

802.11ax HE40 Mode:

5775 MHz									
Horizontal					Vertical				
Freq.	Reading	Factor	Level	Limit	Margin	Height	Degree	Remark	
MHz	dBuV	dB/m	dBuV/m	dBuV/m	dB	(cm)	(°)		
11510.000	31.23	7.22	38.45	54.00	-15.55	153	357	Average	
11510.000	40.43	7.22	47.65	74.00	-26.35	153	357	Peak	
17265.000	55.11	11.88	66.99	68.20	-1.21	100	337	Peak	

5795 MHz									
Horizontal					Vertical				
Freq.	Reading	Factor	Level	Limit	Margin	Height	Degree	Remark	
MHz	dBuV	dB/m	dBuV/m	dBuV/m	dB	(cm)	(°)		
11590.000	31.35	7.18	38.53	54.00	-15.47	146	298	Average	
11590.000	40.70	7.18	47.88	74.00	-26.12	146	298	Peak	
17385.000	54.17	12.56	66.73	68.20	-1.47	194	331	Peak	

802.11ax HE80 Mode:

5775 MHz									
Horizontal					Vertical				
Freq.	Reading	Factor	Level	Limit	Margin	Height	Degree	Remark	
MHz	dBuV	dB/m	dBuV/m	dBuV/m	dB	(cm)	(°)		
11550.000	31.99	7.21	39.20	54.00	-14.80	148	103	Average	
11550.000	42.04	7.21	49.25	74.00	-24.75	148	103	Peak	
17325.000	53.47	12.13	65.60	68.20	-2.60	199	331	Peak	

5795 MHz									
Horizontal					Vertical				
Freq.	Reading	Factor	Level	Limit	Margin	Height	Degree	Remark	
MHz	dBuV	dB/m	dBuV/m	dBuV/m	dB	(cm)	(°)		
11550.000	37.42	7.21	44.63	54.00	-9.37	100	4	Average	
11550.000	47.24	7.21	54.45	74.00	-19.55	100	4	Peak	
17325.000	50.24	12.13	62.37	68.20	-5.83	202	44	Peak	

Level = Reading + Factor.
Margin = Level – Limit.
Factor = Antenna Factor + Cable Loss – Amplifier Gain.

Beamforming Mode:

5150-5250MHz

802.11ac VHT20 Mode:

5180 MHz									
Horizontal					Vertical				

802.11ac VHT40 Mode:

5190 MHz									
Horizontal					Vertical				
Freq.	Reading	Factor	Level	Limit	Margin	Height	Degree	Remark	
MHz	dBuV	dB/m	dBuV/m	dBuV/m	dB	(cm)	(°)		
10380.000	43.89	5.84	49.73	68.20	-18.47	156	8	Peak	
15570.000	31.22	8.78	40.00	54.00	-14.00	152	315	Average	
15570.000	43.08	8.78	51.86	74.00	-22.14	152	315	Peak	

5230 MHz									
Horizontal					Vertical				
Freq.	Reading	Factor	Level	Limit	Margin	Height	Degree	Remark	
MHz	dBuV	dB/m	dBuV/m	dBuV/m	dB	(cm)	(°)		
10460.000	43.21	6.06	49.27	68.20	-18.93	189	127	Peak	
15690.000	37.90	9.23	47.13	54.00	-6.87	197	351	Average	
15690.000	52.75	9.23	61.98	74.00	-12.02	197	351	Peak	

802.11ac VHT80 Mode:

5210 MHz									
Horizontal					Vertical				
Freq.	Reading	Factor	Level	Limit	Margin	Height	Degree	Remark	
MHz	dBuV	dB/m	dBuV/m	dBuV/m	dB	(cm)	(°)		
10420.000	43.40	5.99	49.39	68.20	-18.81	179	133	Peak	
15630.000	32.97	8.93	41.90	54.00	-12.10	188	356	Average	
15630.000	43.37	8.93	52.30	74.00	-21.70	188	356	Peak	

5210 MHz									
Horizontal					Vertical				
Freq.	Reading	Factor	Level	Limit	Margin	Height	Degree	Remark	
MHz	dBuV	dB/m	dBuV/m	dBuV/m	dB	(cm)	(°)		
10420.000	43.54	5.99	49.53	68.20	-18.67	105	17	Peak	
15630.000	34.19	8.93	43.12	54.00	-10.88	105	231	Average	
15630.000	44.94	8.93	53.87	74.00	-20.13	105	231	Peak	

802.11ax HE20 Mode:

5180 MHz																	
Horizontal									Vertical								
Freq.	Reading	Factor	Level	Limit	Margin	Height	Degree	Remark	Freq.	Reading	Factor	Level	Limit	Margin	Height	Degree	Remark
MHz	dBuV	dB/m	dBuV/m	dBuV/m	dB	(cm)	(°)		MHz	dBuV	dB/m	dBuV/m	dBuV/m	dB	(cm)	(°)	
10360.000	41.87	5.72	47.59	68.20	-20.61	156	69	Peak	10360.000	50.20	5.72	55.92	68.20	-12.28	128	13	Peak
15540.000	36.46	8.79	45.25	54.00	-8.75	203	196	Average	15540.000	33.90	8.79	42.69	54.00	-11.31	135	176	Average
15540.000	50.35	8.79	59.14	74.00	-14.86	203	196	Peak	15540.000	46.59	8.79	55.38	74.00	-18.62	135	176	Peak

5200 MHz																	
Horizontal									Vertical								
Freq.	Reading	Factor	Level	Limit	Margin	Height	Degree	Remark	Freq.	Reading	Factor	Level	Limit	Margin	Height	Degree	Remark
MHz	dBuV	dB/m	dBuV/m	dBuV/m	dB	(cm)	(°)		MHz	dBuV	dB/m	dBuV/m	dBuV/m	dB	(cm)	(°)	
10400.000	43.40	5.96	49.36	68.20	-18.84	137	243	Peak	10400.000	52.64	5.96	58.60	68.20	-9.60	116	3	Peak
15600.000	41.98	8.78	50.76	54.00	-3.24	209	212	Average	15600.000	42.27	8.78	51.05	54.00	-2.95	202	170	Average
15600.000	55.97	8.78	64.75	74.00	-9.25	209	212	Peak	15600.000	55.42	8.78	64.20	74.00	-9.80	202	170	Peak

5240 MHz																	
Horizontal									Vertical								
Freq.	Reading	Factor	Level	Limit	Margin	Height	Degree	Remark	Freq.	Reading	Factor	Level	Limit	Margin	Height	Degree	Remark
MHz	dBuV	dB/m	dBuV/m	dBuV/m	dB	(cm)	(°)		MHz	dBuV	dB/m	dBuV/m	dBuV/m	dB	(cm)	(°)	
10480.000	48.82	6.09	54.91	68.20	-13.29	118	261	Peak	10480.000	50.44	6.09	56.53	68.20	-11.67	135	341	Peak
15720.000	43.97	9.44	53.41	54.00	-0.59	212	209	Average	15720.000	44.15	9.44	53.59	54.00	-0.41	103	3	Average
15720.000	59.50	9.44	68.94	74.00	-5.06	212	209	Peak	15720.000	59.66	9.44	69.10	74.00	-4.90	103	3	Peak

802.11ax HE40 Mode:

5190 MHz																	
Horizontal									Vertical								
Freq.	Reading	Factor	Level	Limit	Margin	Height	Degree	Remark	Freq.	Reading	Factor	Level	Limit	Margin	Height	Degree	Remark
MHz	dBuV	dB/m	dBuV/m	dBuV/m	dB	(cm)	(°)		MHz	dBuV	dB/m	dBuV/m	dBuV/m	dB	(cm)	(°)	
10380.000	43.22	5.84	49.06	68.20	-19.14	189	0	Peak	10380.000	48.66	5.84	54.50	68.20	-13.70	105	0	Peak
15570.000	31.09	8.78	39.87	54.00	-14.13	193	192	Average	15570.000	31.07	8.78	39.85	54.00	-14.15	102	360	Average
15570.000	42.97	8.78	51.75	74.00	-22.25	193	192	Peak	15570.000	42.88	8.78	51.66	74.00	-22.34	102	360	Peak

5230 MHz																	
Horizontal									Vertical								
Freq.	Reading	Factor	Level	Limit	Margin	Height	Degree	Remark	Freq.	Reading	Factor	Level	Limit	Margin	Height	Degree	Remark
MHz	dBuV	dB/m	dBuV/m	dBuV/m	dB	(cm)	(°)		MHz	dBuV	dB/m	dBuV/m	dBuV/m	dB	(cm)	(°)	
10460.000	44.17	6.06	50.23	68.20	-17.97	182	75	Peak	10460.000	47.77	6.06	53.83	68.20	-14.37	108	360	Peak
15690.000	36.81	9.23	46.04	54.00	-7.96	201	353	Average	15690.000	35.06	9.23	44.29	54.00	-9.71	104	350	Average
15690.000	53.56	9.23	62.79	74.00	-11.21	201	353	Peak	15690.000	51.16	9.23	60.39	74.00	-13.61	104	350	Peak

802.11ax HE80 Mode:

5210 MHz																	
Horizontal									Vertical								
Freq.	Reading	Factor	Level	Limit	Margin	Height	Degree	Remark	Freq.	Reading	Factor	Level	Limit	Margin	Height	Degree	Remark
MHz	dBuV	dB/m	dBuV/m	dBuV/m	dB	(cm)	(°)		MHz	dBuV	dB/m	dBuV/m	dBuV/m	dB	(cm)	(°)	
10420.000	44.89	5.99	50.88	68.20	-17.32	188	173	Peak	10420.000	42.72	5.99	48.71	68.20	-19.49	105	211	Peak
15630.000	33.81	8.93	42.74	54.00	-11.26	196	189	Average	15630.000	34.46	8.93	43.39	54.00	-10.61	108	36	Average
15630.000	44.93	8.93	53.86	74.00	-20.14	196	189	Peak	15630.000	45.68	8.93	54.61	74.00	-19.39	108	36	Peak

Level = Reading + Factor.
Margin = Level – Limit.
Factor = Antenna Factor + Cable Loss – Amplifier Gain.

5725-5850MHz

802.11ac VHT20 Mode:

5745 MHz									
Horizontal					Vertical				
Freq.	Reading	Factor	Level	Limit	Margin	Height	Degree	Remark	
MHz	dBuV	dB/m	dBuV/m	dBuV/m	dB	(cm)	(°)		
11490.000	32.16	7.23	39.39	54.00	-14.61	131	349	Average	
11490.000	45.28	7.23	52.51	74.00	-21.49	131	349	Peak	
17235.000	54.52	11.80	66.32	68.20	-1.88	193	358	Peak	
Freq.	Reading	Factor	Level	Limit	Margin	Height	Degree	Remark	
MHz	dBuV	dB/m	dBuV/m	dBuV/m	dB	(cm)	(°)		
11490.000	38.27	7.23	45.50	54.00	-8.50	106	360	Average	
11490.000	51.76	7.23	58.99	74.00	-15.01	106	360	Peak	
17235.000	52.07	11.80	63.87	68.20	-4.33	206	39	Peak	
5785 MHz									
Horizontal					Vertical				
Freq.	Reading	Factor	Level	Limit	Margin	Height	Degree	Remark	
MHz	dBuV	dB/m	dBuV/m	dBuV/m	dB	(cm)	(°)		
11570.000	30.83	7.19	38.02	54.00	-15.98	135	315	Average	
11570.000	40.51	7.19	47.70	74.00	-26.30	135	315	Peak	
17355.000	55.01	12.35	67.36	68.20	-0.84	182	343	Peak	
Freq.	Reading	Factor	Level	Limit	Margin	Height	Degree	Remark	
MHz	dBuV	dB/m	dBuV/m	dBuV/m	dB	(cm)	(°)		
11570.000	39.26	7.19	46.45	54.00	-7.55	103	360	Average	
11570.000	52.33	7.19	59.52	74.00	-14.48	103	360	Peak	
17355.000	52.14	12.35	64.49	68.20	-3.71	146	42	Peak	
5825 MHz									
Horizontal					Vertical				
Freq.	Reading	Factor	Level	Limit	Margin	Height	Degree	Remark	
MHz	dBuV	dB/m	dBuV/m	dBuV/m	dB	(cm)	(°)		
11650.000	30.34	7.20	37.54	54.00	-16.46	152	8	Average	
11650.000	39.88	7.20	47.08	74.00	-26.92	152	8	Peak	
17475.000	54.51	11.89	66.40	68.20	-1.80	201	214	Peak	
Freq.	Reading	Factor	Level	Limit	Margin	Height	Degree	Remark	
MHz	dBuV	dB/m	dBuV/m	dBuV/m	dB	(cm)	(°)		
11650.000	38.20	7.20	45.40	54.00	-8.60	104	360	Average	
11650.000	50.47	7.20	57.67	74.00	-16.33	104	360	Peak	
17475.000	51.49	11.89	63.38	68.20	-4.82	150	358	Peak	

802.11ac VHT40 Mode:

5755 MHz									
Horizontal					Vertical				
Freq.	Reading	Factor	Level	Limit	Margin	Height	Degree	Remark	
MHz	dBuV	dB/m	dBuV/m	dBuV/m	dB	(cm)	(°)		
11510.000	31.07	7.22	38.29	54.00	-15.71	158	348	Average	
11510.000	43.10	7.22	50.32	74.00	-23.68	158	348	Peak	
17265.000	56.07	11.88	67.95	68.20	-0.25	197	337	Peak	
17779.000	30.80	12.79	43.59	54.00	-10.41	150	45	Average	
17779.000	43.52	12.79	56.31	74.00	-17.69	150	45	Peak	

Freq.	Reading	Factor	Level	Limit	Margin	Height	Degree	Remark	
MHz	dBuV	dB/m	dBuV/m	dBuV/m	dB	(cm)	(°)		
11510.000	38.27	7.22	45.49	54.00	-8.51	102	0	Average	
11510.000	50.56	7.22	57.78	74.00	-16.22	102	0	Peak	
17265.000	49.11	11.88	60.99	68.20	-7.21	104	340	Peak	
17779.000	31.00	12.79	43.79	54.00	-10.21	150	155	Average	
17779.000	43.24	12.79	56.03	74.00	-17.97	150	155	Peak	

5795 MHz

5795 MHz									
Horizontal					Vertical				
Freq.	Reading	Factor	Level	Limit	Margin	Height	Degree	Remark	
MHz	dBuV	dB/m	dBuV/m	dBuV/m	dB	(cm)	(°)		
11590.000	31.69	7.18	38.87	54.00	-15.13	117	250	Average	
11590.000	43.66	7.18	50.84	74.00	-23.16	117	250	Peak	
17385.000	55.13	12.56	67.69	68.20	-0.51	193	320	Peak	

Freq.	Reading	Factor	Level	Limit	Margin	Height	Degree	Remark	
MHz	dBuV	dB/m	dBuV/m	dBuV/m	dB	(cm)	(°)		
11590.000	39.45	7.18	46.63	54.00	-7.37	104	0	Average	
11590.000	51.14	7.18	58.32	74.00	-15.68	104	0	Peak	
17385.000	52.10	12.56	64.66	68.20	-3.54	108	0	Peak	

802.11ac VHT80 Mode:

5775 MHz									
Horizontal					Vertical				
Freq.	Reading	Factor	Level	Limit	Margin	Height	Degree	Remark	
MHz	dBuV	dB/m	dBuV/m	dBuV/m	dB	(cm)	(°)		
11550.000	32.75	7.21	39.96	54.00	-14.04	192	91	Average	
11550.000	43.30	7.21	50.51	74.00	-23.49	192	91	Peak	
17325.000	52.42	12.13	64.55	68.20	-3.65	202	350	Peak	

Freq.	Reading	Factor	Level	Limit	Margin	Height	Degree	Remark	
MHz	dBuV	dB/m	dBuV/m	dBuV/m	dB	(cm)	(°)		
11550.000	38.65	7.21	45.86	54.00	-8.14	102	2	Average	
11550.000	47.80	7.21	55.01	74.00	-18.99	102	2	Peak	
17325.000	51.03	12.13	63.16	68.20	-5.04	106	139	Peak	

802.11ax HE20 Mode:

5745 MHz																	
Horizontal									Vertical								
Freq.	Reading	Factor	Level	Limit	Margin	Height	Degree	Remark	Freq.	Reading	Factor	Level	Limit	Margin	Height	Degree	Remark
MHz	dBuV	dB/m	dBuV/m	dBuV/m	dB	(cm)	(°)		MHz	dBuV	dB/m	dBuV/m	dBuV/m	dB	(cm)	(°)	
11490.000	30.62	7.23	37.85	54.00	-16.15	147	353	Average	11490.000	38.76	7.23	45.99	54.00	-8.01	103	344	Average
11490.000	42.43	7.23	49.66	74.00	-24.34	147	353	Peak	11490.000	49.87	7.23	57.10	74.00	-16.90	103	344	Peak
17235.000	56.06	11.80	67.86	68.20	-0.34	197	350	Peak	17235.000	52.56	11.80	64.36	68.20	-3.84	109	318	Peak

5785 MHz																	
Horizontal									Vertical								
Freq.	Reading	Factor	Level	Limit	Margin	Height	Degree	Remark	Freq.	Reading	Factor	Level	Limit	Margin	Height	Degree	Remark
MHz	dBuV	dB/m	dBuV/m	dBuV/m	dB	(cm)	(°)		MHz	dBuV	dB/m	dBuV/m	dBuV/m	dB	(cm)	(°)	
11570.000	30.43	7.19	37.62	54.00	-16.38	153	350	Average	11570.000	37.00	7.19	44.99	54.00	-9.01	102	6	Average
11570.000	41.55	7.19	48.74	74.00	-25.26	153	350	Peak	11570.000	49.95	7.19	57.14	74.00	-16.86	102	6	Peak
17355.000	55.25	12.35	67.60	68.20	-0.60	194	225	Peak	17355.000	53.52	12.35	65.87	68.20	-2.33	103	350	Peak

5825 MHz																	
Horizontal									Vertical								
Freq.	Reading	Factor	Level	Limit	Margin	Height	Degree	Remark	Freq.	Reading	Factor	Level	Limit	Margin	Height	Degree	Remark
MHz	dBuV	dB/m	dBuV/m	dBuV/m	dB	(cm)	(°)		MHz	dBuV	dB/m	dBuV/m	dBuV/m	dB	(cm)	(°)	
11650.000	31.72	7.20	38.92	54.00	-15.08	169	313	Average	11650.000	37.54	7.20	44.74	54.00	-9.26	107	6	Average
11650.000	42.74	7.20	49.94	74.00	-24.06	169	313	Peak	11650.000	50.22	7.20	57.42	74.00	-16.58	107	6	Peak
17475.000	55.72	11.89	67.61	68.20	-0.59	205	337	Peak	17475.000	50.08	11.89	61.97	68.20	-6.23	106	6	Peak

802.11ax HE40 Mode:

5775 MHz									
Horizontal					Vertical				
Freq.	Reading	Factor	Level	Limit	Margin	Height	Degree	Remark	
MHz	dBuV	dB/m	dBuV/m	dBuV/m	dB	(cm)	(°)		
11510.000	31.31	7.22	38.53	54.00	-15.47	174	347	Average	
11510.000	43.18	7.22	50.40	74.00	-23.60	174	347	Peak	
17265.000	56.00	11.88	67.88	68.20	-0.32	197	342	Peak	

Freq.	Reading	Factor	Level	Limit	Margin	Height	Degree	Remark	
MHz	dBuV	dB/m	dBuV/m	dBuV/m	dB	(cm)	(°)		
11510.000	39.93	7.22	47.15	54.00	-6.85	104	0	Average	
11510.000	51.37	7.22	58.59	74.00	-15.41	104	0	Peak	
17265.000	53.62	11.88	65.50	68.20	-2.70	107	32	Peak	

802.11ax HE80 Mode:

5775 MHz									
Horizontal					Vertical				
Freq.	Reading	Factor	Level	Limit	Margin	Height	Degree	Remark	
MHz	dBuV	dB/m	dBuV/m	dBuV/m	dB	(cm)	(°)		
11550.000	32.62	7.18	39.80	54.00	-14.20	185	301	Average	
11550.000	44.42	7.18	51.60	74.00	-22.40	185	301	Peak	
17385.000	54.86	12.56	67.42	68.20	-0.78	201	338	Peak	

Freq.	Reading	Factor	Level	Limit	Margin	Height	Degree	Remark	
MHz	dBuV	dB/m	dBuV/m	dBuV/m	dB	(cm)	(°)		
11550.000	37.17	7.18	44.35	54.00	-9.65	103	3	Average	
11550.000	49.73	7.18	56.91	74.00	-17.09	103	3	Peak	
17385.000	53.60	12.56	66.16	68.20	-2.04	108	0	Peak	

Level = Reading + Factor.

Margin = Level - Limit.

Factor = Antenna Factor + Cable Loss - Amplifier Gain.

9 FCC §15.407(a)(e) – Emission Bandwidth And Occupied Bandwidth

9.1 Applicable Standard

As per FCC §15.407(a): The maximum power spectral density is measured as a conducted emission by direct connection of a calibrated test instrument to the equipment under test. If the device cannot be connected directly, alternative techniques acceptable to the Commission may be used. Measurements in the 5.725-5.85 GHz band are made over a reference bandwidth of 500 kHz or the 26 dB emission bandwidth of the device, whichever is less. Measurements in the 5.15-5.25 GHz, 5.25-5.35 GHz, and the 5.47-5.725 GHz bands are made over a bandwidth of 1 MHz or the 26 dB emission bandwidth of the device, whichever is less. A narrower resolution bandwidth can be used, provided that the measured power is integrated over the full reference bandwidth.

As per FCC §15.407(e): for equipment operating in the band 5725 – 5850 MHz, the minimum 6 dB bandwidth of U-NII devices shall be 500 kHz.

9.2 Test Procedure

26dB Emission Bandwidth (EBW)

According to ANSI C63.10-2013 Section 12.4.1

- a) Set RBW = approximately 1% of the emission bandwidth.
- b) Set the VBW > RBW.
- c) Detector = Peak.
- d) Trace mode = max hold.
- e) Measure the maximum width of the emission that is 26 dB down from the maximum of the emission. Compare this with the RBW setting of the analyzer. Readjust RBW and repeat measurement as needed until the RBW/EBW ratio is approximately 1%.

Minimum Emission Bandwidth for the band 5.725-5.85 GHz

According to KDB 789033 D02 General UNII Test Procedures New Rules v02r01

Section 15.407(e) specifies the minimum 6 dB emission bandwidth of at least 500 KHz for the band 5.715-5.85 GHz. The following procedure shall be used for measuring this bandwidth:

- a) Set RBW = 100 kHz.
- b) Set the video bandwidth (VBW) $\geq 3 \times$ RBW.
- c) Detector = Peak.
- d) Trace mode = max hold.
- e) Sweep = auto couple.
- f) Allow the trace to stabilize.
- g) Measure the maximum width of the emission that is constrained by the frequencies associated with the two outermost amplitude points (upper and lower frequencies) that are attenuated by 6 dB relative to the maximum level measured in the fundamental emission.

99% Occupied Bandwidth:

According to ANSI C63.10-2013 Section 12.4.2&6.9.3

The occupied bandwidth is the frequency bandwidth such that, below its lower and above its upper frequency limits, the mean powers are each equal to 0.5% of the total mean power of the given emission.

The following procedure shall be used for measuring 99% power bandwidth:

- a) The instrument center frequency is set to the nominal EUT channel center frequency. The frequency span for the spectrum analyzer shall be between 1.5 times and 5.0 times the OBW.
- b) The nominal IF filter bandwidth (3 dB RBW) shall be in the range of 1% to 5% of the OBW, and VBW shall be approximately three times the RBW, unless otherwise specified by the applicable requirement.
- c) Set the reference level of the instrument as required, keeping the signal from exceeding the maximum input mixer level for linear operation. In general, the peak of the spectral envelope shall be more than $[10 \log (OBW/RBW)]$ below the reference level. Specific guidance is given in 4.1.5.2.
- d) Step a) through step c) might require iteration to adjust within the specified range.
- e) Video averaging is not permitted. Where practical, a sample detection and single sweep mode shall be used. Otherwise, peak detection and max hold mode (until the trace stabilizes) shall be used.
- f) Use the 99% power bandwidth function of the instrument (if available) and report the measured bandwidth.
- g) If the instrument does not have a 99% power bandwidth function, then the trace data points are recovered and directly summed in linear power terms. The recovered amplitude data points, beginning at the lowest frequency, are placed in a running sum until 0.5% of the total is reached; that frequency is recorded as the lower frequency. The process is repeated until 99.5% of the total is reached; that frequency is recorded as the upper frequency. The 99% power bandwidth is the difference between these two frequencies.
- h) The occupied bandwidth shall be reported by providing plot(s) of the measuring instrument display; the plot axes and the scale units per division shall be clearly labeled. Tabular data may be reported in addition to the plot(s).

9.3 Test Results

Test mode: Transmitting

Non Beamforming Mode:

5150-5250MHz

Mode	Channel	Frequency (MHz)	26dB Emission Bandwidth (MHz)			99% Emission Bandwidth (MHz)		
			Chain 0	Chain 1	Chain 2	Chain 0	Chain 1	Chain 2
802.11a	36	5180	29.32	28.32	28.24	16.82	17.02	16.98
	40	5200	29.80	28.68	29.40	16.82	16.82	16.94
	48	5240	20.44	20.40	20.40	17.02	17.02	17.02
802.11ac 20	36	5180	29.52	29.76	29.12	17.90	18.02	18.02
	40	5200	29.40	29.76	29.28	18.02	18.02	18.02
	48	5240	20.72	20.60	20.60	17.82	17.86	17.86
802.11ac 40	38	5190	40.72	40.80	40.24	36.44	36.44	36.44
	46	5230	41.04	40.32	40.64	36.20	36.20	36.20
802.11ac 80	42	5210	79.68	79.52	97.60	75.44	75.60	75.44
802.11ax 20	36	5180	27.80	25.52	25.16	19.14	19.14	19.14
	40	5200	29.92	29.36	28.48	19.06	19.26	19.18
	48	5240	20.08	20.08	20.08	18.94	18.98	18.90
802.11ax 40	38	5190	47.68	45.12	43.04	37.80	37.72	37.80
	46	5230	39.84	39.76	39.68	37.64	37.80	37.72
802.11ax 80	42	5210	80.00	80.16	94.56	77.20	77.04	77.52

The 99% Occupied Bandwidth have not fallen into the band 5250-5350MHz, please refer to the test plots of 99% Occupied Bandwidth.

5725-5850MHz

Mode	Channel	Frequency (MHz)	6dB Emission Bandwidth (MHz)			99% Emission Bandwidth (MHz)			Limit (kHz)	Result
			Chain 0	Chain 1	Chain 2	Chain 0	Chain 1	Chain 2		
802.11a	149	5745	16.32	16.32	16.32	16.78	16.78	16.82	≥500	PASS
	157	5785	16.32	16.32	16.32	16.66	16.74	16.74	≥500	PASS
	165	5825	16.36	16.32	16.32	16.74	16.82	16.82	≥500	PASS
802.11ac 20	149	5745	17.56	17.60	17.60	17.78	17.82	17.82	≥500	PASS
	157	5785	17.60	17.60	17.60	17.78	17.70	17.70	≥500	PASS
	165	5825	17.60	17.60	17.60	17.98	17.90	17.86	≥500	PASS
802.11ac 40	151	5755	35.20	35.20	35.12	36.36	36.20	36.28	≥500	PASS
	159	5795	35.20	35.20	35.12	36.28	36.20	36.12	≥500	PASS
802.11ac 80	155	5775	75.20	75.20	75.20	75.28	75.44	75.12	≥500	PASS
802.11ax 20	149	5745	18.84	19.08	19.04	19.14	19.14	19.10	≥500	PASS
	157	5785	19.00	19.08	19.04	18.94	18.98	18.94	≥500	PASS
	165	5825	19.04	19.04	19.04	19.14	19.10	19.14	≥500	PASS
802.11ax 40	151	5755	37.60	37.60	37.60	37.72	37.56	37.80	≥500	PASS
	159	5795	37.60	37.60	37.60	37.72	37.56	37.72	≥500	PASS
802.11ax 80	155	5775	76.64	75.84	77.12	76.72	76.72	76.72	≥500	PASS

The 99% Occupied Bandwidth have not fallen into the band 5470-5725MHz, please refer to the test plots of 99% Occupied Bandwidth.

Beamforming Mode:

5150-5250MHz

Mode	Channel	Frequency (MHz)	26dB Emission Bandwidth (MHz)			99% Emission Bandwidth (MHz)		
			Chain 0	Chain 1	Chain 2	Chain 0	Chain 1	Chain 2
802.11ac 20	36	5180	29.72	29.56	26.80	17.86	17.78	17.86
	40	5200	26.48	28.80	27.32	17.82	17.86	17.86
	48	5240	20.76	20.80	20.64	19.46	19.22	19.34
802.11ac 40	38	5190	48.40	46.72	43.52	36.52	36.52	36.52
	46	5230	42.24	42.96	40.88	36.28	36.44	36.36
802.11ac 80	42	5210	94.88	99.20	94.72	75.60	75.60	75.60
802.11ax 20	36	5180	29.08	28.76	28.28	19.14	19.18	19.22
	40	5200	27.64	29.44	26.64	19.14	19.14	19.14
	48	5240	29.24	26.60	22.60	18.98	18.94	18.98
802.11ax 40	38	5190	48.00	39.68	46.32	37.72	37.72	37.72
	46	5230	39.60	39.68	39.68	37.64	37.56	37.64
802.11ax 80	42	5210	98.88	89.12	84.80	77.20	77.04	77.20

The 99% Occupied Bandwidth have not fallen into the band 5250-5350MHz, please refer to the test plots of 99% Occupied Bandwidth.

5725-5850MHz

Mode	Channel	Frequency (MHz)	6dB Emission Bandwidth (MHz)			99% Emission Bandwidth (MHz)			Limit (kHz)	Result
			Chain 0	Chain 1	Chain 2	Chain 0	Chain 1	Chain 2		
802.11ac 20	149	5745	17.64	17.64	17.68	17.86	17.86	17.78	≥500	PASS
	157	5785	17.32	17.40	16.68	17.74	17.74	17.74	≥500	PASS
	165	5825	17.32	17.44	17.68	17.86	17.86	17.78	≥500	PASS
802.11ac 40	151	5755	36.32	35.28	35.12	36.76	36.76	36.76	≥500	PASS
	159	5795	35.12	35.12	35.12	36.52	36.60	36.52	≥500	PASS
802.11ac 80	155	5775	75.20	75.68	75.20	75.60	75.76	75.76	≥500	PASS
802.11ax 20	149	5745	18.84	18.84	18.92	19.10	19.02	19.14	≥500	PASS
	157	5785	18.88	19.00	18.72	18.98	19.10	19.02	≥500	PASS
	165	5825	18.20	18.76	18.56	19.14	19.14	19.06	≥500	PASS
802.11ax 40	151	5755	38.00	35.20	38.16	37.96	38.04	37.96	≥500	PASS
	159	5795	36.96	38.08	37.84	37.80	37.88	37.88	≥500	PASS
802.11ax 80	155	5775	76.00	75.20	75.20	77.36	77.36	77.52	≥500	PASS

The 99% Occupied Bandwidth have not fallen into the band 5470-5725MHz, please refer to the test plots of 99% Occupied Bandwidth.

Please refer to the following plots

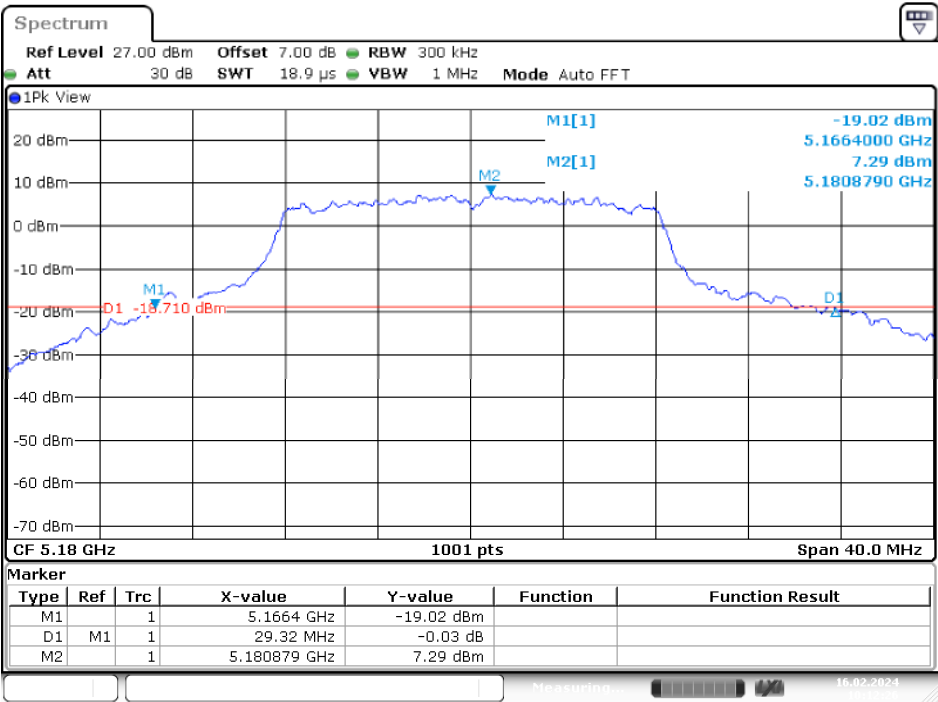
UNII-1 Band I / BW 26dBc

Non Beamforming Mode:

Chain 0

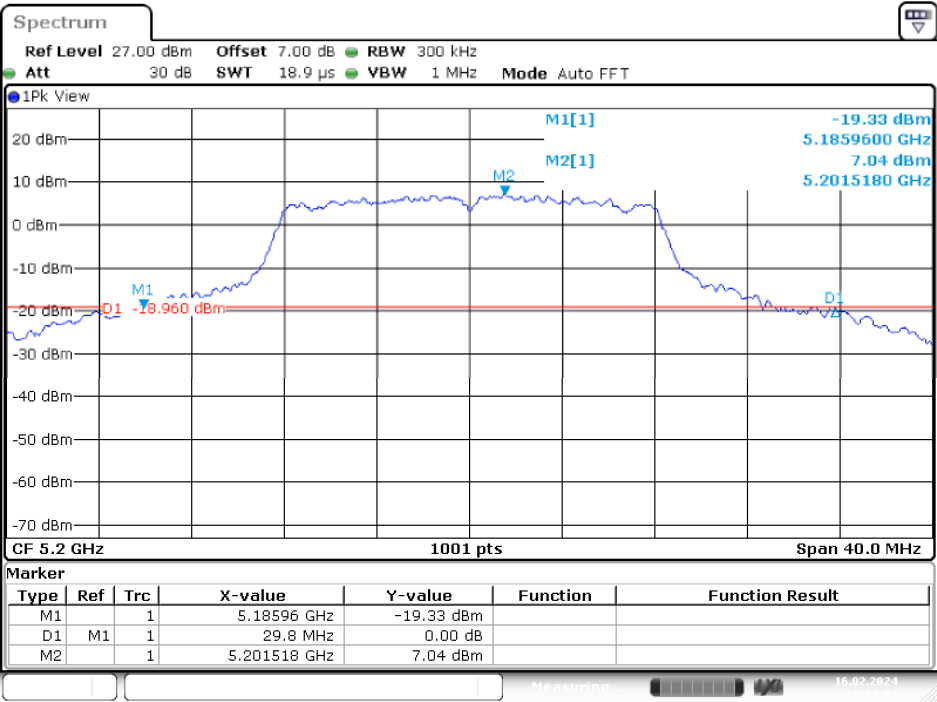
IEEE 802.11a Mode / 5150 ~ 5250MHz

5180MHz



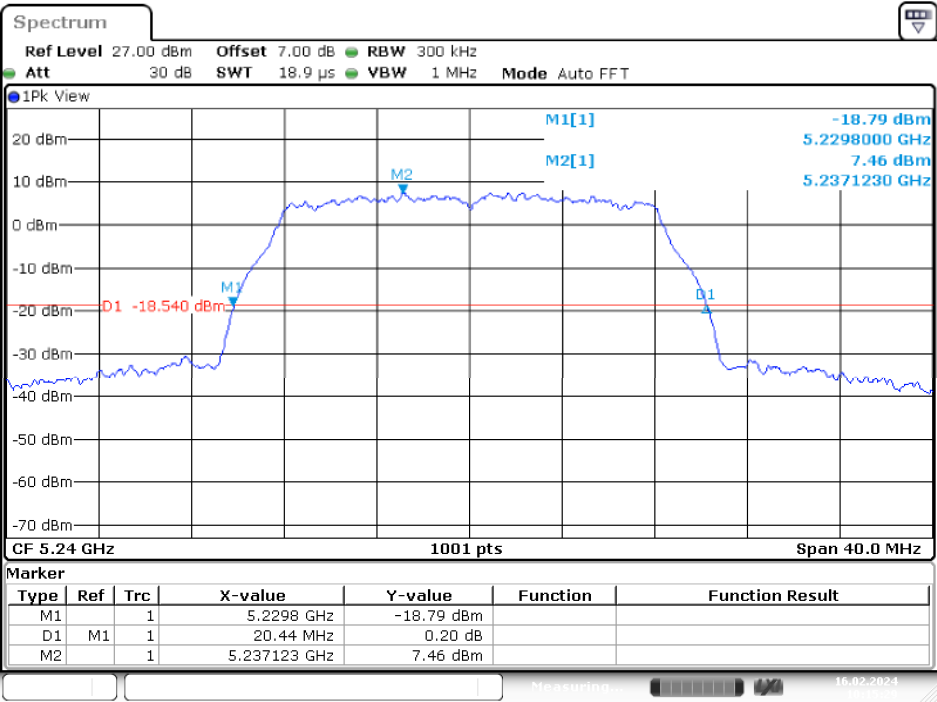
Date: 16.FEB.2024 10:12:27

5200MHz



Date: 16.FEB.2024 10:14:04

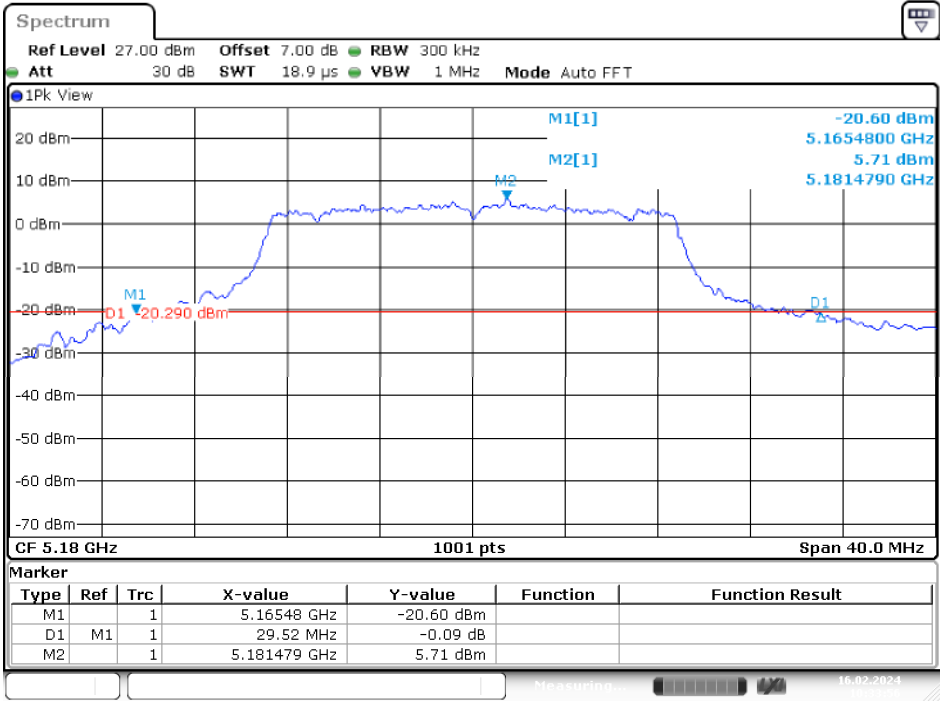
5240MHz



Date: 16.FEB.2024 10:15:29

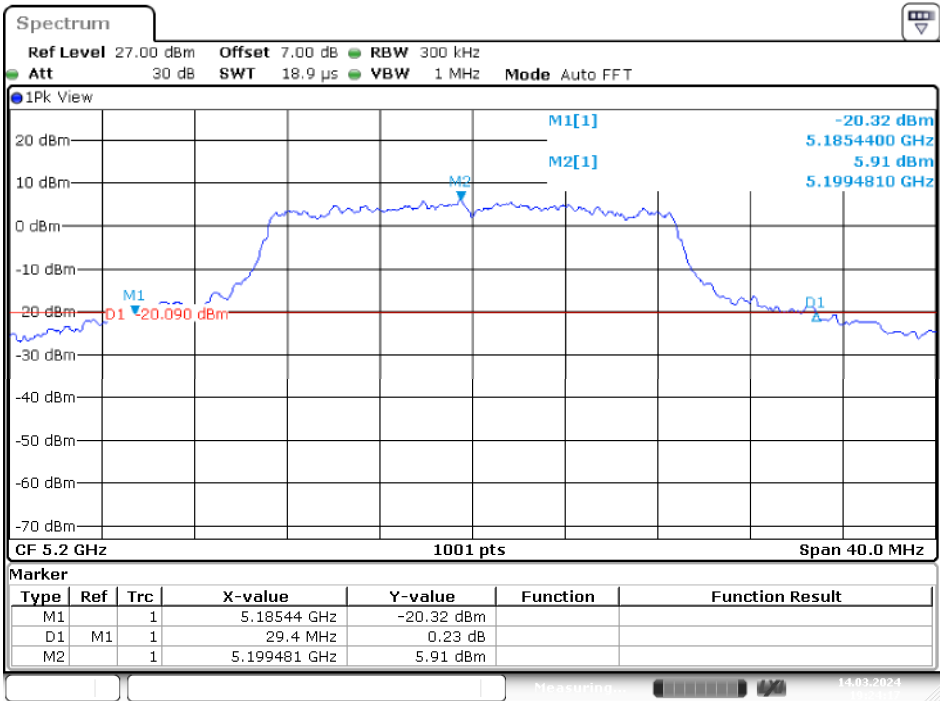
IEEE 802.11ac VHT20 Mode / 5150 ~ 5250MHz

5180MHz



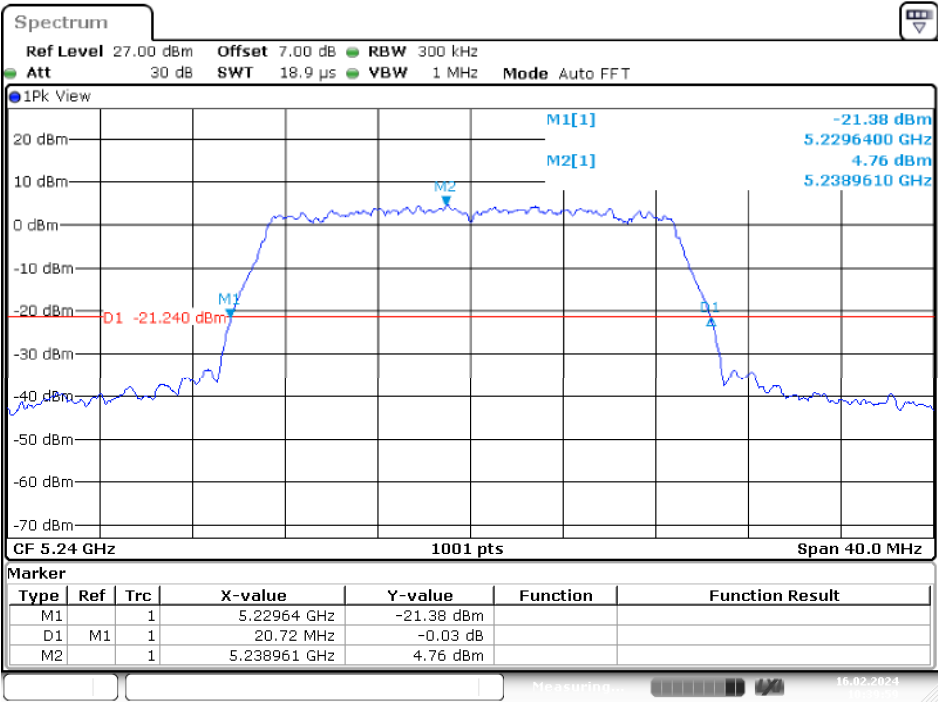
Date: 16.FEB.2024 10:33:56

5200MHz



Date: 14.MAR.2024 19:24:18

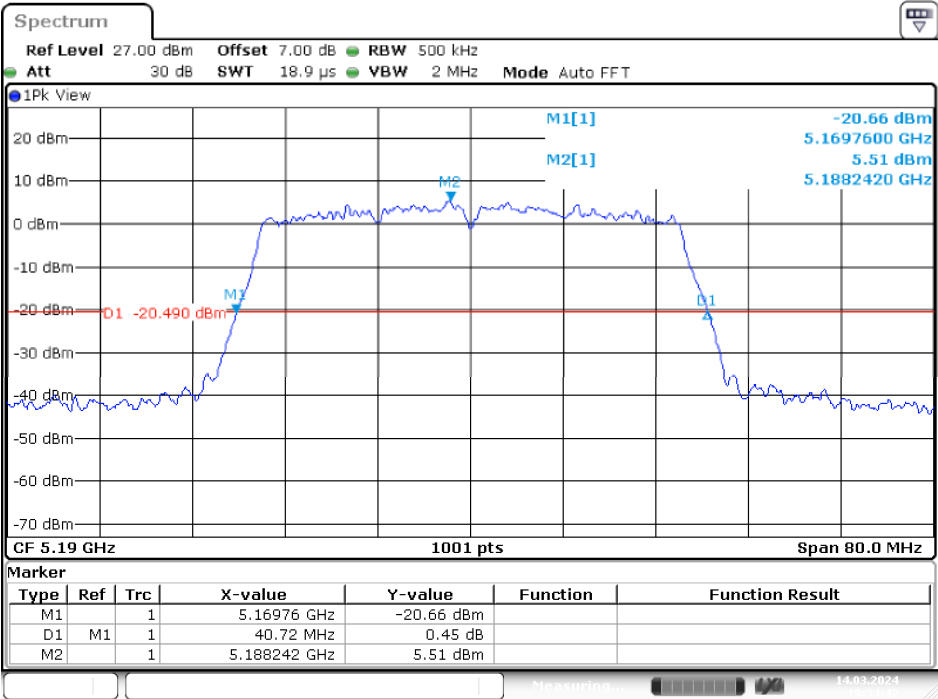
5240MHz



Date: 16.FEB.2024 10:39:59

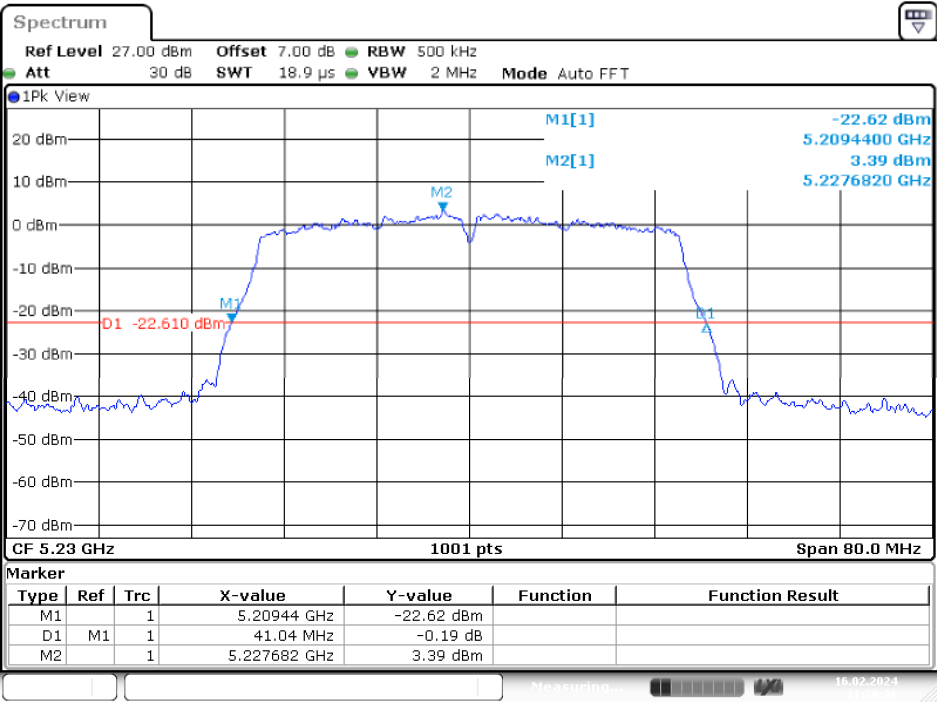
IEEE 802.11ac VHT40 Mode / 5150 ~ 5250MHz

5190MHz



Date: 14.MAR.2024 19:34:42

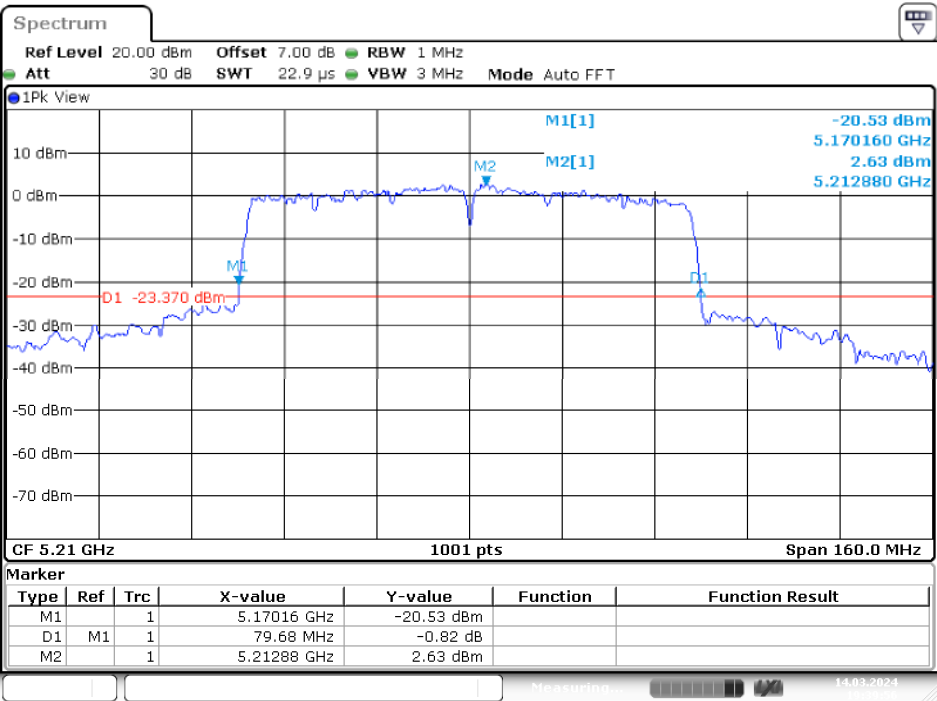
5230MHz



Date: 16.FEB.2024 11:20:36

IEEE 802.11ac VHT80 Mode / 5150 ~ 5250MHz

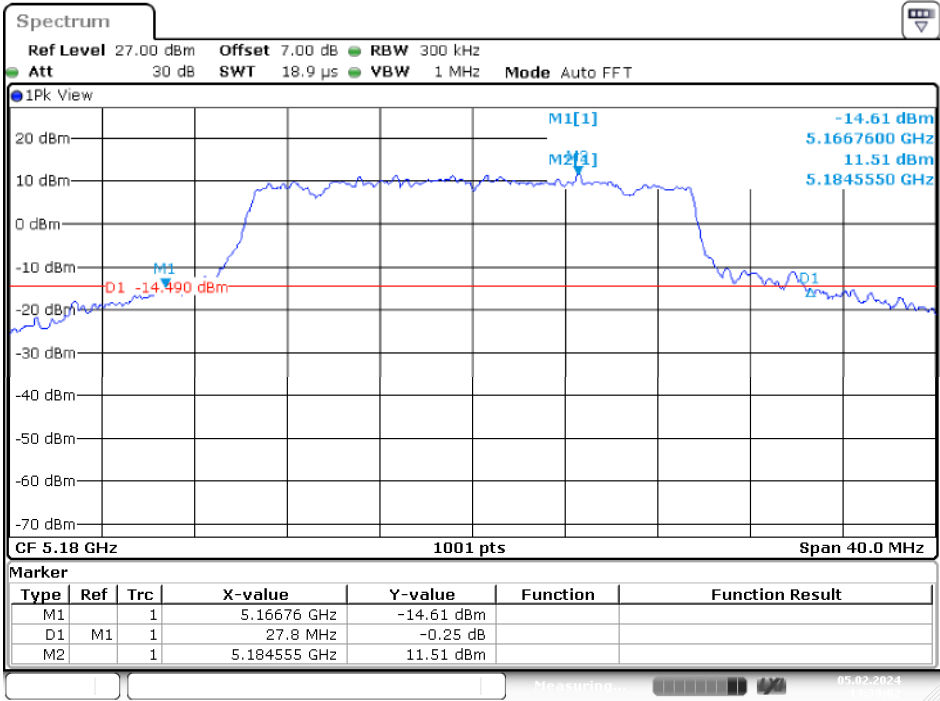
5210MHz



Date: 14.MAR.2024 19:39:56

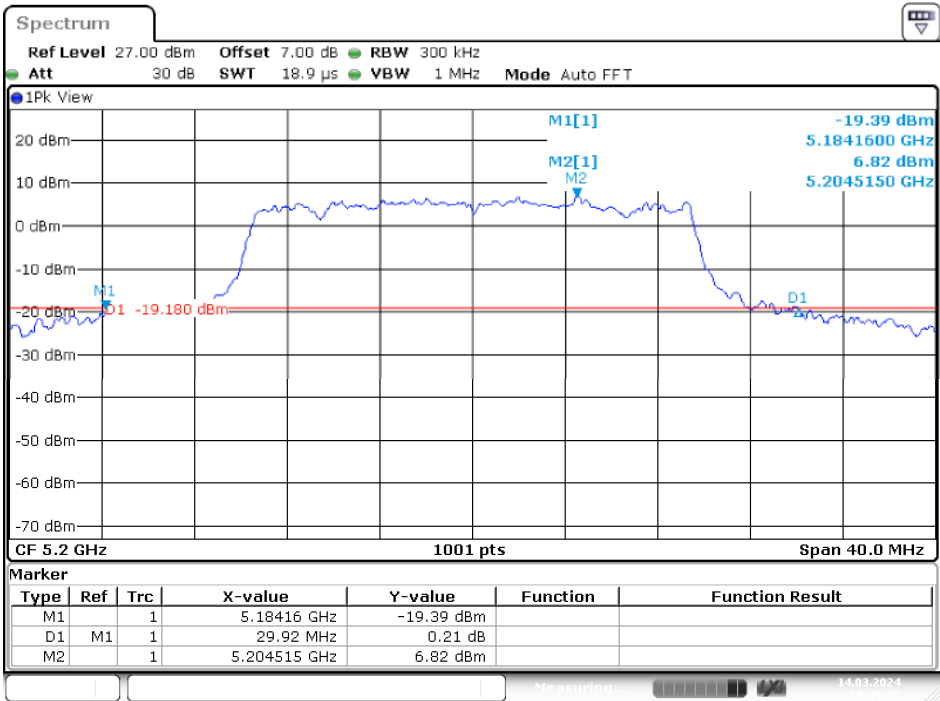
IEEE 802.11ax HE20 Mode / 5150 ~ 5250MHz

5180MHz



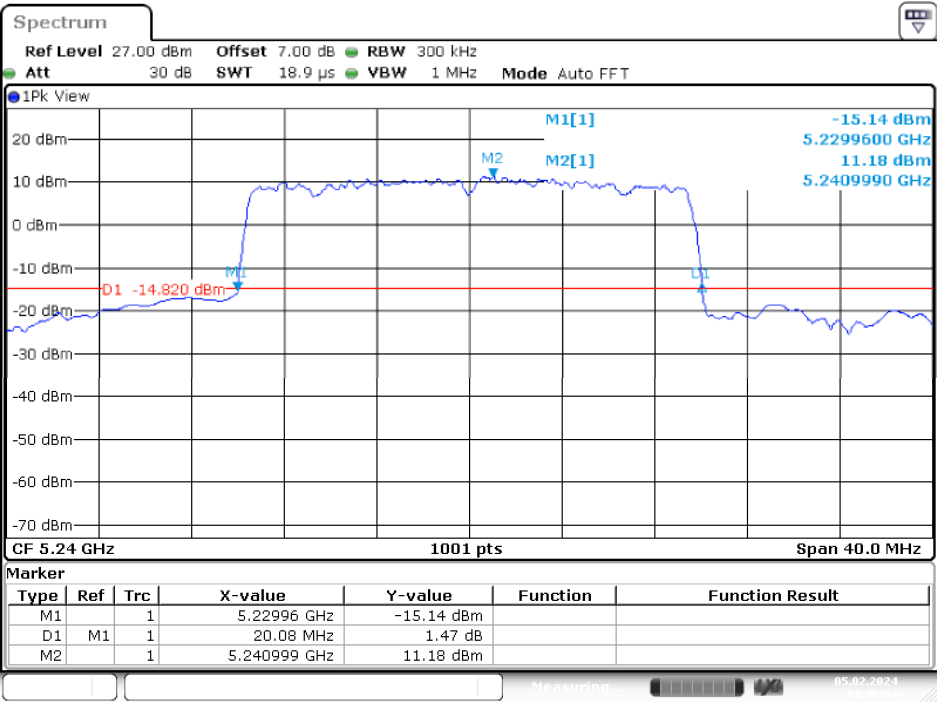
Date: 5.FEB.2024 14:39:03

5200MHz



Date: 14.MAR.2024 19:49:45

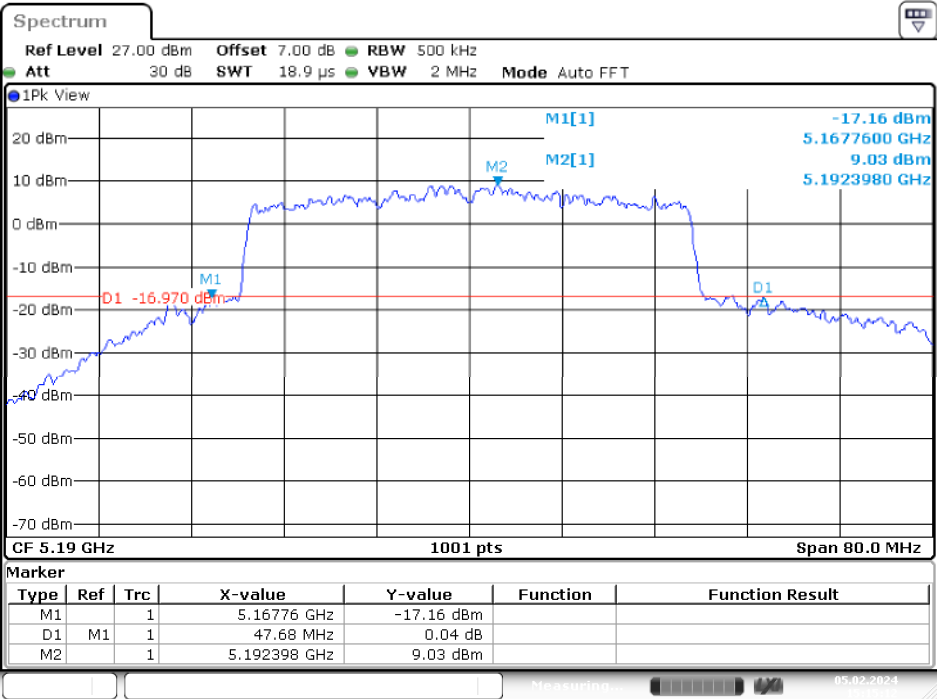
5240MHz



Date: 5.FEB.2024 14:46:54

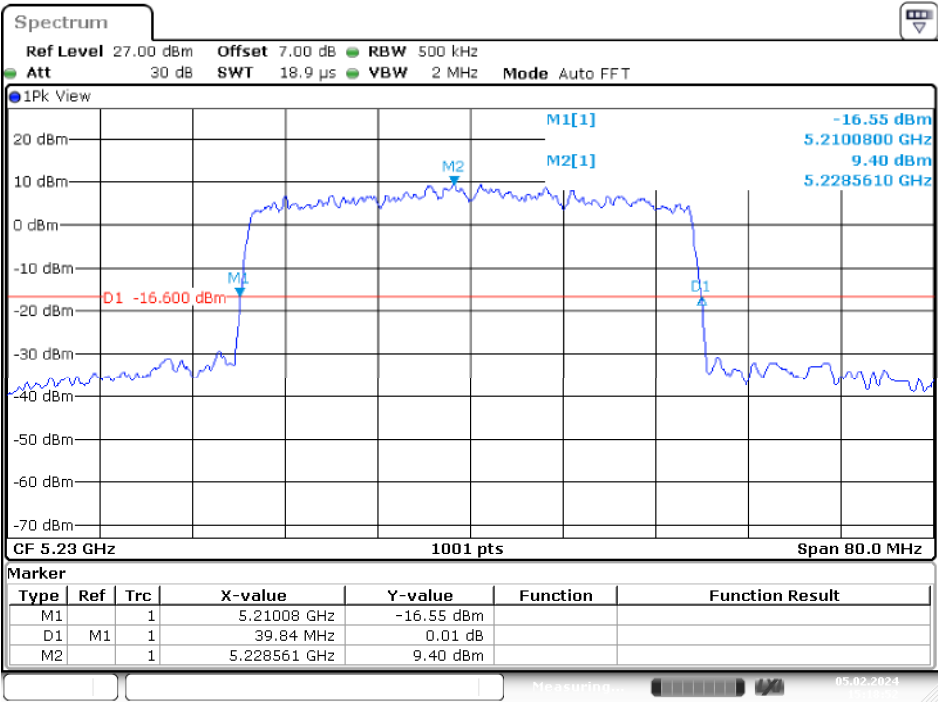
IEEE 802.11ax HE40 Mode / 5150 ~ 5250MHz

5190MHz



Date: 5.FEB.2024 15:15:12

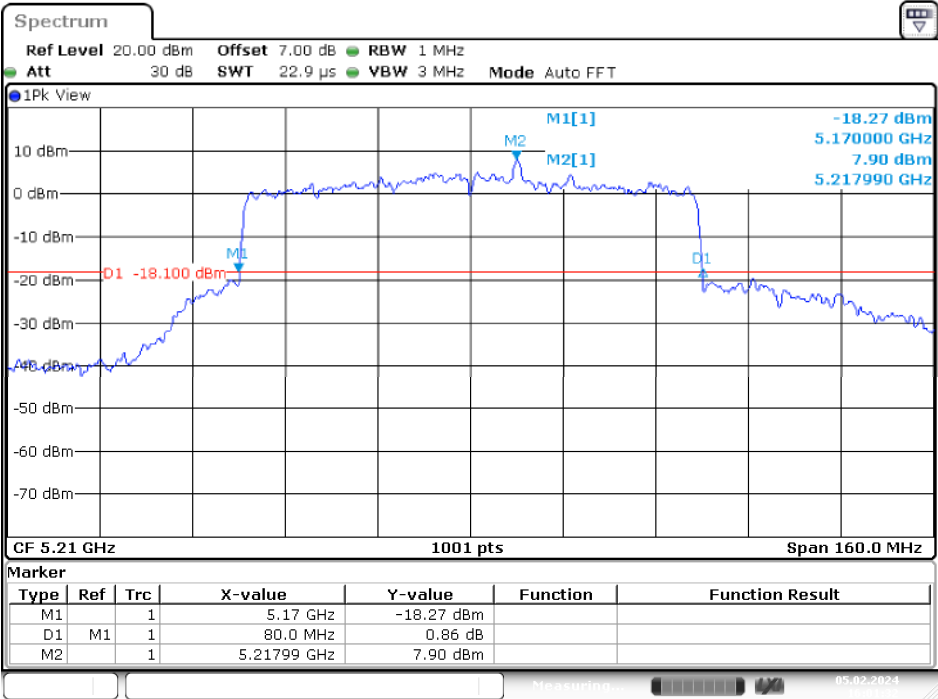
5230MHz



Date: 5.FEB.2024 15:18:52

IEEE 802.11ax HE80 Mode / 5150 ~ 5250MHz

5210MHz

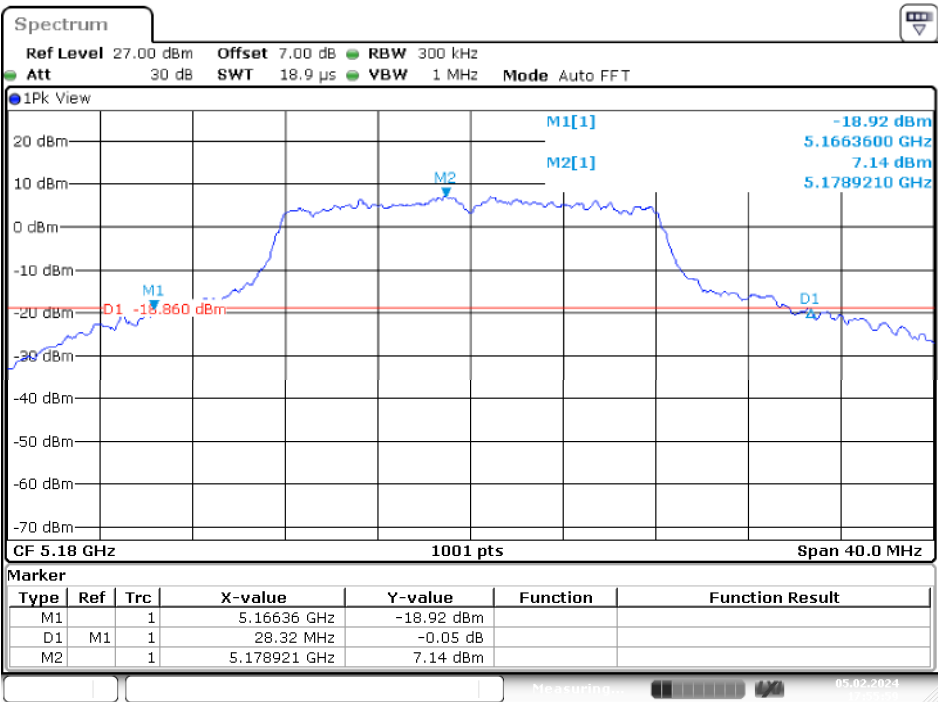


Date: 5.FEB.2024 16:01:33

Chain 1

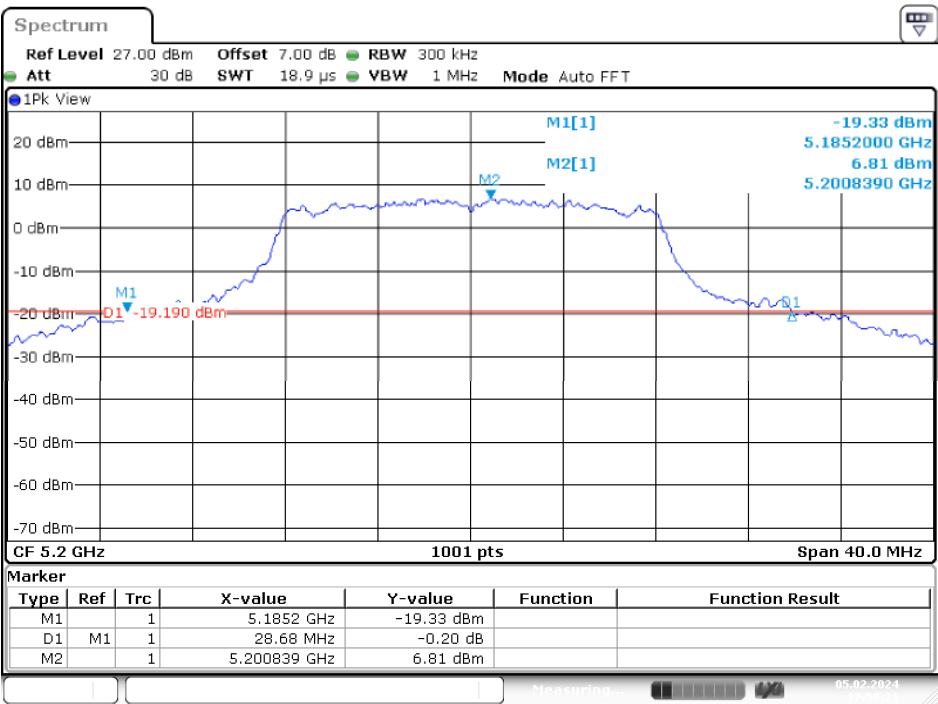
IEEE 802.11a Mode / 5150 ~ 5250MHz

5180MHz



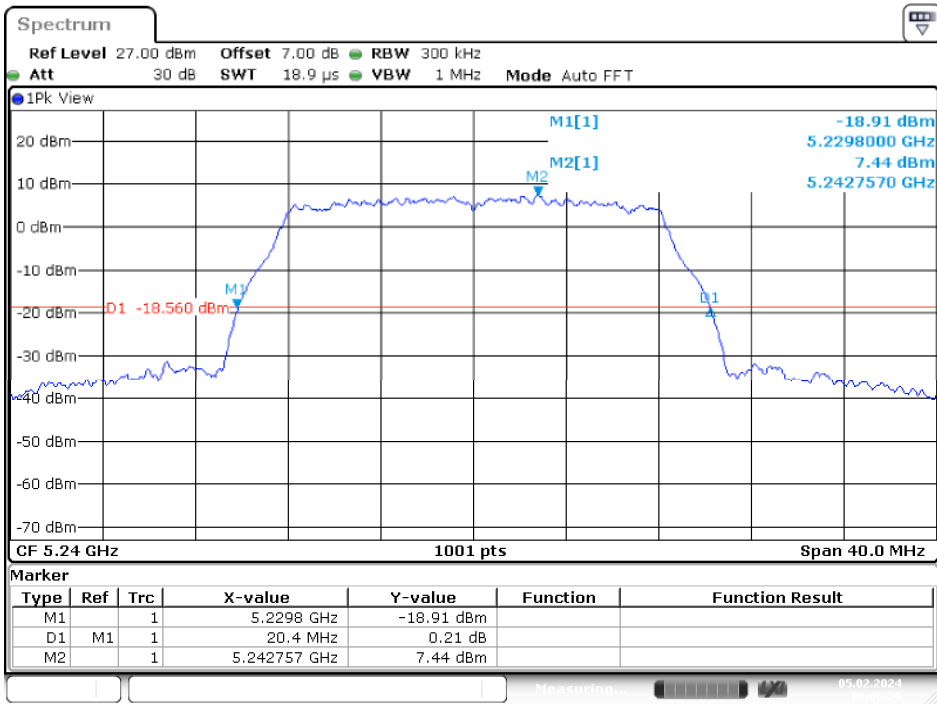
Date: 5.FEB.2024 17:55:59

5200MHz



Date: 5.FEB.2024 17:58:21

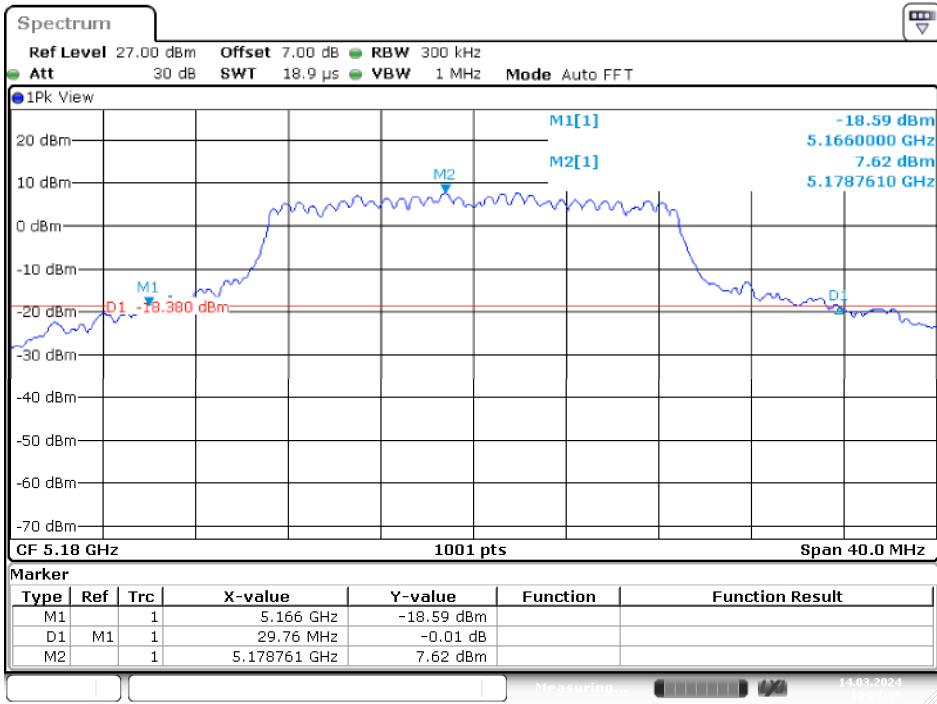
5240MHz



Date: 5.FEB.2024 18:00:30

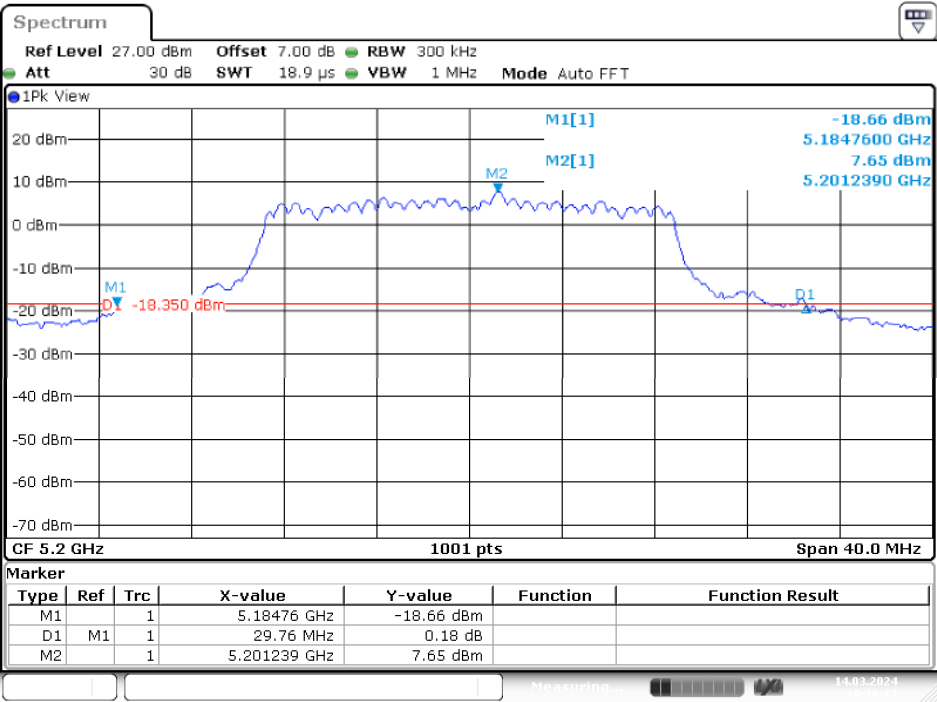
IEEE 802.11ac VHT20 Mode / 5150 ~ 5250MHz

5180MHz



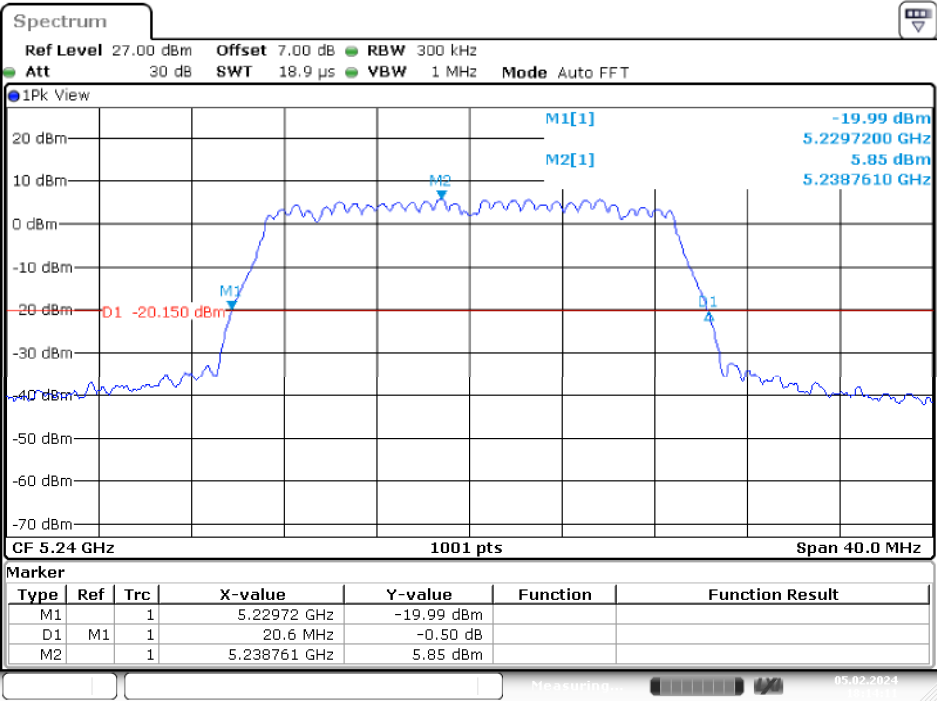
Date: 14.MAR.2024 19:27:35

5200MHz



Date: 14.MAR.2024 19:16:14

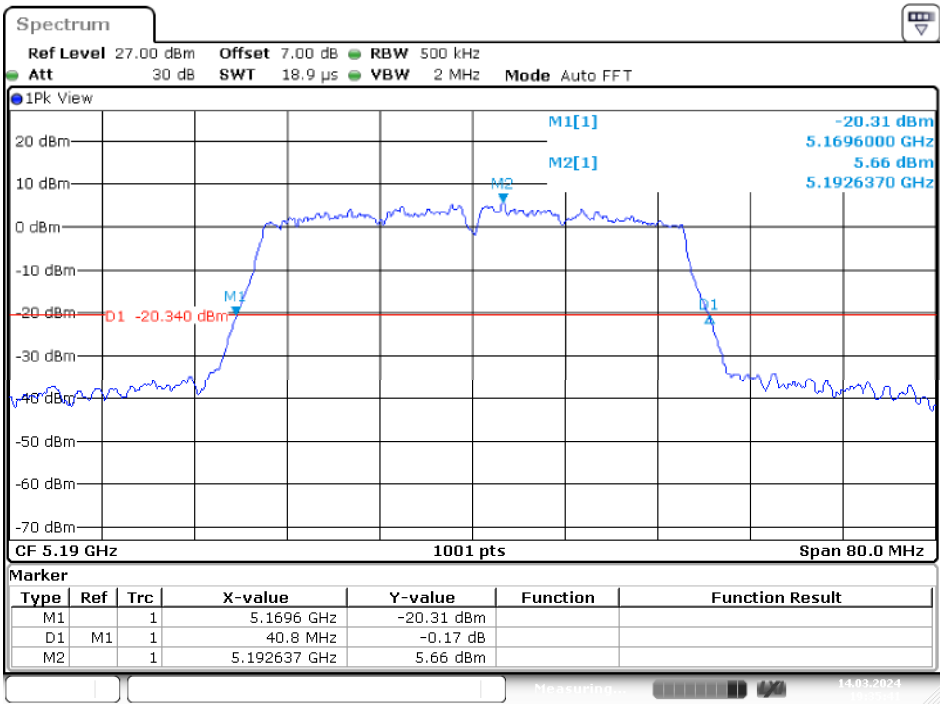
5240MHz



Date: 5.FEB.2024 18:14:11

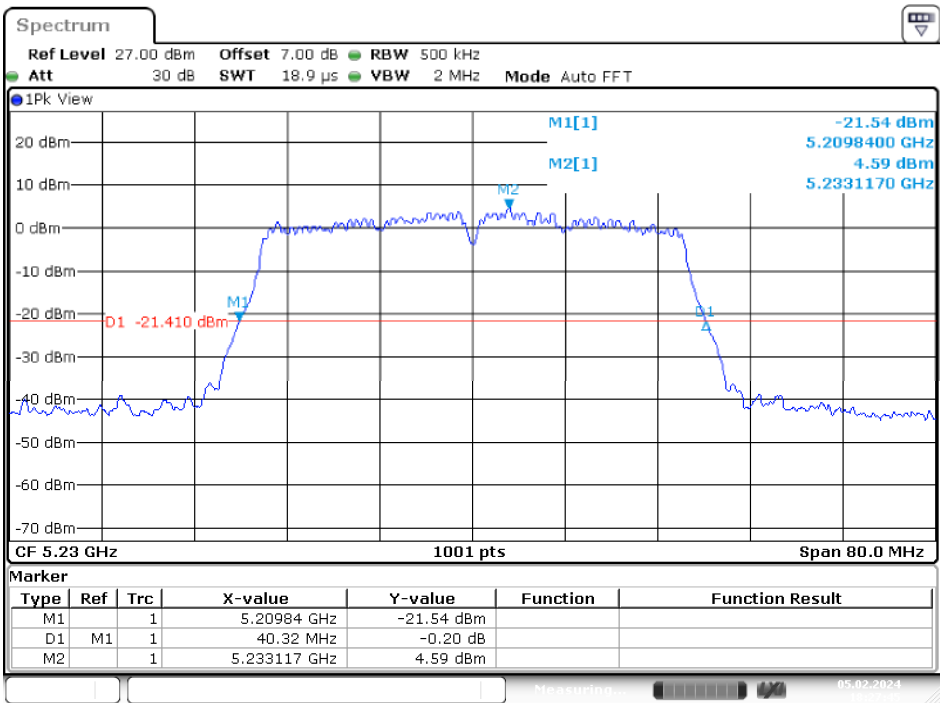
IEEE 802.11ac VHT40 Mode / 5150 ~ 5250MHz

5190MHz



Date: 14.MAR.2024 19:35:40

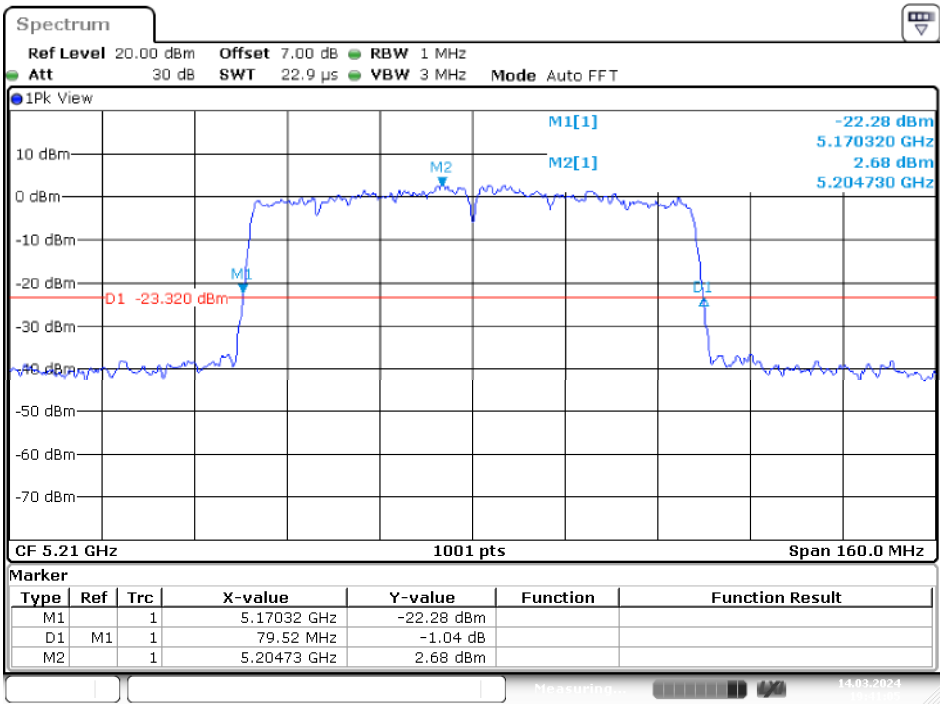
5230MHz



Date: 5.FEB.2024 18:27:45

IEEE 802.11ac VHT80 Mode / 5150 ~ 5250MHz

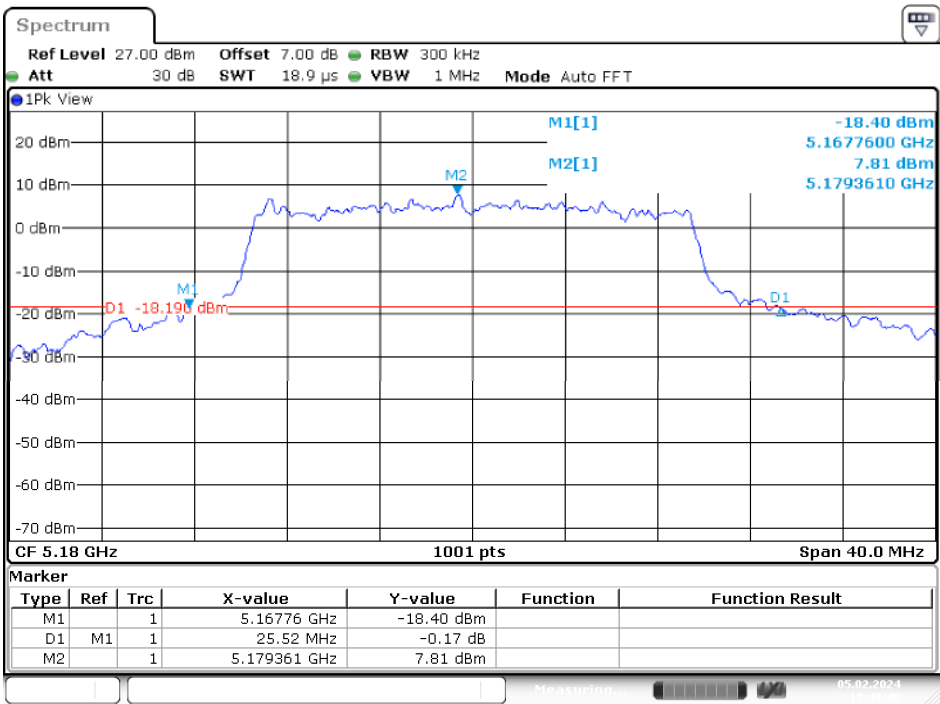
5210MHz



Date: 14.MAR.2024 19:41:05

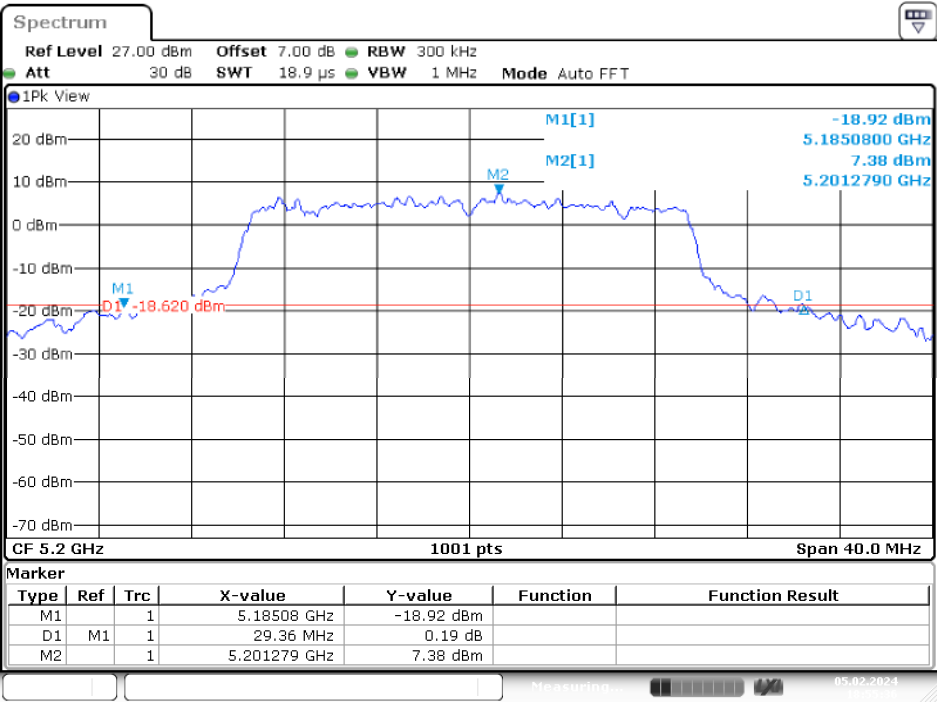
IEEE 802.11ax HE20 Mode / 5150 ~ 5250MHz

5180MHz



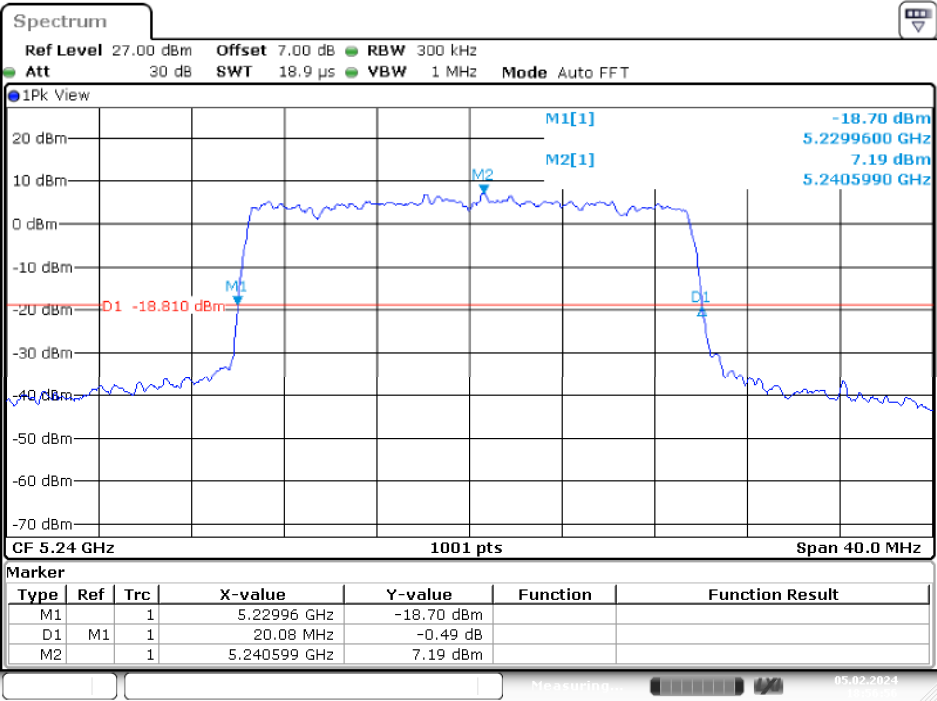
Date: 5.FEB.2024 18:49:40

5200MHz



Date: 5.FEB.2024 18:55:36

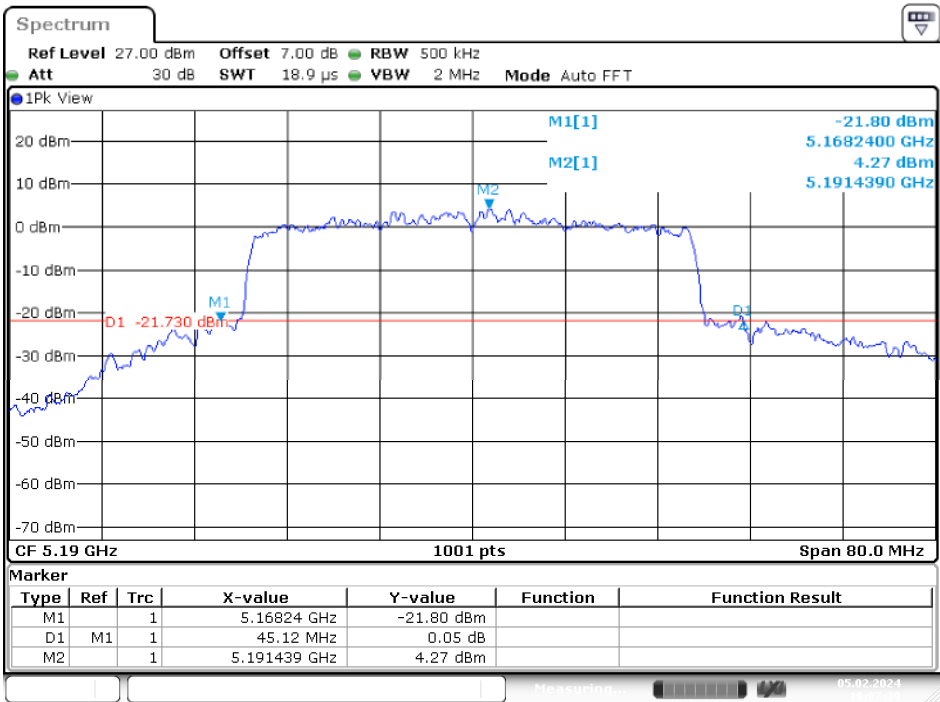
5240MHz



Date: 5.FEB.2024 18:56:56

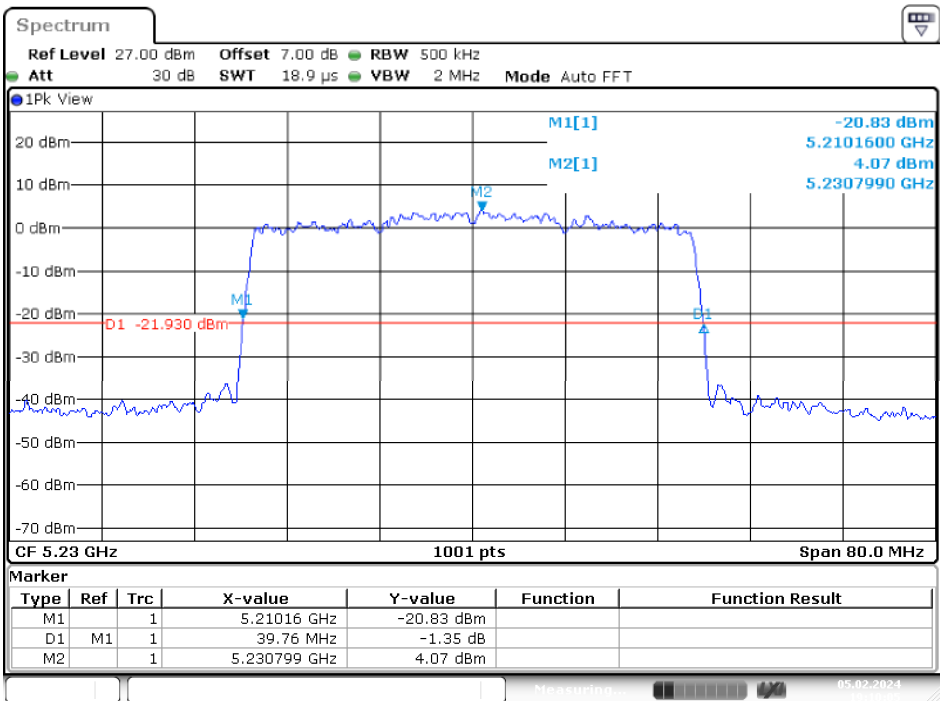
IEEE 802.11ax HE40 Mode / 5150 ~ 5250MHz

5190MHz



Date: 5.FEB.2024 19:07:39

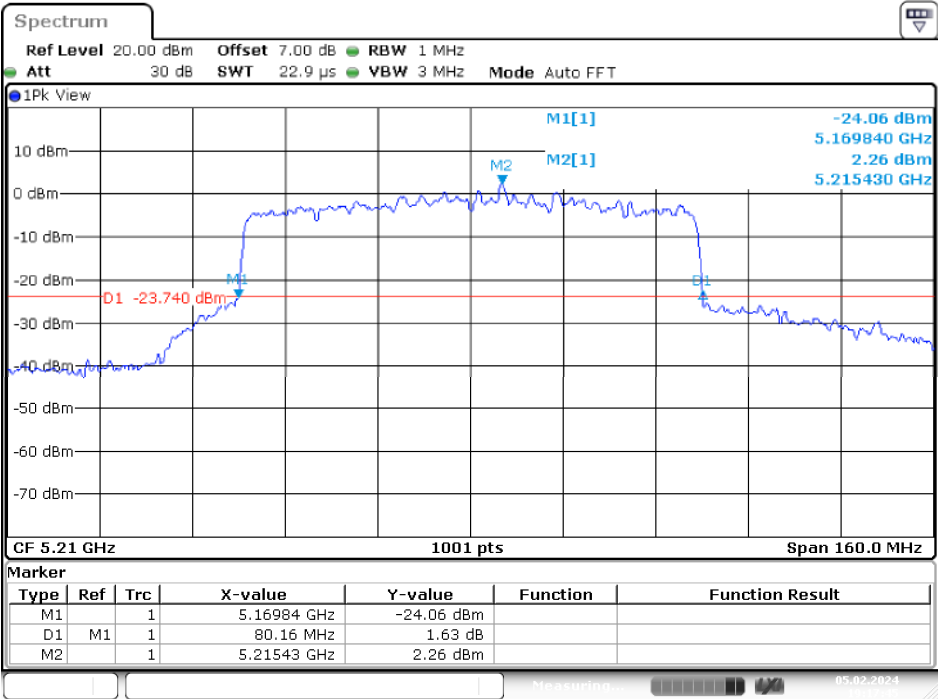
5230MHz



Date: 5.FEB.2024 19:10:05

IEEE 802.11ax 80 Mode / 5150 ~ 5250MHz

5210MHz

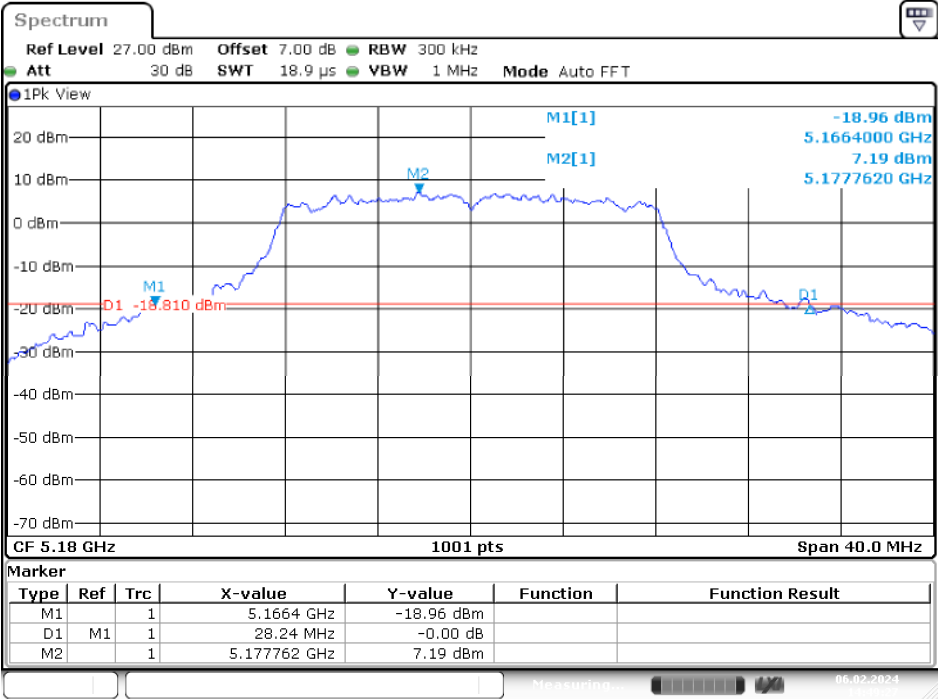


Date: 5.FEB.2024 19:17:45

Chain 2

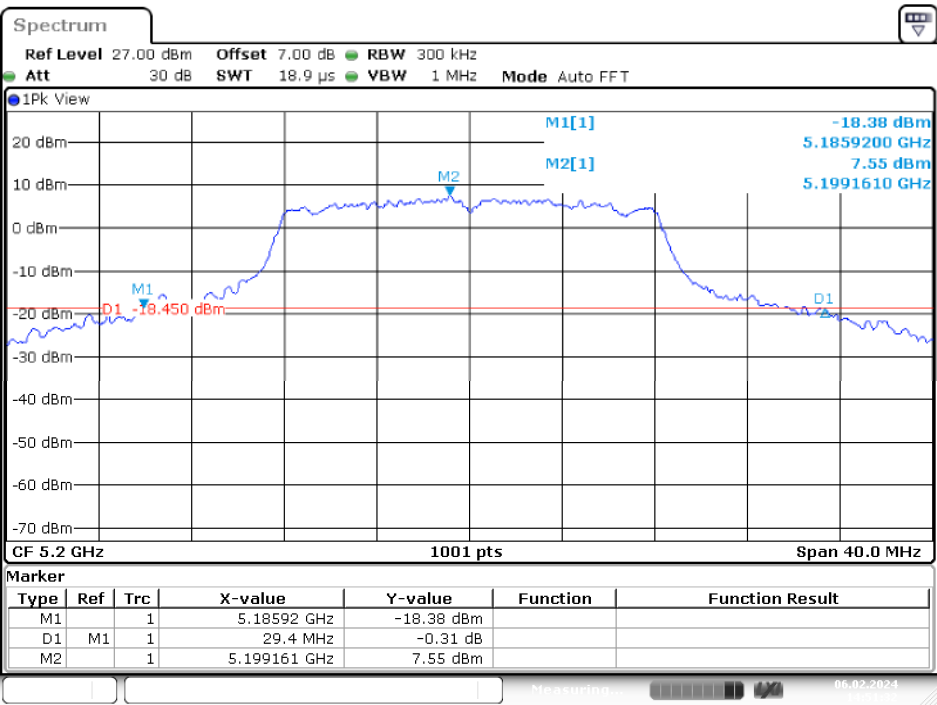
IEEE 802.11a Mode / 5150 ~ 5250MHz

5180MHz



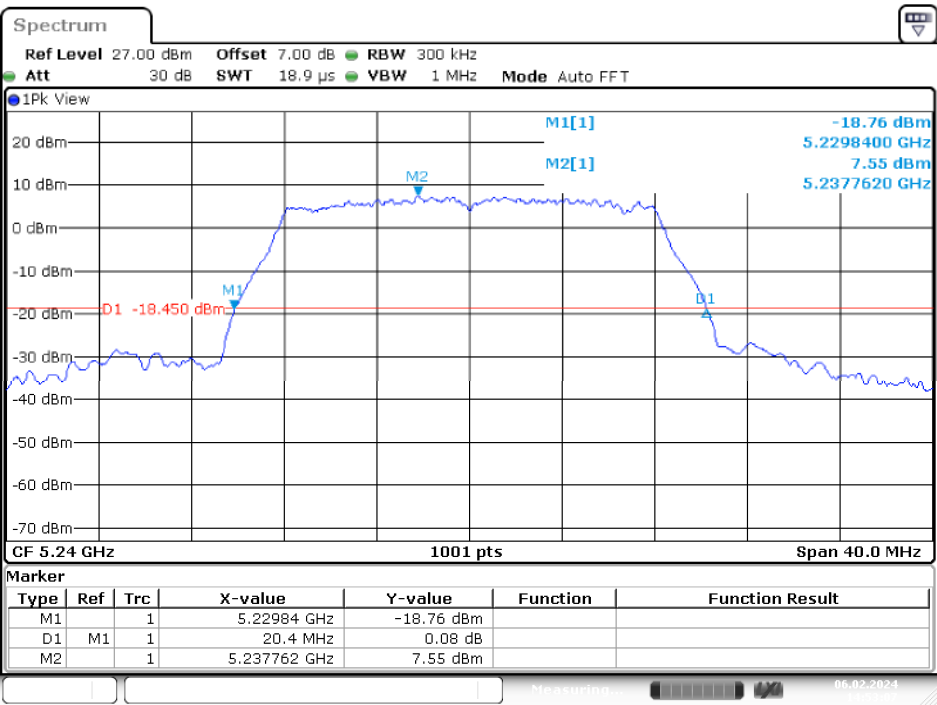
Date: 6.FEB.2024 14:49:27

5200MHz



Date: 6.FEB.2024 14:51:32

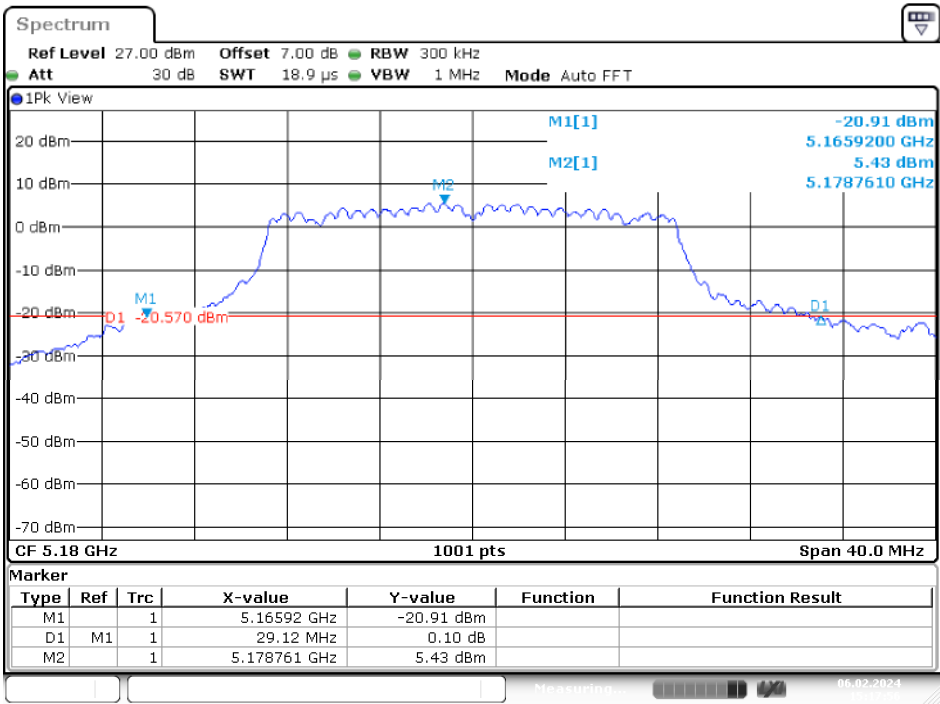
5240MHz



Date: 6.FEB.2024 14:53:08

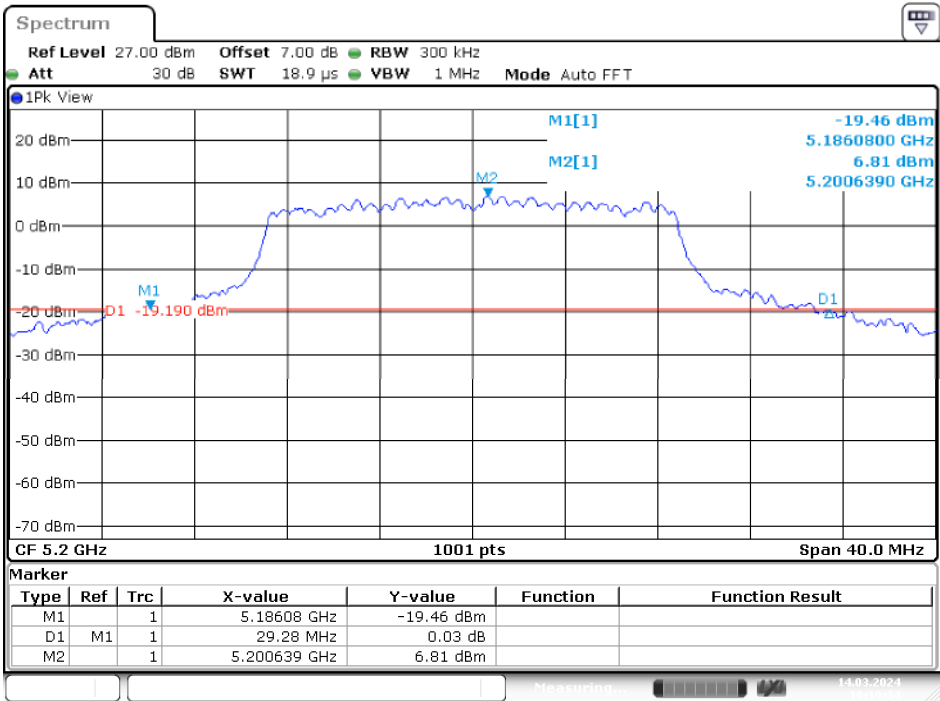
IEEE 802.11ac VHT20 Mode / 5150 ~ 5250MHz

5180MHz



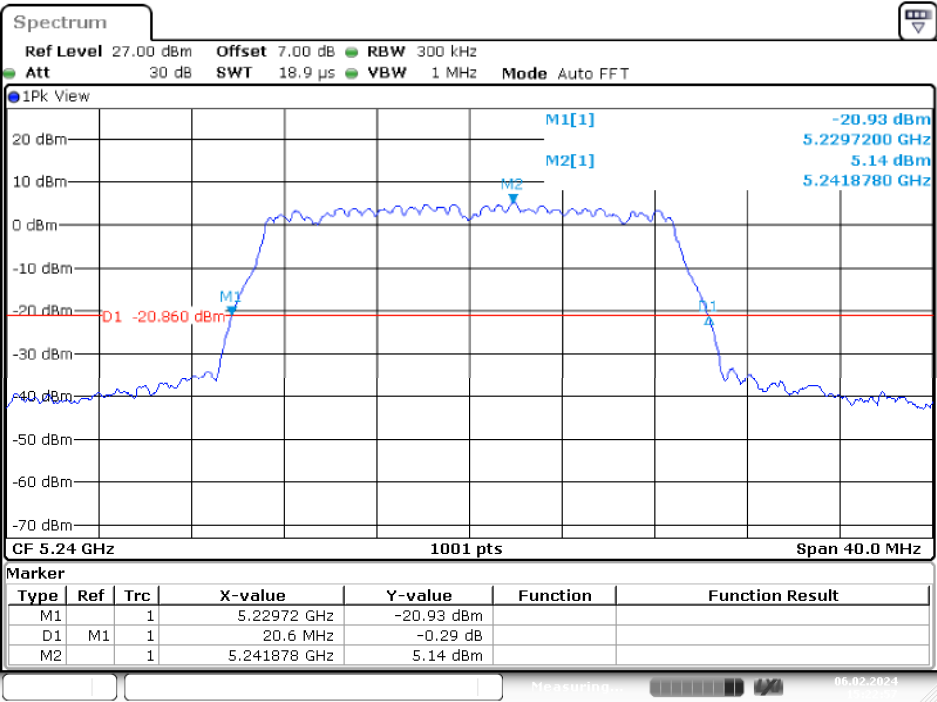
Date: 6.FEB.2024 15:17:56

5200MHz



Date: 14.MAR.2024 19:19:34

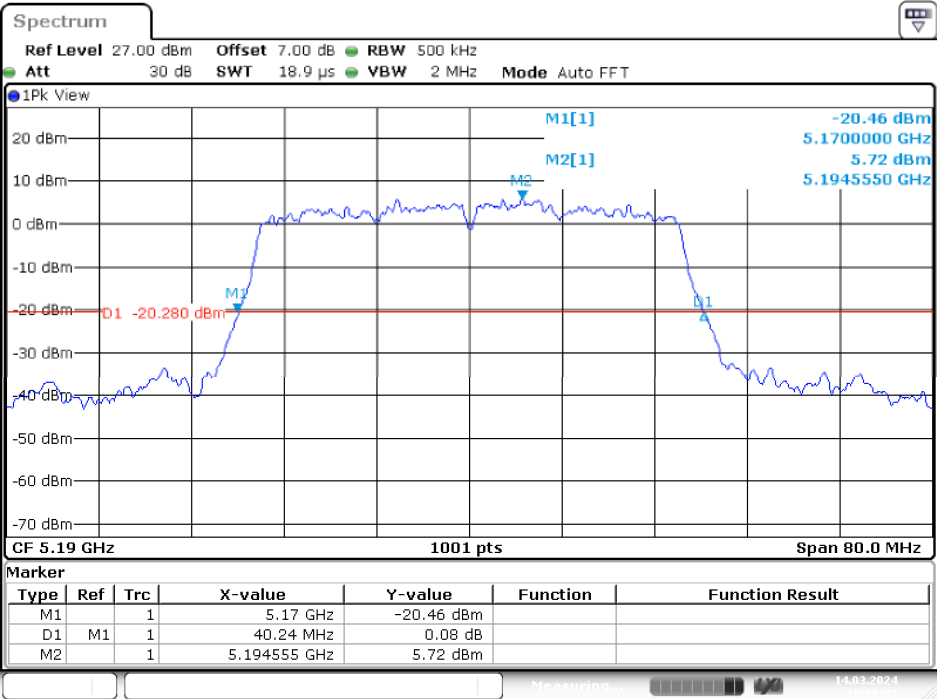
5240MHz



Date: 6.FEB.2024 15:22:57

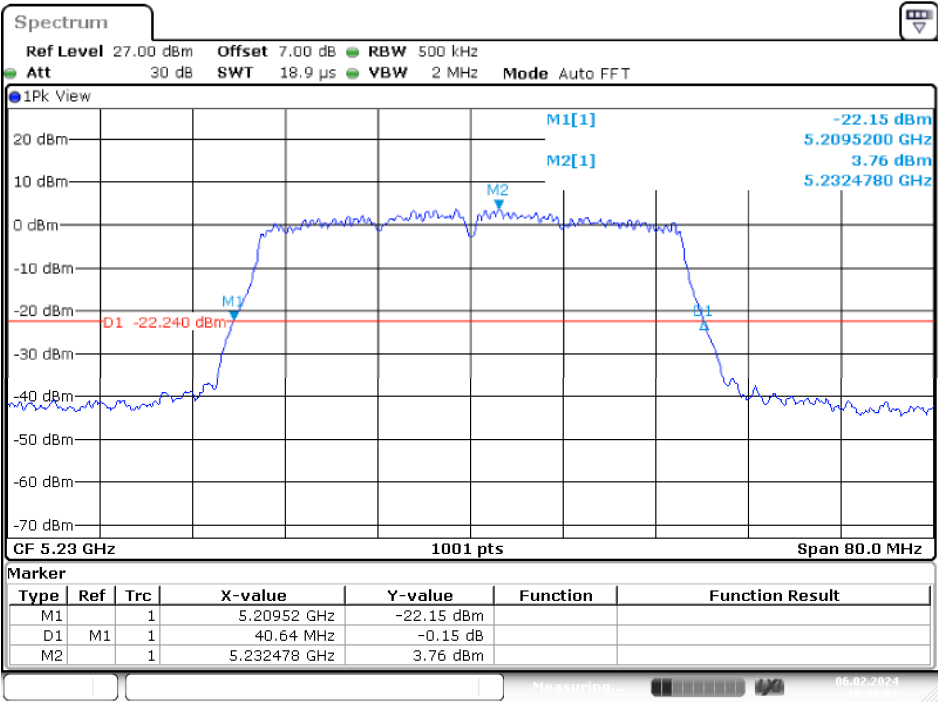
IEEE 802.11ac VHT40 Mode / 5150 ~ 5250MHz

5190MHz



Date: 14.MAR.2024 19:36:33

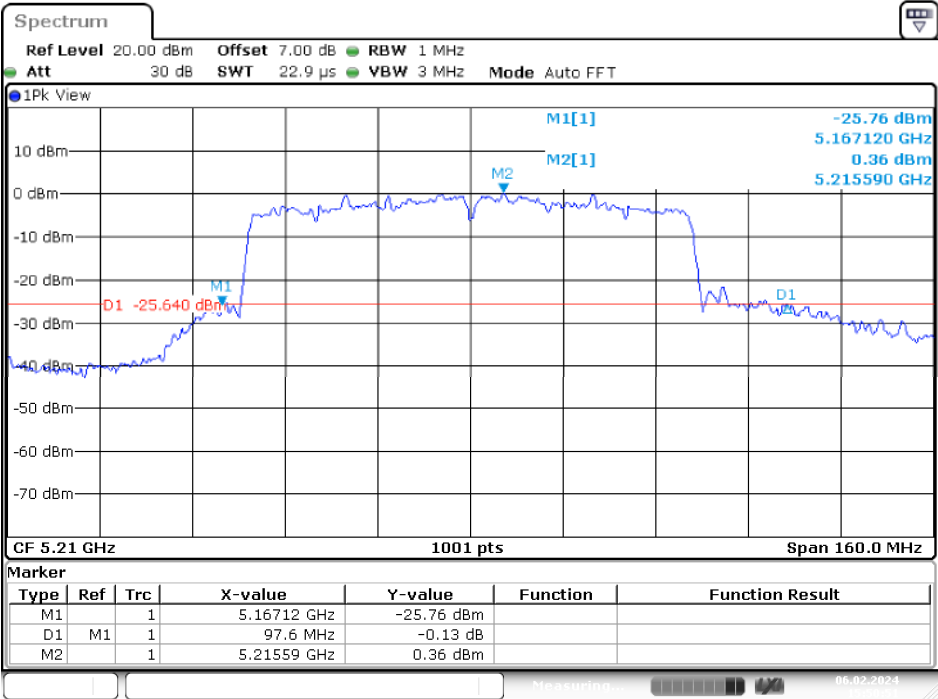
5230MHz



Date: 6.FEB.2024 15:39:01

IEEE 802.11ac VHT80 Mode / 5150 ~ 5250MHz

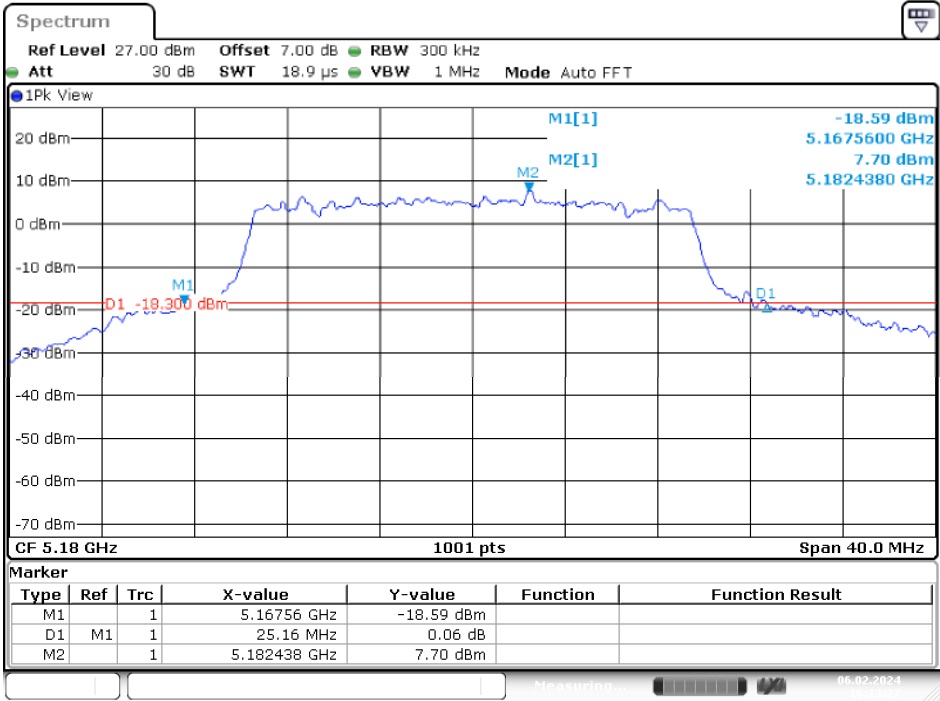
5210MHz



Date: 6.FEB.2024 15:50:51

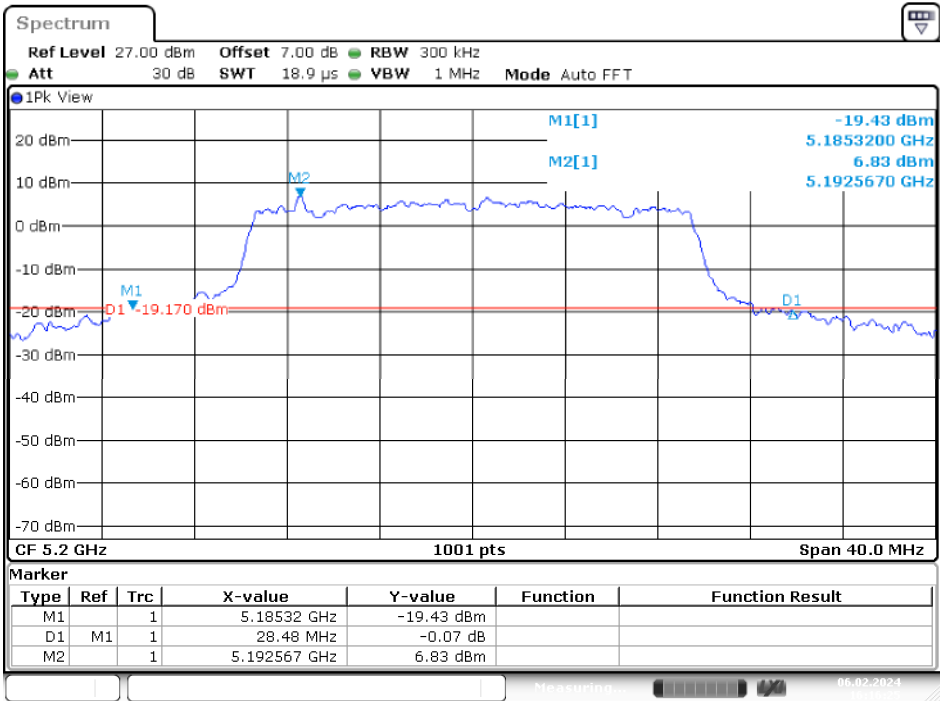
IEEE 802.11ax HE20 Mode / 5150 ~ 5250MHz

5180MHz



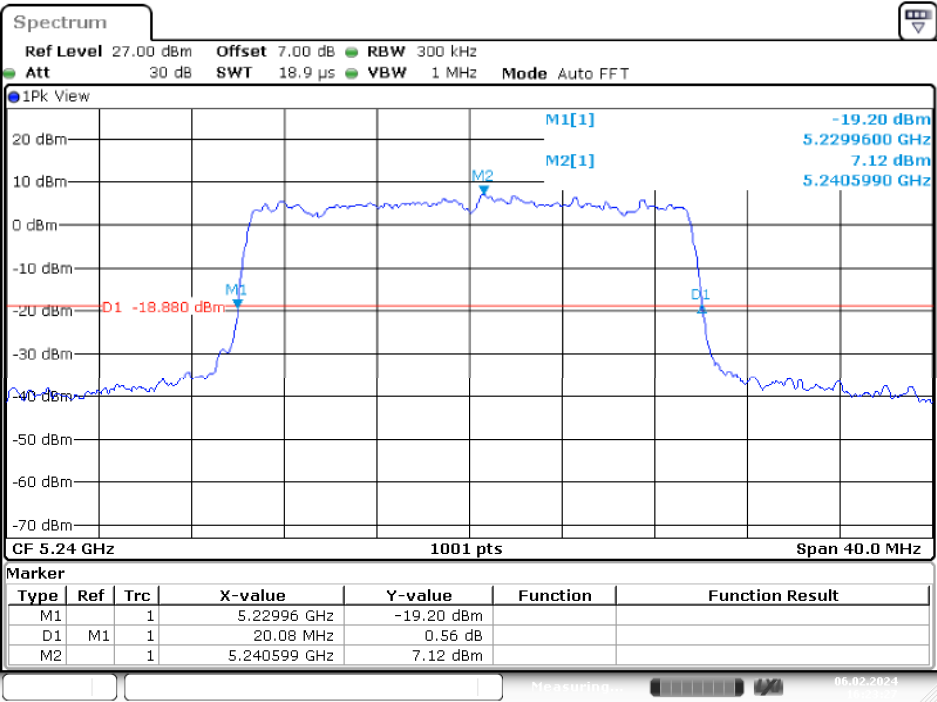
Date: 6.FEB.2024 16:13:27

5200MHz



Date: 6.FEB.2024 16:16:25

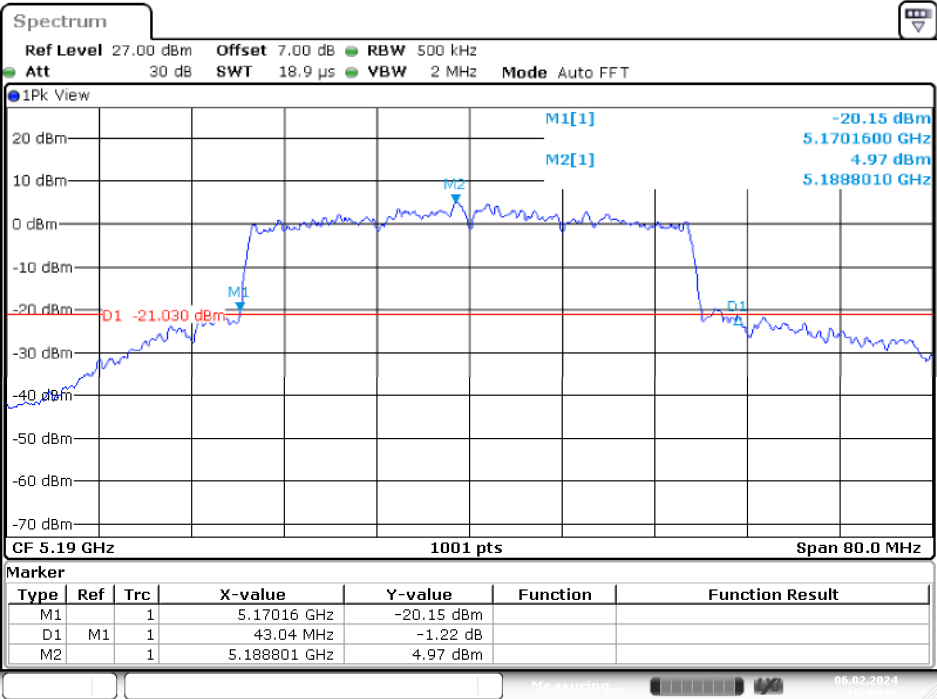
5240MHz



Date: 6.FEB.2024 16:23:27

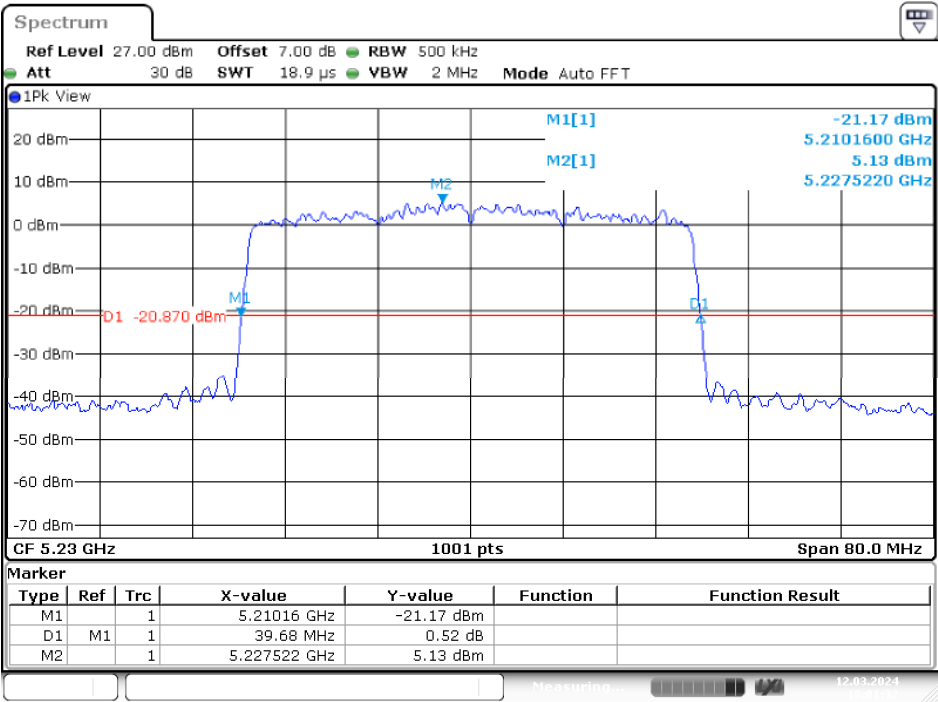
IEEE 802.11ax HE40 Mode / 5150 ~ 5250MHz

5190MHz



Date: 6.FEB.2024 16:40:15

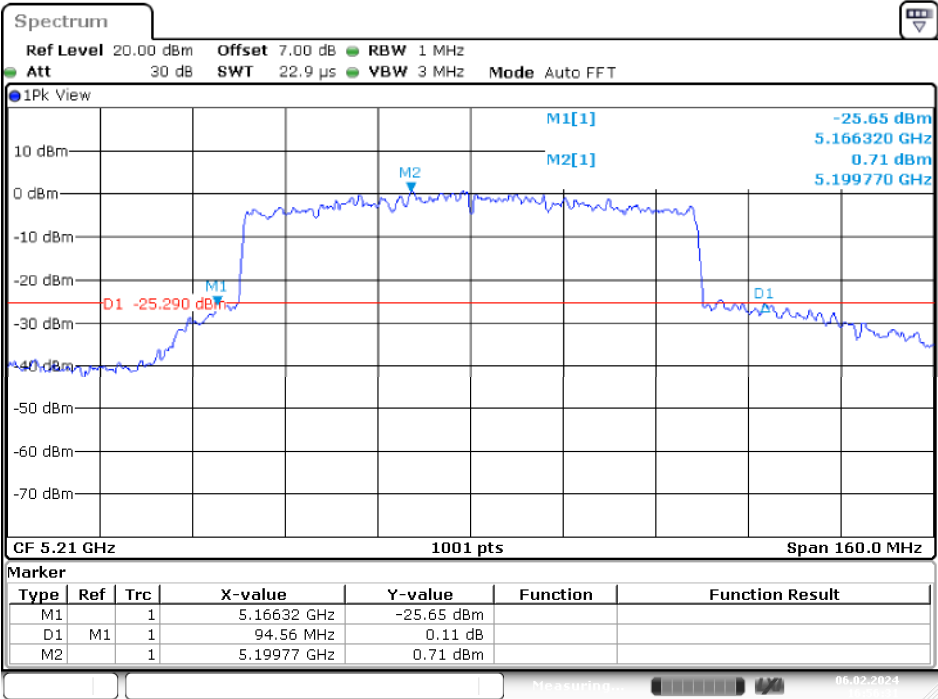
5230MHz



Date: 12.MAR.2024 18:01:33

IEEE 802.11ax HE80 Mode / 5150 ~ 5250MHz

5210MHz

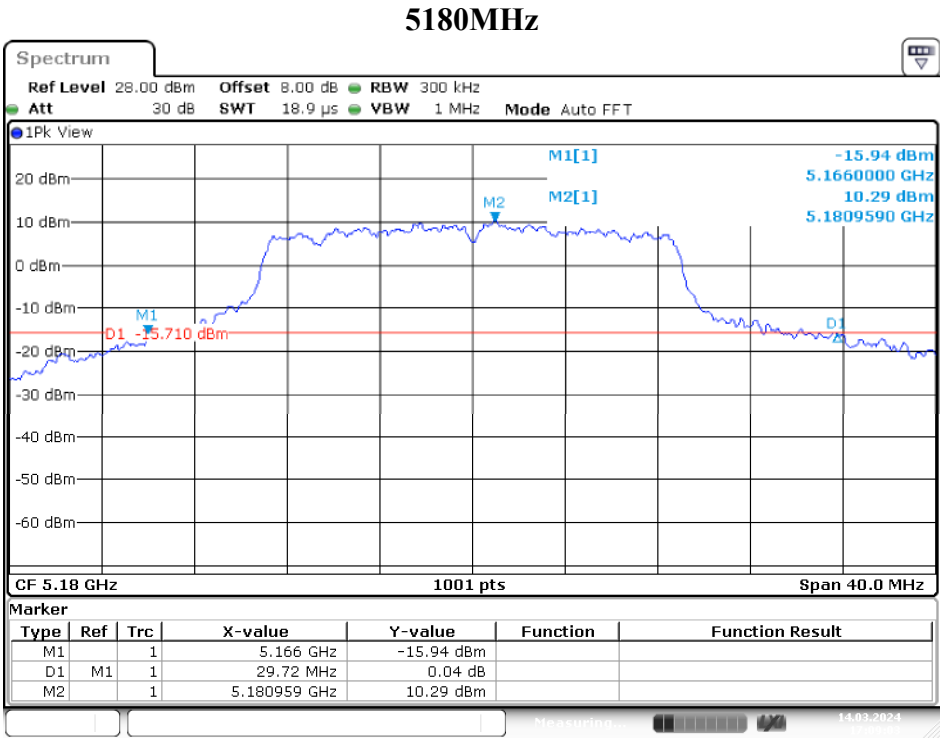


Date: 6.FEB.2024 16:56:31

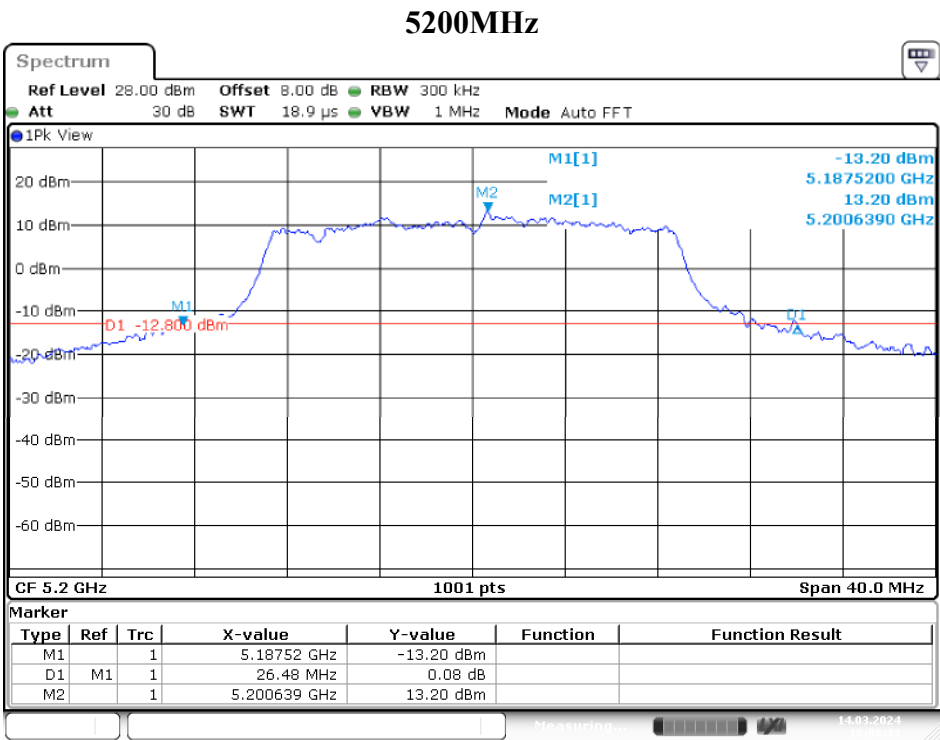
Beamforming Mode:

Chain 0

IEEE 802.11ac VHT20 Mode / 5150 ~ 5250MHz

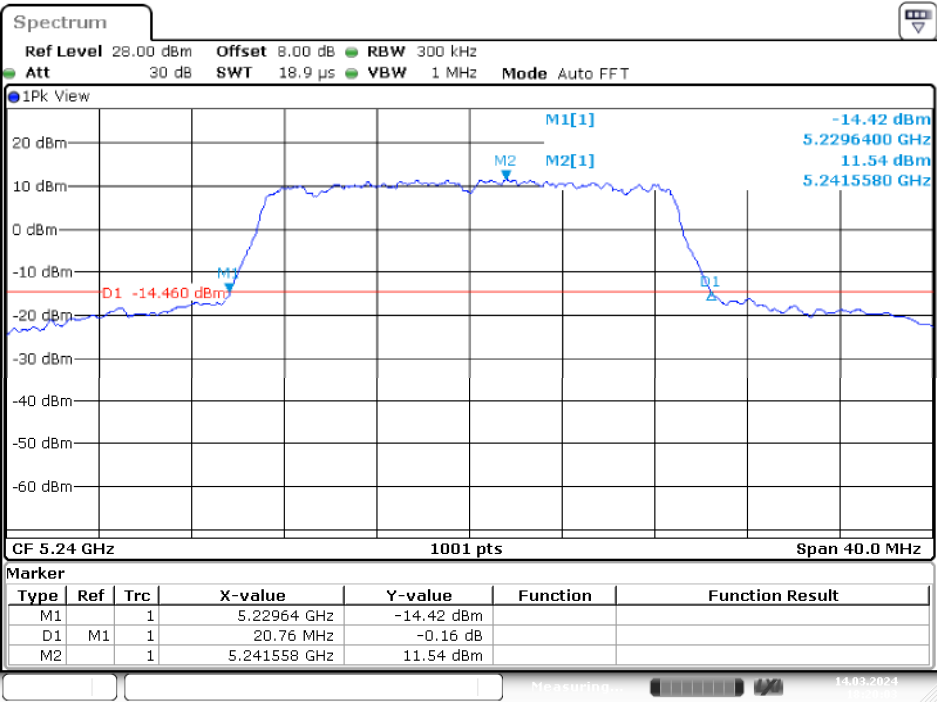


Date: 14.MAR.2024 17:09:03



Date: 14.MAR.2024 18:08:34

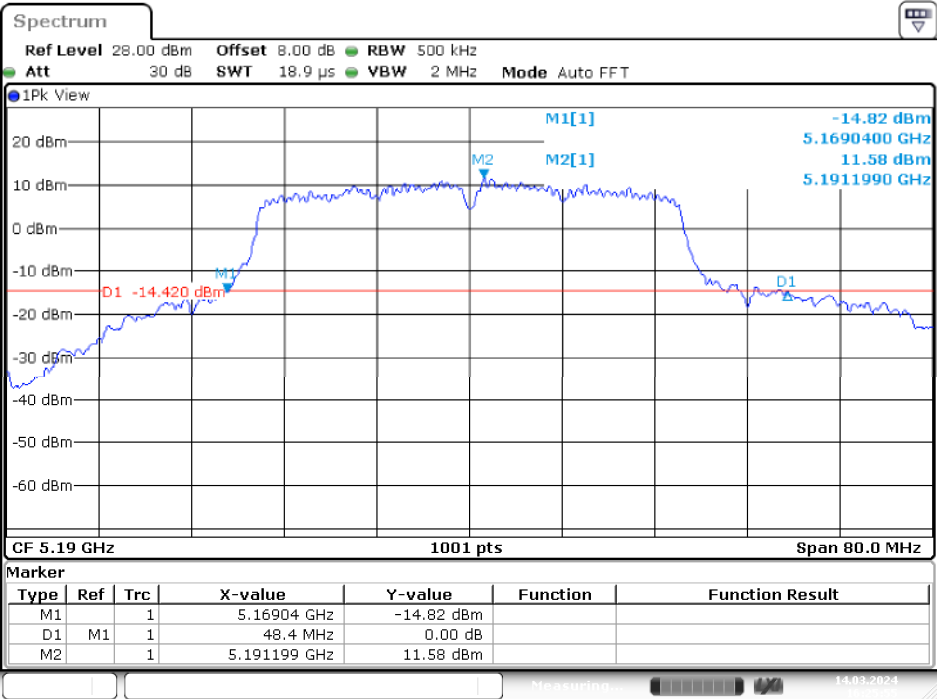
5240MHz



Date: 14.MAR.2024 18:20:04

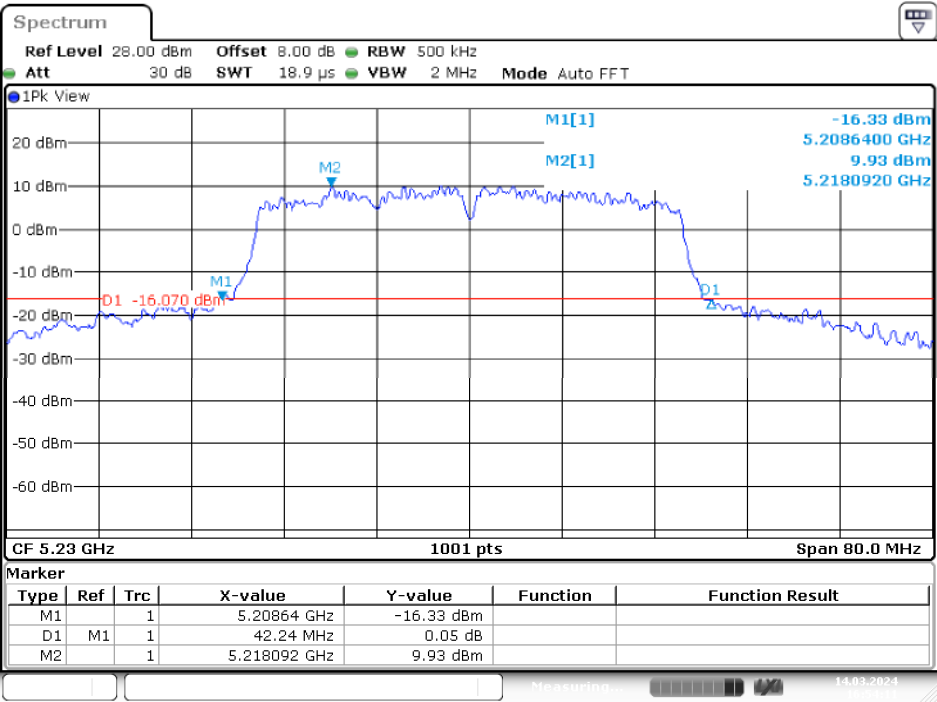
IEEE 802.11ac VHT40 Mode / 5150 ~ 5250MHz

5190MHz



Date: 14.MAR.2024 16:25:55

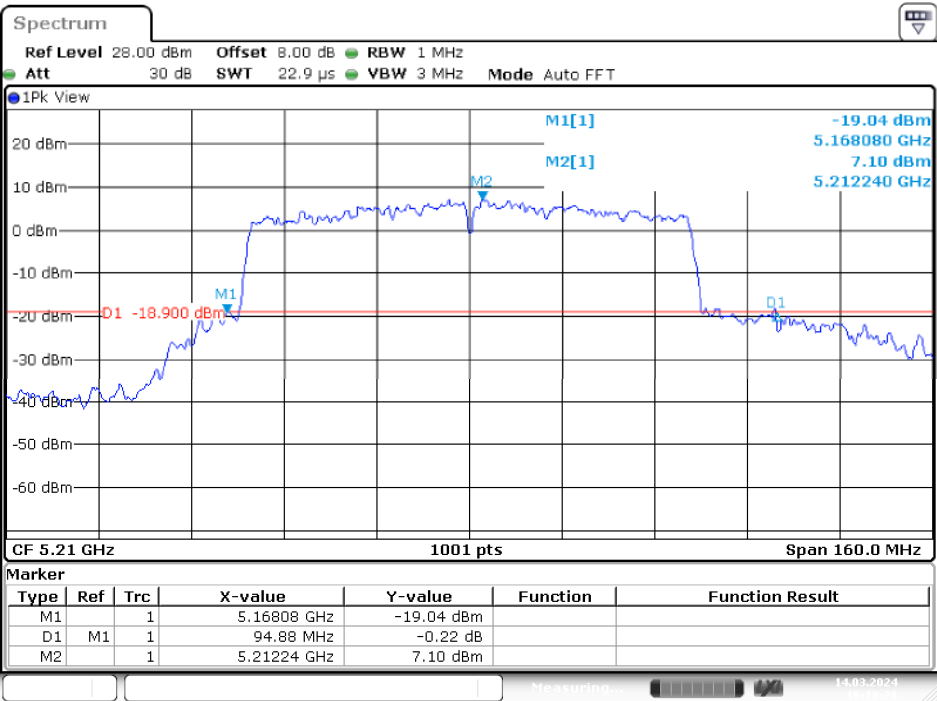
5230MHz



Date: 14.MAR.2024 16:54:11

IEEE 802.11ac VHT80 Mode / 5150 ~ 5250MHz

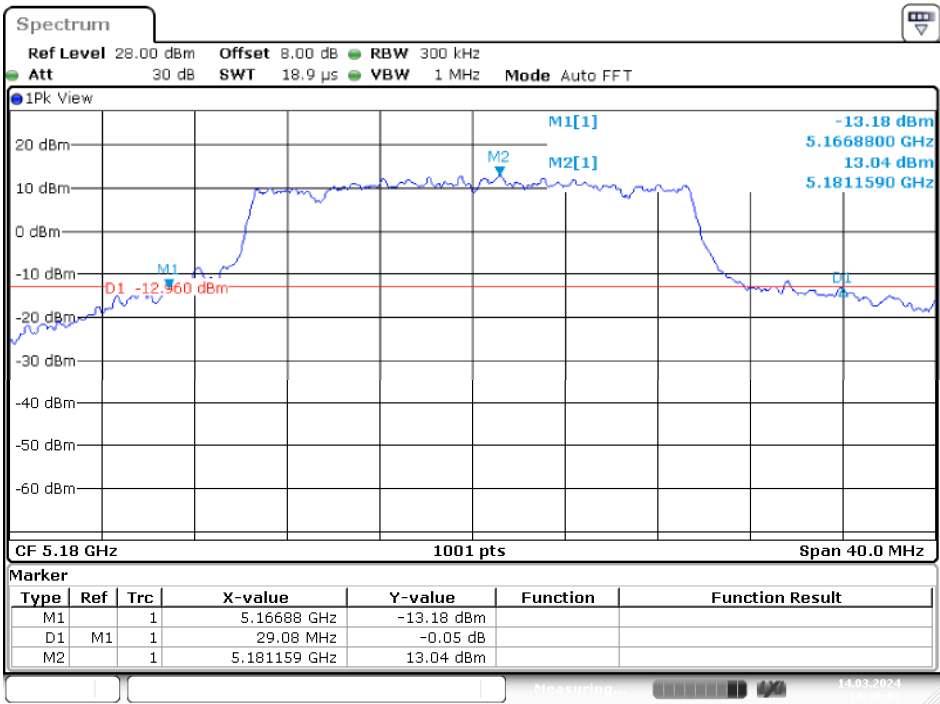
5210MHz



Date: 14.MAR.2024 16:18:28

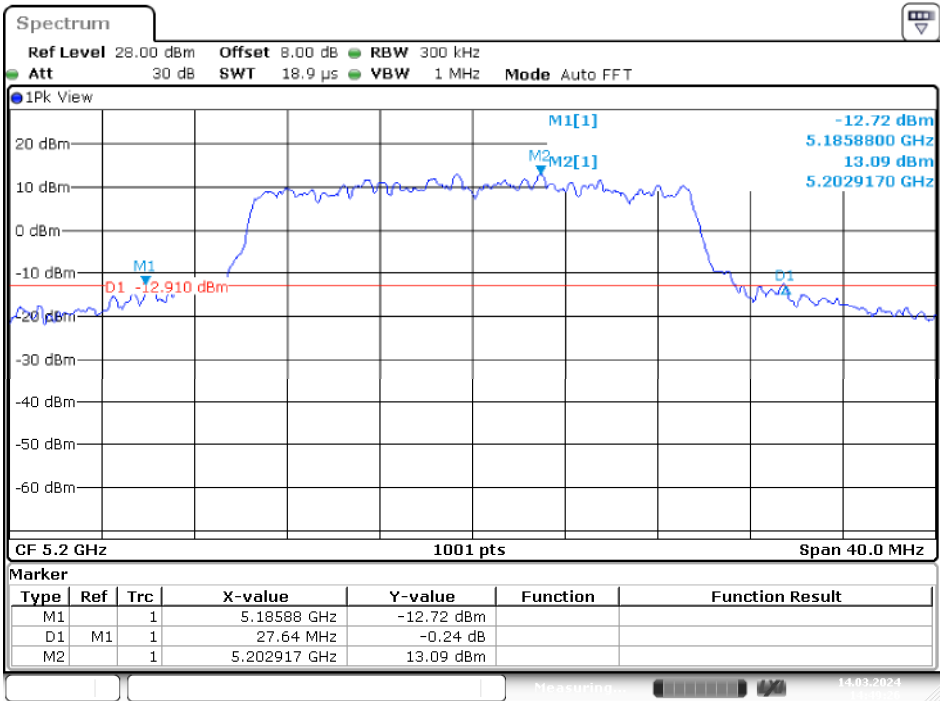
IEEE 802.11ax HE20 Mode / 5150 ~ 5250MHz

5180MHz



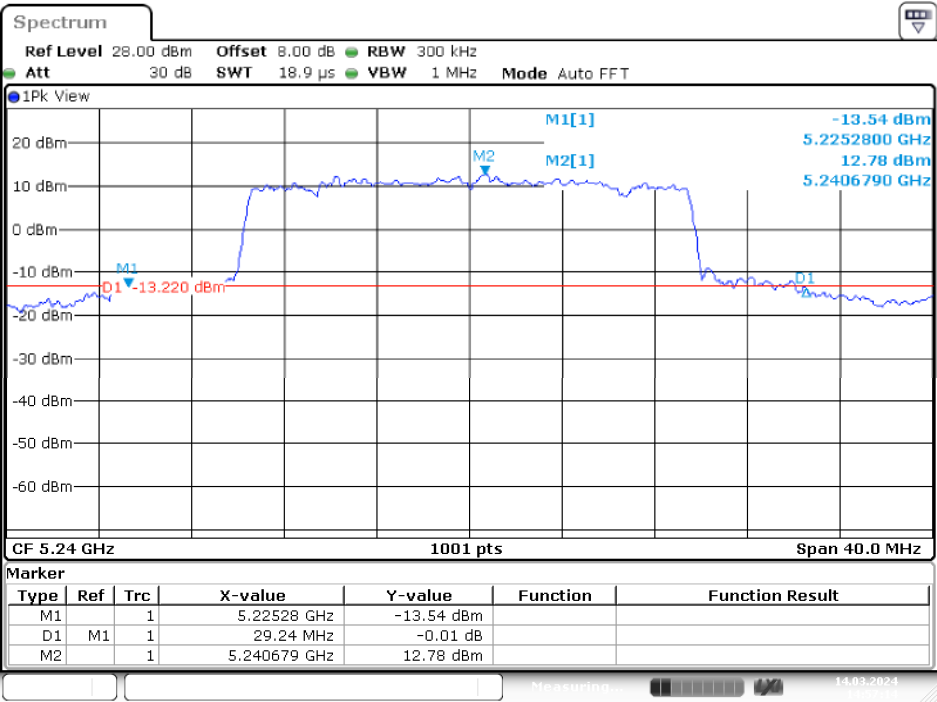
Date: 14.MAR.2024 14:18:03

5200MHz



Date: 14.MAR.2024 14:49:26

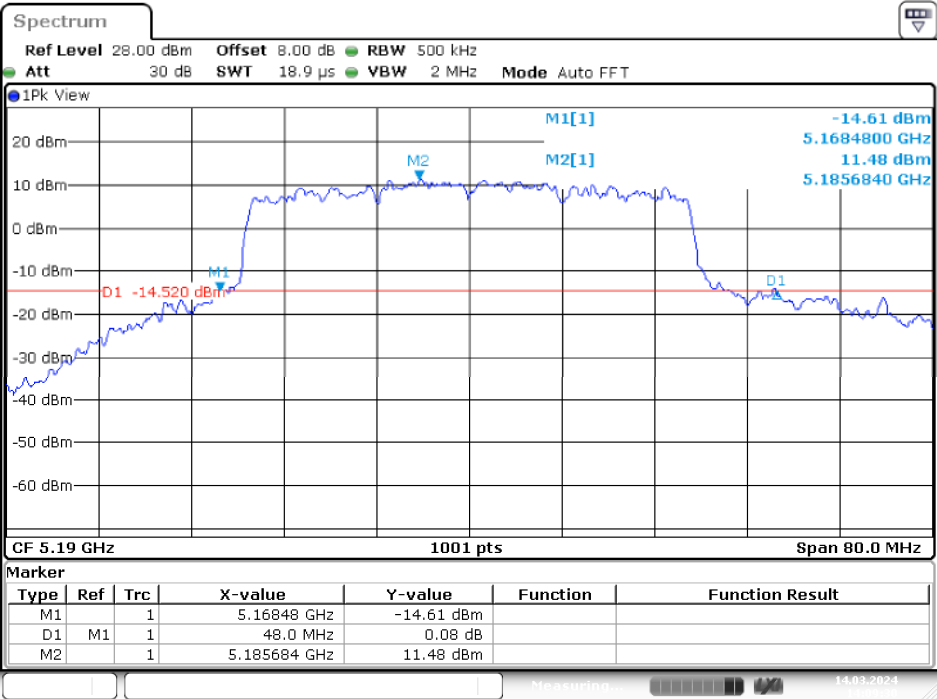
5240MHz



Date: 14.MAR.2024 14:57:14

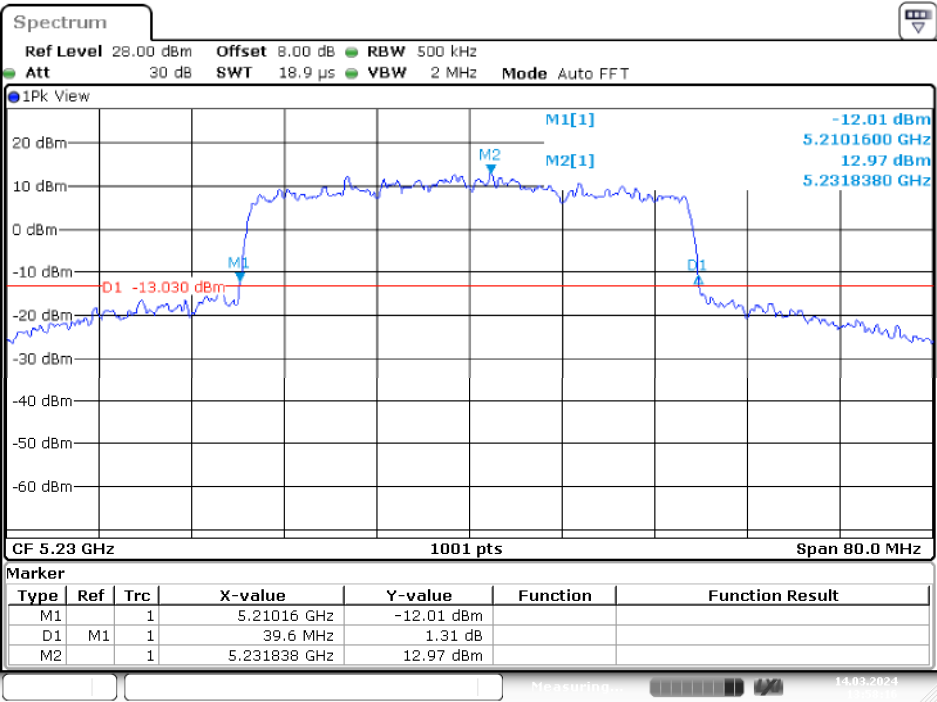
IEEE 802.11ax HE40 Mode / 5150 ~ 5250MHz

5190MHz



Date: 14.MAR.2024 14:09:30

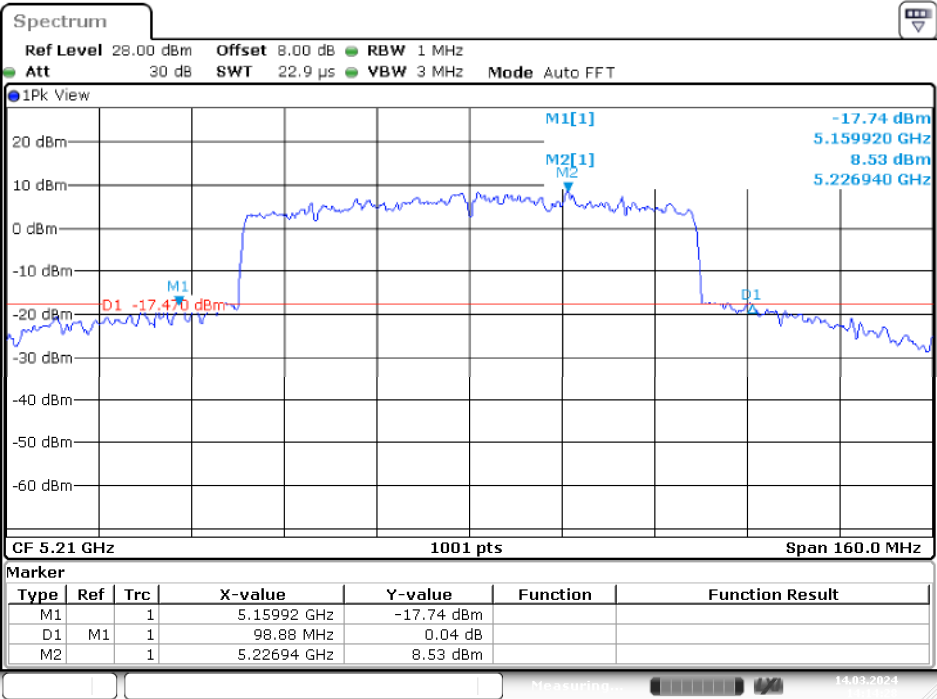
5230MHz



Date: 14.MAR.2024 13:58:16

IEEE 802.11ax HE80 Mode / 5150 ~ 5250MHz

5210MHz

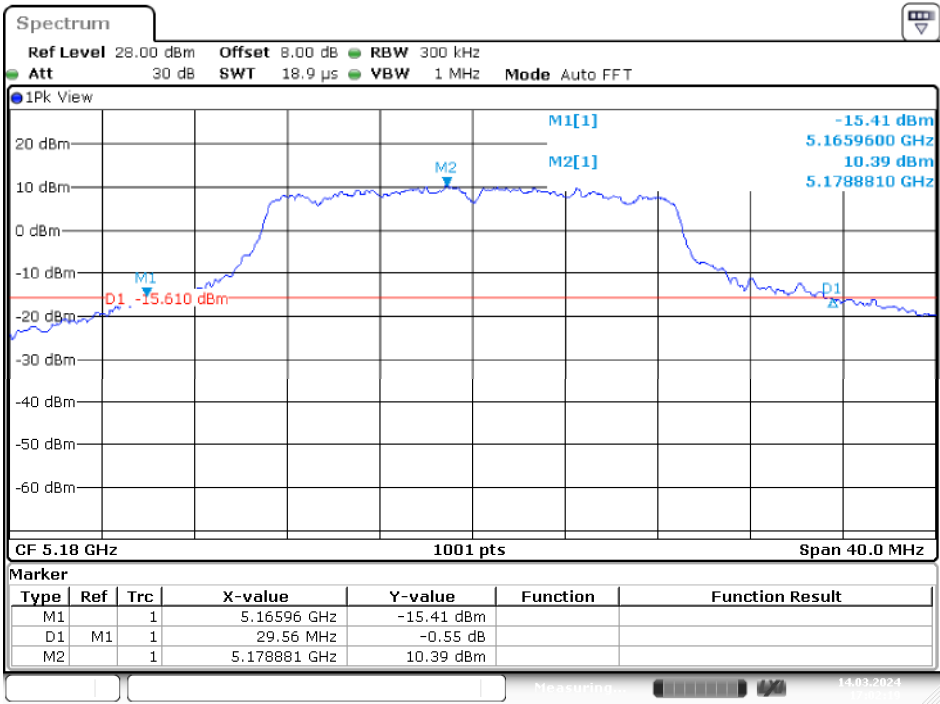


Date: 14.MAR.2024 14:14:28

Chain 1

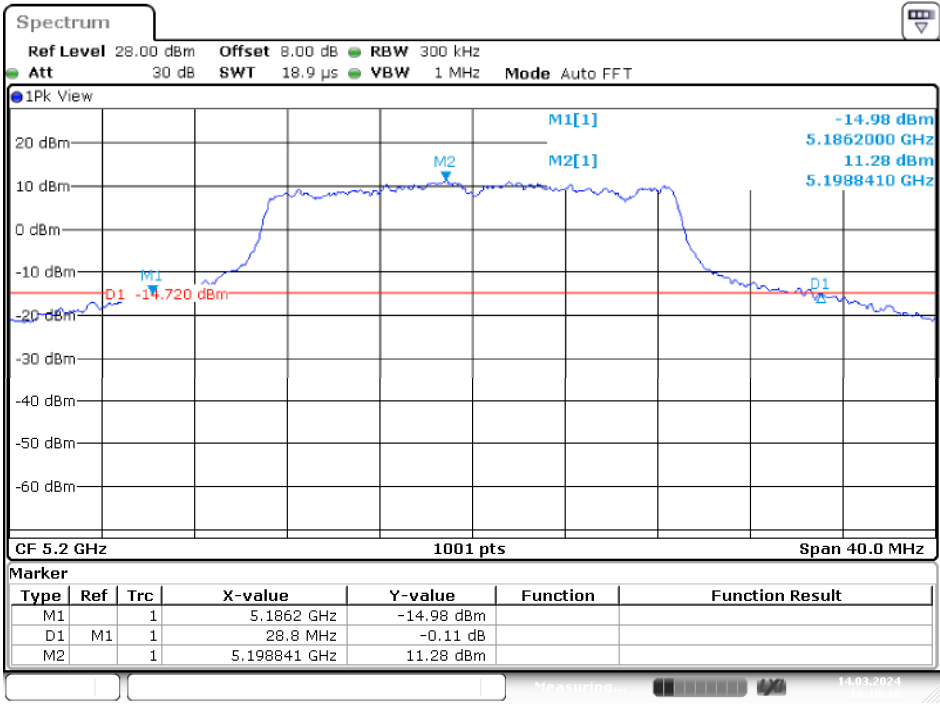
IEEE 802.11ac VHT20 Mode / 5150 ~ 5250MHz

5180MHz



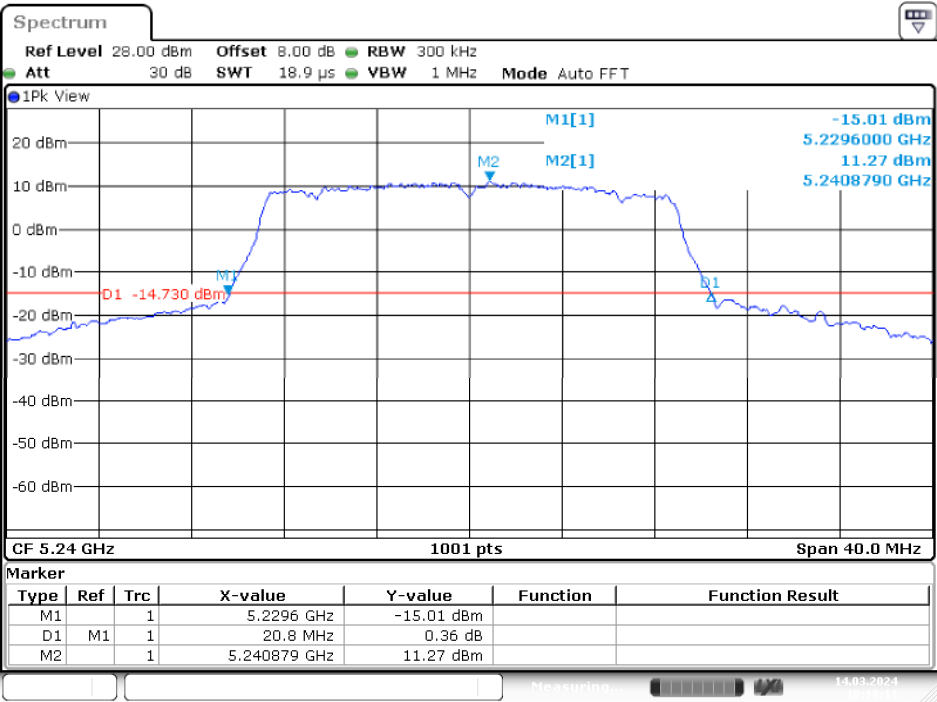
Date: 14.MAR.2024 17:02:19

5200MHz



Date: 14.MAR.2024 18:10:19

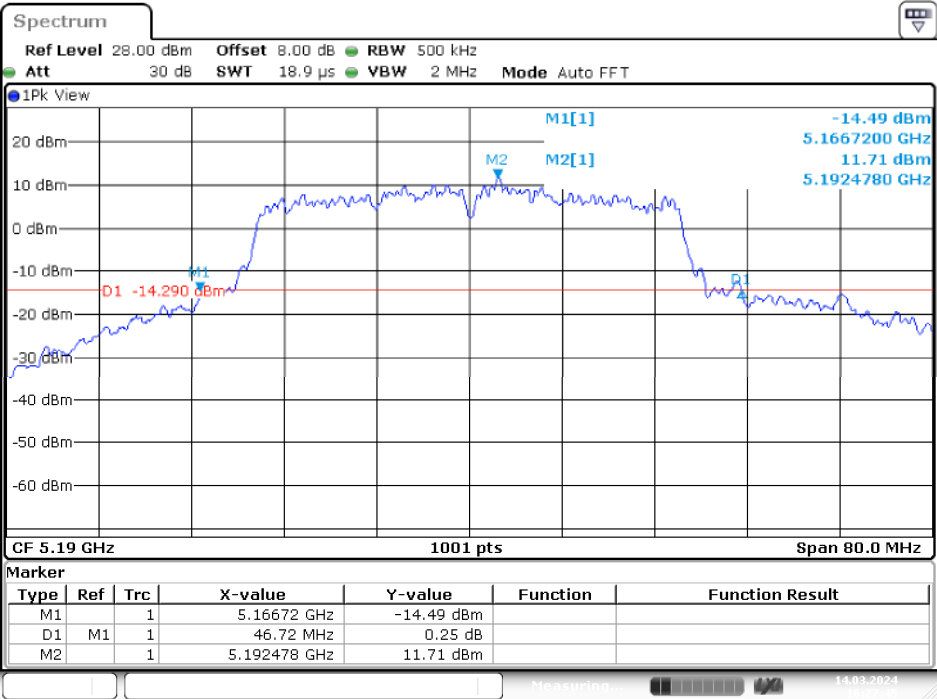
5240MHz



Date: 14.MAR.2024 18:18:11

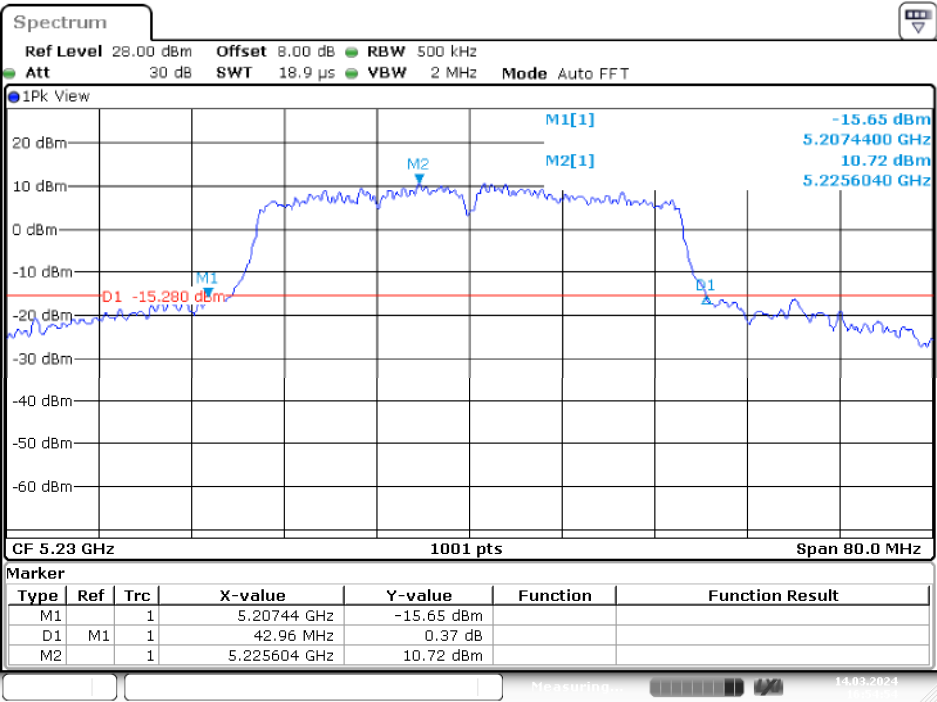
IEEE 802.11ac VHT40 Mode / 5150 ~ 5250MHz

5190MHz



Date: 14.MAR.2024 16:27:45

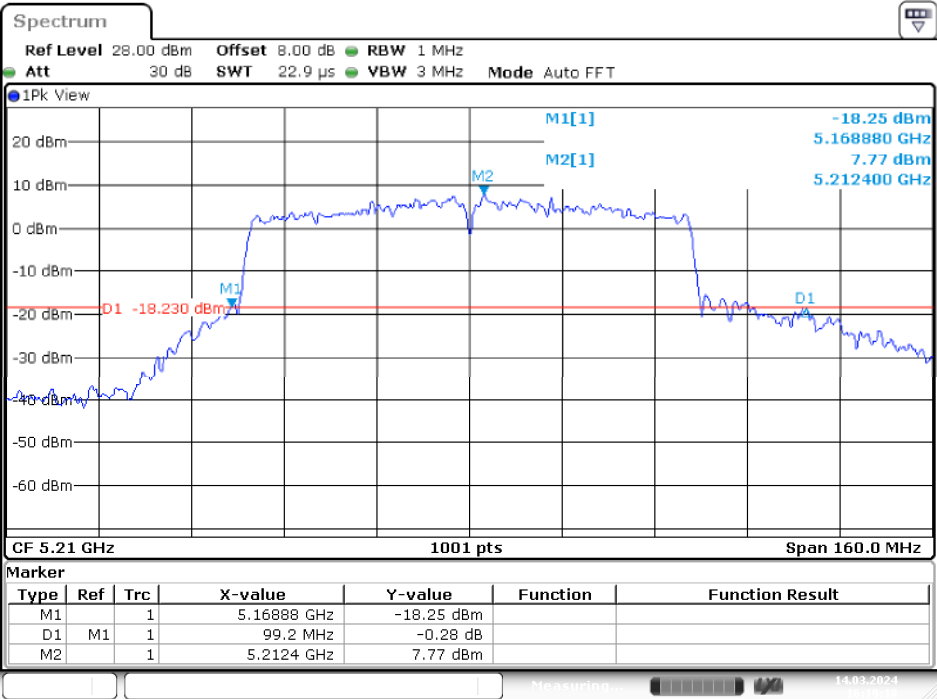
5230MHz



Date: 14.MAR.2024 16:54:54

IEEE 802.11ac VHT80 Mode / 5150 ~ 5250MHz

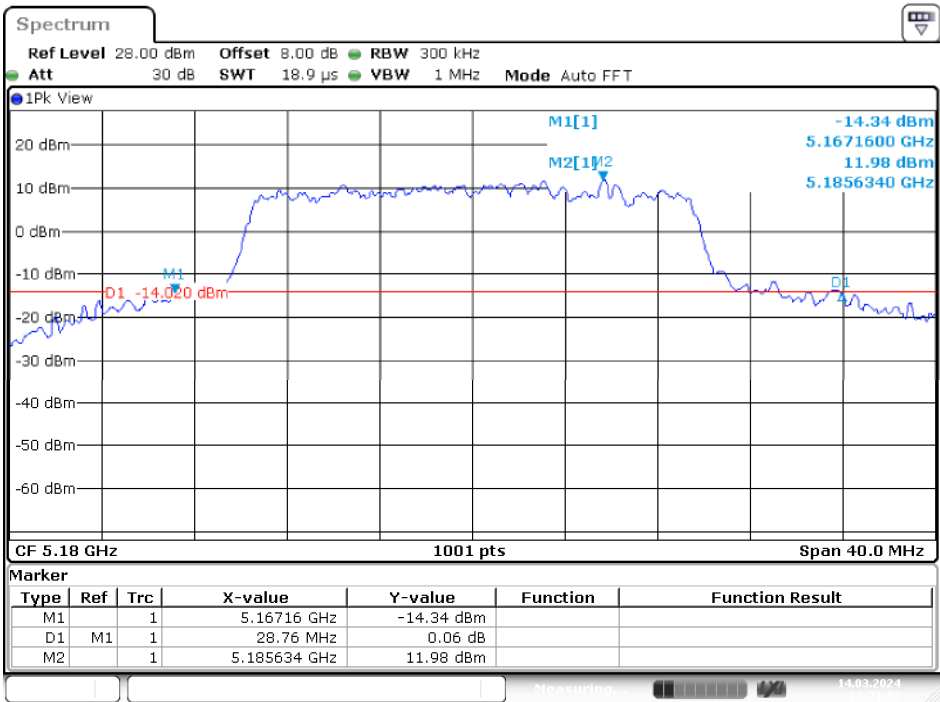
5210MHz



Date: 14.MAR.2024 16:19:18

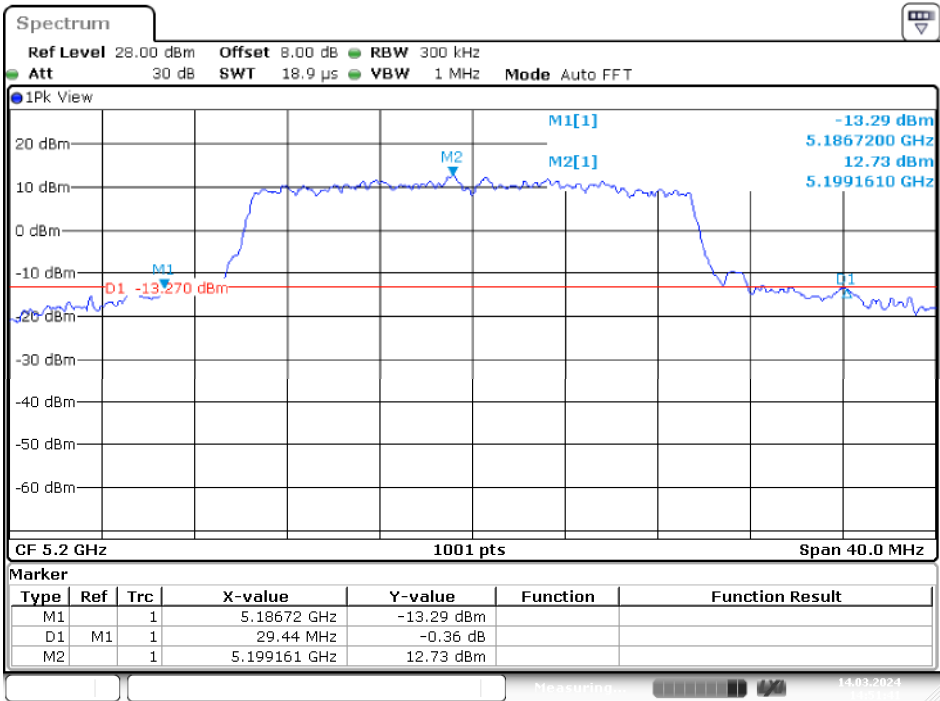
IEEE 802.11ax HE20 Mode / 5150 ~ 5250MHz

5180MHz



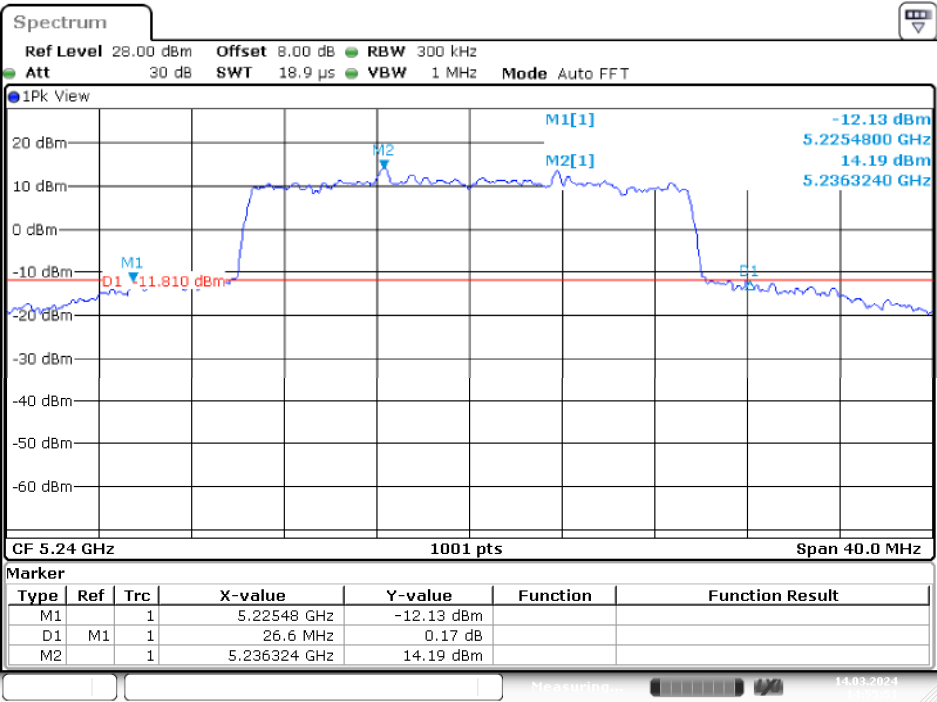
Date: 14.MAR.2024 14:21:02

5200MHz



Date: 14.MAR.2024 14:51:41

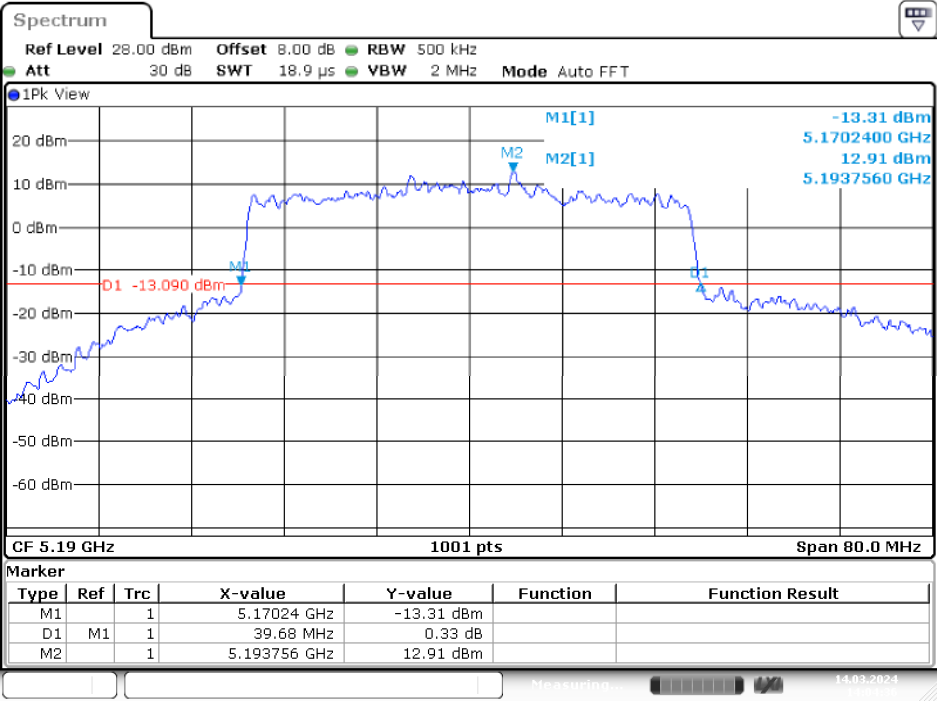
5240MHz



Date: 14.MAR.2024 14:55:51

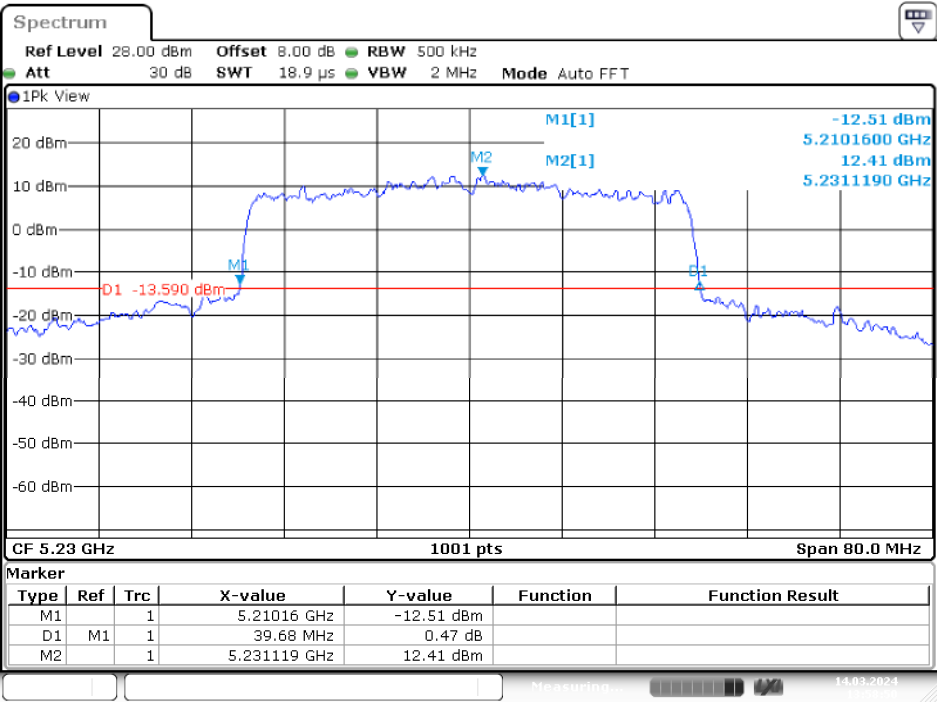
IEEE 802.11ax HE40 Mode / 5150 ~ 5250MHz

5190MHz



Date: 14.MAR.2024 14:04:36

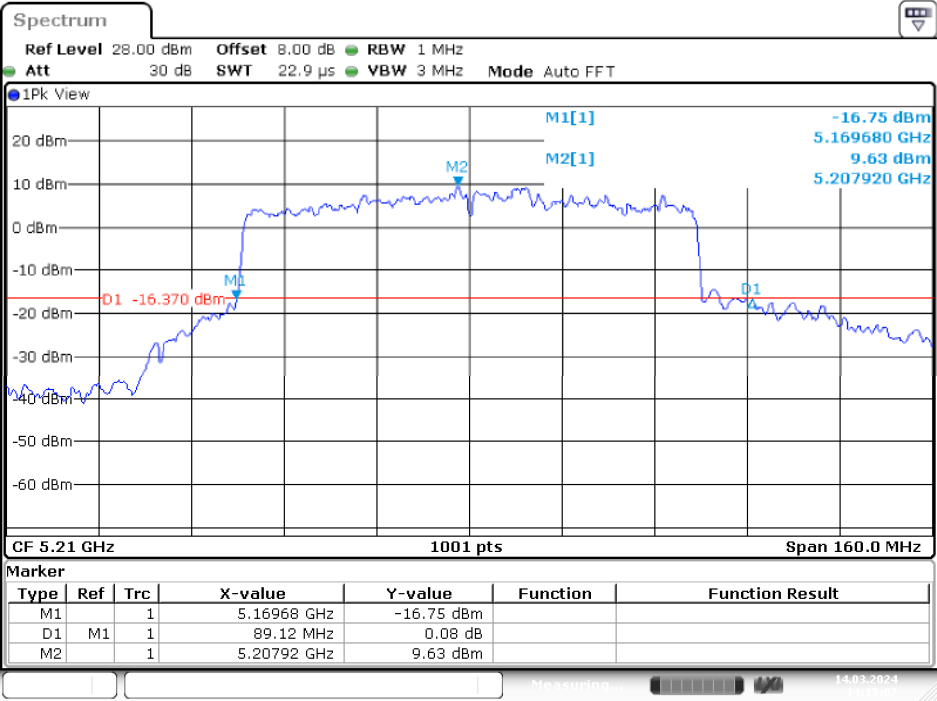
5230MHz



Date: 14.MAR.2024 13:58:50

IEEE 802.11ax HE80 Mode / 5150 ~ 5250MHz

5210MHz

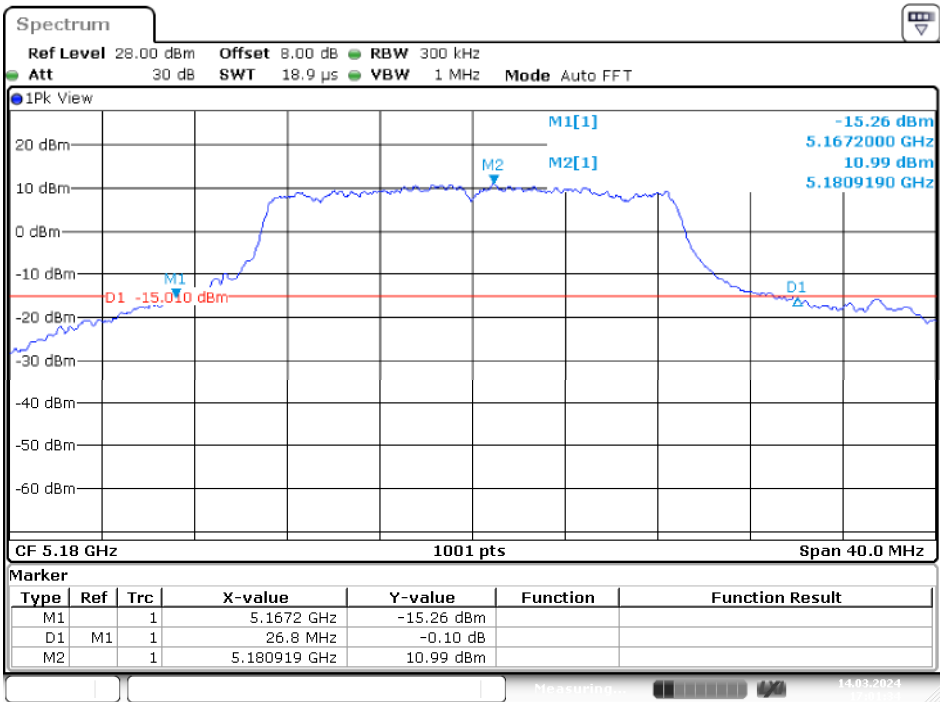


Date: 14.MAR.2024 14:15:07

Chain 2

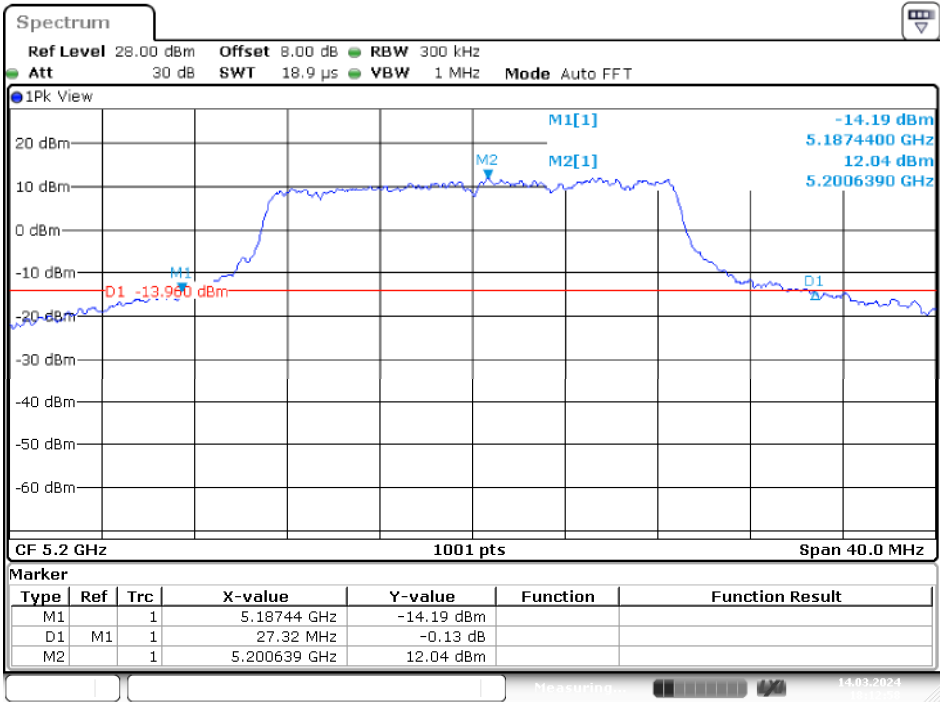
IEEE 802.11ac VHT20 Mode / 5150 ~ 5250MHz

5180MHz



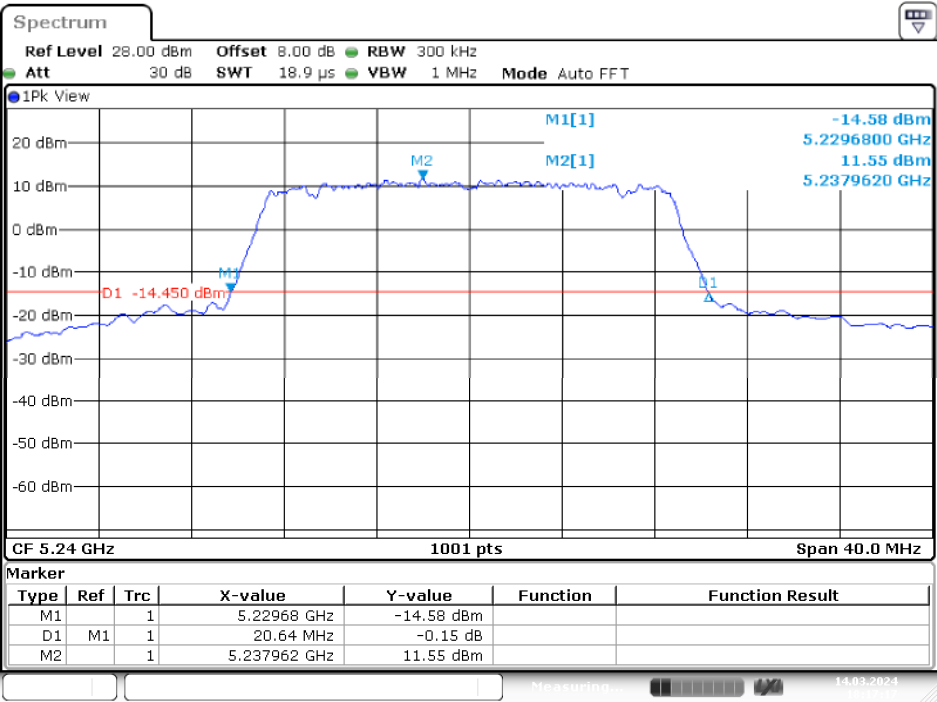
Date: 14.MAR.2024 17:01:34

5200MHz



Date: 14.MAR.2024 18:12:59

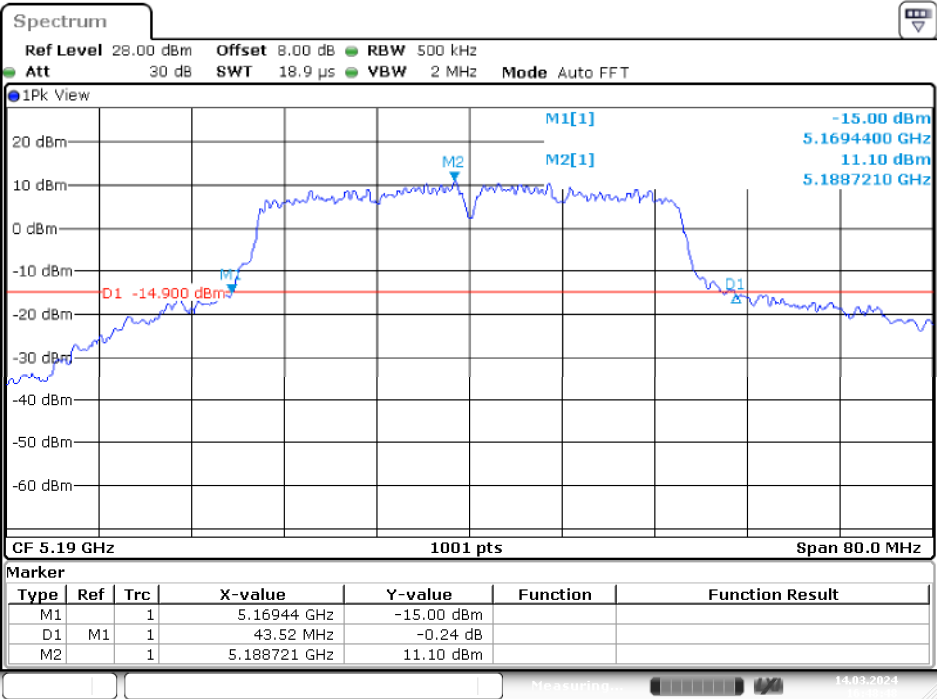
5240MHz



Date: 14.MAR.2024 18:17:17

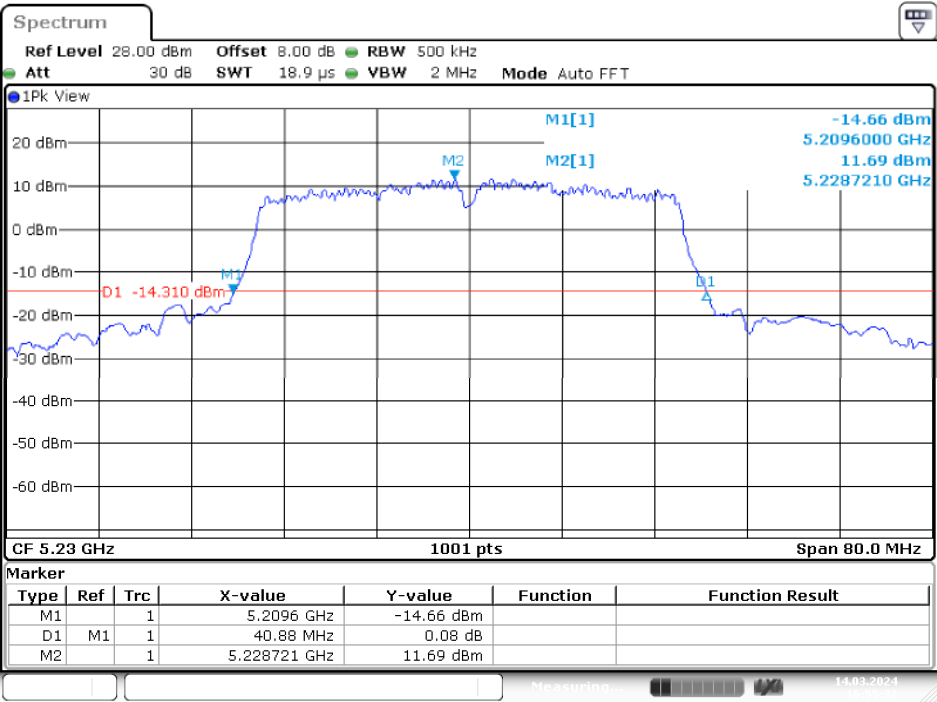
IEEE 802.11ac VHT40 Mode / 5150 ~ 5250MHz

5190MHz



Date: 14.MAR.2024 16:48:49

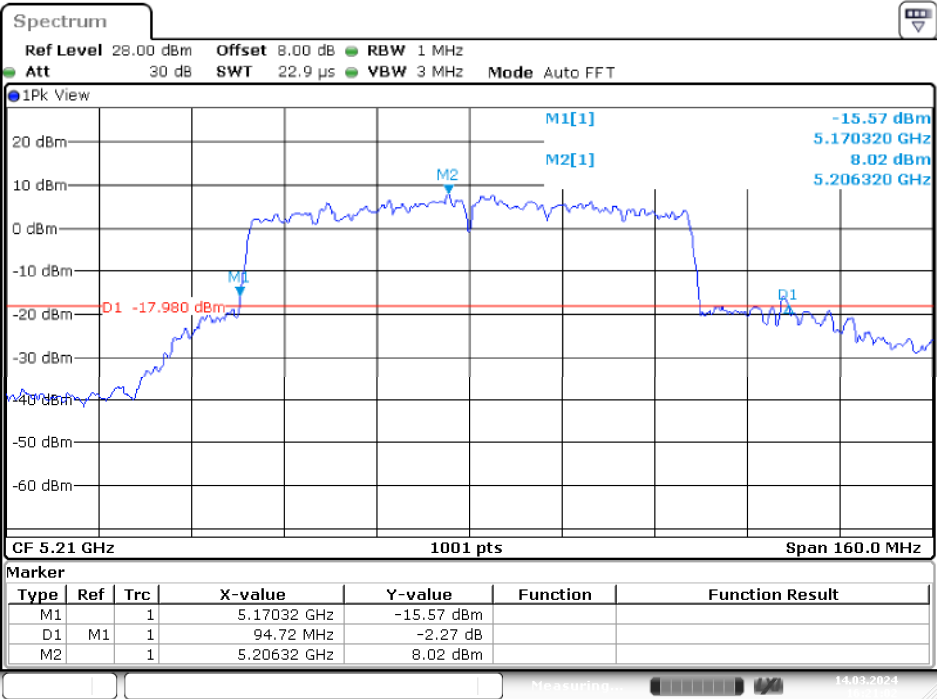
5230MHz



Date: 14.MAR.2024 16:55:32

IEEE 802.11ac VHT80 Mode / 5150 ~ 5250MHz

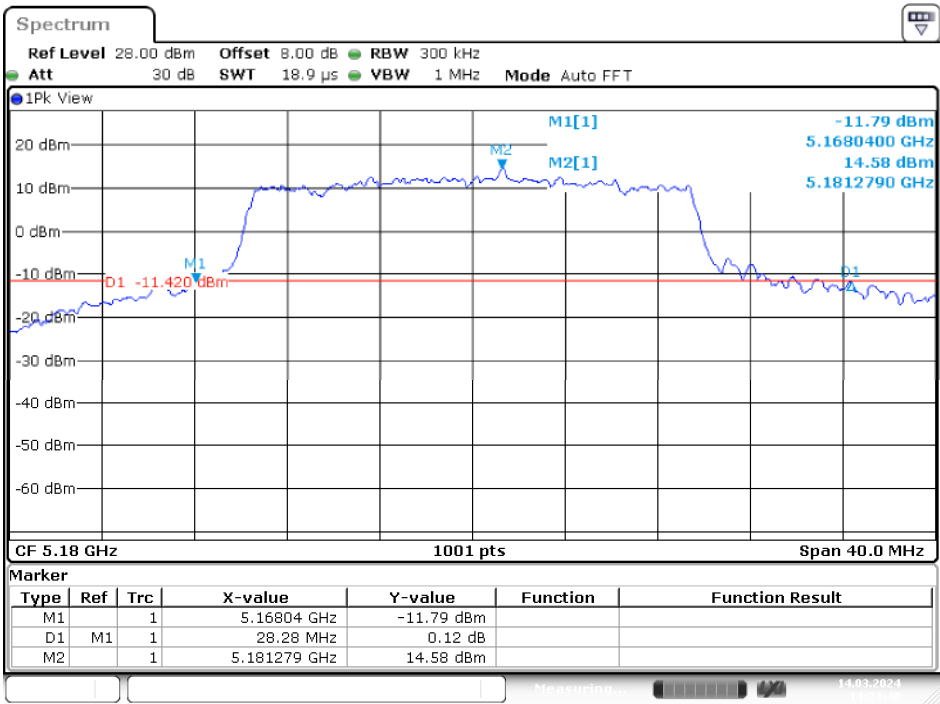
5210MHz



Date: 14.MAR.2024 16:21:02

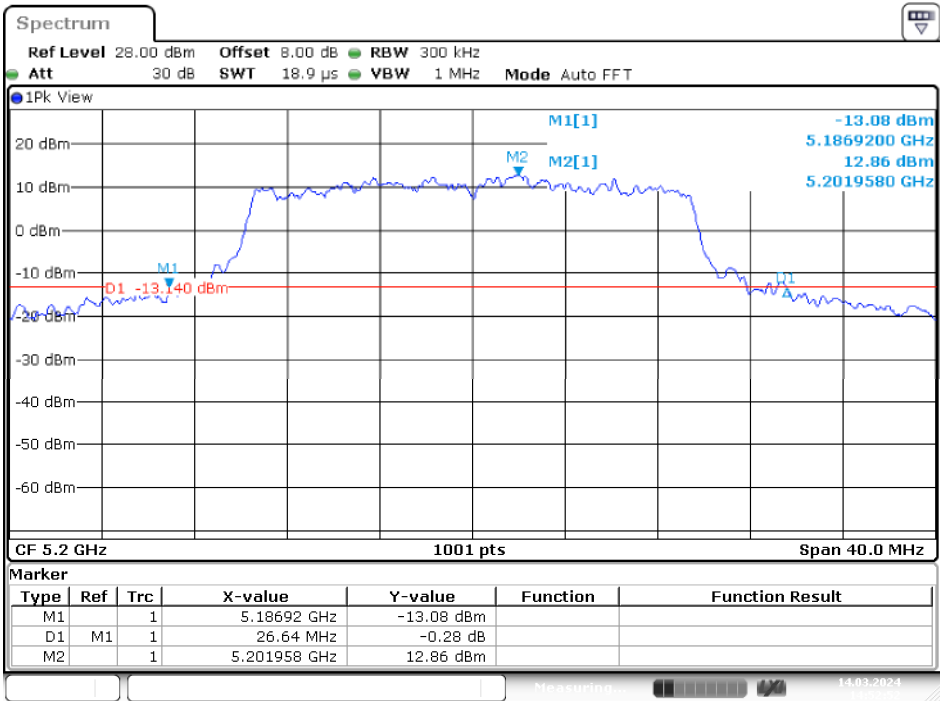
IEEE 802.11ax HE20 Mode / 5150 ~ 5250MHz

5180MHz



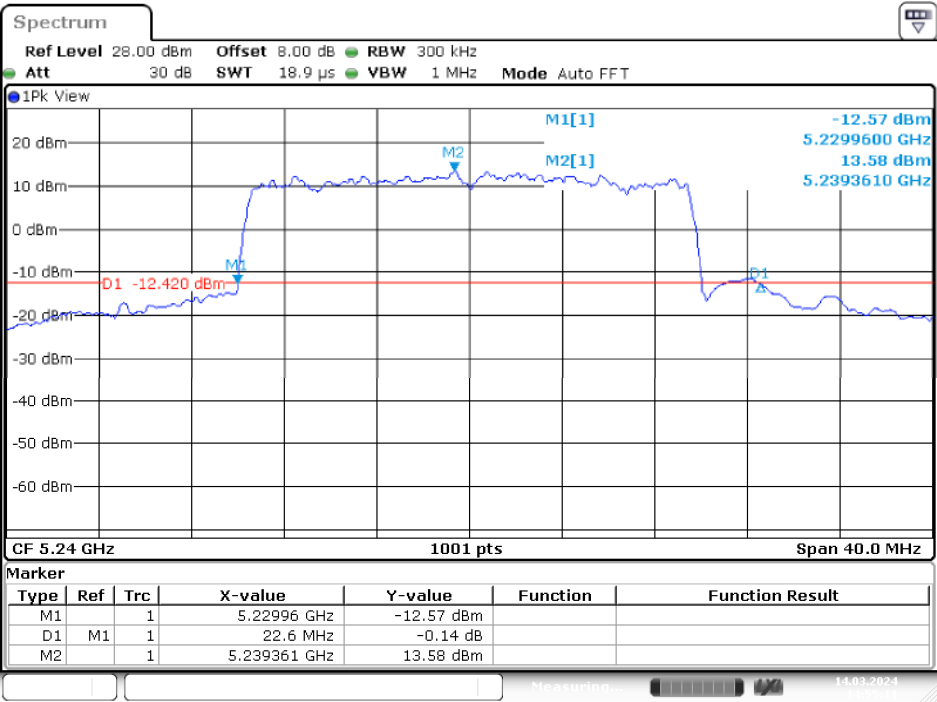
Date: 14.MAR.2024 14:24:40

5200MHz



Date: 14.MAR.2024 14:52:52

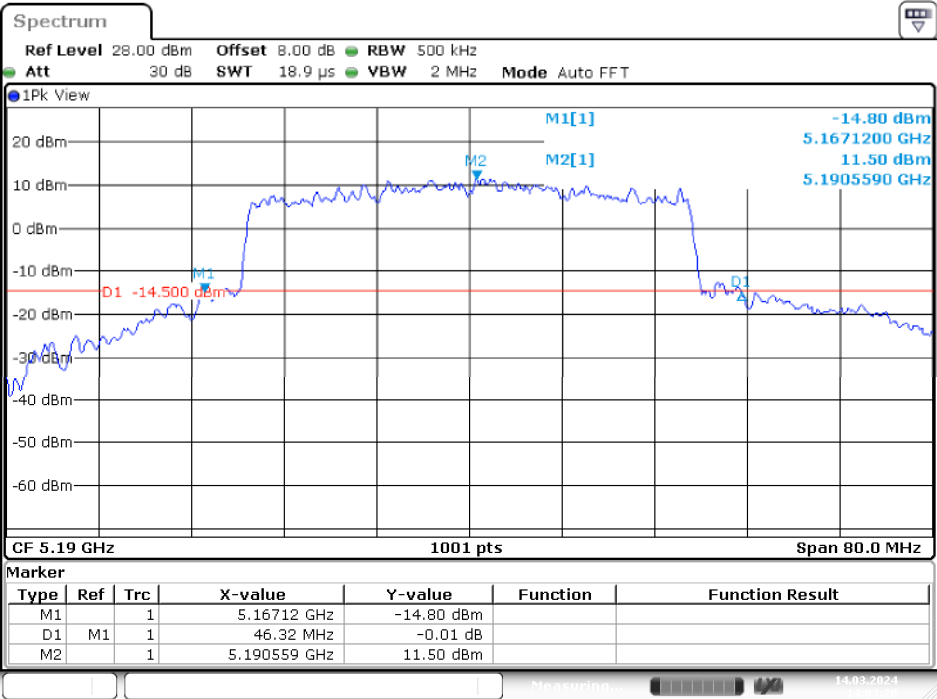
5240MHz



Date: 14.MAR.2024 14:55:11

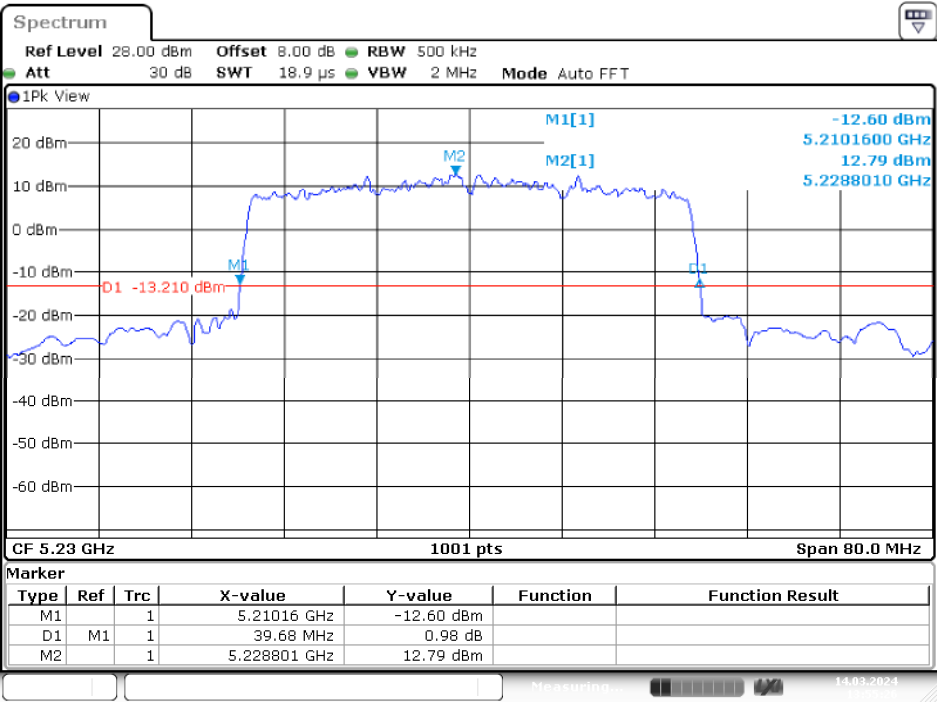
IEEE 802.11ax HE40 Mode / 5150 ~ 5250MHz

5190MHz



Date: 14.MAR.2024 14:03:20

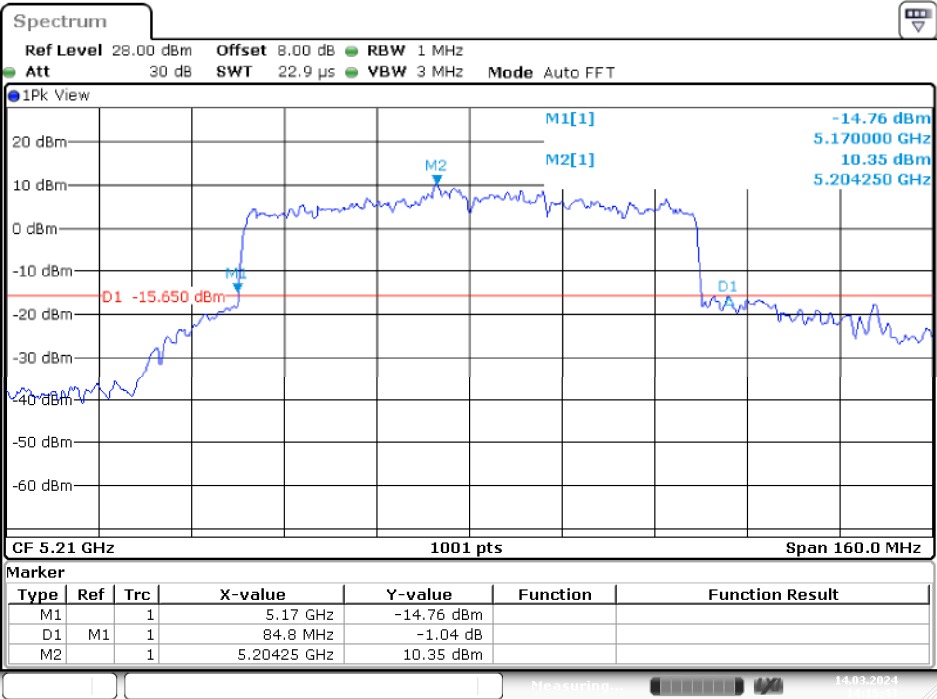
5230MHz



Date: 14.MAR.2024 13:55:26

IEEE 802.11ax HE80 Mode / 5150 ~ 5250MHz

5210MHz



Date: 14.MAR.2024 14:15:43

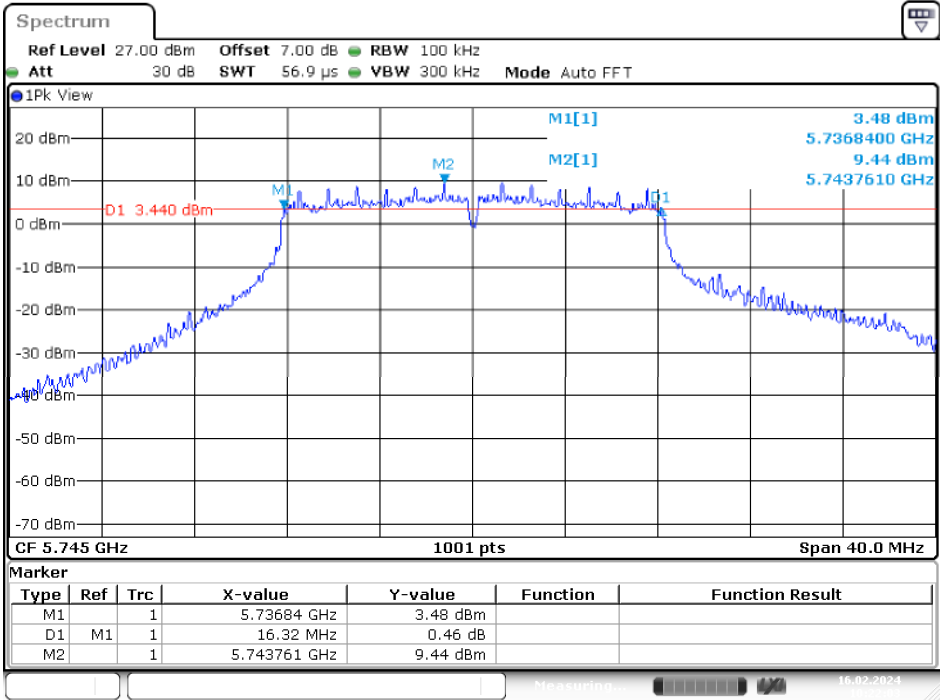
UNII-3 Band IV / BW 6dBc

Non Beamforming Mode:

Chain 0

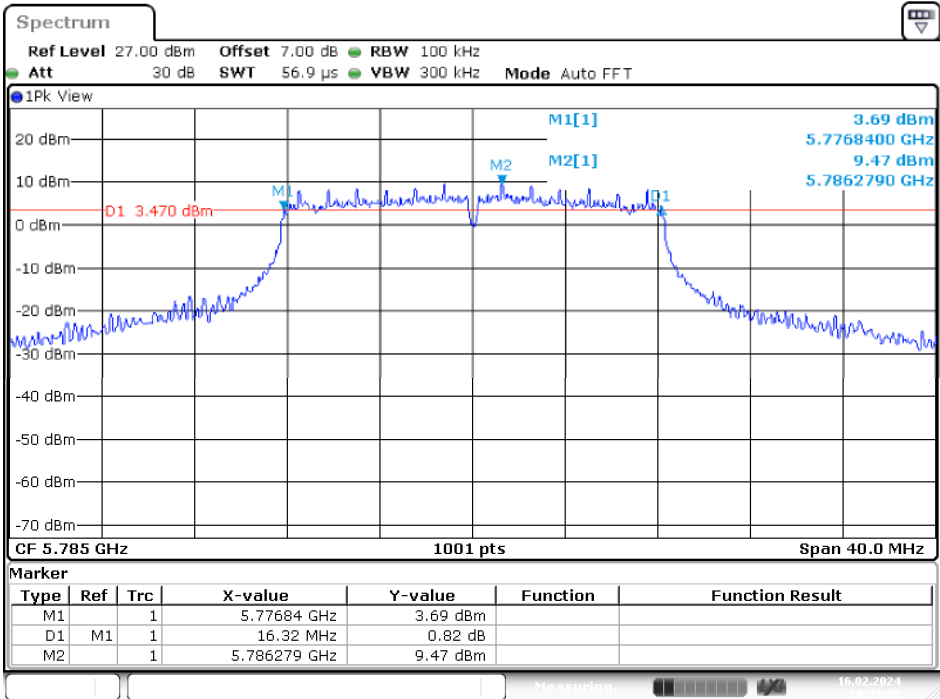
IEEE 802.11a Mode / 5725 ~ 5850MHz

5745MHz



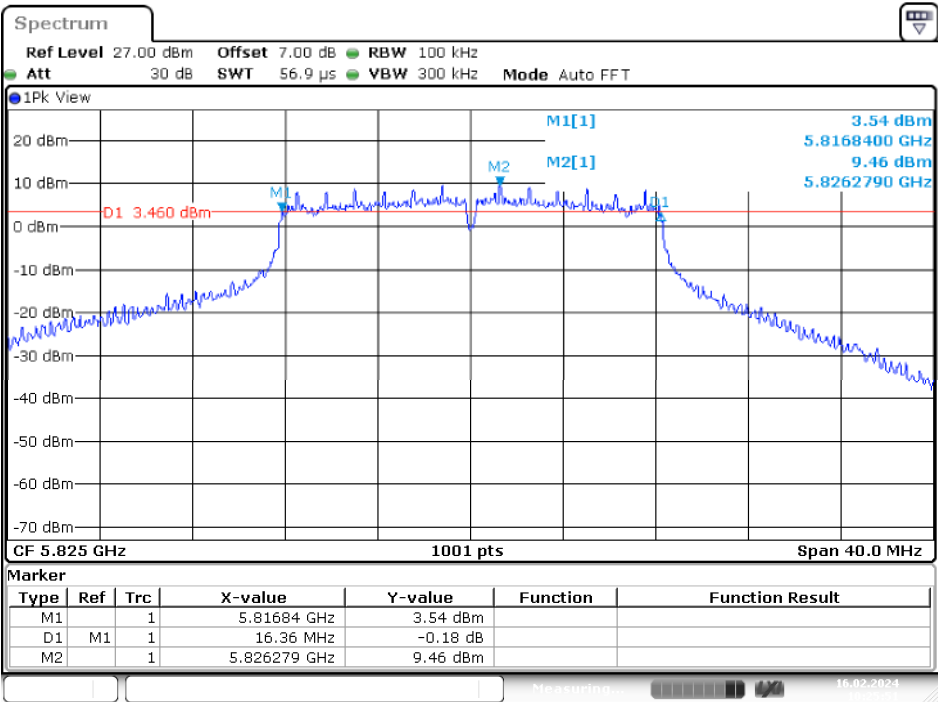
Date: 16.FEB.2024 10:22:04

5785MHz



Date: 16.FEB.2024 10:23:53

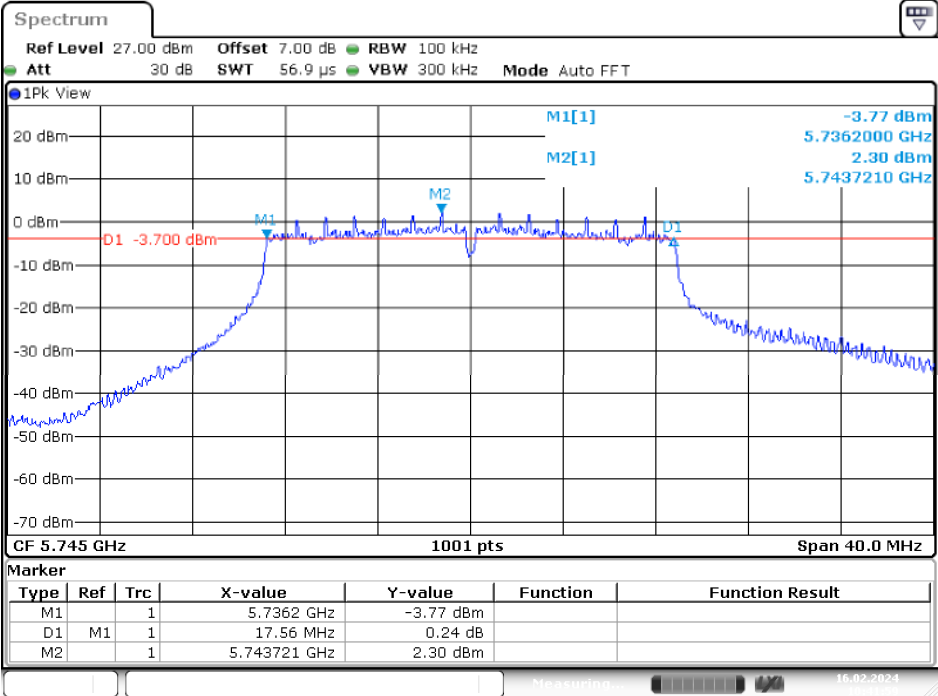
5825MHz



Date: 16.FEB.2024 10:25:52

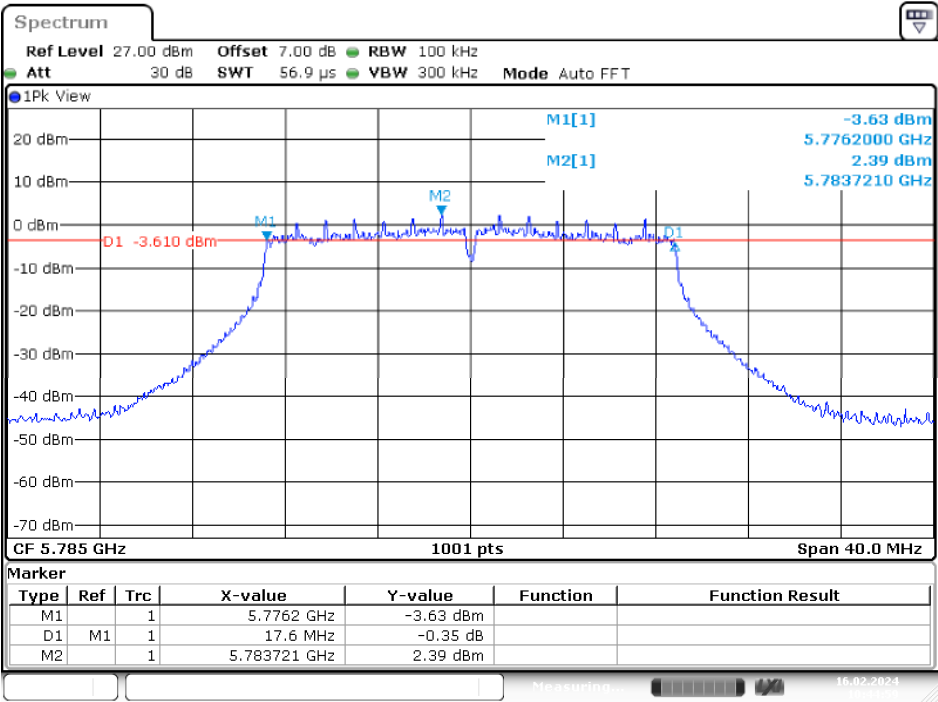
IEEE 802.11ac VHT20 Mode / 5725 ~ 5850MHz

5745MHz



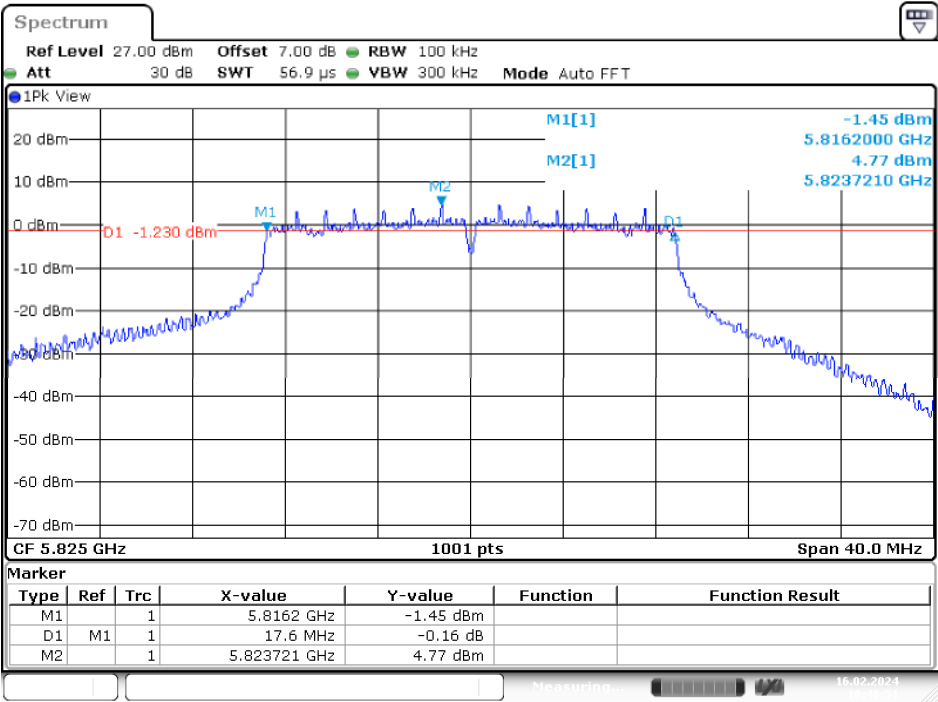
Date: 16.FEB.2024 10:41:59

5785MHz



Date: 16.FEB.2024 10:44:58

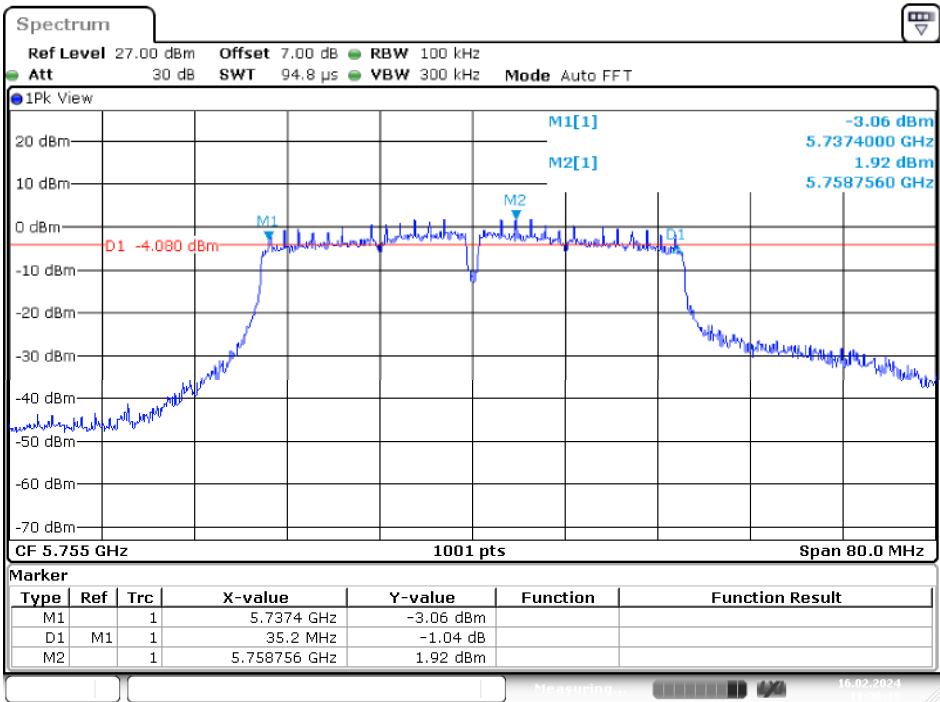
5825MHz



Date: 16.FEB.2024 10:48:51

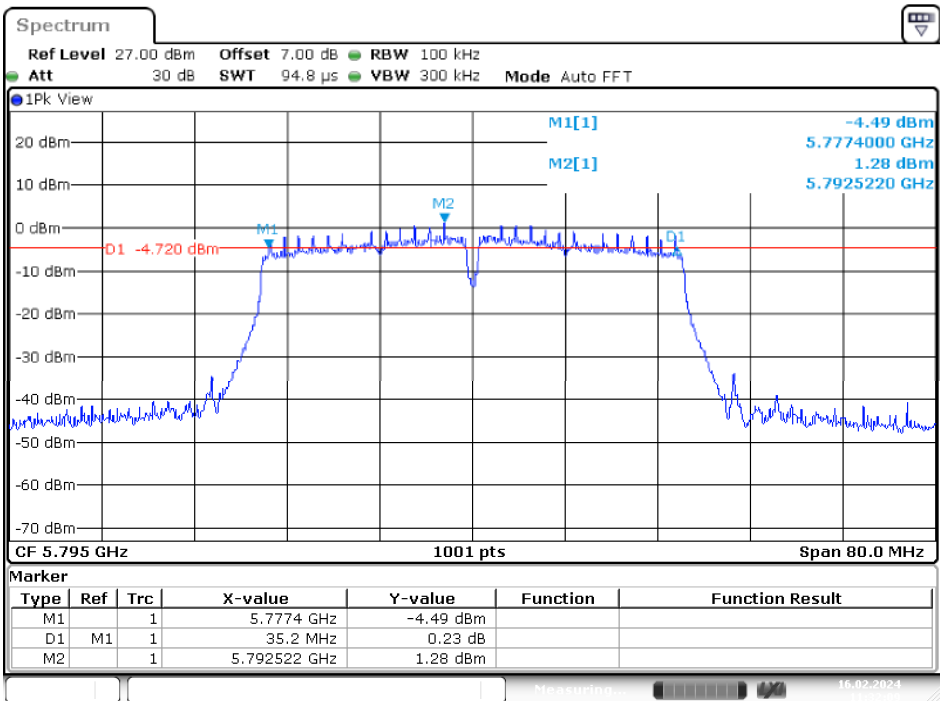
IEEE 802.11ac VHT40 Mode / 5725 ~ 5850MHz

5755MHz



Date: 16.FEB.2024 11:30:15

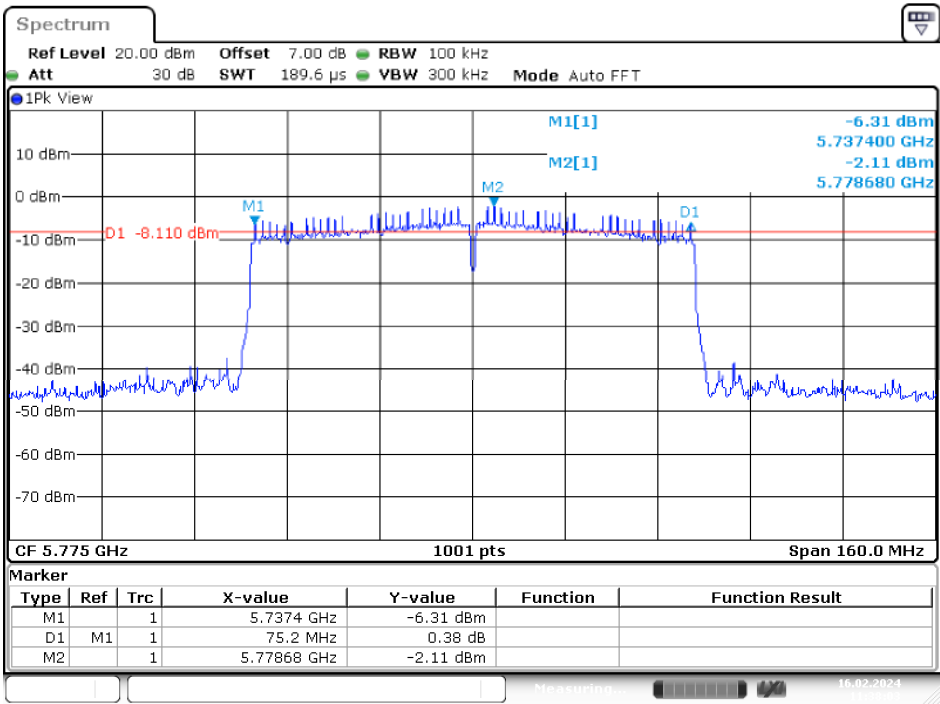
5795MHz



Date: 16.FEB.2024 11:32:09

IEEE 802.11ac VHT80 Mode / 5725 ~ 5850MHz

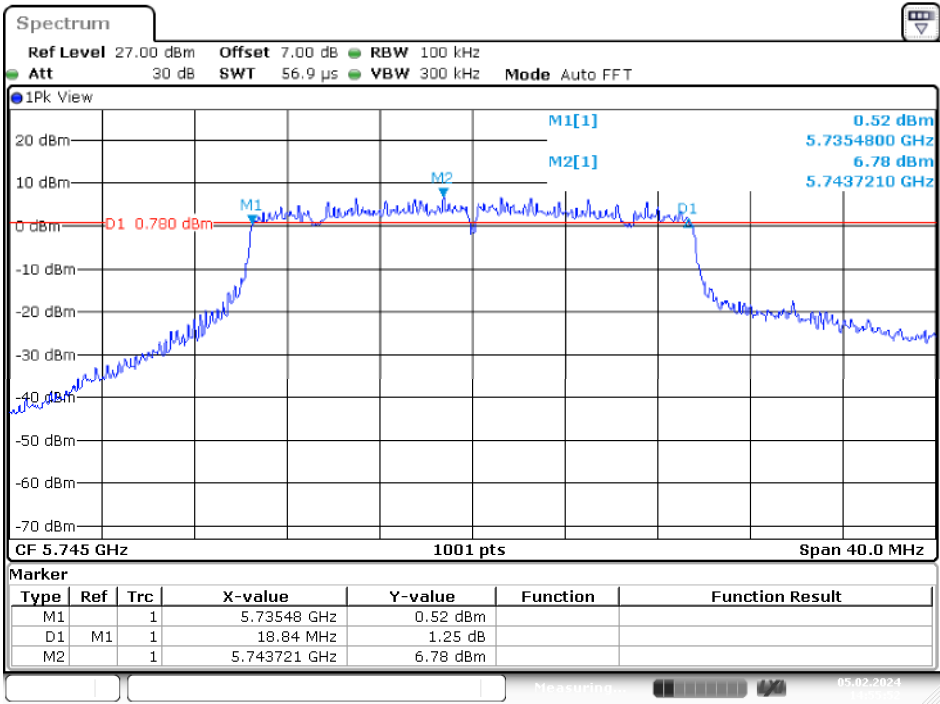
5775MHz



Date: 16.FEB.2024 11:38:03

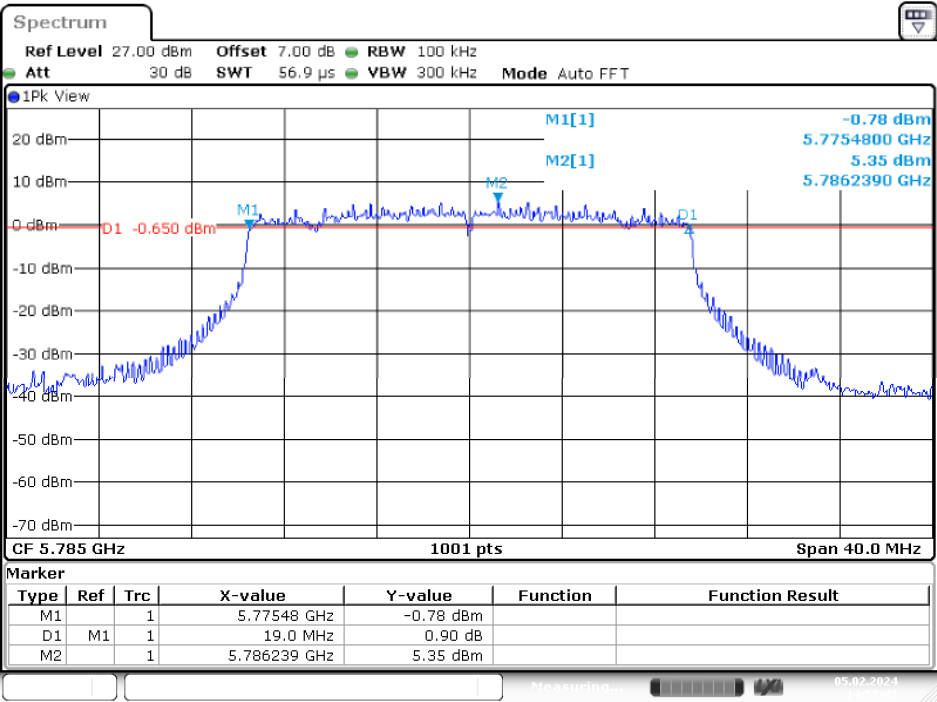
IEEE 802.11ax HE20 Mode / 5725 ~ 5850MHz

5745MHz



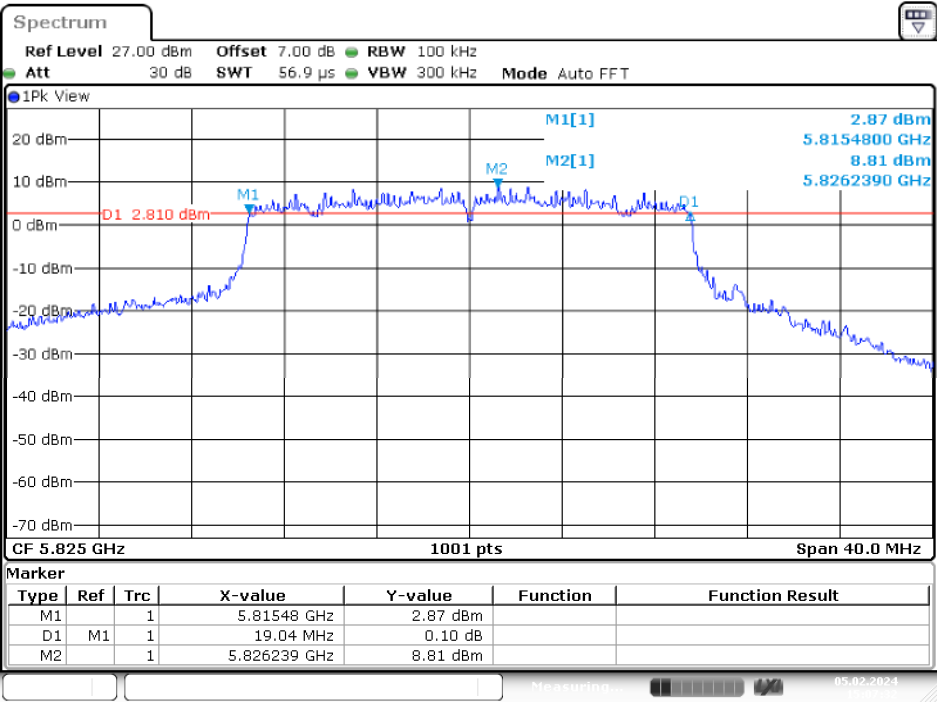
Date: 5.FEB.2024 14:55:52

5785MHz



Date: 5.FEB.2024 14:58:43

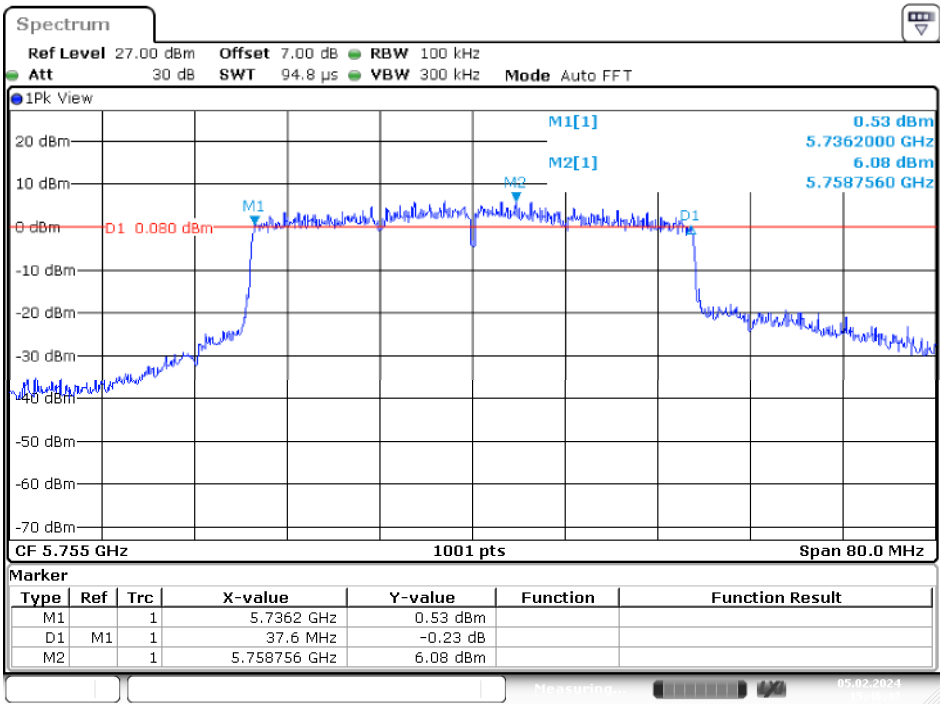
5825MHz



Date: 5.FEB.2024 15:07:33

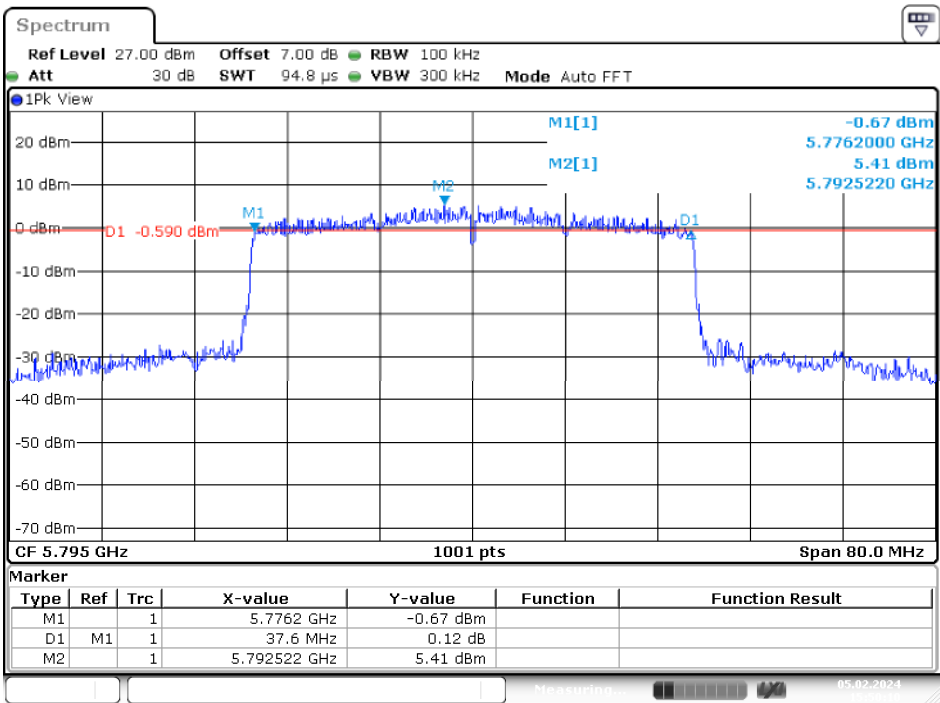
IEEE 802.11ax HE40 Mode / 5725 ~ 5850MHz

5755MHz



Date: 5.FEB.2024 15:46:43

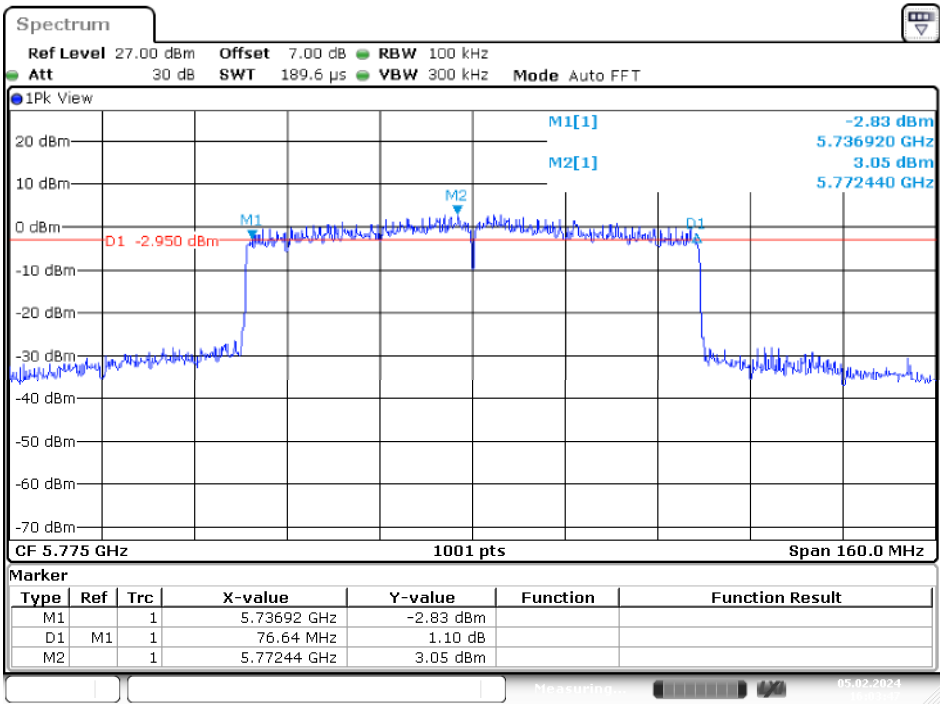
5795MHz



Date: 5.FEB.2024 15:50:11

IEEE 802.11ax HE80 Mode / 5725 ~ 5850MHz

5775MHz

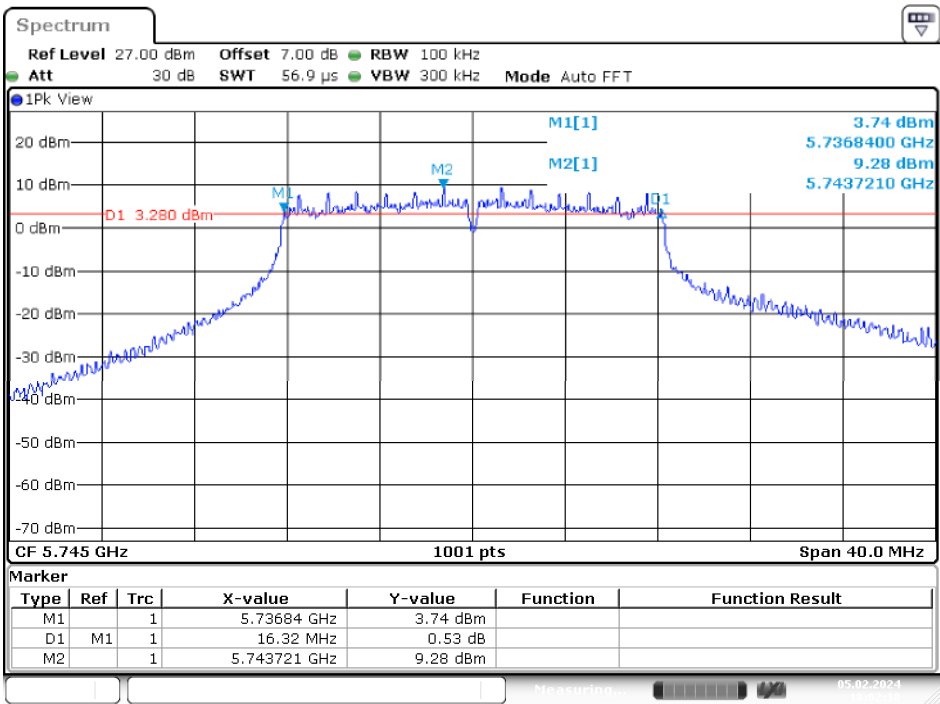


Date: 5.FEB.2024 16:03:47

Chain 1

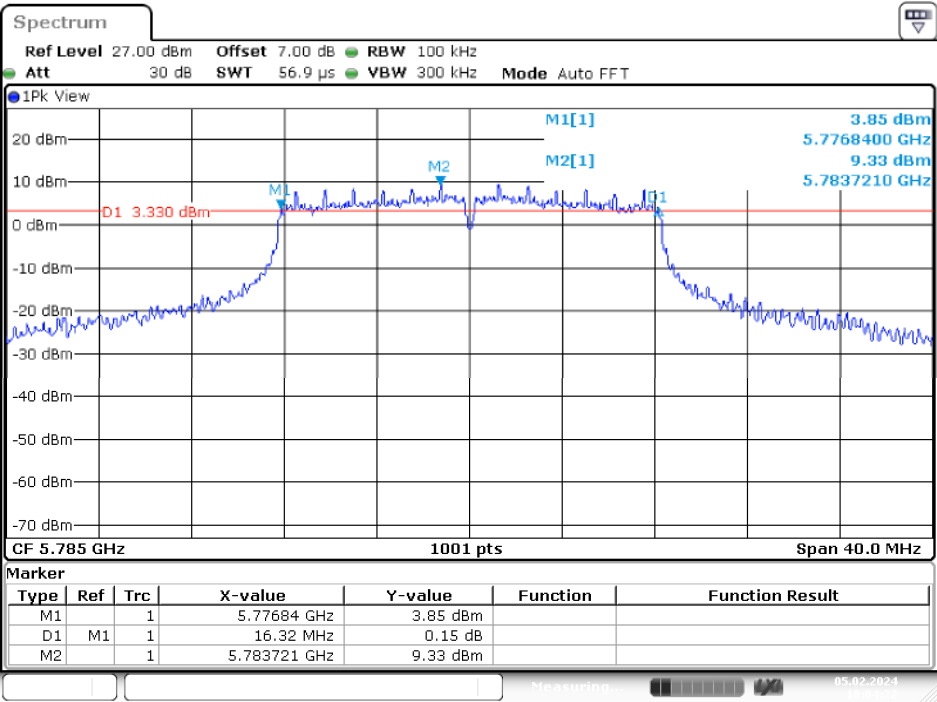
IEEE 802.11a Mode / 5725 ~ 5850MHz

5745MHz



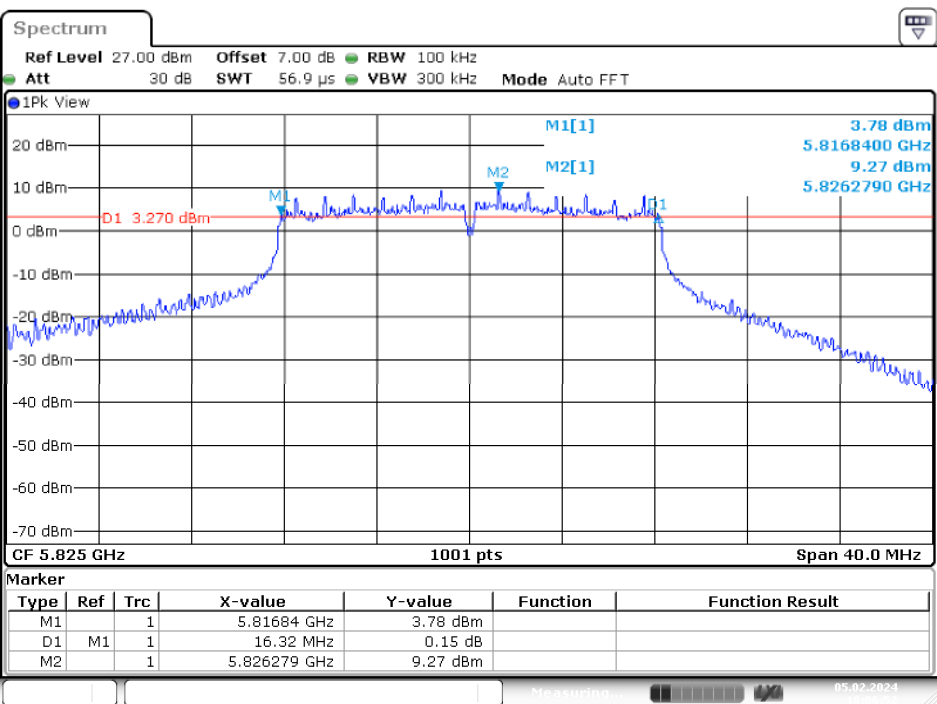
Date: 5.FEB.2024 18:02:18

5785MHz



Date: 5.FEB.2024 18:04:23

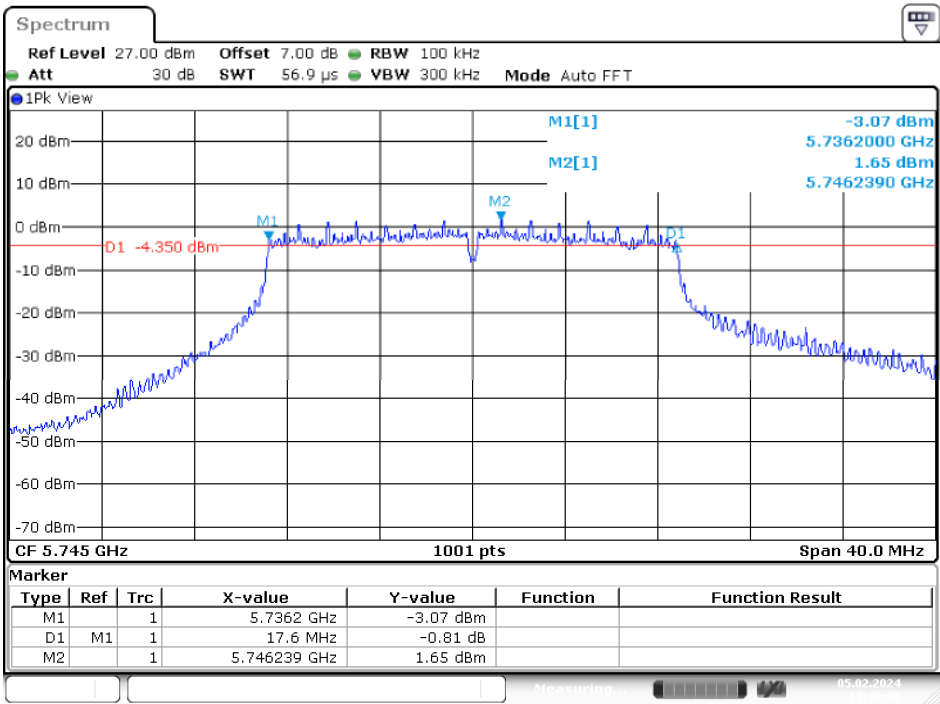
5825MHz



Date: 5.FEB.2024 18:06:52

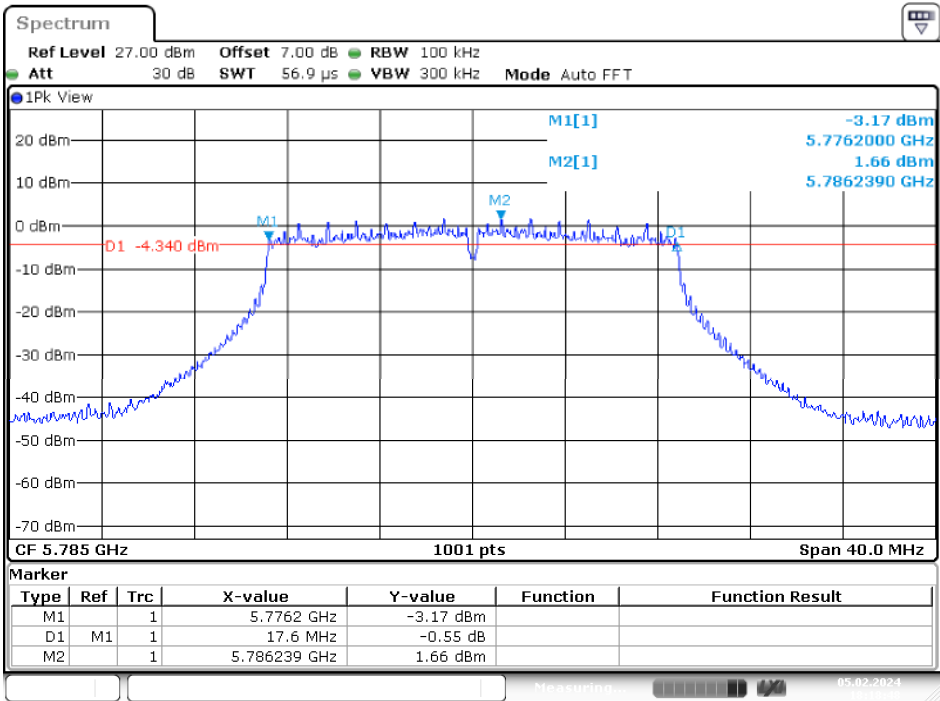
IEEE 802.11ac VHT20 Mode / 5725 ~ 5850MHz

5745MHz



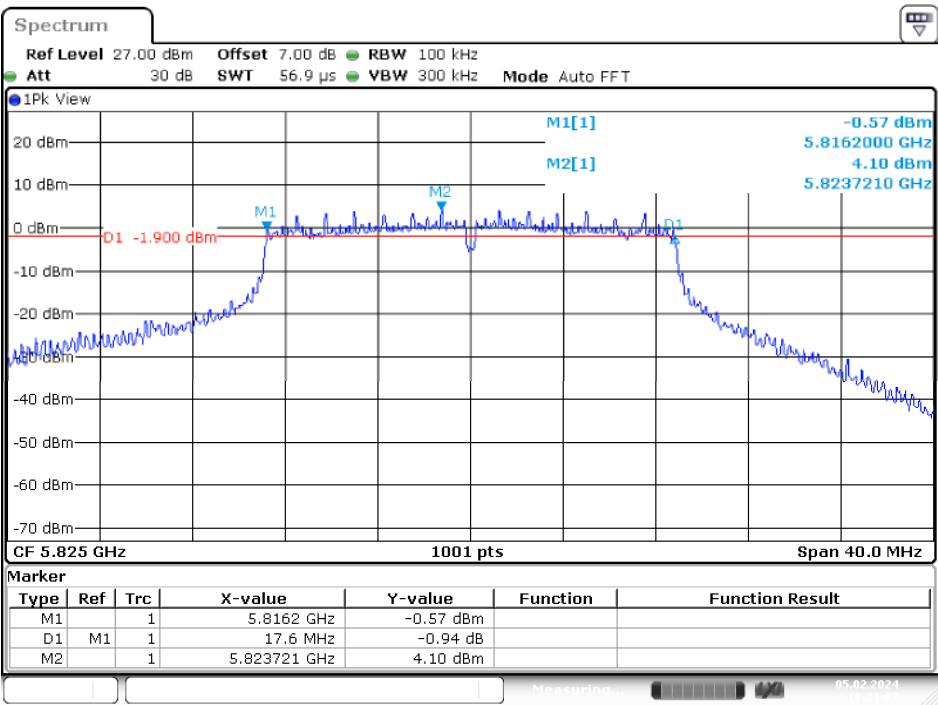
Date: 5.FEB.2024 18:16:40

5785MHz



Date: 5.FEB.2024 18:18:49

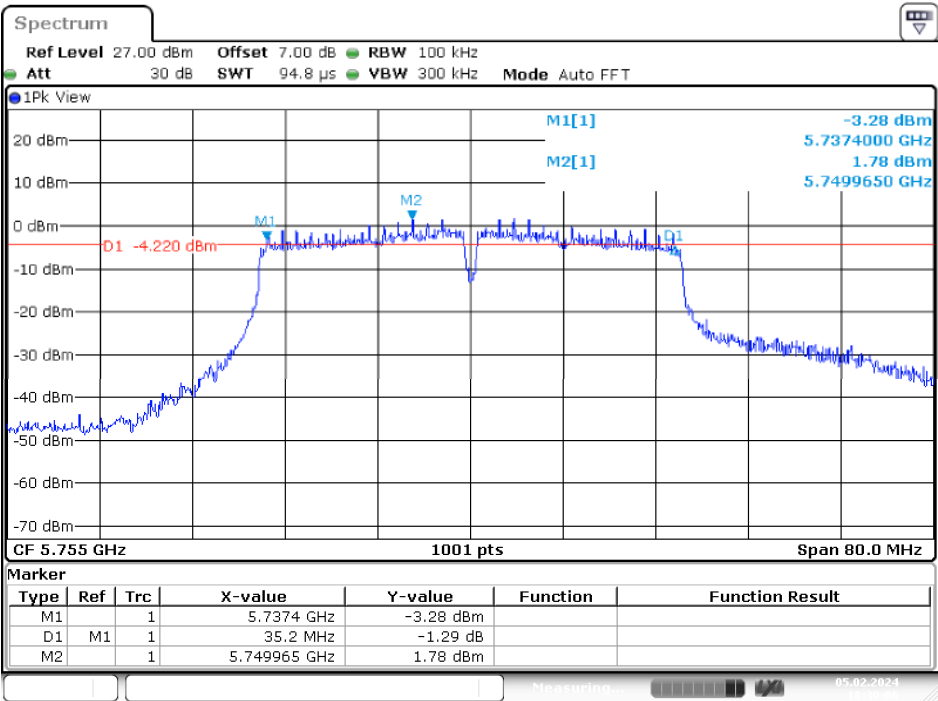
5825MHz



Date: 5.FEB.2024 18:21:08

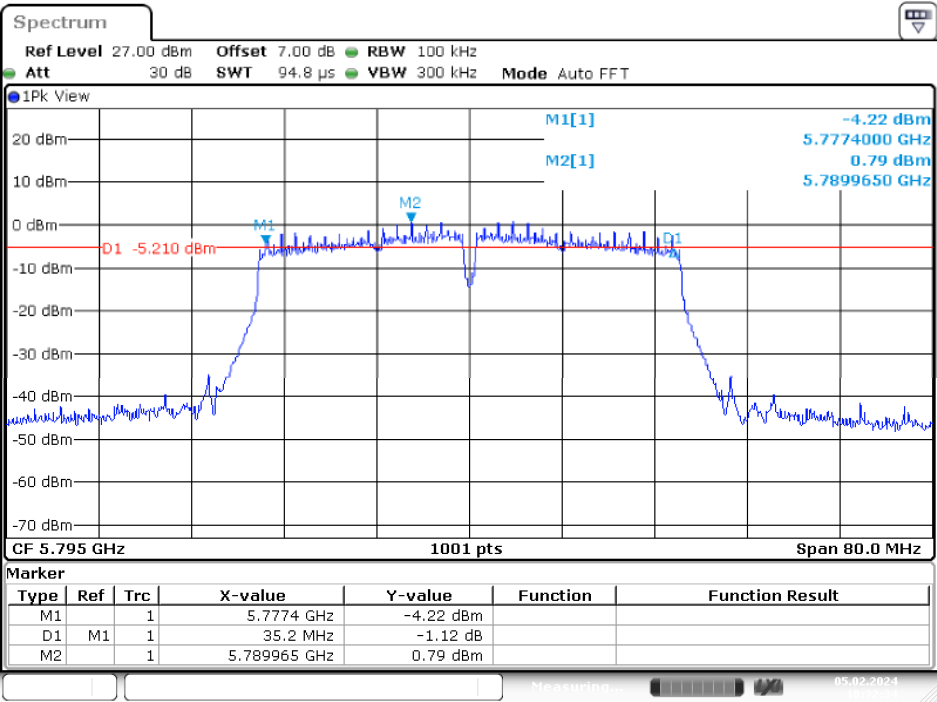
IEEE 802.11ac VHT40 Mode / 5725 ~ 5850MHz

5755MHz



Date: 5.FEB.2024 18:30:06

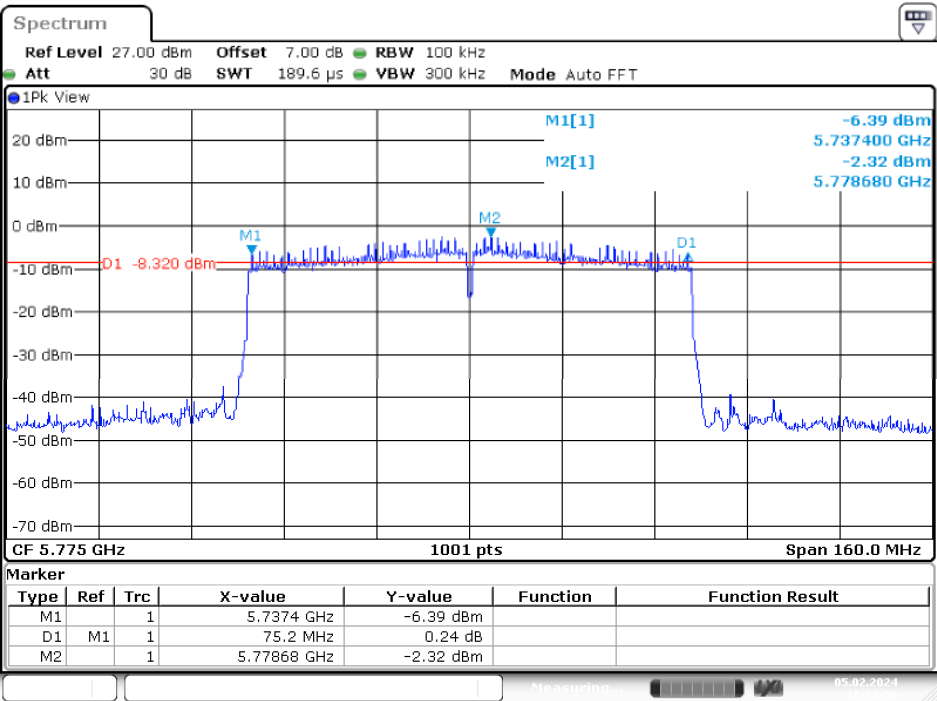
5795MHz



Date: 5.FEB.2024 18:32:34

IEEE 802.11ac VHT80 Mode / 5725 ~ 5850MHz

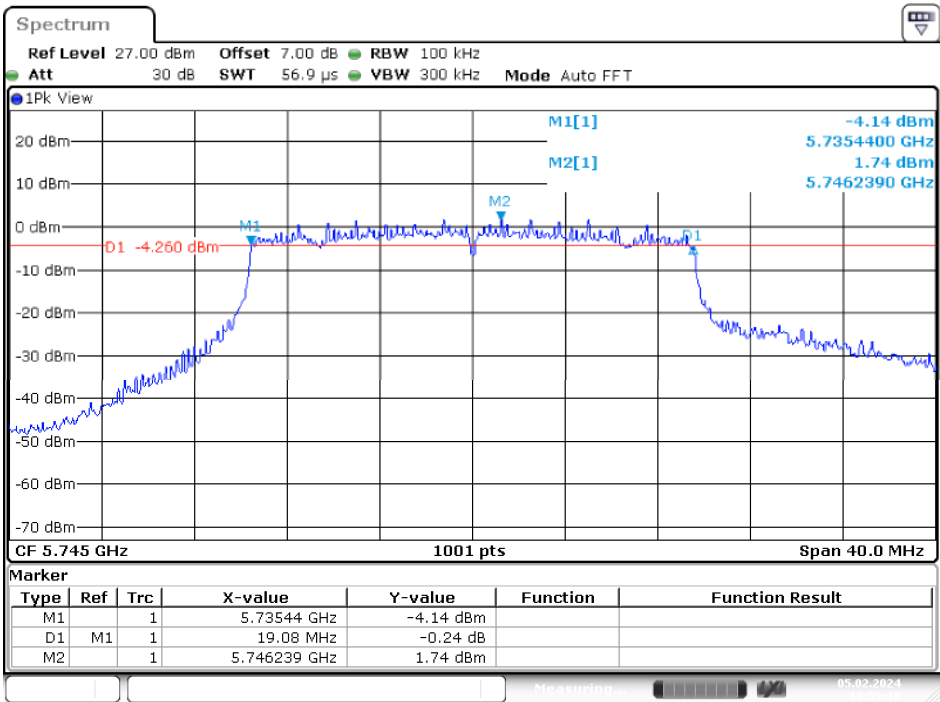
5775MHz



Date: 5.FEB.2024 18:38:37

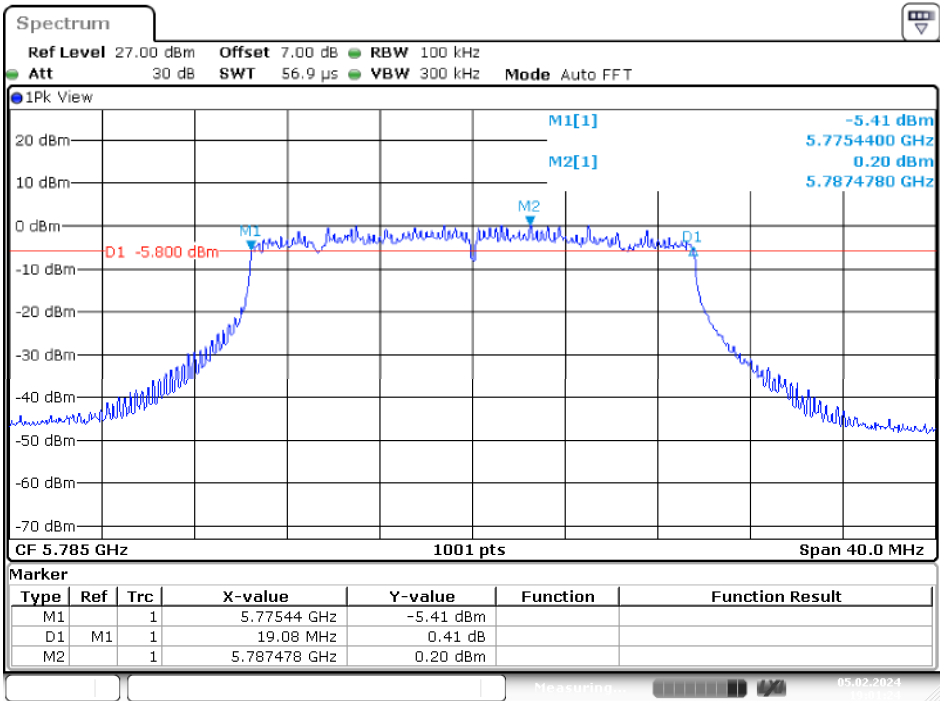
IEEE 802.11ax HE20 Mode / 5725 ~ 5850MHz

5745MHz



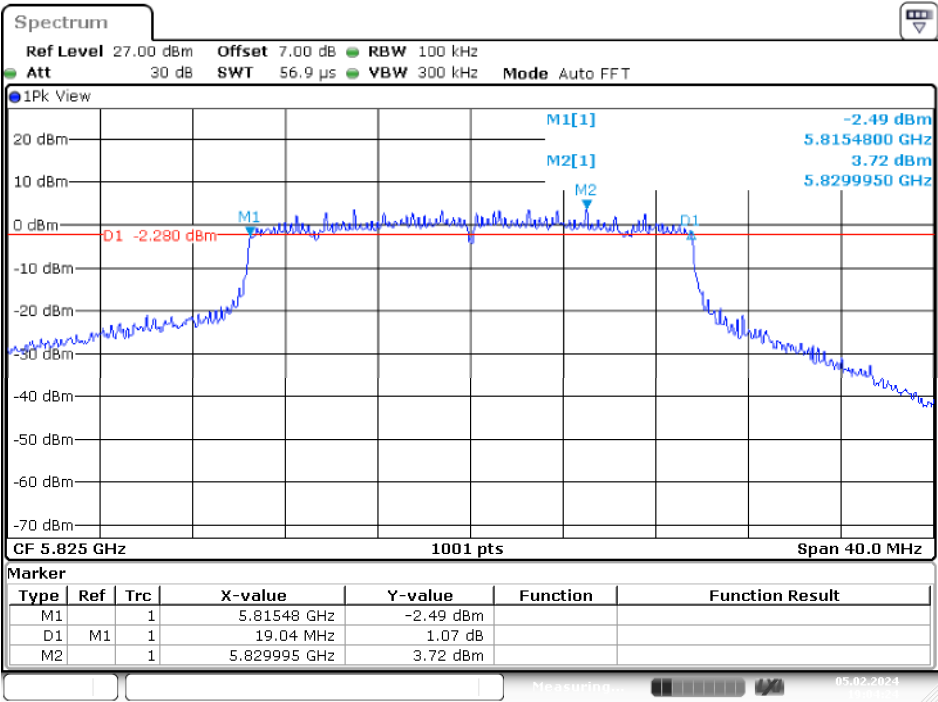
Date: 5.FEB.2024 18:59:10

5785MHz



Date: 5.FEB.2024 19:01:24

5825MHz



Date: 5.FEB.2024 19:04:25

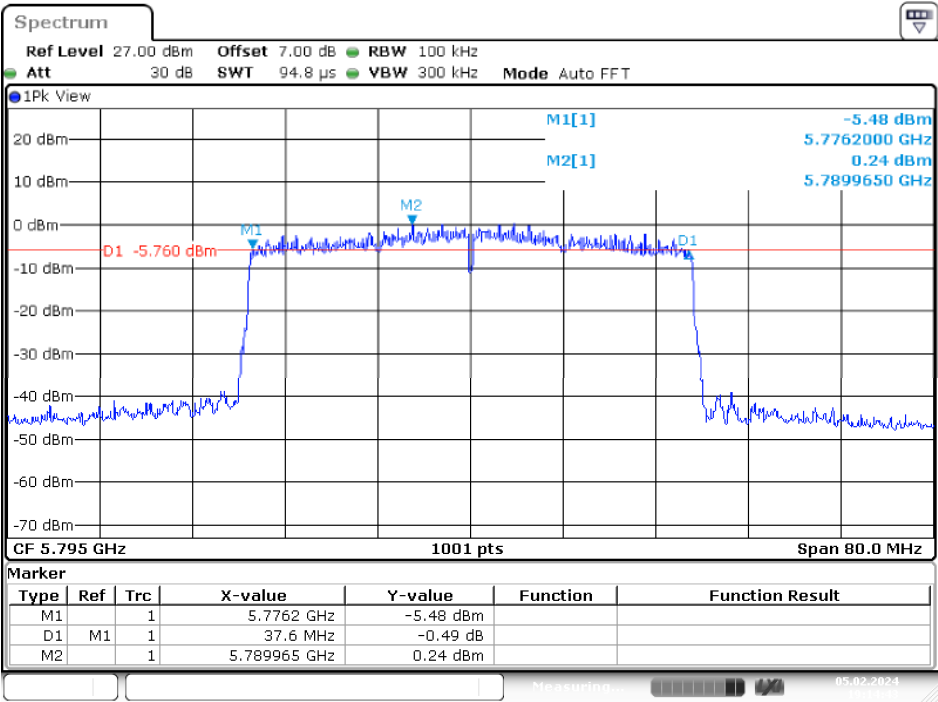
IEEE 802.11ax HE40 Mode / 5725 ~ 5850MHz

5755MHz



Date: 5.FEB.2024 19:12:36

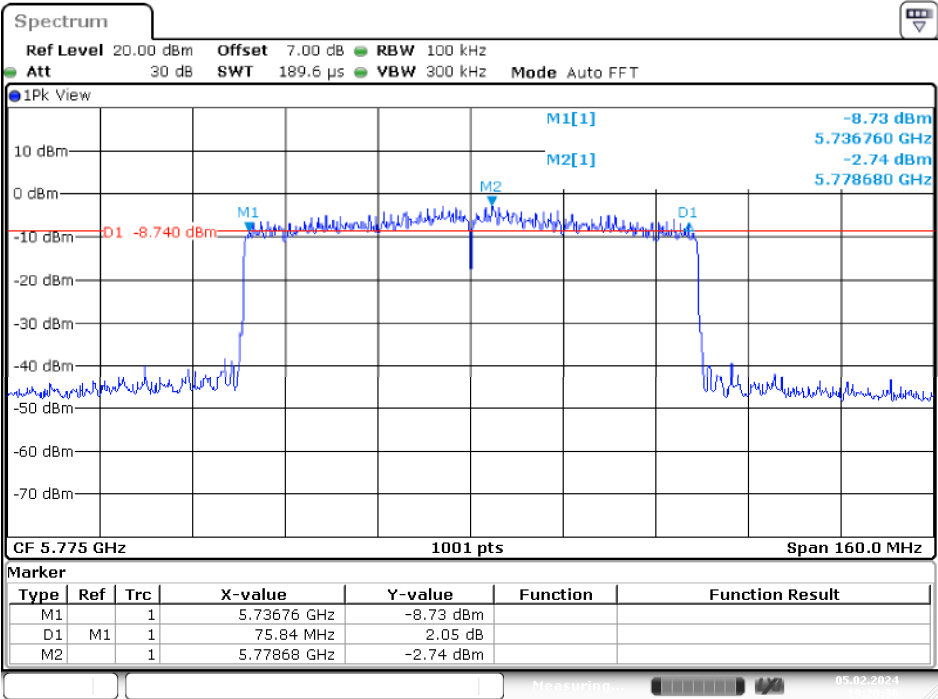
5795MHz



Date: 5.FEB.2024 19:14:43

IEEE 802.11ax HE80 Mode / 5725 ~ 5850MHz

5775MHz

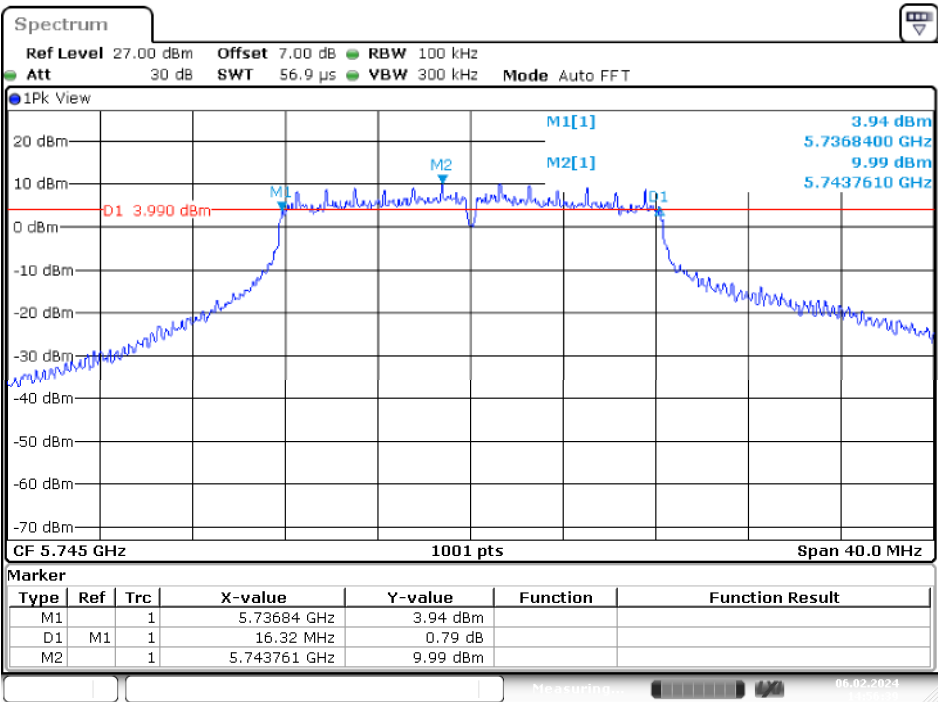


Date: 5.FEB.2024 19:20:36

Chain 2

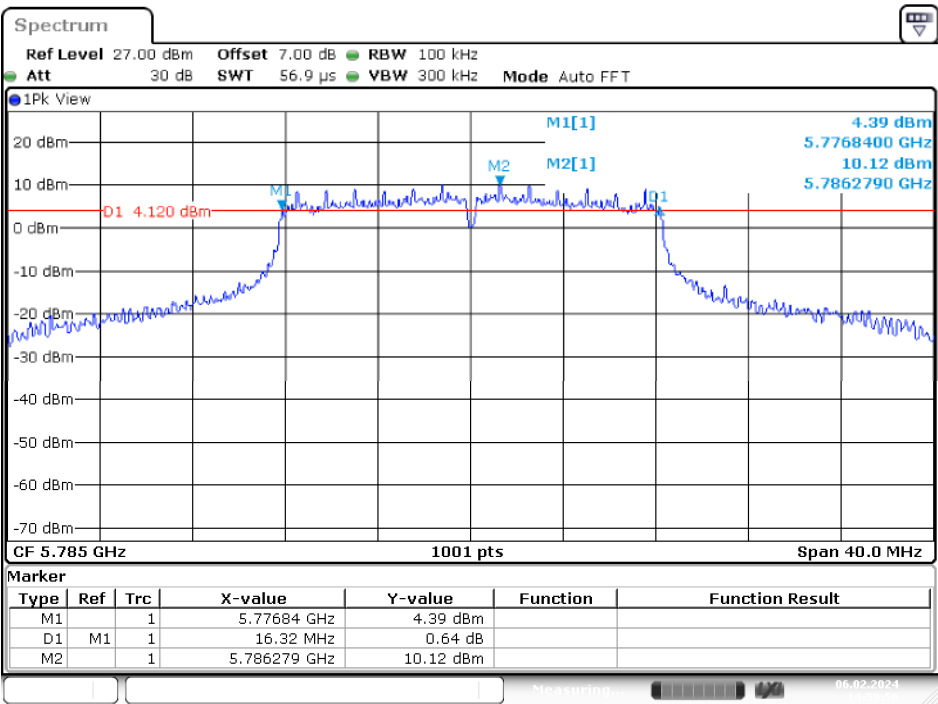
IEEE 802.11a Mode / 5725 ~ 5850MHz

5745MHz



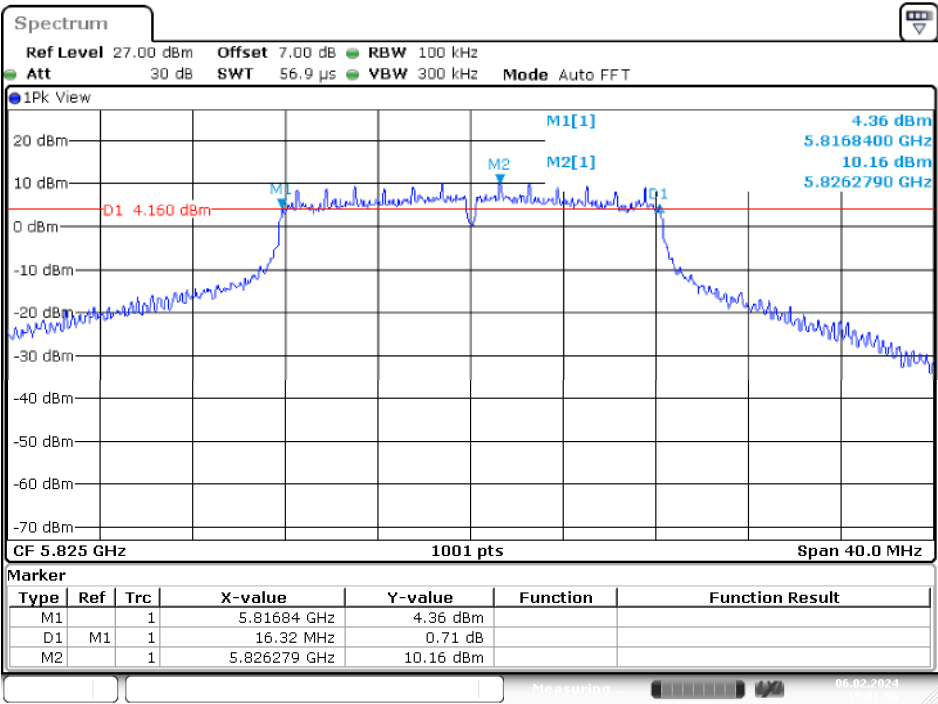
Date: 6.FEB.2024 14:56:39

5785MHz



Date: 6.FEB.2024 14:58:56

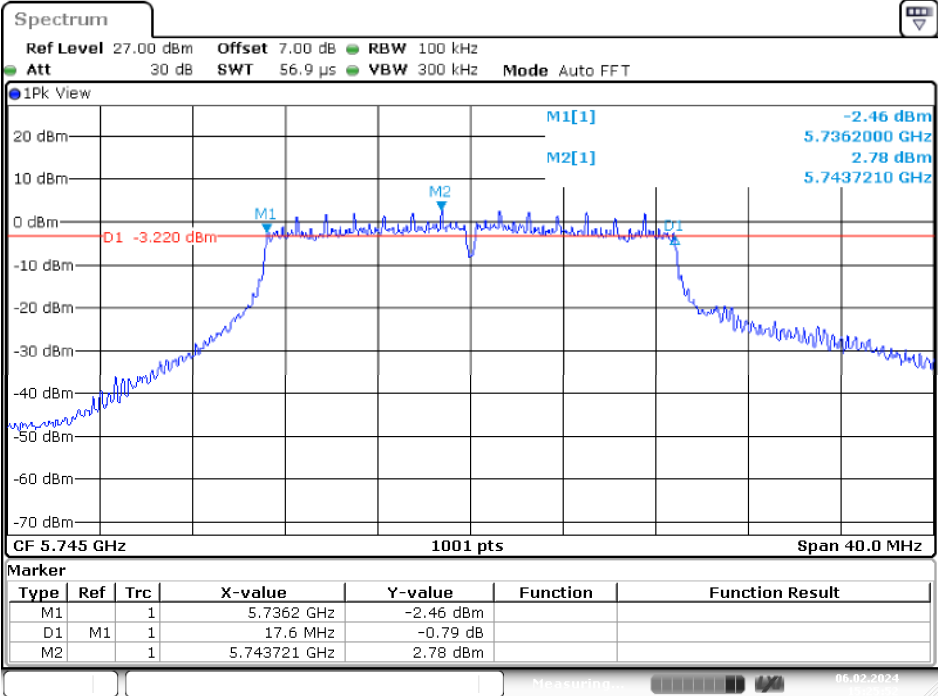
5825MHz



Date: 6.FEB.2024 15:01:56

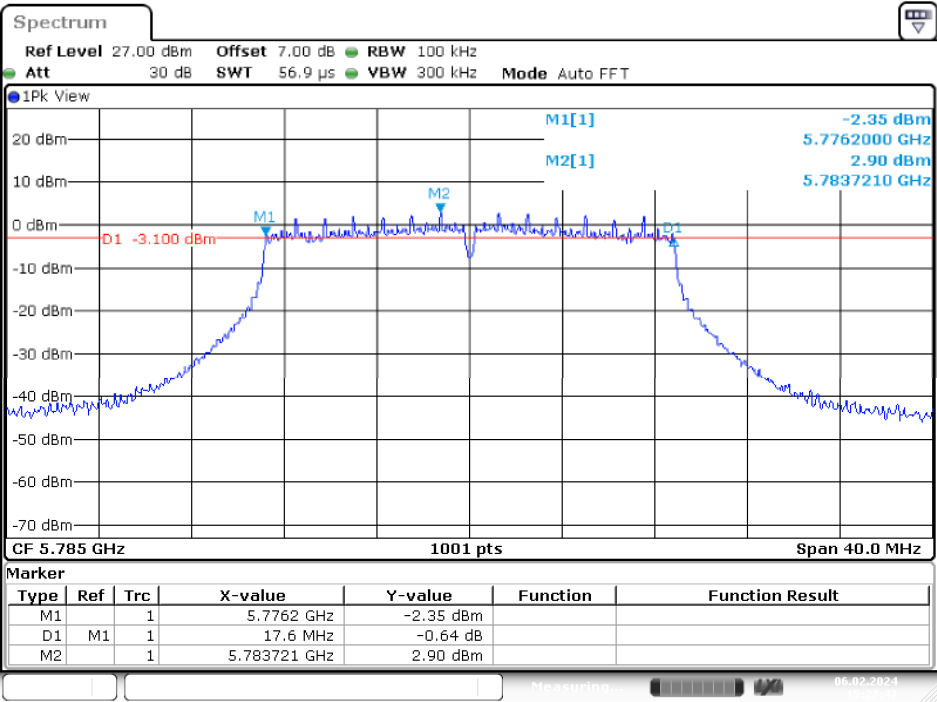
IEEE 802.11ac VHT20 Mode / 5725 ~ 5850MHz

5745MHz



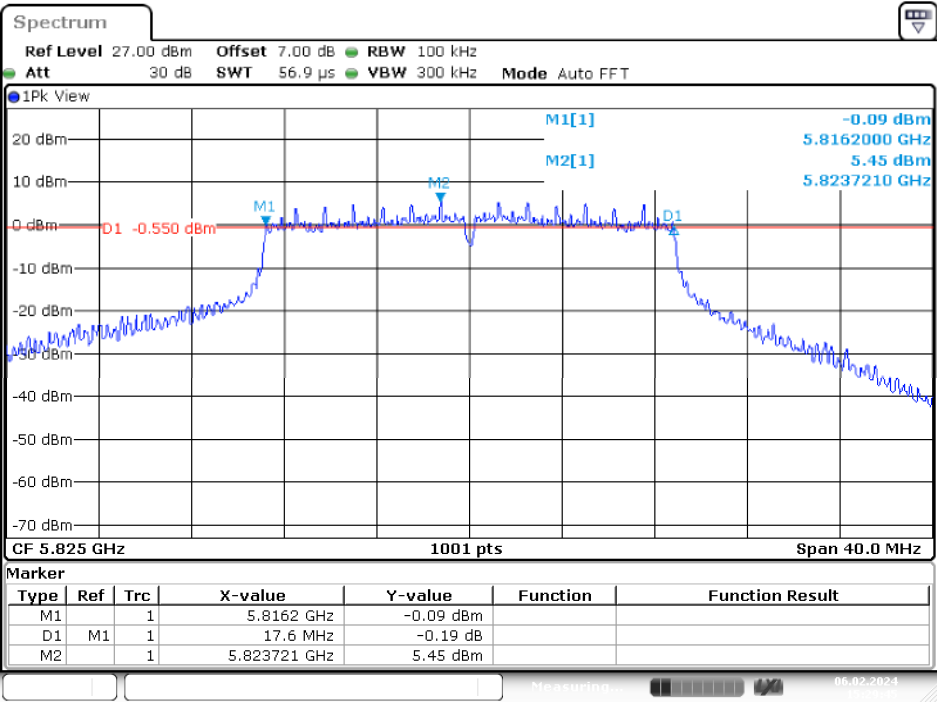
Date: 6.FEB.2024 15:25:52

5785MHz



Date: 6.FEB.2024 15:27:47

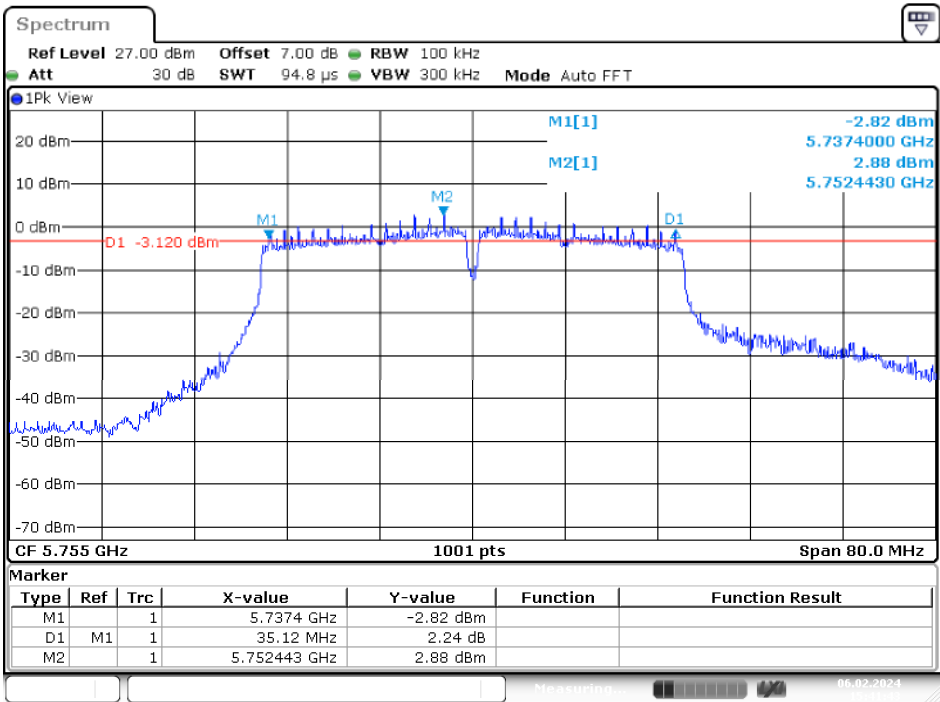
5825MHz



Date: 6.FEB.2024 15:29:45

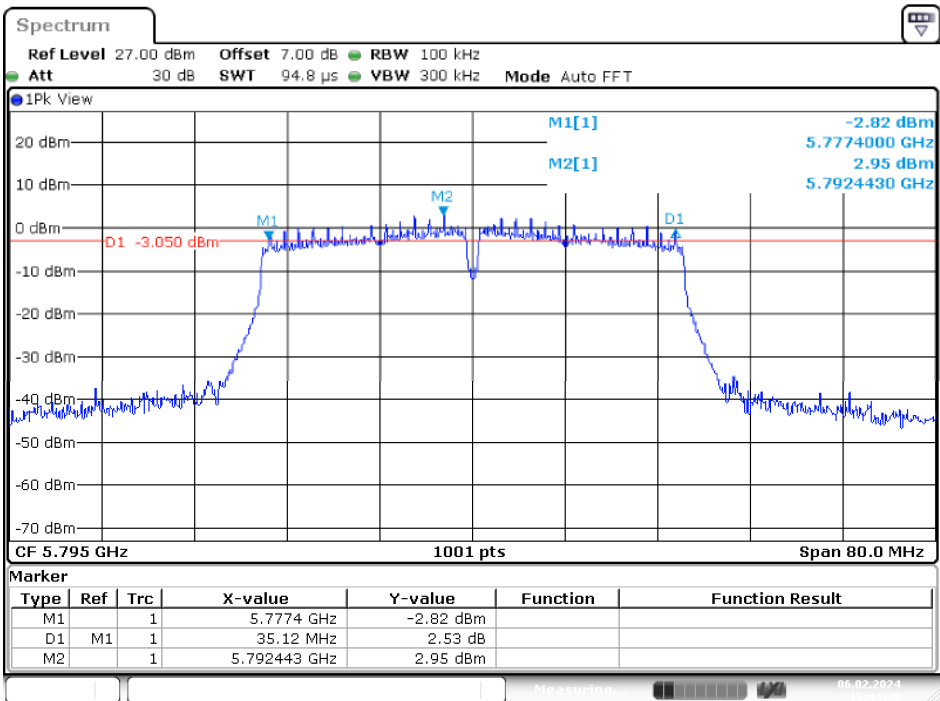
IEEE 802.11ac VHT40 Mode / 5725 ~ 5850MHz

5755MHz



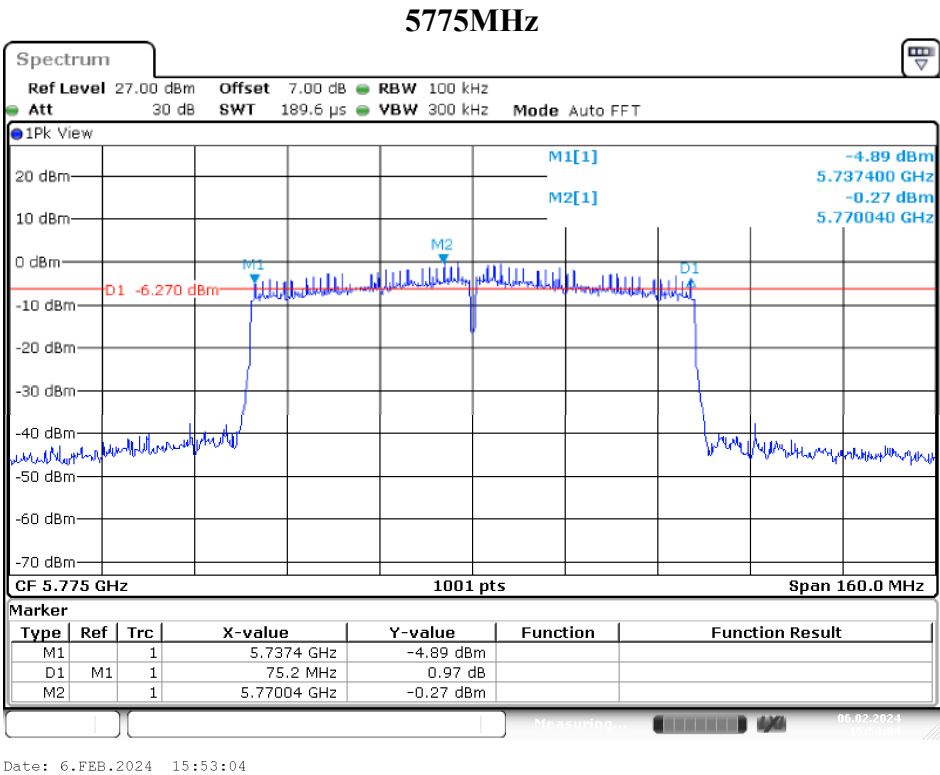
Date: 6.FEB.2024 15:41:43

5795MHz



Date: 6.FEB.2024 15:44:49

IEEE 802.11ac VHT80 Mode / 5725 ~ 5850MHz



IEEE 802.11ax HE20 Mode / 5725 ~ 5850MHz

