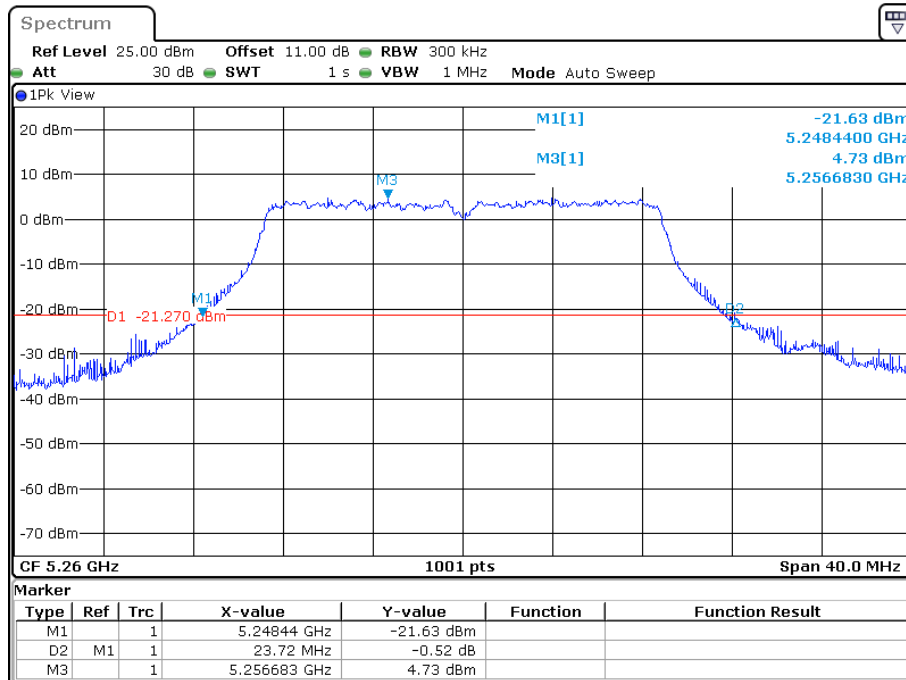
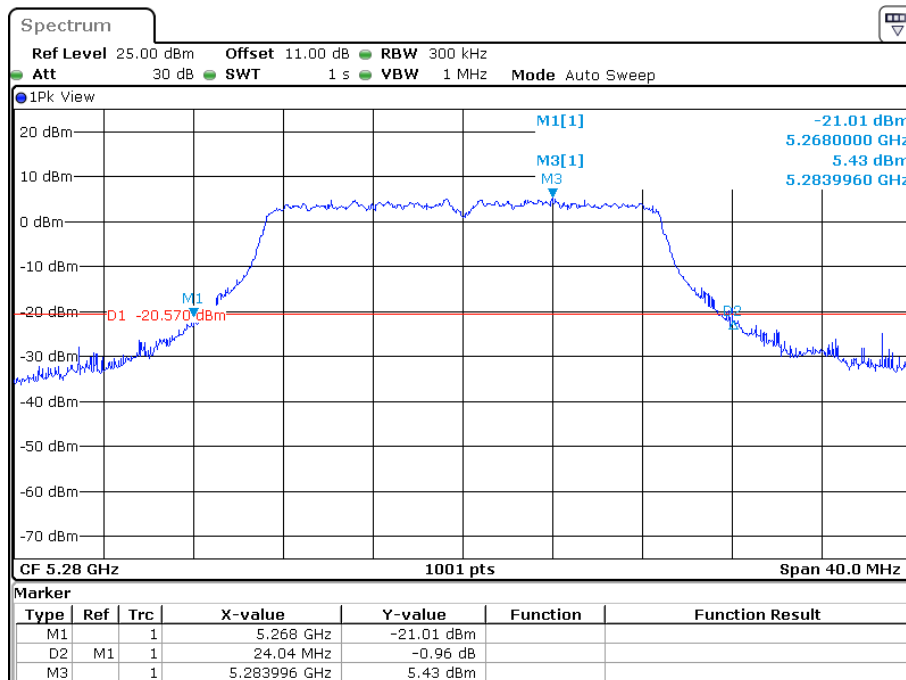


802.11ac20 mode, 5260 MHz



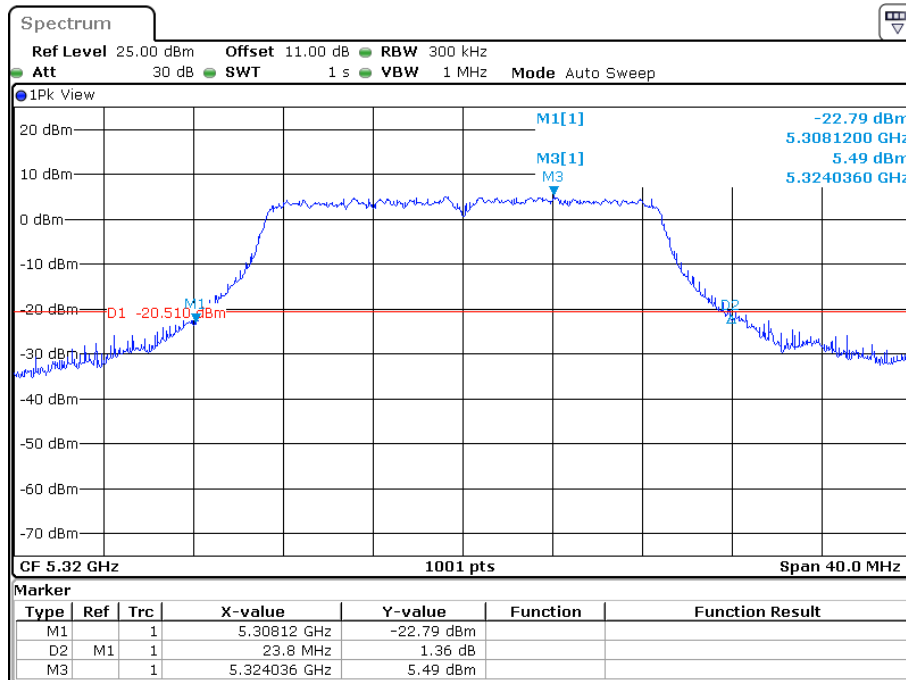
Date: 29.JUN.2022 19:52:33

802.11ac20 mode, 5280 MHz

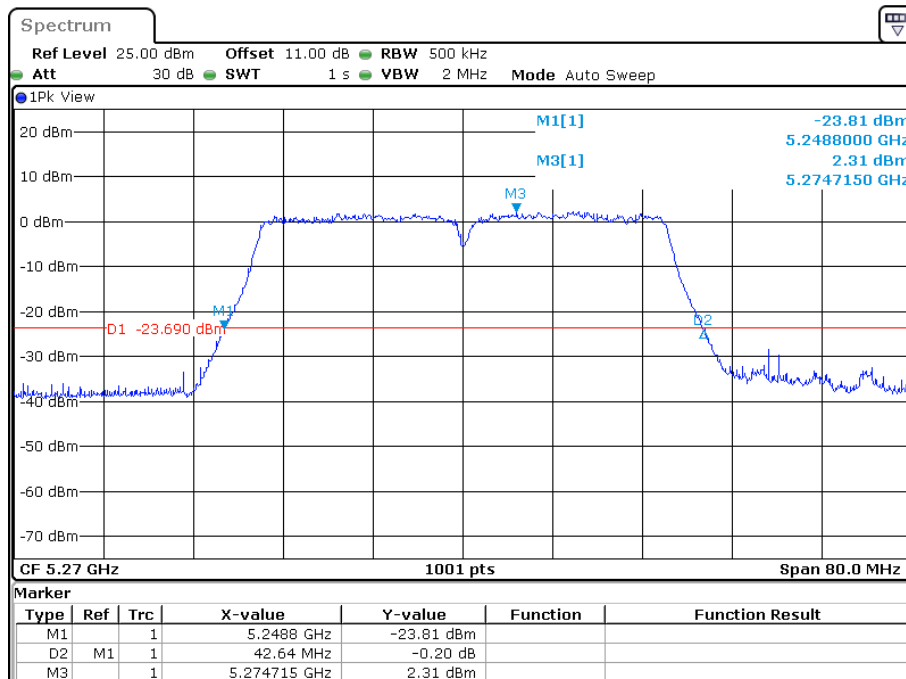


Date: 29.JUN.2022 22:58:31

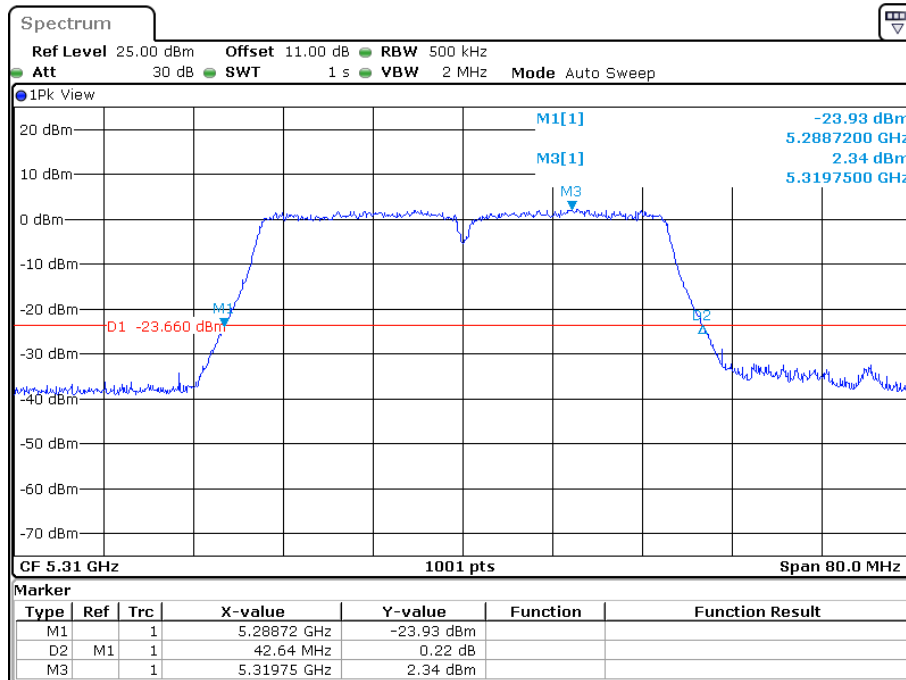
802.11ac20 mode, 5320 MHz



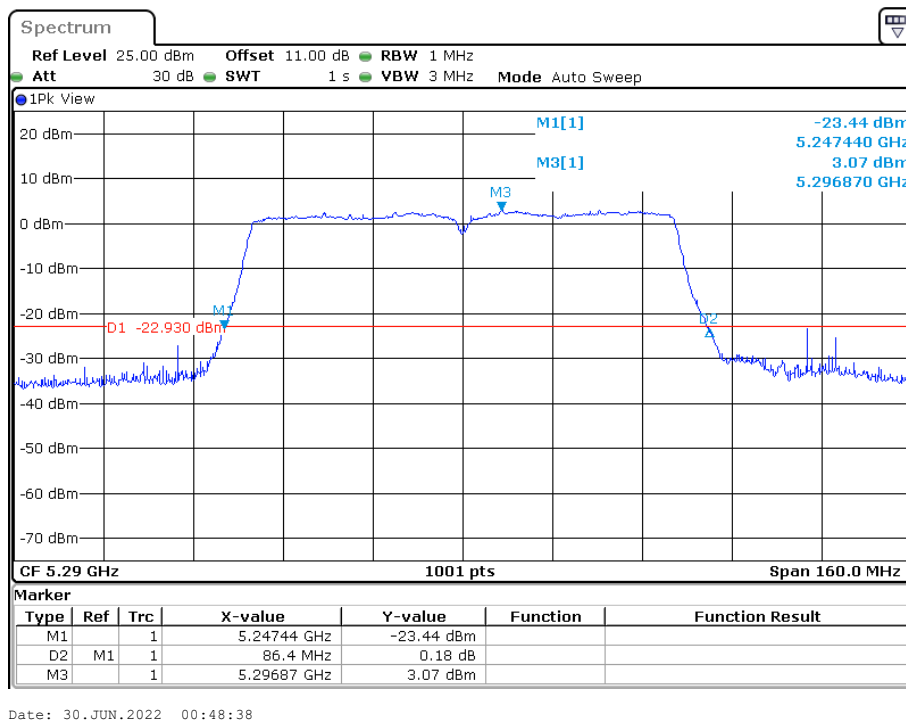
802.11ac40 mode, 5270 MHz



802.11ac40 mode, 5310MHz

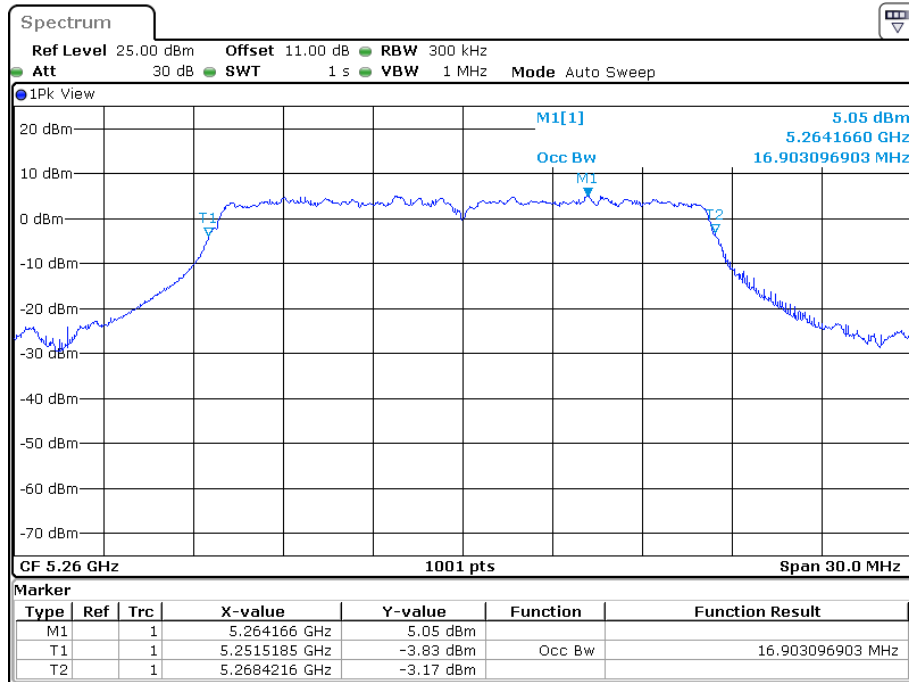


802.11ac80 mode, 5290 MHz



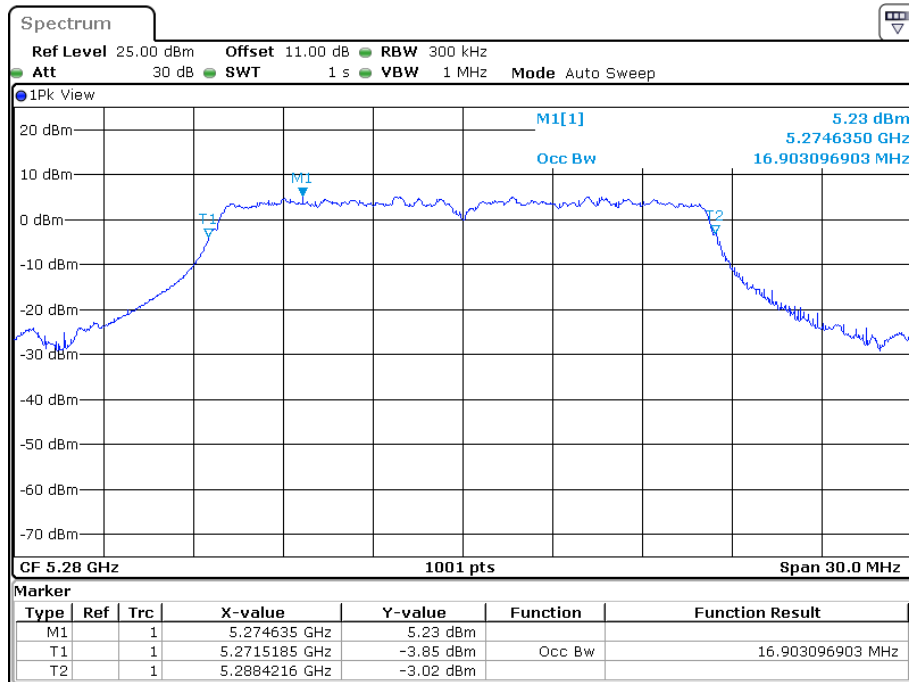
99% Occupied Bandwidth

802.11a mode, 5260 MHz



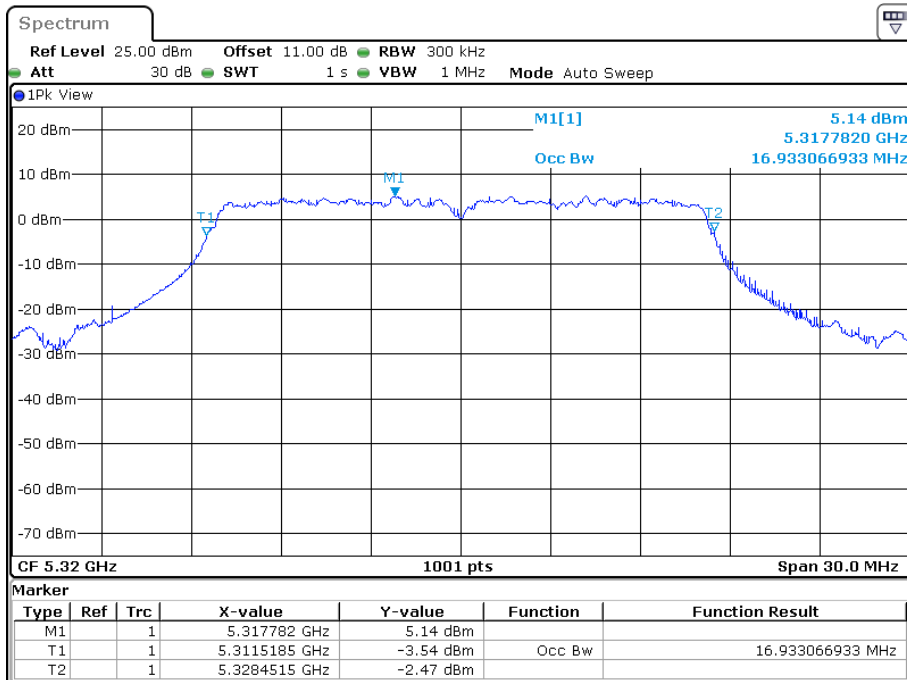
Date: 28.JUN.2022 21:05:29

802.11a mode, 5280MHz



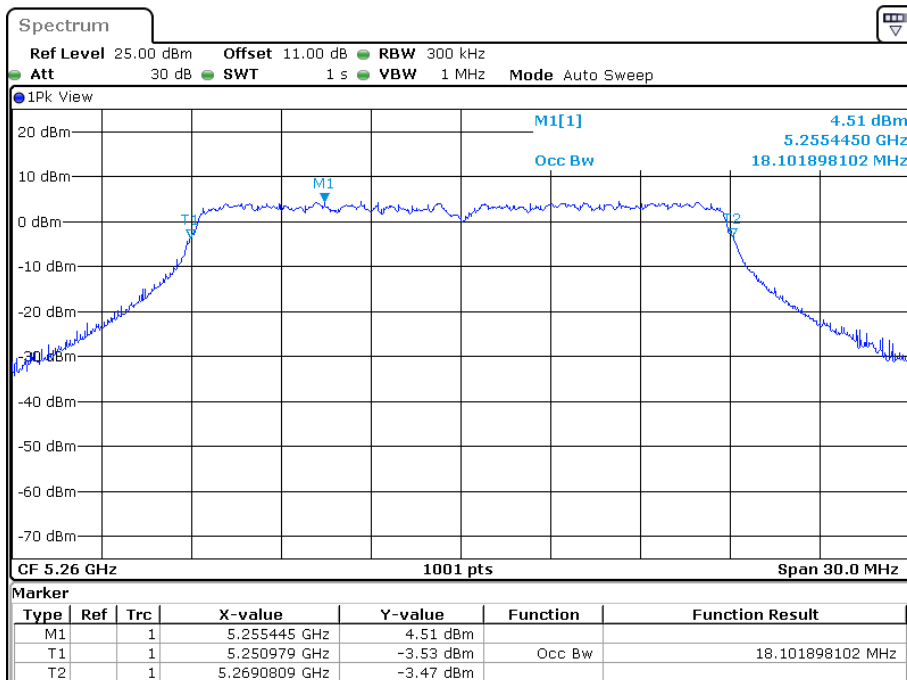
Date: 28.JUN.2022 21:26:25

802.11a mode, 5320MHz



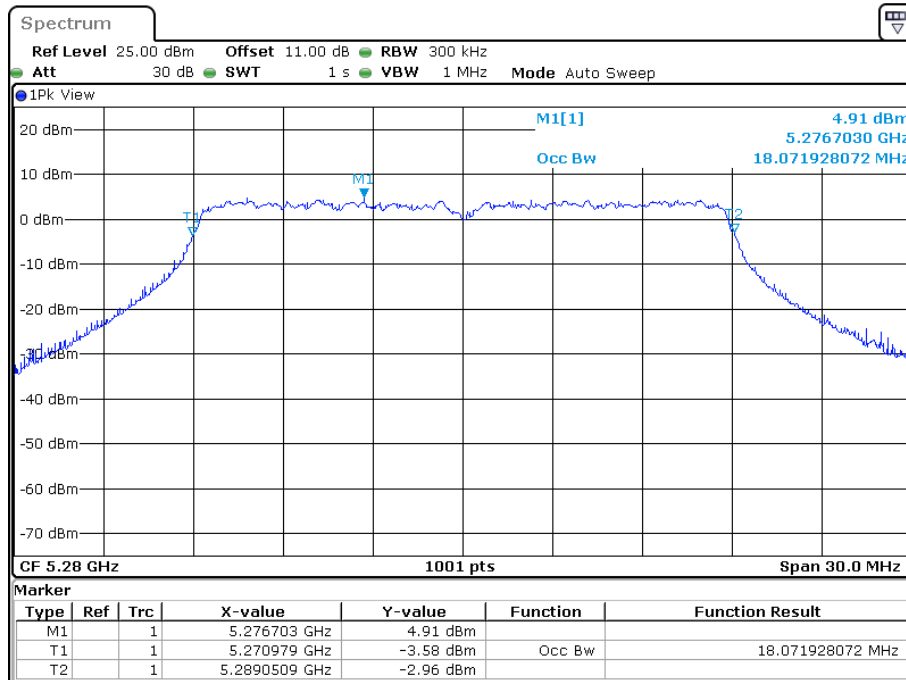
Date: 28.JUN.2022 21:41:45

802.11n20 mode, 5260 MHz



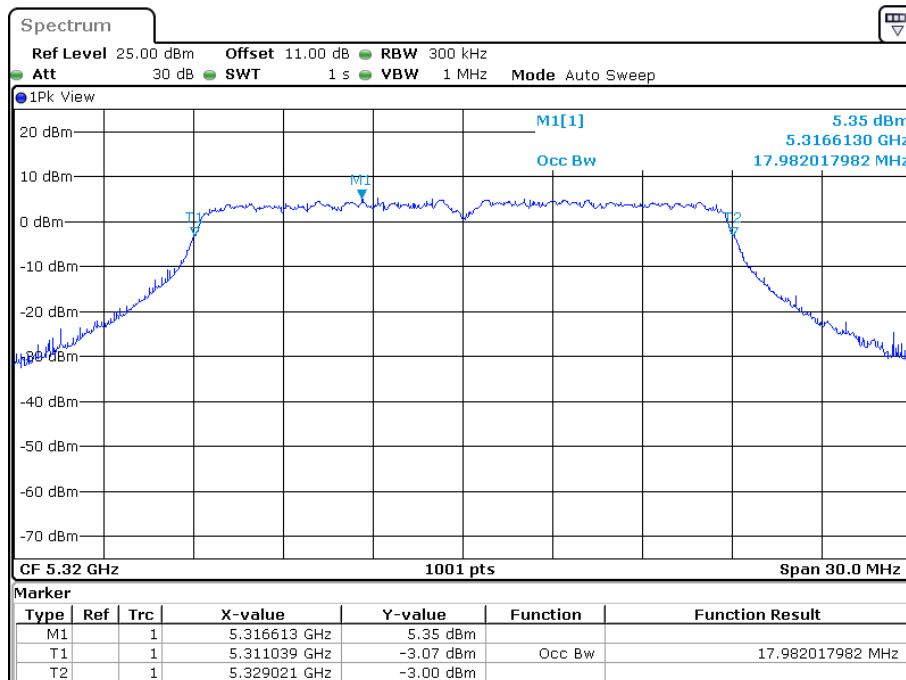
Date: 29.JUN.2022 00:12:58

802.11n20 mode, 5280MHz



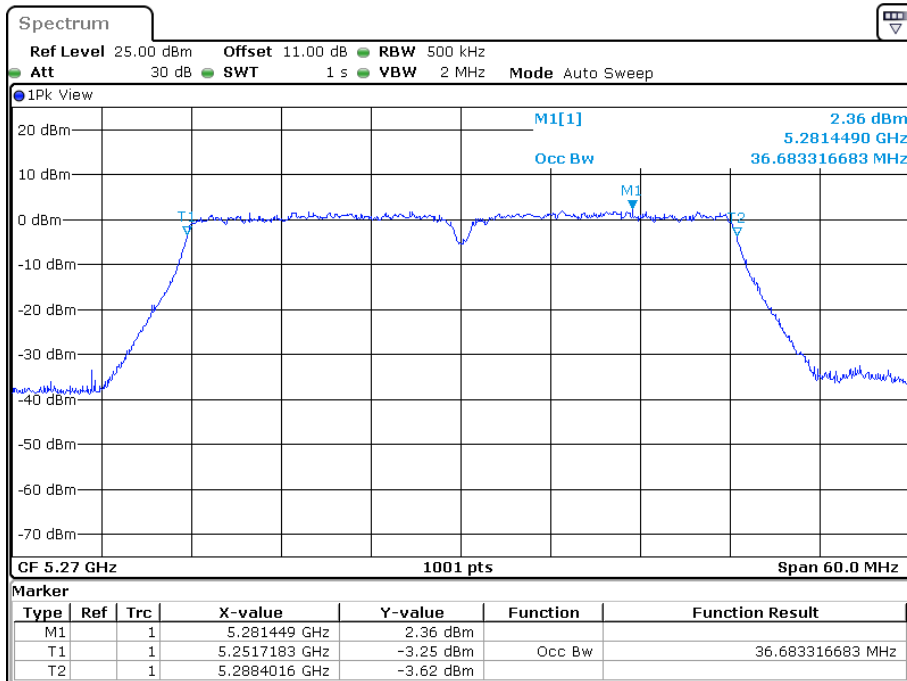
Date: 29.JUN.2022 00:15:25

802.11n20 mode, 5320 MHz



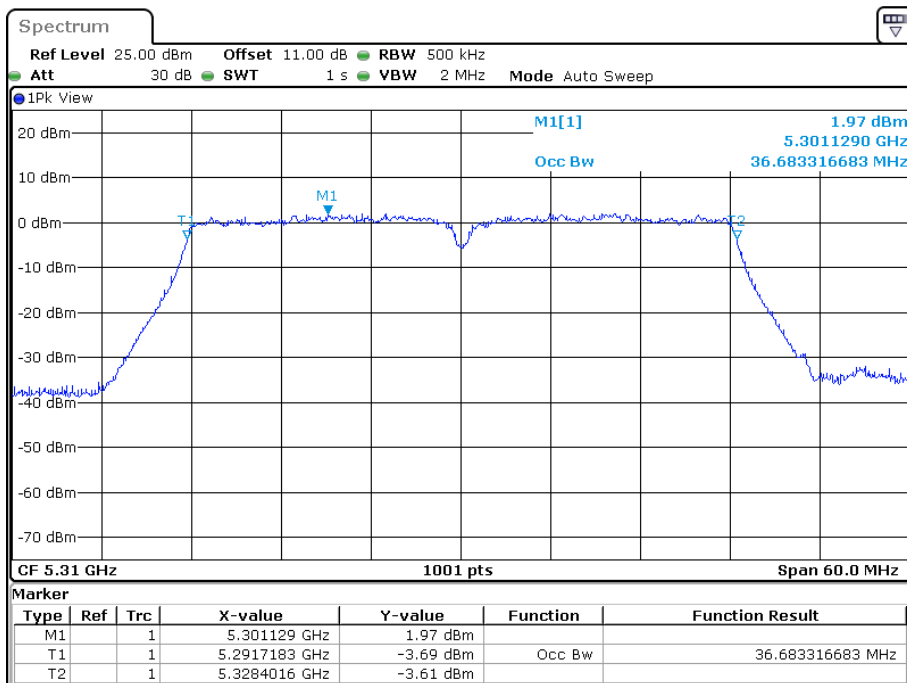
Date: 29.JUN.2022 00:17:56

802.11n40 mode, 5270 MHz



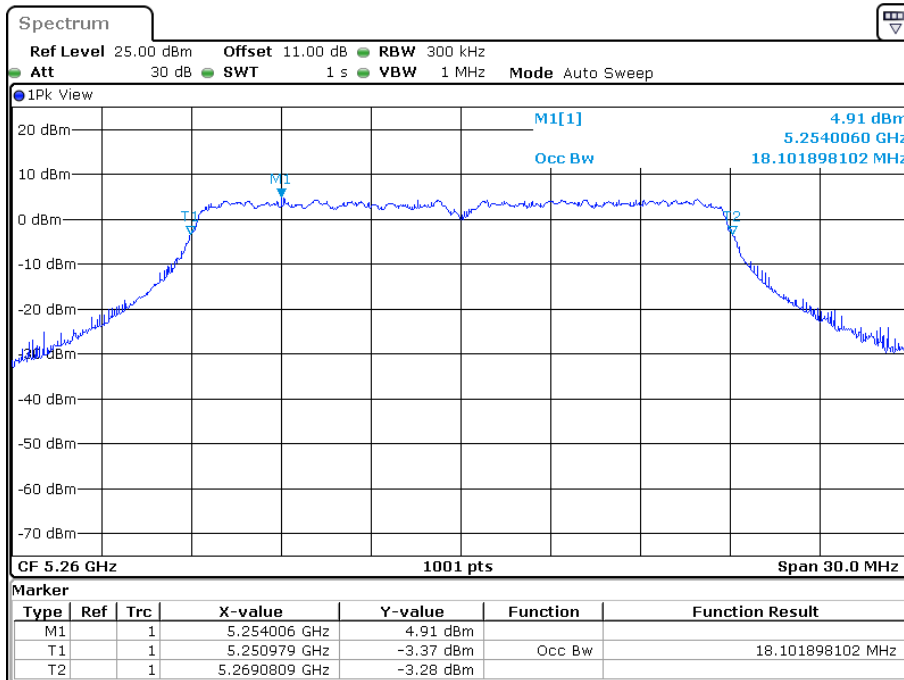
Date: 29.JUN.2022 00:34:29

802.11n40 mode, 5310 MHz

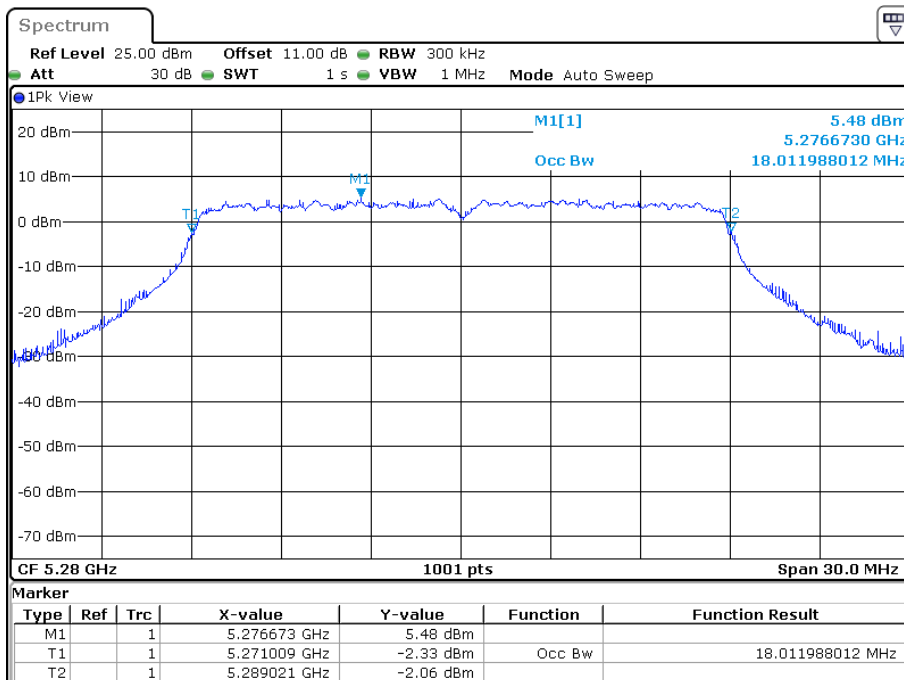


Date: 29.JUN.2022 00:37:06

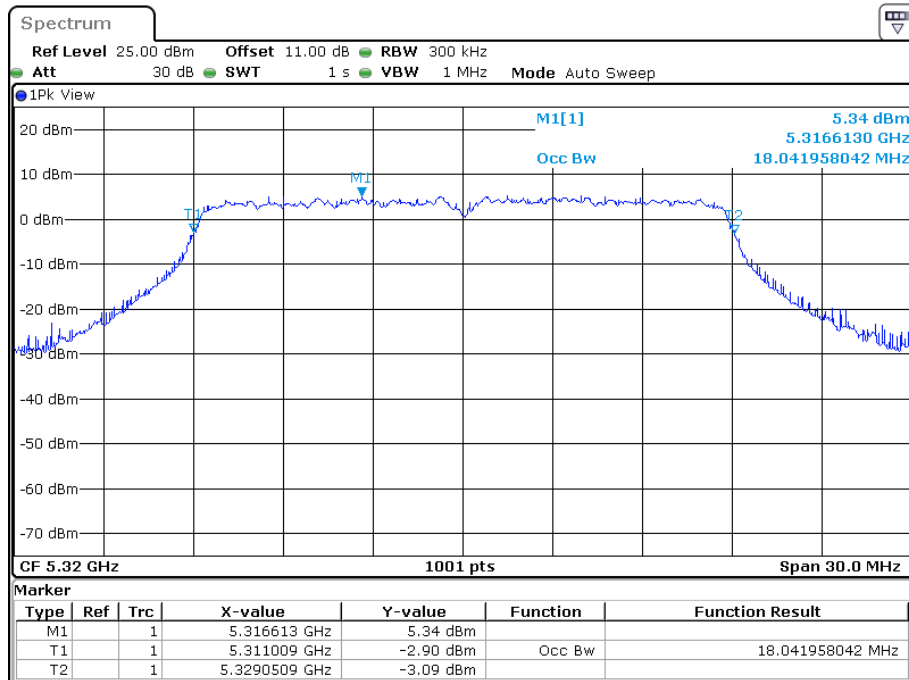
802.11ac20 mode, 5260 MHz



802.11ac20 mode, 5280 MHz

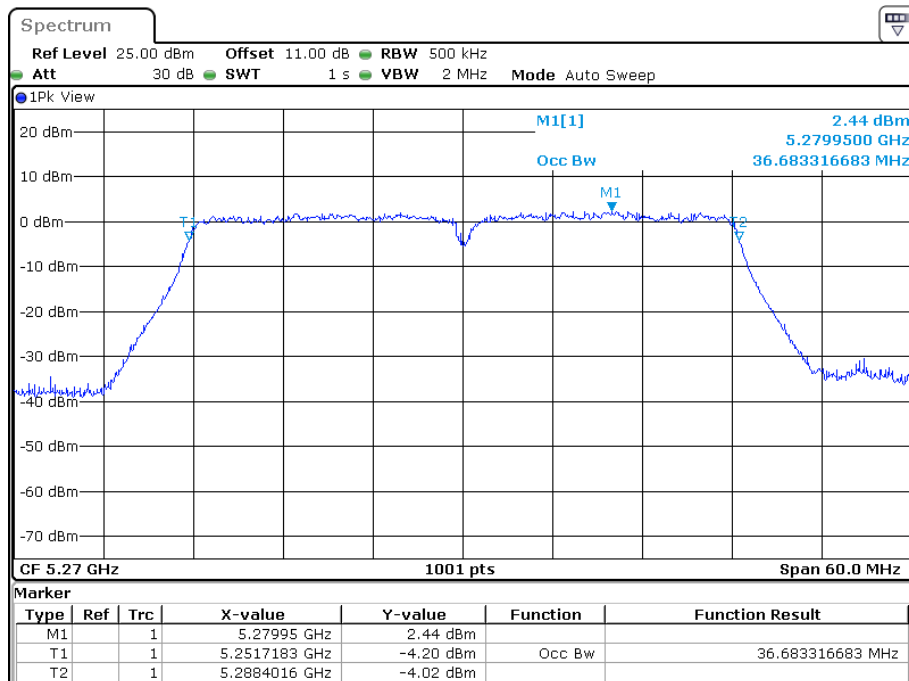


802.11ac20 mode, 5320 MHz



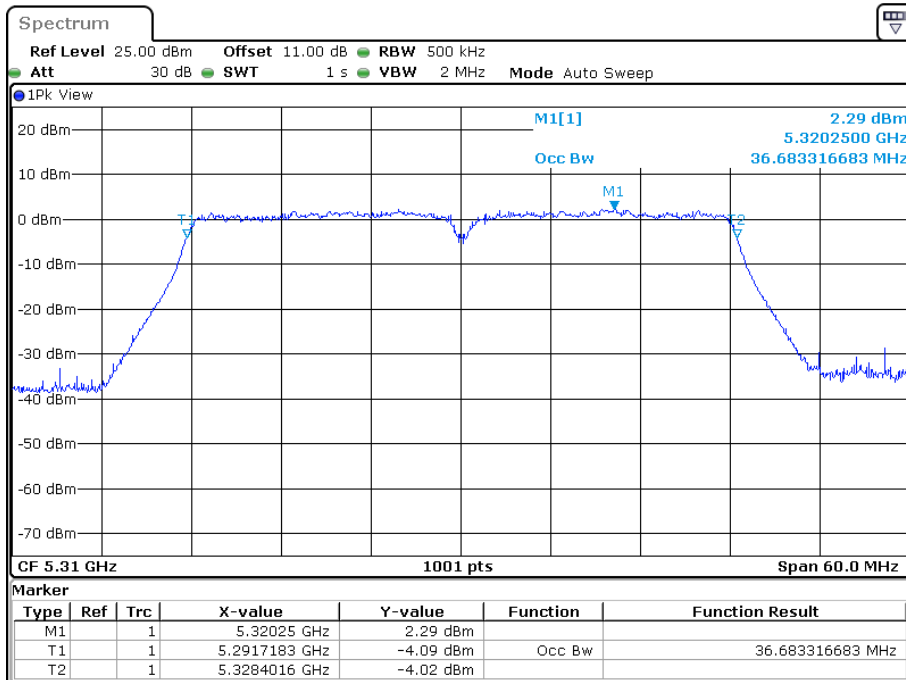
Date: 29.JUN.2022 23:00:38

802.11ac40 mode, 5270 MHz



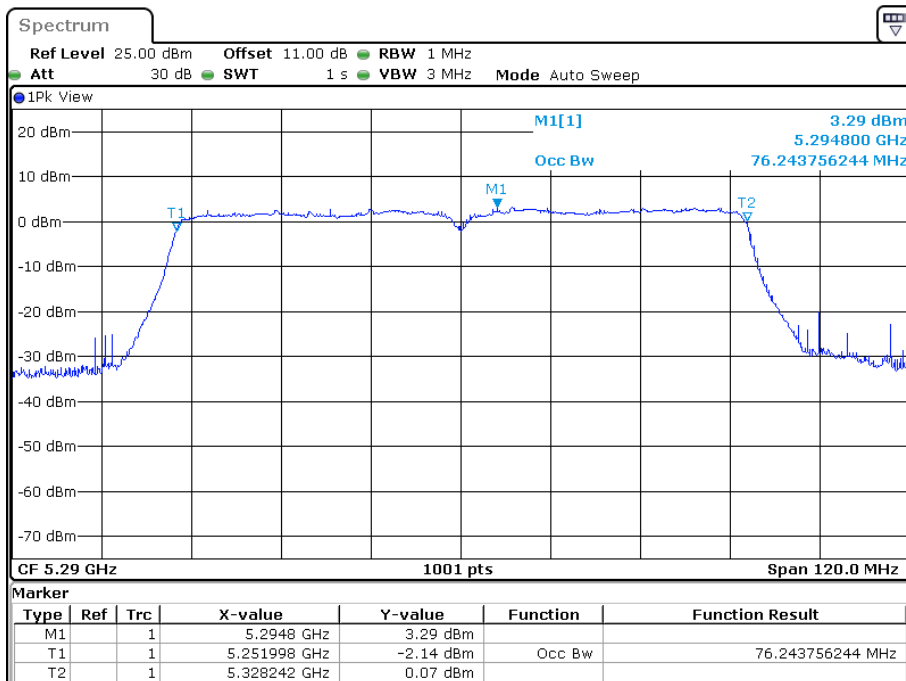
Date: 30.JUN.2022 00:30:06

802.11ac40 mode, 5310MHz



Date: 30.JUN.2022 00:33:03

802.11ac80 mode, 5290 MHz



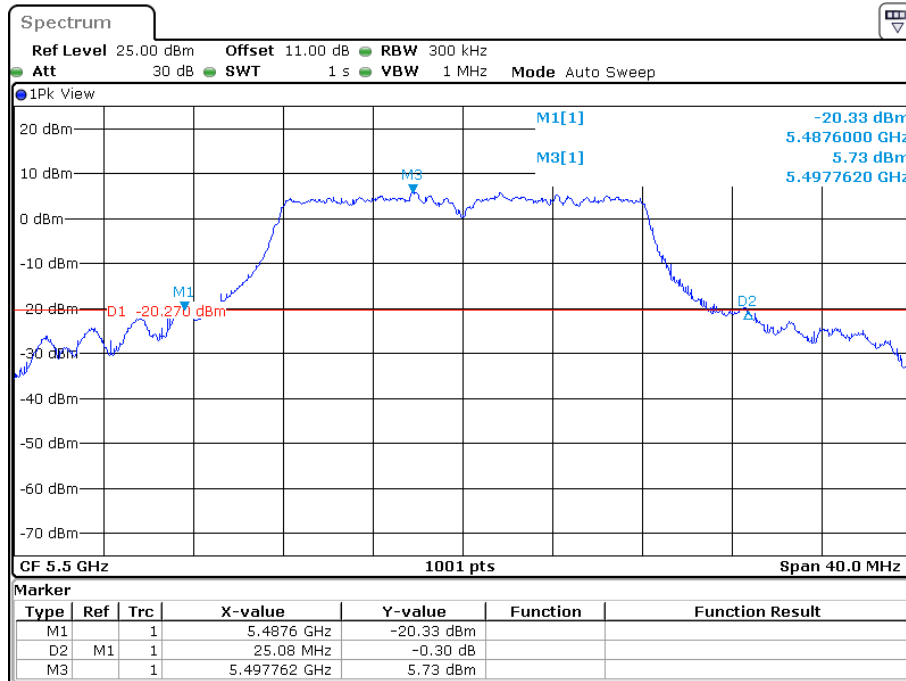
Date: 30.JUN.2022 00:48:09

5470-5725MHz:

Frequency (MHz)	Antenna Port	26dB bandwidth (MHz)	99% Bandwidth (MHz)
802.11a			
5500	Ant1	25.08	16.96
5580	Ant1	23.12	16.96
5700	Ant1	22.32	16.96
802.11n20			
5500	Ant1	24.24	17.98
5580	Ant1	24.40	17.95
5700	Ant1	23.64	17.98
802.11n40			
5510	Ant1	42.80	36.80
5550	Ant1	43..12	36.80
5670	Ant1	42.88	36.68
802.11ac20			
5500	Ant1	24.16	18.07
5580	Ant1	23.80	17.98
5700	Ant1	23.32	18.10
802.11ac40			
5510	Ant1	43.04	36.74
5550	Ant1	42.80	36.68
5670	Ant1	42.80	36.68
802.11ac80			
5530	Ant1	86.72	76.48
5610	Ant1	86.40	76.48

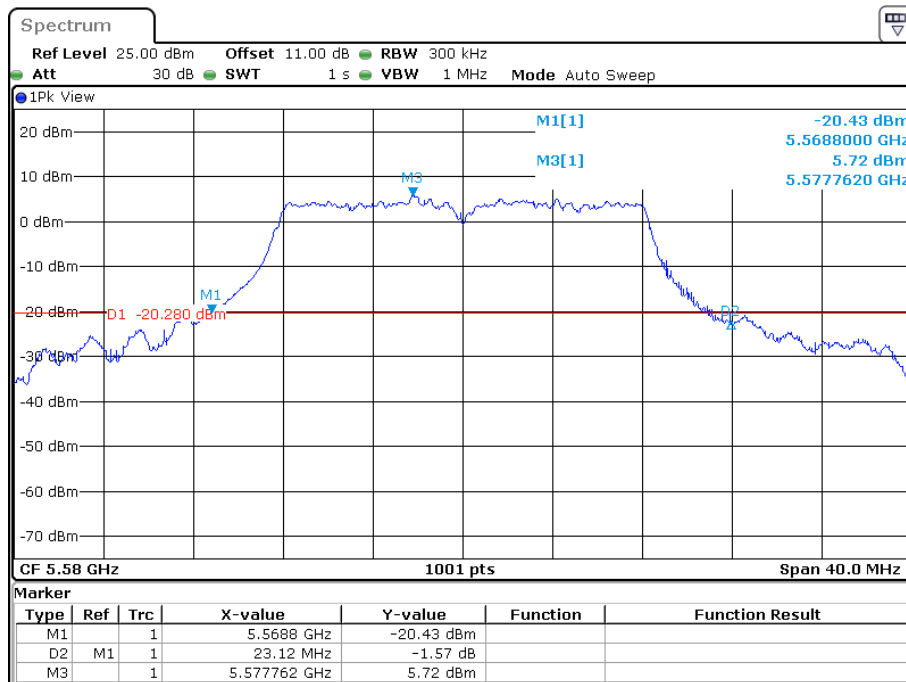
26 dB Emission Bandwidth

802.11a mode, 5500MHz



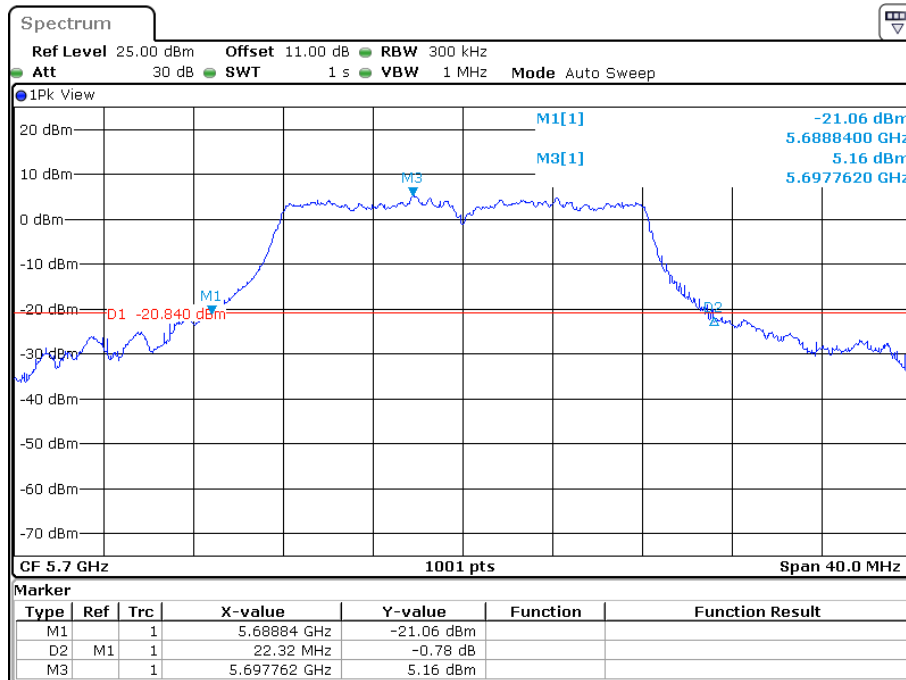
Date: 28.JUN.2022 21:46:28

802.11a mode, 5580MHz



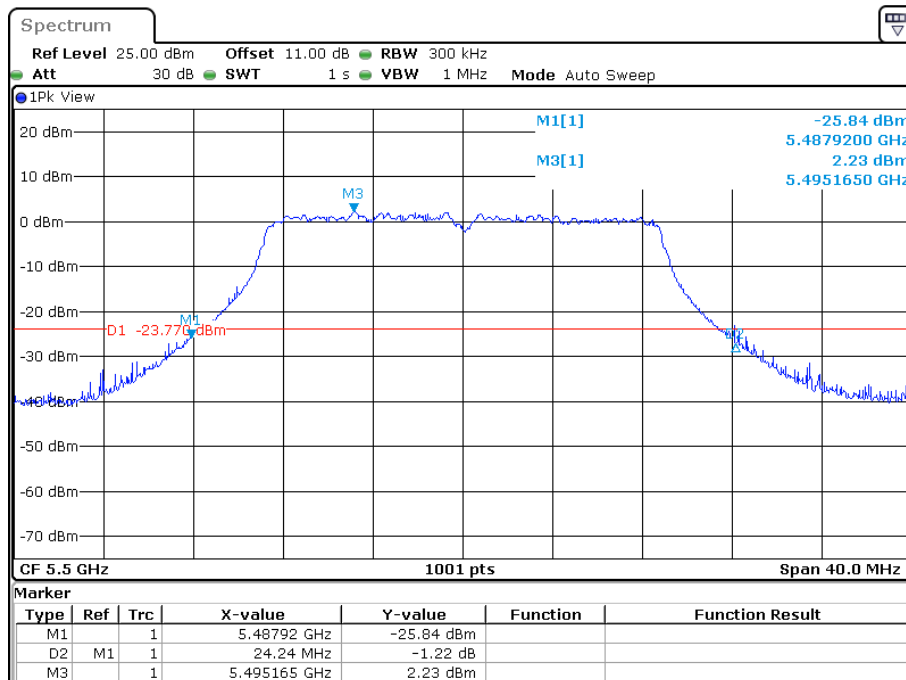
Date: 28.JUN.2022 21:48:26

802.11a mode, 5700MHz



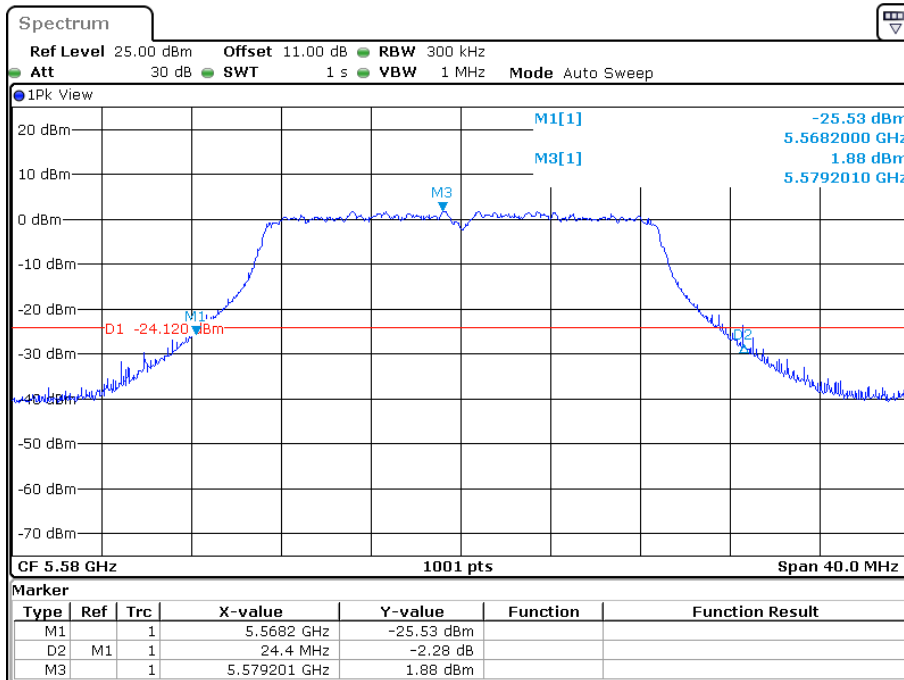
Date: 28.JUN.2022 21:50:54

802.11n mode, 5500 MHz



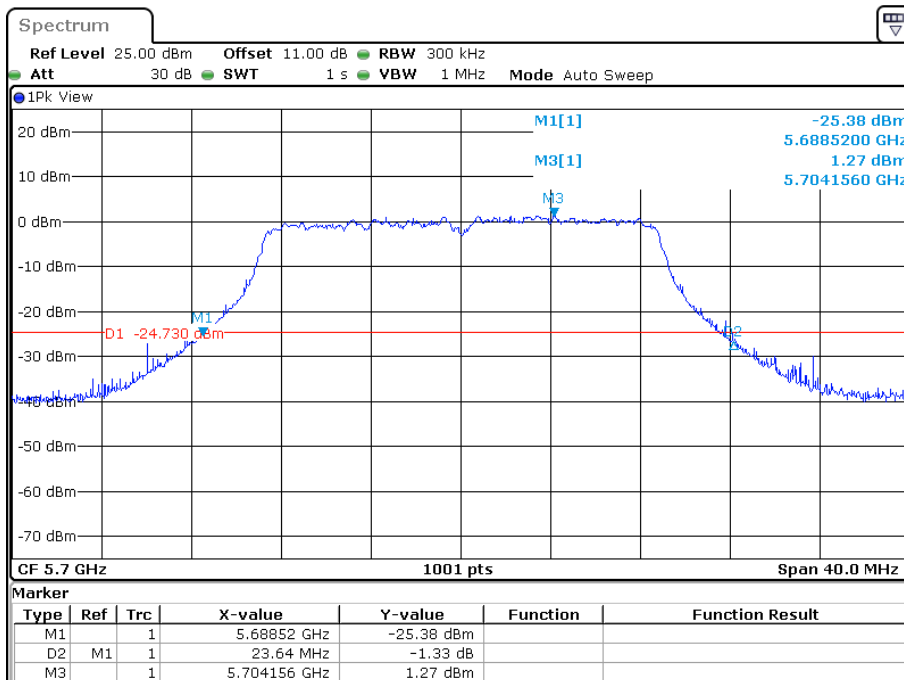
Date: 29.JUN.2022 00:21:04

802.11n20 mode, 5580 MHz



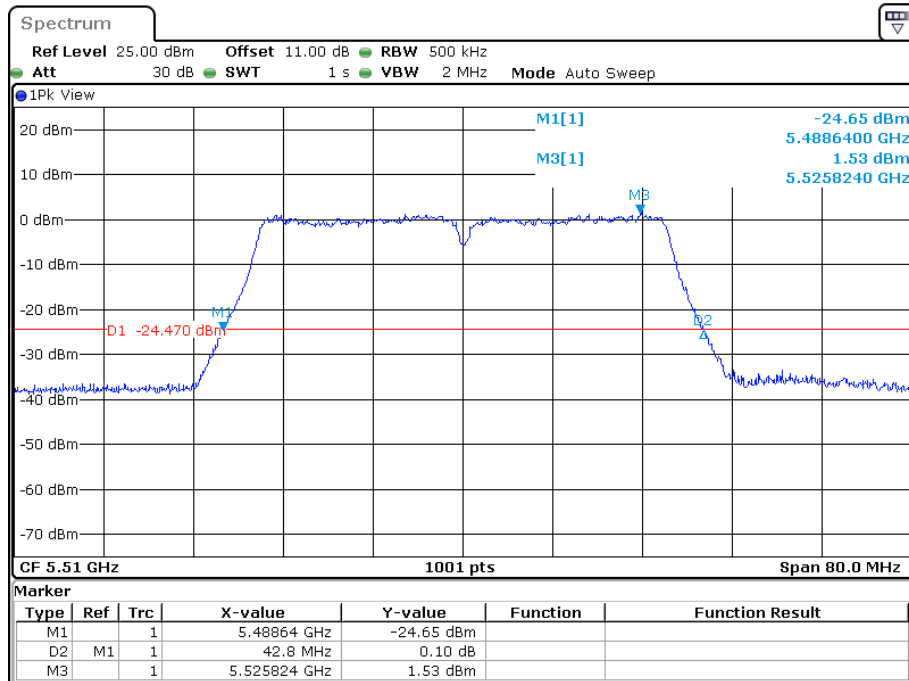
Date: 29.JUN.2022 00:23:39

802.11n20 mode, 5700 MHz



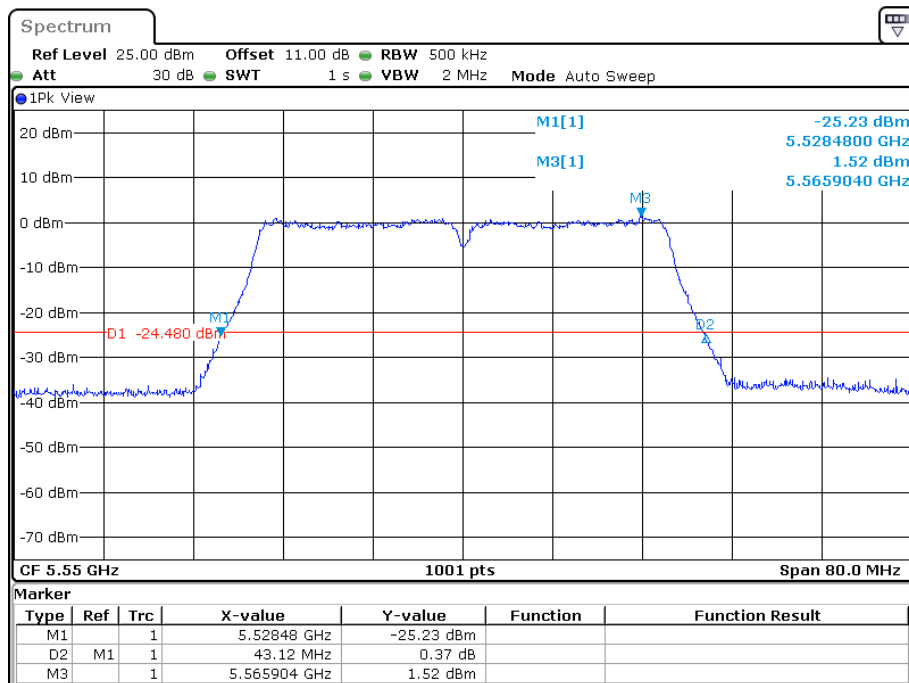
Date: 29.JUN.2022 00:26:09

802.11n40 mode, 5510 MHz



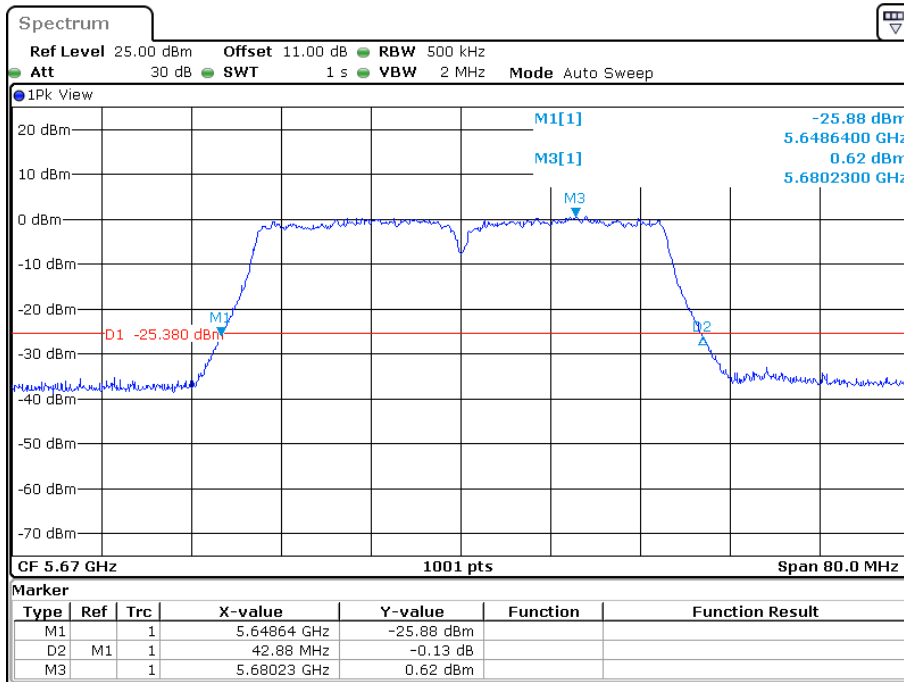
Date: 29 JUN 2022 00:40:01

802.11n40 mode, 5550 MHz

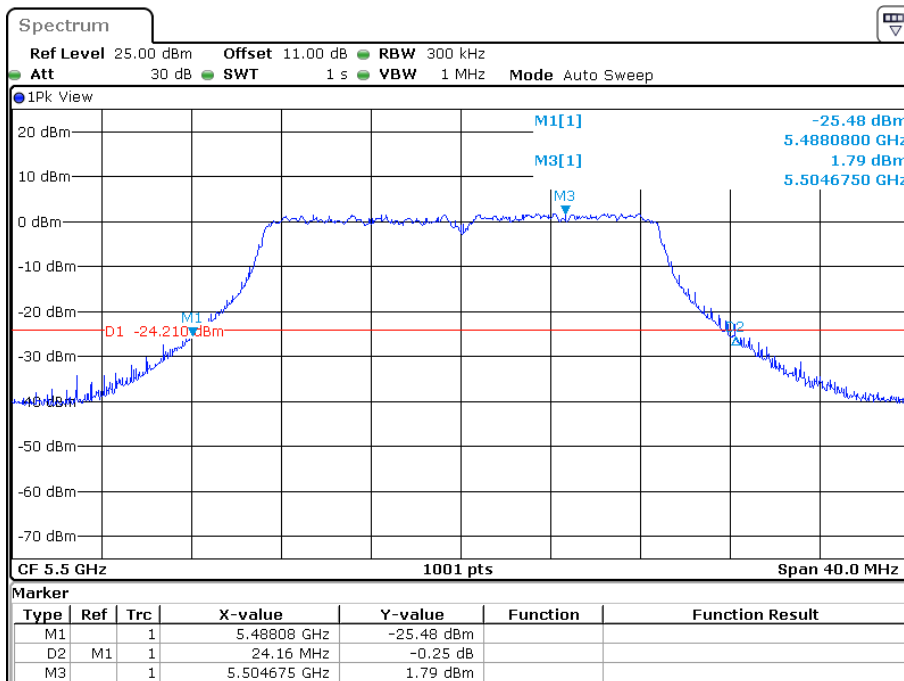


Date: 29 JUN 2022 00:42:31

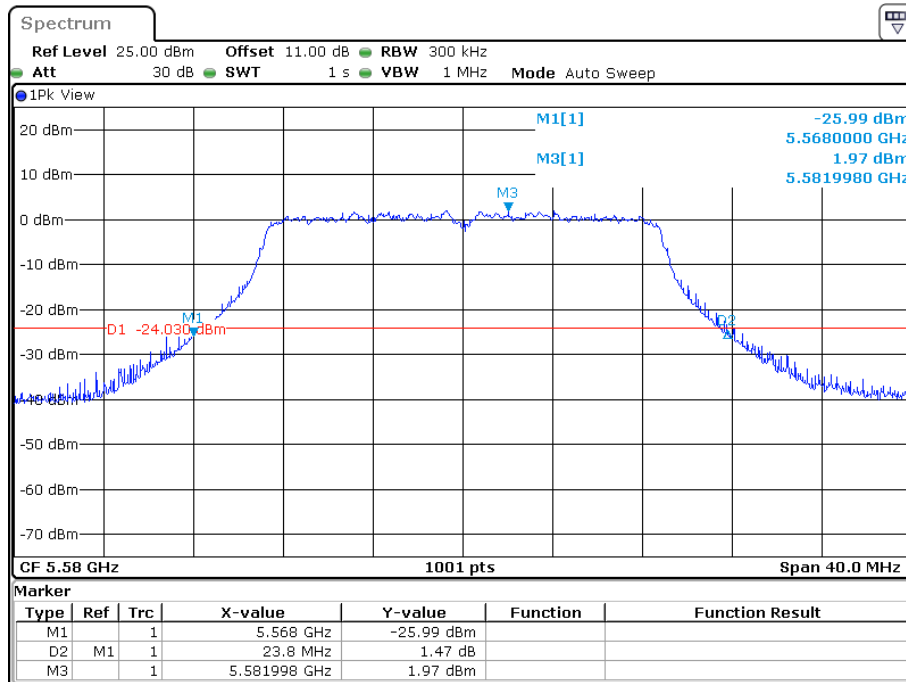
802.11n40 mode, 5670MHz



802.11ac20 mode, 5500MHz

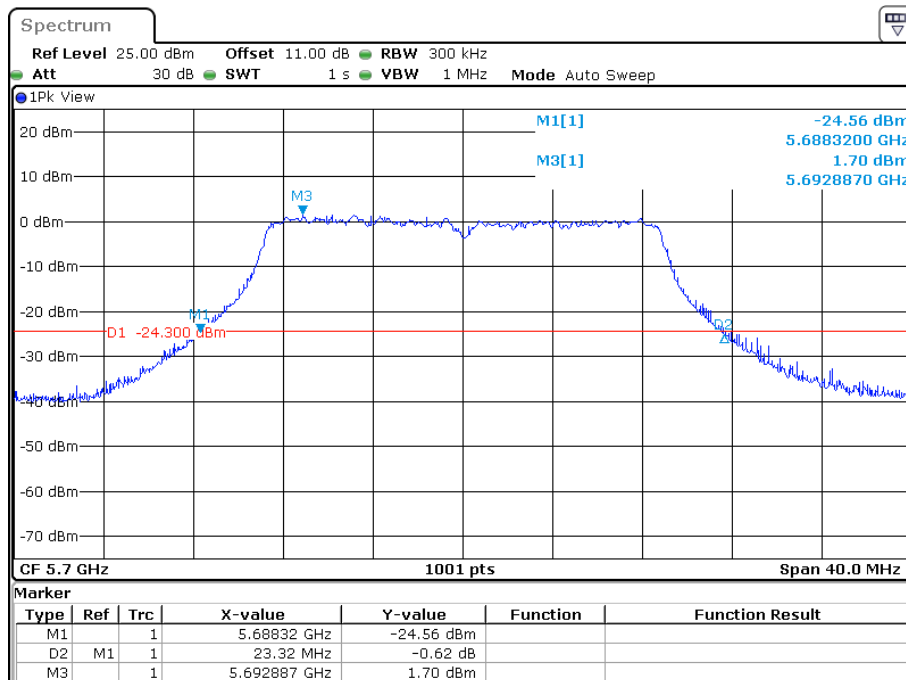


802.11ac20 mode, 5580 MHz



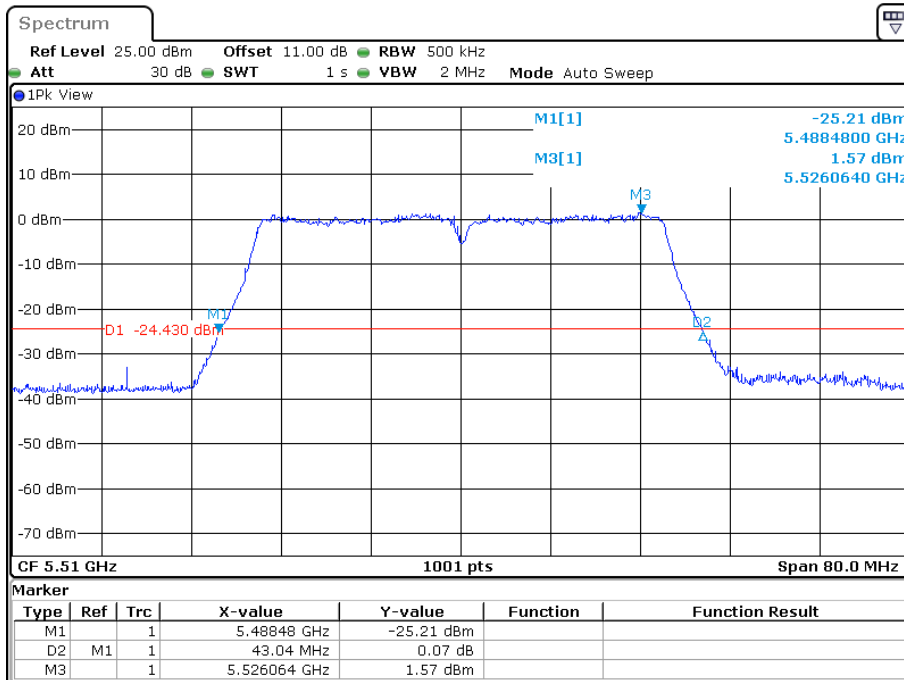
Date: 29.JUN.2022 23:06:10

802.11ac20 mode, 5700MHz



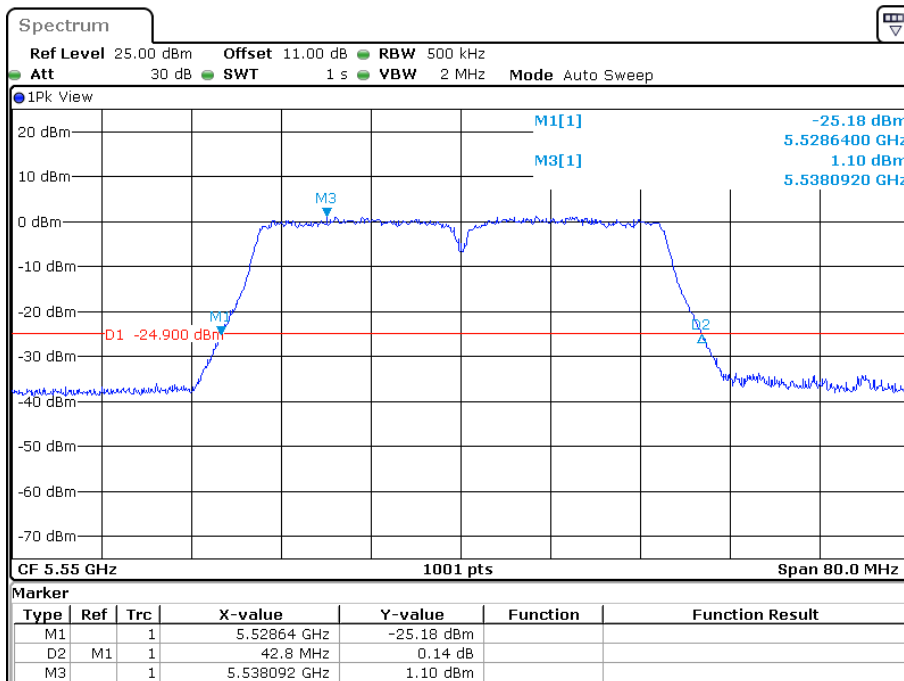
Date: 29.JUN.2022 23:08:40

802.11ac40 mode, 5510MHz



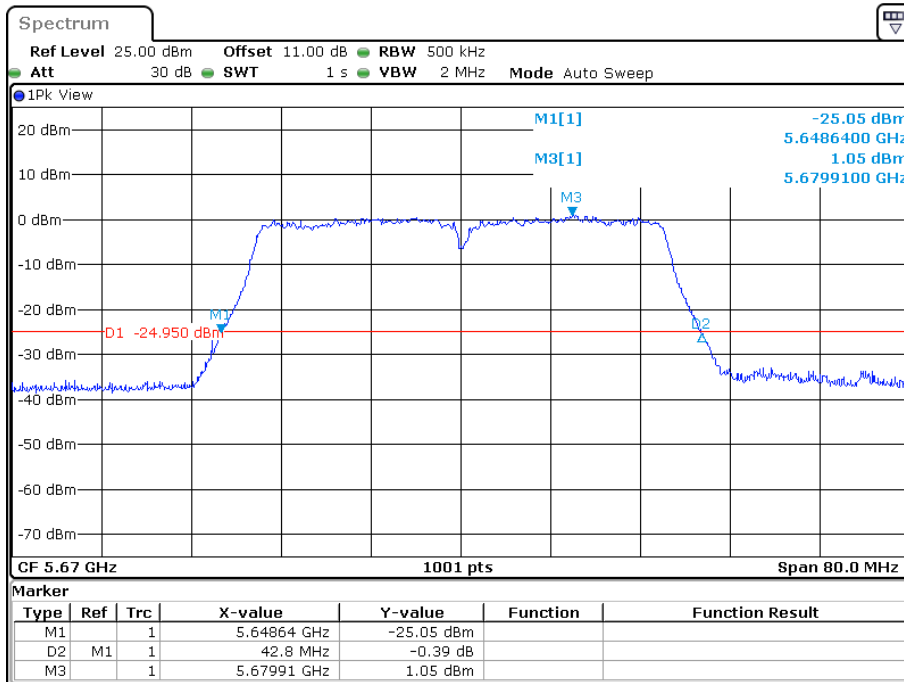
Date: 30.JUN.2022 00:36:19

802.11ac40 mode, 5550 MHz



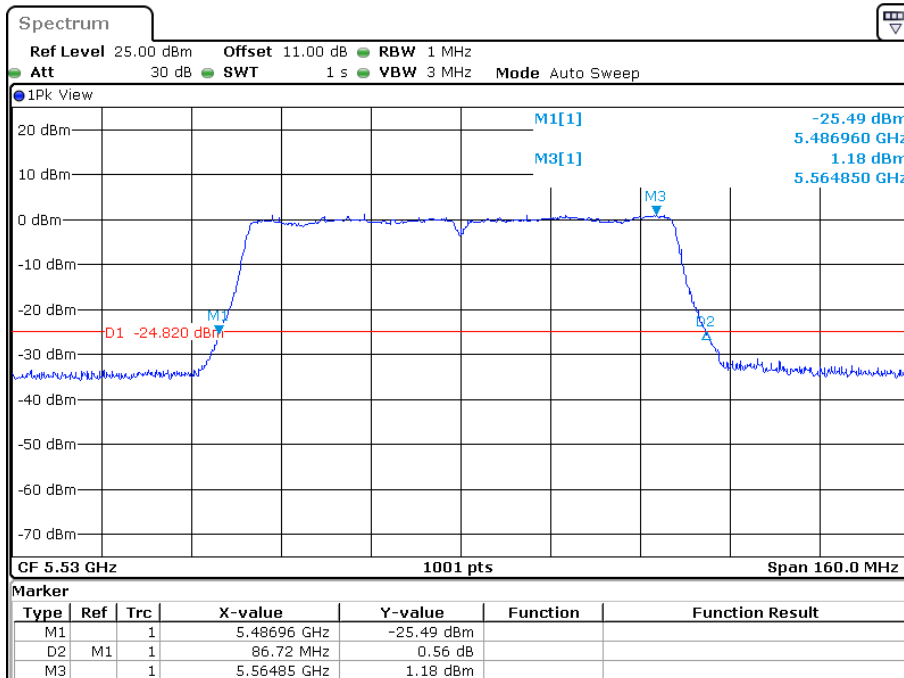
Date: 30.JUN.2022 00:38:45

802.11ac40 mode, 5670 MHz



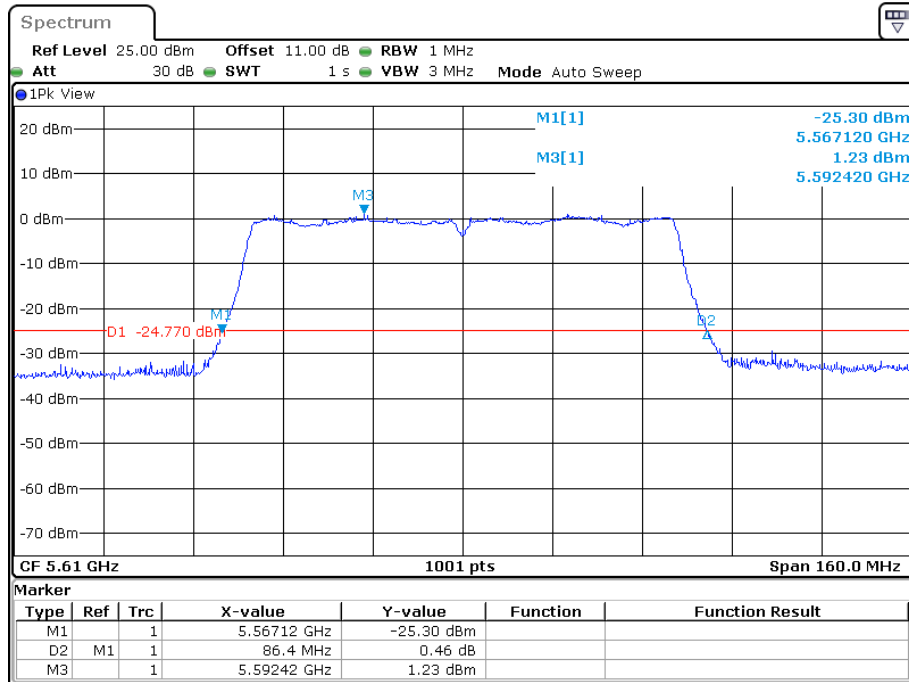
Date: 30.JUN.2022 00:41:40

802.11ac80 mode, 5530MHz



Date: 30.JUN.2022 00:52:34

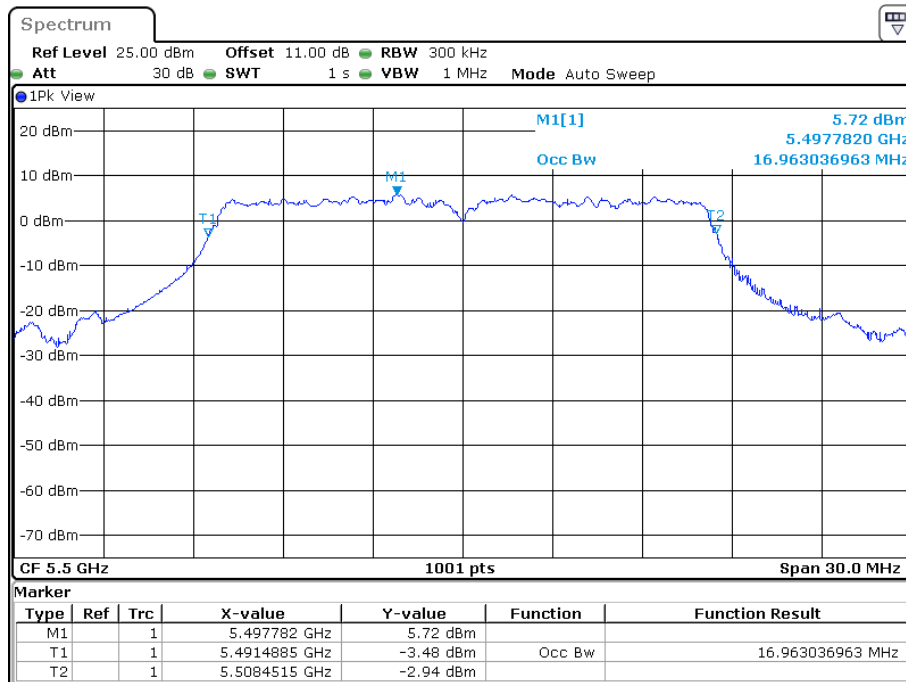
802.11ac80 mode, 5610MHz



Date: 30.JUN.2022 00:55:09

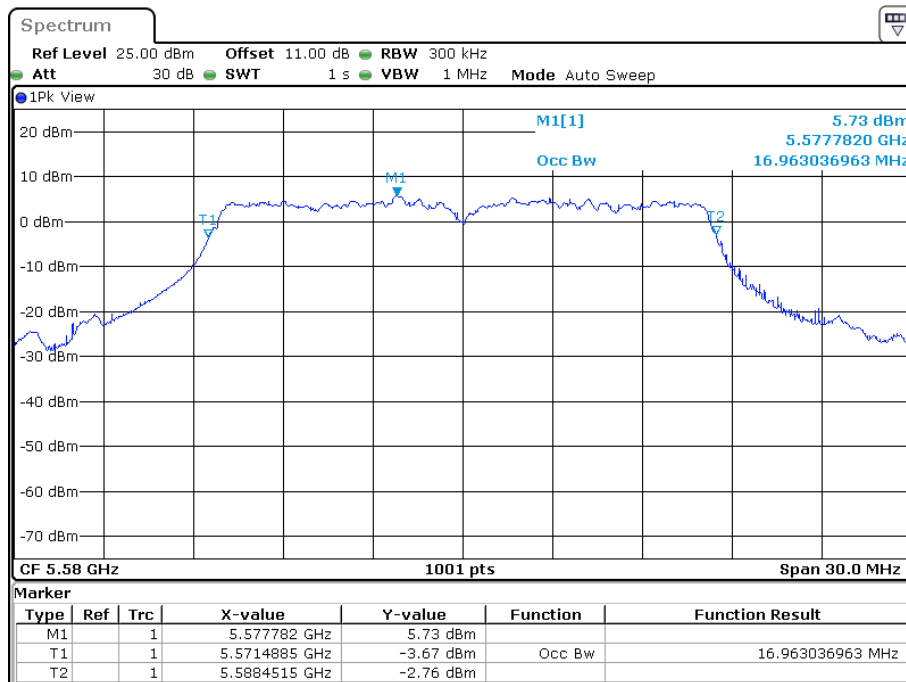
99% Occupied Bandwidth

802.11a mode, 5500MHz



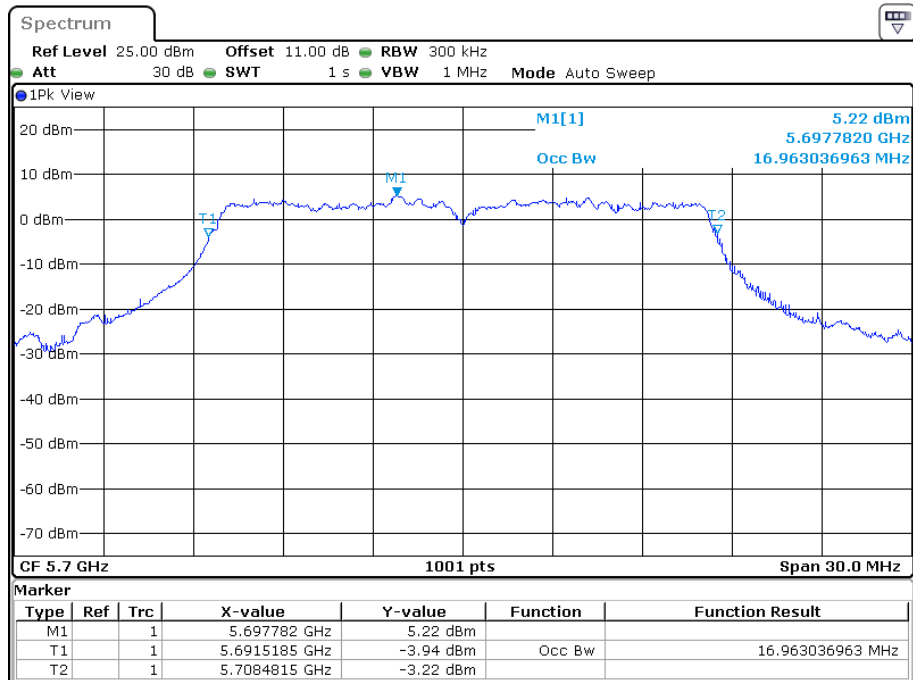
Date: 28.JUN.2022 21:44:17

802.11a mode, 5580MHz



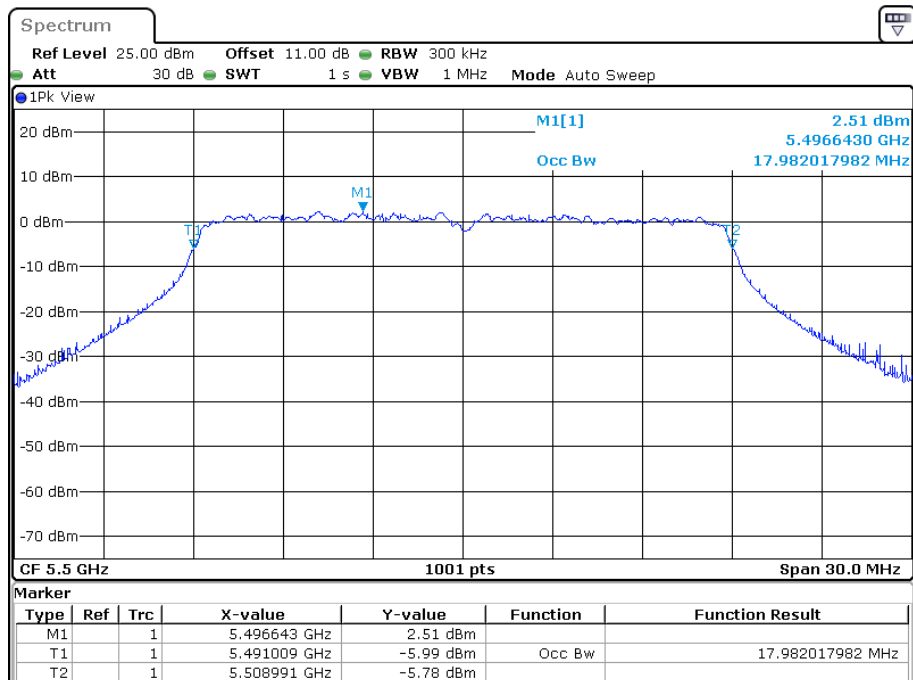
Date: 28.JUN.2022 21:47:56

802.11a mode, 5700MHz



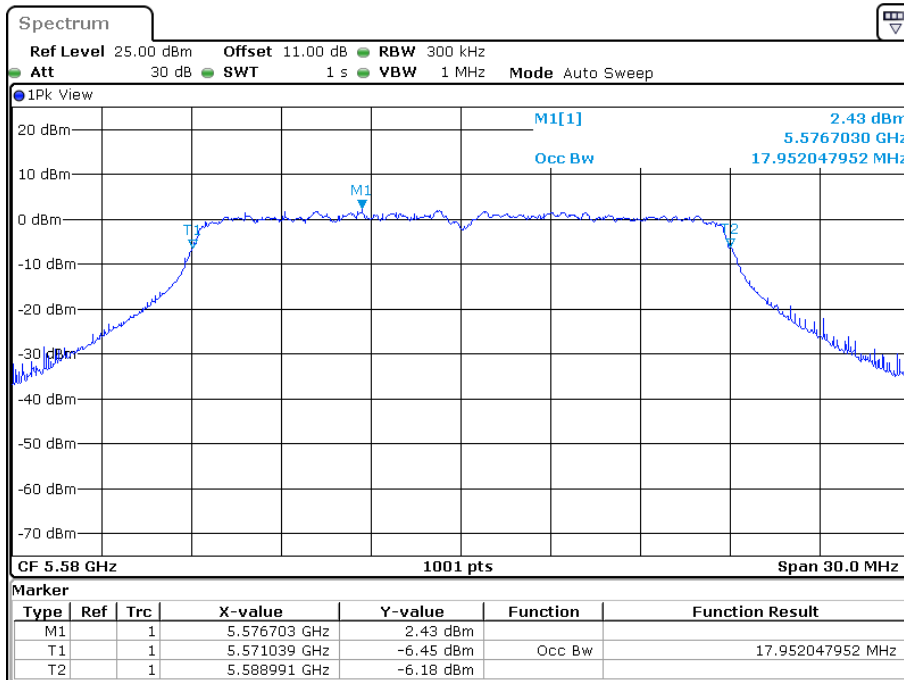
Date: 28.JUN.2022 21:50:25

802.11n20 mode, 5500 MHz



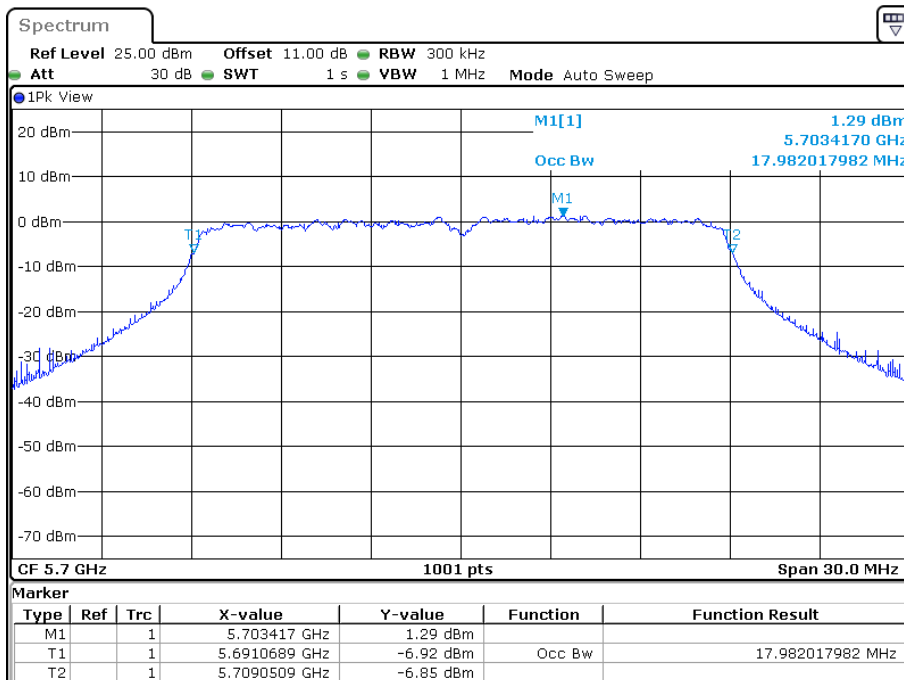
Date: 29.JUN.2022 00:20:34

802.11n20 mode, 5580 MHz



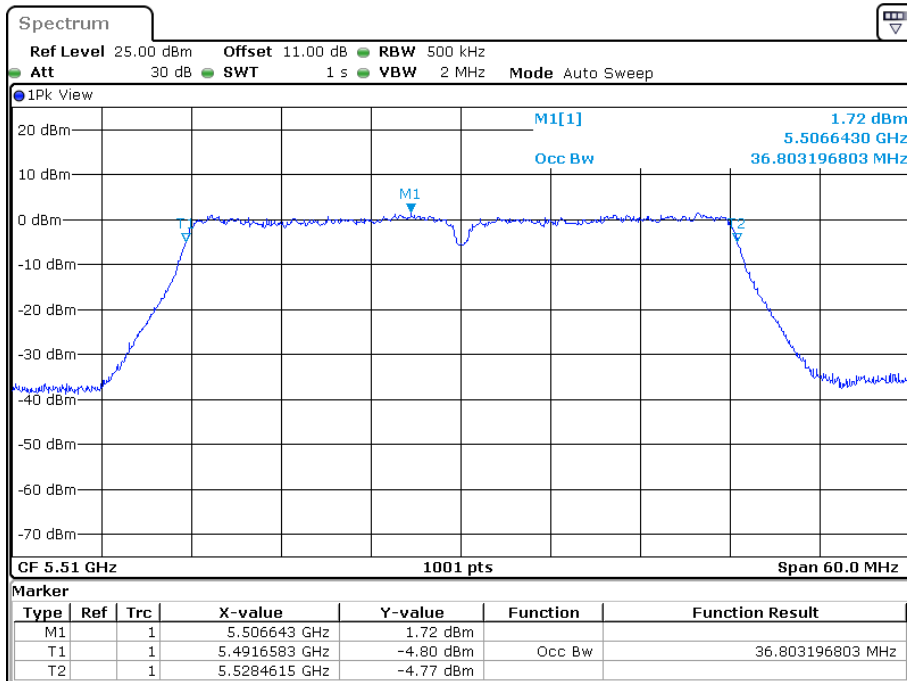
Date: 29.JUN.2022 00:23:10

802.11n20 mode, 5700 MHz

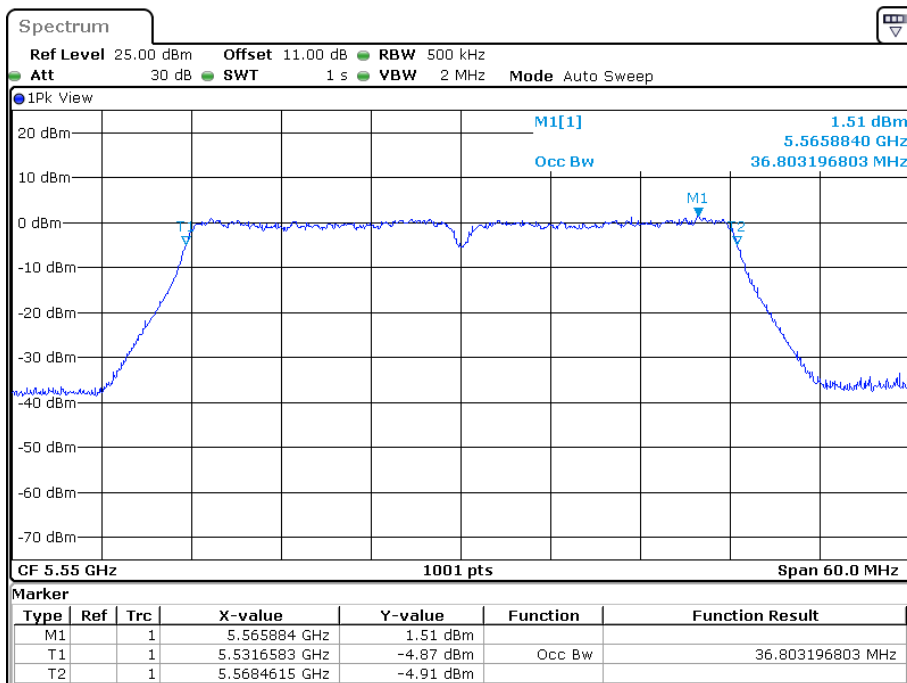


Date: 29.JUN.2022 00:25:40

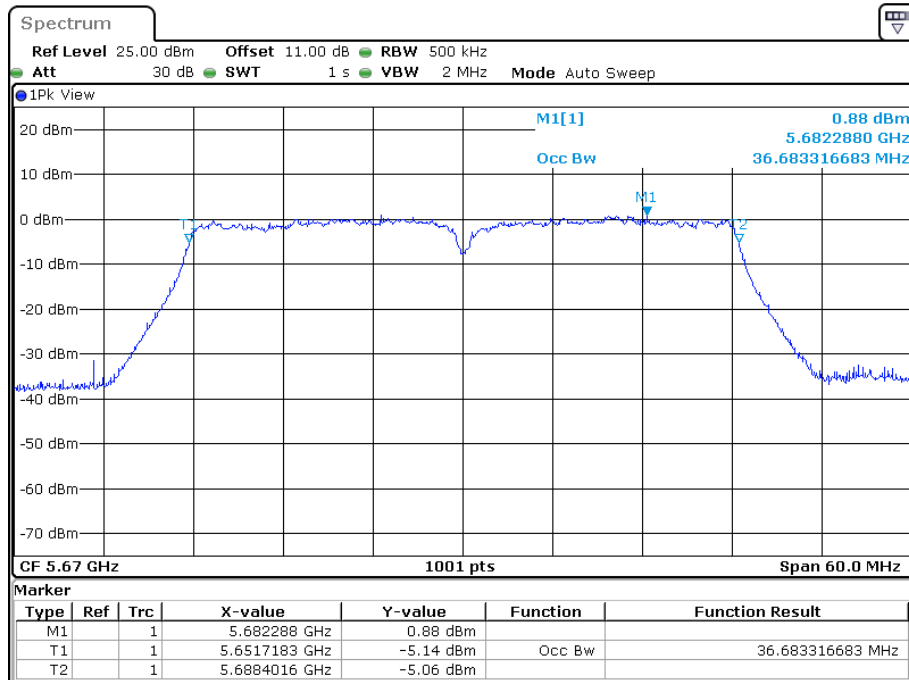
802.11n40 mode, 5510 MHz



802.11n40 mode, 5550 MHz

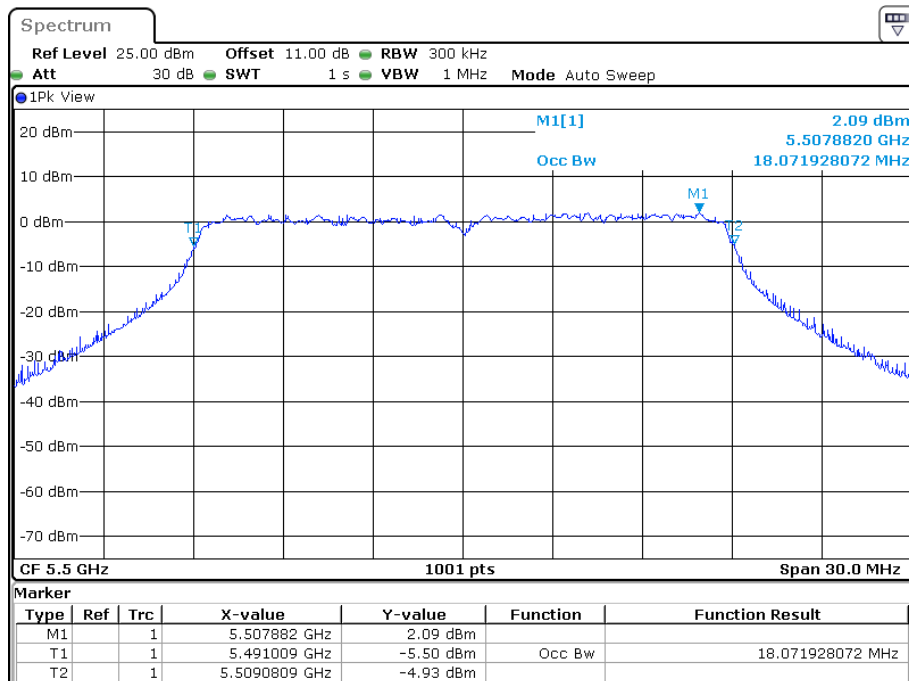


802.11n40 mode, 5670 MHz



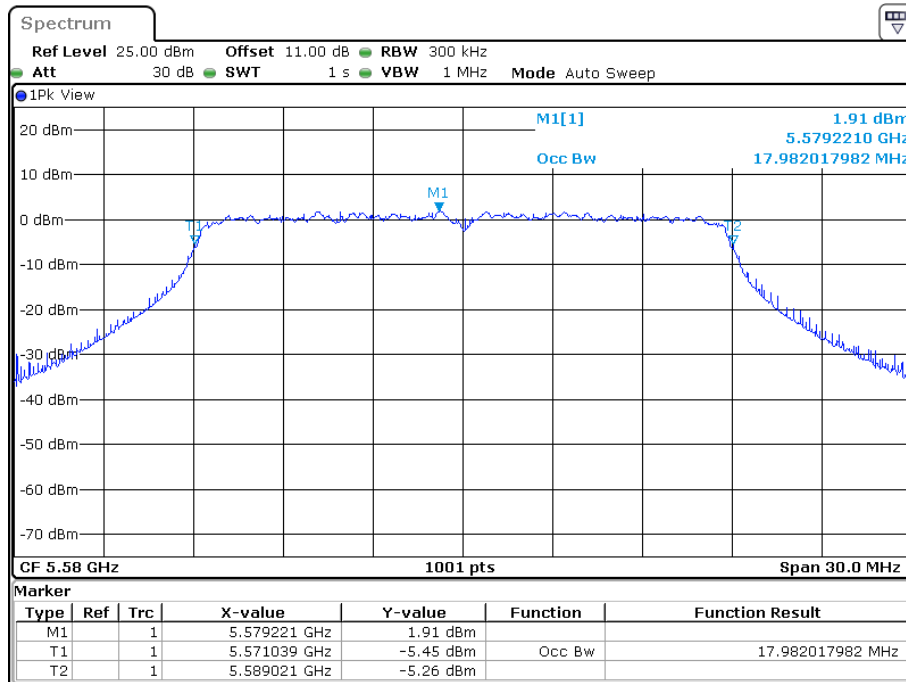
Date: 29.JUN.2022 00:44:40

802.11ac20 mode, 5500MHz

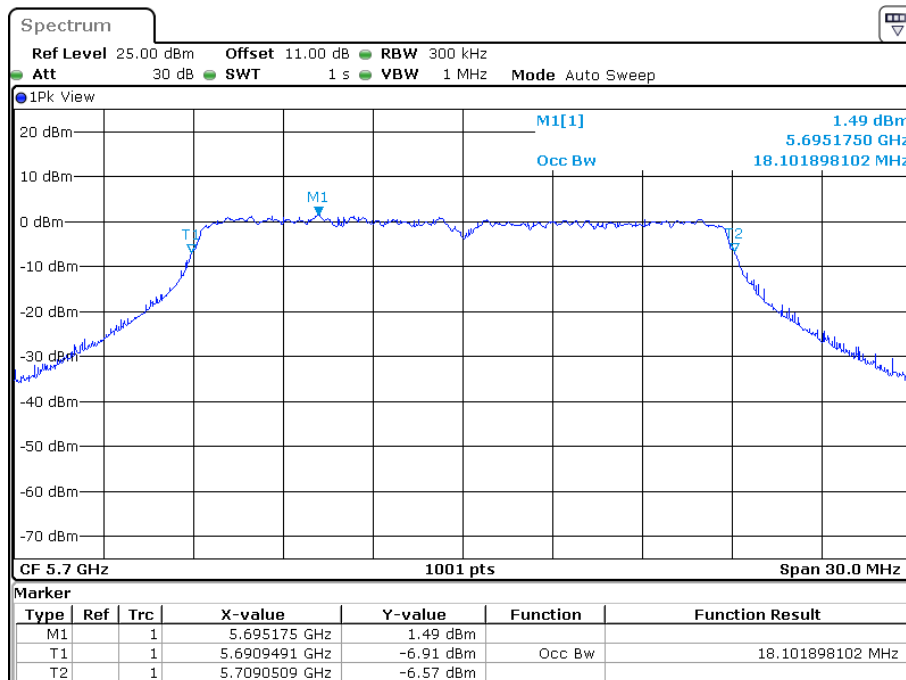


Date: 29.JUN.2022 23:03:10

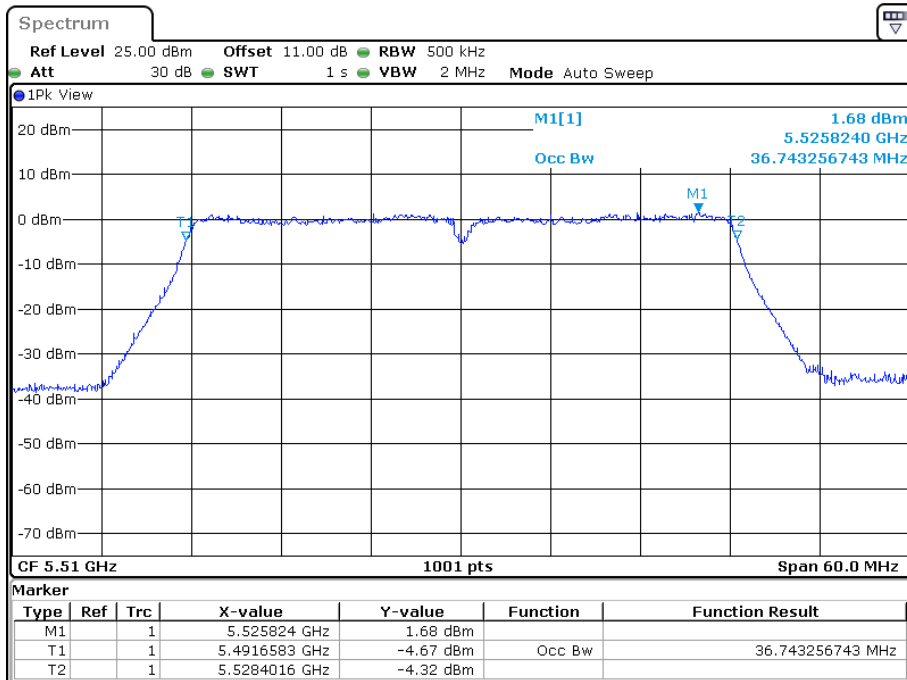
802.11ac20 mode, 5580 MHz



802.11ac20 mode, 5700MHz

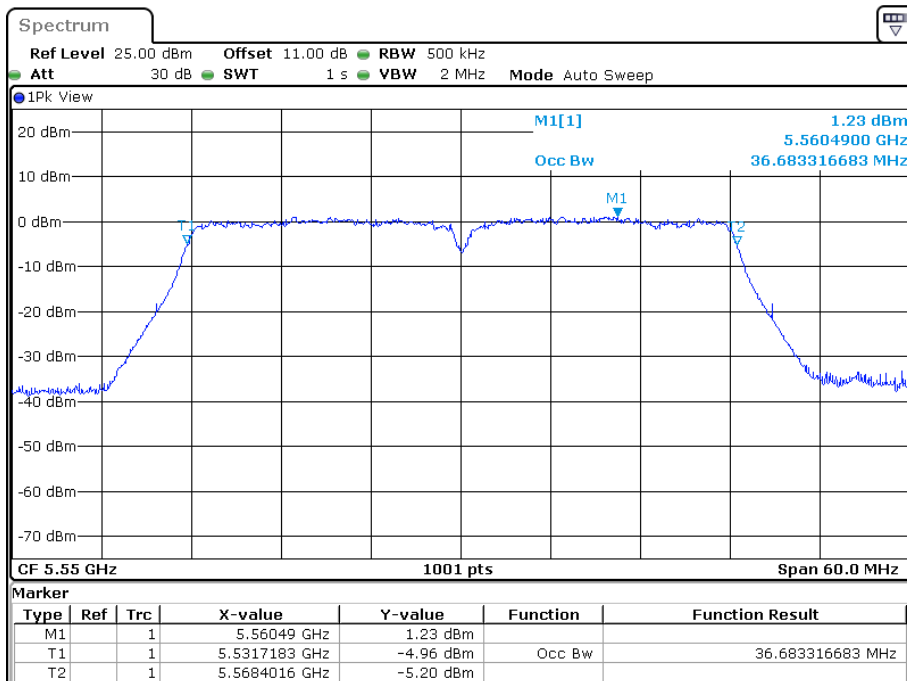


802.11ac40 mode, 5510MHz



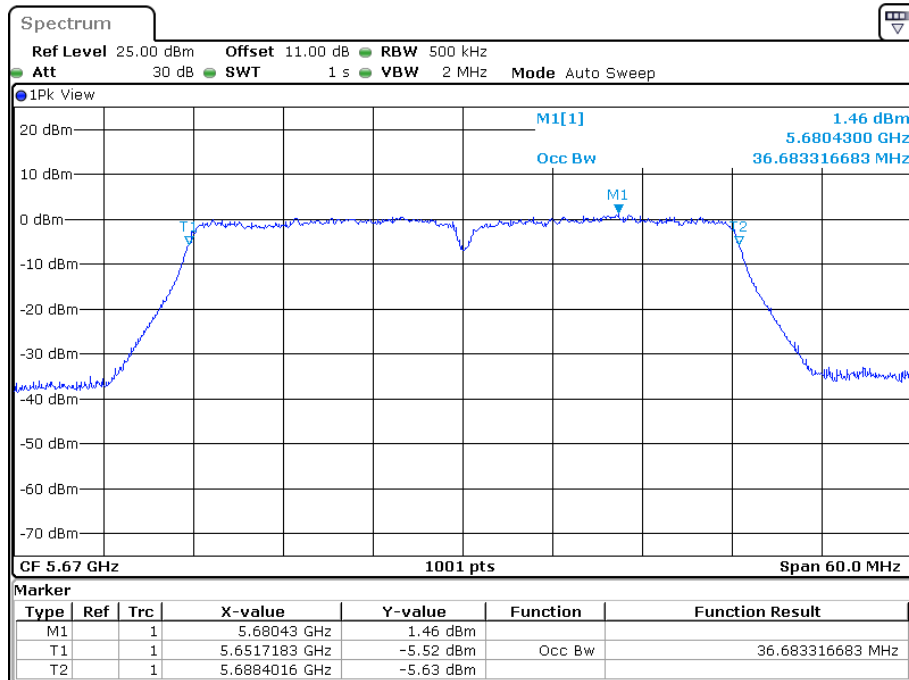
Date: 30.JUN.2022 00:35:49

802.11ac40 mode, 5550 MHz



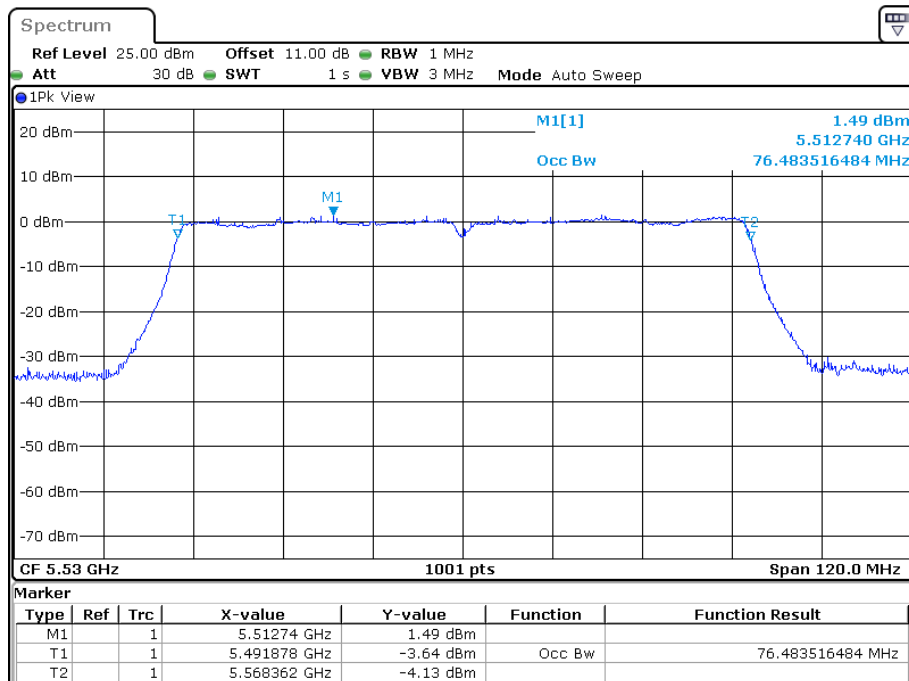
Date: 30.JUN.2022 00:38:16

802.11ac40 mode, 5670 MHz



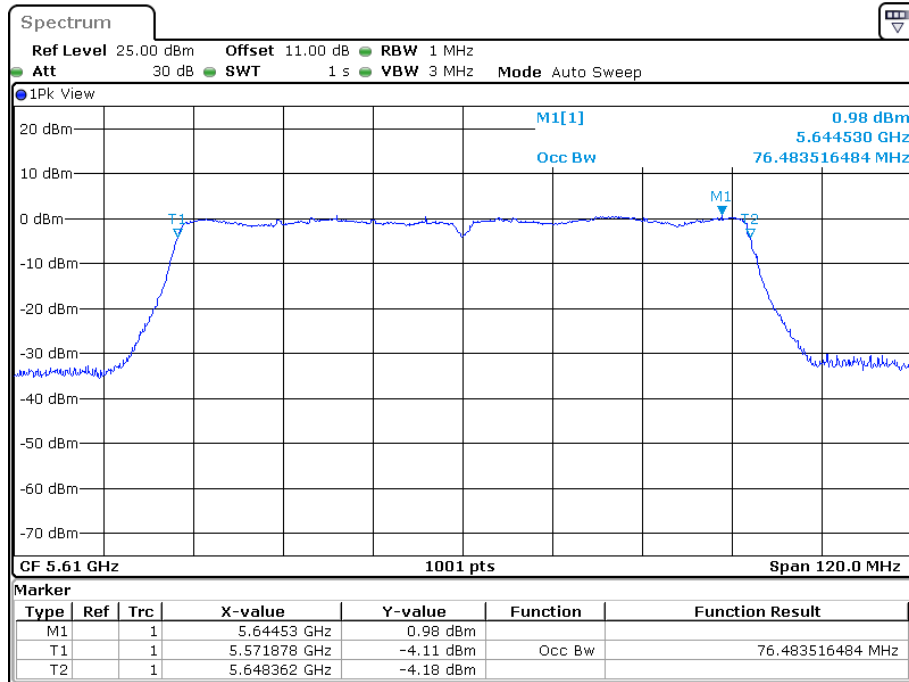
Date: 30.JUN.2022 00:41:09

802.11ac80 mode, 5530MHz



Date: 30.JUN.2022 00:52:04

802.11ac80 mode, 5610MHz



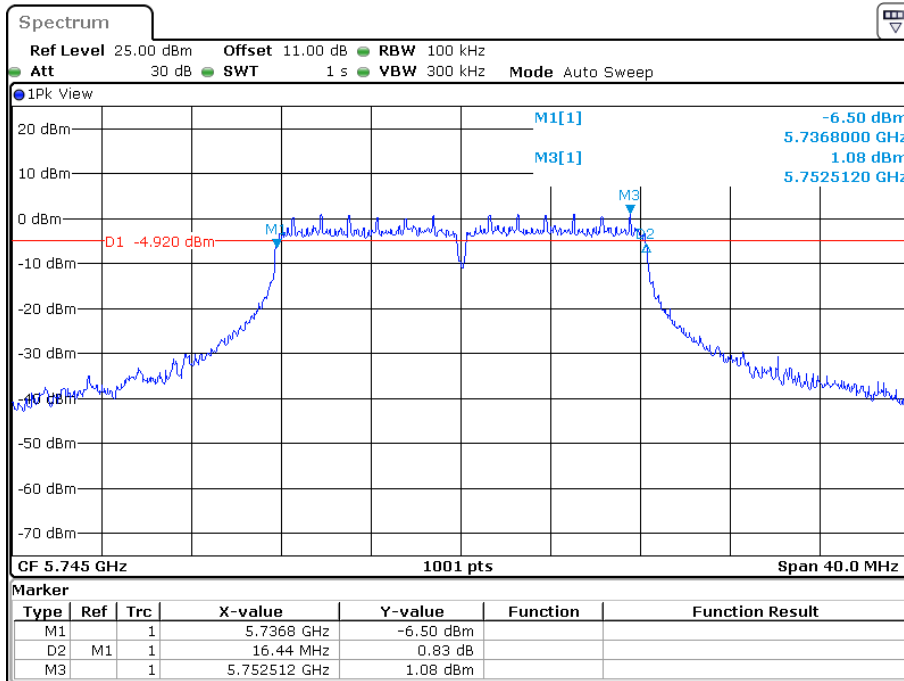
Date: 30.JUN.2022 00:54:40

5725 MHz – 5850 MHz:

Frequency (MHz)	Antenna Port	6dB Bandwidth (MHz)	99% Bandwidth (MHz)	Limit (MHz)	Remark
802.11a					No transmitted signal in the 99% bandwidth extends into the U-NII-2C band
5745	Ant1	16.44	16.93	0.5	
5785	Ant1	16.44	16.93	0.5	
5825	Ant1	16.44	16.93	0.5	
802.11n20					
5745	Ant1	17.64	18.04	0.5	
5785	Ant1	17.64	18.01	0.5	
5825	Ant1	17.68	18.10	0.5	
802.11n40					
5755	Ant1	36.56	36.74	0.5	
5795	Ant1	36.56	36.80	0.5	
802.11ac20					
5745	Ant1	17.64	18.10	0.5	
5785	Ant1	17.68	18.07	0.5	
5825	Ant1	17.64	17.98	0.5	
802.11ac40					
5755	Ant1	36.56	36.74	0.5	
5795	Ant1	36.56	36.74	0.5	
11ac80					
5775	Ant1	76.64	76.48	0.5	

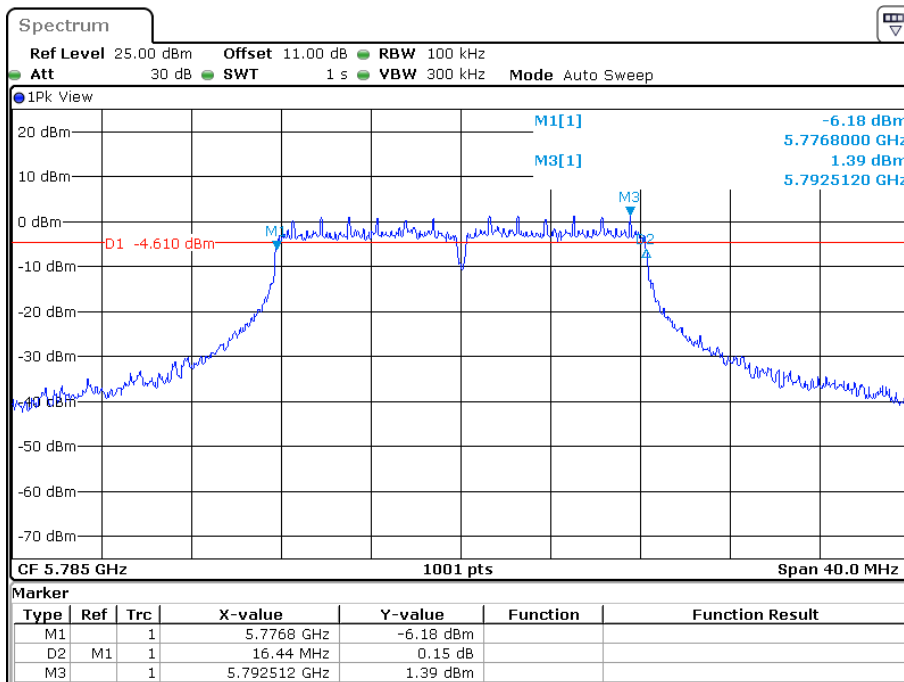
26 dB Emission Bandwidth

802.11a mode, 5475MHz



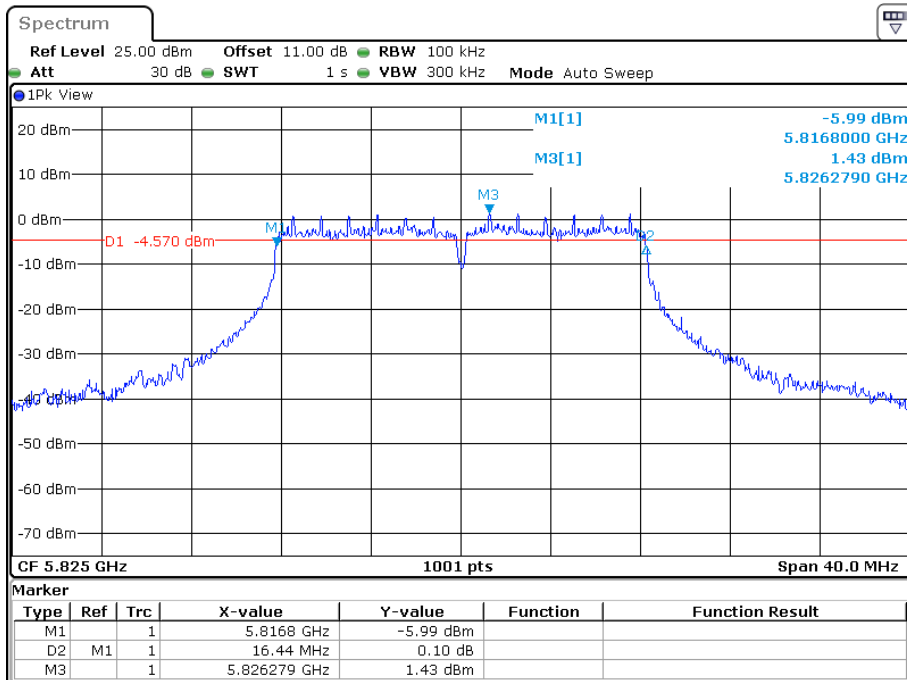
Date: 28.JUN.2022 21:59:55

802.11a mode, 5785MHz



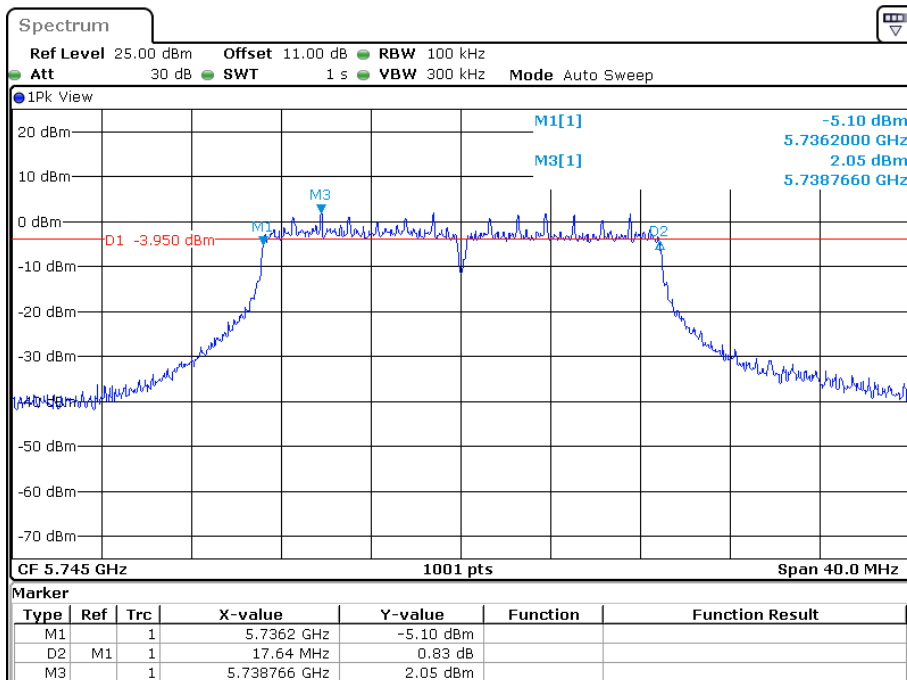
Date: 28.JUN.2022 22:04:25

802.11a mode, 5825 MHz



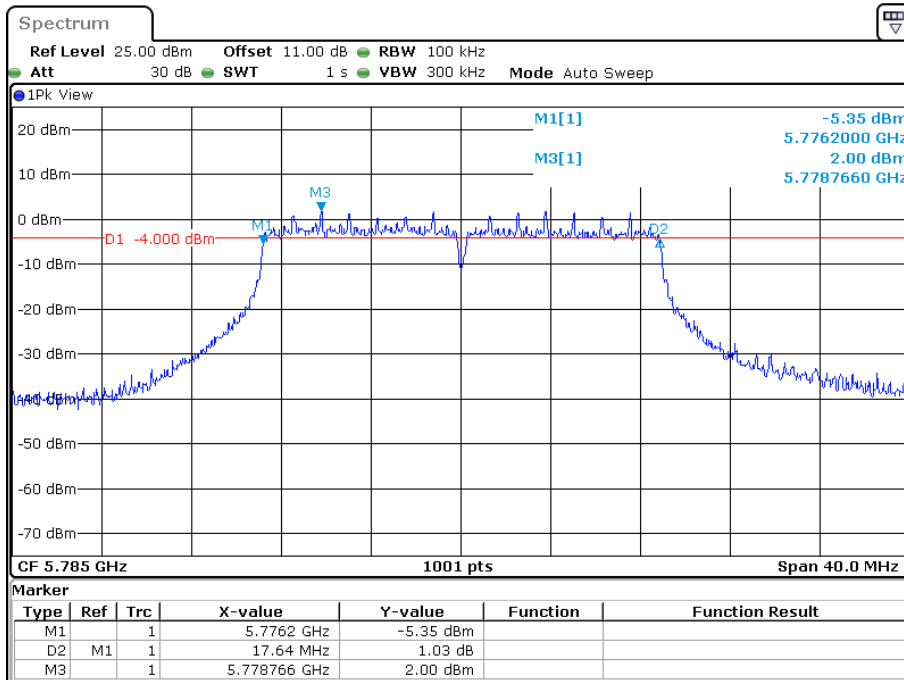
Date: 28.JUN.2022 22:06:55

802.11n20 mode, 5745 MHz



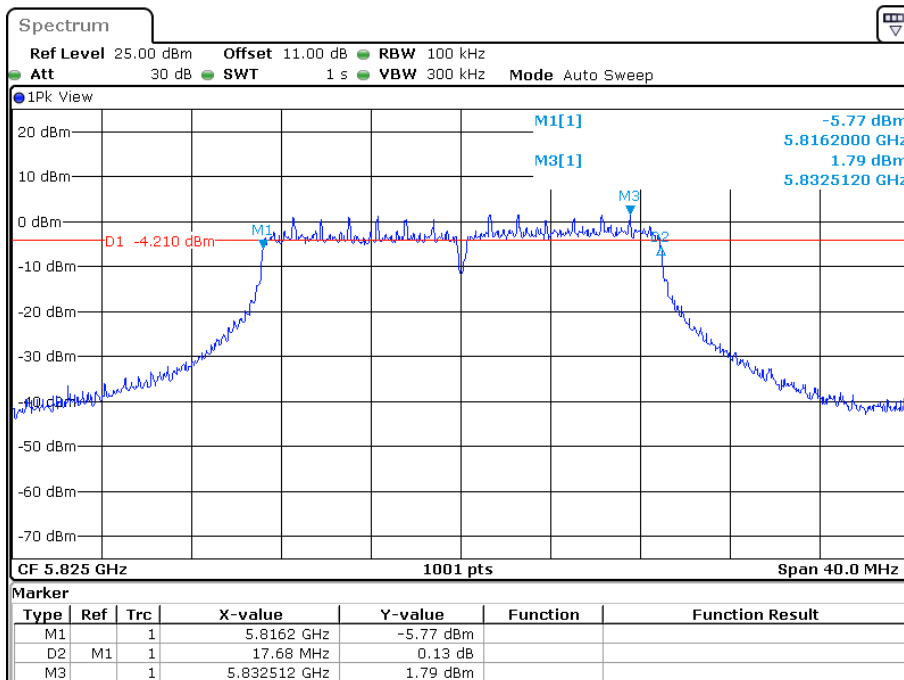
Date: 29.JUN.2022 00:03:02

802.11n20 mode, 5785 MHz



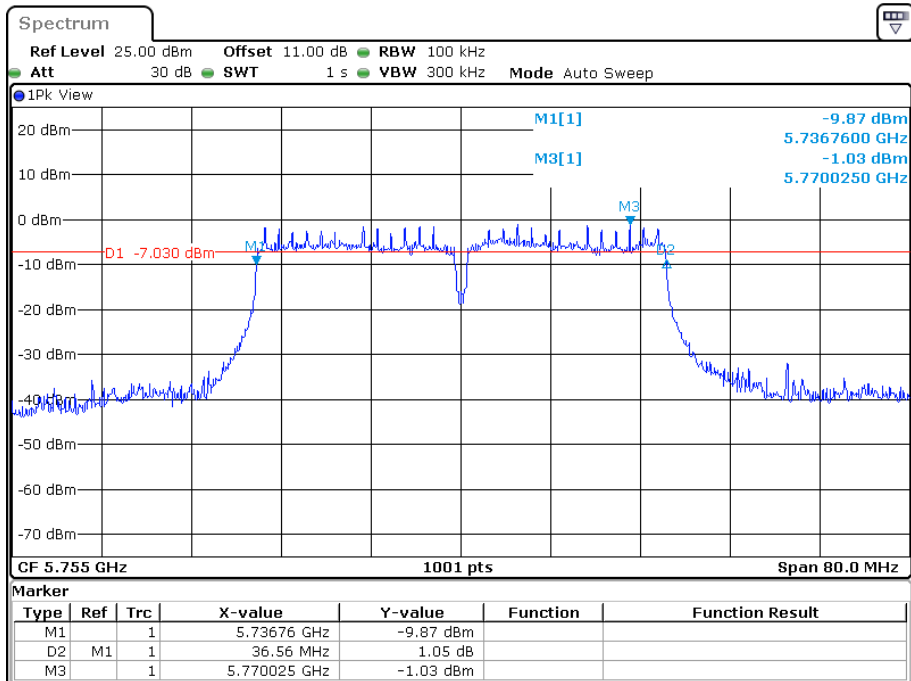
Date: 29.JUN.2022 00:00:08

802.11n20 mode, 5825 MHz



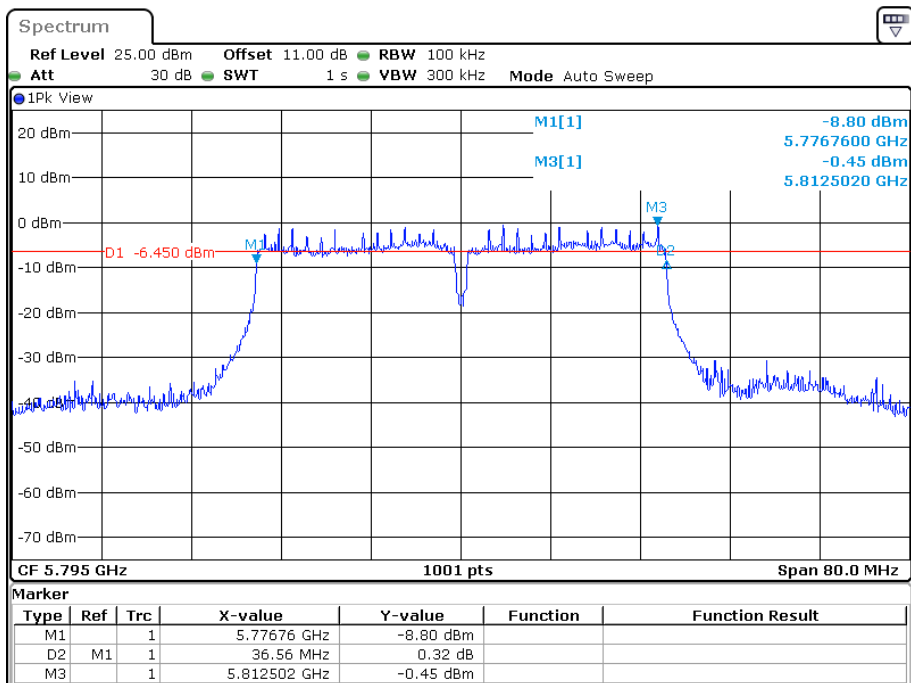
Date: 28.JUN.2022 23:57:09

802.11n40 mode, 5755MHz



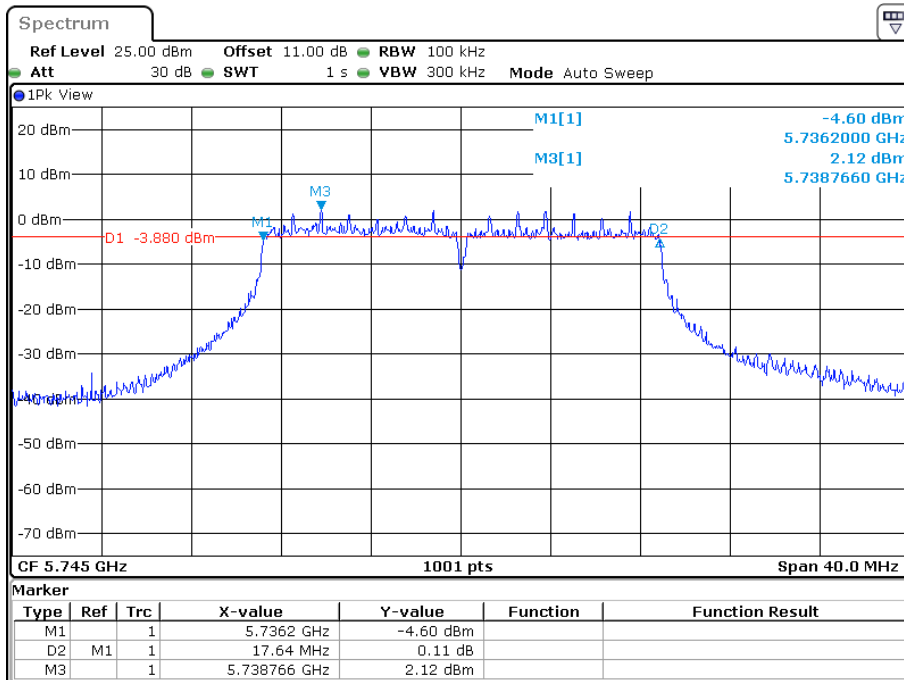
Date: 29.JUN.2022 00:48:28

802.11n40 mode, 5795 MHz



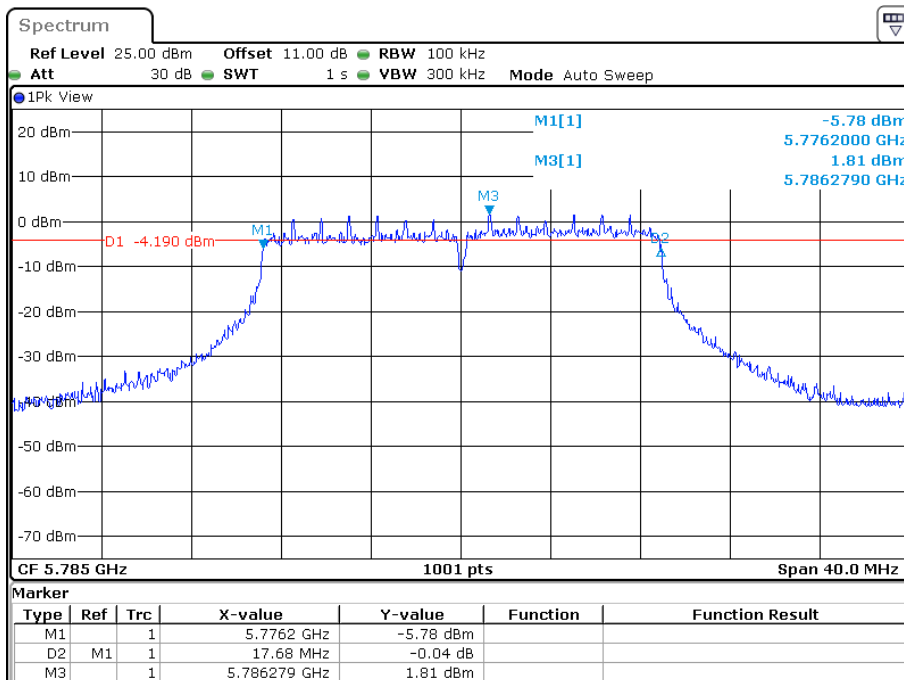
Date: 29.JUN.2022 00:50:59

802.11ac20 mode, 5745 MHz



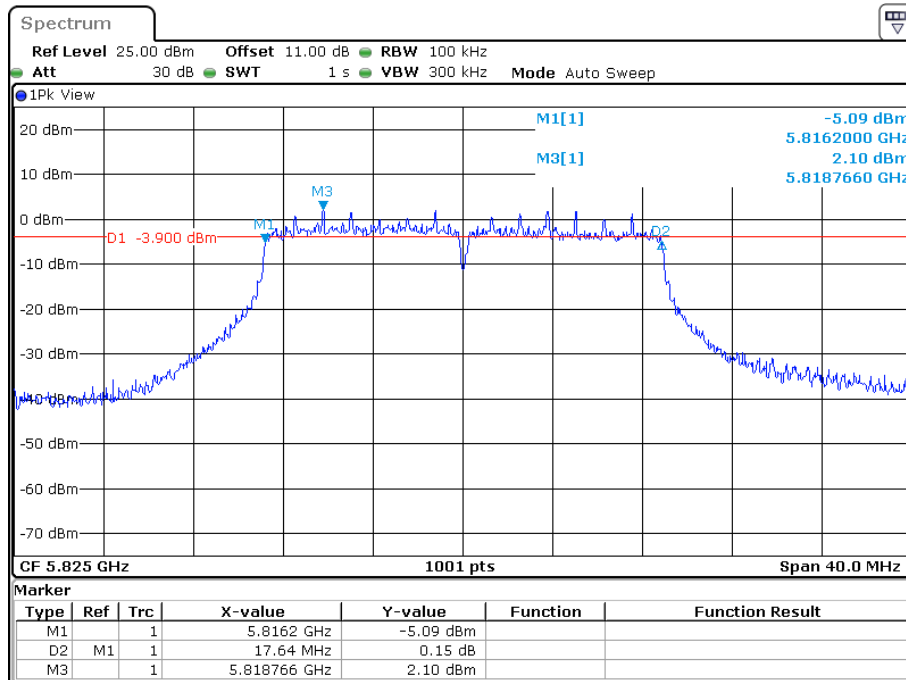
Date: 29.JUN.2022 23:11:17

802.11ac20 mode, 5785 MHz



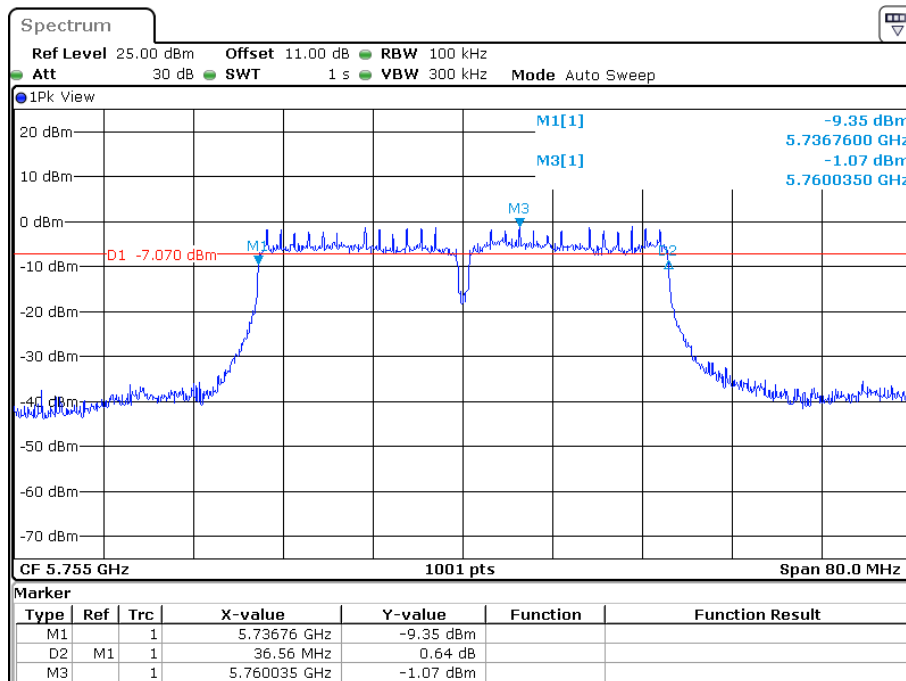
Date: 29.JUN.2022 23:13:41

802.11ac20 mode, 5825 MHz



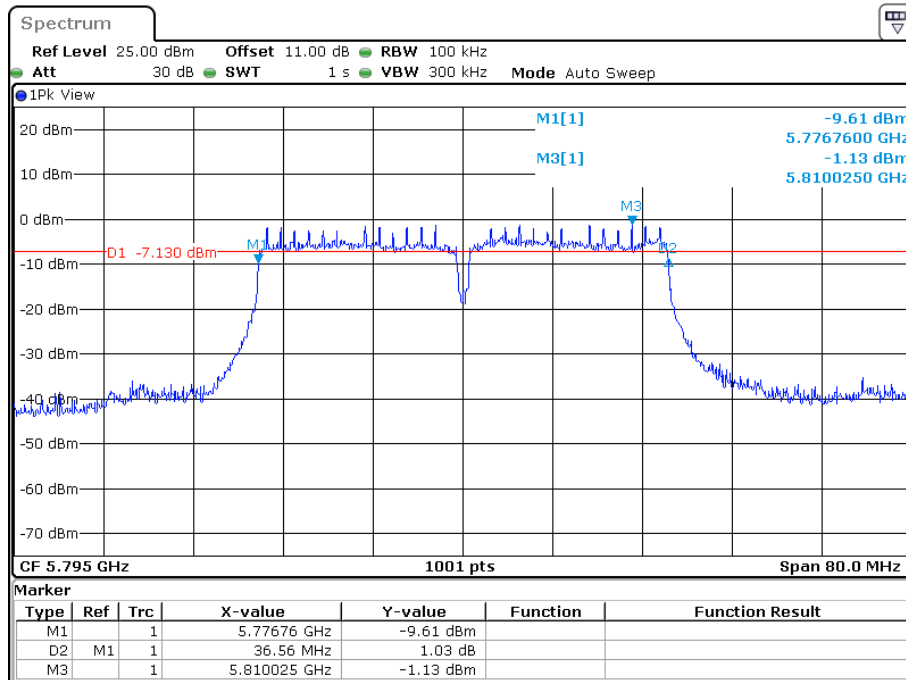
Date: 29.JUN.2022 23:16:13

802.11ac40 mode, 5755MHz



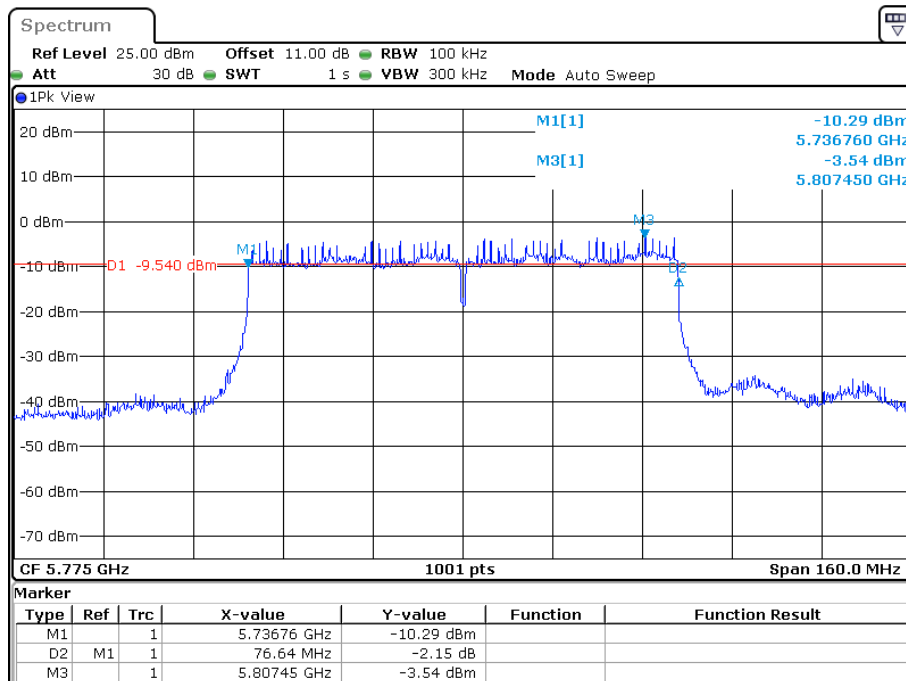
Date: 30.JUN.2022 00:22:47

802.11ac40 mode, 5795 MHz



Date: 30.JUN.2022 00:20:21

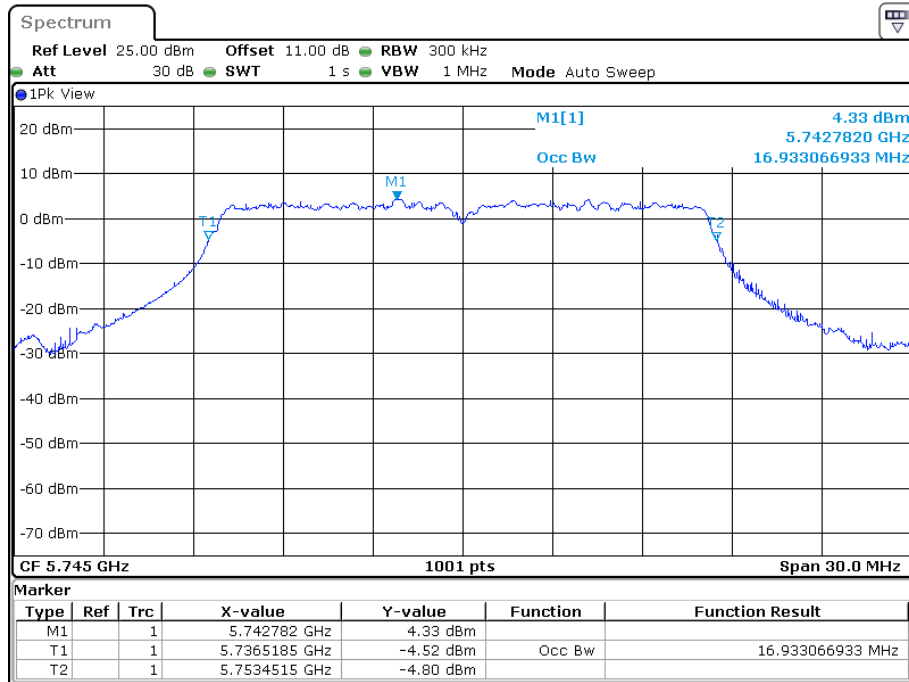
802.11ac80 mode, 5775MHz



Date: 30.JUN.2022 00:59:16

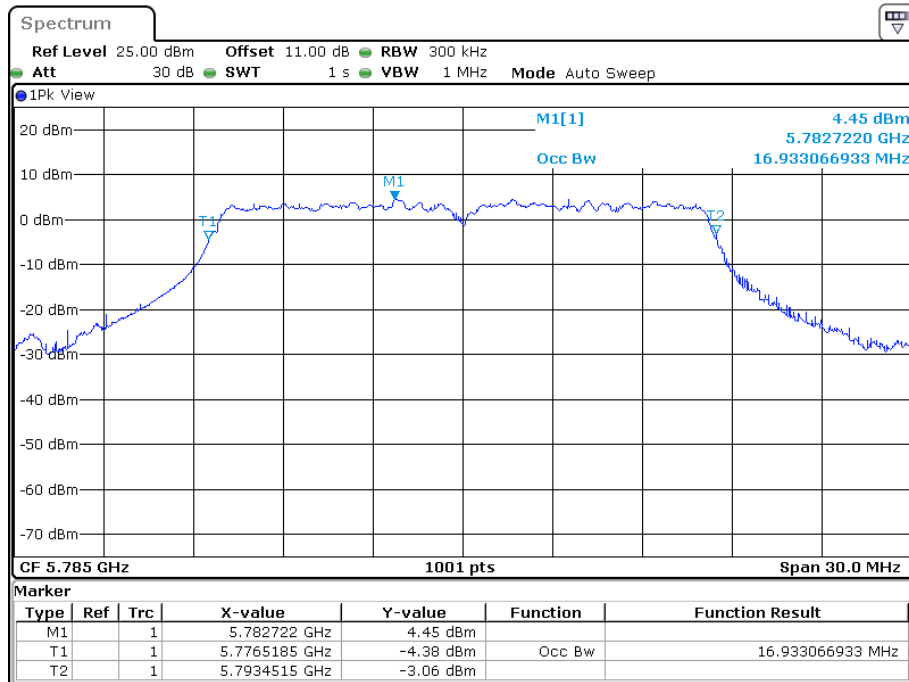
99% Occupied Bandwidth

802.11a mode, 5475MHz



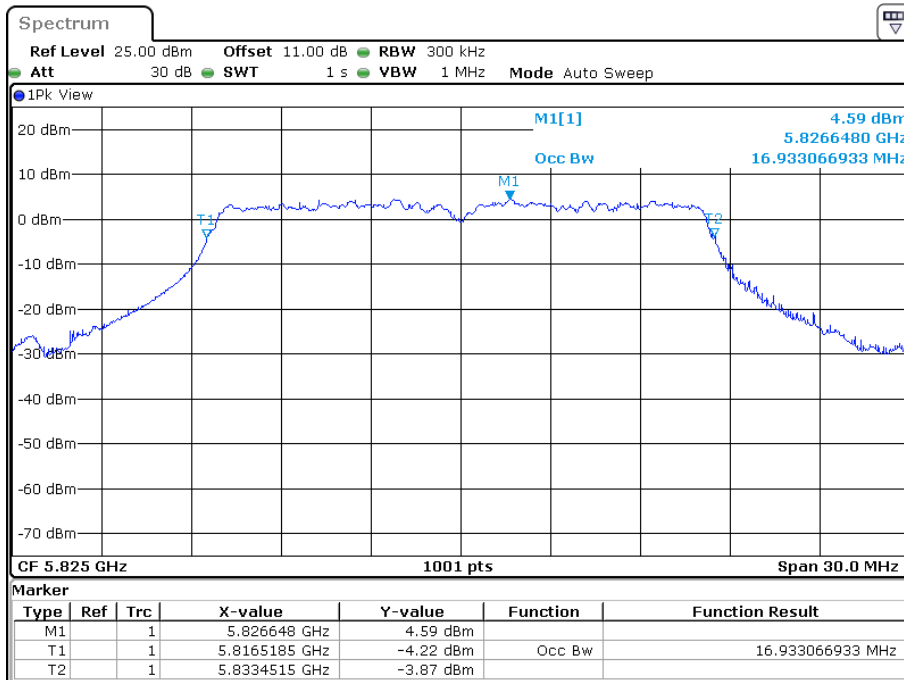
Date: 28.JUN.2022 21:59:27

802.11a mode, 5785MHz



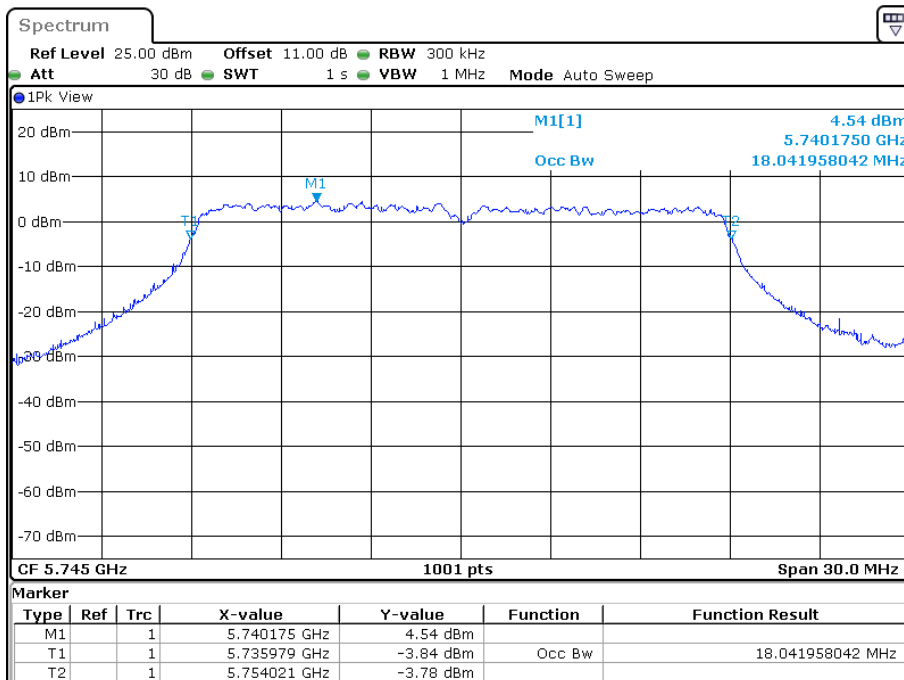
Date: 28.JUN.2022 22:03:57

802.11a mode, 5825 MHz



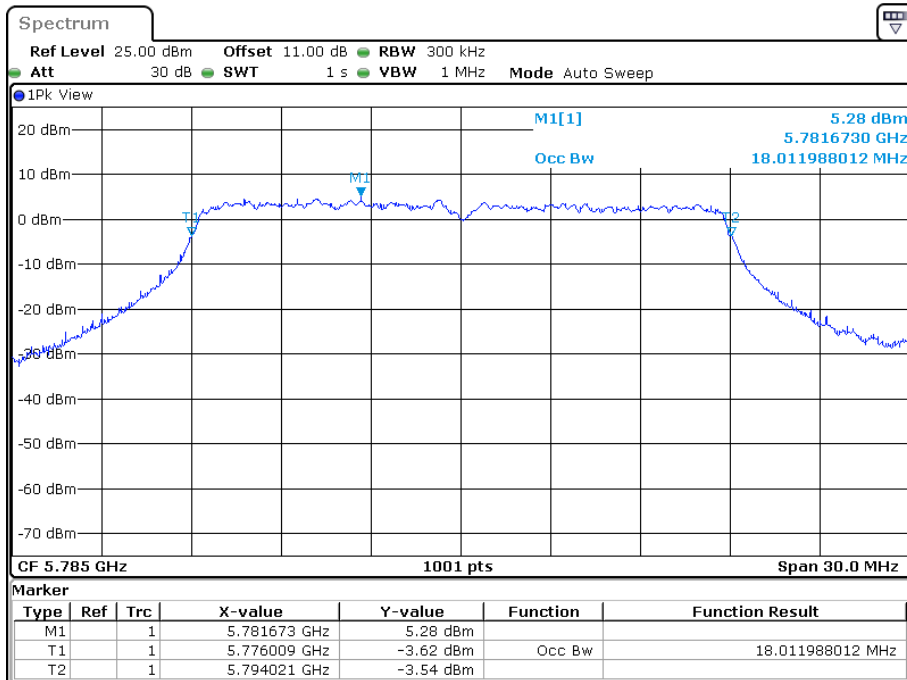
Date: 28.JUN.2022 22:06:27

802.11n20 mode, 5745 MHz



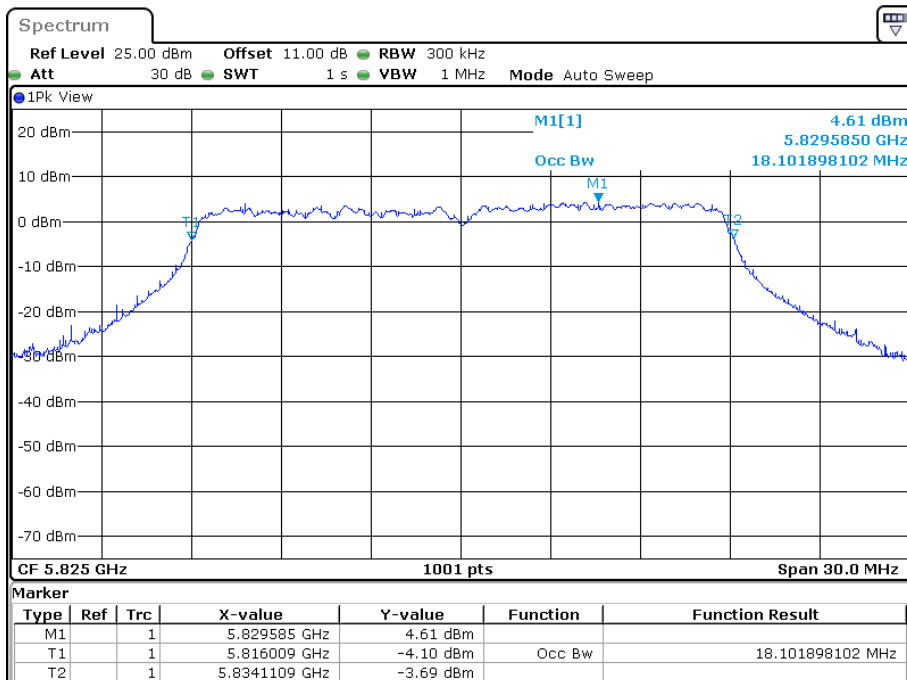
Date: 29.JUN.2022 00:02:32

802.11n20 mode, 5785 MHz



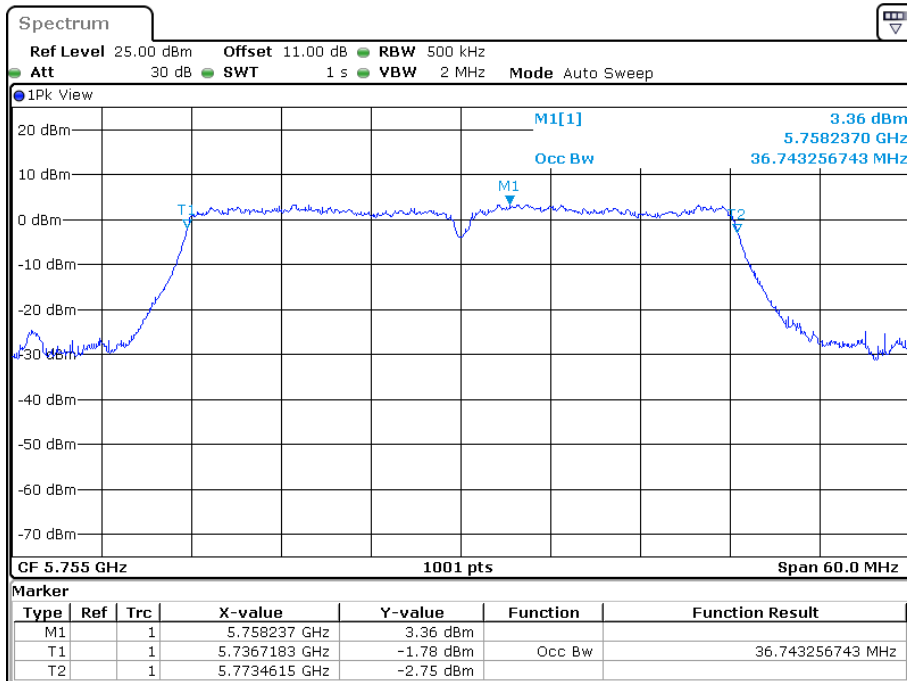
Date: 28.JUN.2022 23:59:39

802.11n20 mode, 5825 MHz



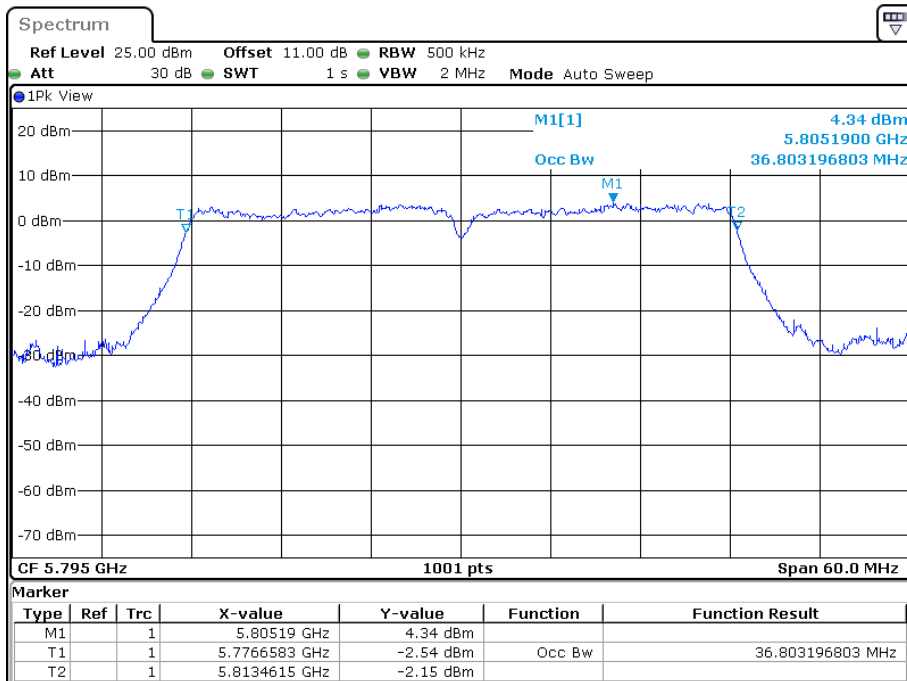
Date: 28.JUN.2022 23:56:39

802.11n40 mode, 5755MHz



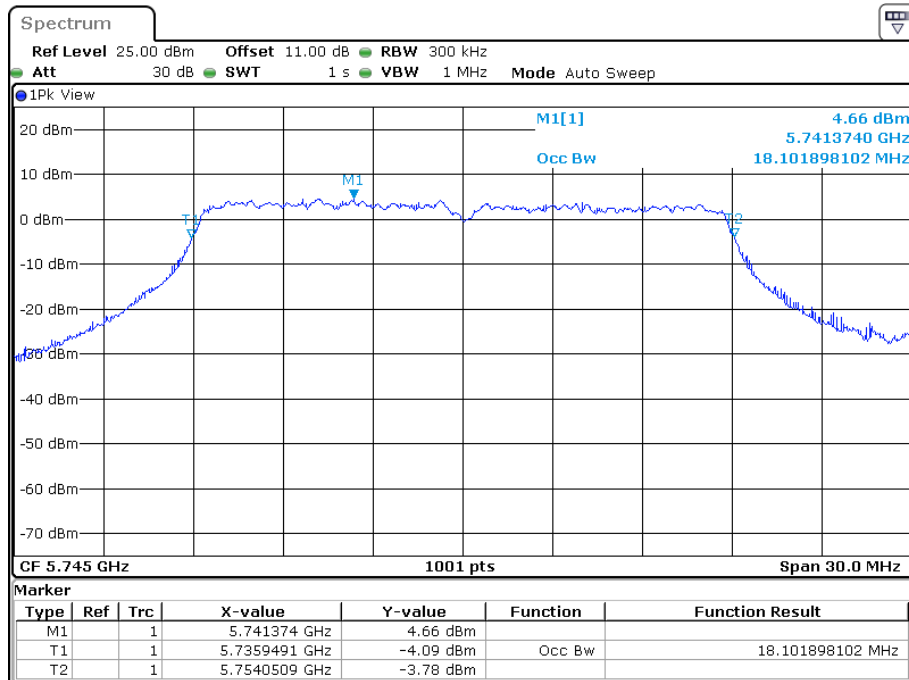
Date: 29.JUN.2022 00:47:58

802.11n40 mode, 5795 MHz



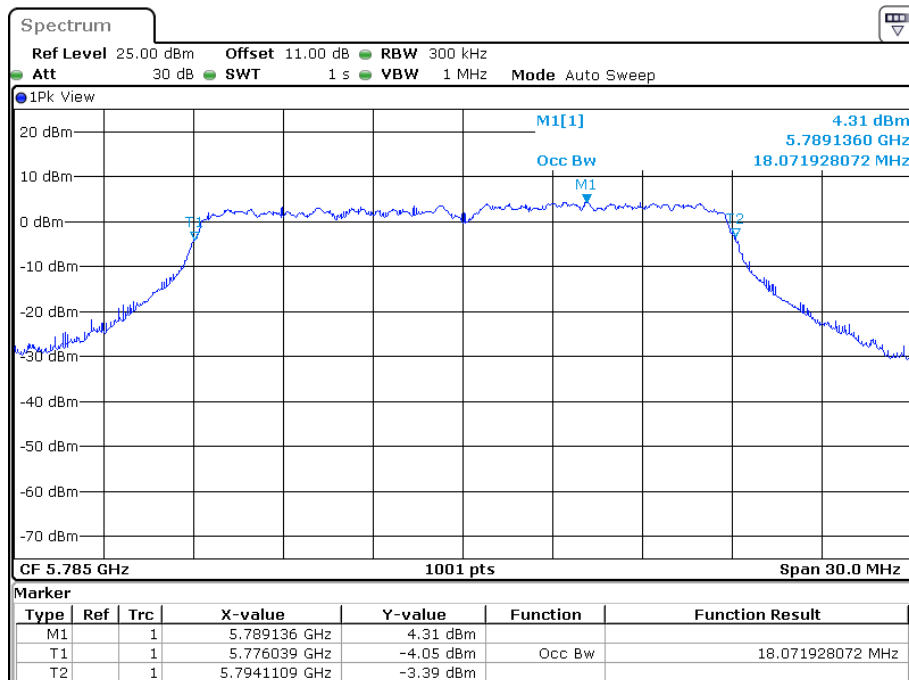
Date: 29.JUN.2022 00:50:29

802.11ac20 mode, 5745 MHz



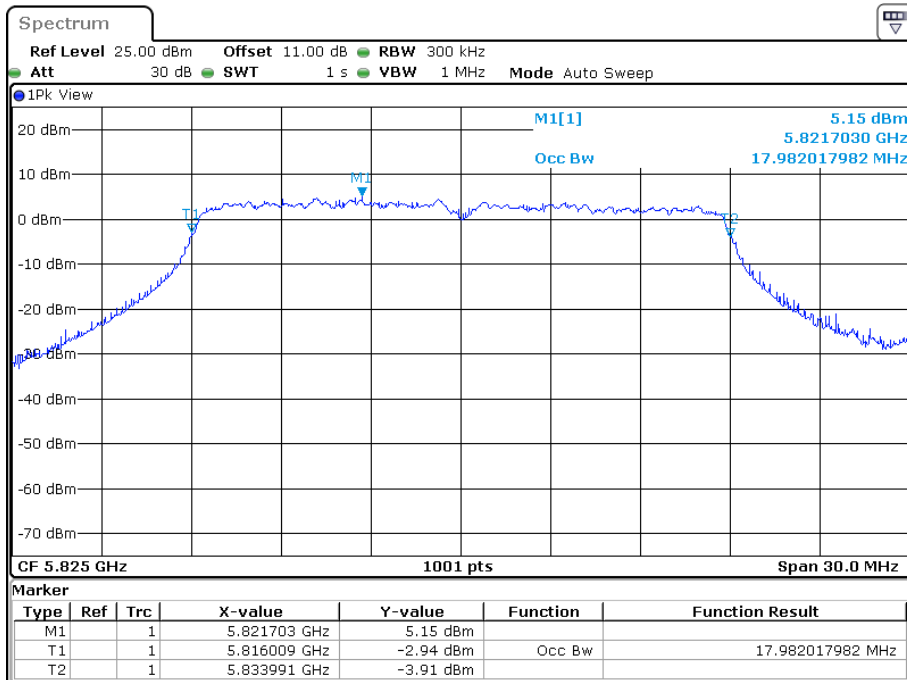
Date: 29.JUN.2022 23:10:48

802.11ac20 mode, 5785 MHz

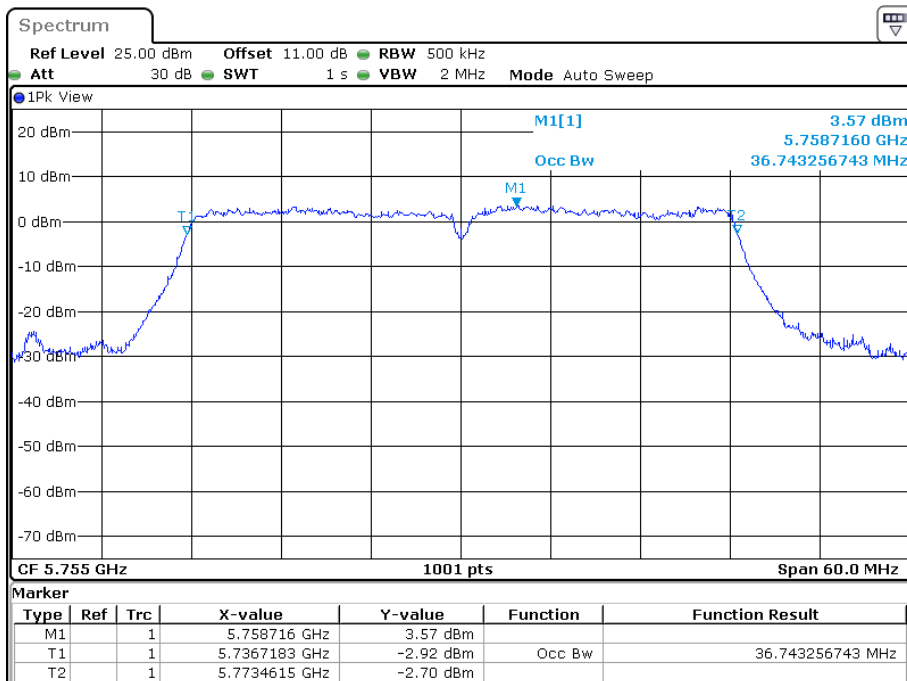


Date: 29.JUN.2022 23:13:12

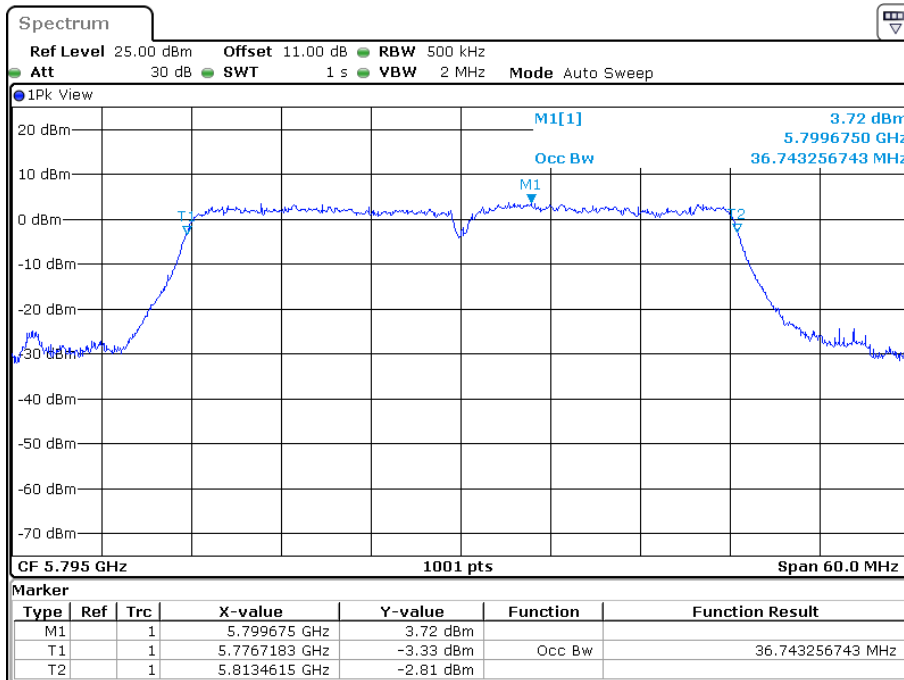
802.11ac20 mode, 5825 MHz



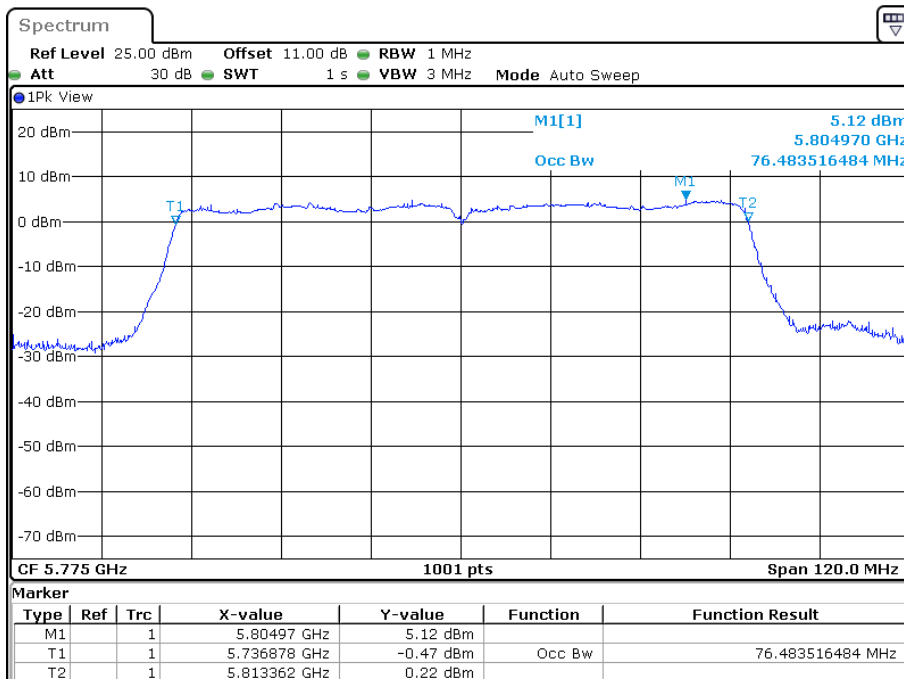
802.11ac40 mode, 5755MHz



802.11ac40 mode, 5795 MHz



802.11ac80 mode, 5775MHz



FCC §15.407(a)–CONDUCTED TRANSMITTER OUTPUT POWER

Applicable Standard

For an indoor access point operating in the band 5.15-5.25 GHz, the maximum conducted output power over the frequency band of operation shall not exceed 1 W provided the maximum antenna gain does not exceed 6 dBi. In addition, the maximum power spectral density shall not exceed 17 dBm in any 1 megahertz band. If transmitting antennas of directional gain greater than 6 dBi are used, both the maximum conducted output power and the maximum power spectral density shall be reduced by the amount in dB that the directional gain of the antenna exceeds 6 dBi.

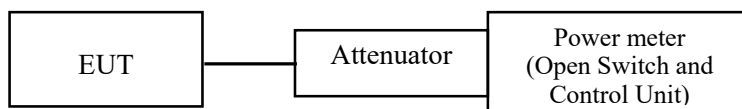
For client devices in the 5.15-5.25 GHz band, the maximum conducted output power over the frequency band of operation shall not exceed 250 mW provided the maximum antenna gain does not exceed 6 dBi. In addition, the maximum power spectral density shall not exceed 11 dBm in any 1 megahertz band. If transmitting antennas of directional gain greater than 6 dBi are used, both the maximum conducted output power and the maximum power spectral density shall be reduced by the amount in dB that the directional gain of the antenna exceeds 6 dBi.

For the 5.25-5.35 GHz and 5.47-5.725 GHz bands, the maximum conducted output power over the frequency bands of operation shall not exceed the lesser of 250 mW or $11 \text{ dBm} + 10 \log B$, where B is the 26 dB emission bandwidth in megahertz. In addition, the maximum power spectral density shall not exceed 11 dBm in any 1 megahertz band. If transmitting antennas of directional gain greater than 6 dBi are used, both the maximum conducted output power and the maximum power spectral density shall be reduced by the amount in dB that the directional gain of the antenna exceeds 6 dBi.

For the band 5.725-5.85 GHz, the maximum conducted output power over the frequency band of operation shall not exceed 1 W. In addition, the maximum power spectral density shall not exceed 30 dBm in any 500-kHz band. If transmitting antennas of directional gain greater than 6 dBi are used, both the maximum conducted output power and the maximum power spectral density shall be reduced by the amount in dB that the directional gain of the antenna exceeds 6 dBi. However, fixed point-to-point U-NII devices operating in this band may employ transmitting antennas with directional gain greater than 6 dBi without any corresponding reduction in transmitter conducted power. Fixed, point-to-point operations exclude the use of point-to-multipoint systems, omnidirectional applications, and multiple collocated transmitters transmitting the same information. The operator of the U-NII device, or if the equipment is professionally installed, the installer, is responsible for ensuring that systems employing high gain directional antennas are used exclusively for fixed, point-to-point operations.

Test Procedure

- c. Place the EUT on a bench and set it in transmitting mode.
- d. Remove the antenna from the EUT and then connect a low loss RF cable from the antenna port to one test equipment.
- e. Add a correction factor to the display.



Note: the Open Switch and Control Unit has a built-in power sensor.

Test Data**Environmental Conditions**

Temperature:	25.2~27.3 °C
Relative Humidity:	46~55 %
ATM Pressure:	100.2~101.3 kPa

The testing was performed by Roger Ling from 2022-06-27 to 2022-06-30.

EUT operation mode: Transmitting

Test Result: Pass

Please refer to the following tables.

For module: YL43455

5150 MHz – 5250 MHz

Frequency (MHz)	Antenna Port	Reading (dBm)	Duty Cycle Factor (dB)	Average Output Power (dBm)	Limit (dBm)
802.11a					
5180	0	14.25	0.31	14.56	24
5200	0	14.12	0.31	14.43	
5240	0	13.92	0.31	14.23	
802.11n20					
5180	0	13.78	0.32	14.10	24
5200	0	13.65	0.32	13.97	
5240	0	13.57	0.32	13.89	
802.11n40					
5190	0	12.22	0.64	12.86	24
5230	0	11.94	0.64	12.58	
802.11ac20					
5180	0	13.80	0.33	14.13	24
5200	0	13.80	0.33	14.13	
5240	0	13.49	0.33	13.82	
802.11ac40					
5190	0	12.11	0.63	12.74	24
5230	0	11.90	0.63	12.53	
802.11ac80					
5210	0	9.57	1.19	10.76	24

5250 MHz – 5350 MHz

Frequency (MHz)	Antenna Port	Reading (dBm)	Duty Cycle Factor (dB)	Average Output Power (dBm)	Limit (dBm)
802.11a					
5260	0	13.48	0.31	13.79	24
5280	0	13.43	0.31	13.74	
5320	0	13.66	0.31	13.97	
802.11n20					
5260	0	13.10	0.32	13.42	24
5280	0	13.02	0.32	13.34	
5320	0	13.18	0.32	13.50	
802.11n40					
5270	0	11.48	0.64	12.12	24
5310	0	11.58	0.64	12.22	
802.11ac20					
5260	0	13.12	0.33	13.45	24
5280	0	13.11	0.33	13.44	
5320	0	13.15	0.33	13.48	
802.11ac40					
5270	0	11.42	0.63	12.05	24
5310	0	11.49	0.63	12.12	
802.11ac80					
5290	0	9.27	1.19	10.46	24

5470 MHz – 5725 MHz:

Frequency (MHz)	Antenna Port	Reading (dBm)	Duty Cycle Factor (dB)	Average Output Power (dBm)	Limit (dBm)
802.11a					
5500	0	8.97	0.31	9.28	24
5580	0	8.24	0.31	8.55	
5700	0	8.70	0.31	9.01	
802.11n20					
5500	0	8.71	0.32	9.03	24
5580	0	7.83	0.32	8.15	
5700	0	8.45	0.32	8.77	
802.11n40					
5510	0	6.83	0.64	7.47	24
5550	0	6.36	0.64	7.00	
5670	0	6.14	0.64	6.78	
802.11ac20					
5500	0	8.80	0.33	9.13	24
5580	0	8.10	0.33	8.43	
5700	0	8.47	0.33	8.80	
802.11ac40					
5510	0	6.77	0.63	7.40	24
5550	0	6.29	0.63	6.92	
5670	0	6.10	0.63	6.73	
802.11ac80					
5530	0	5.69	1.19	6.88	24
5610	0	5.23	1.19	6.42	

5725 MHz – 5850 MHz:

Frequency (MHz)	Antenna Port	Reading (dBm)	Duty Cycle Factor (dB)	Average Output Power (dBm)	Limit (dBm)
802.11a					
5745	0	13.20	0.31	13.51	30
5785	0	13.06	0.31	13.37	
5825	0	12.71	0.31	13.02	
802.11n20					
5745	0	12.93	0.32	13.25	30
5785	0	12.79	0.32	13.11	
5825	0	12.30	0.32	12.62	
802.11n40					
5755	0	13.08	0.64	13.72	30
5795	0	12.88	0.64	13.52	
802.11ac20					
5745	0	12.85	0.33	13.18	30
5785	0	12.74	0.33	13.07	
5825	0	12.35	0.33	12.68	
802.11ac40					
5755	0	13.05	0.64	13.69	30
5795	0	12.83	0.64	13.47	
802.11ac80					
5775	0	12.22	1.19	13.41	30

For module: D845

5150 MHz – 5250 MHz

Frequency (MHz)	Antenna Port	Reading (dBm)	Duty Cycle Factor (dB)	Average Output Power (dBm)	Total Power (dBm)	Limit (dBm)
802.11a						
5180	0	13.72	/	13.72	\	24
	1	14.86	/	14.86		
5200	0	13.62	/	13.62	\	
	1	14.88	/	14.88		
5240	0	13.56	/	13.56	\	
	1	14.82	/	14.82		
802.11n20						
5180	0	13.90	/	13.90	17.54	24
	1	15.08	/	15.08		
5200	0	13.55	/	13.55	17.34	
	1	14.99	/	14.99		
5240	0	13.65	/	13.65	17.36	
	1	14.95	/	14.95		
802.11n40						
5190	0	11.75	0.16	11.91	15.36	24
	1	12.59	0.16	12.75		
5230	0	11.56	0.16	11.72	14.89	
	1	11.88	0.16	12.04		
802.11ac20						
5180	0	13.48	/	13.48	17.54	24
	1	15.24	/	15.24		
5200	0	13.41	/	13.41	17.54	
	1	15.29	/	15.29		
5240	0	13.73	/	13.73	17.65	
	1	15.26	/	15.26		
802.11ac40						
5190	0	11.79	0.17	11.96	15.69	24
	1	13.13	0.17	13.30		
5230	0	11.97	0.17	12.14	15.80	
	1	13.18	0.17	13.35		
802.11ac80						
5210	0	11.82	0.34	12.16	15.87	24
	1	13.13	0.34	13.47		

5250 MHz – 5350 MHz

Frequency (MHz)	Antenna Port	Reading (dBm)	Duty Cycle Factor (dB)	Average Output Power (dBm)	Total Power (dBm)	Limit (dBm)
802.11a						
5260	0	13.47	/	13.47	\	24
	1	14.79	/	14.79		
5280	0	13.44	/	13.44	\	
	1	14.87	/	14.87		
5320	0	13.58	/	13.58	\	
	1	15.03	/	15.03		
802.11n20						
5260	0	13.34	/	13.34	17.25	24
	1	14.98	/	14.98		
5280	0	13.33	/	13.33	17.26	
	1	15.01	/	15.01		
5320	0	13.79	/	13.79	17.61	
	1	15.28	/	15.28		
802.11n40						
5270	0	11.39	0.16	11.55	15.18	24
	1	12.54	0.16	12.70		
5310	0	11.42	0.16	11.58	15.38	
	1	12.86	0.16	13.02		
802.11ac20						
5260	0	13.33	/	13.33	17.42	24
	1	15.28	/	15.28		
5280	0	13.79	/	13.79	17.56	
	1	15.19	/	15.19		
5320	0	13.94	/	13.94	17.71	
	1	15.35	/	15.35		
802.11ac40						
5270	0	11.63	0.17	11.80	15.58	24
	1	13.06	0.17	13.23		
5310	0	11.70	0.17	11.87	15.63	
	1	13.09	0.17	13.26		
802.11ac80						
5290	0	11.71	0.34	12.05	15.80	24
	1	13.09	0.34	13.43		

5470 MHz – 5725 MHz

Frequency (MHz)	Antenna Port	Reading (dBm)	Duty Cycle Factor (dB)	Average Output Power (dBm)	Total Power (dBm)	Limit (dBm)
802.11a						
5500	0	13.90	/	13.90	\	24
	1	15.57	/	15.57		
5580	0	13.62	/	13.62	\	
	1	15.50	/	15.50		
5700	0	12.95	/	12.95	\	
	1	15.52	/	15.52		
802.11n20						
5500	0	10.81	/	10.81	15.00	24
	1	12.78	/	12.78		
5580	0	10.60	/	10.60	14.84	
	1	12.66	/	12.66		
5700	0	9.93	/	9.93	14.64	
	1	12.72	/	12.72		
802.11n40						
5510	0	10.71	0.16	10.87	14.94	24
	1	12.62	0.16	12.78		
5550	0	10.58	0.16	10.74	14.85	
	1	12.56	0.16	12.72		
5670	0	9.95	0.16	10.11	14.50	
	1	12.38	0.16	12.54		
802.11ac20						
5500	0	10.74	/	10.74	14.97	24
	1	12.78	/	12.78		
5580	0	10.59	/	10.59	14.96	
	1	12.85	/	12.85		
5700	0	9.99	/	9.99	14.70	
	1	12.78	/	12.78		
802.11ac40						
5510	0	10.80	0.17	10.97	15.03	24
	1	12.70	0.17	12.87		
5550	0	10.60	0.17	10.77	14.96	
	1	12.70	0.17	12.87		
5670	0	10.22	0.17	10.39	14.81	
	1	12.69	0.17	12.86		
802.11ac80						
5530	0	9.67	0.34	10.01	14.01	24
	1	11.47	0.34	11.81		
5610	0	9.20	0.34	9.54	13.88	
	1	11.54	0.34	11.88		

5725 MHz – 5850 MHz:

Frequency (MHz)	Antenna Port	Reading (dBm)	Duty Cycle Factor (dB)	Average Output Power (dBm)	Total Power (dBm)	Limit (dBm)
802.11a						
5745	0	12.72	/	12.72	\	30
	1	15.53	/	15.53		
5785	0	12.73	/	12.73	\	
	1	15.81	/	15.81		
5825	0	12.60	/	12.60	\	
	1	16.15	/	16.15		
802.11n20						
5745	0	13.03	/	13.03	17.56	30
	1	15.67	/	15.67		
5785	0	13.02	/	13.02	17.61	
	1	15.76	/	15.76		
5825	0	12.83	/	12.83	17.88	
	1	16.25	/	16.25		
802.11n40						
5755	0	12.78	0.16	12.94	17.66	30
	1	15.71	0.16	15.87		
5795	0	13.07	0.16	13.23	17.87	
	1	15.88	0.16	16.04		
802.11ac20						
5745	0	13.04	/	13.04	17.57	30
	1	15.69	/	15.69		
5785	0	12.84	/	12.84	17.54	
	1	15.74	/	15.74		
5825	0	12.99	/	12.99	17.81	
	1	16.08	/	16.08		
802.11ac40						
5755	0	12.87	0.17	13.04	17.76	30
	1	15.80	0.17	15.97		
5795	0	12.81	0.17	12.98	17.85	
	1	15.97	0.17	16.14		
802.11ac80						
5775	0	13.27	0.34	13.61	17.92	30
	1	15.57	0.34	15.91		

Note: For 802.11n/ac mode, the EUT employ CDD

$$\text{Directional Gain} = G_{ANT} + \text{Array Gain}$$

For Output Power Measurement, $\text{Array Gain} = 0\text{dB}$ for $N_{ANT} \leq 4$

$$G_{ANT} = 2.47\text{dBi}$$

$$\text{Directional Gain} = 2.47\text{dBi} + 0\text{dB} = 2.47\text{dBi} < 6\text{dBi}$$

FCC §15.407(a)- POWER SPECTRAL DENSITY

For client devices in the 5.15-5.25 GHz band, the maximum conducted output power over the frequency band of operation shall not exceed 250 mW provided the maximum antenna gain does not exceed 6 dBi. In addition, the maximum power spectral density shall not exceed 11 dBm in any 1 megahertz band. If transmitting antennas of directional gain greater than 6 dBi are used, both the maximum conducted output power and the maximum power spectral density shall be reduced by the amount in dB that the directional gain of the antenna exceeds 6 dBi.

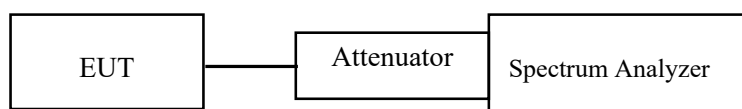
For the 5.25-5.35 GHz and 5.47-5.725 GHz bands, the maximum conducted output power over the frequency bands of operation shall not exceed the lesser of 250 mW or $11 \text{ dBm} + 10 \log B$, where B is the 26 dB emission bandwidth in megahertz. In addition, the maximum power spectral density shall not exceed 11 dBm in any 1 megahertz band. If transmitting antennas of directional gain greater than 6 dBi are used, both the maximum conducted output power and the maximum power spectral density shall be reduced by the amount in dB that the directional gain of the antenna exceeds 6 dBi.

For the band 5.725-5.85 GHz, the maximum conducted output power over the frequency band of operation shall not exceed 1 W. In addition, the maximum power spectral density shall not exceed 30 dBm in any 500-kHz band. If transmitting antennas of directional gain greater than 6 dBi are used, both the maximum conducted output power and the maximum power spectral density shall be reduced by the amount in dB that the directional gain of the antenna exceeds 6 dBi. However, fixed point-to-point U-NII devices operating in this band may employ transmitting antennas with directional gain greater than 6 dBi without any corresponding reduction in transmitter conducted power. Fixed, point-to-point operations exclude the use of point-to-multipoint systems, omnidirectional applications, and multiple collocated transmitters transmitting the same information. The operator of the U-NII device, or if the equipment is professionally installed, the installer, is responsible for ensuring that systems employing high gain directional antennas are used exclusively for fixed, point-to-point operations.

Test Procedure

For devices operating in the bands 5.15-5.25 GHz, 5.25-5.35 GHz, and 5.47-5.725 GHz, the above procedures make use of 1 MHz RBW to satisfy directly the 1 MHz reference bandwidth specified in § 15.407(a)(5). For devices operating in the band 5.725-5.85 GHz, the rules specify a measurement bandwidth of 500 kHz. Many spectrum analyzers do not have 500 kHz RBW, thus a narrower RBW may need to be used. The rules permit the use of a RBWs less than 1 MHz, or 500 kHz, “provided that the measured power is integrated over the full reference bandwidth” to show the total power over the specified measurement bandwidth (i.e., 1 MHz, or 500 kHz). If measurements are performed using a reduced resolution bandwidth (< 1 MHz, or < 500 kHz) and integrated over 1 MHz, or 500 kHz bandwidth, the following adjustments to the procedures apply:

- a) Set $\text{RBW} \geq 1/T$, where T is defined in section II.B.1.a).
- b) Set $\text{VBW} \geq 3 \text{ RBW}$.
- c) If measurement bandwidth of Maximum PSD is specified in 500 kHz, add $10 \log (500 \text{ kHz}/\text{RBW})$ to the measured result, whereas $\text{RBW} (< 500 \text{ kHz})$ is the reduced resolution bandwidth of the spectrum analyzer set during measurement.
- d) If measurement bandwidth of Maximum PSD is specified in 1 MHz, add $10 \log (1\text{MHz}/\text{RBW})$ to the measured result, whereas $\text{RBW} (< 1 \text{ MHz})$ is the reduced resolution bandwidth of spectrum analyzer set during measurement.
- e) Care must be taken to ensure that the measurements are performed during a period of continuous transmission or are corrected upward for duty cycle.



Test Data**Environmental Conditions**

Temperature:	25.2~27.3 °C
Relative Humidity:	46~55 %
ATM Pressure:	100.2~101.3 kPa

The testing was performed by Roger Ling from 2022-06-27 to 2022-06-30.

EUT operation mode: Transmitting

Test Result: Pass

Please refer to the following tables and plots.

For module : YL43455

5150 MHz – 5250 MHz:

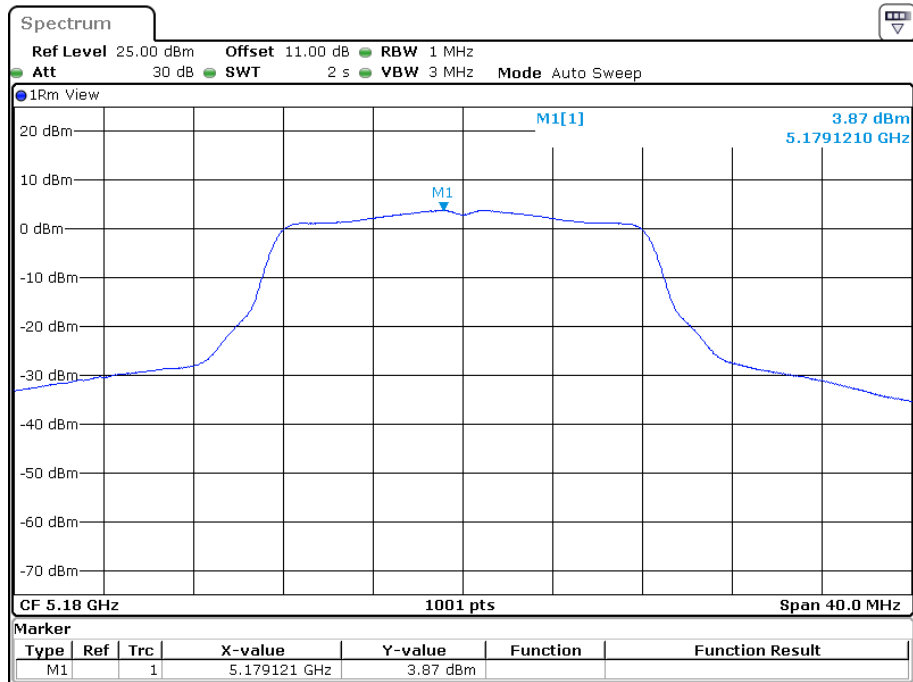
Frequency (MHz)	Antenna Port	Reading (dBm/MHz)	Duty Cycle Factor (dB)	PSD (dBm/MHz)	Limit (dBm/MHz)
802.11a					
5180	0	3.87	0.31	4.18	11
5200	0	3.71	0.31	4.02	
5240	0	3.47	0.31	3.78	
802.11n20					
5180	0	3.09	0.32	3.41	11
5200	0	3.20	0.32	3.52	
5240	0	2.99	0.32	3.31	
802.11n40					
5190	0	-1.46	0.64	-0.82	11
5230	0	-1.72	0.64	-1.08	
802.11ac20					
5180	0	3.15	0.33	3.48	11
5200	0	3.12	0.33	3.45	
5240	0	2.80	0.33	3.13	
802.11ac40					
5190	0	-1.54	0.63	-0.91	11
5230	0	-1.66	0.63	-1.03	
802.11ac80					
5210	0	-6.91	1.19	-5.72	11

Note:

1) Power Spectral Density = Reading + Duty Cycle Factor.

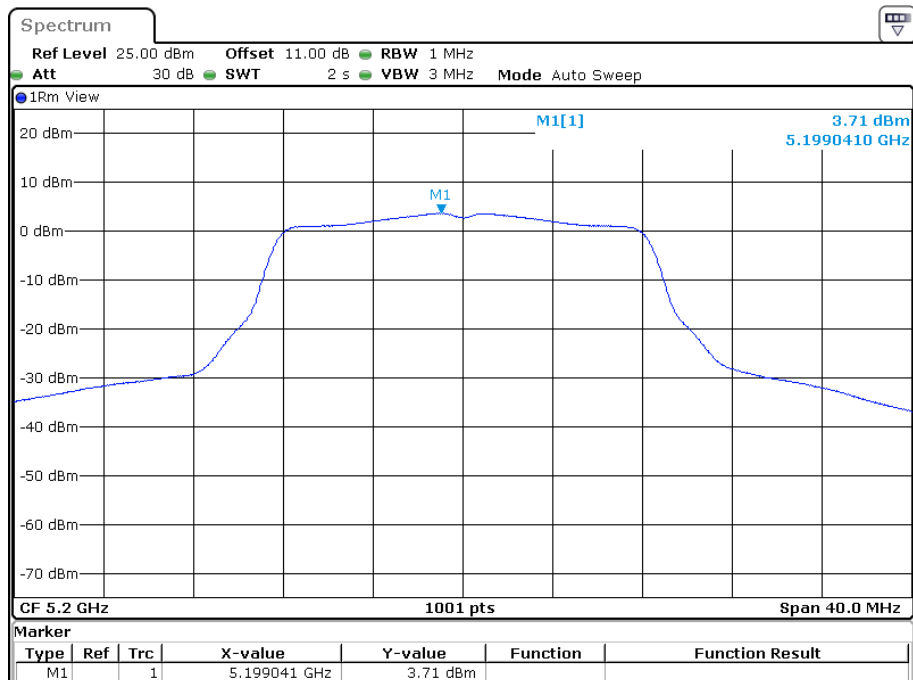
2) Duty Cycle Factor = $10 \log(1/D)$, D = Duty Cycle

802.11a mode, Power Spectral Density, 5180 MHz



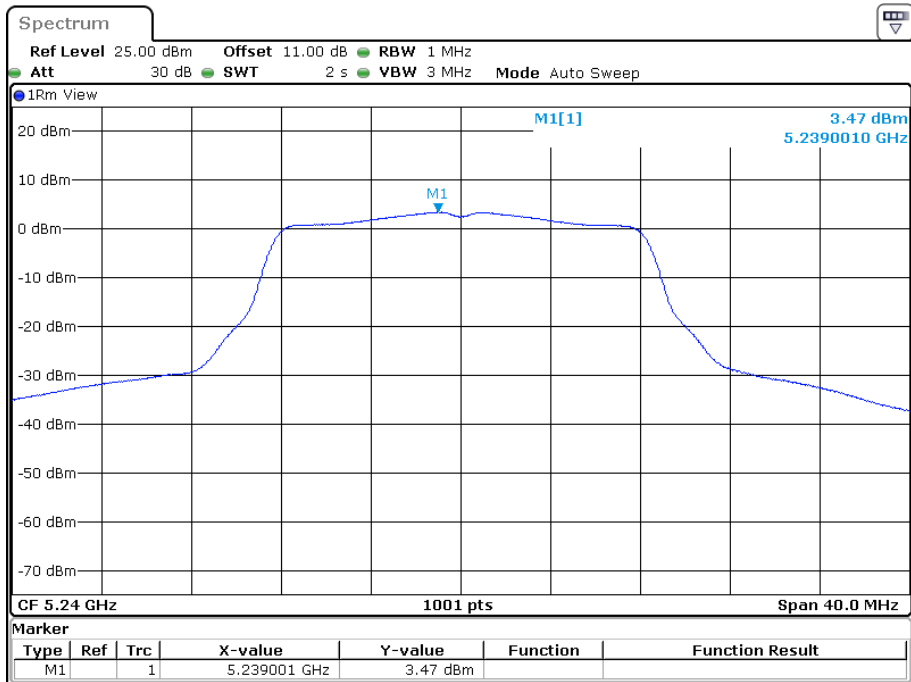
Date: 27.JUN.2022 21:18:20

802.11a mode, Power Spectral Density, 5200 MHz



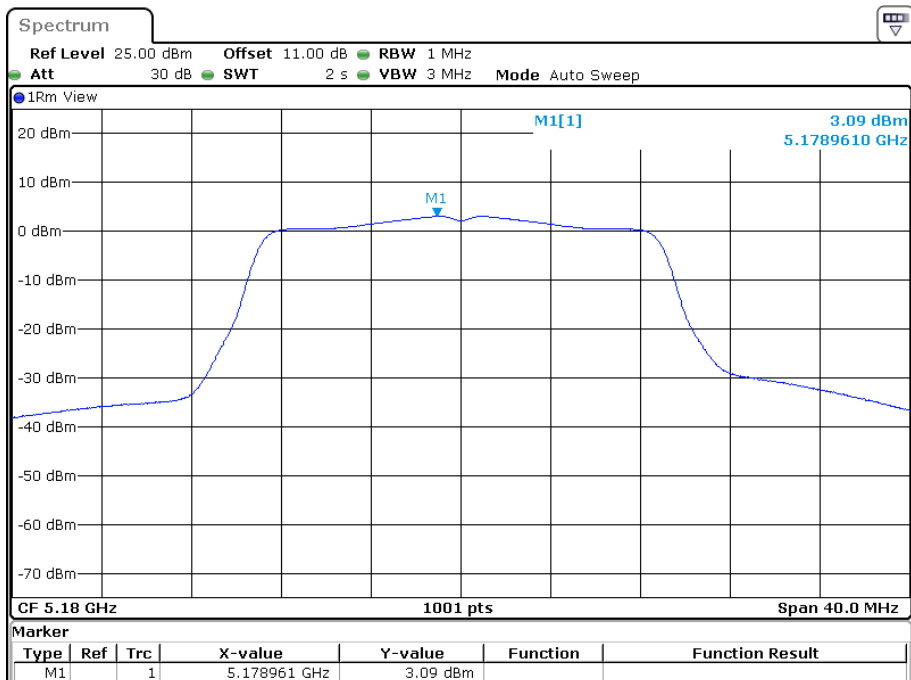
Date: 27.JUN.2022 21:20:57

802.11a mode, Power Spectral Density, 5240 MHz



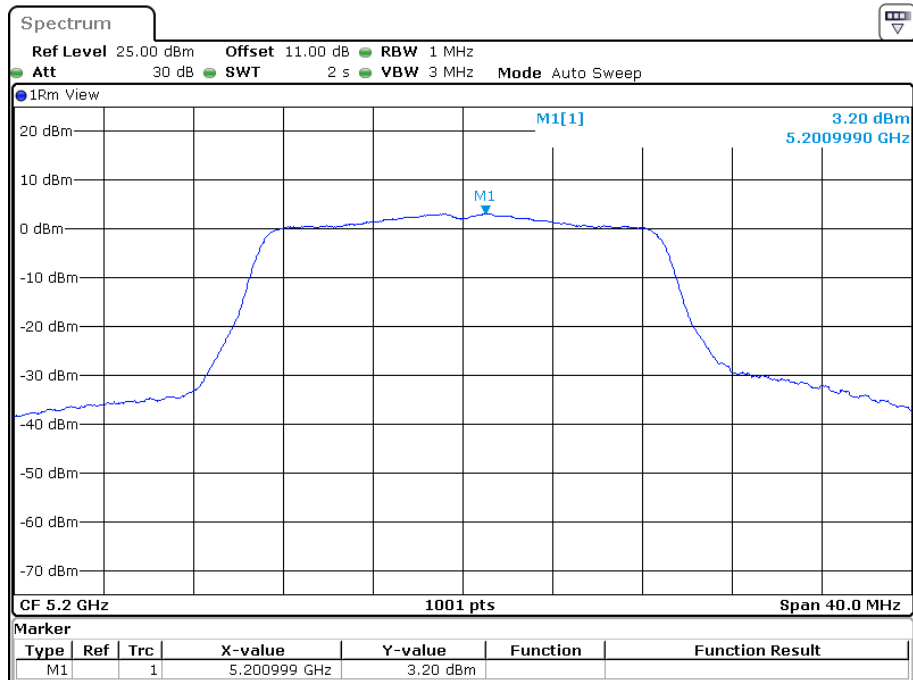
Date: 27.JUN.2022 21:23:26

802.11n20 mode, Power Spectral Density, 5180 MHz



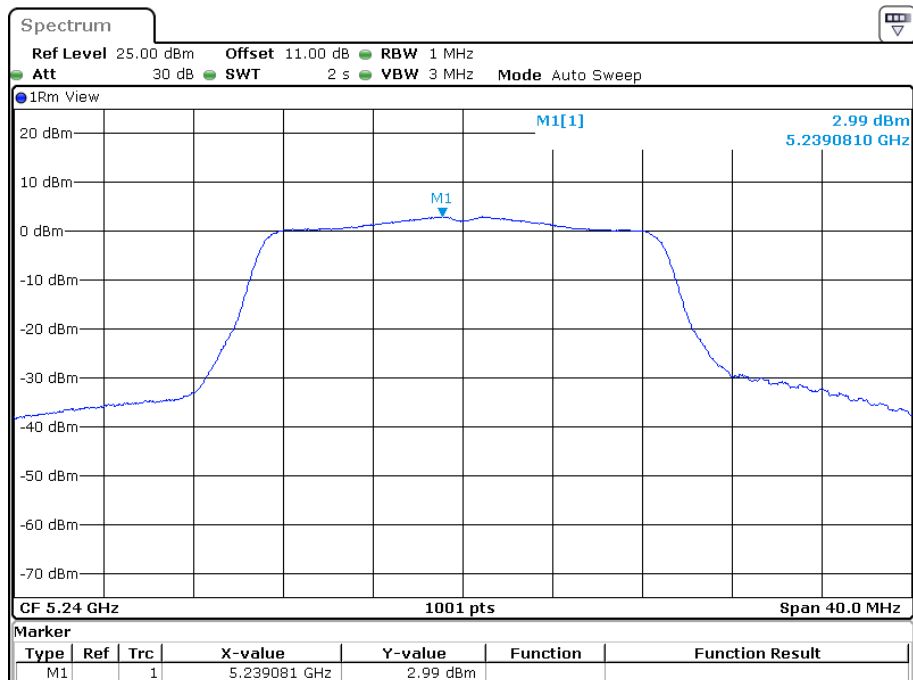
Date: 27.JUN.2022 22:11:02

802.11n20 mode, Power Spectral Density, 5200 MHz



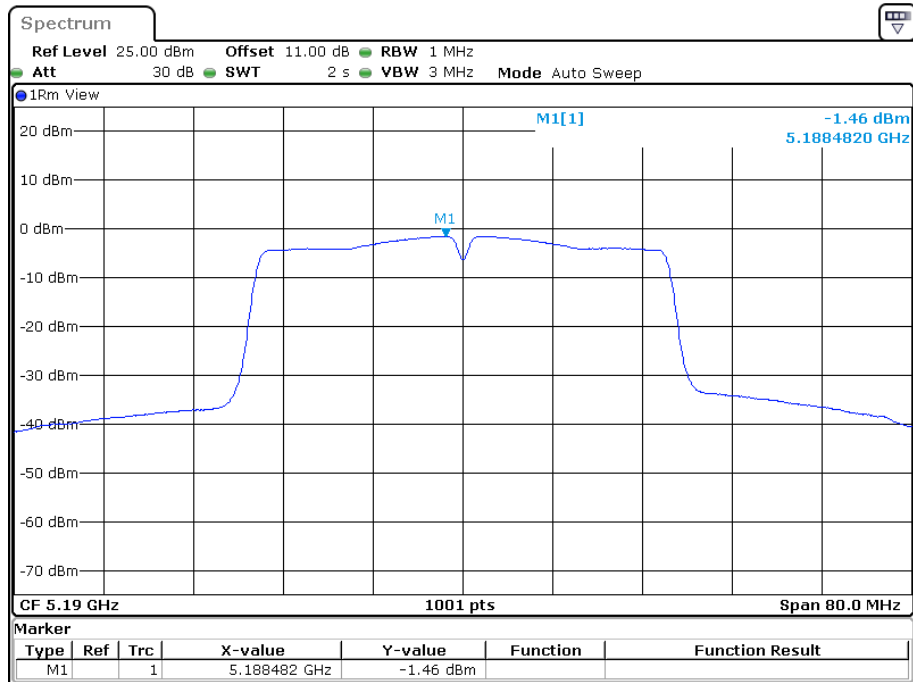
Date: 27.JUN.2022 22:13:55

802.11n20 mode, Power Spectral Density, 5240 MHz



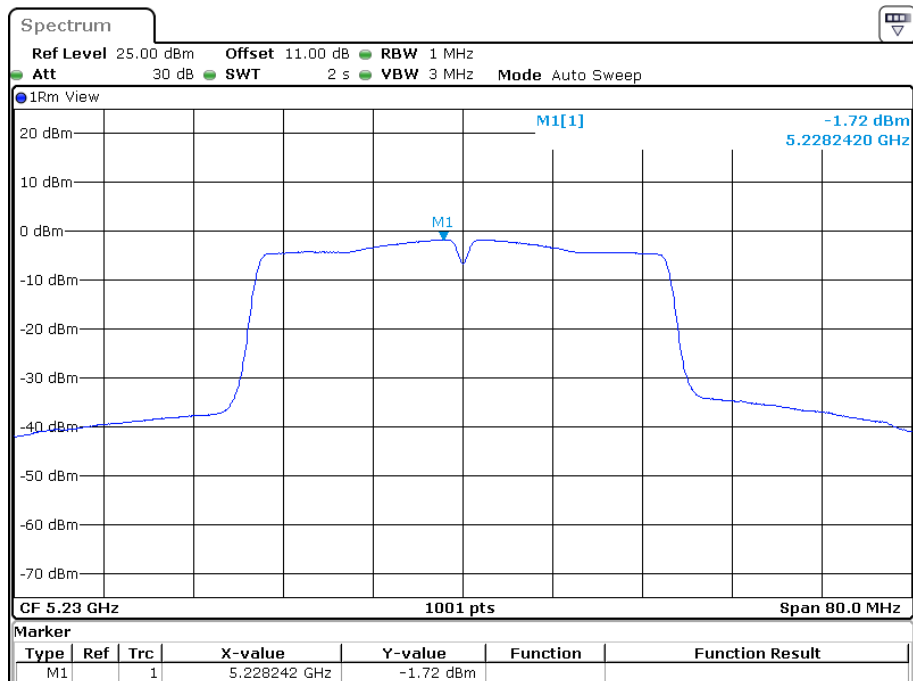
Date: 27.JUN.2022 22:16:37

802.11n40 mode, Power Spectral Density, 5190 MHz



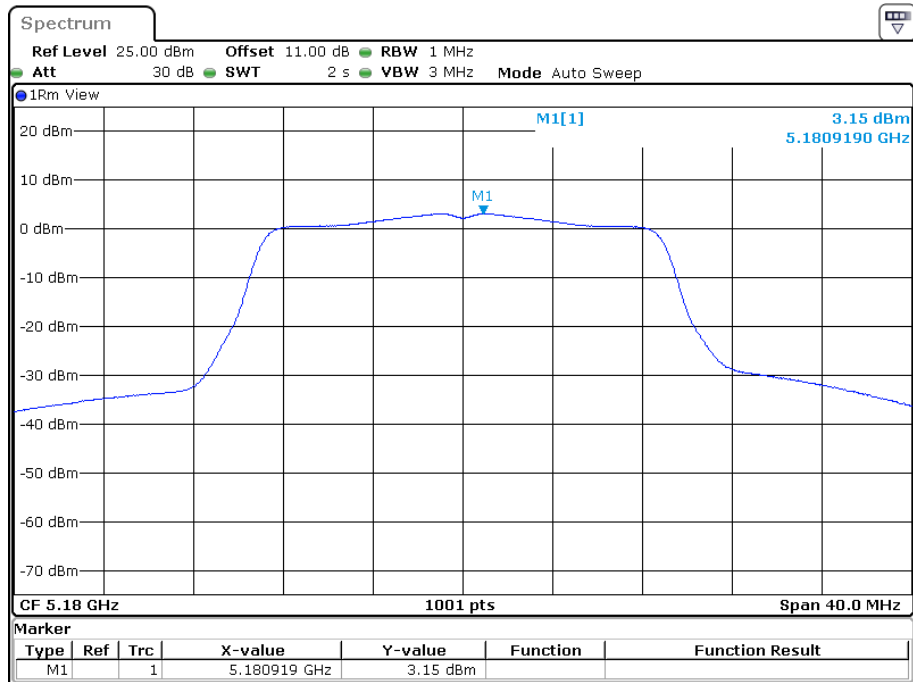
Date: 27.JUN.2022 23:24:42

802.11n40 mode, Power Spectral Density, 5230 MHz



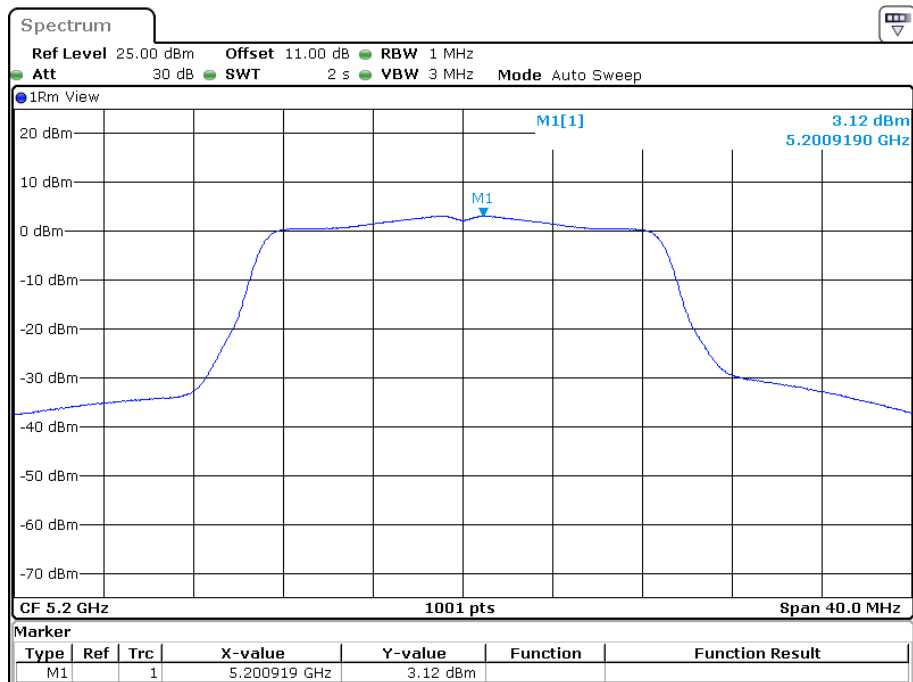
Date: 27.JUN.2022 23:34:27

802.11ac20 mode, Power Spectral Density, 5180 MHz



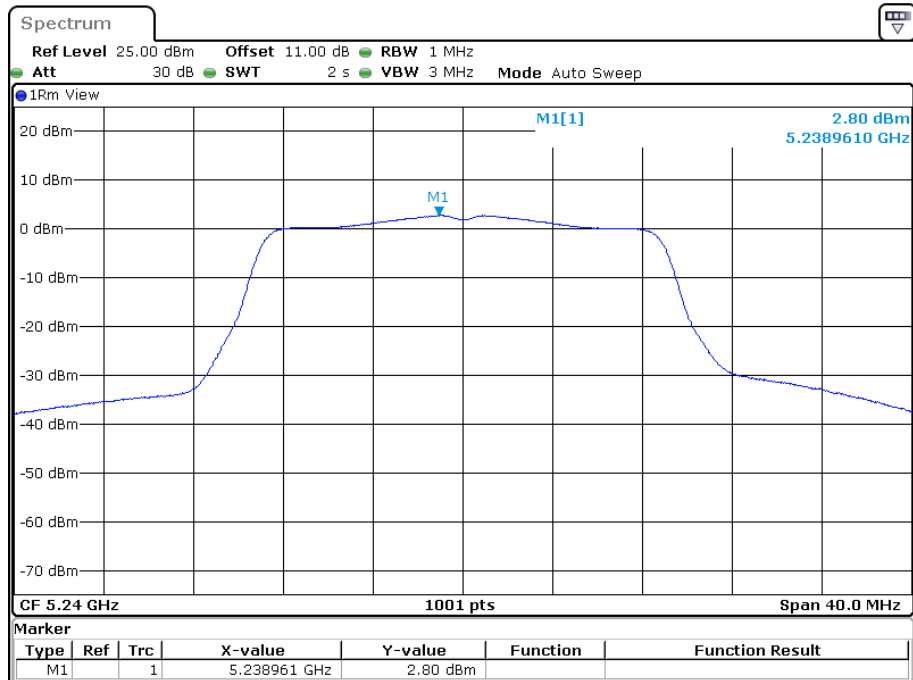
Date: 27.JUN.2022 22:44:45

802.11ac20 mode, Power Spectral Density, 5200 MHz



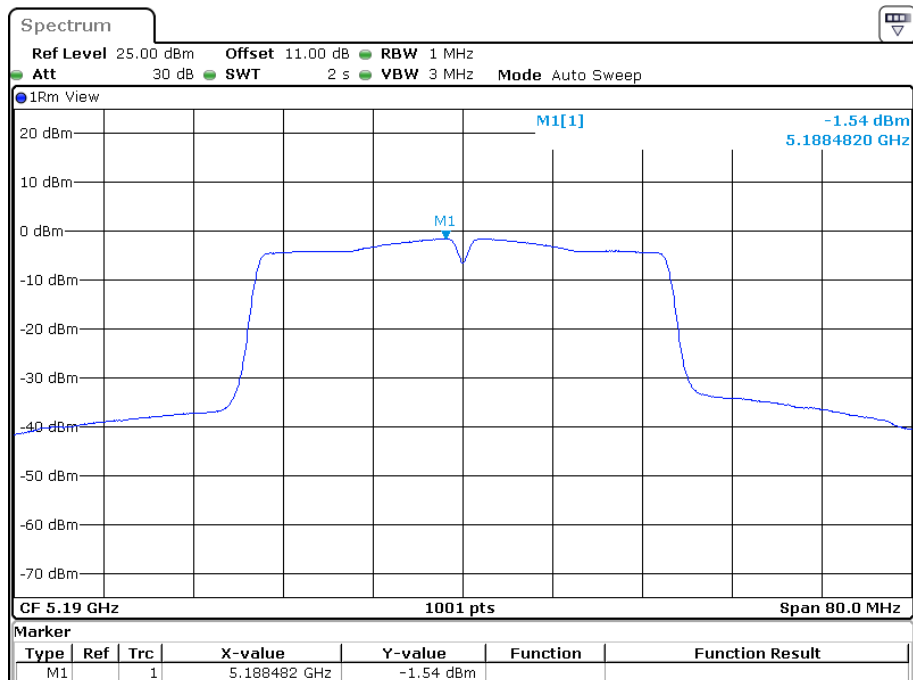
Date: 27.JUN.2022 22:48:17

802.11ac20 mode, Power Spectral Density, 5240 MHz



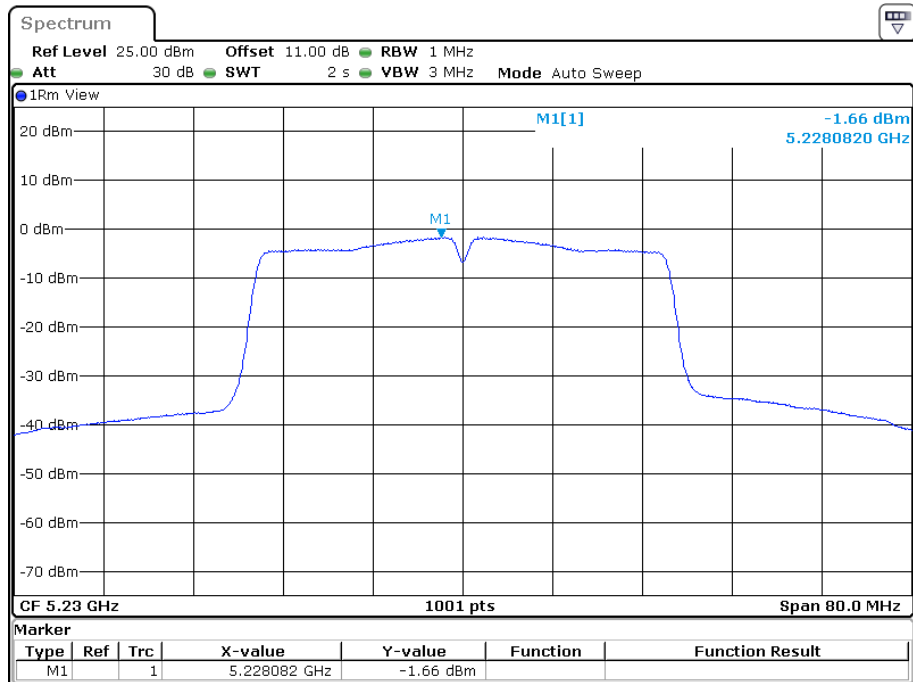
Date: 27.JUN.2022 22:50:44

802.11ac40 mode, Power Spectral Density, 5190 MHz



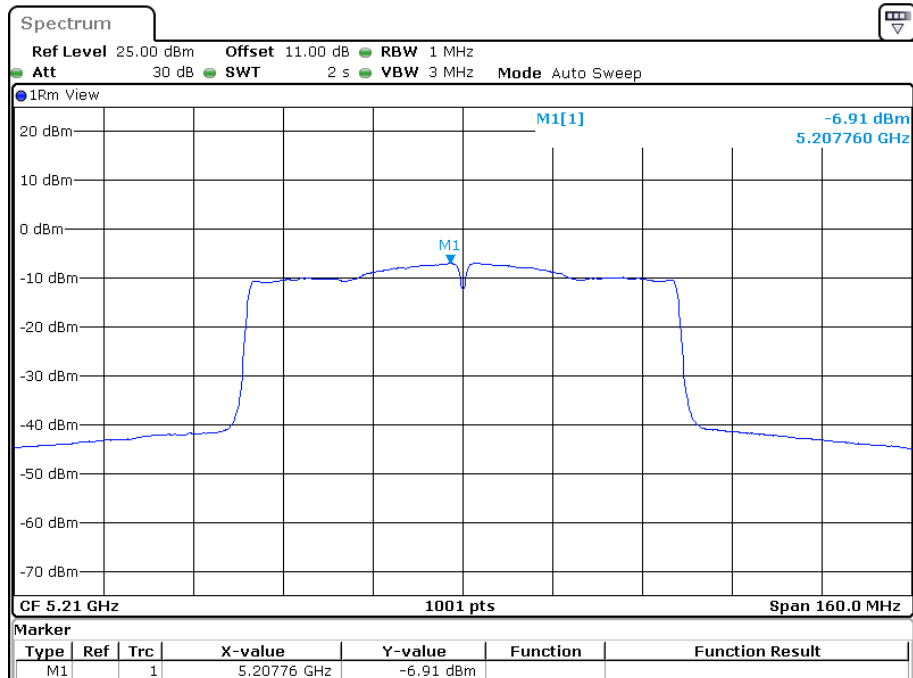
Date: 27.JUN.2022 23:56:49

802.11ac40 mode, Power Spectral Density, 5230 MHz



Date: 27.JUN.2022 23:59:24

802.11ac80 mode, Power Spectral Density, 5210 MHz



Date: 28.JUN.2022 00:20:36

5250 MHz – 5350 MHz:

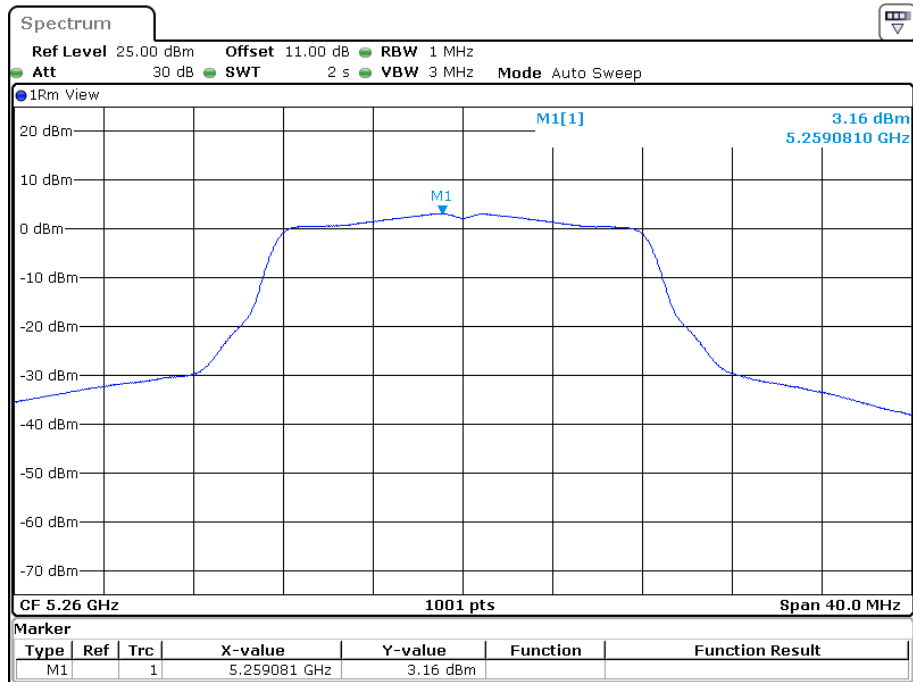
Frequency (MHz)	Antenna Port	Reading (dBm/MHz)	Duty Cycle Factor (dB)	PSD (dBm/MHz)	Limit (dBm/MHz)
802.11a					
5260	0	3.16	0.31	3.47	11
5280	0	3.15	0.31	3.46	
5320	0	3.23	0.31	3.54	
802.11n20					
5260	0	2.48	0.32	2.80	11
5280	0	2.36	0.32	2.68	
5320	0	2.58	0.32	2.90	
802.11n40					
5270	0	-2.15	1.64	-0.51	11
5310	0	-2.00	1.64	-0.36	
802.11ac20					
5260	0	2.51	0.33	2.84	11
5280	0	2.52	0.33	2.85	
5320	0	2.45	0.33	2.78	
802.11ac40					
5270	0	-2.26	0.63	-1.63	11
5310	0	-2.06	0.63	-1.43	
802.11ac80					
5290	0	-7.19	1.21	-5.98	11

Note:

1) Power Spectral Density = Reading + Duty Cycle Factor.

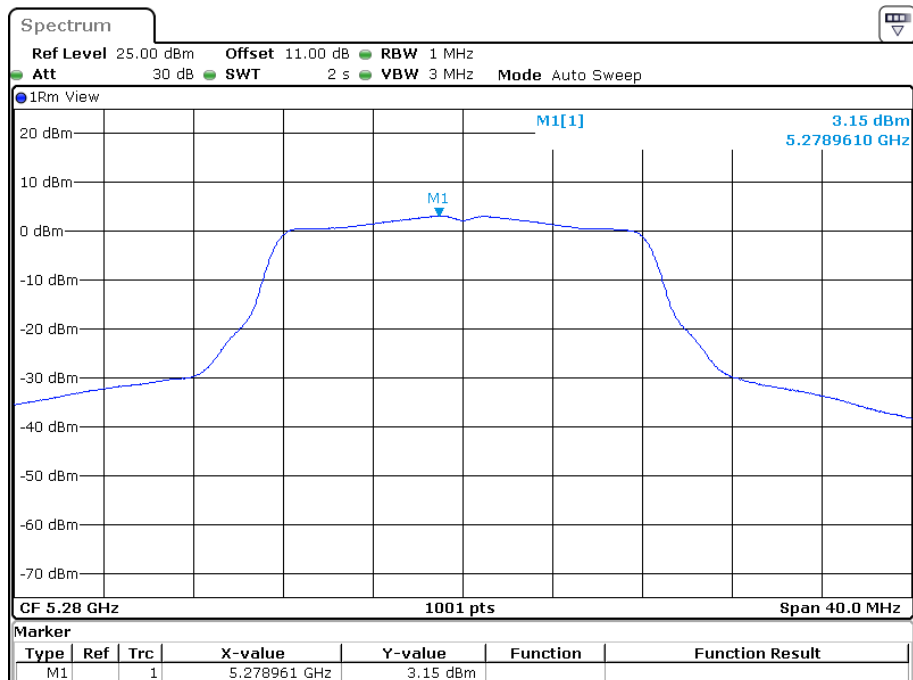
2) Duty Cycle Factor = $10 \log(1/D)$, D = Duty Cycle

802.11a mode, Power Spectral Density, 5260MHz



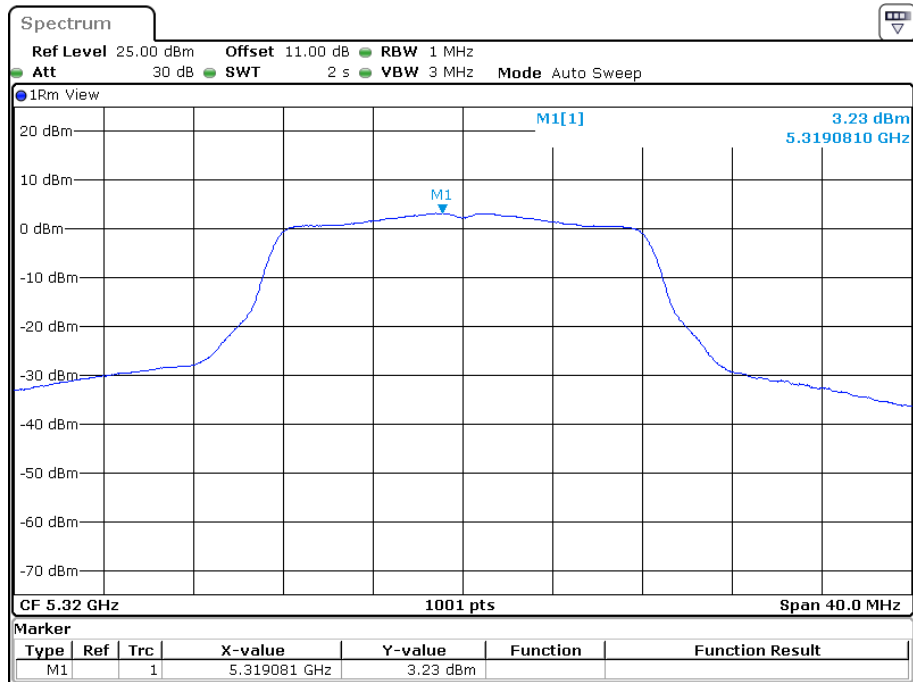
Date: 27.JUN.2022 21:26:18

802.11a mode, Power Spectral Density, 5280MHz



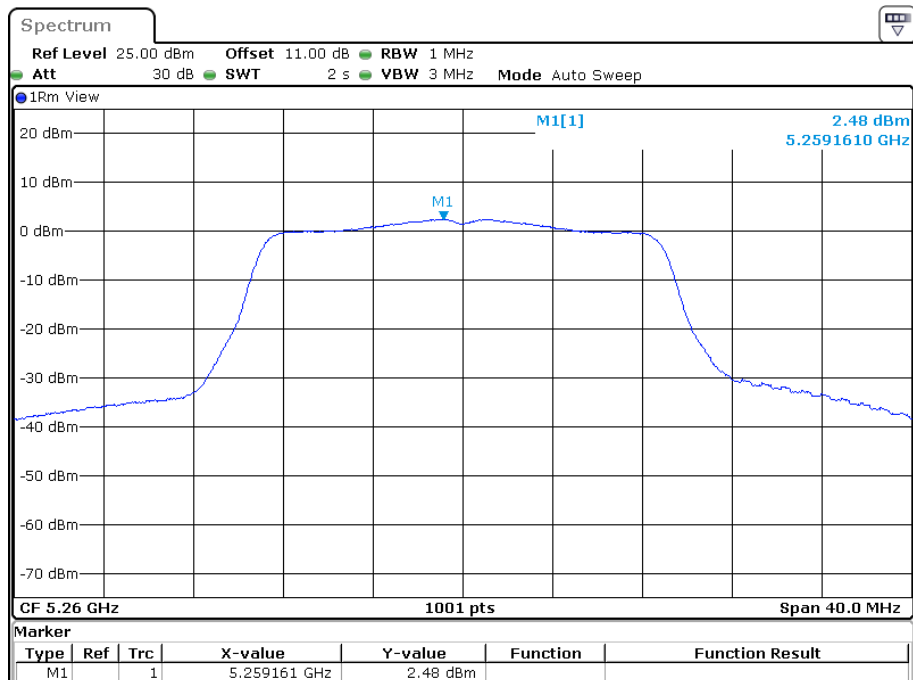
Date: 27.JUN.2022 21:28:56

802.11a mode, Power Spectral Density, 5320 MHz



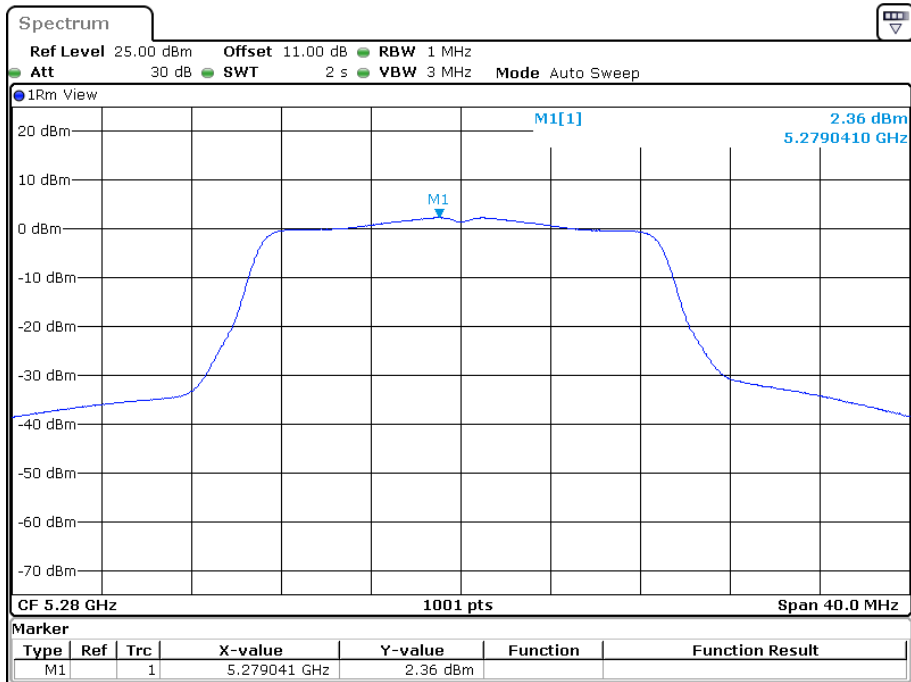
Date: 27.JUN.2022 21:32:24

802.11n20 mode, Power Spectral Density, 5260 MHz



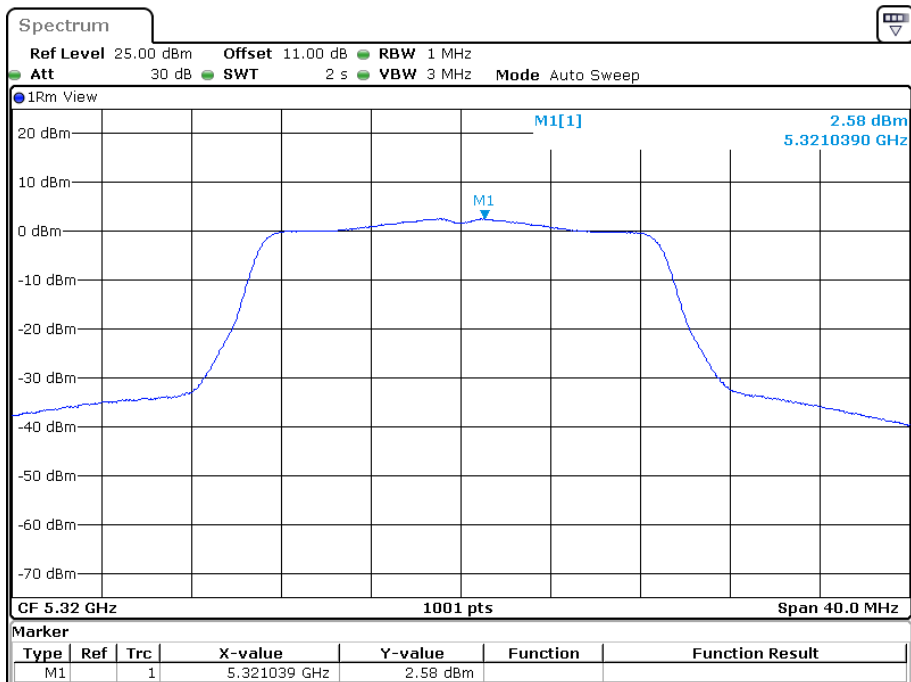
Date: 27.JUN.2022 22:19:14

802.11n20 mode, Power Spectral Density, 5280MHz



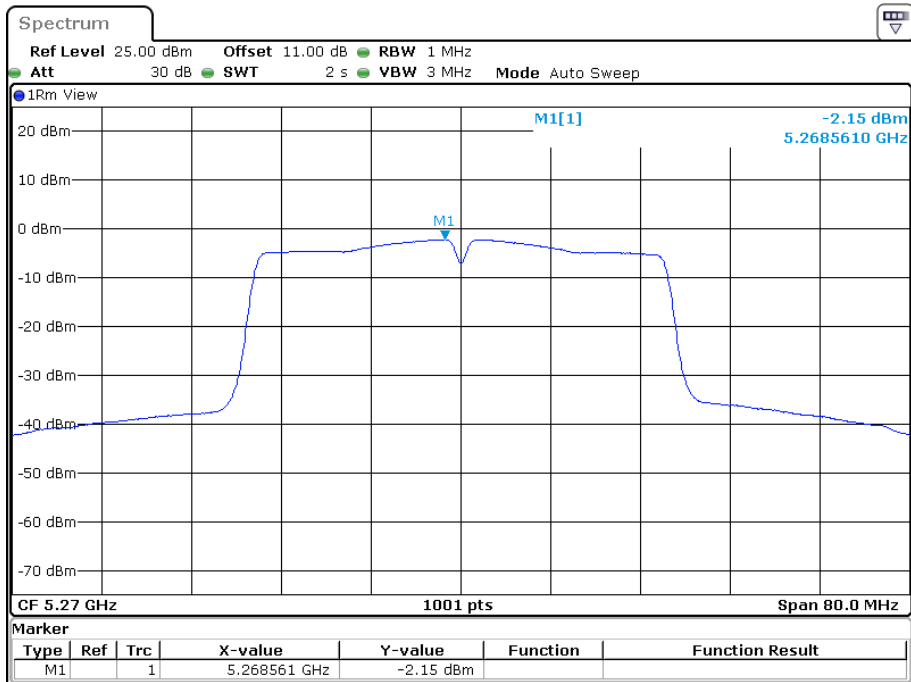
Date: 27.JUN.2022 22:23:31

802.11n20 mode, Power Spectral Density, 5320MHz



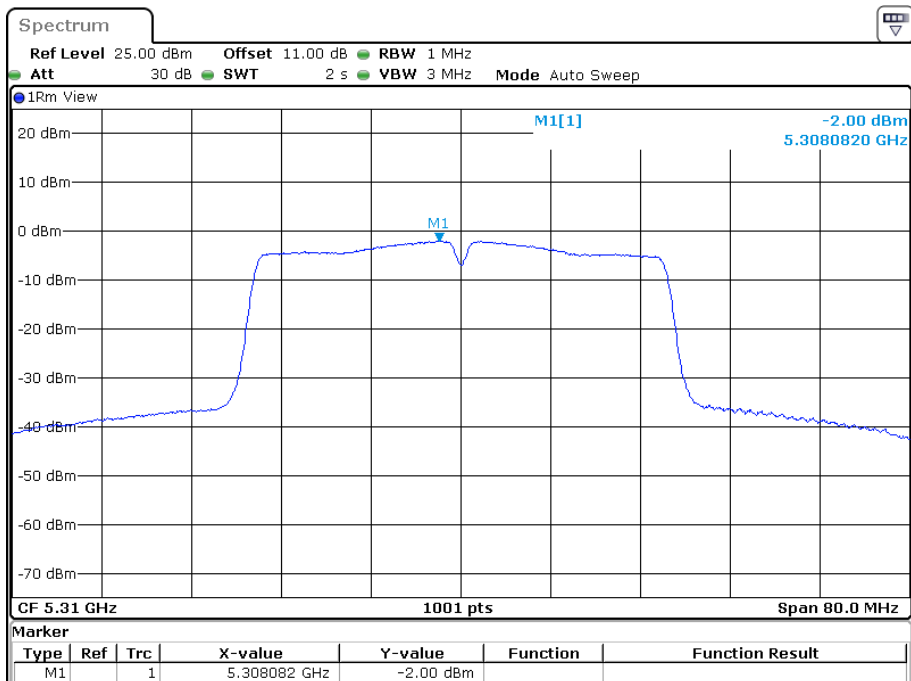
Date: 27.JUN.2022 22:25:58

802.11n40 mode, Power Spectral Density, 5270MHz



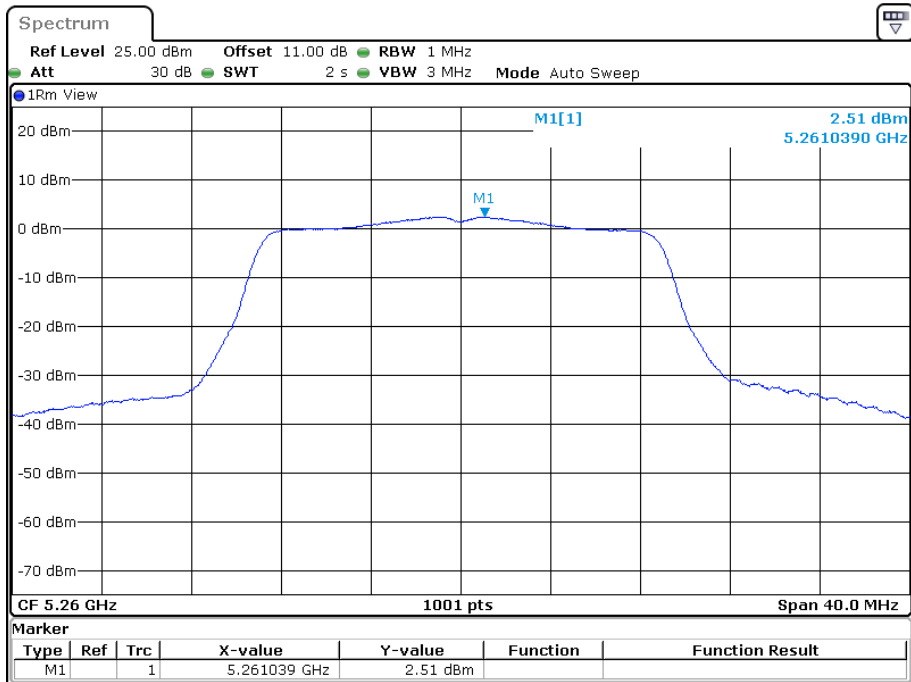
Date: 27.JUN.2022 23:37:04

802.11n40 mode, Power Spectral Density, 5310MHz



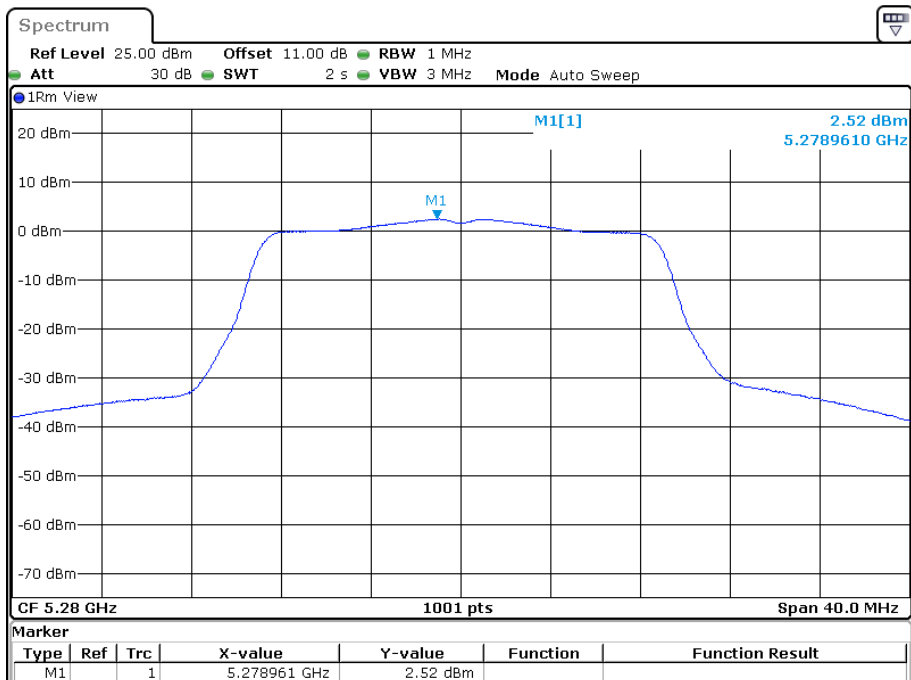
Date: 27.JUN.2022 23:39:33

802.11ac20 mode, Power Spectral Density, 5260 MHz



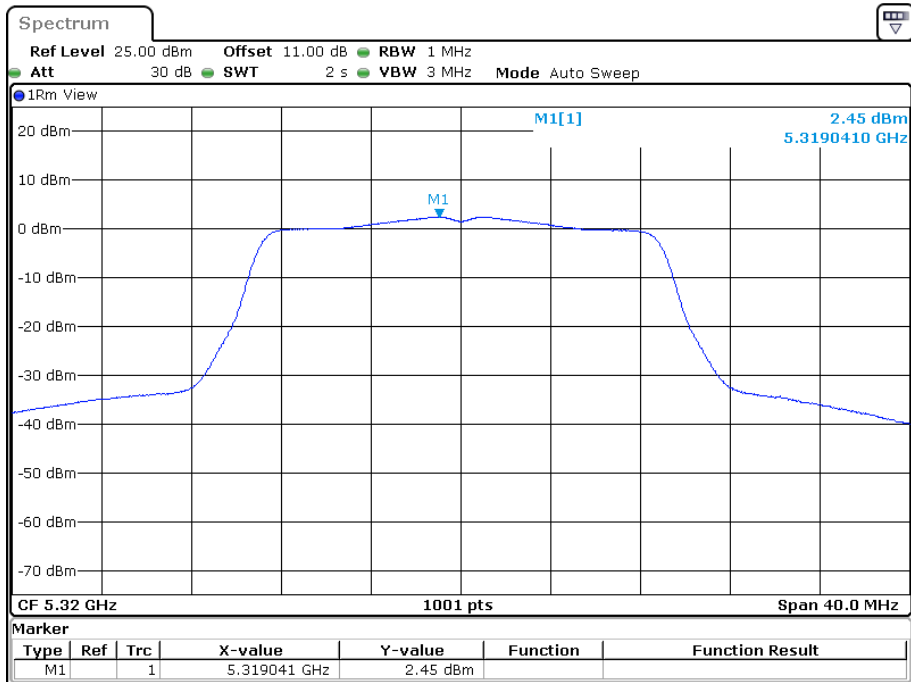
Date: 27.JUN.2022 22:57:29

802.11ac20 mode, Power Spectral Density, 5280MHz



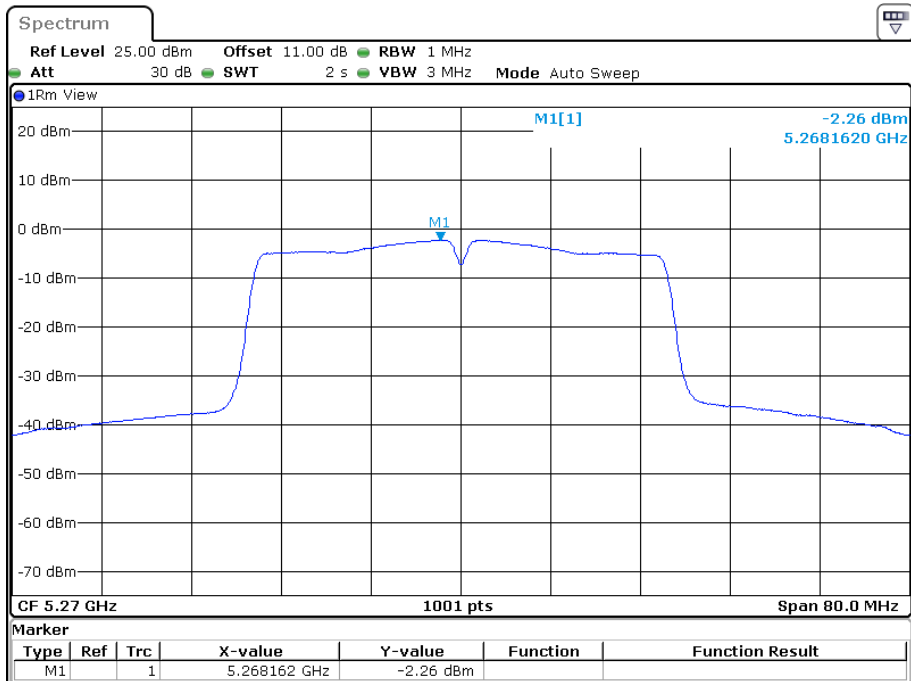
Date: 27.JUN.2022 23:05:12

802.11ac20 mode, Power Spectral Density, 5320MHz



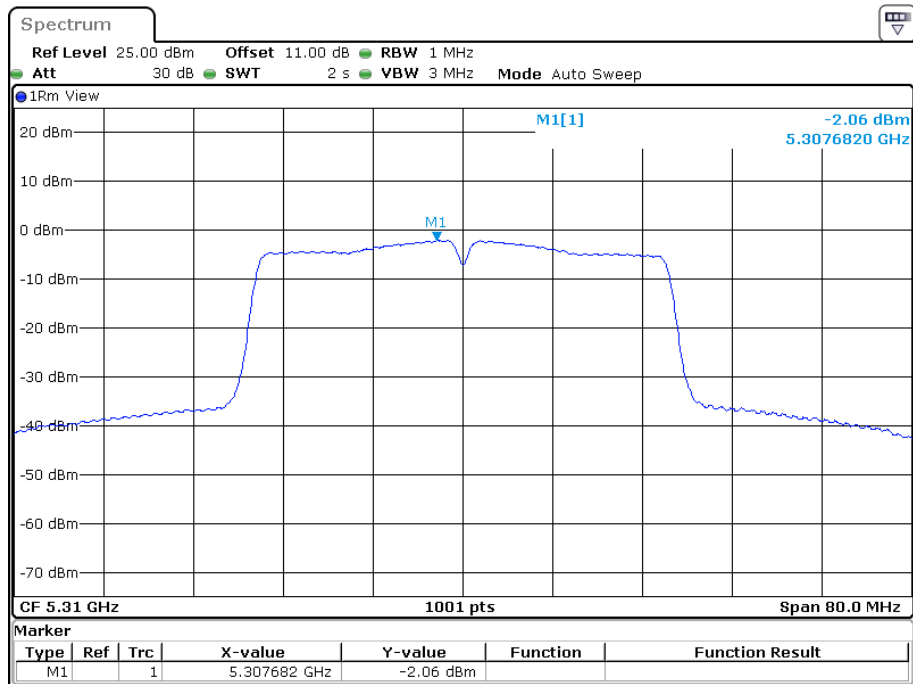
Date: 27.JUN.2022 23:00:04

802.11ac40 mode, Power Spectral Density, 5270MHz



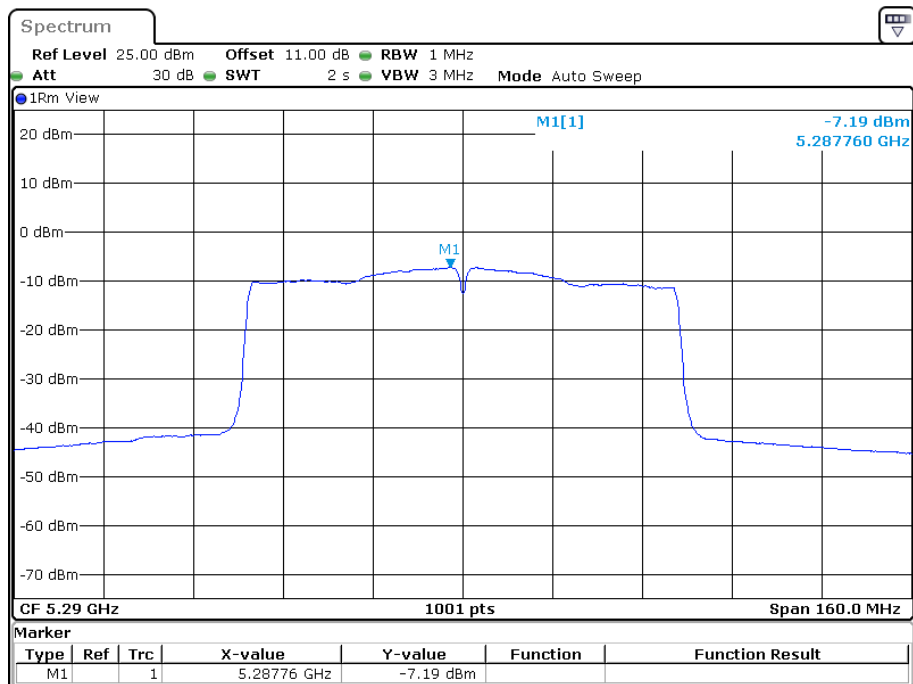
Date: 28.JUN.2022 00:02:08

802. 11ac40 mode, Power Spectral Density, 5310 MHz



Date: 28.JUN.2022 00:04:40

802. 11ac80 mode, Power Spectral Density, 5290 MHz



Date: 28.JUN.2022 00:23:28

5470 MHz – 5725 MHz

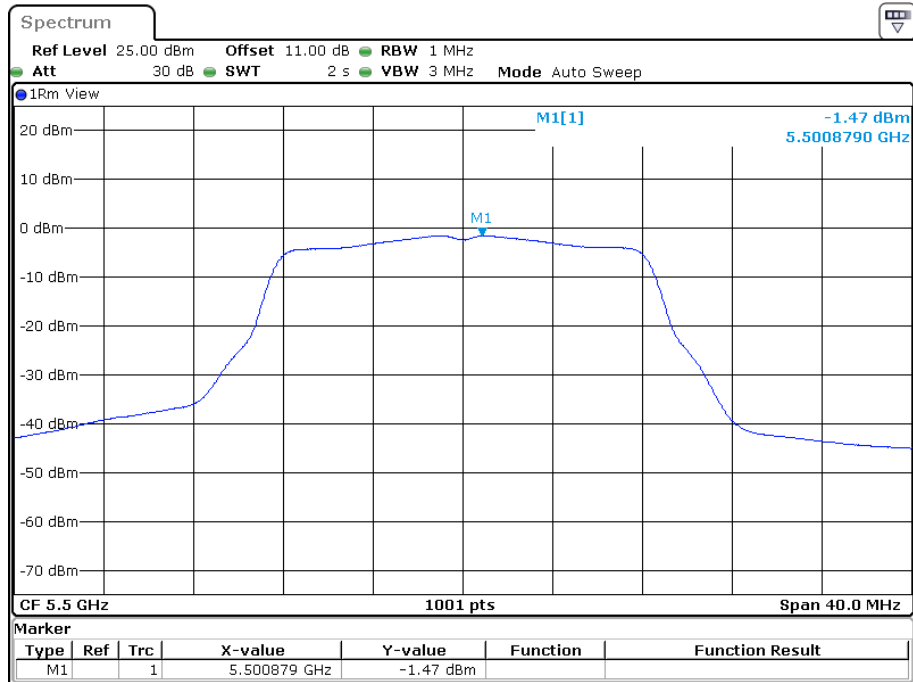
Frequency (MHz)	Antenna Port	Reading (dBm/MHz)	Duty Cycle Factor (dB)	PSD (dBm/MHz)	Limit (dBm/MHz)
802.11a					
5500	0	-1.47	0.31	-1.16	11
5580	0	-2.14	0.31	-1.83	
5700	0	-1.67	0.31	-1.36	
802.11n20					
5500	0	-1.94	0.32	-1.62	11
5580	0	-2.85	0.32	-2.53	
5700	0	-2.25	0.32	-1.93	
802.11n40					
5510	0	-6.87	0.65	-6.22	11
5550	0	-7.35	0.65	-6.70	
5670	0	-7.36	0.65	-6.71	
802.11ac20					
5500	0	-1.84	0.33	-1.51	11
5580	0	-2.58	0.33	-2.25	
5700	0	-2.22	0.33	-1.89	
802.11ac40					
5510	0	-6.91	0.63	-6.28	11
5550	0	-7.37	0.63	-6.74	
5670	0	-7.40	0.63	-6.77	
802.11ac80					
5530	0	-10.84	1.19	-9.65	11
5610	0	-11.23	1.19	-10.04	

Note:

1) Power Spectral Density = Reading + Duty Cycle Factor.

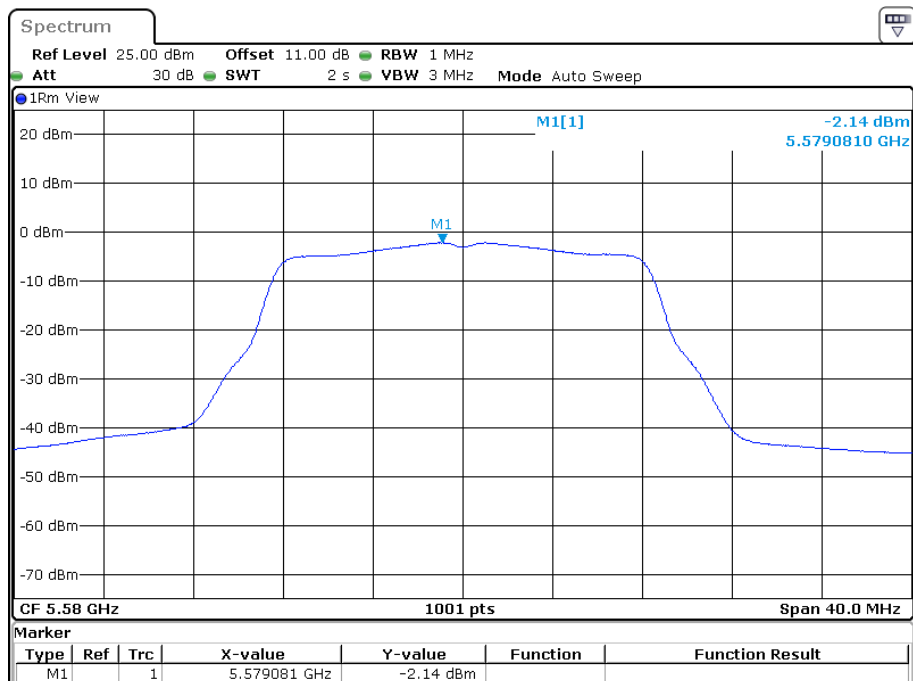
2) Duty Cycle Factor = $10 \log(1/D)$, D = Duty Cycle

802.11a mode, Power Spectral Density, 5500MHz



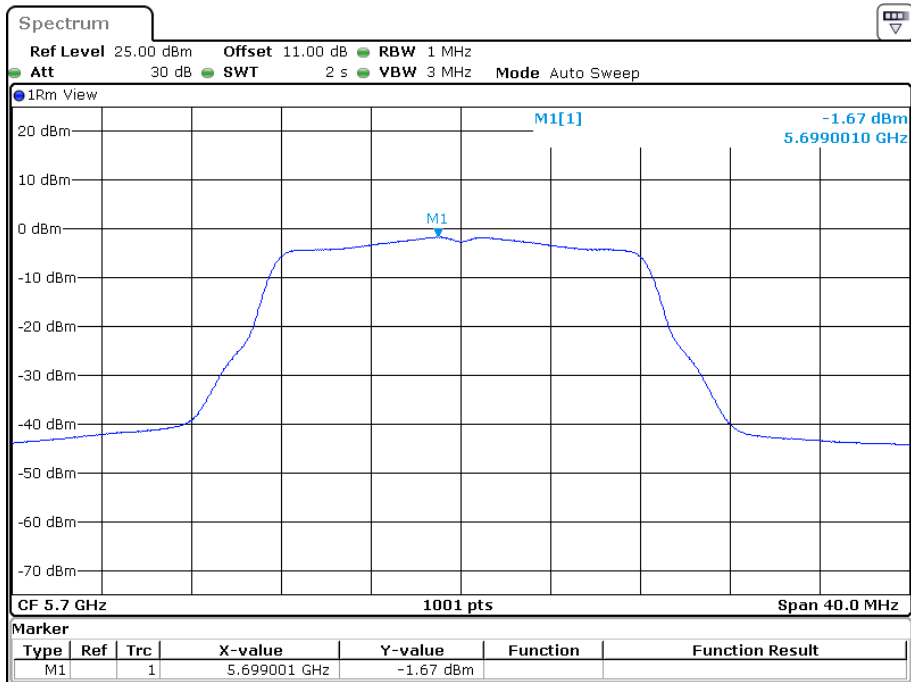
Date: 27.JUN.2022 21:35:03

802.11a mode, Power Spectral Density, 5580MHz



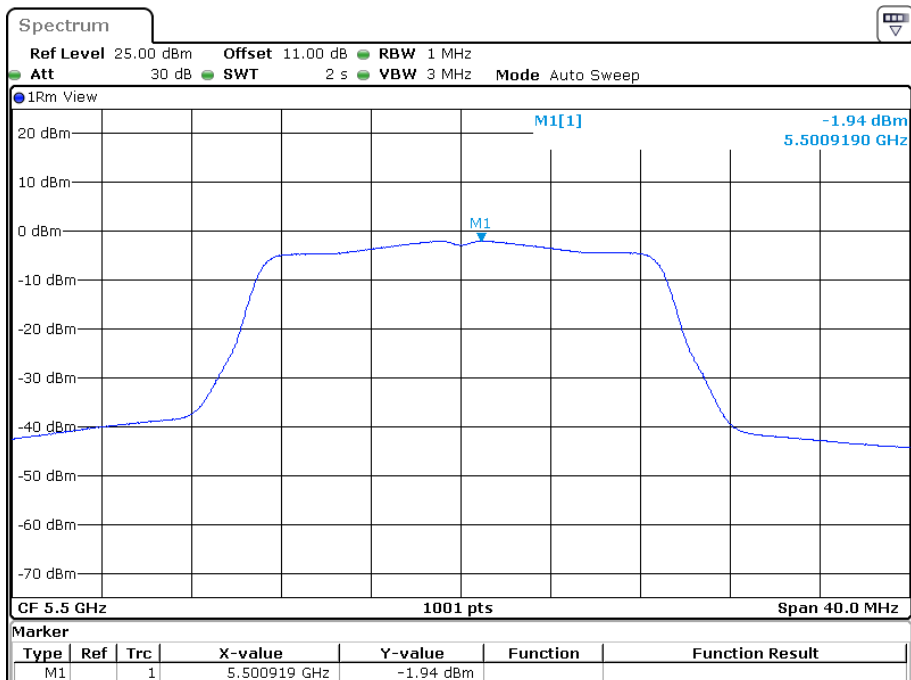
Date: 27.JUN.2022 21:37:40

802.11a mode, Power Spectral Density, 5700MHz



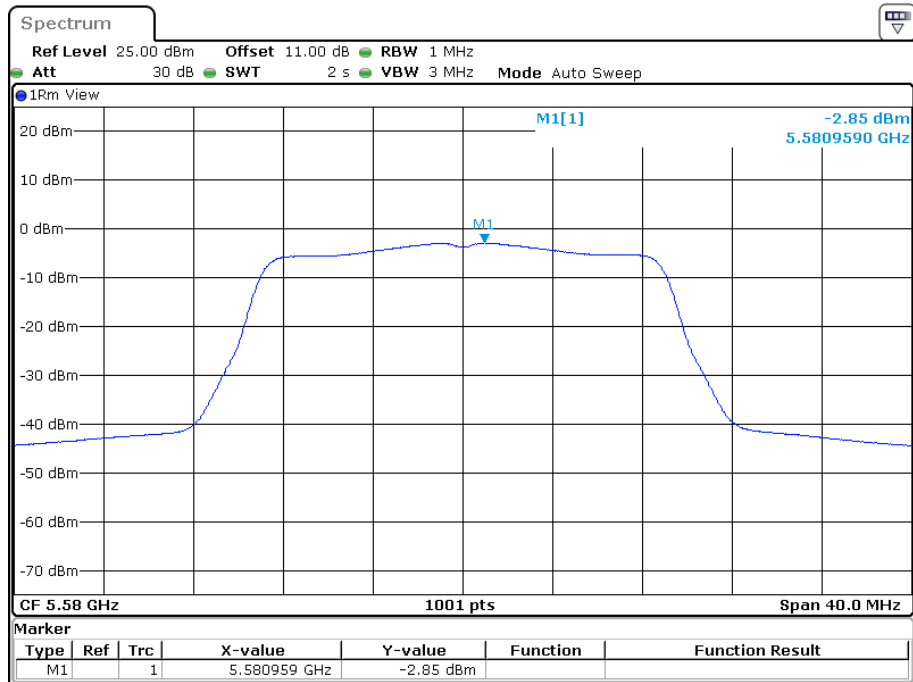
Date: 27.JUN.2022 21:40:15

802.11n20 mode, Power Spectral Density, 5500MHz



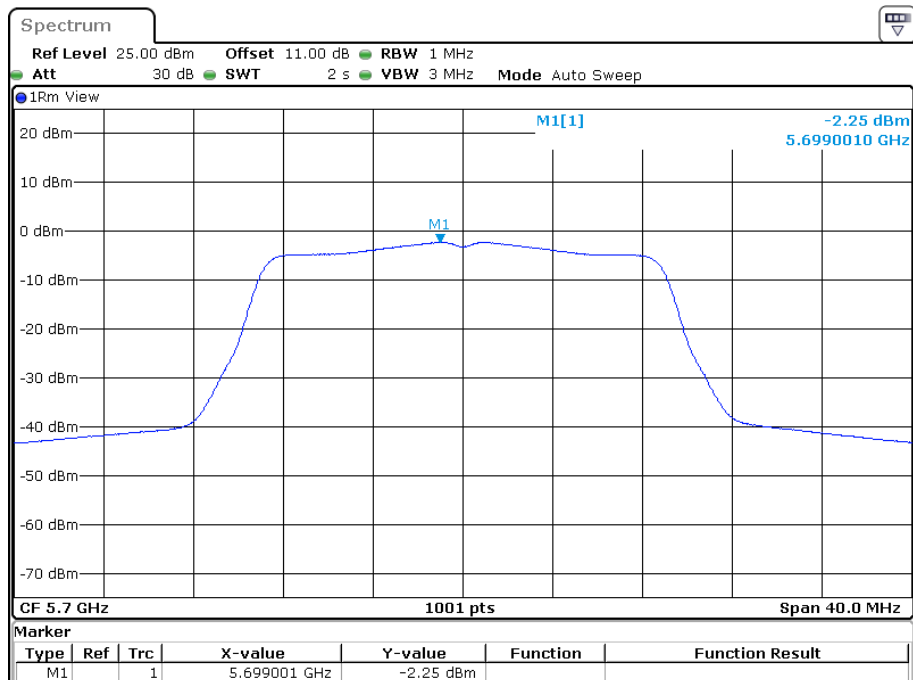
Date: 27.JUN.2022 22:28:53

802.11n20 mode, Power Spectral Density, 5580MHz



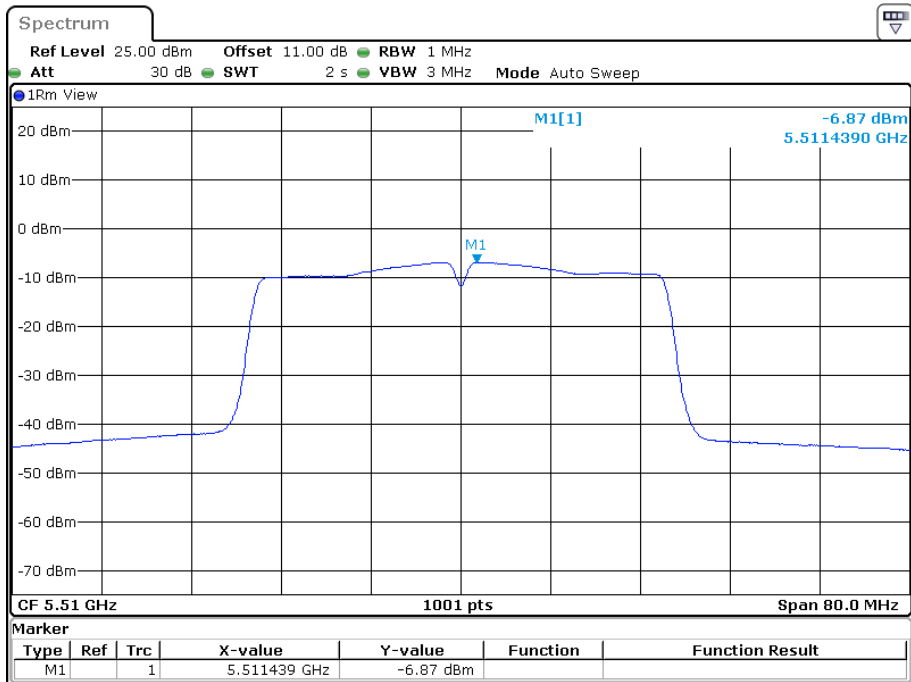
Date: 27.JUN.2022 22:31:33

802.11n20 mode, Power Spectral Density, 5700MHz



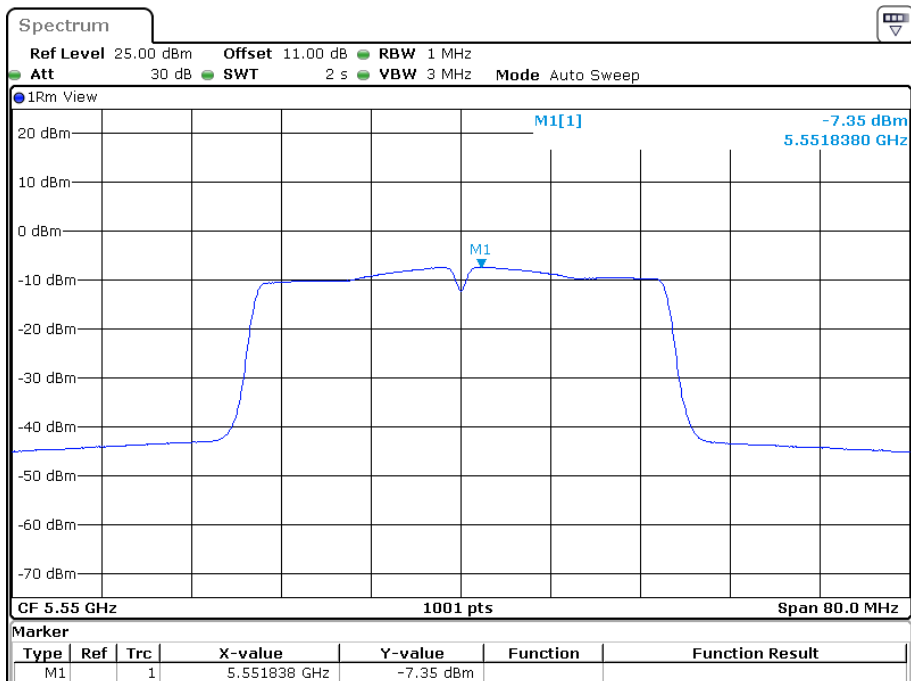
Date: 27.JUN.2022 22:34:04

802.11n40 mode, Power Spectral Density, 5510MHz



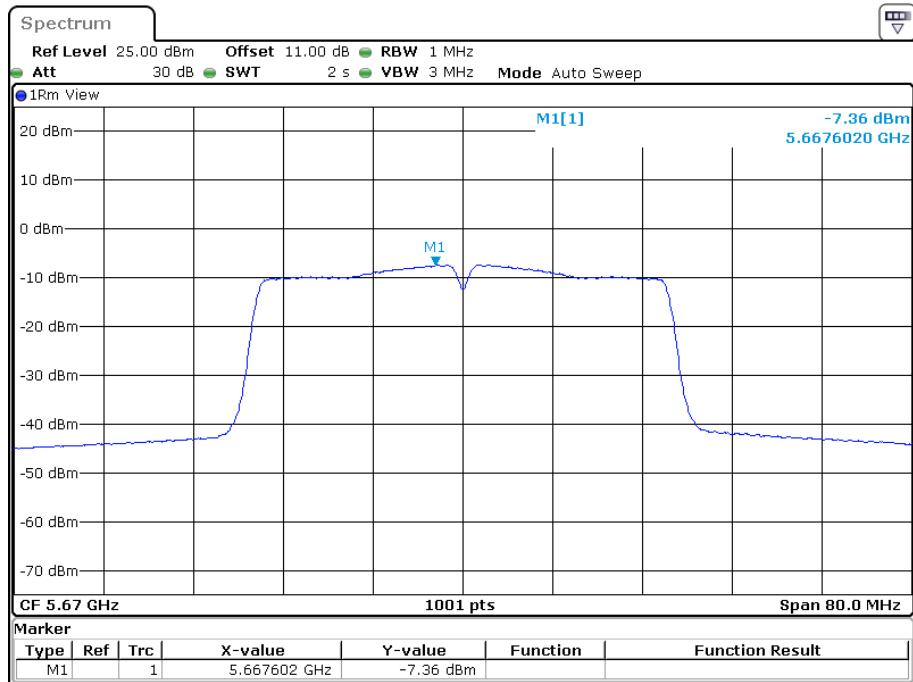
Date: 27.JUN.2022 23:42:11

802.11n40 mode, Power Spectral Density, 5550MHz



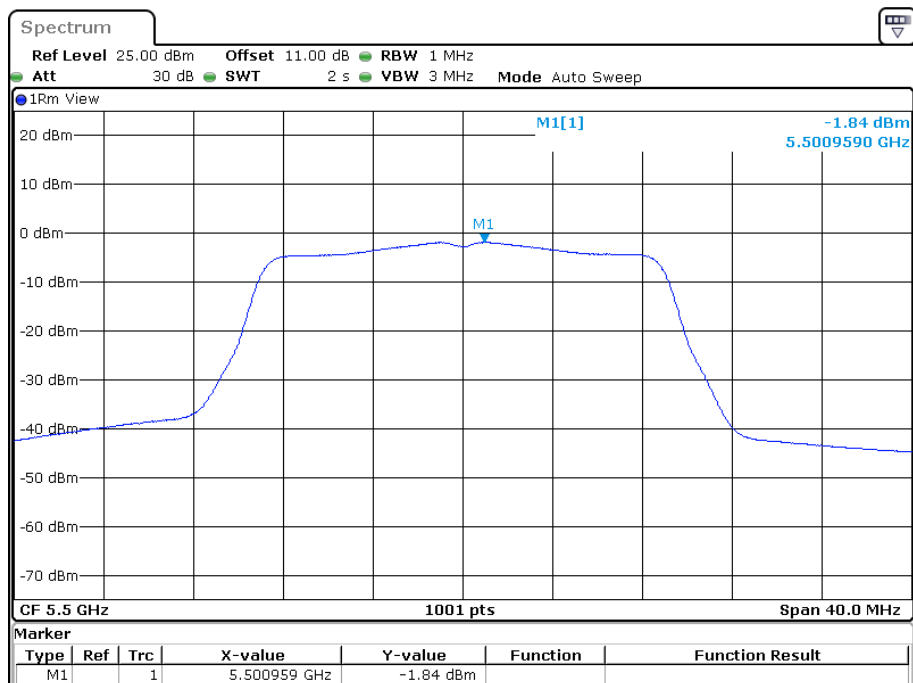
Date: 27.JUN.2022 23:44:55

802.11n40 mode, Power Spectral Density, 5670MHz



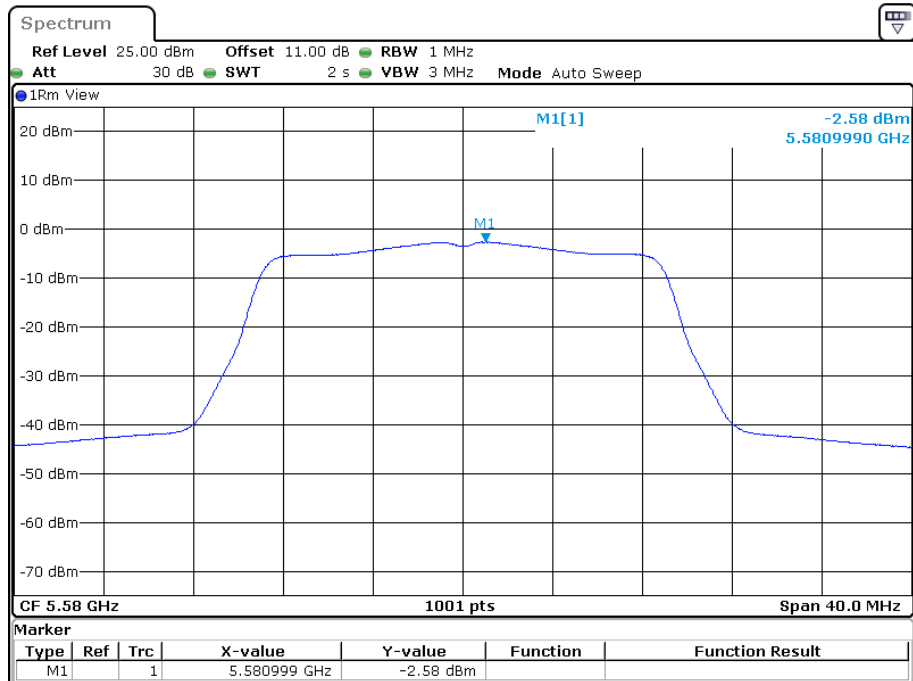
Date: 27.JUN.2022 23:47:40

802.11ac20 mode, Power Spectral Density, 5500 MHz



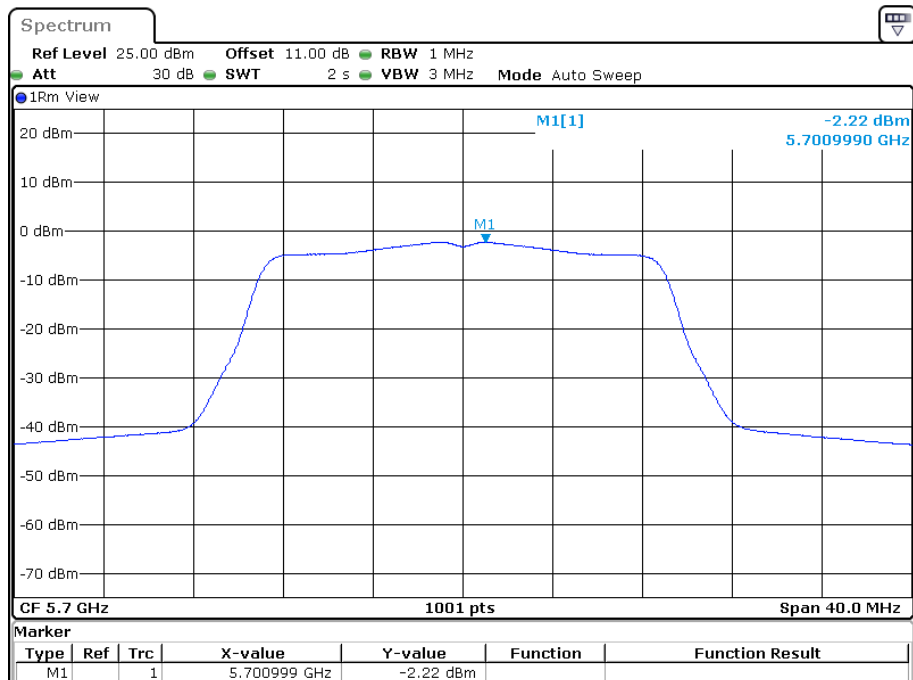
Date: 27.JUN.2022 23:02:44

802.11ac20 mode, Power Spectral Density, 5580MHz



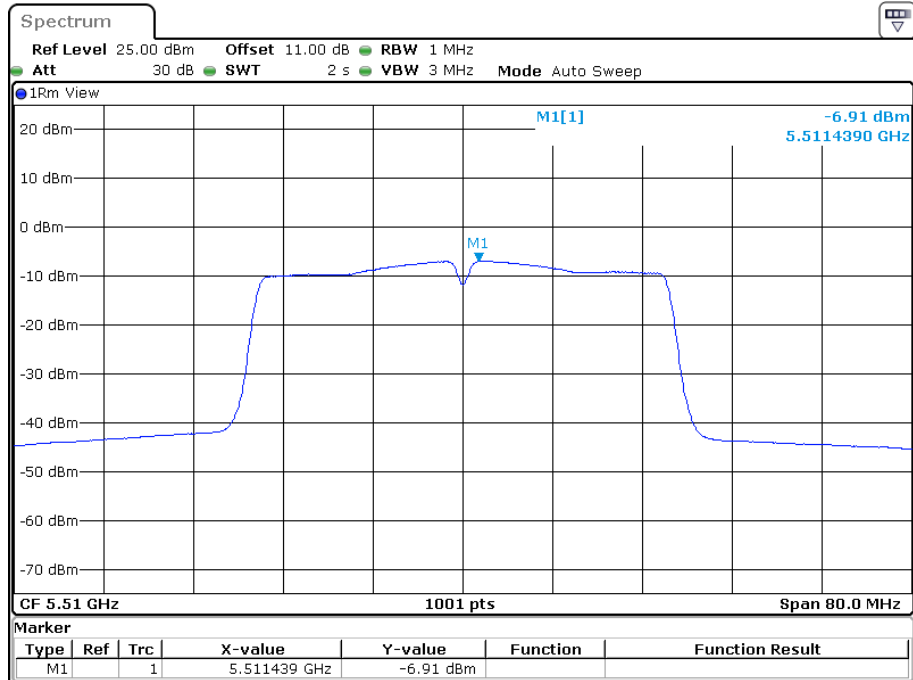
Date: 27.JUN.2022 23:08:07

802.11ac20 mode, Power Spectral Density, 5700MHz



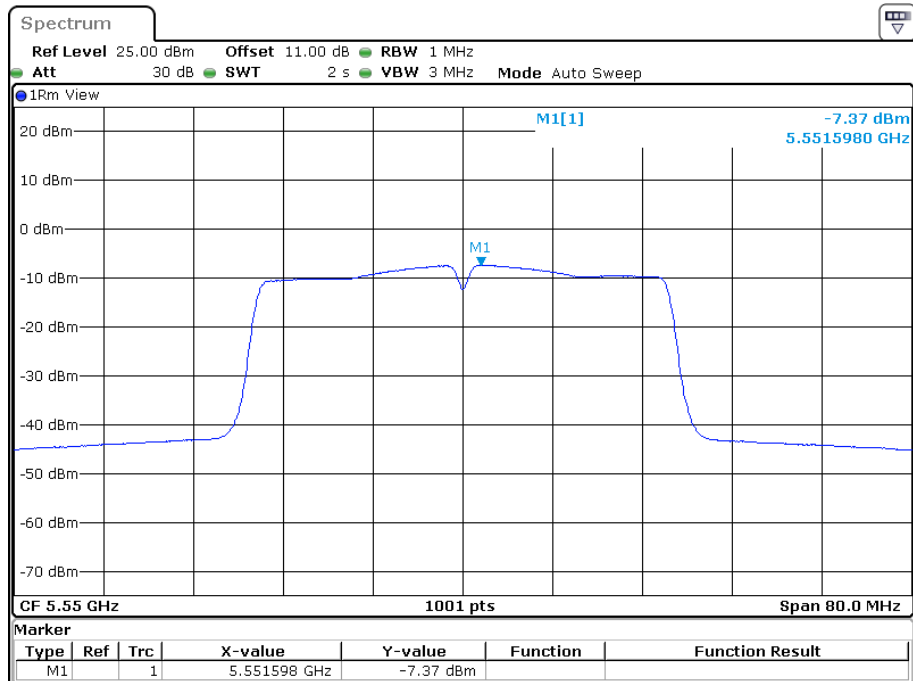
Date: 27.JUN.2022 23:10:54

802.11ac40 mode, Power Spectral Density, 5510MHz



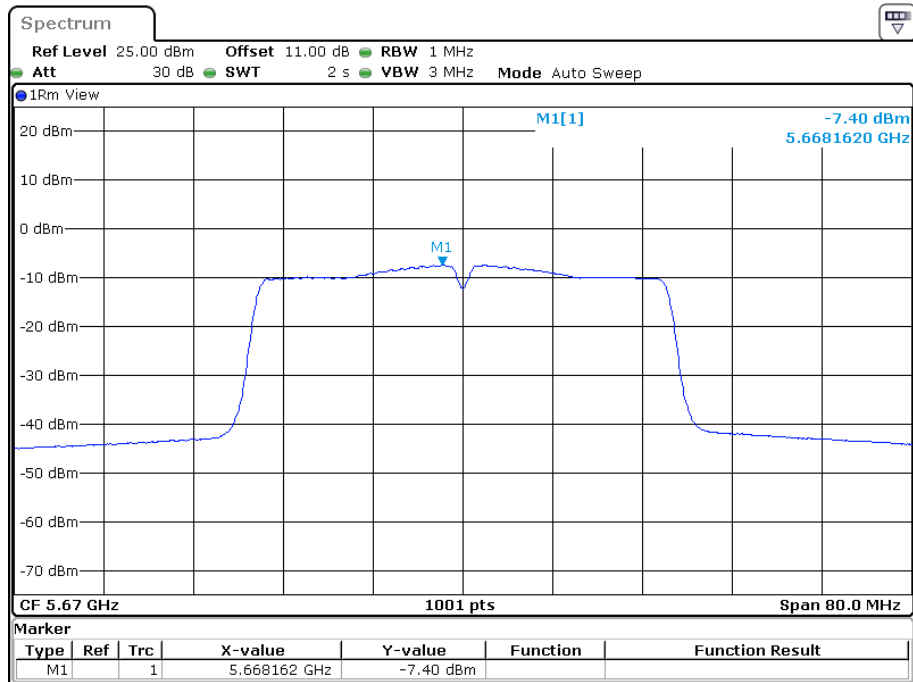
Date: 28.JUN.2022 00:07:18

802.11ac40 mode, Power Spectral Density, 5550MHz



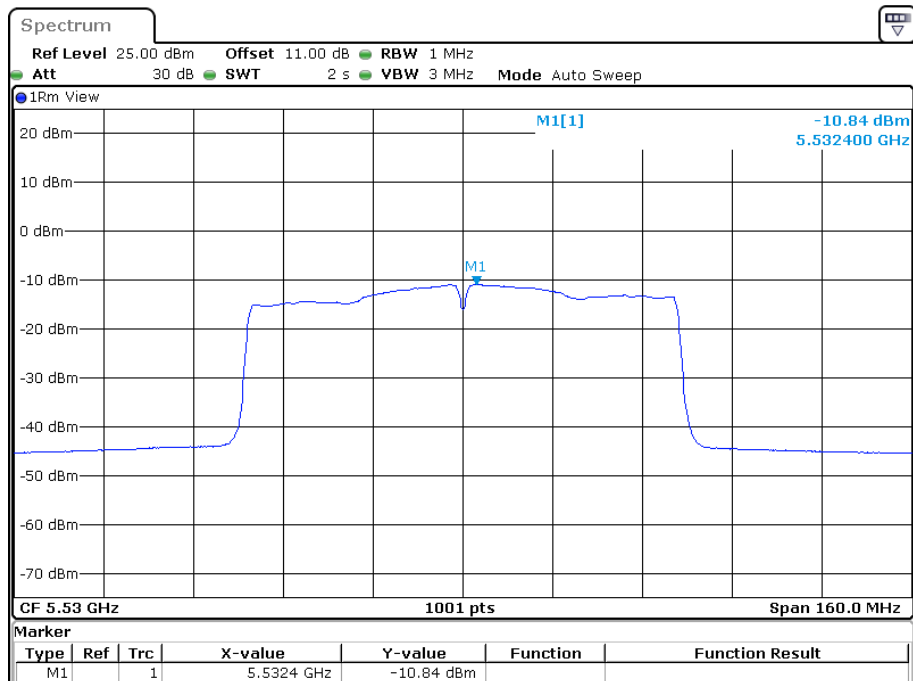
Date: 28.JUN.2022 00:10:07

802.11ac40 mode, Power Spectral Density, 5670MHz



Date: 28.JUN.2022 00:12:41

802.11ac80 mode, Power Spectral Density, 5530 MHz



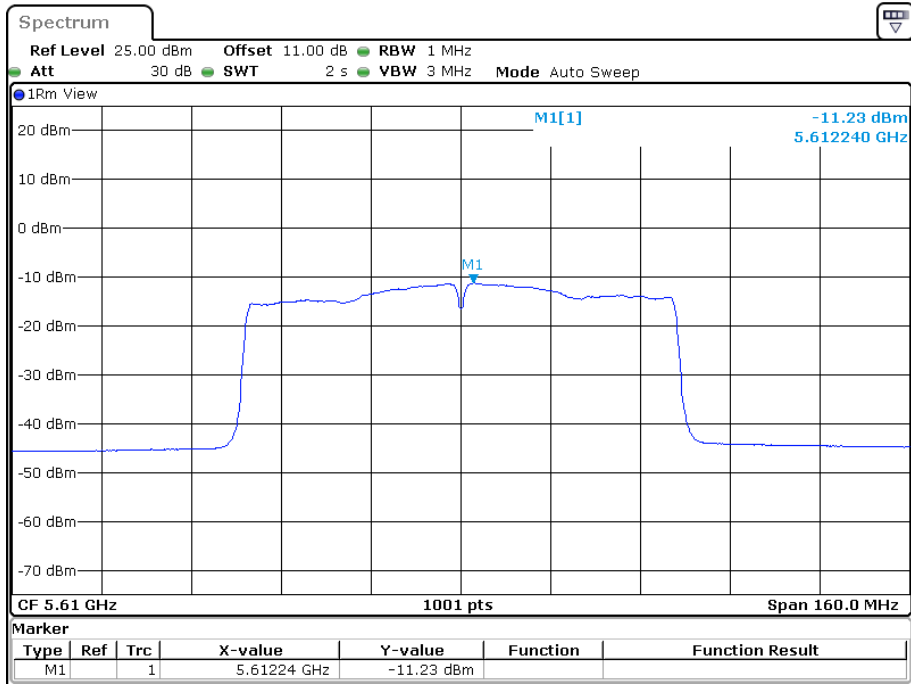
Date: 28.JUN.2022 00:26:12

Marker						
Type	Ref	Trc	X-value	Y-value	Function	Function Result
M1		1	5.61224 GHz	-11.23 dBm		

Date: 28.JUN.2022 00:29:16

0

802.11ac80 mode, Power Spectral Density, 5610 MHz



Date: 28.JUN.2022 00:29:16

5725 MHz – 5850MHz:

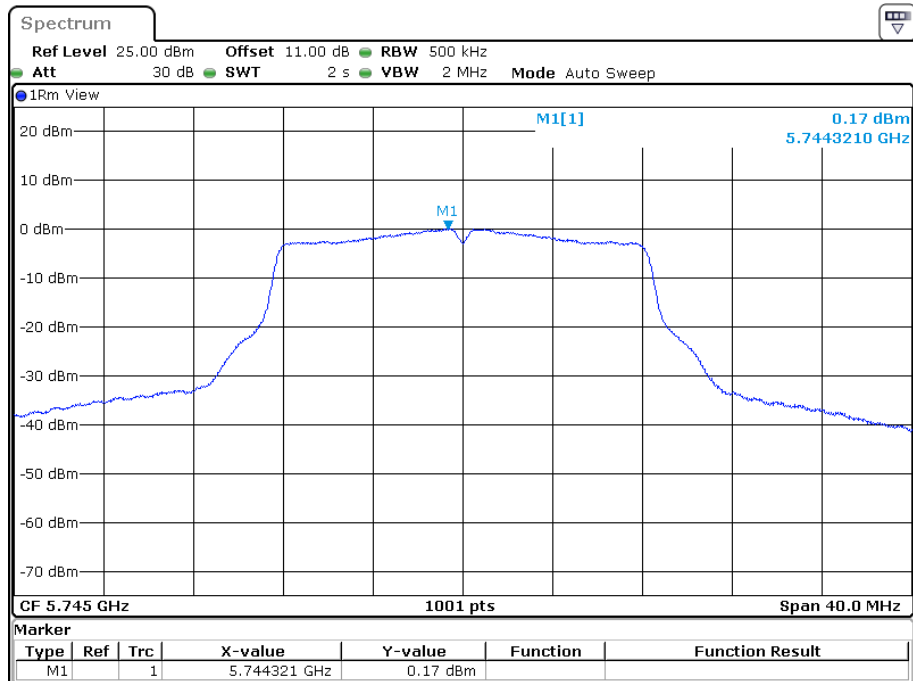
Frequency (MHz)	Antenna Port	Reading (dBm/500kHz)	Duty Cycle Factor (dB)	PSD (dBm/500kHz)	Limit (dBm/500kHz)
802.11a					
5745	0	0.17	0.31	0.48	30
5785	0	-0.02	0.31	0.29	
5825	0	-0.48	0.31	-0.17	
802.11n20					
5745	0	-0.54	0.32	-0.22	30
5785	0	-0.60	0.32	-0.28	
5825	0	-1.03	0.32	-0.71	
802.11n40					
5755	0	-3.50	0.64	-2.86	30
5795	0	-3.68	0.64	-3.04	
802.11ac20					
5745	0	-0.56	0.33	-0.23	30
5785	0	-0.69	0.33	-0.36	
5825	0	-1.12	0.33	-0.79	
802.11ac40					
5755	0	-3.50	0.64	-2.86	30
5795	0	-3.79	0.64	-3.15	
802.11ac80					
5775	0	-7.20	1.19	-6.01	30

Note:

1) Power Spectral Density = Reading + Duty Cycle Factor.

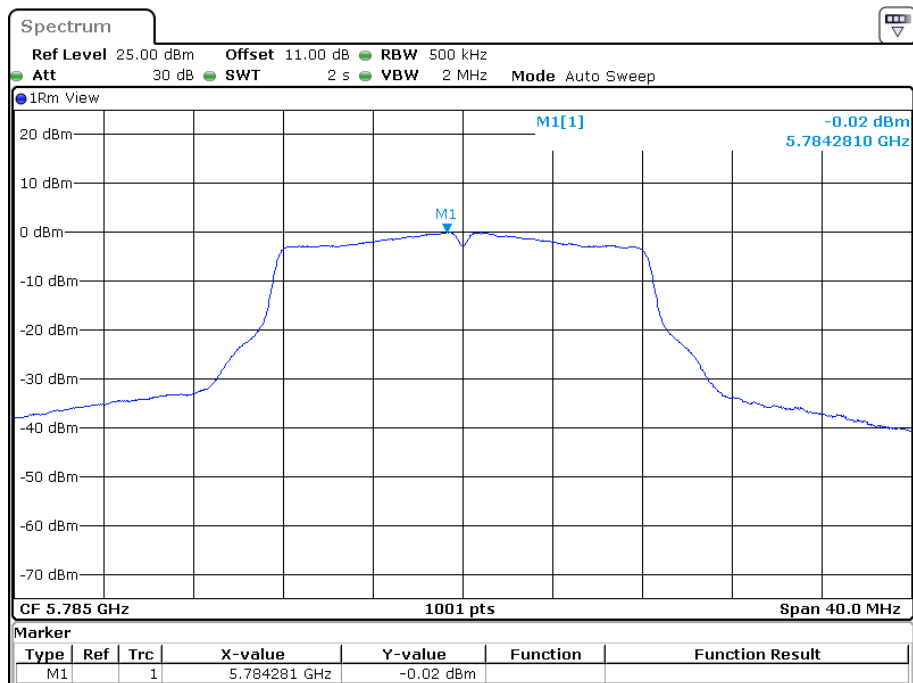
2) Duty Cycle Factor = $10 \log (I / D)$, D=Duty Cycle

802.11a mode, Power Spectral Density, 5745MHz



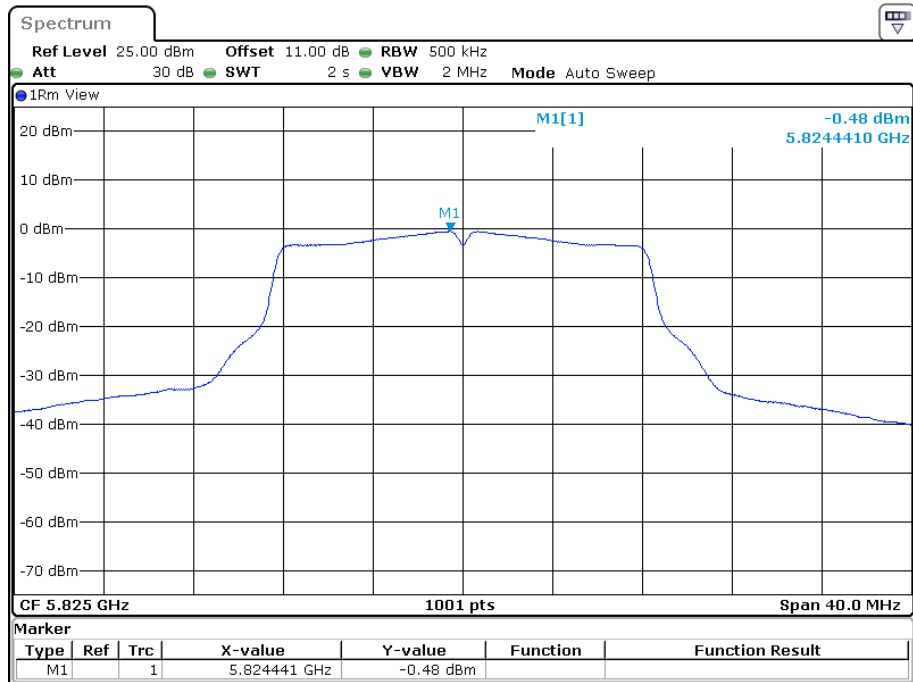
Date: 27.JUN.2022 21:42:52

802.11a mode, Power Spectral Density, 5785MHz



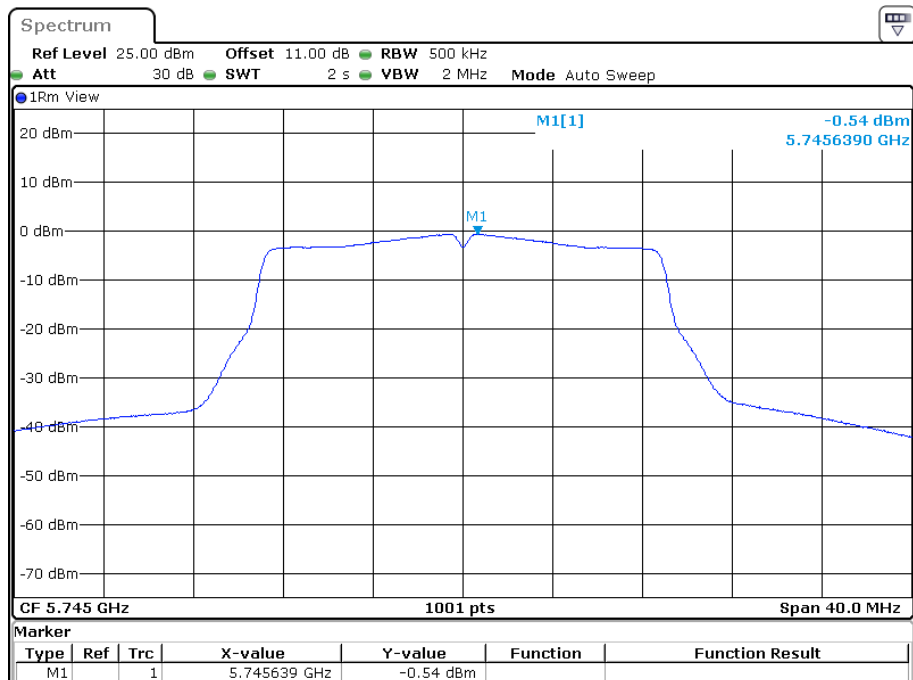
Date: 27.JUN.2022 21:45:24

802.11a mode, Power Spectral Density, 5825MHz



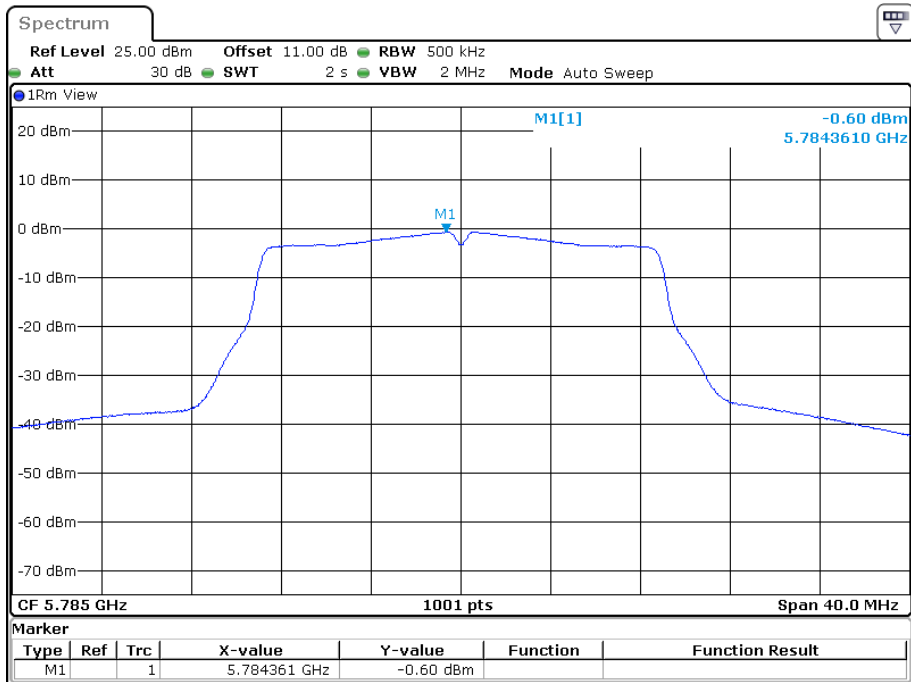
Date: 27.JUN.2022 21:47:56

802.11n20 mode, Power Spectral Density, 5745MHz



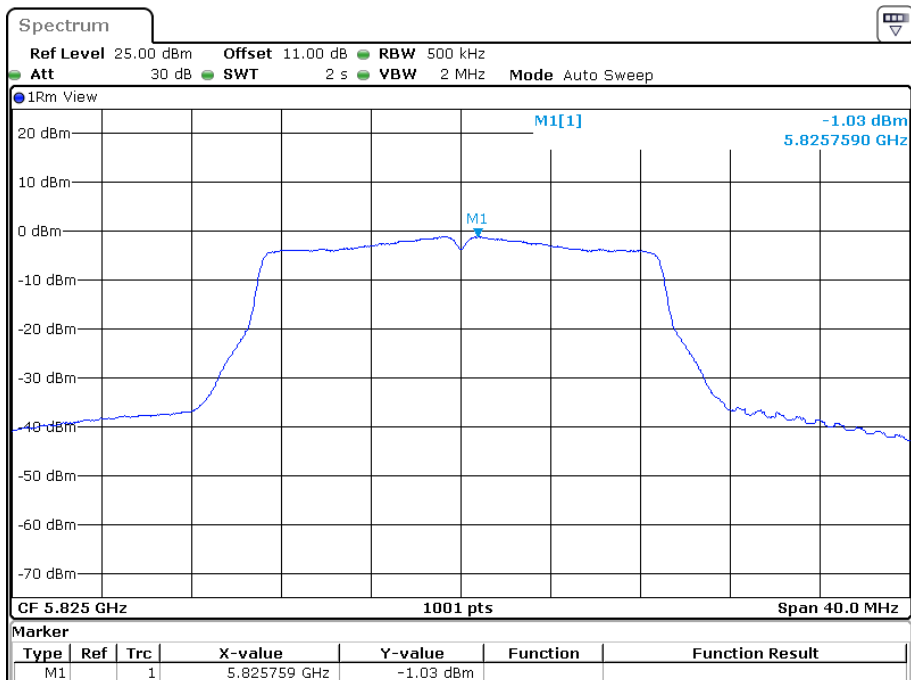
Date: 27.JUN.2022 22:36:46

802.11n20 mode, Power Spectral Density, 5785MHz



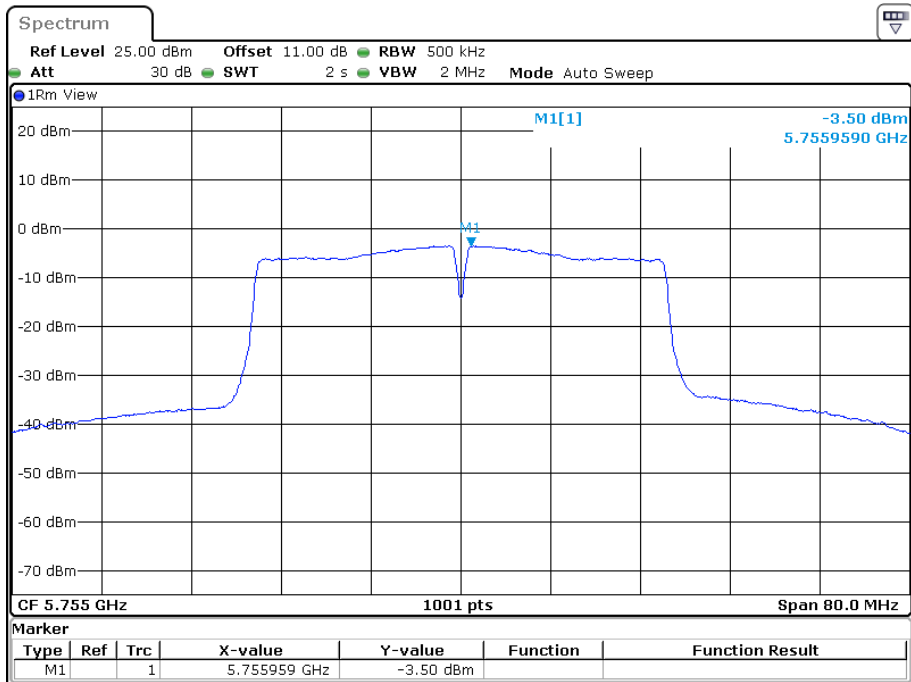
Date: 27.JUN.2022 22:39:30

802.11n20 mode, Power Spectral Density, 5825MHz



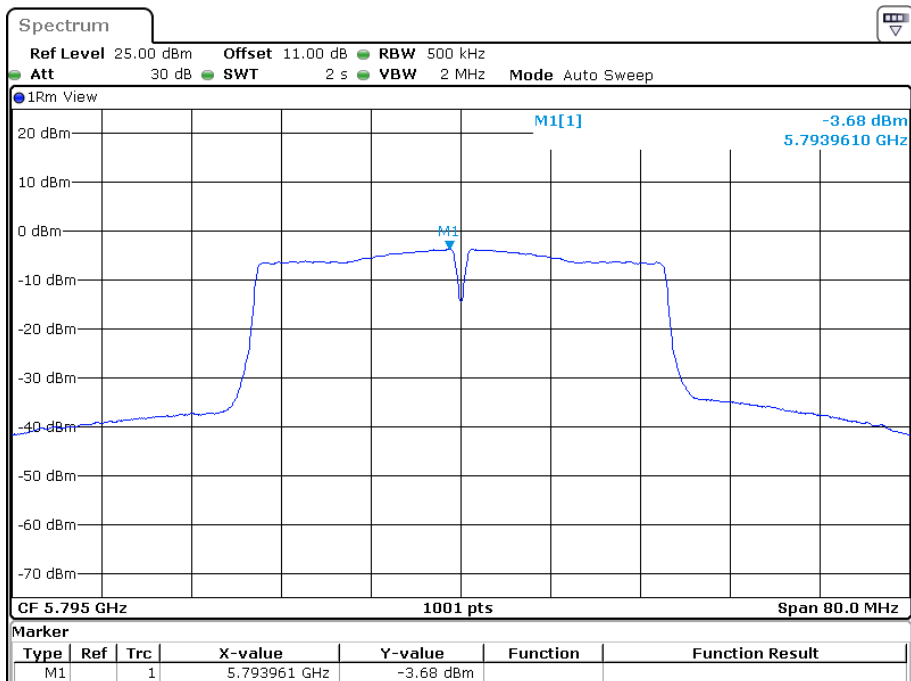
Date: 27.JUN.2022 22:41:59

802.11n40 mode, Power Spectral Density, 5755MHz



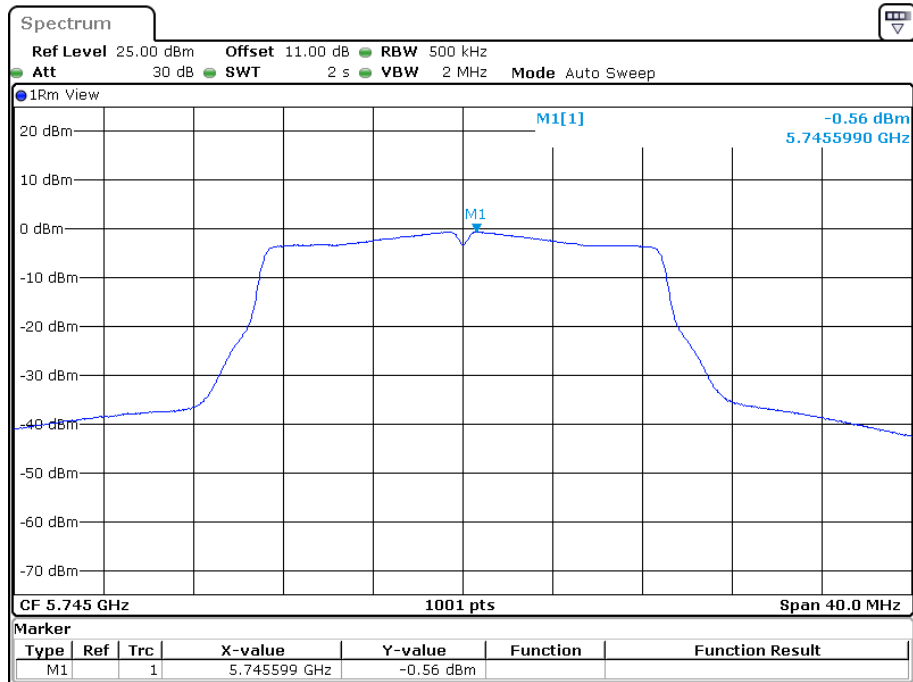
Date: 27.JUN.2022 23:50:17

802.11n40 mode, Power Spectral Density, 5795MHz



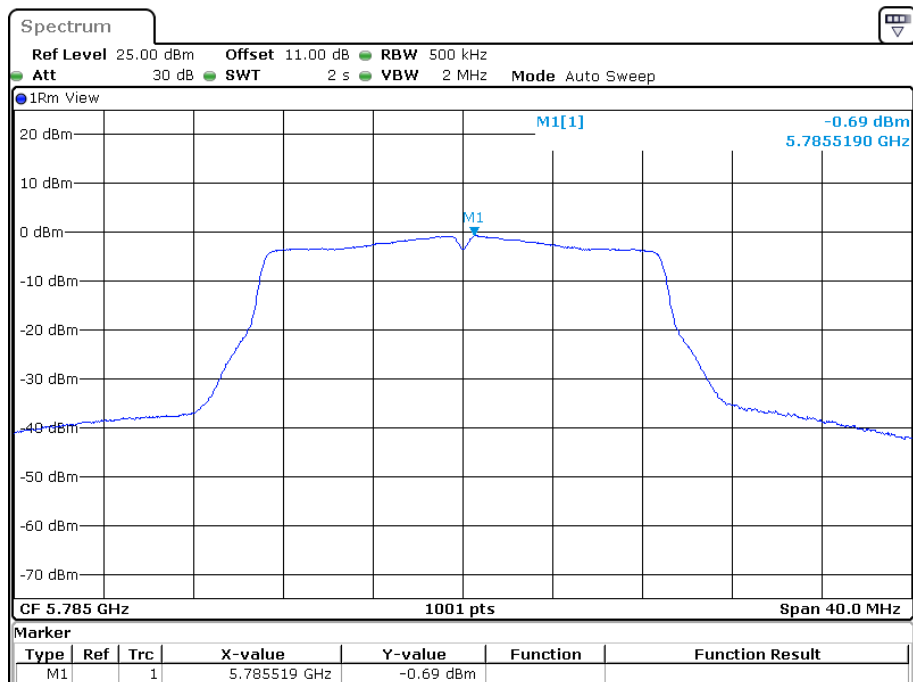
Date: 27.JUN.2022 23:53:58

802.11ac20 mode, Power Spectral Density, 5745 MHz



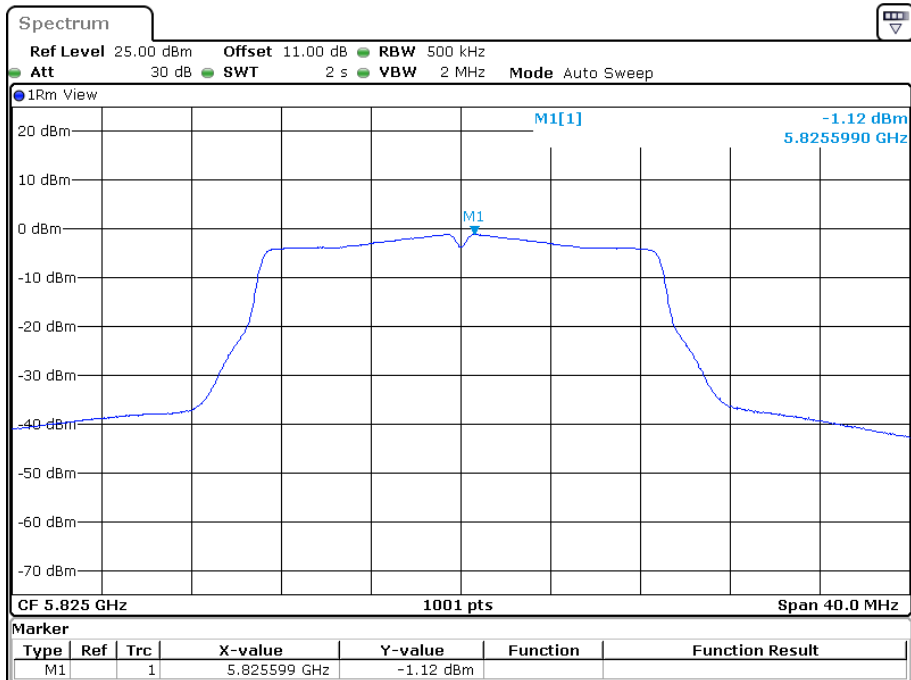
Date: 27.JUN.2022 23:13:23

802.11ac20 mode, Power Spectral Density, 5785MHz



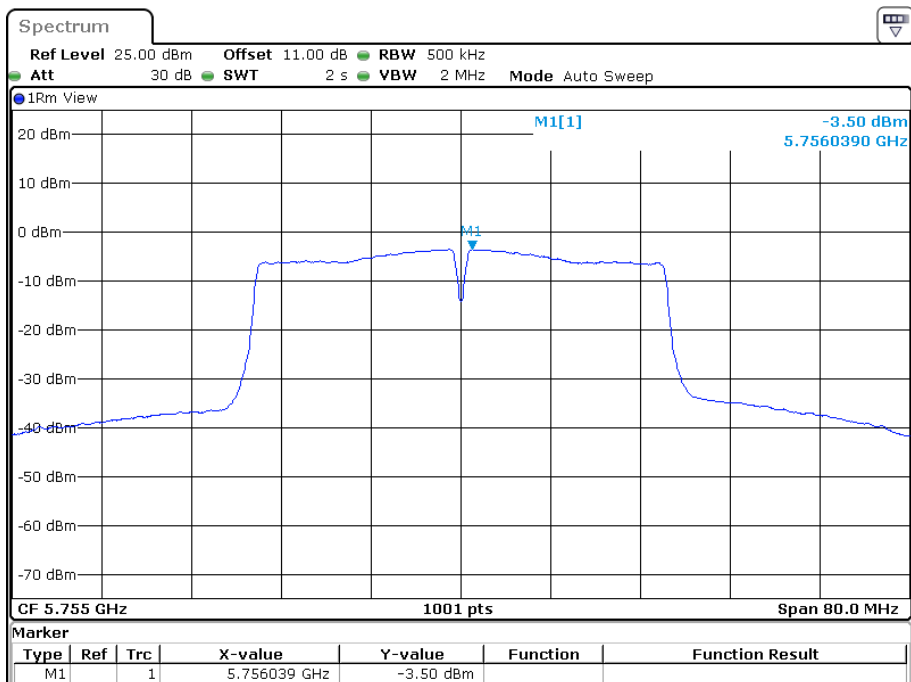
Date: 27.JUN.2022 23:15:59

802.11ac20 mode, Power Spectral Density, 5825MHz



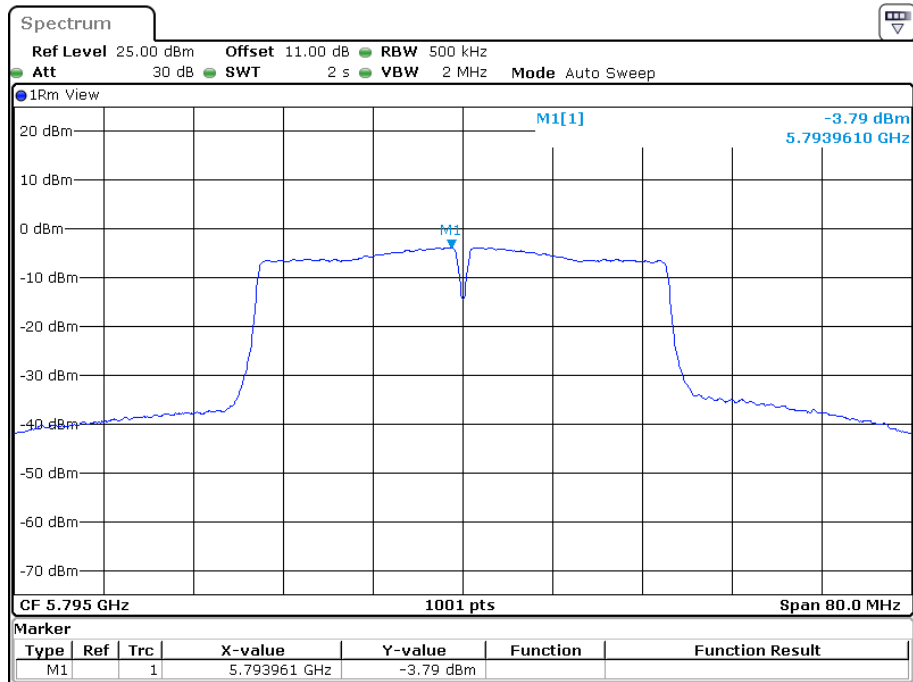
Date: 27.JUN.2022 23:18:42

802.11ac40 mode, Power Spectral Density, 5755MHz



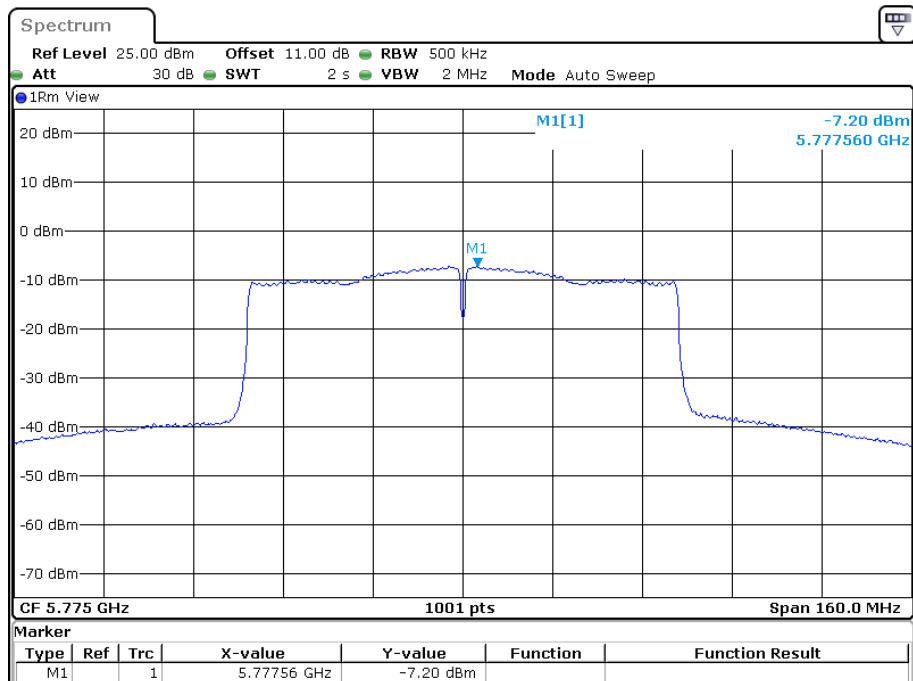
Date: 28.JUN.2022 00:15:17

802.11ac40 mode, Power Spectral Density, 5795MHz



Date: 28.JUN.2022 00:17:51

802.11ac80 mode, Power Spectral Density, 5775 MHz



Date: 28.JUN.2022 00:32:01

For module:D845

5150 MHz – 5250 MHz:

Frequency (MHz)	Antenna Port	Reading (dBm/MHz)	Duty Cycle Factor (dB)	PSD (dBm/MHz)	TotalPSD (dBm/MHz)	Limit (dBm/MHz)	
802.11a							
5180	0	2.34	/	2.34	\	11	
	1	3.30	/	3.30			
5200	0	2.17	/	2.17	\		
	1	3.31	/	3.31			
5240	0	1.93	/	1.93	\		
	1	3.27	/	3.27			
802.11n20							
5180	0	2.02	/	2.02	5.70	11	
	1	3.27	/	3.27			
5200	0	1.83	/	1.83	5.46		
	1	3.00	/	3.00			
5240	0	1.84	/	1.84	5.56		
	1	3.16	/	3.16			
802.11n40							
5190	0	-2.74	0.16	-2.58	0.57	11	
	1	-2.47	0.16	-2.31			
5230	0	-3.12	0.16	-2.96	0.22		
	1	-2.78	0.16	-2.62			
802.11ac20							
5180	0	1.78	/	1.78	5.62		11
	1	3.30	/	3.30			
5200	0	1.78	/	1.78	5.74		
	1	3.51	/	3.51			
5240	0	1.75	/	1.75	5.72		
	1	3.50	/	3.50			
802.11ac40							
5190	0	-2.90	0.17	-2.73	1.00	11	
	1	-1.56	0.17	-1.39			
5230	0	-2.47	0.17	-2.30	1.25		
	1	-1.45	0.17	-1.28			
802.11ac80							
5210	0	-5.74	0.34	-5.40	-1.42		11
	1	-3.97	0.34	-3.63			

Note:

1) *Power Spectral Density = Reading + Duty Cycle Factor.*

2) *Duty Cycle Factor = $10 \log(1/D)$, $D = \text{Duty Cycle}$*

For 802.11n/ac mode, the EUT employ CDD

Directional Gain = $G_{ANT} + \text{Array Gain}$

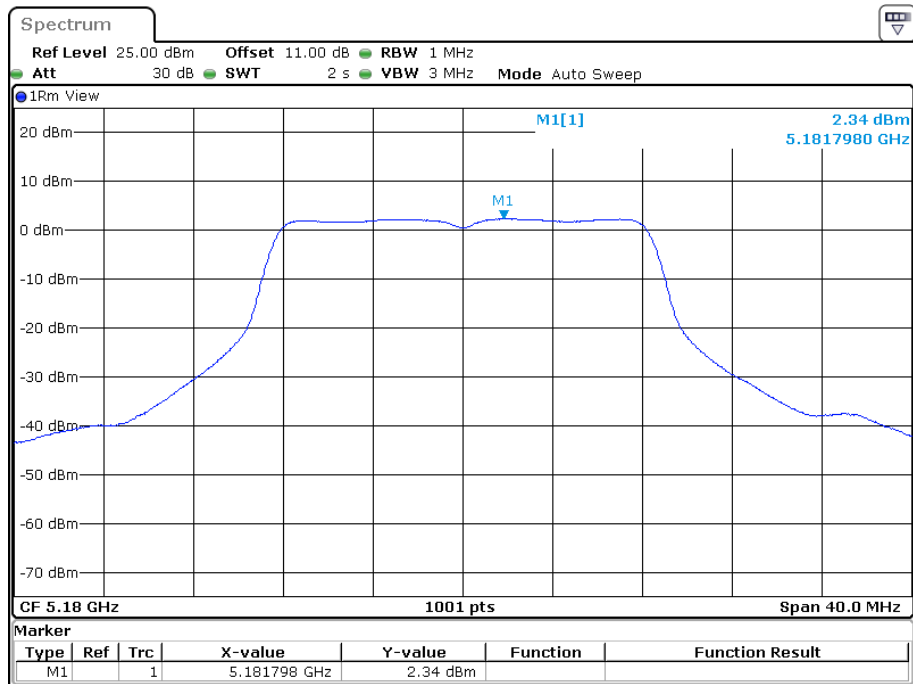
For PSD Measurement, *Array Gain = $10 * \log N_{ANT} = 10 * \log 2 = 3 \text{dB}$*

$G_{ANT} = 2.47 \text{dBi}$

Directional Gain = $2.47 \text{dBi} + 3 \text{dB} = 5.47 \text{dBi} < 6 \text{dBi}$

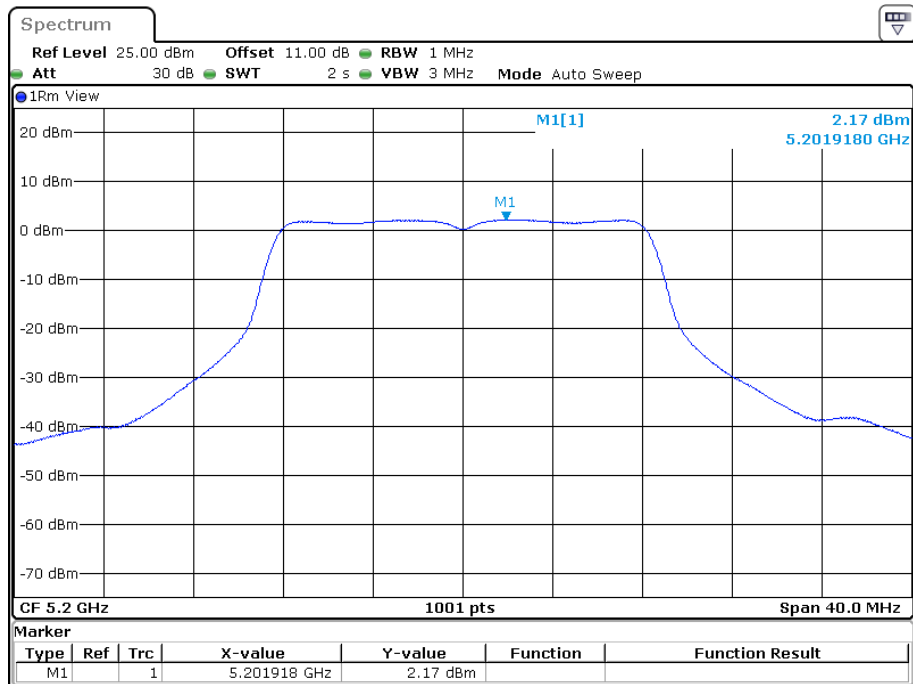
ANT0:

802.11a mode, Power Spectral Density, 5180 MHz



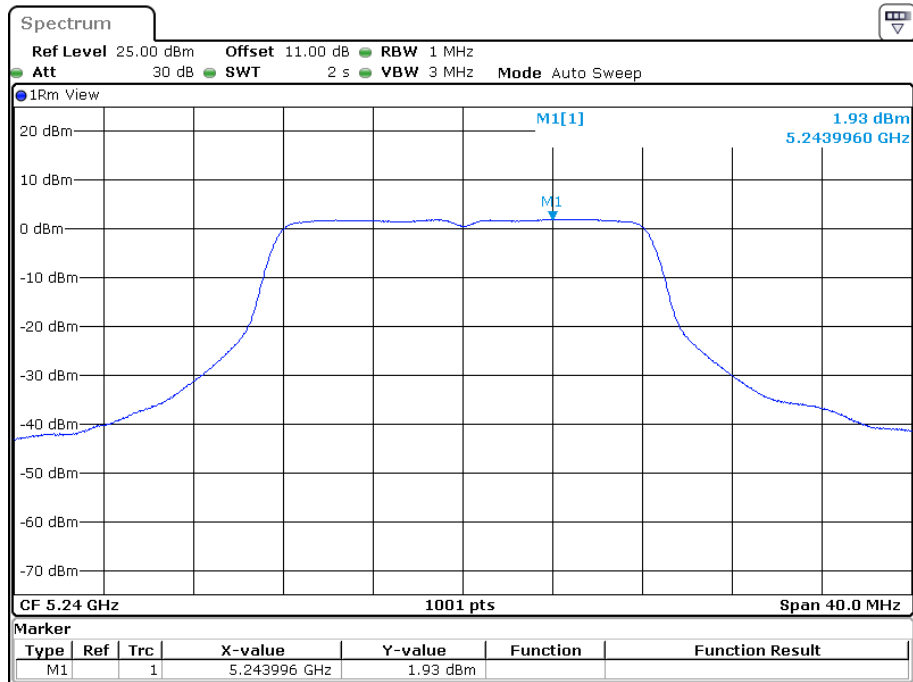
Date: 28.JUN.2022 20:58:17

802.11a mode, Power Spectral Density, 5200 MHz



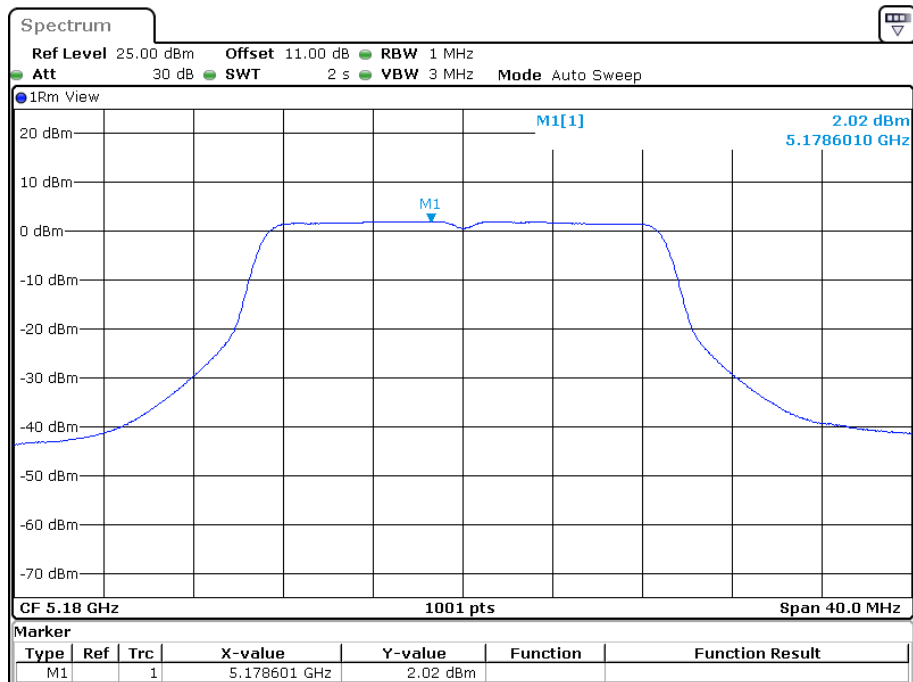
Date: 28.JUN.2022 21:00:50

802.11a mode, Power Spectral Density, 5240 MHz



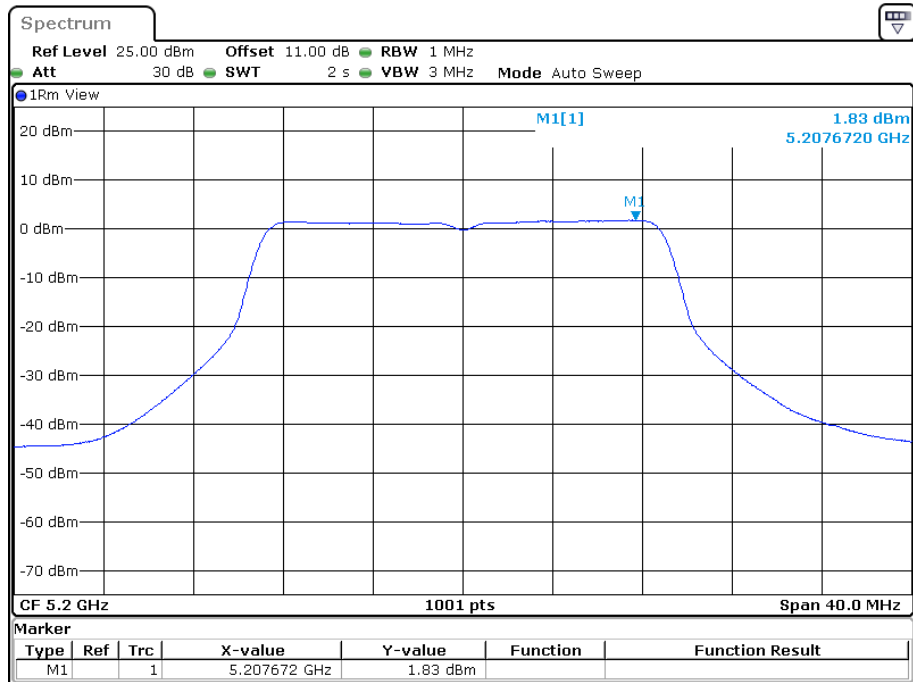
Date: 28.JUN.2022 21:04:00

802.11n20 mode, Power Spectral Density, 5180 MHz



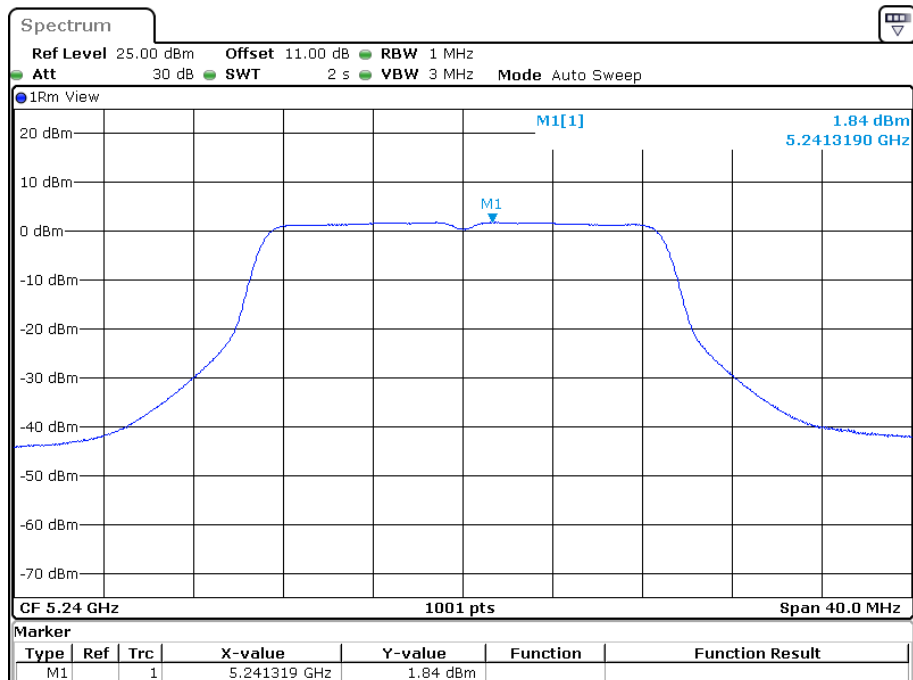
Date: 29.JUN.2022 00:06:31

802.11n20 mode, Power Spectral Density, 5200 MHz



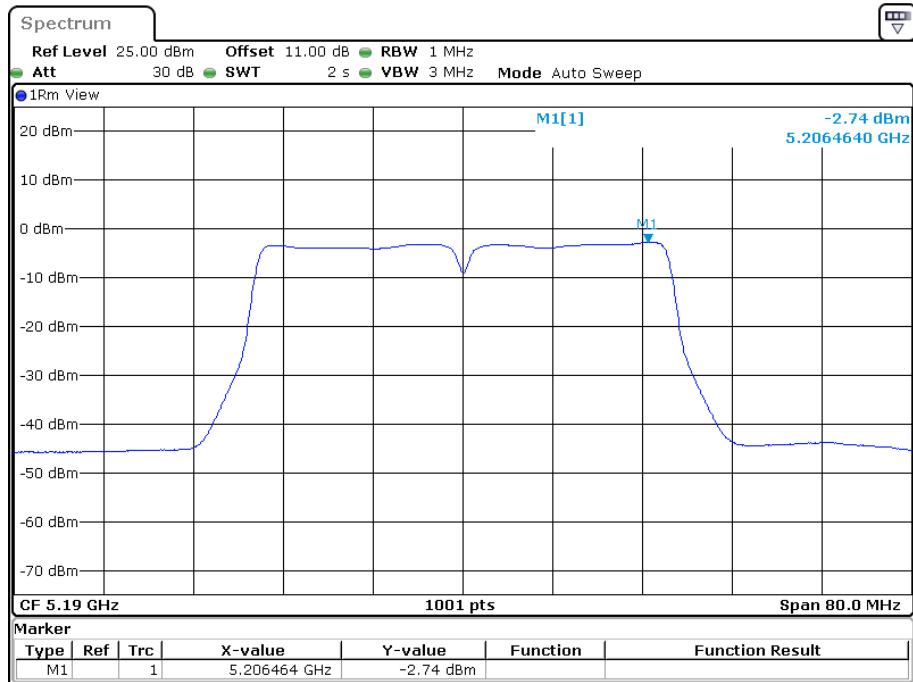
Date: 29.JUN.2022 00:08:59

802.11n20 mode, Power Spectral Density, 5240 MHz



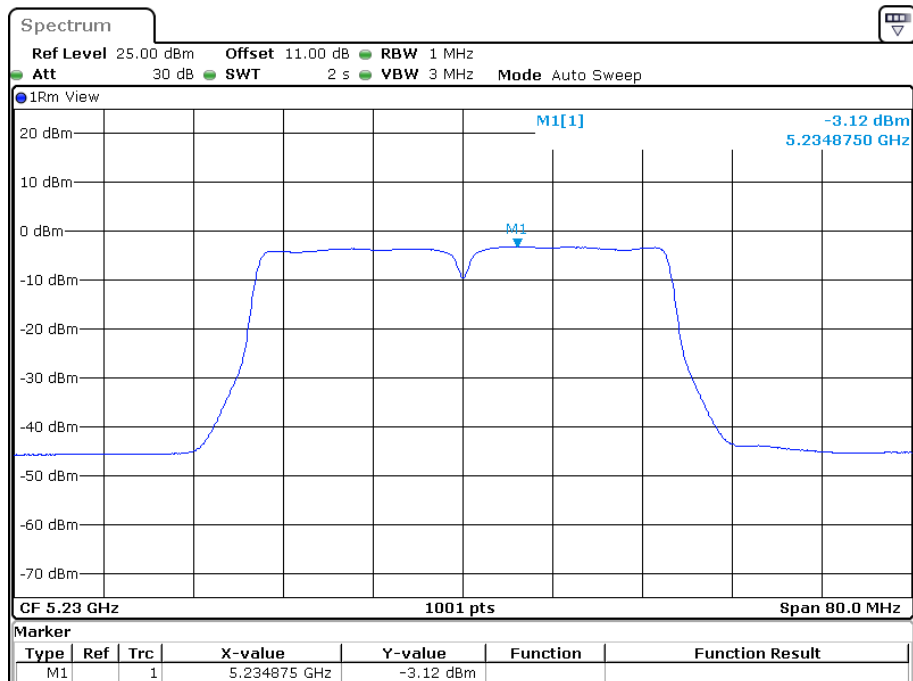
Date: 29.JUN.2022 00:11:30

802.11n40 mode, Power Spectral Density, 5190 MHz



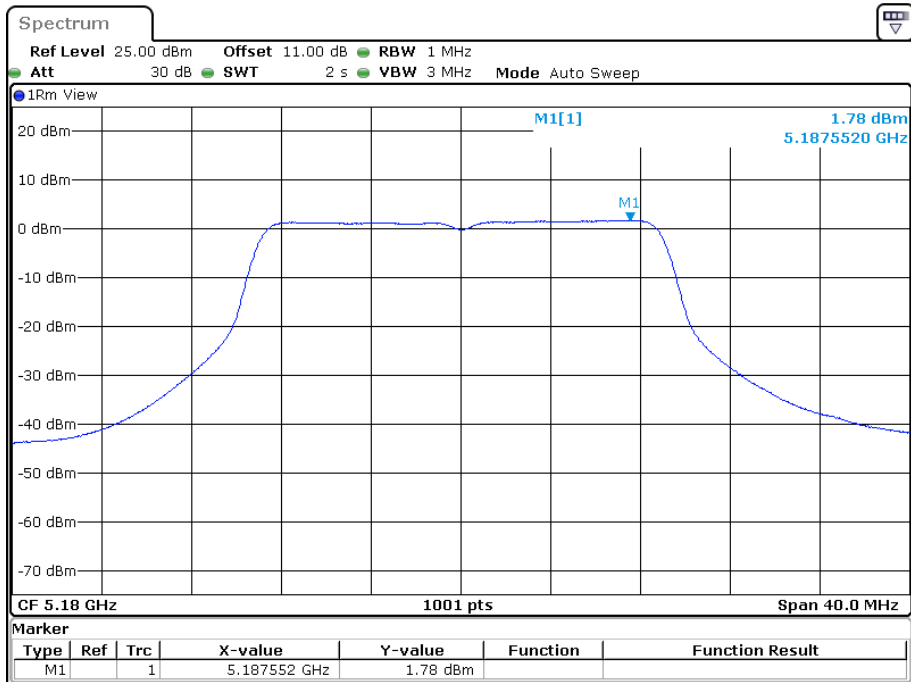
Date: 29.JUN.2022 00:30:26

802.11n40 mode, Power Spectral Density, 5230 MHz



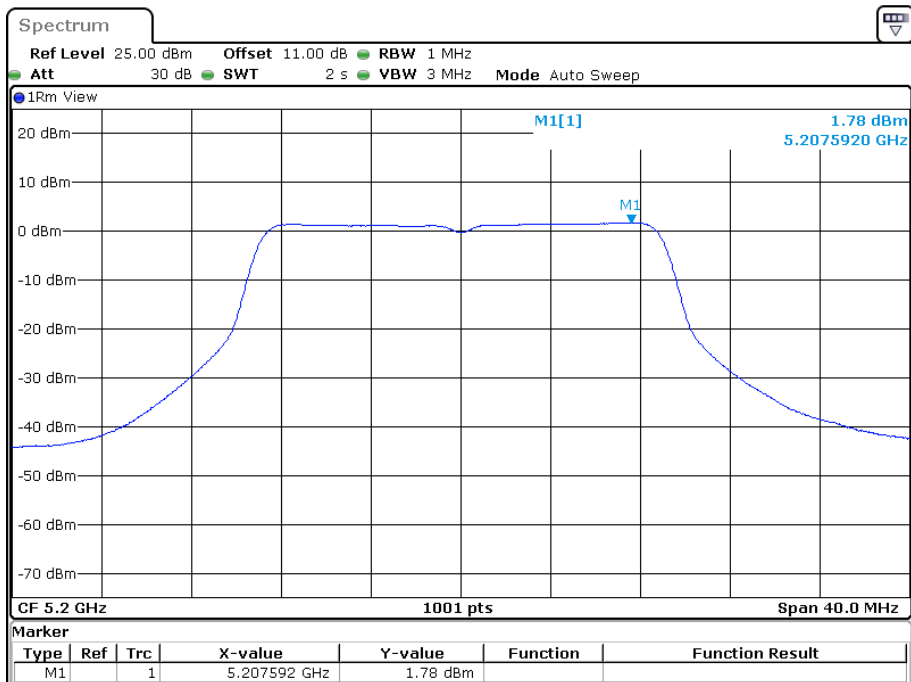
Date: 29.JUN.2022 00:32:55

802.11ac20 mode, Power Spectral Density, 5180 MHz



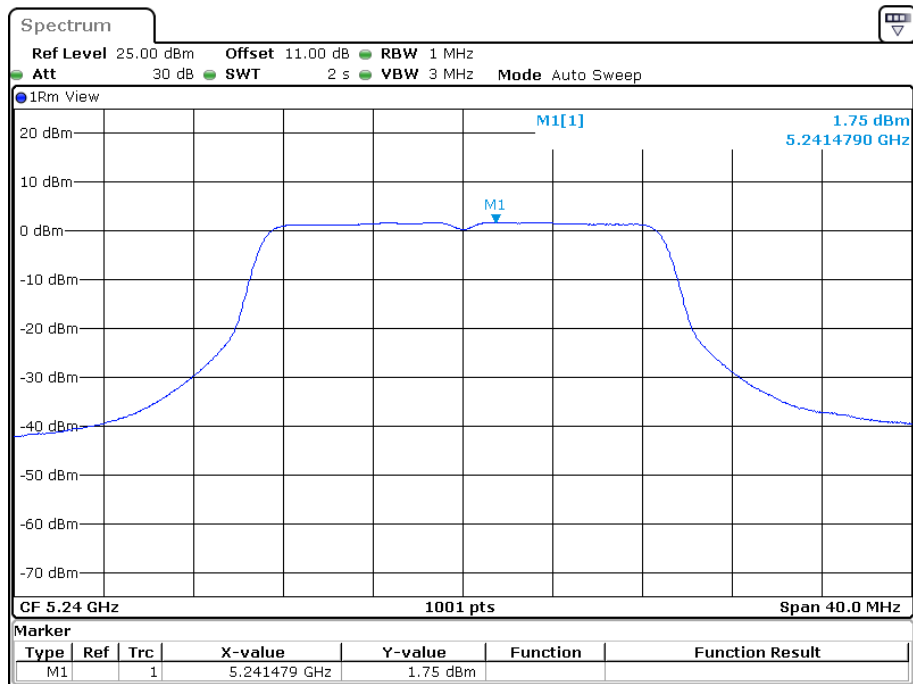
Date: 29.JUN.2022 19:42:58

802.11ac20 mode, Power Spectral Density, 5200 MHz



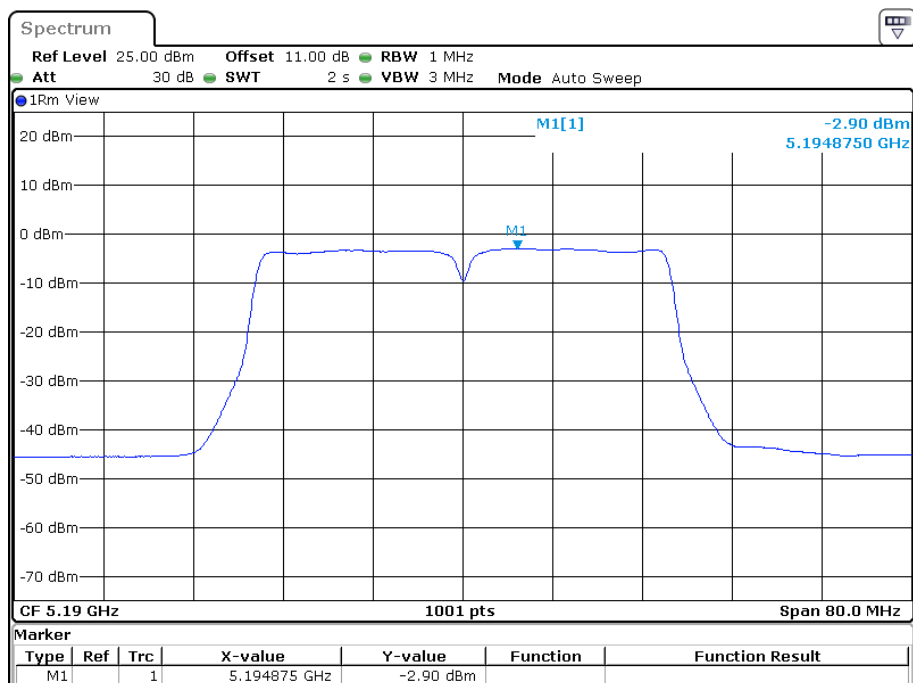
Date: 29.JUN.2022 19:45:23

802.11ac20 mode, Power Spectral Density, 5240 MHz



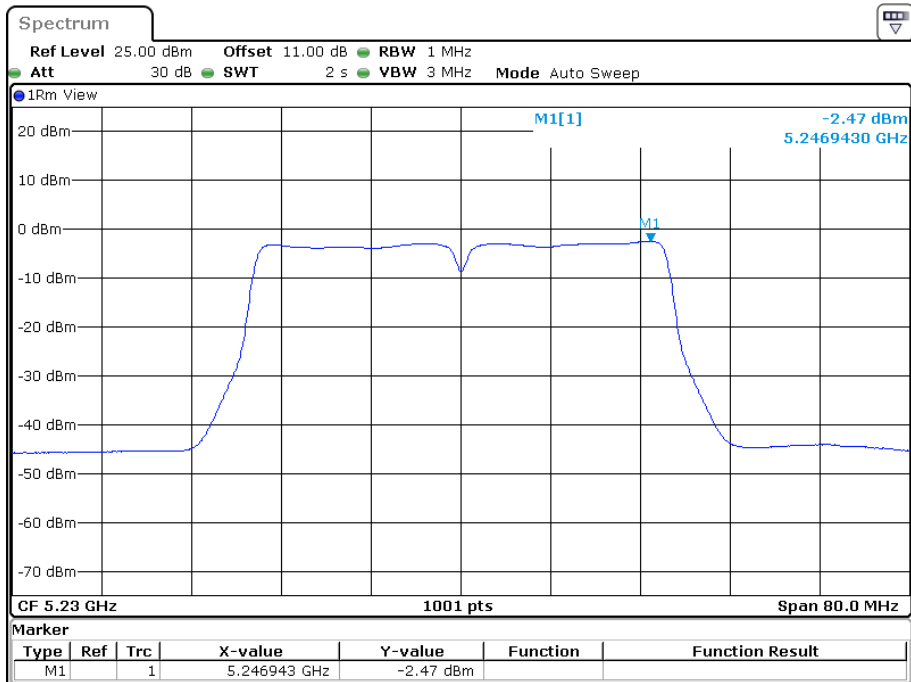
Date: 29.JUN.2022 19:48:55

802.11ac40 mode, Power Spectral Density, 5190 MHz



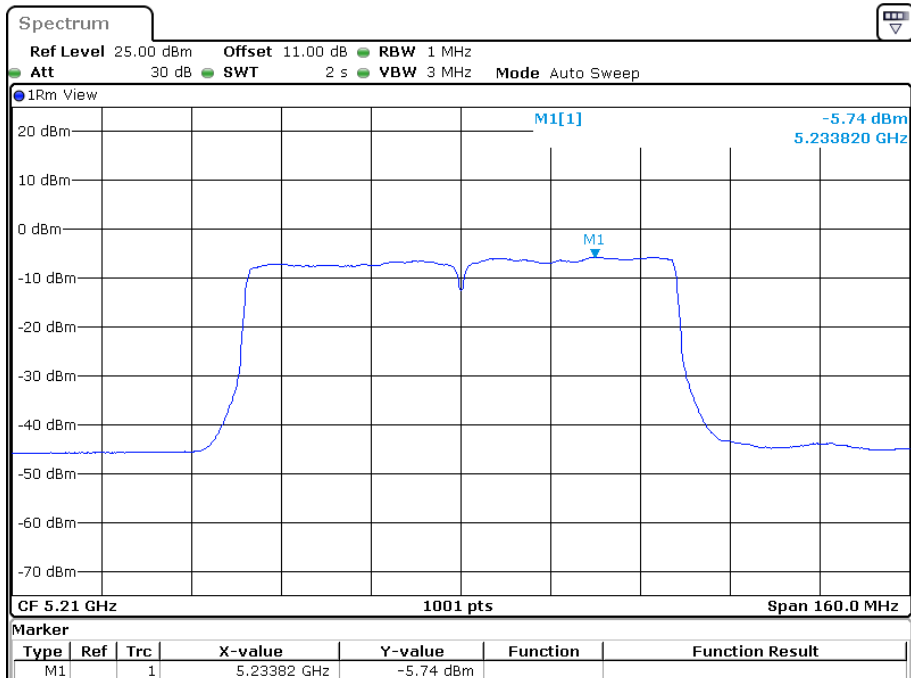
Date: 30.JUN.2022 00:26:13

802. 11ac40 mode, Power Spectral Density, 5230 MHz



Date: 30.JUN.2022 00:28:48

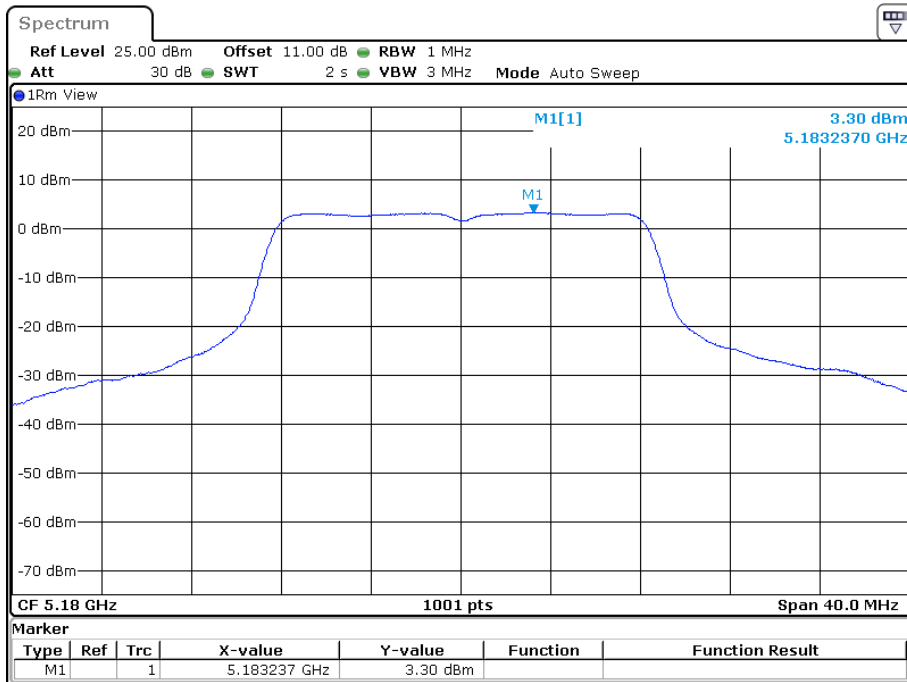
802. 11ac80 mode, Power Spectral Density, 5210 MHz



Date: 30.JUN.2022 00:50:44

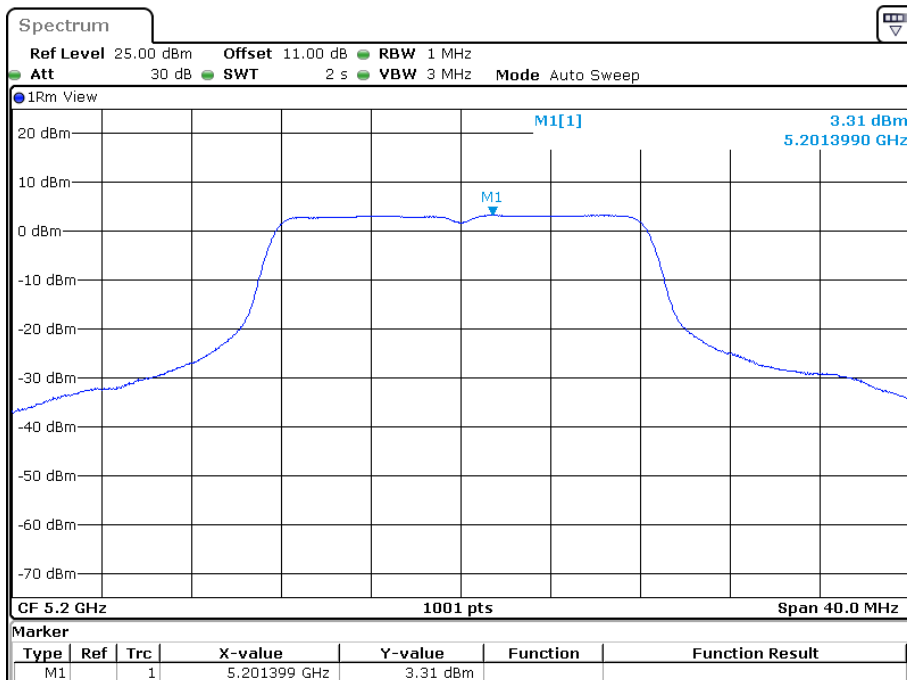
ANT1:

802.11a mode, Power Spectral Density, 5180 MHz



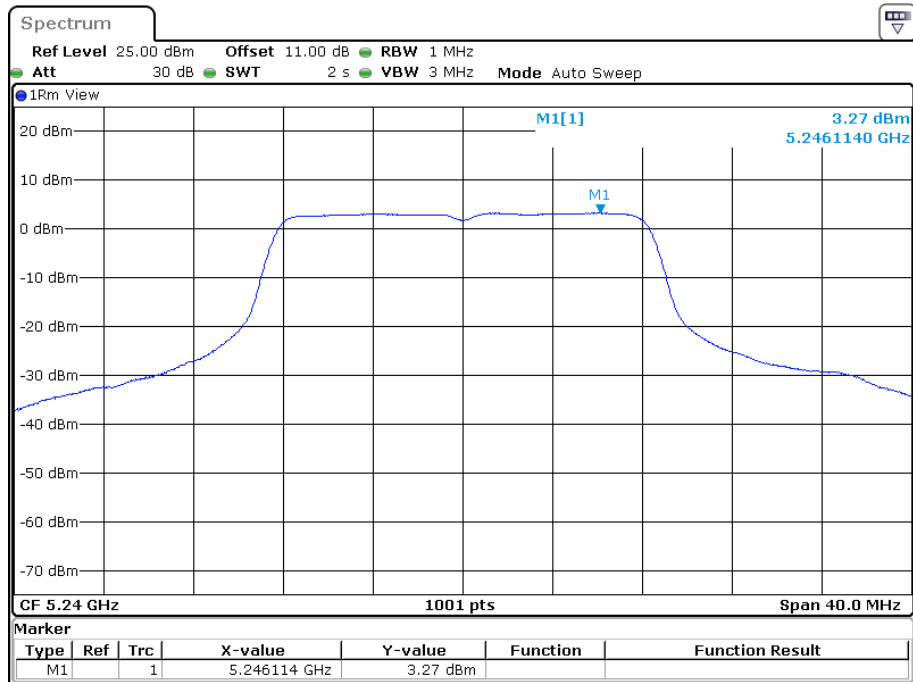
Date: 28.JUN.2022 22:37:44

802.11a mode, Power Spectral Density, 5200 MHz



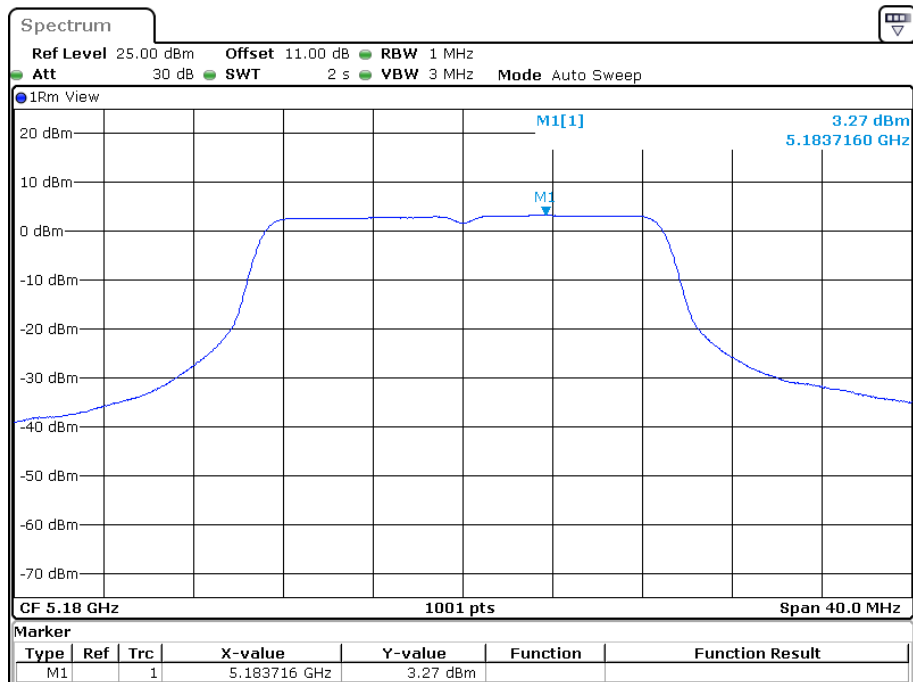
Date: 28.JUN.2022 22:44:15

802.11a mode, Power Spectral Density, 5240 MHz



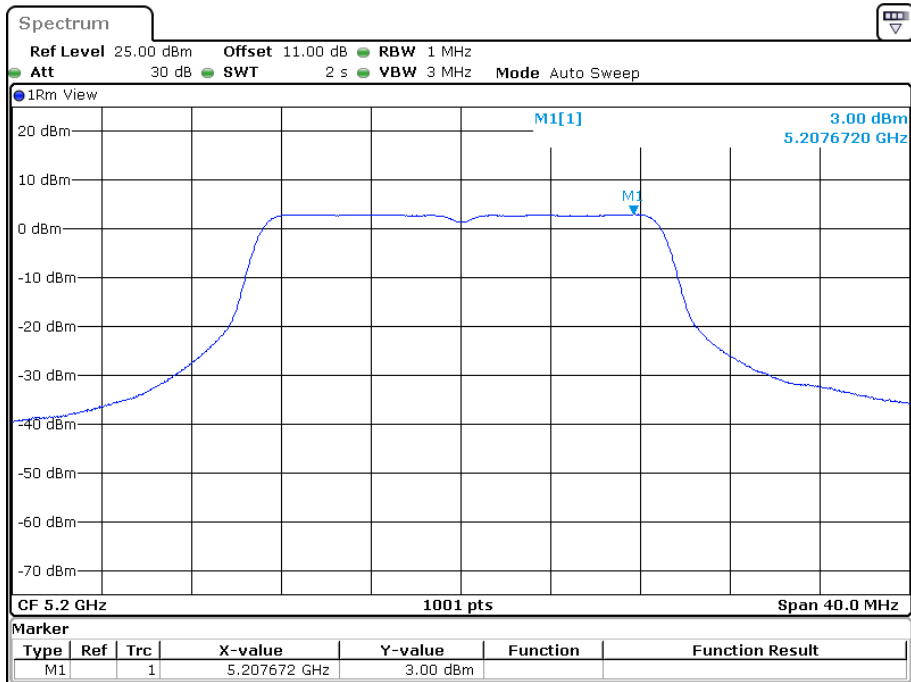
Date: 28.JUN.2022 22:46:52

802.11n20 mode, Power Spectral Density, 5180 MHz



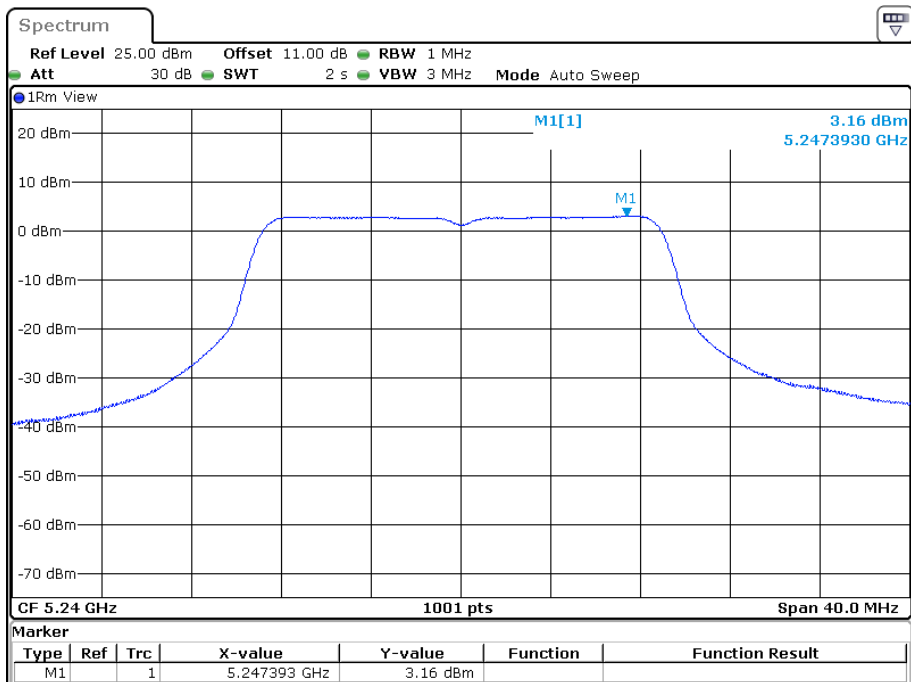
Date: 28.JUN.2022 23:22:42

802.11n20 mode, Power Spectral Density, 5200 MHz



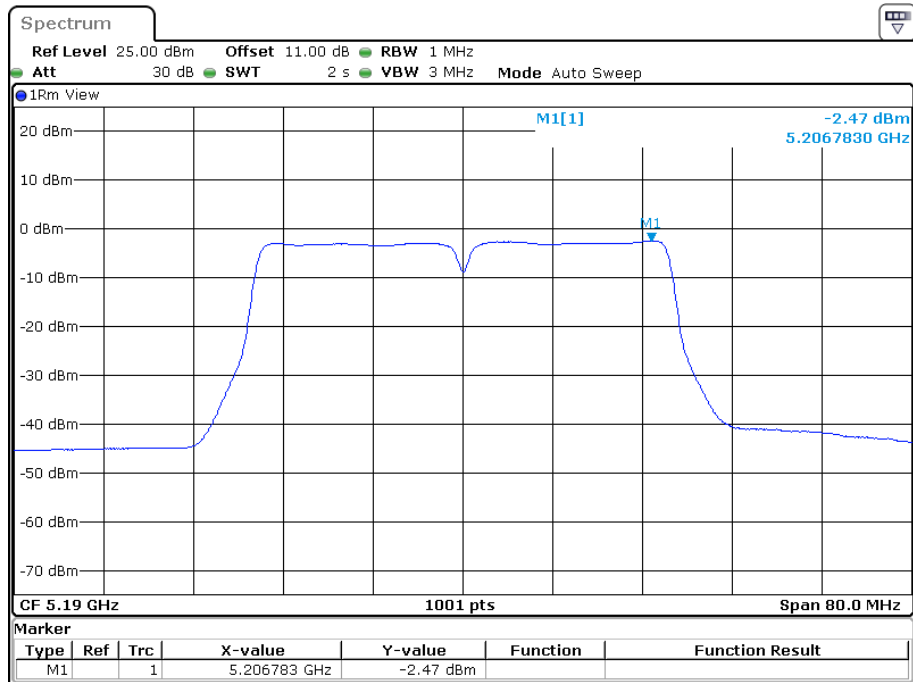
Date: 28.JUN.2022 23:26:16

802.11n20 mode, Power Spectral Density, 5240 MHz



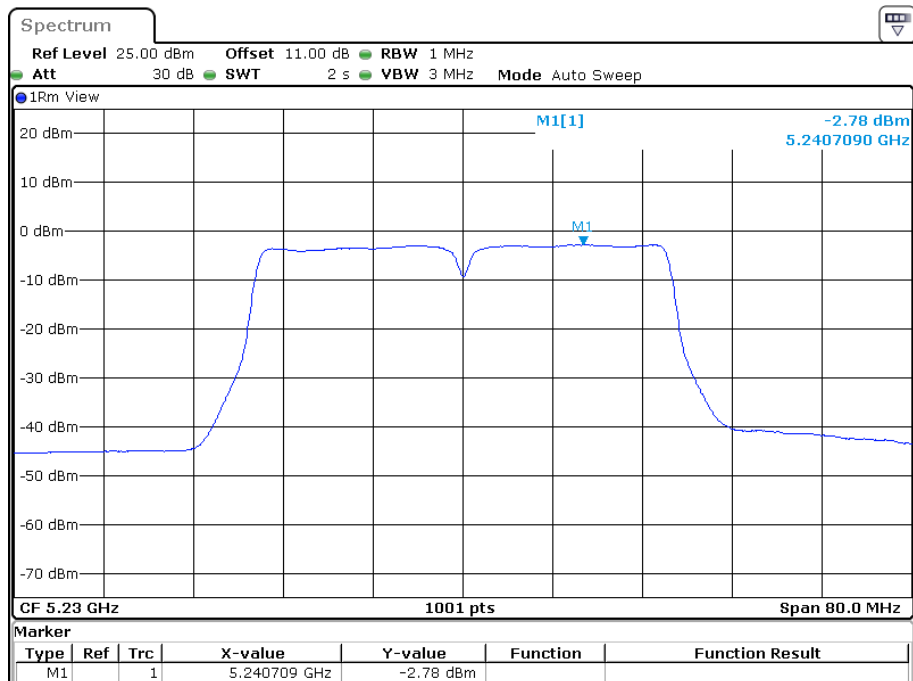
Date: 28.JUN.2022 23:30:08

802.11n40 mode, Power Spectral Density, 5190 MHz



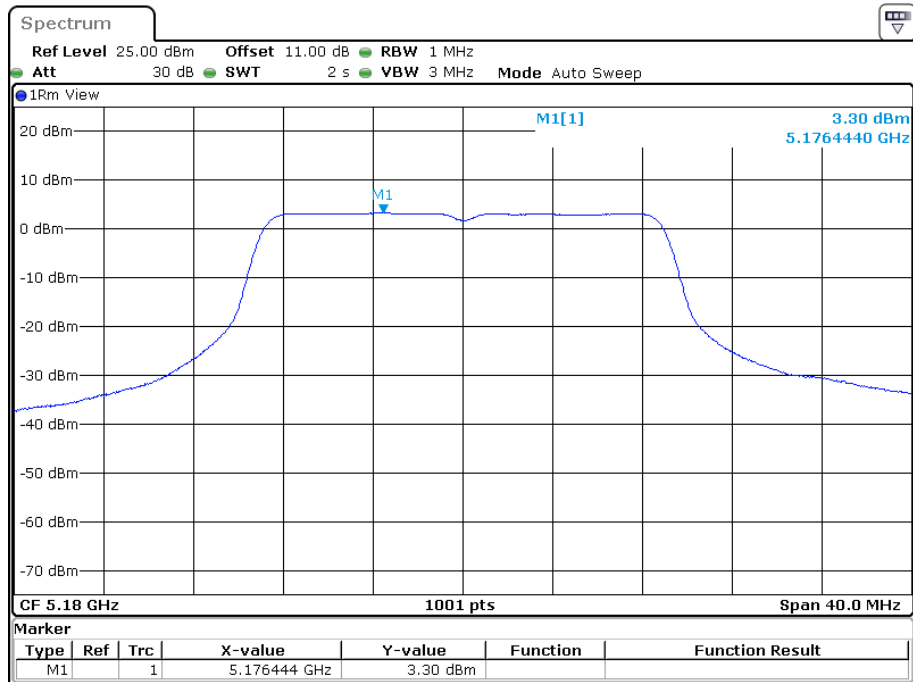
Date: 29.JUN.2022 01:28:10

802.11n40 mode, Power Spectral Density, 5230 MHz



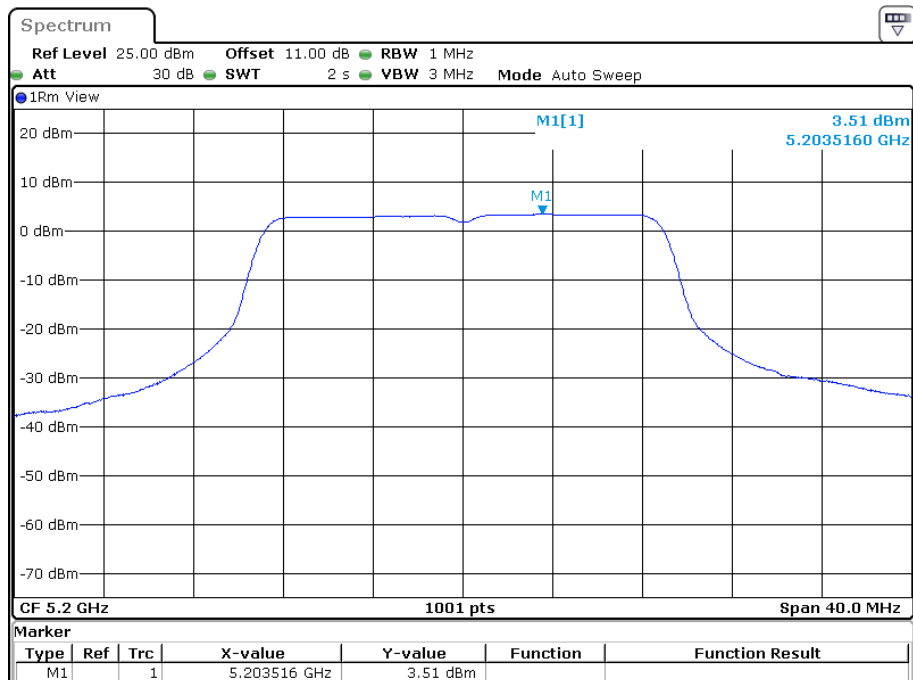
Date: 29.JUN.2022 01:30:42

802.11ac20 mode, Power Spectral Density, 5180 MHz



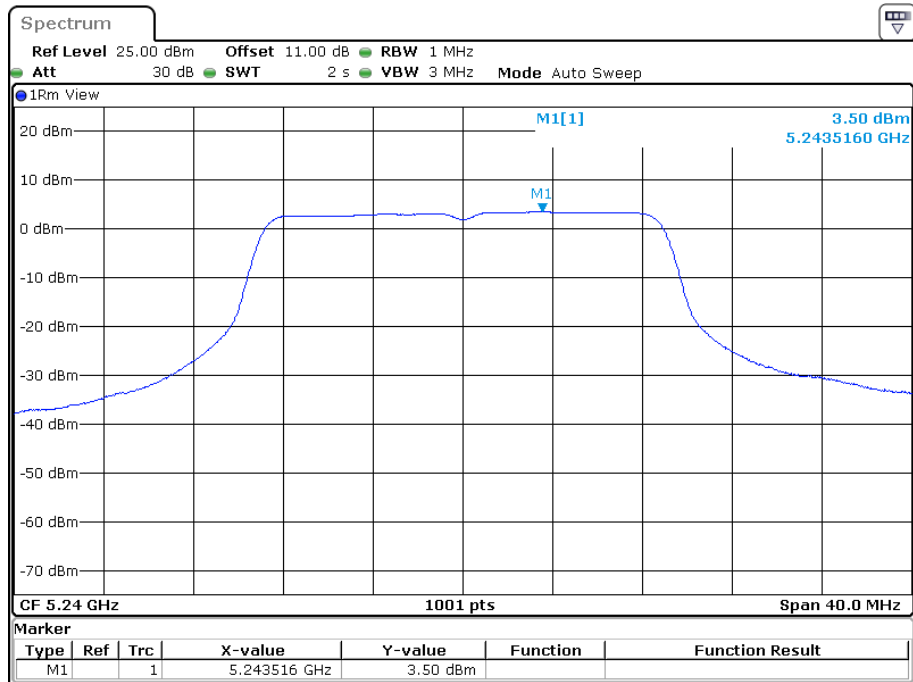
Date: 29.JUN.2022 23:27:11

802.11ac20 mode, Power Spectral Density, 5200 MHz



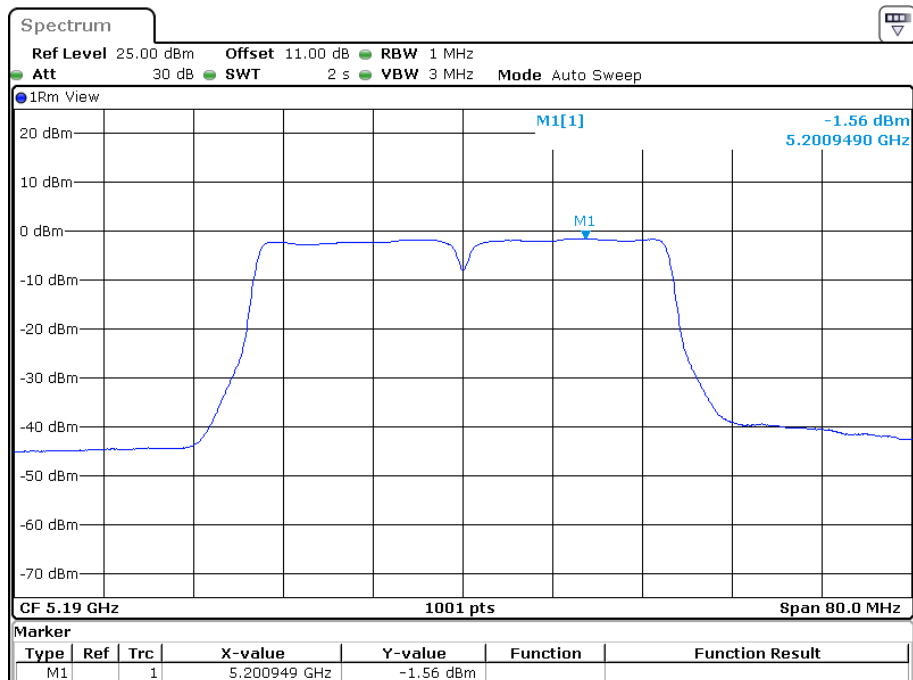
Date: 29.JUN.2022 23:30:50

802.11ac20 mode, Power Spectral Density, 5240 MHz



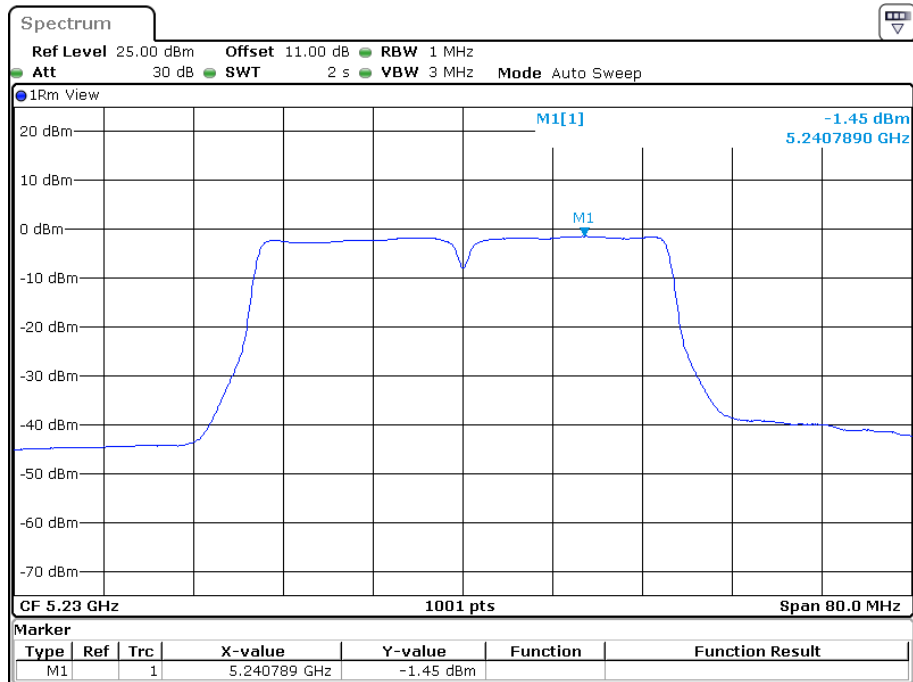
Date: 29.JUN.2022 23:33:22

802.11ac40 mode, Power Spectral Density, 5190 MHz



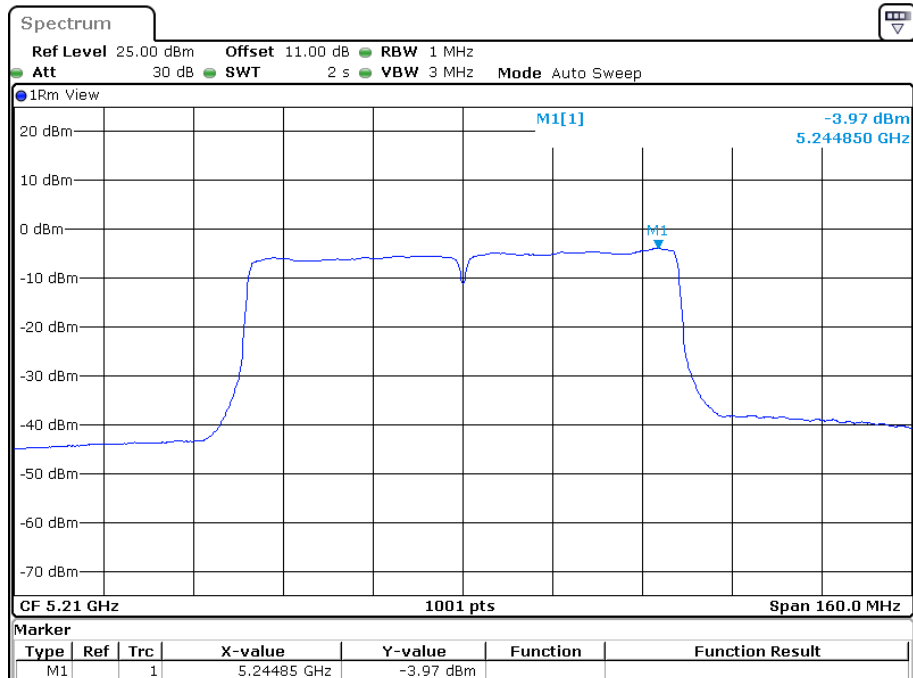
Date: 29.JUN.2022 23:56:48

802.11ac40 mode, Power Spectral Density, 5230 MHz



Date: 29.JUN.2022 23:59:18

802.11ac80 mode, Power Spectral Density, 5210 MHz



Date: 30.JUN.2022 01:05:21

5250 MHz – 5350 MHz:

Frequency (MHz)	Antenna Port	Reading (dBm/MHz)	Duty Cycle Factor (dB)	PSD (dBm/MHz)	TotalPSD (dBm/MHz)	Limit (dBm/MHz)
802.11a						
5260	0	1.88	/	1.88	\	11
	1	3.24	/	3.24		
5280	0	1.94	/	1.94	\	
	1	3.28	/	3.28		
5320	0	1.98	/	1.98	\	
	1	3.40	/	3.40		
802.11n20						
5260	0	1.68	/	1.68	5.52	11
	1	3.20	/	3.20		
5280	0	1.57	/	1.57	5.50	
	1	3.25	/	3.25		
5320	0	2.09	/	2.09	5.78	
	1	3.36	/	3.36		
802.11n40						
5270	0	-3.27	0.16	-3.11	0.45	11
	1	-2.24	0.16	-2.08		
5310	0	-3.23	0.16	-3.07	0.64	
	1	-1.93	0.16	-1.77		
802.11ac20						
5260	0	1.56	/	1.56	5.67	11
	1	3.54	/	3.54		
5280	0	2.00	/	2.00	5.73	
	1	3.33	/	3.33		
5320	0	2.23	/	2.23	5.94	
	1	3.53	/	3.53		
802.11ac40						
5270	0	-3.01	0.17	-2.84	0.91	11
	1	-1.63	0.17	-1.46		
5310	0	-2.97	0.17	-2.80	0.89	
	1	-1.70	0.17	-1.53		
802.11ac80						
5290	0	-5.93	0.34	-5.59	-1.60	11
	1	-4.15	0.34	-3.81		

Note:

1) *Power Spectral Density = Reading + Duty Cycle Factor.*

2) *Duty Cycle Factor = $10 \log(1/D)$, $D = \text{Duty Cycle}$*

For 802.11n/ac mode, the EUT employ CDD

Directional Gain = $G_{ANT} + \text{Array Gain}$

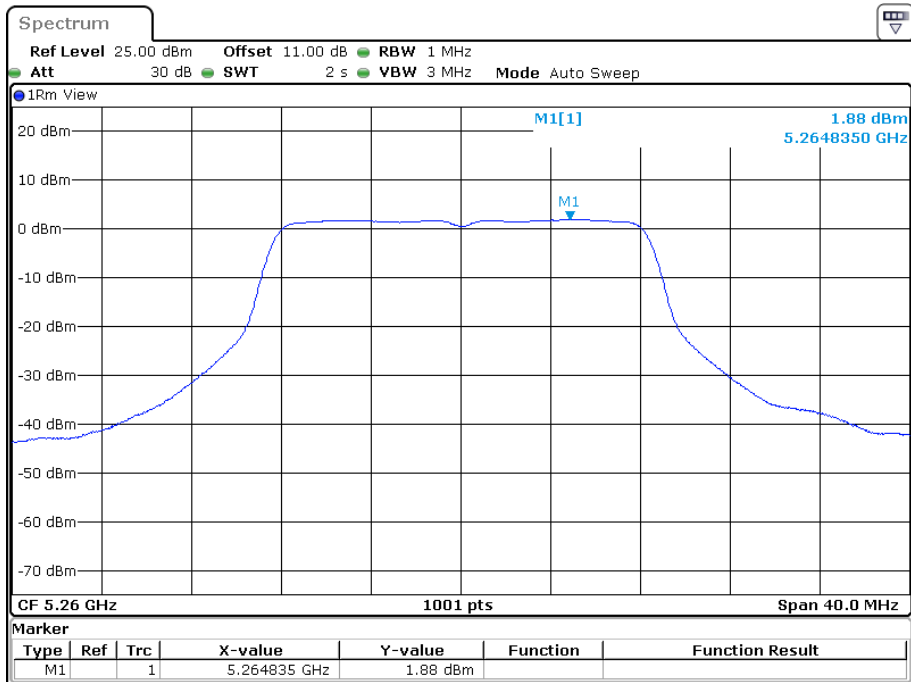
For PSD Measurement, *Array Gain = $10 * \log N_{ANT} = 10 * \log 2 = 3 \text{dB}$*

$G_{ANT} = 2.47 \text{dBi}$

Directional Gain = $2.47 \text{dBi} + 3 \text{dB} = 5.47 \text{dBi} < 6 \text{dBi}$

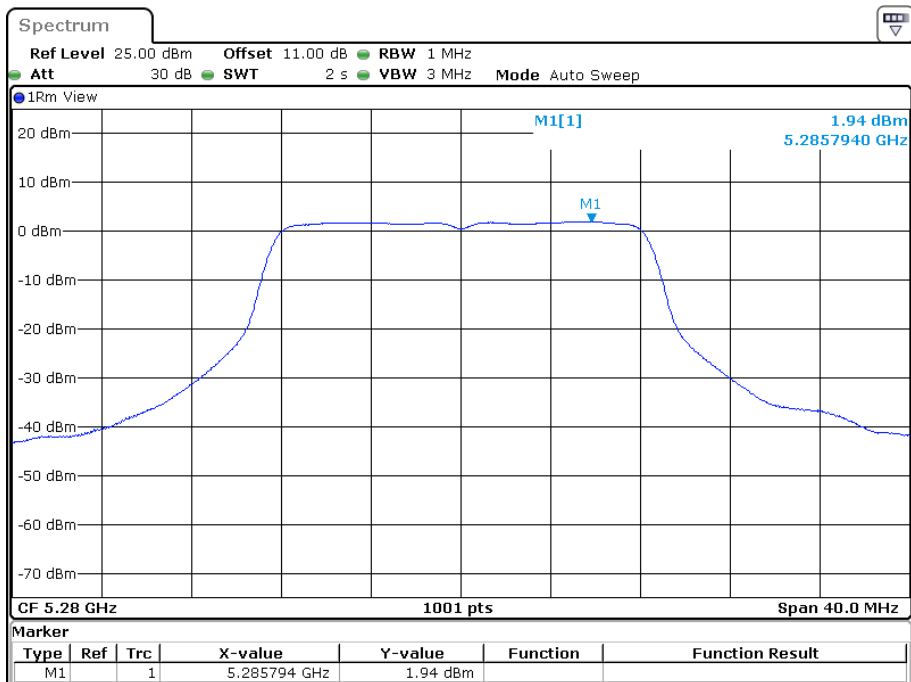
ANT0:

802.11a mode, Power Spectral Density, 5260MHz



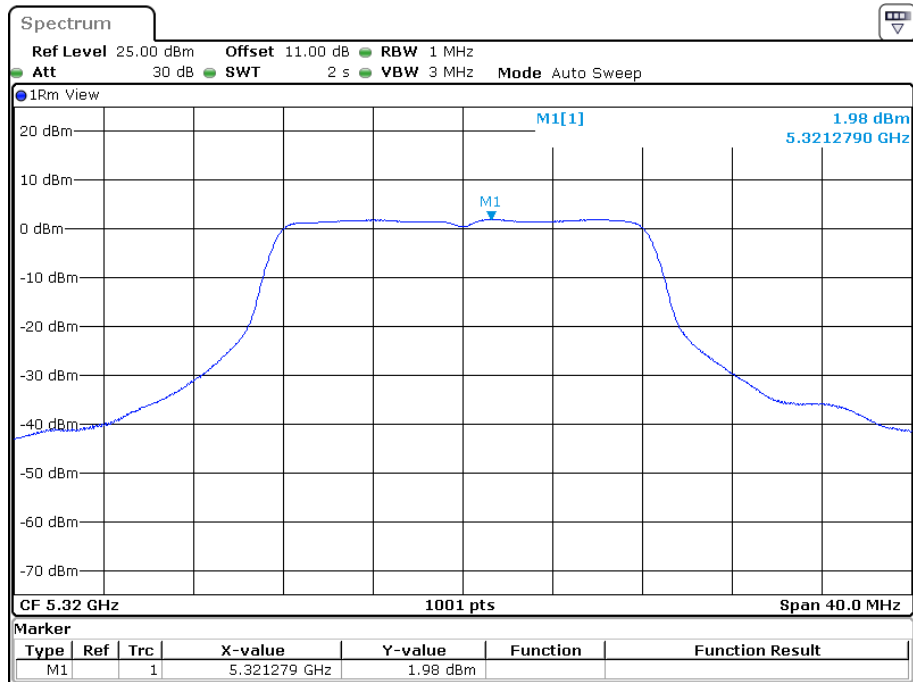
Date: 28.JUN.2022 21:06:38

802.11a mode, Power Spectral Density, 5280MHz



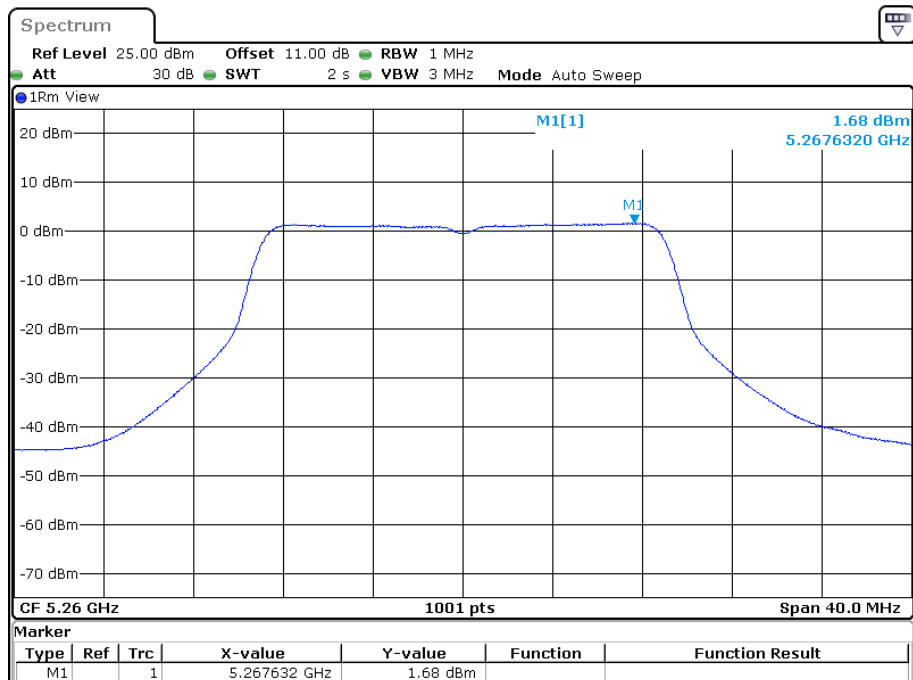
Date: 28.JUN.2022 21:27:34

802.11a mode, Power Spectral Density, 5320 MHz



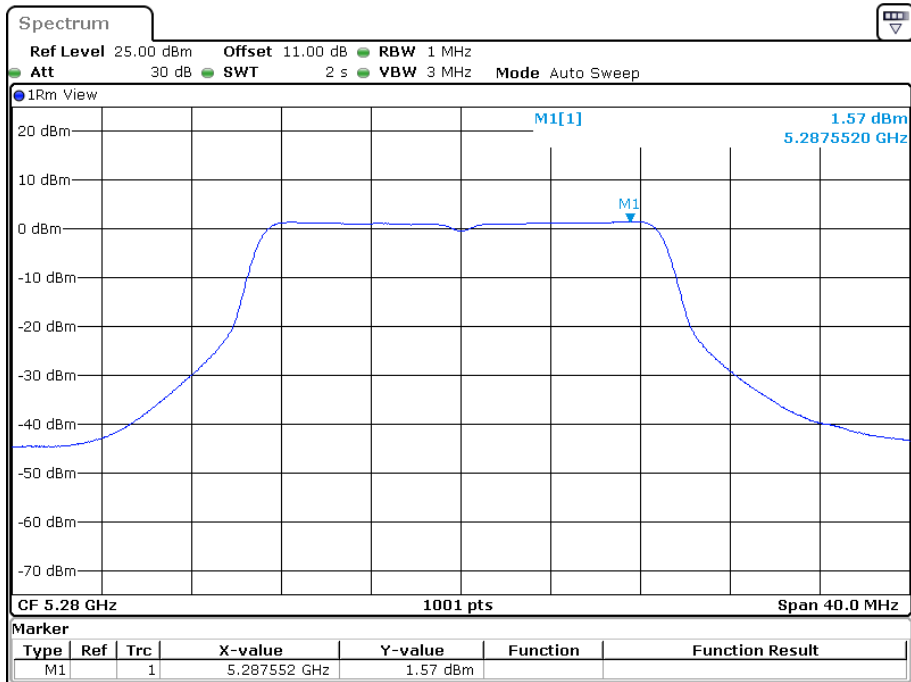
Date: 28.JUN.2022 21:42:55

802.11n20 mode, Power Spectral Density, 5260 MHz



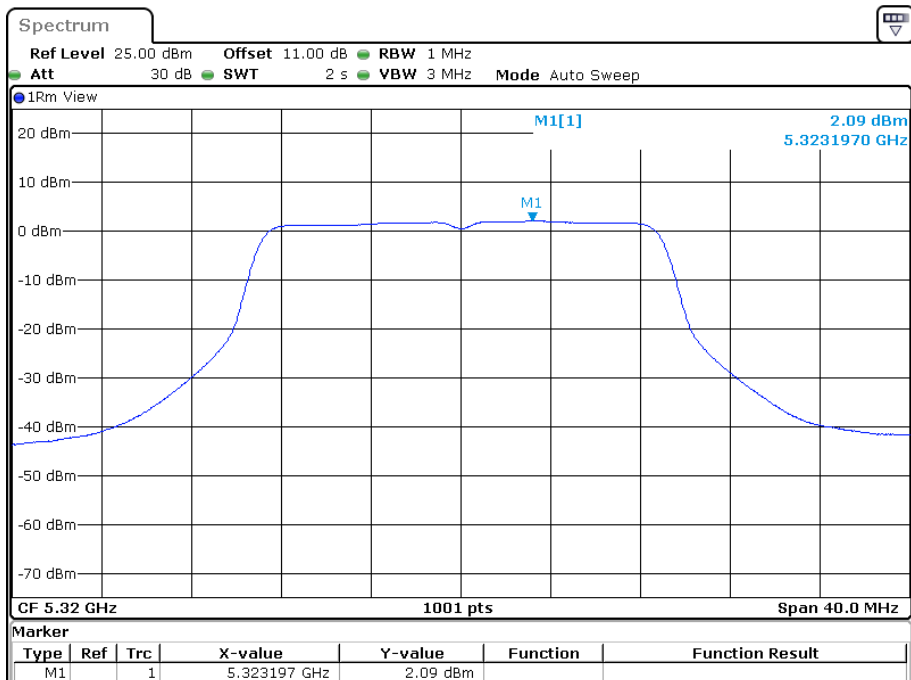
Date: 29.JUN.2022 00:14:08

802.11n20 mode, Power Spectral Density, 5280MHz



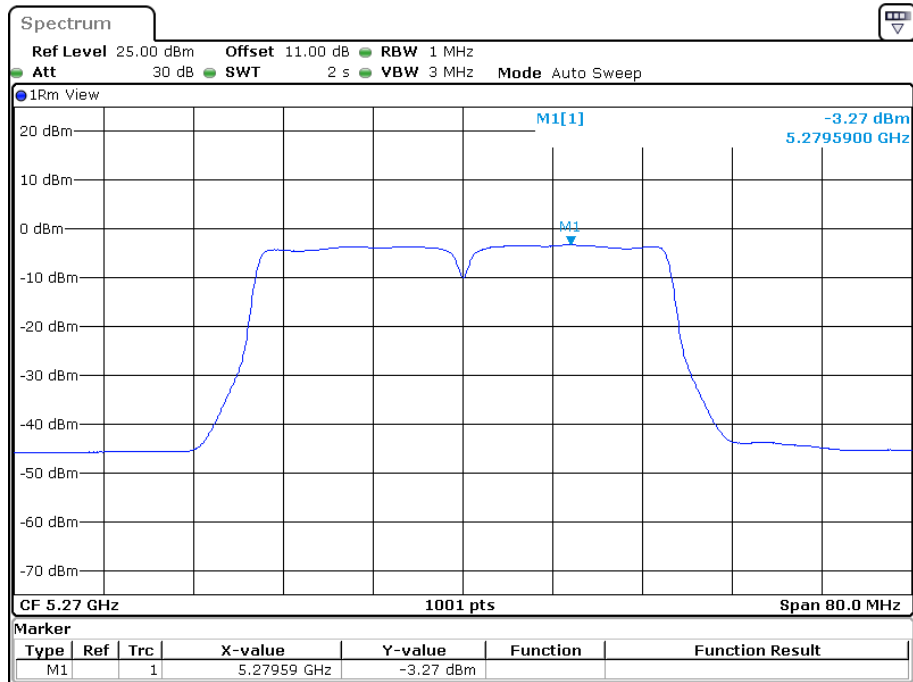
Date: 29.JUN.2022 00:16:35

802.11n20 mode, Power Spectral Density, 5320MHz



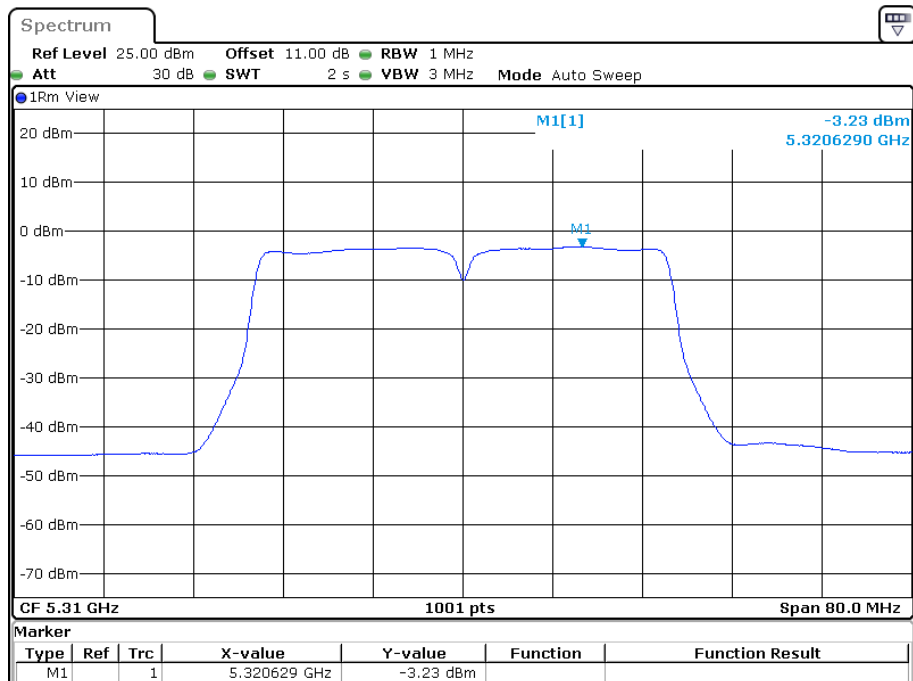
Date: 29.JUN.2022 00:19:08

802.11n40 mode, Power Spectral Density, 5270MHz



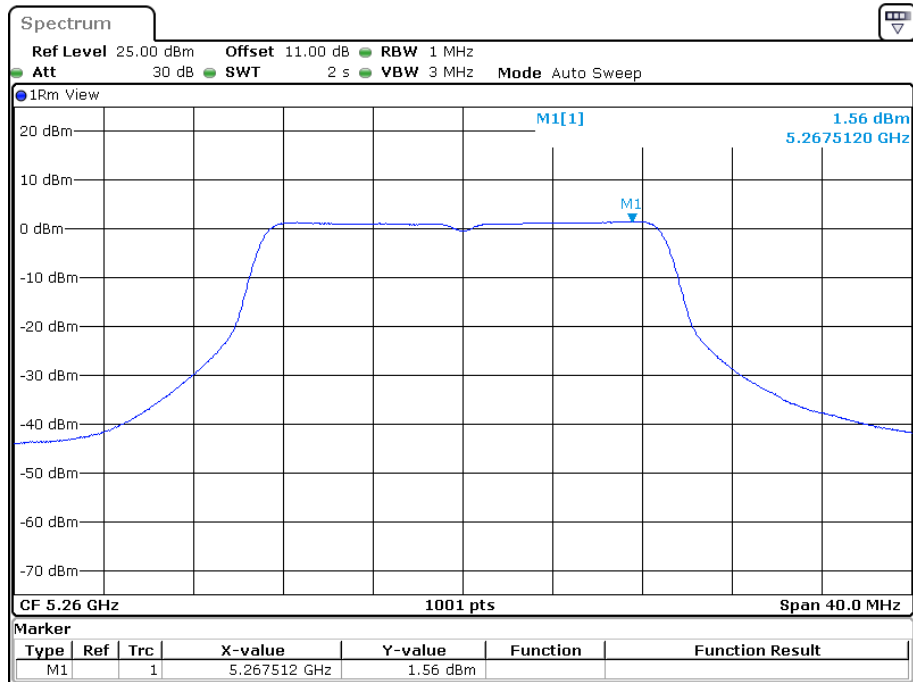
Date: 29.JUN.2022 00:35:38

802.11n40 mode, Power Spectral Density, 5310MHz



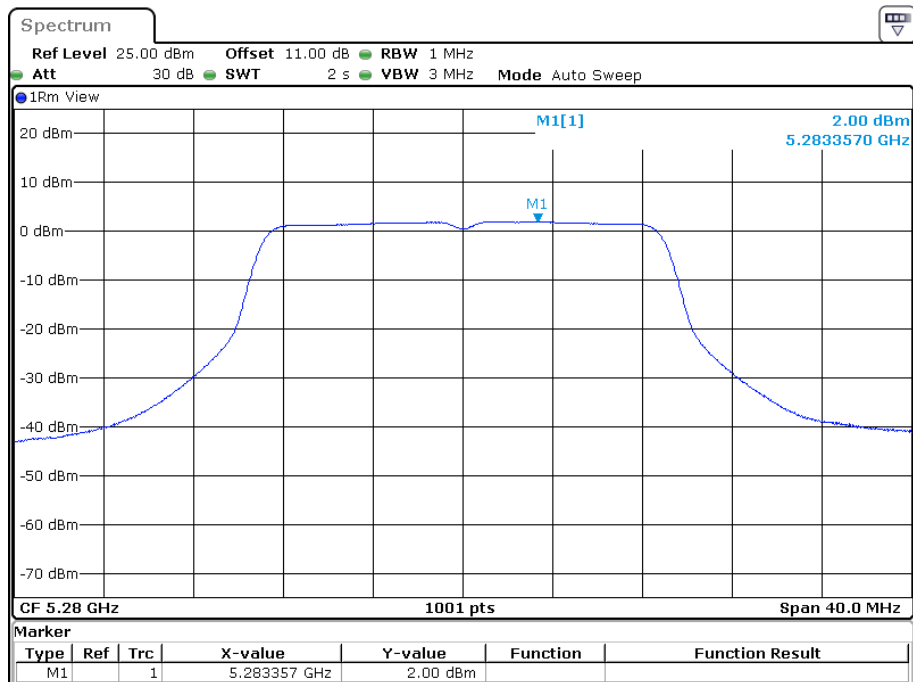
Date: 29.JUN.2022 00:38:16

802.11ac20 mode, Power Spectral Density, 5260 MHz



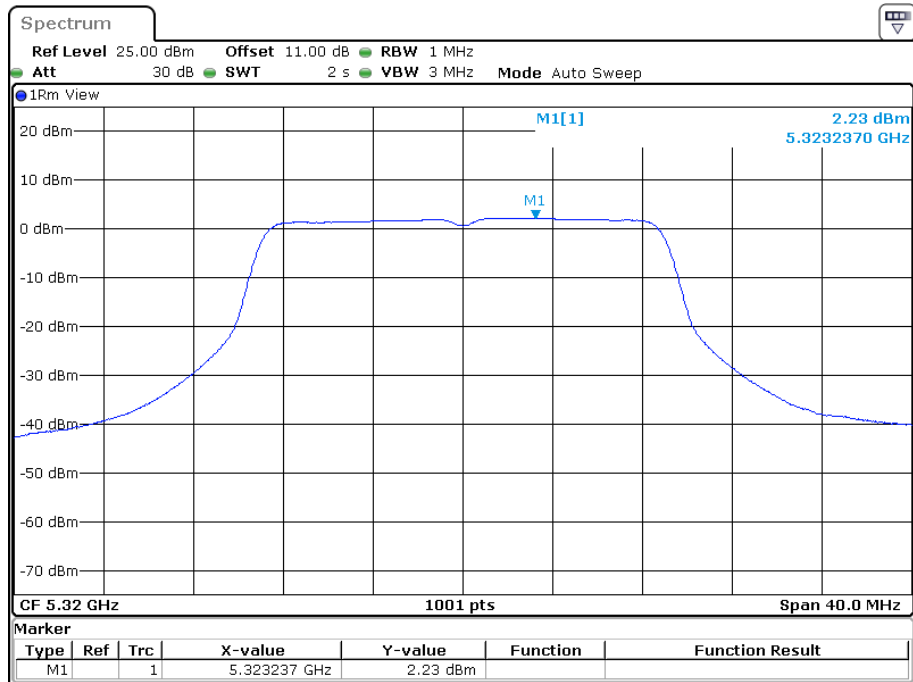
Date: 29.JUN.2022 19:53:13

802.11ac20 mode, Power Spectral Density, 5280MHz



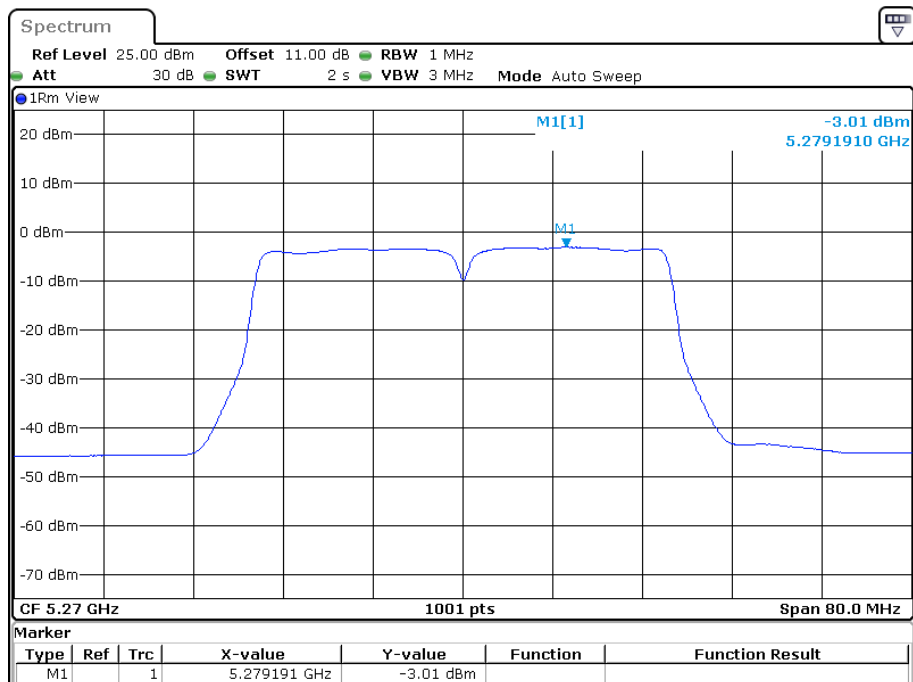
Date: 29.JUN.2022 22:59:11

802.11ac20 mode, Power Spectral Density, 5320MHz



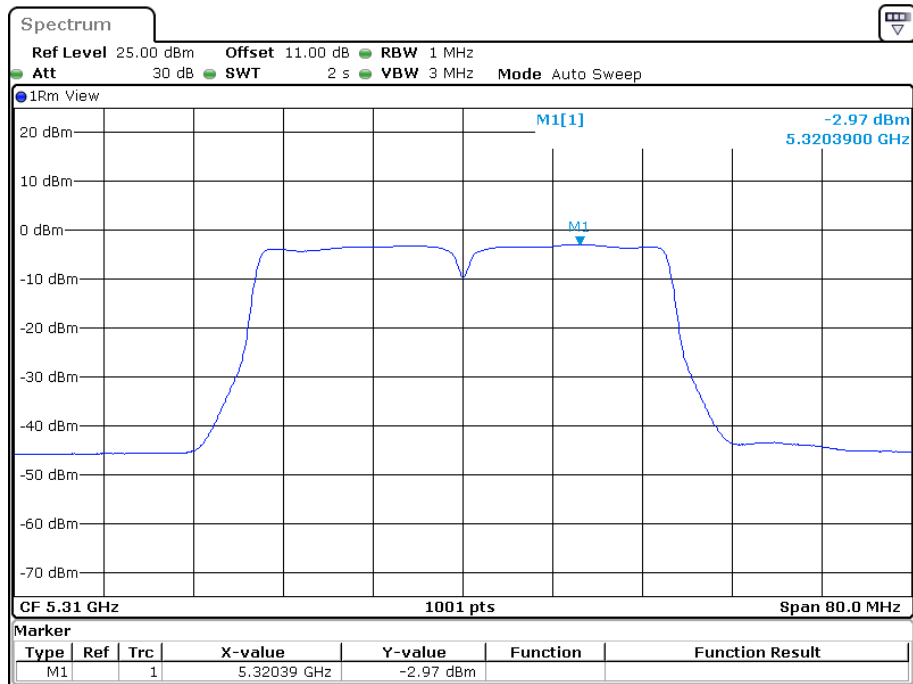
Date: 29.JUN.2022 23:01:48

802.11ac40 mode, Power Spectral Density, 5270MHz



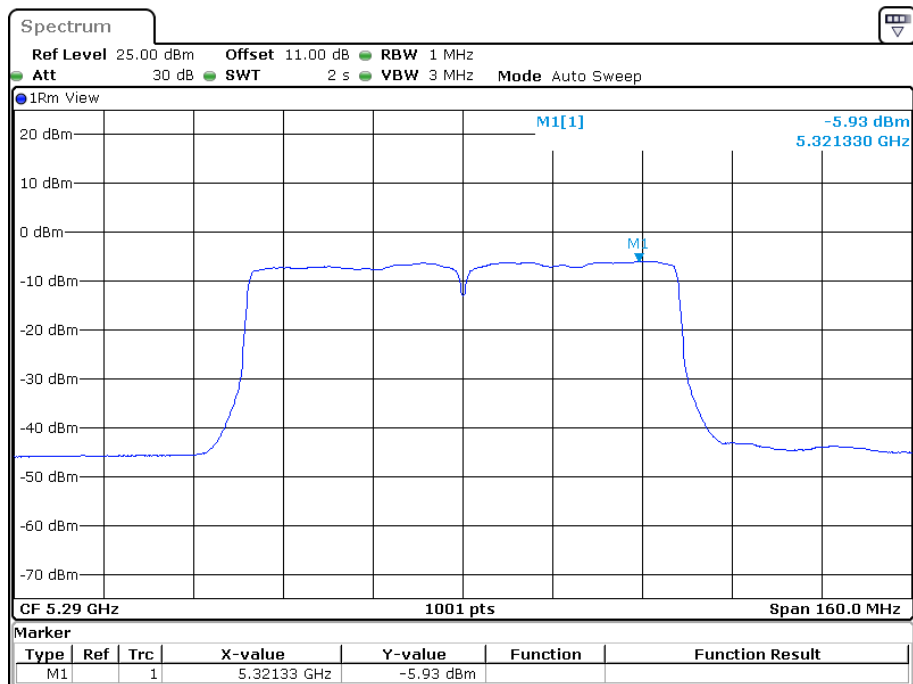
Date: 30.JUN.2022 00:31:16

802. 11ac40 mode, Power Spectral Density, 5310 MHz



Date: 30.JUN.2022 00:34:12

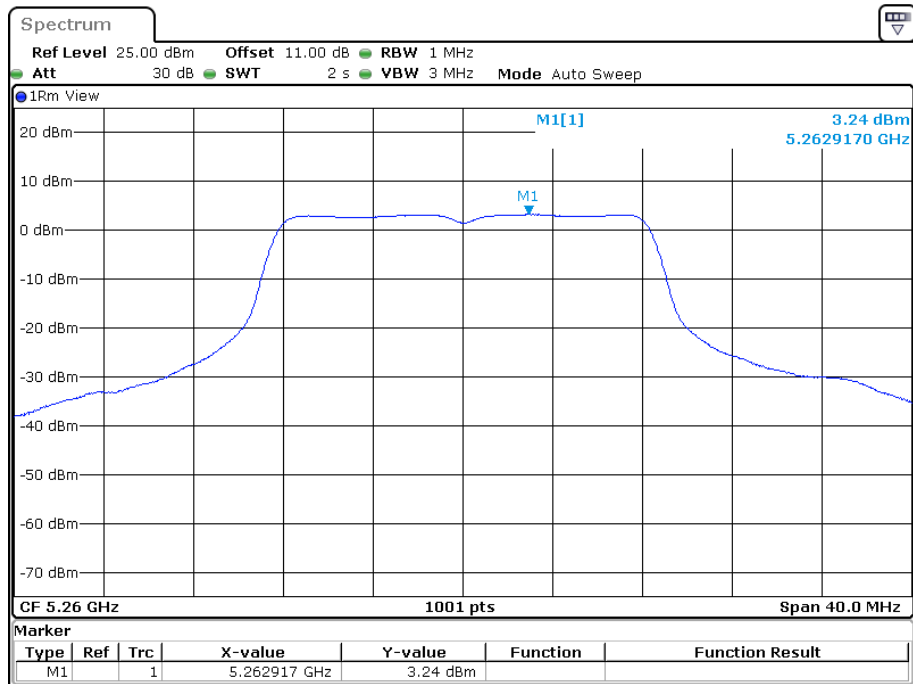
802. 11ac80 mode, Power Spectral Density, 5290 MHz



Date: 30.JUN.2022 00:49:18

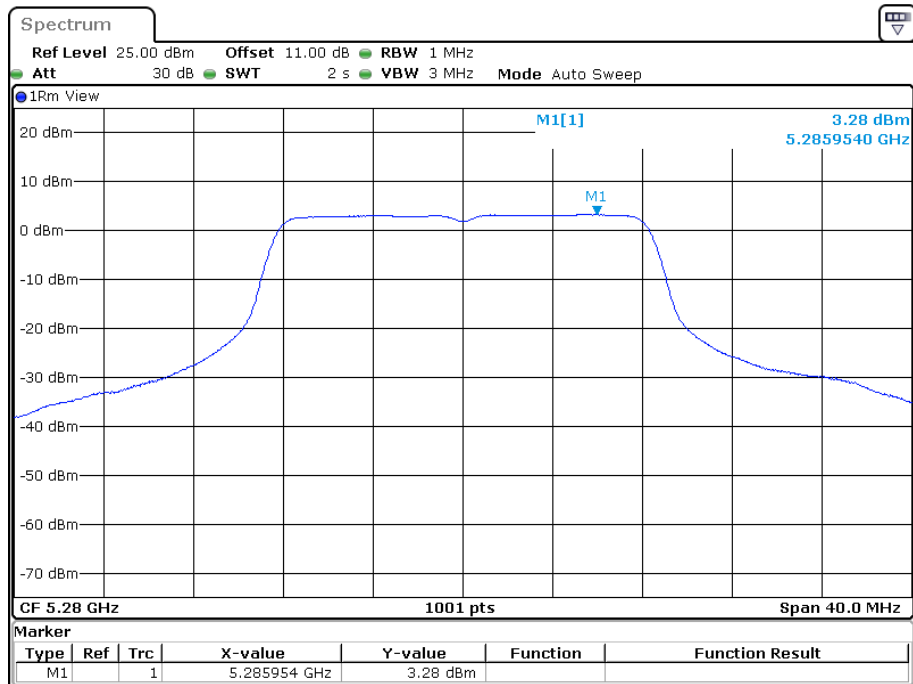
ANT1:

802.11a mode, Power Spectral Density, 5260MHz



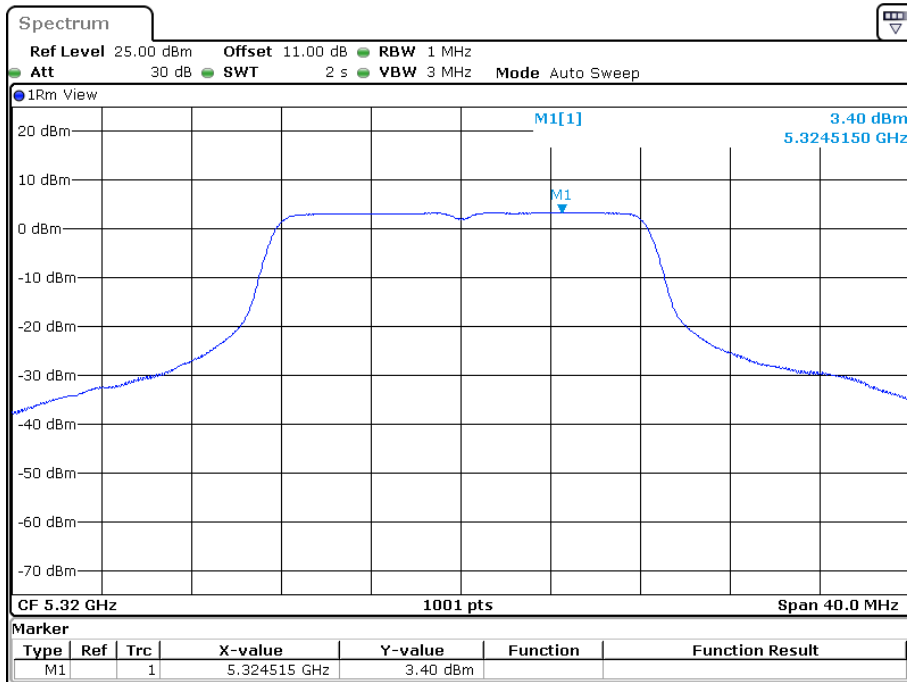
Date: 28.JUN.2022 22:54:48

802.11a mode, Power Spectral Density, 5280MHz



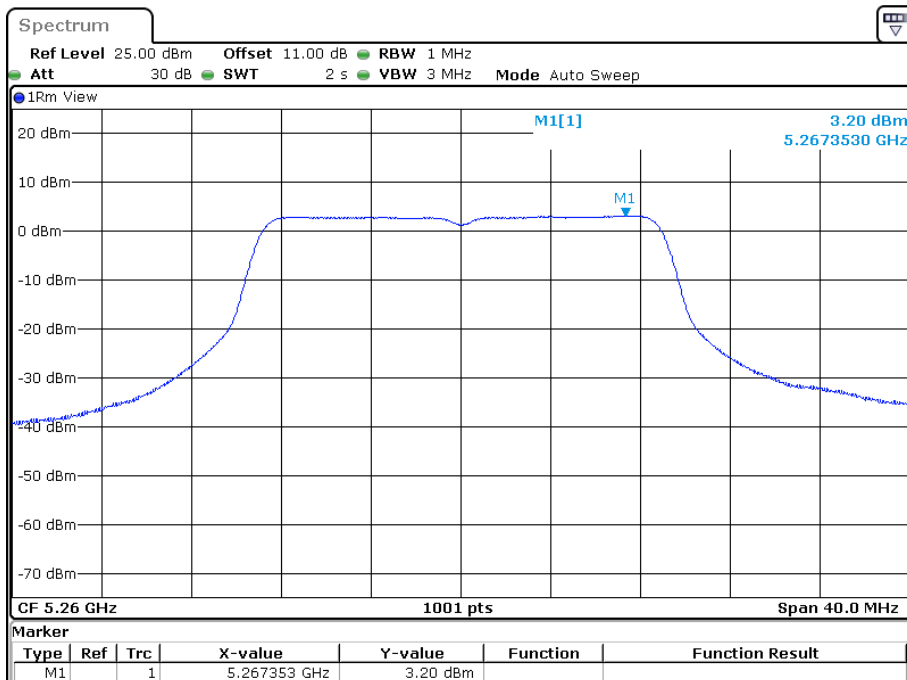
Date: 28.JUN.2022 22:59:54

802.11a mode, Power Spectral Density, 5320 MHz



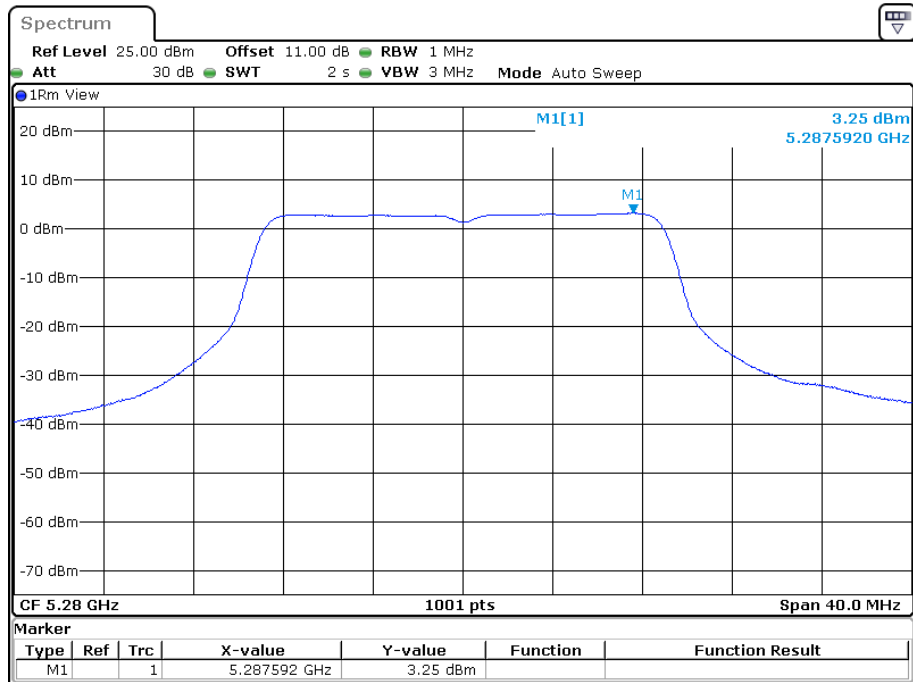
Date: 28.JUN.2022 22:57:27

802.11n20 mode, Power Spectral Density, 5260 MHz



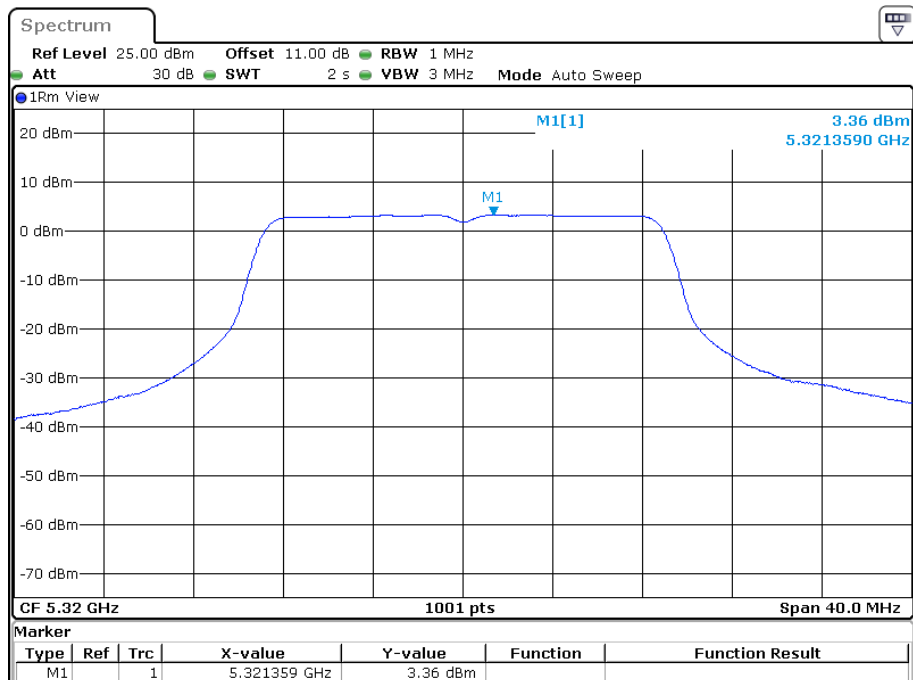
Date: 28.JUN.2022 23:32:45

802.11n20 mode, Power Spectral Density, 5280MHz



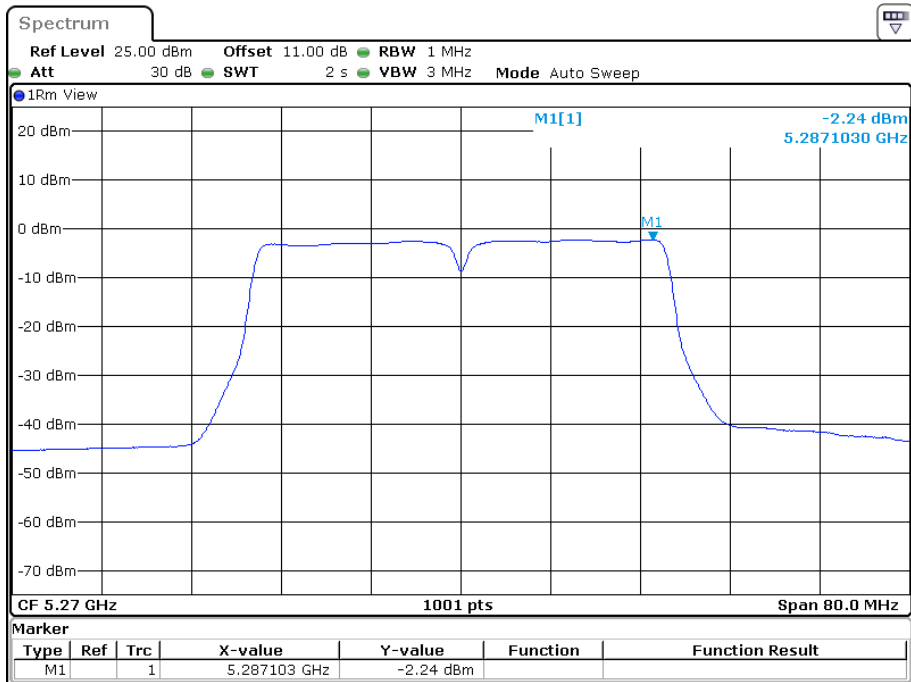
Date: 28.JUN.2022 23:35:33

802.11n20 mode, Power Spectral Density, 5320MHz



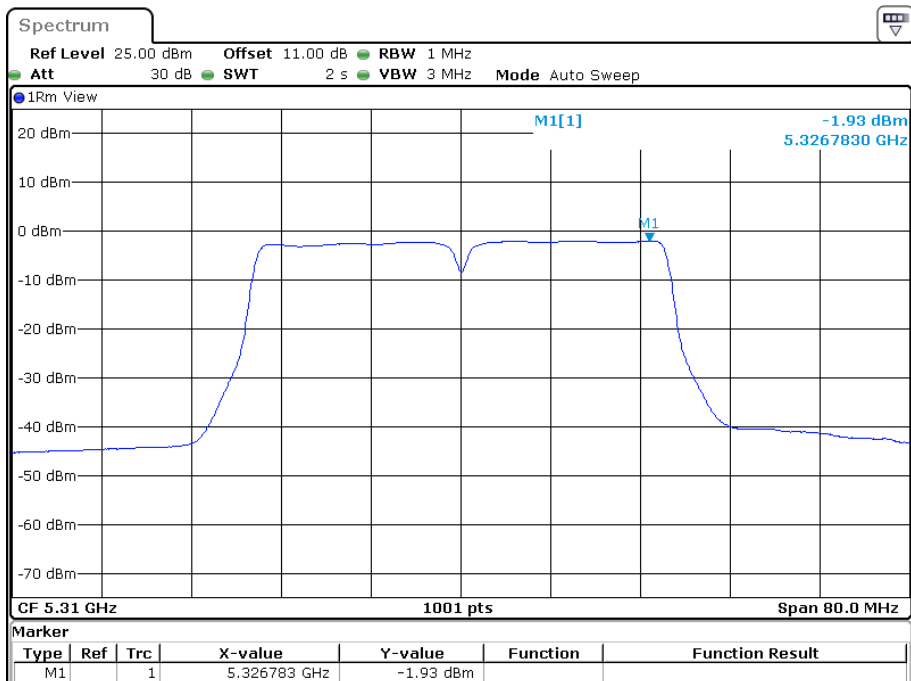
Date: 28.JUN.2022 23:38:07

802.11n40 mode, Power Spectral Density, 5270MHz



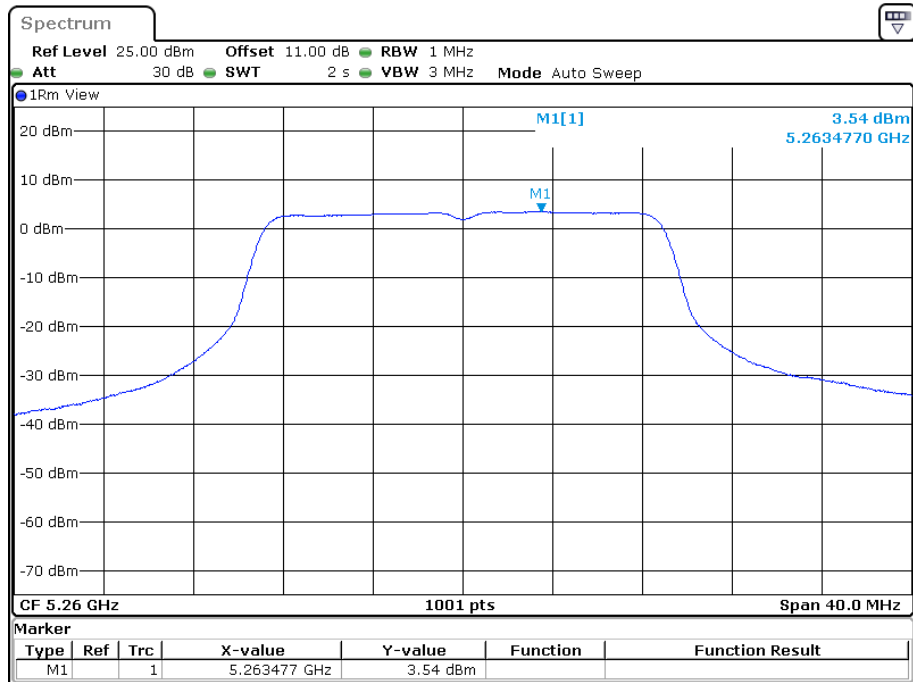
Date: 29.JUN.2022 01:33:19

802.11n40 mode, Power Spectral Density, 5310MHz



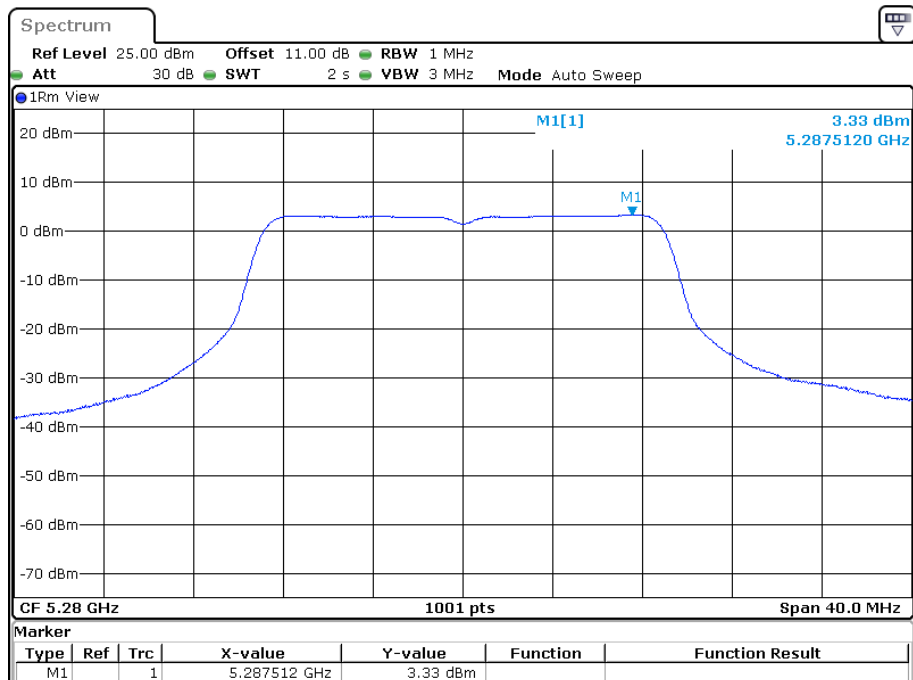
Date: 29.JUN.2022 01:36:10

802.11ac20 mode, Power Spectral Density, 5260 MHz



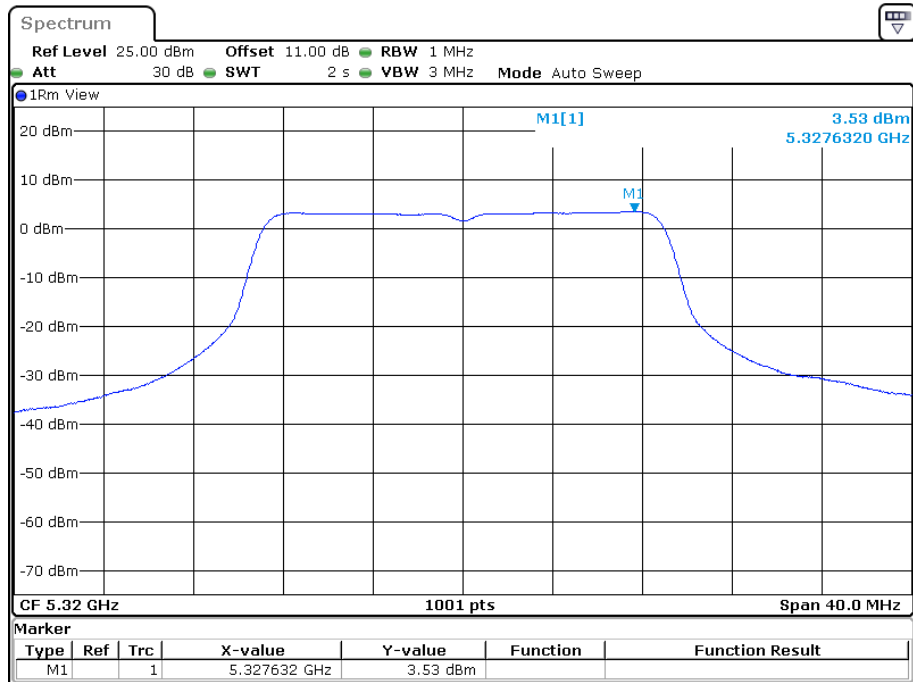
Date: 29.JUN.2022 23:39:07

802.11ac20 mode, Power Spectral Density, 5280MHz



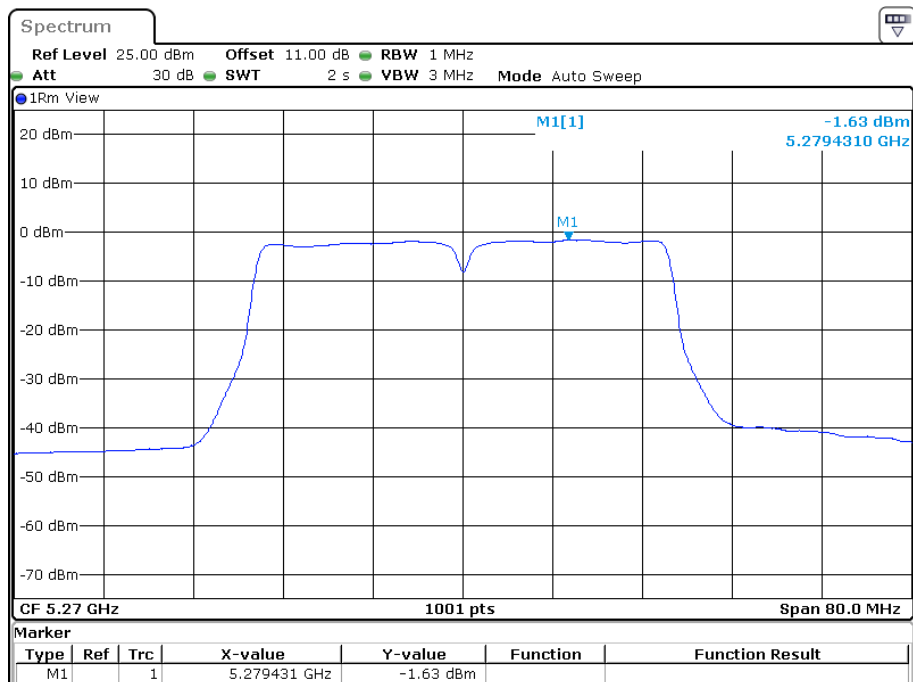
Date: 29.JUN.2022 23:42:31

802.11ac20 mode, Power Spectral Density, 5320MHz



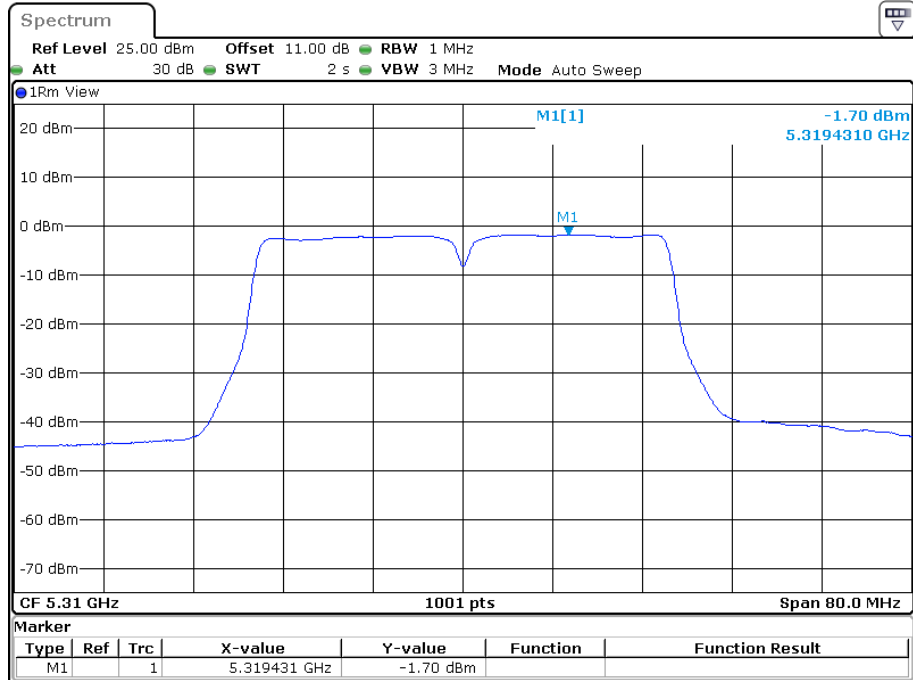
Date: 29.JUN.2022 23:45:06

802.11ac40 mode, Power Spectral Density, 5270MHz



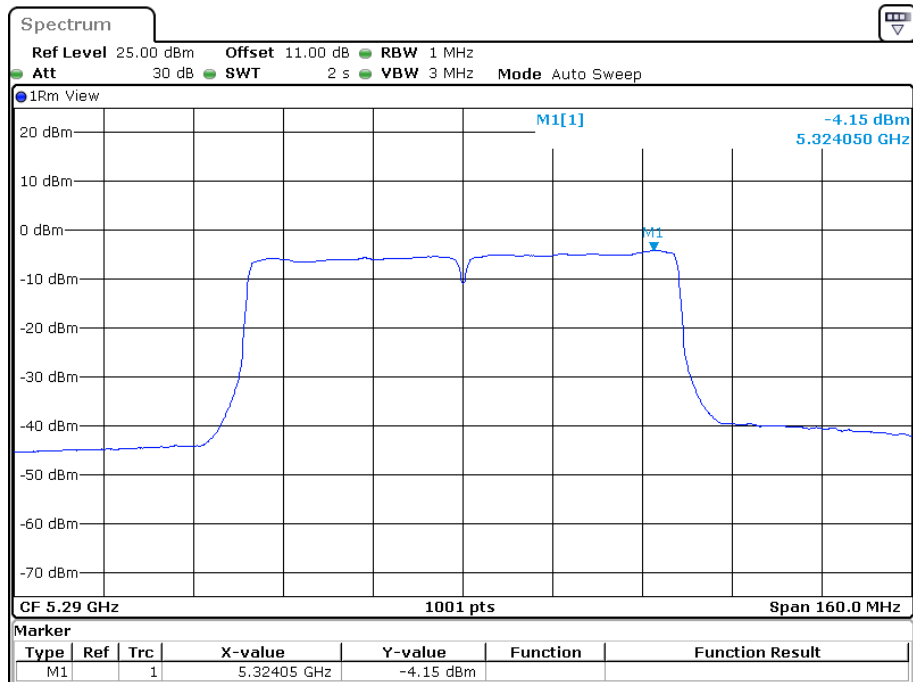
Date: 30.JUN.2022 00:02:00

802. 11ac40 mode, Power Spectral Density, 5310 MHz



Date: 30.JUN.2022 00:04:47

802. 11ac80 mode, Power Spectral Density, 5290 MHz



Date: 30.JUN.2022 01:07:53

5470 MHz – 5725 MHz

Frequency (MHz)	Antenna Port	Reading (dBm/MHz)	Duty Cycle Factor (dB)	PSD (dBm/MHz)	TotalPSD (dBm/MHz)	Limit (dBm/MHz)
802.11a						
5500	0	2.46	/	2.46	\	11
	1	3.85	/	3.85		
5580	0	2.15	/	2.15	\	
	1	3.91	/	3.91		
5700	0	1.69	/	1.69	\	
	1	3.91	/	3.91		
802.11n20						
5500	0	-0.75	/	-0.75	3.16	11
	1	0.90	/	0.90		
5580	0	-1.03	/	-1.03	2.91	
	1	0.66	/	0.66		
5700	0	-1.54	/	-1.54	2.72	
	1	0.68	/	0.68		
802.11n40						
5510	0	-3.84	0.16	-3.68	0.26	11
	1	-2.14	0.16	-1.98		
5550	0	-3.83	0.16	-3.67	0.18	
	1	-2.29	0.16	-2.13		
5670	0	-4.53	0.16	-4.37	-0.17	
	1	-2.41	0.16	-2.25		
802.11ac20						
5500	0	-0.83	/	-0.83	3.11	11
	1	0.86	/	0.86		
5580	0	-1.00	/	-1.00	3.08	
	1	0.92	/	0.92		
5700	0	-1.63	/	-1.63	2.79	
	1	0.85	/	0.85		
802.11ac40						
5510	0	-3.75	0.17	-3.58	0.31	11
	1	-2.14	0.17	-1.97		
5550	0	-4.07	0.17	-3.90	0.26	
	1	-2.01	0.17	-1.84		
5670	0	-4.24	0.17	-4.07	0.17	
	1	-2.05	0.17	-1.88		
802.11ac80						
5530	0	-7.66	0.34	-7.32	-3.48	11
	1	-6.13	0.34	-5.79		
5610	0	-8.38	0.34	-8.04	-3.93	
	1	-6.41	0.34	-6.07		

Note:

1) *Power Spectral Density = Reading + Duty Cycle Factor.*

2) *Duty Cycle Factor = 10 log (1 / D), D = Duty Cycle*

For 802.11n/ac mode, the EUT employ CDD

Directional Gain = G_{ANT} + Array Gain

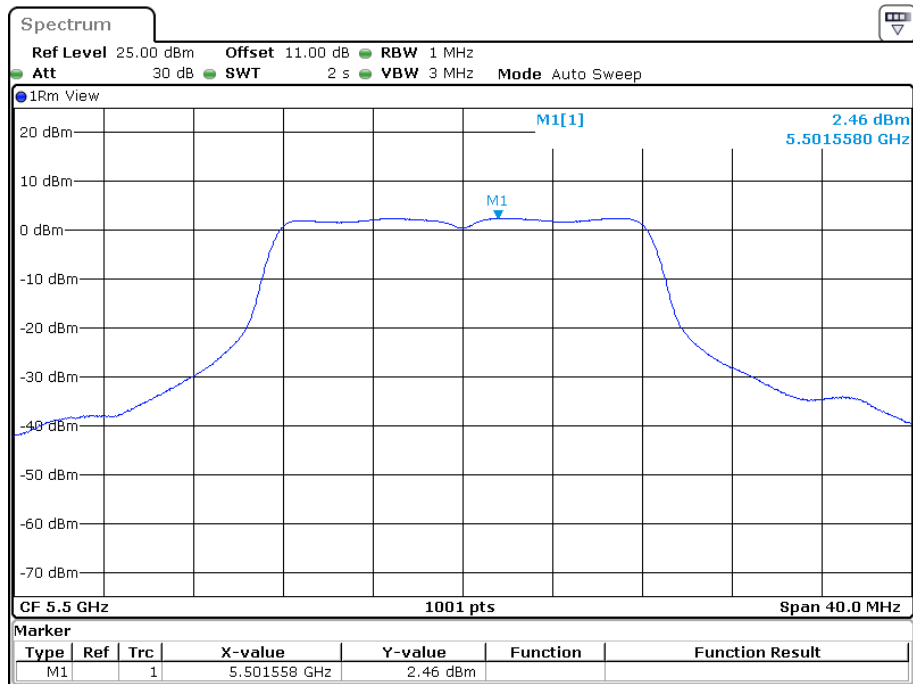
For PSD Measurement, *Array Gain = 10 * log N_{ANT} = 10 * log 2 = 3dB*

G_{ANT} = 2.47dBi

Directional Gain = 2.47dBi + 3dB = 5.47dBi < 6dBi

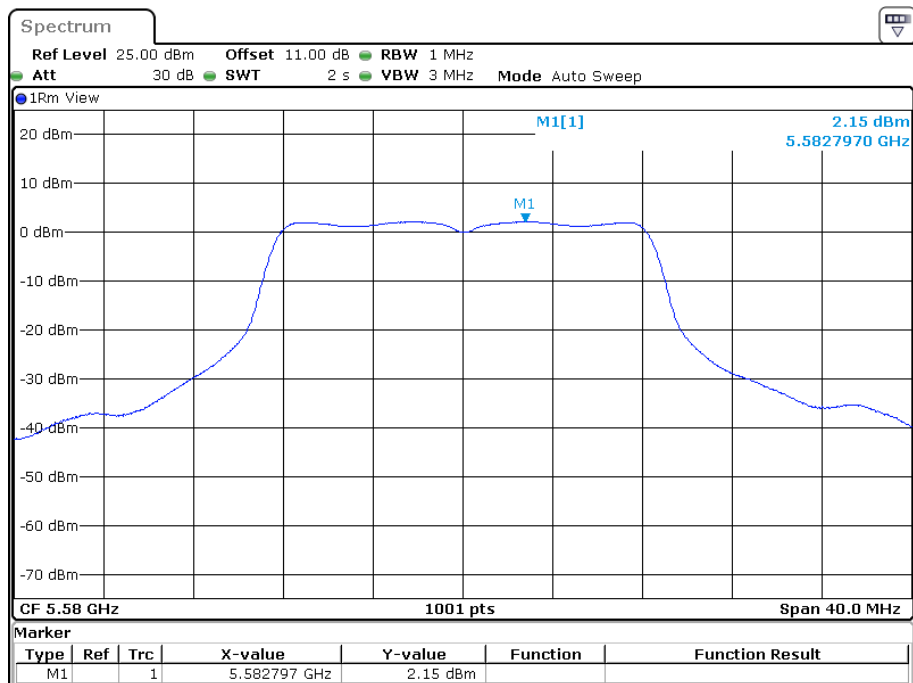
ANT0:

802.11a mode, Power Spectral Density, 5500MHz



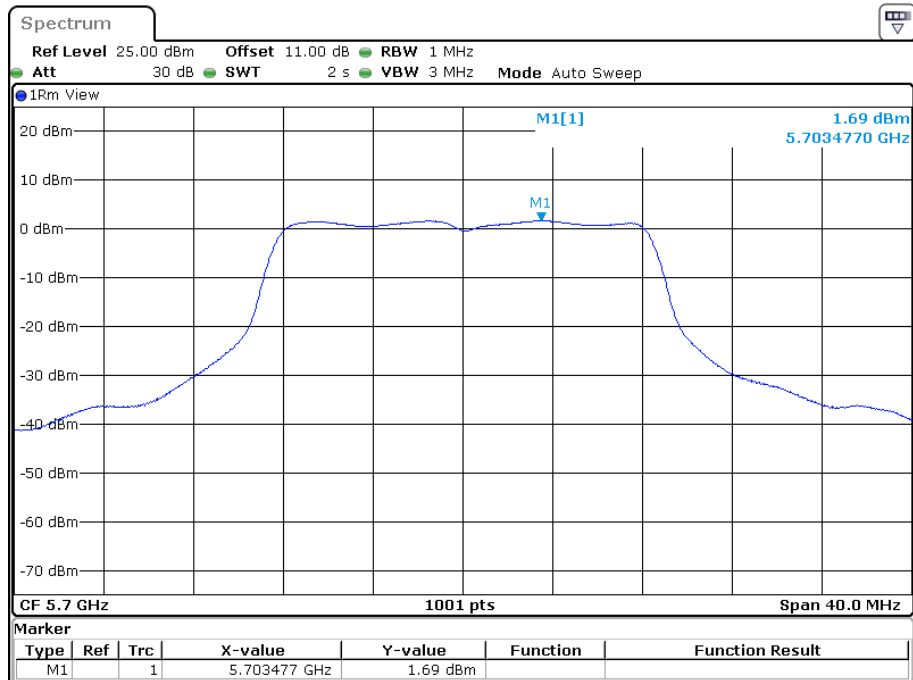
Date: 28.JUN.2022 21:45:26

802.11a mode, Power Spectral Density, 5580MHz



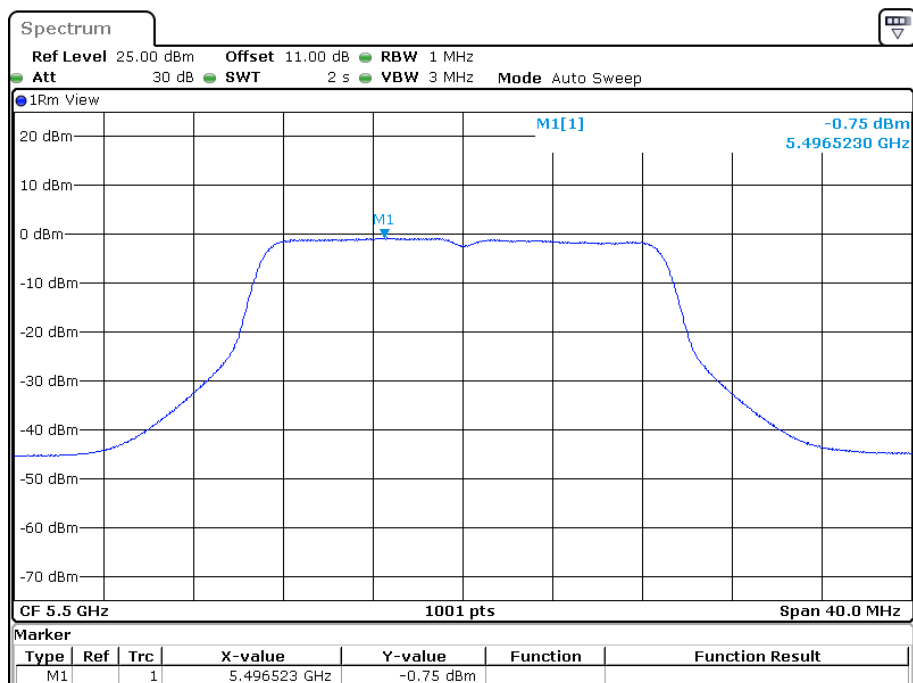
Date: 28.JUN.2022 21:49:06

802.11a mode, Power Spectral Density, 5700MHz



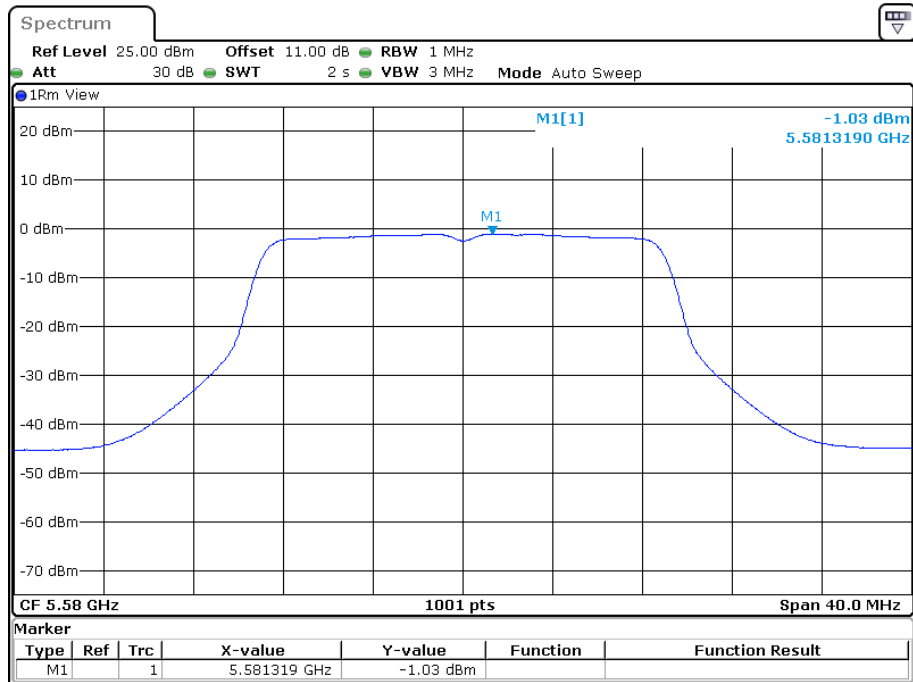
Date: 28.JUN.2022 21:51:34

802.11n20 mode, Power Spectral Density, 5500MHz



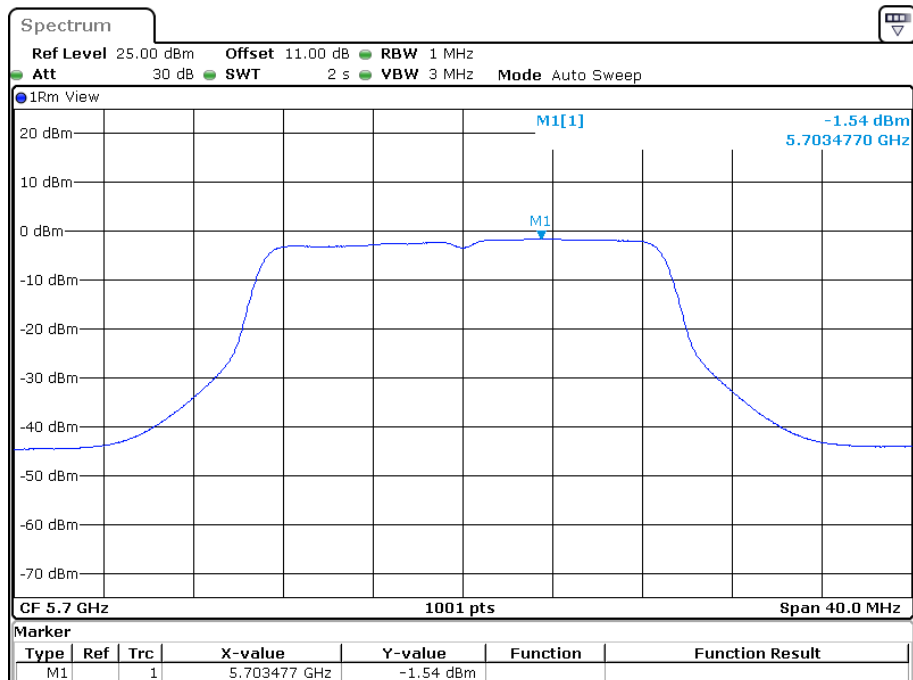
Date: 29.JUN.2022 00:21:45

802.11n20 mode, Power Spectral Density, 5580MHz



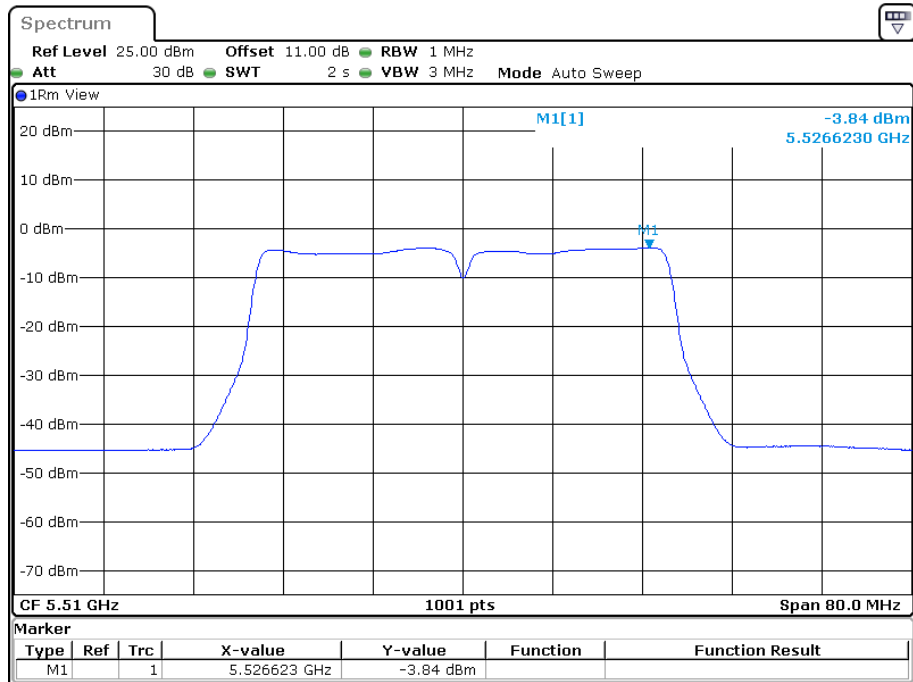
Date: 29.JUN.2022 00:24:19

802.11n20 mode, Power Spectral Density, 5700MHz



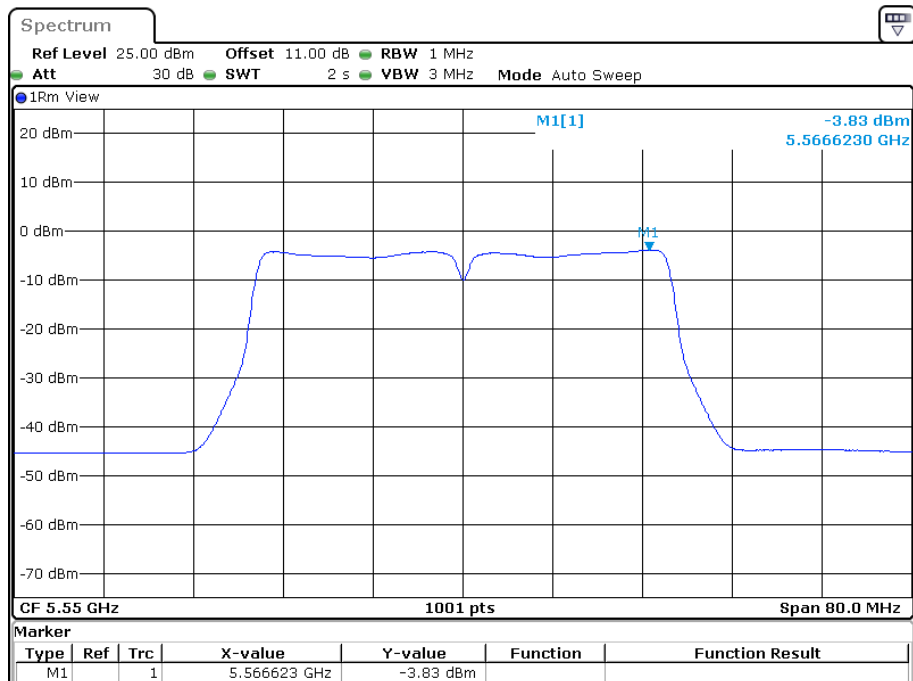
Date: 29.JUN.2022 00:26:49

802.11n40 mode, Power Spectral Density, 5510MHz



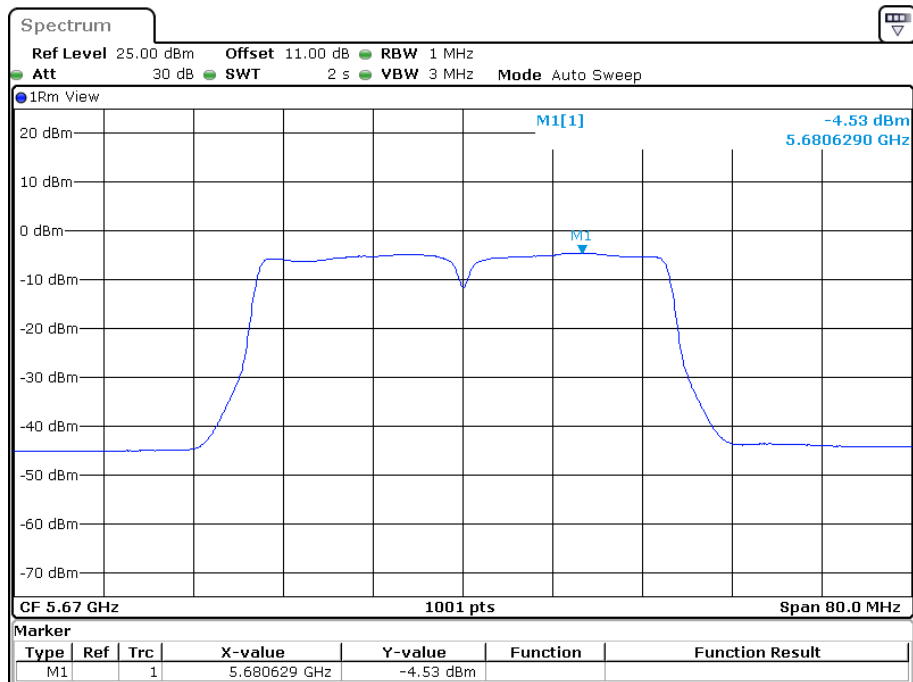
Date: 29.JUN.2022 00:40:41

802.11n40 mode, Power Spectral Density, 5550MHz



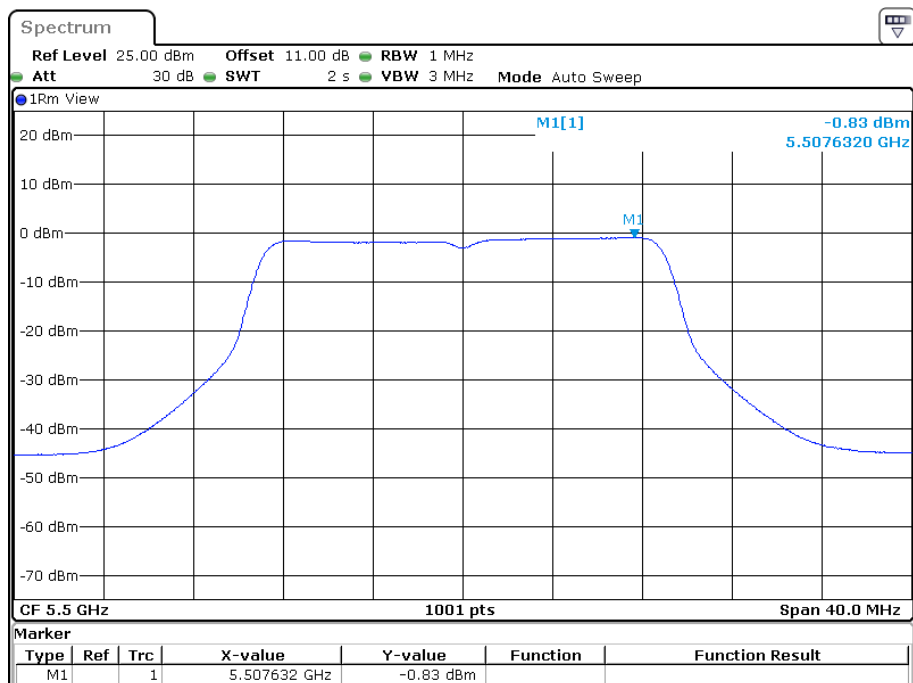
Date: 29.JUN.2022 00:43:12

802.11n40 mode, Power Spectral Density, 5670MHz



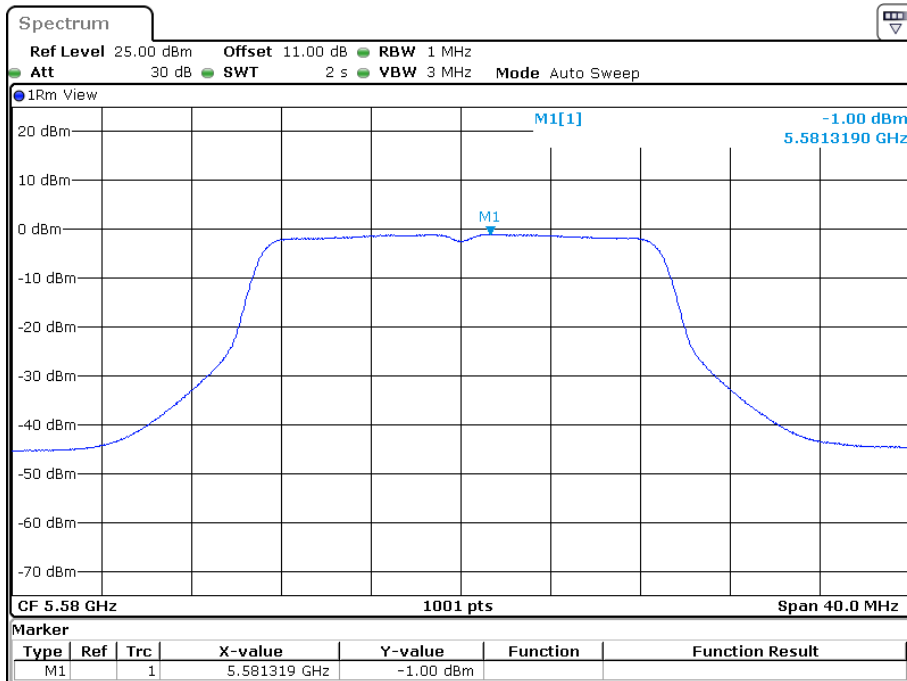
Date: 29.JUN.2022 00:45:50

802.11ac20 mode, Power Spectral Density, 5500 MHz



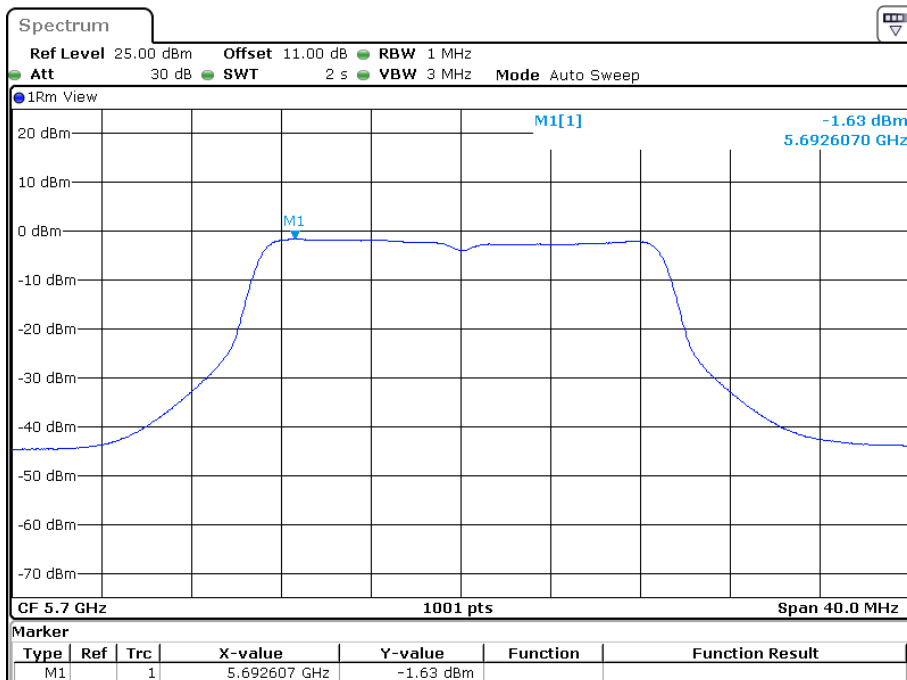
Date: 29.JUN.2022 23:04:20

802.11ac20 mode, Power Spectral Density, 5580MHz



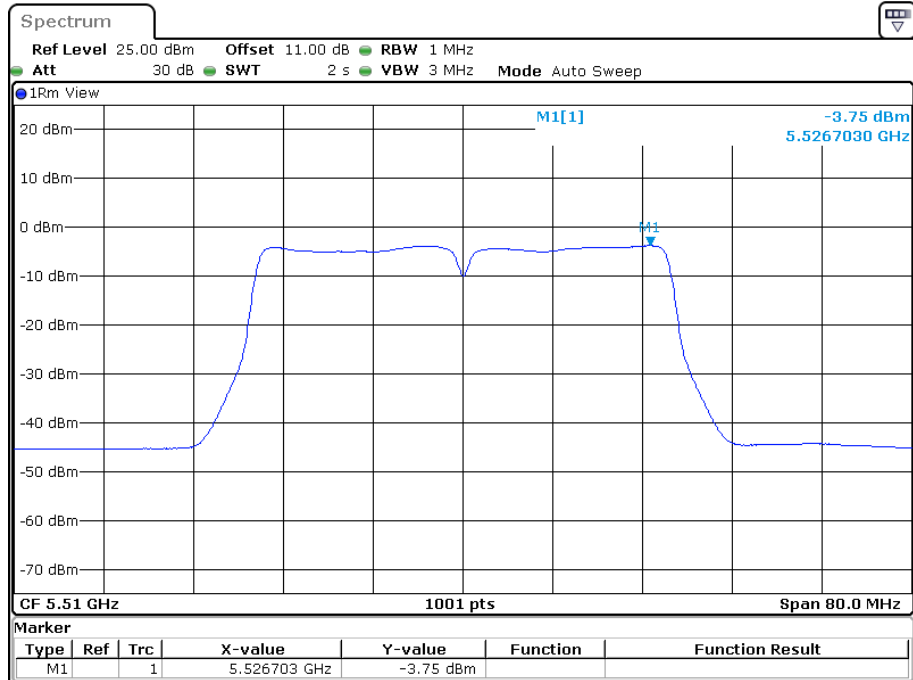
Date: 29.JUN.2022 23:06:51

802.11ac20 mode, Power Spectral Density, 5700MHz



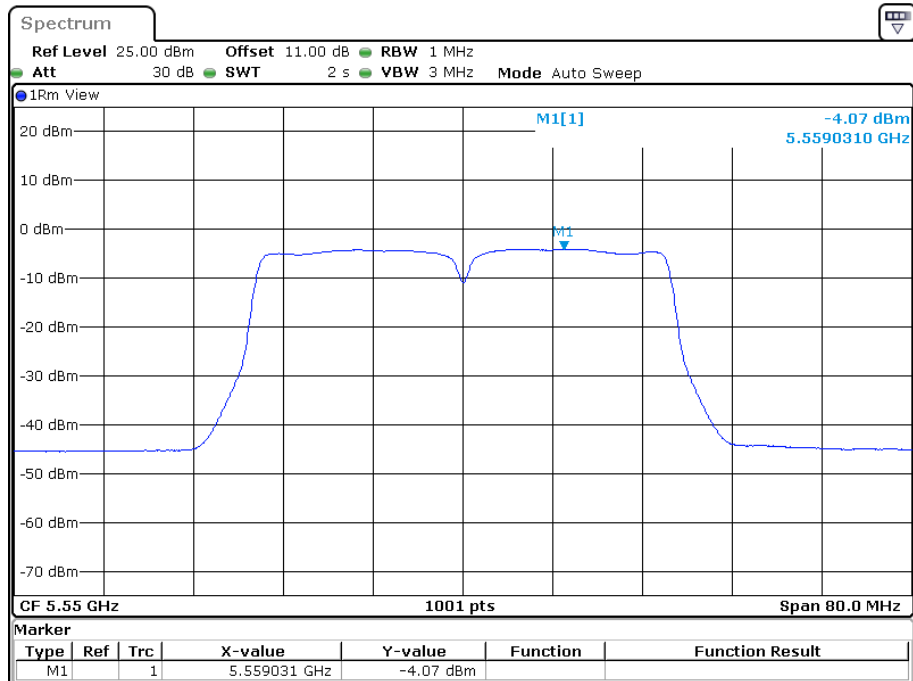
Date: 29.JUN.2022 23:09:20

802.11ac40 mode, Power Spectral Density, 5510MHz



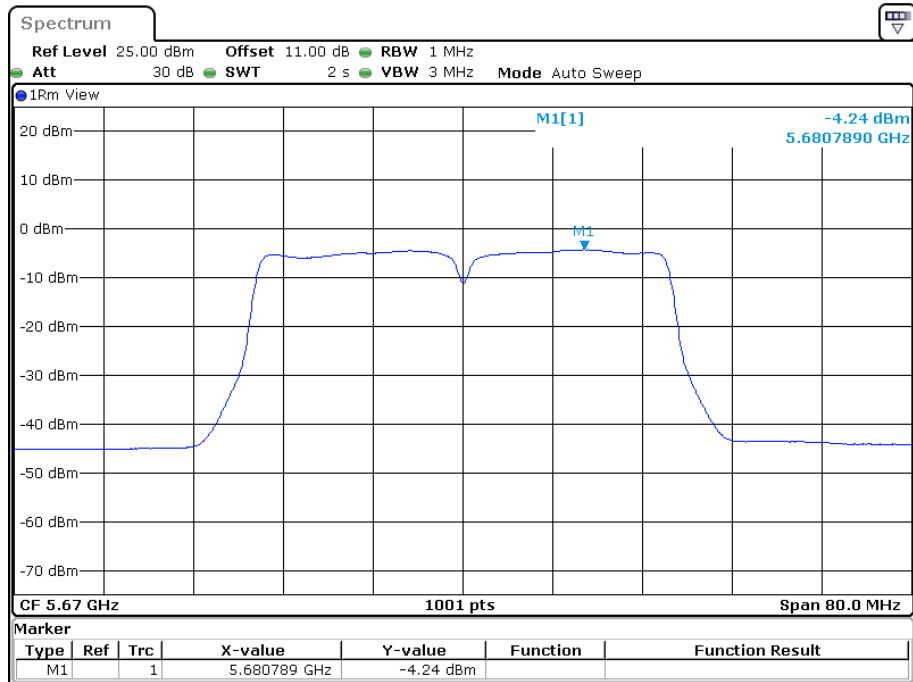
Date: 30.JUN.2022 00:36:59

802.11ac40 mode, Power Spectral Density, 5550MHz



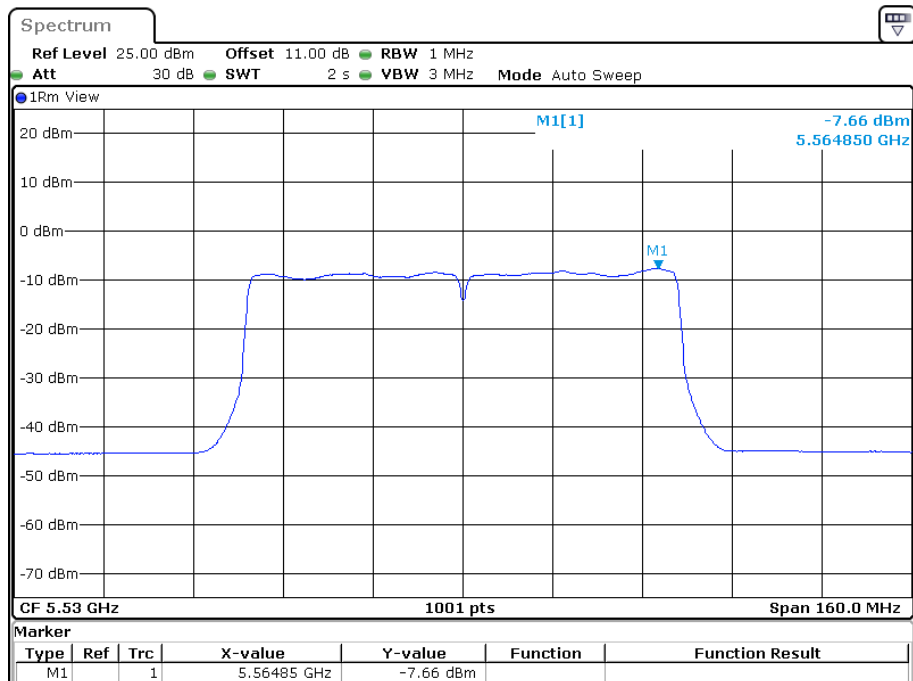
Date: 30.JUN.2022 00:39:25

802.11ac40 mode, Power Spectral Density, 5670MHz



Date: 30.JUN.2022 00:42:20

802.11ac80 mode, Power Spectral Density, 5530 MHz



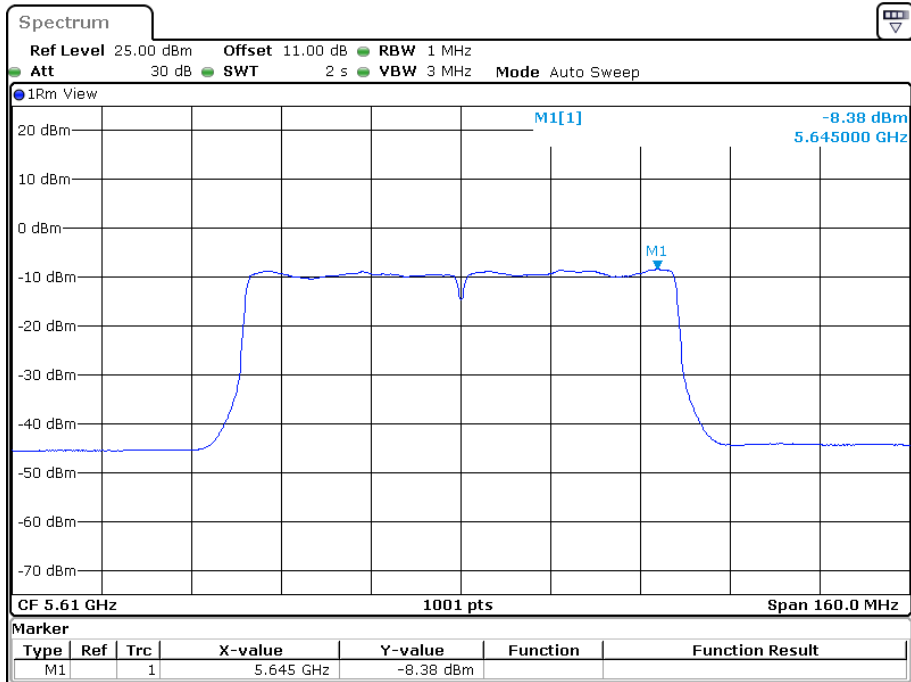
Date: 30.JUN.2022 00:53:14

Marker						
Type	Ref	Trc	X-value	Y-value	Function	Function Result
M1		1	5.61224 GHz	-11.23 dBm		

Date: 28.JUN.2022 00:29:16

0

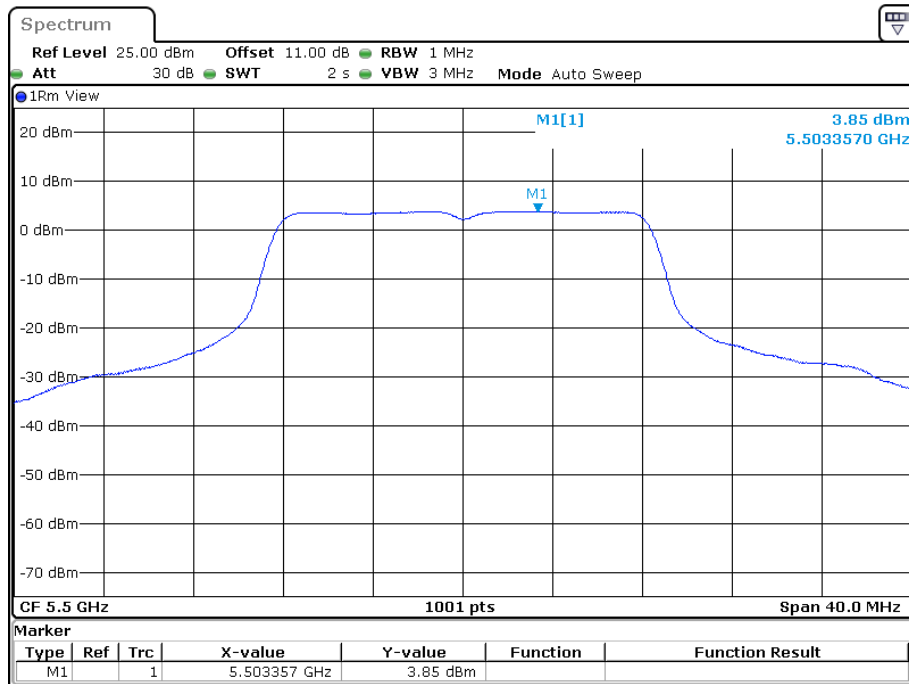
802.11ac80 mode, Power Spectral Density, 5610 MHz



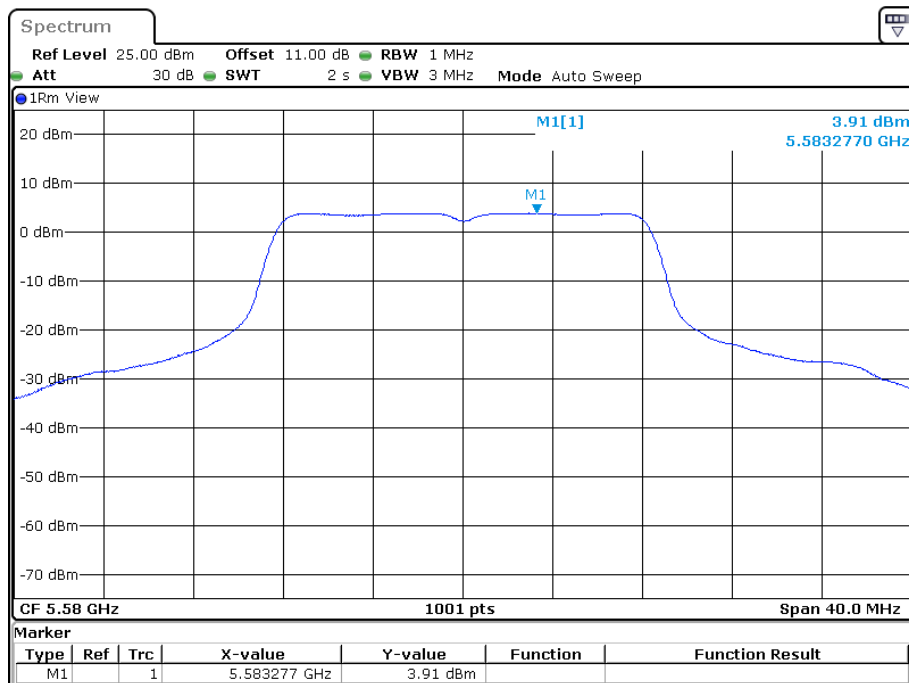
Date: 30.JUN.2022 00:55:49

ANT1:

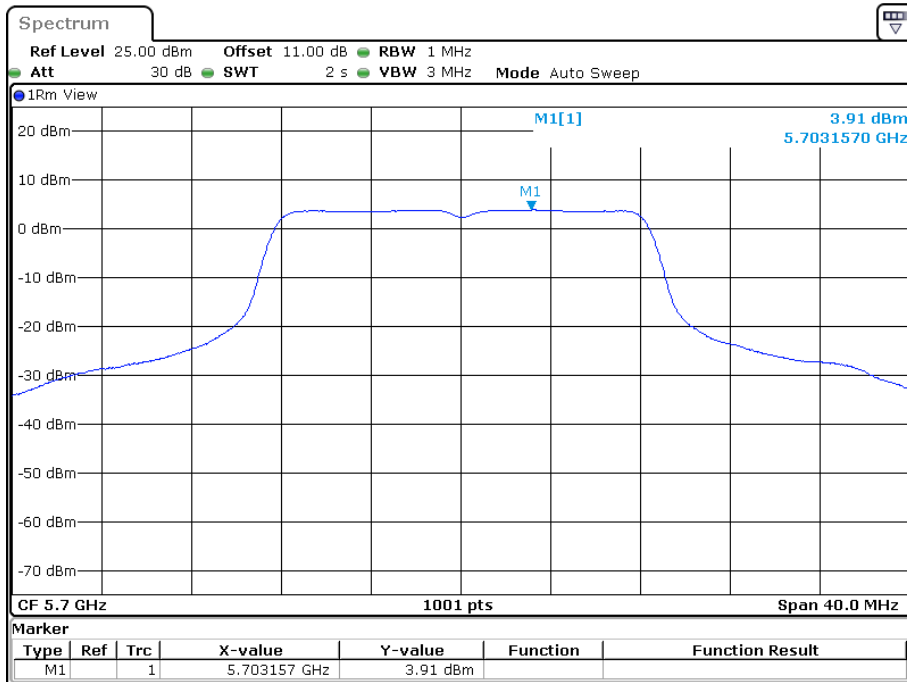
802.11a mode, Power Spectral Density, 5500MHz



802.11a mode, Power Spectral Density, 5580MHz

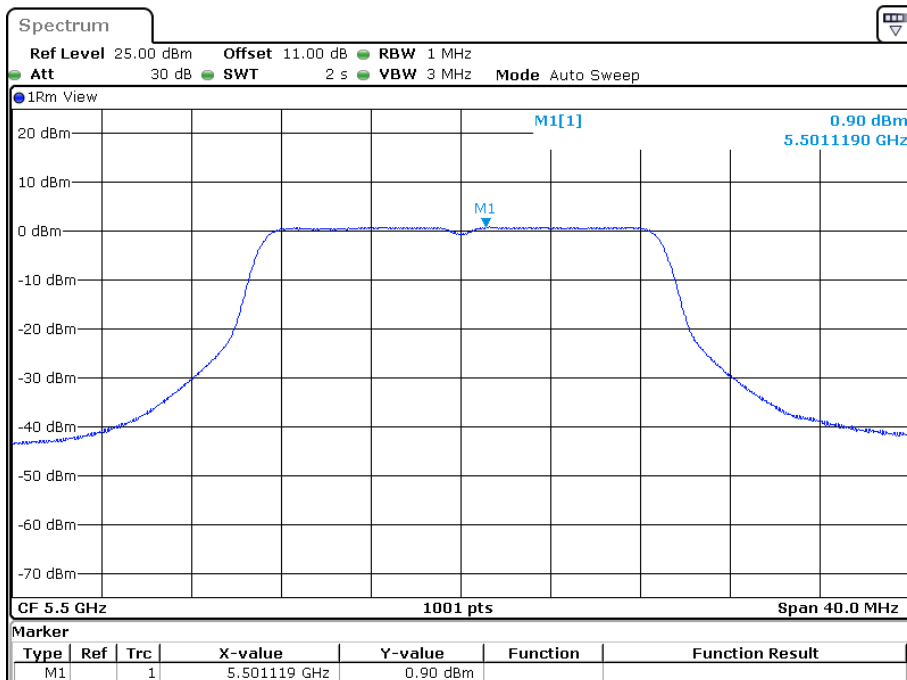


802.11a mode, Power Spectral Density, 5700MHz



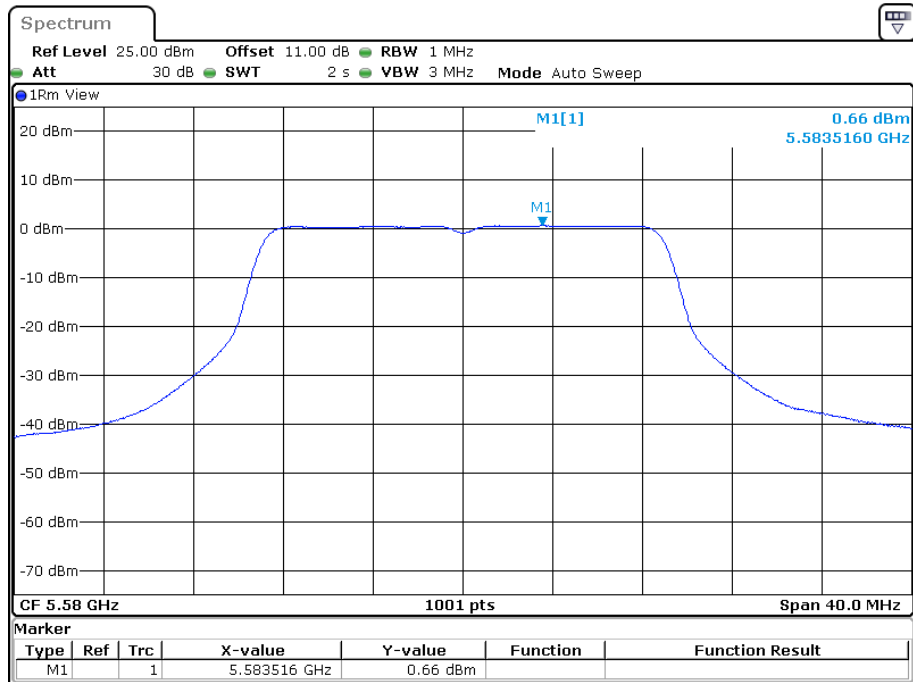
Date: 28.JUN.2022 23:08:46

802.11n20 mode, Power Spectral Density, 5500MHz



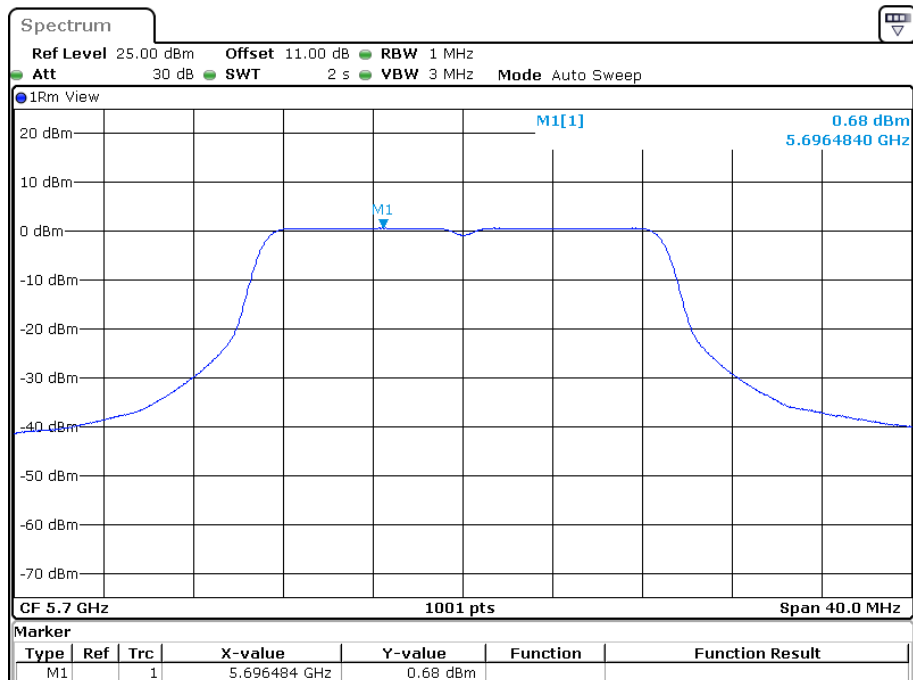
Date: 28.JUN.2022 23:42:41

802.11n20 mode, Power Spectral Density, 5580MHz



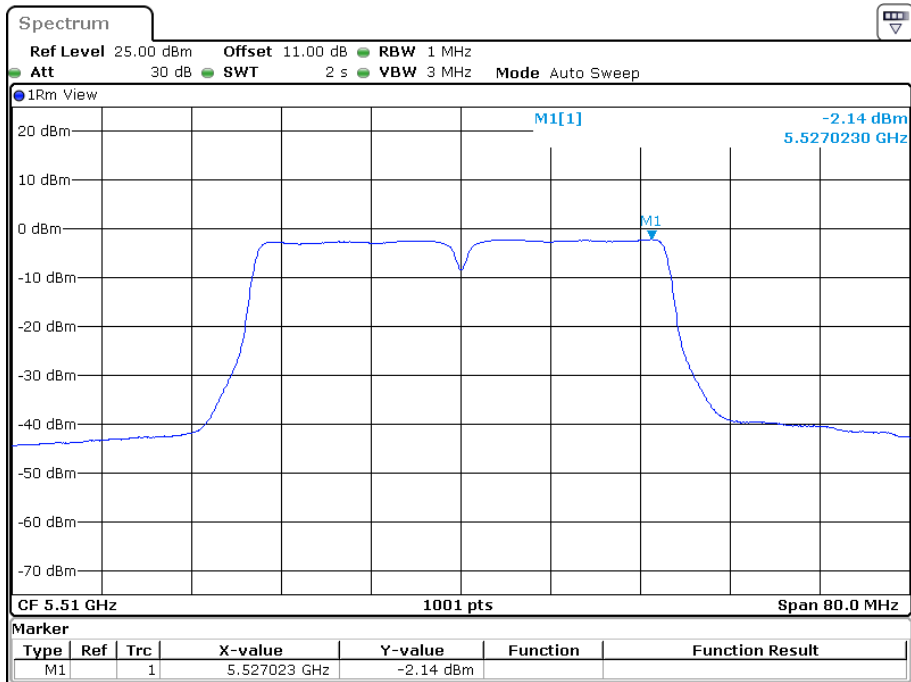
Date: 28.JUN.2022 23:45:09

802.11n20 mode, Power Spectral Density, 5700MHz



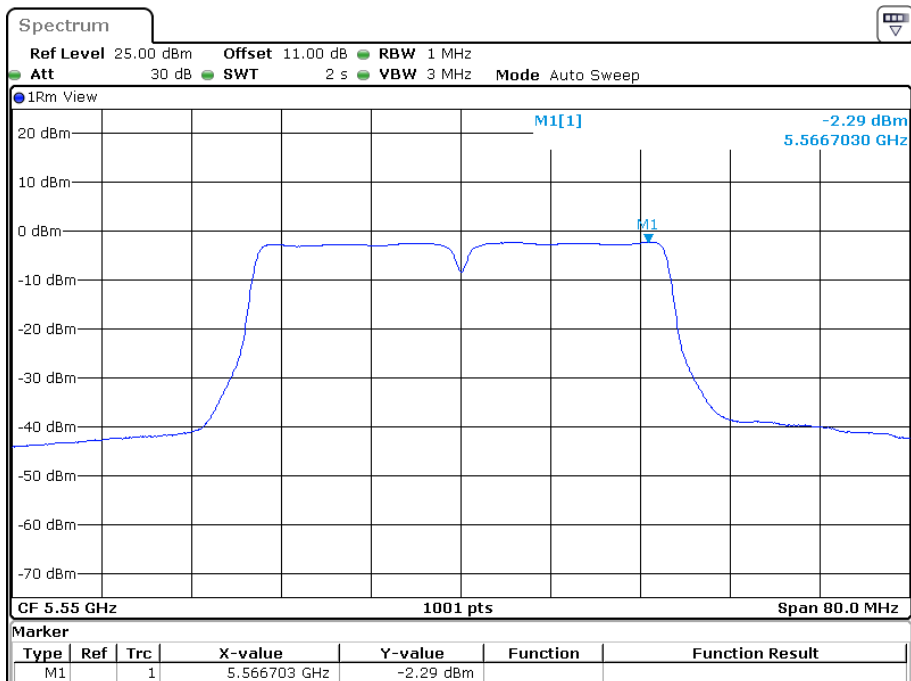
Date: 28.JUN.2022 23:47:37

802.11n40 mode, Power Spectral Density, 5510MHz



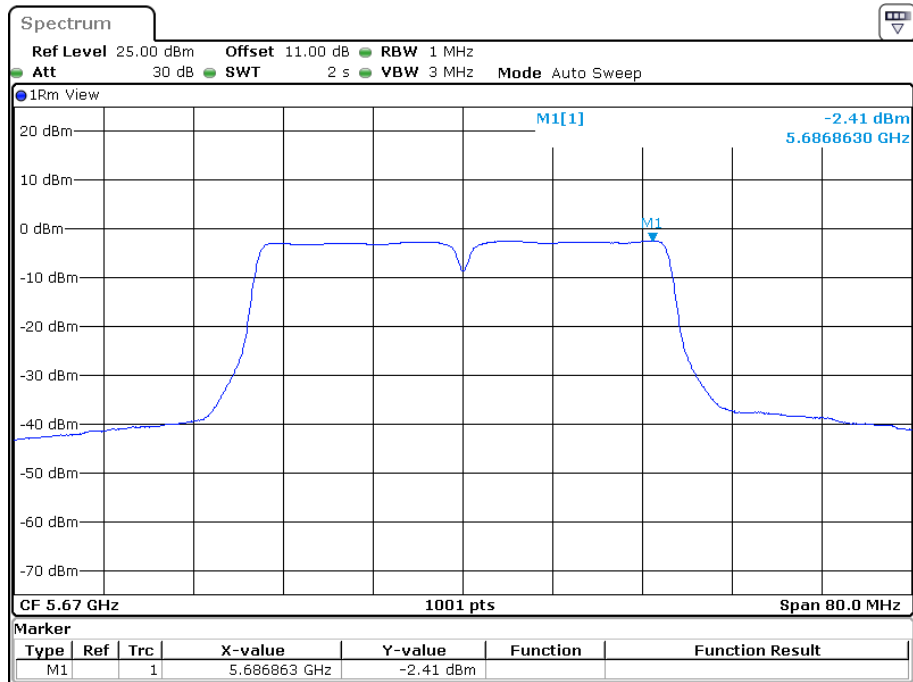
Date: 29.JUN.2022 01:38:41

802.11n40 mode, Power Spectral Density, 5550MHz



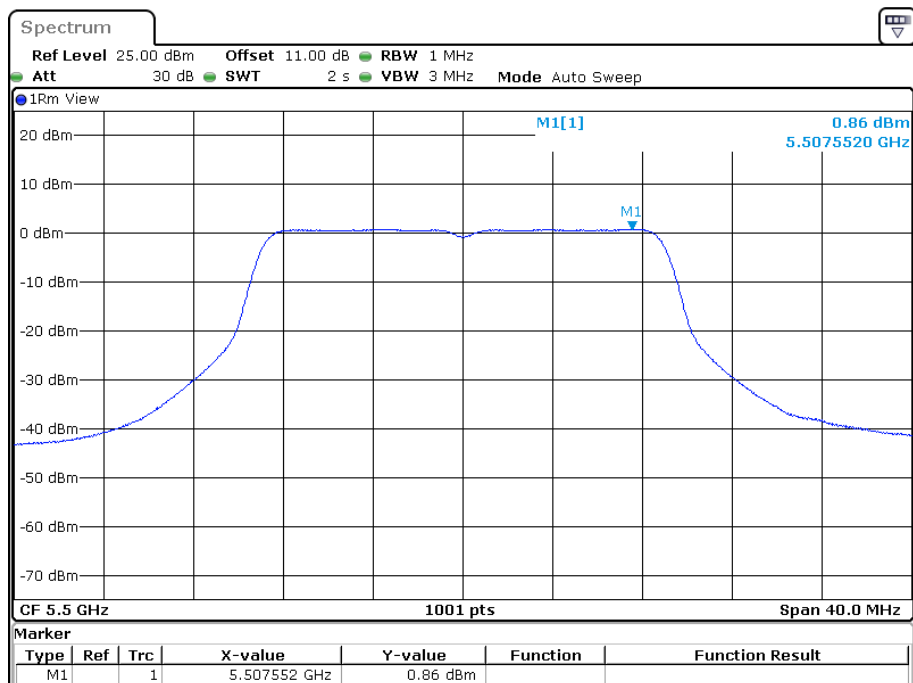
Date: 29.JUN.2022 01:41:10

802.11n40 mode, Power Spectral Density, 5670MHz



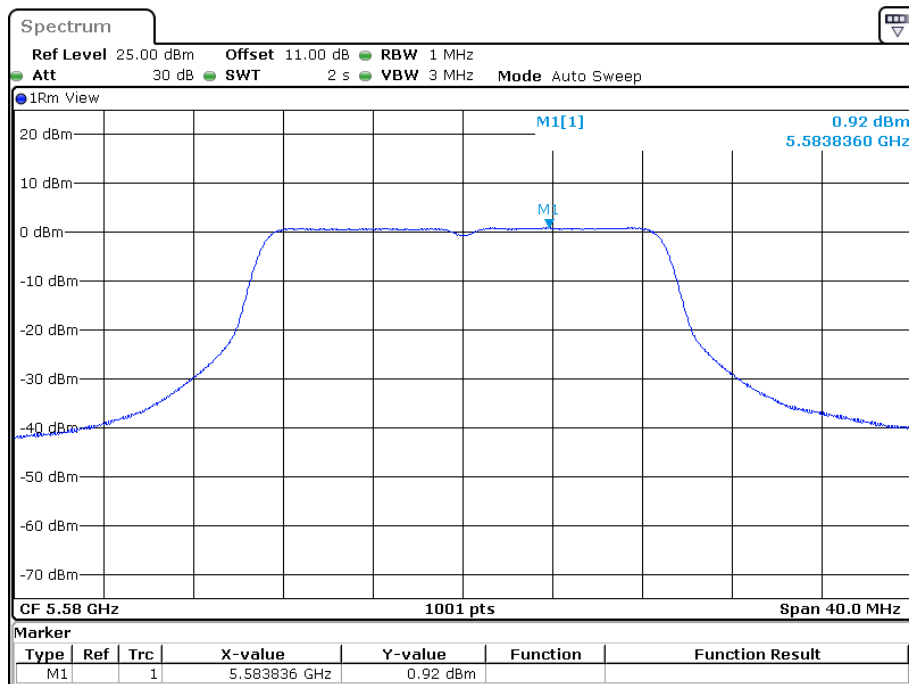
Date: 29.JUN.2022 01:43:46

802.11ac20 mode, Power Spectral Density, 5500 MHz



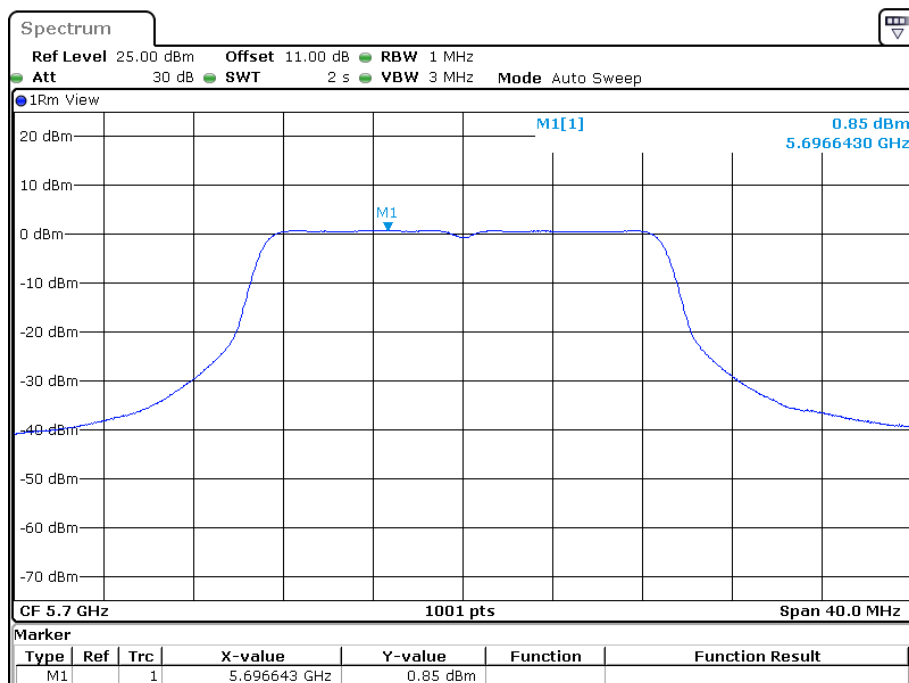
Date: 29.JUN.2022 23:47:35

802.11ac20 mode, Power Spectral Density, 5580MHz



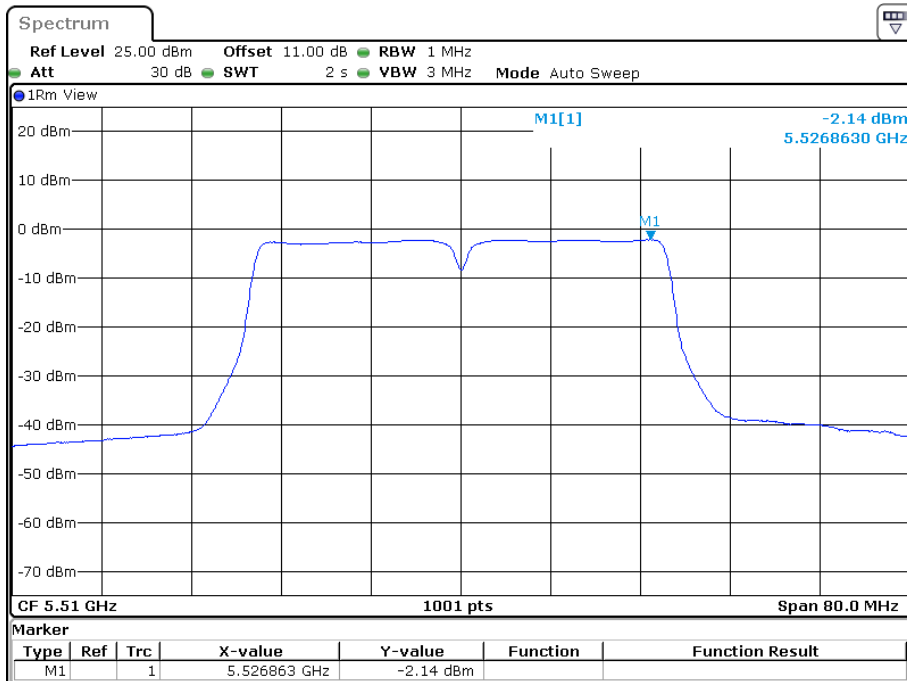
Date: 29.JUN.2022 23:50:08

802.11ac20 mode, Power Spectral Density, 5700MHz



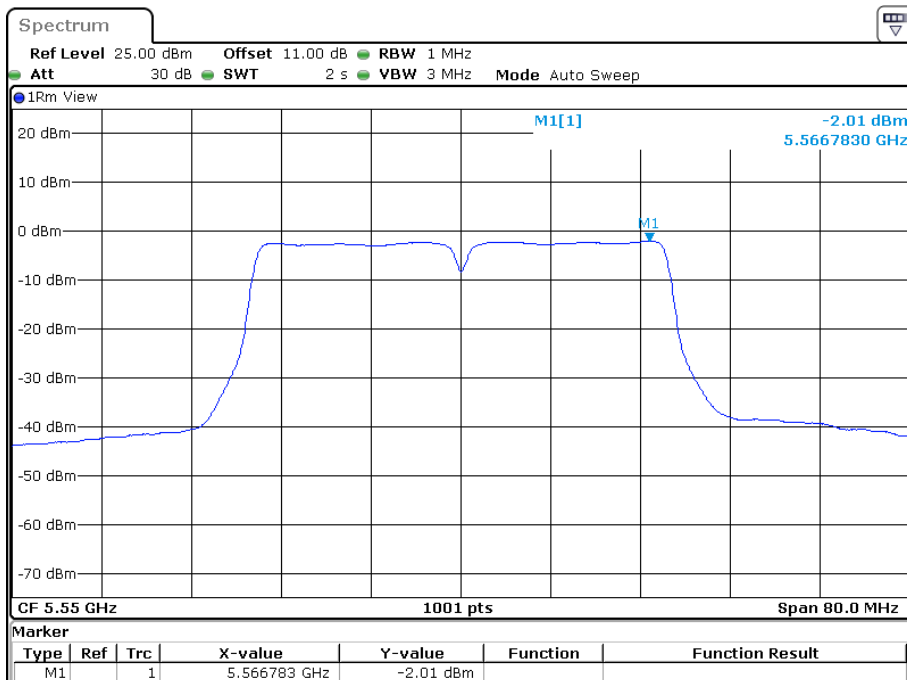
Date: 29.JUN.2022 23:52:40

802.11ac40 mode, Power Spectral Density, 5510MHz



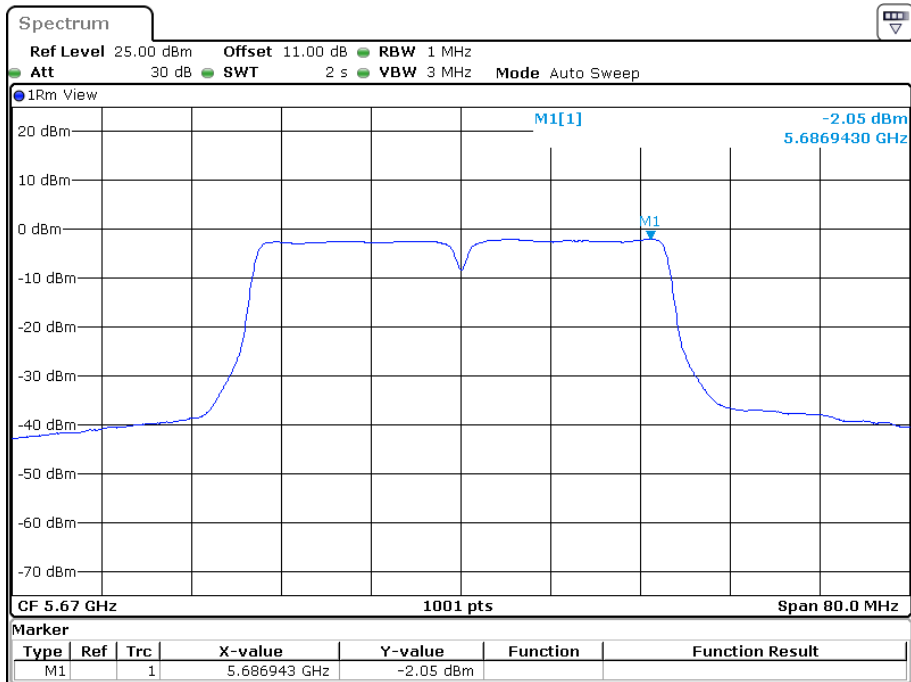
Date: 30.JUN.2022 00:07:31

802.11ac40 mode, Power Spectral Density, 5550MHz



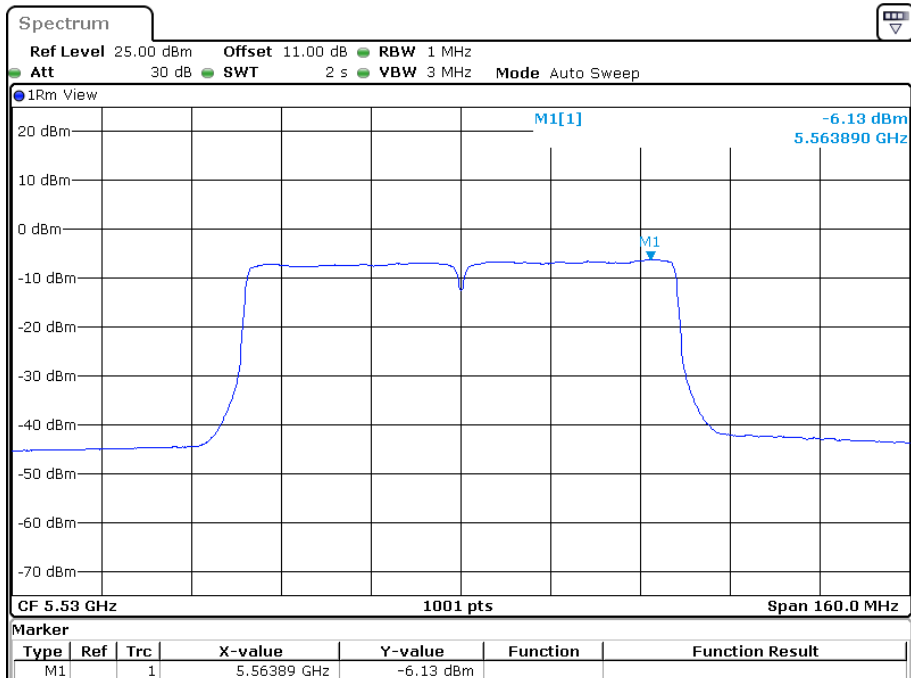
Date: 30.JUN.2022 00:10:12

802.11ac40 mode, Power Spectral Density, 5670MHz



Date: 30.JUN.2022 00:12:38

802.11ac80 mode, Power Spectral Density, 5530 MHz



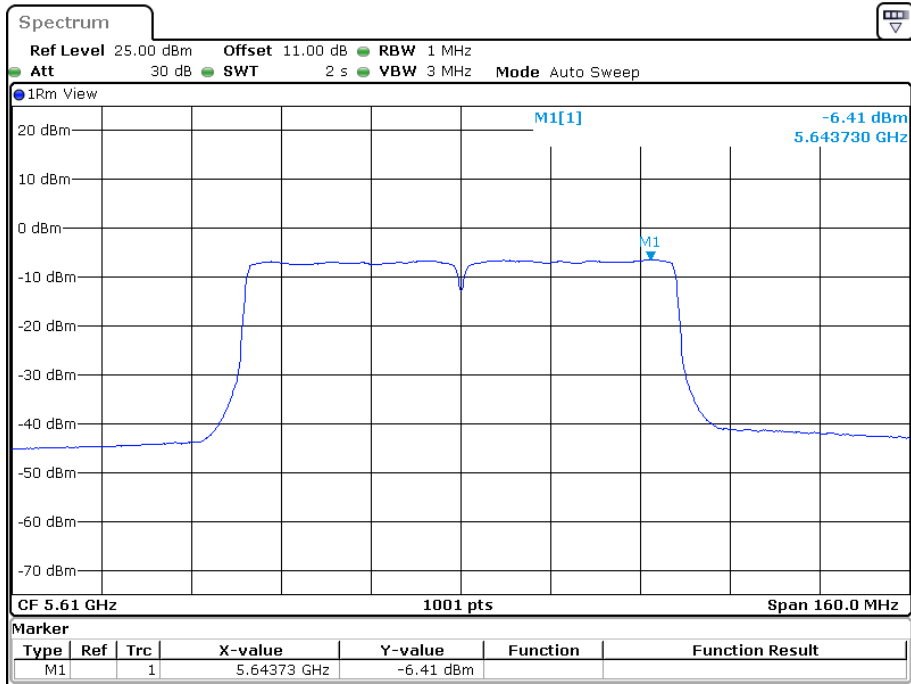
Date: 30.JUN.2022 01:10:32

Marker						
Type	Ref	Trc	X-value	Y-value	Function	Function Result
M1		1	5.61224 GHz	-11.23 dBm		

Date: 28.JUN.2022 00:29:16

0

802.11ac80 mode, Power Spectral Density, 5610 MHz



Date: 30.JUN.2022 01:13:02

5725 MHz – 5850MHz:

Frequency (MHz)	Antenna Port	Reading (dBm/500kHz)	Duty Cycle Factor (dB)	PSD (dBm/500kHz)	TotalPSD (dBm/500kHz)	Limit (dBm/500kHz)
802.11a						
5745	0	-1.94	/	-1.94	\	30
	1	0.96	/	0.96		
5785	0	-1.65	/	-1.65	\	
	1	1.18	/	1.18		
5825	0	-1.56	/	-1.56	\	
	1	1.48	/	1.48		
802.11n20						
5745	0	-1.52	/	-1.52	2.79	30
	1	0.78	/	0.78		
5785	0	-1.49	/	-1.49	2.83	
	1	0.83	/	0.83		
5825	0	-1.44	/	-1.44	3.21	
	1	1.39	/	1.39		
802.11n40						
5755	0	-4.48	0.16	-4.32	0	30
	1	-2.16	0.16	-2.00		
5795	0	-4.32	0.16	-4.16	0.16	
	1	-2.00	0.16	-1.84		
802.11ac20						
5745	0	-1.52	/	-1.52	2.84	30
	1	0.86	/	0.86		
5785	0	-1.50	/	-1.50	2.82	
	1	0.82	/	0.82		
5825	0	-1.34	/	-1.34	3.09	
	1	1.15	/	1.15		
802.11ac40						
5755	0	-4.38	0.17	-4.21	0.17	30
	1	-1.97	0.17	-1.80		
5795	0	-4.49	0.17	-4.32	0.29	
	1	-1.73	0.17	-1.56		
802.11ac80						
5775	0	-6.88	0.34	-6.54	-2.72	30
	1	-5.39	0.34	-5.05		

Note:

1) *Power Spectral Density = Reading + Duty Cycle Factor.*

2) *Duty Cycle Factor = $10 \log(1/D)$, $D = \text{Duty Cycle}$*

For 802.11n/ac mode, the EUT employ CDD

Directional Gain = $G_{ANT} + \text{Array Gain}$

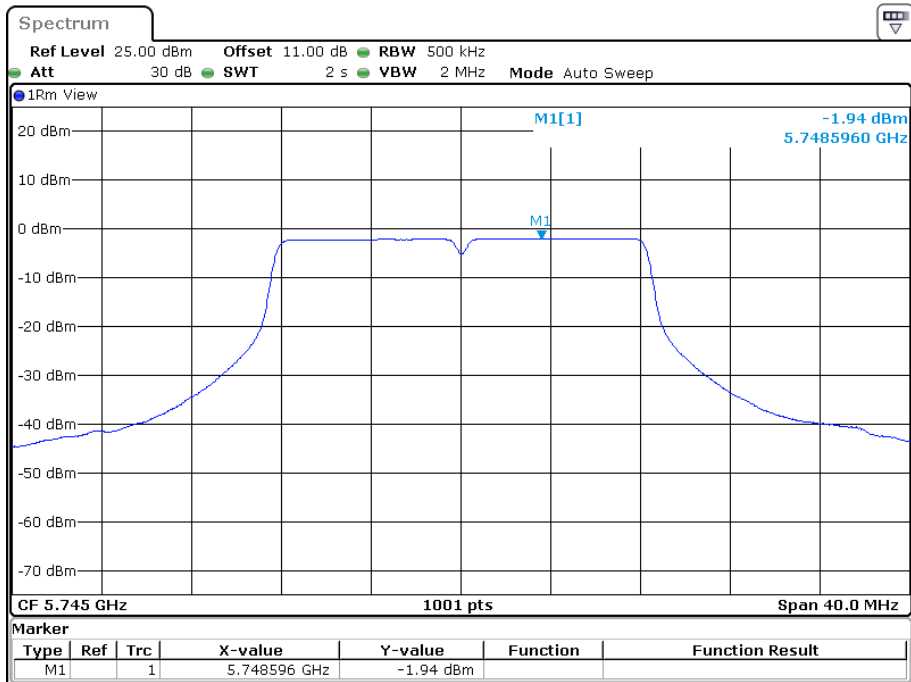
For PSD Measurement, *Array Gain = $10 * \log N_{ANT} = 10 * \log 2 = 3 \text{dB}$*

$G_{ANT} = 2.47 \text{dBi}$

Directional Gain = $2.47 \text{dBi} + 3 \text{dB} = 5.47 \text{dBi} < 6 \text{dBi}$

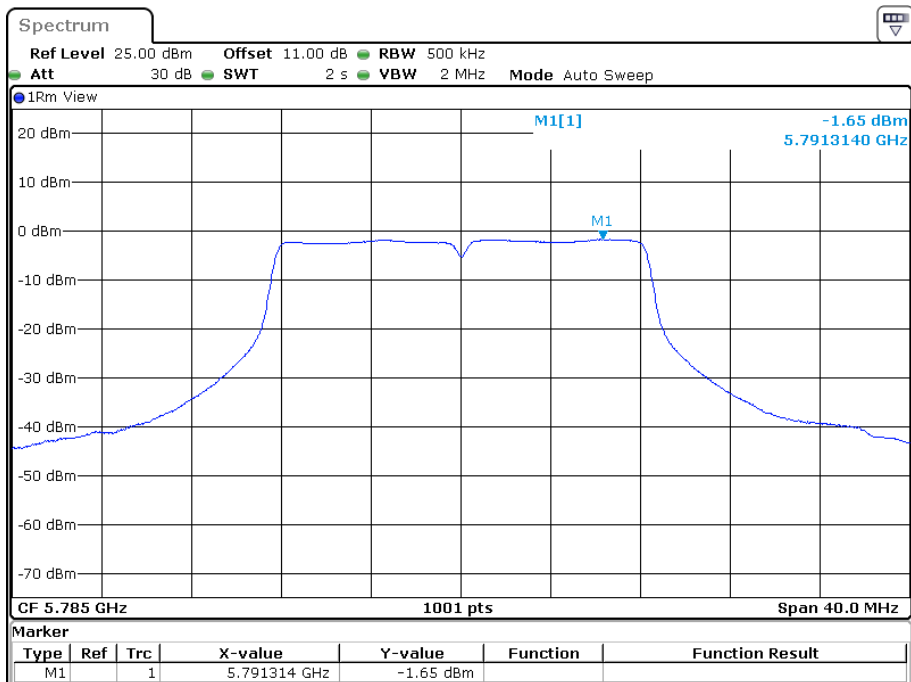
ANT0:

802.11a mode, Power Spectral Density, 5745MHz



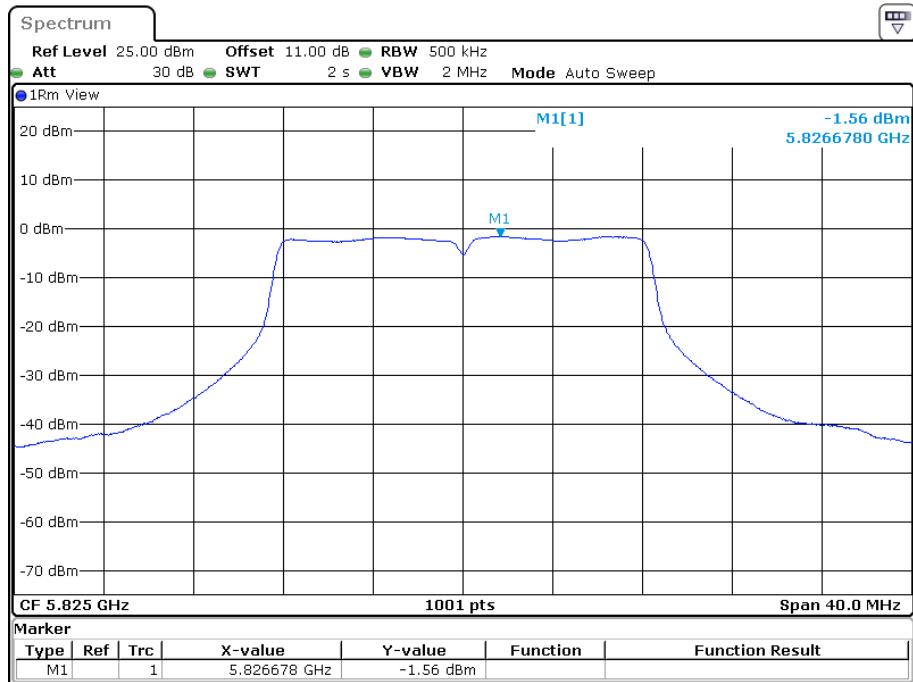
Date: 28.JUN.2022 22:02:22

802.11a mode, Power Spectral Density, 5785MHz



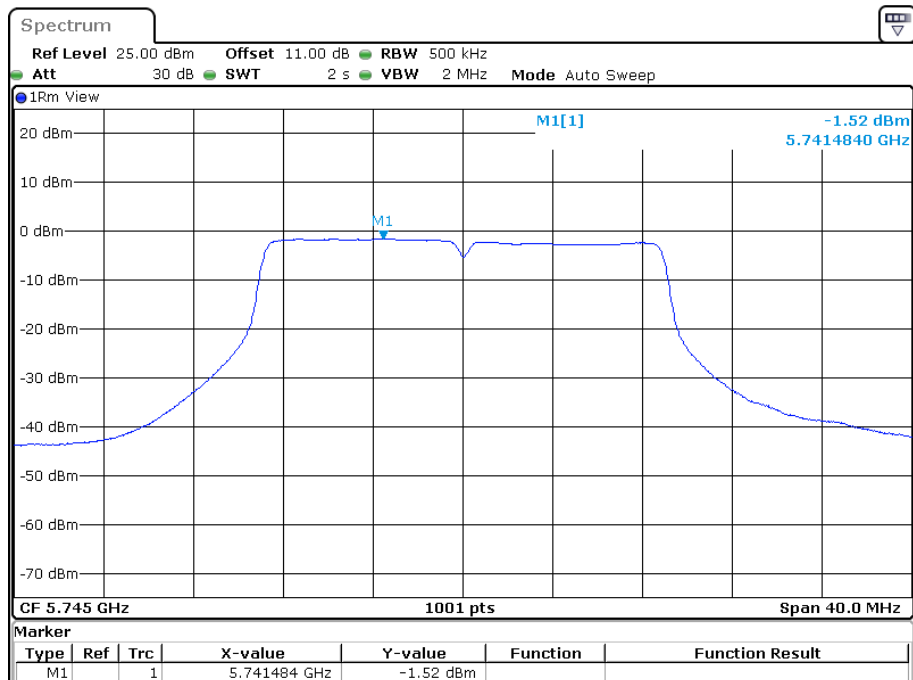
Date: 28.JUN.2022 22:05:03

802.11a mode, Power Spectral Density, 5825MHz



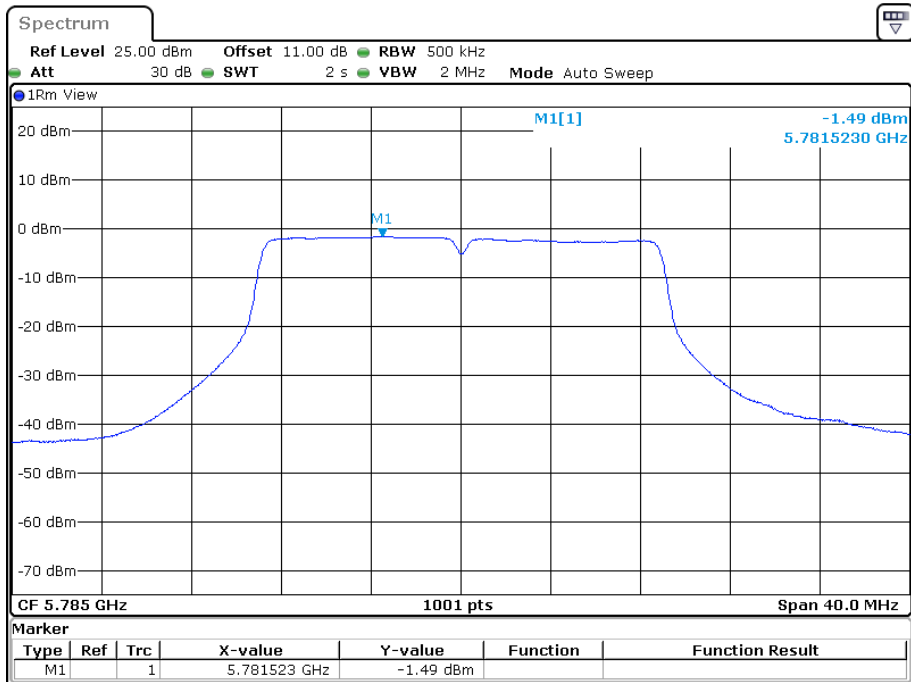
Date: 28.JUN.2022 22:07:33

802.11n20 mode, Power Spectral Density, 5745MHz



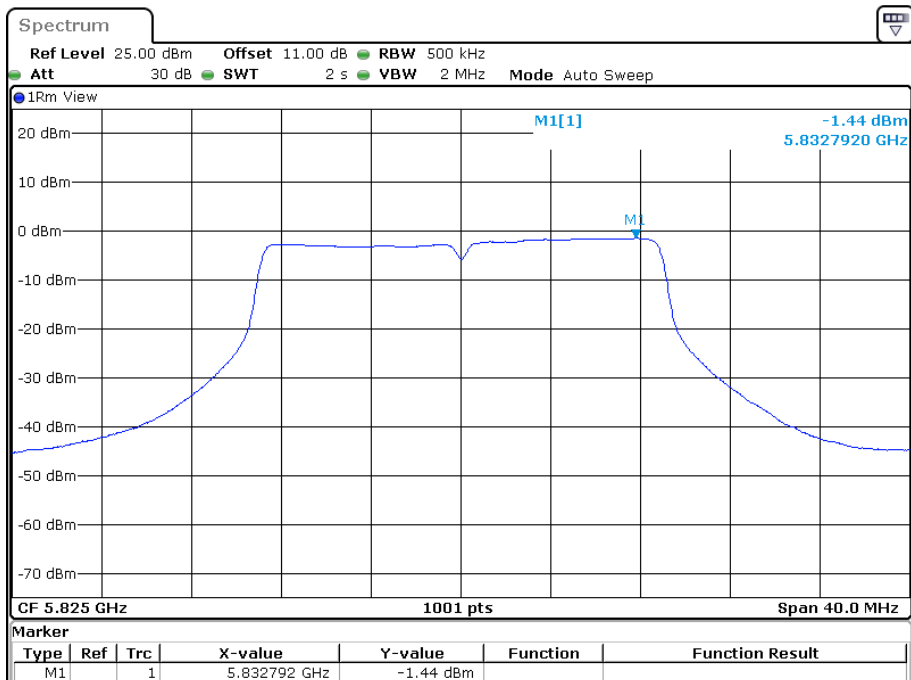
Date: 29.JUN.2022 00:03:42

802.11n20 mode, Power Spectral Density, 5785MHz



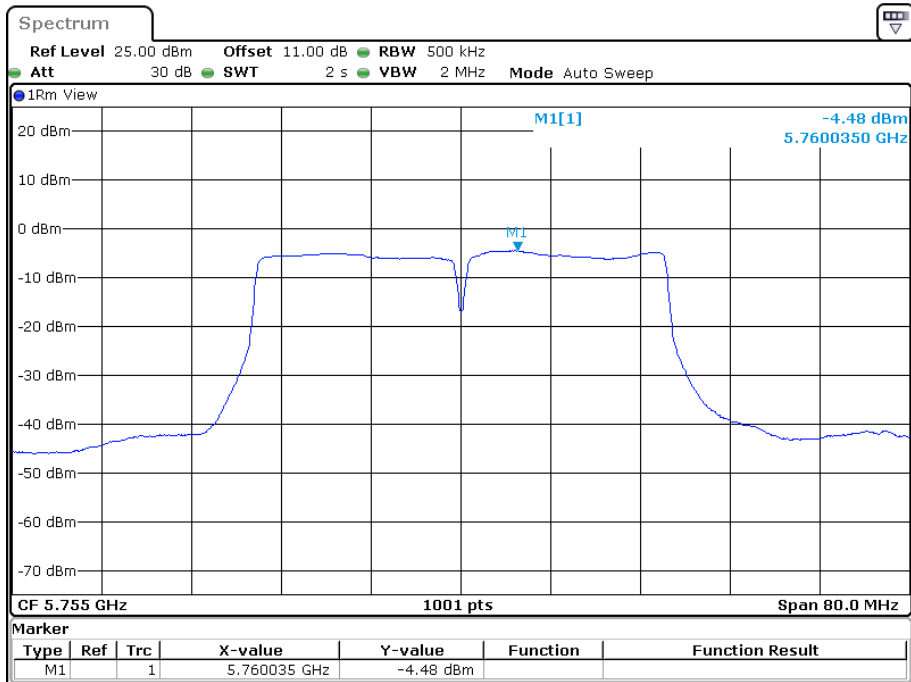
Date: 29.JUN.2022 00:00:48

802.11n20 mode, Power Spectral Density, 5825MHz



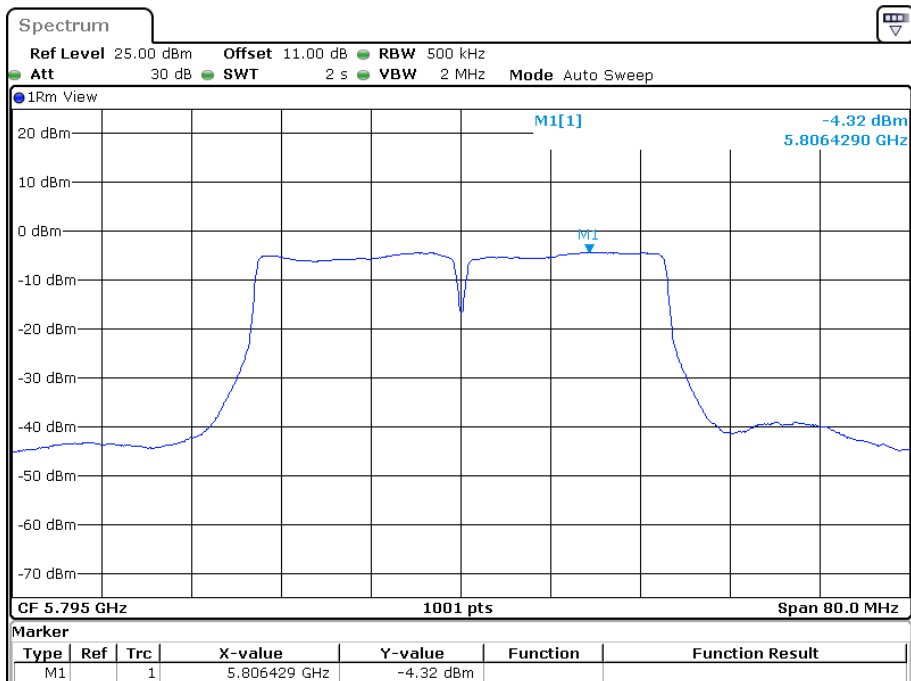
Date: 28.JUN.2022 23:57:49

802.11n40 mode, Power Spectral Density, 5755MHz



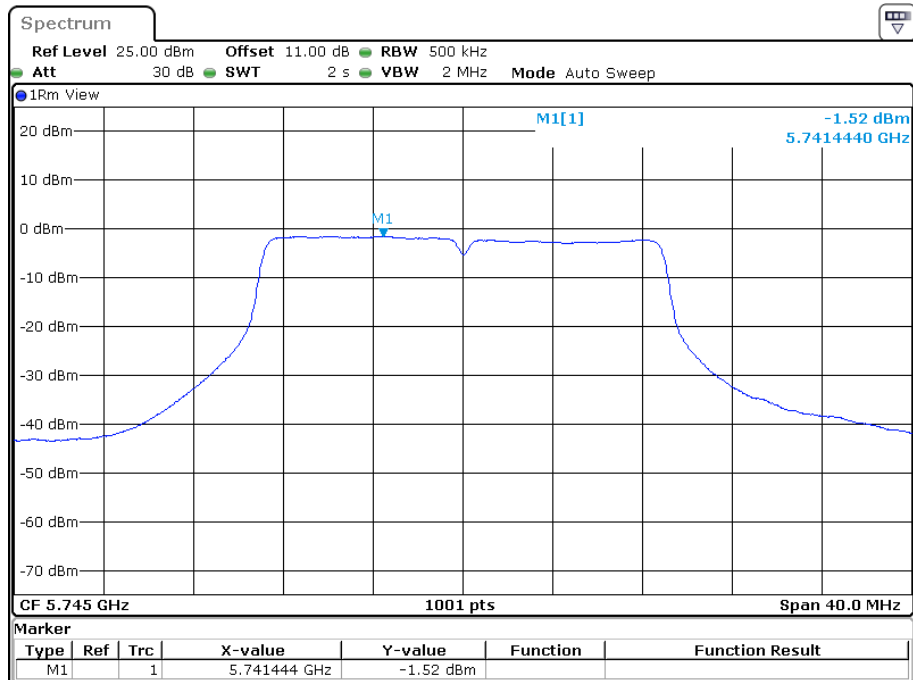
Date: 29.JUN.2022 00:49:07

802.11n40 mode, Power Spectral Density, 5795MHz



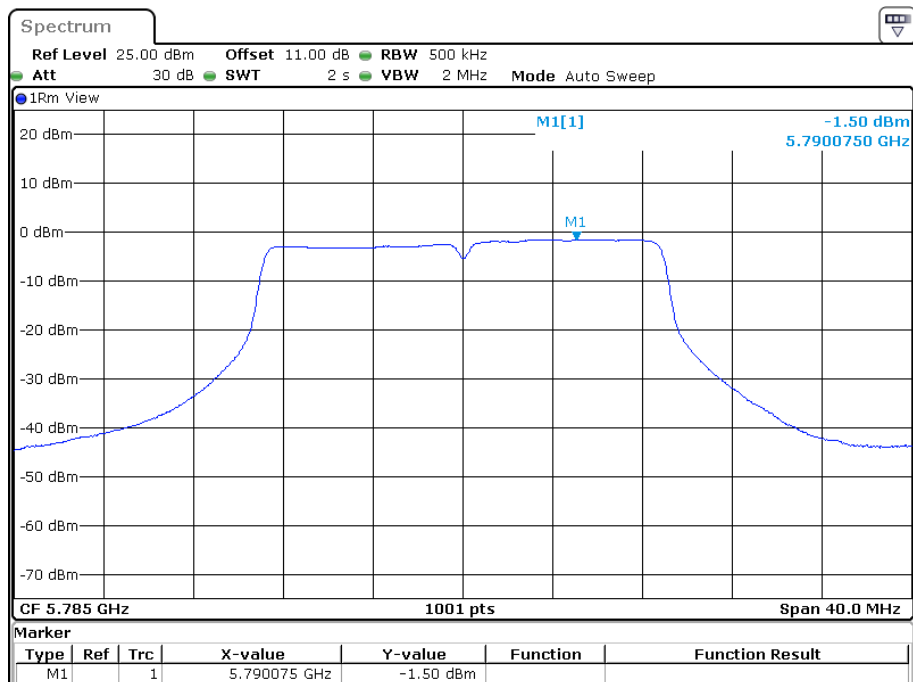
Date: 29.JUN.2022 00:51:39

802.11ac20 mode, Power Spectral Density, 5745 MHz



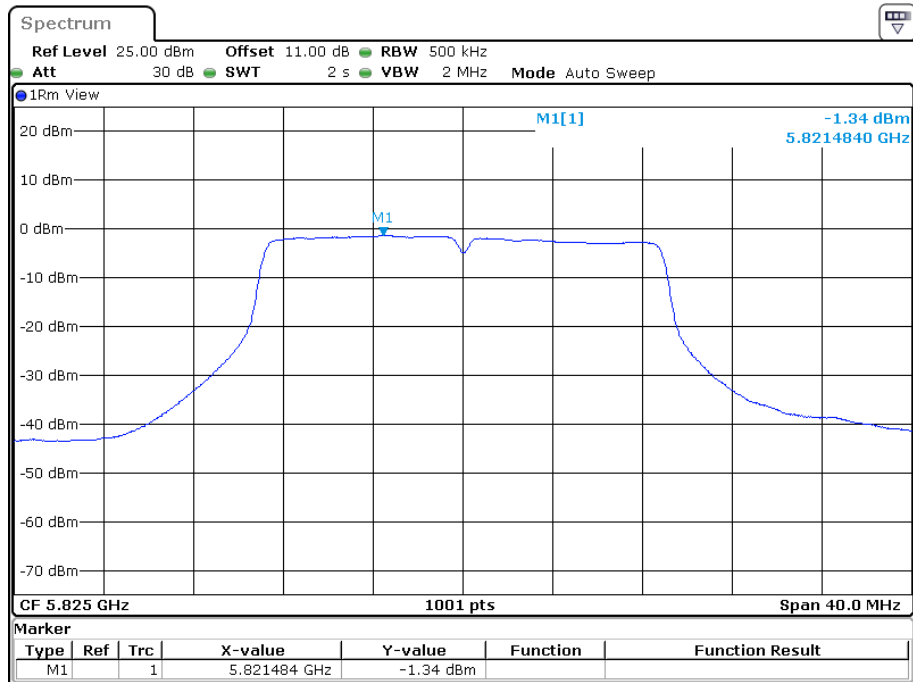
Date: 29.JUN.2022 23:11:57

802.11ac20 mode, Power Spectral Density, 5785MHz



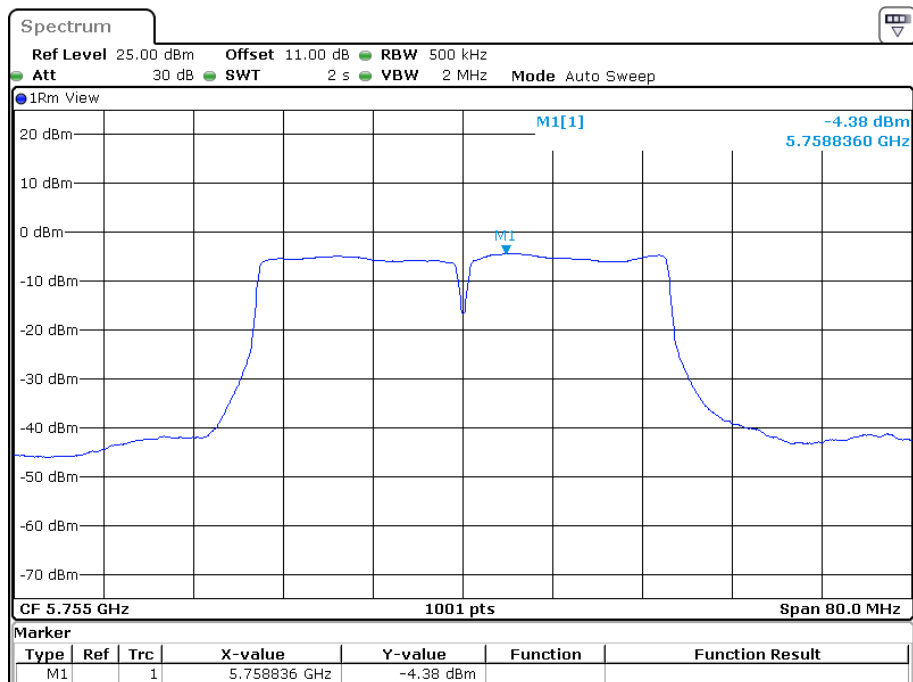
Date: 29.JUN.2022 23:14:21

802.11ac20 mode, Power Spectral Density, 5825MHz



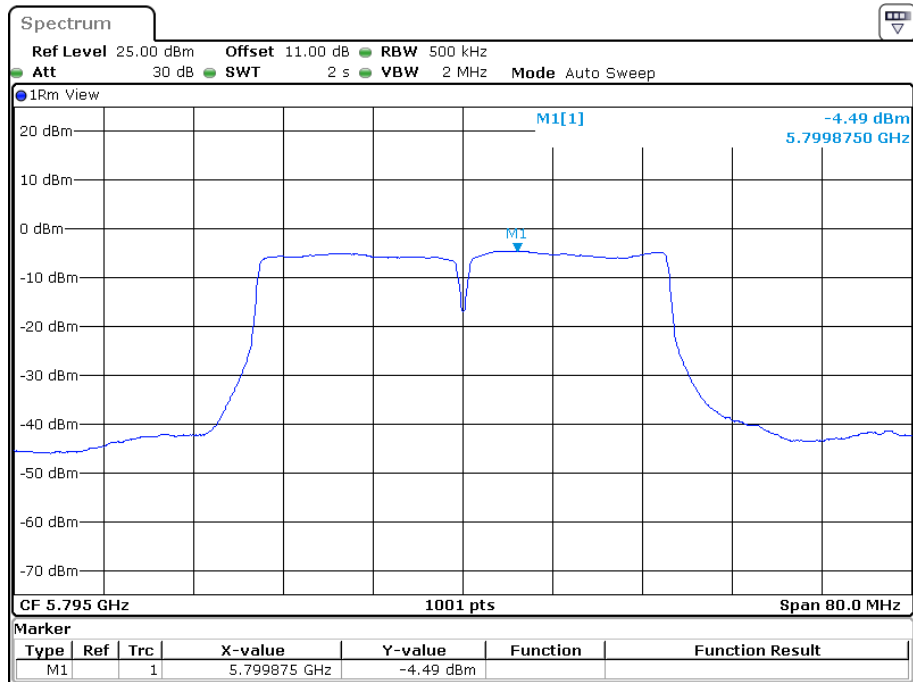
Date: 29.JUN.2022 23:16:53

802.11ac40 mode, Power Spectral Density, 5755MHz



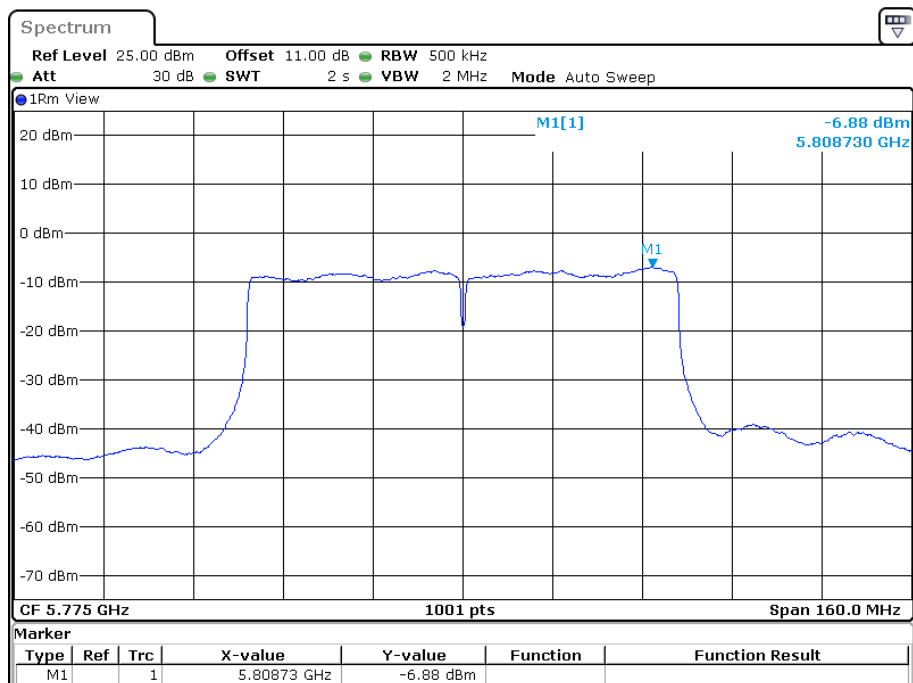
Date: 30.JUN.2022 00:23:27

802.11ac40 mode, Power Spectral Density, 5795MHz



Date: 30.JUN.2022 00:21:01

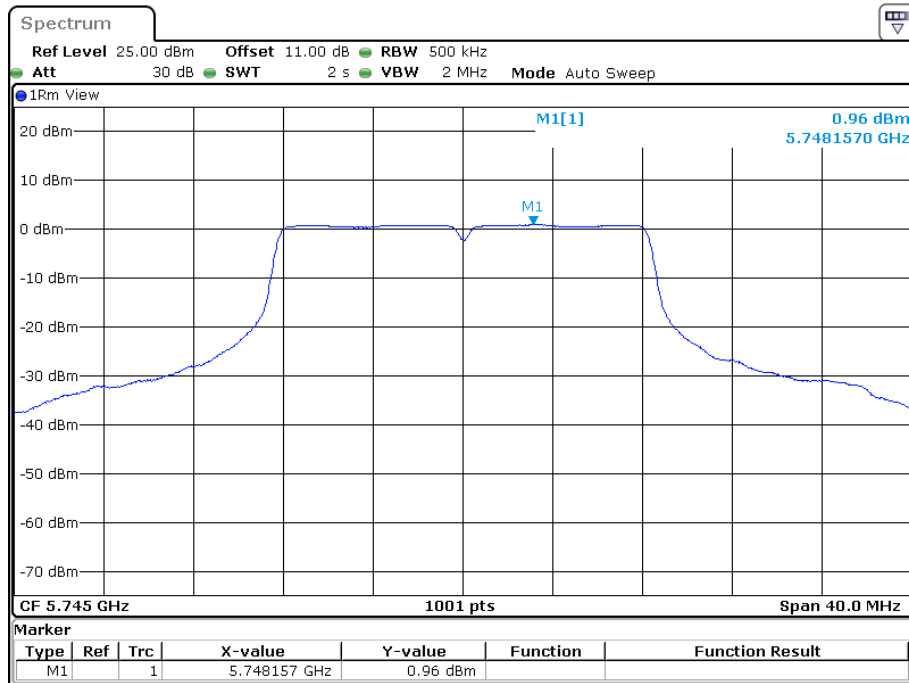
802.11ac80 mode, Power Spectral Density, 5775 MHz



Date: 30.JUN.2022 00:59:56

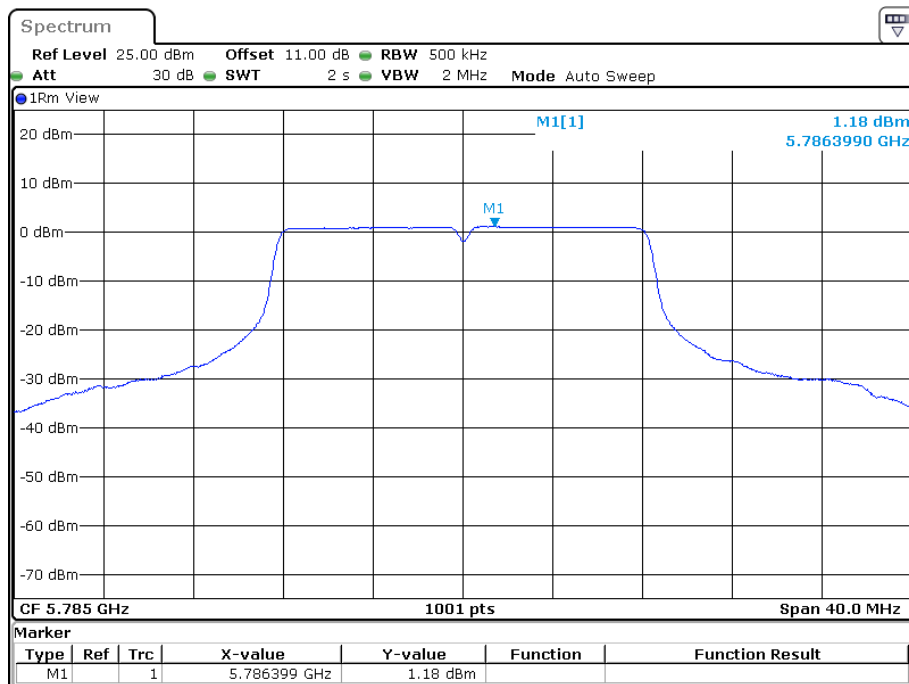
ANT1:

802.11a mode, Power Spectral Density, 5745MHz



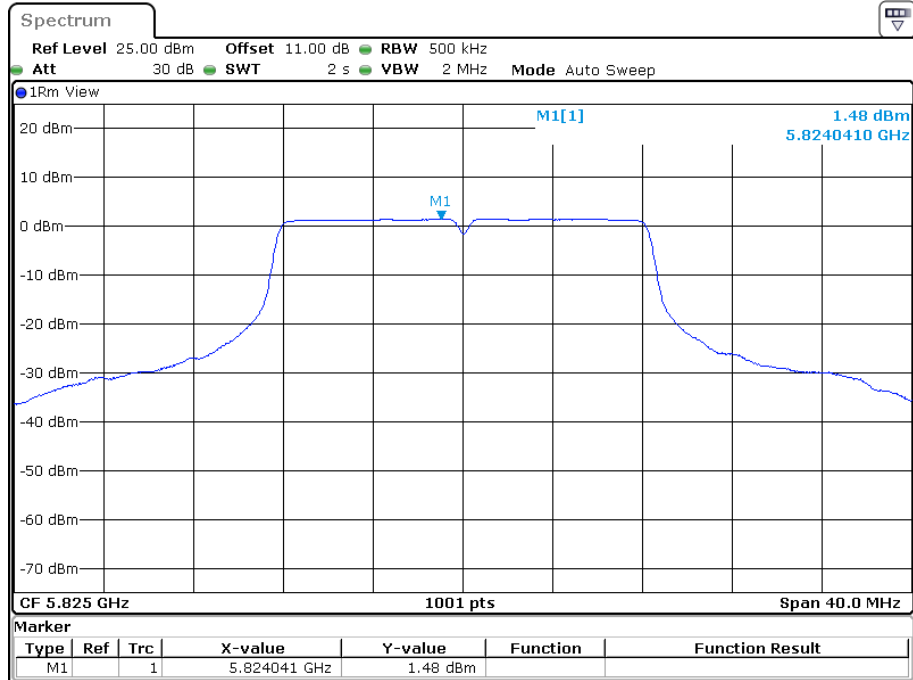
Date: 28.JUN.2022 23:14:00

802.11a mode, Power Spectral Density, 5785MHz



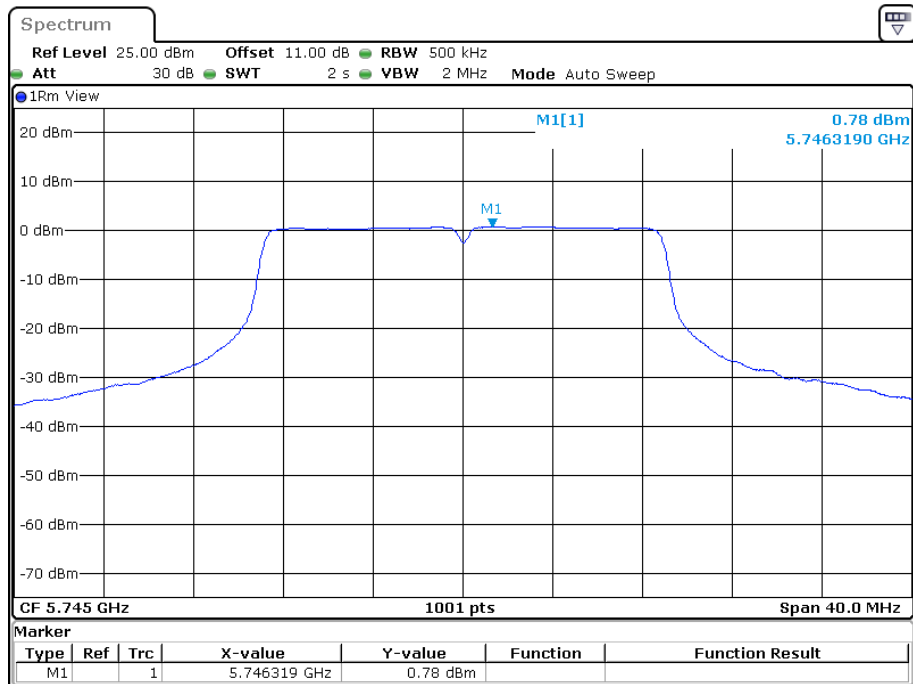
Date: 28.JUN.2022 23:16:28

802.11a mode, Power Spectral Density, 5825MHz



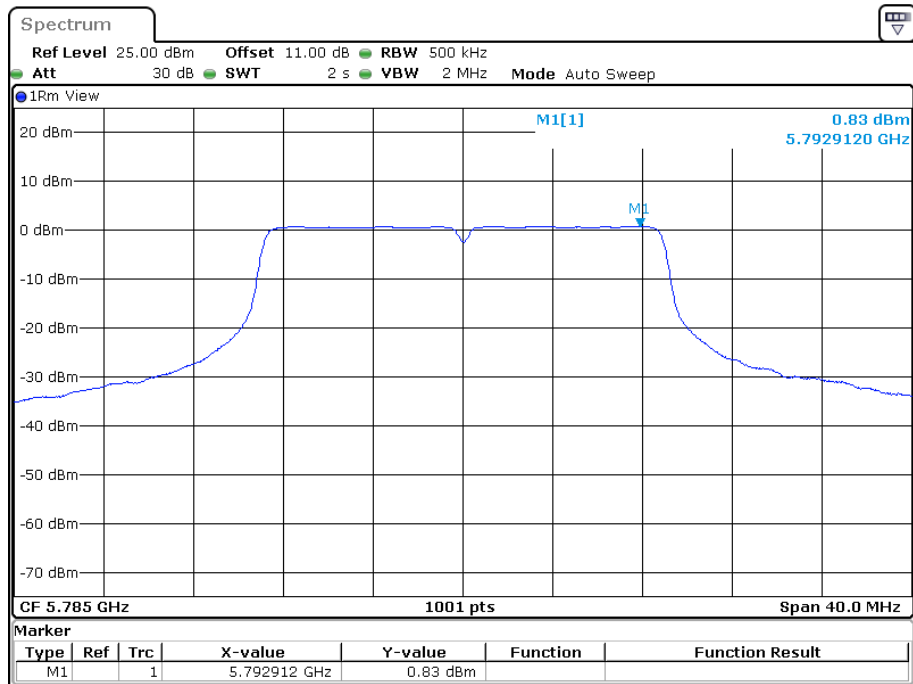
Date: 28.JUN.2022 23:18:52

802.11n20 mode, Power Spectral Density, 5745MHz



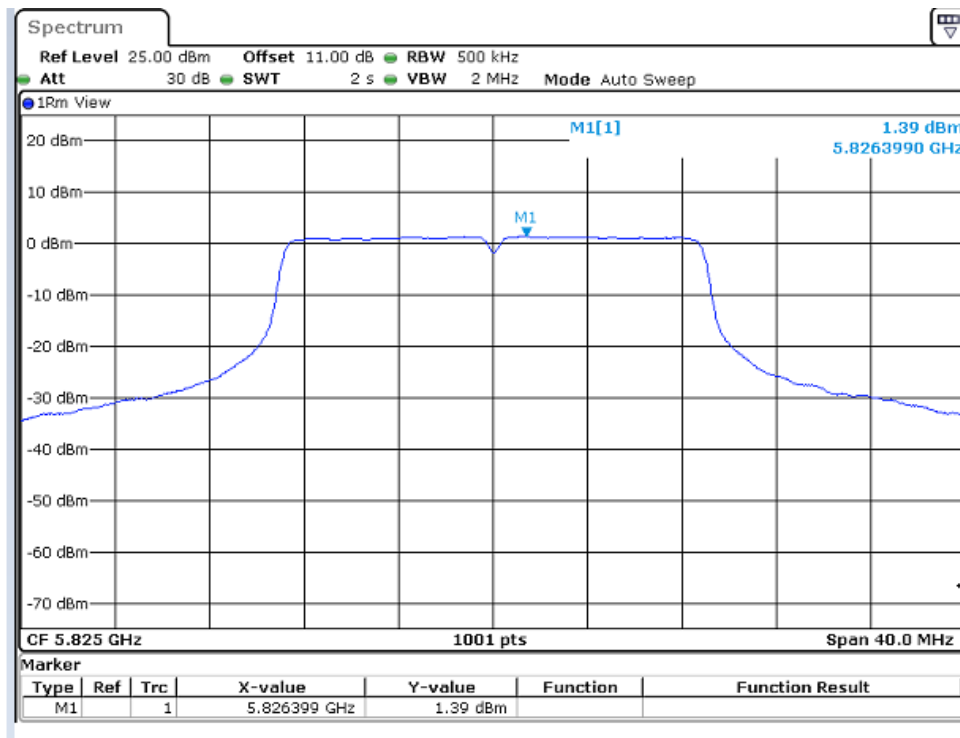
Date: 28.JUN.2022 23:50:13

802.11n20 mode, Power Spectral Density, 5785MHz

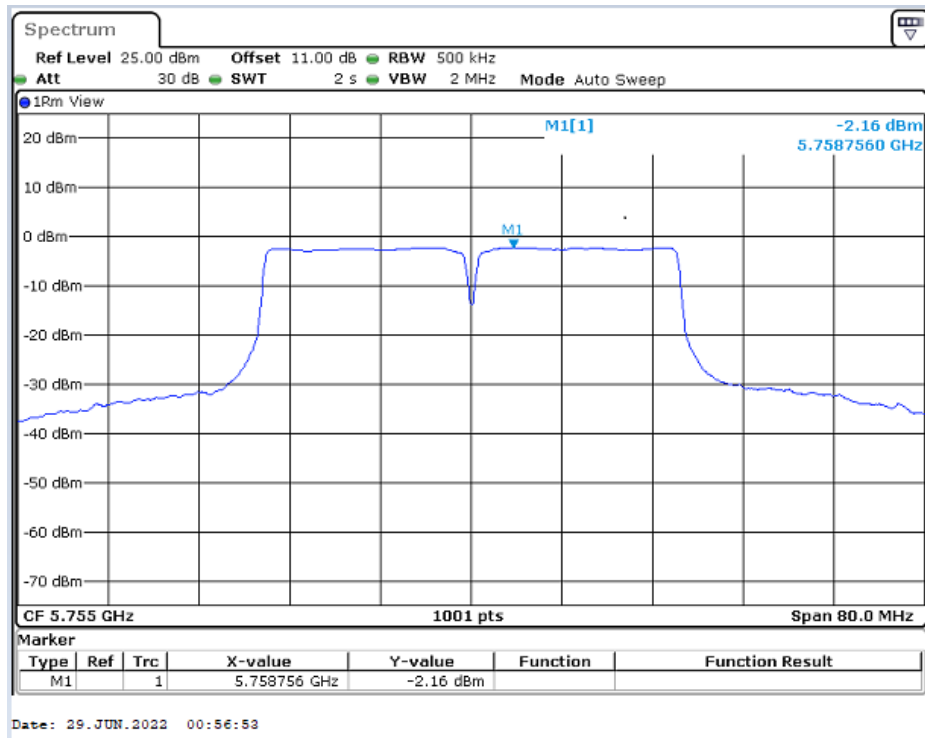


Date: 28.JUN.2022 23:52:39

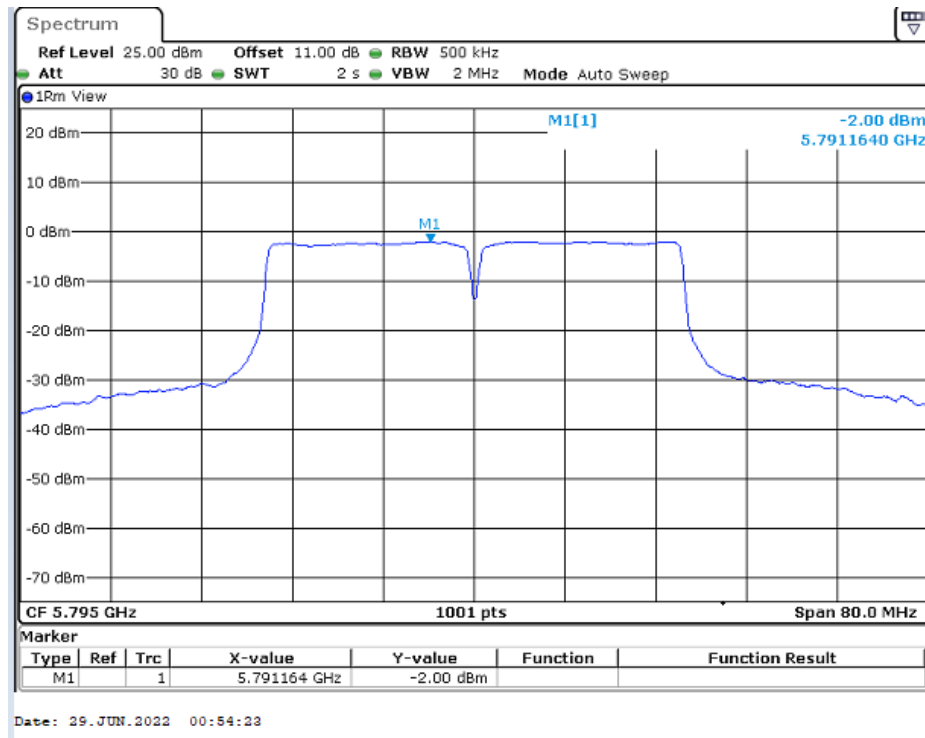
802.11n20 mode, Power Spectral Density, 5825MHz



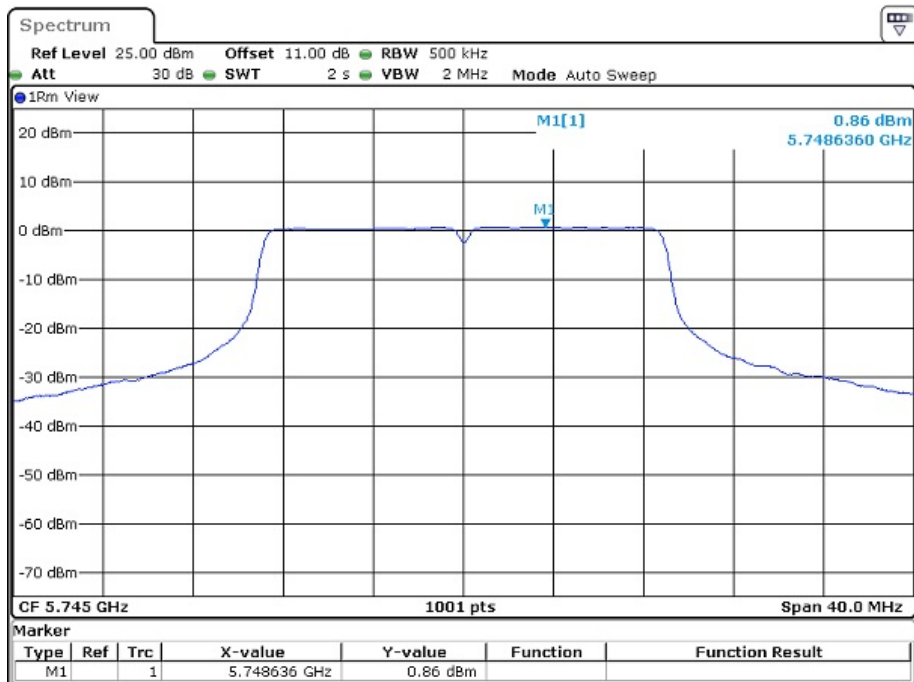
802.11n40 mode, Power Spectral Density, 5755MHz



802.11n40 mode, Power Spectral Density, 5795MHz

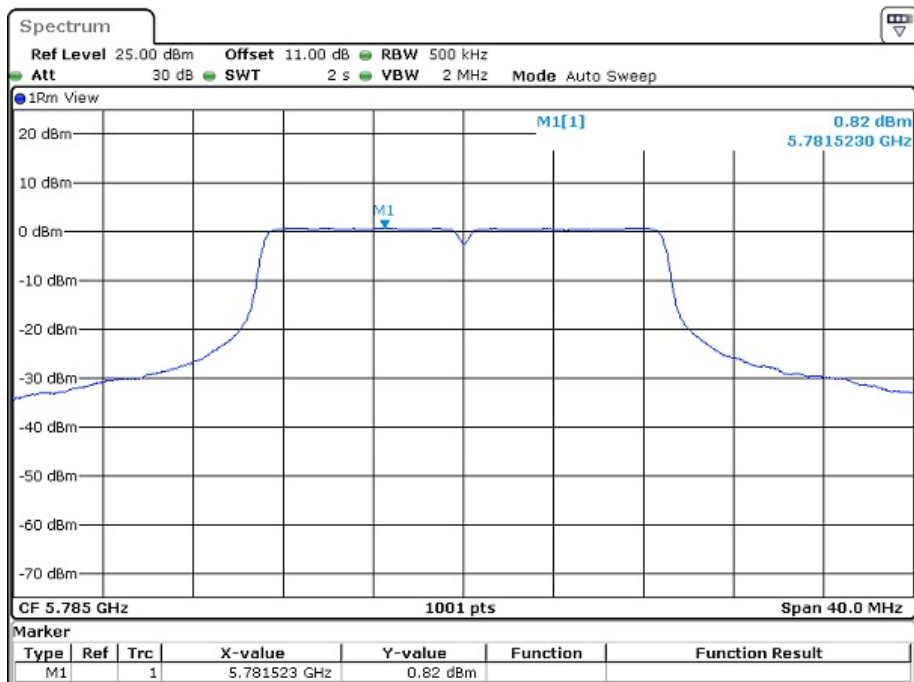


802.11ac20 mode, Power Spectral Density, 5745 MHz



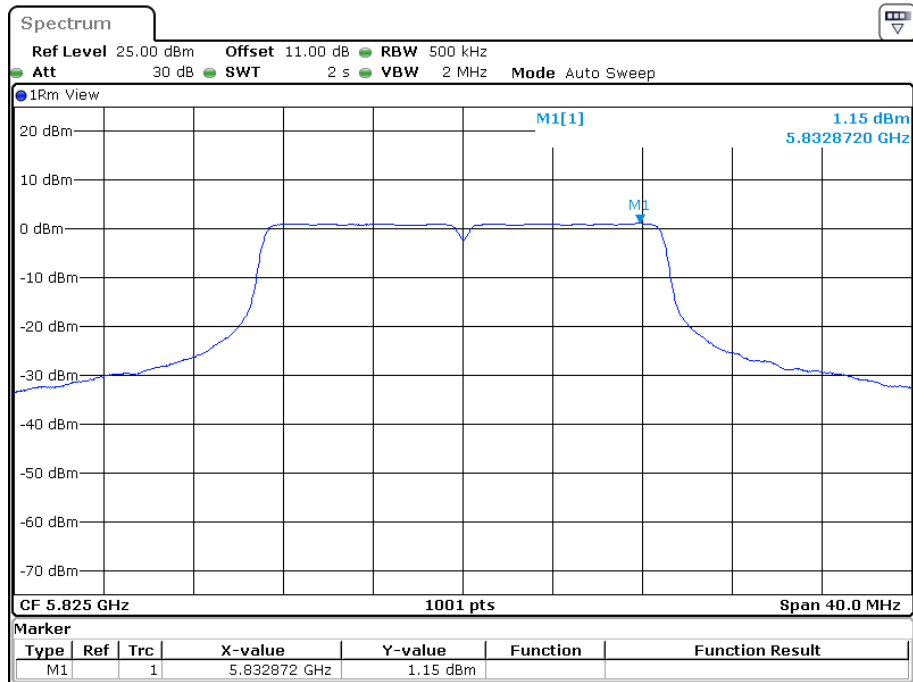
Date: 29 JUN 2022 23:24:39

802.11ac20 mode, Power Spectral Density, 5785MHz



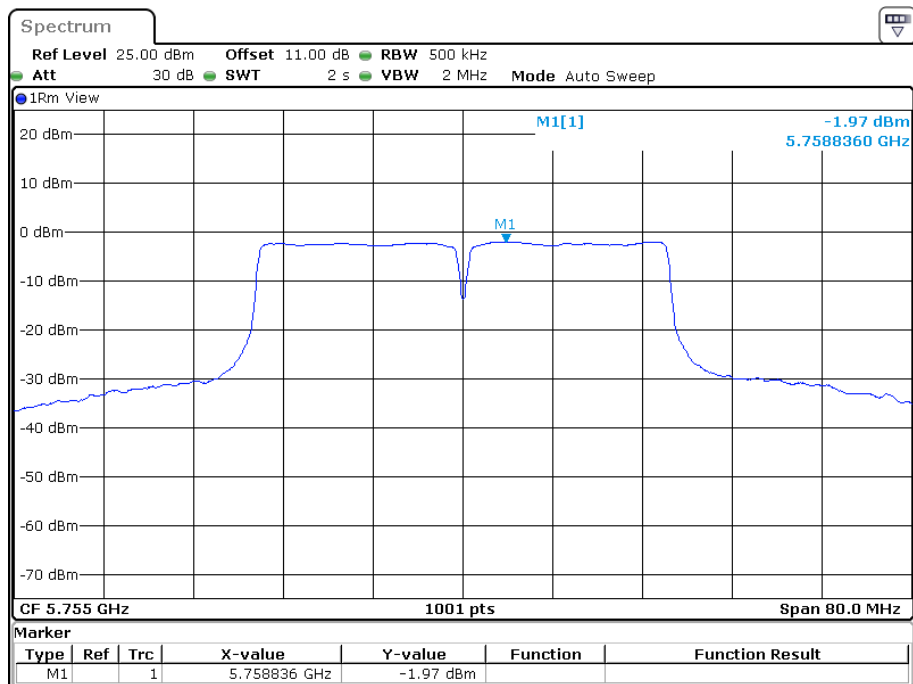
Date: 29 JUN 2022 23:22:13

802.11ac20 mode, Power Spectral Density, 5825MHz



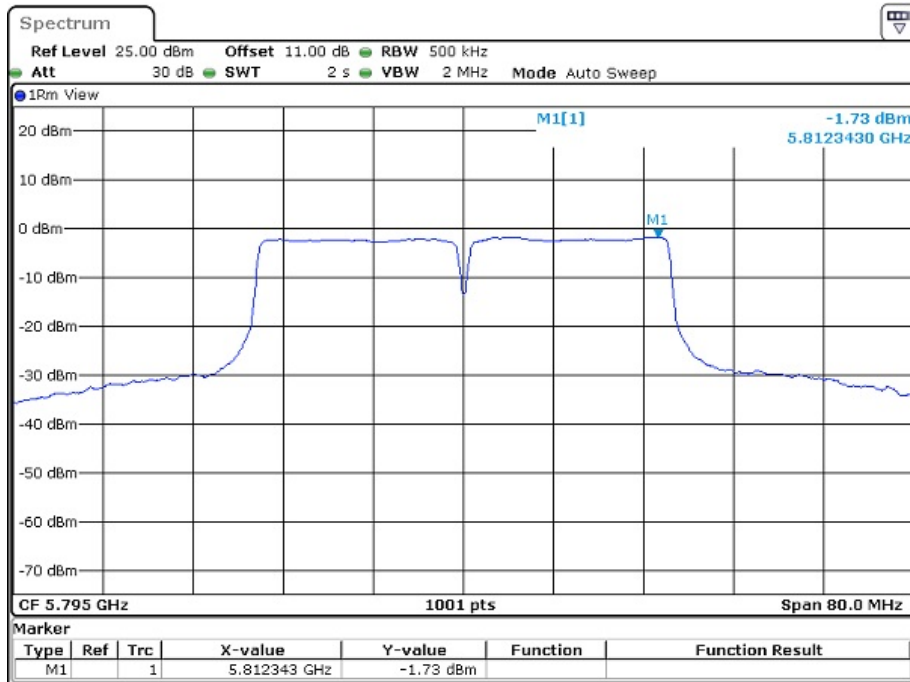
Date: 29.JUN.2022 23:19:37

802.11ac40 mode, Power Spectral Density, 5755MHz



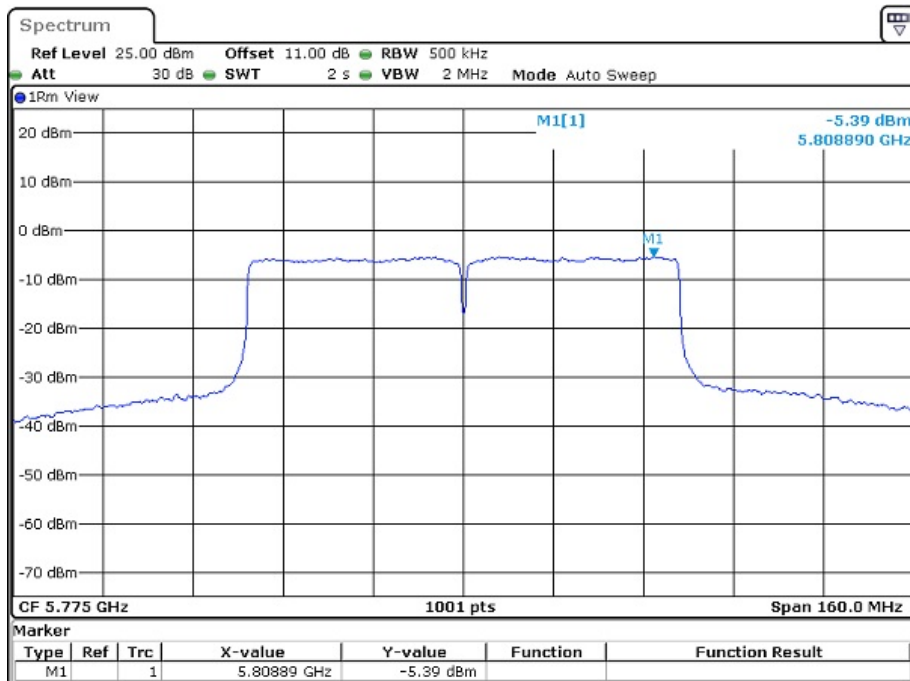
Date: 30.JUN.2022 00:15:07

802.11ac40 mode, Power Spectral Density, 5795MHz



Date: 30 JUN 2022 00:17:38

802.11ac80 mode, Power Spectral Density, 5775 MHz



Date: 30 JUN 2022 01:02:39

***** END OF REPORT *****