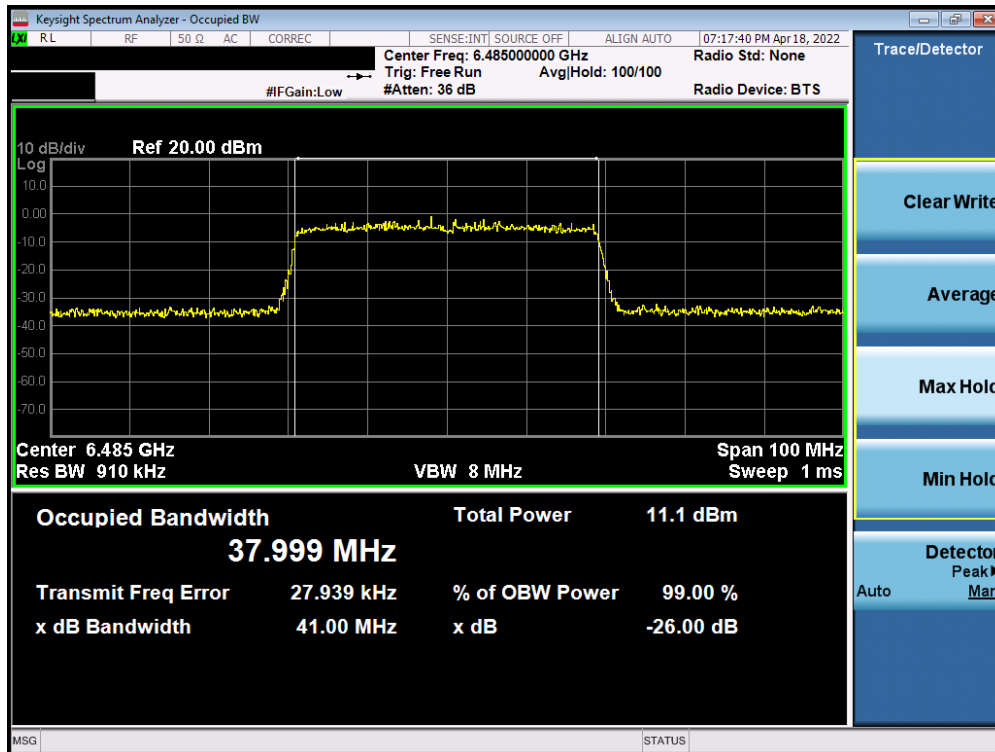
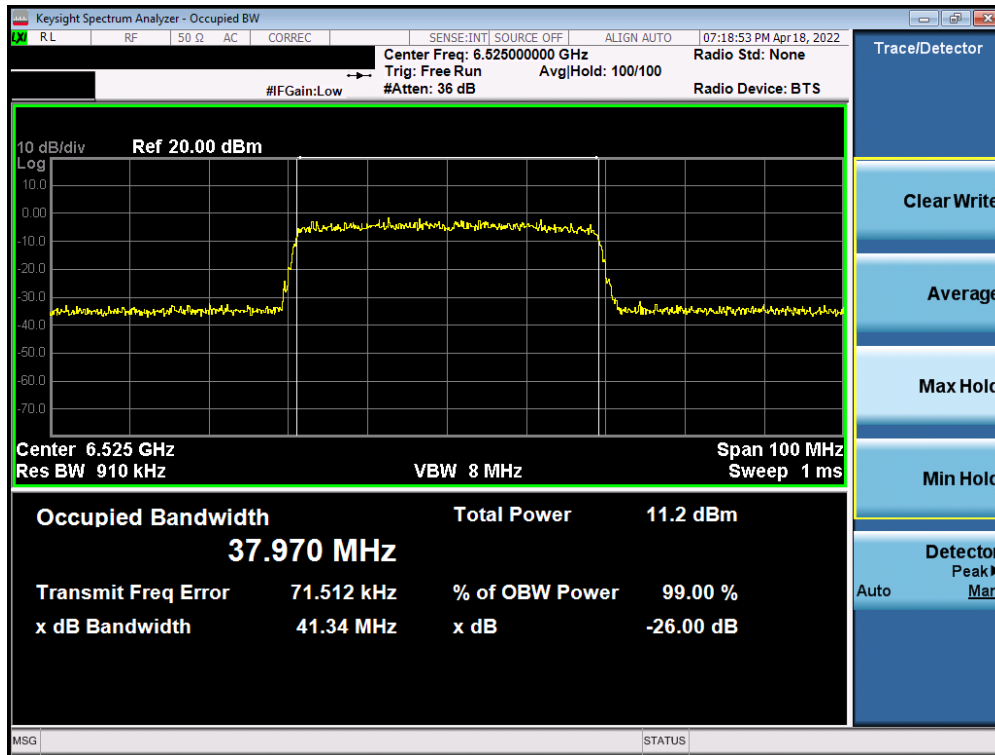


Plot 7-178. 26dB Bandwidth Plot MIMO ANT2 (40MHz 802.11ax (UNII Band 6) – Ch. 99)

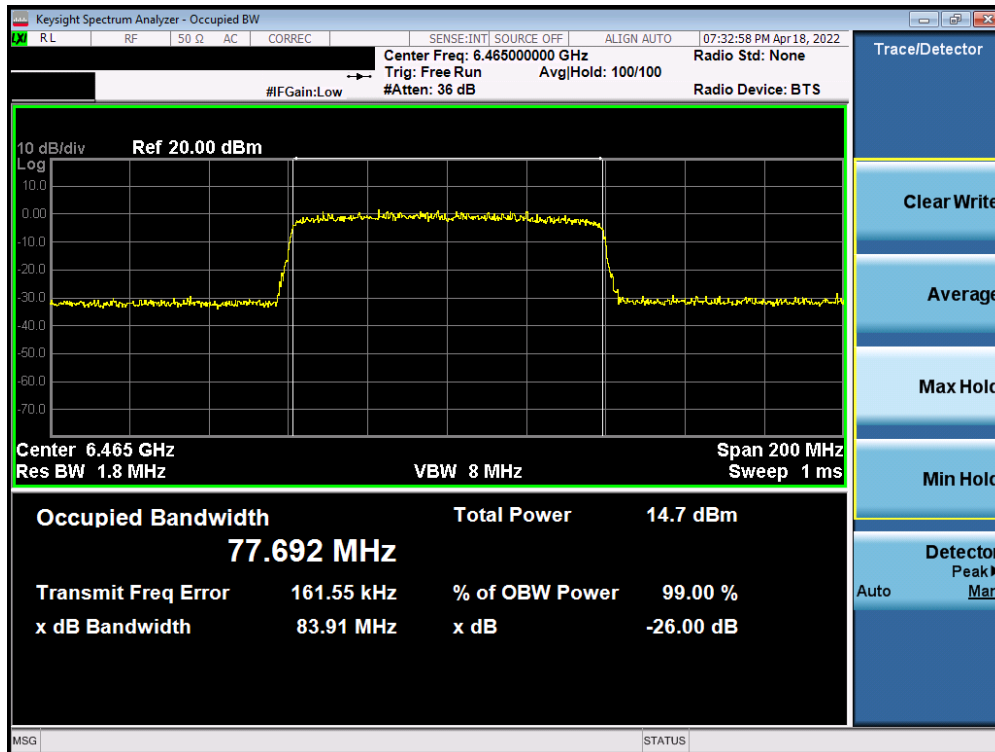


Plot 7-179. 26dB Bandwidth Plot MIMO ANT2 (40MHz 802.11ax (UNII Band 6) – Ch. 107)

FCC ID: C3K1997	MEASUREMENT REPORT (CERTIFICATION)		Approved by: Technical Manager
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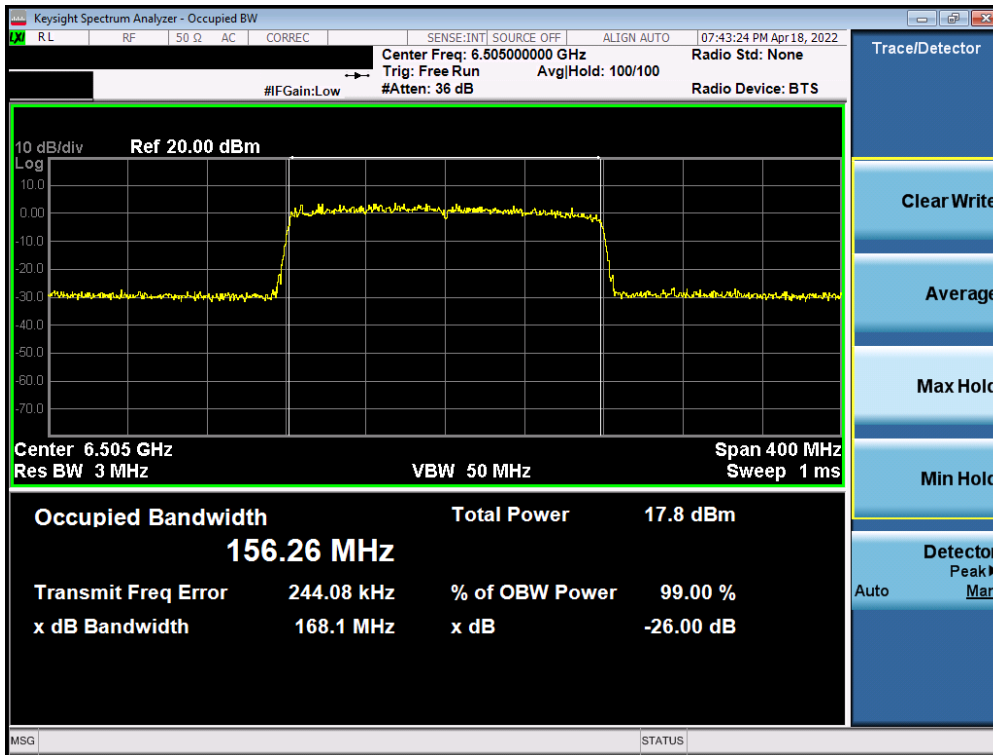


Plot 7-180. 26dB Bandwidth Plot MIMO ANT2 (40MHz 802.11ax (UNII Band 6) – Ch. 115)



Plot 7-181. 26dB Bandwidth Plot MIMO ANT2 (80MHz 802.11ax (UNII Band 6) – Ch. 103)

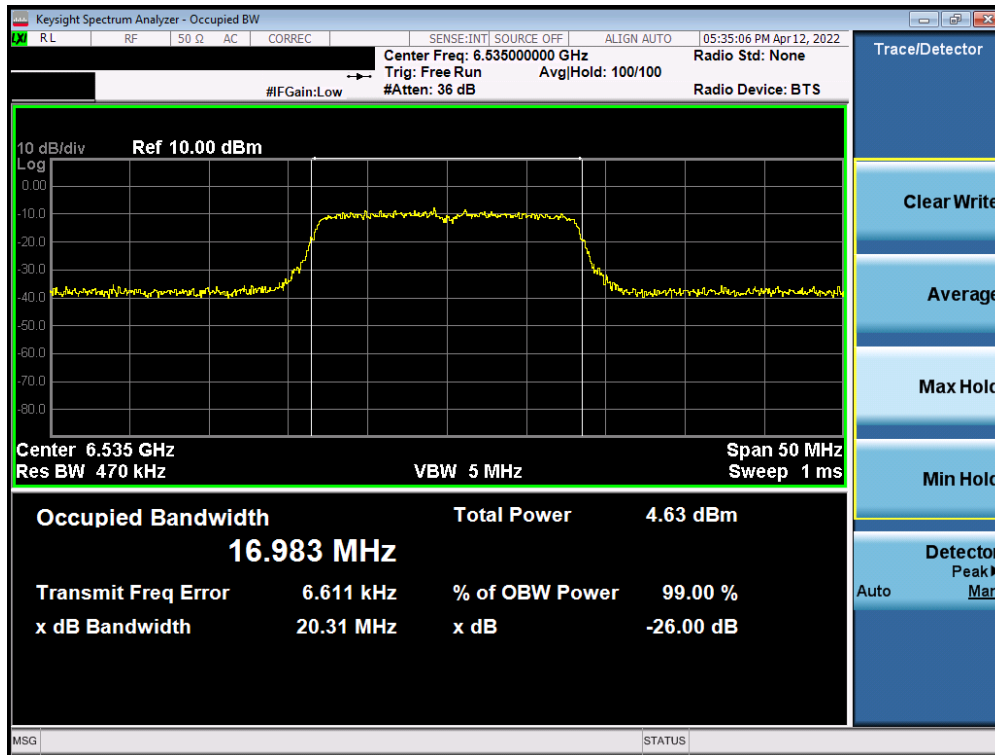
FCC ID: C3K1997	MEASUREMENT REPORT (CERTIFICATION)		Approved by: Technical Manager
Test Report S/N: 1M2204040049-17-R1.C3K	Test Dates: 3/14/2022 – 7/8/2022	EUT Type: Portable Computing Device	Page 108 of 422



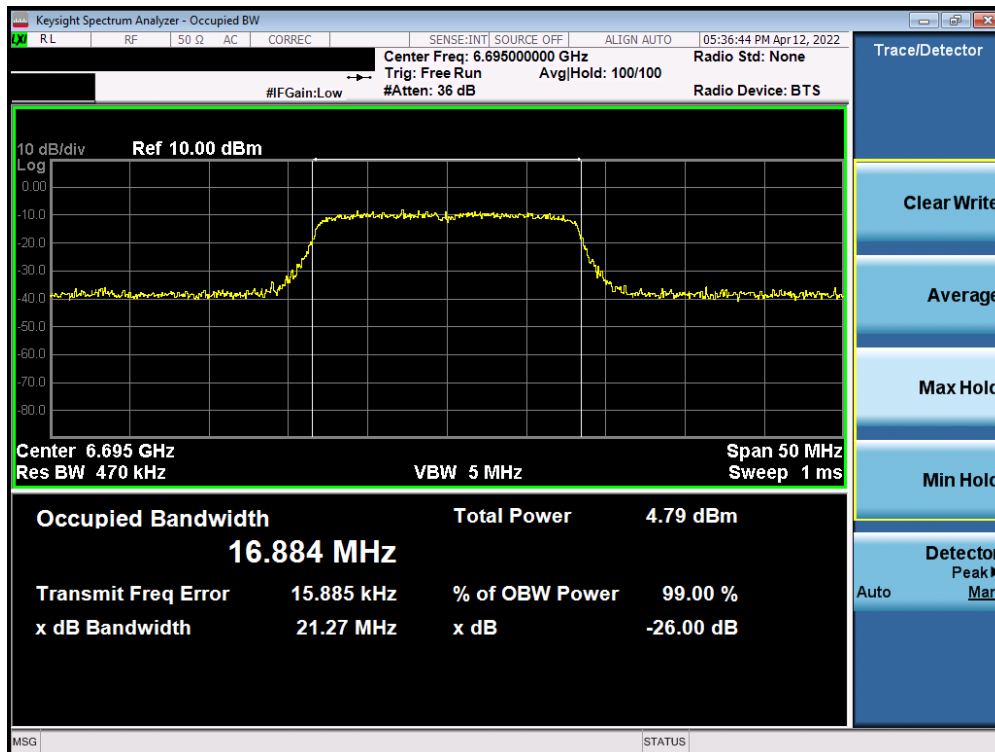
Plot 7-182. 26dB Bandwidth Plot MIMO ANT2 (160MHz 802.11ax (UNII Band 6) – Ch. 111)

FCC ID: C3K1997	MEASUREMENT REPORT (CERTIFICATION)		Approved by: Technical Manager
Test Report S/N: 1M2204040049-17-R1.C3K	Test Dates: 3/14/2022 – 7/8/2022	EUT Type: Portable Computing Device	Page 109 of 422

MIMO Antenna-2 26 dB Bandwidth Measurements - (UNII Band 7)

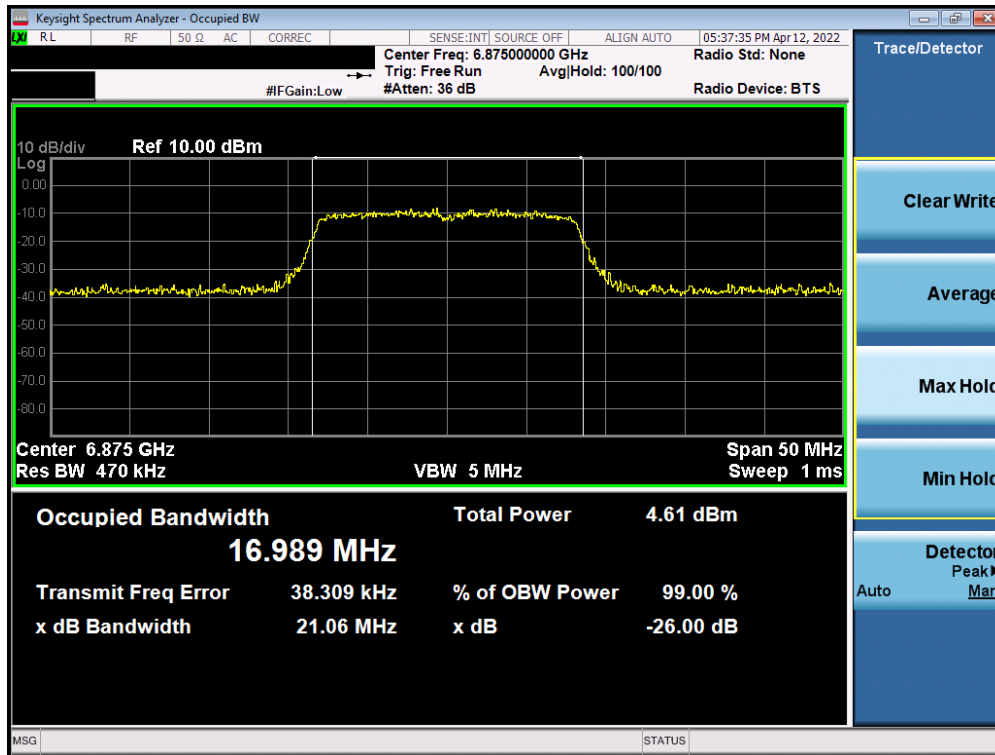


Plot 7-183. 26dB Bandwidth Plot MIMO ANT2 (20MHz 802.11a (UNII Band 7) – Ch. 117)

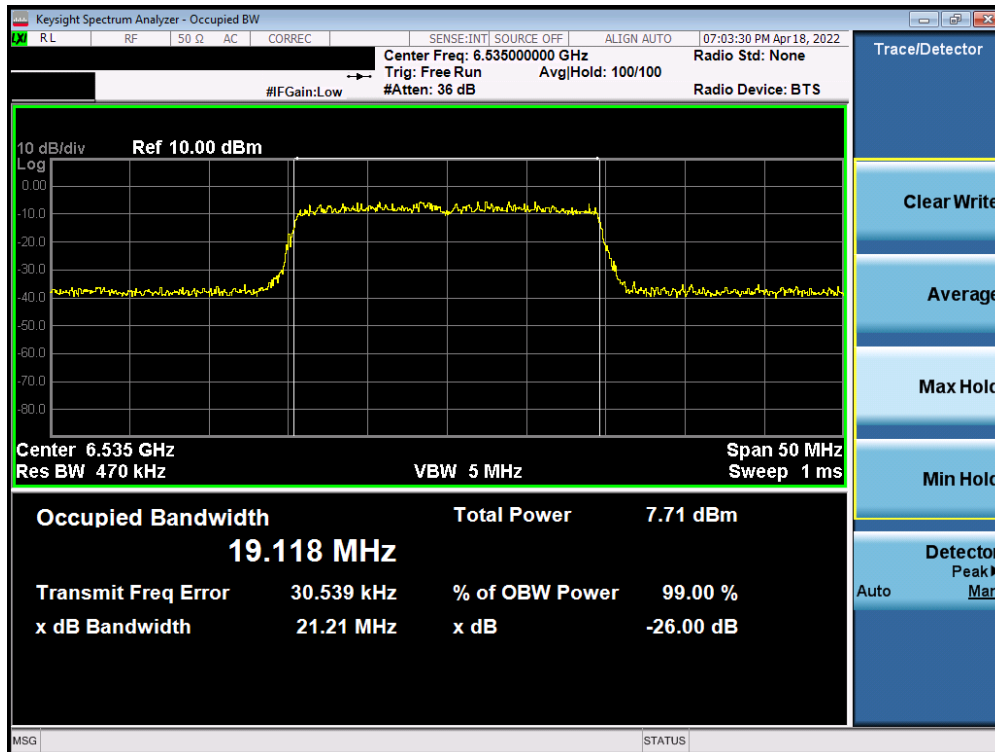


Plot 7-184. 26dB Bandwidth Plot MIMO ANT2 (20MHz 802.11a (UNII Band 7) – Ch. 149)

FCC ID: C3K1997	MEASUREMENT REPORT (CERTIFICATION)		Approved by: Technical Manager
Test Report S/N: 1M2204040049-17-R1.C3K	Test Dates: 3/14/2022 – 7/8/2022	EUT Type: Portable Computing Device	Page 110 of 422

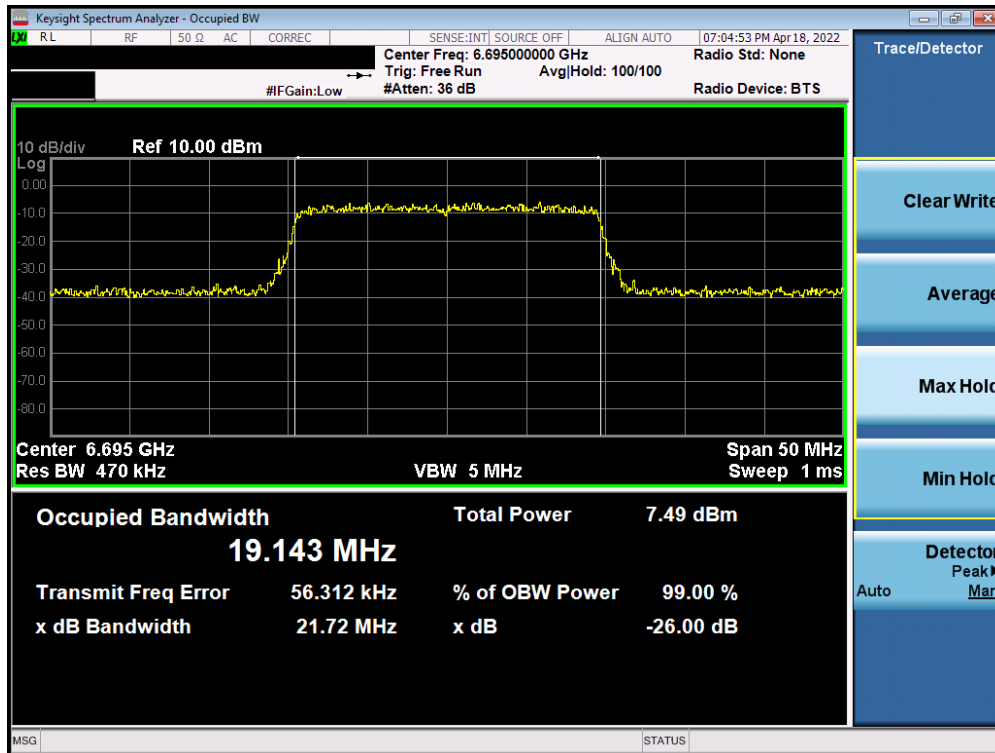


Plot 7-185. 26dB Bandwidth Plot MIMO ANT2 (20MHz 802.11a (UNII Band 7) – Ch. 185)

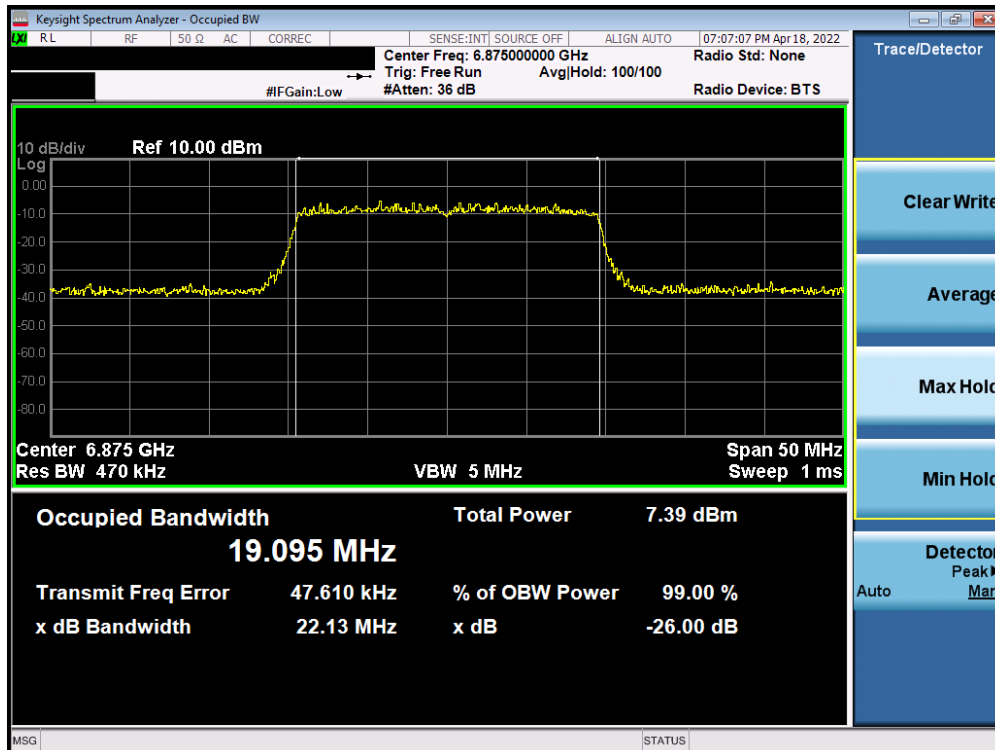


Plot 7-186. 26dB Bandwidth Plot MIMO ANT2 (20MHz 802.11ax (UNII Band 7) – Ch. 117)

FCC ID: C3K1997	MEASUREMENT REPORT (CERTIFICATION)		Approved by: Technical Manager
Test Report S/N: 1M2204040049-17-R1.C3K	Test Dates: 3/14/2022 – 7/8/2022	EUT Type: Portable Computing Device	Page 111 of 422

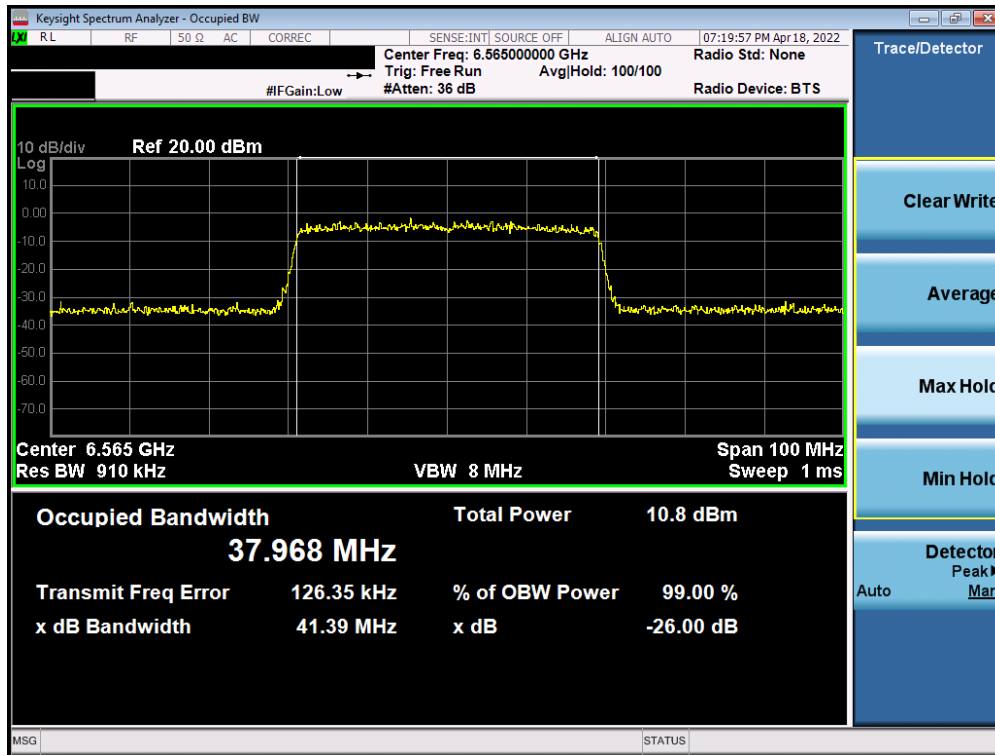


Plot 7-187. 26dB Bandwidth Plot MIMO ANT2 (20MHz 802.11ax (UNII Band 7) – Ch. 149)

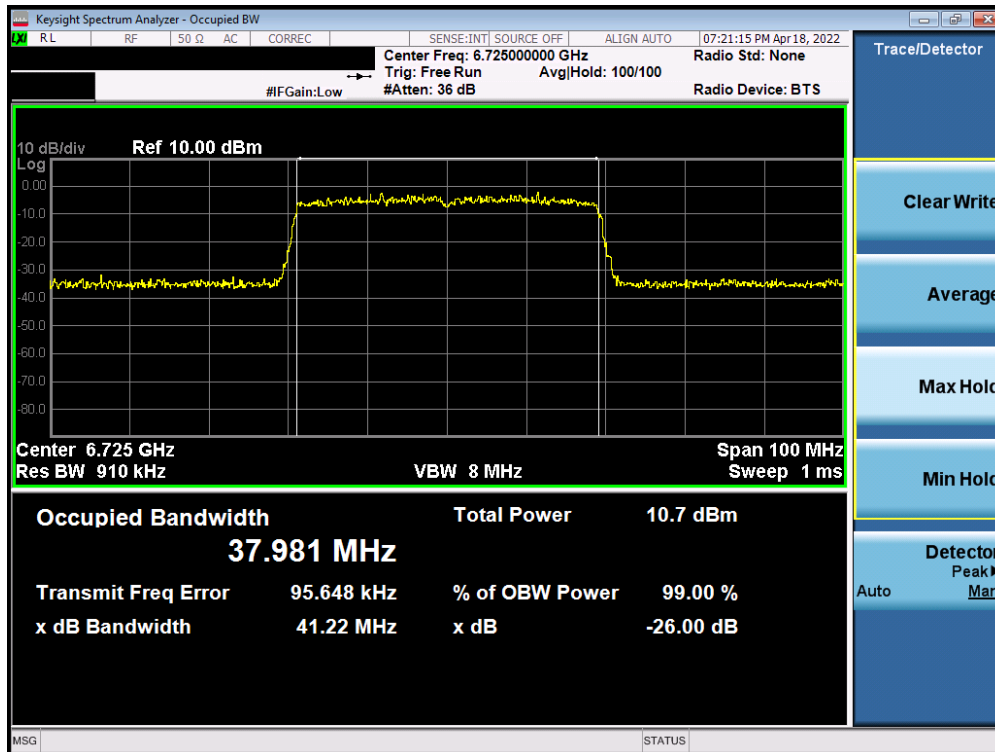


Plot 7-188. 26dB Bandwidth Plot MIMO ANT2 (20MHz 802.11ax (UNII Band 7) – Ch. 185)

FCC ID: C3K1997	MEASUREMENT REPORT (CERTIFICATION)		Approved by: Technical Manager
Test Report S/N: 1M2204040049-17-R1.C3K	Test Dates: 3/14/2022 – 7/8/2022	EUT Type: Portable Computing Device	Page 112 of 422

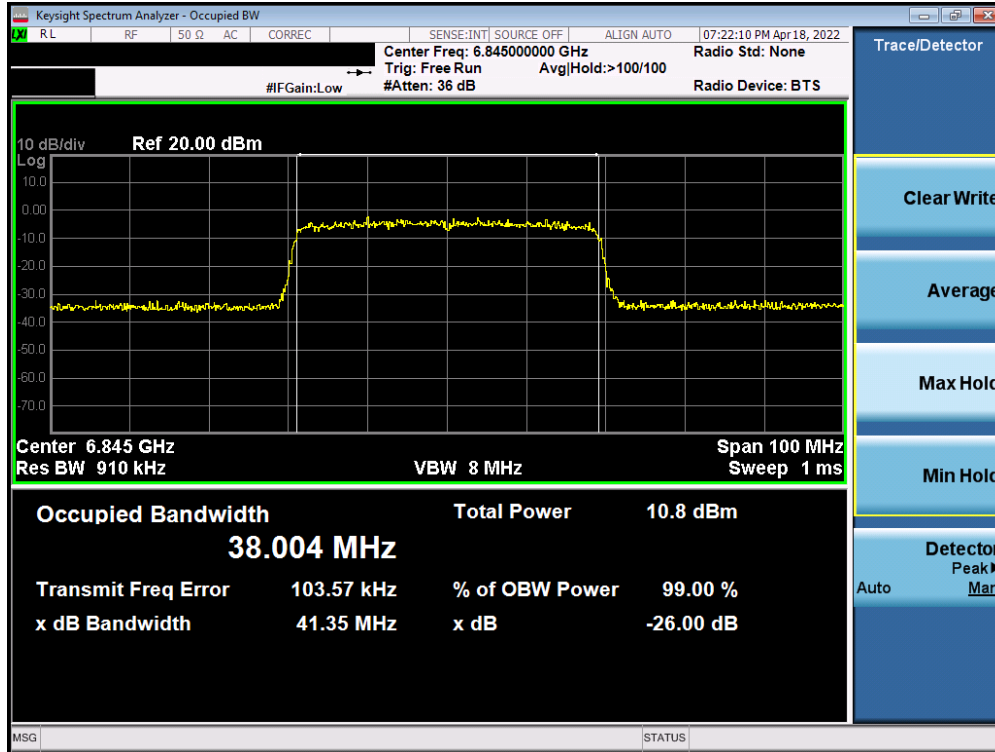


Plot 7-189. 26dB Bandwidth Plot MIMO ANT2 (40MHz 802.11ax (UNII Band 7) – Ch. 123)

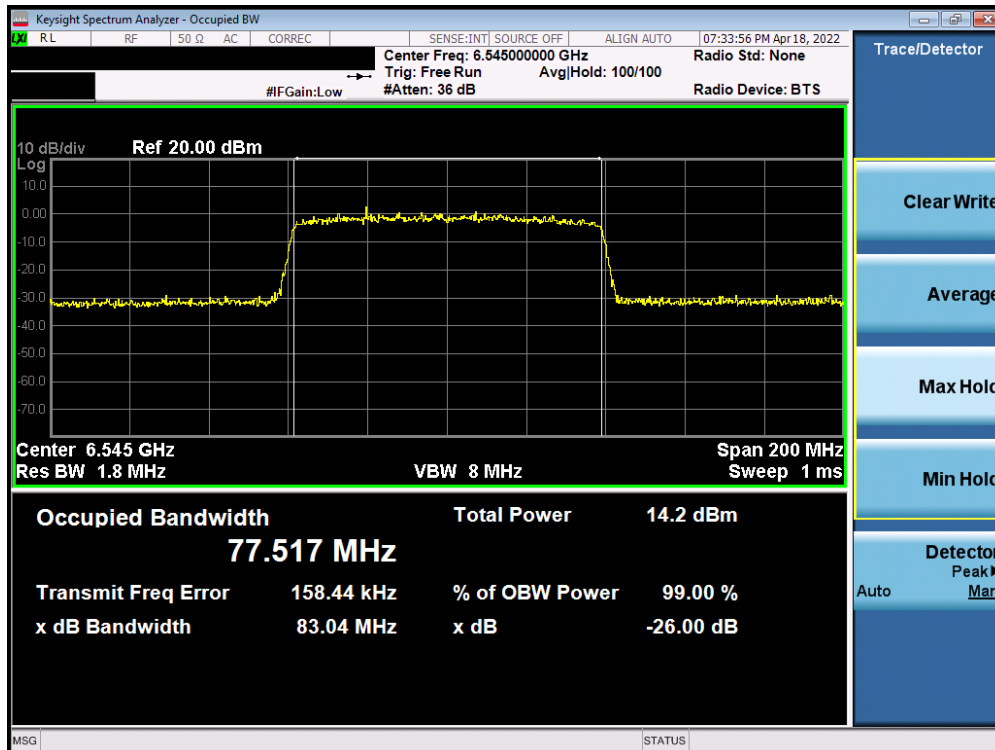


Plot 7-190. 26dB Bandwidth Plot MIMO ANT2 (40MHz 802.11ax (UNII Band 7) – Ch. 155)

FCC ID: C3K1997	MEASUREMENT REPORT (CERTIFICATION)		Approved by: Technical Manager
Test Report S/N: 1M2204040049-17-R1.C3K	Test Dates: 3/14/2022 – 7/8/2022	EUT Type: Portable Computing Device	Page 113 of 422

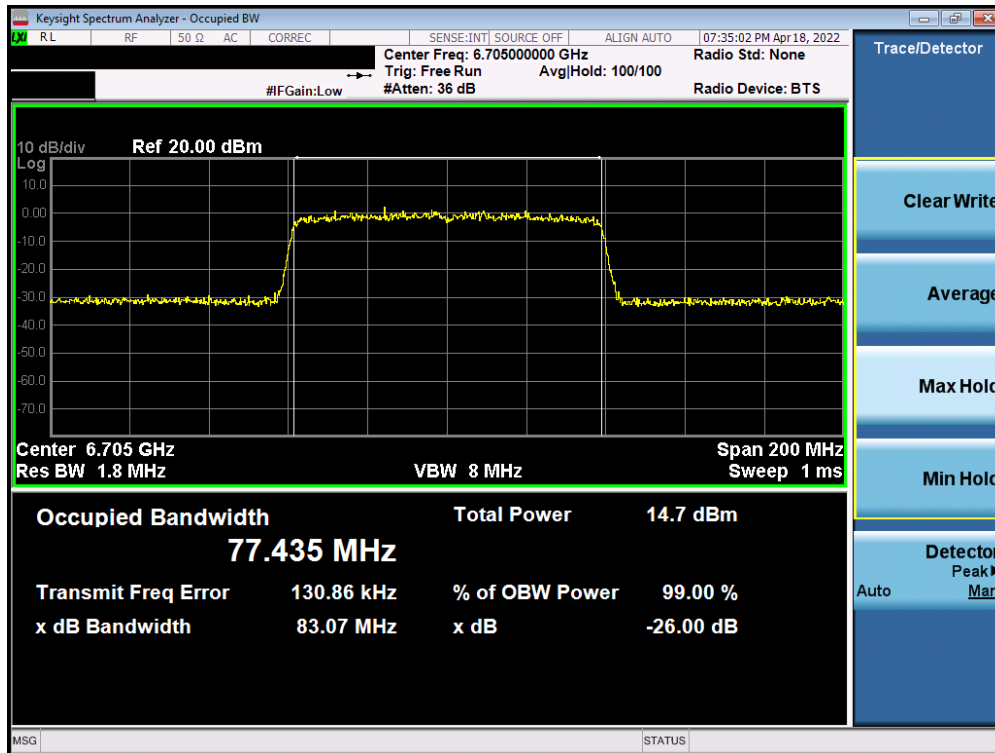


Plot 7-191. 26dB Bandwidth Plot MIMO ANT2 (40MHz 802.11ax (UNII Band 7) – Ch. 179)

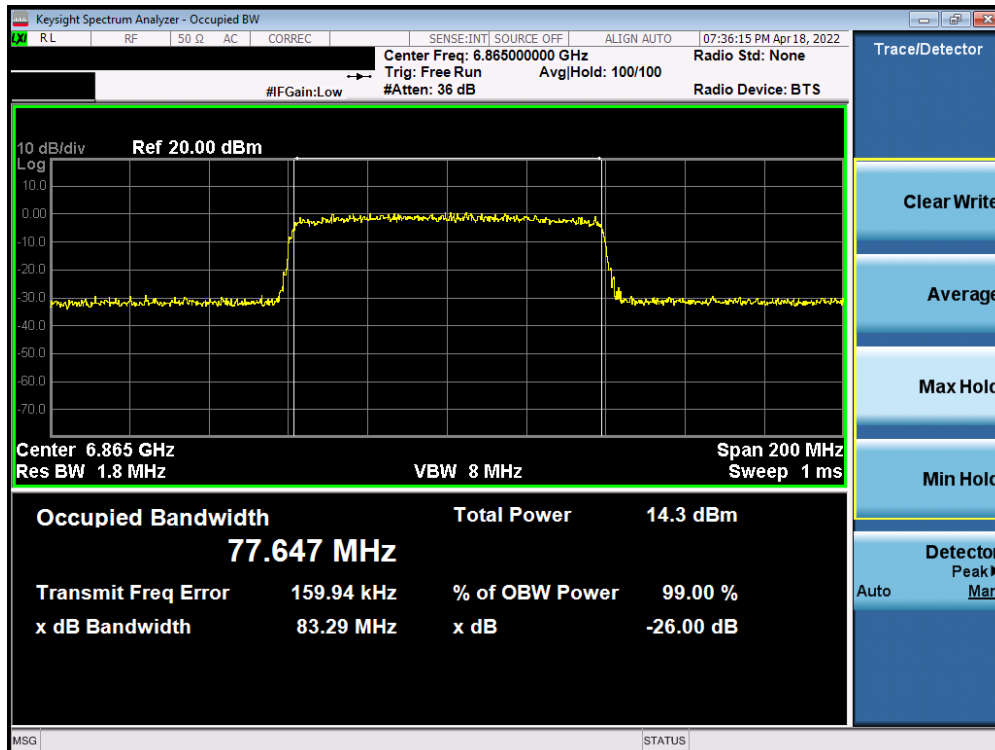


Plot 7-192. 26dB Bandwidth Plot MIMO ANT2 (80MHz 802.11ax (UNII Band 7) – Ch. 119)

FCC ID: C3K1997	MEASUREMENT REPORT (CERTIFICATION)		Approved by: Technical Manager
Test Report S/N: 1M2204040049-17-R1.C3K	Test Dates: 3/14/2022 – 7/8/2022	EUT Type: Portable Computing Device	Page 114 of 422

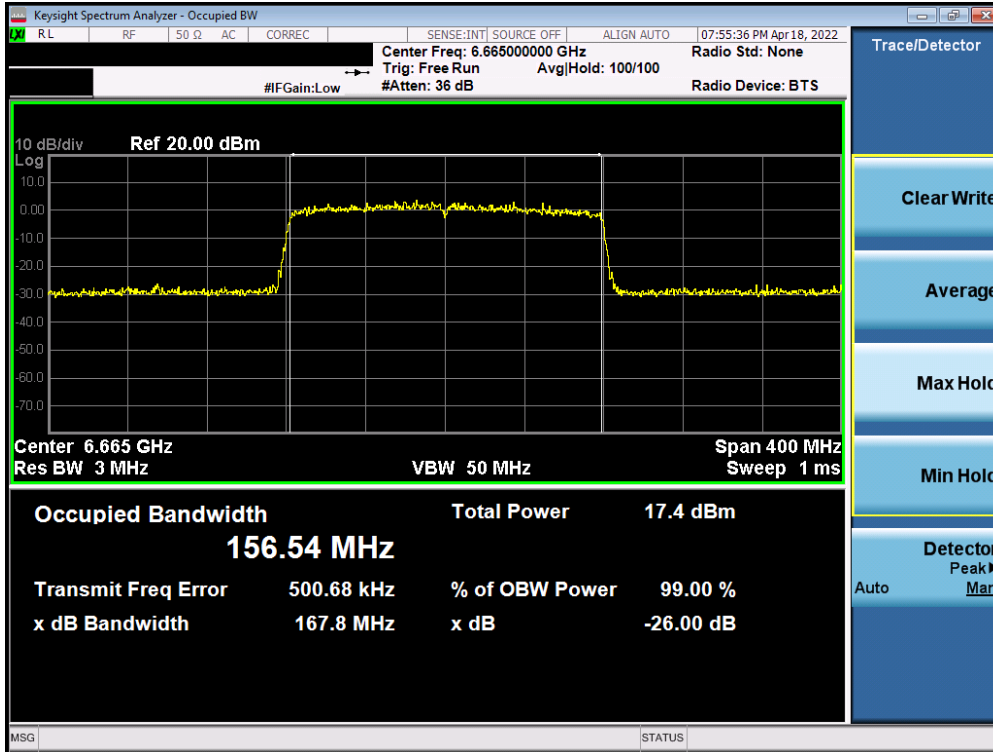


Plot 7-193. 26dB Bandwidth Plot MIMO ANT2 (80MHz 802.11ax (UNII Band 7) – Ch. 151)

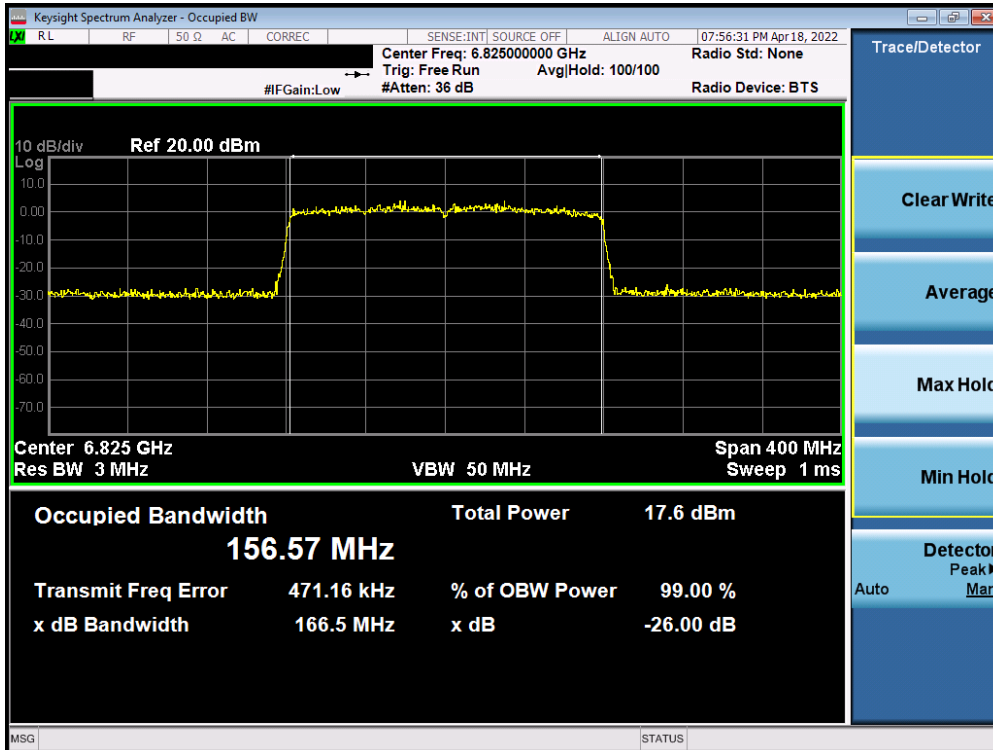


Plot 7-194. 26dB Bandwidth Plot MIMO ANT2 (80MHz 802.11ax (UNII Band 7) – Ch. 183)

FCC ID: C3K1997	MEASUREMENT REPORT (CERTIFICATION)		Approved by: Technical Manager
Test Report S/N: 1M2204040049-17-R1.C3K	Test Dates: 3/14/2022 – 7/8/2022	EUT Type: Portable Computing Device	Page 115 of 422



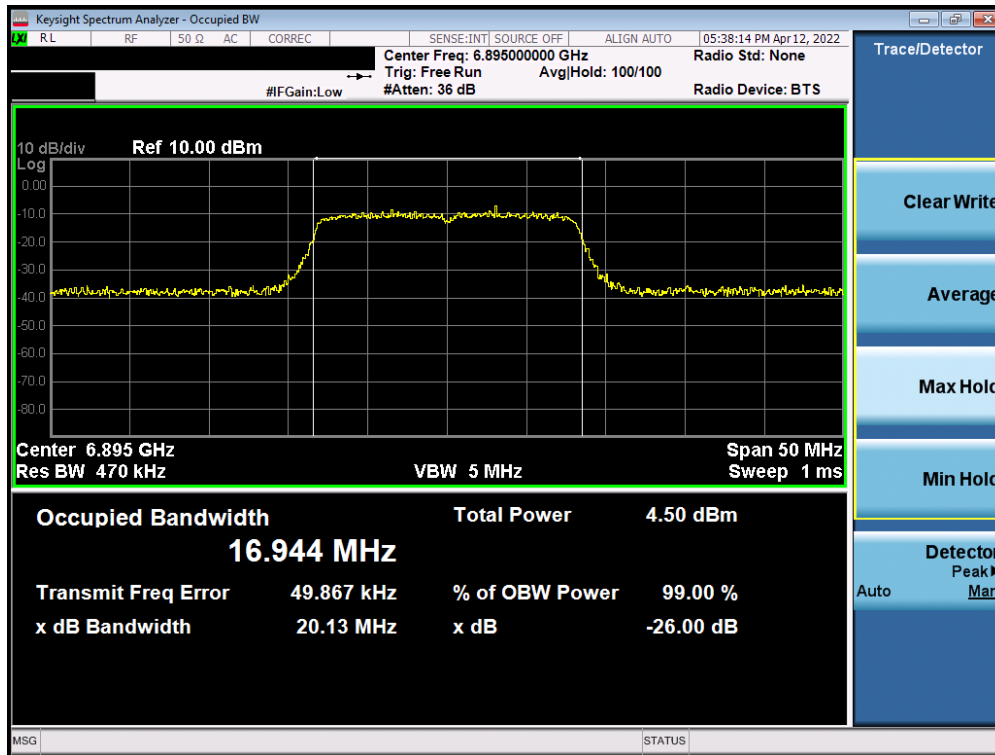
Plot 7-195. 26dB Bandwidth Plot MIMO ANT2 (160MHz 802.11ax (UNII Band 7) – Ch. 143)



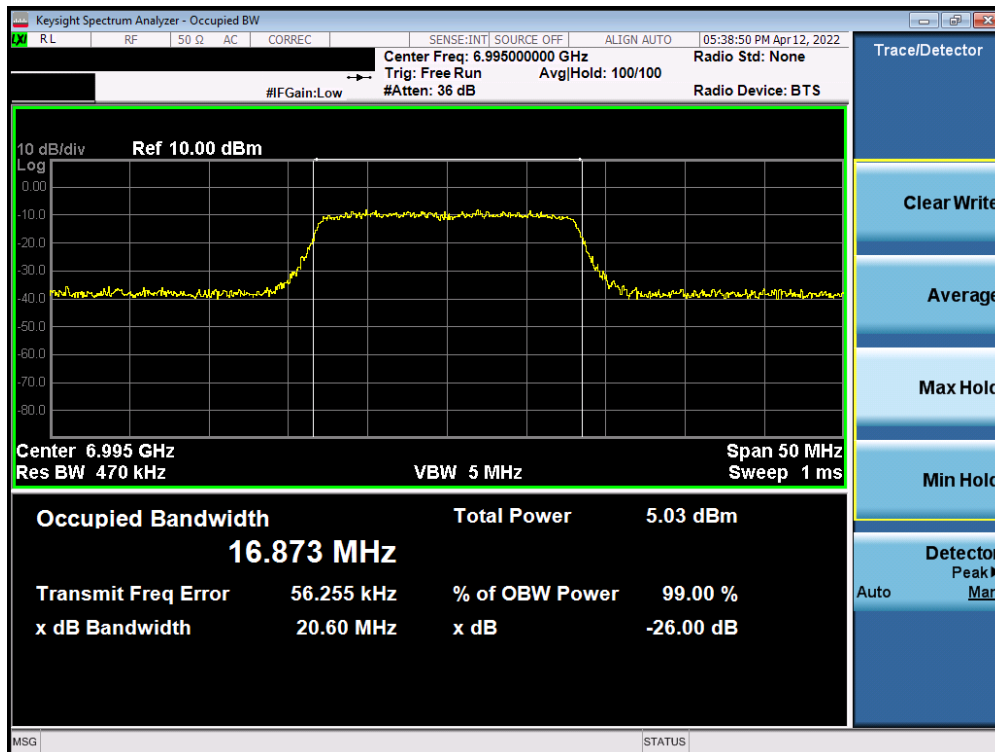
Plot 7-196. 26dB Bandwidth Plot MIMO ANT2 (160MHz 802.11ax (UNII Band 7) – Ch. 175)

FCC ID: C3K1997	MEASUREMENT REPORT (CERTIFICATION)		Approved by: Technical Manager
Test Report S/N: 1M2204040049-17-R1.C3K	Test Dates: 3/14/2022 – 7/8/2022	EUT Type: Portable Computing Device	Page 116 of 422

MIMO Antenna-2 26 dB Bandwidth Measurements - (UNII Band 8)

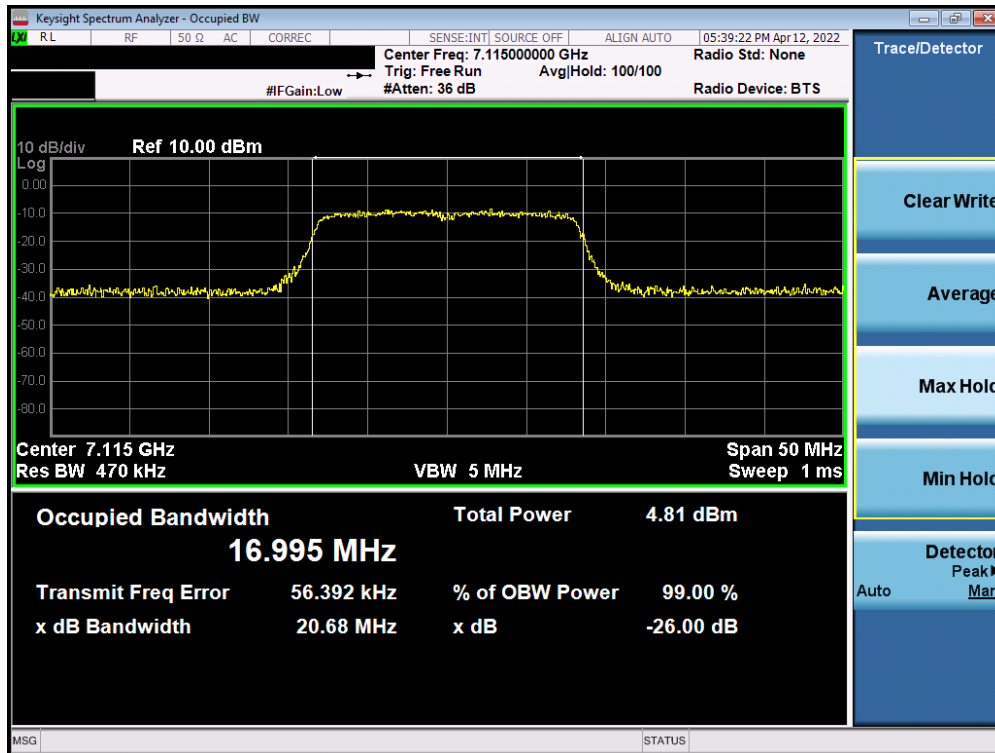


Plot 7-197. 26dB Bandwidth Plot MIMO ANT2 (20MHz 802.11a (UNII Band 8) – Ch. 189)

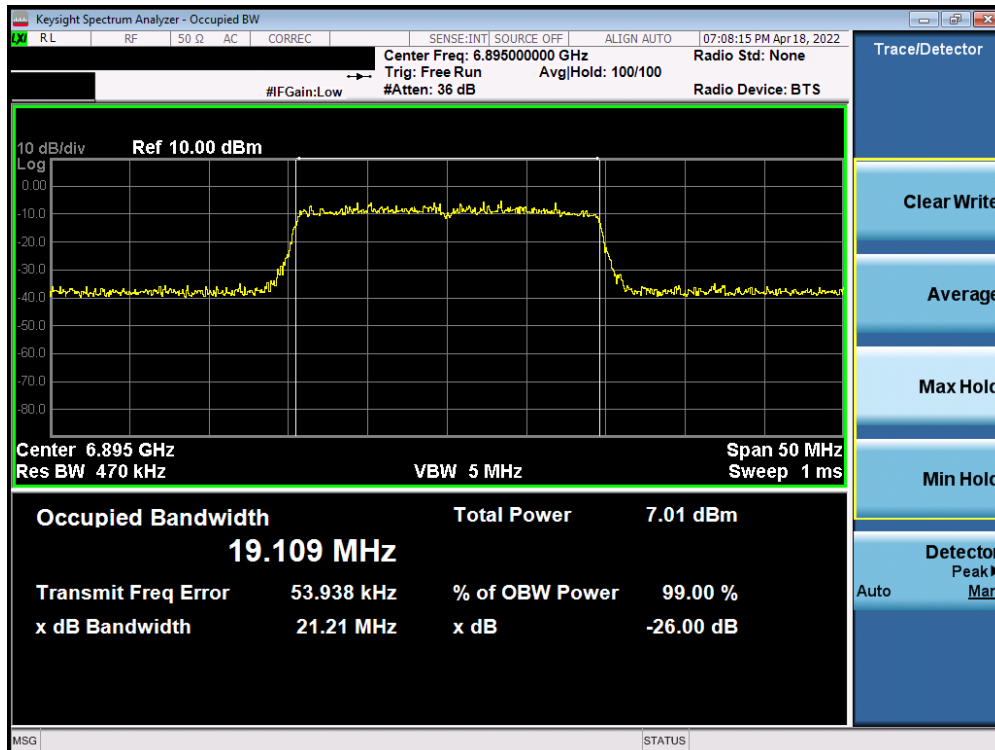


Plot 7-198. 26dB Bandwidth Plot MIMO ANT2 (20MHz 802.11a (UNII Band 8) – Ch. 209)

FCC ID: C3K1997	MEASUREMENT REPORT (CERTIFICATION)		Approved by: Technical Manager
Test Report S/N: 1M2204040049-17-R1.C3K	Test Dates: 3/14/2022 – 7/8/2022	EUT Type: Portable Computing Device	Page 117 of 422

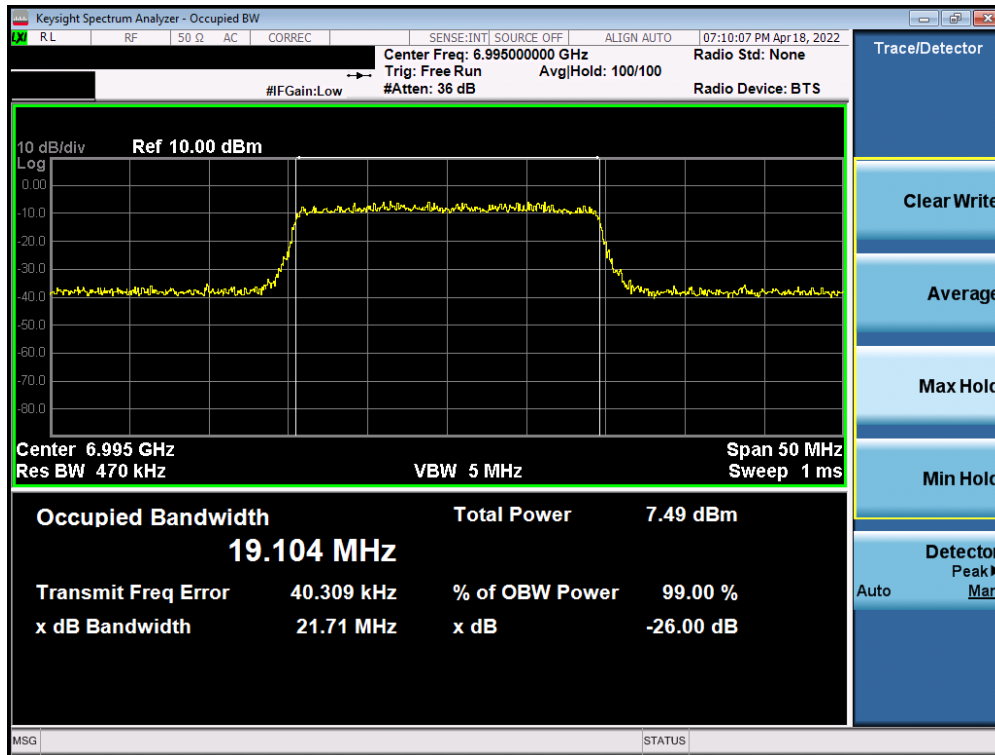


Plot 7-199. 26dB Bandwidth Plot MIMO ANT2 (20MHz 802.11a (UNII Band 8) – Ch. 233)

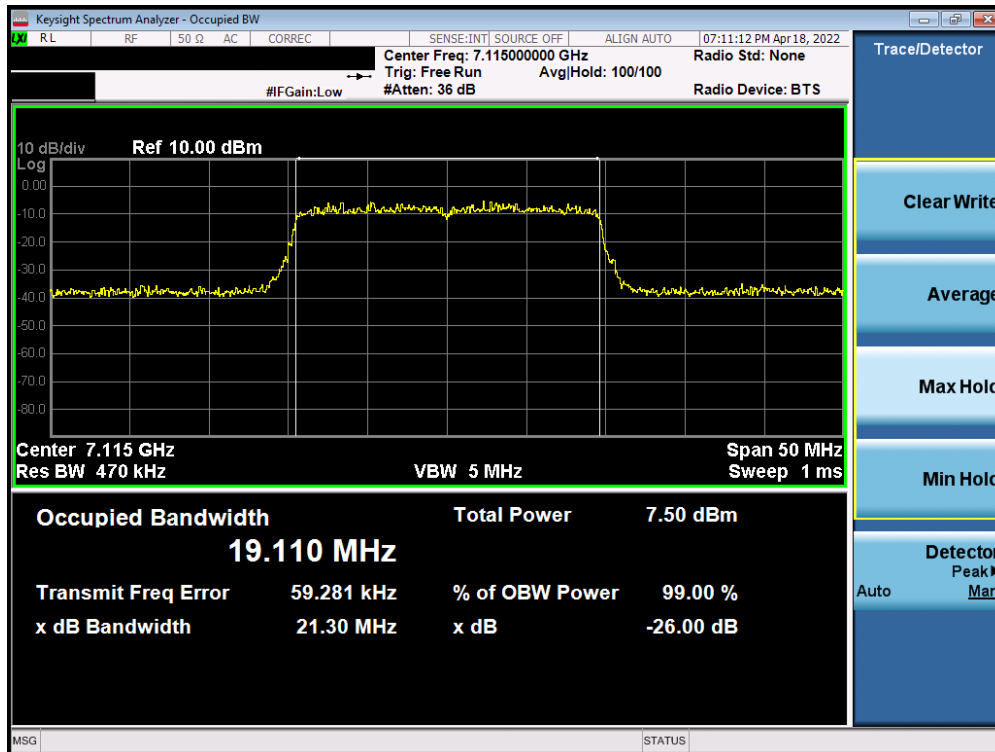


Plot 7-200. 26dB Bandwidth Plot MIMO ANT2 (20MHz 802.11ax (UNII Band 8) – Ch. 189)

FCC ID: C3K1997		MEASUREMENT REPORT (CERTIFICATION)		Approved by: Technical Manager
Test Report S/N: 1M2204040049-17-R1.C3K	Test Dates: 3/14/2022 – 7/8/2022	EUT Type: Portable Computing Device		Page 118 of 422

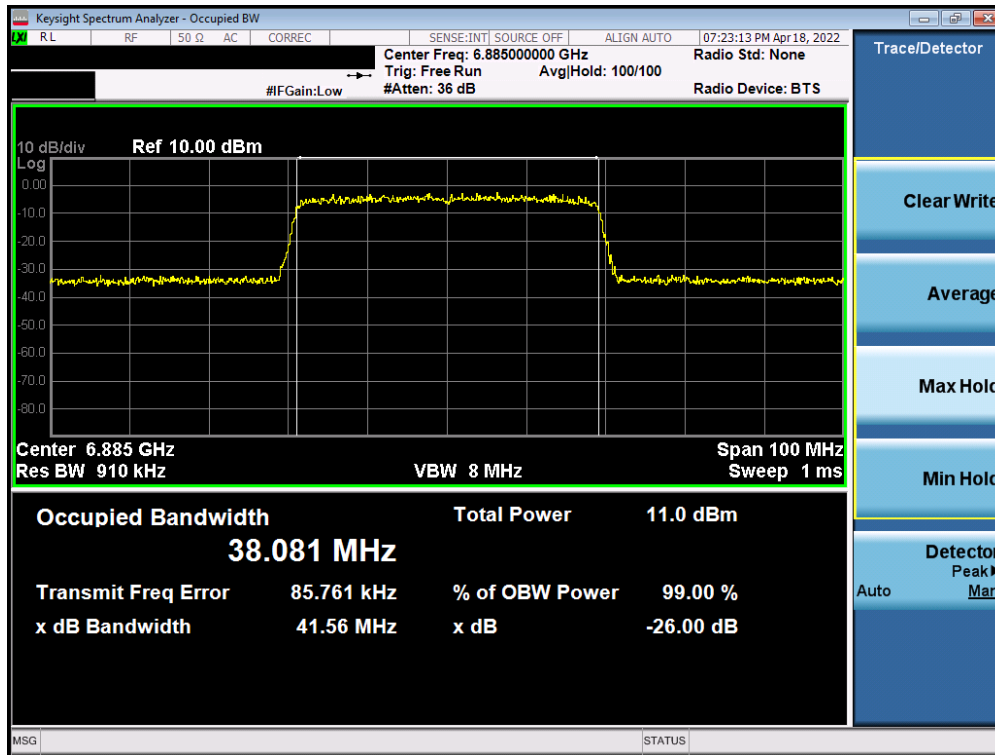


Plot 7-201. 26dB Bandwidth Plot MIMO ANT2 (20MHz 802.11ax (UNII Band 8) – Ch. 209)

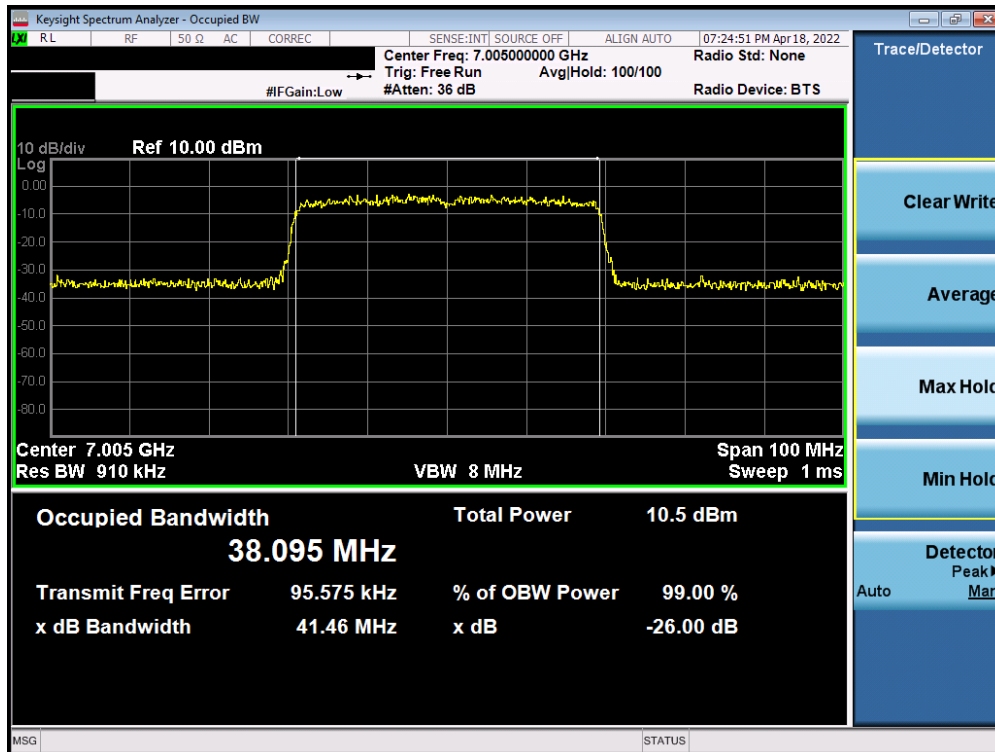


Plot 7-202. 26dB Bandwidth Plot MIMO ANT2 (20MHz 802.11ax (UNII Band 8) – Ch. 233)

FCC ID: C3K1997	MEASUREMENT REPORT (CERTIFICATION)		Approved by: Technical Manager
Test Report S/N: 1M2204040049-17-R1.C3K	Test Dates: 3/14/2022 – 7/8/2022	EUT Type: Portable Computing Device	Page 119 of 422

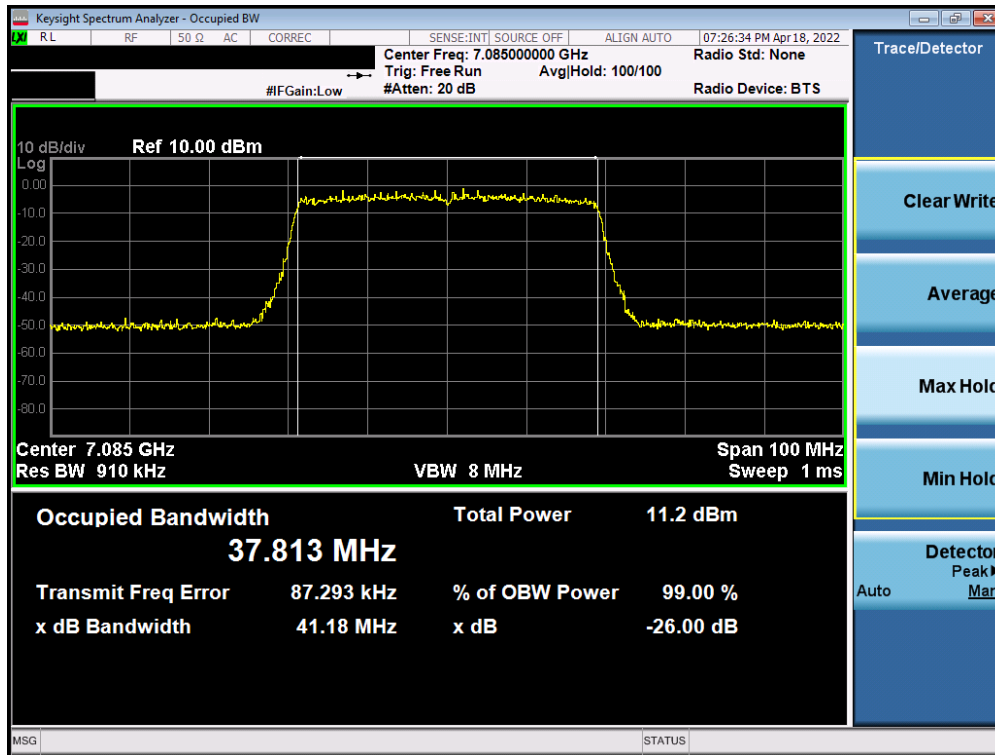


Plot 7-203. 26dB Bandwidth Plot MIMO ANT2 (40MHz 802.11ax (UNII Band 8) – Ch. 187)

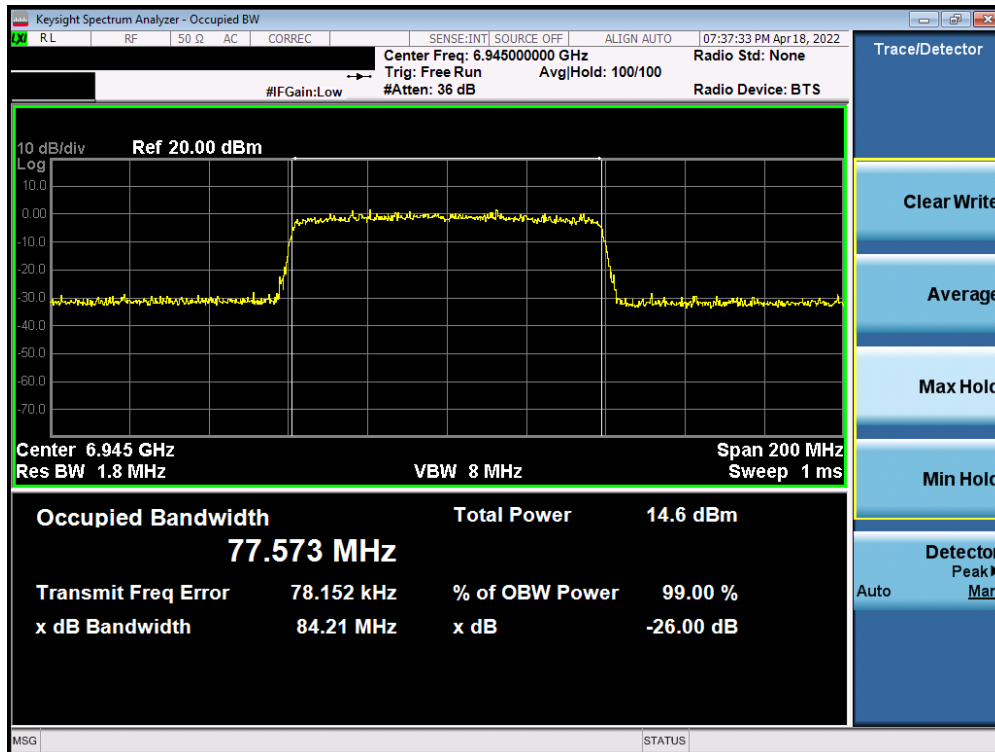


Plot 7-204. 26dB Bandwidth Plot MIMO ANT2 (40MHz 802.11ax (UNII Band 8) – Ch. 211)

FCC ID: C3K1997	MEASUREMENT REPORT (CERTIFICATION)		Approved by: Technical Manager
Test Report S/N: 1M2204040049-17-R1.C3K	Test Dates: 3/14/2022 – 7/8/2022	EUT Type: Portable Computing Device	Page 120 of 422

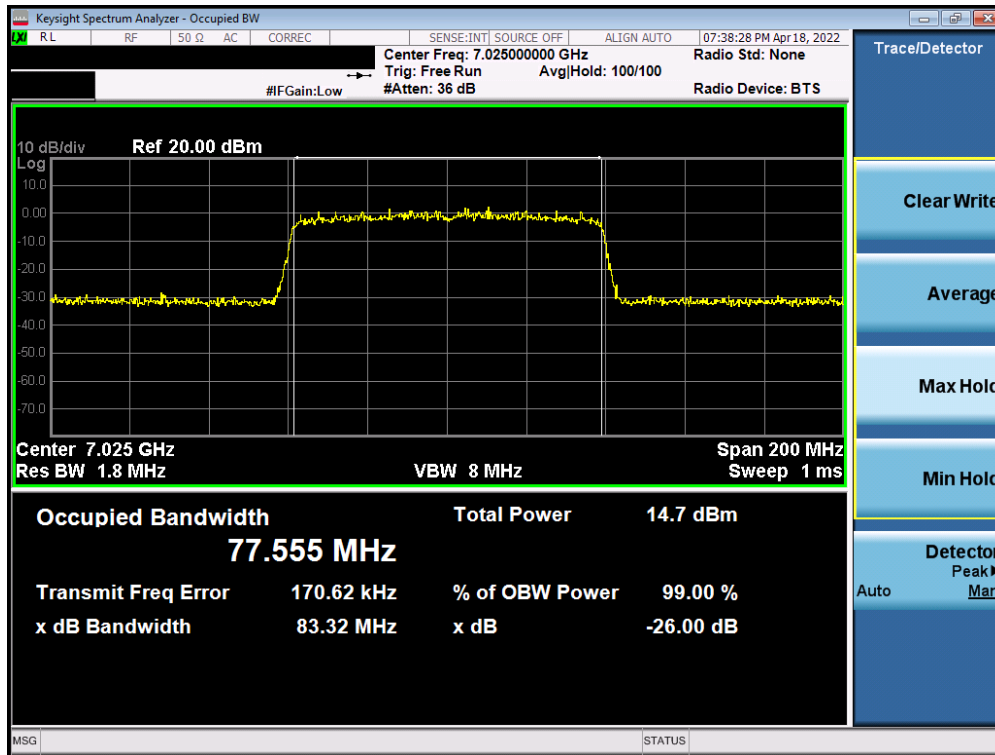


Plot 7-205. 26dB Bandwidth Plot MIMO ANT2 (40MHz 802.11ax (UNII Band 8) – Ch. 227)

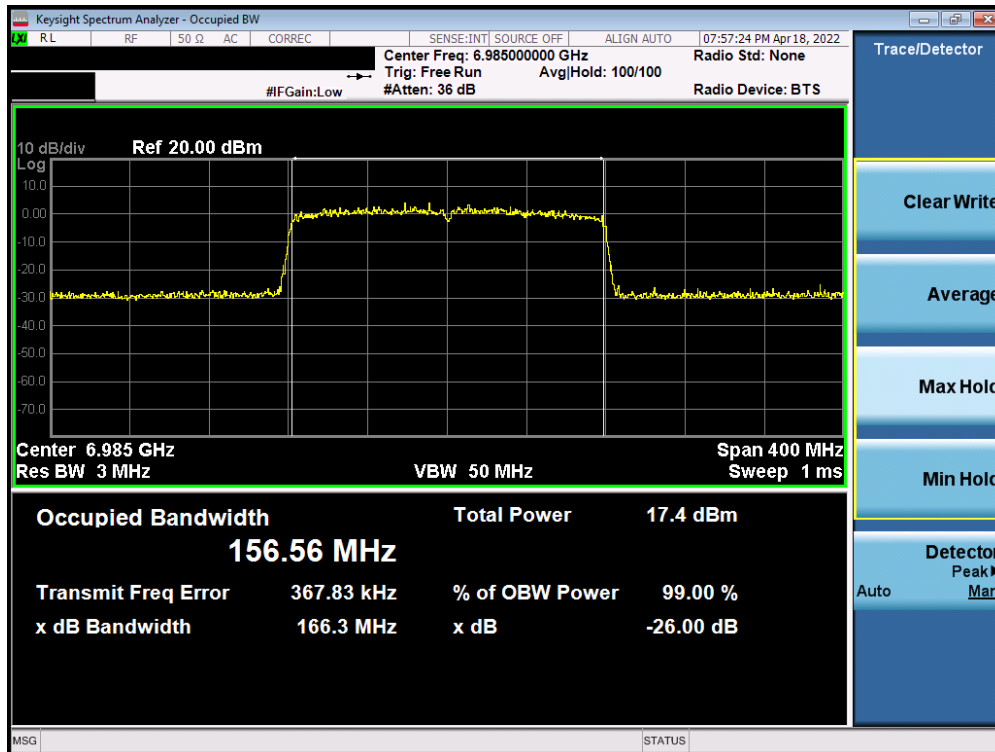


Plot 7-206. 26dB Bandwidth Plot MIMO ANT2 (80MHz 802.11ax (UNII Band 8) – Ch. 199)

FCC ID: C3K1997	MEASUREMENT REPORT (CERTIFICATION)		Approved by: Technical Manager
Test Report S/N: 1M2204040049-17-R1.C3K	Test Dates: 3/14/2022 – 7/8/2022	EUT Type: Portable Computing Device	Page 121 of 422



Plot 7-207. 26dB Bandwidth Plot MIMO ANT2 (80MHz 802.11ax (UNII Band 8) – Ch. 215)



Plot 7-208. 26dB Bandwidth Plot MIMO ANT2 (160MHz 802.11ax (UNII Band 8) – Ch. 207)

FCC ID: C3K1997	MEASUREMENT REPORT (CERTIFICATION)		Approved by: Technical Manager
Test Report S/N: 1M2204040049-17-R1.C3K	Test Dates: 3/14/2022 – 7/8/2022	EUT Type: Portable Computing Device	Page 122 of 422

7.3 UNII Output Power Measurement – 802.11a/ax § 2.1046, §15.407(a)(11), §15.407(a)(8); RSS-248 [4.6]

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 KDB 789033 D02 v02r01, and at the appropriate frequencies.

Test Procedure Used

ANSI C63.10-2013 – Section 12.3.3.2 Method PM-G
 KDB 789033 D02 v02r01 – Section E)3)b) Method PM-G
 ANSI C63.10-2013 – Section 14.2 Measure-and-Sum Technique
 KDB 662911 v02r01 – Section E)1) 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

None.

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SISO ANT1 Maximum Conducted Output Power Measurements

6GHz (20MHz Bandwidth)	6GHz (20MHz) Conducted Power [dBm]							
	Freq [MHz]	Channel	IEEE Transmission Mode		Ant. Gain [dBi]	Max e.i.r.p. [dBm]	Max e.i.r.p. Limit [dBm]	e.i.r.p. Margin [dB]
			802.11a	802.11ax				
5935	2	6.02	6.38	3.50	9.88	24.00	-14.12	
6075	25	5.98	6.32	3.50	9.82	24.00	-14.18	
6175	45	6.04	6.39	3.50	9.89	24.00	-14.11	
6275	65	5.92	6.30	3.50	9.80	24.00	-14.20	
6415	93	6.37	6.68	3.50	10.18	24.00	-13.82	
6435	97	6.26	6.13	3.40	9.66	24.00	-14.34	
6475	105	6.47	6.77	3.40	10.17	24.00	-13.83	
6515	113	6.37	6.90	3.40	10.30	24.00	-13.70	
6535	117	6.23	6.56	3.40	9.96	24.00	-14.04	
6675	145	6.25	6.81	3.40	10.21	24.00	-13.79	
6695	149	6.39	6.84	3.40	10.24	24.00	-13.76	
6875	185	6.49	6.26	3.40	9.89	24.00	-14.11	
6895	189	6.46	6.24	3.50	9.96	24.00	-14.04	
6995	209	6.32	6.07	3.50	9.82	24.00	-14.18	
7115	233	6.41	3.32	3.50	9.91	24.00	-14.09	

Table 7-2. SISO ANT1 20MHz BW (UNII) Maximum Conducted Output Power

6GHz (40MHz Bandwidth)	6GHz (40MHz) Conducted Power [dBm]						
	Freq [MHz]	Channel	IEEE Transmission Mode	Ant. Gain [dBi]	Max e.i.r.p. [dBm]	Max e.i.r.p. Limit [dBm]	e.i.r.p. Margin [dB]
			802.11ax				
5965	3	9.23	3.50	12.73	24.00	-11.27	
6085	27	9.05	3.50	12.55	24.00	-11.45	
6165	43	8.92	3.50	12.42	24.00	-11.58	
6285	67	8.91	3.50	12.41	24.00	-11.59	
6405	91	9.47	3.50	12.97	24.00	-11.03	
6445	99	9.36	3.40	12.76	24.00	-11.24	
6485	107	9.20	3.40	12.60	24.00	-11.40	
6525	115	9.39	3.40	12.79	24.00	-11.21	
6565	123	9.36	3.40	12.76	24.00	-11.24	
6685	147	9.29	3.40	12.69	24.00	-11.31	
6725	155	9.46	3.40	12.86	24.00	-11.14	
6845	179	9.39	3.40	12.79	24.00	-11.21	
6885	187	9.44	3.50	12.94	24.00	-11.06	
7005	211	9.21	3.50	12.71	24.00	-11.29	
7085	227	9.27	3.50	12.77	24.00	-11.23	

Table 7-3. SISO ANT1 40MHz BW 802.11ax (UNII) Maximum Conducted Output Power

FCC ID: C3K1997	MEASUREMENT REPORT (CERTIFICATION)		Approved by: Technical Manager
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6GHz (80MHz Bandwidth)	6GHz (80MHz) Conducted Power [dBm]						
	Freq [MHz]	Channel	IEEE Transmission Mode	Ant. Gain [dBi]	Max e.i.r.p. [dBm]	Max e.i.r.p. Limit [dBm]	e.i.r.p. Margin [dB]
			802.11ax				
	5985	7	12.31	3.50	15.81	24.00	-8.19
	6065	23	12.23	3.50	15.73	24.00	-8.27
	6145	39	12.05	3.50	15.55	24.00	-8.45
	6305	71	12.34	3.50	15.84	24.00	-8.16
	6385	87	12.29	3.50	15.79	24.00	-8.21
	6465	103	12.35	3.40	15.75	24.00	-8.25
	6545	119	12.34	3.40	15.74	24.00	-8.26
	6705	151	12.38	3.40	15.78	24.00	-8.22
	6785	167	12.60	3.40	16.00	24.00	-8.00
	6865	183	12.55	3.40	15.95	24.00	-8.05
	6945	199	12.43	3.50	15.93	24.00	-8.07
	7025	215	12.39	3.50	15.89	24.00	-8.11

Table 7-4. SISO ANT1 80MHz BW 802.11ax (UNII) Maximum Conducted Output Power

6GHz (160MHz Bandwidth)	6GHz (160MHz) Conducted Power [dBm]						
	Freq [MHz]	Channel	IEEE Transmission Mode	Ant. Gain [dBi]	Max e.i.r.p. [dBm]	Max e.i.r.p. Limit [dBm]	e.i.r.p. Margin [dB]
			802.11ax				
	6025	15	15.12	3.50	18.62	24.00	-5.38
	6185	47	14.98	3.50	18.48	24.00	-5.52
	6345	79	15.19	3.50	18.69	24.00	-5.31
	6505	111	15.43	3.40	18.83	24.00	-5.17
	6665	143	15.34	3.40	18.74	24.00	-5.26
	6825	175	15.47	3.40	18.87	24.00	-5.13
	6985	207	15.19	3.50	18.69	24.00	-5.31

Table 7-5. SISO ANT1 160MHz BW 802.11ax (UNII) Maximum Conducted Output Power

FCC ID: C3K1997	MEASUREMENT REPORT (CERTIFICATION)		Approved by: Technical Manager
Test Report S/N: 1M2204040049-17-R1.C3K	Test Dates: 3/14/2022 – 7/8/2022	EUT Type: Portable Computing Device	Page 125 of 422

SISO ANT2 Maximum Conducted Output Power Measurements

6GHz (20MHz Bandwidth)	6GHz (20MHz) Conducted Power [dBm]							
	Freq [MHz]	Channel	IEEE Transmission Mode		Ant. Gain [dBi]	Max e.i.r.p. [dBm]	Max e.i.r.p. Limit [dBm]	e.i.r.p. Margin [dB]
			802.11a	802.11ax				
5935	2	6.34	6.15	3.20	9.54	24.00	-14.46	
6075	25	6.25	6.54	3.20	9.74	24.00	-14.26	
6175	45	6.13	6.41	3.20	9.61	24.00	-14.39	
6275	65	6.27	6.59	3.20	9.79	24.00	-14.21	
6415	93	6.26	6.78	3.20	9.98	24.00	-14.02	
6435	97	6.35	6.32	2.40	8.75	24.00	-15.25	
6475	105	5.91	6.54	2.40	8.94	24.00	-15.06	
6515	113	6.00	6.05	2.40	8.45	24.00	-15.55	
6535	117	6.30	6.80	3.30	10.10	24.00	-13.90	
6675	145	6.29	6.63	3.30	9.93	24.00	-14.07	
6695	149	6.12	6.44	3.30	9.74	24.00	-14.26	
6875	185	5.74	6.17	3.30	9.47	24.00	-14.53	
6895	189	6.39	6.21	3.30	9.69	24.00	-14.31	
6995	209	5.41	6.65	3.30	9.95	24.00	-14.05	
7115	233	6.37	3.48	3.30	9.67	24.00	-14.33	

Table 7-6. SISO ANT2 20MHz BW (UNII) Maximum Conducted Output Power

6GHz (40MHz Bandwidth)	6GHz (40MHz) Conducted Power [dBm]						
	Freq [MHz]	Channel	IEEE Transmission Mode	Ant. Gain [dBi]	Max e.i.r.p [dBm]	Max e.i.r.p Limit [dBm]	e.i.r.p Margin [dB]
			802.11ax				
5965	3	9.84	3.20	13.34	24.00	-10.66	
6085	27	9.79	3.20	13.29	24.00	-10.71	
6165	43	9.76	3.20	13.26	24.00	-10.74	
6285	67	9.59	3.20	13.09	24.00	-10.91	
6405	91	9.98	3.20	13.48	24.00	-10.52	
6445	99	9.72	2.40	13.12	24.00	-10.88	
6485	107	9.54	2.40	12.94	24.00	-11.06	
6525	115	9.63	2.40	13.03	24.00	-10.97	
6565	123	9.74	3.30	13.14	24.00	-10.86	
6685	147	9.37	3.30	12.77	24.00	-11.23	
6725	155	9.61	3.30	13.01	24.00	-10.99	
6845	179	9.59	3.30	12.99	24.00	-11.01	
6885	187	9.52	3.30	13.02	24.00	-10.98	
7005	211	9.33	3.30	12.83	24.00	-11.17	
7085	227	9.44	3.30	12.94	24.00	-11.06	

Table 7-7. SISO ANT2 40MHz BW 802.11ax (UNII) Maximum Conducted Output Power

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6GHz (80MHz Bandwidth)	6GHz (80MHz) Conducted Power [dBm]						
	Freq [MHz]	Channel	IEEE Transmission Mode	Ant. Gain [dBi]	Max e.i.r.p. [dBm]	Max e.i.r.p. Limit [dBm]	e.i.r.p. Margin [dB]
			802.11ax				
	5985	7	12.49	3.20	15.69	24.00	-8.31
	6065	23	12.46	3.20	15.66	24.00	-8.34
	6145	39	12.53	3.20	15.73	24.00	-8.27
	6305	71	12.70	3.20	15.90	24.00	-8.10
	6385	87	12.60	3.20	15.80	24.00	-8.20
	6465	103	12.87	2.40	15.27	24.00	-8.73
	6545	119	12.79	3.30	16.09	24.00	-7.91
	6705	151	12.65	3.30	15.95	24.00	-8.05
	6785	167	12.98	3.30	16.28	24.00	-7.72
	6865	183	12.91	3.30	16.21	24.00	-7.79
	6945	199	12.81	3.30	16.11	24.00	-7.89
	7025	215	12.83	3.30	16.13	24.00	-7.87

Table 7-8. SISO ANT2 80MHz BW 802.11ax (UNII) Maximum Conducted Output Power

6GHz (160MHz Bandwidth)	6GHz (160MHz) Conducted Power [dBm]						
	Freq [MHz]	Channel	IEEE Transmission Mode	Ant. Gain [dBi]	Max e.i.r.p. [dBm]	Max e.i.r.p. Limit [dBm]	e.i.r.p. Margin [dB]
			802.11ax				
	6025	15	15.66	3.20	18.86	24.00	-5.14
	6185	47	15.52	3.20	18.72	24.00	-5.28
	6345	79	15.34	3.20	18.54	24.00	-5.46
	6505	111	15.51	2.40	17.91	24.00	-6.09
	6665	143	15.50	3.30	18.80	24.00	-5.20
	6825	175	15.48	3.30	18.78	24.00	-5.22
	6985	207	15.64	3.30	18.94	24.00	-5.06

Table 7-9. SISO ANT2 160MHz BW 802.11ax (UNII) Maximum Conducted Output Power

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MIMO Maximum Conducted Output Power Measurements

6GHz (20MHz Bandwidth)	6GHz (20MHz) 802.11a Conducted Power [dBm]								
	Freq [MHz]	Channel	ANT1	ANT2	MIMO	Directional Ant. Gain [dBi]	Max e.i.r.p. [dBm]	Max e.i.r.p. Limit [dBm]	e.i.r.p. Margin [dB]
	5955	1	-1.79	-2.14	1.05	6.36	7.41	24.00	-16.59
	6075	25	-1.90	-1.89	1.12	6.36	7.48	24.00	-16.52
	6175	45	-2.20	-2.03	0.90	6.36	7.26	24.00	-16.74
	6275	65	-1.83	-1.79	1.20	6.36	7.56	24.00	-16.44
	6415	93	-1.99	-2.03	1.00	6.36	7.36	24.00	-16.64
	6435	97	-2.01	-2.09	0.96	5.92	6.88	24.00	-17.12
	6475	105	-2.03	-1.76	1.12	5.92	7.04	24.00	-16.96
	6515	113	-2.03	-1.78	1.11	5.92	7.03	24.00	-16.97
6535	117	-2.02	-1.76	1.12	6.36	7.48	24.00	-16.52	
6675	145	-1.97	-2.12	0.97	6.36	7.33	24.00	-16.67	
6695	149	-2.00	-1.97	1.03	6.36	7.39	24.00	-16.61	
6875	185	-1.85	-2.10	1.04	6.36	7.40	24.00	-16.60	
6895	189	-2.07	-2.07	0.94	6.41	7.35	24.00	-16.65	
6995	209	-2.06	-1.79	1.09	6.41	7.50	24.00	-16.50	
7115	233	-2.15	-1.91	0.98	6.41	7.39	24.00	-16.61	

Table 7-10. MIMO 20MHz BW 802.11a (UNII) Maximum Conducted Output Power

6GHz (20MHz Bandwidth)	6GHz (20MHz) 802.11ax Conducted Power [dBm]								
	Freq [MHz]	Channel	ANT1	ANT2	MIMO	Directional Ant. Gain [dBi]	Max e.i.r.p. [dBm]	Max e.i.r.p. Limit [dBm]	e.i.r.p. Margin [dB]
	5955	1	0.67	0.29	3.49	6.36	9.85	24.00	-14.15
	6075	25	0.74	0.24	3.51	6.36	9.87	24.00	-14.13
	6175	45	0.64	0.18	3.43	6.36	9.79	24.00	-14.21
	6275	65	0.87	0.31	3.61	6.36	9.97	24.00	-14.03
	6415	93	0.46	-0.06	3.22	6.36	9.58	24.00	-14.42
	6435	97	0.74	-0.14	3.33	5.92	9.25	24.00	-14.75
	6475	105	0.66	-0.23	3.25	5.92	9.17	24.00	-14.83
	6515	113	0.7	-0.72	3.06	5.92	8.98	24.00	-15.02
6535	117	0.75	-0.27	3.28	6.36	9.64	24.00	-14.36	
6675	145	0.83	0.34	3.60	6.36	9.96	24.00	-14.04	
6695	149	0.31	-0.18	3.08	6.36	9.44	24.00	-14.56	
6875	185	0.44	-0.67	2.93	6.36	9.29	24.00	-14.71	
6895	189	0.62	-0.57	3.08	6.41	9.49	24.00	-14.51	
6995	209	0.71	-0.06	3.35	6.41	9.76	24.00	-14.24	
7115	233	0.78	-0.26	3.30	6.41	9.71	24.00	-14.29	

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

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6GHz (40MHz Bandwidth)	6GHz (40MHz) 802.11ax Conducted Power [dBm]								
	Freq [MHz]	Channel	ANT1	ANT2	MIMO	Directional Ant. Gain [dBi]	Max e.i.r.p. [dBm]	Max e.i.r.p. Limit [dBm]	e.i.r.p. Margin [dB]
	5965	3	3.46	2.56	6.04	6.36	12.40	24.00	-11.60
	6085	27	3.49	2.6	6.10	6.36	12.46	24.00	-11.54
	6165	43	3.16	2.54	5.87	6.36	12.23	24.00	-11.77
	6285	67	3.09	2.3	5.72	6.36	12.08	24.00	-11.92
	6405	91	3.14	2.81	5.99	6.36	12.35	24.00	-11.65
	6445	99	3.11	2.56	5.85	5.92	11.77	24.00	-12.23
	6485	107	3.49	2.69	6.12	5.92	12.04	24.00	-11.96
	6525	115	3.11	2.75	5.94	5.92	11.86	24.00	-12.14
6565	123	2.91	2.39	5.67	6.36	12.03	24.00	-11.97	
6685	147	3.16	2.6	5.89	6.36	12.25	24.00	-11.75	
6725	155	2.87	2.41	5.66	6.36	12.02	24.00	-11.98	
6845	179	3.45	2.14	5.85	6.36	12.21	24.00	-11.79	
6885	187	3.33	2.28	5.85	6.41	12.26	24.00	-11.74	
7005	211	3.48	2.81	6.17	6.41	12.58	24.00	-11.42	
7085	227	3.49	2.61	6.08	6.41	12.49	24.00	-11.51	

Table 7-12. MIMO 40MHz BW 802.11ax (UNII) Maximum Conducted Output Power

6GHz (80MHz Bandwidth)	6GHz (80MHz) 802.11ax Conducted Power [dBm]								
	Freq [MHz]	Channel	ANT1	ANT2	MIMO	Directional Ant. Gain [dBi]	Max e.i.r.p. [dBm]	Max e.i.r.p. Limit [dBm]	e.i.r.p. Margin [dB]
	5985	7	6.14	5.83	9.00	6.36	15.36	24.00	-8.64
	6065	23	6.42	5.9	9.17	6.36	15.53	24.00	-8.47
	6145	39	6.62	5.94	9.30	6.36	15.66	24.00	-8.34
	6305	71	6.49	5.6	9.08	6.36	15.44	24.00	-8.56
	6385	87	6.48	5.42	8.99	6.36	15.35	24.00	-8.65
	6465	103	6.37	5.72	9.07	5.92	14.99	24.00	-9.01
	6545	119	6.49	5.58	9.07	6.36	15.43	24.00	-8.57
	6705	151	6.48	5.76	9.15	6.36	15.51	24.00	-8.49
6785	167	6.21	5.44	8.85	6.36	15.21	24.00	-8.79	
6865	183	6.08	5.44	8.78	6.36	15.14	24.00	-8.86	
6945	199	6.41	5.99	9.22	6.41	15.63	24.00	-8.37	
7025	215	6.40	6.04	9.23	6.41	15.64	24.00	-8.36	

Table 7-13. MIMO 80MHz BW 802.11ax (UNII) Maximum Conducted Output Power

6GHz (160MHz Bandwidth)	6GHz (160MHz) 802.11ax Conducted Power [dBm]								
	Freq [MHz]	Channel	ANT1	ANT2	MIMO	Directional Ant. Gain [dBi]	Max e.i.r.p [dBm]	Max e.i.r.p Limit [dBm]	e.i.r.p Margin [dB]
	6025	15	8.65	8.39	11.53	6.36	17.89	24.00	-6.11
	6185	47	8.55	8.14	11.36	6.36	17.72	24.00	-6.28
	6345	79	8.81	8.19	11.52	6.36	17.88	24.00	-6.12
	6505	111	8.99	8.53	11.78	6.36	18.14	24.00	-5.86
	6665	143	8.79	8.38	11.60	6.36	17.96	24.00	-6.04
	6825	175	8.78	8.35	11.58	6.36	17.94	24.00	-6.06
6985	207	8.75	8.55	11.66	6.36	18.02	24.00	-5.98	

Table 7-14. MIMO 160MHz BW 802.11ax (UNII) Maximum Conducted Output Power

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Sample MIMO Calculation:

At 5955MHz in 802.11ax (20MHz BW) mode, the average conducted output power was measured to be 10.64 dBm for Antenna-1 and 10.61 dBm for Antenna-2.

Antenna 1 + Antenna 2 = MIMO

$$(0.67 \text{ dBm} + 0.29 \text{ dBm}) = (11.59 \text{ mW} + 11.50 \text{ mW}) = 23.09 \text{ mW} = 3.49 \text{ dBm}$$

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.

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

Sample e.i.r.p. Calculation:

At 5955MHz in 802.11ax (20MHz BW) mode, the average MIMO conducted power was calculated to be 3.49 dBm with directional gain of 6.36 dBi.

$$\text{e.i.r.p. (dBm)} = \text{Conducted Power (dBm)} + \text{Ant gain (dBi)}$$

$$3.49 \text{ dBm} + 6.36 \text{ dBi} = 9.85 \text{ dBm}$$

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7.4 Maximum Power Spectral Density – 802.11a/ax §15.407(a)(8); RSS-248 [4.6.3]

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 KDB 789033 D02 v02r01, and at the appropriate frequencies. Method SA-1, as defined in ANSI C63.10-2013 and KDB 789033 D02 v02r01, was used to measure the power spectral density for 802.11a/ax.

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

Test Procedure Used

ANSI C63.10-2013 – Section 12.3.2.2

KDB 789033 D02 v02r01 – Section F

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

KDB 662911 v02r01 – Section E)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 $\geq 2 \times$ (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.

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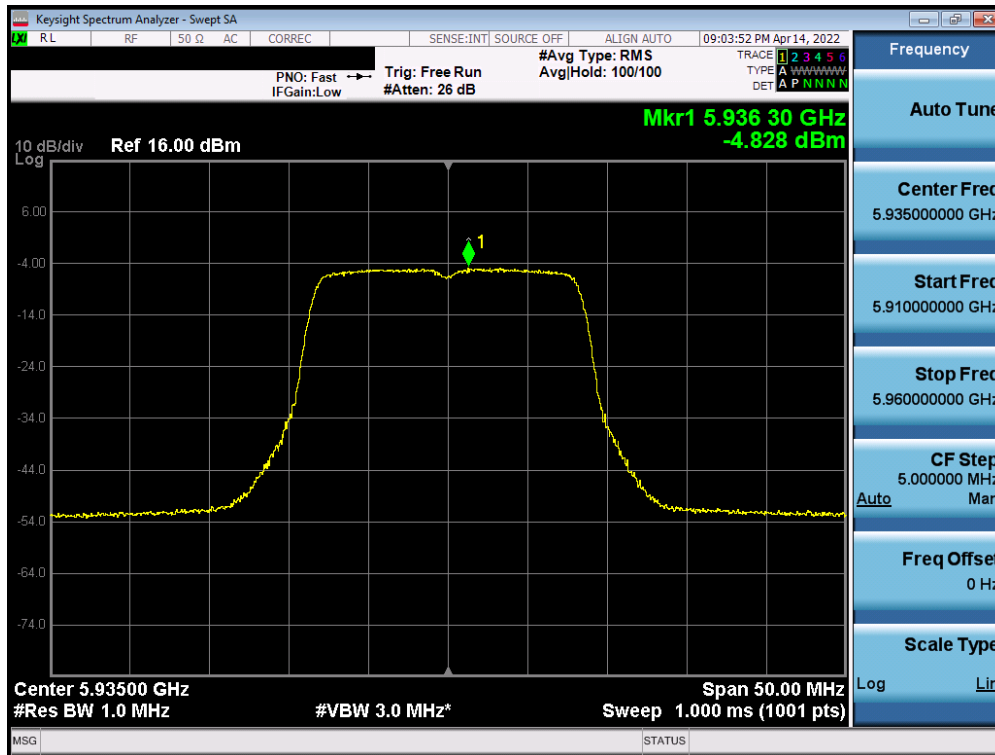
SISO Antenna 1 Power Spectral Density Measurements

	Frequency [MHz]	Channel	802.11 MODE	Antenna-1 Power Density [dBm]	Antenna-1 Gain [dBi]	e.i.r.p Density [dBm/MHz]	Max EIRP Density [dBm/MHz]	Margin [dB]
Band 5	5955	2	a	-4.83	3.50	-1.33	-1	-0.33
	6175	45	a	-5.16	3.50	-1.66	-1	-0.66
	6415	93	a	-4.68	3.50	-1.18	-1	-0.18
	5955	2	ax (20MHz)	-5.23	3.50	-1.73	-1	-0.73
	6175	45	ax (20MHz)	-5.18	3.50	-1.68	-1	-0.68
	6415	93	ax (20MHz)	-4.96	3.50	-1.46	-1	-0.46
	5965	3	ax (40MHz)	-5.32	3.50	-1.82	-1	-0.82
	6165	43	ax (40MHz)	-5.61	3.50	-2.11	-1	-1.11
	6405	91	ax (40MHz)	-4.97	3.50	-1.47	-1	-0.47
	5985	7	ax (80MHz)	-5.34	3.50	-1.84	-1	-0.84
	6145	39	ax (80MHz)	-5.43	3.50	-1.93	-1	-0.93
	6385	87	ax (80MHz)	-5.12	3.50	-1.62	-1	-0.62
	6025	15	ax (160MHz)	-5.04	3.50	-1.54	-1	-0.54
	6185	47	ax (160MHz)	-5.00	3.50	-1.50	-1	-0.50
6345	79	ax (160MHz)	-4.92	3.50	-1.42	-1	-0.42	
Band 6	6435	97	a	-4.80	3.40	-1.40	-1	-0.40
	6475	105	a	-5.13	3.40	-1.73	-1	-0.73
	6515	113	a	-5.27	3.40	-1.87	-1	-0.87
	6345	97	ax (20MHz)	-5.55	3.40	-2.15	-1	-1.15
	6475	105	ax (20MHz)	-4.67	3.40	-1.27	-1	-0.27
	6515	113	ax (20MHz)	-4.71	3.40	-1.31	-1	-0.31
	6445	99	ax (40MHz)	-5.33	3.40	-1.93	-1	-0.93
	6485	107	ax (40MHz)	-5.37	3.40	-1.97	-1	-0.97
	6525	115	ax (40MHz)	-5.30	3.40	-1.90	-1	-0.90
	6465	103	ax (80MHz)	-4.98	3.40	-1.58	-1	-0.58
6505	111	ax (160MHz)	-4.64	3.40	-1.24	-1	-0.24	
Band 7	6535	117	a	-4.97	3.40	-1.57	-1	-0.57
	6695	149	a	-4.80	3.40	-1.40	-1	-0.40
	6875	185	a	-5.49	3.40	-2.09	-1	-1.09
	6535	117	ax (20MHz)	-5.00	3.40	-1.60	-1	-0.60
	6695	149	ax (20MHz)	-4.96	3.40	-1.56	-1	-0.56
	6875	185	ax (20MHz)	-5.36	3.40	-1.96	-1	-0.96
	6565	123	ax (40MHz)	-5.15	3.40	-1.75	-1	-0.75
	6725	155	ax (40MHz)	-5.04	3.40	-1.64	-1	-0.64
	6885	179	ax (40MHz)	-5.17	3.40	-1.77	-1	-0.77
	6545	119	ax (80MHz)	-5.20	3.40	-1.80	-1	-0.80
	6705	151	ax (80MHz)	-5.02	3.40	-1.62	-1	-0.62
	6865	183	ax (80MHz)	-4.91	3.40	-1.51	-1	-0.51
	6665	143	ax (160MHz)	-4.98	3.40	-1.58	-1	-0.58
	6825	175	ax (160MHz)	-4.72	3.40	-1.32	-1	-0.32
Band 8	6895	189	a	-4.86	3.50	-1.36	-1	-0.36
	6995	209	a	-5.70	3.50	-2.20	-1	-1.20
	7115	233	a	-4.79	3.50	-1.29	-1	-0.29
	6895	189	ax (20MHz)	-5.48	3.50	-1.98	-1	-0.98
	6995	209	ax (20MHz)	-5.53	3.50	-2.03	-1	-1.03
	7115	233	ax (20MHz)	-5.40	3.50	-1.90	-1	-0.90
	6885	187	ax (40MHz)	-5.18	3.50	-1.68	-1	-0.68
	7005	211	ax (40MHz)	-5.32	3.50	-1.82	-1	-0.82
	7085	227	ax (40MHz)	-5.20	3.50	-1.70	-1	-0.70
	6945	199	ax (80MHz)	-5.08	3.50	-1.58	-1	-0.58
	7025	215	ax (80MHz)	-5.04	3.50	-1.54	-1	-0.54
6985	207	ax (160MHz)	-4.86	3.50	-1.36	-1	-0.36	

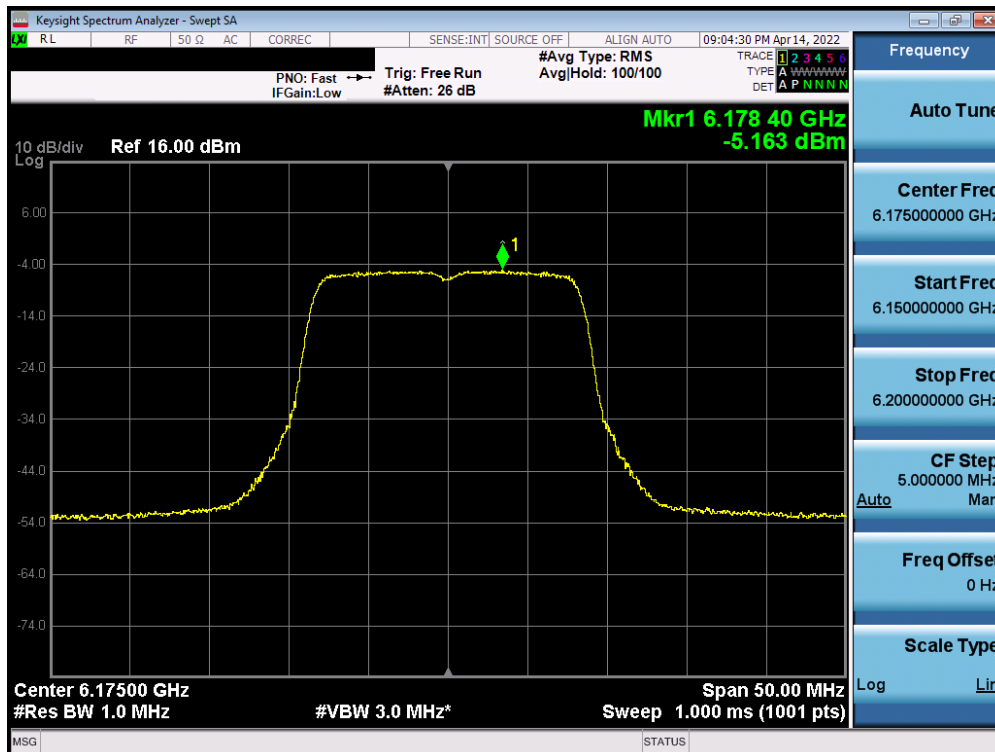
Table 7-15. SISO Antenna 1 e.i.r.p. Conducted Power Spectral Density Measurements

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SISO Antenna-1 Power Spectral Density Measurement - (UNII Band 5)

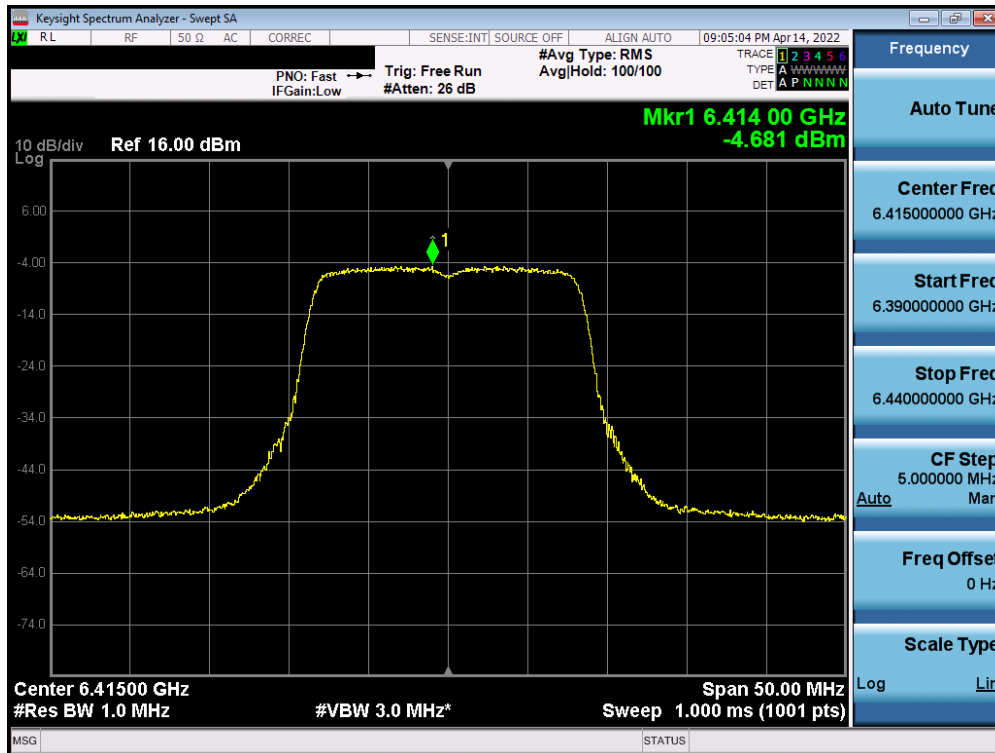


Plot 7-209. Power Spectral Density Measurement SISO ANT1 (20MHz 802.11a (UNII Band 5) – Ch. 2)

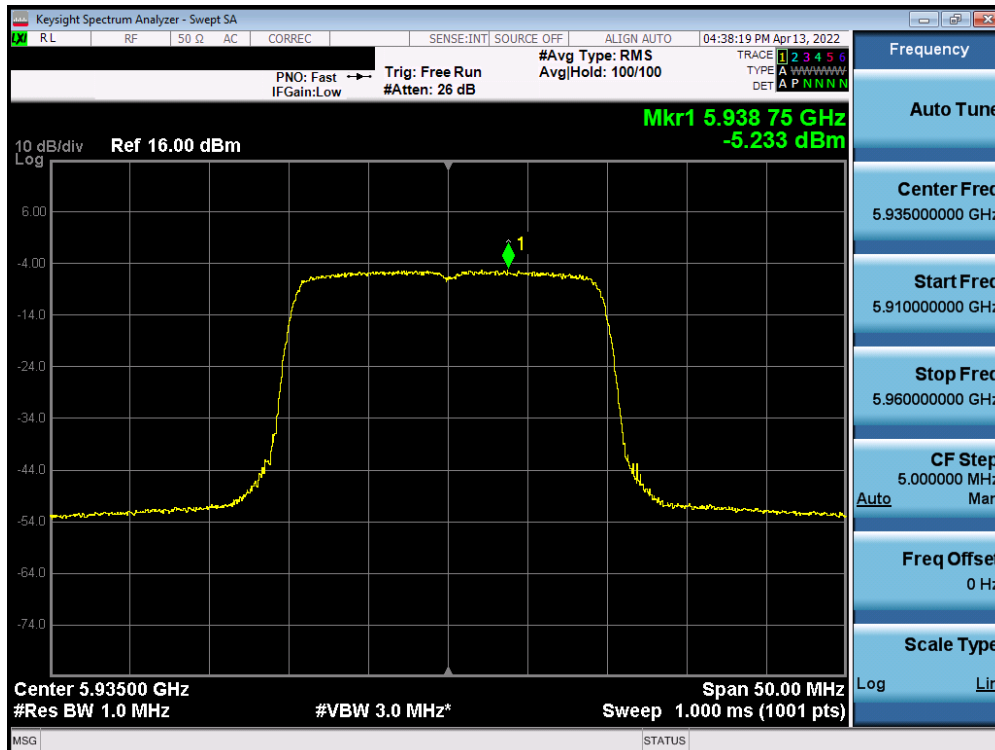


Plot 7-210. Power Spectral Density Measurement SISO ANT1 (20MHz 802.11a (UNII Band 5) – Ch. 45)

FCC ID: C3K1997	MEASUREMENT REPORT (CERTIFICATION)		Approved by: Technical Manager
Test Report S/N: 1M2204040049-17-R1.C3K	Test Dates: 3/14/2022 – 7/8/2022	EUT Type: Portable Computing Device	Page 133 of 422

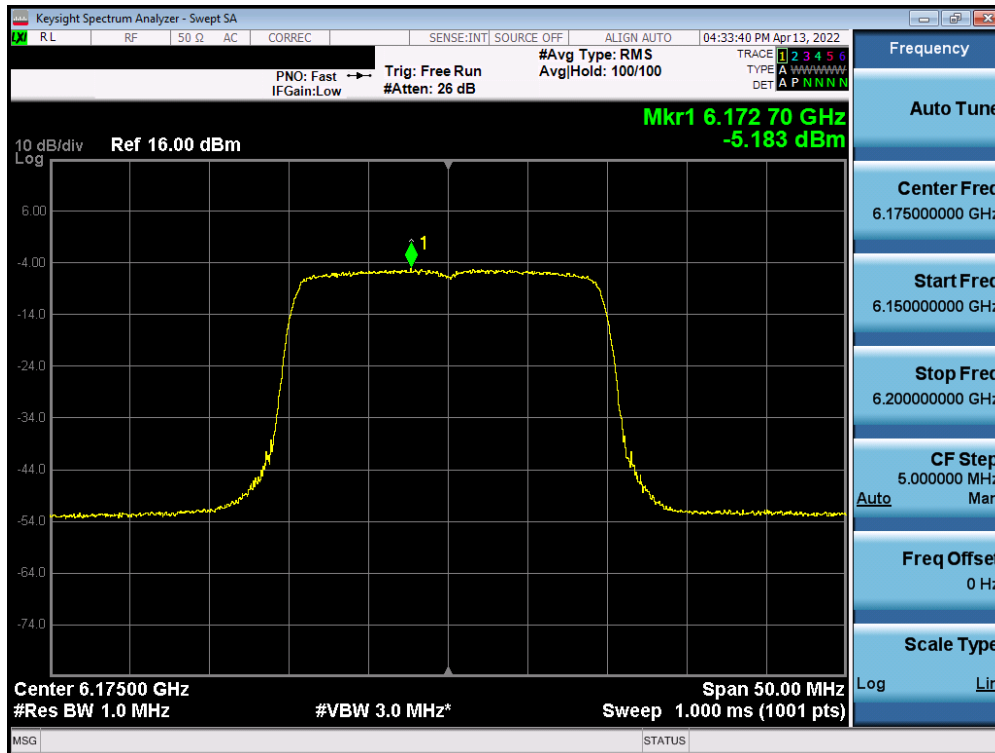


Plot 7-211. Power Spectral Density Measurement SISO ANT1 (20MHz 802.11a (UNII Band 5) – Ch. 93)

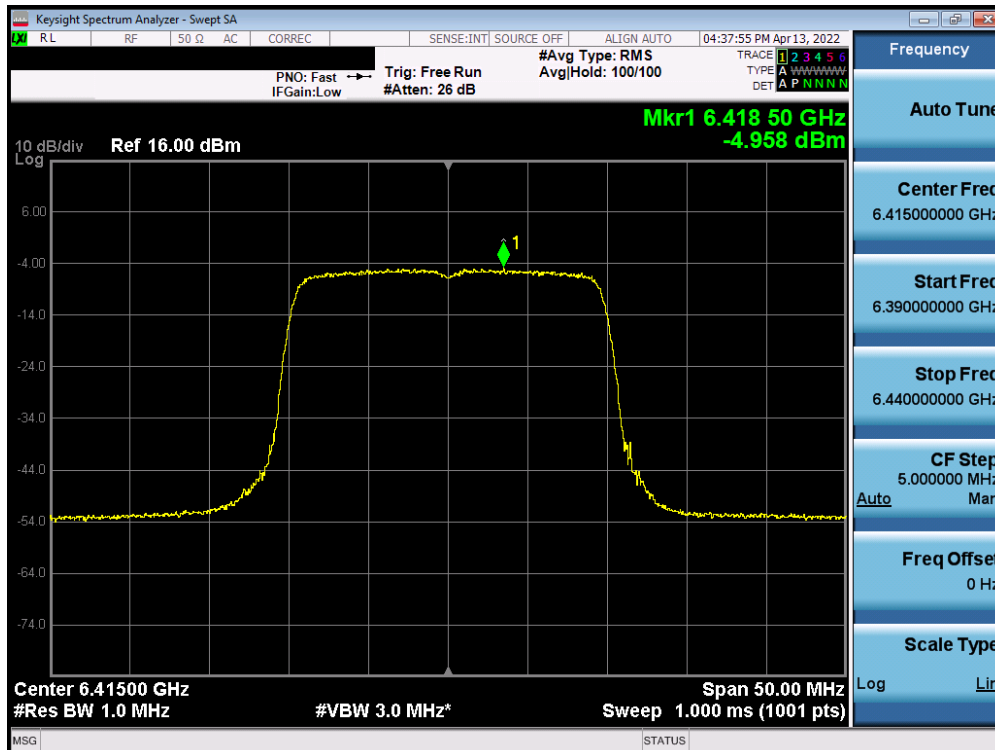


Plot 7-212. Power Spectral Density Measurement SISO ANT1 (20MHz 802.11ax (UNII Band 5) – Ch. 2)

FCC ID: C3K1997	MEASUREMENT REPORT (CERTIFICATION)		Approved by: Technical Manager
Test Report S/N: 1M2204040049-17-R1.C3K	Test Dates: 3/14/2022 – 7/8/2022	EUT Type: Portable Computing Device	Page 134 of 422

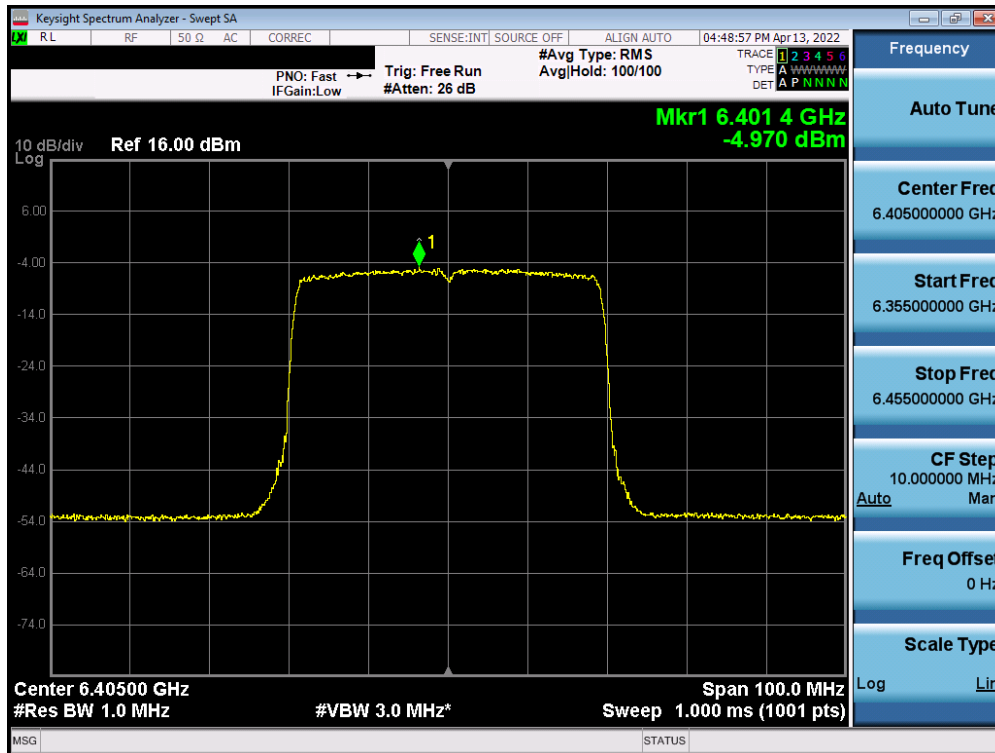


Plot 7-213. Power Spectral Density Measurement SISO ANT1 (20MHz 802.11ax (UNII Band 5) – Ch. 45)

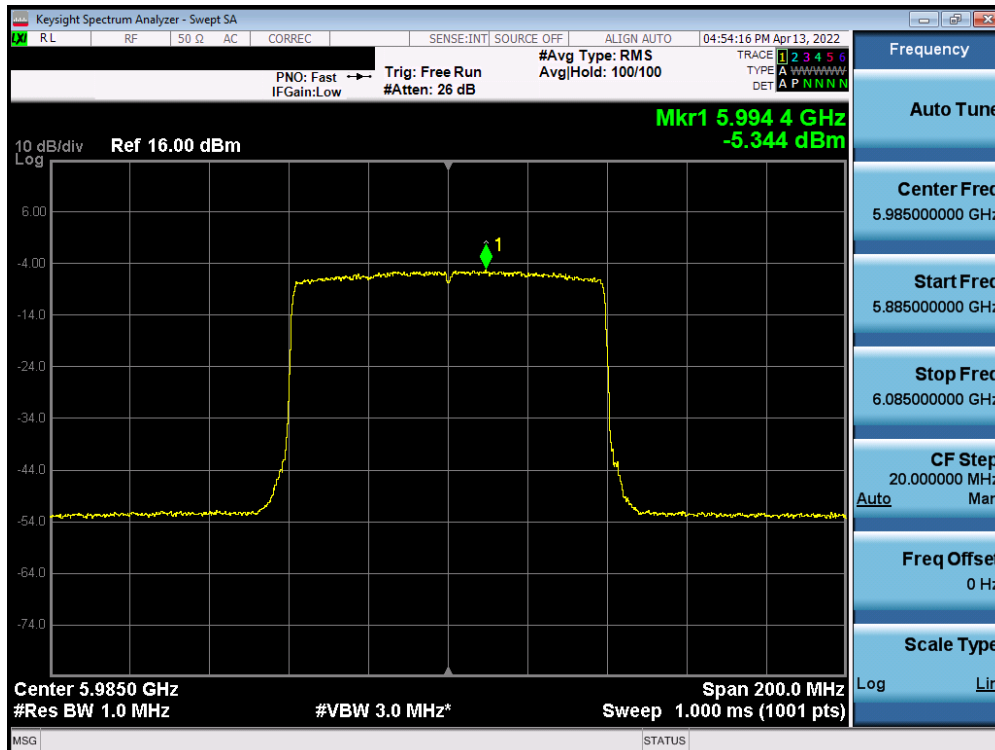


Plot 7-214. Power Spectral Density Measurement SISO ANT1 (20MHz 802.11ax (UNII Band 5) – Ch. 93)

FCC ID: C3K1997	MEASUREMENT REPORT (CERTIFICATION)		Approved by: Technical Manager
Test Report S/N: 1M2204040049-17-R1.C3K	Test Dates: 3/14/2022 – 7/8/2022	EUT Type: Portable Computing Device	Page 135 of 422

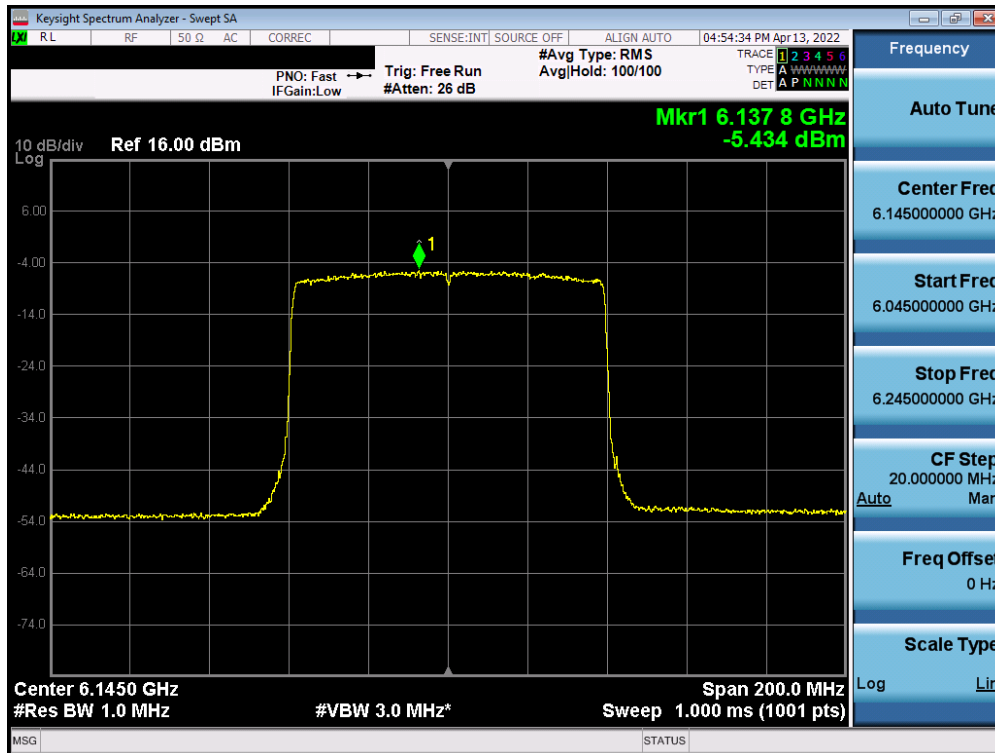


Plot 7-217. Power Spectral Density Measurement SISO ANT1 (40MHz 802.11ax (UNII Band 5) – Ch. 91)

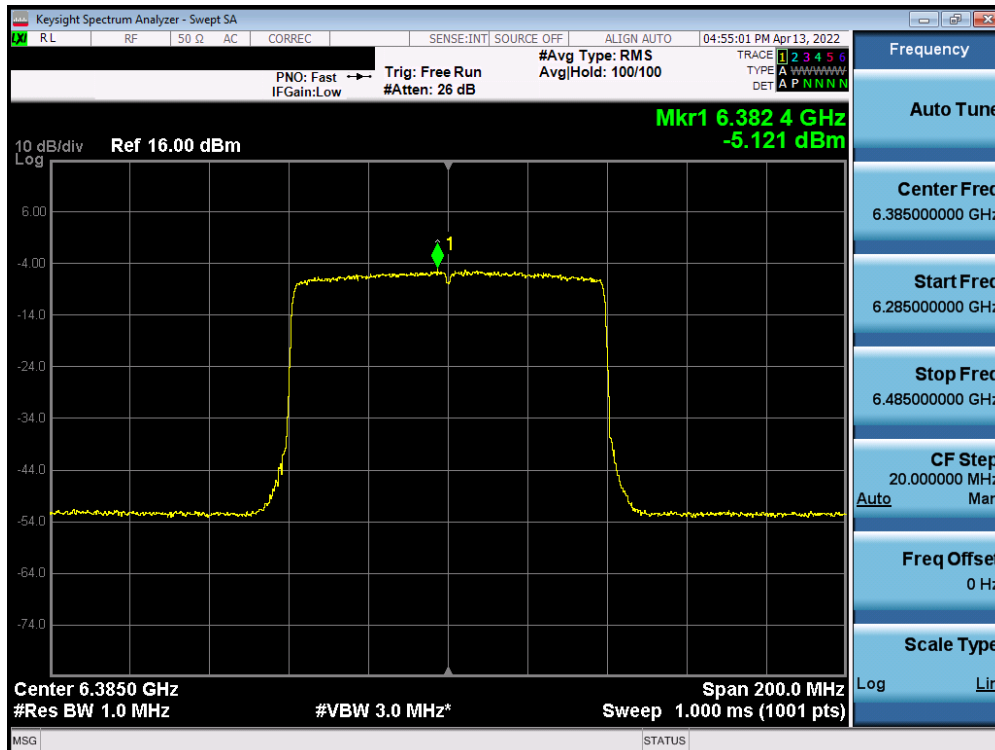


Plot 7-218. Power Spectral Density Measurement SISO ANT1 (80MHz 802.11ax (UNII Band 5) – Ch. 7)

FCC ID: C3K1997	MEASUREMENT REPORT (CERTIFICATION)		Approved by: Technical Manager
Test Report S/N: 1M2204040049-17-R1.C3K	Test Dates: 3/14/2022 – 7/8/2022	EUT Type: Portable Computing Device	Page 137 of 422

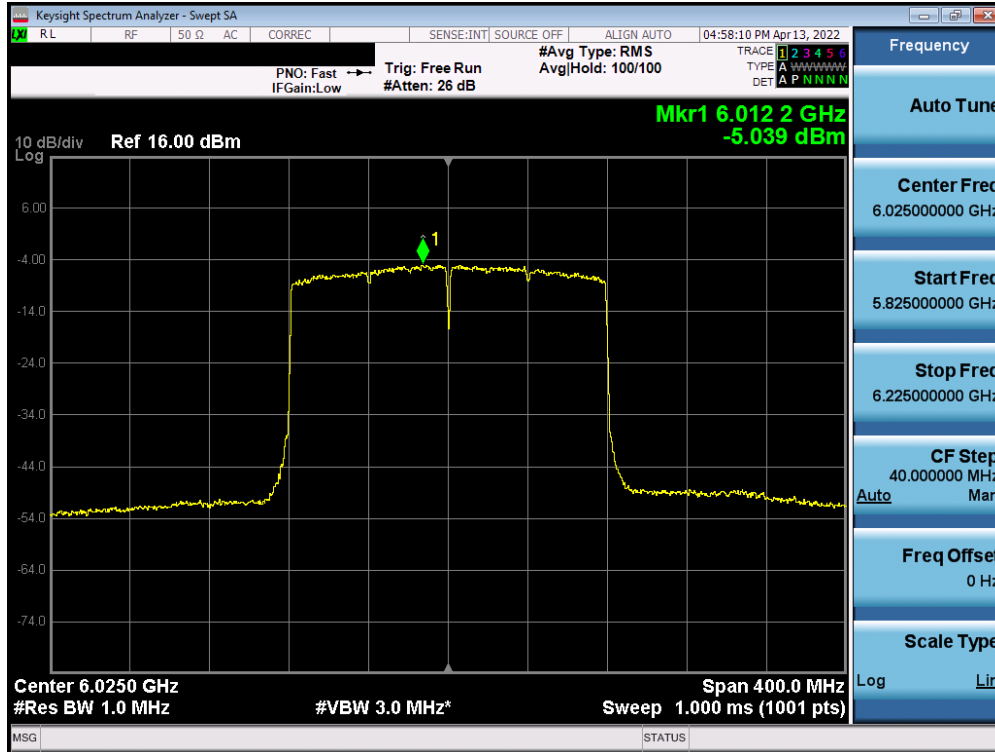


Plot 7-219. Power Spectral Density Measurement SISO ANT1 (80MHz 802.11ax (UNII Band 5) – Ch. 39)

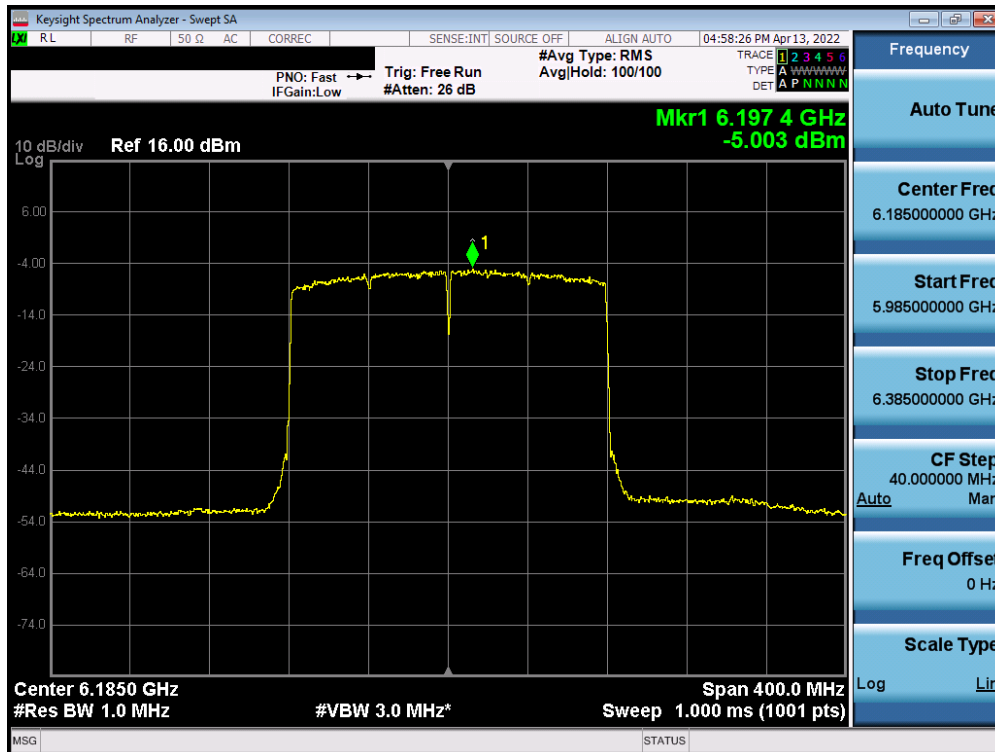


Plot 7-220. Power Spectral Density Measurement SISO ANT1 (80MHz 802.11ax (UNII Band 5) – Ch. 87)

FCC ID: C3K1997	MEASUREMENT REPORT (CERTIFICATION)		Approved by: Technical Manager
Test Report S/N: 1M2204040049-17-R1.C3K	Test Dates: 3/14/2022 – 7/8/2022	EUT Type: Portable Computing Device	Page 138 of 422

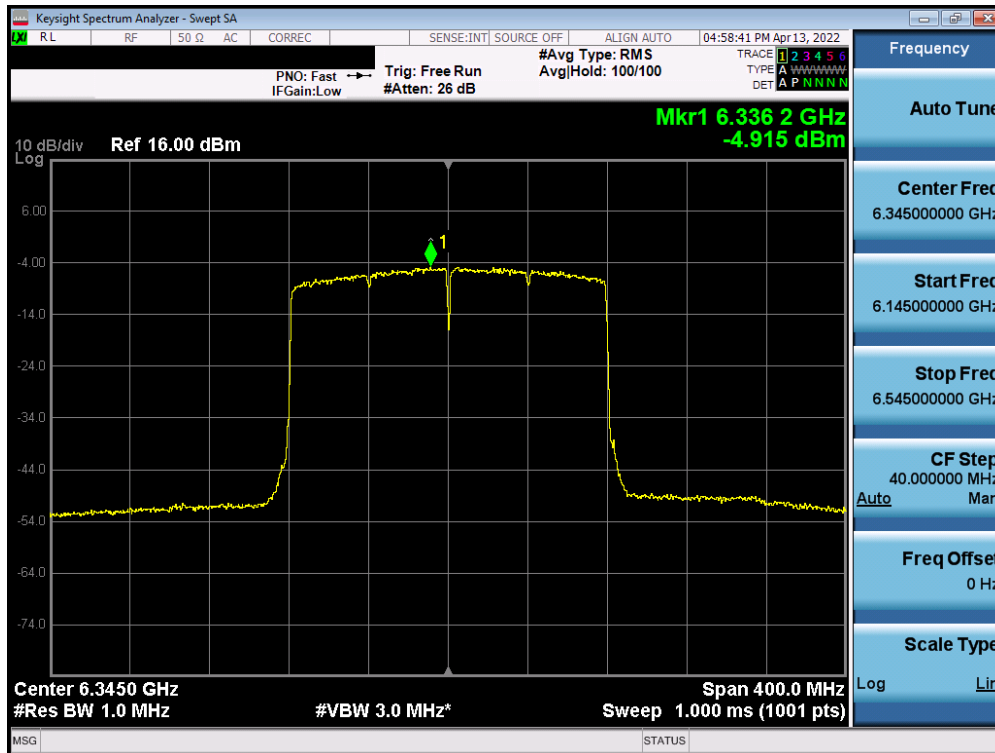


Plot 7-221. Power Spectral Density Measurement SISO ANT1 (160MHz 802.11ax (UNII Band 5) – Ch. 15)



Plot 7-222. Power Spectral Density Measurement SISO ANT1 (160MHz 802.11ax (UNII Band 5) – Ch. 47)

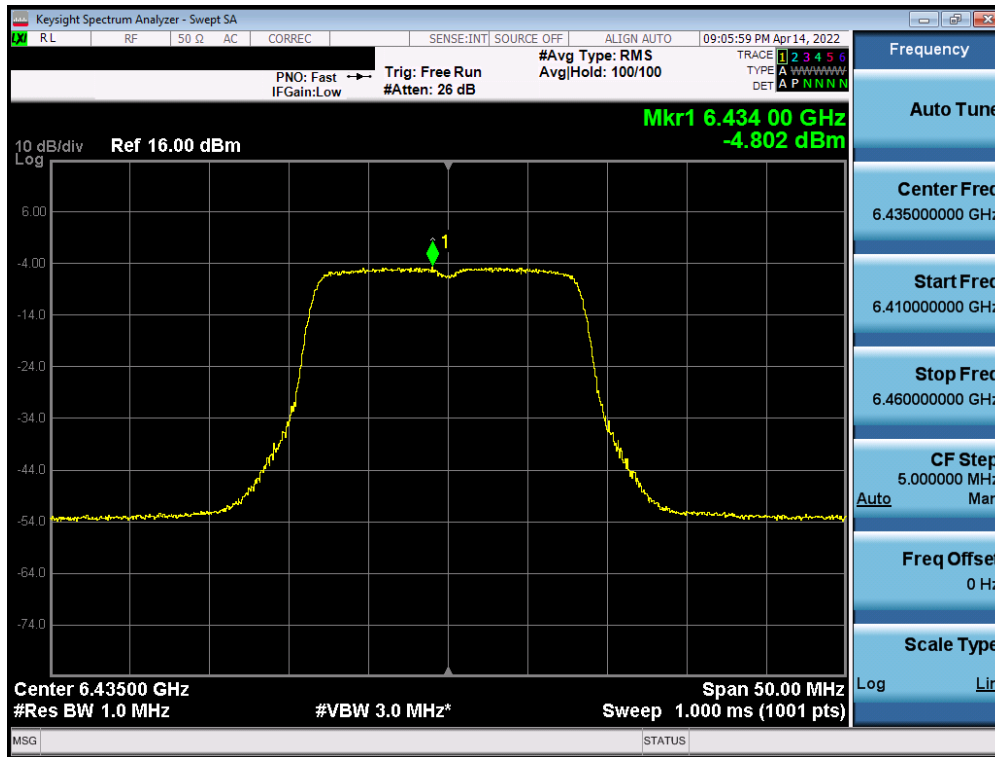
FCC ID: C3K1997	MEASUREMENT REPORT (CERTIFICATION)		Approved by: Technical Manager
Test Report S/N: 1M2204040049-17-R1.C3K	Test Dates: 3/14/2022 – 7/8/2022	EUT Type: Portable Computing Device	Page 139 of 422



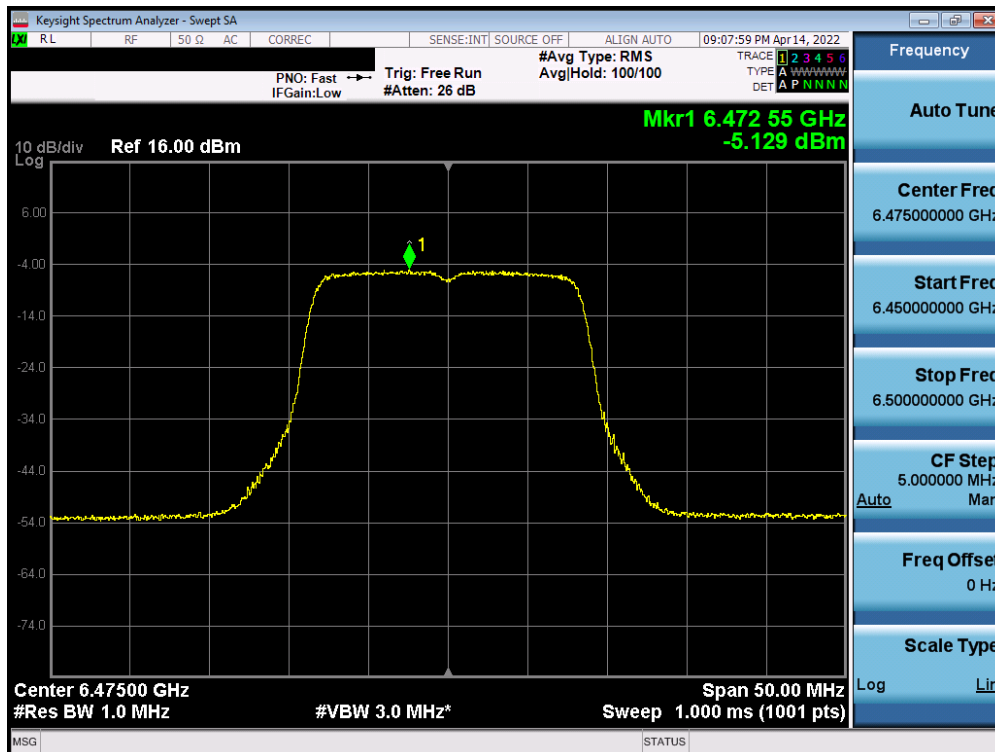
Plot 7-223. Power Spectral Density Measurement SISO ANT1 (160MHz 802.11ax (UNII Band 5) – Ch. 79)

FCC ID: C3K1997	MEASUREMENT REPORT (CERTIFICATION)		Approved by: Technical Manager
Test Report S/N: 1M2204040049-17-R1.C3K	Test Dates: 3/14/2022 – 7/8/2022	EUT Type: Portable Computing Device	Page 140 of 422

SISO Antenna-1 Power Spectral Density Measurement - (UNII Band 6)

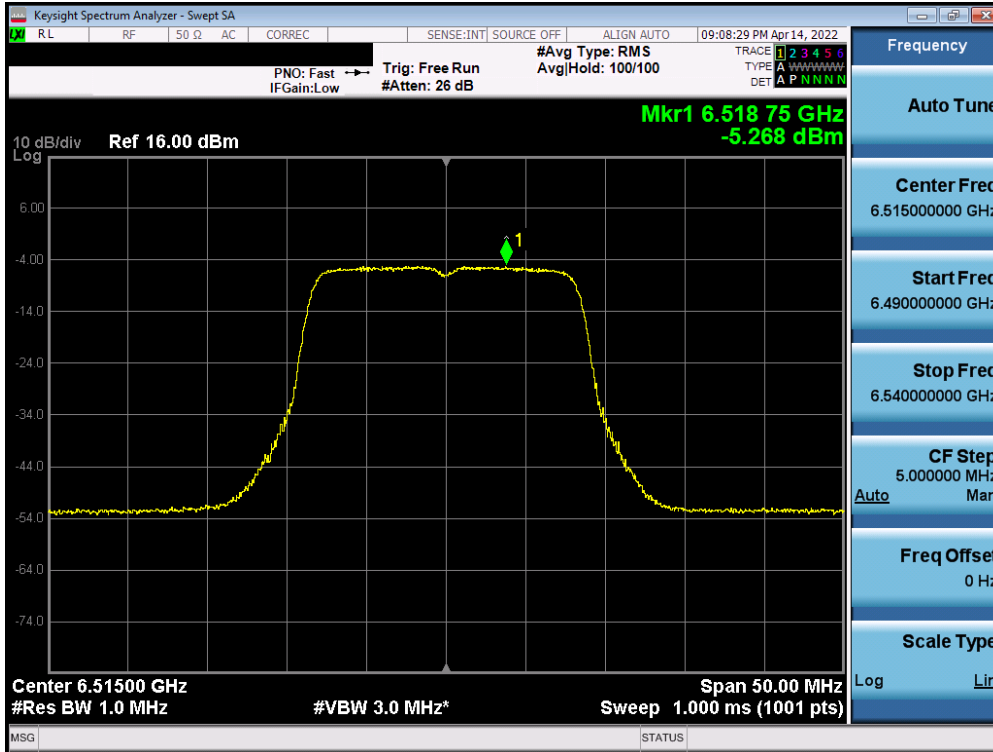


Plot 7-224. Power Spectral Density Measurement SISO ANT1 (20MHz 802.11a (UNII Band 6) – Ch. 97)

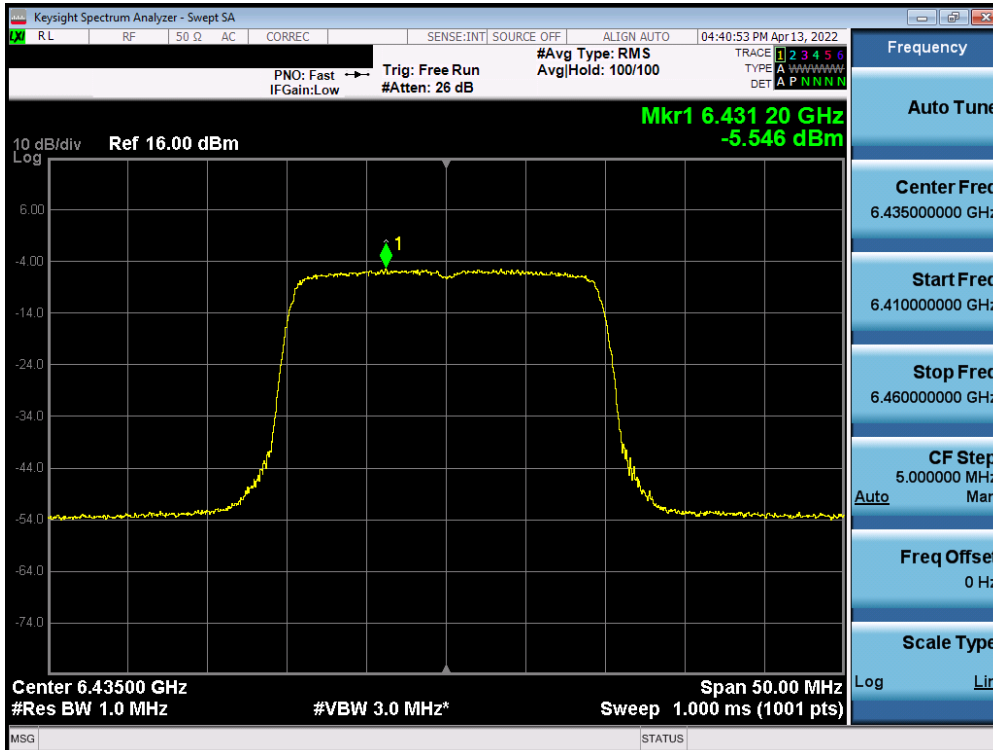


Plot 7-225. Power Spectral Density Measurement SISO ANT1 (20MHz 802.11a (UNII Band 6) – Ch. 105)

FCC ID: C3K1997	MEASUREMENT REPORT (CERTIFICATION)		Approved by: Technical Manager
Test Report S/N: 1M2204040049-17-R1.C3K	Test Dates: 3/14/2022 – 7/8/2022	EUT Type: Portable Computing Device	Page 141 of 422

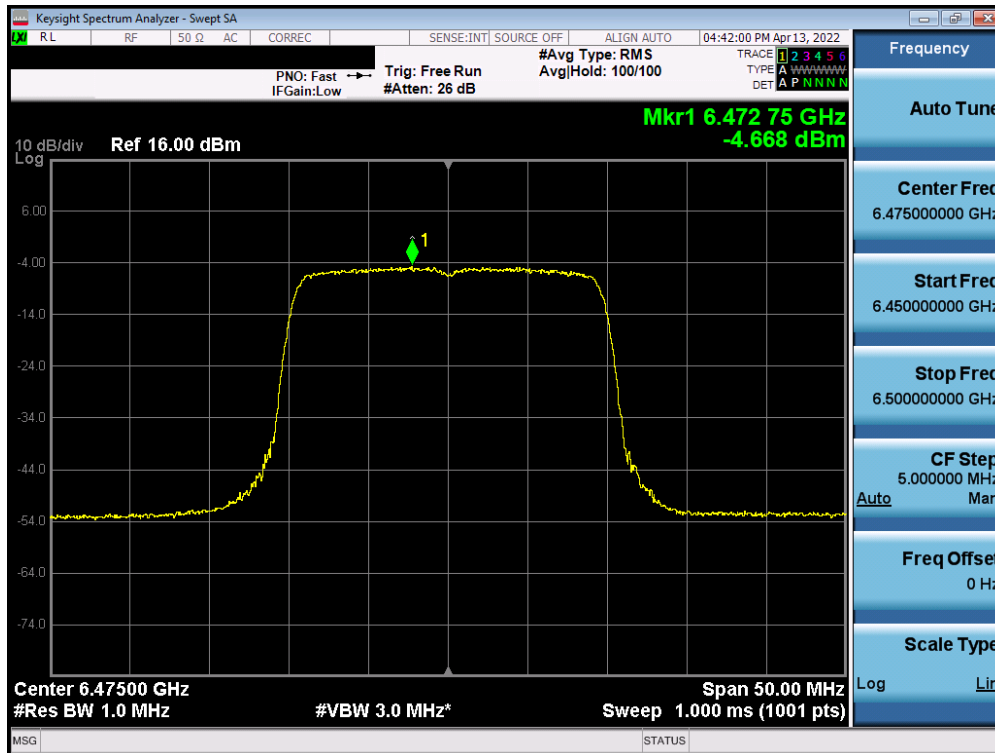


Plot 7-226. Power Spectral Density Measurement SISO ANT1 (20MHz 802.11a (UNII Band 6) – Ch. 113)

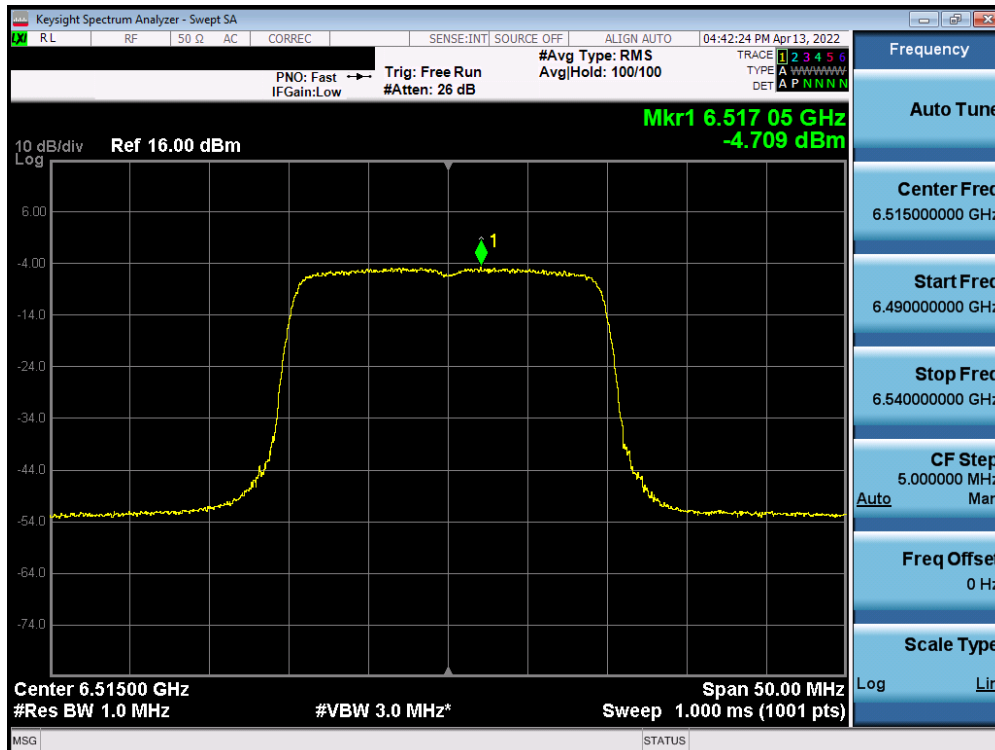


Plot 7-227. Power Spectral Density Measurement SISO ANT1 (20MHz 802.11ax (UNII Band 6) – Ch. 97)

FCC ID: C3K1997	MEASUREMENT REPORT (CERTIFICATION)		Approved by: Technical Manager
Test Report S/N: 1M2204040049-17-R1.C3K	Test Dates: 3/14/2022 – 7/8/2022	EUT Type: Portable Computing Device	Page 142 of 422

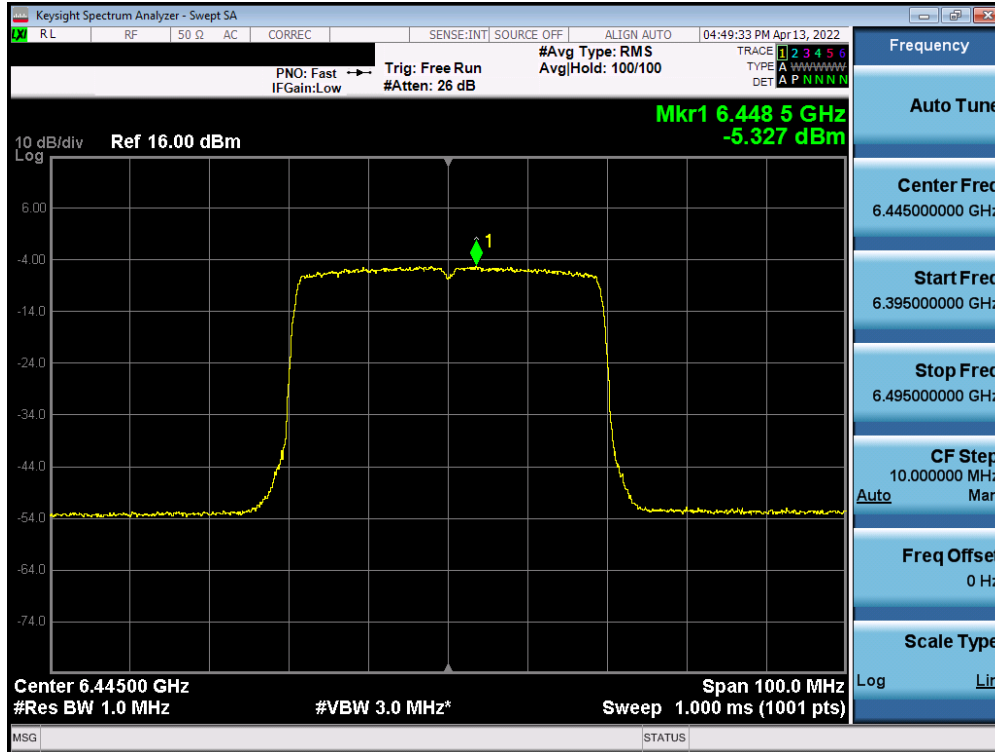


Plot 7-228. Power Spectral Density Measurement SISO ANT1 (20MHz 802.11ax (UNII Band 6) – Ch. 105)

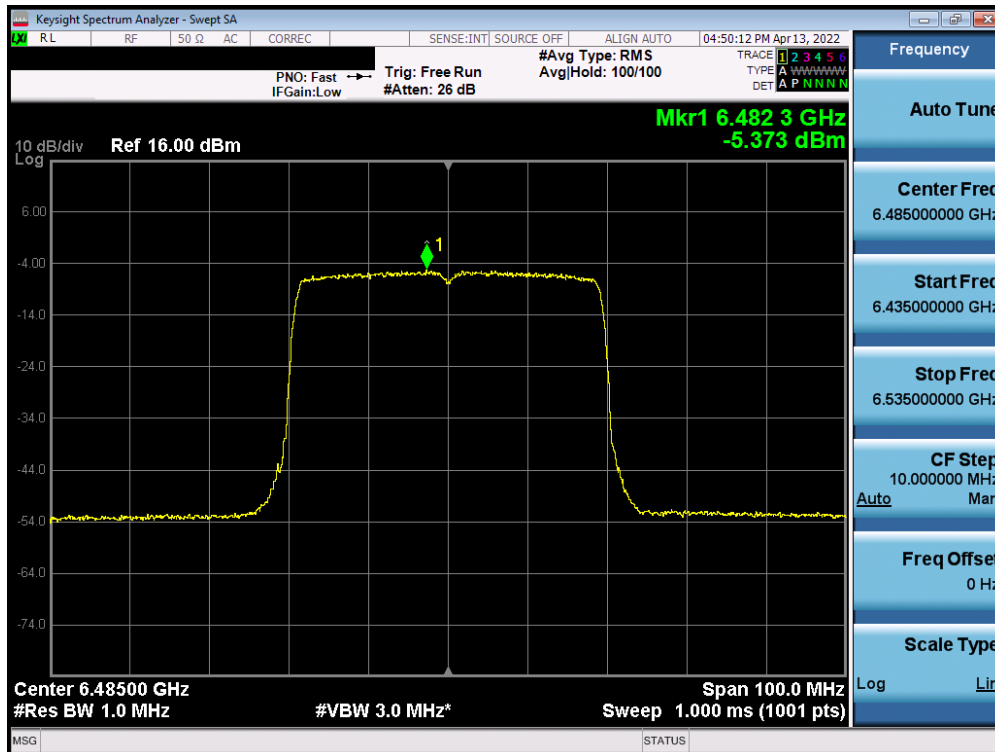


Plot 7-229. Power Spectral Density Measurement SISO ANT1 (20MHz 802.11ax (UNII Band 6) – Ch. 113)

FCC ID: C3K1997	MEASUREMENT REPORT (CERTIFICATION)		Approved by: Technical Manager
Test Report S/N: 1M2204040049-17-R1.C3K	Test Dates: 3/14/2022 – 7/8/2022	EUT Type: Portable Computing Device	Page 143 of 422

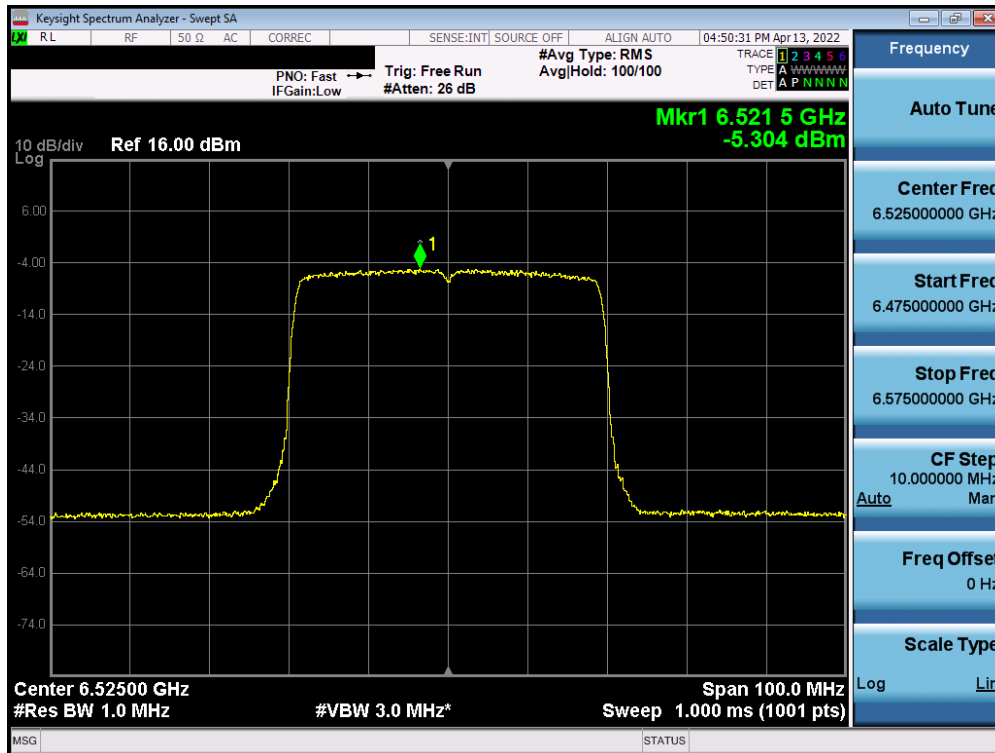


Plot 7-230. Power Spectral Density Measurement SISO ANT1 (40MHz 802.11ax (UNII Band 6) – Ch. 99)

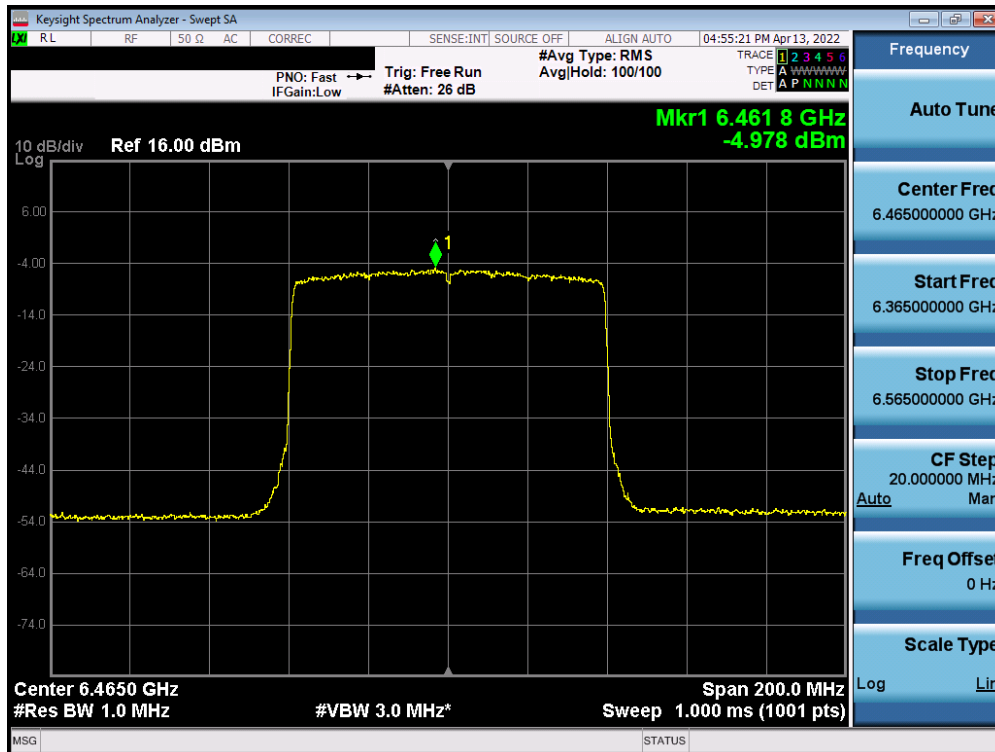


Plot 7-231. Power Spectral Density Measurement SISO ANT1 (40MHz 802.11ax (UNII Band 6) – Ch. 107)

FCC ID: C3K1997	MEASUREMENT REPORT (CERTIFICATION)		Approved by: Technical Manager
Test Report S/N: 1M2204040049-17-R1.C3K	Test Dates: 3/14/2022 – 7/8/2022	EUT Type: Portable Computing Device	Page 144 of 422

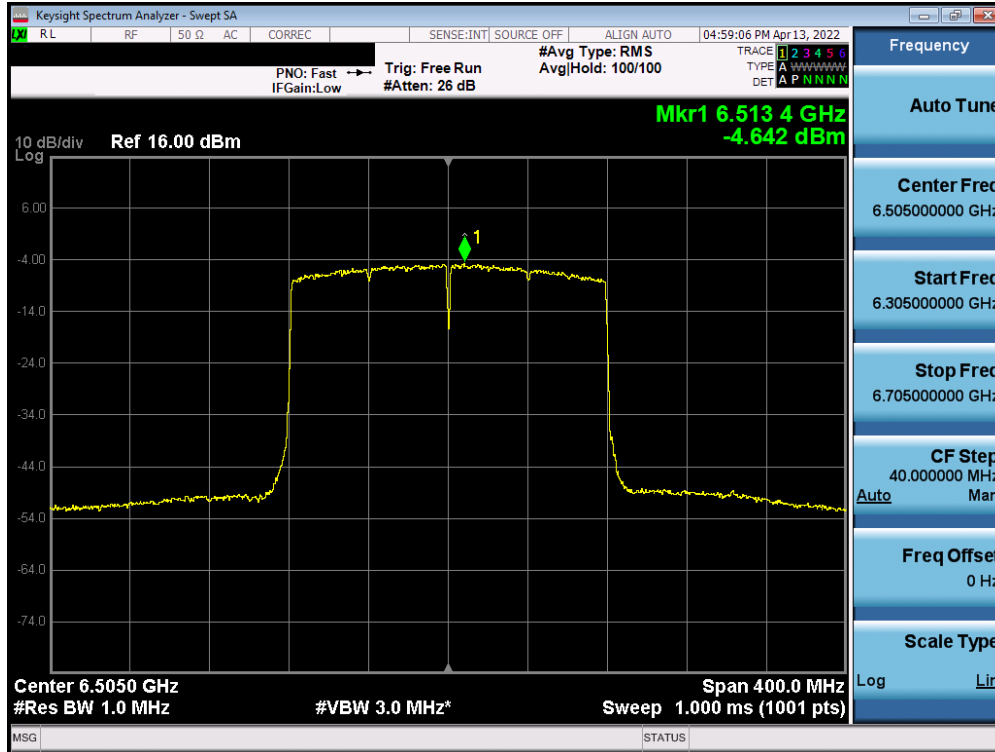


Plot 7-232. Power Spectral Density Measurement SISO ANT1 (40MHz 802.11ax (UNII Band 6) – Ch. 115)



Plot 7-233. Power Spectral Density Measurement SISO ANT1 (80MHz 802.11ax (UNII Band 6) – Ch. 103)

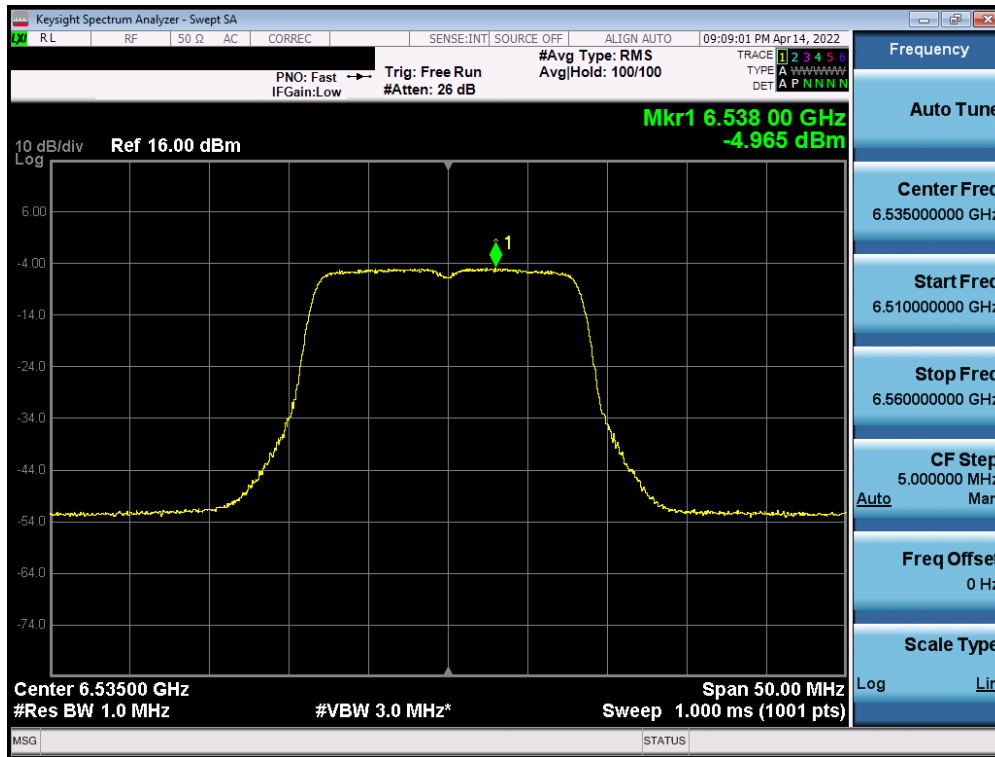
FCC ID: C3K1997		MEASUREMENT REPORT (CERTIFICATION)		Approved by: Technical Manager
Test Report S/N: 1M2204040049-17-R1.C3K	Test Dates: 3/14/2022 – 7/8/2022	EUT Type: Portable Computing Device		Page 145 of 422



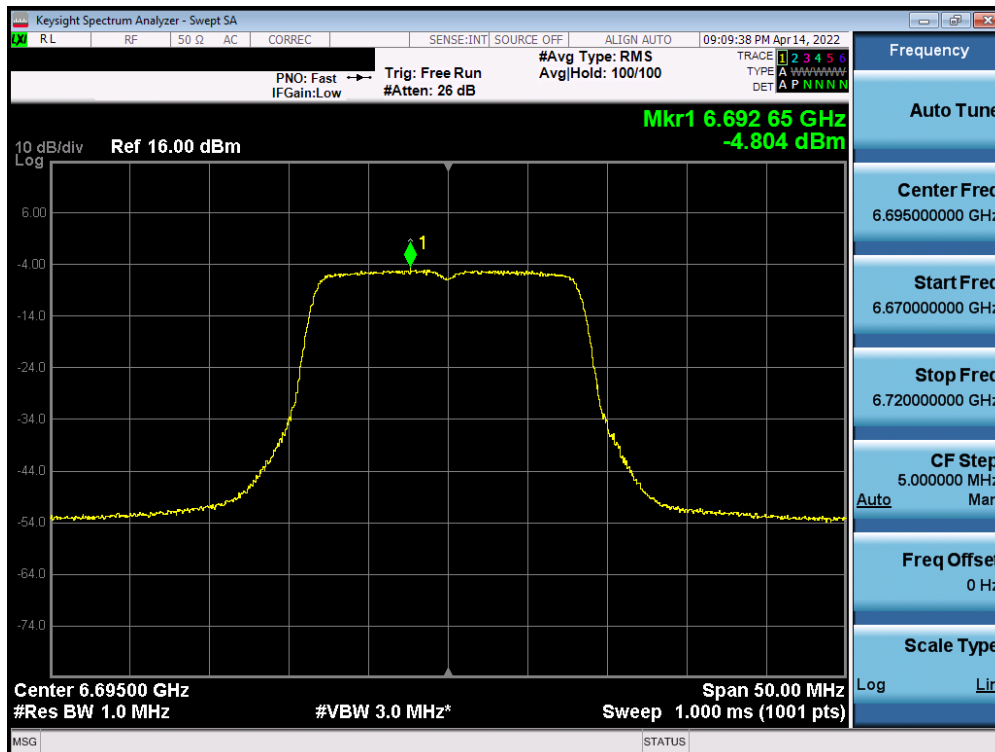
Plot 7-234. Power Spectral Density Measurement SISO ANT1 (160MHz 802.11ax (UNII Band 6) – Ch. 111)

FCC ID: C3K1997	MEASUREMENT REPORT (CERTIFICATION)		Approved by: Technical Manager
Test Report S/N: 1M2204040049-17-R1.C3K	Test Dates: 3/14/2022 – 7/8/2022	EUT Type: Portable Computing Device	Page 146 of 422

SISO Antenna-1 Power Spectral Density Measurement - (UNII Band 7)

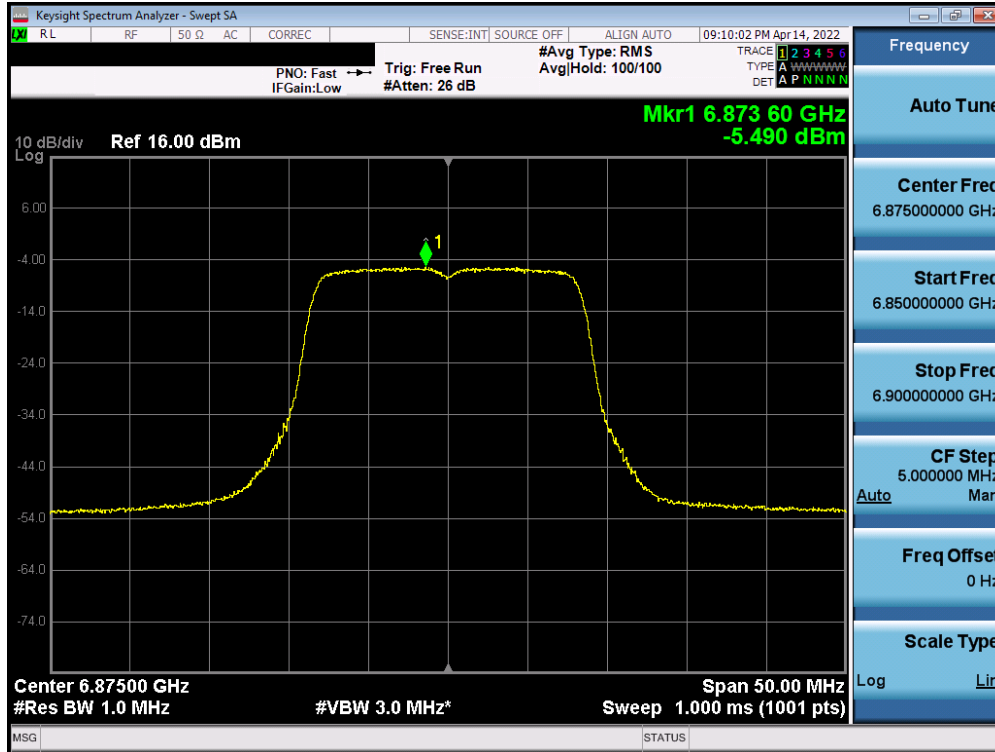


Plot 7-235. Power Spectral Density Measurement SISO ANT1 (20MHz 802.11a (UNII Band 7) – Ch. 117)

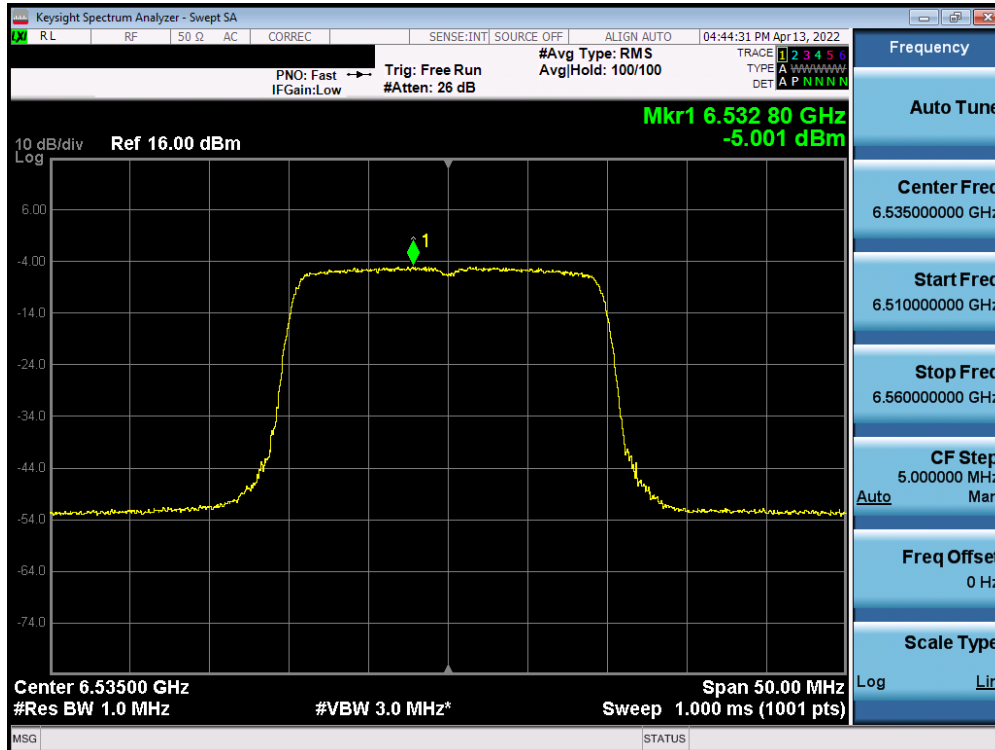


Plot 7-236. Power Spectral Density Measurement SISO ANT1 (20MHz 802.11a (UNII Band 7) – Ch. 149)

FCC ID: C3K1997	MEASUREMENT REPORT (CERTIFICATION)		Approved by: Technical Manager
Test Report S/N: 1M2204040049-17-R1.C3K	Test Dates: 3/14/2022 – 7/8/2022	EUT Type: Portable Computing Device	Page 147 of 422

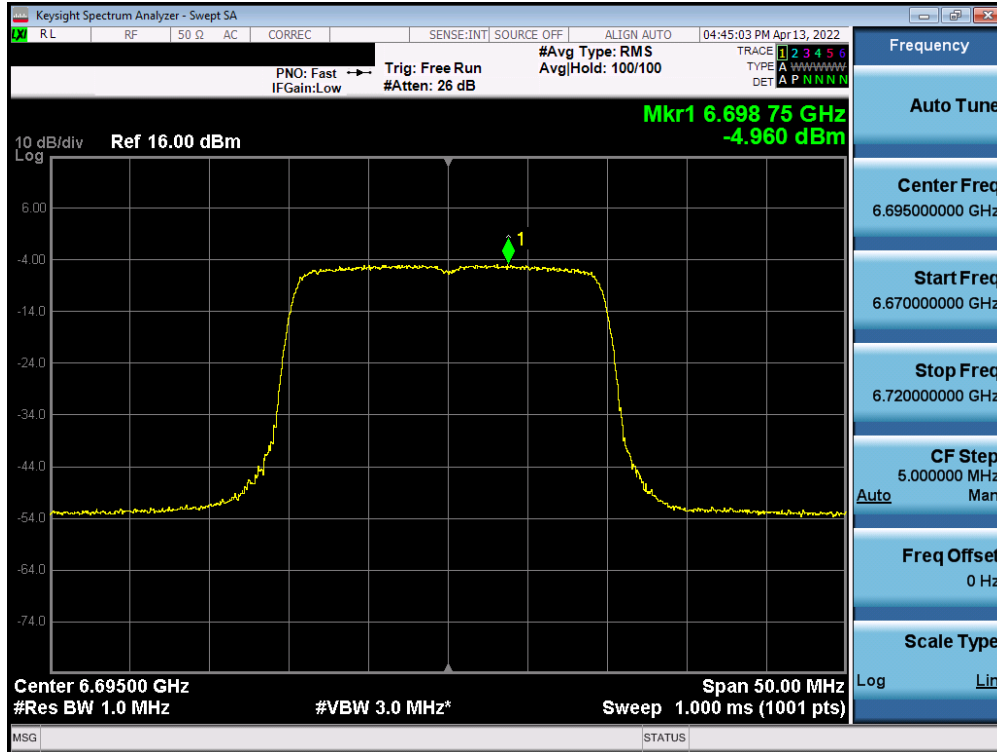


Plot 7-237. Power Spectral Density Measurement SISO ANT1 (20MHz 802.11a (UNII Band 7) – Ch. 185)

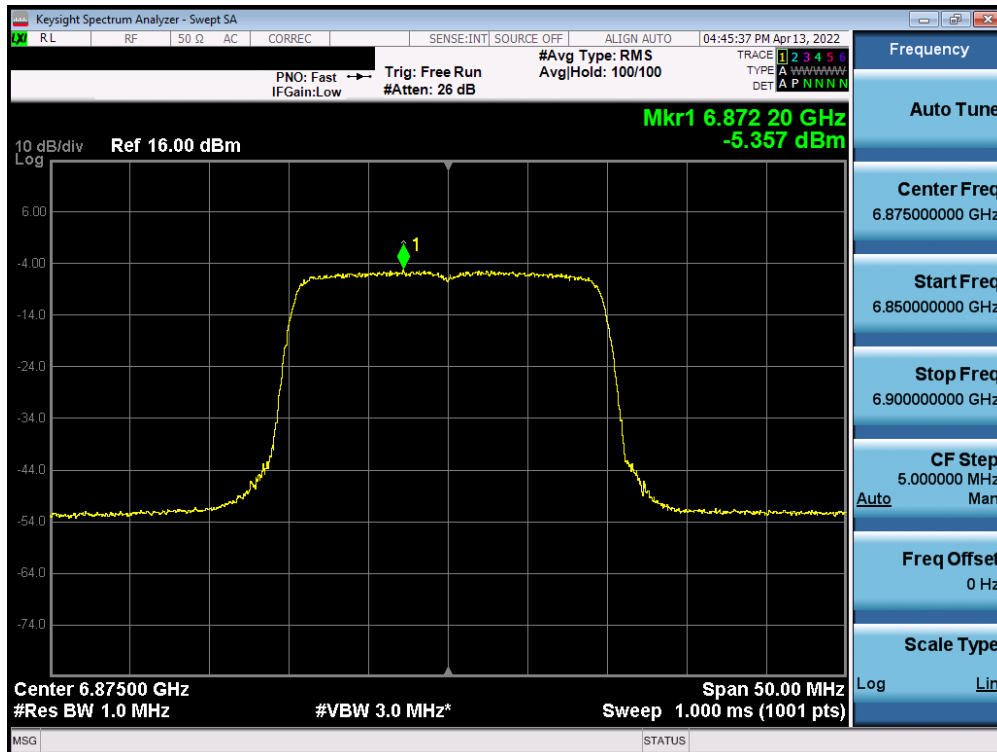


Plot 7-238. Power Spectral Density Measurement SISO ANT1 (20MHz 802.11ax (UNII Band 7) – Ch. 117)

FCC ID: C3K1997	MEASUREMENT REPORT (CERTIFICATION)		Approved by: Technical Manager
Test Report S/N: 1M2204040049-17-R1.C3K	Test Dates: 3/14/2022 – 7/8/2022	EUT Type: Portable Computing Device	Page 148 of 422

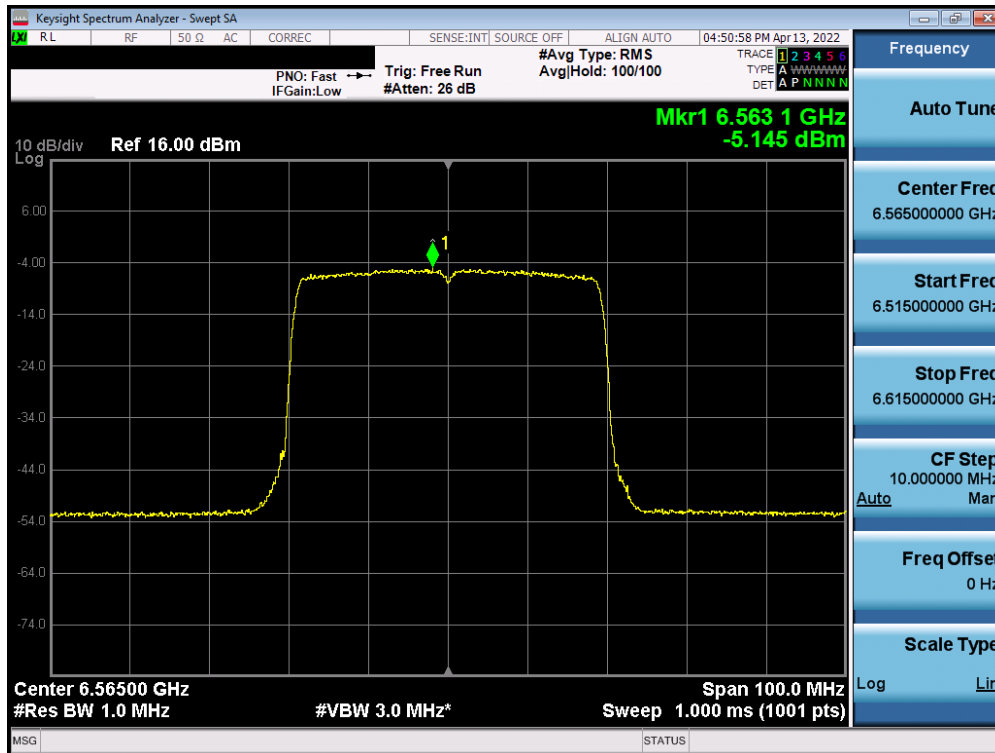


Plot 7-239. Power Spectral Density Measurement SISO ANT1 (20MHz 802.11ax (UNII Band 7) – Ch. 149)

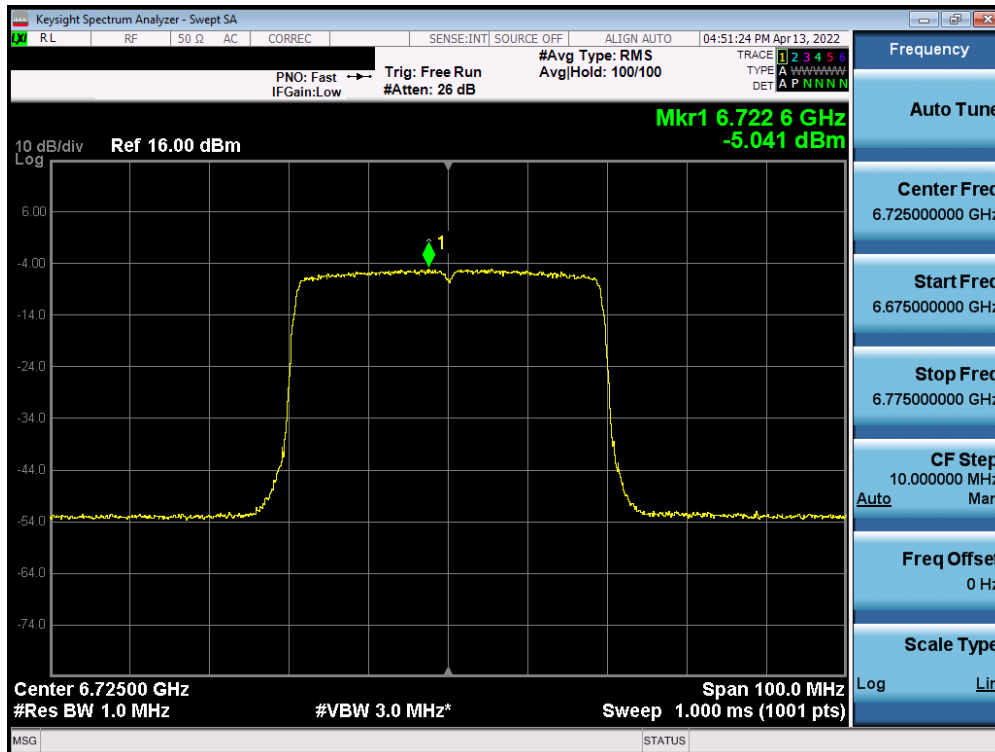


Plot 7-240. Power Spectral Density Measurement SISO ANT1 (20MHz 802.11ax (UNII Band 7) – Ch. 185)

FCC ID: C3K1997	MEASUREMENT REPORT (CERTIFICATION)		Approved by: Technical Manager
Test Report S/N: 1M2204040049-17-R1.C3K	Test Dates: 3/14/2022 – 7/8/2022	EUT Type: Portable Computing Device	Page 149 of 422

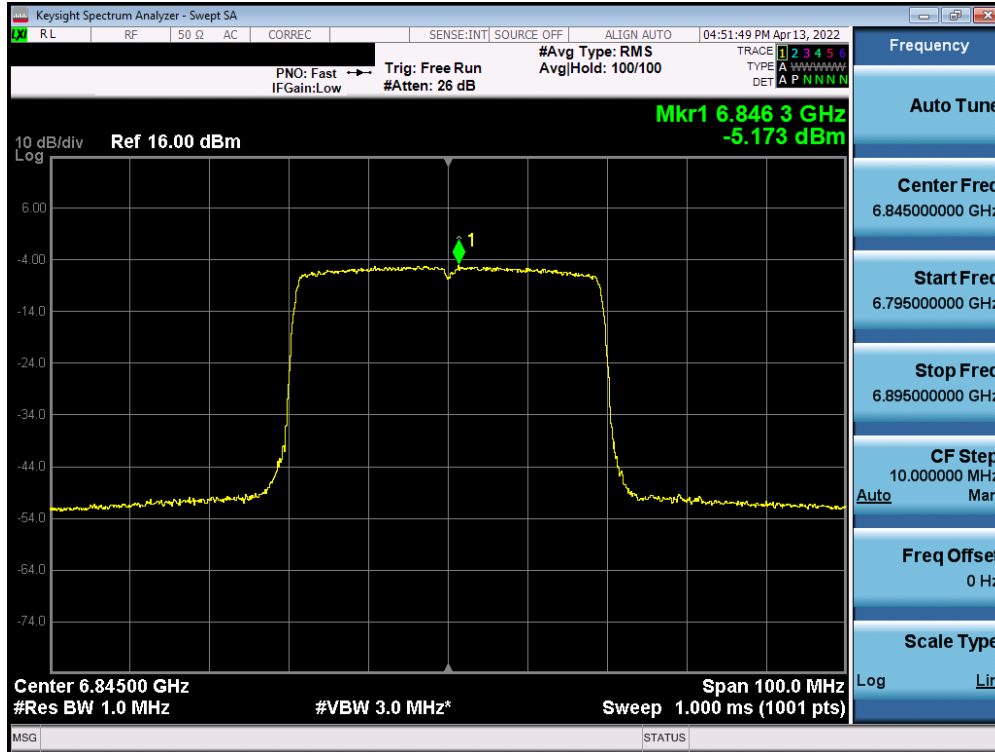


Plot 7-241. Power Spectral Density Measurement SISO ANT1 (40MHz 802.11ax (UNII Band 7) – Ch. 123)

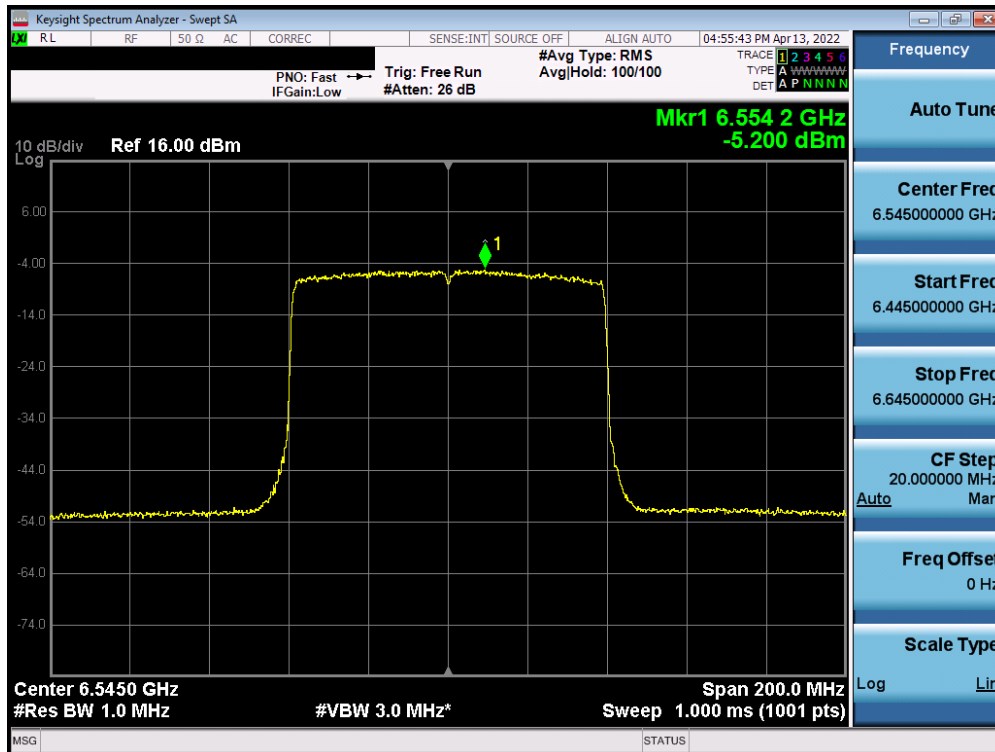


Plot 7-242. Power Spectral Density Measurement SISO ANT1 (40MHz 802.11ax (UNII Band 7) – Ch. 155)

FCC ID: C3K1997	MEASUREMENT REPORT (CERTIFICATION)		Approved by: Technical Manager
Test Report S/N: 1M2204040049-17-R1.C3K	Test Dates: 3/14/2022 – 7/8/2022	EUT Type: Portable Computing Device	Page 150 of 422

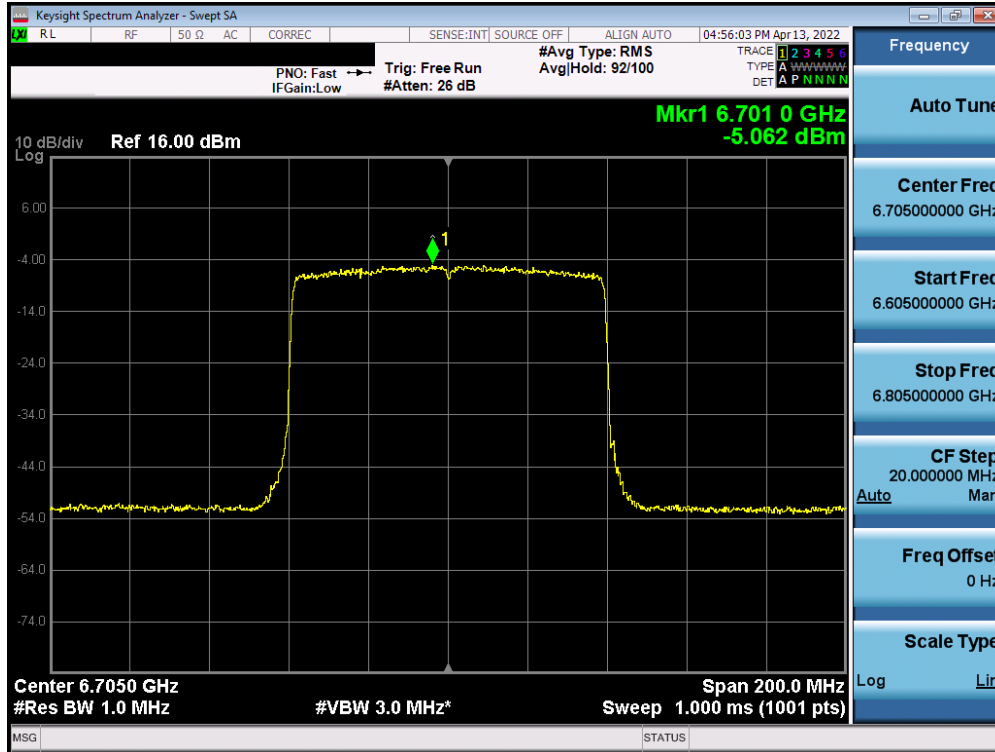


Plot 7-243. Power Spectral Density Measurement SISO ANT1 (40MHz 802.11ax (UNII Band 7) – Ch. 179)

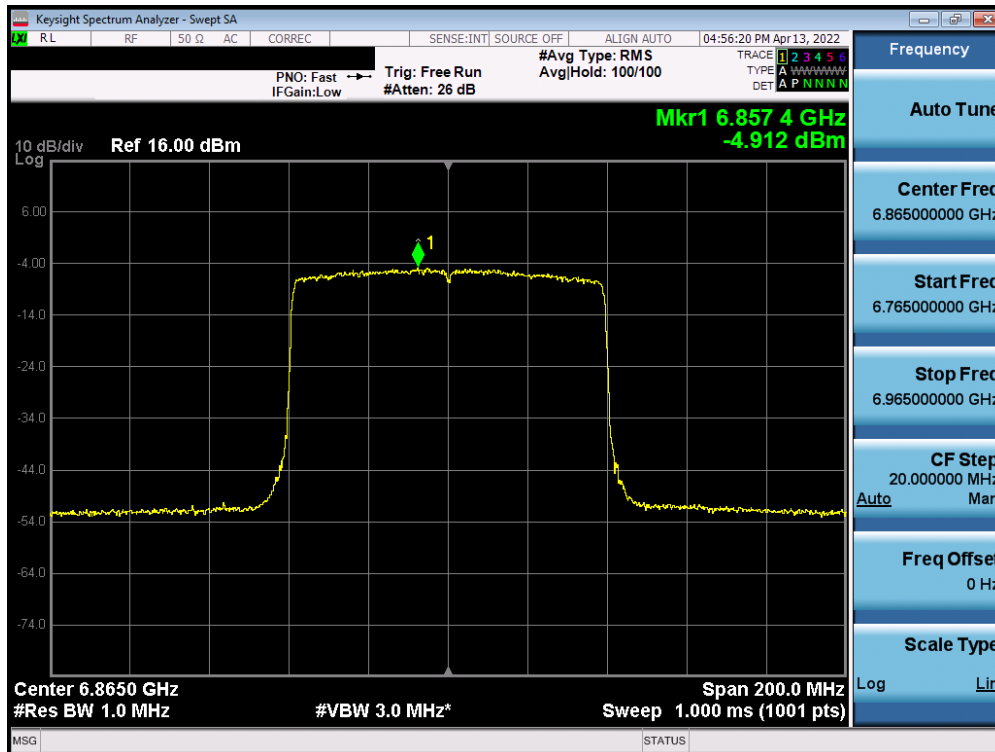


Plot 7-244. Power Spectral Density Measurement SISO ANT1 (80MHz 802.11ax (UNII Band 7) – Ch. 119)

FCC ID: C3K1997	MEASUREMENT REPORT (CERTIFICATION)		Approved by: Technical Manager
Test Report S/N: 1M2204040049-17-R1.C3K	Test Dates: 3/14/2022 – 7/8/2022	EUT Type: Portable Computing Device	Page 151 of 422

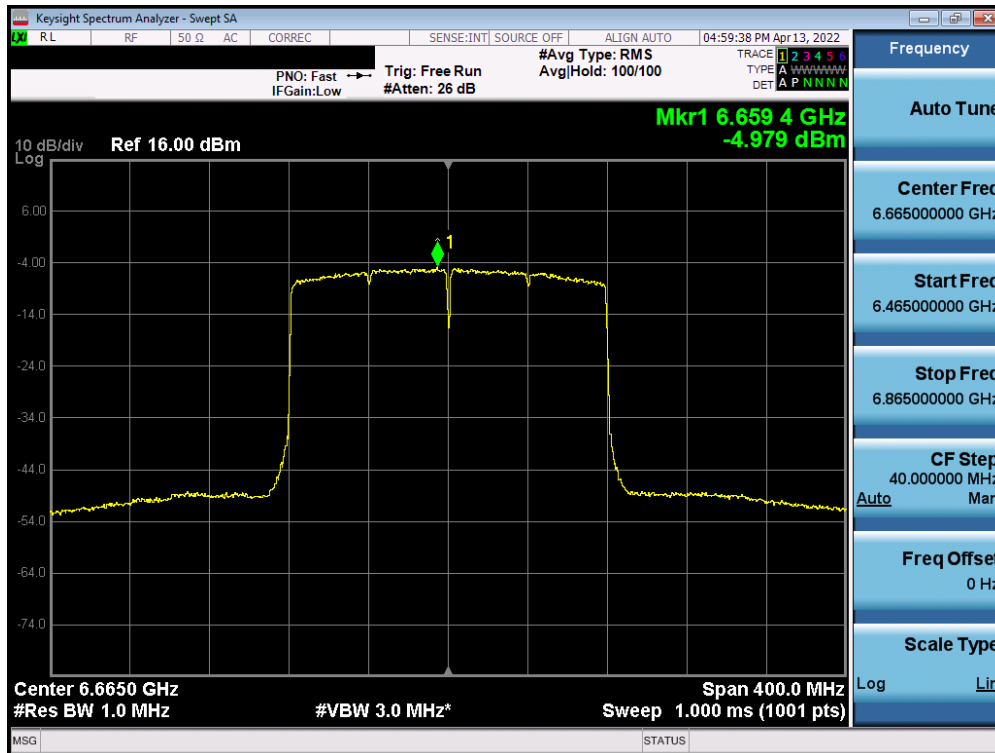


Plot 7-245. Power Spectral Density Measurement SISO ANT1 (80MHz 802.11ax (UNII Band 7) – Ch. 151)

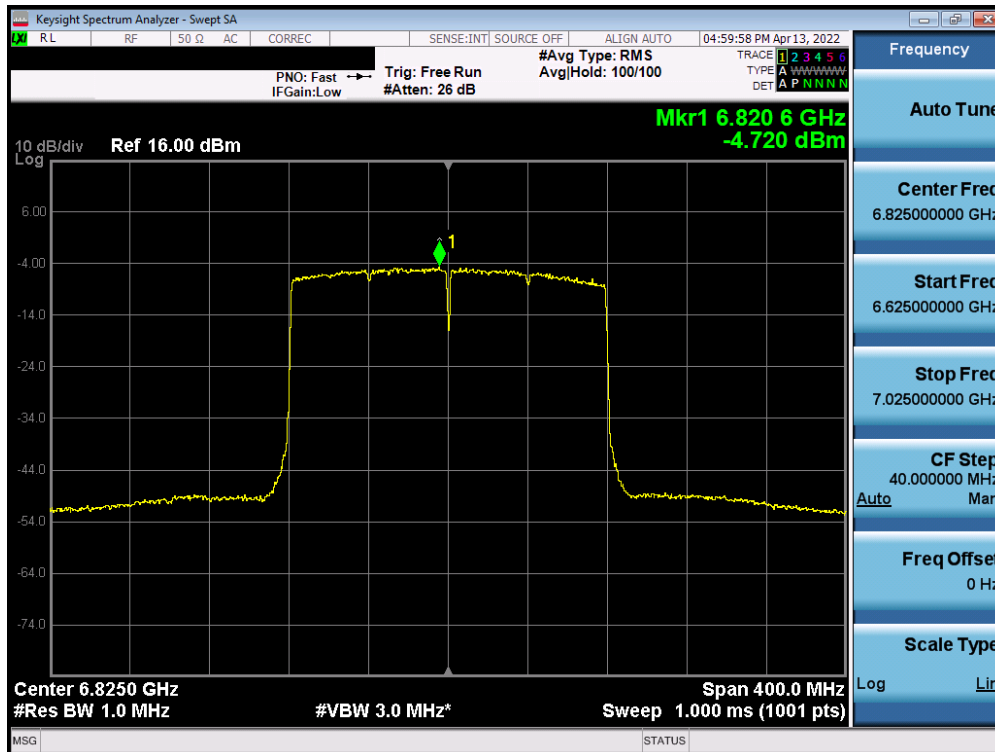


Plot 7-246. Power Spectral Density Measurement SISO ANT1 (80MHz 802.11ax (UNII Band 7) – Ch. 183)

FCC ID: C3K1997	MEASUREMENT REPORT (CERTIFICATION)		Approved by: Technical Manager
Test Report S/N: 1M2204040049-17-R1.C3K	Test Dates: 3/14/2022 – 7/8/2022	EUT Type: Portable Computing Device	Page 152 of 422



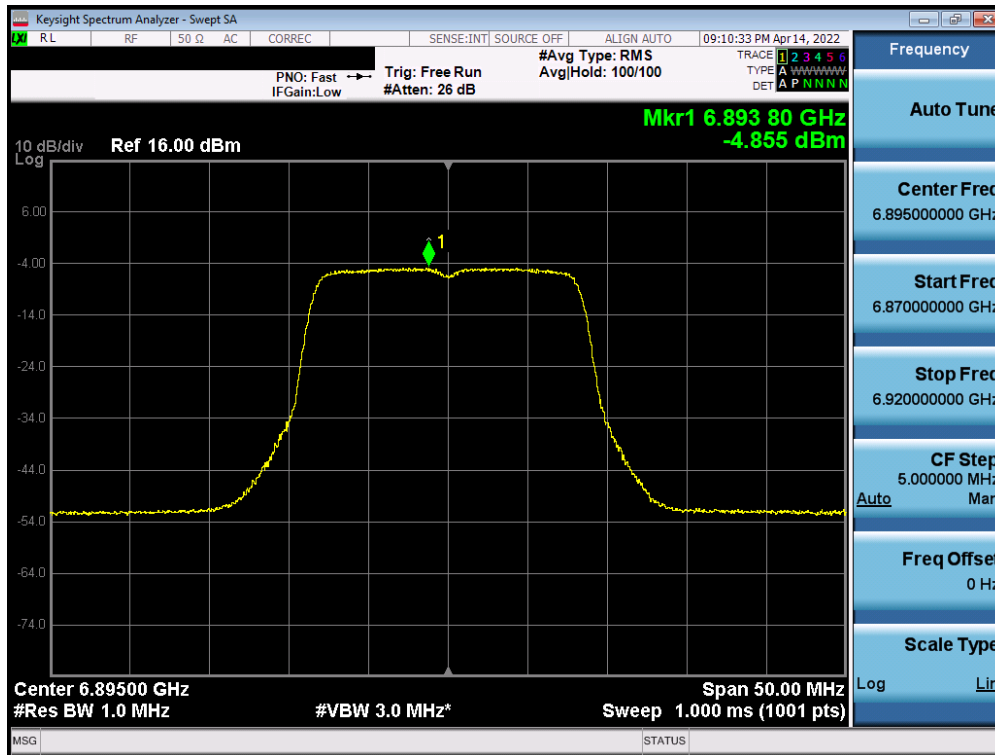
Plot 7-247. Power Spectral Density Measurement SISO ANT1 (160MHz 802.11ax (UNII Band 7) – Ch. 143)



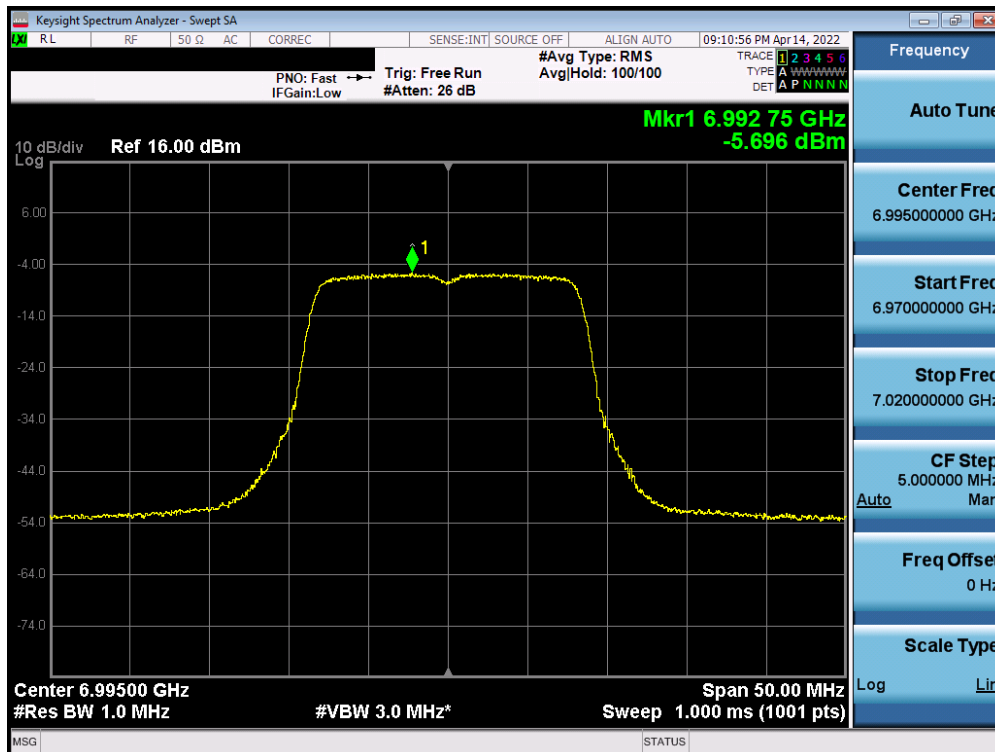
Plot 7-248. Power Spectral Density Measurement SISO ANT1 (160MHz 802.11ax (UNII Band 7) – Ch. 175)

FCC ID: C3K1997	MEASUREMENT REPORT (CERTIFICATION)		Approved by: Technical Manager
Test Report S/N: 1M2204040049-17-R1.C3K	Test Dates: 3/14/2022 – 7/8/2022	EUT Type: Portable Computing Device	Page 153 of 422

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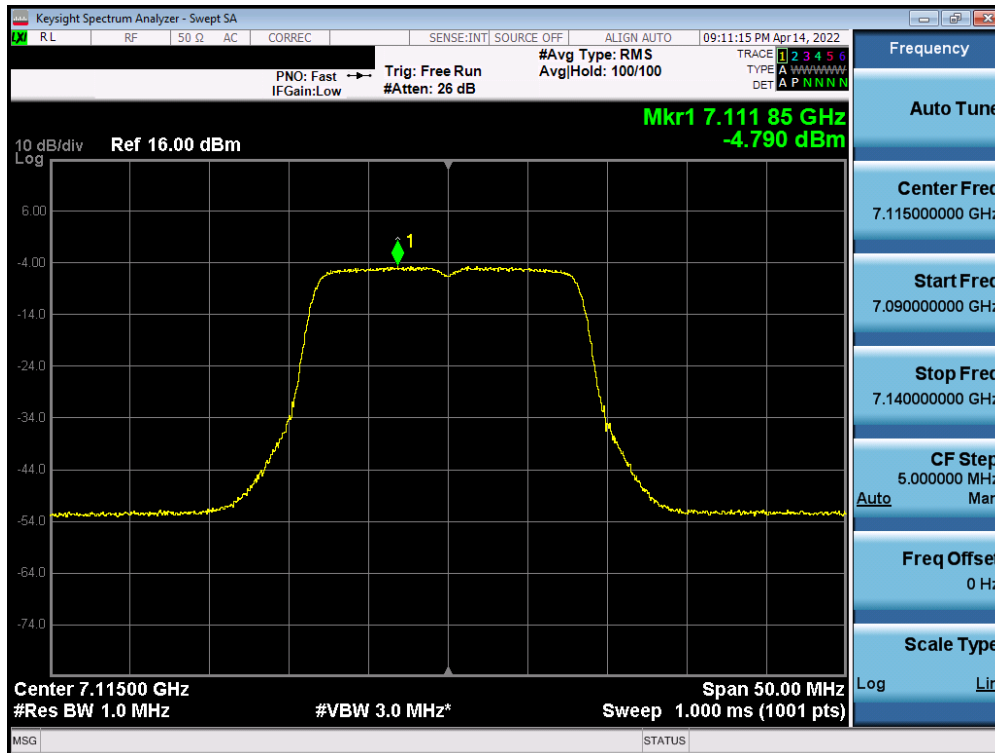


Plot 7-249. Power Spectral Density Measurement SISO ANT1 (20MHz 802.11a (UNII Band 8) – Ch. 189)

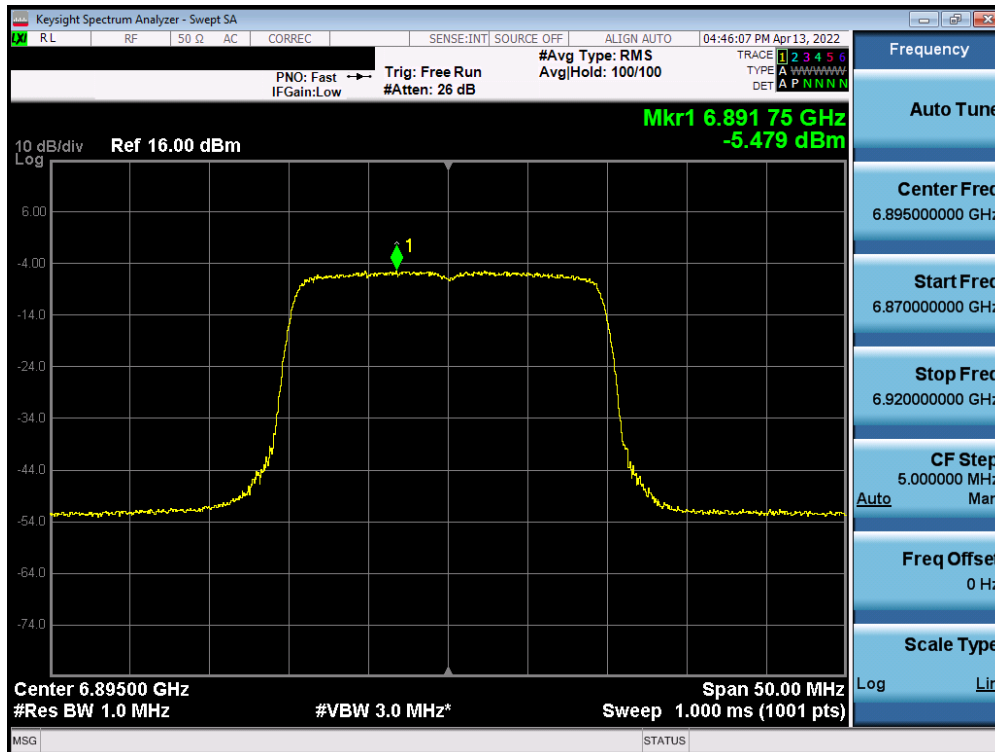


Plot 7-250. Power Spectral Density Measurement SISO ANT1 (20MHz 802.11a (UNII Band 8) – Ch. 209)

FCC ID: C3K1997	MEASUREMENT REPORT (CERTIFICATION)		Approved by: Technical Manager
Test Report S/N: 1M2204040049-17-R1.C3K	Test Dates: 3/14/2022 – 7/8/2022	EUT Type: Portable Computing Device	Page 154 of 422

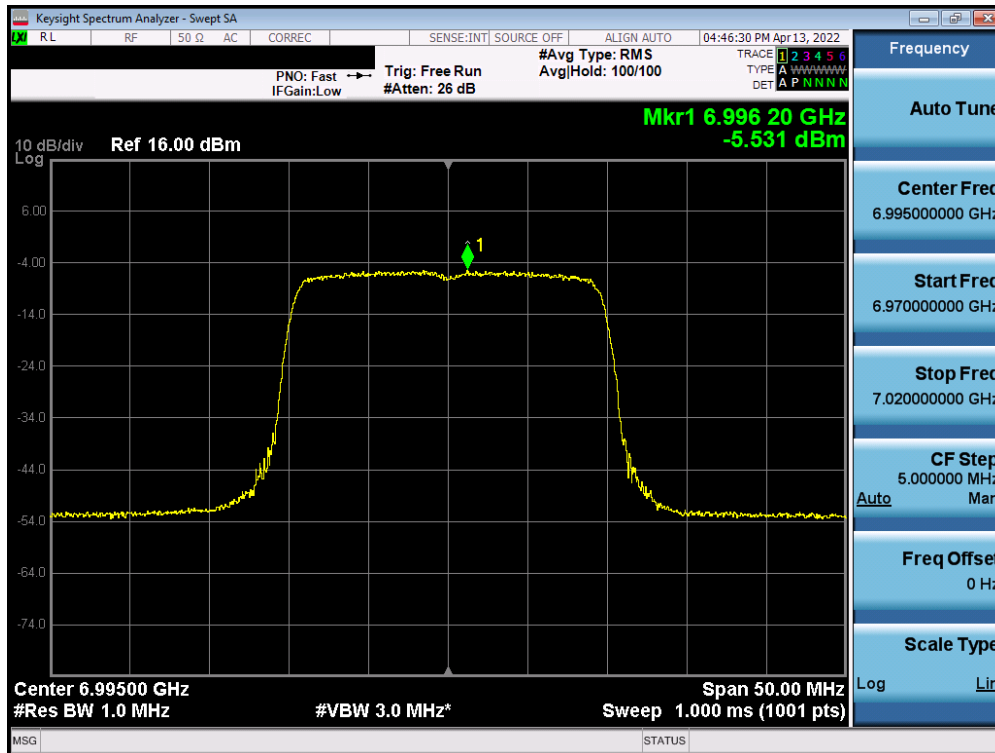


Plot 7-251. Power Spectral Density Measurement SISO ANT1 (20MHz 802.11a (UNII Band 8) – Ch. 233)

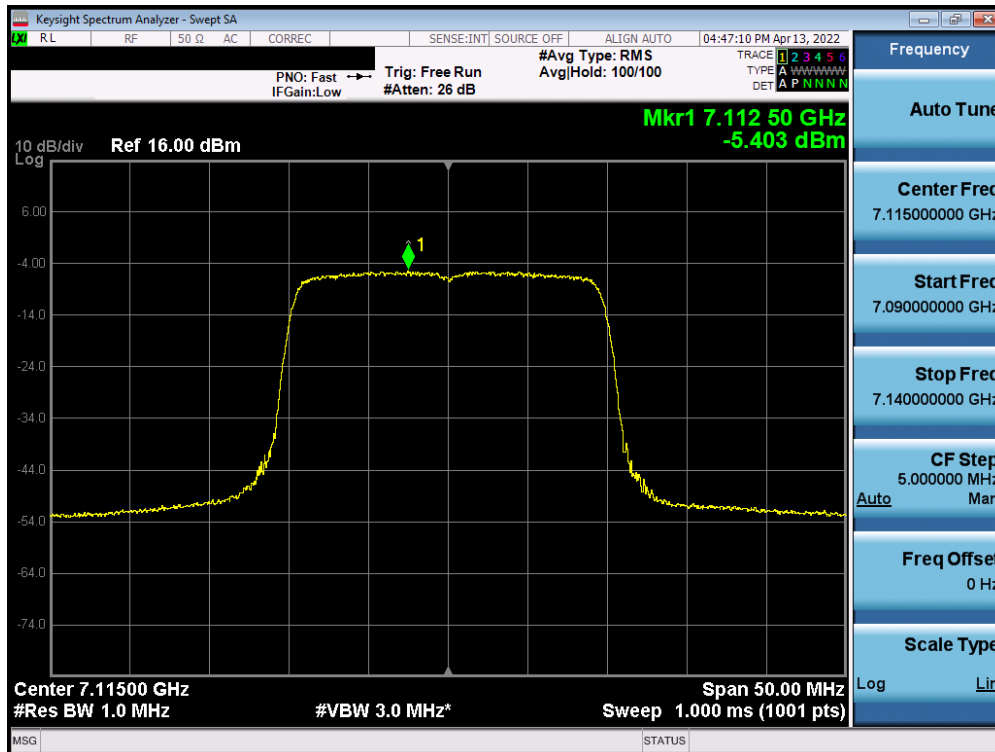


Plot 7-252. Power Spectral Density Measurement SISO ANT1 (20MHz 802.11ax (UNII Band 8) – Ch. 189)

FCC ID: C3K1997	MEASUREMENT REPORT (CERTIFICATION)		Approved by: Technical Manager
Test Report S/N: 1M2204040049-17-R1.C3K	Test Dates: 3/14/2022 – 7/8/2022	EUT Type: Portable Computing Device	Page 155 of 422

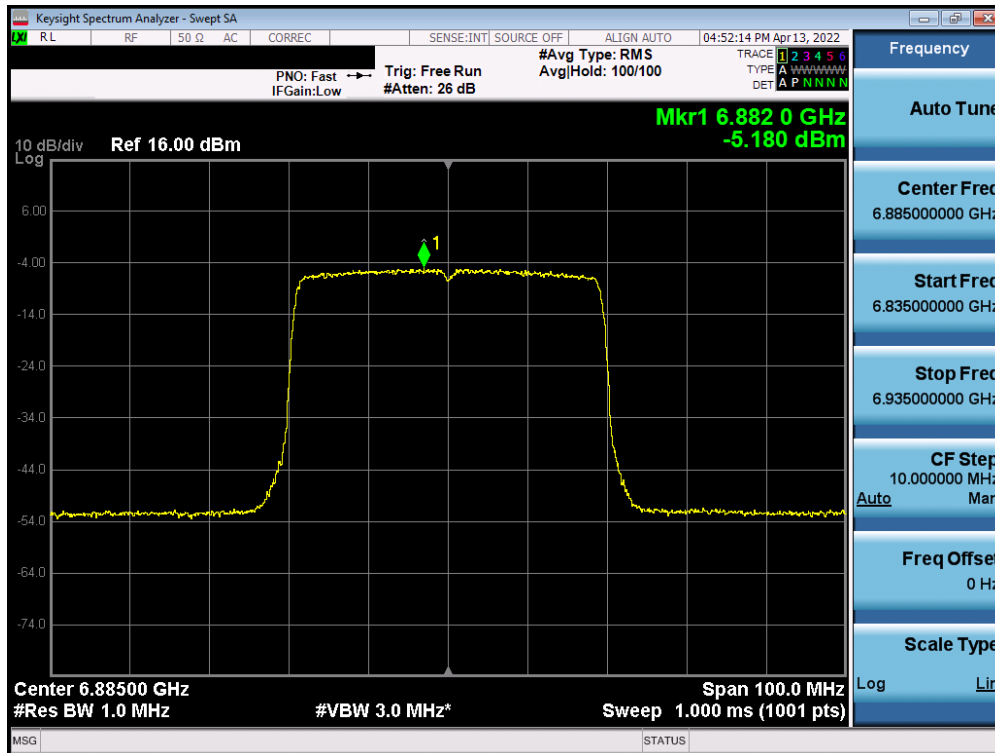


Plot 7-253. Power Spectral Density Measurement SISO ANT1 (20MHz 802.11ax (UNII Band 8) – Ch. 209)

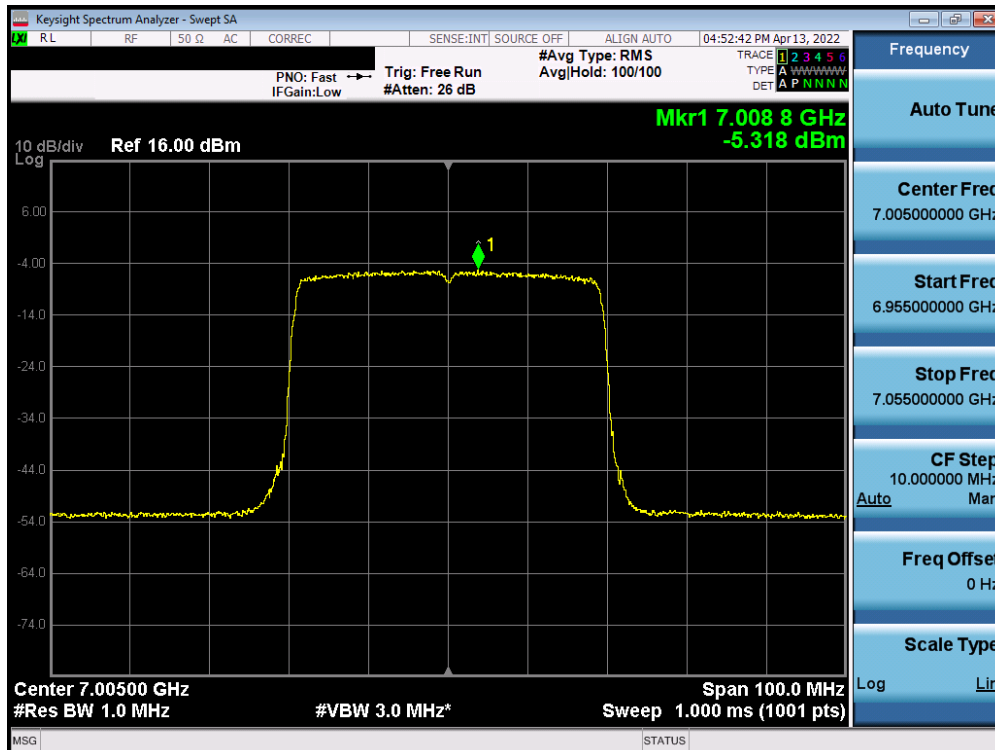


Plot 7-254. Power Spectral Density Measurement SISO ANT1 (20MHz 802.11ax (UNII Band 8) – Ch. 233)

FCC ID: C3K1997	MEASUREMENT REPORT (CERTIFICATION)		Approved by: Technical Manager
Test Report S/N: 1M2204040049-17-R1.C3K	Test Dates: 3/14/2022 – 7/8/2022	EUT Type: Portable Computing Device	Page 156 of 422

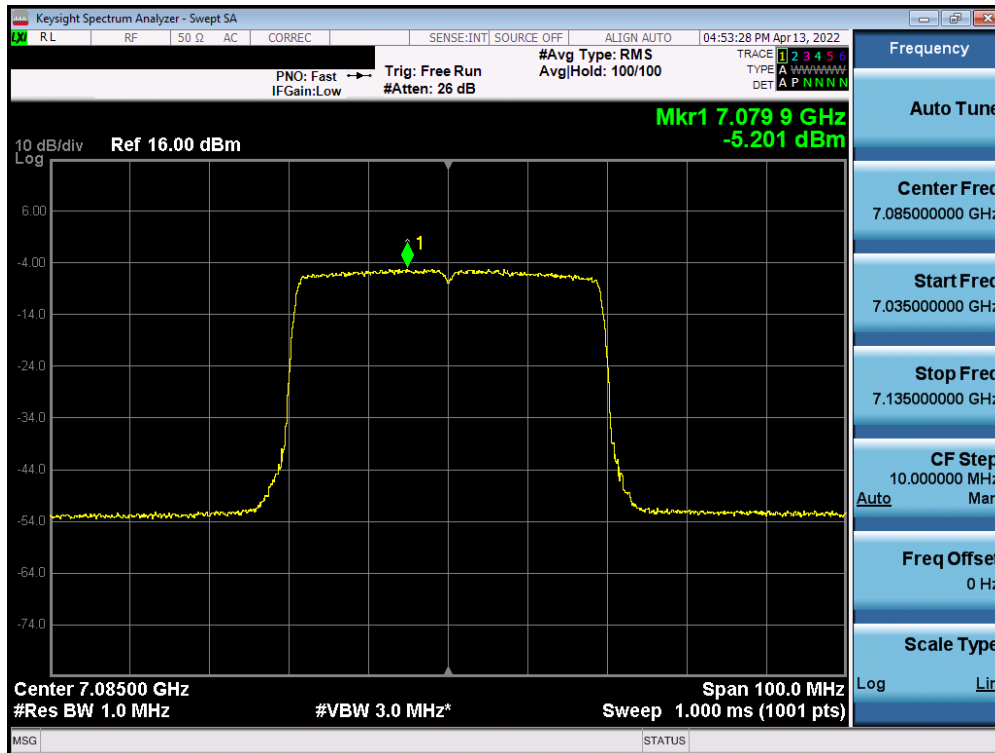


Plot 7-255. Power Spectral Density Measurement SISO ANT1 (40MHz 802.11ax (UNII Band 8) – Ch. 187)

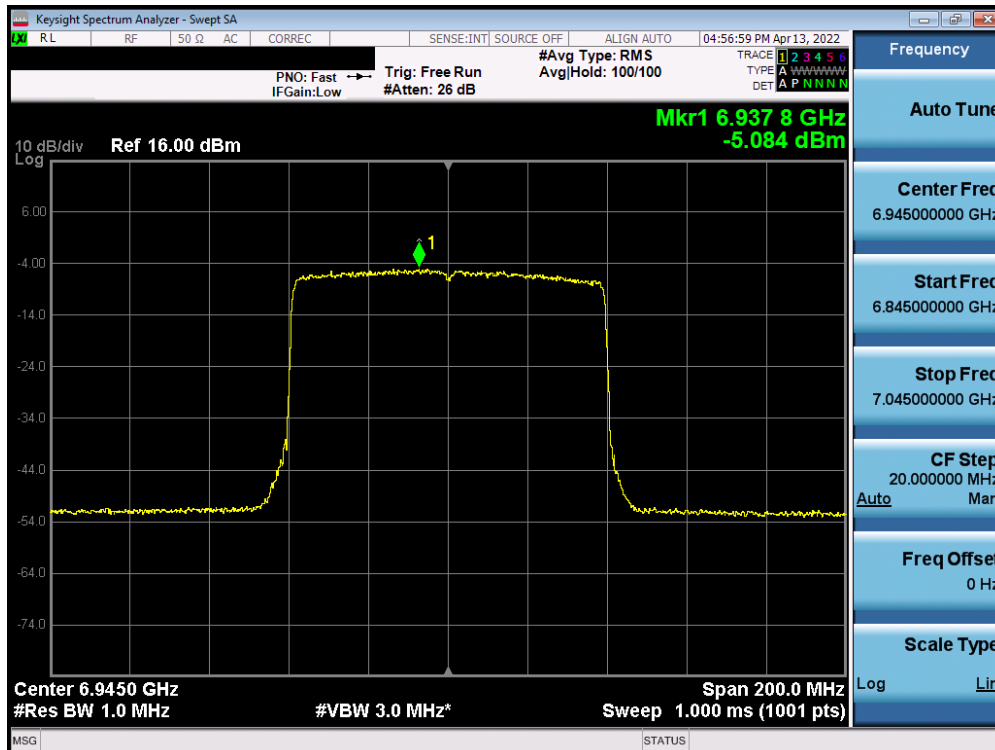


Plot 7-256. Power Spectral Density Measurement SISO ANT1 (40MHz 802.11ax (UNII Band 8) – Ch. 211)

FCC ID: C3K1997	MEASUREMENT REPORT (CERTIFICATION)		Approved by: Technical Manager
Test Report S/N: 1M2204040049-17-R1.C3K	Test Dates: 3/14/2022 – 7/8/2022	EUT Type: Portable Computing Device	Page 157 of 422

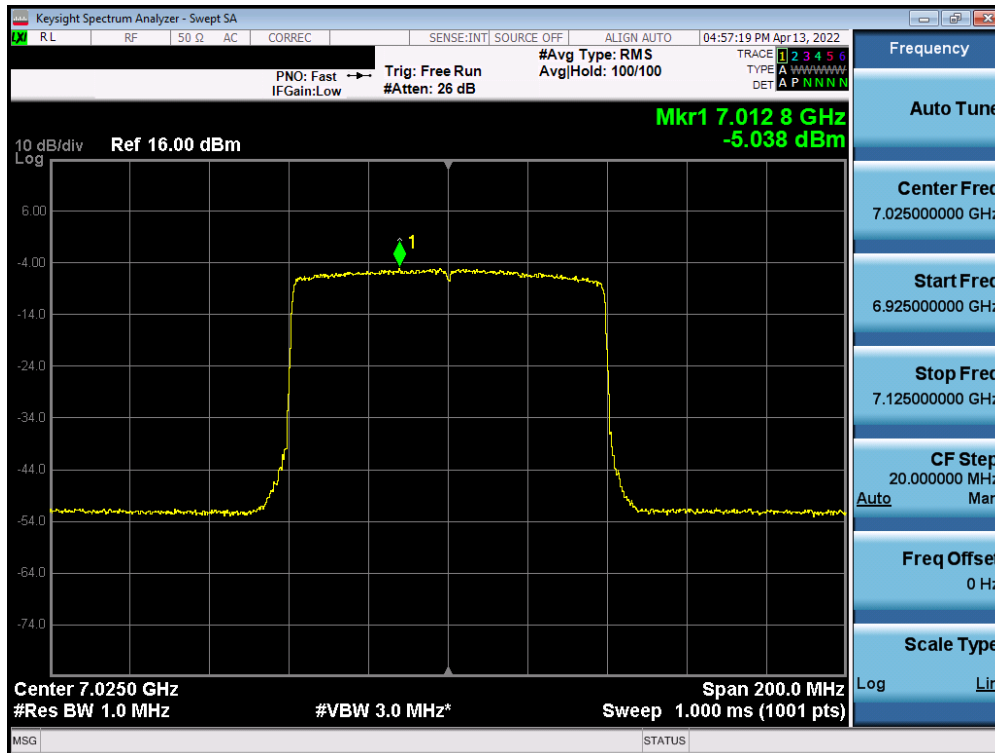


Plot 7-257. Power Spectral Density Measurement SISO ANT1 (40MHz 802.11ax (UNII Band 8) – Ch. 227)

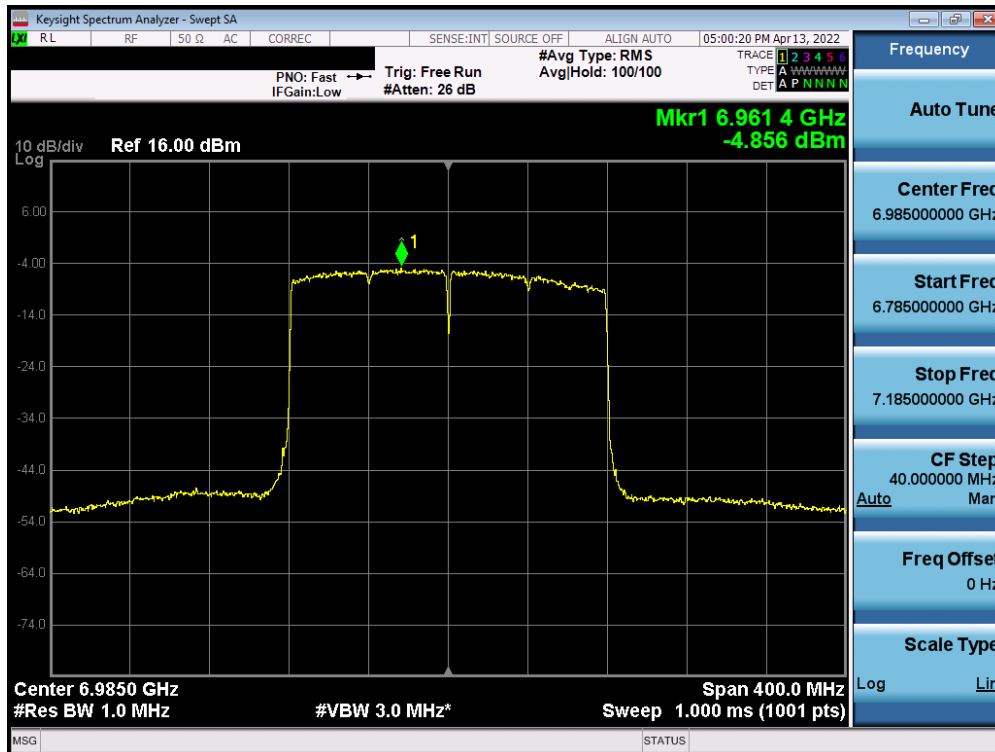


Plot 7-258. Power Spectral Density Measurement SISO ANT1 (80MHz 802.11ax (UNII Band 8) – Ch. 199)

FCC ID: C3K1997	MEASUREMENT REPORT (CERTIFICATION)		Approved by: Technical Manager
Test Report S/N: 1M2204040049-17-R1.C3K	Test Dates: 3/14/2022 – 7/8/2022	EUT Type: Portable Computing Device	Page 158 of 422



Plot 7-259. Power Spectral Density Measurement SISO ANT1 (80MHz 802.11ax (UNII Band 8) – Ch. 215)



Plot 7-260. Power Spectral Density Measurement SISO ANT1 (160MHz 802.11ax (UNII Band 8) – Ch. 207)

FCC ID: C3K1997	MEASUREMENT REPORT (CERTIFICATION)		Approved by: Technical Manager
Test Report S/N: 1M2204040049-17-R1.C3K	Test Dates: 3/14/2022 – 7/8/2022	EUT Type: Portable Computing Device	Page 159 of 422

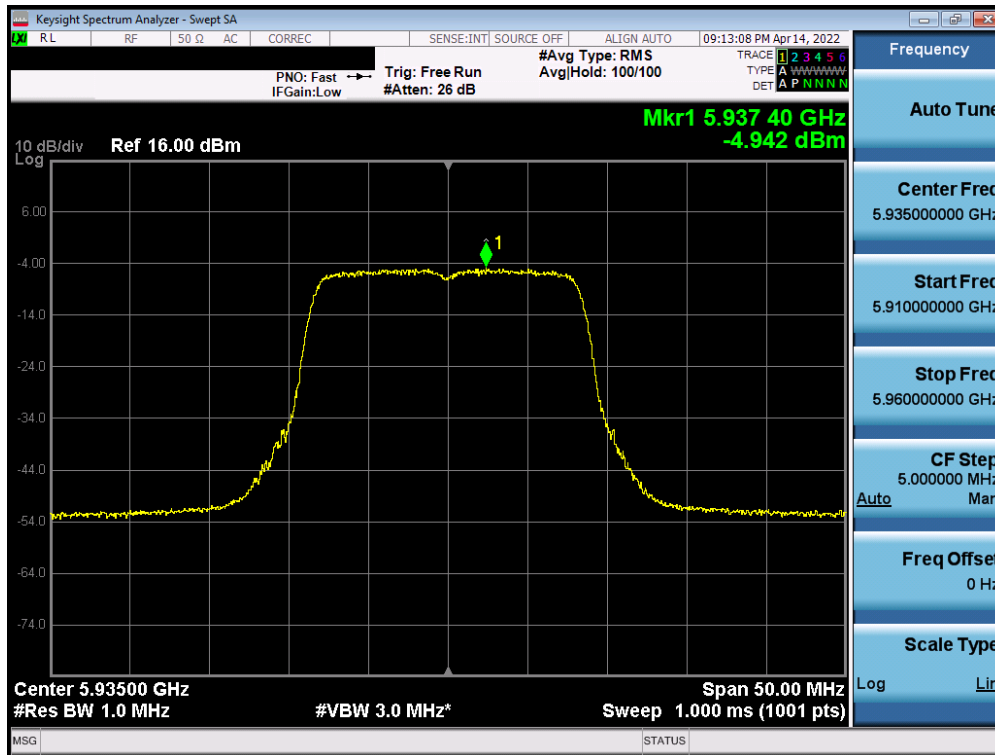
SISO Antenna 2 Power Spectral Density Measurements

	Frequency [MHz]	Channel	802.11 MODE	Antenna-2 Power Density [dBm]	Antenna-2 Gain [dBi]	e.i.r.p Density [dBm/MHz]	Max EIRP Density [dBm/MHz]	Margin [dB]
Band 5	5955	2	a	-4.94	3.20	-1.74	-1	-0.74
	6175	45	a	-4.98	3.20	-1.78	-1	-0.78
	6415	93	a	-4.64	3.20	-1.44	-1	-0.44
	5955	2	ax (20MHz)	-5.47	3.20	-2.27	-1	-1.27
	6175	45	ax (20MHz)	-4.78	3.20	-1.58	-1	-0.58
	6415	93	ax (20MHz)	-4.42	3.20	-1.22	-1	-0.22
	5965	3	ax (40MHz)	-4.91	3.20	-1.71	-1	-0.71
	6165	43	ax (40MHz)	-4.74	3.20	-1.54	-1	-0.54
	6405	91	ax (40MHz)	-4.49	3.20	-1.29	-1	-0.29
	5985	7	ax (80MHz)	-5.02	3.20	-1.82	-1	-0.82
	6145	39	ax (80MHz)	-5.00	3.20	-1.80	-1	-0.80
	6385	87	ax (80MHz)	-4.86	3.20	-1.66	-1	-0.66
	6025	15	ax (160MHz)	-4.51	3.20	-1.31	-1	-0.31
6185	47	ax (160MHz)	-4.76	3.20	-1.56	-1	-0.56	
6345	79	ax (160MHz)	-4.84	3.20	-1.64	-1	-0.64	
Band 6	6435	97	a	-4.97	2.40	-2.57	-1	-1.57
	6475	105	a	-4.63	2.40	-2.23	-1	-1.23
	6515	113	a	-4.73	2.40	-2.33	-1	-1.33
	6345	97	ax (20MHz)	-5.16	2.40	-2.76	-1	-1.76
	6475	105	ax (20MHz)	-4.59	2.40	-2.19	-1	-1.19
	6515	113	ax (20MHz)	-4.91	2.40	-2.51	-1	-1.51
	6445	99	ax (40MHz)	-4.88	2.40	-2.48	-1	-1.48
	6485	107	ax (40MHz)	-4.57	2.40	-2.17	-1	-1.17
	6525	115	ax (40MHz)	-4.82	2.40	-2.42	-1	-1.42
	6465	103	ax (80MHz)	-4.58	2.40	-2.18	-1	-1.18
6505	111	ax (160MHz)	-4.66	2.40	-2.26	-1	-1.26	
Band 7	6535	117	a	-4.87	3.30	-1.57	-1	-0.57
	6695	149	a	-4.77	3.30	-1.47	-1	-0.47
	6875	185	a	-5.21	3.30	-1.91	-1	-0.91
	6535	117	ax (20MHz)	-4.78	3.30	-1.48	-1	-0.48
	6695	149	ax (20MHz)	-5.16	3.30	-1.86	-1	-0.86
	6875	185	ax (20MHz)	-5.49	3.30	-2.19	-1	-1.19
	6565	123	ax (40MHz)	-4.69	3.30	-1.39	-1	-0.39
	6725	155	ax (40MHz)	-4.92	3.30	-1.62	-1	-0.62
	6885	179	ax (40MHz)	-4.96	3.30	-1.66	-1	-0.66
	6545	119	ax (80MHz)	-4.78	3.30	-1.48	-1	-0.48
	6705	151	ax (80MHz)	-5.08	3.30	-1.78	-1	-0.78
	6865	183	ax (80MHz)	-4.67	3.30	-1.37	-1	-0.37
	6665	143	ax (160MHz)	-4.90	3.30	-1.60	-1	-0.60
6825	175	ax (160MHz)	-4.73	3.30	-1.43	-1	-0.43	
Band 8	6895	189	a	-5.20	3.30	-1.90	-1	-0.90
	6995	209	a	-5.35	3.30	-2.05	-1	-1.05
	7115	233	a	-4.98	3.30	-1.68	-1	-0.68
	6895	189	ax (20MHz)	-5.36	3.30	-2.06	-1	-1.06
	6995	209	ax (20MHz)	-5.06	3.30	-1.76	-1	-0.76
	7115	233	ax (20MHz)	-4.97	3.30	-1.67	-1	-0.67
	6885	187	ax (40MHz)	-5.05	3.30	-1.75	-1	-0.75
	7005	211	ax (40MHz)	-5.18	3.30	-1.88	-1	-0.88
	7085	227	ax (40MHz)	-5.06	3.30	-1.76	-1	-0.76
	6945	199	ax (80MHz)	-4.71	3.30	-1.41	-1	-0.41
	7025	215	ax (80MHz)	-4.67	3.30	-1.37	-1	-0.37
6985	207	ax (160MHz)	-4.59	3.30	-1.29	-1	-0.29	

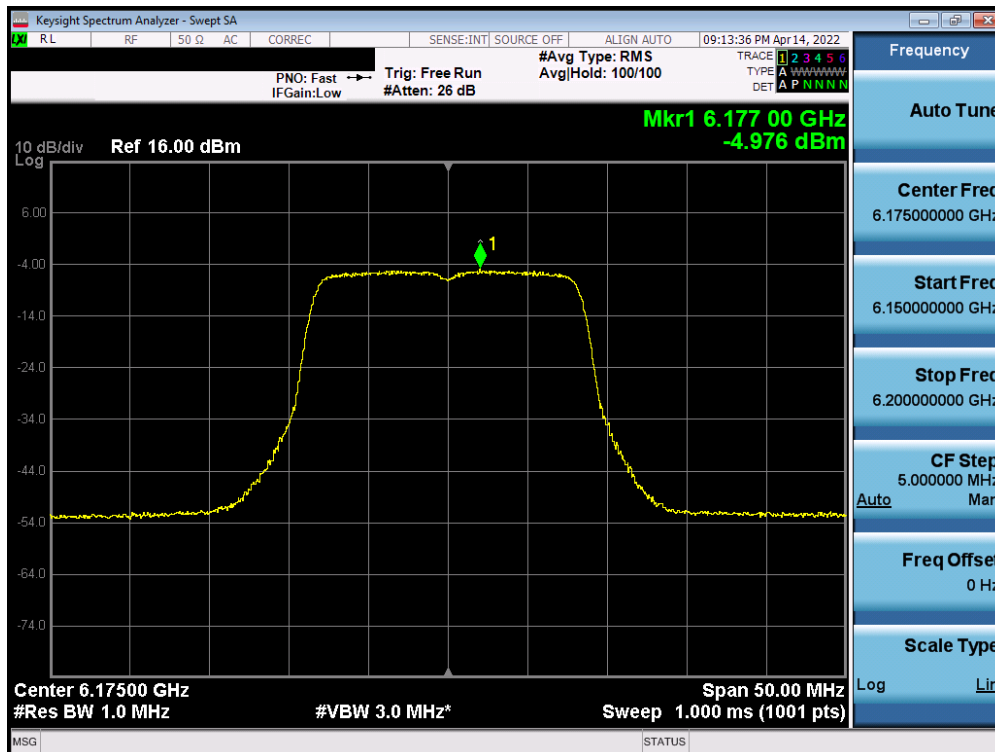
Table 7-16. SISO Antenna 2 e.i.r.p. Conducted Power Spectral Density Measurements

FCC ID: C3K1997	MEASUREMENT REPORT (CERTIFICATION)		Approved by: Technical Manager
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SISO Antenna-2 Power Spectral Density Measurement - (UNII Band 5)

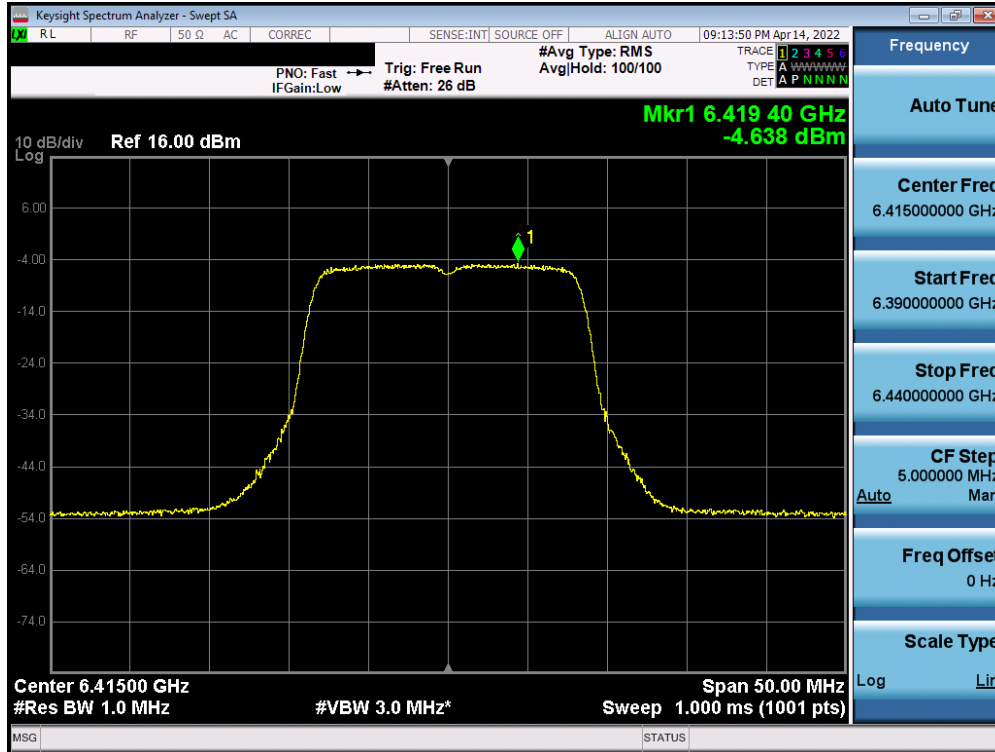


Plot 7-261. Power Spectral Density Measurement SISO ANT2 (20MHz 802.11a (UNII Band 5) – Ch. 2)

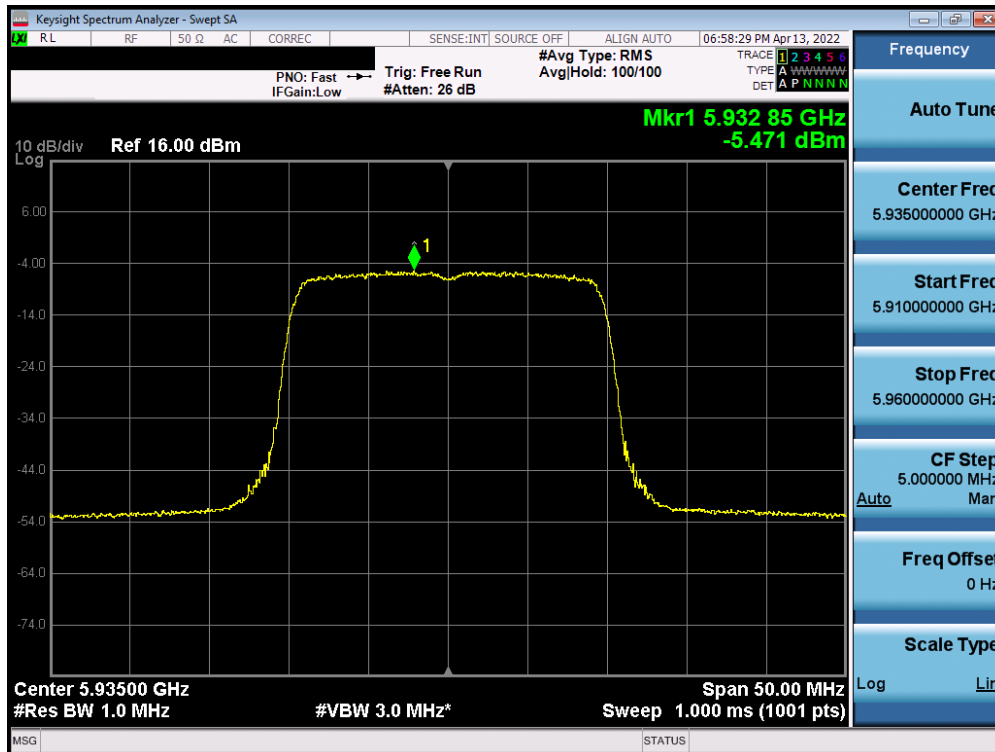


Plot 7-262. Power Spectral Density Measurement SISO ANT2 (20MHz 802.11a (UNII Band 5) – Ch. 45)

FCC ID: C3K1997	MEASUREMENT REPORT (CERTIFICATION)		Approved by: Technical Manager
Test Report S/N: 1M2204040049-17-R1.C3K	Test Dates: 3/14/2022 – 7/8/2022	EUT Type: Portable Computing Device	Page 161 of 422

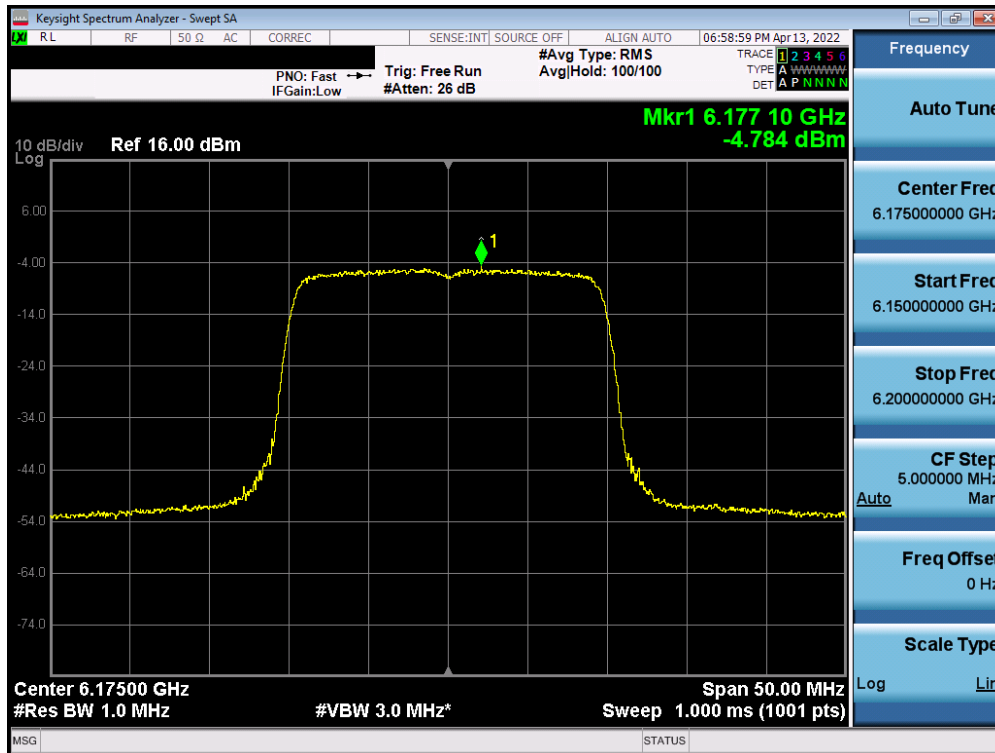


Plot 7-263. Power Spectral Density Measurement SISO ANT2 (20MHz 802.11a (UNII Band 5) – Ch. 93)

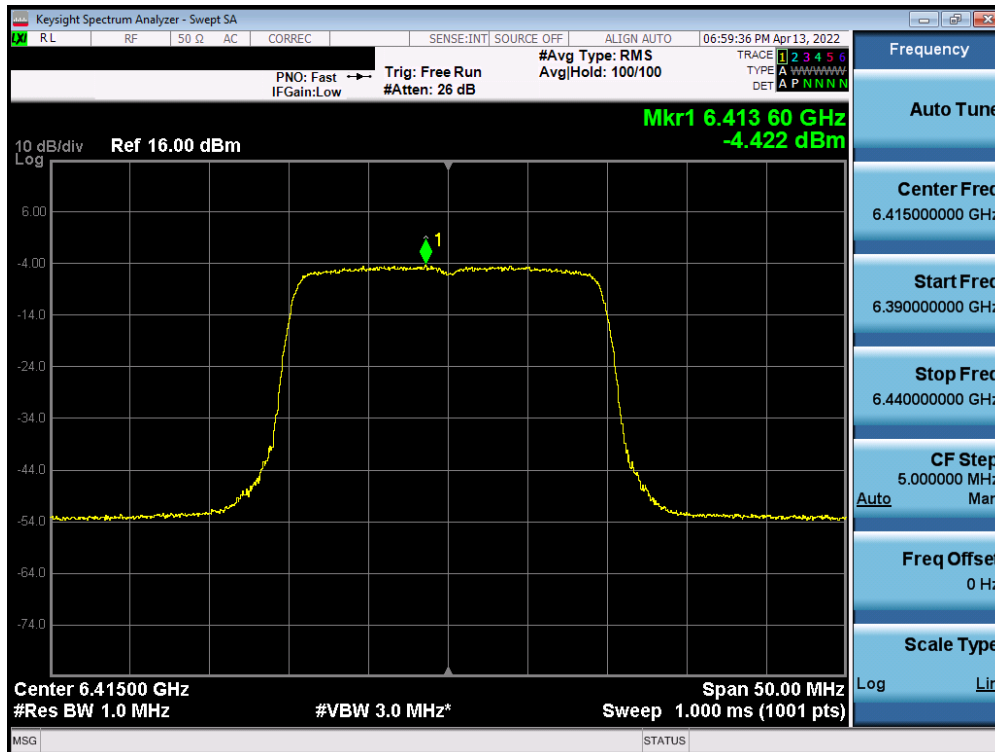


Plot 7-264. Power Spectral Density Measurement SISO ANT2 (20MHz 802.11ax (UNII Band 5) – Ch. 2)

FCC ID: C3K1997	MEASUREMENT REPORT (CERTIFICATION)		Approved by: Technical Manager
Test Report S/N: 1M2204040049-17-R1.C3K	Test Dates: 3/14/2022 – 7/8/2022	EUT Type: Portable Computing Device	Page 162 of 422



Plot 7-265. Power Spectral Density Measurement SISO ANT2 (20MHz 802.11ax (UNII Band 5) – Ch. 45)



Plot 7-266. Power Spectral Density Measurement SISO ANT2 (20MHz 802.11ax (UNII Band 5) – Ch. 93)

FCC ID: C3K1997	MEASUREMENT REPORT (CERTIFICATION)		Approved by: Technical Manager
Test Report S/N: 1M2204040049-17-R1.C3K	Test Dates: 3/14/2022 – 7/8/2022	EUT Type: Portable Computing Device	Page 163 of 422