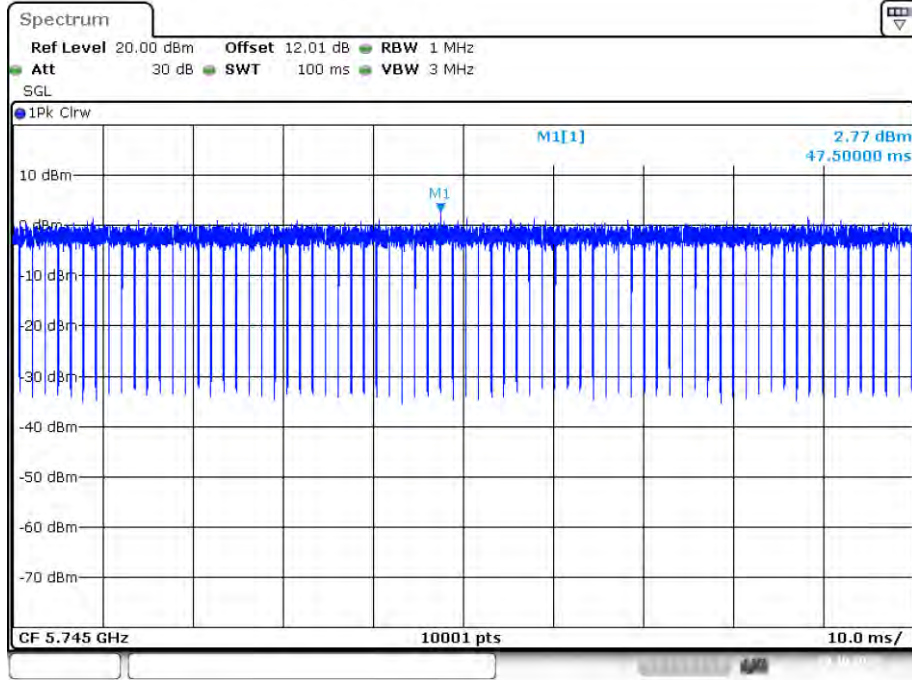
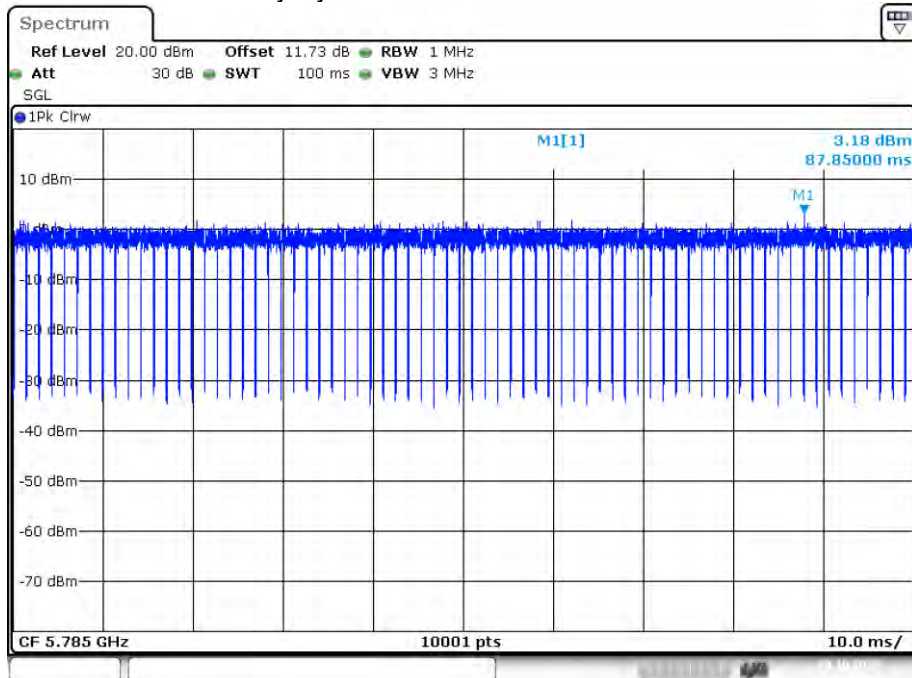


### Duty Cycle NVNT ac20 5745MHz Ant1



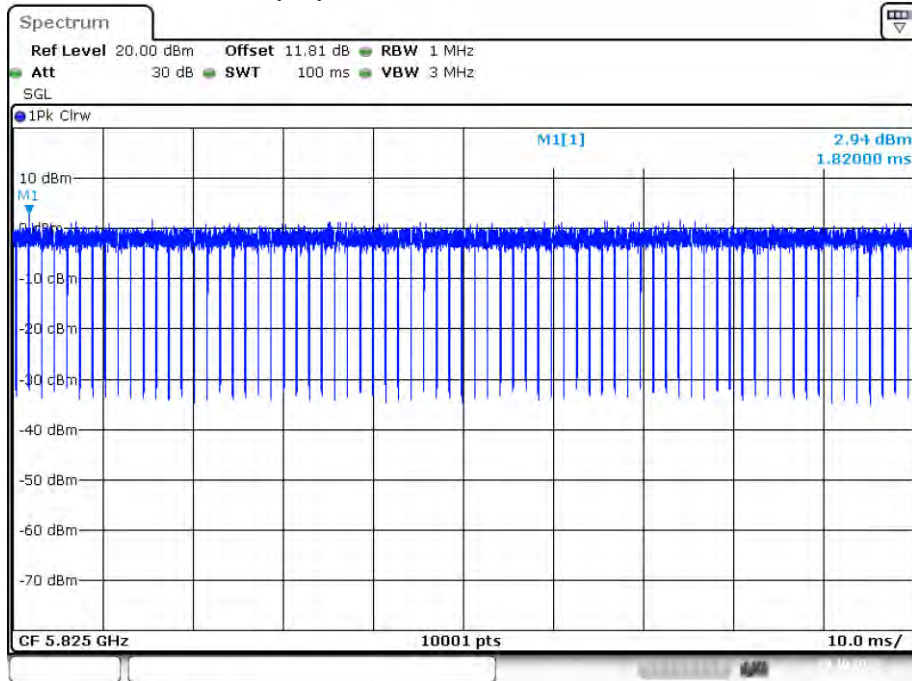
Date: 20.OCT.2023 05:26:18

### Duty Cycle NVNT ac20 5785MHz Ant1



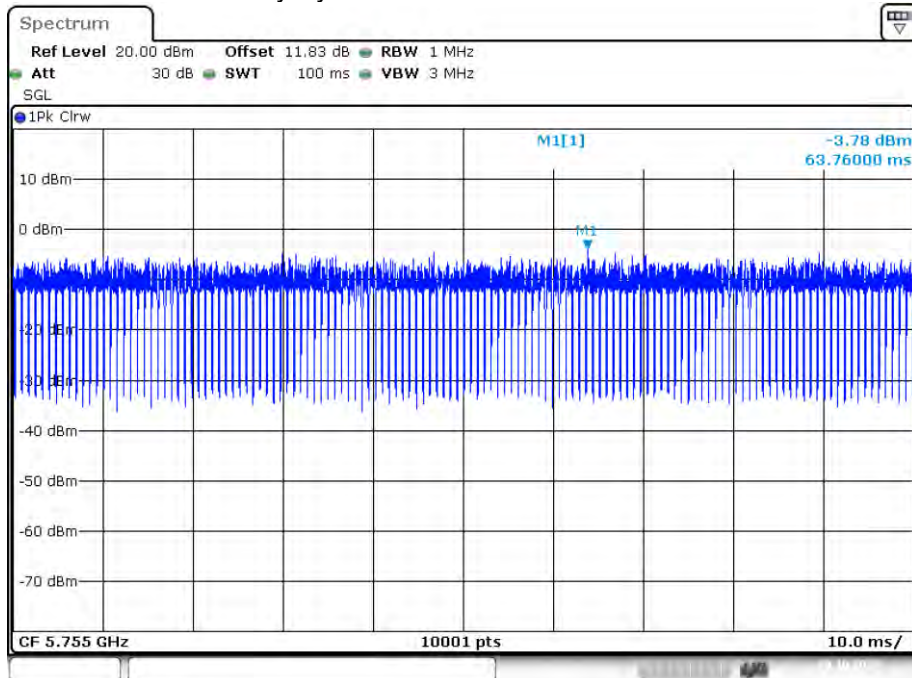
Date: 20.OCT.2023 05:34:00

### Duty Cycle NVNT ac20 5825MHz Ant1



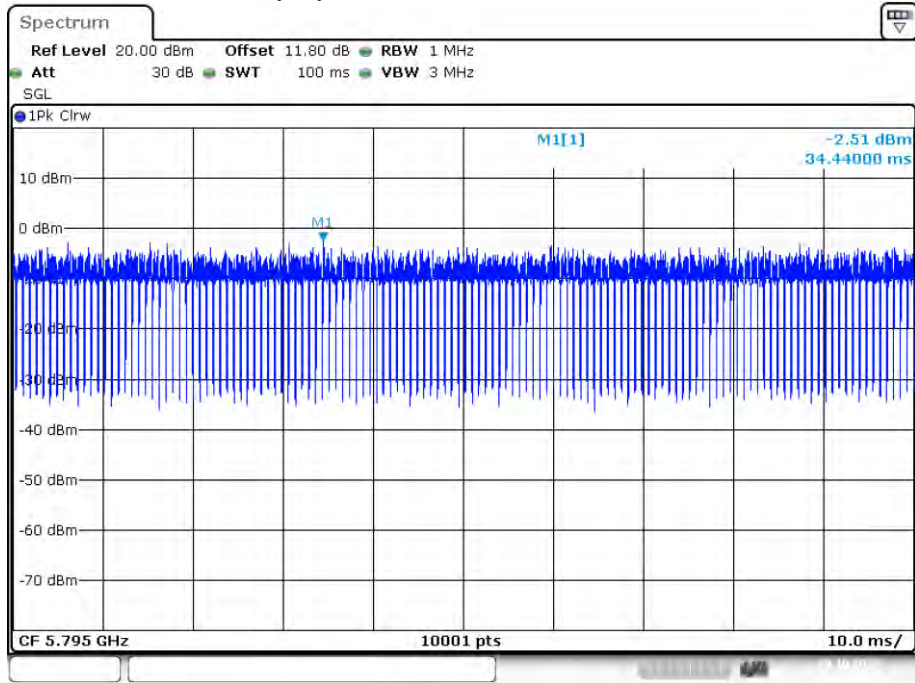
Date: 20.OCT.2023 05:37:54

### Duty Cycle NVNT ac40 5755MHz Ant1



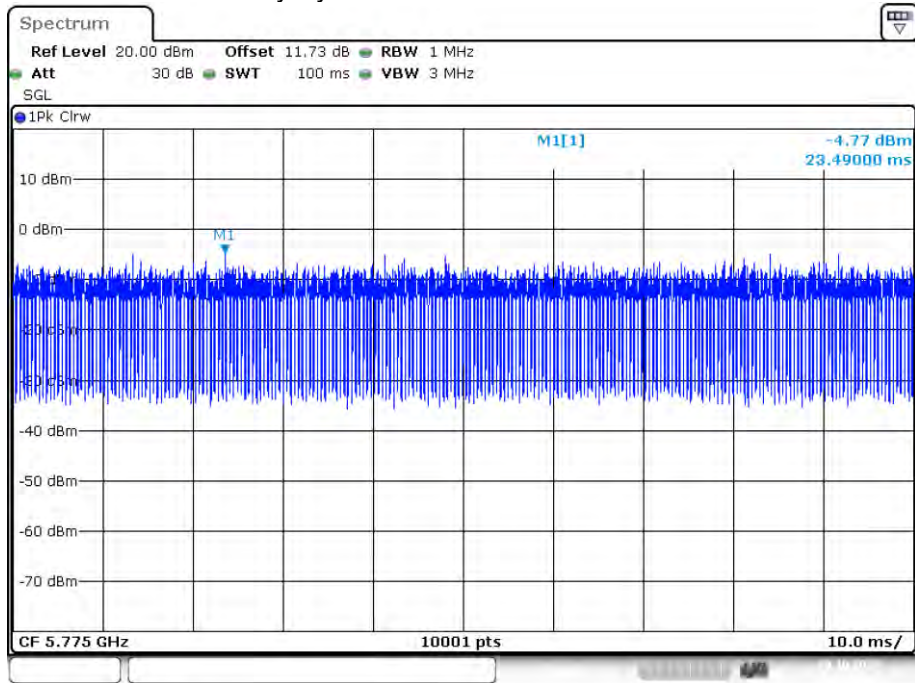
Date: 20.OCT.2023 06:15:49

### Duty Cycle NVNT ac40 5795MHz Ant1



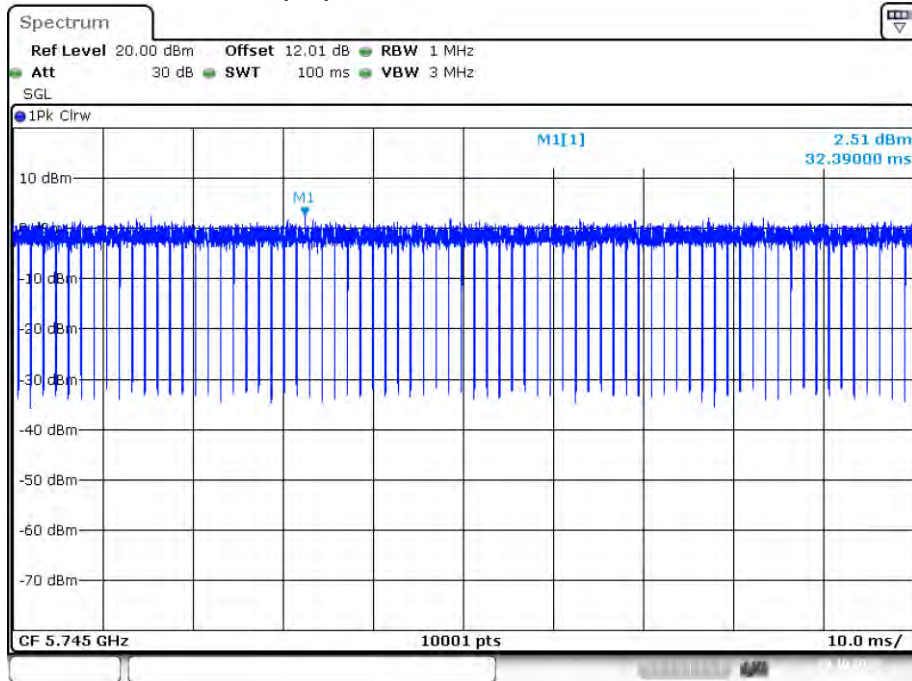
Date: 20.OCT.2023 06:44:07

### Duty Cycle NVNT ac80 5775MHz Ant1



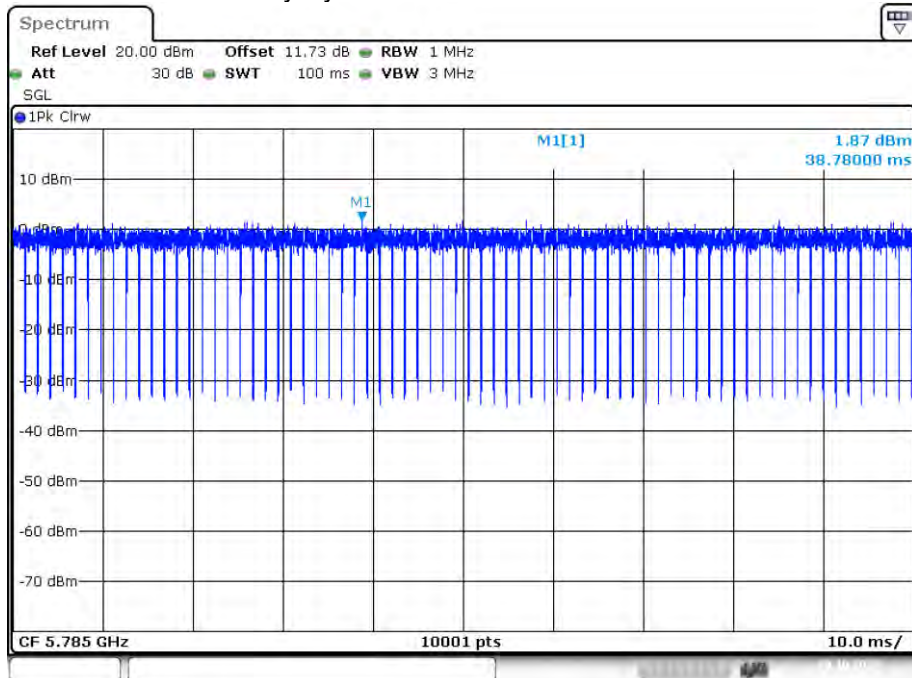
Date: 20.OCT.2023 06:52:38

### Duty Cycle NVNT n20 5745MHz Ant1



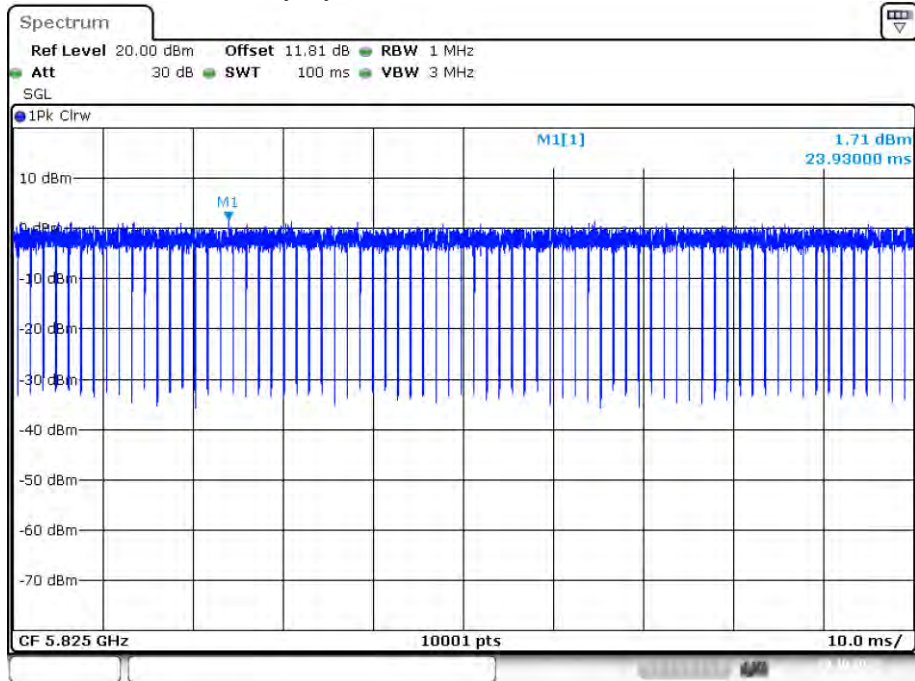
Date: 20.OCT.2023 05:04:09

### Duty Cycle NVNT n20 5785MHz Ant1



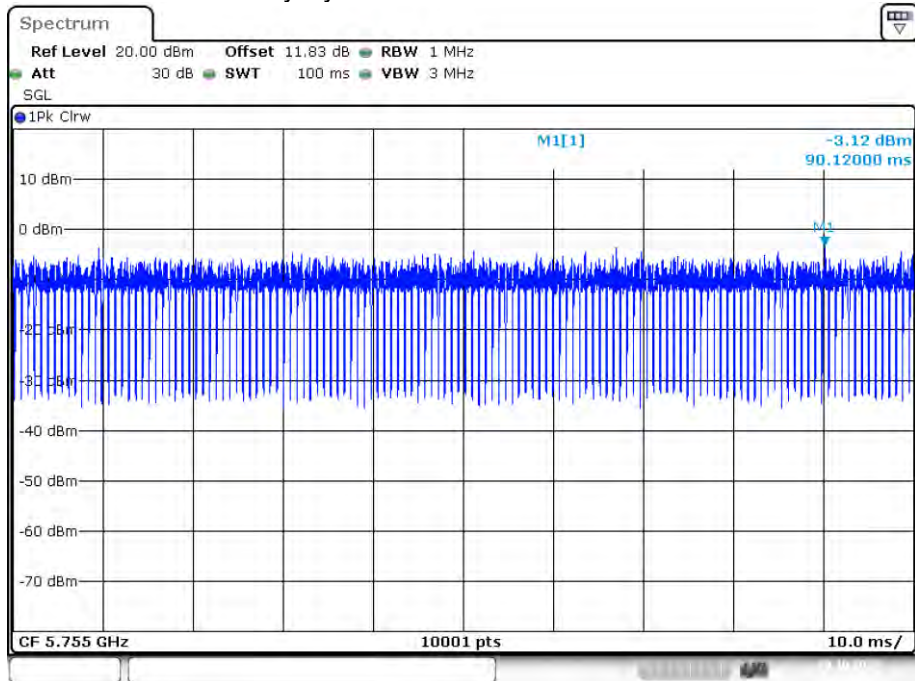
Date: 20.OCT.2023 05:08:27

### Duty Cycle NVNT n20 5825MHz Ant1



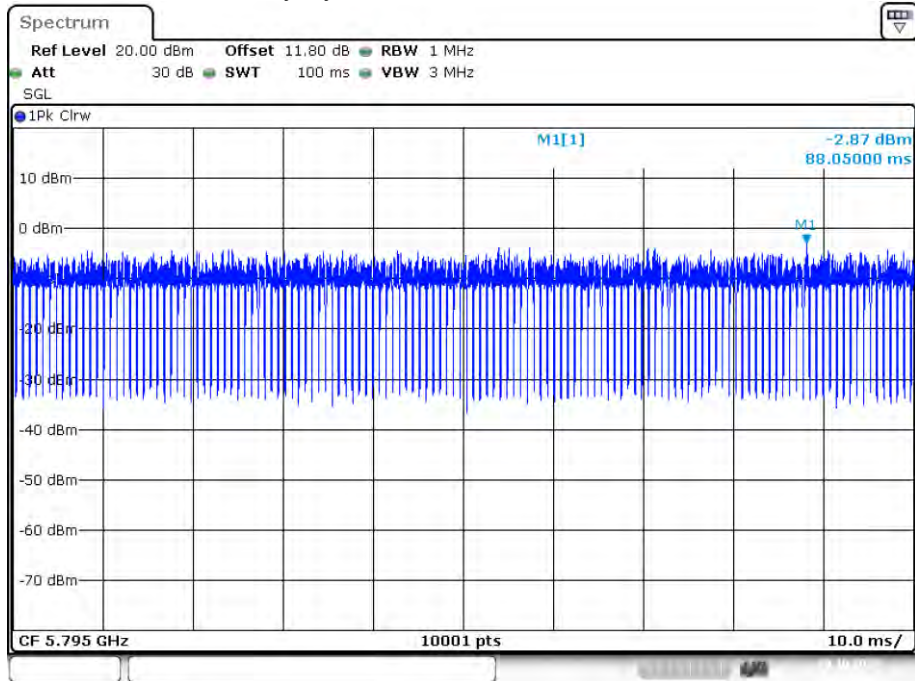
Date: 20.OCT.2023 05:15:51

### Duty Cycle NVNT n40 5755MHz Ant1



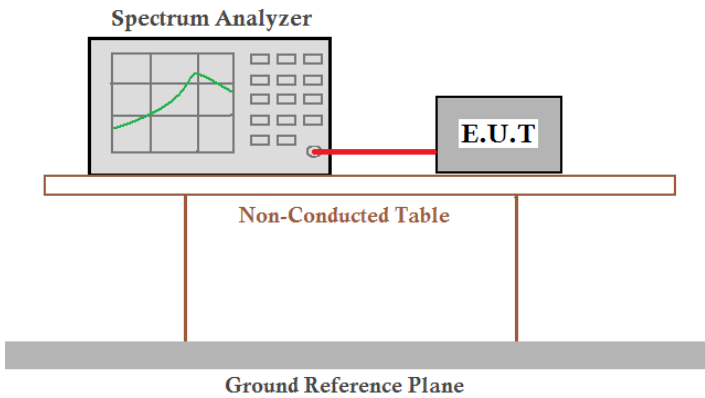
Date: 20.OCT.2023 05:53:56

### Duty Cycle NVNT n40 5795MHz Ant1



Date: 20.OCT.2023 06:10:19

## 4.5 Power Spectral Density

Test Requirement:	FCC Part15 E Section 15.407
Test Method:	KDB 789033 D02 General UNII Test Procedures New Rules v02r01
Limit:	$\leq 11.00\text{dBm/MHz}$ for 5150MHz-5250MHz, 5250-5350MHz and 5470-5725 MHz $\leq 30.00\text{dBm/500KHz}$ for 5725MHz-5850MHz
Test setup:	 <p>The diagram illustrates the test setup. A Spectrum Analyzer is connected to an E.U.T. (Equipment Under Test) via a red cable. Both are placed on a Non-Conducted Table, which is supported by a Ground Reference Plane.</p>
Test procedure:	<ol style="list-style-type: none"> <li>1) Create an average power spectrum for the EUT operating mode being tested by following the instructions in section E)2) for measuring maximum conducted output power using a spectrum analyzer or EMI receiver: select the appropriate test method (SA-1, SA-2, SA-3, or alternatives to each) and apply it up to, but not including, the step labeled, "Compute power...".</li> <li>2) Use the peak search function on the instrument to find the peak of the spectrum.</li> <li>3) Make the following adjustments to the peak value of the spectrum, if applicable:             <ol style="list-style-type: none"> <li>a) If Method SA-2 or SA-2 Alternative was used, add <math>10 \log(1/x)</math>, where <math>x</math> is the duty cycle, to the peak of the spectrum.</li> <li>b) If Method SA-3 Alternative was used and the linear mode was used in step E)2)g)(viii), add 1 dB to the final result to compensate for the difference between linear averaging and power averaging.</li> </ol> </li> <li>4) The result is the PSD.</li> </ol>
Test Instruments:	Refer to section 5.10 for details
Test mode:	Refer to section 5.3 for details
Test results:	Pass

**Measurement Data****Band 1 (5150 - 5250 MHz)**

Condition	Mode	Frequency (MHz)	Antenna	Max PSD (dBm)	Limit (dBm)	Verdict
NVNT	a	5180	Ant1	3.379	11	Pass
NVNT	a	5200	Ant1	4.259	11	Pass
NVNT	a	5240	Ant1	5.088	11	Pass
NVNT	ac20	5180	Ant1	2.397	11	Pass
NVNT	ac20	5200	Ant1	2.609	11	Pass
NVNT	ac20	5240	Ant1	3.873	11	Pass
NVNT	ac40	5190	Ant1	-0.156	11	Pass
NVNT	ac40	5230	Ant1	0.261	11	Pass
NVNT	ac80	5210	Ant1	-3.52	11	Pass
NVNT	n20	5180	Ant1	3.709	11	Pass
NVNT	n20	5200	Ant1	3.695	11	Pass
NVNT	n20	5240	Ant1	4.588	11	Pass
NVNT	n40	5190	Ant1	0.511	11	Pass
NVNT	n40	5230	Ant1	0.599	11	Pass

Condition	Mode	Frequency (MHz)	Antenna	Max PSD (dBm)	Limit (dBm)	Verdict
NVNT	a	5180	Ant2	3.097	11	Pass
NVNT	a	5200	Ant2	3.768	11	Pass
NVNT	a	5240	Ant2	3.687	11	Pass
NVNT	ac20	5180	Ant2	3.104	11	Pass
NVNT	ac20	5200	Ant2	3.051	11	Pass
NVNT	ac20	5240	Ant2	2.938	11	Pass
NVNT	ac40	5190	Ant2	0.263	11	Pass
NVNT	ac40	5230	Ant2	0.372	11	Pass
NVNT	ac80	5210	Ant2	-3.823	11	Pass
NVNT	n20	5180	Ant2	3.737	11	Pass
NVNT	n20	5200	Ant2	4.327	11	Pass
NVNT	n20	5240	Ant2	4.087	11	Pass
NVNT	n40	5190	Ant2	0.441	11	Pass
NVNT	n40	5230	Ant2	0.501	11	Pass

Condition	Mode	Frequency (MHz)	Antenna	Max PSD (dBm)	Limit (dBm)	Verdict
NVNT	ac20	5180	MIMO	5.78	11	Pass
NVNT	ac20	5200	MIMO	5.85	11	Pass
NVNT	ac20	5240	MIMO	6.44	11	Pass
NVNT	ac40	5190	MIMO	3.07	11	Pass
NVNT	ac40	5230	MIMO	3.33	11	Pass
NVNT	ac80	5210	MIMO	-0.66	11	Pass
NVNT	n20	5180	MIMO	6.73	11	Pass
NVNT	n20	5200	MIMO	7.03	11	Pass
NVNT	n20	5240	MIMO	7.36	11	Pass
NVNT	n40	5190	MIMO	3.49	11	Pass
NVNT	n40	5230	MIMO	3.56	11	Pass

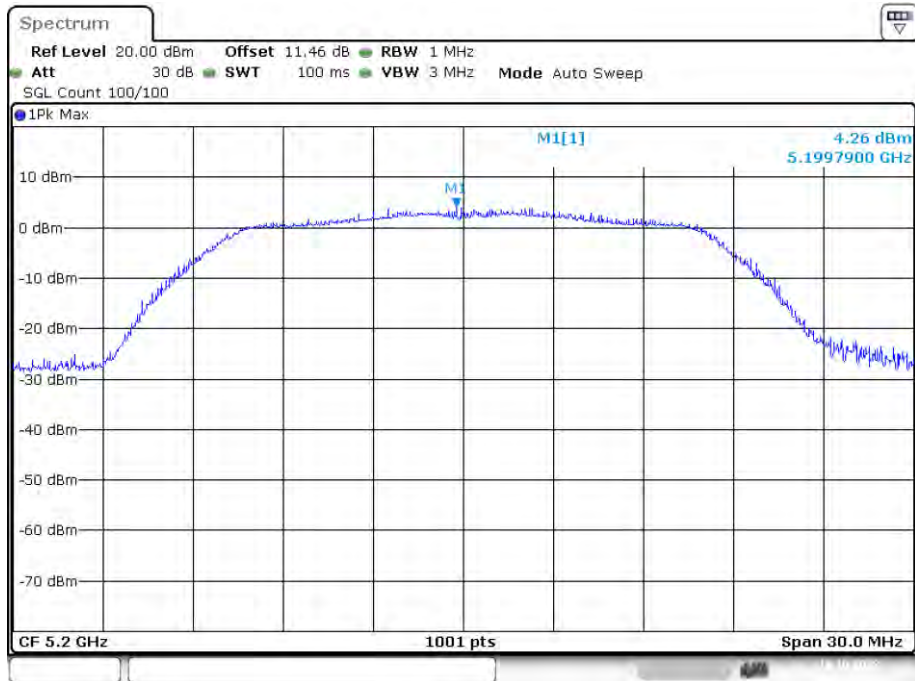


### PSD NVNT a 5180MHz Ant1



Date: 19.OCT.2023 13:17:24

### PSD NVNT a 5200MHz Ant1



Date: 19.OCT.2023 13:21:20

### PSD NVNT a 5240MHz Ant1



Date: 19.OCT.2023 13:27:29

### PSD NVNT ac20 5180MHz Ant1



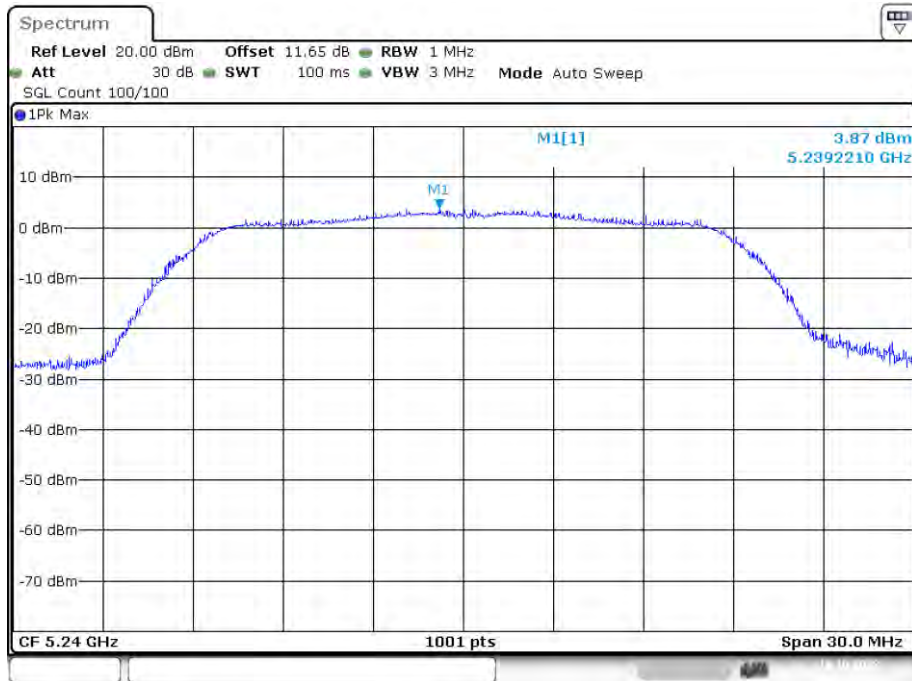
Date: 19.OCT.2023 15:14:59

### PSD NVNT ac20 5200MHz Ant1



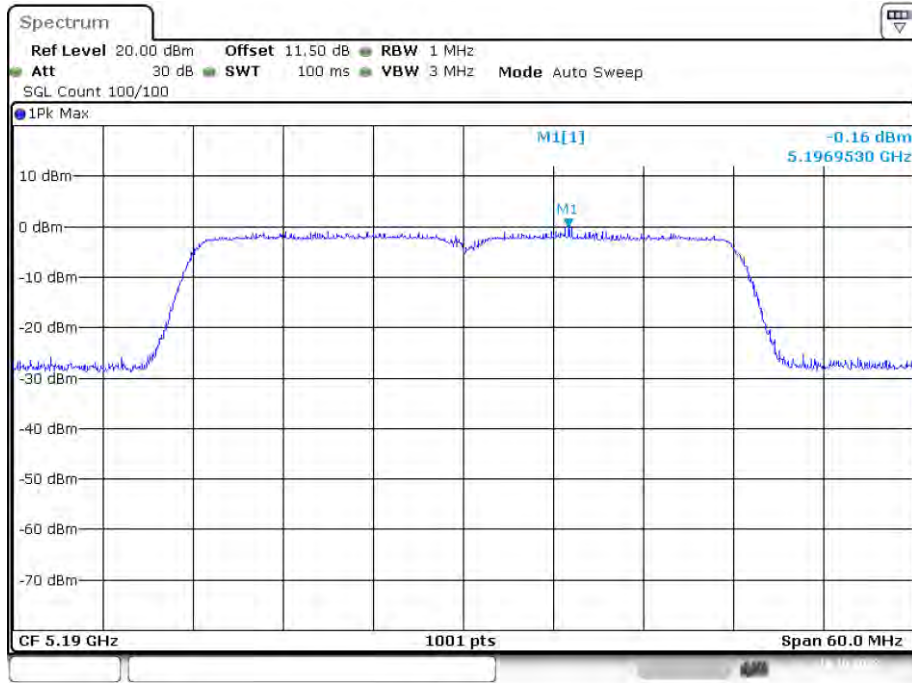
Date: 19.OCT.2023 15:19:59

### PSD NVNT ac20 5240MHz Ant1



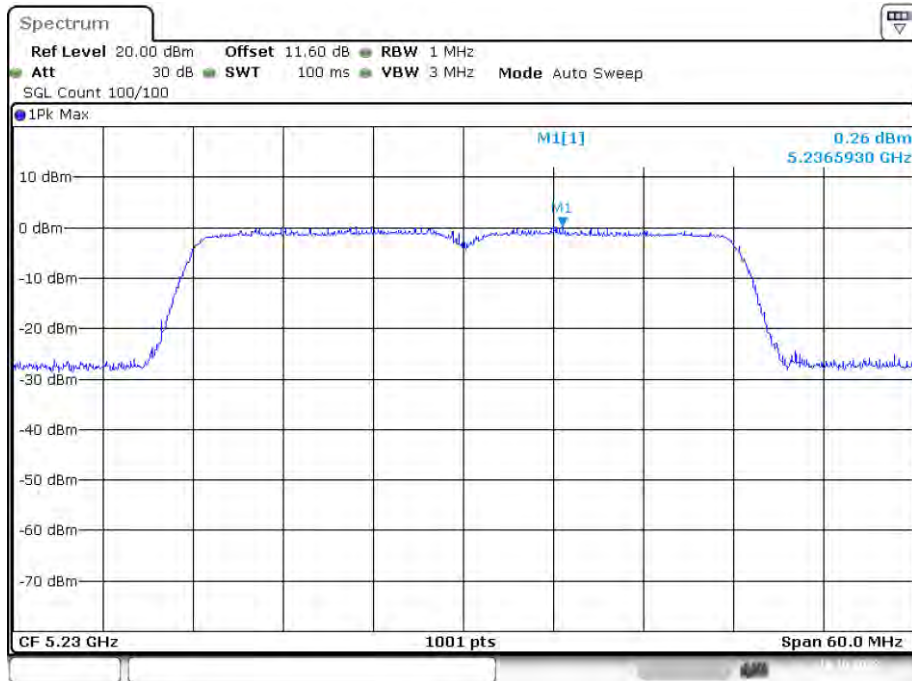
Date: 19.OCT.2023 15:24:47

### PSD NVNT ac40 5190MHz Ant1



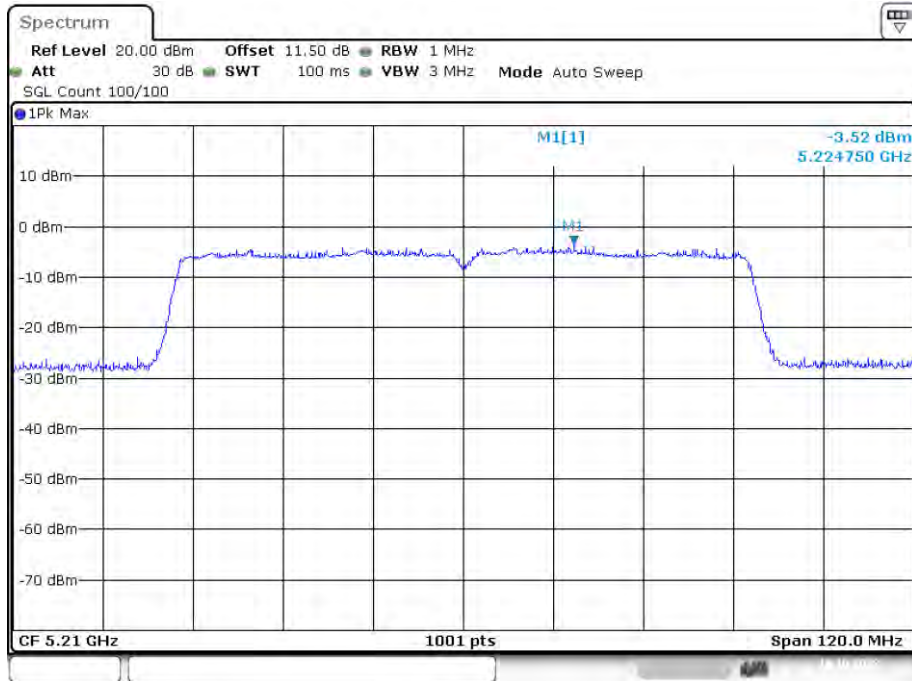
Date: 19.OCT.2023 15:32:22

### PSD NVNT ac40 5230MHz Ant1



Date: 19.OCT.2023 15:37:17

### PSD NVNT ac80 5210MHz Ant1



Date: 19.OCT.2023 15:46:58

### PSD NVNT n20 5180MHz Ant1



Date: 19.OCT.2023 14:37:42

### PSD NVNT n20 5200MHz Ant1



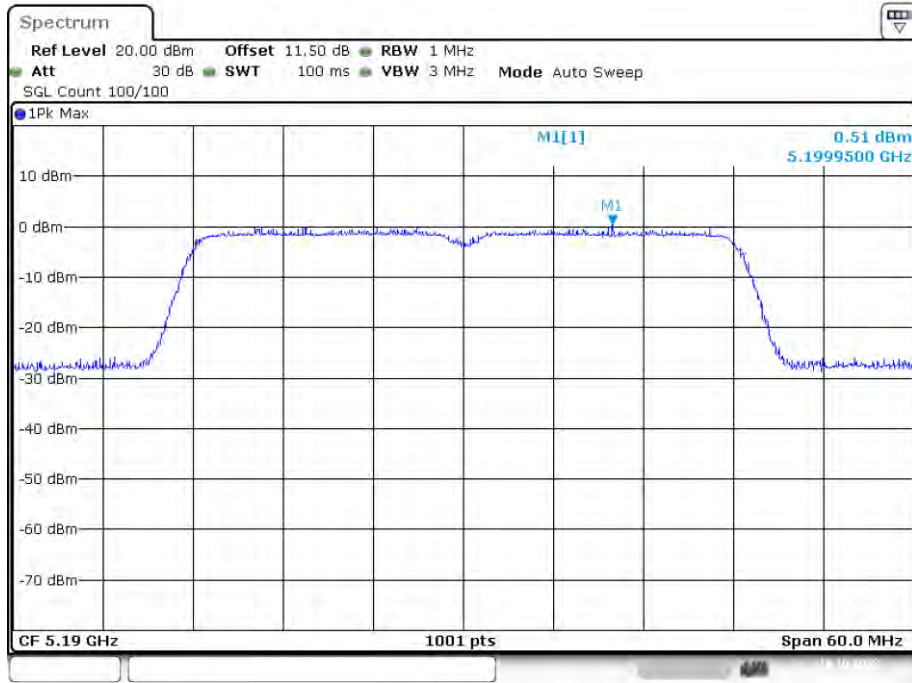
Date: 19.OCT.2023 14:41:51

### PSD NVNT n20 5240MHz Ant1



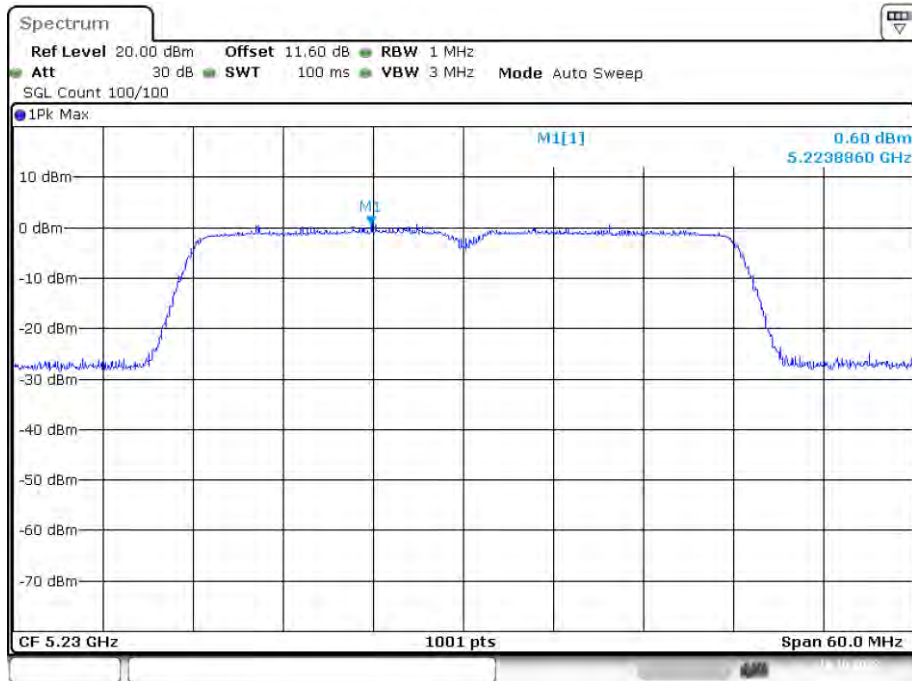
Date: 19.OCT.2023 14:48:54

### PSD NVNT n40 5190MHz Ant1



Date: 19.OCT.2023 15:02:25

### PSD NVNT n40 5230MHz Ant1



Date: 19.OCT.2023 15:07:34

### PSD NVNT a 5180MHz Ant2



Date: 1.NOV.2023 14:21:55

### PSD NVNT a 5200MHz Ant2



Date: 1.NOV.2023 14:23:37

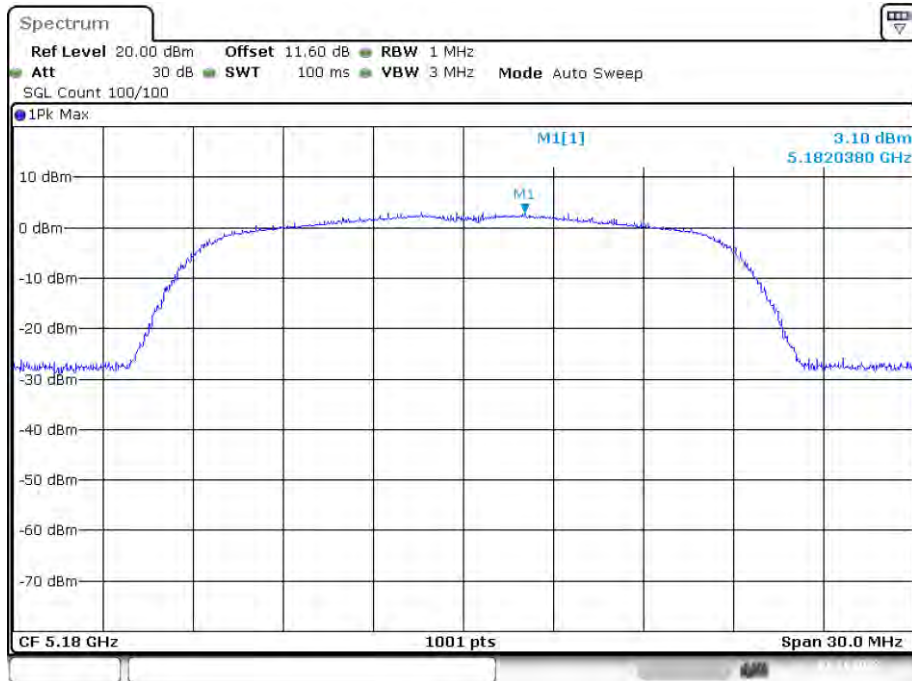


### PSD NVNT a 5240MHz Ant2



Date: 1.NOV.2023 14:25:09

### PSD NVNT ac20 5180MHz Ant2



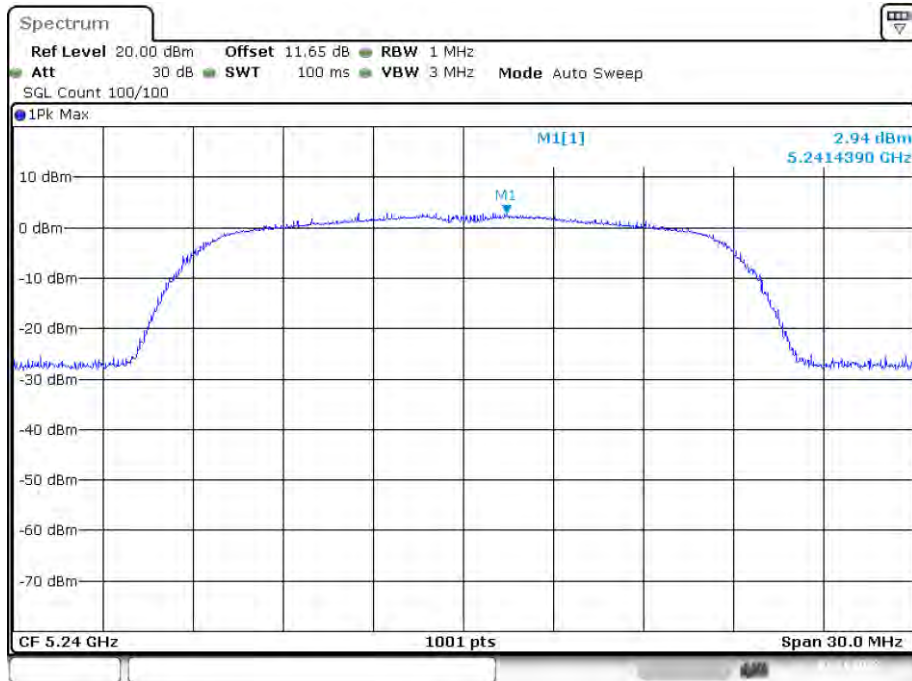
Date: 1.NOV.2023 14:35:13

### PSD NVNT ac20 5200MHz Ant2



Date: 1.NOV.2023 14:37:33

### PSD NVNT ac20 5240MHz Ant2



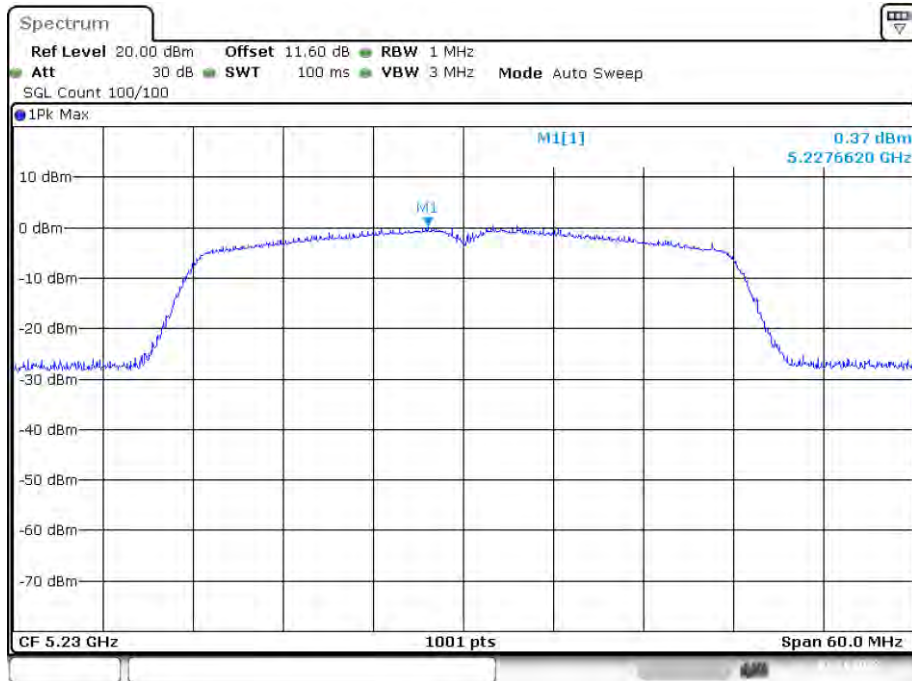
Date: 1.NOV.2023 14:38:03

### PSD NVNT ac40 5190MHz Ant2



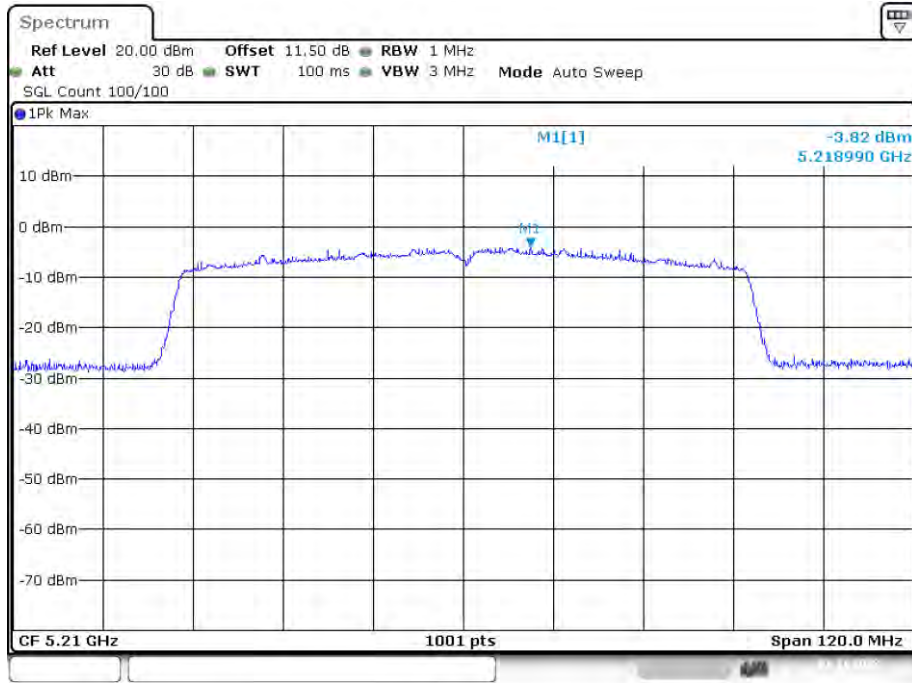
Date: 1.NOV.2023 14:44:20

### PSD NVNT ac40 5230MHz Ant2



Date: 1.NOV.2023 14:45:13

### PSD NVNT ac80 5210MHz Ant2



Date: 1.NOV.2023 14:48:46

### PSD NVNT n20 5180MHz Ant2



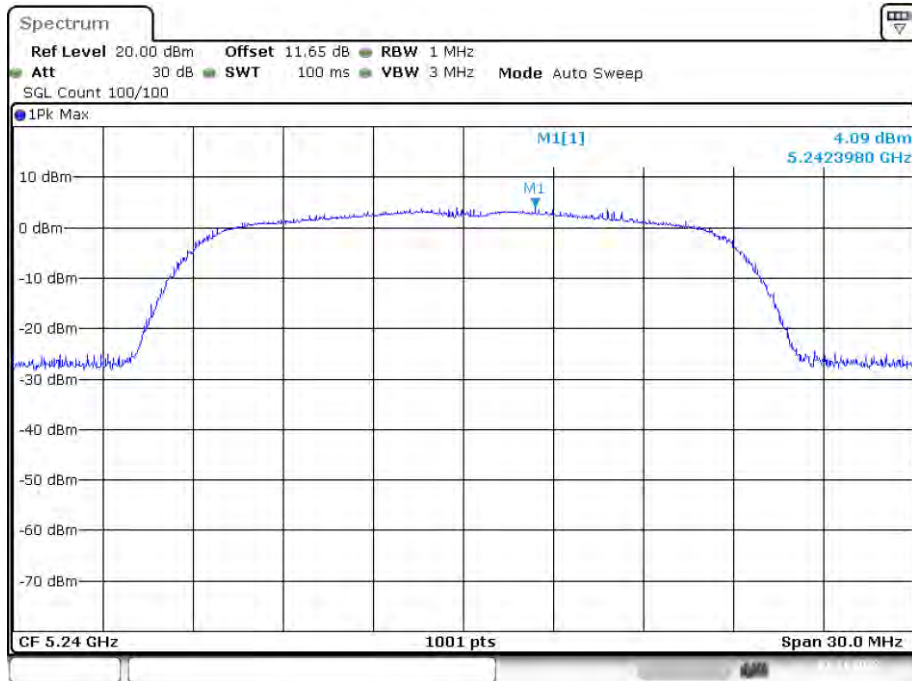
Date: 1.NOV.2023 14:27:02

### PSD NVNT n20 5200MHz Ant2



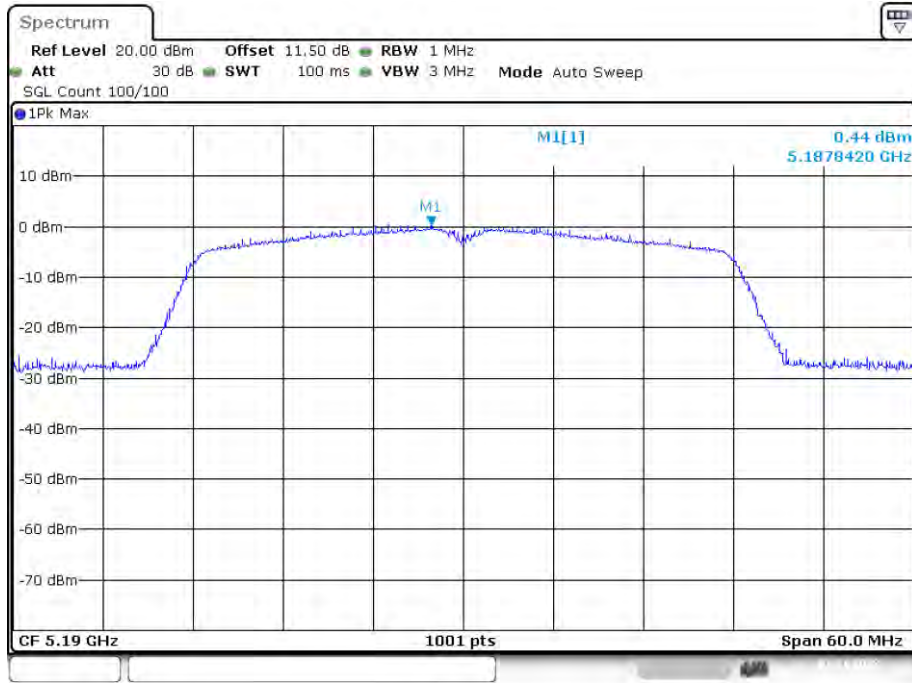
Date: 1.NOV.2023 14:28:44

### PSD NVNT n20 5240MHz Ant2



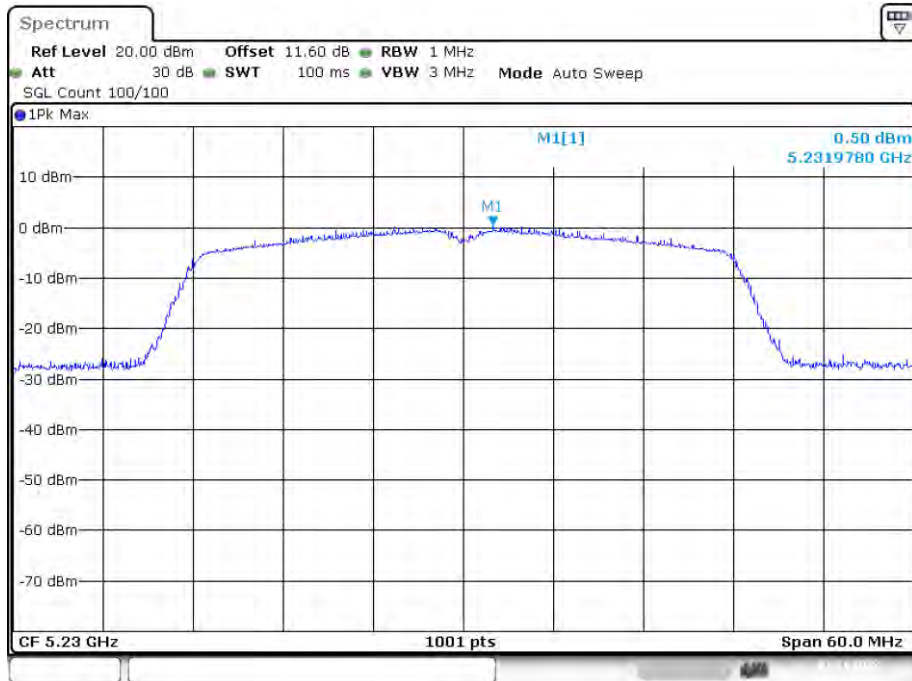
Date: 1.NOV.2023 14:33:12

### PSD NVNT n40 5190MHz Ant2



Date: 1.NOV.2023 14:39:12

### PSD NVNT n40 5230MHz Ant2



Date: 1.NOV.2023 14:42:28

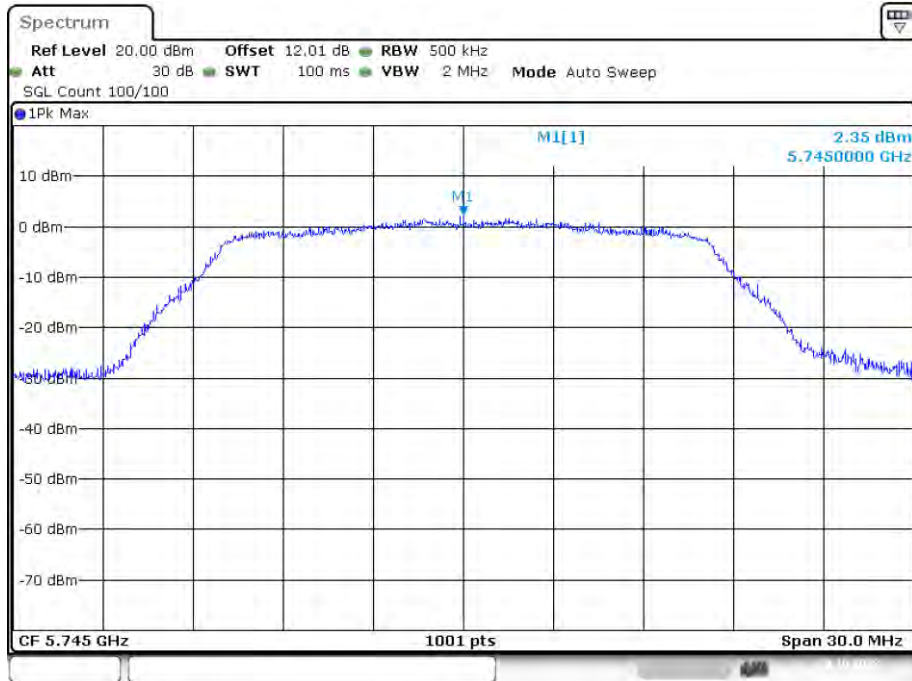
**Band 4 (5725 - 5850 MHz)**

Condition	Mode	Frequency (MHz)	Antenna	Max PSD (dBm)	Limit (dBm)	Verdict
NVNT	a	5745	Ant1	2.351	30	Pass
NVNT	a	5785	Ant1	1.496	30	Pass
NVNT	a	5825	Ant1	0.018	30	Pass
NVNT	ac20	5745	Ant1	-0.698	30	Pass
NVNT	ac20	5785	Ant1	0.339	30	Pass
NVNT	ac20	5825	Ant1	-0.579	30	Pass
NVNT	ac40	5755	Ant1	-3.712	30	Pass
NVNT	ac40	5795	Ant1	-2.653	30	Pass
NVNT	ac80	5775	Ant1	-5.186	30	Pass
NVNT	n20	5745	Ant1	0.253	30	Pass
NVNT	n20	5785	Ant1	0.156	30	Pass
NVNT	n20	5825	Ant1	-0.334	30	Pass
NVNT	n40	5755	Ant1	-3.449	30	Pass
NVNT	n40	5795	Ant1	-3.98	30	Pass

Condition	Mode	Frequency (MHz)	Antenna	Max PSD (dBm)	Limit (dBm)	Verdict
NVNT	a	5745	Ant2	1.086	30	Pass
NVNT	a	5785	Ant2	1.613	30	Pass
NVNT	a	5825	Ant2	0.304	30	Pass
NVNT	ac20	5745	Ant2	0.586	30	Pass
NVNT	ac20	5785	Ant2	-0.34	30	Pass
NVNT	ac20	5825	Ant2	-0.942	30	Pass
NVNT	ac40	5755	Ant2	-3.1	30	Pass
NVNT	ac40	5795	Ant2	-3.365	30	Pass
NVNT	ac80	5775	Ant2	-5.871	30	Pass
NVNT	n20	5745	Ant2	0.209	30	Pass
NVNT	n20	5785	Ant2	0.018	30	Pass
NVNT	n40	5755	Ant2	-3.532	30	Pass
NVNT	n40	5795	Ant2	-3.322	30	Pass

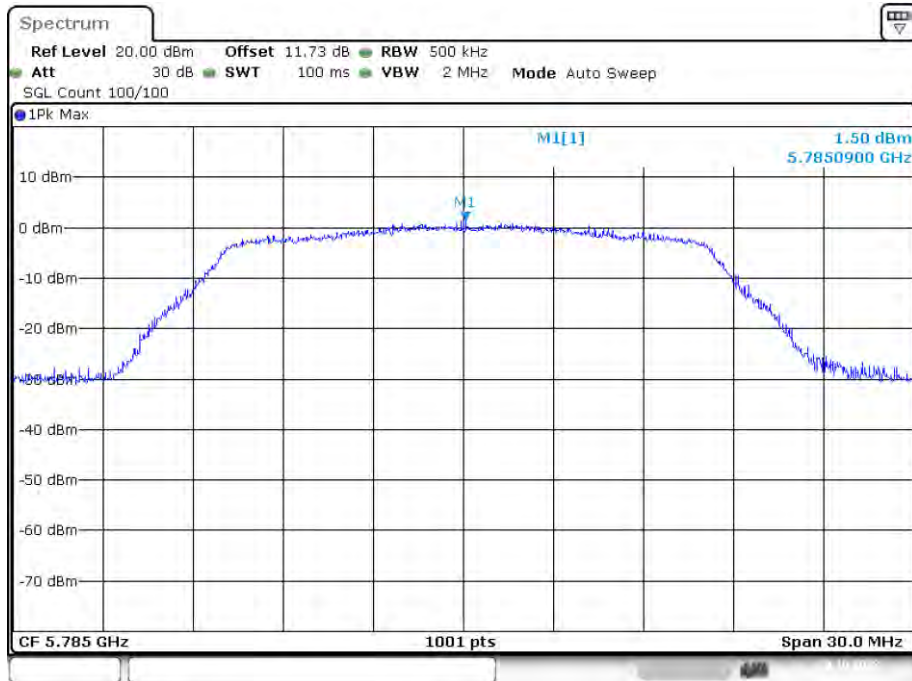
Condition	Mode	Frequency (MHz)	Antenna	Max PSD (dBm)	Limit (dBm)	Verdict
NVNT	ac20	5745	MIMO	3.00	11	Pass
NVNT	ac20	5785	MIMO	3.02	11	Pass
NVNT	ac20	5825	MIMO	2.25	11	Pass
NVNT	ac40	5755	MIMO	-0.38	11	Pass
NVNT	ac40	5795	MIMO	0.02	11	Pass
NVNT	ac80	5775	MIMO	-2.50	11	Pass
NVNT	n20	5745	MIMO	3.24	11	Pass
NVNT	n20	5785	MIMO	3.10	11	Pass
NVNT	n20	5755	MIMO	1.37	11	Pass
NVNT	n40	5795	MIMO	-0.37	11	Pass
NVNT	n40	5745	MIMO	1.82	11	Pass

### PSD NVNT a 5745MHz Ant1



Date: 20.OCT.2023 04:46:04

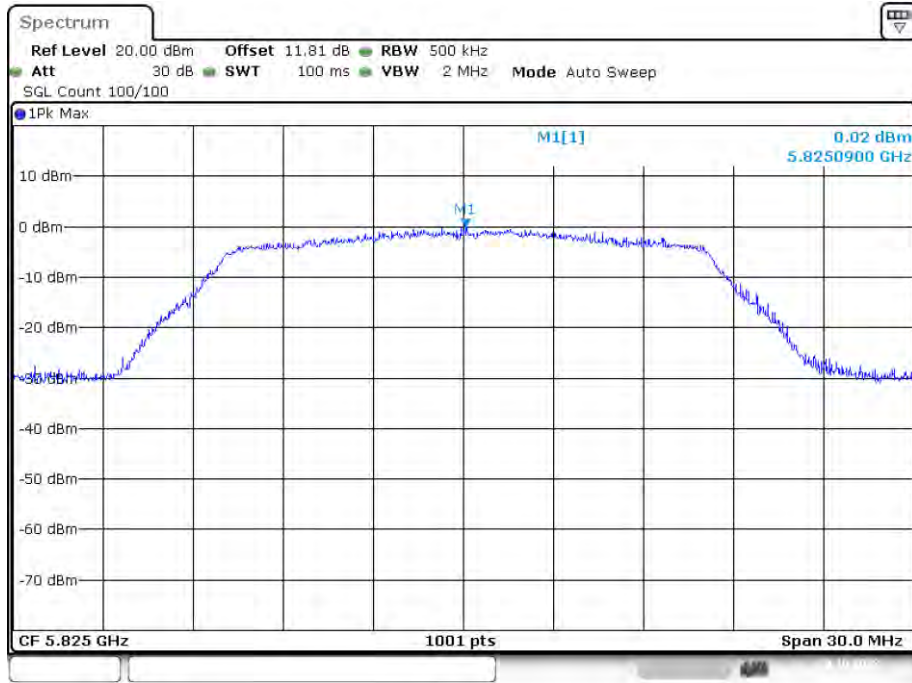
### PSD NVNT a 5785MHz Ant1



Date: 20.OCT.2023 04:49:25

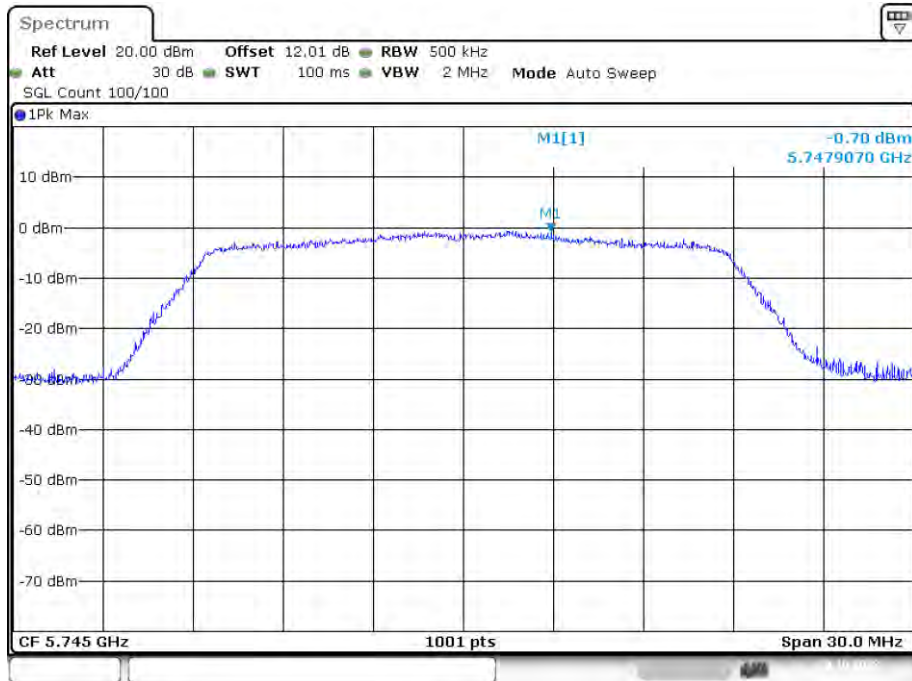


### PSD NVNT a 5825MHz Ant1



Date: 20.OCT.2023 04:53:39

### PSD NVNT ac20 5745MHz Ant1



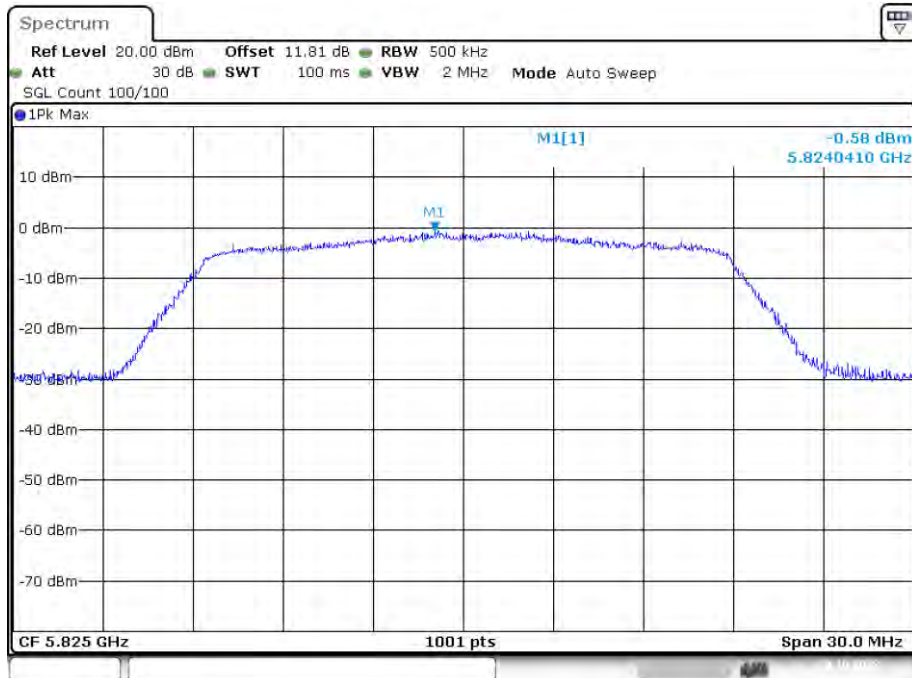
Date: 20.OCT.2023 05:27:42

### PSD NVNT ac20 5785MHz Ant1



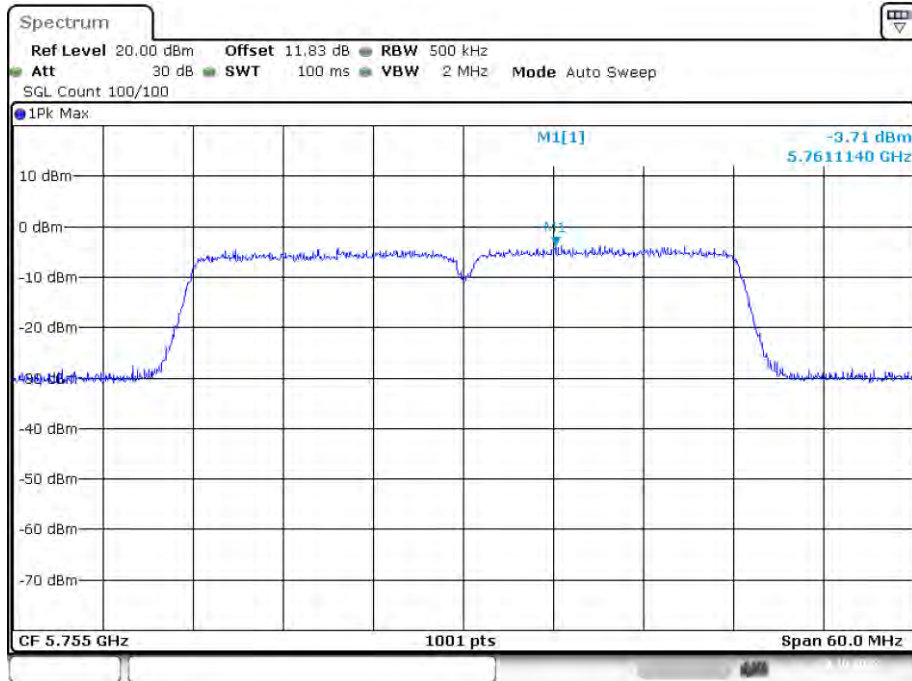
Date: 20.OCT.2023 05:35:37

### PSD NVNT ac20 5825MHz Ant1



Date: 20.OCT.2023 05:35:27

### PSD NVNT ac40 5755MHz Ant1



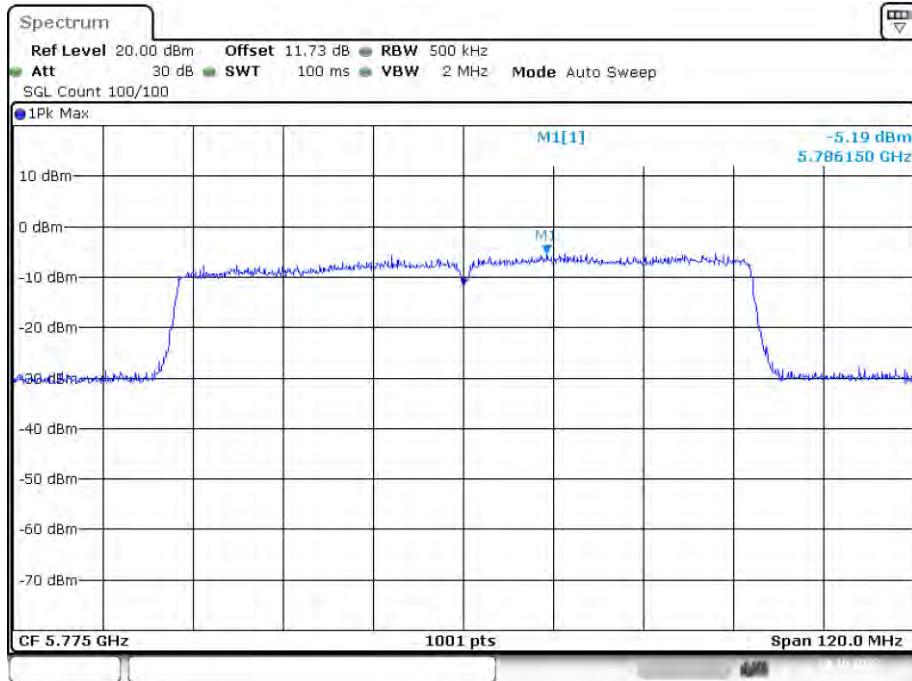
Date: 20.OCT.2023 06:17:20

### PSD NVNT ac40 5795MHz Ant1



Date: 20.OCT.2023 06:45:48

### PSD NVNT ac80 5775MHz Ant1



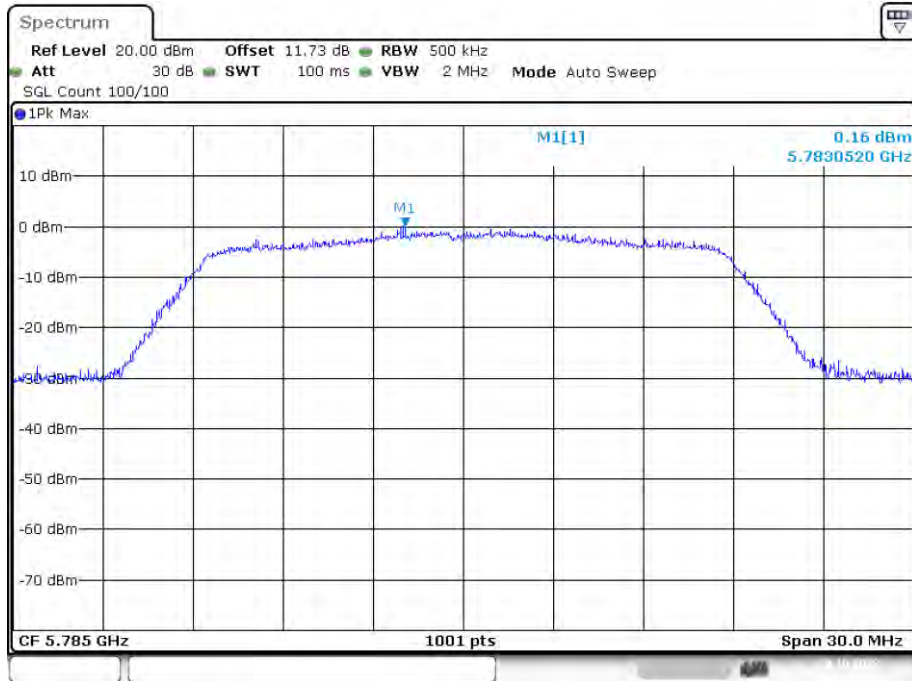
Date: 20.OCT.2023 06:53:37

### PSD NVNT n20 5745MHz Ant1



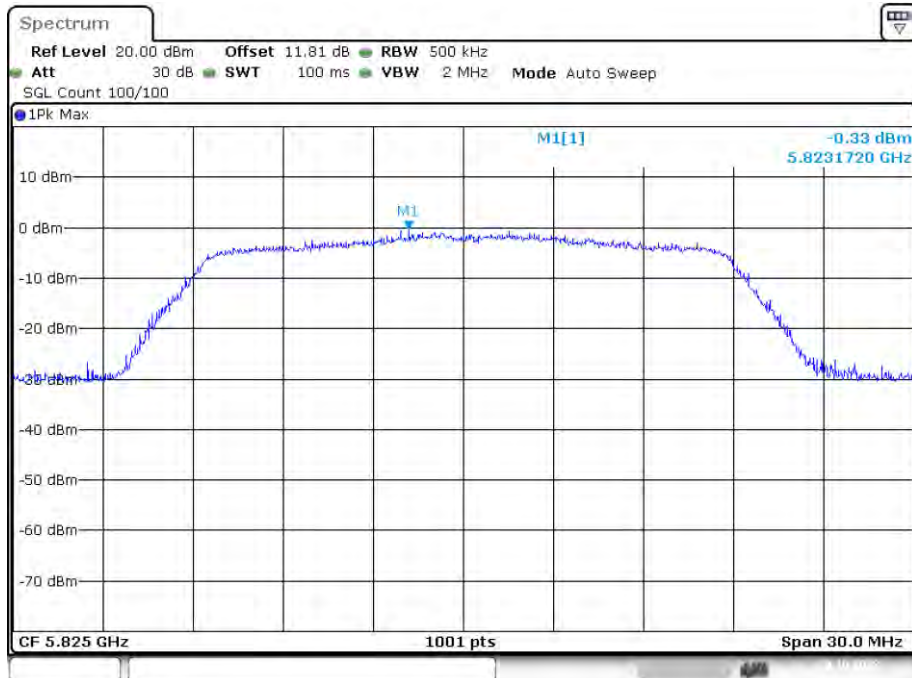
Date: 20.OCT.2023 05:05:16

### PSD NVNT n20 5785MHz Ant1



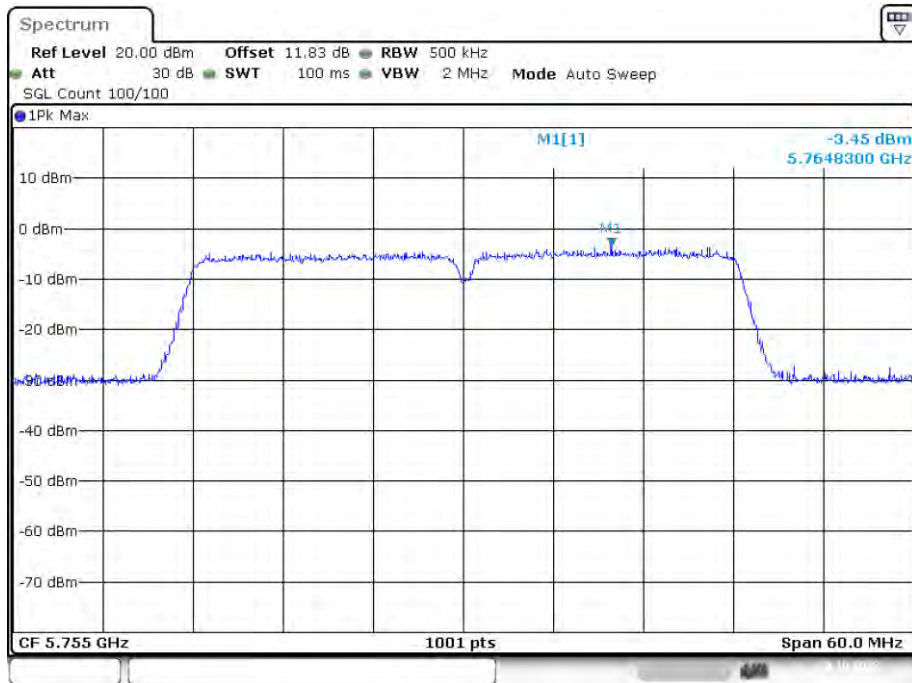
Date: 20.OCT.2023 05:09:39

### PSD NVNT n20 5825MHz Ant1



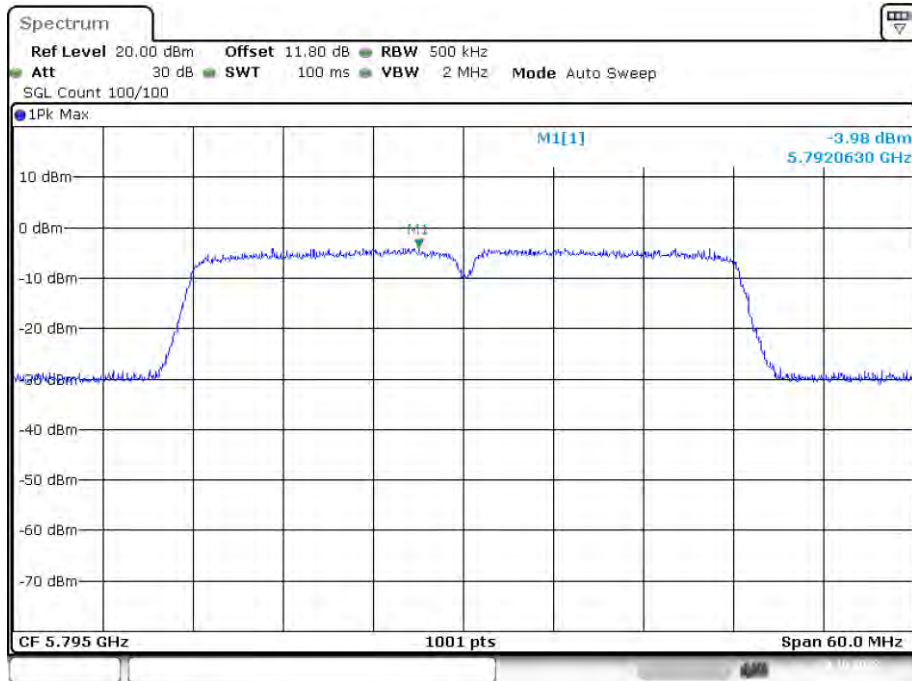
Date: 20.OCT.2023 05:17:06

### PSD NVNT n40 5755MHz Ant1



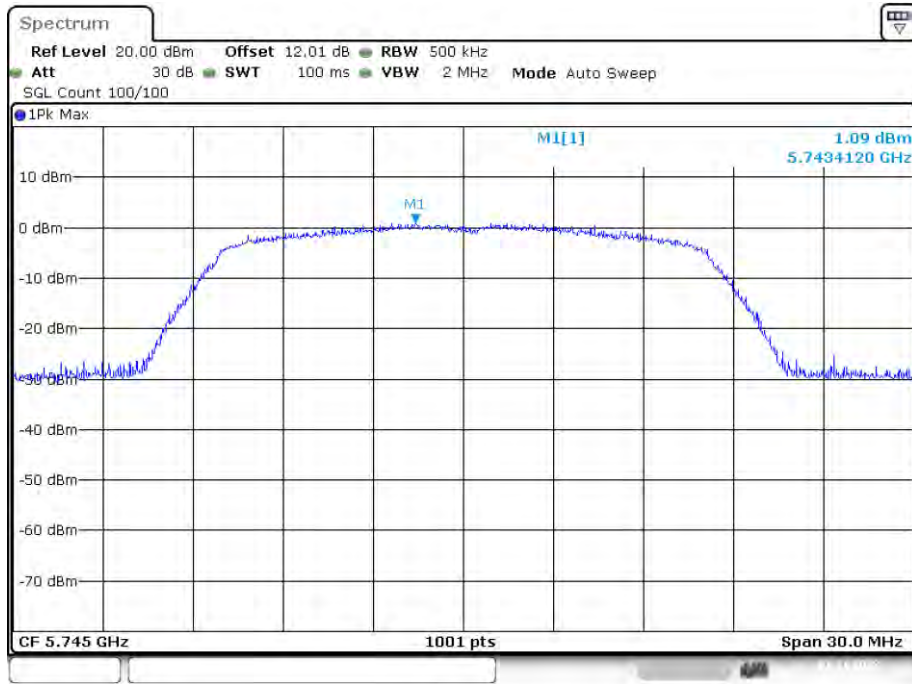
Date: 20.OCT.2023 05:55:50

### PSD NVNT n40 5795MHz Ant1



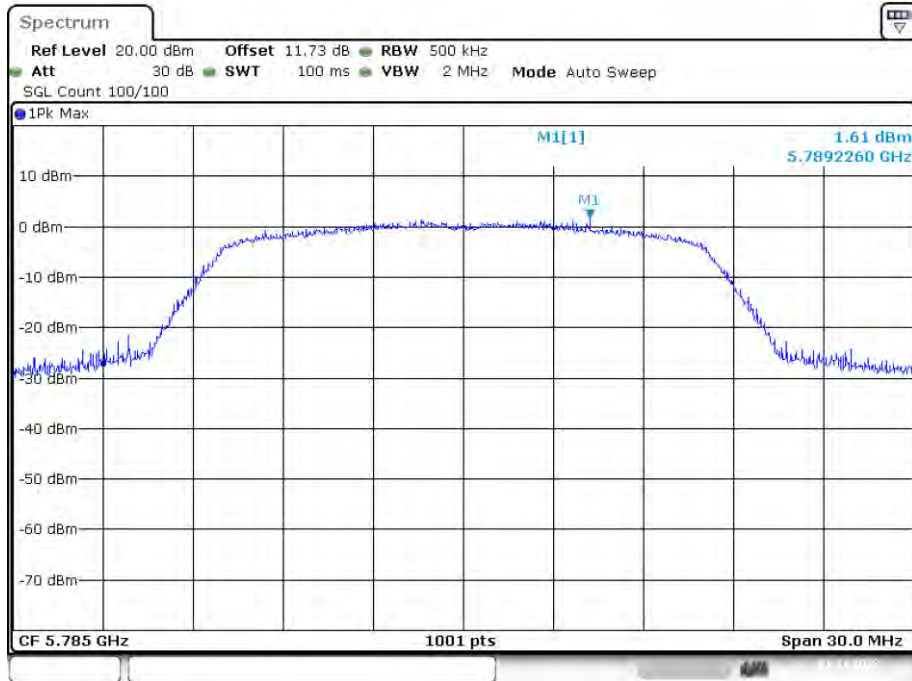
Date: 20.OCT.2023 06:11:49

### PSD NVNT a 5745MHz Ant2



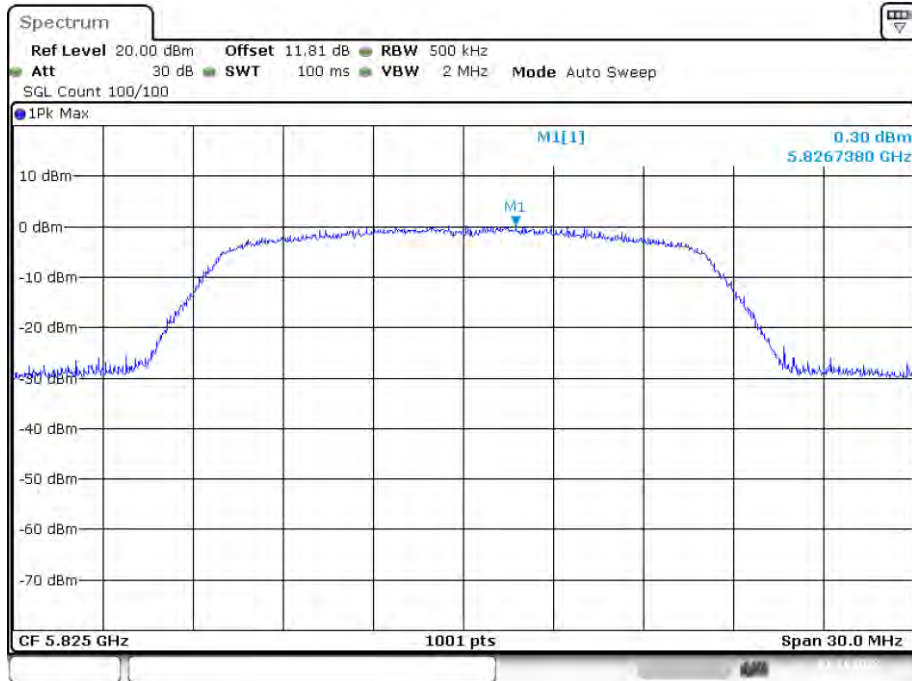
Date: 1.NOV.2023 14:52:50

### PSD NVNT a 5785MHz Ant2



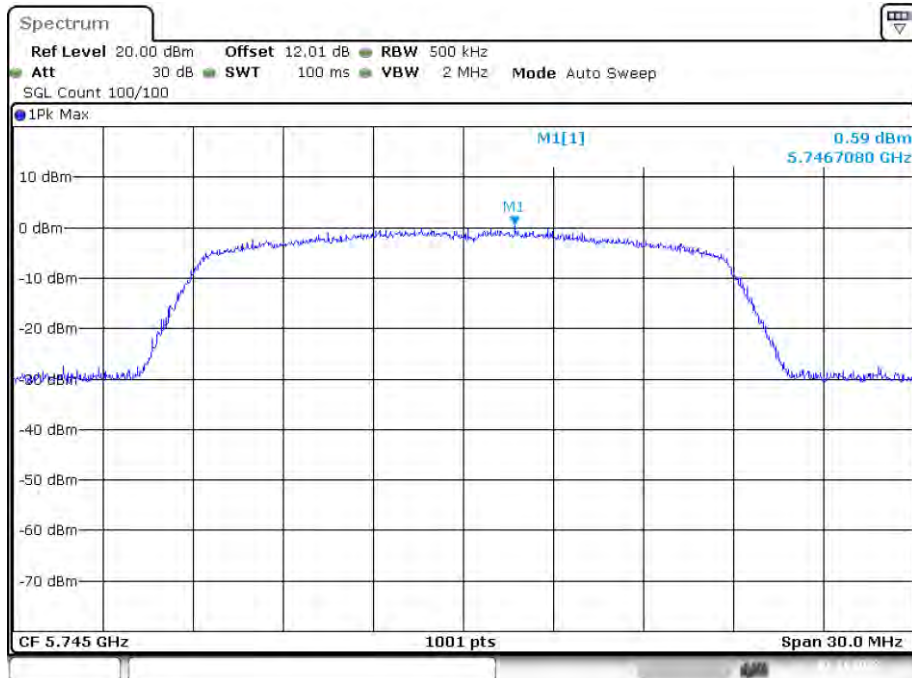
Date: 1.NOV.2023 14:55:31

### PSD NVNT a 5825MHz Ant2



Date: 1.NOV.2023 14:57:22

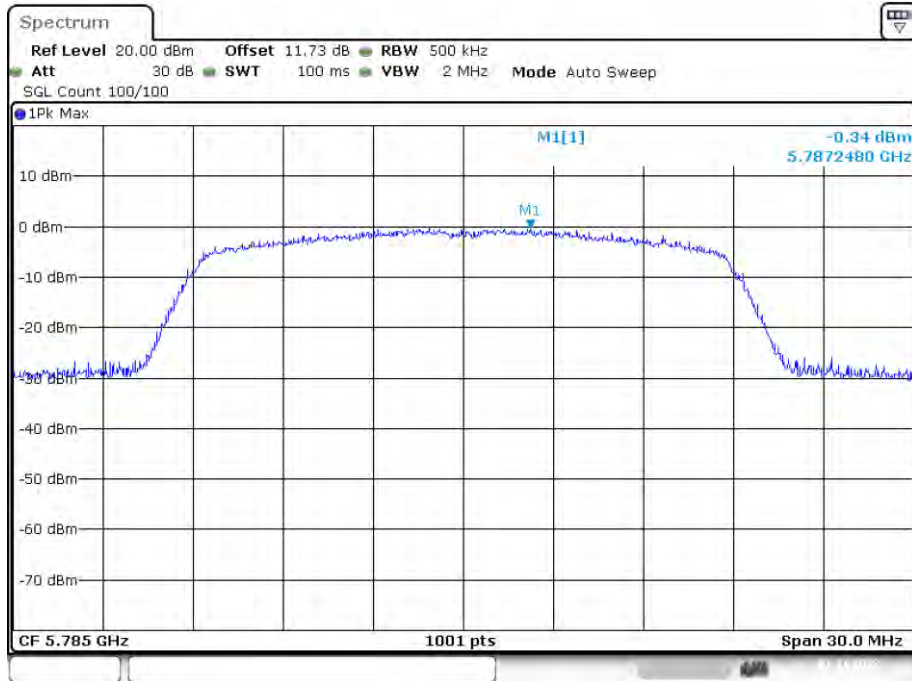
### PSD NVNT ac20 5745MHz Ant2



Date: 1.NOV.2023 15:05:49

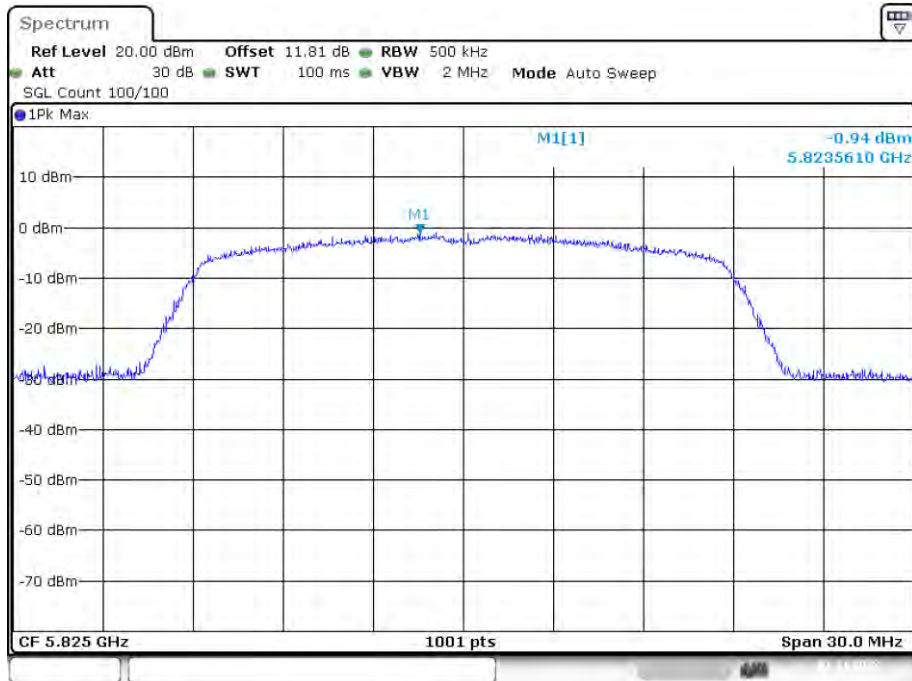


### PSD NVNT ac20 5785MHz Ant2



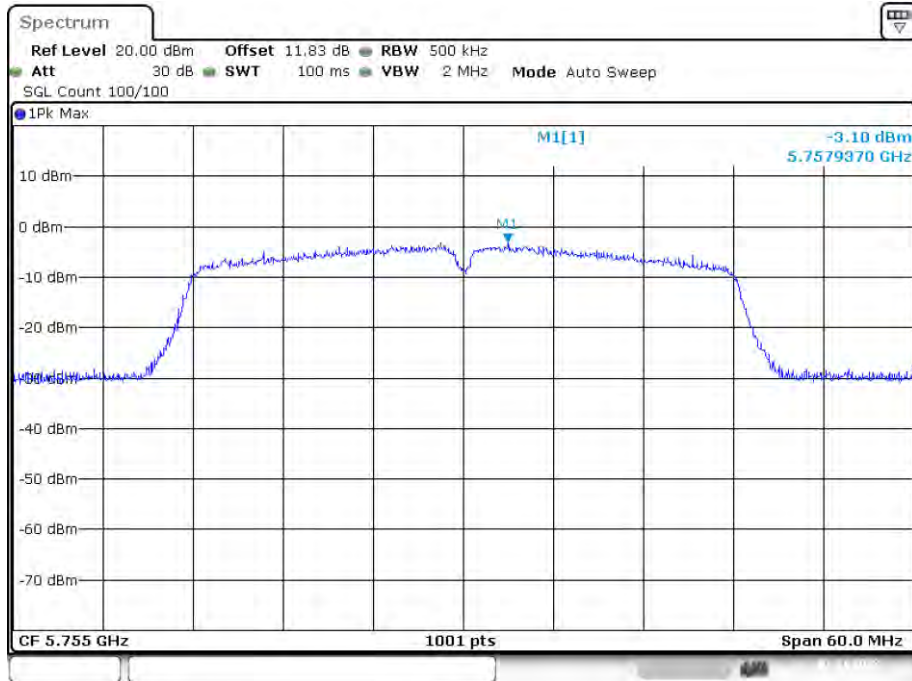
Date: 1.NOV.2023 15:07:59

### PSD NVNT ac20 5825MHz Ant2



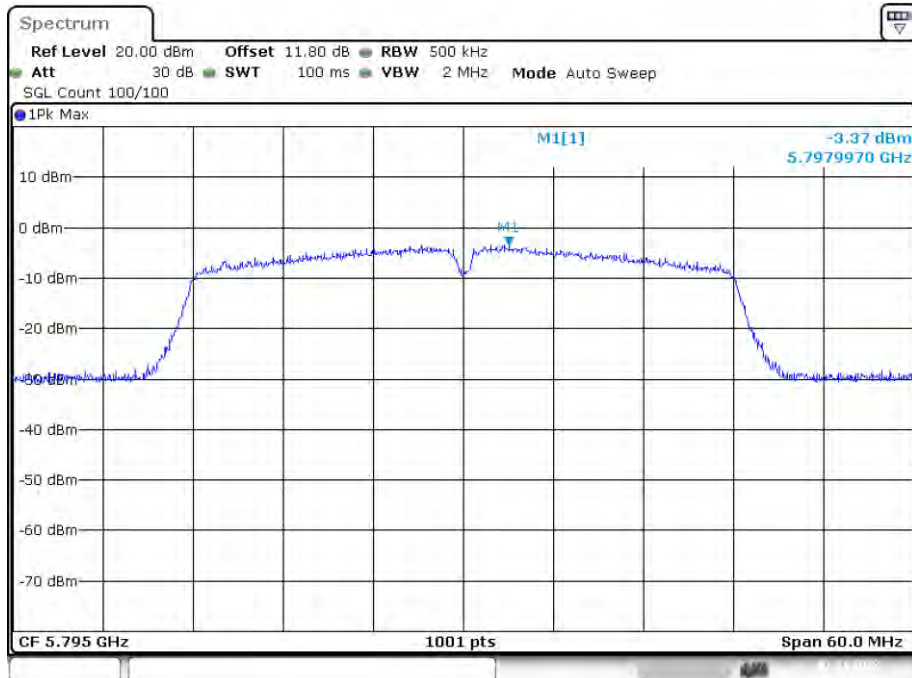
Date: 1.NOV.2023 15:09:49

### PSD NVNT ac40 5755MHz Ant2



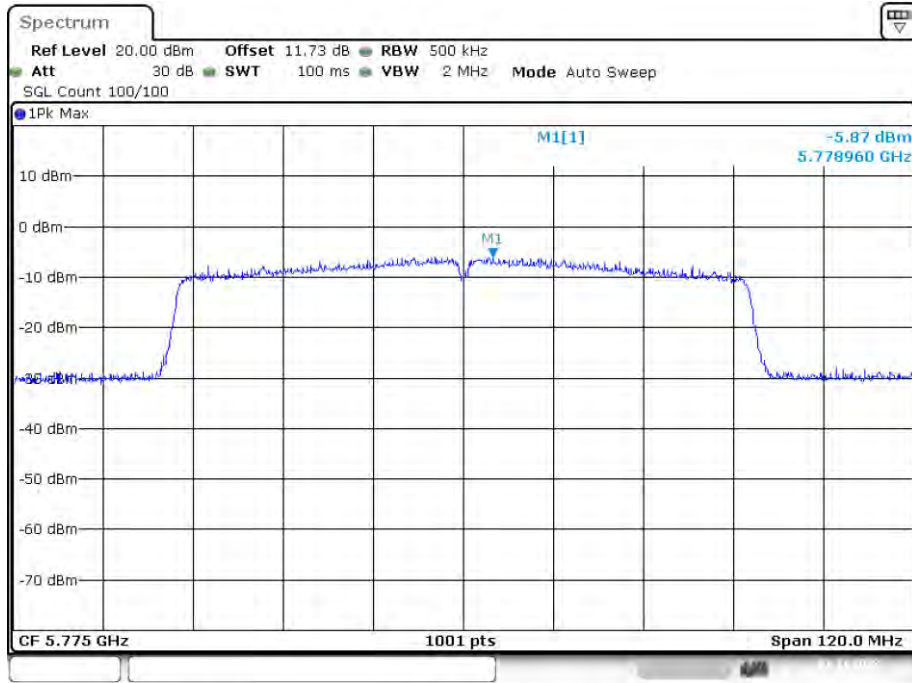
Date: 1.NOV.2023 15:14:26

### PSD NVNT ac40 5795MHz Ant2



Date: 1.NOV.2023 15:15:50

### PSD NVNT ac80 5775MHz Ant2



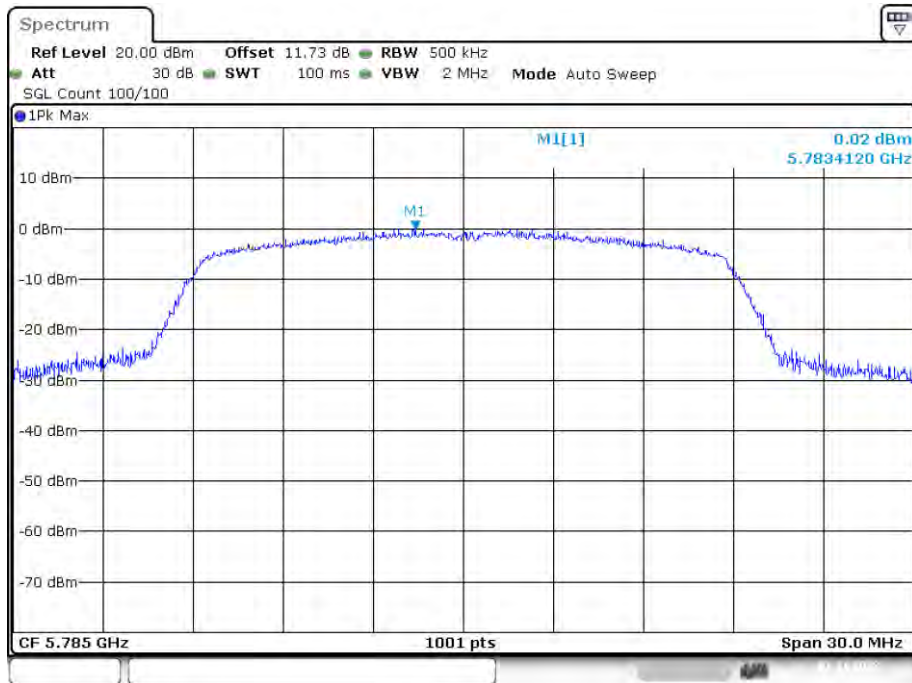
Date: 1.NOV.2023 15:17:26

### PSD NVNT n20 5745MHz Ant2



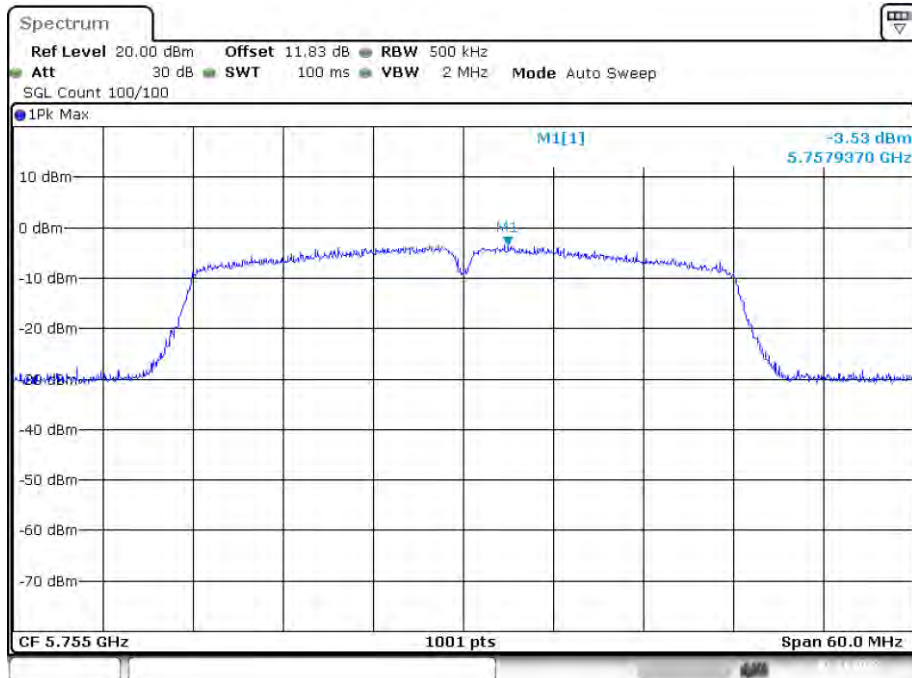
Date: 1.NOV.2023 15:01:10

### PSD NVNT n20 5785MHz Ant2



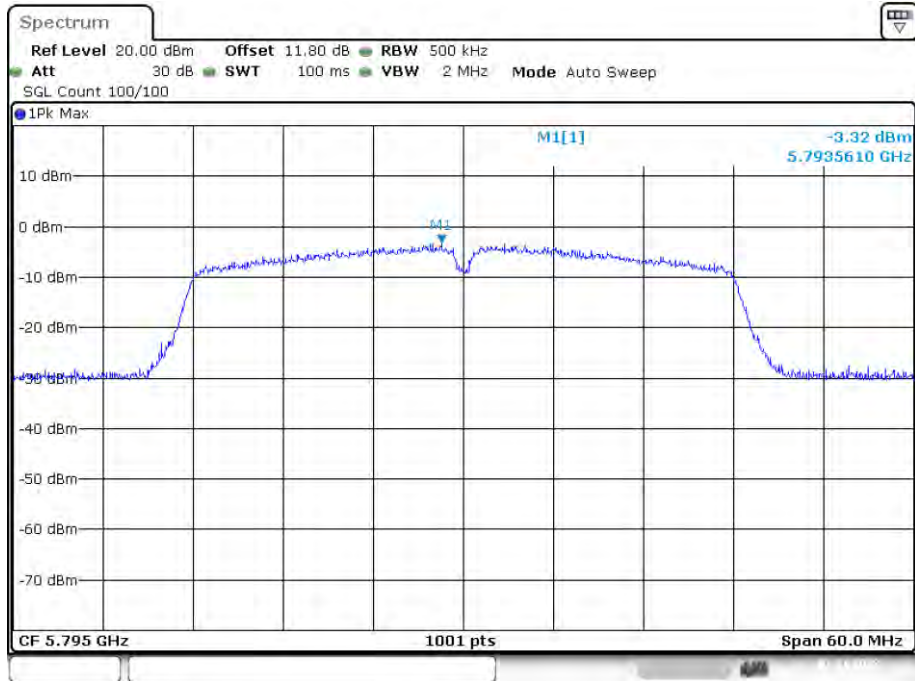
Date: 1.NOV.2023 15:05:07

### PSD NVNT n40 5755MHz Ant2



Date: 1.NOV.2023 15:12:23

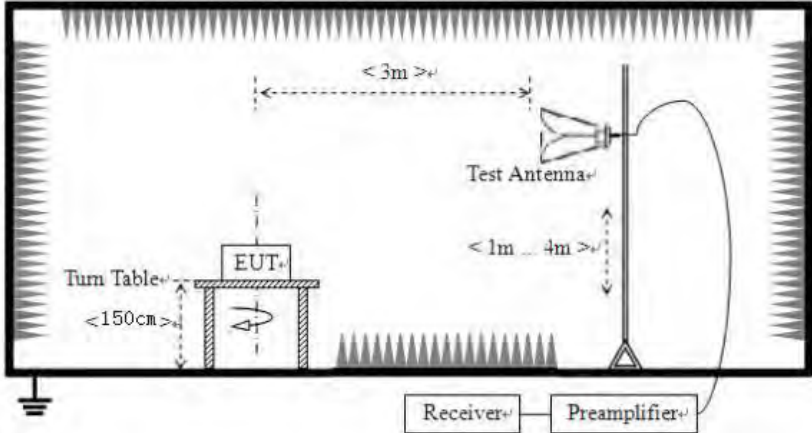
### PSD NVNT n40 5795MHz Ant2



Date: 1.NOV.2023 15:13:18

## 4.6 Band Edge

Test Requirement:	FCC Part15 E Section 15.407 and 15.205				
Test Method:	ANSI C63.10:2013				
Test site:	Measurement Distance: 3m (Semi-Anechoic Chamber)				
Receiver setup:					
	Frequency	Detector	RBW	VBW	Remark
	30MHz-1GHz	Quasi-peak	100KHz	300KHz	Quasi-peak Value
	Above 1GHz	Peak	1MHz	3MHz	Peak Value
AV		1MHz	3MHz	Average Value	
Limit:					
	Frequency		Limit (dBuV/m @3m)		Remark
	30MHz-88MHz		40.0		Quasi-peak Value
	88MHz-216MHz		43.5		Quasi-peak Value
	216MHz-960MHz		46.0		Quasi-peak Value
	960MHz-1GHz		54.0		Quasi-peak Value
	Above 1GHz		54.0		Average Value
68.2			Peak Value		
Undesirable emission limits:					
(1) 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 EIRP of -27 dBm/MHz.					
(2) 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 EIRP of -27 dBm/MHz. Devices operating in the 5.25-5.35 GHz band that generate emissions in the 5.15-5.25 GHz band must meet all applicable technical requirements for operation in the 5.15-5.25 GHz band (including indoor use) or alternatively meet an out-of-band emission EIRP limit of -27 dBm/MHz in the 5.15-5.25 GHz band.					
(3) 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 EIRP of -27 dBm/MHz.					
Test Procedure:	<p>a. 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.</p> <p>b. The EUT was set 3 meters away from the interference-receiving antenna, which was mounted on the top of a variable-height antenna tower.</p> <p>c. 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.</p> <p>d. 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.</p> <p>e. The test-receiver system was set to Peak Detect Function and Specified Bandwidth with Maximum Hold Mode.</p> <p>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.</p>				
Test setup:	Above 1GHz				

	
Test Instruments:	Refer to section 5.10 for details
Test mode:	Refer to section 5.3 for details
Test results:	Pass

## Remark:

According to KDB 789033 D02 v02r01 section G) 1) (d), for For measurements above 1000 MHz @ 3m distance, the limit of field strength is computed as follows:

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

For example, if EIRP = -27dBm

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

**Measurement Data:****Band1**

Mode:		802.11a		Frequency:		5180MHz	
Antenna Pol.	Frequency (MHz)	Reading Level (dBuV)	Factor (dB/m)	Measure Level (dBuV/m)	Limit (dBuV/m)	Over limit(dB)	Detector
H	5150.00	35.75	17.18	52.93	68.20	-15.27	PK
V	5150.00	33.74	17.18	50.92	68.20	-17.28	PK
Mode:		802.11a		Frequency:		5180MHz	
Antenna Pol.	Frequency (MHz)	Reading Level (dBuV)	Factor (dB/m)	Measure Level (dBuV/m)	Limit (dBuV/m)	Over limit(dB)	Detector
H	5150.00	25.42	17.18	42.60	54.00	-11.40	AV
V	5150.00	26.43	17.18	43.61	54.00	-10.39	AV
Mode:		802.11a		Frequency:		5240MHz	
Antenna Pol.	Frequency (MHz)	Reading Level (dBuV)	Factor (dB/m)	Measure Level (dBuV/m)	Limit (dBuV/m)	Over limit(dB)	Detector
H	5350.00	36.50	17.18	53.68	68.20	-14.52	PK
V	5350.00	33.76	17.18	50.94	68.20	-17.26	PK
Mode:		802.11a		Frequency:		5240MHz	
Antenna Pol.	Frequency (MHz)	Reading Level (dBuV)	Factor (dB/m)	Measure Level (dBuV/m)	Limit (dBuV/m)	Over limit(dB)	Detector
H	5350.00	25.34	17.18	42.52	54.00	-11.48	AV
V	5350.00	24.01	17.18	41.19	54.00	-12.81	AV



Mode:		802.11n(HT20)		Frequency:		5180MHz	
Antenna Pol.	Frequency (MHz)	Reading Level (dBuV)	Factor (dB/m)	Measure Level (dBuV/m)	Limit (dBuV/m)	Over limit(dB)	Detector
H	5150.00	33.63	17.18	50.81	68.20	-17.39	PK
V	5150.00	33.45	17.18	50.63	68.20	-17.57	PK
Mode:		802.11n(HT20)		Frequency:		5180MHz	
Antenna Pol.	Frequency (MHz)	Reading Level (dBuV)	Factor (dB/m)	Measure Level (dBuV/m)	Limit (dBuV/m)	Over limit(dB)	Detector
H	5150.00	26.35	17.18	43.53	54.00	-10.47	AV
V	5150.00	27.23	17.18	44.41	54.00	-9.59	AV
Mode:		802.11n(HT20)		Frequency:		5240MHz	
Antenna Pol.	Frequency (MHz)	Reading Level (dBuV)	Factor (dB/m)	Measure Level (dBuV/m)	Limit (dBuV/m)	Over limit(dB)	Detector
H	5350.00	35.24	17.18	52.42	68.20	-15.78	PK
V	5350.00	34.61	17.18	51.79	68.20	-16.41	PK
Mode:		802.11n(HT20)		Frequency:		5240MHz	
Antenna Pol.	Frequency (MHz)	Reading Level (dBuV)	Factor (dB/m)	Measure Level (dBuV/m)	Limit (dBuV/m)	Over limit(dB)	Detector
H	5350.00	26.28	17.18	43.46	54.00	-10.54	AV
V	5350.00	24.39	17.18	41.57	54.00	-12.43	AV

Mode:		802.11ac(VHT20)		Frequency:		5180MHz	
Antenna Pol.	Frequency (MHz)	Reading Level (dBuV)	Factor (dB/m)	Measure Level (dBuV/m)	Limit (dBuV/m)	Over limit(dB)	Detector
H	5150.00	35.51	17.18	52.69	68.20	-15.51	PK
V	5150.00	33.83	17.18	51.01	68.20	-17.19	PK
Mode:		802.11ac(VHT20)		Frequency:		5180MHz	
Antenna Pol.	Frequency (MHz)	Reading Level (dBuV)	Factor (dB/m)	Measure Level (dBuV/m)	Limit (dBuV/m)	Over limit(dB)	Detector
H	5150.00	27.35	17.18	44.53	54.00	-9.47	AV
V	5150.00	23.40	17.18	40.58	54.00	-13.42	AV
Mode:		802.11ac(VHT20)		Frequency:		5240MHz	
Antenna Pol.	Frequency (MHz)	Reading Level (dBuV)	Factor (dB/m)	Measure Level (dBuV/m)	Limit (dBuV/m)	Over limit(dB)	Detector
H	5350.00	33.70	17.18	50.88	68.20	-17.32	PK
V	5350.00	36.17	17.18	53.35	68.20	-14.85	PK
Mode:		802.11ac(VHT20)		Frequency:		5240MHz	
Antenna Pol.	Frequency (MHz)	Reading Level (dBuV)	Factor (dB/m)	Measure Level (dBuV/m)	Limit (dBuV/m)	Over limit(dB)	Detector
H	5350.00	24.39	17.18	41.57	54.00	-12.43	AV
V	5350.00	26.52	17.18	43.70	54.00	-10.30	AV

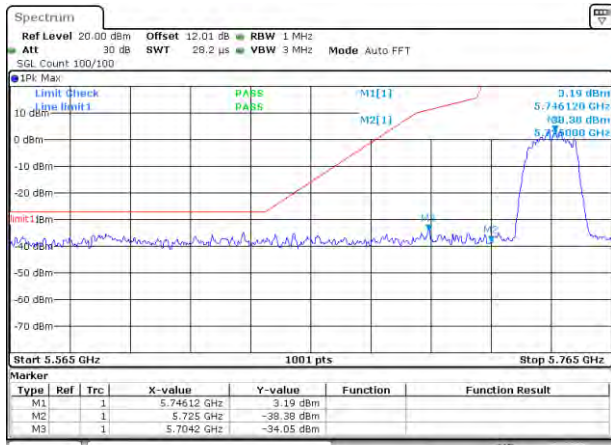
Mode:		802.11n(HT40)		Frequency:		5190MHz	
Antenna Pol.	Frequency (MHz)	Reading Level (dBuV)	Factor (dB/m)	Measure Level (dBuV/m)	Limit (dBuV/m)	Over limit(dB)	Detector
H	5150.00	34.41	17.18	51.59	68.20	-16.61	PK
V	5150.00	34.58	17.18	51.76	68.20	-16.44	PK
Mode:		802.11n(HT40)		Frequency:		5190MHz	
Antenna Pol.	Frequency (MHz)	Reading Level (dBuV)	Factor (dB/m)	Measure Level (dBuV/m)	Limit (dBuV/m)	Over limit(dB)	Detector
H	5150.00	27.70	17.18	44.88	54.00	-9.12	AV
V	5150.00	23.99	17.18	41.17	54.00	-12.83	AV
Mode:		802.11n(HT40)		Frequency:		5230MHz	
Antenna Pol.	Frequency (MHz)	Reading Level (dBuV)	Factor (dB/m)	Measure Level (dBuV/m)	Limit (dBuV/m)	Over limit(dB)	Detector
H	5350.00	34.06	17.18	51.24	68.20	-16.96	PK
V	5350.00	35.35	17.18	52.53	68.20	-15.67	PK
Mode:		802.11n(HT40)		Frequency:		5230MHz	
Antenna Pol.	Frequency (MHz)	Reading Level (dBuV)	Factor (dB/m)	Measure Level (dBuV/m)	Limit (dBuV/m)	Over limit(dB)	Detector
H	5350.00	26.59	17.18	43.77	54.00	-10.23	AV
V	5350.00	26.42	17.18	43.60	54.00	-10.40	AV

Mode:		802.11ac(VHT40)		Frequency:		5190MHz	
Antenna Pol.	Frequency (MHz)	Reading Level (dBuV)	Factor (dB/m)	Measure Level (dBuV/m)	Limit (dBuV/m)	Over limit(dB)	Detector
H	5150.00	36.82	17.18	54.00	68.20	-14.20	PK
V	5150.00	33.82	17.18	51.00	68.20	-17.20	PK
Mode:		802.11ac(VHT40)		Frequency:		5190MHz	
Antenna Pol.	Frequency (MHz)	Reading Level (dBuV)	Factor (dB/m)	Measure Level (dBuV/m)	Limit (dBuV/m)	Over limit(dB)	Detector
H	5150.00	27.61	17.18	44.79	54.00	-9.21	AV
V	5150.00	27.09	17.18	44.27	54.00	-9.73	AV
Mode:		802.11ac(VHT40)		Frequency:		5230MHz	
Antenna Pol.	Frequency (MHz)	Reading Level (dBuV)	Factor (dB/m)	Measure Level (dBuV/m)	Limit (dBuV/m)	Over limit(dB)	Detector
H	5350.00	35.23	17.18	52.41	68.20	-15.79	PK
V	5350.00	36.06	17.18	53.24	68.20	-14.96	PK
Mode:		802.11ac(VHT40)		Frequency:		5230MHz	
Antenna Pol.	Frequency (MHz)	Reading Level (dBuV)	Factor (dB/m)	Measure Level (dBuV/m)	Limit (dBuV/m)	Over limit(dB)	Detector
H	5350.00	27.48	17.18	44.66	54.00	-9.34	AV
V	5350.00	25.71	17.18	42.89	54.00	-11.11	AV

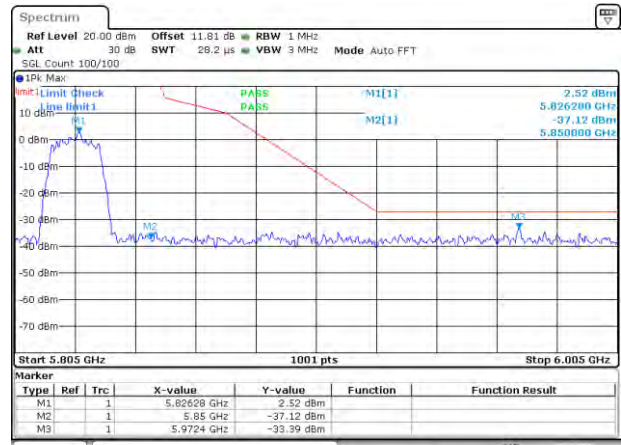
Mode:		802.11ac(VHT80)		Frequency:		5210MHz	
Antenna Pol.	Frequency (MHz)	Reading Level (dBuV)	Factor (dB/m)	Measure Level (dBuV/m)	Limit (dBuV/m)	Over limit(dB)	Detector
H	5150.00	34.16	17.18	51.34	68.20	-16.86	PK
V	5150.00	35.29	17.18	52.47	68.20	-15.73	PK
Mode:		802.11ac(VHT80)		Frequency:		5210MHz	
Antenna Pol.	Frequency (MHz)	Reading Level (dBuV)	Factor (dB/m)	Measure Level (dBuV/m)	Limit (dBuV/m)	Over limit(dB)	Detector
H	5150.00	25.63	17.18	42.81	54.00	-11.19	AV
V	5150.00	25.91	17.18	43.09	54.00	-10.91	AV
Mode:		802.11ac(VHT80)		Frequency:		5210MHz	
Antenna Pol.	Frequency (MHz)	Reading Level (dBuV)	Factor (dB/m)	Measure Level (dBuV/m)	Limit (dBuV/m)	Over limit(dB)	Detector
H	5350.00	33.83	17.18	51.01	68.20	-17.19	PK
V	5350.00	33.81	17.18	50.99	68.20	-17.21	PK
Mode:		802.11ac(VHT80)		Frequency:		5210MHz	
Antenna Pol.	Frequency (MHz)	Reading Level (dBuV)	Factor (dB/m)	Measure Level (dBuV/m)	Limit (dBuV/m)	Over limit(dB)	Detector
H	5350.00	27.42	17.18	44.60	54.00	-9.40	AV
V	5350.00	23.40	17.18	40.58	54.00	-13.42	AV

**Band4**

**802.11a**

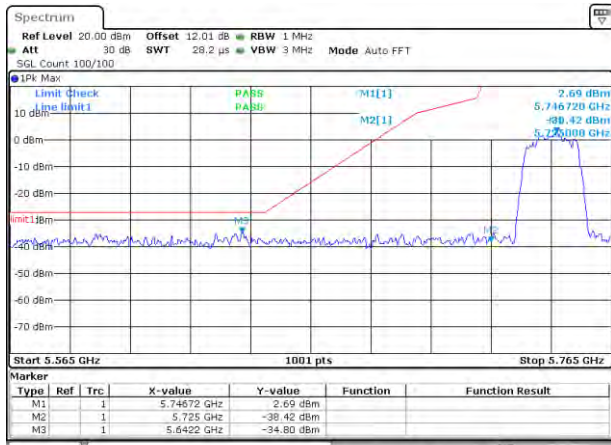


Low: 5745MHz

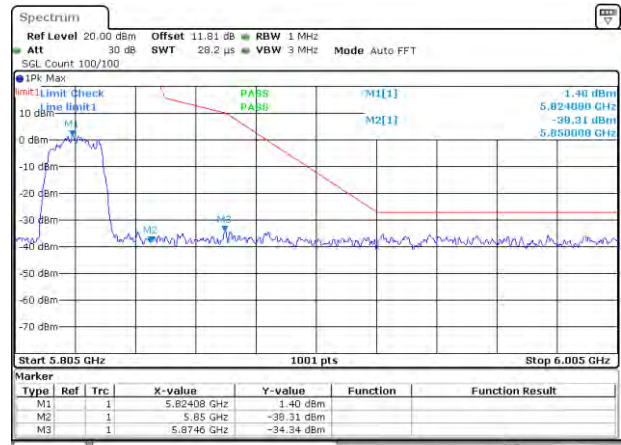


High: 5825MHz

**802.11n(HT20)**

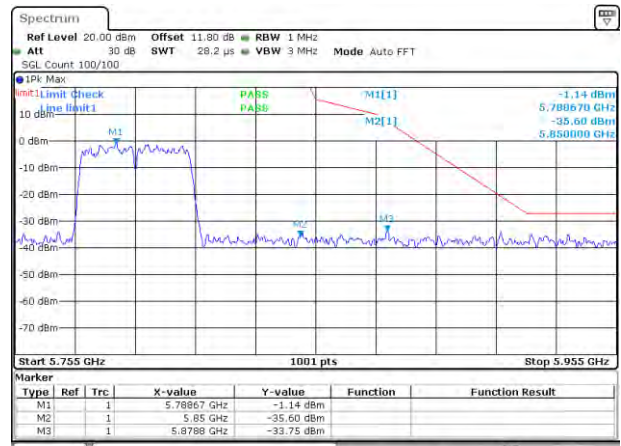
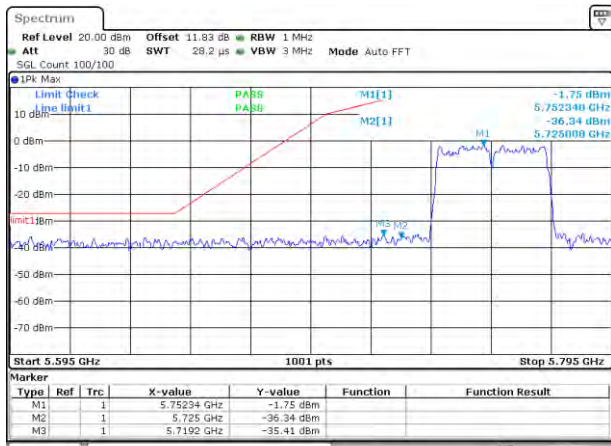


Low: 5745MHz

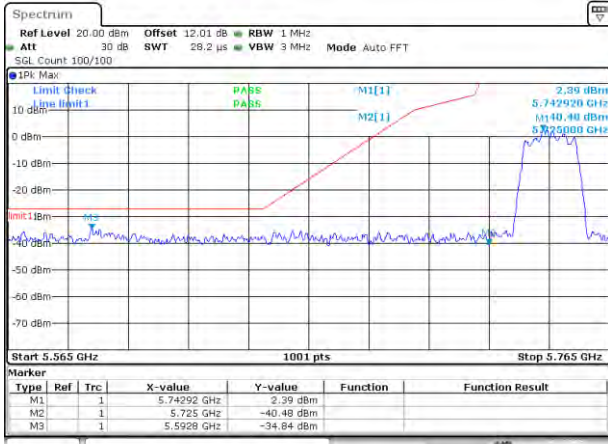


High: 5825MHz

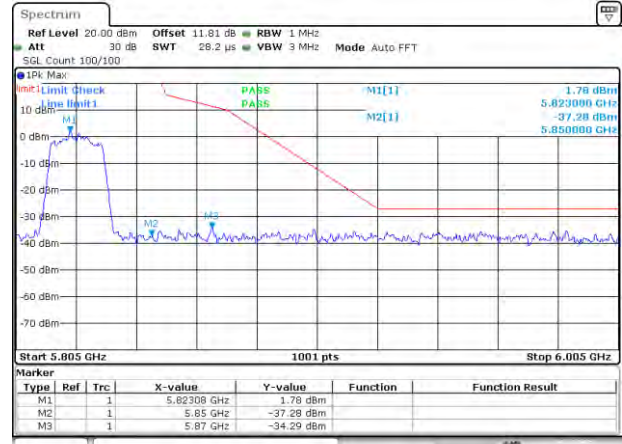
**802.11n(HT40)**



802.11ac20

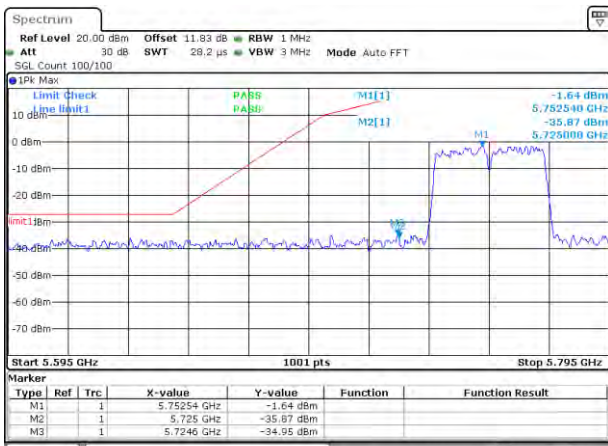


Low: 5745MHz

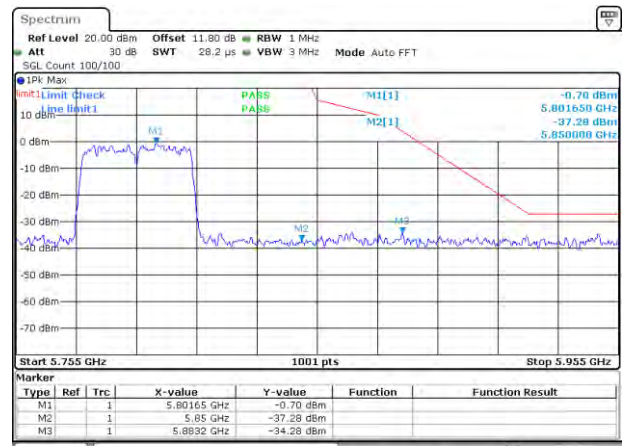


High: 5825MHz

802.11ac40

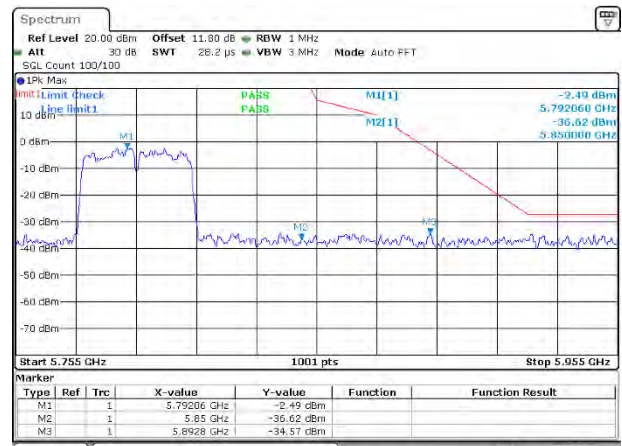
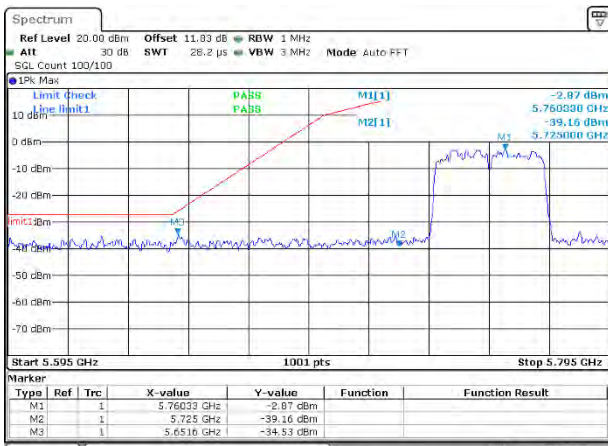


Low: 5745MHz



High: 5825MHz

802.11ac80



Note: 1. Except for mode a, other modes test the MIMO status.  
 2. Mode a represents the worst data of antenna 1.

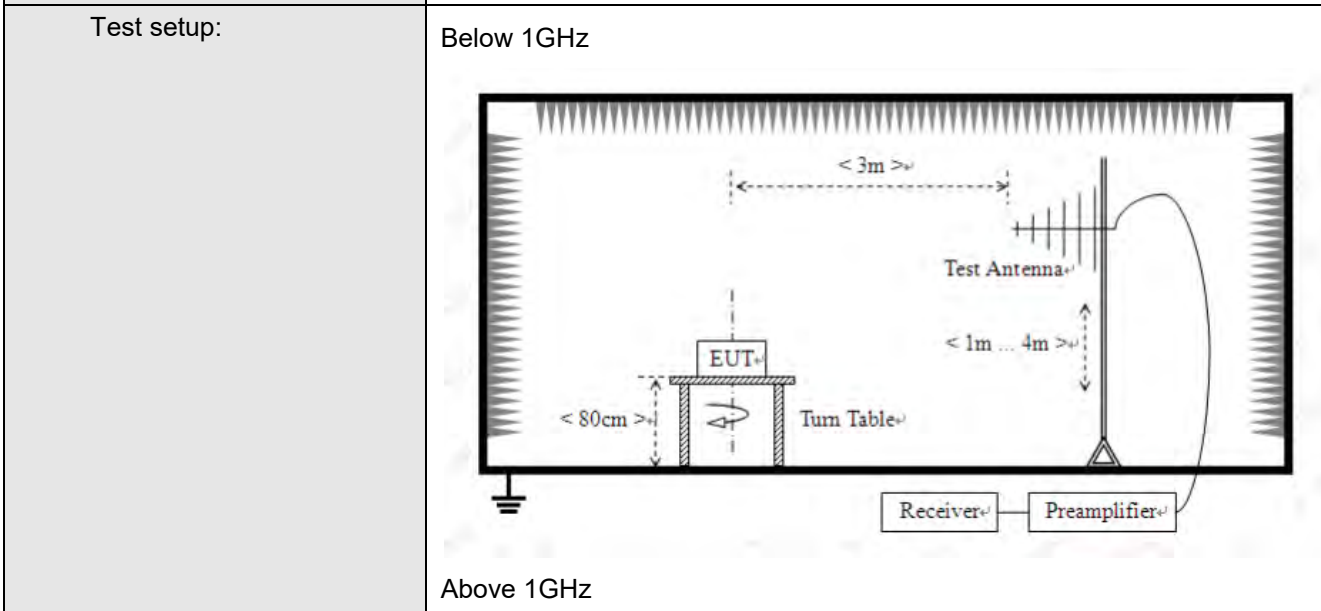
## 4.7 Radiated Emission

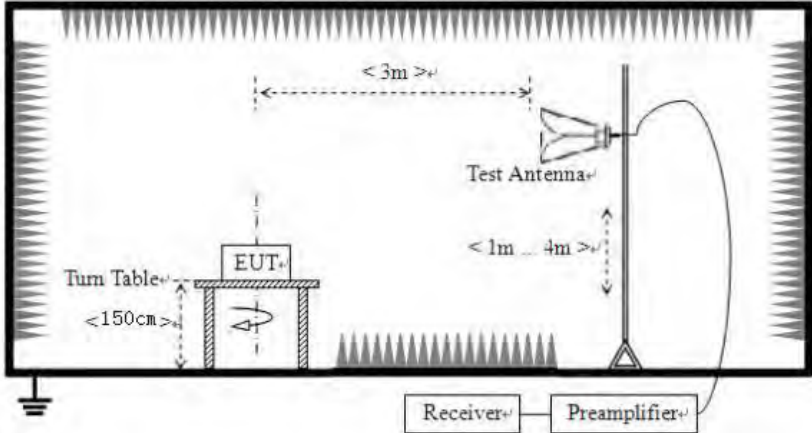
Test Requirement:	FCC Part15 C Section 15.209 and 15.205				
Test Method:	ANSI C63.10:2013				
Test Frequency Range:	30MHz to 40GHz				
Test site:	Measurement Distance: 3m (Semi-Anechoic Chamber)				
Receiver setup:	Frequency	Detector	RBW	VBW	Value
	30MHz-1GHz	Quasi-peak	100KHz	300KHz	Quasi-peak Value
	Above 1GHz	Peak	1MHz	3MHz	Peak Value
AV		1MHz	3MHz	Average Value	
Limit:	Frequency		Limit (dBuV/m @3m)		Remark
	30MHz-88MHz		40.0		Quasi-peak Value
	88MHz-216MHz		43.5		Quasi-peak Value
	216MHz-960MHz		46.0		Quasi-peak Value
	960MHz-1GHz		54.0		Quasi-peak Value
	Above 1GHz		74.0		Peak Value
54.0			Average Value		
Test Procedure:	<p>Substitution method was performed to determine the actual ERP emission levels of the EUT. The following test procedure as below:</p> <p>1&gt;.Below 1GHz test procedure:</p> <ol style="list-style-type: none"> <li>1. The EUT was placed on the top of a rotating table (0.8m for below 1GHz and 1.5 meters for above 1GHz) above the ground at a 3 meter camber. The table was rotated 360 degrees to determine the position of the highest radiation.</li> <li>2. The EUT was set 3 meters away from the interference-receiving antenna, which was mounted on the top of a variable-height antenna tower.</li> <li>3. 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.</li> <li>4. For each suspected emission, the EUT was arranged to its worst case and then the antenna was tuned to heights from 1 meter to 4 meters and the rotatable table was turned from 0 degrees to 360 degrees to find the maximum reading.</li> <li>5. The test-receiver system was set to Peak Detect Function and Specified Bandwidth with Maximum Hold Mode.</li> <li>6. 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.</li> </ol> <p>2&gt;.Above 1GHz test procedure:</p> <ol style="list-style-type: none"> <li>1. On the test site as test setup graph above,the EUT shall be placed at the 1.5m support on the turntable and in the position closest to normal use as declared by the provider.</li> <li>2. The test antenna shall be oriented initially for vertical polarization and shall be chosen to correspond to the frequency of the transmitter.The output of the test antenna shall be connected to the measuring receiver.</li> <li>3. The transmitter shall be switched on, if possible, without modulation and the measuring receiver shall be tuned to the frequency of the transmitter under test.</li> </ol>				

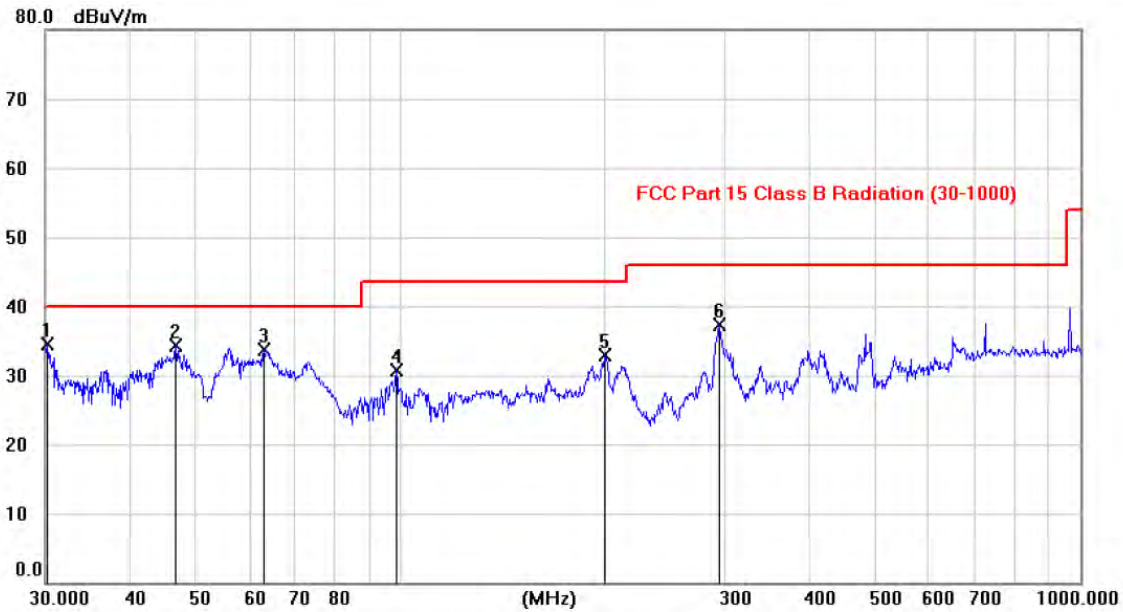


4. The test antenna shall be raised and lowered from 1m to 4m until a maximum signal level is detected by the measuring receiver. Then the turntable should be rotated through 360° in the horizontal plane, until the maximum signal level is detected by the measuring receiver.
5. Repeat step 4 for test frequency with the test antenna polarized horizontally.
6. Remove the transmitter and replace it with a substitution antenna
7. Feed the substitution antenna at the transmitter end with a signal generator connected to the antenna by means of a nonradiating cable. With the antennas at both ends vertically polarized, and with the signal generator tuned to a particular test frequency, raise and lower the test antenna to obtain a maximum reading at the spectrum analyzer. Adjust the level of the signal generator output until the previously recorded maximum reading for this set of conditions is obtained. This should be done carefully repeating the adjustment of the test antenna and generator output.
8. Repeat step 7 with both antennas horizontally polarized for each test frequency.
9. Calculate power in dBm into a reference ideal half-wave dipole antenna by reducing the readings obtained in steps 7 and 8 by the power loss in the cable between the generator and the antenna, and further corrected for the gain of the substitution antenna used relative to an ideal half-wave dipole antenna by the following formula:  

$$\text{EIRP(dBm)} = P_g(\text{dBm}) - \text{cable loss (dB)} + \text{antenna gain (dBi)}$$
 where:  
 $P_g$  is the generator output power into the substitution antenna.



	
Test Instruments:	Refer to section 5.10 for details
Test mode:	Refer to section 5.3 for details
Test results:	Pass

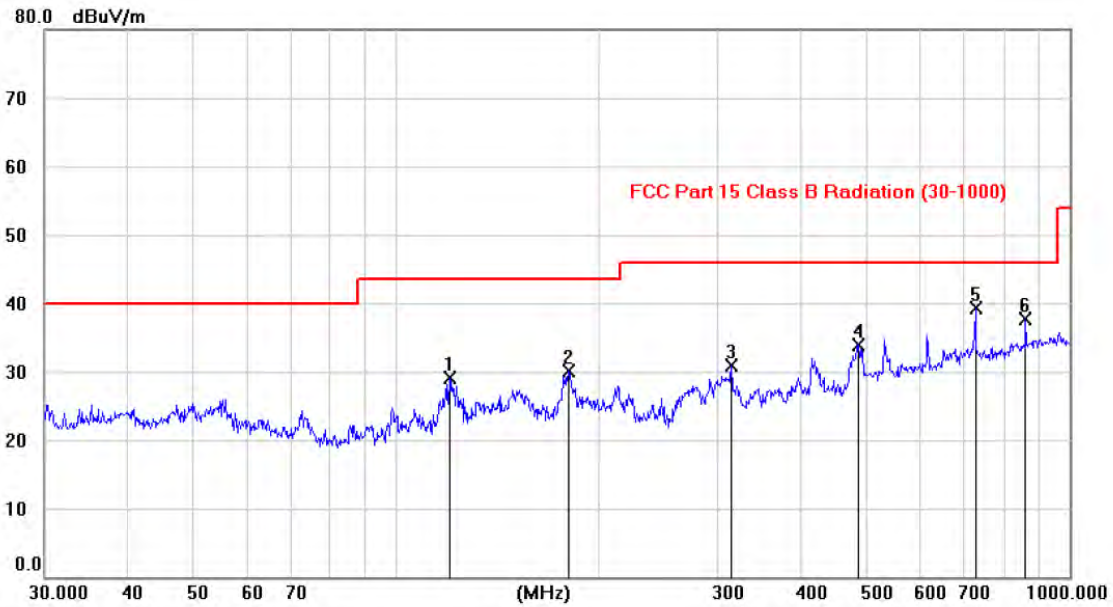
**Measurement Data:****Below 1GHz****Vertical:**

No.	Mk.	Freq. MHz	Reading Level dBuV	Correct Factor dB	Measure- ment dBuV/m	Limit dBuV/m	Margin dB	Antenna Height cm	Table Degree degree	Comment
1	*	30.2393	20.95	13.53	34.48	40.00	-5.52			peak
2		46.7701	20.32	14.08	34.40	40.00	-5.60			peak
3		63.0252	21.13	12.51	33.64	40.00	-6.36			peak
4		98.5787	19.92	10.78	30.70	43.50	-12.80			peak
5		200.0089	22.01	10.90	32.91	43.50	-10.59			peak
6		295.0089	23.32	13.99	37.31	46.00	-8.69			peak

Note:1. \*:Maximum data; x:Over limit; !:over margin.

2.Measurement=Reading Level+Correct Factor; Correct Factor=Antenna Factor+Cable Loss.

**Horizontal:**



No.	Mk.	Freq. MHz	Reading Level dBuV	Correct Factor dB	Measure- ment dBuV/m	Limit dBuV/m	Margin dB	Antenna Height cm	Table Degree degree	Comment
1		119.9957	16.01	13.04	29.05	43.50	-14.45			peak
2		180.5432	17.42	12.61	30.03	43.50	-13.47			peak
3		314.8545	16.39	14.48	30.87	46.00	-15.13			peak
4		486.3477	15.91	18.03	33.94	46.00	-12.06			peak
5	*	724.5997	17.19	22.08	39.27	46.00	-6.73			peak
6		862.5519	14.27	23.51	37.78	46.00	-8.22			peak

Note:1. \*:Maximum data; x:Over limit; !:over margin.

2.Measurement=Reading Level+Correct Factor; Correct Factor=Antenna Factor+Cable Loss.

Remark: All modes have been tested, and only worst data of a mode, Channel 5180MHz was listed in this report.

**Above 1GHz:****BAND1:****802.11a(HT20) 5180MHz**

Frequency (MHz)	Read Level (dBuV)	Antenna Factor (dB/m)	Cable Loss (dB)	Preamp Factor (dB)	Level (dBuV/m)	Limit Line (dBuV/m)	Over Limit (dB)	polarization
10360.01	67.67	11.25	14.62	32.65	60.89	74	-13.11	Vertical
15540.16	63.11	11.93	17.66	34.46	58.24	74	-15.76	Vertical
10360.41	64.51	9.4	14.62	32.65	55.88	74	-18.12	Horizontal
15540.47	68.24	8.5	17.66	34.46	59.94	74	-14.06	Horizontal

**802.11a(HT20) 5200MHz**

Frequency (MHz)	Read Level (dBuV)	Antenna Factor (dB/m)	Cable Loss (dB)	Preamp Factor (dB)	Level (dBuV/m)	Limit Line (dBuV/m)	Over Limit (dB)	polarization
10400.64	67.16	11.25	14.62	32.65	60.38	74	-13.62	Vertical
15600.42	63.38	11.93	17.66	34.46	58.51	74	-15.49	Vertical
10400.10	64.35	9.4	14.62	32.65	55.72	74	-18.28	Horizontal
15600.43	67.74	8.5	17.66	34.46	59.44	74	-14.56	Horizontal

**802.11a(HT20) 5240MHz**

Frequency (MHz)	Read Level (dBuV)	Antenna Factor (dB/m)	Cable Loss (dB)	Preamp Factor (dB)	Level (dBuV/m)	Limit Line (dBuV/m)	Over Limit (dB)	polarization
10480.12	67.00	11.25	14.62	32.65	60.22	74	-13.78	Vertical
15720.06	63.30	11.93	17.66	34.46	58.43	74	-15.57	Vertical
10480.78	64.56	9.4	14.62	32.65	55.93	74	-18.07	Horizontal
15720.47	67.83	8.5	17.66	34.46	59.53	74	-14.47	Horizontal

**802.11n(HT20) 5180MHz**

Frequency (MHz)	Read Level (dBuV)	Antenna Factor (dB/m)	Cable Loss (dB)	Preamp Factor (dB)	Level (dBuV/m)	Limit Line (dBuV/m)	Over Limit (dB)	polarization
10360.78	67.39	11.25	14.62	32.65	60.61	74	-13.39	Vertical
15540.28	63.26	11.93	17.66	34.46	58.39	74	-15.61	Vertical
10360.76	64.28	9.4	14.62	32.65	55.65	74	-18.35	Horizontal
15540.49	67.93	8.5	17.66	34.46	59.63	74	-14.37	Horizontal

**802.11n(HT20) 5200MHz**

Frequency (MHz)	Read Level (dBuV)	Antenna Factor (dB/m)	Cable Loss (dB)	Preamp Factor (dB)	Level (dBuV/m)	Limit Line (dBuV/m)	Over Limit (dB)	polarization
10400.12	67.03	11.25	14.62	32.65	60.25	74	-13.75	Vertical
15600.05	63.43	11.93	17.66	34.46	58.56	74	-15.44	Vertical
10400.67	64.61	9.4	14.62	32.65	55.98	74	-18.02	Horizontal
15600.97	68.12	8.5	17.66	34.46	59.82	74	-14.18	Horizontal

**802.11n(HT20) 5240MHz**

Frequency (MHz)	Read Level (dBuV)	Antenna Factor (dB/m)	Cable Loss (dB)	Preamp Factor (dB)	Level (dBuV/m)	Limit Line (dBuV/m)	Over Limit (dB)	polarization
10480.38	67.97	11.25	14.62	32.65	61.19	74	-12.81	Vertical
15720.21	63.22	11.93	17.66	34.46	58.35	74	-15.65	Vertical
10480.91	64.89	9.4	14.62	32.65	56.26	74	-17.74	Horizontal
15720.40	67.90	8.5	17.66	34.46	59.60	74	-14.40	Horizontal

**802.11ac(VHT20) 5180MHz**

Frequency (MHz)	Read Level (dBuV)	Antenna Factor (dB/m)	Cable Loss (dB)	Preamp Factor (dB)	Level (dBuV/m)	Limit Line (dBuV/m)	Over Limit (dB)	polarization
10360.55	67.02	11.25	14.62	32.65	60.24	74	-13.76	Vertical
15540.03	63.56	11.93	17.66	34.46	58.69	74	-15.31	Vertical
10360.01	64.55	9.4	14.62	32.65	55.92	74	-18.08	Horizontal
15540.78	68.33	8.5	17.66	34.46	60.03	74	-13.97	Horizontal

## 802.11ac(VHT20) 5200MHz

Frequency (MHz)	Read Level (dBuV)	Antenna Factor (dB/m)	Cable Loss (dB)	Preamp Factor (dB)	Level (dBuV/m)	Limit Line (dBuV/m)	Over Limit (dB)	polarization
10400.60	67.86	11.25	14.62	32.65	61.08	74	-12.92	Vertical
15600.52	63.76	11.93	17.66	34.46	58.89	74	-15.11	Vertical
10400.52	64.43	9.4	14.62	32.65	55.80	74	-18.20	Horizontal
15600.04	68.05	8.5	17.66	34.46	59.75	74	-14.25	Horizontal

## 802.11ac(VHT20) 5240MHz

Frequency (MHz)	Read Level (dBuV)	Antenna Factor (dB/m)	Cable Loss (dB)	Preamp Factor (dB)	Level (dBuV/m)	Limit Line (dBuV/m)	Over Limit (dB)	polarization
10480.06	67.84	11.25	14.62	32.65	61.06	74	-12.94	Vertical
15720.69	63.08	11.93	17.66	34.46	58.21	74	-15.79	Vertical
10480.06	65.07	9.4	14.62	32.65	56.44	74	-17.56	Horizontal
15720.23	67.81	8.5	17.66	34.46	59.51	74	-14.49	Horizontal

## 802.11n(HT40) 5190MHz

Frequency (MHz)	Read Level (dBuV)	Antenna Factor (dB/m)	Cable Loss (dB)	Preamp Factor (dB)	Level (dBuV/m)	Limit Line (dBuV/m)	Over Limit (dB)	polarization
10380.31	67.96	11.25	14.62	32.65	61.18	74	-12.82	Vertical
15570.92	63.58	11.93	17.66	34.46	58.71	74	-15.29	Vertical
10380.70	64.73	9.4	14.62	32.65	56.10	74	-17.90	Horizontal
15570.88	67.79	8.5	17.66	34.46	59.49	74	-14.51	Horizontal

## 802.11n(HT40) 5230MHz

Frequency (MHz)	Read Level (dBuV)	Antenna Factor (dB/m)	Cable Loss (dB)	Preamp Factor (dB)	Level (dBuV/m)	Limit Line (dBuV/m)	Over Limit (dB)	polarization
10460.75	67.14	11.25	14.62	32.65	60.36	74	-13.64	Vertical
15690.73	63.24	11.93	17.66	34.46	58.37	74	-15.63	Vertical
10460.69	64.65	9.4	14.62	32.65	56.02	74	-17.98	Horizontal
15690.80	68.47	8.5	17.66	34.46	60.17	74	-13.83	Horizontal

## 802.11ac(VHT40) 5190MHz

Frequency (MHz)	Read Level (dBuV)	Antenna Factor (dB/m)	Cable Loss (dB)	Preamp Factor (dB)	Level (dBuV/m)	Limit Line (dBuV/m)	Over Limit (dB)	polarization
10380.78	67.40	11.25	14.62	32.65	60.62	74	-13.38	Vertical
15570.05	63.61	11.93	17.66	34.46	58.74	74	-15.26	Vertical
10380.36	65.07	9.4	14.62	32.65	56.44	74	-17.56	Horizontal
15570.25	68.21	8.5	17.66	34.46	59.91	74	-14.09	Horizontal

## 802.11ac(VHT40) 5230MHz

Frequency (MHz)	Read Level (dBuV)	Antenna Factor (dB/m)	Cable Loss (dB)	Preamp Factor (dB)	Level (dBuV/m)	Limit Line (dBuV/m)	Over Limit (dB)	polarization
10460.18	67.51	11.25	14.62	32.65	60.73	74	-13.27	Vertical
15690.92	63.77	11.93	17.66	34.46	58.90	74	-15.10	Vertical
10460.99	65.14	9.4	14.62	32.65	56.51	74	-17.49	Horizontal
15690.02	67.81	8.5	17.66	34.46	59.51	74	-14.49	Horizontal

## 802.11ac(VHT80) 5210MHz

Frequency (MHz)	Read Level (dBuV)	Antenna Factor (dB/m)	Cable Loss (dB)	Preamp Factor (dB)	Level (dBuV/m)	Limit Line (dBuV/m)	Over Limit (dB)	polarization
10420.32	67.45	11.25	14.62	32.65	60.67	74	-13.33	Vertical
15630.90	63.63	11.93	17.66	34.46	58.76	74	-15.24	Vertical
10420.93	64.56	9.4	14.62	32.65	55.93	74	-18.07	Horizontal
15630.64	68.29	8.5	17.66	34.46	59.99	74	-14.01	Horizontal

**BAND4:**

## 802.11a(HT20) 5745MHz

Frequency (MHz)	Read Level (dBuV)	Antenna Factor (dB/m)	Cable Loss (dB)	Preamp Factor (dB)	Level (dBuV/m)	Limit Line (dBuV/m)	Over Limit (dB)	polarization
11490.39	67.90	11.25	14.62	32.65	61.12	74	-12.88	Vertical
17235.25	62.79	11.93	17.66	34.46	57.92	74	-16.08	Vertical
11490.07	64.34	9.4	14.62	32.65	55.71	74	-18.29	Horizontal
17235.91	67.63	8.5	17.66	34.46	59.33	74	-14.67	Horizontal

## 802.11a(HT20) 5785MHz

Frequency (MHz)	Read Level (dBuV)	Antenna Factor (dB/m)	Cable Loss (dB)	Preamp Factor (dB)	Level (dBuV/m)	Limit Line (dBuV/m)	Over Limit (dB)	polarization
11570.29	67.67	11.25	14.62	32.65	60.89	74	-13.11	Vertical
17355.21	63.53	11.93	17.66	34.46	58.66	74	-15.34	Vertical
11570.56	64.92	9.4	14.62	32.65	56.29	74	-17.71	Horizontal
17355.00	68.18	8.5	17.66	34.46	59.88	74	-14.12	Horizontal

## 802.11a(HT20) 5825MHz

Frequency (MHz)	Read Level (dBuV)	Antenna Factor (dB/m)	Cable Loss (dB)	Preamp Factor (dB)	Level (dBuV/m)	Limit Line (dBuV/m)	Over Limit (dB)	polarization
11650.61	67.16	11.25	14.62	32.65	60.38	74	-13.62	Vertical
17475.94	62.83	11.93	17.66	34.46	57.96	74	-16.04	Vertical
11650.28	64.74	9.4	14.62	32.65	56.11	74	-17.89	Horizontal
17475.23	68.19	8.5	17.66	34.46	59.89	74	-14.11	Horizontal

## 802.11n(HT20) 5745MHz

Frequency (MHz)	Read Level (dBuV)	Antenna Factor (dB/m)	Cable Loss (dB)	Preamp Factor (dB)	Level (dBuV/m)	Limit Line (dBuV/m)	Over Limit (dB)	polarization
11490.22	67.67	11.25	14.62	32.65	60.89	74	-13.11	Vertical
17235.50	62.94	11.93	17.66	34.46	58.07	74	-15.93	Vertical
11490.24	64.25	9.4	14.62	32.65	55.62	74	-18.38	Horizontal
17235.51	68.23	8.5	17.66	34.46	59.93	74	-14.07	Horizontal

## 802.11n(HT20) 5785MHz

Frequency (MHz)	Read Level (dBuV)	Antenna Factor (dB/m)	Cable Loss (dB)	Preamp Factor (dB)	Level (dBuV/m)	Limit Line (dBuV/m)	Over Limit (dB)	polarization
11570.91	67.76	11.25	14.62	32.65	60.98	74	-13.02	Vertical
17355.78	63.17	11.93	17.66	34.46	58.30	74	-15.70	Vertical
11570.44	64.78	9.4	14.62	32.65	56.15	74	-17.85	Horizontal
17355.41	67.69	8.5	17.66	34.46	59.39	74	-14.61	Horizontal

## 802.11n(HT20) 5825MHz

Frequency (MHz)	Read Level (dBuV)	Antenna Factor (dB/m)	Cable Loss (dB)	Preamp Factor (dB)	Level (dBuV/m)	Limit Line (dBuV/m)	Over Limit (dB)	polarization
11650.61	67.16	11.25	14.62	32.65	60.38	74	-13.62	Vertical
17475.94	62.83	11.93	17.66	34.46	57.96	74	-16.04	Vertical
11650.28	64.74	9.4	14.62	32.65	56.11	74	-17.89	Horizontal
17475.23	68.19	8.5	17.66	34.46	59.89	74	-14.11	Horizontal

## 802.11ac(VHT20) 5745MHz

Frequency (MHz)	Read Level (dBuV)	Antenna Factor (dB/m)	Cable Loss (dB)	Preamp Factor (dB)	Level (dBuV/m)	Limit Line (dBuV/m)	Over Limit (dB)	polarization
11490.55	67.90	11.25	14.62	32.65	61.12	74	-12.88	Vertical
17235.27	63.59	11.93	17.66	34.46	58.72	74	-15.28	Vertical
11490.59	64.89	9.4	14.62	32.65	56.26	74	-17.74	Horizontal
17235.22	68.05	8.5	17.66	34.46	59.75	74	-14.25	Horizontal

## 802.11ac(VHT20) 5785MHz

Frequency (MHz)	Read Level (dBuV)	Antenna Factor (dB/m)	Cable Loss (dB)	Preamp Factor (dB)	Level (dBuV/m)	Limit Line (dBuV/m)	Over Limit (dB)	polarization
11570.97	67.09	11.25	14.62	32.65	60.31	74	-13.69	Vertical
17355.07	62.80	11.93	17.66	34.46	57.93	74	-16.07	Vertical
11570.28	64.46	9.4	14.62	32.65	55.83	74	-18.17	Horizontal
17355.18	67.69	8.5	17.66	34.46	59.39	74	-14.61	Horizontal

## 802.11ac(VHT20) 5825MHz

Frequency (MHz)	Read Level (dBuV)	Antenna Factor (dB/m)	Cable Loss (dB)	Preamp Factor (dB)	Level (dBuV/m)	Limit Line (dBuV/m)	Over Limit (dB)	polarization
11650.61	67.16	11.25	14.62	32.65	60.38	74	-13.62	Vertical
17475.94	62.83	11.93	17.66	34.46	57.96	74	-16.04	Vertical
11650.28	64.74	9.4	14.62	32.65	56.11	74	-17.89	Horizontal
17475.23	68.19	8.5	17.66	34.46	59.89	74	-14.11	Horizontal

## 802.11n(HT40) 5755MHz

Frequency (MHz)	Read Level (dBuV)	Antenna Factor (dB/m)	Cable Loss (dB)	Preamp Factor (dB)	Level (dBuV/m)	Limit Line (dBuV/m)	Over Limit (dB)	polarization
11510.13	67.32	11.25	14.62	32.65	60.54	74	-13.46	Vertical
17265.53	63.59	11.93	17.66	34.46	58.72	74	-15.28	Vertical
11510.23	64.74	9.4	14.62	32.65	56.11	74	-17.89	Horizontal
17265.34	67.66	8.5	17.66	34.46	59.36	74	-14.64	Horizontal

## 802.11n(HT40) 5795MHz

Frequency (MHz)	Read Level (dBuV)	Antenna Factor (dB/m)	Cable Loss (dB)	Preamp Factor (dB)	Level (dBuV/m)	Limit Line (dBuV/m)	Over Limit (dB)	polarization
11590.43	67.82	11.25	14.62	32.65	61.04	74	-12.96	Vertical
17385.73	63.15	11.93	17.66	34.46	58.28	74	-15.72	Vertical
11590.58	64.55	9.4	14.62	32.65	55.92	74	-18.08	Horizontal
17385.42	68.49	8.5	17.66	34.46	60.19	74	-13.81	Horizontal

## 802.11ac(VHT40) 5755MHz

Frequency (MHz)	Read Level (dBuV)	Antenna Factor (dB/m)	Cable Loss (dB)	Preamp Factor (dB)	Level (dBuV/m)	Limit Line (dBuV/m)	Over Limit (dB)	polarization
11510.08	67.20	11.25	14.62	32.65	60.42	74	-13.58	Vertical
17265.19	63.04	11.93	17.66	34.46	58.17	74	-15.83	Vertical
11510.05	64.46	9.4	14.62	32.65	55.83	74	-18.17	Horizontal
17265.31	67.70	8.5	17.66	34.46	59.40	74	-14.60	Horizontal

## 802.11ac(VHT40) 5795MHz

Frequency (MHz)	Read Level (dBuV)	Antenna Factor (dB/m)	Cable Loss (dB)	Preamp Factor (dB)	Level (dBuV/m)	Limit Line (dBuV/m)	Over Limit (dB)	polarization
11590.43	67.82	11.25	14.62	32.65	61.04	74	-12.96	Vertical
17385.73	63.15	11.93	17.66	34.46	58.28	74	-15.72	Vertical
11590.58	64.55	9.4	14.62	32.65	55.92	74	-18.08	Horizontal
17385.42	68.49	8.5	17.66	34.46	60.19	74	-13.81	Horizontal

## 802.11ac(VHT80) 5775MHz

Frequency (MHz)	Read Level (dBuV)	Antenna Factor (dB/m)	Cable Loss (dB)	Preamp Factor (dB)	Level (dBuV/m)	Limit Line (dBuV/m)	Over Limit (dB)	polarization
11550.67	67.55	11.25	14.62	32.65	60.77	74	-13.23	Vertical
17325.58	63.04	11.93	17.66	34.46	58.17	74	-15.83	Vertical
11550.19	64.78	9.4	14.62	32.65	56.15	74	-17.85	Horizontal
17325.62	68.53	8.5	17.66	34.46	60.23	74	-13.77	Horizontal



**Note:**

1. Level = Read Level + Antenna Factor+ Cable loss- Preamp Factor.
2. The test trace is same as the ambient noise (the test frequency range: 18GHz~40GHz), therefore no data appear in the report.
3. This limit applies for using average detector, if the test result on peak is lower than average limit, then average measurement needn't be performed.
4. Except for mode a, other modes test the MIMO status.
5. Mode a represents the worst data of antenna 1.

## 4.8 Frequency stability

Test limit	Manufacturers of U-NII devices are responsible for ensuring frequency stability such that an emission is maintained within the band of operation under all conditions of normal operation as specified in the user's manual.
Test results:	Pass

**Measurement Data:**

Mode	Voltage (V)	FHL (5180MHz)	Deviation (KHz)	FHH (5240MHz)	Deviation (KHz)
Band 1 (5150-5250 MHz)	DC 16.32V	5179.987	13	5239.987	13
	DC 19.2V	5179.989	11	5239.989	11
	DC 22.08V	5179.992	8	5239.988	12

Mode	Temperature (°C)	FHL (5180MHz)	Deviation (KHz)	FHH (5240MHz)	Deviation (KHz)
Band 1 (5150-5250 MHz)	-20°C	5179.989	11	5239.992	8
	-10°C	5179.987	13	5239.988	12
	-5°C	5179.987	13	5239.990	10
	0°C	5179.988	12	5239.991	9
	+10°C	5179.988	12	5239.988	12
	+20°C	5179.992	8	5239.990	10
	+30°C	5179.988	12	5239.987	13
	+40°C	5179.990	10	5239.989	11
	+50°C	5179.992	8	5239.991	9

Mode	Voltage (V)	FHL (5180MHz)	Deviation (KHz)	FHH (5240MHz)	Deviation (KHz)
Band 4 (5725-5850 MHz)	DC 16.32V	5744.990	10	5824.992	8
	DC 19.2V	5744.987	13	5824.989	11
	DC 22.08V	5744.992	8	5824.988	12

Mode	Temperature (°C)	FHL (5180MHz)	Deviation (KHz)	FHH (5240MHz)	Deviation (KHz)
Band 4 (5725-5850 MHz)	-20°C	5744.988	12	5824.989	11
	-10°C	5744.991	9	5824.991	9
	-5°C	5744.991	9	5824.987	13
	0°C	5744.986	14	5824.987	13
	+10°C	5744.991	9	5824.988	12
	+20°C	5744.990	10	5824.989	11
	+30°C	5744.986	14	5824.988	12
	+40°C	5744.986	14	5824.991	9
	+50°C	5744.986	14	5239.991	9

-----END OF REPORT-----