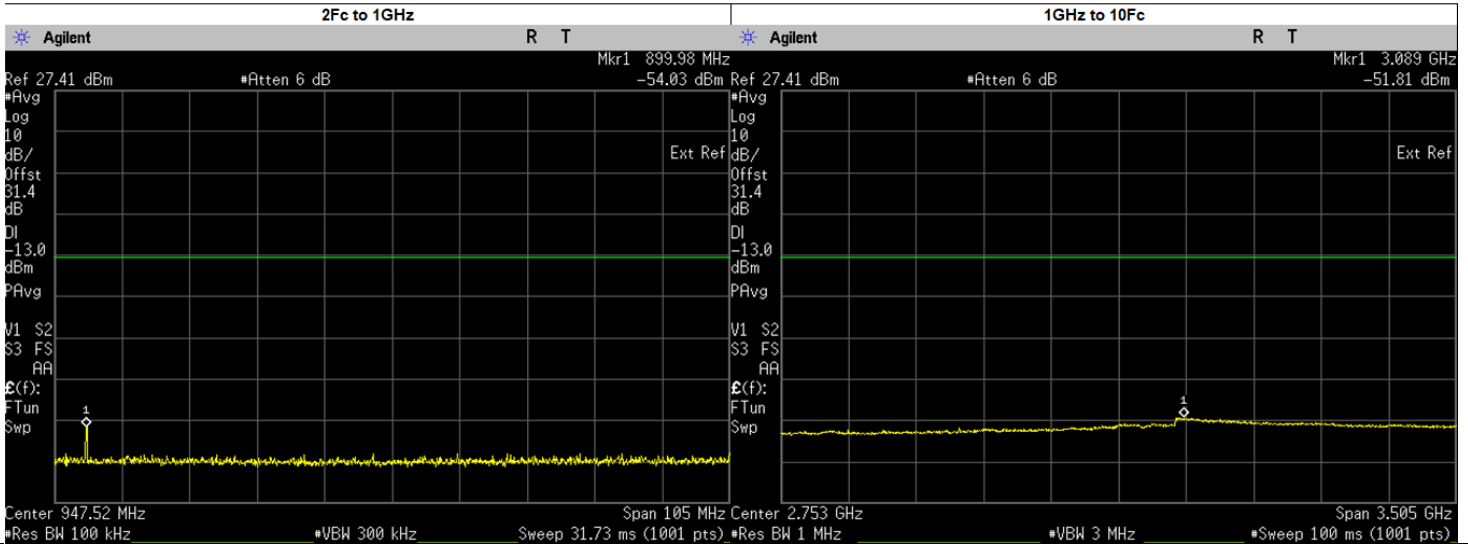
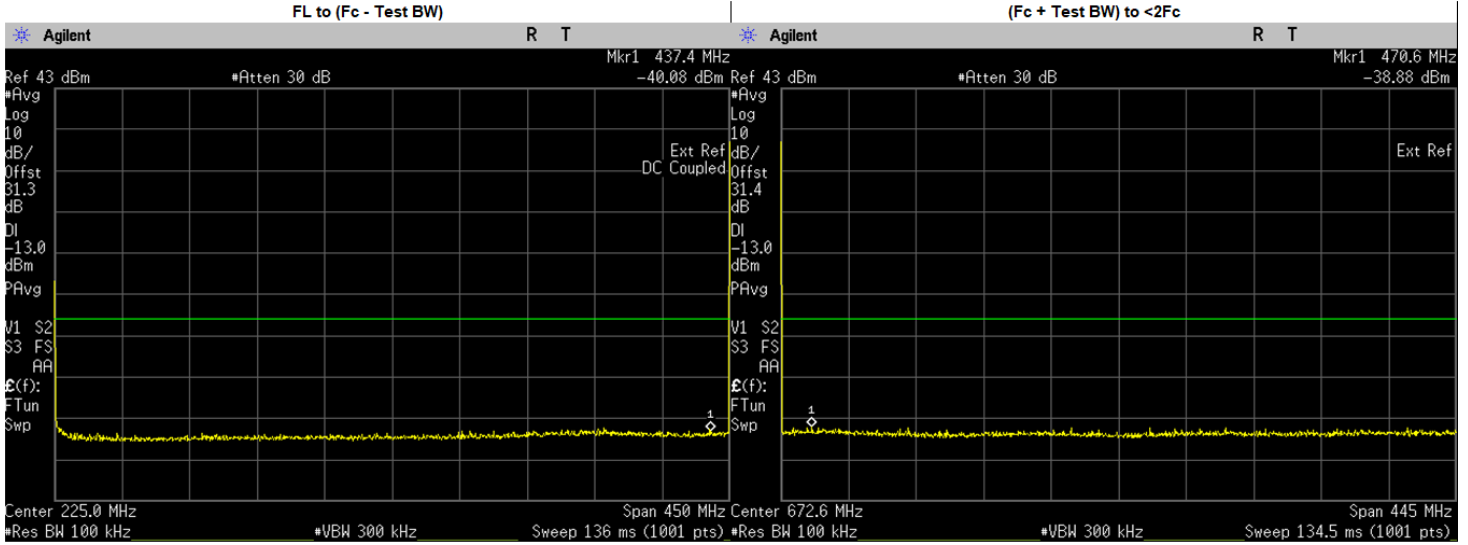
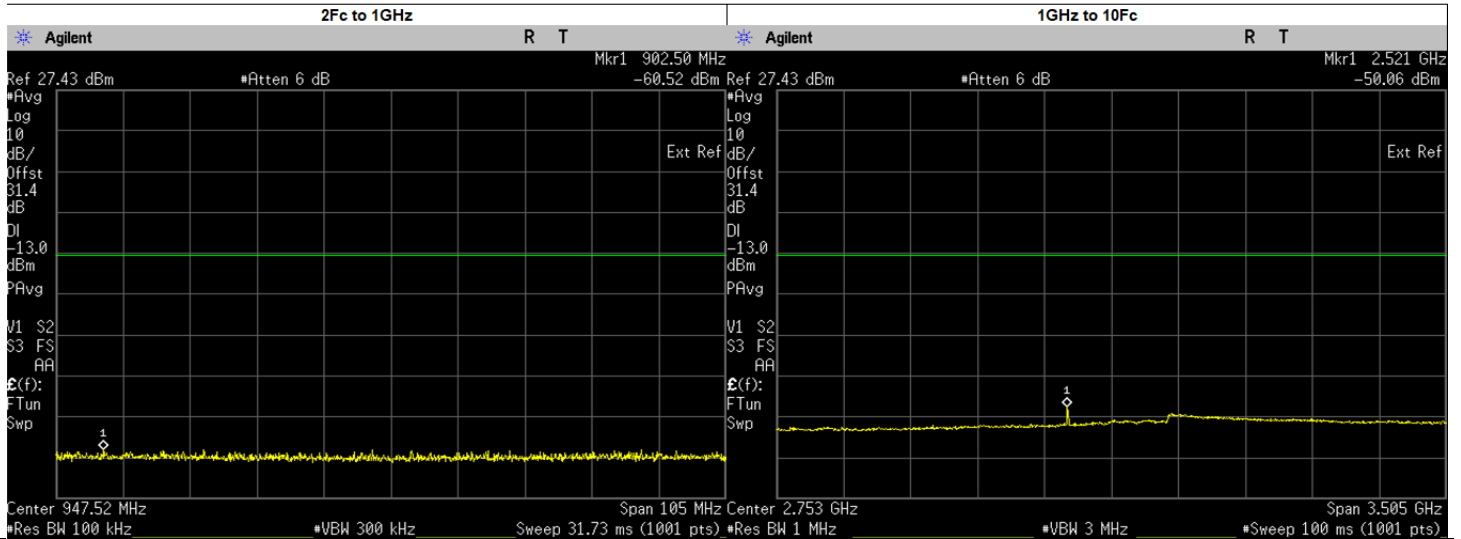
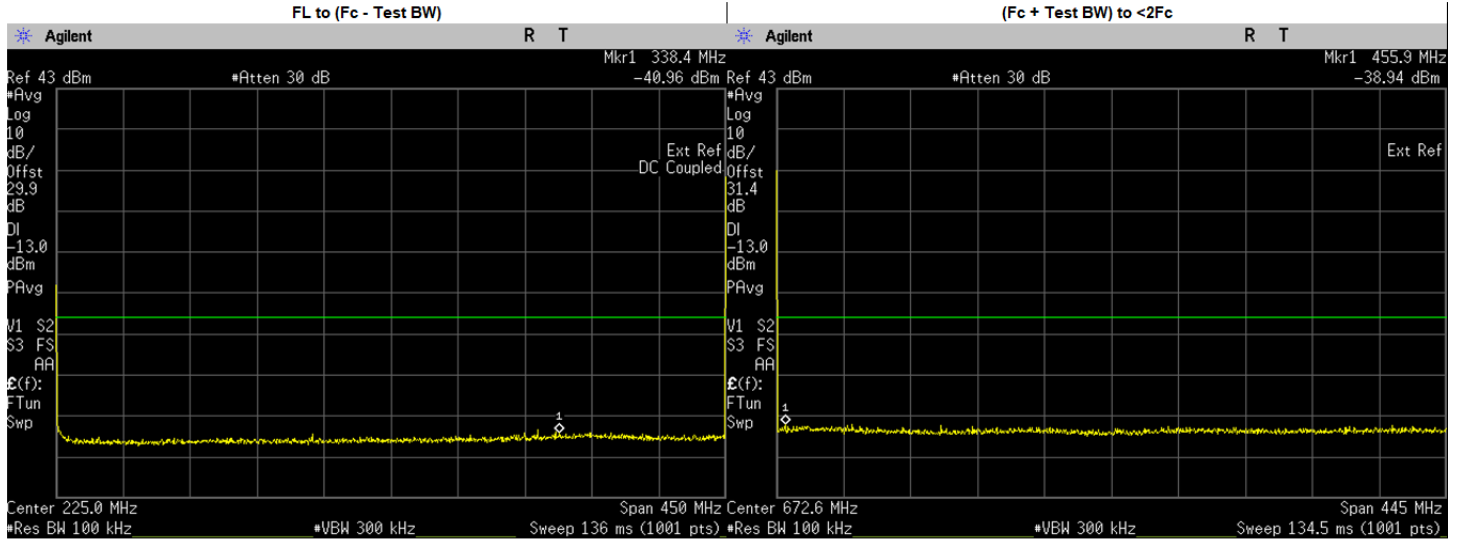


**Analog: 450.025 MHz, 25 kHz Channel Spacing, Max Power**  
 Not for FCC review



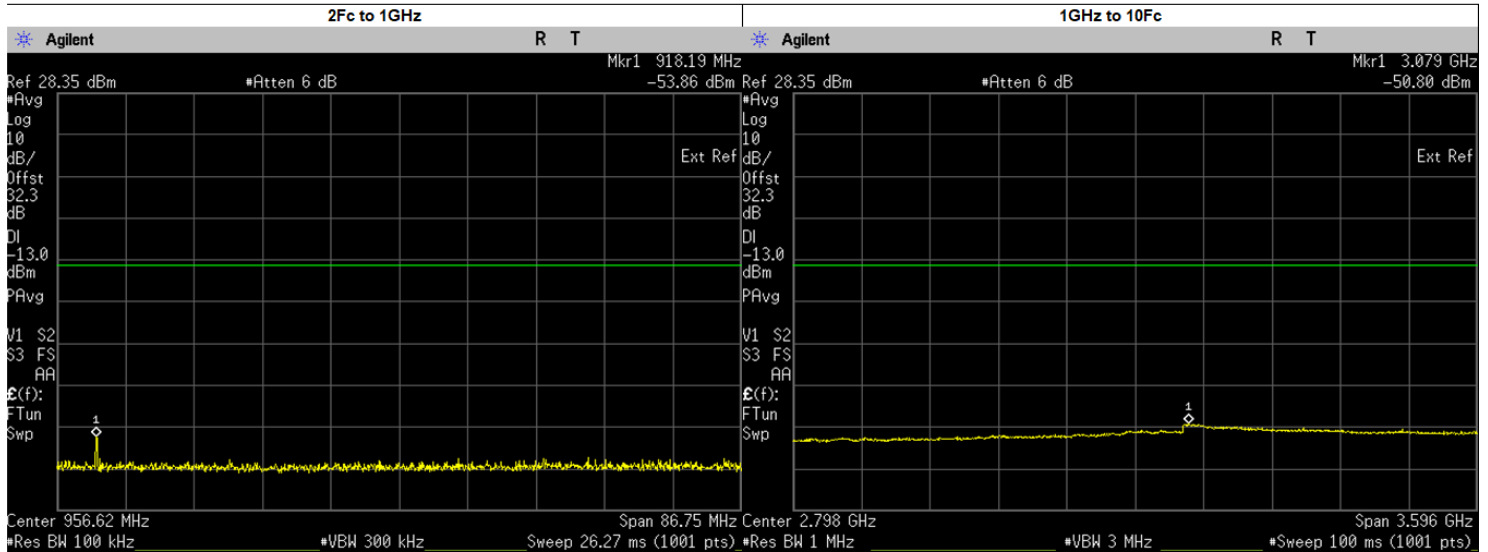
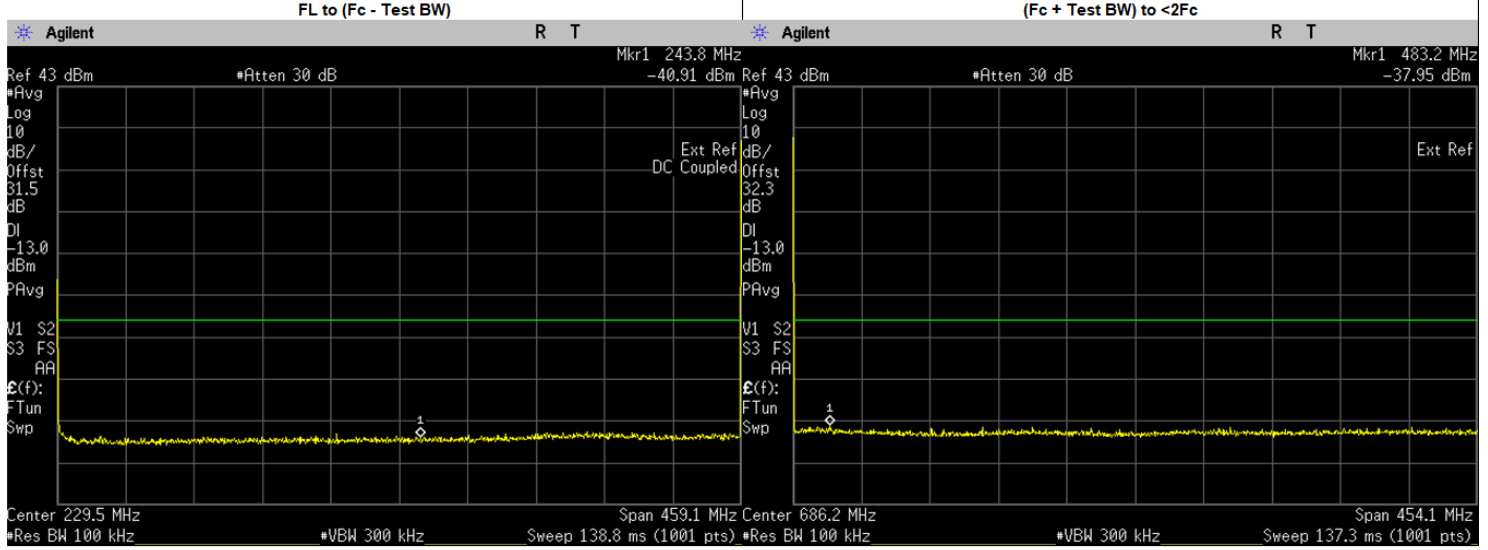
Frequency Range	Highest Spur Frequency (MHz)	Spurious Level (dBm)	Failing Limit (dBm)	Results
FL to (Fc - Test BW)	437.4000	-40.0830	-13.00	PASS
(Fc + Test BW) to <2Fc	470.5503	-38.8800	-13.00	PASS
2Fc to 1GHz	899.9827	-54.0300	-13.00	PASS
	900.0500	-54.1130	-13.00	PASS
1GHz to 10Fc	3089.1290	-51.8100	-13.00	PASS
	1350.0750	-54.9505	-13.00	PASS
	1800.1000	-55.3551	-13.00	PASS
	2250.1250	-54.9508	-13.00	PASS
	2700.1500	-54.1843	-13.00	PASS
	3150.1750	-52.4292	-13.00	PASS
	3600.2000	-53.4076	-13.00	PASS
	4050.2250	-53.6023	-13.00	PASS
	4500.2500	-53.9746	-13.00	PASS

**Analog: 450.025 MHz, 25 kHz Channel Spacing, Low Power**  
 Not for FCC review



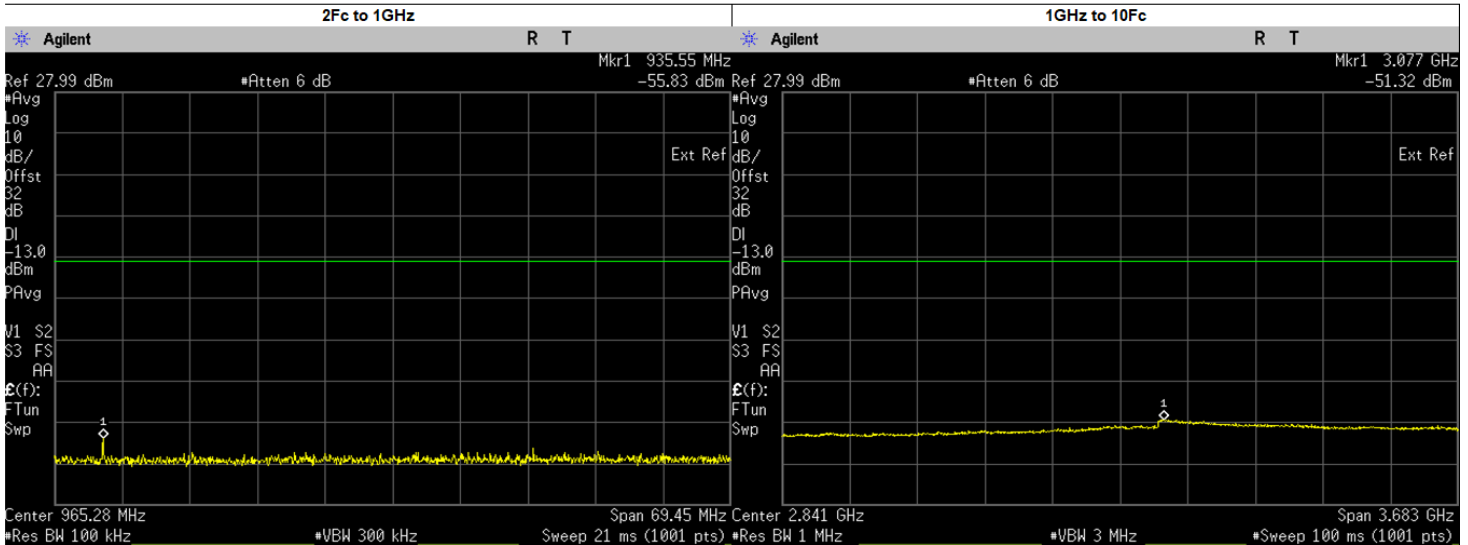
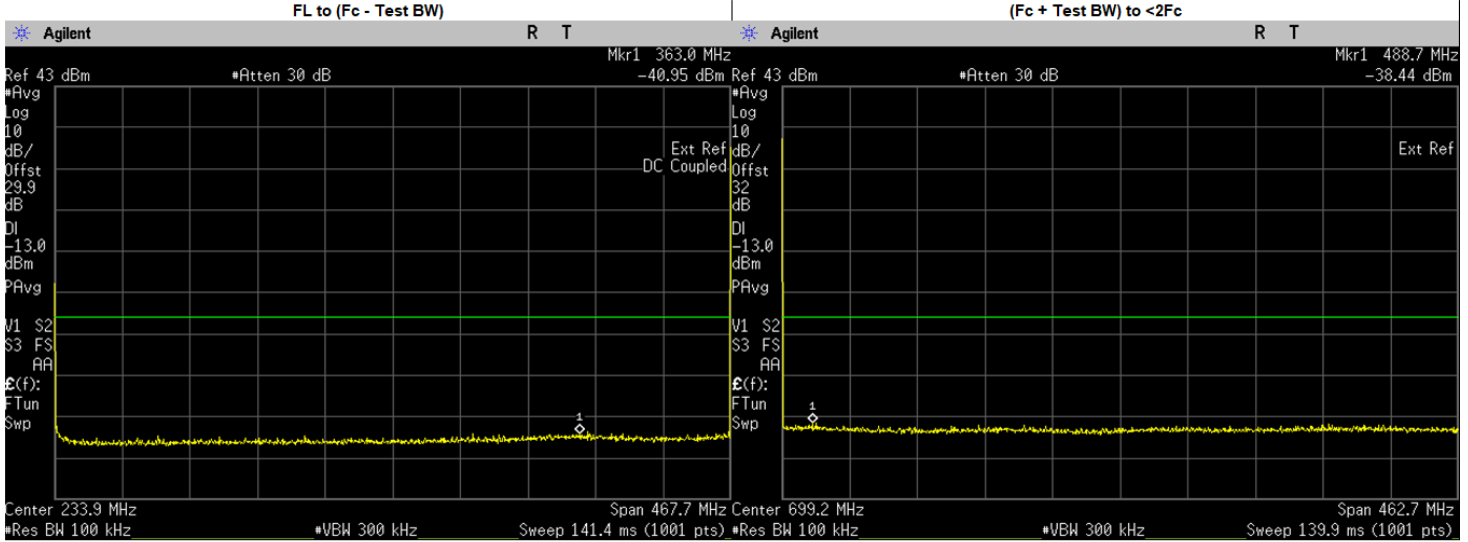
Frequency Range	Highest Spur Frequency (MHz)	Spurious Level (dBm)	Failing Limit (dBm)	Results
FL to (Fc - Test BW)	338.4000	-40.9570	-13.00	PASS
(Fc + Test BW) to <2Fc	455.8664	-38.9500	-13.00	PASS
2Fc to 1GHz	902.5014	-60.5200	-13.00	PASS
	900.0500	-62.2362	-13.00	PASS
1GHz to 10Fc	2521.2780	-50.0600	-13.00	PASS
	1350.0750	-55.6172	-13.00	PASS
	1800.1000	-55.3649	-13.00	PASS
	2250.1250	-54.9180	-13.00	PASS
	2700.1500	-54.1506	-13.00	PASS
	3150.1750	-52.4208	-13.00	PASS
	3600.2000	-53.3111	-13.00	PASS
	4050.2250	-54.0199	-13.00	PASS
	4500.2500	-53.9262	-13.00	PASS

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



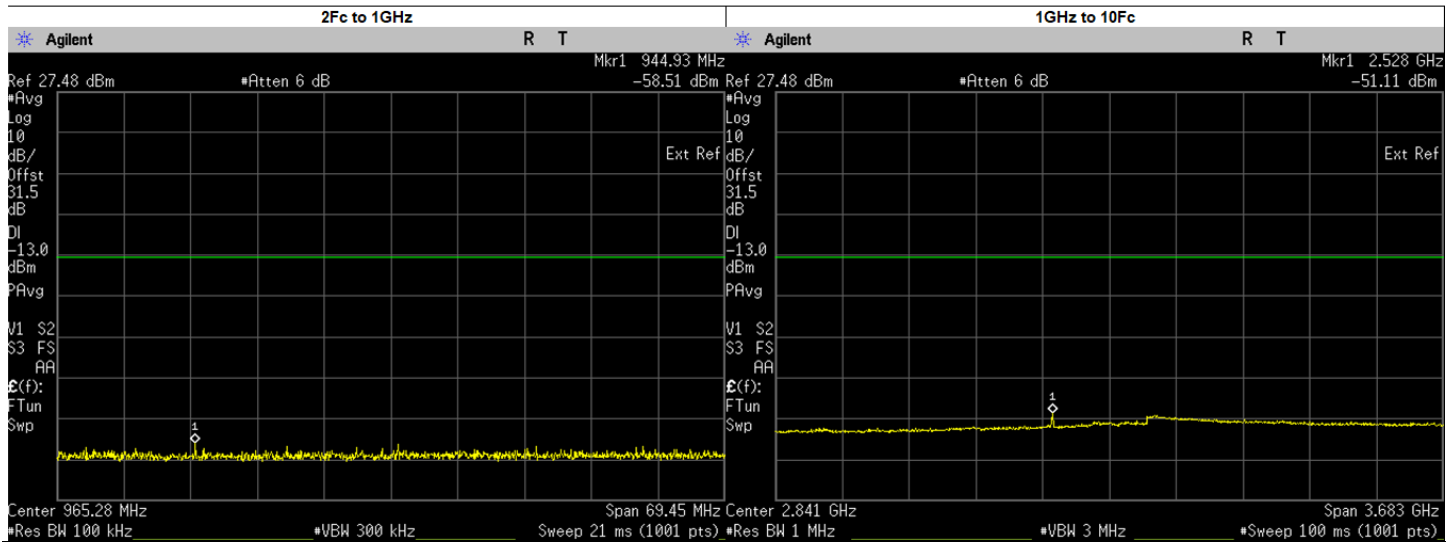
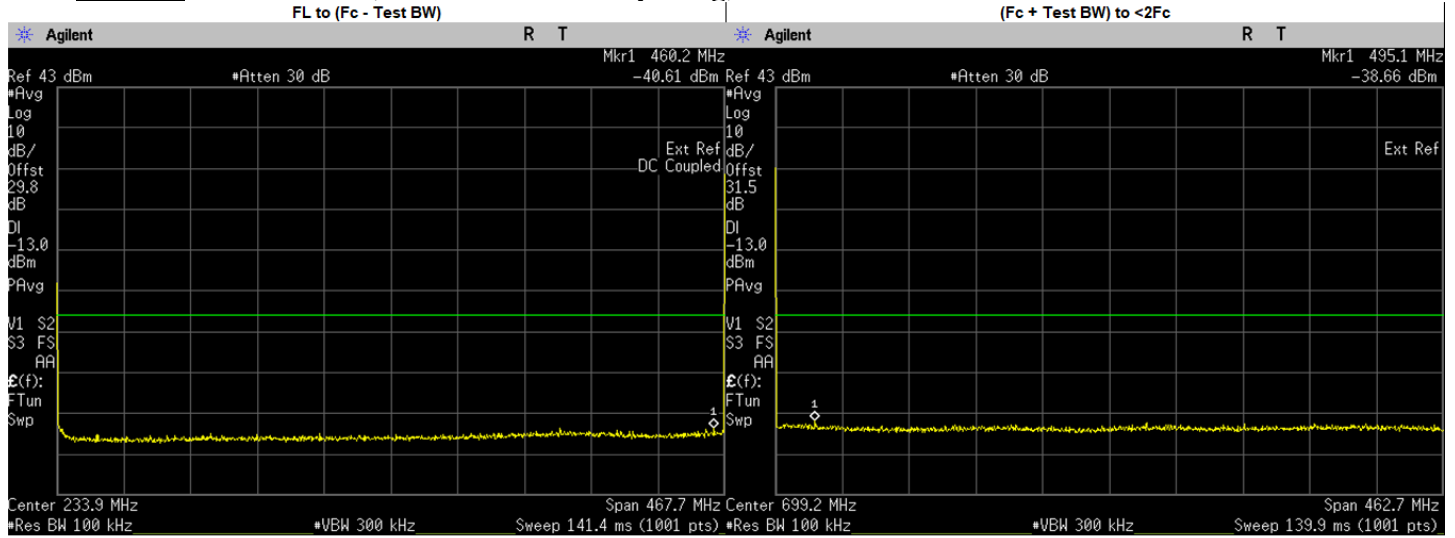
Frequency Range	Highest Spur Frequency (MHz)	Spurious Level (dBm)	Failing Limit (dBm)	Results
FL to (Fc - Test BW)	243.8000	-40.9120	-13.00	PASS
(Fc + Test BW) to <2Fc	483.2474	-37.9500	-13.00	PASS
2Fc to 1GHz	918.1947	-53.8600	-13.00	PASS
	918.2500	-54.1027	-13.00	PASS
1GHz to 10Fc	3078.6330	-50.8000	-13.00	PASS
	1377.3750	-54.2075	-13.00	PASS
	1836.5000	-54.4135	-13.00	PASS
	2295.6250	-53.9801	-13.00	PASS
	2754.7500	-52.7634	-13.00	PASS
	3213.8750	-51.9222	-13.00	PASS
	3673.0000	-52.4822	-13.00	PASS
	4132.1250	-52.9343	-13.00	PASS
	4591.2500	-52.8855	-13.00	PASS

**Analog: 467.775 MHz, 25 kHz Channel Spacing, Max Power**



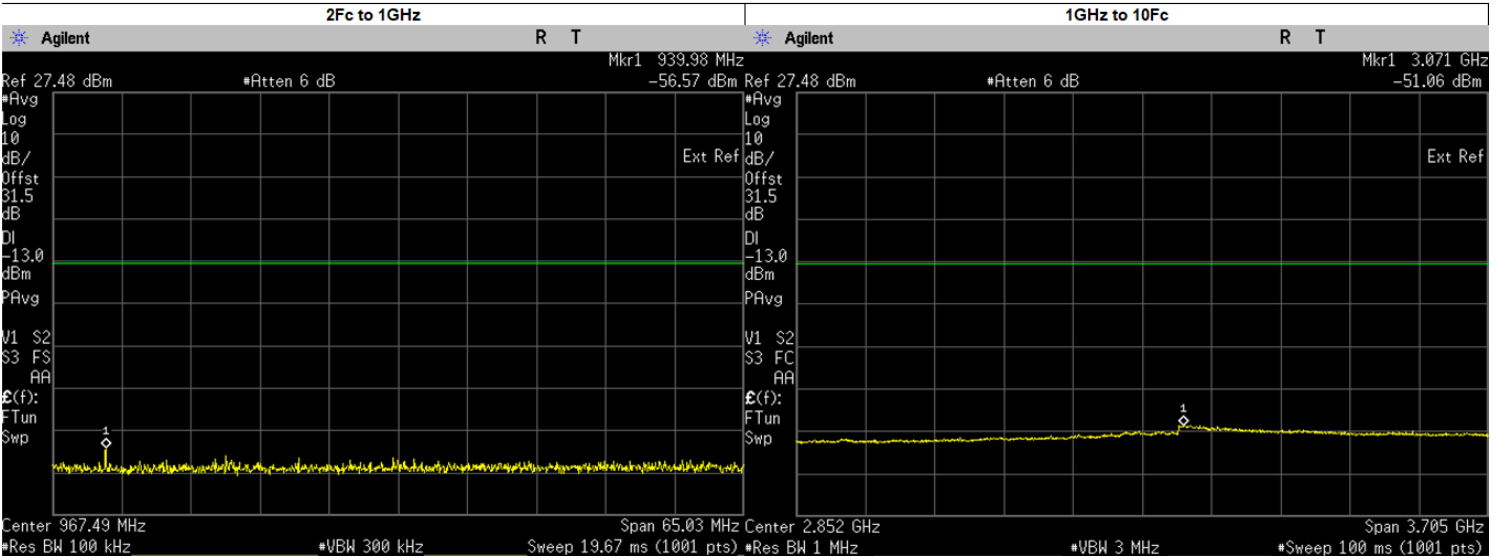
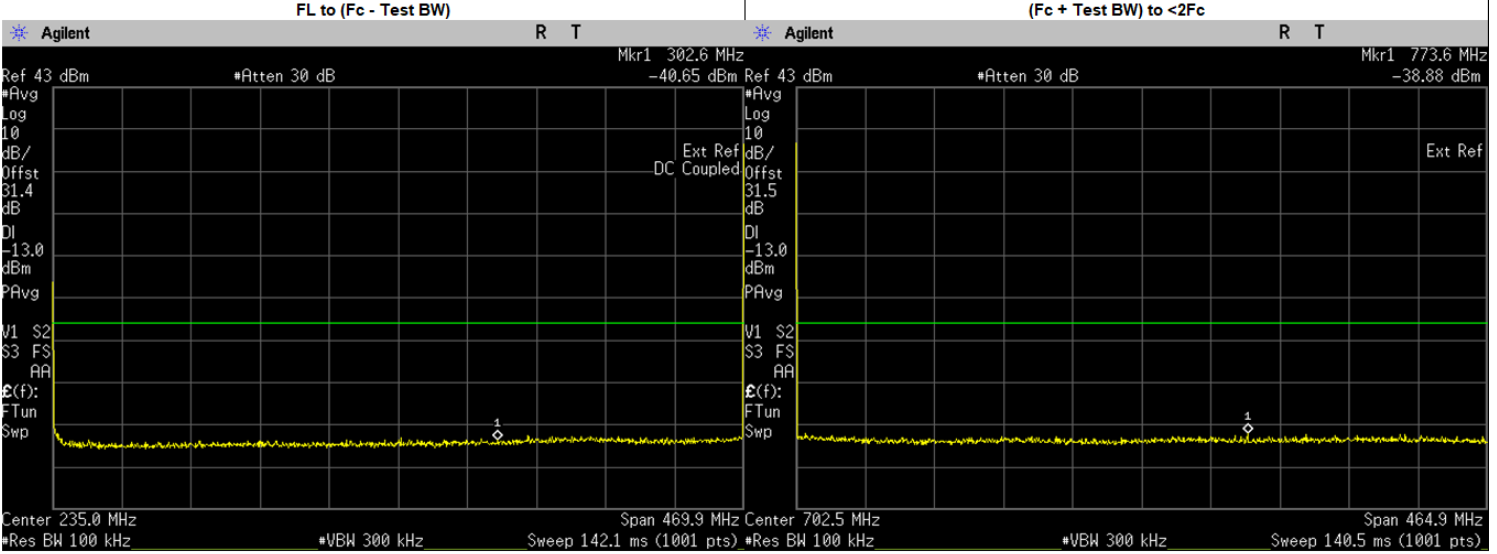
Frequency Range	Highest Spur Frequency (MHz)	Spurious Level (dBm)	Failing Limit (dBm)	Results
FL to (Fc - Test BW)	363.0000	-40.9490	-13.00	PASS
(Fc + Test BW) to <2Fc	488.6541	-38.4400	-13.00	PASS
2Fc to 1GHz 1GHz to 10Fc	935.5500	-55.8390	-13.00	PASS
	3077.0710	-51.3200	-13.00	PASS
	1403.3250	-54.8246	-13.00	PASS
	1871.1000	-54.5684	-13.00	PASS
	2338.8750	-54.2231	-13.00	PASS
	2806.6500	-53.1559	-13.00	PASS
	3274.4250	-52.0184	-13.00	PASS
	3742.2000	-52.5327	-13.00	PASS
	4209.9750	-53.0133	-13.00	PASS
4677.7500	-53.7299	-13.00	PASS	

**Analog: 467.775 MHz, 25 kHz Channel Spacing, Low Power**



Frequency Range	Highest Spur Frequency (MHz)	Spurious Level (dBm)	Failing Limit (dBm)	Results
FL to (Fc - Test BW)	460.2000	-40.6110	-13.00	PASS
(Fc + Test BW) to <2Fc	495.1322	-38.6600	-13.00	PASS
2Fc to 1GHz	944.9262	-58.5100	-13.00	PASS
	935.5500	-60.9848	-13.00	PASS
1GHz to 10Fc	2528.3410	-51.1100	-13.00	PASS
	1403.3250	-55.6797	-13.00	PASS
	1871.1000	-55.3206	-13.00	PASS
	2338.8750	-54.7523	-13.00	PASS
	2806.6500	-53.5738	-13.00	PASS
	3274.4250	-52.6967	-13.00	PASS
	3742.2000	-53.3482	-13.00	PASS
	4209.9750	-53.7045	-13.00	PASS
	4677.7500	-54.1621	-13.00	PASS

**Analog: 469.9875 MHz, 25 kHz Channel Spacing, Max Power**  
 Not for FCC review

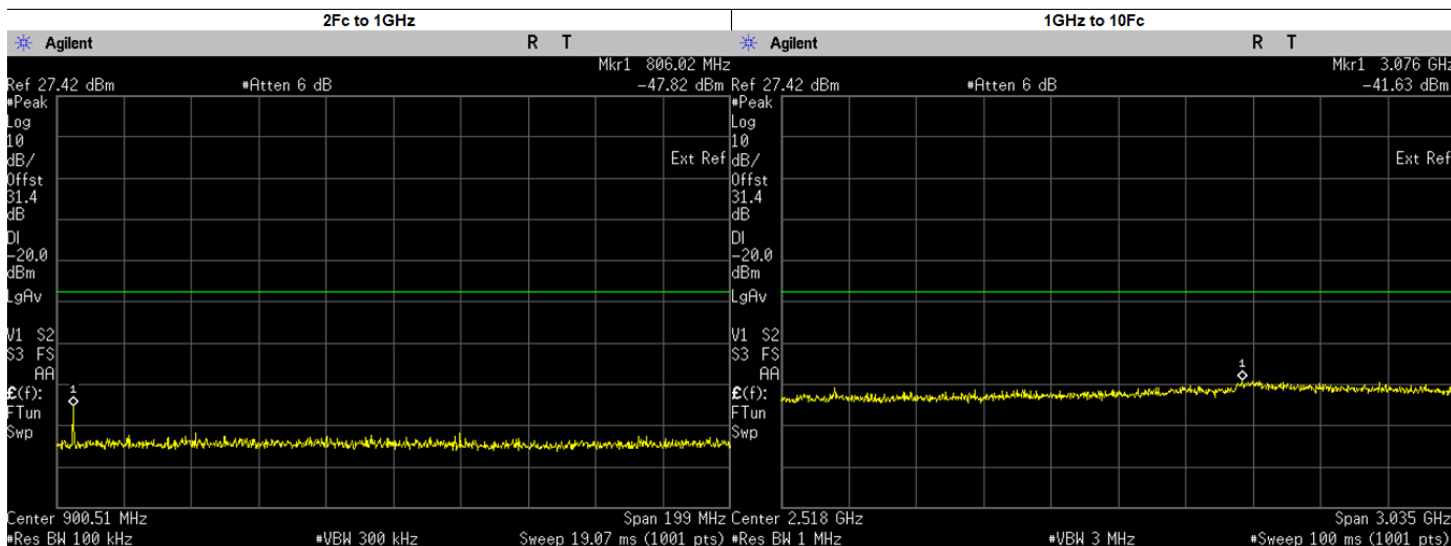
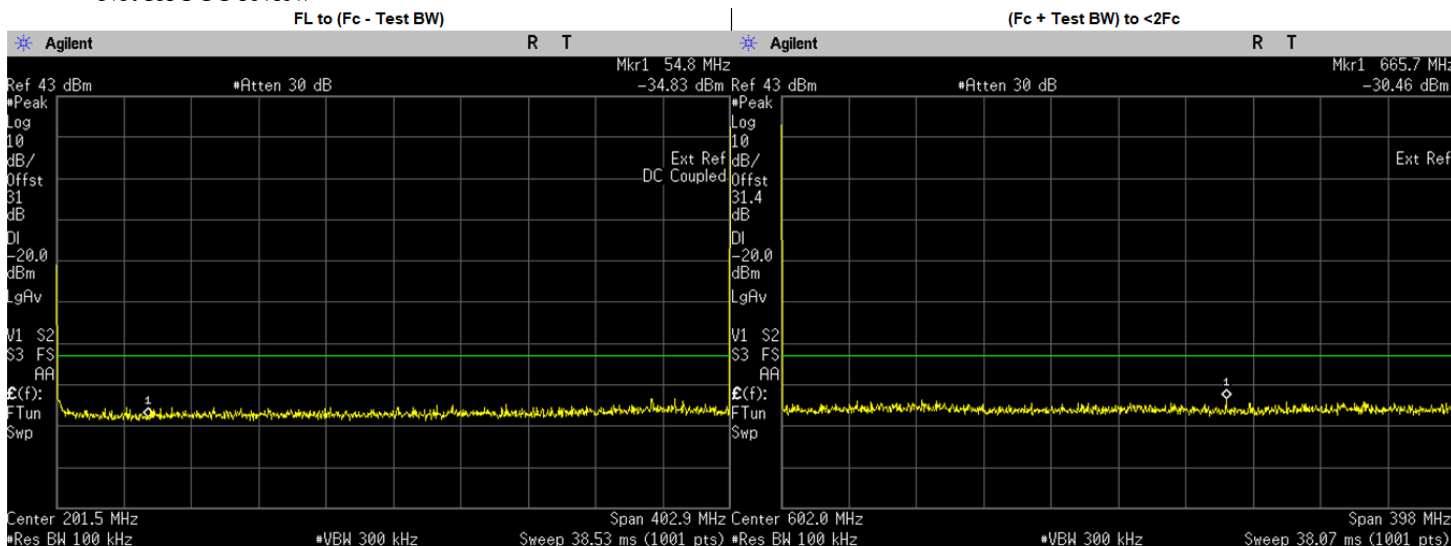


Frequency Range	Highest Spur Frequency (MHz)	Spurious Level (dBm)	Failing Limit (dBm)	Results
FL to (Fc - Test BW)	302.6000	-40.6520	-13.00	PASS
(Fc + Test BW) to <2Fc	773.6440	-38.8800	-13.00	PASS
2Fc to 1GHz 1GHz to 10Fc	939.9750	-56.5700	-13.00	PASS
	3071.0000	-51.0600	-13.00	PASS
	1409.9630	-55.1144	-13.00	PASS
	1879.9500	-55.2054	-13.00	PASS
	2349.9370	-54.7647	-13.00	PASS
	2819.9250	-53.6152	-13.00	PASS
	3289.9120	-52.6543	-13.00	PASS
	3759.9000	-53.1608	-13.00	PASS
	4229.8870	-53.6219	-13.00	PASS
4699.8750	-54.1942	-13.00	PASS	

### 6.9.3. Test Result (Digital)

#### Digital.: 403.0125 MHz, 12.5 kHz Channel Spacing, Max Power

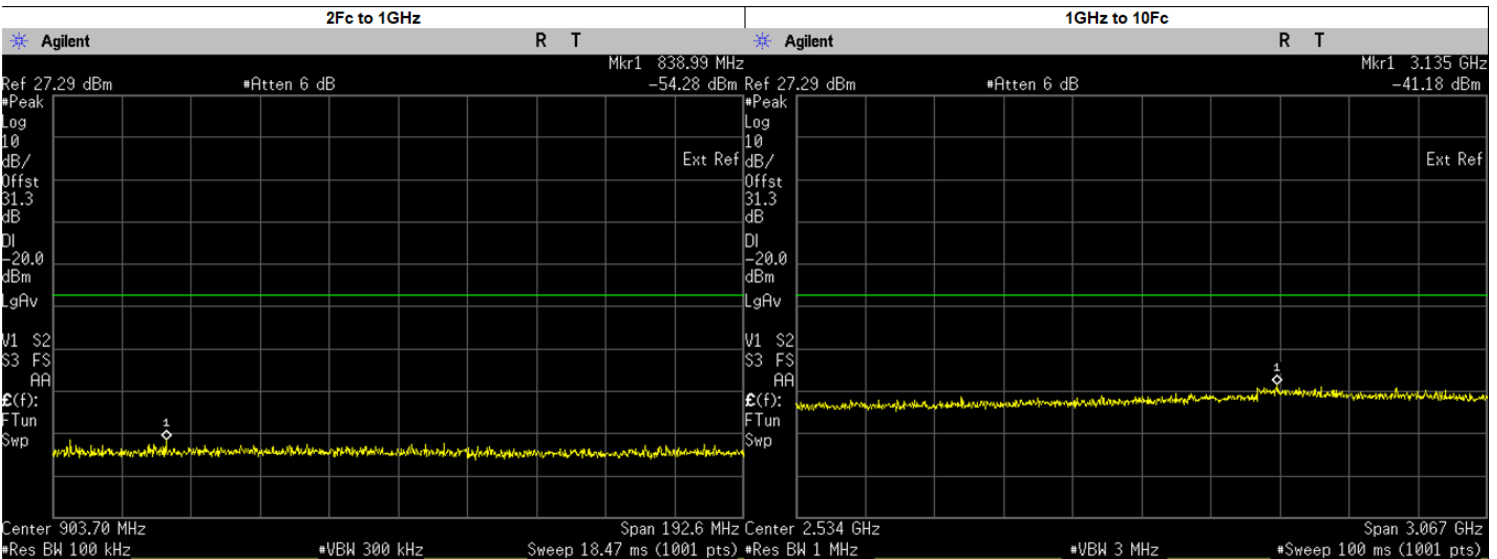
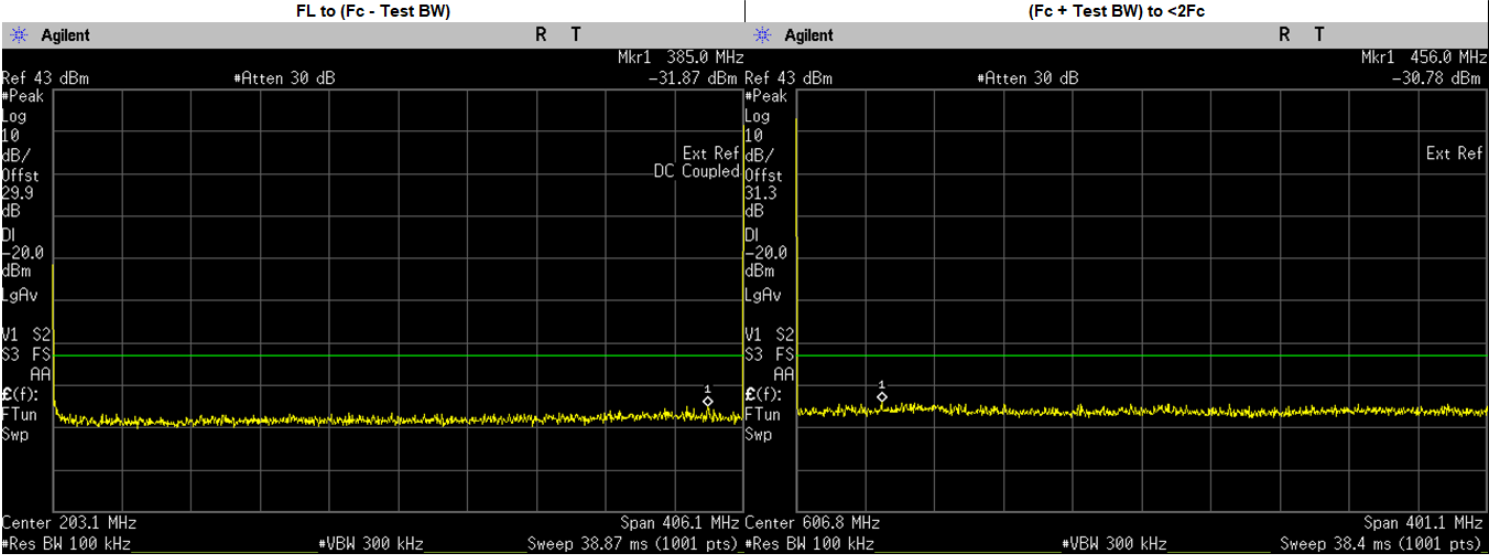
Not for FCC review



Frequency Range	Highest Spur Frequency (MHz)	Spurious Level (dBm)	Failing Limit (dBm)	Results
FL to (Fc - Test BW)	54.8000	-34.8350	-20.00	PASS
(Fc + Test BW) to <2Fc	665.7197	-30.4600	-20.00	PASS
2Fc to 1GHz 1GHz to 10Fc	806.0250	-47.8200	-20.00	PASS
	3076.0260	-41.6300	-20.00	PASS
	1209.0370	-46.6010	-20.00	PASS
	1612.0500	-45.6440	-20.00	PASS
	2015.0620	-44.9741	-20.00	PASS
	2418.0750	-45.6086	-20.00	PASS
	2821.0880	-43.8605	-20.00	PASS
	3224.1000	-43.7159	-20.00	PASS
	3627.1130	-42.9195	-20.00	PASS
4030.1250	-44.5812	-20.00	PASS	



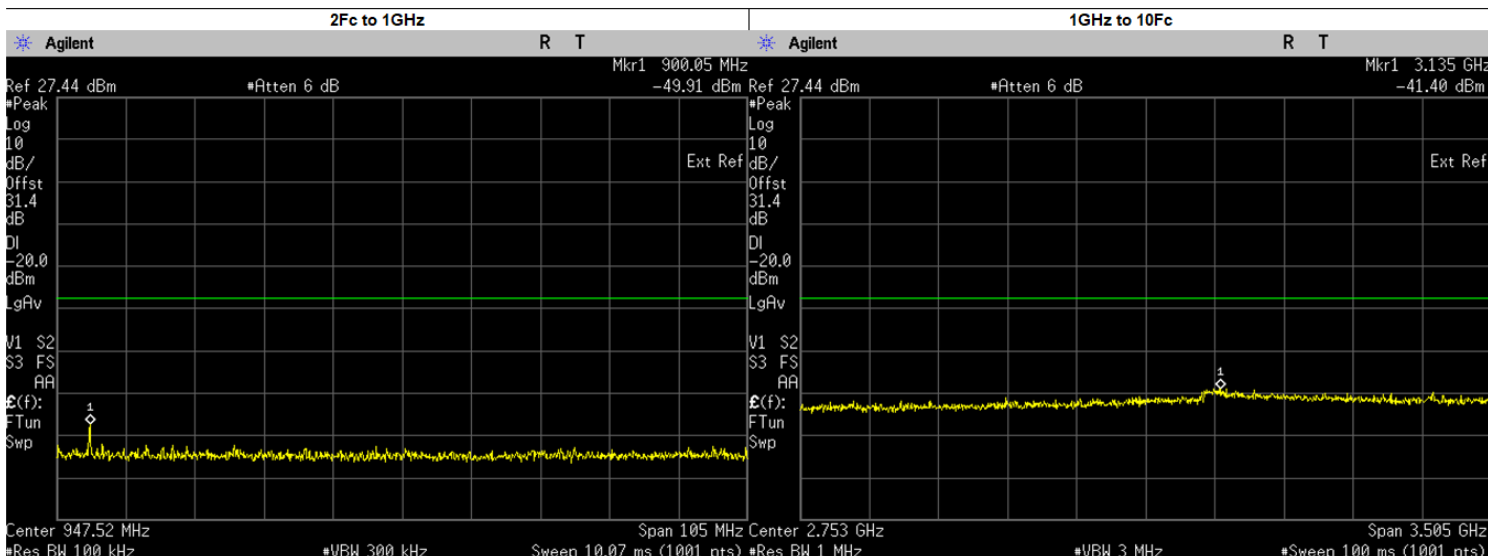
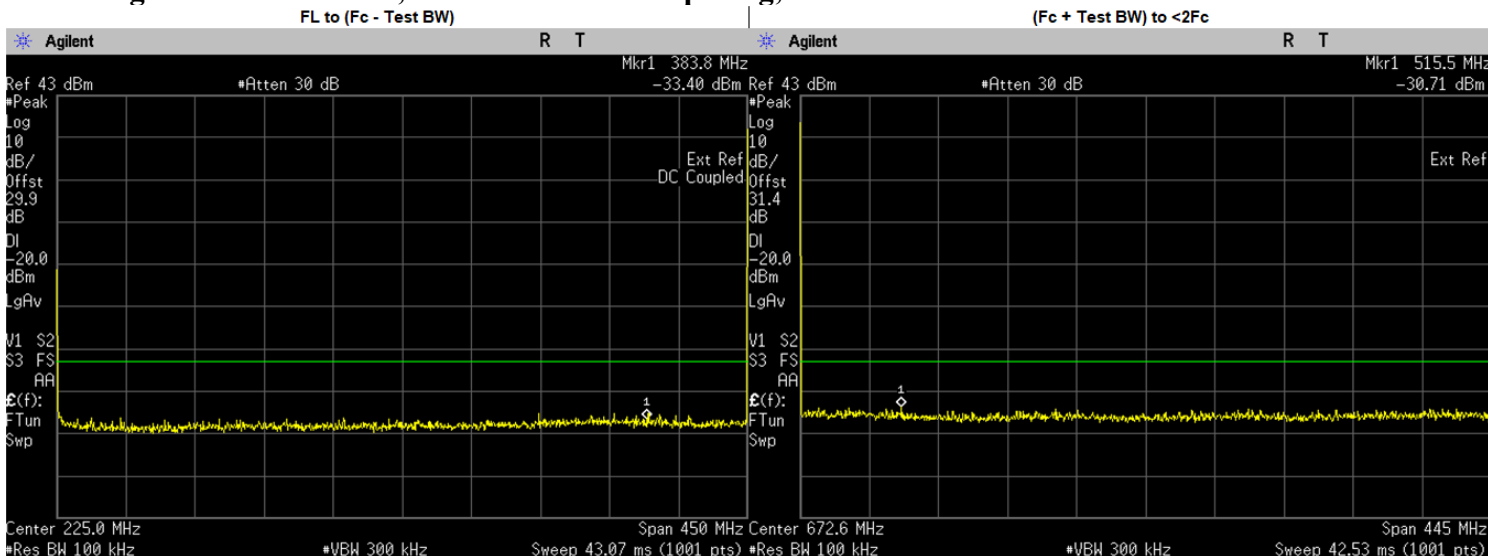
**Digital.: 406.2 MHz, 12.5 kHz Channel Spacing, Max Power**



Frequency Range	Highest Spur Frequency (MHz)	Spurious Level (dBm)	Failing Limit (dBm)	Results
FL to (Fc - Test BW)	385.0000	-31.8730	-20.00	PASS
(Fc + Test BW) to <2Fc	455.9975	-30.7800	-20.00	PASS
2Fc to 1GHz	838.9864	-54.2800	-20.00	PASS
	812.4000	-54.3463	-20.00	PASS
1GHz to 10Fc	3134.6320	-41.1800	-20.00	PASS
	1218.6000	-45.5889	-20.00	PASS
	1624.8000	-46.2500	-20.00	PASS
	2031.0000	-45.4961	-20.00	PASS
	2437.2000	-44.8271	-20.00	PASS
	2843.4000	-44.1176	-20.00	PASS
	3249.6000	-43.5146	-20.00	PASS
	3655.8000	-44.2769	-20.00	PASS
	4062.0000	-43.8119	-20.00	PASS

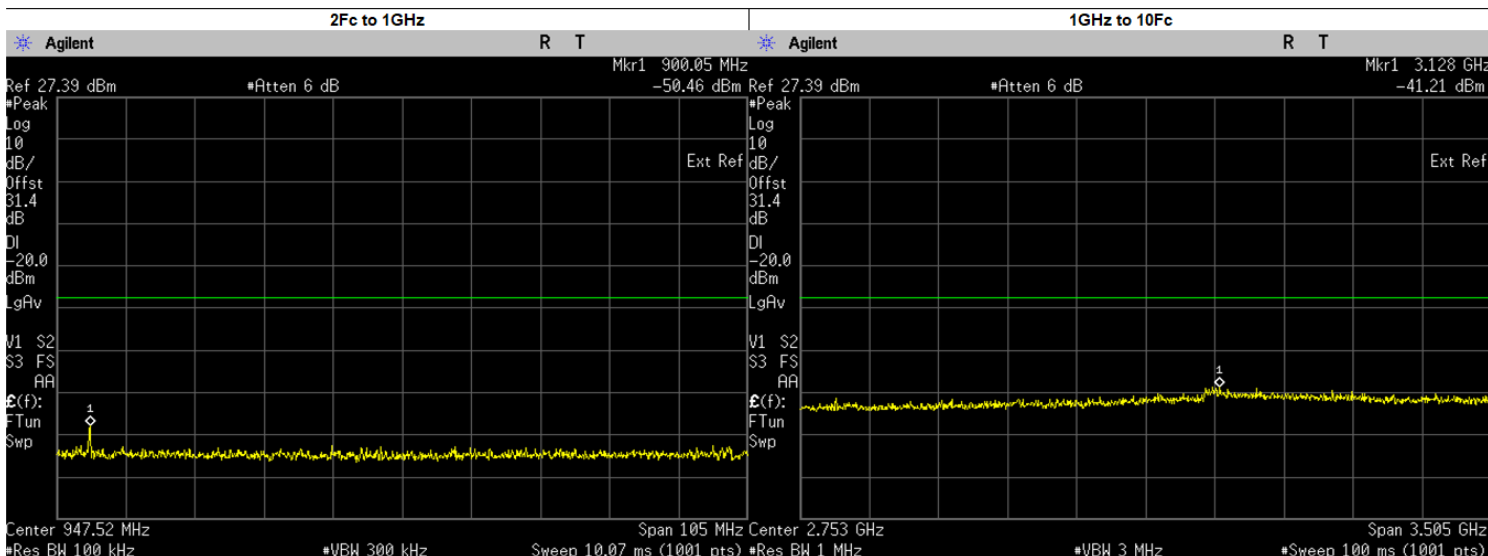
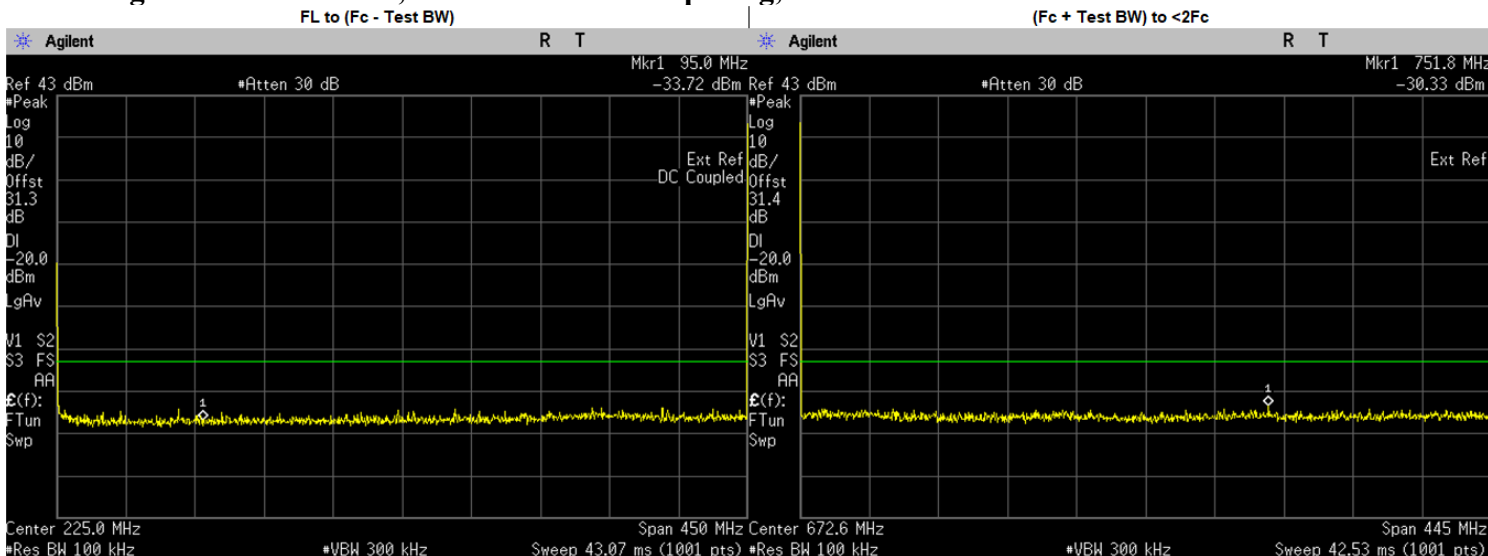


### Digital.: 450.025 MHz, 12.5 kHz Channel Spacing, Max Power



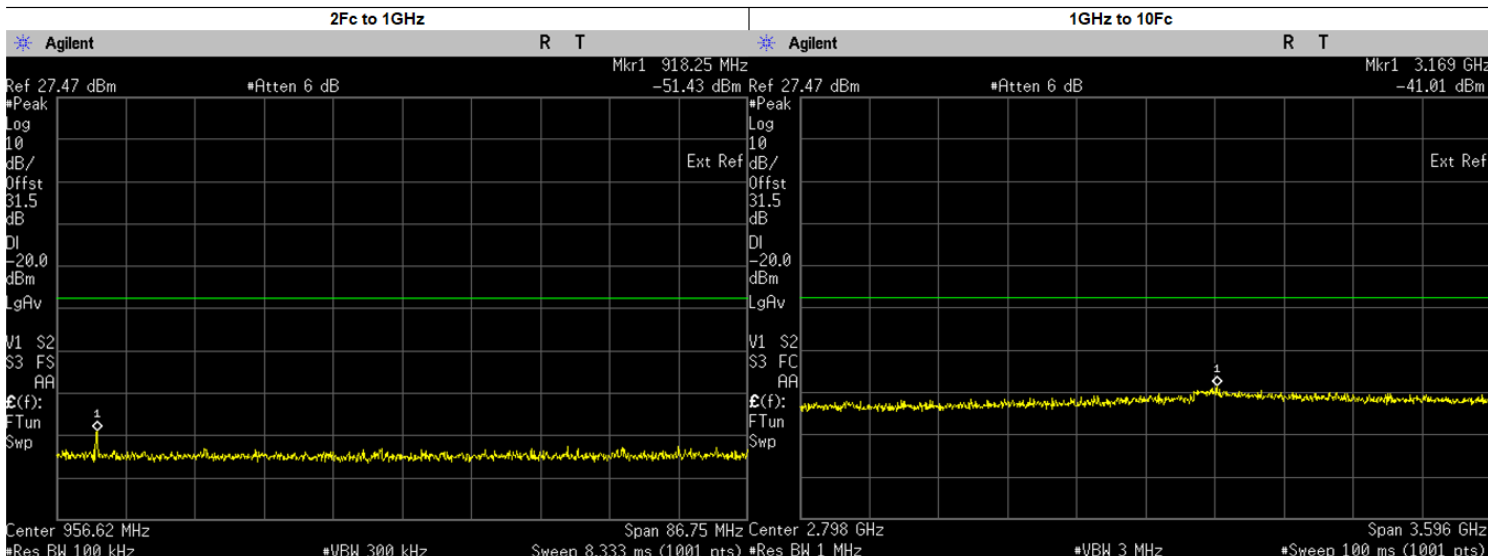
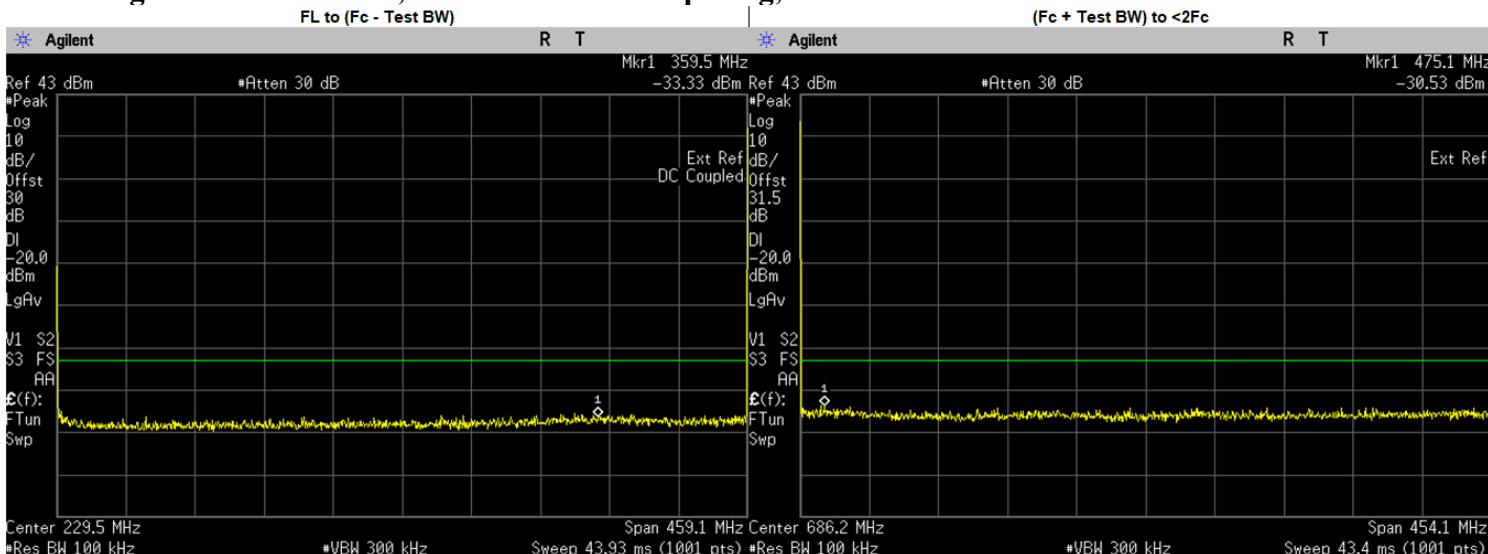
Frequency Range	Highest Spur Frequency (MHz)	Spurious Level (dBm)	Failing Limit (dBm)	Results
FL to (Fc - Test BW)	383.8000	-33.4000	-20.00	PASS
(Fc + Test BW) to <2Fc	515.4921	-30.7100	-20.00	PASS
2Fc to 1GHz 1GHz to 10Fc	900.0500	-49.9100	-20.00	PASS
	3134.6970	-41.4000	-20.00	PASS
	1350.0750	-45.7154	-20.00	PASS
	1800.1000	-45.9323	-20.00	PASS
	2250.1250	-45.2910	-20.00	PASS
	2700.1500	-43.6768	-20.00	PASS
	3150.1750	-42.6312	-20.00	PASS
	3600.2000	-44.2585	-20.00	PASS
	4050.2250	-44.6217	-20.00	PASS
4500.2500	-44.6022	-20.00	PASS	

### Digital.: 450.025 MHz, 12.5 kHz Channel Spacing, Low Power



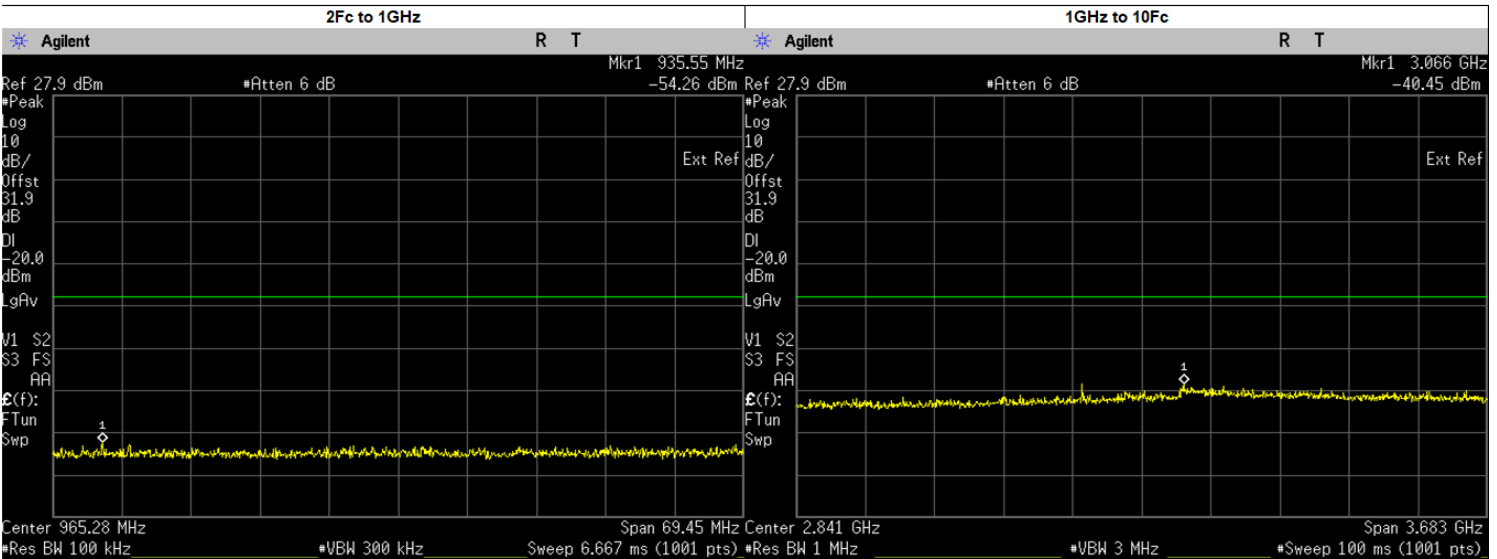
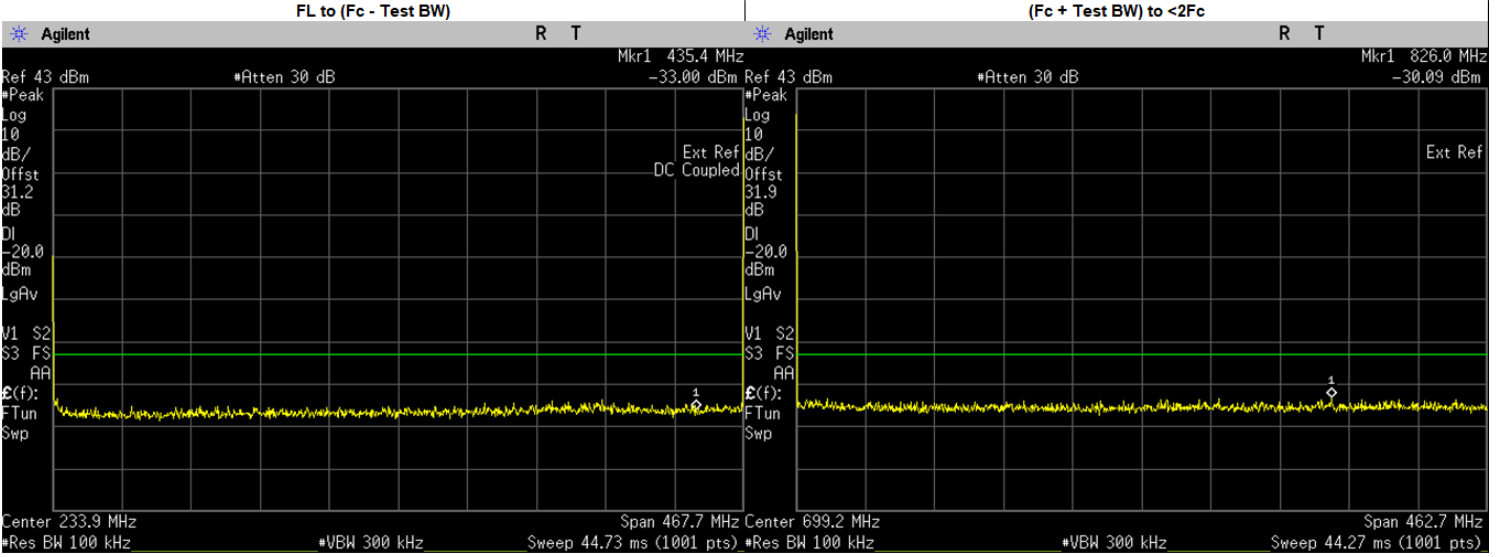
Frequency Range	Highest Spur Frequency (MHz)	Spurious Level (dBm)	Failing Limit (dBm)	Results
FL to (Fc - Test BW)	95.0000	-33.7150	-20.00	PASS
(Fc + Test BW) to <2Fc	751.7702	-30.3300	-20.00	PASS
2Fc to 1GHz 1GHz to 10Fc	900.0500	-50.4600	-20.00	PASS
	3127.6870	-41.2100	-20.00	PASS
	1350.0750	-46.0850	-20.00	PASS
	1800.1000	-45.5999	-20.00	PASS
	2250.1250	-45.7613	-20.00	PASS
	2700.1500	-45.3368	-20.00	PASS
	3150.1750	-42.8377	-20.00	PASS
	3600.2000	-43.3269	-20.00	PASS
	4050.2250	-44.3157	-20.00	PASS
4500.2500	-44.1895	-20.00	PASS	

### Digital.: 459.125 MHz, 12.5 kHz Channel Spacing, Max Power



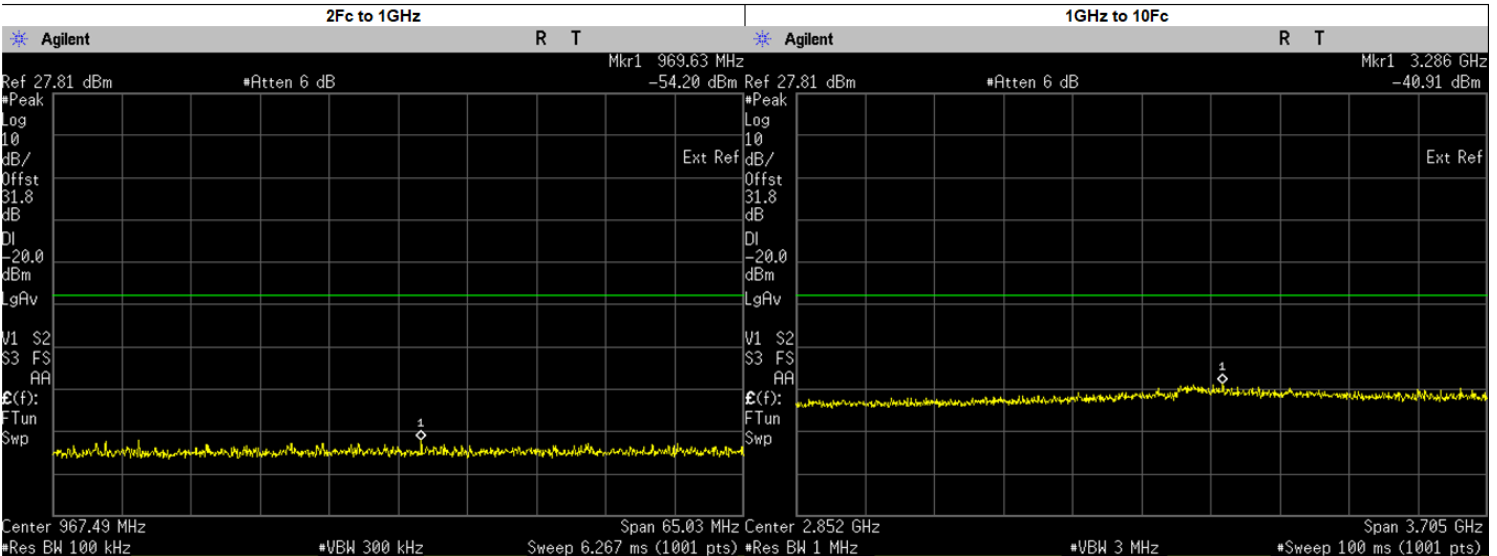
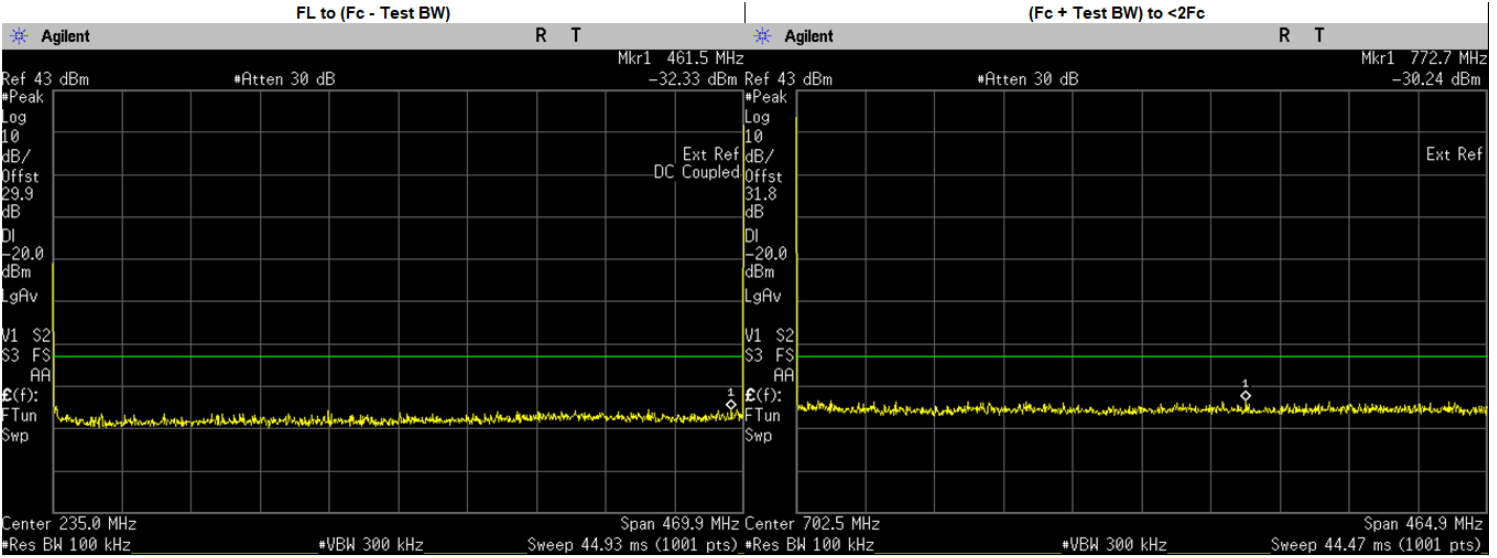
Frequency Range	Highest Spur Frequency (MHz)	Spurious Level (dBm)	Failing Limit (dBm)	Results
FL to (Fc - Test BW)	359.5000	-33.3250	-20.00	PASS
(Fc + Test BW) to <2Fc	475.0742	-30.5300	-20.00	PASS
2Fc to 1GHz 1GHz to 10Fc	918.2500	-51.4300	-20.00	PASS
	3169.0000	-41.0100	-20.00	PASS
	1836.5000	-45.7925	-20.00	PASS
	2295.6250	-45.2998	-20.00	PASS
	2754.7500	-44.1311	-20.00	PASS
	3213.8750	-42.7372	-20.00	PASS
	3673.0000	-43.9395	-20.00	PASS
	4132.1250	-43.9187	-20.00	PASS
4591.2500	-44.2019	-20.00	PASS	

**Digital.: 467.775 MHz, 12.5 kHz Channel Spacing, Max Power**



Frequency Range	Highest Spur Frequency (MHz)	Spurious Level (dBm)	Failing Limit (dBm)	Results
FL to (Fc - Test BW)	435.4000	-33.0010	-20.00	PASS
(Fc + Test BW) to <2Fc	825.9757	-30.0900	-20.00	PASS
2Fc to 1GHz 1GHz to 10Fc	935.5500	-54.2609	-20.00	PASS
	3066.0230	-40.4500	-20.00	PASS
	1403.3250	-45.6607	-20.00	PASS
	1871.1000	-45.2886	-20.00	PASS
	2338.8750	-44.9242	-20.00	PASS
	2806.6500	-43.9282	-20.00	PASS
	3274.4250	-41.3650	-20.00	PASS
	3742.2000	-42.6366	-20.00	PASS
	4209.9750	-44.0514	-20.00	PASS
4677.7500	-43.9359	-20.00	PASS	

**Digital: 469.9875 MHz, 12.5 kHz Channel Spacing, Max Power**  
 Not for FCC review



Frequency Range	Highest Spur Frequency (MHz)	Spurious Level (dBm)	Failing Limit (dBm)	Results
FL to (Fc - Test BW)	461.5000	-32.3350	-20.00	PASS
(Fc + Test BW) to <2Fc	772.7142	-30.2400	-20.00	PASS
2Fc to 1GHz	969.6333	-54.2000	-20.00	PASS
	939.9750	-54.6195	-20.00	PASS
1GHz to 10Fc	3285.9080	-40.9100	-20.00	PASS
	1409.9630	-45.9412	-20.00	PASS
	1879.9500	-45.0752	-20.00	PASS
	2349.9370	-45.1901	-20.00	PASS
	2819.9250	-43.3677	-20.00	PASS
	3289.9120	-42.0600	-20.00	PASS
	3759.9000	-43.3129	-20.00	PASS
	4229.8870	-44.3442	-20.00	PASS
	4699.8750	-44.0737	-20.00	PASS

### 6.9.4. Test Limit

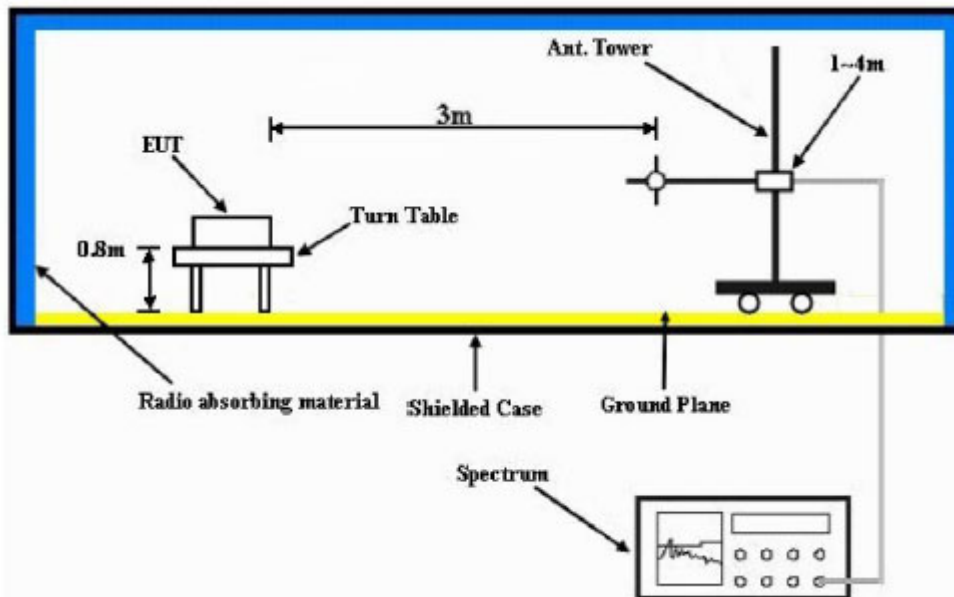
Table below summarized the power of any emission outside a licensee’s frequency block shall be attenuated below the transmitter power (P) by at least

Channel Spacing	Part 22	Part 24D	Part 74	Part 80	Part 90 (UHF, VHF, 800, 900)	Part 90 (700)
12.5kHz	43 + log <sub>10</sub> (P) (-13 dBm)	43 + log <sub>10</sub> (P) (-13 dBm)	43 + log <sub>10</sub> (P) (-13 dBm)	Not Applicable	50 + log <sub>10</sub> (P) (-20 dBm)	43 + log <sub>10</sub> (P) (-13 dBm)
25kHz		Not Applicable		43 + log <sub>10</sub> (P) (-13 dBm)	43 + log <sub>10</sub> (P) (-13 dBm)	43 + log <sub>10</sub> (P) (-13 dBm)

Channel Spacing	RSS 134	RSS 182	RSS 119 (UHF, VHF, 800, 900)	RSS 119 (700)
12.5kHz	43 + log <sub>10</sub> (P) (-13 dBm)	Not Applicable	50 + log <sub>10</sub> (P) (-20 dBm)	43 + log <sub>10</sub> (P) (-13 dBm)
25kHz	Not Applicable	43 + log <sub>10</sub> (P) (-13 dBm)	43 + log <sub>10</sub> (P) (-13 dBm)	43 + log <sub>10</sub> (P) (-13 dBm)

## 6.10. Radiated Spurious Emission

### 6.10.1. 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  $F_c < 1\text{GHz}$ ) or 1.5m height (for  $F_c > 1\text{GHz}$ ) 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.



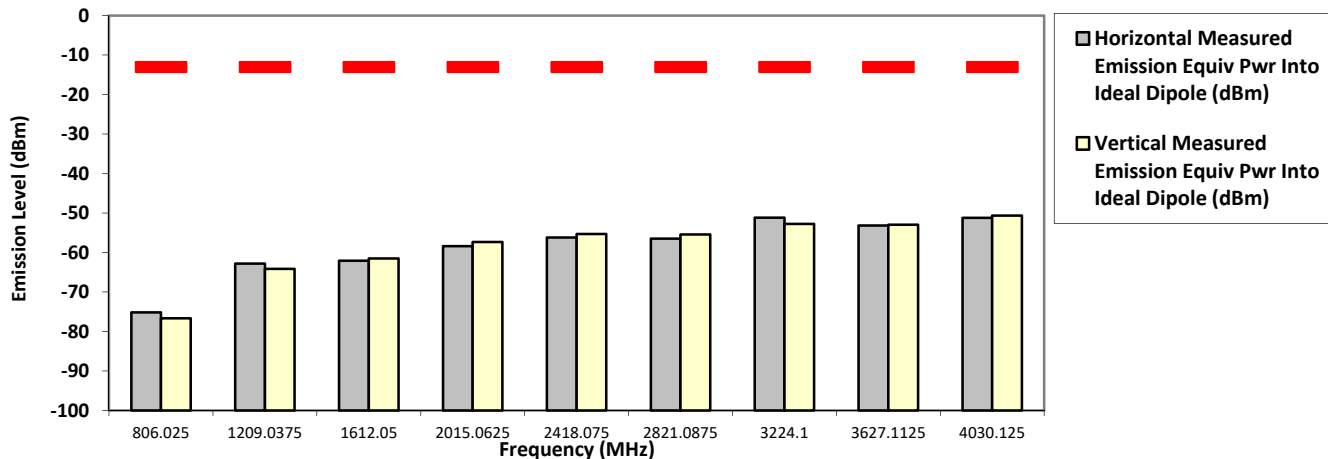
### 6.10.2. Test Result (Analog)

**SAC Transmitter Radiated Emission:**

Model Number: AAH01QDC9JA2AN      S/N: 752TXT0633      SR:29146-EMC-00005  
 Battery Part No: NNTN4497DR      Accy Part No: NA  
 Test Mode: TX Analog  
 403.012500 MHz (Not for FCC review)      25 kHz      4.800 Watt(s) /Max Power

Frequency (MHz)	Limit	Horizontal Measured Emission Equip Pwr Into Ideal Dipole (dBm)	Vertical Measured Emission Equip Pwr Into ideal Dipole (dBm)
806.0250	-13.0000	-75.1535 **	-76.6751 **
1209.0375	-13.0000	-62.8341 **	-64.1437 **
1612.0500	-13.0000	-62.0839 **	-61.4975 **
2015.0625	-13.0000	-58.4014 **	-57.3367 **
2418.0750	-13.0000	-56.1934 **	-55.3326 **
2821.0875	-13.0000	-56.4787 **	-55.4323 **
3224.1000	-13.0000	-51.1854 **	-52.7809 **
3627.1125	-13.0000	-53.1852 **	-52.9533 **
4030.1250	-13.0000	-51.2086 **	-50.6447 **

#### 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&Qawiman      Sat, 2 Oct, 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): 69.2

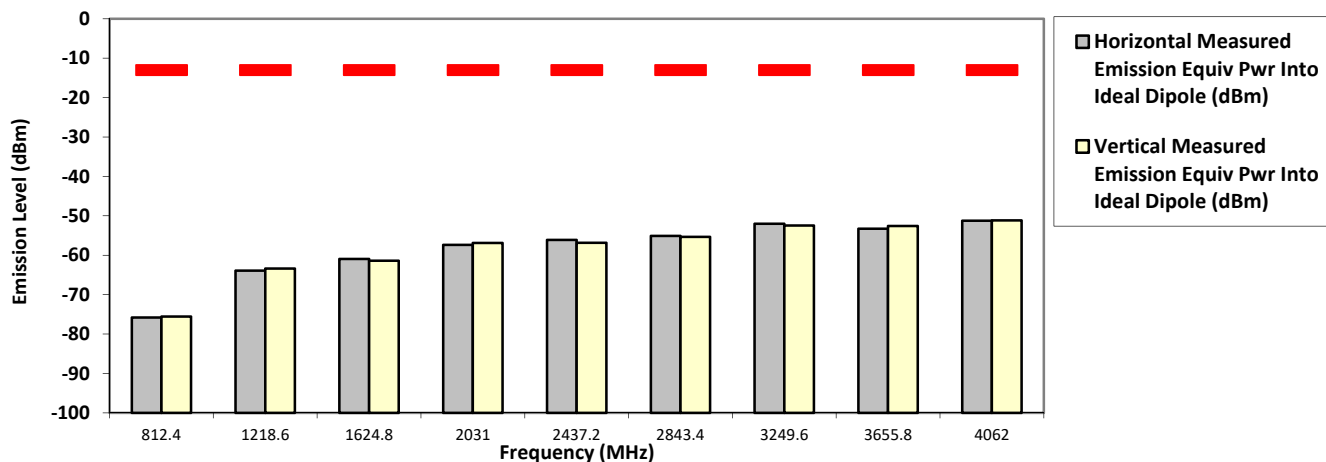
Remarks: Passed Results Marginal Results Failed Results

**SAC Transmitter Radiated Emission:**

**Model Number: AAH01QDC9JA2AN**      **S/N: 752TXT0633**      **SR:29146-EMC-00005**  
**Battery Part No: NNTN4497DR**      **Accy Part No: NA**  
**Test Mode: TX Analog**  
**406.20000 MHz (Not for FCC review)**      **25 kHz**      **4.800 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	-75.8241 **	-75.5420 **
1218.6000	-13.0000	-63.9241 **	-63.3636 **
1624.8000	-13.0000	-60.9610 **	-61.3747 **
2031.0000	-13.0000	-57.3912 **	-56.8854 **
2437.2000	-13.0000	-56.1023 **	-56.8485 **
2843.4000	-13.0000	-55.0846 **	-55.3411 **
3249.6000	-13.0000	-52.0045 **	-52.4763 **
3655.8000	-13.0000	-53.2589 **	-52.6001 **
4062.0000	-13.0000	-51.2463 **	-51.1682 **

**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&Qawiman      Sat, 2 Oct, 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): 69.2

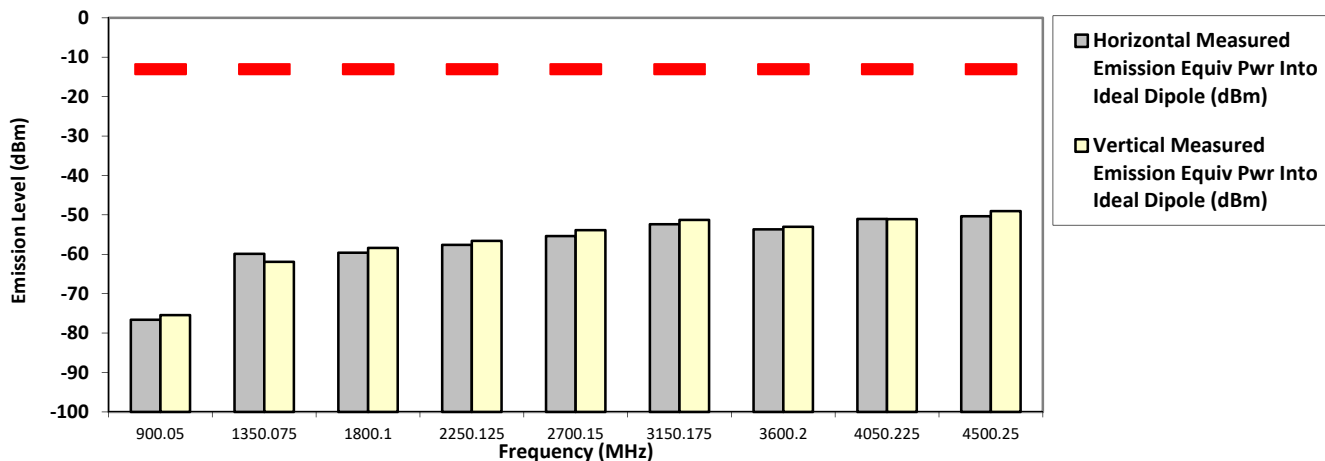
Remarks: Passed Results Marginal Results Failed Results

**SAC Transmitter Radiated Emission:**

**Model Number: AAH01QDC9JA2AN**      **S/N: 752TXT0633**      **SR:29146-EMC-00005**  
**Battery Part No: NNTN4497DR**      **Accy Part No: NA**  
**Test Mode: TX Analog**  
**450.025000 MHz (Not for FCC review)**      **25 kHz**      **4.800 Watt(s) /Max Power**

Frequency (MHz)	Limit	Horizontal Measured Emission Equip Pwr Into Ideal Dipole (dBm)	Vertical Measured Emission Equip Pwr Into ideal Dipole (dBm)
900.0500	-13.0000	-76.6314 **	-75.4346 **
1350.0750	-13.0000	-59.8786 **	-61.9392 **
1800.1000	-13.0000	-59.5878 **	-58.3881 **
2250.1250	-13.0000	-57.6012 **	-56.6129 **
2700.1500	-13.0000	-55.4034 **	-53.8718 **
3150.1750	-13.0000	-52.3658 **	-51.2918 **
3600.2000	-13.0000	-53.6665 **	-53.0172 **
4050.2250	-13.0000	-51.0295 **	-51.0728 **
4500.2500	-13.0000	-50.3488 **	-49.0545 **

**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&Qawiman      Sat, 2 Oct, 2021

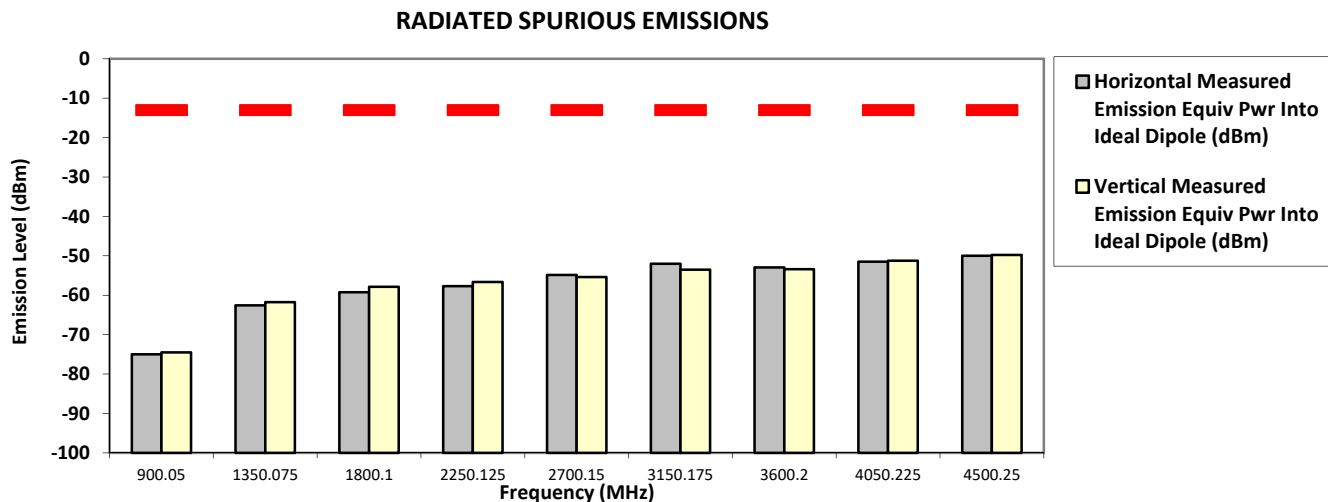
Remarks: \*\* Indicates the spurious emission could not be detected due to noise limitations or ambient.  
 \*Pursuant to CFR 47 Part 2.1057 ( c ), emissions attenuated more than 20 dB below the permissible limit are not reported  
 Temp(Deg): 23.6 Hum(%RH): 69.2

Remarks: Passed Results Marginal Results Failed Results

**SAC Transmitter Radiated Emission:**

Model Number: AAH01QDC9JA2AN      S/N: 752TXT0633      SR:29146-EMC-00005  
 Battery Part No: NNTN4497DR      Test Mode: TX Analog      Accy Part No: NA  
 450.025000 MHz (Not for FCC review)      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	-74.9758 **	-74.4901 **
1350.0750	-13.0000	-62.5862 **	-61.7505 **
1800.1000	-13.0000	-59.2489 **	-57.8673 **
2250.1250	-13.0000	-57.6973 **	-56.6634 **
2700.1500	-13.0000	-54.8701 **	-55.3871 **
3150.1750	-13.0000	-52.0257 **	-53.5003 **
3600.2000	-13.0000	-52.9590 **	-53.3894 **
4050.2250	-13.0000	-51.4948 **	-51.2269 **
4500.2500	-13.0000	-49.9675 **	-49.7971 **



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&Qawiman      Sat, 2 Oct, 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): 69.2

System MU: 4.03 dB

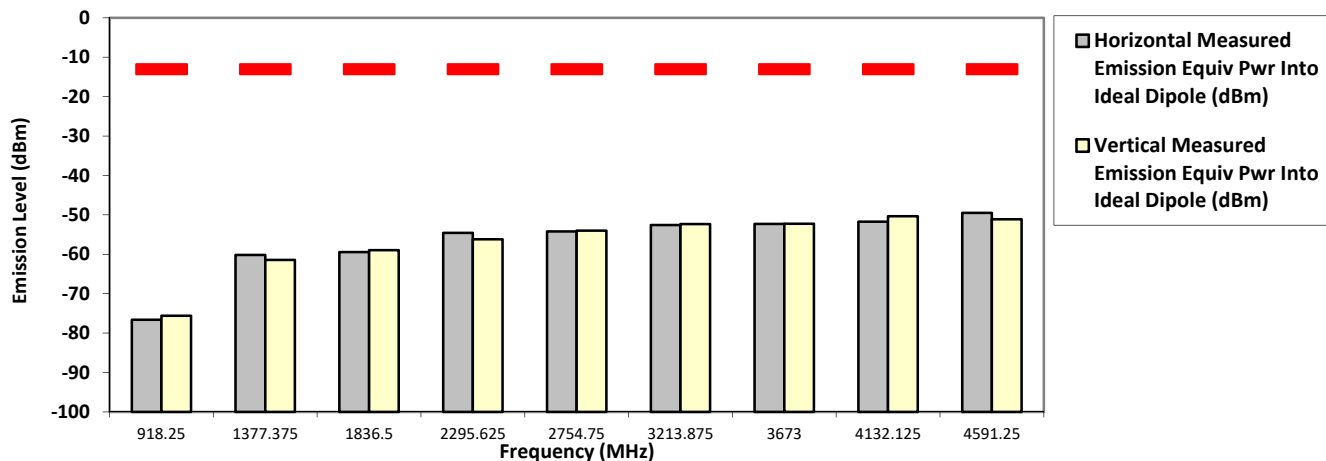
Remarks: Passed Results Marginal Results Failed Results

**SAC Transmitter Radiated Emission:**

Model Number: AAH01QDC9JA2AN      S/N: 752TXT0633      SR:29146-EMC-00005  
 Battery Part No: NNTN4497DR      Accy Part No: NA  
 Test Mode: TX Analog  
 459.125000 MHz (For Part 22)      25 kHz      4.800 Watt(s) /Max Power

Frequency (MHz)	Limit	Horizontal Measured Emission Equip Pwr Into Ideal Dipole (dBm)	Vertical Measured Emission Equip Pwr Into ideal Dipole (dBm)
918.2500	-13.0000	-76.6196 **	-75.6103 **
1377.3750	-13.0000	-60.1794 **	-61.4392 **
1836.5000	-13.0000	-59.4607 **	-58.9771 **
2295.6250	-13.0000	-54.5798 **	-56.2156 **
2754.7500	-13.0000	-54.2134 **	-53.9862 **
3213.8750	-13.0000	-52.5728 **	-52.3362 **
3673.0000	-13.0000	-52.2932 **	-52.2569 **
4132.1250	-13.0000	-51.7260 **	-50.3317 **
4591.2500	-13.0000	-49.5102 **	-51.1263 **

**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&Qawiman      Sat, 2 Oct, 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): 69.2

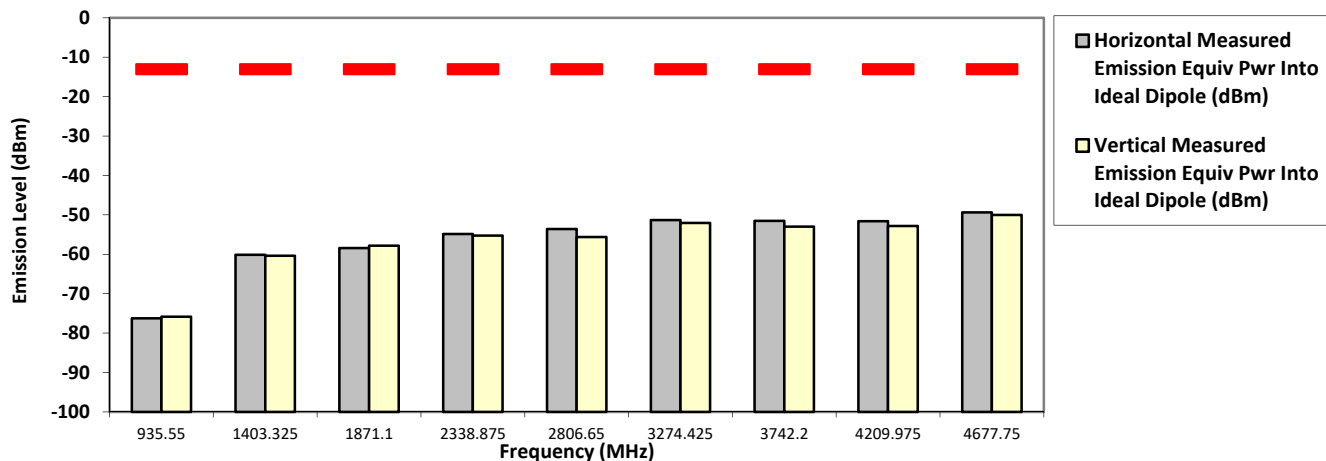
Remarks: Passed Results Marginal Results Failed Results

**SAC Transmitter Radiated Emission:**

Model Number: AAH01QDC9JA2AN      S/N: 752TXT0633      SR:29146-EMC-00005  
 Battery Part No: NNTN4497DR      Accy Part No: NA  
 Test Mode: TX Analog  
 467.775000 MHz      25 kHz      4.800 Watt(s) /Max Power

Frequency (MHz)	Limit	Horizontal Measured Emission Equip Pwr Into Ideal Dipole (dBm)	Vertical Measured Emission Equip Pwr Into ideal Dipole (dBm)
935.5500	-13.0000	-76.2456 **	-75.8427 **
1403.3250	-13.0000	-60.1246 **	-60.3817 **
1871.1000	-13.0000	-58.4374 **	-57.8183 **
2338.8750	-13.0000	-54.8731 **	-55.2552 **
2806.6500	-13.0000	-53.5956 **	-55.6374 **
3274.4250	-13.0000	-51.3123 **	-52.0447 **
3742.2000	-13.0000	-51.5320 **	-53.0041 **
4209.9750	-13.0000	-51.5970 **	-52.8351 **
4677.7500	-13.0000	-49.3602 **	-50.0459 **

**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&Qawiman      Sat, 2 Oct, 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): 69.2

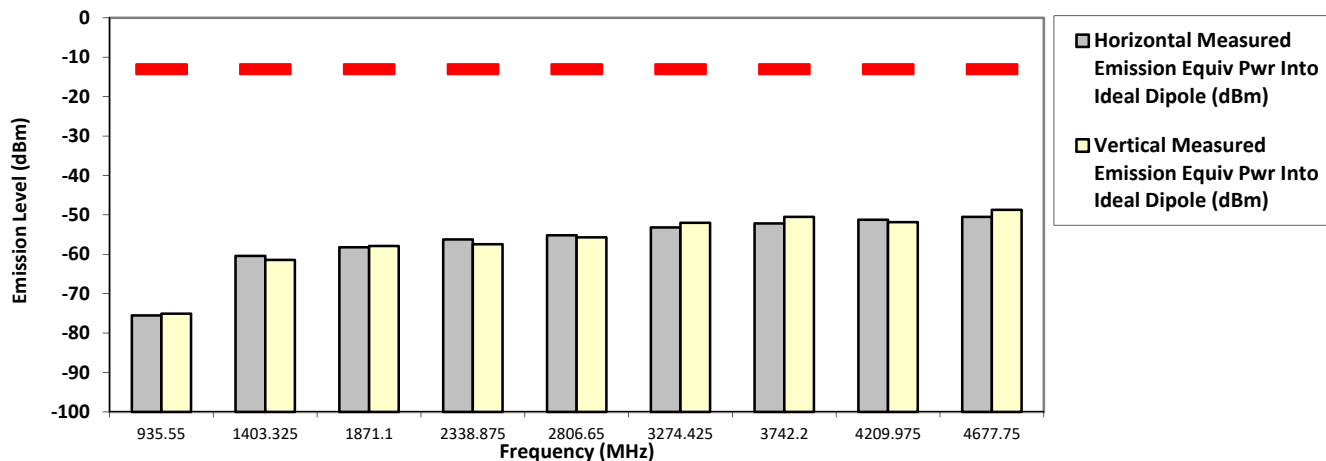
Remarks: Passed Results Marginal Results Failed Results

**SAC Transmitter Radiated Emission:**

**Model Number: AAH01QDC9JA2AN**      **S/N: 752TXT0633**      **SR:29146-EMC-00005**  
**Battery Part No: NNTN4497DR**      **Accy Part No: NA**  
**Test Mode: TX Analog**  
**467.775000 MHz**      **25 kHz**      **1.000 Watt(s) /Low Power**

Frequency (MHz)	Limit	Horizontal Measured Emission Equip Pwr Into Ideal Dipole (dBm)	Vertical Measured Emission Equip Pwr Into ideal Dipole (dBm)
935.5500	-13.0000	-75.5294 **	-75.0951 **
1403.3250	-13.0000	-60.4076 **	-61.4391 **
1871.1000	-13.0000	-58.2388 **	-57.9141 **
2338.8750	-13.0000	-56.2204 **	-57.4612 **
2806.6500	-13.0000	-55.1877 **	-55.6972 **
3274.4250	-13.0000	-53.1746 **	-51.9991 **
3742.2000	-13.0000	-52.1676 **	-50.5129 **
4209.9750	-13.0000	-51.2372 **	-51.8416 **
4677.7500	-13.0000	-50.5004 **	-48.7238 **

**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&Qawiman      Sat, 2 Oct, 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): 69.2

Remarks: Passed Results Marginal Results Failed Results

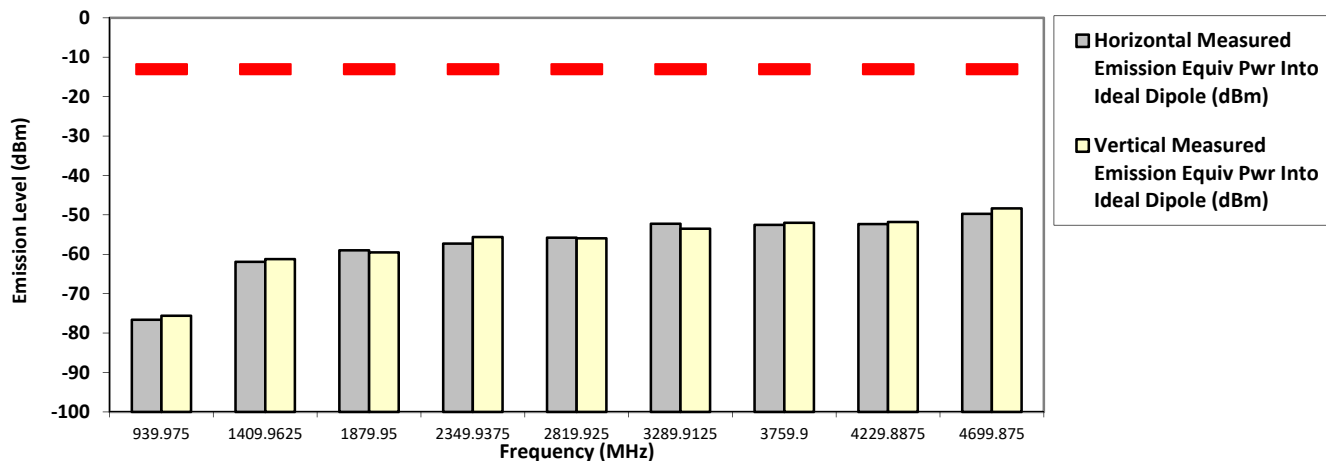


**SAC Transmitter Radiated Emission:**

**Model Number: AAH01QDC9JA2AN**      **S/N: 752TXT0633**      **SR:29146-EMC-00005**  
**Battery Part No: NNTN4497DR**      **Accy Part No: NA**  
**Test Mode: TX Analog**  
**469.987500 MHz (Not for FCC review)      25 kHz      4.800 Watt(s) /Max Power**

Frequency (MHz)	Limit	Horizontal Measured Emission Equip Pwr Into Ideal Dipole (dBm)	Vertical Measured Emission Equip Pwr Into ideal Dipole (dBm)
939.9750	-13.0000	-76.6103 **	-75.6214 **
1409.9625	-13.0000	-61.9078 **	-61.2448 **
1879.9500	-13.0000	-59.0056 **	-59.5153 **
2349.9375	-13.0000	-57.3050 **	-55.6093 **
2819.9250	-13.0000	-55.8052 **	-55.9379 **
3289.9125	-13.0000	-52.2696 **	-53.5002 **
3759.9000	-13.0000	-52.5399 **	-52.0102 **
4229.8875	-13.0000	-52.3388 **	-51.8002 **
4699.8750	-13.0000	-49.7384 **	-48.3673 **

**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&Qawiman      Sat, 2 Oct, 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): 69.2

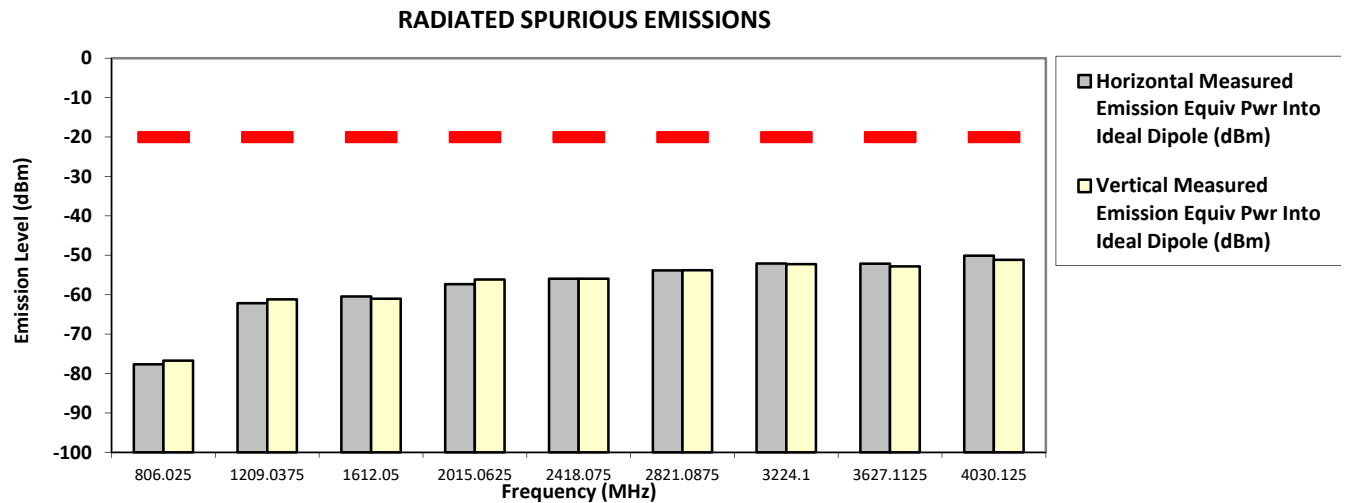
Remarks: Passed Results Marginal Results Failed Results

### 6.10.3. Test Result (Digital)

**SAC Transmitter Radiated Emission:**

Model Number: AAH01QDC9JA2AN      S/N: 752TXT0633      SR:29146-EMC-00005  
 Battery Part No: NNTN4497DR      Accy Part No: NA  
 Test Mode: TX Digital  
 403.012500 MHz (Not for FCC review)      12.5 kHz      4.800 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	-77.6750 **	-76.7588 **
1209.0375	-20.0000	-62.1596 **	-61.1842 **
1612.0500	-20.0000	-60.4553 **	-61.0244 **
2015.0625	-20.0000	-57.3471 **	-56.1496 **
2418.0750	-20.0000	-55.9688 **	-55.9551 **
2821.0875	-20.0000	-53.8232 **	-53.8135 **
3224.1000	-20.0000	-52.0899 **	-52.2439 **
3627.1125	-20.0000	-52.1264 **	-52.8425 **
4030.1250	-20.0000	-50.1122 **	-51.1723 **



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&Qawiman      Sat, 2 Oct, 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): 69.2

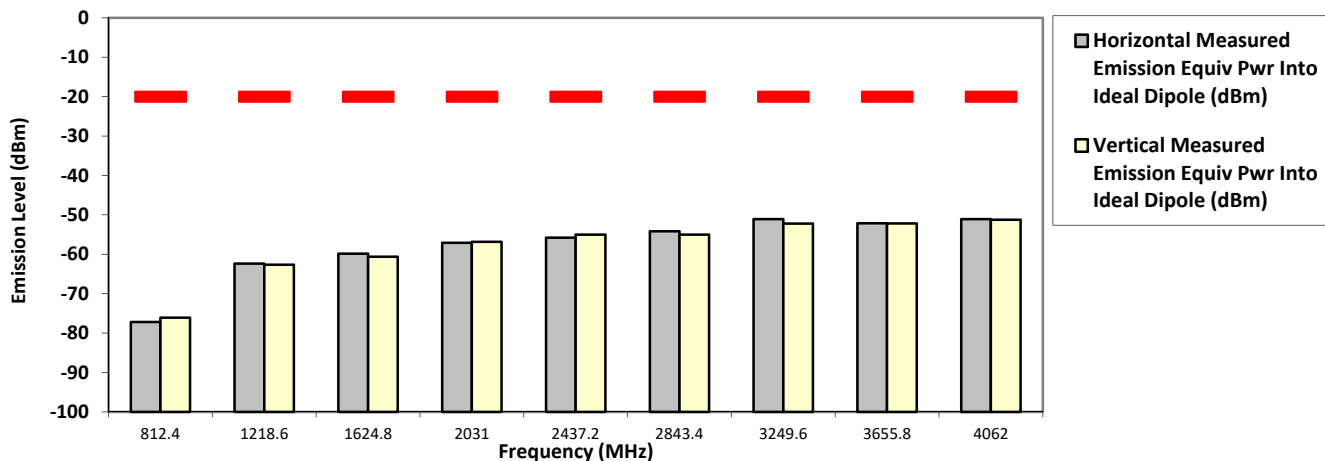
Remarks: Passed Results Marginal Results Failed Results

**SAC Transmitter Radiated Emission:**

Model Number: AAH01QDC9JA2AN      S/N: 752TXT0633      SR:29146-EMC-00005  
 Battery Part No: NNTN4497DR      Test Mode: TX Digital      Accy Part No: NA  
 406.200000 MHz      12.5 kHz      4.800 Watt(s) /Max Power

Frequency (MHz)	Limit	Horizontal Measured Emission Equip Pwr Into Ideal Dipole (dBm)	Vertical Measured Emission Equip Pwr Into ideal Dipole (dBm)
812.4000	-20.0000	-77.1786 **	-76.1078 **
1218.6000	-20.0000	-62.3734 **	-62.6688 **
1624.8000	-20.0000	-59.8327 **	-60.6035 **
2031.0000	-20.0000	-57.0806 **	-56.8431 **
2437.2000	-20.0000	-55.7841 **	-55.0066 **
2843.4000	-20.0000	-54.1745 **	-55.0294 **
3249.6000	-20.0000	-51.0614 **	-52.2185 **
3655.8000	-20.0000	-52.1385 **	-52.1816 **
4062.0000	-20.0000	-51.0727 **	-51.2360 **

**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&Qawiman      Sat, 2 Oct, 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): 69.2

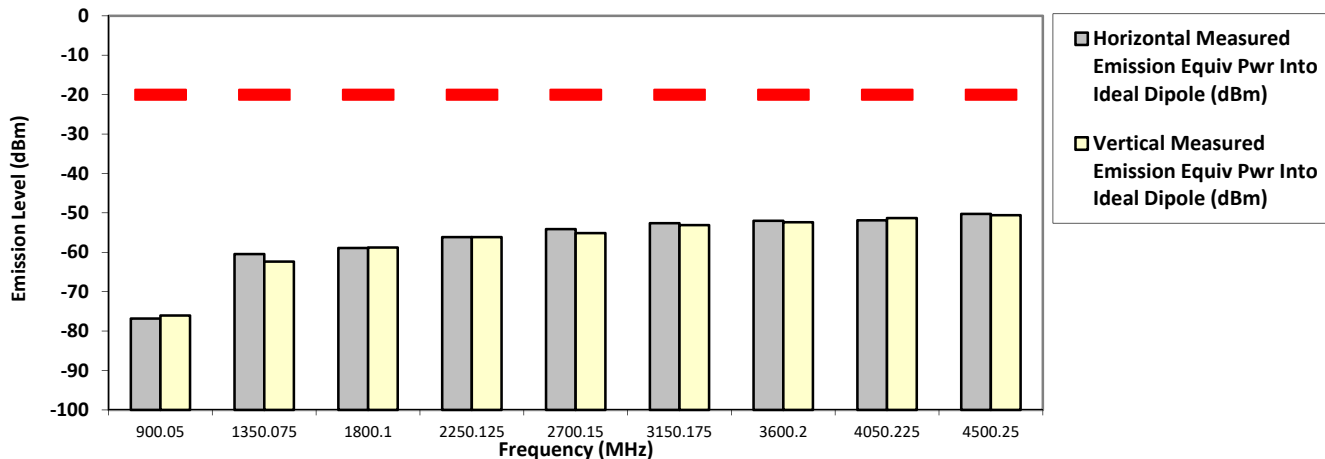
Remarks: Passed Results Marginal Results Failed Results

**SAC Transmitter Radiated Emission:**

Model Number: AAH01QDC9JA2AN      S/N: 752TXT0633      SR:29146-EMC-00005  
 Battery Part No: NNTN4497DR      Test Mode: TX Digital      Accy Part No: NA  
 450.025000 MHz      12.5 kHz      4.800 Watt(s) /Max Power

Frequency (MHz)	Limit	Horizontal Measured Emission Equip Pwr Into Ideal Dipole (dBm)	Vertical Measured Emission Equip Pwr Into ideal Dipole (dBm)
900.0500	-20.0000	-76.8075 **	-76.0626 **
1350.0750	-20.0000	-60.4548 **	-62.3695 **
1800.1000	-20.0000	-58.9275 **	-58.7893 **
2250.1250	-20.0000	-56.1628 **	-56.1389 **
2700.1500	-20.0000	-54.1161 **	-55.1399 **
3150.1750	-20.0000	-52.6401 **	-53.1051 **
3600.2000	-20.0000	-52.0322 **	-52.3858 **
4050.2250	-20.0000	-51.8815 **	-51.3210 **
4500.2500	-20.0000	-50.2579 **	-50.6136 **

**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&Qawiman      Sat, 2 Oct, 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): 69.2

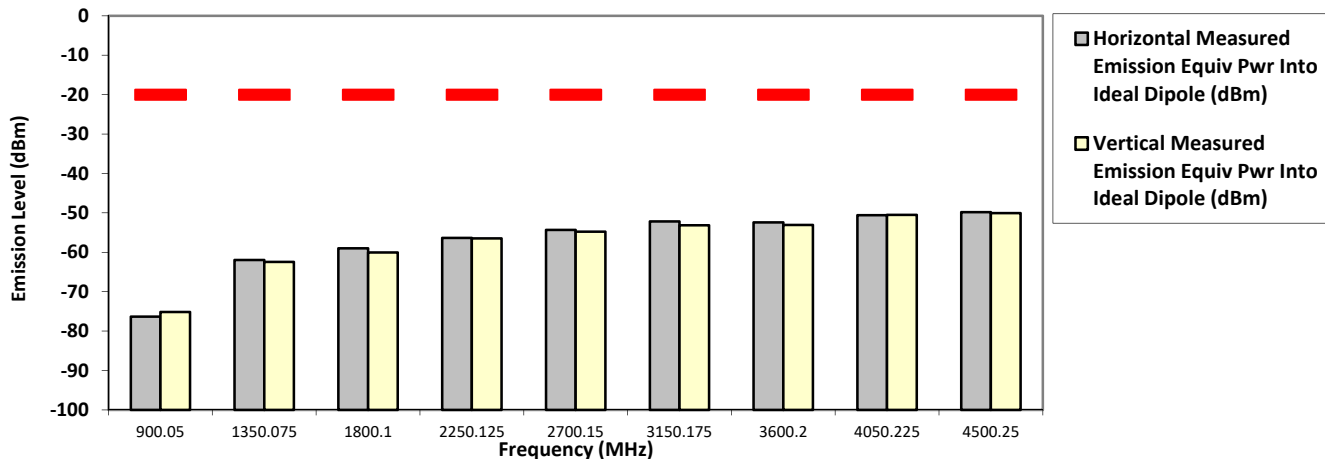
Remarks: Passed Results Marginal Results Failed Results

**SAC Transmitter Radiated Emission:**

**Model Number: AAH01QDC9JA2AN**      **S/N: 752TXT0633**      **SR:29146-EMC-00005**  
**Battery Part No: NNTN4497DR**      **Test Mode: TX Digital**      **Accy Part No: NA**  
**450.025000 MHz**      **12.5 kHz**      **1.000 Watt(s) /Low Power**

Frequency (MHz)	Limit	Horizontal Measured Emission Equip Pwr Into Ideal Dipole (dBm)	Vertical Measured Emission Equip Pwr Into ideal Dipole (dBm)
900.0500	-20.0000	-76.3321 **	-75.1424 **
1350.0750	-20.0000	-61.9464 **	-62.4291 **
1800.1000	-20.0000	-58.9823 **	-60.0359 **
2250.1250	-20.0000	-56.3614 **	-56.4936 **
2700.1500	-20.0000	-54.3441 **	-54.7961 **
3150.1750	-20.0000	-52.1965 **	-53.1432 **
3600.2000	-20.0000	-52.4272 **	-53.0627 **
4050.2250	-20.0000	-50.5825 **	-50.5139 **
4500.2500	-20.0000	-49.8339 **	-50.0797 **

**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&Qawiman      Sat, 2 Oct, 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): 69.2

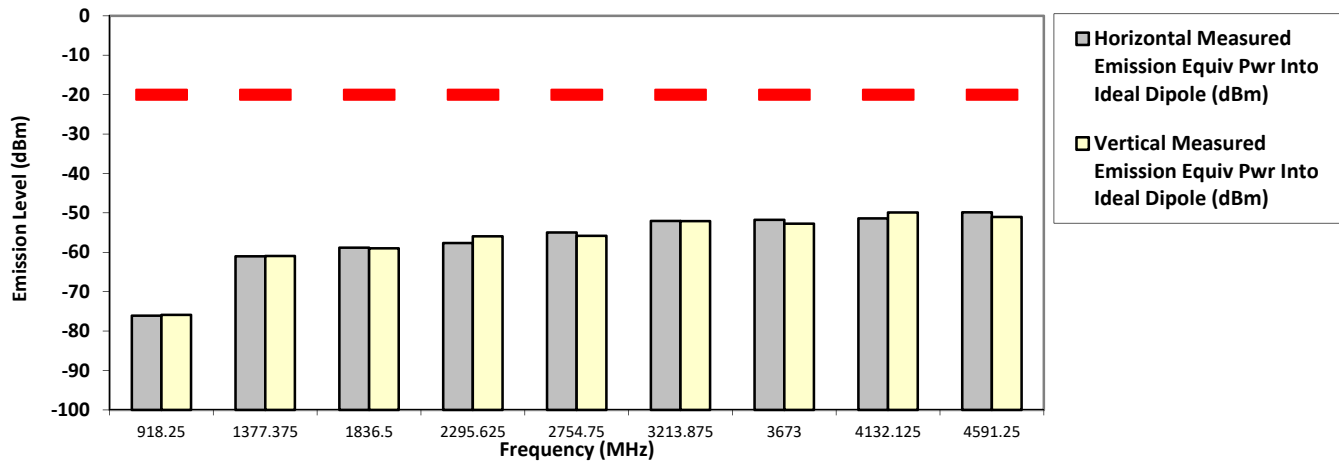
Remarks: Passed Results Marginal Results Failed Results

**SAC Transmitter Radiated Emission:**

Model Number: AAH01QDC9JA2AN      S/N: 752TXT0633      SR:29146-EMC-00005  
 Battery Part No: NNTN4497DR      Test Mode: TX Digital      Accy Part No: NA  
 459.125000 MHz      12.5 kHz      4.800 Watt(s) /Max Power

Frequency (MHz)	Limit	Horizontal Measured Emission Equip Pwr Into Ideal Dipole (dBm)	Vertical Measured Emission Equip Pwr Into ideal Dipole (dBm)
918.2500	-20.0000	-76.0748 **	-75.8833 **
1377.3750	-20.0000	-61.0450 **	-60.9465 **
1836.5000	-20.0000	-58.8267 **	-59.0163 **
2295.6250	-20.0000	-57.6559 **	-55.9685 **
2754.7500	-20.0000	-54.9607 **	-55.8288 **
3213.8750	-20.0000	-52.0375 **	-52.0820 **
3673.0000	-20.0000	-51.7861 **	-52.7541 **
4132.1250	-20.0000	-51.4235 **	-49.9003 **
4591.2500	-20.0000	-49.8484 **	-51.0307 **

**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&Qawiman      Sat, 2 Oct, 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): 69.2

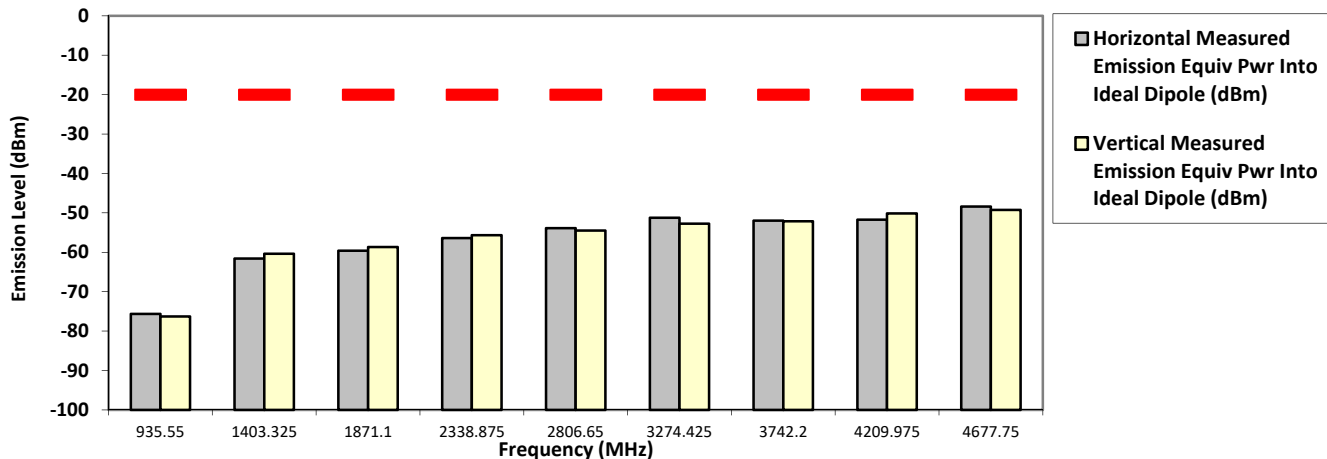
Remarks: Passed Results Marginal Results Failed Results

**SAC Transmitter Radiated Emission:**

**Model Number: AAH01QDC9JA2AN**      **S/N: 752TXT0633**      **SR:29146-EMC-00005**  
**Battery Part No: NNTN4497DR**      **Accy Part No: NA**  
**Test Mode: TX Digital**  
**467.775000 MHz**      **12.5 kHz**      **4.800 Watt(s) /Max Power**

Frequency (MHz)	Limit	Horizontal Measured Emission Equip Pwr Into Ideal Dipole (dBm)	Vertical Measured Emission Equip Pwr Into ideal Dipole (dBm)
935.5500	-20.0000	-75.6347 **	-76.3125 **
1403.3250	-20.0000	-61.5774 **	-60.3879 **
1871.1000	-20.0000	-59.6142 **	-58.6892 **
2338.8750	-20.0000	-56.4198 **	-55.6505 **
2806.6500	-20.0000	-53.8749 **	-54.5104 **
3274.4250	-20.0000	-51.2577 **	-52.7660 **
3742.2000	-20.0000	-51.9862 **	-52.1512 **
4209.9750	-20.0000	-51.7373 **	-50.1595 **
4677.7500	-20.0000	-48.4060 **	-49.2463 **

**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&Qawiman      Sat, 2 Oct, 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): 69.2

Remarks: Passed Results Marginal Results Failed Results

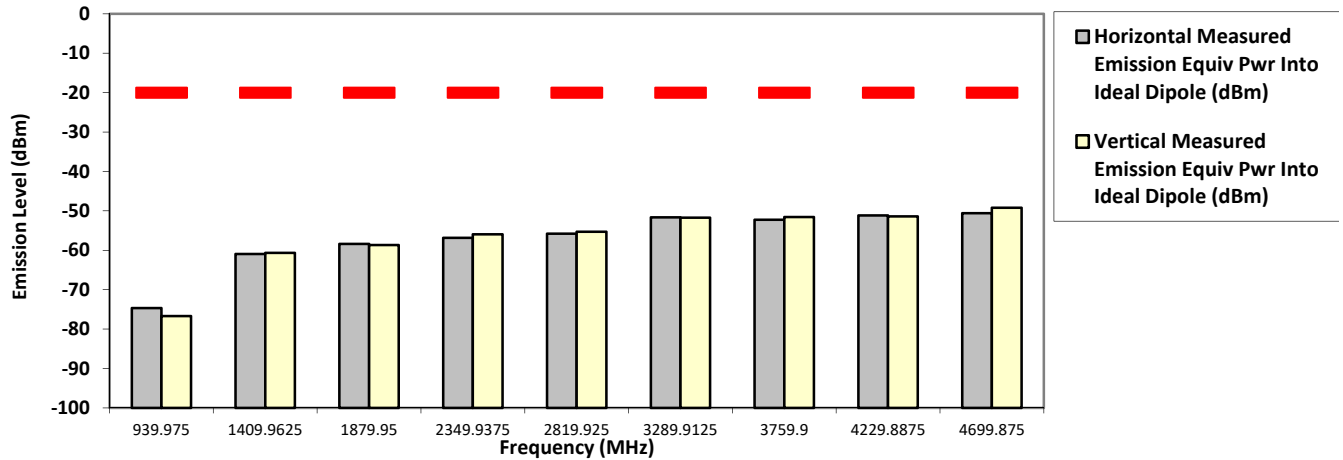


**SAC Transmitter Radiated Emission:**

**Model Number: AAH01QDC9JA2AN**      **S/N: 752TXT0633**      **SR:29146-EMC-00005**  
**Battery Part No: NNTN4497DR**      **Accy Part No: NA**  
**469.987500 MHz (Not for FCC review)**      **Test Mode: TX Digital**      **12.5 kHz**      **4.800 Watt(s) /Max Power**

Frequency (MHz)	Limit	Horizontal Measured Emission Equip Pwr Into Ideal Dipole (dBm)	Vertical Measured Emission Equip Pwr Into ideal Dipole (dBm)
939.9750	-20.0000	-74.6507 **	-76.7033 **
1409.9625	-20.0000	-60.9321 **	-60.6691 **
1879.9500	-20.0000	-58.3925 **	-58.6917 **
2349.9375	-20.0000	-56.8380 **	-55.9344 **
2819.9250	-20.0000	-55.7777 **	-55.3073 **
3289.9125	-20.0000	-51.6379 **	-51.7138 **
3759.9000	-20.0000	-52.2674 **	-51.5649 **
4229.8875	-20.0000	-51.1537 **	-51.3901 **
4699.8750	-20.0000	-50.6006 **	-49.2193 **

**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&Qawiman      Sat, 2 Oct, 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): 69.2

Remarks: Passed Results Marginal Results Failed Results

### 6.10.4. Test Limit

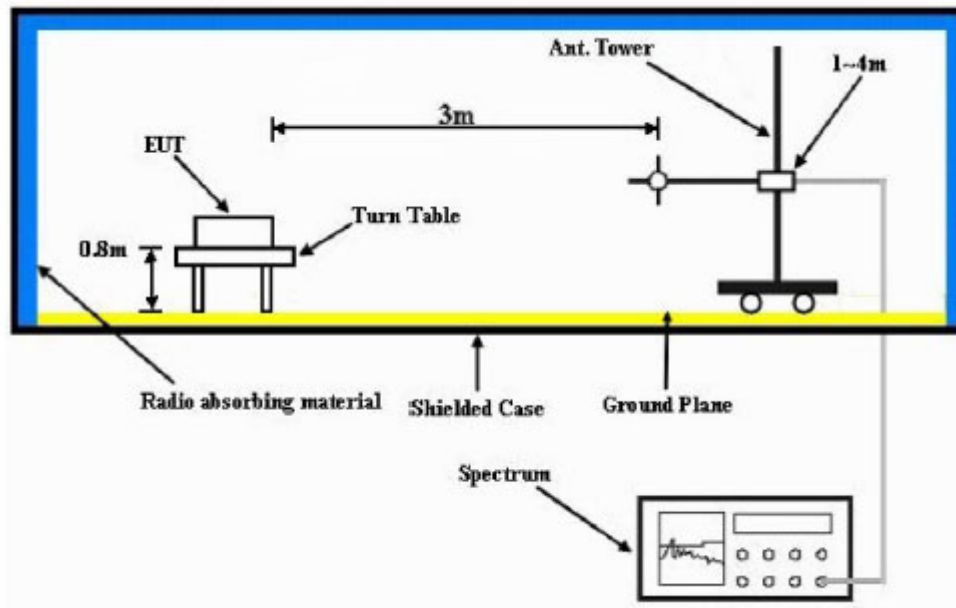
Table below summarized the power of any emission outside a licensee's frequency block shall be attenuated below the transmitter power (P) by at least

Channel Spacing	Part 22	Part 24D	Part 74	Part 80	Part 90 (UHF, VHF, 800, 900)	Part 90 (700)
12.5kHz	43 + log <sub>10</sub> (P) (-13 dBm)	43 + log <sub>10</sub> (P) (-13 dBm)	43 + log <sub>10</sub> (P) (-13 dBm)	Not Applicable	50 + log <sub>10</sub> (P) (-20 dBm)	43 + log <sub>10</sub> (P) (-13 dBm)
25kHz		Not Applicable		43 + log <sub>10</sub> (P) (-13 dBm)	43 + log <sub>10</sub> (P) (-13 dBm)	43 + log <sub>10</sub> (P) (-13 dBm)

Channel Spacing	RSS 134	RSS 182	RSS 119 (UHF, VHF, 800, 900)	RSS 119 (700)
12.5kHz	43 + log <sub>10</sub> (P) (-13 dBm)	Not Applicable	50 + log <sub>10</sub> (P) (-20 dBm)	43 + log <sub>10</sub> (P) (-13 dBm)
25kHz	Not Applicable	43 + log <sub>10</sub> (P) (-13 dBm)	43 + log <sub>10</sub> (P) (-13 dBm)	43 + log <sub>10</sub> (P) (-13 dBm)

## 6.11. Effective Radiated Power (ERP)

### 6.11.1. 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  $F_c < 1\text{GHz}$ ) or 1.5m (for  $F_c > 1\text{GHz}$ ) 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.

### 6.11.2. Test Result

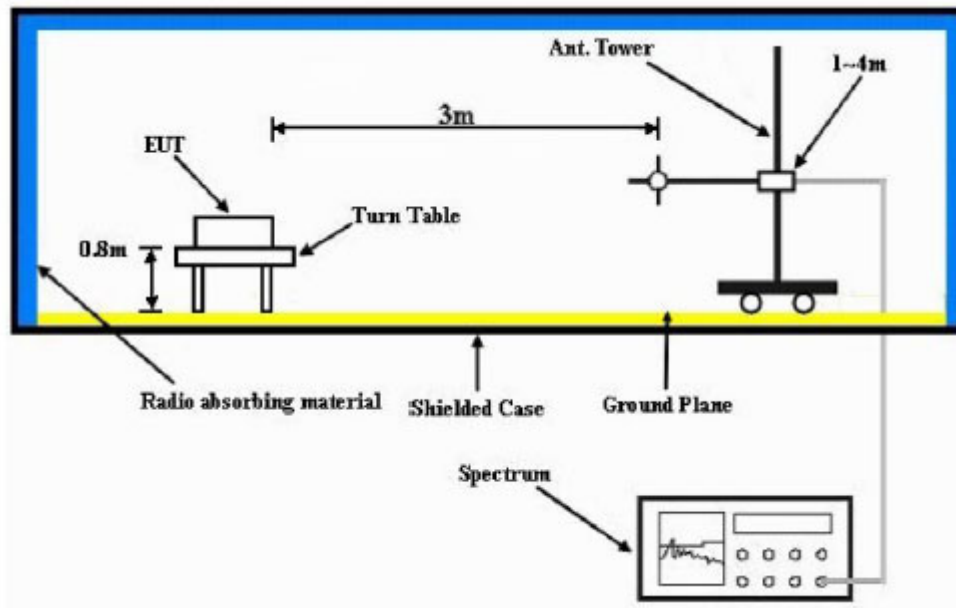
Not Applicable.

### 6.11.3. Test Limit

The maximum output power of the transmitter for mobile stations is 100 watts (20 dB). Power is given in terms of effective radiated power (ERP).

## 6.12. GNSS (EIRP for 1559 - 1610MHz)

### 6.12.1. 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)  $EIRP = \text{“Read Value”} + \text{Measured substitution value} + 2.15$ .

### 6.12.1. Test Result

**Not Applicable.**

### 6.12.2. 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 ~**