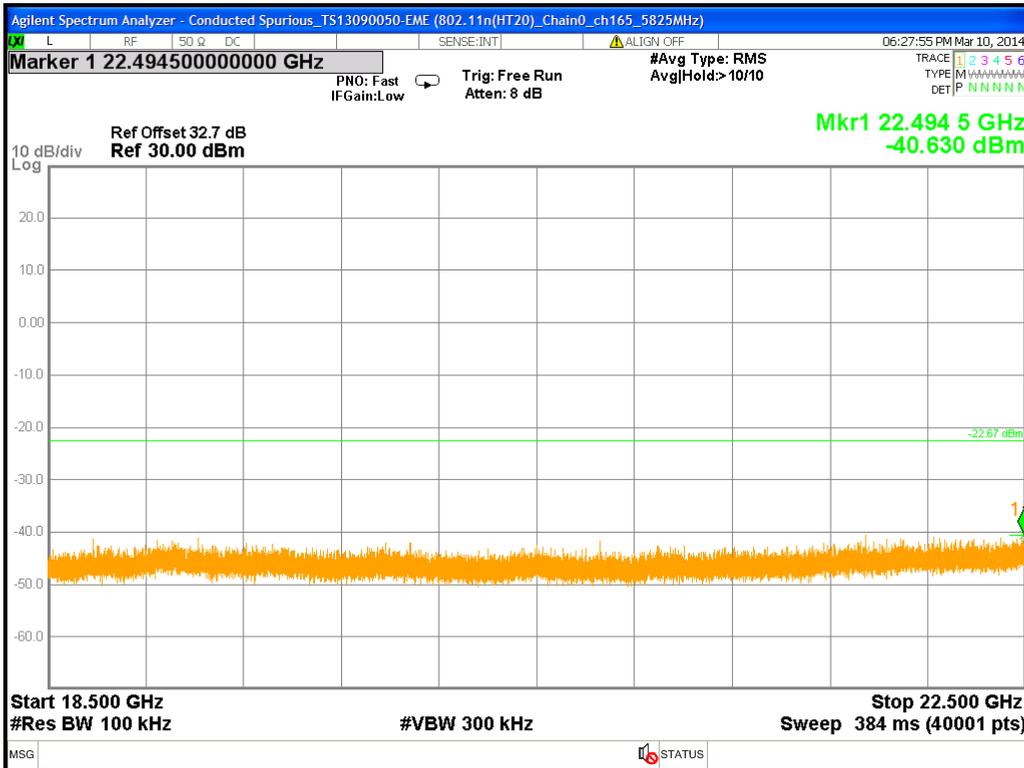
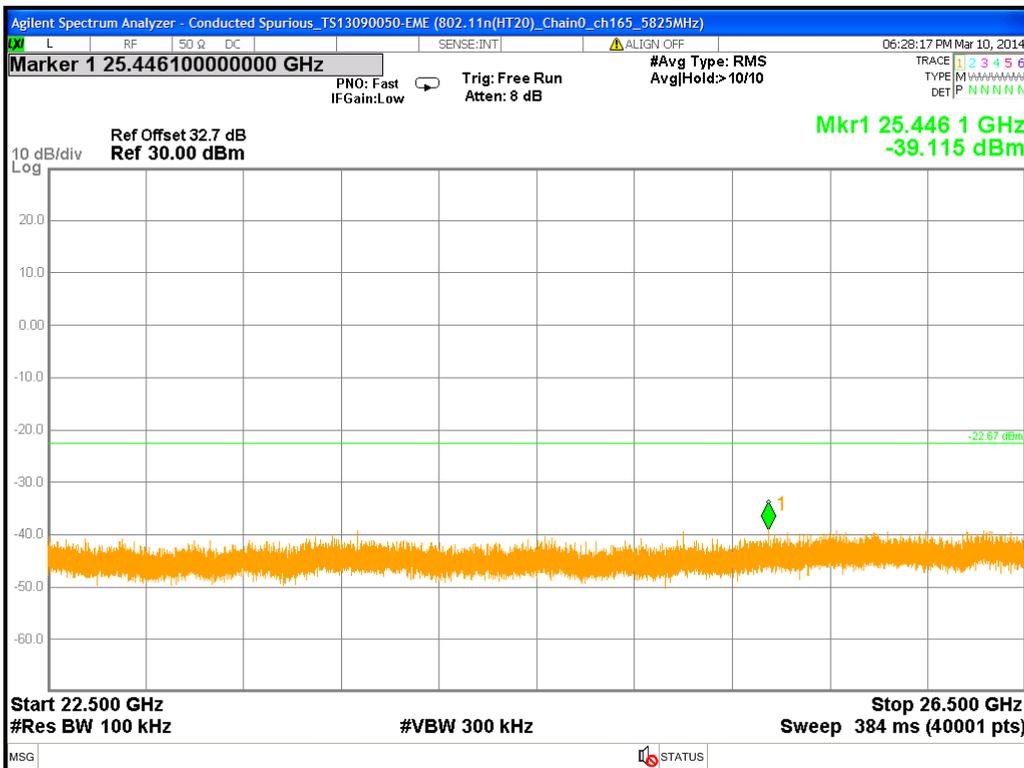


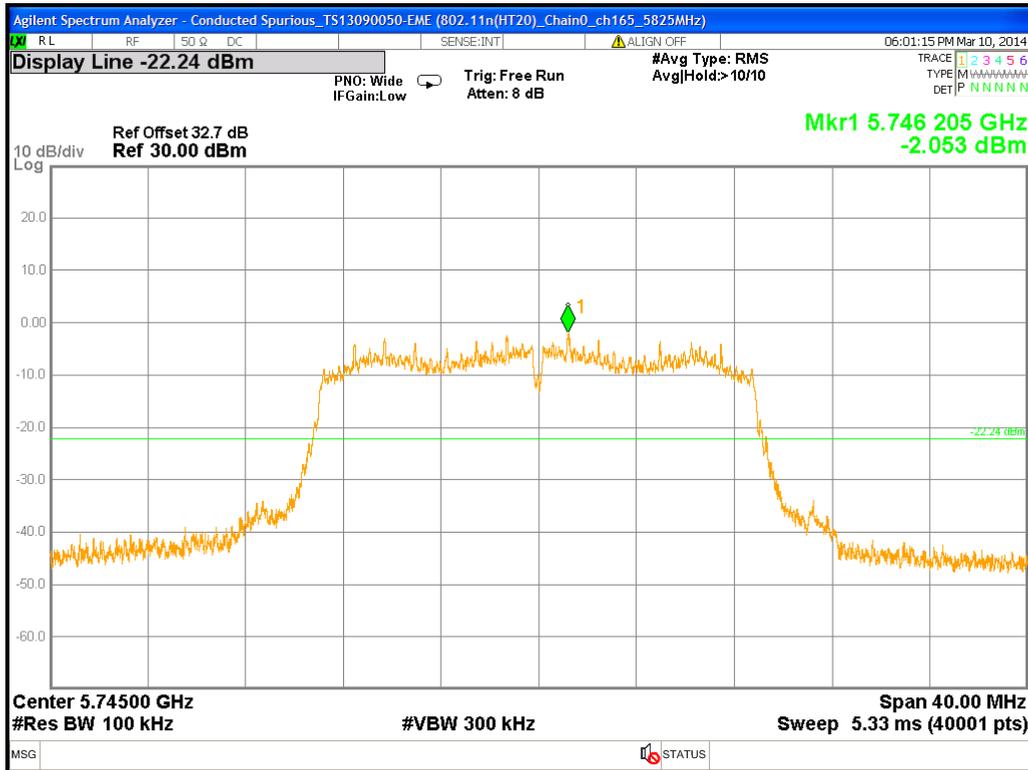
Chain0 : Conducted Spurious @ 802.11n(HT20) Mode ch165 (18.5G~22.5G)



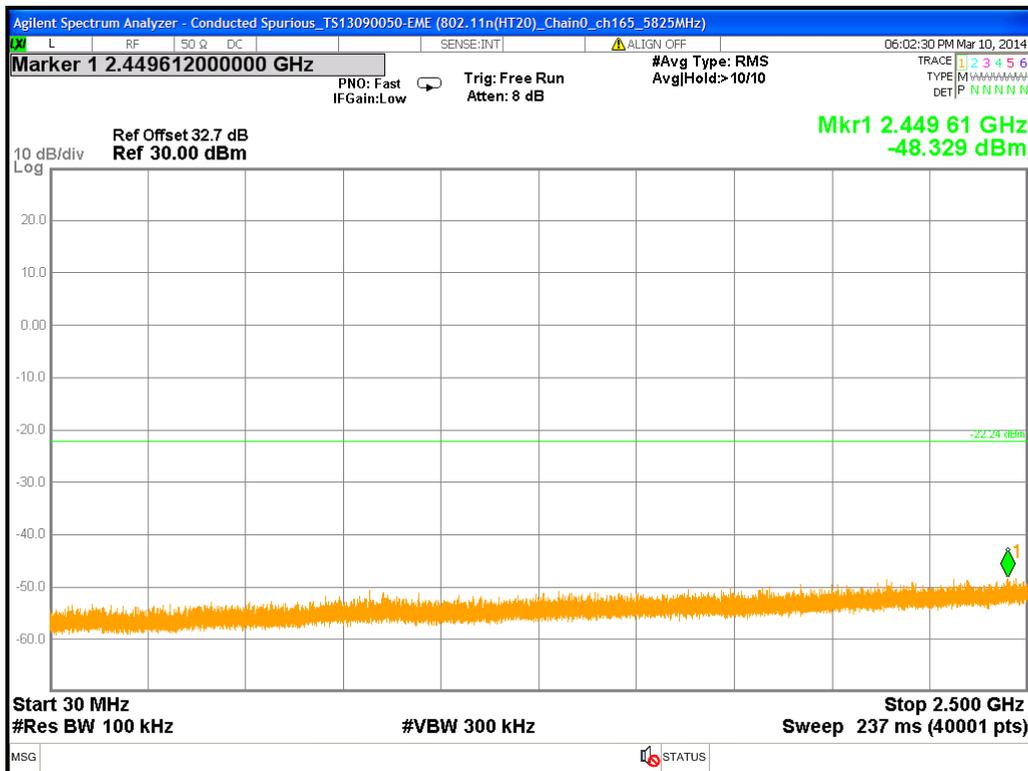
Chain0 : Conducted Spurious @ 802.11n(HT20) Mode ch165 (22.5G~26.5G)



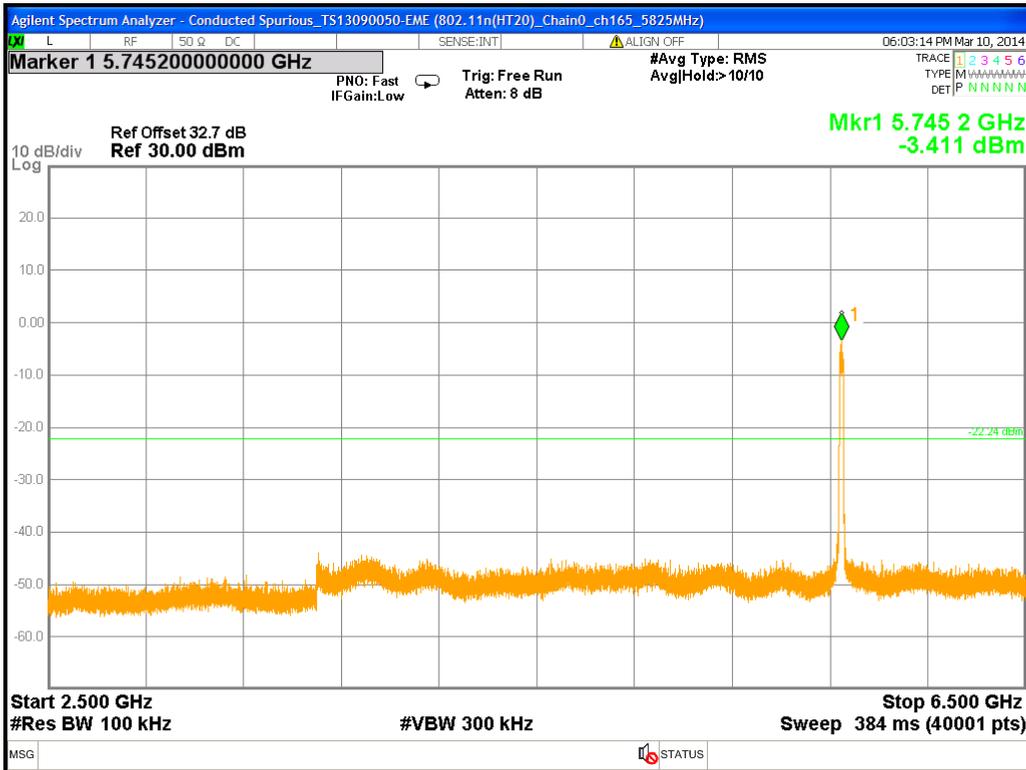
Chain1 : Conducted Spurious @ 802.11n(HT20) Mode ch149



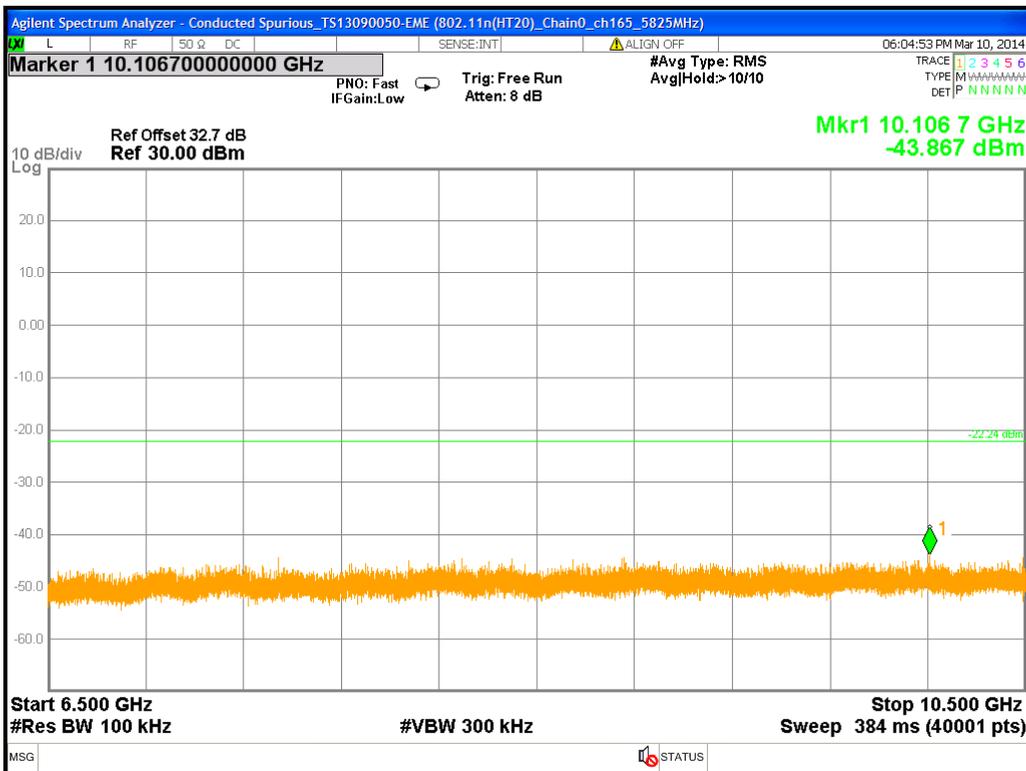
Chain1 : Conducted Spurious @ 802.11n(HT20) Mode ch149 (30M~2.5G)



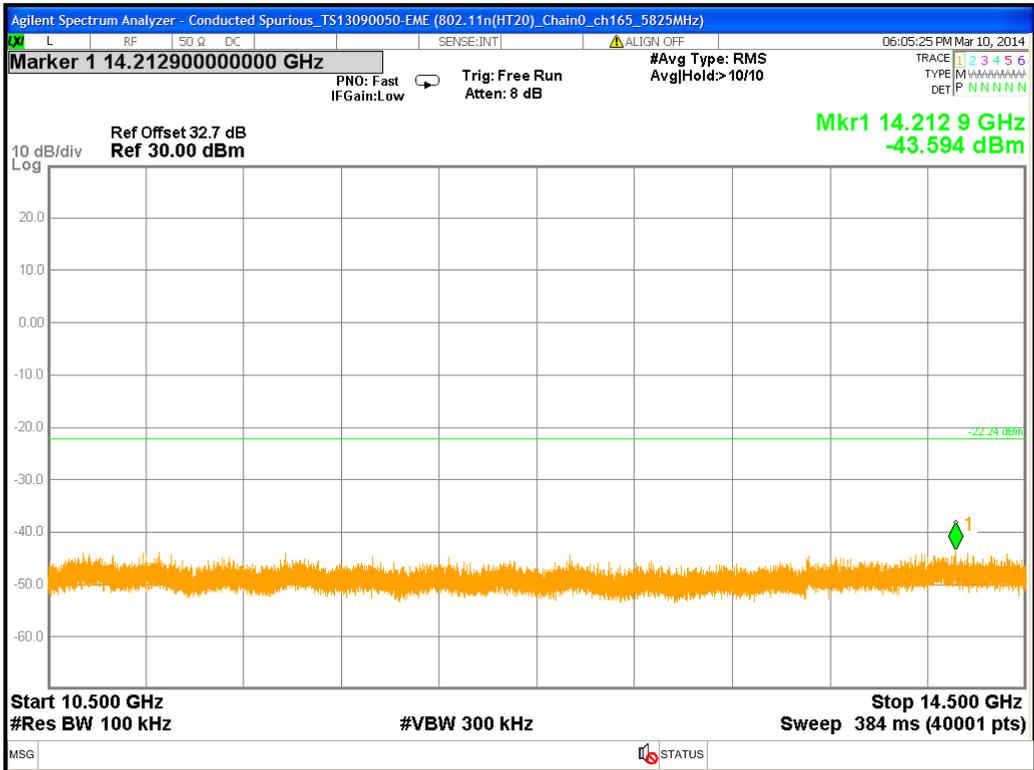
Chain1 : Conducted Spurious @ 802.11n(HT20) Mode ch149 (2.5G~6.5G)



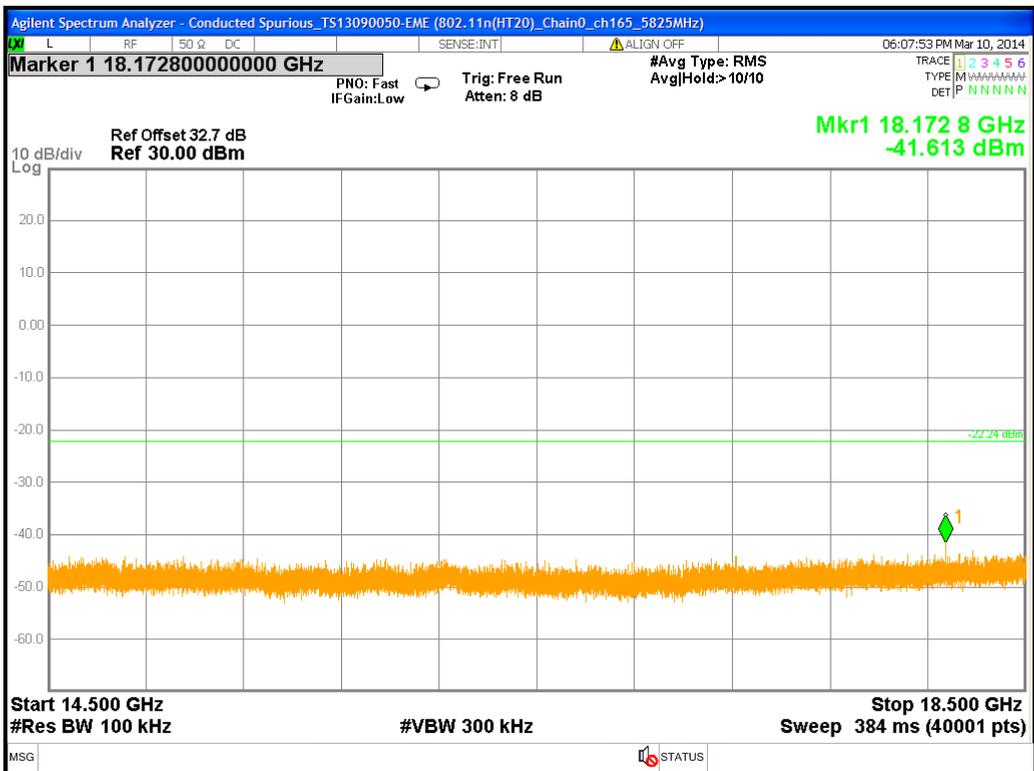
Chain1 : Conducted Spurious @ 802.11n(HT20) Mode ch149 (6.5G~10.5G)



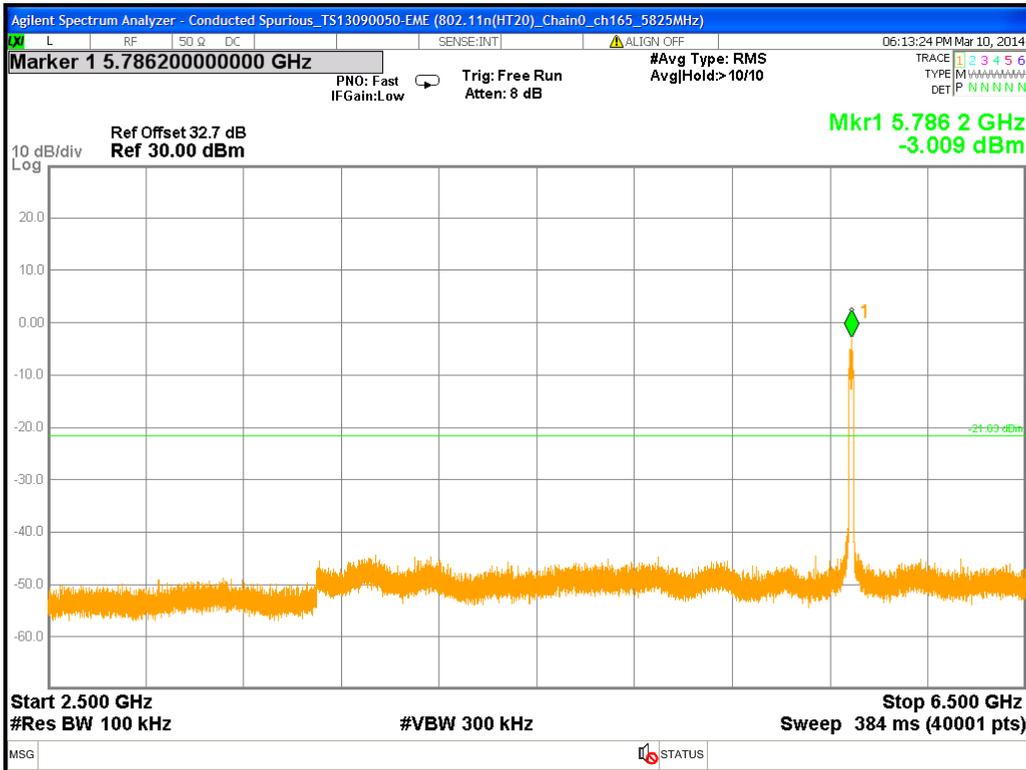
Chain1 : Conducted Spurious @ 802.11n(HT20) Mode ch149 (10.5G~14.5G)



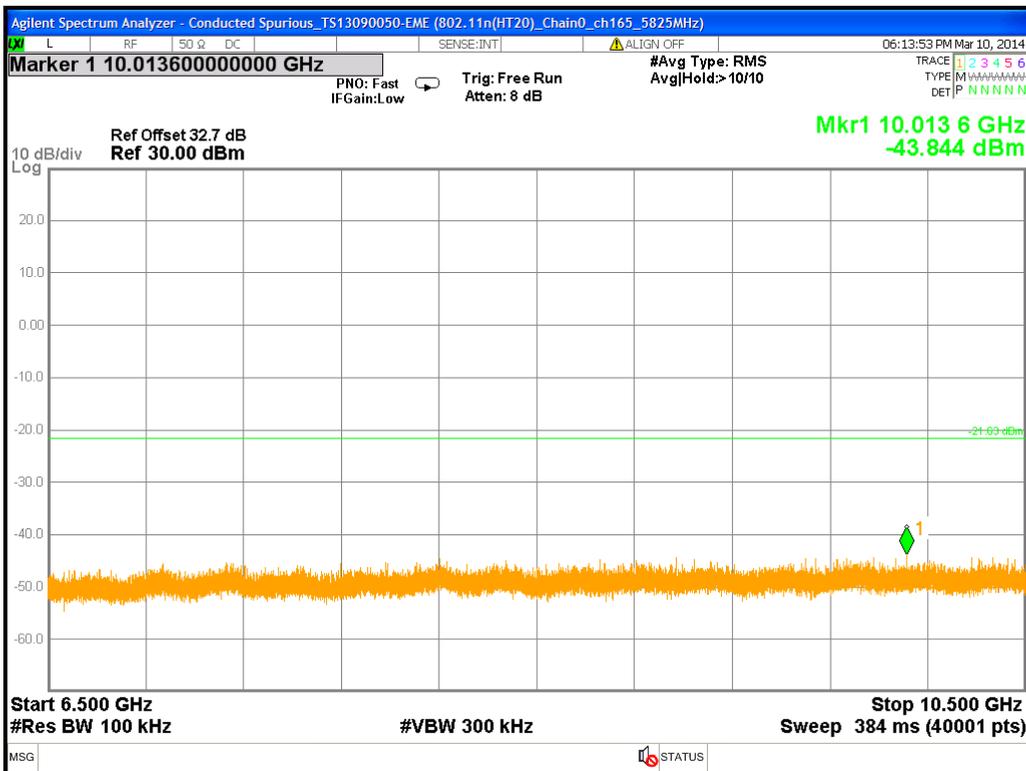
Chain1 : Conducted Spurious @ 802.11n(HT20) Mode ch149 (14.5G~18.5G)



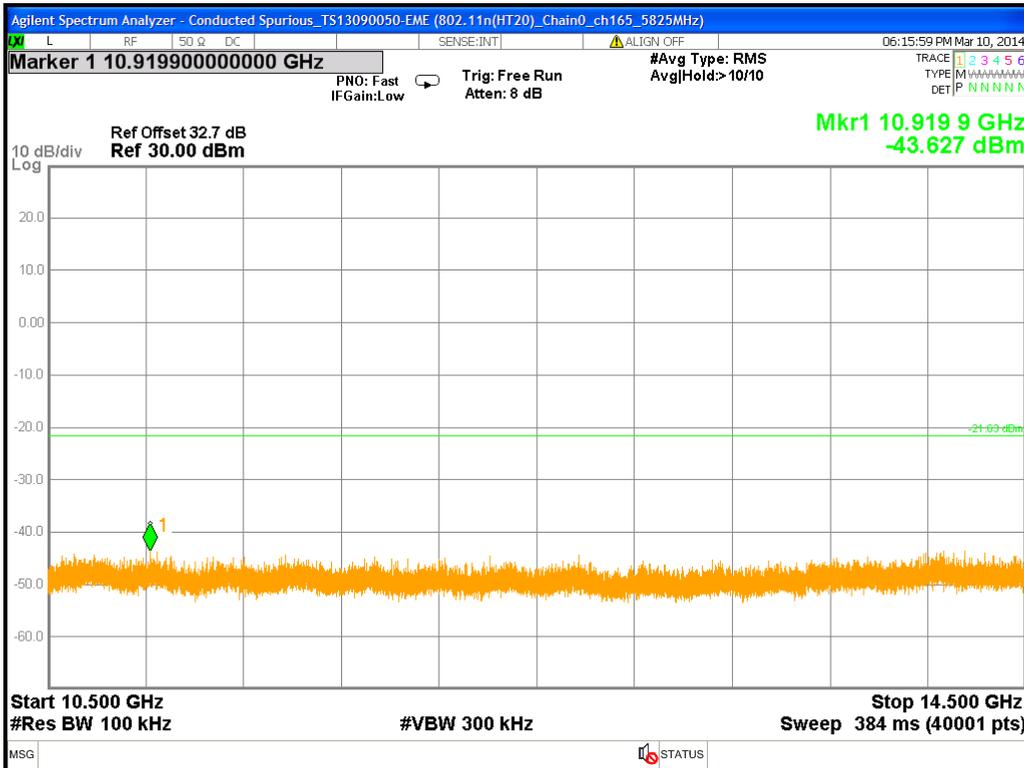
Chain1 : Conducted Spurious @ 802.11n(HT20) Mode ch157 (2.5G~6.5G)



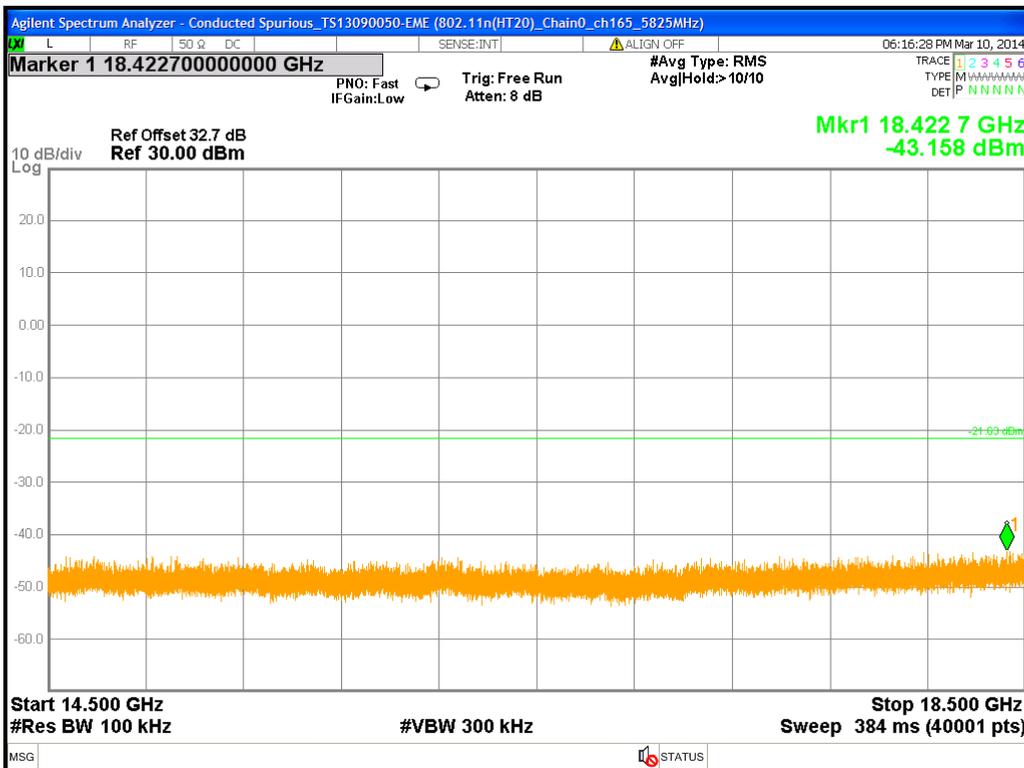
Chain1 : Conducted Spurious @ 802.11n(HT20) Mode ch157 (6.5G~10.5G)



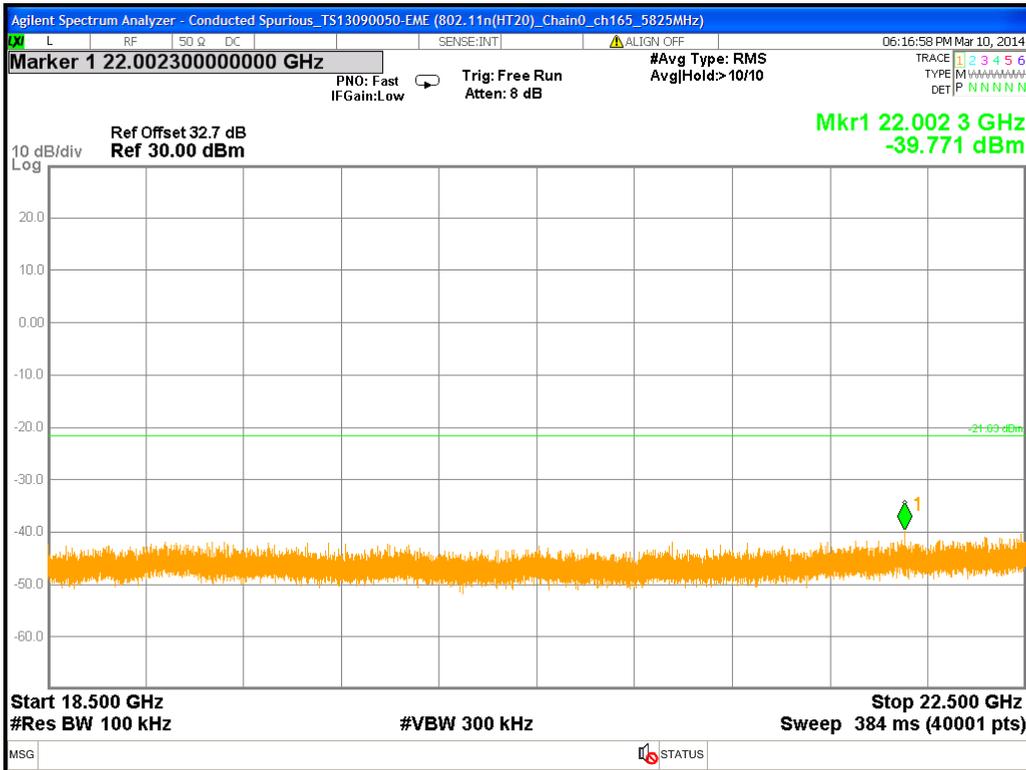
Chain1 : Conducted Spurious @ 802.11n(HT20) Mode ch157 (10.5G~14.5G)



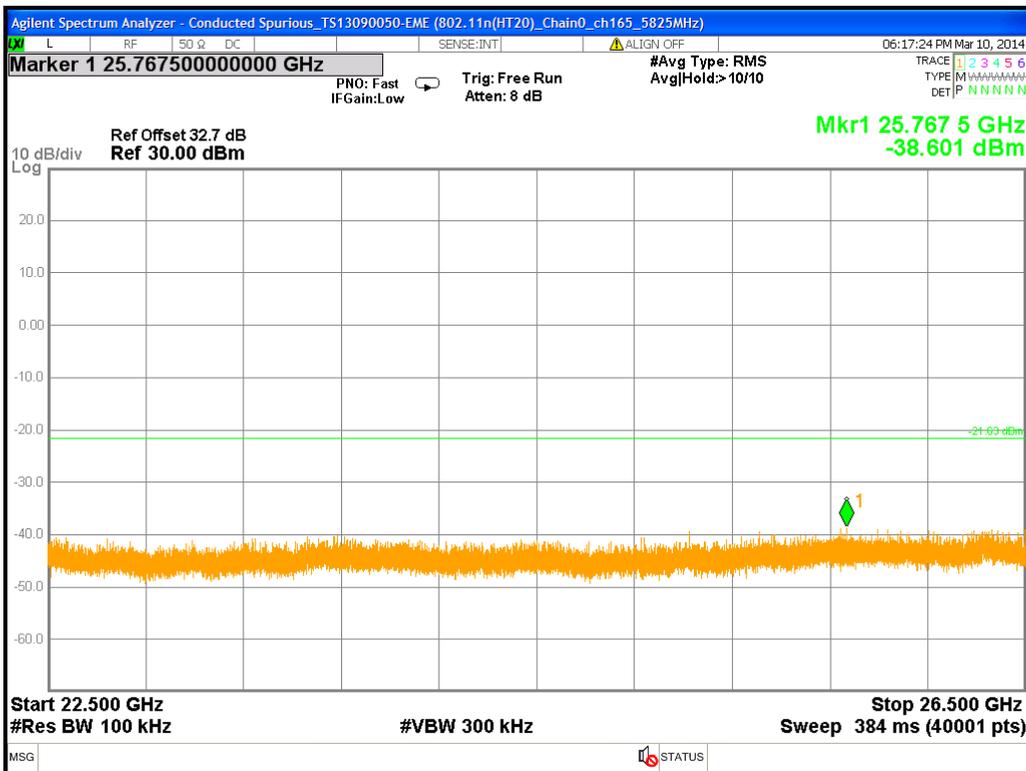
Chain1 : Conducted Spurious @ 802.11n(HT20) Mode ch157 (14.5G~18.5G)



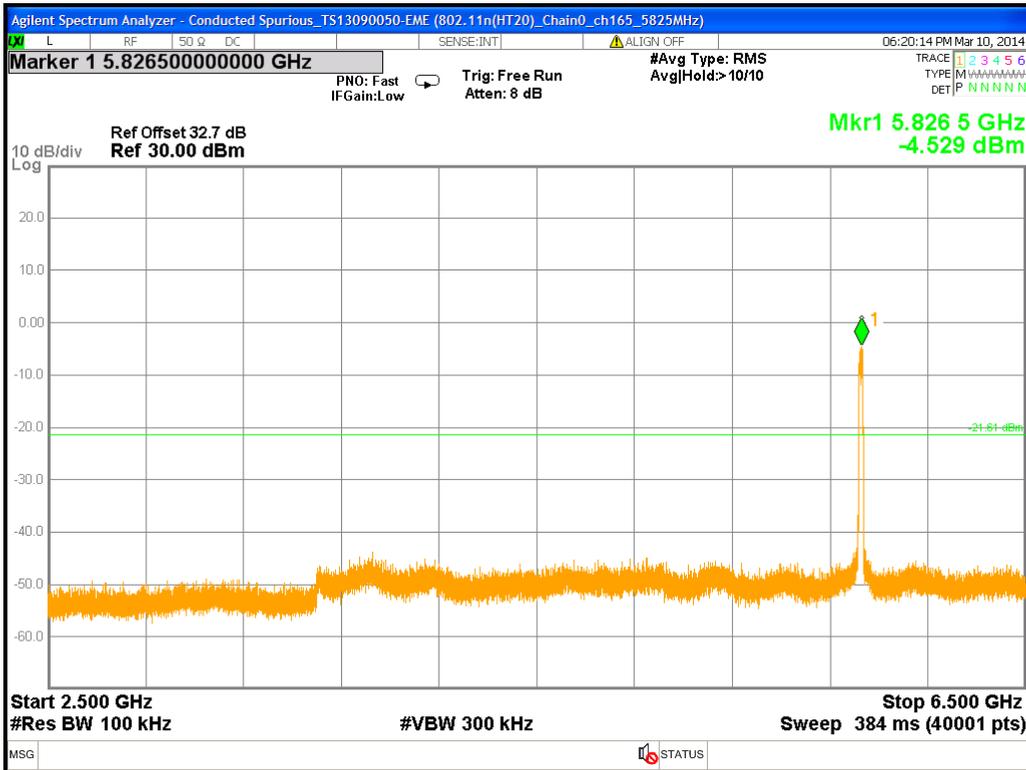
Chain1 : Conducted Spurious @ 802.11n(HT20) Mode ch157 (18.5G~22.5G)



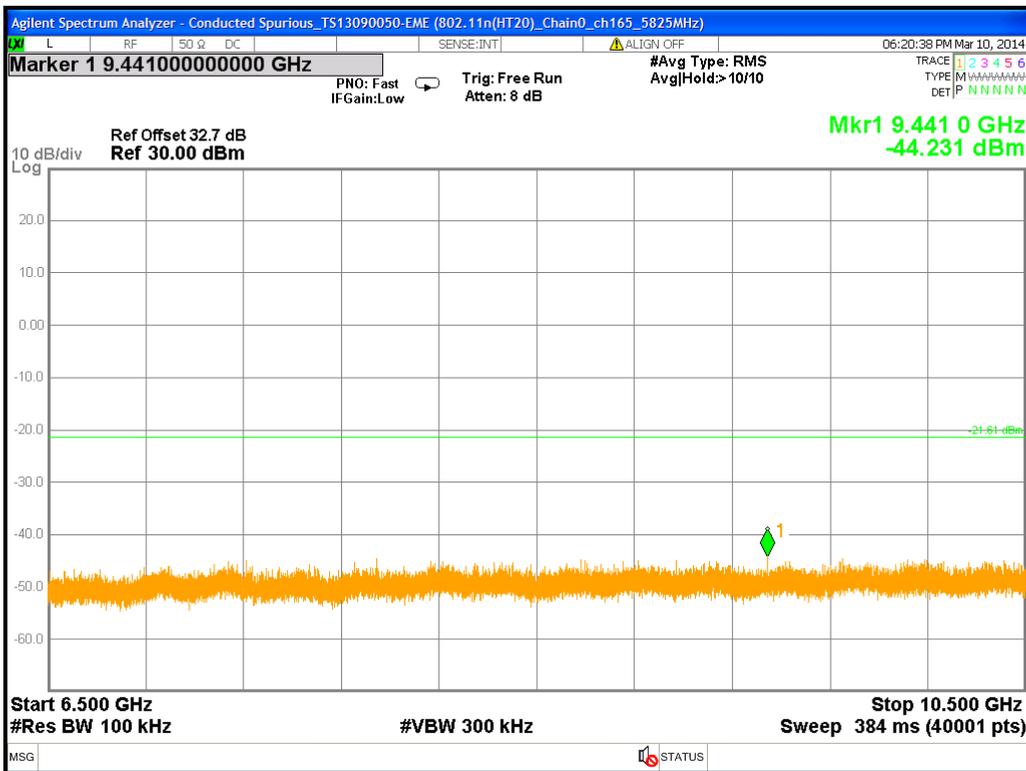
Chain1 : Conducted Spurious @ 802.11n(HT20) Mode ch157 (22.5G~26.5G)



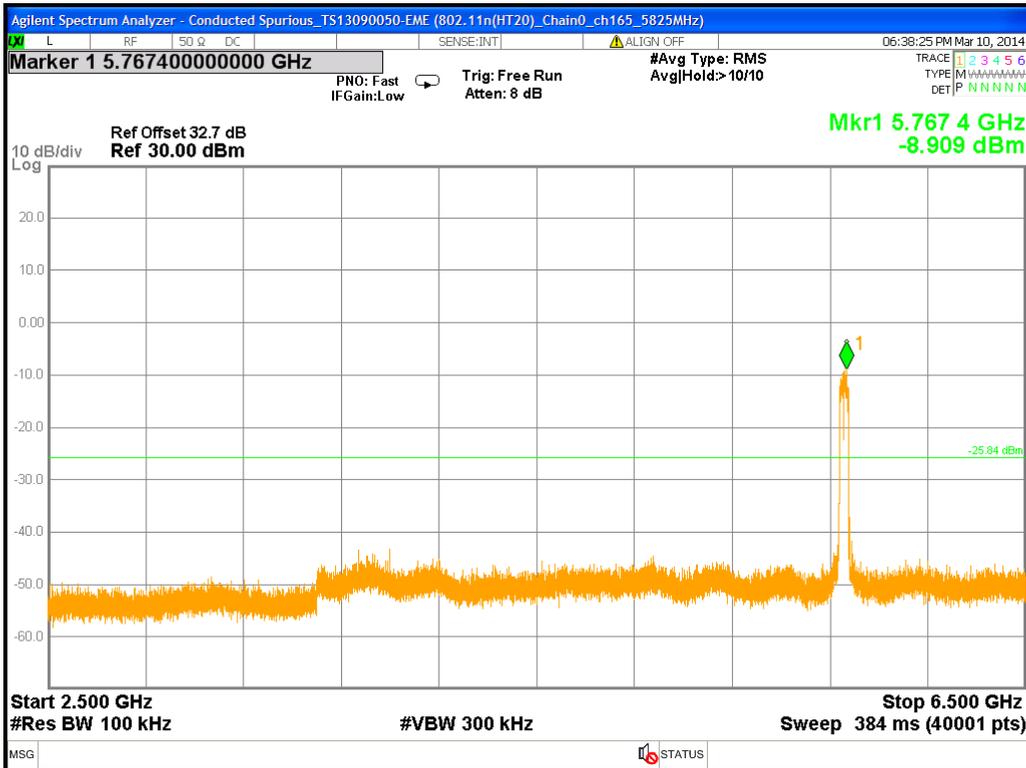
Chain1 : Conducted Spurious @ 802.11n(HT20) Mode ch165 (2.5G~6.5G)



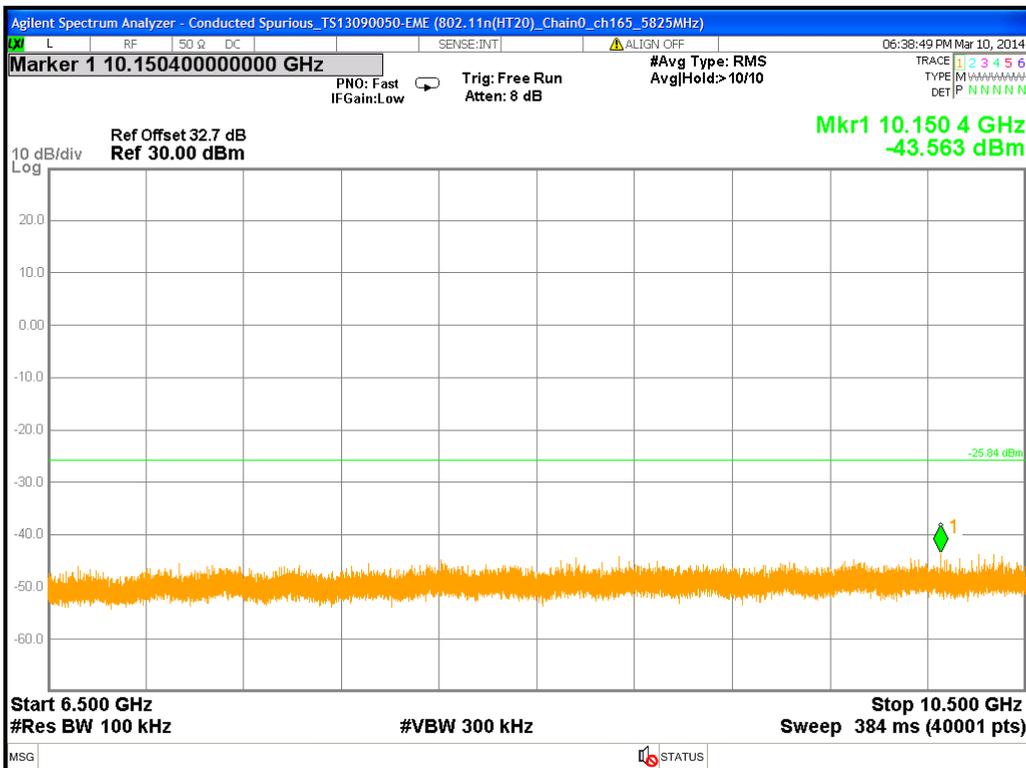
Chain1 : Conducted Spurious @ 802.11n(HT20) Mode ch165 (6.5G~10.5G)



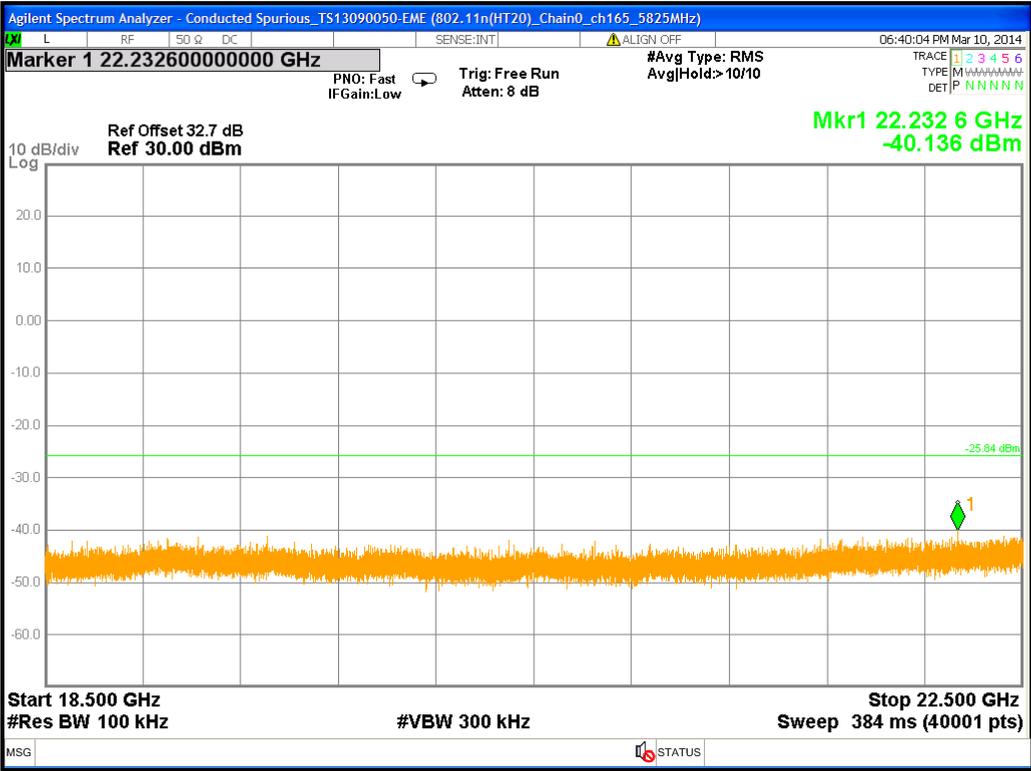
Chain0 : Conducted Spurious @ 802.11n(HT40) Mode ch151 (2.5G~6.5G)



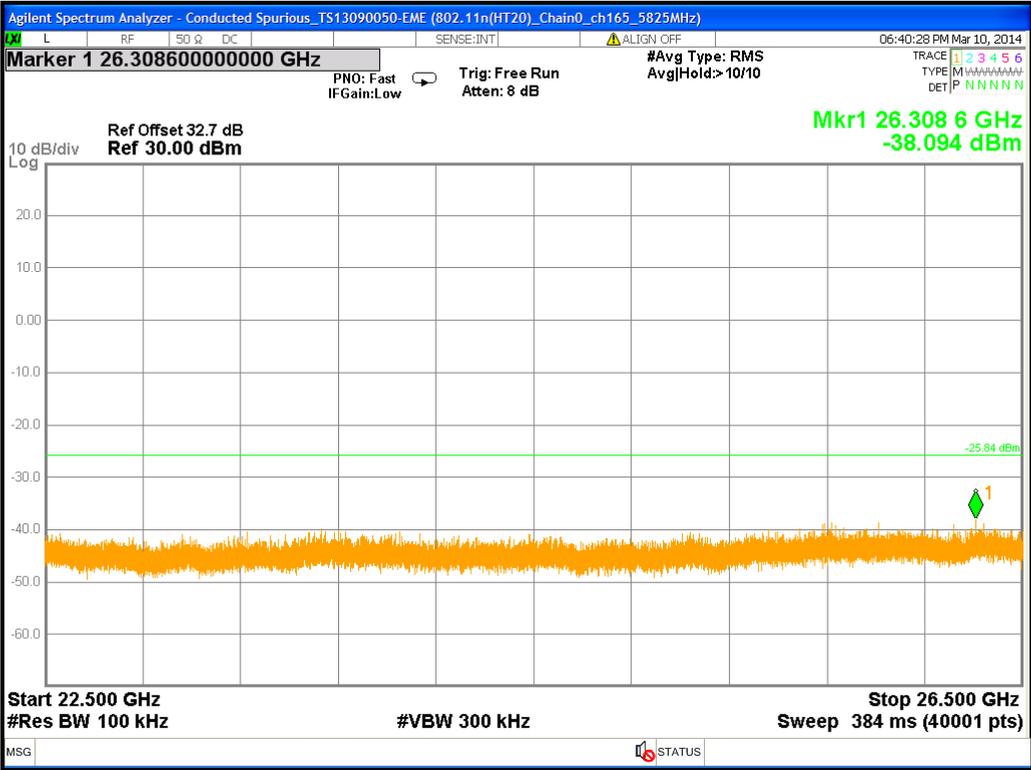
Chain0 : Conducted Spurious @ 802.11n(HT40) Mode ch151 (6.5G~10.5G)



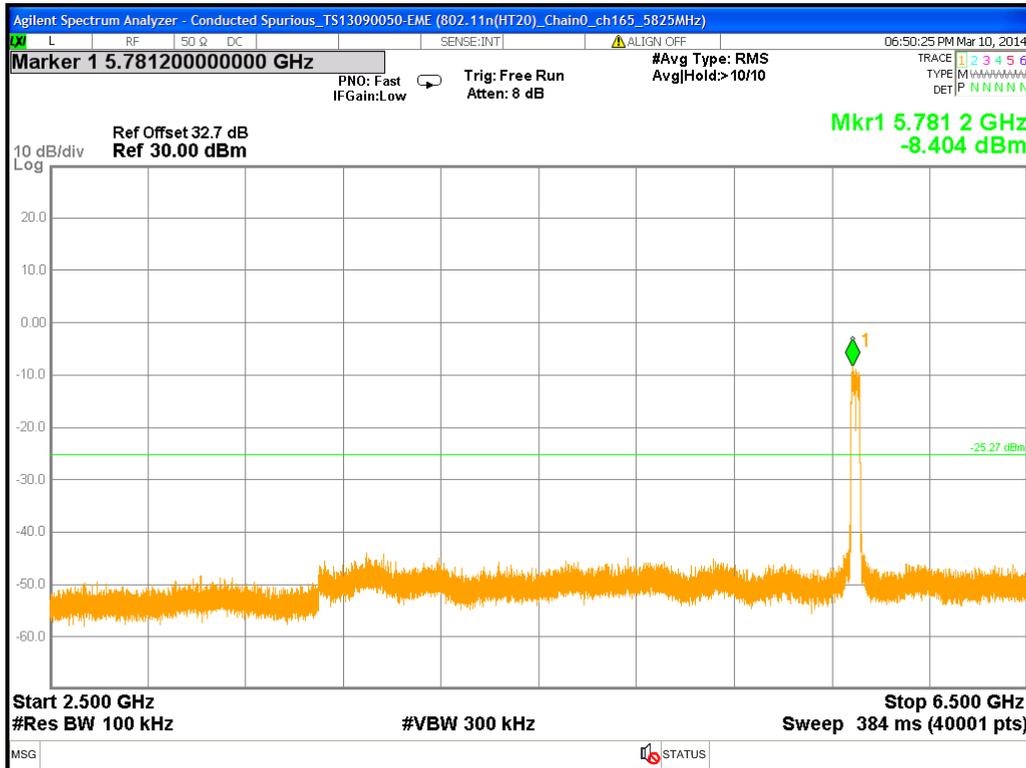
Chain0 : Conducted Spurious @ 802.11n(HT40) Mode ch151 (18.5G~22.5G)



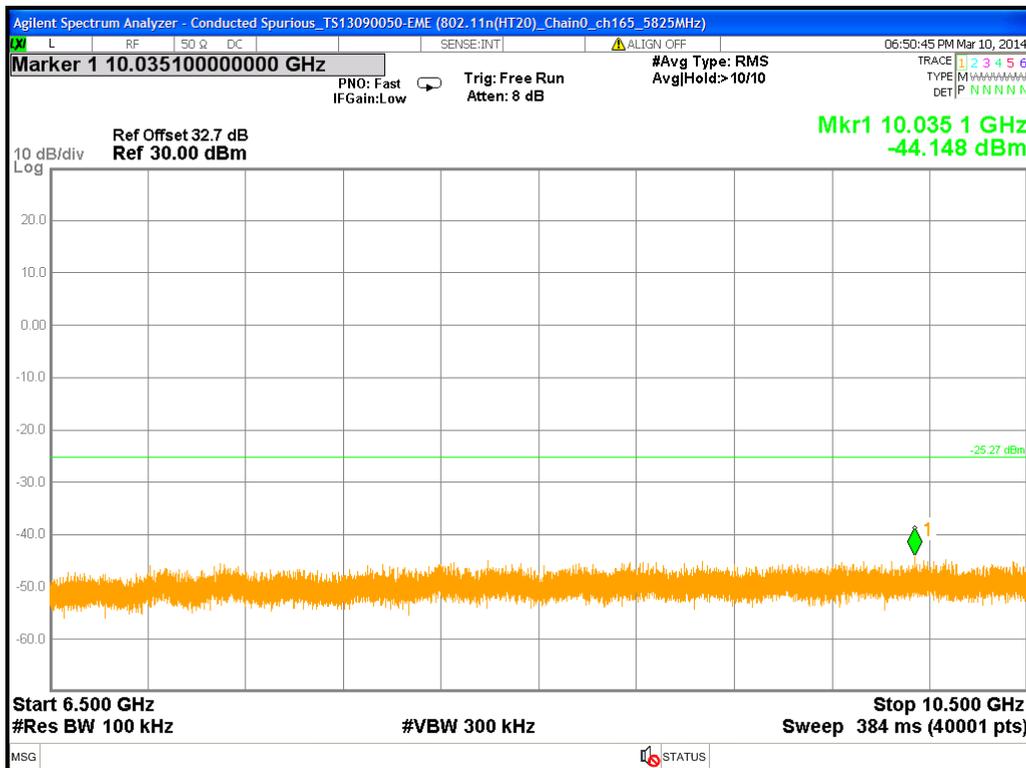
Chain0 : Conducted Spurious @ 802.11n(HT40) Mode ch151 (22.5G~26.5G)



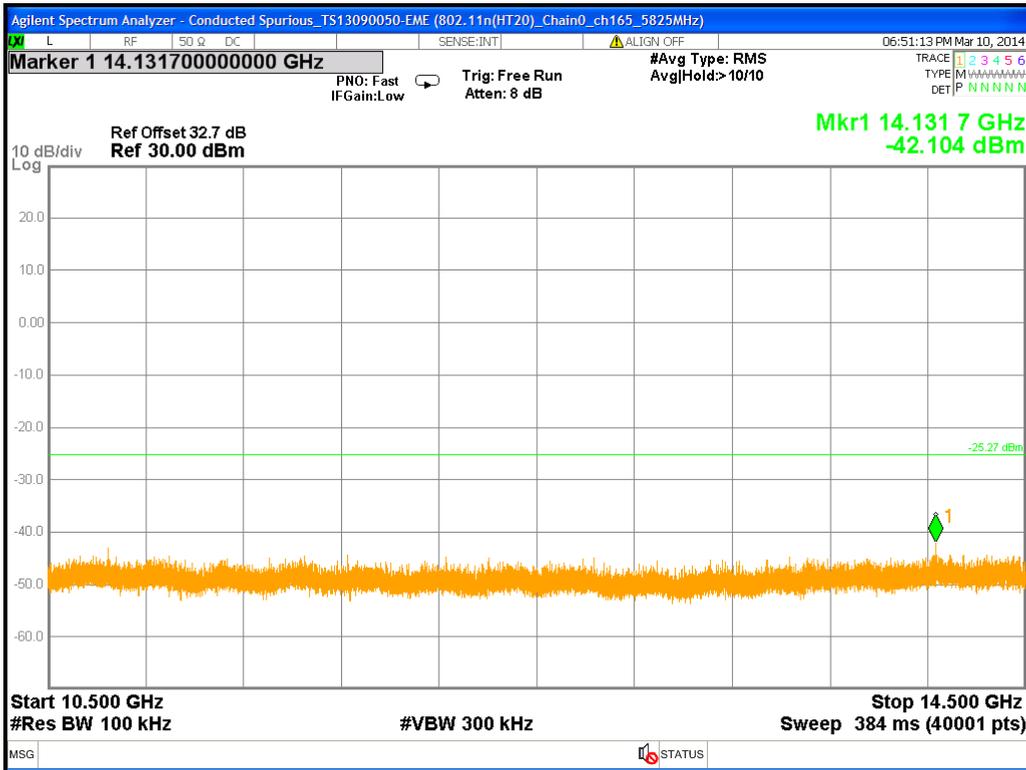
Chain0 : Conducted Spurious @ 802.11n(HT40) Mode ch159 (2.5G~6.5G)



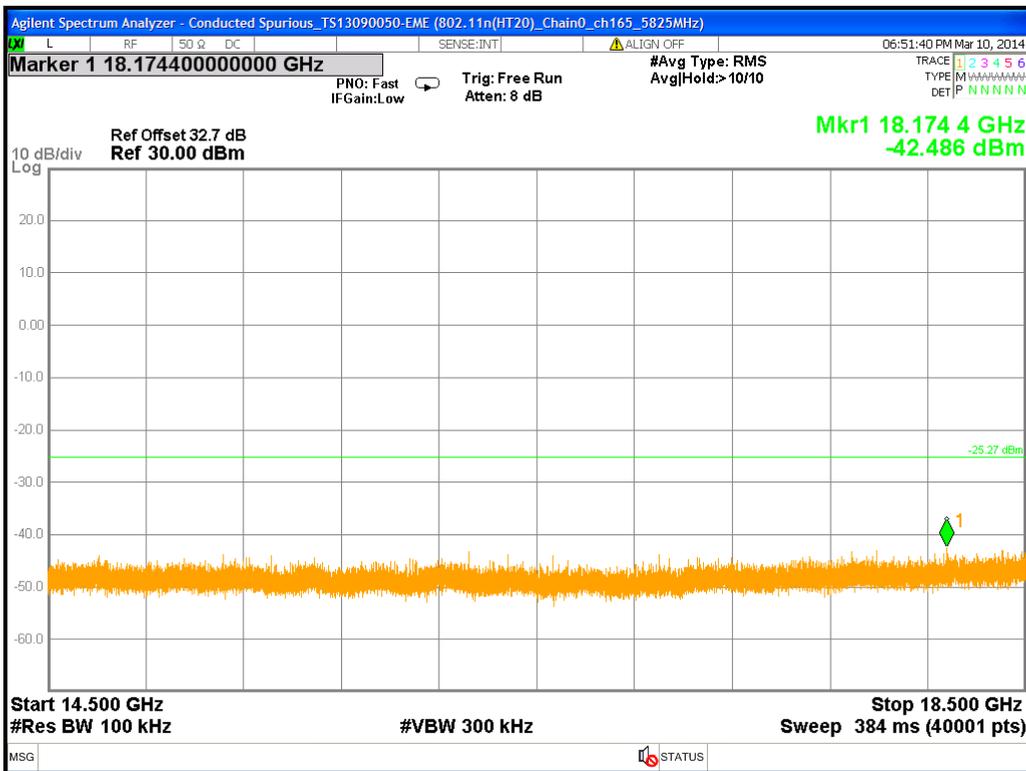
Chain0 : Conducted Spurious @ 802.11n(HT40) Mode ch159 (6.5G~10.5G)



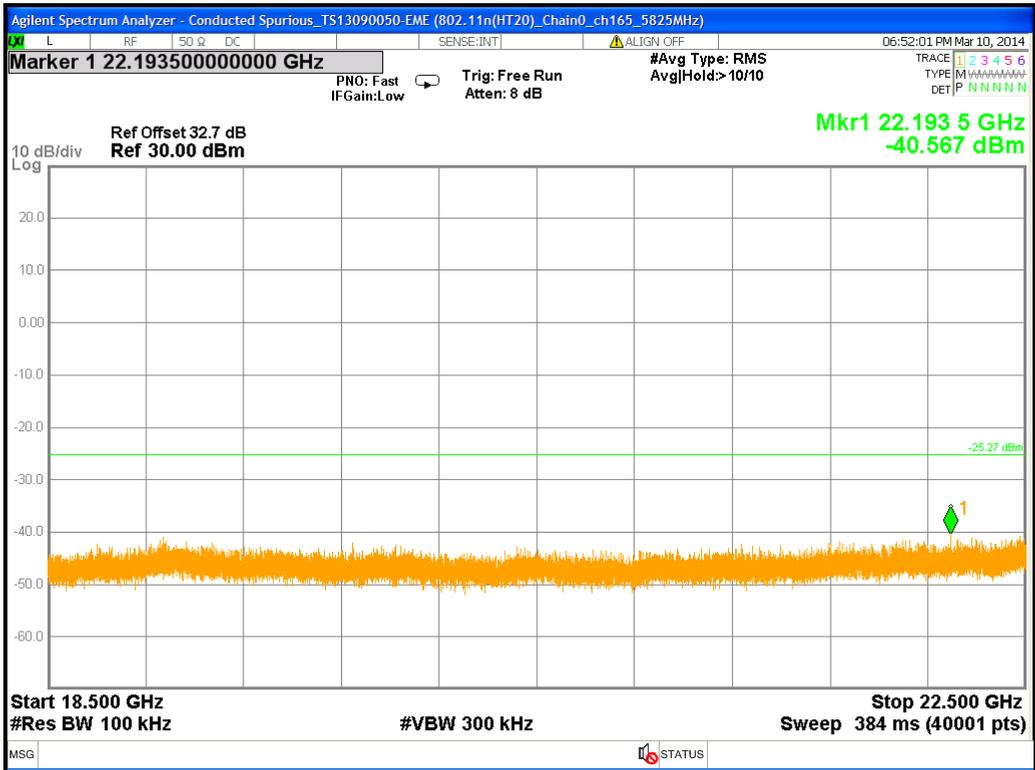
Chain0 : Conducted Spurious @ 802.11n(HT40) Mode ch159 (10.5G~14.5G)



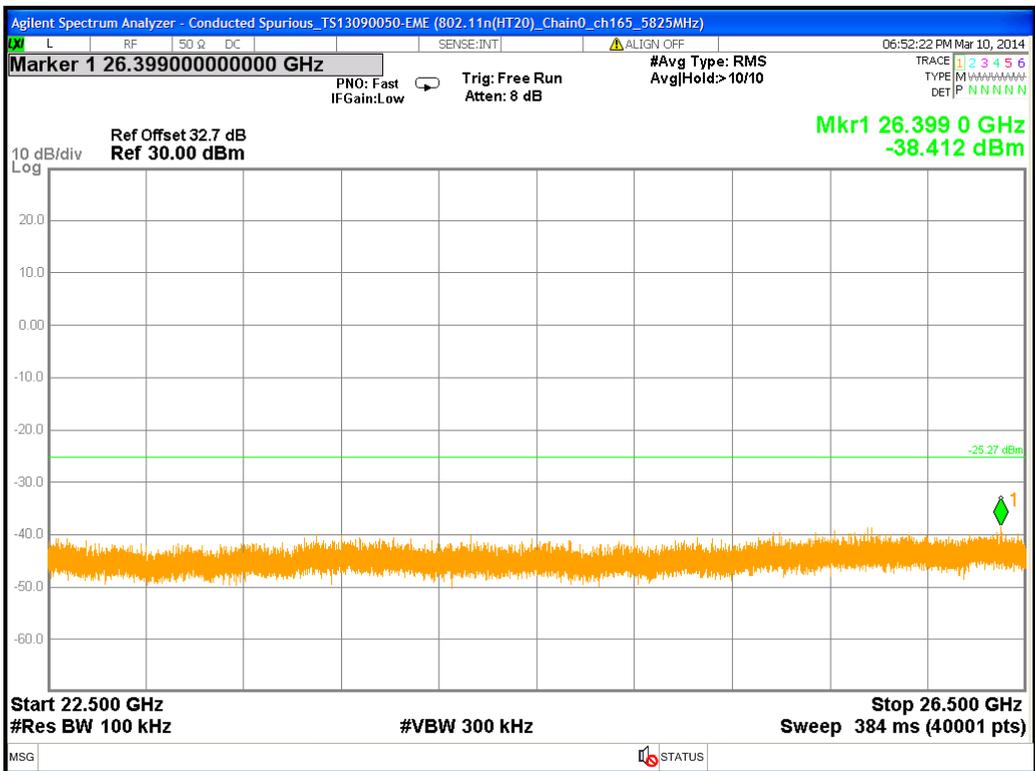
Chain0 : Conducted Spurious @ 802.11n(HT40) Mode ch159 (14.5G~18.5G)



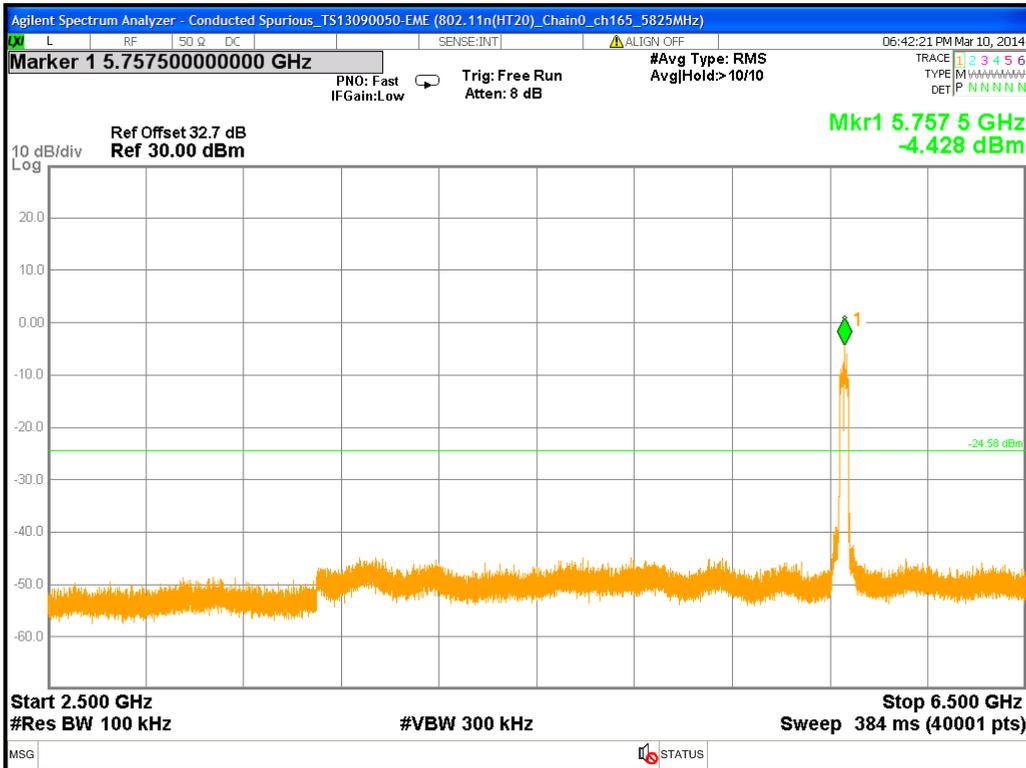
Chain0 : Conducted Spurious @ 802.11n(HT40) Mode ch159 (18.5G~22.5G)



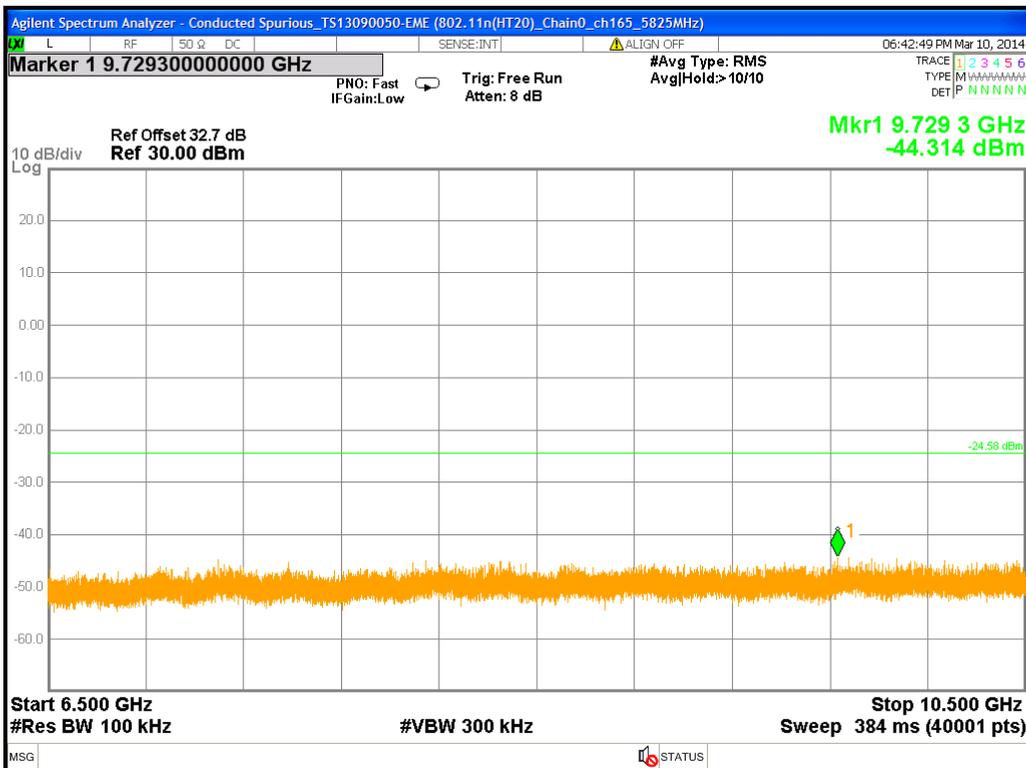
Chain0 : Conducted Spurious @ 802.11n(HT40) Mode ch159 (22.5G~26.5G)



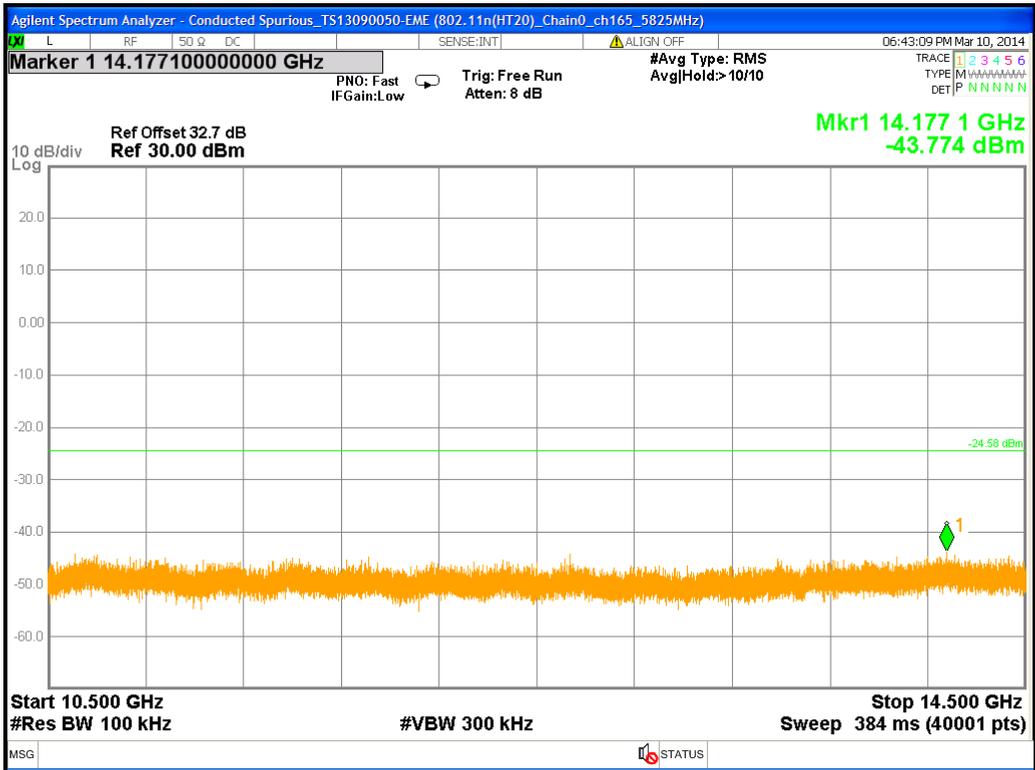
Chain1 : Conducted Spurious @ 802.11n(HT40) Mode ch151 (2.5G~6.5G)



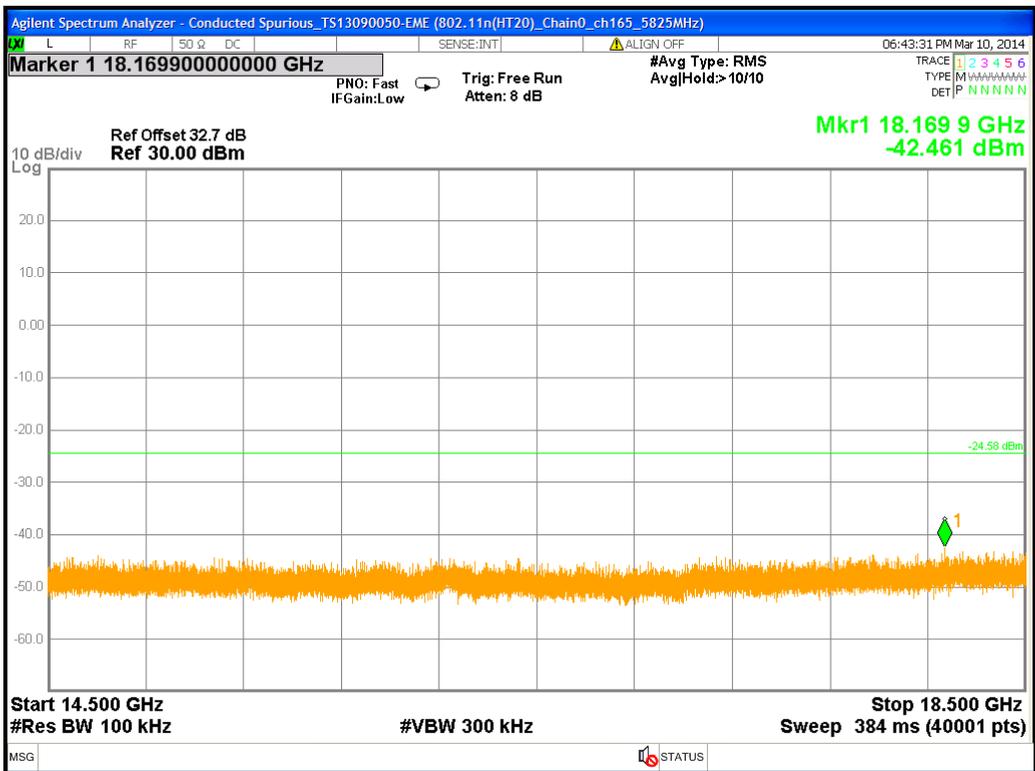
Chain1 : Conducted Spurious @ 802.11n(HT40) Mode ch151 (6.5G~10.5G)



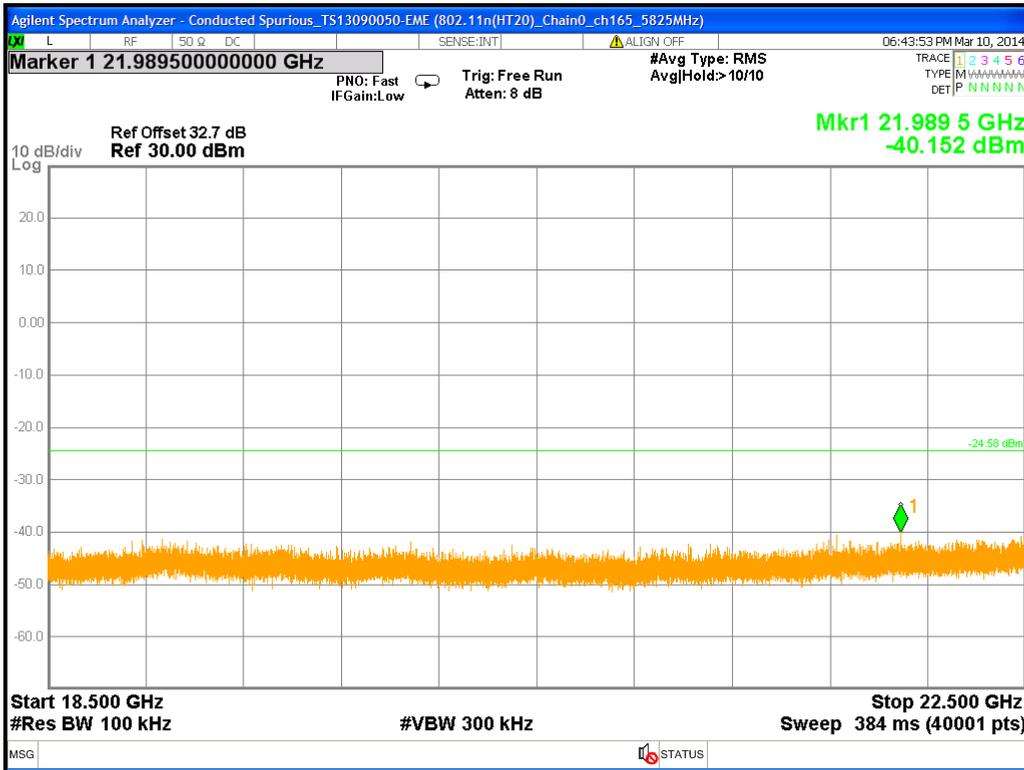
Chain1 : Conducted Spurious @ 802.11n(HT40) Mode ch151 (10.5G~14.5G)



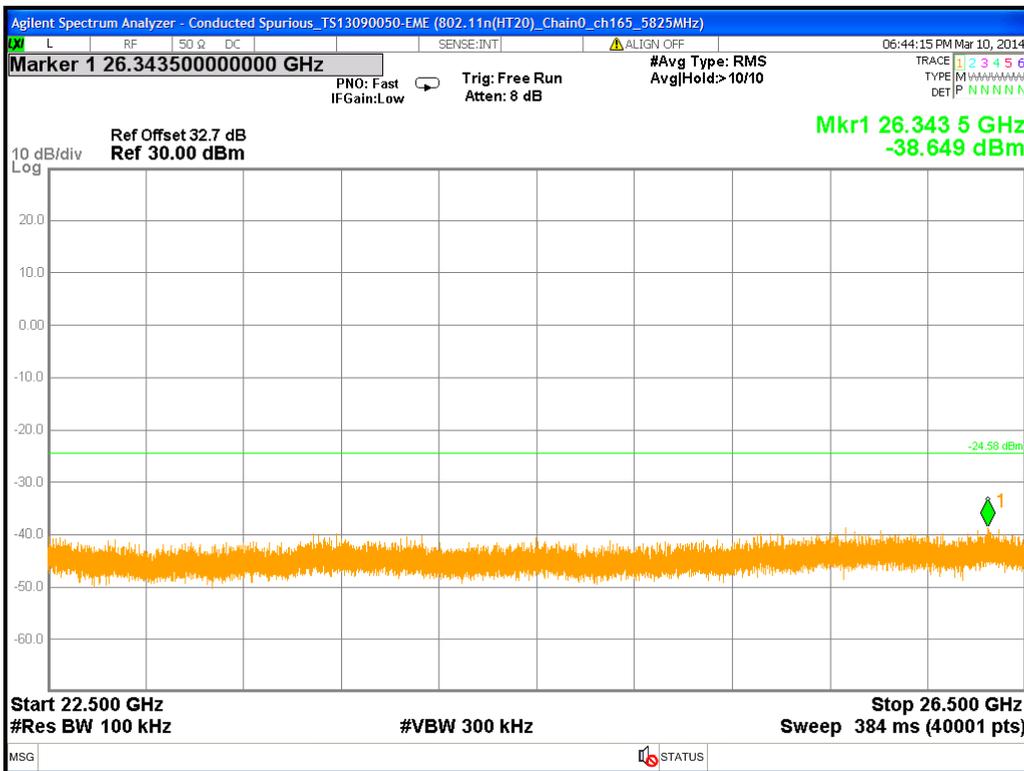
Chain1 : Conducted Spurious @ 802.11n(HT40) Mode ch151 (14.5G~18.5G)



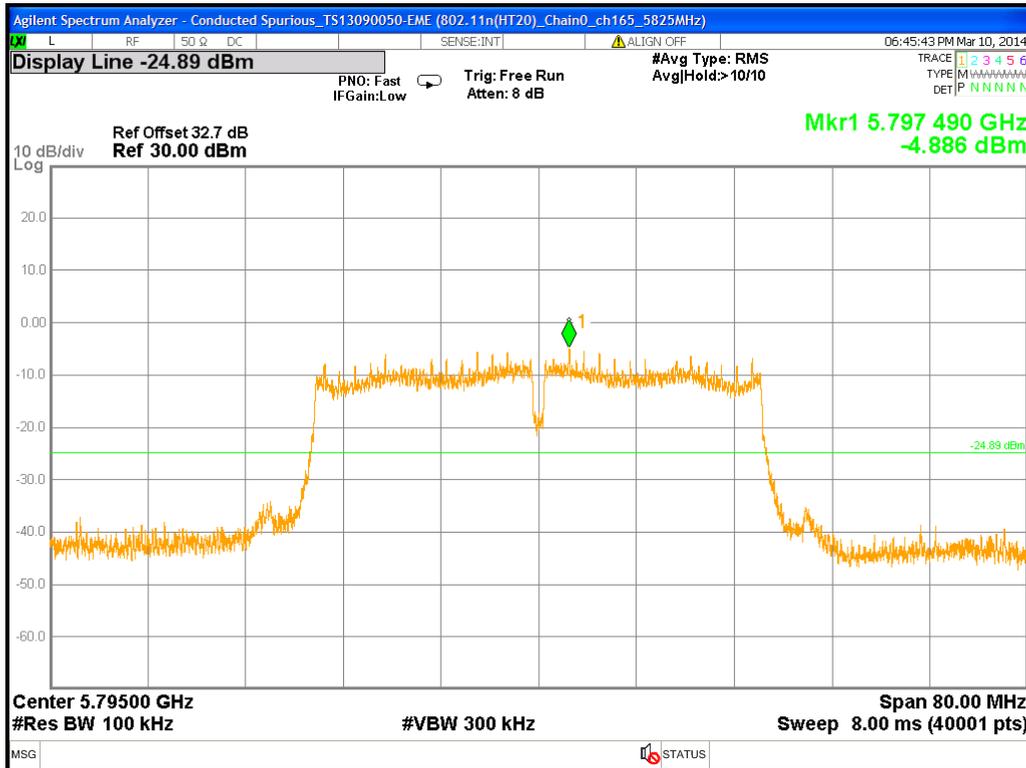
Chain1 : Conducted Spurious @ 802.11n(HT40) Mode ch151 (18.5G~22.5G)



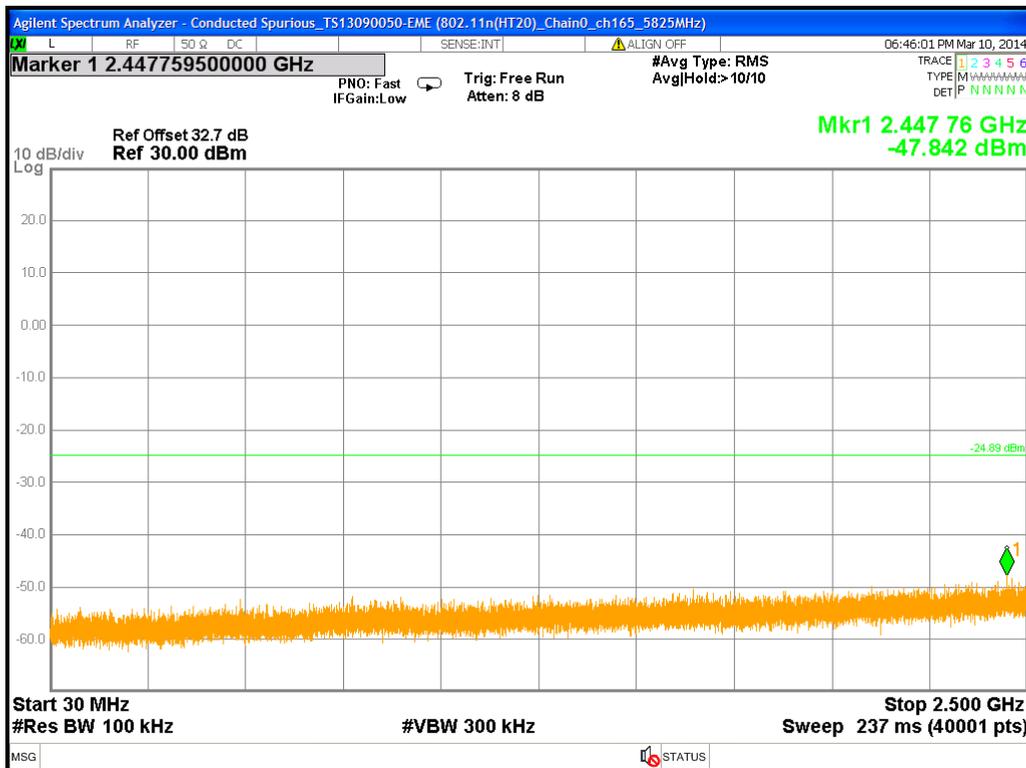
Chain1 : Conducted Spurious @ 802.11n(HT40) Mode ch151 (22.5G~26.5G)



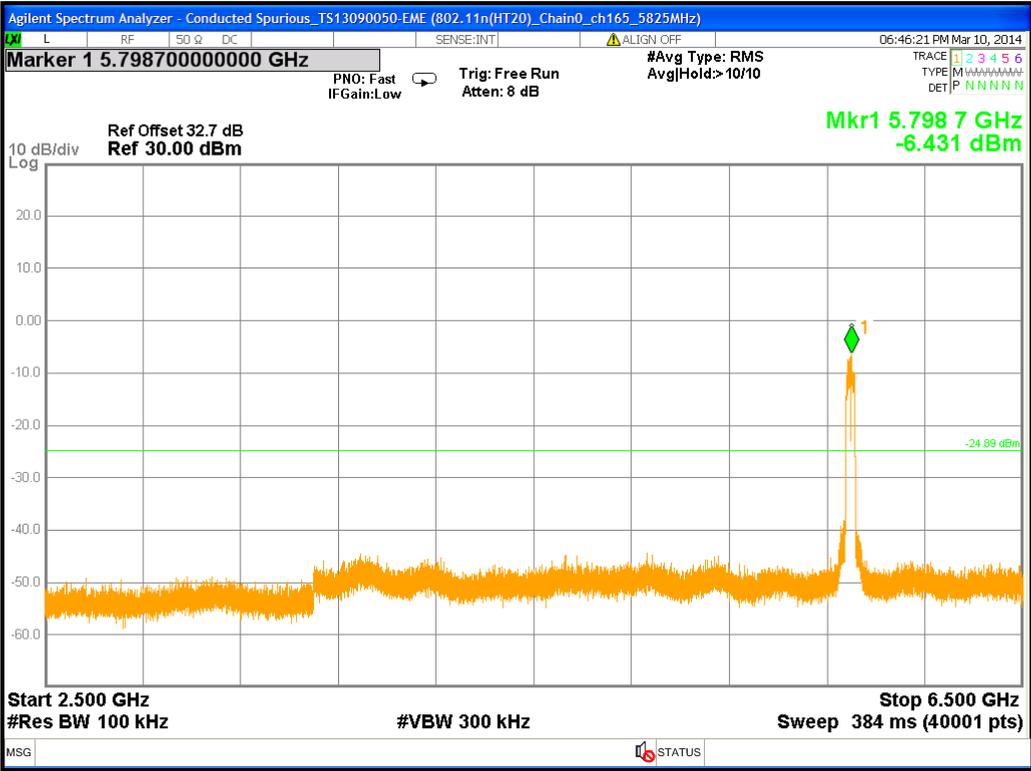
Chain1 : Conducted Spurious @ 802.11n(HT40) Mode ch159



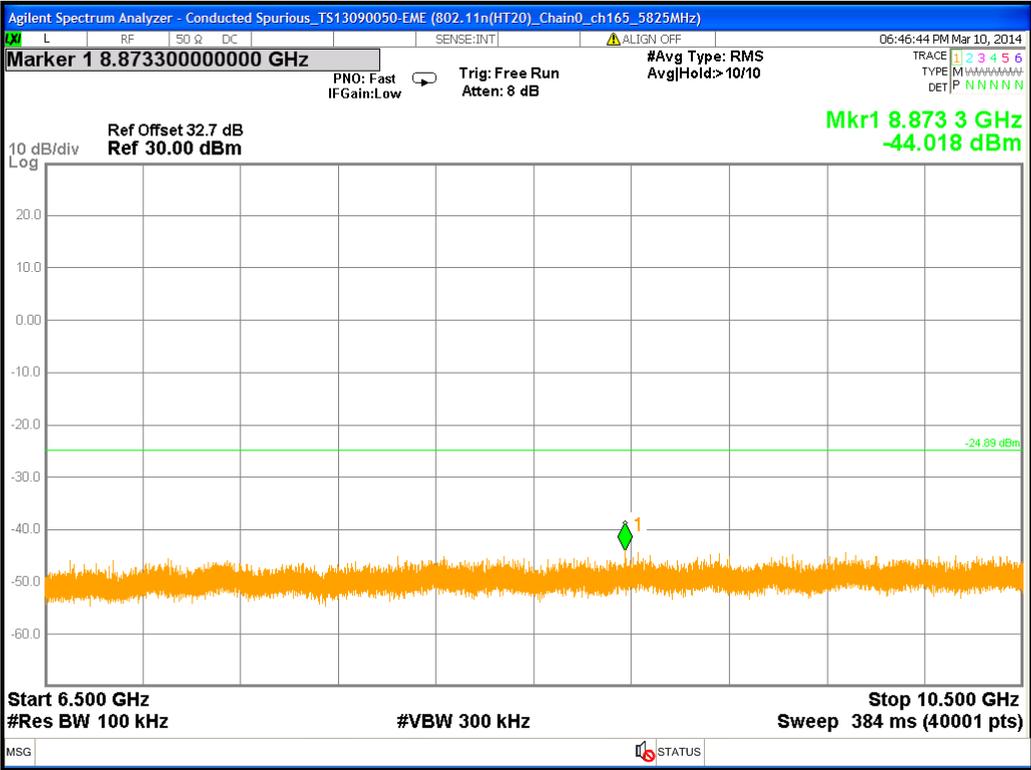
Chain1 : Conducted Spurious @ 802.11n(HT40) Mode ch159 (30M~2.5G)



Chain1 : Conducted Spurious @ 802.11n(HT40) Mode ch159 (2.5G~6.5G)



Chain1 : Conducted Spurious @ 802.11n(HT40) Mode ch159 (6.5G~10.5G)



7. Radiated Spurious Emission

Name of Test	Radiated Spurious Emission
Base Standard	FCC 15.247(d), 15.209, 15.205, 15.33(a)

Test Result: Complies
Measurement Data: See Tables below

Method of Measurement:

Reference FCC document: KDB 558074 D01 v03r01, ANSI C63.4:2009

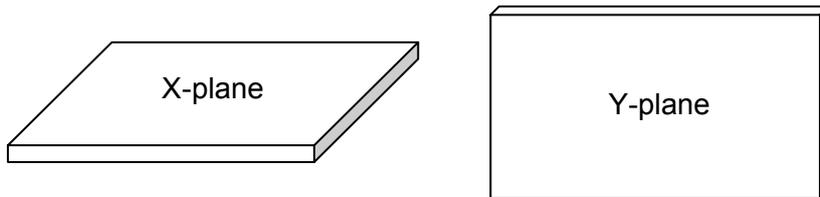
The signal is maximized through rotation and placement in the three orthogonal axes. According to §15.33(a), the spectrum shall be investigated from the lowest radio frequency signal generated in the device, to the tenth harmonic of the highest fundamental frequency or to 40 GHz, whichever is lower. Spectrum Analyzer Resolution Bandwidth is 100kHz or greater for frequencies 30MHz to 1GHz, 1MHz – for frequencies above 1GHz.

The EUT for testing is arranged on a wooden turntable. If some peripherals apply to the EUT, the peripherals will be connected to EUT and the whole system. During the test, all cables were arranged to produce worst-case emissions. The signal is maximized through rotation. The height of antenna and polarization is changing constantly for exploring for maximum signal level. The height of antenna can be up to 4 meters and down to 1 meter. The measurement for radiated emission will be done at the distance of three meters unless the signal level is too low to measure at that distance. In the case of the reading under noise floor, a pre-amplifier is used and/or the test is conducted at a closer distance. And then all readings are extrapolated back to the equivalent 3 meters reading using inverse scaling with distance.

The EUT configuration please refer to the “Spurious set-up photo.pdf”.

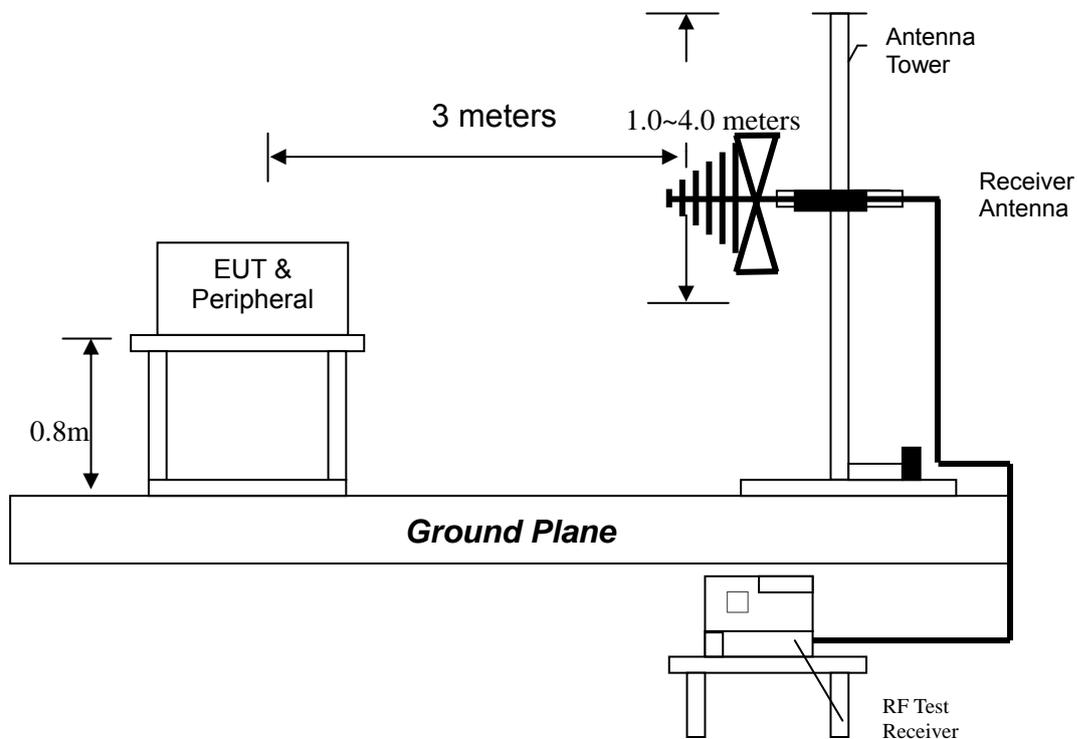
Test Diagram:

The signal is maximized through rotation and placement in the two orthogonal axes.

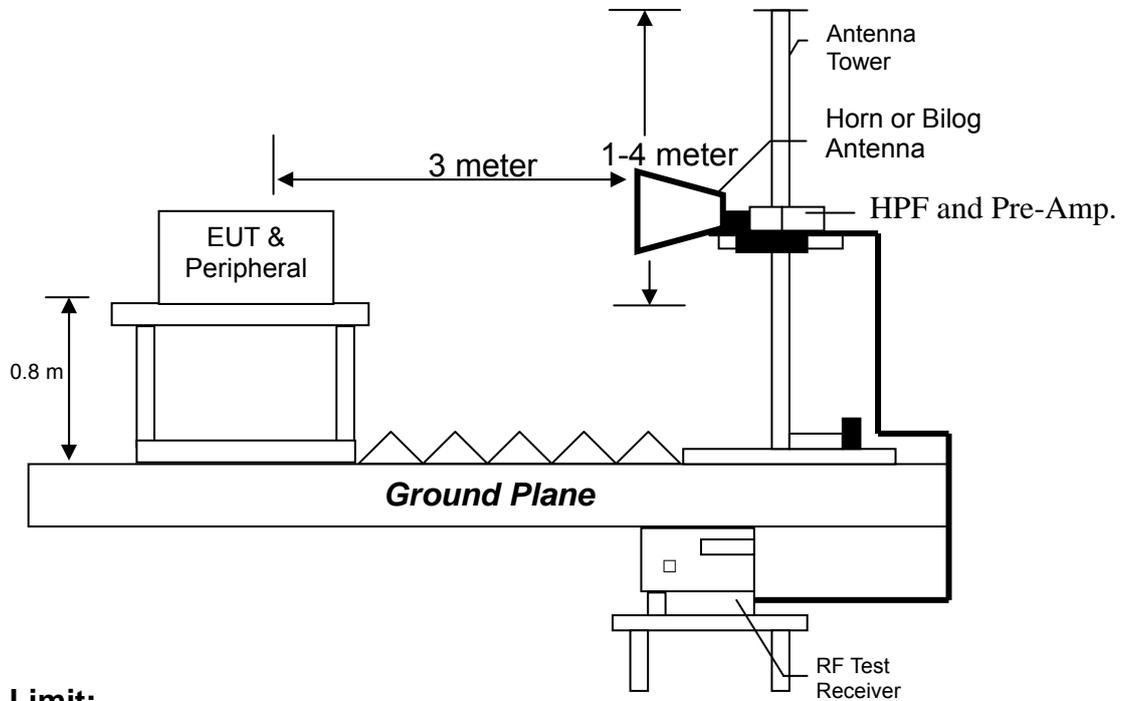


After verifying two axes, we found the maximum electromagnetic field was occurred at Y-plane configuration. The final test data was executed under this configuration.

Radiated emission from 30MHz to 1GHz uses Bilog Antenna:



Radiated emission above 1GHz uses Horn Antenna:



Emission Limit:

The spurious Emission shall test through the 10th harmonic. In addition, radiated emissions which fall in the restricted bands, as defined in §15.205(a), must also comply with the radiated emission limits specified in §15.209(a).

Frequency (MHz)	Field Strength (microvolts/meter)
0.009~0.490	2400/F(kHz)
0.490~1.705	2400/F(kHz)
1.705~30	30
30~88	100
88~216	150
216~960	200
Above 960	500

Remark:

1. In the above table, the tighter limit applies at the band edges.
2. Distance refers to the distance in meters between the measuring instrument antenna and the closed point of any part of the device or system

Measurement results: frequencies equal to or less than 1 GHz

The test was performed on EUT under 802.11b/g/n continuously transmitting mode. The worst case occurred at chain 0: 802.11b Tx channel 1.

EUT : WMTB-177N
 Worst Case : Chain 0: 802.11b Tx channel 1

Antenna Polariz. (V/H)	Freq. (MHz)	Receiver Detector	Corr. Factor (dB/m)	Reading (dBuV)	Corrected Level (dBuV/m)	Limit @ 3 m (dBuV/m)	Margin (dB)
V	103.72	QP	7.64	28.02	35.66	43.50	-7.84
V	222.06	QP	12.08	21.31	33.39	46.00	-12.61
V	293.84	QP	13.95	22.74	36.69	46.00	-9.31
V	594.54	QP	20.71	21.10	41.81	46.00	-4.19
V	623.64	QP	20.75	14.98	35.73	46.00	-10.27
V	743.92	QP	22.74	19.86	42.60	46.00	-3.40
H	132.82	QP	12.32	28.61	40.93	43.50	-2.57
H	295.78	QP	14.17	21.59	35.75	46.00	-10.25
H	363.68	QP	15.48	18.24	33.71	46.00	-12.29
H	431.58	QP	18.12	15.15	33.27	46.00	-12.73
H	623.64	QP	20.88	12.88	33.75	46.00	-12.25
H	720.64	QP	22.44	18.19	40.63	46.00	-5.37

Remark:

1. Corr. Factor = Antenna Factor + Cable Loss

2. Corrected Level = Reading + Corr. Factor

Note: The amplitude of spurious emissions that are attenuated by more than 20dB below the permissible value has no need to be reported.

Measurement results: frequency above 1GHz

EUT : WMTB-177N
Test Condition : Chain 0: 802.11b Tx channel 1

Frequency (MHz)	Spectrum Analyzer Detector	Antenna Polariz. (H/V)	Preamp. Gain (dB)	Correction Factor (dB/m)	Reading (dBuV)	Corrected Level (dBuV/m)	Limit @ 3 m (dBuV/m)	Margin (dB)
4824	PK	V	35.1	38.54	46.15	49.59	54	-4.41
7236	PK	V	33.0	44.60	38.32	49.92	54	-4.08
4824	PK	H	35.1	38.54	47.11	50.55	54	-3.45
7236	PK	H	33.0	44.60	45.24	56.84	74	-17.16
7236	AV	H	33.0	44.60	40.02	51.62	54	-2.38

Remark:

1. Correction Factor = Antenna Factor + Cable Loss
2. Corrected Level = Reading + Correction Factor – Preamp. Gain
3. The frequency measured ranges from 1 GHz to 25 GHz.The data value listed above which is higher than the system noise floor.

EUT : WMTB-177N
Test Condition : Chain 0: 802.11b Tx channel 6

Frequency (MHz)	Spectrum Analyzer Detector	Antenna Polariz. (H/V)	Preamp. Gain (dB)	Correction Factor (dB/m)	Reading (dBuV)	Corrected Level (dBuV/m)	Limit @ 3 m (dBuV/m)	Margin (dB)
4874	PK	V	35.1	38.54	49.92	53.36	54	-0.64
7311	PK	V	33.0	44.60	40.44	52.04	54	-1.96
4874	PK	H	35.1	38.54	45.37	48.81	54	-5.19
7236	PK	H	33.0	44.60	44.37	55.97	74	-18.03
7311	AV	H	33.0	44.60	38.73	50.33	54	-3.67

Remark:

1. Correction Factor = Antenna Factor + Cable Loss
2. Corrected Level = Reading + Correction Factor – Preamp. Gain
3. The frequency measured ranges from 1 GHz to 25 GHz.The data value listed above which is higher than the system noise floor.

EUT : WMTB-177N
 Test Condition : Chain 0: 802.11b Tx channel 11

Frequency (MHz)	Spectrum Analyzer Detector	Antenna Polariz. (H/V)	Preamp. Gain (dB)	Correction Factor (dB/m)	Reading (dBuV)	Corrected Level (dBuV/m)	Limit @ 3 m (dBuV/m)	Margin (dB)
4924	PK	V	35.1	38.54	46.08	49.52	54	-4.48
7386	PK	V	33.0	44.60	39.86	51.46	54	-2.54
4924	PK	H	35.1	38.54	42.58	46.02	54	-7.98
7386	PK	H	33.0	44.60	43.93	55.53	74	-18.47
7386	AV	H	33.0	44.60	38.49	50.09	54	-3.91

Remark:

1. Correction Factor = Antenna Factor + Cable Loss
2. Corrected Level = Reading + Correction Factor – Preamp. Gain
3. The frequency measured ranges from 1 GHz to 25 GHz. The data value listed above which is higher than the system noise floor.

EUT : WMTB-177N
 Test Condition : Chain 1: 802.11b Tx channel 1

Frequency (MHz)	Spectrum Analyzer Detector	Antenna Polariz. (H/V)	Preamp. Gain (dB)	Correction Factor (dB/m)	Reading (dBuV)	Corrected Level (dBuV/m)	Limit @ 3 m (dBuV/m)	Margin (dB)
3618	PK	V	33.9	36.16	41.18	43.44	54	-10.56
4824	PK	V	35.1	38.54	42.81	46.25	54	-7.75
6030	PK	V	34.6	41.49	40.38	47.27	54	-6.73
7236	PK	V	33.0	44.60	46.01	57.61	74	-16.39
7236	AV	V	33.0	44.60	40.61	52.21	54	-1.79
3618	PK	H	33.9	36.16	44.01	46.27	54	-7.73
4824	PK	H	35.1	38.54	40.29	43.73	54	-10.27
6030	PK	H	34.6	41.49	39.95	46.84	54	-7.16
7236	PK	H	33.0	44.60	46.37	57.97	74	-16.03
7236	AV	H	33.0	44.60	41.97	53.57	54	-0.43

Remark:

1. Correction Factor = Antenna Factor + Cable Loss
2. Corrected Level = Reading + Correction Factor – Preamp. Gain
3. The frequency measured ranges from 1 GHz to 25 GHz. The data value listed above which is higher than the system noise floor.

EUT : WMTB-177N
Test Condition : Chain 1: 802.11b Tx channel 6

Frequency (MHz)	Spectrum Analyzer Detector	Antenna Polariz. (H/V)	Preamp. Gain (dB)	Correction Factor (dB/m)	Reading (dBuV)	Corrected Level (dBuV/m)	Limit @ 3 m (dBuV/m)	Margin (dB)
4874	PK	V	35.1	38.54	47.27	50.71	54	-3.29
7311	PK	V	33.0	44.60	44.79	56.39	74	-17.61
7311	AV	V	33.0	44.60	39.39	50.99	54	-3.01
3663	PK	H	33.9	36.16	42.50	44.76	74	-29.24
4874	PK	H	35.1	38.54	41.67	45.11	54	-8.89
7311	PK	H	33.0	44.60	45.09	56.69	74	-17.31
7311	AV	H	33.0	44.60	39.69	51.29	54	-2.71

Remark:

1. Correction Factor = Antenna Factor + Cable Loss
2. Corrected Level = Reading + Correction Factor – Preamp. Gain
3. The frequency measured ranges from 1 GHz to 25 GHz. The data value listed above which is higher than the system noise floor.

EUT : WMTB-177N
Test Condition : Chain 1: 802.11b Tx channel 11

Frequency (MHz)	Spectrum Analyzer Detector	Antenna Polariz. (H/V)	Preamp. Gain (dB)	Correction Factor (dB/m)	Reading (dBuV)	Corrected Level (dBuV/m)	Limit @ 3 m (dBuV/m)	Margin (dB)
4924	PK	V	35.1	38.54	50.23	53.67	54	-0.33
7386	PK	V	33.0	44.60	43.84	55.44	74	-18.56
7386	AV	V	33.0	44.60	38.84	50.44	54	-3.56
4924	PK	H	35.1	38.54	51.13	54.57	74	-19.43
4924	AV	H	35.1	38.54	45.73	49.17	54	-4.83
7386	PK	H	33.0	44.60	45.94	57.54	74	-16.46
7386	AV	H	33.0	44.60	41.54	53.14	54	-0.86

Remark:

1. Correction Factor = Antenna Factor + Cable Loss
2. Corrected Level = Reading + Correction Factor – Preamp. Gain
3. The frequency measured ranges from 1 GHz to 25 GHz. The data value listed above which is higher than the system noise floor.

EUT : WMTB-177N
Test Condition : Chain 0: 802.11g Tx channel 1

Frequency (MHz)	Spectrum Analyzer Detector	Antenna Polariz. (H/V)	Preamp. Gain (dB)	Correction Factor (dB/m)	Reading (dBuV)	Corrected Level (dBuV/m)	Limit @ 3 m (dBuV/m)	Margin (dB)
4824	PK	V	35.1	38.54	44.15	47.59	54	-6.41
7236	PK	V	33.0	44.60	41.91	53.51	54	-0.49
4824	PK	H	35.1	38.54	46.58	50.02	54	-3.98
7236	PK	H	33.0	44.60	45.51	57.11	74	-16.89
7236	AV	H	33.0	44.60	32.30	43.90	54	-10.10

Remark:

1. Correction Factor = Antenna Factor + Cable Loss
2. Corrected Level = Reading + Correction Factor – Preamp. Gain
3. The frequency measured ranges from 1 GHz to 25 GHz. The data value listed above which is higher than the system noise floor.

EUT : WMTB-177N
Test Condition : Chain 0:802.11g Tx at channel 6

Frequency (MHz)	Spectrum Analyzer Detector	Antenna Polariz. (H/V)	Preamp. Gain (dB)	Correction Factor (dB/m)	Reading (dBuV)	Corrected Level (dBuV/m)	Limit @ 3 m (dBuV/m)	Margin (dB)
4824	PK	V	35.1	38.54	41.77	45.21	54	-8.79
7311	PK	V	33.0	44.60	41.05	52.65	54	-1.35
4824	PK	H	35.1	38.54	42.34	45.78	54	-8.22
7311	PK	H	33.0	44.60	50.42	62.02	74	-11.98
7311	AV	H	33.0	44.60	31.39	42.99	54	-11.01

Remark:

1. Correction Factor = Antenna Factor + Cable Loss
2. Corrected Level = Reading + Correction Factor – Preamp. Gain
3. The frequency measured ranges from 1 GHz to 25 GHz. The data value listed above which is higher than the system noise floor.

EUT : WMTB-177N
 Test Condition : Chain 0: 802.11g Tx at channel 11

Frequency (MHz)	Spectrum Analyzer Detector	Antenna Polariz. (H/V)	Preamp. Gain (dB)	Correction Factor (dB/m)	Reading (dBUV)	Corrected Level (dBUV/m)	Limit @ 3 m (dBUV/m)	Margin (dB)
4924	PK	V	35.1	38.54	45.87	49.31	54	-4.69
6030	PK	V	34.6	41.49	42.40	49.29	74	-24.71
7386	PK	V	33.0	44.60	39.33	50.93	54	-3.07
4924	PK	H	35.1	38.54	40.06	43.50	54	-10.50
6030	PK	H	34.6	41.49	43.36	50.25	54	-3.75
7386	PK	H	33.0	44.60	45.48	57.08	74	-16.92
7386	AV	H	33.0	44.60	28.66	40.26	54	-13.74

Remark:

1. Correction Factor = Antenna Factor + Cable Loss
2. Corrected Level = Reading + Correction Factor – Preamp. Gain
3. The frequency measured ranges from 1 GHz to 25 GHz. The data value listed above which is higher than the system noise floor.

EUT : WMTB-177N
 Test Condition : Chain 1: 802.11g Tx channel 1

Frequency (MHz)	Spectrum Analyzer Detector	Antenna Polariz. (H/V)	Preamp. Gain (dB)	Correction Factor (dB/m)	Reading (dBuV)	Corrected Level (dBuV/m)	Limit @ 3 m (dBuV/m)	Margin (dB)
3618	PK	V	33.9	36.16	42.52	44.78	54	-9.22
4824	PK	V	35.1	38.54	42.30	45.74	54	-8.26
6030	PK	V	34.6	41.49	41.79	48.68	54	-5.32
7236	PK	V	33.0	44.60	54.52	66.12	74	-7.88
7236	AV	V	33.0	44.60	34.36	45.96	54	-8.04
3618	PK	H	33.9	36.16	43.31	45.57	54	-8.43
4824	PK	H	35.1	38.54	43.85	47.29	54	-6.71
7236	PK	H	33.0	44.60	49.75	61.35	74	-12.65
7236	AV	H	33.0	44.60	30.75	42.35	54	-11.65

Remark:

1. Correction Factor = Antenna Factor + Cable Loss
2. Corrected Level = Reading + Correction Factor – Preamp. Gain
3. The frequency measured ranges from 1 GHz to 25 GHz. The data value listed above which is higher than the system noise floor.

EUT : WMTB-177N
Test Condition : Chain 1: 802.11g Tx at channel 6

Frequency (MHz)	Spectrum Analyzer Detector	Antenna Polariz. (H/V)	Preamp. Gain (dB)	Correction Factor (dB/m)	Reading (dBUV)	Corrected Level (dBUV/m)	Limit @ 3 m (dBUV/m)	Margin (dB)
3663	PK	V	33.9	36.16	40.31	42.57	54	-11.43
4874	PK	V	35.1	38.54	43.17	46.61	54	-7.39
7311	PK	V	33.0	44.60	45.27	56.87	74	-17.13
7311	AV	V	33.0	44.60	26.27	37.87	54	-16.13
3663	PK	H	33.9	36.16	41.90	44.16	54	-9.84
4874	PK	H	35.1	38.54	43.16	46.60	54	-7.40
7311	PK	H	33.0	44.60	49.06	60.66	74	-13.34

Remark:

1. Correction Factor = Antenna Factor + Cable Loss
2. Corrected Level = Reading + Correction Factor – Preamp. Gain
3. The frequency measured ranges from 1 GHz to 25 GHz. The data value listed above which is higher than the system noise floor.

EUT : WMTB-177N
Test Condition : Chain 1: 802.11g Tx at channel 11

Frequency (MHz)	Spectrum Analyzer Detector	Antenna Polariz. (H/V)	Preamp. Gain (dB)	Correction Factor (dB/m)	Reading (dBUV)	Corrected Level (dBUV/m)	Limit @ 3 m (dBUV/m)	Margin (dB)
3708	PK	V	33.9	36.16	41.31	43.57	54	-10.43
4924	PK	V	35.1	38.54	45.44	48.88	54	-5.12
7386	PK	V	33.0	44.60	46.58	58.18	74	-15.82
7386	AV	V	33.0	44.60	27.58	39.18	54	-14.82
3708	PK	H	33.9	36.16	41.51	43.77	54	-10.23
4924	PK	H	35.1	38.54	46.33	49.77	54	-4.23
7386	PK	H	33.0	44.60	48.97	60.57	74	-13.43
7386	AV	H	33.0	44.60	29.97	41.57	54	-12.43

Remark:

1. Correction Factor = Antenna Factor + Cable Loss
2. Corrected Level = Reading + Correction Factor – Preamp. Gain
3. The frequency measured ranges from 1 GHz to 25 GHz. The data value listed above which is higher than the system noise floor.

EUT : WMTB-177N
Test Condition : Chain 0+1: 802.11n HT20 Tx channel 1

Frequency (MHz)	Spectrum Analyzer Detector	Antenna Polariz. (H/V)	Preamp. Gain (dB)	Correction Factor (dB/m)	Reading (dBUV)	Corrected Level (dBUV/m)	Limit @ 3 m (dBUV/m)	Margin (dB)
3618	PK	V	33.9	36.16	41.39	43.65	54	-10.35
4824	PK	V	35.1	38.54	39.67	43.11	54	-10.89
6030	PK	V	34.6	41.49	39.89	46.78	54	-7.22
7236	PK	V	33.0	44.60	37.16	48.76	54	-5.24
3618	PK	H	33.9	36.16	42.09	44.35	54	-9.65
4824	PK	H	35.1	38.54	39.57	43.01	54	-10.99
7236	PK	H	33.0	44.60	38.47	50.07	54	-3.93

Remark:

1. Correction Factor = Antenna Factor + Cable Loss
2. Corrected Level = Reading + Correction Factor – Preamp. Gain
3. The frequency measured ranges from 1 GHz to 25 GHz. The data value listed above which is higher than the system noise floor.

EUT : WMTB-177N
Test Condition : Chain 0+1: 802.11n HT20 Tx channel 6

Frequency (MHz)	Spectrum Analyzer Detector	Antenna Polariz. (H/V)	Preamp. Gain (dB)	Correction Factor (dB/m)	Reading (dBUV)	Corrected Level (dBUV/m)	Limit @ 3 m (dBUV/m)	Margin (dB)
3663	PK	V	33.9	36.16	41.18	43.44	54	-10.56
4874	PK	V	35.1	38.54	39.66	43.10	54	-10.90
6105	PK	V	34.6	41.49	41.06	47.95	54	-6.05
7311	PK	V	33.0	44.60	37.41	49.01	74	-24.99
3663	PK	H	33.9	36.16	40.80	43.06	74	-30.94
4874	PK	H	35.1	38.54	39.46	42.9	54	-11.10
7311	AV	H	33.0	44.60	40.86	52.46	54	-1.54

Remark:

1. Correction Factor = Antenna Factor + Cable Loss
2. Corrected Level = Reading + Correction Factor – Preamp. Gain
3. The frequency measured ranges from 1 GHz to 25 GHz. The data value listed above which is higher than the system noise floor.

EUT : WMTB-177N

Test Condition : Chain 0+1: 802.11n HT20 Tx channel 11

Frequency (MHz)	Spectrum Analyzer Detector	Antenna Polariz. (H/V)	Preamp. Gain (dB)	Correction Factor (dB/m)	Reading (dBuV)	Corrected Level (dBuV/m)	Limit @ 3 m (dBuV/m)	Margin (dB)
3708	PK	V	33.9	36.16	41.57	43.83	54	-10.17
4924	PK	V	35.1	38.54	40.76	44.20	54	-9.80
7386	PK	V	33.0	44.60	35.42	47.02	54	-6.98
3708	PK	H	33.9	36.16	41.58	43.84	54	-10.16
4924	PK	H	35.1	38.54	40.46	43.9	54	-10.10
7386	PK	H	33.0	44.60	39.64	51.24	54	-2.76

Remark:

1. Correction Factor = Antenna Factor + Cable Loss
2. Corrected Level = Reading + Correction Factor – Preamp. Gain
3. The frequency measured ranges from 1 GHz to 25 GHz. The data value listed above which is higher than the system noise floor.

EUT : WMTB-177N

Test Condition : Chain 0+1: 802.11n HT40 Tx channel 3

Frequency (MHz)	Spectrum Analyzer Detector	Antenna Polariz. (H/V)	Preamp. Gain (dB)	Correction Factor (dB/m)	Reading (dBuV)	Corrected Level (dBuV/m)	Limit @ 3 m (dBuV/m)	Margin (dB)
3633	PK	V	33.9	36.16	40.95	43.21	54	-10.79
4844	PK	V	35.1	38.54	38.21	41.65	54	-12.35
3633	PK	H	33.9	36.16	40.31	42.57	54	-11.43
4844	PK	H	35.1	38.54	38.01	41.45	54	-12.55
7266	PK	H	33.0	44.60	38.03	49.63	54	-4.37

Remark:

1. Correction Factor = Antenna Factor + Cable Loss
2. Corrected Level = Reading + Correction Factor – Preamp. Gain
3. The frequency measured ranges from 1 GHz to 25 GHz. The data value listed above which is higher than the system noise floor.

EUT : WMTB-177N
Test Condition : Chain 0+1: 802.11n HT40 Tx channel 6

Frequency (MHz)	Spectrum Analyzer Detector	Antenna Polariz. (H/V)	Preamp. Gain (dB)	Correction Factor (dB/m)	Reading (dBUV)	Corrected Level (dBUV/m)	Limit @ 3 m (dBUV/m)	Margin (dB)
3663	PK	V	33.9	36.16	40.23	42.49	54	-11.51
4874	PK	V	35.1	38.54	39.66	43.1	54	-10.90
3663	PK	H	33.9	36.16	40.64	42.90	54	-11.10
4874	PK	H	35.1	38.54	39.26	42.7	54	-11.30
7326	PK	H	33.0	44.60	37.66	49.26	54	-4.74

Remark:

1. Correction Factor = Antenna Factor + Cable Loss
2. Corrected Level = Reading + Correction Factor – Preamp. Gain
3. The frequency measured ranges from 1 GHz to 25 GHz.The data value listed above which is higher than the system noise floor.

EUT : WMTB-177N
Test Condition : Chain 0+1: 802.11n HT40 Tx channel 9

Frequency (MHz)	Spectrum Analyzer Detector	Antenna Polariz. (H/V)	Preamp. Gain (dB)	Correction Factor (dB/m)	Reading (dBUV)	Corrected Level (dBUV/m)	Limit @ 3 m (dBUV/m)	Margin (dB)
3678	PK	V	33.9	36.16	40.95	43.21	54	-10.79
4904	PK	V	35.1	38.54	40.39	43.83	54	-10.17
3678	PK	H	33.9	36.16	41.59	43.85	54	-10.15
4904	PK	H	35.1	38.54	40.91	44.35	54	-9.65
6130	PK	H	34.6	41.49	38.45	45.34	54	-8.66
7356	PK	H	33.0	44.60	39.16	50.76	54	-3.24

Remark:

1. Correction Factor = Antenna Factor + Cable Loss
2. Corrected Level = Reading + Correction Factor – Preamp. Gain
3. The frequency measured ranges from 1 GHz to 25 GHz.The data value listed above which is higher than the system noise floor.

EUT : WMTB-177N
 Test Condition : Chain 0: 802.11a Tx at channel 149

Frequency (MHz)	Spectrum Analyzer Detector	Antenna Polariz. (H/V)	Preamp. Gain (dB)	Correction Factor (dB/m)	Reading (dBuV)	Corrected Level (dBuV/m)	Limit @ 3 m (dBuV/m)	Margin (dB)
11490	PK	V	29.8	51.41	31.88	53.49	54	-0.51
11490	PK	H	29.8	51.41	31.86	53.47	54	-0.53

Remark:

1. Correction Factor = Antenna Factor + Cable Loss
2. Corrected Level = Reading + Correction Factor – Preamp. Gain
3. The frequency measured ranges from 1 GHz to 25 GHz. The data value listed above which is higher than the system noise floor.

EUT : WMTB-177N
 Test Condition : Chain 0: 802.11a Tx at channel 157

Frequency (MHz)	Spectrum Analyzer Detector	Antenna Polariz. (H/V)	Preamp. Gain (dB)	Correction Factor (dB/m)	Reading (dBuV)	Corrected Level (dBuV/m)	Limit @ 3 m (dBuV/m)	Margin (dB)
11570	PK	V	30.3	51.84	32.34	53.88	54	-0.12
11570	PK	H	30.3	51.84	31.28	52.82	54	-1.18

Remark:

1. Correction Factor = Antenna Factor + Cable Loss
2. Corrected Level = Reading + Correction Factor – Preamp. Gain
3. The frequency measured ranges from 1 GHz to 25 GHz. The data value listed above which is higher than the system noise floor.

EUT : WMTB-177N
Test Condition : Chain 0: 802.11a Tx at channel 165

Frequency (MHz)	Spectrum Analyzer Detector	Antenna Polariz. (H/V)	Preamp. Gain (dB)	Correction Factor (dB/m)	Reading (dBuV)	Corrected Level (dBuV/m)	Limit @ 3 m (dBuV/m)	Margin (dB)
11650	PK	V	30.3	51.84	32.32	53.86	54	-0.14
11650	PK	H	30.3	51.84	21.83	43.37	54	-10.63

Remark:

1. Correction Factor = Antenna Factor + Cable Loss
2. Corrected Level = Reading + Correction Factor – Preamp. Gain
3. The frequency measured ranges from 1 GHz to 25 GHz. The data value listed above which is higher than the system noise floor.

EUT : WMTB-177N
Test Condition : Chain 1: 802.11a Tx at channel 149

Frequency (MHz)	Spectrum Analyzer Detector	Antenna Polariz. (H/V)	Preamp. Gain (dB)	Correction Factor (dB/m)	Reading (dBuV)	Corrected Level (dBuV/m)	Limit @ 3 m (dBuV/m)	Margin (dB)
11490	PK	V	29.8	51.41	37.7	59.31	74	-14.69
11490	AV	V	29.8	51.41	23.7	45.31	54	-8.69
11490	PK	H	29.8	51.41	36.16	57.77	74	-16.23
11490	AV	H	29.8	51.41	21.16	42.77	54	-11.23
17235	PK	H	32.3	55.26	35.76	58.72	74	-15.28
17235	AV	H	32.3	55.26	20.76	43.72	54	-10.28

Remark:

1. Correction Factor = Antenna Factor + Cable Loss
2. Corrected Level = Reading + Correction Factor – Preamp. Gain
3. The frequency measured ranges from 1 GHz to 25 GHz. The data value listed above which is higher than the system noise floor.

EUT : WMTB-177N
Test Condition : Chain 1: 802.11a Tx at channel 157

Frequency (MHz)	Spectrum Analyzer Detector	Antenna Polariz. (H/V)	Preamp. Gain (dB)	Correction Factor (dB/m)	Reading (dBUV)	Corrected Level (dBUV/m)	Limit @ 3 m (dBUV/m)	Margin (dB)
11570	PK	V	30.3	51.84	37.62	59.16	74	-14.84
11570	AV	V	30.3	51.84	22.62	44.16	54	-9.84
11570	PK	H	30.3	51.84	34.54	56.08	74	-17.92
11570	AV	H	30.3	51.84	19.54	41.08	54	-12.92

Remark:

1. Correction Factor = Antenna Factor + Cable Loss
2. Corrected Level = Reading + Correction Factor – Preamp. Gain
3. The frequency measured ranges from 1 GHz to 25 GHz. The data value listed above which is higher than the system noise floor.

EUT : WMTB-177N
Test Condition : Chain 1: 802.11a Tx at channel 165

Frequency (MHz)	Spectrum Analyzer Detector	Antenna Polariz. (H/V)	Preamp. Gain (dB)	Correction Factor (dB/m)	Reading (dBUV)	Corrected Level (dBUV/m)	Limit @ 3 m (dBUV/m)	Margin (dB)
11650	PK	V	30.3	51.84	36.53	58.07	74	-15.93
11650	AV	V	30.3	51.84	21.53	43.07	54	-10.93
11650	PK	H	30.3	51.84	35.95	57.49	74	-16.51
11650	AV	H	30.3	51.84	20.95	42.49	54	-11.51

Remark:

1. Correction Factor = Antenna Factor + Cable Loss
2. Corrected Level = Reading + Correction Factor – Preamp. Gain
3. The frequency measured ranges from 1 GHz to 25 GHz. The data value listed above which is higher than the system noise floor.

EUT : WMTB-177N
Test Condition : Chain 0+1: 802.11n (HT 20) Tx at channel 149

Frequency (MHz)	Spectrum Analyzer Detector	Antenna Polariz. (H/V)	Preamp. Gain (dB)	Correction Factor (dB/m)	Reading (dBUV)	Corrected Level (dBUV/m)	Limit @ 3 m (dBUV/m)	Margin (dB)
11490	PK	V	29.8	51.41	35.64	57.25	74	-16.75
11490	AV	V	29.8	51.41	20.64	42.25	54	-11.75
17235	PK	H	32.3	55.26	31.86	54.82	74	-19.18
17235	AV	H	32.3	55.26	16.86	39.82	54	-14.18

Remark:

1. Correction Factor = Antenna Factor + Cable Loss
2. Corrected Level = Reading + Correction Factor – Preamp. Gain
3. The frequency measured ranges from 1 GHz to 25 GHz. The data value listed above which is higher than the system noise floor.

EUT : WMTB-177N
Test Condition : Chain 0+1: 802.11n (HT 20) Tx at channel 157

Frequency (MHz)	Spectrum Analyzer Detector	Antenna Polariz. (H/V)	Preamp. Gain (dB)	Correction Factor (dB/m)	Reading (dBUV)	Corrected Level (dBUV/m)	Limit @ 3 m (dBUV/m)	Margin (dB)
11570	PK	V	30.3	51.84	34.16	55.7	74	-18.30
11570	AV	V	30.3	51.84	19.16	40.7	54	-13.30
11570	PK	H	30.3	51.84	33.73	55.27	74	-18.73
11570	AV	H	30.3	51.84	18.73	40.27	54	-13.73

Remark:

1. Correction Factor = Antenna Factor + Cable Loss
2. Corrected Level = Reading + Correction Factor – Preamp. Gain
3. The frequency measured ranges from 1 GHz to 25 GHz. The data value listed above which is higher than the system noise floor.

EUT : WMTB-177N
Test Condition : Chain 0+1: 802.11n (HT 20) Tx at channel 165

Frequency (MHz)	Spectrum Analyzer Detector	Antenna Polariz. (H/V)	Preamp. Gain (dB)	Correction Factor (dB/m)	Reading (dBuV)	Corrected Level (dBuV/m)	Limit @ 3 m (dBuV/m)	Margin (dB)
11650	PK	V	30.3	51.84	32.5	54.04	74	-19.96
11650	AV	H	30.3	51.84	17.5	39.04	54	-14.96
11650	PK	V	30.3	51.84	33.24	54.78	74	-19.22
11650	AV	H	30.3	51.84	18.24	39.78	54	-14.22

Remark:

1. Correction Factor = Antenna Factor + Cable Loss
2. Corrected Level = Reading + Correction Factor – Preamp. Gain
3. The frequency measured ranges from 1 GHz to 25 GHz. The data value listed above which is higher than the system noise floor.

EUT : WMTB-177N
Test Condition : Chain 0+1: 802.11n (HT 40) Tx at channel 151

Frequency (MHz)	Spectrum Analyzer Detector	Antenna Polariz. (H/V)	Preamp. Gain (dB)	Correction Factor (dB/m)	Reading (dBuV)	Corrected Level (dBuV/m)	Limit @ 3 m (dBuV/m)	Margin (dB)
11510	PK	V	30.3	51.84	32.48	54.02	74	-19.98
11510	AV	V	30.3	51.84	17.48	39.02	54	-14.98
11510	PK	H	30.3	51.84	32.15	53.69	54	-0.31

Remark:

1. Correction Factor = Antenna Factor + Cable Loss
2. Corrected Level = Reading + Correction Factor – Preamp. Gain
3. The frequency measured ranges from 1 GHz to 25 GHz. The data value listed above which is higher than the system noise floor.

EUT : WMTB-177N
 Test Condition : Chain 0+1: 802.11n (HT 40) Tx at channel 159

Frequency (MHz)	Spectrum Analyzer Detector	Antenna Polariz. (H/V)	Preamp. Gain (dB)	Correction Factor (dB/m)	Reading (dBuV)	Corrected Level (dBuV/m)	Limit @ 3 m (dBuV/m)	Margin (dB)
11590	PK	V	30.3	51.84	32.32	53.86	54	-0.14
11590	PK	H	30.3	51.84	32.05	53.59	54	-0.41

Remark:

1. Correction Factor = Antenna Factor + Cable Loss
2. Corrected Level = Reading + Correction Factor – Preamp. Gain
3. The frequency measured ranges from 1 GHz to 25 GHz. The data value listed above which is higher than the system noise floor.

8. Emission on Band Edge

Name of Test	Emission Band Edge
Base Standard	FCC 15.247(d)

Test Result: Complies
Measurement Data: See Tables & plots below

Method of Measurement:

Reference FCC document: KDB 558074 D01 v03r01, ANSI C63.4:2009

The frequency range from 30 MHz to 1000 MHz using Bilog Antenna.

The frequency range over 1 GHz using Horn Antenna.

Radiated emissions were investigated cover the frequency range from 30 MHz to 1000 MHz using a receiver RBW of 120 kHz record QP reading, and the frequency over 1 GHz using a spectrum analyzer RBW of 1 MHz and 10 Hz VBW record Average reading. (15.209 paragraph), the Peak reading (1 MHz RBW/ 3 MHz VBW) recorded also on the report.

EUT : WMTB-177N
Test Condition : Chain 0: 802.11b mode

Frequency (MHz)	Spectrum Analyzer Detector	Ant. Pol. (H/V)	Preamp. Gain (dB)	Correction Factor (dB/m)	Reading (dBuV)	Corrected Reading (dBuV/m)	Limit @ 3 m (dBuV/m)	Margin (dB)	Restricted band (MHz)
2389.74	PK	V	38.02	31.85	66.04	59.87	74	-14.13	2310~2390
2389.74	AV	V	38.02	31.85	52.91	46.74	54	-7.26	
2412	PK	V	38.03	31.95	115.35	109.28	-	109.28	-
2412	AV	V	38.03	31.95	108.94	102.87	-	102.87	-
2462	PK	V	38.04	32.19	115.89	110.04	-	110.04	-
2462	AV	V	38.04	32.19	109.58	103.73	-	103.73	-
2483.49	PK	V	38.05	32.29	65.22	59.47	74	-14.53	2483.5~2500
2483.49	AV	V	38.05	32.29	53.51	47.76	54	-6.24	

EUT : WMTB-177N
Test Condition : Chain 1: 802.11b mode

Frequency (MHz)	Spectrum Analyzer Detector	Ant. Pol. (H/V)	Preamp. Gain (dB)	Correction Factor (dB/m)	Reading (dBuV)	Corrected Reading (dBuV/m)	Limit @ 3 m (dBuV/m)	Margin (dB)	Restricted band (MHz)
2389.30	PK	V	38.02	31.85	64.71	58.54	74	-15.46	2310~2390
2389.30	AV	V	38.02	31.85	51.80	45.63	54	-8.37	
2412	PK	V	38.03	31.95	110.93	104.86	-	104.86	-
2412	AV	V	38.03	31.95	104.79	98.72	-	98.72	-
2462	PK	V	38.04	32.19	112.41	106.56	-	106.56	-
2462	AV	V	38.04	32.19	106.13	100.28	-	100.28	-
2483.49	PK	V	38.05	32.29	64.00	58.25	74	-15.75	2483.5~2500
2483.49	AV	V	38.05	32.29	52.27	46.52	54	-7.48	

EUT : WMTB-177N
Test Condition : Chain 0: 802.11g mode

Frequency (MHz)	Spectrum Analyzer Detector	Ant. Pol. (H/V)	Preamp. Gain (dB)	Correction Factor (dB/m)	Reading (dBuV)	Corrected Reading (dBuV/m)	Limit @ 3 m (dBuV/m)	Margin (dB)	Restricted band (MHz)
2389.52	PK	V	38.02	31.85	79.68	73.50	74	-0.50	2310~2390
2389.52	AV	V	38.02	31.85	59.46	53.29	54	-0.71	
2412	PK	V	38.03	31.95	115.90	109.82	-	109.82	-
2412	AV	V	38.03	31.95	102.24	96.16	-	96.16	-
2462	PK	V	38.04	32.20	117.96	112.12	-	112.12	-
2462	AV	V	38.04	32.20	104.77	98.93	-	98.93	-
2483.50	PK	V	38.05	32.29	77.30	71.55	74	-2.45	2483.5~2500
2483.50	AV	V	38.05	32.29	59.22	53.47	54	-0.53	

EUT : WMTB-177N
Test Condition : Chain 1: 802.11g mode

Frequency (MHz)	Spectrum Analyzer Detector	Ant. Pol. (H/V)	Preamp. Gain (dB)	Correction Factor (dB/m)	Reading (dBuV)	Corrected Reading (dBuV/m)	Limit @ 3 m (dBuV/m)	Margin (dB)	Restricted band (MHz)
2389.68	PK	V	38.02	31.84	79.67	73.49	74	-0.51	2310~2390
2389.68	AV	V	38.02	31.85	57.65	51.48	54	-2.52	
2412	PK	V	38.03	31.95	114.27	108.19	-	108.19	-
2412	AV	V	38.03	31.95	100.24	94.16	-	94.16	-
2462	PK	V	38.04	32.19	114.59	108.74	-	108.74	-
2462	AV	V	38.04	32.19	101.05	95.20	-	95.20	-
2483.58	PK	V	38.05	32.29	75.37	69.62	74	-4.38	2483.5~2500
2483.58	AV	V	38.05	32.29	57.11	51.36	54	-2.64	

EUT : WMTB-177N
Test Condition : Chain 0+1: 802.11n HT 20 mode

Frequency (MHz)	Spectrum Analyzer Detector	Ant. Pol. (H/V)	Preamp. Gain (dB)	Correction Factor (dB/m)	Reading (dBuV)	Corrected Reading (dBuV/m)	Limit @ 3 m (dBuV/m)	Margin (dB)	Restricted band (MHz)
2387.73	PK	H	38.02	31.84	68.90	62.72	74	-11.28	2310~2390
2387.73	AV	H	38.02	31.84	56.41	50.23	54	-3.77	
2412	PK	H	38.03	31.95	114.88	108.80	-	108.80	-
2412	AV	H	38.03	31.95	101.58	95.50	-	95.50	-
2462	PK	H	38.04	32.19	114.33	108.48	-	108.48	-
2462	AV	H	38.04	32.19	101.12	95.27	-	95.27	-
2483.79	PK	H	38.05	32.31	68.53	62.79	74	-11.21	2483.5~2500
2483.79	AV	H	38.05	32.29	59.17	53.42	54	-0.58	

EUT : WMTB-177N
Test Condition : Chain 0+1: 802.11n HT 40 mode

Frequency (MHz)	Spectrum Analyzer Detector	Ant. Pol. (H/V)	Preamp. Gain (dB)	Correction Factor (dB/m)	Reading (dBuV)	Corrected Reading (dBuV/m)	Limit @ 3 m (dBuV/m)	Margin (dB)	Restricted band (MHz)
2386.03	PK	H	38.02	31.85	79.44	73.27	74	-0.73	2310~2390
2386.03	AV	H	38.02	31.83	58.59	52.40	54	-1.60	
2422	PK	H	38.03	32.00	112.19	106.16	-	106.16	-
2422	AV	H	38.03	32.00	96.95	90.92	-	90.92	-
2452	PK	H	38.04	32.15	112.37	106.48	-	106.48	-
2452	AV	H	38.04	32.15	96.43	90.54	-	90.54	-
2488.17	PK	H	38.05	32.29	72.48	66.73	74	-7.27	2483.5~2500
2488.17	AV	H	38.05	32.32	55.41	49.68	54	-4.32	

9. AC power line conducted emission

Name of Test	AC power line conducted emission
Base Standard	FCC 15.207

Test Result: Complies
Measurement Data: See Tables & plots below

Method of Measurement:

Reference FCC document: KDB 558074 D01 v03r01, ANSI C63.4:2009

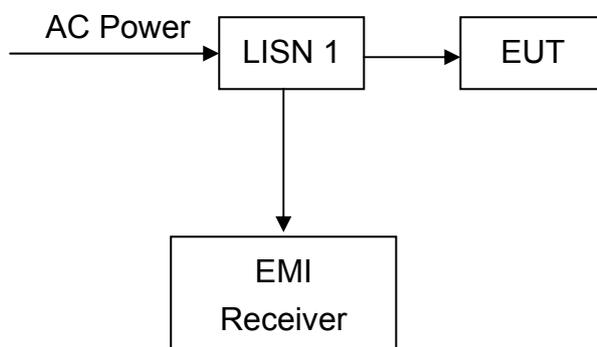
The EUT are connected to the main power through a line impedance stabilization network (LISN). This provides a 50 ohm/50 uH coupling impedance for the measuring equipment. The peripheral devices are also connected to the main power through a LISN that provides a 50 ohm/ 50 uH coupling impedance with 50 ohm termination.

Both sides (Line and Neutral) of AC line are checked for maximum conducted interference. In order to find the maximum emission, the relative positions of equipment and all of the interface cables must be changed according to ANSI C63.4:2009 on conducted measurement.

The bandwidth of the field strength meter (R & S Test Receiver ESCS 30) is set at 9kHz.

The EUT configuration please refer to the “Conducted set-up photo.pdf”.

Test Diagram:



Emission Limit:

Freq. (MHz)	Conducted Limit (dBuV)	
	Q.P.	Ave.
0.15~0.50	66 – 56*	56 – 46*
0.50~5.00	56	46
5.00~30.0	60	50

*Decreases with the logarithm of the frequency.

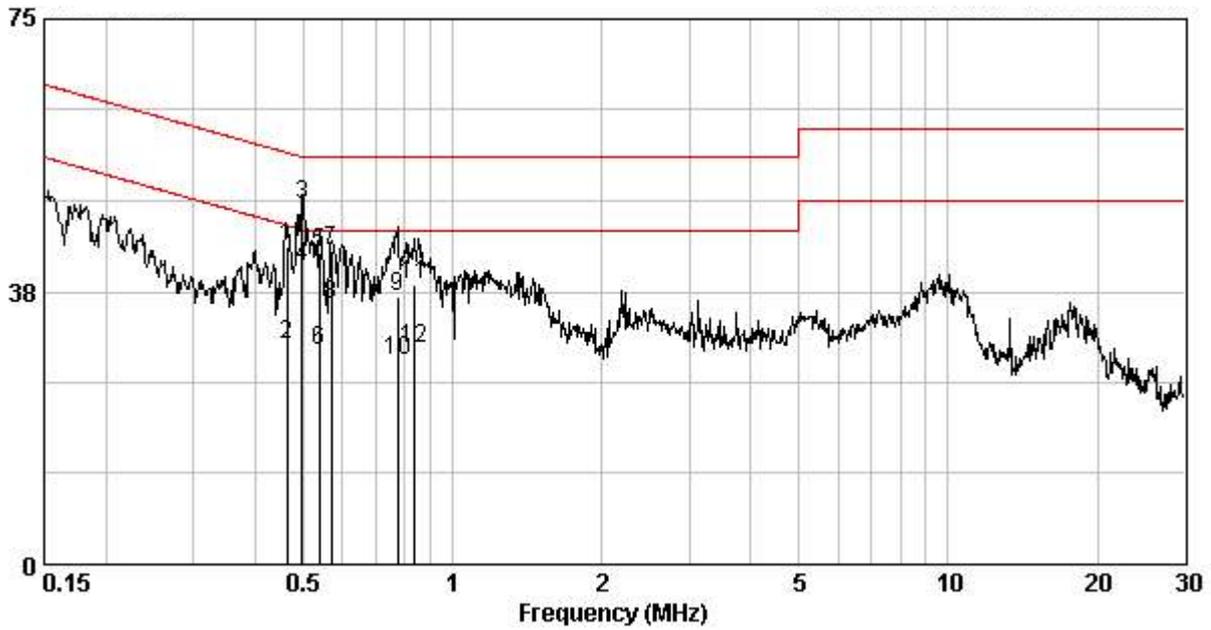
Note: The EUT was tested while in normal communication mode.

Phase : Line
EUT : WMTB-177N
Test Condition : TX mode

Frequency (MHz)	Corr. Factor (dB)	Level Qp (dBuV)	Limit Qp (dBuV)	Level Av (dBuV)	Limit Av (dBuV)	Margin (dB)	
						Qp	Av
0.464	9.59	43.62	56.63	30.15	46.63	-13.00	-16.47
0.497	9.60	49.39	56.05	40.95	46.05	-6.67	-5.11
0.538	9.60	42.91	56.00	29.45	46.00	-13.09	-16.55
0.570	9.60	43.06	56.00	35.60	46.00	-12.94	-10.40
0.775	9.61	36.72	56.00	27.92	46.00	-19.28	-18.08
0.839	9.62	38.58	56.00	29.56	46.00	-17.42	-16.44

Remark:

1. Correction Factor (dB) = LISN Factor (dB) + Cable Loss (dB)
2. Margin (dB) = Level (dBuV) – Limit (dBuV)

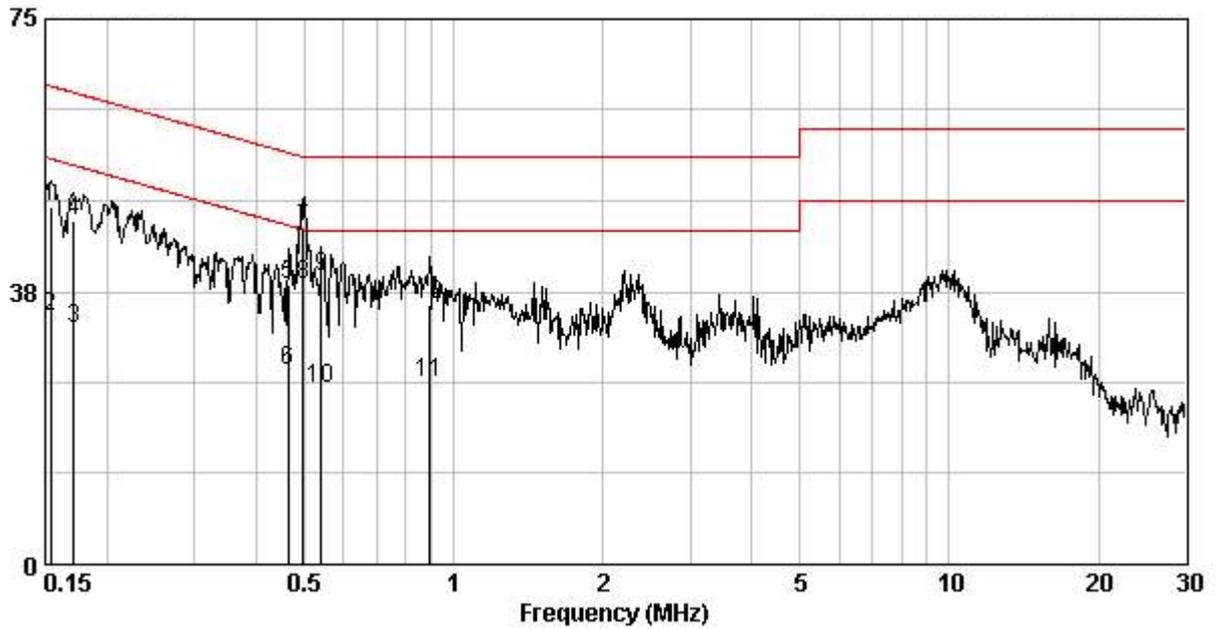


Phase : Neutral
EUT : WMTB-177N
Test Condition : TX mode

Frequency (MHz)	Corr. Factor (dB)	Level Qp (dBuV)	Limit Qp (dBuV)	Level Av (dBuV)	Limit Av (dBuV)	Margin (dB)	
						Qp	Av
0.154	9.55	49.17	65.78	34.18	55.78	-16.61	-21.60
0.171	9.55	47.26	64.90	32.41	54.90	-17.64	-22.49
0.464	9.59	38.37	56.63	26.71	46.63	-18.25	-19.91
0.498	9.60	46.03	56.03	38.51	46.03	-10.01	-7.53
0.541	9.60	39.56	56.00	24.18	46.00	-16.44	-21.82
0.894	9.62	35.81	56.00	24.88	46.00	-20.19	-21.12

Remark:

1. Correction Factor (dB) = LISN Factor (dB) + Cable Loss (dB)
2. Margin (dB) = Level (dBuV) – Limit (dBuV)



Appendix A: Test Equipment List

Equipment	Brand	Model No.	Serial No.	Calibration Date	Next Calibration Date
ESCI EMI Test Receiver	Rohde & Schwarz	ESCI	100018	2013/12/3	2014/12/2
Spectrum Analyzer	Rohde&schwarz	FSP30	100137	2013/06/21	2014/06/20
Spectrum Analyzer	Rohde&schwarz	FSEK30	100186	2013/01/23	2014/01/22
Horn Antenna (1-18G)	Schwarzbeck	BBHA 9120 D	9120D-456	2012/09/03	2014/09/02
Horn Antenna (14-42G)	SHWARZBECK	BBHA 9170	BBHA9170159	2012/09/05	2014/09/04
Broadband Antenna	SCHWARZBECK	VULB 9168	9168-172	2013/08/08	2015/08/07
Loop Antenna	RolfHeine	LA-285	02/10033	2012/03/20	2014/03/19
Pre-Amplifier	MITEQ	AFS44-001026 50--42-10P-44	1495287	2013/10/27	2015/10/26
Pre-Amplifier	MITEQ	JS4-26004000-- 27-8A	828825	2012/9/18	2014/9/17
Power Meter	Anritsu	ML2495A	0844001	2013/10/10	2014/10/9
Power Sensor	Anritsu	MA2411B	0738452	2013/10/10	2014/10/9
Temperature&Humidity Test Chamber	TERCHY	MHU-225LRU (SA)	950838	2013/06/14	2014/06/13
Two-Line -V-Network	Rohde&schwarz	ESH3-Z5	825562/003	2013/10/12	2014/10/11
Two-Line V-Network	Rohde&schwarz	ESH3-Z5	838979/014	2013/10/12	2014/10/11

Measurement Uncertainty:

Measurement uncertainty was calculated in accordance with TR 100 028-1.

Parameter	Uncertainty		
Radiated Emission	Below 1 GHz	Vertical	3.90 dB
		Horizontal	3.86 dB
	Above 1 GHz	Vertical	5.74 dB
		Horizontal	5.55 dB
Conducted Emission	2.08 dB		

This uncertainty represents an expanded uncertainty expressed at approximately the 95 % confidence level using a coverage factor of $k=2$.