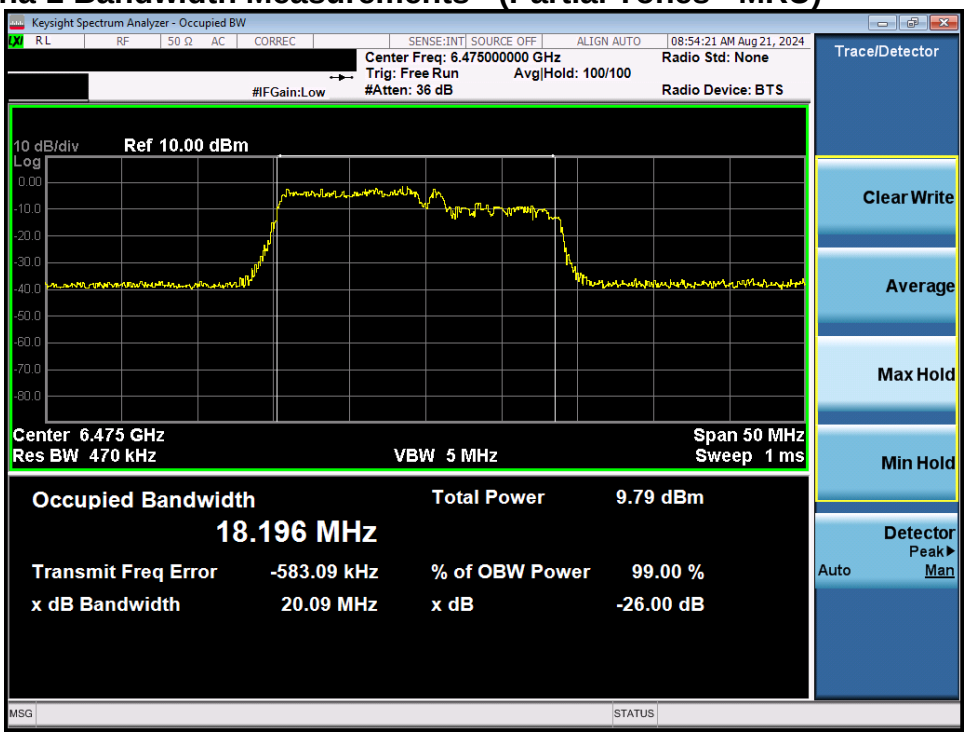
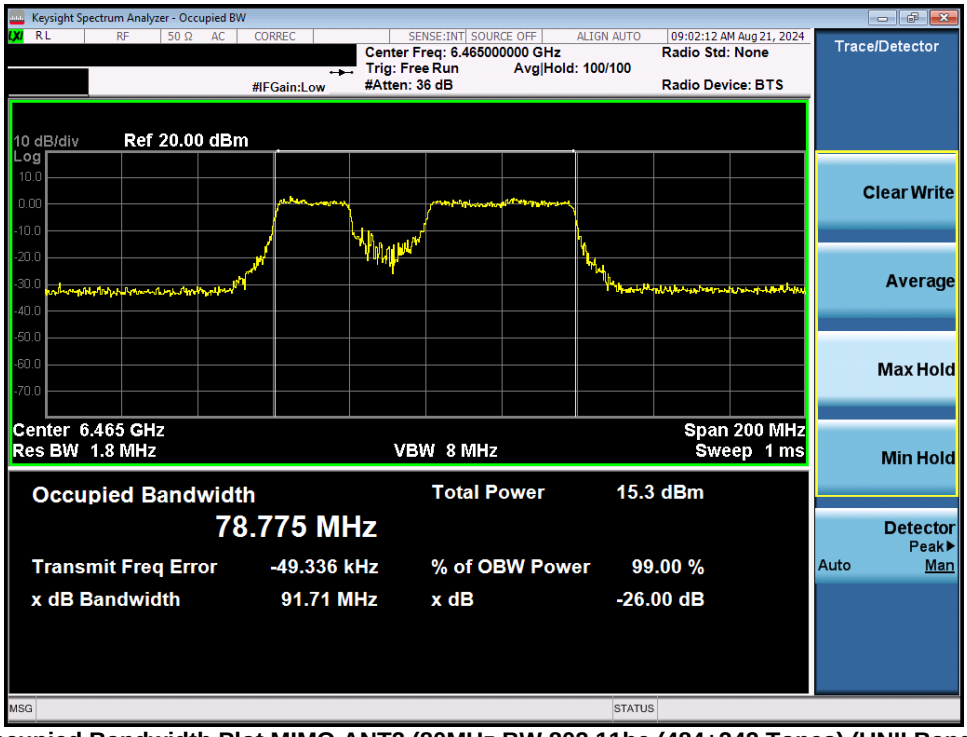
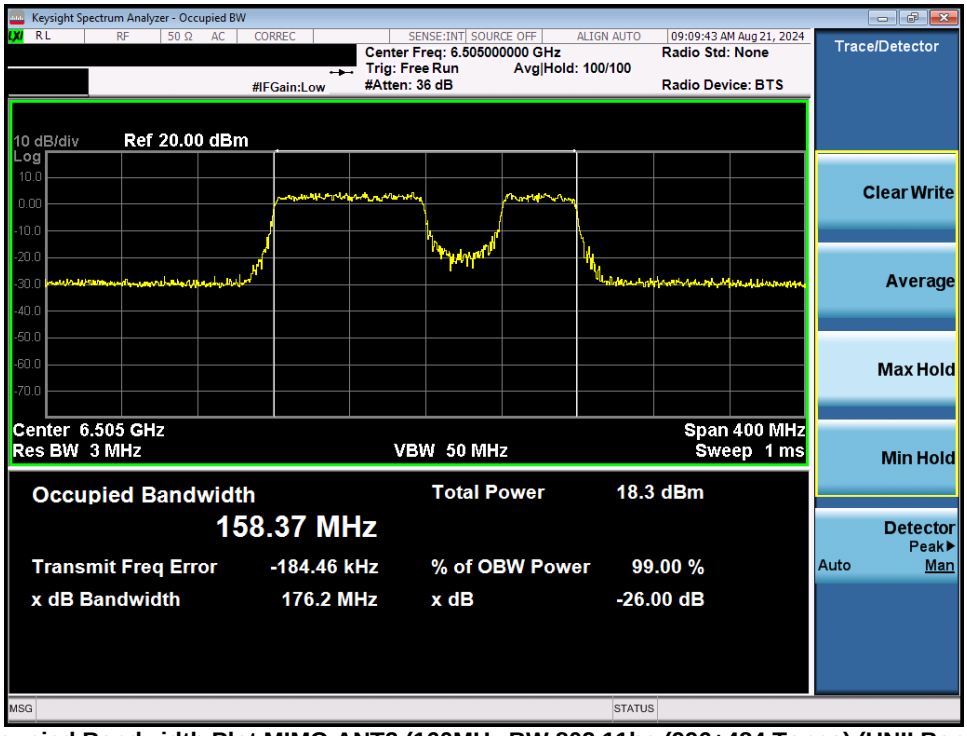
MIMO Antenna-2 Bandwidth Measurements - (Partial Tones - MRU)



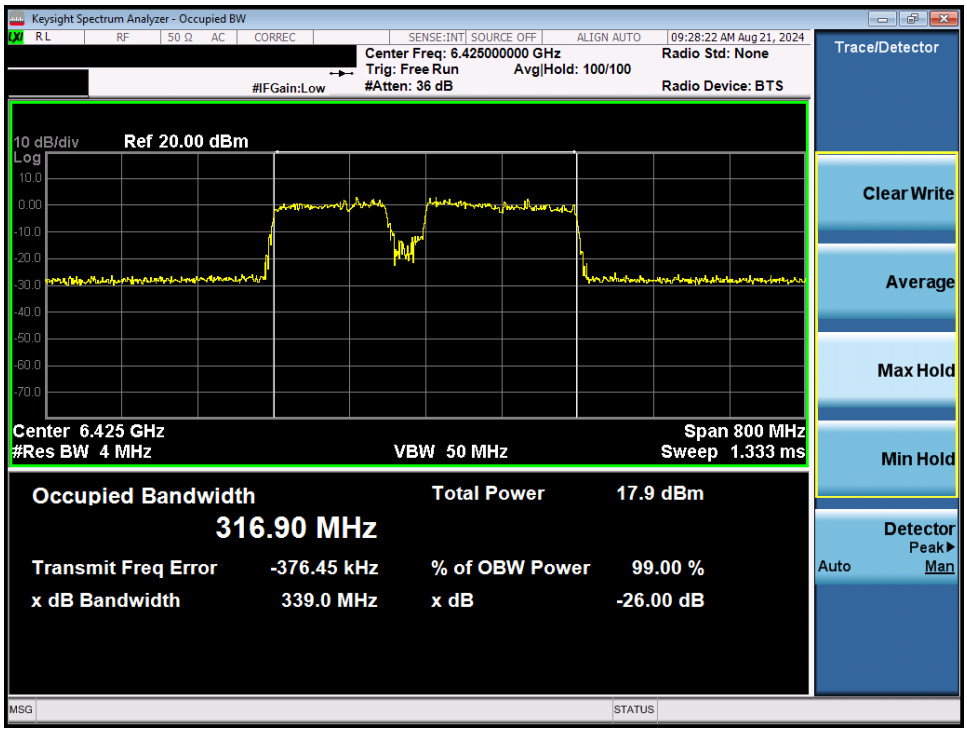
Plot 7-101. Occupied Bandwidth Plot MIMO ANT2 (20MHz BW 802.11be (106+26 Tones) (UNII Band 6) – Ch. 105)



Plot 7-102. Occupied Bandwidth Plot MIMO ANT2 (80MHz BW 802.11be (484+242 Tones) (UNII Band 6) – Ch. 103)

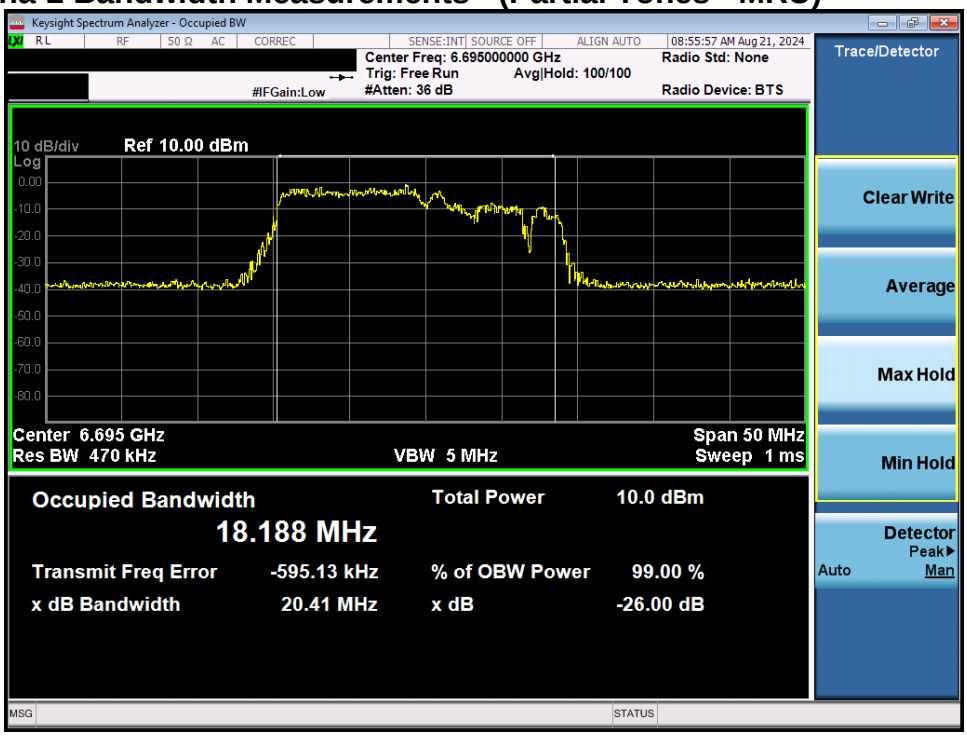


Plot 7-103. Occupied Bandwidth Plot MIMO ANT2 (160MHz BW 802.11be (996+484 Tones) (UNII Band 6) – Ch. 111)

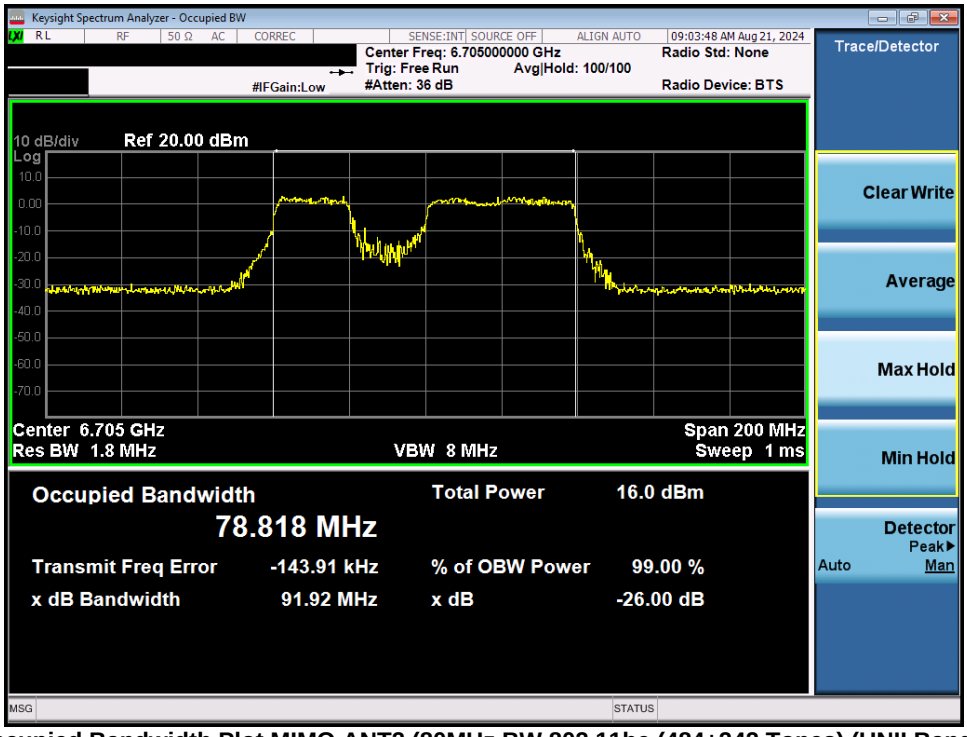


Plot 7-104. Occupied Bandwidth Plot MIMO ANT2 (320MHz BW 802.11be (3*996+484 Tones) (UNII Band 6) – Ch. 95)

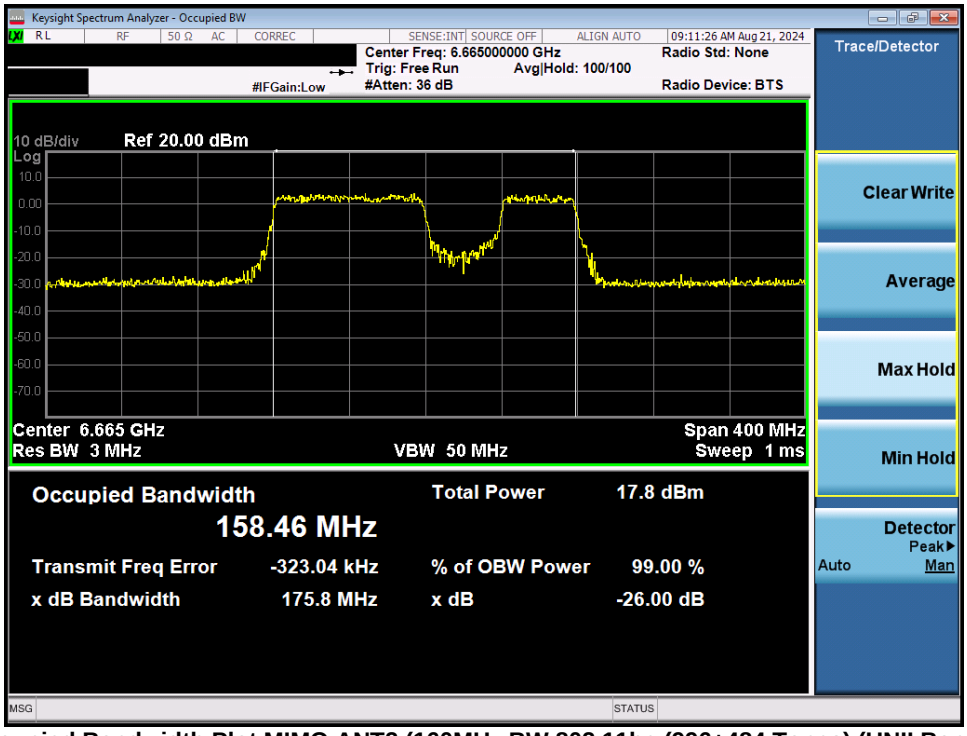
MIMO Antenna-2 Bandwidth Measurements - (Partial Tones - MRU)



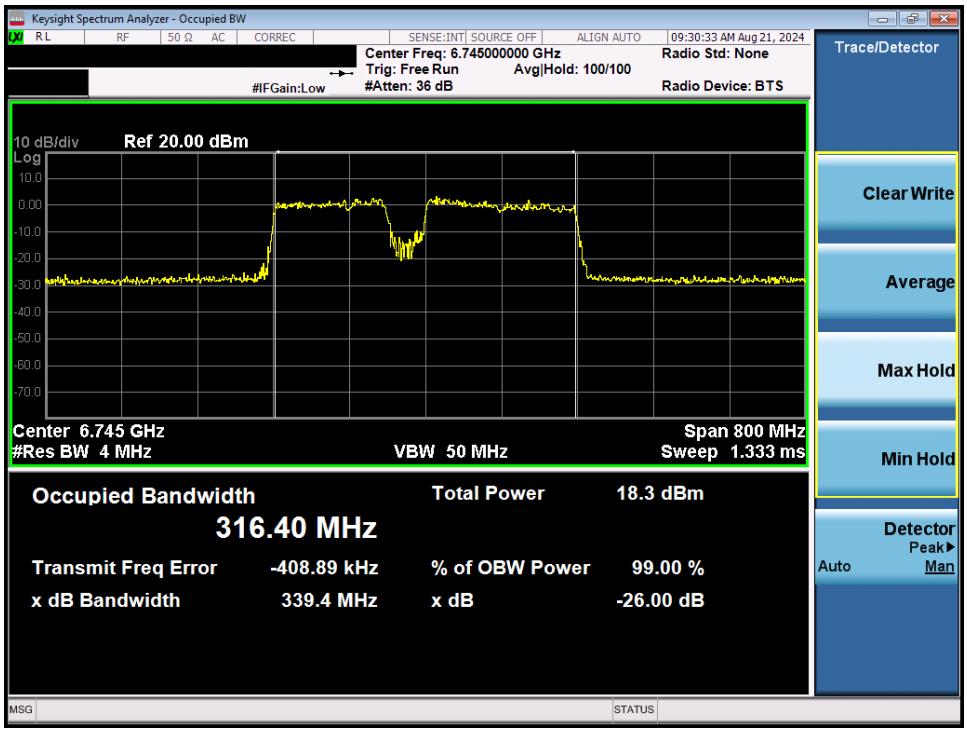
Plot 7-105. Occupied Bandwidth Plot MIMO ANT2 (20MHz BW 802.11be (106+26 Tones) (UNII Band 7) – Ch. 149)



Plot 7-106. Occupied Bandwidth Plot MIMO ANT2 (80MHz BW 802.11be (484+242 Tones) (UNII Band 7) – Ch. 151)

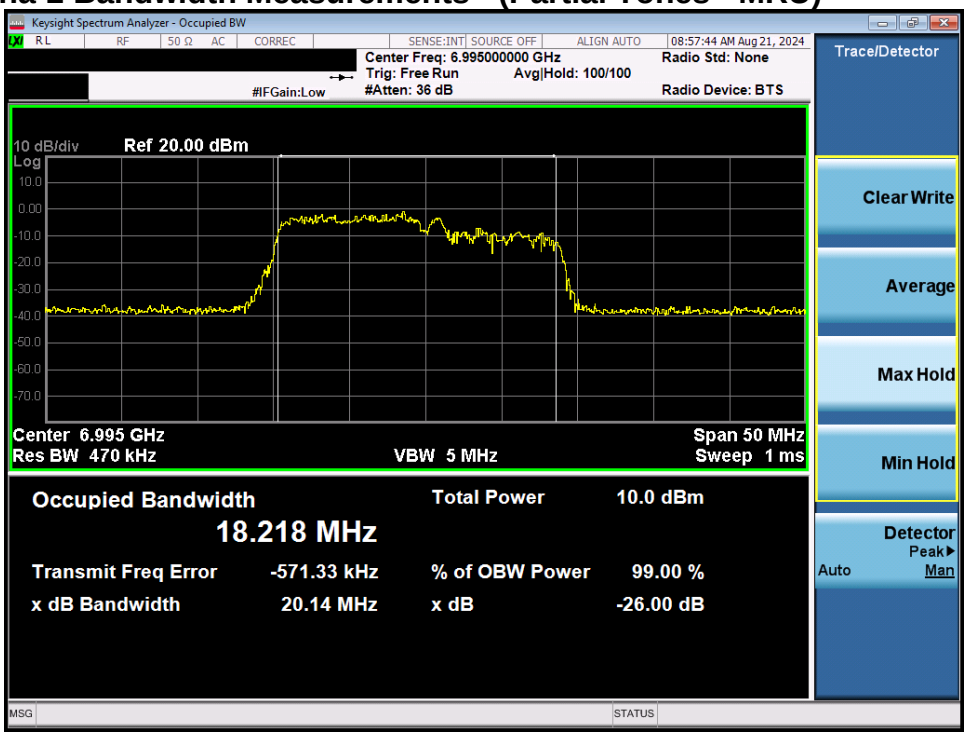


Plot 7-107. Occupied Bandwidth Plot MIMO ANT2 (160MHz BW 802.11be (996+484 Tones) (UNII Band 7) – Ch. 143)

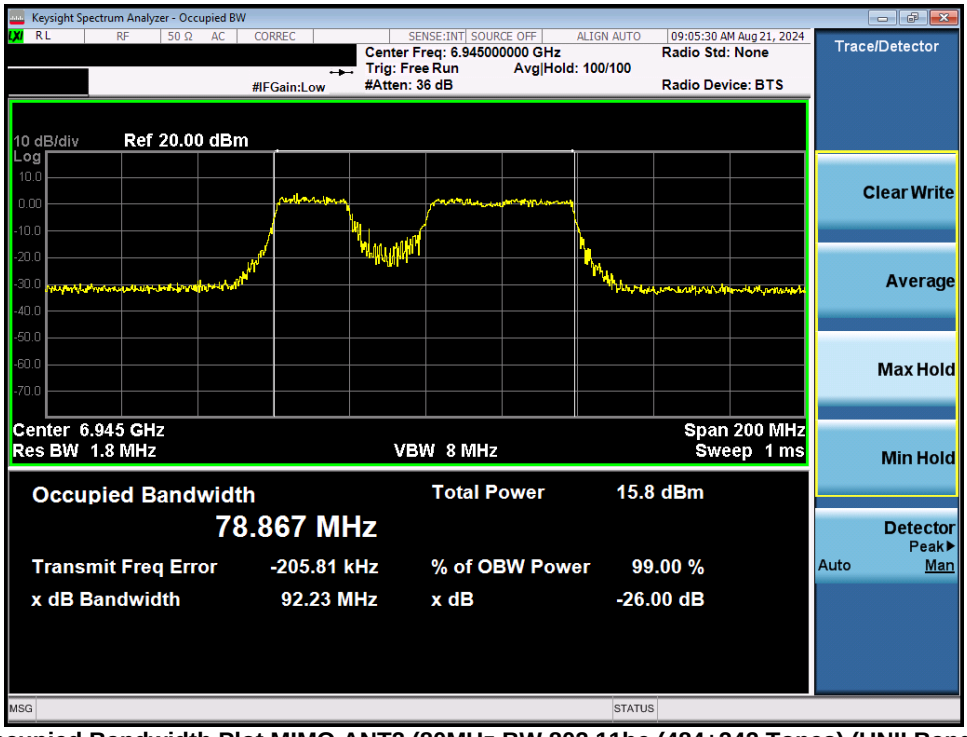


Plot 7-108. Occupied Bandwidth Plot MIMO ANT2 (320MHz BW 802.11be (3*996+484 Tones) (UNII Band 7) – Ch. 159)

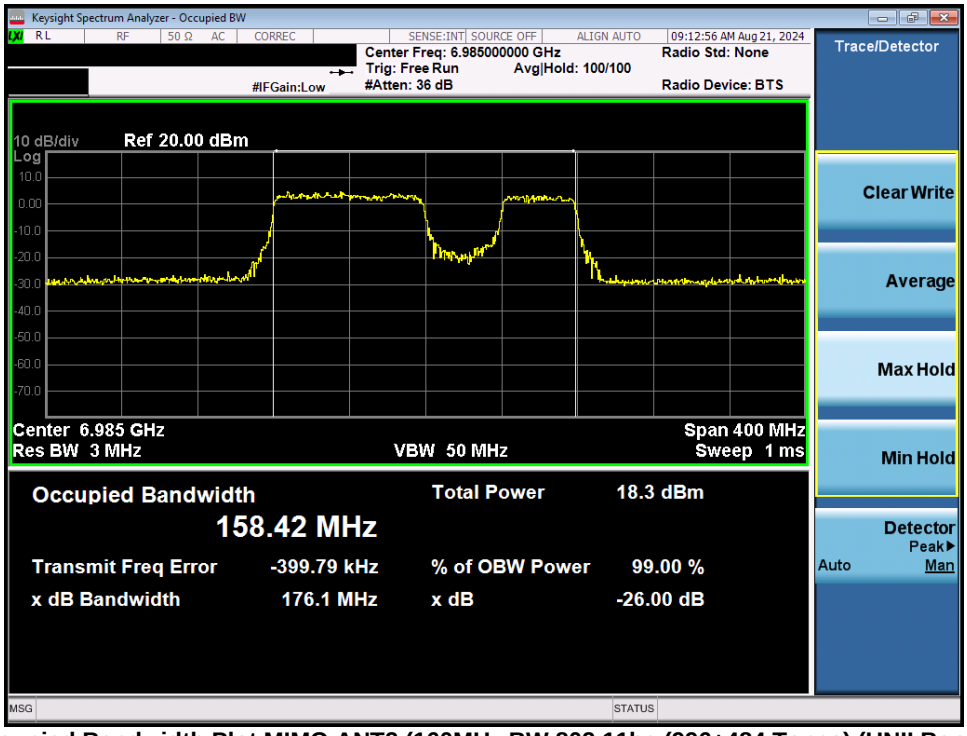
MIMO Antenna-2 Bandwidth Measurements - (Partial Tones - MRU)



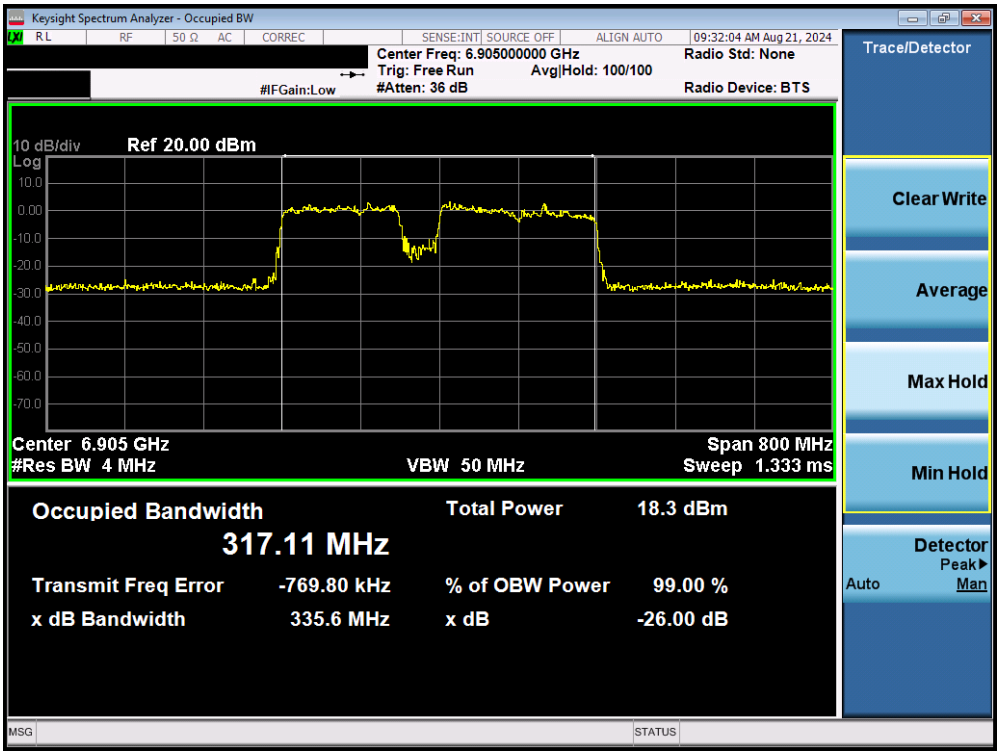
Plot 7-109. Occupied Bandwidth Plot MIMO ANT2 (20MHz BW 802.11be (106+26 Tones) (UNII Band 8) – Ch. 209)



Plot 7-110. Occupied Bandwidth Plot MIMO ANT2 (80MHz BW 802.11be (484+242 Tones) (UNII Band 8) – Ch. 199)



Plot 7-111. Occupied Bandwidth Plot MIMO ANT2 (160MHz BW 802.11be (996+484 Tones) (UNII Band 8) – Ch. 207)



Plot 7-112. Occupied Bandwidth Plot MIMO ANT2 (320MHz BW 802.11be (3*996+484 Tones) (UNII Band 8) – Ch. 191)

7.3 UNII Output Power Measurement

Test Overview and Limits

A transmitter antenna terminal of the EUT is connected to the input of an RF pulse power sensor. Measurement is made using a broadband average power meter while the EUT is operating at its maximum duty cycle, at its maximum power control level, as defined in ANSI C63.10-2013, and at the appropriate frequencies.

For client devices operating under the control of an indoor access point in the 5.925-7.125 GHz bands, the maximum e.i.r.p. over the frequency band of operation must not exceed 24 dBm. For client devices operating under the control of a standard power access point, the maximum e.i.r.p. over the frequency band of operation must not exceed 30 dBm and the device must limit its power to no more than 6 dB below its associated standard power access point's authorized transmit power.

Test Procedure Used

ANSI C63.10-2013 – Section 12.3.3.2 Method PM-G
ANSI C63.10-2013 – Section 14.2 Measure-and-Sum Technique

Test Settings

Average power measurements were performed only when the EUT was transmitting at its maximum power control level using a broadband power meter with a pulse sensor. The power meter implemented triggering and gating capabilities which were set up such that power measurements were recorded only during the ON time of the transmitter. The trace was averaged over 100 traces to obtain the final measured average power.

Test Setup

The EUT and measurement equipment were set up as shown in the diagram below.

Figure 7-2. Test Instrument & Measurement Setup

Test Notes

Compliance for this device while operating under the control of either an indoor low power access point or a standard power access point is demonstrated by applying the tighter low power indoor access point limit of 24dBm e.i.r.p. for both cases.

MIMO Maximum Conducted Output Power Measurements (26 Tones)

20MHz BW	Band	Freq [MHz]	Channel	Tones	Average Conducted Power (dBm) RU Index 0 ANT1	0 ANT2	0 MIMO	4 ANT1	4 ANT2	4 MIMO	8 ANT1	8 ANT2	8 MIMO	Dir. Ant. Gain [dBi]	Max e.i.r.p [dBm]	e.i.r.p Limit [dBm]	e.i.r.p Margin [dB]
	5	5935	2	26T	-3.3	-6.3	-1.54	-3.3	-6.4	-1.57	-3.5	-6.3	-1.67	2.53	1.0	24.0	-23.00
		6175	45	26T	-3.80	-6.10	-1.79	-3.50	-6.10	-1.60	-3.50	-6.30	-1.67	2.53	0.9	24.0	-23.07
		6415	93	26T	-3.60	-6.10	-1.66	-3.80	-6.30	-1.86	-3.60	-6.10	-1.66	2.53	0.9	24.0	-23.13
	6	6435	97	26T	-3.80	-6.00	-1.75	-3.60	-5.90	-1.59	-3.60	-6.20	-1.70	2.54	1.0	24.0	-23.05
		6475	105	26T	-3.40	-6.30	-1.60	-3.60	-6.49	-1.80	-3.60	-6.00	-1.63	2.54	0.9	24.0	-23.06
		6515	113	26T	-3.40	-6.20	-1.57	-3.50	-6.40	-1.70	-3.20	-6.49	-1.53	2.54	1.0	24.0	-22.99
	7	6535	117	26T	-3.40	-6.20	-1.57	-3.50	-5.90	-1.53	-3.45	-6.30	-1.63	2.31	0.8	24.0	-23.21
		6695	149	26T	-3.40	-6.40	-1.64	-3.70	-5.60	-1.54	-3.30	-6.27	-1.53	2.31	0.8	24.0	-23.21
		6875	185	26T	-3.60	-6.10	-1.66	-3.50	-5.90	-1.53	-3.50	-6.10	-1.60	2.31	0.8	24.0	-23.21
	8	6895	189	26T	-3.70	-6.30	-1.80	-3.70	-5.80	-1.61	-3.90	-5.90	-1.78	1.78	0.2	24.0	-23.84
		6995	209	26T	-3.50	-6.18	-1.63	-3.60	-6.40	-1.77	-3.80	-6.20	-1.83	1.78	0.1	24.0	-23.85
		7115	233	26T	-3.56	-6.40	-1.74	-3.55	-6.30	-1.70	-3.42	-6.45	-1.67	1.78	0.1	24.0	-23.89

Table 7-5. MIMO 20MHz BW 802.11ax/be (UNII) Maximum Conducted Output Power – LPI

20MHz BW	Band	Freq [MHz]	Channel	Tones	Average Conducted Power (dBm) RU Index 0 ANT1	0 ANT2	0 MIMO	4 ANT1	4 ANT2	4 MIMO	8 ANT1	8 ANT2	8 MIMO	Dir. Ant. Gain [dBi]	Max e.i.r.p [dBm]	e.i.r.p Limit [dBm]	e.i.r.p Margin [dB]
	5	5935	2	26T	2.37	2.04	5.22	2.19	1.82	5.02	1.9	2.1	5.02	2.53	7.8	24.0	-16.25
		6175	45	26T	8.78	8.67	11.74	8.77	8.47	11.63	8.48	8.77	11.64	2.53	14.3	24.0	-9.73
		6415	93	26T	8.58	8.07	11.34	8.62	7.50	11.11	8.54	8.52	11.54	2.53	14.1	24.0	-9.93
	7	6535	117	26T	8.82	8.84	11.84	8.58	8.71	11.66	8.95	8.89	11.93	2.31	14.2	24.0	-9.76
		6695	149	26T	8.01	7.85	10.94	8.88	8.42	11.67	8.18	8.05	11.13	2.31	14.0	24.0	-10.02

Table 7-6. MIMO 20MHz BW 802.11ax/be (UNII) Maximum Conducted Output Power – SP

MIMO Maximum Conducted Output Power Measurements (52 Tones)

	Band	Freq [MHz]	Channel	Tones	Average Conducted Power (dBm) RU Index 37 ANT1	37 ANT2	37 MIMO	39 ANT1	39 ANT2	39 MIMO	40 ANT1	40 ANT2	40 MIMO	Dir. Ant. Gain [dBi]	Max e.i.r.p [dBm]	e.i.r.p Limit [dBm]	e.i.r.p Margin [dB]
20MHz BW	5	5935	2	52T	-2.0	-3.6	0.28	-2.1	-3.6	0.22	-2.2	-3.8	0.08	2.53	2.8	24.0	-21.19
		6175	45	52T	-2.50	-3.60	0.00	-2.50	-3.50	0.04	-2.60	-3.63	-0.07	2.53	2.6	24.0	-21.43
		6415	93	52T	-2.70	-3.99	-0.29	-2.70	-3.70	-0.16	-2.40	-3.40	0.14	2.53	2.7	24.0	-21.33
	6	6435	97	52T	-2.10	-2.50	0.71	-2.50	-3.40	0.08	-2.40	-3.60	0.05	2.54	3.3	24.0	-20.74
		6475	105	52T	-2.60	-3.50	-0.02	-2.50	-3.40	0.08	-2.40	-3.70	0.01	2.54	2.6	24.0	-21.37
		6515	113	52T	-2.20	-3.70	0.12	-2.10	-3.50	0.27	-2.20	-3.80	0.08	2.54	2.8	24.0	-21.19
	7	6535	117	52T	-2.40	-3.60	0.05	-2.30	-3.40	0.20	-2.10	-3.70	0.18	2.31	2.5	24.0	-21.49
		6695	149	52T	-2.02	-3.50	0.31	-2.10	-3.70	0.18	-2.10	-3.99	0.07	2.31	2.6	24.0	-21.37
		6875	185	52T	-2.10	-4.60	-0.16	-2.09	-4.20	-0.01	-2.07	-4.60	-0.14	2.31	2.3	24.0	-21.70
	8	6895	189	52T	-2.10	-4.70	-0.20	-2.10	-4.40	-0.09	-2.10	-4.80	-0.23	1.78	1.7	24.0	-22.31
		6995	209	52T	-2.05	-5.50	-0.43	-2.11	-5.30	-0.41	-2.09	-5.70	-0.52	1.78	1.4	24.0	-22.63
		7115	233	52T	-2.03	-5.42	-0.39	-2.09	-6.10	-0.64	-2.08	-5.99	-0.60	1.78	1.4	24.0	-22.62

Table 7-7. MIMO 20MHz BW 802.11ax/be (UNII) Maximum Conducted Output Power – LPI

	Band	Freq [MHz]	Channel	Tones	Average Conducted Power (dBm) RU Index 37 ANT1	37 ANT2	37 MIMO	39 ANT1	39 ANT2	39 MIMO	40 ANT1	40 ANT2	40 MIMO	Dir. Ant. Gain [dBi]	Max e.i.r.p [dBm]	e.i.r.p Limit [dBm]	e.i.r.p Margin [dB]
20MHz BW	5	5935	2	52T	2.05	1.58	4.83	2.01	1.91	4.97	1.9	2.3	5.13	2.53	7.7	24.0	-16.33
		6175	45	52T	8.55	8.45	11.51	8.88	8.43	11.67	8.81	8.80	11.82	2.53	14.3	24.0	-9.65
		6415	93	52T	8.83	8.27	11.57	8.47	7.80	11.16	8.75	8.61	11.69	2.53	14.2	24.0	-9.78
	7	6535	117	52T	8.05	8.44	11.26	8.69	8.79	11.75	8.06	8.57	11.33	2.31	14.1	24.0	-9.94
		6695	149	52T	8.04	7.87	10.97	8.92	8.26	11.61	8.48	8.21	11.36	2.31	13.9	24.0	-10.08

Table 7-8. MIMO 20MHz BW 802.11ax/be (UNII) Maximum Conducted Output Power – SP

MIMO Maximum Conducted Output Power Measurements (106 Tones)

	Band	Freq [MHz]	Channel	Tones	Average Conducted Power (dBm) RU Index 53 ANT1	53 ANT2	53 MIMO	54 ANT1	54 ANT2	54 MIMO	Dir. Ant. Gain [dBi]	Max e.i.r.p [dBm]	e.i.r.p Limit [dBm]	e.i.r.p Margin [dB]
20MHz BW		5935	2	106T	1.0	0.4	3.69	0.9	0.3	3.61	2.53	6.2	24.0	-17.77
		6175	45	106T	0.73	0.90	3.83	0.64	0.88	3.77	2.53	6.4	24.0	-17.64
		6415	93	106T	0.50	0.62	3.57	0.40	0.57	3.50	2.53	6.1	24.0	-17.90
	6	6435	97	106T	0.10	0.16	3.14	0.20	0.19	3.21	2.54	5.7	24.0	-18.25
		6475	105	106T	0.40	0.46	3.44	0.50	0.52	3.52	2.54	6.1	24.0	-17.94
		6515	113	106T	0.47	0.07	3.28	0.66	0.08	3.39	2.54	5.9	24.0	-18.07
	7	6535	117	106T	0.57	0.60	3.60	0.75	0.58	3.68	2.31	6.0	24.0	-18.01
		6695	149	106T	0.80	0.13	3.49	0.99	0.19	3.62	2.31	5.9	24.0	-18.07
		6875	185	106T	0.90	-0.30	3.35	0.98	-0.29	3.40	2.31	5.7	24.0	-18.29
	8	6895	189	106T	0.90	-0.44	3.29	0.98	-0.44	3.34	1.78	5.1	24.0	-18.89
		6995	209	106T	0.89	-0.70	3.18	0.98	-0.79	3.19	1.78	5.0	24.0	-19.03
		7115	233	106T	-0.97	-0.70	2.18	0.99	-0.90	3.16	1.78	4.9	24.0	-19.07

Table 7-9. MIMO 20MHz BW 802.11ax/be (UNII) Maximum Conducted Output Power – LPI

	Band	Freq [MHz]	Channel	Tones	Average Conducted Power (dBm) RU Index 53 ANT1	53 ANT2	53 MIMO	54 ANT1	54 ANT2	54 MIMO	Dir. Ant. Gain [dBi]	Max e.i.r.p [dBm]	e.i.r.p Limit [dBm]	e.i.r.p Margin [dB]
20MHz BW	5	5935	2	106T	2.08	1.77	4.94	2.19	2.36	5.29	2.53	7.8	24.0	-16.18
		6175	45	106T	8.83	8.41	11.64	8.50	8.51	11.52	2.53	14.2	24.0	-9.83
		6415	93	106T	8.81	7.87	11.38	8.88	8.29	11.61	2.53	14.1	24.0	-9.86
	7	6535	117	106T	8.12	8.68	11.42	8.37	8.73	11.56	2.31	13.9	24.0	-10.12
		6695	149	106T	8.46	8.12	11.30	8.77	8.37	11.58	2.31	13.9	24.0	-10.10

Table 7-10. MIMO 20MHz BW 802.11ax/be (UNII) Maximum Conducted Output Power – SP

MIMO Maximum Conducted Output Power Measurements (242 Tones)

	Band	Freq [MHz]	Channel	Tones	Average Conducted Power (dBm) RU Index 61			Dir. Ant. Gain [dBi]	Max e.i.r.p [dBm]	e.i.r.p Limit [dBm]	e.i.r.p Margin [dB]
					ANT1	ANT2	MIMO				
20MHz BW	5	5935	2	242T	4.4	4.4	7.39	2.53	9.9	24.0	-14.08
		6175	45	242T	4.49	4.19	7.35	2.53	9.9	24.0	-14.12
		6415	93	242T	4.48	4.15	7.33	2.53	9.9	24.0	-14.14
	6	6435	97	242T	4.48	3.80	7.16	2.54	9.7	24.0	-14.29
		6475	105	242T	4.49	3.85	7.19	2.54	9.7	24.0	-14.26
		6515	113	242T	4.42	3.70	7.09	2.54	9.6	24.0	-14.37
	7	6535	117	242T	4.42	3.62	7.05	2.31	9.4	24.0	-14.64
		6695	149	242T	4.30	3.40	6.88	2.31	9.2	24.0	-14.80
		6875	185	242T	4.35	3.30	6.87	2.31	9.2	24.0	-14.82
	8	6895	189	242T	4.39	3.28	6.88	1.78	8.7	24.0	-15.34
		6995	209	242T	4.48	3.00	6.81	1.78	8.6	24.0	-15.41
		7115	233	242T	4.49	3.35	6.97	1.78	8.7	24.0	-15.26

Table 7-11. MIMO 20MHz BW 802.11ax/be (UNII) Maximum Conducted Output Power – LPI

	Band	Freq [MHz]	Channel	Tones	Average Conducted Power (dBm) RU Index 61			Dir. Ant. Gain [dBi]	Max e.i.r.p [dBm]	e.i.r.p Limit [dBm]	e.i.r.p Margin [dB]
					ANT1	ANT2	MIMO				
20MHz BW	5	5935	2	242T	2.29	2.17	5.24	2.53	7.8	24.0	-16.23
		6175	45	242T	8.64	8.26	11.46	2.53	14.0	24.0	-10.00
		6415	93	242T	8.72	8.00	11.39	2.53	13.9	24.0	-10.08
	7	6535	117	242T	8.12	8.50	11.32	2.31	13.6	24.0	-10.36
		6695	149	242T	8.49	8.11	11.31	2.31	13.6	24.0	-10.37

Table 7-12. MIMO 20MHz BW 802.11ax/be (UNII) Maximum Conducted Output Power – SP

MIMO Maximum Conducted Output Power Measurements (484 Tones)

	Band	Freq [MHz]	Channel	Tones	Average Conducted Power (dBm) RU Index 65			Dir. Ant. Gain [dBi]	Max e.i.r.p [dBm]	e.i.r.p Limit [dBm]	e.i.r.p Margin [dB]
					ANT1	ANT2	MIMO				
40MHz BW	5	5965	3	484T	7.0	6.4	9.70	2.53	12.2	24.0	-11.77
		6005	11	484T	7.0	6.4	9.69	2.53	12.2	24.0	-11.78
		6165	43	484T	6.8	7.0	9.93	2.53	12.5	24.0	-11.54
		6405	91	484T	6.7	6.9	9.82	2.53	12.4	24.0	-11.65
	6	6445	99	484T	6.4	6.2	9.30	2.54	11.8	24.0	-12.15
		6485	107	484T	6.6	6.7	9.63	2.54	12.2	24.0	-11.83
		6525	115	484T	6.9	6.9	9.90	2.54	12.4	24.0	-11.56
	7	6565	123	484T	6.4	6.8	9.59	2.31	11.9	24.0	-12.09
		6685	147	484T	6.2	6.7	9.44	2.31	11.8	24.0	-12.24
		6845	179	484T	6.6	6.7	9.65	2.31	12.0	24.0	-12.04
	8	6885	187	484T	6.7	6.4	9.58	1.78	11.4	24.0	-12.64
		7005	211	484T	6.9	6.4	9.66	1.78	11.4	24.0	-12.57
		7085	227	484T	6.7	5.8	9.28	1.78	11.1	24.0	-12.94

Table 7-13. MIMO 40MHz BW 802.11ax/be (UNII) Maximum Conducted Output Power – LPI

	Band	Freq [MHz]	Channel	Tones	Average Conducted Power (dBm) RU Index 65			Dir. Ant. Gain [dBi]	Max e.i.r.p [dBm]	e.i.r.p Limit [dBm]	e.i.r.p Margin [dB]
					ANT1	ANT2	MIMO				
40MHz BW	5	5965	3	484T	8.94	7.63	11.34	2.53	13.9	24.0	-10.12
		6005	11	484T	8.64	8.06	11.37	2.53	13.9	24.0	-10.10
		6165	43	484T	8.71	7.62	11.21	2.53	13.7	24.0	-10.26
		6405	91	484T	8.79	7.01	11.00	2.53	13.5	24.0	-10.47
	7	6565	123	484T	8.58	8.85	11.73	2.31	14.0	24.0	-9.96
		6685	147	484T	8.50	7.38	10.99	2.31	13.3	24.0	-10.70
		6845	179	484T	8.86	8.12	11.52	2.31	13.8	24.0	-10.17

Table 7-14. MIMO 40MHz BW 802.11ax/be (UNII) Maximum Conducted Output Power – SP

MIMO Maximum Conducted Output Power Measurements (996 Tones)

	Band	Freq [MHz]	Channel	Tones	Average Conducted Power (dBm) RU Index 67			Dir. Ant. Gain [dBi]	Max e.i.r.p [dBm]	e.i.r.p Limit [dBm]	e.i.r.p Margin [dB]
					ANT1	ANT2	MIMO				
80MHz BW	5	5985	7	996T	8.50	8.60	11.56	2.53	14.1	24.0	-9.91
		6145	39	996T	8.20	8.48	11.35	2.53	13.9	24.0	-10.12
		6385	87	996T	8.56	8.80	11.69	2.53	14.2	24.0	-9.78
	6	6465	103	996T	8.10	8.42	11.27	2.54	13.8	24.0	-10.18
	7	6545	119	996T	8.00	8.70	11.37	2.31	13.7	24.0	-10.31
		6705	151	996T	8.70	8.90	11.81	2.31	14.1	24.0	-9.88
		6865	183	996T	8.10	8.65	11.39	2.31	13.7	24.0	-10.29
	8	6945	199	996T	8.99	8.86	11.94	1.78	13.7	24.0	-10.29
		7025	215	996T	8.70	8.50	11.61	1.78	13.4	24.0	-10.61

Table 7-15. MIMO 80MHz BW 802.11ax/be (UNII) Maximum Conducted Output Power – LPI/SP

MIMO Maximum Conducted Output Power Measurements (2x996 Tones)

	Band	Freq [MHz]	Channel	Tones	Average Conducted Power (dBm)			Dir. Ant. Gain [dBi]	Max e.i.r.p [dBm]	e.i.r.p Limit [dBm]	e.i.r.p Margin [dB]
					RU Index						
					68						
					ANT1	ANT2	MIMO				
160MHz BW	5	6025	15	2x996T	8.00	8.23	11.13	2.53	13.7	24.0	-10.34
		6185	47	2x996T	8.00	8.50	11.27	2.53	13.8	24.0	-10.20
		6345	79	2x996T	8.18	8.60	11.41	2.53	13.9	24.0	-10.06
	6	6505	111	2x996T	8.00	8.39	11.21	2.54	13.8	24.0	-10.25
	7	6665	143	2x996T	8.33	8.90	11.63	2.31	13.9	24.0	-10.05
		6825	175	2x996T	8.50	8.30	11.41	2.31	13.7	24.0	-10.28
	8	6985	207	2x996T	8.79	8.56	11.69	1.78	13.5	24.0	-10.54

Table 7-16. MIMO 160MHz BW 802.11ax/be (UNII) Maximum Conducted Output Power – LPI/SP

MIMO Maximum Conducted Output Power Measurements (4x996 Tones)

	Band	Freq [MHz]	Channel	Tones	Average Conducted Power (dBm) RU Index 69			Dir. Ant. Gain [dBi]	Max e.i.r.p [dBm]	e.i.r.p Limit [dBm]	e.i.r.p Margin [dB]
					ANT1	ANT2	MIMO				
320MHz BW	5	6105	31	4x996T	8.23	8.32	11.29	2.53	13.8	24.0	-10.18
		6265	63	4x996T	8.35	8.57	11.47	2.53	14.0	24.0	-10.00
	6	6425	95	4x996T	8.41	8.76	11.60	2.54	14.1	24.0	-9.86
	7	6585	127	4x996T	7.85	8.80	11.36	2.31	13.7	24.0	-10.33
		6745	159	4x996T	7.90	8.45	11.19	2.31	13.5	24.0	-10.49
	8	6905	191	4x996T	8.65	8.73	11.70	1.78	13.5	24.0	-10.52

Table 7-17. MIMO 320MHz BW 802.11be (UNII) Maximum Conducted Output Power – LPI/SP

MIMO Maximum Conducted Output Power Measurements (MRU)

	Band	Freq [MHz]	Channel	Tones	Average Conducted Power (dBm) MRU Index 71 ANT1	ANT2	MIMO	Dir. Ant. Gain [dBi]	Max e.i.r.p [dBm]	e.i.r.p Limit [dBm]	e.i.r.p Margin [dB]
20MHz BW	5	6175	45	52+26T	-2.01	-3.70	0.24	2.53	2.8	24.0	-21.23
	6	6475	105	52+26T	-2.50	-3.46	0.06	2.54	2.6	24.0	-21.40
	7	6695	149	52+26T	-2.20	-3.60	0.17	2.31	2.5	24.0	-21.52
	8	6995	209	52+26T	-2.06	-4.60	-0.14	1.78	1.6	24.0	-22.36

Table 7-18. MIMO 20MHz BW 802.11be (UNII) Maximum Conducted Output Power (52+26T) – LPI

	Band	Freq [MHz]	Channel	Tones	Average Conducted Power (dBm) MRU Index 82 ANT1	ANT2	MIMO	83 ANT1	ANT2	MIMO	Dir. Ant. Gain [dBi]	Max e.i.r.p [dBm]	e.i.r.p Limit [dBm]	e.i.r.p Margin [dB]
20MHz BW	5	6175	45	106+26T	0.99	0.15	3.60	0.92	0.20	3.59	2.53	6.1	24.0	-17.87
	6	6475	105	106+26T	-0.20	0.50	3.17	-0.10	0.45	3.19	2.54	5.7	24.0	-18.26
	7	6695	149	106+26T	0.50	0.60	3.56	0.70	0.58	3.65	2.31	6.0	24.0	-18.04
	8	6995	209	106+26T	0.90	0.20	3.57	0.92	0.25	3.61	1.78	5.4	24.0	-18.62

Table 7-19. MIMO 20MHz BW 802.11be (UNII) Maximum Conducted Output Power (106+26T) – LPI

	Band	Freq [MHz]	Channel	Tones	Average Conducted Power (dBm) MRU Index 70 ANT1	ANT2	MIMO	71 ANT1	ANT2	MIMO	72 ANT1	ANT2	MIMO	Dir. Ant. Gain [dBi]	Max e.i.r.p [dBm]	e.i.r.p Limit [dBm]	e.i.r.p Margin [dB]
20MHz BW	5	6175	45	52+26T	8.90	8.96	11.94	8.90	8.99	11.96	8.70	8.90	11.81	2.53	14.5	24.0	-9.51
	7	6695	149	52+26T	8.30	8.99	11.67	8.10	8.60	11.37	8.30	8.70	11.51	2.31	14.0	24.0	-10.02

Table 7-20. MIMO 20MHz BW 802.11be (UNII) Maximum Conducted Output Power (52+26T) – SP

	Band	Freq [MHz]	Channel	Tones	Average Conducted Power (dBm) MRU Index 82 ANT1	ANT2	MIMO	83 ANT1	ANT2	MIMO	Dir. Ant. Gain [dBi]	Max e.i.r.p [dBm]	e.i.r.p Limit [dBm]	e.i.r.p Margin [dB]
20MHz BW	5	6175	45	106+26T	8.80	8.87	11.85	8.70	8.00	11.37	2.53	14.4	24.0	-9.62
	7	6695	149	106+26T	8.38	8.92	11.67	8.20	8.56	11.39	2.31	14.0	24.0	-10.02

Table 7-21. MIMO 20MHz BW 802.11be (UNII) Maximum Conducted Output Power (106+26T) – SP

	Band	Freq [MHz]	Channel	Tones	Average Conducted Power (dBm) MRU Index 91 ANT1	ANT2	MIMO	90 ANT1	ANT2	MIMO	92 ANT1	ANT2	MIMO	Dir. Ant. Gain [dBi]	Max e.i.r.p [dBm]	e.i.r.p Limit [dBm]	e.i.r.p Margin [dB]
80MHz BW	5	5985	7	242+484T	6.9	6.3	9.60	6.9	6.4	9.65	6.9	6.3	9.60	2.53	12.2	24.0	-11.82
		6145	39	242+484T	6.6	7.0	9.82	6.8	7.0	9.89	6.6	7.0	9.83	2.53	12.4	24.0	-11.58
		6385	87	242+484T	6.7	7.0	9.82	6.7	7.0	9.86	6.7	7.0	9.85	2.53	12.4	24.0	-11.61
	6	6465	103	242+484T	6.8	6.9	9.86	6.9	7.0	9.96	6.8	6.9	9.87	2.54	12.5	24.0	-11.50
	7	6545	119	242+484T	6.7	6.7	9.68	6.8	6.7	9.75	6.6	6.7	9.68	2.31	12.1	24.0	-11.94
		6705	151	242+484T	6.9	6.9	9.92	6.3	6.6	9.46	6.1	6.6	9.37	2.31	12.2	24.0	-11.77
		6865	183	242+484T	6.9	6.9	9.93	6.6	6.5	9.56	6.5	6.5	9.53	2.31	12.2	24.0	-11.76
	8	6945	199	242+484T	6.9	6.4	9.64	6.9	6.4	9.67	6.8	6.4	9.61	1.78	11.4	24.0	-12.56
		7025	215	242+484T	6.6	6.3	9.46	6.8	6.4	9.61	6.7	6.4	9.56	1.78	11.4	24.0	-12.61

Table 7-22. MIMO 80MHz BW 802.11be (UNII) Maximum Conducted Output Power (484+242T) – LPI

	Band	Freq [MHz]	Channel	Tones	Average Conducted Power (dBm) MRU Index 90 ANT1	ANT2	MIMO	91 ANT1	ANT2	MIMO	92 ANT1	ANT2	MIMO	Dir. Ant. Gain [dBi]	Max e.i.r.p [dBm]	e.i.r.p Limit [dBm]	e.i.r.p Margin [dB]
80MHz BW	5	5985	7	242+484T	8.4	8.7	11.56	8.4	8.6	11.53	8.3	8.7	11.51	2.53	14.1	24.0	-9.91
		6145	39	242+484T	8.5	8.7	11.59	8.4	8.6	11.50	8.3	8.6	11.46	2.53	14.1	24.0	-9.88
		6385	87	242+484T	8.6	8.4	11.52	8.4	8.4	11.43	8.5	8.4	11.47	2.53	14.0	24.0	-9.95
	7	6705	151	242+484T	8.2	8.6	11.43	8.1	8.6	11.37	8.0	8.7	11.37	2.31	13.7	24.0	-10.25

Table 7-23. MIMO 80MHz BW 802.11be (UNII) Maximum Conducted Output Power (484+242T) – SP

	Band	Freq [MHz]	Channel	Tones	Average Conducted Power (dBm) MRU Index 094 ANT1	ANT2	MIMO	095 ANT1	ANT2	MIMO	1095 ANT1	ANT2	MIMO	Dir. Ant. Gain [dBi]	Max e.i.r.p [dBm]	e.i.r.p Limit [dBm]	e.i.r.p Margin [dB]
160MHz BW	5	6025	15	996+484T	8.65	8.99	11.83	8.40	8.73	11.58	8.60	8.90	11.76	2.53	14.4	24.0	-9.63
		6185	47	996+484T	8.30	8.80	11.57	8.00	8.50	11.27	8.30	8.80	11.57	2.53	14.1	24.0	-9.90
		6345	79	996+484T	8.20	8.80	11.52	8.00	8.60	11.32	8.34	8.90	11.64	2.53	14.2	24.0	-9.83
	6	6505	111	996+484T	8.65	8.80	11.74	8.40	8.60	11.51	8.69	8.99	11.85	2.54	14.4	24.0	-9.60
	7	6665	143	996+484T	8.46	8.90	11.70	8.16	8.60	11.40	8.35	8.99	11.69	2.31	14.0	24.0	-9.99
		6825	175	996+484T	8.30	8.20	11.26	8.00	8.00	11.01	8.40	8.40	11.41	2.31	13.7	24.0	-10.28
	8	6985	207	996+484T	8.77	8.69	11.74	8.40	8.45	11.44	8.80	8.70	11.76	1.78	13.5	24.0	-10.46

Table 7-24. MIMO 160MHz BW 802.11be (UNII) Maximum Conducted Output Power (996+484T) – LPI/SP

	Band	Freq [MHz]	Channel	Tones	Average Conducted Power (dBm) MRU Index 00105 ANT1	ANT2	MIMO	01106 ANT1	ANT2	MIMO	11106 ANT1	ANT2	MIMO	Dir. Ant. Gain [dBi]	Max e.i.r.p [dBm]	e.i.r.p Limit [dBm]	e.i.r.p Margin [dB]
320MHz BW	5	6105	31	3x996+484T	8.00	8.50	11.27	8.30	8.70	11.51	7.98	8.55	11.28	2.53	14.0	24.0	-9.95
		6265	63	3x996+484T	8.00	8.50	11.27	8.40	8.90	11.67	8.00	8.50	11.27	2.53	14.2	24.0	-9.80
	6	6425	95	3x996+484T	8.27	8.68	11.49	8.00	8.40	11.21	8.30	8.70	11.51	2.54	14.1	24.0	-9.94
	7	6585	127	3x996+484T	8.40	8.90	11.67	8.20	8.70	11.47	8.40	8.99	11.72	2.31	14.0	24.0	-9.97
		6745	159	3x996+484T	8.00	8.70	11.37	8.30	8.90	11.62	8.10	8.80	11.47	2.31	13.9	24.0	-10.07
	8	6905	191	3x996+484T	8.50	8.50	11.51	8.30	8.10	11.21	8.60	8.50	11.56	1.78	13.3	24.0	-10.66

Table 7-25. MIMO 320MHz BW 802.11be (UNII) Maximum Conducted Output Power (3x996+484T) – LPI/SP

320MHz BW	Band	Freq [MHz]	Channel	Tones	Average Conducted Power (dBm) MRU Index 00104 ANT1	00104 ANT2	00104 MIMO	01104 ANT1	01104 ANT2	01104 MIMO	11104 ANT1	11104 ANT2	11104 MIMO	Dir. Ant. Gain [dBi]	Max e.i.r.p [dBm]	e.i.r.p Limit [dBm]	e.i.r.p Margin [dB]
	5	6105	31	3x996T	8.00	8.60	11.32	8.30	8.70	11.51	8.20	8.60	11.41	2.53	14.0	24.0	-9.95
		6265	63	3x996T	8.10	8.60	11.37	8.40	8.90	11.67	8.24	8.70	11.49	2.53	14.2	24.0	-9.80
	6	6425	95	3x996T	8.33	8.77	11.57	8.00	8.34	11.18	8.50	8.90	11.71	2.54	14.3	24.0	-9.74
	7	6585	127	3x996T	8.60	8.99	11.81	8.30	8.70	11.51	7.96	8.70	11.36	2.31	14.1	24.0	-9.88
		6745	159	3x996T	8.30	8.80	11.57	8.30	8.80	11.57	8.26	8.90	11.60	2.31	13.9	24.0	-10.09
	8	6905	191	3x996T	8.00	8.10	11.06	8.30	8.20	11.26	8.80	8.60	11.71	1.78	13.5	24.0	-10.51

Table 7-26. MIMO 320MHz BW 802.11be (UNII) Maximum Conducted Output Power (3x996T) – LPI/SP

320MHz BW	Band	Freq [MHz]	Channel	Tones	Average Conducted Power (dBm) MRU Index 00100 ANT1	00100 ANT2	00100 MIMO	01100 ANT1	01100 ANT2	01100 MIMO	11103 ANT1	11103 ANT2	11103 MIMO	Dir. Ant. Gain [dBi]	Max e.i.r.p [dBm]	e.i.r.p Limit [dBm]	e.i.r.p Margin [dB]
	5	6105	31	2x996+484T	8.40	8.90	11.67	8.30	8.80	11.57	8.30	8.90	11.62	2.53	14.2	24.0	-9.80
		6265	63	2x996+484T	8.00	8.47	11.25	7.95	8.30	11.14	8.00	8.40	11.21	2.53	13.8	24.0	-10.22
	6	6425	95	2x996+484T	8.20	8.60	11.41	8.19	8.50	11.36	8.15	8.52	11.35	2.54	14.0	24.0	-10.04
	7	6585	127	2x996+484T	8.20	8.99	11.62	8.00	8.97	11.52	8.30	8.90	11.62	2.31	13.9	24.0	-10.06
		6745	159	2x996+484T	8.20	8.80	11.52	8.00	8.70	11.37	8.10	8.60	11.37	2.31	13.8	24.0	-10.17
	8	6905	191	2x996+484T	8.40	8.45	11.44	8.44	8.30	11.38	8.40	8.40	11.41	1.78	13.2	24.0	-10.79

Table 7-27. MIMO 320MHz BW 802.11be (UNII) Maximum Conducted Output Power (2x996+484T) – LPI/SP

Sample MIMO Calculation:

At 5935MHz in 802.11ax (20MHz BW – 26 Tones) mode, the average conducted output power was measured to be -3.30 dBm for Antenna-1 and -6.30 dBm for Antenna-2.

Antenna 1 + Antenna 2 = MIMO

(-3.30 dBm + -6.30 dBm) = (0.468 mW + 0.234 mW) = 0.702 mW = -1.54 dBm

Sample Directional Gain Calculation:

Per ANSI C63.10-2013 Section 14.4.3, the directional gain is calculated using the following formula, where GN is the gain of the nth antenna and NANT, the total number of antennas used.

$$\text{Directional gain} = 10 \log[(10^{G1/20} + 10^{G2/20} + \ldots + 10^{GN/20})^2 / N_{ANT}] \text{ dBi}$$

Sample e.i.r.p. Calculation:

At 5935MHz in 802.11ax (20MHz BW – 26 Tones) mode, the average MIMO conducted power was calculated to be -1.54 dBm with directional gain of 2.53 dBi.

e.i.r.p. (dBm) = Conducted Power (dBm) + Ant gain (dBi)

-1.54 dBm + 2.53 dBi = -0.01 dBm

7.4 Maximum Power Spectral Density

Test Overview and Limit

The spectrum analyzer was connected to the antenna terminal while the EUT was operating at its maximum duty cycle, at its maximum power control level, as defined in ANSI C63.10-2013, and at the appropriate frequencies. Method SA-1, as defined in ANSI C63.10-2013, was used to measure the power spectral density.

In the 5.925-7.125 GHz bands, the maximum power spectral density must not exceed −1 dBm e.i.r.p. in any 1-megahertz band. For client devices, except for fixed client devices as defined in this subpart, operating under the control of a standard power access point in 5.925-6.425 GHz and 6.525-6.875 GHz bands, the maximum power spectral density must not exceed 17 dBm/MHz e.i.r.p.

Test Procedure Used

ANSI C63.10-2013 – Section 12.3.2.2
ANSI C63.10-2013 – Section 14.3.2.2 Measure-and-Sum Technique

Test Settings

1. Analyzer was set to the center frequency of the UNII channel under investigation
2. Span was set to encompass the entire emission bandwidth of the signal
3. RBW = 1MHz
4. VBW = 3MHz
5. Number of sweep points ≥ 2 x (span/RBW)
6. Sweep time = auto
7. Detector = power averaging (RMS)
8. Trigger was set to free run for all modes
9. Trace was averaged over 100 sweeps
10. The peak search function of the spectrum analyzer was used to find the peak of the spectrum.

Test Setup

The EUT and measurement equipment were set up as shown in the diagram below.

Figure 7-3. Test Instrument & Measurement Setup

Test Notes

None

MIMO Power Spectral Density Measurements

	Frequency [MHz]	Channel	802.11 MODE	Antenna-1 Power Density [dBm]	Antenna-2 Power Density [dBm]	Antenna-1 Gain [dBi]	Antenna-2 Gain [dBi]	Summed MIMO Power Density [dBm]	Directional Gain [dBi]	EIRP [dBm]	Max EIRP [dBm]	Margin [dB]
Band 5	5935	2	be (20MHz)	-6.66	-7.20	-0.15	-0.82	-3.91	2.53	-1.38	-1	-0.38
	6175	45	be (20MHz)	-7.14	-6.57	-0.15	-0.82	-3.83	2.53	-1.30	-1	-0.30
	6415	93	be (20MHz)	-7.15	-6.51	-0.15	-0.82	-3.81	2.53	-1.27	-1	-0.27
	5965	3	be (40MHz)	-6.48	-7.31	-0.15	-0.82	-3.86	2.53	-1.33	-1	-0.33
	6165	43	be (40MHz)	-6.85	-6.86	-0.15	-0.82	-3.84	2.53	-1.31	-1	-0.31
	6405	91	be (40MHz)	-6.37	-8.61	-0.15	-0.82	-4.34	2.53	-1.80	-1	-0.80
	5985	7	be (80MHz)	-6.03	-7.18	-0.15	-0.82	-3.56	2.53	-1.03	-1	-0.03
	6145	39	be (80MHz)	-7.49	-6.30	-0.15	-0.82	-3.85	2.53	-1.31	-1	-0.31
	6385	87	be (80MHz)	-7.91	-6.83	-0.15	-0.82	-4.32	2.53	-1.79	-1	-0.79
	6025	15	be (160MHz)	-6.67	-7.19	-0.15	-0.82	-3.91	2.53	-1.38	-1	-0.38
	6185	47	be (160MHz)	-7.59	-6.96	-0.15	-0.82	-4.25	2.53	-1.72	-1	-0.72
	6345	79	be (160MHz)	-7.61	-6.74	-0.15	-0.82	-4.14	2.53	-1.61	-1	-0.61
	6105	31	be (320MHz)	-7.23	-6.13	-0.15	-0.82	-3.64	2.53	-1.11	-1	-0.11
	6265	63	be (320MHz)	-6.82	-7.32	-0.15	-0.82	-4.05	2.53	-1.52	-1	-0.52
Band 6	6435	97	be (20MHz)	-6.91	-6.82	-0.09	-0.86	-3.85	2.54	-1.31	-1	-0.31
	6475	105	be (20MHz)	-7.19	-6.95	-0.09	-0.86	-4.06	2.54	-1.51	-1	-0.51
	6515	113	be (20MHz)	-7.06	-6.99	-0.09	-0.86	-4.01	2.54	-1.47	-1	-0.47
	6445	99	be (40MHz)	-7.25	-7.68	-0.09	-0.86	-4.45	2.54	-1.90	-1	-0.90
	6485	107	be (40MHz)	-7.22	-7.67	-0.09	-0.86	-4.43	2.54	-1.88	-1	-0.88
	6525	115	be (40MHz)	-6.82	-7.32	-0.09	-0.86	-4.05	2.54	-1.51	-1	-0.51
	6465	103	be (80MHz)	-7.54	-6.58	-0.09	-0.86	-4.02	2.54	-1.48	-1	-0.48
	6505	111	be (160MHz)	-7.60	-6.81	-0.09	-0.86	-4.18	2.54	-1.63	-1	-0.63
Band 5/6/7	6425	95	be (320MHz)	-6.91	-6.77	-0.09	-0.86	-3.83	2.54	-1.28	-1	-0.28
Band 7	6695	117	be (20MHz)	-6.50	-6.46	-0.53	-0.87	-3.47	2.31	-1.16	-1	-0.16
	6695	149	be (20MHz)	-7.47	-6.79	-0.53	-0.87	-4.11	2.31	-1.80	-1	-0.80
	6875	185	be (20MHz)	-6.90	-6.42	-0.53	-0.87	-3.64	2.31	-1.33	-1	-0.33
	6565	123	be (40MHz)	-6.96	-7.69	-0.53	-0.87	-4.30	2.31	-1.99	-1	-0.99
	6725	155	be (40MHz)	-8.02	-7.62	-0.53	-0.87	-4.81	2.31	-2.49	-1	-1.49
	6845	179	be (40MHz)	-8.12	-6.69	-0.53	-0.87	-4.34	2.31	-2.02	-1	-1.02
	6545	119	be (80MHz)	-7.12	-6.47	-0.53	-0.87	-3.77	2.31	-1.46	-1	-0.46
	6705	151	be (80MHz)	-9.01	-6.41	-0.53	-0.87	-4.50	2.31	-2.19	-1	-1.19
	6865	183	be (80MHz)	-9.09	-5.95	-0.53	-0.87	-4.23	2.31	-1.92	-1	-0.92
	6665	143	be (160MHz)	-9.50	-7.09	-0.53	-0.87	-5.12	2.31	-2.81	-1	-1.81
	6825	175	be (160MHz)	-8.31	-6.78	-0.53	-0.87	-4.47	2.31	-2.15	-1	-1.15
Band 6/7	6585	127	be (320MHz)	-8.96	-5.97	-0.53	-0.87	-4.20	2.31	-1.89	-1	-0.89
Band 7/8	6745	159	be (320MHz)	-7.36	-5.82	-0.53	-0.87	-3.51	2.31	-1.20	-1	-0.20
Band 8	6895	189	be (20MHz)	-7.12	-6.71	-1.18	-1.29	-3.90	1.78	-2.13	-1	-1.13
	6995	209	be (20MHz)	-6.91	-7.30	-1.18	-1.29	-4.09	1.78	-2.32	-1	-1.32
	7115	233	be (20MHz)	-7.29	-7.72	-1.18	-1.29	-4.49	1.78	-2.71	-1	-1.71
	6885	187	be (40MHz)	-8.37	-6.80	-1.18	-1.29	-4.50	1.78	-2.73	-1	-1.73
	6965	211	be (40MHz)	-7.46	-7.71	-1.18	-1.29	-4.57	1.78	-2.80	-1	-1.80
	7085	227	be (40MHz)	-7.24	-6.61	-1.18	-1.29	-3.90	1.78	-2.13	-1	-1.13
	6945	199	be (80MHz)	-8.26	-5.80	-1.18	-1.29	-3.85	1.78	-2.08	-1	-1.08
	7025	215	be (80MHz)	-7.57	-6.72	-1.18	-1.29	-4.11	1.78	-2.34	-1	-1.34
	6985	207	be (160MHz)	-8.03	-7.23	-1.18	-1.29	-4.60	1.78	-2.82	-1	-1.82
Band 7/8	6985	191	be (320MHz)	-7.49	-6.75	-1.18	-1.29	-4.10	1.78	-2.32	-1	-1.32

Table 7-28. MIMO e.i.r.p. Conducted Power Spectral Density Measurements (26 Tones) LPI/SP

	Frequency [MHz]	Channel	802.11 MODE	Antenna-1 Power Density [dBm]	Antenna-2 Power Density [dBm]	Antenna-1 Gain [dBi]	Antenna-2 Gain [dBi]	Summed MIMO Power Density [dBm]	Directional Gain [dBi]	EIRP [dBm]	Max EIRP [dBm]	Margin [dB]
Band 5	5935	2	be (20MHz)	0.08	-0.74	-0.15	-0.82	2.70	2.53	5.23	17	-11.77
	6175	45	be (20MHz)	6.65	6.03	-0.15	-0.82	9.36	2.53	11.89	17	-5.11
	6415	93	be (20MHz)	6.99	5.89	-0.15	-0.82	9.48	2.53	12.01	17	-4.99
	5965	3	be (40MHz)	8.37	8.04	-0.15	-0.82	11.22	2.53	13.75	17	-3.25
	6165	43	be (40MHz)	7.27	7.07	-0.15	-0.82	10.18	2.53	12.71	17	-4.29
	6405	91	be (40MHz)	7.87	6.60	-0.15	-0.82	10.29	2.53	12.82	17	-4.18
	5985	7	be (80MHz)	7.77	7.61	-0.15	-0.82	10.70	2.53	13.23	17	-3.77
	6145	39	be (80MHz)	6.64	6.57	-0.15	-0.82	9.62	2.53	12.15	17	-4.85
	6385	87	be (80MHz)	7.67	6.19	-0.15	-0.82	10.00	2.53	12.53	17	-4.47
	6025	15	be (160MHz)	7.07	6.84	-0.15	-0.82	9.96	2.53	12.50	17	-4.50
	6185	47	be (160MHz)	7.02	6.39	-0.15	-0.82	9.73	2.53	12.26	17	-4.74
	6345	79	be (160MHz)	7.68	6.54	-0.15	-0.82	10.16	2.53	12.69	17	-4.31
	6105	31	be (320MHz)	7.97	7.18	-0.15	-0.82	10.60	2.53	13.13	17	-3.87
	6265	63	be (320MHz)	7.31	6.65	-0.15	-0.82	10.00	2.53	12.53	17	-4.47
Band 7	6695	117	be (20MHz)	7.10	7.18	-0.53	-0.87	10.15	2.31	12.46	17	-4.54
	6695	149	be (20MHz)	7.19	7.41	-0.53	-0.87	10.31	2.31	12.62	17	-4.38
	6875	185	be (20MHz)	7.18	7.49	-0.53	-0.87	10.34	2.31	12.66	17	-4.34
	6565	123	be (40MHz)	8.37	6.47	-0.53	-0.87	10.54	2.31	12.85	17	-4.15
	6725	155	be (40MHz)	7.97	6.60	-0.53	-0.87	10.35	2.31	12.66	17	-4.34
	6845	179	be (40MHz)	8.03	6.59	-0.53	-0.87	10.38	2.31	12.69	17	-4.31
	6545	119	be (80MHz)	7.87	6.24	-0.53	-0.87	10.14	2.31	12.46	17	-4.54
	6705	151	be (80MHz)	7.39	6.81	-0.53	-0.87	10.12	2.31	12.43	17	-4.57
	6865	183	be (80MHz)	7.37	6.67	-0.53	-0.87	10.04	2.31	12.36	17	-4.64
	6665	143	be (160MHz)	7.22	6.34	-0.53	-0.87	9.82	2.31	12.13	17	-4.87
	6825	175	be (160MHz)	6.95	6.49	-0.53	-0.87	9.74	2.31	12.05	17	-4.95
Band 6/7	6585	127	be (320MHz)	7.17	6.63	-0.53	-0.87	9.92	2.31	12.23	17	-4.77
Band 7/8	6745	159	be (320MHz)	6.91	6.90	-0.53	-0.87	9.91	2.31	12.23	17	-4.77

Table 7-29. MIMO e.i.r.p. Conducted Power Spectral Density Measurements (26 Tones) SP

	Frequency [MHz]	Channel	802.11 MODE	Antenna-1 Power Density [dBm]	Antenna-2 Power Density [dBm]	Antenna-1 Gain [dBi]	Antenna-2 Gain [dBi]	Summed MIMO Power Density [dBm]	Directional Gain [dBi]	DCCF	EIRP [dBm]	Max EIRP [dBm]	Margin [dB]
Band 5	5935	2	be (20MHz)	-7.06	-6.31	-0.15	-0.82	-3.66	2.53	0.00	-1.13	-1	-0.13
	6175	45	be (20MHz)	-7.35	-6.85	-0.15	-0.82	-4.08	2.53	0.00	-1.55	-1	-0.55
	6415	93	be (20MHz)	-7.38	-6.79	-0.15	-0.82	-4.06	2.53	0.00	-1.53	-1	-0.53
	5965	3	be (40MHz)	-6.97	-6.83	-0.15	-0.82	-3.88	2.53	0.12	-1.23	-1	-0.23
	6165	43	be (40MHz)	-6.97	-7.41	-0.15	-0.82	-4.17	2.53	0.12	-1.52	-1	-0.52
	6405	91	be (40MHz)	-7.23	-7.89	-0.15	-0.82	-4.54	2.53	0.12	-1.89	-1	-0.89
	5985	7	be (80MHz)	-6.71	-7.00	-0.15	-0.82	-3.84	2.53	0.11	-1.20	-1	-0.20
	6145	39	be (80MHz)	-7.85	-7.89	-0.15	-0.82	-4.86	2.53	0.11	-2.22	-1	-1.22
	6385	87	be (80MHz)	-7.51	-9.07	-0.15	-0.82	-5.21	2.53	0.11	-2.57	-1	-1.57
	6025	15	be (160MHz)	-10.72	-11.27	-0.15	-0.82	-7.98	2.53	0.11	-5.33	-1	-4.33
	6185	47	be (160MHz)	-11.15	-11.77	-0.15	-0.82	-8.44	2.53	0.11	-5.80	-1	-4.80
	6345	79	be (160MHz)	-10.39	-11.67	-0.15	-0.82	-7.97	2.53	0.11	-5.33	-1	-4.33
	6105	31	be (320MHz)	-9.05	-10.66	-0.15	-0.82	-6.77	2.53	0.09	-4.15	-1	-3.15
	6265	63	be (320MHz)	-9.91	-10.90	-0.15	-0.82	-7.37	2.53	0.09	-4.75	-1	-3.75
Band 6	6435	97	be (20MHz)	-6.92	-6.88	-0.09	-0.86	-3.89	2.54	0.00	-1.34	-1	-0.34
	6475	105	be (20MHz)	-7.02	-6.87	-0.09	-0.86	-3.94	2.54	0.00	-1.39	-1	-0.39
	6515	113	be (20MHz)	-6.94	-6.41	-0.09	-0.86	-3.66	2.54	0.00	-1.11	-1	-0.11
	6445	99	be (40MHz)	-7.02	-7.94	-0.09	-0.86	-4.45	2.54	0.12	-1.78	-1	-0.78
	6485	107	be (40MHz)	-7.09	-7.67	-0.09	-0.86	-4.36	2.54	0.12	-1.69	-1	-0.69
	6525	115	be (40MHz)	-6.81	-7.41	-0.09	-0.86	-4.09	2.54	0.12	-1.43	-1	-0.43
	6465	103	be (80MHz)	-7.93	-8.70	-0.09	-0.86	-5.29	2.54	0.11	-2.63	-1	-1.63
	6505	111	be (160MHz)	-10.56	-10.87	-0.09	-0.86	-7.70	2.54	0.11	-5.05	-1	-4.05
Band 5/6/7	6425	95	be (320MHz)	-9.35	-11.11	-0.09	-0.86	-7.13	2.54	0.09	-4.49	-1	-3.49
Band 7	6695	117	be (20MHz)	-6.93	-7.06	-0.53	-0.87	-3.98	2.31	0.00	-1.67	-1	-0.67
	6695	149	be (20MHz)	-6.83	-6.94	-0.53	-0.87	-3.87	2.31	0.00	-1.56	-1	-0.56
	6875	185	be (20MHz)	-6.58	-7.17	-0.53	-0.87	-3.85	2.31	0.00	-1.54	-1	-0.54
	6565	123	be (40MHz)	-6.76	-7.72	-0.53	-0.87	-4.20	2.31	0.12	-1.77	-1	-0.77
	6725	155	be (40MHz)	-7.18	-7.18	-0.53	-0.87	-4.17	2.31	0.12	-1.74	-1	-0.74
	6845	179	be (40MHz)	-6.94	-7.34	-0.53	-0.87	-4.12	2.31	0.12	-1.69	-1	-0.69
	6545	119	be (80MHz)	-6.52	-8.43	-0.53	-0.87	-4.36	2.31	0.11	-1.94	-1	-0.94
	6705	151	be (80MHz)	-7.03	-8.05	-0.53	-0.87	-4.50	2.31	0.11	-2.08	-1	-1.08
	6865	183	be (80MHz)	-7.37	-8.14	-0.53	-0.87	-4.73	2.31	0.11	-2.30	-1	-1.30
	6665	143	be (160MHz)	-10.55	-12.04	-0.53	-0.87	-8.22	2.31	0.11	-5.80	-1	-4.80
	6825	175	be (160MHz)	-10.84	-11.86	-0.53	-0.87	-8.31	2.31	0.11	-5.89	-1	-4.89
Band 6/7	6585	127	be (320MHz)	-8.92	-10.94	-0.53	-0.87	-6.80	2.31	0.09	-4.40	-1	-3.40
Band 7/8	6745	159	be (320MHz)	-9.36	-10.96	-0.53	-0.87	-7.08	2.31	0.09	-4.68	-1	-3.68
Band 8	6895	189	be (20MHz)	-6.44	-7.16	-1.18	-1.29	-3.78	1.78	0.00	-2.00	-1	-1.00
	6995	209	be (20MHz)	-6.78	-7.33	-1.18	-1.29	-4.04	1.78	0.00	-2.26	-1	-1.26
	7115	233	be (20MHz)	-6.30	-6.58	-1.18	-1.29	-3.43	1.78	0.00	-1.65	-1	-0.65
	6885	187	be (40MHz)	-6.78	-7.40	-1.18	-1.29	-4.07	1.78	0.12	-2.17	-1	-1.17
	6965	211	be (40MHz)	-6.46	-7.26	-1.18	-1.29	-3.83	1.78	0.12	-1.94	-1	-0.94
	7085	227	be (40MHz)	-6.13	-6.75	-1.18	-1.29	-3.41	1.78	0.12	-1.52	-1	-0.52
	6945	199	be (80MHz)	-6.87	-7.95	-1.18	-1.29	-4.36	1.78	0.11	-2.48	-1	-1.48
	7025	215	be (80MHz)	-7.31	-7.80	-1.18	-1.29	-4.54	1.78	0.11	-2.65	-1	-1.65
	6985	207	be (160MHz)	-10.21	-11.63	-1.18	-1.29	-7.85	1.78	0.11	-5.97	-1	-4.97
Band 7/8	6905	191	be (320MHz)	-9.33	-10.78	-1.18	-1.29	-6.98	1.78	0.09	-5.11	-1	-4.11

Table 7-30. MIMO e.i.r.p. Conducted Power Spectral Density Measurements (Full Tones) LPI/SP

	Frequency [MHz]	Channel	802.11 MODE	Antenna-1 Power Density [dBm]	Antenna-2 Power Density [dBm]	Antenna-1 Gain [dBi]	Antenna-2 Gain [dBi]	Summed MIMO Power Density [dBm]	Directional Gain [dBi]	DCCF	EIRP [dBm]	Max EIRP [dBm]	Margin [dB]
Band 5	5935	2	be (20MHz)	-8.71	-9.42	-0.15	-0.82	-6.04	2.53	0.00	-3.51	17	-20.51
	6175	45	be (20MHz)	-2.35	-2.44	-0.15	-0.82	0.62	2.53	0.00	3.15	17	-13.85
	6415	93	be (20MHz)	-1.72	-2.47	-0.15	-0.82	0.93	2.53	0.00	3.46	17	-13.54
	5965	3	be (40MHz)	-4.10	-4.21	-0.15	-0.82	-1.14	2.53	0.12	1.51	17	-15.49
	6165	43	be (40MHz)	-4.92	-5.14	-0.15	-0.82	-2.01	2.53	0.12	0.64	17	-16.36
	6405	91	be (40MHz)	-4.41	-5.79	-0.15	-0.82	-2.03	2.53	0.12	0.62	17	-16.38
	5985	7	be (80MHz)	-6.75	-7.10	-0.15	-0.82	-3.91	2.53	0.17	-1.21	17	-18.21
	6145	39	be (80MHz)	-7.92	-8.03	-0.15	-0.82	-4.96	2.53	0.17	-2.26	17	-19.26
	6385	87	be (80MHz)	-6.60	-8.63	-0.15	-0.82	-4.49	2.53	0.17	-1.78	17	-18.78
	6025	15	be (160MHz)	-10.68	-11.10	-0.15	-0.82	-7.88	2.53	0.19	-5.15	17	-22.15
	6185	47	be (160MHz)	-10.82	-11.65	-0.15	-0.82	-8.20	2.53	0.19	-5.48	17	-22.48
	6345	79	be (160MHz)	-10.54	-11.59	-0.15	-0.82	-8.02	2.53	0.19	-5.30	17	-22.30
	6105	31	be (320MHz)	-8.51	-9.71	-0.15	-0.82	-6.06	2.53	0.00	-3.53	17	-20.53
	6265	63	be (320MHz)	-9.90	-10.81	-0.15	-0.82	-7.32	2.53	0.00	-4.79	17	-21.79
Band 7	6695	117	be (20MHz)	-1.77	-2.15	-0.53	-0.87	1.05	2.31	0.00	3.37	17	-13.63
	6695	149	be (20MHz)	-1.52	-2.04	-0.53	-0.87	1.24	2.31	0.00	3.55	17	-13.45
	6875	185	be (20MHz)	-1.51	-1.97	-0.53	-0.87	1.28	2.31	0.00	3.59	17	-13.41
	6565	123	be (40MHz)	-3.94	-5.49	-0.53	-0.87	-1.64	2.31	0.12	0.80	17	-16.20
	6725	155	be (40MHz)	-4.71	-5.20	-0.53	-0.87	-1.94	2.31	0.12	0.49	17	-16.51
	6845	179	be (40MHz)	-4.41	-5.21	-0.53	-0.87	-1.78	2.31	0.12	0.65	17	-16.35
	6545	119	be (80MHz)	-6.78	-8.52	-0.53	-0.87	-4.55	2.31	0.17	-2.07	17	-19.07
	6705	151	be (80MHz)	-7.25	-8.03	-0.53	-0.87	-4.61	2.31	0.17	-2.13	17	-19.13
	6865	183	be (80MHz)	-7.31	-8.34	-0.53	-0.87	-4.78	2.31	0.17	-2.30	17	-19.30
	6665	143	be (160MHz)	-10.50	-11.93	-0.53	-0.87	-8.15	2.31	0.19	-5.65	17	-22.65
	6825	175	be (160MHz)	-11.09	-11.61	-0.53	-0.87	-8.33	2.31	0.19	-5.83	17	-22.83
Band 6/7	6585	127	be (320MHz)	-9.04	-10.78	-0.53	-0.87	-6.81	2.31	0.00	-4.50	17	-21.50
Band 7/8	6745	159	be (320MHz)	-9.47	-10.72	-0.53	-0.87	-7.04	2.31	0.00	-4.73	17	-21.73

Table 7-31. MIMO e.i.r.p. Conducted Power Spectral Density Measurements (Full Tones) SP

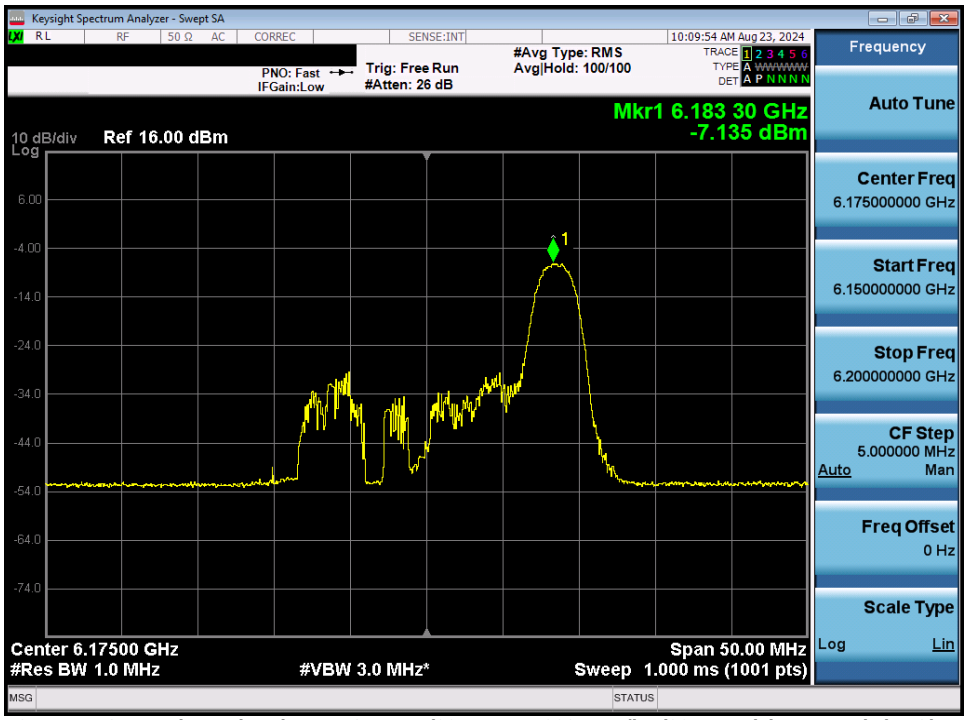
	Frequency [MHz]	Channel	802.11 MODE	MRU Cases	Antenna-1 Power Density [dBm]	Antenna-2 Power Density [dBm]	Antenna-1 Gain [dBi]	Antenna-2 Gain [dBi]	Summed MIMO Power Density [dBm]	Directional Gain [dBi]	DCCF	EIRP [dBm]	Max EIRP [dBm]	Margin [dB]
Band 5	6175	45	be (20MHz)	106+26T	-8.03	-8.23	-0.15	-0.82	-5.12	2.53	0.09	-2.50	-1	-1.50
	6145	39	be (80MHz)	484+242T	-9.37	-8.30	-0.15	-0.82	-5.79	2.53	0.09	-3.17	-1	-2.17
	6185	47	be (160MHz)	996+484T	-9.01	-9.93	-0.15	-0.82	-6.43	2.53	0.09	-3.81	-1	-2.81
	6105	31	be (320MHz)	3x996+484T	-10.22	-11.51	-0.15	-0.82	-7.81	2.53	0.14	-5.14	-1	-4.14
	6105	31	be (320MHz)	3x996T	-9.75	-11.82	-0.15	-0.82	-7.65	2.53	0.17	-4.95	-1	-3.95
	6105	31	be (320MHz)	2x996+484T	-9.86	-11.23	-0.15	-0.82	-7.48	2.53	0.14	-4.81	-1	-3.81
Band 6	6475	105	be (20MHz)	106+26T	-7.73	-8.37	-0.09	-0.86	-5.03	2.54	0.09	-2.39	-1	-1.39
	6465	103	be (80MHz)	484+242T	-7.60	-9.50	-0.09	-0.86	-5.44	2.54	0.09	-2.80	-1	-1.80
	6505	111	be (160MHz)	996+484T	-8.61	-9.92	-0.09	-0.86	-6.21	2.54	0.09	-3.57	-1	-2.57
Band 5/6/7	6425	95	be (320MHz)	3x996+484T	-11.37	-13.15	-0.09	-0.86	-9.16	2.54	0.14	-6.47	-1	-5.47
	6425	95	be (320MHz)	3x996T	-10.14	-12.71	-0.09	-0.86	-8.22	2.54	0.17	-5.51	-1	-4.51
	6425	95	be (320MHz)	2x996+484T	-10.33	-11.84	-0.09	-0.86	-8.01	2.54	0.14	-5.32	-1	-4.32
Band 7	6695	149	be (20MHz)	106+26T	-7.52	-7.81	-0.53	-0.87	-4.65	2.31	0.09	-2.25	-1	-1.25
	6705	151	be (80MHz)	484+242T	-7.90	-8.75	-0.53	-0.87	-5.29	2.31	0.09	-2.89	-1	-1.89
	6665	143	be (160MHz)	996+484T	-8.81	-10.37	-0.53	-0.87	-6.51	2.31	0.09	-4.11	-1	-3.11
Band 7/8	6745	159	be (320MHz)	3x996+484T	-11.04	-12.53	-0.53	-0.87	-8.71	2.31	0.14	-6.26	-1	-5.26
	6745	159	be (320MHz)	3x996T	-10.70	-11.95	-0.53	-0.87	-8.27	2.31	0.17	-5.78	-1	-4.78
	6745	159	be (320MHz)	2x996+484T	-10.38	-11.39	-0.53	-0.87	-7.84	2.31	0.14	-5.39	-1	-4.39
Band 8	6995	209	be (20MHz)	106+26T	-6.77	-7.74	-1.18	-1.29	-4.22	1.78	0.09	-2.35	-1	-1.35
	6945	199	be (80MHz)	484+242T	-7.76	-8.75	-1.18	-1.29	-5.22	1.78	0.09	-3.35	-1	-2.35
	6985	207	be (160MHz)	996+484T	-8.54	-9.73	-1.18	-1.29	-6.09	1.78	0.09	-4.22	-1	-3.22
Band 7/8	6905	191	be (320MHz)	3x996+484T	-12.06	-12.69	-1.18	-1.29	-9.35	1.78	0.14	-7.44	-1	-6.44
	6905	191	be (320MHz)	3x996T	-10.26	-12.13	-1.18	-1.29	-8.08	1.78	0.17	-6.14	-1	-5.14
	6905	191	be (320MHz)	2x996+484T	-10.27	-11.49	-1.18	-1.29	-7.83	1.78	0.14	-5.91	-1	-4.91

Table 7-32. MIMO e.i.r.p. Conducted Power Spectral Density Measurements (MRU) LPI/SP

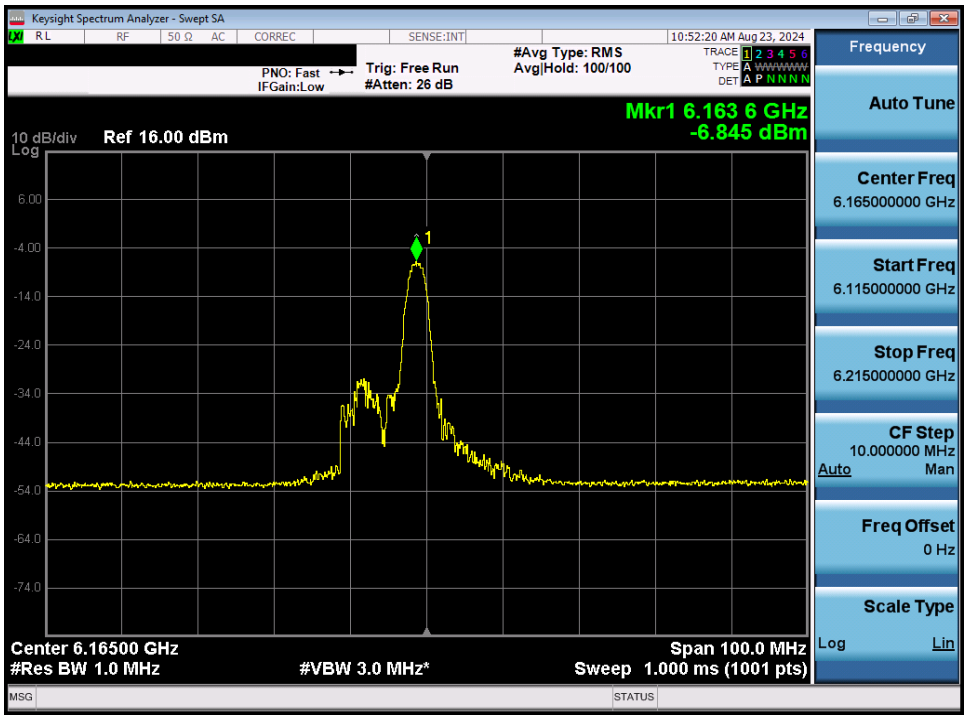
	Frequency [MHz]	Channel	802.11 MODE	MRU Cases	Antenna-1 Power Density [dBm]	Antenna-2 Power Density [dBm]	Antenna-1 Gain [dBi]	Antenna-2 Gain [dBi]	Summed MIMO Power Density [dBm]	Directional Gain [dBi]	DCCF	EIRP [dBm]	Max EIRP [dBm]	Margin [dB]
Band 5	6175	45	be (20MHz)	52+26T	2.85	2.53	-0.15	-0.82	5.70	2.53	0.09	8.32	17	-8.68
	6175	45	be (20MHz)	106+26T	0.33	0.32	-0.15	-0.82	3.33	2.53	0.09	5.96	17	-11.04
Band 7	6695	149	be (20MHz)	52+26T	3.26	2.39	-0.53	-0.87	5.86	2.31	0.09	8.26	17	-8.74
	6695	149	be (20MHz)	106+26T	1.02	0.48	-0.53	-0.87	3.77	2.31	0.09	6.17	17	-10.83

Table 7-33. MIMO e.i.r.p. Conducted Power Spectral Density Measurements (MRU) SP

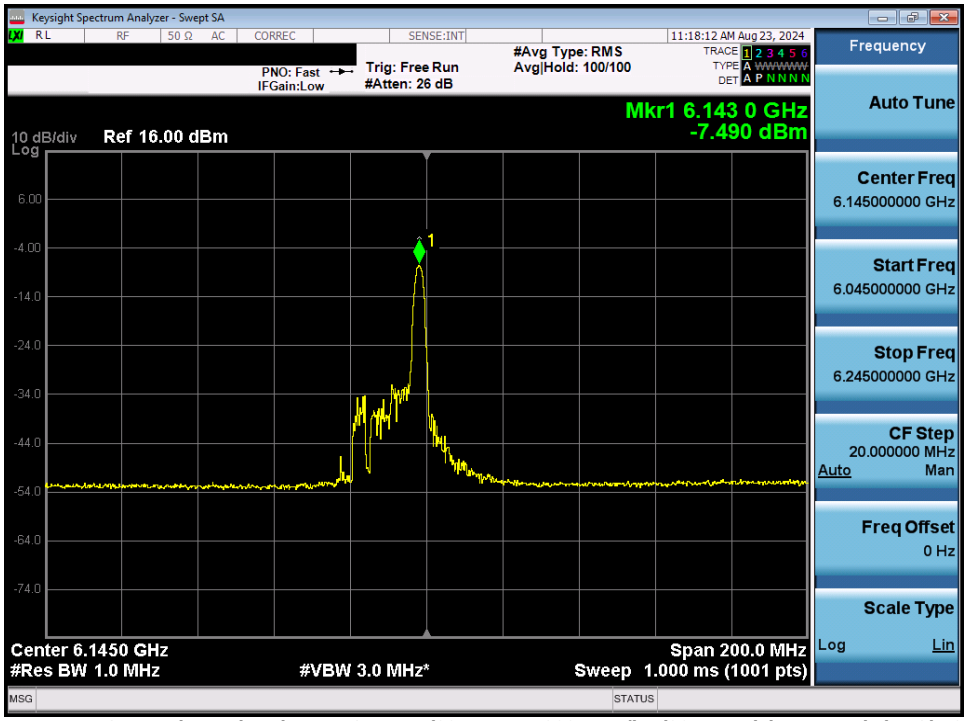
7.4.1 MIMO Antenna-1 Power Spectral Density Measurements



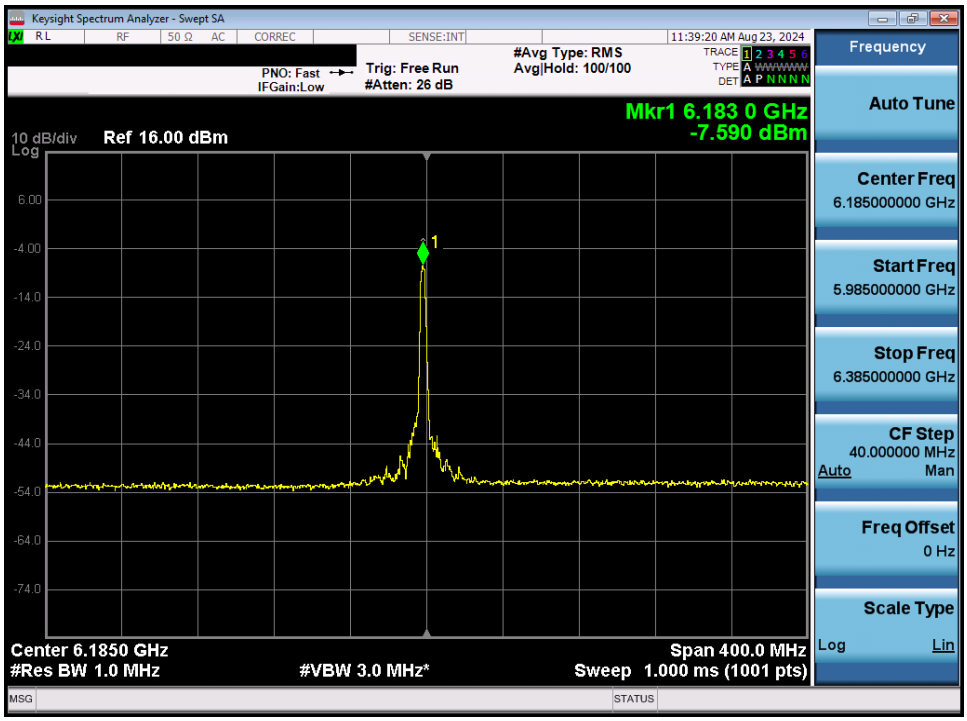
Plot 7-113. Power Spectral Density Plot MIMO ANT1 (20MHz BW 802.11ax/be (26 Tones) (UNII Band 5) – Ch. 45) – LPI



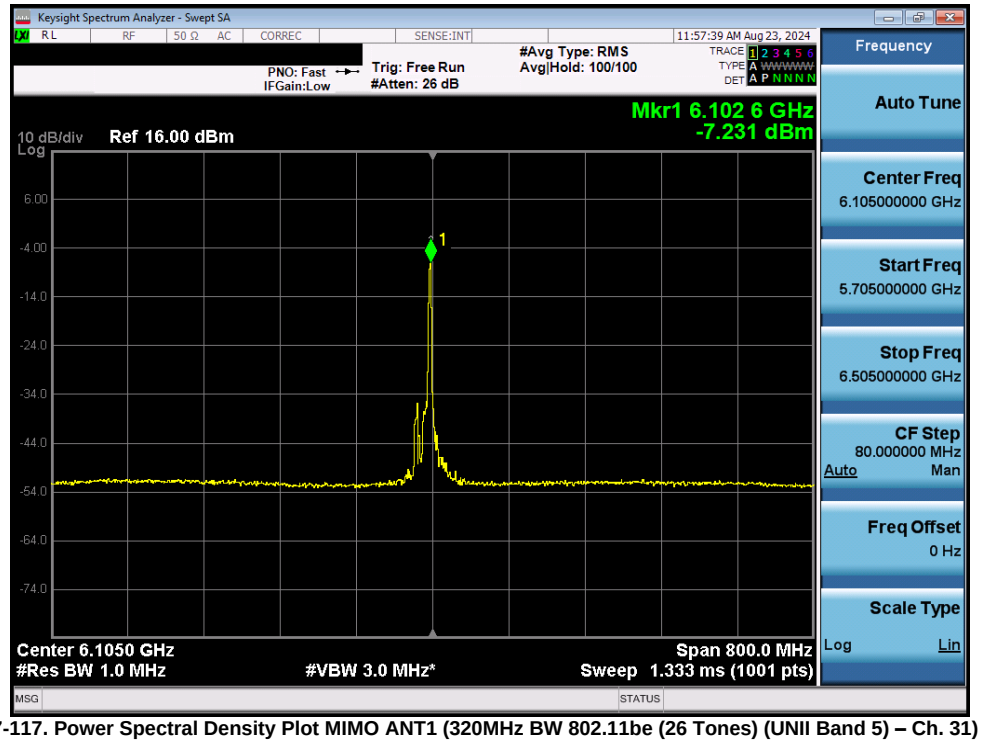
Plot 7-114. Power Spectral Density Plot MIMO ANT1 (40MHz BW 802.11ax/be (26 Tones) (UNII Band 5) – Ch. 43) – LPI



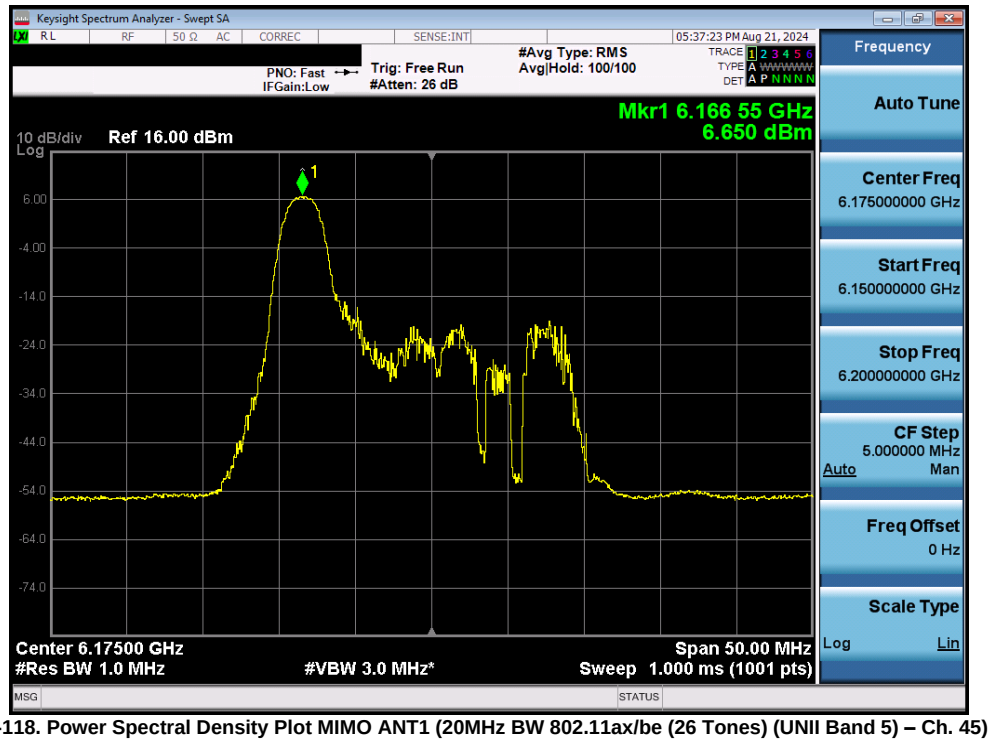
Plot 7-115. Power Spectral Density Plot MIMO ANT1 (80MHz BW 802.11ax/be (26 Tones) (UNII Band 5) – Ch. 39) – LPI



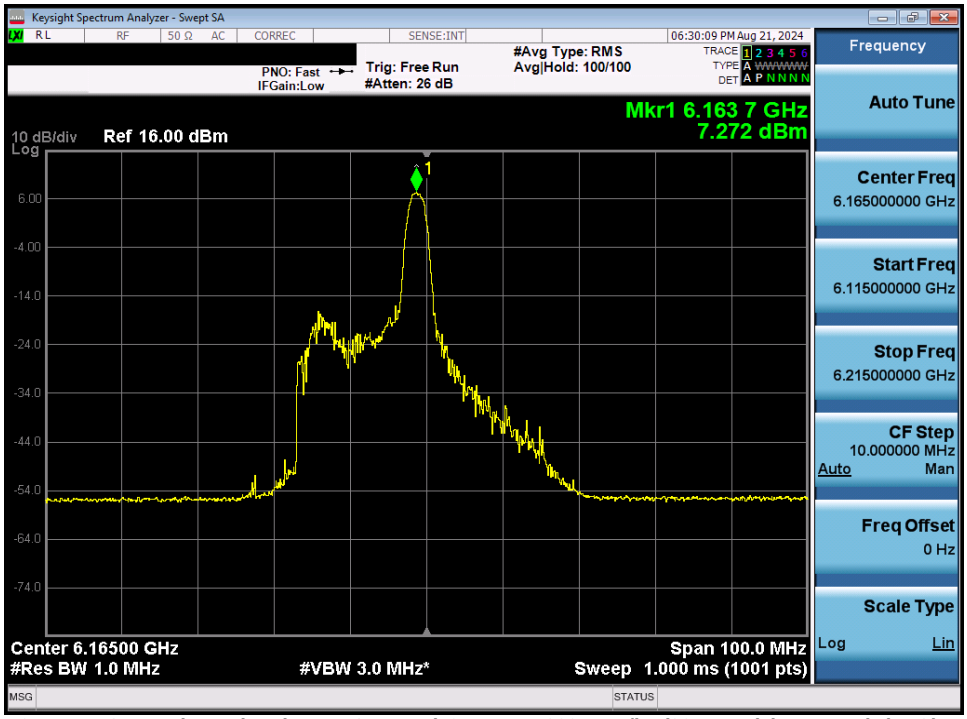
Plot 7-116. Power Spectral Density Plot MIMO ANT1 (160MHz BW 802.11ax/be (26 Tones) (UNII Band 5) – Ch. 47) – LPI



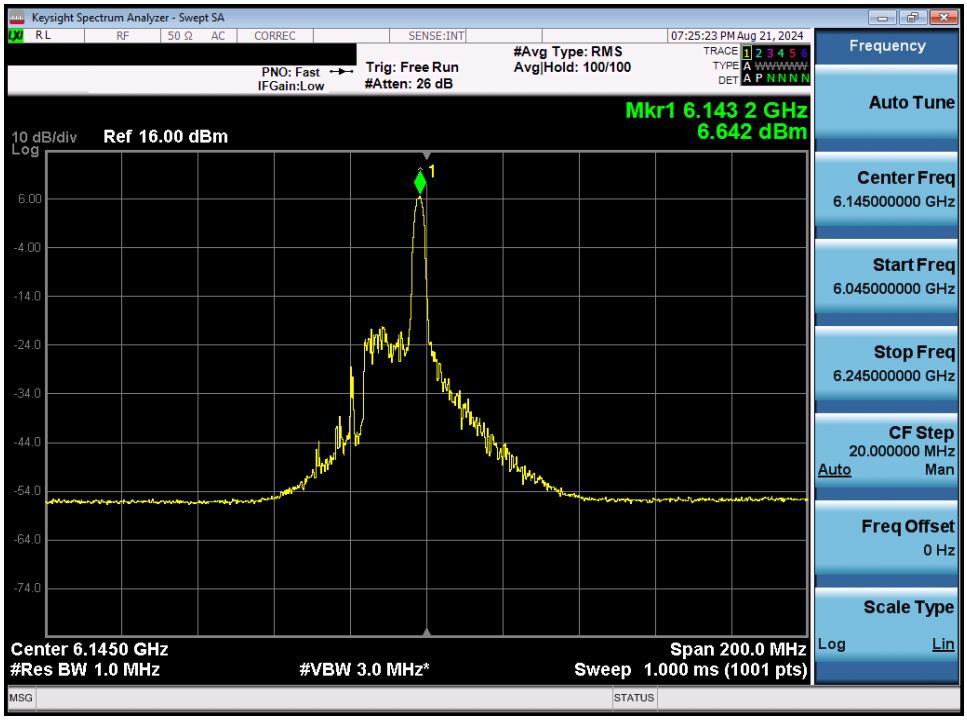
Plot 7-117. Power Spectral Density Plot MIMO ANT1 (320MHz BW 802.11be (26 Tones) (UNII Band 5) – Ch. 31) – LPI



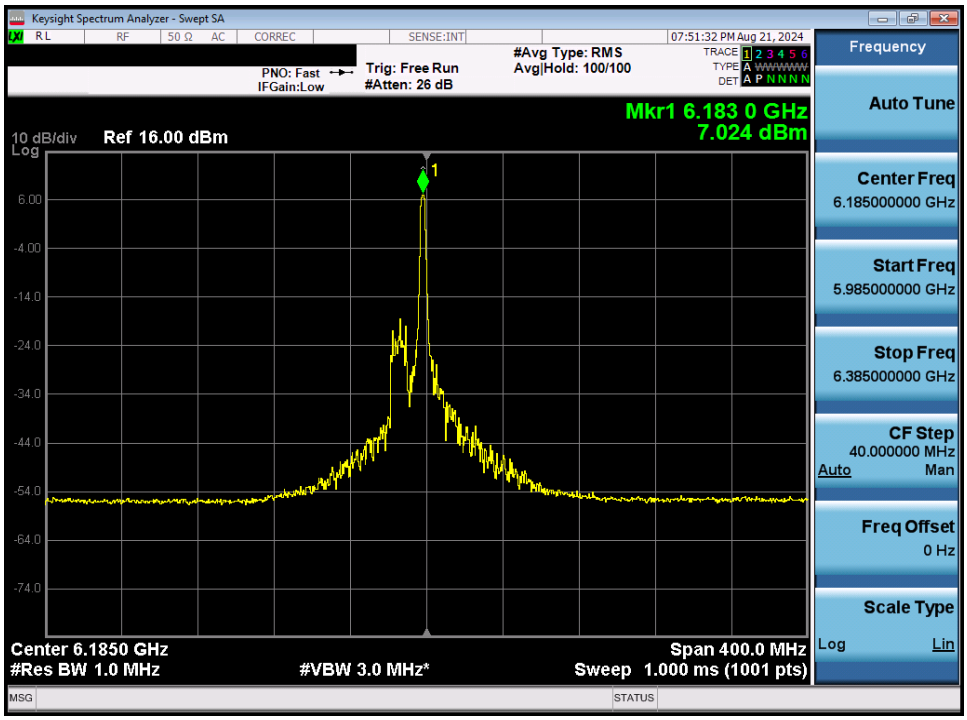
Plot 7-118. Power Spectral Density Plot MIMO ANT1 (20MHz BW 802.11ax/be (26 Tones) (UNII Band 5) – Ch. 45) – SP



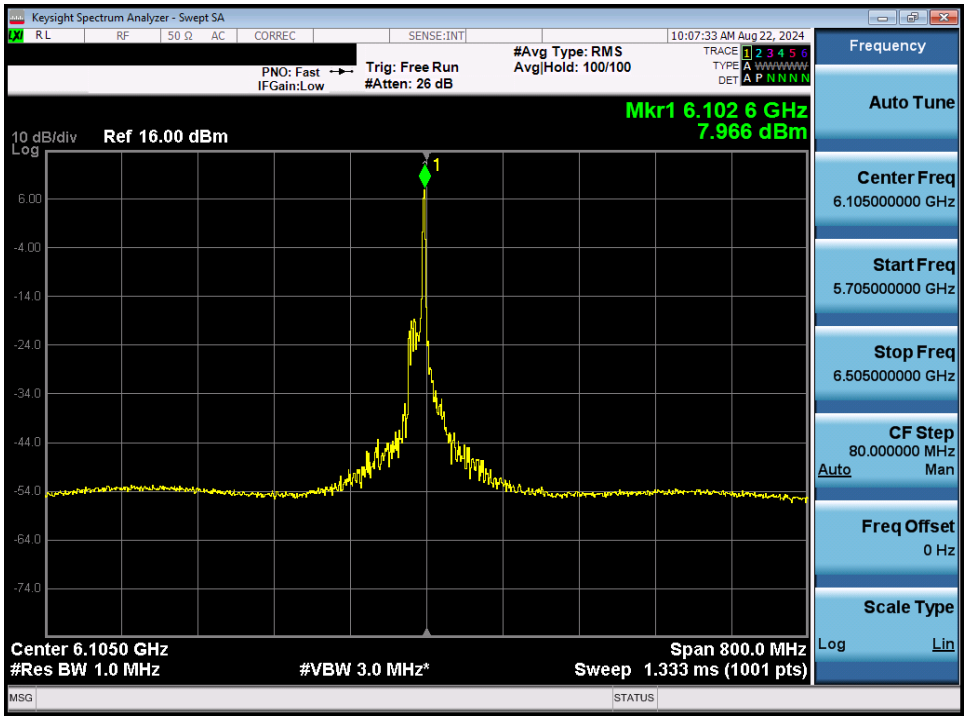
Plot 7-119. Power Spectral Density Plot MIMO ANT1 (40MHz BW 802.11ax/be (26 Tones) (UNII Band 5) – Ch. 43) – SP



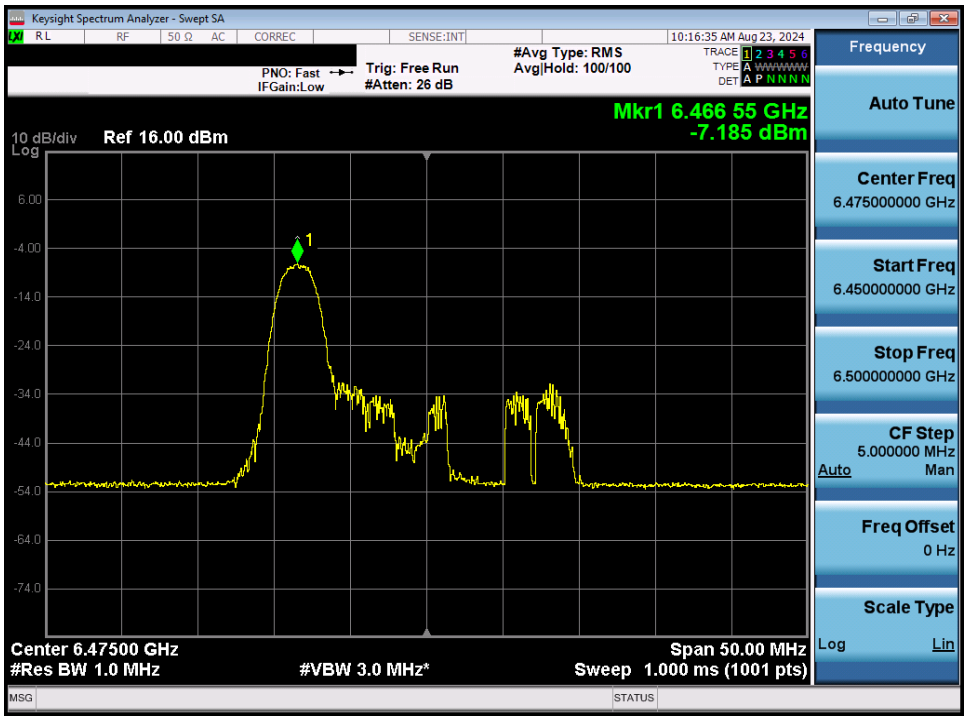
Plot 7-120. Power Spectral Density Plot MIMO ANT1 (80MHz BW 802.11ax/be (26 Tones) (UNII Band 5) – Ch. 39) – SP



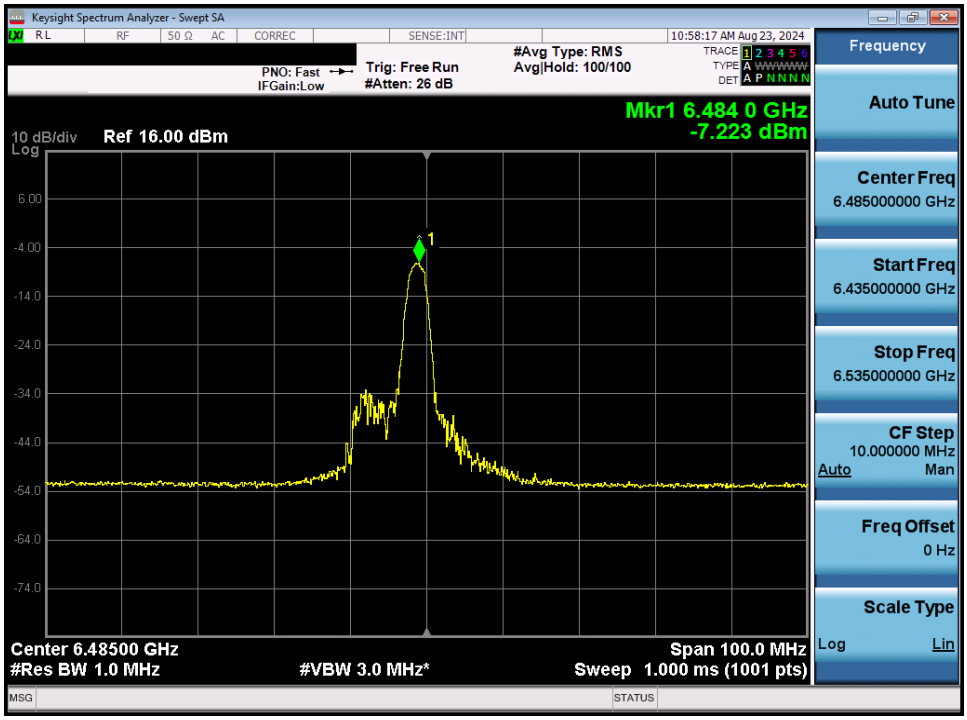
Plot 7-121. Power Spectral Density Plot MIMO ANT1 (160MHz BW 802.11ax/be (26 Tones) (UNII Band 5) – Ch. 47) – SP



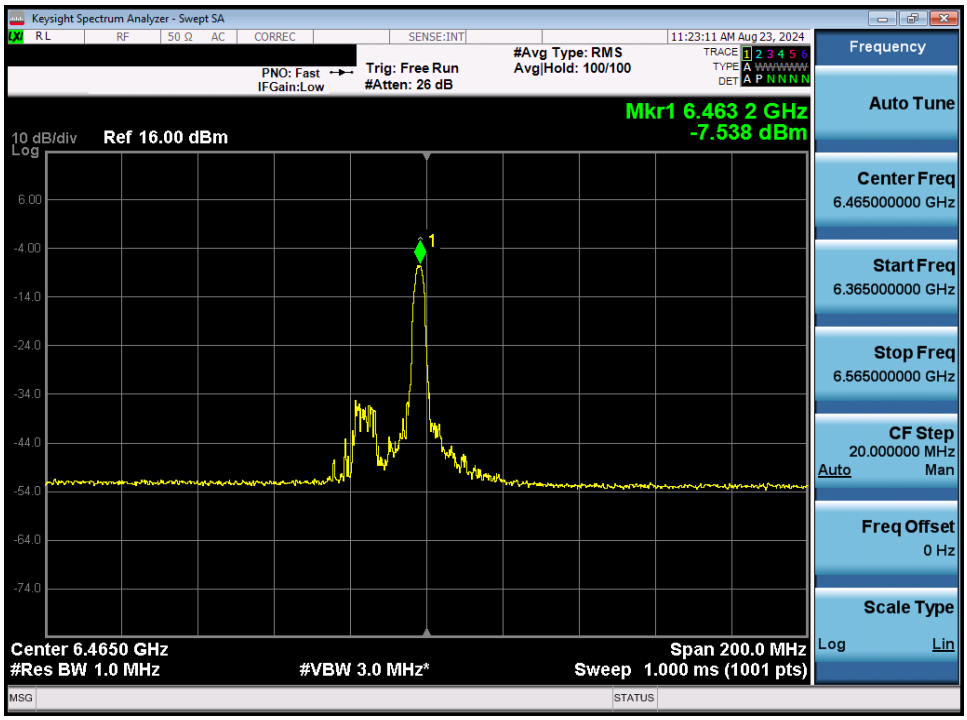
Plot 7-122. Power Spectral Density Plot MIMO ANT1 (320MHz BW 802.11be (26 Tones) (UNII Band 5) – Ch. 31) – SP



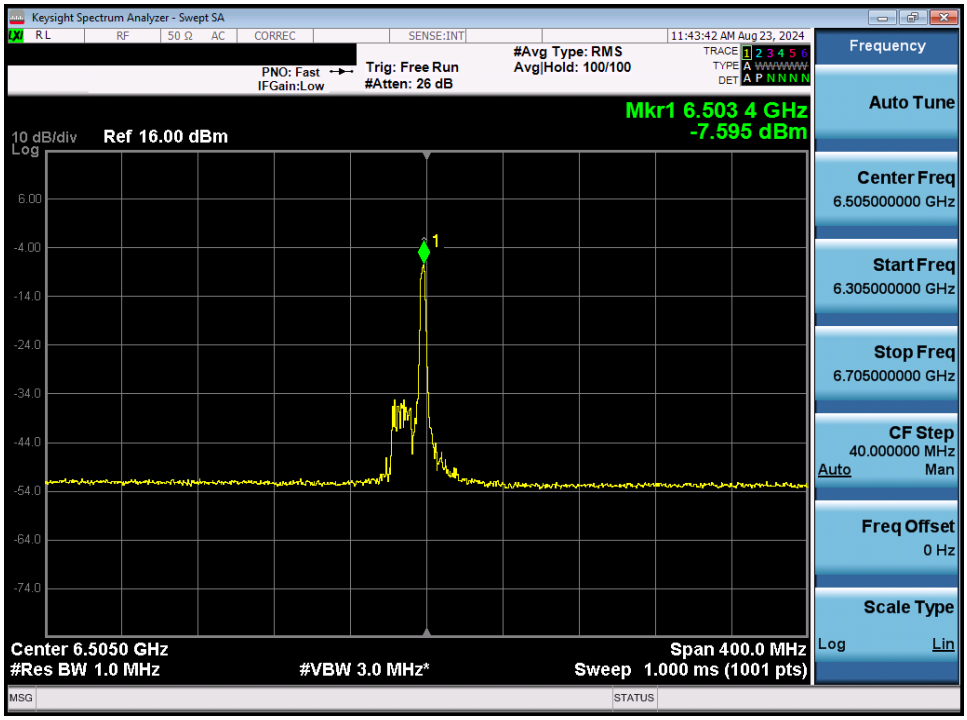
Plot 7-123. Power Spectral Density Plot MIMO ANT1 (20MHz BW 802.11ax/be (26 Tones) (UNII Band 6) – Ch. 105) – LPI



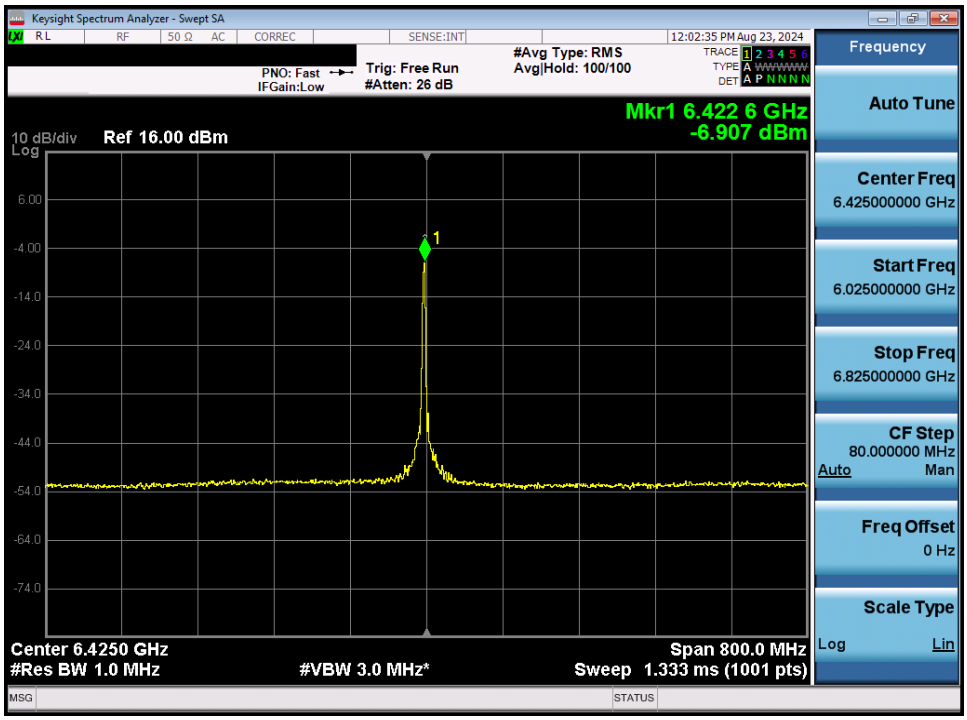
Plot 7-124. Power Spectral Density Plot MIMO ANT1 (40MHz BW 802.11ax/be (26 Tones) (UNII Band 6) – Ch. 107) – LPI



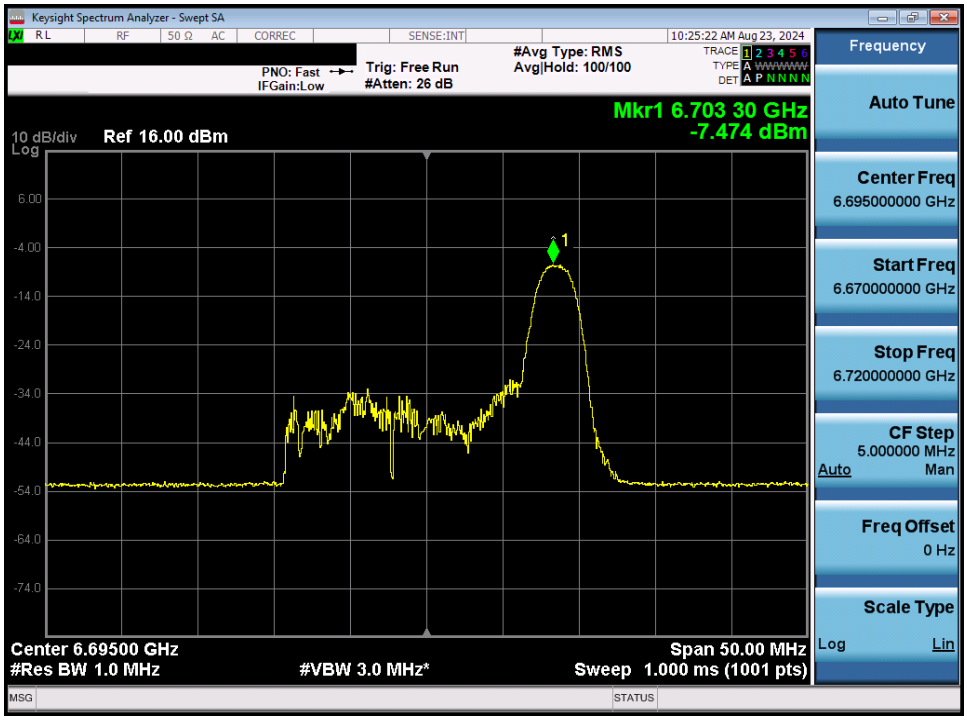
Plot 7-125. Power Spectral Density Plot MIMO ANT1 (80MHz BW 802.11ax/be (26 Tones) (UNII Band 6) – Ch. 103) – LPI



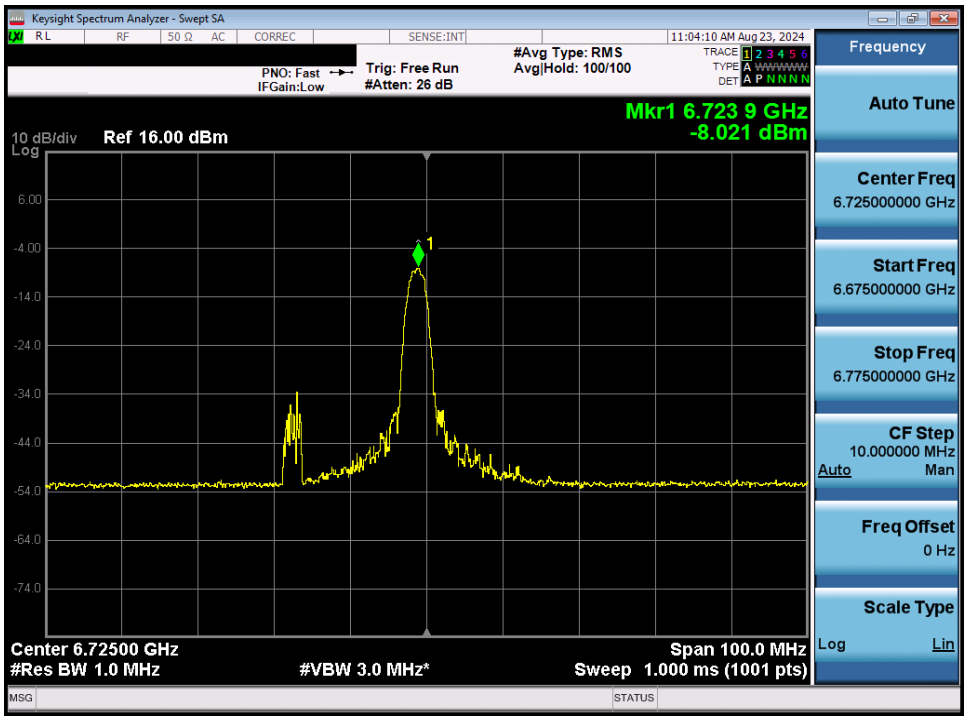
Plot 7-126. Power Spectral Density Plot MIMO ANT1 (160MHz BW 802.11ax/be (26 Tones) (UNII Band 6) – Ch. 111) – LPI



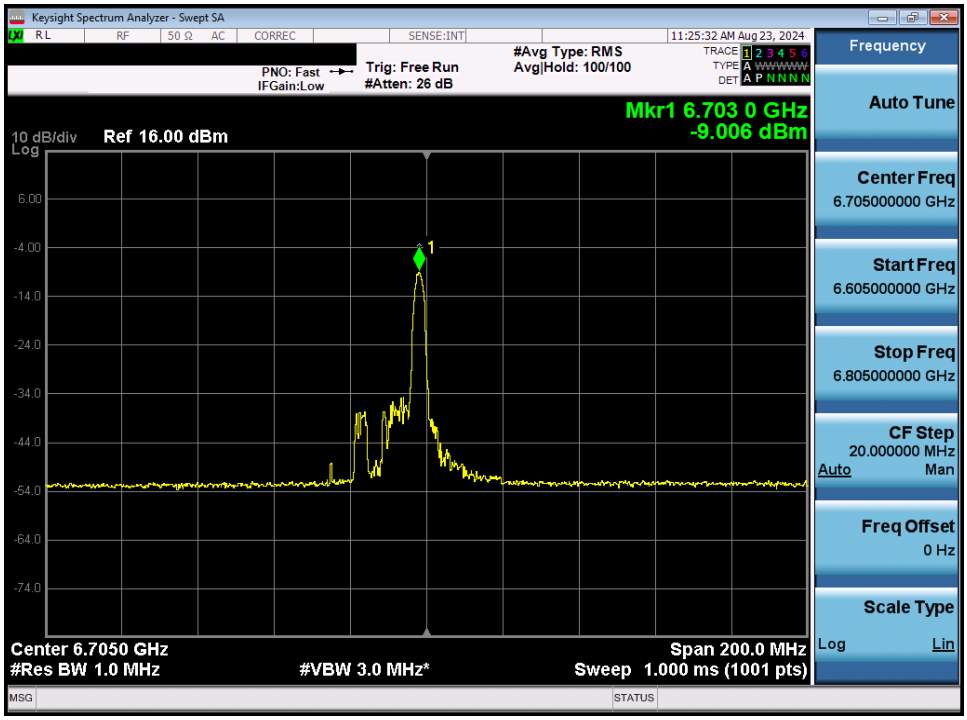
Plot 7-127. Power Spectral Density Plot MIMO ANT1 (320MHz BW 802.11be (26 Tones) (UNII Band 6) – Ch. 95) – LPI



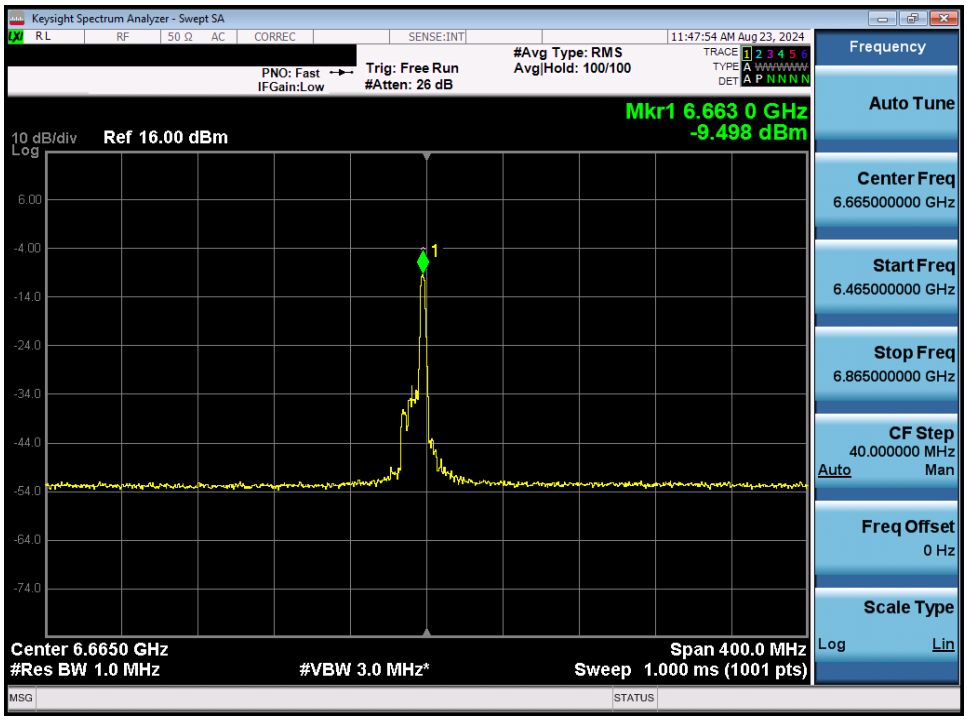
Plot 7-128. Power Spectral Density Plot MIMO ANT1 (20MHz BW 802.11ax/be (26 Tones) (UNII Band 7) – Ch. 149) – LPI



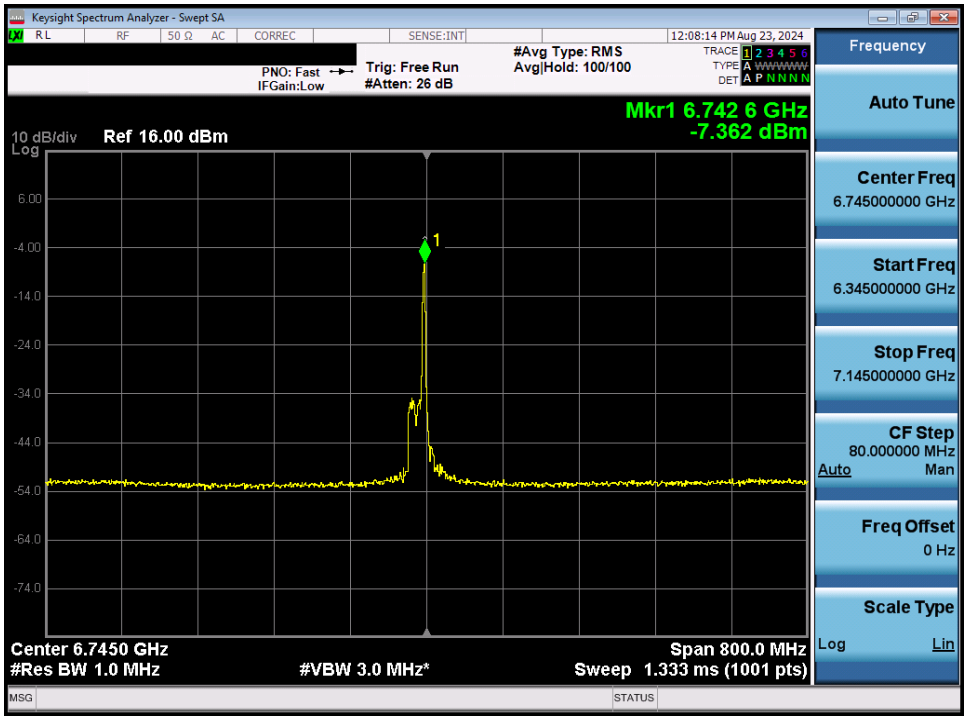
Plot 7-129. Power Spectral Density Plot MIMO ANT1 (40MHz BW 802.11ax/be (26 Tones) (UNII Band 7) – Ch. 155) – LPI



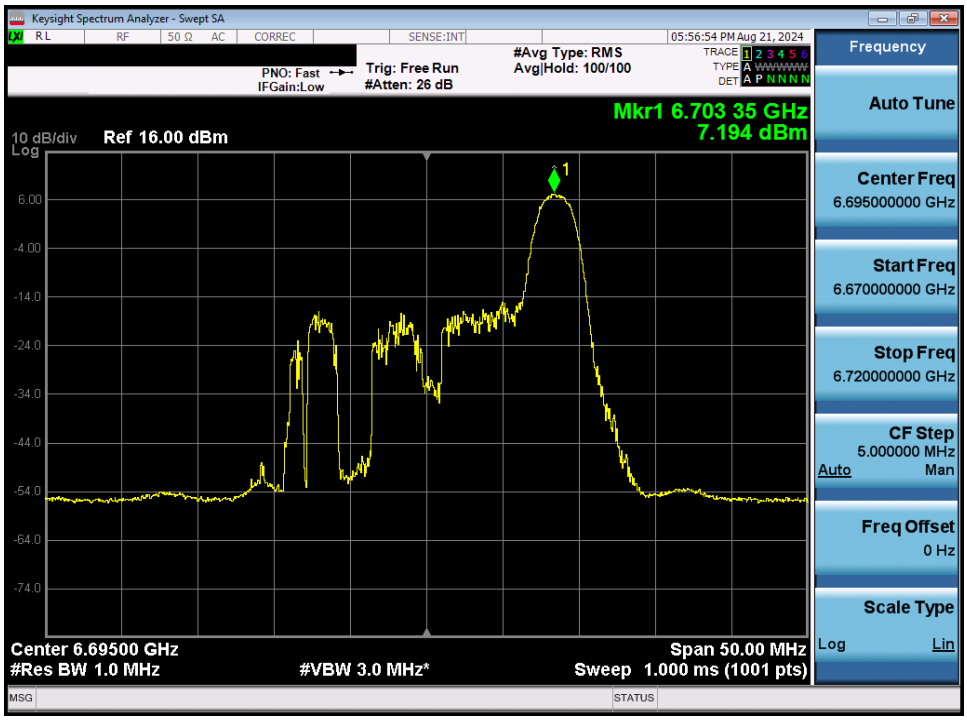
Plot 7-130. Power Spectral Density Plot MIMO ANT1 (80MHz BW 802.11ax/be (26 Tones) (UNII Band 7) – Ch. 151) – LPI



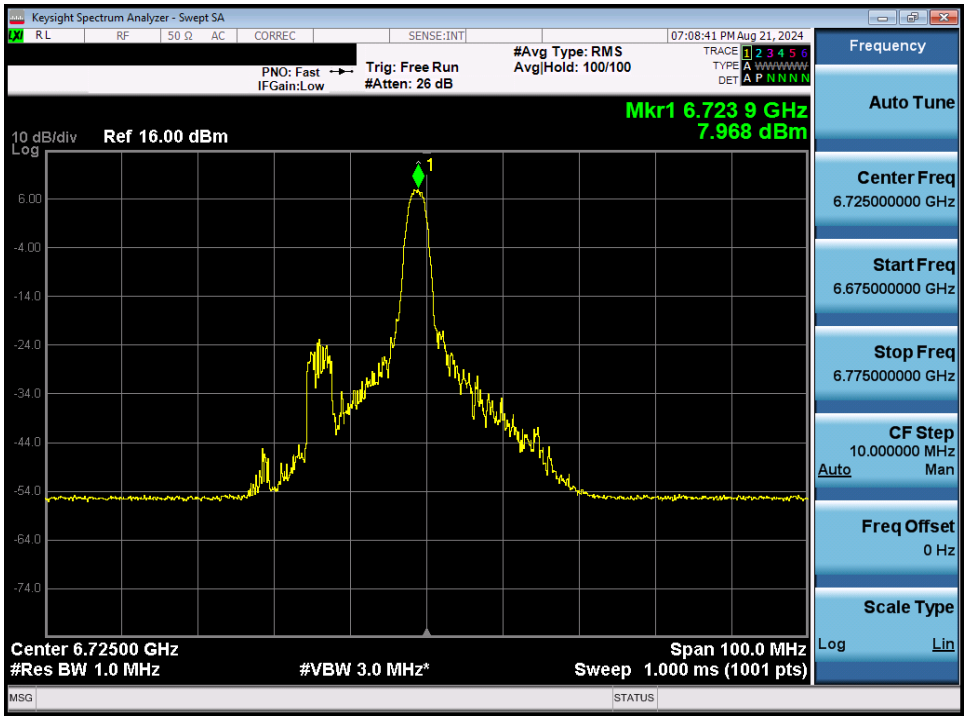
Plot 7-131. Power Spectral Density Plot MIMO ANT1 (160MHz BW 802.11ax/be (26 Tones) (UNII Band 7) – Ch. 143) – LPI



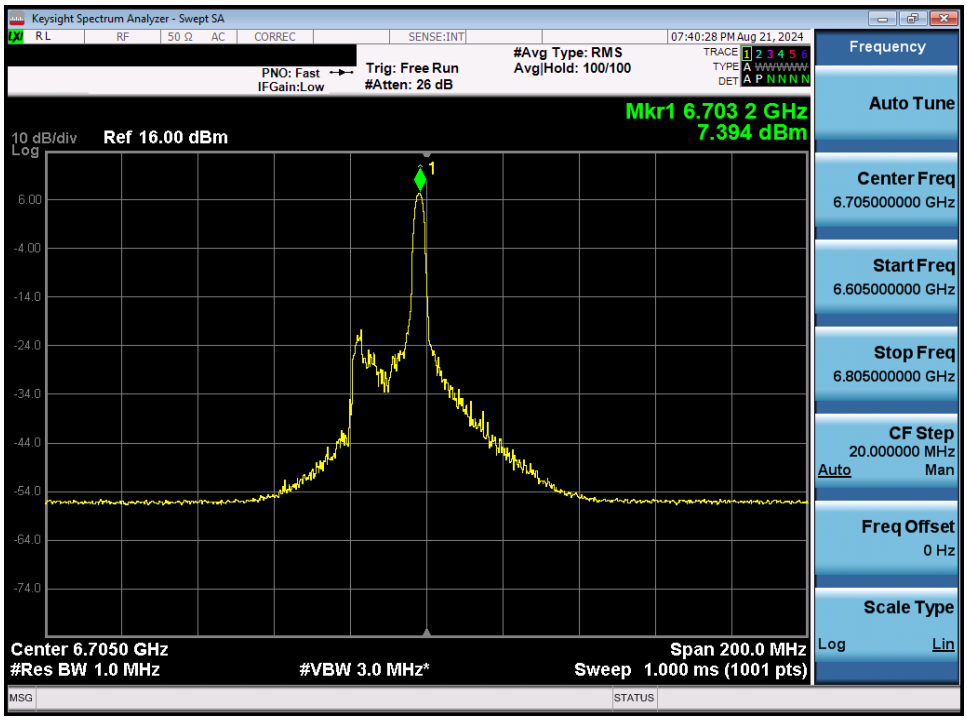
Plot 7-132. Power Spectral Density Plot MIMO ANT1 (320MHz BW 802.11be (26 Tones) (UNII Band 7) – Ch. 159) – LPI



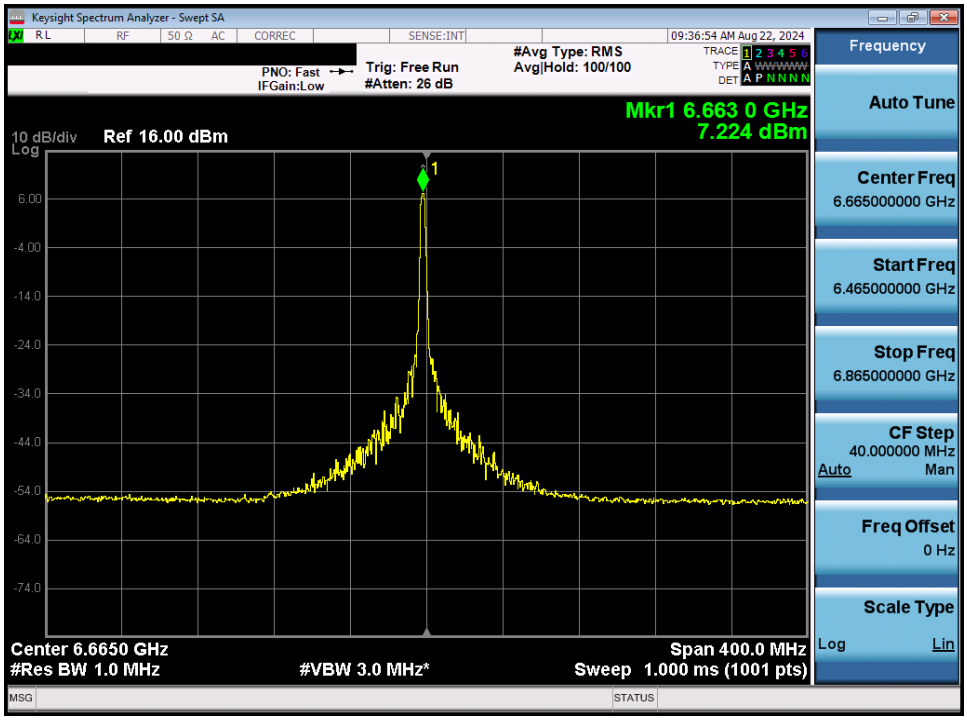
Plot 7-133. Power Spectral Density Plot MIMO ANT1 (20MHz BW 802.11ax/be (26 Tones) (UNII Band 7) – Ch. 149) – SP



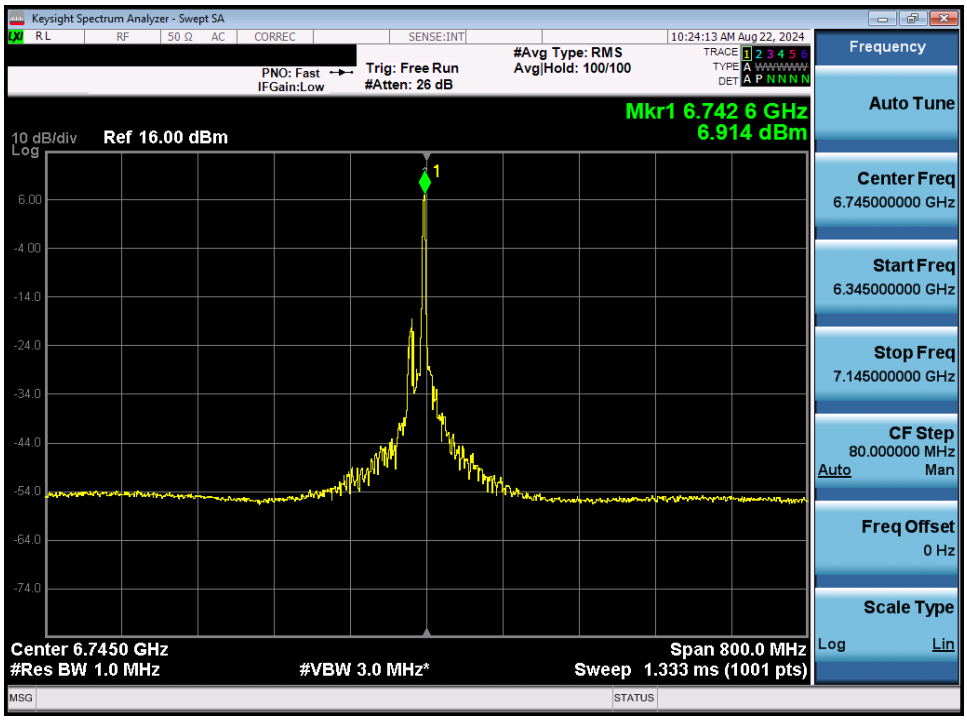
Plot 7-134. Power Spectral Density Plot MIMO ANT1 (40MHz BW 802.11ax/be (26 Tones) (UNII Band 7) – Ch. 155) – SP



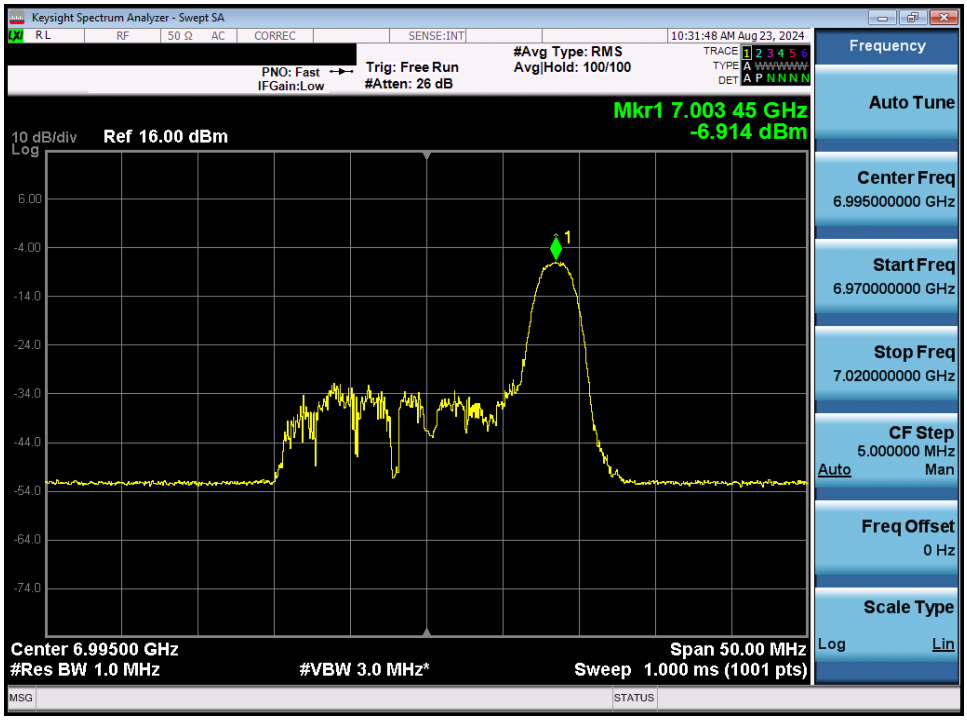
Plot 7-135. Power Spectral Density Plot MIMO ANT1 (80MHz BW 802.11ax/be (26 Tones) (UNII Band 7) – Ch. 151) – SP



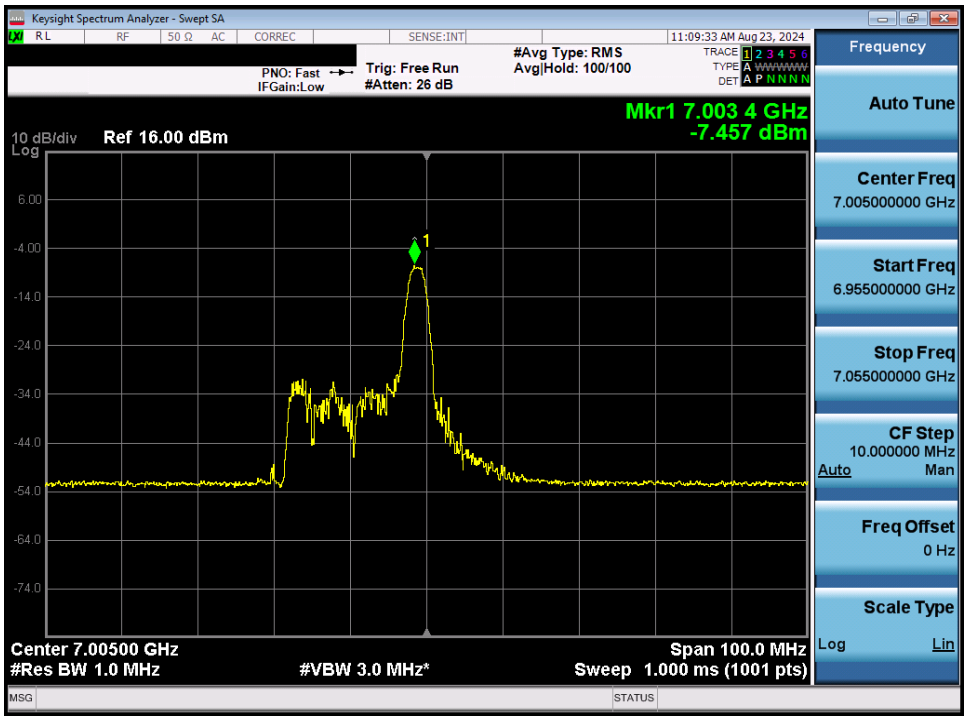
Plot 7-136. Power Spectral Density Plot MIMO ANT1 (160MHz BW 802.11ax/be (26 Tones) (UNII Band 7) – Ch. 143) – SP



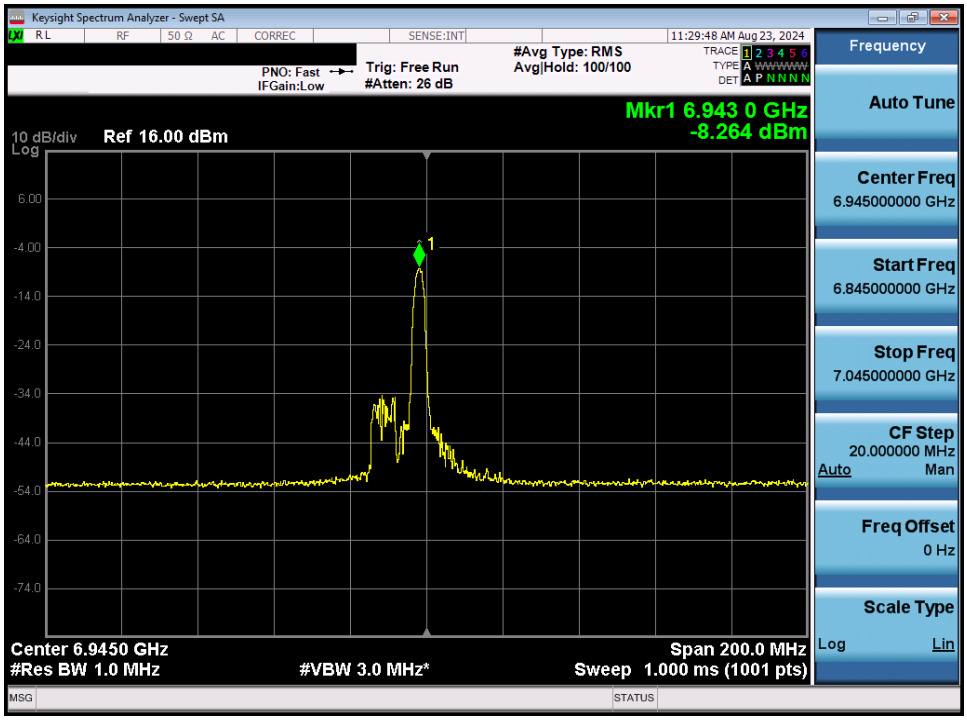
Plot 7-137. Power Spectral Density Plot MIMO ANT1 (320MHz BW 802.11be (26 Tones) (UNII Band 7) – Ch. 159) – SP



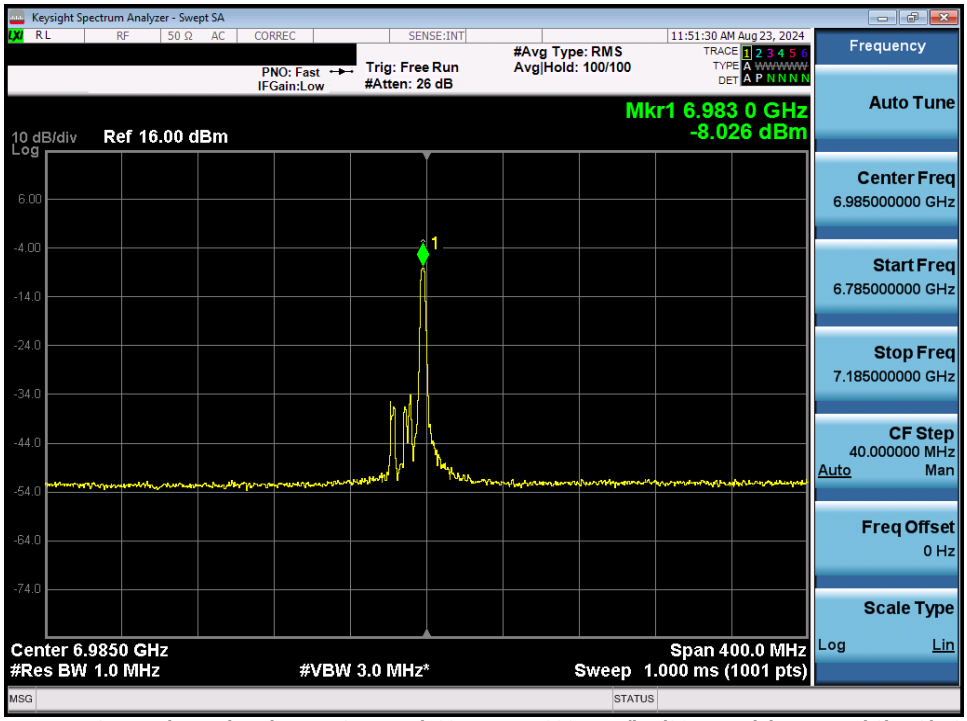
Plot 7-138. Power Spectral Density Plot MIMO ANT1 (20MHz BW 802.11ax/be (26 Tones) (UNII Band 8) – Ch. 209) – LPI



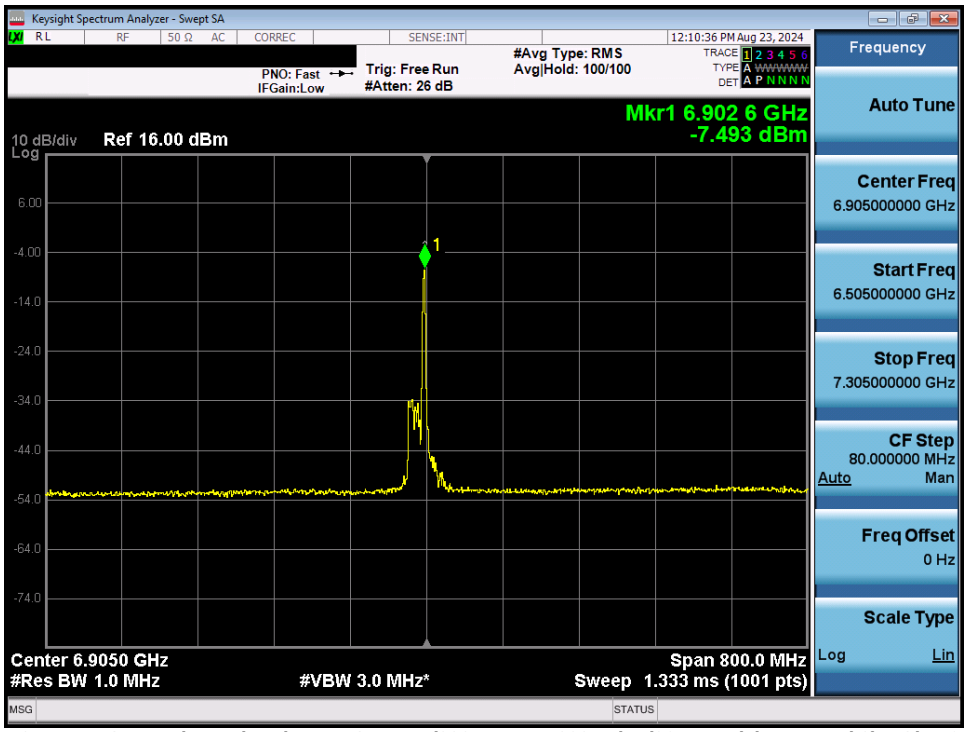
Plot 7-139. Power Spectral Density Plot MIMO ANT1 (40MHz BW 802.11ax/be (26 Tones) (UNII Band 8) – Ch. 211) – LPI



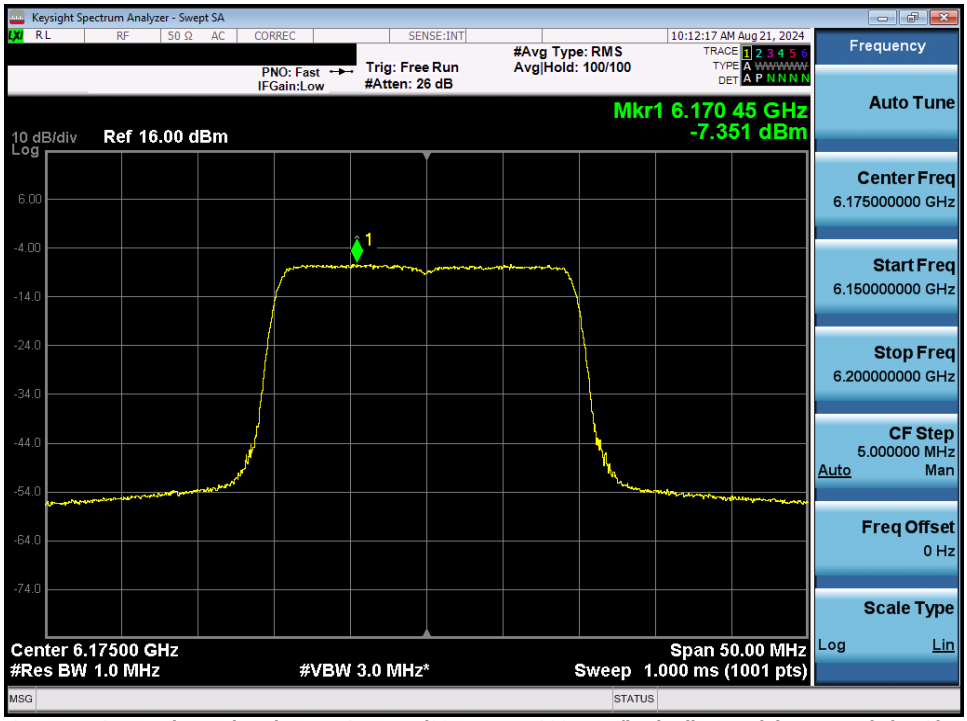
Plot 7-140. Power Spectral Density Plot MIMO ANT1 (80MHz BW 802.11ax/be (26 Tones) (UNII Band 8) – Ch. 199) – LPI



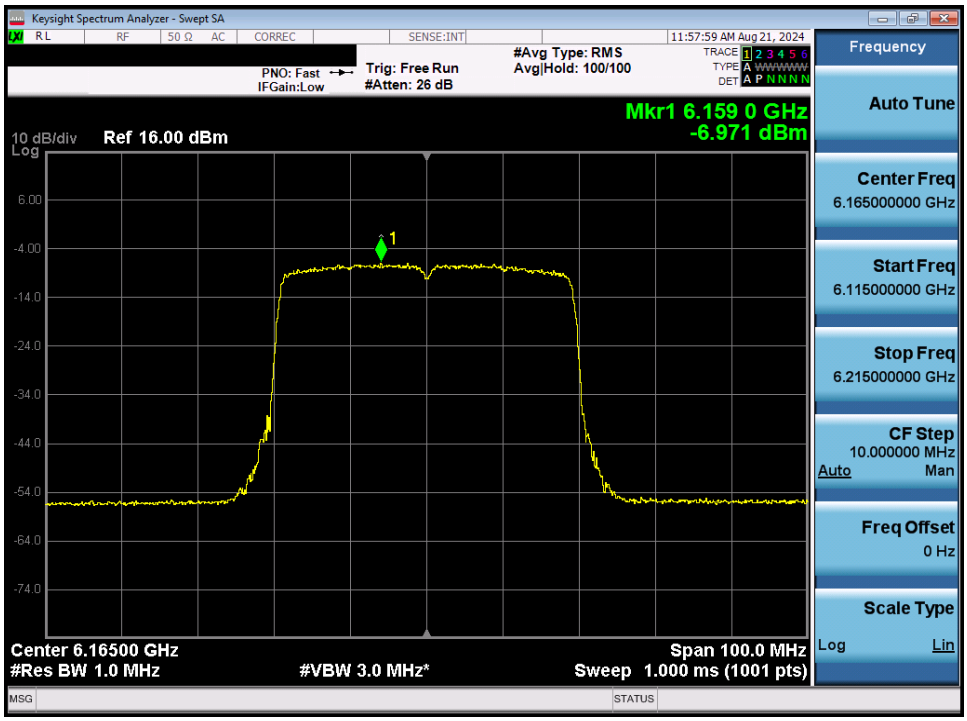
Plot 7-141. Power Spectral Density Plot MIMO ANT1 (160MHz BW 802.11ax/be (26 Tones) (UNII Band 8) – Ch. 207) – LPI



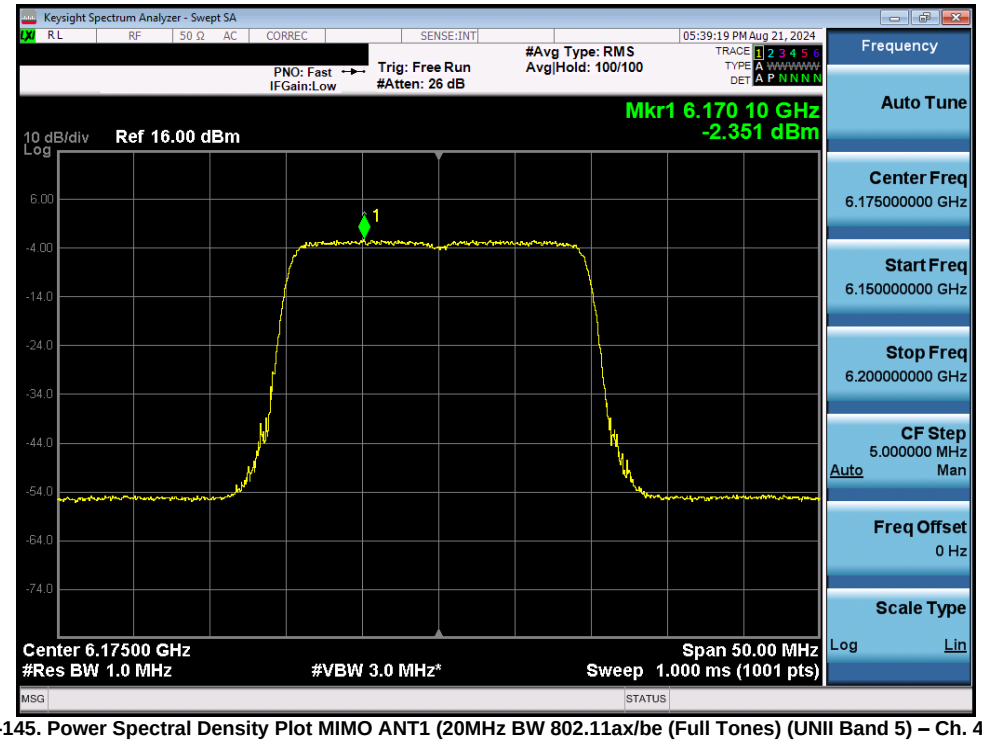
Plot 7-142. Power Spectral Density Plot MIMO ANT1 (320MHz BW 802.11be (26 Tones) (UNII Band 8) – Ch. 191) – LPI



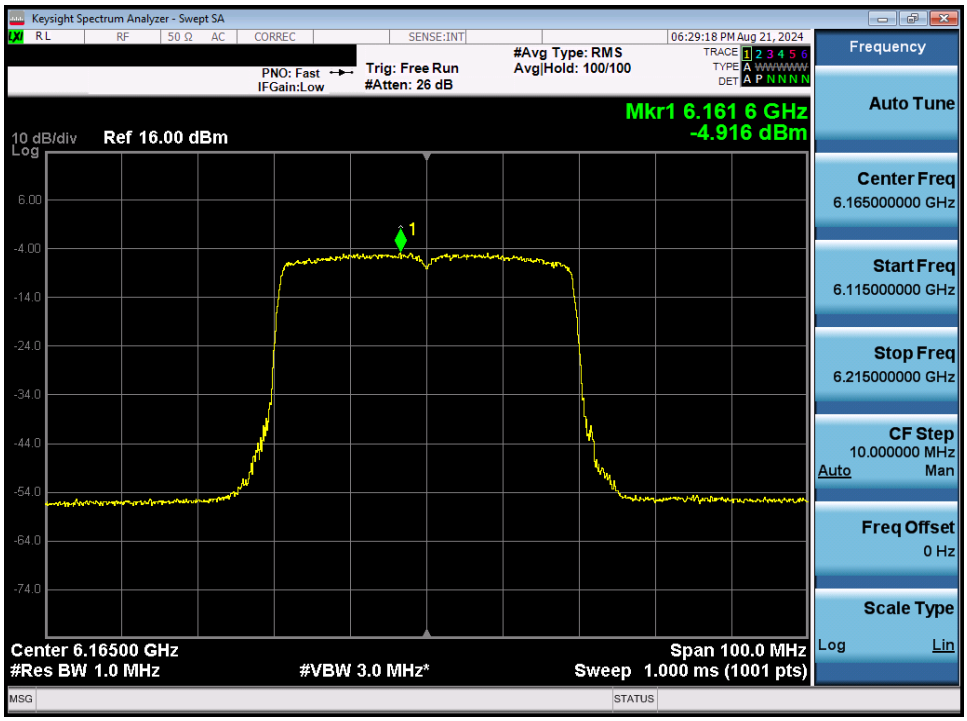
Plot 7-143. Power Spectral Density Plot MIMO ANT1 (20MHz BW 802.11ax/be (Full Tones) (UNII Band 5) – Ch. 45) – LPI



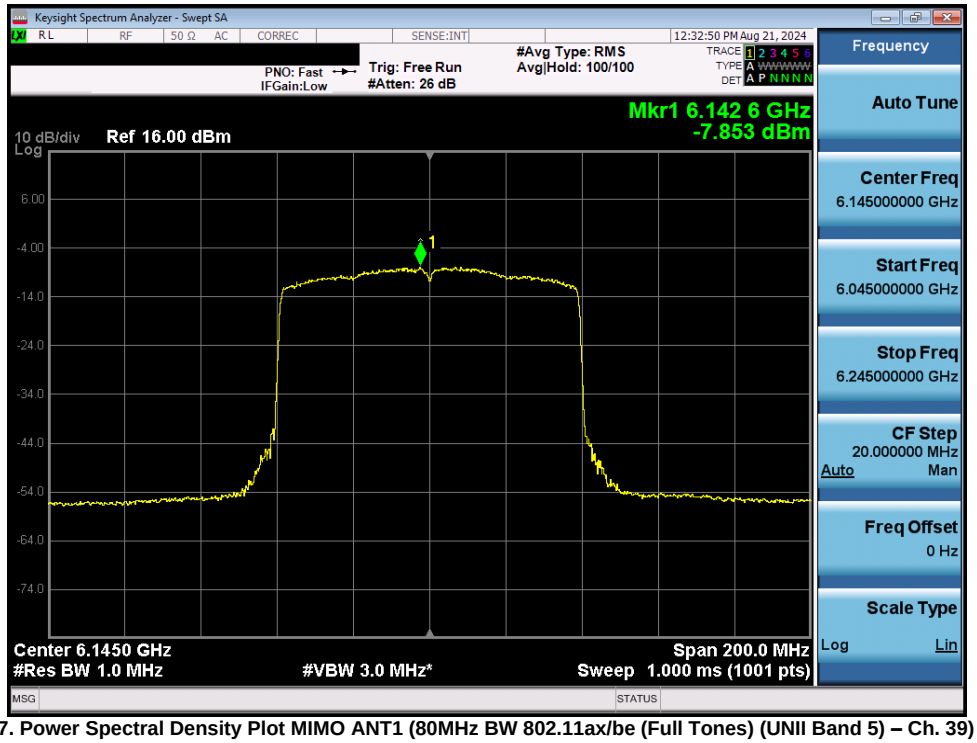
Plot 7-144. Power Spectral Density Plot MIMO ANT1 (40MHz BW 802.11ax/be (Full Tones) (UNII Band 5) – Ch. 43) – LPI



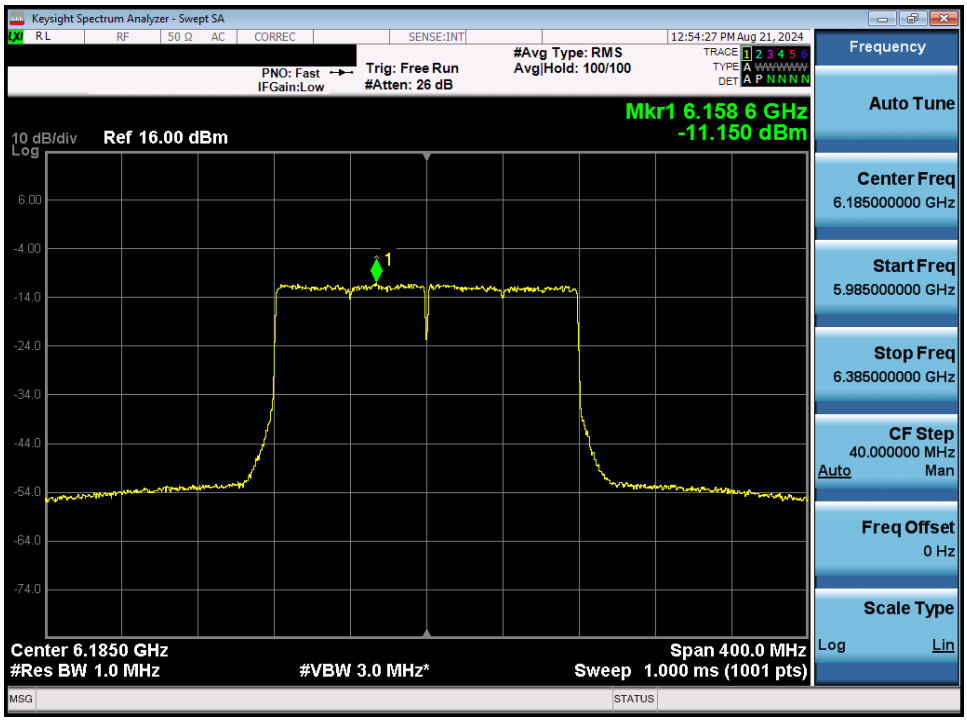
Plot 7-145. Power Spectral Density Plot MIMO ANT1 (20MHz BW 802.11ax/be (Full Tones) (UNII Band 5) – Ch. 45) – SP



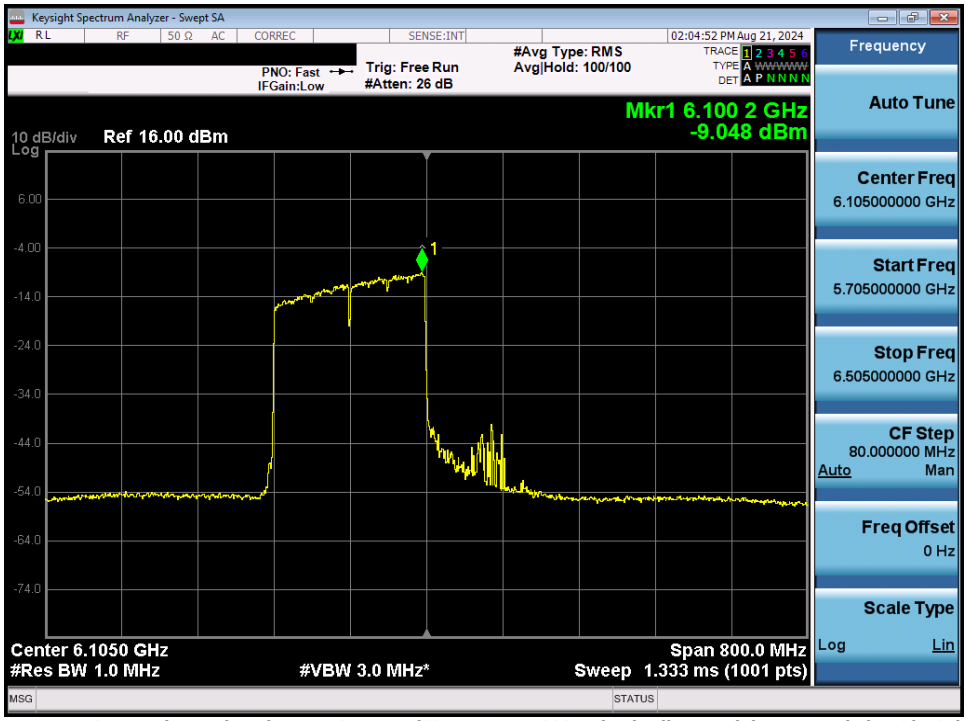
Plot 7-146. Power Spectral Density Plot MIMO ANT1 (40MHz BW 802.11ax/be (Full Tones) (UNII Band 5) – Ch. 43) – SP



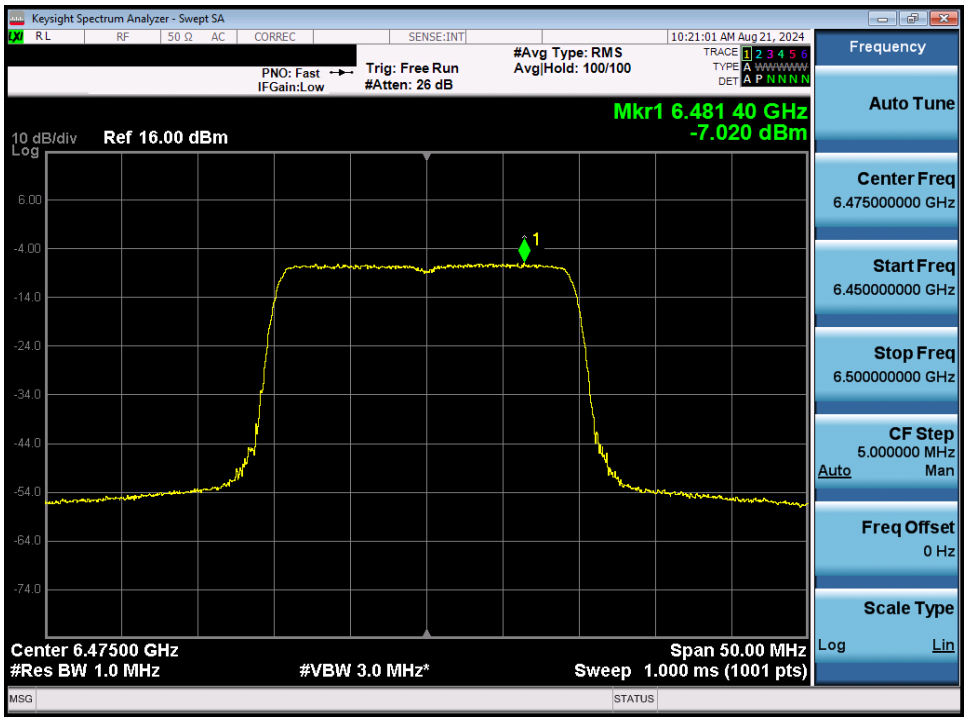
Plot 7-147. Power Spectral Density Plot MIMO ANT1 (80MHz BW 802.11ax/be (Full Tones) (UNII Band 5) – Ch. 39) – LPI/SP



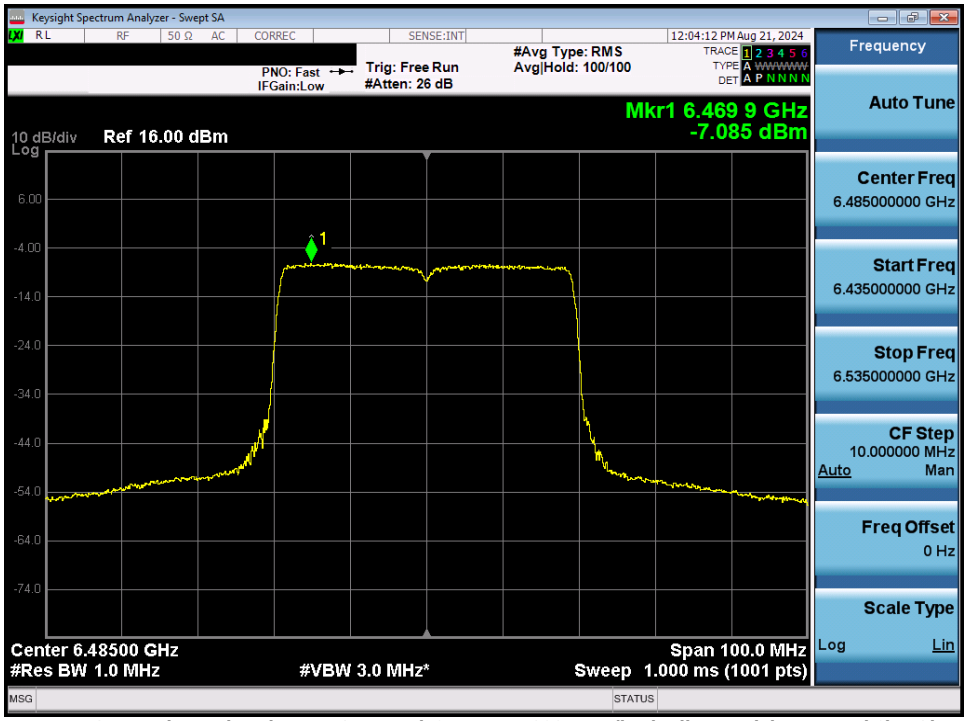
Plot 7-148. Power Spectral Density Plot MIMO ANT1 (160MHz BW 802.11ax/be (Full Tones) (UNII Band 5) – Ch. 47) – LPI/SP



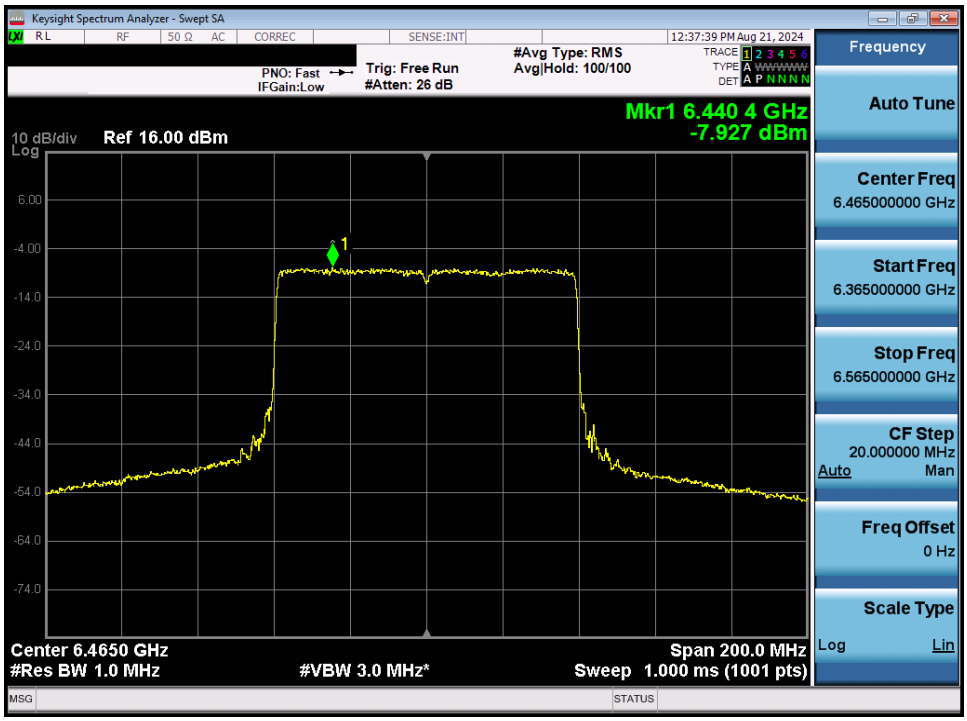
Plot 7-149. Power Spectral Density Plot MIMO ANT1 (320MHz BW 802.11be (Full Tones) (UNII Band 5) – Ch. 31) – LPI/SP



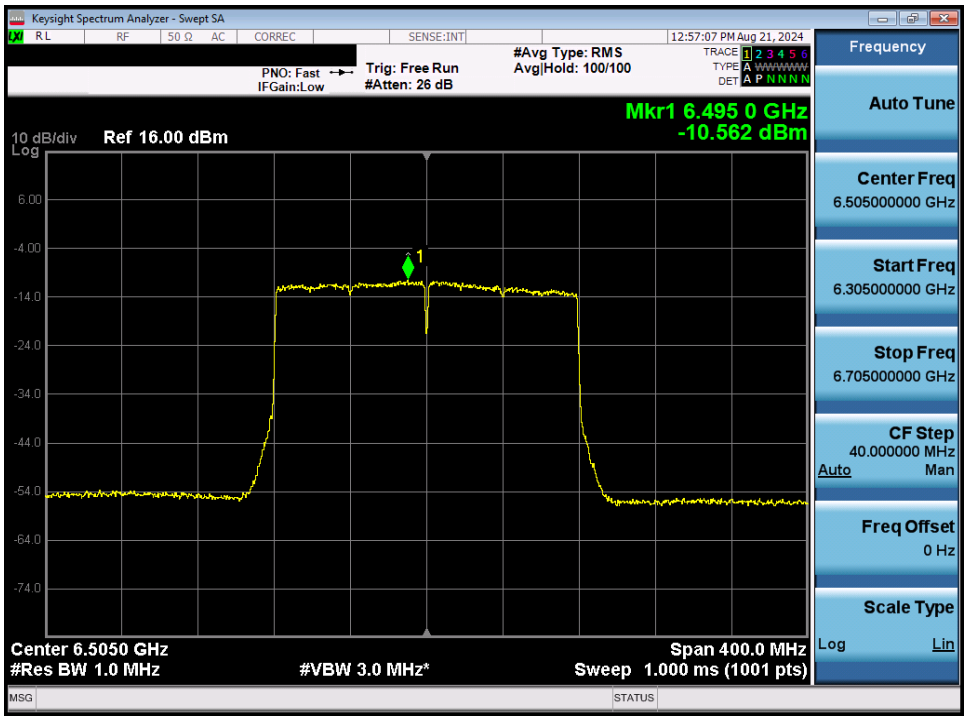
Plot 7-150. Power Spectral Density Plot MIMO ANT1 (20MHz BW 802.11ax/be (Full Tones) (UNII Band 6) – Ch. 105) – LPI



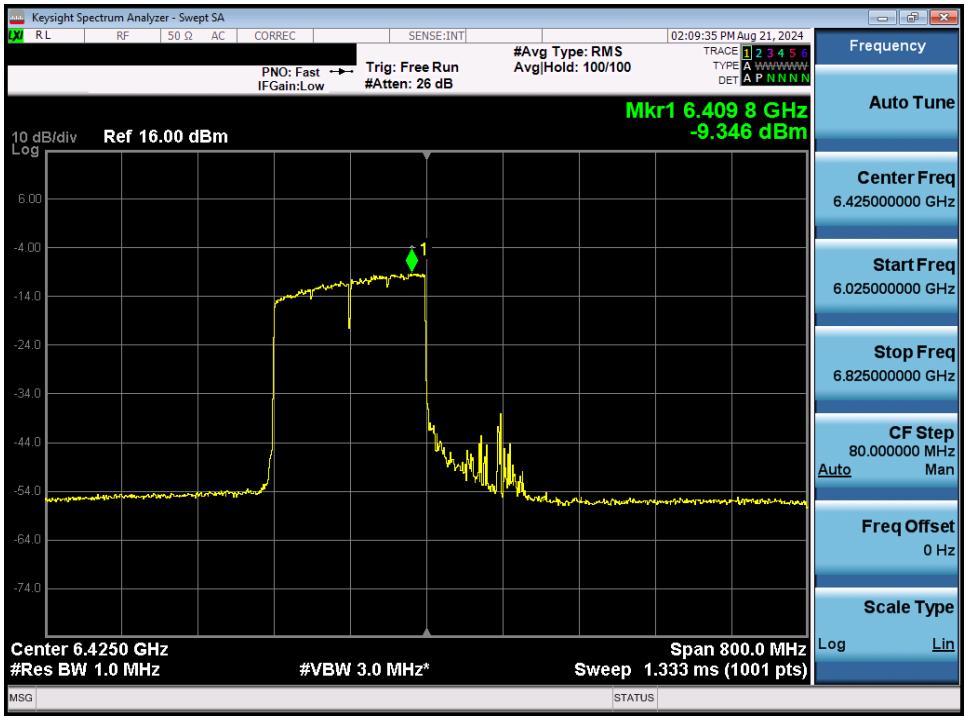
Plot 7-151. Power Spectral Density Plot MIMO ANT1 (40MHz BW 802.11ax/be (Full Tones) (UNII Band 6) – Ch. 107) – LPI



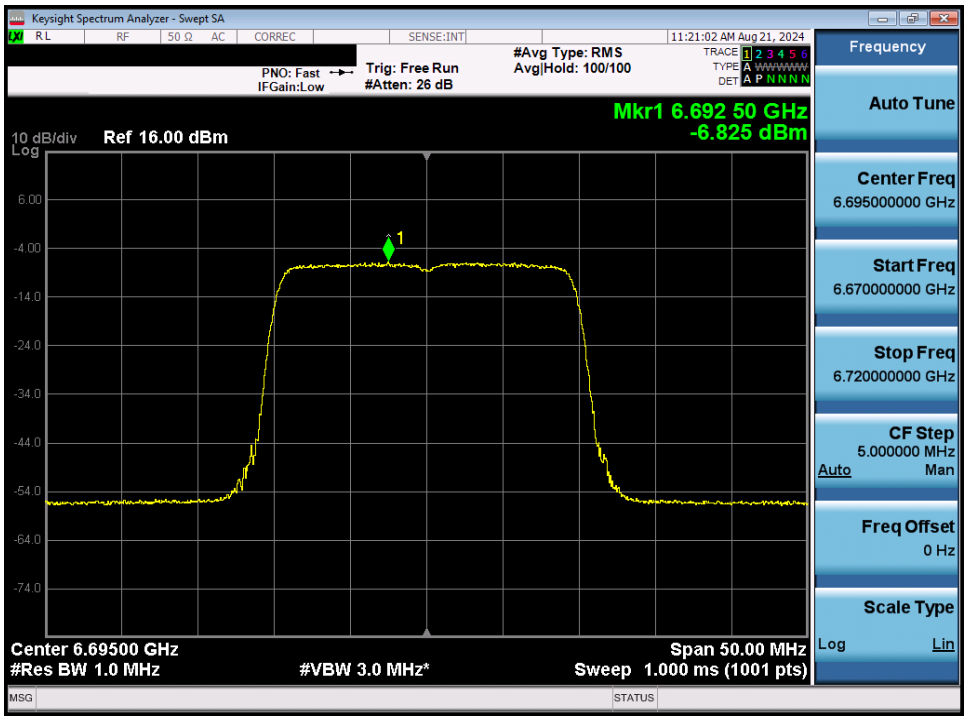
Plot 7-152. Power Spectral Density Plot MIMO ANT1 (80MHz BW 802.11ax/be (Full Tones) (UNII Band 6) – Ch. 103) – LPI/SP



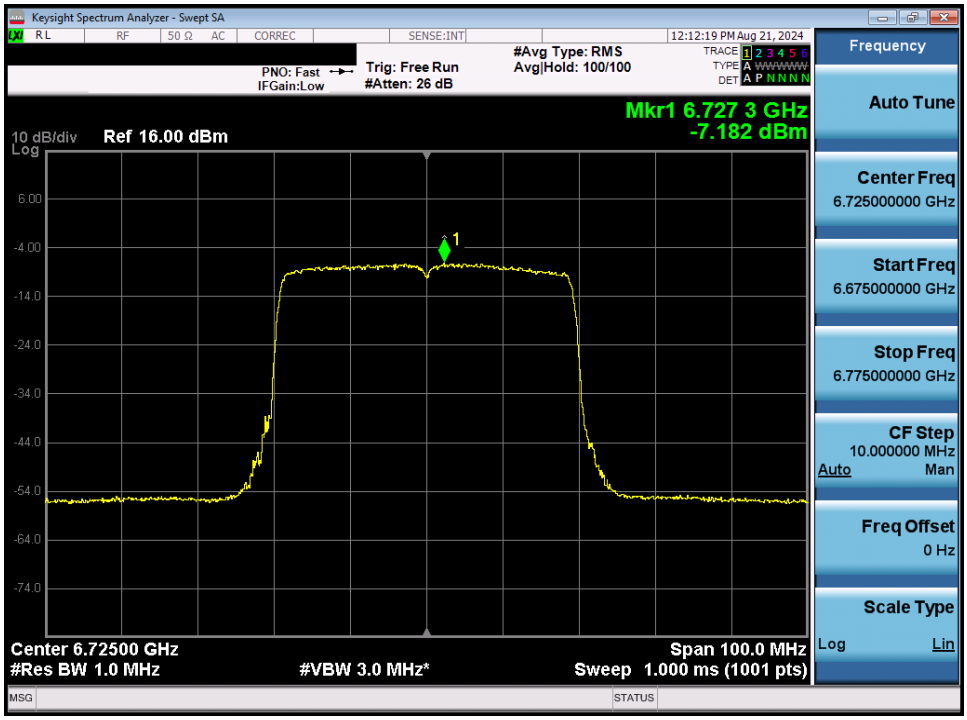
Plot 7-153. Power Spectral Density Plot MIMO ANT1 (160MHz BW 802.11ax/be (Full Tones) (UNII Band 6) – Ch. 111) – LPI/SP



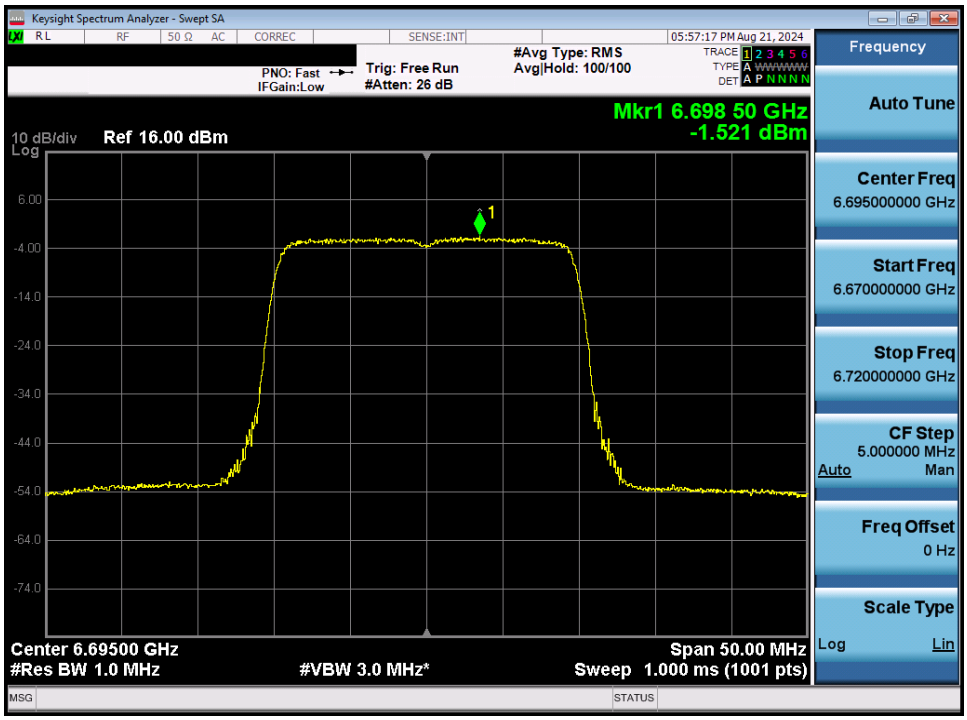
Plot 7-154. Power Spectral Density Plot MIMO ANT1 (320MHz BW 802.11be (Full Tones) (UNII Band 6) – Ch. 95) – LPI/SP



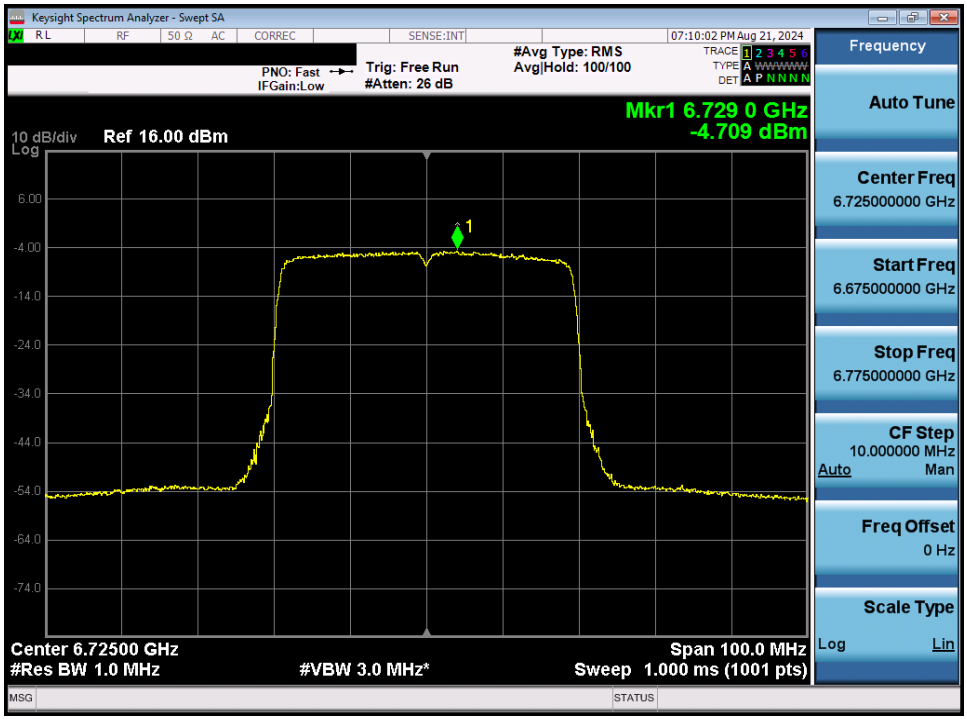
Plot 7-155. Power Spectral Density Plot MIMO ANT1 (20MHz BW 802.11ax/be (Full Tones) (UNII Band 7) – Ch. 149) – LPI



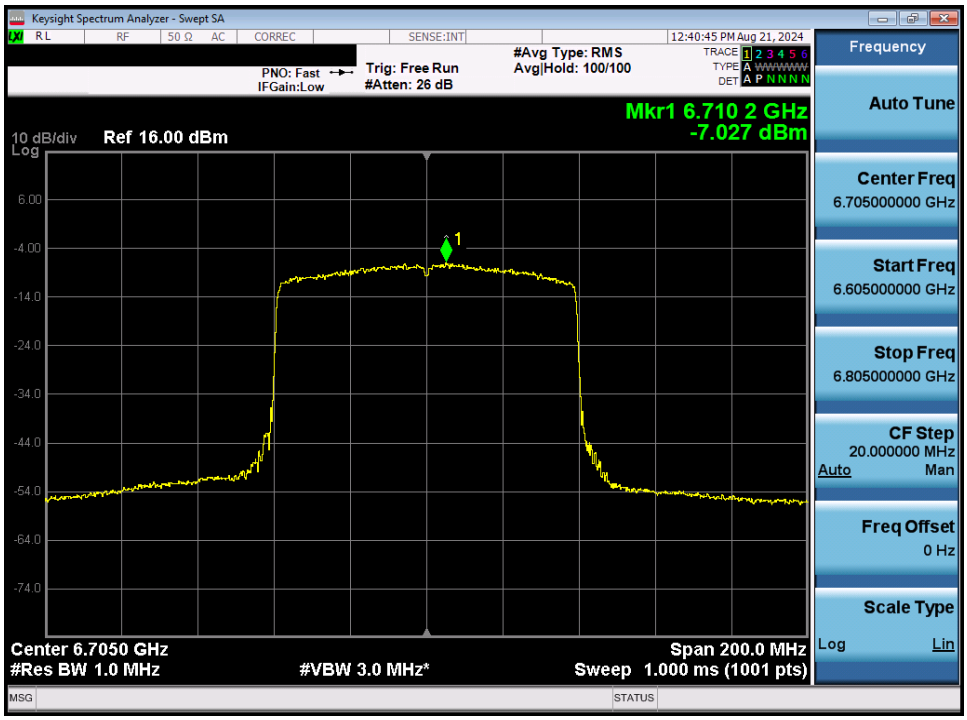
Plot 7-156. Power Spectral Density Plot MIMO ANT1 (40MHz BW 802.11ax/be (Full Tones) (UNII Band 7) – Ch. 155) – LPI



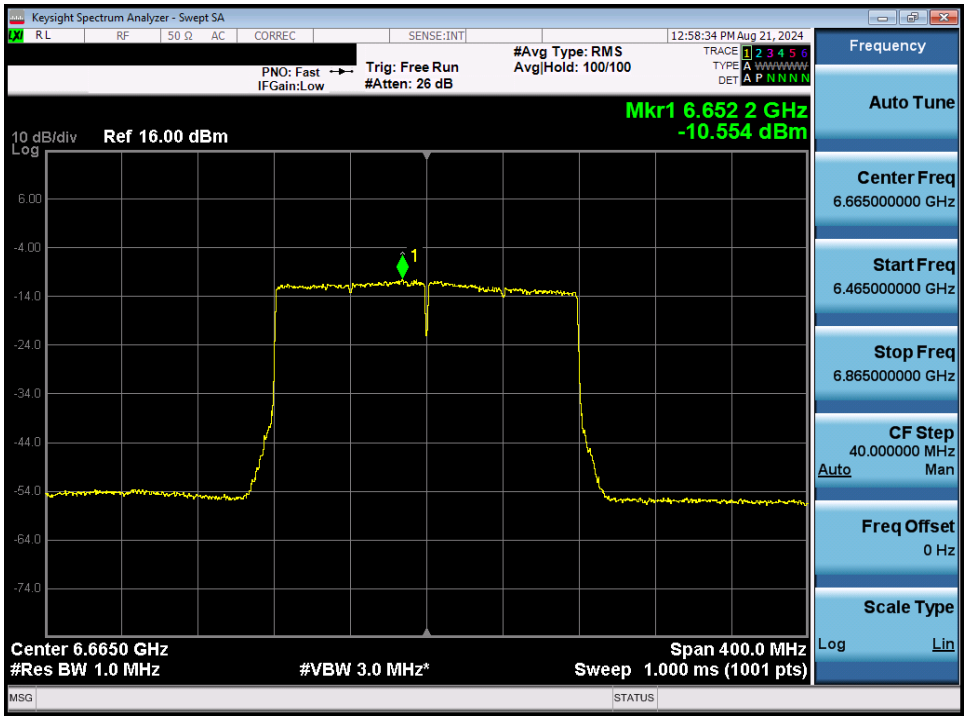
Plot 7-157. Power Spectral Density Plot MIMO ANT1 (20MHz BW 802.11ax/be (Full Tones) (UNII Band 7) – Ch. 149) – SP



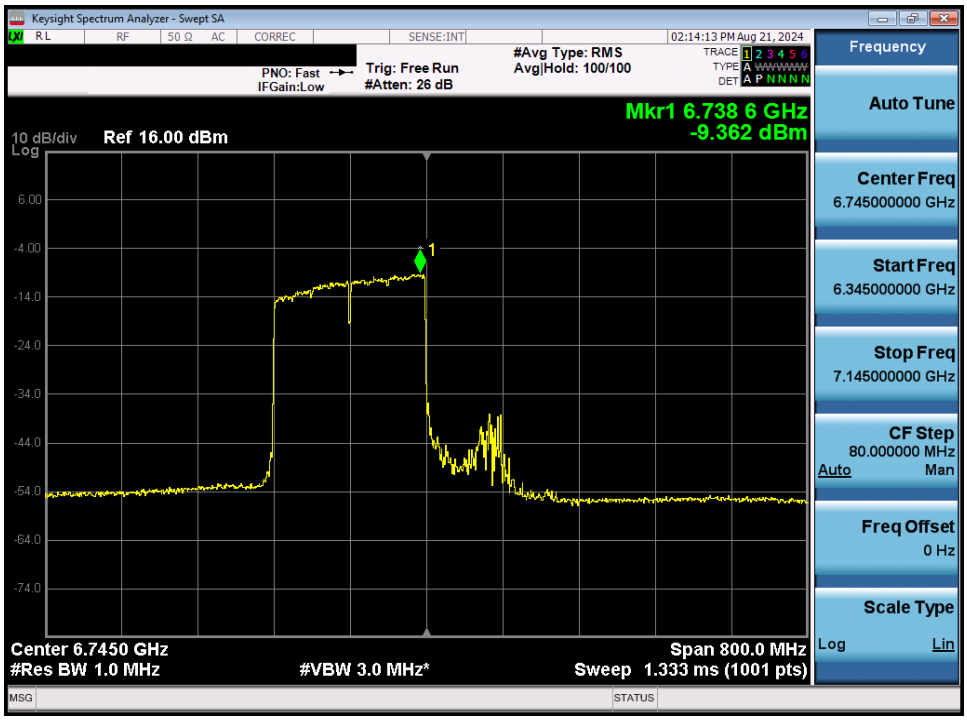
Plot 7-158. Power Spectral Density Plot MIMO ANT1 (40MHz BW 802.11ax/be (Full Tones) (UNII Band 7) – Ch. 155) – SP



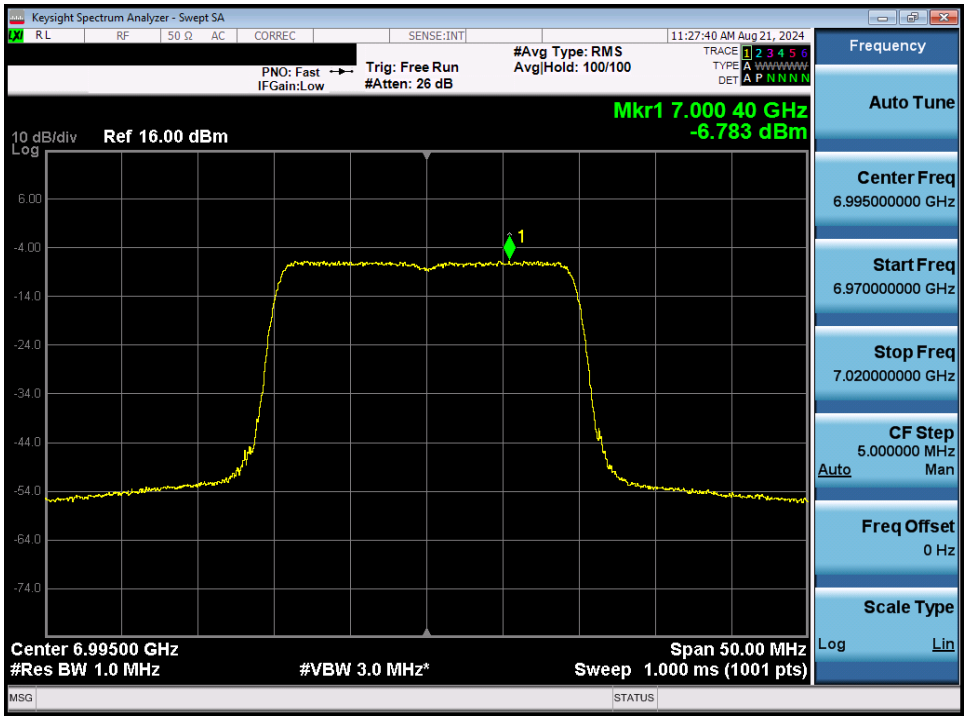
Plot 7-159. Power Spectral Density Plot MIMO ANT1 (80MHz BW 802.11ax/be (Full Tones) (UNII Band 7) – Ch. 151) – LPI/SP



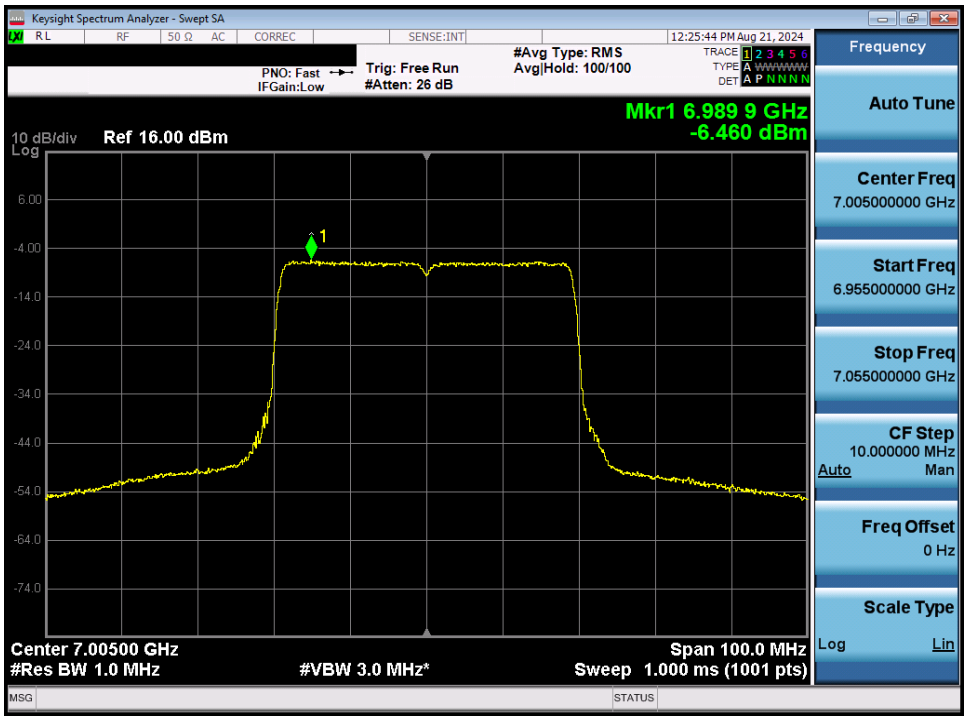
Plot 7-160. Power Spectral Density Plot MIMO ANT1 (160MHz BW 802.11ax/be (Full Tones) (UNII Band 7) – Ch. 143) – LPI/SP



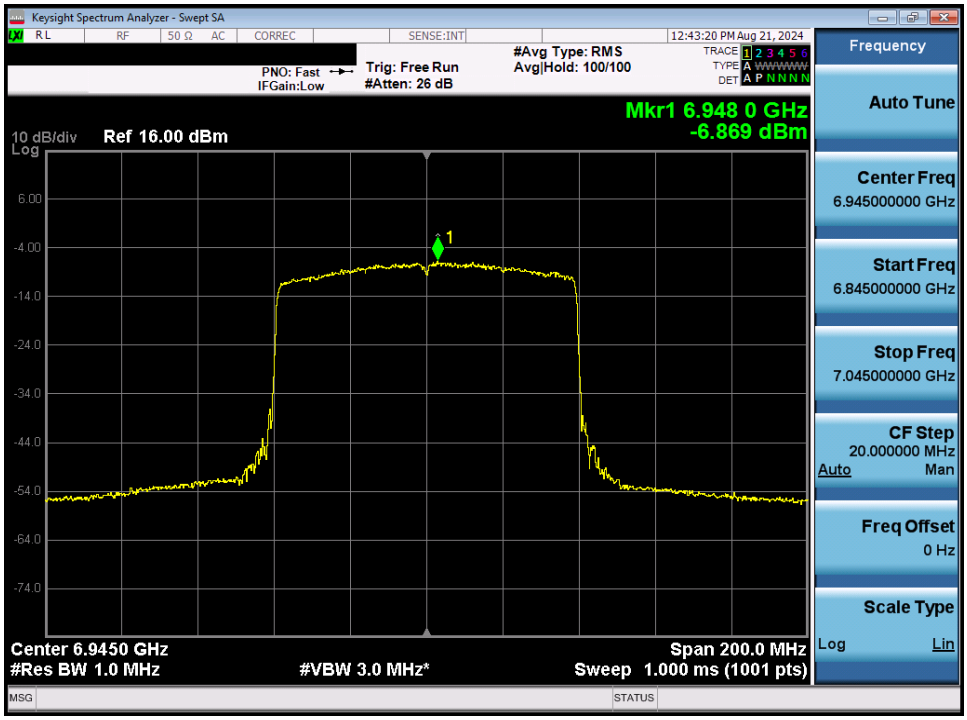
Plot 7-161. Power Spectral Density Plot MIMO ANT1 (320MHz BW 802.11be (Full Tones) (UNII Band 7) – Ch. 159) – LPI/SP



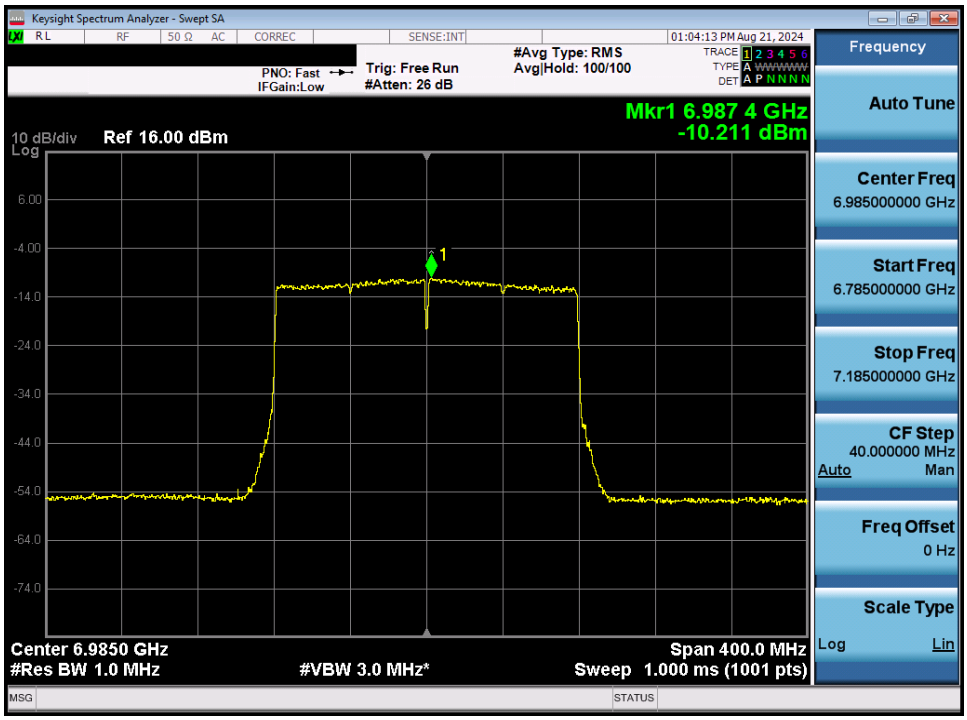
Plot 7-162. Power Spectral Density Plot MIMO ANT1 (20MHz BW 802.11ax/be (Full Tones) (UNII Band 8) – Ch. 209) – LPI



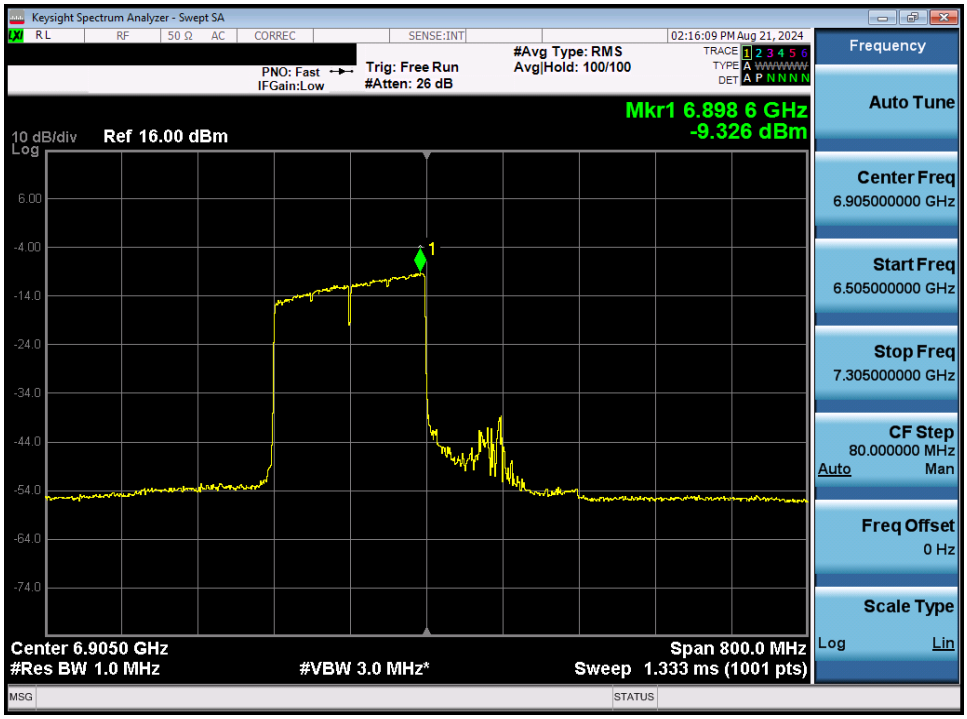
Plot 7-163. Power Spectral Density Plot MIMO ANT1 (40MHz BW 802.11ax/be (Full Tones) (UNII Band 8) – Ch. 211) – LPI



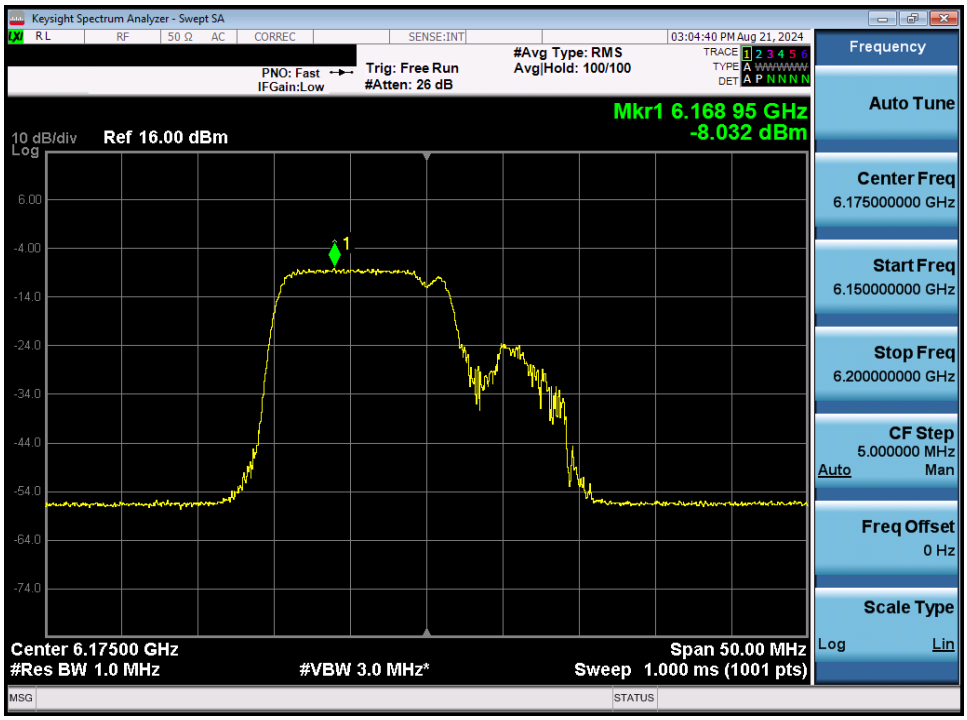
Plot 7-164. Power Spectral Density Plot MIMO ANT1 (80MHz BW 802.11ax/be (Full Tones) (UNII Band 8) – Ch. 199) – LPI/SP



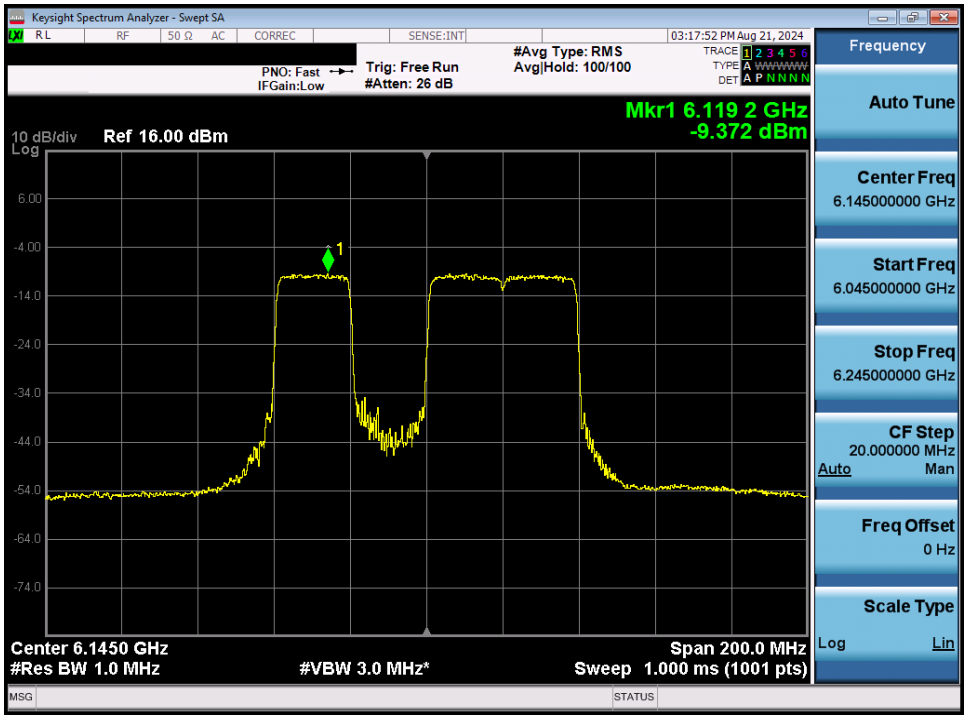
Plot 7-165. Power Spectral Density Plot MIMO ANT1 (160MHz BW 802.11ax/be (Full Tones) (UNII Band 8) – Ch. 207) – LPI/SP



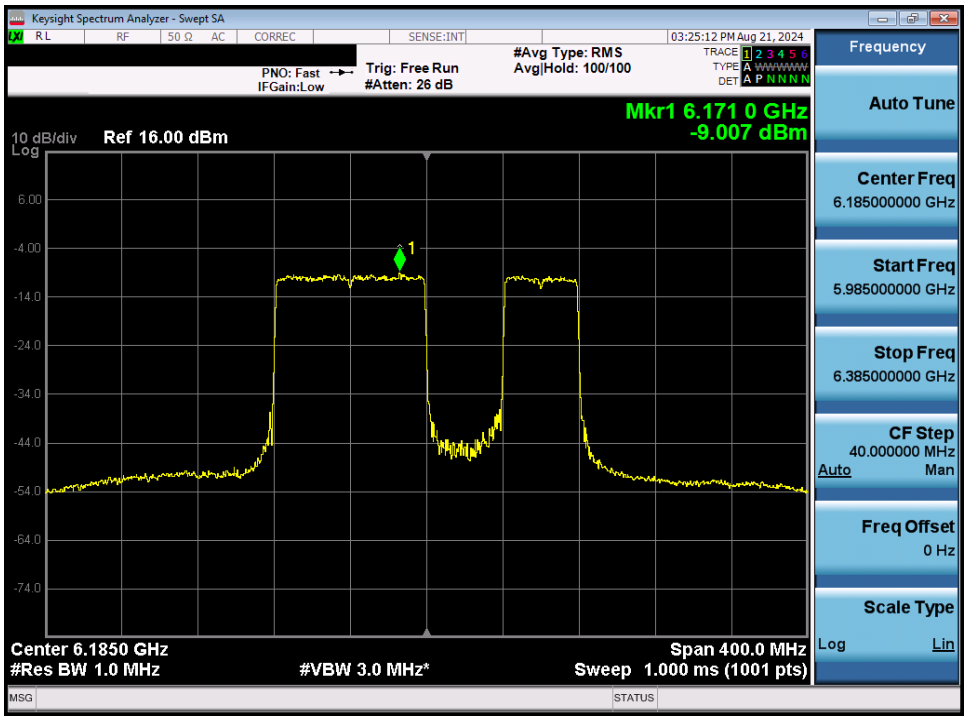
Plot 7-166. Power Spectral Density Plot MIMO ANT1 (320MHz BW 802.11be (Full Tones) (UNII Band 8) – Ch. 191)



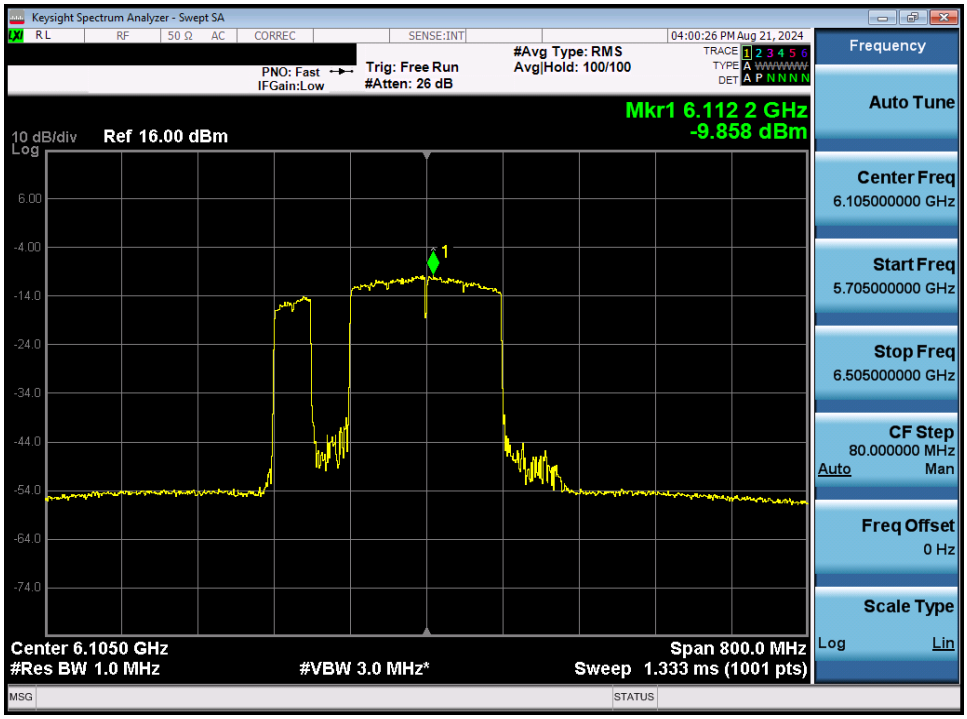
Plot 7-167. Power Spectral Density MIMO ANT1 (20MHz BW 802.11be (52+26 Tones) (UNII Band 5) – Ch. 45)



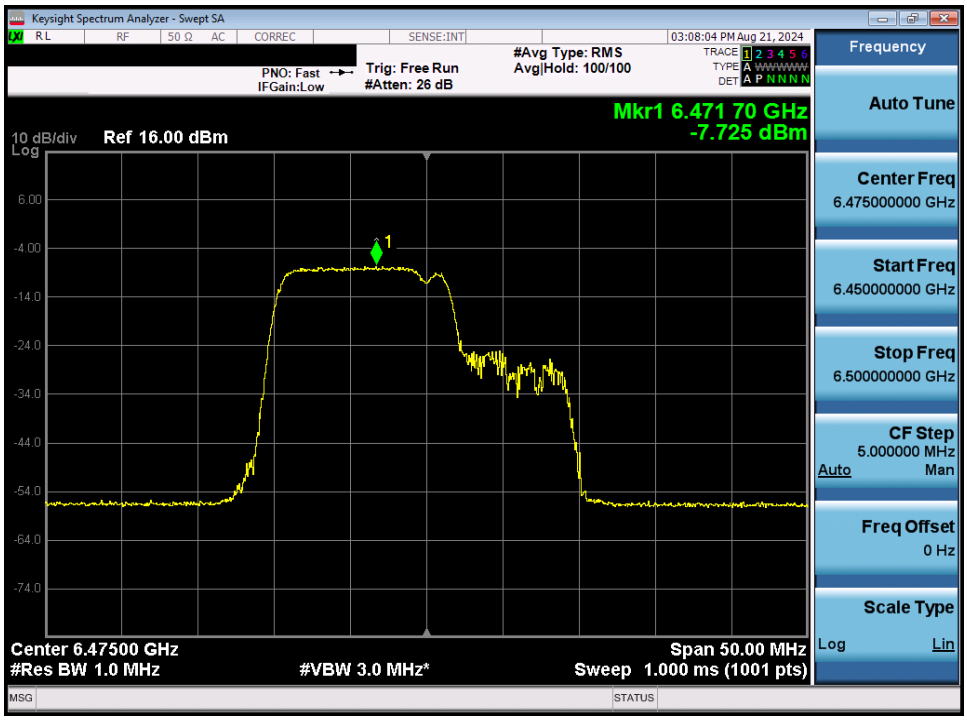
Plot 7-168. Power Spectral Density MIMO ANT1 (80MHz BW 802.11be (484+242 Tones) (UNII Band 5) – Ch. 39)



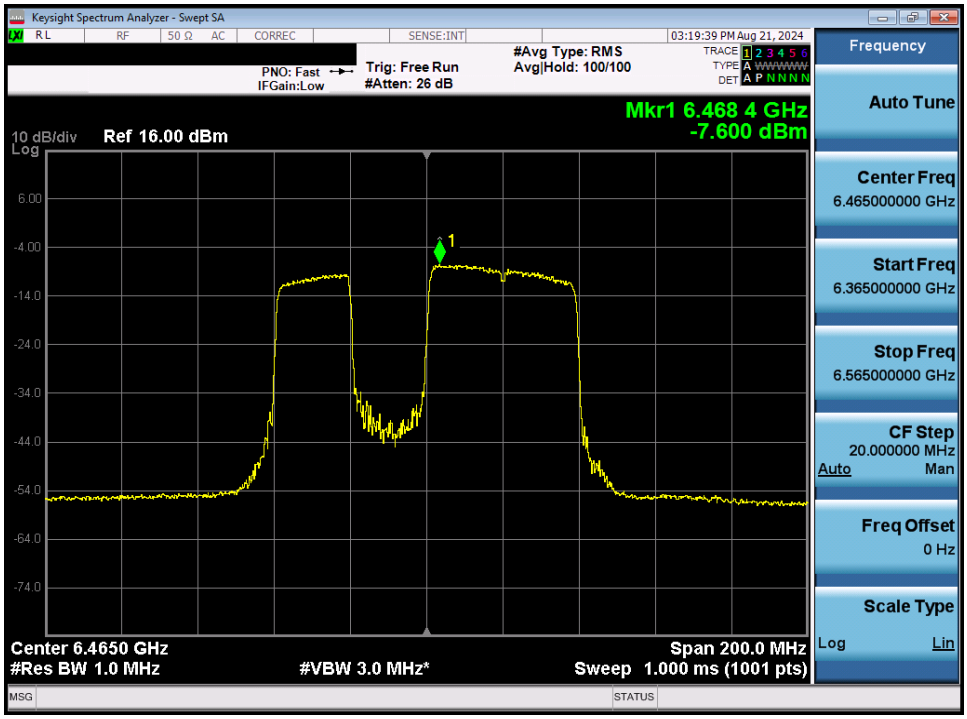
Plot 7-169. Power Spectral Density MIMO ANT1 (160MHz BW 802.11be (996+484 Tones) (UNII Band 5) – Ch. 47)



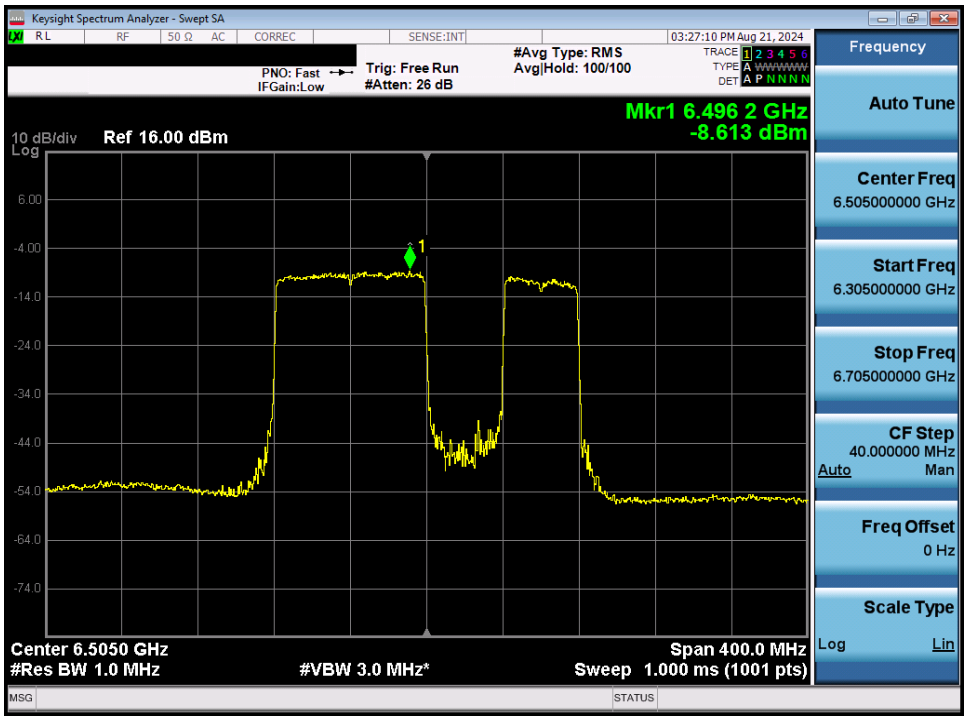
Plot 7-170. Power Spectral Density MIMO ANT1 (320MHz BW 802.11be (2*996+484 Tones) (UNII Band 5) – Ch. 31)



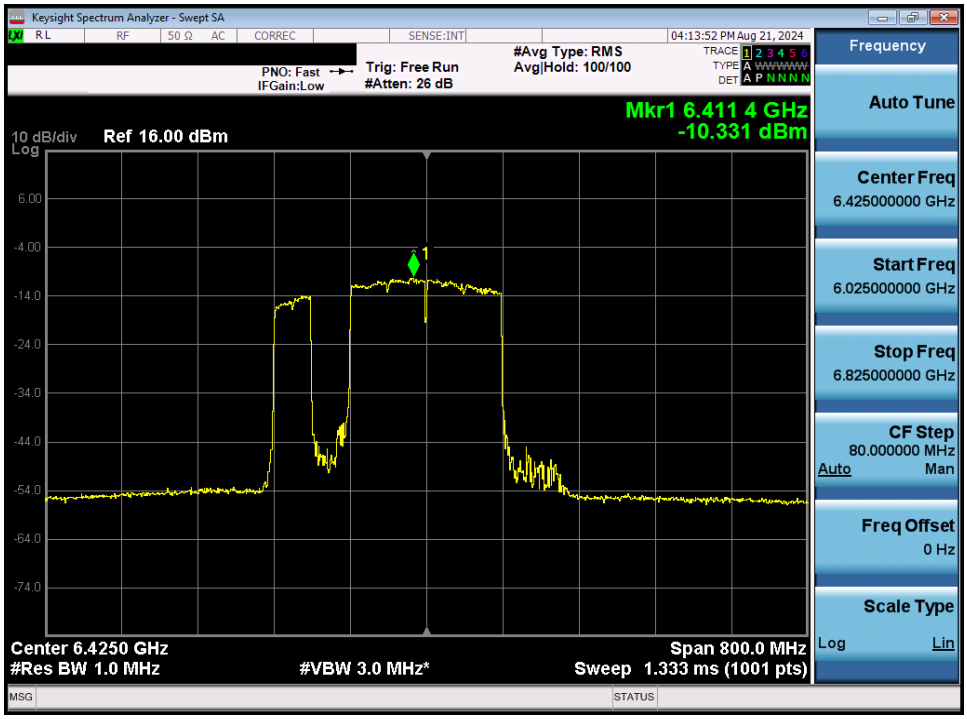
Plot 7-171. Power Spectral Density MIMO ANT1 (20MHz BW 802.11be (106+26 Tones) (UNII Band 6) – Ch. 105)



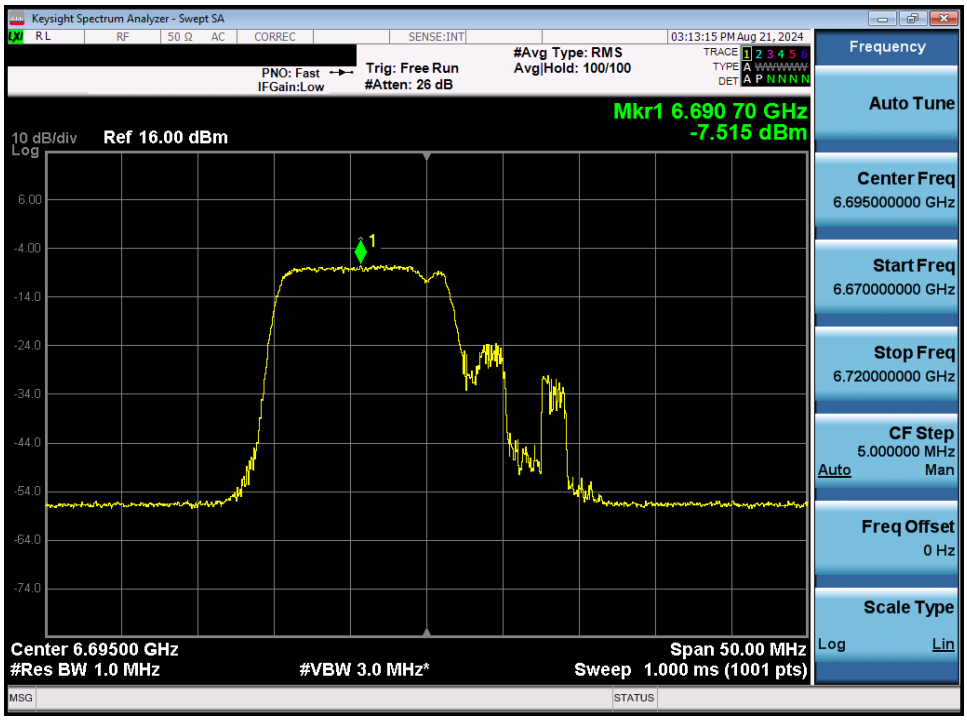
Plot 7-172. Power Spectral Density MIMO ANT1 (80MHz BW 802.11be (484+242 Tones) (UNII Band 6) – Ch. 103)



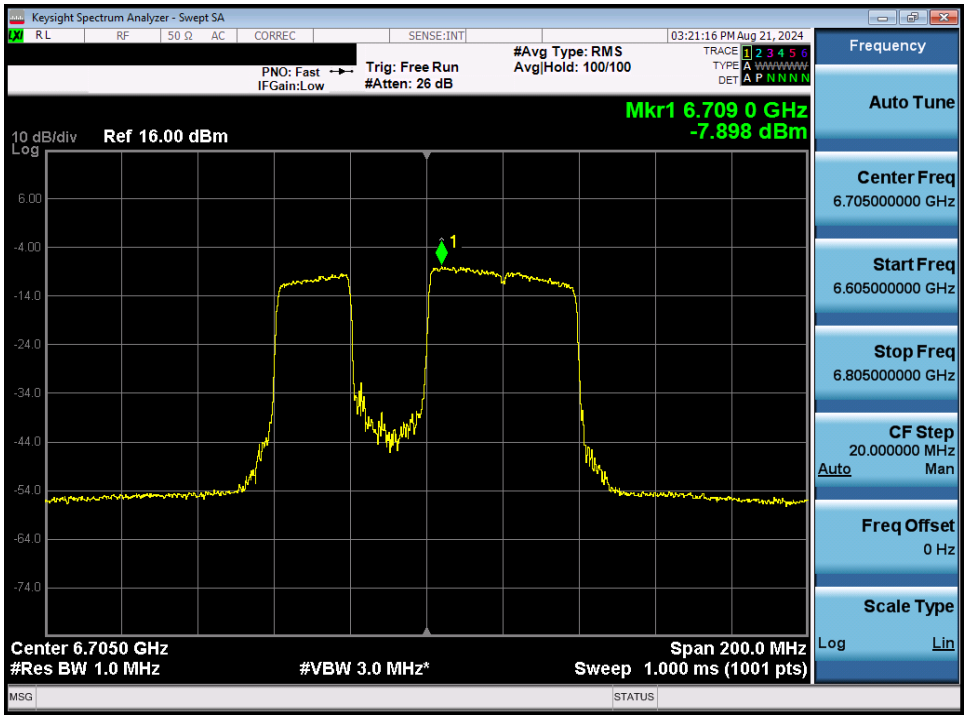
Plot 7-173. Power Spectral Density MIMO ANT1 (160MHz BW 802.11be (996+484 Tones) (UNII Band 6) – Ch. 111)



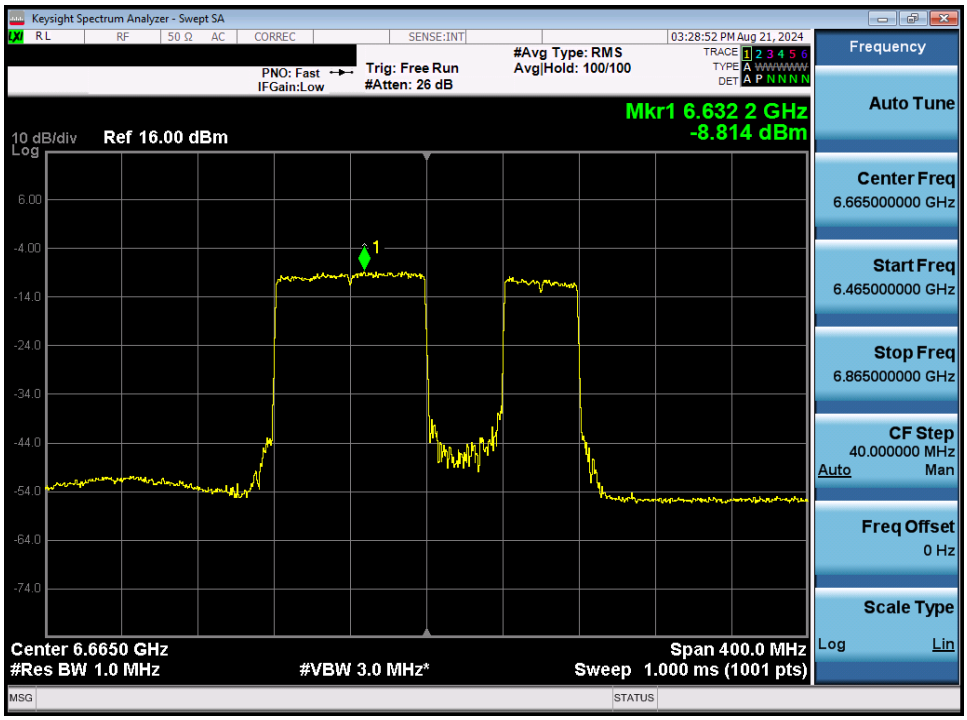
Plot 7-174. Power Spectral Density MIMO ANT1 (320MHz BW 802.11be (2*996+484 Tones) (UNII Band 6) – Ch. 95)



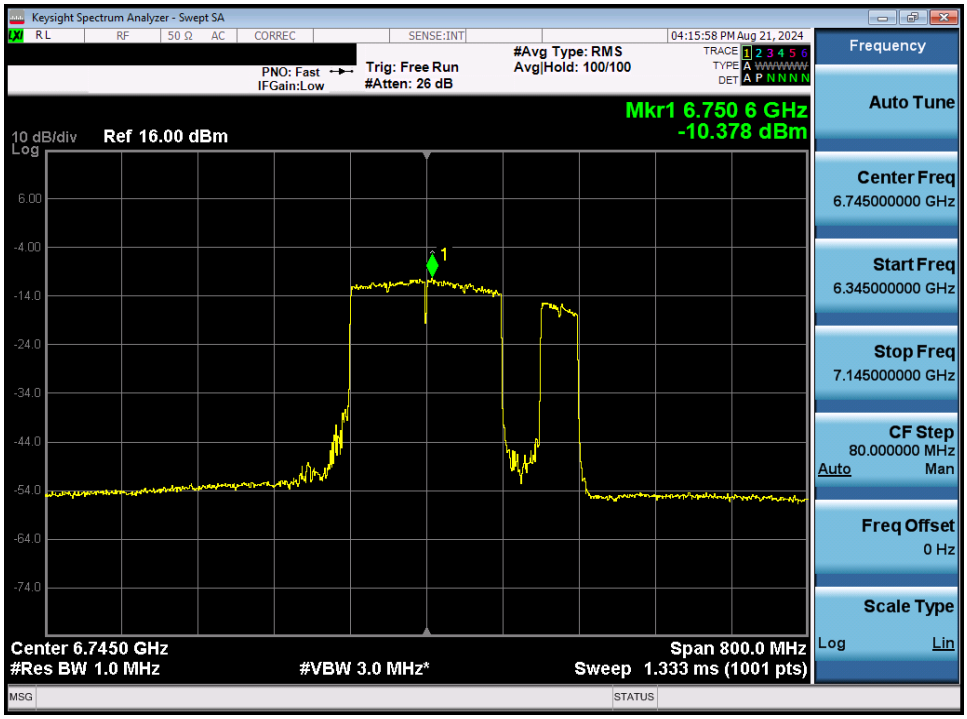
Plot 7-175. Power Spectral Density MIMO ANT1 (20MHz BW 802.11be (106+26 Tones) (UNII Band 7) – Ch. 149)



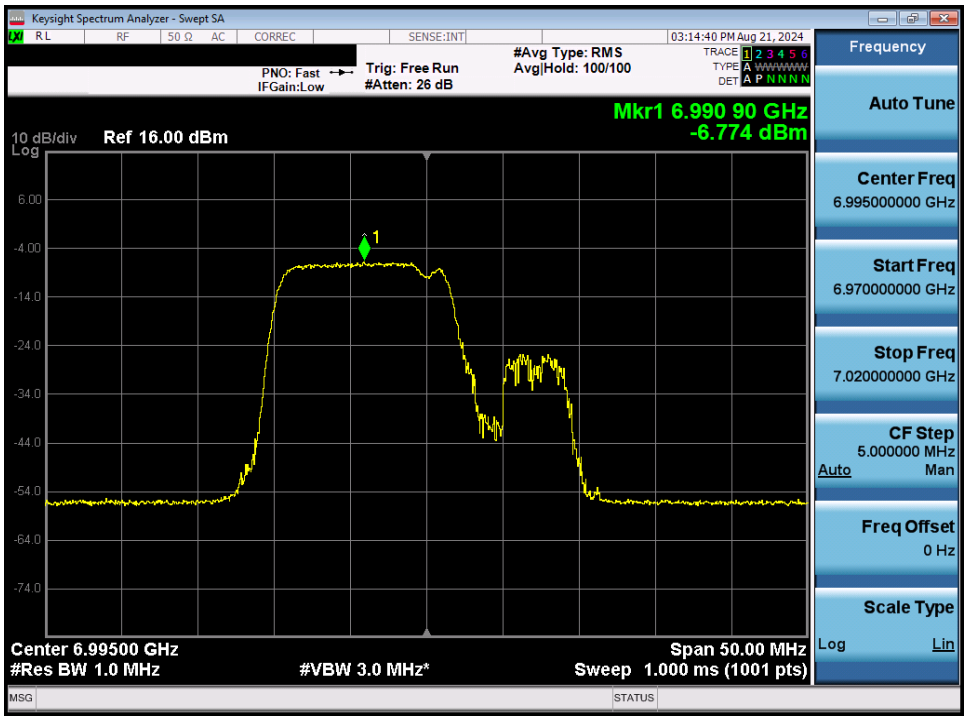
Plot 7-176. Power Spectral Density MIMO ANT1 (80MHz BW 802.11be (484+242 Tones) (UNII Band 7) – Ch. 151)



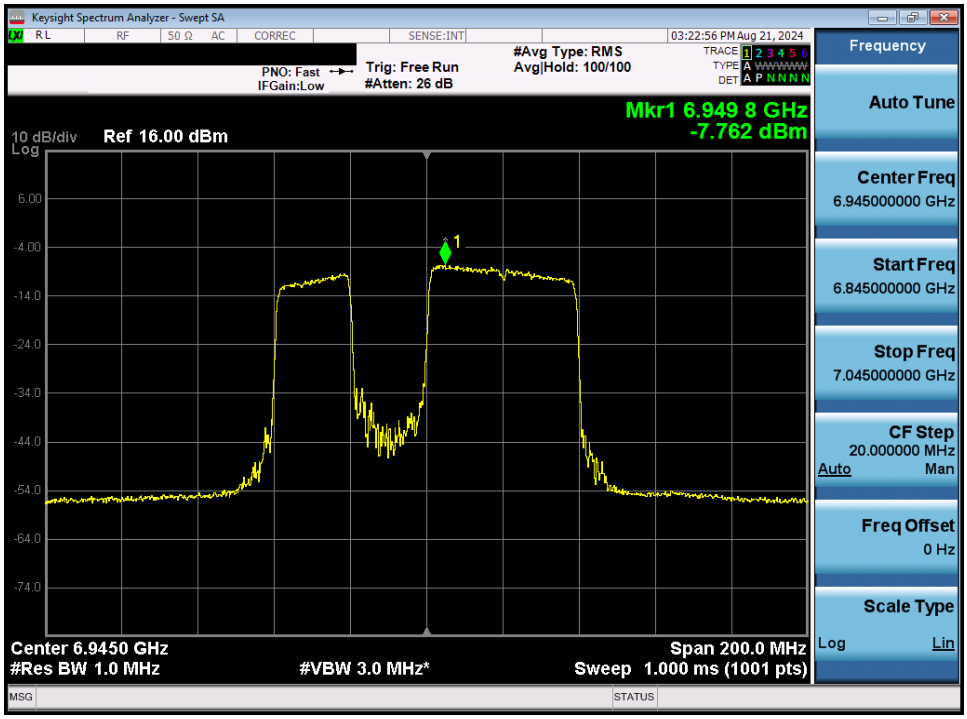
Plot 7-177. Power Spectral Density MIMO ANT1 (160MHz BW 802.11be (996+484 Tones) (UNII Band 7) – Ch. 143)



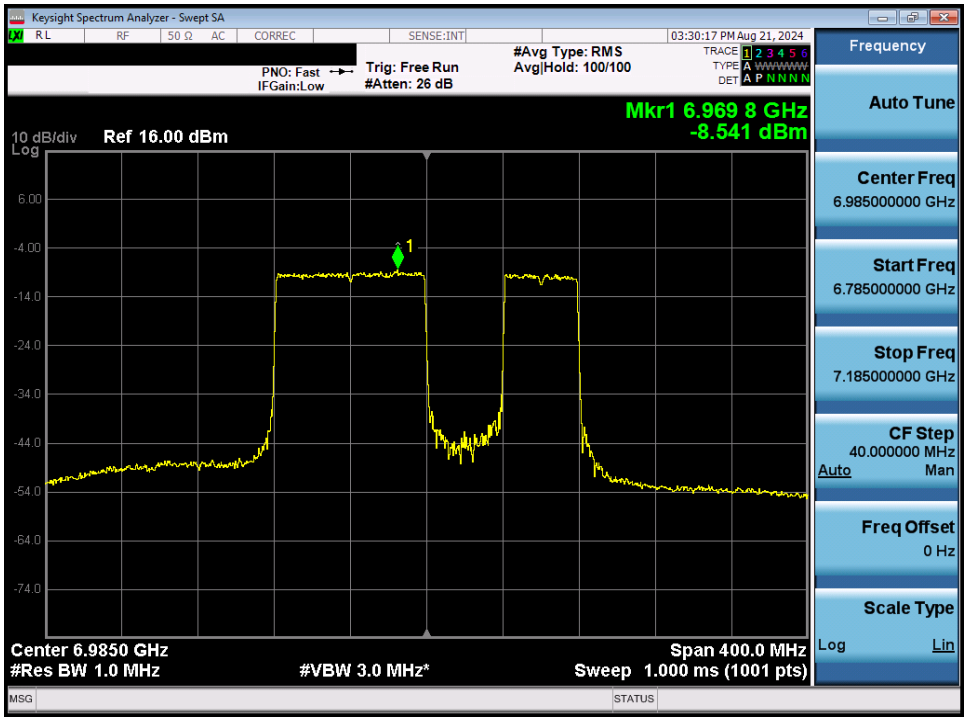
Plot 7-178. Power Spectral Density MIMO ANT1 (320MHz BW 802.11be (2*996+484 Tones) (UNII Band 7) – Ch. 159)



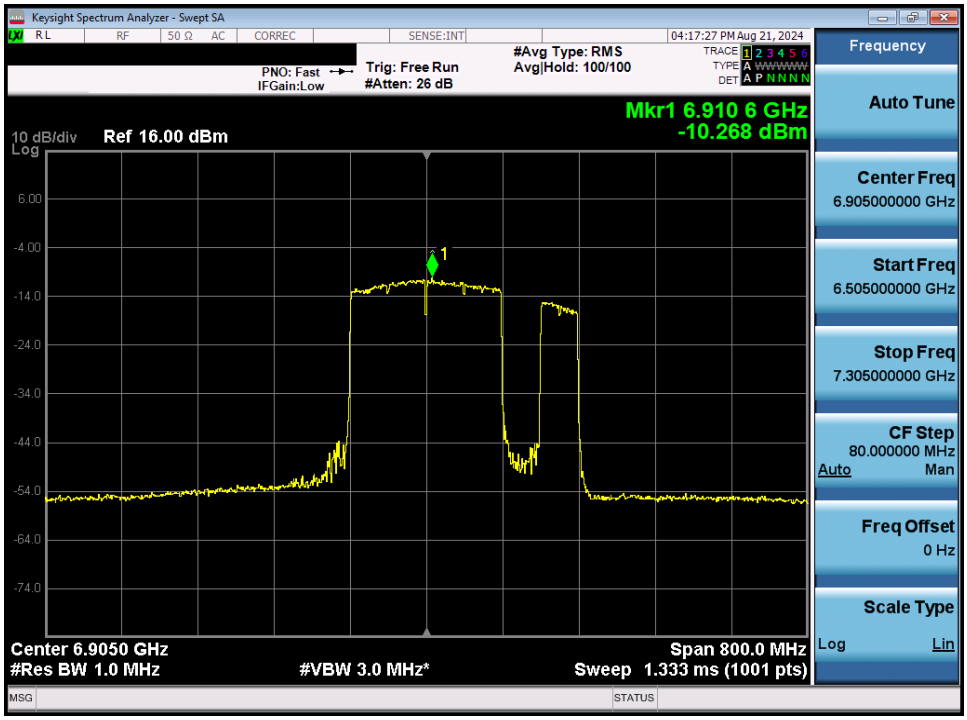
Plot 7-179. Power Spectral Density MIMO ANT1 (20MHz BW 802.11be (106+26 Tones) (UNII Band 8) – Ch. 209)



Plot 7-180. Power Spectral Density MIMO ANT1 (80MHz BW 802.11be (484+242 Tones) (UNII Band 8) – Ch. 199)

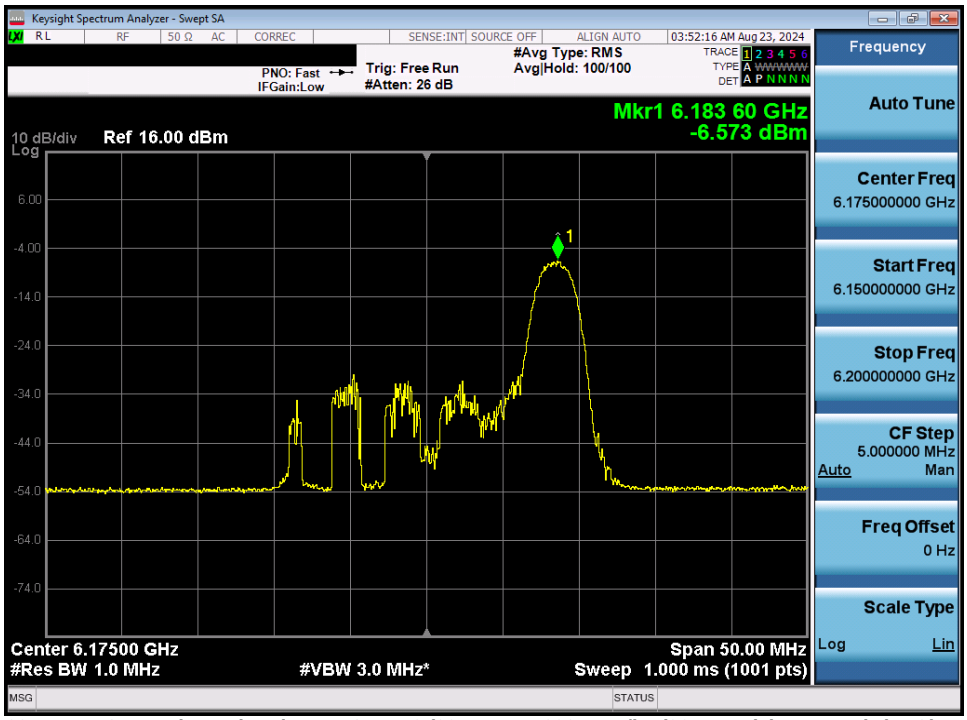


Plot 7-181. Power Spectral Density MIMO ANT1 (160MHz BW 802.11be (996+484 Tones) (UNII Band 8) – Ch. 207)



Plot 7-182. Power Spectral Density MIMO ANT1 (320MHz BW 802.11be (2*996+484 Tones) (UNII Band 8) – Ch. 191)

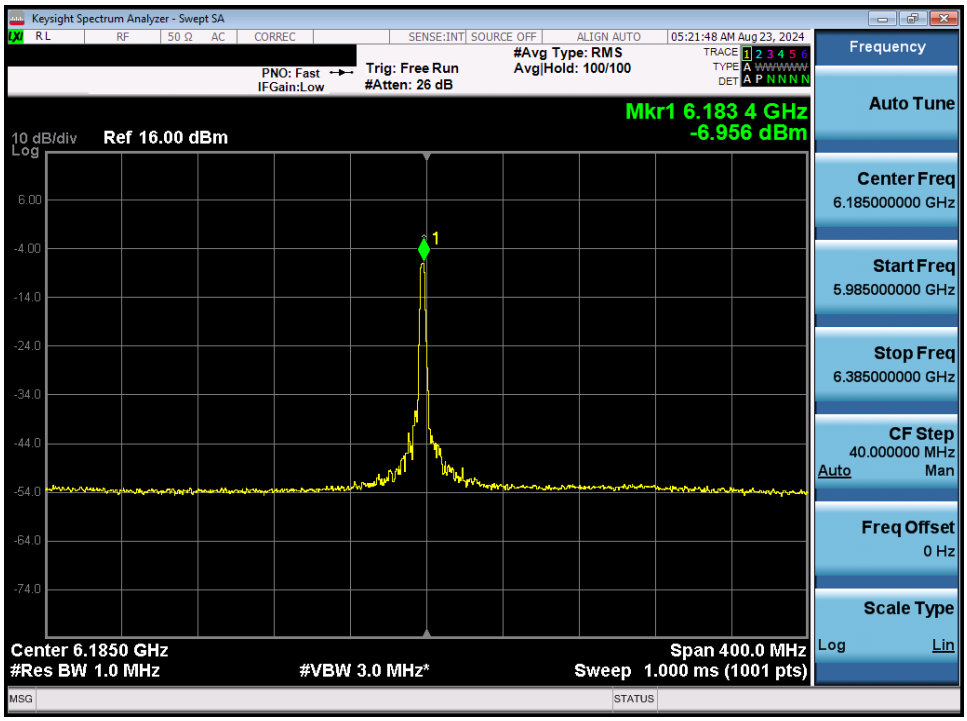
7.4.2 MIMO Antenna-2 Power Spectral Density Measurements



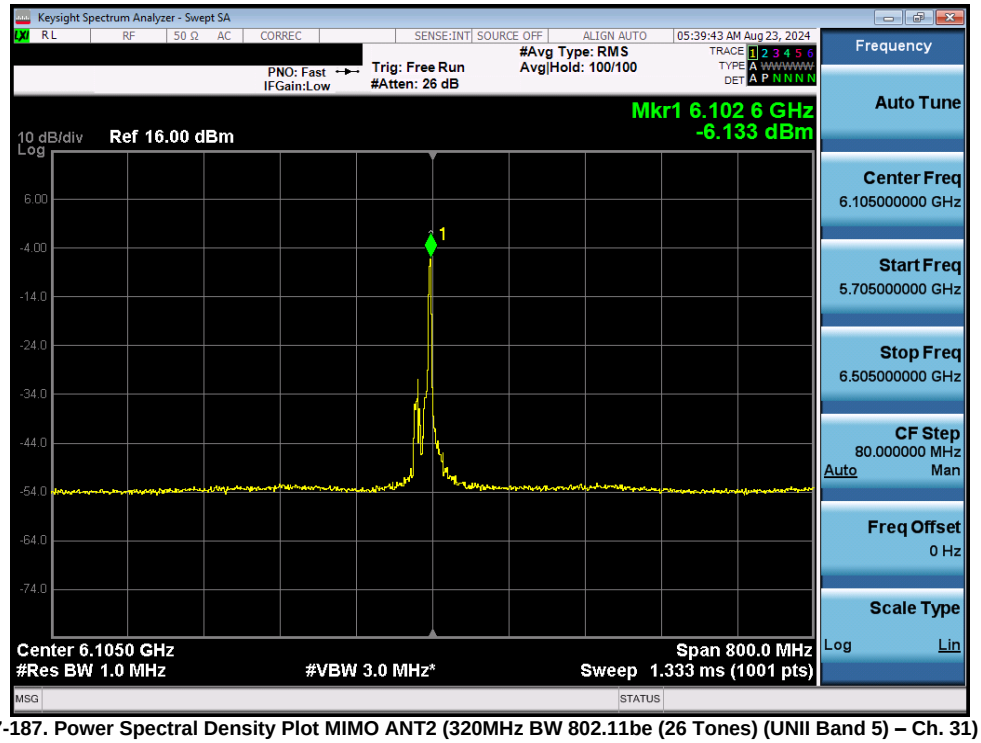
Plot 7-183. Power Spectral Density Plot MIMO ANT2 (20MHz BW 802.11ax/be (26 Tones) (UNII Band 5) – Ch. 45) – LPI

Plot 7-184. Power Spectral Density Plot MIMO ANT2 (40MHz BW 802.11ax/be (26 Tones) (UNII Band 5) – Ch. 43) – LPI

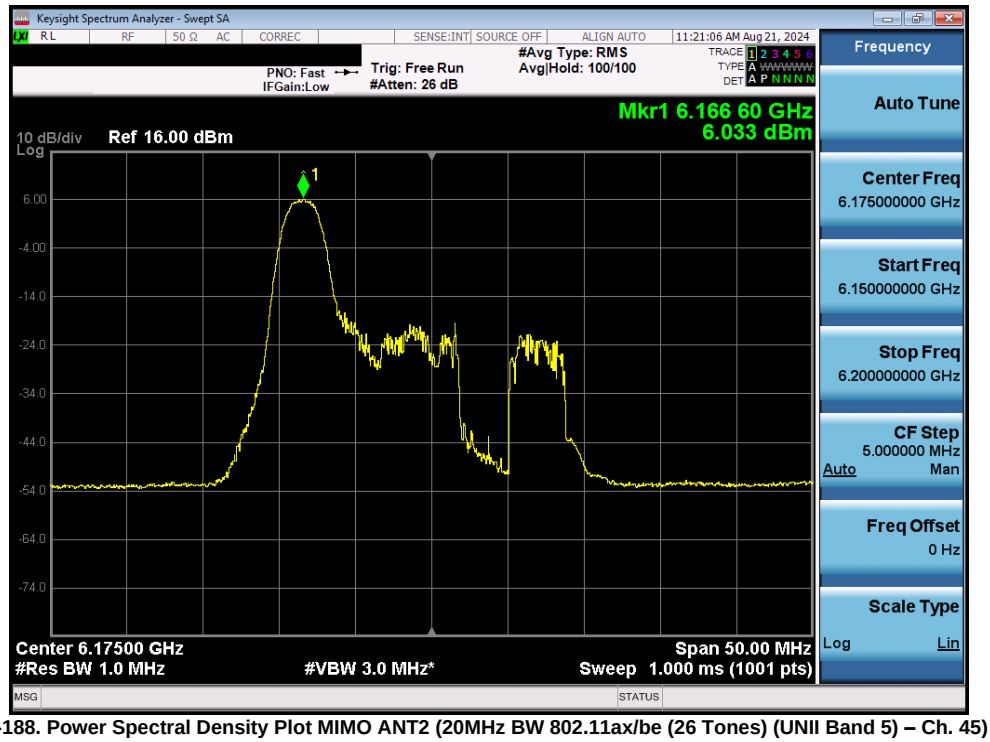
Plot 7-185. Power Spectral Density Plot MIMO ANT2 (80MHz BW 802.11ax/be (26 Tones) (UNII Band 5) – Ch. 39) – LPI



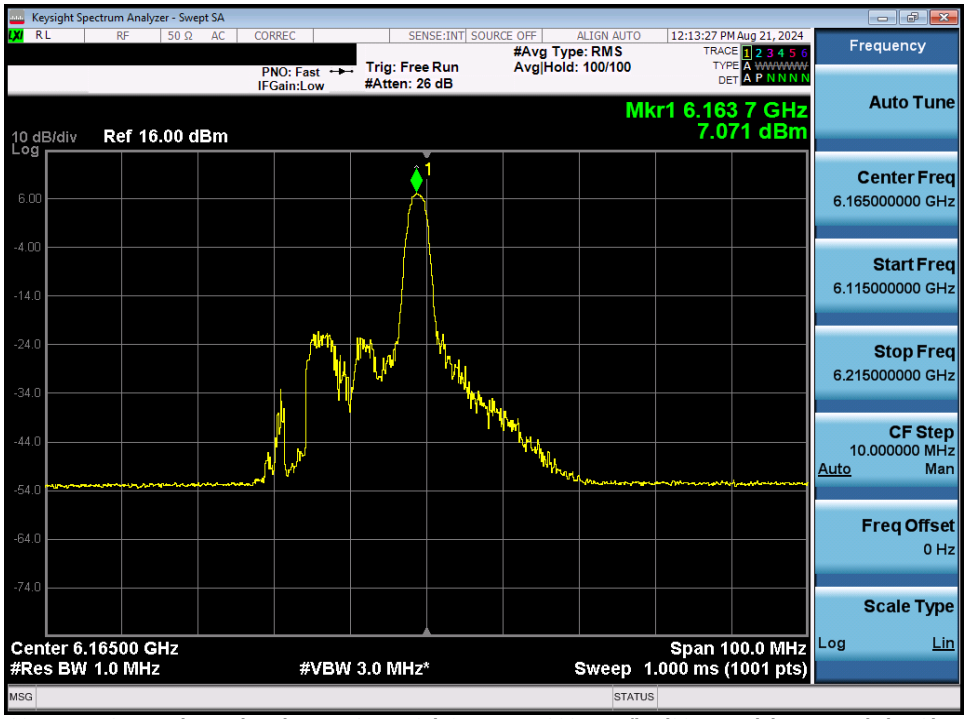
Plot 7-186. Power Spectral Density Plot MIMO ANT2 (160MHz BW 802.11ax/be (26 Tones) (UNII Band 5) – Ch. 47) – LPI



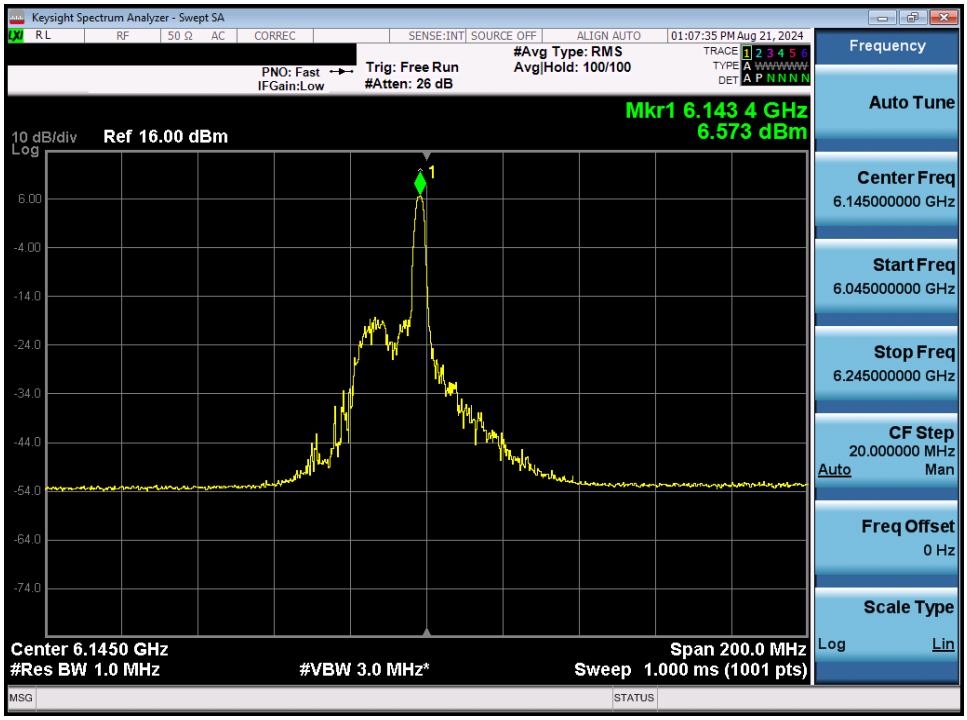
Plot 7-187. Power Spectral Density Plot MIMO ANT2 (320MHz BW 802.11be (26 Tones) (UNII Band 5) – Ch. 31) – LPI



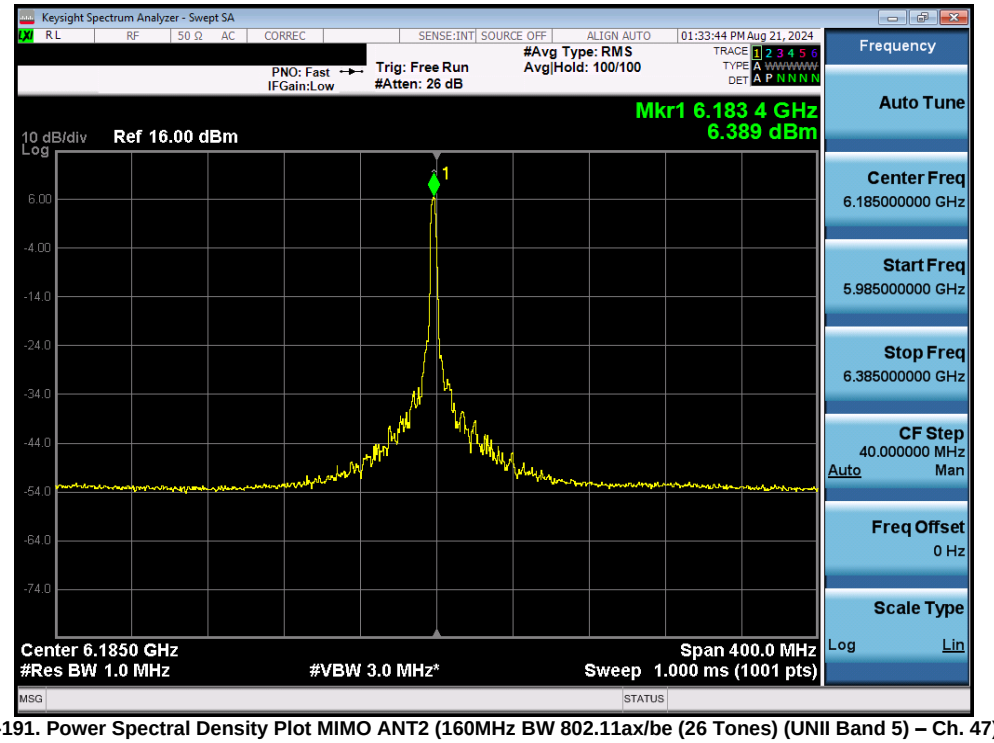
Plot 7-188. Power Spectral Density Plot MIMO ANT2 (20MHz BW 802.11ax/be (26 Tones) (UNII Band 5) – Ch. 45) – SP



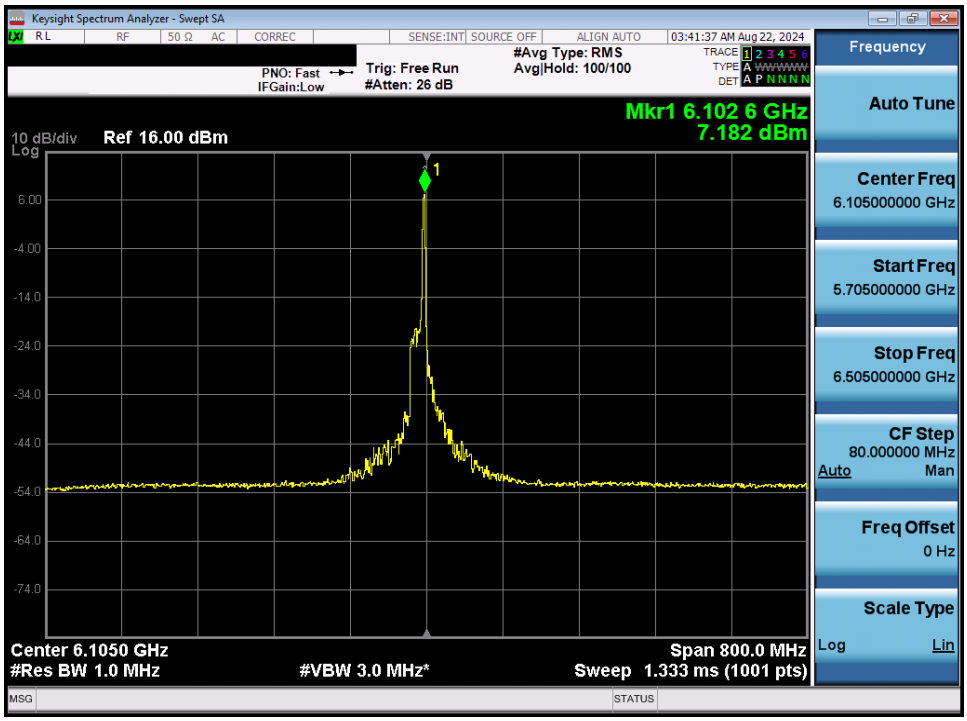
Plot 7-189. Power Spectral Density Plot MIMO ANT2 (40MHz BW 802.11ax/be (26 Tones) (UNII Band 5) – Ch. 43) – SP



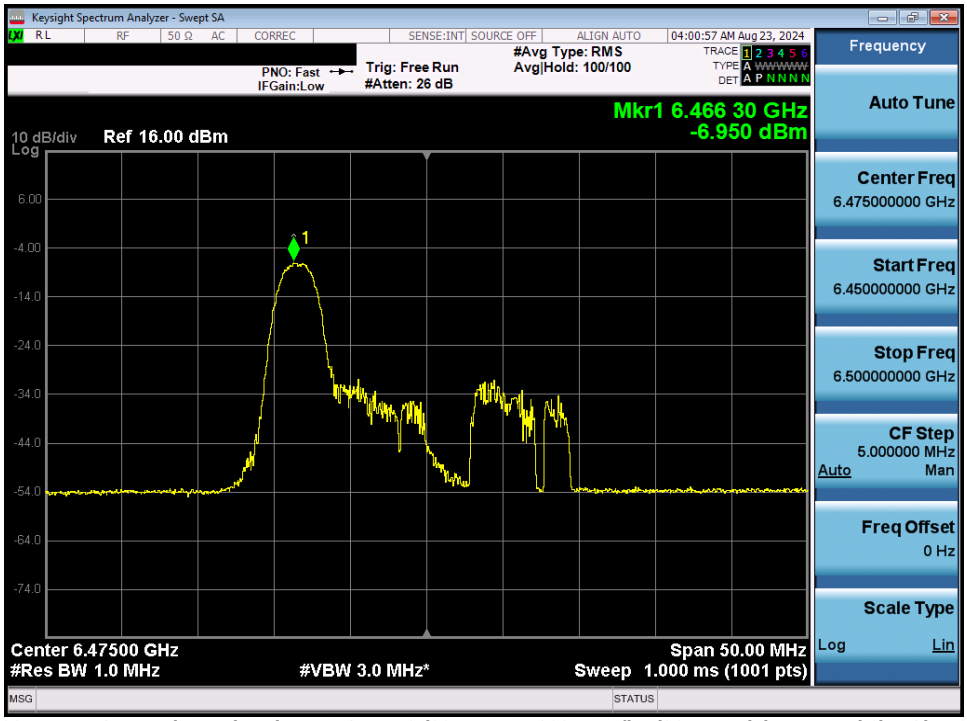
Plot 7-190. Power Spectral Density Plot MIMO ANT2 (80MHz BW 802.11ax/be (26 Tones) (UNII Band 5) – Ch. 39) – SP



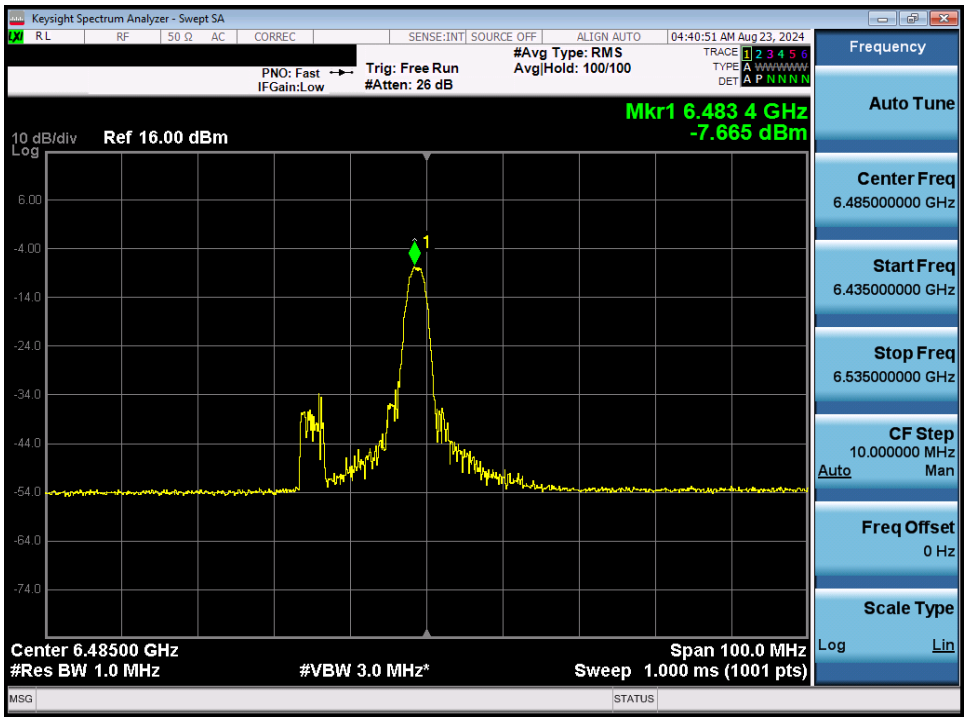
Plot 7-191. Power Spectral Density Plot MIMO ANT2 (160MHz BW 802.11ax/be (26 Tones) (UNII Band 5) – Ch. 47) – SP



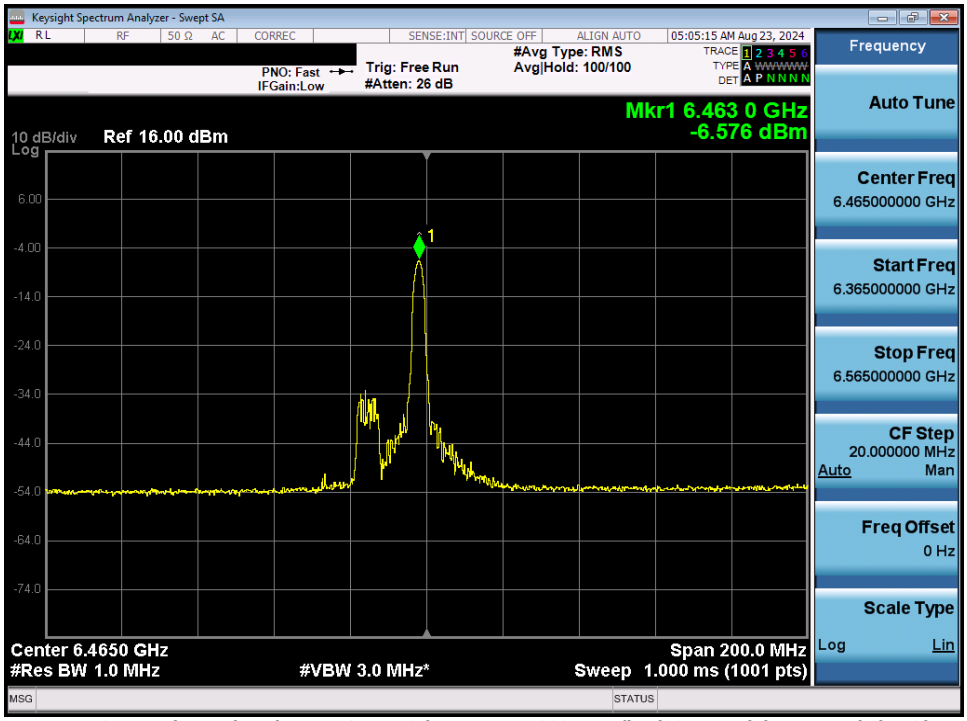
Plot 7-192. Power Spectral Density Plot MIMO ANT2 (320MHz BW 802.11be (26 Tones) (UNII Band 5) – Ch. 31) – SP



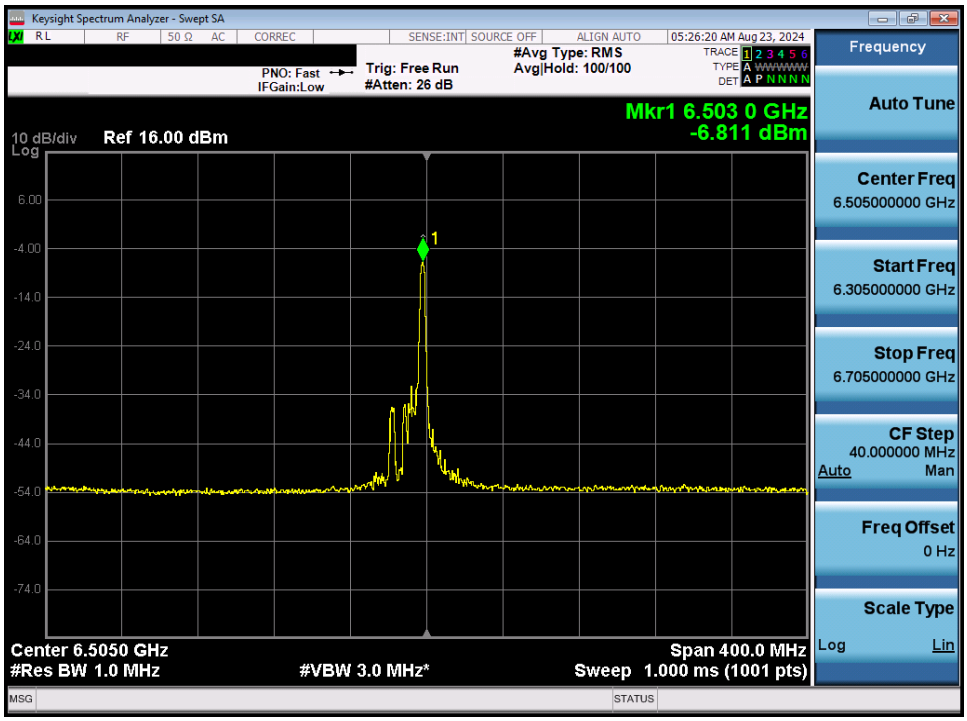
Plot 7-193. Power Spectral Density Plot MIMO ANT2 (20MHz BW 802.11ax/be (26 Tones) (UNII Band 6) – Ch. 105) – LPI



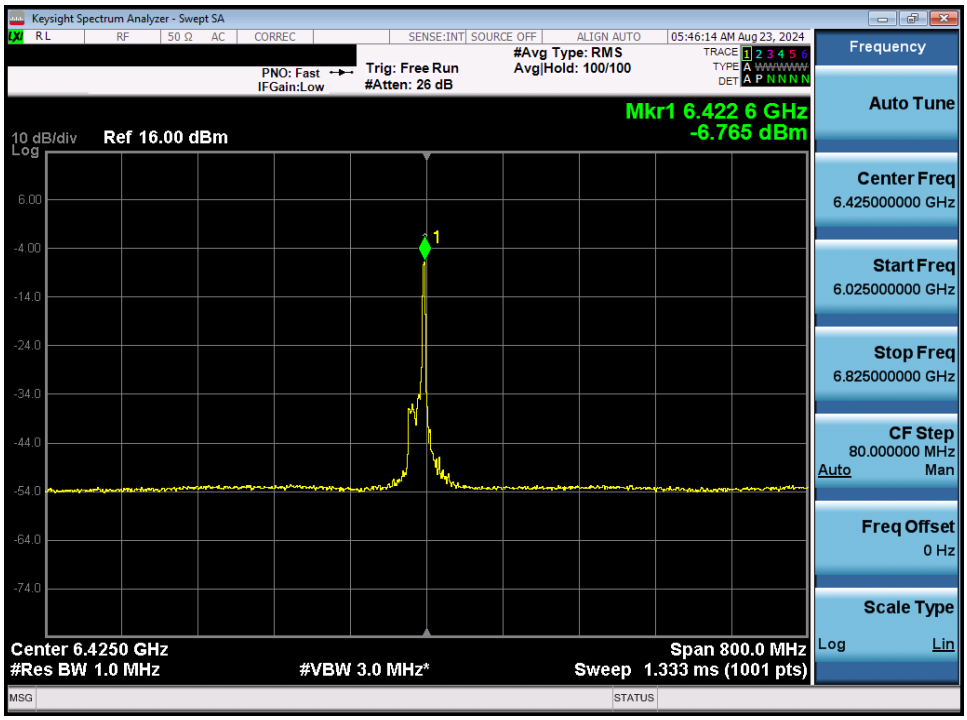
Plot 7-194. Power Spectral Density Plot MIMO ANT2 (40MHz BW 802.11ax/be (26 Tones) (UNII Band 6) – Ch. 107) – LPI



Plot 7-195. Power Spectral Density Plot MIMO ANT2 (80MHz BW 802.11ax/be (26 Tones) (UNII Band 6) – Ch. 103) – LPI

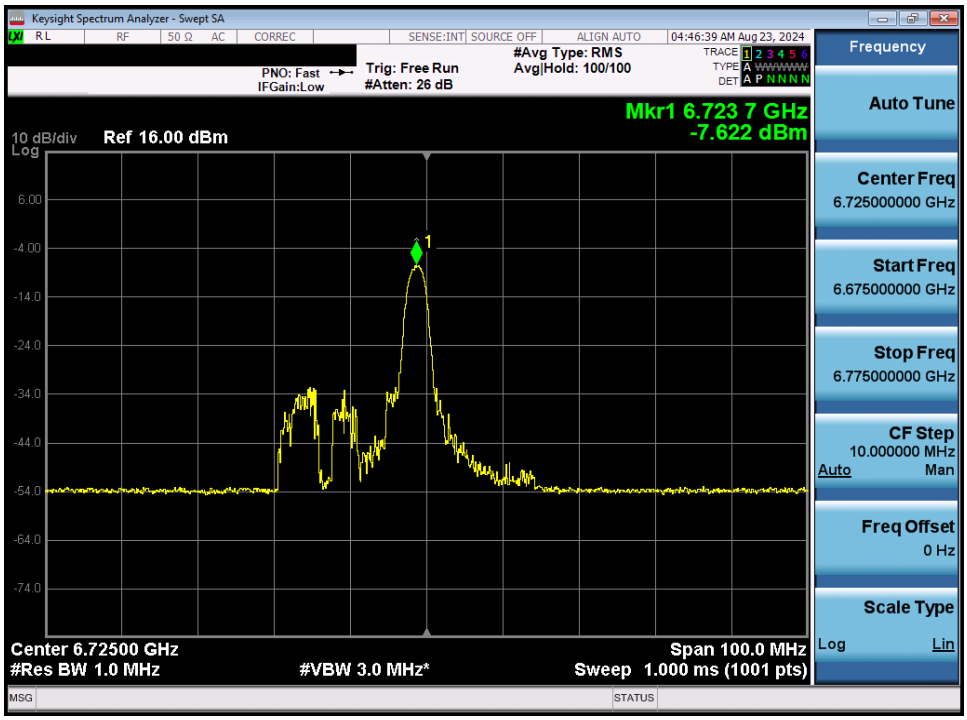


Plot 7-196. Power Spectral Density Plot MIMO ANT2 (160MHz BW 802.11ax/be (26 Tones) (UNII Band 6) – Ch. 111) – LPI

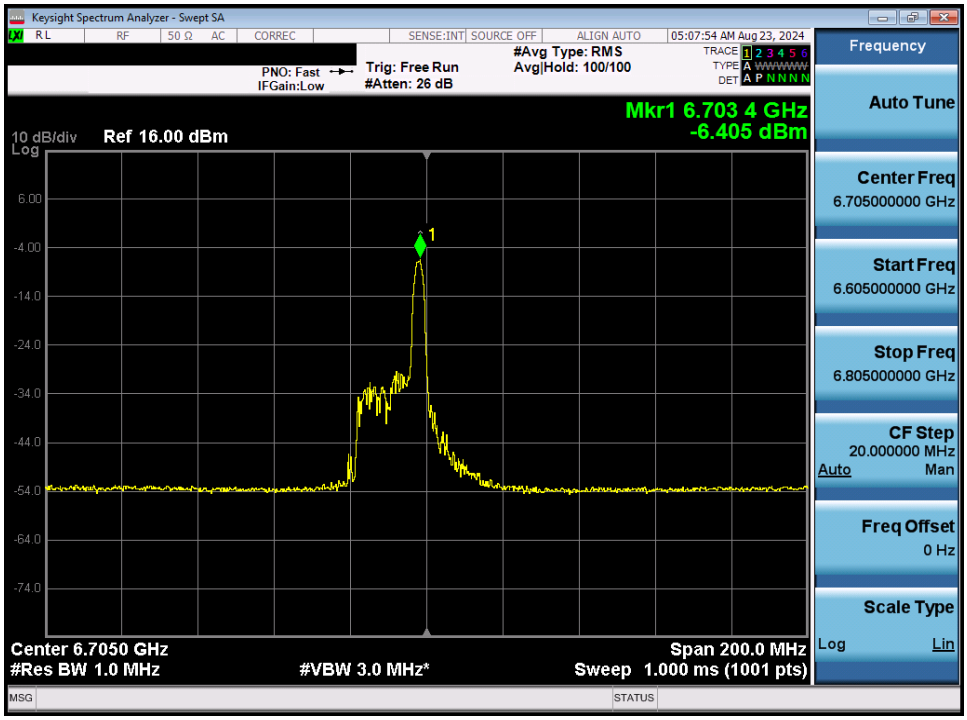


Plot 7-197. Power Spectral Density Plot MIMO ANT2 (320MHz BW 802.11be (26 Tones) (UNII Band 6) – Ch. 95) – LPI

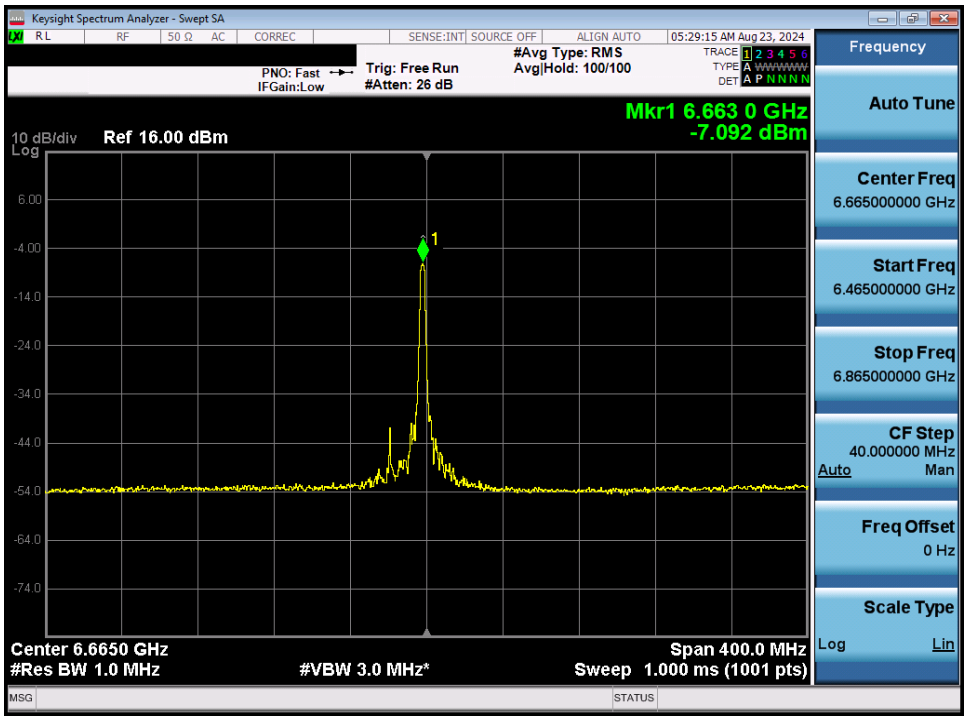
Plot 7-198. Power Spectral Density Plot MIMO ANT2 (20MHz BW 802.11ax/be (26 Tones) (UNII Band 7) – Ch. 149) – LPI



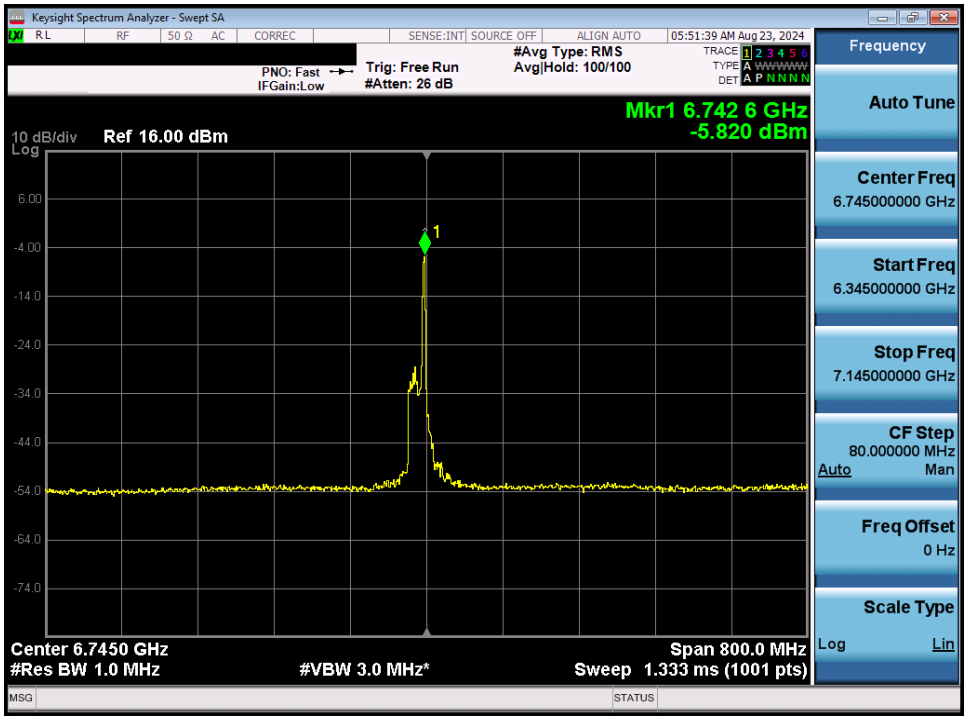
Plot 7-199. Power Spectral Density Plot MIMO ANT2 (40MHz BW 802.11ax/be (26 Tones) (UNII Band 7) – Ch. 155) – LPI



Plot 7-200. Power Spectral Density Plot MIMO ANT2 (80MHz BW 802.11ax/be (26 Tones) (UNII Band 7) – Ch. 151) – LPI



Plot 7-201. Power Spectral Density Plot MIMO ANT2 (160MHz BW 802.11ax/be (26 Tones) (UNII Band 7) – Ch. 143) – LPI



Plot 7-202. Power Spectral Density Plot MIMO ANT2 (320MHz BW 802.11be (26 Tones) (UNII Band 7) – Ch. 159) – LPI