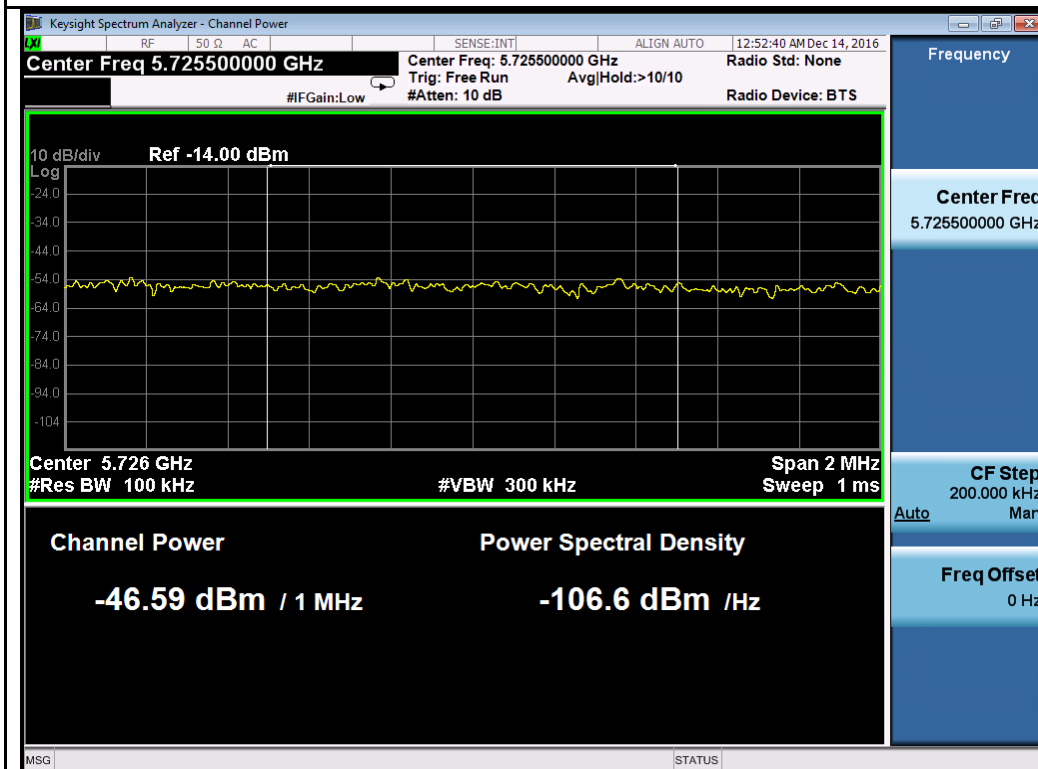
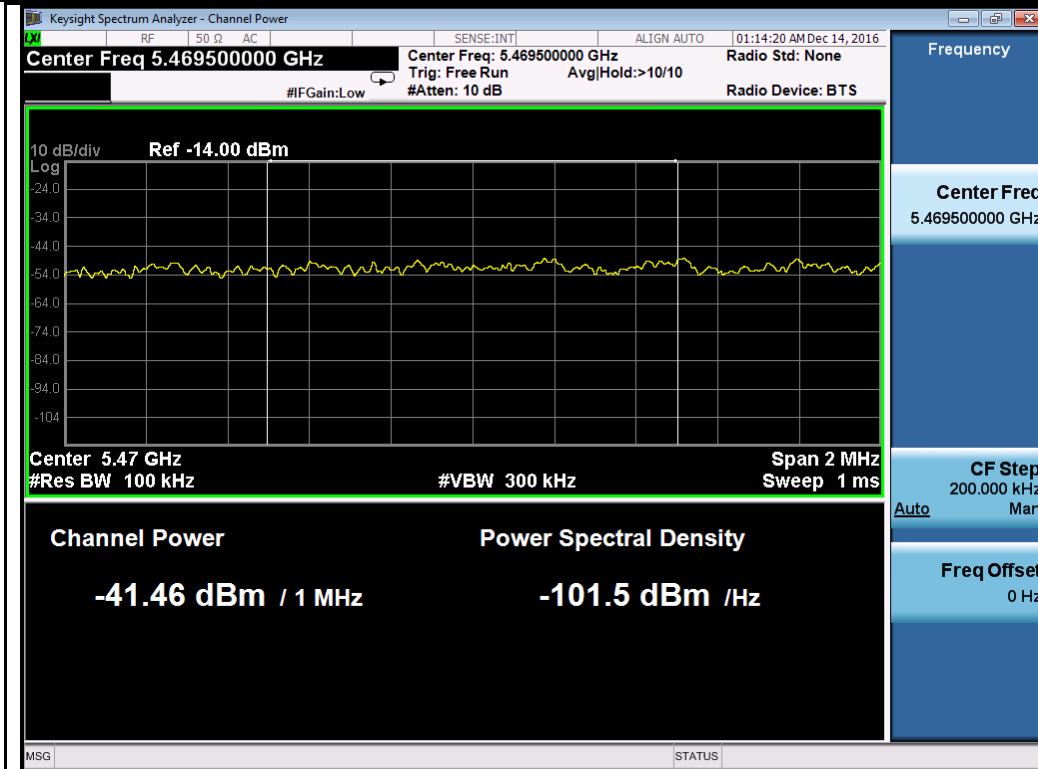


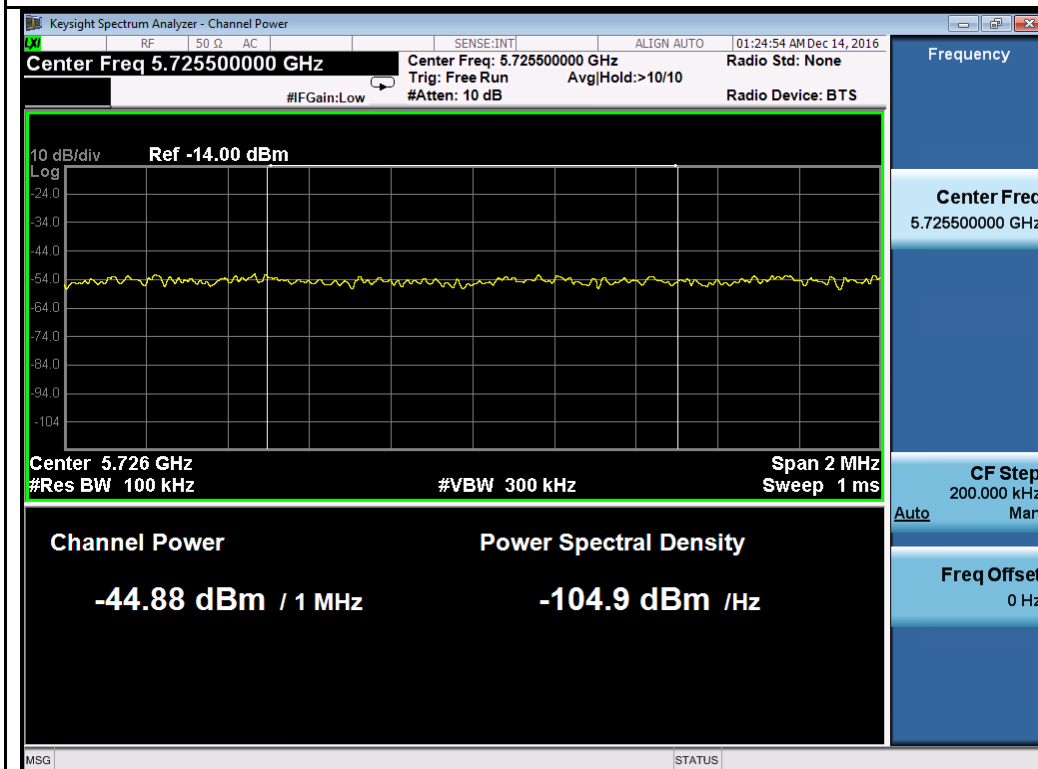
802.11n-HT20-5500MHz



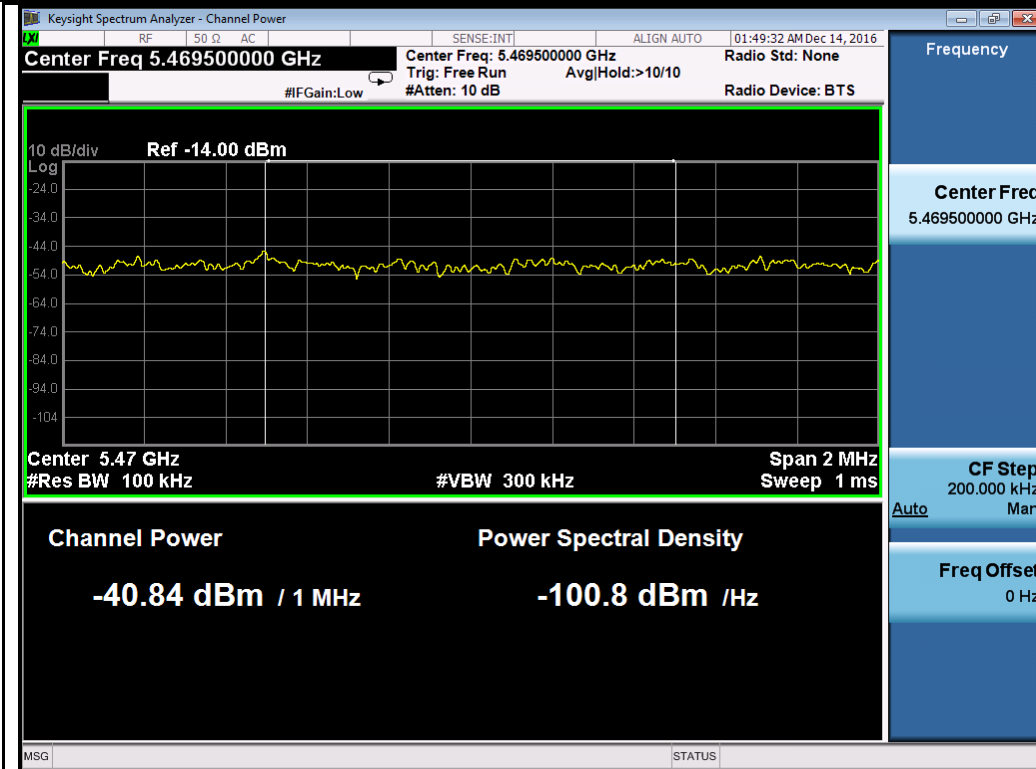
802.11n-HT20-5700MHz



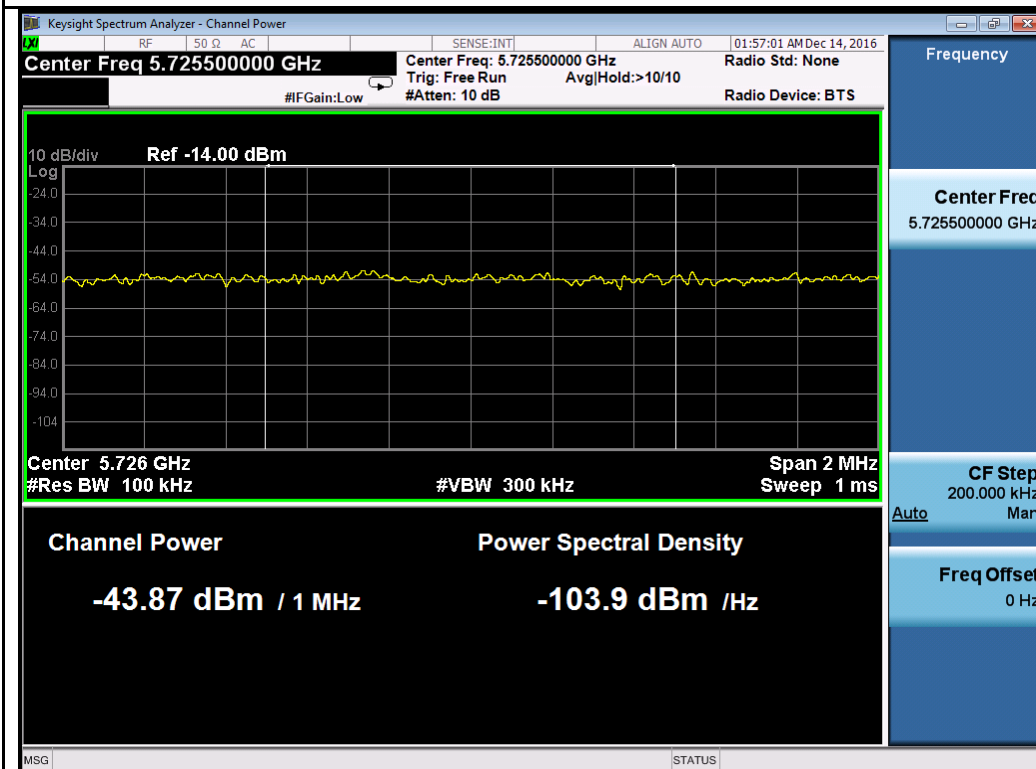
802.11n-HT40-5510MHz



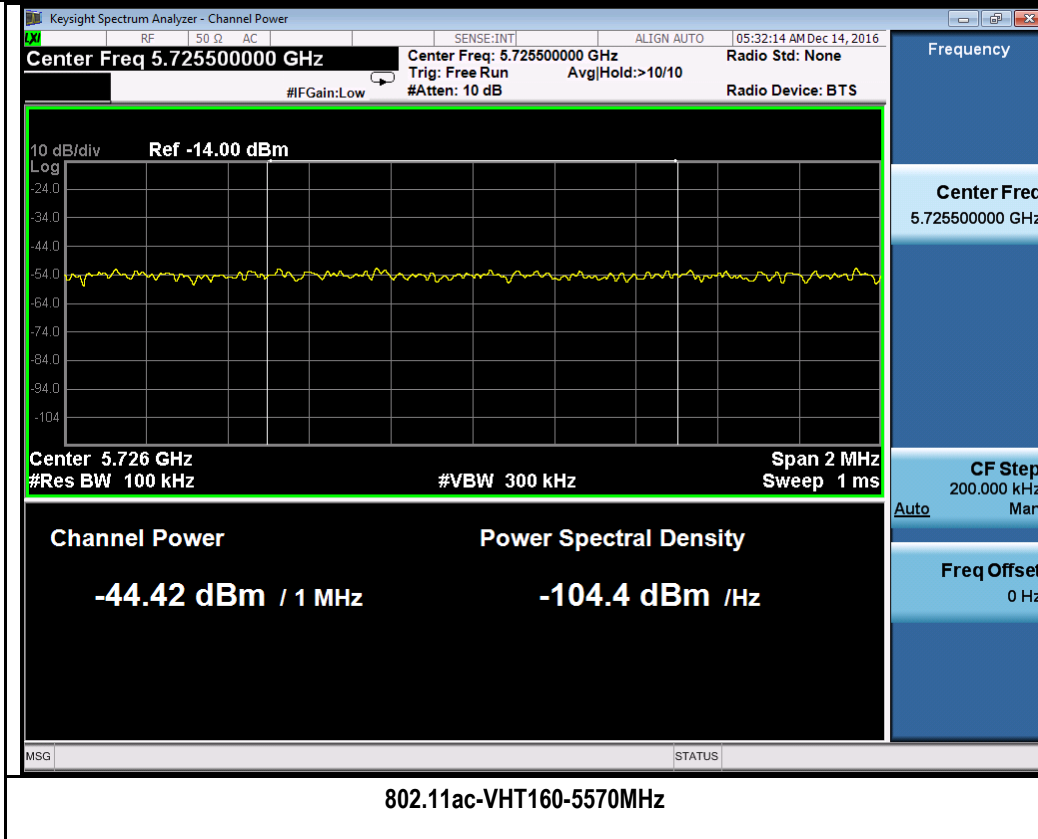
802.11n-HT40-5670MHz



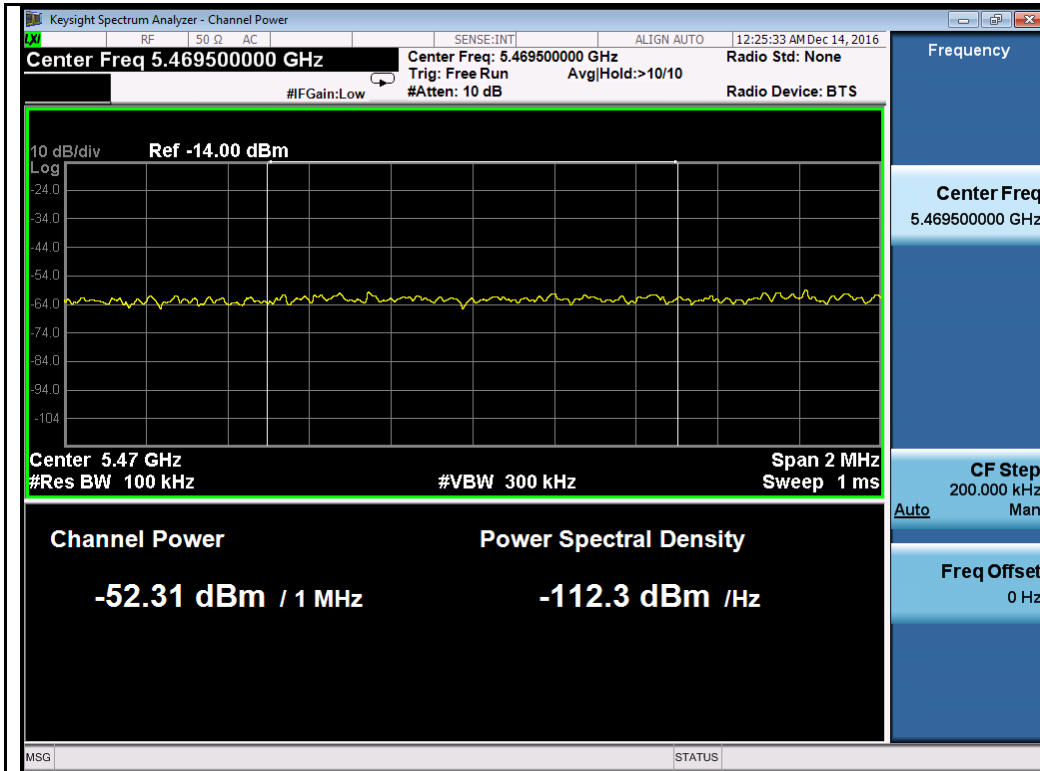
802.11ac-VHT80-5530MHz



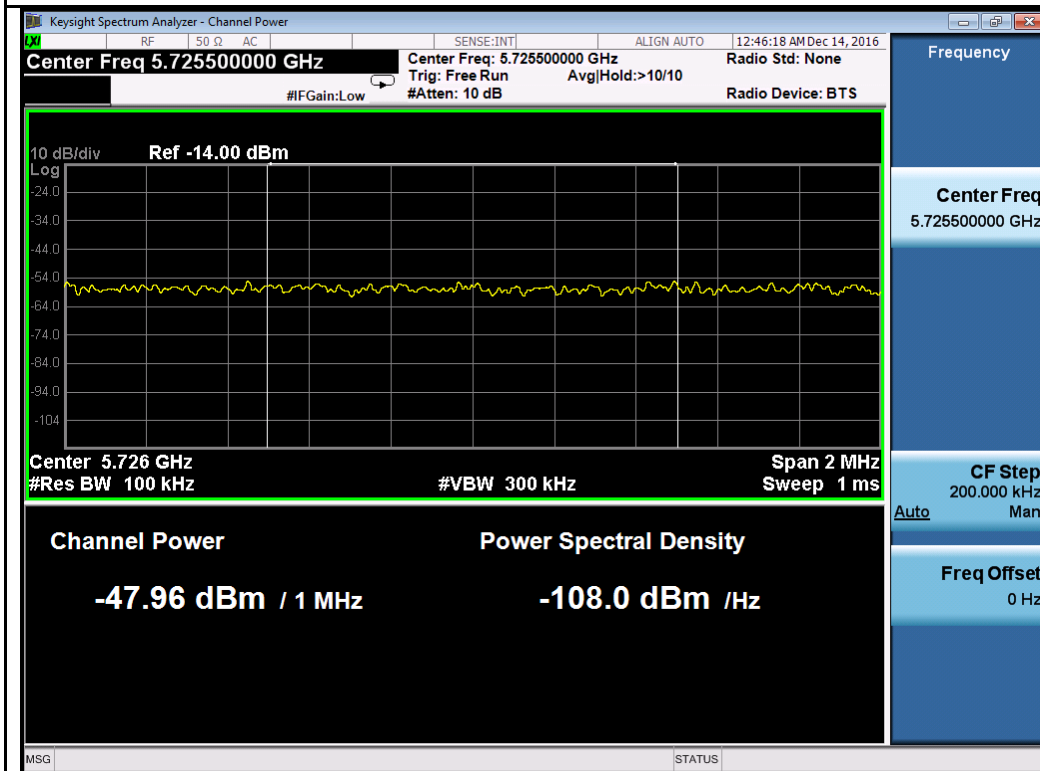
802.11ac-VHT80-5610MHz



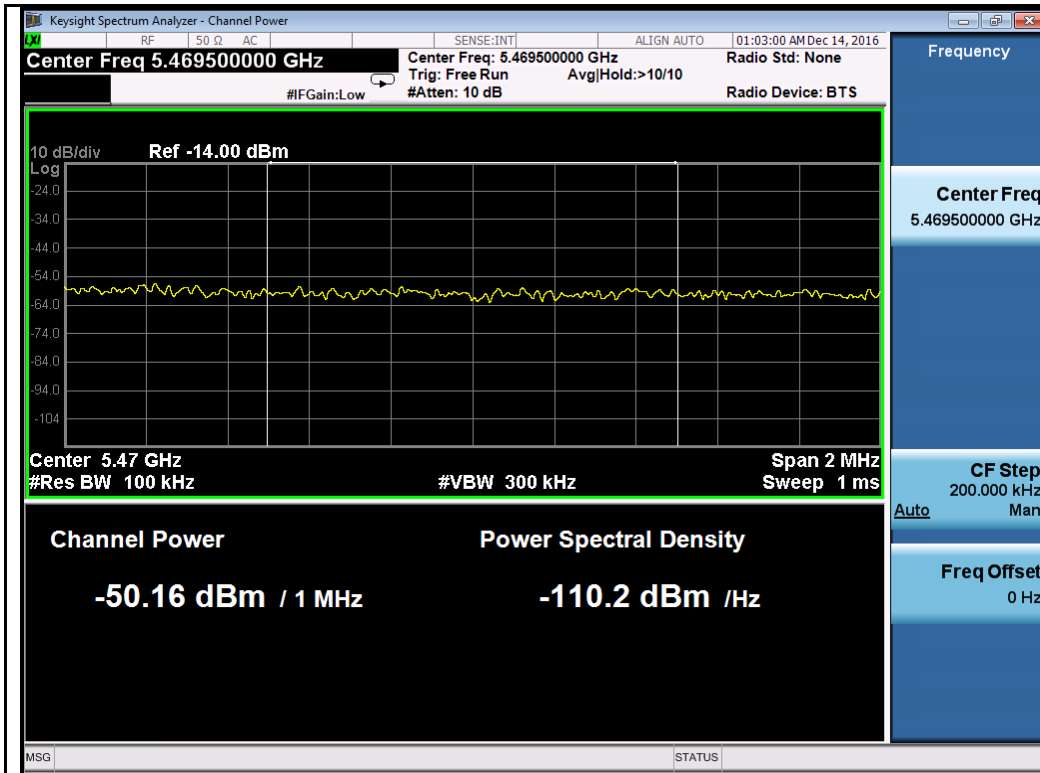
Chain 4:



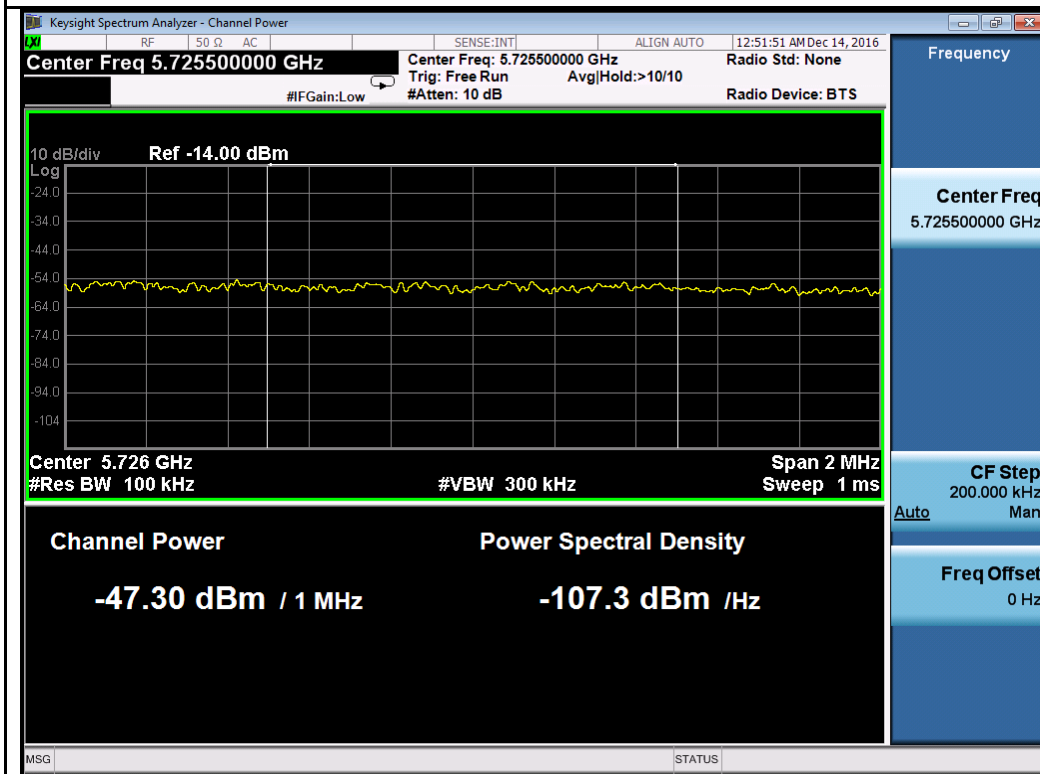
802.11a-5500MHz



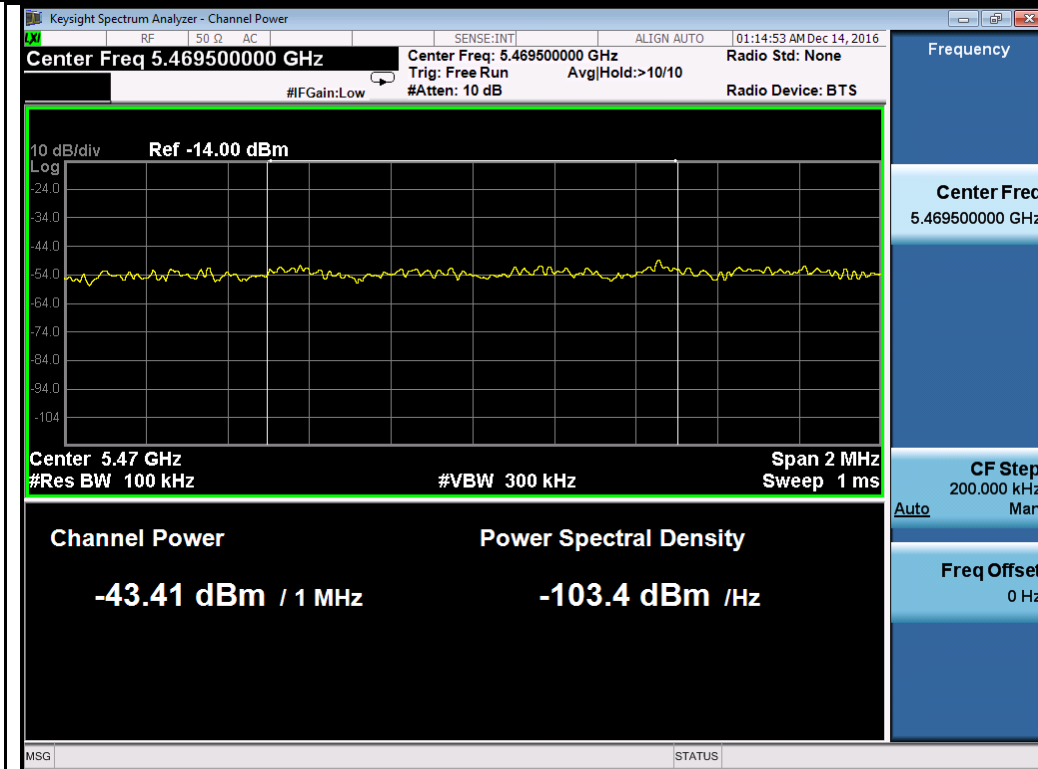
802.11a-5700MHz



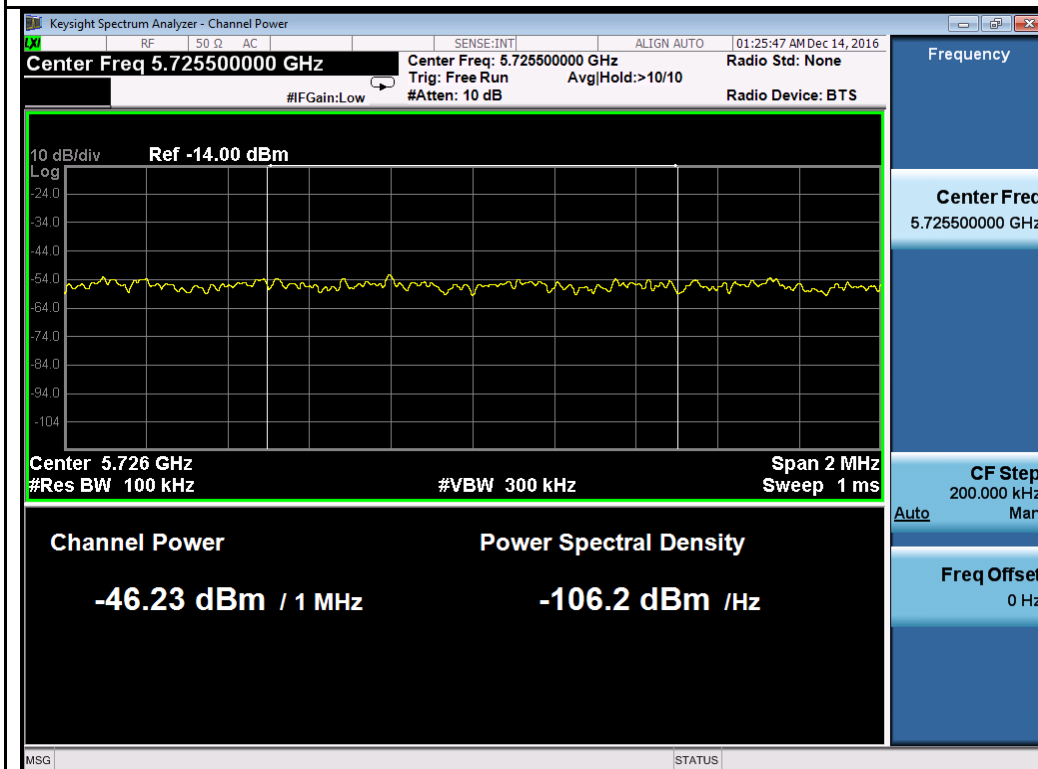
802.11n-HT20-5500MHz



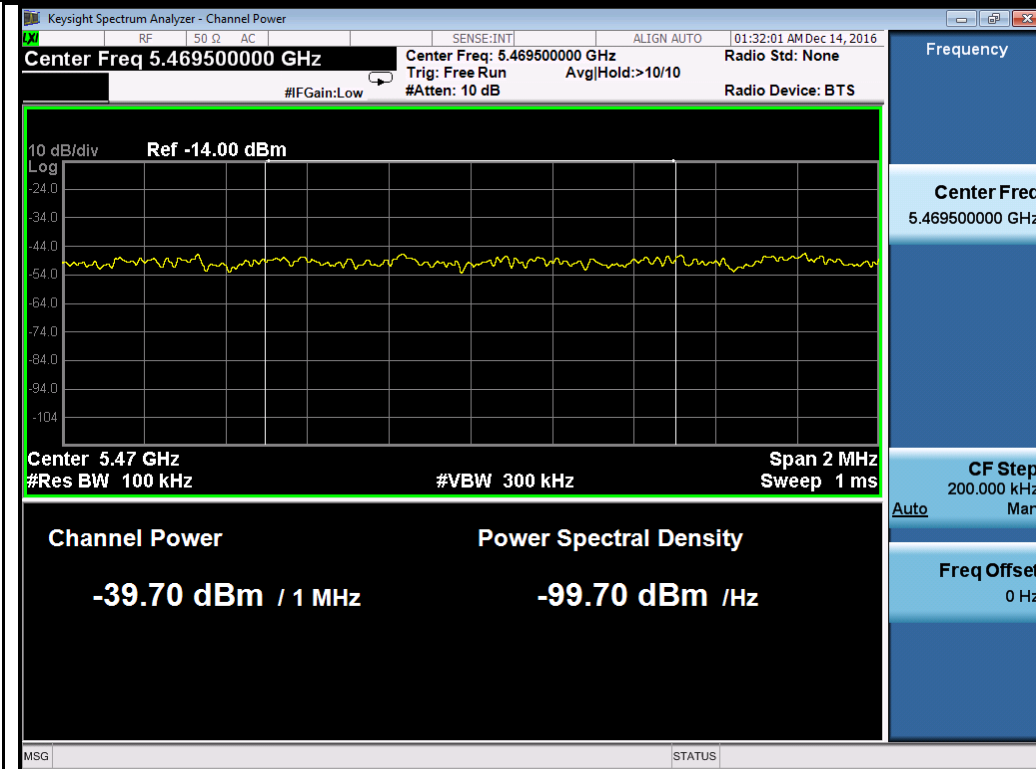
802.11n-HT20-5700MHz



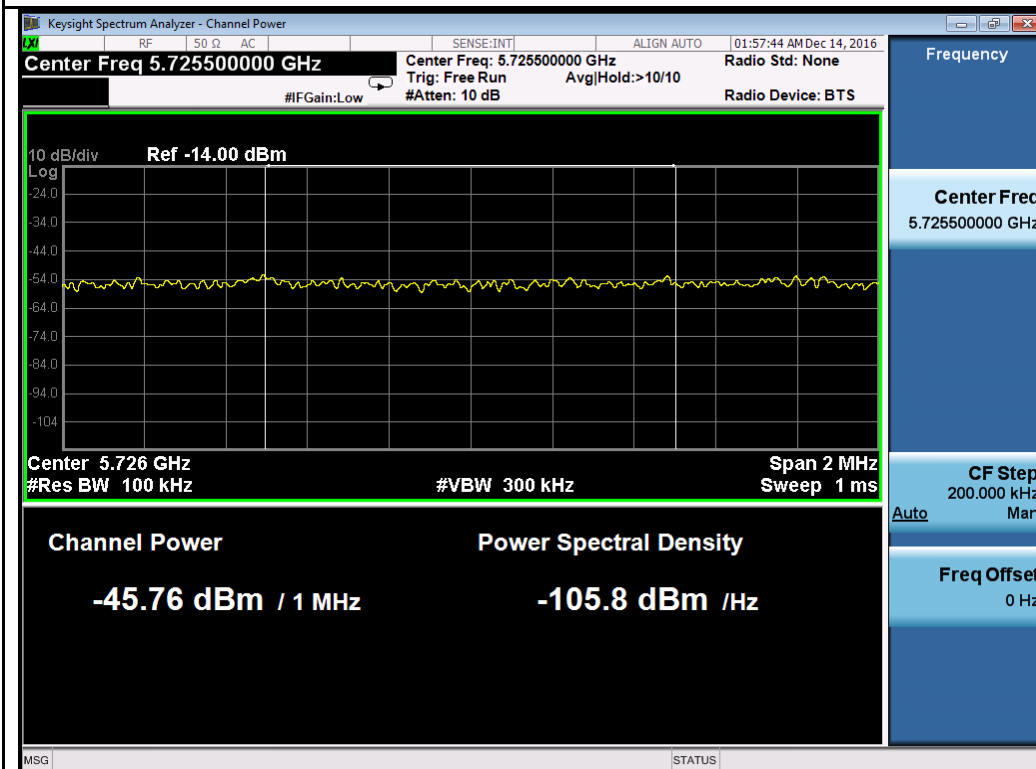
802.11n-HT40-5510MHz



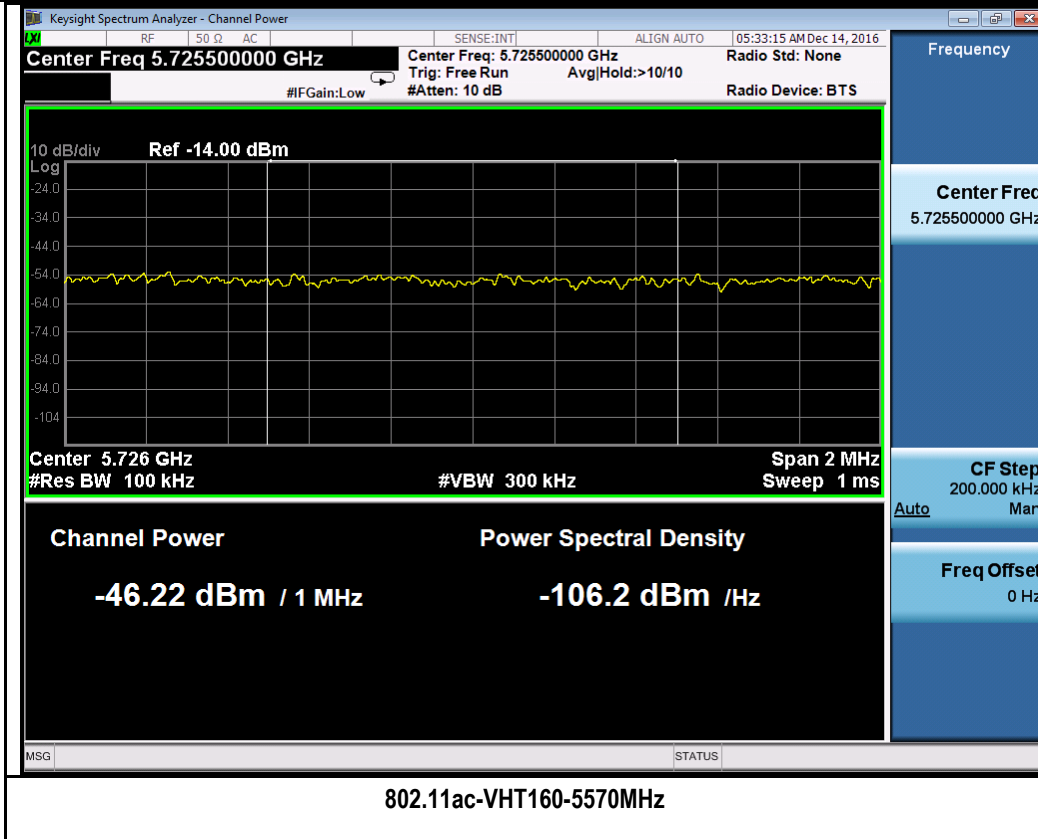
802.11n-HT40-5670MHz



802.11ac-VHT80-5530MHz



802.11ac-VHT80-5610MHz



10.6 Radiated Spurious Emissions below 1GHz

Requirement(s):

Spec	Requirement	Applicable										
47CFR§ 15.407(b) 15.209 (a)	<p>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</p> <table border="1"> <thead> <tr> <th>Frequency range (MHz)</th> <th>Field Strength (uV/m)</th> </tr> </thead> <tbody> <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> </tbody> </table>	Frequency range (MHz)	Field Strength (uV/m)	30 – 88	100	88 – 216	150	216 960	200	Above 960	500	☒
Frequency range (MHz)	Field Strength (uV/m)											
30 – 88	100											
88 – 216	150											
216 960	200											
Above 960	500											
Test Setup												
Procedure	<ol style="list-style-type: none"> The EUT was switched on and allowed to warm up to its normal operating condition. 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: <ol style="list-style-type: none"> Vertical or horizontal polarisation (whichever gave the higher emission level over a full rotation of the EUT) was chosen. The EUT was then rotated to the direction that gave the maximum emission. Finally, the antenna height was adjusted to the height that gave the maximum emission. A Quasi-peak measurement was then made for that frequency point. 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 1GHz. Both horizontal and vertical polarities were investigated. The results show only the worst case.											
Result	☒ Pass ☐ Fail											

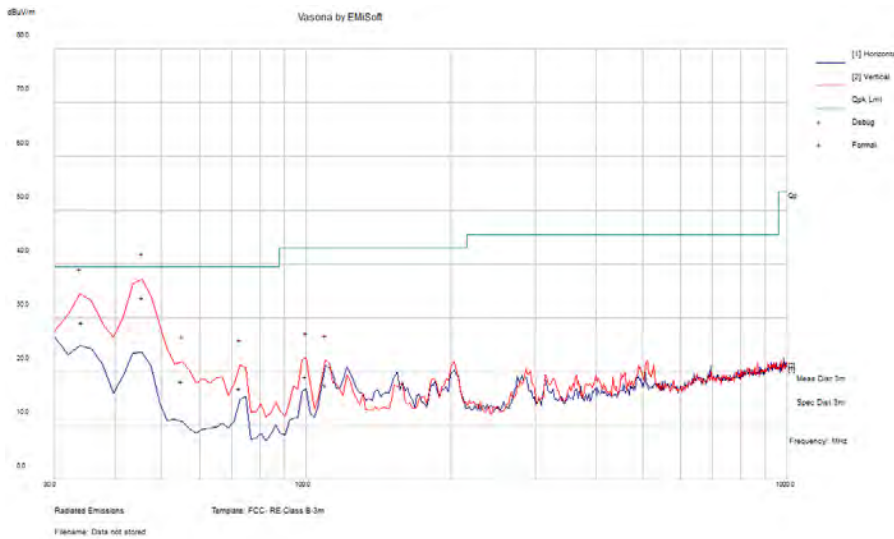
Test Data ☒ Yes (See below) ☐ N/A

Test Plot ☒ Yes (See below) ☐ N/A

Test was done by Shuo Zhang at 10m chamber.

Radiated Emission Test Results (Below 1GHz)

Test specification	below 1GHz			Result	Pass
Environmental Conditions:	Temp (°C):	23			
	Humidity (%)	46			
	Atmospheric (mbar):	1017			
Mains Power:	120VAC, 60Hz				
Tested by:	Shuo Zhang				
Test Date:	01/11/2017				
Remarks:	802.11ac – VHT160, 5250MHz				



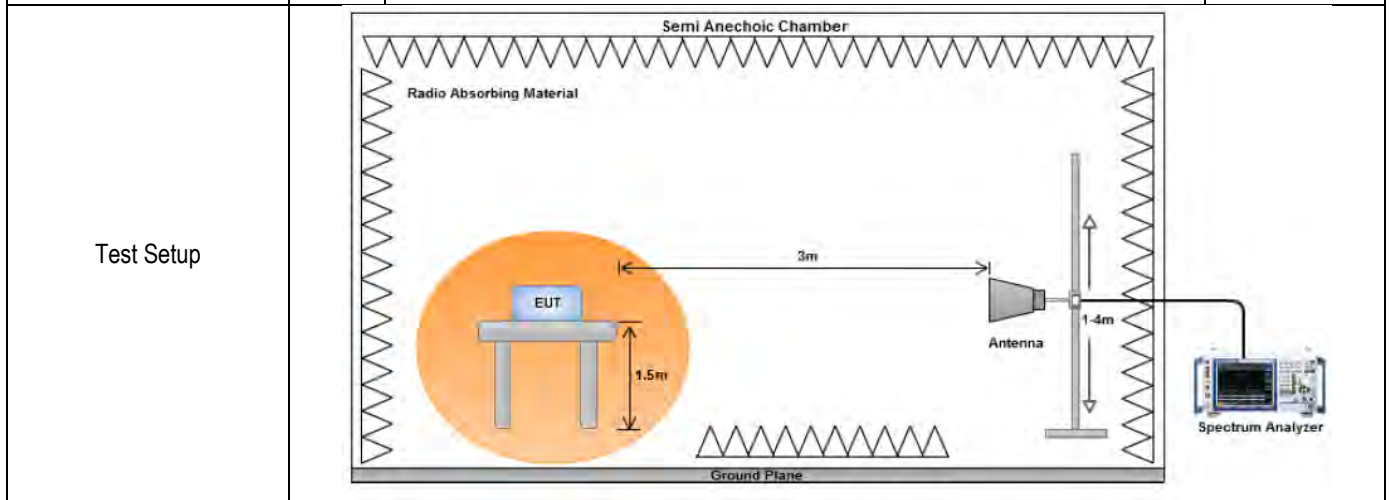
Frequency MHz	Raw dBuV	Cable Loss	AF dB	Level dBuV/m	Measurement Type	Pol	Hgt cm	Azt Deg	Limit dBuV/m	Margin dB	Pass /Fail
45.60	60.95	0.98	-28.09	33.85	Quasi Max	V	156	303	39.5	-5.65	Pass
34.13	48.25	0.83	-19.92	29.16	Quasi Max	V	123	301	39.5	-10.34	Pass
55.09	48.21	1.17	-31.2	18.18	Quasi Max	V	122	204	39.5	-21.32	Pass
72.72	46.91	1.27	-31.24	16.94	Quasi Max	V	115	264	39.5	-22.56	Pass
99.78	47.06	1.57	-29.49	19.13	Quasi Max	V	103	133	43	-23.87	Pass
109.93	43.37	1.54	-27.3	17.61	Quasi Max	V	108	225	43	-25.39	Pass

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

10.7 Radiated Spurious Emissions 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.	<input type="checkbox"/>
	(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.	<input checked="" type="checkbox"/>
	(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.	<input checked="" type="checkbox"/>
	(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.	<input type="checkbox"/>
	(5)	Restricted band, emission must also comply with the radiated emission limits specified in 15.209	<input checked="" type="checkbox"/>



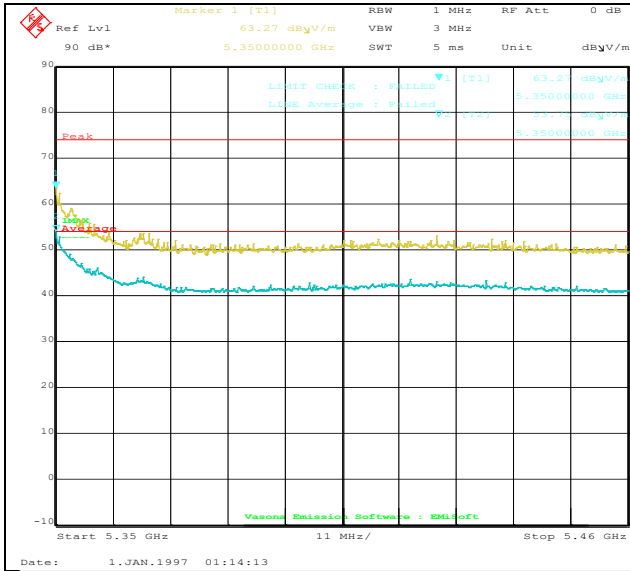
Procedure	<ol style="list-style-type: none"> 1. The EUT was switched on and allowed to warm up to its normal operating condition. 2. The test was carried out at the selected frequency points obtained from the EUT characterisation. Maximization of the emissions, was carried out by rotating the EUT, changing the antenna polarization, and adjusting the antenna height in the following manner: <ol style="list-style-type: none"> 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.
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Remark	The EUT was scanned up to 40GHz. Both horizontal and vertical polarities were investigated. The results show only the worst case.
Result	<input checked="" type="checkbox"/> Pass <input type="checkbox"/> Fail

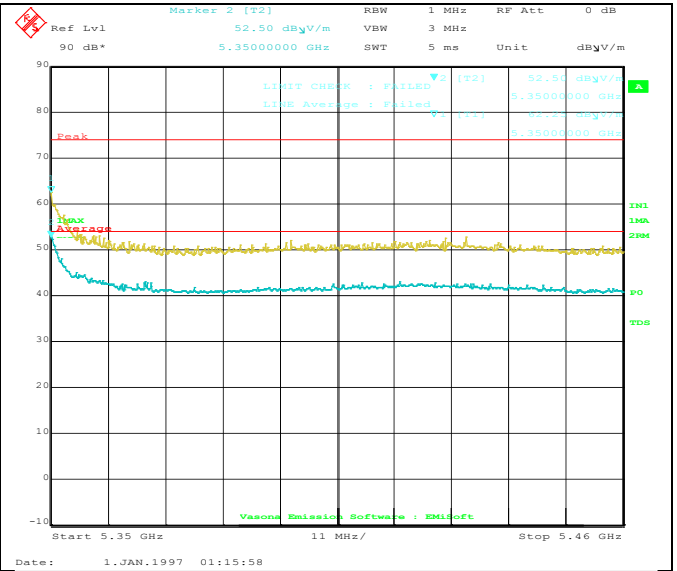
Test Data Yes (See below) N/A
 Test Plot Yes (See below) N/A

Test was done by Gary Chou at 10m chamber.

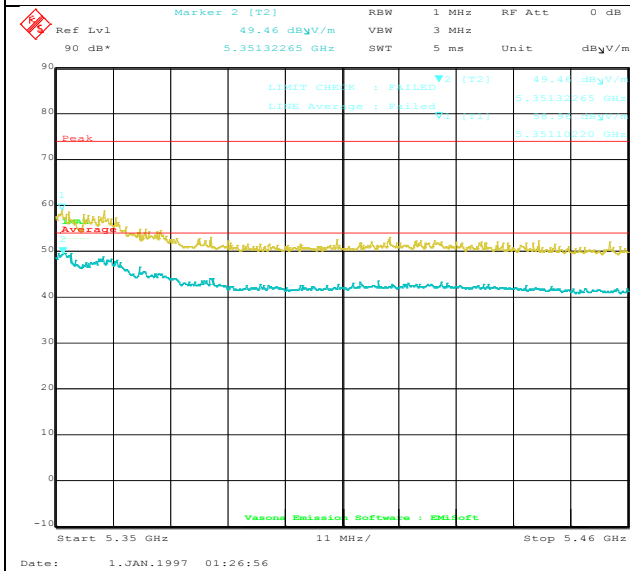
Radiated Restricted band and Band Edge Measurement Plots:



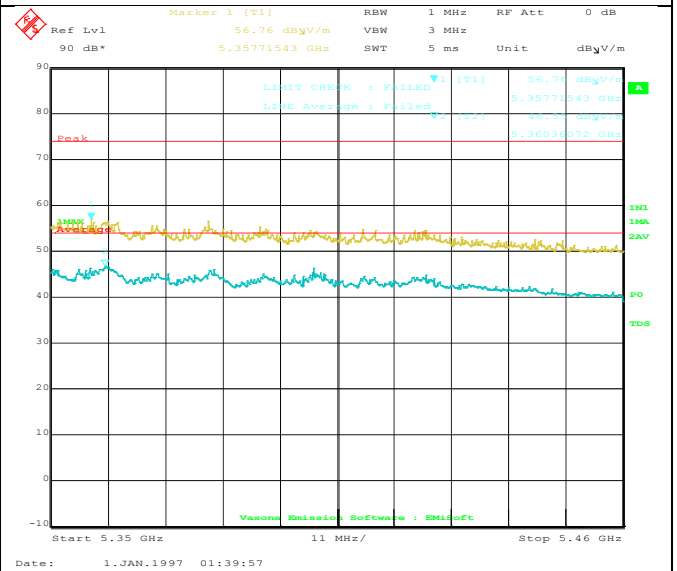
802.11a 5320M(5350-5460MHz)



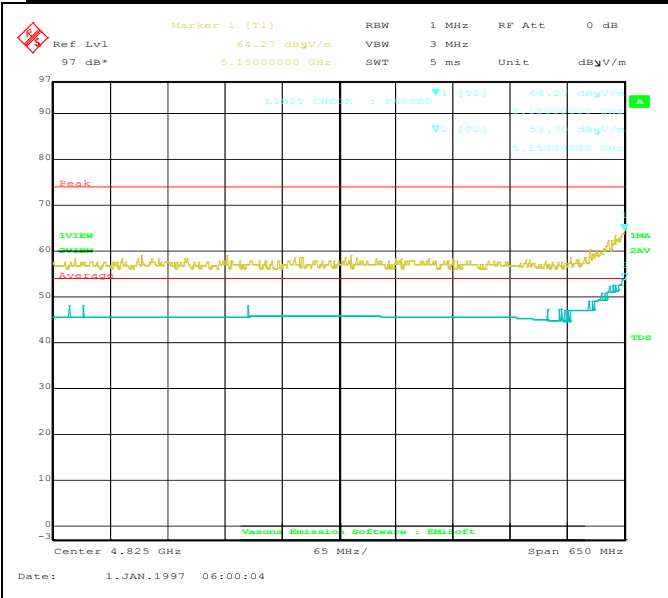
802.11n-HT20 5320M(5350-5460MHz)



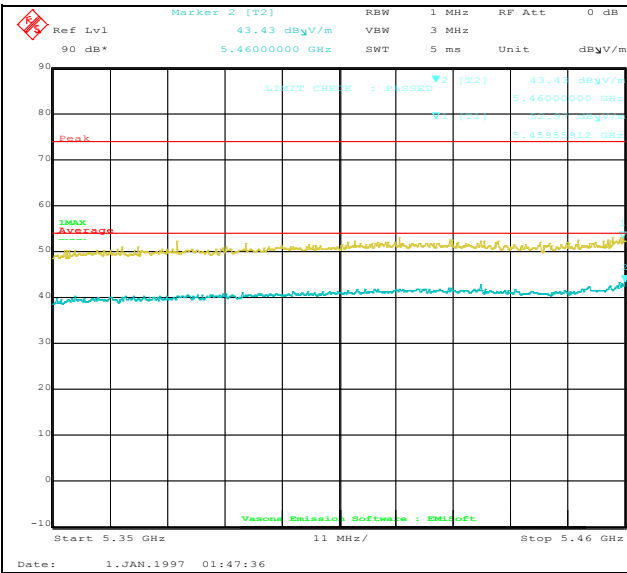
802.11n-HT40 5310M(5350-5460MHz)



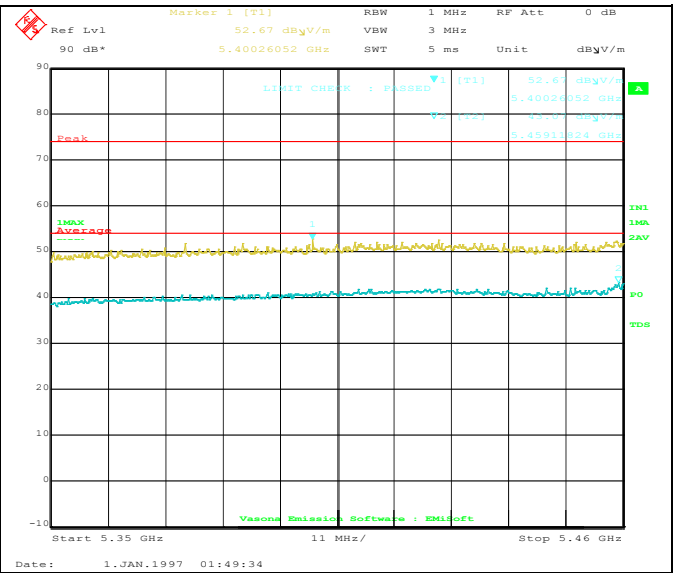
802.11ac 5290M(5350-5460MHz)



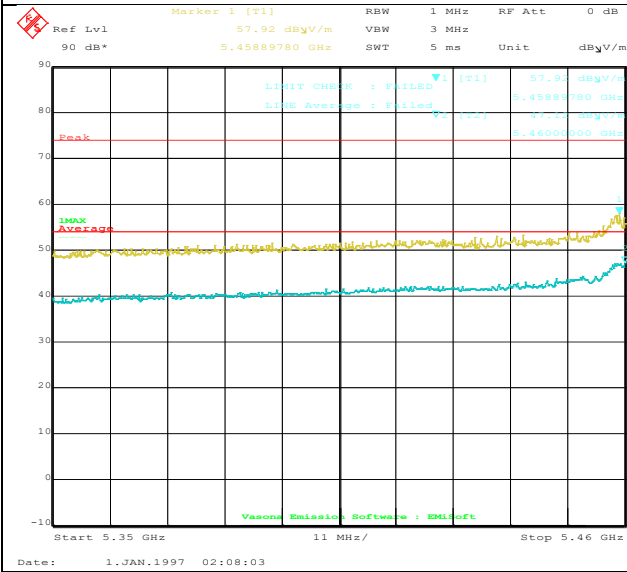
802.11ac-VHT160 5250MHz



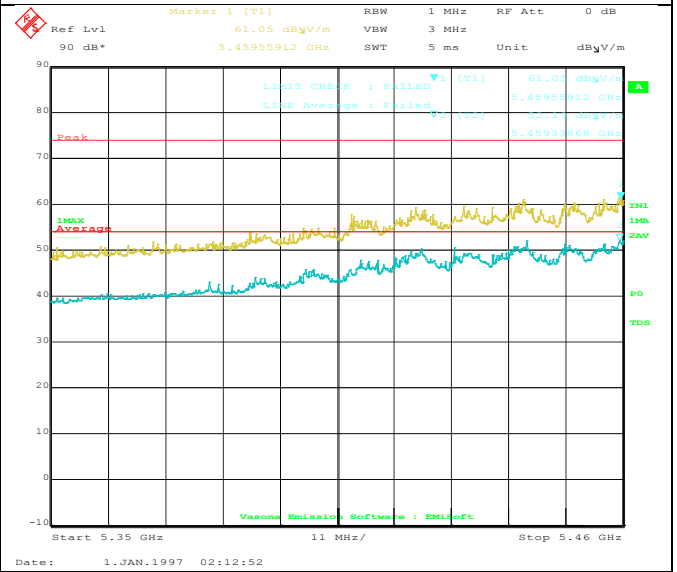
802.11a 5500M(5350-5460MHz)



802.11n-HT20 5500M(5350-5460MHz)



802.11n-HT40 5510M(5350-5460MHz)



802.11ac 5530M(5350-5460MHz)

Radiated Emission Test Results (Above 1GHz)

W53 band:

Above 1GHz-40GHz – 802.11a – 5260MHz

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
1894.81	45.32	3.16	-12.32	36.16	Peak Max	V	159	21	74	-37.84	Pass
3542.77	43.57	4.31	-7.22	40.65	Peak Max	V	192	30	74	-33.35	Pass
10519.86	40.04	7.27	0.34	47.65	Peak Max	V	121	33	74	-26.36	Pass
1894.81	33.67	3.16	-12.32	24.51	Average Max	V	159	21	54	-29.49	Pass
3542.77	32.06	4.31	-7.22	29.15	Average Max	V	192	30	54	-24.86	Pass
10519.86	28.41	7.27	0.34	36.02	Average Max	V	121	33	54	-17.98	Pass

Above 1GHz-40GHz – 802.11a – 5280MHz

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
1897.33	45.78	3.16	-12.3	36.64	Peak Max	V	146	272	74	-37.36	Pass
3541.70	44.37	4.3	-7.23	41.45	Peak Max	V	120	202	74	-32.56	Pass
10561.35	40.02	7.33	0.26	47.61	Peak Max	V	190	226	74	-26.39	Pass
1897.33	33.58	3.16	-12.3	24.44	Average Max	V	146	272	54	-29.56	Pass
3541.70	31.57	4.3	-7.23	28.65	Average Max	V	120	202	54	-25.35	Pass
10561.35	28.78	7.33	0.26	36.37	Average Max	V	190	226	54	-17.63	Pass

Above 1GHz-40GHz – 802.11a – 5320MHz

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
1894.44	45.66	3.16	-12.32	36.5	Peak Max	V	120	275	74	-37.5	Pass
3572.60	43.31	4.33	-7.13	40.51	Peak Max	V	108	350	74	-33.49	Pass
10639.29	40.63	7.46	0.35	48.44	Peak Max	V	164	19	74	-25.56	Pass
1894.44	33.69	3.16	-12.32	24.53	Average Max	V	120	275	54	-29.47	Pass
3572.60	31.25	4.33	-7.13	28.45	Average Max	V	108	350	54	-25.55	Pass
10639.29	29.03	7.46	0.35	36.84	Average Max	V	164	19	54	-17.16	Pass

Above 1GHz-40GHz – 802.11n-20M – 5260MHz

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
1874.03	45.26	3.14	-12.46	35.93	Peak Max	V	188	98	74	-38.07	Pass
3552.69	43.77	4.31	-7.19	40.89	Peak Max	V	176	69	74	-33.11	Pass
10521.06	40.2	7.27	0.34	47.81	Peak Max	V	106	310	74	-26.19	Pass
1874.03	33.36	3.14	-12.46	24.04	Average Max	V	188	98	54	-29.96	Pass
3552.69	31.7	4.31	-7.19	28.82	Average Max	V	176	69	54	-25.18	Pass
10521.06	28.74	7.27	0.34	36.35	Average Max	V	106	310	54	-17.65	Pass

Above 1GHz-40GHz – 802.11n-20M – 5280MHz

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
1885.09	46.06	3.15	-12.39	36.82	Peak Max	V	160	208	74	-37.18	Pass
3551.34	44.3	4.31	-7.2	41.42	Peak Max	V	147	320	74	-32.58	Pass
10559.24	39.81	7.33	0.27	47.4	Peak Max	V	109	271	74	-26.6	Pass
1885.09	33.5	3.15	-12.39	24.26	Average Max	V	160	208	54	-29.74	Pass
3551.34	31.37	4.31	-7.2	28.49	Average Max	V	147	320	54	-25.51	Pass
10559.24	28.46	7.33	0.27	36.06	Average Max	V	109	271	54	-17.94	Pass

Above 1GHz-40GHz – 802.11n-20M – 5320MHz

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
1882.58	45.73	3.15	-12.4	36.48	Peak Max	V	113	79	74	-37.52	Pass
3551.60	43.92	4.31	-7.2	41.04	Peak Max	V	175	196	74	-32.96	Pass
10640.91	40.86	7.46	0.36	48.68	Peak Max	V	159	273	74	-25.32	Pass
1882.58	33.41	3.15	-12.4	24.15	Average Max	V	113	79	54	-29.85	Pass
3551.60	31.76	4.31	-7.2	28.87	Average Max	V	175	196	54	-25.13	Pass
10640.91	29.03	7.46	0.36	36.85	Average Max	V	159	273	54	-17.15	Pass

Above 1GHz-40GHz – 802.11n-40M – 5270MHz

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
1863.42	44.49	3.13	-12.54	35.08	Peak Max	V	113	280	74	-38.93	Pass
3559.36	43.1	4.32	-7.17	40.24	Peak Max	V	99	335	74	-33.76	Pass
10539.35	40.77	7.3	0.31	48.37	Peak Max	V	155	60	74	-25.63	Pass
1863.42	33.15	3.13	-12.54	23.74	Average Max	V	113	280	54	-30.26	Pass
3559.36	31.02	4.32	-7.17	28.17	Average Max	V	99	335	54	-25.84	Pass
10539.35	28.65	7.3	0.31	36.25	Average Max	V	155	60	54	-17.75	Pass

Above 1GHz-40GHz – 802.11n-40M – 5310MHz

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
1857.62	44.7	3.12	-12.58	35.24	Peak Max	V	135	347	74	-38.76	Pass
3558.41	43.27	4.32	-7.17	40.41	Peak Max	V	100	106	74	-33.59	Pass
10618.94	41.1	7.43	0.27	48.8	Peak Max	V	152	147	74	-25.2	Pass
1857.62	33.19	3.12	-12.58	23.73	Average Max	V	135	347	54	-30.27	Pass
3558.41	31.05	4.32	-7.17	28.2	Average Max	V	100	106	54	-25.8	Pass
10618.94	28.99	7.43	0.27	36.68	Average Max	V	152	147	54	-17.32	Pass

Above 1GHz-40GHz – 802.11ac-80M – 5290MHz

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
1923.73	44.65	3.19	-12.16	35.68	Peak Max	V	103	356	74	-38.32	Pass
3581.72	43.65	4.34	-7.1	40.89	Peak Max	V	167	69	74	-33.11	Pass
10579.09	40.52	7.36	0.23	48.11	Peak Max	V	142	134	74	-25.89	Pass
1923.73	33.12	3.19	-12.16	24.15	Average Max	V	103	356	54	-29.85	Pass
3581.72	31.58	4.34	-7.1	28.82	Average Max	V	167	69	54	-25.18	Pass
10579.09	28.72	7.36	0.23	36.31	Average Max	V	142	134	54	-17.69	Pass

1GHz-40GHz – 802.11ac-160M – 5250MHz

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
1904.26	45.31	3.17	-12.26	36.22	Peak Max	V	152	244	74	-37.78	Pass
3583.92	43.4	4.34	-7.09	40.65	Peak Max	V	166	4	74	-33.35	Pass
11059.21	40.61	7.97	1.75	50.33	Peak Max	V	100	264	74	-23.67	Pass
1904.26	33.49	3.17	-12.26	24.4	Average Max	V	152	244	54	-29.61	Pass
3583.92	31.72	4.34	-7.09	28.97	Average Max	V	166	4	54	-25.04	Pass
11059.21	28.33	7.97	1.75	38.06	Average Max	V	100	264	54	-15.95	Pass

**W56 band:
Above 1GHz-40GHz – 802.11a – 5500MHz**

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
1885.28	45.6	3.15	-12.38	36.37	Peak Max	V	164	39	74	-37.63	Pass
3550.29	43.59	4.31	-7.2	40.7	Peak Max	V	177	233	74	-33.3	Pass
11001.10	40.57	8.02	1.5	50.1	Peak Max	V	182	51	74	-23.9	Pass
1885.28	33.47	3.15	-12.38	24.23	Average Max	V	164	39	54	-29.77	Pass
3550.29	31.75	4.31	-7.2	28.86	Average Max	V	177	233	54	-25.14	Pass
11001.10	27.93	8.02	1.5	37.46	Average Max	V	182	51	54	-16.54	Pass

Above 1GHz-40GHz – 802.11a – 5580MHz

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
1885.25	44.99	3.15	-12.38	35.75	Peak Max	V	164	338	74	-38.25	Pass
3550.57	43.35	4.31	-7.2	40.47	Peak Max	V	180	72	74	-33.53	Pass
11161.20	39.84	7.88	2.1	49.83	Peak Max	V	120	72	74	-24.17	Pass
1885.25	33.48	3.15	-12.38	24.24	Average Max	V	164	338	54	-29.76	Pass
3550.57	31.54	4.31	-7.2	28.66	Average Max	V	180	72	54	-25.35	Pass
11161.20	28.29	7.88	2.1	38.28	Average Max	V	120	72	54	-15.72	Pass

Above 1GHz-40GHz – 802.11a – 5700MHz

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
1884.03	45.45	3.15	-12.39	36.21	Peak Max	V	194	283	74	-37.79	Pass
3552.64	43.26	4.31	-7.19	40.38	Peak Max	V	190	42	74	-33.62	Pass
11400.53	40.57	7.68	2.36	50.61	Peak Max	V	107	19	74	-23.39	Pass
1884.03	33.52	3.15	-12.39	24.27	Average Max	V	194	283	54	-29.73	Pass
3552.64	31.84	4.31	-7.19	28.96	Average Max	V	190	42	54	-25.04	Pass
11400.53	29.03	7.68	2.36	39.07	Average Max	V	107	19	54	-14.93	Pass

Above 1GHz-40GHz – 802.11n-20M – 5500MHz

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
1896.39	45.01	3.16	-12.31	35.87	Peak Max	V	135	166	74	-38.13	Pass
3573.64	43.83	4.33	-7.13	41.03	Peak Max	V	100	280	74	-32.97	Pass
11001.79	40.37	8.02	1.51	49.9	Peak Max	V	109	245	74	-24.1	Pass
1896.39	33.62	3.16	-12.31	24.47	Average Max	V	135	166	54	-29.53	Pass
3573.64	31.47	4.33	-7.13	28.68	Average Max	V	100	280	54	-25.33	Pass
11001.79	28.04	8.02	1.51	37.57	Average Max	V	109	245	54	-16.43	Pass

Above 1GHz-40GHz – 802.11n-20M – 5580MHz

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
1911.38	45.47	3.18	-12.22	36.42	Peak Max	V	151	114	74	-37.58	Pass
3574.20	43.29	4.33	-7.12	40.5	Peak Max	V	138	71	74	-33.5	Pass
11162.13	39.95	7.88	2.1	49.93	Peak Max	V	134	190	74	-24.07	Pass
1911.38	33.44	3.18	-12.22	24.39	Average Max	V	151	114	54	-29.61	Pass
3574.20	31.75	4.33	-7.12	28.96	Average Max	V	138	71	54	-25.04	Pass
11162.13	28.51	7.88	2.1	38.5	Average Max	V	134	190	54	-15.5	Pass

Above 1GHz-40GHz – 802.11n-20M – 5700MHz

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
1908.88	44.88	3.17	-12.24	35.82	Peak Max	V	103	93	74	-38.18	Pass
3574.12	43.3	4.33	-7.12	40.51	Peak Max	V	151	273	74	-33.5	Pass
11399.59	40.14	7.68	2.36	50.18	Peak Max	V	120	20	74	-23.82	Pass
1908.88	33.43	3.17	-12.24	24.37	Average Max	V	103	93	54	-29.63	Pass
3574.12	31.68	4.33	-7.12	28.89	Average Max	V	151	273	54	-25.11	Pass
11399.59	28.88	7.68	2.36	38.92	Average Max	V	120	20	54	-15.08	Pass

Above 1GHz-40GHz – 802.11n-40M – 5510MHz

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
1890.01	46.18	3.15	-12.35	36.98	Peak Max	V	181	93	74	-37.02	Pass
3560.45	43.47	4.32	-7.17	40.62	Peak Max	V	145	76	74	-33.38	Pass
11001.09	40.21	8.02	1.5	49.74	Peak Max	V	108	351	74	-24.26	Pass
1890.01	33.84	3.15	-12.35	24.64	Average Max	V	181	93	54	-29.36	Pass
3560.45	31.62	4.32	-7.17	28.77	Average Max	V	145	76	54	-25.23	Pass
11001.09	28.02	8.02	1.5	37.55	Average Max	V	108	351	54	-16.45	Pass

Above 1GHz-40GHz – 802.11n-40M – 5550MHz

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
1890.75	45.01	3.15	-12.35	35.82	Peak Max	V	102	336	74	-38.19	Pass
3558.10	43.96	4.32	-7.18	41.1	Peak Max	V	190	237	74	-32.9	Pass
11140.97	39.98	7.9	2.04	49.92	Peak Max	V	162	106	74	-24.08	Pass
1890.75	33.58	3.15	-12.35	24.39	Average Max	V	102	336	54	-29.61	Pass
3558.10	31.95	4.32	-7.18	29.09	Average Max	V	190	237	54	-24.91	Pass
11140.97	28.14	7.9	2.04	38.08	Average Max	V	162	106	54	-15.92	Pass

Above 1GHz-40GHz – 802.11n-40M – 5670MHz

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
1889.96	45.37	3.15	-12.35	36.17	Peak Max	V	155	245	74	-37.83	Pass
3560.91	43.68	4.32	-7.17	40.83	Peak Max	V	166	262	74	-33.17	Pass
11339.87	40.63	7.73	2.03	50.39	Peak Max	V	171	191	74	-23.62	Pass
1889.96	33.68	3.15	-12.35	24.48	Average Max	V	155	245	54	-29.52	Pass
3560.91	31.86	4.32	-7.17	29.02	Average Max	V	166	262	54	-24.98	Pass
11339.87	28.9	7.73	2.03	38.66	Average Max	V	171	191	54	-15.34	Pass

Above 1GHz-40GHz – 802.11ac-80M – 5530MHz

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
1904.26	45.31	3.17	-12.26	36.22	Peak Max	V	152	244	74	-37.78	Pass
3583.92	43.4	4.34	-7.09	40.65	Peak Max	V	166	4	74	-33.35	Pass
11059.21	40.61	7.97	1.75	50.33	Peak Max	V	100	264	74	-23.67	Pass
1904.26	33.49	3.17	-12.26	24.4	Average Max	V	152	244	54	-29.61	Pass
3583.92	31.72	4.34	-7.09	28.97	Average Max	V	166	4	54	-25.04	Pass
11059.21	28.33	7.97	1.75	38.06	Average Max	V	100	264	54	-15.95	Pass

Above 1GHz-40GHz – 802.11ac-80M – 5610MHz

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
1903.76	45.25	3.17	-12.26	36.16	Peak Max	V	135	326	74	-37.84	Pass
3583.52	44.16	4.34	-7.1	41.41	Peak Max	V	185	147	74	-32.59	Pass
11219.55	39.4	7.83	2.13	49.37	Peak Max	V	140	101	74	-24.63	Pass
1903.76	33.46	3.17	-12.26	24.37	Average Max	V	135	326	54	-29.64	Pass
3583.52	31.83	4.34	-7.1	29.07	Average Max	V	185	147	54	-24.93	Pass
11219.55	28.21	7.83	2.13	38.18	Average Max	V	140	101	54	-15.82	Pass

Above 1GHz-40GHz – 802.11ac-160M – 5570MHz

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
1907.64	45.25	3.17	-12.24	36.18	Peak Max	V	148	104	74	-37.82	Pass
3520.22	43.37	4.29	-7.3	40.36	Peak Max	V	171	154	74	-33.64	Pass
11500.31	41.19	7.57	1.92	50.68	Peak Max	V	135	138	74	-23.32	Pass
1907.64	33.52	3.17	-12.24	24.45	Average Max	V	148	104	54	-29.55	Pass
3520.22	31.81	4.29	-7.3	28.8	Average Max	V	171	154	54	-25.2	Pass
11500.31	28.33	7.57	1.92	37.82	Average Max	V	135	138	54	-16.18	Pass

Above 1GHz-40GHz – 802.11ac-80+80M – 5210+5530MHz

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
1907.42	45.25	3.17	-12.24	36.18	Peak Max	V	148	104	74	-37.82	Pass
3520.48	43.36	4.29	-7.3	40.35	Peak Max	V	171	154	74	-33.65	Pass
11140.21	41.44	7.57	1.92	50.93	Peak Max	V	135	138	74	-23.07	Pass
1907.42	33.57	3.17	-12.24	24.5	Average Max	V	148	104	54	-29.5	Pass
3520.48	31.16	4.29	-7.3	28.15	Average Max	V	171	154	54	-25.85	Pass
11140.21	28.24	7.57	1.92	37.73	Average Max	V	135	138	54	-16.27	Pass

Above 1GHz-40GHz – 802.11ac-80+80M – 5210+5610MHz

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
1907.24	45.38	3.17	-12.24	36.31	Peak Max	V	148	104	74	-37.69	Pass
3520.18	43.25	4.29	-7.3	40.24	Peak Max	V	171	154	74	-33.76	Pass
11740.14	41.19	7.57	1.92	50.68	Peak Max	V	135	138	74	-23.32	Pass
1907.24	33.33	3.17	-12.24	24.26	Average Max	V	148	104	54	-29.74	Pass
3520.18	31.28	4.29	-7.3	28.27	Average Max	V	171	154	54	-25.73	Pass
11740.14	28.46	7.57	1.92	37.95	Average Max	V	135	138	54	-16.05	Pass

Above 1GHz-40GHz – 802.11ac-80+80M – 5210+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
1907.64	45.42	3.17	-12.24	36.35	Peak Max	V	148	104	74	-37.65	Pass
3520.23	43.71	4.29	-7.3	40.7	Peak Max	V	171	154	74	-33.3	Pass
11820.24	41.25	7.57	1.92	50.74	Peak Max	V	135	138	74	-23.26	Pass
1907.64	33.47	3.17	-12.24	24.4	Average Max	V	148	104	54	-29.6	Pass
3520.23	31.58	4.29	-7.3	28.57	Average Max	V	171	154	54	-25.43	Pass
11820.24	28.2	7.57	1.92	37.69	Average Max	V	135	138	54	-16.31	Pass

Above 1GHz-40GHz – 802.11ac-80+80M – 5290+5530MHz

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
1907.36	45.26	3.17	-12.24	36.19	Peak Max	V	148	104	74	-37.81	Pass
3520.18	43.48	4.29	-7.3	40.47	Peak Max	V	171	154	74	-33.53	Pass
10985.27	41.53	7.57	1.92	51.02	Peak Max	V	135	138	74	-22.98	Pass
1907.36	33.42	3.17	-12.24	24.35	Average Max	V	148	104	54	-29.65	Pass
3520.18	31.38	4.29	-7.3	28.37	Average Max	V	171	154	54	-25.63	Pass
10985.27	28.42	7.57	1.92	37.91	Average Max	V	135	138	54	-16.09	Pass

Above 1GHz-40GHz – 802.11ac-80+80M – 5290+5610MHz

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
1896.32	44.83	3.16	-12.31	35.68	Peak Max	V	100	284	74	-38.32	Pass
3542.87	43.68	4.31	-7.22	40.76	Peak Max	V	100	244	74	-33.24	Pass
10479.21	40	7.23	0.33	47.56	Peak Max	V	116	217	74	-26.44	Pass
1896.32	33.56	3.16	-12.31	24.41	Average Max	V	100	284	54	-29.59	Pass
3542.87	31.8	4.31	-7.22	28.89	Average Max	V	100	244	54	-25.12	Pass
10479.21	28.22	7.23	0.33	35.78	Average Max	V	116	217	54	-18.22	Pass

Above 1GHz-40GHz – 802.11ac-80+80M – 5290+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
1896.99	45.44	3.16	-12.3	36.29	Peak Max	V	181	163	74	-37.71	Pass
3534.13	43.08	4.3	-7.25	40.13	Peak Max	V	101	94	74	-33.87	Pass
10401.83	39.64	7.24	0.14	47.02	Peak Max	V	143	351	74	-26.98	Pass
1896.99	33.64	3.16	-12.3	24.5	Average Max	V	181	163	54	-29.5	Pass
3534.13	31.53	4.3	-7.25	28.58	Average Max	V	101	94	54	-25.42	Pass
10401.83	28.47	7.24	0.14	35.85	Average Max	V	143	351	54	-18.15	Pass

Above 1GHz-40GHz – 802.11ac-80+80M – 5530+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
1873.06	45.55	3.14	-12.47	36.22	Peak Max	V	122	109	74	-37.78	Pass
3551.56	43.74	4.31	-7.2	40.86	Peak Max	V	196	55	74	-33.15	Pass
10400.74	40.03	7.24	0.14	47.4	Peak Max	V	133	243	74	-26.6	Pass
1873.06	33.27	3.14	-12.47	23.93	Average Max	V	122	109	54	-30.07	Pass
3551.56	31.9	4.31	-7.2	29.02	Average Max	V	196	55	54	-24.98	Pass
10400.74	28.29	7.24	0.14	35.67	Average Max	V	133	243	54	-18.33	Pass

Above 1GHz-40GHz – 802.11ac-80+80M – 5610+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
1873.74	45.12	3.14	-12.46	35.79	Peak Max	V	129	327	74	-38.21	Pass
3551.99	42.93	4.31	-7.19	40.05	Peak Max	V	179	245	74	-33.96	Pass
10481.32	41.8	7.23	0.33	49.37	Peak Max	V	199	75	74	-24.63	Pass
1873.74	33.27	3.14	-12.46	23.94	Average Max	V	129	327	54	-30.06	Pass
3551.99	31.69	4.31	-7.19	28.8	Average Max	V	179	245	54	-25.2	Pass
10481.32	28.52	7.23	0.33	36.09	Average Max	V	199	75	54	-17.91	Pass

















Above 1GHz-40GHz – Co-Location for 2.4GHz and 5GHz







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
1911.71	44.99	3.18	-12.22	35.95	Peak Max	V	99	163	74	-38.05	Pass
3560.23	44.77	4.32	-7.17	41.92	Peak Max	V	176	159	74	-32.08	Pass
10461.64	40.7	7.24	0.29	48.22	Peak Max	V	119	60	74	-25.78	Pass
1911.71	33.32	3.18	-12.22	24.27	Average Max	V	99	163	54	-29.73	Pass
3560.23	31.94	4.32	-7.17	29.09	Average Max	V	176	159	54	-24.91	Pass
10461.64	28.09	7.24	0.29	35.61	Average Max	V	119	60	54	-18.39	Pass

Annex A. TEST INSTRUMENT

Instrument	Model	Serial #	Cal Date	Cal Cycle	Cal Due	In use
Conducted Emissions						
R & S Receiver	ESIB 40	100179	05/23/2016	1 Year	05/23/2017	<input checked="" type="checkbox"/>
CHASE LISN	MN2050B	1018	08/07/2016	1 Year	08/07/2017	<input checked="" type="checkbox"/>
Radiated Emissions						
R & S Receiver	ESL6	100178	05/27/2016	1 Year	05/27/2017	<input checked="" type="checkbox"/>
R & S Receiver	ESIB 40	100179	05/23/2016	1 Year	05/23/2017	<input checked="" type="checkbox"/>
ETS-Lingren Loop Antenna	6512	00049120	05/12/2016	1 Year	05/12/2017	<input checked="" type="checkbox"/>
Bi-Log antenna (30MHz~2GHz)	JB1	A030702	08/12/2016	1 Year	08/12/2017	<input checked="" type="checkbox"/>
3 Meters SAC	3M	N/A	08/08/2016	1 Year	08/08/2017	<input checked="" type="checkbox"/>
10 Meters SAC	10M	N/A	09/05/2016	1 Year	09/05/2017	<input checked="" type="checkbox"/>
RF Conducted Measurement						
Spectrum Analyzer	N9010A	10SL0219	08/20/2016	1 Year	08/20/2017	<input checked="" type="checkbox"/>
R & S Receiver	ESIB 40	100179	05/23/2016	1 Year	05/23/2017	<input checked="" type="checkbox"/>
ETS-Lingren USB RF Power Sensor	7002-006	10SL0190	09/03/2016	1 Year	09/03/2017	<input checked="" type="checkbox"/>

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		<p>Radio: A1. Terminal equipment for purpose of calling</p> <p>Telecom: B1. Specified radio equipment specified in Article 38-2, Paragraph 1, Item 1 of the Radio Law</p>
Korea CAB Accreditation		<p>EMI: KCC Notice 2008-39, RRL Notice 2008-3: CA Procedures for EMI KN22: Test Method for EMI</p> <p>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</p>
		<p>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</p> <p>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</p>
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		<p>EMC: AS/NZS CISPR 11, AS/NZS CISPR 14.1, AS/NZS CISPR22, AS/NZS 61000.6.3, AS/NZS 61000.6.4</p>
		<p>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</p>
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