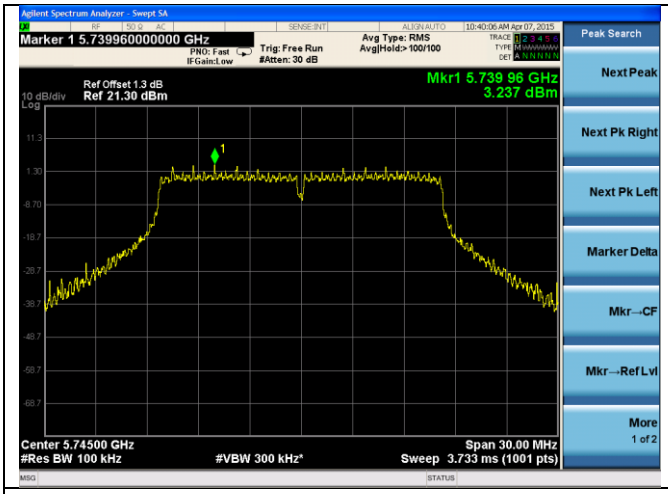
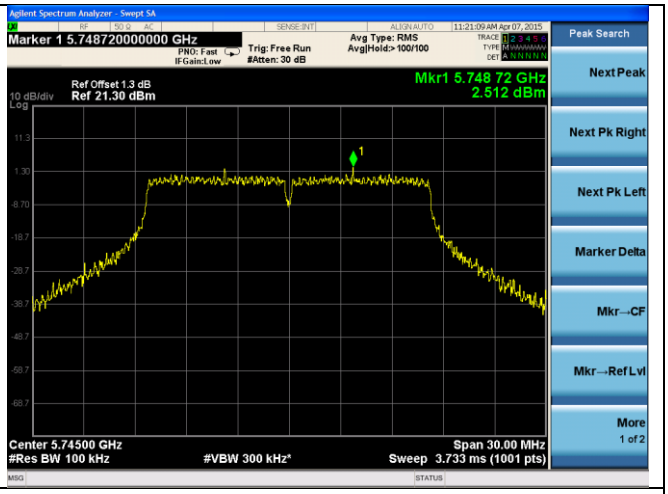


14dBi ANT-PSD-802.11a-5745M-chain1



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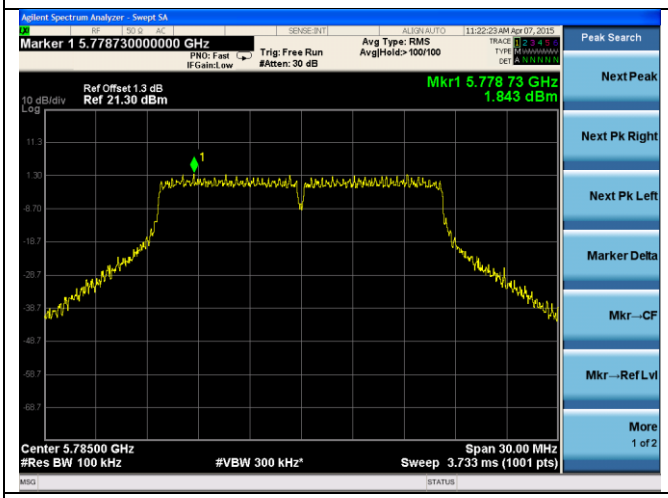
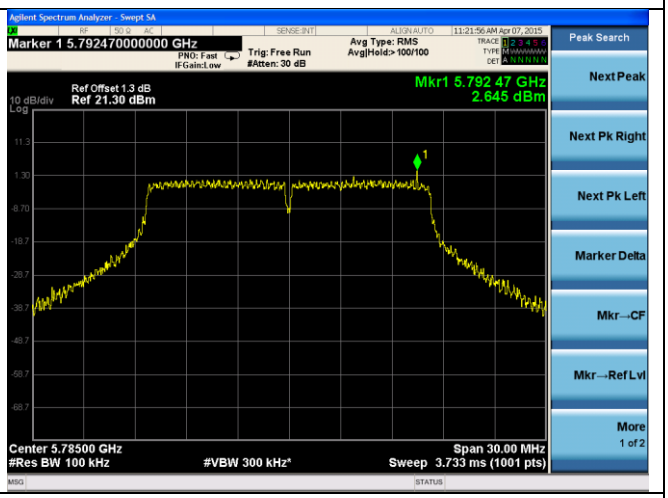


14dBi ANT-PSD-802.11a-5785M-chain1



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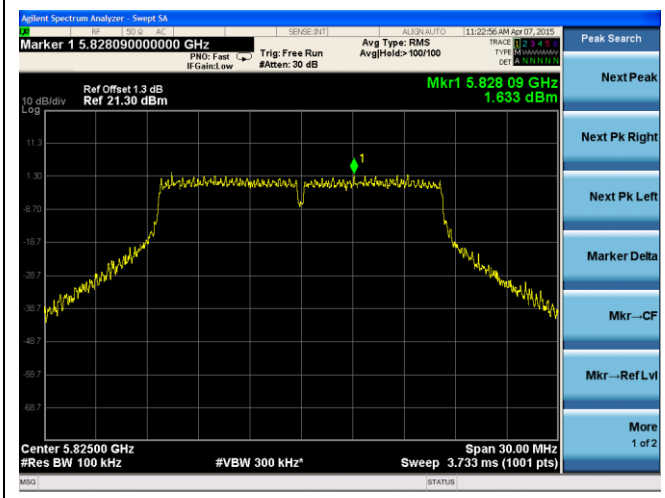
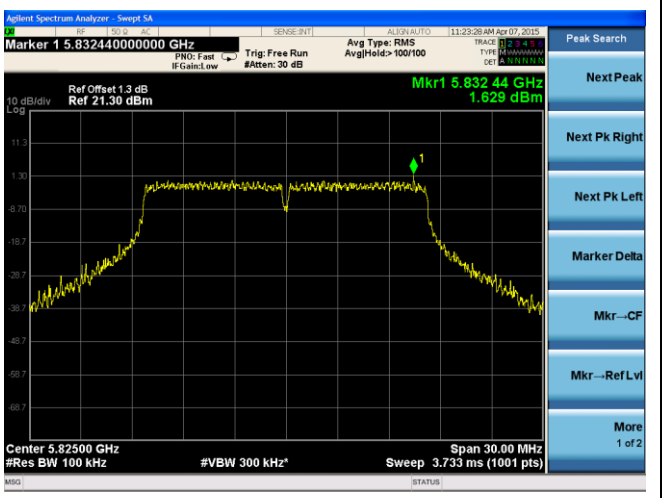


14dBi ANT-PSD-802.11a-5825M-chain1



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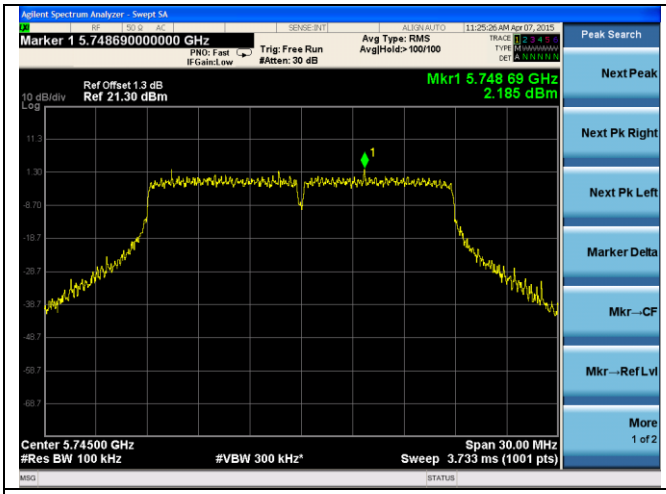

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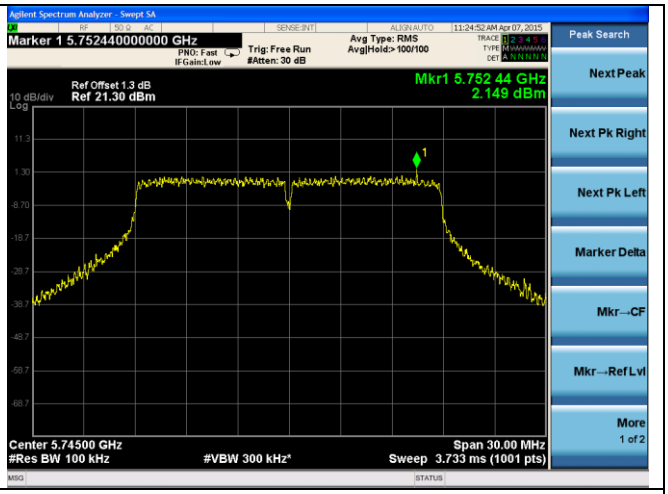

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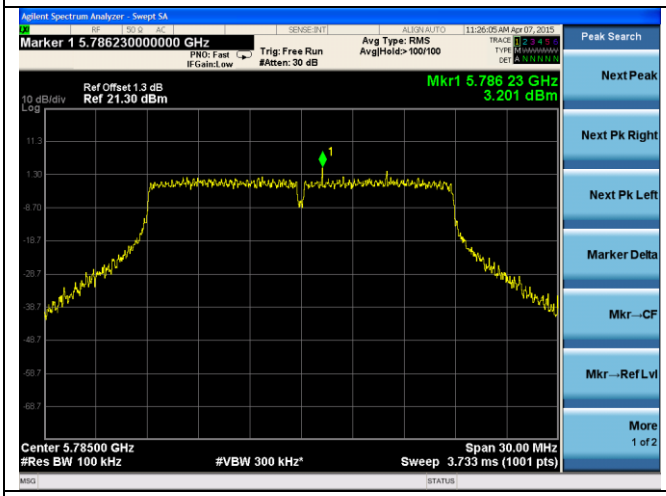

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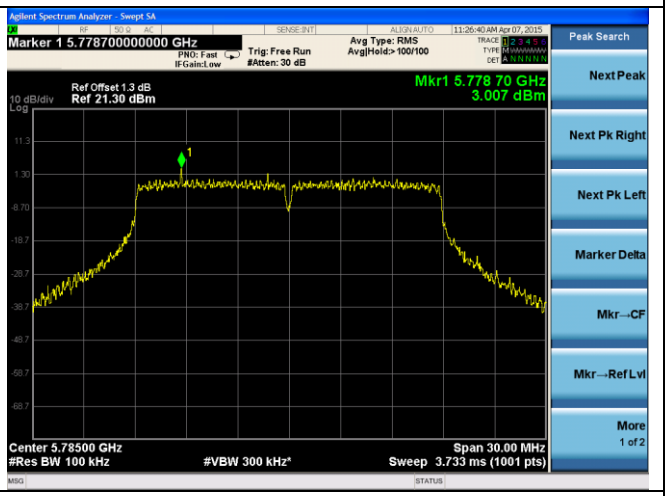

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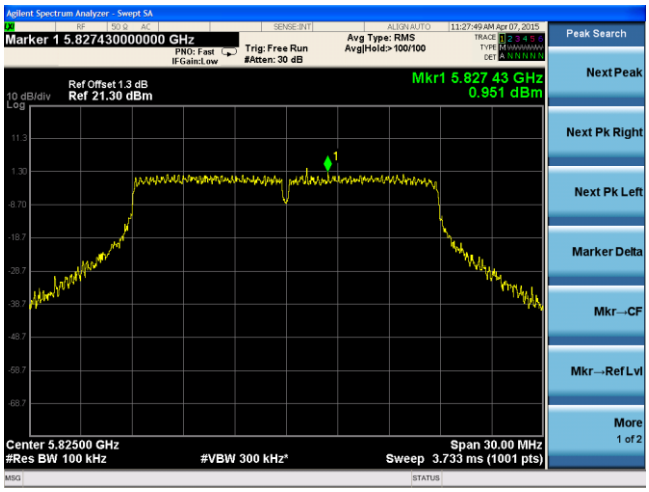

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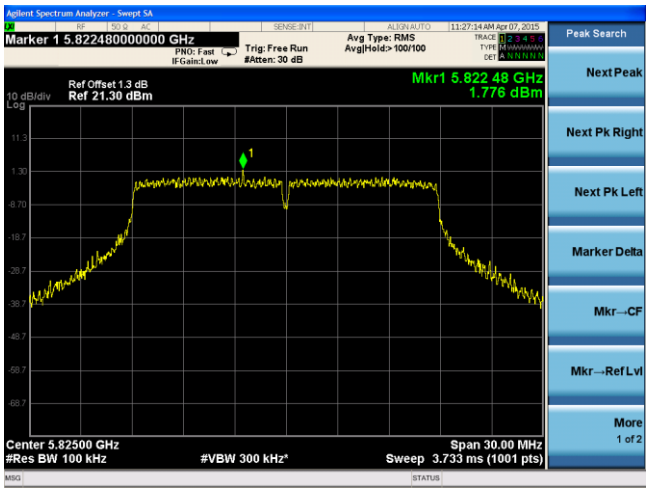

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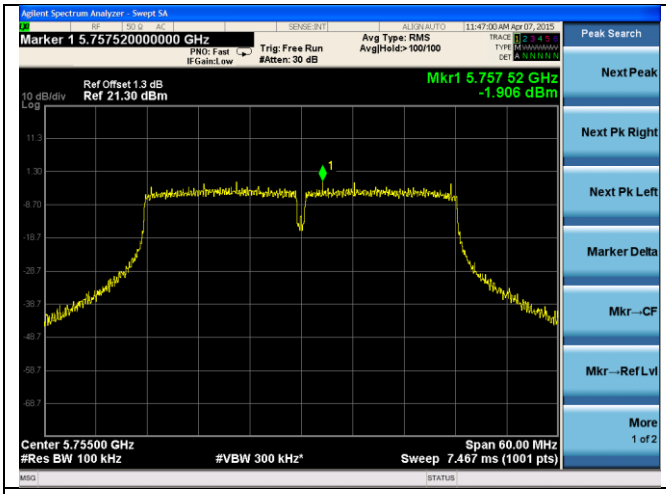
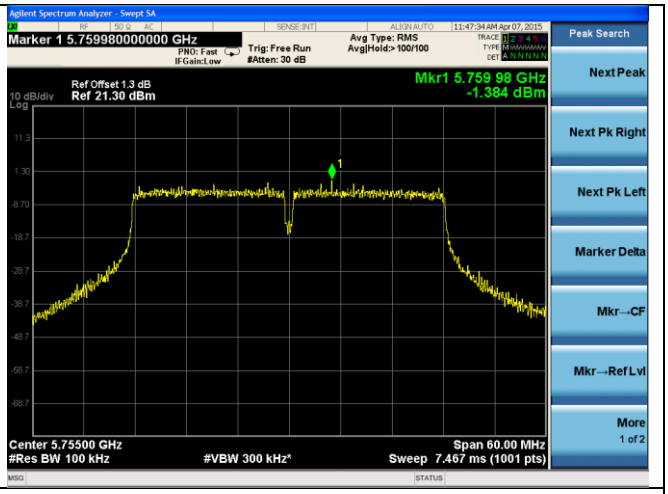


14dBi ANT-PSD-802.11n-HT40-5755M-chain1



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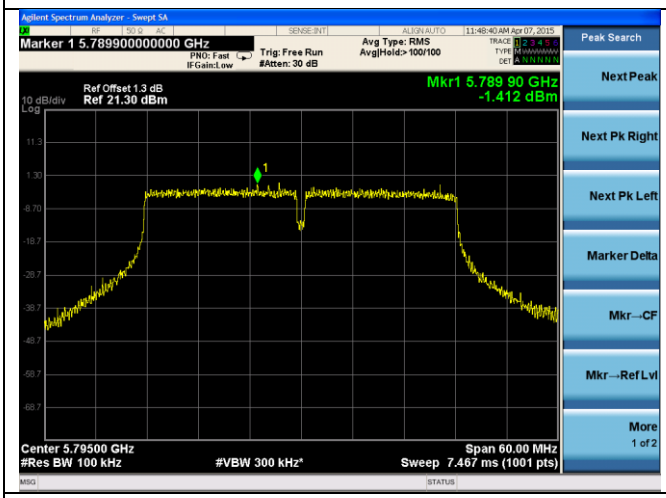

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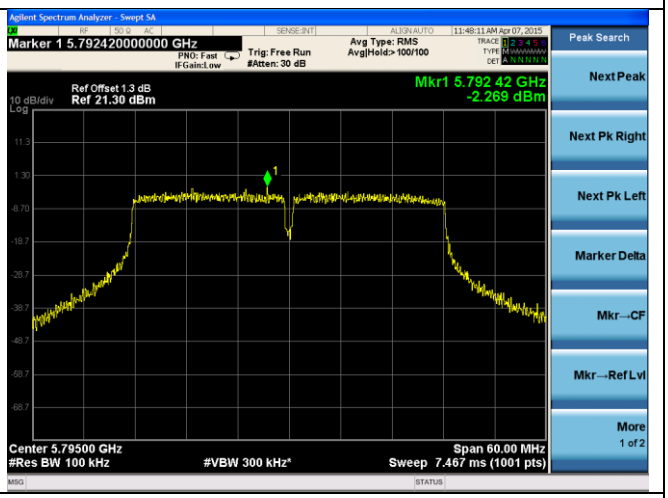

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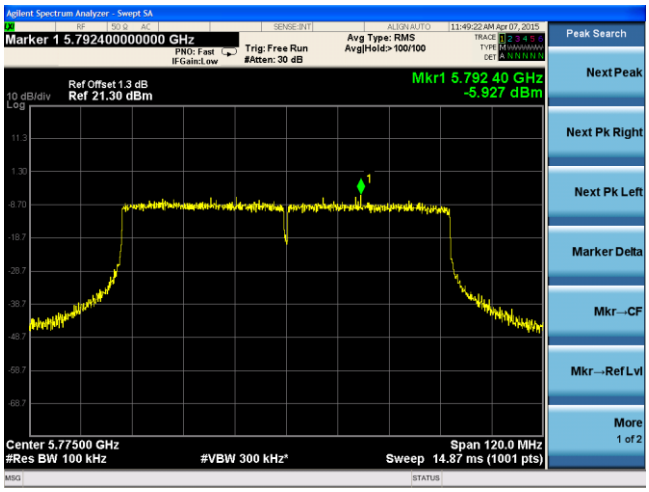

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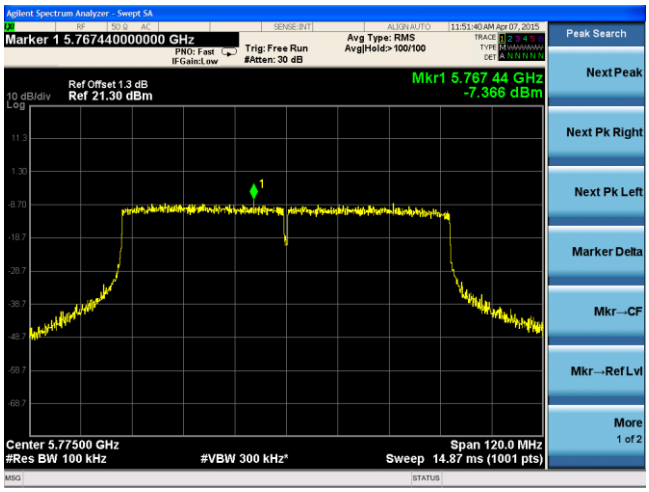

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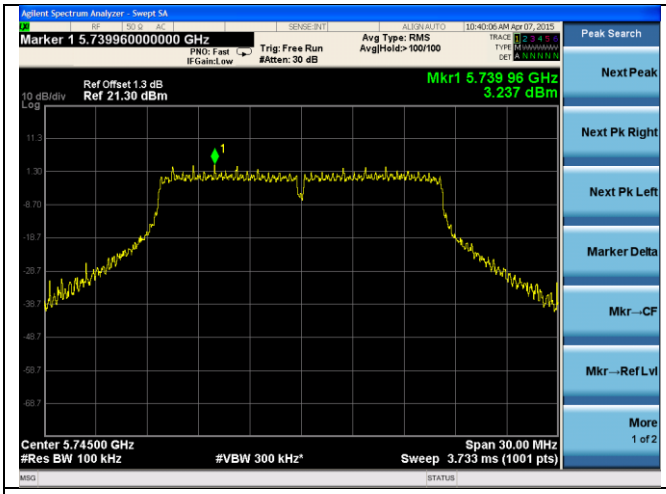

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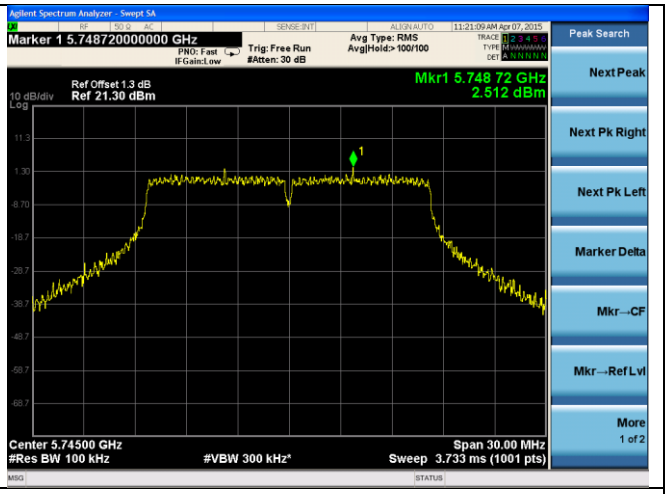

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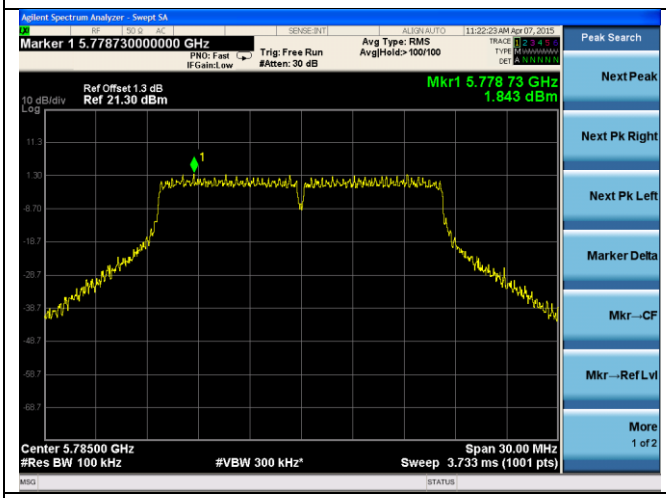

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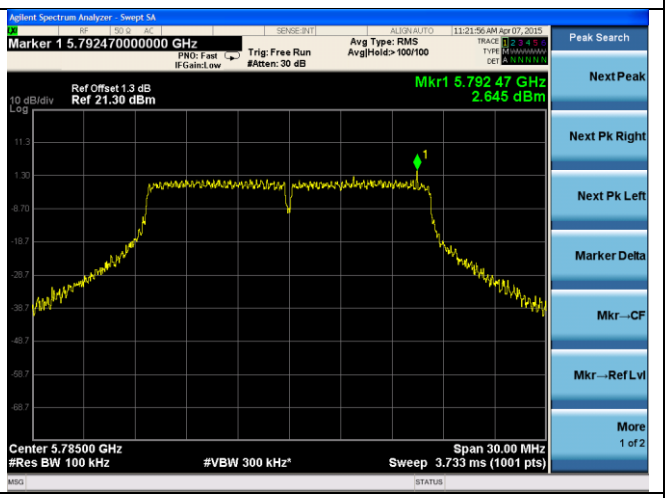

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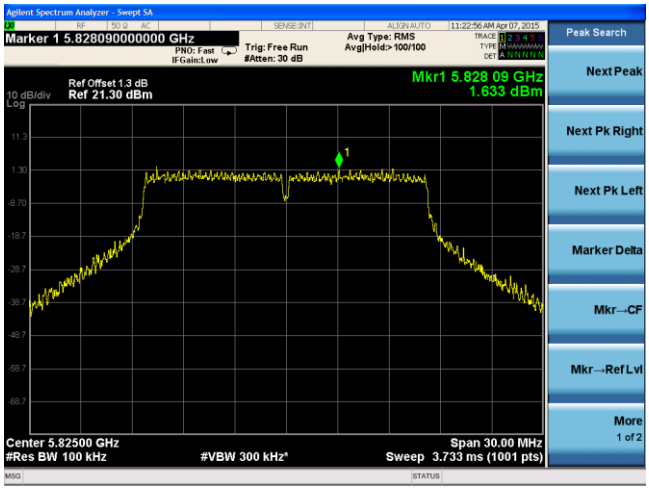

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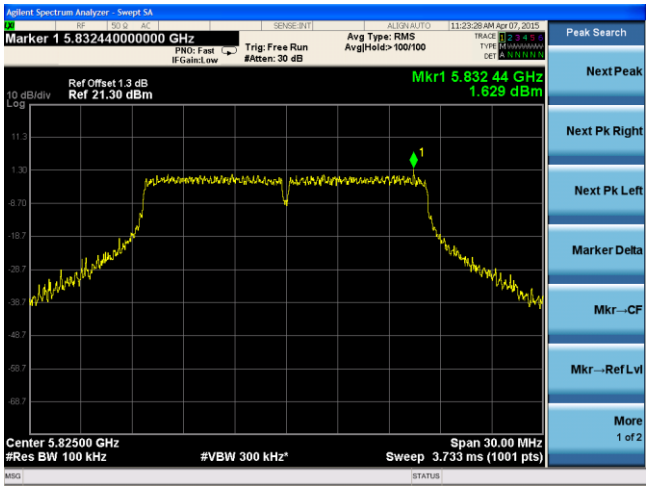

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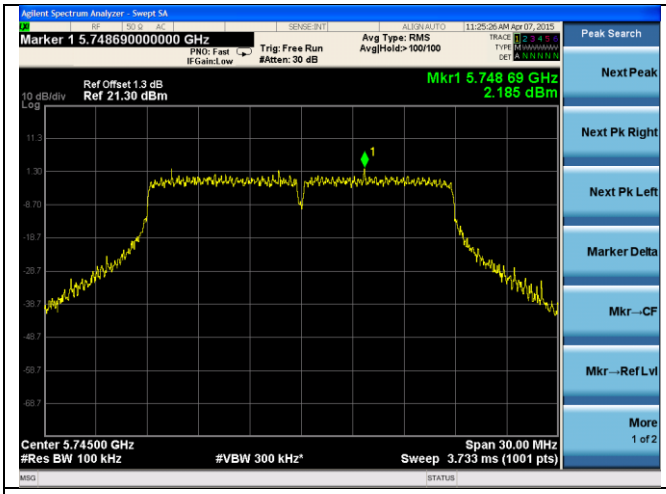

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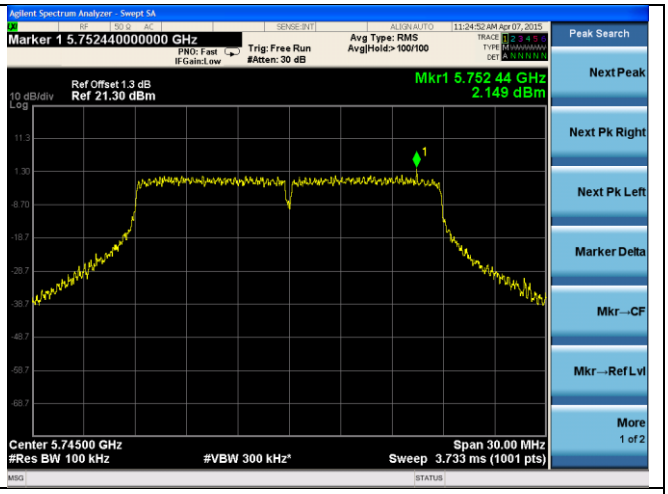

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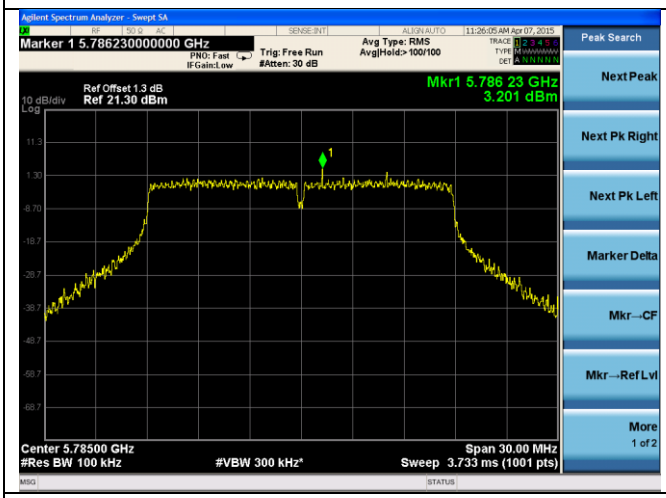

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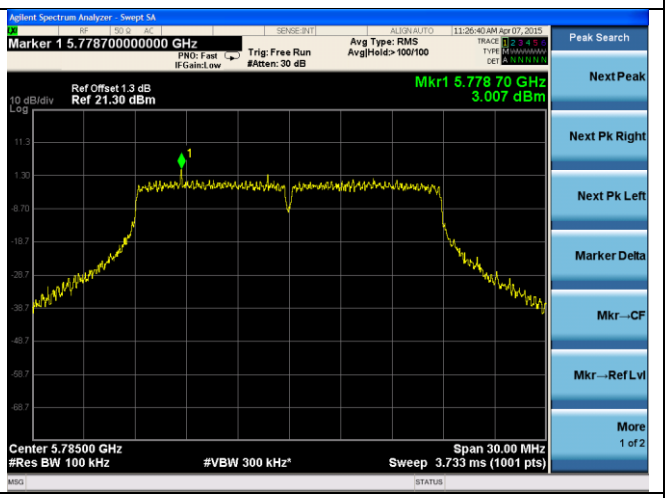

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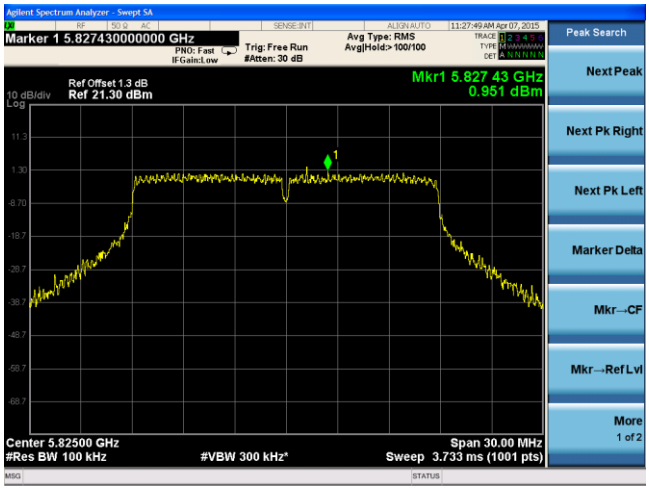

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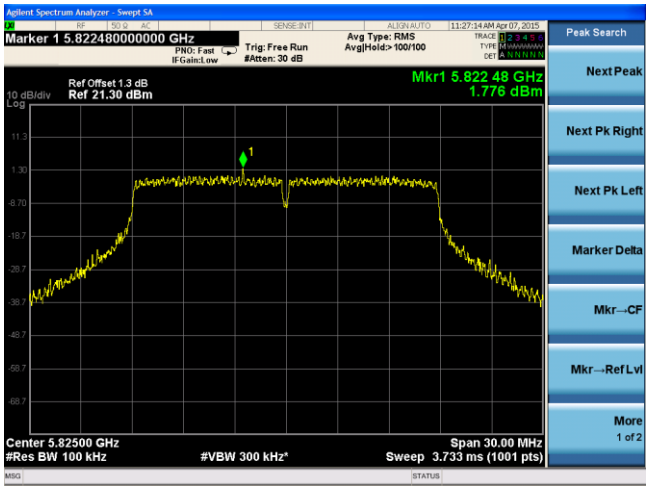

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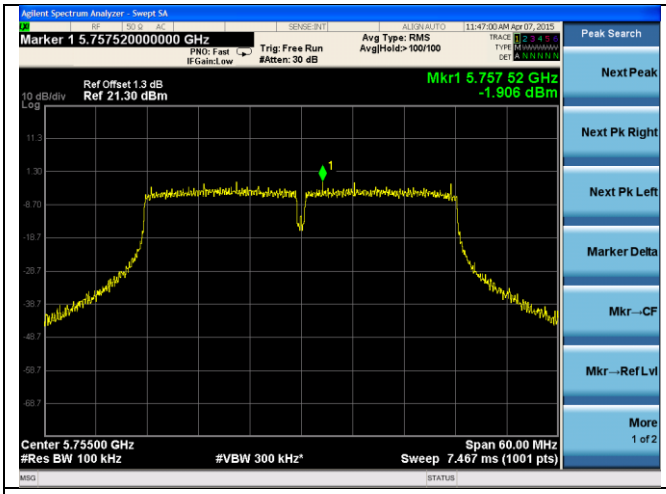

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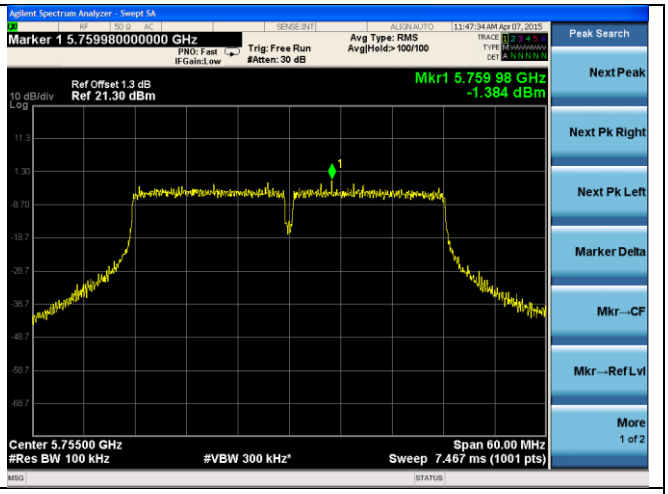

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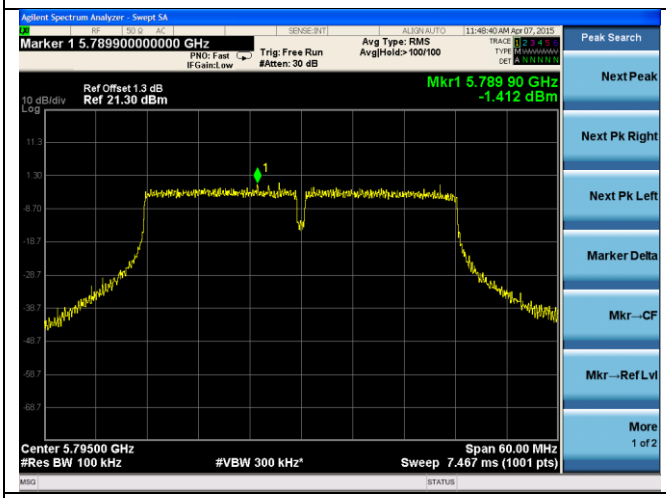

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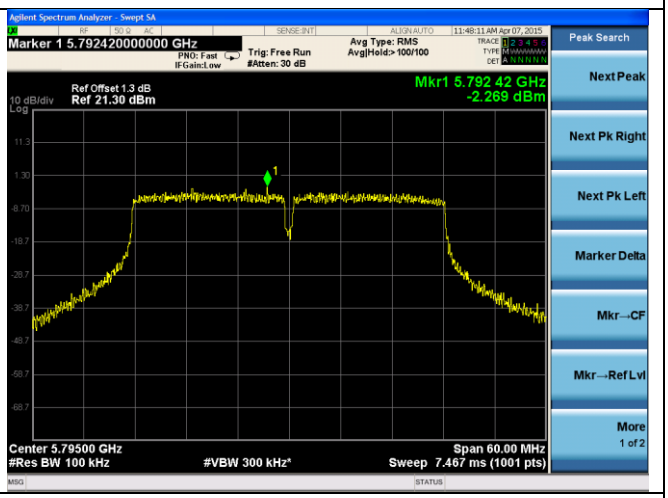

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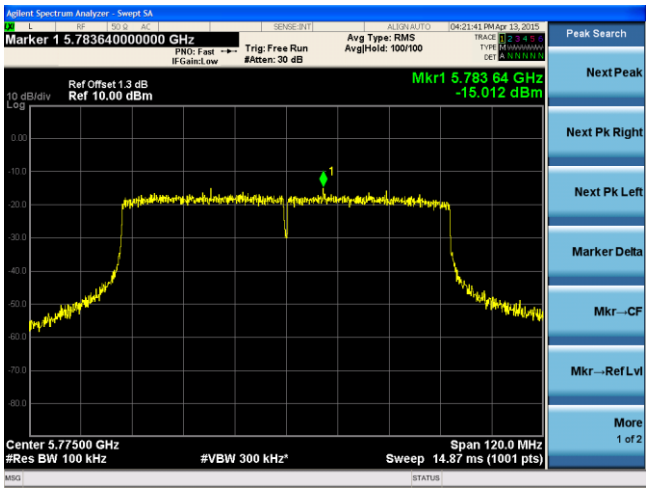

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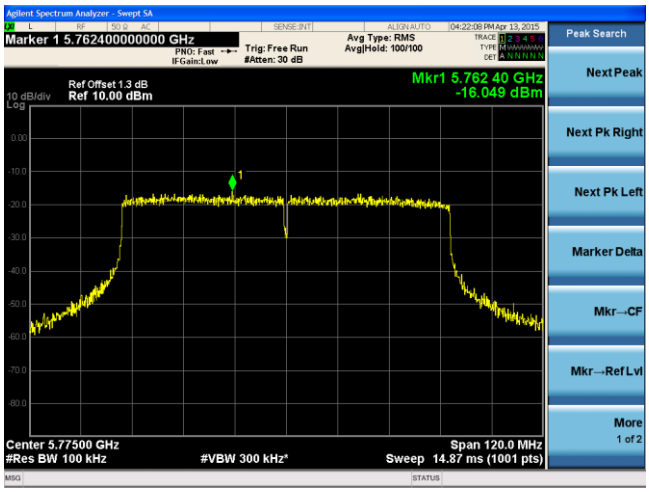

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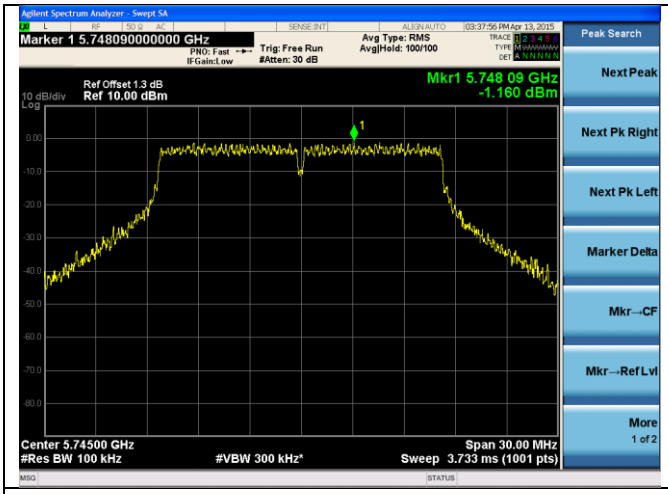

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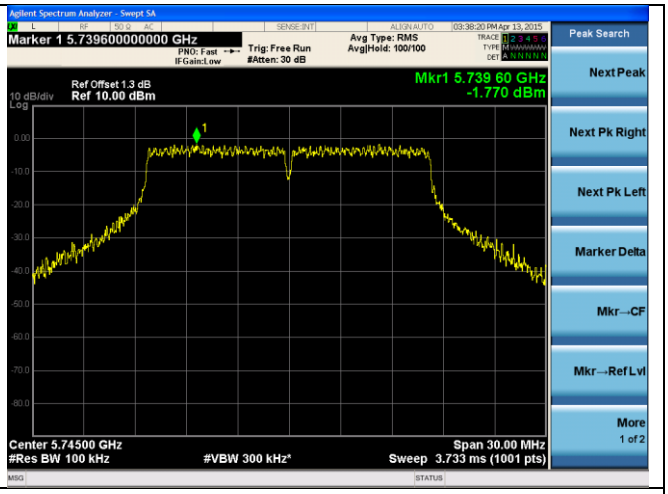

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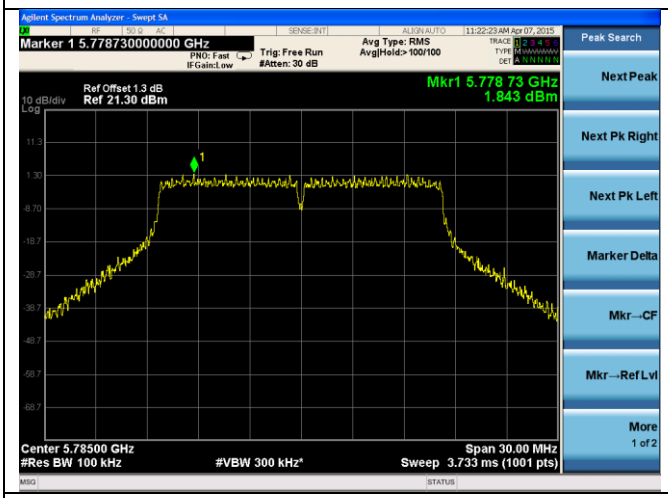

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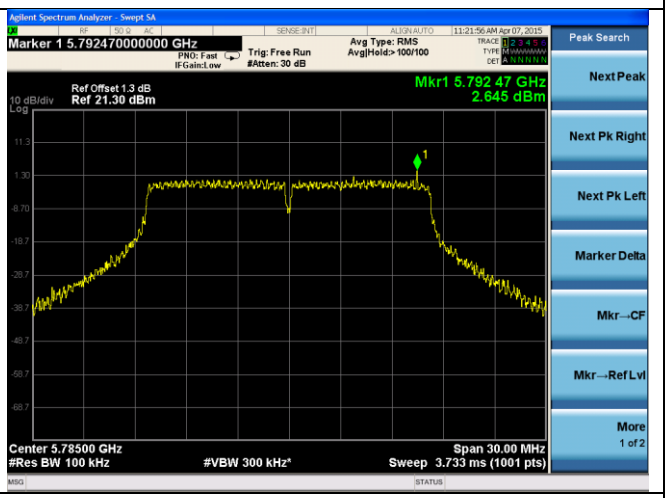

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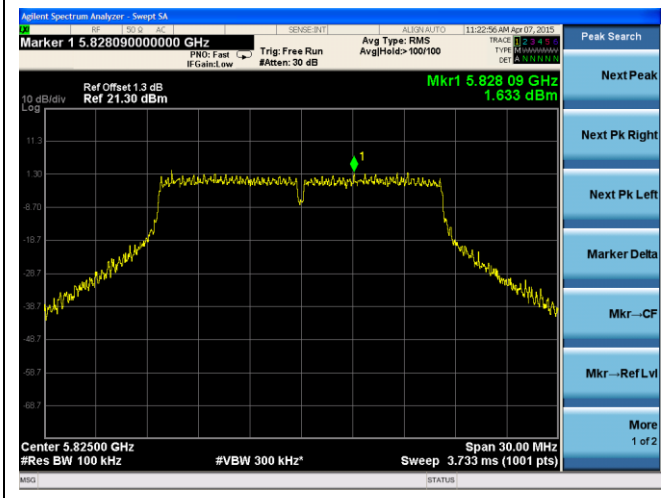

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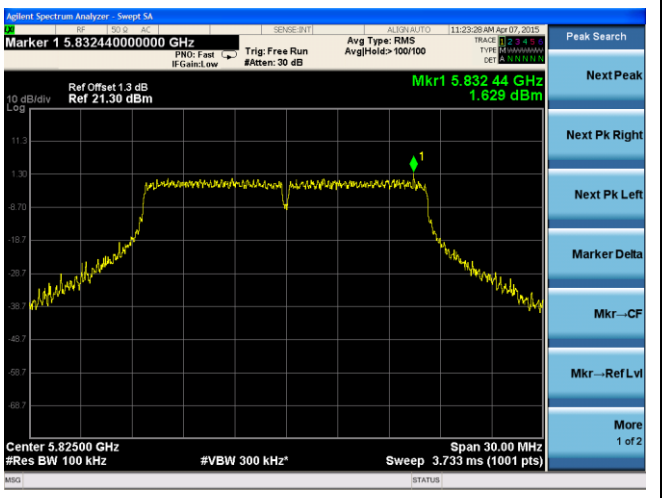

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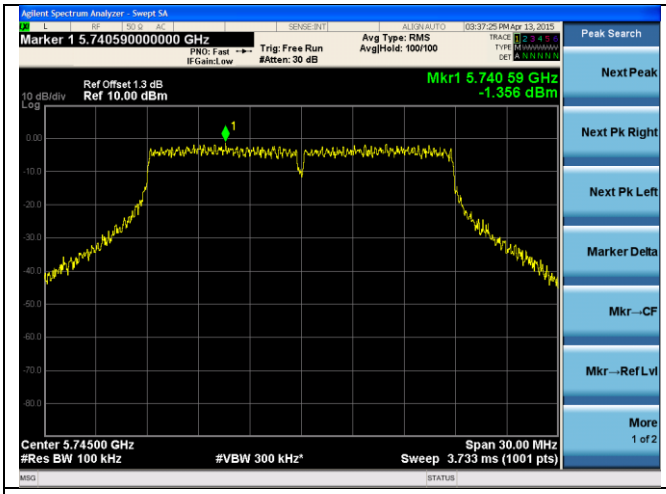

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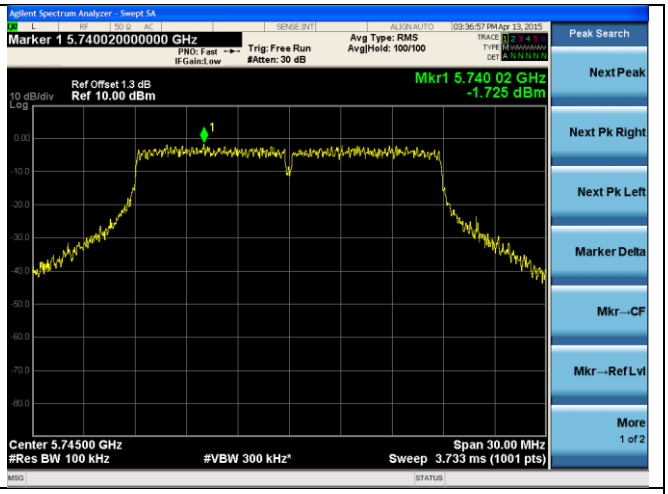

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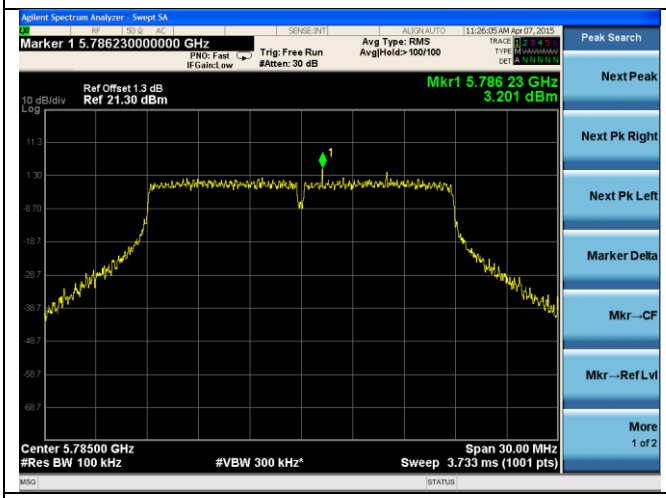

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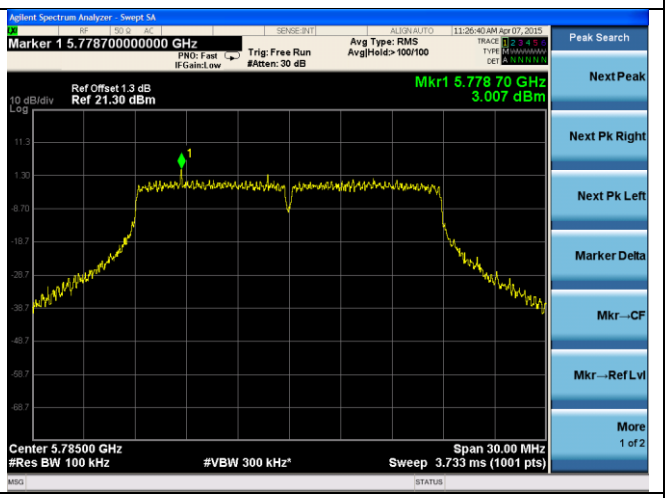

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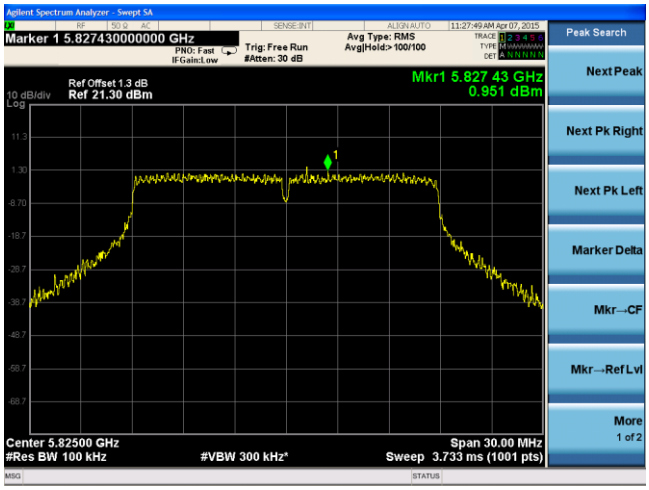

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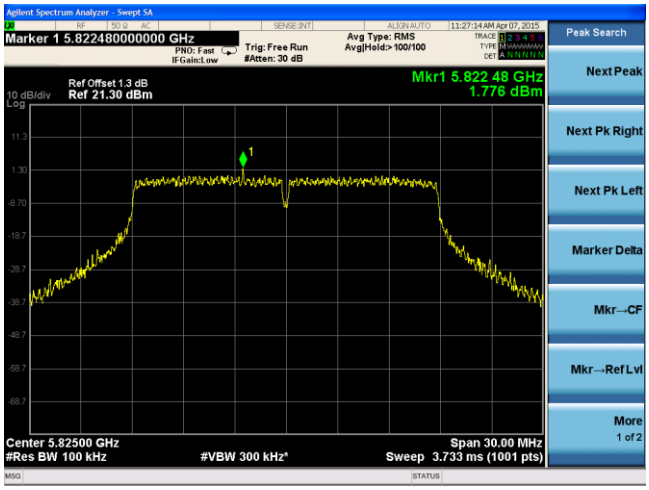

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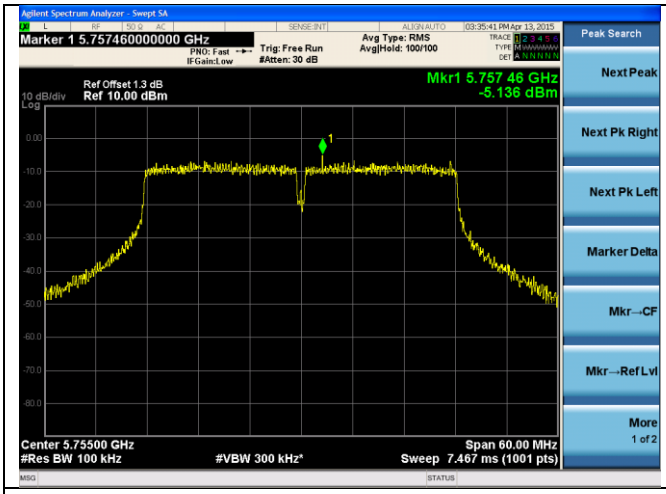

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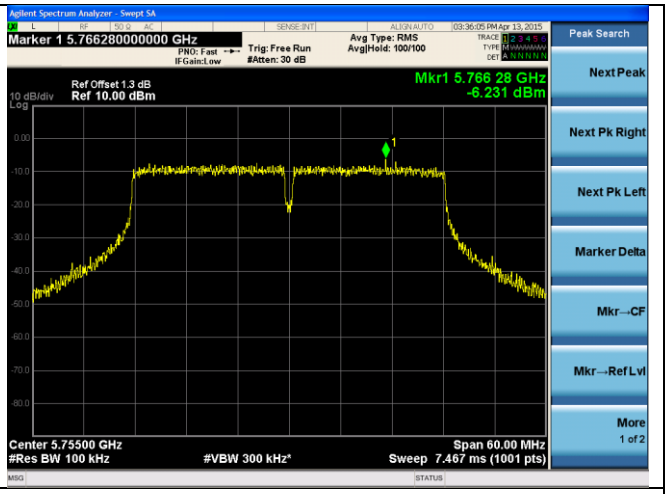

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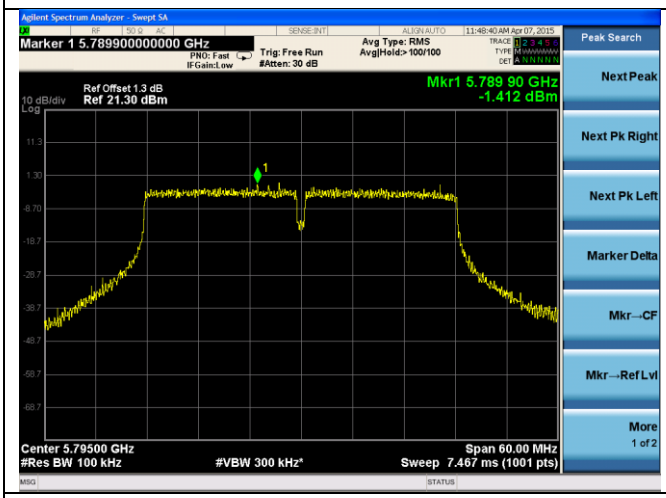

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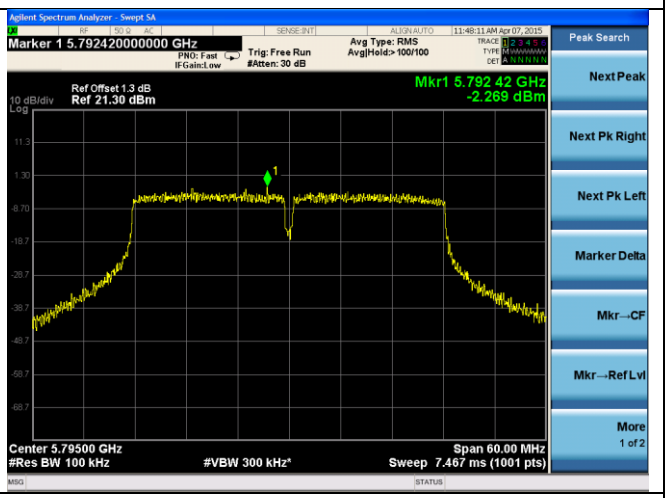

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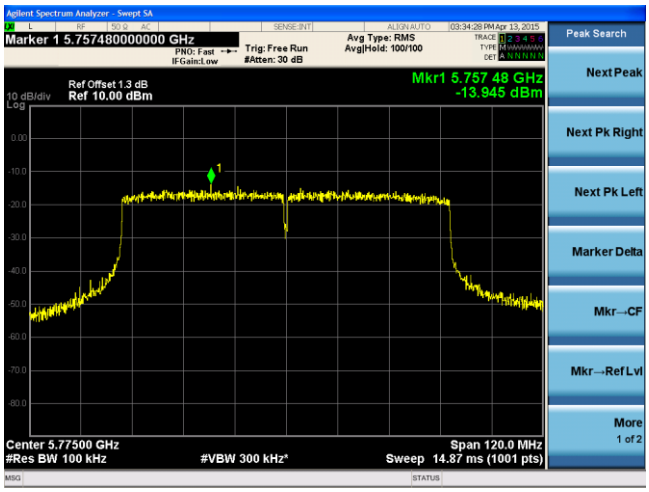
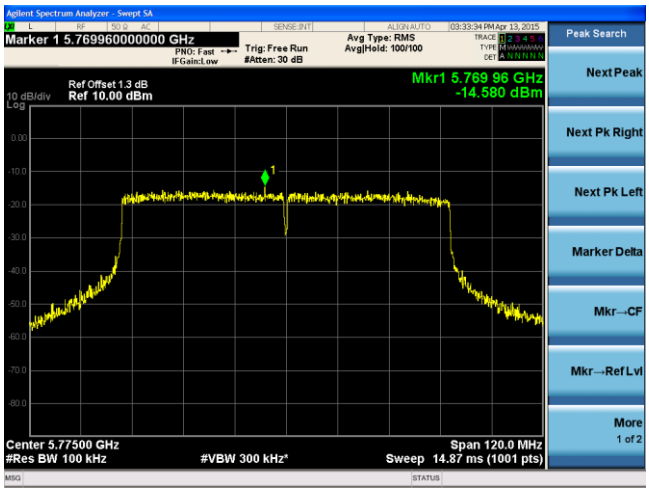


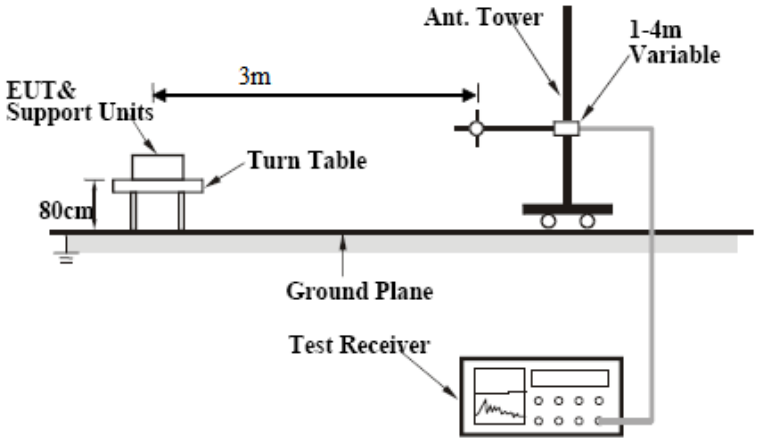
24dBi ANT-PSD-802.11ac -5775M-chain1



24dBi ANT-PSD-802.11ac -5775M-chain2

10.5 Radiated Emissions below 1GHz

Requirement(s):

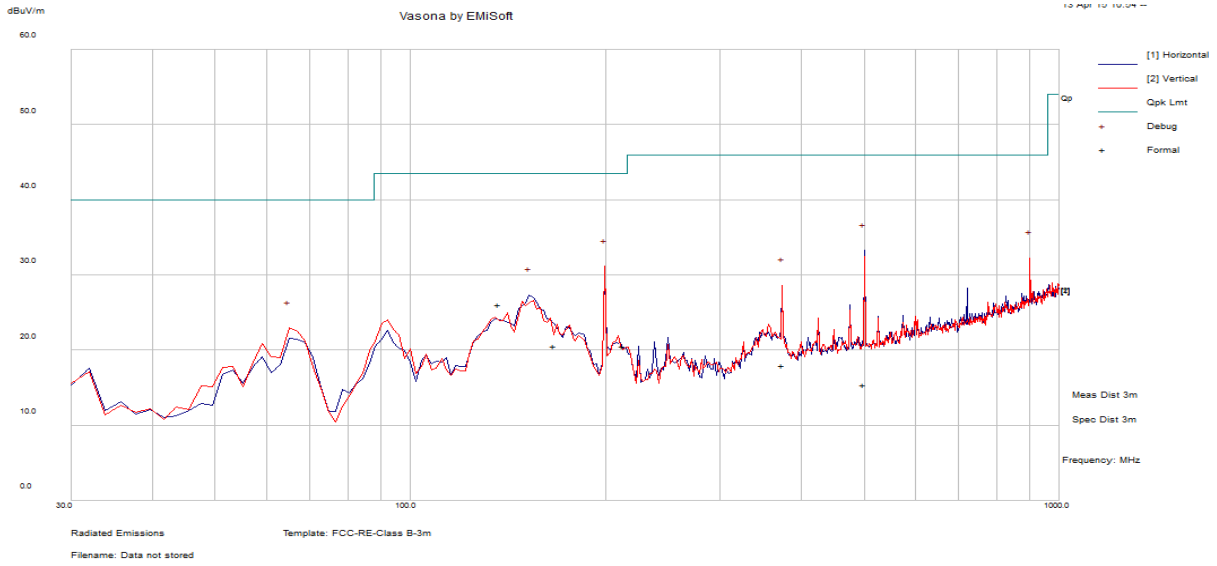
<table>
<tr><th>Spec</th><th>Requirement</th><th>Applicable</th></tr>
<tr><td>47CFR§
15.407(b)
15.209 (a)</td><td>Except higher limit as specified elsewhere in other section, the emissions from the low-power radio-frequency devices shall not exceed the field strength levels specified in the following table and the level of any unwanted emissions shall not exceed the level of the fundamental emission. The tighter limit applies at the band edges
<table>
<tr><th>Frequency range (MHz)</th><th>Field Strength (uV/m)</th></tr>
<tr><td>30 – 88</td><td>100</td></tr>
<tr><td>88 – 216</td><td>150</td></tr>
<tr><td>216 960</td><td>200</td></tr>
<tr><td>Above 960</td><td>500</td></tr>
</table></td><td>☒</td></tr>
<tr><td>Test Setup</td><td> 
</td></tr>
<tr><td>Procedure</td><td>1. The EUT was switched on and allowed to warm up to its normal operating condition.
2. The test was carried out at the selected frequency points obtained from the EUT characterisation. Maximization of the emissions, was carried out by rotating the EUT, changing the antenna polarization, and adjusting the antenna height in the following manner:
a. Vertical or horizontal polarisation (whichever gave the higher emission level over a full rotation of the EUT) was chosen.
b. The EUT was then rotated to the direction that gave the maximum emission.
c. Finally, the antenna height was adjusted to the height that gave the maximum emission.
3. A Quasi-peak measurement was then made for that frequency point.
4. Steps 2 and 3 were repeated for the next frequency point, until all selected frequency points were measured.</td></tr>
<tr><td>Remark</td><td>The EUT was scanned up to 40GHz. Both horizontal and vertical polarities were investigated. The results show only the worst case.
The EUT was scanned for 14 dBi, 21 dBi and 24 dBi antennas. The 21 dBi and 24 dBi antenna are same type of external antennas. The spurious emission data for 14 dBi and 24 dBi antennas are shown as the worst case.</td></tr>
<tr><td>Result</td><td>☒ Pass ☐ Fail</td></tr>
</table>

Test Data ☒ Yes (See below) ☐ N/A

Test Plot ☒ Yes (See below) ☐ N/A

Radiated Emission Test Results (Below 1GHz)

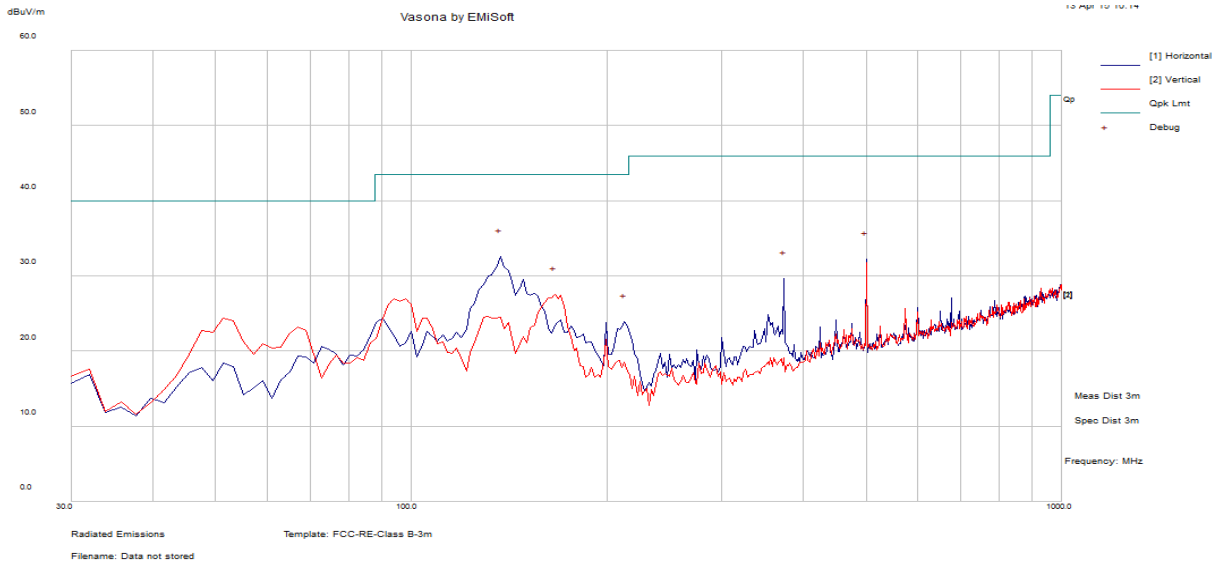
Test specification	below 1GHz			
Environmental Conditions:	Temp (°C):	26.1	Result	Pass
	Humidity (%)	47.5		
	Atmospheric (mbar):	1020		
Mains Power:	120VAC, 60Hz			
Tested by:	Ricky Wang			
Test Date:	04/13/2015			
Remarks:	14dBi internal Antenna			



Frequency MHz	Raw dBuV	Cable Loss	AF dB	Level dBuV/m	Measurement Type	Pol	Hgt cm	Azt Deg	Limit dBuV/m	Margin dB	Pass /Fail
199.36	37.6	2.52	-25.81	14.31	Quasi Max	V	154	144	43.5	-29.19	Pass
500.36	32.09	4.15	-20.9	15.34	Quasi Max	H	263	301	46	-30.66	Pass
901.06	31.85	6.61	-16.7	21.76	Quasi Max	V	283	54	46	-24.24	Pass
152.22	46.84	2.24	-26.1	22.97	Quasi Max	H	176	138	43.5	-20.53	Pass
64.98	44.07	1.38	-30.03	15.42	Quasi Max	V	268	232	40	-24.58	Pass
374.23	37.68	3.48	-23.47	17.69	Quasi Max	V	101	278	46	-28.31	Pass

Note: Both horizontal and vertical polarities were investigated. The results above show only the worst case.

Test specification	below 1GHz			
Environmental Conditions:	Temp (°C):	26.1	Result	Pass
	Humidity (%)	47.5		
	Atmospheric (mbar):	1020		
Mains Power:	120VAC, 60Hz			
Tested by:	Ricky Wang			
Test Date:	04/13/2015			
Remarks:	24dBi External Antenna			

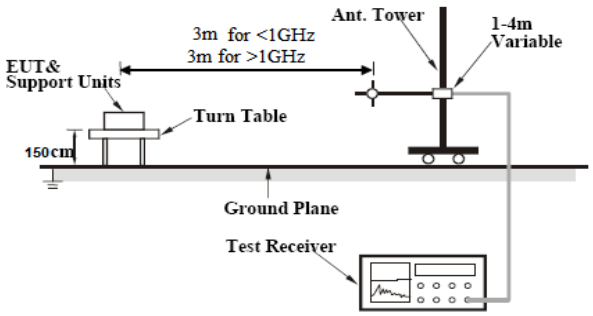


Frequency MHz	Raw dBuV	Cable Loss	AF dB	Level dBuV/m	Measurement Type	Pol	Hgt cm	Azt Deg	Limit dBuV/m	Margin dB	Pass/Fail
136.70	48.98	2.12	-24.99	26.11	Quasi Max	H	209	56	43.5	-17.39	Pass
500.41	32.16	4.15	-20.9	15.41	Quasi Max	H	193	214	46	-30.59	Pass
166.19	45.01	2.33	-26.81	20.53	Quasi Max	V	119	23	43.5	-22.97	Pass
373.89	38.02	3.47	-23.47	18.02	Quasi Max	H	101	271	46	-27.98	Pass
212.91	45.89	2.59	-27.95	20.53	Quasi Max	H	125	113	43.5	-22.97	Pass

Note: Both horizontal and vertical polarities were investigated. The results above show only the worst case.

10.6 Radiated Spurious Emissions between above 1GHz

Requirement(s):

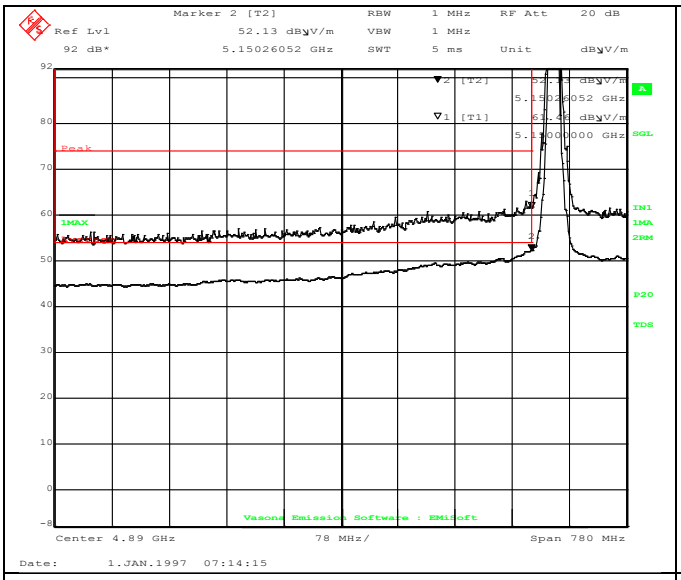
Spec	Item	Requirement	Applicable
47CFR§ 15.407(b)(2), 15.407(b)(6)	(1)	For transmitters operating in the 5.15-5.25 GHz band: all emissions outside of the 5.15-5.35 GHz band shall not exceed an EIRP of -27 dBm/MHz.	☒
	(2)	For transmitters operating in the 5.25-5.35 GHz band: all emissions outside of the 5.15-5.35 GHz band shall not exceed an EIRP of -27 dBm/MHz. Devices operating in the 5.25-5.35 GHz band that generate emissions in the 5.15-5.25 GHz band must meet all applicable technical requirements for operation in the 5.15-5.25 GHz band (including indoor use) or alternatively meet an out-of-band emission EIRP limit of -27 dBm/MHz in the 5.15-5.25 GHz band.	☐
	(3)	For transmitters operating in the 5.47-5.725 GHz band: all emissions outside of the 5.47-5.725 GHz band shall not exceed an EIRP of −27 dBm/MHz.	☐
	(4)	For transmitters operating in the 5.725-5.825 GHz band: all emissions within the frequency range from the band edge to 10 MHz above or below the band edge shall not exceed an EIRP of -17 dBm/MHz; for frequencies 10 MHz or greater above or below the band edge, emissions shall not exceed an EIRP of -27 dBm/MHz.	☒
	(5)	Restricted band, emission must also comply with the radiated emission limits specified in 15.209	☒
Test Setup			
Procedure	1. The EUT was switched on and allowed to warm up to its normal operating condition. 2. The test was carried out at the selected frequency points obtained from the EUT characterisation. Maximization of the emissions, was carried out by rotating the EUT, changing the antenna polarization, and adjusting the antenna height in the following manner: a. Vertical or horizontal polarisation (whichever gave the higher emission level over a full rotation of the EUT) was chosen. b. The EUT was then rotated to the direction that gave the maximum emission. c. Finally, the antenna height was adjusted to the height that gave the maximum emission. 3. An average measurement was then made for that frequency point. 4. Steps 2 and 3 were repeated for the next frequency point, until all selected frequency points were measured.		
Remark	The EUT was scanned up to 40GHz. Both horizontal and vertical polarities were investigated. The results show only the worst case. The EUT was scanned for 14 dBi, 21 dBi and 24 dBi antennas. The 21 dBi and 24 dBi antenna are same type of external antennas. The spurious emission data for 14 dBi and 24 dBi antennas are shown as the worst case.		
Result	☒ Pass ☐ Fail		

Equipment Setting

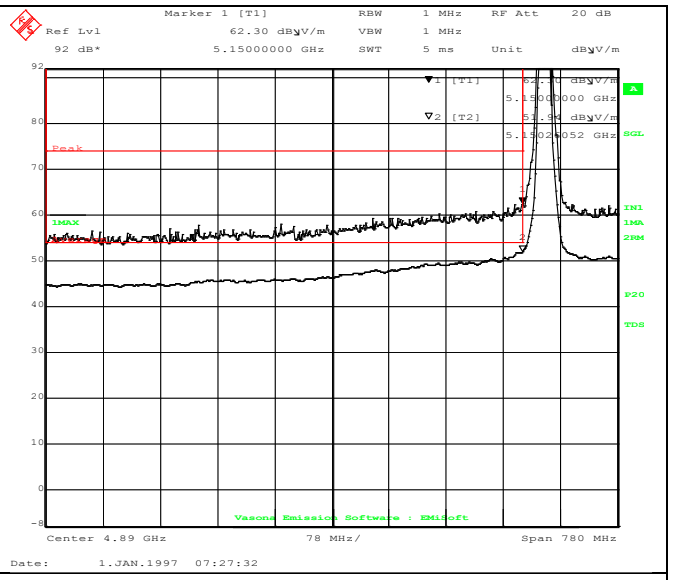
Test	RBW	VBW	Span	Detector	Sweep	Trace	Notes
Radiated Spurious Emission	1MHz	3MHz	1GHz - 40 GHz	Peak	Auto	Max hold	PK Measurement
Radiated Spurious Emission	1MHz	10Hz	1GHz - 40 GHz	Peak	Auto	Max hold	Ave Measurement

Test Data ☐ Yes (See below) ☒ N/A
Test Plot ☒ Yes (See below) ☐ N/A

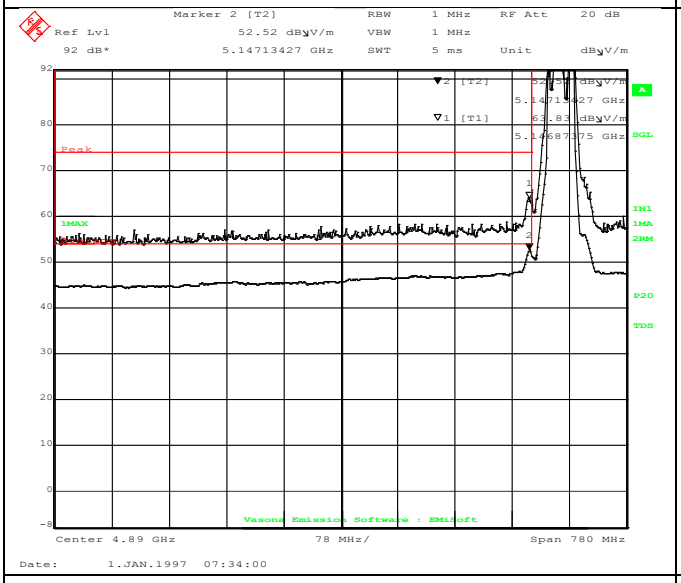
14dBi Antenna Restricted Band Measurement Plots:



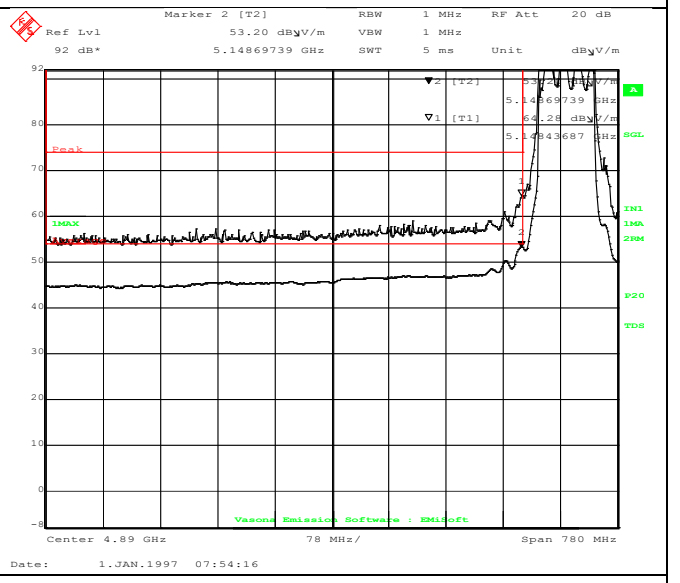
Restriced Band-802.11a 5180M– Edge Freq 5150MHz



Restriced Band-802.11n-HT20 5180M– Edge Freq 5150MHz

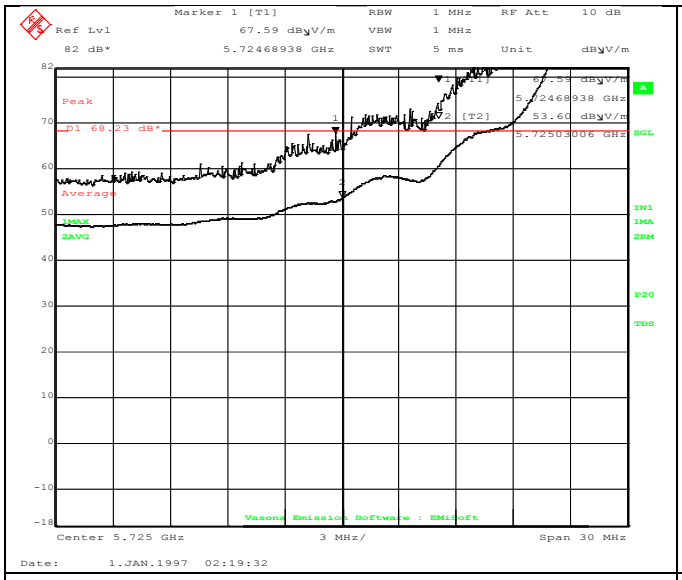


Restriced Band-802.11n-HT40 5190M– Edge Freq 5150MHz

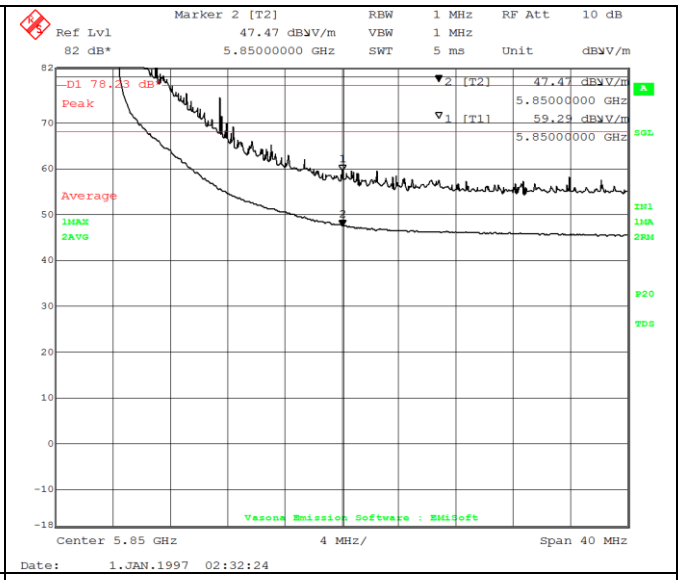


Restriced Band-802.11ac 5210M– Edge Freq 5150MHz

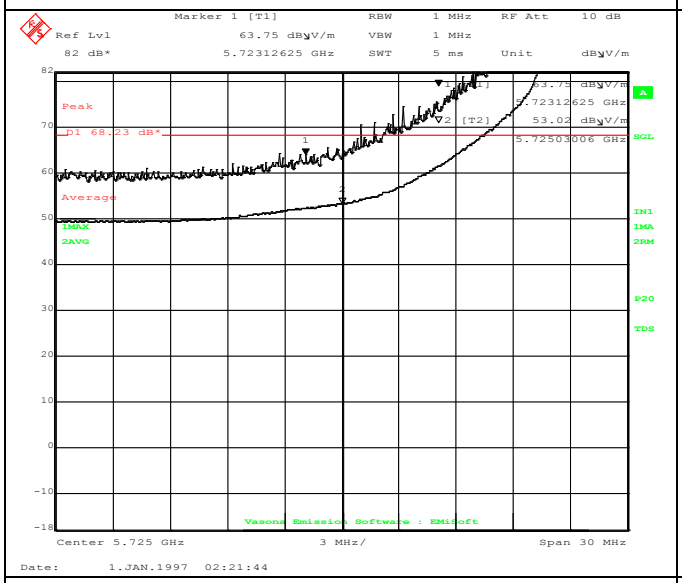
14dBi Antenna Radiated Band Edge Measurement Plots:



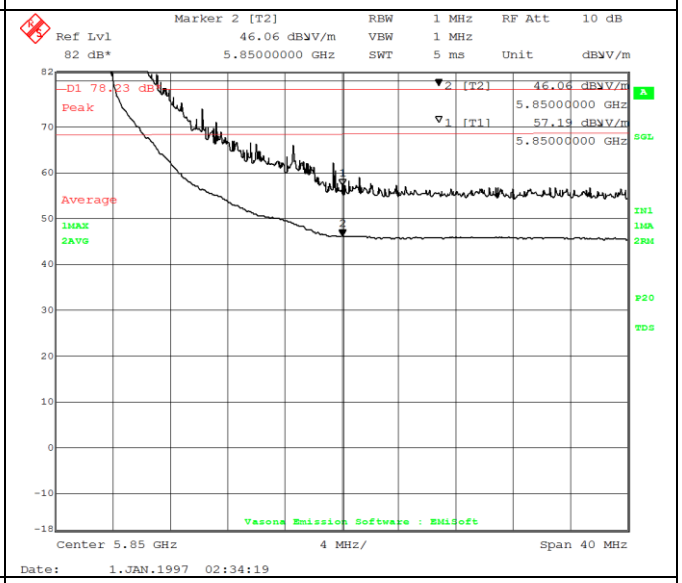
Radiated Band Edge-802.11a 5745M– Edge Freq 5725MHz



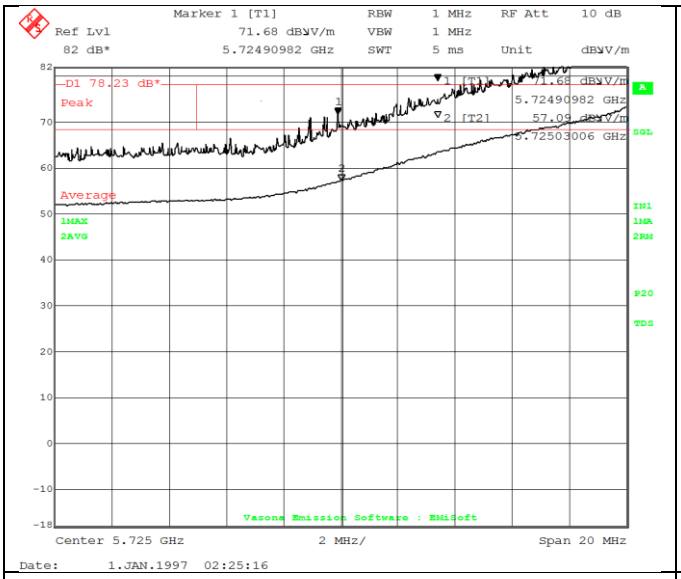
Radiated Band Edge-802.11a 5825M– Edge Freq 5850MHz



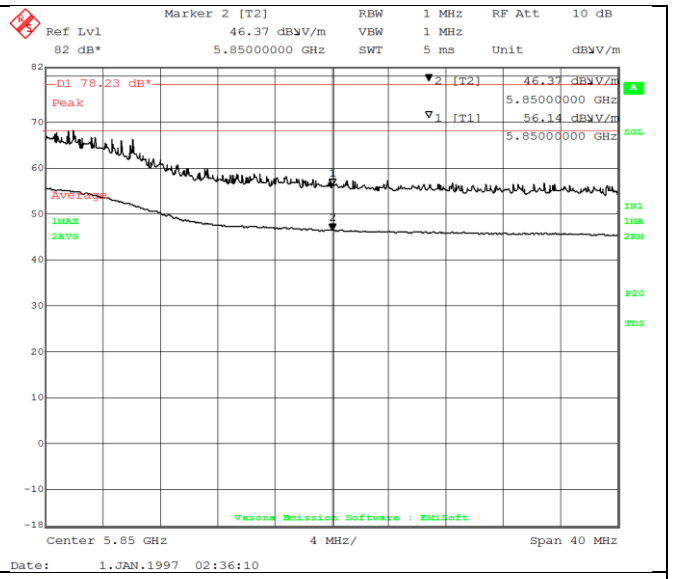
Radiated Band Edge-802.11n 5745M– Edge Freq 5725MHz



Radiated Band Edge-802.11n 5825M– Edge Freq 5850MHz

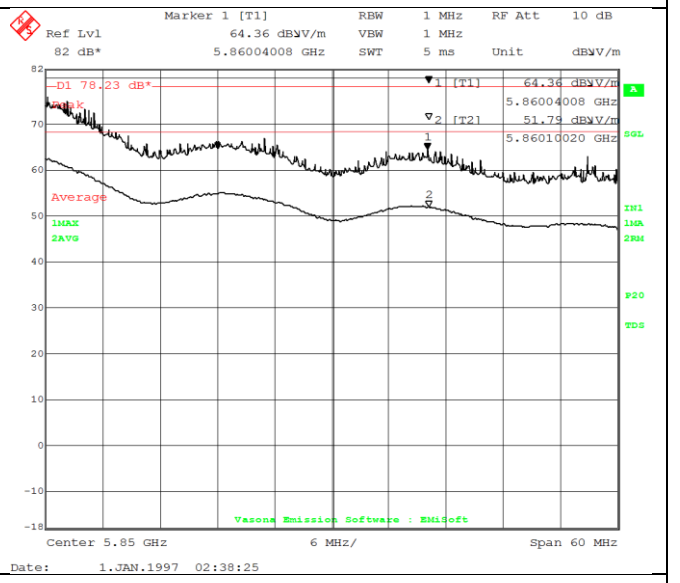


Radiated Band Edge-802.11n 5755M– Edge Freq 5725MHz



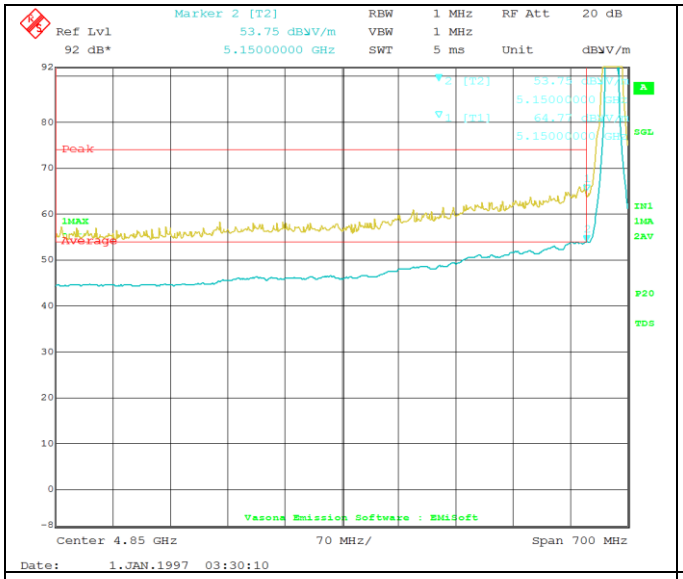
Radiated Band Edge-802.11n 5795M– Edge Freq 5850MHz

Restriced Band-802.11ac 5775M– Edge Freq 5725MHz

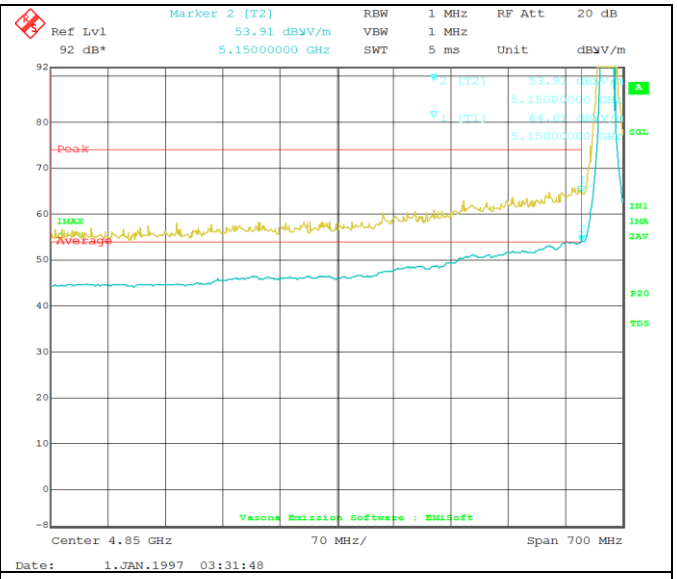


Radiated Band Edge-802.11ac 5775M– Edge Freq 5850MHz

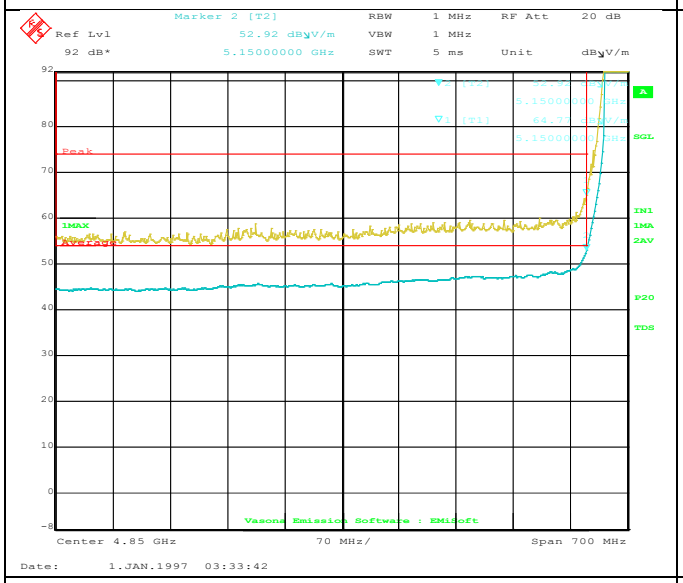
21dBi Antenna Restricted Band Measurement Plots:



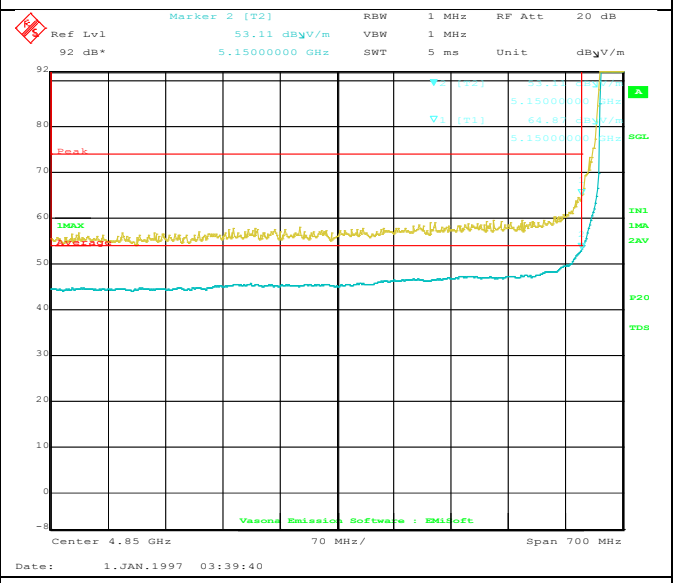
Restriced Band-802.11a 5180M– Edge Freq 5150MHz



Restriced Band-802.11n-HT20 5180M– Edge Freq 5150MHz

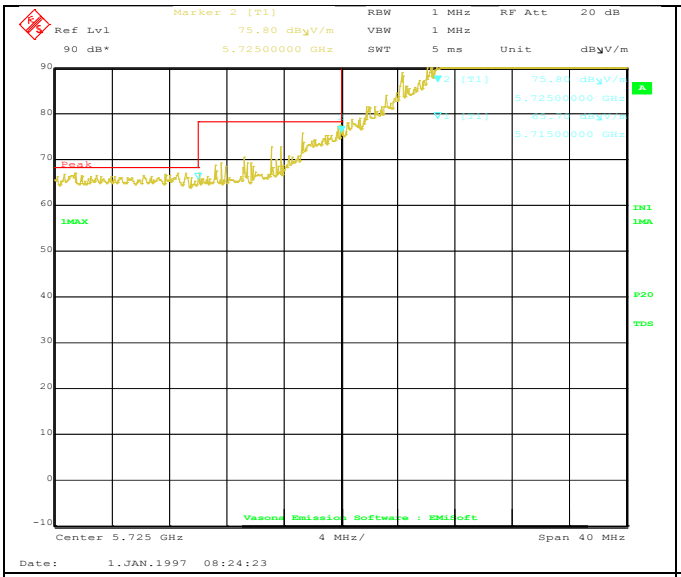


Restriced Band-802.11n-HT40 5190M– Edge Freq 5150MHz

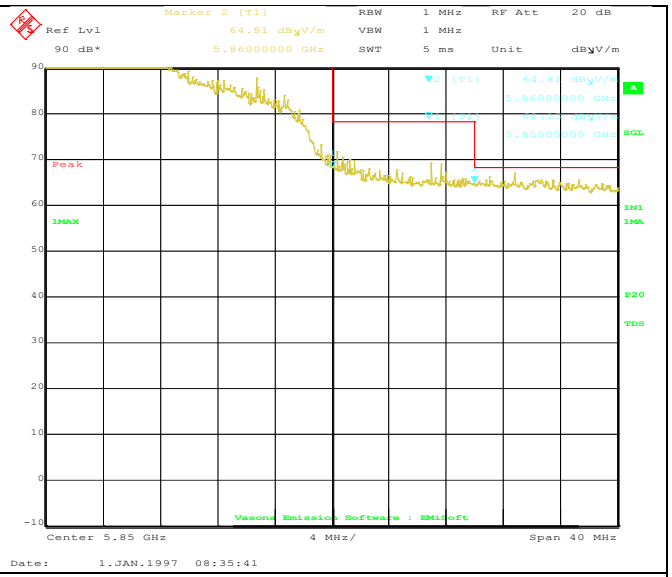


Restriced Band-802.11ac 5210M– Edge Freq 5150MHz

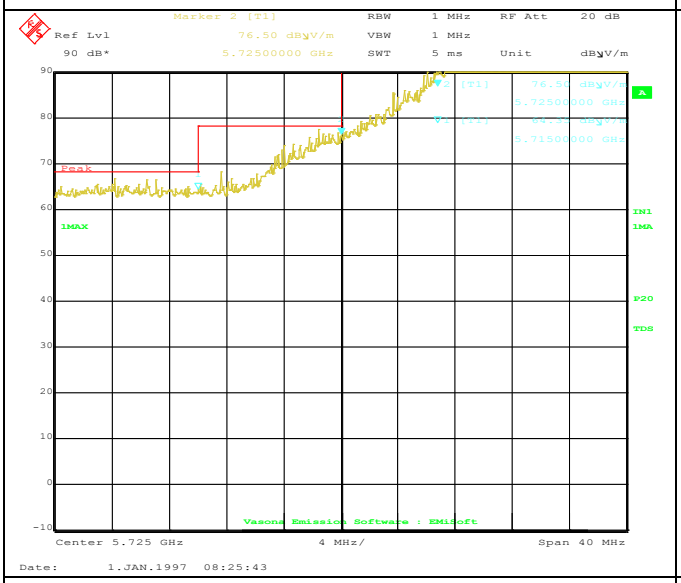
21dBi Antenna Radiated Band Edge Measurement Plots:



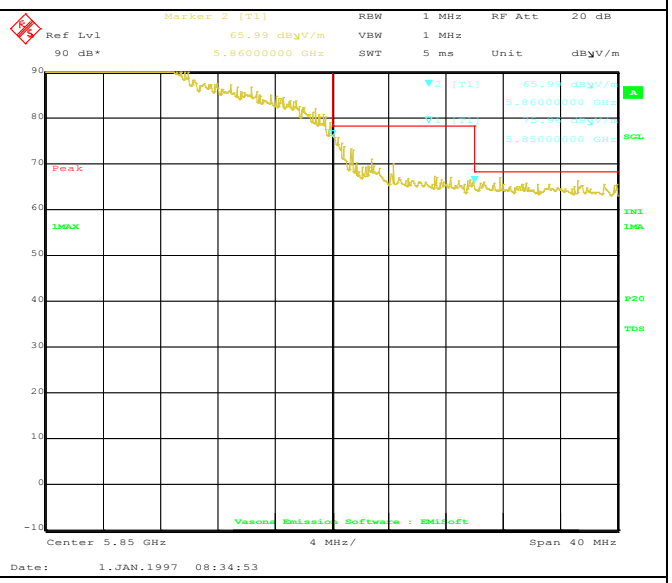
Radiated Band Edge-802.11a 5745M– Edge Freq 5725MHz



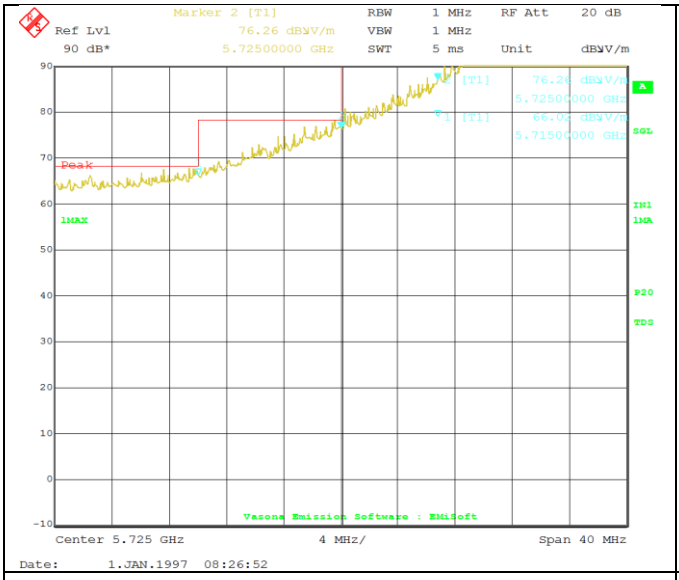
Radiated Band Edge-802.11a 5825M– Edge Freq 5850MHz



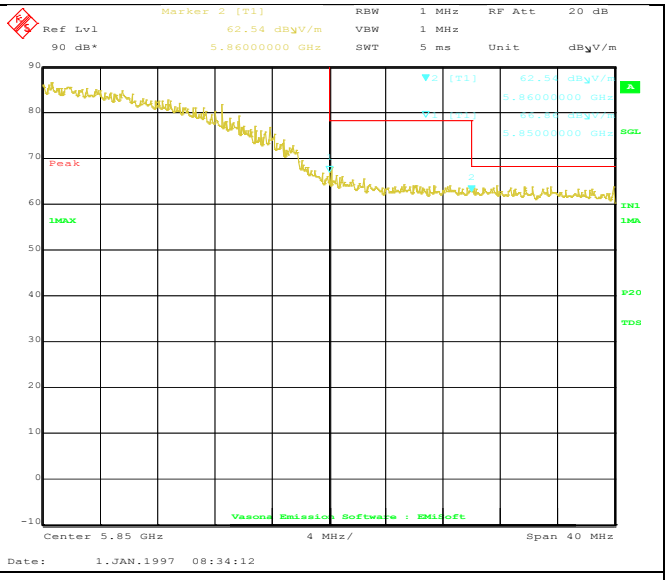
Radiated Band Edge-802.11n 5745M– Edge Freq 5725MHz



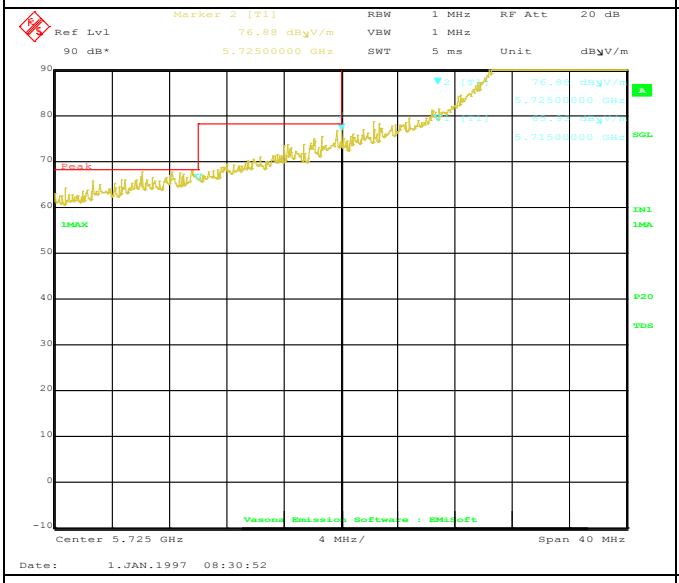
Radiated Band Edge-802.11n 5825M– Edge Freq 5850MHz



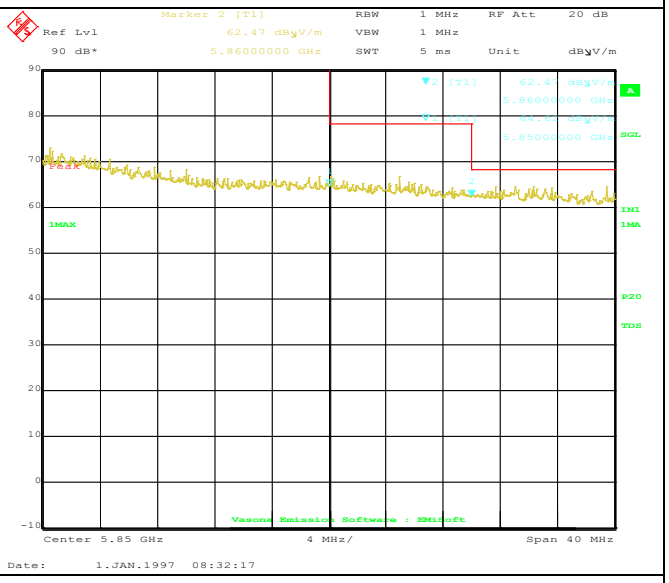
Radiated Band Edge-802.11n 5755M– Edge Freq 5725MHz



Radiated Band Edge-802.11n 5795M– Edge Freq 5850MHz

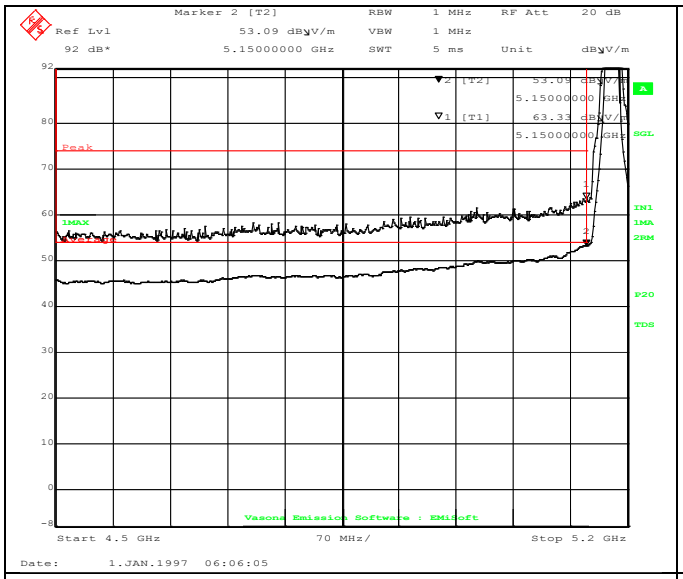


Restriced Band-802.11ac 5775M– Edge Freq 5725MHz

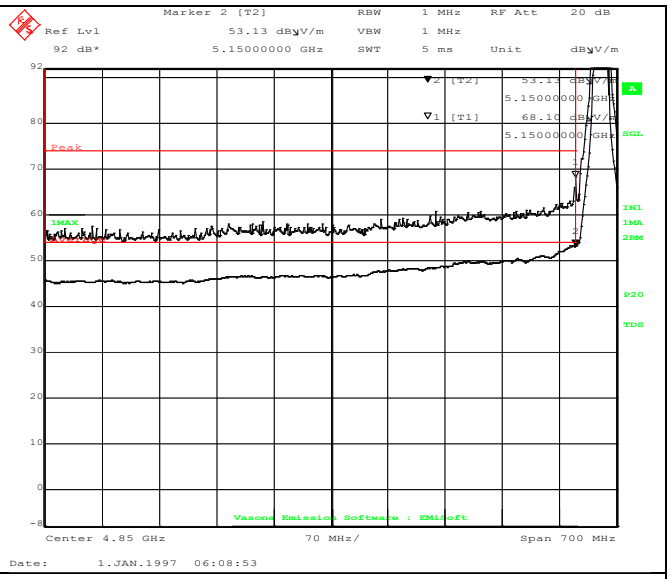


Radiated Band Edge-802.11ac 5775M– Edge Freq 5850MHz

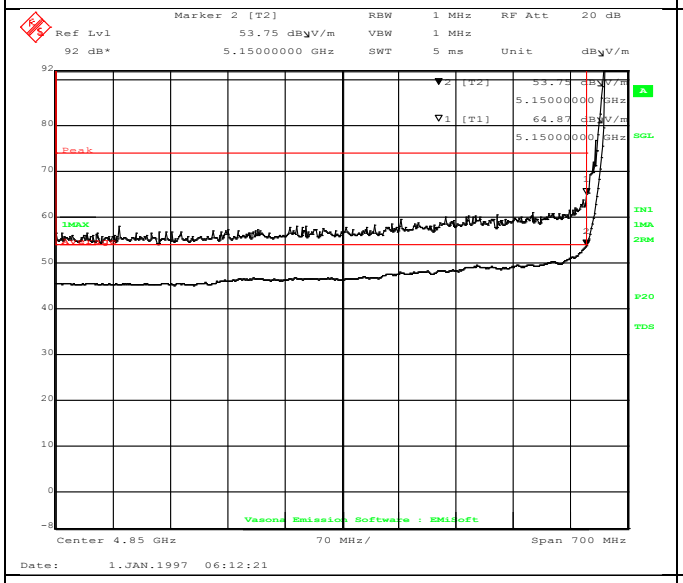
24dBi Antenna Restricted Band Measurement Plots:



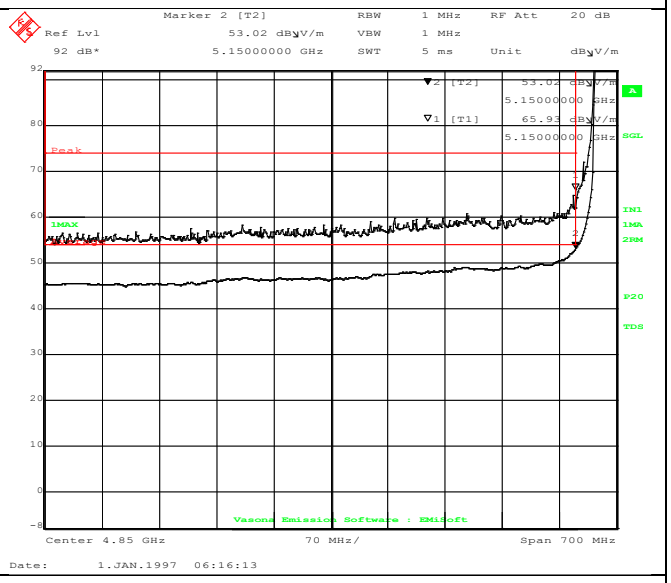
Restriced Band-802.11a 5180M– Edge Freq 5150MHz



Restriced Band-802.11n-HT20 5180M– Edge Freq 5150MHz

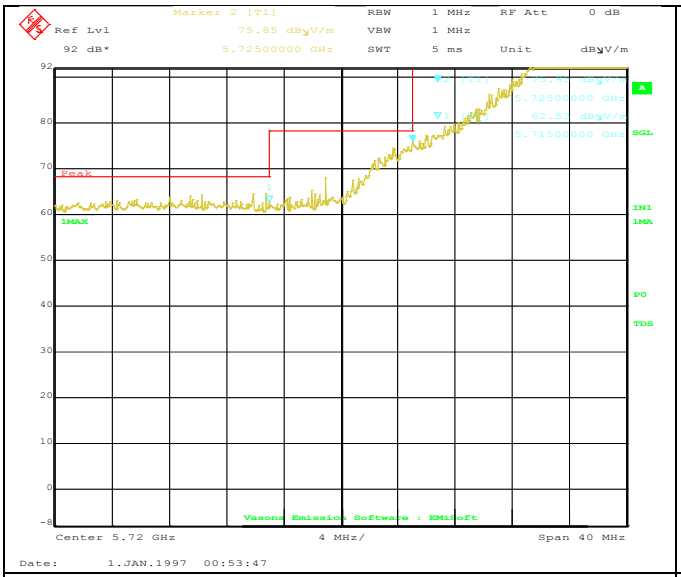


Restriced Band-802.11n-HT40 5190M– Edge Freq 5150MHz

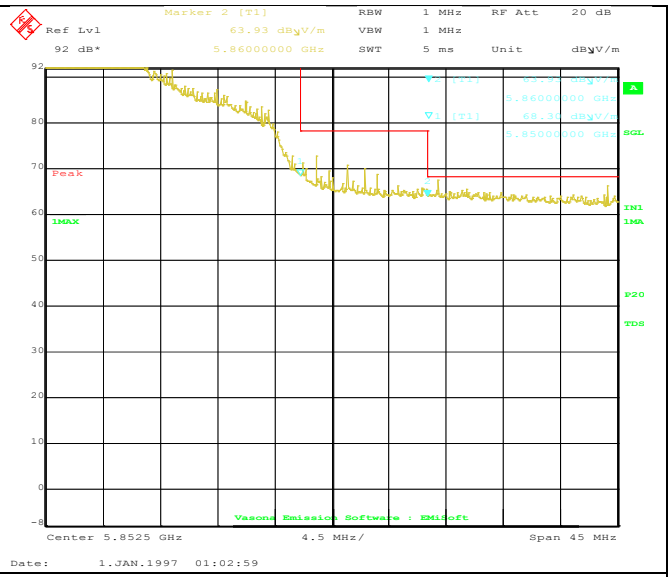


Restriced Band-802.11ac 5210M– Edge Freq 5150MHz

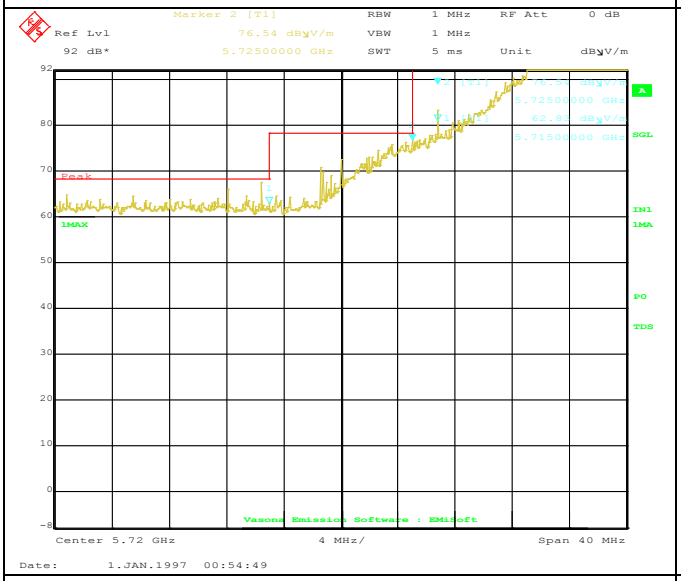
24dBi Antenna Radiated Band Edge Measurement Plots:



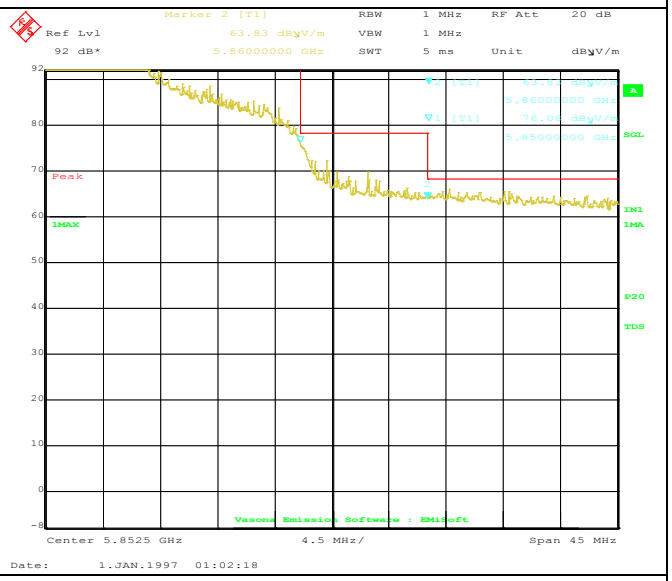
Radiated Band Edge-802.11a 5745M– Edge Freq 5725MHz



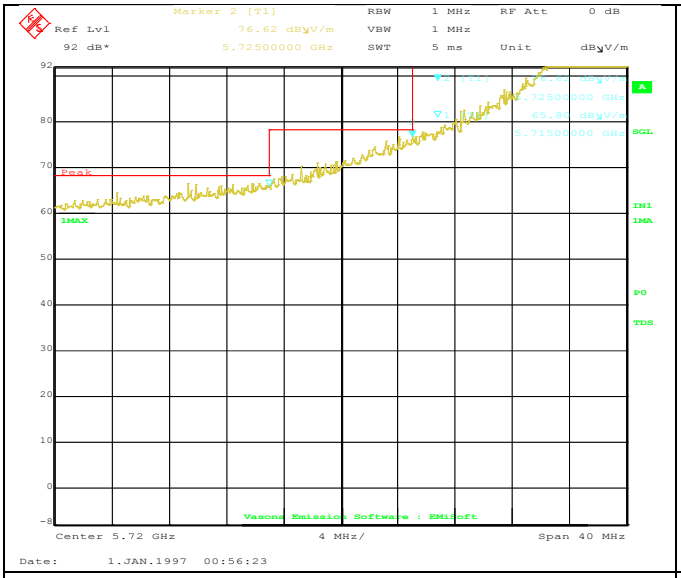
Radiated Band Edge-802.11a 5825M– Edge Freq 5850MHz



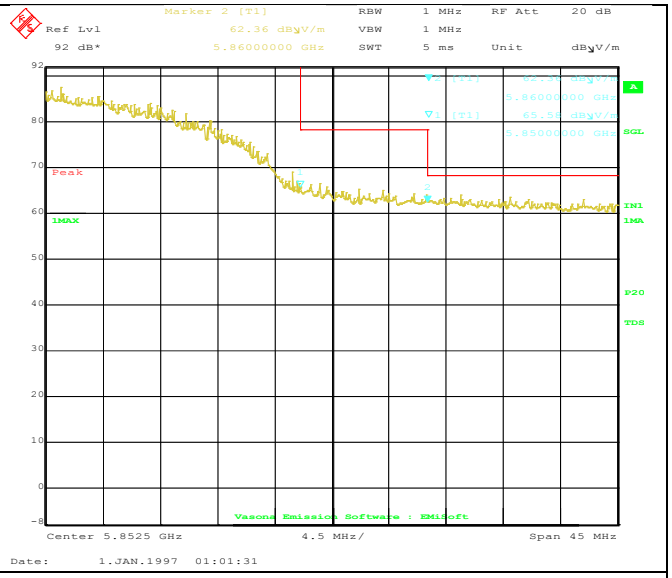
Radiated Band Edge-802.11n 5745M– Edge Freq 5725MHz



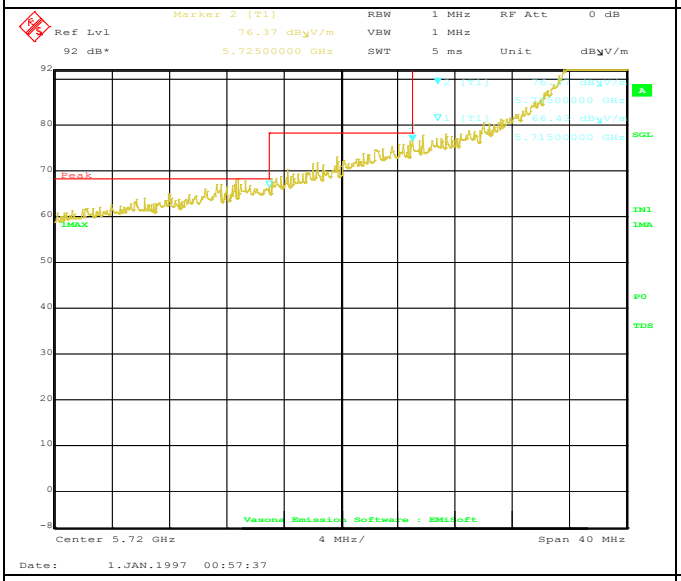
Radiated Band Edge-802.11n 5825M– Edge Freq 5850MHz



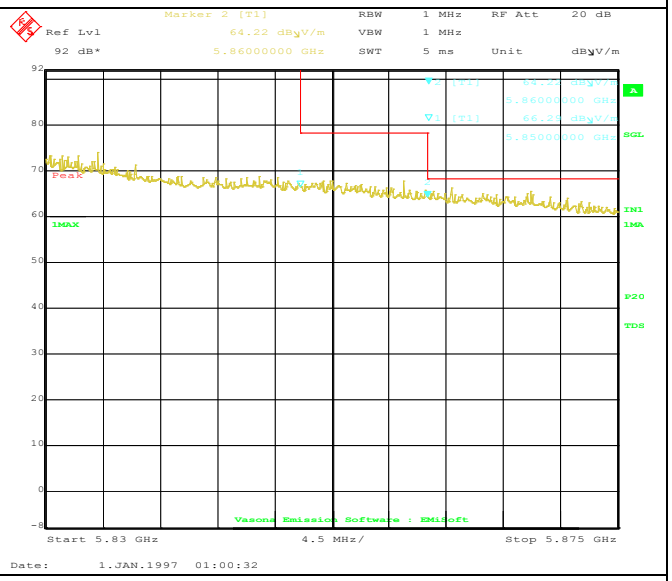
Radiated Band Edge-802.11n 5755M– Edge Freq 5725MHz



Radiated Band Edge-802.11n 5795M– Edge Freq 5850MHz



Restriced Band-802.11ac 5775M– Edge Freq 5725MHz



Radiated Band Edge-802.11ac 5775M– Edge Freq 5850MHz

Radiated Emission Test Results (Above 1GHz)

14dBi Antenna

802.11a – 5180MHz

Frequency MHz	Raw dBuV	Cable Loss	AF dB	Level dBuV/m	Measurement Type	Pol	Hgt cm	Azt Deg	Limit dBuV/m	Margin dB	Pass /Fail
5192.83	41.00	6.37	13.13	60.50	Peak Max	V	224	125	74	-13.50	Pass
2819.86	42.26	5.36	13.55	61.17	Peak Max	V	177	302	74	-12.83	Pass
5158.98	41.37	6.35	13.11	60.83	Peak Max	V	262	208	74	-13.17	Pass
7316.94	48.57	8.50	11.43	68.50	Peak Max	H	203	158	74	-5.50	Pass
5192.83	8.17	6.37	13.13	27.67	Average Max	V	224	125	54	-26.33	Pass
2819.86	9.59	5.36	13.55	28.5	Average Max	V	177	302	54	-25.50	Pass
5158.98	8.54	6.35	13.11	28.00	Average Max	V	262	208	54	-26.00	Pass
7316.94	15.07	8.5	11.43	35.00	Average Max	H	203	158	54	-19.00	Pass

802.11a – 5200MHz

Frequency MHz	Raw dBuV	Cable Loss	AF dB	Level dBuV/m	Measurement Type	Pol	Hgt cm	Azt Deg	Limit dBuV/m	Margin dB	Pass /Fail
5177.91	41.18	6.36	13.12	60.66	Peak Max	H	290	120	74	-13.34	Pass
5218.21	41.45	6.39	13.15	60.99	Peak Max	H	163	17	74	-13.01	Pass
1014.19	46.87	2.45	13.18	62.50	Peak Max	H	220	9	74	-11.50	Pass
2050.79	36.97	3.53	14.84	55.34	Peak Max	V	254	45	74	-18.66	Pass
5177.91	8.35	6.36	13.12	27.83	Average Max	H	290	120	54	-26.17	Pass
5218.21	8.13	6.39	13.15	27.67	Average Max	H	163	17	54	-26.33	Pass
1014.19	17.37	2.45	13.18	33.00	Average Max	H	220	9	54	-21.00	Pass
2050.79	5.30	3.53	14.84	23.67	Average Max	V	254	45	54	-30.33	Pass

802.11a – 5240MHz

Frequency MHz	Raw dBuV	Cable Loss	AF dB	Level dBuV/m	Measurement Type	Pol	Hgt cm	Azt Deg	Limit dBuV/m	Margin dB	Pass /Fail
5209.90	40.97	6.38	13.14	60.50	Peak Max	V	133	313	74	-13.50	Pass
5248.86	39.42	6.41	13.17	59.00	Peak Max	V	152	5	74	-15.00	Pass
1062.08	34.75	2.48	13.10	50.33	Peak Max	V	121	213	74	-23.67	Pass
2027.55	36.99	3.44	14.91	55.34	Peak Max	V	213	208	74	-18.66	Pass
5209.90	8.13	6.38	13.14	27.66	Average Max	V	133	313	54	-26.34	Pass
5248.86	6.42	6.41	13.17	26.00	Average Max	V	152	5	54	-28.00	Pass
1062.08	6.09	2.48	13.10	21.67	Average Max	V	121	213	54	-32.33	Pass
2027.55	5.15	3.44	14.91	23.50	Average Max	V	213	208	54	-30.50	Pass

802.11n-HT20 – 5180MHz

Frequency MHz	Raw dBuV	Cable Loss	AF dB	Level dBuV/m	Measurement Type	Pol	Hgt cm	Azt Deg	Limit dBuV/m	Margin dB	Pass /Fail
2859.60	41.73	5.39	13.55	60.67	Peak Max	H	132	22	74	-13.33	Pass
2859.49	41.39	5.39	13.55	60.33	Peak Max	H	277	82	74	-13.67	Pass
1001.30	47.03	2.44	13.20	62.67	Peak Max	V	158	246	74	-11.33	Pass
6861.81	44.12	8.28	11.93	64.34	Peak Max	H	269	95	74	-9.66	Pass
2859.60	9.39	5.39	13.55	28.33	Average Max	H	132	22	54	-25.67	Pass
2859.49	9.56	5.39	13.55	28.50	Average Max	H	277	82	54	-25.50	Pass
1001.30	17.70	2.44	13.20	33.34	Average Max	V	158	246	54	-20.66	Pass
6861.81	10.77	8.28	11.93	30.99	Average Max	H	269	95	54	-23.01	Pass

802.11n-HT20 – 5200MHz

Frequency MHz	Raw dBuV	Cable Loss	AF dB	Level dBuV/m	Measurement Type	Pol	Hgt cm	Azt Deg	Limit dBuV/m	Margin dB	Pass /Fail
5221.76	41.46	6.39	13.15	61.00	Peak Max	H	301	355	74	-13.00	Pass
1088.92	45.78	2.49	13.06	61.33	Peak Max	V	100	324	74	-12.67	Pass
2034.22	43.64	3.46	14.89	61.99	Peak Max	H	292	174	74	-12.01	Pass
2839.49	41.74	5.38	13.55	60.67	Peak Max	V	203	159	74	-13.33	Pass
5221.76	8.13	6.39	13.15	27.67	Average Max	H	301	355	54	-26.33	Pass
1088.92	16.45	2.49	13.06	32.00	Average Max	V	100	324	54	-22.00	Pass
2034.22	11.82	3.46	14.89	30.17	Average Max	H	292	174	54	-23.83	Pass
2839.49	9.57	5.38	13.55	28.50	Average Max	V	203	159	54	-25.50	Pass

802.11-HT20 – 5240MHz

Frequency MHz	Raw dBuV	Cable Loss	AF dB	Level dBuV/m	Measurement Type	Pol	Hgt cm	Azt Deg	Limit dBuV/m	Margin dB	Pass /Fail
2864.39	42.04	5.40	13.55	60.99	Peak Max	H	206	121	74	-13.01	Pass
2859.93	41.89	5.40	13.55	60.83	Peak Max	H	296	14	74	-13.17	Pass
1013.16	46.20	2.45	13.18	61.83	Peak Max	V	241	352	74	-12.17	Pass
2023.14	43.49	3.42	14.93	61.84	Peak Max	H	213	6	74	-12.16	Pass
2864.39	9.38	5.40	13.55	28.33	Average Max	H	206	121	54	-25.67	Pass
2859.93	9.56	5.40	13.55	28.50	Average Max	H	296	14	54	-25.50	Pass
1013.16	17.53	2.45	13.18	33.16	Average Max	V	241	352	54	-20.84	Pass
2023.14	11.82	3.42	14.93	30.17	Average Max	H	213	6	54	-23.83	Pass

802.11n-HT40 – 5190MHz

Frequency MHz	Raw dBuV	Cable Loss	AF dB	Level dBuV/m	Measurement Type	Pol	Hgt cm	Azt Deg	Limit dBuV/m	Margin dB	Pass /Fail
5195.50	47.49	6.37	13.13	67.00	Peak Max	V	191	350	74	-7.00	Pass
1061.98	45.92	2.48	13.1	61.50	Peak Max	V	294	83	74	-12.50	Pass
2150.73	43.24	3.91	14.53	61.67	Peak Max	V	266	101	74	-12.33	Pass
2835.46	41.90	5.38	13.55	60.83	Peak Max	H	160	41	74	-13.17	Pass
5195.50	16.16	6.37	13.13	35.67	Average Max	V	191	350	54	-18.33	Pass
1061.98	16.92	2.48	13.1	32.50	Average Max	V	294	83	54	-21.50	Pass
2150.73	11.23	3.91	14.53	29.66	Average Max	V	266	101	54	-24.34	Pass
2835.46	9.57	5.38	13.55	28.50	Average Max	H	160	41	54	-25.50	Pass

802.11n-HT40 – 5230MHz

Frequency MHz	Raw dBuV	Cable Loss	AF dB	Level dBuV/m	Measurement Type	Pol	Hgt cm	Azt Deg	Limit dBuV/m	Margin dB	Pass /Fail
5220.05	45.13	6.39	13.15	64.67	Peak Max	H	258	343	74	-9.33	Pass
1005.70	46.21	2.44	13.19	61.84	Peak Max	H	236	195	74	-12.16	Pass
2035.89	43.81	3.47	14.88	62.17	Peak Max	V	193	223	74	-11.83	Pass
4218.31	42.68	6.01	14.8	63.50	Peak Max	V	135	202	74	-10.50	Pass
5220.05	12.79	6.39	13.15	32.33	Average Max	H	258	343	54	-21.67	Pass
1005.70	17.54	2.44	13.19	33.17	Average Max	H	236	195	54	-20.83	Pass
2035.89	11.81	3.47	14.88	30.17	Average Max	V	193	223	54	-23.83	Pass
4218.31	8.02	6.01	14.8	28.84	Average Max	V	135	202	54	-25.16	Pass

802.11ac – 5210MHz

Frequency MHz	Raw dBuV	Cable Loss	AF dB	Level dBuV/m	Measurement Type	Pol	Hgt cm	Azt Deg	Limit dBuV/m	Margin dB	Pass /Fail
1034.39	46.72	2.46	13.14	62.33	Peak Max	V	254	69	74	-11.67	Pass
5206.20	45.14	6.38	13.14	64.66	Peak Max	H	104	4	74	-9.34	Pass
2199.20	43.20	4.08	14.38	61.66	Peak Max	H	206	334	74	-12.34	Pass
7503.89	47.25	8.64	11.45	67.34	Peak Max	H	190	230	74	-6.66	Pass
1034.39	17.39	2.46	13.14	33.00	Average Max	V	254	69	54	-21.00	Pass
5206.20	13.31	6.38	13.14	32.83	Average Max	H	104	4	54	-21.17	Pass
2199.20	11.21	4.08	14.38	29.67	Average Max	H	206	334	54	-24.33	Pass
7503.89	13.74	8.64	11.45	33.83	Average Max	H	190	230	54	-20.17	Pass

802.11a – 5745MHz

Frequency MHz	Raw dBuV	Cable Loss	AF dB	Level dBuV/m	Measurement Type	Pol	Hgt cm	Azt Deg	Limit dBuV/m	Margin dB	Pass /Fail
1012.82	46.19	2.45	13.18	61.82	Peak Max	V	295	208	74	-12.18	Pass
2113.62	43.42	3.77	14.64	61.83	Peak Max	V	233	319	74	-12.17	Pass
4221.47	42.35	6.02	14.79	63.16	Peak Max	V	192	64	74	-10.84	Pass
3085.31	40.90	5.5	13.60	60.00	Peak Max	H	118	19	74	-14.00	Pass
1012.82	17.54	2.45	13.18	33.17	Average Max	V	295	208	54	-20.83	Pass
2113.62	11.60	3.77	14.64	30.01	Average Max	V	233	319	54	-23.99	Pass
4221.47	7.86	6.02	14.79	28.67	Average Max	V	192	64	54	-25.33	Pass
3085.31	8.73	5.5	13.60	27.83	Average Max	H	118	19	54	-26.17	Pass

802.11a – 5785MHz

Frequency MHz	Raw dBuV	Cable Loss	AF dB	Level dBuV/m	Measurement Type	Pol	Hgt cm	Azt Deg	Limit dBuV/m	Margin dB	Pass /Fail
1019.96	46.71	2.45	13.17	62.33	Peak Max	H	199	160	74	-11.67	Pass
2160.68	43.06	3.94	14.5	61.5	Peak Max	V	234	103	74	-12.50	Pass
3988.21	42.47	5.82	15.71	64.00	Peak Max	V	141	91	74	-10.00	Pass
2896.98	42.52	5.42	13.55	61.49	Peak Max	H	211	79	74	-12.51	Pass
1019.96	17.55	2.45	13.17	33.17	Average Max	H	199	160	54	-20.83	Pass
2160.68	11.23	3.94	14.50	29.67	Average Max	V	234	103	54	-24.33	Pass
3988.21	6.80	5.82	15.71	28.33	Average Max	V	141	91	54	-25.67	Pass
2896.98	10.2	5.42	13.55	29.17	Average Max	H	211	79	54	-24.83	Pass

802.11a – 5825MHz

Frequency MHz	Raw dBuV	Cable Loss	AF dB	Level dBuV/m	Measurement Type	Pol	Hgt cm	Azt Deg	Limit dBuV/m	Margin dB	Pass /Fail
5805.21	40.13	6.76	14.11	61.00	Peak Max	V	231	86	74	-13.00	Pass
5846.91	40.66	6.79	14.21	61.66	Peak Max	V	246	181	74	-12.34	Pass
1000.00	37.86	2.44	13.20	53.50	Peak Max	H	202	280	74	-20.50	Pass
2162.53	43.38	3.95	14.49	61.82	Peak Max	V	164	296	74	-12.18	Pass
5805.21	5.96	6.76	14.11	26.83	Average Max	V	231	86	54	-27.17	Pass
5846.91	5.83	6.79	14.21	26.83	Average Max	V	246	181	54	-27.17	Pass
1000.00	17.70	2.44	13.20	33.34	Average Max	H	202	280	54	-20.66	Pass
2162.53	11.39	3.95	14.49	29.83	Average Max	V	164	296	54	-24.17	Pass

802.11n-HT20 – 5745MHz

Frequency MHz	Raw dBuV	Cable Loss	AF dB	Level dBuV/m	Measurement Type	Pol	Hgt cm	Azt Deg	Limit dBuV/m	Margin dB	Pass /Fail
1036.46	46.56	2.46	13.14	62.16	Peak Max	V	190	127	74	-11.84	Pass
2090.86	43.28	3.68	14.71	61.67	Peak Max	V	277	9	74	-12.33	Pass
4169.54	42.52	5.97	15.01	63.50	Peak Max	H	189	283	74	-10.50	Pass
7622.34	46.75	8.66	11.42	66.83	Peak Max	V	280	360	74	-7.17	Pass
1036.46	17.24	2.46	13.14	32.84	Average Max	V	190	127	54	-21.16	Pass
2090.86	11.62	3.68	14.71	30.01	Average Max	V	277	9	54	-23.99	Pass
4169.54	8.19	5.97	15.01	29.17	Average Max	H	189	283	54	-24.83	Pass
7622.34	13.09	8.66	11.42	33.17	Average Max	V	280	360	54	-20.83	Pass

802.11n-HT20 – 5785MHz

Frequency MHz	Raw dBuV	Cable Loss	AF dB	Level dBuV/m	Measurement Type	Pol	Hgt cm	Azt Deg	Limit dBuV/m	Margin dB	Pass /Fail
1010.32	46.53	2.45	13.18	62.16	Peak Max	V	107	257	74	-11.84	Pass
2151.18	43.40	3.91	14.53	61.83	Peak Max	H	174	9	74	-12.17	Pass
4158.72	42.15	5.97	15.06	63.17	Peak Max	V	194	134	74	-10.83	Pass
1010.32	17.54	2.45	13.18	33.17	Average Max	V	107	257	54	-20.83	Pass
2151.18	11.24	3.91	14.53	29.67	Average Max	H	174	9	54	-24.33	Pass
4158.72	7.82	5.97	15.06	28.84	Average Max	V	194	134	54	-25.16	Pass

802.11-HT20 – 5825MHz

Frequency MHz	Raw dBuV	Cable Loss	AF dB	Level dBuV/m	Measurement Type	Pol	Hgt cm	Azt Deg	Limit dBuV/m	Margin dB	Pass /Fail
1031.3	46.4	2.46	13.15	62.01	Peak Max	H	213	53	74	-11.99	Pass
2031.193	43.49	3.45	14.9	61.84	Peak Max	H	172	11	74	-12.16	Pass
4130.447	42.38	5.94	15.18	63.50	Peak Max	V	176	83	74	-10.50	Pass
2895.76	42.54	5.42	13.55	61.51	Peak Max	H	212	341	74	-12.49	Pass
1031.3	17.23	2.46	13.15	32.84	Average Max	H	213	53	54	-21.16	Pass
2031.193	11.98	3.45	14.9	30.33	Average Max	H	172	11	54	-23.67	Pass
4130.447	7.72	5.94	15.18	28.84	Average Max	V	176	83	54	-25.16	Pass
2895.76	10.19	5.42	13.55	29.16	Average Max	H	212	341	54	-24.84	Pass

802.11n-HT40 – 5755MHz

Frequency MHz	Raw dBuV	Cable Loss	AF dB	Level dBuV/m	Measurement Type	Pol	Hgt cm	Azt Deg	Limit dBuV/m	Margin dB	Pass /Fail
1043.92	46.23	2.47	13.13	61.83	Peak Max	V	167	115	74	-12.17	Pass
2037.65	43.30	3.48	14.88	61.66	Peak Max	H	186	272	74	-12.34	Pass
4154.29	42.79	5.96	15.07	63.83	Peak Max	V	116	360	74	-10.17	Pass
2900.00	42.36	5.43	13.55	61.33	Peak Max	H	278	12	74	-12.67	Pass
1043.92	17.07	2.47	13.13	32.67	Average Max	V	167	115	54	-21.33	Pass
2037.65	11.81	3.48	14.88	30.17	Average Max	H	186	272	54	-23.83	Pass
4154.29	7.80	5.96	15.07	28.84	Average Max	V	116	360	54	-25.16	Pass
2900.00	10.20	5.43	13.55	29.17	Average Max	H	278	12	54	-24.83	Pass

802.11n-HT40 – 5795MHz

Frequency MHz	Raw dBuV	Cable Loss	AF dB	Level dBuV/m	Measurement Type	Pol	Hgt cm	Azt Deg	Limit dBuV/m	Margin dB	Pass /Fail
1042.43	46.40	2.47	13.13	62.00	Peak Max	H	100	360	74	-12.00	Pass
2008.26	43.50	3.36	14.97	61.84	Peak Max	V	259	265	74	-12.16	Pass
7422.70	47.97	8.58	11.44	67.99	Peak Max	V	126	166	74	-6.01	Pass
2827.72	41.75	5.37	13.55	60.67	Peak Max	H	195	153	74	-13.33	Pass
1042.43	17.07	2.47	13.13	32.67	Average Max	H	100	360	54	-21.33	Pass
2008.26	11.83	3.36	14.97	30.17	Average Max	V	259	265	54	-23.83	Pass
7422.70	14.15	8.58	11.44	34.17	Average Max	V	126	166	54	-19.83	Pass
2827.72	9.58	5.37	13.55	28.50	Average Max	H	195	153	54	-25.50	Pass

802.11ac – 5775MHz

Frequency MHz	Raw dBuV	Cable Loss	AF dB	Level dBuV/m	Measurement Type	Pol	Hgt cm	Azt Deg	Limit dBuV/m	Margin dB	Pass /Fail
1012.01	46.53	2.45	13.18	62.16	Peak Max	V	226	128	74	-11.84	Pass
4117.64	42.01	5.93	15.23	63.17	Peak Max	V	101	213	74	-10.83	Pass
2027.66	43.65	3.44	14.91	62.00	Peak Max	V	113	234	74	-12.00	Pass
2900.97	43.18	5.43	13.55	62.16	Peak Max	V	214	214	74	-11.84	Pass
1012.01	17.54	2.45	13.18	33.17	Average Max	V	226	128	54	-20.83	Pass
4117.64	7.67	5.93	15.23	28.83	Average Max	V	101	213	54	-25.17	Pass
2027.66	11.82	3.44	14.91	30.17	Average Max	V	113	234	54	-23.83	Pass
2900.97	11.52	5.43	13.55	30.50	Average Max	V	214	214	54	-23.50	Pass

24dBi Antenna

802.11a – 5180MHz

Frequency MHz	Raw dBuV	Cable Loss	AF dB	Level dBuV/m	Measurement Type	Pol	Hgt cm	Azt Deg	Limit dBuV/m	Margin dB	Pass /Fail
5158.08	41.53	6.35	13.11	60.99	Peak Max	H	189	92	74	-13.01	Pass
5197.40	41.32	6.38	13.13	60.83	Peak Max	H	188	289	74	-13.17	Pass
1001.88	46.35	2.44	13.20	61.99	Peak Max	H	100	203	74	-12.01	Pass
6864.07	44.79	8.28	11.93	65.00	Peak Max	H	143	194	74	-9.00	Pass
5158.08	8.71	6.35	13.11	28.17	Average Max	H	189	92	54	-25.83	Pass
5197.40	8.32	6.38	13.13	27.83	Average Max	H	188	289	54	-26.17	Pass
1001.88	17.53	2.44	13.20	33.17	Average Max	H	100	203	54	-20.83	Pass
6864.07	10.78	8.28	11.93	30.99	Average Max	H	143	194	54	-23.01	Pass

802.11a – 5200MHz

Frequency MHz	Raw dBuV	Cable Loss	AF dB	Level dBuV/m	Measurement Type	Pol	Hgt cm	Azt Deg	Limit dBuV/m	Margin dB	Pass /Fail
5176.64	41.69	6.36	13.12	61.17	Peak Max	V	193	50	74	-12.83	Pass
5218.76	41.46	6.39	13.15	61.00	Peak Max	V	179	276	74	-13.00	Pass
1013.89	47.20	2.45	13.18	62.83	Peak Max	H	252	275	74	-11.17	Pass
2083.14	43.45	3.65	14.73	61.84	Peak Max	H	100	135	74	-12.16	Pass
5176.64	8.52	6.36	13.12	28.00	Average Max	V	193	50	54	-26.00	Pass
5218.76	8.29	6.39	13.15	27.83	Average Max	V	179	276	54	-26.17	Pass
1013.89	17.37	2.45	13.18	33.00	Average Max	H	252	275	54	-21.00	Pass
2083.14	11.62	3.65	14.73	30.01	Average Max	H	100	135	54	-23.99	Pass

802.11a – 5240MHz

Frequency MHz	Raw dBuV	Cable Loss	AF dB	Level dBuV/m	Measurement Type	Pol	Hgt cm	Azt Deg	Limit dBuV/m	Margin dB	Pass /Fail
5248.83	47.09	6.41	13.17	66.67	Peak Max	H	177	0	74	-7.33	Pass
1065.14	45.42	2.48	13.10	61.00	Peak Max	H	129	148	74	-13.00	Pass
2135.19	43.41	3.85	14.57	61.83	Peak Max	H	275	311	74	-12.17	Pass
2816.64	41.59	5.36	13.55	60.50	Peak Max	V	228	138	74	-13.50	Pass
5248.83	14.76	6.41	13.17	34.34	Average Max	H	177	0	54	-19.66	Pass
1065.14	16.76	2.48	13.1	32.34	Average Max	H	129	148	54	-21.66	Pass
2135.19	11.25	3.85	14.57	29.67	Average Max	H	275	311	54	-24.33	Pass
2816.64	9.42	5.36	13.55	28.33	Average Max	V	228	138	54	-25.67	Pass

802.11n-HT20 – 5180MHz

Frequency MHz	Raw dBuV	Cable Loss	AF dB	Level dBuV/m	Measurement Type	Pol	Hgt cm	Azt Deg	Limit dBuV/m	Margin dB	Pass /Fail
5164.40	40.71	6.35	13.11	60.17	Peak Max	V	206	206	74	-13.83	Pass
5197.34	41.16	6.38	13.13	60.67	Peak Max	H	199	253	74	-13.33	Pass
1928.86	43.31	3.25	14.44	61	Peak Max	H	128	286	74	-13.00	Pass
1074.00	46.10	2.49	13.08	61.67	Peak Max	H	243	123	74	-12.33	Pass
5164.40	8.04	6.35	13.11	27.5	Average Max	V	206	206	54	-26.50	Pass
5197.34	7.99	6.38	13.13	27.5	Average Max	H	199	253	54	-26.50	Pass
1928.86	12.15	3.25	14.44	29.84	Average Max	H	128	286	54	-24.16	Pass
1074.00	16.76	2.49	13.08	32.33	Average Max	H	243	123	54	-21.67	Pass

802.11n-HT20 – 5200MHz

Frequency MHz	Raw dBuV	Cable Loss	AF dB	Level dBuV/m	Measurement Type	Pol	Hgt cm	Azt Deg	Limit dBuV/m	Margin dB	Pass /Fail
1001.47	46.69	2.44	13.20	62.33	Peak Max	H	243	0	74	-11.67	Pass
4175.50	43.37	5.98	14.98	64.33	Peak Max	V	293	0	74	-9.67	Pass
2010.42	43.82	3.37	14.97	62.16	Peak Max	H	299	0	74	-11.84	Pass
7540.98	47.75	8.65	11.44	67.84	Peak Max	V	210	0	74	-6.16	Pass
1001.47	17.7	2.44	13.20	33.34	Average Max	H	243	0	54	-20.66	Pass
4175.50	8.21	5.98	14.98	29.17	Average Max	V	293	0	54	-24.83	Pass
2010.42	11.66	3.37	14.97	30.00	Average Max	H	299	0	54	-24.00	Pass
7540.98	13.91	8.65	11.44	34.00	Average Max	V	210	0	54	-20.00	Pass

802.11-HT20 – 5240MHz

Frequency MHz	Raw dBuV	Cable Loss	AF dB	Level dBuV/m	Measurement Type	Pol	Hgt cm	Azt Deg	Limit dBuV/m	Margin dB	Pass /Fail
2029.27	43.65	3.45	14.91	62.00	Peak Max	H	222	0	74	-12.00	Pass
15426.17	48.66	13.29	9.22	71.17	Peak Max	V	291	0	74	-2.83	Pass
1054.84	45.75	2.47	13.11	61.34	Peak Max	V	173	0	74	-12.66	Pass
4062.38	42.97	5.88	15.47	64.33	Peak Max	V	173	0	74	-9.67	Pass
2029.27	11.82	3.45	14.91	30.17	Average Max	H	222	0	54	-23.83	Pass
15426.17	12.16	13.29	9.22	34.67	Average Max	V	291	0	54	-19.33	Pass
1054.84	16.91	2.47	13.11	32.50	Average Max	V	173	0	54	-21.50	Pass
4062.38	7.47	5.88	15.47	28.83	Average Max	V	173	0	54	-25.17	Pass

802.11n-HT40 – 5190MHz

Frequency MHz	Raw dBuV	Cable Loss	AF dB	Level dBuV/m	Measurement Type	Pol	Hgt cm	Azt Deg	Limit dBuV/m	Margin dB	Pass /Fail
1026.59	46.22	2.46	13.16	61.83	Peak Max	H	216	0	74	-12.17	Pass
15393.45	47.84	13.34	9.33	70.51	Peak Max	H	256	0	74	-3.49	Pass
4160.06	42.48	5.97	15.05	63.5	Peak Max	V	193	0	74	-10.50	Pass
2232.00	42.67	4.20	14.29	61.16	Peak Max	V	174	0	74	-12.84	Pass
1026.593	17.40	2.46	13.16	33.01	Average Max	H	216	0	54	-20.99	Pass
15393.45	12.00	13.34	9.33	34.67	Average Max	H	256	0	54	-19.33	Pass
4160.06	7.99	5.97	15.05	29.01	Average Max	V	193	0	54	-24.99	Pass
2232.0	11.00	4.20	14.29	29.49	Average Max	V	174	0	54	-24.51	Pass

802.11n-HT40 – 5230MHz

Frequency MHz	Raw dBuV	Cable Loss	AF dB	Level dBuV/m	Measurement Type	Pol	Hgt cm	Azt Deg	Limit dBuV/m	Margin dB	Pass /Fail
1030.92	46.23	2.46	13.15	61.84	Peak Max	V	203	0	74	-12.16	Pass
2077.48	42.79	3.63	14.75	61.17	Peak Max	V	142	0	74	-12.83	Pass
7564.96	47.26	8.65	11.44	67.34	Peak Max	V	164	0	74	-6.66	Pass
4062.24	42.48	5.88	15.47	63.84	Peak Max	V	201	0	74	-10.16	Pass
1030.92	17.22	2.46	13.15	32.83	Average Max	V	203	0	54	-21.17	Pass
2077.48	11.63	3.63	14.75	30.01	Average Max	V	142	0	54	-23.99	Pass
7564.96	13.92	8.65	11.44	34.0	Average Max	V	164	0	54	-20.00	Pass
4062.24	7.47	5.88	15.47	28.83	Average Max	V	201	0	54	-25.17	Pass

802.11ac – 5210MHz

Frequency MHz	Raw dBuV	Cable Loss	AF dB	Level dBuV/m	Measurement Type	Pol	Hgt cm	Azt Deg	Limit dBuV/m	Margin dB	Pass /Fail
5202.90	47.64	6.38	13.14	67.16	Peak Max	V	164	245	74	-6.84	Pass
1018.31	46.89	2.45	13.17	62.51	Peak Max	V	156	114	74	-11.49	Pass
2033.58	43.16	3.46	14.89	61.51	Peak Max	V	120	29	74	-12.49	Pass
6896.95	43.93	8.27	11.79	64.00	Peak Max	V	111	71	74	-10.00	Pass
5202.90	16.82	6.38	13.14	36.34	Average Max	V	164	245	54	-17.66	Pass
1018.31	17.38	2.45	13.17	33.00	Average Max	V	156	114	54	-21.00	Pass
2033.58	11.49	3.46	14.89	29.84	Average Max	V	120	29	54	-24.16	Pass
6896.95	10.59	8.27	11.79	30.66	Average Max	V	111	71	54	-23.34	Pass

802.11a – 5745MHz

Frequency MHz	Raw dBuV	Cable Loss	AF dB	Level dBuV/m	Measurement Type	Pol	Hgt cm	Azt Deg	Limit dBuV/m	Margin dB	Pass /Fail
5765.62	40.74	6.74	14.01	61.49	Peak Max	H	164	209	74	-12.51	Pass
5722.96	40.88	6.71	13.9	61.5	Peak Max	H	219	332	74	-12.50	Pass
4827.16	46.05	6.24	13.22	65.51	Peak Max	H	159	243	74	-8.49	Pass
1004.30	46.69	2.44	13.19	62.33	Peak Max	V	160	27	74	-11.67	Pass
5765.62	6.25	6.74	14.01	27.00	Average Max	H	164	209	54	-27.00	Pass
5722.96	6.55	6.71	13.90	27.17	Average Max	H	219	332	54	-26.83	Pass
4827.16	13.21	6.24	13.22	32.67	Average Max	H	159	243	54	-21.33	Pass
1004.30	17.53	2.44	13.19	33.17	Average Max	V	160	27	54	-20.83	Pass

802.11a – 5785MHz

Frequency MHz	Raw dBuV	Cable Loss	AF dB	Level dBuV/m	Measurement Type	Pol	Hgt cm	Azt Deg	Limit dBuV/m	Margin dB	Pass /Fail
2888.04	42.19	5.42	13.55	61.16	Peak Max	H	228	211	74	-12.84	Pass
2890.77	42.19	5.42	13.55	61.16	Peak Max	H	129	6	74	-12.84	Pass
2841.29	41.90	5.38	13.55	60.83	Peak Max	H	153	45	74	-13.17	Pass
1000.00	36.86	2.44	13.20	52.50	Peak Max	V	103	354	74	-21.50	Pass
2888.04	9.87	5.42	13.55	28.84	Average Max	H	228	211	54	-25.16	Pass
2890.77	9.70	5.42	13.55	28.67	Average Max	H	129	6	54	-25.33	Pass
2841.29	9.57	5.38	13.55	28.50	Average Max	H	153	45	54	-25.50	Pass
1000.00	17.53	2.44	13.20	33.17	Average Max	V	103	354	54	-20.83	Pass

802.11a – 5825MHz

Frequency MHz	Raw dBuV	Cable Loss	AF dB	Level dBuV/m	Measurement Type	Pol	Hgt cm	Azt Deg	Limit dBuV/m	Margin dB	Pass /Fail
5845.17	40.16	6.79	14.21	61.16	Peak Max	V	128	183	74	-12.84	Pass
5804.57	40.79	6.76	14.11	61.66	Peak Max	V	143	151	74	-12.34	Pass
4786.73	44.49	6.24	13.27	64.00	Peak Max	H	136	242	74	-10.00	Pass
1014.20	46.69	2.45	13.18	62.32	Peak Max	H	198	102	74	-11.68	Pass
5845.17	5.66	6.79	14.21	26.66	Average Max	V	128	183	54	-27.34	Pass
5804.57	6.13	6.76	14.11	27.00	Average Max	V	143	151	54	-27.00	Pass
4786.73	11.65	6.24	13.27	31.16	Average Max	H	136	242	54	-22.84	Pass
1014.20	17.37	2.45	13.18	33.00	Average Max	H	198	102	54	-21.00	Pass

802.11n-HT20 – 5745MHz

Frequency MHz	Raw dBuV	Cable Loss	AF dB	Level dBuV/m	Measurement Type	Pol	Hgt cm	Azt Deg	Limit dBuV/m	Margin dB	Pass /Fail
5708.76	40.94	6.71	13.87	61.51	Peak Max	V	278	0	74	-12.49	Pass
5757.70	40.76	6.74	13.99	61.49	Peak Max	H	115	134	74	-12.51	Pass
4781.38	44.48	6.24	13.28	64.00	Peak Max	V	154	242	74	-10.00	Pass
1979.68	43.69	3.31	14.84	61.84	Peak Max	V	251	333	74	-12.16	Pass
5708.76	6.60	6.71	13.87	27.17	Average Max	V	278	0	54	-26.83	Pass
5757.70	6.27	6.74	13.99	27.00	Average Max	H	115	134	54	-27.00	Pass
4781.38	11.48	6.24	13.28	31.00	Average Max	V	154	242	54	-23.00	Pass
1979.68	11.68	3.31	14.84	29.83	Average Max	V	251	333	54	-24.17	Pass

802.11n-HT20 – 5785MHz

Frequency MHz	Raw dBuV	Cable Loss	AF dB	Level dBuV/m	Measurement Type	Pol	Hgt cm	Azt Deg	Limit dBuV/m	Margin dB	Pass /Fail
5751.01	40.78	6.73	13.97	61.49	Peak Max	H	141	289	74	-12.51	Pass
5793.12	49.33	6.76	14.08	70.17	Peak Max	H	151	237	74	-3.83	Pass
4830.89	44.88	6.24	13.21	64.33	Peak Max	H	135	242	74	-9.67	Pass
1022.60	46.39	2.45	13.16	62.01	Peak Max	V	250	121	74	-11.99	Pass
5751.01	6.46	6.73	13.97	27.17	Average Max	H	141	289	54	-26.83	Pass
5793.12	17.83	6.76	14.08	38.67	Average Max	H	151	237	54	-15.33	Pass
4830.89	12.04	6.24	13.21	31.49	Average Max	H	135	242	54	-22.51	Pass
1022.60	17.38	2.45	13.16	33.00	Average Max	V	250	121	54	-21.00	Pass

802.11-HT20 – 5825MHz

Frequency MHz	Raw dBuV	Cable Loss	AF dB	Level dBuV/m	Measurement Type	Pol	Hgt cm	Azt Deg	Limit dBuV/m	Margin dB	Pass /Fail
5846.56	39.83	6.79	14.21	60.83	Peak Max	V	219	0	74	-13.17	Pass
5803.45	40.96	6.76	14.11	61.83	Peak Max	V	143	338	74	-12.17	Pass
4823.80	44.21	6.24	13.22	63.67	Peak Max	V	153	239	74	-10.33	Pass
1031.74	46.39	2.46	13.15	62.00	Peak Max	V	188	0	74	-12.00	Pass
5846.56	5.84	6.79	14.21	26.84	Average Max	V	219	0	54	-27.16	Pass
5803.45	6.12	6.76	14.11	26.99	Average Max	V	143	338	54	-27.01	Pass
4823.80	11.21	6.24	13.22	30.67	Average Max	V	153	239	54	-23.33	Pass
1031.74	17.23	2.46	13.15	32.84	Average Max	V	188	0	54	-21.16	Pass

802.11n-HT40 – 5755MHz

Frequency MHz	Raw dBuV	Cable Loss	AF dB	Level dBuV/m	Measurement Type	Pol	Hgt cm	Azt Deg	Limit dBuV/m	Margin dB	Pass /Fail
5768.70	49.58	6.74	14.02	70.34	Peak Max	V	157	240	74	-3.66	Pass
4780.06	41.31	6.24	13.28	60.83	Peak Max	V	194	237	74	-13.17	Pass
1037.56	45.91	2.46	13.14	61.51	Peak Max	V	175	146	74	-12.49	Pass
2022.60	43.32	3.42	14.93	61.67	Peak Max	V	234	97	74	-12.33	Pass
5768.70	16.90	6.74	14.02	37.66	Average Max	V	157	240	54	-16.34	Pass
4780.06	8.48	6.24	13.28	28.00	Average Max	V	194	237	54	-26.00	Pass
1037.56	17.07	2.46	13.14	32.67	Average Max	V	175	146	54	-21.33	Pass
2022.60	11.65	3.42	14.93	30.00	Average Max	V	234	97	54	-24.00	Pass

802.11n-HT40 – 5795MHz

Frequency MHz	Raw dBuV	Cable Loss	AF dB	Level dBuV/m	Measurement Type	Pol	Hgt cm	Azt Deg	Limit dBuV/m	Margin dB	Pass /Fail
5751.20	40.13	6.73	13.98	60.84	Peak Max	H	100	133	74	-13.16	Pass
1054.04	46.08	2.47	13.11	61.67	Peak Max	V	157	56	74	-12.33	Pass
2024.51	43.48	3.43	14.92	61.83	Peak Max	V	101	234	74	-12.17	Pass
2892.23	42.03	5.42	13.55	61.00	Peak Max	V	210	332	74	-13.00	Pass
5751.20	6.12	6.73	13.98	26.83	Average Max	H	100	133	54	-27.17	Pass
1054.04	16.91	2.47	13.11	32.50	Average Max	V	157	56	54	-21.50	Pass
2024.51	11.65	3.43	14.92	30.00	Average Max	V	101	234	54	-24.00	Pass
2892.23	9.87	5.42	13.55	28.84	Average Max	V	210	332	54	-25.16	Pass

802.11ac – 5775MHz

Frequency MHz	Raw dBuV	Cable Loss	AF dB	Level dBuV/m	Measurement Type	Pol	Hgt cm	Azt Deg	Limit dBuV/m	Margin dB	Pass /Fail
5760.86	49.42	6.74	14.00	70.16	Peak Max	V	144	241	74	-3.84	Pass
5822.39	40.40	6.77	14.15	61.33	Peak Max	V	160	305	74	-12.67	Pass
1011.18	46.70	2.45	13.18	62.33	Peak Max	V	152	287	74	-11.67	Pass
2032.49	43.82	3.46	14.90	62.17	Peak Max	H	273	187	74	-11.83	Pass
5760.86	17.26	6.74	14.00	38.00	Average Max	V	144	241	54	-16.00	Pass
5822.39	5.73	6.77	14.15	26.66	Average Max	V	160	305	54	-27.34	Pass
1011.18	17.54	2.45	13.18	33.17	Average Max	V	152	287	54	-20.83	Pass
2032.49	11.81	3.46	14.9	30.16	Average Max	H	273	187	54	-23.84	Pass

Annex A. TEST INSTRUMENT

Instrument	Model	Serial #	Cal Cycle	Cal Due	In use
Conducted Emissions					
Spectrum Analyzer	N9010A	MY50210206	1 Year	8/13/2015	☒
Signal Analyzer	FSIQ7	825555/013	1 Year	05/31/2015	☒
V-LISN (150 kHz – 30 MHz)	NNLK 8129	8129-190	1 Year	08/11/2015	☒
LISN (9 kHz – 30 MHz)	MN2050B	1018	1 Year	07/31/2015	☒
TLISN	ISN T800	30814	1 Year	08/08/2015	☒
Hygro Hermograph	ST-50	HE01-000092	1 Year	05/25/2015	☒
Radiated Emissions					
EMI Test Receiver	ESIB 40	100179	1 Year	05/24/2015	☒
Antenna - Biconlog (30 MHz – 2 GHz)	JB1	A030702	1 Year	08/12/2015	☒
DoubleRidged Waveguide Horn Antenna (1-18 GHz)	3115	10SL0059	1 Year	08/11/2015	☒
Horn Antenna (18-40 GHz)	AH-840	101013	1 Year	08/11/2015	☒
RF Pre-Amplifier	LPA-6-30	11140711	1 Year	02/19/2016	☒
Microwave Preamplifier (18-40 GHz)	PA-840	181251	1 Year	02/19/2016	☒
10 Meters SAC	10M	N/A	1 Year	09/05/2015	☒
Hygro Hermograph	ST-50	HE01-000092	1 Year	05/25/2015	☒
RF Conducted Measurement					
Spectrum Analyzer	N9010A	MY50210206	1 Year	8/13/2015	☒

Annex B. SIEMIC Accreditation

Accreditations	Document	Scope / Remark
ISO 17025 (A2LA)		Please see the documents for the detailed scope
ISO Guide 65 (A2LA)		Please see the documents for the detailed scope
TCB Designation		A1, A2, A3, A4, B1, B2, B3, B4, C
FCC DoC Accreditation		FCC Declaration of Conformity Accreditation
FCC Site Registration		3 meter site
FCC Site Registration		10 meter site
IC Site Registration		3 meter site
IC Site Registration		10 meter site
EU NB		**Radio & Telecommunications Terminal Equipment:** EN45001 – EN ISO/IEC 17025
		Electromagnetic Compatibility: EN45001 – EN ISO/IEC 17025
Singapore iDA CB(Certification Body)		Phase I, Phase II
Vietnam MIC CAB Accreditation		Please see the document for the detailed scope
Hong Kong OFCA		**(Phase II)** OFCA Foreign Certification Body for Radio and Telecom
		(Phase I) Conformity Assessment Body for Radio and Telecom
Industry Canada CAB		**Radio:** Scope A – All Radio Standard Specification in Category I
		Telecom: CS-03 Part I, II, V, VI, VII, VIII

Japan Recognized Certification Body Designation		**Radio**: A1. Terminal equipment for purpose of calling **Telecom**: B1. Specified radio equipment specified in Article 38-2, Paragraph 1, Item 1 of the Radio Law
Korea CAB Accreditation		**EMI:** KCC Notice 2008-39, RRL Notice 2008-3: CA Procedures for EMI KN22: Test Method for EMI **EMS:** KCC Notice 2008-38, RRL Notice 2008-4: CA Procedures for EMS KN24, KN61000-4-2, -4-3, -4-4, -4-5, -4-6, -4-8, -4-11: Test Method for EMS
		Radio: RRL Notice 2008-26, RRL Notice 2008-2, RRL Notice 2008-10, RRL Notice 2007-49, RRL Notice 2007-20, RRL Notice 2007-21, RRL Notice 2007-80, RRL Notice 2004-68
		Telecom: President Notice 20664, RRL Notice 2007-30, RRL Notice 2008-7 with attachments 1, 3, 5, 6; President Notice 20664, RRL Notice 2008-7 with attachment 4
Taiwan NCC CAB Recognition		LP0002, PSTN01, ADSL01, ID0002, IS6100, CNS14336, PLMN07, PLMN01, PLMN08
Taiwan BSMI CAB Recognition		CNS 13438
Japan VCCI		R-3083: Radiation 3 meter site C-3421: Main Ports Conducted Interference Measurement T-1597: Telecommunication Ports Conducted Interference Measurement
Australia CAB Recognition		**EMC:** AS/NZS CISPR 11, AS/NZS CISPR 14.1, AS/NZS CISPR22, AS/NZS 61000.6.3, AS/NZS 61000.6.4
		Radio communications: AS/NZS 4281, AS/NZS 4268, AS/NZS 4280.1, AS/NZS 4280.2, AS/NZS 4295, AS/NZS 4582, AS/NZS 4583, AS/NZS 4769.1, AS/NZS 4769.2, AS/NZS 4770, AS/NZS 4771
		Telecommunications: AS/ACIF S002:05, AS/ACIF S003:06, AS/ACIF S004:06 AS/ACIF S006:01, AS/ACIF S016:01, AS/ACIF S031:01, AS/ACIF S038:01, AS/ACIF S040:01, AS/ACIF S041:05, AS/ACIF S043.2:06, AS/ACIF S60950.1
Australia NATA Recognition		AS/ACIF S002, AS/ACIF S003, AS/ACIF S004, AS/ACIF S006, AS/ACIF S016,AS/ACIF S031, AS/ACIF S038, AS/ACIF S040, AS/ACIF S041, AS/ACIF S043.2