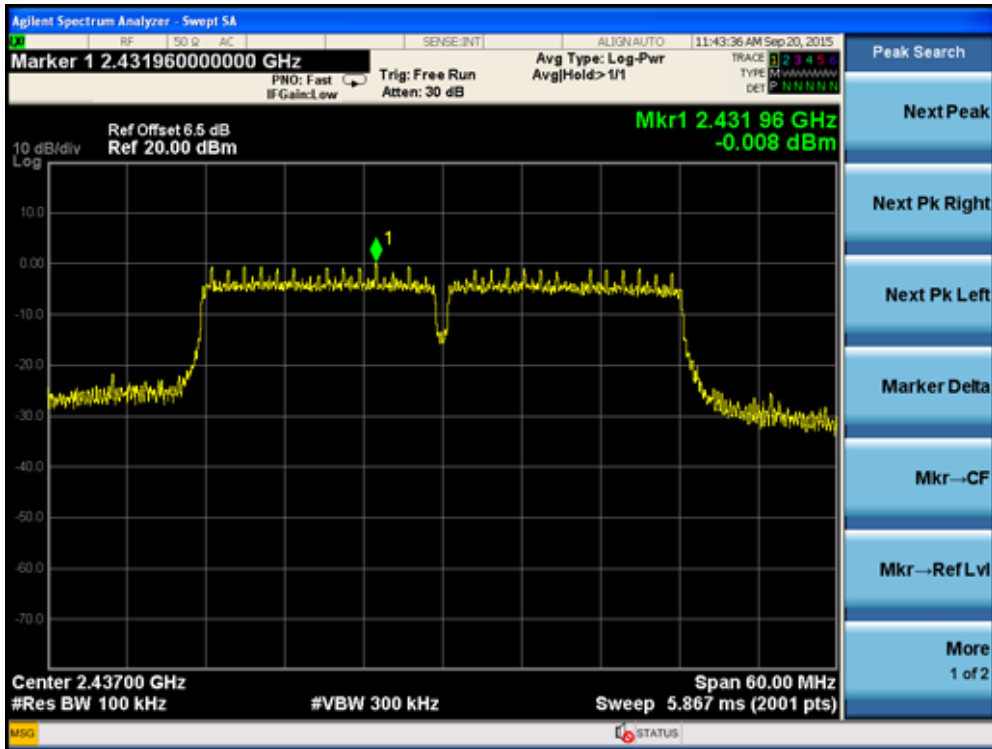
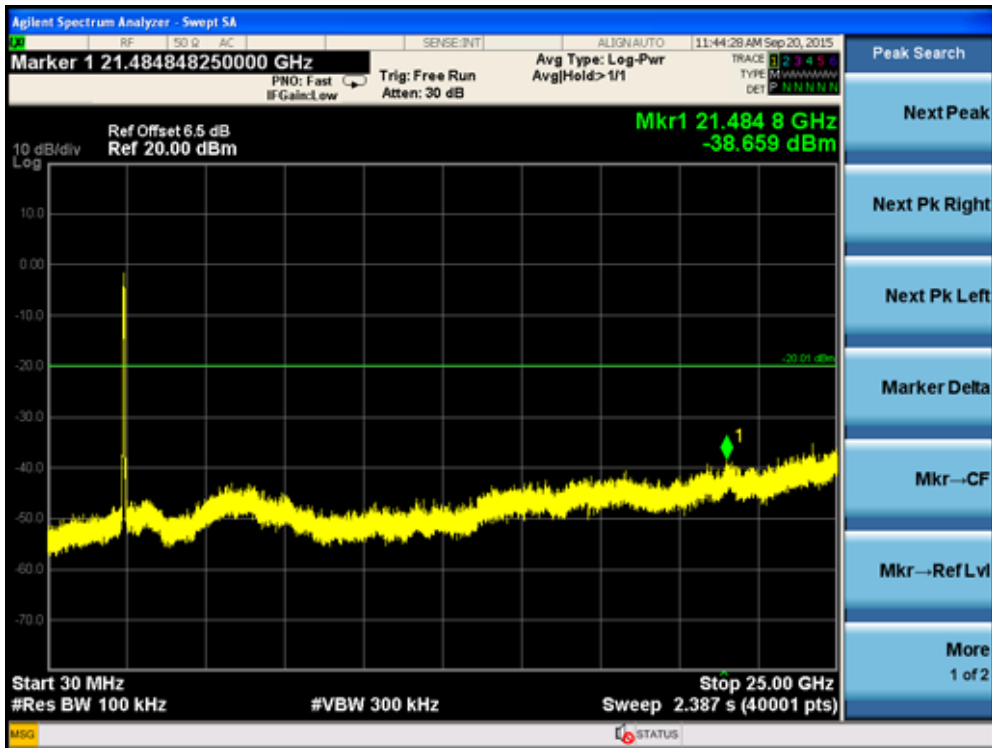


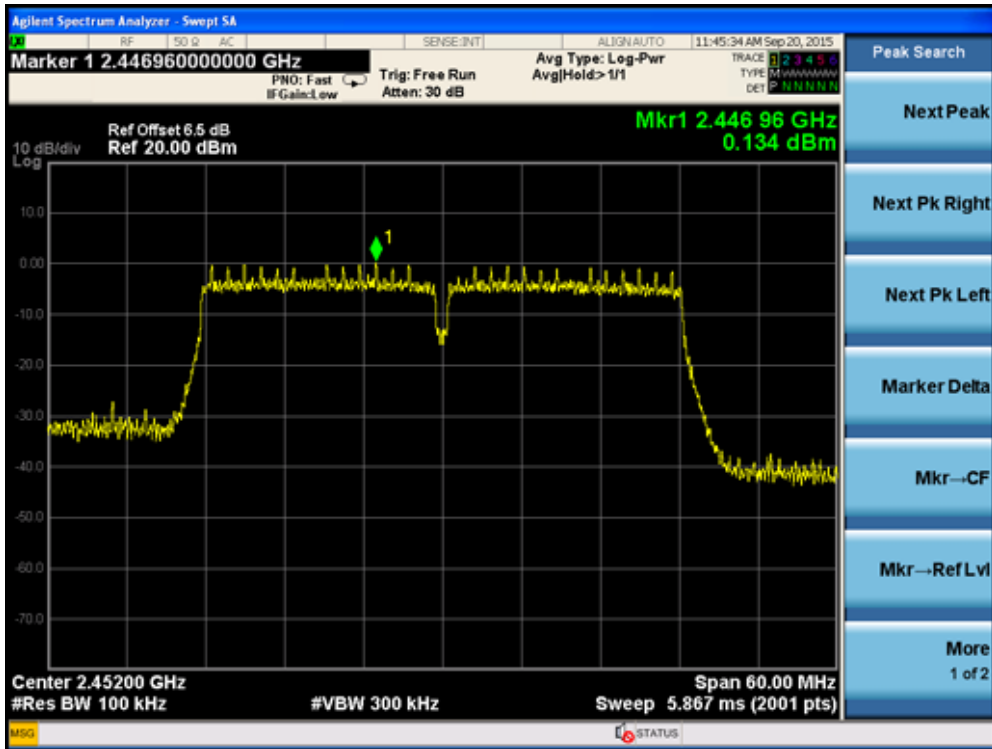
Channel 06 (2437MHz) -MIMO-Ant 1
 Reference Level – Frequency M



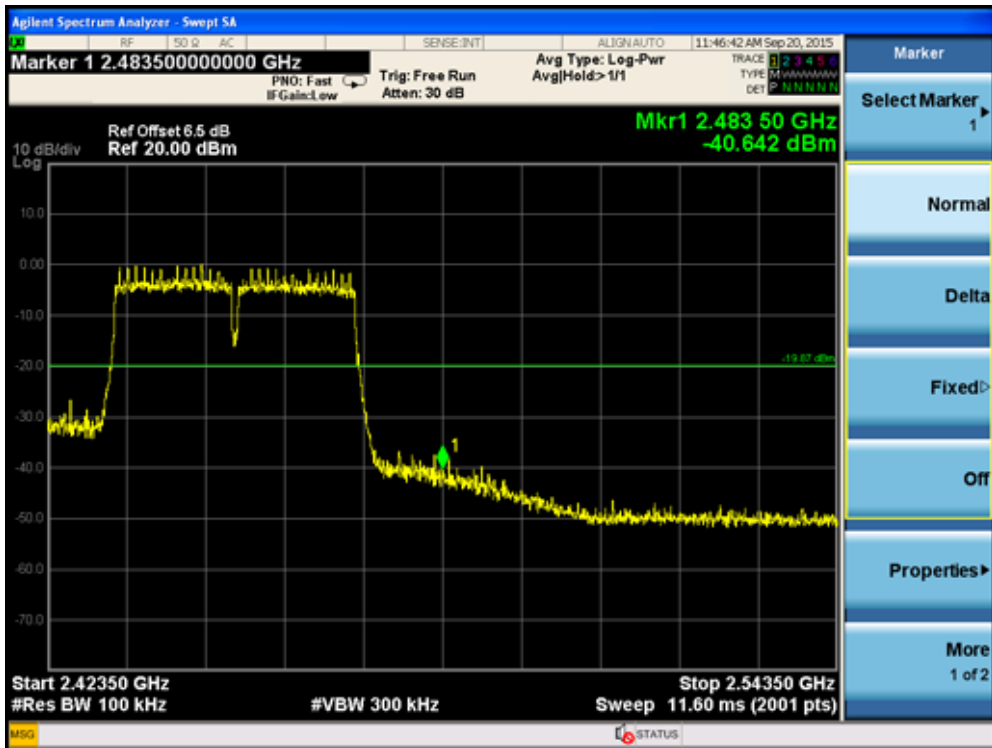
Spurious Emission 30MHz ~ 25GHz - Frequency M



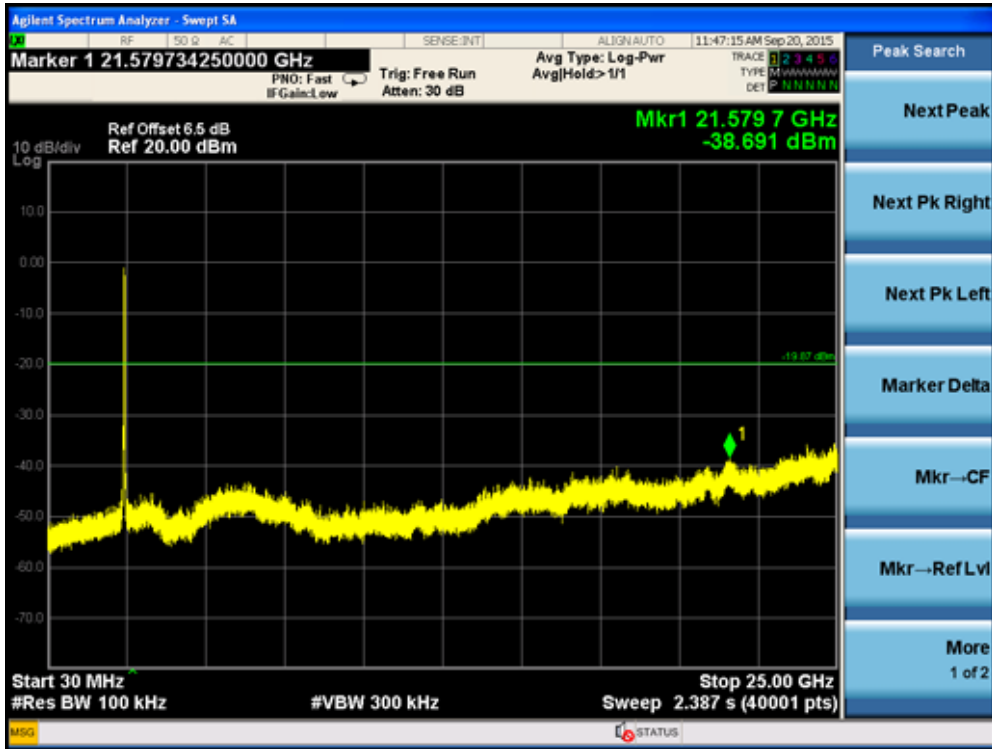
Channel 09 (2452MHz)-MIMO-Ant 1 Reference Level – Frequency H



High Band Edge - Frequency H



Spurious Emission 30MHz ~ 25GHz - Frequency H



7. Radiated Emission Band Edge

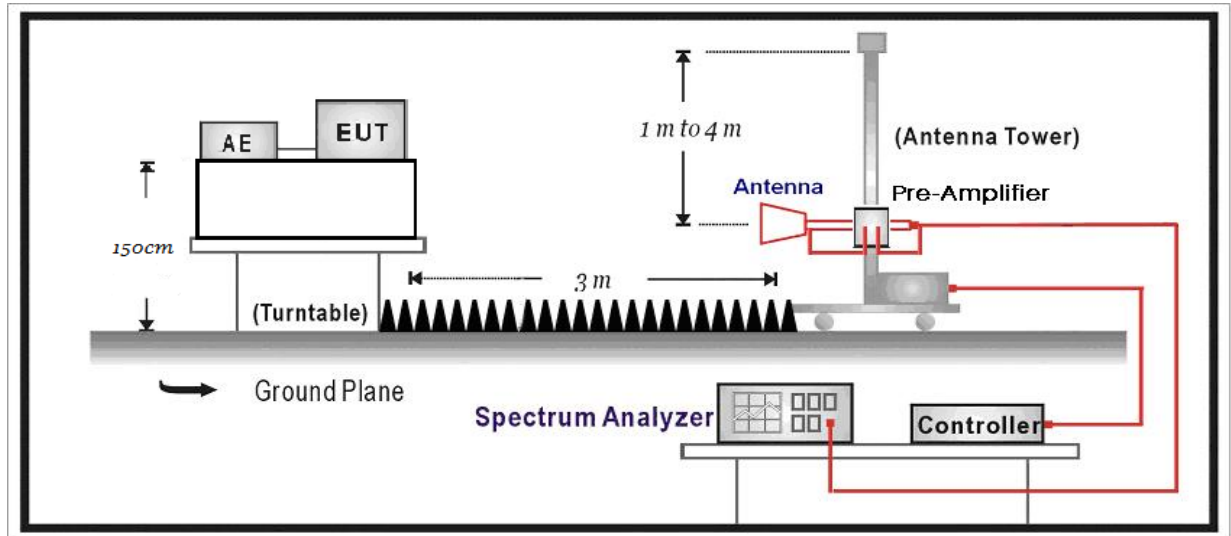
7.1. Test Equipment

Radiated Emission Band Edge / AC-5

Instrument	Manufacturer	Type No.	Serial No.	Cali. Due Date
Spectrum Analyzer	Agilent	N9010A	MY48030494	2016.03.10
Preamplifier	Miteq	NSP1800-25	1364185	2016.05.03
Preamplifier	QuieTek	AP-040G	CHM-0906001	2016.05.03
Bilog Antenna	Teseq GmbH	CBL6112D	27612	2015.10.15
DRG Horn	ETS-Lindgren	3117	00123988	2016.01.07
Coaxial Cable	Huber+Suhner	SUCOFLEX 106	AC5-C1	2016.03.01
Coaxial Cable	Huber+Suhner	SUCOFLEX 106	AC5-C2	2016.03.01
Coaxial Cable	Huber+Suhner	SUCOFLEX 102	AC5-C3	2016.03.01
EMI Receiver	Agilent	N9038A	MY51210196	2016.06.09
Temperature/Humidity Meter	Zhichen	ZC1-2	AC5-TH	2016.01.08

Note 1: All equipments are calibrated with traceable calibrations. Each calibration is traceable to the national or international standards.

7.2. Test Setup



7.3. Limit

FCC&IC

Radiated emissions which fall in the restricted bands, as defined in Section 15.205(a) of FCC part 15, must also comply with the radiated emission limits specified in Section 15.209(a) (see Section 15.205(c)).

7.4. Test Procedure

According to FCC ANSI C63.4: 2014 & ANSI C63.10: 2013 & FCC 47CFR 15.247 & KDB 558074 D01v03r03 & Industry Canada RSS-Gen Issue 4 & RSS-247 Issue 1

This test is required for any spurious emission or modulation product that falls in a Restricted Band, as defined in Section 15.205 of FCC part 15. It must be performed with the highest gain of each type of antenna proposed for use with the EUT. Use the following spectrum analyzer settings:

Span = wide enough to fully capture the emission being measured

RBW = 1 MHz for $f \geq 1$ GHz, 100 kHz for $f < 1$ GHz

VBW \geq RBW

Sweep = auto

Detector function = peak

Trace = max hold

Follow the guidelines in ANSI C63.4 with respect to maximizing the emission by rotating the EUT, measuring the emission while the EUT is situated in three orthogonal planes (if appropriate), adjusting the measurement antenna height and polarization, etc. A pre-amp and a

high pass filter are required for this test, in order to provide the measuring system with sufficient sensitivity. Allow the trace to stabilize. The peak reading of the emission, after being corrected by the antenna factor, cable loss, pre-amp gain, etc., is the peak field strength, which must comply with the limit specified in Section 15.35(b) of FCC part 15.

Now set the VBW $\geq 1 / T$ (the minimum transmission duration), while maintaining all of the other instrument settings. This peak level, once corrected, must comply with the limit specified in Section 15.209 of FCC Part 15.

If the emission on which a radiated measurement must be made is located at the edge of the authorized band of operation, then the alternative “marker-IP-STB” method may be employed.

7.5. Uncertainty

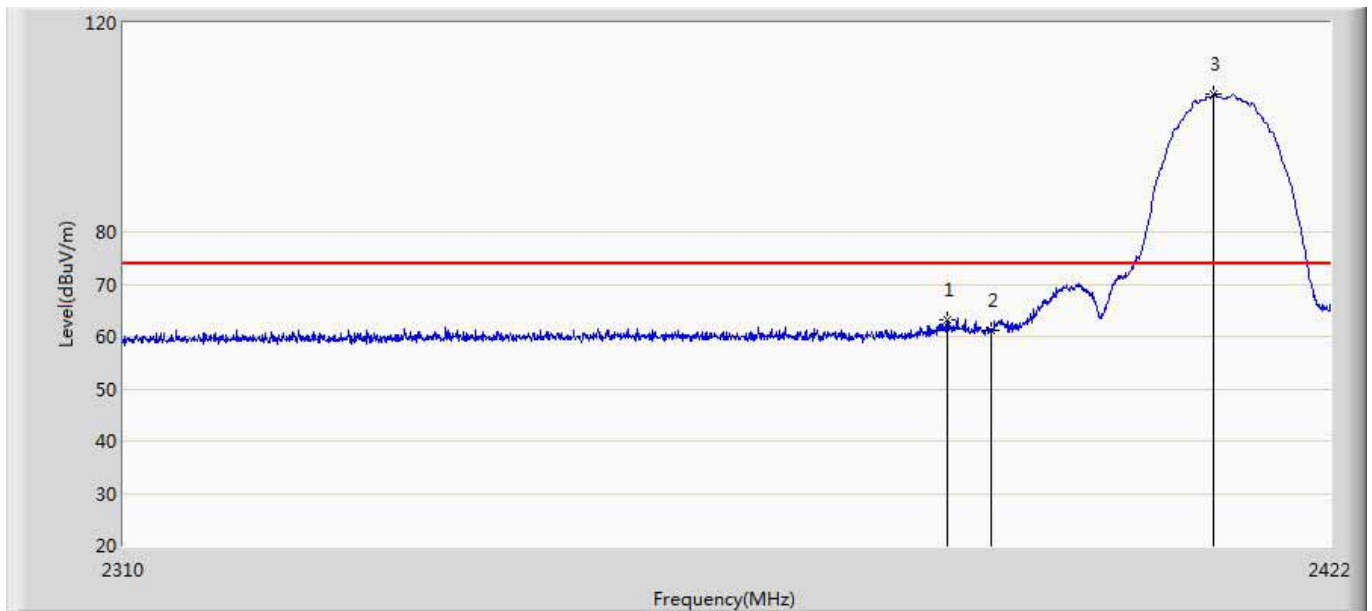
The measurement uncertainty above 1G is defined as ± 3.9 dB

7.6. Test Result

Measure Level = Reading Level + Cable Loss + Antenna Factor - Preamplifier Gain

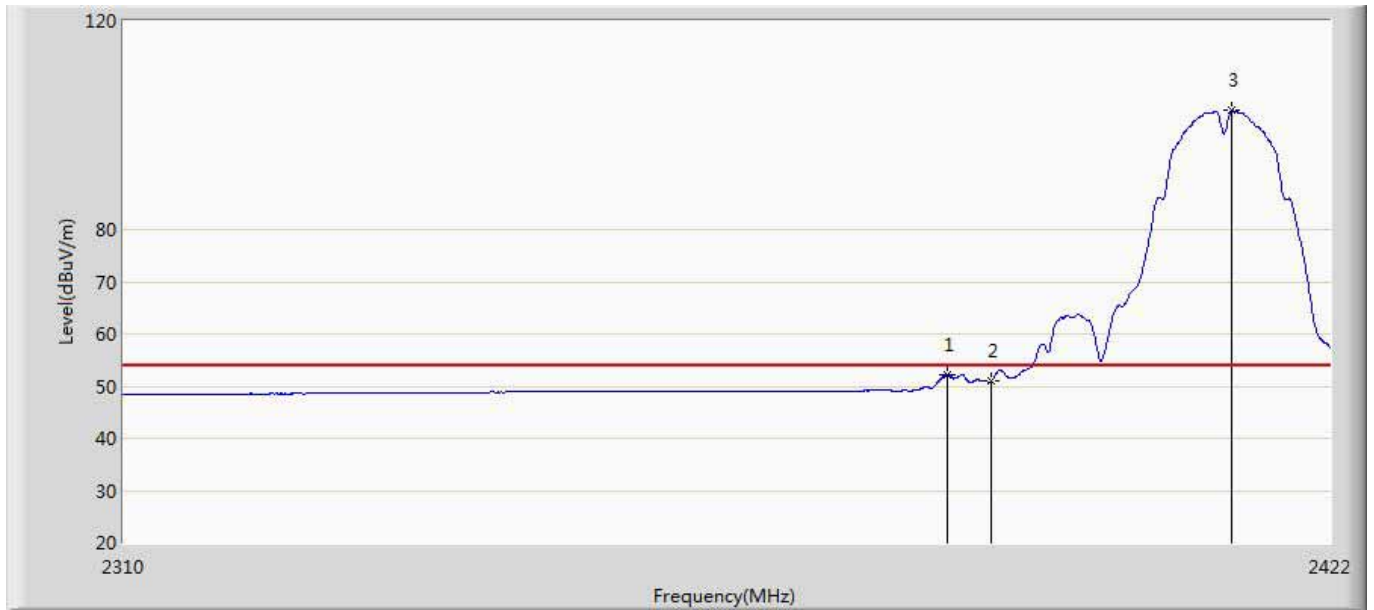
Note: when the duty cycle is less than 98%, a duty cycle factor is calculated in the correction factor.

Engineer: Scott	
Site: AC5	Time: 2015/08/27 - 10:24
Limit: FCC_Part15.209_RE(3m)	Margin: 0
Probe: Horn_3117_00167055(1-18GHz)	Polarity: Horizontal
EUT: IP-STB	Power: 120V/60Hz
Note: Mode 1 Transmit at 802.11b CH2412 by ant1	



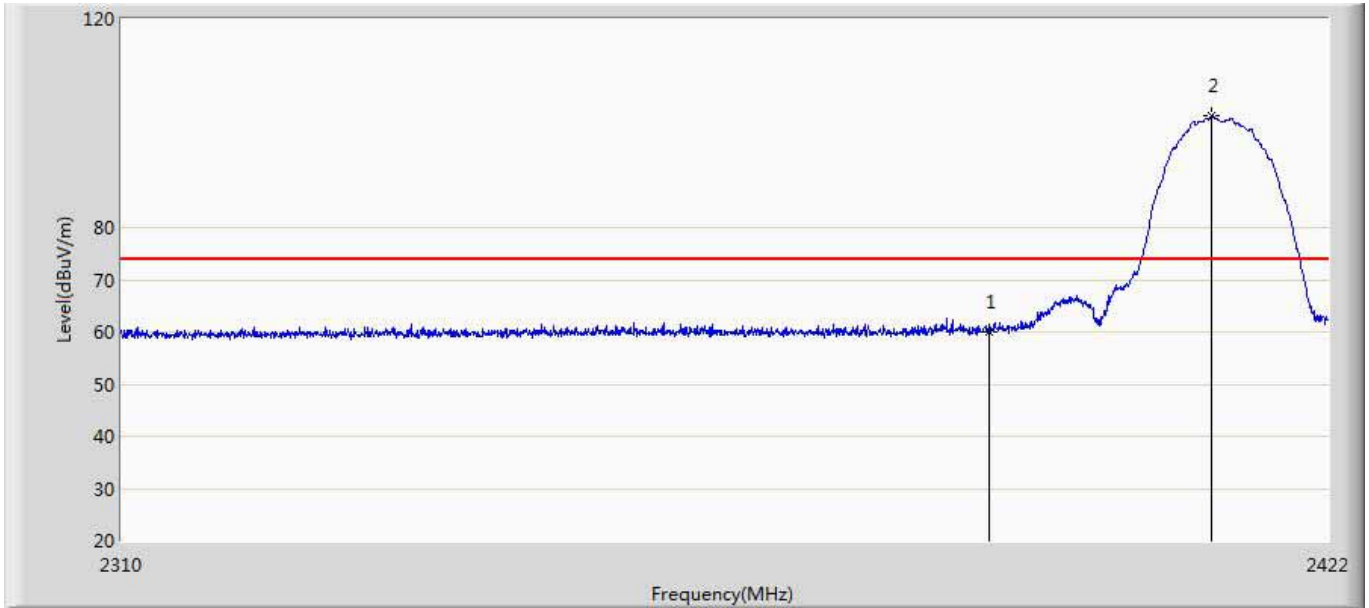
No	Mark	Frequency (MHz)	Measure Level (dBuV/m)	Reading Level (dBuV)	Over Limit (dB)	Limit (dBuV/m)	Factor (dB)	Type
1		2385.880	63.171	26.189	-10.829	74.000	36.983	PK
2		2390.000	61.076	24.085	-12.924	74.000	36.991	PK
3	*	2410.912	106.268	69.254	32.268	74.000	37.015	PK

Engineer: Scott	
Site: AC5	Time: 2015/08/27 - 10:20
Limit: FCC_Part15.209_RE(3m)	Margin: 0
Probe: Horn_3117_00167055(1-18GHz)	Polarity: Horizontal
EUT: IP-STB	Power: 120V/60Hz
Note: Mode 1 Transmit at 802.11b CH2412 by ant1	



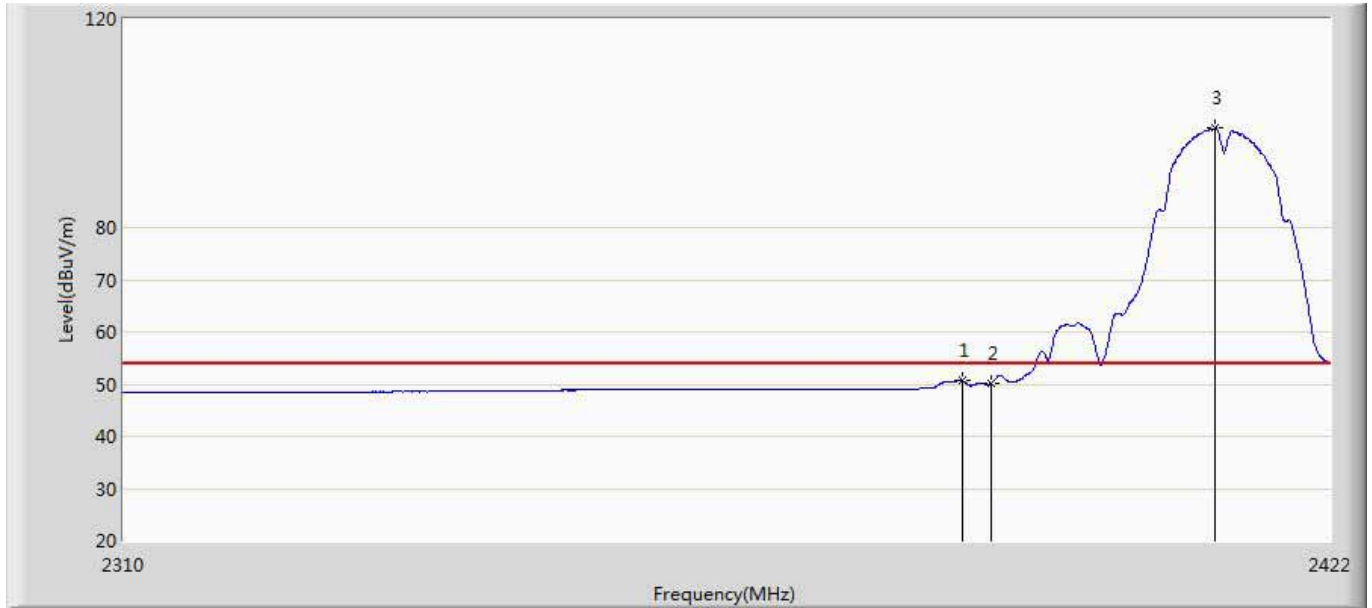
No	Mark	Frequency (MHz)	Measure Level (dBuV/m)	Reading Level (dBuV)	Over Limit (dB)	Limit (dBuV/m)	Factor (dB)	Type
1		2385.880	52.171	15.189	-1.829	54.000	36.983	AV
2		2390.000	50.915	13.924	-3.085	54.000	36.991	AV
3	*	2412.704	102.798	65.768	48.798	54.000	37.030	AV

Engineer: Scott	
Site: AC5	Time: 2015/08/27 - 10:31
Limit: FCC_Part15.209_RE(3m)	Margin: 0
Probe: Horn_3117_00167055(1-18GHz)	Polarity: Vertical
EUT: IP-STB	Power: 120V/60Hz
Note: Mode 1 Transmit at 802.11b CH2412 by ant1	



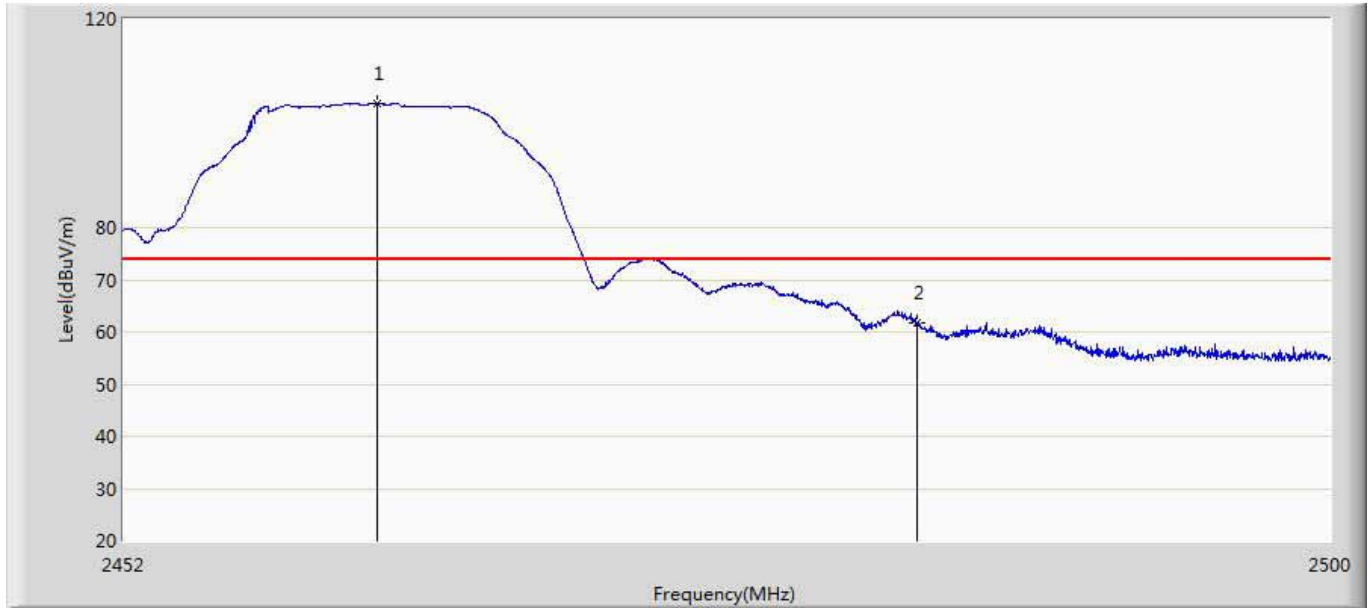
No	Mark	Frequency (MHz)	Measure Level (dBuV/m)	Reading Level (dBuV)	Over Limit (dB)	Limit (dBuV/m)	Factor (dB)	Type
1		2390.000	60.128	23.137	-13.872	74.000	36.991	PK
2	*	2410.968	101.314	64.300	27.314	74.000	37.015	PK

Engineer: Scott	
Site: AC5	Time: 2015/08/27 - 10:31
Limit: FCC_Part15.209_RE(3m)	Margin: 0
Probe: Horn_3117_00167055(1-18GHz)	Polarity: Vertical
EUT: IP-STB	Power: 120V/60Hz
Note: Mode 1 Transmit at 802.11b CH2412 by ant1	



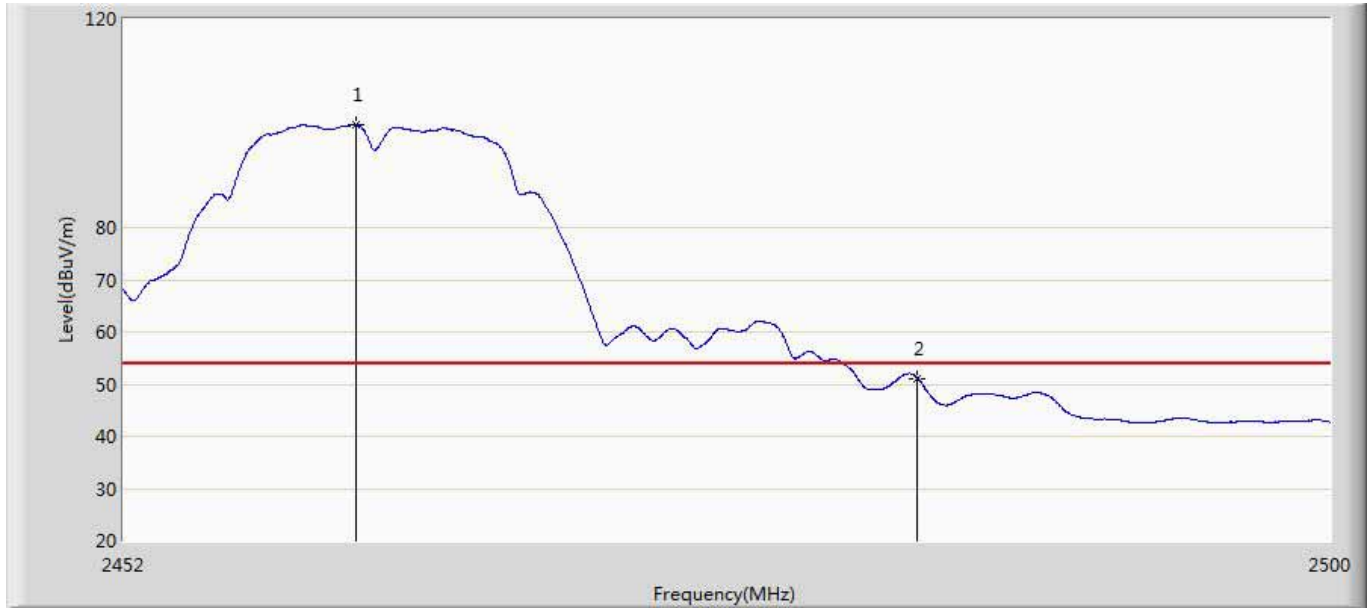
No	Mark	Frequency (MHz)	Measure Level (dBuV/m)	Reading Level (dBuV)	Over Limit (dB)	Limit (dBuV/m)	Factor (dB)	Type
1		2387.392	50.599	13.613	-3.401	54.000	36.985	AV
2		2390.000	50.103	13.112	-3.897	54.000	36.991	AV
3	*	2411.080	99.050	62.035	45.050	54.000	37.015	AV

Engineer: Scott	
Site: AC5	Time: 2015/08/27 - 10:45
Limit: FCC_Part15.209_RE(3m)	Margin: 0
Probe: Horn_3117_00167055(1-18GHz)	Polarity: Horizontal
EUT: IP-STB	Power: 120V/60Hz
Note: Mode 1 Transmit at 802.11b CH2462 by ant1	



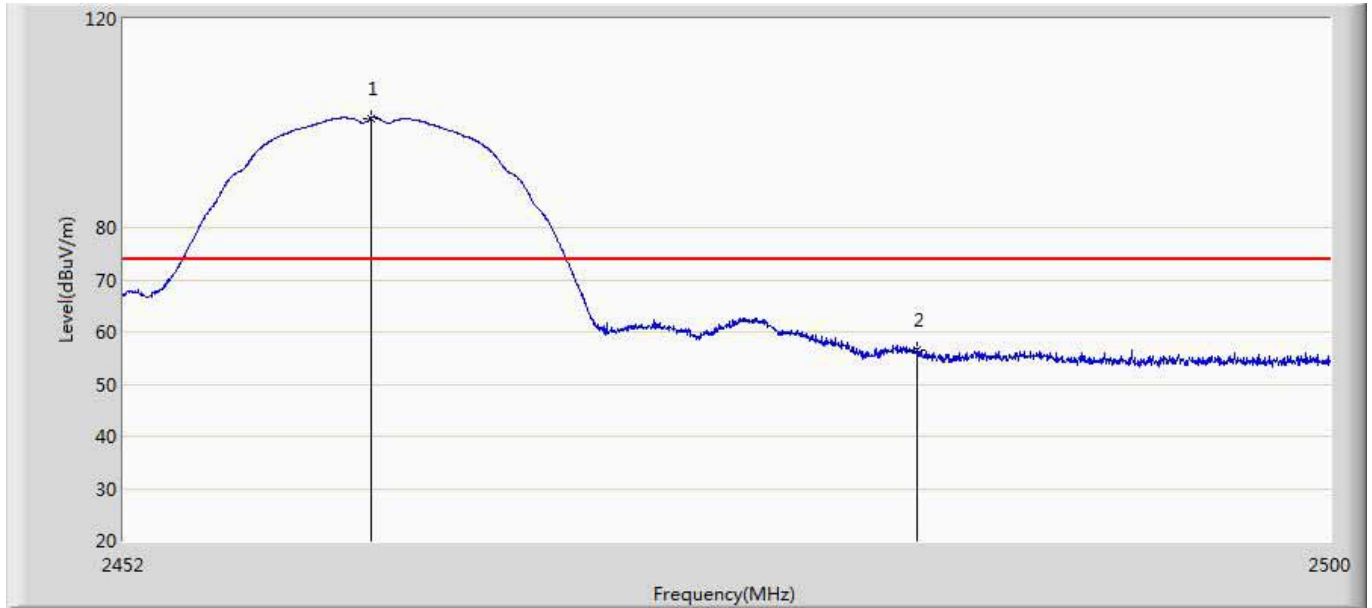
No	Mark	Frequency (MHz)	Measure Level (dBuV/m)	Reading Level (dBuV)	Over Limit (dB)	Limit (dBuV/m)	Factor (dB)	Type
1	*	2462.032	103.747	66.517	29.747	74.000	37.229	PK
2		2483.500	61.825	24.454	-12.175	74.000	37.371	PK

Engineer: Scott	
Site: AC5	Time: 2015/08/27 - 10:46
Limit: FCC_Part15.209_RE(3m)	Margin: 0
Probe: Horn_3117_00167055(1-18GHz)	Polarity: Horizontal
EUT: IP-STB	Power: 120V/60Hz
Note: Mode 1 Transmit at 802.11b CH2462 by ant1	



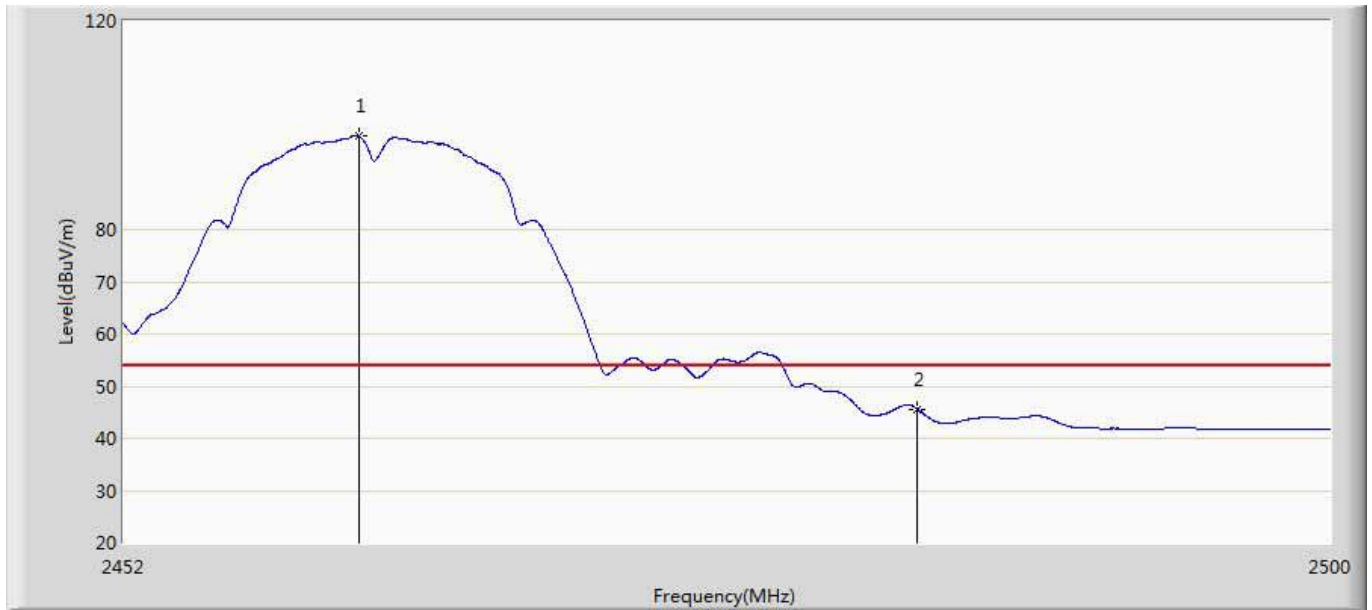
No	Mark	Frequency (MHz)	Measure Level (dBuV/m)	Reading Level (dBuV)	Over Limit (dB)	Limit (dBuV/m)	Factor (dB)	Type
1	*	2461.216	99.764	62.536	45.764	54.000	37.228	AV
2		2483.500	51.158	13.787	-2.842	54.000	37.371	AV

Engineer: Scott	
Site: AC5	Time: 2015/08/27 - 10:49
Limit: FCC_Part15.209_RE(3m)	Margin: 0
Probe: Horn_3117_00167055(1-18GHz)	Polarity: Vertical
EUT: IP-STB	Power: 120V/60Hz
Note: Mode 1 Transmit at 802.11b CH2462 by ant1	



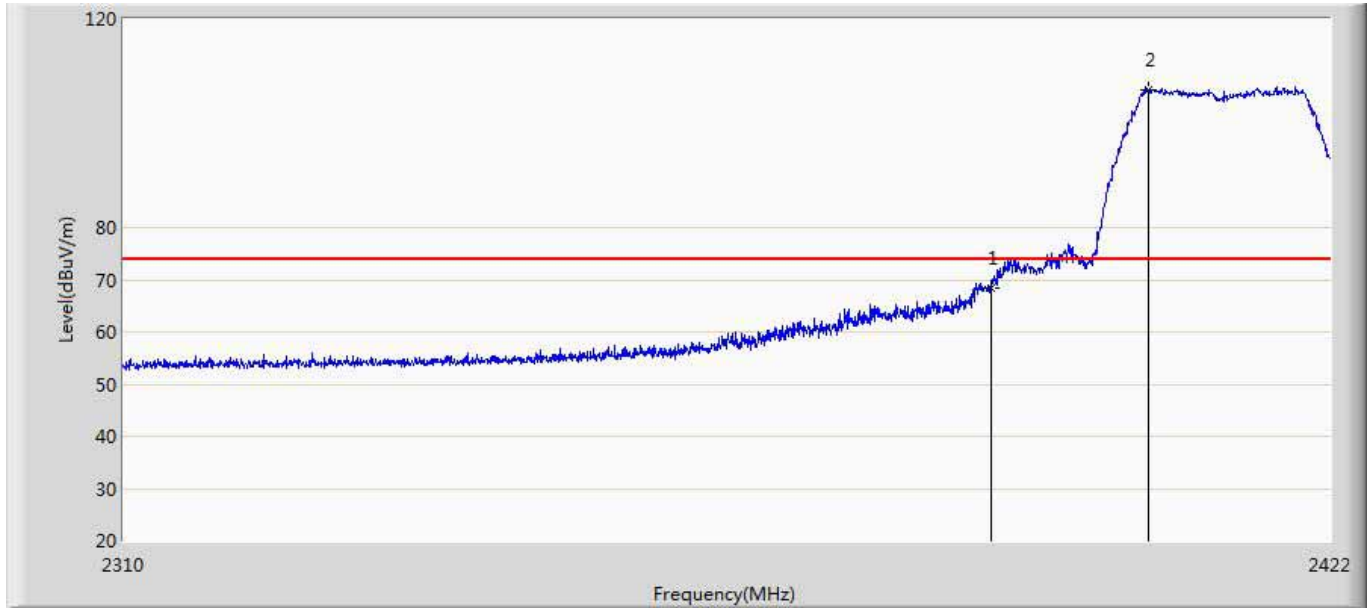
No	Mark	Frequency (MHz)	Measure Level (dBuV/m)	Reading Level (dBuV)	Over Limit (dB)	Limit (dBuV/m)	Factor (dB)	Type
1	*	2461.792	100.967	63.738	26.967	74.000	37.229	PK
2		2483.500	56.396	19.025	-17.604	74.000	37.371	PK

Engineer: Scott	
Site: AC5	Time: 2015/08/27 - 10:50
Limit: FCC_Part15.209_RE(3m)	Margin: 0
Probe: Horn_3117_00167055(1-18GHz)	Polarity: Vertical
EUT: IP-STB	Power: 120V/60Hz
Note: Mode 1 Transmit at 802.11b CH2462 by ant1	



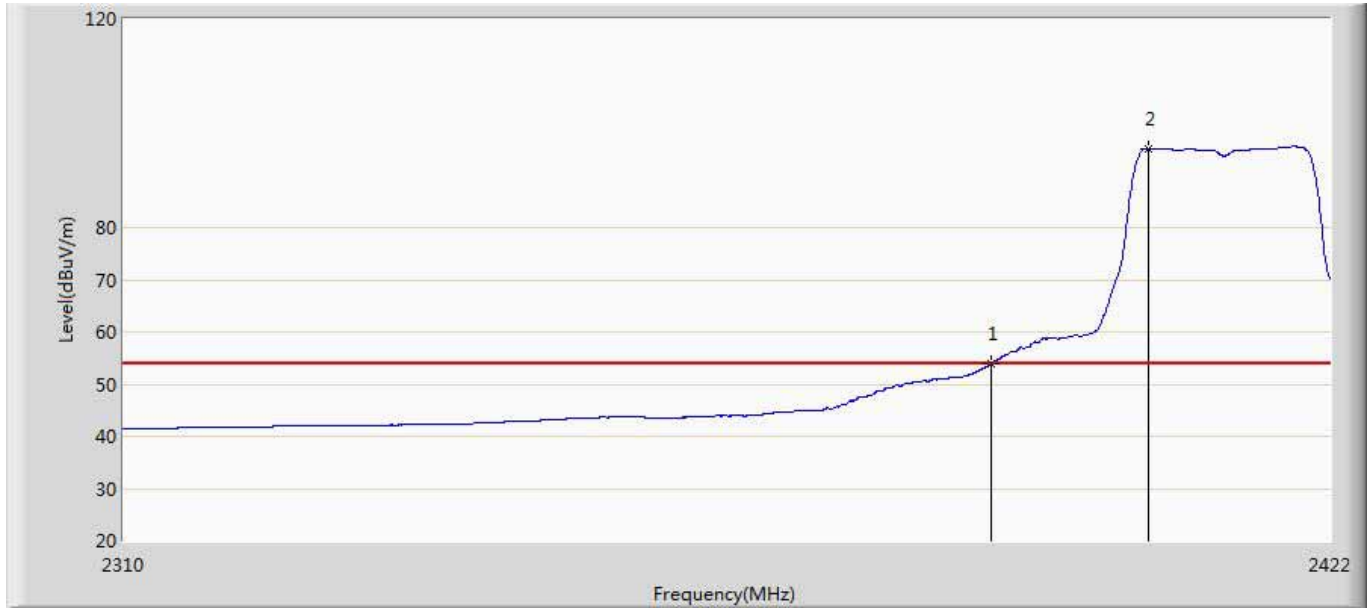
No	Mark	Frequency (MHz)	Measure Level (dBuV/m)	Reading Level (dBuV)	Over Limit (dB)	Limit (dBuV/m)	Factor (dB)	Type
1	*	2461.288	97.868	60.640	43.868	54.000	37.228	AV
2		2483.500	45.581	8.210	-8.419	54.000	37.371	AV

Engineer: Scott	
Site: AC5	Time: 2015/08/27 - 10:59
Limit: FCC_Part15.209_RE(3m)	Margin: 0
Probe: Horn_3117_00167055(1-18GHz)	Polarity: Horizontal
EUT: IP-STB	Power: 120V/60Hz
Note: Mode 2 Transmit at 802.11g CH2412 by ant1	



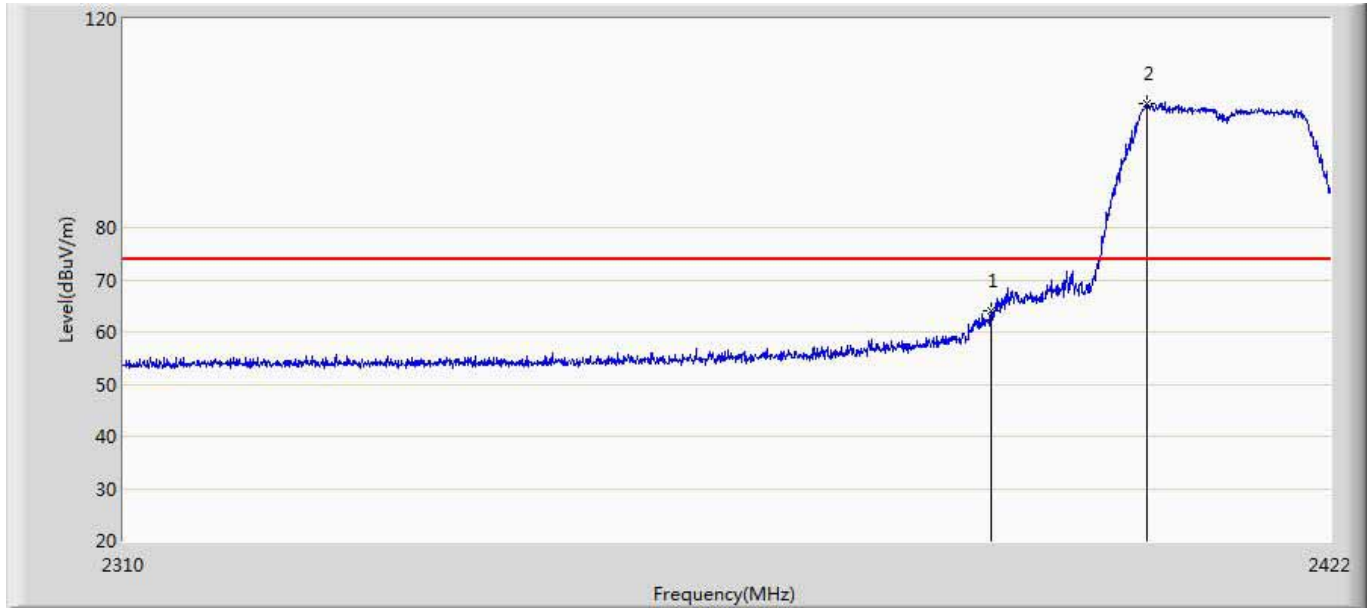
No	Mark	Frequency (MHz)	Measure Level (dBuV/m)	Reading Level (dBuV)	Over Limit (dB)	Limit (dBuV/m)	Factor (dB)	Type
1		2390.000	68.474	31.483	-5.526	74.000	36.991	PK
2	*	2404.864	106.501	69.492	32.501	74.000	37.009	PK

Engineer: Scott	
Site: AC5	Time: 2015/08/27 - 11:01
Limit: FCC_Part15.209_RE(3m)	Margin: 0
Probe: Horn_3117_00167055(1-18GHz)	Polarity: Horizontal
EUT: IP-STB	Power: 120V/60Hz
Note: Mode 2 Transmit at 802.11g CH2412 by ant1	



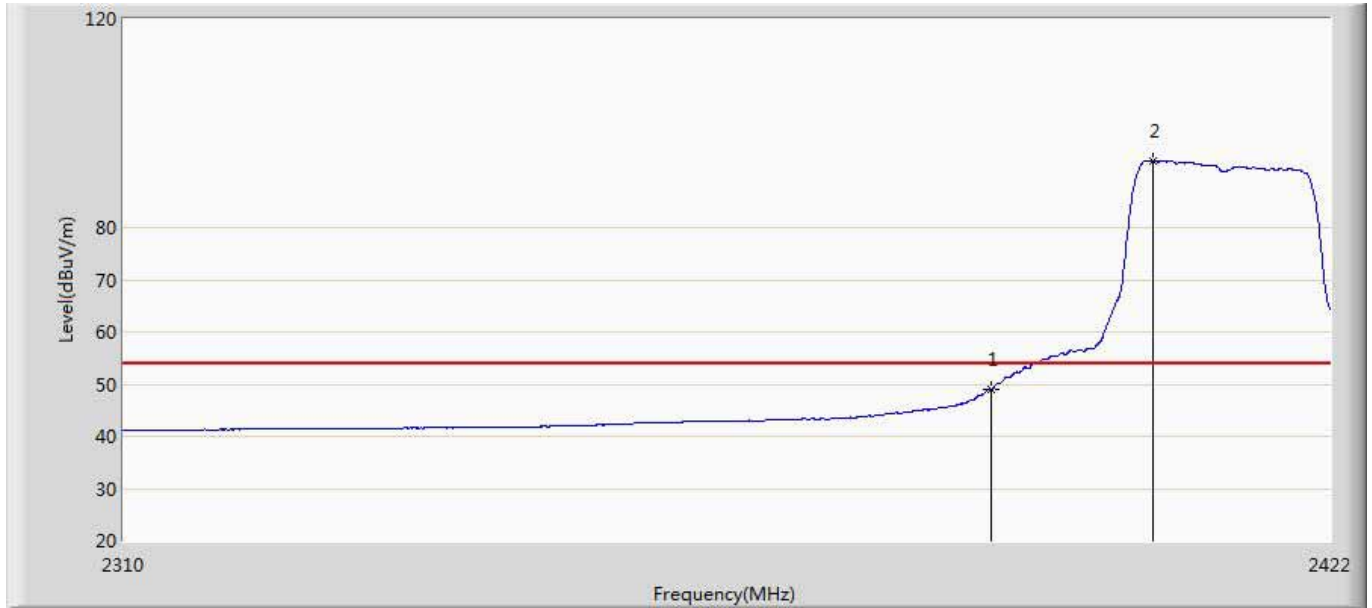
No	Mark	Frequency (MHz)	Measure Level (dBuV/m)	Reading Level (dBuV)	Over Limit (dB)	Limit (dBuV/m)	Factor (dB)	Type
1		2390.000	53.795	16.804	-0.205	54.000	36.991	AV
2	*	2404.752	95.200	58.191	41.200	54.000	37.009	AV

Engineer: Scott	
Site: AC5	Time: 2015/08/27 - 11:05
Limit: FCC_Part15.209_RE(3m)	Margin: 0
Probe: Horn_3117_00167055(1-18GHz)	Polarity: Vertical
EUT: IP-STB	Power: 120V/60Hz
Note: Mode 2 Transmit at 802.11g CH2412 by ant1	



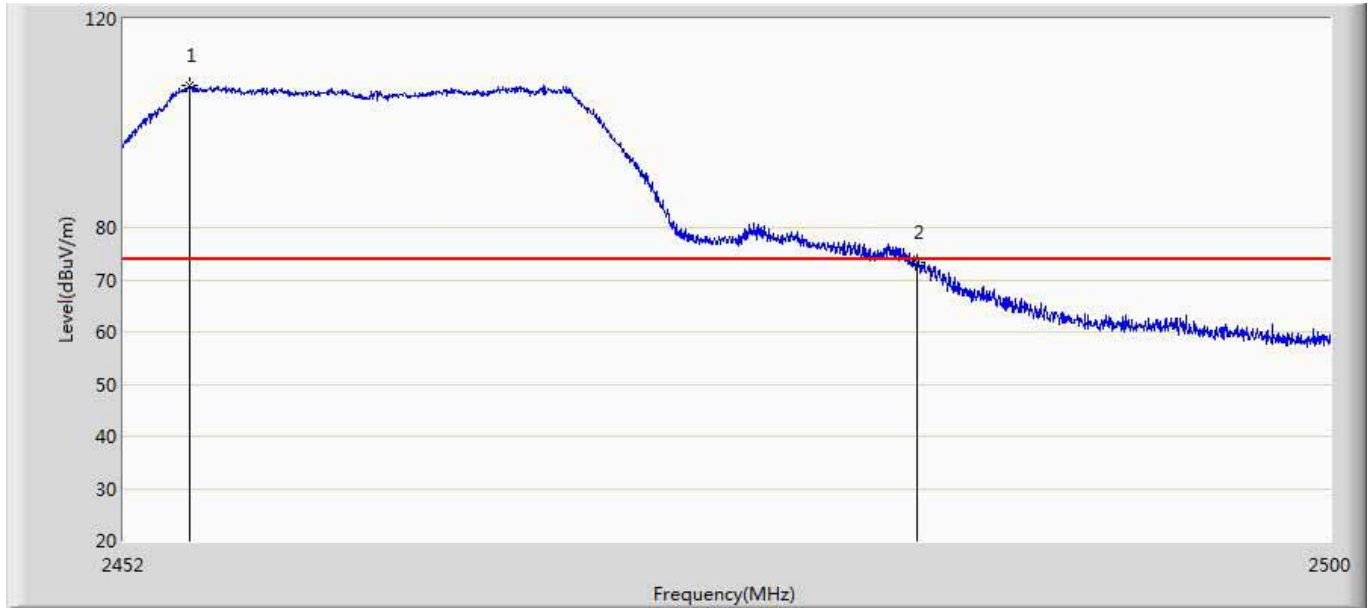
No	Mark	Frequency (MHz)	Measure Level (dBuV/m)	Reading Level (dBuV)	Over Limit (dB)	Limit (dBuV/m)	Factor (dB)	Type
1		2390.000	63.980	26.989	-10.020	74.000	36.991	PK
2	*	2404.640	103.711	66.702	29.711	74.000	37.009	PK

Engineer: Scott	
Site: AC5	Time: 2015/08/27 - 11:05
Limit: FCC_Part15.209_RE(3m)	Margin: 0
Probe: Horn_3117_00167055(1-18GHz)	Polarity: Vertical
EUT: IP-STB	Power: 120V/60Hz
Note: Mode 2 Transmit at 802.11g CH2412 by ant1	



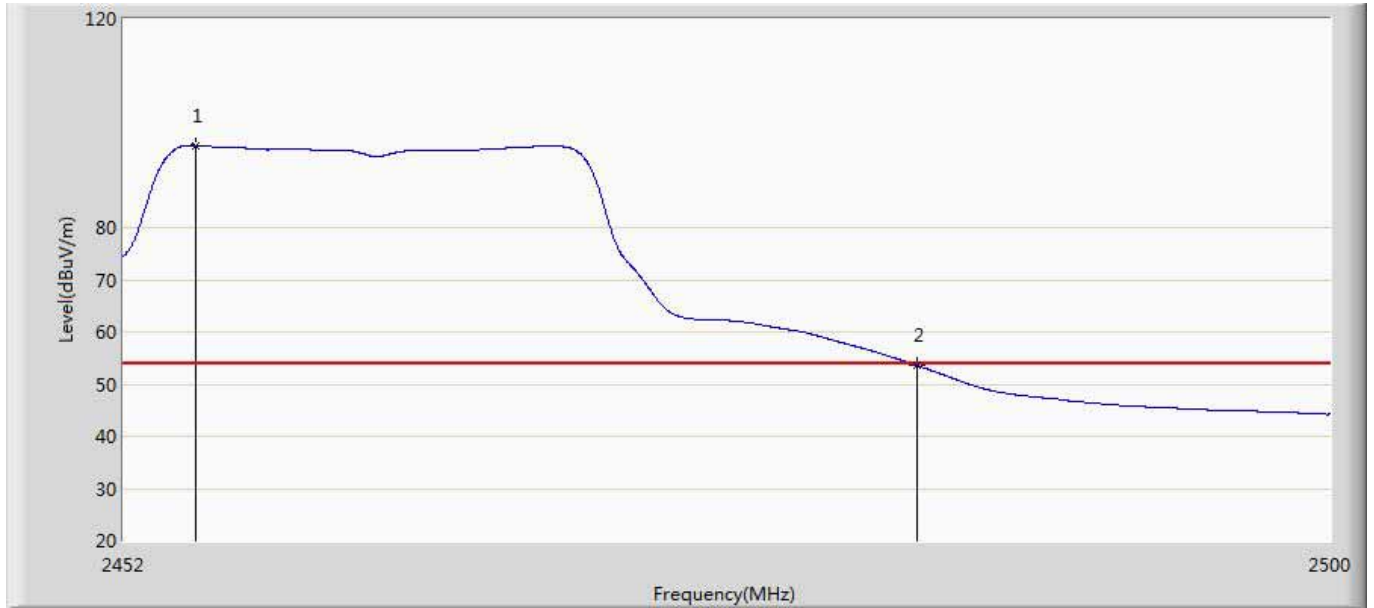
No	Mark	Frequency (MHz)	Measure Level (dBuV/m)	Reading Level (dBuV)	Over Limit (dB)	Limit (dBuV/m)	Factor (dB)	Type
1		2390.000	48.986	11.995	-5.014	54.000	36.991	AV
2	*	2405.200	92.836	55.827	38.836	54.000	37.010	AV

Engineer: Scott	
Site: AC5	Time: 2015/08/27 - 11:10
Limit: FCC_Part15.209_RE(3m)	Margin: 0
Probe: Horn_3117_00167055(1-18GHz)	Polarity: Horizontal
EUT: IP-STB	Power: 120V/60Hz
Note: Mode 2 Transmit at 802.11g CH2462 by ant1	



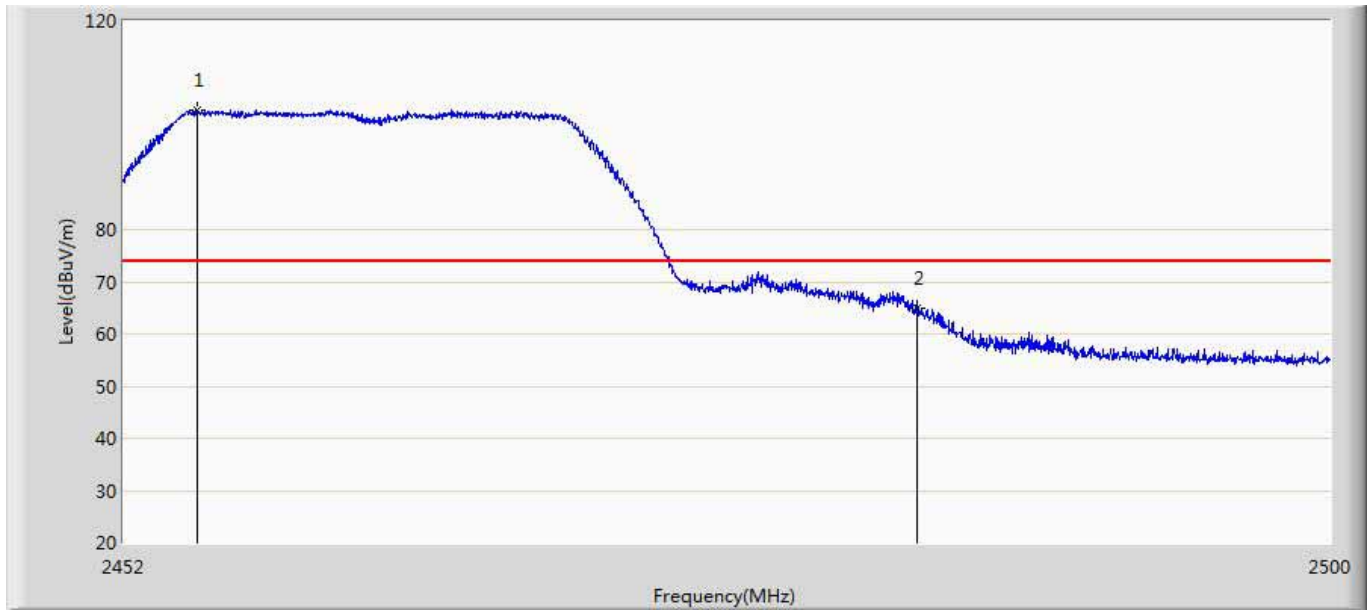
No	Mark	Frequency (MHz)	Measure Level (dBuV/m)	Reading Level (dBuV)	Over Limit (dB)	Limit (dBuV/m)	Factor (dB)	Type
1	*	2454.616	107.117	69.900	33.117	74.000	37.218	PK
2		2483.500	73.288	35.917	-0.712	74.000	37.371	PK

Engineer: Scott	
Site: AC5	Time: 2015/08/27 - 11:14
Limit: FCC_Part15.209_RE(3m)	Margin: 0
Probe: Horn_3117_00167055(1-18GHz)	Polarity: Horizontal
EUT: IP-STB	Power: 120V/60Hz
Note: Mode 2 Transmit at 802.11g CH2462 by ant1	



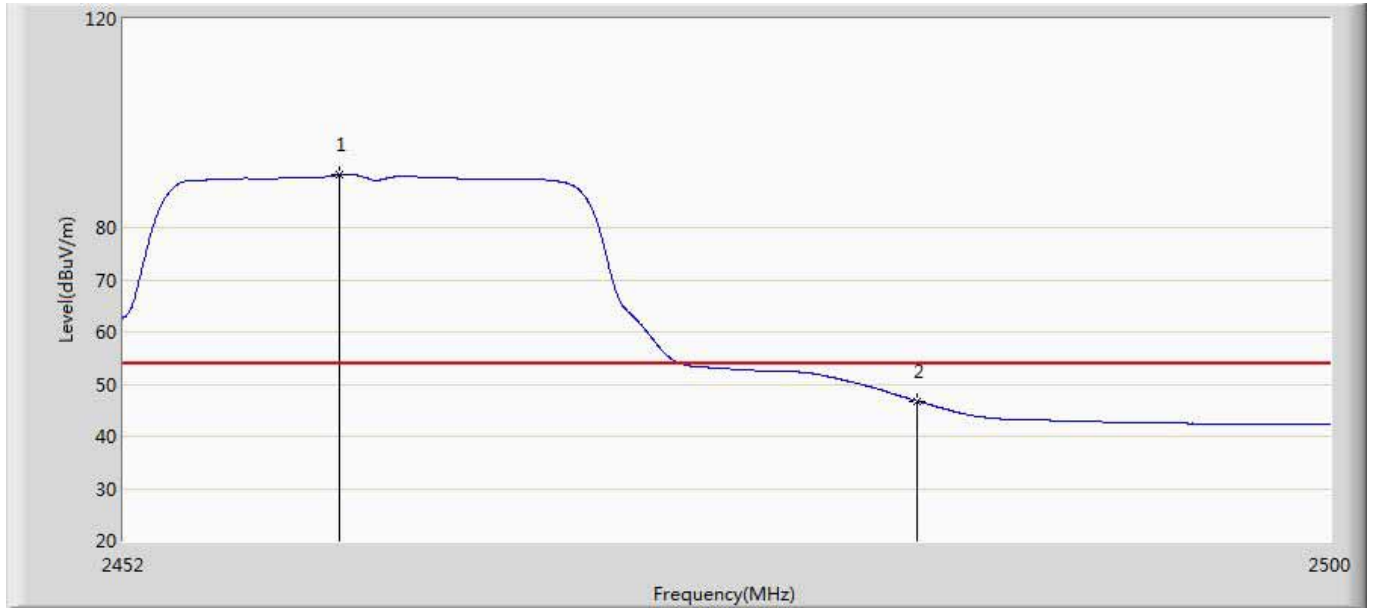
No	Mark	Frequency (MHz)	Measure Level (dBuV/m)	Reading Level (dBuV)	Over Limit (dB)	Limit (dBuV/m)	Factor (dB)	Type
1	*	2454.880	95.766	58.548	41.766	54.000	37.217	AV
2		2483.500	53.521	16.150	-0.479	54.000	37.371	AV

Engineer: Scott	
Site: AC5	Time: 2015/08/27 - 11:20
Limit: FCC_Part15.209_RE(3m)	Margin: 0
Probe: Horn_3117_00167055(1-18GHz)	Polarity: Vertical
EUT: IP-STB	Power: 120V/60Hz
Note: Mode 2 Transmit at 802.11g CH2462 by ant1	



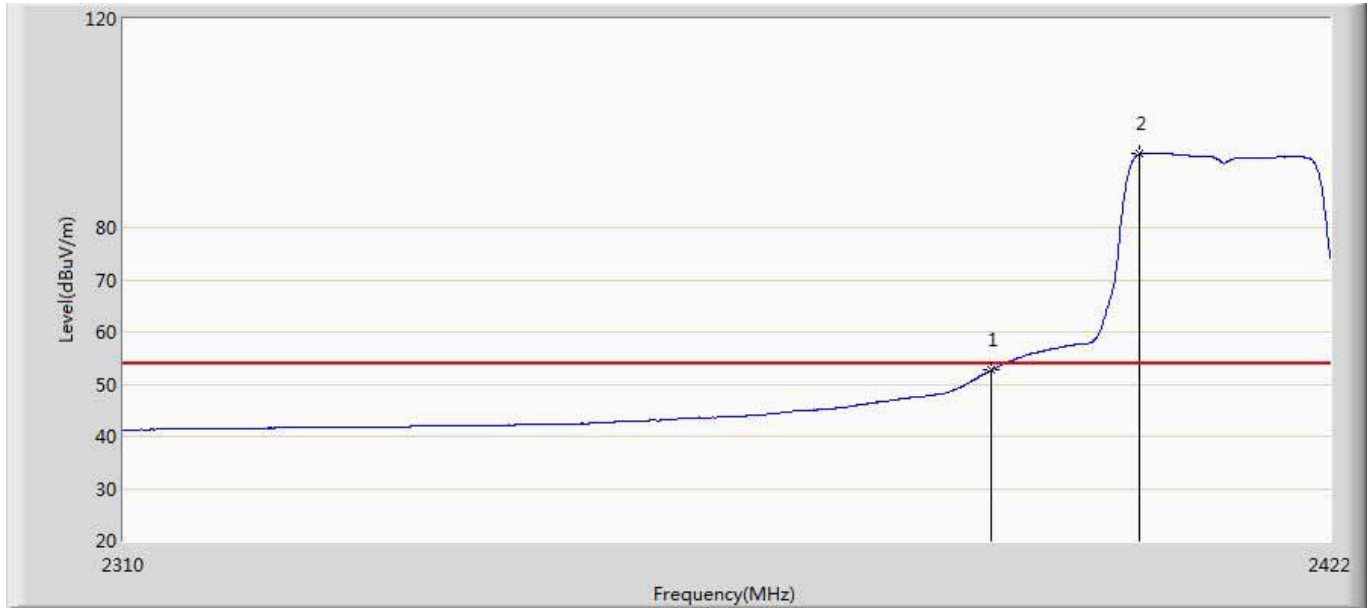
No	Mark	Frequency (MHz)	Measure Level (dBuV/m)	Reading Level (dBuV)	Over Limit (dB)	Limit (dBuV/m)	Factor (dB)	Type
1	*	2454.928	102.787	65.569	28.787	74.000	37.218	PK
2		2483.500	65.064	27.693	-8.936	74.000	37.371	PK

Engineer: Scott	
Site: AC5	Time: 2015/08/27 - 11:20
Limit: FCC_Part15.209_RE(3m)	Margin: 0
Probe: Horn_3117_00167055(1-18GHz)	Polarity: Vertical
EUT: IP-STB	Power: 120V/60Hz
Note: Mode 2 Transmit at 802.11g CH2462 by ant1	



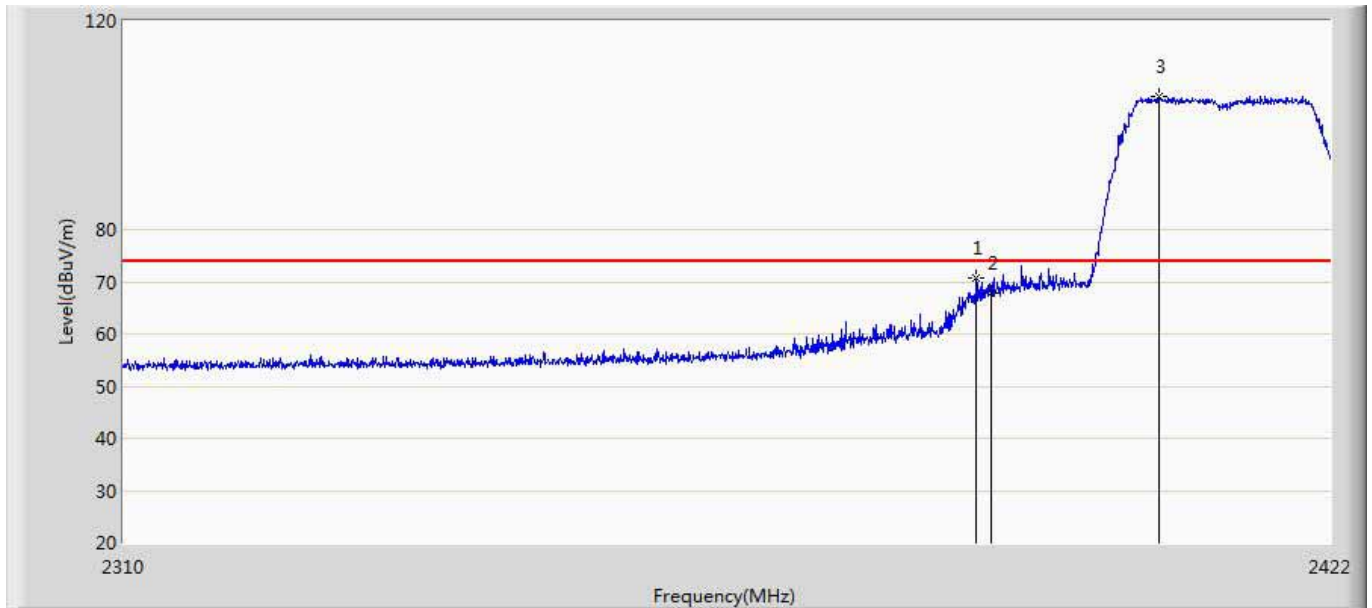
No	Mark	Frequency (MHz)	Measure Level (dBuV/m)	Reading Level (dBuV)	Over Limit (dB)	Limit (dBuV/m)	Factor (dB)	Type
1	*	2460.544	90.080	52.853	36.080	54.000	37.227	AV
2		2483.500	46.712	9.341	-7.288	54.000	37.371	AV

Engineer: Scott	
Site: AC5	Time: 2015/08/27 - 11:35
Limit: FCC_Part15.209_RE(3m)	Margin: 0
Probe: Horn_3117_00167055(1-18GHz)	Polarity: Horizontal
EUT: IP-STB	Power: 120V/60Hz
Note: Mode 3 Transmit at 802.11n(20MHz) CH2412 by ant1	



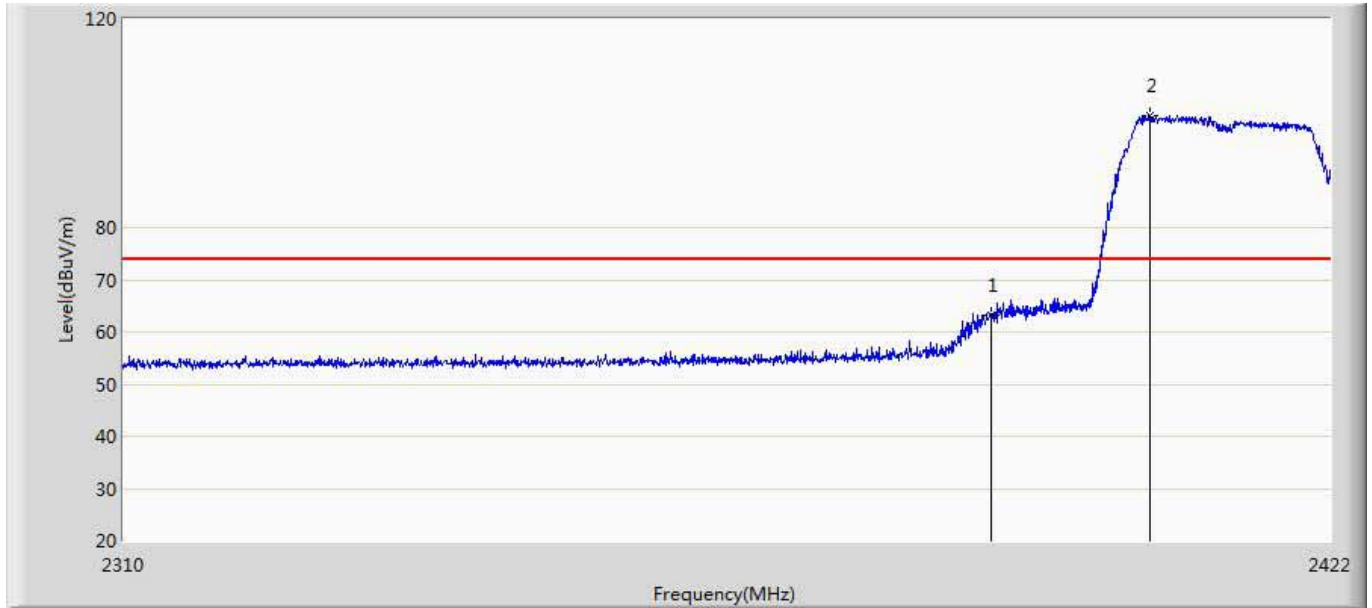
No	Mark	Frequency (MHz)	Measure Level (dBuV/m)	Reading Level (dBuV)	Over Limit (dB)	Limit (dBuV/m)	Factor (dB)	Type
1		2390.000	52.625	15.634	-1.375	54.000	36.991	AV
2	*	2403.912	94.099	57.091	40.099	54.000	37.008	AV

Engineer: Scott	
Site: AC5	Time: 2015/08/27 - 11:37
Limit: FCC_Part15.209_RE(3m)	Margin: 0
Probe: Horn_3117_00167055(1-18GHz)	Polarity: Horizontal
EUT: IP-STB	Power: 120V/60Hz
Note: Mode 3 Transmit at 802.11n(20MHz) CH2412 by ant1	



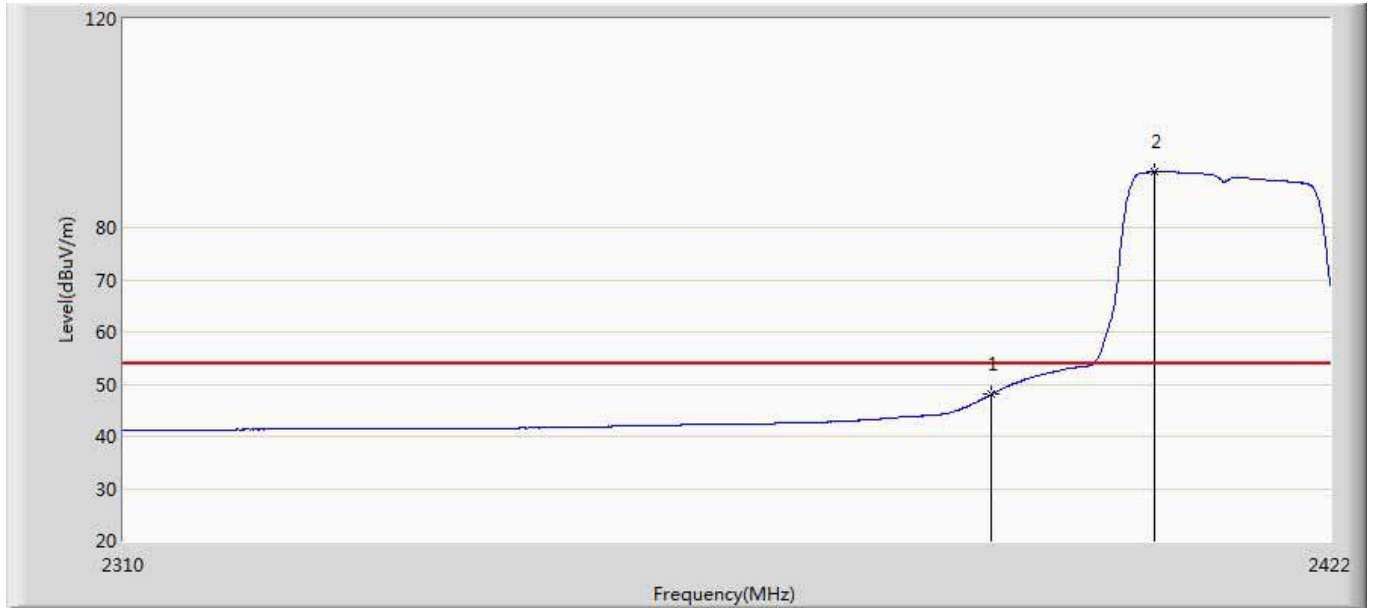
No	Mark	Frequency (MHz)	Measure Level (dBuV/m)	Reading Level (dBuV)	Over Limit (dB)	Limit (dBuV/m)	Factor (dB)	Type
1		2388.624	70.690	33.702	-3.310	74.000	36.988	PK
2		2390.000	67.778	30.787	-6.222	74.000	36.991	PK
3	*	2405.872	105.516	68.506	31.516	74.000	37.010	PK

Engineer: Scott	
Site: AC5	Time: 2015/08/27 - 11:39
Limit: FCC_Part15.209_RE(3m)	Margin: 0
Probe: Horn_3117_00167055(1-18GHz)	Polarity: Vertical
EUT: IP-STB	Power: 120V/60Hz
Note: Mode 3 Transmit at 802.11n(20MHz) CH2412 by ant1	



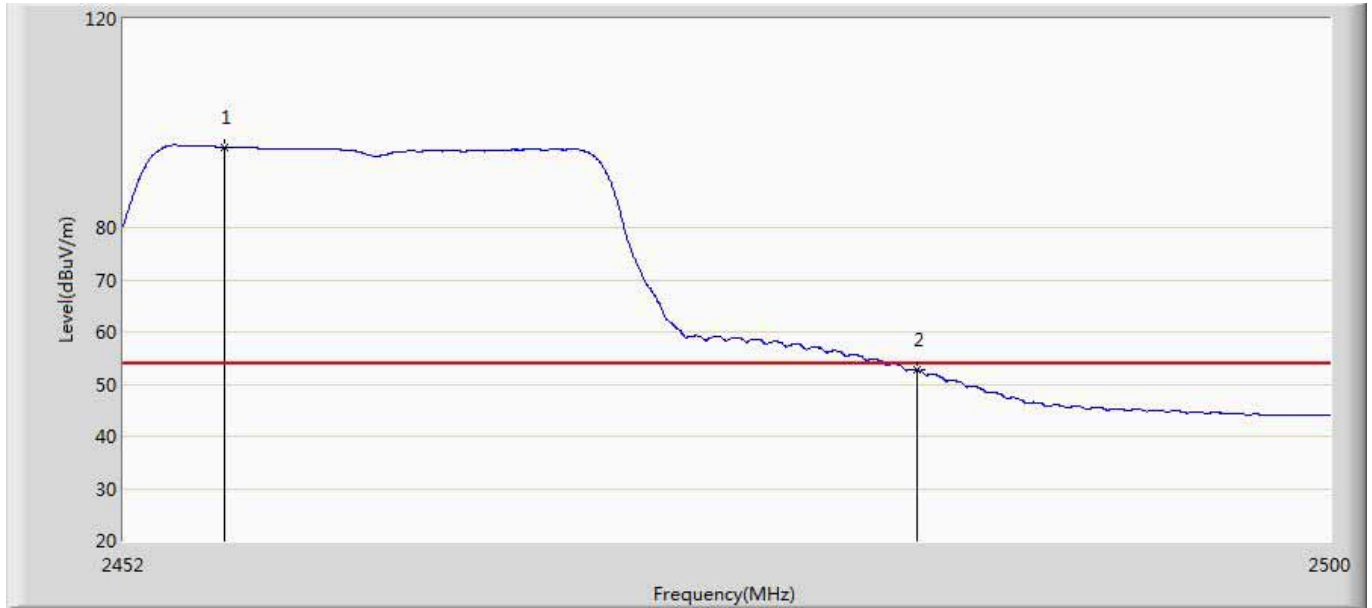
No	Mark	Frequency (MHz)	Measure Level (dBuV/m)	Reading Level (dBuV)	Over Limit (dB)	Limit (dBuV/m)	Factor (dB)	Type
1		2390.000	63.273	26.282	-10.727	74.000	36.991	PK
2	*	2404.976	101.585	64.576	27.585	74.000	37.009	PK

Engineer: Scott	
Site: AC5	Time: 2015/08/27 - 11:39
Limit: FCC_Part15.209_RE(3m)	Margin: 0
Probe: Horn_3117_00167055(1-18GHz)	Polarity: Vertical
EUT: IP-STB	Power: 120V/60Hz
Note: Mode 3 Transmit at 802.11n(20MHz) CH2412 by ant1	



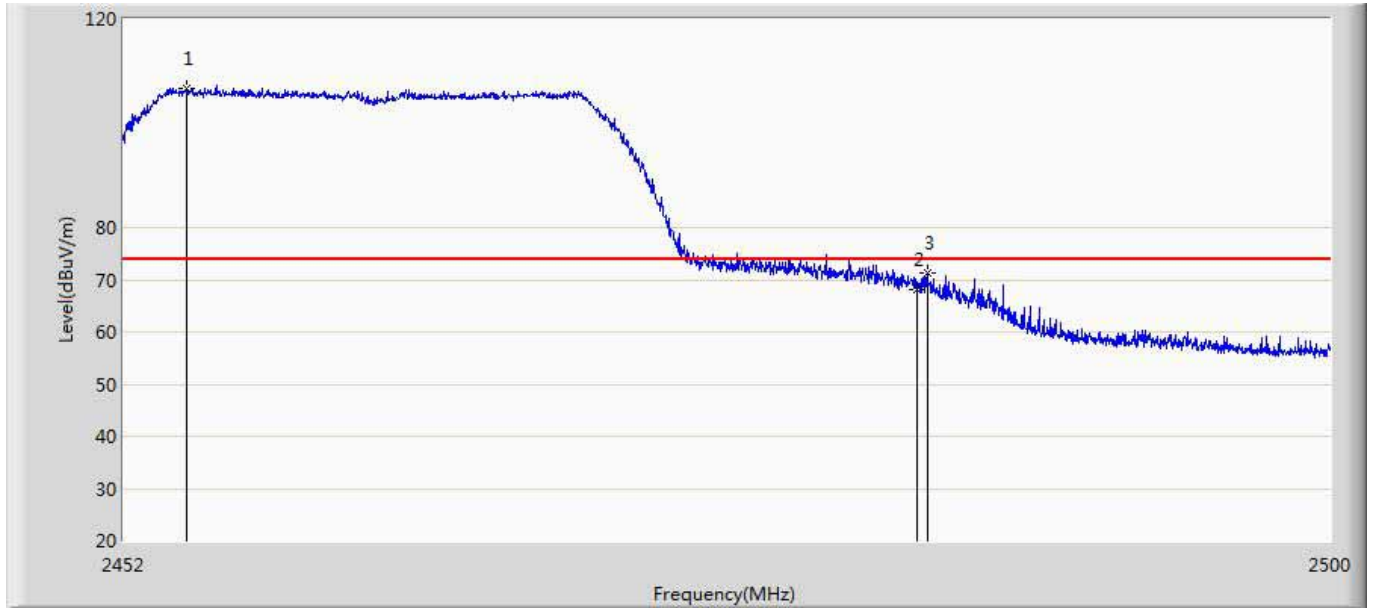
No	Mark	Frequency (MHz)	Measure Level (dBuV/m)	Reading Level (dBuV)	Over Limit (dB)	Limit (dBuV/m)	Factor (dB)	Type
1		2390.000	48.000	11.009	-6.000	54.000	36.991	AV
2	*	2405.368	90.662	53.652	36.662	54.000	37.009	AV

Engineer: Scott	
Site: AC5	Time: 2015/08/27 - 11:46
Limit: FCC_Part15.209_RE(3m)	Margin: 0
Probe: Horn_3117_00167055(1-18GHz)	Polarity: Horizontal
EUT: IP-STB	Power: 120V/60Hz
Note: Mode 3 Transmit at 802.11n(20MHz) CH2462 by ant1	



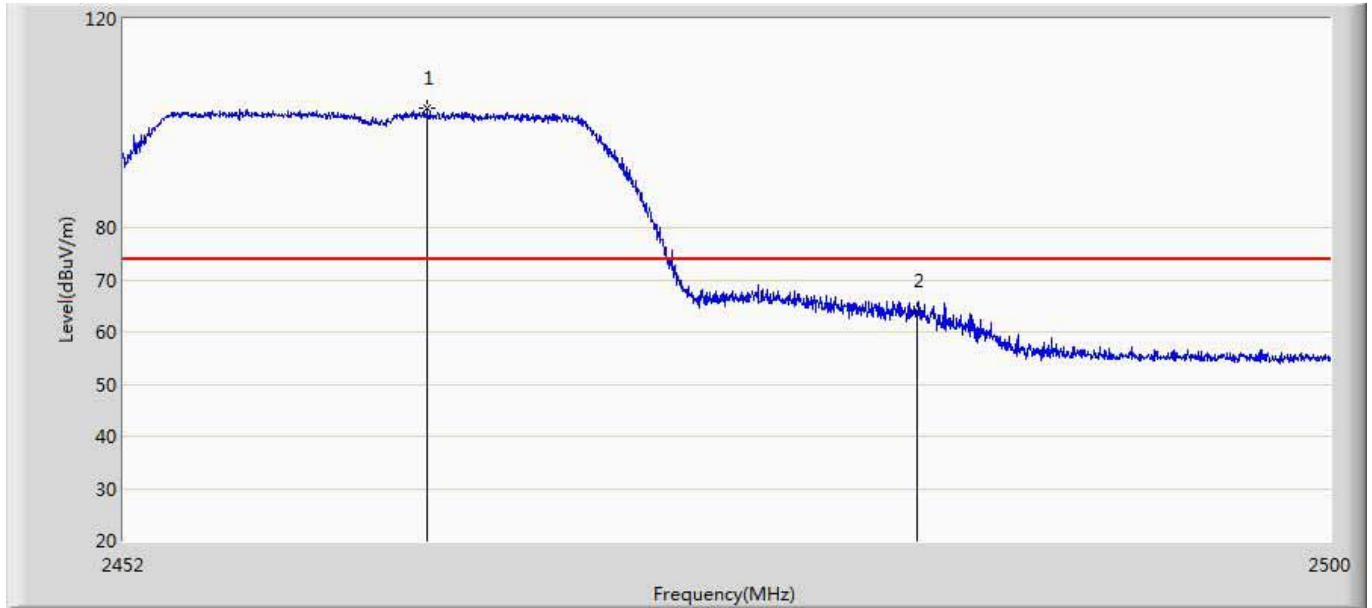
No	Mark	Frequency (MHz)	Measure Level (dBuV/m)	Reading Level (dBuV)	Over Limit (dB)	Limit (dBuV/m)	Factor (dB)	Type
1	*	2455.984	95.381	58.161	41.381	54.000	37.219	AV
2		2483.500	52.651	15.280	-1.349	54.000	37.371	AV

Engineer: Scott	
Site: AC5	Time: 2015/08/27 - 11:50
Limit: FCC_Part15.209_RE(3m)	Margin: 0
Probe: Horn_3117_00167055(1-18GHz)	Polarity: Horizontal
EUT: IP-STB	Power: 120V/60Hz
Note: Mode 3 Transmit at 802.11n(20MHz) CH2462 by ant1	



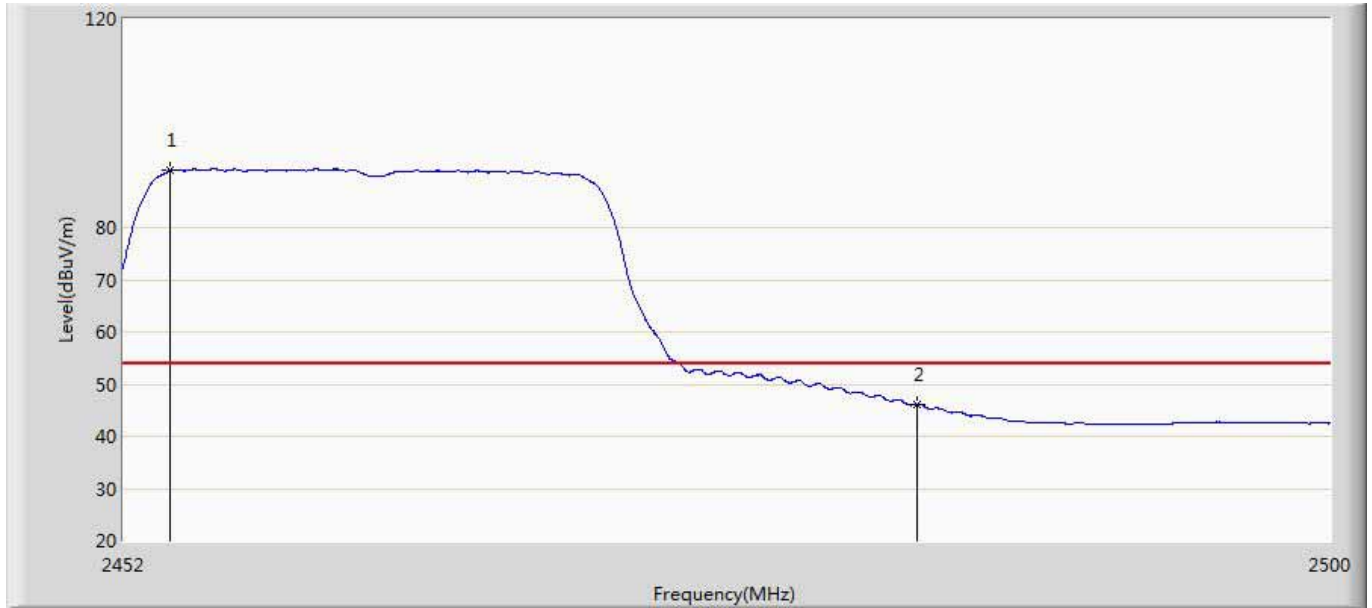
No	Mark	Frequency (MHz)	Measure Level (dBuV/m)	Reading Level (dBuV)	Over Limit (dB)	Limit (dBuV/m)	Factor (dB)	Type
1	*	2454.496	106.809	69.592	32.809	74.000	37.217	PK
2		2483.500	68.228	30.857	-5.772	74.000	37.371	PK
3		2483.872	71.405	34.030	-2.595	74.000	37.375	PK

Engineer: Scott	
Site: AC5	Time: 2015/08/27 - 11:51
Limit: FCC_Part15.209_RE(3m)	Margin: 0
Probe: Horn_3117_00167055(1-18GHz)	Polarity: Vertical
EUT: IP-STB	Power: 120V/60Hz
Note: Mode 3 Transmit at 802.11n(20MHz) CH2462 by ant1	



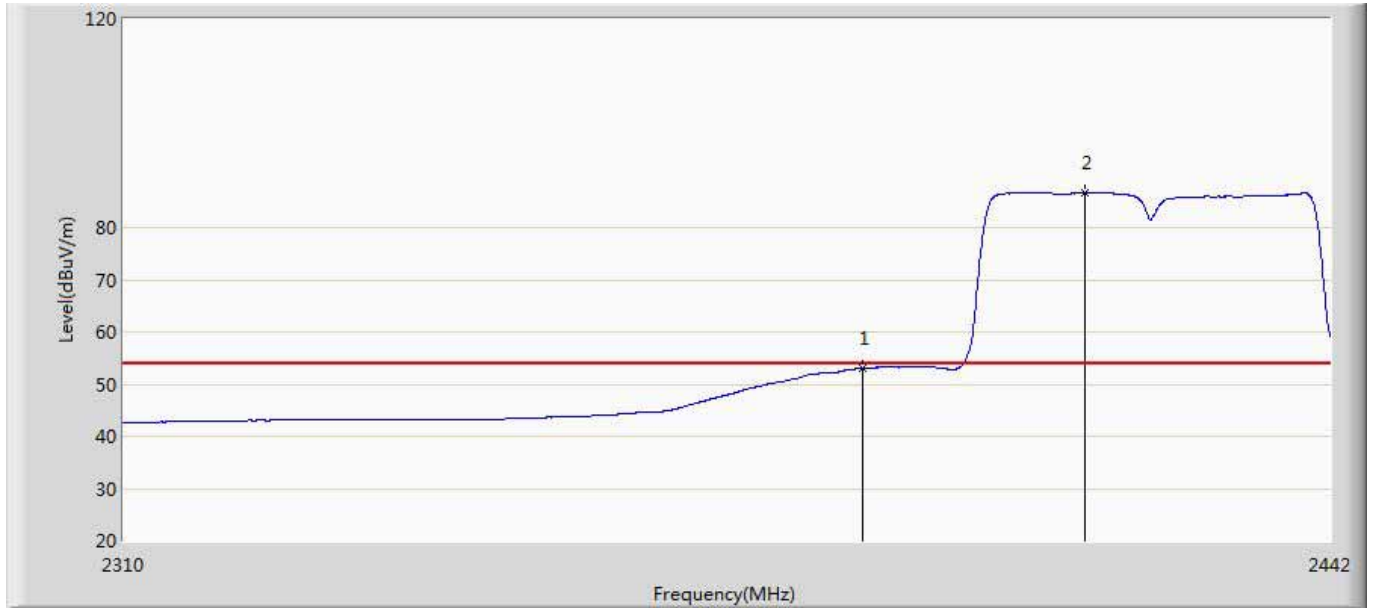
No	Mark	Frequency (MHz)	Measure Level (dBuV/m)	Reading Level (dBuV)	Over Limit (dB)	Limit (dBuV/m)	Factor (dB)	Type
1	*	2464.000	102.773	65.532	28.773	74.000	37.241	PK
2		2483.500	64.019	26.648	-9.981	74.000	37.371	PK

Engineer: Scott	
Site: AC5	Time: 2015/08/27 - 11:51
Limit: FCC_Part15.209_RE(3m)	Margin: 0
Probe: Horn_3117_00167055(1-18GHz)	Polarity: Vertical
EUT: IP-STB	Power: 120V/60Hz
Note: Mode 3 Transmit at 802.11n(20MHz) CH2462 by ant1	



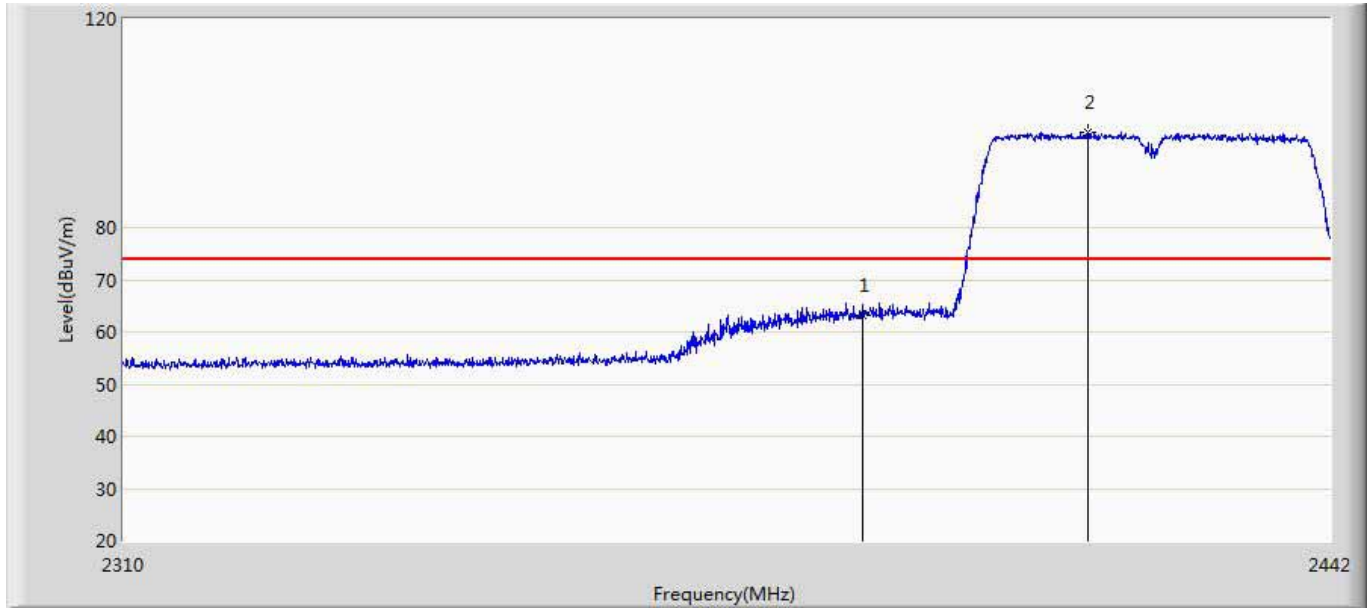
No	Mark	Frequency (MHz)	Measure Level (dBuV/m)	Reading Level (dBuV)	Over Limit (dB)	Limit (dBuV/m)	Factor (dB)	Type
1	*	2453.872	90.966	53.750	36.966	54.000	37.216	AV
2		2483.500	46.158	8.787	-7.842	54.000	37.371	AV

Engineer: Scott	
Site: AC5	Time: 2015/08/27 - 13:52
Limit: FCC_Part15.209_RE(3m)	Margin: 0
Probe: Horn_3117_00167055(1-18GHz)	Polarity: Horizontal
EUT: IP-STB	Power: 120V/60Hz
Note: Mode 4 Transmit at 802.11n(40MHz) CH2422 by ant1	



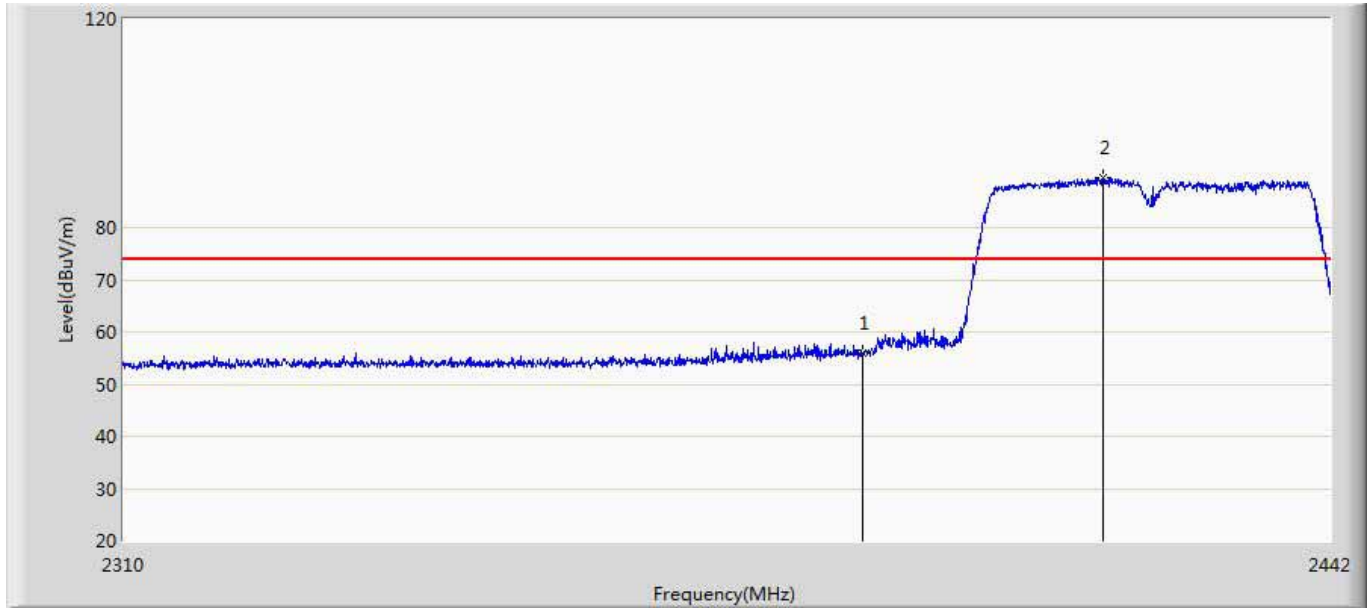
No	Mark	Frequency (MHz)	Measure Level (dBuV/m)	Reading Level (dBuV)	Over Limit (dB)	Limit (dBuV/m)	Factor (dB)	Type
1		2390.000	53.011	16.020	-0.989	54.000	36.991	AV
2	*	2414.544	86.621	49.574	32.621	54.000	37.047	AV

Engineer: Scott	
Site: AC5	Time: 2015/08/27 - 15:07
Limit: FCC_Part15.209_RE(3m)	Margin: 0
Probe: Horn_3117_00167055(1-18GHz)	Polarity: Horizontal
EUT: IP-STB	Power: 120V/60Hz
Note: Mode 4 Transmit at 802.11n(40MHz) CH2422 by ant1	



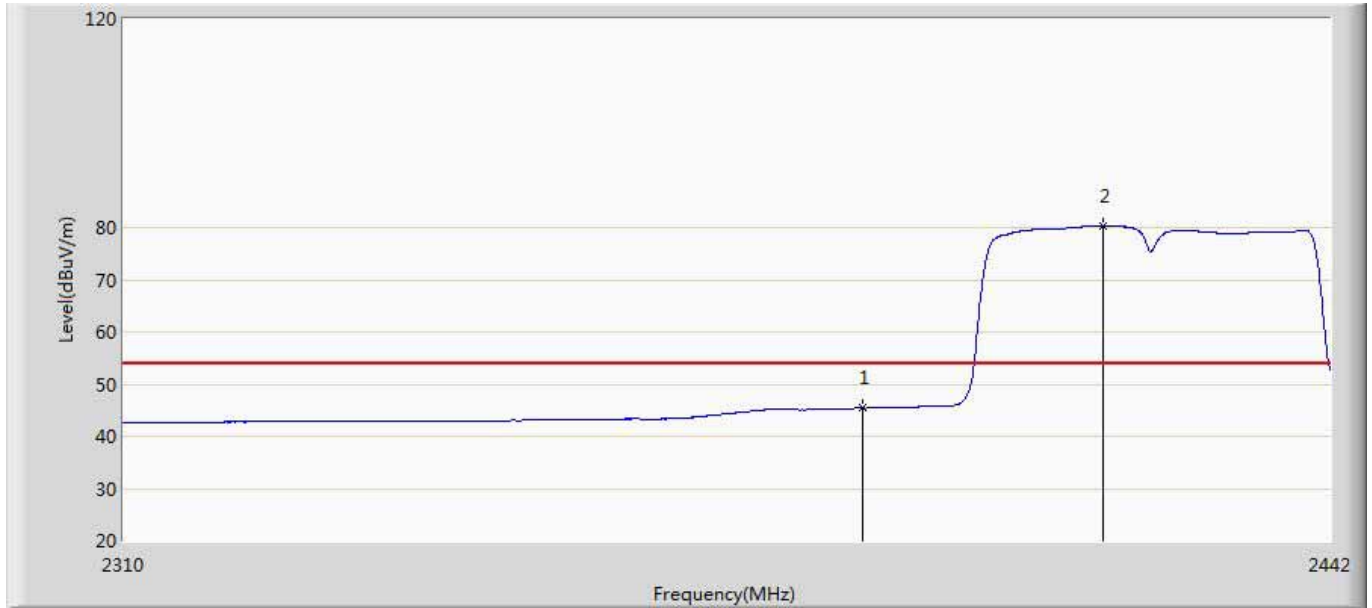
No	Mark	Frequency (MHz)	Measure Level (dBuV/m)	Reading Level (dBuV)	Over Limit (dB)	Limit (dBuV/m)	Factor (dB)	Type
1		2390.000	63.143	26.152	-10.857	74.000	36.991	PK
2	*	2415.006	98.144	61.093	24.144	74.000	37.051	PK

Engineer: Scott	
Site: AC5	Time: 2015/08/27 - 15:08
Limit: FCC_Part15.209_RE(3m)	Margin: 0
Probe: Horn_3117_00167055(1-18GHz)	Polarity: Vertical
EUT: IP-STB	Power: 120V/60Hz
Note: Mode 4 Transmit at 802.11n(40MHz) CH2422 by ant1	



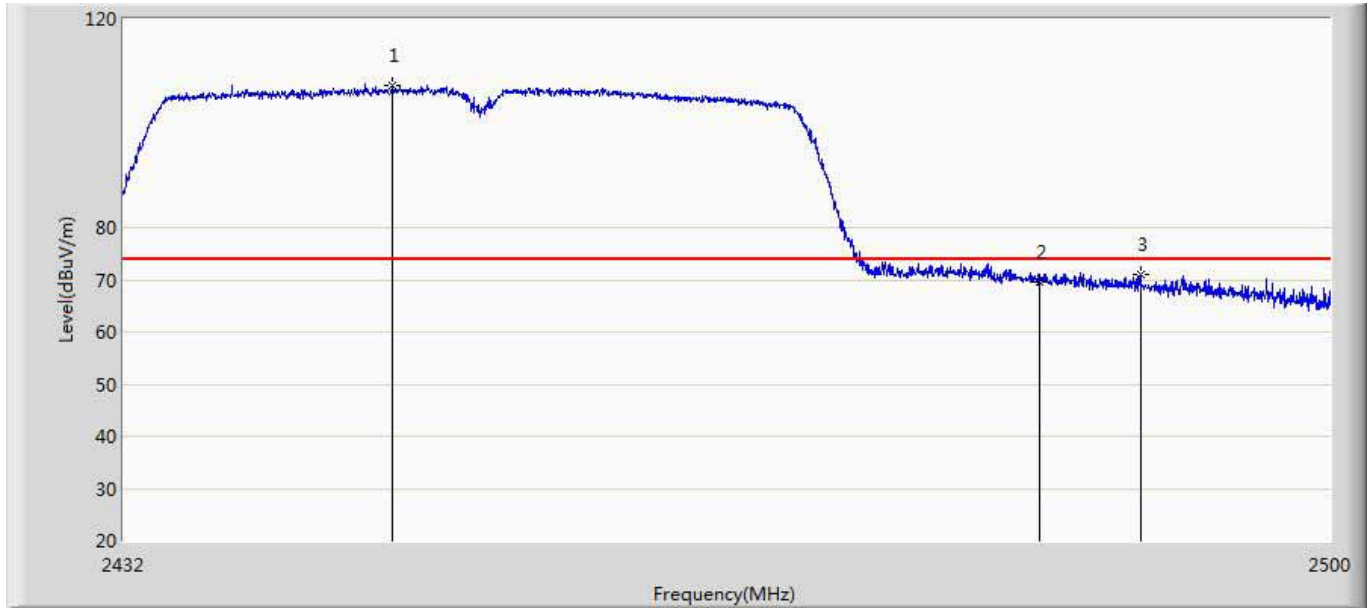
No	Mark	Frequency (MHz)	Measure Level (dBuV/m)	Reading Level (dBuV)	Over Limit (dB)	Limit (dBuV/m)	Factor (dB)	Type
1		2390.000	55.916	18.925	-18.084	74.000	36.991	PK
2	*	2416.590	89.642	52.577	15.642	74.000	37.065	PK

Engineer: Scott	
Site: AC5	Time: 2015/08/27 - 15:09
Limit: FCC_Part15.209_RE(3m)	Margin: 0
Probe: Horn_3117_00167055(1-18GHz)	Polarity: Vertical
EUT: IP-STB	Power: 120V/60Hz
Note: Mode 4 Transmit at 802.11n(40MHz) CH2422 by ant1	



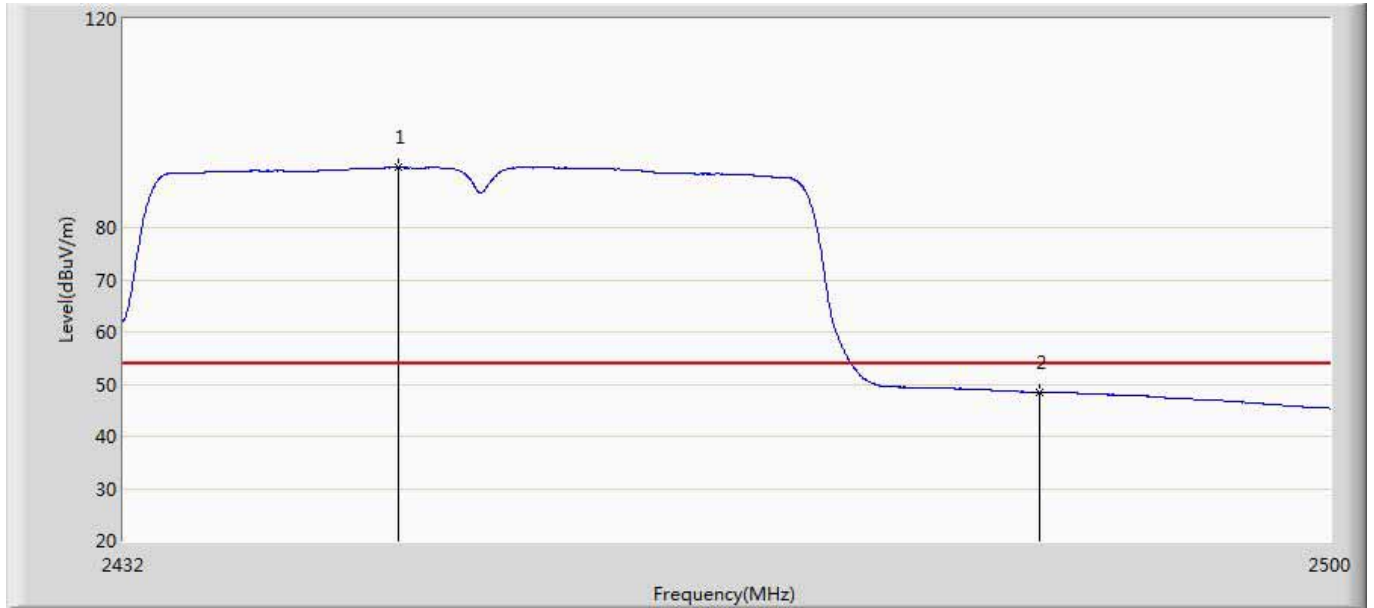
No	Mark	Frequency (MHz)	Measure Level (dBuV/m)	Reading Level (dBuV)	Over Limit (dB)	Limit (dBuV/m)	Factor (dB)	Type
1		2390.000	45.370	8.379	-8.630	54.000	36.991	AV
2	*	2416.590	80.350	43.285	26.350	54.000	37.065	AV

Engineer: Scott	
Site: AC5	Time: 2015/08/27 - 15:22
Limit: FCC_Part15.209_RE(3m)	Margin: 0
Probe: Horn_3117_00167055(1-18GHz)	Polarity: Horizontal
EUT: IP-STB	Power: 120V/60Hz
Note: Mode 4 Transmit at 802.11n(40MHz) CH2452 by ant1	



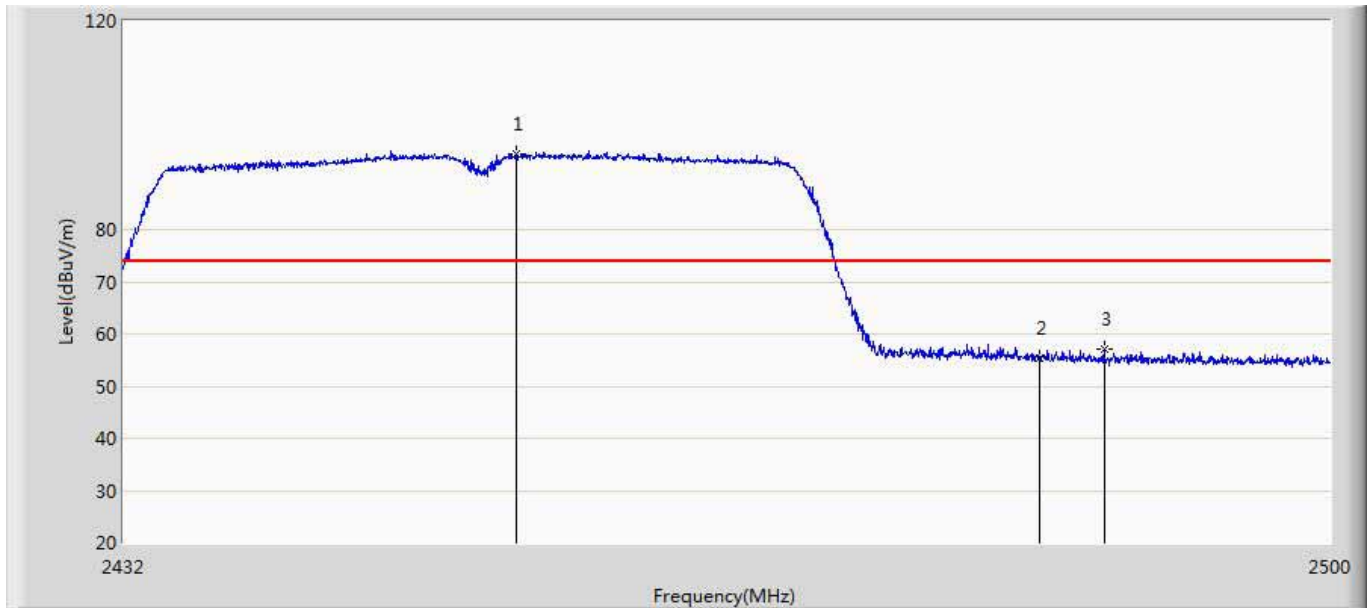
No	Mark	Frequency (MHz)	Measure Level (dBuV/m)	Reading Level (dBuV)	Over Limit (dB)	Limit (dBuV/m)	Factor (dB)	Type
1	*	2447.028	107.164	69.959	33.164	74.000	37.205	PK
2		2483.500	69.440	32.069	-4.560	74.000	37.371	PK
3		2489.188	70.925	33.499	-3.075	74.000	37.426	PK

Engineer: Scott	
Site: AC5	Time: 2015/08/27 - 15:35
Limit: FCC_Part15.209_RE(3m)	Margin: 0
Probe: Horn_3117_00167055(1-18GHz)	Polarity: Horizontal
EUT: IP-STB	Power: 120V/60Hz
Note: Mode 4 Transmit at 802.11n(40MHz) CH2452 by ant1	



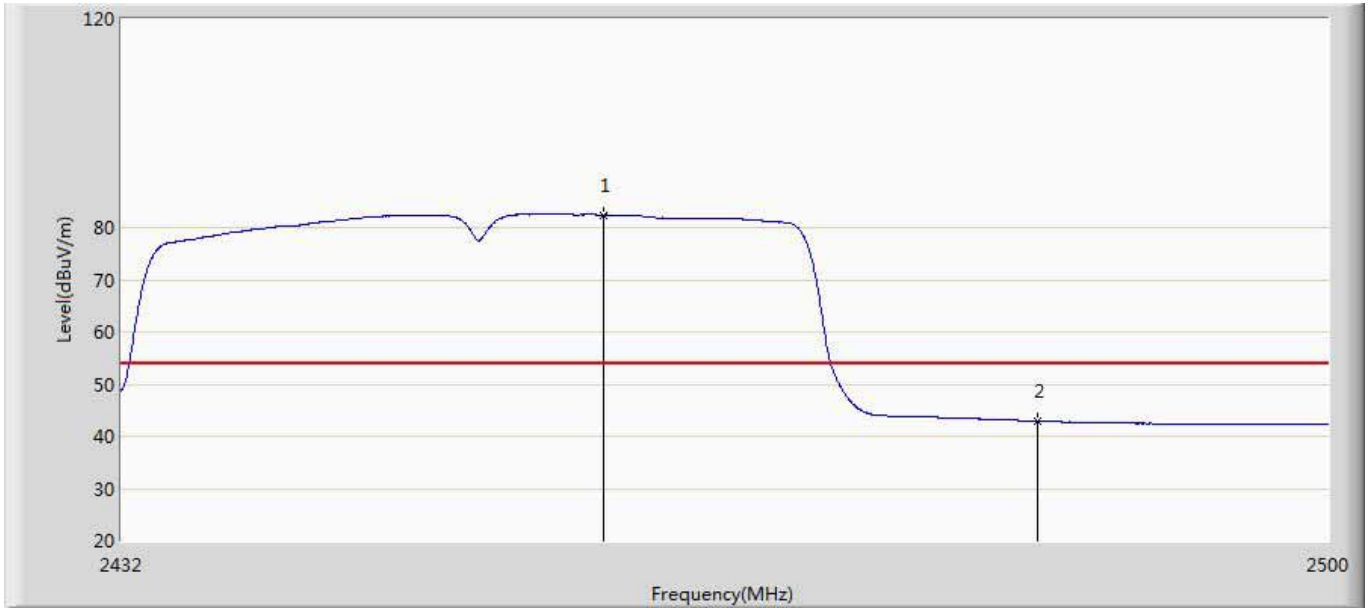
No	Mark	Frequency (MHz)	Measure Level (dBuV/m)	Reading Level (dBuV)	Over Limit (dB)	Limit (dBuV/m)	Factor (dB)	Type
1	*	2447.334	91.466	54.261	37.466	54.000	37.205	AV
2		2483.500	48.407	11.036	-5.593	54.000	37.371	AV

Engineer: Scott	
Site: AC5	Time: 2015/08/27 - 15:38
Limit: FCC_Part15.209_RE(3m)	Margin: 0
Probe: Horn_3117_00167055(1-18GHz)	Polarity: Vertical
EUT: IP-STB	Power: 120V/60Hz
Note: Mode 4 Transmit at 802.11n(40MHz) CH2452 by ant1	



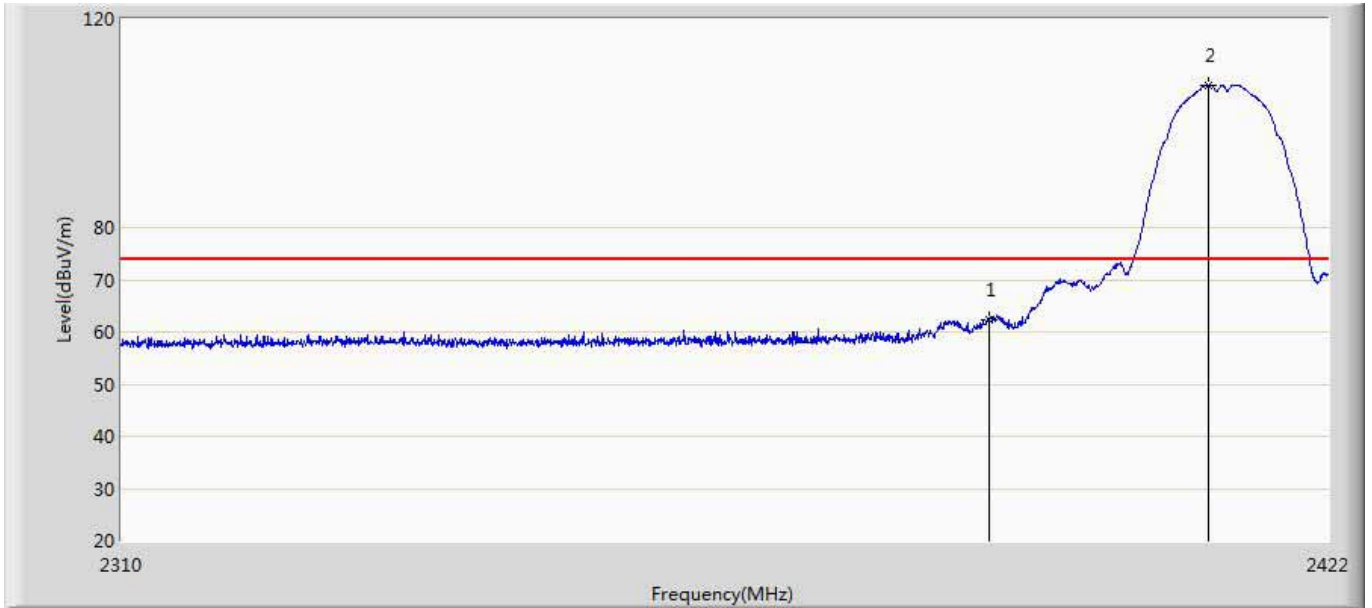
No	Mark	Frequency (MHz)	Measure Level (dBuV/m)	Reading Level (dBuV)	Over Limit (dB)	Limit (dBuV/m)	Factor (dB)	Type
1	*	2453.964	94.432	57.216	20.432	74.000	37.216	PK
2		2483.500	55.490	18.119	-18.510	74.000	37.371	PK
3		2487.148	56.986	19.579	-17.014	74.000	37.407	PK

Engineer: Scott	
Site: AC5	Time: 2015/08/27 - 15:39
Limit: FCC_Part15.209_RE(3m)	Margin: 0
Probe: Horn_3117_00167055(1-18GHz)	Polarity: Vertical
EUT: IP-STB	Power: 120V/60Hz
Note: Mode 4 Transmit at 802.11n(40MHz) CH2452 by ant1	



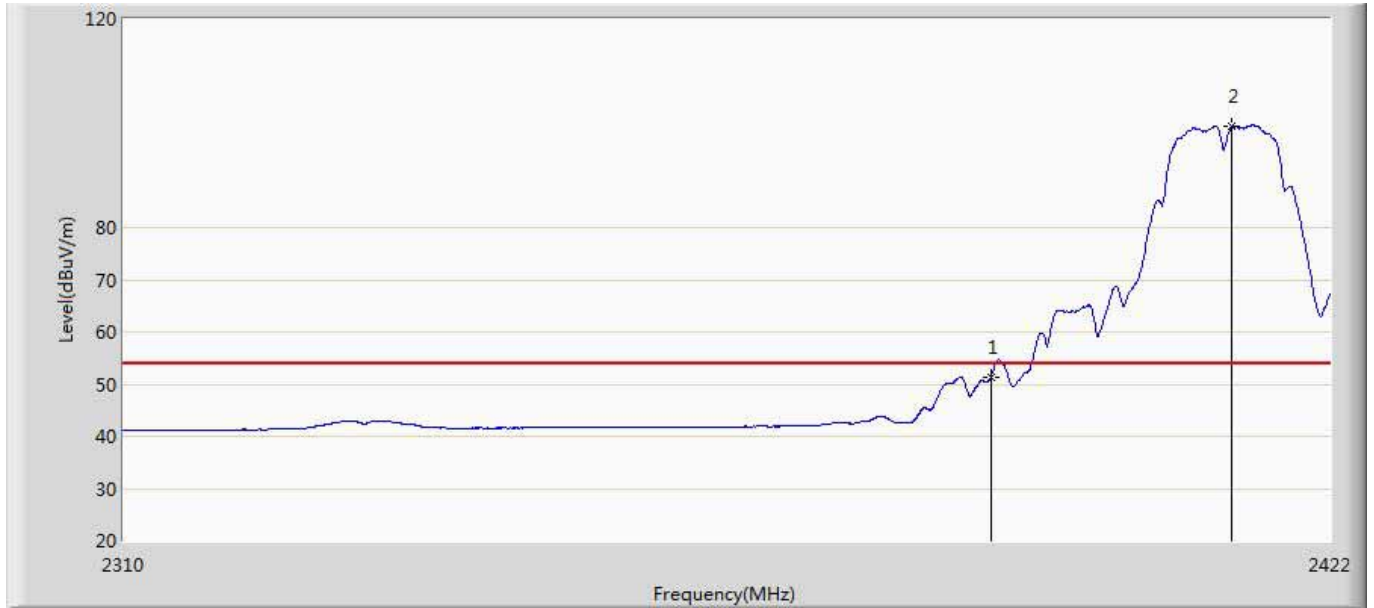
No	Mark	Frequency (MHz)	Measure Level (dBuV/m)	Reading Level (dBuV)	Over Limit (dB)	Limit (dBuV/m)	Factor (dB)	Type
1	*	2458.996	82.457	45.233	28.457	54.000	37.224	AV
2		2483.500	42.881	5.510	-11.119	54.000	37.371	AV

Engineer: Scott	
Site: AC5	Time: 2015/08/27 - 16:23
Limit: FCC_Part15.209_RE(3m)	Margin: 0
Probe: Horn_3117_00167055(1-18GHz)	Polarity: Horizontal
EUT: IP-STB	Power: 120V/60Hz
Note: Mode 1 Transmit at 802.11b CH2412 by ant2	



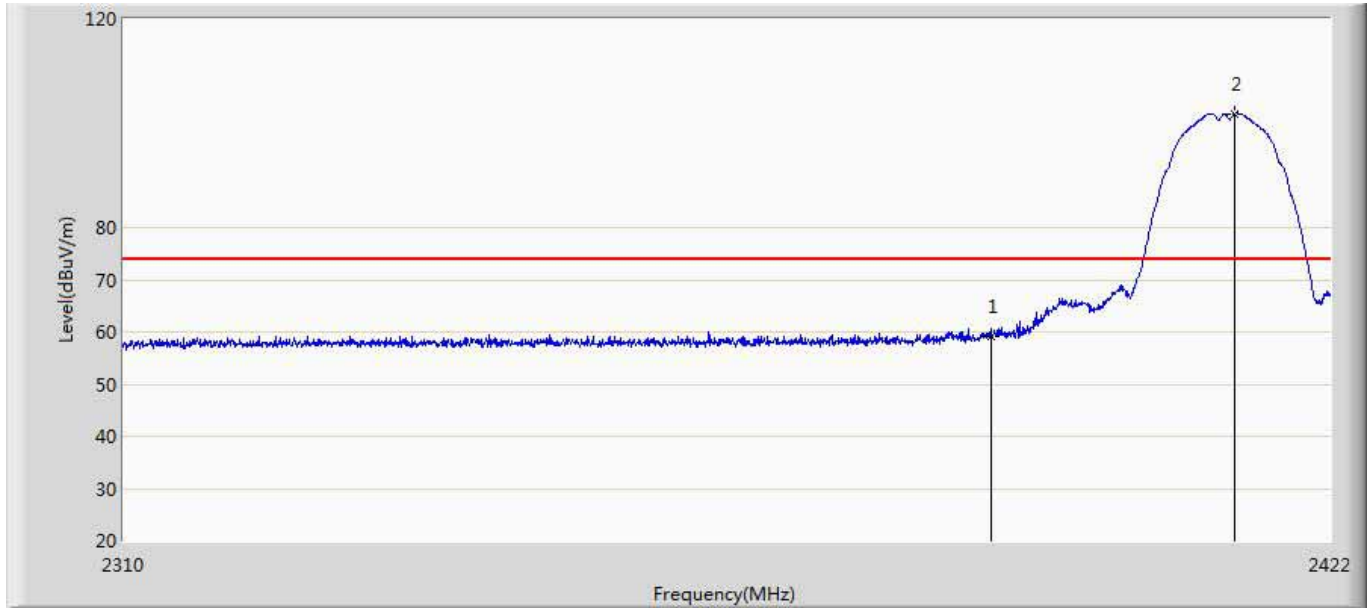
No	Mark	Frequency (MHz)	Measure Level (dBuV/m)	Reading Level (dBuV)	Over Limit (dB)	Limit (dBuV/m)	Factor (dB)	Type
1		2390.000	62.188	25.197	-11.812	74.000	36.991	PK
2	*	2410.632	107.262	70.248	33.262	74.000	37.015	PK

Engineer: Scott	
Site: AC5	Time: 2015/08/27 - 16:23
Limit: FCC_Part15.209_RE(3m)	Margin: 0
Probe: Horn_3117_00167055(1-18GHz)	Polarity: Horizontal
EUT: IP-STB	Power: 120V/60Hz
Note: Mode 1 Transmit at 802.11b CH2412 by ant2	



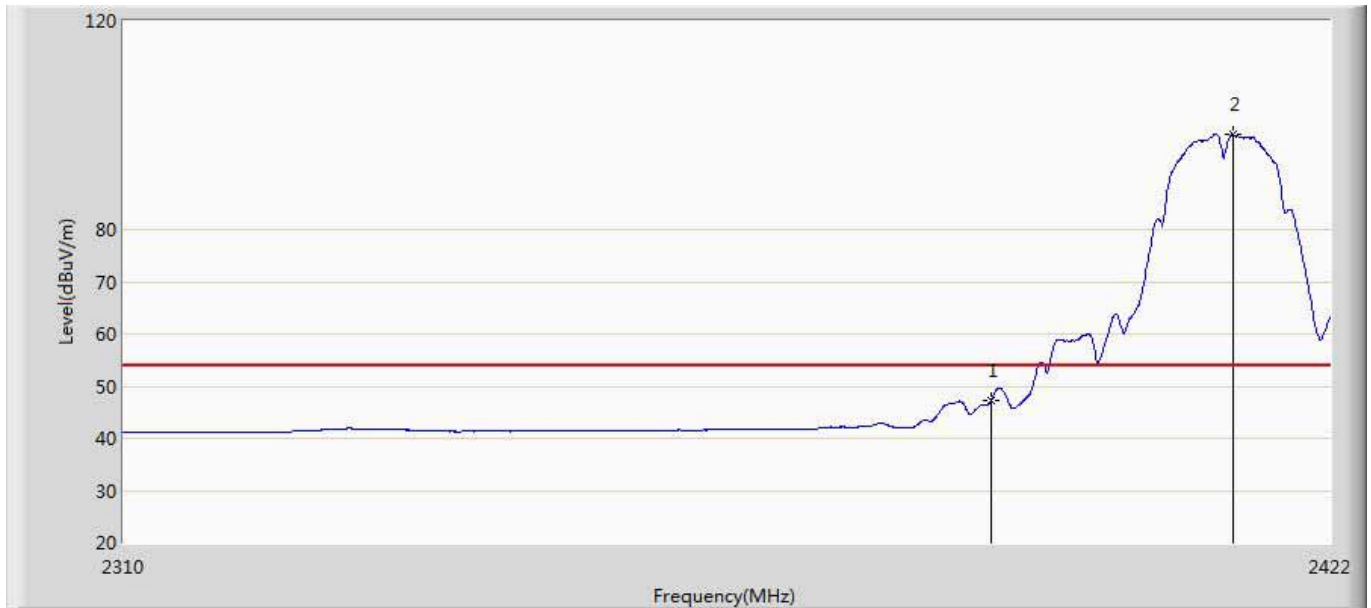
No	Mark	Frequency (MHz)	Measure Level (dBuV/m)	Reading Level (dBuV)	Over Limit (dB)	Limit (dBuV/m)	Factor (dB)	Type
1		2390.000	51.357	14.366	-2.643	54.000	36.991	AV
2	*	2412.704	99.360	62.330	45.360	54.000	37.030	AV

Engineer: Scott	
Site: AC5	Time: 2015/08/27 - 16:27
Limit: FCC_Part15.209_RE(3m)	Margin: 0
Probe: Horn_3117_00167055(1-18GHz)	Polarity: Vertical
EUT: IP-STB	Power: 120V/60Hz
Note: Mode 1 Transmit at 802.11b CH2412 by ant2	



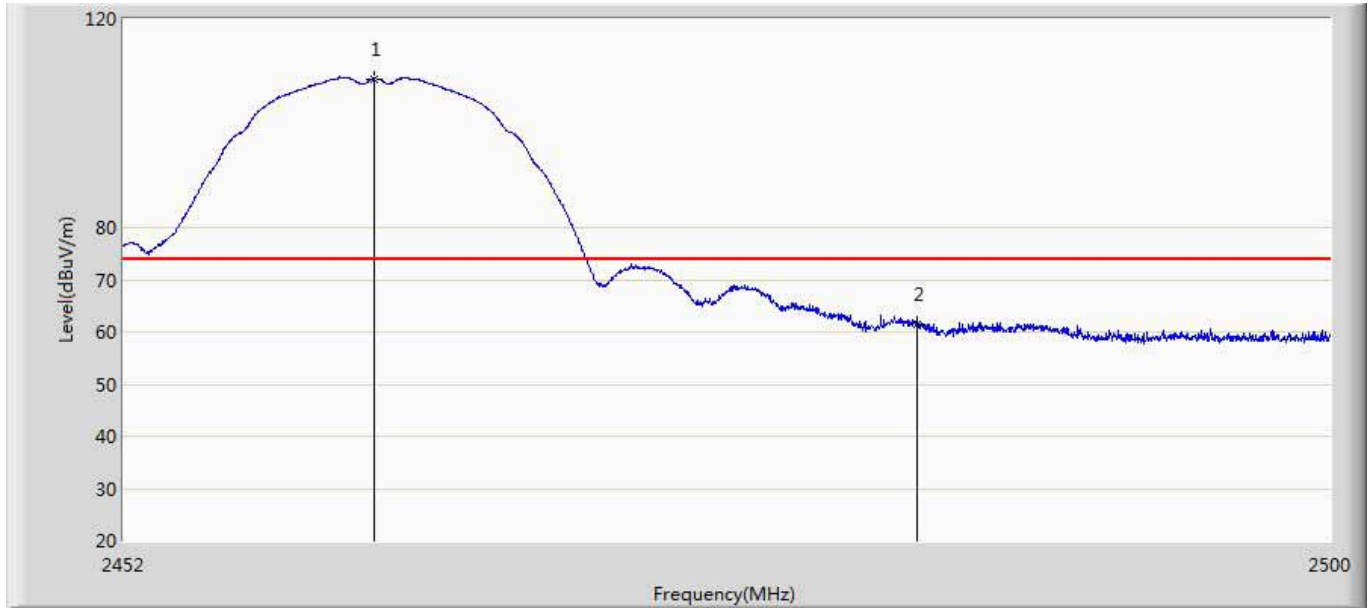
No	Mark	Frequency (MHz)	Measure Level (dBuV/m)	Reading Level (dBuV)	Over Limit (dB)	Limit (dBuV/m)	Factor (dB)	Type
1		2390.000	59.233	22.242	-14.767	74.000	36.991	PK
2	*	2412.984	101.876	64.843	27.876	74.000	37.032	PK

Engineer: Scott	
Site: AC5	Time: 2015/08/27 - 16:27
Limit: FCC_Part15.209_RE(3m)	Margin: 0
Probe: Horn_3117_00167055(1-18GHz)	Polarity: Vertical
EUT: IP-STB	Power: 120V/60Hz
Note: Mode 1 Transmit at 802.11b CH2412 by ant2	



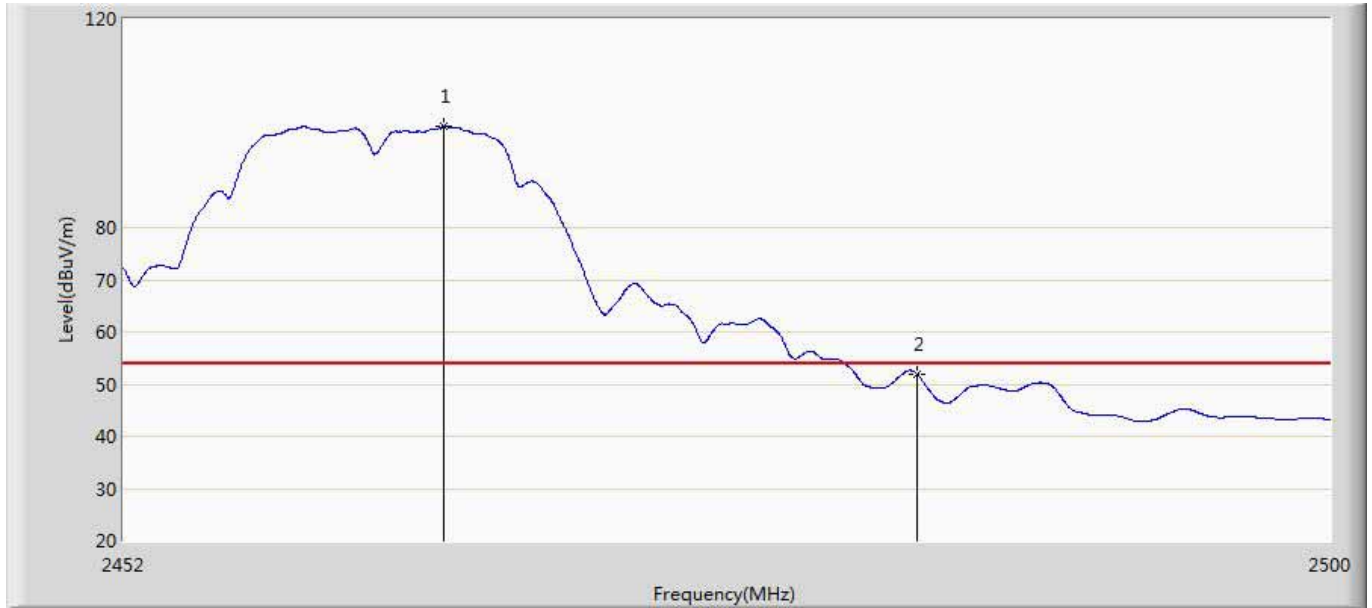
No	Mark	Frequency (MHz)	Measure Level (dBuV/m)	Reading Level (dBuV)	Over Limit (dB)	Limit (dBuV/m)	Factor (dB)	Type
1		2390.000	47.178	10.187	-6.822	54.000	36.991	AV
2	*	2412.816	98.231	61.200	44.231	54.000	37.032	AV

Engineer: Scott	
Site: AC5	Time: 2015/08/27 - 16:32
Limit: FCC_Part15.209_RE(3m)	Margin: 0
Probe: Horn_3117_00167055(1-18GHz)	Polarity: Horizontal
EUT: IP-STB	Power: 120V/60Hz
Note: Mode 1 Transmit at 802.11b CH2462 by ant2	



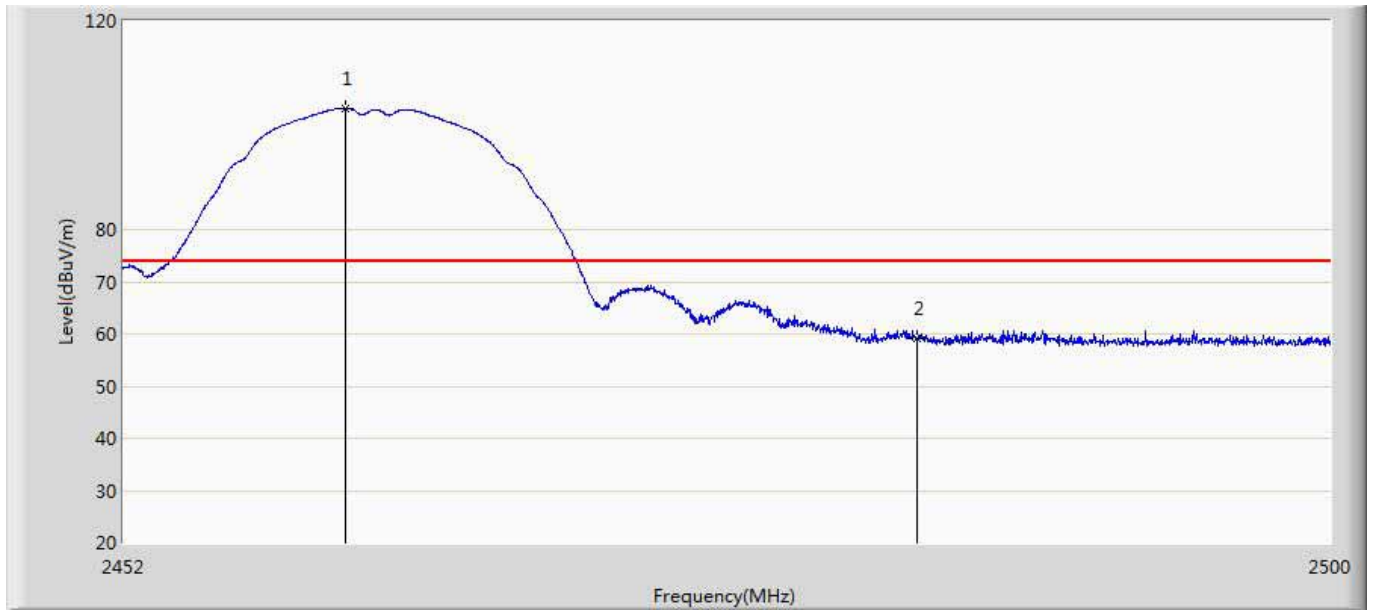
No	Mark	Frequency (MHz)	Measure Level (dBuV/m)	Reading Level (dBuV)	Over Limit (dB)	Limit (dBuV/m)	Factor (dB)	Type
1	*	2461.888	108.515	71.286	34.515	74.000	37.230	PK
2		2483.500	61.359	23.988	-12.641	74.000	37.371	PK

Engineer: Scott	
Site: AC5	Time: 2015/08/27 - 16:33
Limit: FCC_Part15.209_RE(3m)	Margin: 0
Probe: Horn_3117_00167055(1-18GHz)	Polarity: Horizontal
EUT: IP-STB	Power: 120V/60Hz
Note: Mode 1 Transmit at 802.11b CH2462 by ant2	



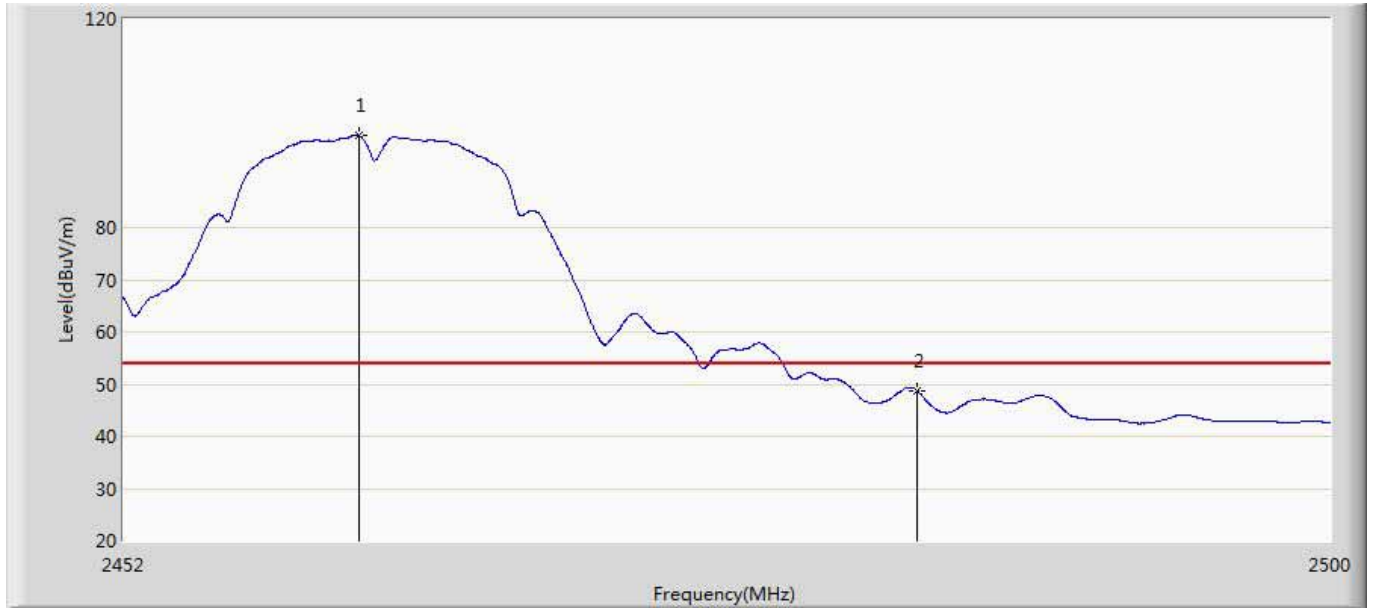
No	Mark	Frequency (MHz)	Measure Level (dBuV/m)	Reading Level (dBuV)	Over Limit (dB)	Limit (dBuV/m)	Factor (dB)	Type
1	*	2464.648	99.362	62.117	45.362	54.000	37.245	AV
2		2483.500	51.821	14.450	-2.179	54.000	37.371	AV

Engineer: Scott	
Site: AC5	Time: 2015/08/27 - 16:36
Limit: FCC_Part15.209_RE(3m)	Margin: 0
Probe: Horn_3117_00167055(1-18GHz)	Polarity: Vertical
EUT: IP-STB	Power: 120V/60Hz
Note: Mode 1 Transmit at 802.11b CH2462 by ant2	



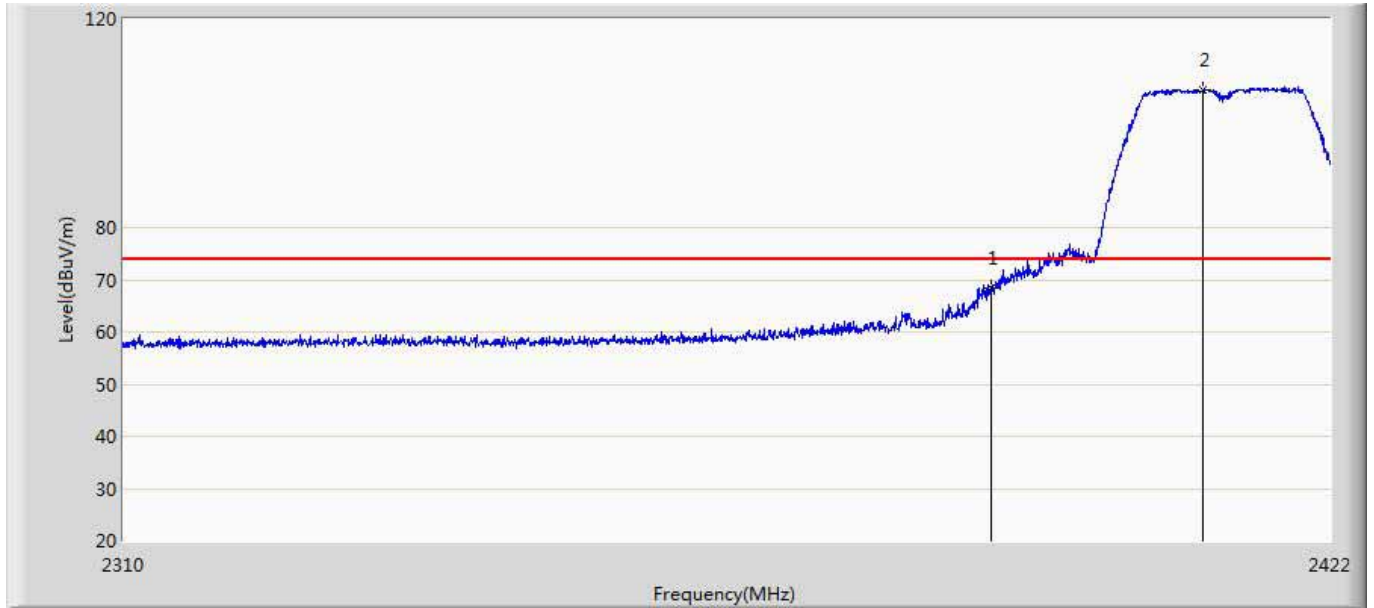
No	Mark	Frequency (MHz)	Measure Level (dBuV/m)	Reading Level (dBuV)	Over Limit (dB)	Limit (dBuV/m)	Factor (dB)	Type
1	*	2460.760	103.233	66.006	29.233	74.000	37.228	PK
2		2483.500	59.194	21.823	-14.806	74.000	37.371	PK

Engineer: Scott	
Site: AC5	Time: 2015/08/27 - 16:36
Limit: FCC_Part15.209_RE(3m)	Margin: 0
Probe: Horn_3117_00167055(1-18GHz)	Polarity: Vertical
EUT: IP-STB	Power: 120V/60Hz
Note: Mode 1 Transmit at 802.11b CH2462 by ant2	



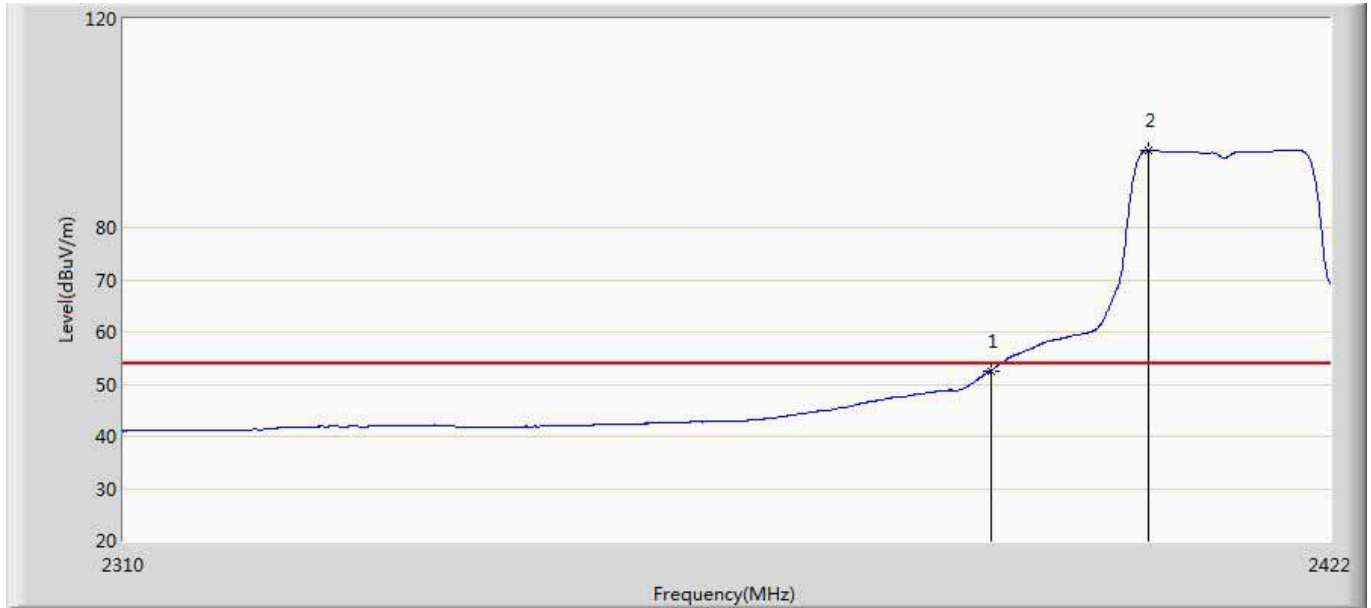
No	Mark	Frequency (MHz)	Measure Level (dBuV/m)	Reading Level (dBuV)	Over Limit (dB)	Limit (dBuV/m)	Factor (dB)	Type
1	*	2461.288	97.588	60.360	43.588	54.000	37.228	AV
2		2483.500	48.667	11.296	-5.333	54.000	37.371	AV

Engineer: Scott	
Site: AC5	Time: 2015/08/27 - 16:44
Limit: FCC_Part15.209_RE(3m)	Margin: 0
Probe: Horn_3117_00167055(1-18GHz)	Polarity: Horizontal
EUT: IP-STB	Power: 120V/60Hz
Note: Mode 2 Transmit at 802.11g CH2412 by ant2	



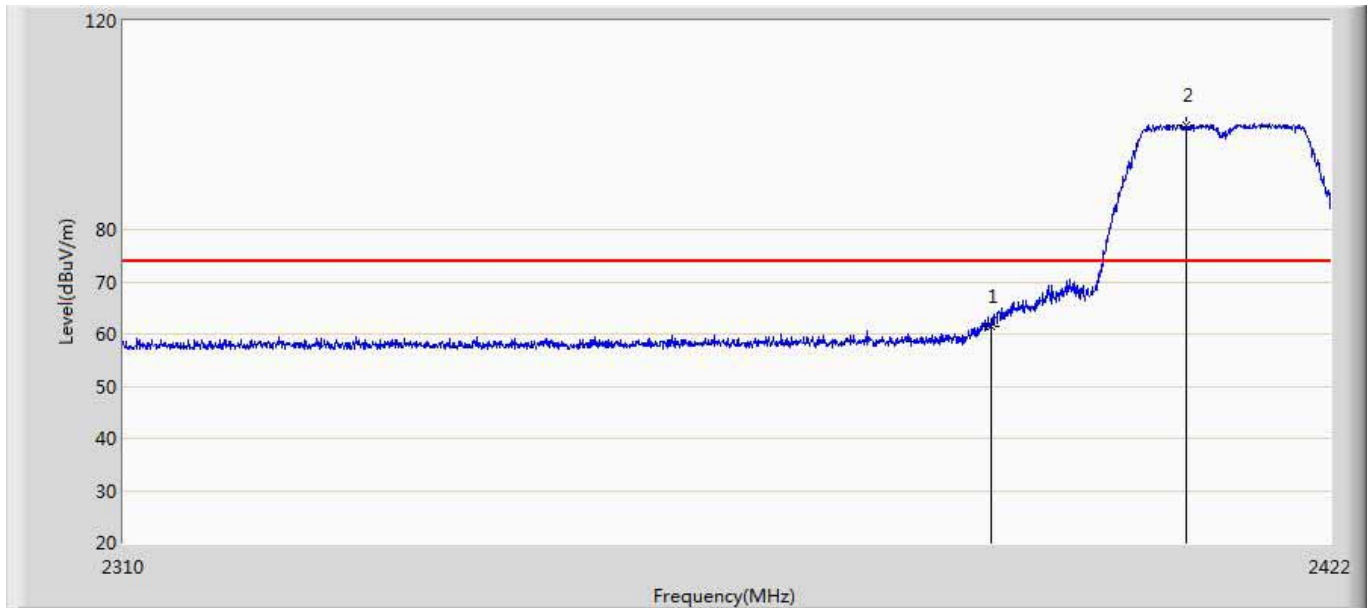
No	Mark	Frequency (MHz)	Measure Level (dBuV/m)	Reading Level (dBuV)	Over Limit (dB)	Limit (dBuV/m)	Factor (dB)	Type
1		2390.000	68.318	31.327	-5.682	74.000	36.991	PK
2	*	2410.016	106.495	69.481	32.495	74.000	37.013	PK

Engineer: Scott	
Site: AC5	Time: 2015/08/27 - 16:44
Limit: FCC_Part15.209_RE(3m)	Margin: 0
Probe: Horn_3117_00167055(1-18GHz)	Polarity: Horizontal
EUT: IP-STB	Power: 120V/60Hz
Note: Mode 2 Transmit at 802.11g CH2412 by ant2	



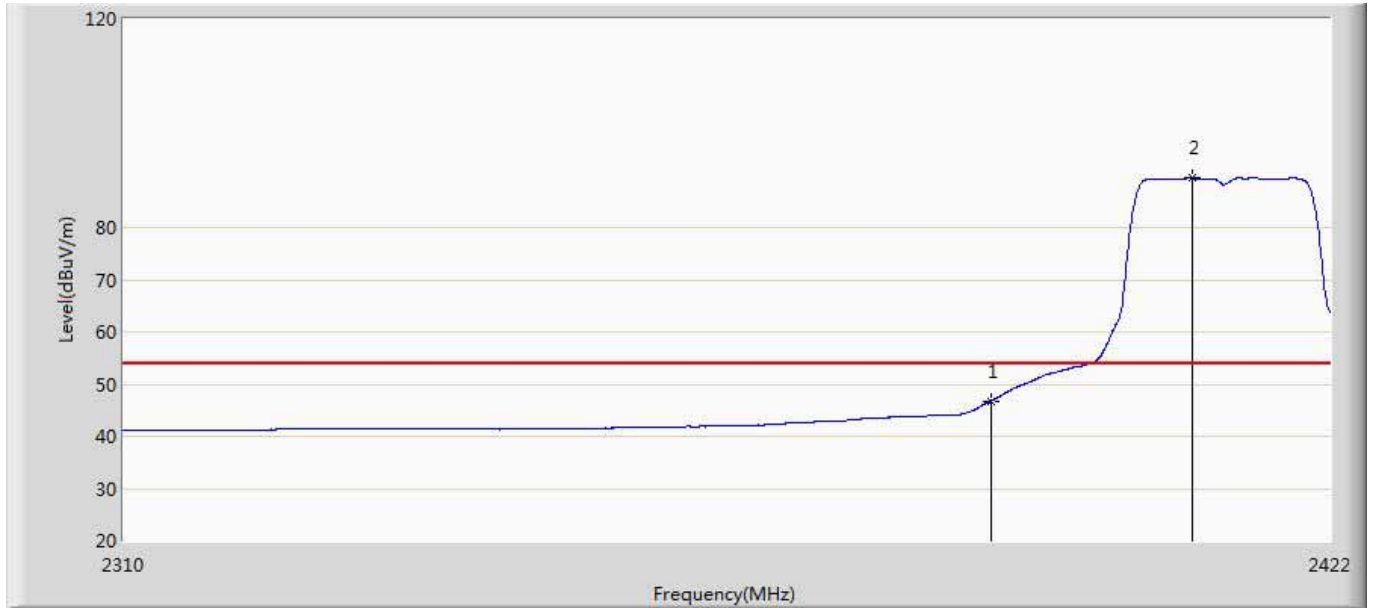
No	Mark	Frequency (MHz)	Measure Level (dBuV/m)	Reading Level (dBuV)	Over Limit (dB)	Limit (dBuV/m)	Factor (dB)	Type
1		2390.000	52.589	15.598	-1.411	54.000	36.991	AV
2	*	2404.752	94.782	57.773	40.782	54.000	37.009	AV

Engineer: Scott	
Site: AC5	Time: 2015/08/27 - 16:47
Limit: FCC_Part15.209_RE(3m)	Margin: 0
Probe: Horn_3117_00167055(1-18GHz)	Polarity: Vertical
EUT: IP-STB	Power: 120V/60Hz
Note: Mode 2 Transmit at 802.11g CH2412 by ant2	



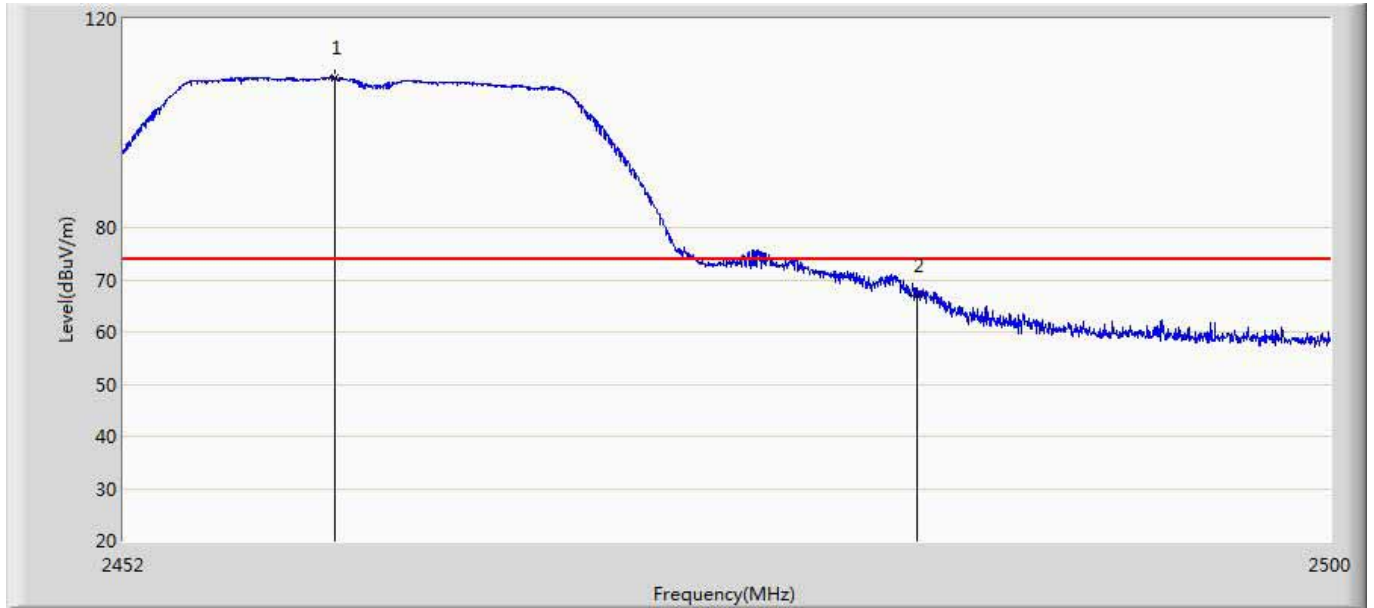
No	Mark	Frequency (MHz)	Measure Level (dBuV/m)	Reading Level (dBuV)	Over Limit (dB)	Limit (dBuV/m)	Factor (dB)	Type
1		2390.000	61.417	24.426	-12.583	74.000	36.991	PK
2	*	2408.448	99.993	62.981	25.993	74.000	37.013	PK

Engineer: Scott	
Site: AC5	Time: 2015/08/27 - 16:48
Limit: FCC_Part15.209_RE(3m)	Margin: 0
Probe: Horn_3117_00167055(1-18GHz)	Polarity: Vertical
EUT: IP-STB	Power: 120V/60Hz
Note: Mode 2 Transmit at 802.11g CH2412 by ant2	



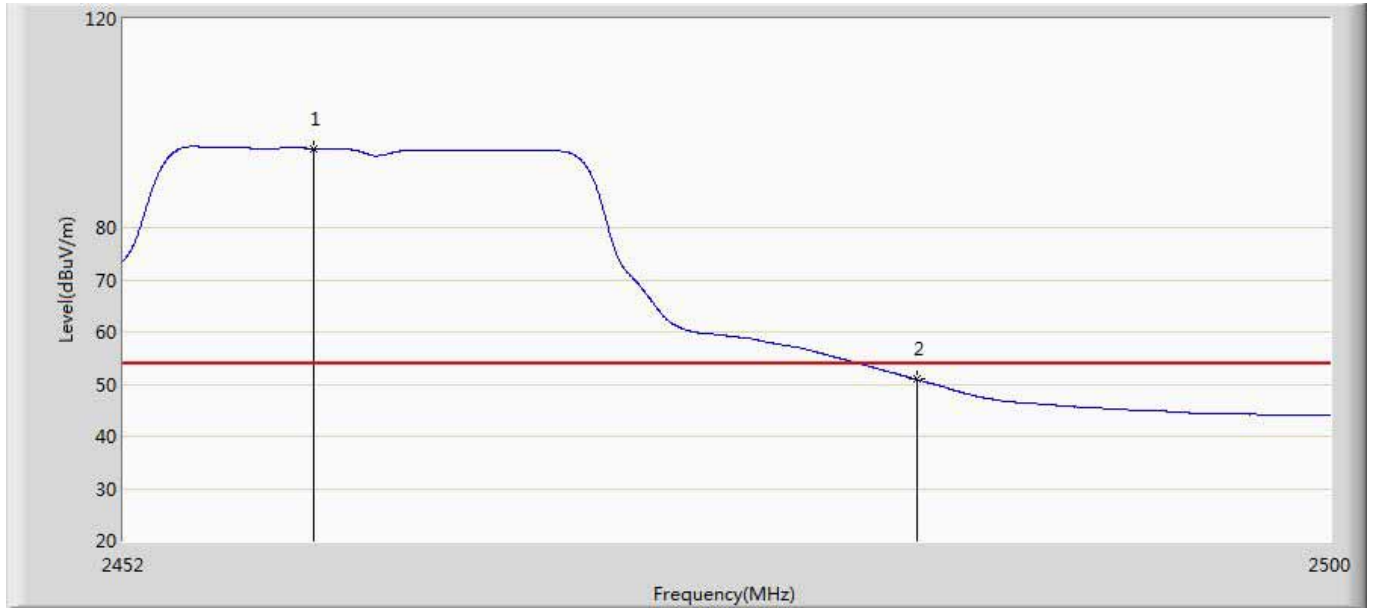
No	Mark	Frequency (MHz)	Measure Level (dBuV/m)	Reading Level (dBuV)	Over Limit (dB)	Limit (dBuV/m)	Factor (dB)	Type
1		2390.000	46.738	9.747	-7.262	54.000	36.991	AV
2	*	2408.896	89.463	52.450	35.463	54.000	37.012	AV

Engineer: Scott	
Site: AC5	Time: 2015/08/27 - 16:52
Limit: FCC_Part15.209_RE(3m)	Margin: 0
Probe: Horn_3117_00167055(1-18GHz)	Polarity: Horizontal
EUT: IP-STB	Power: 120V/60Hz
Note: Mode 2 Transmit at 802.11g CH2462 by ant2	



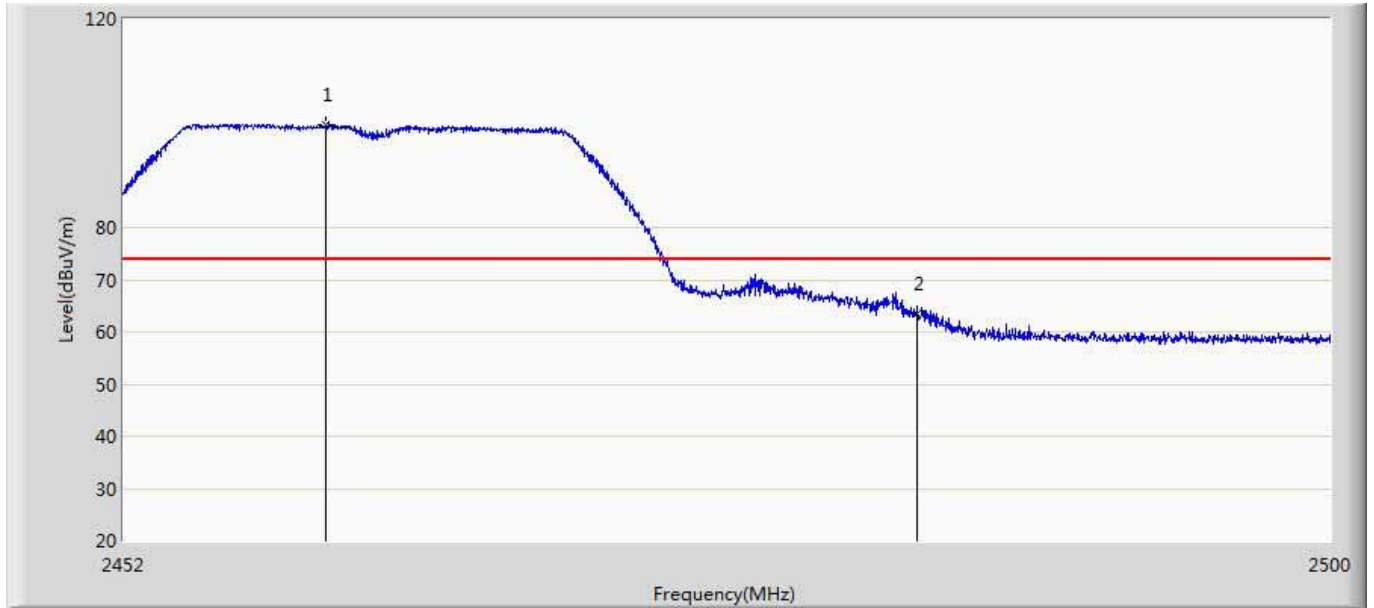
No	Mark	Frequency (MHz)	Measure Level (dBuV/m)	Reading Level (dBuV)	Over Limit (dB)	Limit (dBuV/m)	Factor (dB)	Type
1	*	2460.352	108.706	71.479	34.706	74.000	37.227	PK
2		2483.500	67.075	29.704	-6.925	74.000	37.371	PK

Engineer: Scott	
Site: AC5	Time: 2015/08/27 - 16:52
Limit: FCC_Part15.209_RE(3m)	Margin: 0
Probe: Horn_3117_00167055(1-18GHz)	Polarity: Horizontal
EUT: IP-STB	Power: 120V/60Hz
Note: Mode 2 Transmit at 802.11g CH2462 by ant2	



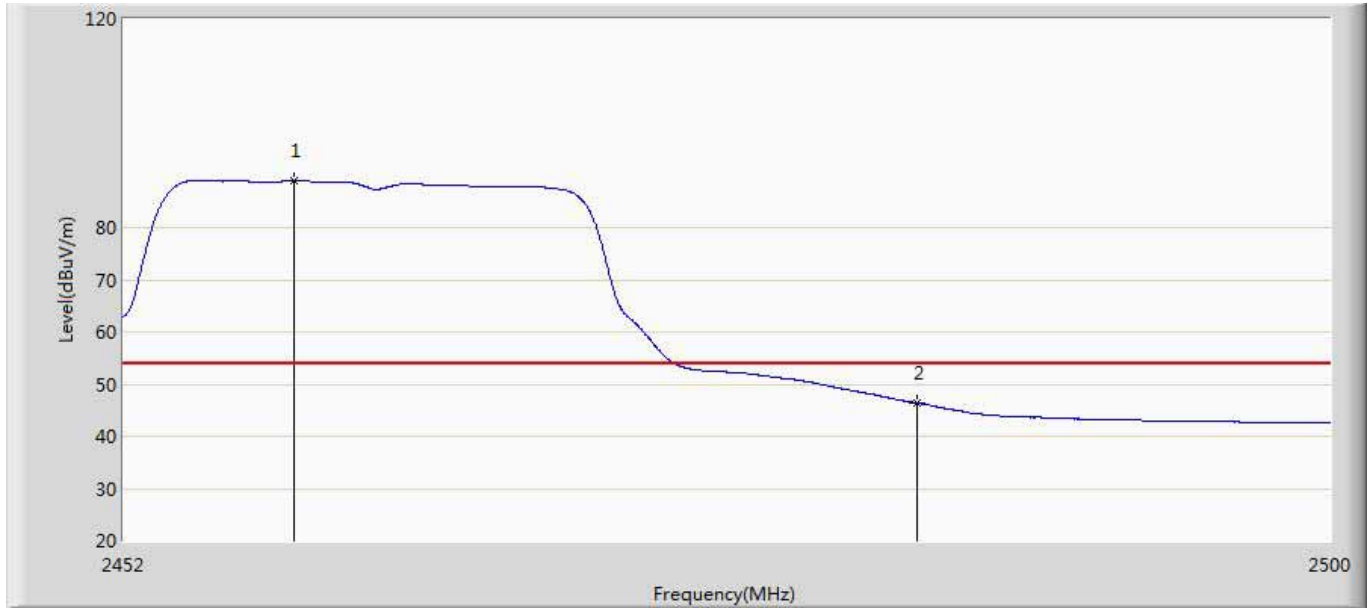
No	Mark	Frequency (MHz)	Measure Level (dBuV/m)	Reading Level (dBuV)	Over Limit (dB)	Limit (dBuV/m)	Factor (dB)	Type
1	*	2459.488	95.099	57.874	41.099	54.000	37.225	AV
2		2483.500	50.878	13.507	-3.122	54.000	37.371	AV

Engineer: Scott	
Site: AC5	Time: 2015/08/27 - 16:58
Limit: FCC_Part15.209_RE(3m)	Margin: 0
Probe: Horn_3117_00167055(1-18GHz)	Polarity: Vertical
EUT: IP-STB	Power: 120V/60Hz
Note: Mode 2 Transmit at 802.11g CH2462 by ant2	



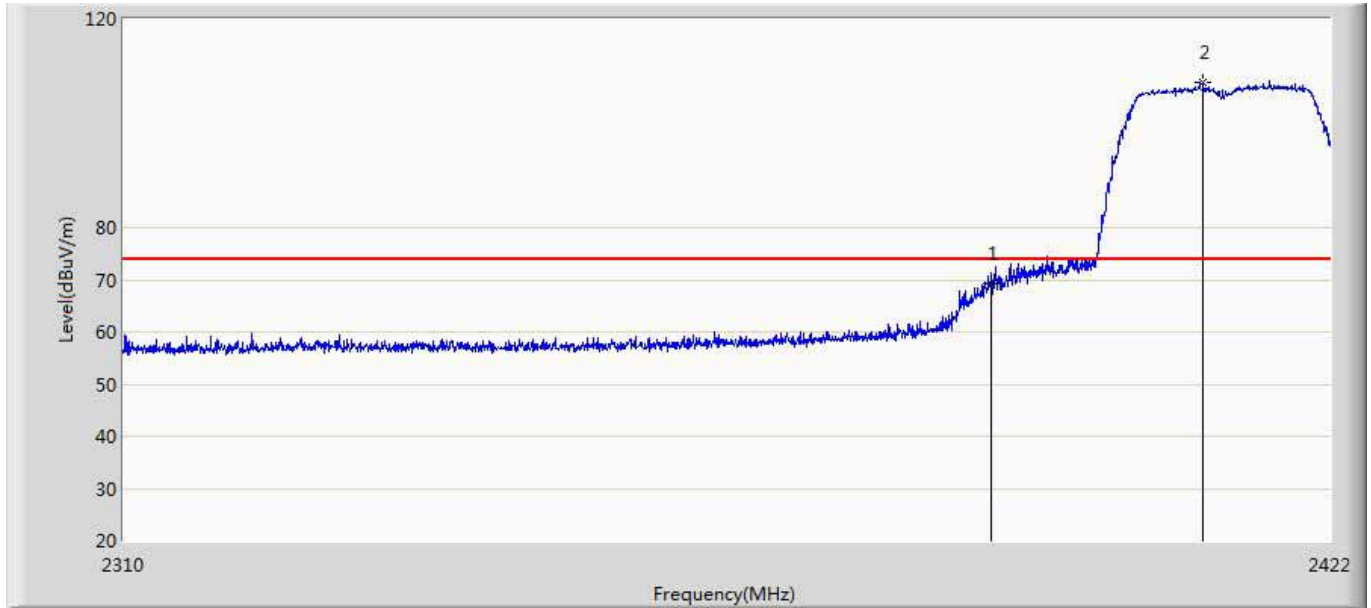
No	Mark	Frequency (MHz)	Measure Level (dBuV/m)	Reading Level (dBuV)	Over Limit (dB)	Limit (dBuV/m)	Factor (dB)	Type
1	*	2459.968	99.733	62.507	25.733	74.000	37.226	PK
2		2483.500	63.587	26.216	-10.413	74.000	37.371	PK

Engineer: Scott	
Site: AC5	Time: 2015/08/27 - 16:59
Limit: FCC_Part15.209_RE(3m)	Margin: 0
Probe: Horn_3117_00167055(1-18GHz)	Polarity: Vertical
EUT: IP-STB	Power: 120V/60Hz
Note: Mode 2 Transmit at 802.11g CH2462 by ant2	



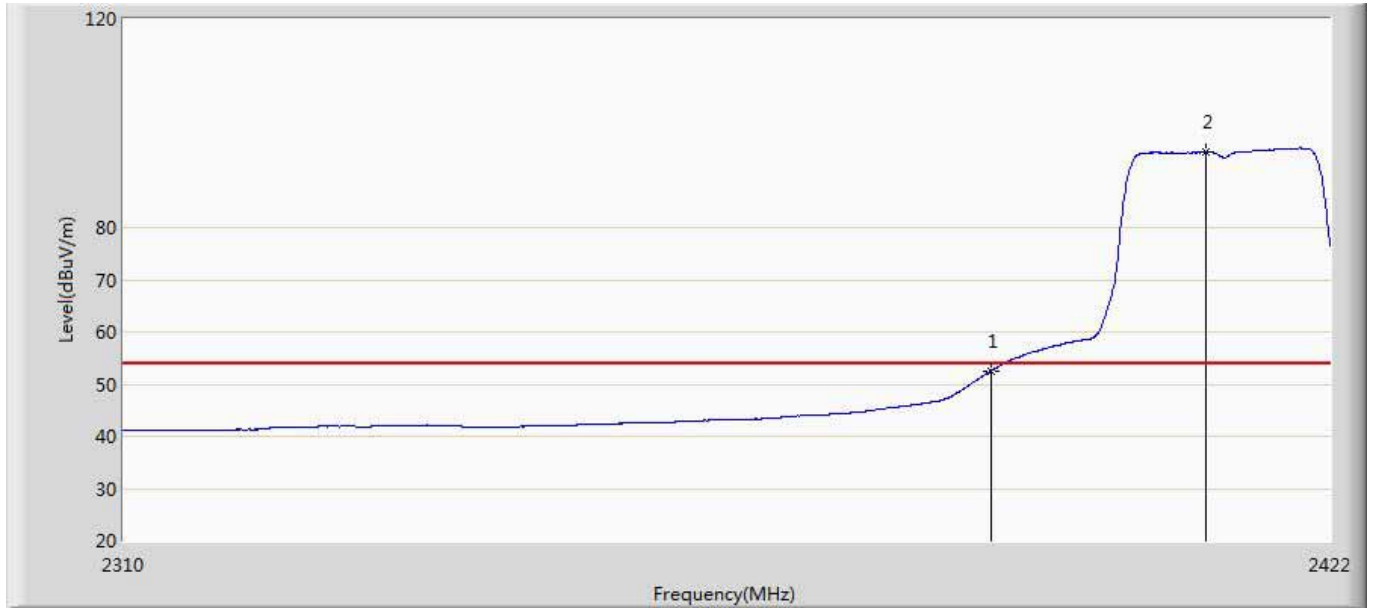
No	Mark	Frequency (MHz)	Measure Level (dBuV/m)	Reading Level (dBuV)	Over Limit (dB)	Limit (dBuV/m)	Factor (dB)	Type
1	*	2458.744	88.916	51.692	34.916	54.000	37.224	AV
2		2483.500	46.315	8.944	-7.685	54.000	37.371	AV

Engineer: Scott	
Site: AC5	Time: 2015/08/27 - 17:04
Limit: FCC_Part15.209_RE(3m)	Margin: 0
Probe: Horn_3117_00167055(1-18GHz)	Polarity: Horizontal
EUT: IP-STB	Power: 120V/60Hz
Note: Mode 3 Transmit at 802.11n(20MHz) CH2412 by ant2	



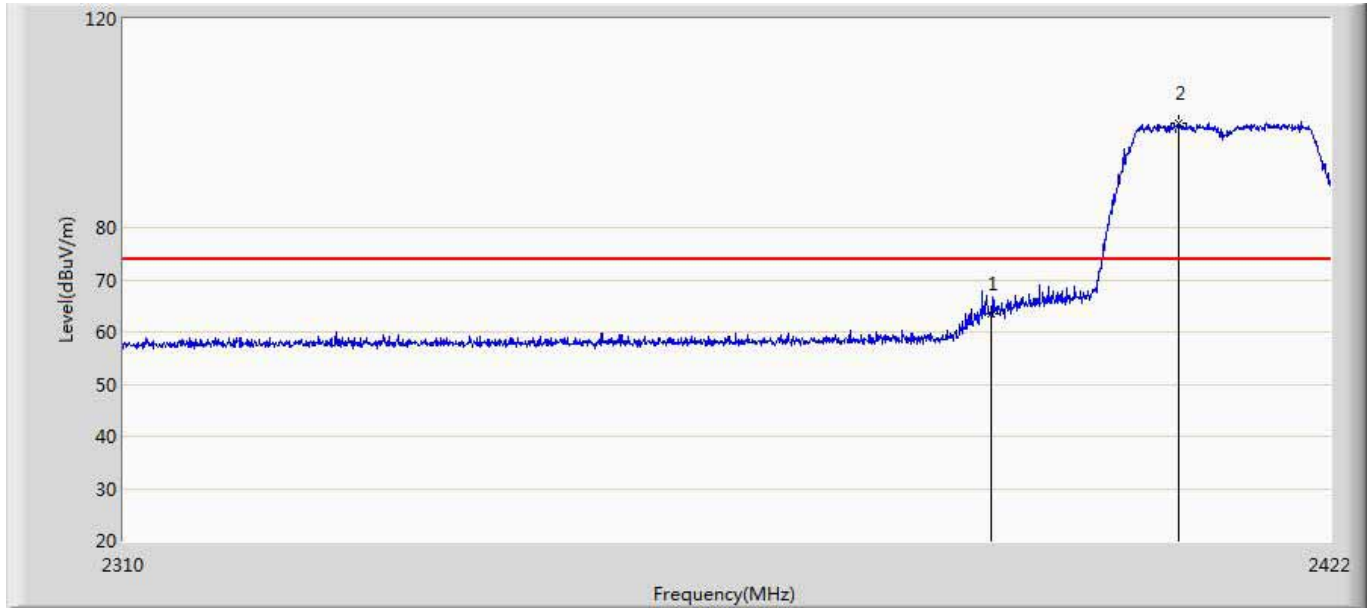
No	Mark	Frequency (MHz)	Measure Level (dBuV/m)	Reading Level (dBuV)	Over Limit (dB)	Limit (dBuV/m)	Factor (dB)	Type
1		2390.000	69.133	32.142	-4.867	74.000	36.991	PK
2	*	2410.016	107.815	70.801	33.815	74.000	37.013	PK

Engineer: Scott	
Site: AC5	Time: 2015/08/27 - 17:04
Limit: FCC_Part15.209_RE(3m)	Margin: 0
Probe: Horn_3117_00167055(1-18GHz)	Polarity: Horizontal
EUT: IP-STB	Power: 120V/60Hz
Note: Mode 3 Transmit at 802.11n(20MHz) CH2412 by ant2	



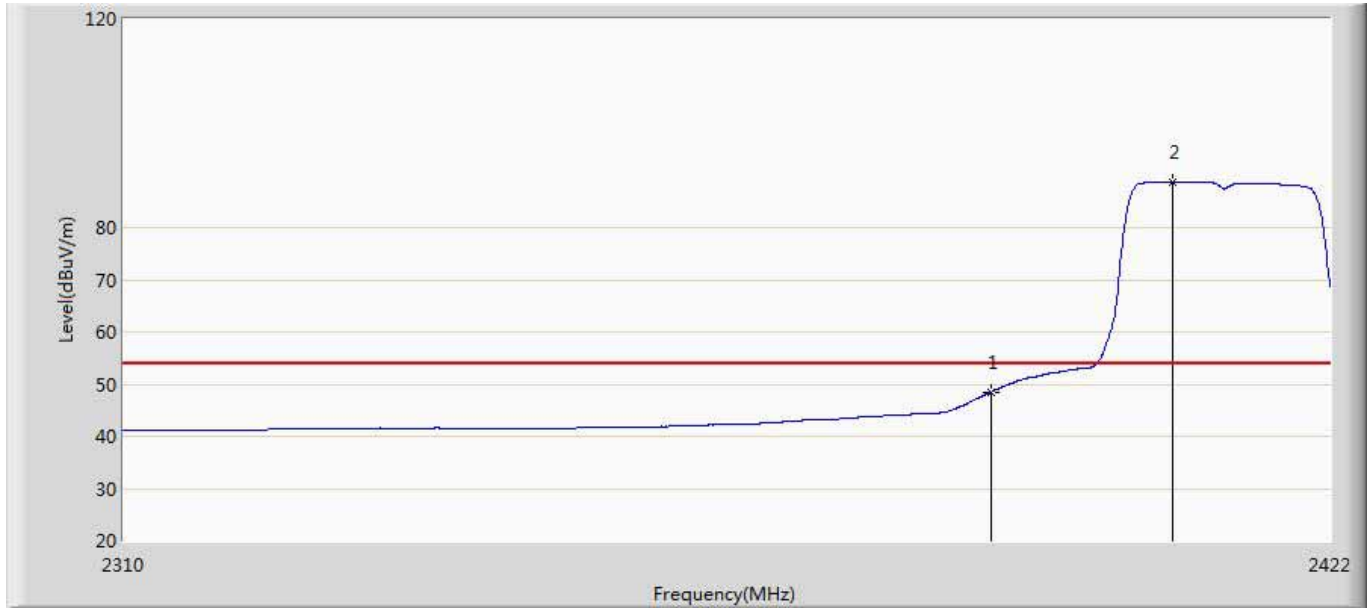
No	Mark	Frequency (MHz)	Measure Level (dBuV/m)	Reading Level (dBuV)	Over Limit (dB)	Limit (dBuV/m)	Factor (dB)	Type
1		2390.000	52.540	15.549	-1.460	54.000	36.991	AV
2	*	2410.184	94.411	57.397	40.411	54.000	37.014	AV

Engineer: Scott	
Site: AC5	Time: 2015/08/27 - 17:11
Limit: FCC_Part15.209_RE(3m)	Margin: 0
Probe: Horn_3117_00167055(1-18GHz)	Polarity: Vertical
EUT: IP-STB	Power: 120V/60Hz
Note: Mode 3 Transmit at 802.11n(20MHz) CH2412 by ant2	



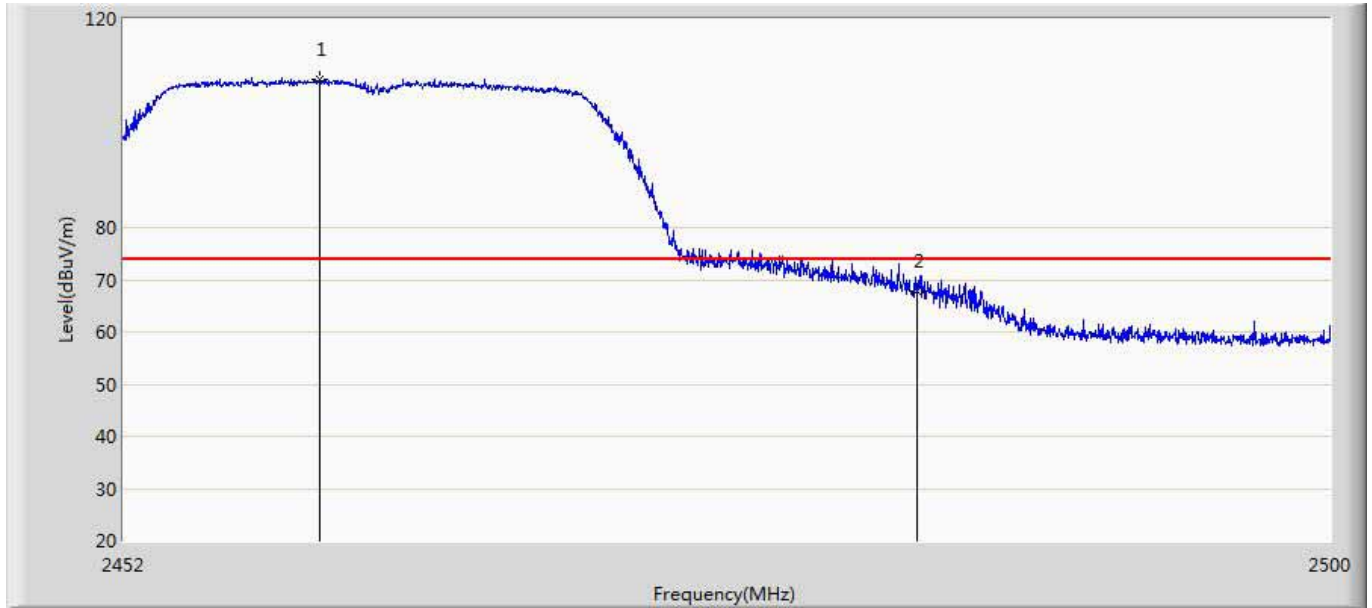
No	Mark	Frequency (MHz)	Measure Level (dBuV/m)	Reading Level (dBuV)	Over Limit (dB)	Limit (dBuV/m)	Factor (dB)	Type
1		2390.000	63.342	26.351	-10.658	74.000	36.991	PK
2	*	2407.664	99.970	62.958	25.970	74.000	37.012	PK

Engineer: Scott	
Site: AC5	Time: 2015/08/27 - 17:12
Limit: FCC_Part15.209_RE(3m)	Margin: 0
Probe: Horn_3117_00167055(1-18GHz)	Polarity: Vertical
EUT: IP-STB	Power: 120V/60Hz
Note: Mode 3 Transmit at 802.11n(20MHz) CH2412 by ant2	



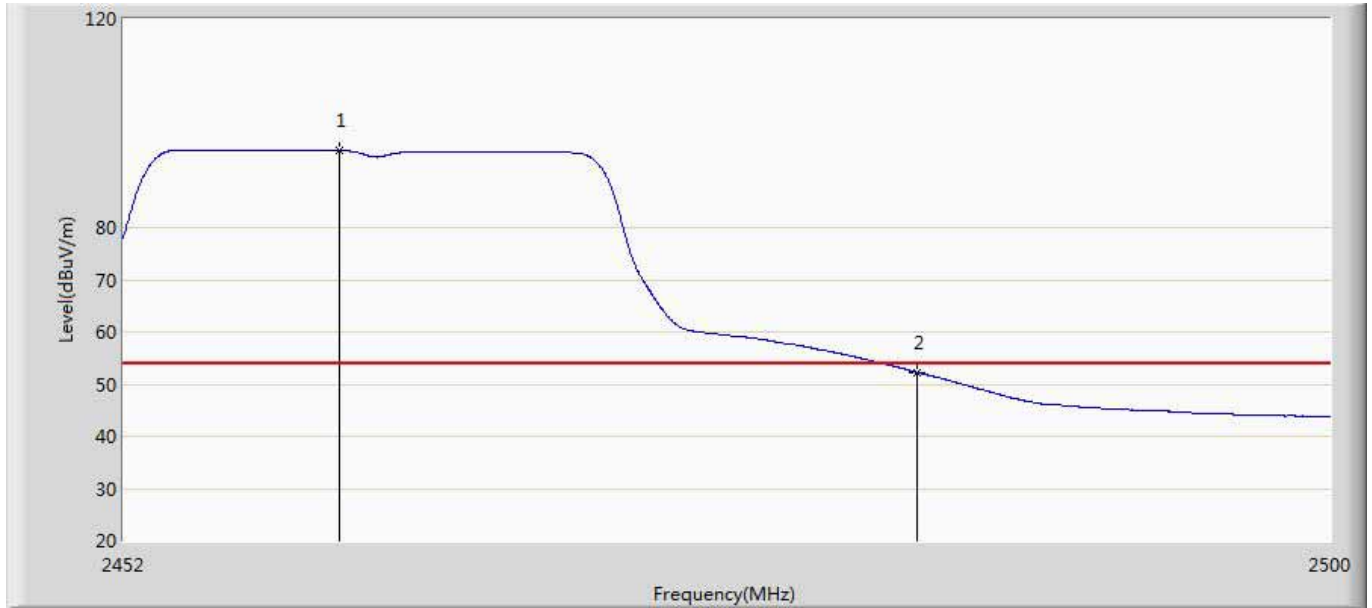
No	Mark	Frequency (MHz)	Measure Level (dBuV/m)	Reading Level (dBuV)	Over Limit (dB)	Limit (dBuV/m)	Factor (dB)	Type
1		2390.000	48.464	11.473	-5.536	54.000	36.991	AV
2	*	2407.104	88.800	51.789	34.800	54.000	37.011	AV

Engineer: Scott	
Site: AC5	Time: 2015/08/27 - 17:16
Limit: FCC_Part15.209_RE(3m)	Margin: 0
Probe: Horn_3117_00167055(1-18GHz)	Polarity: Horizontal
EUT: IP-STB	Power: 120V/60Hz
Note: Mode 3 Transmit at 802.11n(20MHz) CH2462 by ant2	



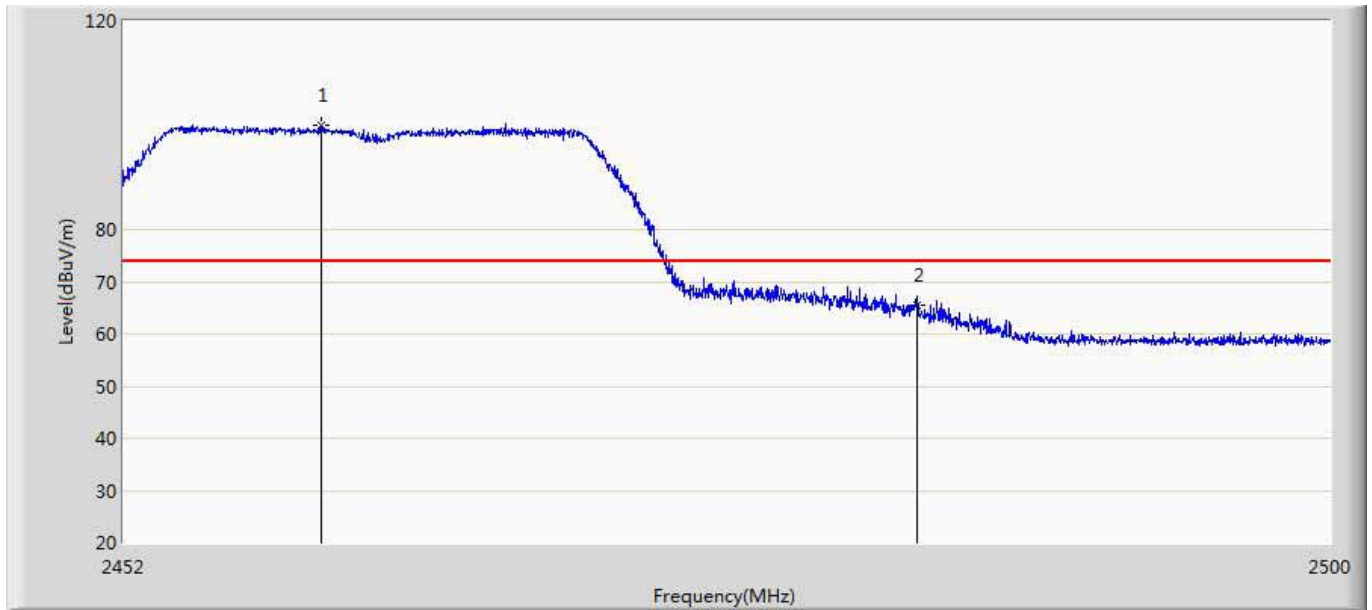
No	Mark	Frequency (MHz)	Measure Level (dBuV/m)	Reading Level (dBuV)	Over Limit (dB)	Limit (dBuV/m)	Factor (dB)	Type
1	*	2459.728	108.532	71.306	34.532	74.000	37.226	PK
2		2483.500	67.792	30.421	-6.208	74.000	37.371	PK

Engineer: Scott	
Site: AC5	Time: 2015/08/27 - 17:16
Limit: FCC_Part15.209_RE(3m)	Margin: 0
Probe: Horn_3117_00167055(1-18GHz)	Polarity: Horizontal
EUT: IP-STB	Power: 120V/60Hz
Note: Mode 3 Transmit at 802.11n(20MHz) CH2462 by ant2	



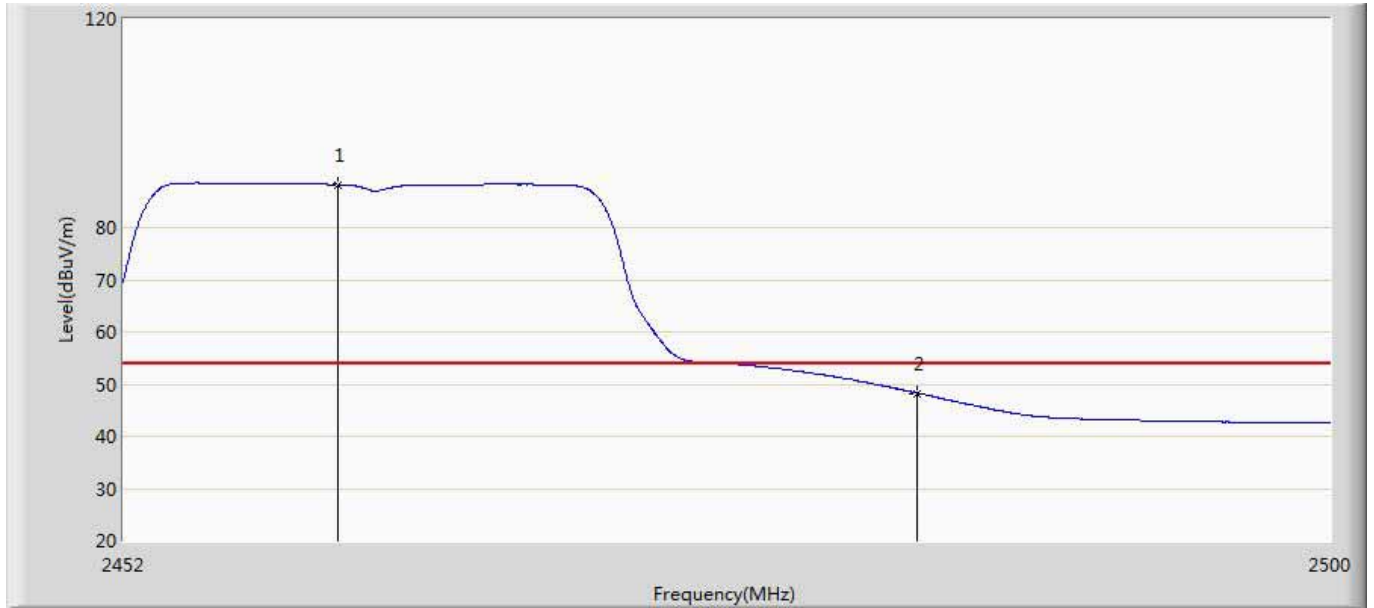
No	Mark	Frequency (MHz)	Measure Level (dBuV/m)	Reading Level (dBuV)	Over Limit (dB)	Limit (dBuV/m)	Factor (dB)	Type
1	*	2460.544	94.747	57.520	40.747	54.000	37.227	AV
2		2483.500	52.146	14.775	-1.854	54.000	37.371	AV

Engineer: Scott	
Site: AC5	Time: 2015/08/27 - 17:21
Limit: FCC_Part15.209_RE(3m)	Margin: 0
Probe: Horn_3117_00167055(1-18GHz)	Polarity: Vertical
EUT: IP-STB	Power: 120V/60Hz
Note: Mode 3 Transmit at 802.11n(20MHz) CH2462 by ant2	



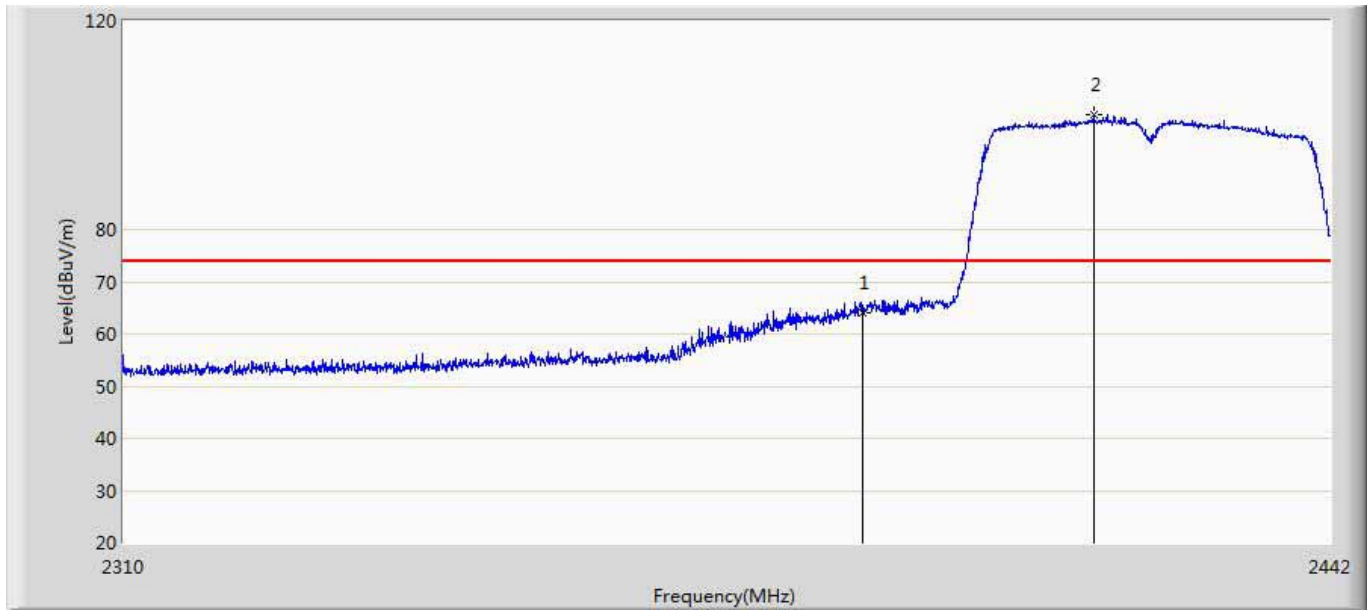
No	Mark	Frequency (MHz)	Measure Level (dBuV/m)	Reading Level (dBuV)	Over Limit (dB)	Limit (dBuV/m)	Factor (dB)	Type
1	*	2459.800	100.107	62.881	26.107	74.000	37.226	PK
2		2483.500	65.454	28.083	-8.546	74.000	37.371	PK

Engineer: Scott	
Site: AC5	Time: 2015/08/27 - 17:21
Limit: FCC_Part15.209_RE(3m)	Margin: 0
Probe: Horn_3117_00167055(1-18GHz)	Polarity: Vertical
EUT: IP-STB	Power: 120V/60Hz
Note: Mode 3 Transmit at 802.11n(20MHz) CH2462 by ant2	



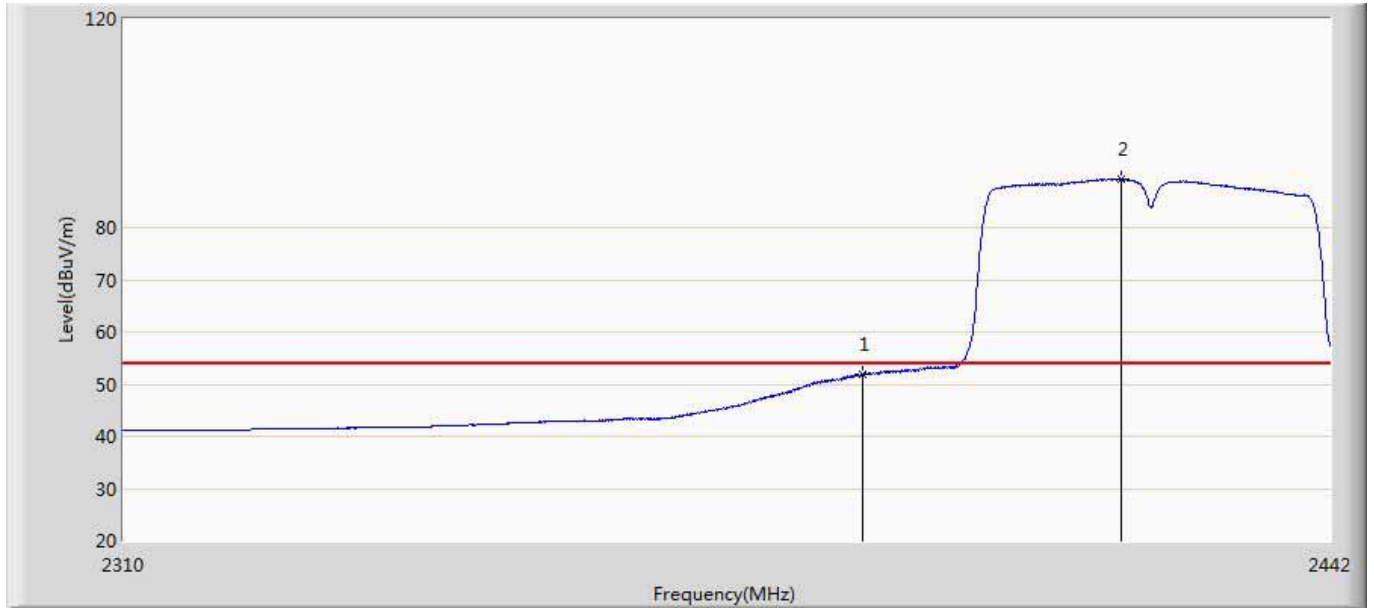
No	Mark	Frequency (MHz)	Measure Level (dBuV/m)	Reading Level (dBuV)	Over Limit (dB)	Limit (dBuV/m)	Factor (dB)	Type
1	*	2460.472	88.243	51.016	34.243	54.000	37.227	AV
2		2483.500	48.255	10.884	-5.745	54.000	37.371	AV

Engineer: Scott	
Site: AC5	Time: 2015/08/27 - 17:26
Limit: FCC_Part15.209_RE(3m)	Margin: 0
Probe: Horn_3117_00167055(1-18GHz)	Polarity: Horizontal
EUT: IP-STB	Power: 120V/60Hz
Note: Mode 4 Transmit at 802.11n(40MHz) CH2422 by ant2	



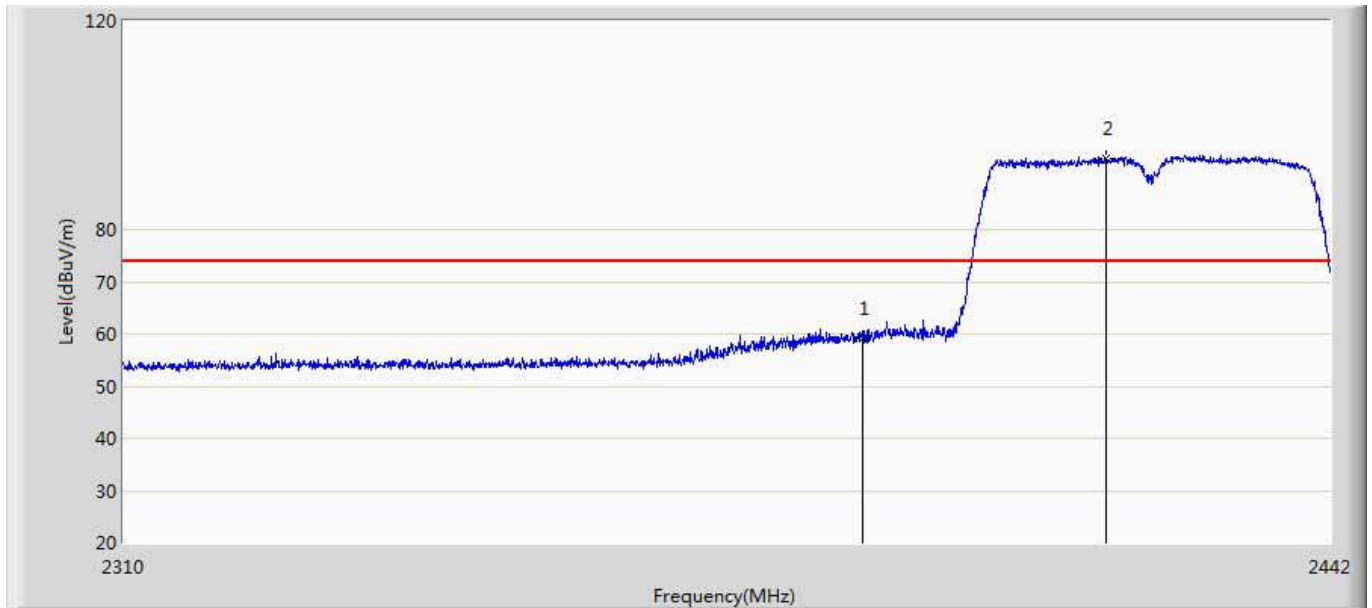
No	Mark	Frequency (MHz)	Measure Level (dBuV/m)	Reading Level (dBuV)	Over Limit (dB)	Limit (dBuV/m)	Factor (dB)	Type
1		2390.000	64.081	27.090	-9.919	74.000	36.991	PK
2	*	2415.534	101.988	64.932	27.988	74.000	37.055	PK

Engineer: Scott	
Site: AC5	Time: 2015/08/27 - 17:26
Limit: FCC_Part15.209_RE(3m)	Margin: 0
Probe: Horn_3117_00167055(1-18GHz)	Polarity: Horizontal
EUT: IP-STB	Power: 120V/60Hz
Note: Mode 4 Transmit at 802.11n(40MHz) CH2422 by ant2	



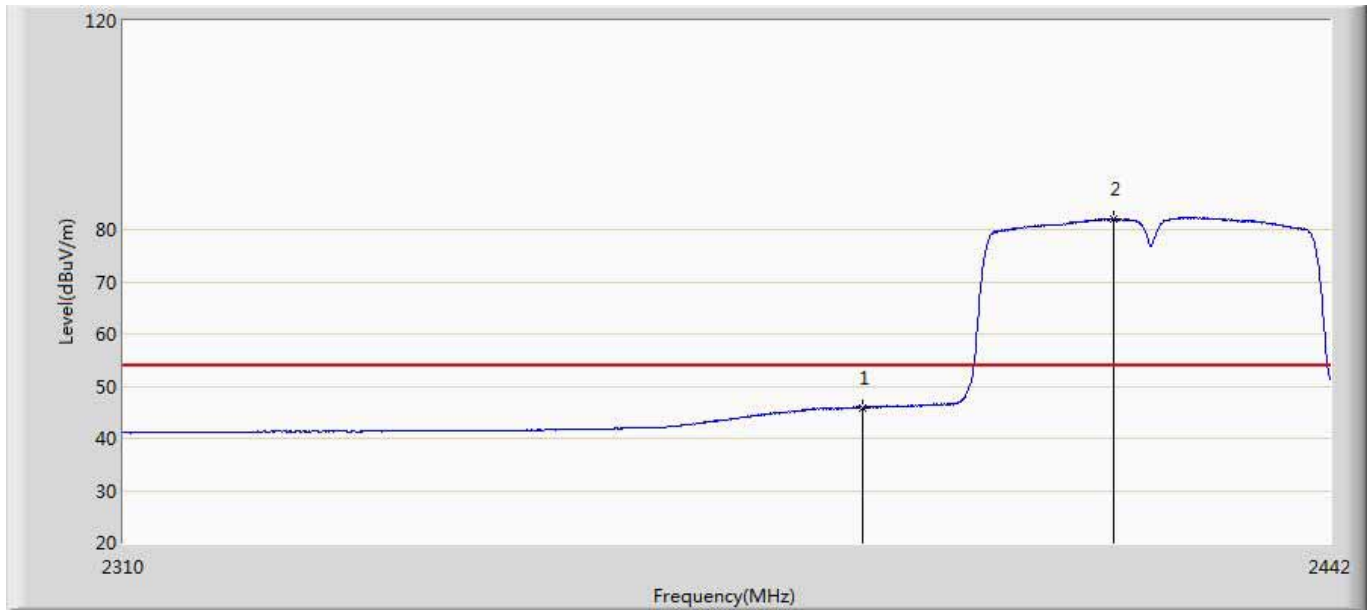
No	Mark	Frequency (MHz)	Measure Level (dBuV/m)	Reading Level (dBuV)	Over Limit (dB)	Limit (dBuV/m)	Factor (dB)	Type
1		2390.000	51.897	14.906	-2.103	54.000	36.991	AV
2	*	2418.702	89.142	52.057	35.142	54.000	37.085	AV

Engineer: Scott	
Site: AC5	Time: 2015/08/27 - 17:31
Limit: FCC_Part15.209_RE(3m)	Margin: 0
Probe: Horn_3117_00167055(1-18GHz)	Polarity: Vertical
EUT: IP-STB	Power: 120V/60Hz
Note: Mode 4 Transmit at 802.11n(40MHz) CH2422 by ant2	



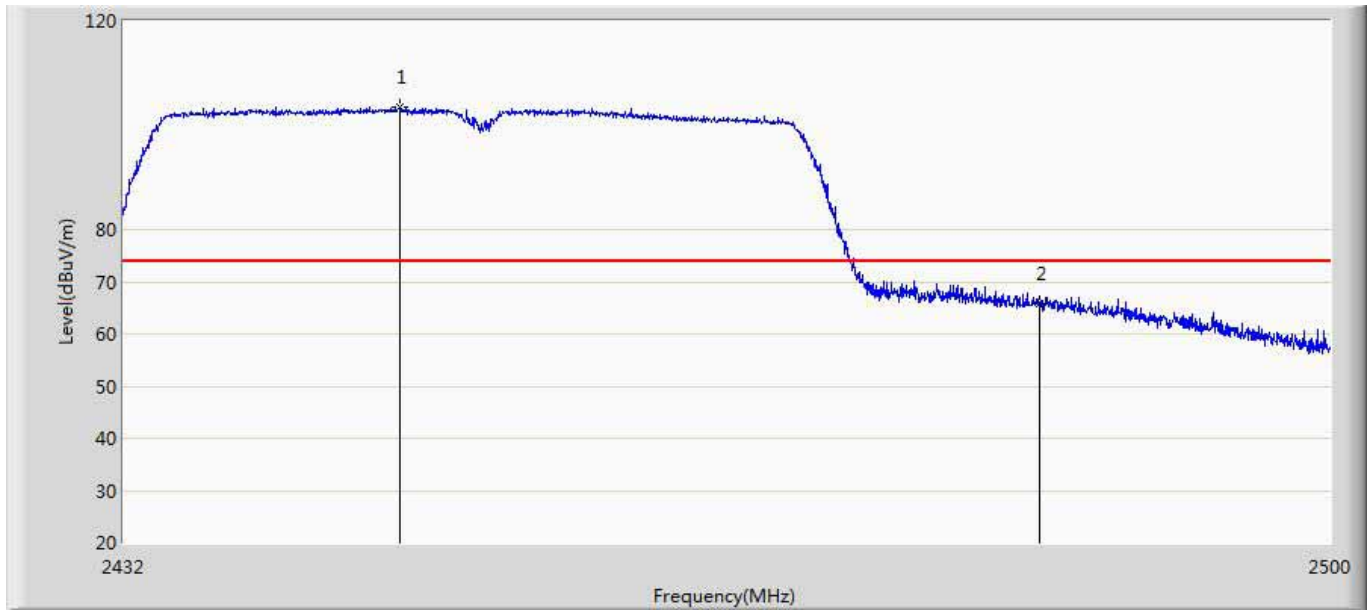
No	Mark	Frequency (MHz)	Measure Level (dBuV/m)	Reading Level (dBuV)	Over Limit (dB)	Limit (dBuV/m)	Factor (dB)	Type
1		2390.000	59.202	22.211	-14.798	74.000	36.991	PK
2	*	2416.986	93.765	56.696	19.765	74.000	37.068	PK

Engineer: Scott	
Site: AC5	Time: 2015/08/27 - 17:32
Limit: FCC_Part15.209_RE(3m)	Margin: 0
Probe: Horn_3117_00167055(1-18GHz)	Polarity: Vertical
EUT: IP-STB	Power: 120V/60Hz
Note: Mode 4 Transmit at 802.11n(40MHz) CH2422 by ant2	



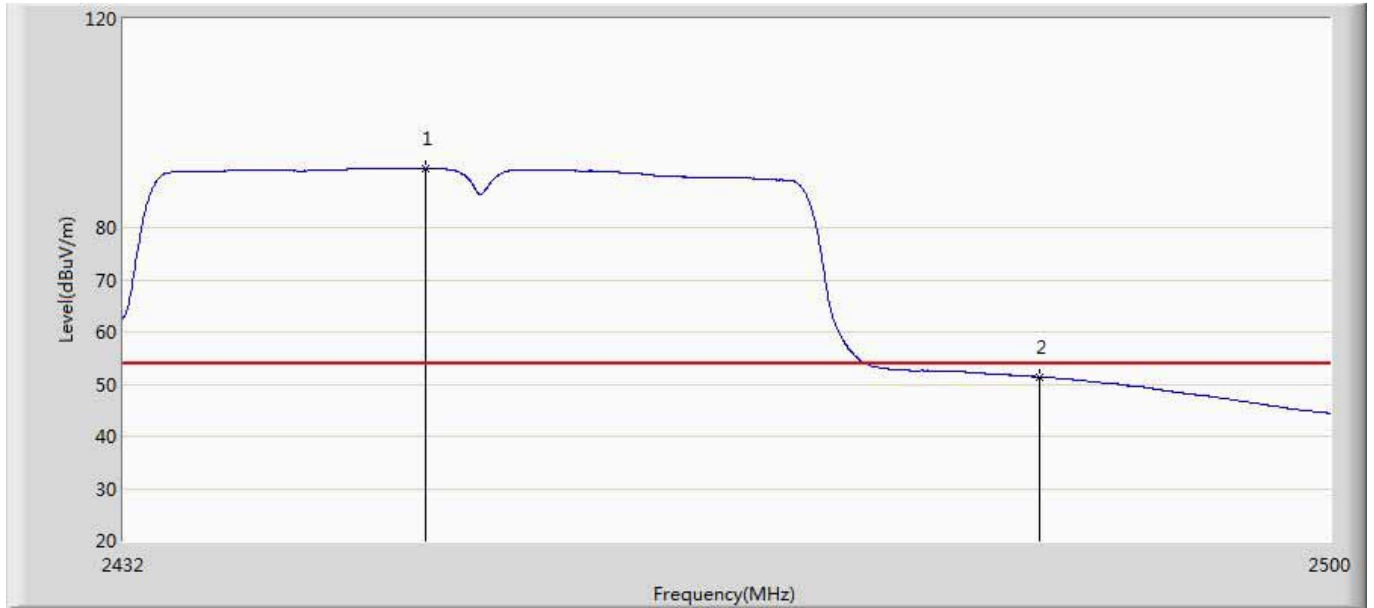
No	Mark	Frequency (MHz)	Measure Level (dBuV/m)	Reading Level (dBuV)	Over Limit (dB)	Limit (dBuV/m)	Factor (dB)	Type
1		2390.000	45.874	8.883	-8.126	54.000	36.991	AV
2	*	2417.844	82.011	44.934	28.011	54.000	37.077	AV

Engineer: Scott	
Site: AC5	Time: 2015/08/27 - 18:43
Limit: FCC_Part15.209_RE(3m)	Margin: 0
Probe: Horn_3117_00167055(1-18GHz)	Polarity: Horizontal
EUT: IP-STB	Power: 120V/60Hz
Note: Mode 4 Transmit at 802.11n(40MHz) CH2452 by ant2	



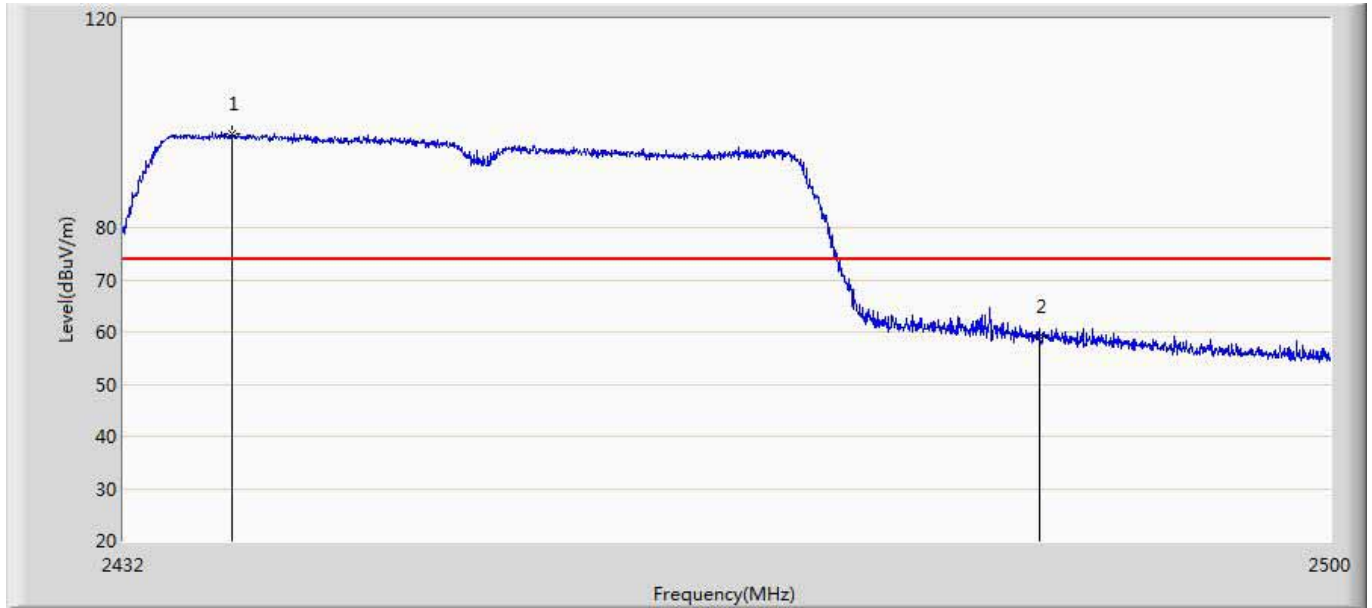
No	Mark	Frequency (MHz)	Measure Level (dBuV/m)	Reading Level (dBuV)	Over Limit (dB)	Limit (dBuV/m)	Factor (dB)	Type
1	*	2447.470	103.563	66.357	29.563	74.000	37.206	PK
2		2483.500	65.875	28.504	-8.125	74.000	37.371	PK

Engineer: Scott	
Site: AC5	Time: 2015/08/27 - 18:43
Limit: FCC_Part15.209_RE(3m)	Margin: 0
Probe: Horn_3117_00167055(1-18GHz)	Polarity: Horizontal
EUT: IP-STB	Power: 120V/60Hz
Note: Mode 4 Transmit at 802.11n(40MHz) CH2452 by ant2	



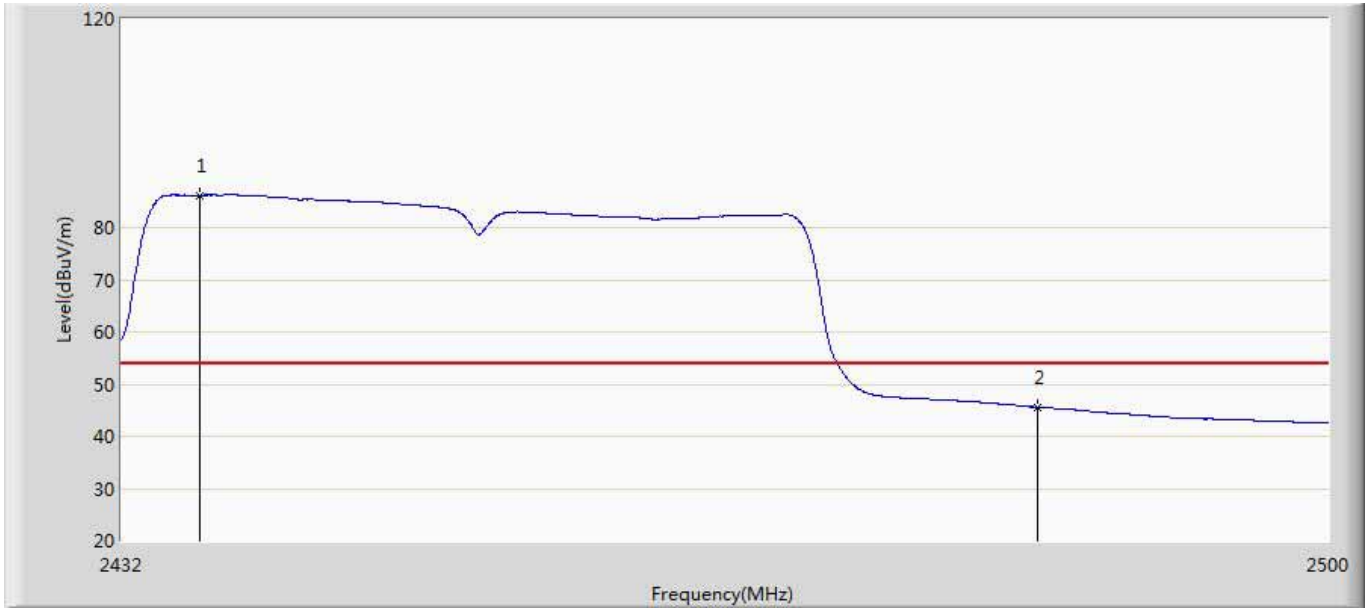
No	Mark	Frequency (MHz)	Measure Level (dBuV/m)	Reading Level (dBuV)	Over Limit (dB)	Limit (dBuV/m)	Factor (dB)	Type
1	*	2448.830	91.306	54.098	37.306	54.000	37.208	AV
2		2483.500	51.329	13.958	-2.671	54.000	37.371	AV

Engineer: Scott	
Site: AC5	Time: 2015/08/27 - 18:48
Limit: FCC_Part15.209_RE(3m)	Margin: 0
Probe: Horn_3117_00167055(1-18GHz)	Polarity: Vertical
EUT: IP-STB	Power: 120V/60Hz
Note: Mode 4 Transmit at 802.11n(40MHz) CH2452 by ant2	



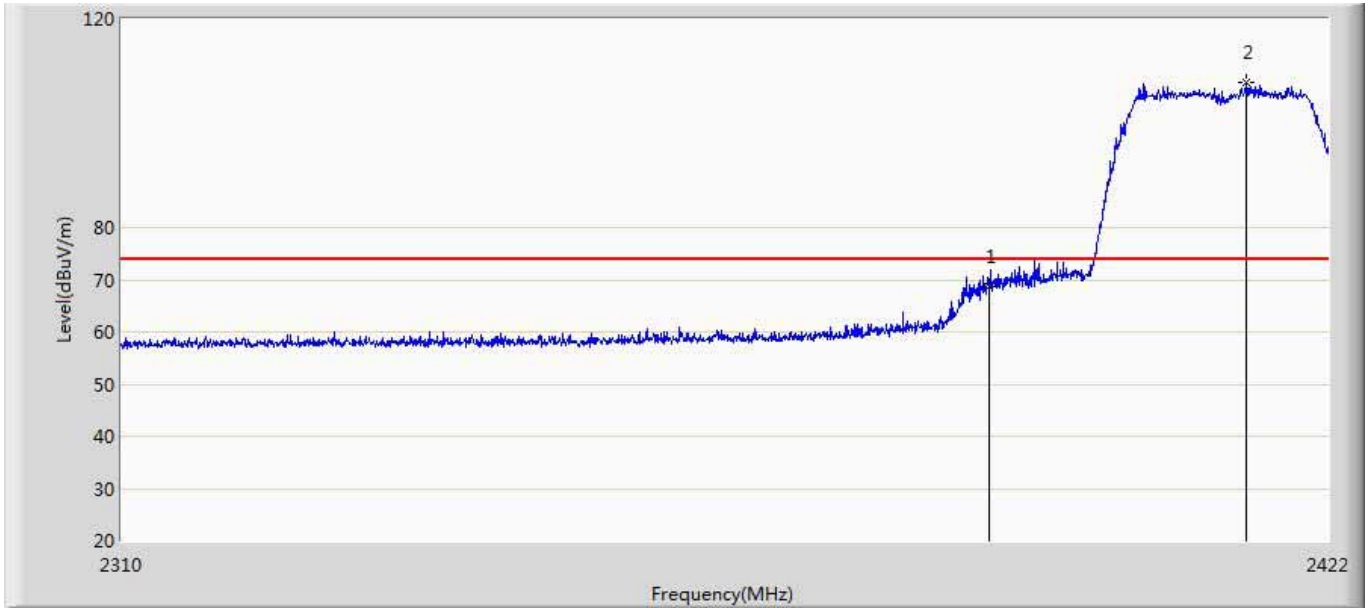
No	Mark	Frequency (MHz)	Measure Level (dBuV/m)	Reading Level (dBuV)	Over Limit (dB)	Limit (dBuV/m)	Factor (dB)	Type
1	*	2438.052	98.096	60.908	24.096	74.000	37.188	PK
2		2483.500	59.115	21.744	-14.885	74.000	37.371	PK

Engineer: Scott	
Site: AC5	Time: 2015/08/27 - 18:49
Limit: FCC_Part15.209_RE(3m)	Margin: 0
Probe: Horn_3117_00167055(1-18GHz)	Polarity: Vertical
EUT: IP-STB	Power: 120V/60Hz
Note: Mode 4 Transmit at 802.11n(40MHz) CH2452 by ant2	



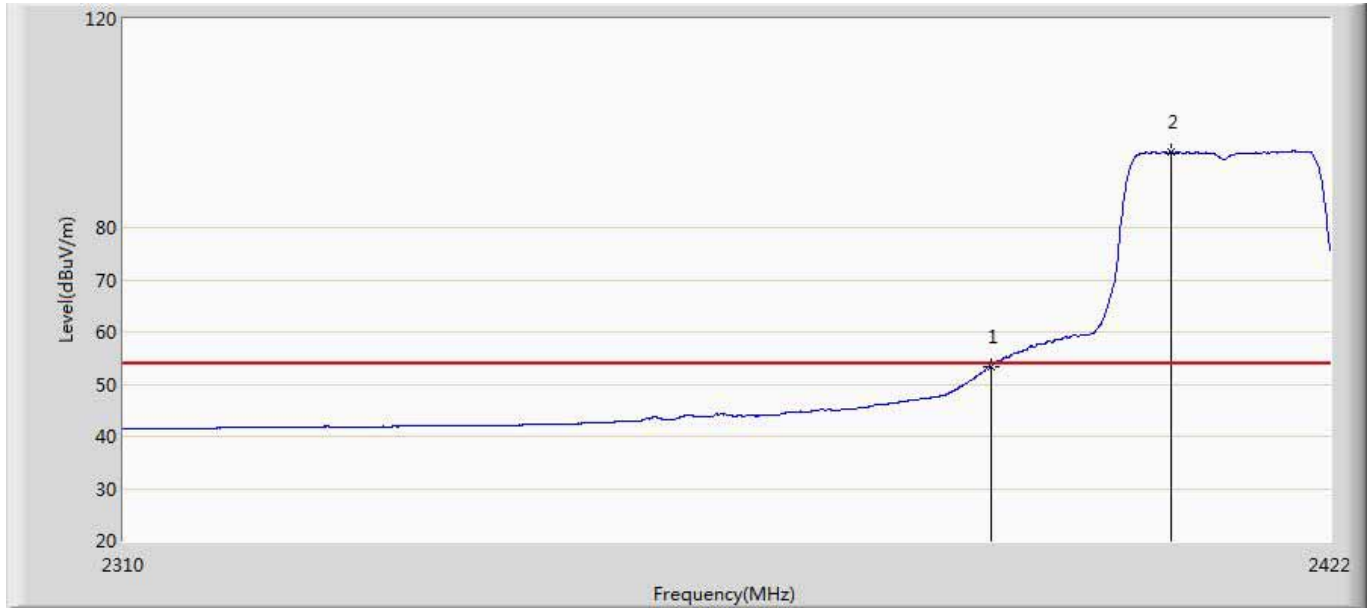
No	Mark	Frequency (MHz)	Measure Level (dBuV/m)	Reading Level (dBuV)	Over Limit (dB)	Limit (dBuV/m)	Factor (dB)	Type
1	*	2436.386	86.199	49.014	32.199	54.000	37.185	AV
2		2483.500	45.602	8.231	-8.398	54.000	37.371	AV

Engineer: Scott	
Site: AC5	Time: 2015/08/27 - 19:08
Limit: FCC_Part15.209_RE(3m)	Margin: 0
Probe: Horn_3117_00167055(1-18GHz)	Polarity: Horizontal
EUT: IP-STB	Power: 120V/60Hz
Note: Mode 3 Transmit at 802.11n(20MHz) CH2412 by ant1+2	



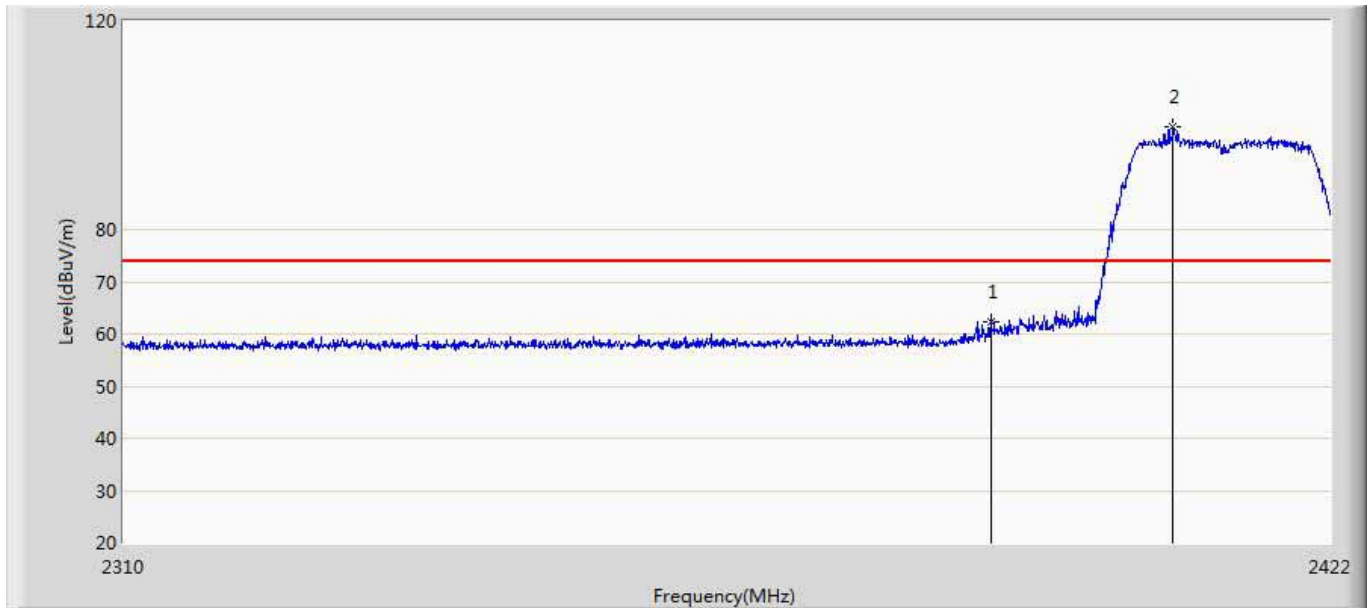
No	Mark	Frequency (MHz)	Measure Level (dBuV/m)	Reading Level (dBuV)	Over Limit (dB)	Limit (dBuV/m)	Factor (dB)	Type
1		2390.000	68.792	31.801	-5.208	74.000	36.991	PK
2	*	2414.216	107.717	70.673	33.717	74.000	37.044	PK

Engineer: Scott	
Site: AC5	Time: 2015/08/27 - 19:09
Limit: FCC_Part15.209_RE(3m)	Margin: 0
Probe: Horn_3117_00167055(1-18GHz)	Polarity: Horizontal
EUT: IP-STB	Power: 120V/60Hz
Note: Mode 3 Transmit at 802.11n(20MHz) CH2412 by ant1+2	



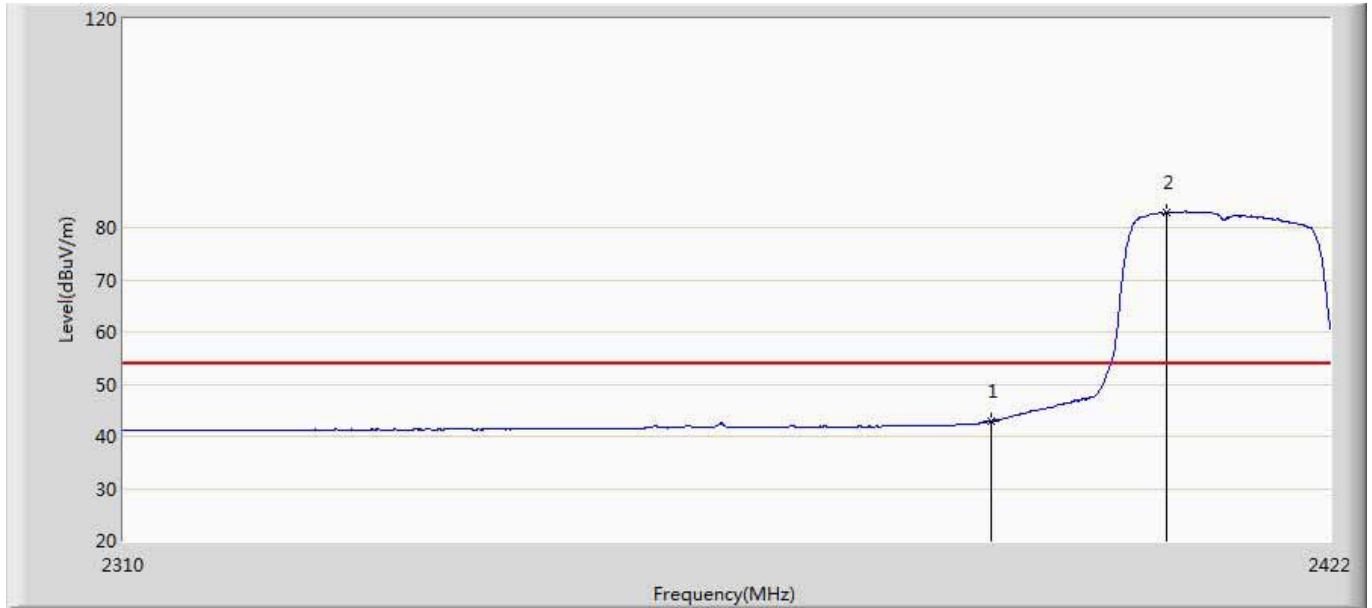
No	Mark	Frequency (MHz)	Measure Level (dBuV/m)	Reading Level (dBuV)	Over Limit (dB)	Limit (dBuV/m)	Factor (dB)	Type
1		2390.000	53.408	16.417	-0.592	54.000	36.991	AV
2	*	2406.992	94.380	57.369	40.380	54.000	37.011	AV

Engineer: Scott	
Site: AC5	Time: 2015/08/27 - 19:12
Limit: FCC_Part15.209_RE(3m)	Margin: 0
Probe: Horn_3117_00167055(1-18GHz)	Polarity: Vertical
EUT: IP-STB	Power: 120V/60Hz
Note: Mode 3 Transmit at 802.11n(20MHz) CH2412 by ant1+2	



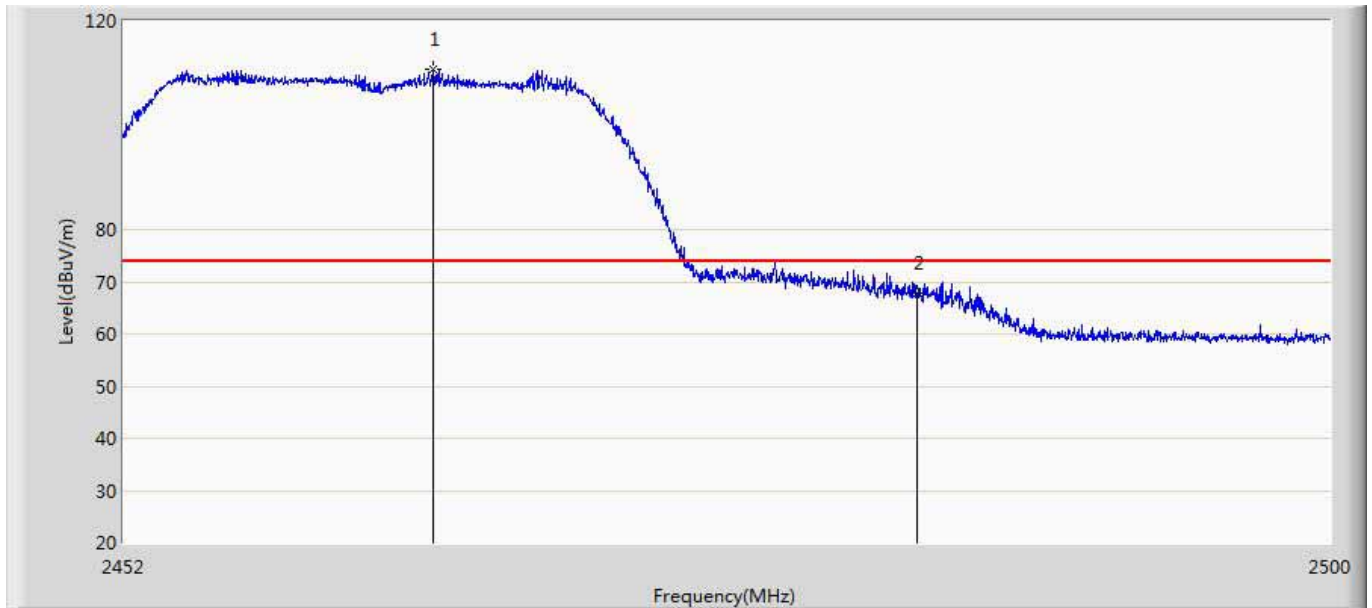
No	Mark	Frequency (MHz)	Measure Level (dBuV/m)	Reading Level (dBuV)	Over Limit (dB)	Limit (dBuV/m)	Factor (dB)	Type
1		2390.000	62.177	25.186	-11.823	74.000	36.991	PK
2	*	2407.160	99.752	62.741	25.752	74.000	37.011	PK

Engineer: Scott	
Site: AC5	Time: 2015/08/27 - 19:13
Limit: FCC_Part15.209_RE(3m)	Margin: 0
Probe: Horn_3117_00167055(1-18GHz)	Polarity: Vertical
EUT: IP-STB	Power: 120V/60Hz
Note: Mode 3 Transmit at 802.11n(20MHz) CH2412 by ant1+2	



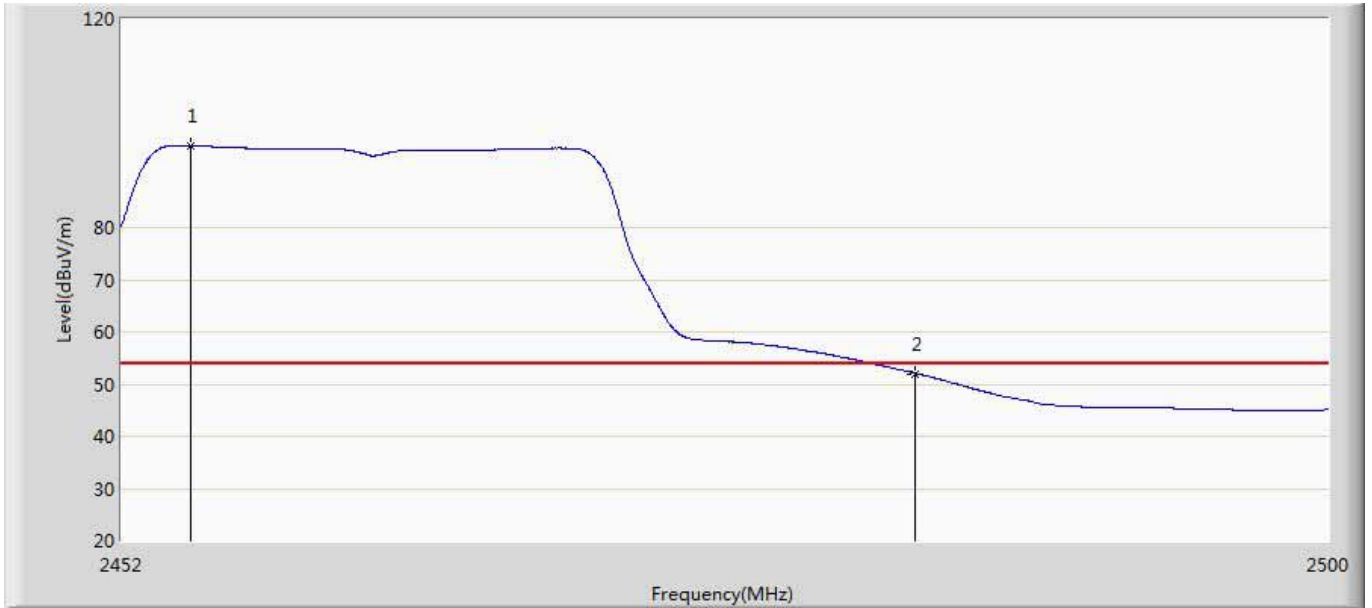
No	Mark	Frequency (MHz)	Measure Level (dBuV/m)	Reading Level (dBuV)	Over Limit (dB)	Limit (dBuV/m)	Factor (dB)	Type
1		2390.000	42.930	5.939	-11.070	54.000	36.991	AV
2	*	2406.600	82.943	45.932	28.943	54.000	37.011	AV

Engineer: Scott	
Site: AC5	Time: 2015/08/27 - 19:17
Limit: FCC_Part15.209_RE(3m)	Margin: 0
Probe: Horn_3117_00167055(1-18GHz)	Polarity: Horizontal
EUT: IP-STB	Power: 120V/60Hz
Note: Mode 3 Transmit at 802.11n(20MHz) CH2462 by ant1+2	



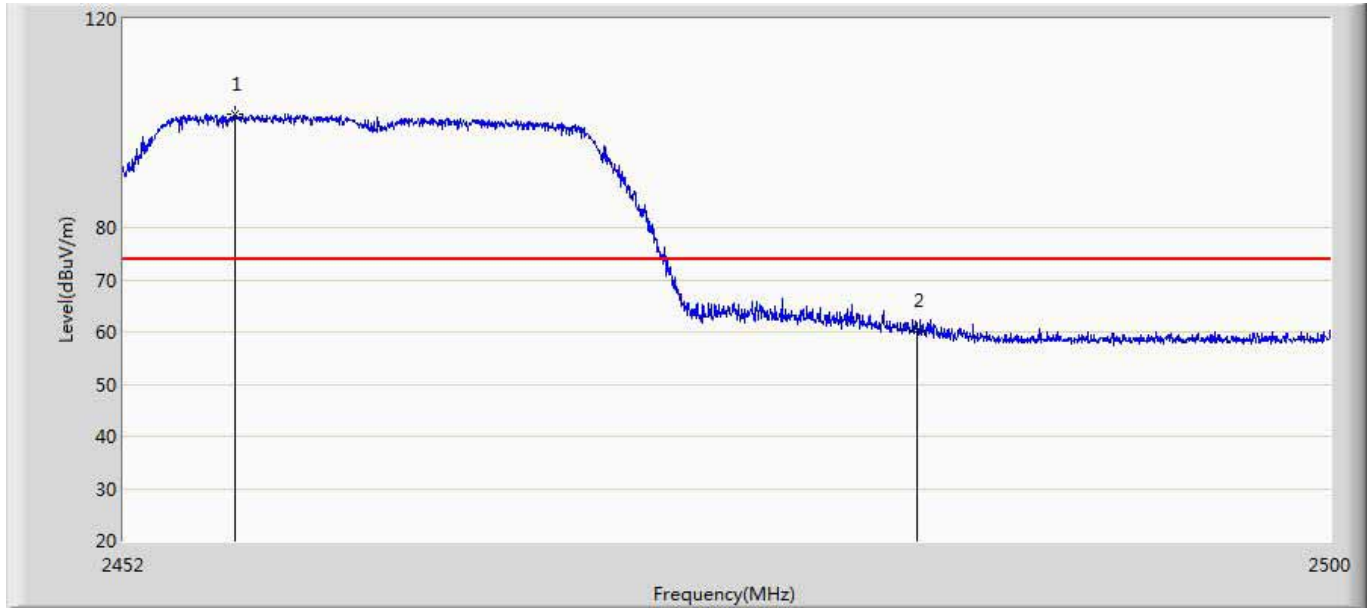
No	Mark	Frequency (MHz)	Measure Level (dBuV/m)	Reading Level (dBuV)	Over Limit (dB)	Limit (dBuV/m)	Factor (dB)	Type
1	*	2464.264	110.783	73.540	36.783	74.000	37.242	PK
2		2483.500	67.820	30.449	-6.180	74.000	37.371	PK

Engineer: Scott	
Site: AC5	Time: 2015/08/27 - 19:17
Limit: FCC_Part15.209_RE(3m)	Margin: 0
Probe: Horn_3117_00167055(1-18GHz)	Polarity: Horizontal
EUT: IP-STB	Power: 120V/60Hz
Note: Mode 3 Transmit at 802.11n(20MHz) CH2462 by ant1+2	



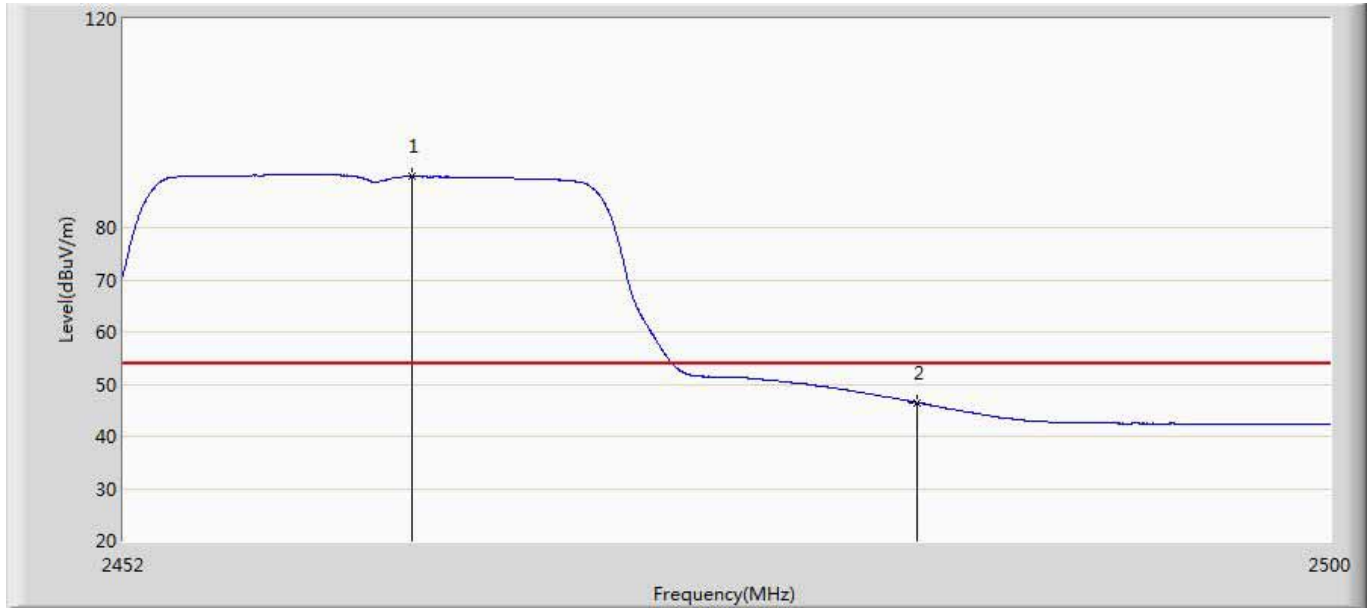
No	Mark	Frequency (MHz)	Measure Level (dBuV/m)	Reading Level (dBuV)	Over Limit (dB)	Limit (dBuV/m)	Factor (dB)	Type
1	*	2454.736	95.655	58.438	41.655	54.000	37.218	AV
2		2483.500	52.007	14.636	-1.993	54.000	37.371	AV

Engineer: Scott	
Site: AC5	Time: 2015/08/27 - 19:20
Limit: FCC_Part15.209_RE(3m)	Margin: 0
Probe: Horn_3117_00167055(1-18GHz)	Polarity: Vertical
EUT: IP-STB	Power: 120V/60Hz
Note: Mode 3 Transmit at 802.11n(20MHz) CH2462 by ant1+2	



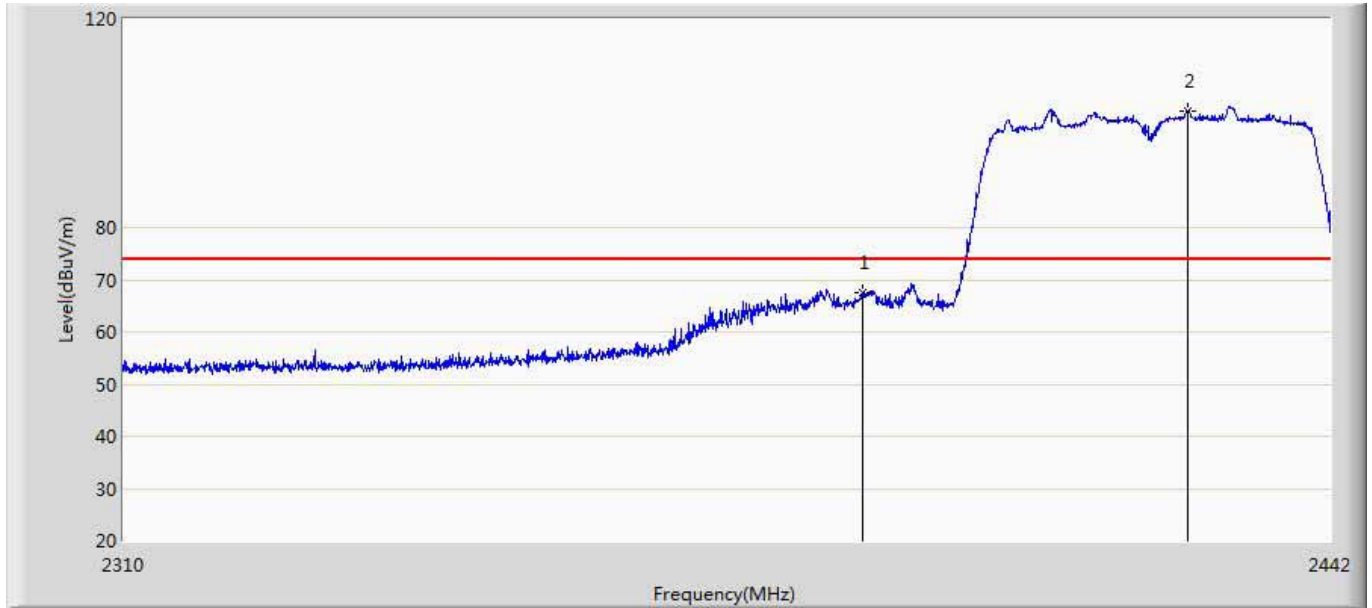
No	Mark	Frequency (MHz)	Measure Level (dBuV/m)	Reading Level (dBuV)	Over Limit (dB)	Limit (dBuV/m)	Factor (dB)	Type
1	*	2456.440	101.855	64.635	27.855	74.000	37.220	PK
2		2483.500	60.434	23.063	-13.566	74.000	37.371	PK

Engineer: Scott	
Site: AC5	Time: 2015/08/27 - 19:21
Limit: FCC_Part15.209_RE(3m)	Margin: 0
Probe: Horn_3117_00167055(1-18GHz)	Polarity: Vertical
EUT: IP-STB	Power: 120V/60Hz
Note: Mode 3 Transmit at 802.11n(20MHz) CH2462 by ant1+2	



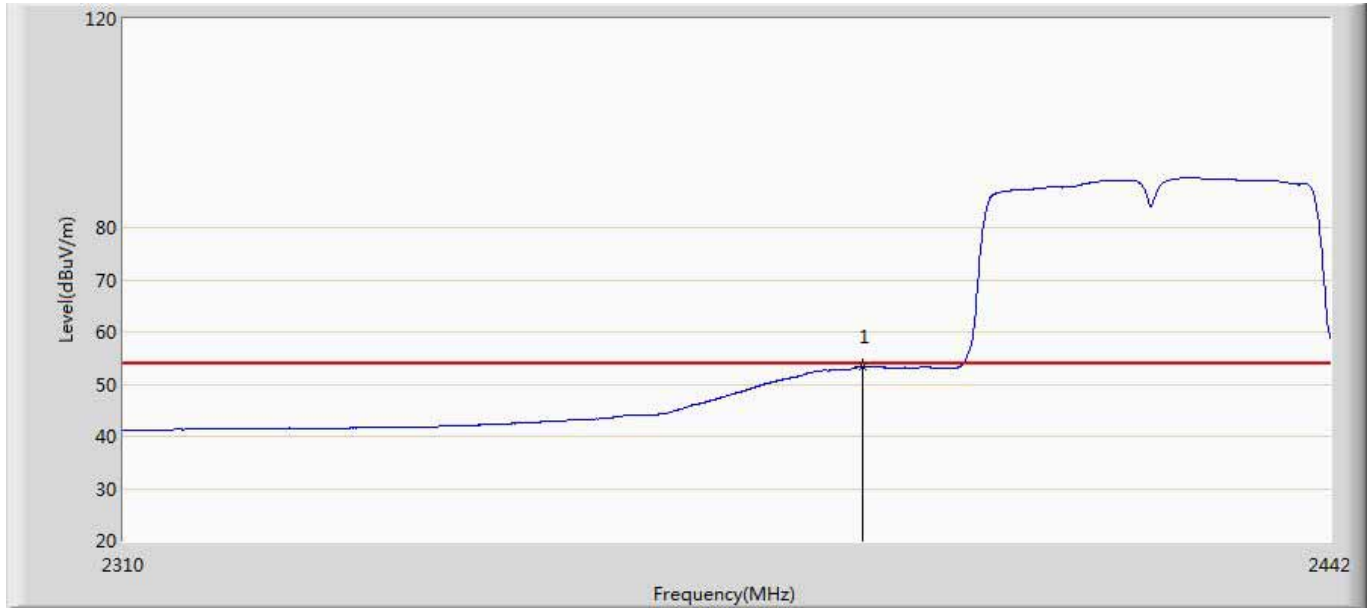
No	Mark	Frequency (MHz)	Measure Level (dBuV/m)	Reading Level (dBuV)	Over Limit (dB)	Limit (dBuV/m)	Factor (dB)	Type
1	*	2463.376	89.721	52.484	35.721	54.000	37.237	AV
2		2483.500	46.439	9.068	-7.561	54.000	37.371	AV

Engineer: Scott	
Site: AC5	Time: 2015/08/27 - 19:27
Limit: FCC_Part15.209_RE(3m)	Margin: 0
Probe: Horn_3117_00167055(1-18GHz)	Polarity: Horizontal
EUT: IP-STB	Power: 120V/60Hz
Note: Mode 4 Transmit at 802.11n(40MHz) CH2422 by ant1+2	



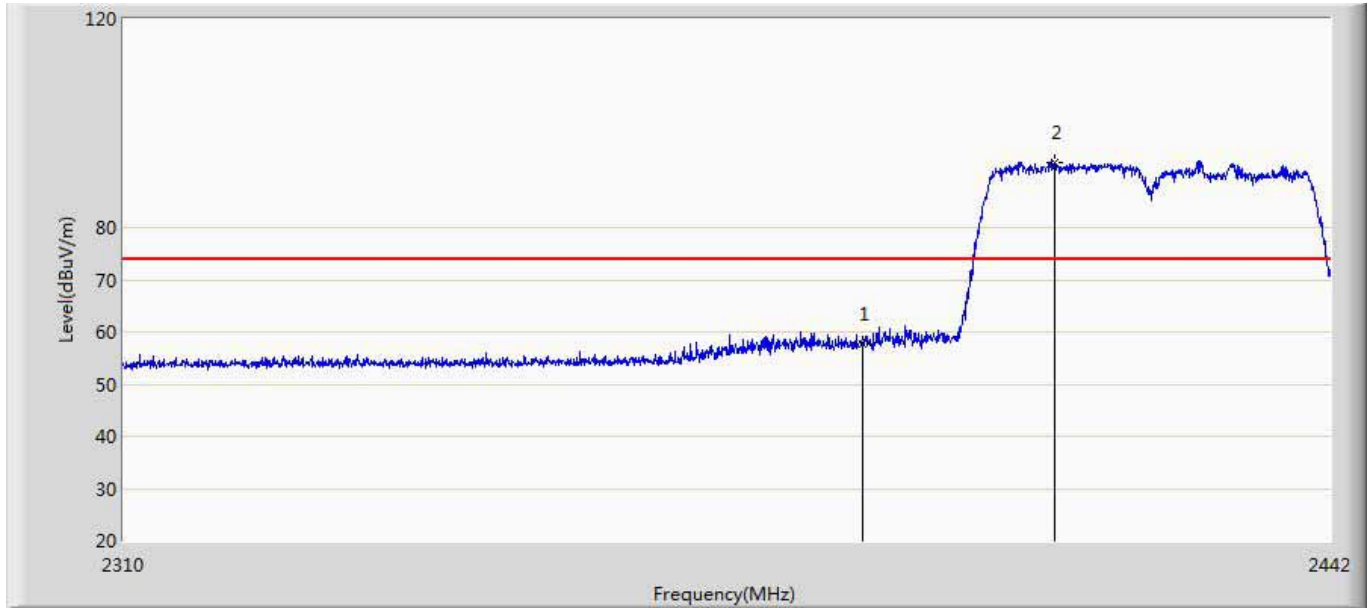
No	Mark	Frequency (MHz)	Measure Level (dBuV/m)	Reading Level (dBuV)	Over Limit (dB)	Limit (dBuV/m)	Factor (dB)	Type
1		2390.000	67.442	30.451	-6.558	74.000	36.991	PK
2	*	2426.028	102.424	65.273	28.424	74.000	37.151	PK

Engineer: Scott	
Site: AC5	Time: 2015/08/27 - 19:27
Limit: FCC_Part15.209_RE(3m)	Margin: 0
Probe: Horn_3117_00167055(1-18GHz)	Polarity: Horizontal
EUT: IP-STB	Power: 120V/60Hz
Note: Mode 4 Transmit at 802.11n(40MHz) CH2422 by ant1+2	



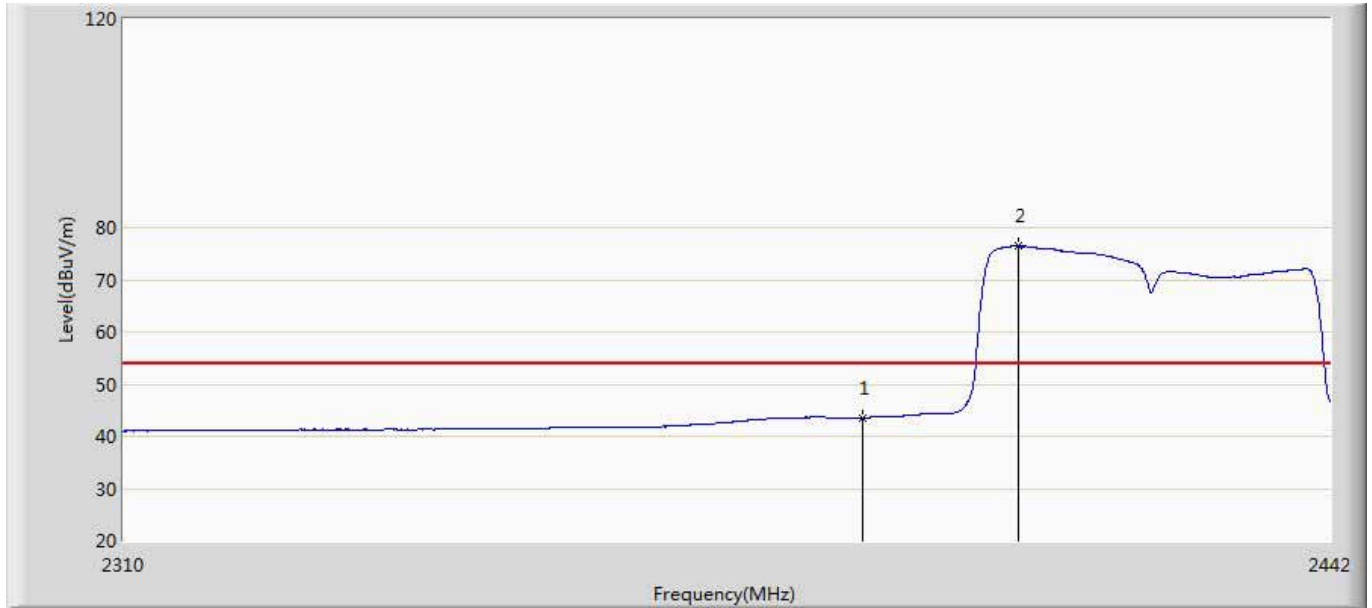
No	Mark	Frequency (MHz)	Measure Level (dBuV/m)	Reading Level (dBuV)	Over Limit (dB)	Limit (dBuV/m)	Factor (dB)	Type
1	*	2390.000	53.215	16.224	-0.785	54.000	36.991	AV

Engineer: Scott	
Site: AC5	Time: 2015/08/27 - 19:32
Limit: FCC_Part15.209_RE(3m)	Margin: 0
Probe: Horn_3117_00167055(1-18GHz)	Polarity: Vertical
EUT: IP-STB	Power: 120V/60Hz
Note: Mode 4 Transmit at 802.11n(40MHz) CH2422 by ant1+2	



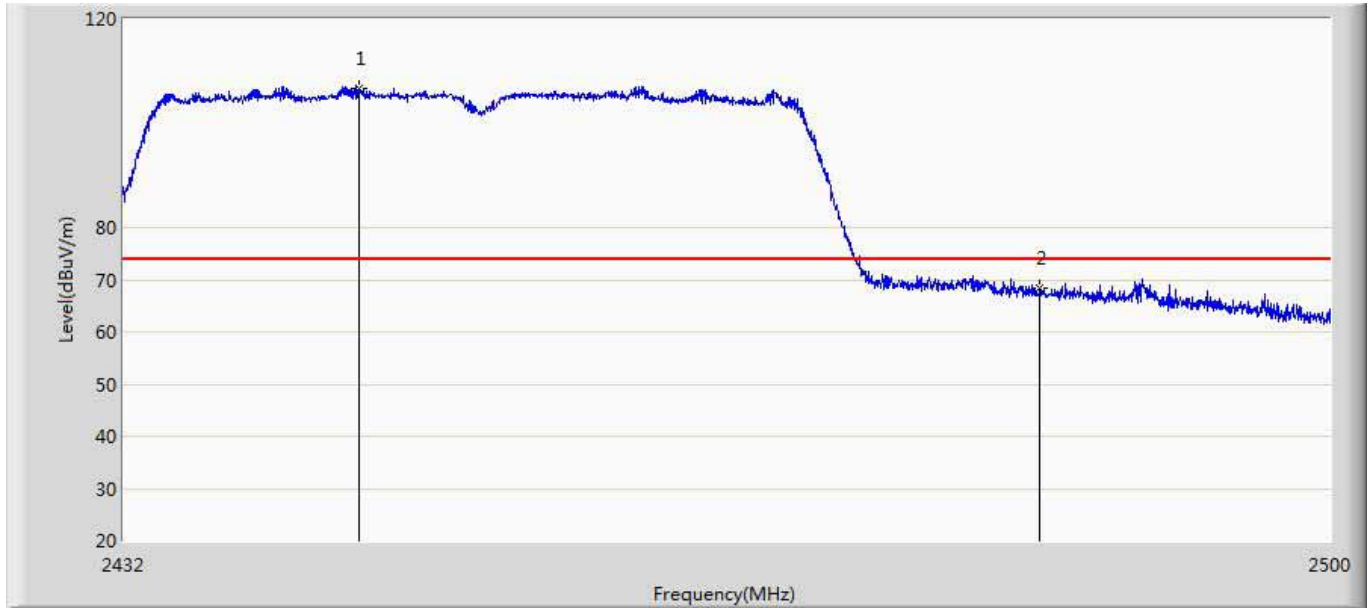
No	Mark	Frequency (MHz)	Measure Level (dBuV/m)	Reading Level (dBuV)	Over Limit (dB)	Limit (dBuV/m)	Factor (dB)	Type
1		2390.000	57.797	20.806	-16.203	74.000	36.991	PK
2	*	2411.178	92.589	55.573	18.589	74.000	37.016	PK

Engineer: Scott	
Site: AC5	Time: 2015/08/27 - 19:33
Limit: FCC_Part15.209_RE(3m)	Margin: 0
Probe: Horn_3117_00167055(1-18GHz)	Polarity: Vertical
EUT: IP-STB	Power: 120V/60Hz
Note: Mode 4 Transmit at 802.11n(40MHz) CH2422 by ant1+2	



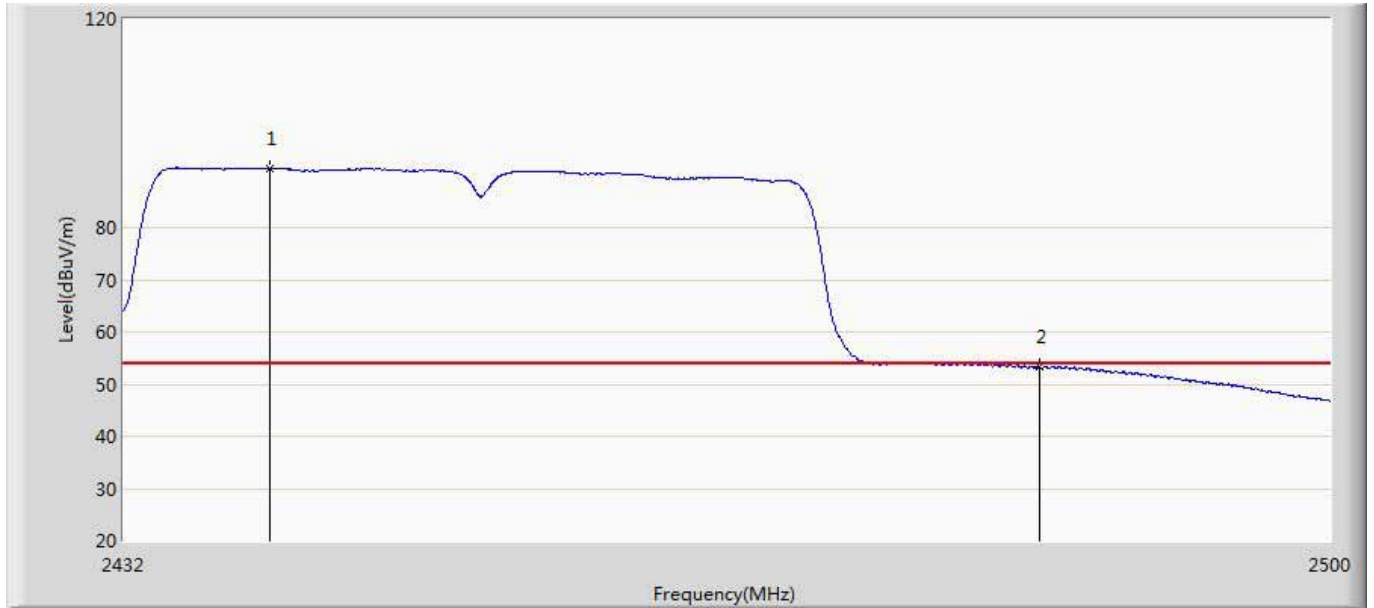
No	Mark	Frequency (MHz)	Measure Level (dBuV/m)	Reading Level (dBuV)	Over Limit (dB)	Limit (dBuV/m)	Factor (dB)	Type
1		2390.000	43.563	6.572	-10.437	54.000	36.991	AV
2	*	2407.152	76.490	39.479	22.490	54.000	37.011	AV

Engineer: Scott	
Site: AC5	Time: 2015/08/27 - 19:37
Limit: FCC_Part15.209_RE(3m)	Margin: 0
Probe: Horn_3117_00167055(1-18GHz)	Polarity: Horizontal
EUT: IP-STB	Power: 120V/60Hz
Note: Mode 4 Transmit at 802.11n(40MHz) CH2452 by ant1+2	



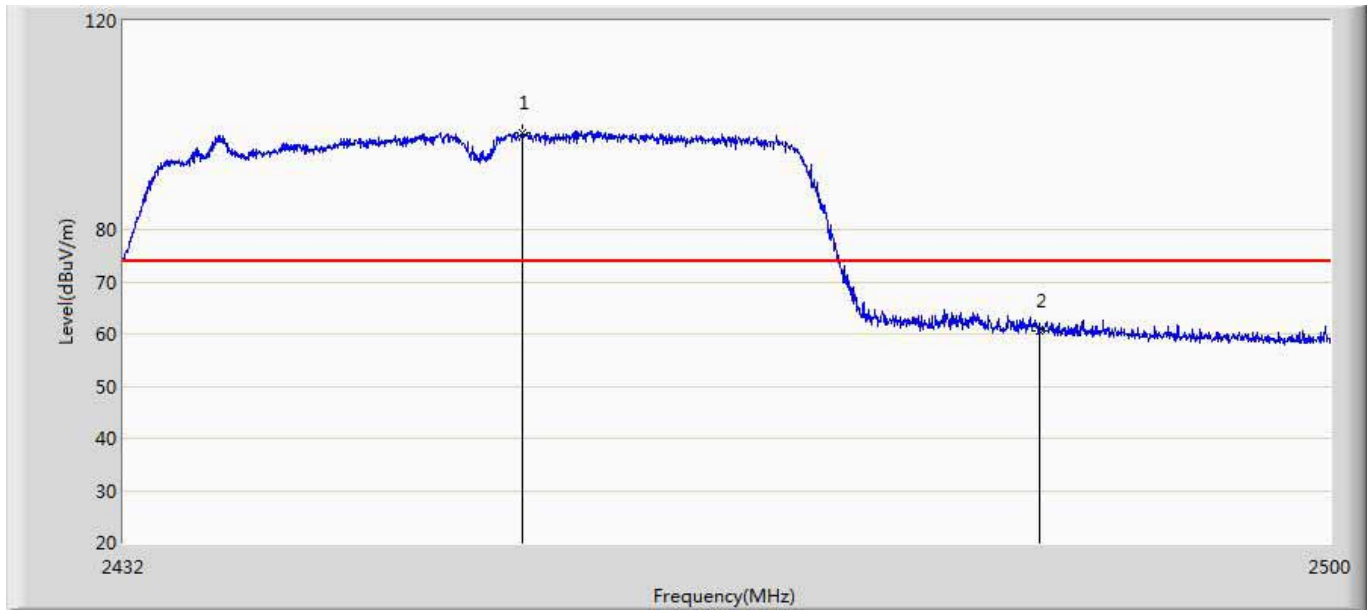
No	Mark	Frequency (MHz)	Measure Level (dBuV/m)	Reading Level (dBuV)	Over Limit (dB)	Limit (dBuV/m)	Factor (dB)	Type
1	*	2445.124	106.654	69.452	32.654	74.000	37.201	PK
2		2483.500	68.322	30.951	-5.678	74.000	37.371	PK

Engineer: Scott	
Site: AC5	Time: 2015/08/27 - 19:37
Limit: FCC_Part15.209_RE(3m)	Margin: 0
Probe: Horn_3117_00167055(1-18GHz)	Polarity: Horizontal
EUT: IP-STB	Power: 120V/60Hz
Note: Mode 4 Transmit at 802.11n(40MHz) CH2452 by ant1+2	



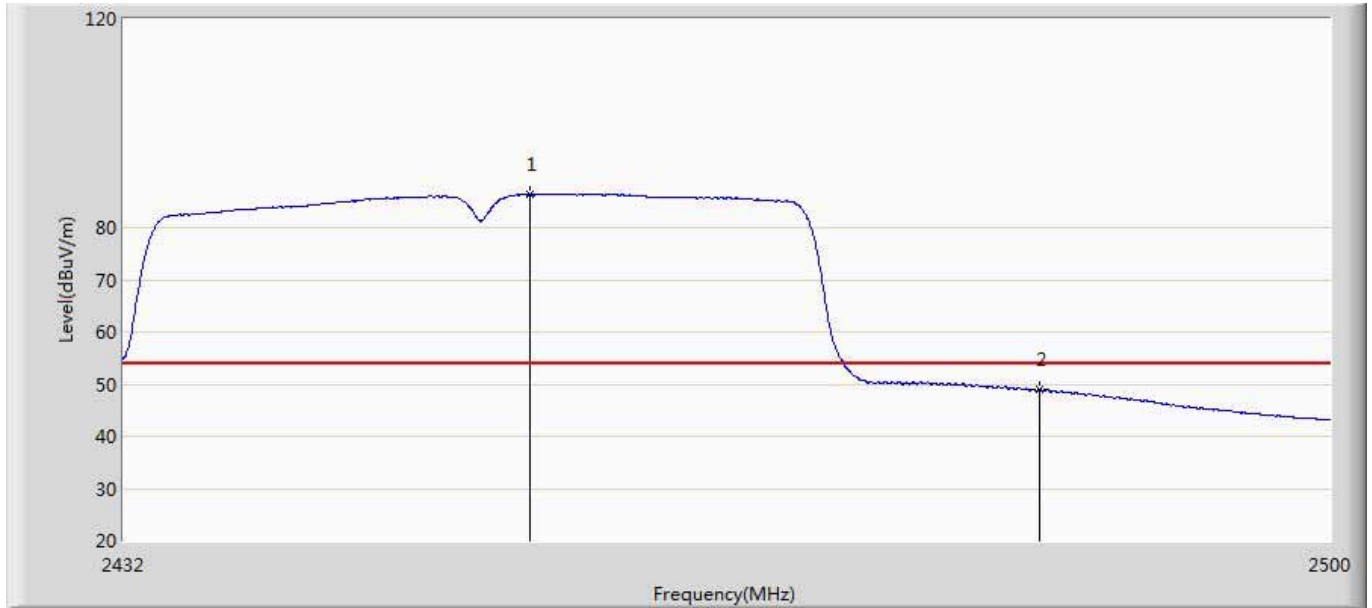
No	Mark	Frequency (MHz)	Measure Level (dBuV/m)	Reading Level (dBuV)	Over Limit (dB)	Limit (dBuV/m)	Factor (dB)	Type
1	*	2440.160	91.322	54.130	37.322	54.000	37.193	AV
2		2483.500	53.215	15.844	-0.785	54.000	37.371	AV

Engineer: Scott	
Site: AC5	Time: 2015/08/27 - 19:40
Limit: FCC_Part15.209_RE(3m)	Margin: 0
Probe: Horn_3117_00167055(1-18GHz)	Polarity: Vertical
EUT: IP-STB	Power: 120V/60Hz
Note: Mode 4 Transmit at 802.11n(40MHz) CH2452 by ant1+2	



No	Mark	Frequency (MHz)	Measure Level (dBuV/m)	Reading Level (dBuV)	Over Limit (dB)	Limit (dBuV/m)	Factor (dB)	Type
1	*	2454.304	98.690	61.473	24.690	74.000	37.216	PK
2		2483.500	60.563	23.192	-13.437	74.000	37.371	PK

Engineer: Scott	
Site: AC5	Time: 2015/08/27 - 19:41
Limit: FCC_Part15.209_RE(3m)	Margin: 0
Probe: Horn_3117_00167055(1-18GHz)	Polarity: Vertical
EUT: IP-STB	Power: 120V/60Hz
Note: Mode 4 Transmit at 802.11n(40MHz) CH2452 by ant1+2	



No	Mark	Frequency (MHz)	Measure Level (dBuV/m)	Reading Level (dBuV)	Over Limit (dB)	Limit (dBuV/m)	Factor (dB)	Type
1	*	2454.746	86.341	49.124	32.341	54.000	37.217	AV
2		2483.500	48.959	11.588	-5.041	54.000	37.371	AV

8. Occupied Bandwidth

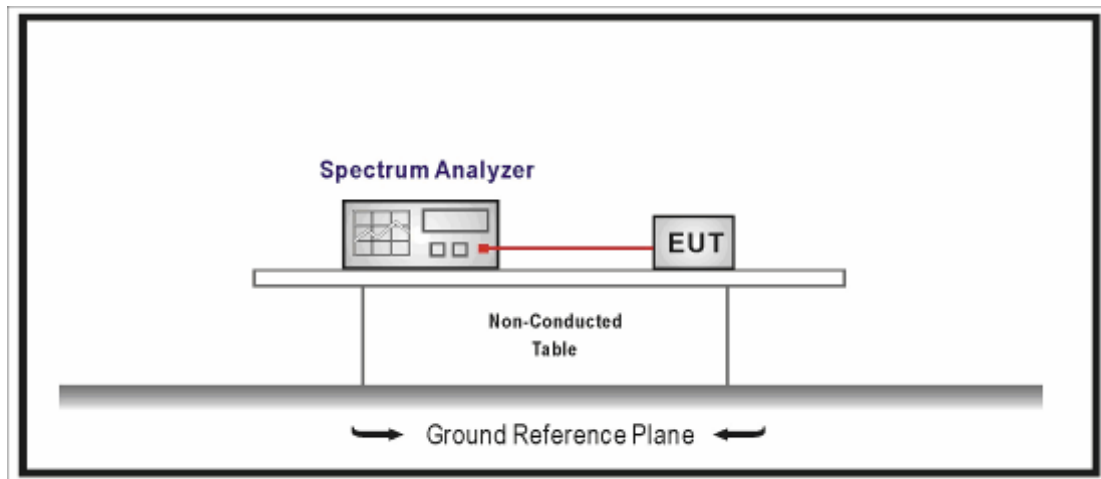
8.1. Test Equipment

Occupied Bandwidth / TR-8

Instrument	Manufacturer	Type No.	Serial No.	Cal. Due Date
Spectrum Analyzer	Agilent	N9010A	MY48030494	2016.03.10
Temperature/Humidity Meter	zhicheng	ZC1-2	TR8-TH	2016.04.09

Note: All equipments are calibrated with traceable calibrations. Each calibration is traceable to the national or international standards.

8.2. Test Setup



8.3. Limit

For IC

99% occupied bandwidth should be less than the nominal bandwidth.

For FCC

The minimum 6dB bandwidth shall be at least 500 kHz.

8.4. Test Procedure

According to FCC ANSI C63.4: 2014 & ANSI C63.10: 2013& FCC 47CFR 15.247& KDB 558074 D01v03r03& Industry Canada RSS-Gen Issue 4& RSS-247 Issue 1

- a) Set RBW = in the range of 1% to 5% of the OBW.
- b) Set the video bandwidth (VBW) $\geq 3 \times$ RBW.

- c) Detector = Peak.
- d) Trace mode = max hold.
- e) Sweep = auto couple.
- f) Allow the trace to stabilize.
- g) Use the 99% power bandwidth and -6dBm function of the instrument (if available) and report the measured bandwidth.

8.5. Uncertainty

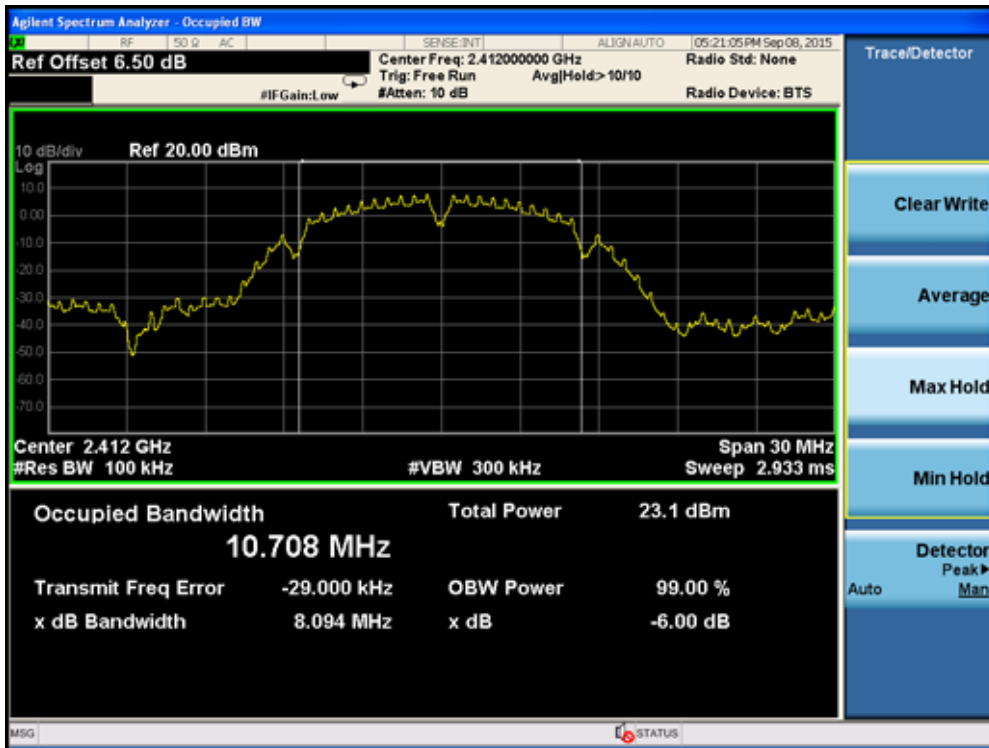
The measurement uncertainty is defined as ± 1 kHz

8.6. Test Result

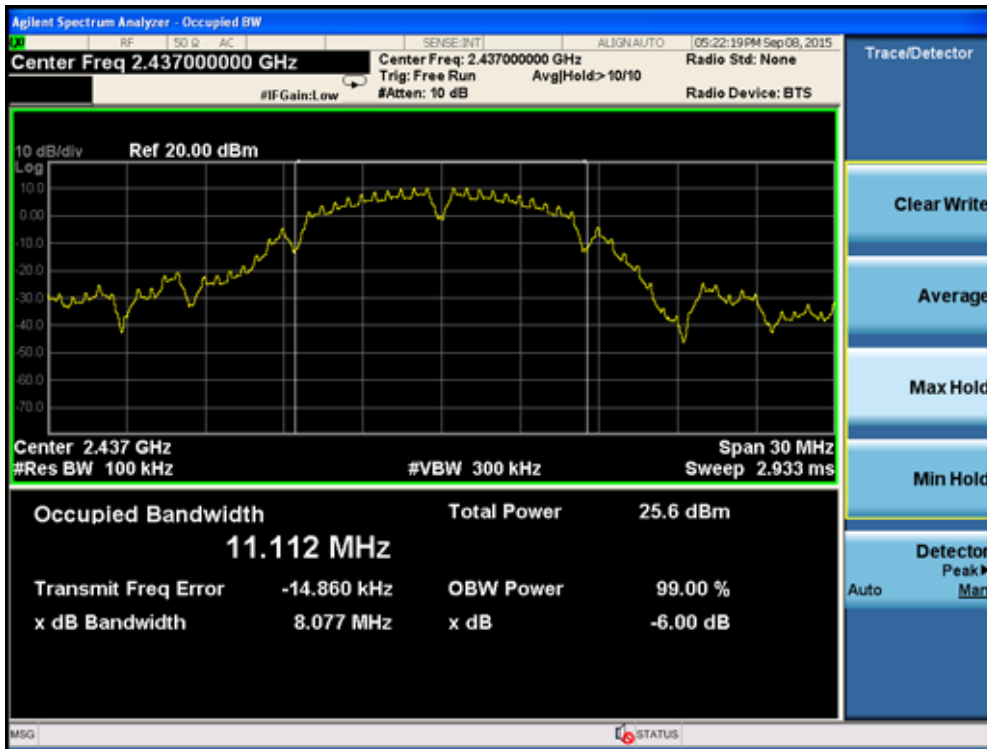
Product	:	IP-STB
Test Item	:	6dB Occupied Bandwidth
Test Mode	:	Mode 1: Transmit by 802.11b

Channel No.	Frequency (MHz)	99%Occupied Bandwidth (kHz)	6dB Occupied Bandwidth (kHz)	Limit (kHz)	Result
01	2412	10708	8094	500	Pass
06	2437	11112	8077	500	Pass
11	2462	11200	8091	500	Pass

Channel 01 (2412MHz)



Channel 06 (2437MHz)



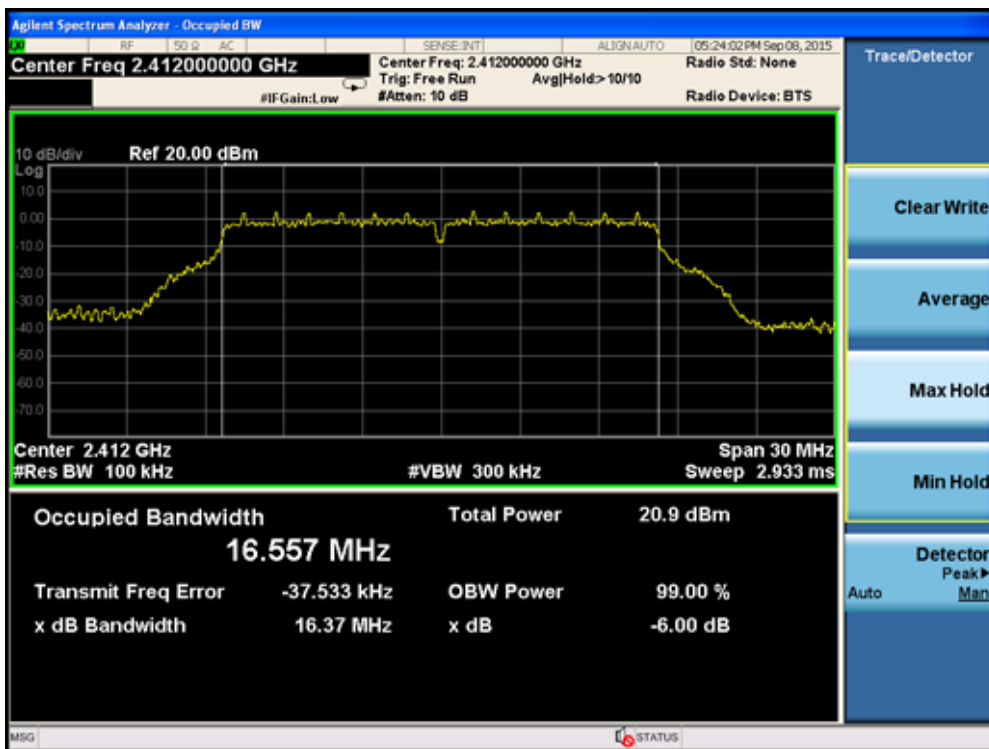
Channel 11 (2462MHz)



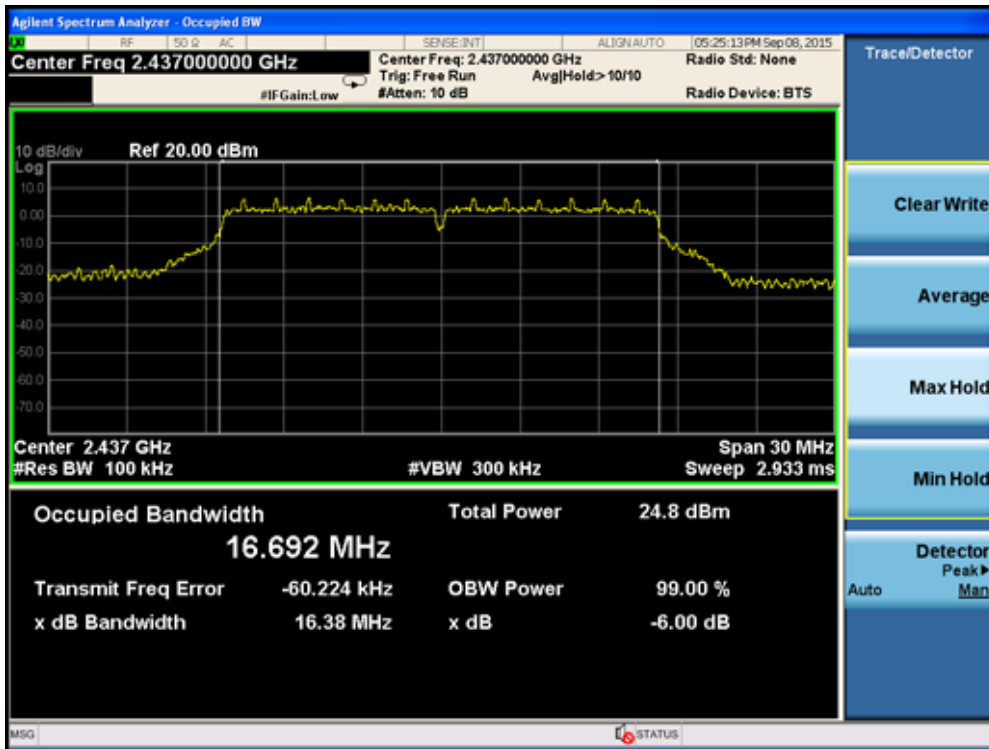
Product	:	IP-STB
Test Item	:	6dB Occupied Bandwidth
Test Mode	:	Mode 2: Transmit by 802.11g

Channel No.	Frequency (MHz)	99%Occupied Bandwidth (kHz)	6dB Occupied Bandwidth (kHz)	Limit (kHz)	Result
01	2412	16557	16370	500	Pass
06	2437	16692	16380	500	Pass
11	2462	16568	16390	500	Pass

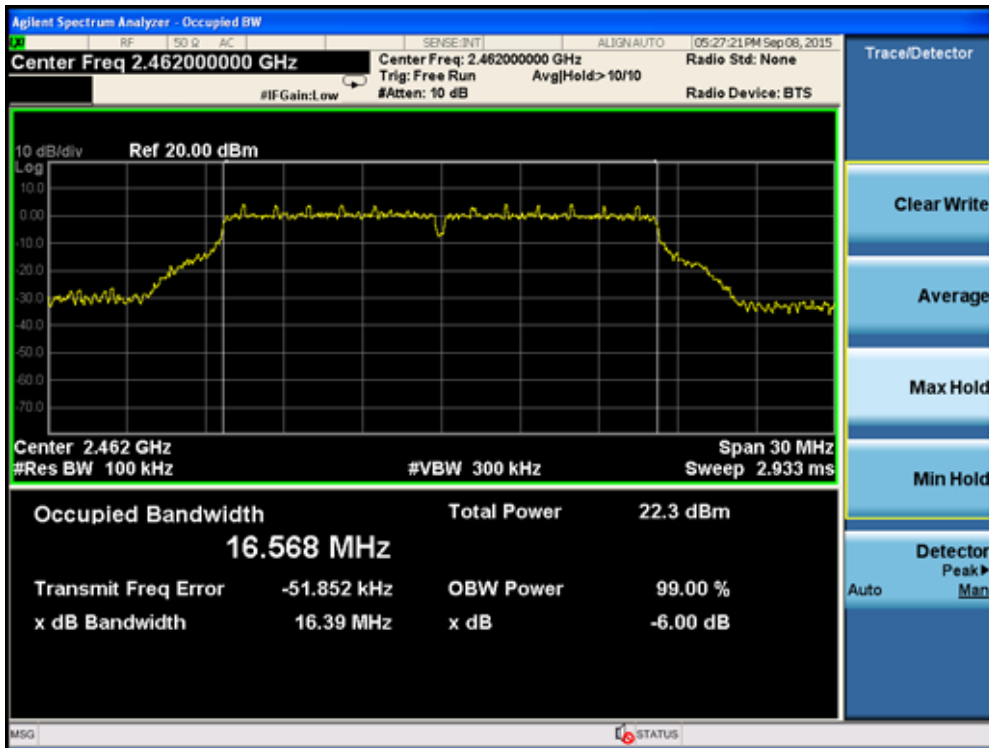
Channel 01 (2412MHz)



Channel 06 (2437MHz)



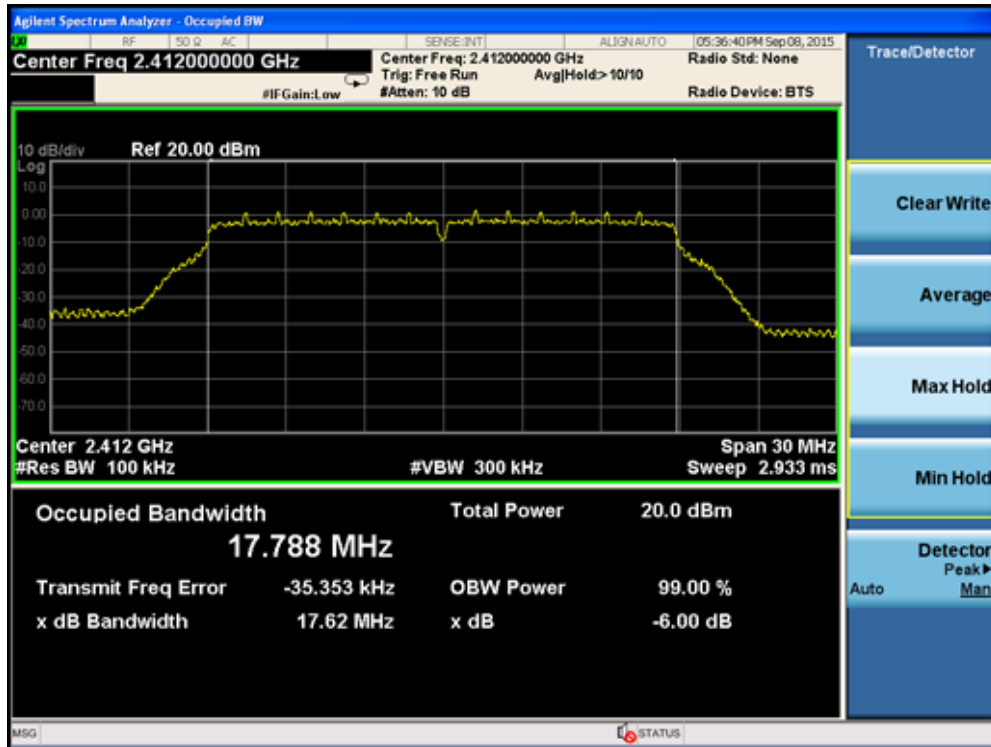
Channel 11 (2462MHz)



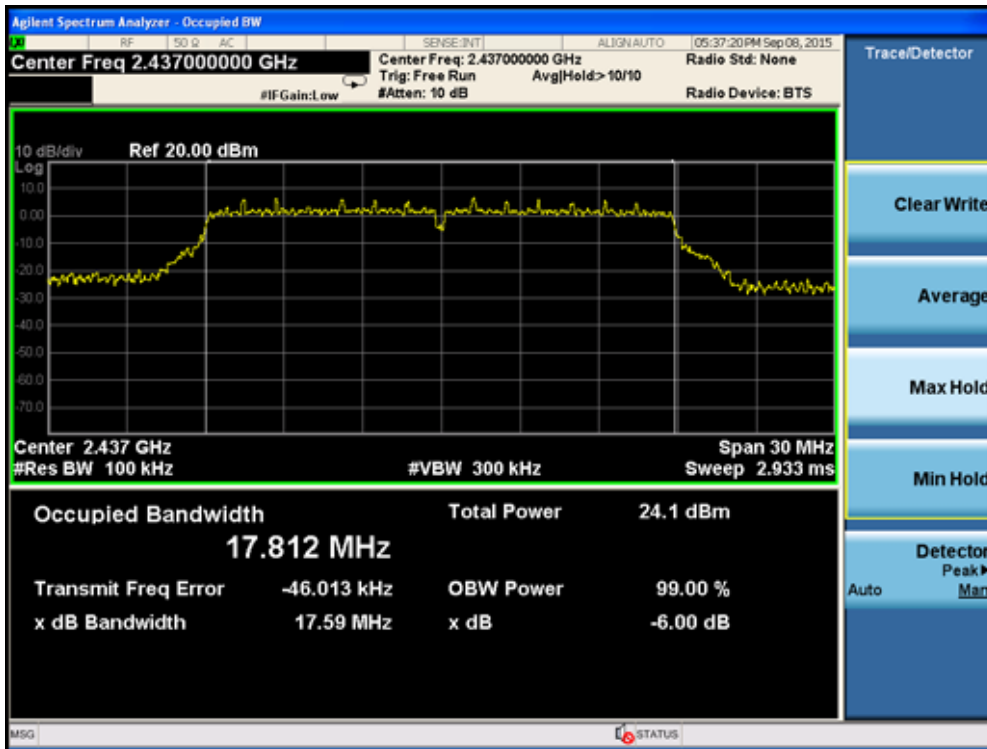
Product	:	IP-STB
Test Item	:	6dB Occupied Bandwidth
Test Mode	:	Mode 3: Transmit by 802.11n(20MHz)

Channel No.	Frequency (MHz)	99%Occupied Bandwidth (kHz)	6dB Occupied Bandwidth (kHz)	Limit (kHz)	Result
01	2412	17788	17620	500	Pass
06	2437	17812	17590	500	Pass
11	2462	17763	17610	500	Pass

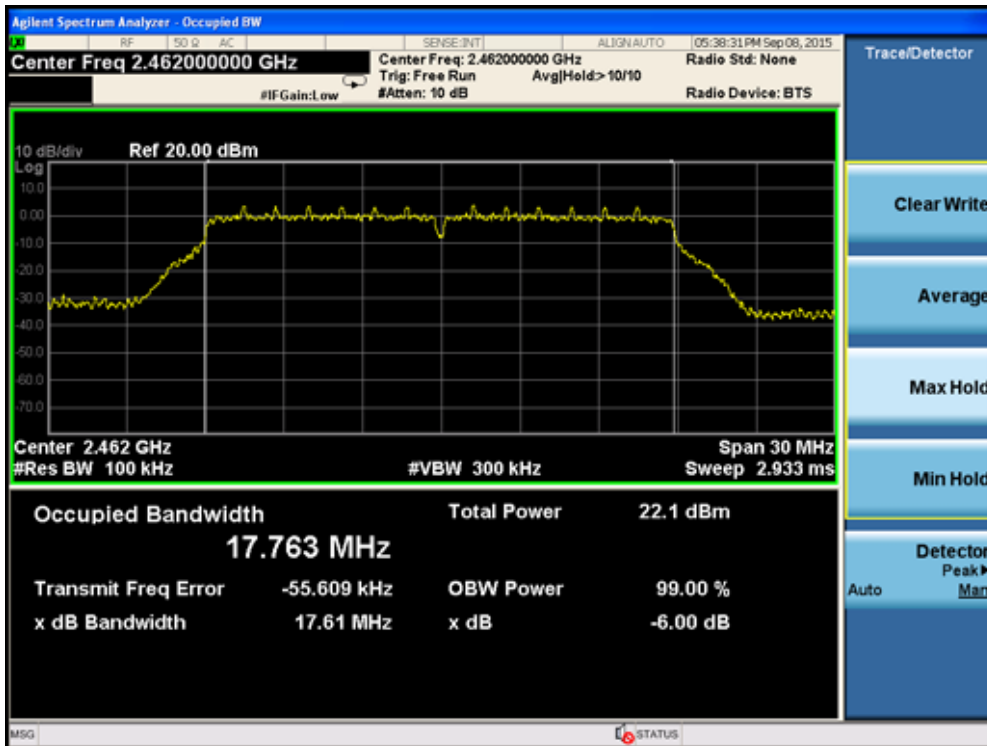
Channel 01 (2412MHz)



Channel 06 (2437MHz)



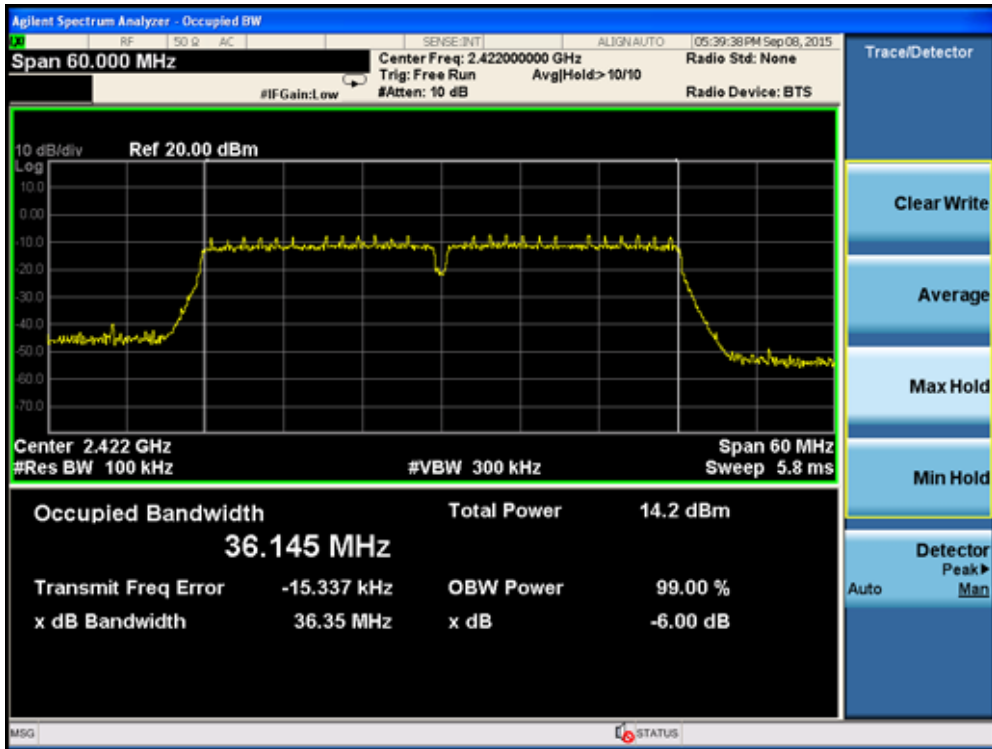
Channel 11 (2462MHz)



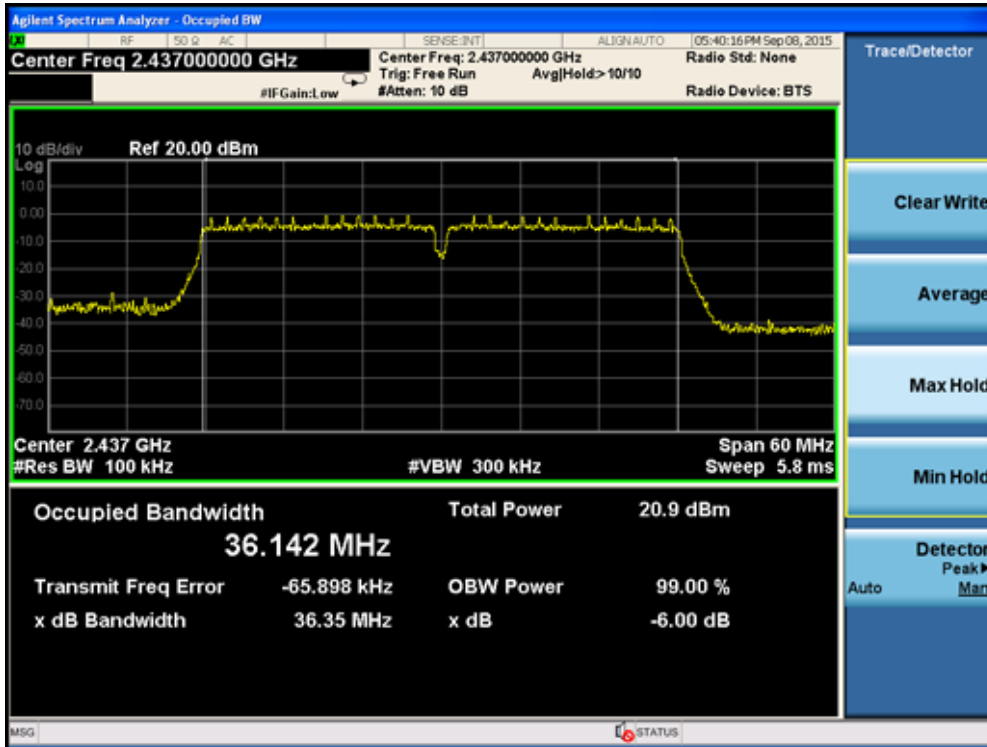
Product	:	IP-STB
Test Item	:	6dB Occupied Bandwidth
Test Mode	:	Mode 4: Transmit by 802.11n(40MHz)

Channel No.	Frequency (MHz)	99%Occupied Bandwidth (kHz)	6dB Occupied Bandwidth (kHz)	Limit (kHz)	Result
03	2422	36145	36350	500	Pass
06	2437	36142	36350	500	Pass
09	2452	34160	36350	500	Pass

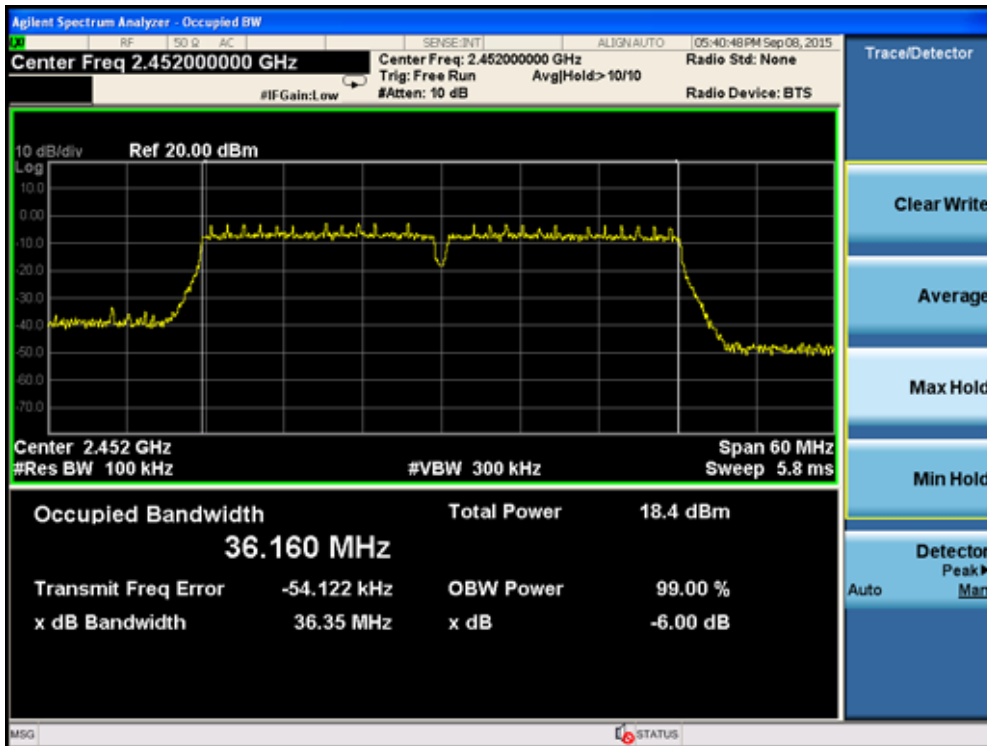
Channel 03 (2422MHz)



Channel 06 (2437MHz)



Channel 09 (2452MHz)



9. Power Output

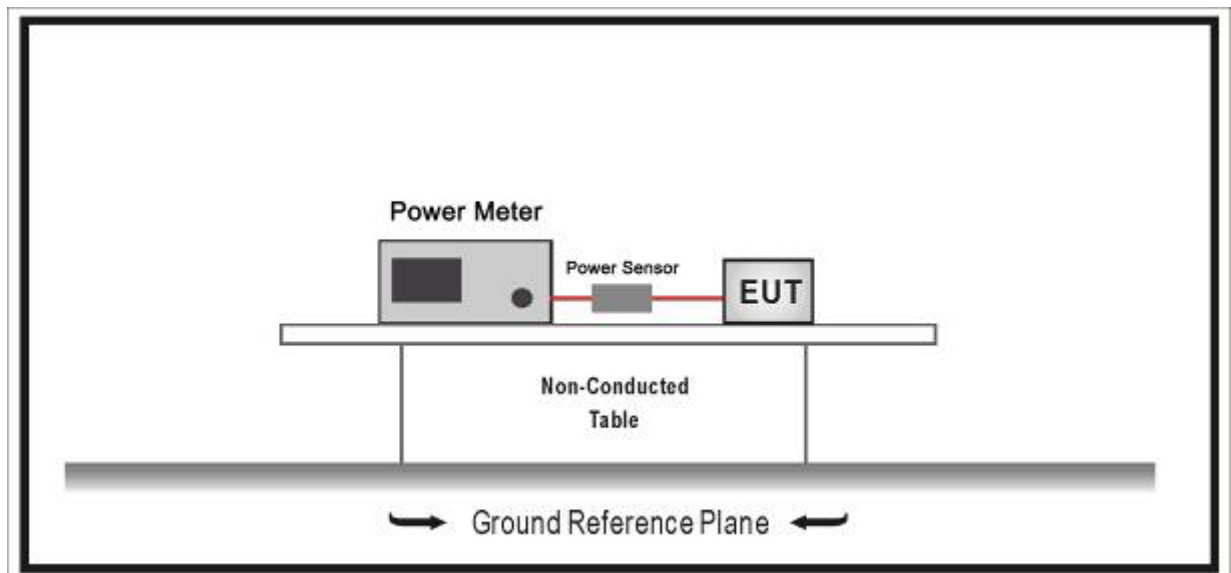
9.1. Test Equipment

Power Output / TR-8

Instrument	Manufacturer	Type No.	Serial No.	Cal. Due Date
Wideband Peak Power Meter	Anritsu	ML2495A	0905006	2015.11.10
Power Sensor	Anritsu	MA2411B	0846014	2015.11.10
Temperature/Humidity Meter	zhicheng	ZC1-2	TR8-TH	2016.04.09

Note: All equipments are calibrated with traceable calibrations. Each calibration is traceable to the national or international standards.

9.2. Test Setup



9.3. Limit

For FCC&IC

The maximum peak power shall be less 1 Watt (30dBm).

Note: the conducted output power limit specified above is based on the use the antennas with directional gains that do not exceed 6 dBi are used, the conducted output power from the intentional radiator shall be reduced below the stated values above, as appropriate, by the amount in dB that the directional gain of antenna exceeds 6 dBi.

9.4. Test Procedure

According to FCC ANSI C63.4: 2014 & ANSI C63.10: 2013& FCC 47CFR 15.247& KDB 558074 D01v03r03& Industry Canada RSS-Gen Issue 4& RSS-247 Issue 1

1. Power meter and sensor's minimum video bandwidth is 50MHz, larger than 802.11n(40MHz) bandwidth;
2. Fast responding diode sensors respond immediately to changes in power level to reduce total test time.
3. Use PK detector to test.

9.5. Uncertainty

The measurement uncertainty is defined as ± 1.27 dB

9.6. Test Result

Power output test was verified over all data rates of each mode shown as below, and then choose the maximum power output (blue marker) for final test of each channel.

Power output at various data rates:

Test Mode	Bandwidth	Frequency (MHz)	Channel	Data Rate	Peak Power (dBm)
802.11b	20	2437	6	1	24.93
				5.5	24.88
				11	24.81
802.11g	20	2437	6	6	22.98
				24	22.89
				54	22.83
802.11n	20	2437	6	MCS0	21.99
				MCS4	21.93
				MCS7	21.85
802.11n	40	2437	6	MCS0	21.45
				MCS4	21.33
				MCS7	21.35

Product	:	IP-STB
Test Item	:	Power Output
Test Site	:	TR8
Test Mode	:	Mode 1: Transmit by 802.11b

Ant 1

Channel No.	Frequency (MHz)	Measurement Power Output (dBm)		Total Power (dBm)	Limit (dBm)	Result
		Ant 1	Ant 2			
1	2412	18.45	N/A	18.45	30.00	Pass
6	2437	21.76	N/A	21.76	30.00	Pass
11	2462	18.84	N/A	18.84	30.00	Pass

Ant 2

Channel No.	Frequency (MHz)	Measurement Power Output (dBm)		Total Power (dBm)	Limit (dBm)	Result
		Ant 1	Ant 2			
1	2412	N/A	21.25	21.25	30.00	Pass
6	2437	N/A	22.71	22.71	30.00	Pass
11	2462	N/A	21.01	21.01	30.00	Pass

Product	:	IP-STB
Test Item	:	Power Output
Test Site	:	TR8
Test Mode	:	Mode 2: Transmit by 802.11g

Ant 1

Channel No.	Frequency (MHz)	Measurement Power Output (dBm)		Total Power (dBm)	Limit (dBm)	Result
		Ant 1	Ant 1			
1	2412	20.56	N/A	20.56	30.00	Pass
6	2437	22.69	N/A	22.69	30.00	Pass
11	2462	21.61	N/A	21.61	30.00	Pass

Ant 2

Channel No.	Frequency (MHz)	Measurement Power Output (dBm)		Total Power (dBm)	Limit (dBm)	Result
		Ant 1	Ant 1			
1	2412	N/A	22.75	22.75	30.00	Pass
6	2437	N/A	23.68	23.68	30.00	Pass
11	2462	N/A	22.74	22.74	30.00	Pass

Product	:	IP-STB
Test Item	:	Power Output
Test Site	:	TR8
Test Mode	:	Mode 3: Transmit by 802.11n(20MHz)

Ant 1

Channel No.	Frequency (MHz)	Measurement Power Output (dBm)		Total Power (dBm)	Limit (dBm)	Result
		Ant 1	Ant 1			
1	2412	19.12	N/A	19.12	30.00	Pass
6	2437	22.72	N/A	22.72	30.00	Pass
11	2462	21.02	N/A	21.02	30.00	Pass

Ant 2

Channel No.	Frequency (MHz)	Measurement Power Output (dBm)		Total Power (dBm)	Limit (dBm)	Result
		Ant 1	Ant 1			
1	2412	N/A	23.02	23.02	30.00	Pass
6	2437	N/A	23.79	23.79	30.00	Pass
11	2462	N/A	22.42	22.42	30.00	Pass

Ant 1+2

Channel No.	Frequency (MHz)	Measurement Power Output (dBm)		Total Power (dBm)	Limit (dBm)	Result
		Ant 1	Ant 1			
1	2412	18.42	17.93	21.19	30.00	Pass
6	2437	22.44	23.72	26.14	30.00	Pass
11	2462	20.25	20.28	23.28	30.00	Pass

Product	:	IP-STB
Test Item	:	Power Output
Test Site	:	TR8
Test Mode	:	Mode 4: Transmit by 802.11n(40MHz)

Ant 1

Channel No.	Frequency (MHz)	Measurement Power Output (dBm)		Total Power (dBm)	Limit (dBm)	Result
		Ant 1	Ant 1			
3	2422	13.82	N/A	13.82	30.00	Pass
6	2437	20.01	N/A	20.01	30.00	Pass
9	2452	18.17	N/A	18.17	30.00	Pass

Ant 2

Channel No.	Frequency (MHz)	Measurement Power Output (dBm)		Total Power (dBm)	Limit (dBm)	Result
		Ant 1	Ant 1			
3	2422	N/A	19.83	19.83	30.00	Pass
6	2437	N/A	22.05	22.05	30.00	Pass
9	2452	N/A	22.36	22.36	30.00	Pass

Ant 1+2

Channel No.	Frequency (MHz)	Measurement Power Output (dBm)		Total Power (dBm)	Limit (dBm)	Result
		Ant 1	Ant 1			
3	2422	16.37	16.04	19.22	30.00	Pass
6	2437	19.96	20.06	23.02	30.00	Pass
9	2452	20.58	20.72	23.66	30.00	Pass

10. Power Spectral Density

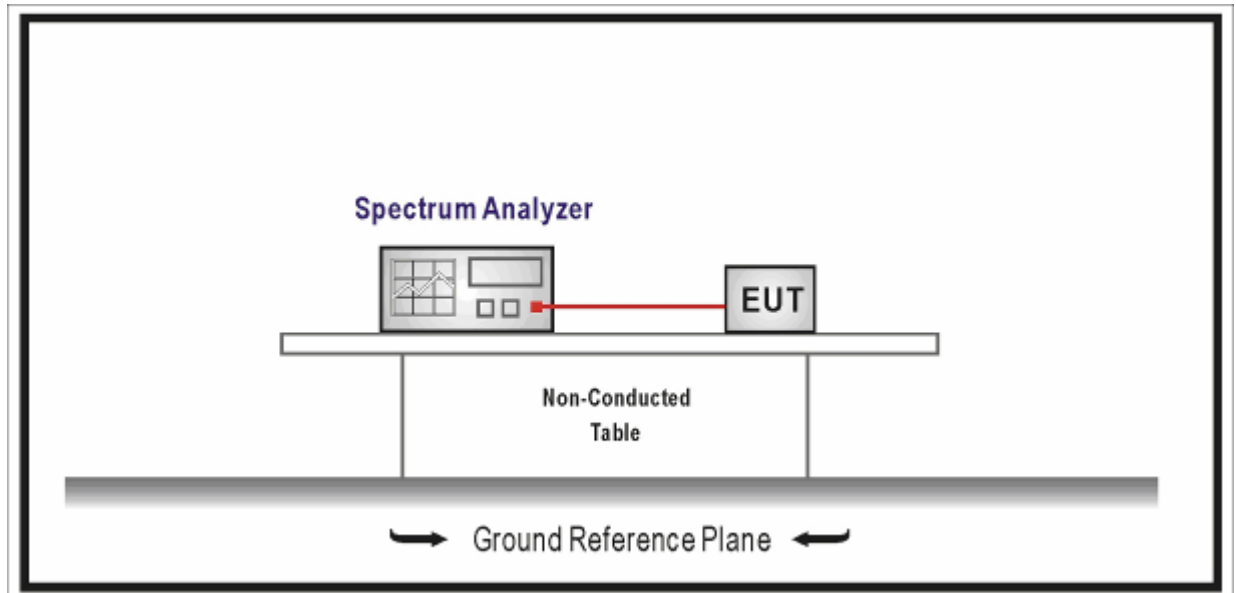
10.1. Test Equipment

Power Spectral Density / TR-8

Instrument	Manufacturer	Type No.	Serial No.	Cal. Due Date
Spectrum Analyzer	Agilent	N9010A	MY48030494	2016.03.10
Temperature/Humidity Meter	zhicheng	ZC1-2	TR8-TH	2016.04.09

Note: All equipments are calibrated with traceable calibrations. Each calibration is traceable to the national or international standards.

10.2. Test Setup



10.3. Limit

For FCC&IC

For digitally modulated systems, the power spectral density conducted from the intentional radiated to the Antenna shall not be greater than 8dBm in any 3kHz band during any time interval of continuous transmission.

10.4. Test Procedure

According to ANSI C63.4: 2014 & ANSI C63.10: 2013& FCC 47CFR 15.247& KDB 558074 D01v03r03& Industry Canada RSS-Gen Issue 4& RSS-247 Issue 1

- a) Set analyzer center frequency to DTS channel center frequency.
- b) Set the span to 1.5 times the DTS bandwidth.
- c) Set the RBW to: $3 \text{ kHz} \leq \text{RBW} \leq 100 \text{ kHz}$. (Actually we use 3kHz RBW)
- d) Set the VBW $\geq 3 \times \text{RBW}$.
- e) Detector = peak.
- f) Sweep time = auto couple.
- g) Trace mode = max hold.
- h) Allow trace to fully stabilize.
- i) Use the peak marker function to determine the maximum amplitude level within the band.
- j) If measured value exceeds limit, reduce RBW (no less than 3 kHz) and repeat.

10.5. Uncertainty

The measurement uncertainty is defined as $\pm 1.27 \text{ dB}$

10.6. Test Result

Product	:	IP-STB
Test Item	:	Power Spectral Density
Test Site	:	TR-8
Test Mode	:	Mode 1: Transmit by 802.11b

Channel No.	Frequency (MHz)	Measurement PPSD (dBm)		Limit (dBm)	Result
		Ant 1	Ant 1		
01	2412	-8.071	-4.028	8	Pass
06	2437	-2.797	-2.477	8	Pass
11	2462	-4.481	-3.174	8	Pass

Ant 1

Channel 01 (2412MHz)



Channel 06 (2437MHz)



Channel 11 (2462MHz)



Ant 2
Channel 01 (2412MHz)



Channel 06 (2437MHz)



Channel 11 (2462MHz)

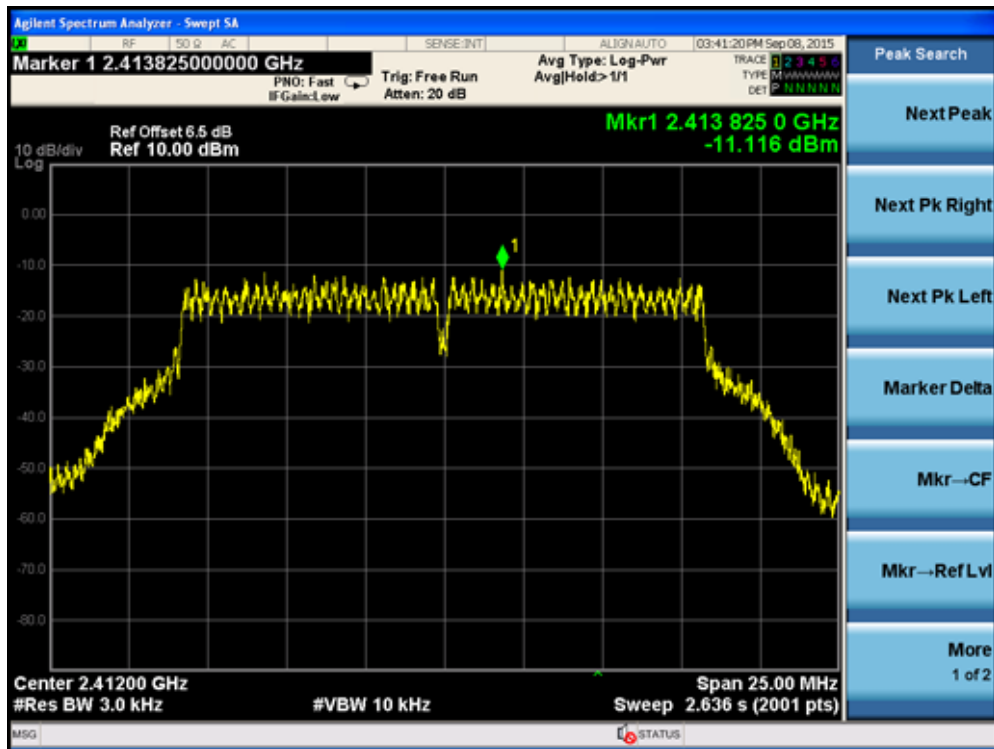


Product	:	IP-STB
Test Item	:	Power Spectral Density
Test Site	:	TR-8
Test Mode	:	Mode 2: Transmit by 802.11g

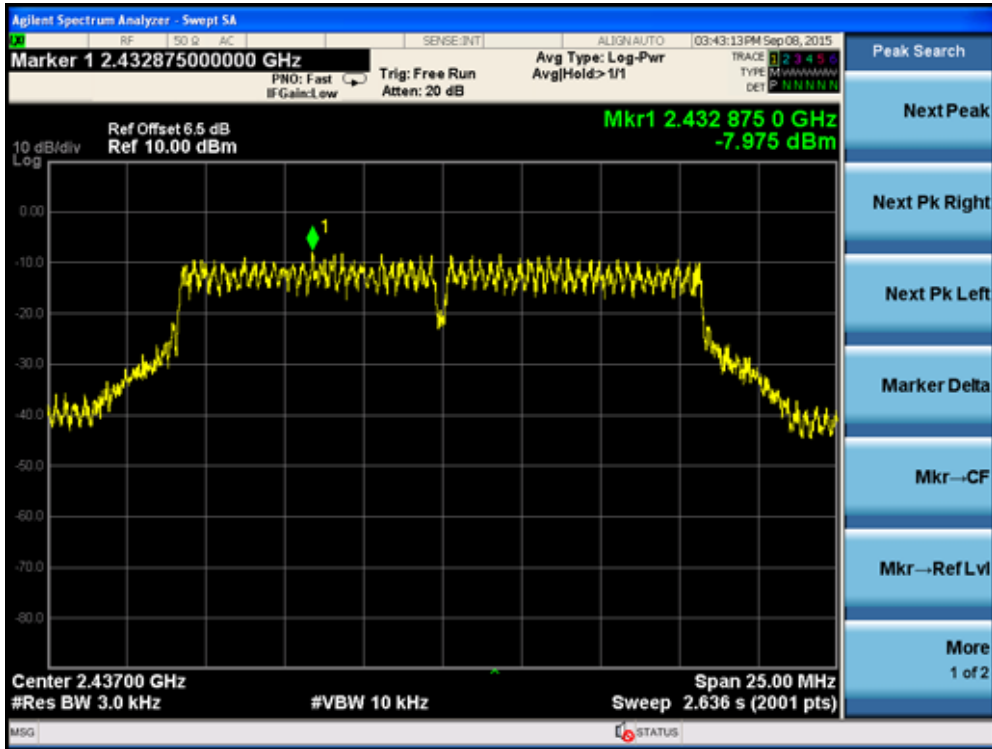
Channel No.	Frequency (MHz)	Measurement PPSD (dBm)		Limit (dBm)	Result
		Ant 1	Ant 1		
01	2412	-11.116	-9.246	8	Pass
06	2437	-7.975	-6.331	8	Pass
11	2462	-8.949	-8.396	8	Pass

Ant 1

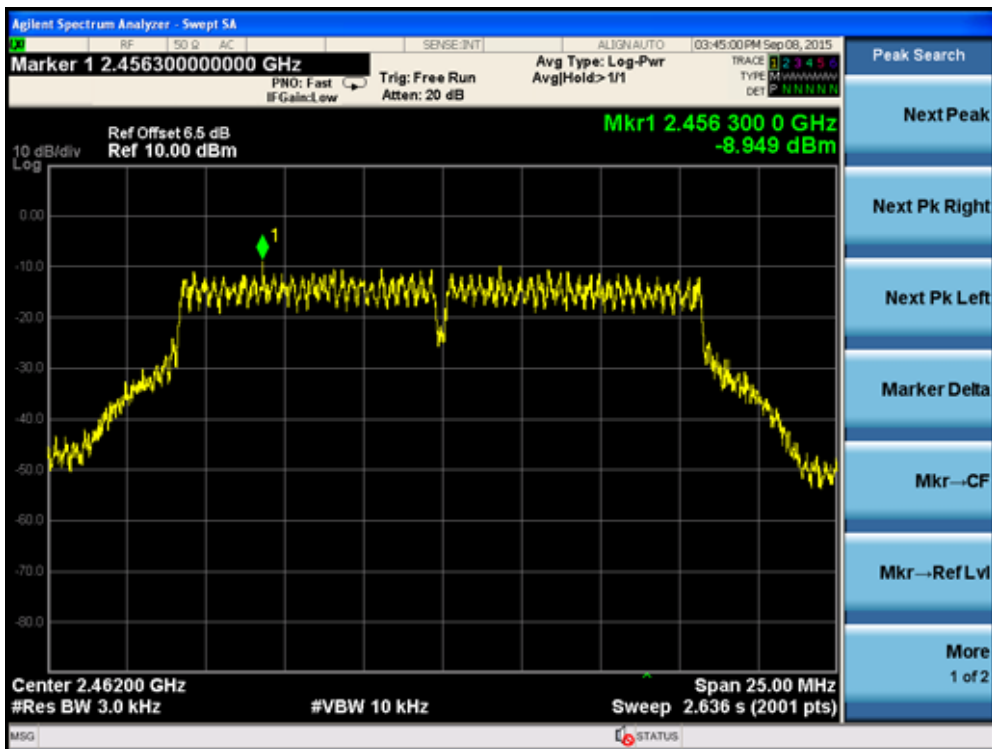
Channel 01 (2412MHz)



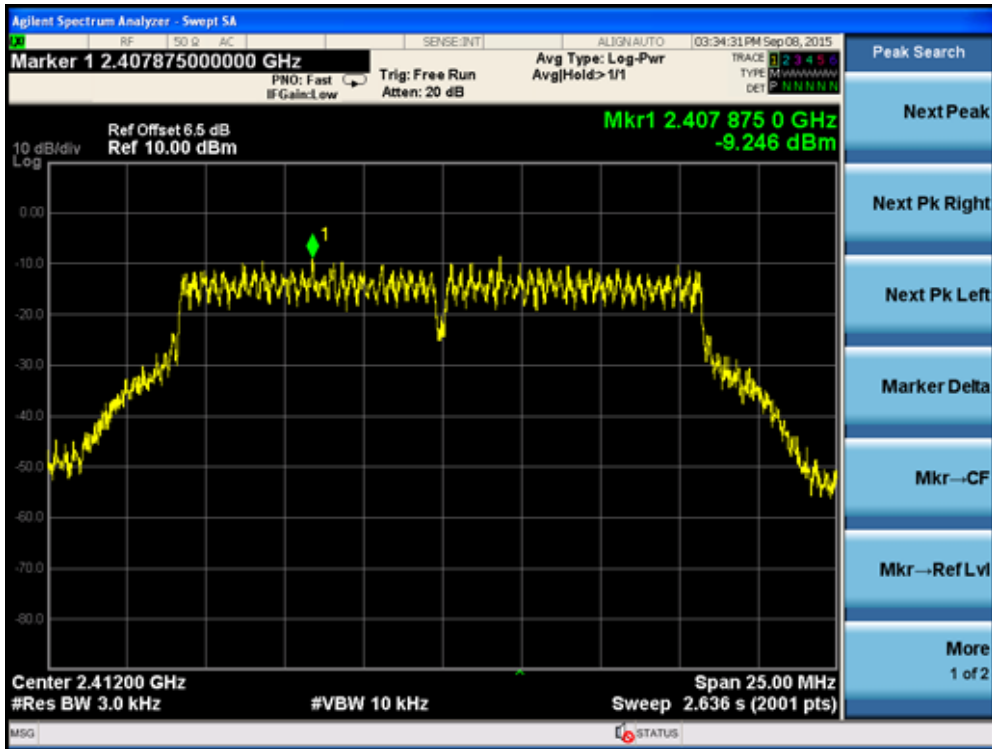
Channel 06 (2437MHz)



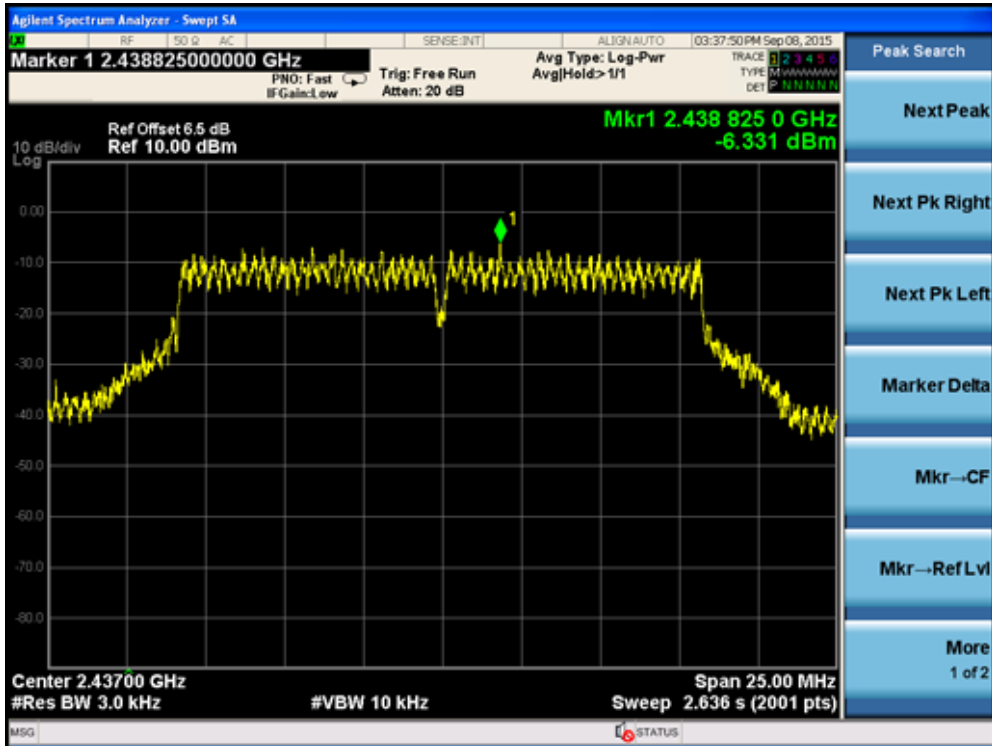
Channel 11 (2462MHz)



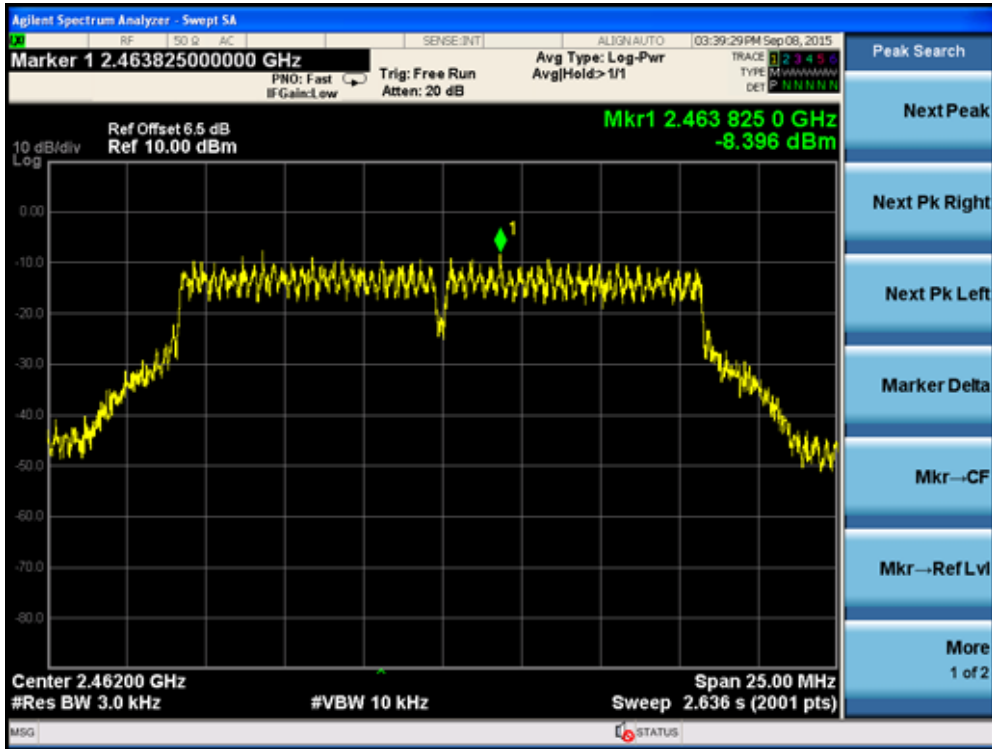
Ant 2
Channel 01 (2412MHz)



Channel 06 (2437MHz)



Channel 11 (2462MHz)

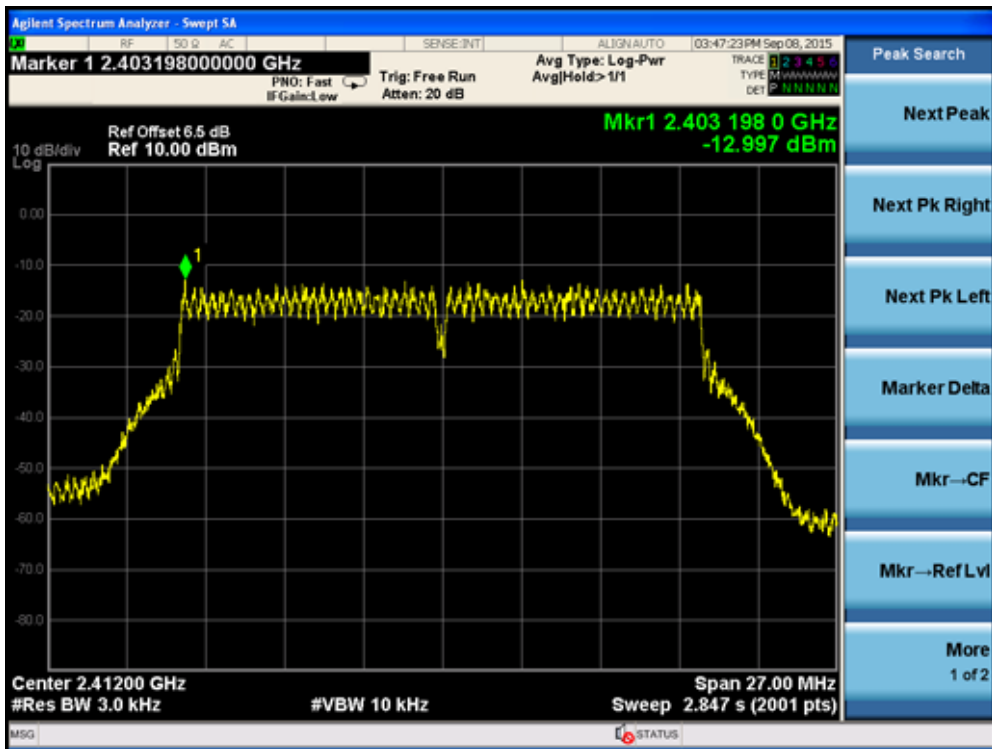


Product	:	IP-STB
Test Item	:	Power Spectral Density
Test Site	:	TR-8
Test Mode	:	Mode 3: Transmit by 802.11n(20MHz)

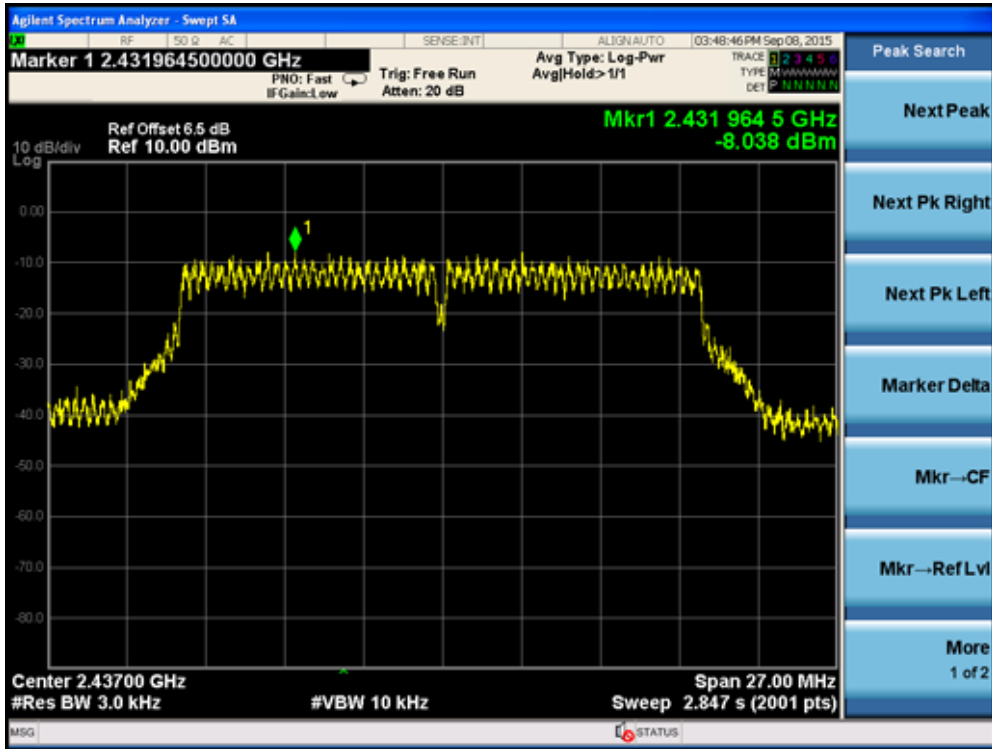
Channel No.	Frequency (MHz)	Measurement PPSD (dBm)		Limit (dBm)	Result
		Ant 1	Ant 1		
01	2412	-12.997	-8.917	8	Pass
06	2437	-8.038	-5.622	8	Pass
11	2462	-10.814	-8.406	8	Pass

Ant 1

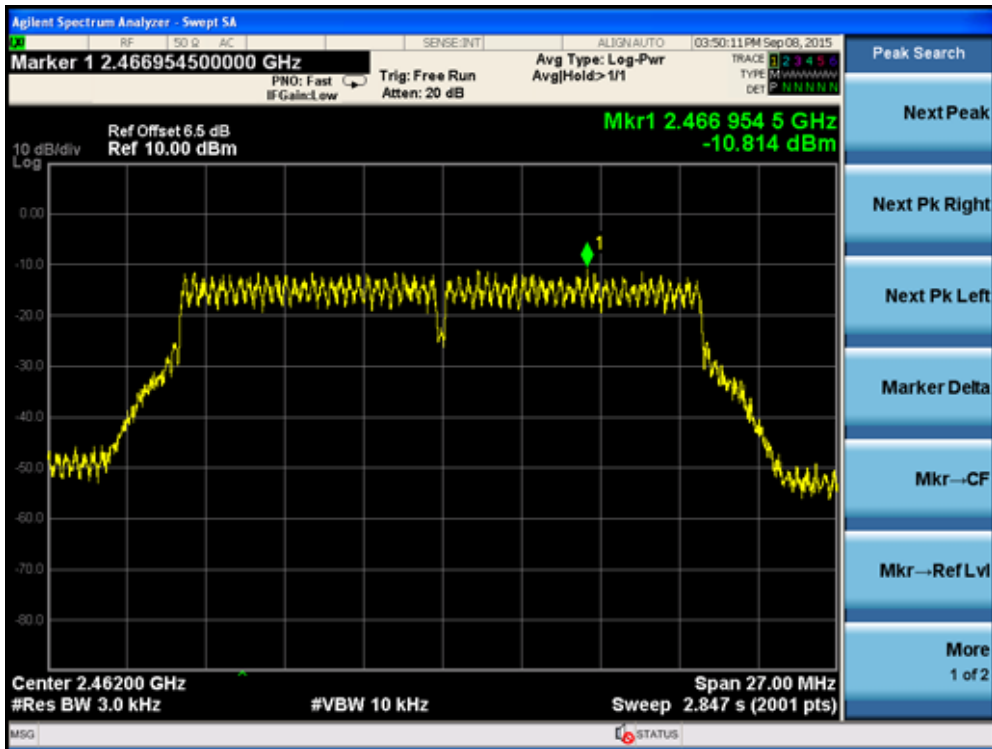
Channel 01 (2412MHz)



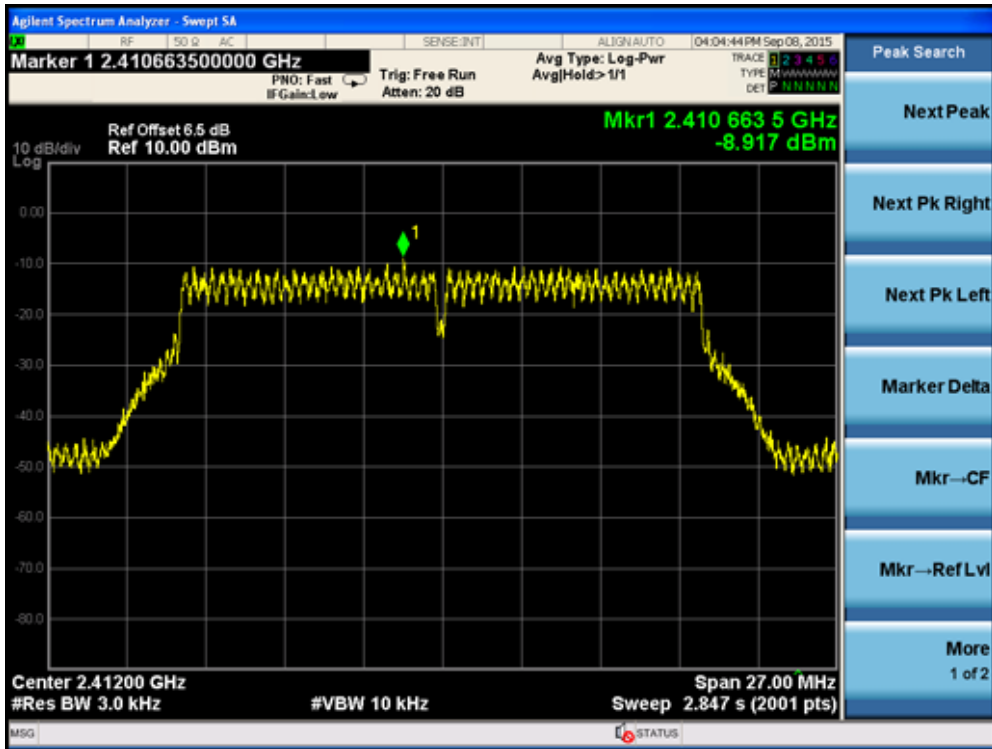
Channel 06 (2437MHz)



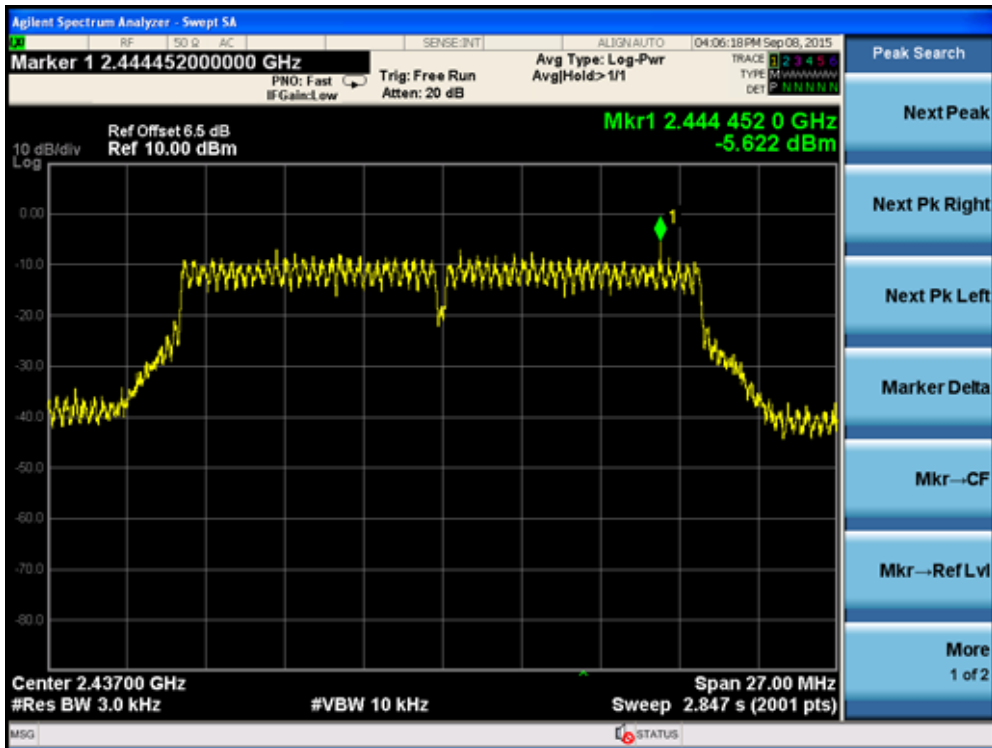
Channel 11 (2462MHz)



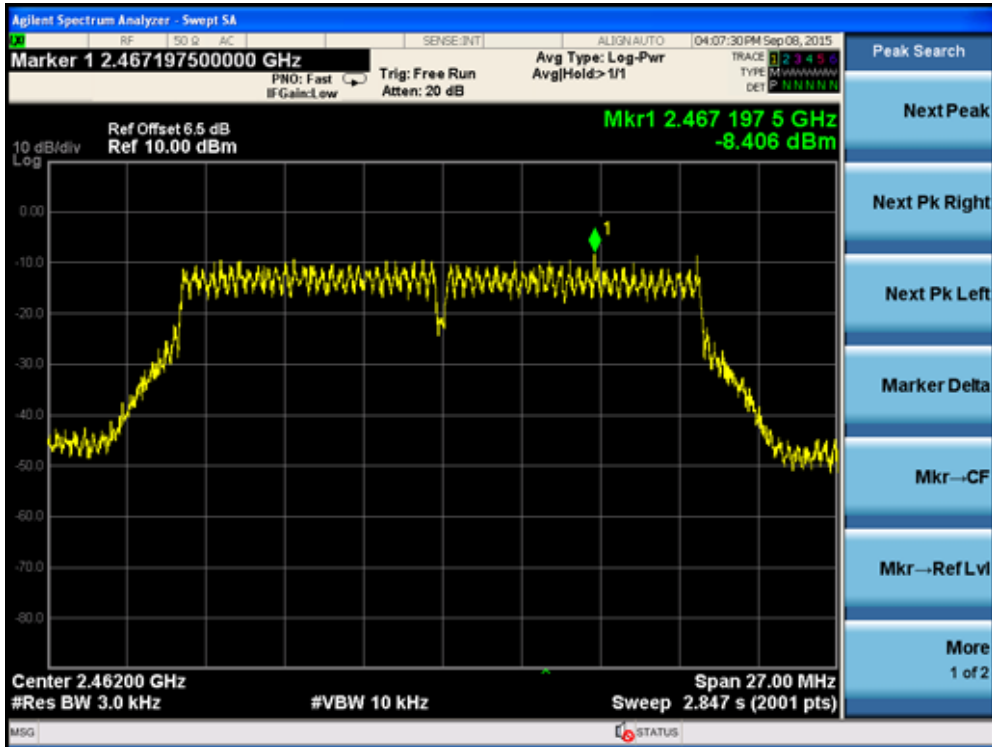
Ant 2
Channel 01 (2412MHz)



Channel 06 (2437MHz)



Channel 11 (2462MHz)

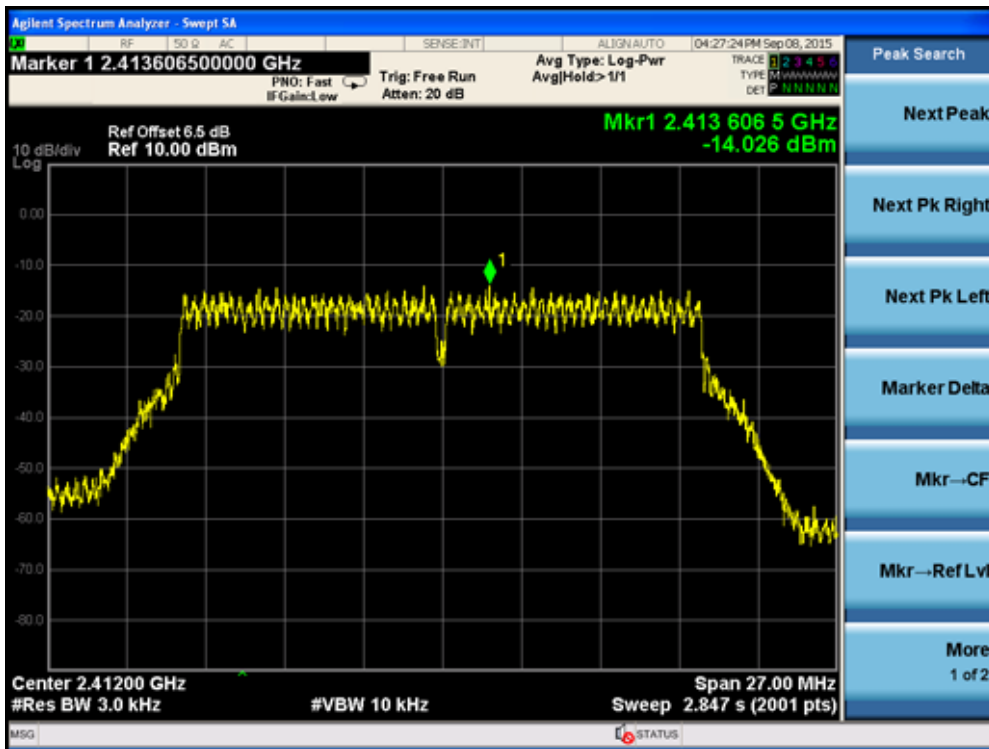


Product	:	IP-STB
Test Item	:	Power Spectral Density
Test Site	:	TR-8
Test Mode	:	Mode 3: Transmit by 802.11n(20MHz)

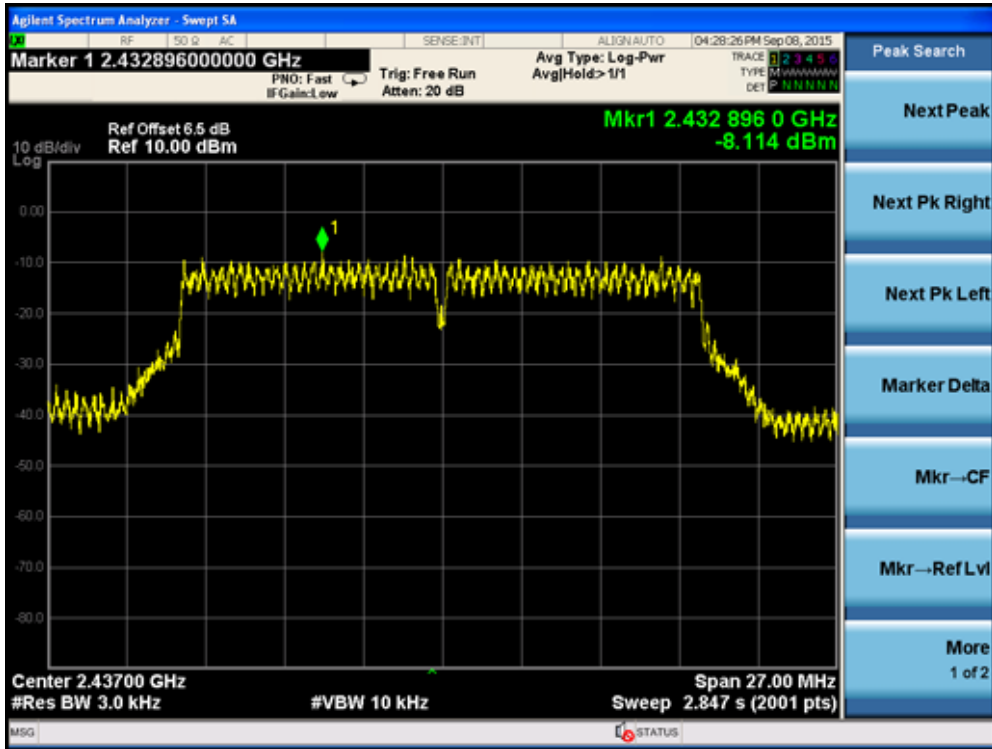
Channel No.	Frequency (MHz)	Measurement PPSD (dBm)		Total PPSD (dBm)	Limit (dBm)	Result
		Ant 1	Ant 1			
01	2412	-14.026	-22.199	-13.410	8	Pass
06	2437	-8.114	-16.318	-7.502	8	Pass
11	2462	-10.668	-17.970	-9.927	8	Pass

Ant 1

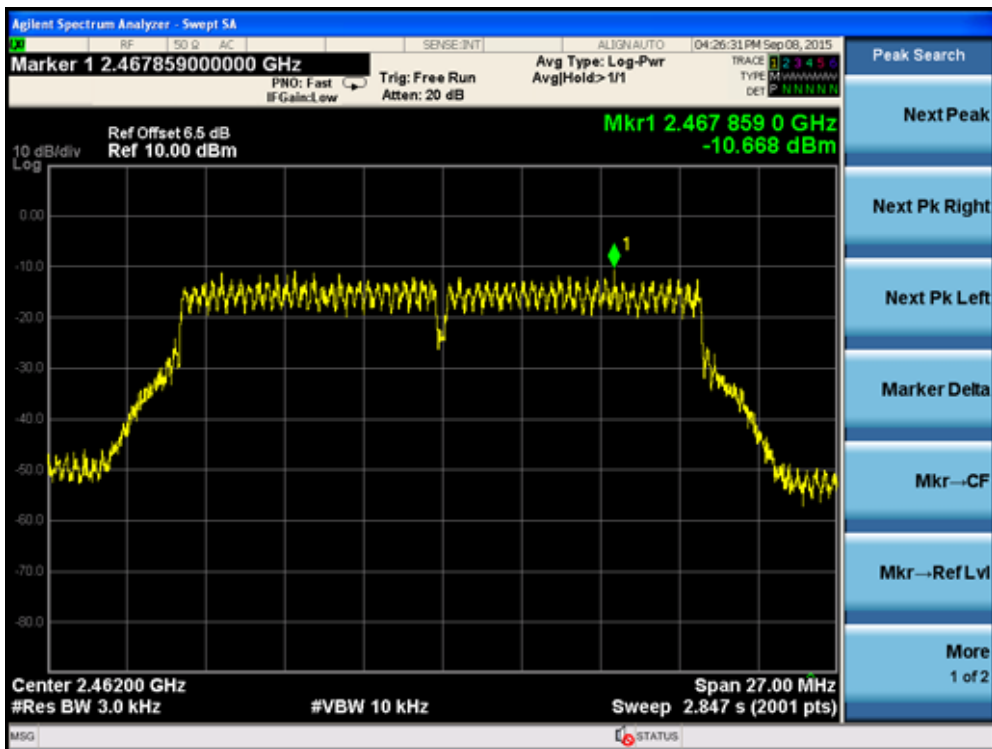
Channel 01 (2412MHz)



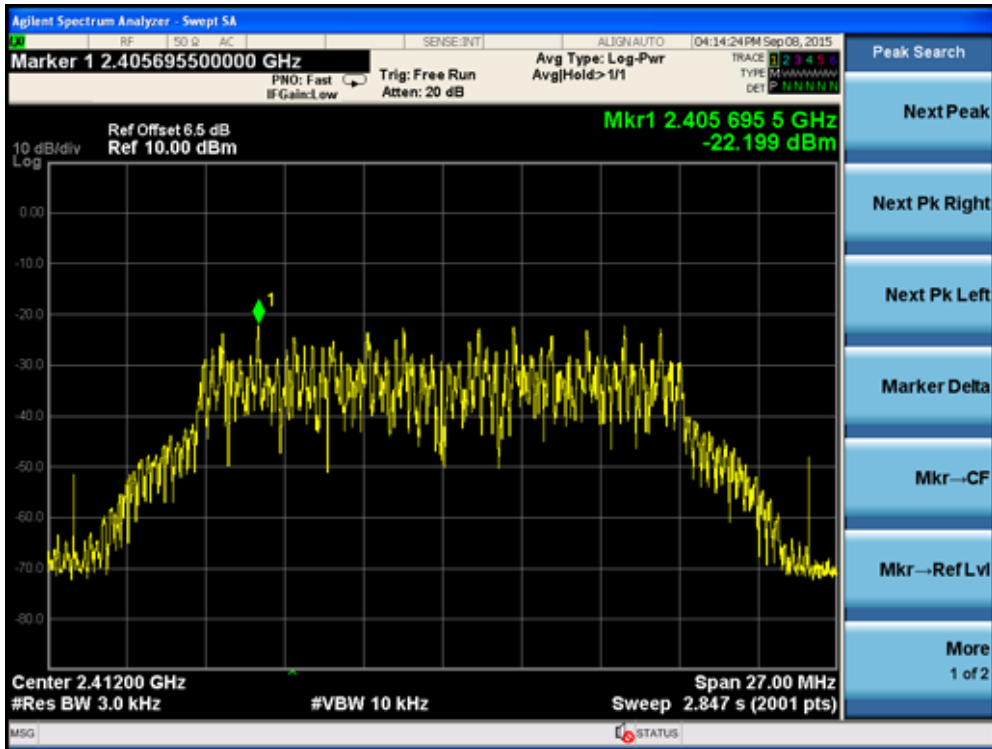
Channel 06 (2437MHz)



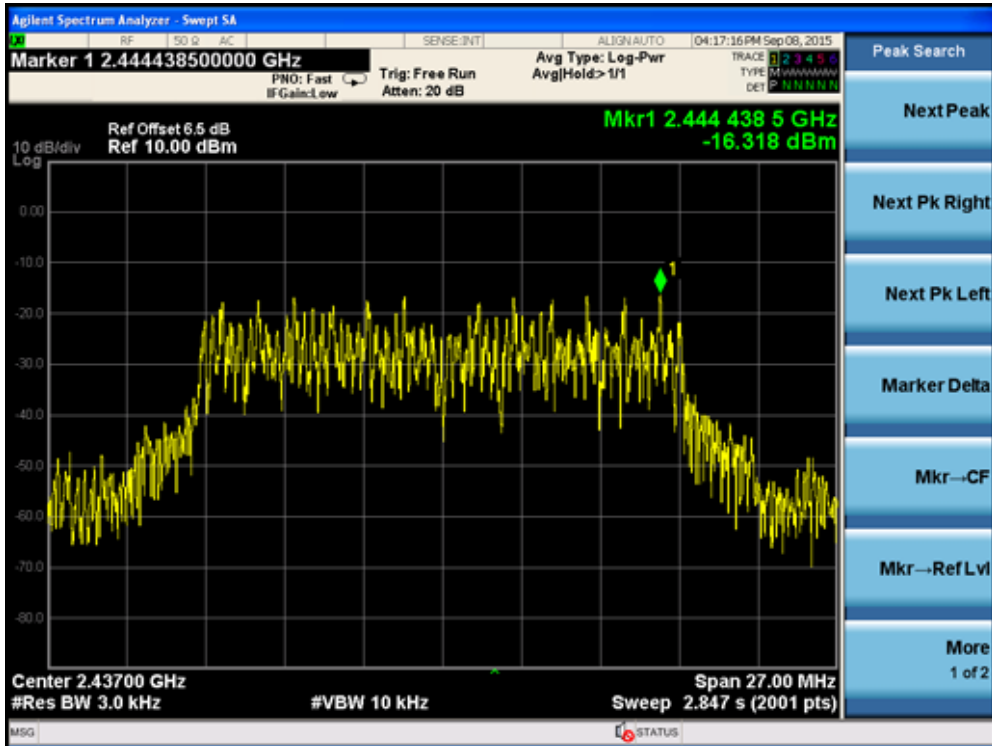
Channel 11 (2462MHz)



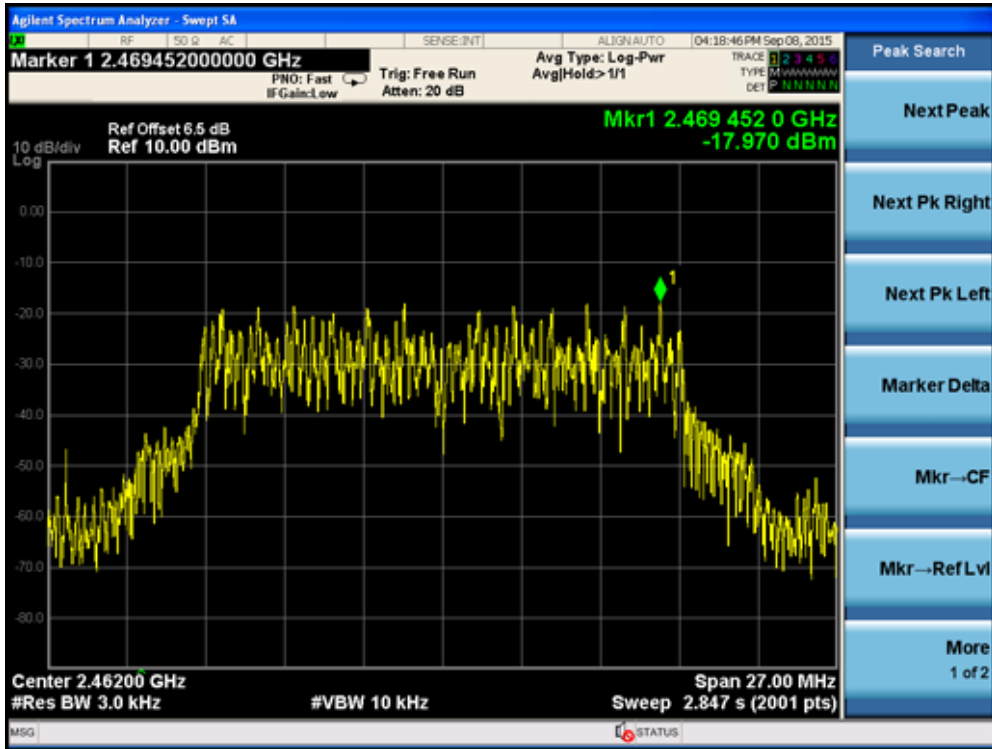
Ant 2
Channel 01 (2412MHz)



Channel 06 (2437MHz)



Channel 11 (2462MHz)

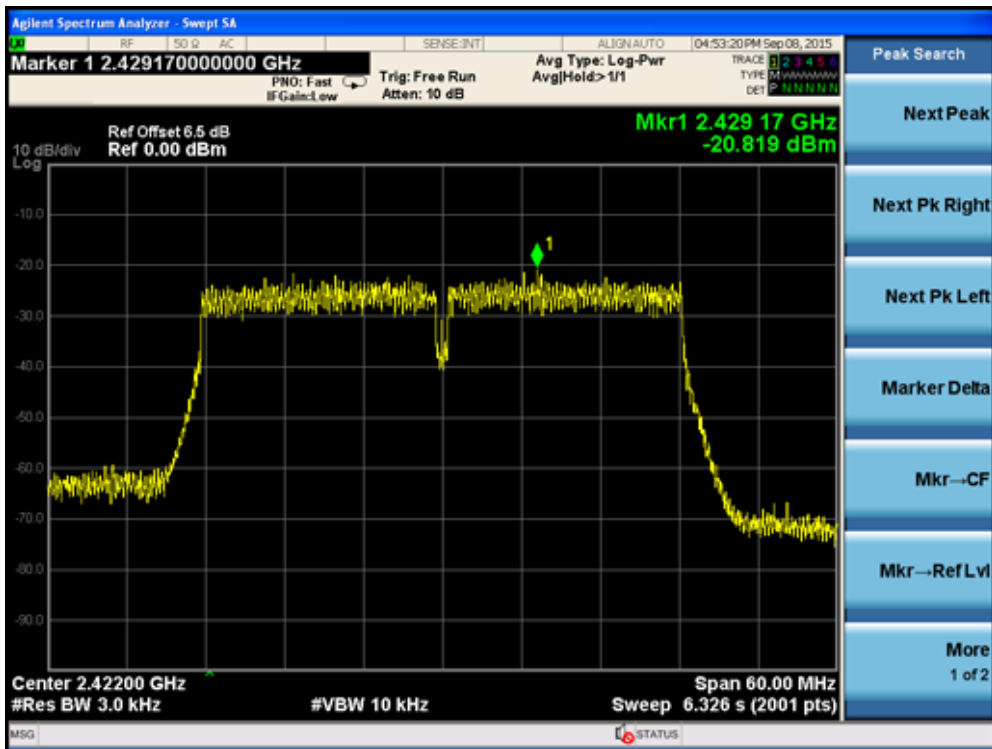


Product	:	IP-STB
Test Item	:	Power Spectral Density
Test Site	:	TR-8
Test Mode	:	Mode 4: Transmit by 802.11n(40MHz)

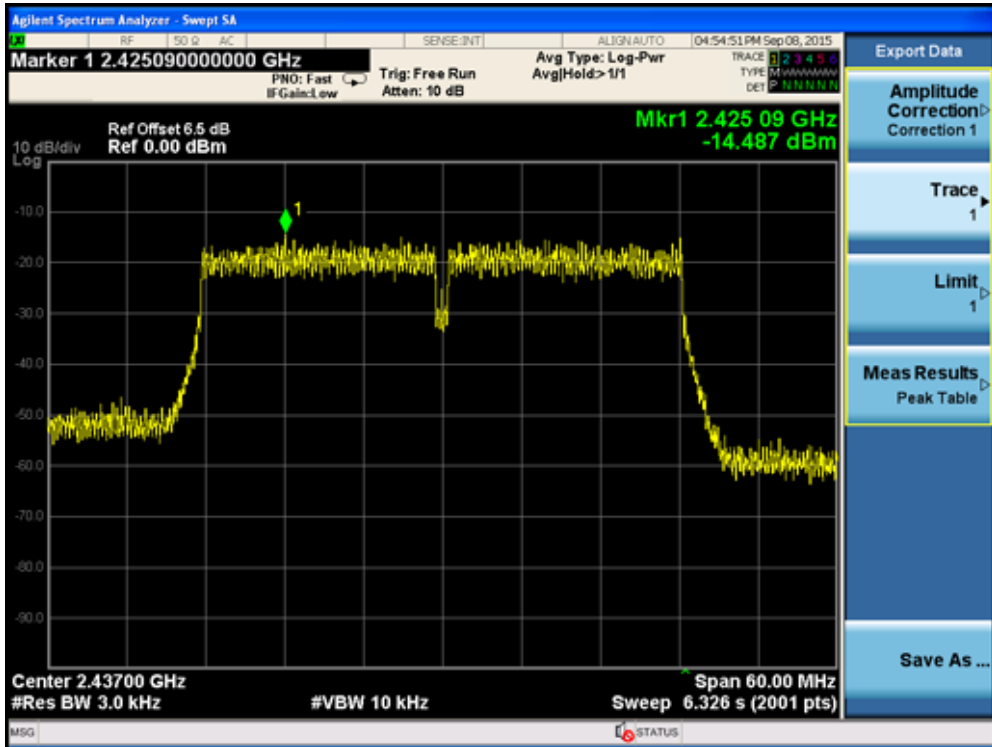
Channel No.	Frequency (MHz)	Measurement PPSD (dBm)		Limit (dBm)	Result
		Ant 1	Ant 1		
03	2422	-20.819	-14.624	8	Pass
06	2437	-14.487	-8.320	8	Pass
09	2452	-16.743	-12.975	8	Pass

Ant 1

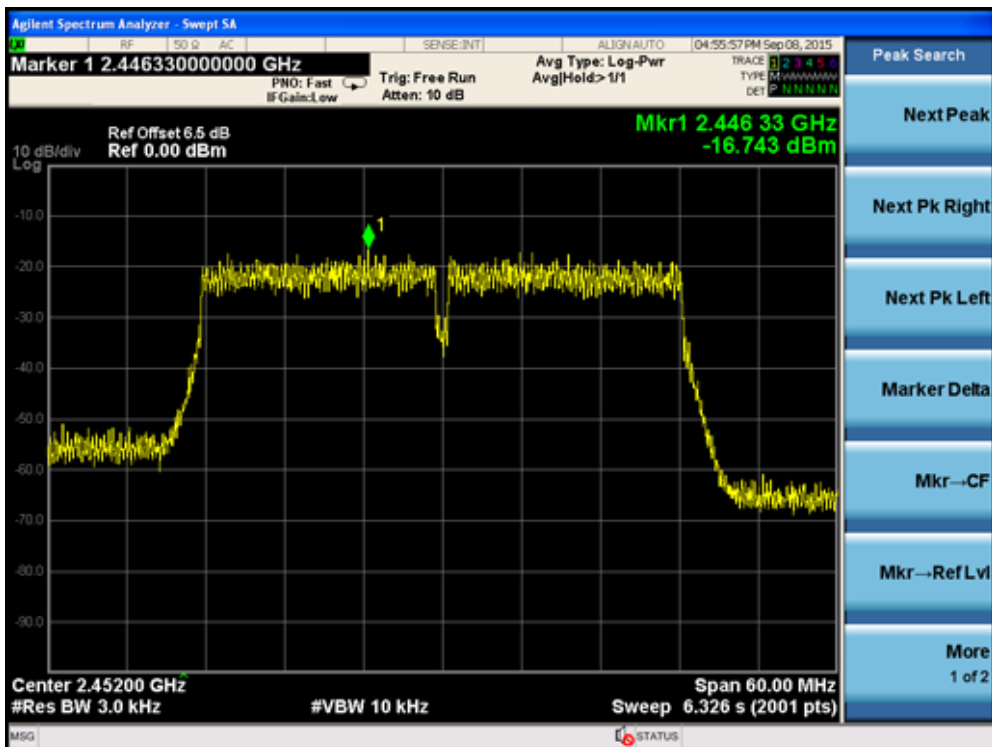
Channel 03 (2422MHz)



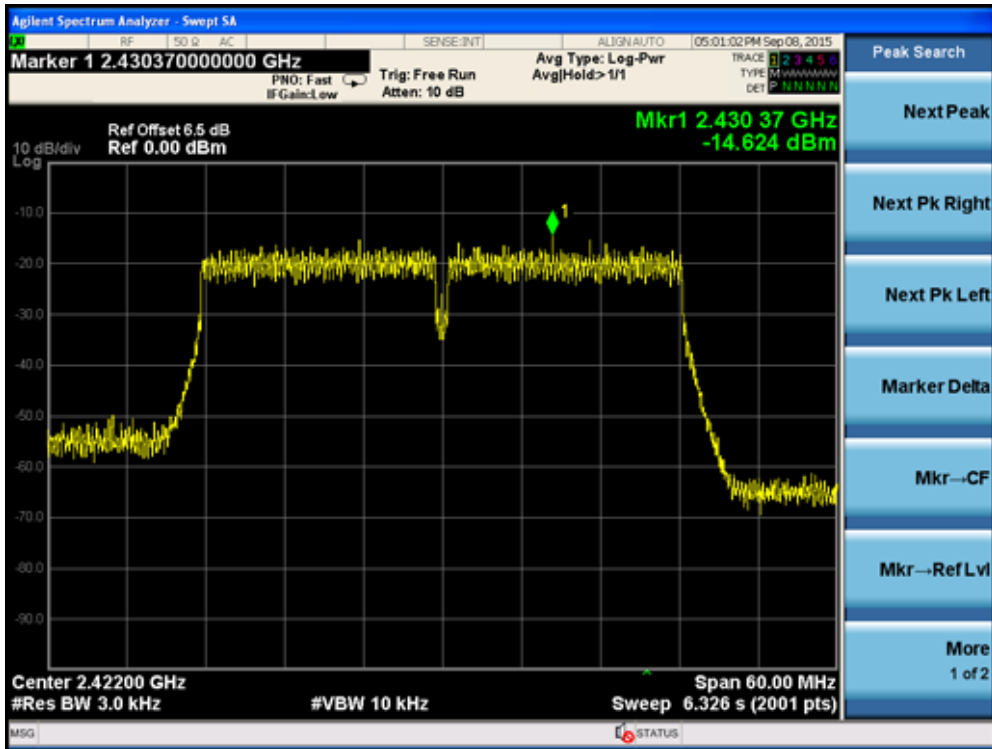
Channel 06 (2437MHz)



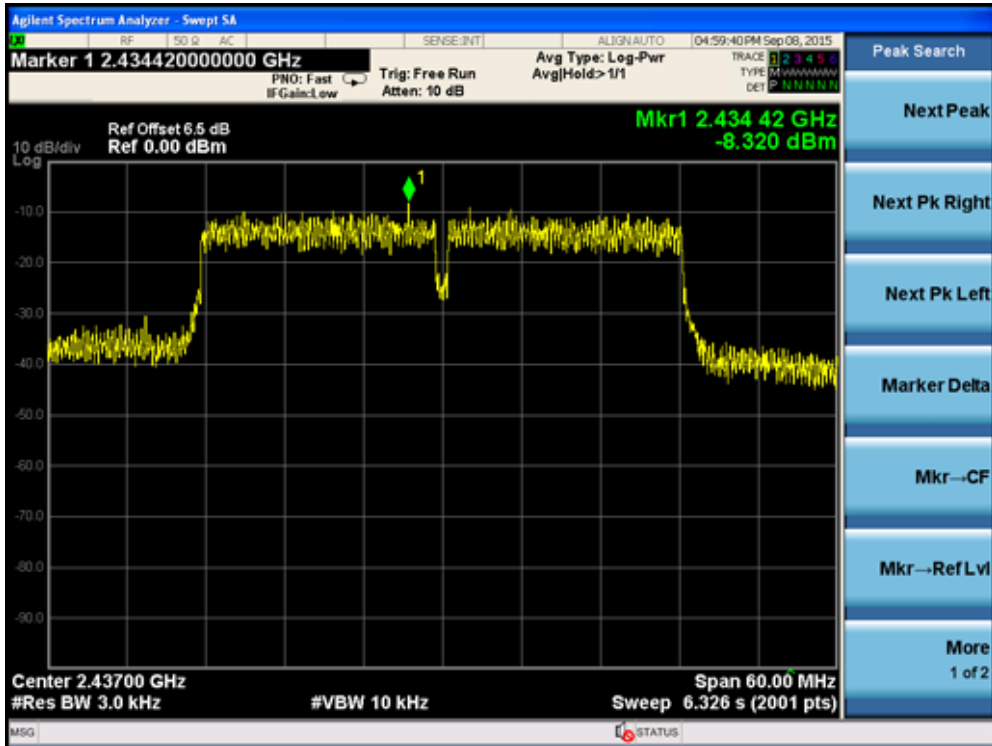
Channel 09 (2452MHz)



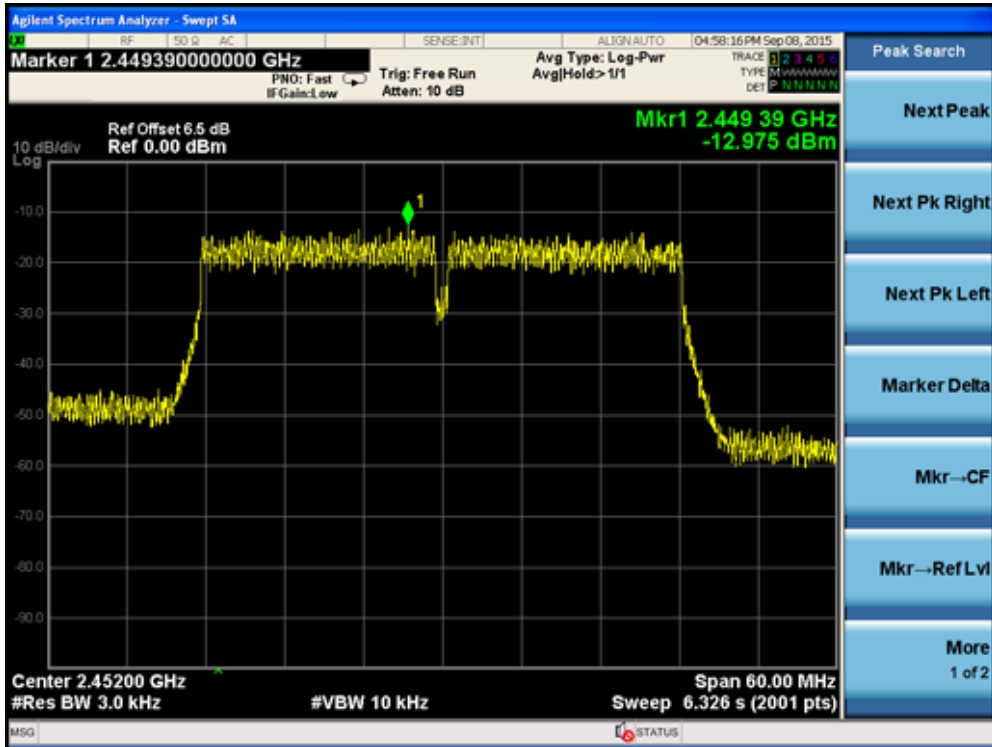
Ant 2
Channel 03 (2422MHz)



Channel 06 (2437MHz)



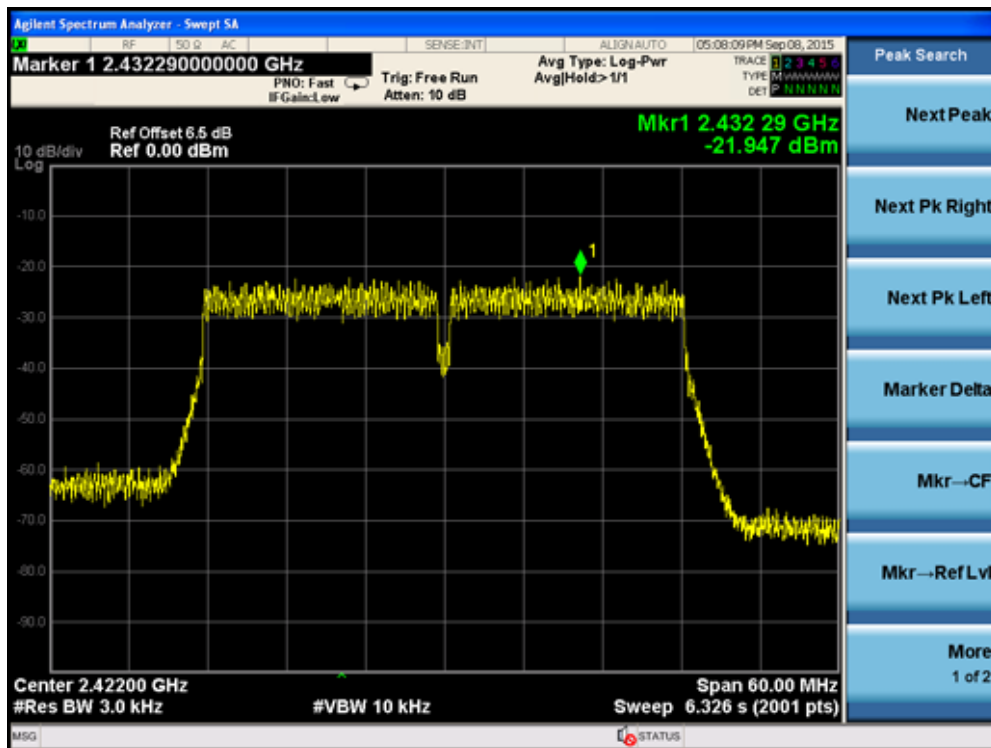
Channel 09 (2452MHz)



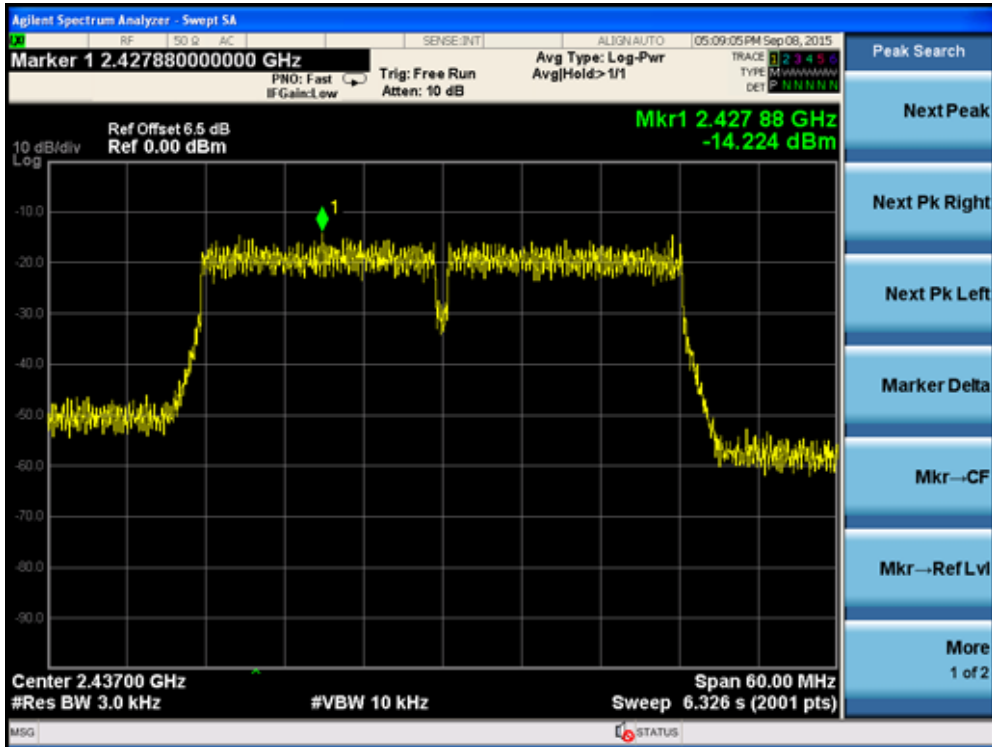
Channel No.	Frequency (MHz)	Measurement PPSD (dBm)		Total PPSD (dBm)	Limit (dBm)	Result
		Ant 1	Ant 1			
03	2422	-21.947	-26.727	-20.700	8	Pass
06	2437	-14.224	-18.900	-12.951	8	Pass
09	2452	-14.625	-21.699	-13.847	8	Pass

Ant 1

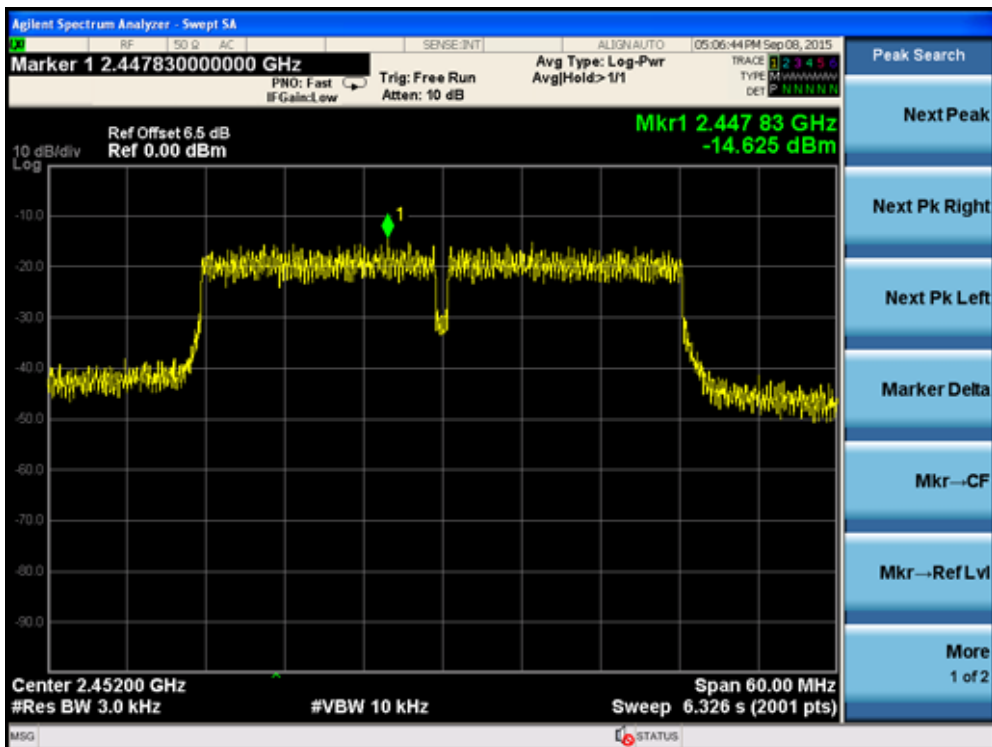
Channel 03 (2422MHz)



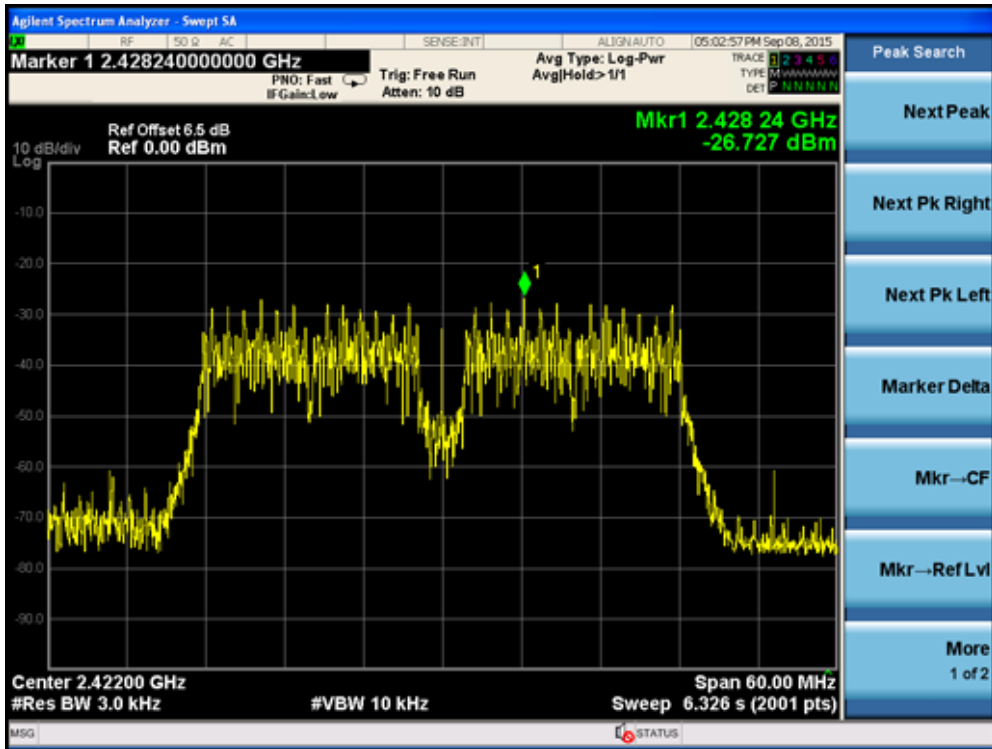
Channel 06 (2437MHz)



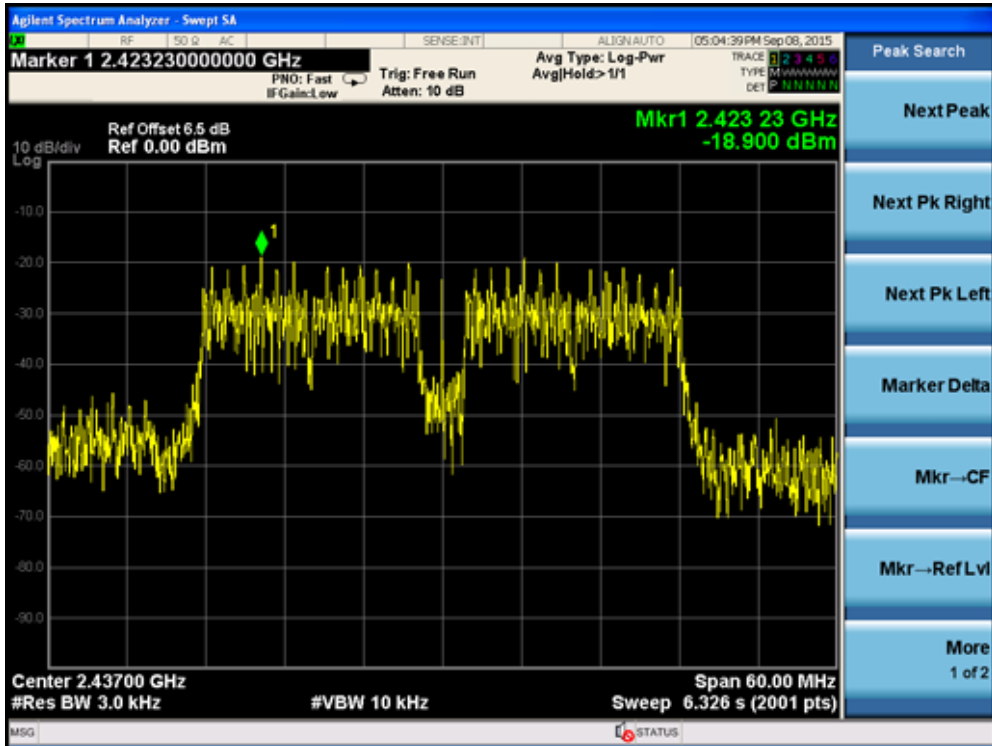
Channel 09 (2452MHz)



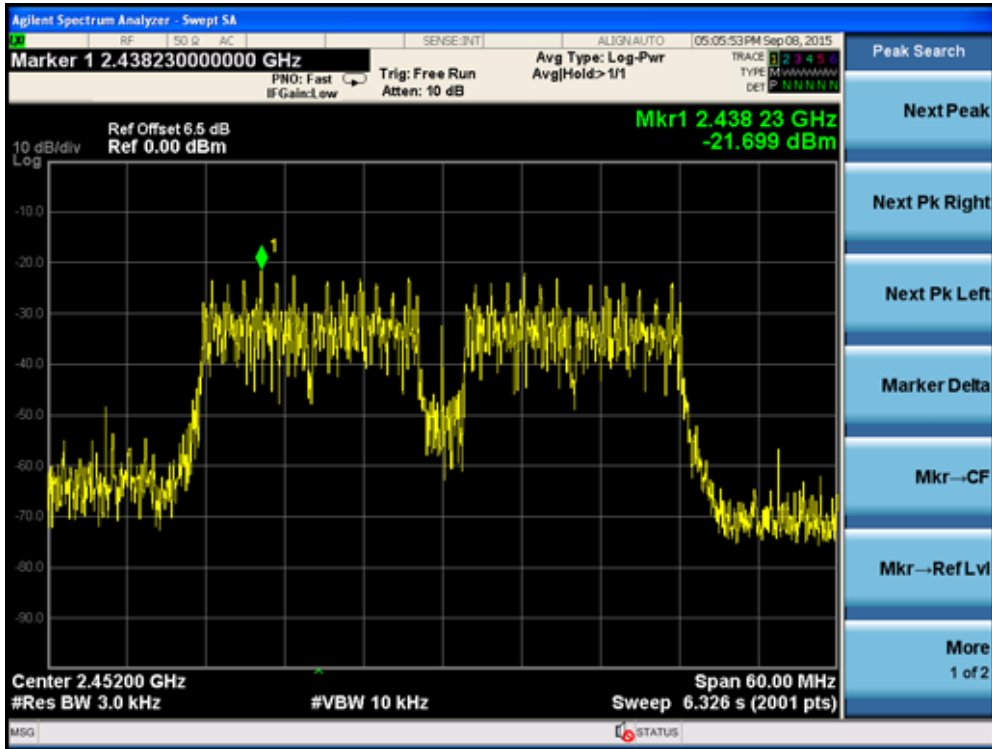
Ant 2
Channel 03 (2422MHz)



Channel 06 (2437MHz)



Channel 09 (2452MHz)



The End