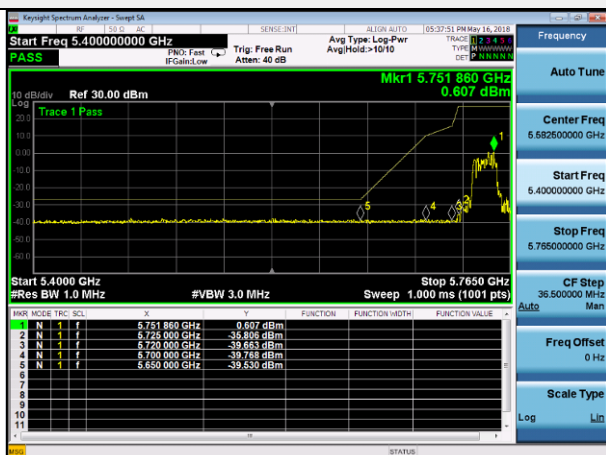
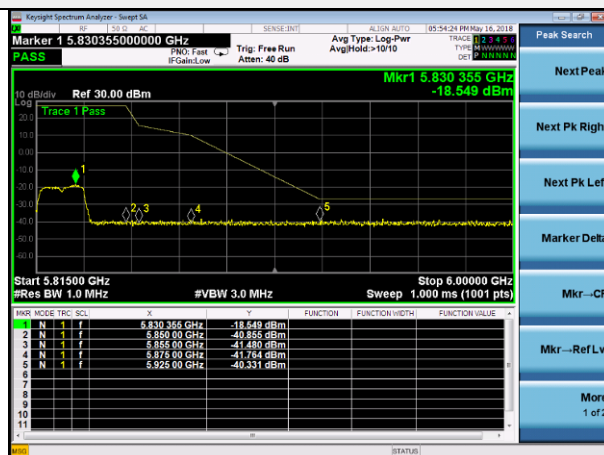


5.8G Antenna 1

802.11a

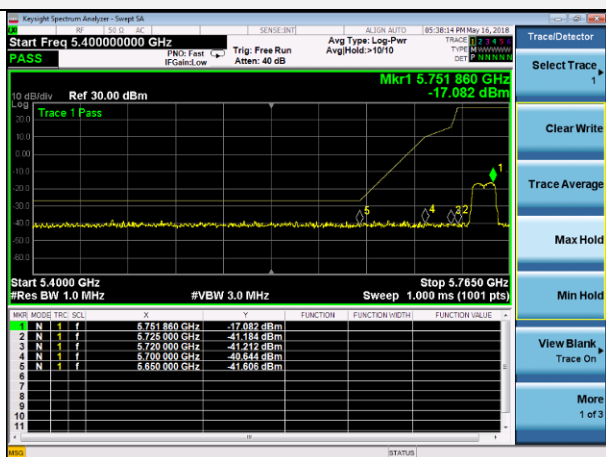


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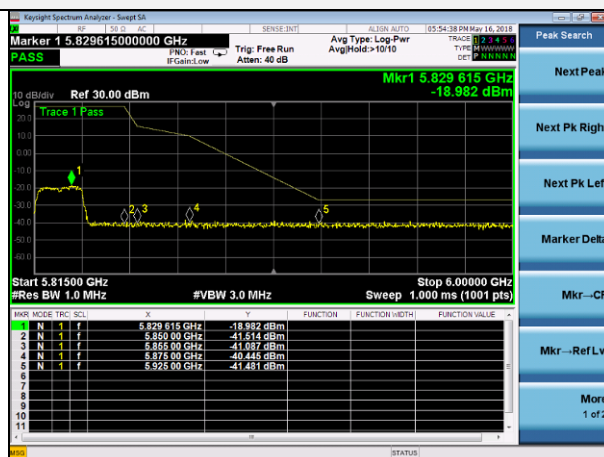


5825

802.11n HT20

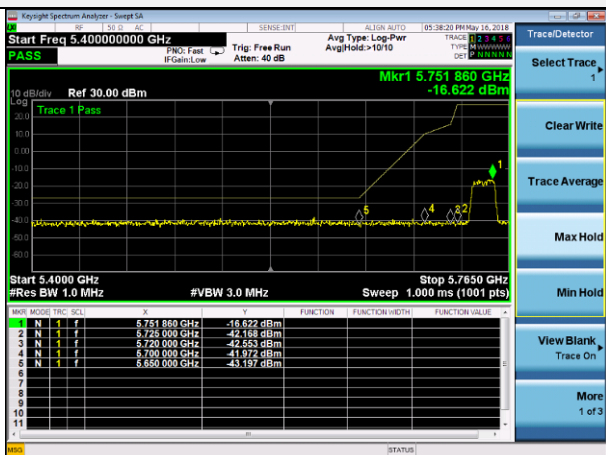


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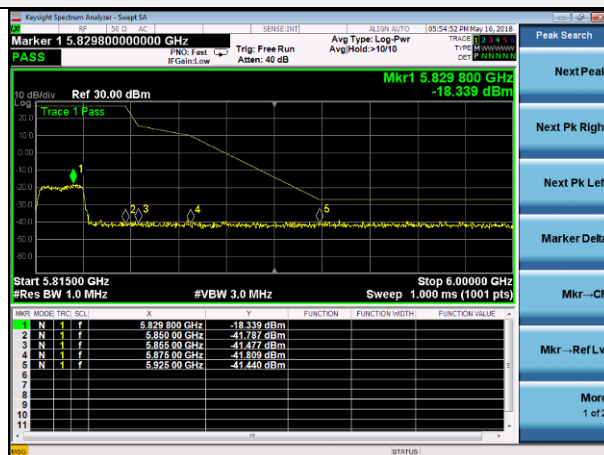


5825

802.11ac VHT20



5745



5825

802.11n HT40



Marker	Mode	Trc	SCN	X	Y	Function	Function Width	Function Value
1	N	1	f	5.809875 GHz	-4.275 dBm			
2	N	1	f	5.850000 GHz	-39.013 dBm			
3	N	1	f	5.855000 GHz	-40.333 dBm			
4	N	1	f	5.875000 GHz	-42.351 dBm			
5	N	1	f	5.925000 GHz	-41.227 dBm			

5795

802.11ac VHT40



Marker	Mode	Trc	SCN	X	Y	Function	Function Width	Function Value
1	N	1	f	5.808300 GHz	-7.730 dBm			
2	N	1	f	5.850000 GHz	-42.789 dBm			
3	N	1	f	5.855000 GHz	-42.335 dBm			
4	N	1	f	5.875000 GHz	-42.114 dBm			
5	N	1	f	5.925000 GHz	-42.075 dBm			

5795

802.11ac VHT80

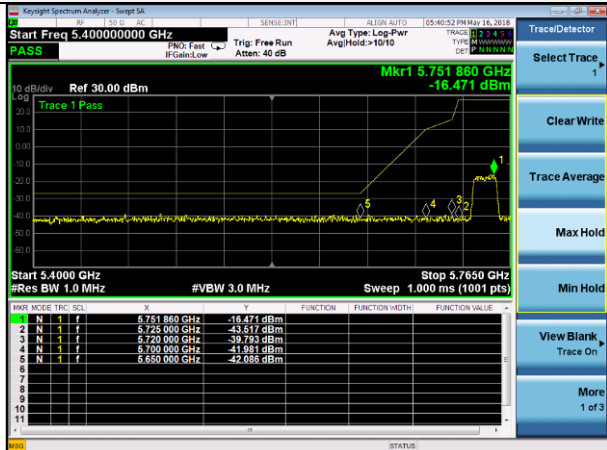


Marker	Mode	Trc	SCN	X	Y	Function	Function Width	Function Value
1	N	1	f	5.75808 GHz	-4.857 dBm			
2	N	1	f	5.850000 GHz	-38.210 dBm			
3	N	1	f	5.855000 GHz	-38.857 dBm			
4	N	1	f	5.875000 GHz	-38.073 dBm			
5	N	1	f	5.925000 GHz	-39.981 dBm			

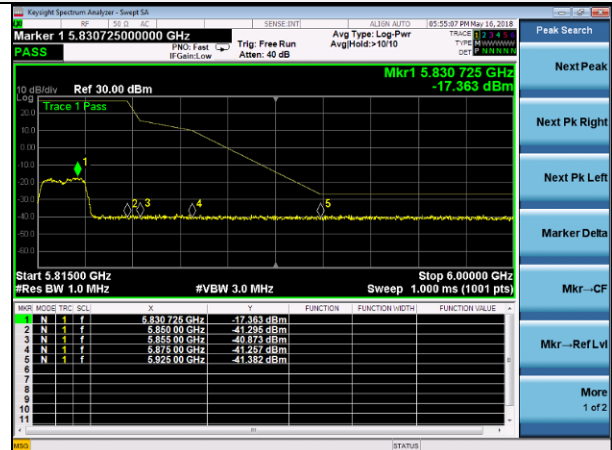
5775

5.8G Antenna 2

802.11a

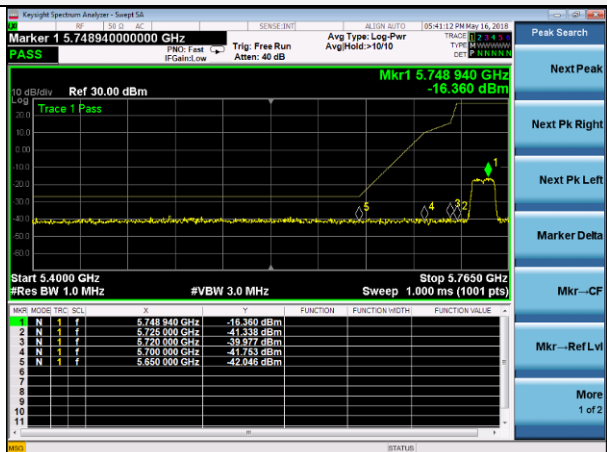


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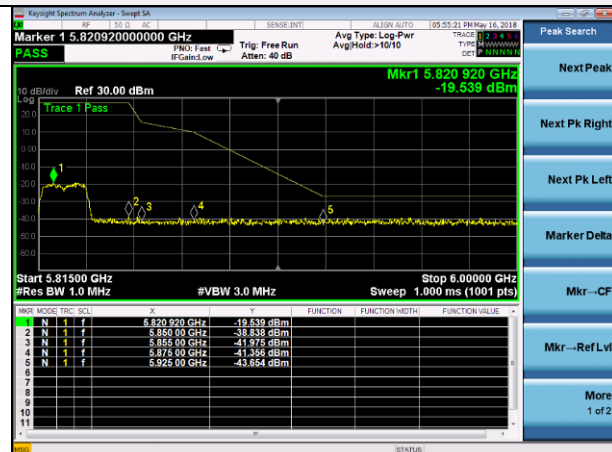


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802.11n HT20

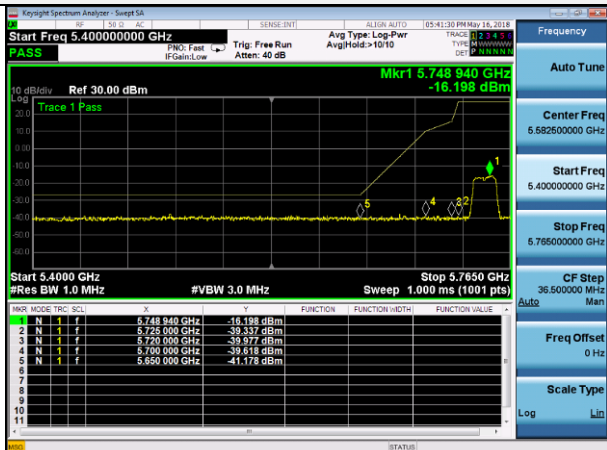


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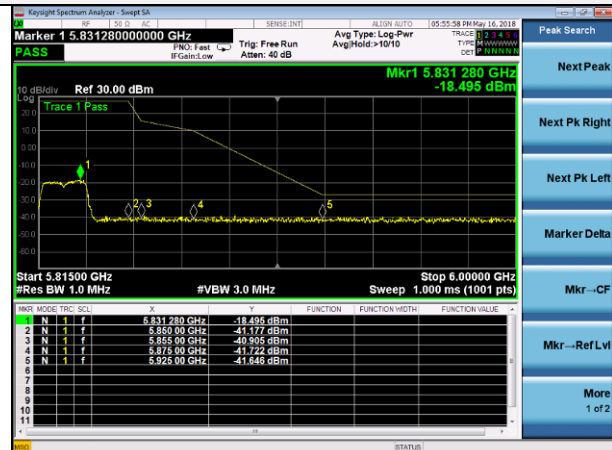


5825

802.11ac VHT20



5745



5825

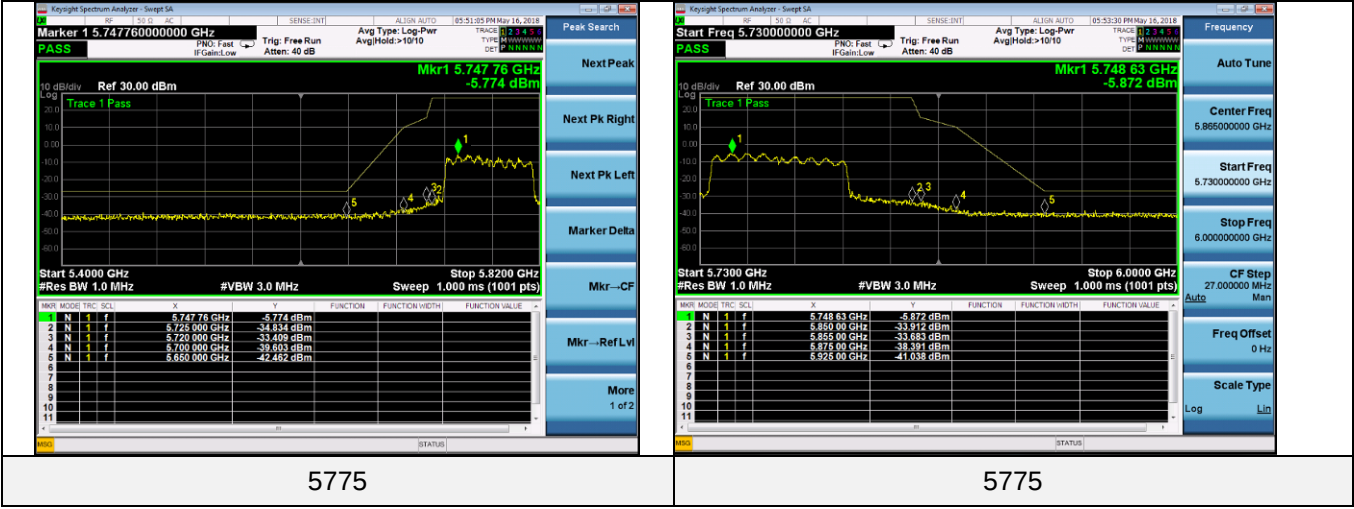
802.11n HT40



802.11ac VHT40

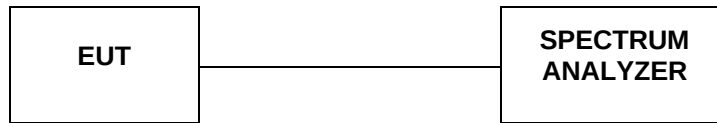


802.11ac VHT80



4.9. Frequency Stability

TEST CONFIGURATION



TEST PROCEDURE

- The EUT was directly connected to the spectrum analyzer and antenna output port
- Spectrum setting as follows:
 RBW=10KHz
 VBW=30KHz
 Span= Entire absence of modulation emissionsbandwidth
 Sweep Time= Auto
 Attenuation= Auto
- The test extreme voltage is to change the primary supply voltage from 85 to 115 percent of the nominal value.

LIMIT

Frequency Range (MHz)	Limit
5150-5250	Specified in the user's manual
5250-5350	
5470-5725	
5725-5850	

TEST RESULTS

Antenna 1

802.11 a/ Channel 36: 5180MHz

Voltage. Frequency Stability

Voltage (V)	Measurement Frequency (MHz)
138	5180.000024
120	5180.000016
102	5180.000022
Maximum Deviation (MHz)	0.000024
Maximum Deviation (ppm)	0.0046

Temperature. Frequency Stability

Temperature (°C)	Measurement Frequency (MHz)
-10	5180.000018
5	5180.000021
15	5180.000019
25	5180.000016
35	5180.000022
45	5180.000020
55	5180.000019
Maximum Deviation (MHz)	0.000022
Maximum Deviation (ppm)	0.0041

802.11 a/ Channel 149: 5745MHz**Voltage. Frequency Stability**

Voltage (V)	Measurement Frequency (MHz)
138	5745.000017
120	5745.000012
102	5745.000018
Maximum Deviation (MHz)	0.000018
Maximum Deviation (ppm)	0.0031

Temperature. Frequency Stability

Temperature (°C)	Measurement Frequency (MHz)
-10	5745.000019
5	5745.000012
15	5745.000018
25	5745.000017
35	5745.000020
45	5745.000016
55	5745.000015
Maximum Deviation (MHz)	0.000020
Maximum Deviation (ppm)	0.0035

Antenna 2**802.11 a/ Channel 36: 5180MHz****Voltage. Frequency Stability**

Voltage (V)	Measurement Frequency (MHz)
138	5180.000013
120	5180.000018
102	5180.000012
Maximum Deviation (MHz)	0.000018
Maximum Deviation (ppm)	0.0035

Temperature. Frequency Stability

Temperature (°C)	Measurement Frequency (MHz)
-10	5180.000014
5	5180.000018
15	5180.000011
25	5180.000016
35	5180.000023
45	5180.000020
55	5180.000017
Maximum Deviation (MHz)	0.000023
Maximum Deviation (ppm)	0.0044

802.11 a/ Channel 149: 5745MHz

Voltage. Frequency Stability

Voltage (V)	Measurement Frequency (MHz)
13.8	5745.000018
12.0	5745.000015
10.2	5745.000019
Maximum Deviation (MHz)	0.000019
Maximum Deviation (ppm)	0.0033

Temperature. Frequency Stability

Temperature (°C)	Measurement Frequency (MHz)
-10	5745.000021
5	5745.000013
15	5745.000018
25	5745.000022
35	5745.000018
45	5745.000020
55	5745.000016
Maximum Deviation (MHz)	0.000022
Maximum Deviation (ppm)	0.0038

4.10. Antenna Requirement

Standard Applicable

For intentional device, according to FCC 47 CFR Section 15.203, an intentional radiator shall be designed to ensure that no antenna other than that furnished by the responsible party shall be used with the device.

And according to FCC 47 CFR Section 15.407 (a), if transmitting antennas of directional gain greater than 6dBi are used, the power shall be reduced by the amount in dB that the directional gain of the antenna exceeds 6dBi.

Test Result

The antenna used for this product is external Antenna and that no antenna other than that furnished by the responsible party shall be used with the device, the maximum peak gain of the transmit antenna is only 2.17dBi.

5. Test Setup Photos of the EUT

Radiated Emission Test



Conducted Emission



6. External and Internal Photos of the EUT

Reference to the test report No. GTSR18050082-WLAN01.

.....End of Report.....