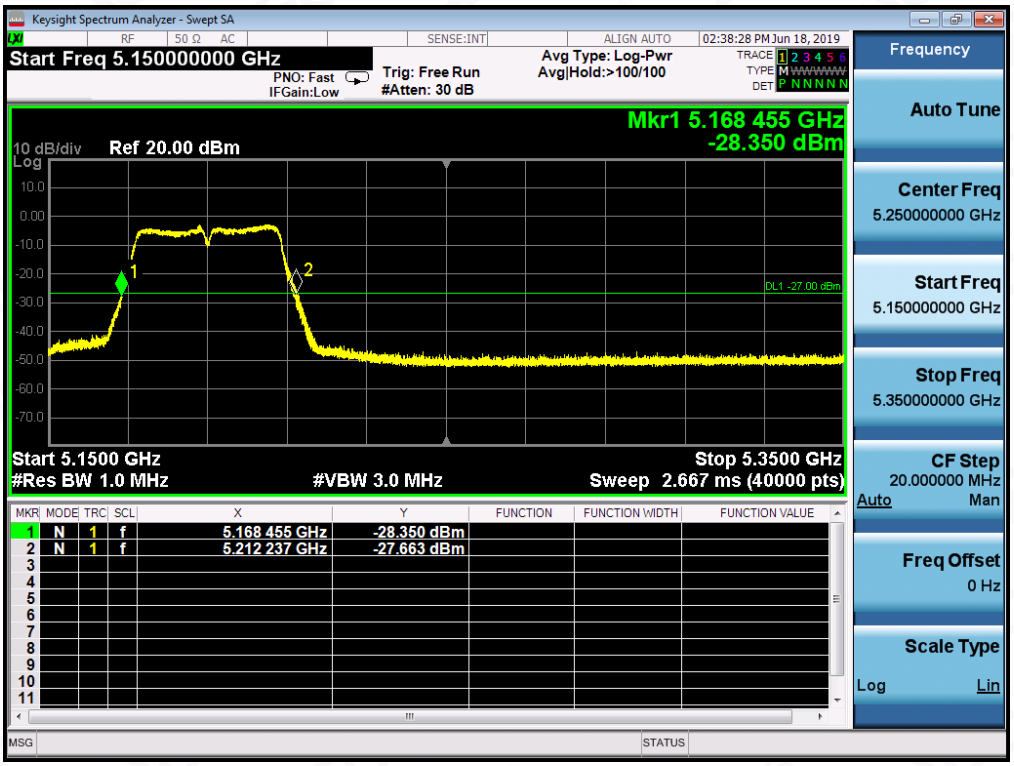
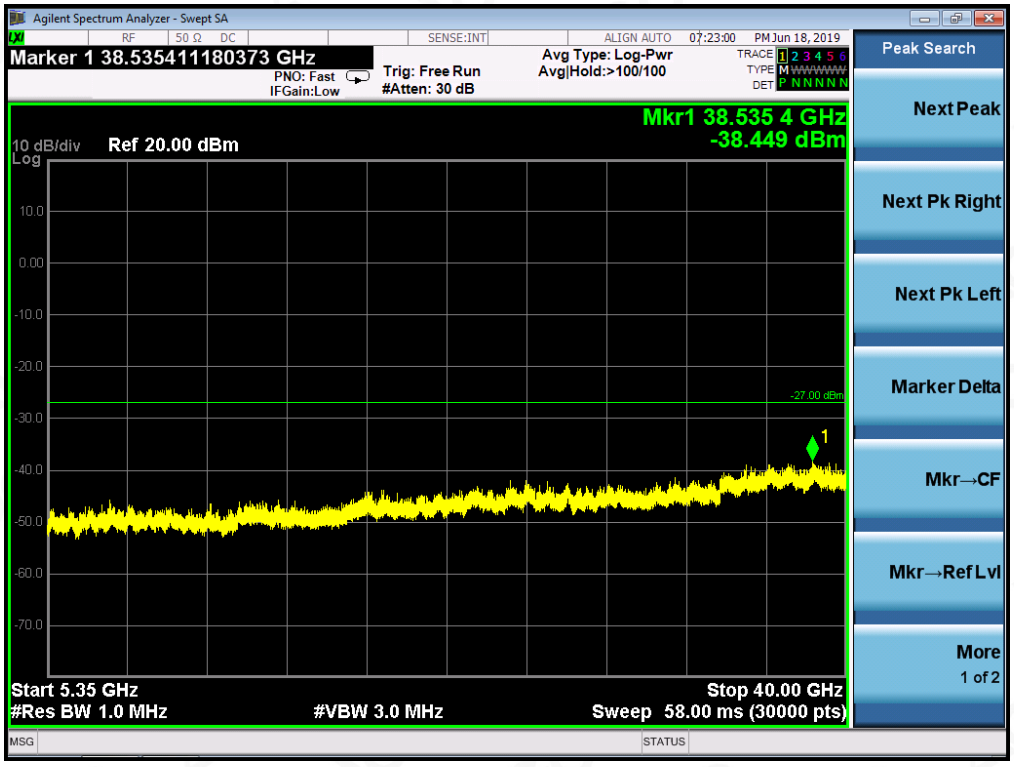
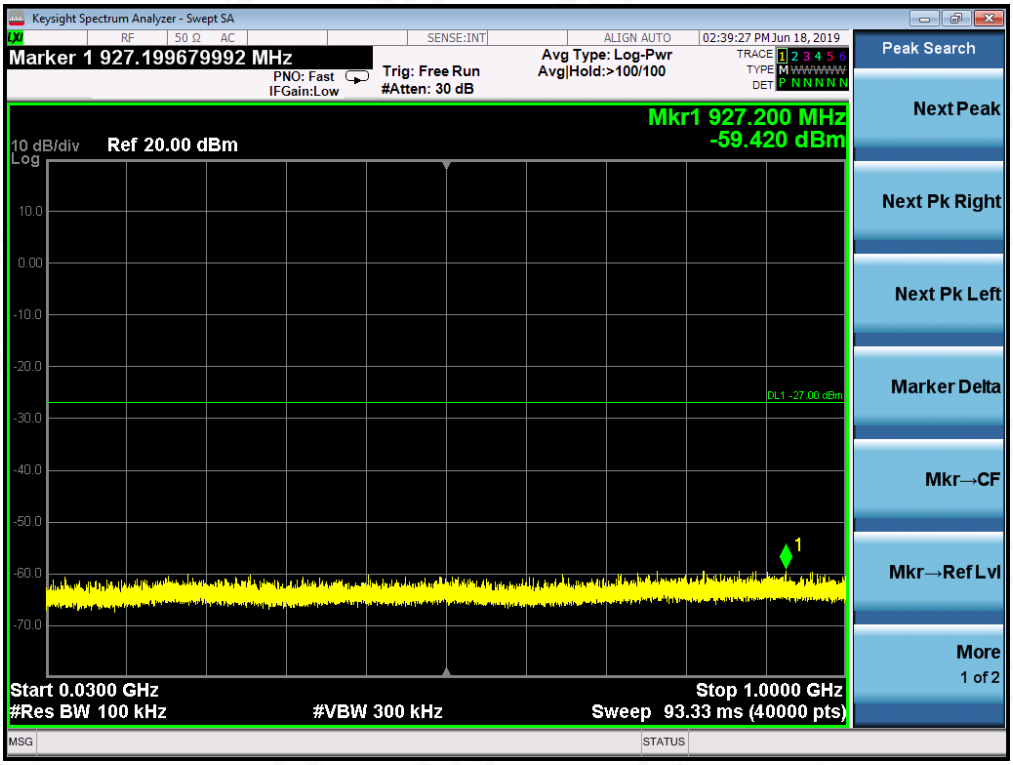
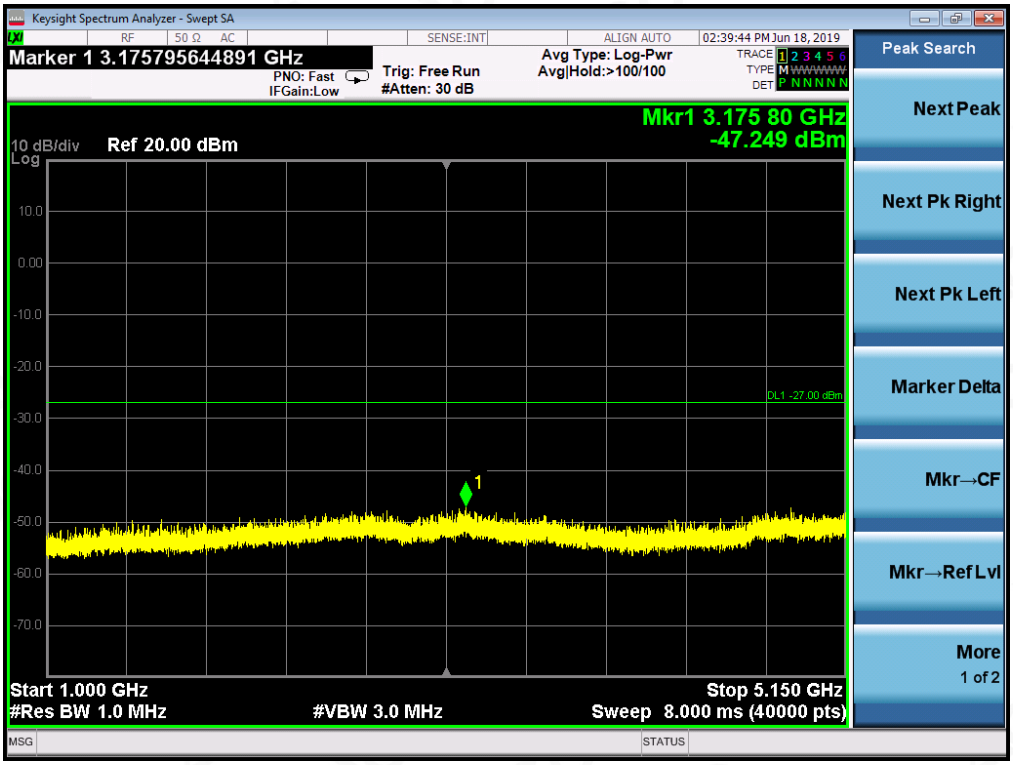
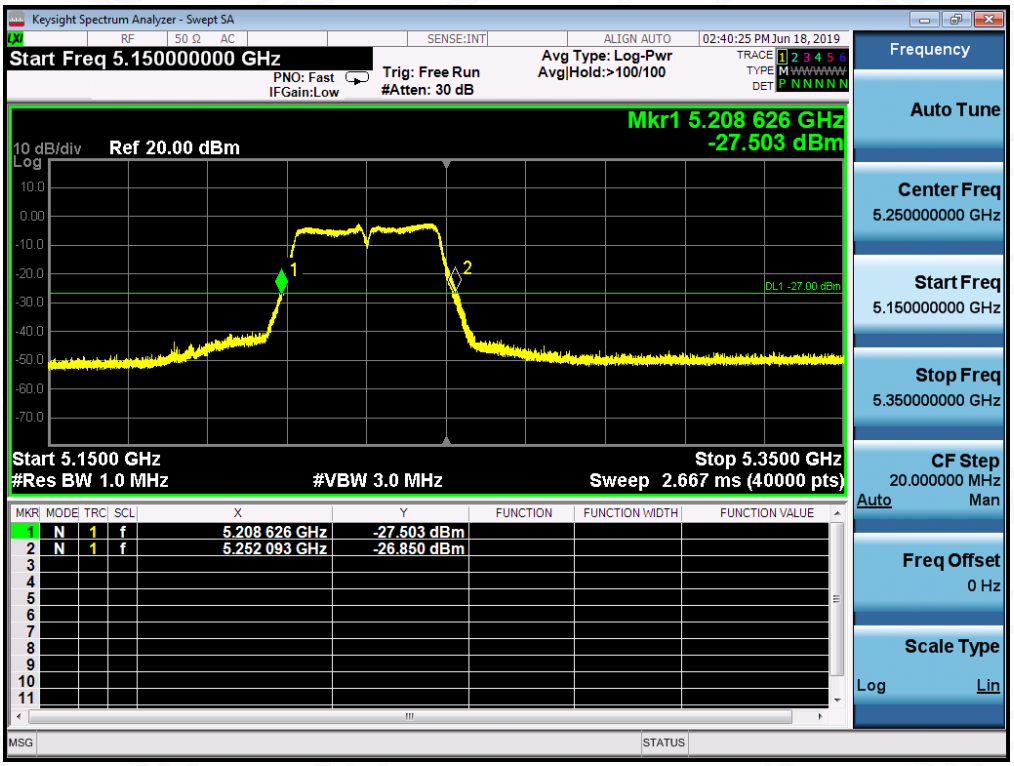

Keysight Spectrum Analyzer - Swept SA
Start Freq 5.150000000 GHz
PNO: Fast
IFGain:Low
Trig: Free Run
#Atten: 30 dB
Avg Type: Log-Pwr
Avg|Hold:>100/100
02:38:28 PM Jun 18, 2019
Mkr1 5.168 455 GHz
-28.350 dBm
10 dB/div
Log
Ref 20.00 dBm
DL1 -27.00 dBm
Start 5.1500 GHz
#Res BW 1.0 MHz
#VBW 3.0 MHz
Stop 5.3500 GHz
Sweep 2.667 ms (40000 pts)
1 N 1 f 5.168 455 GHz -28.350 dBm
2 N 1 f 5.212 237 GHz -27.663 dBm
Frequency
Auto Tune
Center Freq
5.250000000 GHz
Start Freq
5.150000000 GHz
Stop Freq
5.350000000 GHz
CF Step
20.000000 MHz
Auto Man
Freq Offset
0 Hz
Scale Type
Log Lin
MSG
STATUS

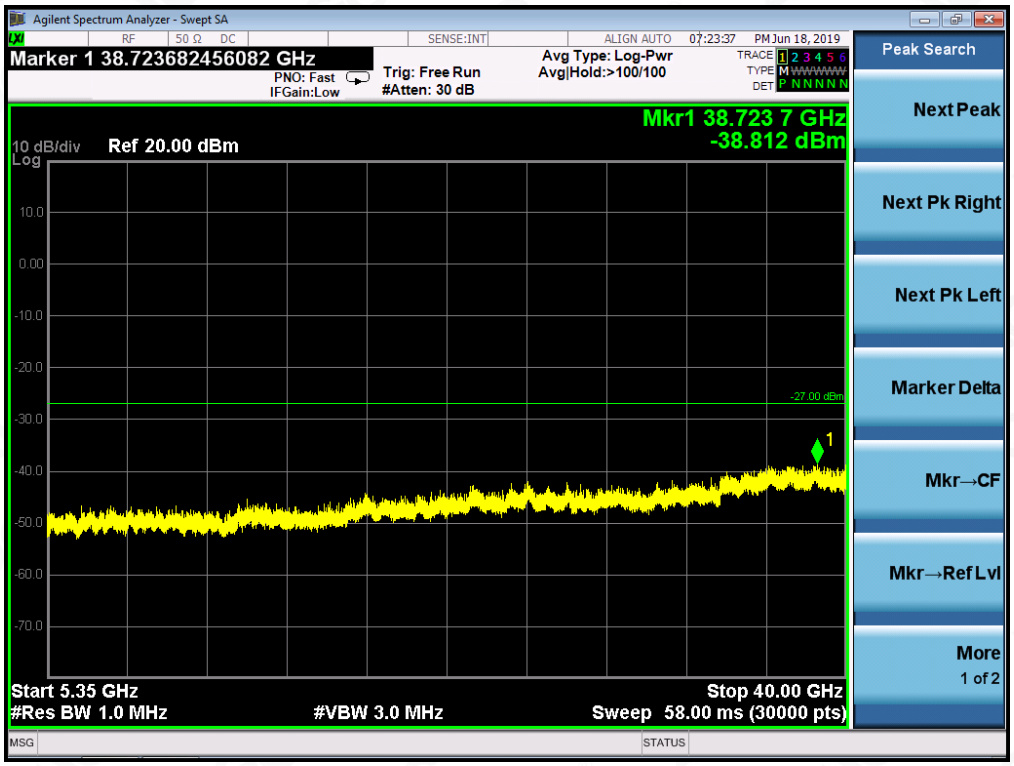

Agilent Spectrum Analyzer - Swept SA
Marker 1 38.535411180373 GHz
PNO: Fast
IFGain:Low
Trig: Free Run
#Atten: 30 dB
Avg Type: Log-Pwr
Avg|Hold:>100/100
07:23:00 PM Jun 18, 2019
Mkr1 38.535 4 GHz
-38.449 dBm
10 dB/div
Log
Ref 20.00 dBm
-27.00 dBm
Start 5.35 GHz
#Res BW 1.0 MHz
#VBW 3.0 MHz
Stop 40.00 GHz
Sweep 58.00 ms (30000 pts)
Peak Search
Next Peak
Next Pk Right
Next Pk Left
Marker Delta
Mkr→CF
Mkr→Ref Lvl
More
1 of 2
MSG
STATUS

TEST PLOT OF OUT OF BAND EMISSIONS FOR MODULATION IN 5230MHz

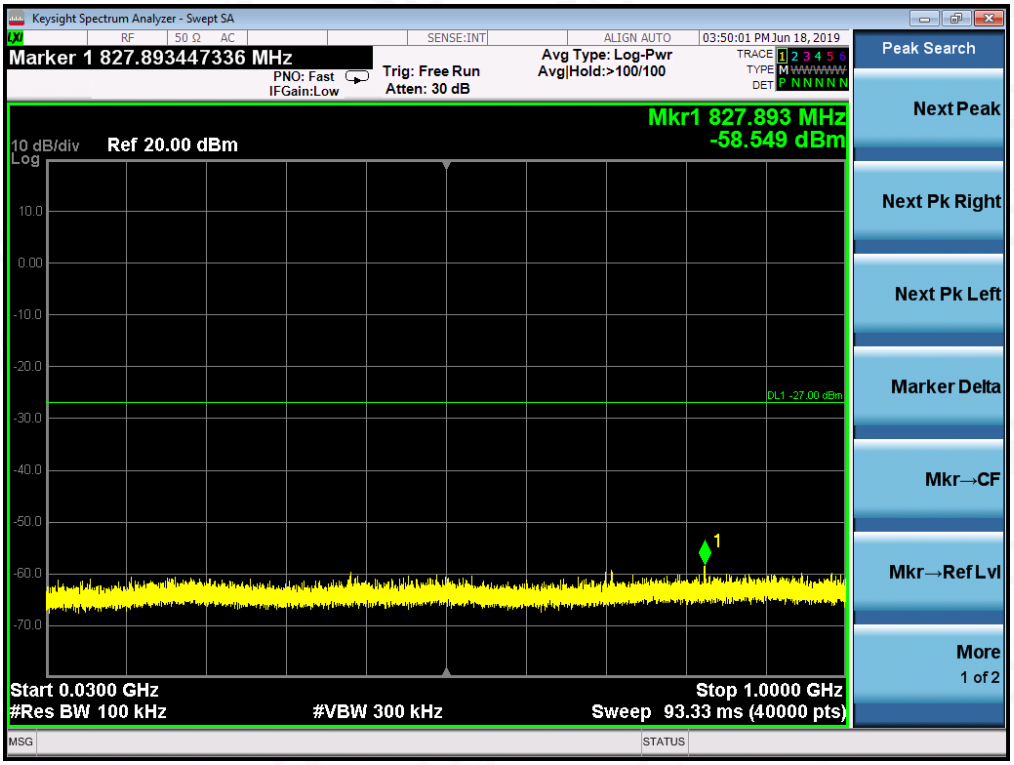


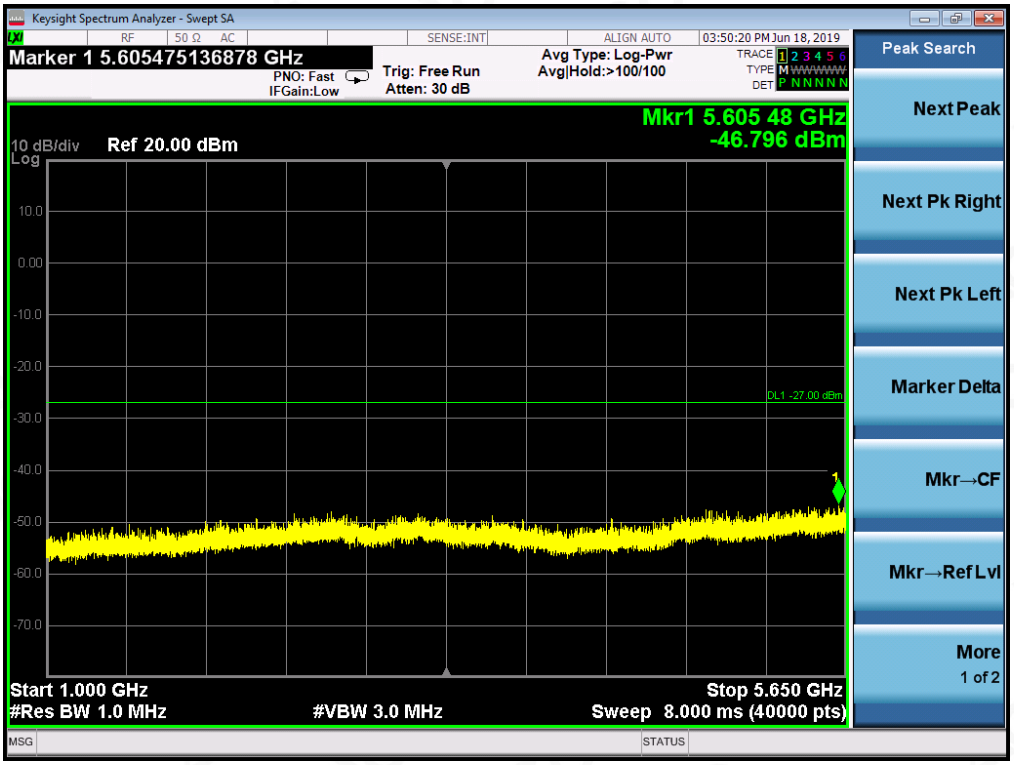


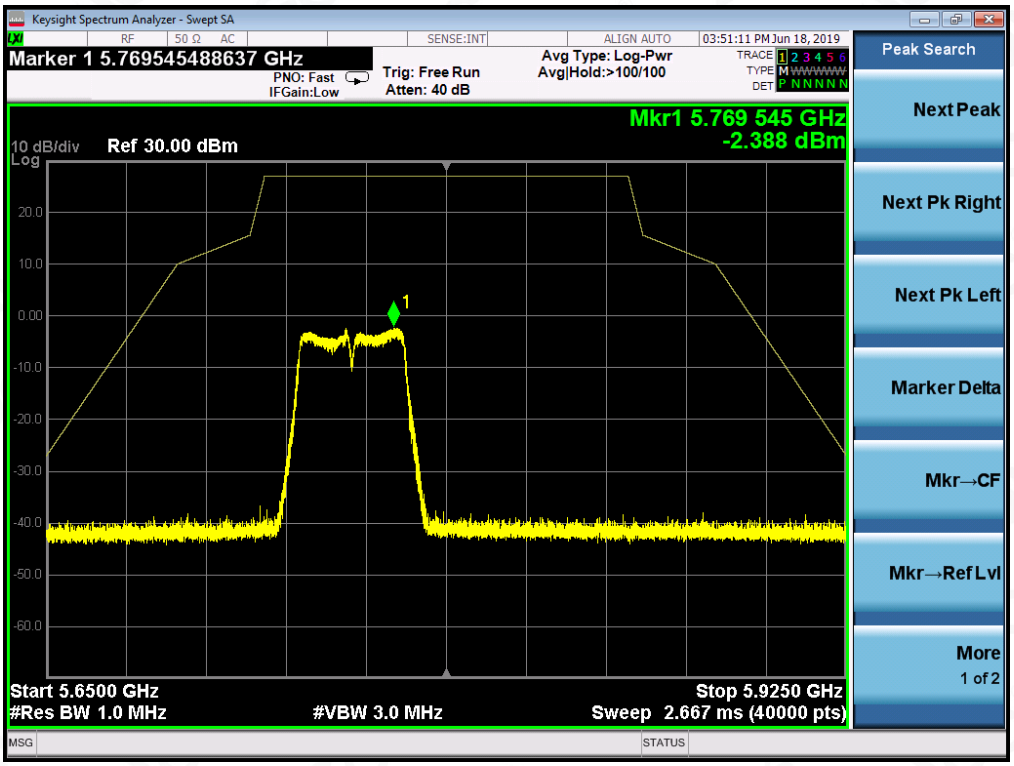

Keysight Spectrum Analyzer - Swept SA
RF 50 Ω AC
SENSE:INT
ALIGN AUTO
02:40:25 PM Jun 18, 2019
Start Freq 5.150000000 GHz
PNO: Fast
IFGain:Low
Trig: Free Run
#Atten: 30 dB
Avg Type: Log-Pwr
Avg|Hold:>100/100
Mkr1 5.208 626 GHz
-27.503 dBm
10 dB/div
Log
Ref 20.00 dBm
DL1 -27.00 dBm
Start 5.1500 GHz
#Res BW 1.0 MHz
#VBW 3.0 MHz
Stop 5.3500 GHz
Sweep 2.667 ms (40000 pts)
1 N 1 f 5.208 626 GHz -27.503 dBm
2 N 1 f 5.252 093 GHz -26.850 dBm
Frequency
Auto Tune
Center Freq
5.250000000 GHz
Start Freq
5.150000000 GHz
Stop Freq
5.350000000 GHz
CF Step
20.000000 MHz
Auto Man
Freq Offset
0 Hz
Scale Type
Log Lin
MSG
STATUS

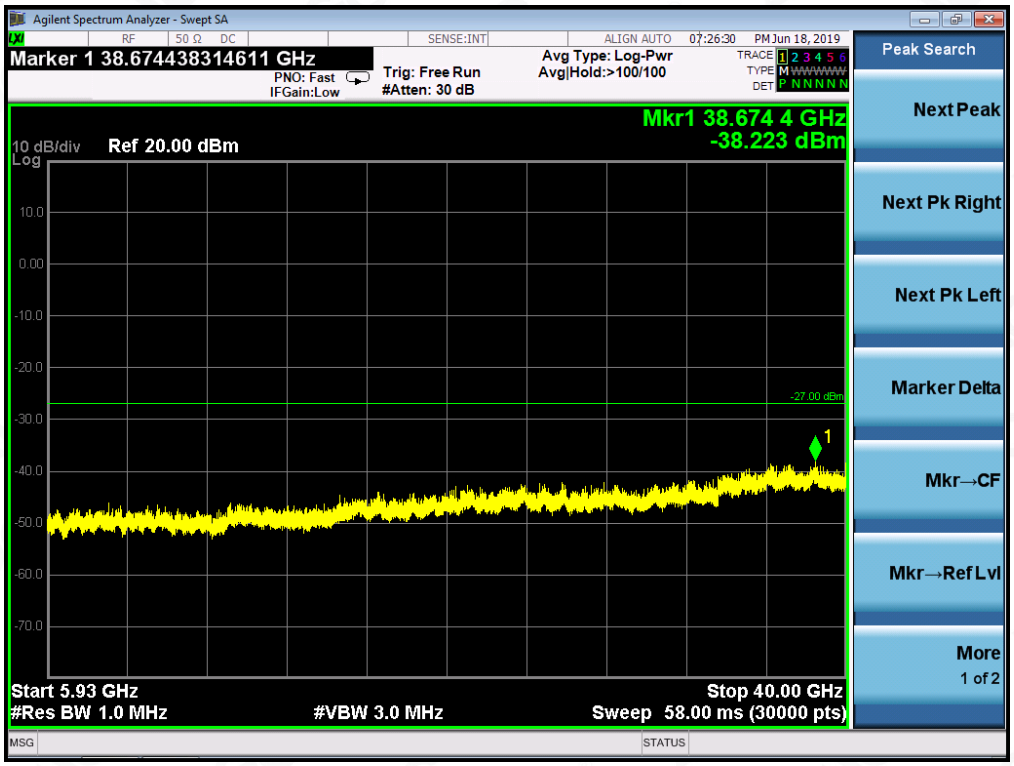

Agilent Spectrum Analyzer - Swept SA
RF 50 Ω DC
SENSE:INT
ALIGN AUTO
07:23:37 PM Jun 18, 2019
Marker 1 38.723682456082 GHz
PNO: Fast
IFGain:Low
Trig: Free Run
#Atten: 30 dB
Avg Type: Log-Pwr
Avg|Hold:>100/100
Mkr1 38.723 7 GHz
-38.812 dBm
10 dB/div
Log
Ref 20.00 dBm
-27.00 dBm
Start 5.35 GHz
#Res BW 1.0 MHz
#VBW 3.0 MHz
Stop 40.00 GHz
Sweep 58.00 ms (30000 pts)
Peak Search
Next Peak
Next Pk Right
Next Pk Left
Marker Delta
Mkr→CF
Mkr→Ref Lvl
More
1 of 2
MSG
STATUS

TEST PLOT OF OUT OF BAND EMISSIONS FOR MODULATION IN 5755MHz

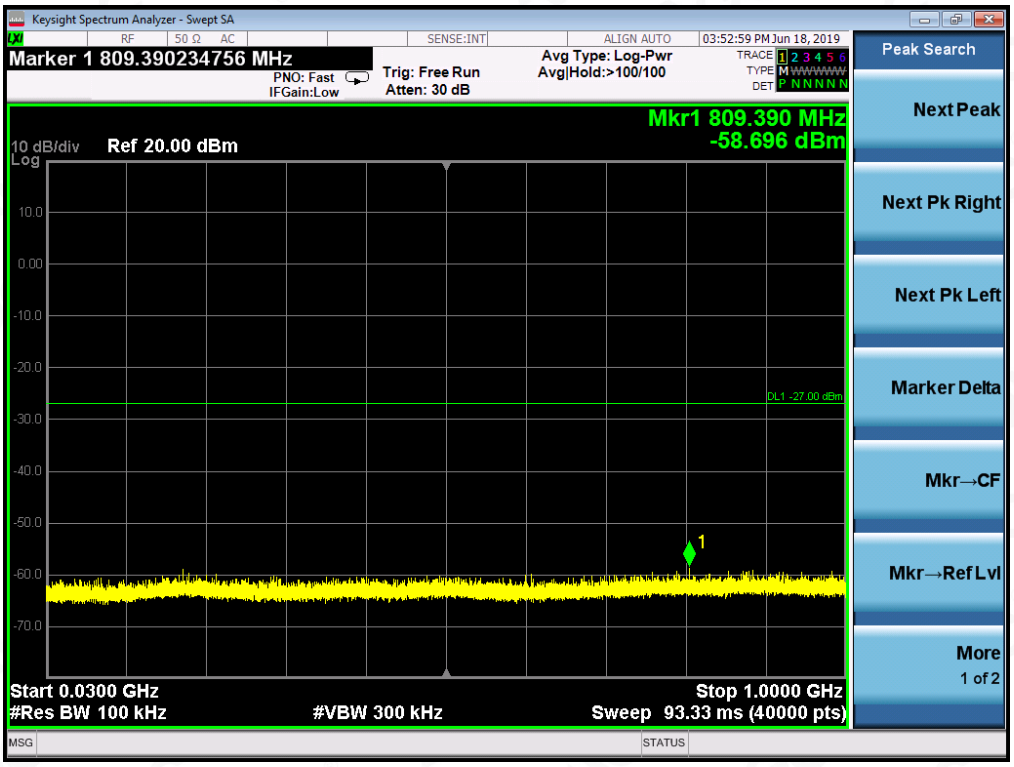


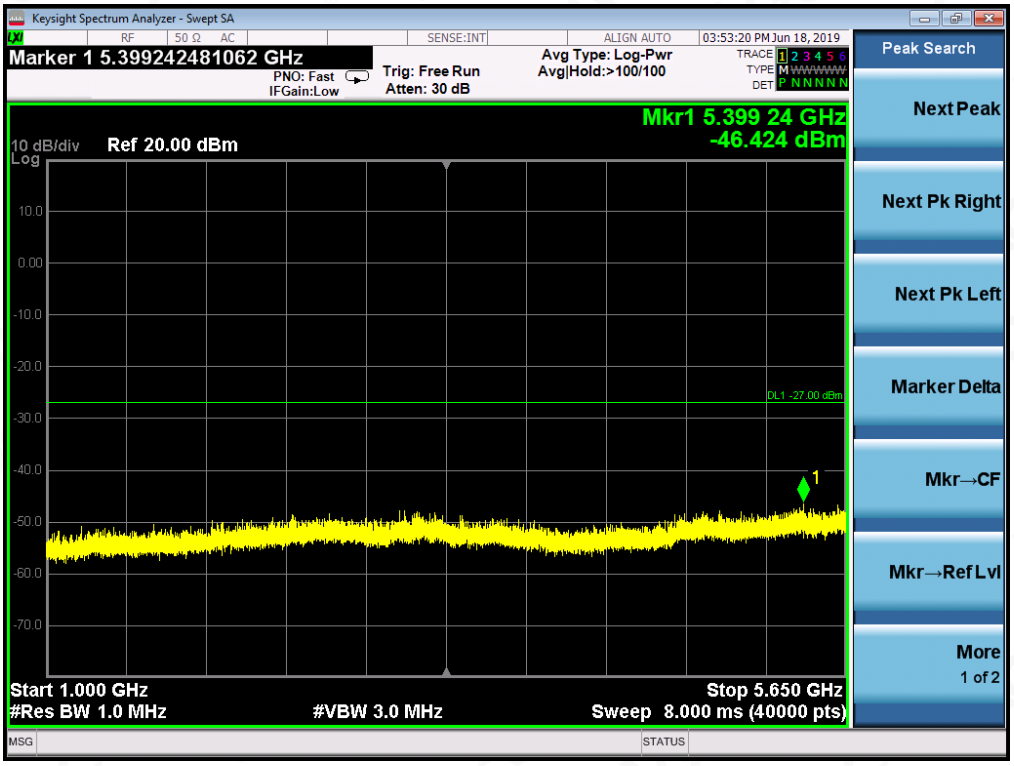


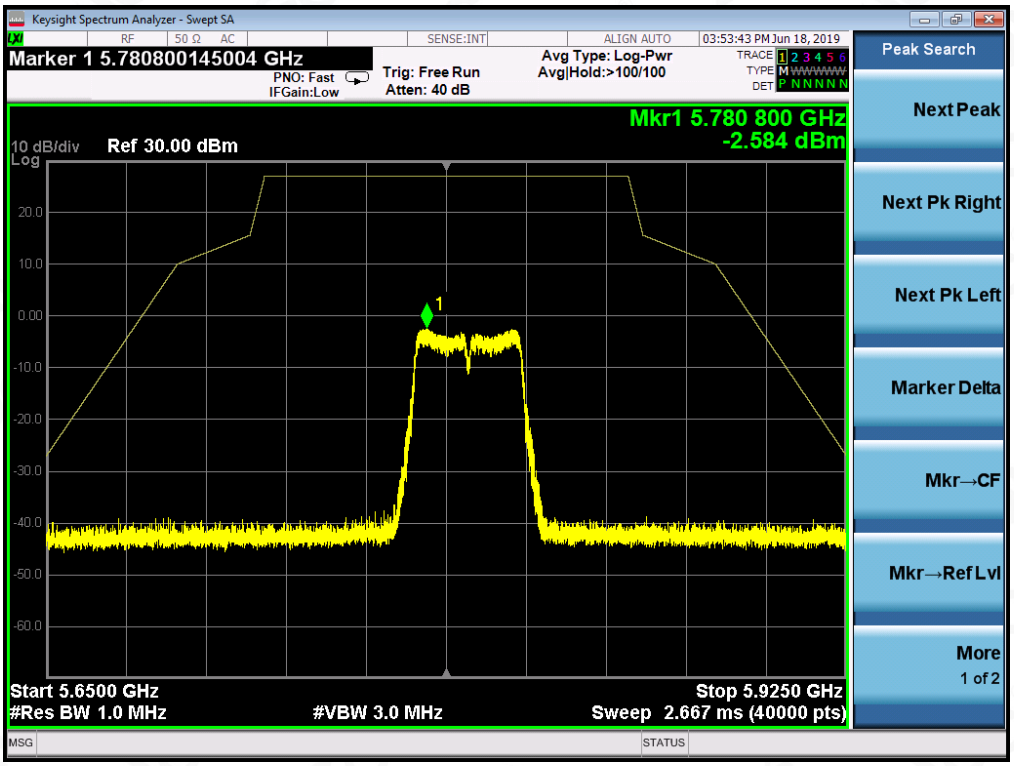

Keysight Spectrum Analyzer - Swept SA
RF 50 Ω AC
SENSE:INT
ALIGN AUTO
03:51:11 PM Jun 18, 2019
Marker 1 5.769545488637 GHz
PNO: Fast
IFGain:Low
Trig: Free Run
Atten: 40 dB
Avg Type: Log-Pwr
Avg|Hold:>100/100
TRACE 1 2 3 4 5 6
TYPE M WWWWW
DET P N N N N N
Mkr1 5.769 545 GHz
-2.388 dBm
10 dB/div
Log
Ref 30.00 dBm
20.0
10.0
0.00
-10.0
-20.0
-30.0
-40.0
-50.0
-60.0
Start 5.6500 GHz
#Res BW 1.0 MHz
#VBW 3.0 MHz
Stop 5.9250 GHz
Sweep 2.667 ms (40000 pts)
Peak Search
Next Peak
Next Pk Right
Next Pk Left
Marker Delta
Mkr→CF
Mkr→Ref Lvl
More
1 of 2
MSG
STATUS

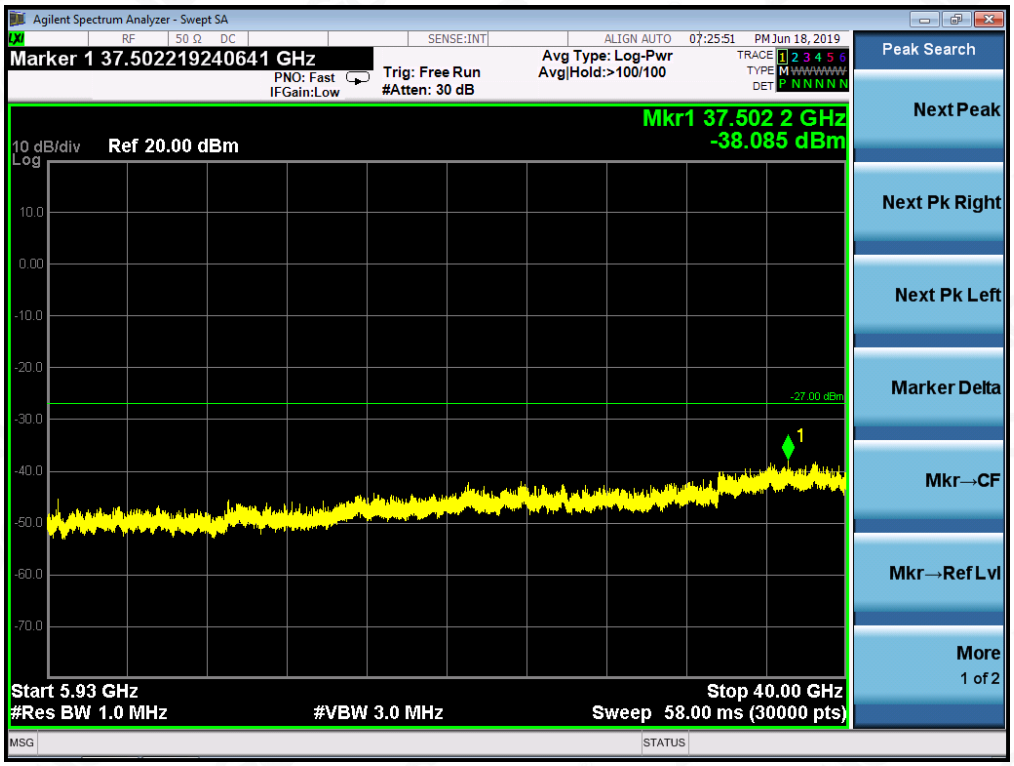

Agilent Spectrum Analyzer - Swept SA
RF 50 Ω DC
SENSE:INT
ALIGN AUTO
07:26:30 PM Jun 18, 2019
Marker 1 38.674438314611 GHz
PNO: Fast
IFGain:Low
Trig: Free Run
#Atten: 30 dB
Avg Type: Log-Pwr
Avg|Hold:>100/100
TRACE 1 2 3 4 5 6
TYPE M WWWWW
DET P N N N N N
Mkr1 38.674 4 GHz
-38.223 dBm
10 dB/div
Log
Ref 20.00 dBm
-27.00 dBm
10.0
0.00
-10.0
-20.0
-30.0
-40.0
-50.0
-60.0
-70.0
Start 5.93 GHz
#Res BW 1.0 MHz
#VBW 3.0 MHz
Stop 40.00 GHz
Sweep 58.00 ms (30000 pts)
Peak Search
Next Peak
Next Pk Right
Next Pk Left
Marker Delta
Mkr→CF
Mkr→Ref Lvl
More
1 of 2
MSG
STATUS

TEST PLOT OF OUT OF BAND EMISSIONS FOR MODULATION IN 5795MHz



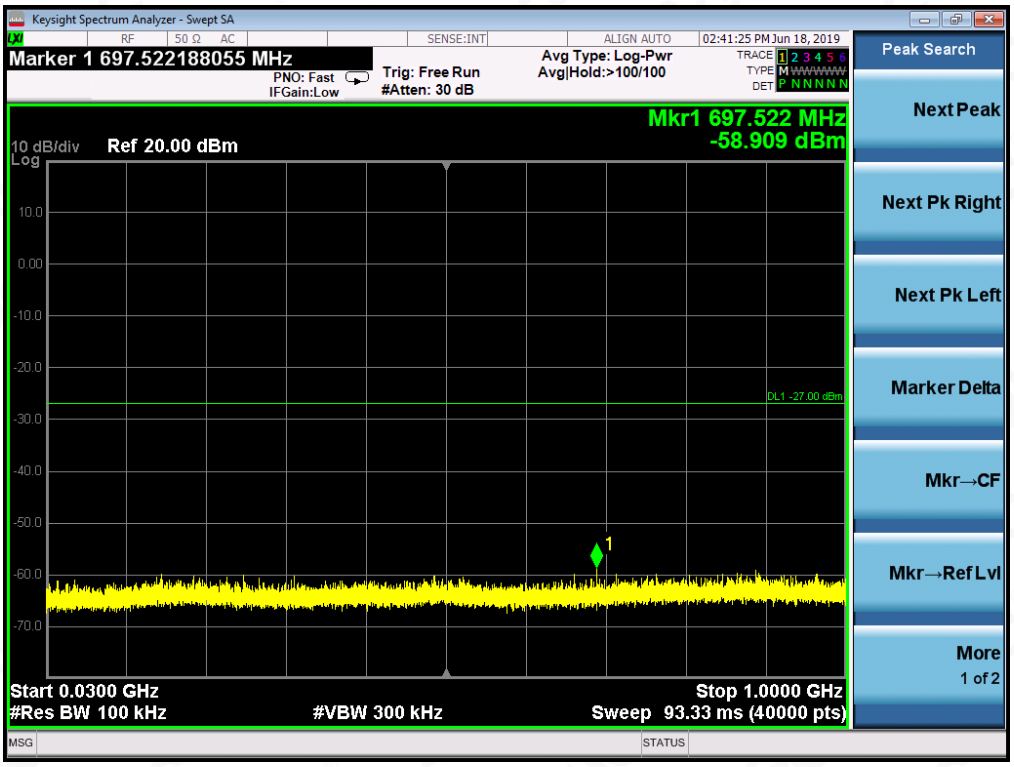


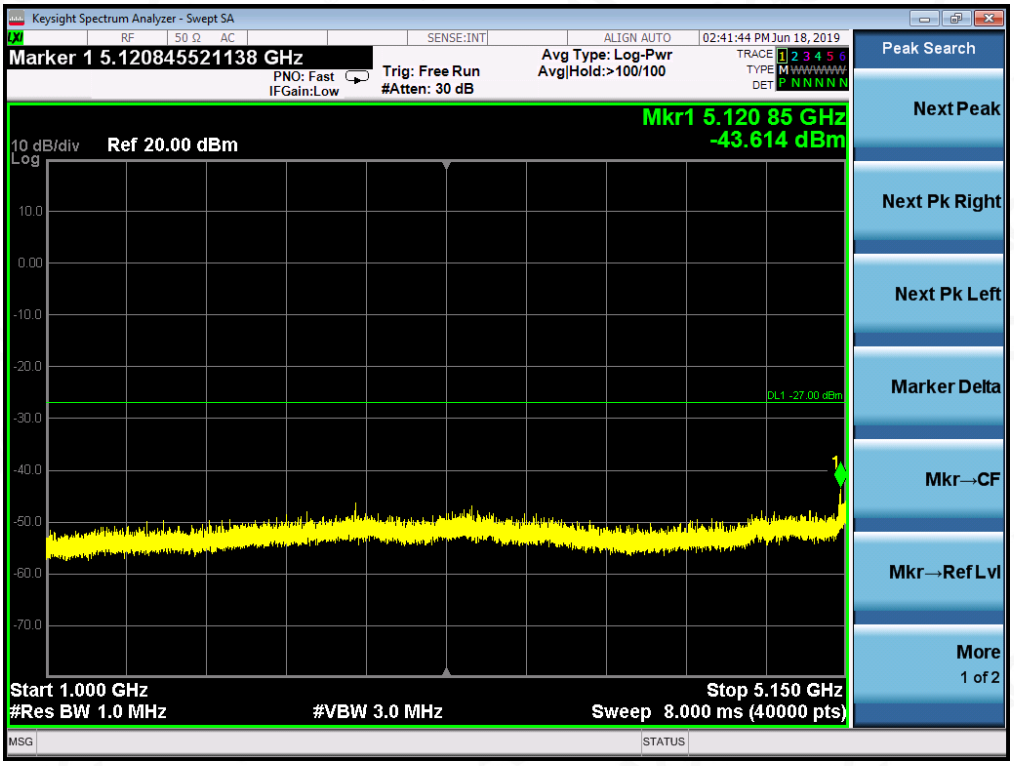

Keysight Spectrum Analyzer - Swept SA
RF 50 Ω AC
SENSE:INT
ALIGN AUTO
03:53:43 PM Jun 18, 2019
Marker 1 5.780800145004 GHz
PNO: Fast
IFGain:Low
Trig: Free Run
Atten: 40 dB
Avg Type: Log-Pwr
Avg|Hold:>100/100
TRACE 1 2 3 4 5 6
TYPE M WWWWW
DET P N N N N N
Mkr1 5.780 800 GHz
-2.584 dBm
10 dB/div
Log
Ref 30.00 dBm
20.0
10.0
0.00
-10.0
-20.0
-30.0
-40.0
-50.0
-60.0
Start 5.6500 GHz
#Res BW 1.0 MHz
#VBW 3.0 MHz
Stop 5.9250 GHz
Sweep 2.667 ms (40000 pts)
Peak Search
Next Peak
Next Pk Right
Next Pk Left
Marker Delta
Mkr→CF
Mkr→Ref Lvl
More
1 of 2
MSG
STATUS

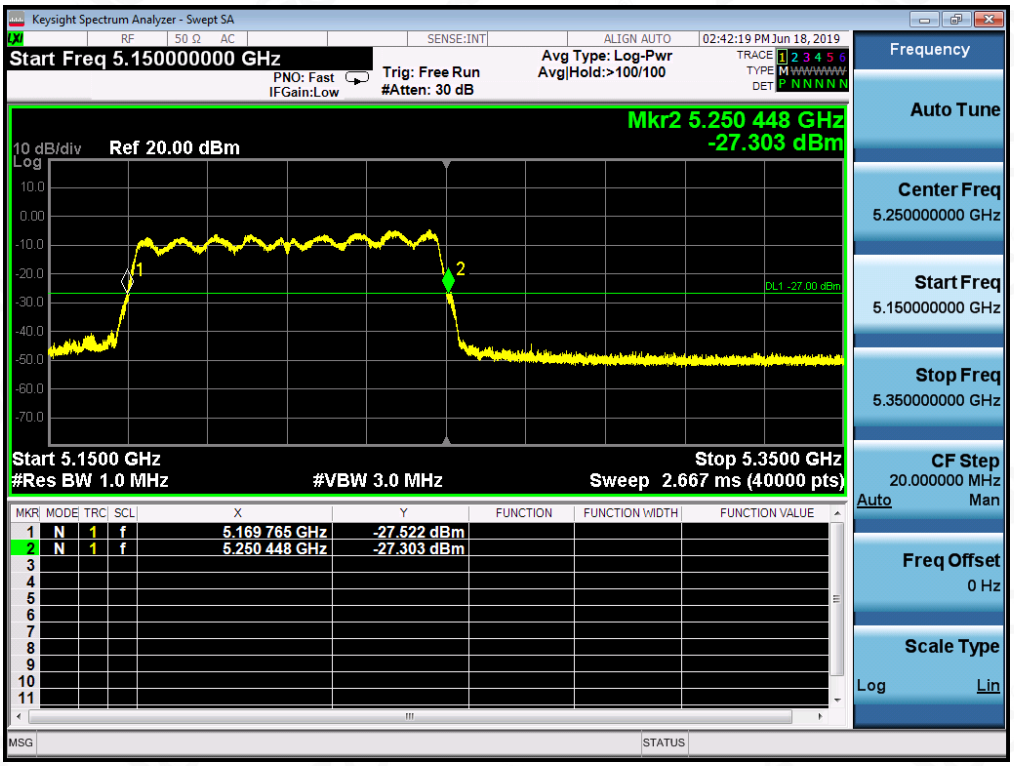

Agilent Spectrum Analyzer - Swept SA
RF 50 Ω DC
SENSE:INT
ALIGN AUTO
07:25:51 PM Jun 18, 2019
Marker 1 37.502219240641 GHz
PNO: Fast
IFGain:Low
Trig: Free Run
#Atten: 30 dB
Avg Type: Log-Pwr
Avg|Hold:>100/100
TRACE 1 2 3 4 5 6
TYPE M WWWWW
DET P N N N N N
Mkr1 37.502 2 GHz
-38.085 dBm
10 dB/div
Log
Ref 20.00 dBm
-27.00 dBm
10.0
0.00
-10.0
-20.0
-30.0
-40.0
-50.0
-60.0
-70.0
Start 5.93 GHz
#Res BW 1.0 MHz
#VBW 3.0 MHz
Stop 40.00 GHz
Sweep 58.00 ms (30000 pts)
Peak Search
Next Peak
Next Pk Right
Next Pk Left
Marker Delta
Mkr→CF
Mkr→Ref Lvl
More
1 of 2
MSG
STATUS

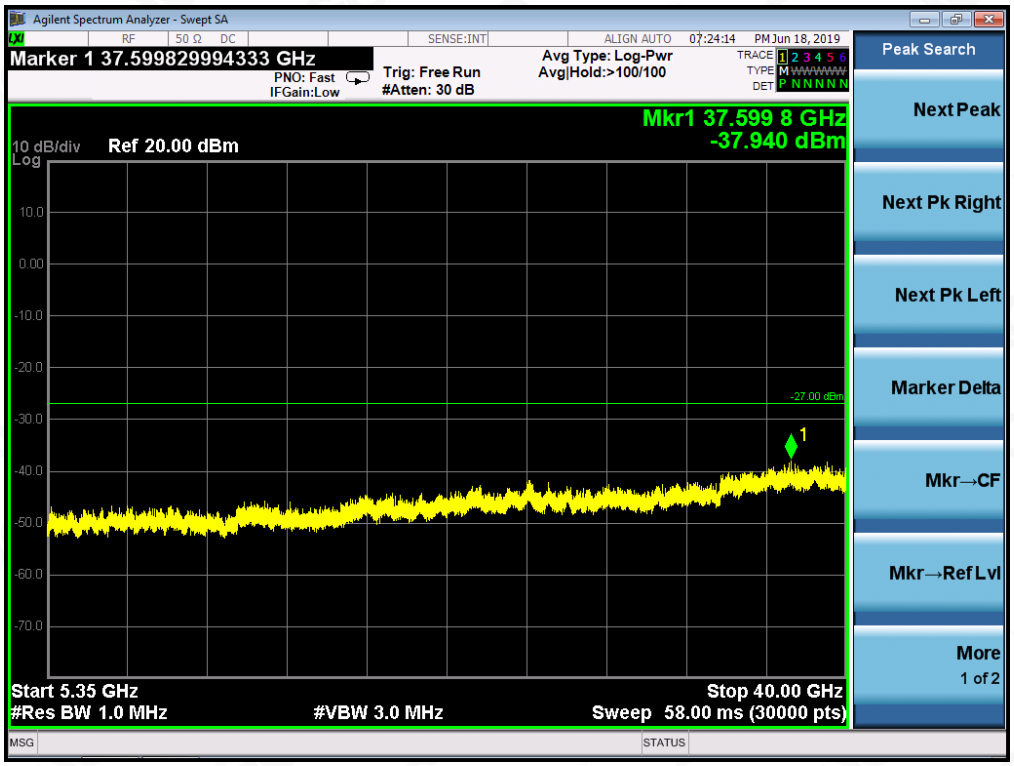
FOR 802.11AC80 MODULATION

TEST PLOT OF OUT OF BAND EMISSIONS FOR MODULATION IN 5210MHz

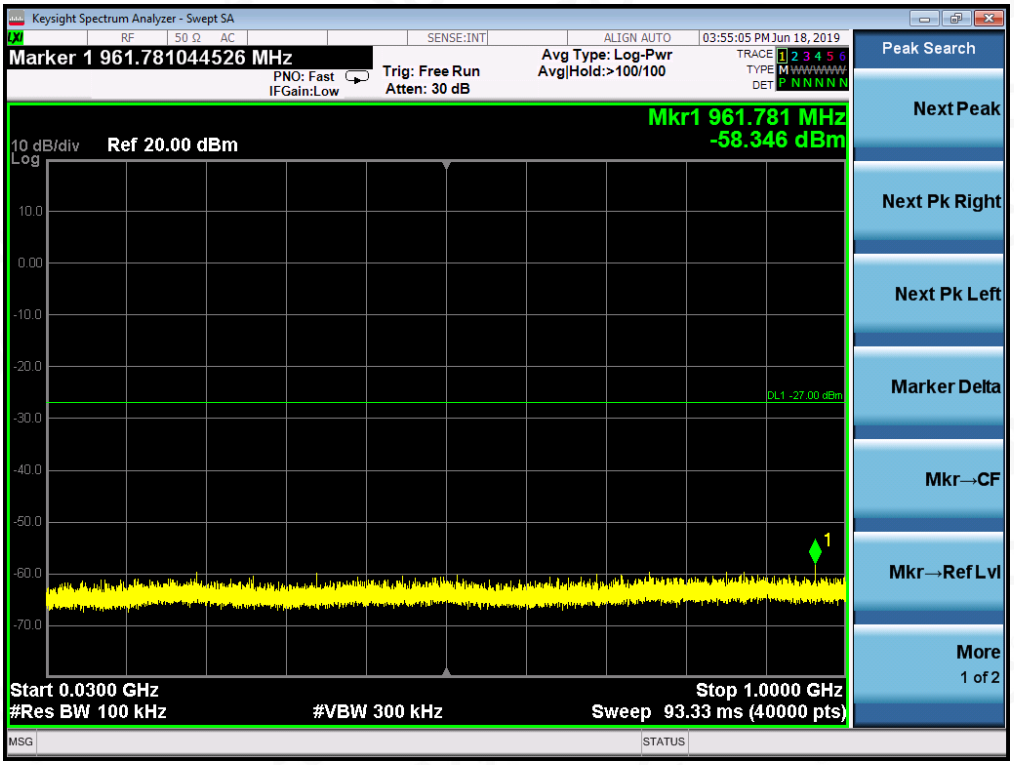


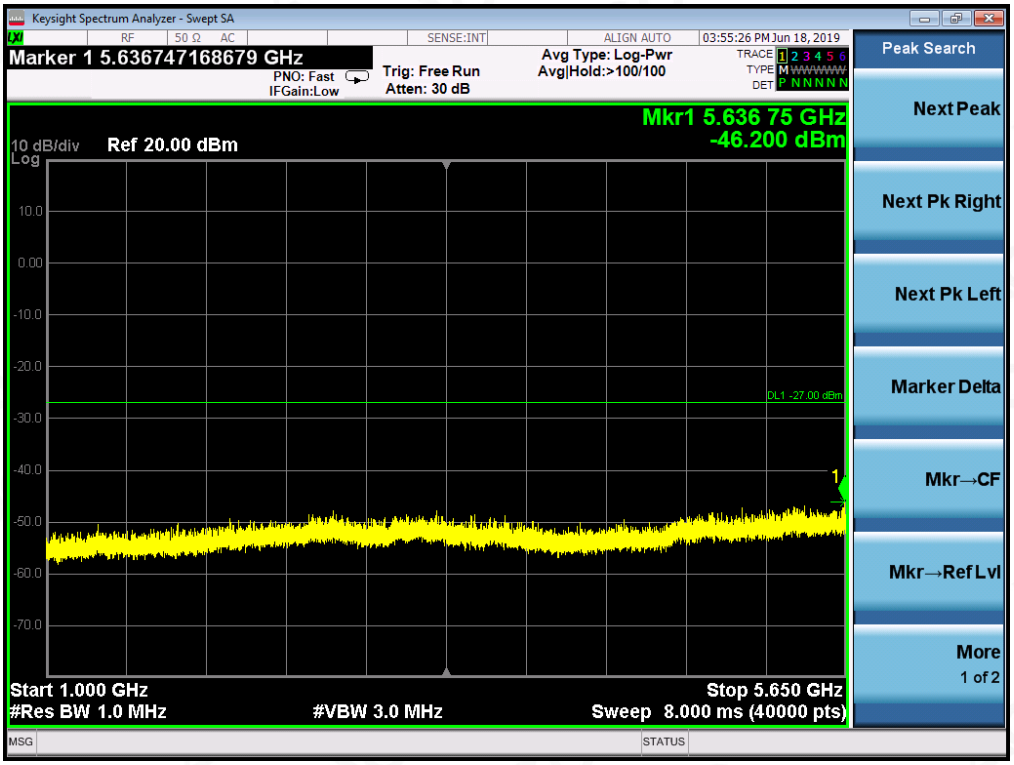


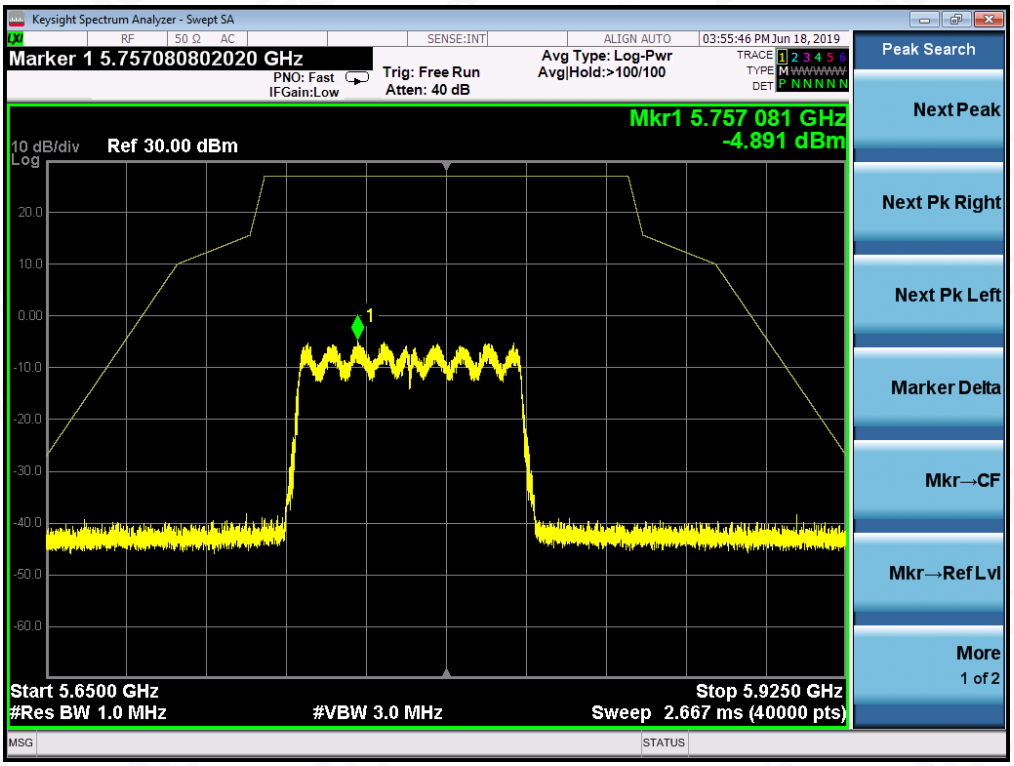

Keysight Spectrum Analyzer - Swept SA
Start Freq 5.150000000 GHz
PNO: Fast
IFGain:Low
Trig: Free Run
#Atten: 30 dB
Avg Type: Log-Pwr
Avg|Hold:>100/100
02:42:19 PM Jun 18, 2019
Mkr2 5.250 448 GHz
-27.303 dBm
10 dB/div
Log
Ref 20.00 dBm
DL1 -27.00 dBm
Start 5.1500 GHz
#Res BW 1.0 MHz
#VBW 3.0 MHz
Stop 5.3500 GHz
Sweep 2.667 ms (40000 pts)
1 N 1 f 5.169 765 GHz -27.522 dBm
2 N 1 f 5.250 448 GHz -27.303 dBm
Frequency
Auto Tune
Center Freq
5.250000000 GHz
Start Freq
5.150000000 GHz
Stop Freq
5.350000000 GHz
CF Step
20.000000 MHz
Auto
Man
Freq Offset
0 Hz
Scale Type
Log
Lin
MSG
STATUS

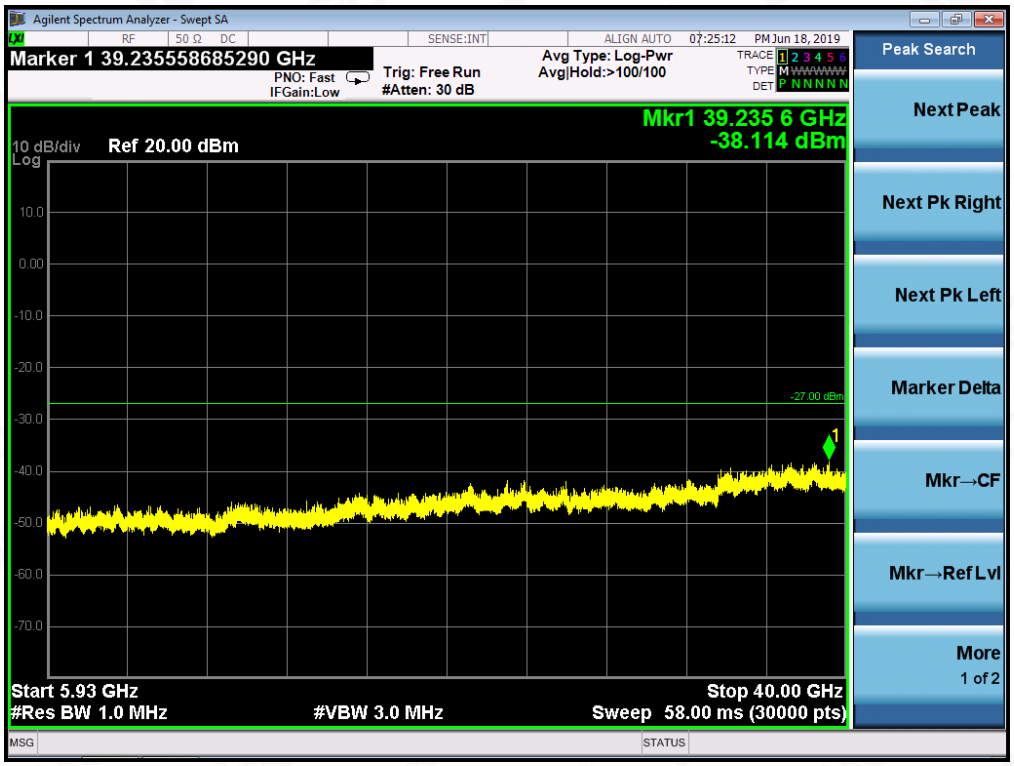

Agilent Spectrum Analyzer - Swept SA
Marker 1 37.599829994333 GHz
PNO: Fast
IFGain:Low
Trig: Free Run
#Atten: 30 dB
Avg Type: Log-Pwr
Avg|Hold:>100/100
07:24:14 PM Jun 18, 2019
Mkr1 37.599 8 GHz
-37.940 dBm
10 dB/div
Log
Ref 20.00 dBm
-27.00 dBm
Start 5.35 GHz
#Res BW 1.0 MHz
#VBW 3.0 MHz
Stop 40.00 GHz
Sweep 58.00 ms (30000 pts)
Peak Search
Next Peak
Next Pk Right
Next Pk Left
Marker Delta
Mkr→CF
Mkr→Ref Lvl
More
1 of 2
MSG
STATUS

TEST PLOT OF OUT OF BAND EMISSIONS FOR MODULATION IN 5775MHz






Keysight Spectrum Analyzer - Swept SA
RF 50 Ω AC
SENSE:INT
ALIGN AUTO
03:55:46 PM Jun 18, 2019
Marker 1 5.757080802020 GHz
PNO: Fast
IFGain:Low
Trig: Free Run
Atten: 40 dB
Avg Type: Log-Pwr
Avg|Hold:>100/100
TRACE 1 2 3 4 5 6
TYPE M
DET P N N N N
Mkr1 5.757 081 GHz
-4.891 dBm
10 dB/div
Log
Ref 30.00 dBm
20.0
10.0
0.00
-10.0
-20.0
-30.0
-40.0
-50.0
-60.0
Start 5.6500 GHz
#Res BW 1.0 MHz
#VBW 3.0 MHz
Stop 5.9250 GHz
Sweep 2.667 ms (40000 pts)
Peak Search
Next Peak
Next Pk Right
Next Pk Left
Marker Delta
Mkr→CF
Mkr→Ref Lvl
More
1 of 2
MSG
STATUS


Agilent Spectrum Analyzer - Swept SA
RF 50 Ω DC
SENSE:INT
ALIGN AUTO
07:25:12 PM Jun 18, 2019
Marker 1 39.235558685290 GHz
PNO: Fast
IFGain:Low
Trig: Free Run
#Atten: 30 dB
Avg Type: Log-Pwr
Avg|Hold:>100/100
TRACE 1 2 3 4 5 6
TYPE M
DET P N N N N
Mkr1 39.235 6 GHz
-38.114 dBm
10 dB/div
Log
Ref 20.00 dBm
10.0
0.00
-10.0
-20.0
-27.00 dBm
-30.0
-40.0
-50.0
-60.0
-70.0
Start 5.93 GHz
#Res BW 1.0 MHz
#VBW 3.0 MHz
Stop 40.00 GHz
Sweep 58.00 ms (30000 pts)
Peak Search
Next Peak
Next Pk Right
Next Pk Left
Marker Delta
Mkr→CF
Mkr→Ref Lvl
More
1 of 2
MSG
STATUS

Note: All the 20MHz bandwidth modulation had been tested, the 802.11a20 was the worst case and record in his test report. All the 40MHz bandwidth modulation had been tested, the 802.11N40 was the worst case and record in his test report. All the 80MHz bandwidth modulation had been tested, the 802.11ac80 was the worst case and record in his test report.

Two transmit chains had been tested, the chain 0 was the worst case and record in the test report.

The spurious emission at chain 0 is more than 6dB below the limits, so the MIMO results for the spurious emissions are comply with the requirement.

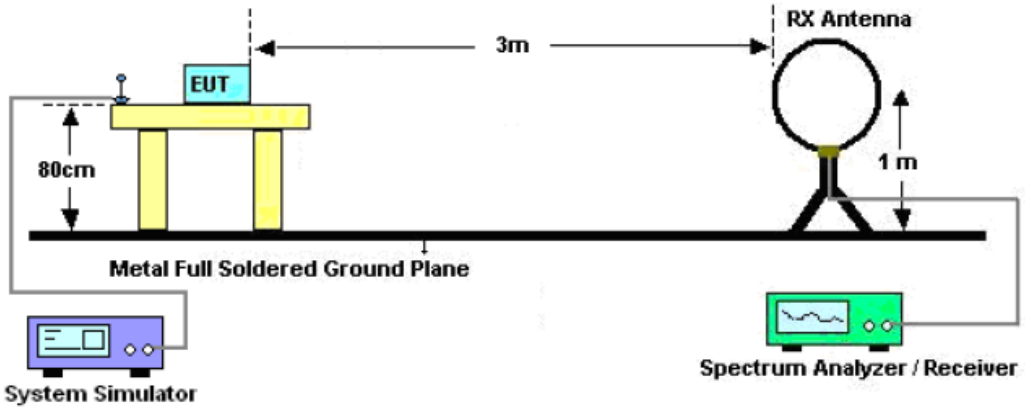
12. RADIATED EMISSION

9.1. MEASUREMENT PROCEDURE

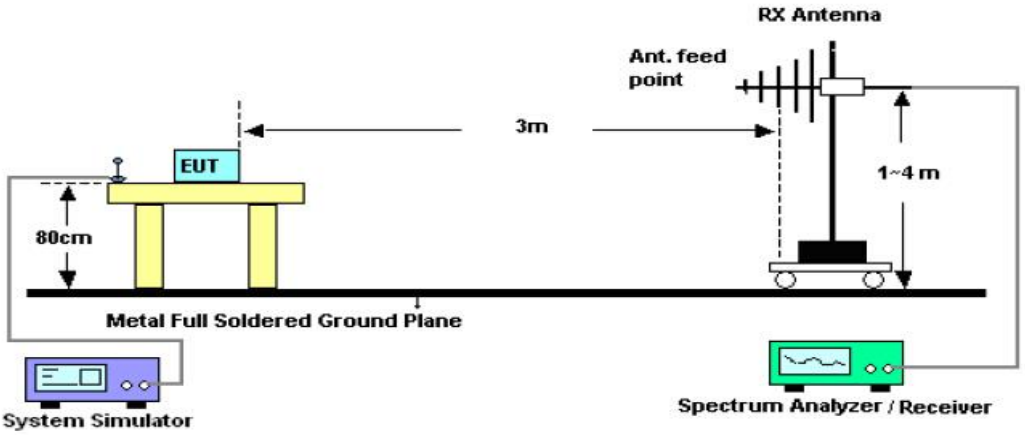
1. The EUT was placed on the top of the turntable 0.8 or 1.5 meter above ground. The phase center of the receiving antenna mounted on the top of a height-variable antenna tower was placed 3 meters far away from the turntable.
2. Power on the EUT and all the supporting units. The turntable was rotated by 360 degrees to determine the position of the highest radiation.
3. The height of the broadband receiving antenna was varied between one meter and four meters above ground to find the maximum emissions field strength of both horizontal and vertical polarization.
4. For each suspected emissions, the antenna tower was scan (from 1 M to 4 M) and then the turntable was rotated (from 0 degree to 360 degrees) to find the maximum reading.
5. Set the test-receiver system to Peak or CISPR quasi-peak Detect Function with specified bandwidth under Maximum Hold Mode.
6. For emissions above 1GHz, use 1MHz RBW and 3M VBW for peak reading. Place the measurement antenna away from each area of the EUT determined to be a source of emissions at the specified measurement distance, while keeping the measurement antenna aimed at the source of emissions at each frequency of significant emissions, with polarization oriented for maximum response. The measurement antenna may have to be higher or lower than the EUT, depending on the radiation pattern of the emission and staying aimed at the emission source for receiving the maximum signal. The final measurement antenna elevation shall be that which maximizes the emissions. The measurement antenna elevation for maximum emissions shall be restricted to a range of heights of from 1 m to 4 m above the ground or reference ground plane.
7. When the radiated emissions limits are expressed in terms of the average value of the emissions, and pulsed operation is employed, the measurement field strength shall be determined by averaging over one complete pulse train, including blanking intervals, as long as the pulse train does not exceed 0.1 seconds. As an alternative (provided the transmitter operates for longer than 0.1 seconds) or in cases where the pulse train exceeds 0.1 seconds, the measured field strength shall be determined from the average absolute voltage during a 0.1 second interval during which the field strength is at its maximum values.
8. If the emissions level of the EUT in peak mode was 3 dB lower than the average limit specified, then testing will be stopped and peak values of EUT will be reported, otherwise, the emissions which do not have 3 dB margin will be repeated one by one using the quasi-peak method for below 1GHz.
9. For testing above 1GHz, the emissions level of the EUT in peak mode was lower than average limit (that means the emissions level in peak mode also complies with the limit in average mode), then testing will be stopped and peak values of EUT will be reported, otherwise, the emissions will be measured in average mode again and reported.
10. In case the emission is lower than 30MHz, loop antenna has to be used for measurement and the recorded data should be QP measured by receiver. High - Low scan is not required in this case.

9.2. TEST SETUP

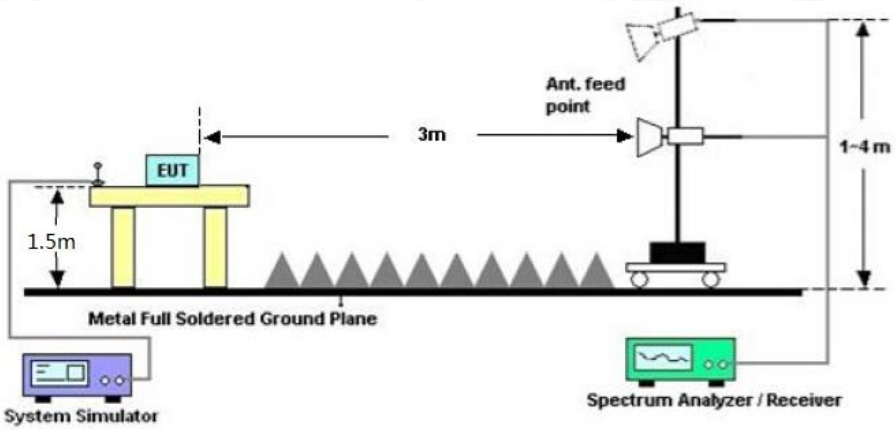
Radiated Emission Test-Setup Frequency Below 30MHz



RADIATED EMISSION TEST SETUP 30MHz-1000MHz



RADIATED EMISSION TEST SETUP ABOVE 1000MHz



9.3. LIMITS AND MEASUREMENT RESULT

15.209(a) Limit in the below table has to be followed

Frequencies (MHz)	Field Strength (micorvolts/meter)	Measurement Distance (meters)
0.009~0.490	2400/F(KHz)	300
0.490~1.705	24000/F(KHz)	30
1.705~30.0	30	30
30~88	100	3
88~216	150	3
216~960	200	3
Above 960	500	3

Note: All modes were tested For restricted band radiated emission,
the test records reported below are the worst result compared to other modes.

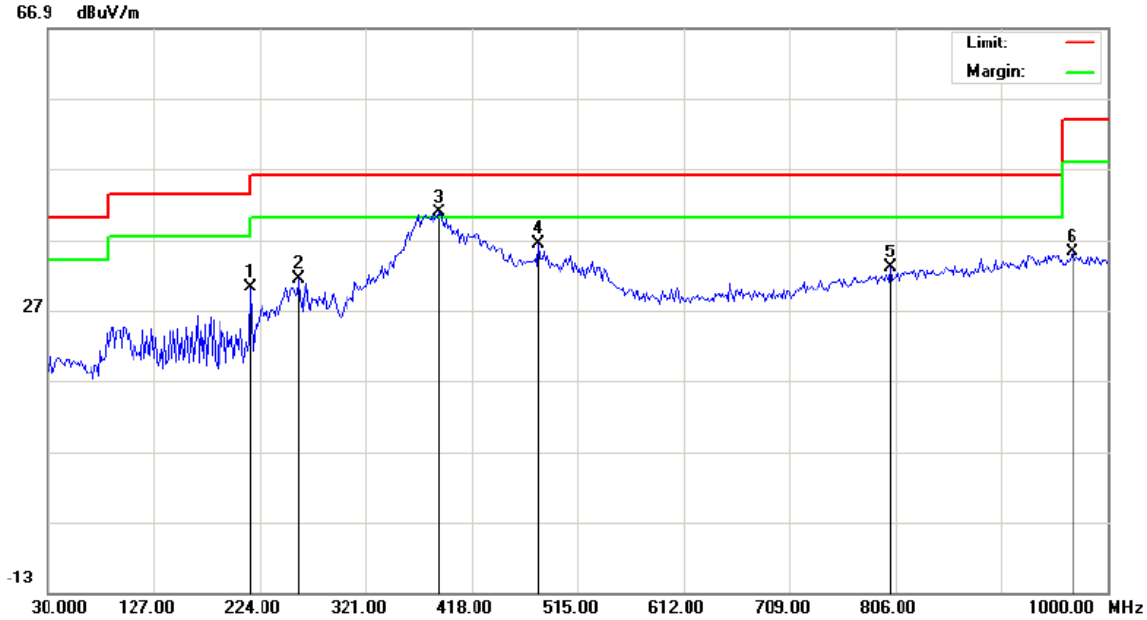
9.4. TEST RESULT

RADIATED EMISSION BELOW 30MHZ

No emission found between lowest internal used/generated frequencies to 30MHz.

RADIATED EMISSION BELOW 1GHZ

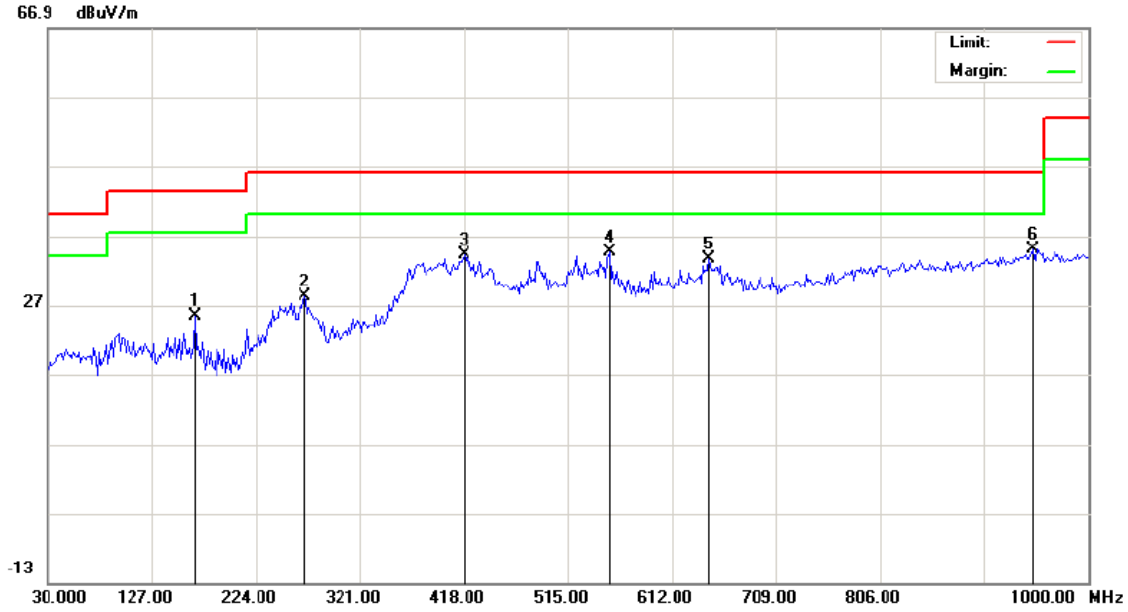
EUT	Dual Band Wireless USB Adapter	**Model Name**	XHT-6B16
Temperature	25℃	**Relative Humidity**	55.4%
Pressure	960hPa	**Test Voltage**	Normal Voltage
Test Mode	802.11a20 5180MHz	**Antenna**	Horizontal



No.	Mk	Freq.	Reading	Factor	Measurement	Limit	Over	Detector	Antenna Height	Table Degree	Comment
		MHz	dBuV	dB/m	dBuV/m	dBuV/m	dB		cm	degree	
1		215.9167	13.28	17.00	30.28	43.50	-13.22	peak			
2		259.5667	13.17	18.32	31.49	46.00	-14.51	peak			
3	*	388.9000	18.26	22.59	40.85	46.00	-5.15	peak			
4		479.4333	11.84	24.58	36.42	46.00	-9.58	peak			
5		801.1500	2.60	30.42	33.02	46.00	-12.98	peak			
6		967.6667	3.00	32.28	35.28	54.00	-18.72	peak			

RESULT: PASS

EUT	Dual Band Wireless USB Adapter	Model Name	XHT-6B16
Temperature	25°C	Relative Humidity	55.4%
Pressure	960hPa	Test Voltage	Normal Voltage
Test Mode	802.11a20 5180MHz	Antenna	Vertical



No.	Mk	Freq.	Reading	Factor	Measurement	Limit	Over	Detector	Antenna Height	Table Degree	Comment
		MHz	dBuV	dB/m	dBuV/m	dBuV/m	dB		cm	degree	
1		167.4167	6.88	18.43	25.31	43.50	-18.19	peak			
2		269.2667	9.17	19.07	28.24	46.00	-17.76	peak			
3		418.0000	10.90	23.34	34.24	46.00	-11.76	peak			
4		553.8000	8.53	26.04	34.57	46.00	-11.43	peak			
5		645.9500	6.13	27.50	33.63	46.00	-12.37	peak			
6	*	948.2667	2.90	32.12	35.02	46.00	-10.98	peak			

RESULT: PASS

Note: All test channels had been tested. The 802.11a20 at 5180MHz is the worst case and recorded in the test report.

Factor = Antenna Factor + Cable loss - Amplifier gain, Margin= Limit-Level.

The “Factor” value can be calculated automatically by software of measurement system.

RADIATED EMISSION ABOVE 1GHZ

EUT	Dual Band Wireless USB Adapter	Model Name	XHT-6B16
Temperature	25°C	Relative Humidity	55.4%
Pressure	960hPa	Test Voltage	Normal Voltage
Test Mode	802.11a20 5180MHz	Antenna	Horizontal/Vertical

RADIATED EMISSION ABOVE 1GHZ–Horizontal

Frequency (MHz)	Meter Reading (dBμV)	Factor (dB)	Emission Level (dBμV/m)	Limits (dBμV/m)	Margin (dB)	Value Type
10360.120	44.06	9.14	53.2	74	-20.8	peak
10360.120	36.45	9.14	45.59	54	-8.41	AVG
15540.180	41.28	10.22	51.5	74	-22.5	peak
15540.180	37.06	10.22	47.28	54	-6.72	AVG
Remark:						
Factor = Antenna Factor + Cable Loss – Pre-amplifier.						

RADIATED EMISSION ABOVE 1GHZ–Vertical

Frequency (MHz)	Meter Reading (dBμV)	Factor (dB)	Emission Level (dBμV/m)	Limits (dBμV/m)	Margin (dB)	Value Type
10360.120	43.15	9.14	52.29	74	-21.71	peak
10360.120	40.22	9.14	49.36	54	-4.64	AVG
15540.180	41.91	10.22	52.13	74	-21.87	peak
15540.180	37.85	10.22	48.07	54	-5.93	AVG
Remark:						
Factor = Antenna Factor + Cable Loss – Pre-amplifier.						

EUT	Dual Band Wireless USB Adapter	Model Name	XHT-6B16
Temperature	25°C	Relative Humidity	55.4%
Pressure	960hPa	Test Voltage	Normal Voltage
Test Mode	802.11a20 5240MHz	Antenna	Horizontal/Vertical

RADIATED EMISSION ABOVE 1GHZ–Horizontal

Frequency (MHz)	Meter Reading (dBμV)	Factor (dB)	Emission Level (dBμV/m)	Limits (dBμV/m)	Margin (dB)	Value Type
10480.120	41.28	9.27	50.55	74	-23.45	peak
10480.120	36.91	9.27	46.18	54	-7.82	AVG
15720.180	40.22	10.38	50.6	74	-23.4	peak
15720.180	35.63	10.38	46.01	54	-7.99	AVG
Remark:						
Factor = Antenna Factor + Cable Loss – Pre-amplifier.						

RADIATED EMISSION ABOVE 1GHZ–Vertical

Frequency (MHz)	Meter Reading (dBμV)	Factor (dB)	Emission Level (dBμV/m)	Limits (dBμV/m)	Margin (dB)	Value Type
10480.120	42.91	9.27	52.18	74	-21.82	peak
10480.120	38.75	9.27	48.02	54	-5.98	AVG
15720.180	39.04	10.38	49.42	74	-24.58	peak
15720.180	36.17	10.38	46.55	54	-7.45	AVG
Remark:						
Factor = Antenna Factor + Cable Loss – Pre-amplifier.						

EUT	Dual Band Wireless USB Adapter	Model Name	XHT-6B16
Temperature	25°C	Relative Humidity	55.4%
Pressure	960hPa	Test Voltage	Normal Voltage
Test Mode	802.11a20 5745MHz	Antenna	Horizontal/Vertical

RADIATED EMISSION ABOVE 1GHZ–Horizontal

Frequency (MHz)	Meter Reading (dBμV)	Factor (dB)	Emission Level (dBμV/m)	Limits (dBμV/m)	Margin (dB)	Value Type
11490.120	40.28	9.42	49.7	74	-24.3	peak
11490.120	36.41	9.42	45.83	54	-8.17	AVG
17235.180	39.52	10.51	50.03	74	-23.97	peak
17235.180	31.23	10.51	41.74	54	-12.26	AVG
Remark:						
Factor = Antenna Factor + Cable Loss – Pre-amplifier.						

RADIATED EMISSION ABOVE 1GHZ–Vertical

Frequency (MHz)	Meter Reading (dBμV)	Factor (dB)	Emission Level (dBμV/m)	Limits (dBμV/m)	Margin (dB)	Value Type
11490.120	41.57	9.42	50.99	74	-23.01	peak
11490.120	36.11	9.42	45.53	54	-8.47	AVG
17235.180	37.24	10.51	47.75	74	-26.25	peak
17235.180	34.31	10.51	44.82	54	-9.18	AVG
Remark:						
Factor = Antenna Factor + Cable Loss – Pre-amplifier.						

EUT	Dual Band Wireless USB Adapter	Model Name	XHT-6B16
Temperature	25°C	Relative Humidity	55.4%
Pressure	960hPa	Test Voltage	Normal Voltage
Test Mode	802.11a20 5825MHz	Antenna	Horizontal/Vertical

RADIATED EMISSION ABOVE 1GHZ–Horizontal

Frequency (MHz)	Meter Reading (dBμV)	Factor (dB)	Emission Level (dBμV/m)	Limits (dBμV/m)	Margin (dB)	Value Type
11650.120	42.58	9.62	52.2	74	-21.8	peak
11650.120	39.54	9.62	49.16	54	-4.84	AVG
17475.180	36.87	10.75	47.62	74	-26.38	peak
17475.180	34.21	10.75	44.96	54	-9.04	AVG
Remark:						
Factor = Antenna Factor + Cable Loss – Pre-amplifier.						

RADIATED EMISSION ABOVE 1GHZ–Vertical

Frequency (MHz)	Meter Reading (dBμV)	Factor (dB)	Emission Level (dBμV/m)	Limits (dBμV/m)	Margin (dB)	Value Type
11650.120	40.99	9.62	50.61	74	-23.39	peak
11650.120	36.15	9.62	45.77	54	-8.23	AVG
17475.180	39.44	10.75	50.19	74	-23.81	peak
17475.180	31.59	10.75	42.34	54	-11.66	AVG
Remark:						
Factor = Antenna Factor + Cable Loss – Pre-amplifier.						

Note: All the case had been tested. The 802.11a modulation is the worst case and recorded in the test report. Other frequencies radiation emission from 1GHz to 40GHz at least have 20dB margin and not recorded in the test report.

Factor = Antenna Factor + Cable loss - Amplifier gain, Margin= Limit-Level.

The “Factor” value can be calculated automatically by software of measurement system.

13. BAND EDGE EMISSION

13.1. MEASUREMENT PROCEDURE

1. The EUT operates at transmitting mode. The operate channel is tested to verify the largest transmission and spurious emissions power at the continuous transmission mode.

2. Set the spectrum analyzer in the following setting in order to capture the lower and upper band-edges of the emission: (a) PEAK: RBW=1MHz, VBW=3MHz / Sweep=AUTO

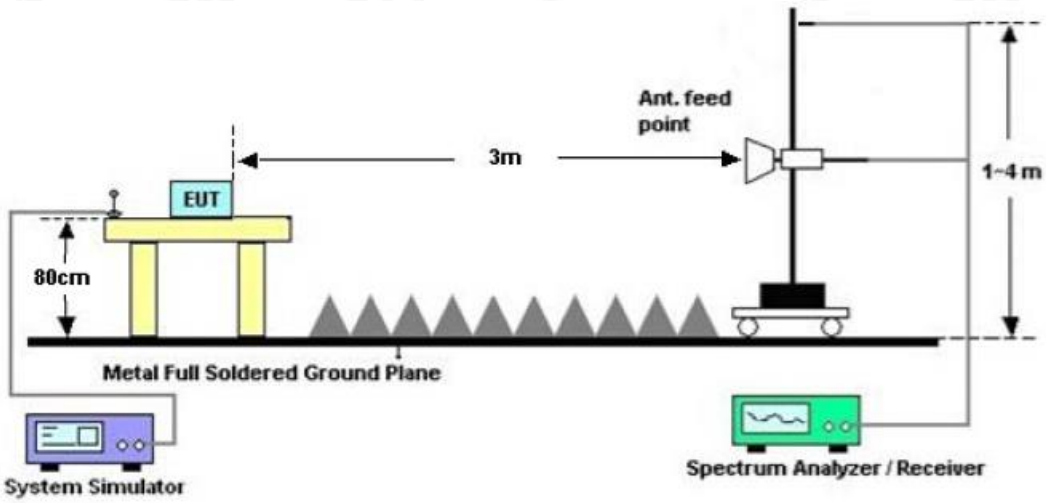
(b) AVERAGE: RBW=1MHz ; VBW=1/on time(1KHz) / Sweep=AUTO

3. Other procedures refer to clause 11.2.

Note:

1. Factor=Antenna Factor + Cable loss - Amplifier gain. Field Strength=Factor + Reading level
2. The factor had been edited in the “Input Correction” of the Spectrum Analyzer. So the Amplitude of test plots is equal to Reading level plus the Factor in dB. Use the A dB(μV) to represent the Amplitude. Use the F dB(μV/m) to represent the Field Strength. So A=F.
3. Only the data of band edge emission at the restricted band 4.5GHz-5.15GHz record in the report. Other restricted band 5.35GHz-5.46GHz and 7.25GHz-7.77GHz were considered as ambient noise. No recording in the test report.

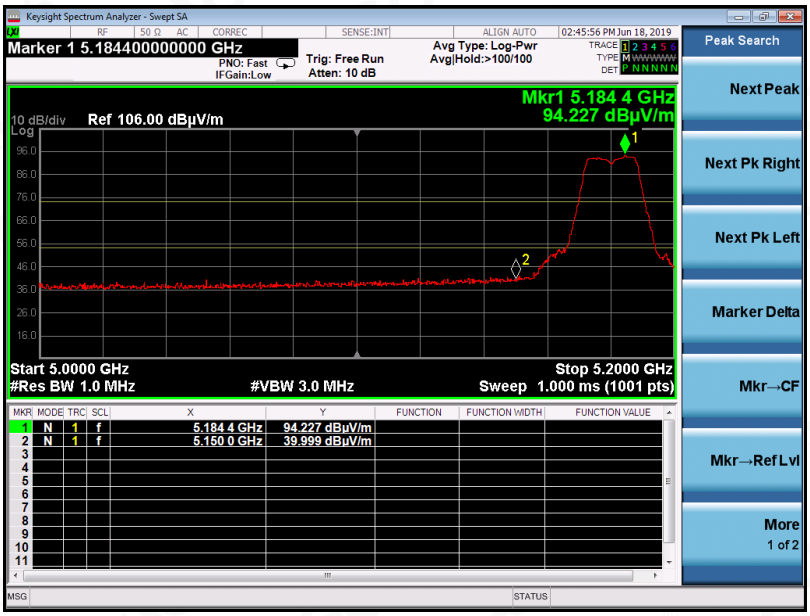
13.2. TEST SET-UP



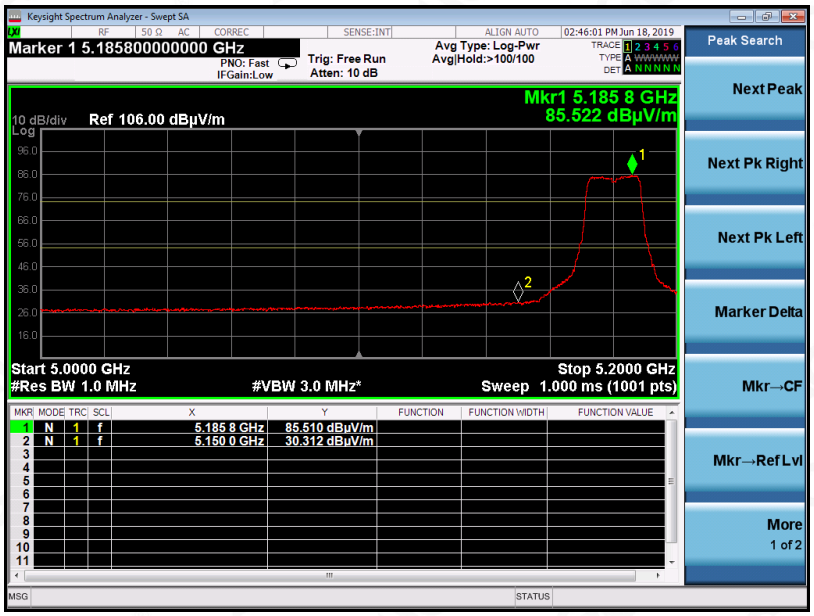
13.3. TEST RESULT

EUT	Dual Band Wireless USB Adapter	Model Name	XHT-6B16
Temperature	25°C	Relative Humidity	55.4%
Pressure	960hPa	Test Voltage	Normal Voltage
Test Mode	802.11a20 5180MHz	Antenna	Horizontal

PK Value

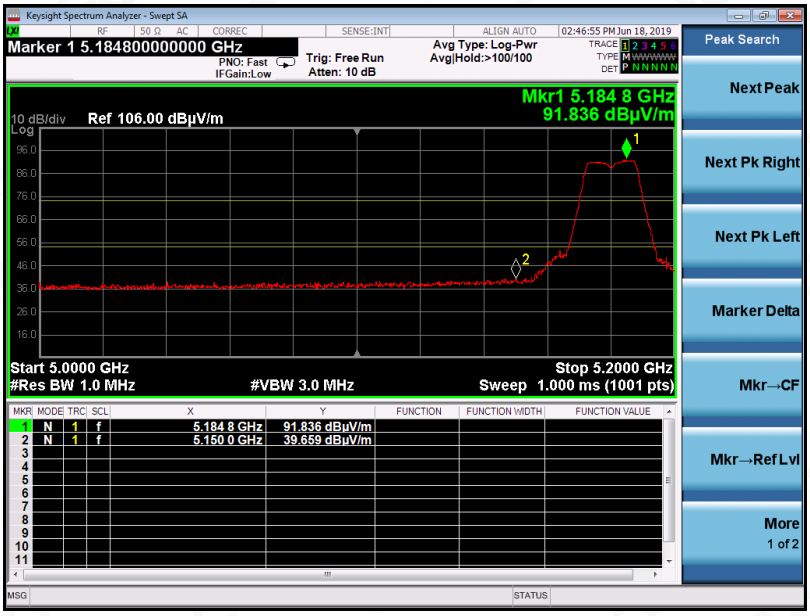


AV Value

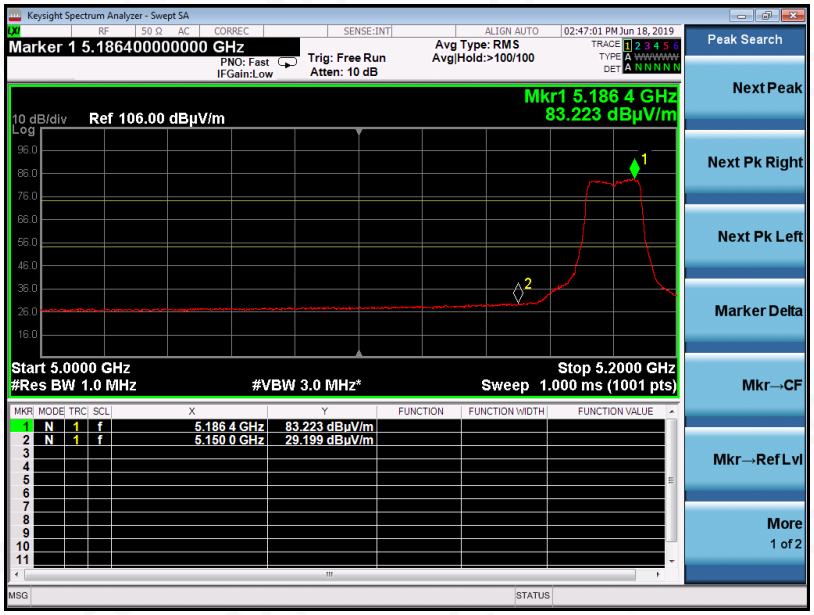


EUT	Dual Band Wireless USB Adapter	Model Name	XHT-6B16
Temperature	25°C	Relative Humidity	55.4%
Pressure	960hPa	Test Voltage	Normal Voltage
Test Mode	802.11a20 5180MHz	Antenna	Vertical

PK Value

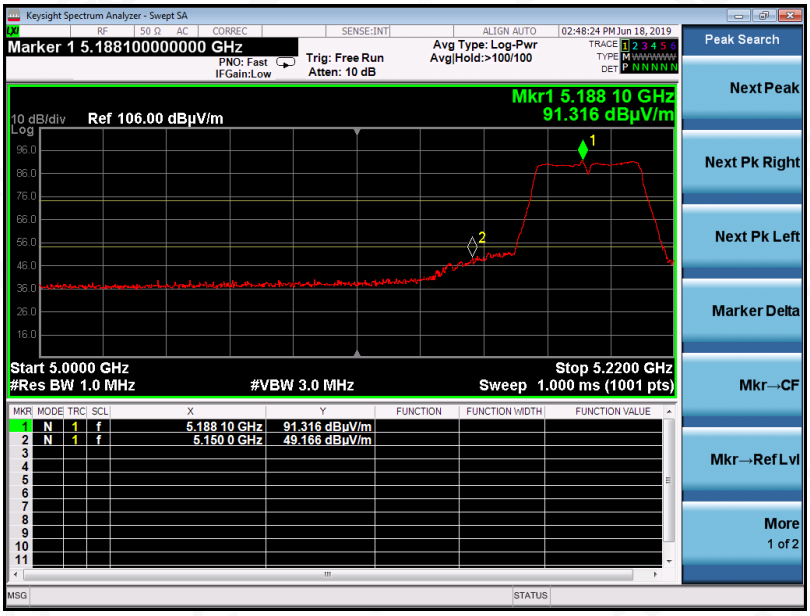


AV Value

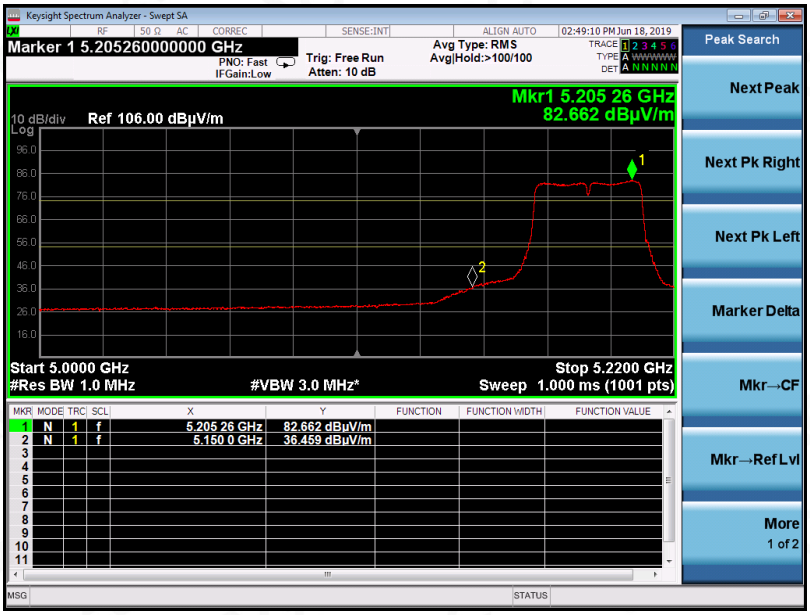


EUT	Dual Band Wireless USB Adapter	Model Name	XHT-6B16
Temperature	25°C	Relative Humidity	55.4%
Pressure	960hPa	Test Voltage	Normal Voltage
Test Mode	802.11n40 5190MHz	Antenna	Horizontal

PK Value



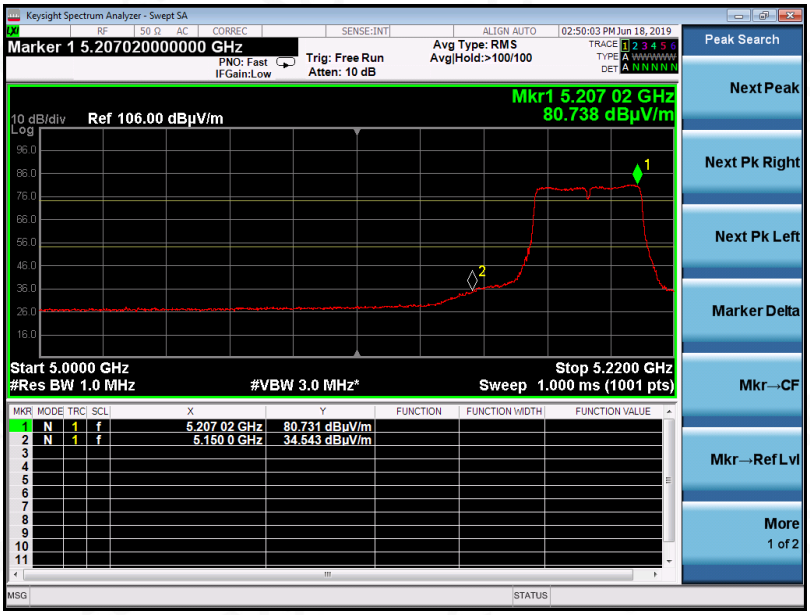
AV Value



EUT	Dual Band Wireless USB Adapter	Model Name	XHT-6B16
Temperature	25°C	Relative Humidity	55.4%
Pressure	960hPa	Test Voltage	Normal Voltage
Test Mode	802.11n40 5190MHz	Antenna	Vertical

PK Value

AV Value



EUT	Dual Band Wireless USB Adapter	Model Name	XHT-6B16
Temperature	25°C	Relative Humidity	55.4%
Pressure	960hPa	Test Voltage	Normal Voltage
Test Mode	802.11ac80 5210MHz	Antenna	Horizontal

PK Value

AV Value

EUT	Dual Band Wireless USB Adapter	Model Name	XHT-6B16
Temperature	25°C	Relative Humidity	55.4%
Pressure	960hPa	Test Voltage	Normal Voltage
Test Mode	802.11ac80 5210MHz	Antenna	Vertical

PK Value

AV Value

RESULT: PASS

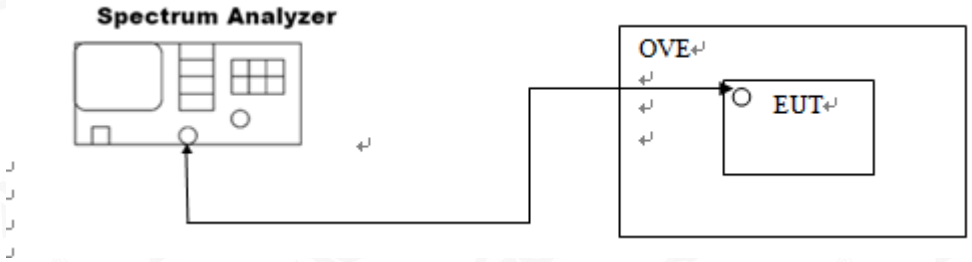
Note: All the 20MHz bandwidth modulation had been tested, the 802.11a20 was the worst case and record in his test report. All the 40MHz bandwidth modulation had been tested, the 802.11N40 was the worst case and record in his test report.

14. FREQUENCY STABILITY

14.1. MEASUREMENT PROCEDURE

1. Connect EUT RF output port to the Spectrum Analyzer through an RF attenuator
2. Set the EUT Work on the operation frequency.
3. Set SPA Centre Frequency = Operation Frequency. SPAN=enough to measure the emission is maintained within the band
4. Set SPA Trace 1 Max hold, then View.
5. Extreme temperature rule is -10°C~60°C.

14.2. TEST SET-UP (BLOCK DIAGRAM OF CONFIGURATION)



14.3. MEASUREMENT RESULTS

Test Mode	Temperature	Measurement Frequency (MHz)	Result	Conclusion
802.11a	- 10℃	5180	within the band	PASS
	0℃	5180	within the band	PASS
	10℃	5180	within the band	PASS
	20℃	5180	within the band	PASS
	30℃	5180	within the band	PASS
	40℃	5180	within the band	PASS
	50℃	5180	within the band	PASS
	60℃	5180	within the band	PASS
	- 10℃	5240	within the band	PASS
	0℃	5240	within the band	PASS
	10℃	5240	within the band	PASS
	20℃	5240	within the band	PASS
	30℃	5240	within the band	PASS
	40℃	5240	within the band	PASS
	50℃	5240	within the band	PASS
	60℃	5240	within the band	PASS
	- 10℃	5745	within the band	PASS
	0℃	5745	within the band	PASS
	10℃	5745	within the band	PASS
	20℃	5745	within the band	PASS
	30℃	5745	within the band	PASS
	40℃	5745	within the band	PASS
	50℃	5745	within the band	PASS
	60℃	5240	within the band	PASS
	- 10℃	5825	within the band	PASS
	0℃	5825	within the band	PASS
	10℃	5825	within the band	PASS
	20℃	5825	within the band	PASS
	30℃	5825	within the band	PASS
	40℃	5825	within the band	PASS
	50℃	5825	within the band	PASS
	60℃	5825	within the band	PASS

Test Mode	Temperature	Measurement Frequency (MHz)	Result	Conclusion
802.11n20	- 10℃	5180	within the band	PASS
	0℃	5180	within the band	PASS
	10℃	5180	within the band	PASS
	20℃	5180	within the band	PASS
	30℃	5180	within the band	PASS
	40℃	5180	within the band	PASS
	50℃	5180	within the band	PASS
	60℃	5180	within the band	PASS
	- 10℃	5240	within the band	PASS
	0℃	5240	within the band	PASS
	10℃	5240	within the band	PASS
	20℃	5240	within the band	PASS
	30℃	5240	within the band	PASS
	40℃	5240	within the band	PASS
	50℃	5240	within the band	PASS
	60℃	5240	within the band	PASS
	- 10℃	5745	within the band	PASS
	0℃	5745	within the band	PASS
	10℃	5745	within the band	PASS
	20℃	5745	within the band	PASS
	30℃	5745	within the band	PASS
	40℃	5745	within the band	PASS
	50℃	5745	within the band	PASS
	60℃	5240	within the band	PASS
	- 10℃	5825	within the band	PASS
	0℃	5825	within the band	PASS
	10℃	5825	within the band	PASS
	20℃	5825	within the band	PASS
	30℃	5825	within the band	PASS
	40℃	5825	within the band	PASS
	50℃	5825	within the band	PASS
	60℃	5825	within the band	PASS

Test Mode	Temperature	Measurement Frequency (MHz)	Result	Conclusion
802.11ac20	- 10℃	5180	within the band	PASS
	0℃	5180	within the band	PASS
	10℃	5180	within the band	PASS
	20℃	5180	within the band	PASS
	30℃	5180	within the band	PASS
	40℃	5180	within the band	PASS
	50℃	5180	within the band	PASS
	60℃	5180	within the band	PASS
	- 10℃	5240	within the band	PASS
	0℃	5240	within the band	PASS
	10℃	5240	within the band	PASS
	20℃	5240	within the band	PASS
	30℃	5240	within the band	PASS
	40℃	5240	within the band	PASS
	50℃	5240	within the band	PASS
	60℃	5240	within the band	PASS
	- 10℃	5745	within the band	PASS
	0℃	5745	within the band	PASS
	10℃	5745	within the band	PASS
	20℃	5745	within the band	PASS
	30℃	5745	within the band	PASS
	40℃	5745	within the band	PASS
	50℃	5745	within the band	PASS
	60℃	5240	within the band	PASS
	- 10℃	5825	within the band	PASS
	0℃	5825	within the band	PASS
	10℃	5825	within the band	PASS
	20℃	5825	within the band	PASS
	30℃	5825	within the band	PASS
	40℃	5825	within the band	PASS
	50℃	5825	within the band	PASS
	60℃	5825	within the band	PASS

Test Mode	Temperature	Measurement Frequency (MHz)	Result	Conclusion
802.11n40	- 10℃	5190	within the band	PASS
	0℃	5190	within the band	PASS
	10℃	5190	within the band	PASS
	20℃	5190	within the band	PASS
	30℃	5190	within the band	PASS
	40℃	5190	within the band	PASS
	50℃	5190	within the band	PASS
	60℃	5190	within the band	PASS
	- 10℃	5230	within the band	PASS
	0℃	5230	within the band	PASS
	10℃	5230	within the band	PASS
	20℃	5230	within the band	PASS
	30℃	5230	within the band	PASS
	40℃	5230	within the band	PASS
	50℃	5230	within the band	PASS
	60℃	5230	within the band	PASS
	- 10℃	5755	within the band	PASS
	0℃	5755	within the band	PASS
	10℃	5755	within the band	PASS
	20℃	5755	within the band	PASS
	30℃	5755	within the band	PASS
	40℃	5755	within the band	PASS
	50℃	5755	within the band	PASS
	60℃	5755	within the band	PASS
	- 10℃	5795	within the band	PASS
	0℃	5795	within the band	PASS
	10℃	5795	within the band	PASS
	20℃	5795	within the band	PASS
	30℃	5795	within the band	PASS
	40℃	5795	within the band	PASS
	50℃	5795	within the band	PASS
	60℃	5795	within the band	PASS

Test Mode	Temperature	Measurement Frequency (MHz)	Result	Conclusion
802.11ac40	- 10℃	5190	within the band	PASS
	0℃	5190	within the band	PASS
	10℃	5190	within the band	PASS
	20℃	5190	within the band	PASS
	30℃	5190	within the band	PASS
	40℃	5190	within the band	PASS
	50℃	5190	within the band	PASS
	60℃	5190	within the band	PASS
	- 10℃	5230	within the band	PASS
	0℃	5230	within the band	PASS
	10℃	5230	within the band	PASS
	20℃	5230	within the band	PASS
	30℃	5230	within the band	PASS
	40℃	5230	within the band	PASS
	50℃	5230	within the band	PASS
	60℃	5230	within the band	PASS
	- 10℃	5755	within the band	PASS
	0℃	5755	within the band	PASS
	10℃	5755	within the band	PASS
	20℃	5755	within the band	PASS
	30℃	5755	within the band	PASS
	40℃	5755	within the band	PASS
	50℃	5755	within the band	PASS
	60℃	5755	within the band	PASS
	- 10℃	5795	within the band	PASS
	0℃	5795	within the band	PASS
	10℃	5795	within the band	PASS
	20℃	5795	within the band	PASS
	30℃	5795	within the band	PASS
	40℃	5795	within the band	PASS
	50℃	5795	within the band	PASS
	60℃	5795	within the band	PASS

Test Mode	Temperature	Measurement Frequency (MHz)	Result	Conclusion
802.11ac80	- 10℃	5210	within the band	PASS
	0℃	5210	within the band	PASS
	10℃	5210	within the band	PASS
	20℃	5210	within the band	PASS
	30℃	5210	within the band	PASS
	40℃	5210	within the band	PASS
	50℃	5210	within the band	PASS
	60℃	5210	within the band	PASS
	- 10℃	5775	within the band	PASS
	0℃	5775	within the band	PASS
	10℃	5775	within the band	PASS
	20℃	5775	within the band	PASS
	30℃	5775	within the band	PASS
	40℃	5775	within the band	PASS
	50℃	5775	within the band	PASS
	60℃	5775	within the band	PASS