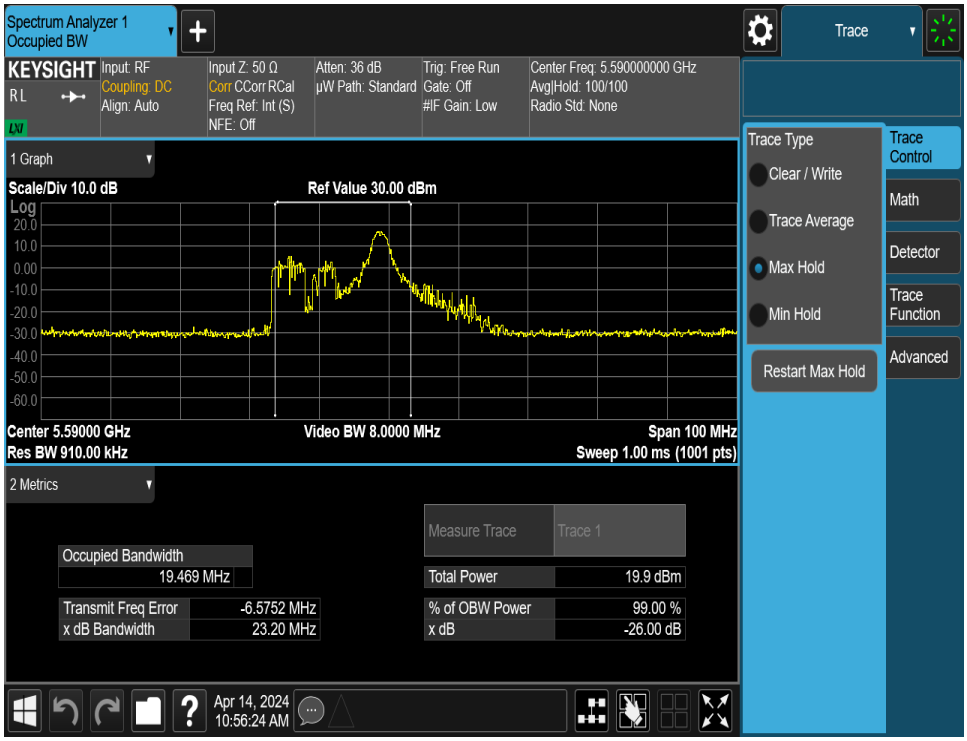
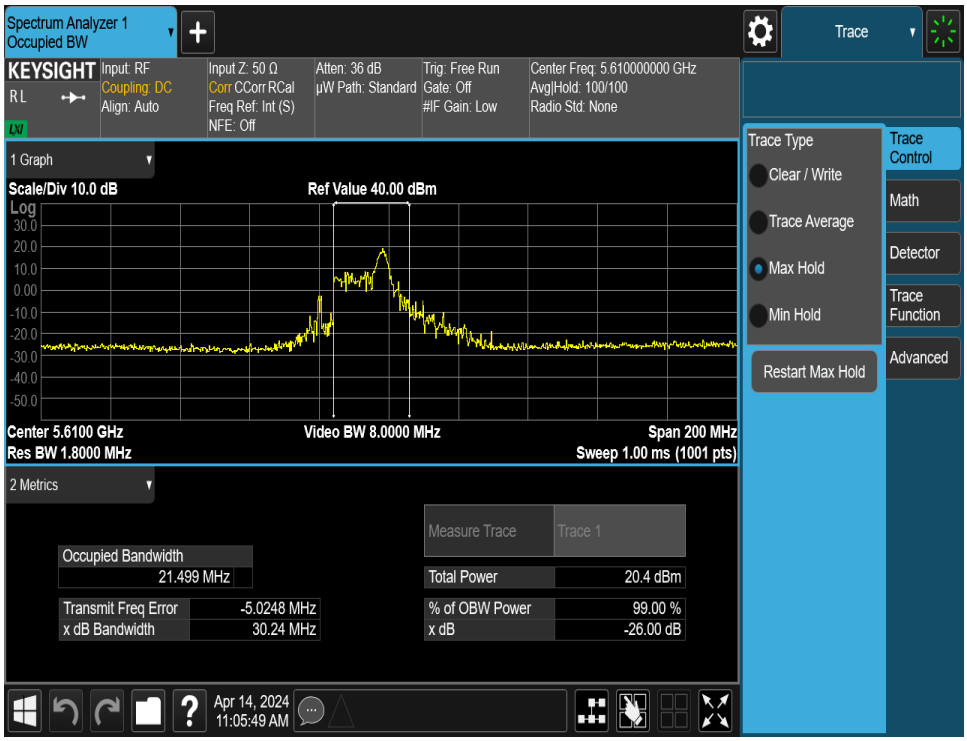


Plot 7-59. 26dB Bandwidth Plot MIMO ANT2 (40MHz BW 802.11be – 26 Tones (UNII Band 2C) – Ch. 118)



Plot 7-60. 26dB Bandwidth Plot MIMO ANT2 (80MHz BW 802.11be – 26 Tones (UNII Band 2C) – Ch. 122)

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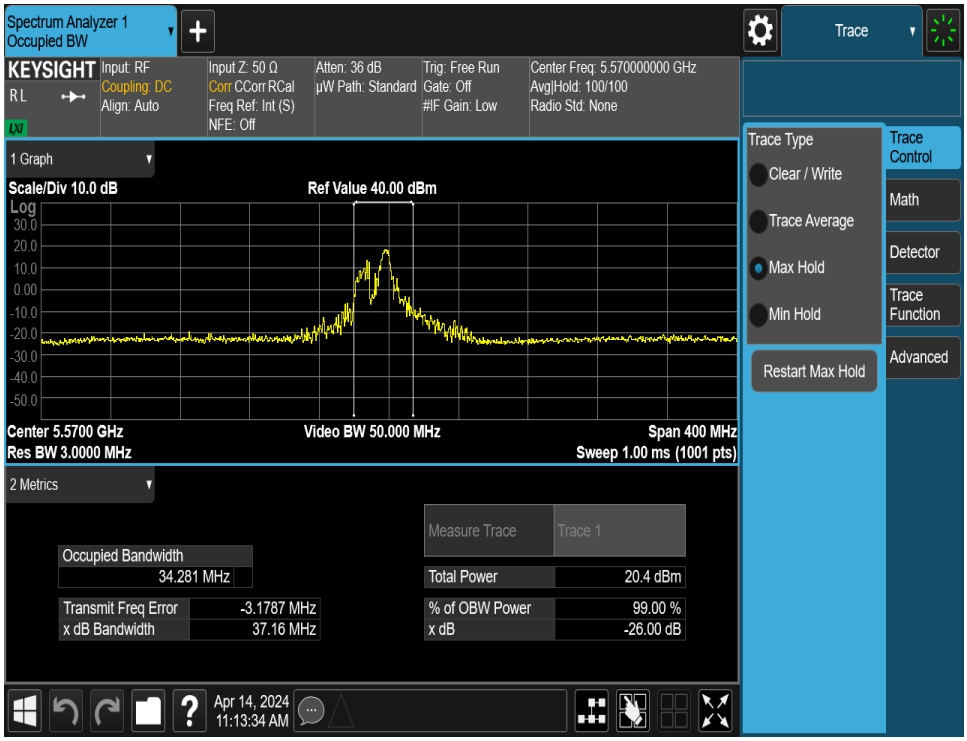
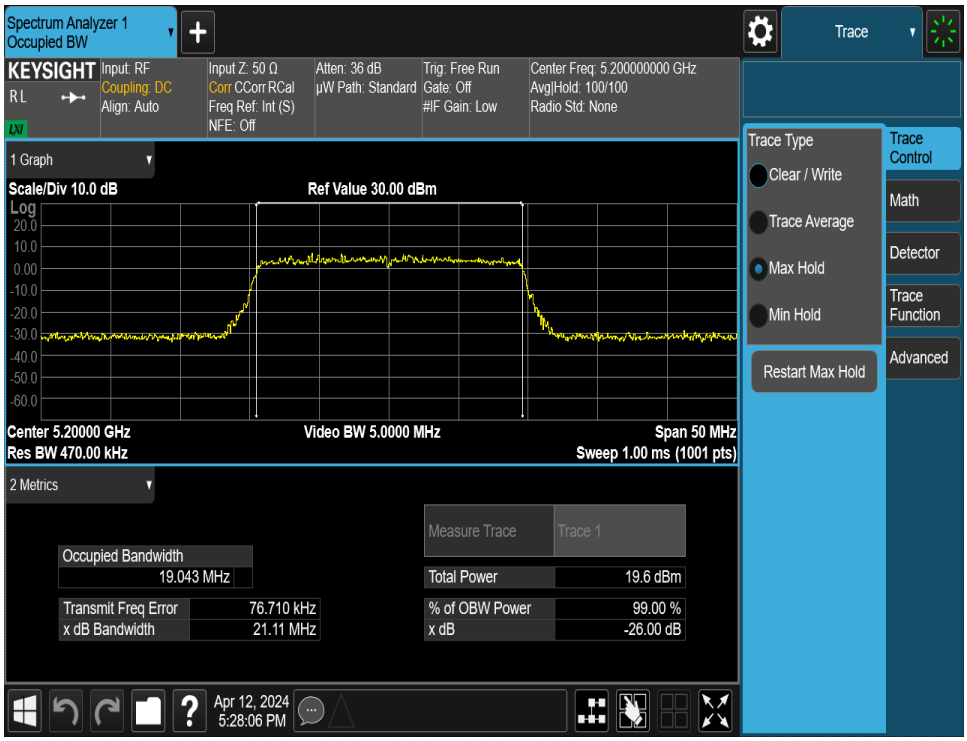


Plot 7-61. 26dB Bandwidth Plot MIMO ANT2 (160MHz BW 802.11be – 26 Tones (UNII Band 2C) – Ch. 114)



Plot 7-62. 26dB Bandwidth Plot MIMO ANT2 (20MHz BW 802.11be – 242 Tones (UNII Band 1) – Ch. 40)

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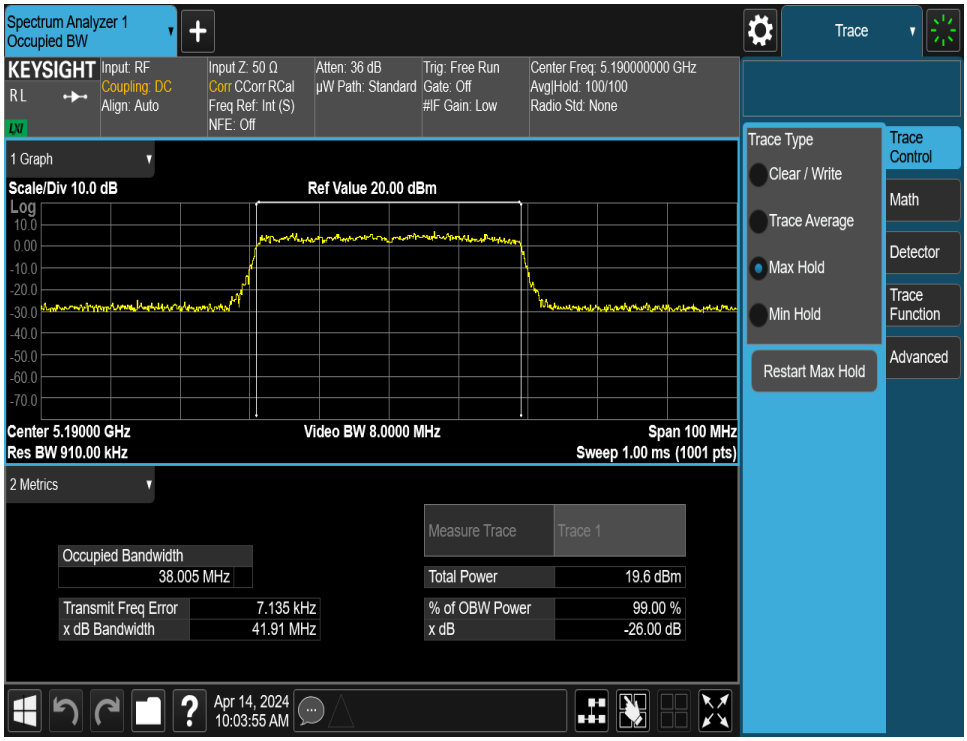

Plot 7-63. 26dB Bandwidth Plot MIMO ANT2 (40MHz BW 802.11be – 484 Tones (UNII Band 1) – Ch. 38)

Plot 7-64. 26dB Bandwidth Plot MIMO ANT2 (80MHz BW 802.11be – 996 Tones (UNII Band 1) – Ch. 42)

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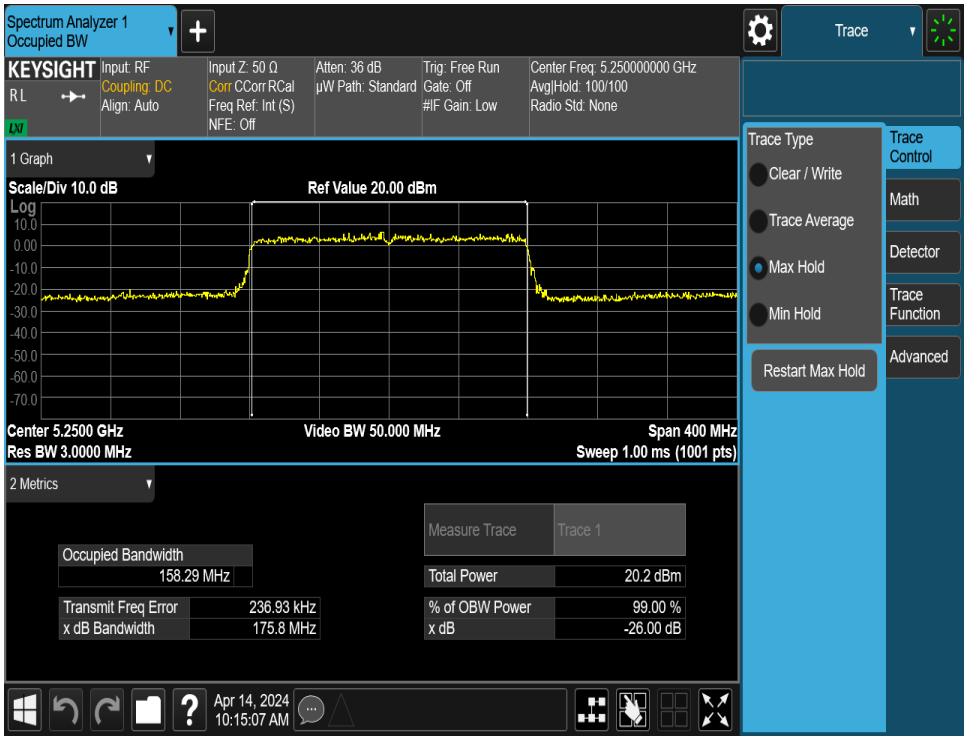
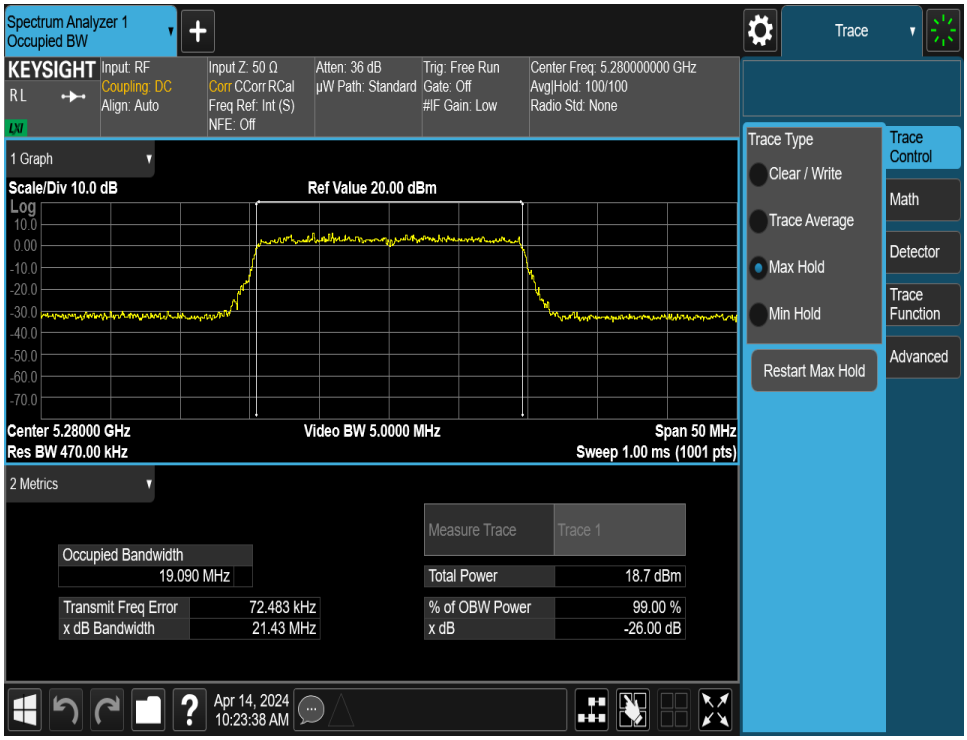


Plot 7-65. 26dB Bandwidth Plot MIMO ANT2 (160MHz BW 802.11be – 2x996 Tones (UNII Band 1/2A) – Ch. 50)



Plot 7-66. 26dB Bandwidth Plot MIMO ANT2 (20MHz BW 802.11be – 242 Tones (UNII Band 2A) – Ch. 56)

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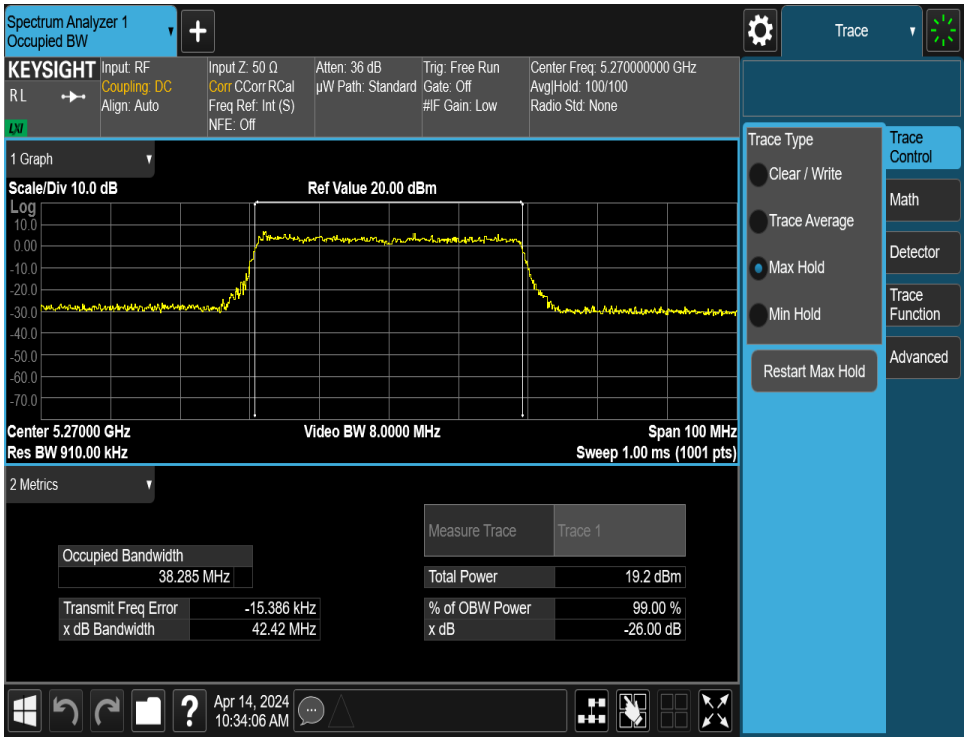
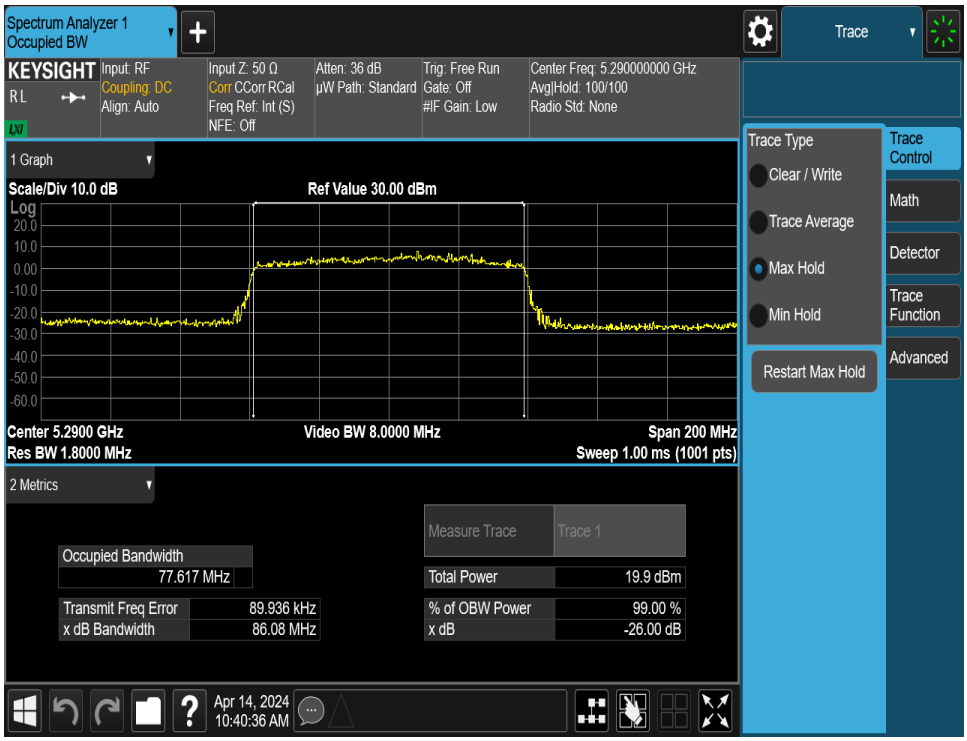


Plot 7-67. 26dB Bandwidth Plot MIMO ANT2 (40MHz BW 802.11be – 484 Tones (UNII Band 2A) – Ch. 54)



Plot 7-68. 26dB Bandwidth Plot MIMO ANT2 (80MHz BW 802.11be – 996 Tones (UNII Band 2A) – Ch. 58)

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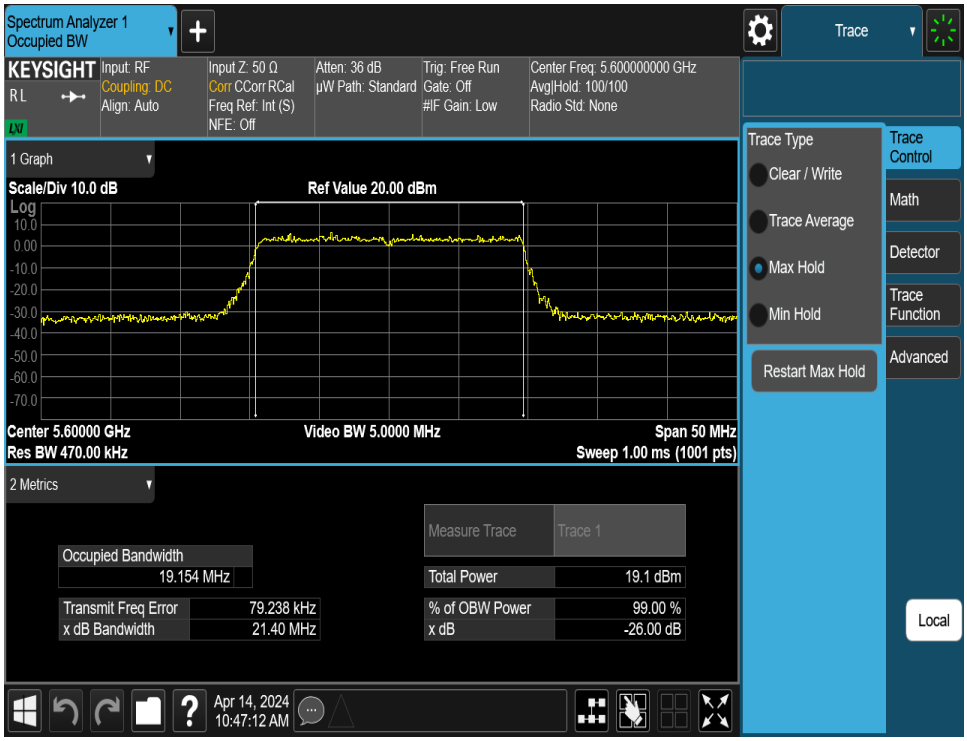

Plot 7-69. 26dB Bandwidth Plot MIMO ANT2 (20MHz BW 802.11be – 242 Tones (UNII Band 2C) – Ch. 120)

Plot 7-70. 26dB Bandwidth Plot MIMO ANT2 (40MHz BW 802.11be – 484 Tones (UNII Band 2C) – Ch. 118)

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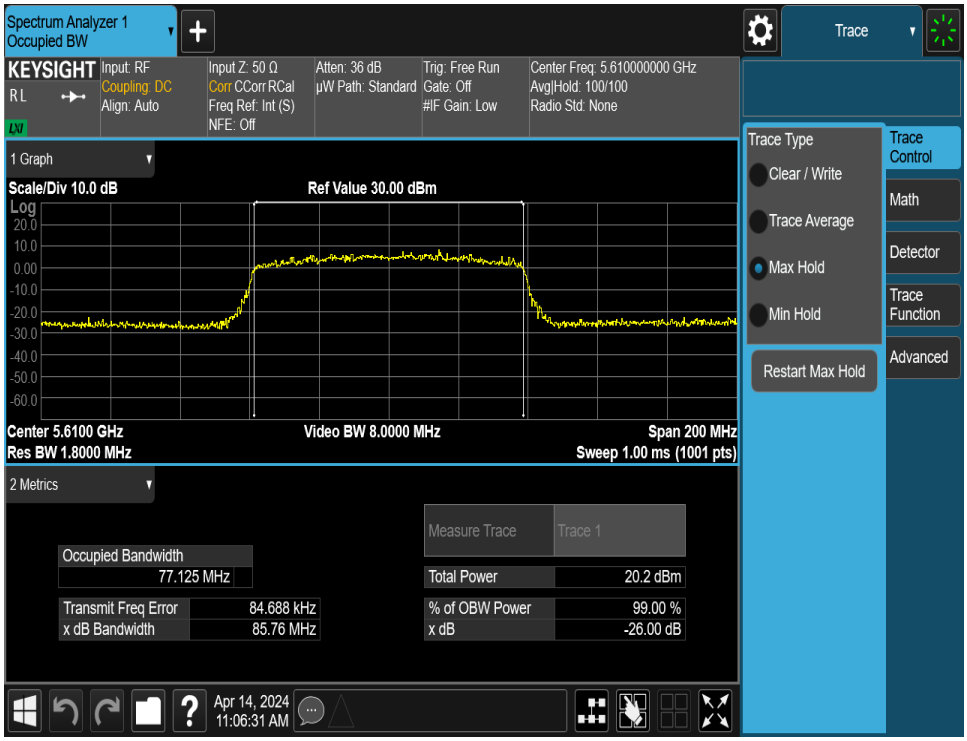
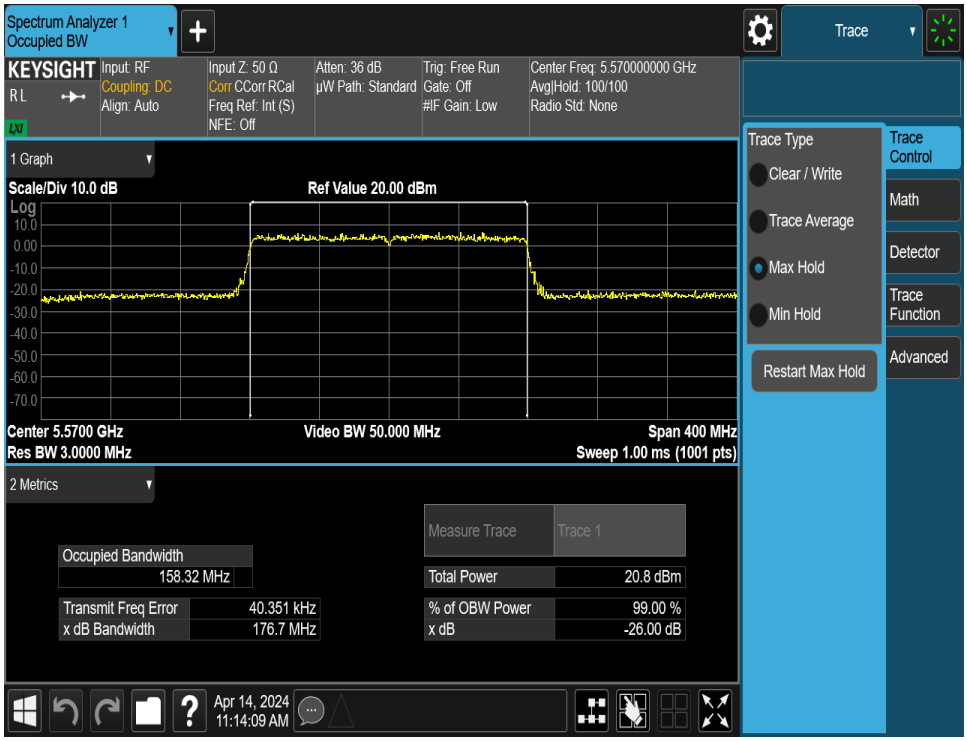


Plot 7-71. 26dB Bandwidth Plot MIMO ANT2 (80MHz BW 802.11be – 996 Tones (UNII Band 2C) – Ch. 122)



Plot 7-72. 26dB Bandwidth Plot MIMO ANT2 (160MHz BW 802.11be – 2x996 Tones (UNII Band 2C) – Ch. 114)

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7.4 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.

The output power limits are specified in the tables below.

UNII Band	Frequency Range	Maximum Conducted Power Limit		Maximum e.i.r.p	
		FCC	ISED	FCC	ISED
UNII 1	5.15 – 5.25GHz	23.98dBm (250mW)	N/A	N/A	The lesser of 23.01dBm (200mW) **or** 10dBm + 10log$_{10}$B
UNII 2A	5.25 – 5.35GHz	The lesser of 23.98dBm (250mW) **or** 11dBm + 10log$_{10}$B		N/A	The lesser of 30dBm (1W) **or** 17dBm + 10log$_{10}$B
UNII 2C	5.47 – 5.725GHz				
UNII 3	5.725 – 5.850GHz	30dBm (1W)		N/A	N/A
UNII 4	5.850 – 5.895GHz	N/A		30dBm (1W)	30dBm (1W)

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 7-3. Test Instrument & Measurement Setup

Test Notes

None.

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MIMO Conducted Output Power Measurements

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	Conducted Power Limit [dBm]	Conducted Power Margin [dB]	Dir. Ant. Gain [dBi]	Max e.i.r.p [dBm]	e.i.r.p Limit [dBm]	e.i.r.p Margin [dB]
1	5180	36	26T	5.06	5.60	8.35	5.01	5.91	8.49	5.26	5.86	8.58	23.98	-15.40	2.93	11.51	30.0	-18.49
	5200	40	26T	5.01	5.78	8.42	5.01	5.99	8.54	5.36	5.86	8.63	23.98	-15.35	2.93	11.56	30.0	-18.44
	5240	48	26T	5.20	5.93	8.59	5.09	5.99	8.57	5.38	5.65	8.53	23.98	-15.39	2.93	11.52	30.0	-18.48
2A	5260	52	26T	5.22	5.59	8.42	5.06	5.84	8.48	5.24	5.57	8.42	23.98	-15.50	2.86	11.34	30.0	-18.66
	5280	56	26T	5.54	5.99	8.78	4.94	5.91	8.46	5.81	5.99	8.91	23.98	-15.07	2.86	11.77	30.0	-18.23
	5320	64	26T	5.30	5.96	8.65	4.62	5.72	8.22	5.45	5.83	8.65	23.98	-15.33	2.86	11.52	30.0	-18.48
2C	5500	100	26T	5.69	5.42	8.57	5.63	5.94	8.80	5.99	5.49	8.76	23.98	-15.18	3.07	11.87	30.0	-18.13
	5600	120	26T	5.15	5.42	8.30	5.15	5.99	8.60	4.90	5.11	8.02	23.98	-15.38	3.07	11.67	30.0	-18.33
	5720	144	26T	5.54	5.92	8.74	5.07	5.88	8.50	5.51	5.38	8.46	23.98	-15.24	3.07	11.82	30.0	-18.18
3	5745	149	26T	5.64	5.77	8.72	5.12	5.89	8.53	5.48	5.46	8.48	30	-21.28	3.16	11.87	36.0	-24.13
	5785	157	26T	5.99	5.48	8.75	5.61	5.50	8.57	5.94	5.14	8.57	30	-21.25	3.16	11.91	36.0	-24.09
	5825	165	26T	4.90	5.44	8.19	4.90	5.98	8.48	5.89	5.99	8.95	30	-21.05	3.16	12.11	36.0	-23.89
4	5845	169	26T	5.75	5.17	8.48	5.91	5.65	8.79	5.99	5.80	8.91	-	-	3.38	12.29	30.0	-17.71
	5865	173	26T	5.59	4.83	8.24	5.68	5.34	8.52	5.92	5.67	8.81	-	-	3.38	12.19	30.0	-17.81
	5885	177	26T	5.66	5.78	8.73	4.56	5.72	8.19	5.48	5.73	8.62	-	-	3.38	12.11	30.0	-17.89

Table 7-8. MIMO 20MHz BW (UNII) Maximum Conducted Output Power (26 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	Conducted Power Limit [dBm]	Conducted Power Margin [dB]	Dir. Ant. Gain [dBi]	Max e.i.r.p [dBm]	e.i.r.p Limit [dBm]	e.i.r.p Margin [dB]
1	5180	36	52T	8.32	9.06	11.72	8.48	9.18	11.85	8.74	9.22	12.00	23.98	-11.98	2.93	14.93	30.0	-15.07
	5200	40	52T	8.35	9.22	11.82	8.48	9.35	11.95	8.82	9.33	12.09	23.98	-11.89	2.93	15.02	30.0	-14.98
	5240	48	52T	8.62	9.09	11.87	8.55	9.07	11.83	8.76	9.05	11.92	23.98	-12.06	2.93	14.85	30.0	-15.15
2A	5260	52	52T	8.52	8.91	11.73	8.39	9.02	11.73	8.71	8.90	11.82	23.98	-12.16	2.86	14.68	30.0	-15.32
	5280	56	52T	8.70	9.30	12.02	8.91	9.45	12.20	8.90	9.45	12.19	23.98	-11.78	2.86	15.06	30.0	-14.94
	5320	64	52T	8.72	9.28	12.02	8.52	9.23	11.90	8.84	9.22	12.04	23.98	-11.94	2.86	14.91	30.0	-15.09
2C	5500	100	52T	9.20	9.05	12.14	9.06	8.99	12.04	9.14	8.74	11.95	23.98	-11.84	3.07	15.21	30.0	-14.79
	5600	120	52T	8.94	9.33	12.15	8.91	9.32	12.13	8.88	8.94	11.92	23.98	-11.83	3.07	15.22	30.0	-14.78
	5720	144	52T	8.69	9.49	12.12	8.12	9.19	11.70	8.59	9.08	11.85	23.98	-11.86	3.07	15.19	30.0	-14.81
3	5745	149	52T	8.76	9.49	12.15	8.15	9.10	11.66	8.64	9.15	11.91	30	-17.85	3.16	15.31	36.0	-20.69
	5785	157	52T	9.09	9.12	12.12	8.81	9.24	12.04	9.41	9.32	12.38	30	-17.62	3.16	15.53	36.0	-20.47
	5825	165	52T	8.90	9.49	12.22	8.56	9.24	11.92	8.69	9.03	11.87	30	-17.78	3.16	15.37	36.0	-20.63
4	5845	169	52T	9.12	9.25	12.20	8.96	9.26	12.12	9.44	9.28	12.37	-	-	3.38	15.75	30.0	-14.25
	5865	173	52T	9.40	9.13	12.28	9.15	9.22	12.20	9.49	9.26	12.39	-	-	3.38	15.77	30.0	-14.23
	5885	177	52T	8.74	9.15	11.96	8.41	9.40	11.94	8.83	9.49	12.18	-	-	3.38	15.57	30.0	-14.43

Table 7-9. MIMO 20MHz BW (UNII) Maximum Conducted Output Power (52 Tones)

Band	Freq [MHz]	Channel	Tones	Average Conducted Power (dBm) RU Index 53 ANT1	53 ANT2	53 MIMO	54 ANT1	54 ANT2	54 MIMO	Conducted Power Limit [dBm]	Conducted Power Margin [dB]	Dir. Ant. Gain [dBi]	Max e.i.r.p [dBm]	e.i.r.p Limit [dBm]	e.i.r.p Margin [dB]
1	5180	36	106T	11.03	11.21	14.13	11.36	11.36	14.37	23.98	-9.61	2.93	17.30	30.0	-12.70
	5200	40	106T	11.03	11.24	14.15	11.36	11.44	14.41	23.98	-9.57	2.93	17.34	30.0	-12.66
	5240	48	106T	11.19	11.28	14.25	11.49	11.43	14.47	23.98	-9.51	2.93	17.40	30.0	-12.60
2A	5260	52	106T	11.24	11.31	14.29	11.52	11.40	14.47	23.98	-9.51	2.86	17.33	30.0	-12.67
	5280	56	106T	11.34	11.41	14.39	11.14	10.96	14.06	23.98	-9.59	2.86	17.25	30.0	-12.75
	5320	64	106T	11.48	11.78	14.64	11.33	11.34	14.35	23.98	-9.34	2.86	17.50	30.0	-12.50
2C	5500	100	106T	11.88	11.33	14.62	11.98	11.09	14.57	23.98	-9.36	3.07	17.70	30.0	-12.30
	5600	120	106T	11.93	11.94	14.95	11.89	11.61	14.76	23.98	-9.03	3.07	18.02	30.0	-11.98
	5720	144	106T	11.68	11.78	14.74	11.56	11.51	14.55	23.98	-9.24	3.07	17.81	30.0	-12.19
3	5745	149	106T	11.58	11.99	14.80	11.98	11.98	14.99	30	-15.01	3.16	18.15	36.0	-17.85
	5785	157	106T	11.53	11.26	14.41	11.97	11.45	14.73	30	-15.27	3.16	17.88	36.0	-18.12
	5825	165	106T	11.52	11.74	14.64	11.64	11.79	14.73	30	-15.27	3.16	17.88	36.0	-18.12
4	5845	169	106T	11.59	11.68	14.65	11.77	11.73	14.76	-	-	3.38	18.14	30.0	-11.86
	5865	173	106T	11.41	11.65	14.54	11.66	11.77	14.73	-	-	3.38	18.11	30.0	-11.89
	5885	177	106T	11.56	11.99	14.79	11.70	11.77	14.75	-	-	3.38	18.17	30.0	-11.83

Table 7-10. MIMO 20MHz BW (UNII) Maximum Conducted Output Power (106 Tones)

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Band	Freq [MHz]	Channel	Tones	Average Conducted Power (dBm) RU Index 61			Conducted Power Limit [dBm]	Conducted Power Margin [dB]	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						
1	5180	36	242T	11.10	11.21	14.17	23.98	-9.81	2.93	17.09	30.0	-12.91
	5200	40	242T	11.09	11.22	14.17	23.98	-9.81	2.93	17.09	30.0	-12.91
	5240	48	242T	11.24	11.26	14.26	23.98	-9.72	2.93	17.19	30.0	-12.81
2A	5260	52	242T	11.28	11.27	14.29	23.98	-9.69	2.86	17.15	30.0	-12.85
	5280	56	242T	11.34	11.35	14.36	23.98	-9.62	2.86	17.22	30.0	-12.78
	5320	64	242T	11.48	11.72	14.61	23.98	-9.37	2.86	17.47	30.0	-12.53
2C	5500	100	242T	11.81	11.13	14.49	23.98	-9.49	3.07	17.57	30.0	-12.43
	5600	120	242T	11.79	11.66	14.74	23.98	-9.24	3.07	17.81	30.0	-12.19
	5720	144	242T	11.56	11.53	14.56	23.98	-9.42	3.07	17.63	30.0	-12.37
3	5745	149	242T	11.38	11.75	14.58	30	-15.42	3.16	17.74	36.0	-18.26
	5785	157	242T	11.91	11.50	14.72	30	-15.28	3.16	17.88	36.0	-18.12
	5825	165	242T	11.64	11.84	14.75	30	-15.25	3.16	17.91	36.0	-18.09
4	5845	169	242T	11.73	11.77	14.76	-	-	3.38	18.14	30.0	-11.86
	5865	173	242T	11.70	11.81	14.77	-	-	3.38	18.15	30.0	-11.85
	5885	177	242T	11.32	11.74	14.55	-	-	3.38	17.93	30.0	-12.07

Table 7-11. MIMO 20MHz BW (UNII) Maximum Conducted Output Power (242 Tones)

Band	Freq [MHz]	Channel	Tones	Average Conducted Power (dBm) RU Index 65			Conducted Power Limit [dBm]	Conducted Power Margin [dB]	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						
1	5190	38	484T	11.32	11.42	14.38	23.98	-9.60	2.93	17.31	30.0	-12.69
	5230	46	484T	11.23	11.50	14.38	23.98	-9.60	2.93	17.31	30.0	-12.69
2A	5270	54	484T	11.61	11.58	14.61	23.98	-9.37	2.86	17.47	30.0	-12.53
	5310	62	484T	11.63	11.98	14.82	23.98	-9.16	2.86	17.68	30.0	-12.32
2C	5510	102	484T	11.67	10.80	14.27	23.98	-9.71	3.07	17.34	30.0	-12.66
	5590	118	484T	11.78	11.48	14.64	23.98	-9.34	3.07	17.71	30.0	-12.29
	5710	142	484T	11.69	11.57	14.64	23.98	-9.34	3.07	17.71	30.0	-12.29
3	5755	151	484T	11.51	11.79	14.66	30	-15.34	3.16	17.82	36.0	-18.18
	5795	159	484T	11.45	11.21	14.34	30	-15.66	3.16	17.50	36.0	-18.50
4	5835	167	484T	11.39	11.70	14.56	-	-	3.38	17.94	30.0	-12.06
	5875	175	484T	11.12	11.47	14.31	-	-	3.38	17.69	30.0	-12.31

Table 7-12. MIMO 40MHz BW (UNII) Maximum Conducted Output Power (484 Tones)

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Band	Freq [MHz]	Channel	Tones	Average Conducted Power (dBm) RU Index 67			Conducted Power Limit [dBm]	Conducted Power Margin [dB]	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						
1	5210	42	996T	11.45	11.58	14.53	23.98	-9.45	2.93	17.45	30.0	-12.55
2A	5290	58	996T	11.16	11.47	14.33	23.98	-9.65	2.86	17.19	30.0	-12.81
2C	5530	106	996T	11.84	11.39	14.63	23.98	-9.35	3.07	17.70	30.0	-12.30
	5610	122	996T	11.79	11.33	14.58	23.98	-9.40	3.07	17.65	30.0	-12.35
	5690	138	996T	11.54	11.01	14.29	23.98	-9.69	3.07	17.36	30.0	-12.64
3	5775	155	996T	11.89	11.62	14.77	30	-15.23	3.16	17.92	36.0	-18.08
4	5855	171	996T	11.46	11.61	14.55	-	-	3.38	17.93	30.0	-12.07

Table 7-13. MIMO 80MHz BW (UNII) Maximum Conducted Output Power (996 Tones)

Band	Freq [MHz]	Channel	Tones	Average Conducted Power (dBm) RU Index 68			Conducted Power Limit [dBm]	Conducted Power Margin [dB]	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						
1/2A	5250	50	2x996T	11.28	11.25	14.28	23.98	-9.70	2.93	17.20	30.0	-12.80
2C	5570	114	2x996T	11.60	11.37	14.50	23.98	-9.48	3.07	17.57	30.0	-12.43
3/4	5815	163	2x996T	11.09	11.18	14.15	-	-	3.38	17.53	30.0	-12.47

Table 7-14. MIMO 160MHz BW (UNII) Maximum Conducted Output Power (2x996 Tones)

Band	Freq [MHz]	Channel	Tones	Average Conducted Power (dBm) MRU Index									Conducted Power Limit [dBm]	Conducted Power Margin [dB]	Dir. Ant. Gain [dBi]	Max e.i.r.p [dBm]	e.i.r.p Limit [dBm]	e.i.r.p Margin [dB]
				70			71			72								
				ANT1	ANT2	MIMO	ANT1	ANT2	MIMO	ANT1	ANT2	MIMO						
1	5200	40	52+26T	8.32	9.23	11.81	8.42	9.31	11.90	8.38	9.47	11.97	23.98	-12.01	2.93	14.90	30.0	-15.10
2A	5280	56	52+26T	8.10	9.10	11.64	8.11	9.14	11.67	8.06	9.46	11.83	23.98	-12.15	2.86	14.69	30.0	-15.31
2C	5600	120	52+26T	8.30	9.37	11.88	8.43	9.30	11.90	8.06	9.28	11.72	23.98	-12.08	3.07	14.97	30.0	-15.03
3	5785	157	52+26T	7.65	8.99	11.38	8.22	9.49	11.91	7.74	9.44	11.68	30	-18.09	3.16	15.07	36.0	-20.93
4	5865	173	52+26T	8.76	9.42	12.11	8.87	9.35	12.13	8.44	9.10	11.79	-	-	3.38	15.51	30.0	-14.49

Table 7-15. MIMO 20MHz BW (UNII) Maximum Conducted Output Power (52 + 26 Tones)

20MHz BW	Band	Freq [MHz]	Channel	Tones	Average Conducted Power (dBm) MRU Index									Conducted Power Limit [dBm]	Conducted Power Margin [dB]	Dir. Ant. Gain [dBi]	Max e.i.r.p [dBm]	e.i.r.p Limit [dBm]	e.i.r.p Margin [dB]
					82			83			NA								
					ANT1	ANT2	MIMO	ANT1	ANT2	MIMO	ANT1	ANT2	MIMO						
	1	5200	40	106+26T	10.53	11.54	14.07	10.61	11.80	14.26				23.98	-9.72	2.93	17.18	30.0	-12.82
	2A	5280	56	106+26T	10.49	11.50	14.03	10.54	11.66	14.15				23.98	-9.83	2.86	17.01	30.0	-12.99
	2C	5600	120	106+26T	10.48	11.50	14.03	10.55	11.59	14.11				23.98	-9.87	3.07	17.18	30.0	-12.82
	3	5785	157	106+26T	10.09	11.77	14.02	10.23	11.99	14.21				30	-15.79	3.16	17.36	36.0	-18.64
	4	5865	173	106+26T	11.48	11.88	14.69	11.13	11.75	14.46				-	-	3.38	18.08	30.0	-11.92

Table 7-16. MIMO 20MHz BW (UNII) Maximum Conducted Output Power (106 + 26 Tones)

Band	Freq [MHz]	Channel	Tones	Average Conducted Power (dBm) MRU Index									Conducted Power Limit [dBm]	Conducted Power Margin [dB]	Dir. Ant. Gain [dBi]	Max e.i.r.p [dBm]	e.i.r.p Limit [dBm]	e.i.r.p Margin [dB]
				90			92			93								
				ANT1	ANT2	MIMO	ANT1	ANT2	MIMO	ANT1	ANT2	MIMO						
1	5210	42	484+242T	11.03	11.77	14.43	11.05	11.74	14.42	11.03	11.76	14.42	23.98	-9.55	2.93	17.35	30.0	-12.65
2A	5290	58	484+242T	11.05	11.65	14.37	11.22	11.76	14.51	11.15	11.80	14.50	23.98	-9.47	2.86	17.37	30.0	-12.63
2C	5530	106	484+242T	11.68	11.74	14.72	11.77	11.87	14.83	11.81	11.83	14.83	23.98	-9.15	3.07	17.90	30.0	-12.10
	5610	122	484+242T	11.50	11.83	14.68	11.55	11.82	14.70	11.52	11.85	14.70	23.98	-9.28	3.07	17.77	30.0	-12.23
	5690	138	484+242T	11.89	11.54	14.73	11.90	11.50	14.71	11.89	11.58	14.75	23.98	-9.23	3.07	17.82	30.0	-12.18
3	5775	155	484+242T	11.50	11.22	14.37	11.71	11.27	14.51	11.67	11.31	14.50	30	-15.49	3.16	17.66	36.0	-18.34
4	5855	171	484+242T	11.44	11.71	14.59	11.45	11.72	14.60	11.49	11.72	14.62	-	-	3.38	18.00	30.0	-12.00

Table 7-17. MIMO 80MHz BW (UNII) Maximum Conducted Output Power (484 + 242 Tones)

Band	Freq [MHz]	Channel	Tones	Average Conducted Power (dBm) MRU Index									Conducted Power Limit [dBm]	Conducted Power Margin [dB]	Dir. Ant. Gain [dBi]	Max e.i.r.p [dBm]	e.i.r.p Limit [dBm]	e.i.r.p Margin [dB]
				94			95			1095								
				ANT1	ANT2	MIMO	ANT1	ANT2	MIMO	ANT1	ANT2	MIMO						
1/2A	5250	50	996+484T	11.04	11.82	14.46	11.02	11.87	14.48	11.03	11.93	14.51	23.98	-9.47	2.93	17.44	30.0	-12.56
2C	5570	114	996+484T	10.82	11.52	14.19	10.88	11.54	14.23	10.84	11.52	14.20	23.98	-9.75	3.07	17.30	30.0	-12.70
3/4	5815	163	996+484T	11.14	11.46	14.31	11.20	11.64	14.44	11.32	11.66	14.50	-	-	3.38	17.89	30.0	-12.11

Table 7-18. MIMO 160MHz BW (UNII) Maximum Conducted Output Power (996 + 484 Tones)

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Note:

Per ANSI C63.10-2013 and KDB 662911 v02r01 Section E)1), the conducted powers at Antenna 1 and Antenna 2 were first measured separately during MIMO transmission as shown in the section above. The measured values were then summed in linear power units then converted back to dBm.

Per ANSI C63.10-2013 Section 14.4.3, the directional gain is calculated using the following formula, where G_N is the gain of the nth antenna and N_{ANT}, 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 MIMO Calculation:

At 5180MHz in 802.11be (20MHz BW 242T) mode, the average conducted output power was measured to be 11.03 dBm for Antenna 1 and 11.21 dBm for Antenna 2.

Antenna 1 + Antenna 2 = MIMO

(11.10 dBm + 11.21 dBm) = (12.88 mW + 13.21 mW) = 26.09 mW = 14.17 dBm

Sample e.i.r.p. Calculation:

At 5180MHz in 802.11be (20MHz BW 242T) mode, the average MIMO conducted power was calculated to be 14.17 dBm with directional gain of 2.93 dBi.

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

14.17 dBm + 2.93 dBi = 17.30 dBm

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7.5 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.

The output power density limits are as specified in the tables below.

UNII Band	Frequency Range	Maximum Power Spectral Density	
		FCC	ISED
UNII 1	5.15 – 5.25GHz	11dBm/MHz	10dBm/MHz e.i.r.p
UNII 2A	5.25 – 5.35GHz	11dBm/MHz	
UNII 2C	5.47 – 5.725GHz		
UNII 3	5.725 – 5.850GHz	30dBm/500kHz	
UNII 4	5.850 – 5.895GHz	14dBm/MHz e.i.r.p	

Test Procedure Used

ANSI C63.10-2013 – Section 12.3.2.2 (Method SA-1)
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 $\geq$ 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 7-4. Test Instrument & Measurement Setup

Test Notes

The power spectral density for each channel was measured with the RU index showing the highest conducted power.

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Summed MIMO Power Spectral Density Measurements

	Frequency [MHz]	802.11 MODE	Channel	Antenna 1 PSD [dBm]	Antenna 2 PSD [dBm]	MIMO Summed PSD [dBm]	Max Conducted PSD [dBm]	Margin [dB]
Band 1	5180	be (20MHz)	36	3.30	3.71	6.52	11.00	-4.48
	5200	be (20MHz)	40	3.24	3.71	6.49	11.00	-4.51
	5240	be (20MHz)	48	3.10	3.56	6.35	11.00	-4.65
	5190	be (40MHz)	38	3.19	4.22	6.75	11.00	-4.25
	5230	be (40MHz)	46	3.00	3.98	6.53	11.00	-4.47
	5210	be (80MHz)	42	2.95	3.43	6.21	11.00	-4.79
Band 1/2A	5250	be (160MHz)	50	3.24	3.71	6.49	11.00	-4.51
Band 2A	5260	be (20MHz)	52	7.80	7.96	10.89	11.00	-0.11
	5280	be (20MHz)	56	8.41	7.49	10.99	11.00	-0.01
	5320	be (20MHz)	64	7.65	7.59	10.63	11.00	-0.37
	5270	be (40MHz)	54	7.56	8.03	10.81	11.00	-0.19
	5310	be (40MHz)	62	6.57	8.90	10.90	11.00	-0.10
	5290	be (80MHz)	58	6.24	9.07	10.89	11.00	-0.11
Band 2C	5500	be (20MHz)	100	8.08	7.53	10.82	11.00	-0.18
	5600	be (20MHz)	120	8.05	7.80	10.93	11.00	-0.07
	5720	be (20MHz)	144	7.99	7.67	10.84	11.00	-0.16
	5510	be (40MHz)	102	7.54	7.35	10.46	11.00	-0.54
	5590	be (40MHz)	118	7.84	7.86	10.86	11.00	-0.14
	5710	be (40MHz)	142	7.65	7.98	10.83	11.00	-0.17
	5530	be (80MHz)	106	8.17	7.73	10.96	11.00	-0.04
	5610	be (80MHz)	122	7.35	7.86	10.62	11.00	-0.38
	5690	be (80MHz)	138	7.84	7.89	10.87	11.00	-0.13
	5570	be (160MHz)	114	7.63	7.95	10.80	11.00	-0.20

Table 7-19. Bands 1, 2A, 2C MIMO Conducted Power Spectral Density Measurements MIMO (26 Tones)

	Frequency [MHz]	802.11 MODE	Channel	Antenna 1 PSD [dBm]	Antenna 2 PSD [dBm]	MIMO Summed PSD [dBm]	Max Conducted PSD [dBm]	Margin [dB]
Band 3	5745	be (20MHz)	149	6.08	6.15	9.13	30.00	-20.87
	5785	be (20MHz)	157	6.30	5.13	8.76	30.00	-21.24
	5825	be (20MHz)	165	6.19	6.01	9.11	30.00	-20.89
	5755	be (40MHz)	151	5.90	6.27	9.10	30.00	-20.90
	5795	be (40MHz)	159	6.66	6.39	9.53	30.00	-20.47
	5775	be (80MHz)	155	5.95	6.11	9.04	30.00	-20.96

Table 7-20. Band 3 MIMO Conducted Power Spectral Density Measurements MIMO (26 Tones)

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	Frequency [MHz]	802.11 MODE	Channel	Antenna 1 PSD [dBm]	Antenna 2 PSD [dBm]	Antenna Gain [dBi]	MIMO Summed EIRP PSD [dBm]	Max EIRP PSD [dBm]	Margin [dB]
Band 3/4	5845	be (20MHz)	169	7.66	7.40	3.38	13.92	14.00	-0.08
Band 4	5865	be (20MHz)	173	7.32	7.28	3.38	13.69	14.00	-0.31
	5885	be (20MHz)	177	7.38	7.68	3.38	13.92	14.00	-0.08
Band 3/4	5835	be (40MHz)	167	7.08	8.01	3.38	13.96	14.00	-0.04
Band 4	5875	be (40MHz)	175	7.25	7.72	3.38	13.88	14.00	-0.12
Band 3/4	5855	be (80MHz)	171	6.88	8.07	3.38	13.91	14.00	-0.09
	5815	be (160MHz)	163	7.49	7.57	3.38	13.92	14.00	-0.08

Table 7-21. Bands 3/4 MIMO Conducted Power Spectral Density Measurements MIMO (26 Tones)

	Frequency [MHz]	802.11 MODE	Channel	Antenna 1 PSD [dBm]	Antenna 2 PSD [dBm]	MIMO Summed PSD [dBm]	Max Conducted PSD [dBm]	Margin [dB]
Band 1	5180	be (20MHz)	36	0.04	0.35	3.21	11.00	-7.79
	5200	be (20MHz)	40	0.56	0.87	3.73	11.00	-7.27
	5240	be (20MHz)	48	0.12	0.60	3.38	11.00	-7.62
	5190	be (40MHz)	38	-2.54	-2.48	0.50	11.00	-10.50
	5230	be (40MHz)	46	-2.91	-2.35	0.39	11.00	-10.61
	5210	be (80MHz)	42	-5.59	-4.43	-1.97	11.00	-12.97
Band 1/2A	5250	be (160MHz)	50	-8.98	-9.27	-6.11	11.00	-17.11
Band 2A	5260	be (20MHz)	52	-0.22	0.03	2.92	11.00	-8.08
	5280	be (20MHz)	56	-0.63	-0.40	2.49	11.00	-8.51
	5320	be (20MHz)	64	-0.36	-0.02	2.82	11.00	-8.18
	5270	be (40MHz)	54	-3.10	-2.94	-0.01	11.00	-11.01
	5310	be (40MHz)	62	-2.68	-2.66	0.34	11.00	-10.66
	5290	be (80MHz)	58	-6.30	-5.02	-2.60	11.00	-13.60
Band 2C	5500	be (20MHz)	100	0.81	-0.09	3.39	11.00	-7.61
	5600	be (20MHz)	120	0.47	0.14	3.32	11.00	-7.68
	5720	be (20MHz)	144	0.67	0.55	3.62	11.00	-7.38
	5510	be (40MHz)	102	-2.74	-3.80	-0.23	11.00	-11.23
	5590	be (40MHz)	118	-2.52	-2.74	0.38	11.00	-10.62
	5710	be (40MHz)	142	-2.13	-2.38	0.76	11.00	-10.24
	5530	be (80MHz)	106	-4.63	-5.94	-2.22	11.00	-13.22
	5610	be (80MHz)	122	-4.95	-5.02	-1.98	11.00	-12.98
	5690	be (80MHz)	138	-4.71	-5.46	-2.06	11.00	-13.06
	5570	be (160MHz)	114	-8.31	-8.45	-5.37	11.00	-16.37

Table 7-22. Bands 1, 2A, 2C MIMO Conducted Power Spectral Density Measurements MIMO (Full Tones)

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	Frequency [MHz]	802.11 MODE	Channel	Antenna 1 PSD [dBm]	Antenna 2 PSD [dBm]	MIMO Summed PSD [dBm]	Max Conducted PSD [dBm]	Margin [dB]
Band 3	5745	be (20MHz)	149	-2.52	-2.27	0.62	30.00	-29.38
	5785	be (20MHz)	157	-1.84	-2.18	1.00	30.00	-29.00
	5825	be (20MHz)	165	-2.15	-1.92	0.98	30.00	-29.02
	5755	be (40MHz)	151	-5.18	-5.28	-2.22	30.00	-32.22
	5795	be (40MHz)	159	-5.13	-5.62	-2.36	30.00	-32.36
	5775	be (80MHz)	155	-7.08	-7.57	-4.31	30.00	-34.31

Table 7-23. Band 3 MIMO Conducted Power Spectral Density Measurements MIMO (Full Tones)

	Frequency [MHz]	802.11 MODE	Channel	Antenna 1 PSD [dBm]	Antenna 2 PSD [dBm]	Antenna Gain [dBi]	MIMO Summed EIRP PSD [dBm]	Max EIRP PSD [dBm]	Margin [dB]
Band 3/4	5845	be (20MHz)	169	0.64	0.36	3.38	6.89	14.00	-7.11
Band 4	5865	be (20MHz)	173	1.04	1.06	3.38	7.44	14.00	-6.56
	5885	be (20MHz)	177	0.70	0.63	3.38	7.05	14.00	-6.95
Band 3/4	5835	be (40MHz)	167	-2.64	-2.70	3.38	3.72	14.00	-10.28
Band 4	5875	be (40MHz)	175	-2.42	-2.27	3.38	4.05	14.00	-9.95
Band 3/4	5855	be (80MHz)	171	-4.32	-4.66	3.38	1.91	14.00	-12.09
	5815	be (160MHz)	163	-8.10	-8.61	3.38	-1.96	14.00	-15.96

Table 7-24. Bands 3/4 MIMO Conducted Power Spectral Density Measurements MIMO (Full Tones)

	Frequency [MHz]	802.11 MODE	Channel	Antenna 1 PSD [dBm]	Antenna 2 PSD [dBm]	MIMO Summed PSD [dBm]	Max Conducted PSD [dBm]	Margin [dB]
Band 1	5200	be (20MHz)	40	2.32	2.94	5.65	11.00	-5.35
Band 2A	5280	be (20MHz)	56	5.20	4.83	8.03	11.00	-2.97
Band 2C	5600	be (20MHz)	120	5.32	5.51	8.43	11.00	-2.57
Band 3	5785	be (20MHz)	157	2.96	3.20	6.09	30.00	-23.91

Table 7-25. Bands 1, 2A, 2C, 3 MIMO Conducted Power Spectral Density Measurements MIMO (52+26T)

	Frequency [MHz]	802.11 MODE	Channel	Antenna 1 PSD [dBm]	Antenna 2 PSD [dBm]	Antenna Gain [dBi]	MIMO Summed EIRP PSD [dBm]	Max EIRP PSD [dBm]	Margin [dB]
Band 4	5865	be (20MHz)	173	5.99	6.33	3.38	12.55	14.00	-1.45

Table 7-26. Band 4 MIMO Conducted Power Spectral Density Measurements MIMO (52+26T)

	Frequency [MHz]	802.11 MODE	Channel	Antenna 1 PSD [dBm]	Antenna 2 PSD [dBm]	MIMO Summed PSD [dBm]	Max Conducted PSD [dBm]	Margin [dB]
Band 1	5200	be (20MHz)	40	3.24	3.72	6.50	11.00	-4.50
Band 2A	5280	be (20MHz)	56	2.94	2.59	5.78	11.00	-5.22
Band 2C	5600	be (20MHz)	120	3.42	3.61	6.53	11.00	-4.47
Band 3	5785	be (20MHz)	157	1.36	0.70	4.05	30.00	-25.95

Table 7-27. Bands 1, 2A, 2C, 3 MIMO Conducted Power Spectral Density Measurements MIMO (26+106T)

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	Frequency [MHz]	802.11 MODE	Channel	Antenna 1 PSD [dBm]	Antenna 2 PSD [dBm]	Antenna Gain [dBi]	MIMO Summed EIRP PSD [dBm]	Max EIRP PSD [dBm]	Margin [dB]
Band 4	5865	be (20MHz)	173	4.01	4.07	3.38	10.43	14.00	-3.57

Table 7-28. Bands 4 MIMO Conducted Power Spectral Density Measurements MIMO (26+106T)

	Frequency [MHz]	802.11 MODE	Channel	Antenna 1 PSD [dBm]	Antenna 2 PSD [dBm]	MIMO Summed PSD [dBm]	Max Conducted PSD [dBm]	Margin [dB]
Band 1	5210	be (80MHz)	42	-3.79	-3.74	-0.75	11.00	-11.75
Band 2A	5290	be (80MHz)	58	-3.49	-3.72	-0.59	11.00	-11.59
Band 2C	5530	be (80MHz)	106	-2.45	-2.53	0.52	11.00	-10.48
	5610	be (80MHz)	122	-2.43	-2.74	0.43	11.00	-10.57
	5690	be (80MHz)	138	-2.75	-3.21	0.04	11.00	-10.96
Band 3	5775	be (80MHz)	155	-5.30	-5.67	-2.47	30.00	-32.47

Table 7-29. Bands 1, 2A, 2C, 3 MIMO Conducted Power Spectral Density Measurements MIMO (242+484T)

	Frequency [MHz]	802.11 MODE	Channel	Antenna 1 PSD [dBm]	Antenna 2 PSD [dBm]	Antenna Gain [dBi]	MIMO Summed EIRP PSD [dBm]	Max EIRP PSD [dBm]	Margin [dB]
Band 3/4	5855	be (80MHz)	171	-2.25	-2.55	3.38	3.99	14.00	-10.01

Table 7-30. Bands 3/4 MIMO Conducted Power Spectral Density Measurements MIMO (242+484T)

	Frequency [MHz]	802.11 MODE	Channel	Antenna 1 PSD [dBm]	Antenna 2 PSD [dBm]	MIMO Summed PSD [dBm]	Max Conducted PSD [dBm]	Margin [dB]
Band 1/2A	5250	be (160MHz)	50	-7.05	-7.02	-4.02	11.00	-15.02
Band 2C	5570	be (160MHz)	114	-7.26	-7.33	-4.28	11.00	-15.28

Table 7-31. Bands 1, 2A, 2C MIMO Conducted Power Spectral Density Measurements MIMO (484+996T)

	Frequency [MHz]	802.11 MODE	Channel	Antenna 1 PSD [dBm]	Antenna 2 PSD [dBm]	Antenna Gain [dBi]	MIMO Summed EIRP PSD [dBm]	Max EIRP PSD [dBm]	Margin [dB]
Band 3/4	5855	be (80MHz)	171	-6.59	-6.64	3.38	-0.22	14.00	-14.22

Table 7-32. Bands 3/4 MIMO Conducted Power Spectral Density Measurements MIMO (484+996T)

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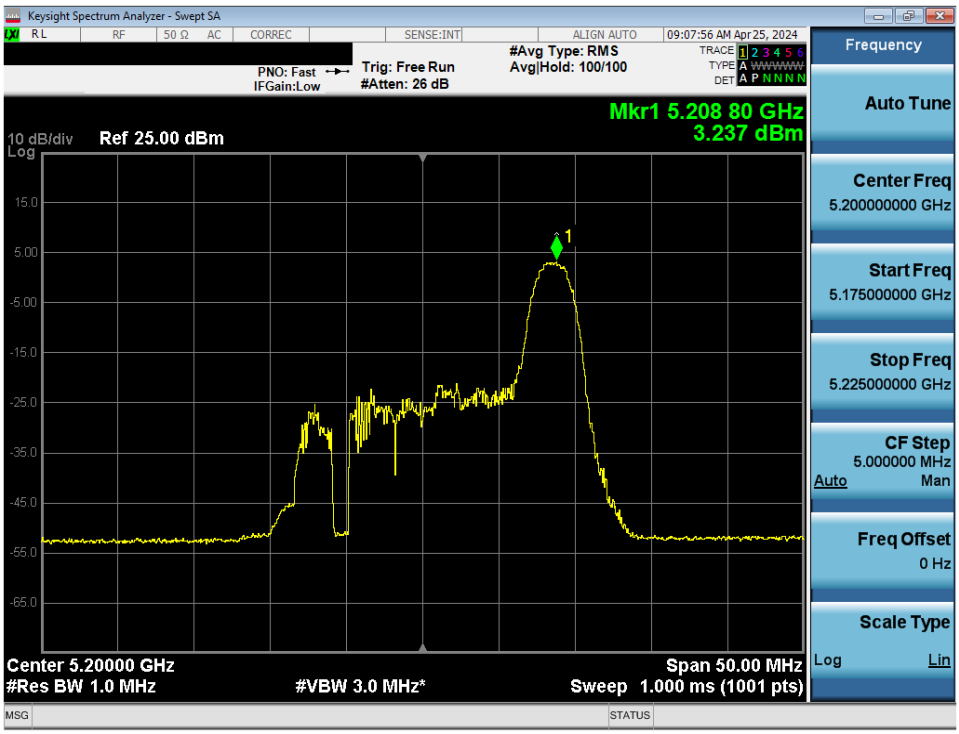
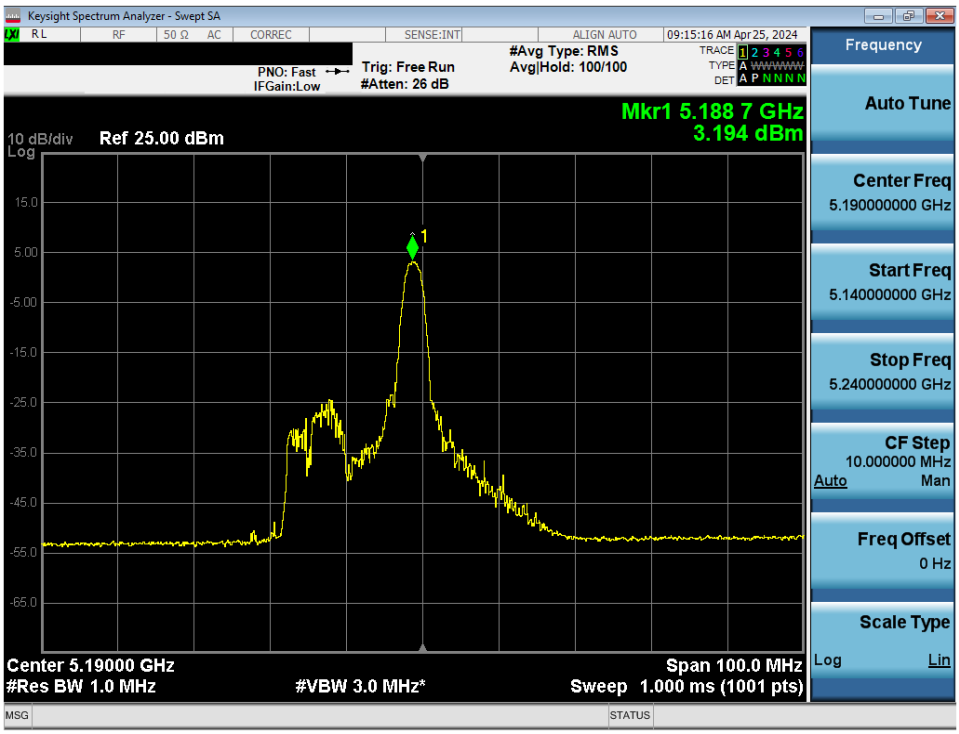
7.5.1 MIMO Antenna-1 Power Spectral Density Measurements



Plot 7-73. Power Spectral Density Plot MIMO ANT1 (20MHz BW 802.11be – 26 Tones (UNII Band 1) – Ch. 40)



Plot 7-74. Power Spectral Density Plot MIMO ANT1 (40MHz BW 802.11be – 26 Tones (UNII Band 1) – Ch. 38)

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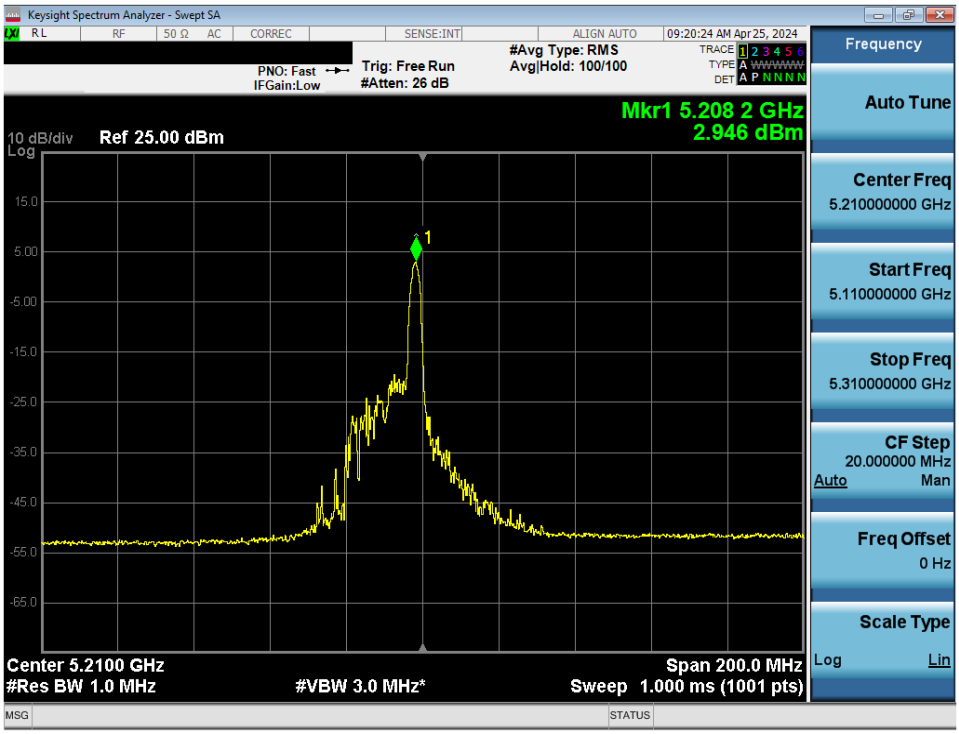
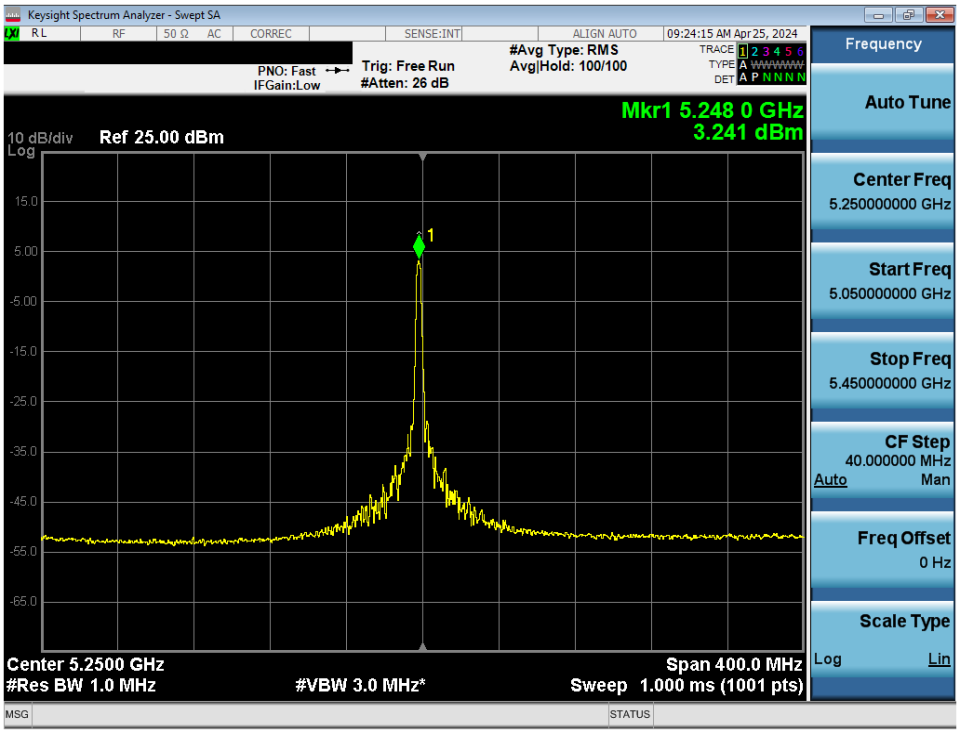


Plot 7-75. Power Spectral Density Plot MIMO ANT1 (80MHz BW 802.11be – 26 Tones (UNII Band 1) – Ch. 42)



Plot 7-76. Power Spectral Density Plot MIMO ANT1 (160MHz BW 802.11be – 26 Tones (UNII Band 1/2A) – Ch. 50)

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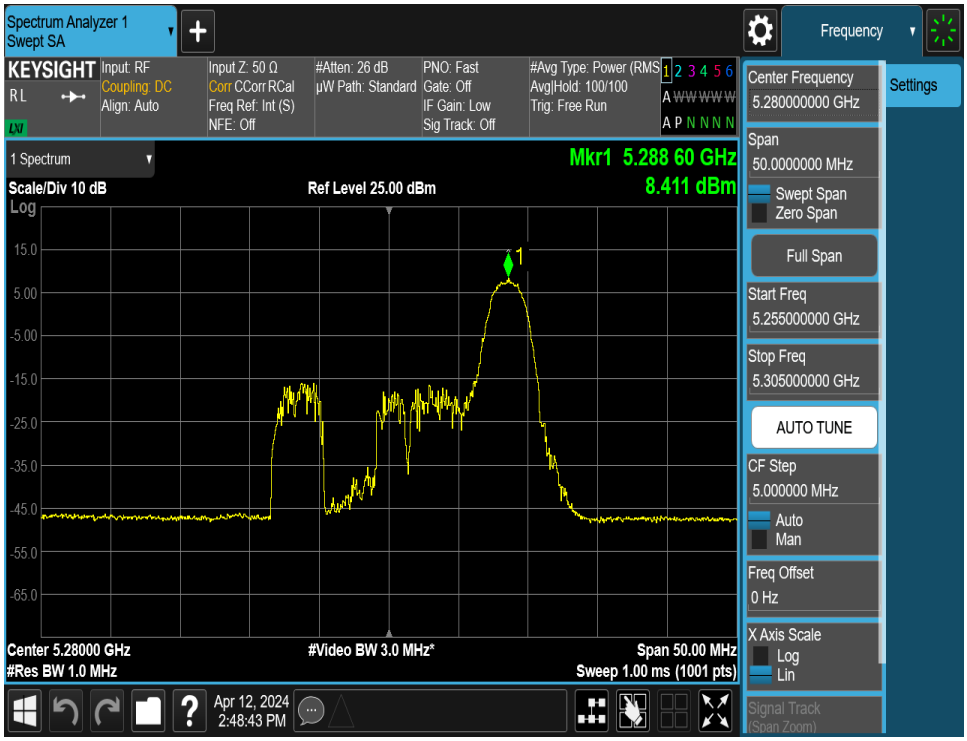

Plot 7-77. Power Spectral Density Plot MIMO ANT1 (20MHz BW 802.11be – 26 Tones (UNII Band 2A) – Ch. 56)

Plot 7-78. Power Spectral Density Plot MIMO ANT1 (40MHz BW 802.11be – 26 Tones (UNII Band 2A) – Ch. 54)

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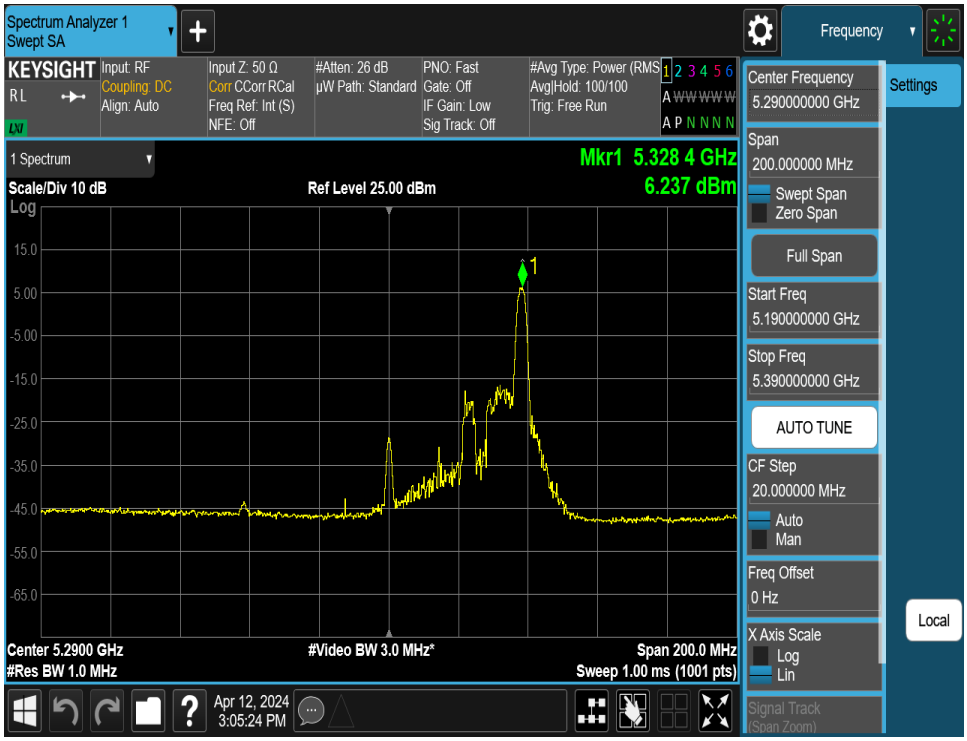

Plot 7-79. Power Spectral Density Plot MIMO ANT1 (80MHz BW 802.11be – 26 Tones (UNII Band 2A) – Ch. 58)

Plot 7-80. Power Spectral Density Plot MIMO ANT1 (20MHz BW 802.11be – 26 Tones (UNII Band 2C) – Ch. 120)

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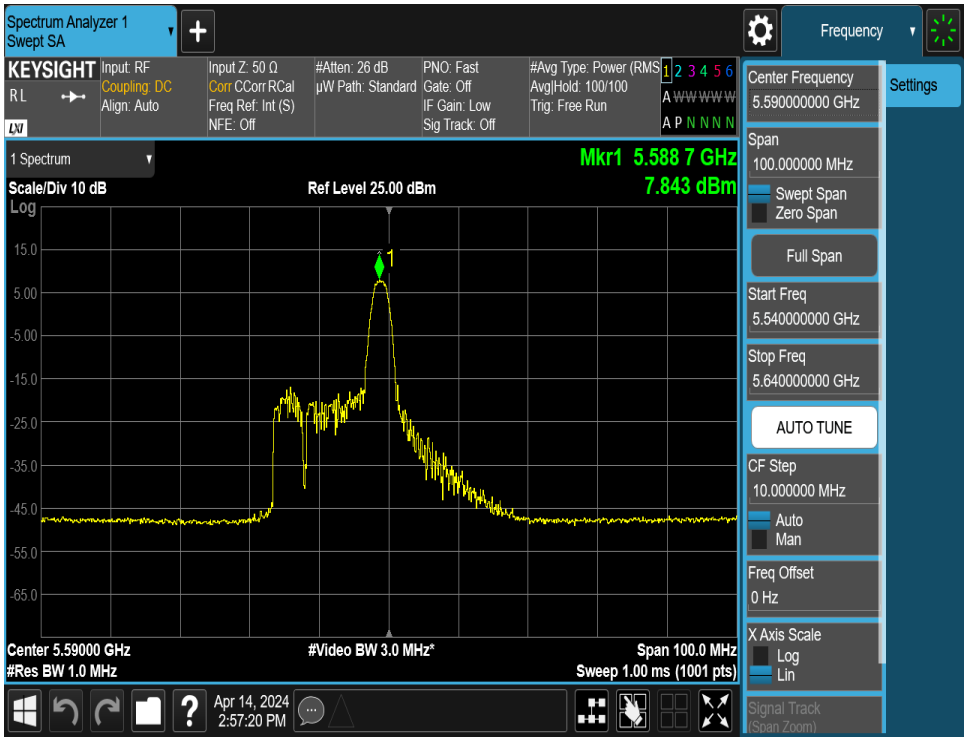
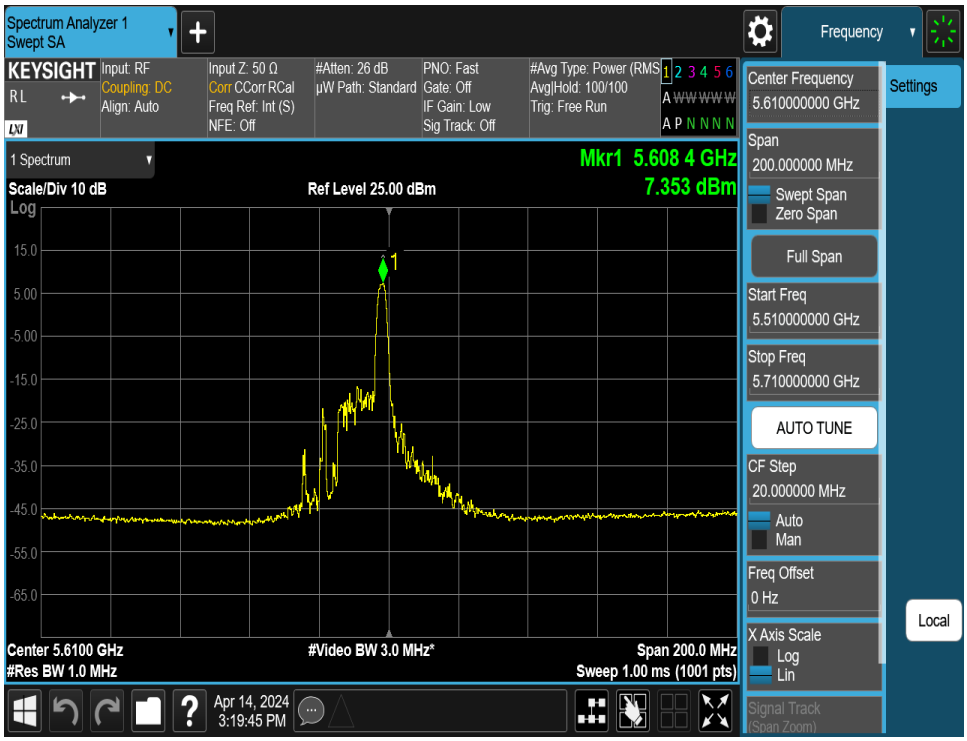


Plot 7-81. Power Spectral Density Plot MIMO ANT1 (40MHz BW 802.11be – 26 Tones (UNII Band 2C) – Ch. 118)



Plot 7-82. Power Spectral Density Plot MIMO ANT1 (80MHz BW 802.11be – 26 Tones (UNII Band 2C) – Ch. 122)

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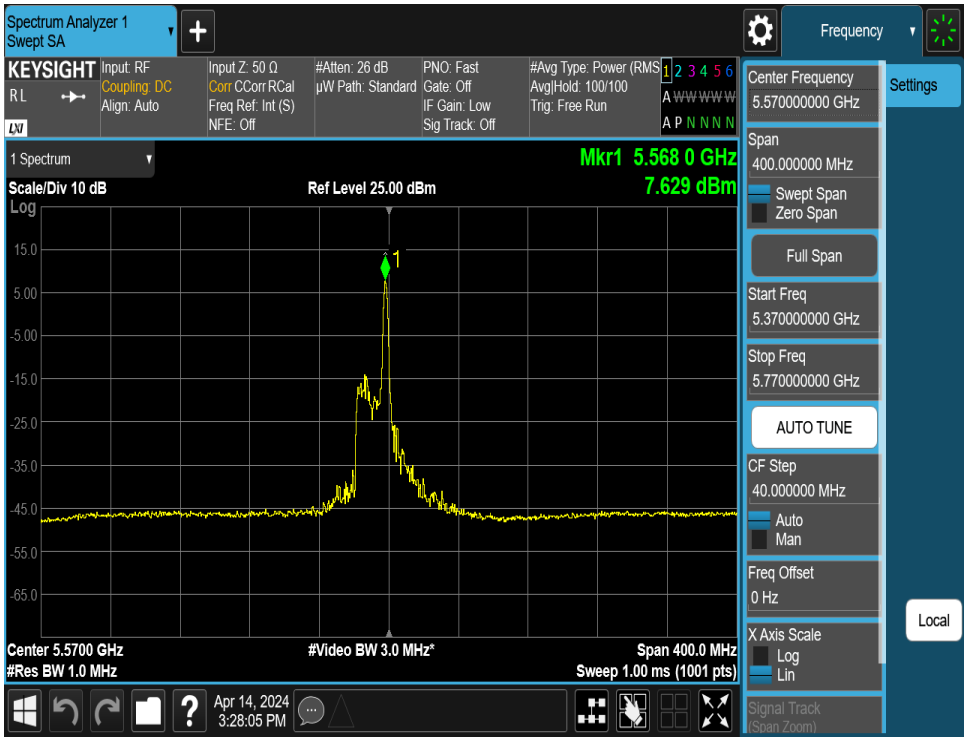

Plot 7-83. Power Spectral Density Plot MIMO ANT1 (160MHz BW 802.11be – 26 Tones (UNII Band 2C) – Ch. 114)

Plot 7-84. Power Spectral Density Plot MIMO ANT1 (20MHz BW 802.11be – 26 Tones (UNII Band 3) – Ch. 157)

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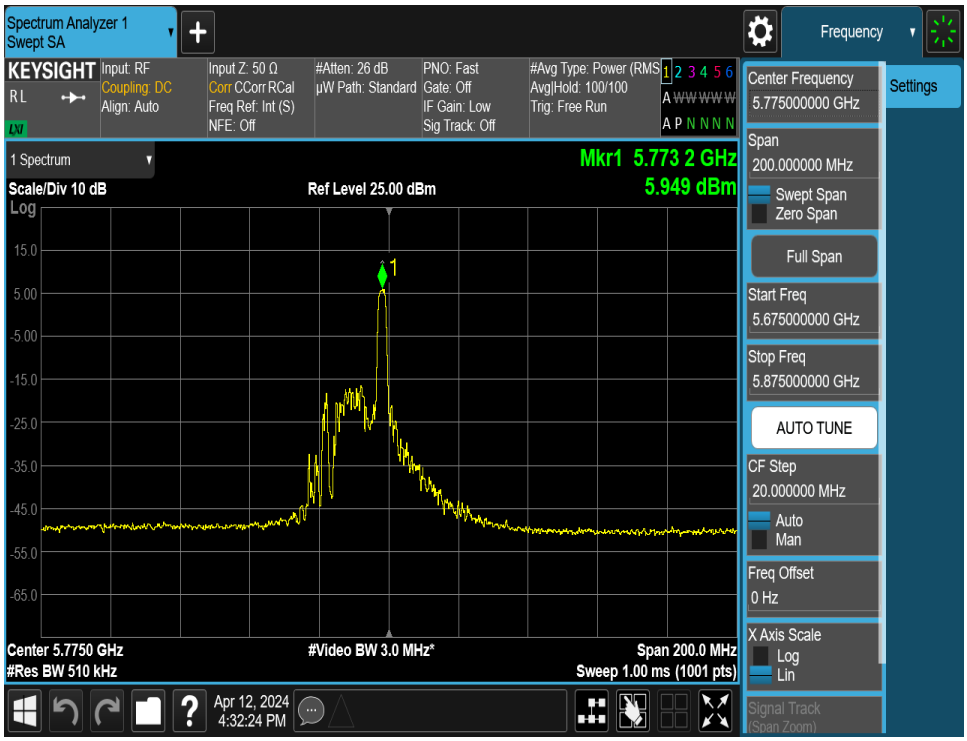
Plot 7-85. Power Spectral Density Plot MIMO ANT1 (40MHz BW 802.11be – 26 Tones (UNII Band 3) – Ch. 151)



Plot 7-86. Power Spectral Density Plot MIMO ANT1 (80MHz BW 802.11be – 26 Tones (UNII Band 3) – Ch. 155)

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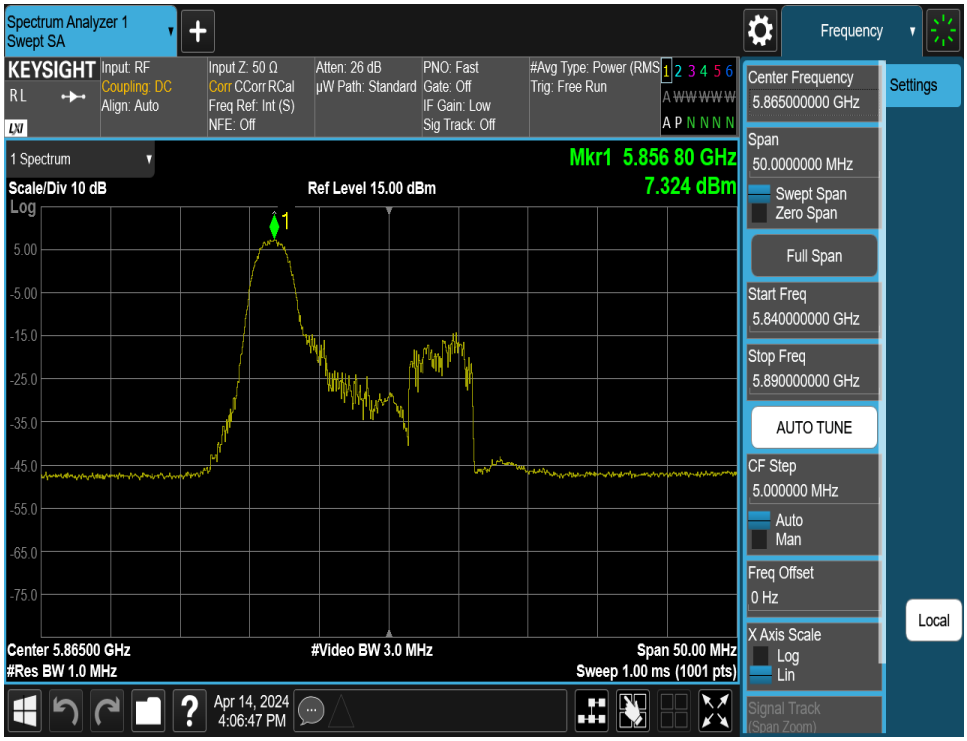
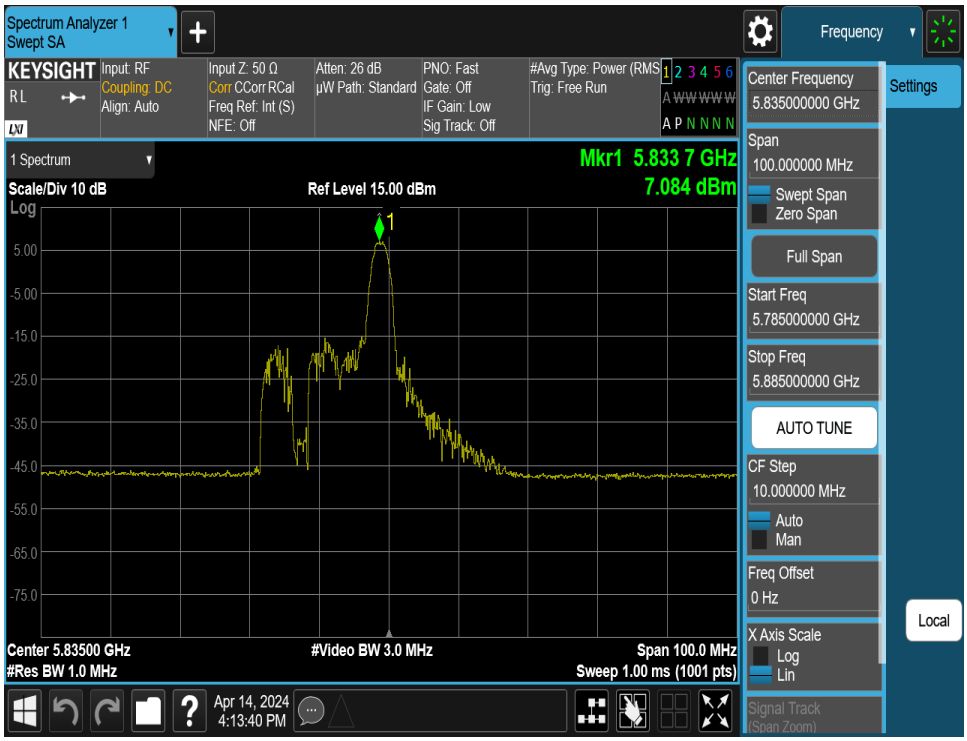


Plot 7-87. Power Spectral Density Plot MIMO ANT1 (20MHz BW 802.11be – 26 Tones (UNII Band 4) – Ch. 173)



Plot 7-88. Power Spectral Density Plot MIMO ANT1 (40MHz BW 802.11be – 26 Tones (UNII Band 3/4) – Ch. 167)

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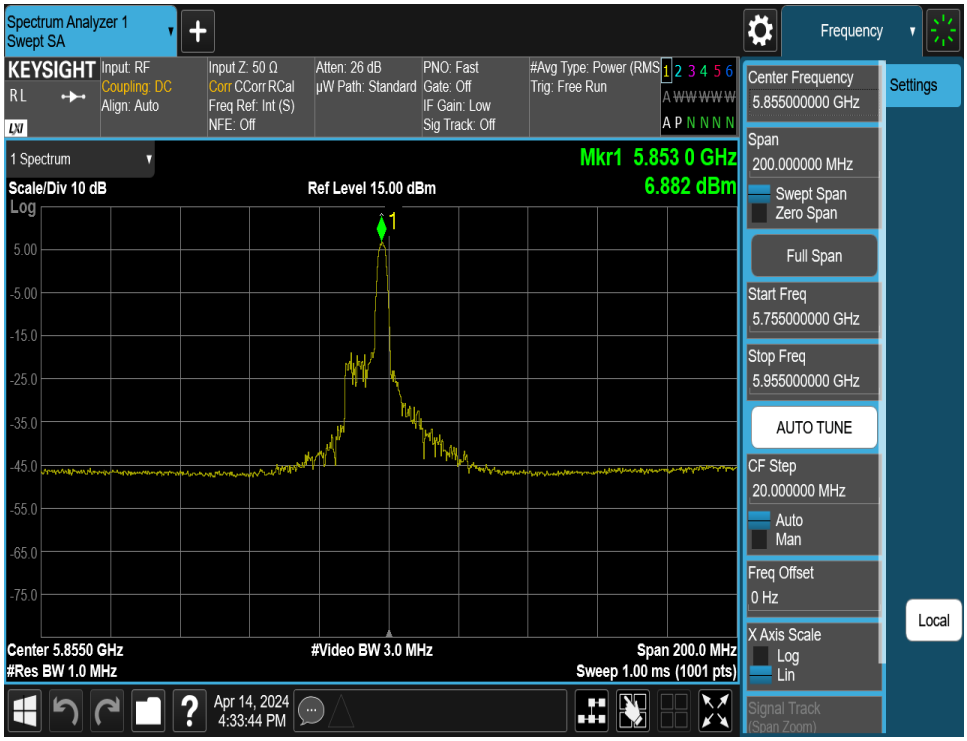
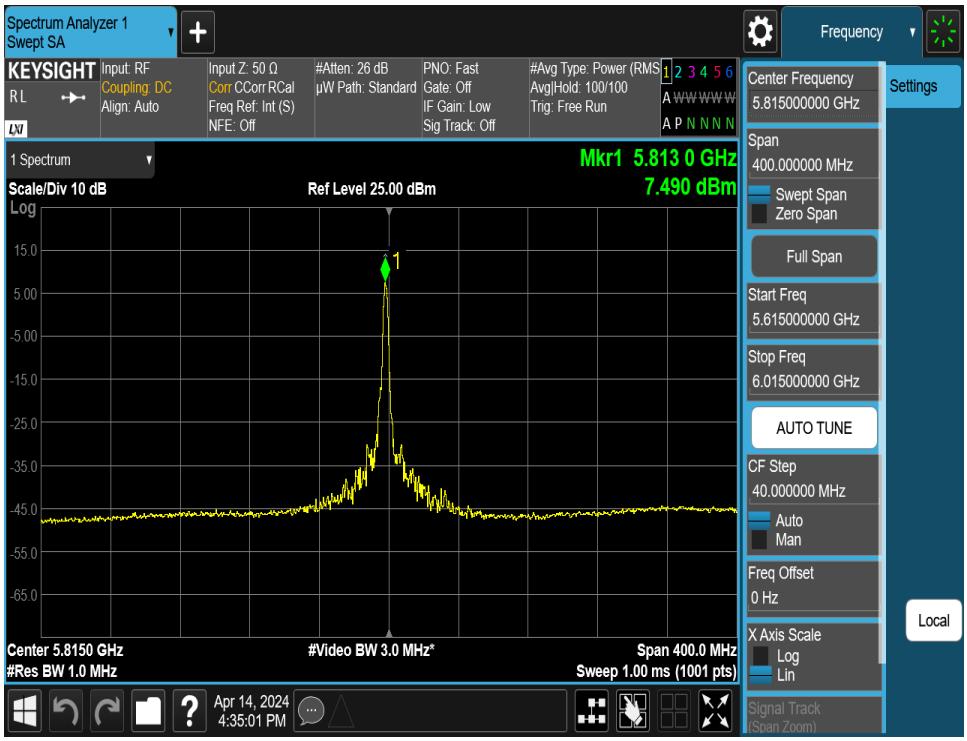


Plot 7-89. Power Spectral Density Plot MIMO ANT1 (80MHz BW 802.11be – 26 Tones (UNII Band 3/4) – Ch. 171)



Plot 7-90. Power Spectral Density Plot MIMO ANT1 (160MHz BW 802.11be – 26 Tones (UNII Band 3/4) – Ch. 163)

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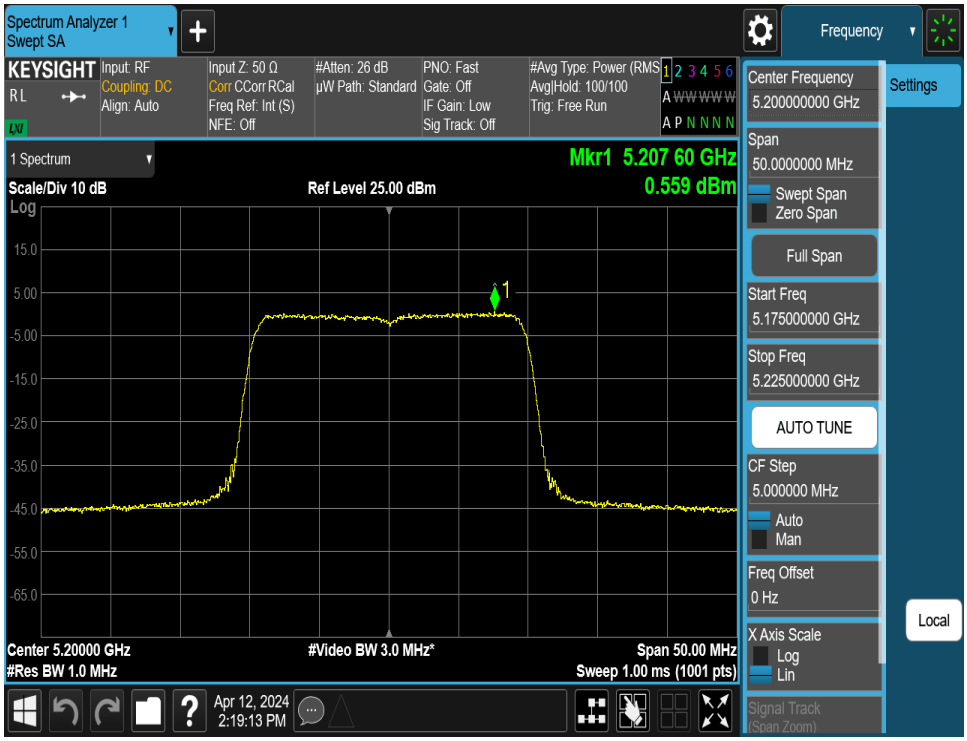
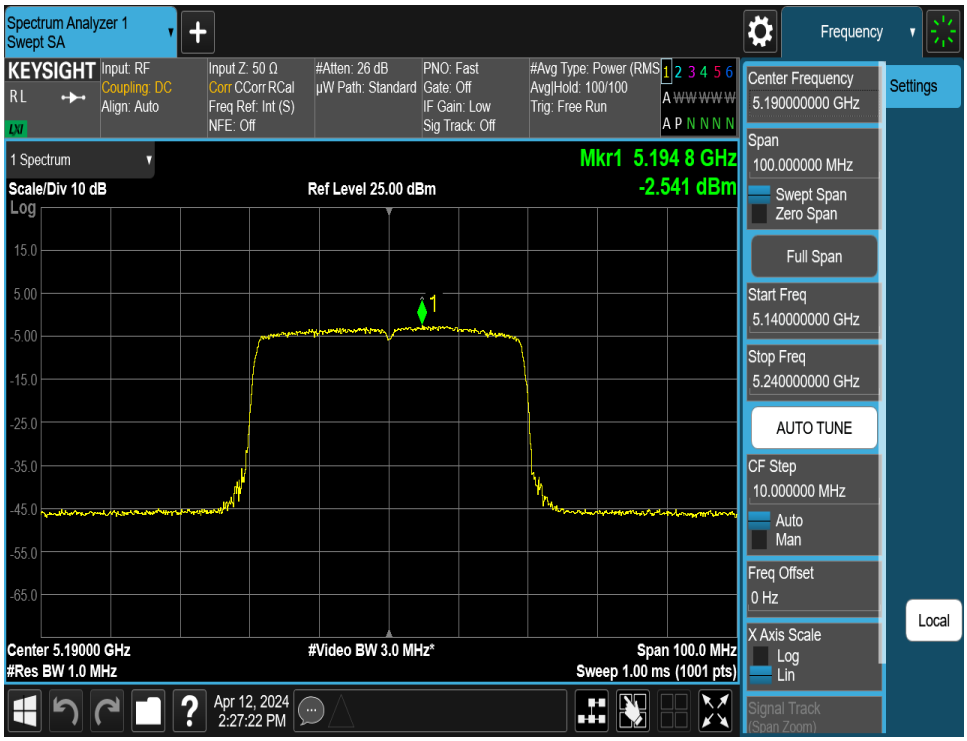


Plot 7-91. Power Spectral Density Plot MIMO ANT1 (20MHz BW 802.11be – 242 Tones (UNII Band 1) – Ch. 40)



Plot 7-92. Power Spectral Density Plot MIMO ANT1 (40MHz BW 802.11be – 484 Tones (UNII Band 1) – Ch. 38)

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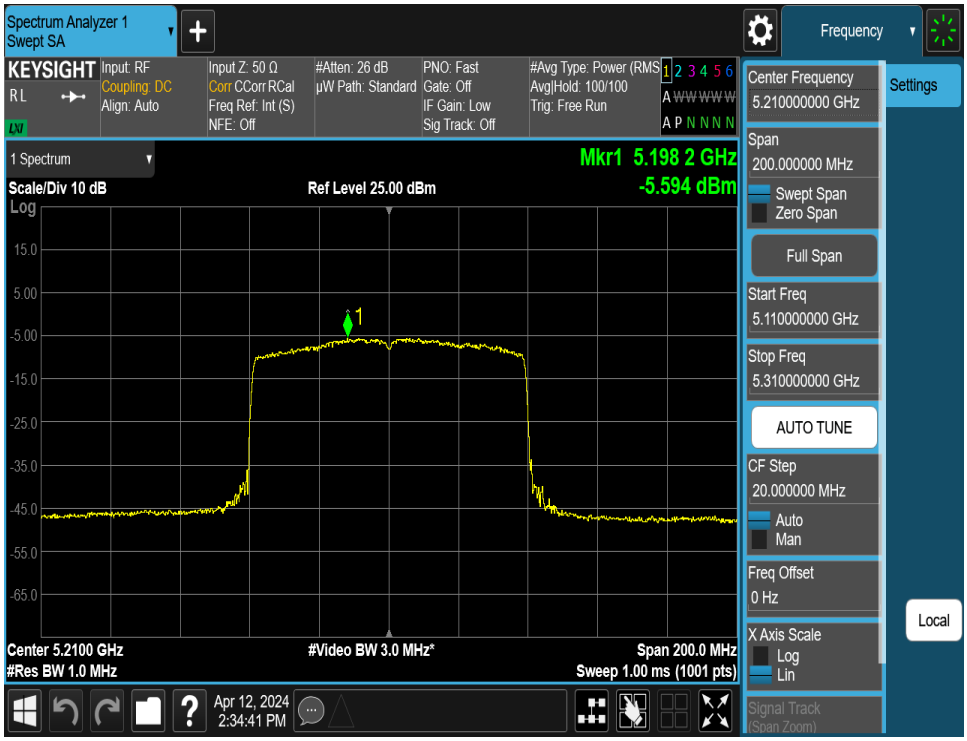
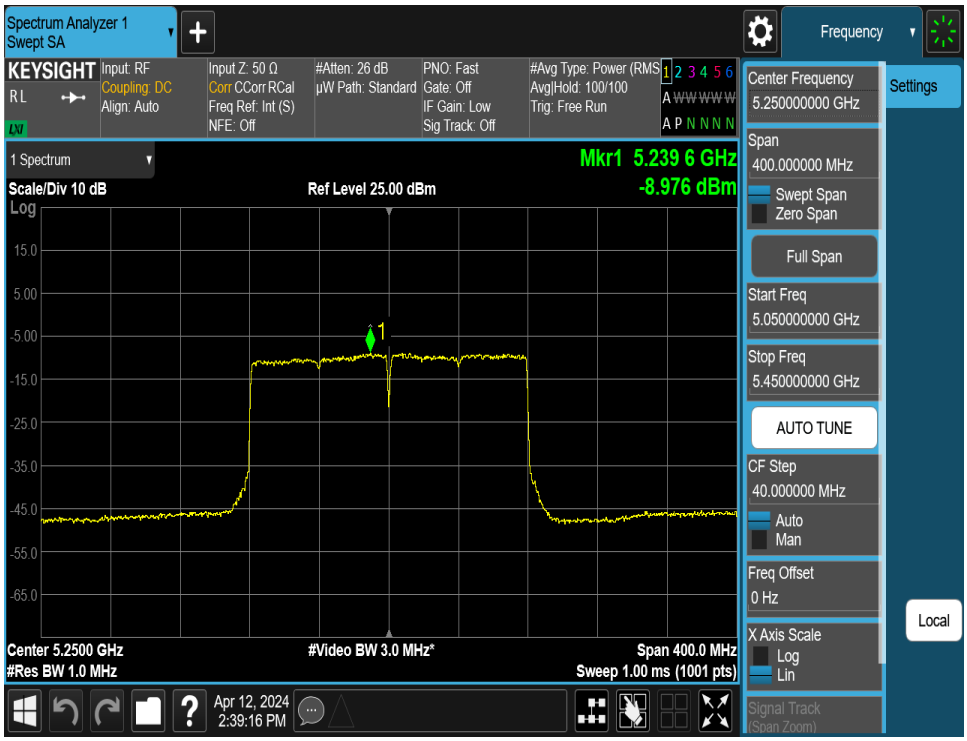


Plot 7-93. Power Spectral Density Plot MIMO ANT1 (80MHz BW 802.11be – 996 Tones (UNII Band 1) – Ch. 42)



Plot 7-94. Power Spectral Density Plot MIMO ANT1 (160MHz BW 802.11be – 2x996 Tones (UNII Band 1/2A) – Ch. 50)

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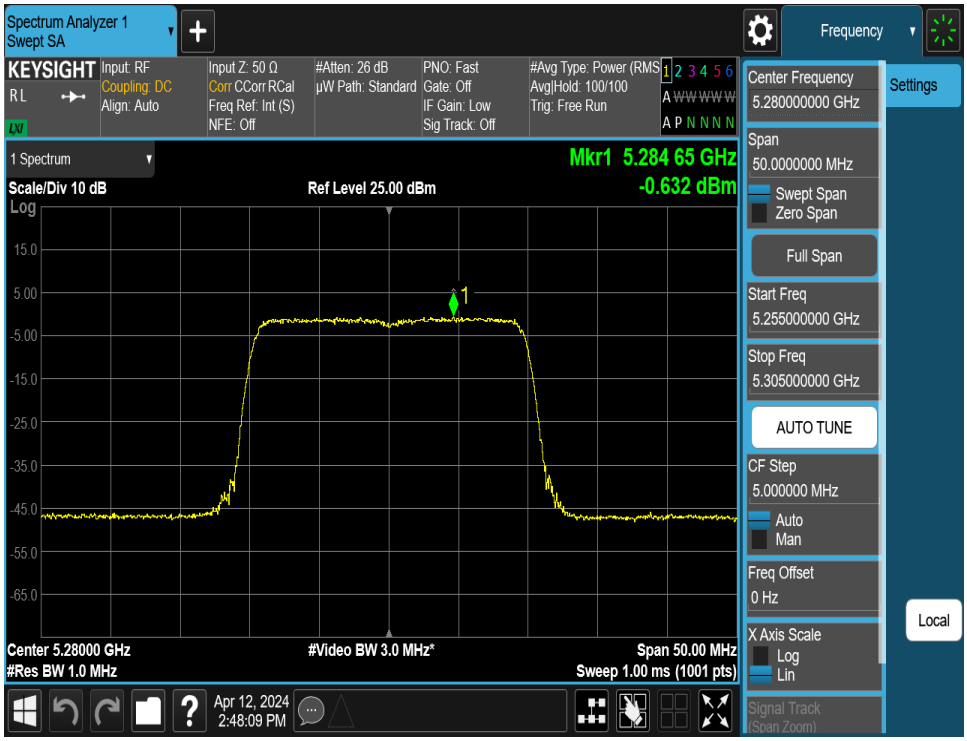
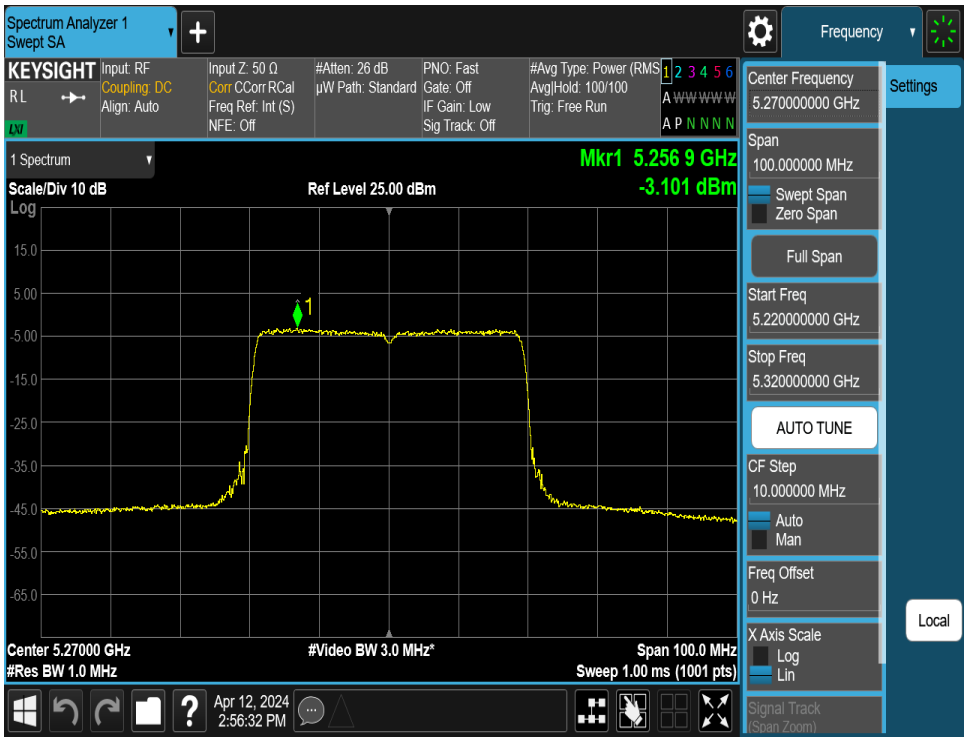


Plot 7-95. Power Spectral Density Plot MIMO ANT1 (20MHz BW 802.11be – 242 Tones (UNII Band 2A) – Ch. 56)



Plot 7-96. Power Spectral Density Plot MIMO ANT1 (40MHz BW 802.11be – 484 Tones (UNII Band 2A) – Ch. 54)

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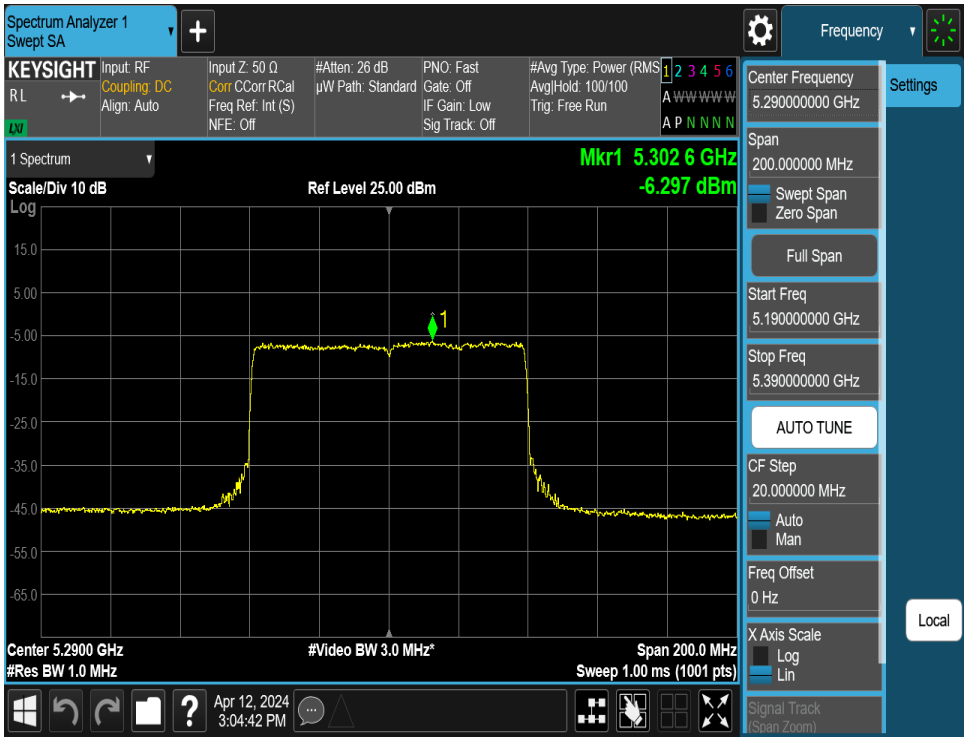
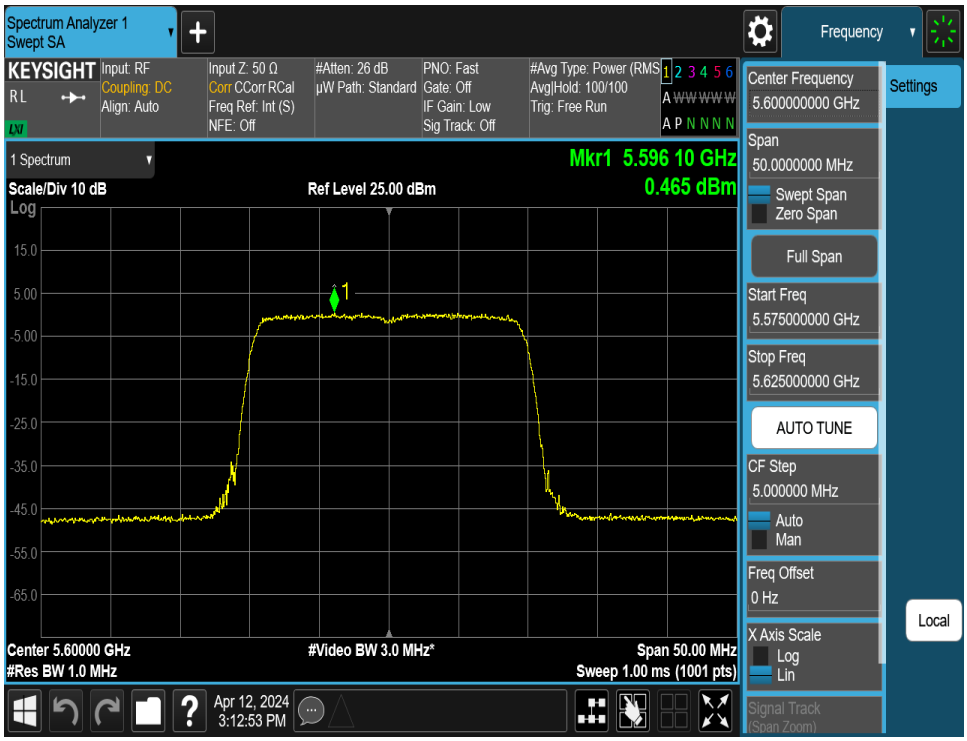


Plot 7-97. Power Spectral Density Plot MIMO ANT1 (80MHz BW 802.11be – 996 Tones (UNII Band 2A) – Ch. 58)



Plot 7-98. Power Spectral Density Plot MIMO ANT1 (20MHz BW 802.11be – 242 Tones (UNII Band 2C) – Ch. 120)

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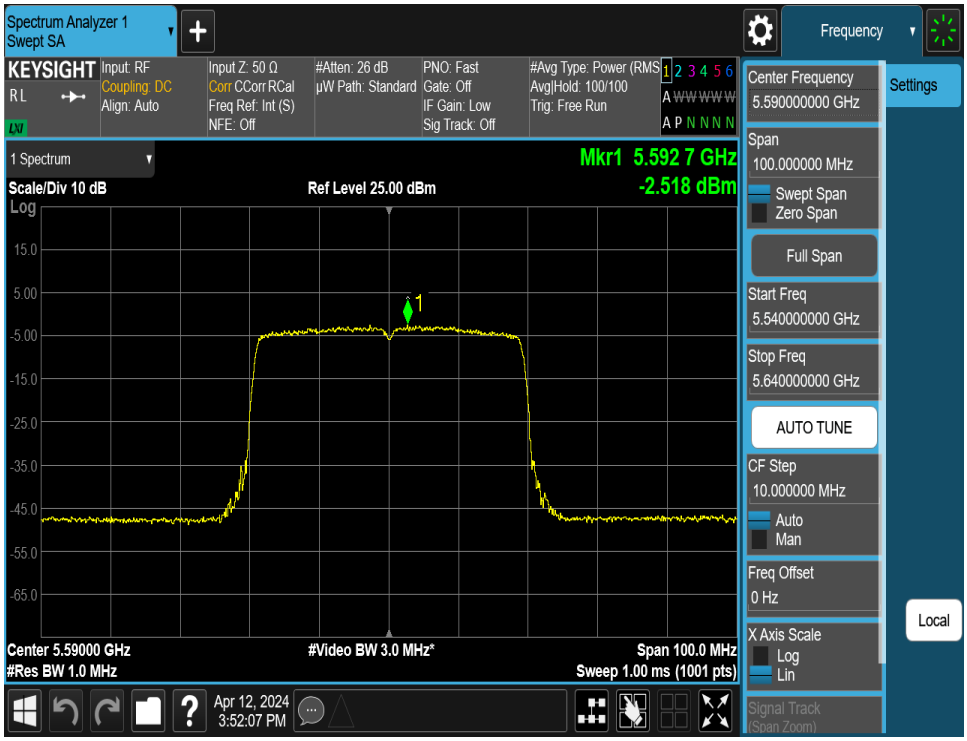
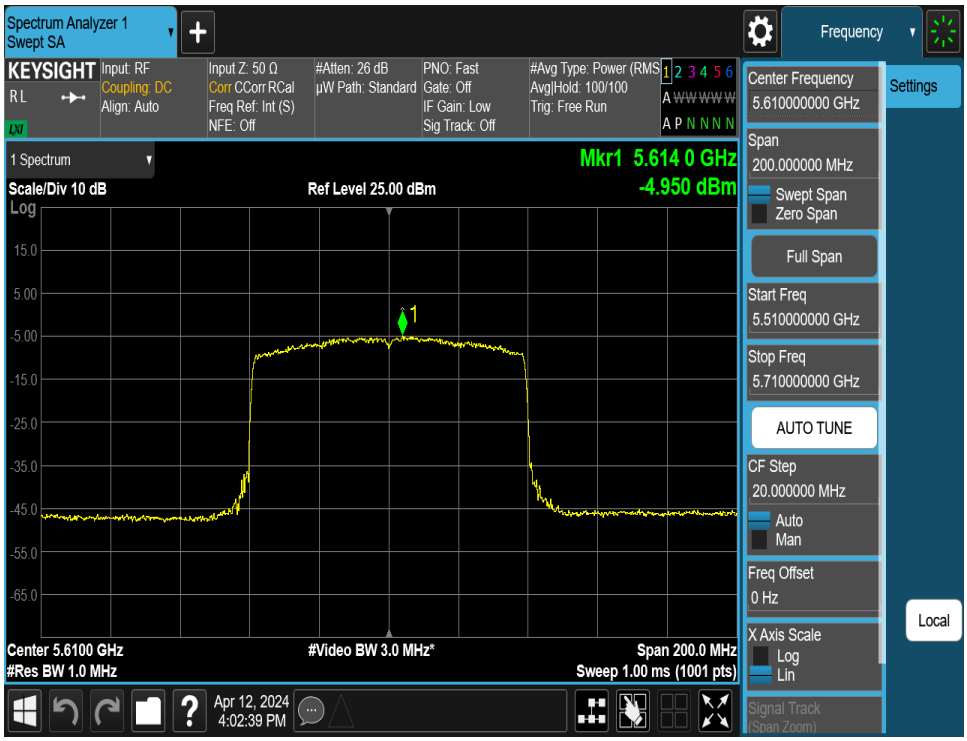


Plot 7-99. Power Spectral Density Plot MIMO ANT1 (40MHz BW 802.11be – 484 Tones (UNII Band 2C) – Ch. 118)



Plot 7-100. Power Spectral Density Plot MIMO ANT1 (80MHz BW 802.11be – 996 Tones (UNII Band 2C) – Ch. 122)

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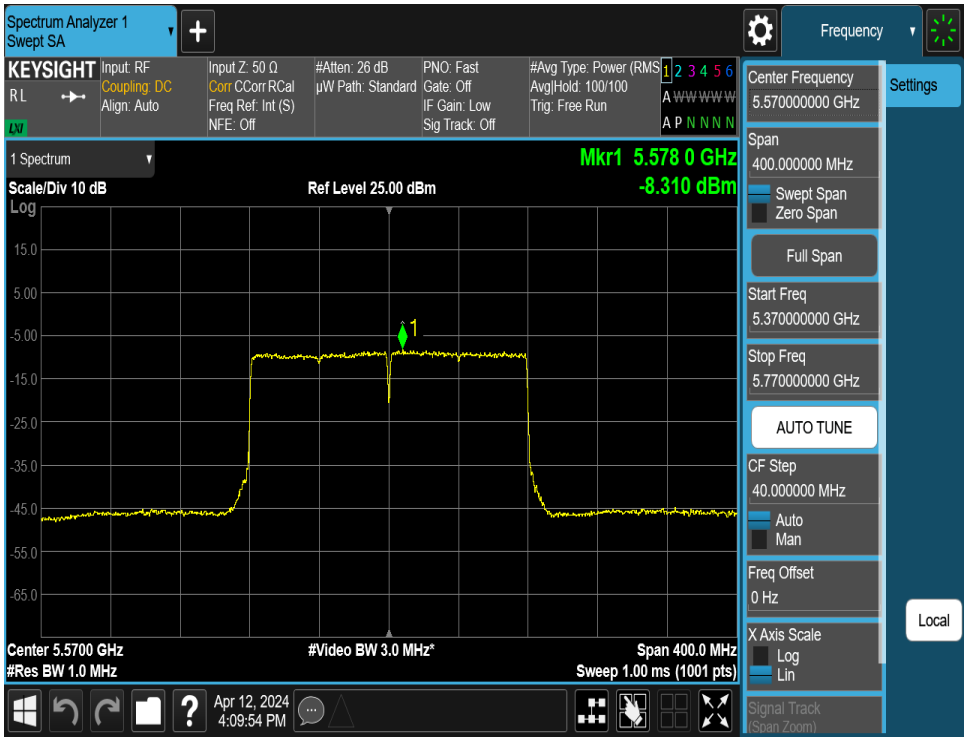
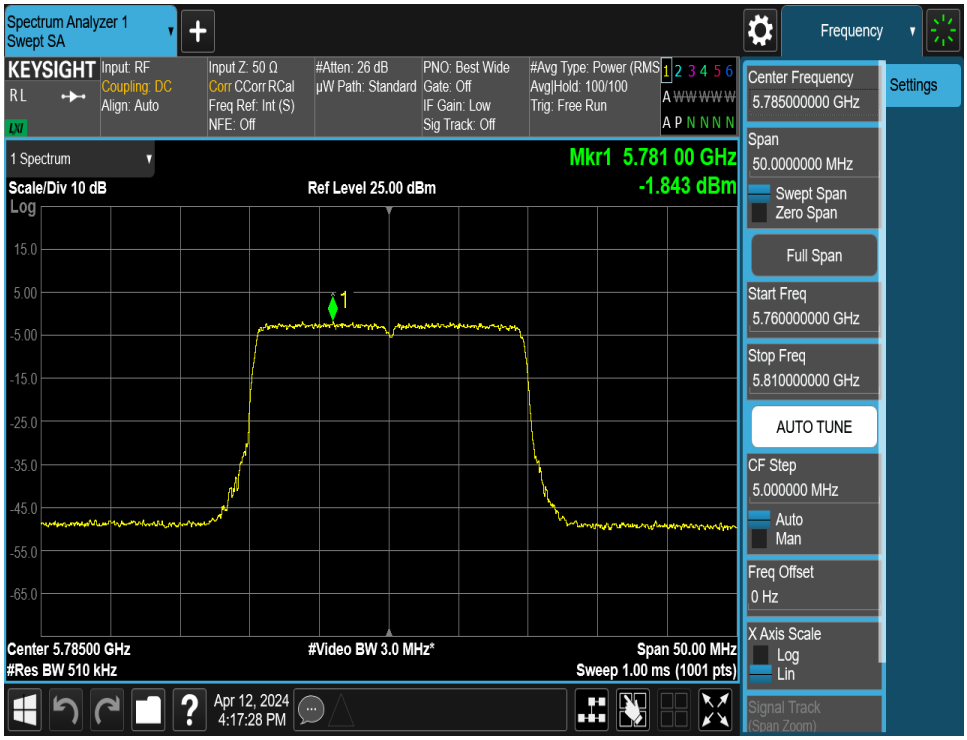


Plot 7-101. Power Spectral Density Plot MIMO ANT1 (160MHz BW 802.11be – 2x996 Tones (UNII Band 2C) – Ch. 114)



Plot 7-102. Power Spectral Density Plot MIMO ANT1 (20MHz BW 802.11be – 242 Tones (UNII Band 3) – Ch. 157)

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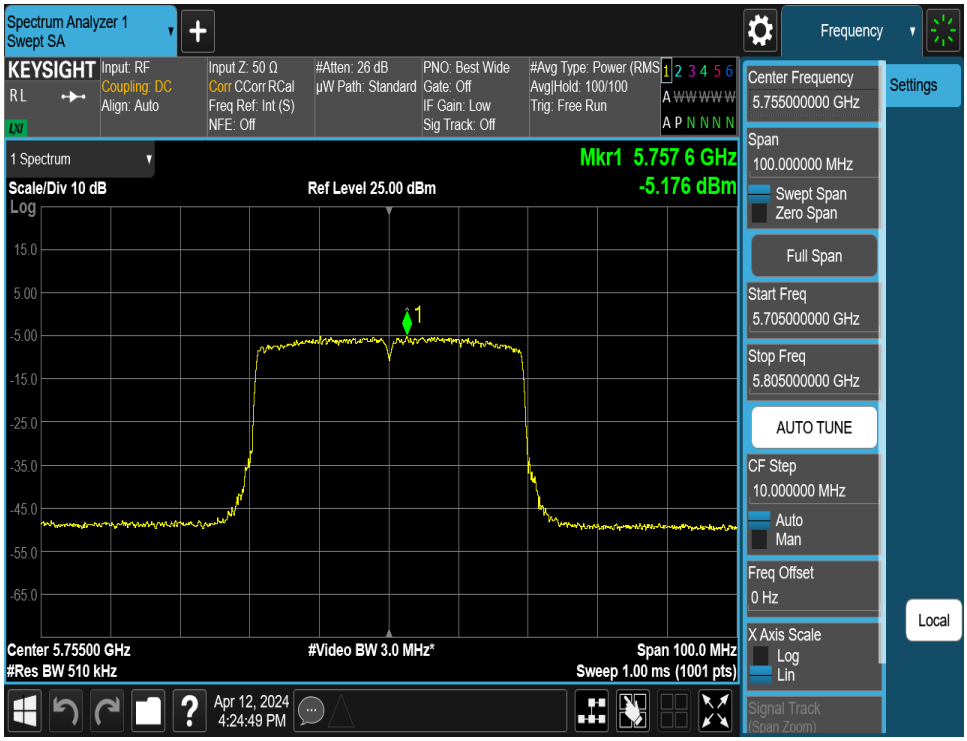
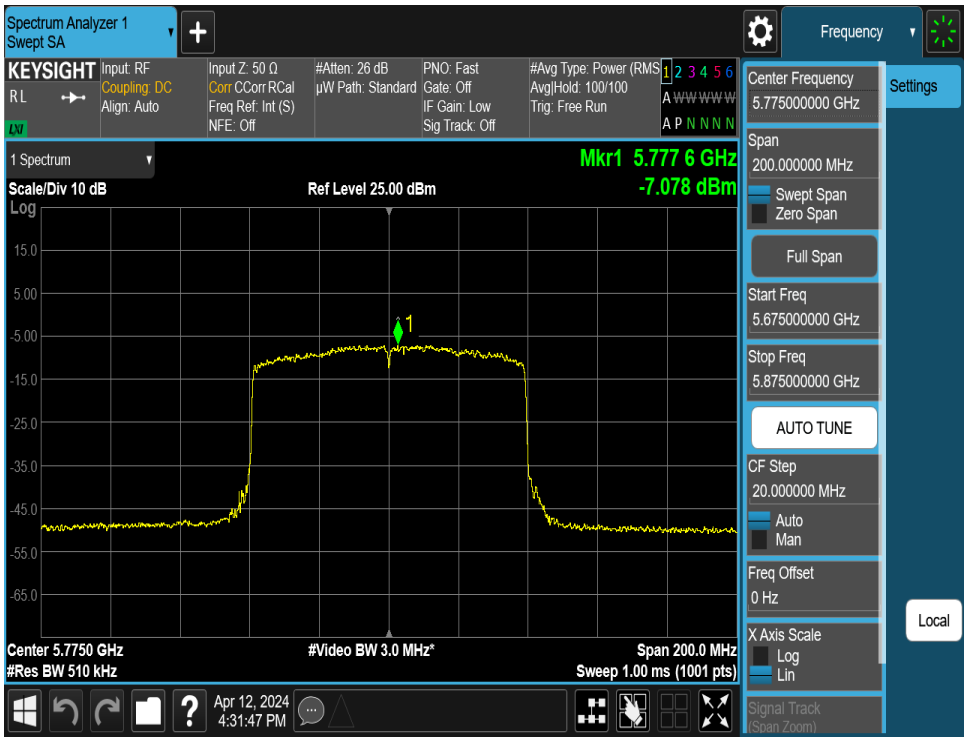


Plot 7-103. Power Spectral Density Plot MIMO ANT1 (40MHz BW 802.11be – 484 Tones (UNII Band 3) – Ch. 151)



Plot 7-104. Power Spectral Density Plot MIMO ANT1 (80MHz BW 802.11be – 996 Tones (UNII Band 3) – Ch. 155)

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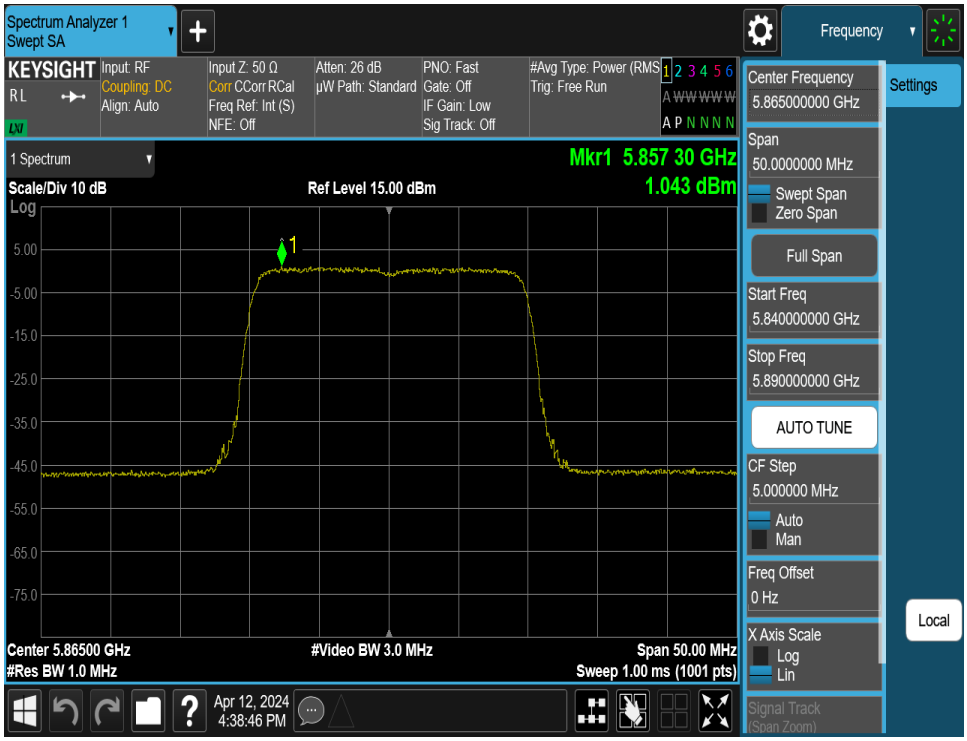
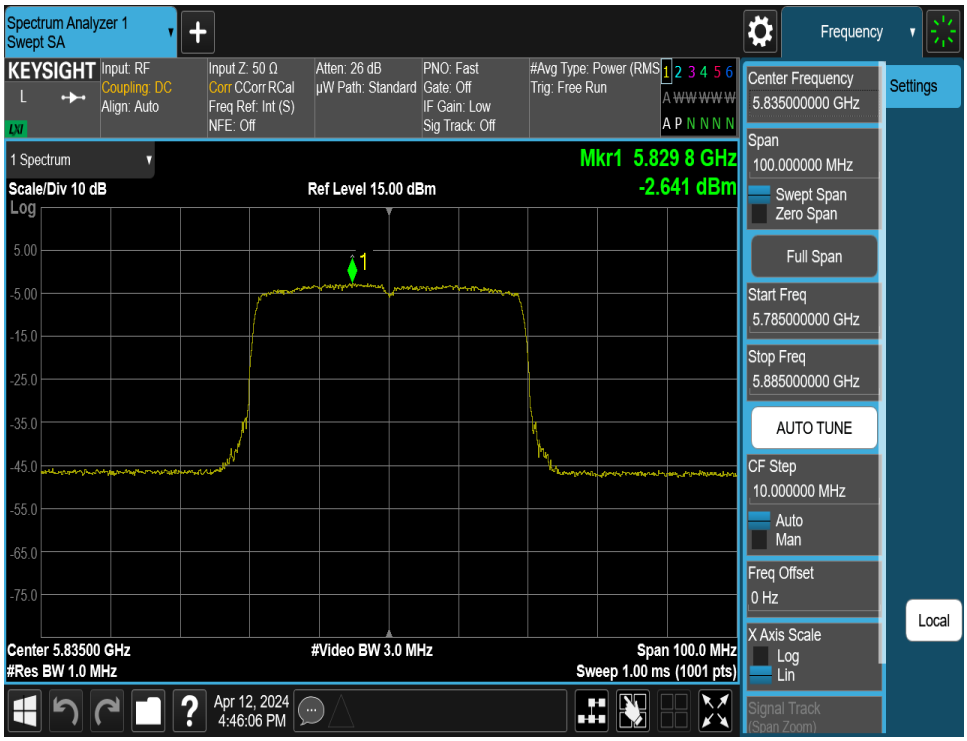


Plot 7-105. Power Spectral Density Plot MIMO ANT1 (20MHz BW 802.11be – 242 Tones (UNII Band 4) – Ch. 173)



Plot 7-106. Power Spectral Density Plot MIMO ANT1 (40MHz BW 802.11be – 484 Tones (UNII Band 3/4) – Ch. 167)

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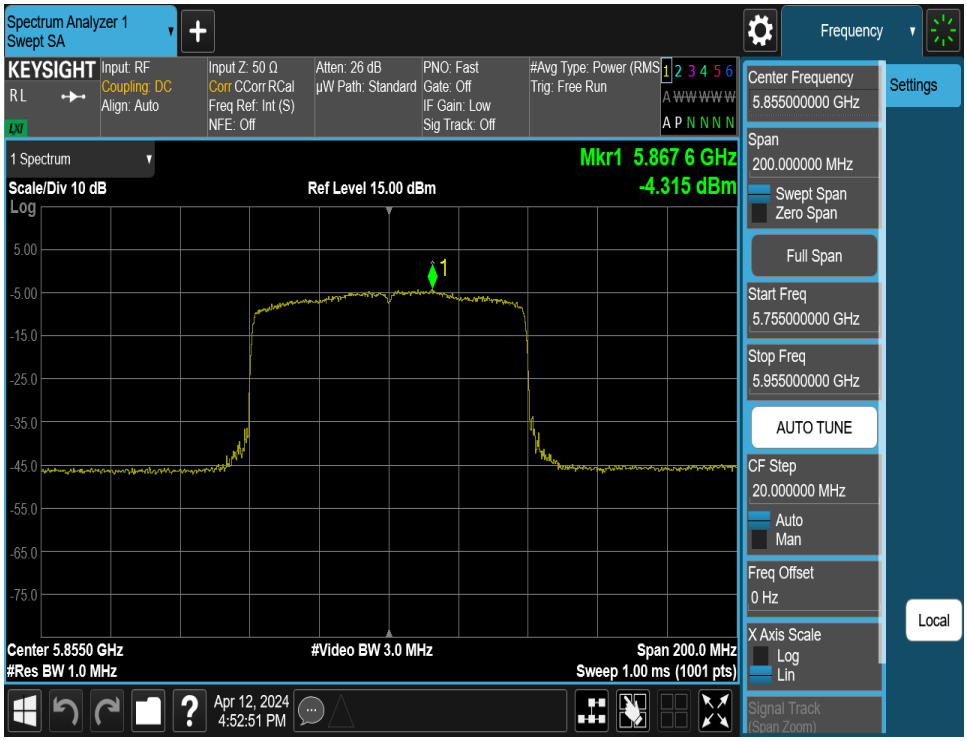
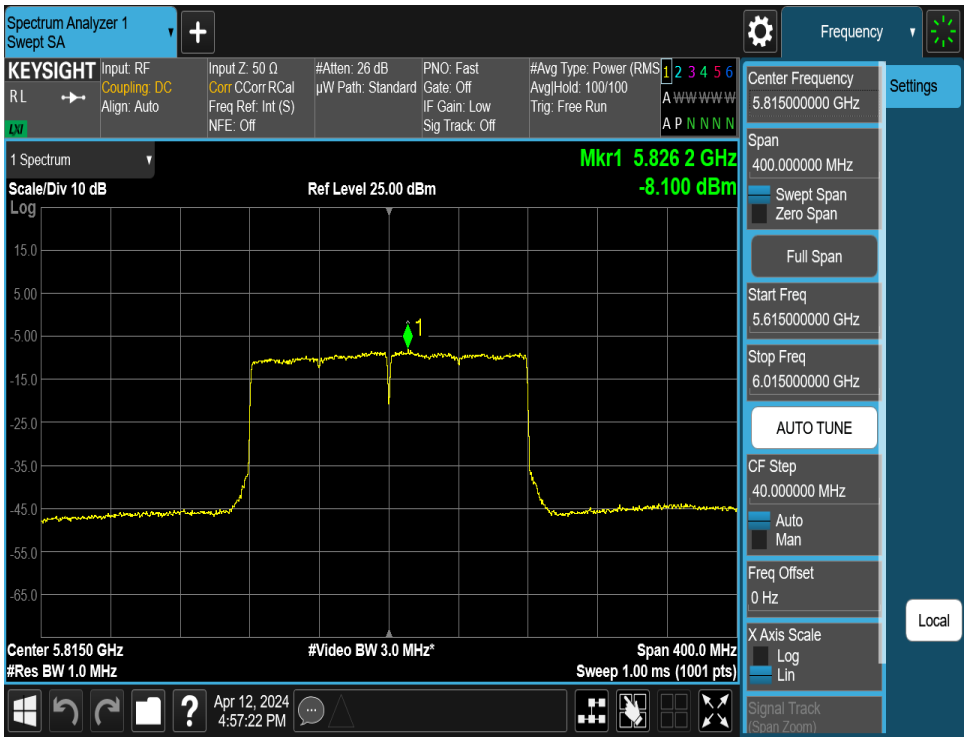


Plot 7-107. Power Spectral Density Plot MIMO ANT1 (80MHz BW 802.11be – 996 Tones (UNII Band 3/4) – Ch. 171)



Plot 7-108. Power Spectral Density Plot MIMO ANT1 (160MHz BW 802.11be – 996*2 Tones (UNII Band 3/4) – Ch. 163)

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Plot 7-109. Power Spectral Density Plot MIMO ANT1 (20MHz BW 802.11be – 52+26 Tones (UNII Band 1) – Ch. 40)

Plot 7-110. Power Spectral Density Plot MIMO ANT1 (20MHz BW 802.11be – 106+26 Tones (UNII Band 1) – Ch. 40)

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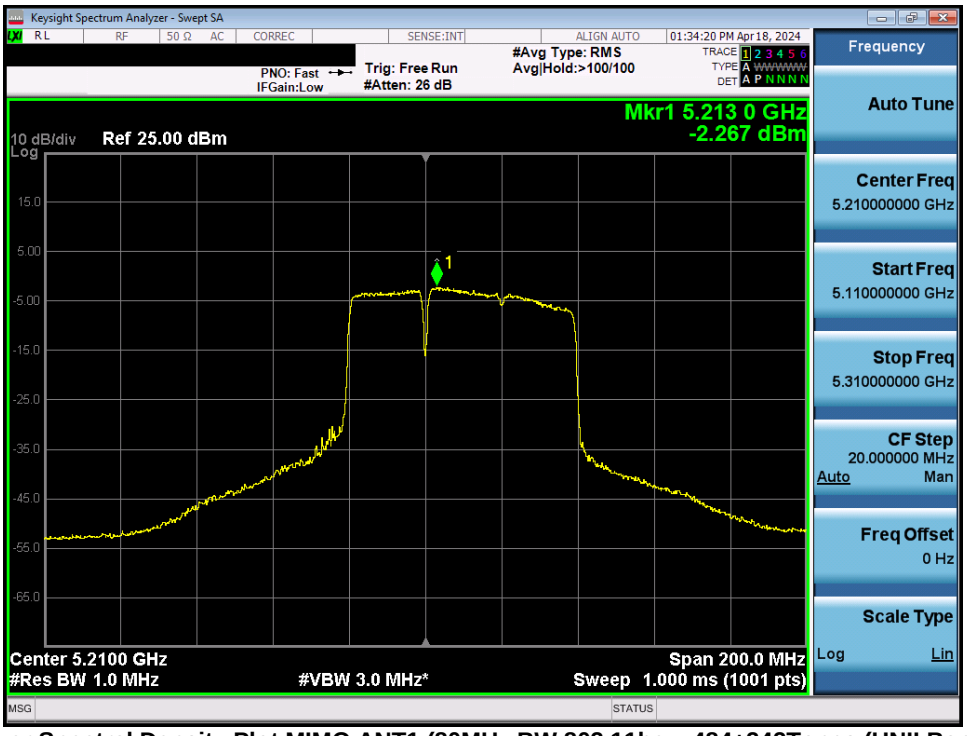

Plot 7-111. Power Spectral Density Plot MIMO ANT1 (80MHz BW 802.11be – 484+242Tones (UNII Band 1) – Ch. 42)

Plot 7-112. Power Spectral Density Plot MIMO ANT1(160MHz BW 802.11be – 996+484 Tones (UNII Band 1/2A) – Ch. 50)

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Plot 7-113. Power Spectral Density Plot MIMO ANT1 (20MHz BW 802.11be – 52+26 Tones (UNII Band 2A) – Ch. 56)

Plot 7-114. Power Spectral Density Plot MIMO ANT1 (20MHz BW 802.11be – 106+26 Tones (UNII Band 2A) – Ch. 56)

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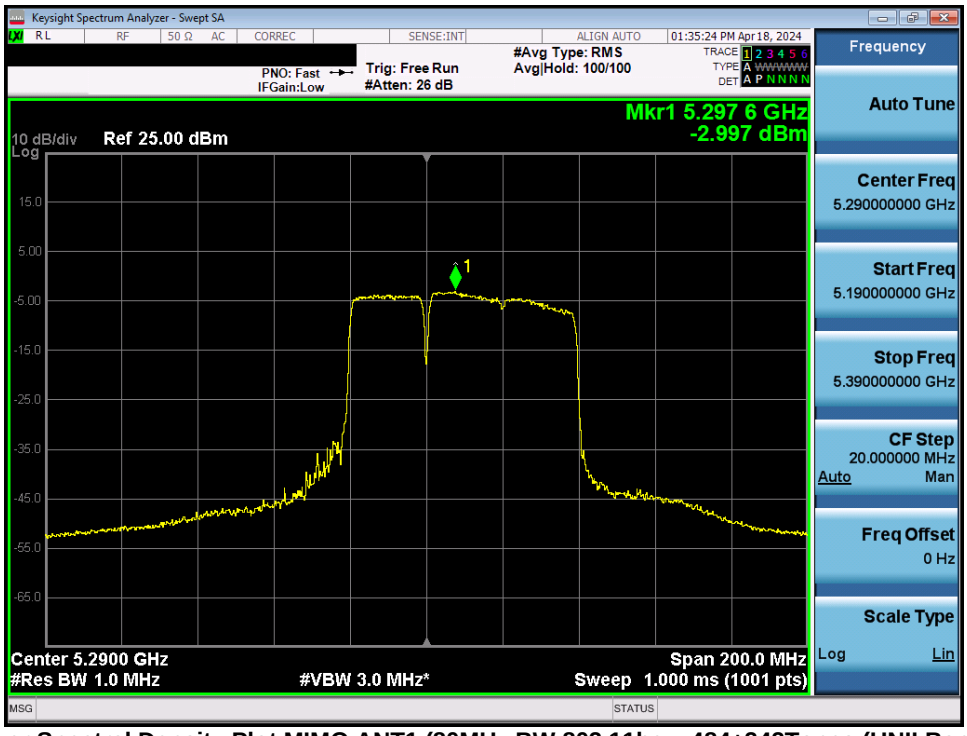

Plot 7-115. Power Spectral Density Plot MIMO ANT1 (80MHz BW 802.11be – 484+242Tones (UNII Band 2A) – Ch. 58)

Plot 7-116. Power Spectral Density Plot MIMO ANT1 (20MHz BW 802.11be – 52+26 Tones (UNII Band 2C) – Ch. 120)

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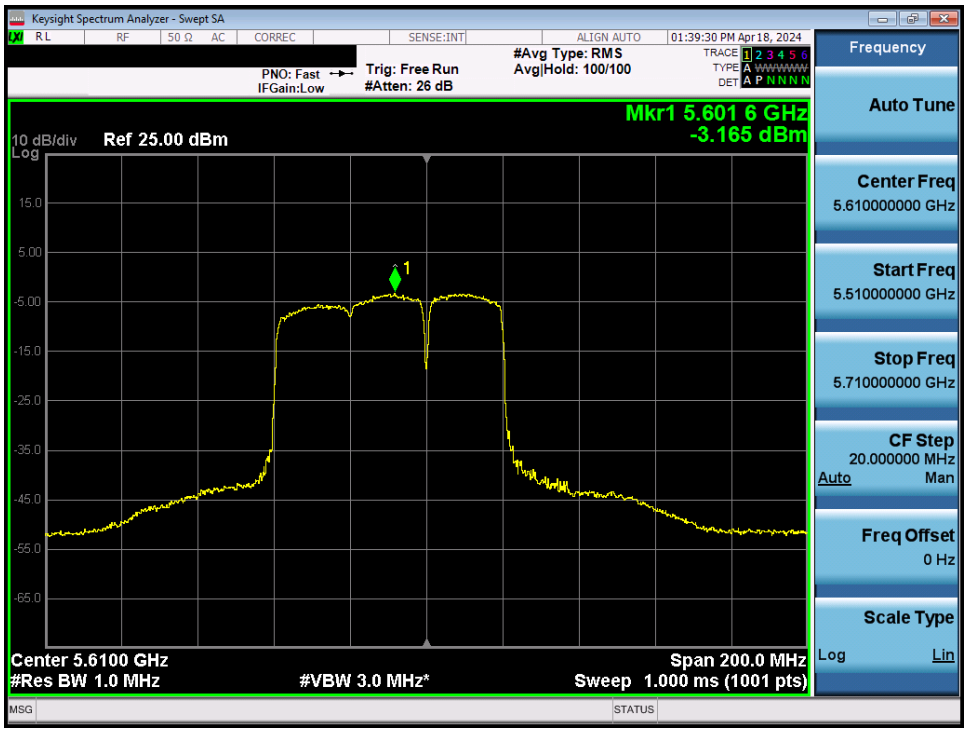
Plot 7-117. Power Spectral Density Plot MIMO ANT1 (20MHz BW 802.11be – 106+26 Tones (UNII Band 2C) – Ch. 120)



Plot 7-118. Power Spectral Density Plot MIMO ANT1 (80MHz BW 802.11be – 484+242Tones (UNII Band 2C) – Ch. 122)

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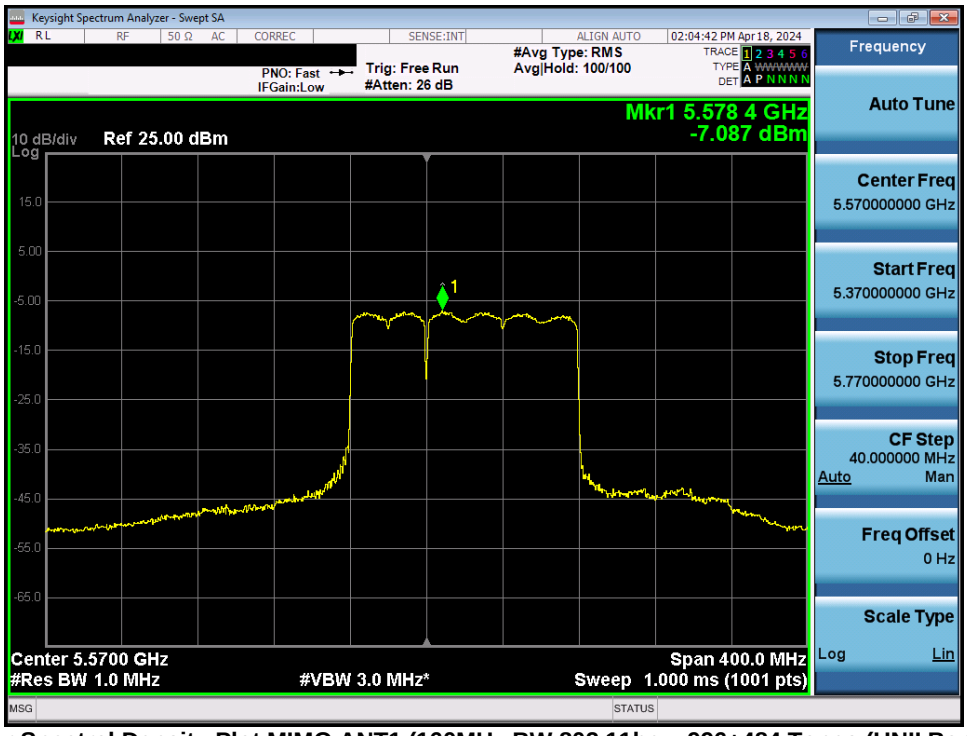
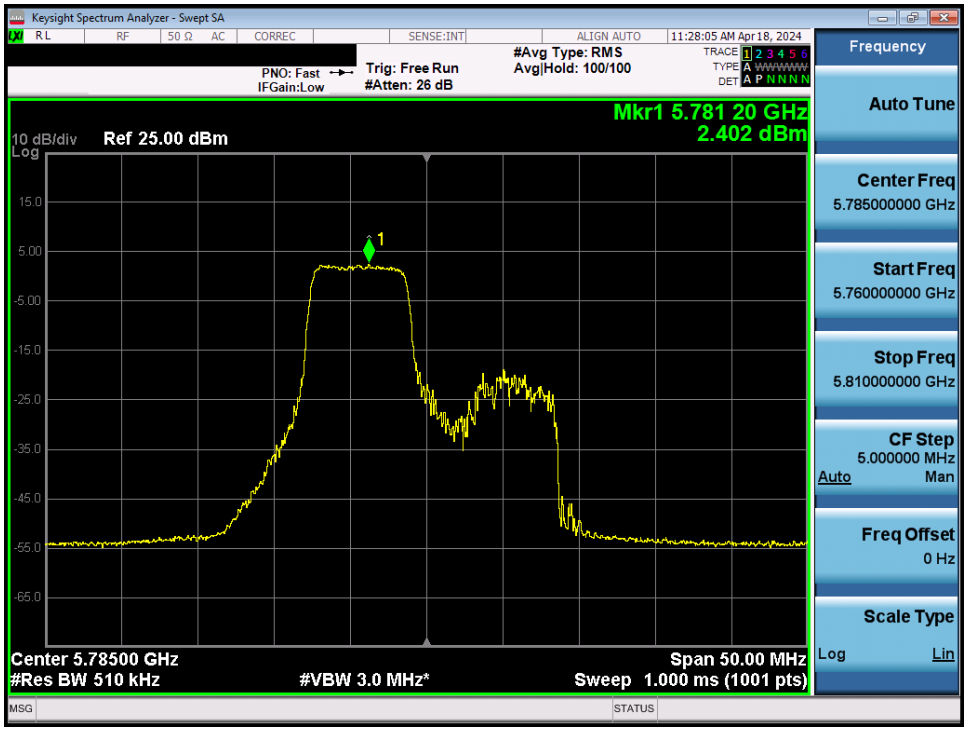


Plot 7-119. Power Spectral Density Plot MIMO ANT1 (160MHz BW 802.11be – 996+484 Tones (UNII Band 2C) – Ch. 114)



Plot 7-120. Power Spectral Density Plot MIMO ANT1 (20MHz BW 802.11be – 52+26 Tones (UNII Band 3) – Ch. 157)

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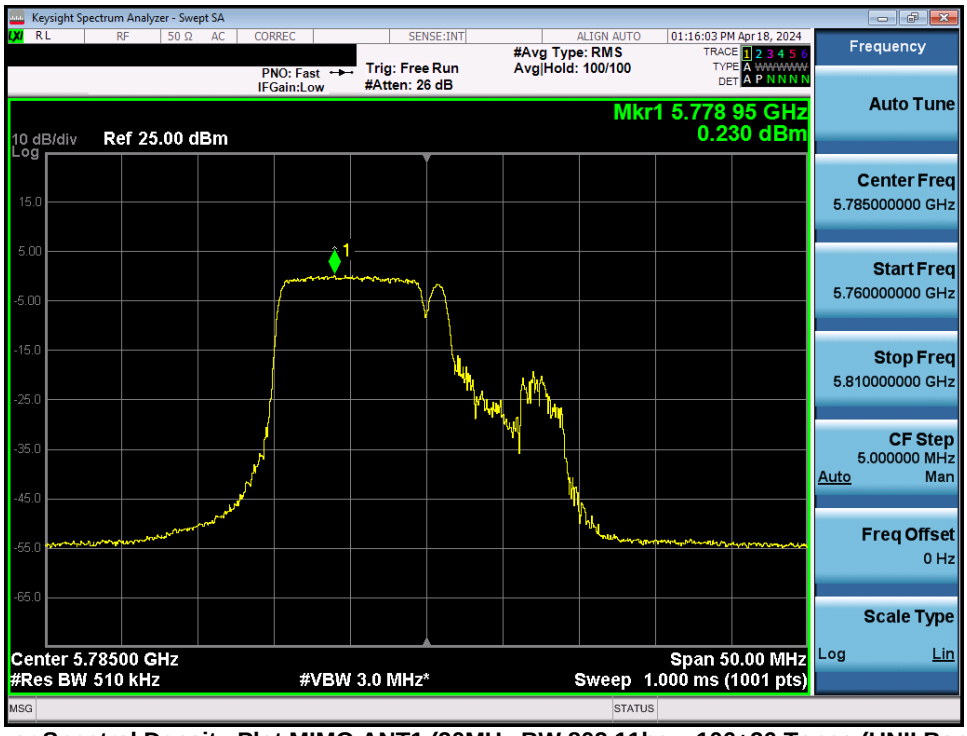

Plot 7-121. Power Spectral Density Plot MIMO ANT1 (20MHz BW 802.11be – 106+26 Tones (UNII Band 3) – Ch. 157)

Plot 7-122. Power Spectral Density Plot MIMO ANT1 (80MHz BW 802.11be – 484+242Tones (UNII Band 3) – Ch. 155)

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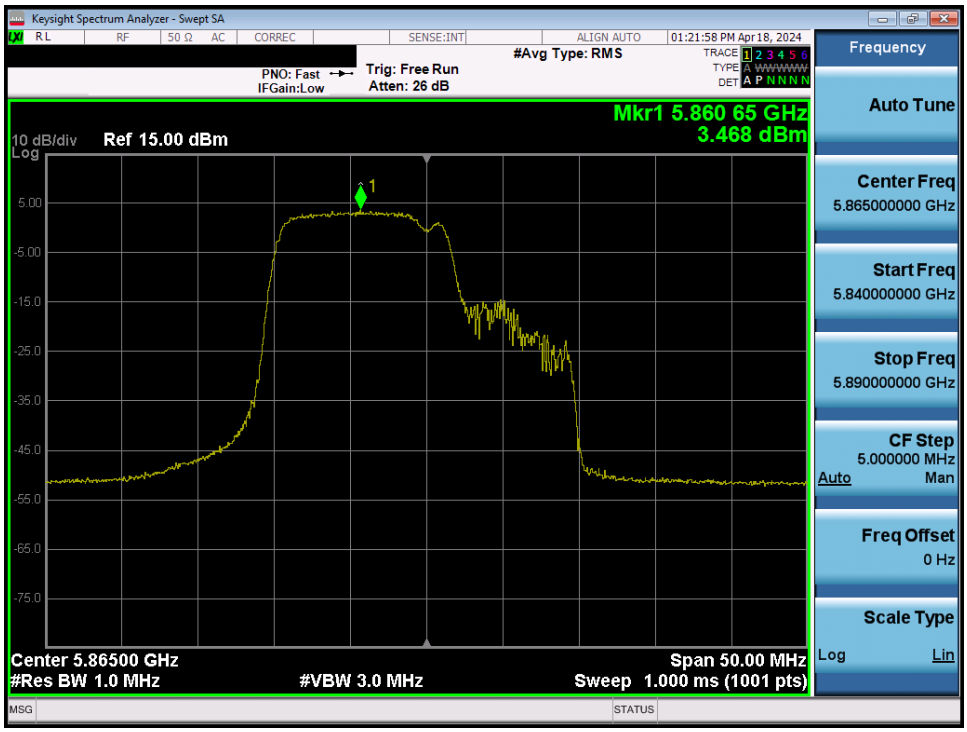
Plot 7-123. Power Spectral Density Plot MIMO ANT1 (20MHz BW 802.11be – 52+26 Tones (UNII Band 4) – Ch. 173)



Plot 7-124. Power Spectral Density Plot MIMO ANT1 (20MHz BW 802.11be – 106+26 Tones (UNII Band 4) – Ch. 173)

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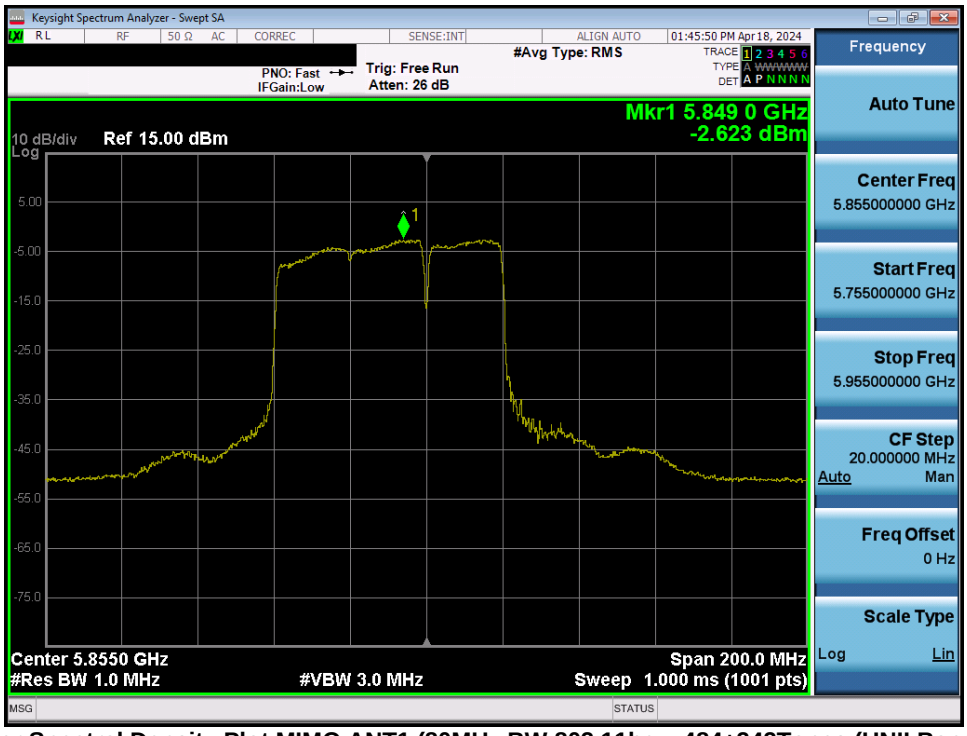
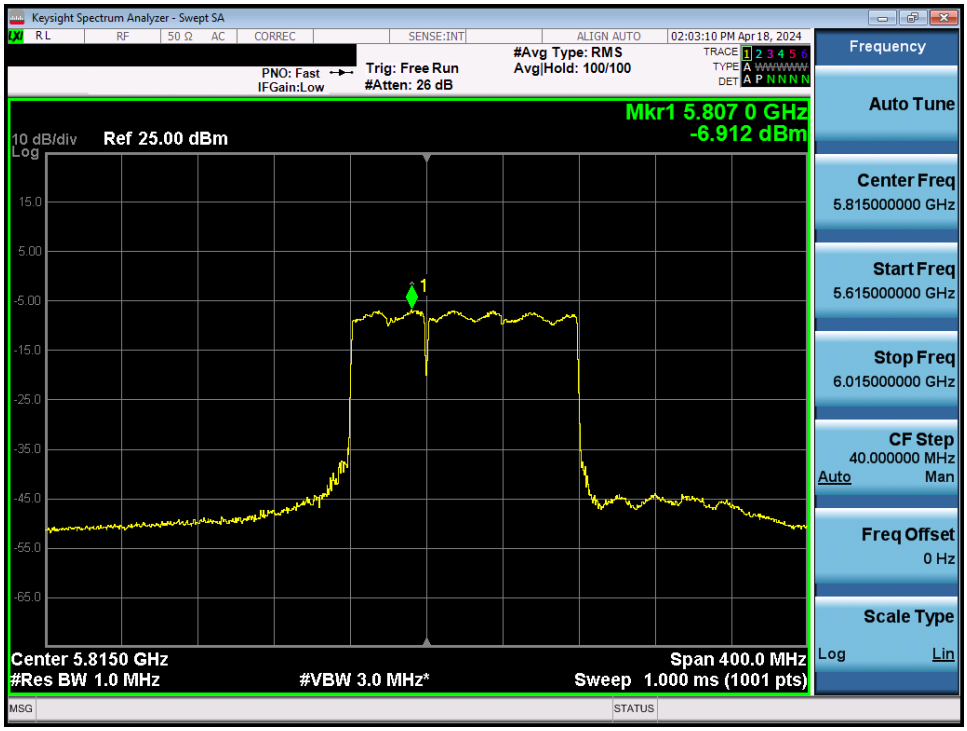


Plot 7-125. Power Spectral Density Plot MIMO ANT1 (80MHz BW 802.11be – 484+242Tones (UNII Band 3/4) – Ch. 171)



Plot 7-126. Power Spectral Density Plot MIMO ANT1 (160MHz BW 802.11be – 996+484 Tones (UNII Band 3/4) – Ch. 163)

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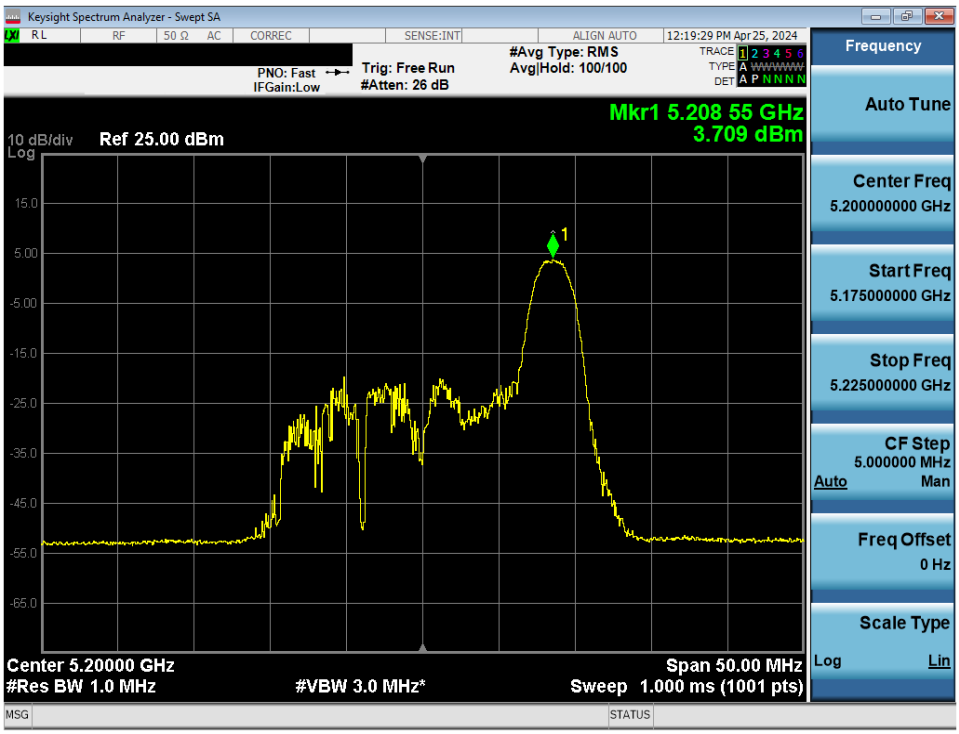
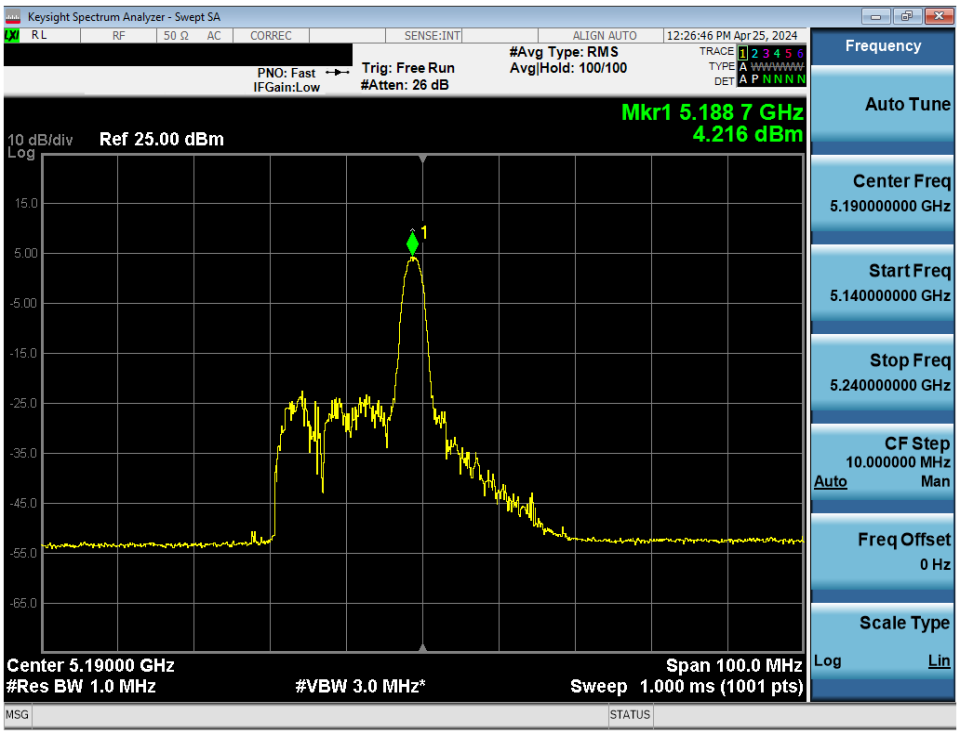
7.5.2 MIMO Antenna-2 Power Spectral Density Measurements



Plot 7-127. Power Spectral Density Plot MIMO ANT2 (20MHz BW 802.11be – 26 Tones (UNII Band 1) – Ch. 40)



Plot 7-128. Power Spectral Density Plot MIMO ANT2 (40MHz BW 802.11be – 26 Tones (UNII Band 1) – Ch. 38)

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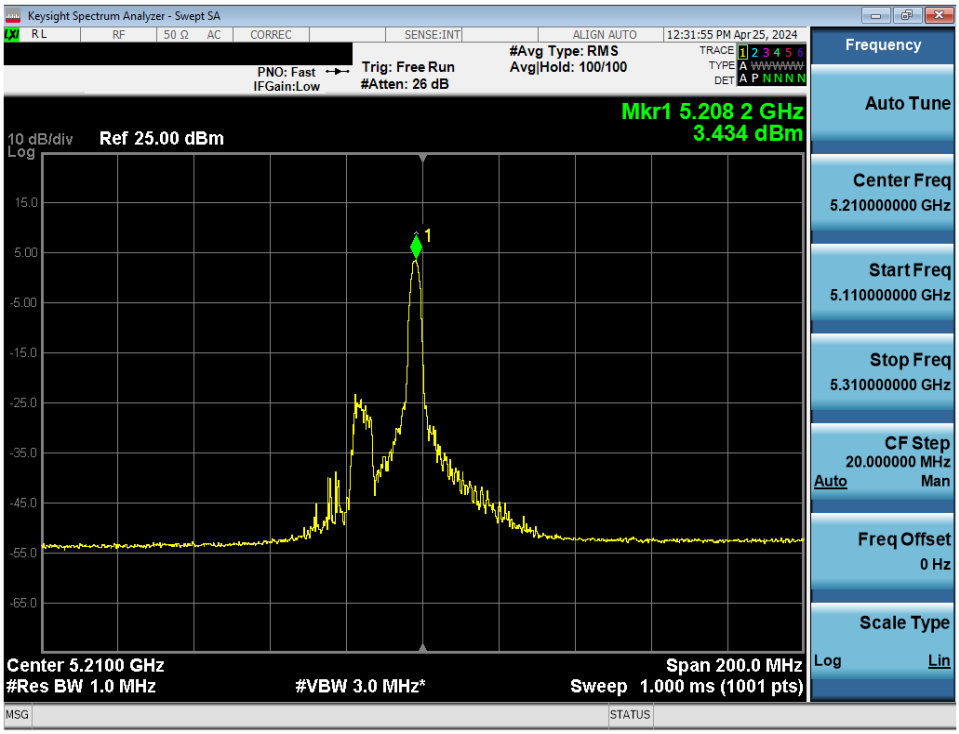
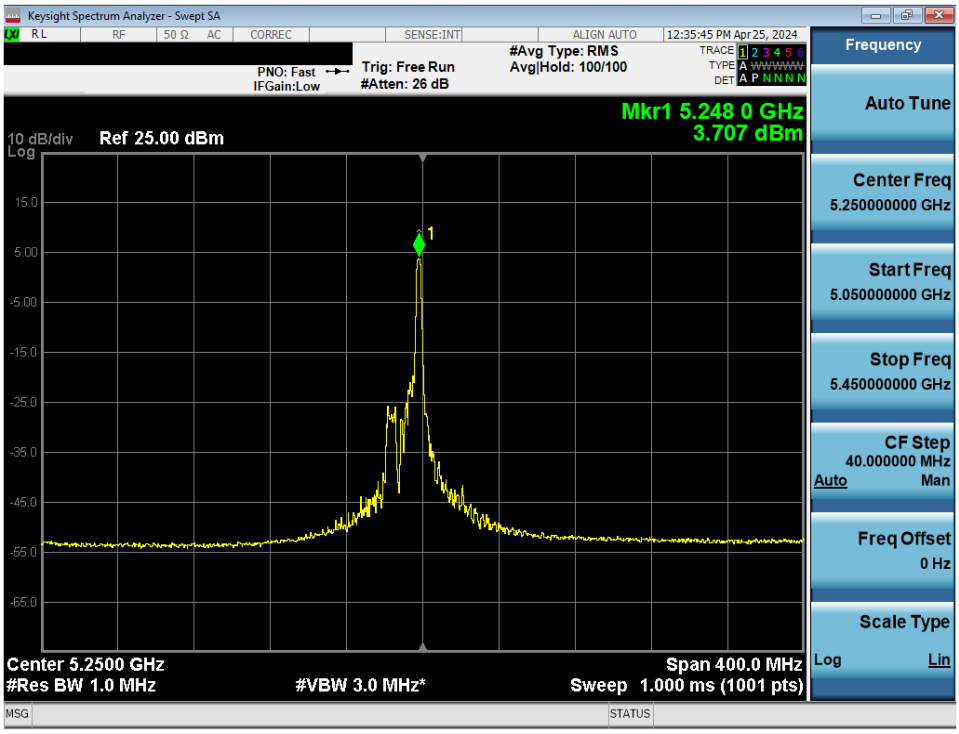


Plot 7-129. Power Spectral Density Plot MIMO ANT2 (80MHz BW 802.11be – 26 Tones (UNII Band 1) – Ch. 42)



Plot 7-130. Power Spectral Density Plot MIMO ANT2 (160MHz BW 802.11be – 26 Tones (UNII Band 1/2A) – Ch. 50)

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