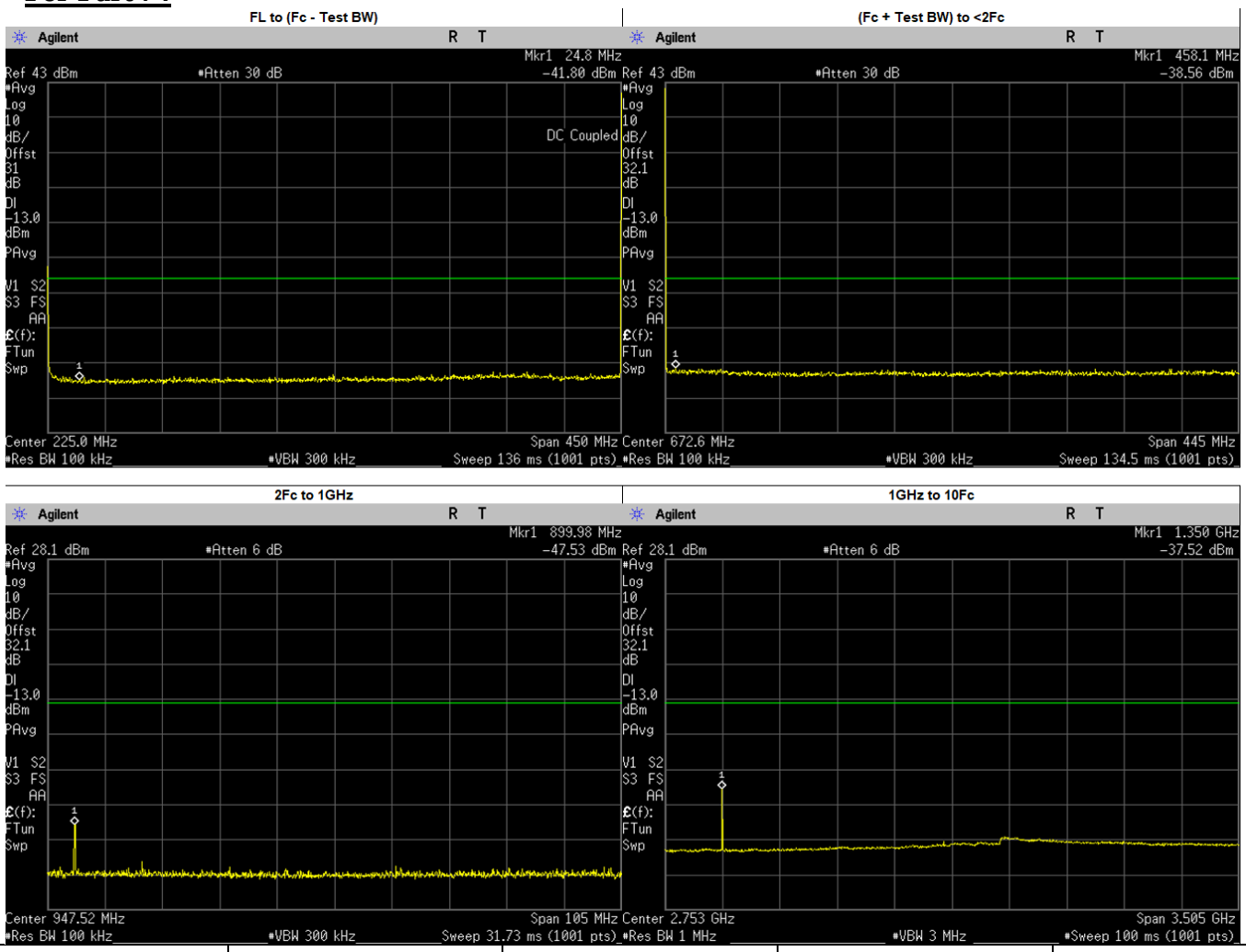
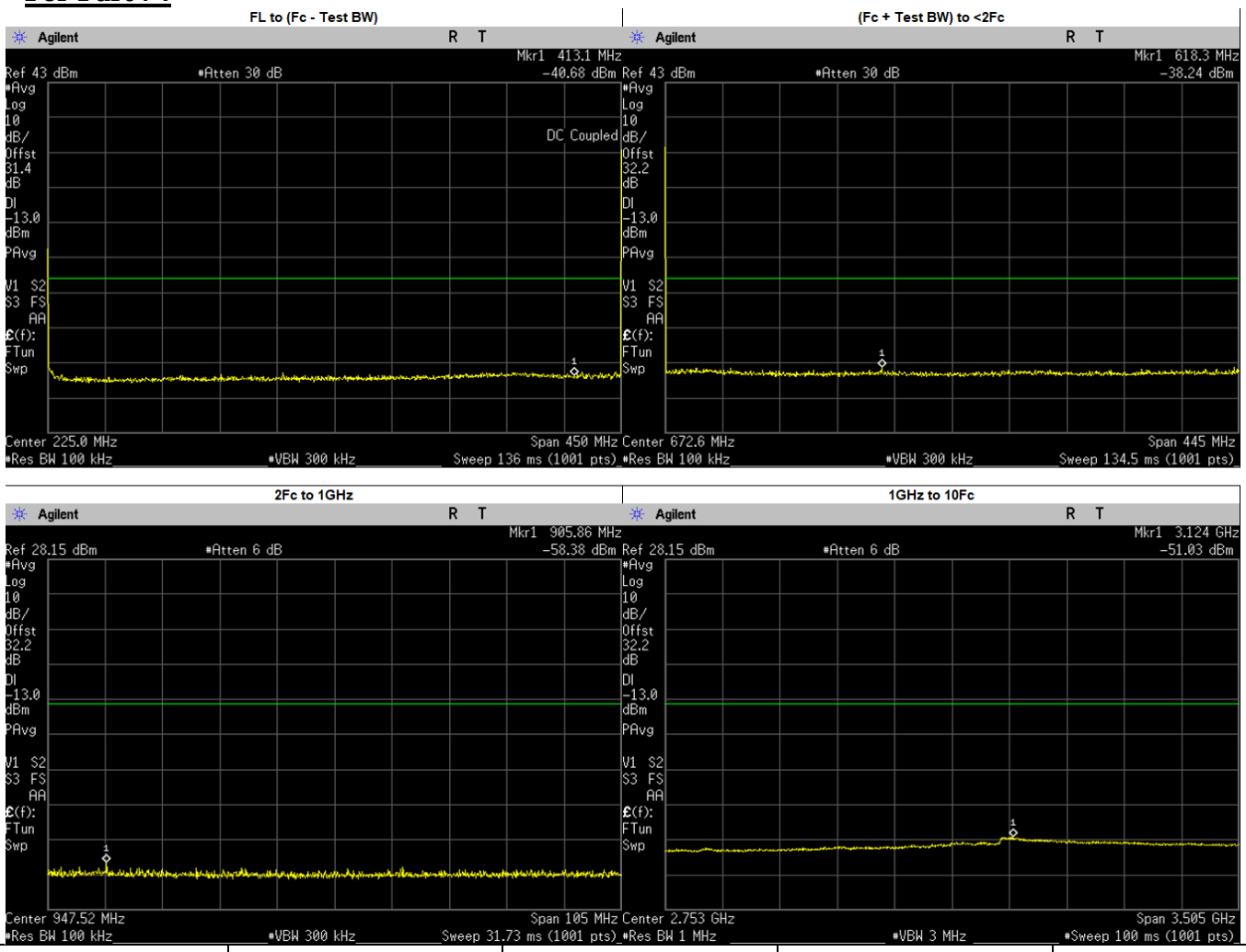
Analog: 450.025. MHz, 25 kHz Channel Spacing, Max. Power For Part 74



Frequency Range	Highest Spur Frequency (MHz)	Spurious Level (dBm)	Failing Limit (dBm)	Results
FL to (Fc - Test BW)	24.8000	-41.7970	-13.00	PASS
(Fc + Test BW) to <2Fc	458.0912	-38.5600	-13.00	PASS
2Fc to 1GHz	899.9827	-47.5300	-13.00	PASS
1GHz to 10Fc	1350.0000	-37.5200	-13.00	PASS
	1350.0750	-39.7286	-13.00	PASS
	1800.1000	-54.2250	-13.00	PASS
	2250.1250	-54.2292	-13.00	PASS
	2700.1500	-52.4255	-13.00	PASS
	3150.1750	-51.4125	-13.00	PASS
	3600.2000	-52.7951	-13.00	PASS
	4050.2250	-53.0425	-13.00	PASS
	4500.2500	-53.2754	-13.00	PASS

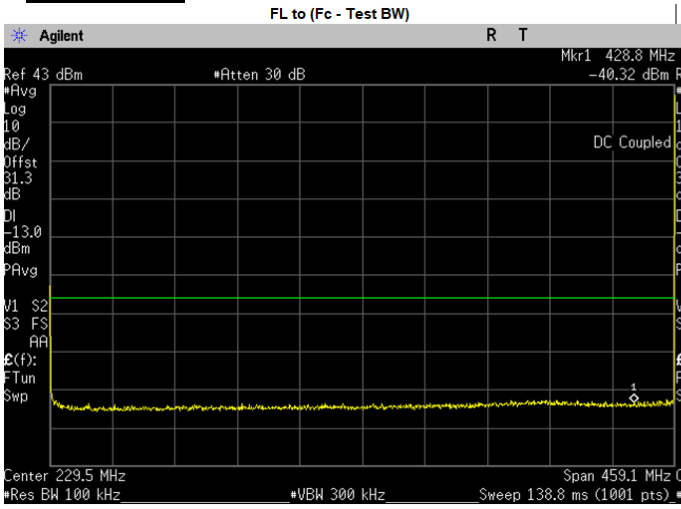
Analog: 450.025. MHz, 25 kHz Channel Spacing, Low. Power For Part 74



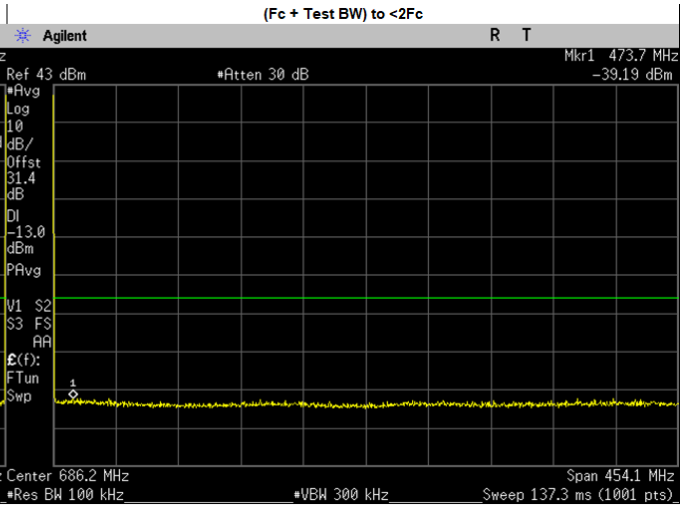
Frequency Range	Highest Spur Frequency (MHz)	Spurious Level (dBm)	Failing Limit (dBm)	Results
FL to (Fc - Test BW)	413.1000	-40.6790	-13.00	PASS
(Fc + Test BW) to <2Fc	618.2798	-38.2300	-13.00	PASS
2Fc to 1GHz	905.8599	-58.3800	-13.00	PASS
1GHz to 10Fc	3124.1820	-51.0300	-13.00	PASS
	1350.0750	-54.6307	-13.00	PASS
	1800.1000	-54.4503	-13.00	PASS
	2250.1250	-54.0637	-13.00	PASS
	2700.1500	-53.4928	-13.00	PASS
	3150.1750	-51.3107	-13.00	PASS
	3600.2000	-52.5322	-13.00	PASS
	4050.2250	-53.1743	-13.00	PASS
	4500.2500	-53.3853	-13.00	PASS

Analog: 459.125. MHz, 25 kHz Channel Spacing, Max. Power For Part 22

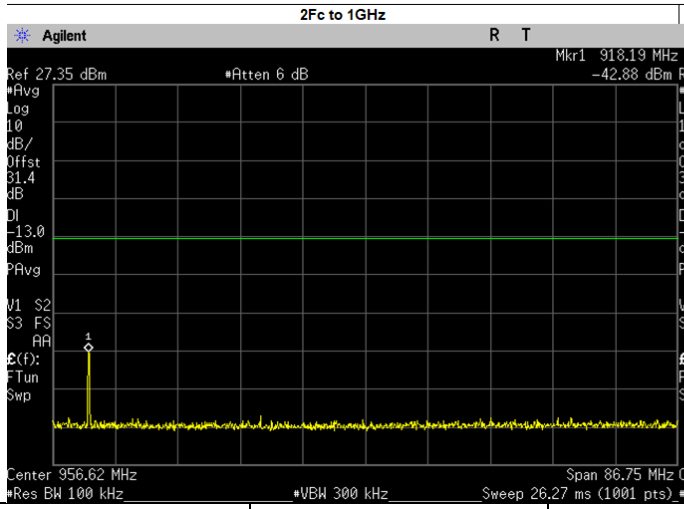
FL to (Fc - Test BW)



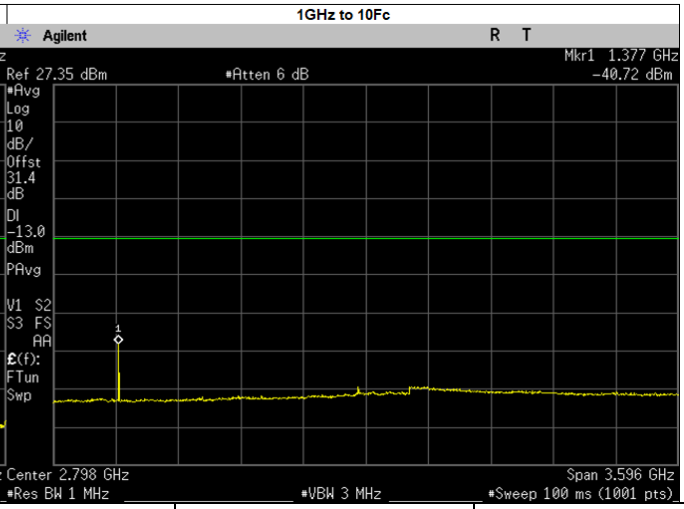
(Fc + Test BW) to <2Fc



2Fc to 1GHz



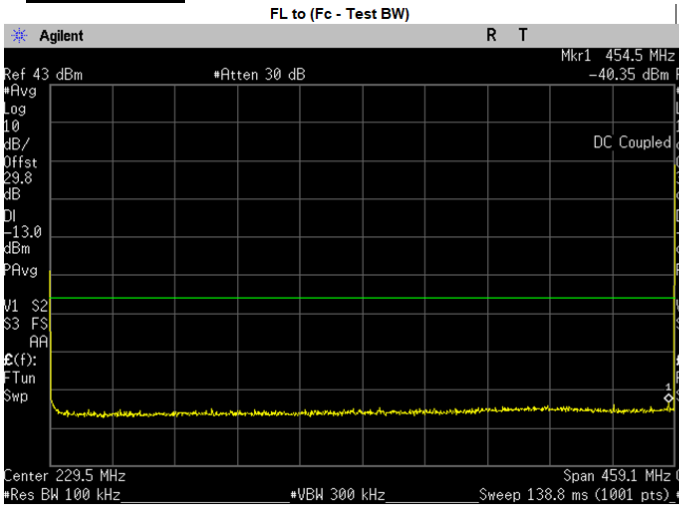
1GHz to 10Fc



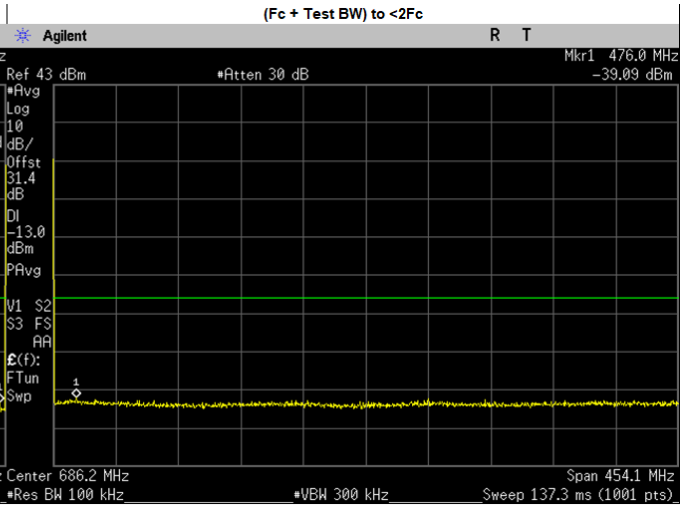
Frequency Range	Highest Spur Frequency (MHz)	Spurious Level (dBm)	Failing Limit (dBm)	Results
FL to (Fc - Test BW)	428.8000	-40.3170	-13.00	PASS
(Fc + Test BW) to <2Fc	473.7120	-39.1900	-13.00	PASS
2Fc to 1GHz	918.1947	-42.8800	-13.00	PASS
1GHz to 10Fc	1377.0000	-40.7200	-13.00	PASS
	1377.3750	-41.6858	-13.00	PASS
	1836.5000	-55.0464	-13.00	PASS
	2295.6250	-55.1734	-13.00	PASS
	2754.7500	-52.1917	-13.00	PASS
	3213.8750	-52.6498	-13.00	PASS
	3673.0000	-53.4338	-13.00	PASS
	4132.1250	-53.8466	-13.00	PASS
	4591.2500	-54.0953	-13.00	PASS

Analog: 459.125. MHz, 25 kHz Channel Spacing, Low. Power For Part 22

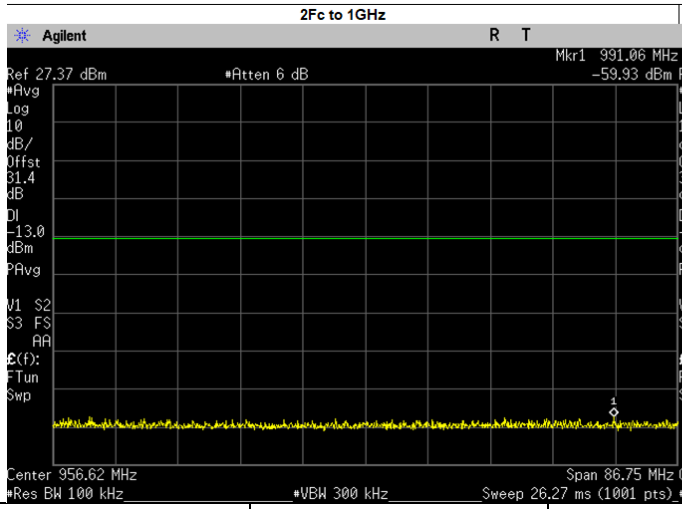
FL to (Fc - Test BW)



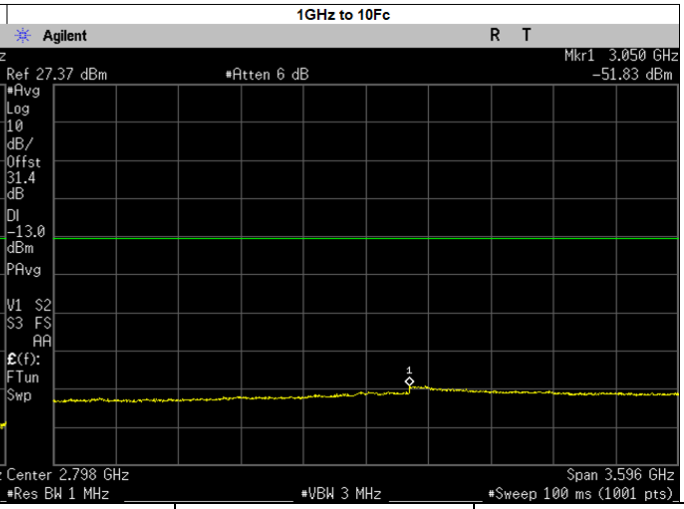
(Fc + Test BW) to <2Fc



2Fc to 1GHz

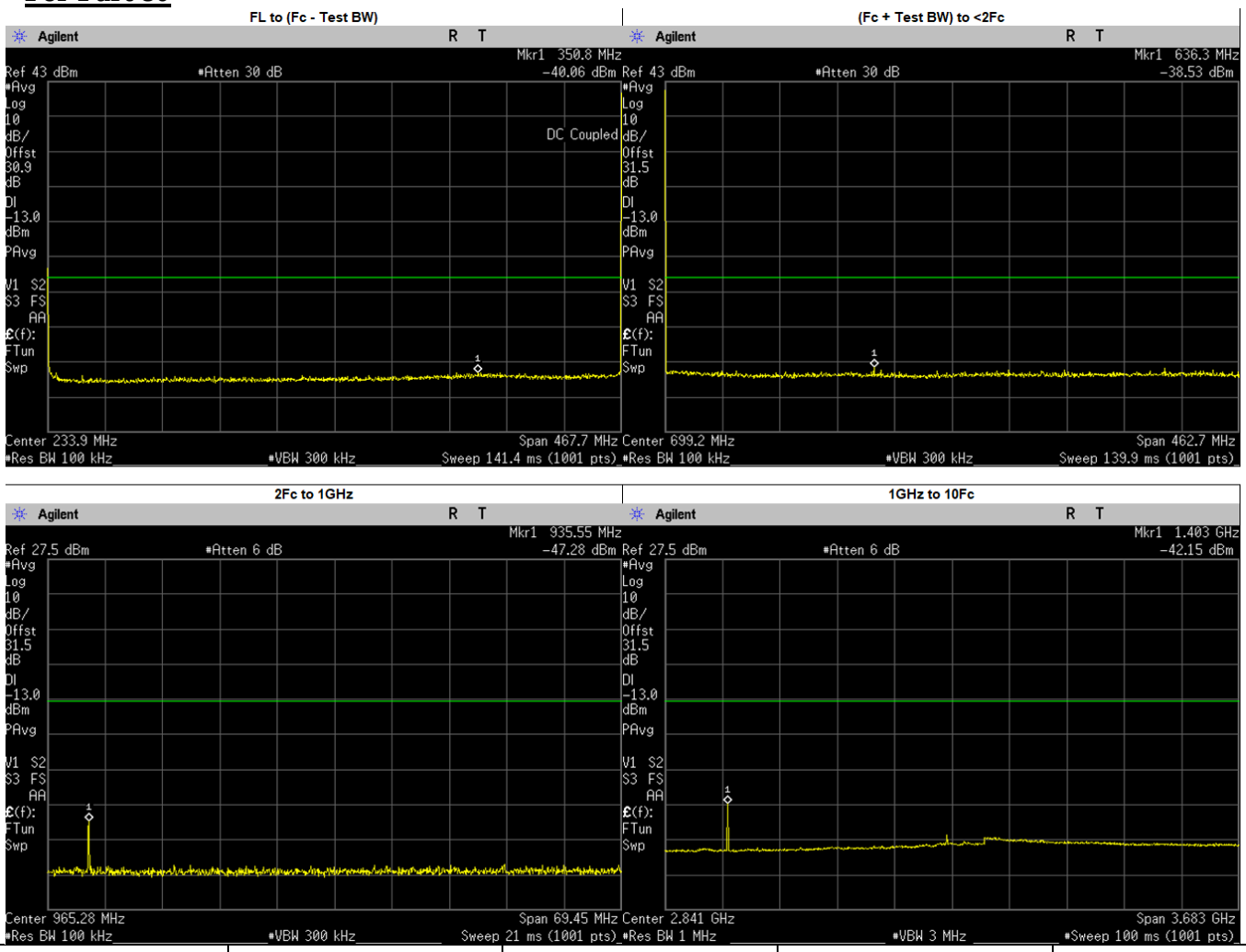


1GHz to 10Fc



Frequency Range	Highest Spur Frequency (MHz)	Spurious Level (dBm)	Failing Limit (dBm)	Results
FL to (Fc - Test BW)	454.5000	-40.3470	-13.00	PASS
(Fc + Test BW) to <2Fc	475.9823	-39.0900	-13.00	PASS
2Fc to 1GHz	991.0648	-59.9300	-13.00	PASS
1GHz to 10Fc	3049.8630	-51.8300	-13.00	PASS
	1377.3750	-55.5079	-13.00	PASS
	1836.5000	-55.3526	-13.00	PASS
	2295.6250	-54.9613	-13.00	PASS
	2754.7500	-53.8402	-13.00	PASS
	3213.8750	-52.6319	-13.00	PASS
	3673.0000	-53.3939	-13.00	PASS
	4132.1250	-53.9238	-13.00	PASS
	4591.2500	-53.7864	-13.00	PASS

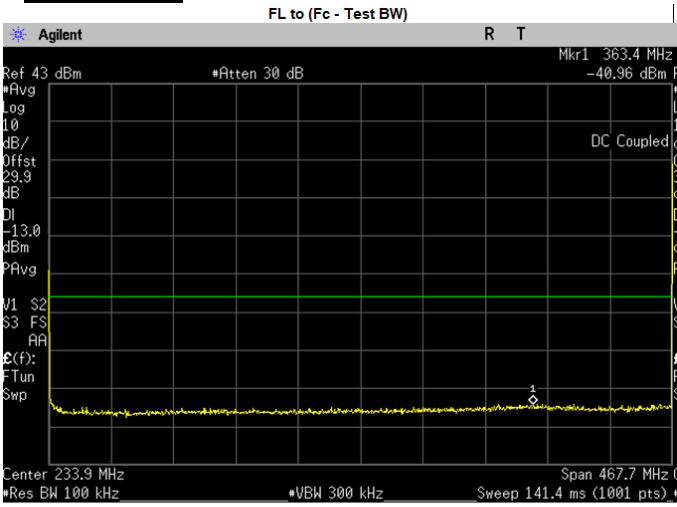
Analog: 467.775. MHz, 25 kHz Channel Spacing, Max. Power
For Part 80



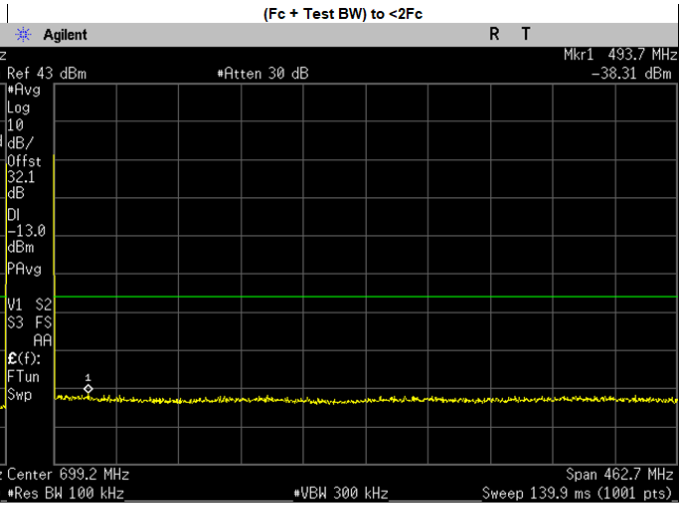
Frequency Range	Highest Spur Frequency (MHz)	Spurious Level (dBm)	Failing Limit (dBm)	Results
FL to (Fc - Test BW)	350.8000	-40.0630	-13.00	PASS
(Fc + Test BW) to <2Fc	636.2612	-38.5300	-13.00	PASS
2Fc to 1GHz	935.5500	-47.2800	-13.00	PASS
1GHz to 10Fc	1403.0000	-42.1500	-13.00	PASS
	1403.3250	-42.3431	-13.00	PASS
	1871.1000	-54.7497	-13.00	PASS
	2338.8750	-54.3185	-13.00	PASS
	2806.6500	-51.5964	-13.00	PASS
	3274.4250	-52.5625	-13.00	PASS
	3742.2000	-53.1761	-13.00	PASS
	4209.9750	-53.7544	-13.00	PASS
	4677.7500	-54.1035	-13.00	PASS

Analog: 467.775. MHz, 25 kHz Channel Spacing, Low. Power For Part 80

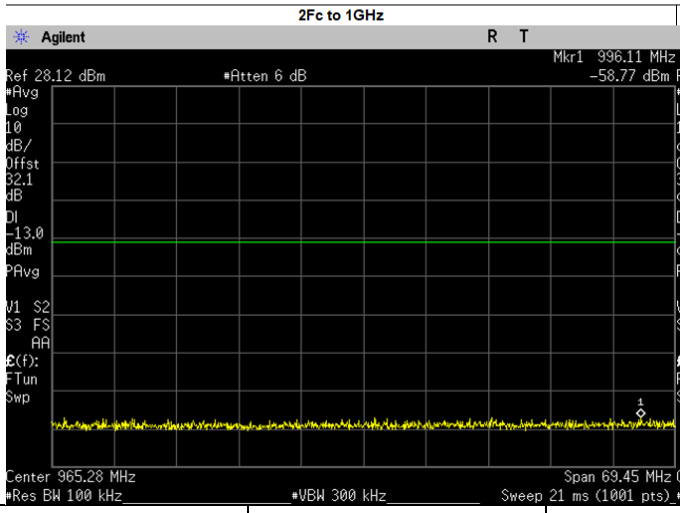
FL to (Fc - Test BW)



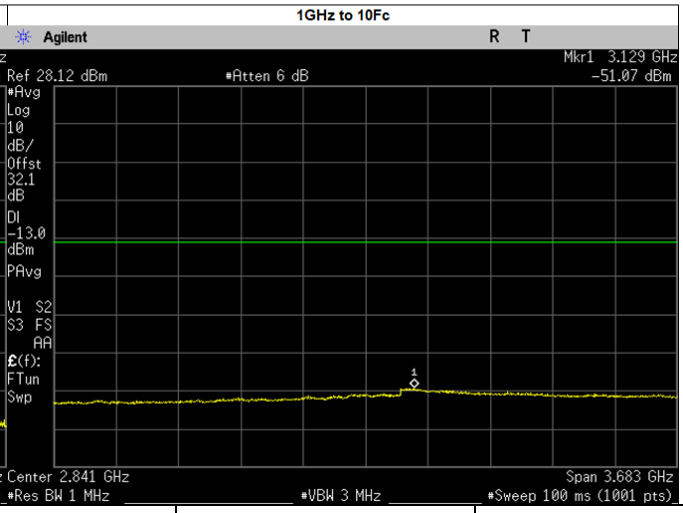
(Fc + Test BW) to <2Fc



2Fc to 1GHz



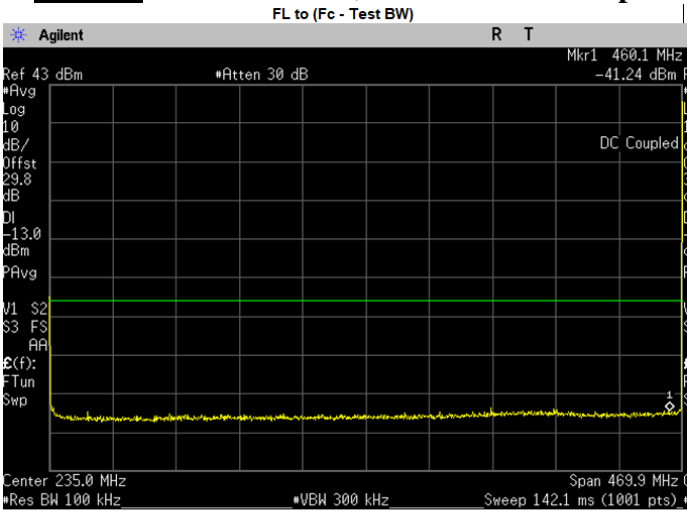
1GHz to 10Fc



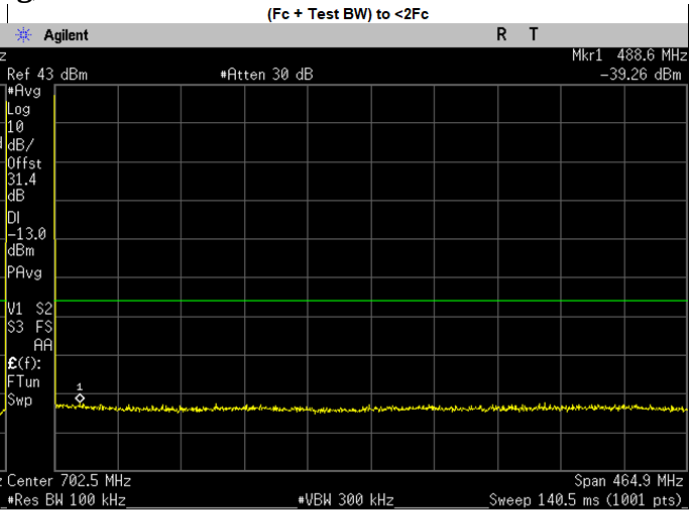
Frequency Range	Highest Spur Frequency (MHz)	Spurious Level (dBm)	Failing Limit (dBm)	Results
FL to (Fc - Test BW)	363.4000	-40.9630	-13.00	PASS
(Fc + Test BW) to <2Fc	493.7440	-38.3100	-13.00	PASS
2Fc to 1GHz	996.1108	-58.7700	-13.00	PASS
1GHz to 10Fc	3128.6300	-51.0700	-13.00	PASS
	1403.3250	-54.6289	-13.00	PASS
	1871.1000	-54.5738	-13.00	PASS
	2338.8750	-54.0643	-13.00	PASS
	2806.6500	-52.9490	-13.00	PASS
	3274.4250	-52.0871	-13.00	PASS
	3742.2000	-52.5612	-13.00	PASS
	4209.9750	-53.0309	-13.00	PASS
	4677.7500	-53.5885	-13.00	PASS

Analog: 469.9875. MHz, 25 kHz Channel Spacing, Max. Power

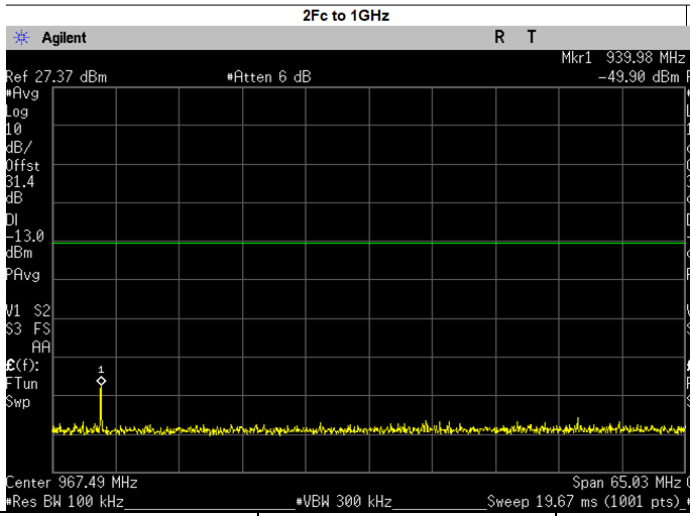
FL to (Fc - Test BW)



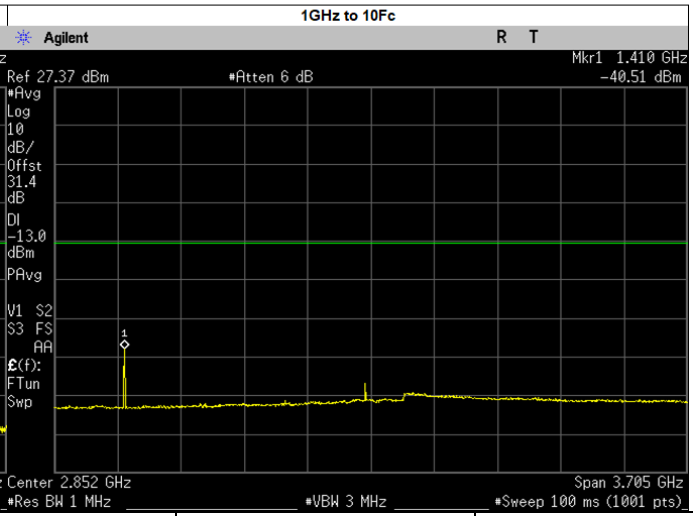
(Fc + Test BW) to <2Fc



2Fc to 1GHz



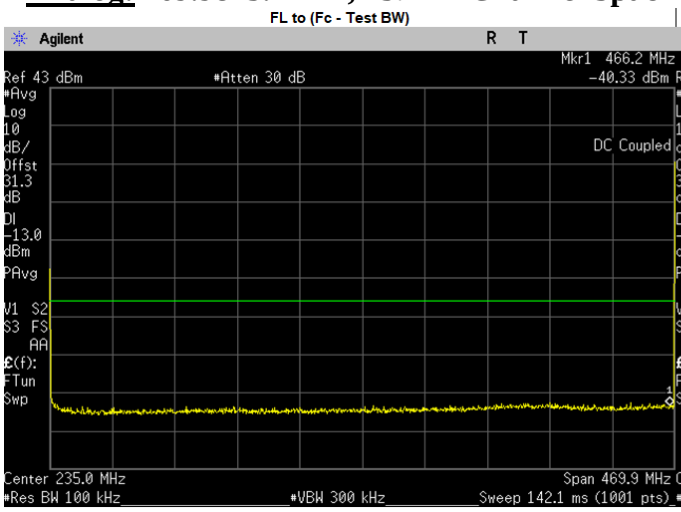
1GHz to 10Fc



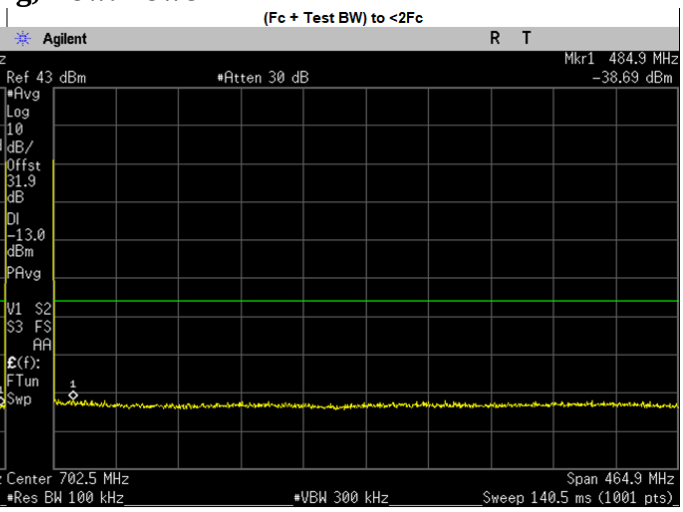
Frequency Range	Highest Spur Frequency (MHz)	Spurious Level (dBm)	Failing Limit (dBm)	Results
FL to (Fc - Test BW)	460.1000	-41.2440	-13.00	PASS
(Fc + Test BW) to <2Fc	488.6415	-39.2600	-13.00	PASS
2Fc to 1GHz	939.9800	-49.9000	-13.00	PASS
1GHz to 10Fc	1410.0000	-40.5100	-13.00	PASS
	1409.9630	-43.4435	-13.00	PASS
	1879.9500	-54.7378	-13.00	PASS
	2349.9370	-54.1383	-13.00	PASS
	2819.9250	-50.4111	-13.00	PASS
	3289.9120	-52.5798	-13.00	PASS
	3759.9000	-53.4771	-13.00	PASS
	4229.8870	-54.0118	-13.00	PASS
	4699.8750	-54.2987	-13.00	PASS

Analog: 469.9875. MHz, 25 kHz Channel Spacing, Low. Power

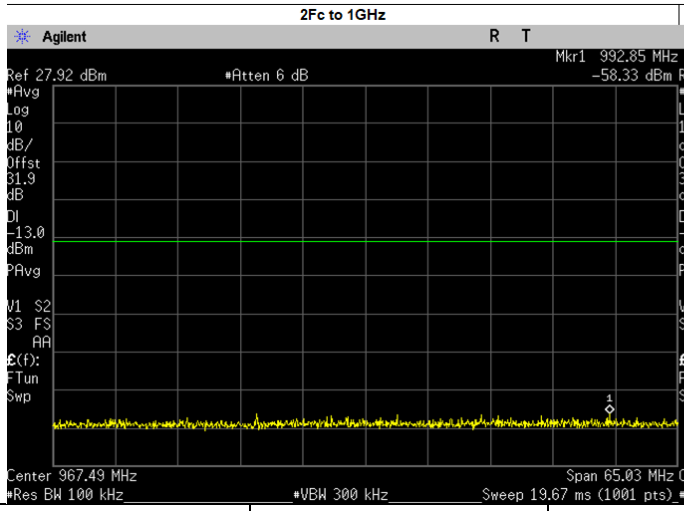
FL to (Fc - Test BW)



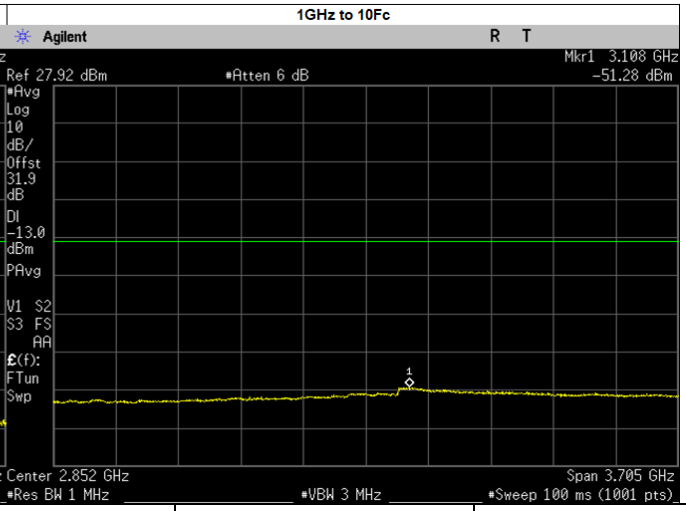
(Fc + Test BW) to <2Fc



2Fc to 1GHz



1GHz to 10Fc

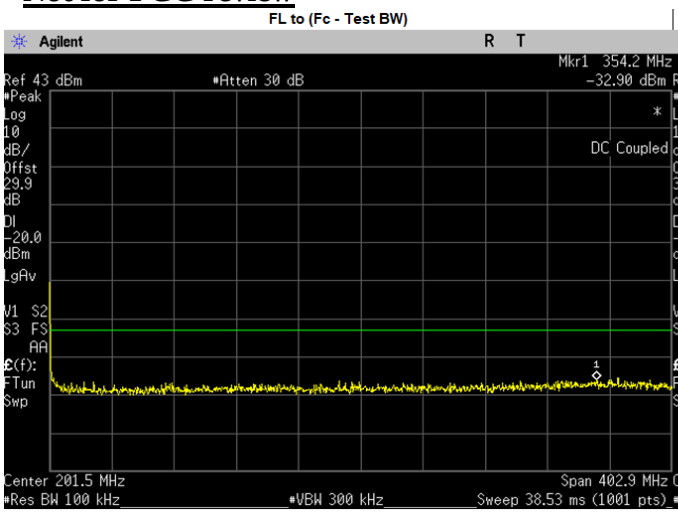


Frequency Range	Highest Spur Frequency (MHz)	Spurious Level (dBm)	Failing Limit (dBm)	Results
FL to (Fc - Test BW)	466.2000	-40.3290	-13.00	PASS
(Fc + Test BW) to <2Fc	484.9221	-38.6900	-13.00	PASS
2Fc to 1GHz	992.8473	-58.3300	-13.00	PASS
1GHz to 10Fc	3108.0740	-51.2800	-13.00	PASS
	1409.9630	-55.1416	-13.00	PASS
	1879.9500	-54.8953	-13.00	PASS
	2349.9370	-54.2910	-13.00	PASS
	2819.9250	-53.3106	-13.00	PASS
	3289.9120	-52.2799	-13.00	PASS
	3759.9000	-52.8283	-13.00	PASS
	4229.8870	-53.3202	-13.00	PASS
	4699.8750	-53.7586	-13.00	PASS

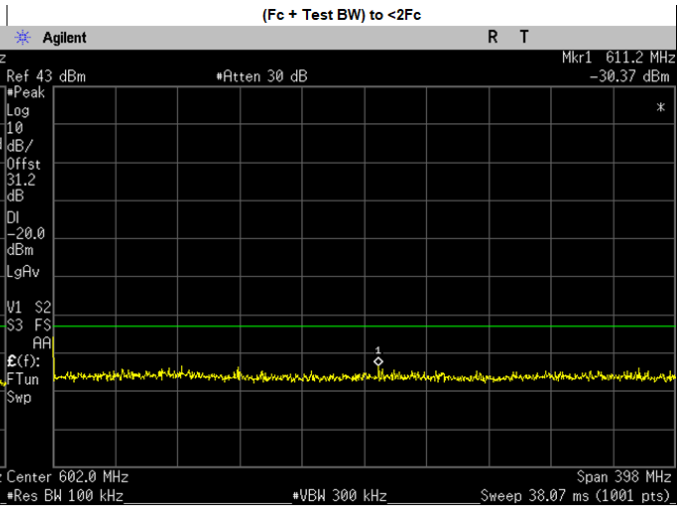
6.10.3. Test Result (Digital)

4FSK.: 403.0125. MHz, 12.5 kHz Channel Spacing, Max Power
Not for FCC review

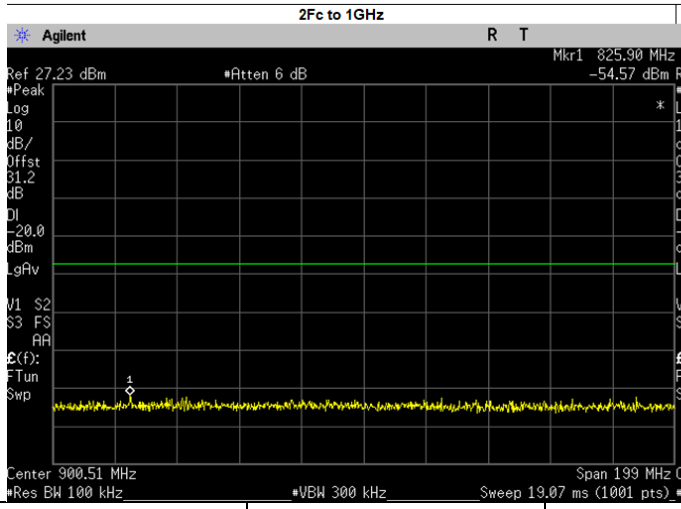
FL to (Fc - Test BW)



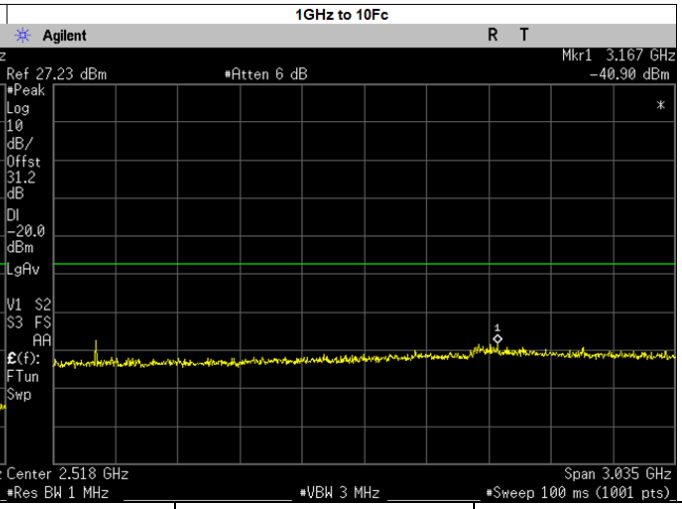
(Fc + Test BW) to <2Fc



2Fc to 1GHz



1GHz to 10Fc

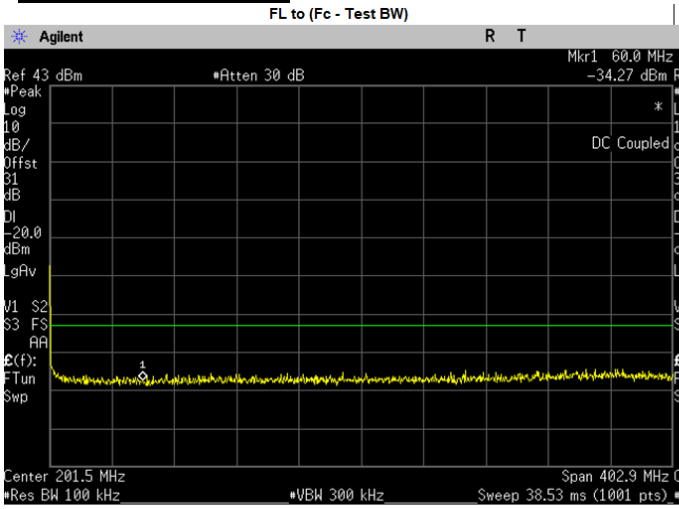


Frequency Range	Highest Spur Frequency (MHz)	Spurious Level (dBm)	Failing Limit (dBm)	Results
FL to (Fc - Test BW)	354.2000	-32.9050	-20.00	PASS
(Fc + Test BW) to <2Fc	611.1996	-30.3700	-20.00	PASS
2Fc to 1GHz	825.8969	-54.5700	-20.00	PASS
1GHz to 10Fc	3167.0790	-40.9000	-20.00	PASS
	1209.0370	-40.9333	-20.00	PASS
	1612.0500	-45.1033	-20.00	PASS
	2015.0620	-45.8774	-20.00	PASS
	2418.0750	-44.9872	-20.00	PASS
	2821.0880	-44.0191	-20.00	PASS
	3224.1000	-43.6126	-20.00	PASS
	3627.1130	-44.2507	-20.00	PASS
	4030.1250	-44.7722	-20.00	PASS

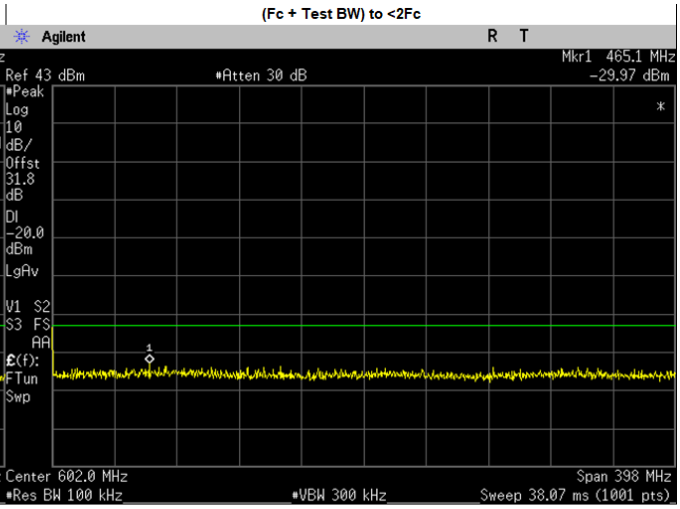
4FSK.: 403.0125. MHz, 12.5 kHz Channel Spacing, Low Power

Not for FCC review

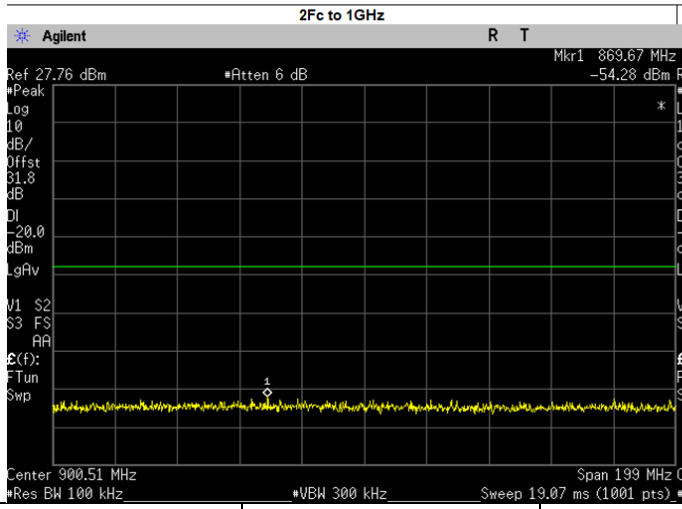
FL to (Fc - Test BW)



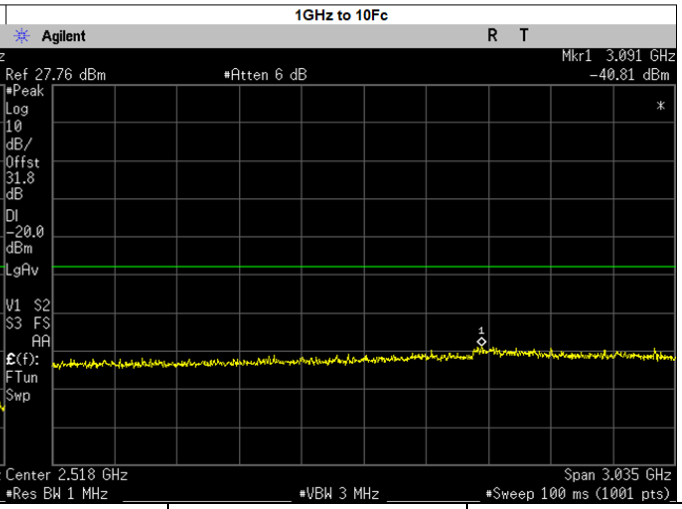
(Fc + Test BW) to <2Fc



2Fc to 1GHz



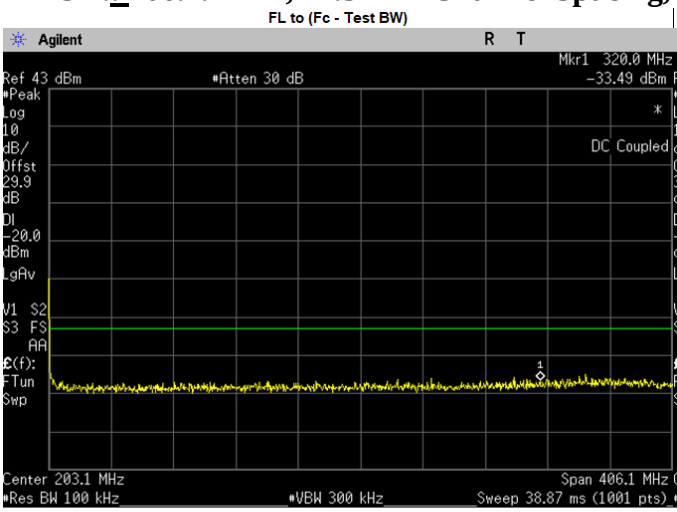
1GHz to 10Fc



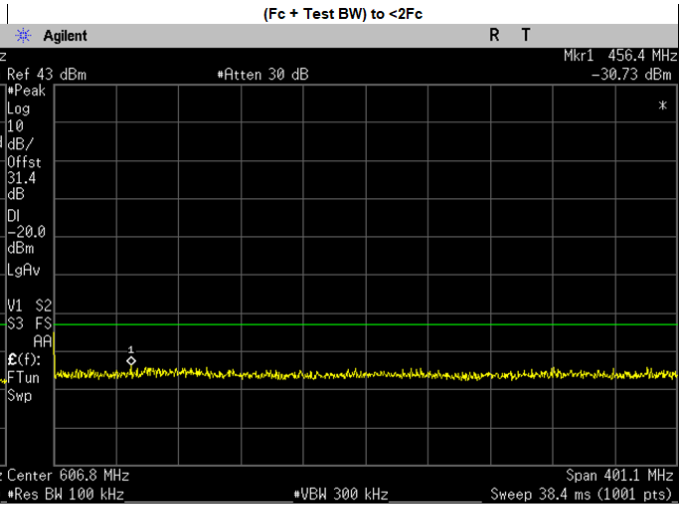
Frequency Range	Highest Spur Frequency (MHz)	Spurious Level (dBm)	Failing Limit (dBm)	Results
FL to (Fc - Test BW)	60.0000	-34.2660	-20.00	PASS
(Fc + Test BW) to <2Fc	465.1494	-29.9700	-20.00	PASS
2Fc to 1GHz	869.6714	-54.2800	-20.00	PASS
1GHz to 10Fc	3091.2010	-40.8100	-20.00	PASS
	1209.0370	-45.4454	-20.00	PASS
	1612.0500	-45.6818	-20.00	PASS
	2015.0620	-45.4328	-20.00	PASS
	2418.0750	-44.9662	-20.00	PASS
	2821.0880	-44.4529	-20.00	PASS
	3224.1000	-42.3604	-20.00	PASS
	3627.1130	-42.9430	-20.00	PASS
	4030.1250	-44.3144	-20.00	PASS

4FSK.: 406.2. MHz, 12.5 kHz Channel Spacing, Max Power

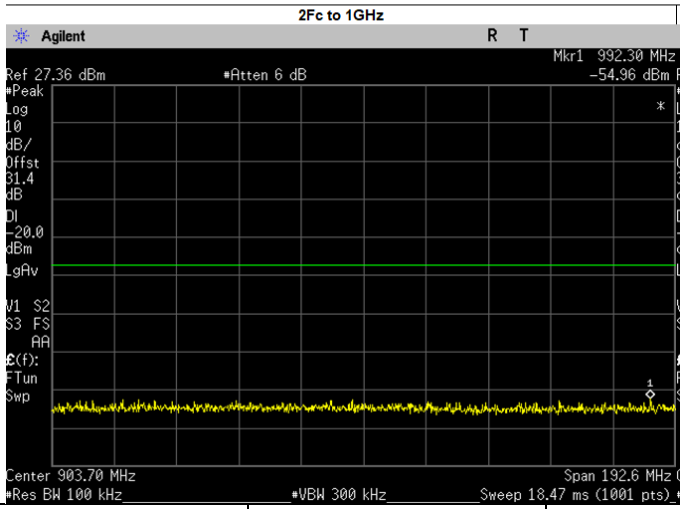
FL to (Fc - Test BW)



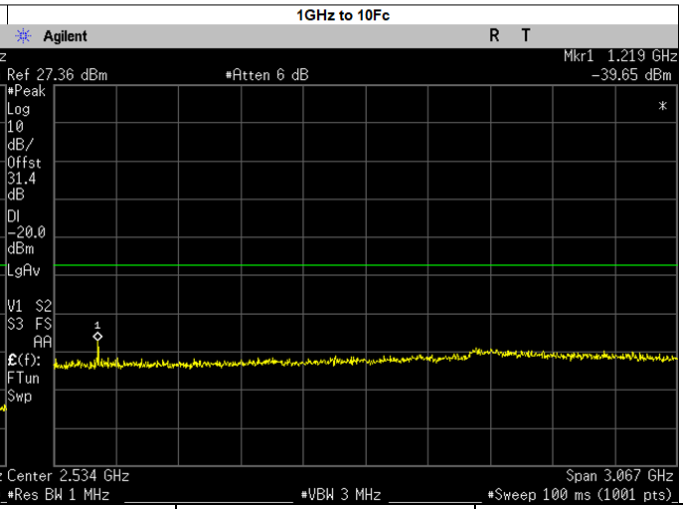
(Fc + Test BW) to <2Fc



2Fc to 1GHz



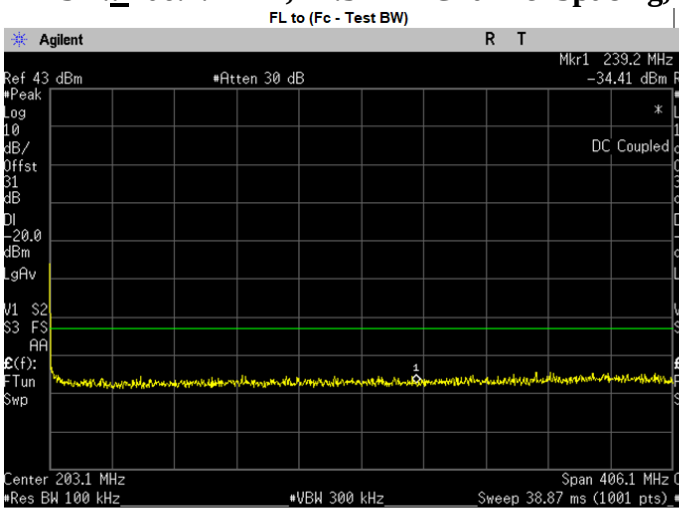
1GHz to 10Fc



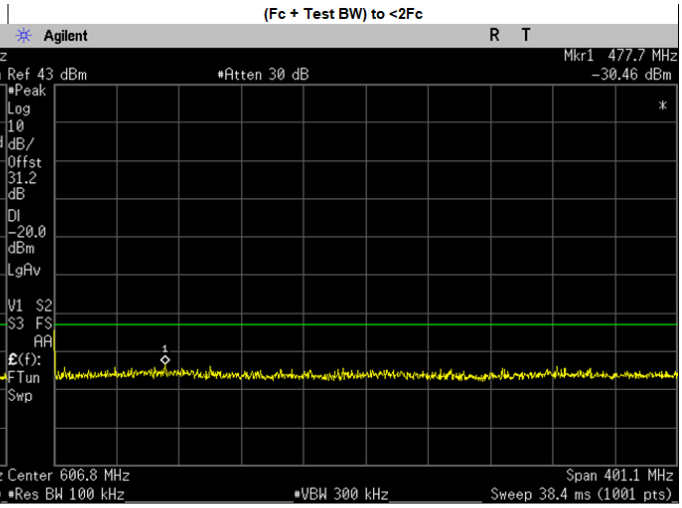
Frequency Range	Highest Spur Frequency (MHz)	Spurious Level (dBm)	Failing Limit (dBm)	Results
FL to (Fc - Test BW)	320.0000	-33.4860	-20.00	PASS
(Fc + Test BW) to <2Fc	456.3987	-30.7300	-20.00	PASS
2Fc to 1GHz	992.2960	-54.9600	-20.00	PASS
1GHz to 10Fc	1219.0000	-39.6500	-20.00	PASS
	1218.6000	-40.5433	-20.00	PASS
	1624.8000	-45.8283	-20.00	PASS
	2031.0000	-45.2006	-20.00	PASS
	2437.2000	-45.4199	-20.00	PASS
	2843.4000	-44.1540	-20.00	PASS
	3249.6000	-42.9741	-20.00	PASS
	3655.8000	-43.9310	-20.00	PASS
	4062.0000	-44.3037	-20.00	PASS

4FSK.: 406.2. MHz, 12.5 kHz Channel Spacing, Low Power

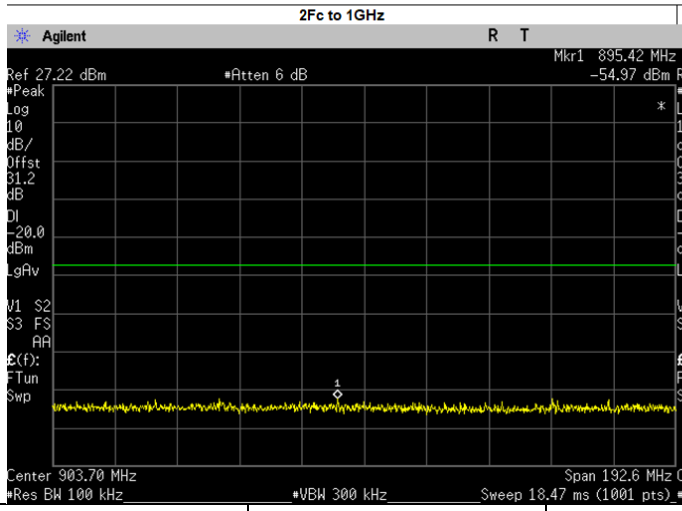
FL to (Fc - Test BW)



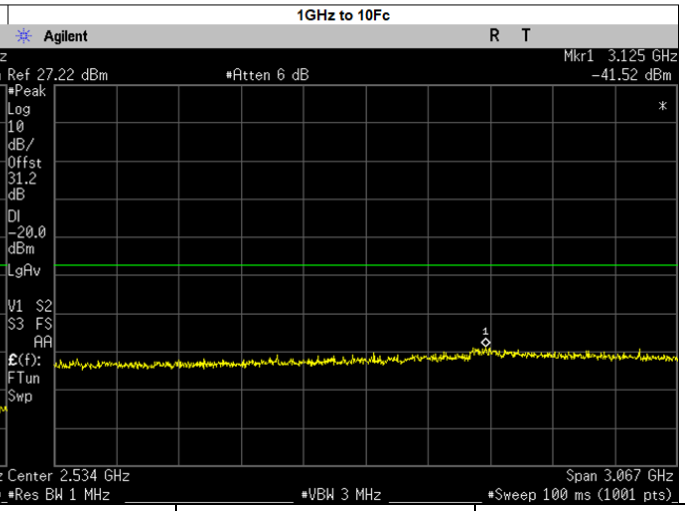
(Fc + Test BW) to <2Fc



2Fc to 1GHz



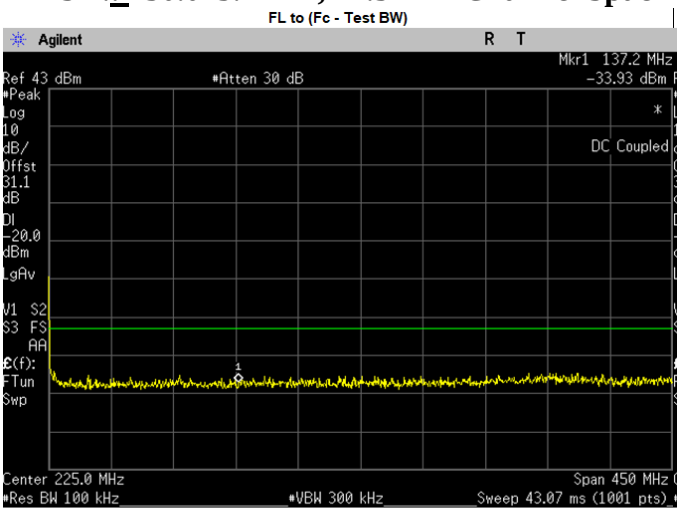
1GHz to 10Fc



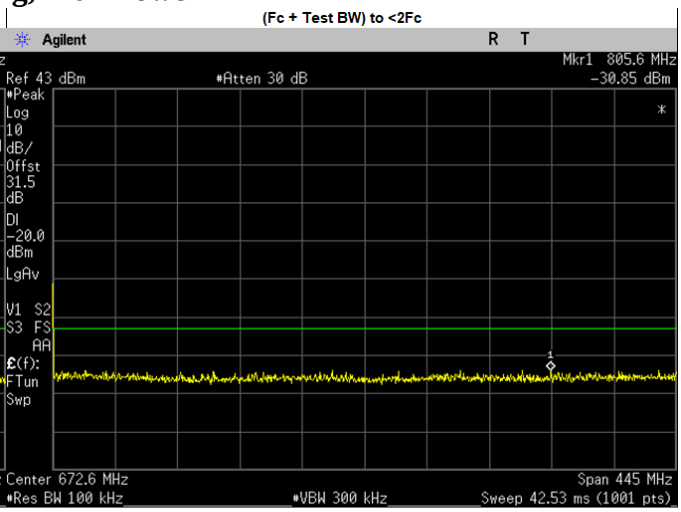
Frequency Range	Highest Spur Frequency (MHz)	Spurious Level (dBm)	Failing Limit (dBm)	Results
FL to (Fc - Test BW)	239.2000	-34.4130	-20.00	PASS
(Fc + Test BW) to <2Fc	477.6593	-30.4600	-20.00	PASS
2Fc to 1GHz	895.4182	-54.9700	-20.00	PASS
1GHz to 10Fc	3125.4310	-41.5200	-20.00	PASS
	1218.6000	-45.2890	-20.00	PASS
	1624.8000	-46.3561	-20.00	PASS
	2031.0000	-45.2889	-20.00	PASS
	2437.2000	-45.5469	-20.00	PASS
	2843.4000	-44.4195	-20.00	PASS
	3249.6000	-42.8362	-20.00	PASS
	3655.8000	-44.0439	-20.00	PASS
	4062.0000	-44.3670	-20.00	PASS

4FSK.: 450.025. MHz, 12.5 kHz Channel Spacing, Max Power

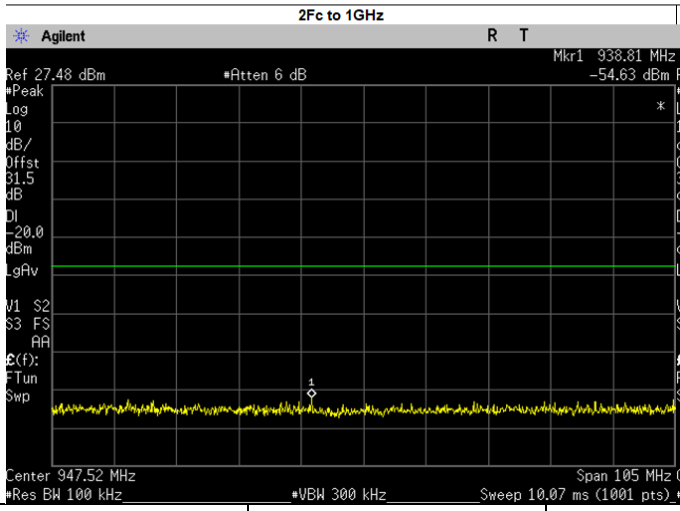
FL to (Fc - Test BW)



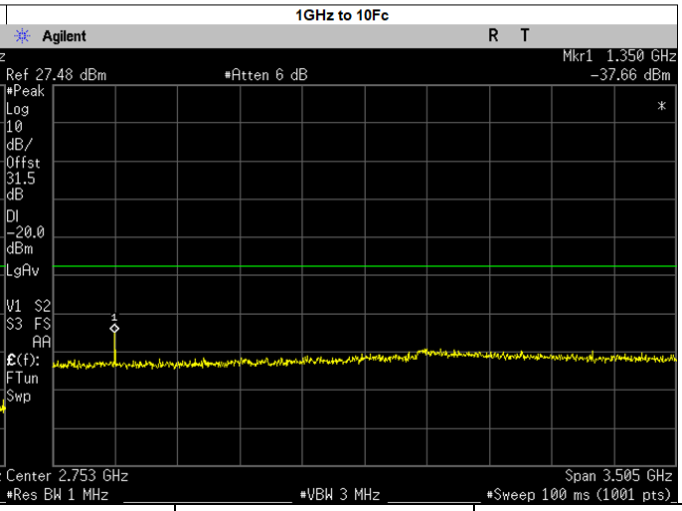
(Fc + Test BW) to <2Fc



2Fc to 1GHz



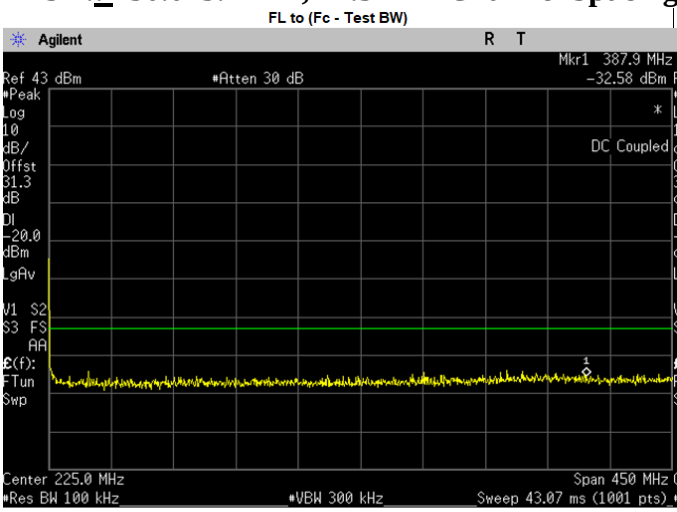
1GHz to 10Fc



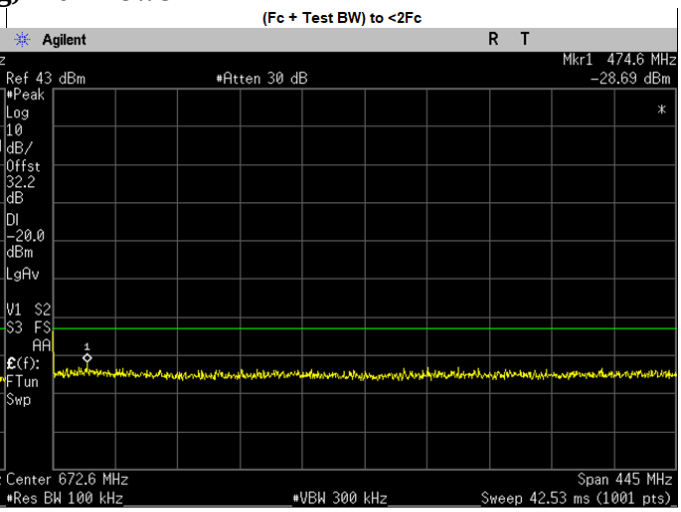
Frequency Range	Highest Spur Frequency (MHz)	Spurious Level (dBm)	Failing Limit (dBm)	Results
FL to (Fc - Test BW)	137.2000	-33.9340	-20.00	PASS
(Fc + Test BW) to <2Fc	805.6114	-30.8500	-20.00	PASS
2Fc to 1GHz	938.8142	-54.6300	-20.00	PASS
1GHz to 10Fc	1350.0000	-37.6600	-20.00	PASS
	1800.1000	-44.8561	-20.00	PASS
	2250.1250	-45.1195	-20.00	PASS
	2700.1500	-43.6219	-20.00	PASS
	3150.1750	-42.9034	-20.00	PASS
	3600.2000	-43.1785	-20.00	PASS
	4050.2250	-44.3605	-20.00	PASS
	4500.2500	-44.3566	-20.00	PASS
	1350.0750	-38.6885	-20.00	PASS

FSK.: 450.025. MHz, 12.5 kHz Channel Spacing, Max Power

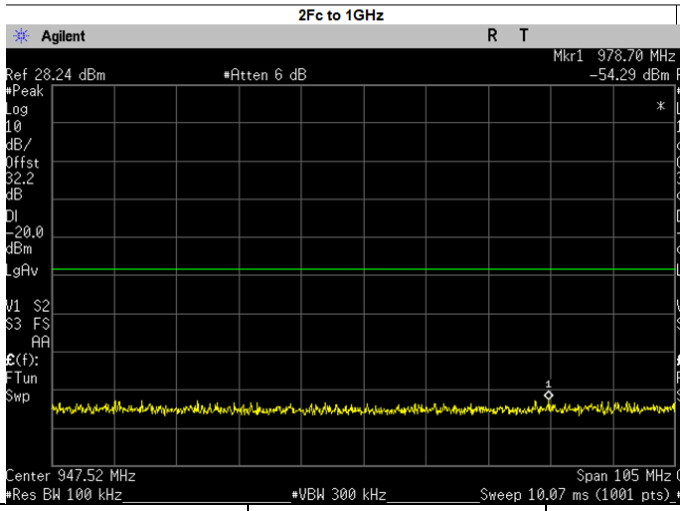
FL to (Fc - Test BW)



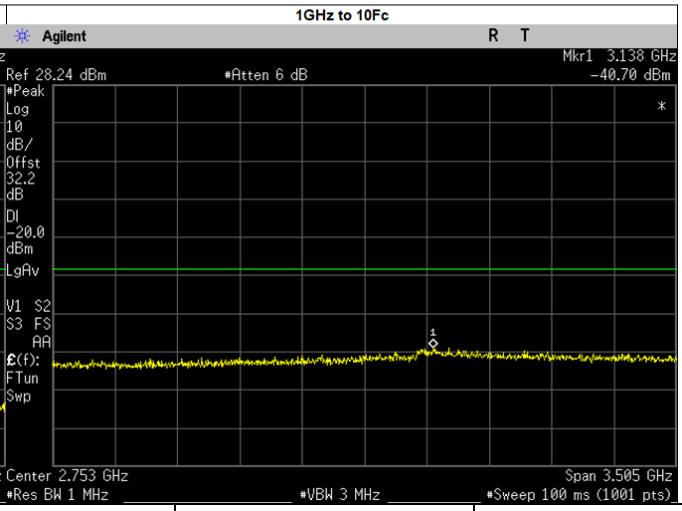
(Fc + Test BW) to <2Fc



2Fc to 1GHz



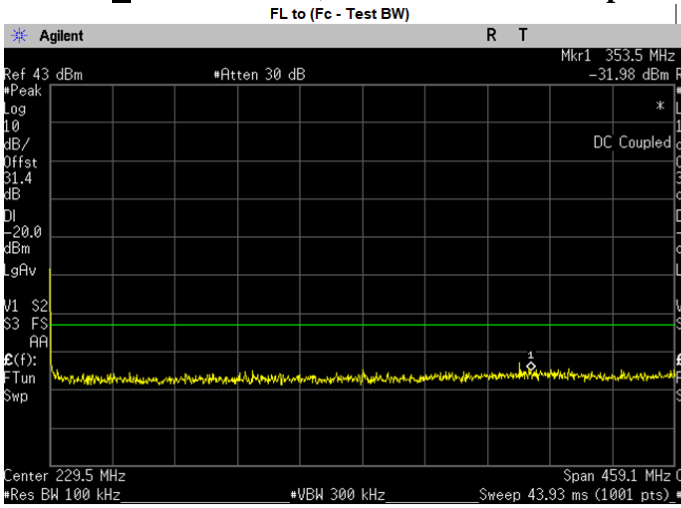
1GHz to 10Fc



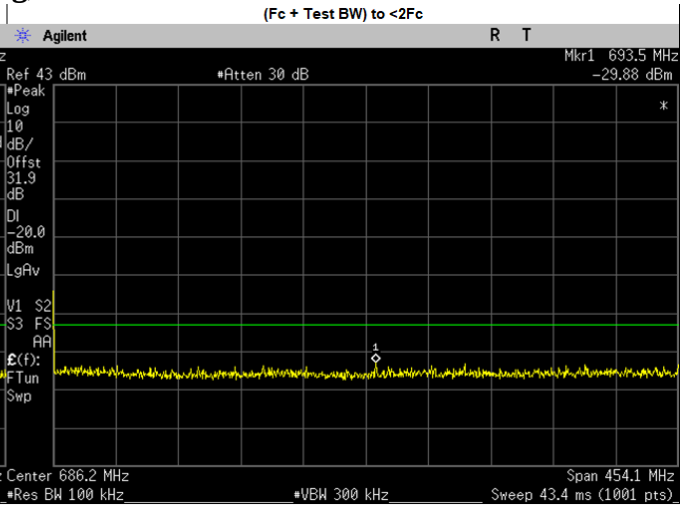
Frequency Range	Highest Spur Frequency (MHz)	Spurious Level (dBm)	Failing Limit (dBm)	Results
FL to (Fc - Test BW)	387.9000	-32.5820	-20.00	PASS
(Fc + Test BW) to <2Fc	474.5551	-28.6900	-20.00	PASS
2Fc to 1GHz	978.6952	-54.2900	-20.00	PASS
1GHz to 10Fc	3138.2020	-40.7000	-20.00	PASS
	1350.0750	-45.5210	-20.00	PASS
	1800.1000	-45.3315	-20.00	PASS
	2250.1250	-43.7036	-20.00	PASS
	2700.1500	-43.3340	-20.00	PASS
	3150.1750	-41.5213	-20.00	PASS
	3600.2000	-42.9347	-20.00	PASS
	4050.2250	-43.7019	-20.00	PASS
	4500.2500	-43.1876	-20.00	PASS

4FSK.: 459.125. MHz, 12.5 kHz Channel Spacing, Max Power

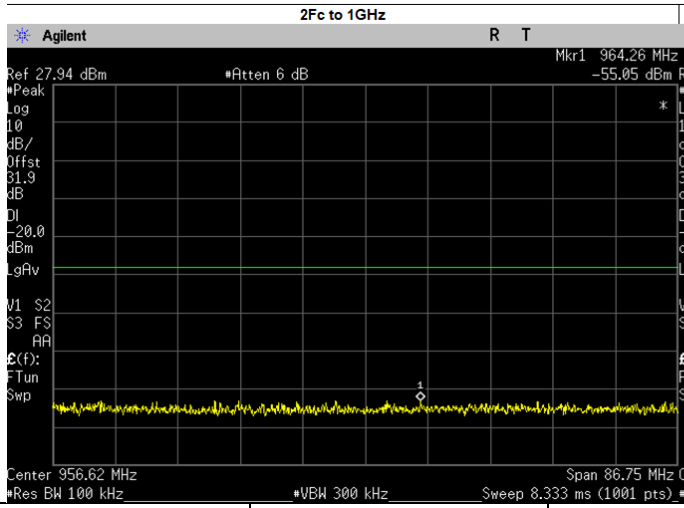
FL to (Fc - Test BW)



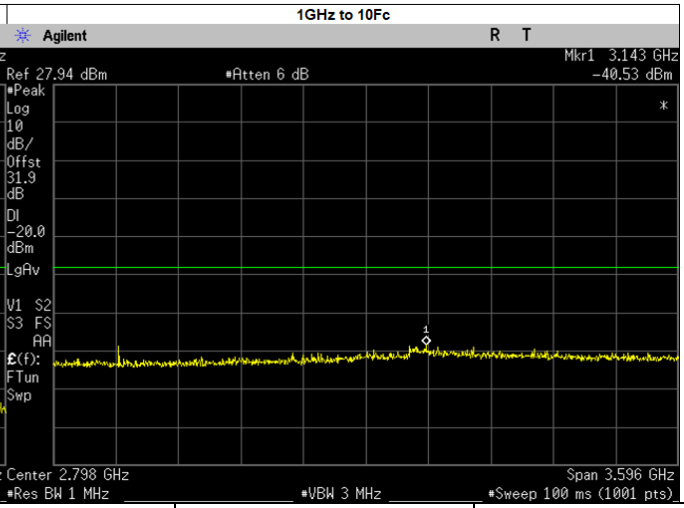
(Fc + Test BW) to <2Fc



2Fc to 1GHz



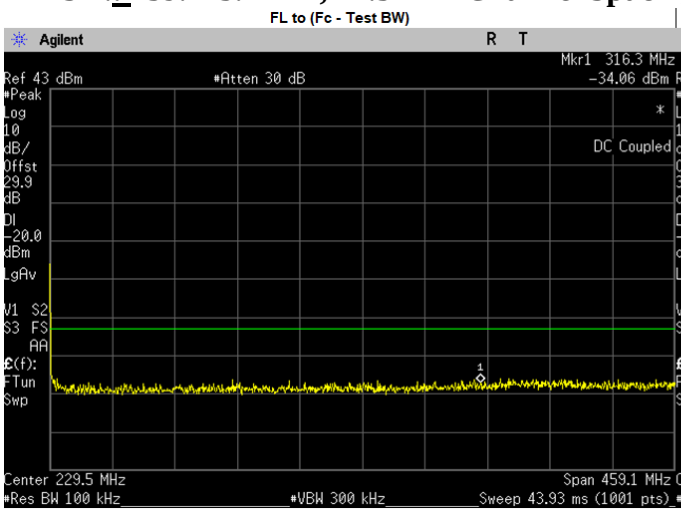
1GHz to 10Fc



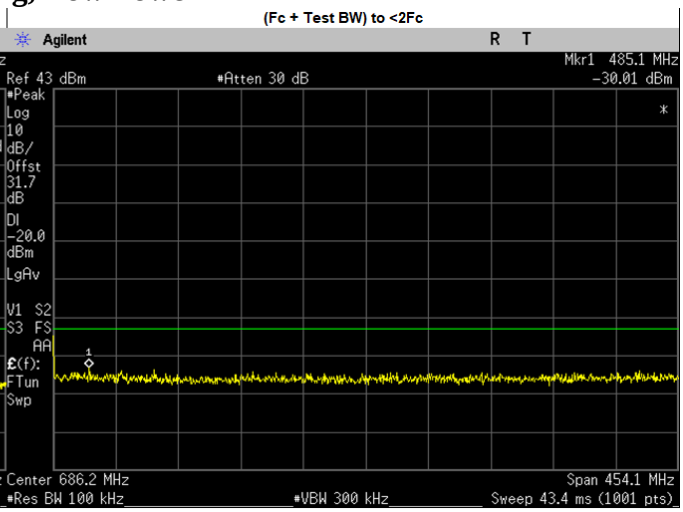
Frequency Range	Highest Spur Frequency (MHz)	Spurious Level (dBm)	Failing Limit (dBm)	Results
FL to (Fc - Test BW)	353.5000	-31.9800	-20.00	PASS
(Fc + Test BW) to <2Fc	693.4810	-29.8800	-20.00	PASS
2Fc to 1GHz	964.2590	-55.0500	-20.00	PASS
1GHz to 10Fc	3143.3650	-40.5300	-20.00	PASS
	1377.3750	-41.0273	-20.00	PASS
	1836.5000	-44.7351	-20.00	PASS
	2295.6250	-45.0158	-20.00	PASS
	2754.7500	-43.0798	-20.00	PASS
	3213.8750	-42.2085	-20.00	PASS
	3673.0000	-43.4345	-20.00	PASS
	4132.1250	-44.6024	-20.00	PASS
	4591.2500	-43.6919	-20.00	PASS

4FSK.: 459.125. MHz, 12.5 kHz Channel Spacing, Low Power

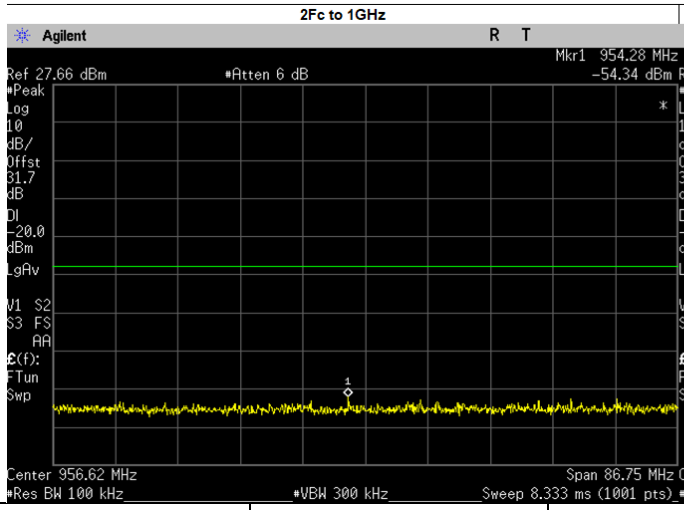
FL to (Fc - Test BW)



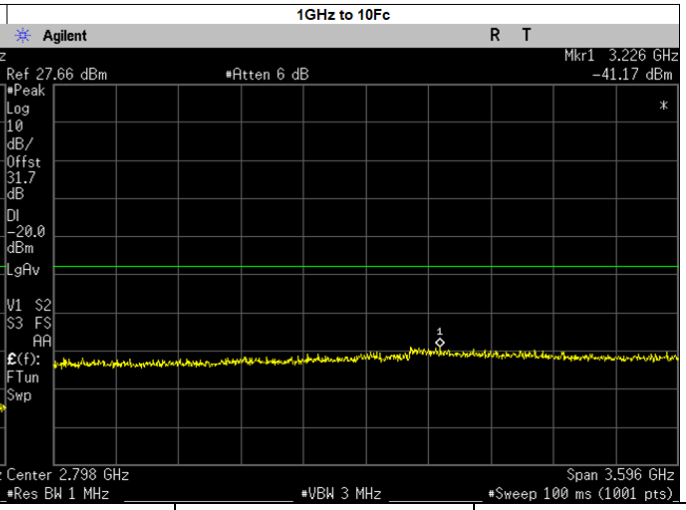
(Fc + Test BW) to <2Fc



2Fc to 1GHz



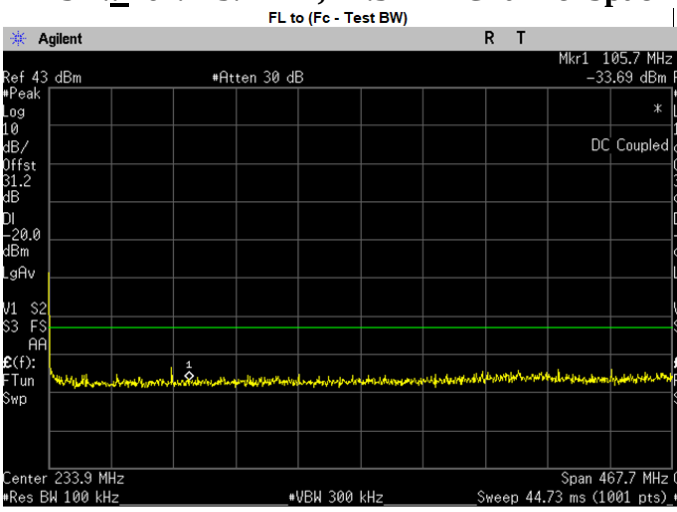
1GHz to 10Fc



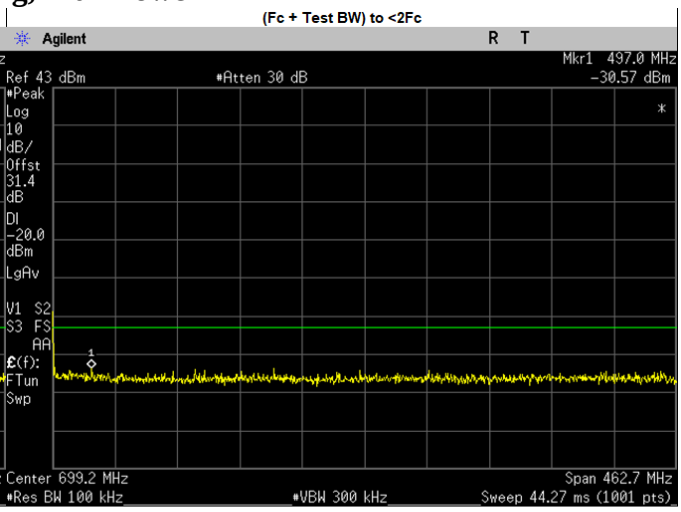
Frequency Range	Highest Spur Frequency (MHz)	Spurious Level (dBm)	Failing Limit (dBm)	Results
FL to (Fc - Test BW)	316.3000	-34.0600	-20.00	PASS
(Fc + Test BW) to <2Fc	485.0637	-30.0100	-20.00	PASS
2Fc to 1GHz	954.2827	-54.3400	-20.00	PASS
1GHz to 10Fc	3226.0790	-41.1700	-20.00	PASS
	1377.3750	-45.5367	-20.00	PASS
	1836.5000	-45.6401	-20.00	PASS
	2295.6250	-45.5076	-20.00	PASS
	2754.7500	-44.3615	-20.00	PASS
	3213.8750	-43.2569	-20.00	PASS
	3673.0000	-43.7267	-20.00	PASS
	4132.1250	-44.2025	-20.00	PASS
	4591.2500	-44.4573	-20.00	PASS

4FSK.: 467.775. MHz, 12.5 kHz Channel Spacing, Max Power

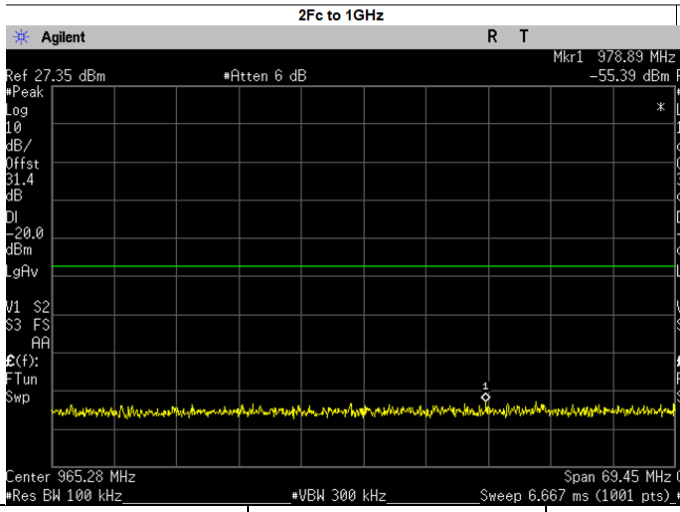
FL to (Fc - Test BW)



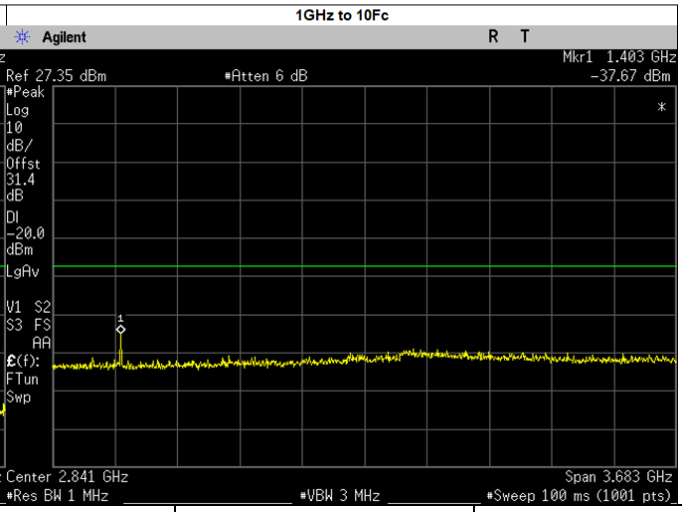
(Fc + Test BW) to <2Fc



2Fc to 1GHz



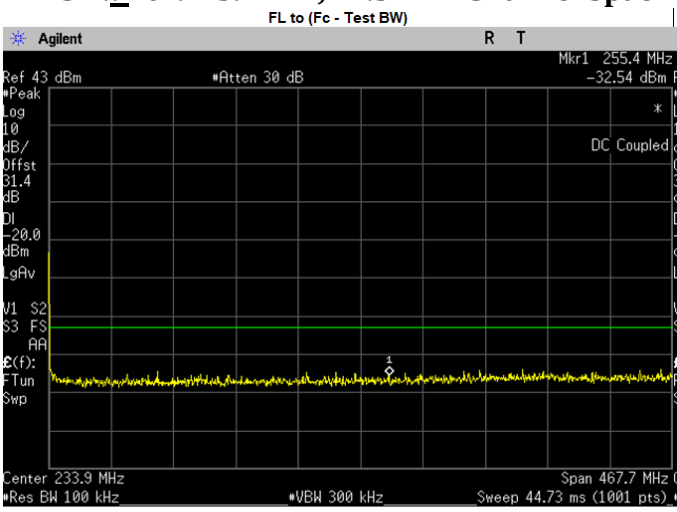
1GHz to 10Fc



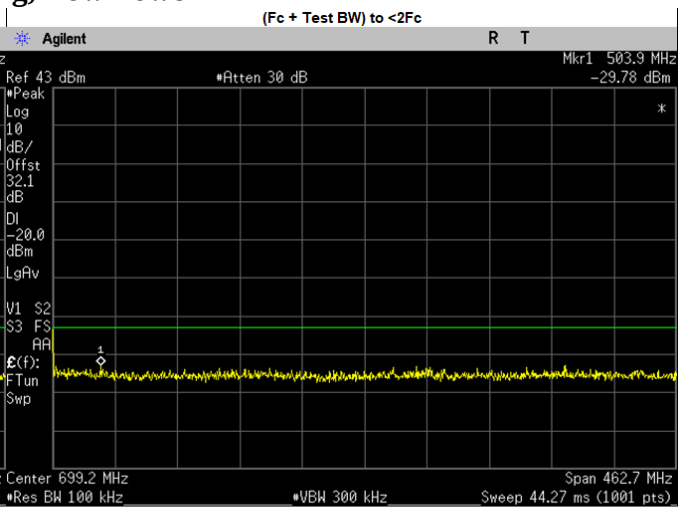
Frequency Range	Highest Spur Frequency (MHz)	Spurious Level (dBm)	Failing Limit (dBm)	Results
FL to (Fc - Test BW)	105.7000	-33.6910	-20.00	PASS
(Fc + Test BW) to <2Fc	496.9830	-30.5700	-20.00	PASS
2Fc to 1GHz	978.8872	-55.3900	-20.00	PASS
1GHz to 10Fc	1403.0000	-37.6700	-20.00	PASS
	2338.8750	-45.1487	-20.00	PASS
	2806.6500	-44.5534	-20.00	PASS
	3274.4250	-42.8996	-20.00	PASS
	3742.2000	-43.7849	-20.00	PASS
	4209.9750	-44.7090	-20.00	PASS
	4677.7500	-44.9481	-20.00	PASS
	1401.4200	-38.3500	-20.00	PASS
	1403.3250	-37.9987	-20.00	PASS

4FSK.: 467.775. MHz, 12.5 kHz Channel Spacing, Low Power

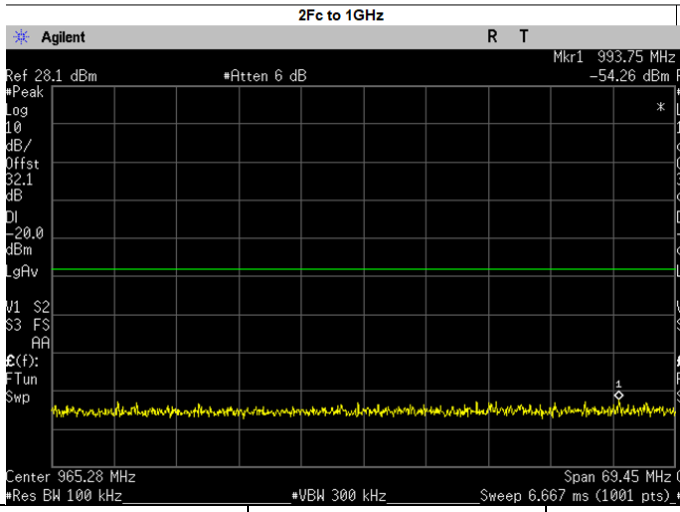
FL to (Fc - Test BW)



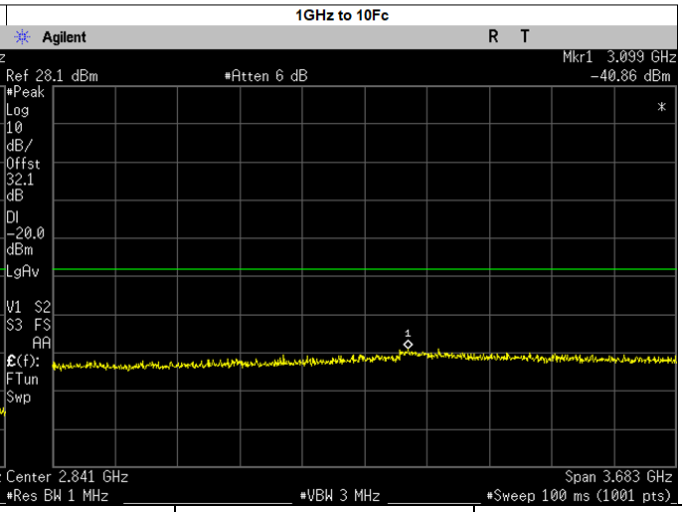
(Fc + Test BW) to <2Fc



2Fc to 1GHz



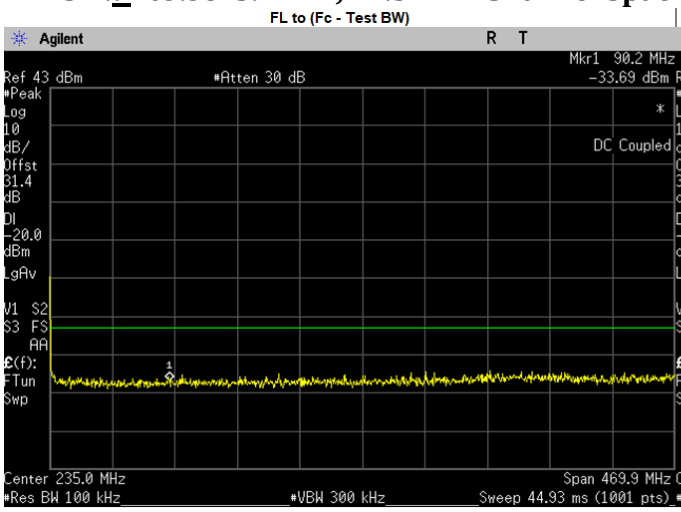
1GHz to 10Fc



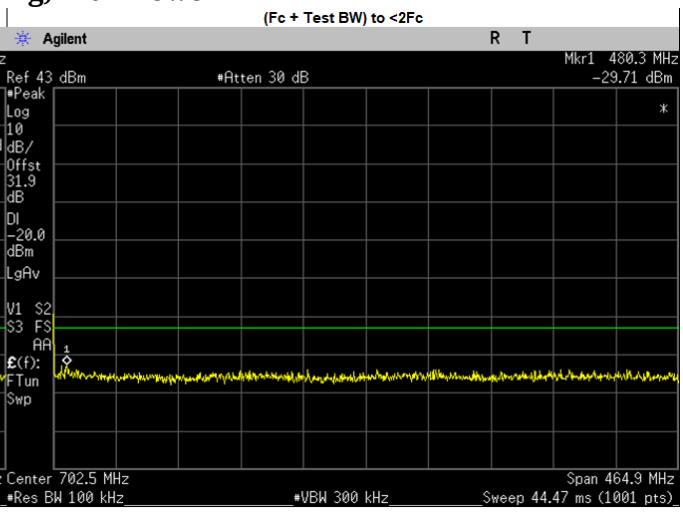
Frequency Range	Highest Spur Frequency (MHz)	Spurious Level (dBm)	Failing Limit (dBm)	Results
FL to (Fc - Test BW)	255.4000	-32.5370	-20.00	PASS
(Fc + Test BW) to <2Fc	503.9238	-29.7800	-20.00	PASS
2Fc to 1GHz	993.7495	-54.2600	-20.00	PASS
1GHz to 10Fc	3099.1680	-40.8600	-20.00	PASS
	1403.3250	-45.1325	-20.00	PASS
	1871.1000	-45.2881	-20.00	PASS
	2338.8750	-44.4295	-20.00	PASS
	2806.6500	-43.6353	-20.00	PASS
	3274.4250	-42.1391	-20.00	PASS
	3742.2000	-43.1701	-20.00	PASS
	4209.9750	-43.6871	-20.00	PASS
	4677.7500	-43.4472	-20.00	PASS

4FSK.: 469.9875. MHz, 12.5 kHz Channel Spacing, Max Power

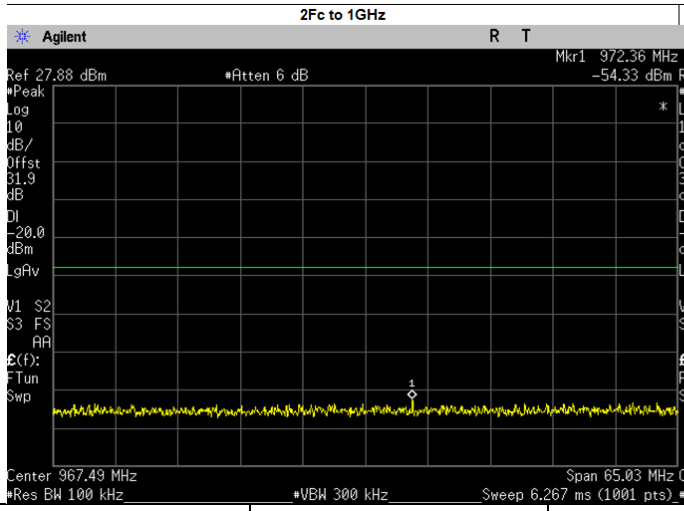
FL to (Fc - Test BW)



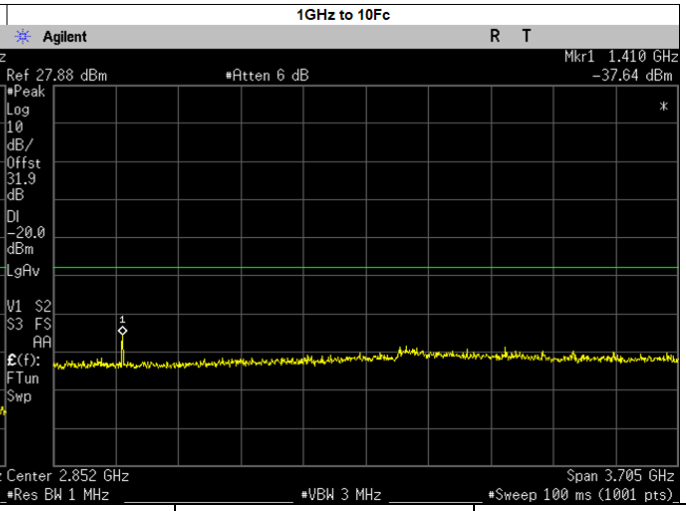
(Fc + Test BW) to <2Fc



2Fc to 1GHz

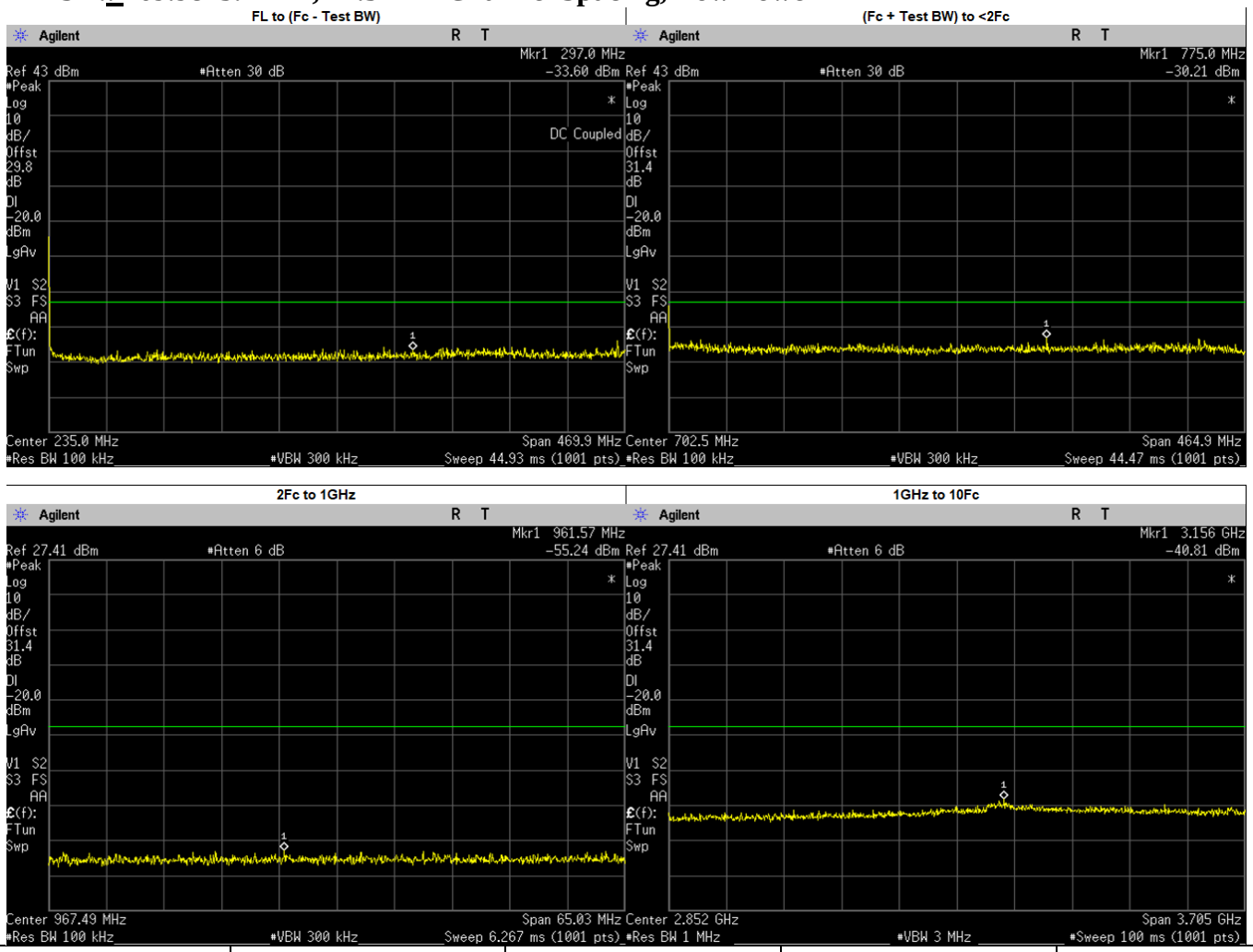


1GHz to 10Fc



Frequency Range	Highest Spur Frequency (MHz)	Spurious Level (dBm)	Failing Limit (dBm)	Results
FL to (Fc - Test BW)	90.2000	-33.6930	-20.00	PASS
(Fc + Test BW) to <2Fc	480.2728	-29.7100	-20.00	PASS
2Fc to 1GHz	972.3644	-54.3300	-20.00	PASS
1GHz to 10Fc	1410.0000	-37.6400	-20.00	PASS
	1879.9500	-45.1916	-20.00	PASS
	2349.9370	-44.8868	-20.00	PASS
	2819.9250	-43.9055	-20.00	PASS
	3289.9120	-42.6901	-20.00	PASS
	3759.9000	-43.2070	-20.00	PASS
	4229.8870	-44.1446	-20.00	PASS
	4699.8750	-44.3986	-20.00	PASS
	1409.9630	-38.6248	-20.00	PASS

4FSK.: 469.9875. MHz, 12.5 kHz Channel Spacing, Low Power



Frequency Range	Highest Spur Frequency (MHz)	Spurious Level (dBm)	Failing Limit (dBm)	Results
FL to (Fc - Test BW)	297.0000	-33.6020	-20.00	PASS
(Fc + Test BW) to <2Fc	775.0388	-30.2100	-20.00	PASS
2Fc to 1GHz	961.5702	-55.2400	-20.00	PASS
1GHz to 10Fc	3156.2370	-40.8100	-20.00	PASS
	1409.9630	-46.5054	-20.00	PASS
	1879.9500	-45.7909	-20.00	PASS
	2349.9370	-44.6561	-20.00	PASS
	2819.9250	-44.0869	-20.00	PASS
	3289.9120	-43.8266	-20.00	PASS
	3759.9000	-44.1962	-20.00	PASS
	4229.8870	-44.3116	-20.00	PASS
	4699.8750	-44.8628	-20.00	PASS

6.10.4. Test Limit

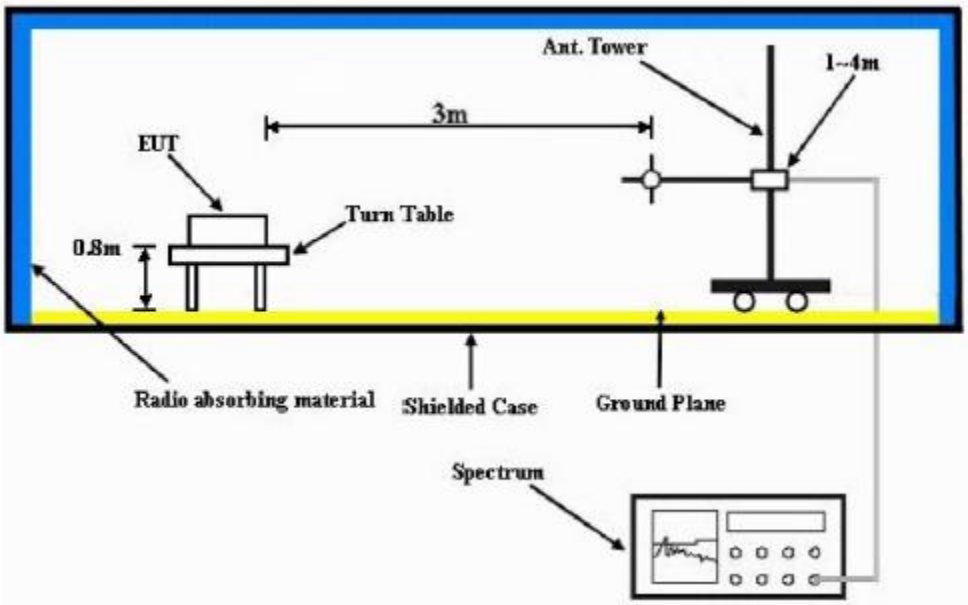
Table below summarized the power of any emission outside a licensee's frequency block shall be attenuated below the transmitter power (P) by at least

Channel Spacing	Part 22	Part 24D	Part 74	Part 80	Part 90 (UHF, VHF, 800, 900)	Part 90 (700)
12.5kHz	43 + log10(P) (-13 dBm)	43 + log10(P) (-13 dBm)	43 + log10(P) (-13 dBm)	Not Applicable	50 + log10(P) (-20 dBm)	43 + log10(P) (-13 dBm)
25kHz		Not Applicable		43 + log10(P) (-13 dBm)	43 + log10(P) (-13 dBm)	43 + log10(P) (-13 dBm)

Channel Spacing	RSS 134	RSS 182	RSS 119 (UHF, VHF, 800, 900)	RSS 119 (700)
12.5kHz	43 + log10(P) (-13 dBm)	Not Applicable	50 + log10(P) (-20 dBm)	43 + log10(P) (-13 dBm)
25kHz	Not Applicable	43 + log10(P) (-13 dBm)	43 + log10(P) (-13 dBm)	43 + log10(P) (-13 dBm)

6.11. Radiated Spurious Emission

6.11.1. Test Setup



1) The Resolution Bandwidth for scanning Radiated Emission below 1 GHz is 100 kHz with Video Bandwidth = 300 kHz and Resolution Bandwidth for above 1 GHz is 1 MHz with Video Bandwidth = 3 MHz. Detector mode is positive peak.
2) In the semi- anechoic chamber, setup as illustrated above the DUT placed on the 0.8m height (for Fc < 1GHz) or 1.5m height (for Fc > 1GHz) of Turn Table, rotated the table around 360 degrees to search the maximum radiation power and receiver antenna shall be rotated vertical and horizontal polarization and moved height from 1m to 4m to find the maximum polar radiated power. The “Read Value” is the spectrum reading the maximum power value.
3) The substitution antenna is substituted for DUT at the same position and signals generator (S.G) export the CW signal to the substitution antenna via a TX cable. The receiver antenna shall be rotated vertical and horizontal polarization and moved height from 1m to 4m to find the maximum radiation power. Record the power level of maximum radiation power from spectrum. So, the measured substitution value = Ref level of S.G + TX cables loss – Substituted Antenna Gain.
4) Final Radiated Spurious Emission = “Read Value” + Measured substitution value.

6.11.2. Test Result (Analog)

SAC Transmitter Radiated Emission:

Model Number: AAM28QNN9RA1AN **S/N: 511TWX2276** **SR:23191-EMC-00006**

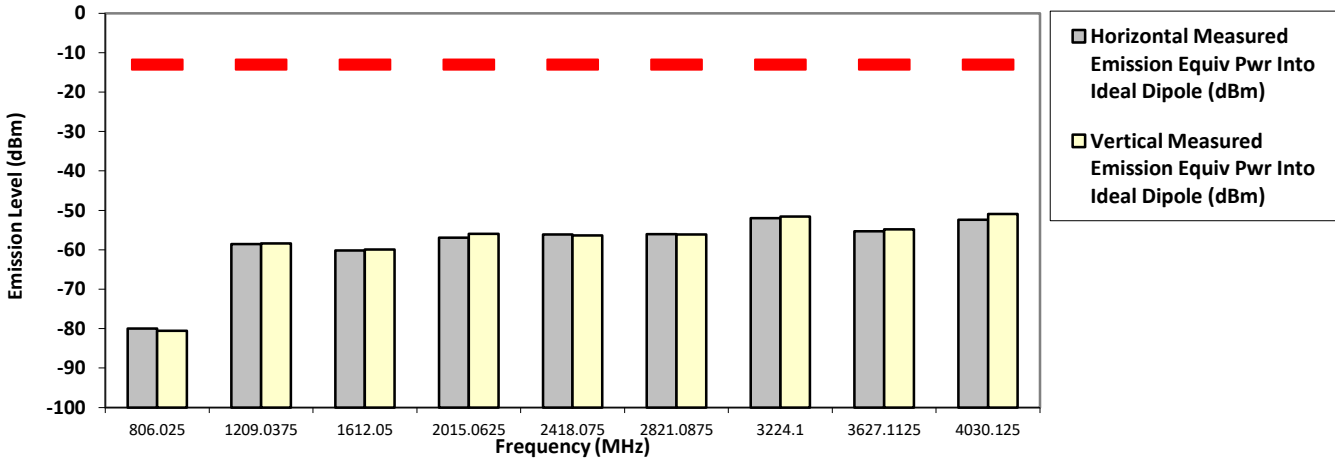
Battery Part No: NA **Accy Part No: 2806-RMN5127C-1, RSN4002A-C3, HKN4192B-C1,RLN5929A-C1**

Test Mode: TX Analog

403.012500 MHz **25 kHz** **30.000 Watt(s) /Max Power**

Frequency (MHz)	Limit	Horizontal Measured Emission Equiv Pwr Into Ideal Dipole (dBm)	Vertical Measured Emission Equiv Pwr Into ideal Dipole (dBm)
806.0250	-13.0000	-79.9701 **	-80.5539 **
1209.0375	-13.0000	-58.5467 **	-58.4215 **
1612.0500	-13.0000	-60.2111 **	-59.9460 **
2015.0625	-13.0000	-56.9464 **	-55.9286 **
2418.0750	-13.0000	-56.1049 **	-56.3649 **
2821.0875	-13.0000	-56.0633 **	-56.0800 **
3224.1000	-13.0000	-51.9585 **	-51.5942 **
3627.1125	-13.0000	-55.2810 **	-54.8457 **
4030.1250	-13.0000	-52.3535 **	-50.9327 **

RADIATED SPURIOUS EMISSIONS



The data presented here was taken using the substitution method as found in the ANSI C63.26-2015 document.

Motorola Penang EMC Lab - Test Performed by: Nazrin&Amaluddin **Tue, 5 Jan, 2021**

Remarks: ** Indicates the spurious emission could not be detected due to noise limitations or ambient.

***Pursuant to CFR 47 Part 2.1057 (c), emissions attenuated more than 20 dB below the permissible limit are not reported**

Temp(Deg): 23.6 Hum(%RH): 71.3

System MU: 4.03 dB

Remarks:

Passed Results	**Marginal Results**	**Failed Results**

SAC Transmitter Radiated Emission:

Model Number: AAM28QNN9RA1AN **S/N: 511TWX2276** **SR:23191-EMC-00006**

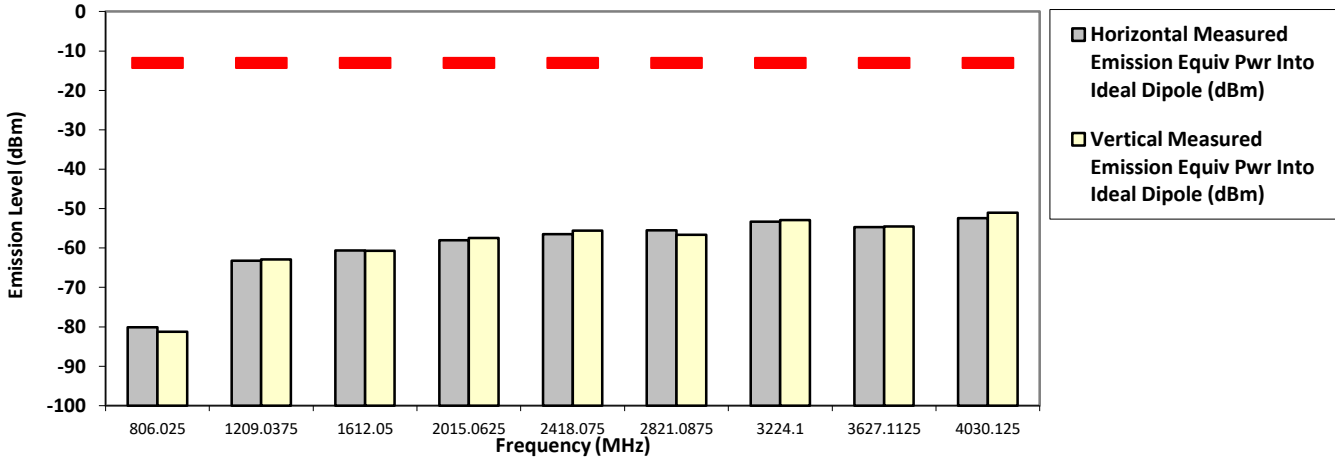
Battery Part No: NA **Accy Part No: 2806-RMN5127C-1, RSN4002A-C3, HKN4192B-C1, RLN5929A-C1**

Test Mode: TX Analog

403.012500 MHz **25 kHz** **1.000 Watt(s) /Low Power**

Frequency (MHz)	Limit	Horizontal Measured Emission Equiv Pwr Into Ideal Dipole (dBm)	Vertical Measured Emission Equiv Pwr Into ideal Dipole (dBm)
806.0250	-13.0000	-80.0936 **	-81.2144 **
1209.0375	-13.0000	-63.1922 **	-62.9044 **
1612.0500	-13.0000	-60.6548 **	-60.7145 **
2015.0625	-13.0000	-58.0009 **	-57.4550 **
2418.0750	-13.0000	-56.5147 **	-55.5618 **
2821.0875	-13.0000	-55.4835 **	-56.6781 **
3224.1000	-13.0000	-53.3426 **	-52.8938 **
3627.1125	-13.0000	-54.7025 **	-54.5030 **
4030.1250	-13.0000	-52.4137 **	-51.0500 **

RADIATED SPURIOUS EMISSIONS



The data presented here was taken using the substitution method as found in the ANSI C63.26-2015 document.

Motorola Penang EMC Lab - Test Performed by: Nazrin&Amaluddin **Tue, 5 Jan, 2021**

Remarks: ** Indicates the spurious emission could not be detected due to noise limitations or ambient.

***Pursuant to CFR 47 Part 2.1057 (c), emissions attenuated more than 20 dB below the permissible limit are not reported**

Temp(Deg): 23.6 Hum(%RH): 71.3

System MU: 4.03 dB

Remarks:

Passed Results	**Marginal Results**	**Failed Results**

SAC Transmitter Radiated Emission:

Model Number: AAM28QNN9RA1AN **S/N: 511TWX2276** **SR:23191-EMC-00006**

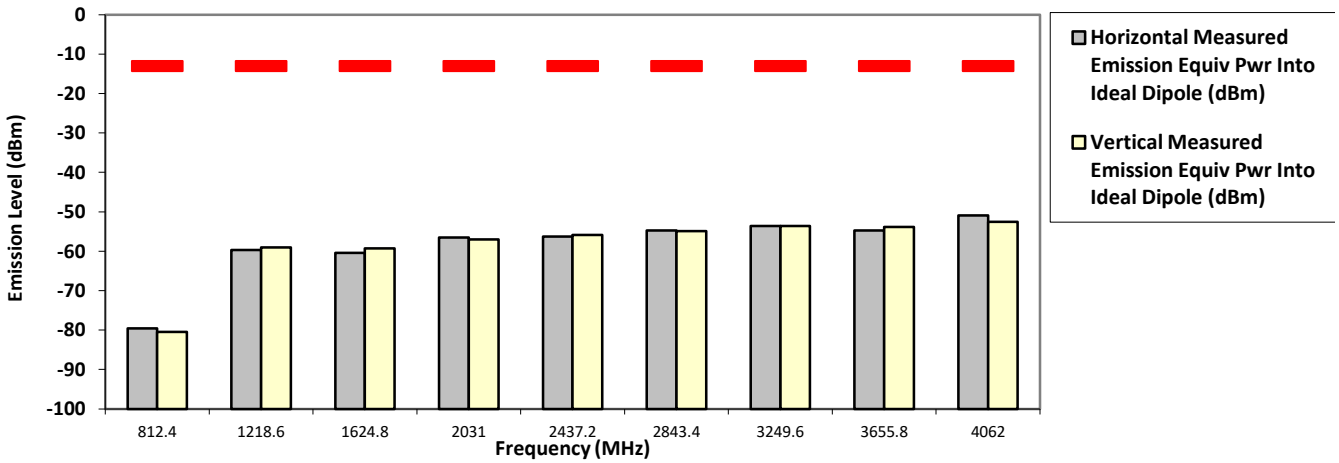
Battery Part No: NA **Accy Part No: 2806-RMN5127C-1, RSN4002A-C3, HKN4192B-C1, RLN5929A-C1**

Test Mode: TX Analog

406.200000 MHz **25 kHz** **30.000 Watt(s) /Max Power**

Frequency (MHz)	Limit	Horizontal Measured Emission Equiv Pwr Into Ideal Dipole (dBm)	Vertical Measured Emission Equiv Pwr Into ideal Dipole (dBm)
812.4000	-13.0000	-79.5632 **	-80.4484 **
1218.6000	-13.0000	-59.7254 **	-59.0063 **
1624.8000	-13.0000	-60.4278 **	-59.2435 **
2031.0000	-13.0000	-56.4909 **	-57.0190 **
2437.2000	-13.0000	-56.2877 **	-55.8899 **
2843.4000	-13.0000	-54.7760 **	-54.9084 **
3249.6000	-13.0000	-53.5742 **	-53.5730 **
3655.8000	-13.0000	-54.7727 **	-53.8127 **
4062.0000	-13.0000	-50.9232 **	-52.5262 **

RADIATED SPURIOUS EMISSIONS



The data presented here was taken using the substitution method as found in the ANSI C63.26-2015 document.

Motorola Penang EMC Lab - Test Performed by: Nazrin&Amaluddin **Tue, 5 Jan, 2021**

Remarks: ** Indicates the spurious emission could not be detected due to noise limitations or ambient.

***Pursuant to CFR 47 Part 2.1057 (c), emissions attenuated more than 20 dB below the permissible limit are not reported**

Temp(Deg): 23.6 Hum(%RH): 71.3

System MU: 4.03 dB

Remarks:

Passed Results	Marginal Results	Failed Results

SAC Transmitter Radiated Emission:

Model Number: AAM28QNN9RA1AN **S/N: 511TWX2276** **SR:23191-EMC-00006**

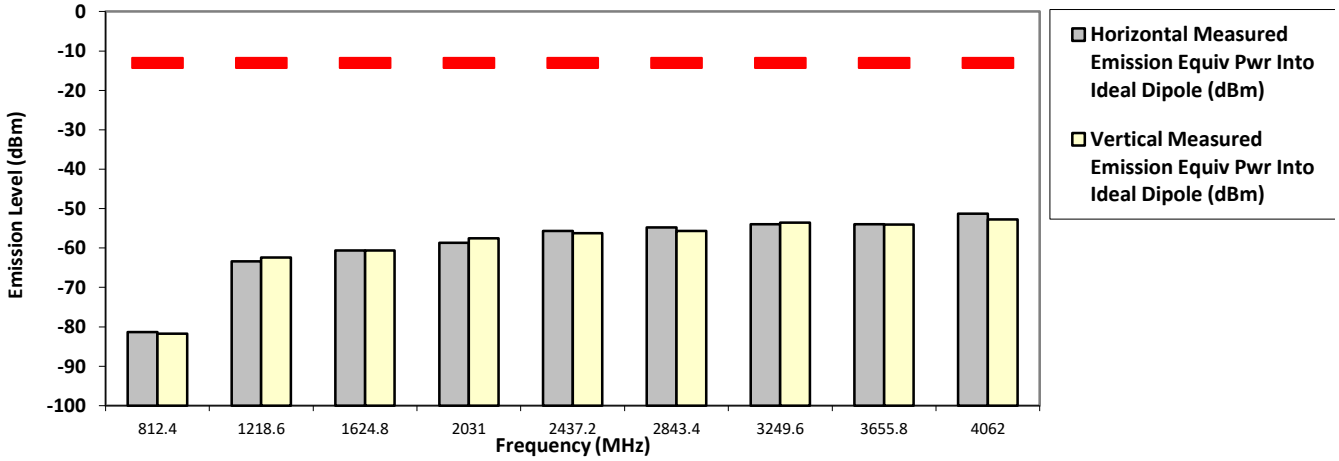
Battery Part No: NA **Accy Part No: 2806-RMN5127C-1, RSN4002A-C3, HKN4192B-C1, RLN5929A-C1**

Test Mode: TX Analog

406.200000 MHz **25 kHz** **1.000 Watt(s) /Low Power**

Frequency (MHz)	Limit	Horizontal Measured Emission Equiv Pwr Into Ideal Dipole (dBm)	Vertical Measured Emission Equiv Pwr Into ideal Dipole (dBm)
812.4000	-13.0000	-81.3385 **	-81.7309 **
1218.6000	-13.0000	-63.3613 **	-62.4485 **
1624.8000	-13.0000	-60.6396 **	-60.5904 **
2031.0000	-13.0000	-58.6636 **	-57.5676 **
2437.2000	-13.0000	-55.6354 **	-56.2703 **
2843.4000	-13.0000	-54.8048 **	-55.6409 **
3249.6000	-13.0000	-53.9405 **	-53.5588 **
3655.8000	-13.0000	-53.9544 **	-54.0140 **
4062.0000	-13.0000	-51.2762 **	-52.7652 **

RADIATED SPURIOUS EMISSIONS



The data presented here was taken using the substitution method as found in the ANSI C63.26-2015 document.

Motorola Penang EMC Lab - Test Performed by: Nazrin&Amaluddin **Tue, 5 Jan, 2021**

Remarks: ** Indicates the spurious emission could not be detected due to noise limitations or ambient.

***Pursuant to CFR 47 Part 2.1057 (c), emissions attenuated more than 20 dB below the permissible limit are not reported**

Temp(Deg): 23.6 Hum(%RH): 71.3

System MU: 4.03 dB

Remarks:

Passed Results	**Marginal Results**	**Failed Results**

SAC Transmitter Radiated Emission:

Model Number: AAM28QNN9RA1AN **S/N: 511TWX2276** **SR:23191-EMC-00006**

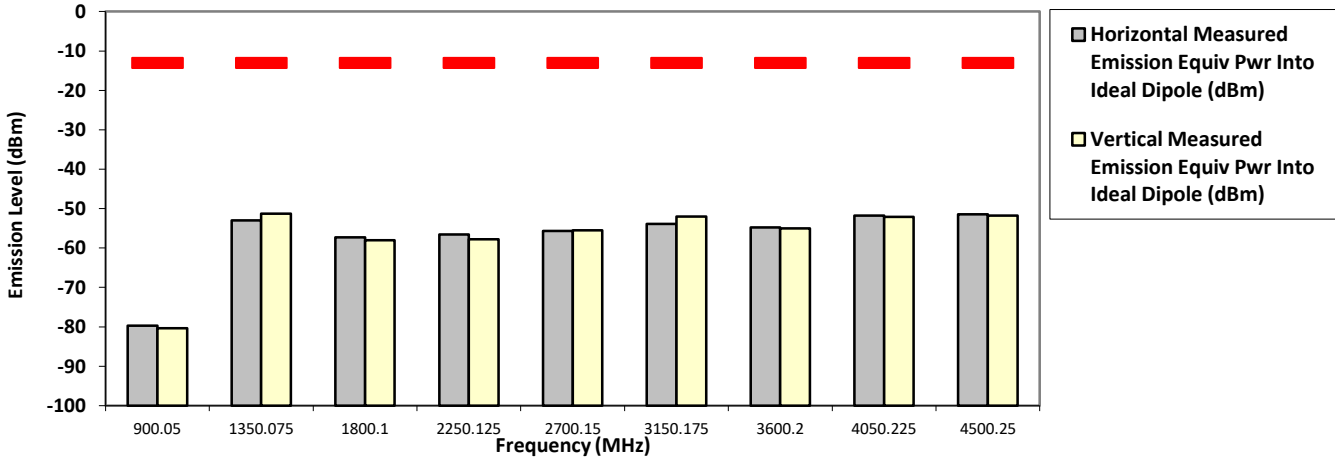
Battery Part No: NA **Accy Part No: 2806-RMN5127C-1, RSN4002A-C3, HKN4192B-C1, RLN5929A-C1**

Test Mode: TX Analog

450.025000 MHz **25 kHz** **30.000 Watt(s) /Max Power**

Frequency (MHz)	Limit	Horizontal Measured Emission Equiv Pwr Into Ideal Dipole (dBm)	Vertical Measured Emission Equiv Pwr Into ideal Dipole (dBm)
900.0500	-13.0000	-79.6850 **	-80.3180 **
1350.0750	-13.0000	-52.9800 *	-51.3200 *
1800.1000	-13.0000	-57.2682 **	-58.0284 **
2250.1250	-13.0000	-56.5860 **	-57.7966 **
2700.1500	-13.0000	-55.6979 **	-55.4943 **
3150.1750	-13.0000	-53.9002 **	-51.9825 **
3600.2000	-13.0000	-54.7381 **	-55.0117 **
4050.2250	-13.0000	-51.7829 **	-52.1207 **
4500.2500	-13.0000	-51.4246 **	-51.7919 **

RADIATED SPURIOUS EMISSIONS



The data presented here was taken using the substitution method as found in the ANSI C63.26-2015 document.

Motorola Penang EMC Lab - Test Performed by: Nazrin&Amaluddin **Tue, 5 Jan, 2021**

Remarks: ** Indicates the spurious emission could not be detected due to noise limitations or ambient.

***Pursuant to CFR 47 Part 2.1057 (c), emissions attenuated more than 20 dB below the permissible limit are not reported**

Temp(Deg): 23.6 Hum(%RH): 71.3

System MU: 4.03 dB

Remarks:

Passed Results	**Marginal Results**	**Failed Results**

SAC Transmitter Radiated Emission:

Model Number: AAM28QNN9RA1AN **S/N: 511TWX2276** **SR:23191-EMC-00006**

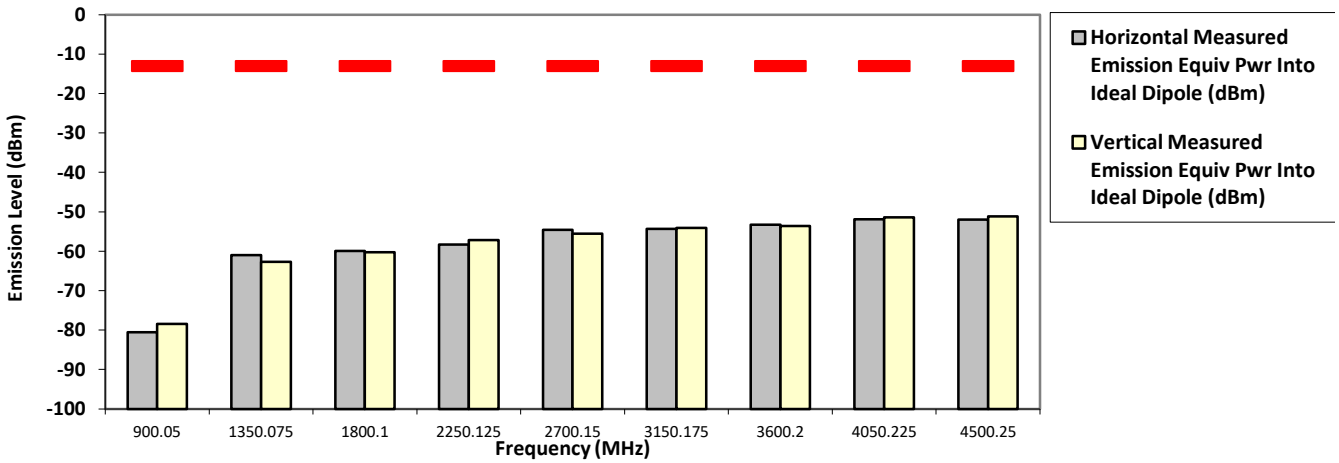
Battery Part No: NA **Accy Part No: 2806-RMN5127C-1, RSN4002A-C3, HKN4192B-C1, RLN5929A-C1**

Test Mode: TX Analog

450.025000 MHz **25 kHz** **1.000 Watt(s) /Low Power**

Frequency (MHz)	Limit	Horizontal Measured Emission Equiv Pwr Into Ideal Dipole (dBm)	Vertical Measured Emission Equiv Pwr Into ideal Dipole (dBm)
900.0500	-13.0000	-80.5478 **	-78.4091 **
1350.0750	-13.0000	-60.9799 **	-62.6929 **
1800.1000	-13.0000	-59.9442 **	-60.2551 **
2250.1250	-13.0000	-58.2710 **	-57.1644 **
2700.1500	-13.0000	-54.6028 **	-55.5607 **
3150.1750	-13.0000	-54.3019 **	-54.1000 **
3600.2000	-13.0000	-53.3004 **	-53.5941 **
4050.2250	-13.0000	-51.8641 **	-51.3923 **
4500.2500	-13.0000	-51.9607 **	-51.1688 **

RADIATED SPURIOUS EMISSIONS



The data presented here was taken using the substitution method as found in the ANSI C63.26-2015 document.

Motorola Penang EMC Lab - Test Performed by: Nazrin&Amaluddin **Tue, 5 Jan, 2021**

Remarks: ** Indicates the spurious emission could not be detected due to noise limitations or ambient.

***Pursuant to CFR 47 Part 2.1057 (c), emissions attenuated more than 20 dB below the permissible limit are not reported**

Temp(Deg): 23.6 Hum(%RH): 71.3

System MU: 4.03 dB

Remarks:

Passed Results	**Marginal Results**	**Failed Results**

SAC Transmitter Radiated Emission:

Model Number: AAM28QNN9RA1AN **S/N: 511TWX2276** **SR:23191-EMC-00006**

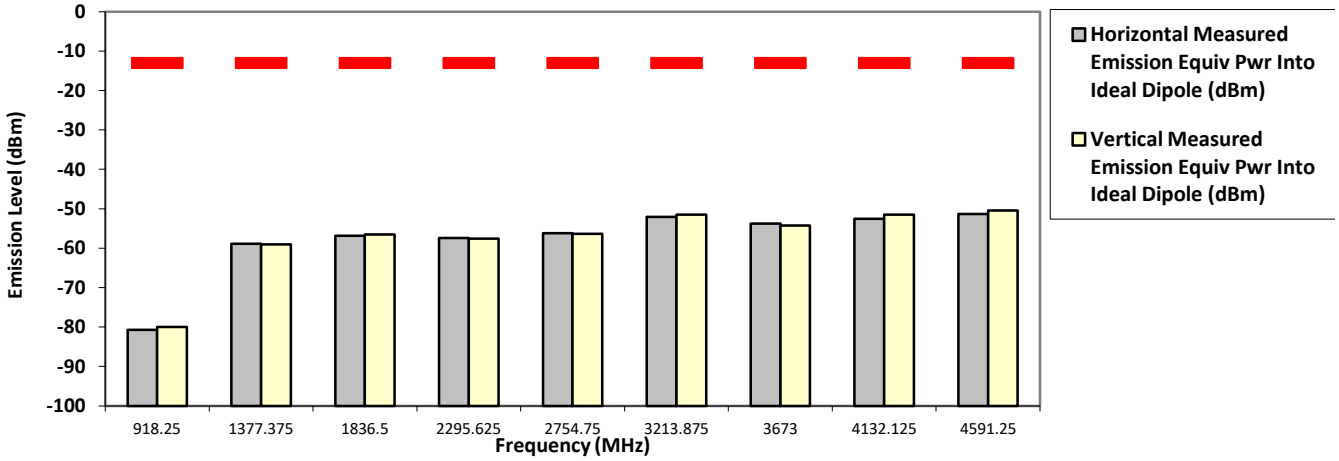
Battery Part No: NA **Accy Part No: 2806-RMN5127C-1, RSN4002A-C3, HKN4192B-C1, RLN5929A-C1**

Test Mode: TX Analog

459.125000 MHz **25 kHz** **30.000 Watt(s) /Max Power**

Frequency (MHz)	Limit	Horizontal Measured Emission Equiv Pwr Into Ideal Dipole (dBm)	Vertical Measured Emission Equiv Pwr Into ideal Dipole (dBm)
918.2500	-13.0000	-80.6896 **	-79.9619 **
1377.3750	-13.0000	-58.8695 **	-59.0154 **
1836.5000	-13.0000	-56.8567 **	-56.5268 **
2295.6250	-13.0000	-57.4358 **	-57.6182 **
2754.7500	-13.0000	-56.2344 **	-56.3884 **
3213.8750	-13.0000	-52.0749 **	-51.5219 **
3673.0000	-13.0000	-53.7665 **	-54.2487 **
4132.1250	-13.0000	-52.5758 **	-51.4550 **
4591.2500	-13.0000	-51.3554 **	-50.4046 **

RADIATED SPURIOUS EMISSIONS



The data presented here was taken using the substitution method as found in the ANSI C63.26-2015 document.

Motorola Penang EMC Lab - Test Performed by: Nazrin&Amaluddin **Tue, 5 Jan, 2021**

Remarks: ** Indicates the spurious emission could not be detected due to noise limitations or ambient.

***Pursuant to CFR 47 Part 2.1057 (c), emissions attenuated more than 20 dB below the permissible limit are not reported**

Temp(Deg): 23.6 Hum(%RH): 71.3

System MU: 4.03 dB

Remarks: Passed Results | **Marginal Results** | **Failed Results**

SAC Transmitter Radiated Emission:

Model Number: AAM28QNN9RA1AN **S/N: 511TWX2276** **SR:23191-EMC-00006**

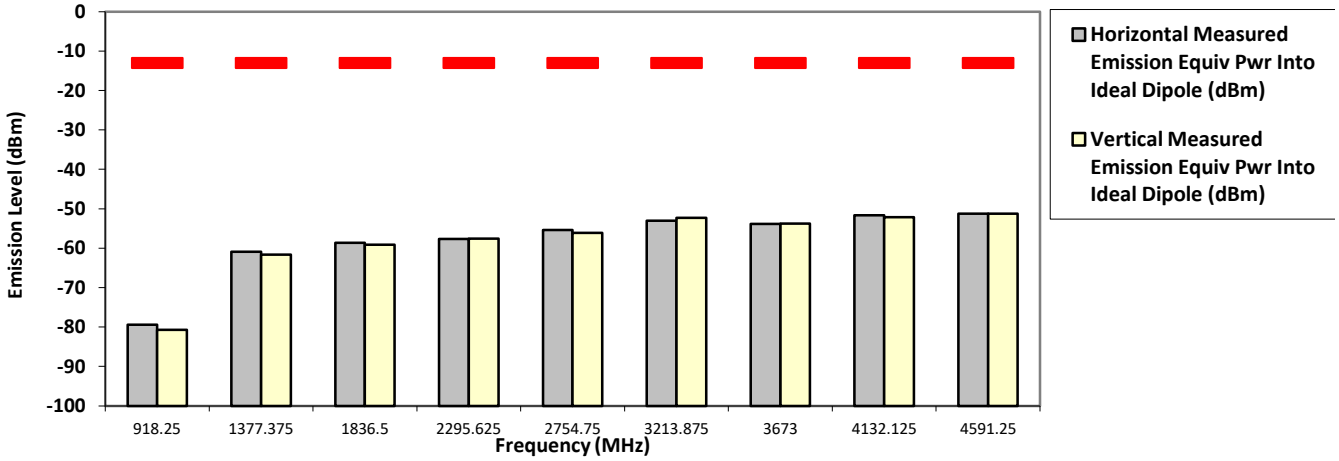
Battery Part No: NA **Accy Part No: 2806-RMN5127C-1, RSN4002A-C3, HKN4192B-C1, RLN5929A-C1**

Test Mode: TX Analog

459.125000 MHz **25 kHz** **1.000 Watt(s) /Low Power**

Frequency (MHz)	Limit	Horizontal Measured Emission Equiv Pwr Into Ideal Dipole (dBm)	Vertical Measured Emission Equiv Pwr Into ideal Dipole (dBm)
918.2500	-13.0000	-79.3985 **	-80.6764 **
1377.3750	-13.0000	-60.9154 **	-61.6453 **
1836.5000	-13.0000	-58.6611 **	-59.1520 **
2295.6250	-13.0000	-57.6512 **	-57.5518 **
2754.7500	-13.0000	-55.3887 **	-56.1311 **
3213.8750	-13.0000	-53.0598 **	-52.3333 **
3673.0000	-13.0000	-53.8239 **	-53.7758 **
4132.1250	-13.0000	-51.6509 **	-52.1532 **
4591.2500	-13.0000	-51.2820 **	-51.2399 **

RADIATED SPURIOUS EMISSIONS



The data presented here was taken using the substitution method as found in the ANSI C63.26-2015 document.

Motorola Penang EMC Lab - Test Performed by: Nazrin&Amaluddin **Tue, 5 Jan, 2021**

Remarks: ** Indicates the spurious emission could not be detected due to noise limitations or ambient.

***Pursuant to CFR 47 Part 2.1057 (c), emissions attenuated more than 20 dB below the permissible limit are not reported**

Temp(Deg): 23.6 Hum(%RH): 71.3

System MU: 4.03 dB

Remarks: Passed Results | **Marginal Results** | **Failed Results**

SAC Transmitter Radiated Emission:

Model Number: AAM28QNN9RA1AN **S/N: 511TWX2276** **SR:23191-EMC-00006**

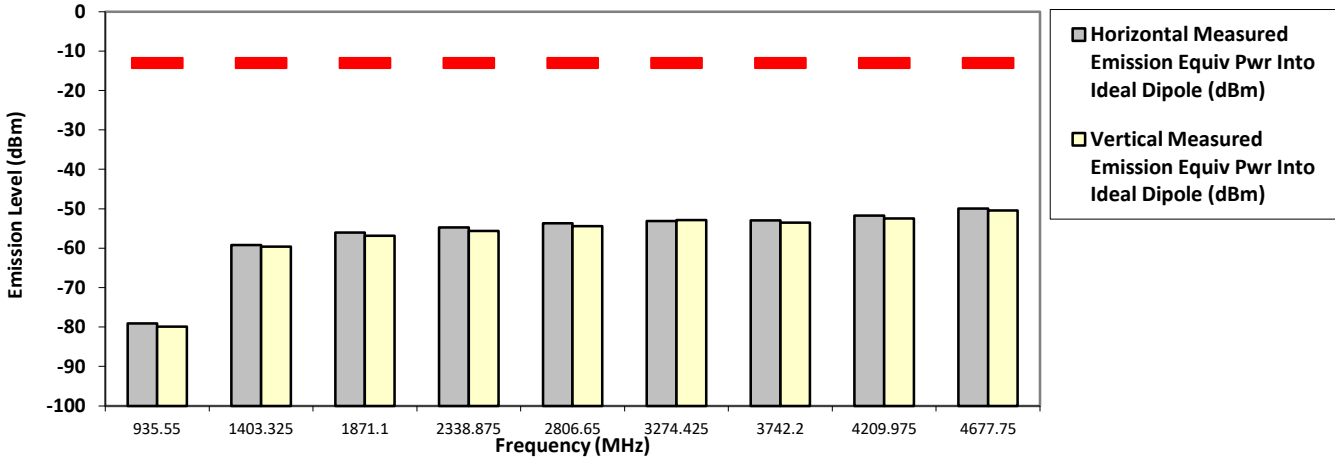
Battery Part No: NA **Accy Part No: 2806-RMN5127C-1, RSN4002A-C3, HKN4192B-C1, RLN5929A-C1**

Test Mode: TX Analog

467.775000 MHz **25 kHz** **30.000 Watt(s) /Max Power**

Frequency (MHz)	Limit	Horizontal Measured Emission Equiv Pwr Into Ideal Dipole (dBm)	Vertical Measured Emission Equiv Pwr Into ideal Dipole (dBm)
935.5500	-13.0000	-79.0456 **	-79.9294 **
1403.3250	-13.0000	-59.2177 **	-59.6151 **
1871.1000	-13.0000	-56.0410 **	-56.8151 **
2338.8750	-13.0000	-54.7717 **	-55.6152 **
2806.6500	-13.0000	-53.6481 **	-54.4268 **
3274.4250	-13.0000	-53.0787 **	-52.8566 **
3742.2000	-13.0000	-52.9564 **	-53.5092 **
4209.9750	-13.0000	-51.7252 **	-52.4667 **
4677.7500	-13.0000	-49.9229 **	-50.4606 **

RADIATED SPURIOUS EMISSIONS



The data presented here was taken using the substitution method as found in the ANSI C63.26-2015 document.

Motorola Penang EMC Lab - Test Performed by: Nazrin&Amaluddin **Tue, 5 Jan, 2021**

Remarks: ** Indicates the spurious emission could not be detected due to noise limitations or ambient.

***Pursuant to CFR 47 Part 2.1057 (c), emissions attenuated more than 20 dB below the permissible limit are not reported**

Temp(Deg): 23.6 Hum(%RH): 71.3

System MU: 4.03 dB

Remarks:

Passed Results	**Marginal Results**	**Failed Results**

SAC Transmitter Radiated Emission:

Model Number: AAM28QNN9RA1AN **S/N: 511TWX2276** **SR:23191-EMC-00006**

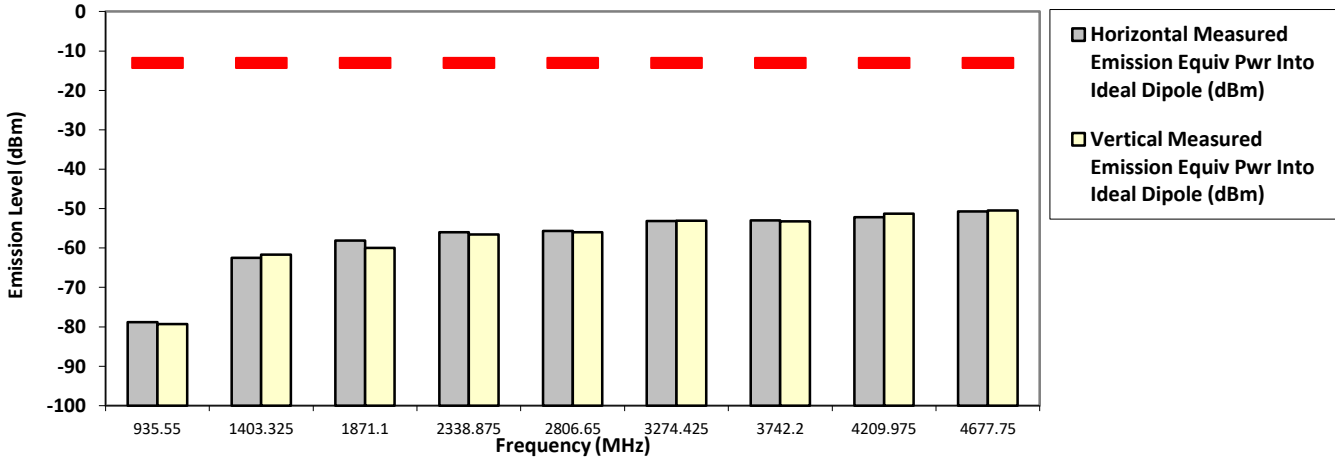
Battery Part No: NA **Accy Part No: 2806-RMN5127C-1, RSN4002A-C3, HKN4192B-C1, RLN5929A-C1**

Test Mode: TX Analog

467.775000 MHz **25 kHz** **1.000 Watt(s) /Low Power**

Frequency (MHz)	Limit	Horizontal Measured Emission Equiv Pwr Into Ideal Dipole (dBm)	Vertical Measured Emission Equiv Pwr Into ideal Dipole (dBm)
935.5500	-13.0000	-78.8428 **	-79.3290 **
1403.3250	-13.0000	-62.4637 **	-61.6627 **
1871.1000	-13.0000	-58.0939 **	-59.9920 **
2338.8750	-13.0000	-56.0338 **	-56.5946 **
2806.6500	-13.0000	-55.6529 **	-56.0183 **
3274.4250	-13.0000	-53.1552 **	-53.0811 **
3742.2000	-13.0000	-52.9677 **	-53.2356 **
4209.9750	-13.0000	-52.1963 **	-51.2754 **
4677.7500	-13.0000	-50.7403 **	-50.4781 **

RADIATED SPURIOUS EMISSIONS



The data presented here was taken using the substitution method as found in the ANSI C63.26-2015 document.

Motorola Penang EMC Lab - Test Performed by: Nazrin&Amaluddin **Tue, 5 Jan, 2021**

Remarks: ** Indicates the spurious emission could not be detected due to noise limitations or ambient.

***Pursuant to CFR 47 Part 2.1057 (c), emissions attenuated more than 20 dB below the permissible limit are not reported**

Temp(Deg): 23.6 Hum(%RH): 71.3

System MU: 4.03 dB

Remarks:

Passed Results	**Marginal Results**	**Failed Results**

SAC Transmitter Radiated Emission:

Model Number: AAM28QNN9RA1AN **S/N: 511TWX2276** **SR:23191-EMC-00006**

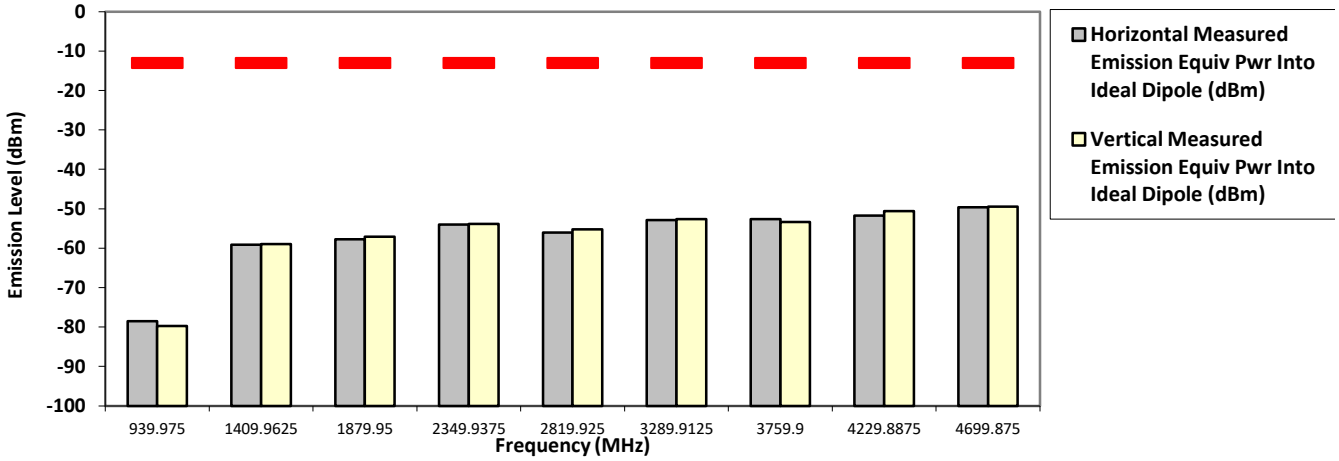
Battery Part No: NA **Accy Part No: 2806-RMN5127C-1, RSN4002A-C3, HKN4192B-C1, RLN5929A-C1**

Test Mode: TX Analog

469.987500 MHz **25 kHz** **30.000 Watt(s) /Max Power**

Frequency (MHz)	Limit	Horizontal Measured Emission Equiv Pwr Into Ideal Dipole (dBm)	Vertical Measured Emission Equiv Pwr Into ideal Dipole (dBm)
939.9750	-13.0000	-78.5185 **	-79.7062 **
1409.9625	-13.0000	-59.1086 **	-58.9427 **
1879.9500	-13.0000	-57.7392 **	-57.1087 **
2349.9375	-13.0000	-54.0071 **	-53.8371 **
2819.9250	-13.0000	-56.0004 **	-55.2467 **
3289.9125	-13.0000	-52.8700 **	-52.6064 **
3759.9000	-13.0000	-52.6563 **	-53.3476 **
4229.8875	-13.0000	-51.7586 **	-50.6148 **
4699.8750	-13.0000	-49.6070 **	-49.4789 **

RADIATED SPURIOUS EMISSIONS



The data presented here was taken using the substitution method as found in the ANSI C63.26-2015 document.

Motorola Penang EMC Lab - Test Performed by: Nazrin&Amaluddin **Tue, 5 Jan, 2021**

Remarks: ** Indicates the spurious emission could not be detected due to noise limitations or ambient.

***Pursuant to CFR 47 Part 2.1057 (c), emissions attenuated more than 20 dB below the permissible limit are not reported**

Temp(Deg): 23.6 Hum(%RH): 71.3

System MU: 4.03 dB

Remarks:

Passed Results	**Marginal Results**	**Failed Results**

SAC Transmitter Radiated Emission:

Model Number: AAM28QNN9RA1AN **S/N: 511TWX2276** **SR:23191-EMC-00006**

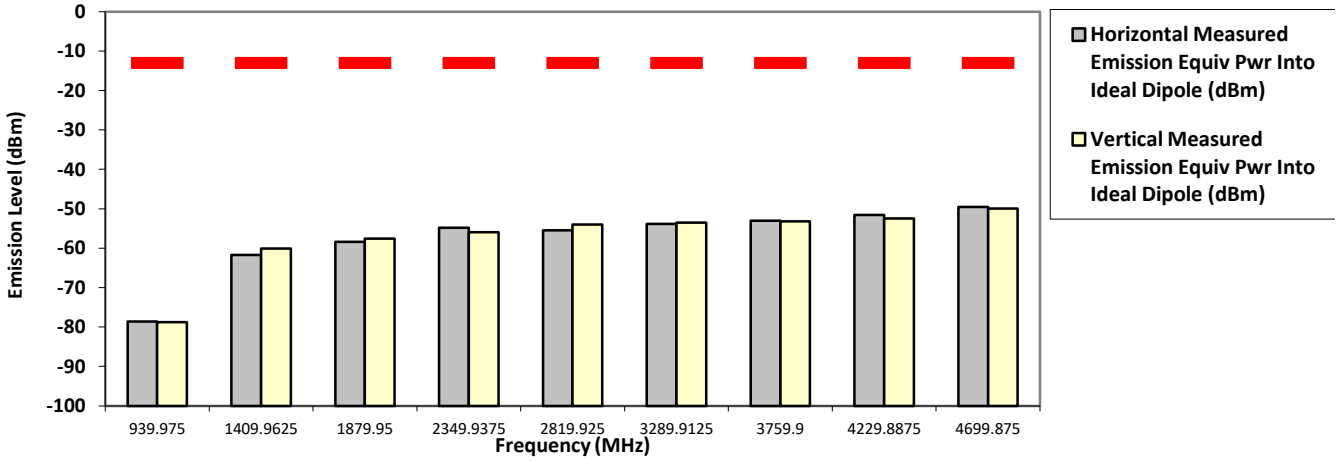
Battery Part No: NA **Accy Part No: 2806-RMN5127C-1, RSN4002A-C3, HKN4192B-C1, RLN5929A-C1**

Test Mode: TX Analog

469.987500 MHz **25 kHz** **1.000 Watt(s) /Low Power**

Frequency (MHz)	Limit	Horizontal Measured Emission Equiv Pwr Into Ideal Dipole (dBm)	Vertical Measured Emission Equiv Pwr Into ideal Dipole (dBm)
939.9750	-13.0000	-78.6187 **	-78.7891 **
1409.9625	-13.0000	-61.7240 **	-60.1247 **
1879.9500	-13.0000	-58.4082 **	-57.6022 **
2349.9375	-13.0000	-54.8518 **	-55.9334 **
2819.9250	-13.0000	-55.4923 **	-54.0416 **
3289.9125	-13.0000	-53.8774 **	-53.5528 **
3759.9000	-13.0000	-53.0087 **	-53.1872 **
4229.8875	-13.0000	-51.5673 **	-52.4851 **
4699.8750	-13.0000	-49.5743 **	-49.9527 **

RADIATED SPURIOUS EMISSIONS



The data presented here was taken using the substitution method as found in the ANSI C63.26-2015 document.

Motorola Penang EMC Lab - Test Performed by: Nazrin&Amaluddin **Tue, 5 Jan, 2021**

Remarks: ** Indicates the spurious emission could not be detected due to noise limitations or ambient.

***Pursuant to CFR 47 Part 2.1057 (c), emissions attenuated more than 20 dB below the permissible limit are not reported**

Temp(Deg): 23.6 Hum(%RH): 71.3

System MU: 4.03 dB

Remarks:

Passed Results	**Marginal Results**	**Failed Results**

6.11.3. Test Result (Digital)

SAC Transmitter Radiated Emission:

Model Number: AAM28QNN9RA1AN **S/N: 511TWX2276** **SR:23191-EMC-00006**

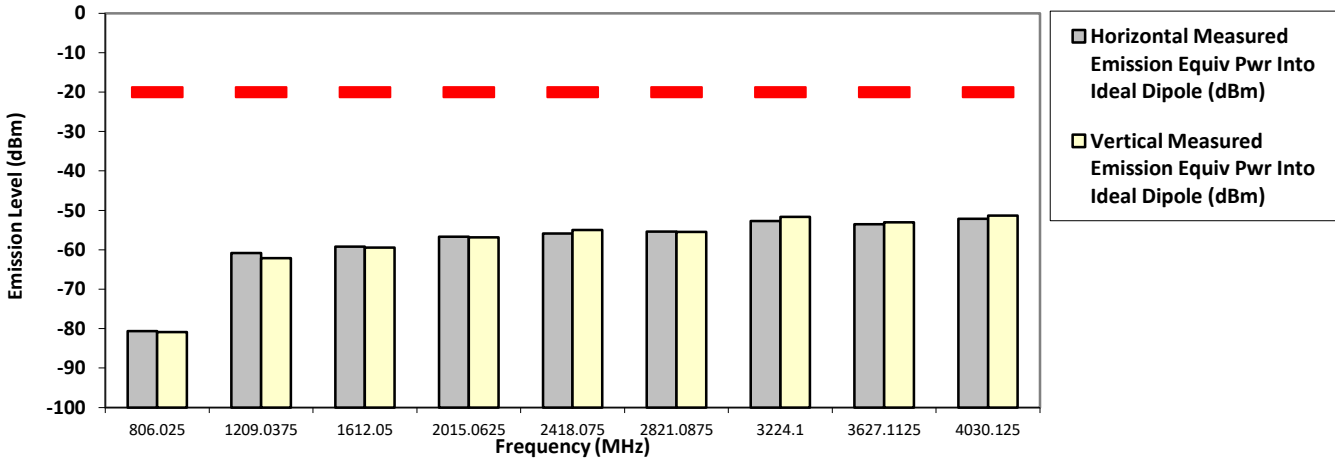
Battery Part No: NA **Accy Part No: 2806-RMN5127C-1, RSN4002A-C3, HKN4192B-C1, RLN5929A-C1**

Test Mode: TX Digital

403.012500 MHz **12.5 kHz** **30.000 Watt(s) /Max Power**

Frequency (MHz)	Limit	Horizontal Measured Emission Equiv Pwr Into Ideal Dipole (dBm)	Vertical Measured Emission Equiv Pwr Into ideal Dipole (dBm)
806.0250	-20.0000	-80.6427 **	-80.8988 **
1209.0375	-20.0000	-60.8552 **	-62.1244 **
1612.0500	-20.0000	-59.2389 **	-59.4620 **
2015.0625	-20.0000	-56.6625 **	-56.8344 **
2418.0750	-20.0000	-55.9139 **	-54.9837 **
2821.0875	-20.0000	-55.3623 **	-55.5099 **
3224.1000	-20.0000	-52.6929 **	-51.6851 **
3627.1125	-20.0000	-53.5243 **	-53.0523 **
4030.1250	-20.0000	-52.1520 **	-51.3195 **

RADIATED SPURIOUS EMISSIONS



The data presented here was taken using the substitution method as found in the ANSI C63.26-2015 document.

Motorola Penang EMC Lab - Test Performed by: Nazrin&Amaluddin **Tue, 5 Jan, 2021**

Remarks: ** Indicates the spurious emission could not be detected due to noise limitations or ambient.

***Pursuant to CFR 47 Part 2.1057 (c), emissions attenuated more than 20 dB below the permissible limit are not reported**

Temp(Deg): 23.6 Hum(%RH): 71.3

System MU: 4.03 dB

Remarks: Passed Results | **Marginal Results** | **Failed Results**

SAC Transmitter Radiated Emission:

Model Number: AAM28QNN9RA1AN **S/N: 511TWX2276** **SR:23191-EMC-00006**

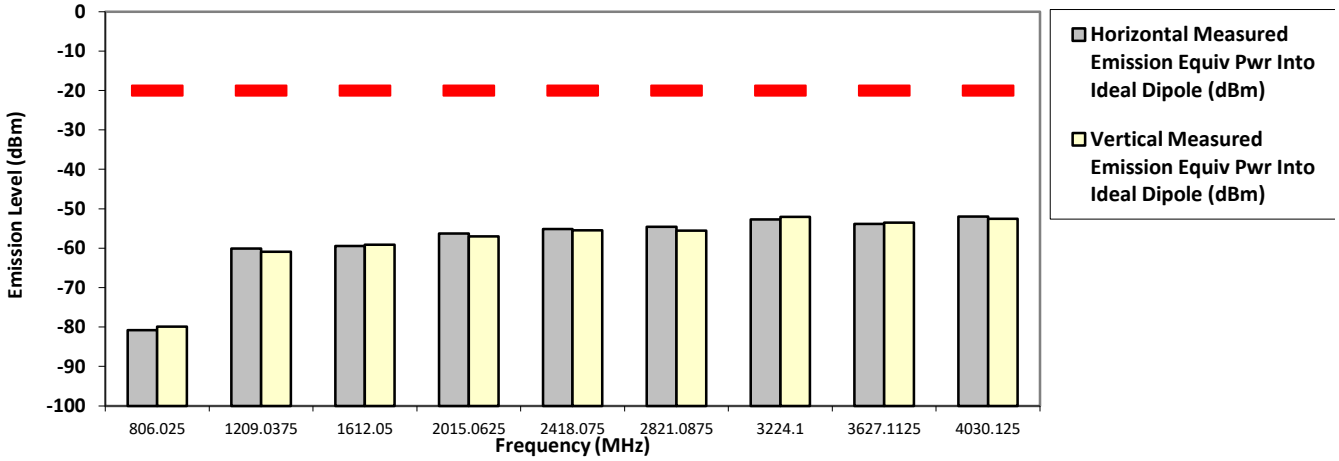
Battery Part No: NA **Accy Part No: 2806-RMN5127C-1, RSN4002A-C3, HKN4192B-C1, RLN5929A-C1**

Test Mode: TX Digital

403.012500 MHz **12.5 kHz** **1.000 Watt(s) /Low Power**

Frequency (MHz)	Limit	Horizontal Measured Emission Equiv Pwr Into Ideal Dipole (dBm)	Vertical Measured Emission Equiv Pwr Into ideal Dipole (dBm)
806.0250	-20.0000	-80.8257 **	-79.9111 **
1209.0375	-20.0000	-60.1129 **	-60.8820 **
1612.0500	-20.0000	-59.4731 **	-59.1303 **
2015.0625	-20.0000	-56.2417 **	-56.9901 **
2418.0750	-20.0000	-55.1627 **	-55.4802 **
2821.0875	-20.0000	-54.6093 **	-55.5328 **
3224.1000	-20.0000	-52.6929 **	-52.0412 **
3627.1125	-20.0000	-53.8744 **	-53.5282 **
4030.1250	-20.0000	-51.9557 **	-52.5329 **

RADIATED SPURIOUS EMISSIONS



The data presented here was taken using the substitution method as found in the ANSI C63.26-2015 document.

Motorola Penang EMC Lab - Test Performed by: Nazrin&Amaluddin **Tue, 5 Jan, 2021**

Remarks: ** Indicates the spurious emission could not be detected due to noise limitations or ambient.

***Pursuant to CFR 47 Part 2.1057 (c), emissions attenuated more than 20 dB below the permissible limit are not reported**

Temp(Deg): 23.6 Hum(%RH): 71.3

System MU: 4.03 dB

Remarks:

Passed Results	**Marginal Results**	**Failed Results**

SAC Transmitter Radiated Emission:

Model Number: AAM28QNN9RA1AN **S/N: 511TWX2276** **SR:23191-EMC-00006**

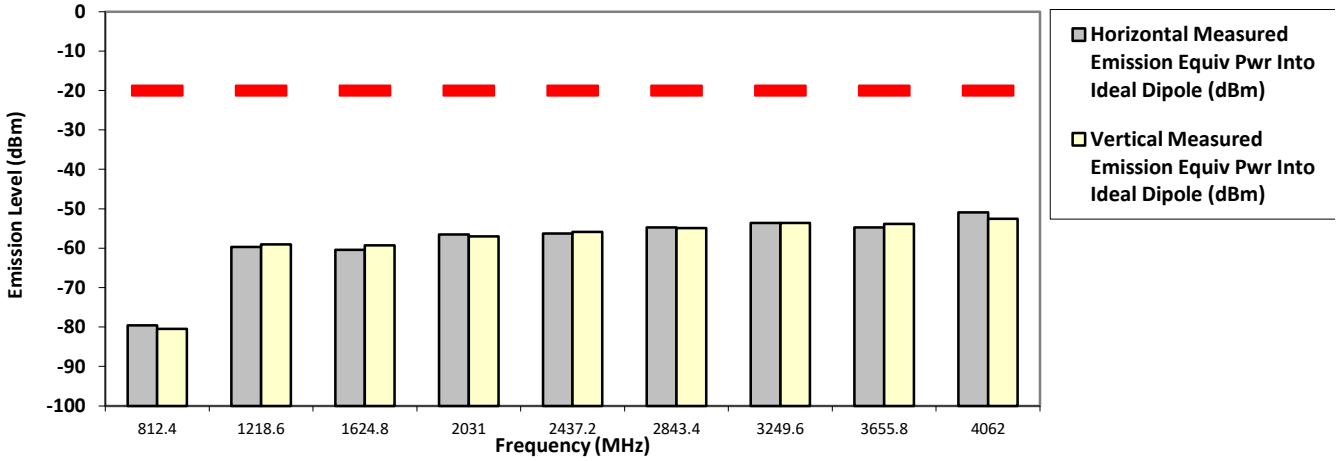
Battery Part No: NA **Accy Part No: 2806-RMN5127C-1, RSN4002A-C3, HKN4192B-C1, RLN5929A-C1**

Test Mode: TX Digital

406.200000 MHz **12.5 kHz** **30.000 Watt(s) /Max Power**

Frequency (MHz)	Limit	Horizontal Measured Emission Equiv Pwr Into Ideal Dipole (dBm)	Vertical Measured Emission Equiv Pwr Into ideal Dipole (dBm)
812.4000	-20.0000	-79.5632 **	-80.4484 **
1218.6000	-20.0000	-59.7254 **	-59.0063 **
1624.8000	-20.0000	-60.4278 **	-59.2435 **
2031.0000	-20.0000	-56.4909 **	-57.0190 **
2437.2000	-20.0000	-56.2877 **	-55.8899 **
2843.4000	-20.0000	-54.7760 **	-54.9084 **
3249.6000	-20.0000	-53.5742 **	-53.5730 **
3655.8000	-20.0000	-54.7727 **	-53.8127 **
4062.0000	-20.0000	-50.9232 **	-52.5262 **

RADIATED SPURIOUS EMISSIONS



The data presented here was taken using the substitution method as found in the ANSI C63.26-2015 document.

Motorola Penang EMC Lab - Test Performed by: Nazrin&Amaluddin **Tue, 5 Jan, 2021**

Remarks: ** Indicates the spurious emission could not be detected due to noise limitations or ambient.

***Pursuant to CFR 47 Part 2.1057 (c), emissions attenuated more than 20 dB below the permissible limit are not reported**

Temp(Deg): 23.6 Hum(%RH): 71.3

System MU: 4.03 dB

Remarks: Passed Results | **Marginal Results** | **Failed Results**

S/N: 511TWX2276 **SR:23191-EMC-00006**

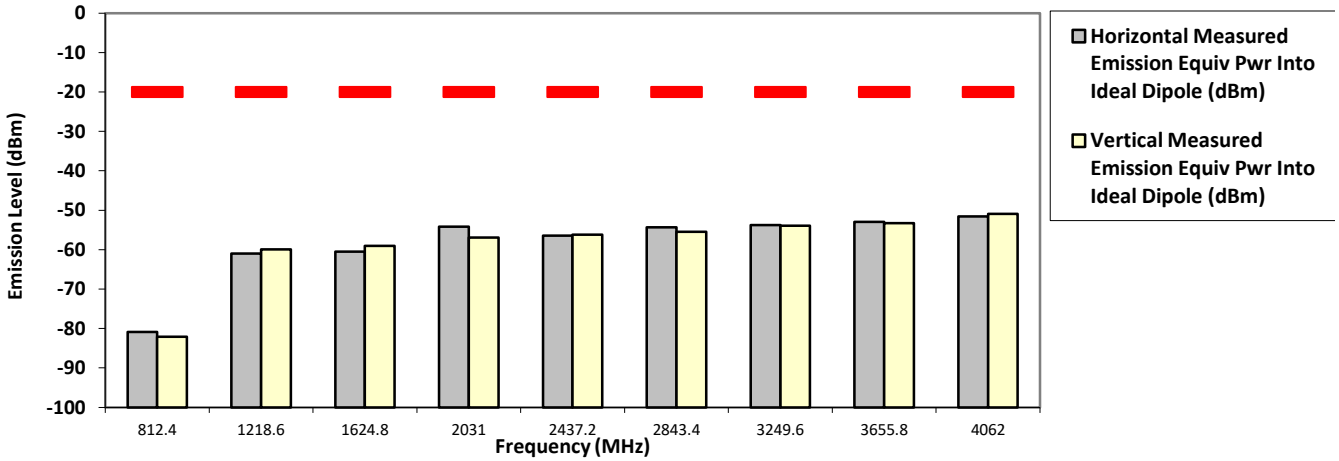
Battery Part No: NA **Accy Part No: 2806-RMN5127C-1, RSN4002A-C3, HKN4192B-C1, RLN5929A-C1**

Test Mode: TX Digital

406.200000 MHz **12.5 kHz** **1.000 Watt(s) /Low Power**

Frequency (MHz)	Limit	Horizontal Measured Emission Equiv Pwr Into Ideal Dipole (dBm)	Vertical Measured Emission Equiv Pwr Into ideal Dipole (dBm)
812.4000	-20.0000	-80.8963 **	-82.0538 **
1218.6000	-20.0000	-60.9755 **	-59.9726 **
1624.8000	-20.0000	-60.5365 **	-59.0570 **
2031.0000	-20.0000	-54.1792 **	-56.9343 **
2437.2000	-20.0000	-56.4164 **	-56.1910 **
2843.4000	-20.0000	-54.3008 **	-55.4816 **
3249.6000	-20.0000	-53.7857 **	-53.8871 **
3655.8000	-20.0000	-52.9652 **	-53.3189 **
4062.0000	-20.0000	-51.5467 **	-50.9388 **

RADIATED SPURIOUS EMISSIONS



The data presented here was taken using the substitution method as found in the ANSI C63.26-2015 document.

Motorola Penang EMC Lab - Test Performed by: Nazrin&Amaluddin **Tue, 5 Jan, 2021**

Remarks: ** Indicates the spurious emission could not be detected due to noise limitations or ambient.

***Pursuant to CFR 47 Part 2.1057 (c), emissions attenuated more than 20 dB below the permissible limit are not reported**

Temp(Deg): 23.6 Hum(%RH): 71.3

System MU: 4.03 dB

Remarks:

Passed Results	**Marginal Results**	**Failed Results**

SAC Transmitter Radiated Emission:

Model Number: AAM28QNN9RA1AN **S/N: 511TWX2276** **SR:23191-EMC-00006**

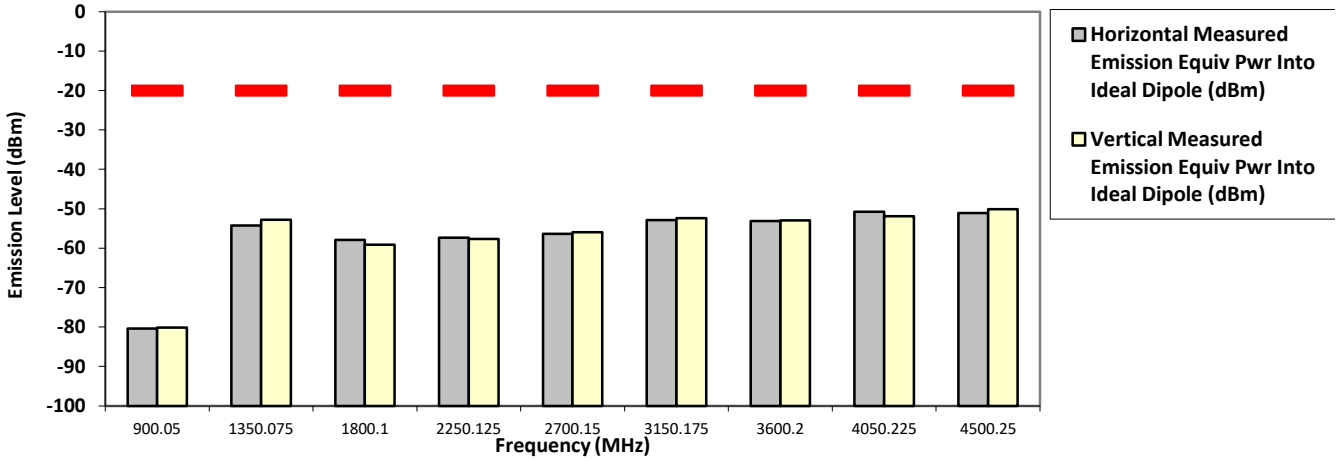
Battery Part No: NA **Accy Part No: 2806-RMN5127C-1, RSN4002A-C3, HKN4192B-C1, RLN5929A-C1**

Test Mode: TX Digital

450.025000 MHz **12.5 kHz** **30.000 Watt(s) /Max Power**

Frequency (MHz)	Limit	Horizontal Measured Emission Equiv Pwr Into Ideal Dipole (dBm)	Vertical Measured Emission Equiv Pwr Into ideal Dipole (dBm)
900.0500	-20.0000	-80.4175 **	-80.1576 **
1350.0750	-20.0000	-54.2600 *	-52.7600 *
1800.1000	-20.0000	-57.9207 **	-59.1348 **
2250.1250	-20.0000	-57.3708 **	-57.6828 **
2700.1500	-20.0000	-56.3473 **	-55.9259 **
3150.1750	-20.0000	-52.8719 **	-52.3585 **
3600.2000	-20.0000	-53.1406 **	-52.9768 **
4050.2250	-20.0000	-50.7817 **	-51.9015 **
4500.2500	-20.0000	-51.0854 **	-50.1397 **

RADIATED SPURIOUS EMISSIONS



The data presented here was taken using the substitution method as found in the ANSI C63.26-2015 document.

Motorola Penang EMC Lab - Test Performed by: Nazrin&Amaluddin **Tue, 5 Jan, 2021**

Remarks: ** Indicates the spurious emission could not be detected due to noise limitations or ambient.

***Pursuant to CFR 47 Part 2.1057 (c), emissions attenuated more than 20 dB below the permissible limit are not reported**

Temp(Deg): 23.6 Hum(%RH): 71.3

System MU: 4.03 dB

Remarks:

Passed Results	**Marginal Results**	**Failed Results**

SAC Transmitter Radiated Emission:

Model Number: AAM28QNN9RA1AN **S/N: 511TWX2276** **SR:23191-EMC-00006**

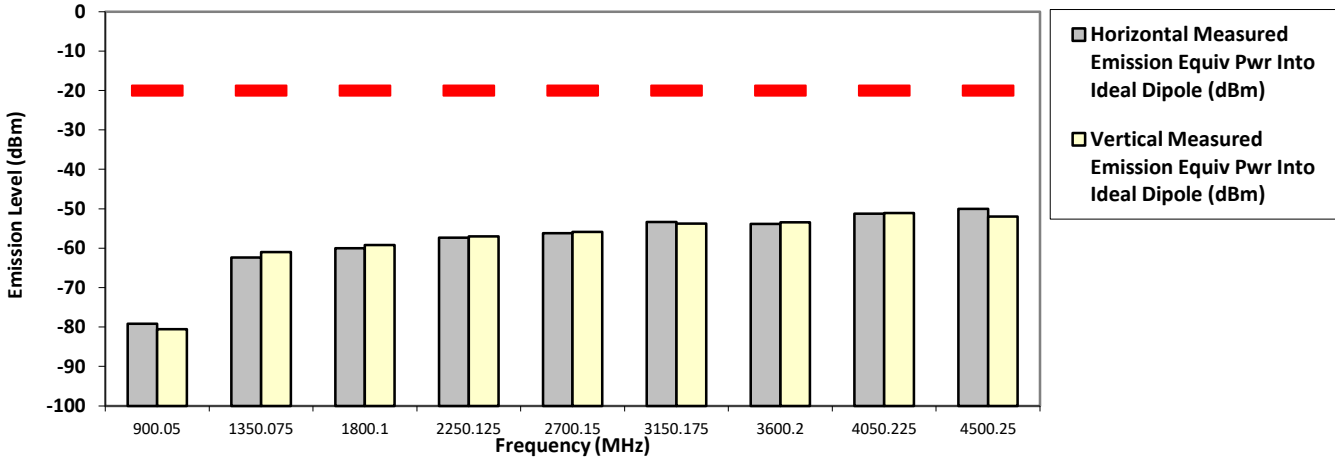
Battery Part No: NA **Accy Part No: 2806-RMN5127C-1, RSN4002A-C3, HKN4192B-C1, RLN5929A-C1**

Test Mode: TX Digital

450.025000 MHz **12.5 kHz** **1.000 Watt(s) /Low Power**

Frequency (MHz)	Limit	Horizontal Measured Emission Equiv Pwr Into Ideal Dipole (dBm)	Vertical Measured Emission Equiv Pwr Into ideal Dipole (dBm)
900.0500	-20.0000	-79.1561 **	-80.5235 **
1350.0750	-20.0000	-62.3284 **	-60.9969 **
1800.1000	-20.0000	-60.0003 **	-59.2344 **
2250.1250	-20.0000	-57.3168 **	-56.9732 **
2700.1500	-20.0000	-56.2070 **	-55.8852 **
3150.1750	-20.0000	-53.3626 **	-53.7258 **
3600.2000	-20.0000	-53.8463 **	-53.4678 **
4050.2250	-20.0000	-51.2206 **	-51.0874 **
4500.2500	-20.0000	-50.0269 **	-51.9483 **

RADIATED SPURIOUS EMISSIONS



The data presented here was taken using the substitution method as found in the ANSI C63.26-2015 document.

Motorola Penang EMC Lab - Test Performed by: Nazrin&Amaluddin **Tue, 5 Jan, 2021**

Remarks: ** Indicates the spurious emission could not be detected due to noise limitations or ambient.

***Pursuant to CFR 47 Part 2.1057 (c), emissions attenuated more than 20 dB below the permissible limit are not reported**

Temp(Deg): 23.6 Hum(%RH): 71.3

System MU: 4.03 dB

Remarks:

Passed Results	**Marginal Results**	**Failed Results**

SAC Transmitter Radiated Emission:

Model Number: AAM28QNN9RA1AN **S/N: 511TWX2276** **SR:23191-EMC-00006**

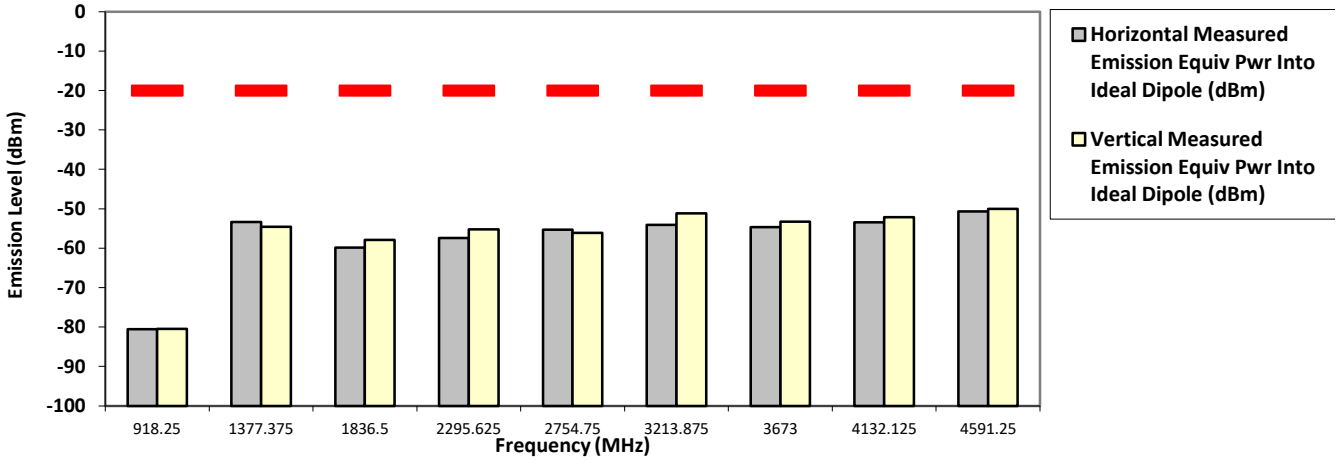
Battery Part No: NA **Accy Part No: 2806-RMN5127C-1, RSN4002A-C3, HKN4192B-C1, RLN5929A-C1**

Test Mode: TX Digital

459.125000 MHz **12.5 kHz** **30.000 Watt(s) /Max Power**

Frequency (MHz)	Limit	Horizontal Measured Emission Equiv Pwr Into Ideal Dipole (dBm)	Vertical Measured Emission Equiv Pwr Into ideal Dipole (dBm)
918.2500	-20.0000	-80.5158 **	-80.4579 **
1377.3750	-20.0000	-53.3500 *	-54.6100 *
1836.5000	-20.0000	-59.8732 **	-57.8718 **
2295.6250	-20.0000	-57.4223 **	-55.2580 **
2754.7500	-20.0000	-55.3375 **	-56.0991 **
3213.8750	-20.0000	-54.0555 **	-51.1544 **
3673.0000	-20.0000	-54.6805 **	-53.2488 **
4132.1250	-20.0000	-53.4076 **	-52.1118 **
4591.2500	-20.0000	-50.6496 **	-50.0367 **

RADIATED SPURIOUS EMISSIONS



The data presented here was taken using the substitution method as found in the ANSI C63.26-2015 document.

Motorola Penang EMC Lab - Test Performed by: Nazrin&Amaluddin **Tue, 5 Jan, 2021**

Remarks: ** Indicates the spurious emission could not be detected due to noise limitations or ambient.

***Pursuant to CFR 47 Part 2.1057 (c), emissions attenuated more than 20 dB below the permissible limit are not reported**

Temp(Deg): 23.6 Hum(%RH): 71.3

System MU: 4.03 dB

Remarks:

Passed Results	**Marginal Results**	**Failed Results**

SAC Transmitter Radiated Emission:

Model Number: AAM28QNN9RA1AN **S/N: 511TWX2276** **SR:23191-EMC-00006**

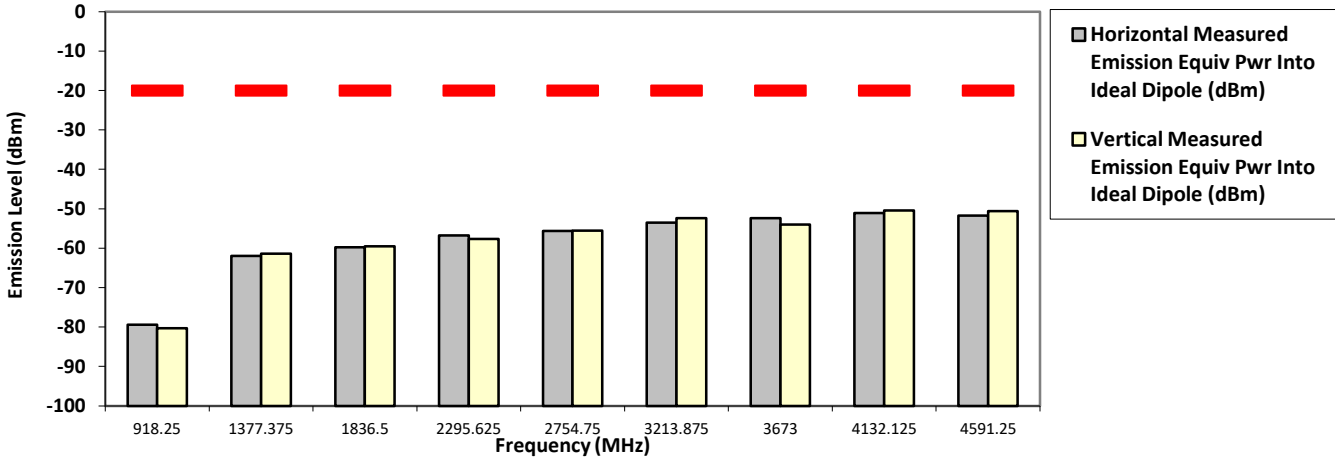
Battery Part No: NA **Accy Part No: 2806-RMN5127C-1, RSN4002A-C3, HKN4192B-C1, RLN5929A-C1**

Test Mode: TX Digital

459.125000 MHz **12.5 kHz** **1.000 Watt(s) /Low Power**

Frequency (MHz)	Limit	Horizontal Measured Emission Equiv Pwr Into Ideal Dipole (dBm)	Vertical Measured Emission Equiv Pwr Into ideal Dipole (dBm)
918.2500	-20.0000	-79.3797 **	-80.3402 **
1377.3750	-20.0000	-61.9542 **	-61.3913 **
1836.5000	-20.0000	-59.7967 **	-59.5533 **
2295.6250	-20.0000	-56.7789 **	-57.6534 **
2754.7500	-20.0000	-55.6171 **	-55.5406 **
3213.8750	-20.0000	-53.4985 **	-52.3562 **
3673.0000	-20.0000	-52.4120 **	-53.9876 **
4132.1250	-20.0000	-51.0806 **	-50.4263 **
4591.2500	-20.0000	-51.7130 **	-50.5844 **

RADIATED SPURIOUS EMISSIONS



The data presented here was taken using the substitution method as found in the ANSI C63.26-2015 document.

Motorola Penang EMC Lab - Test Performed by: Nazrin&Amaluddin **Tue, 5 Jan, 2021**

Remarks: ** Indicates the spurious emission could not be detected due to noise limitations or ambient.

***Pursuant to CFR 47 Part 2.1057 (c), emissions attenuated more than 20 dB below the permissible limit are not reported**

Temp(Deg): 23.6 Hum(%RH): 71.3

System MU: 4.03 dB

Remarks:

Passed Results	**Marginal Results**	**Failed Results**

SAC Transmitter Radiated Emission:

Model Number: AAM28QNN9RA1AN **S/N: 511TWX2276** **SR:23191-EMC-00006**

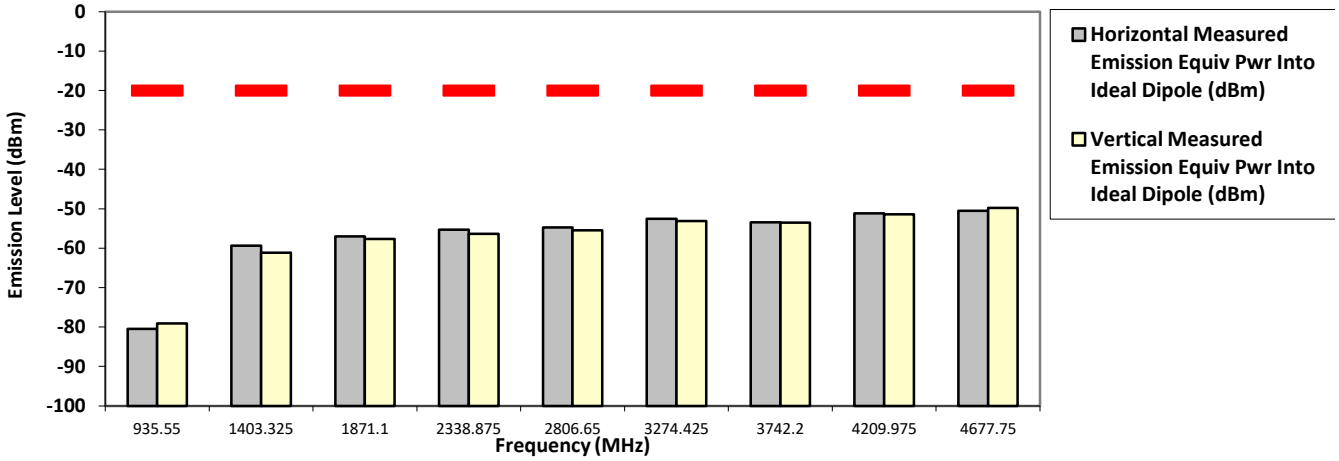
Battery Part No: NA **Accy Part No: 2806-RMN5127C-1, RSN4002A-C3, HKN4192B-C1, RLN5929A-C1**

Test Mode: TX Digital

467.775000 MHz **12.5 kHz** **30.000 Watt(s) /Max Power**

Frequency (MHz)	Limit	Horizontal Measured Emission Equiv Pwr Into Ideal Dipole (dBm)	Vertical Measured Emission Equiv Pwr Into ideal Dipole (dBm)
935.5500	-20.0000	-80.4484 **	-79.1049 **
1403.3250	-20.0000	-59.3808 **	-61.1526 **
1871.1000	-20.0000	-57.0204 **	-57.6583 **
2338.8750	-20.0000	-55.2992 **	-56.3983 **
2806.6500	-20.0000	-54.7438 **	-55.5052 **
3274.4250	-20.0000	-52.5210 **	-53.1312 **
3742.2000	-20.0000	-53.4615 **	-53.5105 **
4209.9750	-20.0000	-51.1544 **	-51.3815 **
4677.7500	-20.0000	-50.5126 **	-49.8002 **

RADIATED SPURIOUS EMISSIONS



The data presented here was taken using the substitution method as found in the ANSI C63.26-2015 document.

Motorola Penang EMC Lab - Test Performed by: Nazrin&Amaluddin **Tue, 5 Jan, 2021**

Remarks: ** Indicates the spurious emission could not be detected due to noise limitations or ambient.

***Pursuant to CFR 47 Part 2.1057 (c), emissions attenuated more than 20 dB below the permissible limit are not reported**

Temp(Deg): 23.6 Hum(%RH): 71.3

System MU: 4.03 dB

Remarks:

Passed Results	**Marginal Results**	**Failed Results**

SAC Transmitter Radiated Emission:

Model Number: AAM28QNN9RA1AN **S/N: 511TWX2276** **SR:23191-EMC-00006**

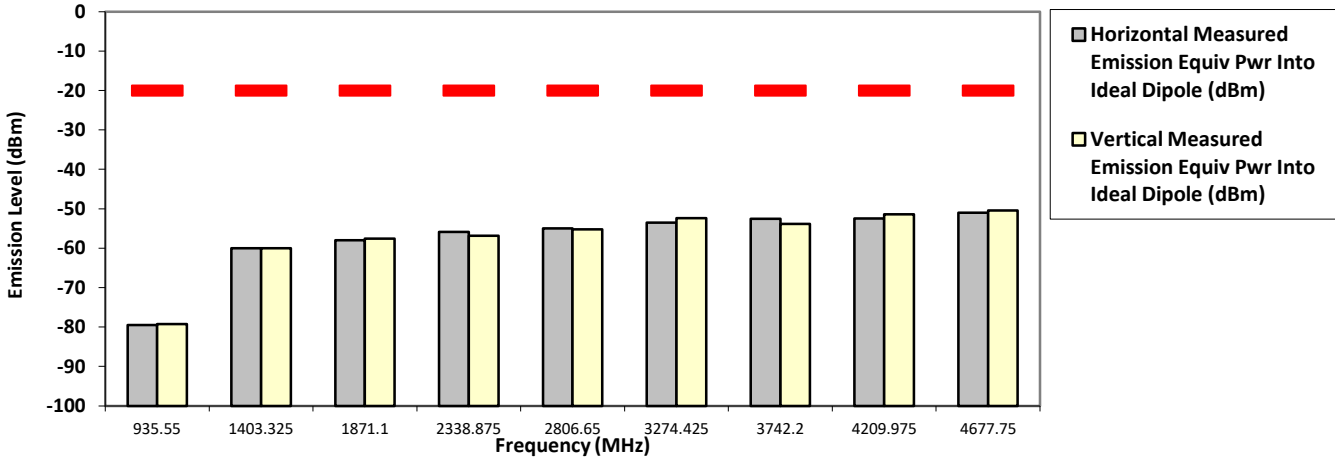
Battery Part No: NA **Accy Part No: 2806-RMN5127C-1, RSN4002A-C3, HKN4192B-C1, RLN5929A-C1**

Test Mode: TX Digital

467.775000 MHz **12.5 kHz** **1.000 Watt(s) /Low Power**

Frequency (MHz)	Limit	Horizontal Measured Emission Equiv Pwr Into Ideal Dipole (dBm)	Vertical Measured Emission Equiv Pwr Into ideal Dipole (dBm)
935.5500	-20.0000	-79.4763 **	-79.2513 **
1403.3250	-20.0000	-60.0454 **	-60.0257 **
1871.1000	-20.0000	-58.0195 **	-57.5678 **
2338.8750	-20.0000	-55.8924 **	-56.8317 **
2806.6500	-20.0000	-55.0133 **	-55.2395 **
3274.4250	-20.0000	-53.5249 **	-52.3894 **
3742.2000	-20.0000	-52.5104 **	-53.8180 **
4209.9750	-20.0000	-52.4985 **	-51.4488 **
4677.7500	-20.0000	-50.9806 **	-50.4632 **

RADIATED SPURIOUS EMISSIONS



The data presented here was taken using the substitution method as found in the ANSI C63.26-2015 document.

Motorola Penang EMC Lab - Test Performed by: Nazrin&Amaluddin **Tue, 5 Jan, 2021**

Remarks: ** Indicates the spurious emission could not be detected due to noise limitations or ambient.

***Pursuant to CFR 47 Part 2.1057 (c), emissions attenuated more than 20 dB below the permissible limit are not reported**

Temp(Deg): 23.6 Hum(%RH): 71.3

System MU: 4.03 dB

Remarks: Passed Results | **Marginal Results** | **Failed Results**

SAC Transmitter Radiated Emission:

Model Number: AAM28QNN9RA1AN **S/N: 511TWX2276** **SR:23191-EMC-00006**

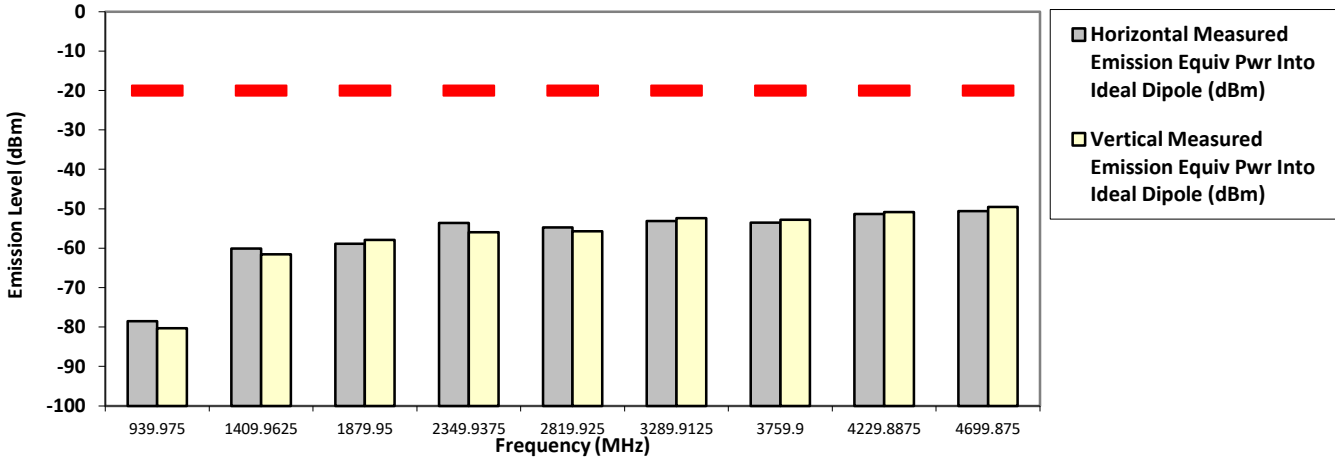
Battery Part No: NA **Accy Part No: 2806-RMN5127C-1, RSN4002A-C3, HKN4192B-C1, RLN5929A-C1**

Test Mode: TX Digital

469.987500 MHz **12.5 kHz** **30.000 Watt(s) /Max Power**

Frequency (MHz)	Limit	Horizontal Measured Emission Equiv Pwr Into Ideal Dipole (dBm)	Vertical Measured Emission Equiv Pwr Into ideal Dipole (dBm)
939.9750	-20.0000	-78.5499 **	-80.3284 **
1409.9625	-20.0000	-60.0823 **	-61.5658 **
1879.9500	-20.0000	-58.8810 **	-57.8642 **
2349.9375	-20.0000	-53.6343 **	-55.9383 **
2819.9250	-20.0000	-54.7201 **	-55.6960 **
3289.9125	-20.0000	-53.1367 **	-52.3977 **
3759.9000	-20.0000	-53.4813 **	-52.7546 **
4229.8875	-20.0000	-51.3104 **	-50.8261 **
4699.8750	-20.0000	-50.6293 **	-49.5088 **

RADIATED SPURIOUS EMISSIONS



The data presented here was taken using the substitution method as found in the ANSI C63.26-2015 document.

Motorola Penang EMC Lab - Test Performed by: Nazrin&Amaluddin **Tue, 5 Jan, 2021**

Remarks: ** Indicates the spurious emission could not be detected due to noise limitations or ambient.

***Pursuant to CFR 47 Part 2.1057 (c), emissions attenuated more than 20 dB below the permissible limit are not reported**

Temp(Deg): 23.6 Hum(%RH): 71.3

System MU: 4.03 dB

Remarks:

Passed Results	**Marginal Results**	**Failed Results**

SAC Transmitter Radiated Emission:

Model Number: AAM28QNN9RA1AN **S/N: 511TWX2276** **SR:23191-EMC-00006**

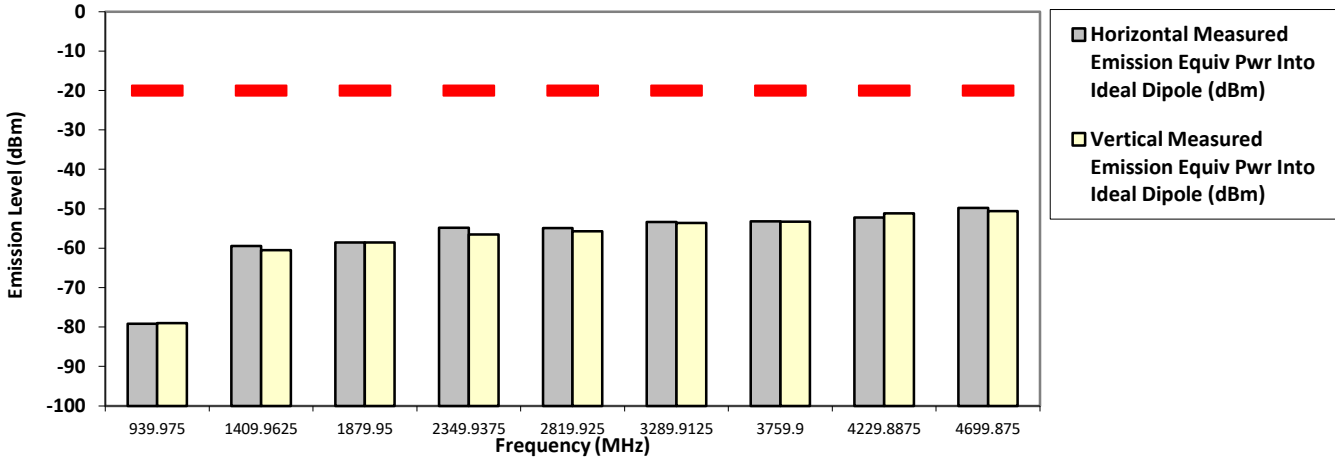
Battery Part No: NA **Accy Part No: 2806-RMN5127C-1, RSN4002A-C3, HKN4192B-C1, RLN5929A-C1**

Test Mode: TX Digital

469.987500 MHz **12.5 kHz** **1.000 Watt(s) /Low Power**

Frequency (MHz)	Limit	Horizontal Measured Emission Equiv Pwr Into Ideal Dipole (dBm)	Vertical Measured Emission Equiv Pwr Into ideal Dipole (dBm)
939.9750	-20.0000	-79.1484 **	-78.9727 **
1409.9625	-20.0000	-59.4517 **	-60.4767 **
1879.9500	-20.0000	-58.5205 **	-58.5398 **
2349.9375	-20.0000	-54.7921 **	-56.4976 **
2819.9250	-20.0000	-54.9397 **	-55.7251 **
3289.9125	-20.0000	-53.3275 **	-53.6248 **
3759.9000	-20.0000	-53.1894 **	-53.2452 **
4229.8875	-20.0000	-52.2024 **	-51.1446 **
4699.8750	-20.0000	-49.7569 **	-50.6060 **

RADIATED SPURIOUS EMISSIONS



The data presented here was taken using the substitution method as found in the ANSI C63.26-2015 document.

Motorola Penang EMC Lab - Test Performed by: Nazrin&Amaluddin **Tue, 5 Jan, 2021**

Remarks: ** Indicates the spurious emission could not be detected due to noise limitations or ambient.

***Pursuant to CFR 47 Part 2.1057 (c), emissions attenuated more than 20 dB below the permissible limit are not reported**

Temp(Deg): 23.6 Hum(%RH): 71.3

System MU: 4.03 dB

Remarks:

Passed Results	**Marginal Results**	**Failed Results**

6.11.4. Test Limit

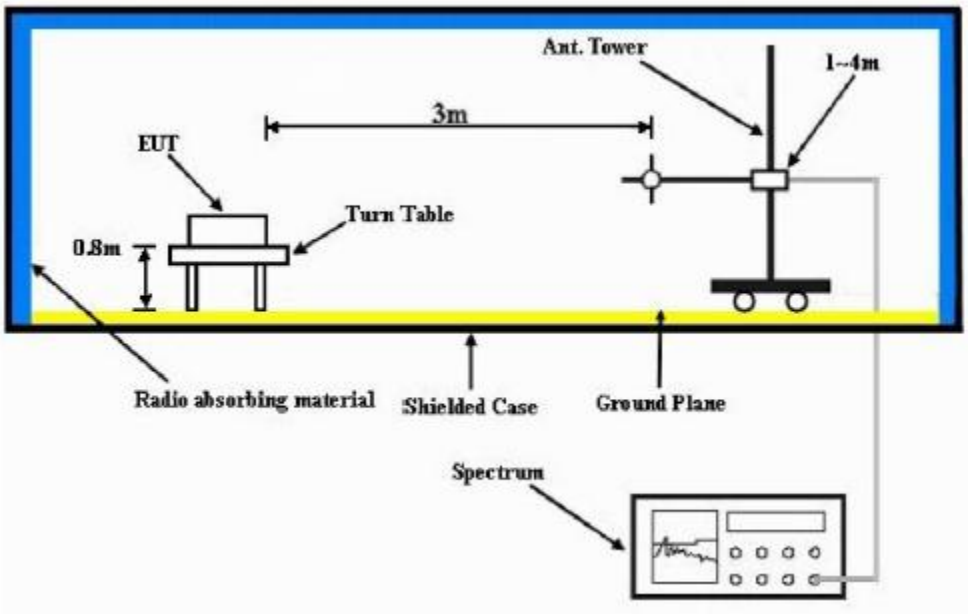
Table below summarized the power of any emission outside a licensee's frequency block shall be attenuated below the transmitter power (P) by at least

Channel Spacing	Part 22	Part 24D	Part 74	Part 80	Part 90 (UHF, VHF, 800, 900)	Part 90 (700)
12.5kHz	43 + log10(P) (-13 dBm)	43 + log10(P) (-13 dBm)	43 + log10(P) (-13 dBm)	Not Applicable	50 + log10(P) (-20 dBm)	43 + log10(P) (-13 dBm)
25kHz		Not Applicable		43 + log10(P) (-13 dBm)	43 + log10(P) (-13 dBm)	43 + log10(P) (-13 dBm)

Channel Spacing	RSS 134	RSS 182	RSS 119 (UHF, VHF, 800, 900)	RSS 119 (700)
12.5kHz	43 + log10(P) (-13 dBm)	Not Applicable	50 + log10(P) (-20 dBm)	43 + log10(P) (-13 dBm)
25kHz	Not Applicable	43 + log10(P) (-13 dBm)	43 + log10(P) (-13 dBm)	43 + log10(P) (-13 dBm)

6.12. Effective Radiated Power (ERP)

6.12.1. Test Setup



1) The Resolution Bandwidth for Equivalent Radiated Power (ERP) below 1 GHz is 100 kHz with Video Bandwidth = 300 kHz and Resolution Bandwidth for EIRP above 1 GHz is 1 MHz with Video Bandwidth = 3 MHz. Detector Mode is RMS.
2) In the semi-anechoic chamber, setup as illustrated above the DUT placed on the 0.8m height (for Fc < 1GHz) or 1.5m (for Fc > 1GHz) of Turn Table, rotated the table 45 degree each interval to search the maximum radiation power and receiver antenna shall be rotated vertical and horizontal polarization and moved height from 1m to 4m to find the maximum polar radiated power for each degree interval. The “Read Value” is the spectrum reading of maximum power value.
3) The substitution antenna is substituted for DUT at the same position and signals generator (S.G) export the CW signal to the substitution antenna via a TX cable. The receiver antenna shall be rotated vertical and horizontal polarization and moved height from 1m to 4m to find the maximum radiation power. Record the power level of maximum radiation power from spectrum. So, the Measured substitution value = Ref level of S.G + TX cables loss – Substituted Antenna Gain.

6.12.2. Test Result

EIRP/ERP

S/N: 511TWX2279 **Tx Power: 2.000 Watts**
Tx Limit Power: 2.00 Watts
Channel Spacing : 25 kHz **Modulation: FM**
Accessory: PMAE4043A, 2806-RMN5127C-1, RSN4002A-C3, HKN4192B-C1, RLN5929A-C1

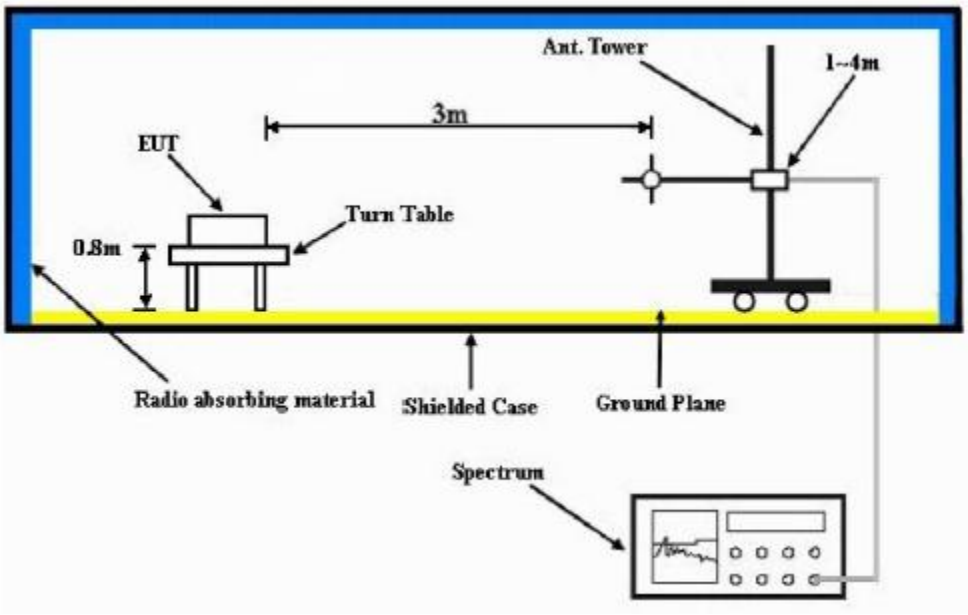
Antenna Polarization	Frequency (MHz)	EIRP (dBm)	ERP (dBm)
Vert.	467.7750	34.35	32.20

6.12.3. Test Limit

Ship station frequencies above 27500kHz must not exceed a conducted power of 4W or 2W ERP per 80.215(e)(3)

6.13. GNSS (EIRP for 1559 - 1610MHz)

6.13.1. Test Setup



4) The Resolution Bandwidth for Equivalent Isotropically Radiated Power (EIRP) below 1 GHz is 100 kHz with Video Bandwidth = 300 kHz and Resolution Bandwidth for EIRP above 1 GHz is 1 MHz with Video Bandwidth = 3 MHz. Detector Mode is RMS.
5) In the semi-anechoic chamber, setup as illustrated above the DUT placed on the 0.8m height of Turn Table, rotated the table 45 degree each interval to search the maximum radiation power and receiver antenna shall be rotated vertical and horizontal polarization and moved height from 1m to 4m to find the maximum polar radiated power for each degree interval. The “Read Value” is the spectrum reading of maximum power value.
6) The substitution antenna is substituted for DUT at the same position and signals generator (S.G) export the CW signal to the substitution antenna via a TX cable. The receiver antenna shall be rotated vertical and horizontal polarization and moved height from 1m to 4m to find the maximum radiation power. Record the power level of maximum radiation power from spectrum. So, the Measured substitution value = Ref level of S.G + TX cables loss – Substituted Antenna Gain.
7) EIRP = “Read Value” + Measured substitution value + 2.15.

6.13.1. Test Result

Not Applicable

6.13.2. Test Limit

For operations in the 758-775 MHz and 788-805 MHz bands, all emissions including harmonics in the band 1559-1610 MHz shall be limited to −70 dBW/MHz equivalent isotropically radiated power (EIRP) for wideband signals, and −80 dBW EIRP for discrete emissions of less than 700 Hz bandwidth.

~ End of Test Report ~