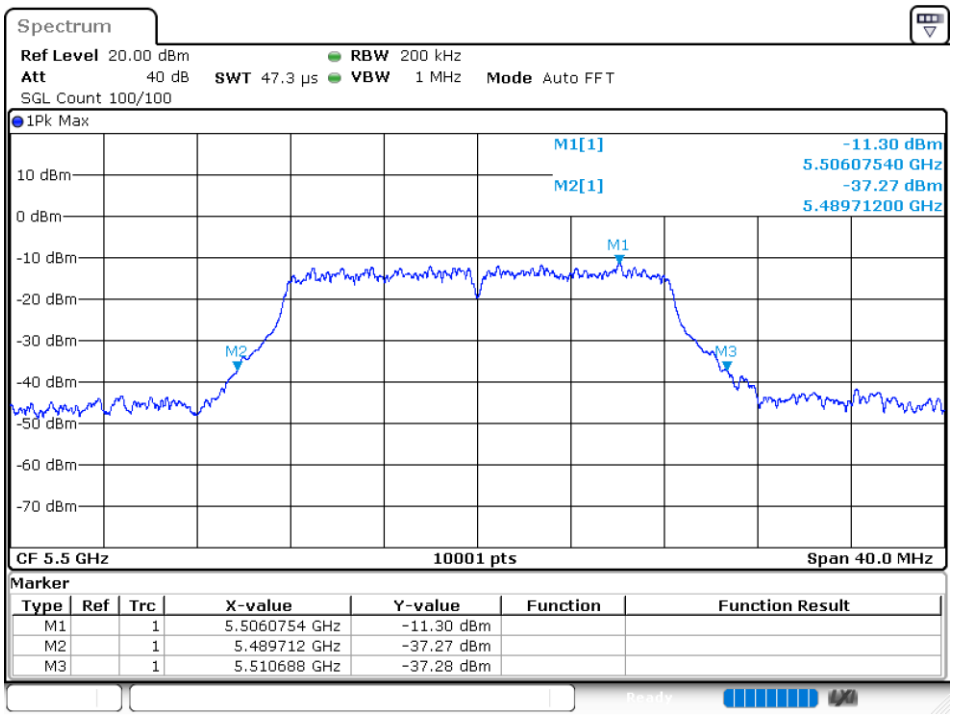
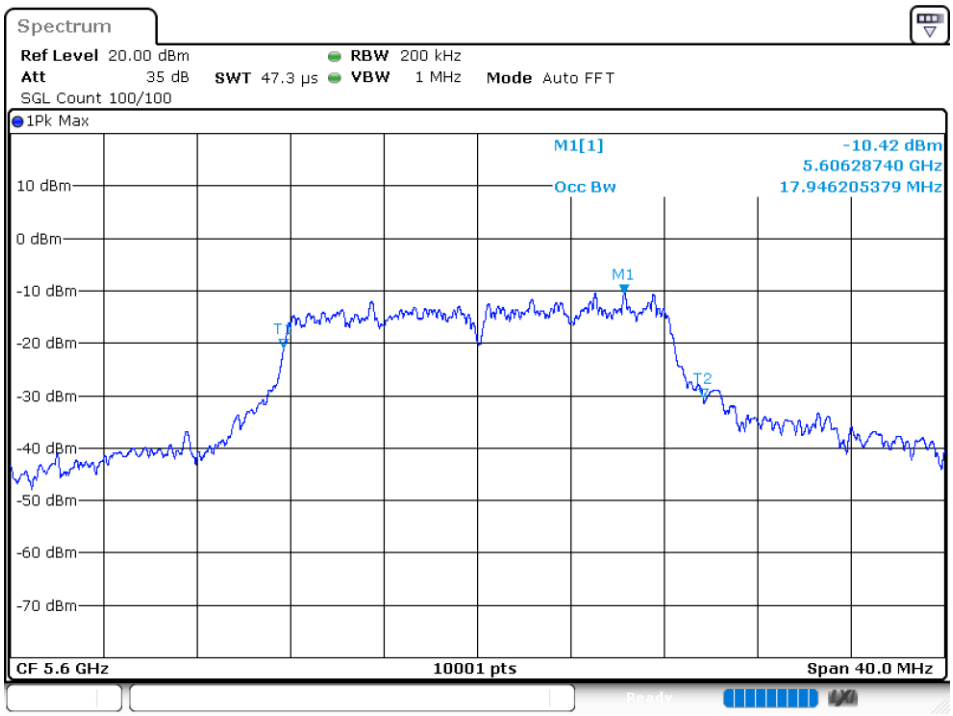
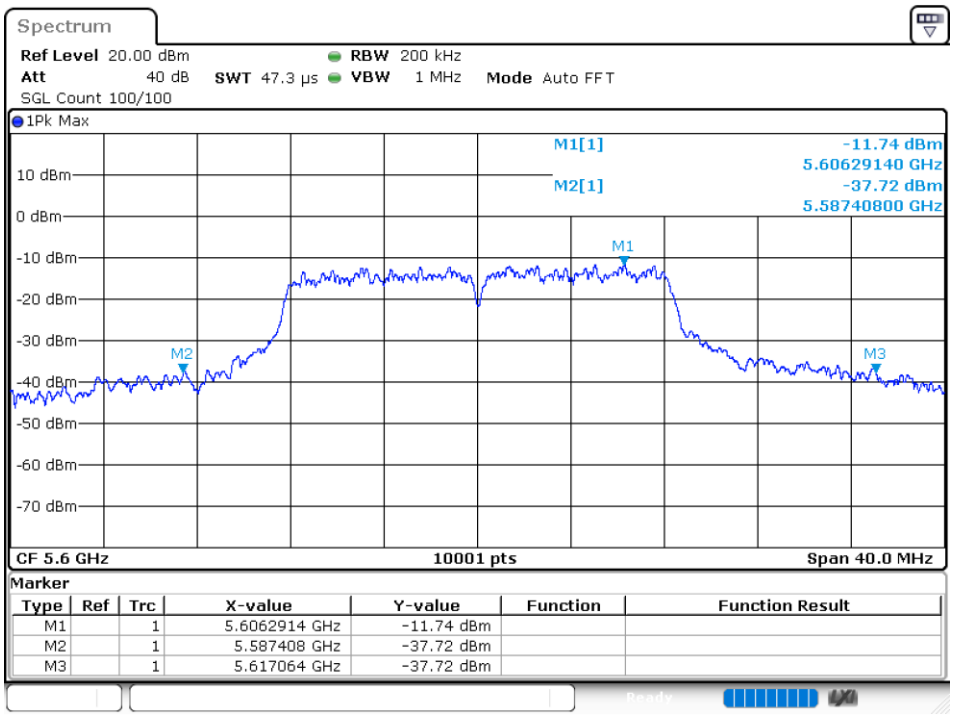


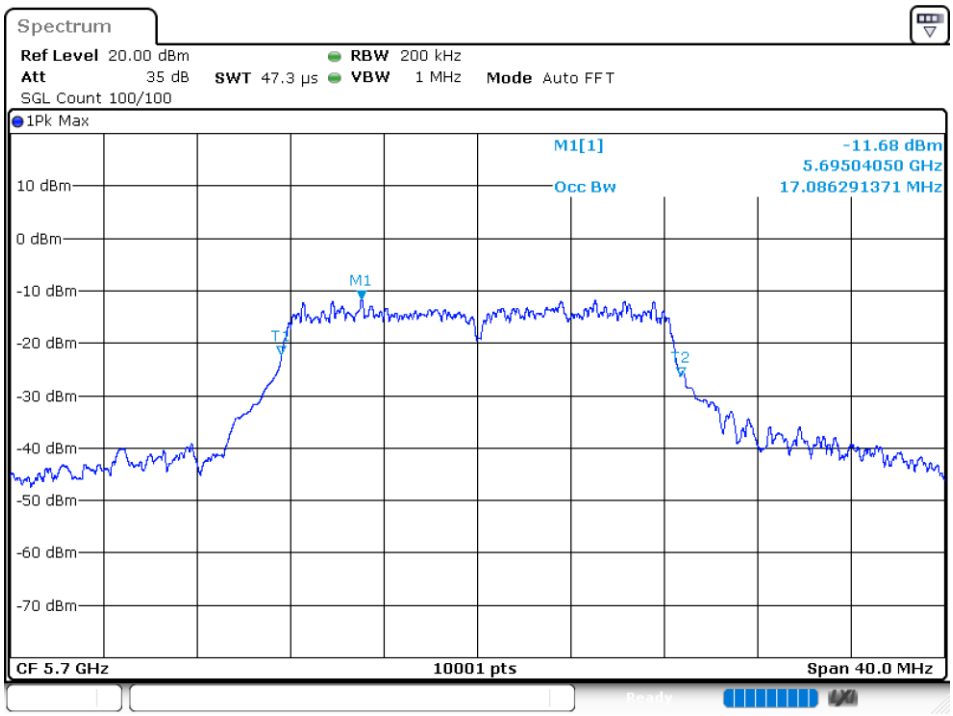
OBW NVNT 802.11a 5600MHz Ant1



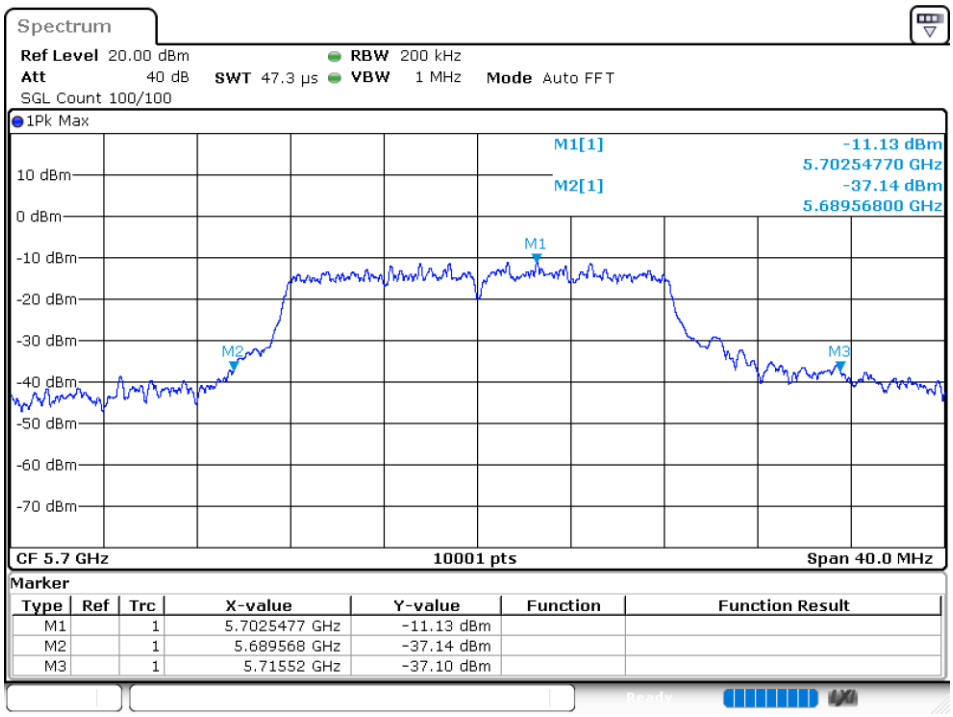
-26 dB BW NVNT 802.11a 5600MHz Ant1



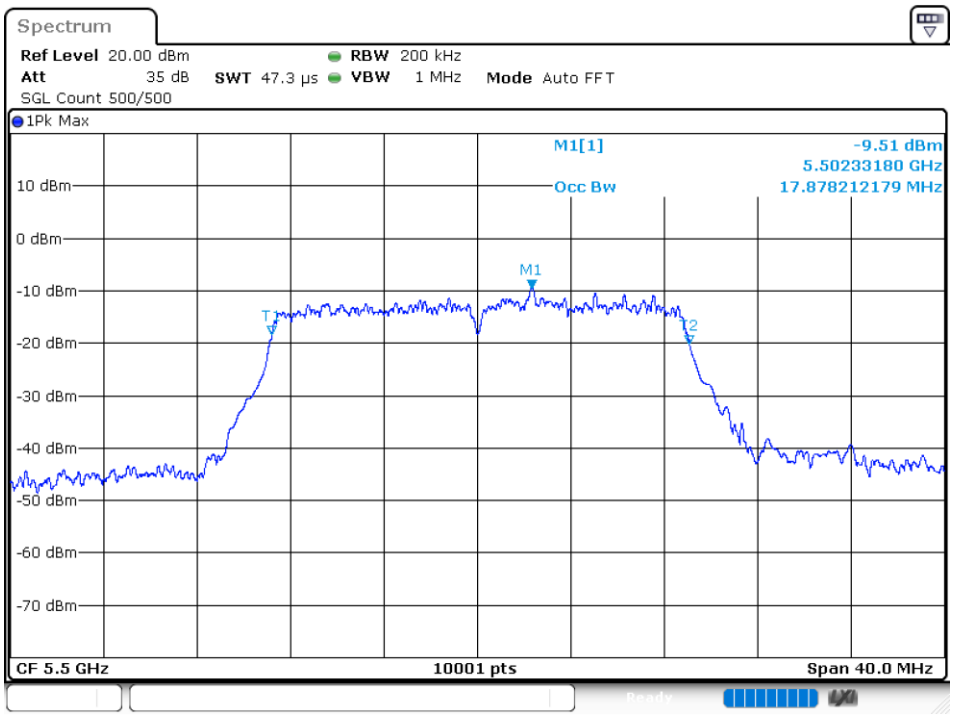
OBW NVNT 802.11a 5700MHz Ant1



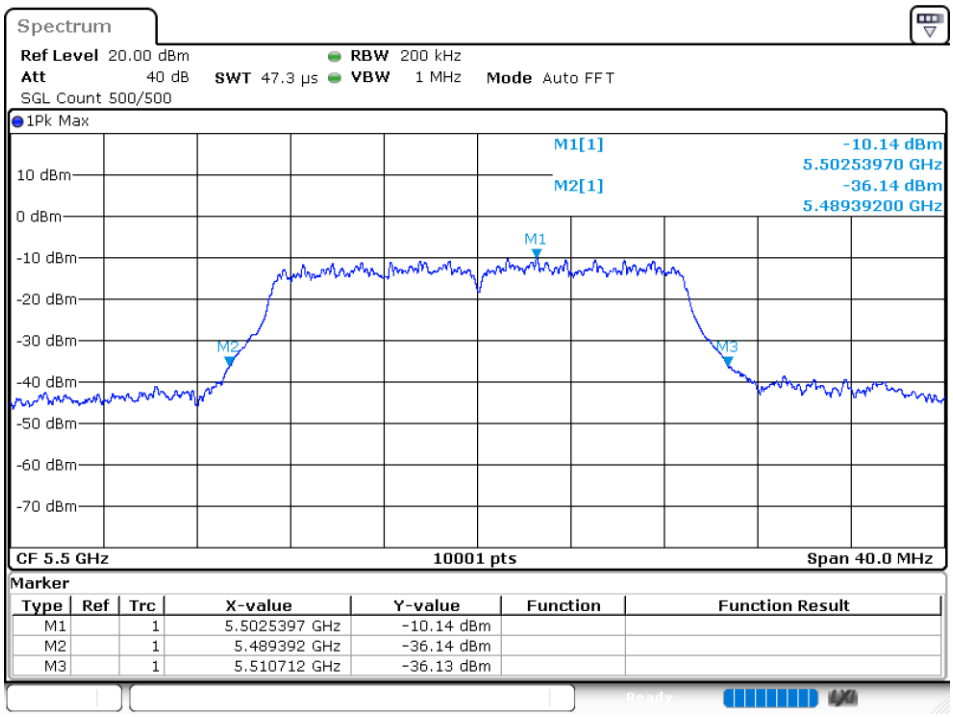
-26 dB BW NVNT 802.11a 5700MHz Ant1



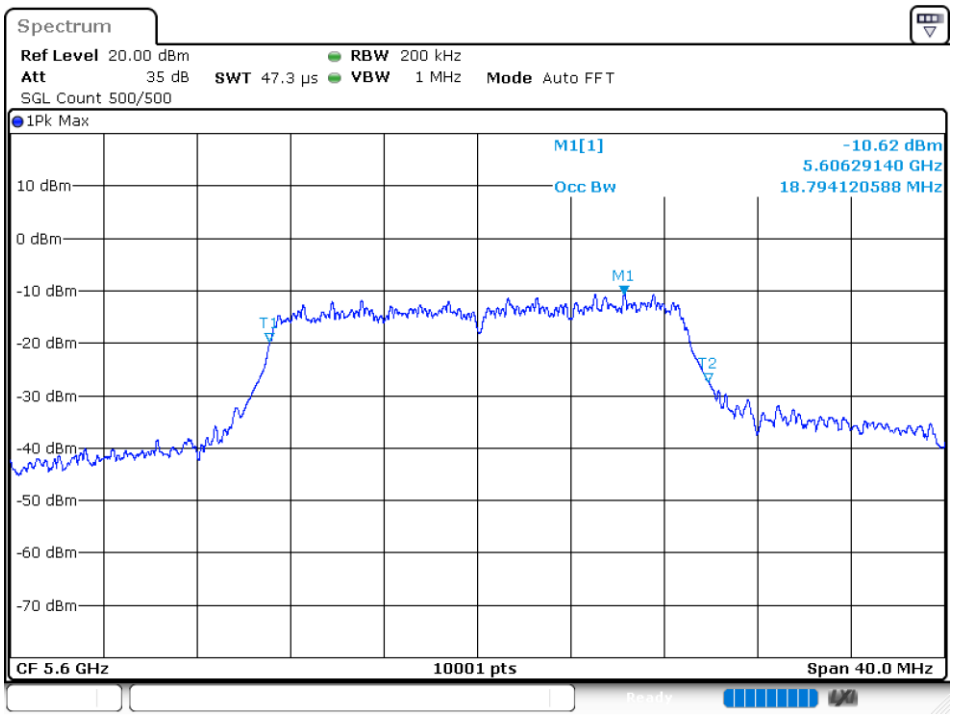
OBW NVNT 802.11n(HT20) 5500MHz Ant1



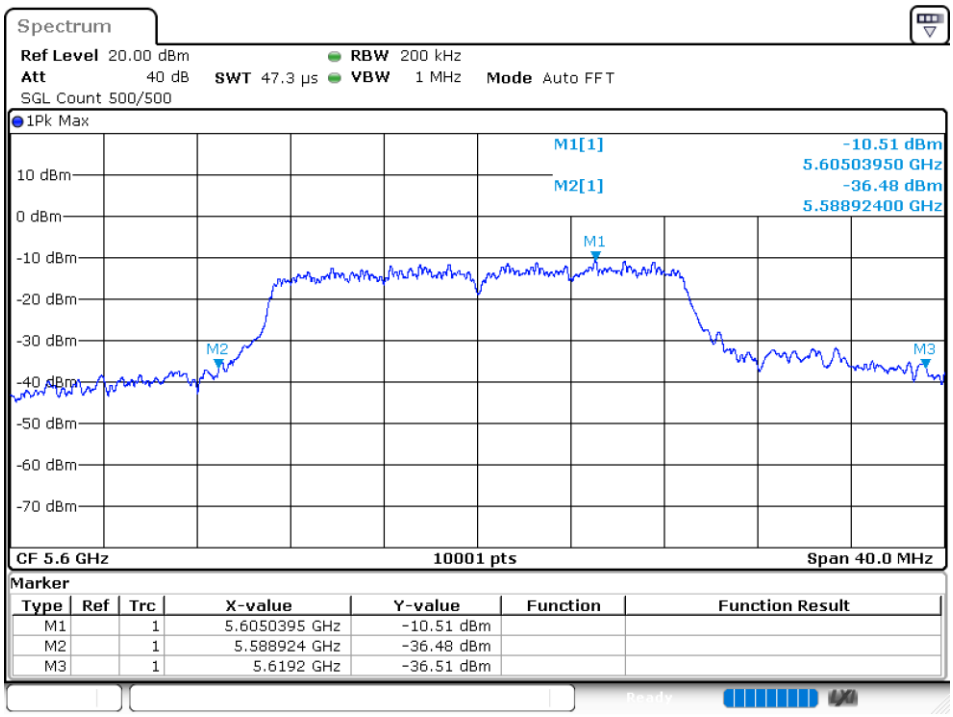
-26 dB BW NVNT 802.11n(HT20) 5500MHz Ant1



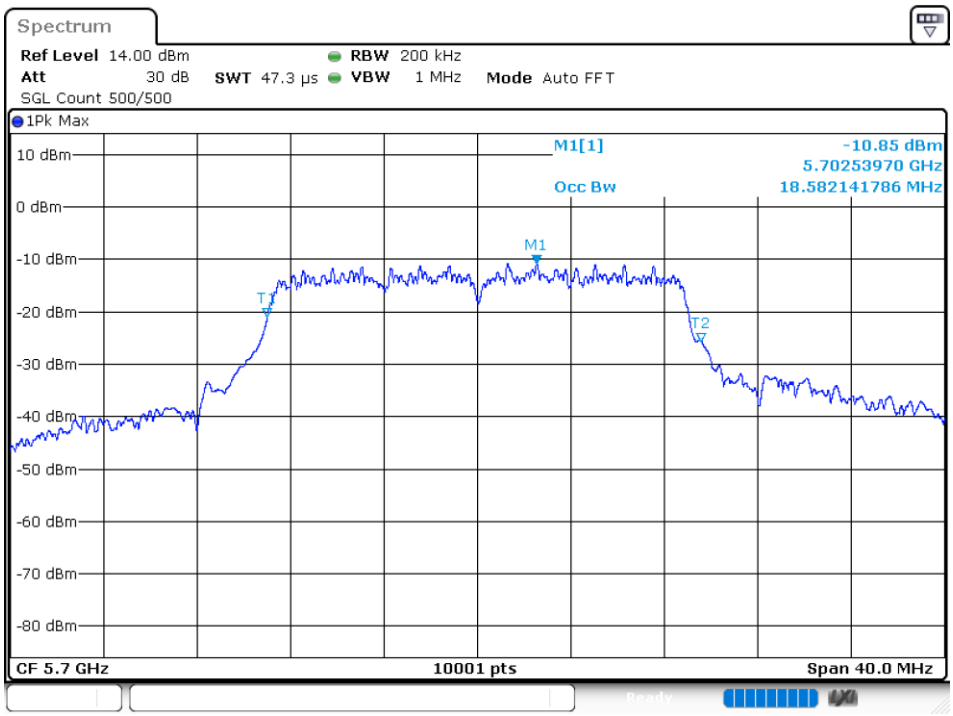
OBW NVNT 802.11n(HT20) 5600MHz Ant1



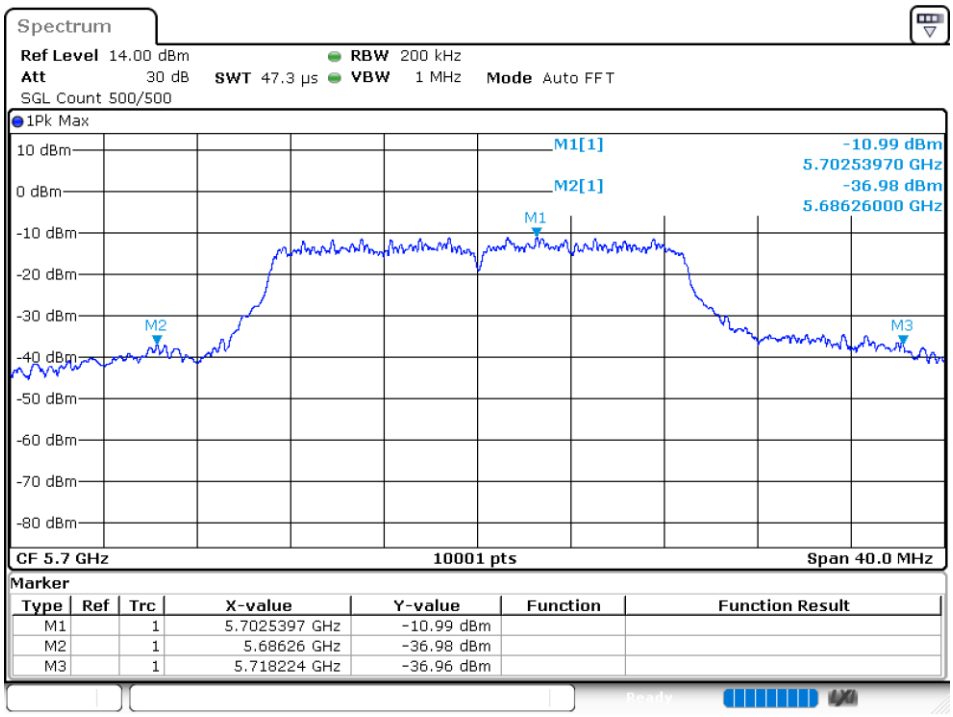
-26 dB BW NVNT 802.11n(HT20) 5600MHz Ant1



OBW NVNT 802.11n(HT20) 5700MHz Ant1



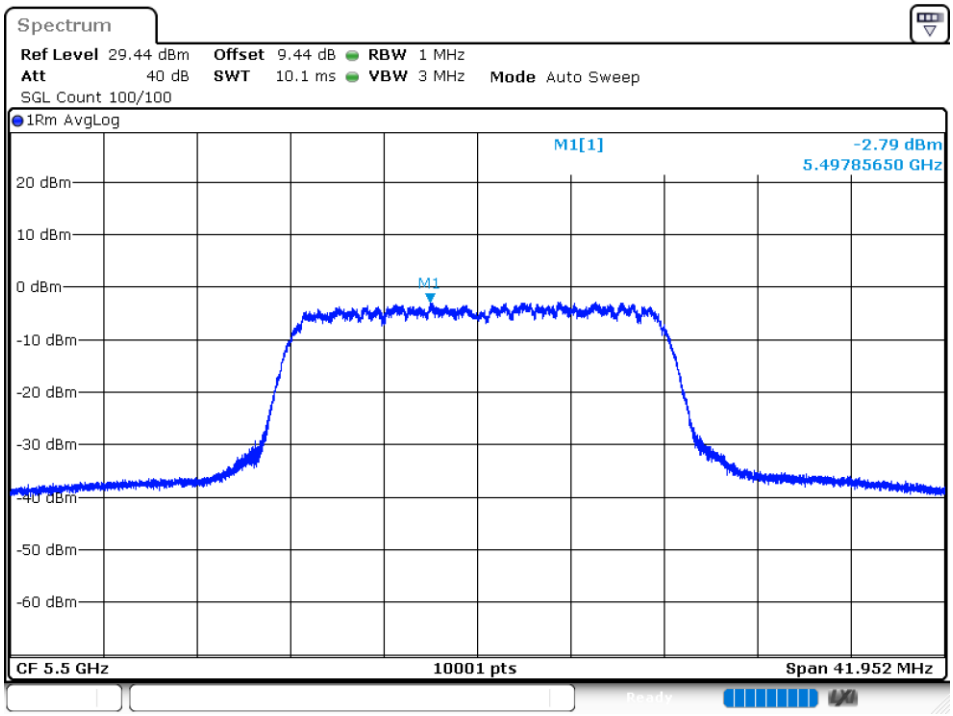
-26 dB BW NVNT 802.11n(HT20) 5700MHz Ant1


Spectrum
Ref Level 14.00 dBm
RBW 200 kHz
Att 30 dB
SWT 47.3 µs
VBW 1 MHz
Mode Auto FFT
SGL Count 500/500
1Pk Max
M1[1] -10.99 dBm 5.70253970 GHz
M2[1] -36.98 dBm 5.68626000 GHz
10 dBm
0 dBm
-10 dBm
-20 dBm
-30 dBm
-40 dBm
-50 dBm
-60 dBm
-70 dBm
-80 dBm
M1
M2
M3
CF 5.7 GHz
10001 pts
Span 40.0 MHz
Marker
Type Ref Trc X-value Y-value Function Function Result
M1 1 5.7025397 GHz -10.99 dBm
M2 1 5.68626 GHz -36.98 dBm
M3 1 5.718224 GHz -36.96 dBm

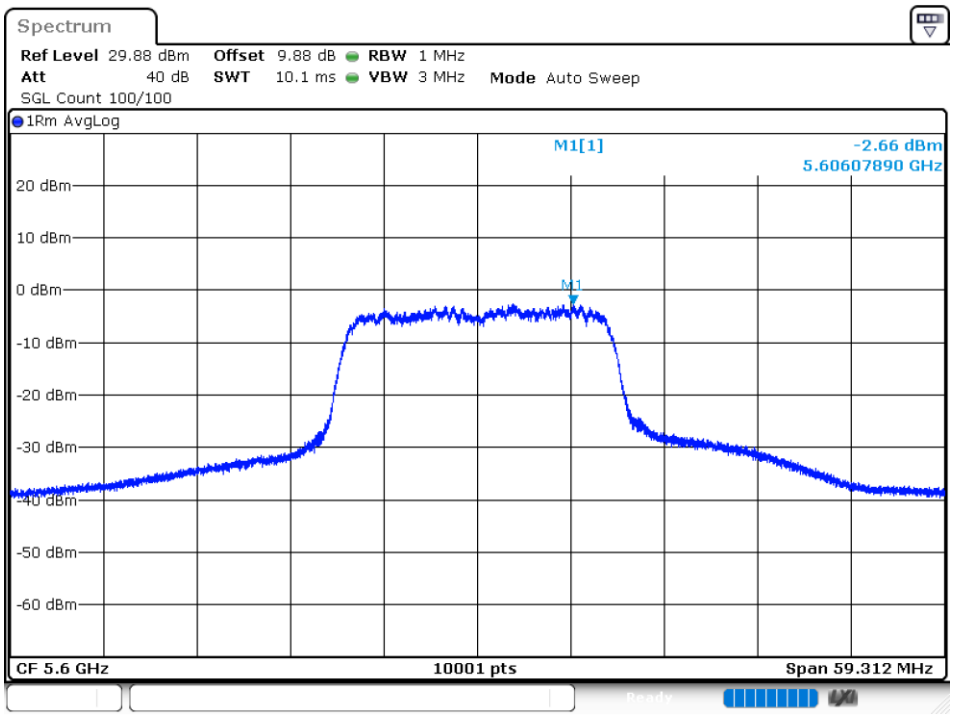
Maximum Power Spectral Density Level

Condition	Mode	Frequency (MHz)	Antenna	Max PSD (dBm)	Duty Factor (dB)	Total PSD (dBm)	Limit (dBm)	Verdict
NVNT	802.11a	5500	Ant 1	-2.788	1.35	-1.438	11	Pass
NVNT	802.11a	5600	Ant 1	-2.661	1.35	-1.311	11	Pass
NVNT	802.11a	5700	Ant 1	-2.856	1.35	-1.506	11	Pass
NVNT	802.11n(HT20)	5500	Ant 1	-3.641	1.35	-2.291	11	Pass
NVNT	802.11n(HT20)	5600	Ant 1	-3.707	1.35	-2.357	11	Pass
NVNT	802.11n(HT20)	5700	Ant 1	-4.034	1.35	-2.684	11	Pass

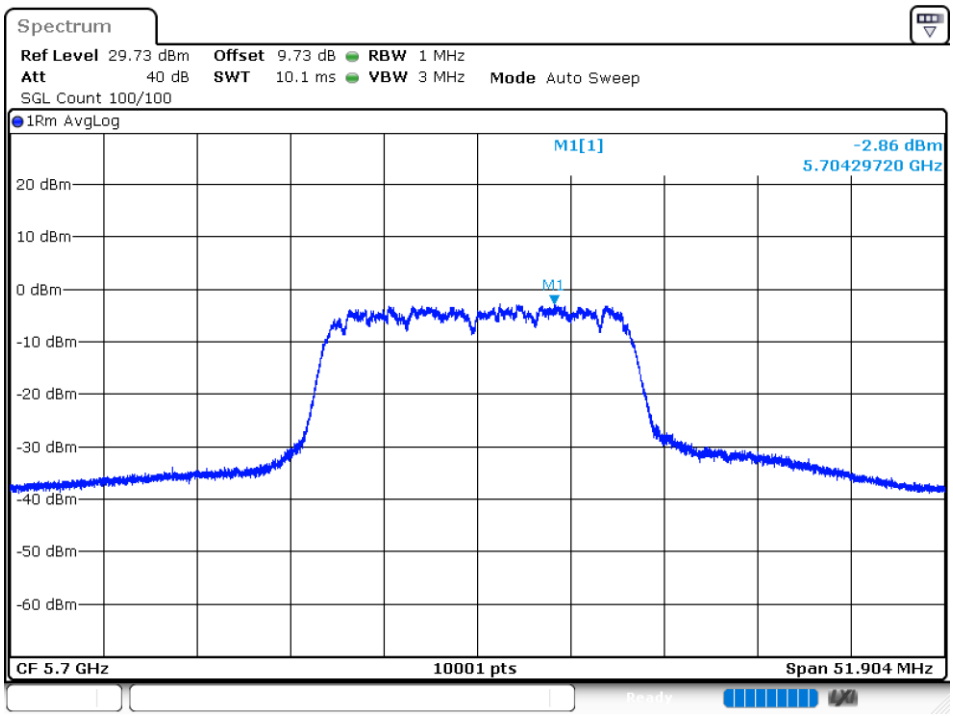
PSD NVNT 802.11a 5500MHz Ant1



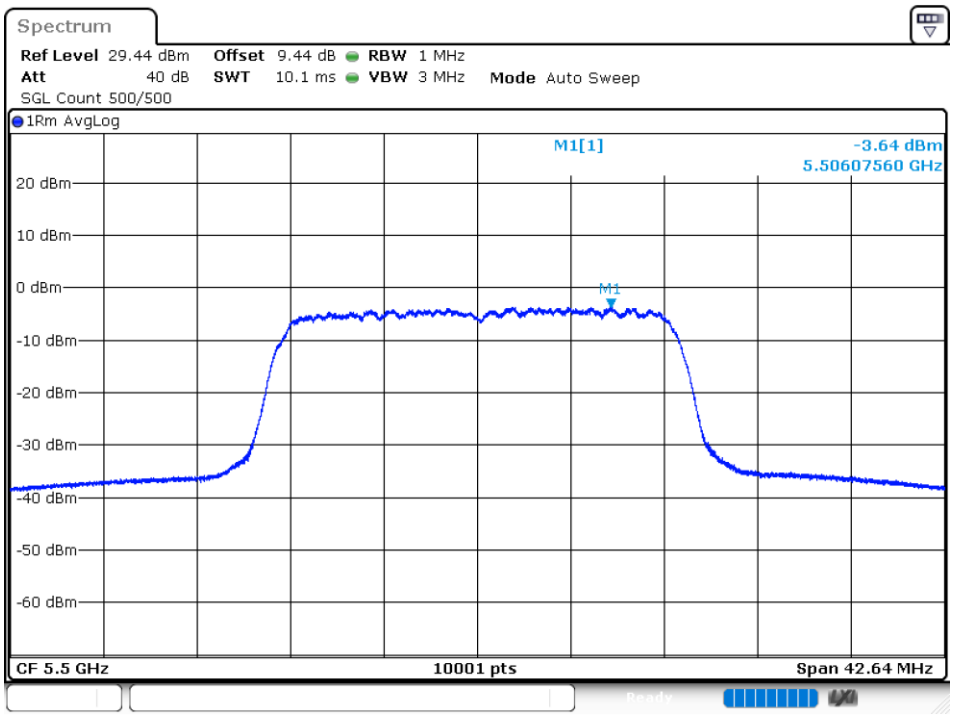
PSD NVNT 802.11a 5600MHz Ant1



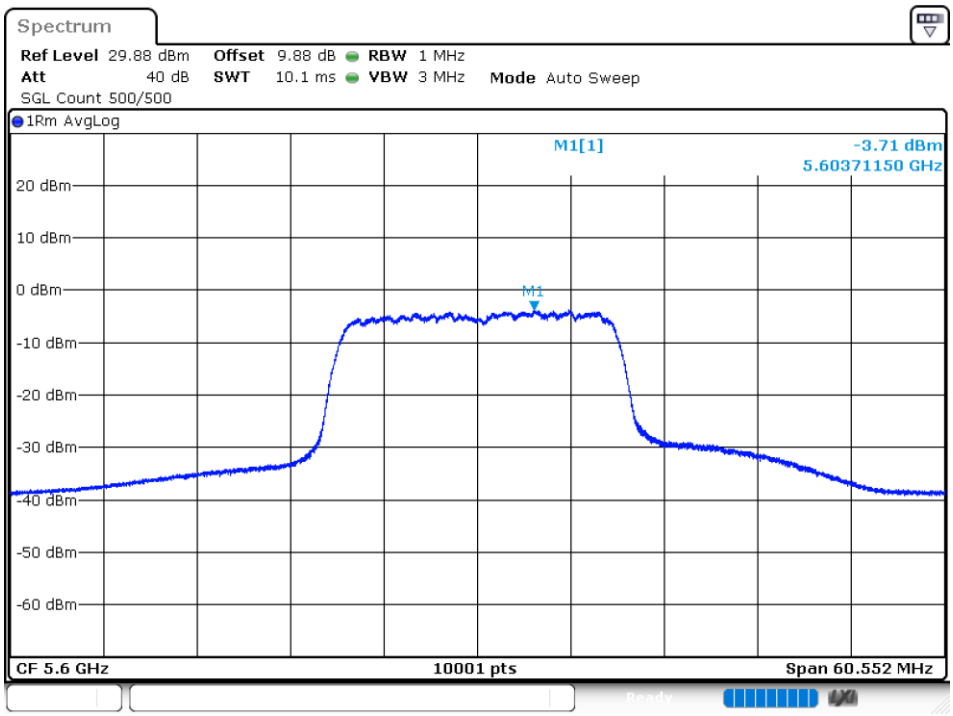
PSD NVNT 802.11a 5700MHz Ant1



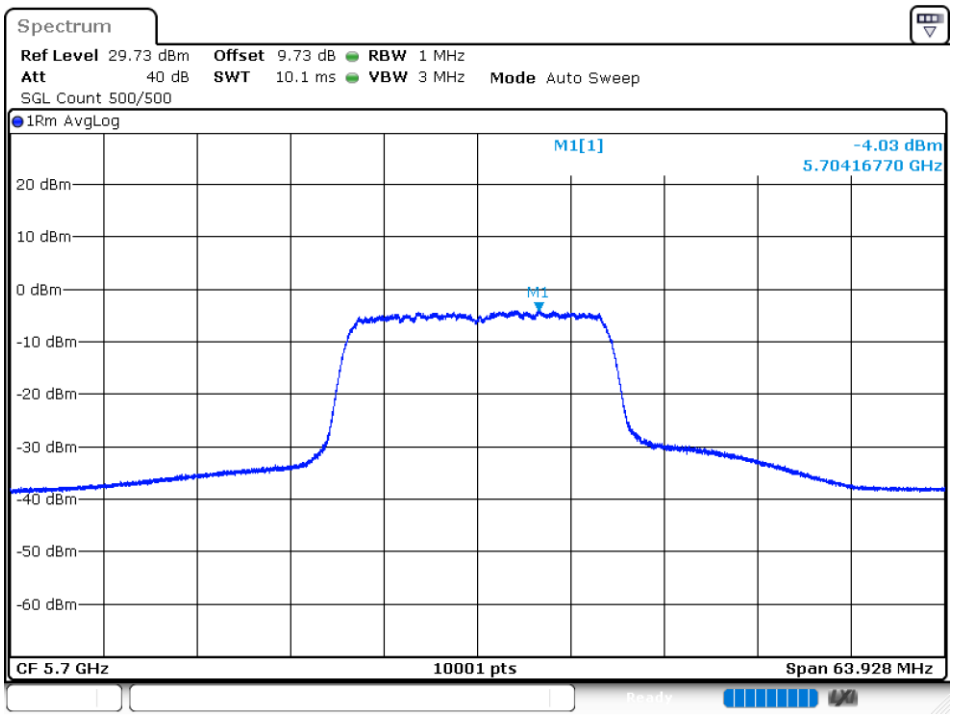
PSD NVNT 802.11n(HT20) 5500MHz Ant1



PSD NVNT 802.11n(HT20) 5600MHz Ant1



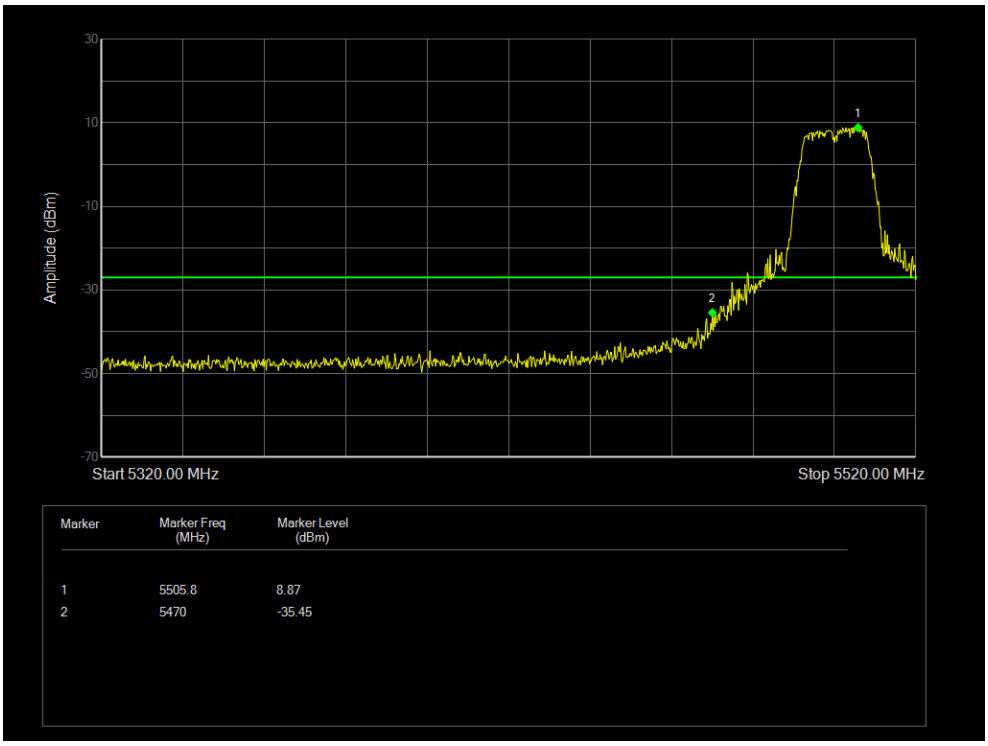
PSD NVNT 802.11n(HT20) 5700MHz Ant1


Spectrum
Ref Level 29.73 dBm Offset 9.73 dB RBW 1 MHz
Att 40 dB SWT 10.1 ms VBW 3 MHz Mode Auto Sweep
SGL Count 500/500
1Rm AvgLog
M1[1] -4.03 dBm
5.70416770 GHz
20 dBm
10 dBm
0 dBm
-10 dBm
-20 dBm
-30 dBm
-40 dBm
-50 dBm
-60 dBm
M1
CF 5.7 GHz
10001 pts
Span 63.928 MHz

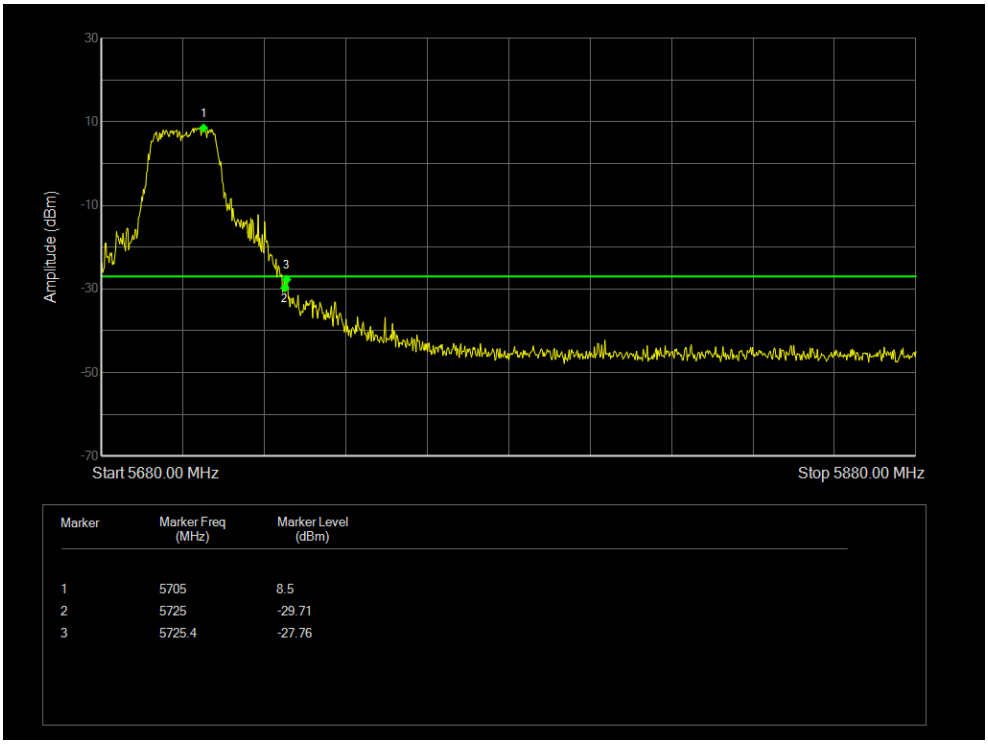
Band Edge

Condition	Mode	Frequency (MHz)	Antenna	Max Value (dBm)	Limit (dBm)	Verdict
NVNT	802.11a	5500	Ant 1	-35.45	-27	Pass
NVNT	802.11a	5700	Ant 1	-27.76	-27	Pass
NVNT	802.11n(HT20)	5500	Ant 1	-34.19	-27	Pass
NVNT	802.11n(HT20)	5700	Ant 1	-27.01	-27	Pass

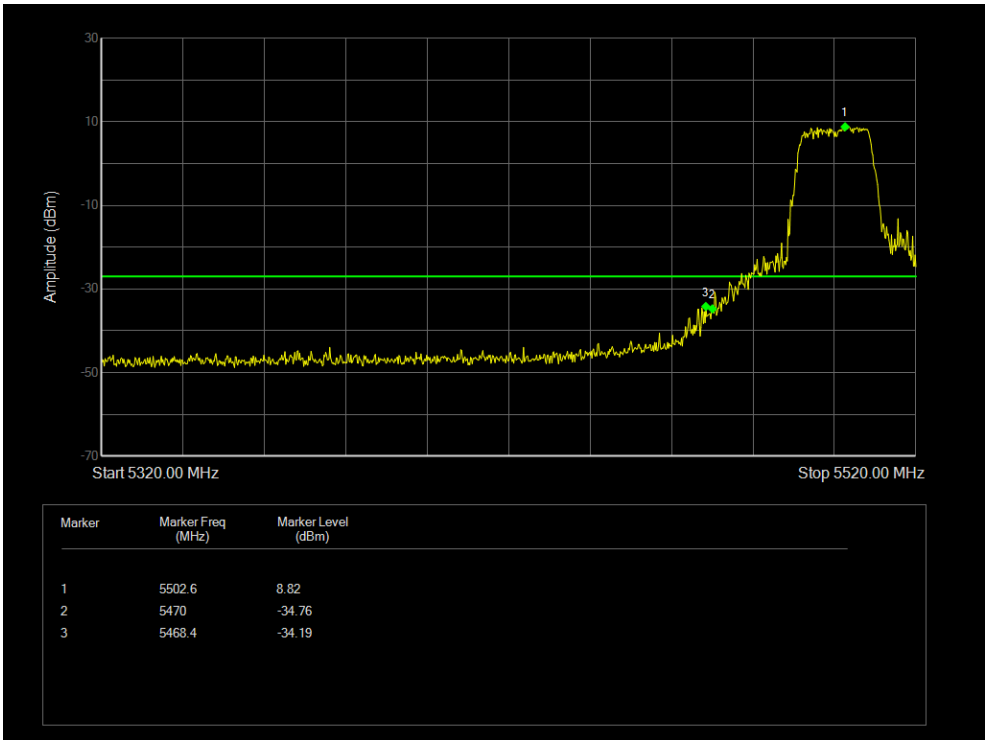
Band Edge NVNT 802.11a 5500MHz Low Ant1



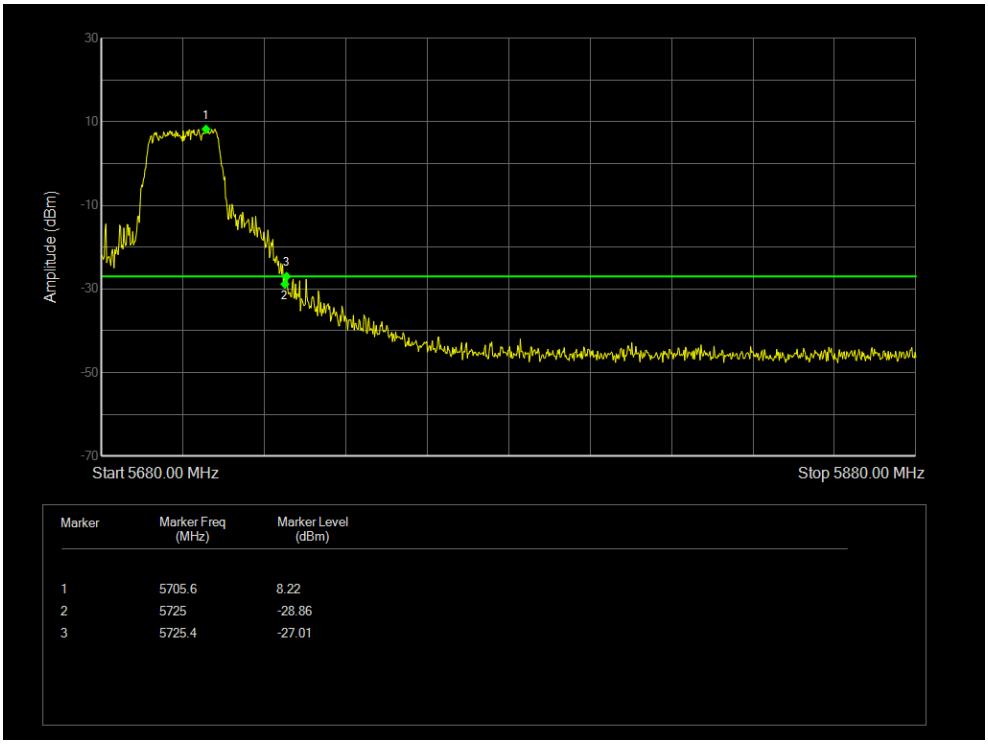
Band Edge NVNT 802.11a 5700MHz High Ant1



Band Edge NVNT 802.11n(HT20) 5500MHz Low Ant1



Band Edge NVNT 802.11n(HT20) 5700MHz High Ant1

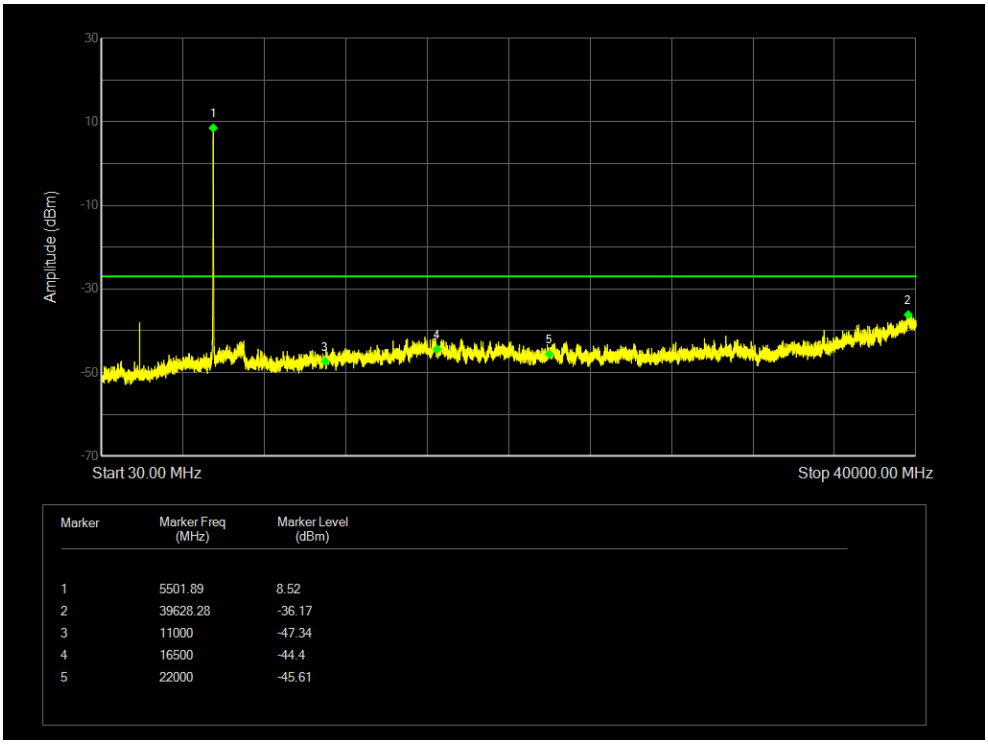


Marker	Marker Freq (MHz)	Marker Level (dBm)
1	5705.6	8.22
2	5725	-28.86
3	5725.4	-27.01

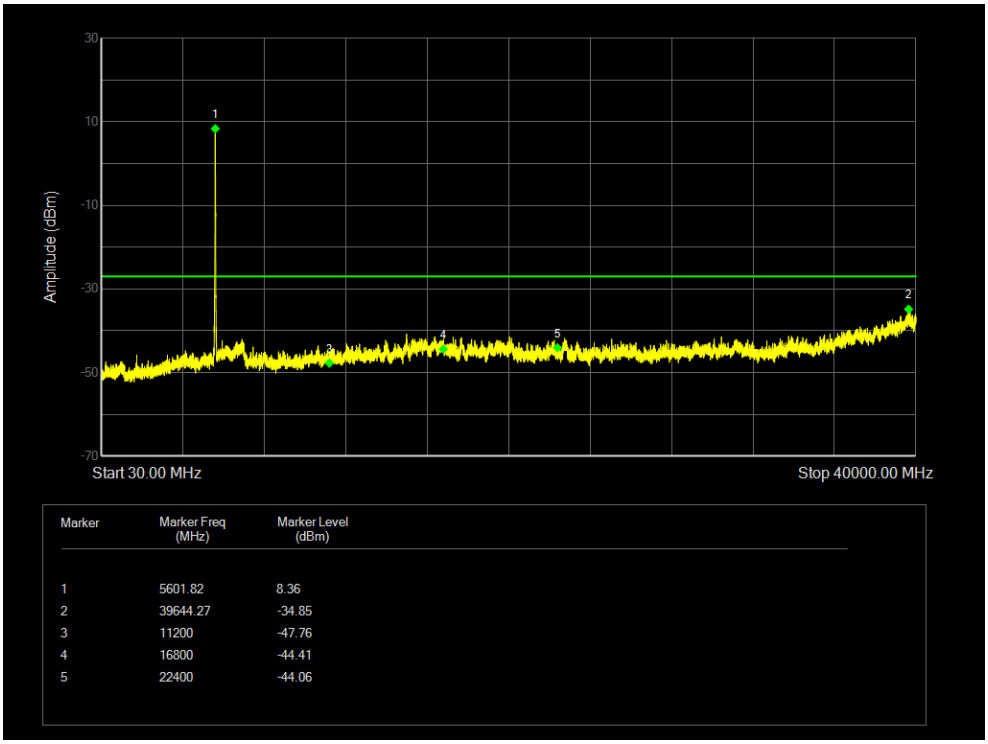
Conducted RF Spurious Emission

Condition	Mode	Frequency (MHz)	Antenna	Max Value (dBc)	Limit (dBc)	Verdict
NVNT	802.11a	5500	Ant 1	-36.17	-27	Pass
NVNT	802.11a	5600	Ant 1	-34.85	-27	Pass
NVNT	802.11a	5700	Ant 1	-35.67	-27	Pass
NVNT	802.11n(HT20)	5500	Ant 1	-36.05	-27	Pass
NVNT	802.11n(HT20)	5600	Ant 1	-35.35	-27	Pass
NVNT	802.11n(HT20)	5700	Ant 1	-35.54	-27	Pass

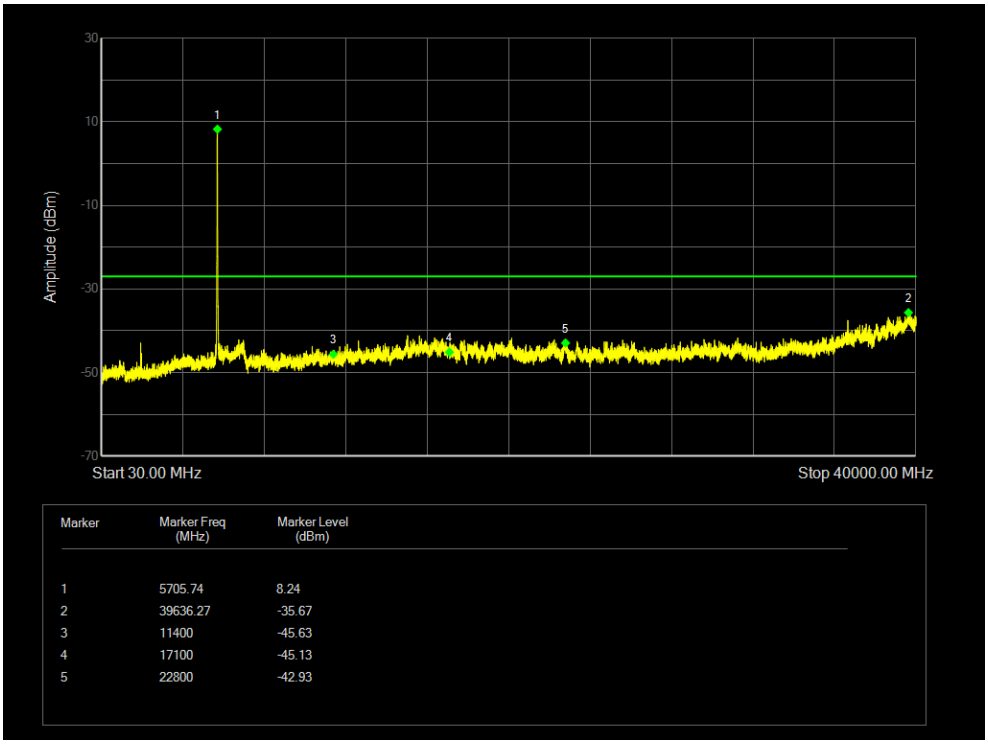
Tx. Spurious NVNT 802.11a 5500MHz Ant1 Emission



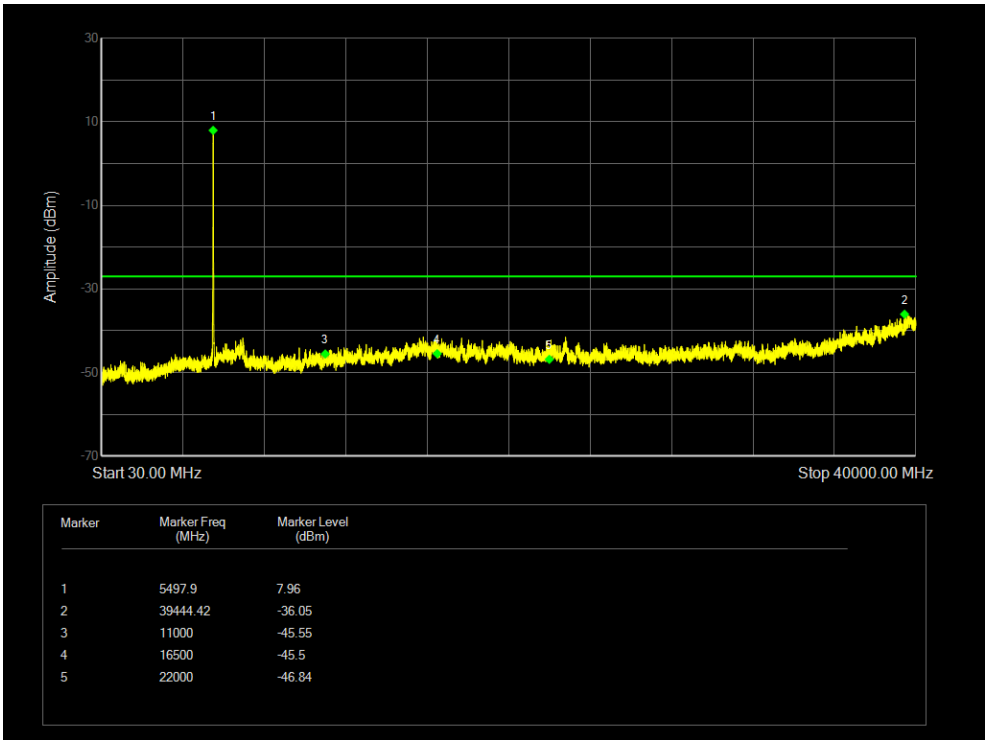
Tx. Spurious NVNT 802.11a 5600MHz Ant1 Emission



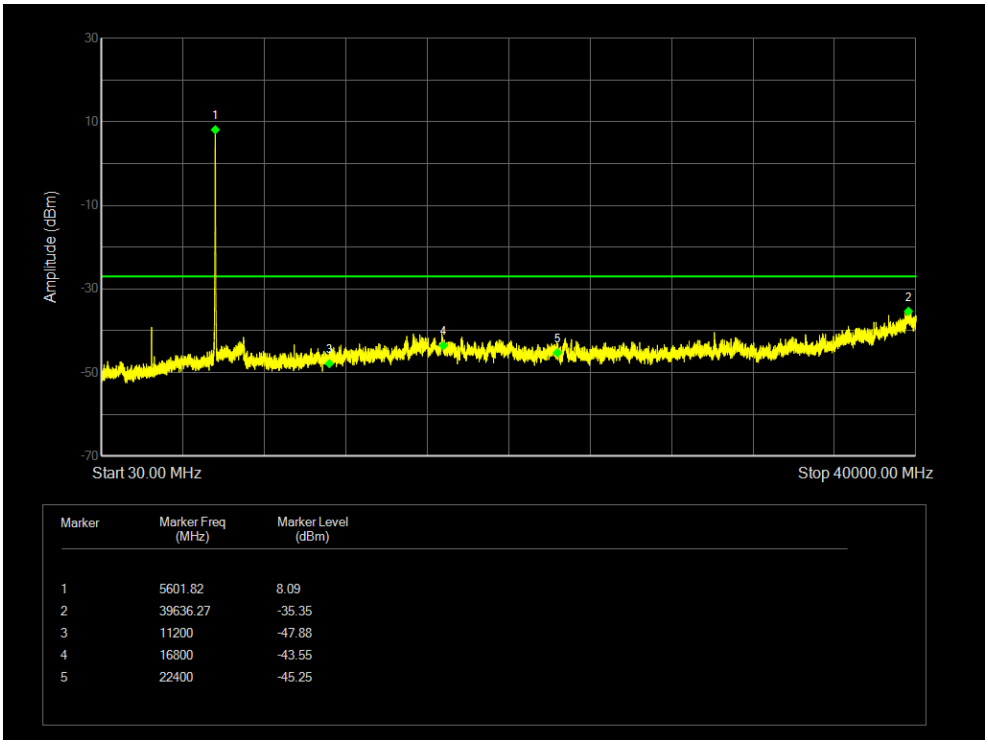
Tx. Spurious NVNT 802.11a 5700MHz Ant1 Emission



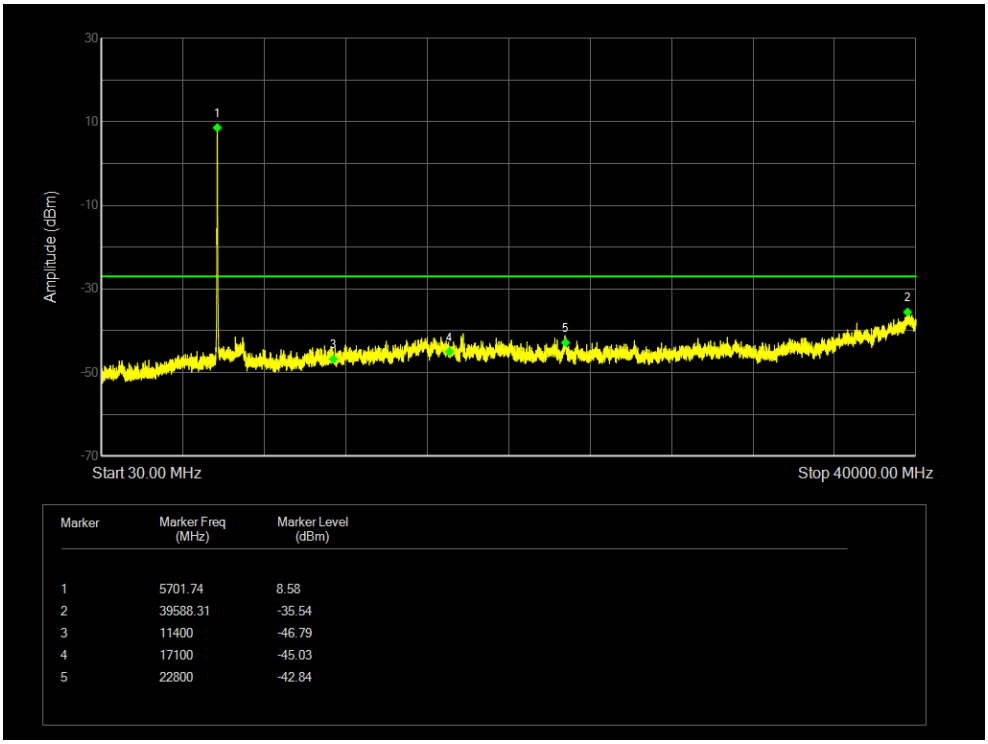
Tx. Spurious NVNT 802.11n(HT20) 5500MHz Ant1 Emission



Tx. Spurious NVNT 802.11n(HT20) 5600MHz Ant1 Emission



Tx. Spurious NVNT 802.11n(HT20) 5700MHz Ant1 Emission



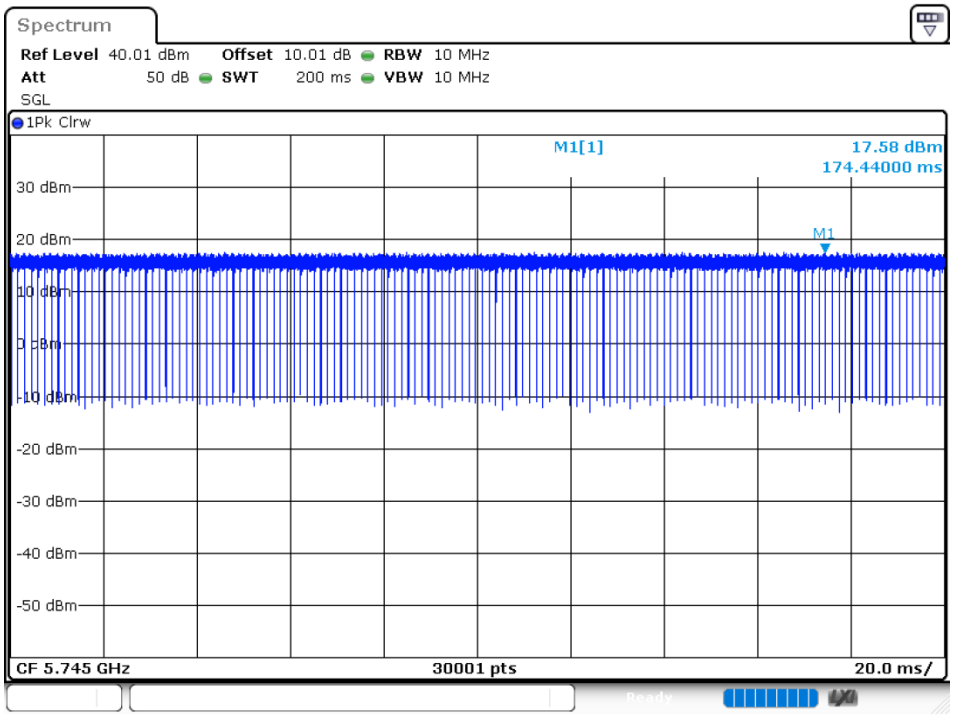
Marker	Marker Freq (MHz)	Marker Level (dBm)
1	5701.74	8.58
2	39588.31	-35.54
3	11400	-46.79
4	17100	-45.03
5	22800	-42.84

5.8G WIFI

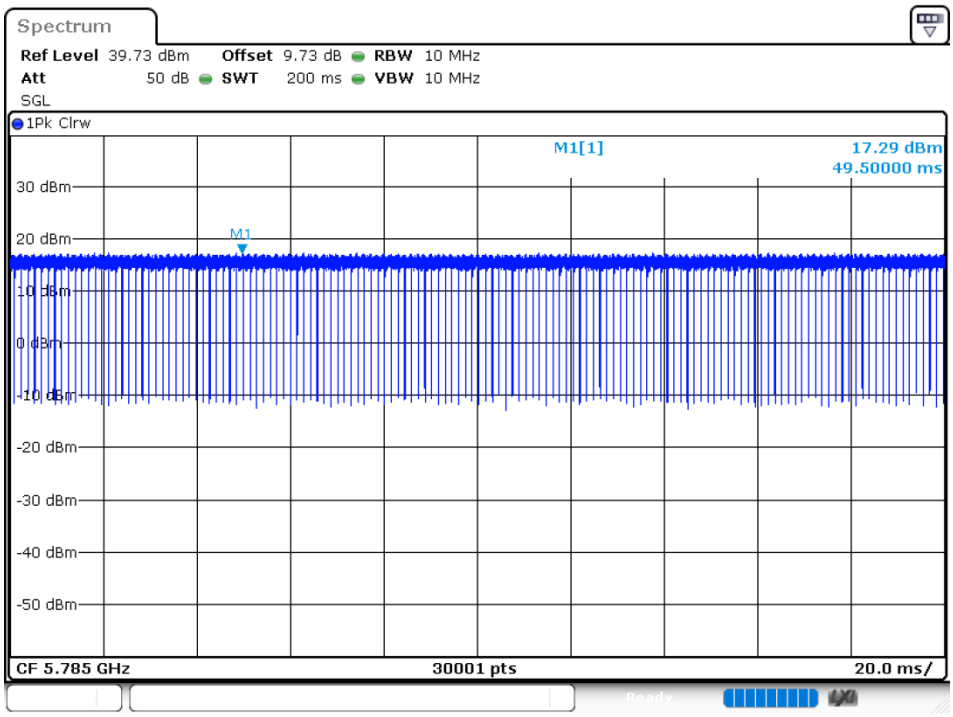
Duty Cycle

Condition	Mode	Frequency (MHz)	Duty Cycle (%)	Correction Factor (dB)
NVNT	802.11a	5745	97.26	0.12
NVNT	802.11a	5785	97.25	0.12
NVNT	802.11a	5825	97.27	0.12
NVNT	802.11n(HT20)	5745	97.07	0.13
NVNT	802.11n(HT20)	5785	97.1	0.13
NVNT	802.11n(HT20)	5825	97.1	0.13

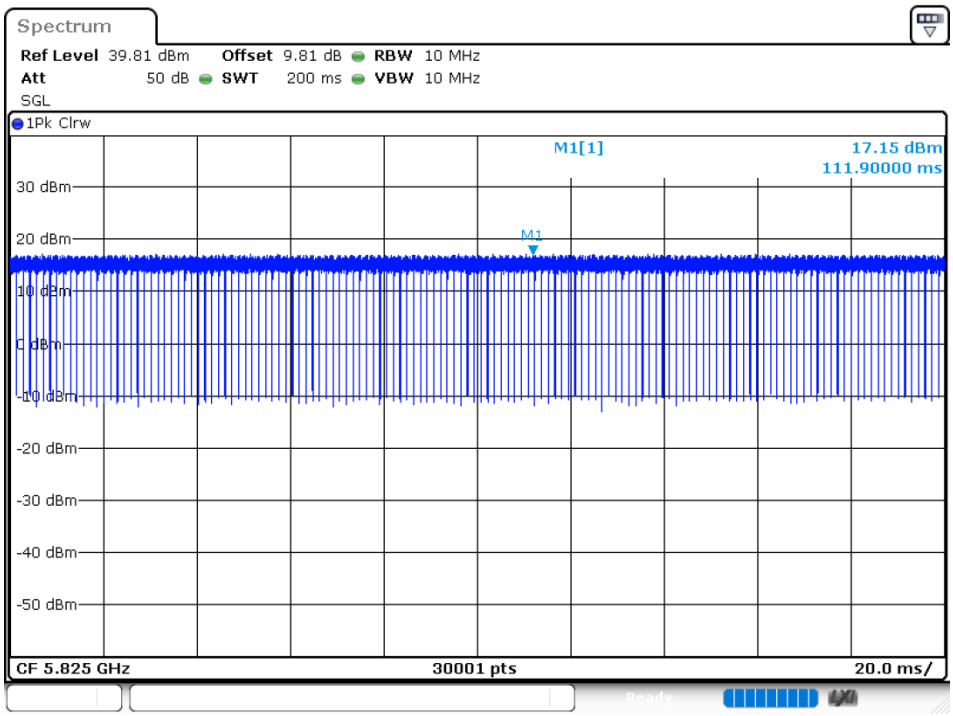
Duty Cycle NVNT 802.11a 5745MHz



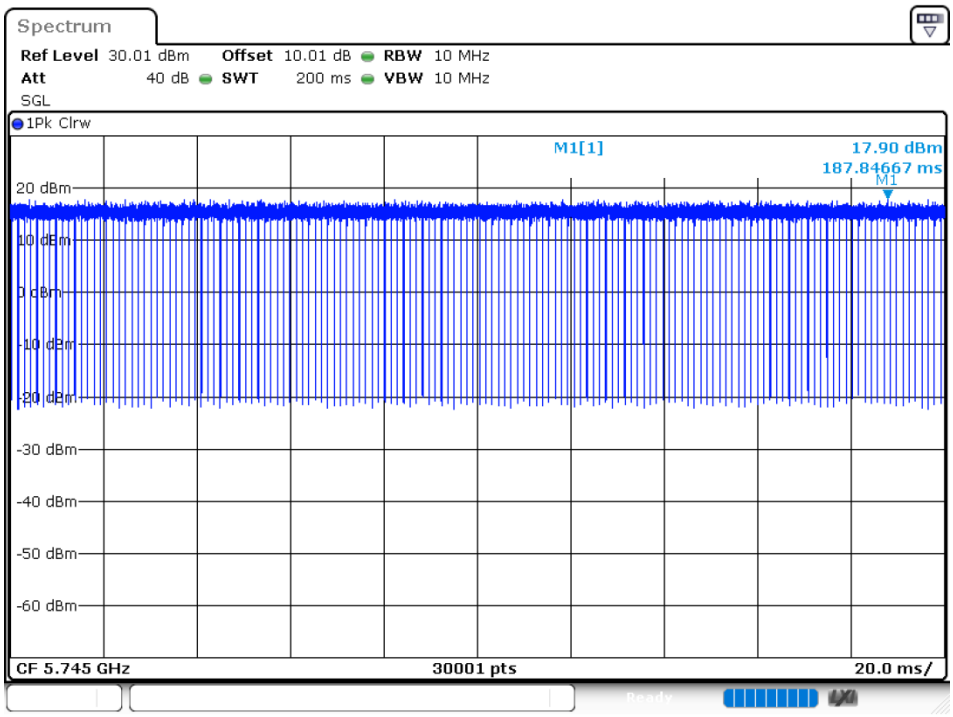
Duty Cycle NVNT 802.11a 5785MHz



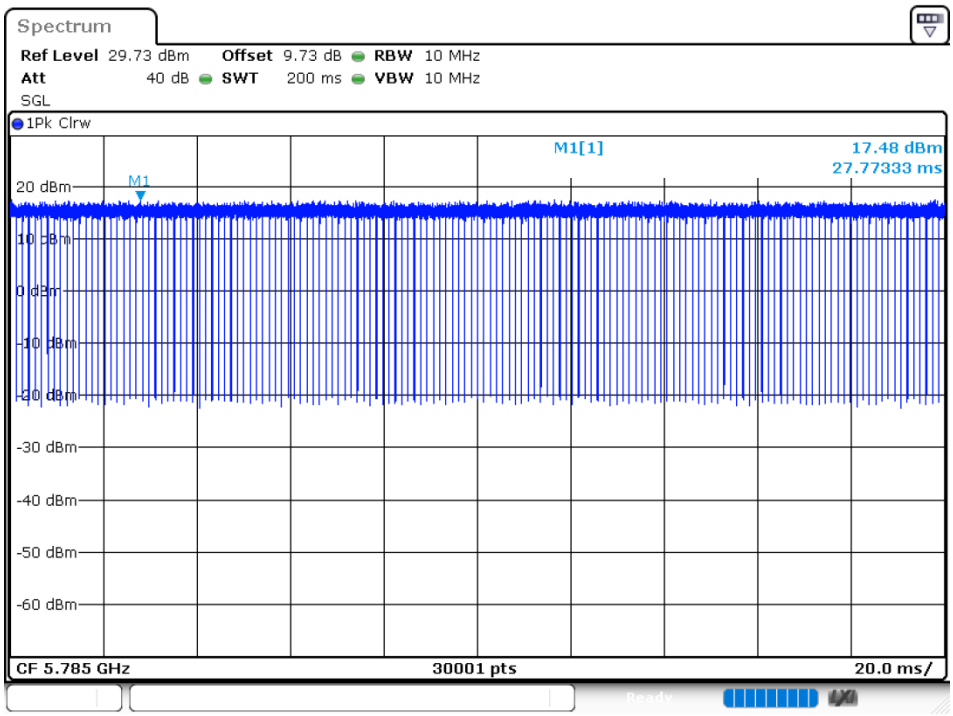
Duty Cycle NVNT 802.11a 5825MHz



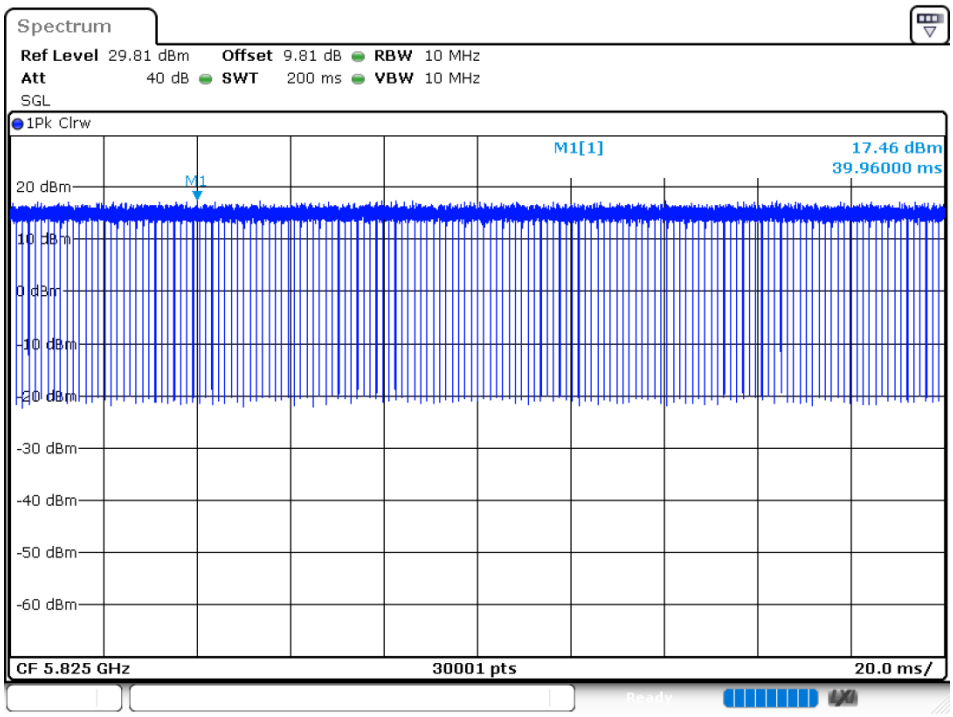
Duty Cycle NVNT 802.11n(HT20) 5745MHz



Duty Cycle NVNT 802.11n(HT20) 5785MHz



Duty Cycle NVNT 802.11n(HT20) 5825MHz


Spectrum
Ref Level 29.81 dBm Offset 9.81 dB RBW 10 MHz
Att 40 dB SWT 200 ms VBW 10 MHz
SGL
1Pk Clrw
M1[1] 17.46 dBm
39.96000 ms
M1
20 dBm
10 dBm
0 dBm
-10 dBm
-20 dBm
-30 dBm
-40 dBm
-50 dBm
-60 dBm
CF 5.825 GHz
30001 pts
20.0 ms/

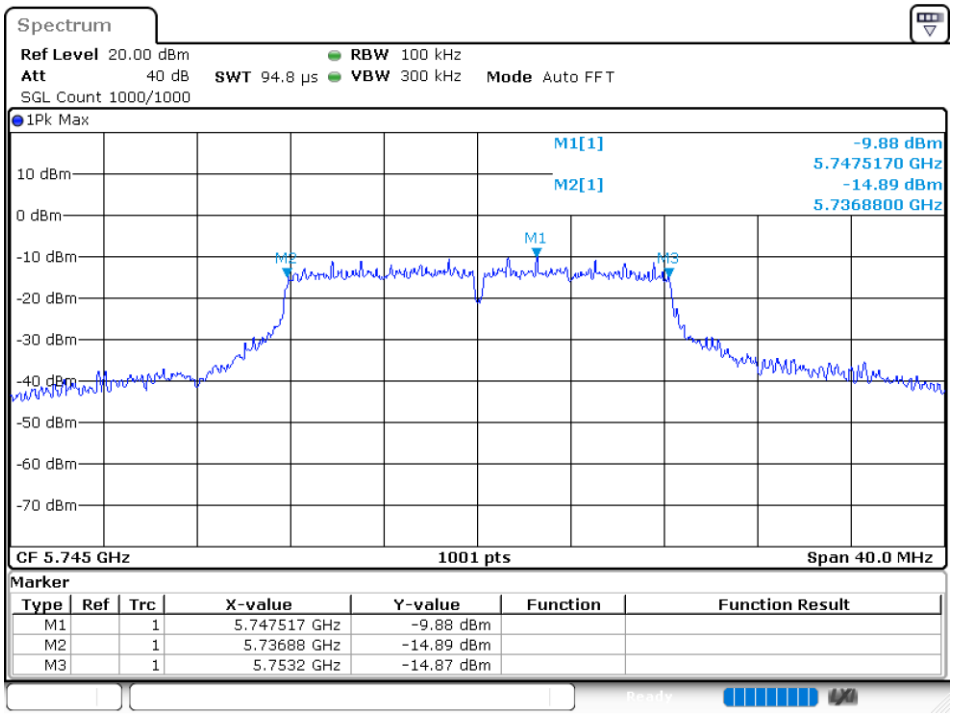
Maximum Conducted Output Power

Condition	Mode	Frequency (MHz)	Antenna	Conducted Power (dBm)	Duty Factor (dB)	Total Power (dBm)	Limit (dBm)	Verdict
NVNT	802.11a	5745	Ant 1	10.6	0	10.6	30	Pass
NVNT	802.11a	5785	Ant 1	10.55	0.12	10.67	30	Pass
NVNT	802.11a	5825	Ant 1	9.96	0.12	10.08	30	Pass
NVNT	802.11n(HT20)	5745	Ant 1	10.55	0.13	10.68	30	Pass
NVNT	802.11n(HT20)	5785	Ant 1	10.73	0.13	10.86	30	Pass
NVNT	802.11n(HT20)	5825	Ant 1	10.01	0.13	10.14	30	Pass

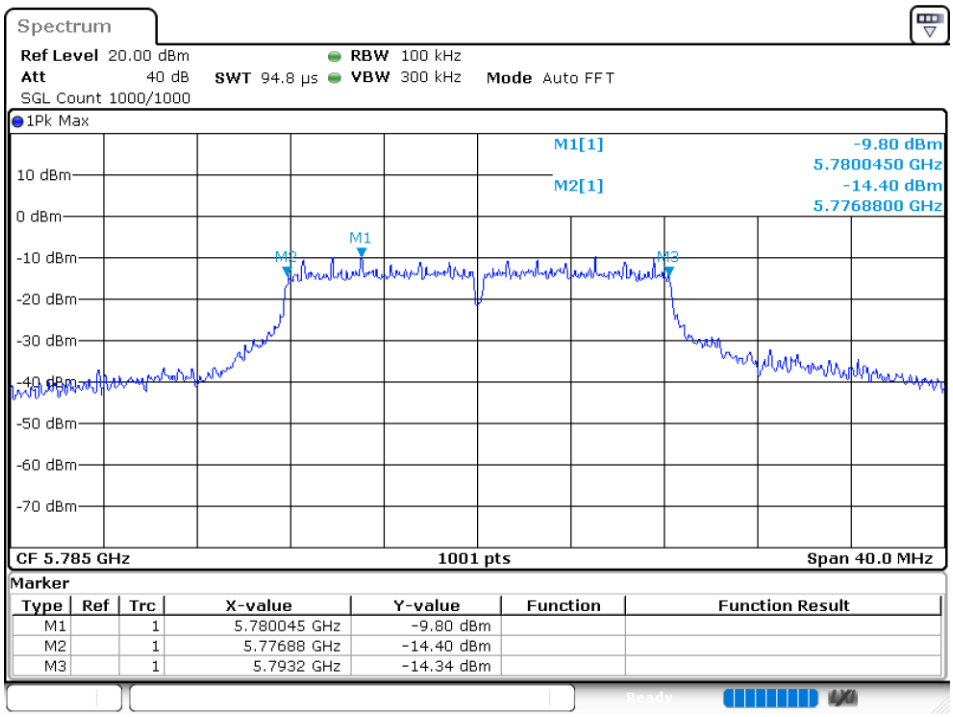
-6dB Emission Bandwidth

Condition	Mode	Frequency (MHz)	Antenna	-6 dB Bandwidth (MHz)	Limit -6 dB Bandwidth (MHz)	Verdict
NVNT	802.11a	5745	Ant 1	16.32	0.5	Pass
NVNT	802.11a	5785	Ant 1	16.32	0.5	Pass
NVNT	802.11a	5825	Ant 1	16.32	0.5	Pass
NVNT	802.11n(HT20)	5745	Ant 1	17.6	0.5	Pass
NVNT	802.11n(HT20)	5785	Ant 1	17.6	0.5	Pass
NVNT	802.11n(HT20)	5825	Ant 1	17.32	0.5	Pass

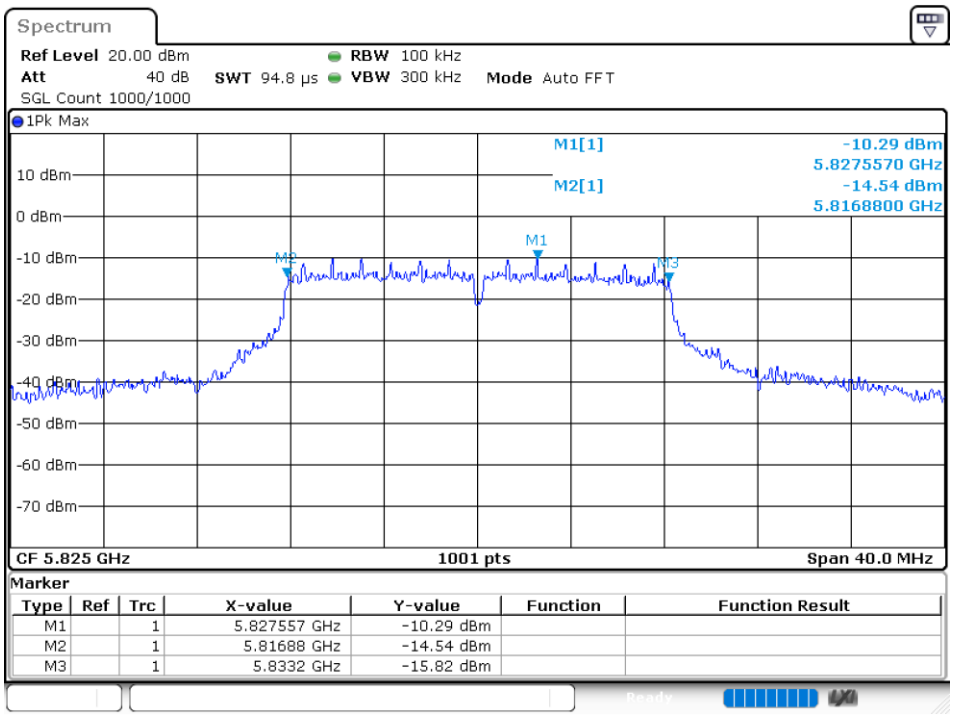
EBW NVNT 802.11a 5745MHz Ant1



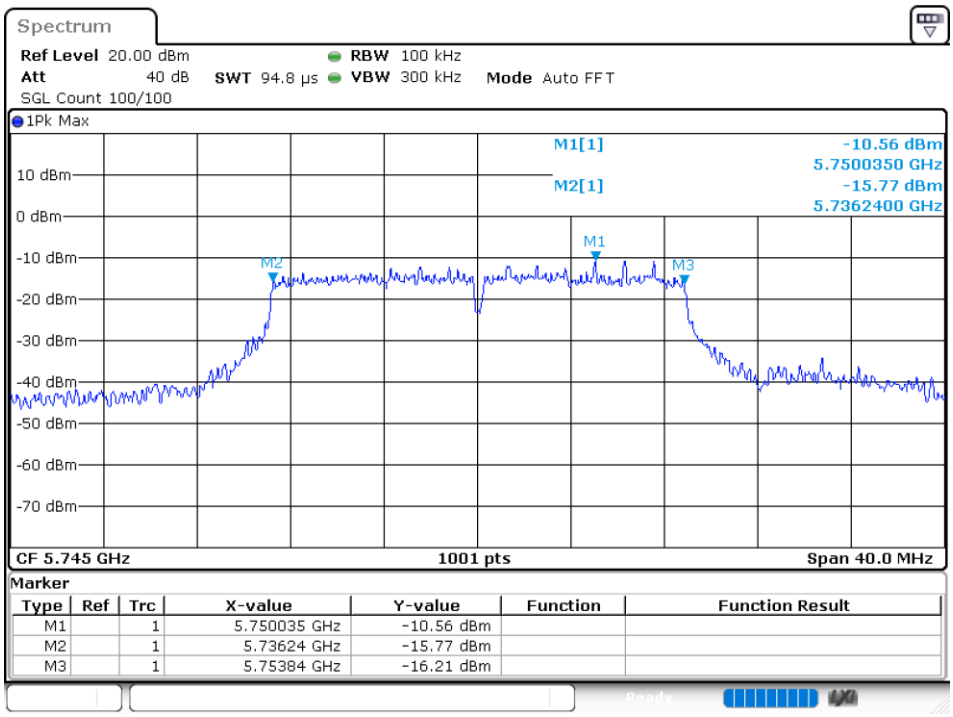
EBW NVNT 802.11a 5785MHz Ant1



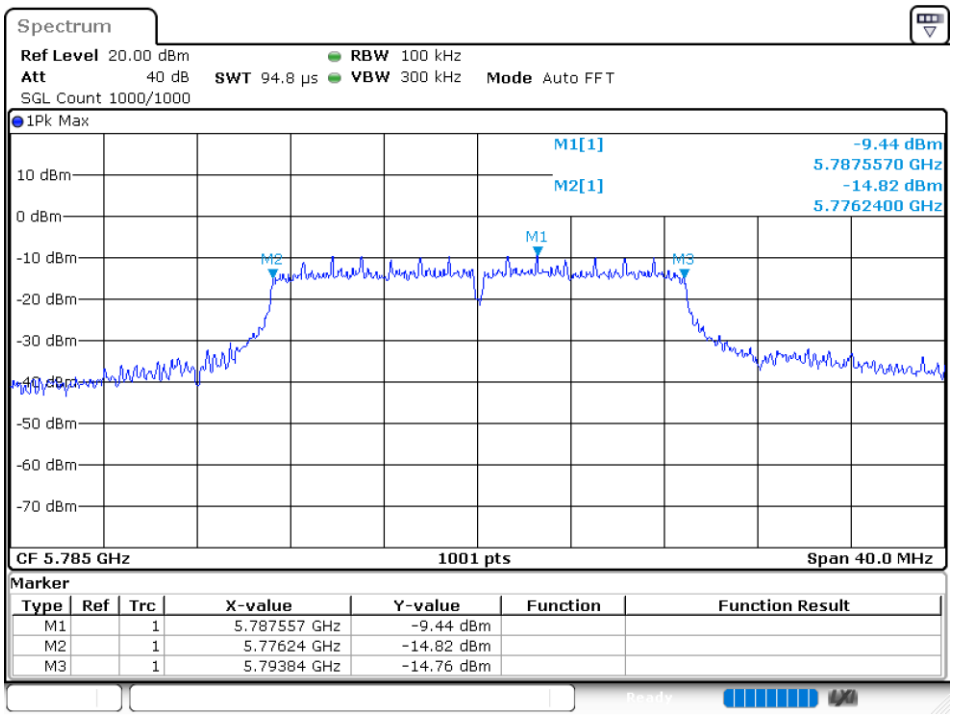
EBW NVNT 802.11a 5825MHz Ant1



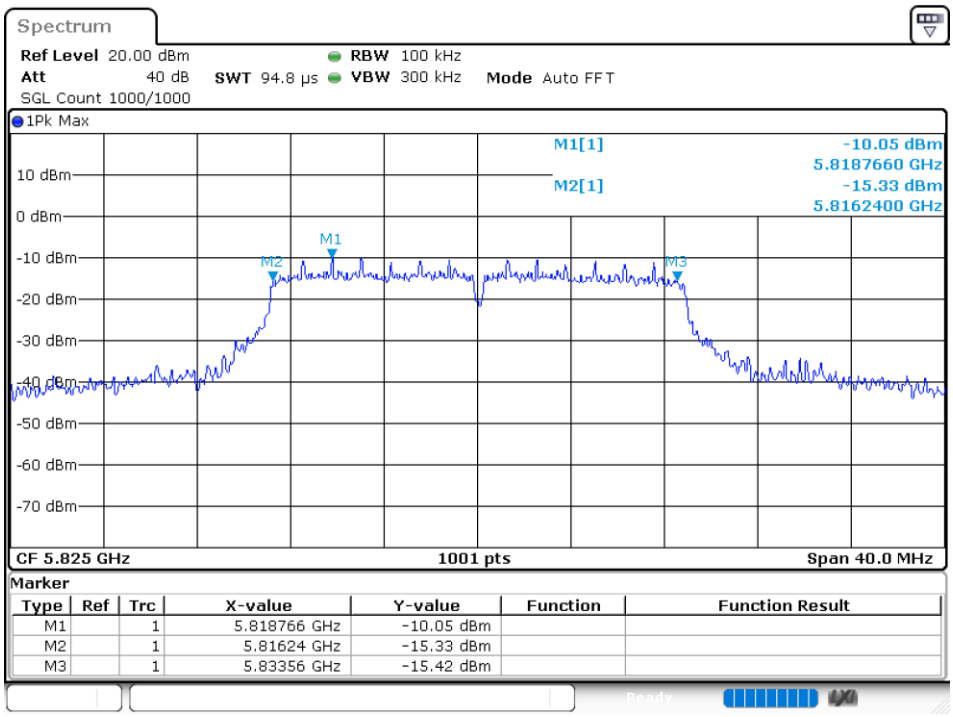
EBW NVNT 802.11n(HT20) 5745MHz Ant1



EBW NVNT 802.11n(HT20) 5785MHz Ant1



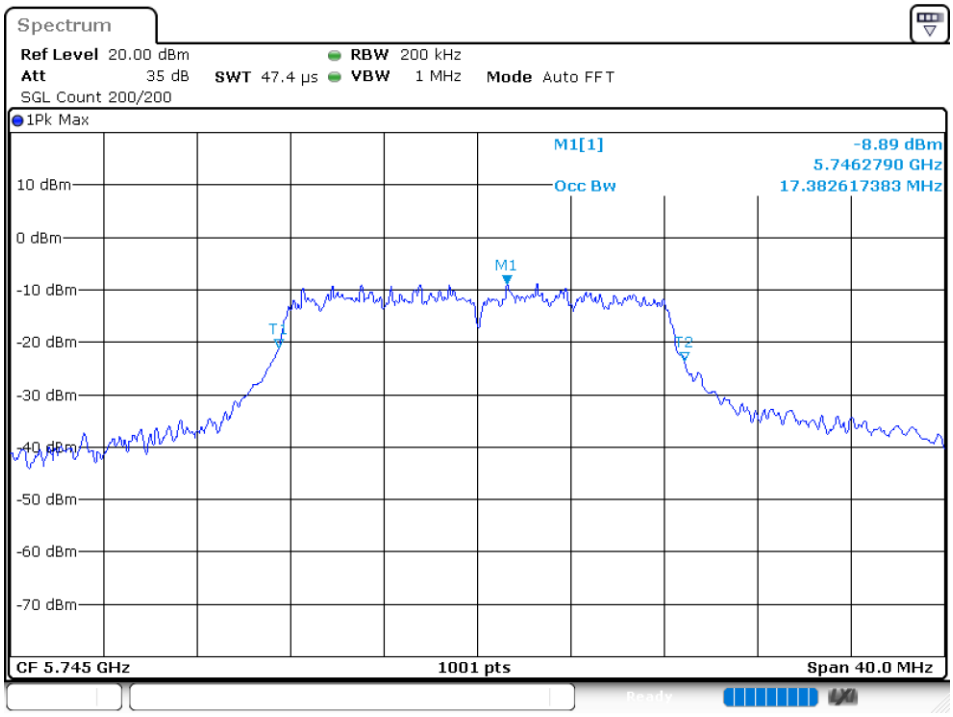
EBW NVNT 802.11n(HT20) 5825MHz Ant1


Spectrum
Ref Level 20.00 dBm
Att 40 dB
SGL Count 1000/1000
SWT 94.8 µs
RBW 100 kHz
VBW 300 kHz
Mode Auto FFT
1Pk Max
M1[1] -10.05 dBm 5.8187660 GHz
M2[1] -15.33 dBm 5.8162400 GHz
10 dBm
0 dBm
-10 dBm
-20 dBm
-30 dBm
-40 dBm
-50 dBm
-60 dBm
-70 dBm
M1
M2
M3
CF 5.825 GHz
1001 pts
Span 40.0 MHz
Marker
Type Ref Trc X-value Y-value Function Function Result
M1 1 5.818766 GHz -10.05 dBm
M2 1 5.81624 GHz -15.33 dBm
M3 1 5.83356 GHz -15.42 dBm

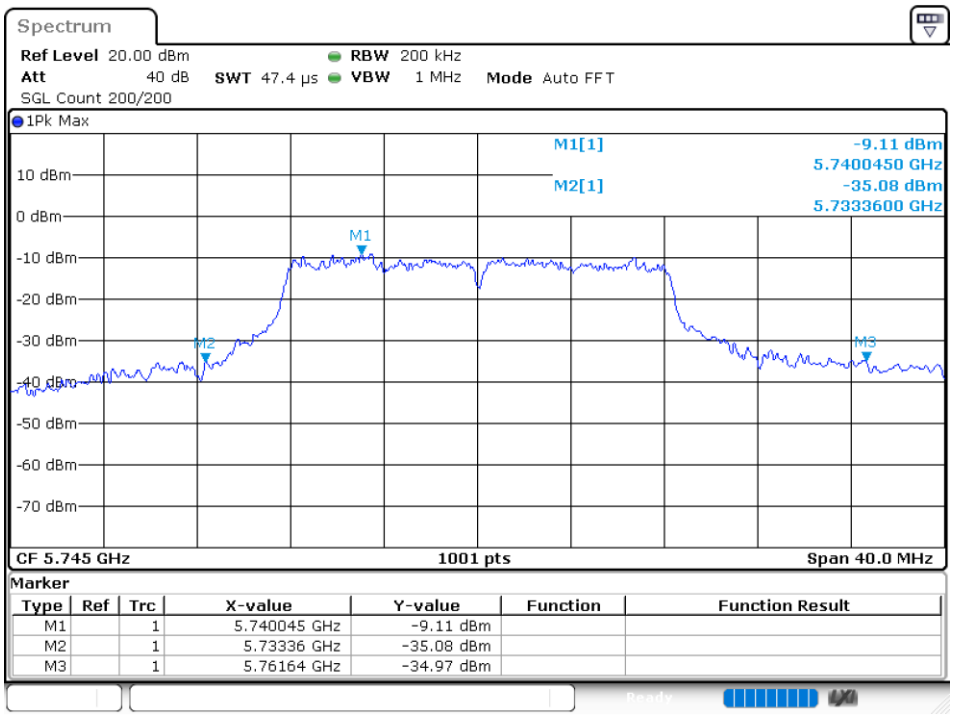
Occupied Channel Bandwidth

Condition	Mode	Frequency (MHz)	Antenna	99% OBW (MHz)	-26 dB Bandwidth (MHz)	Verdict
NVNT	802.11a	5745	Ant 1	17.3826	28.28	Pass
NVNT	802.11a	5785	Ant 1	17.2627	29.44	Pass
NVNT	802.11a	5825	Ant 1	16.8232	26.92	Pass
NVNT	802.11n(HT20)	5745	Ant 1	18.2617	27.92	Pass
NVNT	802.11n(HT20)	5785	Ant 1	18.8212	34.56	Pass
NVNT	802.11n(HT20)	5825	Ant 1	17.9421	28.4	Pass

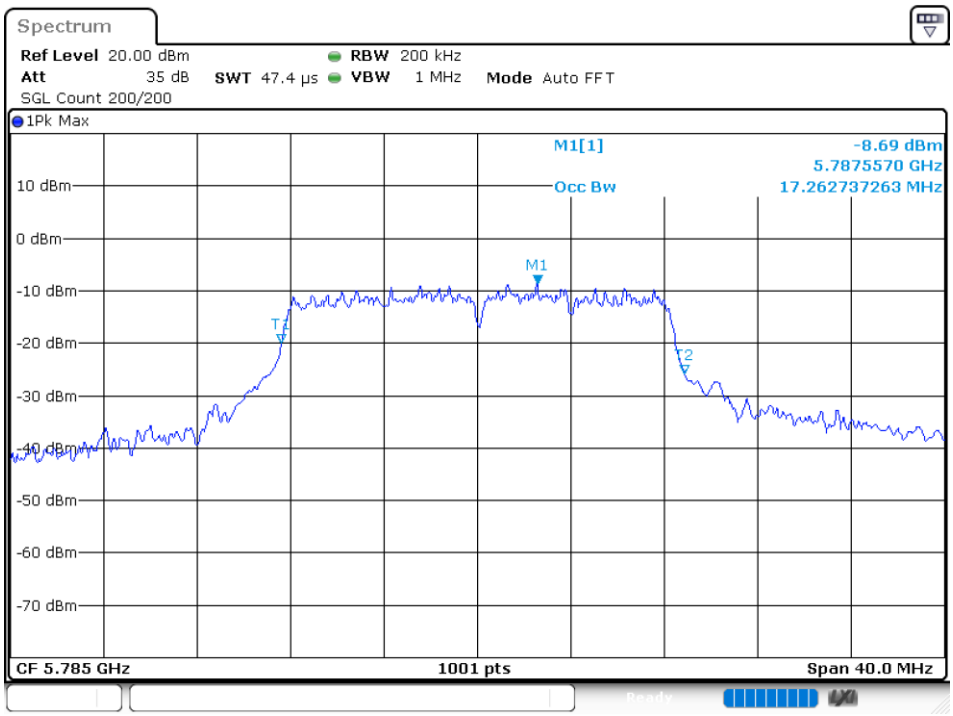
OBW NVNT 802.11a 5745MHz Ant1



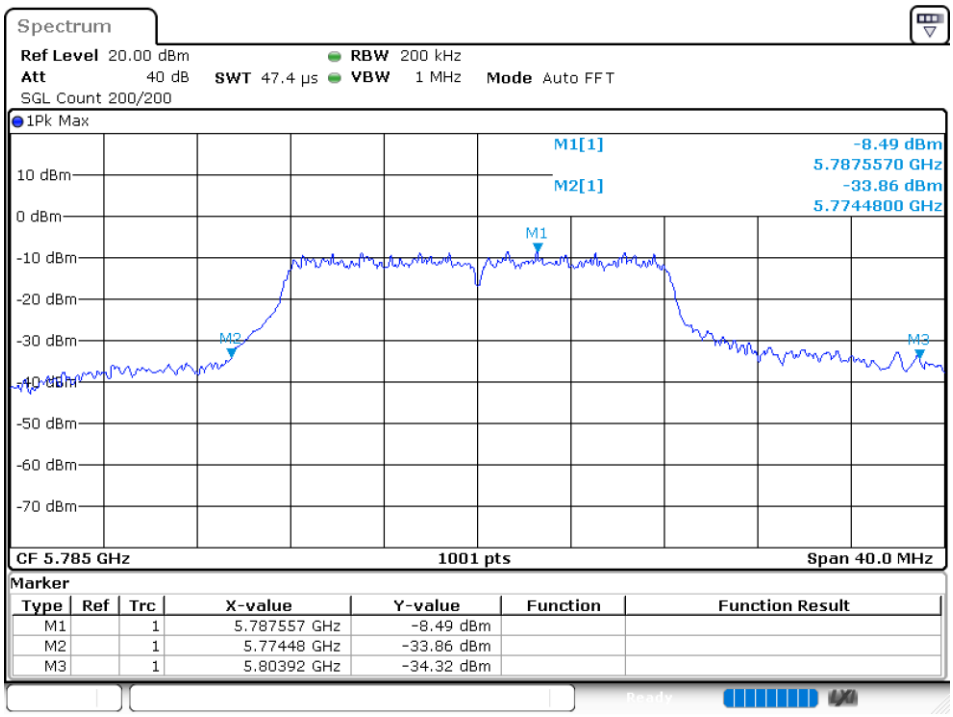
-26 dB BW NVNT 802.11a 5745MHz Ant1



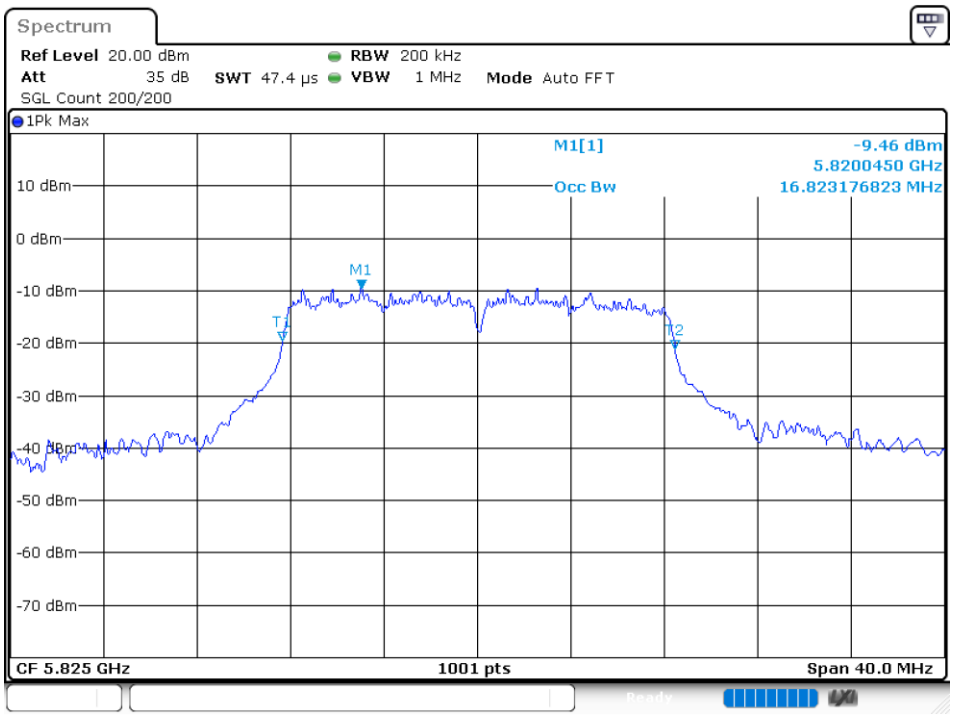
OBW NVNT 802.11a 5785MHz Ant1



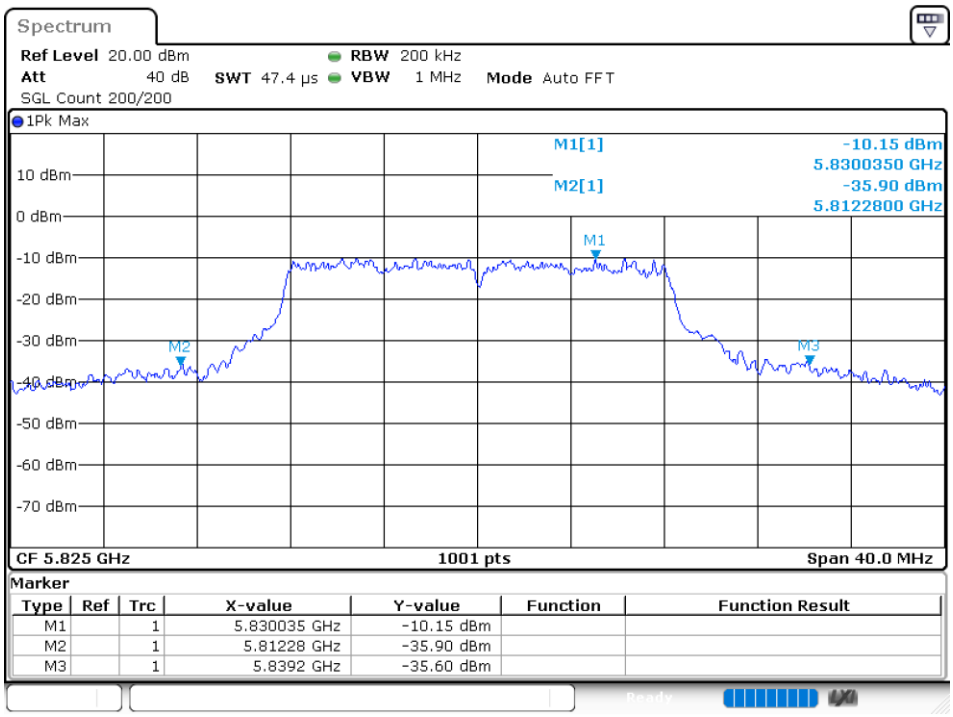
-26 dB BW NVNT 802.11a 5785MHz Ant1



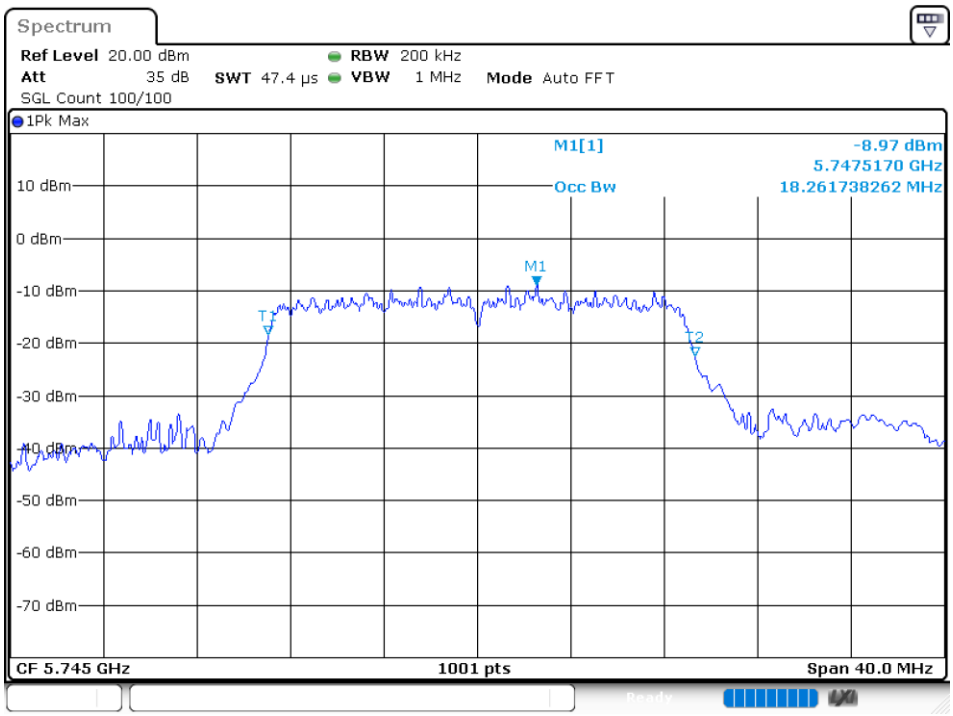
OBW NVNT 802.11a 5825MHz Ant1



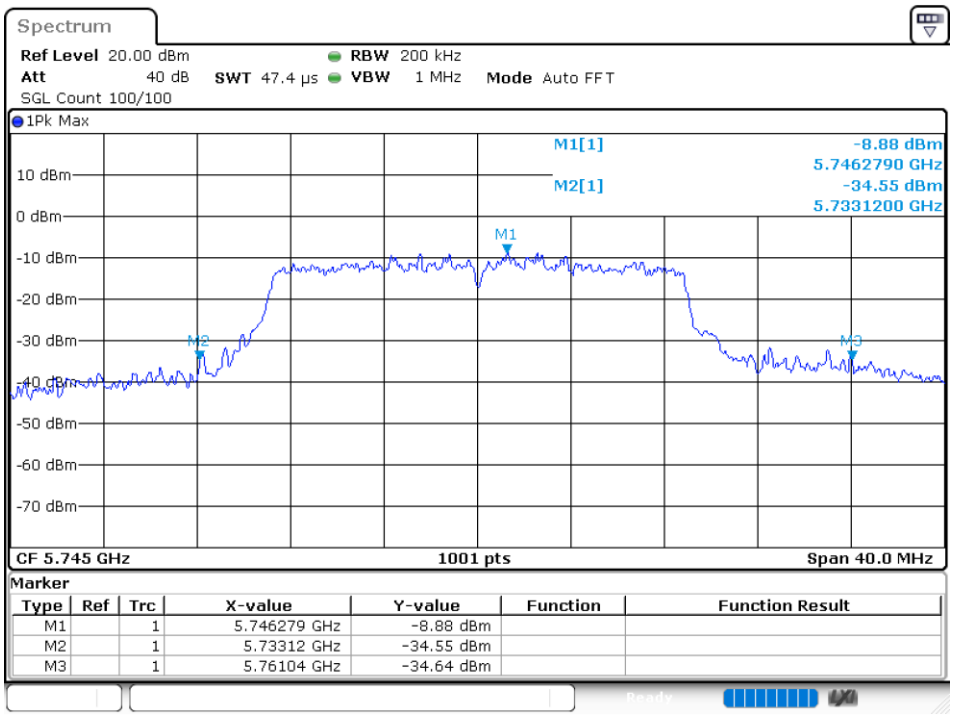
-26 dB BW NVNT 802.11a 5825MHz Ant1



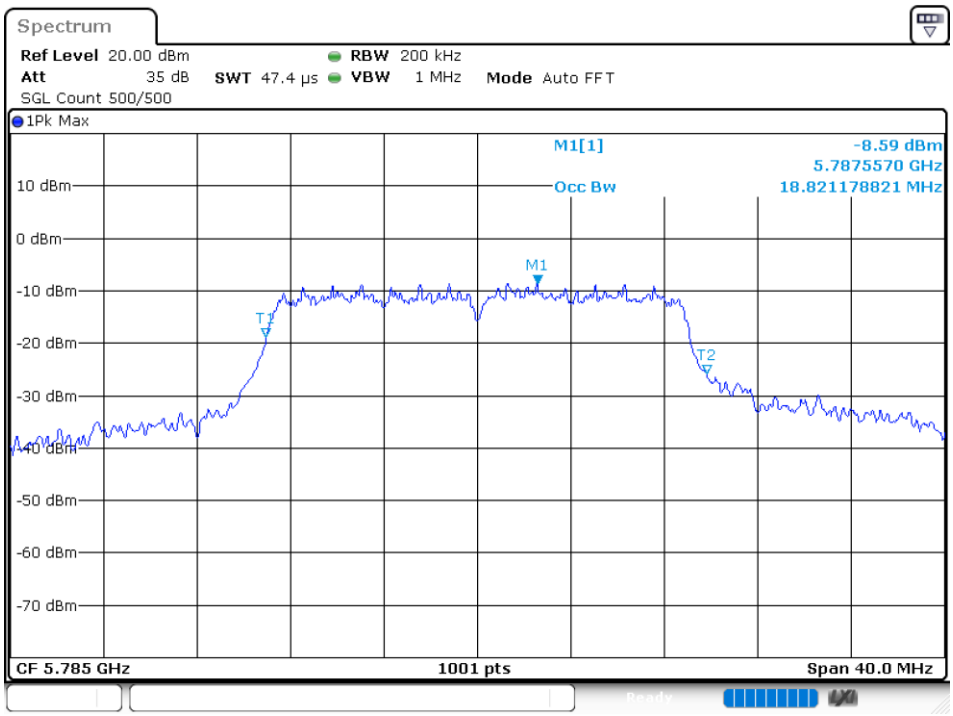
OBW NVNT 802.11n(HT20) 5745MHz Ant1



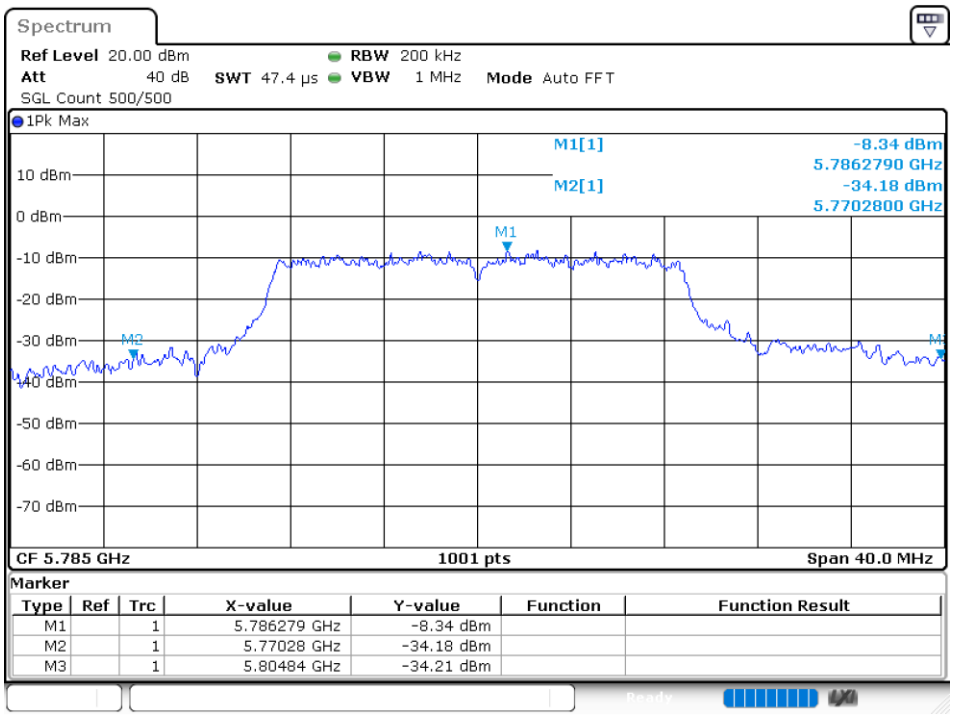
-26 dB BW NVNT 802.11n(HT20) 5745MHz Ant1



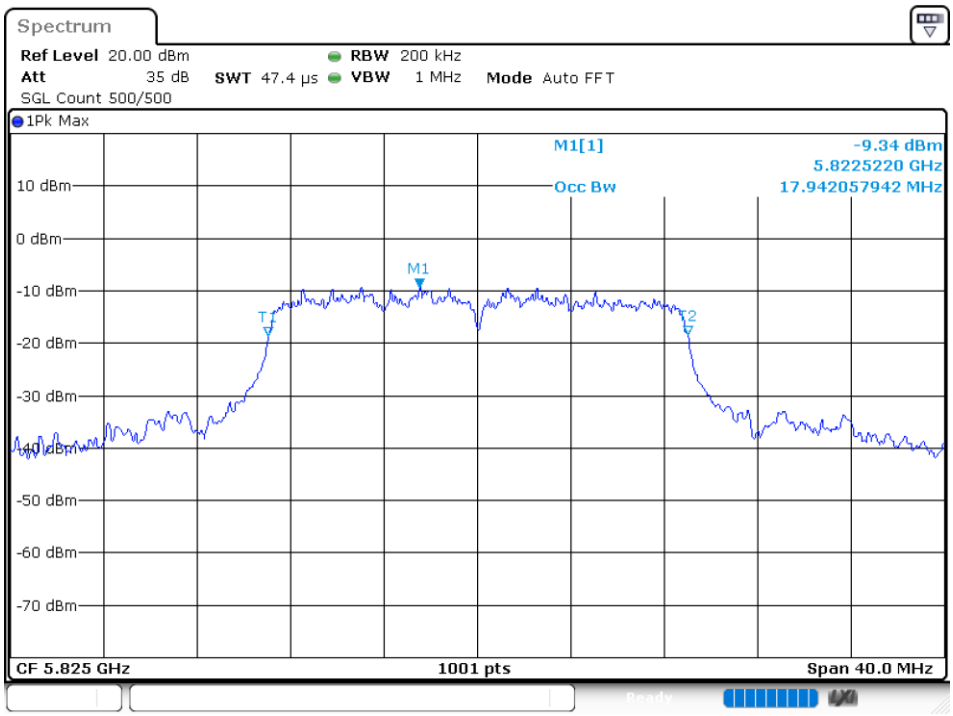
OBW NVNT 802.11n(HT20) 5785MHz Ant1



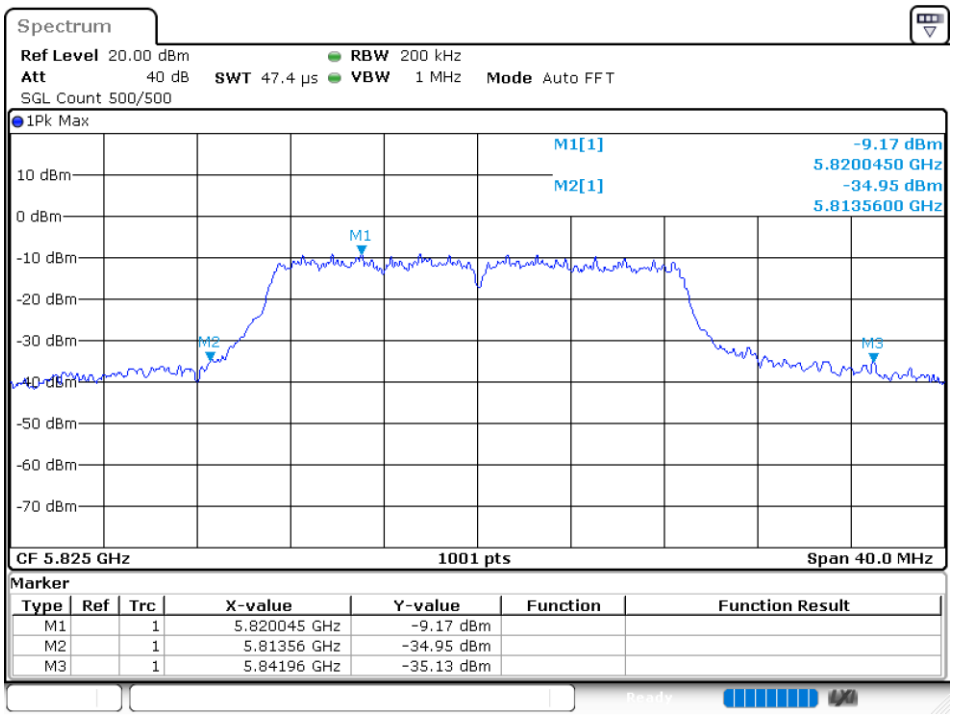
-26 dB BW NVNT 802.11n(HT20) 5785MHz Ant1



OBW NVNT 802.11n(HT20) 5825MHz Ant1



-26 dB BW NVNT 802.11n(HT20) 5825MHz Ant1



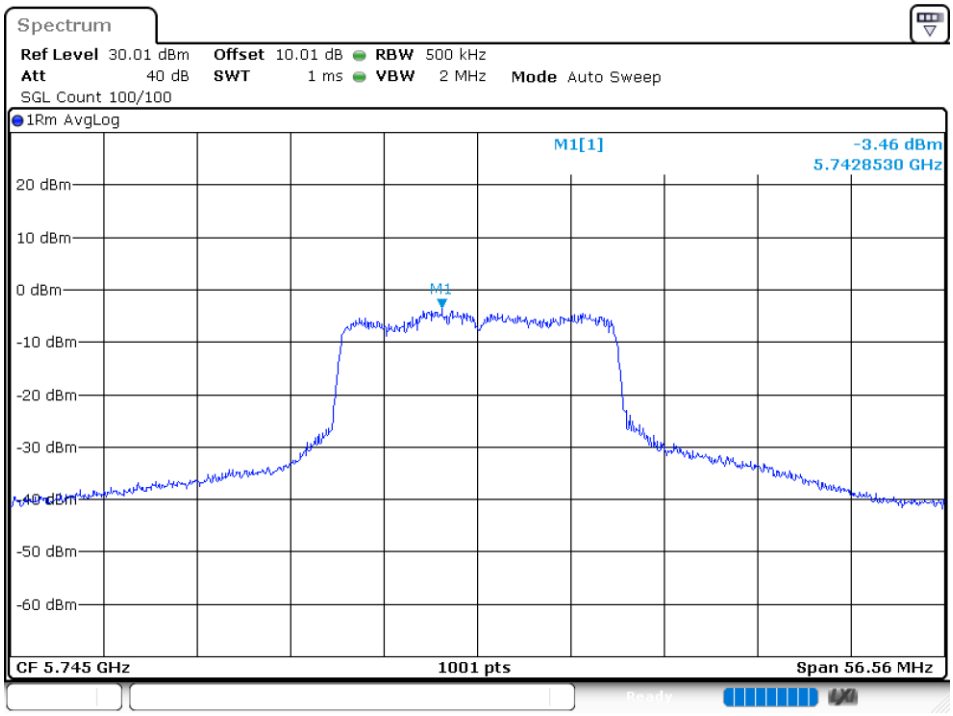
Marker

Type	Ref	Trc	X-value	Y-value	Function	Function Result
M1		1	5.820045 GHz	-9.17 dBm		
M2		1	5.81356 GHz	-34.95 dBm		
M3		1	5.84196 GHz	-35.13 dBm		

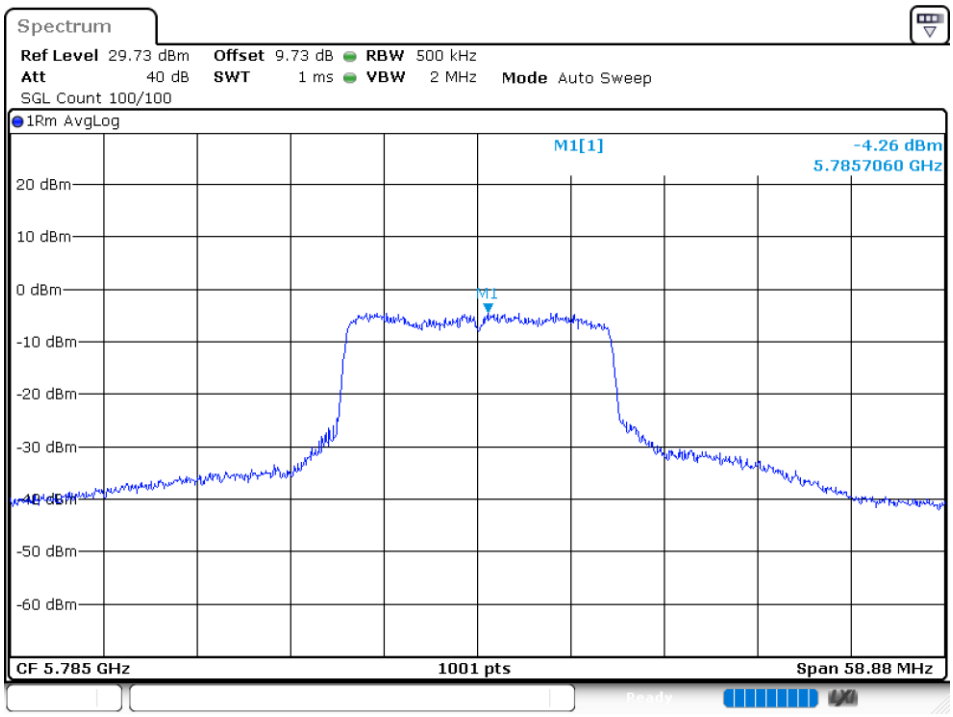
Maximum Power Spectral Density Level

Condition	Mode	Frequency (MHz)	Antenna	Max PSD (dBm)	Duty Factor (dB)	Total PSD (dBm)	Limit (dBm)	Verdict
NVNT	802.11a	5745	Ant 1	-3.463	0	-3.463	30	Pass
NVNT	802.11a	5785	Ant 1	-4.257	0.12	-4.137	30	Pass
NVNT	802.11a	5825	Ant 1	-5.008	0.12	-4.888	30	Pass
NVNT	802.11n(HT20)	5745	Ant 1	-5.251	0.13	-5.121	30	Pass
NVNT	802.11n(HT20)	5785	Ant 1	-5.463	0.13	-5.333	30	Pass
NVNT	802.11n(HT20)	5825	Ant 1	-5.598	0.13	-5.468	30	Pass

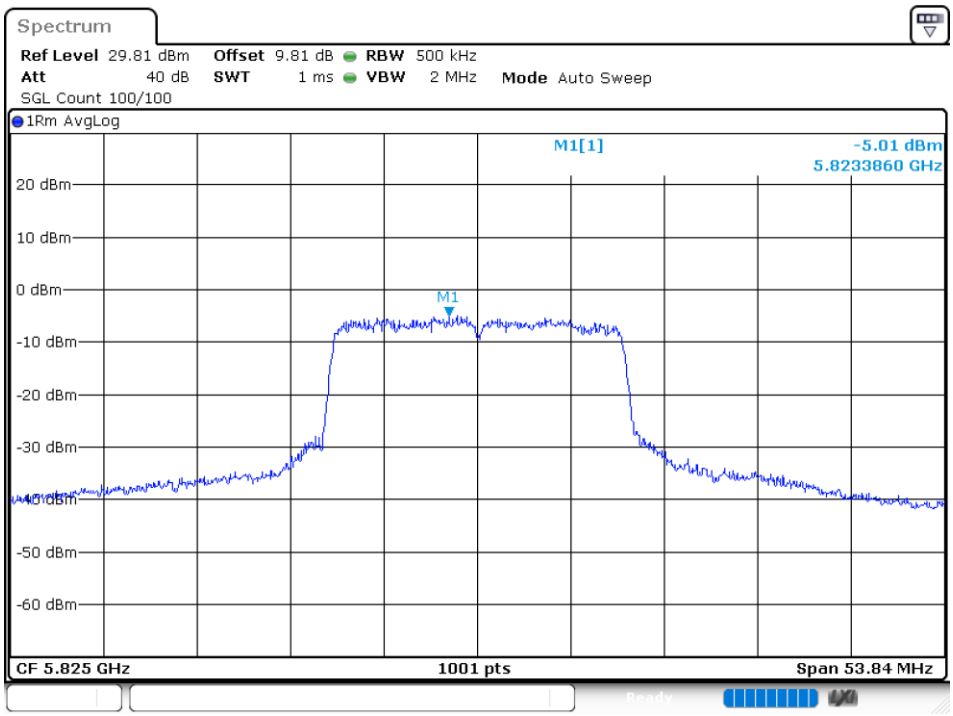
PSD NVNT 802.11a 5745MHz Ant1



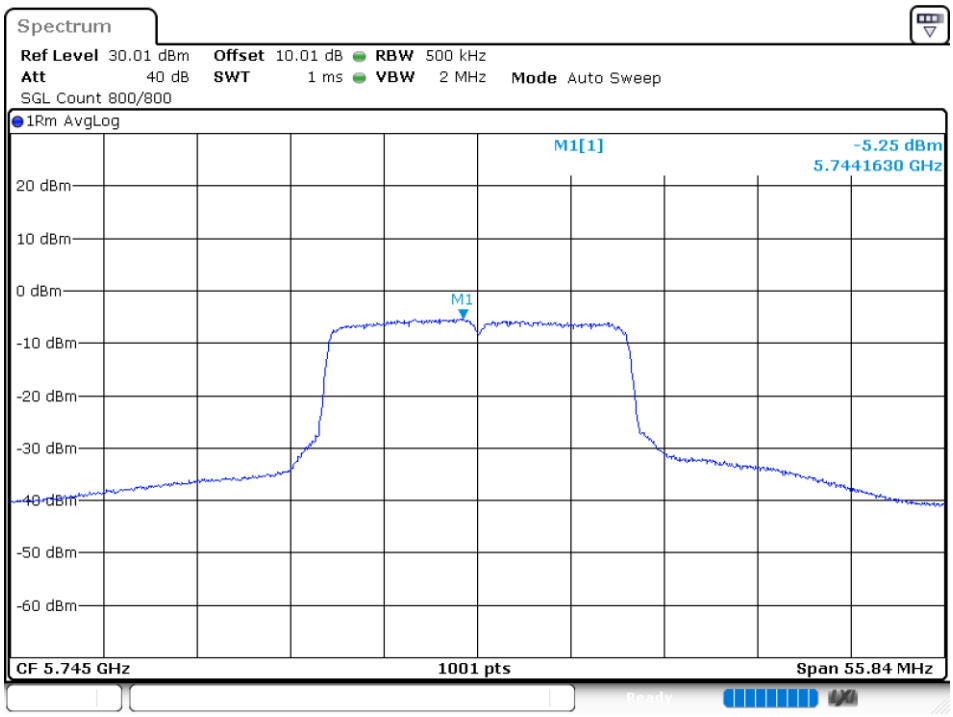
PSD NVNT 802.11a 5785MHz Ant1



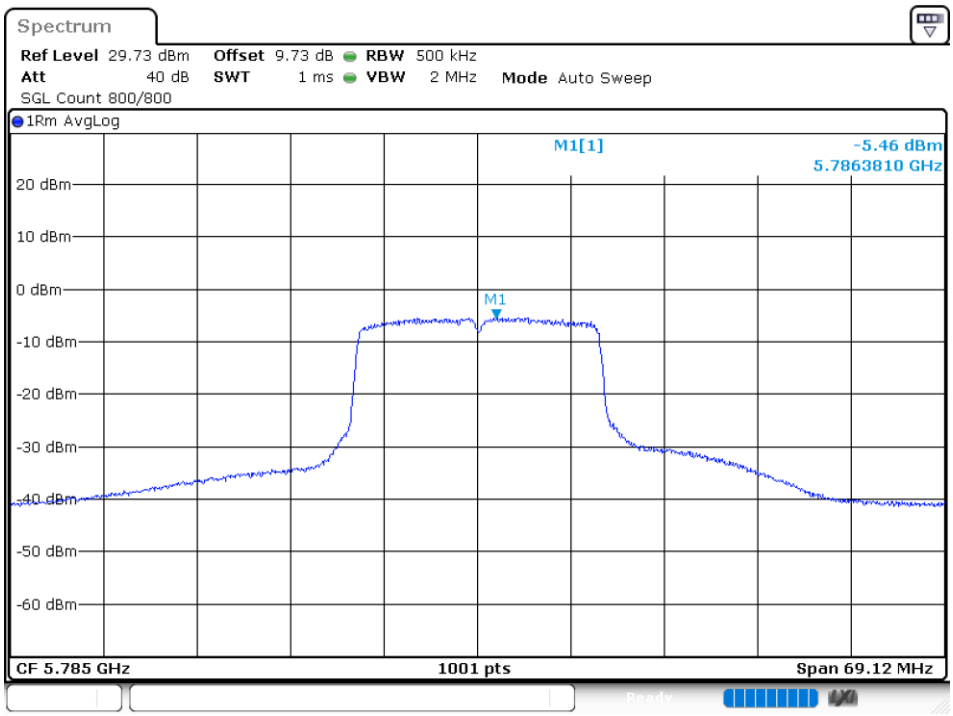
PSD NVNT 802.11a 5825MHz Ant1



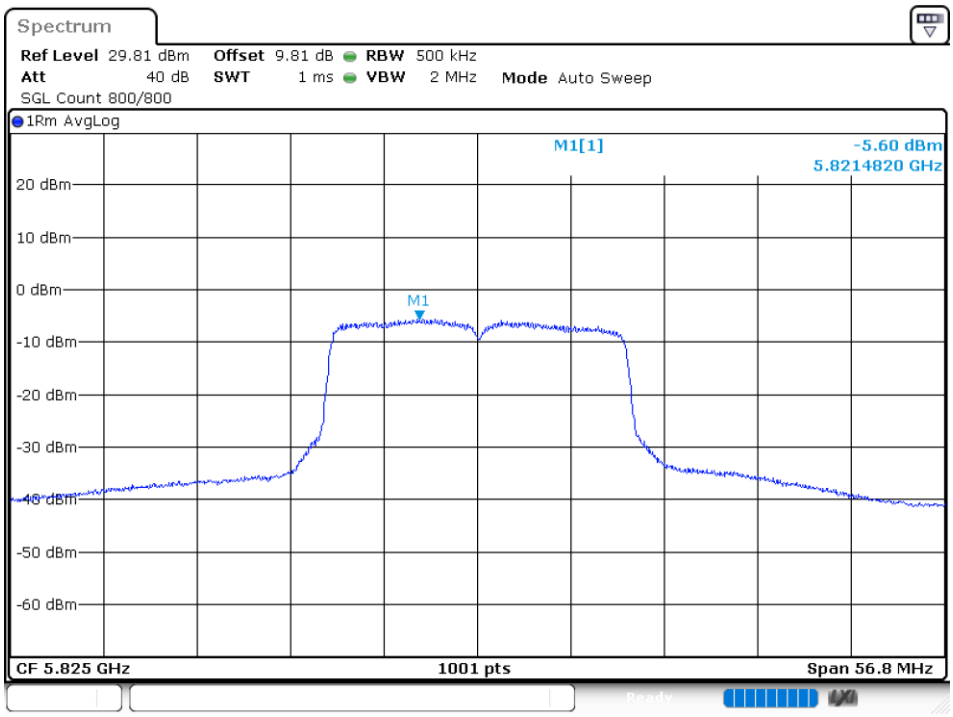
PSD NVNT 802.11n(HT20) 5745MHz Ant1



PSD NVNT 802.11n(HT20) 5785MHz Ant1



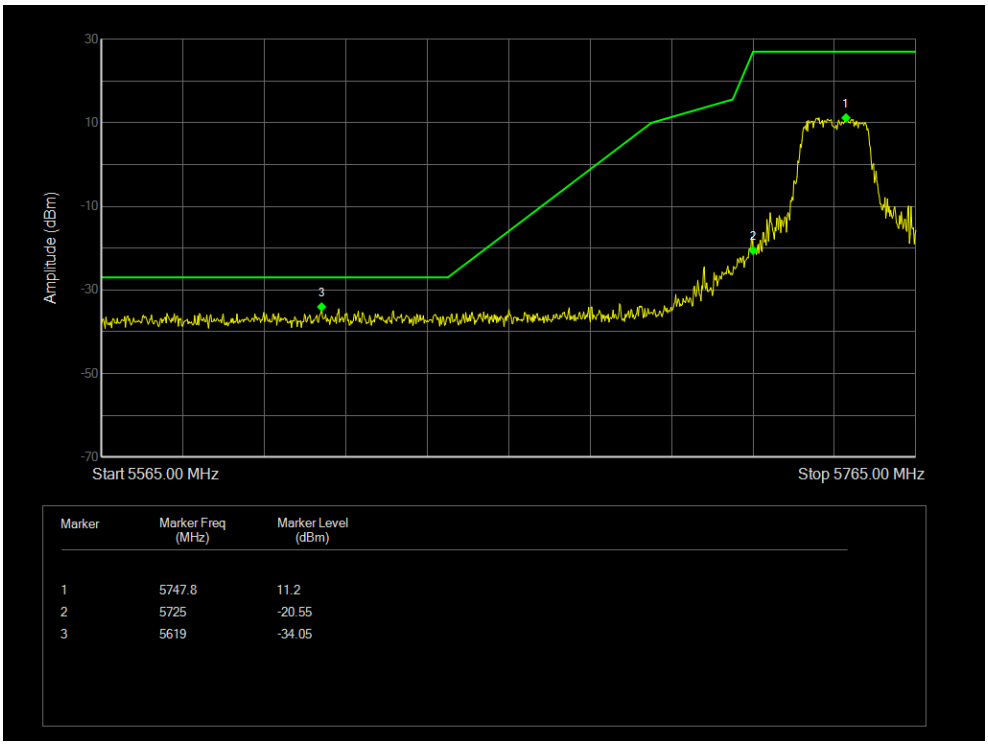
PSD NVNT 802.11n(HT20) 5825MHz Ant1


Spectrum
Ref Level 29.81 dBm Offset 9.81 dB RBW 500 kHz
Att 40 dB SWT 1 ms VBW 2 MHz Mode Auto Sweep
SGL Count 800/800
1Rm AvgLog
M1[1] -5.60 dBm
5.8214820 GHz
20 dBm
10 dBm
0 dBm
-10 dBm
-20 dBm
-30 dBm
-40 dBm
-50 dBm
-60 dBm
M1
CF 5.825 GHz
1001 pts
Span 56.8 MHz

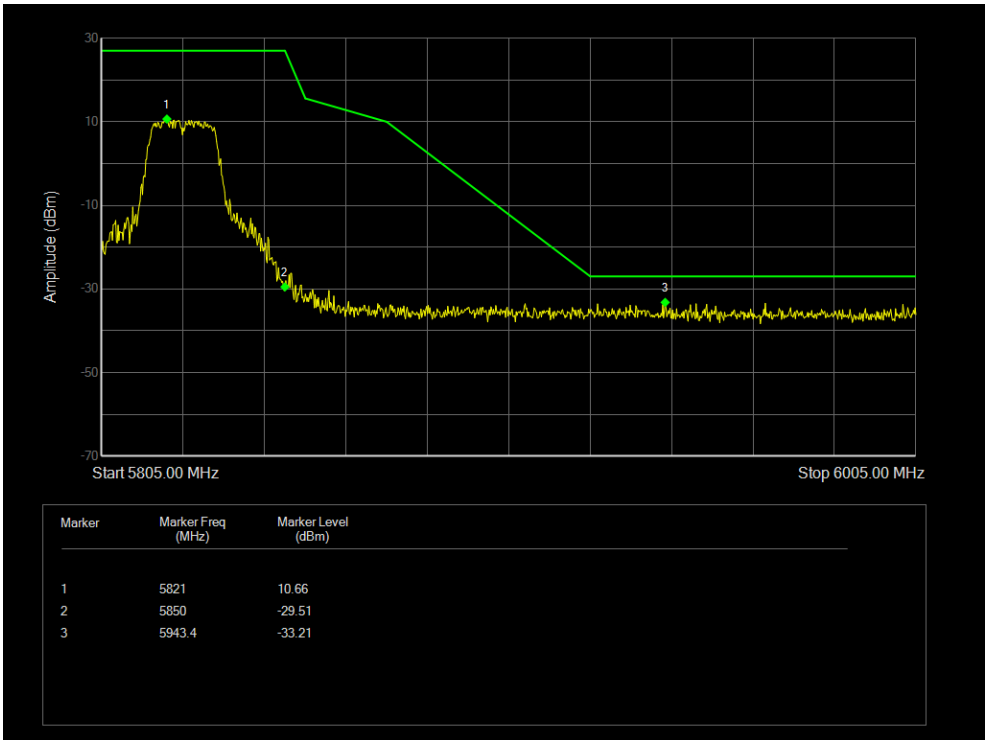
Band Edge

Condition	Mode	Frequency (MHz)	Antenna	Max Value (dBm)	Limit (dBm)	Verdict
NVNT	802.11a	5745	Ant 1	-34.05	-27	Pass
NVNT	802.11a	5825	Ant 1	-33.21	-27	Pass
NVNT	802.11n(HT20)	5745	Ant 1	-33.71	-27	Pass
NVNT	802.11n(HT20)	5825	Ant 1	-33.1	-27	Pass

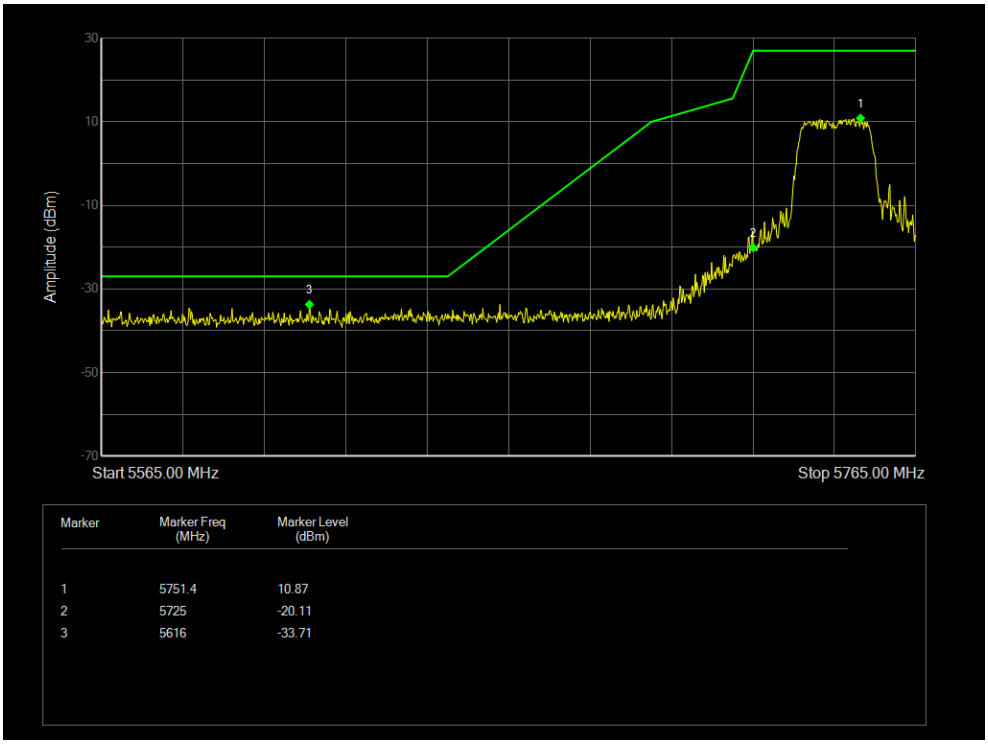
Band Edge NVNT 802.11a 5745MHz Low Ant1



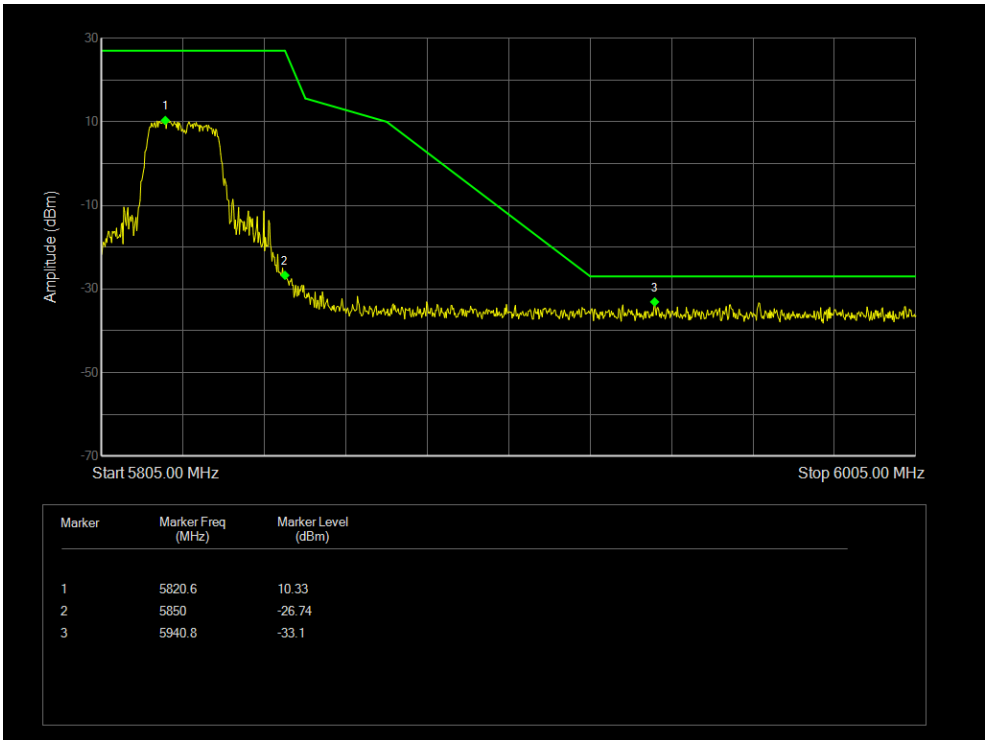
Band Edge NVNT 802.11a 5825MHz High Ant1



Band Edge NVNT 802.11n(HT20) 5745MHz Low Ant1



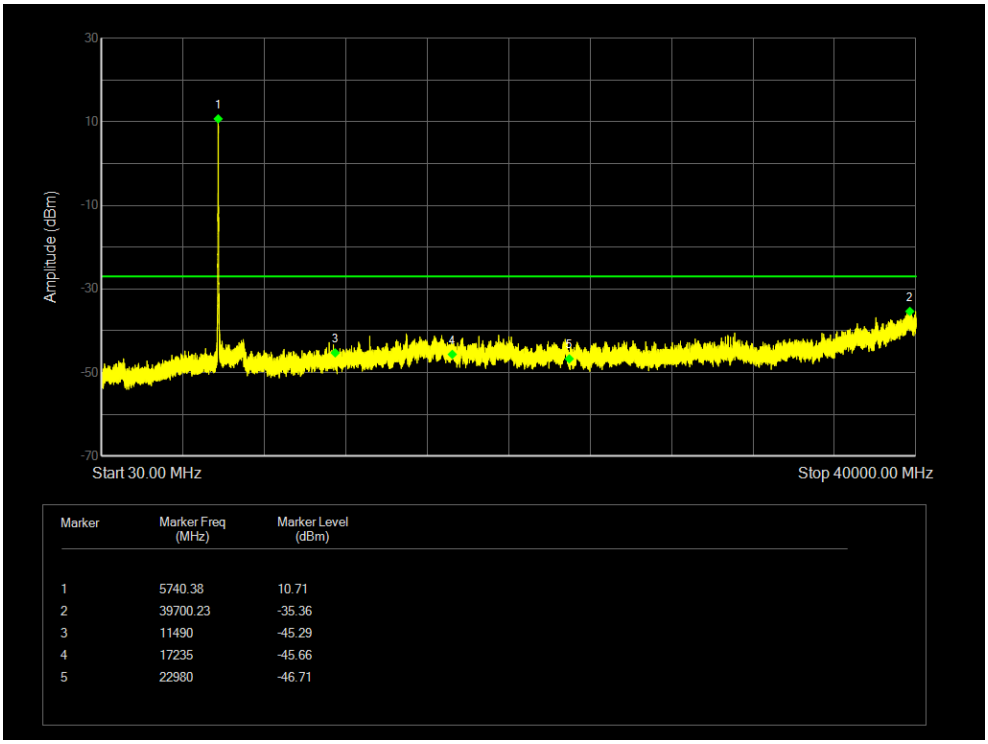
Band Edge NVNT 802.11n(HT20) 5825MHz High Ant1


30
10
-10
-30
-50
-70
Amplitude (dBm)
1
2
3
Start 5805.00 MHz
Stop 6005.00 MHz
Marker
Marker Freq (MHz)
Marker Level (dBm)
1 5820.6 10.33
2 5850 -26.74
3 5940.8 -33.1

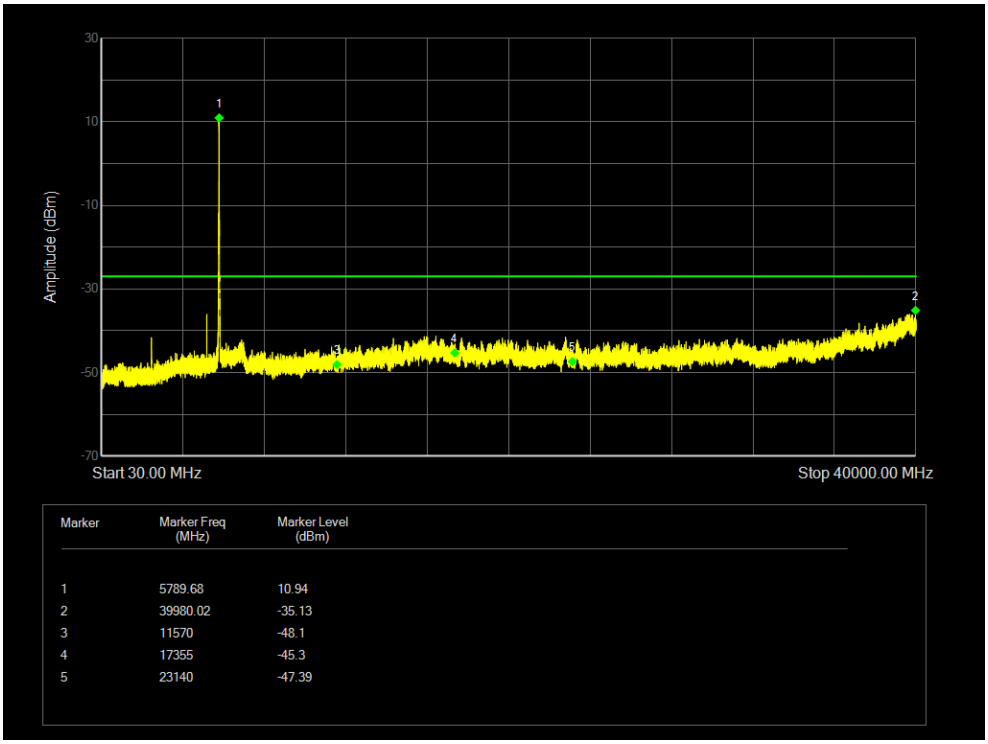
Conducted RF Spurious Emission

Condition	Mode	Frequency (MHz)	Antenna	Max Value (dBc)	Limit (dBc)	Verdict
NVNT	802.11a	5745	Ant 1	-35.36	-27	Pass
NVNT	802.11a	5785	Ant 1	-35.13	-27	Pass
NVNT	802.11a	5825	Ant 1	-35.45	-27	Pass
NVNT	802.11n(HT20)	5745	Ant 1	-35.18	-27	Pass
NVNT	802.11n(HT20)	5785	Ant 1	-34.82	-27	Pass
NVNT	802.11n(HT20)	5825	Ant 1	-35.84	-27	Pass

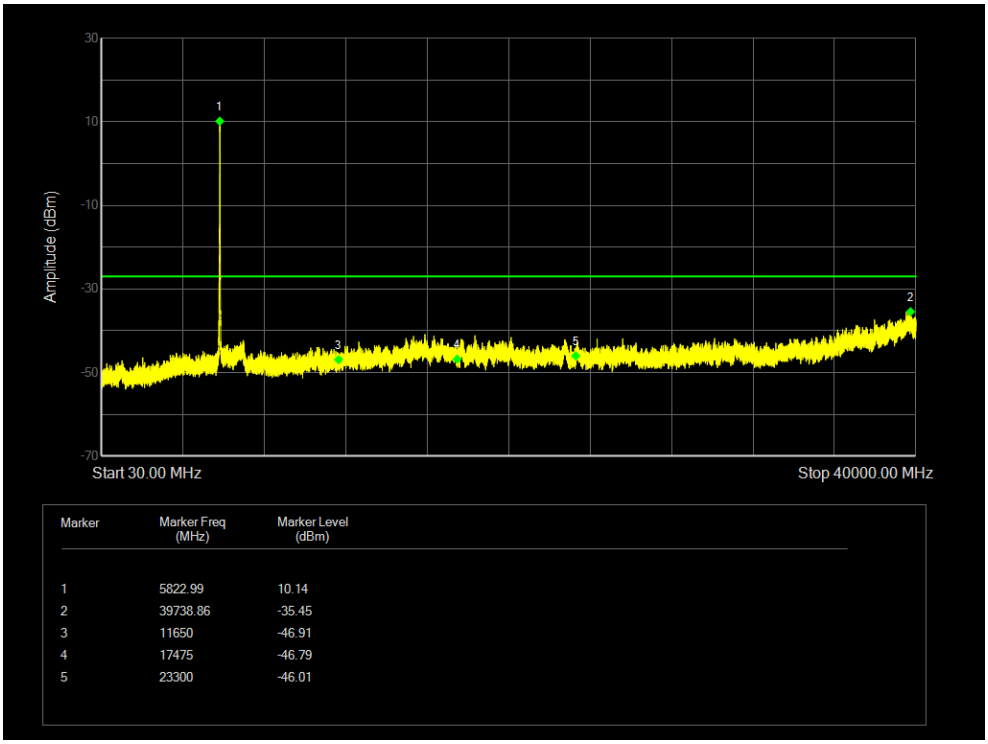
Tx. Spurious NVNT 802.11a 5745MHz Ant1 Emission



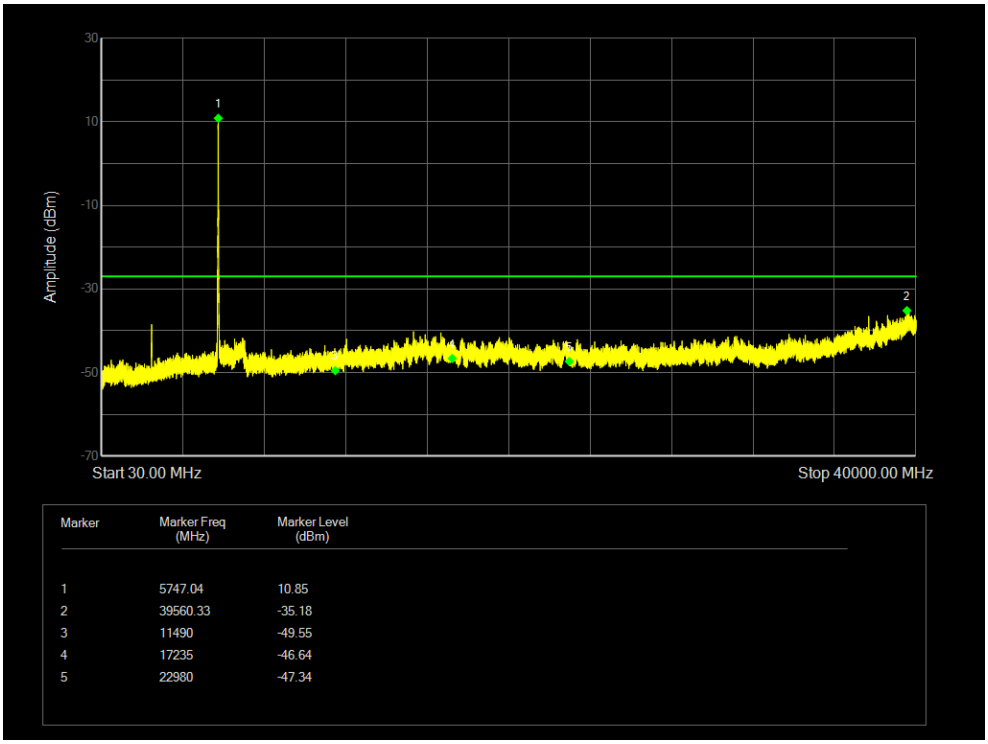
Tx. Spurious NVNT 802.11a 5785MHz Ant1 Emission



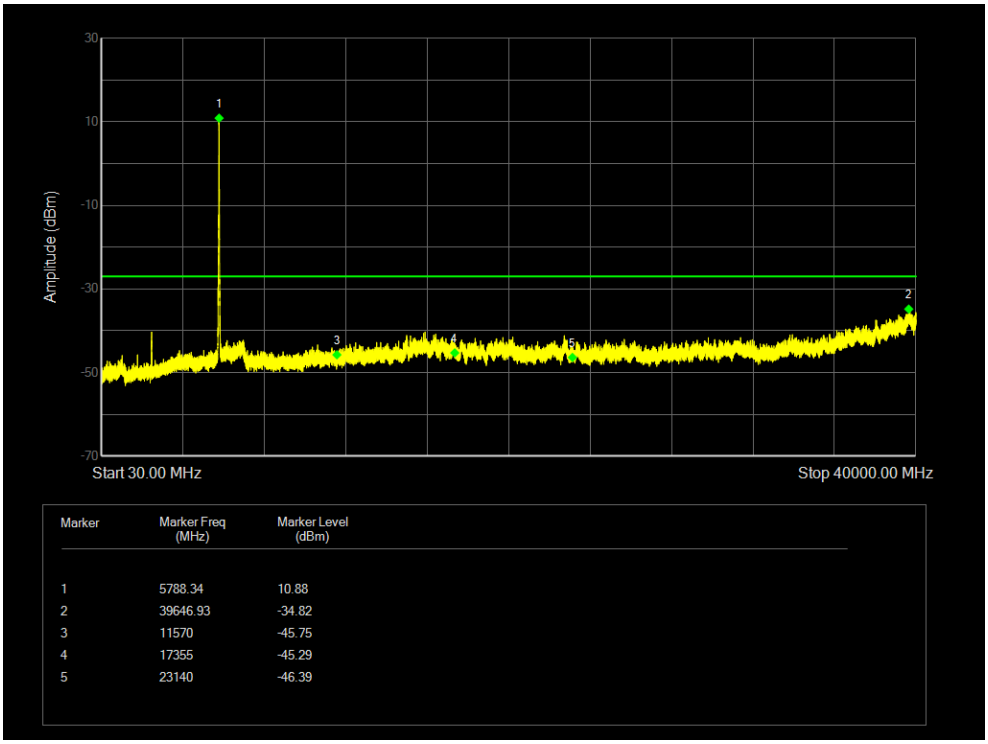
Tx. Spurious NVNT 802.11a 5825MHz Ant1 Emission



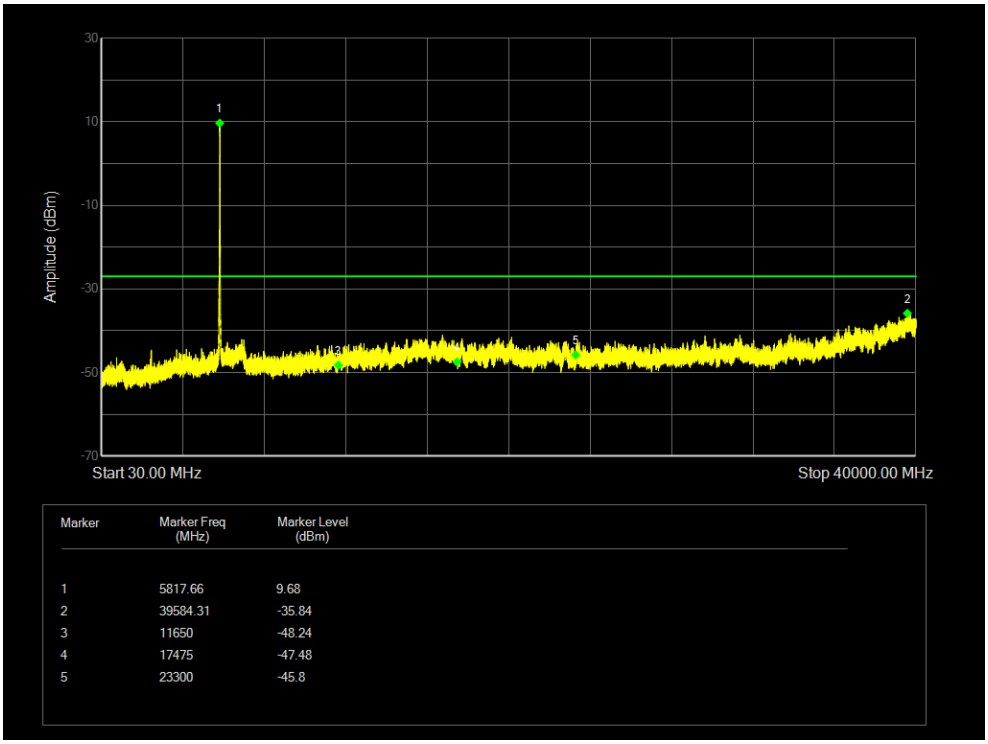
Tx. Spurious NVNT 802.11n(HT20) 5745MHz Ant1 Emission



Tx. Spurious NVNT 802.11n(HT20) 5785MHz Ant1 Emission



Tx. Spurious NVNT 802.11n(HT20) 5825MHz Ant1 Emission

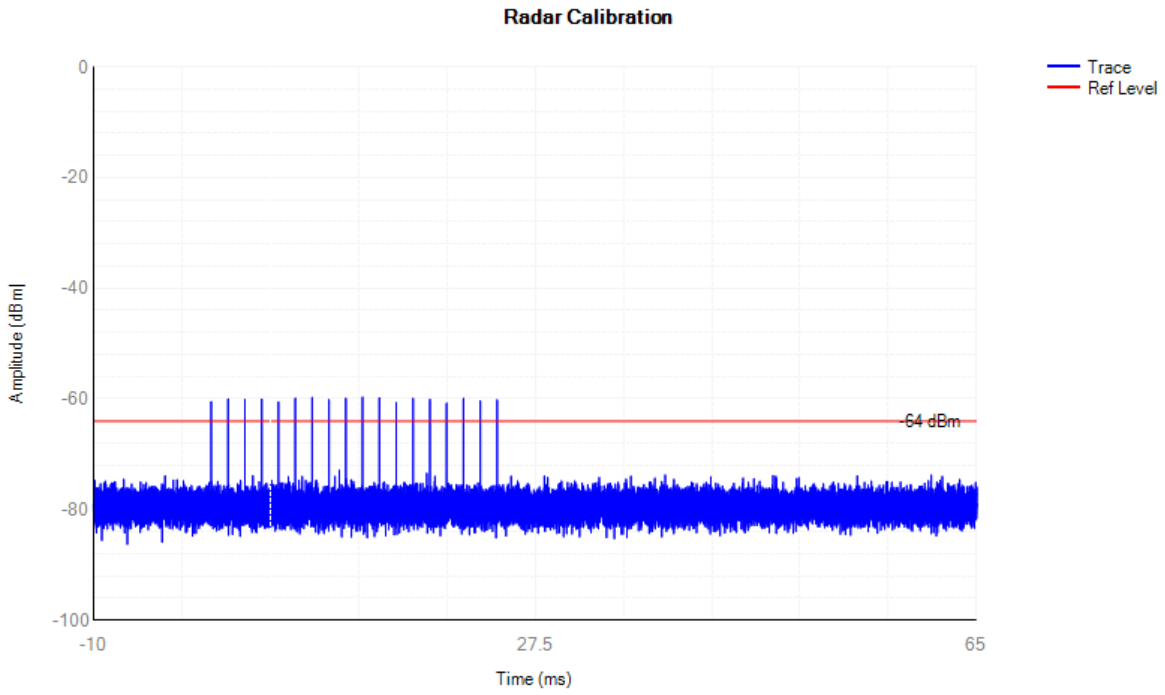


Marker	Marker Freq (MHz)	Marker Level (dBm)
1	5817.66	9.68
2	39584.31	-35.84
3	11650	-48.24
4	17475	-47.48
5	23300	-45.8

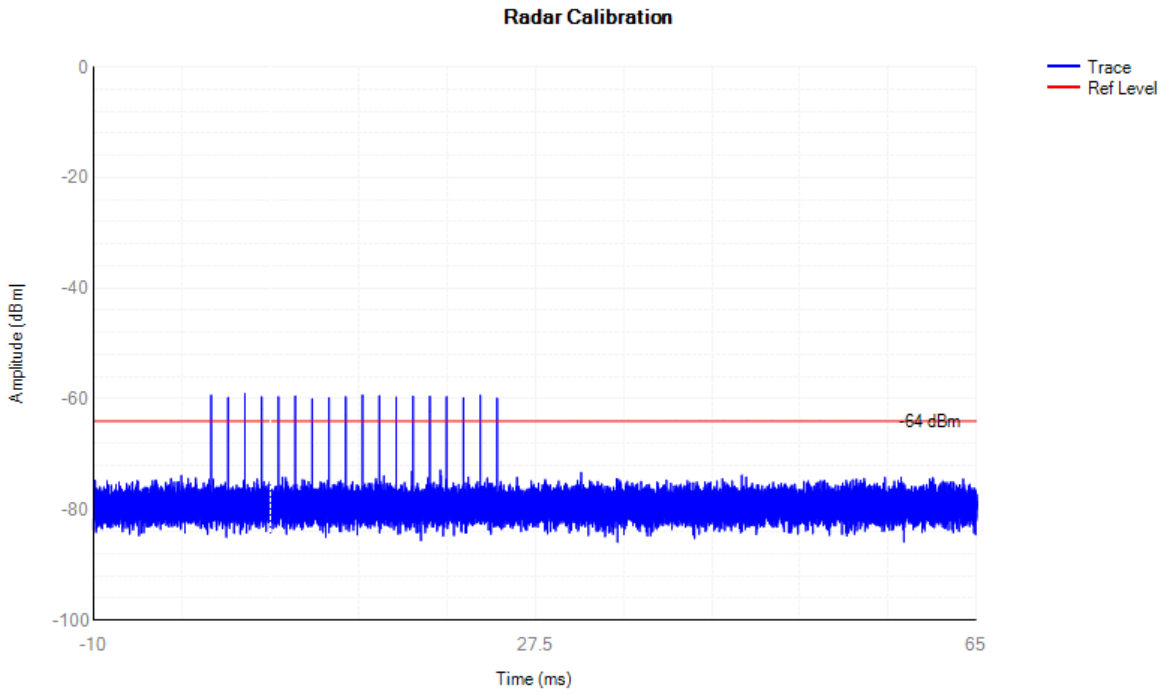
DFS

Calibration

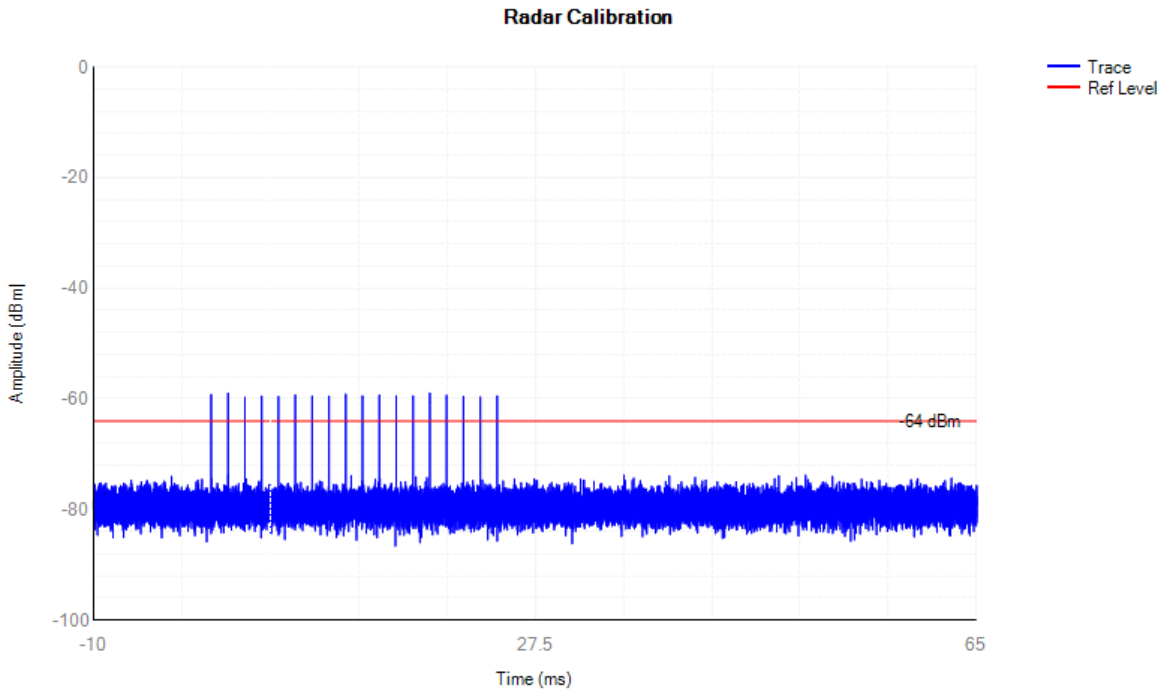
5320MHz a DFS_FCC_T0



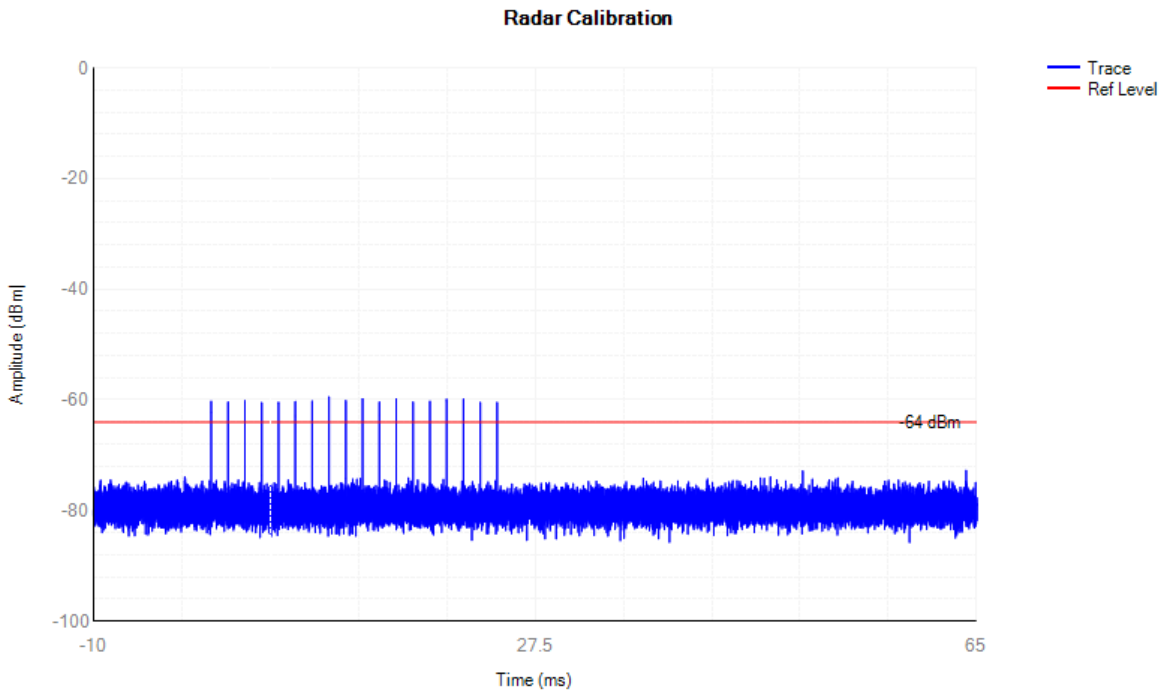
5500MHz a DFS_FCC_T0



5320MHz n20 DFS_FCC_T0

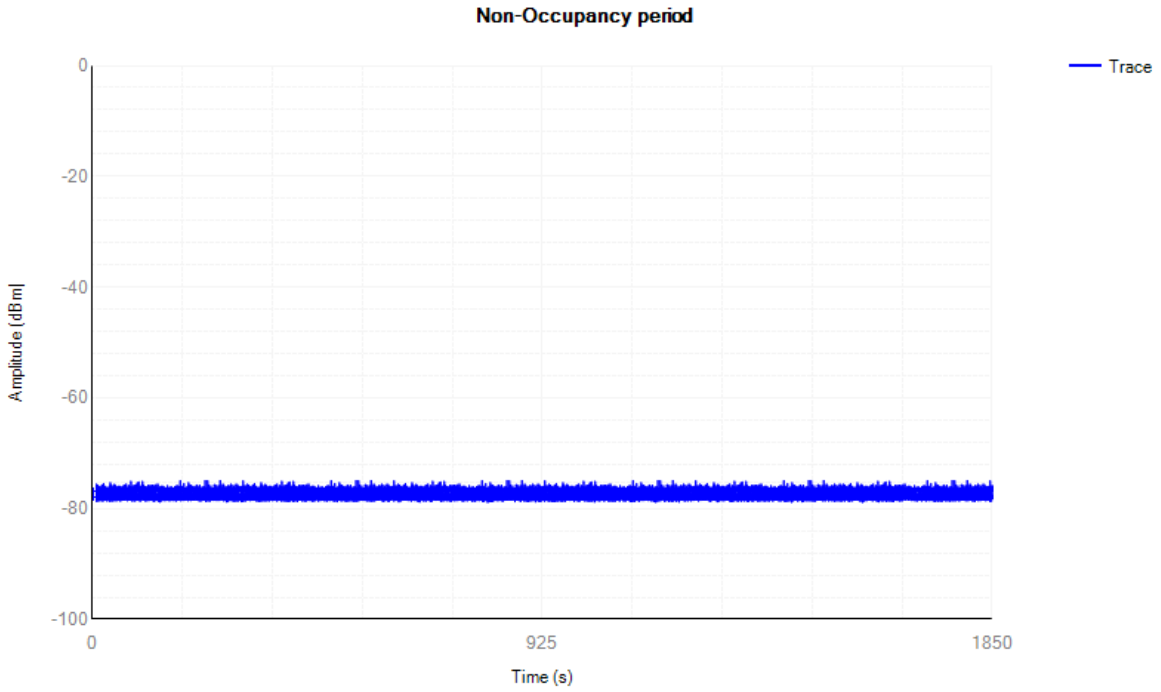


5500MHz n20 DFS_FCC_T0

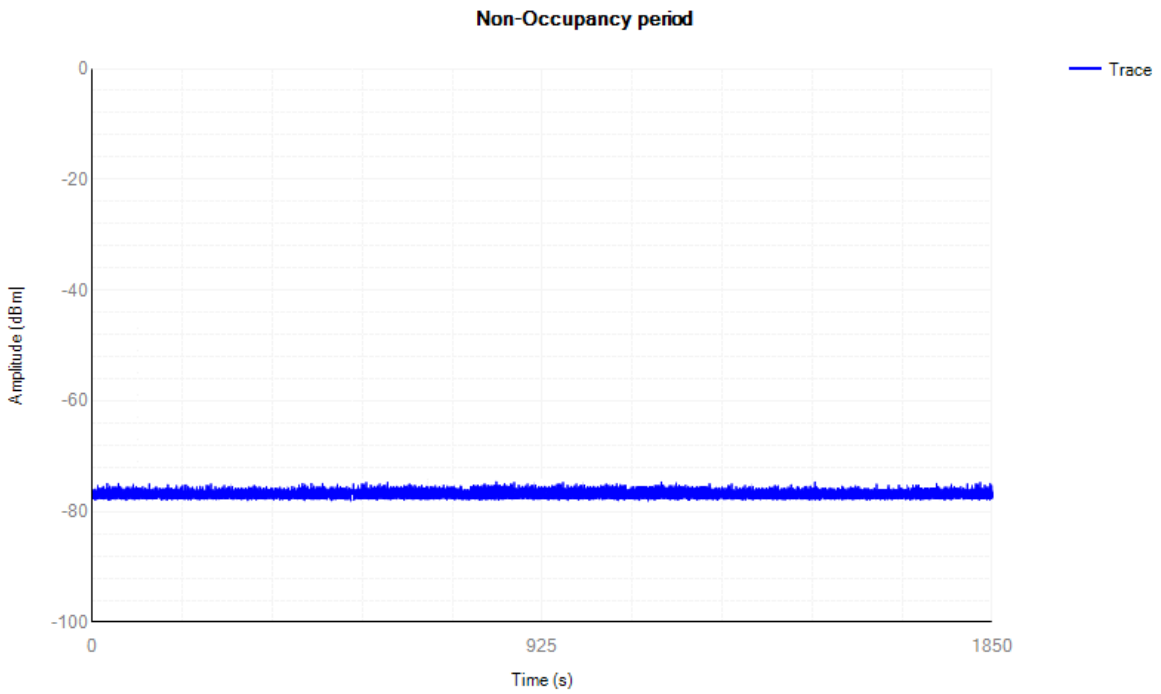


Non-Occupancy

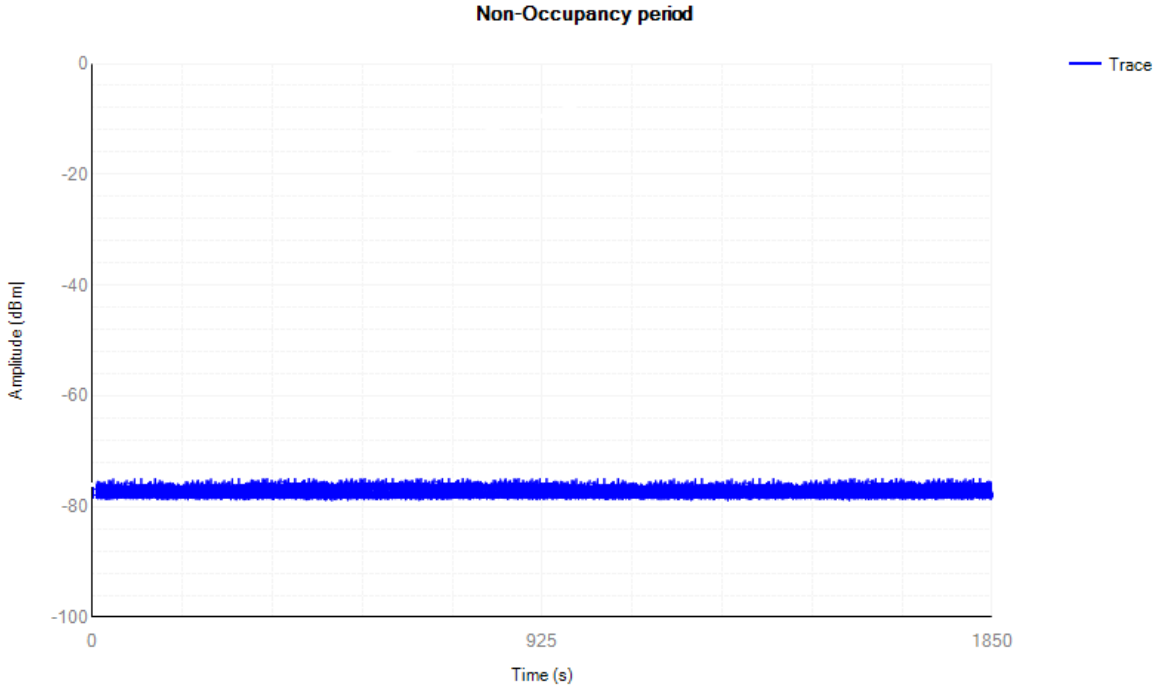
5320MHz a Non-Occupancy



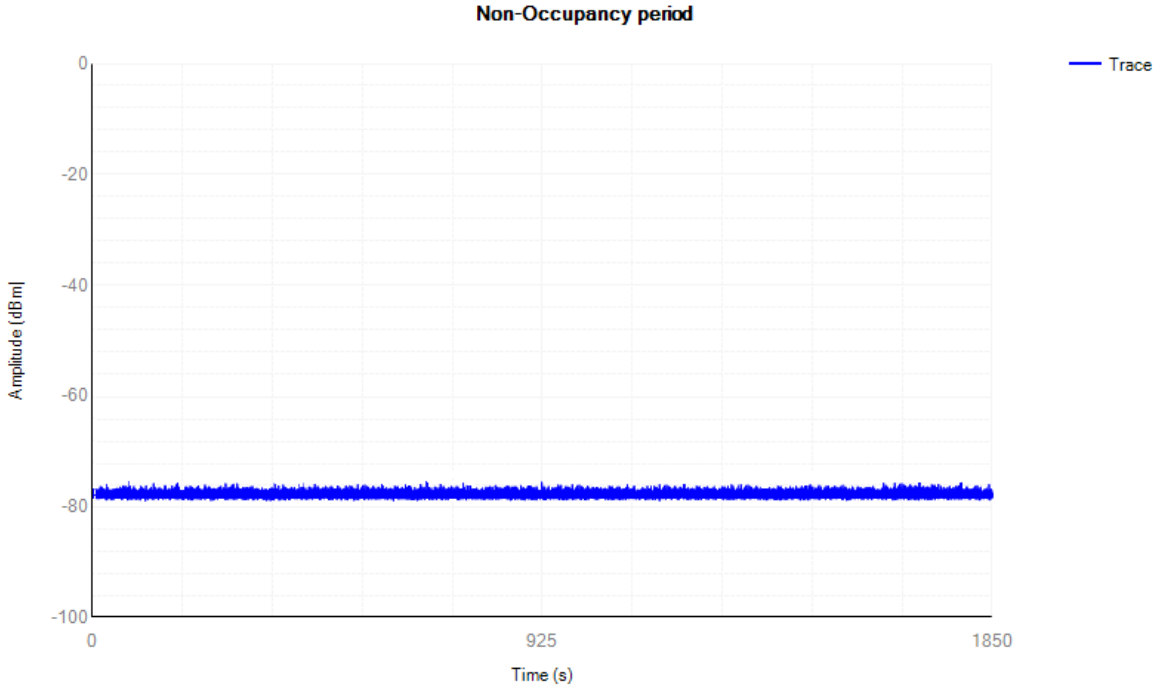
5500MHz a Non-Occupancy



5320MHz n20 Non-Occupancy



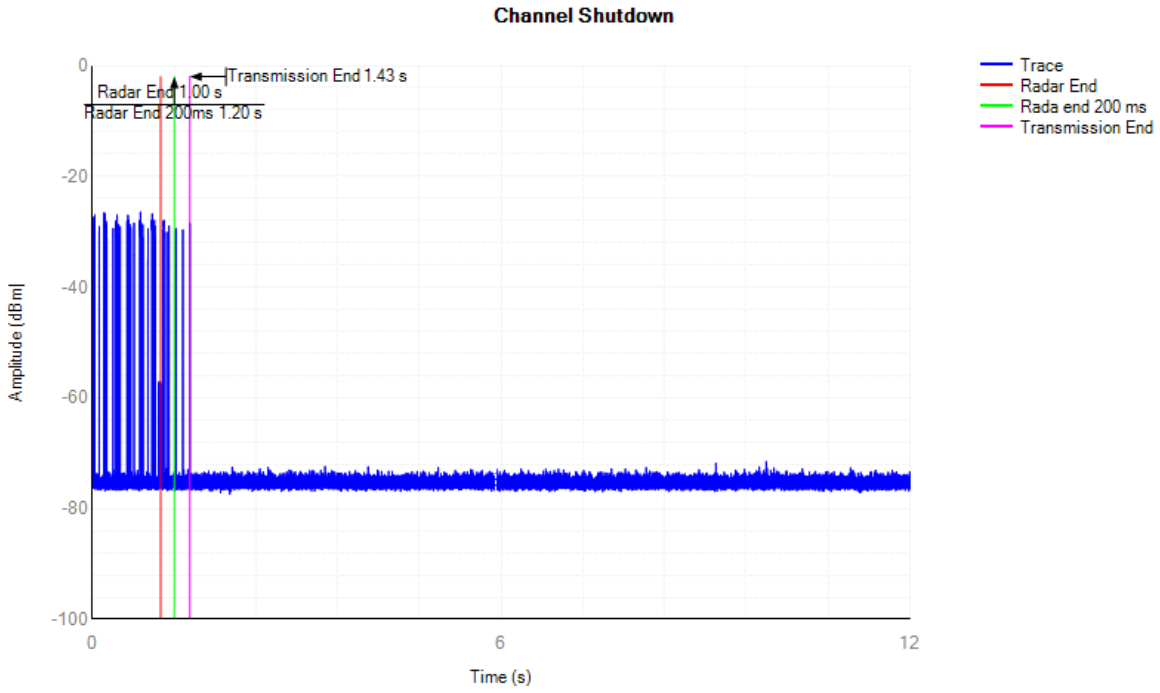
5500MHz n20 Non-Occupancy



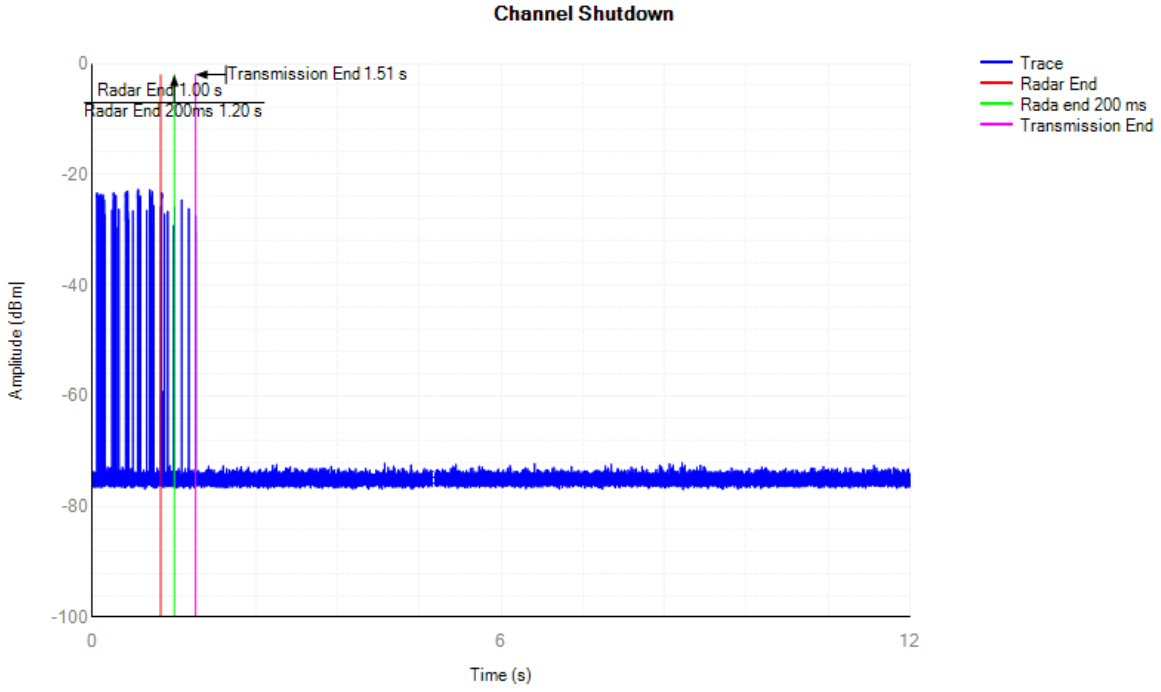
Shutdown Time

Mode	Frequency (MHz)	Channel Move Time (s)	Limit Channel Move Time (s)	Close Transmission Time (s)	Limit Close Transmission Time (s)	Close Transmission Time after 200ms(s)	Limit Close Transmission Time after 200ms (s)	Verdict
a	5320	0.4284	10	0.0084	0.26	0.002	0.06	Pass
a	5500	0.514	10	0.0092	0.26	0.0024	0.06	Pass
n20	5320	0.41	10	0.004	0.26	0.0024	0.06	Pass
n20	5500	0.4312	10	0.004	0.26	0.0024	0.06	Pass

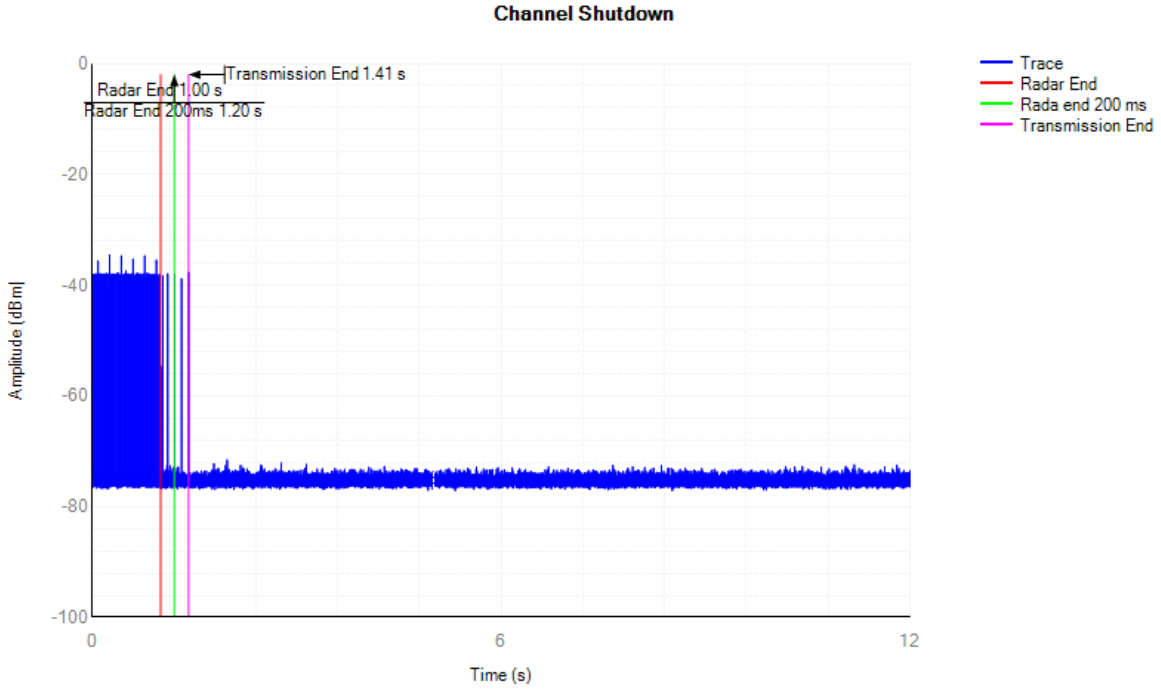
5320MHz a Shutdown



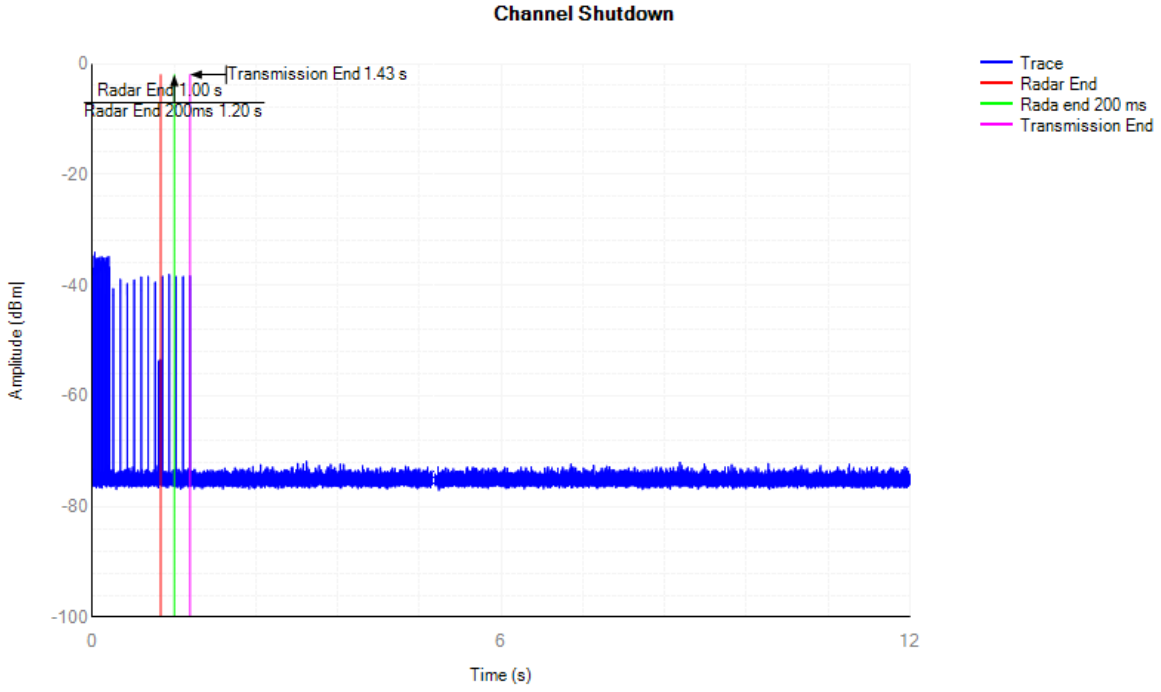
5500MHz a Shutdown



5320MHz n20 Shutdown



5500MHz n20 Shutdown


Channel Shutdown
Transmission End 1.43 s
Radar End 1.00 s
Radar End 200ms 1.20 s
Trace
Radar End
Rada end 200 ms
Transmission End
Amplitude [dBm]
0
-20
-40
-60
-80
-100
0
6
12
Time (s)