

Test Mode:	802.11ac20	Test Date:	2023-12-10
Test Channel:	5200	Test Engineer:	Chuang Li
Remark:	1. Average measurement was not performed if peak level lower than average limit. 2. Other frequency was 20dB below limit line within 1-18GHz, there is not show in the report.		

Frequency (MHz)	Level (dBμV/m)	Factor (dB)	Limit (dBμV/m)	Margin (dB)	Detector	Polarization
7147.8333	48.40	15.16	74.00	25.60	Peak	Horizontal
7684.5000	48.67	15.49	74.00	25.33	Peak	Horizontal
10402.3333	52.19	19.29	74.00	21.81	Peak	Horizontal
11590.6667	53.28	19.68	74.00	20.72	Peak	Horizontal
7397.0000	49.12	15.96	74.00	24.88	Peak	Vertical
8056.3333	49.42	15.76	74.00	24.58	Peak	Vertical
10387.0000	51.56	19.22	74.00	22.44	Peak	Vertical
11652.0000	53.19	19.60	74.00	20.81	Peak	Vertical

Test Mode:	802.11ac20	Test Date:	2023-12-10
Test Channel:	5240	Test Engineer:	Chuang Li
Remark:	1. Average measurement was not performed if peak level lower than average limit. 2. Other frequency was 20dB below limit line within 1-18GHz, there is not show in the report.		

Frequency (MHz)	Level (dB μ V/m)	Factor (dB)	Limit (dB μ V/m)	Margin (dB)	Detector	Polarization
7086.5000	48.63	15.23	74.00	25.37	Peak	Horizontal
8332.3333	49.71	15.60	74.00	24.29	Peak	Horizontal
10379.3333	51.71	19.17	74.00	22.29	Peak	Horizontal
11652.0000	53.36	19.60	74.00	20.64	Peak	Horizontal
7381.6667	48.89	15.82	74.00	25.11	Peak	Vertical
8432.0000	48.30	15.99	74.00	25.70	Peak	Vertical
10410.0000	51.77	19.20	74.00	22.23	Peak	Vertical
12066.0000	53.50	19.73	74.00	20.50	Peak	Vertical

Test Mode:	802.11ac20	Test Date:	2023-12-10
Test Channel:	5745	Test Engineer:	Chuang Li
Remark:	1. Average measurement was not performed if peak level lower than average limit. 2. Other frequency was 20dB below limit line within 1-18GHz, there is not show in the report.		

Frequency (MHz)	Level (dBμV/m)	Factor (dB)	Limit (dBμV/m)	Margin (dB)	Detector	Polarization
7366.3333	48.39	15.67	74.00	25.61	Peak	Horizontal
8995.5000	49.99	16.63	74.00	24.01	Peak	Horizontal
10701.3333	52.52	19.84	74.00	21.48	Peak	Horizontal
11709.5000	53.93	19.94	74.00	20.07	Peak	Horizontal
7193.8333	47.99	15.25	74.00	26.01	Peak	Vertical
8696.5000	49.83	16.55	74.00	24.17	Peak	Vertical
10632.3333	52.43	19.29	74.00	21.57	Peak	Vertical
12284.5000	53.47	20.23	74.00	20.53	Peak	Vertical

Test Mode:	802.11ac20	Test Date:	2023-12-10
Test Channel:	5785	Test Engineer:	Chuang Li
Remark:	1. Average measurement was not performed if peak level lower than average limit. 2. Other frequency was 20dB below limit line within 1-18GHz, there is not show in the report.		

Frequency (MHz)	Level (dBμV/m)	Factor (dB)	Limit (dBμV/m)	Margin (dB)	Detector	Polarization
7546.5000	48.76	15.71	74.00	25.24	Peak	Horizontal
9505.3333	51.12	17.64	74.00	22.88	Peak	Horizontal
10582.5000	52.89	19.18	74.00	21.11	Peak	Horizontal
11820.6667	53.40	19.70	74.00	20.60	Peak	Horizontal
7220.6667	48.06	15.21	74.00	25.94	Peak	Vertical
9516.8333	50.45	17.58	74.00	23.55	Peak	Vertical
10663.0000	52.47	19.51	74.00	21.53	Peak	Vertical
11897.3333	53.21	20.08	74.00	20.79	Peak	Vertical

Test Mode:	802.11ac20	Test Date:	2023-12-10
Test Channel:	5825	Test Engineer:	Chuang Li
Remark:	1. Average measurement was not performed if peak level lower than average limit. 2. Other frequency was 20dB below limit line within 1-18GHz, there is not show in the report.		

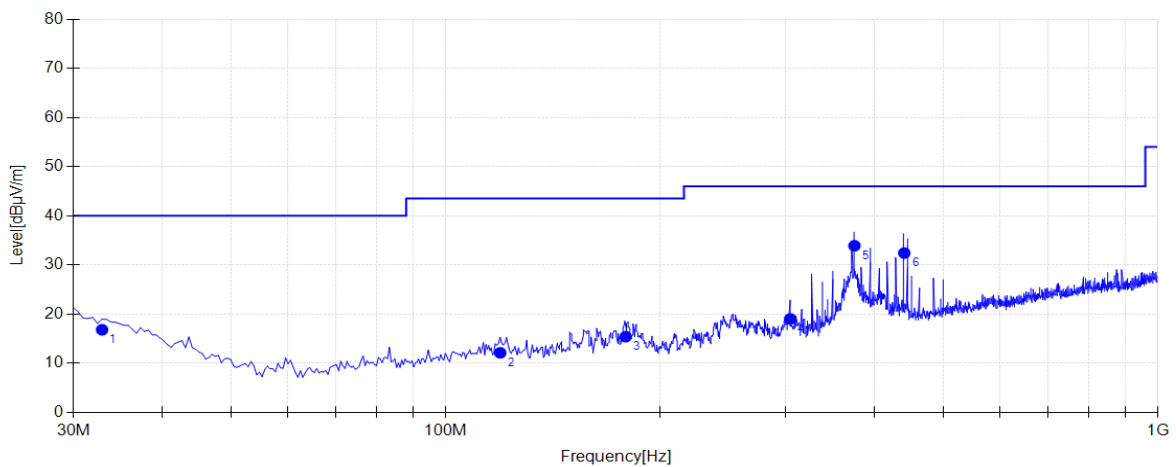
Frequency (MHz)	Level (dBμV/m)	Factor (dB)	Limit (dBμV/m)	Margin (dB)	Detector	Polarization
7412.3333	47.71	15.91	74.00	26.29	Peak	Horizontal
9574.3333	50.30	17.88	74.00	23.70	Peak	Horizontal
10701.3333	51.84	19.84	74.00	22.16	Peak	Horizontal
12230.8333	53.58	19.92	74.00	20.42	Peak	Horizontal
7688.3333	47.95	15.50	74.00	26.05	Peak	Vertical
9612.6667	50.63	18.32	74.00	23.37	Peak	Vertical
10521.1667	52.95	19.49	74.00	21.05	Peak	Vertical
12292.1667	53.34	20.31	74.00	20.66	Peak	Vertical

The worst case of Radiated Emission below 1GHz:

30MHz – 1GHz Test Data

EUT:	Motorcycle Media Players	Polarity:	Horizontal
Model:	CFDLMMI008	S/N:	/
Mode:	Transmit by 802.11ac80 at Channel 5775MHz	Voltage:	DC 13.5V
Environment:	Temp: 22°C; Humi:52%	Engineer:	Chuang Li

Test Graph

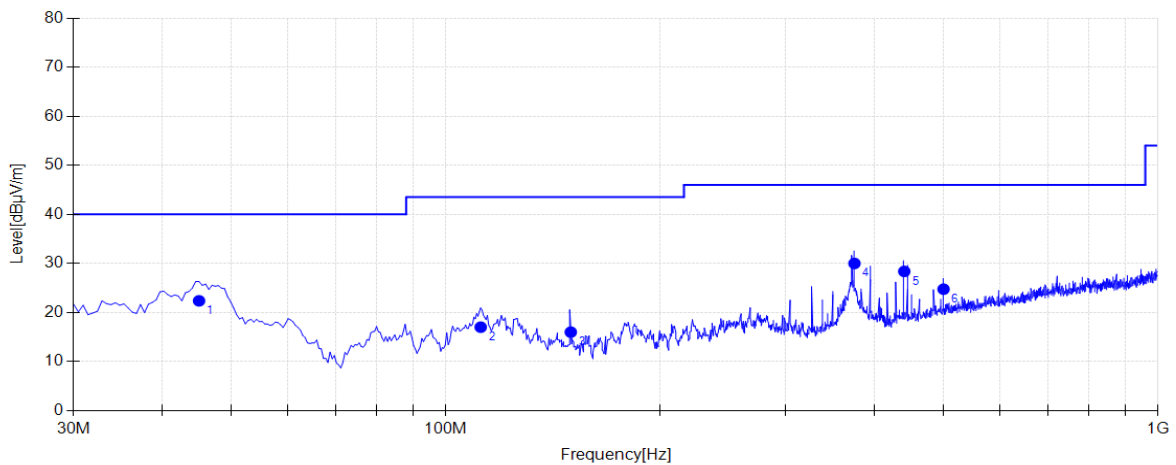


Final Data List								
NO.	Freq. [MHz]	Factor [dB]	QP Value [dBμV/m]	QP Limit [dBμV/m]	QP Margin [dB]	Height [cm]	Angle [°]	Polarity
1	32.9100	18.24	16.82	40.00	23.18	200	346	Horizontal
2	119.240	11.64	12.14	43.50	31.36	200	299	Horizontal
3	178.895	10.70	15.42	43.50	28.08	200	169	Horizontal
4	304.510	13.85	19.04	46.00	26.96	100	255	Horizontal
5	374.835	15.33	33.91	46.00	12.09	100	0	Horizontal
6	440.310	17.24	32.42	46.00	13.58	100	336	Horizontal

Note 1: The test trace is same as the ambient noise and the amplitude of the emissions are attenuated more than 20dB below the permissible (the test frequency range: 9kHz ~ 30MHz, 18GHz ~ 25GHz), therefore no data appear in the report.

EUT:	Motorcycle Media Players	Polarity:	Vertical
Model:	CFDLMMI008	S/N:	/
Mode:	Transmit by 802.11ac80 at Channel 5775MHz	Voltage:	DC 13.5V
Environment:	Temp: 22°C; Humi:52%	Engineer:	Chuang Li

Test Graph



Final Data List								
NO.	Freq. [MHz]	Factor [dB]	QP Value [dBμV/m]	QP Limit [dBμV/m]	QP Margin [dB]	Height [cm]	Angle [°]	Polarity
1	45.0350	12.06	22.39	40.00	17.61	100	138	Vertical
2	111.965	11.49	17.02	43.50	26.48	100	318	Vertical
3	149.795	10.84	16.00	43.50	27.50	200	242	Vertical
4	374.835	15.33	30.00	46.00	16.00	200	254	Vertical
5	440.310	17.24	28.38	46.00	17.62	200	220	Vertical
6	499.965	18.92	24.76	46.00	21.24	100	304	Vertical

Note 1: The test trace is same as the ambient noise and the amplitude of the emissions are attenuated more than 20dB below the permissible (the test frequency range: 9kHz ~ 30MHz, 18GHz ~ 40GHz), therefore no data appear in the report.

7.9. Restricted Band Edge Measurement

7.9.1. Test Limit

For 15.205 requirement:

Radiated emissions which fall in the restricted bands, as defined in Section 15.205(a) of FCC part 15, must also comply with the radiated emission limits specified in Section 15.209(a).

Frequency (MHz)	Frequency (MHz)	Frequency (MHz)	Frequency (GHz)
0.090 - 0.110	16.42 - 16.423	399.9 - 410	4.5 - 5.15
1 0.495 - 0.505	16.69475 - 16.69525	608 - 614	5.35 - 5.46
2.1735 - 2.1905	16.80425 - 16.80475	960 - 1240	7.25 - 7.75
4.125 - 4.128	25.5 - 25.67	1300 - 1427	8.25 - 8.5
4.17725 - 4.17775	37.5 - 38.25	1435 - 1626.5	9.0 - 9.2
4.20725 - 4.20775	73 - 74.6	1645.5 - 1646.5	9.3 - 9.5
6.215 - 6.218	74.8 - 75.2	1660 - 1710	10.6 - 12.7
6.26775 - 6.26825	108 - 121.94	1718.8 - 1722.2	13.25 - 13.4
6.31175 - 6.31225	123 - 138	2200 - 2300	14.47 - 14.5
8.291 - 8.294	149.9 - 150.05	2310 - 2390	15.35 - 16.2
8.362 - 8.366	156.52475 - 156.525	2483.5 - 2500	17.7 - 21.4
8.37625 - 8.38675	156.7 - 156.9	2690 - 2900	22.01 - 23.12
8.41425 - 8.41475	162.0125 - 167.17	3260 - 3267	23.6 - 24.0
12.29 - 12.293	167.72 - 173.2	3332 - 3339	31.2 - 31.8
12.51975 - 12.52025	240 - 285	3345.8 - 3358	36.43 - 36.5
12.57675 - 12.57725	322 - 335.4	3600 - 4400	(2)
13.36 - 13.41	--	--	--

For RSS-Gen Section 8.10 Requirement:

Radiated emissions which fall in the restricted bands, as defined in Section 8.10 of RSS-Gen, must also comply with the radiated emission limits specified in Section 8.9.

Frequency (MHz)	Frequency (MHz)	Frequency (GHz)
0.009 ~ 0.110	240 ~ 285	9.0 ~ 9.2
2.1735 ~ 2.1905	322 ~ 335.4	9.3 ~ 9.5
3.020 ~ 3.026	399.9 ~ 410	10.6 ~ 12.7
4.125 ~ 4.128	608 ~ 614	13.25 ~ 13.4
4.17725 ~ 4.17775	960 ~ 1427	14.47 ~ 14.5
4.20725 ~ 4.20775	1435 ~ 1626.5	15.35 ~ 16.2
5.677 ~ 5.683	1645.5 ~ 1646.5	17.7 ~ 21.4
6.215 ~ 6.218	1660 ~ 1710	22.01 ~ 23.12
6.26775 ~ 6.26825	1718.8 ~1722.2	23.6 ~ 24.0
6.31175 ~ 6.31225	2200 ~ 2300	31.2 ~ 31.8
8.291 ~ 8.294	2310 ~ 2390	36.43 ~ 36.5
8.362 ~ 8.366	2655 ~ 2900	Above 38.6
8.37625 ~ 8.38675	3260 ~ 3267	--
8.41425 ~ 8.41475	3332 ~ 3339	
12.29 ~ 12.293	334.5 ~ 3358	
12.51975 ~ 12.52025	3500 ~ 4400	
12.57675 ~ 12.57725	4500 ~ 5150	
13.36 ~13.41	5350 ~ 5460	
16.42 ~ 16.423	7250 ~ 7750	
16.69475 ~ 16.69525	8025 ~ 8500	
16.80425 ~ 16.80475	--	
25.5 ~ 25.67		
37.5 ~ 38.25		
73 ~ 74.6		
74.8 ~ 75.2		
108 ~ 138		
156.52475 ~ 156.525225		
156.7 ~ 156.9		

Note: *Certain frequency bands listed in Table 6 and in bands above 38.6 GHz are designated for licence-exempt applications. These frequency bands and the requirements that apply to the devices are set out in the 200- and 300-series of RSSs, such as RSS-210 and RSS-310, which contain the

requirements that apply to licence-exempt radio apparatus.

For 15.407(b) requirement:

For transmitters operating in the 5.15-5.25 GHz band: All emissions outside of the 5.15-5.35 GHz band shall not exceed an e.i.r.p. of -27 dBm/MHz.

For transmitters operating in the 5.25-5.35 GHz band: All emissions outside of the 5.15-5.35 GHz band shall not exceed an e.i.r.p. of -27 dBm/MHz.

For transmitters operating in the 5.47-5.725 GHz band: All emissions outside of the 5.47-5.725 GHz band shall not exceed an e.i.r.p. of -27 dBm/MHz.

For FCC transmitters operating in the 5.725-5.85 GHz band: All emissions shall be limited to a level of -27 dBm/MHz at 75 MHz or more above or below the band edge increasing linearly to 10 dBm/MHz at 25 MHz above or below the band edge, and from 25 MHz above or below the band edge increasing linearly to a level of 15.6 dBm/MHz at 5 MHz above or below the band edge, and from 5 MHz above or below the band edge increasing linearly to a level of 27 dBm/MHz at the band edge.

For IC transmitters operating in the 5.725-5.85 GHz band: All emissions within the frequency range from the band edge to 10 MHz above or below the band edge shall not exceed an e.i.r.p. of -17 dBm/MHz; for frequencies 10 MHz or greater above or below the band edge, emissions shall not exceed an e.i.r.p. of -27 dBm/MHz.

Refer to KDB 789033 D02v02r01 G)2)c), as specified in § 15.407(b), emissions above 1000 MHz that are outside of the restricted bands are subject to a maximum emission limit of -27 dBm/MHz (or -17 dBm/MHz as specified in § 15.407(b)(4)). However, an out-of-band emission that complies with both the peak and average limits of § 15.209 is not required to satisfy the -27 dBm/MHz or -17 dBm/MHz maximum emission limit.

All out of band emissions appearing in a restricted band as specified in Section 15.205 of the Title 47 CFR must not exceed the limits shown in Table per Section 15.209.

FCC Part 15 Subpart C Paragraph 15.209		
Frequency [MHz]	Field Strength [V/m]	Measured Distance [Meters]
0.009 ~ 0.490	2400/F (kHz)	300
0.490 ~ 1.705	24000/F (kHz)	30
1.705 ~ 30	30	30
30 ~ 88	100	3
88 ~ 216	150	3
216 ~ 960	200	3
Above 960	500	3

7.9.2. Test Result

Test Result B1/2/3

Test Mode	Antenna	ChName	Channel	Result[dBm]	Limit[dBm]	Verdict
11A	Ant1	Low	5180	-41.12	≤-27	PASS
		High	5320	-42.68	≤-27	PASS
		Low	5500	-42.42	≤-27	PASS
		High	5700	-42.33	≤-27	PASS
11N20SISO	Ant1	Low	5180	-40.44	≤-27	PASS
		High	5320	-42.03	≤-27	PASS
		Low	5500	-41.98	≤-27	PASS
		High	5700	-43.72	≤-27	PASS
11N40SISO	Ant1	Low	5190	-33.38	≤-27	PASS
		High	5310	-31.45	≤-27	PASS
		Low	5510	-34.99	≤-27	PASS
		High	5670	-43.36	≤-27	PASS
11AC20SISO	Ant1	Low	5180	-41.65	≤-27	PASS
		High	5320	-41.8	≤-27	PASS
		Low	5500	-43.7	≤-27	PASS
		High	5700	-43.46	≤-27	PASS
11AC40SISO	Ant1	Low	5190	-34.4	≤-27	PASS
		High	5310	-33.13	≤-27	PASS
		Low	5510	-36.64	≤-27	PASS
		High	5670	-42.92	≤-27	PASS
11AC80SISO	Ant1	Low	5210	-31.79	≤-27	PASS
		High	5290	-31.39	≤-27	PASS
		Low	5530	-32.33	≤-27	PASS
		High	5610	-43.35	≤-27	PASS

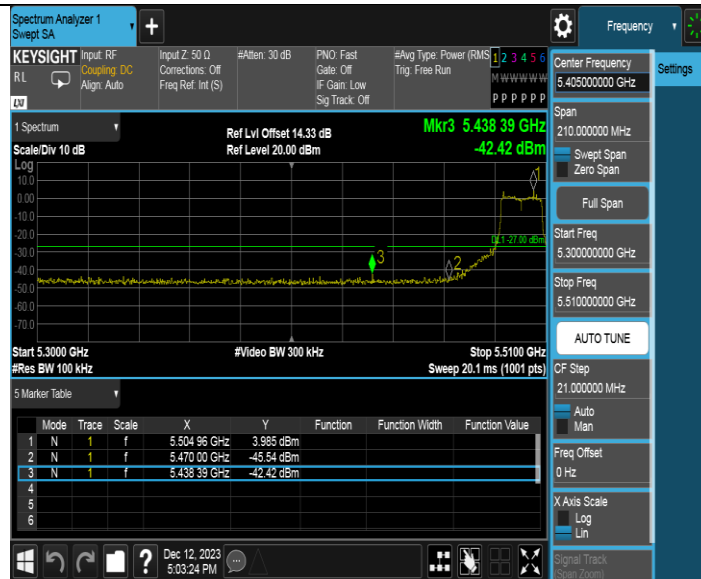
Test Result B4

Test Mode	Antenna	ChName	Channel	FreqRange [MHz]	Result [dBm]	Limit [dBm]	Verdict
11A	Ant1	Low	5745	5650~5700	-43.62	≤2.49	PASS
				5700~5720	-40.27	≤15.34	PASS
				5720~5725	-35.64	≤25.52	PASS
				5760~5650	-45.08	≤-27	PASS
		High	5825	5850~5855	-35.32	≤20.41	PASS
				5855~5875	-37.88	≤10.32	PASS
				5875~5925	-42.75	≤-26.96	PASS
				5925~5935	-43.81	≤-27	PASS
11N20SIS O	Ant1	Low	5745	5650~5700	-44.5	≤-26.45	PASS
				5700~5720	-43.68	≤10.06	PASS
				5720~5725	-40.14	≤16.87	PASS
				5760~5650	-44.96	≤-27	PASS
		High	5825	5850~5855	-36.05	≤15.73	PASS
				5855~5875	-37.55	≤14.82	PASS
				5875~5925	-45.22	≤-26.71	PASS
				5925~5935	-44.11	≤-27	PASS
11N40SIS O	Ant1	Low	5755	5650~5700	-44.93	≤-26.00	PASS
				5700~5720	-32.34	≤14.97	PASS
				5720~5725	-37.04	≤15.74	PASS
				5780~5650	-44.03	≤-27	PASS
		High	5795	5850~5855	-37.93	≤17.54	PASS
				5855~5875	-40.08	≤11.96	PASS
				5875~5925	-42.89	≤-26.46	PASS
				5925~5935	-43.24	≤-27	PASS
11AC20SI SO	Ant1	Low	5745	5650~5700	-45.62	≤-26.79	PASS
				5700~5720	-44.74	≤10.02	PASS
				5720~5725	-40.48	≤16.34	PASS
				5760~5650	-44.71	≤-27	PASS
		High	5825	5850~5855	-37.15	≤16.34	PASS
				5855~5875	-42.08	≤10.55	PASS
				5875~5925	-43.68	≤-26.11	PASS
				5925~5935	-43.63	≤-27	PASS
11AC40SI	Ant1	Low	5755	5650~5700	-45.46	≤-26.70	PASS

SO				5700~5720	-36.58	≤ 14.60	PASS
				5720~5725	-37.63	≤ 16.04	PASS
				5780~5650	-43.87	≤ -27	PASS
		High	5795	5850~5855	-39.52	≤ 18.67	PASS
				5855~5875	-41.58	≤ 10.34	PASS
				5875~5925	-44.61	≤ -26.83	PASS
				5925~5935	-42.86	≤ -27	PASS
11AC80SI SO	Ant1	Low	5775	5650~5700	-44.93	≤ -26.91	PASS
				5700~5720	-42.77	≤ 11.74	PASS
				5720~5725	-45.3	≤ 15.65	PASS
				5800~5650	-44.43	≤ -27	PASS
		High	5775	5850~5855	-43.1	≤ 17.10	PASS
				5855~5875	-43.05	≤ 10.40	PASS
				5875~5925	-43	≤ -25.09	PASS
				5925~5935	-42.38	≤ -27	PASS

Test Graphs B1/2/3

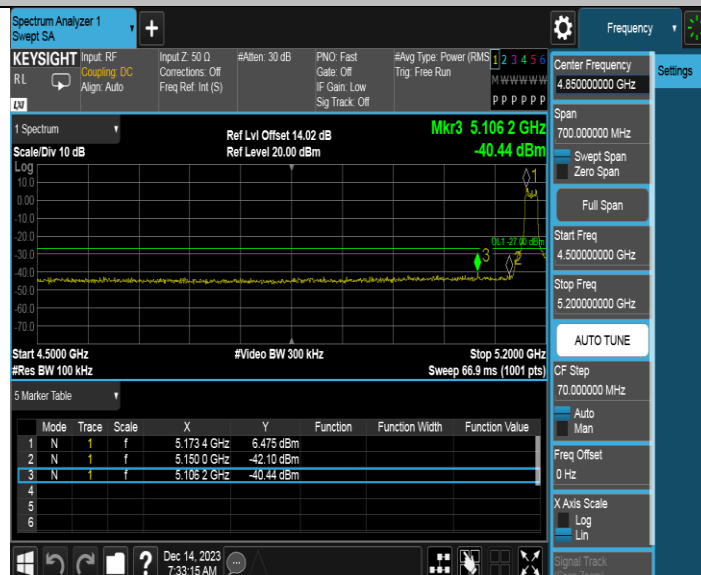




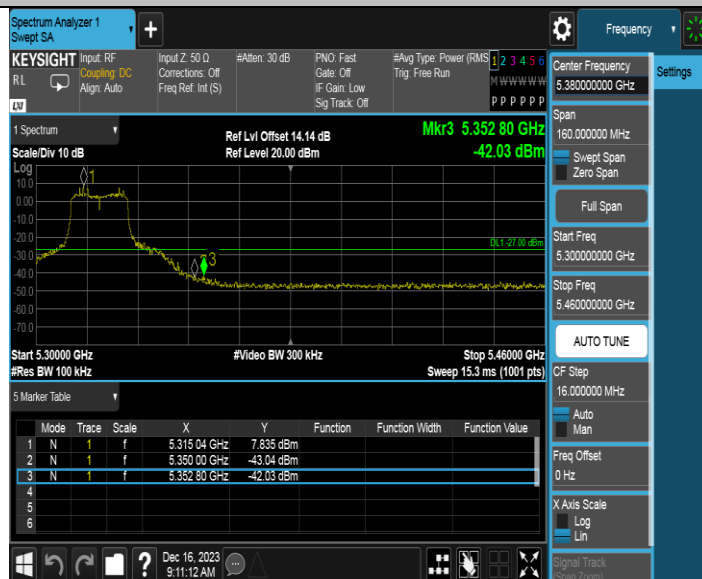
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11N20SISO_Ant1_Low_5180



11N20SISO_Ant1_High_5320



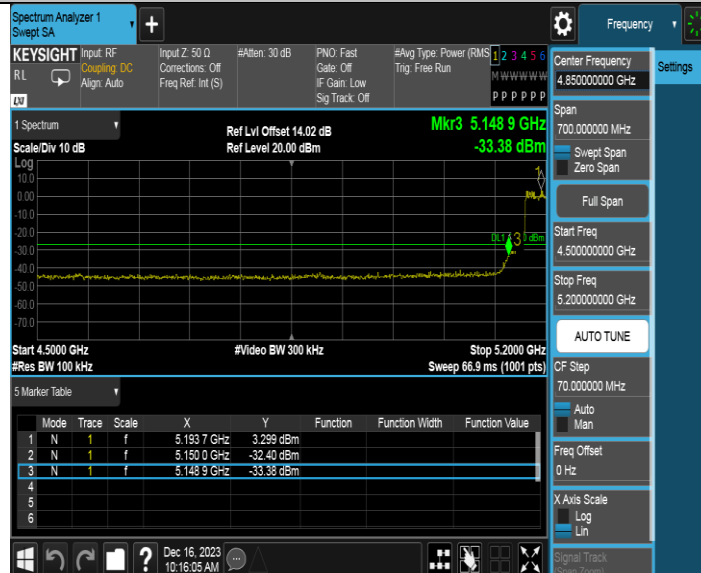
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11N20SISO_Ant1_High_5700



11N40SISO_Ant1_Low_5190



11N40SISO_Ant1_High_5310

