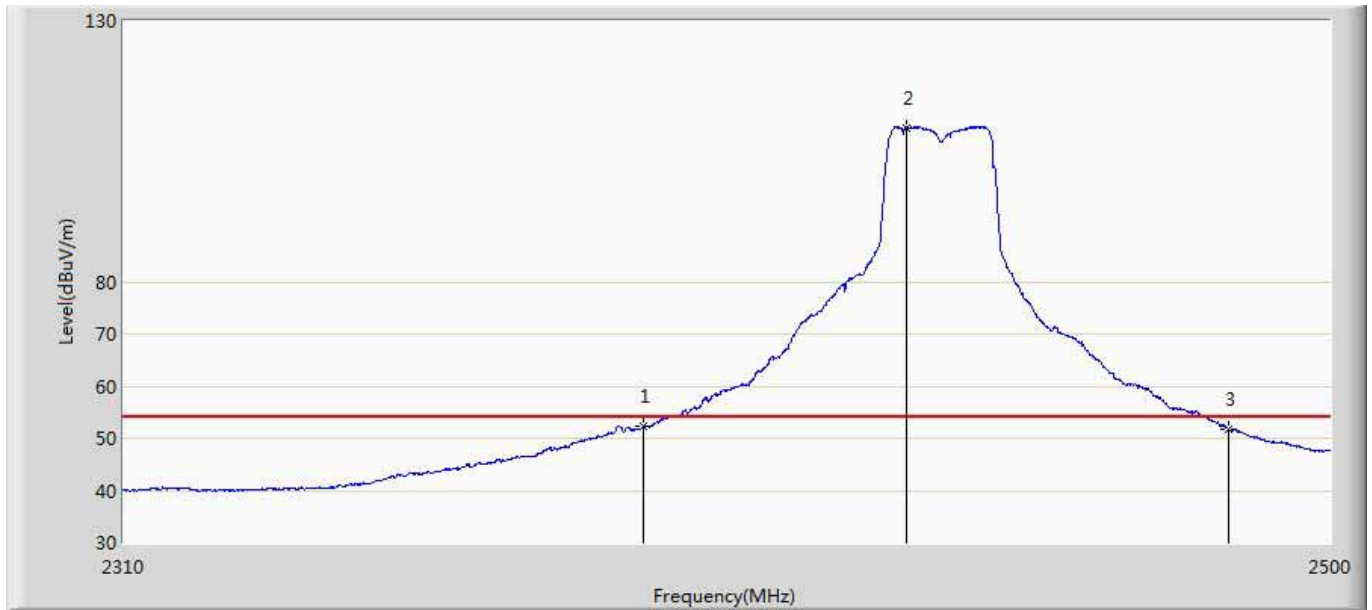
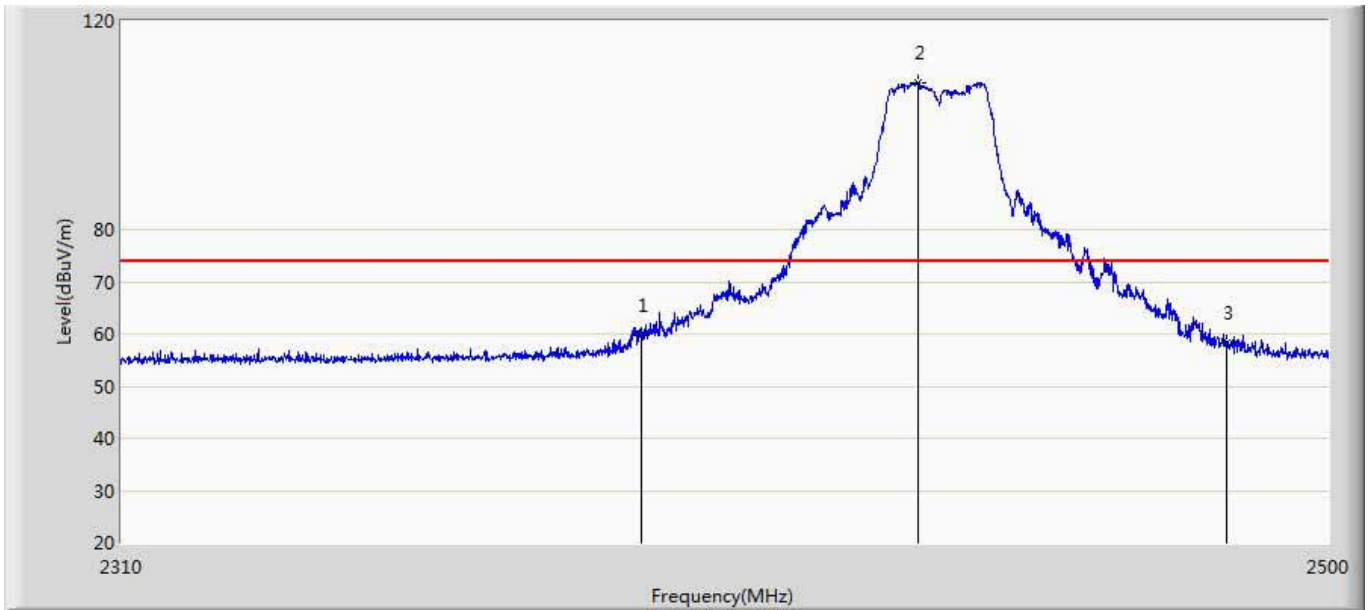


Site: AC5	Time: 2015/11/10 - 18:50
Limit: FCC_Part15.209_RE(3m)	Margin: 0
Probe: Horn_3117_00167055(1-18GHz)	Polarity: Vertical
EUT: RTSA04NU	Power: AC 120V/60Hz
Note: Mode 2 Transmit at 802.11g CH2437	



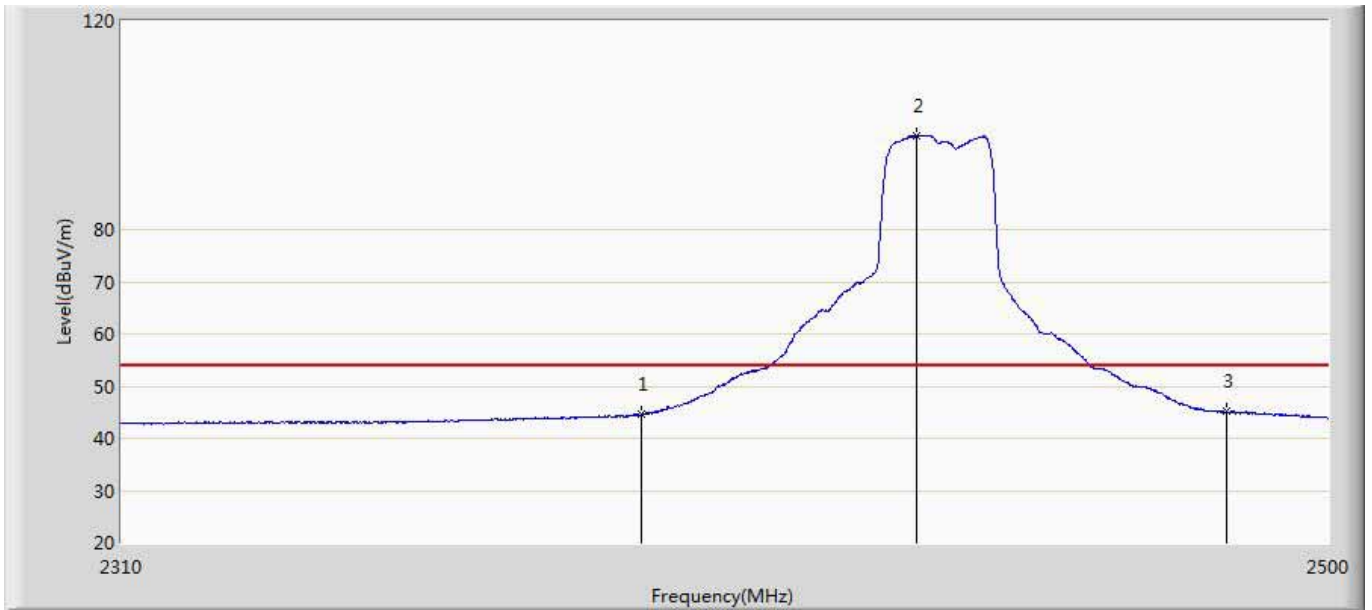
No	Mark	Frequency (MHz)	Measure Level (dBuV/m)	Reading Level (dBuV)	Over Limit (dB)	Limit (dBuV/m)	Factor (dB)	Type
1		2390.000	52.242	14.379	-1.758	54.000	37.863	AV
2	*	2431.600	109.551	71.619	55.551	54.000	37.931	AV
3		2483.500	51.734	13.696	-2.266	54.000	38.038	AV

Site: AC5	Time: 2015/11/10 - 18:54
Limit: FCC_Part15.209_RE(3m)	Margin: 0
Probe: Horn_3117_00167055(1-18GHz)	Polarity: Horizontal
EUT: RTSA04NU	Power: AC 120V/60Hz
Note: Mode 2 Transmit at 802.11g CH2437	



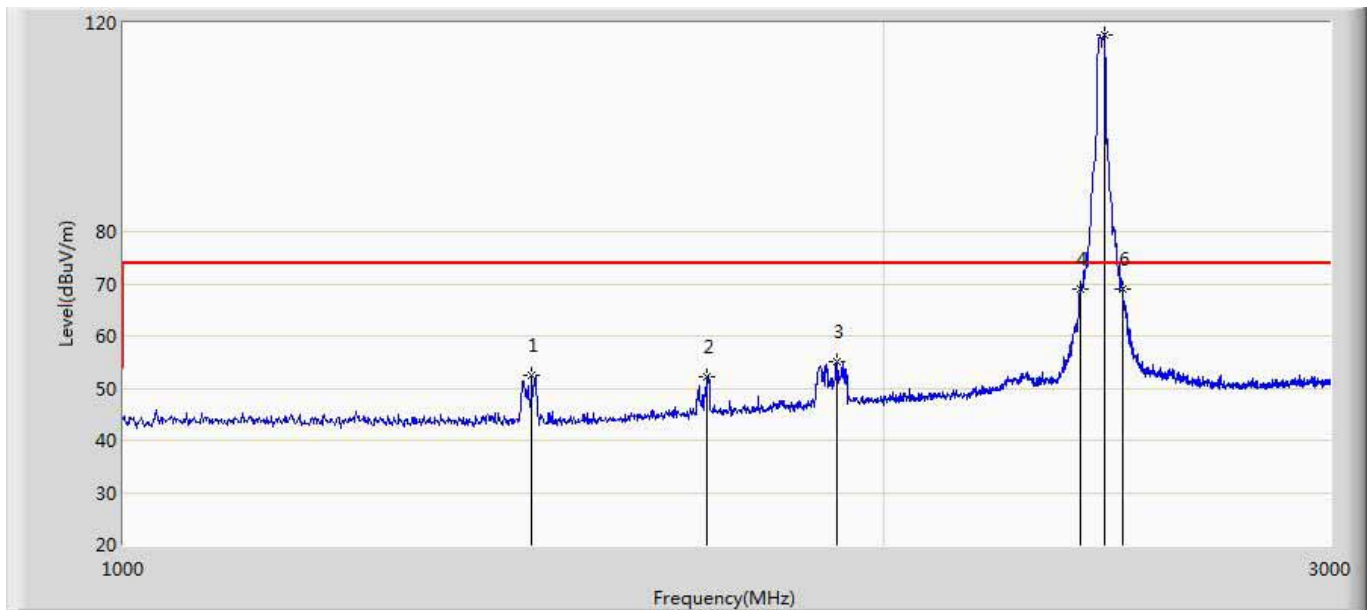
No	Mark	Frequency (MHz)	Measure Level (dBuV/m)	Reading Level (dBuV)	Over Limit (dB)	Limit (dBuV/m)	Factor (dB)	Type
1		2390.000	59.725	21.862	-14.275	74.000	37.863	PK
2	*	2433.785	108.213	70.280	34.213	74.000	37.933	PK
3		2483.500	58.251	20.213	-15.749	74.000	38.038	PK

Site: AC5	Time: 2015/11/10 - 18:56
Limit: FCC_Part15.209_RE(3m)	Margin: 0
Probe: Horn_3117_00167055(1-18GHz)	Polarity: Horizontal
EUT: RTSA04NU	Power: AC 120V/60Hz
Note: Mode 2 Transmit at 802.11g CH2437	



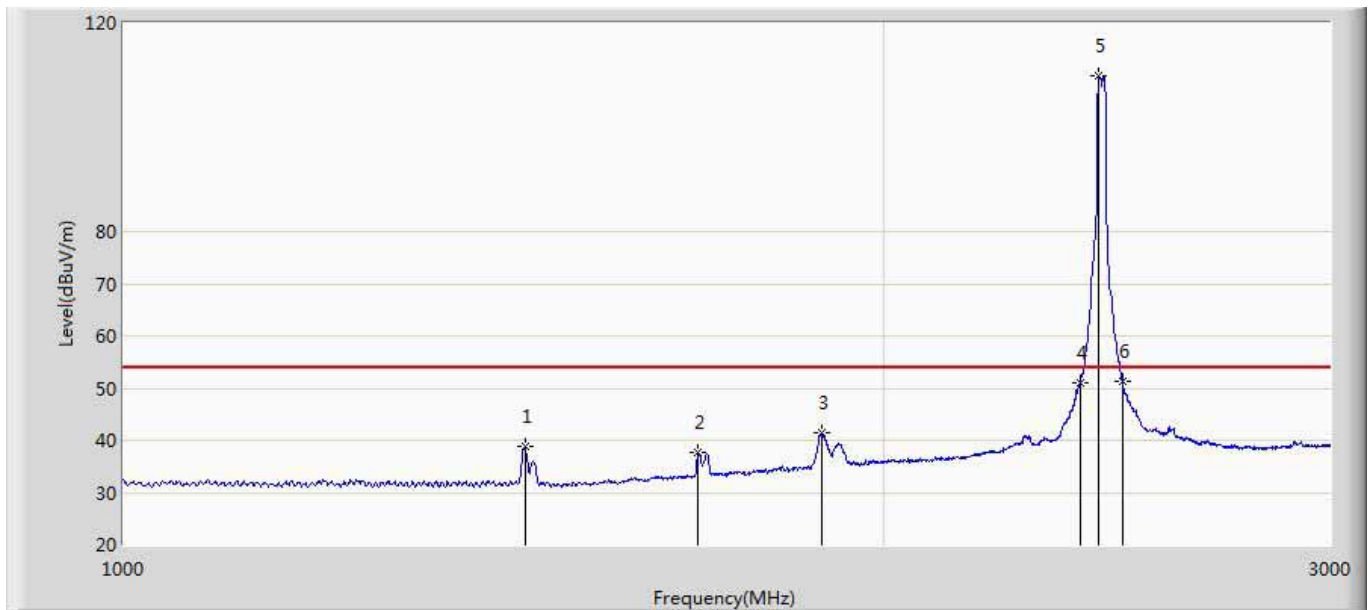
No	Mark	Frequency (MHz)	Measure Level (dBuV/m)	Reading Level (dBuV)	Over Limit (dB)	Limit (dBuV/m)	Factor (dB)	Type
1		2390.000	44.521	6.658	-9.479	54.000	37.863	AV
2	*	2433.595	98.114	60.181	44.114	54.000	37.933	AV
3		2483.500	45.133	7.095	-8.867	54.000	38.038	AV

Site: AC5	Time: 2015/11/10 - 18:59
Limit: FCC_Part15.209_RE(3m)	Margin: 0
Probe: Horn_3117_00167055(1-18GHz)	Polarity: Vertical
EUT: RTSA04NU	Power: AC 120V/60Hz
Note: Mode 2 Transmit at 802.11g CH2437	



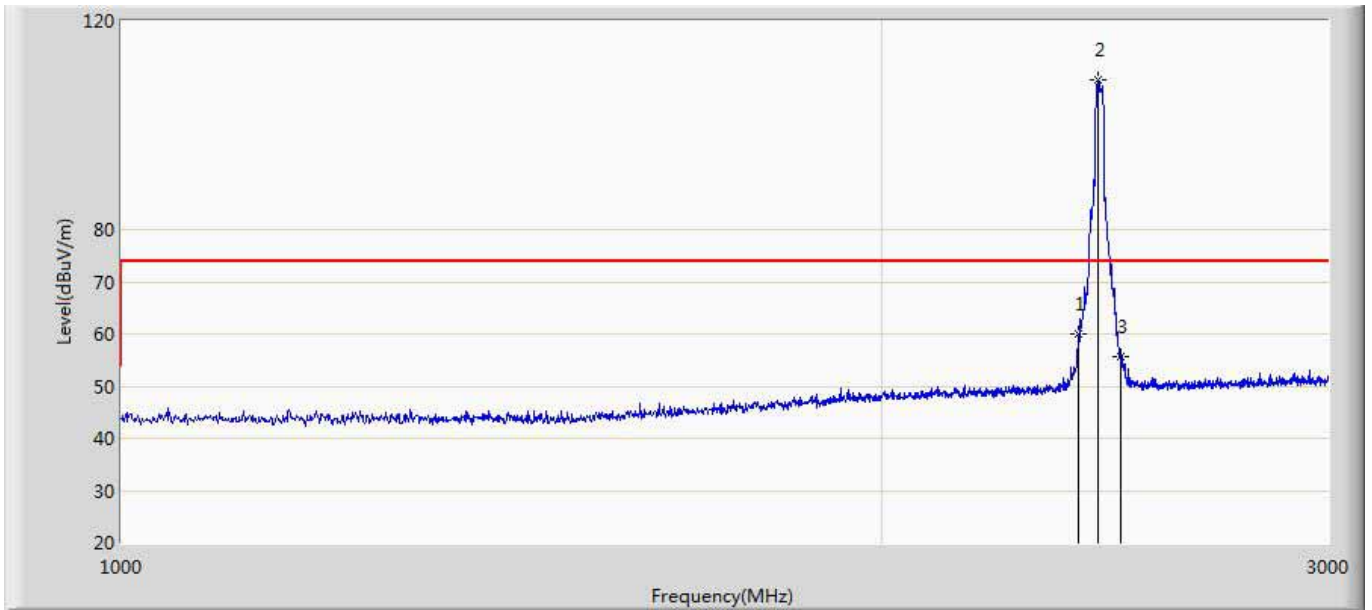
No	Mark	Frequency (MHz)	Measure Level (dBuV/m)	Reading Level (dBuV)	Over Limit (dB)	Limit (dBuV/m)	Factor (dB)	Type
1		1451.000	52.346	19.939	-21.654	74.000	32.407	PK
2		1701.000	52.116	17.957	-21.884	74.000	34.160	PK
3		1914.000	55.094	19.068	-18.906	74.000	36.026	PK
4		2390.000	68.906	31.043	-5.094	74.000	37.863	PK
5	*	2443.000	117.748	79.809	43.748	74.000	37.939	PK
6		2483.500	68.976	30.938	-5.024	74.000	38.038	PK

Site: AC5	Time: 2015/11/10 - 19:06
Limit: FCC_Part15.209_RE(3m)	Margin: 0
Probe: Horn_3117_00167055(1-18GHz)	Polarity: Vertical
EUT: RTSA04NU	Power: AC 120V/60Hz
Note: Mode 2 Transmit at 802.11g CH2437	



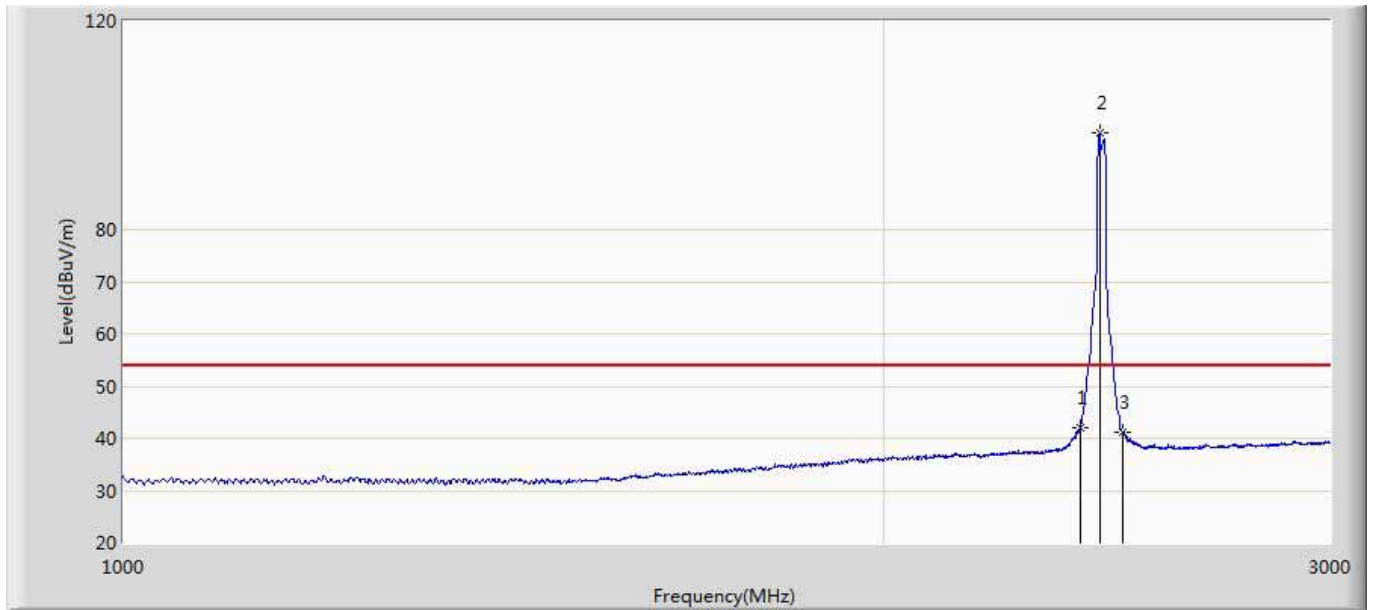
No	Mark	Frequency (MHz)	Measure Level (dBuV/m)	Reading Level (dBuV)	Over Limit (dB)	Limit (dBuV/m)	Factor (dB)	Type
1		1442.000	38.783	6.364	-15.217	54.000	32.419	AV
2		1688.000	37.608	3.562	-16.392	54.000	34.046	AV
3		1889.000	41.380	5.566	-12.620	54.000	35.815	AV
4		2390.000	50.873	13.010	-3.127	54.000	37.863	AV
5	*	2430.000	109.820	71.890	55.820	54.000	37.930	AV
6		2483.500	51.423	13.385	-2.577	54.000	38.038	AV

Site: AC5	Time: 2015/11/10 - 19:14
Limit: FCC_Part15.209_RE(3m)	Margin: 0
Probe: Horn_3117_00167055(1-18GHz)	Polarity: Horizontal
EUT: RTSA04NU	Power: AC 120V/60Hz
Note: Mode 2 Transmit at 802.11g CH2437	



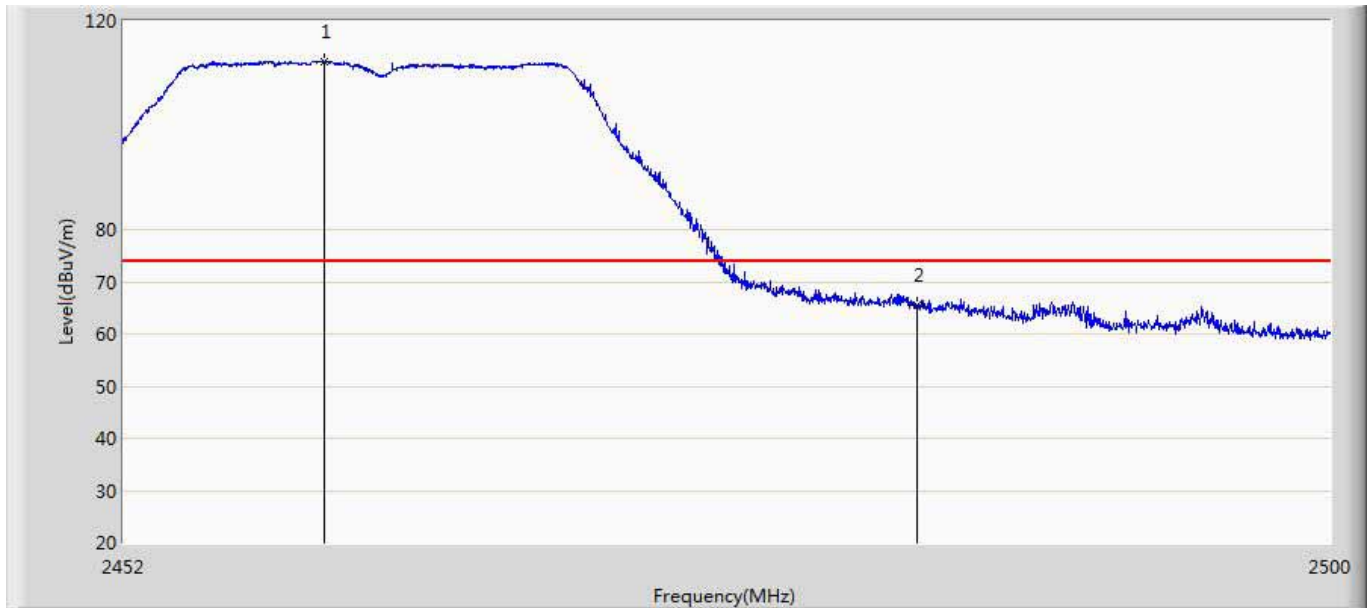
No	Mark	Frequency (MHz)	Measure Level (dBuV/m)	Reading Level (dBuV)	Over Limit (dB)	Limit (dBuV/m)	Factor (dB)	Type
1		2390.000	60.120	22.257	-13.880	74.000	37.863	PK
2	*	2435.000	108.667	70.733	34.667	74.000	37.933	PK
3		2483.500	55.562	17.524	-18.438	74.000	38.038	PK

Site: AC5	Time: 2015/11/10 - 19:16
Limit: FCC_Part15.209_RE(3m)	Margin: 0
Probe: Horn_3117_00167055(1-18GHz)	Polarity: Horizontal
EUT: RTSA04NU	Power: AC 120V/60Hz
Note: Mode 2 Transmit at 802.11g CH2437	



No	Mark	Frequency (MHz)	Measure Level (dBuV/m)	Reading Level (dBuV)	Over Limit (dB)	Limit (dBuV/m)	Factor (dB)	Type
1		2390.000	42.037	4.174	-11.963	54.000	37.863	AV
2	*	2434.000	98.449	60.516	44.449	54.000	37.933	AV
3		2483.500	41.121	3.083	-12.879	54.000	38.038	AV

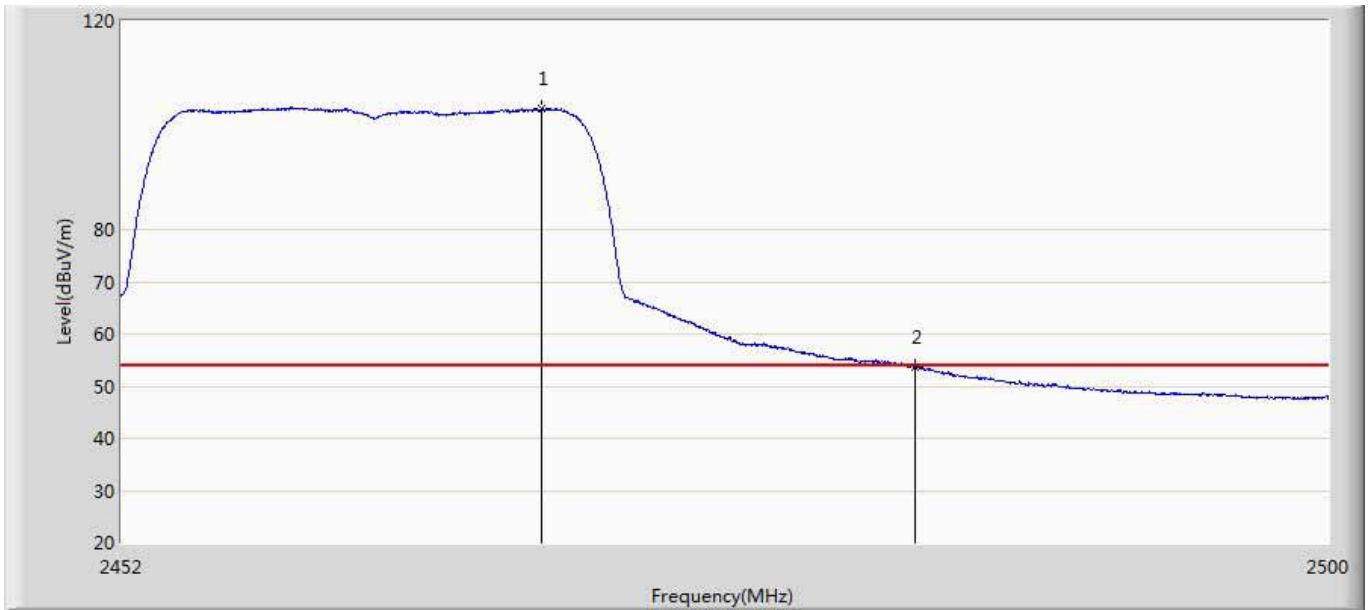
Site: AC5	Time: 2015/11/04 - 19:56
Limit: FCC_Part15.209_RE(3m)	Margin: 0
Probe: Horn_3117_00167055(1-18GHz)	Polarity: Vertical
EUT: RTSA04NU	Power: AC 120V/60Hz
Note: Mode 2 Transmit at 802.11g CH2462	



No	Mark	Frequency (MHz)	Measure Level (dBuV/m)	Reading Level (dBuV)	Over Limit (dB)	Limit (dBuV/m)	Factor (dB)	Type
1	*	2459.944	112.169	74.170	38.169	N/A	N/A	PK
2		2483.500	65.413	27.375	-8.587	74.000	38.038	PK

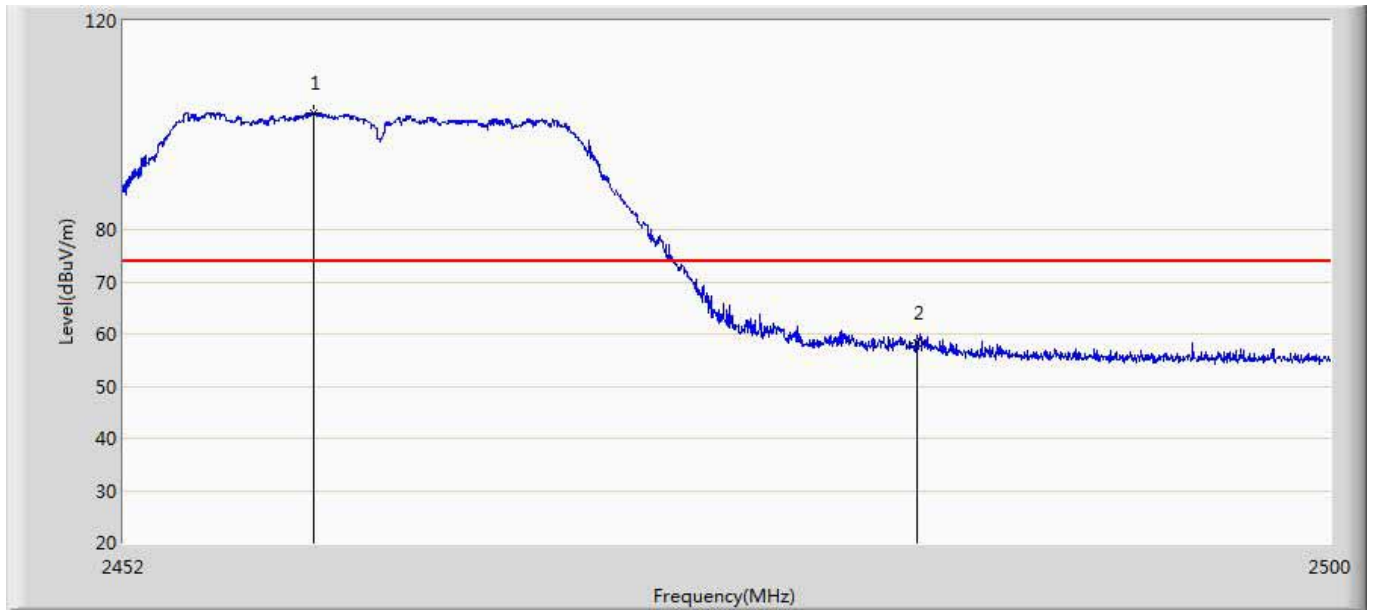


Site: AC5	Time: 2015/11/04 - 20:01
Limit: FCC_Part15.209_RE(3m)	Margin: 0
Probe: Horn_3117_00167055(1-18GHz)	Polarity: Vertical
EUT: RTSA04NU	Power: AC 120V/60Hz
Note: Mode 2 Transmit at 802.11g CH2462	



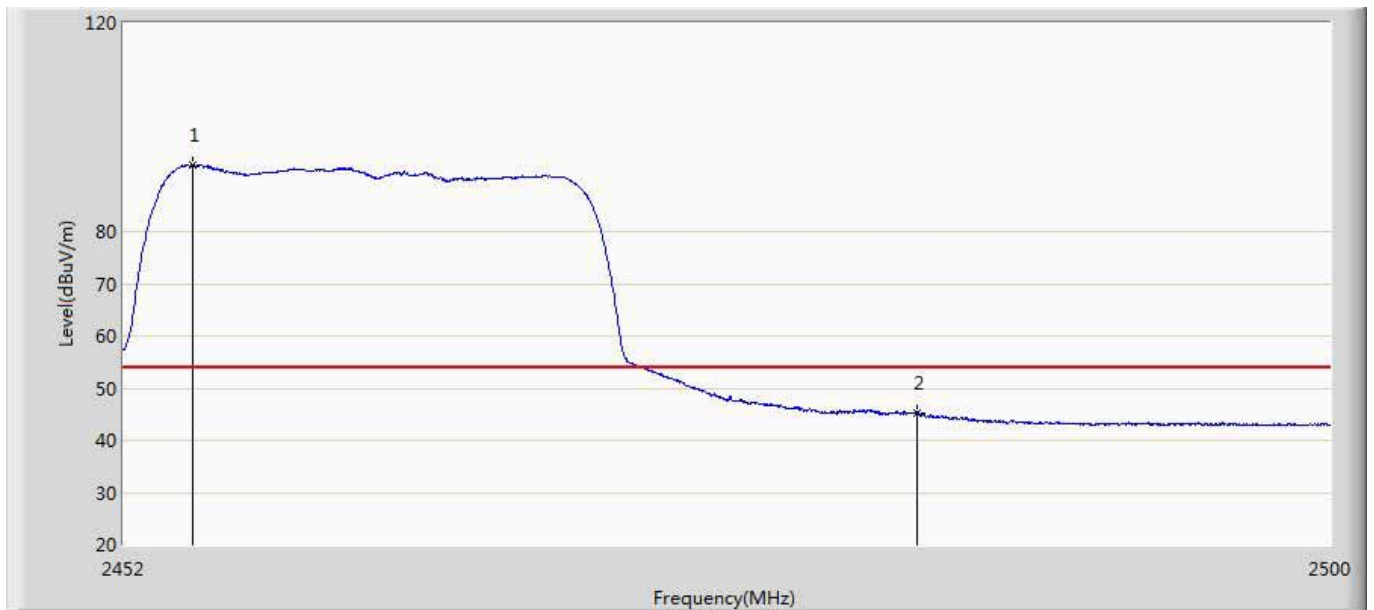
No	Mark	Frequency (MHz)	Measure Level (dBuV/m)	Reading Level (dBuV)	Over Limit (dB)	Limit (dBuV/m)	Factor (dB)	Type
1	*	2468.632	103.149	65.142	49.149	N/A	N/A	AV
2		2483.500	53.705	15.667	-0.295	54.000	38.038	AV

Site: AC5	Time: 2015/11/04 - 20:15
Limit: FCC_Part15.209_RE(3m)	Margin: 0
Probe: Horn_3117_00167055(1-18GHz)	Polarity: Horizontal
EUT: RTSA04NU	Power: AC 120V/60Hz
Note: Mode 2 Transmit at 802.11g CH2462	



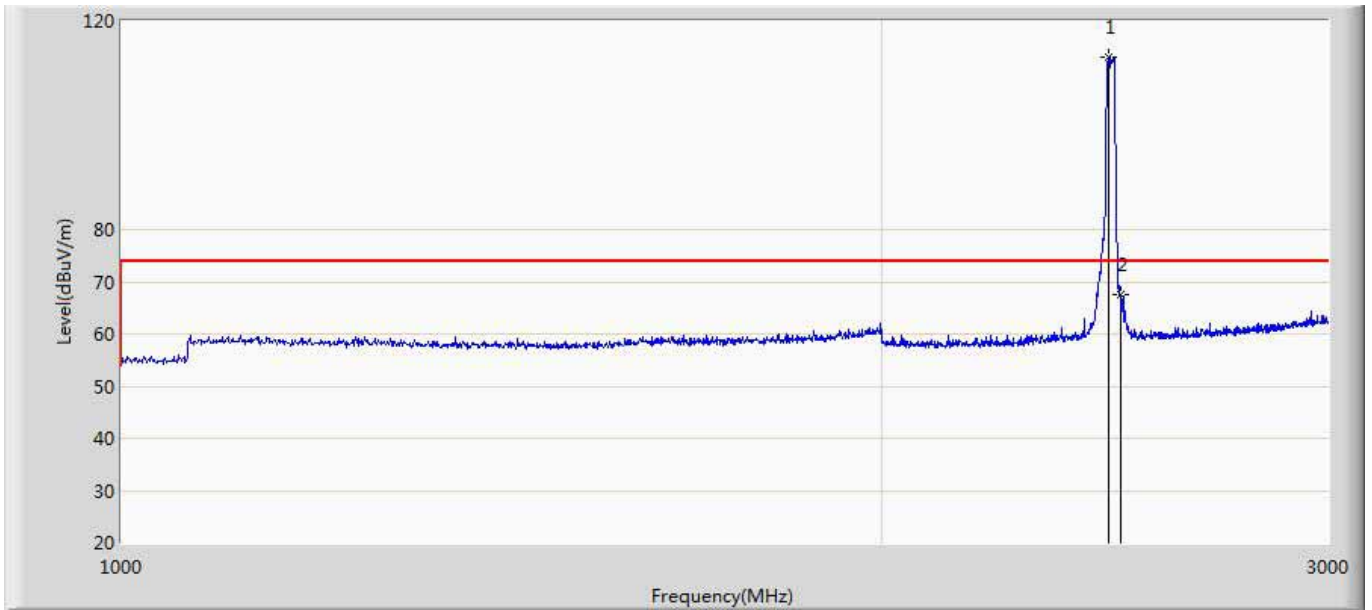
No	Mark	Frequency (MHz)	Measure Level (dBuV/m)	Reading Level (dBuV)	Over Limit (dB)	Limit (dBuV/m)	Factor (dB)	Type
1	*	2459.512	102.253	64.255	28.253	N/A	N/A	PK
2		2483.500	58.327	20.289	-15.673	74.000	38.038	PK

Site: AC5	Time: 2015/11/04 - 20:17
Limit: FCC_Part15.209_RE(3m)	Margin: 0
Probe: Horn_3117_00167055(1-18GHz)	Polarity: Horizontal
EUT: RTSA04NU	Power: AC 120V/60Hz
Note: Mode 2 Transmit at 802.11g CH2462	



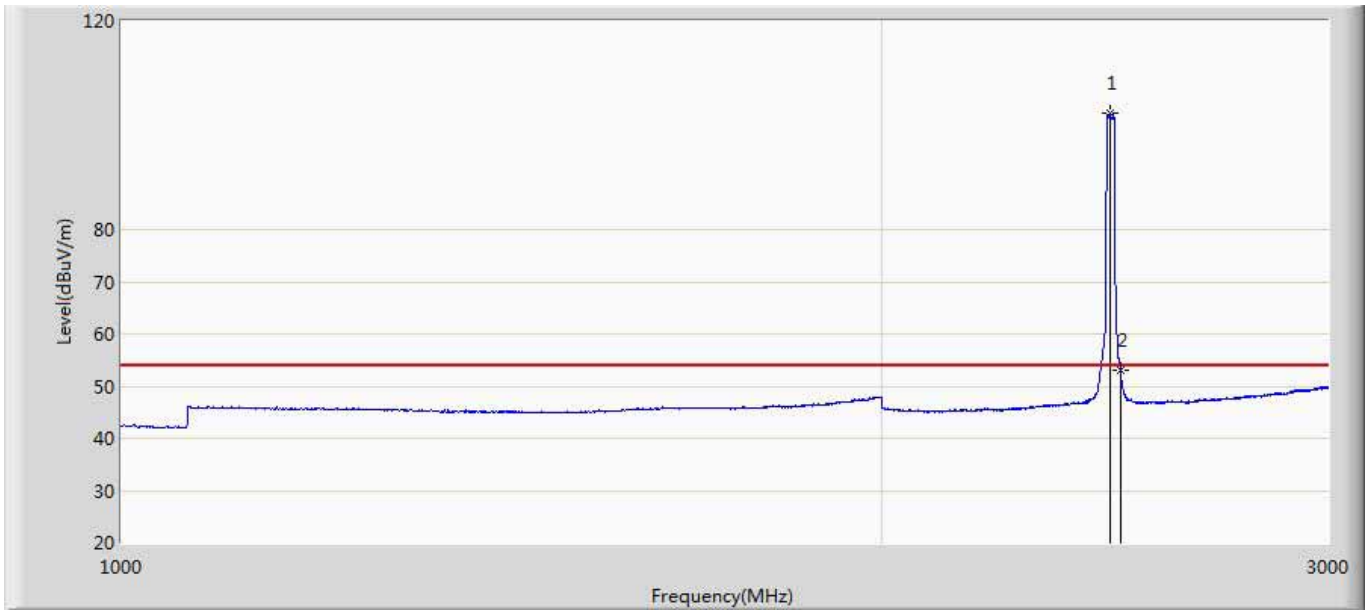
No	Mark	Frequency (MHz)	Measure Level (dBuV/m)	Reading Level (dBuV)	Over Limit (dB)	Limit (dBuV/m)	Factor (dB)	Type
1	*	2454.736	92.790	54.811	38.790	N/A	N/A	AV
2		2483.500	45.253	7.215	-8.747	54.000	38.038	AV

Site: AC5	Time: 2015/11/04 - 20:19
Limit: FCC_Part15.209_RE(3m)	Margin: 0
Probe: Horn_3117_00167055(1-18GHz)	Polarity: Vertical
EUT: RTSA04NU	Power: AC 120V/60Hz
Note: Mode 2 Transmit at 802.11g CH2462	



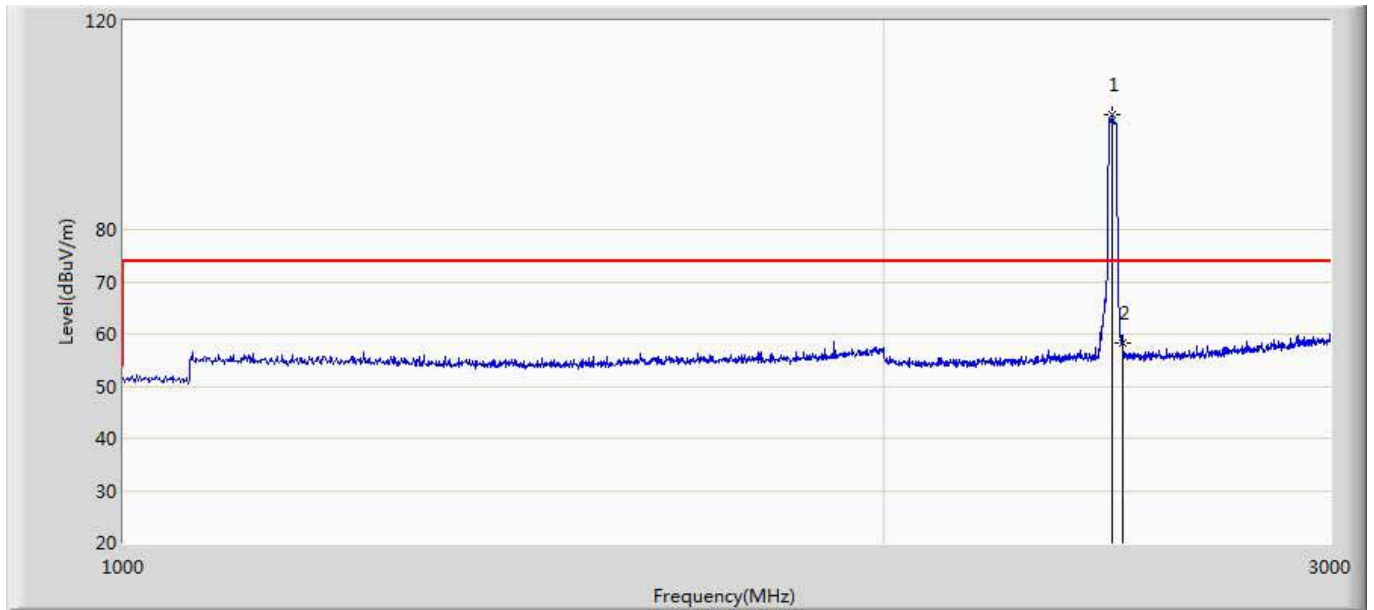
No	Mark	Frequency (MHz)	Measure Level (dBuV/m)	Reading Level (dBuV)	Over Limit (dB)	Limit (dBuV/m)	Factor (dB)	Type
1	*	2458.000	113.013	75.021	39.013	N/A	N/A	PK
2		2483.500	67.560	29.522	-6.440	74.000	38.038	PK

Site: AC5	Time: 2015/11/04 - 20:23
Limit: FCC_Part15.209_RE(3m)	Margin: 0
Probe: Horn_3117_00167055(1-18GHz)	Polarity: Vertical
EUT: RTSA04NU	Power: AC 120V/60Hz
Note: Mode 2 Transmit at 802.11g CH2462	



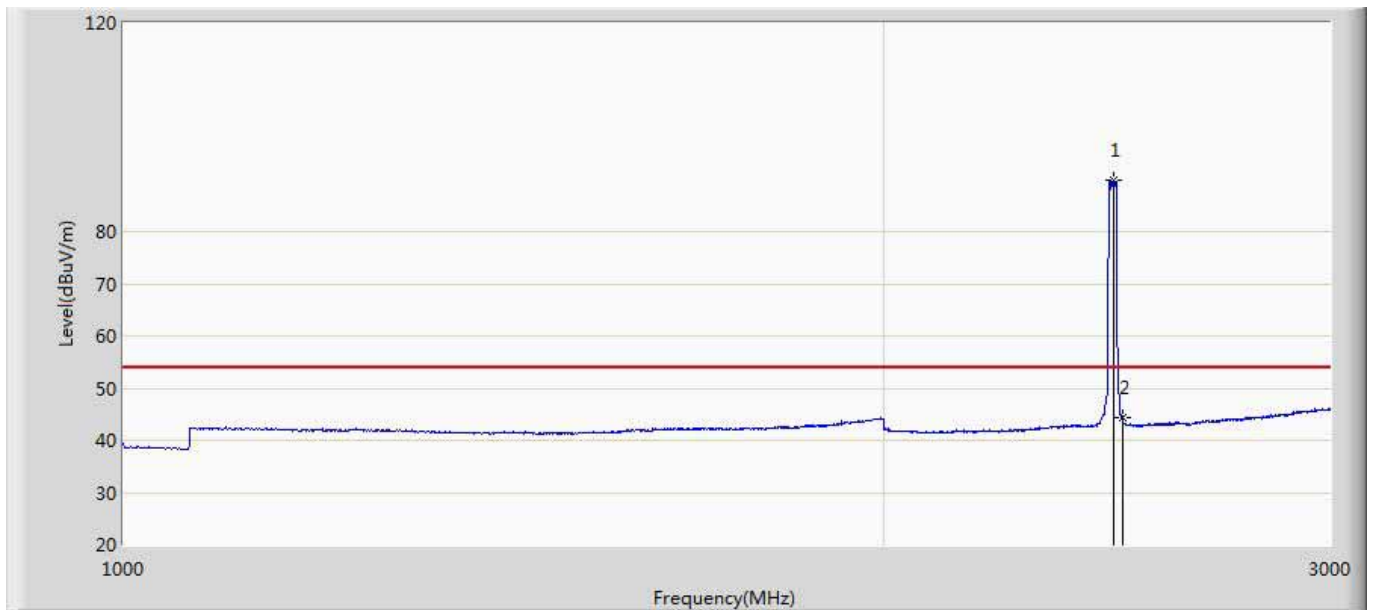
No	Mark	Frequency (MHz)	Measure Level (dBuV/m)	Reading Level (dBuV)	Over Limit (dB)	Limit (dBuV/m)	Factor (dB)	Type
1	*	2459.000	102.210	64.214	48.210	N/A	N/A	AV
2		2483.500	52.949	14.911	-1.051	54.000	38.038	AV

Site: AC5	Time: 2015/11/04 - 20:28
Limit: FCC_Part15.209_RE(3m)	Margin: 0
Probe: Horn_3117_00167055(1-18GHz)	Polarity: Horizontal
EUT: RTSA04NU	Power: AC 120V/60Hz
Note: Mode 2 Transmit at 802.11g CH2462	



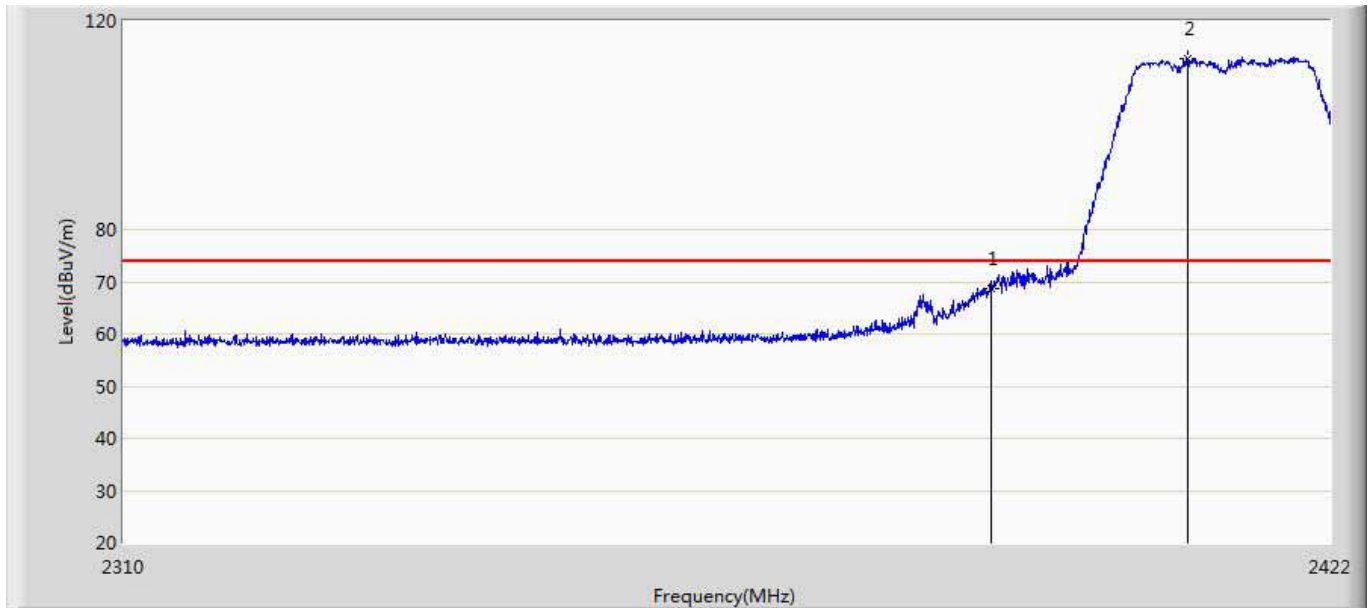
No	Mark	Frequency (MHz)	Measure Level (dBuV/m)	Reading Level (dBuV)	Over Limit (dB)	Limit (dBuV/m)	Factor (dB)	Type
1	*	2460.000	101.992	63.992	27.992	N/A	N/A	PK
2		2483.500	58.169	20.131	-15.831	74.000	38.038	PK

Site: AC5	Time: 2015/11/04 - 20:31
Limit: FCC_Part15.209_RE(3m)	Margin: 0
Probe: Horn_3117_00167055(1-18GHz)	Polarity: Horizontal
EUT: RTSA04NU	Power: AC 120V/60Hz
Note: Mode 2 Transmit at 802.11g CH2462	



No	Mark	Frequency (MHz)	Measure Level (dBuV/m)	Reading Level (dBuV)	Over Limit (dB)	Limit (dBuV/m)	Factor (dB)	Type
1	*	2464.000	89.817	51.810	35.817	N/A	N/A	AV
2		2483.500	44.357	6.319	-9.643	54.000	38.038	AV

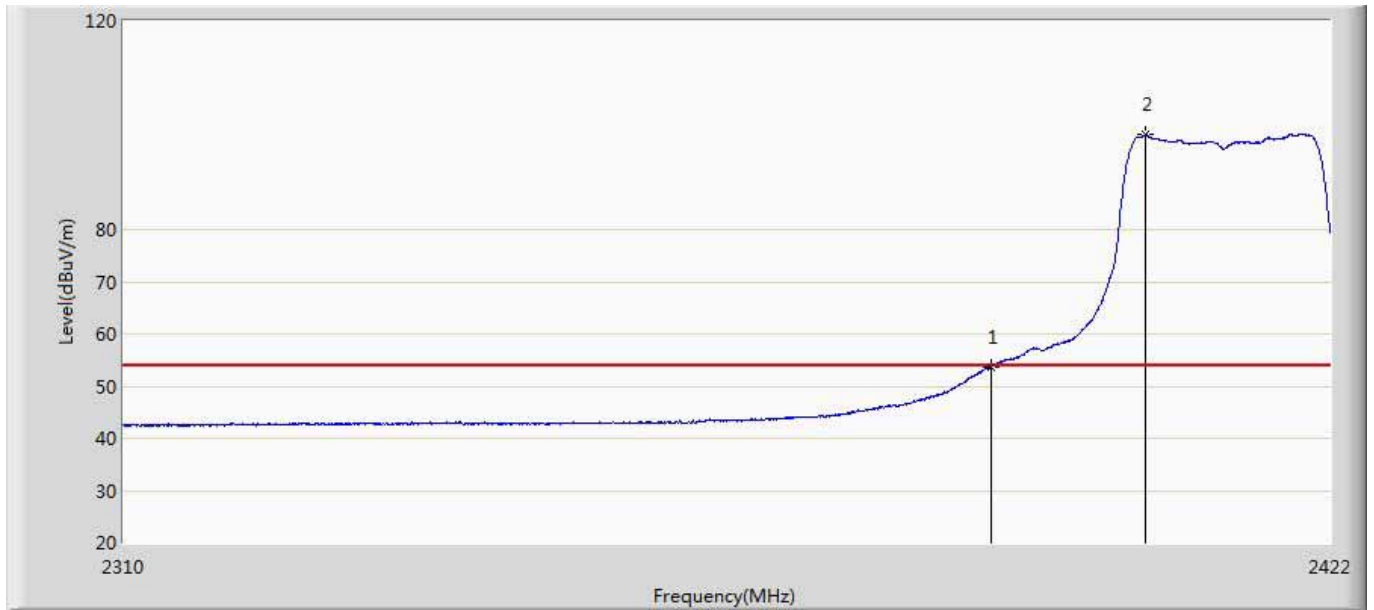
Site: AC5	Time: 2015/11/04 - 20:36
Limit: FCC_Part15.209_RE(3m)	Margin: 0
Probe: Horn_3117_00167055(1-18GHz)	Polarity: Vertical
EUT: RTSA04NU	Power: AC 120V/60Hz
Note: Mode 3 Transmit at 802.11n20 CH2412	



No	Mark	Frequency (MHz)	Measure Level (dBuV/m)	Reading Level (dBuV)	Over Limit (dB)	Limit (dBuV/m)	Factor (dB)	Type
1		2390.000	68.754	30.891	-5.246	74.000	37.863	PK
2	*	2408.560	112.784	74.950	38.784	N/A	N/A	PK

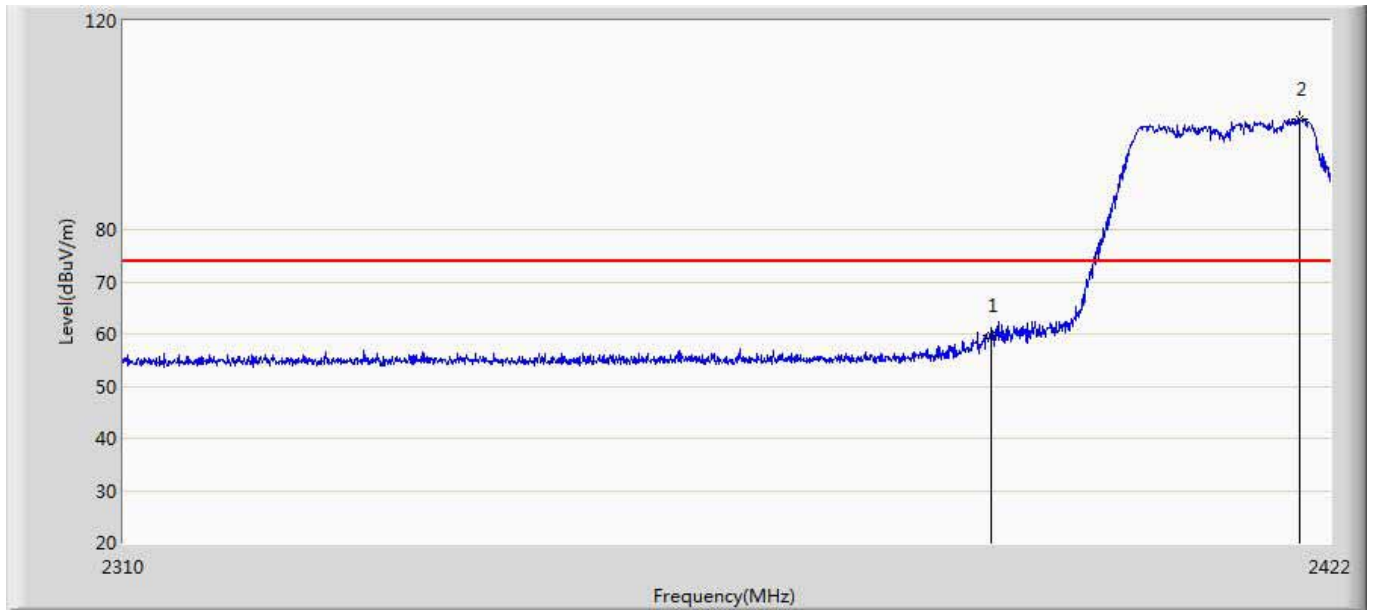


Site: AC5	Time: 2015/11/04 - 20:40
Limit: FCC_Part15.209_RE(3m)	Margin: 0
Probe: Horn_3117_00167055(1-18GHz)	Polarity: Vertical
EUT: RTSA04NU	Power: AC 120V/60Hz
Note: Mode 3 Transmit at 802.11n20 CH2412	



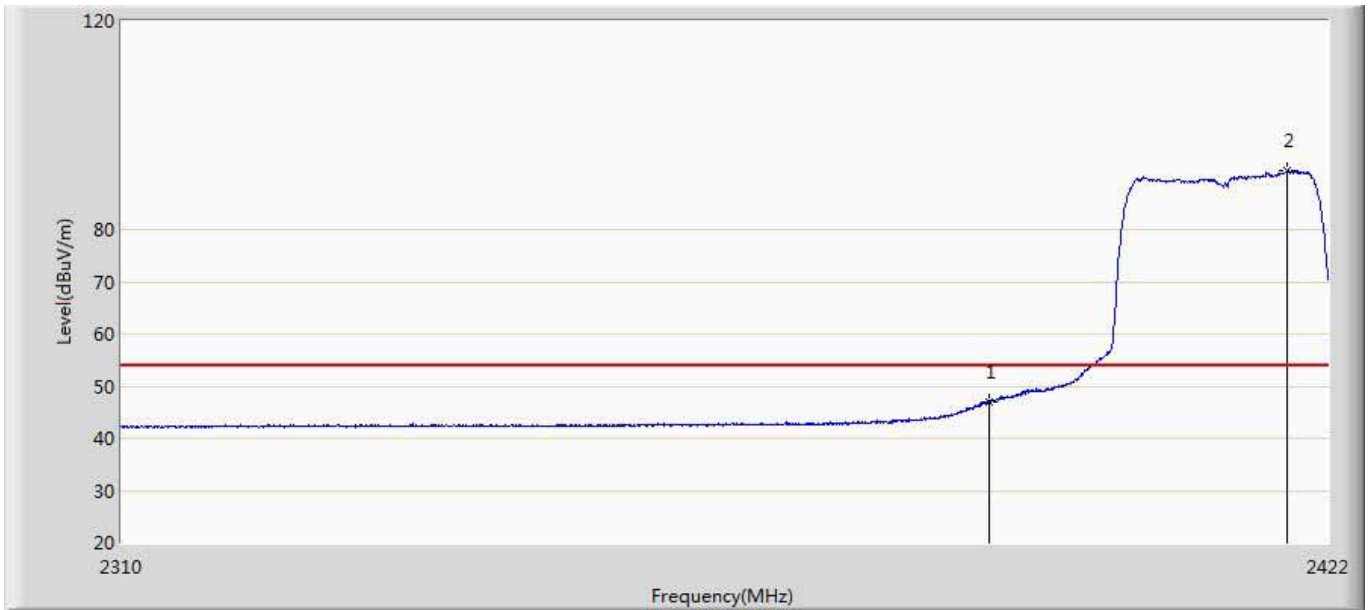
No	Mark	Frequency (MHz)	Measure Level (dBuV/m)	Reading Level (dBuV)	Over Limit (dB)	Limit (dBuV/m)	Factor (dB)	Type
1		2390.000	53.708	15.845	-0.292	54.000	37.863	AV
2	*	2404.528	98.133	60.295	44.133	N/A	N/A	AV

Site: AC5	Time: 2015/11/04 - 20:47
Limit: FCC_Part15.209_RE(3m)	Margin: 0
Probe: Horn_3117_00167055(1-18GHz)	Polarity: Horizontal
EUT: RTSA04NU	Power: AC 120V/60Hz
Note: Mode 3 Transmit at 802.11n20 CH2412	



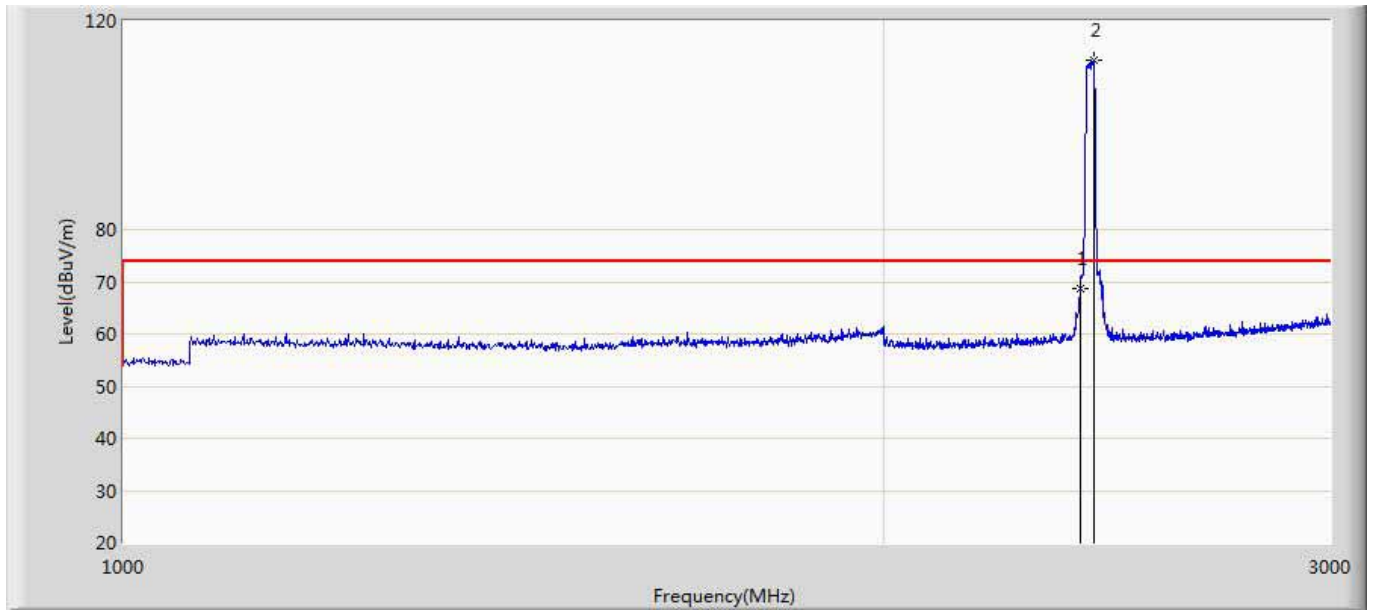
No	Mark	Frequency (MHz)	Measure Level (dBuV/m)	Reading Level (dBuV)	Over Limit (dB)	Limit (dBuV/m)	Factor (dB)	Type
1		2390.000	59.771	21.908	-14.229	74.000	37.863	PK
2	*	2419.144	101.015	63.137	27.015	N/A	N/A	PK

Site: AC5	Time: 2015/11/04 - 20:47
Limit: FCC_Part15.209_RE(3m)	Margin: 0
Probe: Horn_3117_00167055(1-18GHz)	Polarity: Horizontal
EUT: RTSA04NU	Power: AC 120V/60Hz
Note: Mode 3 Transmit at 802.11n20 CH2412	



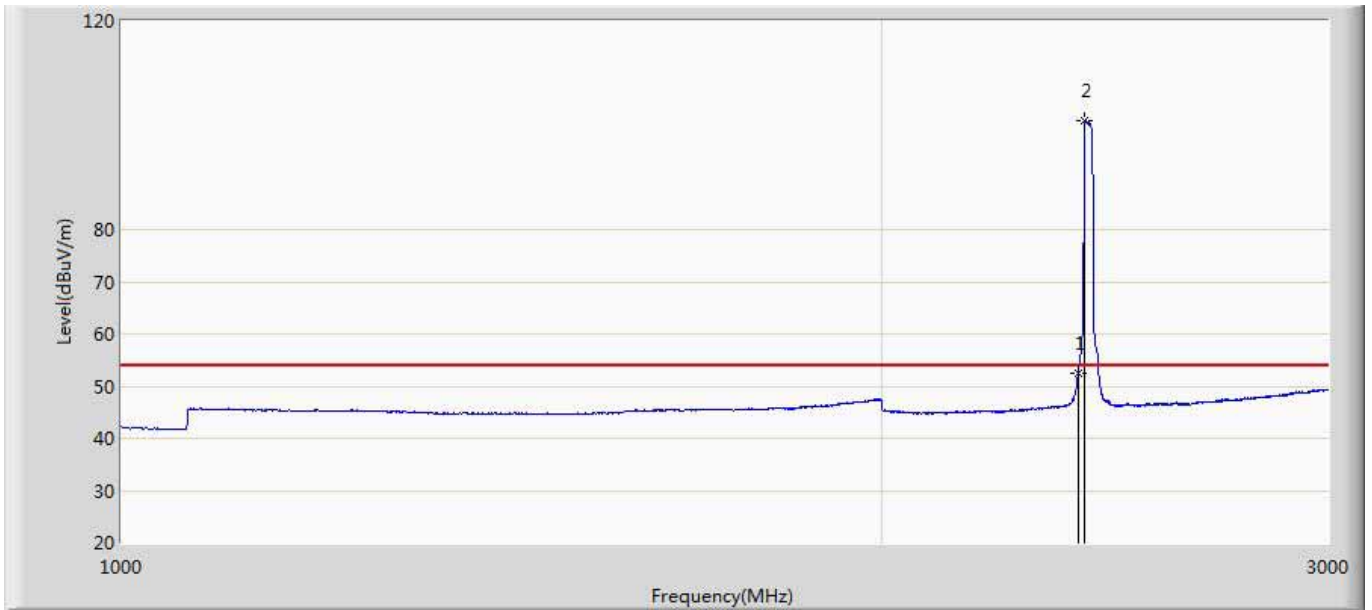
No	Mark	Frequency (MHz)	Measure Level (dBuV/m)	Reading Level (dBuV)	Over Limit (dB)	Limit (dBuV/m)	Factor (dB)	Type
1		2390.000	46.958	9.095	-7.042	54.000	37.863	AV
2	*	2418.136	91.275	53.403	37.275	N/A	N/A	AV

Site: AC5	Time: 2015/11/04 - 20:48
Limit: FCC_Part15.209_RE(3m)	Margin: 0
Probe: Horn_3117_00167055(1-18GHz)	Polarity: Vertical
EUT: RTSA04NU	Power: AC 120V/60Hz
Note: Mode 3 Transmit at 802.11n20 CH2412	



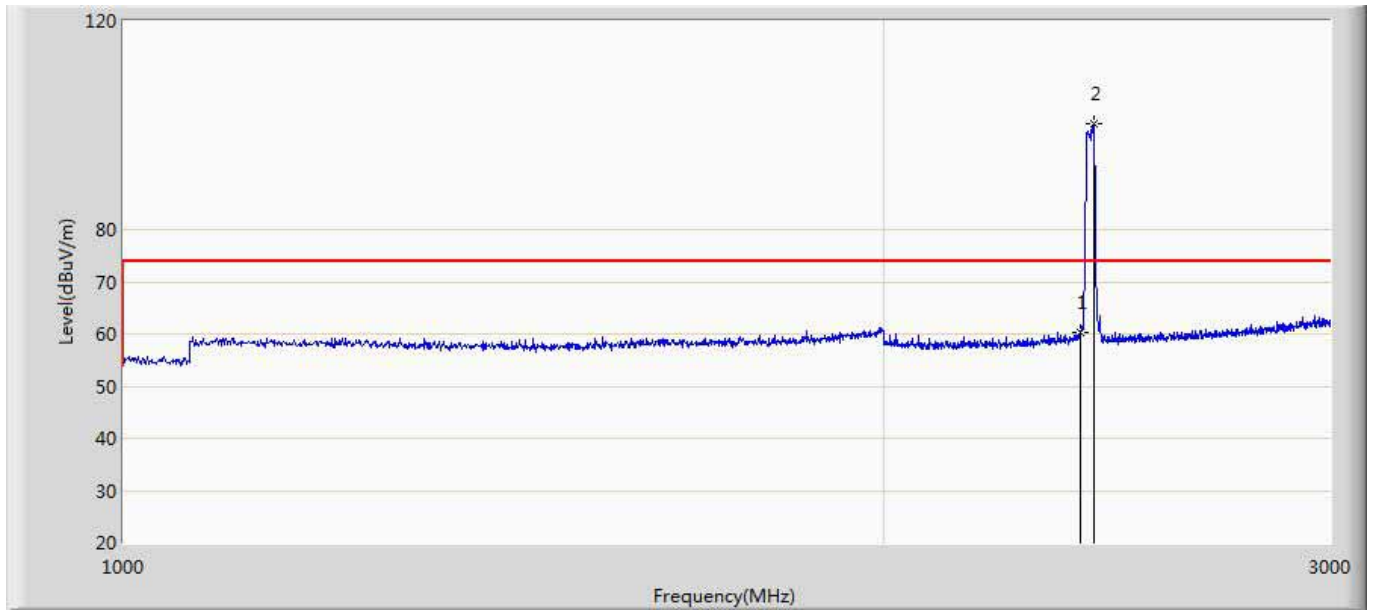
No	Mark	Frequency (MHz)	Measure Level (dBuV/m)	Reading Level (dBuV)	Over Limit (dB)	Limit (dBuV/m)	Factor (dB)	Type
1		2390.000	68.702	30.839	-5.298	74.000	37.863	PK
2	*	2419.000	112.571	74.694	38.571	N/A	N/A	PK

Site: AC5	Time: 2015/11/04 - 20:50
Limit: FCC_Part15.209_RE(3m)	Margin: 0
Probe: Horn_3117_00167055(1-18GHz)	Polarity: Vertical
EUT: RTSA04NU	Power: AC 120V/60Hz
Note: Mode 3 Transmit at 802.11n20 CH2412	



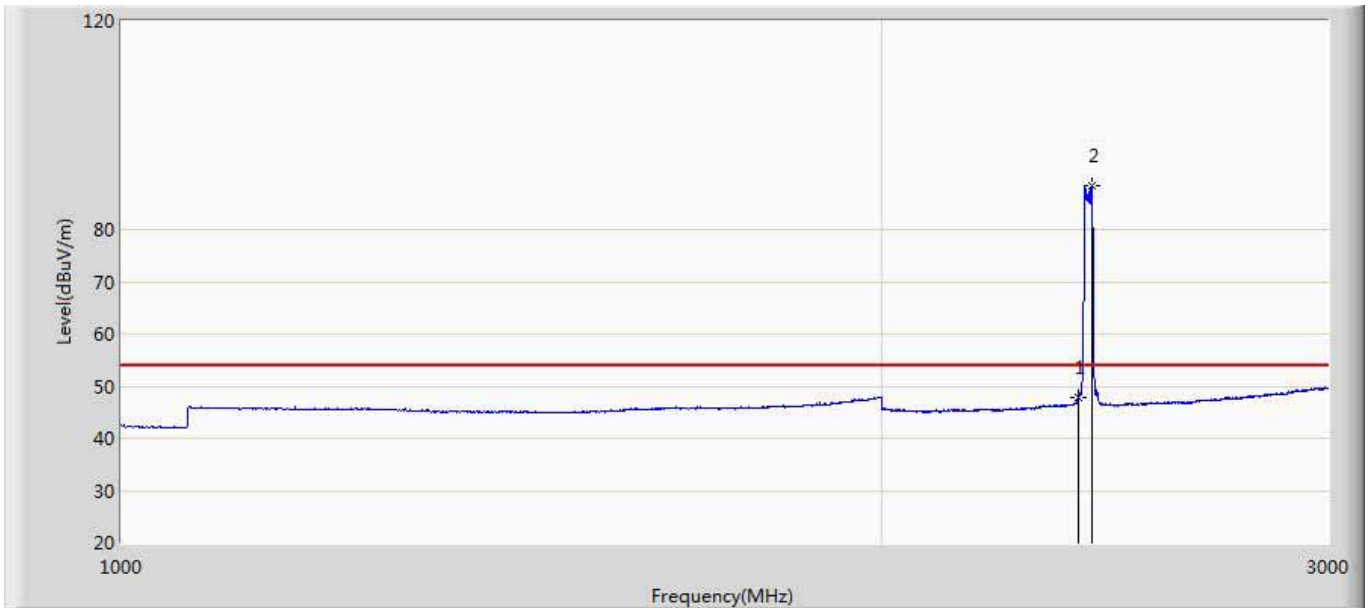
No	Mark	Frequency (MHz)	Measure Level (dBuV/m)	Reading Level (dBuV)	Over Limit (dB)	Limit (dBuV/m)	Factor (dB)	Type
1		2390.000	52.417	14.554	-1.583	54.000	37.863	AV
2	*	2405.000	100.918	63.081	46.918	N/A	N/A	AV

Site: AC5	Time: 2015/11/04 - 20:53
Limit: FCC_Part15.209_RE(3m)	Margin: 0
Probe: Horn_3117_00167055(1-18GHz)	Polarity: Horizontal
EUT: RTSA04NU	Power: AC 120V/60Hz
Note: Mode 3 Transmit at 802.11n20 CH2412	



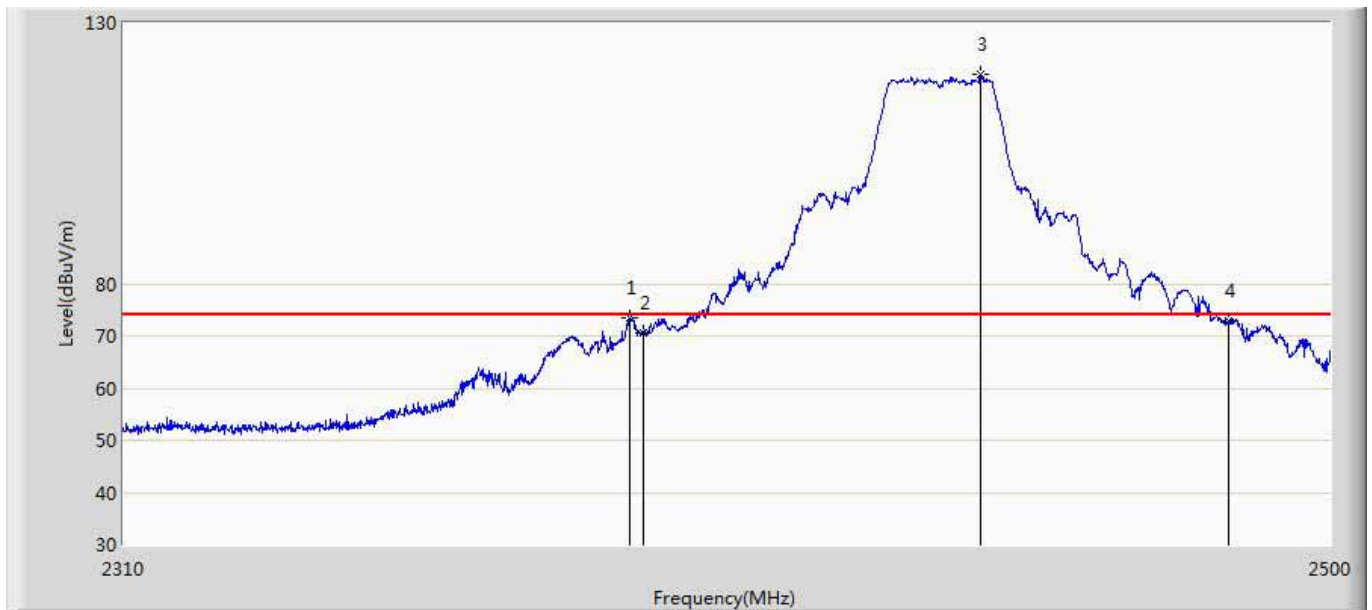
No	Mark	Frequency (MHz)	Measure Level (dBuV/m)	Reading Level (dBuV)	Over Limit (dB)	Limit (dBuV/m)	Factor (dB)	Type
1		2390.000	60.318	22.455	-13.682	74.000	37.863	PK
2	*	2419.000	100.251	62.374	26.251	N/A	N/A	PK

Site: AC5	Time: 2015/11/04 - 20:56
Limit: FCC_Part15.209_RE(3m)	Margin: 0
Probe: Horn_3117_00167055(1-18GHz)	Polarity: Horizontal
EUT: RTSA04NU	Power: AC 120V/60Hz
Note: Mode 3 Transmit at 802.11n20 CH2412	



No	Mark	Frequency (MHz)	Measure Level (dBuV/m)	Reading Level (dBuV)	Over Limit (dB)	Limit (dBuV/m)	Factor (dB)	Type
1		2390.000	47.790	9.927	-6.210	54.000	37.863	AV
2	*	2419.000	88.413	50.536	34.413	N/A	N/A	AV

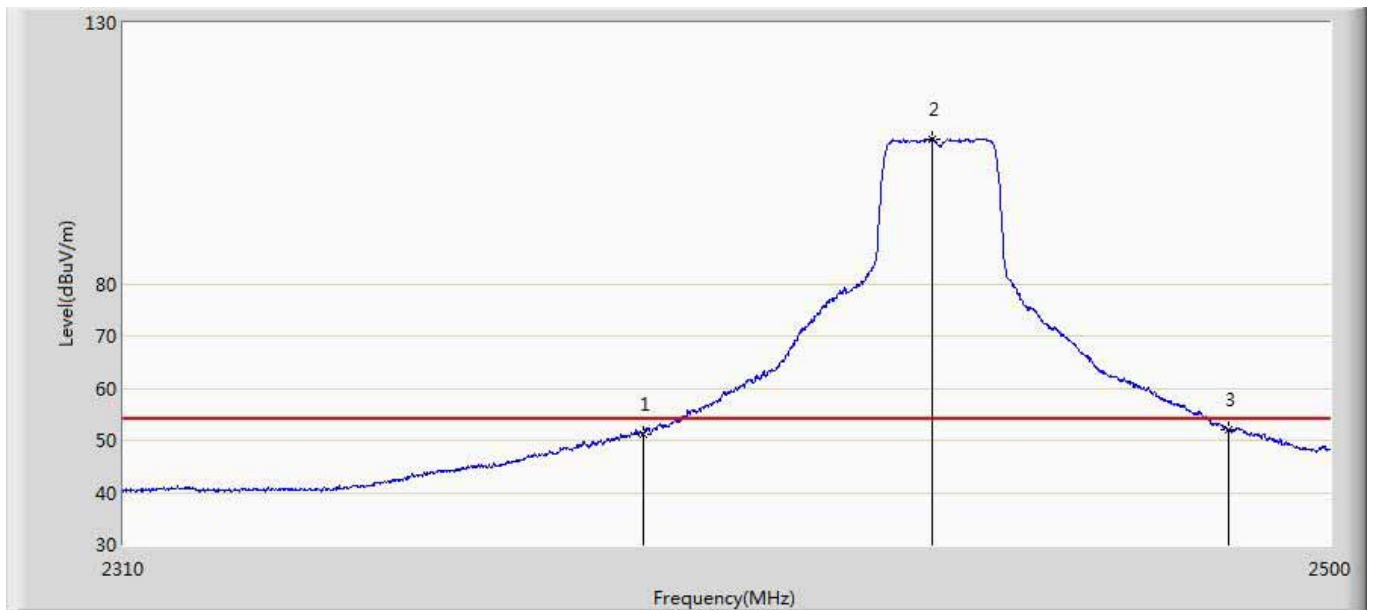
Site: AC5	Time: 2015/11/10 - 19:30
Limit: FCC_Part15.209_RE(3m)	Margin: 0
Probe: Horn_3117_00167055(1-18GHz)	Polarity: Vertical
EUT: RTSA04NU	Power: AC 120V/60Hz
Note: Mode 3 Transmit at 802.11n20 CH2437	



No	Mark	Frequency (MHz)	Measure Level (dBuV/m)	Reading Level (dBuV)	Over Limit (dB)	Limit (dBuV/m)	Factor (dB)	Type
1		2387.995	73.455	35.584	-0.545	74.000	37.871	PK
2		2390.000	70.599	32.736	-3.401	74.000	37.863	PK
3	*	2443.475	120.058	82.119	46.058	74.000	37.939	PK
4		2483.500	72.768	34.730	-1.232	74.000	38.038	PK

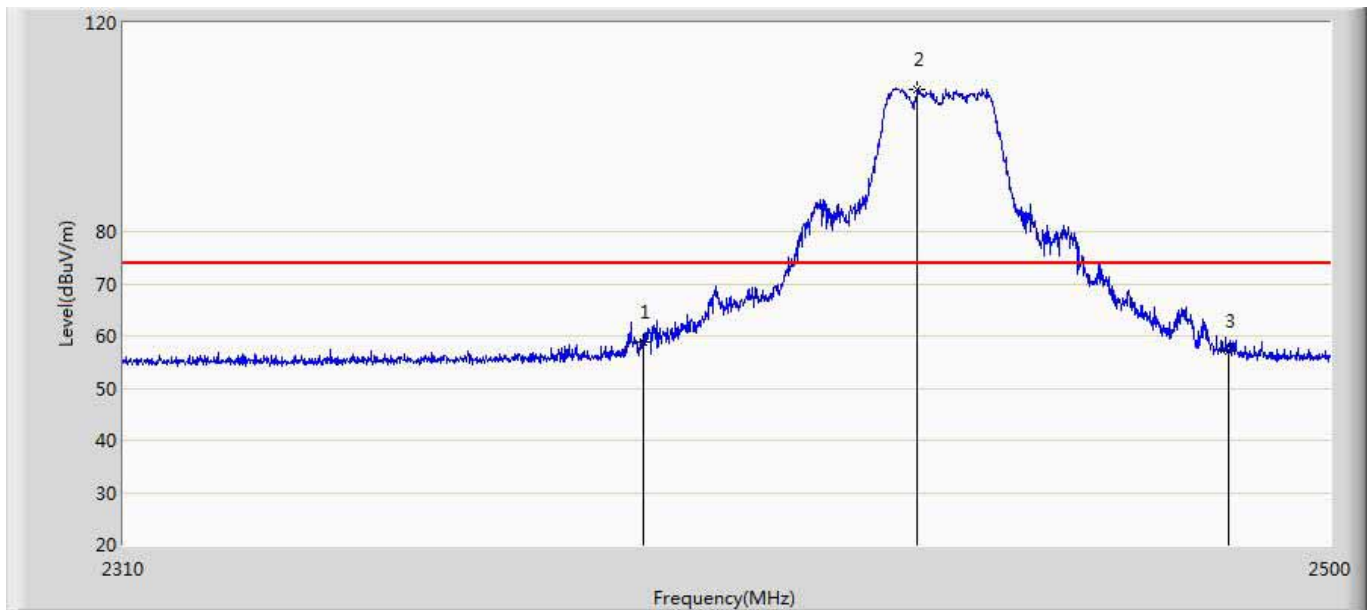


Site: AC5	Time: 2015/11/10 - 19:32
Limit: FCC_Part15.209_RE(3m)	Margin: 0
Probe: Horn_3117_00167055(1-18GHz)	Polarity: Vertical
EUT: RTSA04NU	Power: AC 120V/60Hz
Note: Mode 3 Transmit at 802.11n20 CH2437	



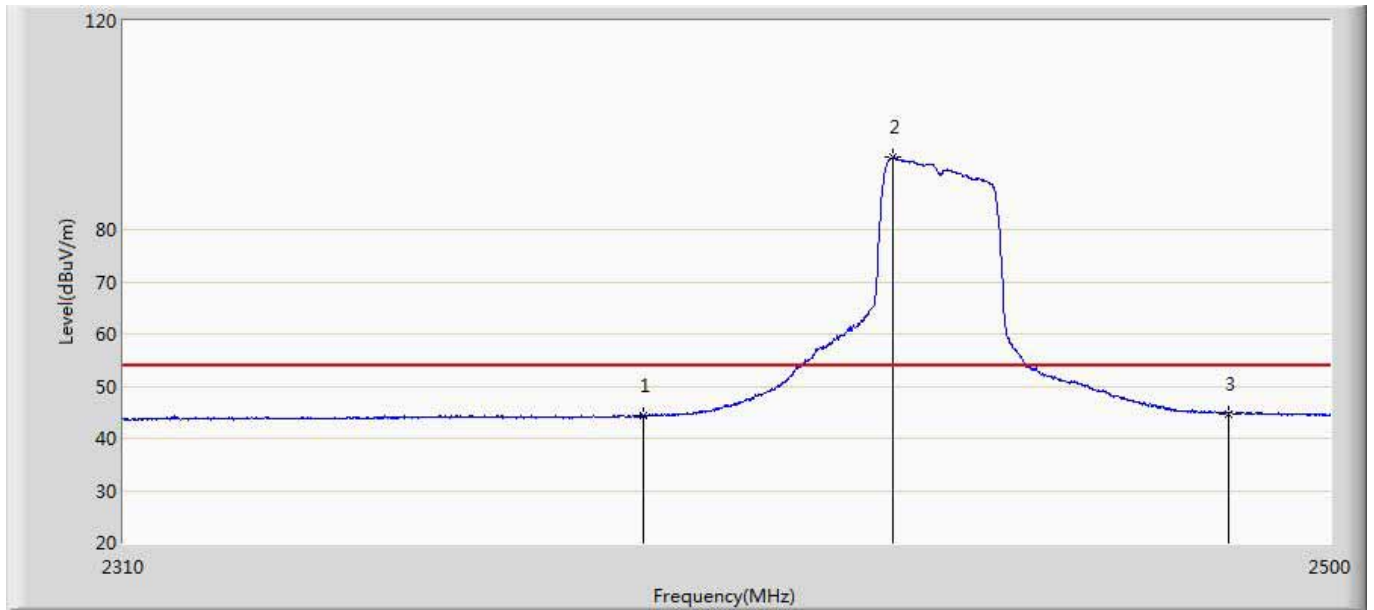
No	Mark	Frequency (MHz)	Measure Level (dBuV/m)	Reading Level (dBuV)	Over Limit (dB)	Limit (dBuV/m)	Factor (dB)	Type
1		2390.000	51.186	13.323	-2.814	54.000	37.863	AV
2	*	2435.780	107.812	69.878	53.812	54.000	37.934	AV
3		2483.500	52.137	14.099	-1.863	54.000	38.038	AV

Site: AC5	Time: 2015/11/10 - 19:34
Limit: FCC_Part15.209_RE(3m)	Margin: 0
Probe: Horn_3117_00167055(1-18GHz)	Polarity: Horizontal
EUT: RTSA04NU	Power: AC 120V/60Hz
Note: Mode 3 Transmit at 802.11n20 CH2437	



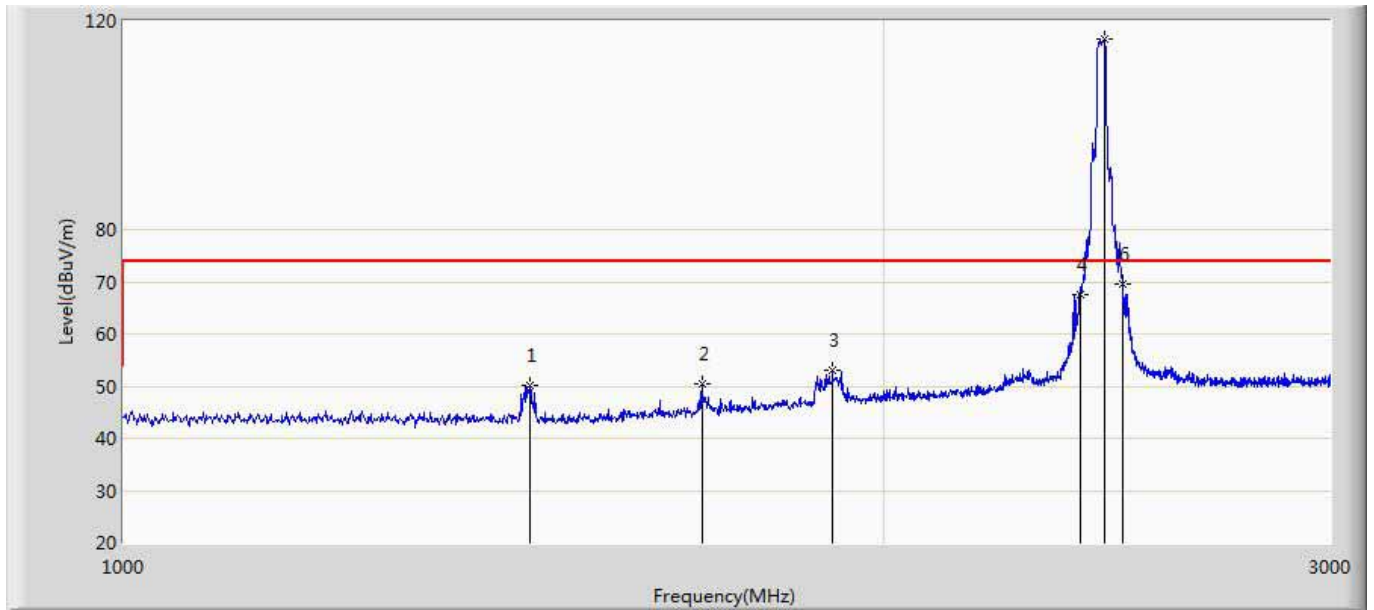
No	Mark	Frequency (MHz)	Measure Level (dBuV/m)	Reading Level (dBuV)	Over Limit (dB)	Limit (dBuV/m)	Factor (dB)	Type
1		2390.000	58.779	20.916	-15.221	74.000	37.863	PK
2	*	2433.310	107.260	69.327	33.260	74.000	37.932	PK
3		2483.500	57.057	19.019	-16.943	74.000	38.038	PK

Site: AC5	Time: 2015/11/10 - 19:38
Limit: FCC_Part15.209_RE(3m)	Margin: 0
Probe: Horn_3117_00167055(1-18GHz)	Polarity: Horizontal
EUT: RTSA04NU	Power: AC 120V/60Hz
Note: Mode 3 Transmit at 802.11n20 CH2437	



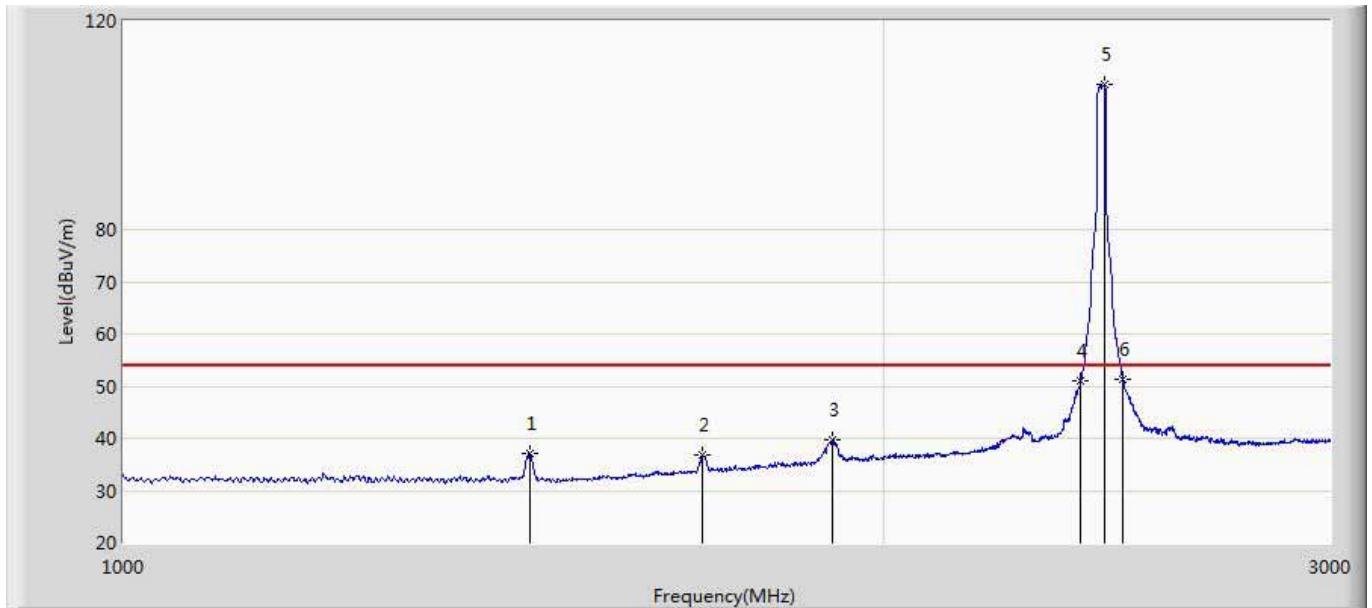
No	Mark	Frequency (MHz)	Measure Level (dBuV/m)	Reading Level (dBuV)	Over Limit (dB)	Limit (dBuV/m)	Factor (dB)	Type
1		2390.000	44.364	6.501	-9.636	54.000	37.863	AV
2	*	2429.510	93.793	55.863	39.793	54.000	37.930	AV
3		2483.500	44.747	6.709	-9.253	54.000	38.038	AV

Site: AC5	Time: 2015/11/10 - 19:38
Limit: FCC_Part15.209_RE(3m)	Margin: 0
Probe: Horn_3117_00167055(1-18GHz)	Polarity: Vertical
EUT: RTSA04NU	Power: AC 120V/60Hz
Note: Mode 3 Transmit at 802.11n20 CH2437	



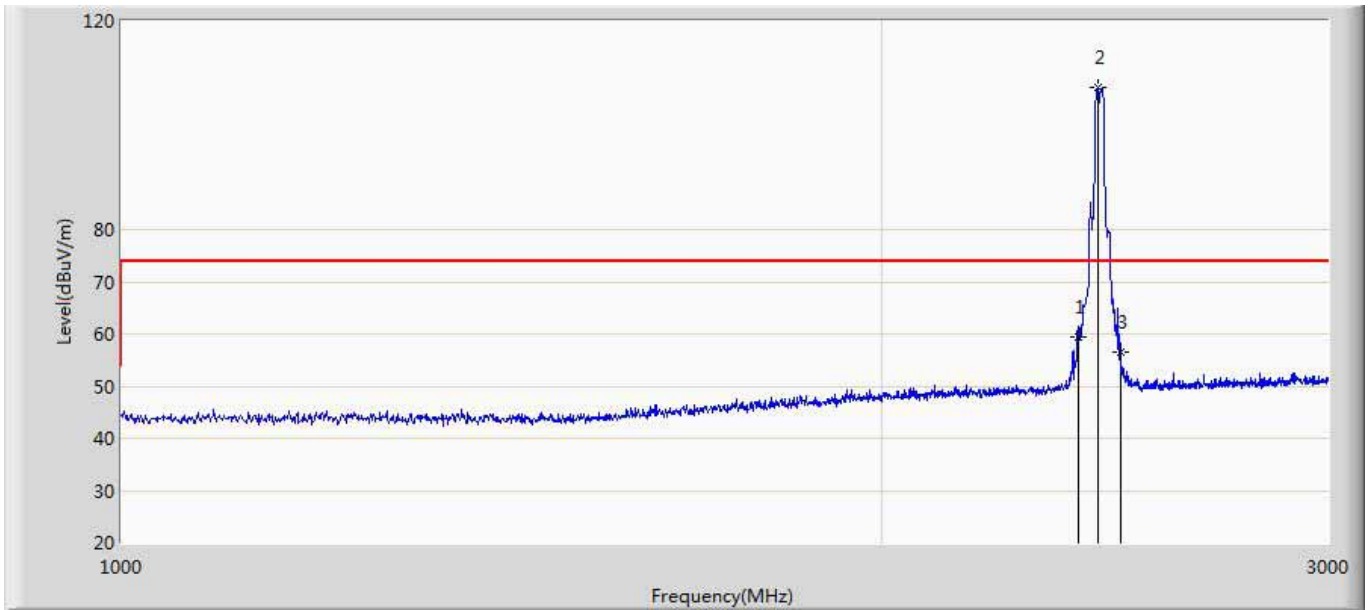
No	Mark	Frequency (MHz)	Measure Level (dBuV/m)	Reading Level (dBuV)	Over Limit (dB)	Limit (dBuV/m)	Factor (dB)	Type
1		1449.000	50.270	17.861	-23.730	74.000	32.409	PK
2		1694.000	50.404	16.309	-23.596	74.000	34.095	PK
3		1907.000	53.101	17.131	-20.899	74.000	35.970	PK
4		2390.000	67.474	29.611	-6.526	74.000	37.863	PK
5	*	2443.000	116.546	78.607	42.546	74.000	37.939	PK
6		2483.500	69.617	31.579	-4.383	74.000	38.038	PK

Site: AC5	Time: 2015/11/10 - 19:39
Limit: FCC_Part15.209_RE(3m)	Margin: 0
Probe: Horn_3117_00167055(1-18GHz)	Polarity: Vertical
EUT: RTSA04NU	Power: AC 120V/60Hz
Note: Mode 3 Transmit at 802.11n20 CH2437	



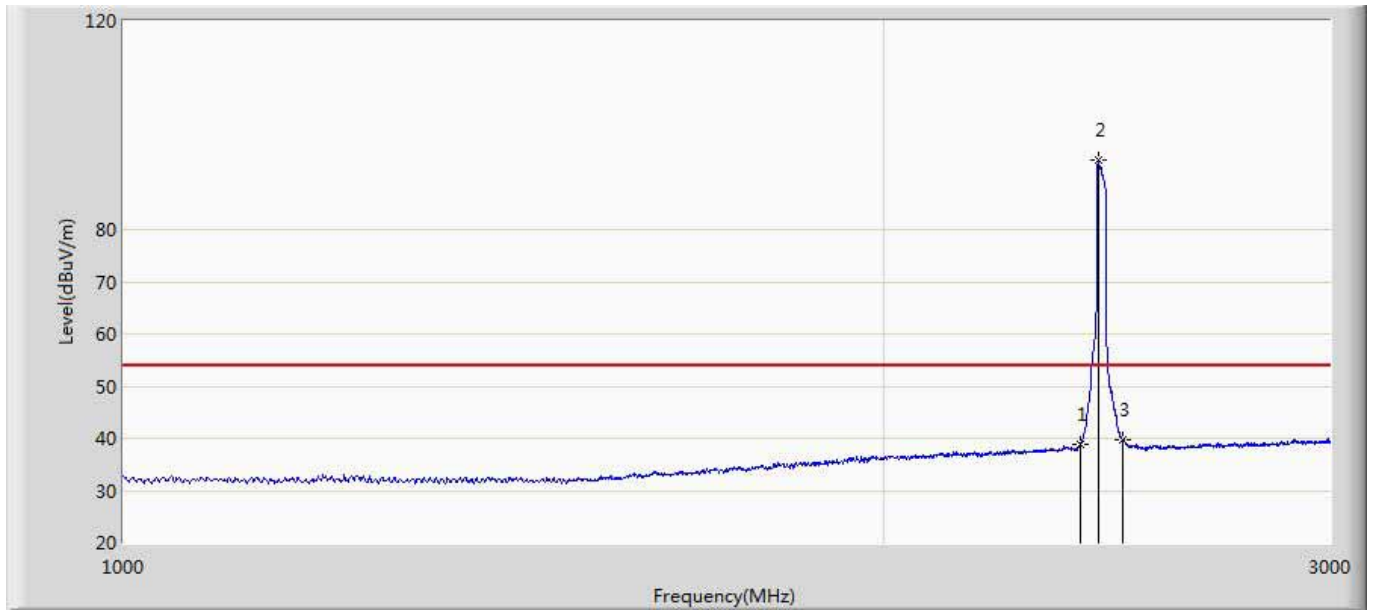
No	Mark	Frequency (MHz)	Measure Level (dBuV/m)	Reading Level (dBuV)	Over Limit (dB)	Limit (dBuV/m)	Factor (dB)	Type
1		1449.000	37.150	4.741	-16.850	54.000	32.409	AV
2		1695.000	36.924	2.821	-17.076	54.000	34.103	AV
3		1908.000	39.815	3.837	-14.185	54.000	35.978	AV
4		2390.000	50.908	13.045	-3.092	54.000	37.863	AV
5	*	2444.000	107.897	69.958	53.897	54.000	37.940	AV
6		2483.500	51.361	13.323	-2.639	54.000	38.038	AV

Site: AC5	Time: 2015/11/10 - 19:41
Limit: FCC_Part15.209_RE(3m)	Margin: 0
Probe: Horn_3117_00167055(1-18GHz)	Polarity: Horizontal
EUT: RTSA04NU	Power: AC 120V/60Hz
Note: Mode 3 Transmit at 802.11n20 CH2437	



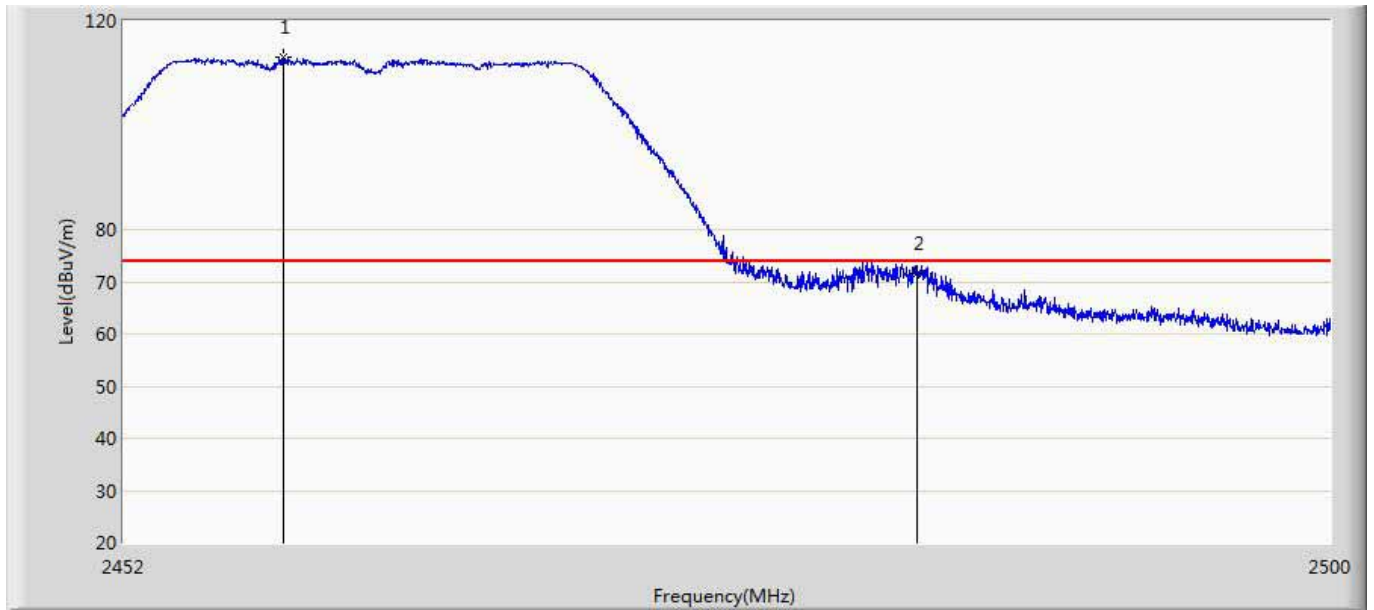
No	Mark	Frequency (MHz)	Measure Level (dBuV/m)	Reading Level (dBuV)	Over Limit (dB)	Limit (dBuV/m)	Factor (dB)	Type
1		2390.000	59.410	21.547	-14.590	74.000	37.863	PK
2	*	2433.000	107.164	69.232	33.164	74.000	37.933	PK
3		2483.500	56.566	18.528	-17.434	74.000	38.038	PK

Site: AC5	Time: 2015/11/10 - 19:43
Limit: FCC_Part15.209_RE(3m)	Margin: 0
Probe: Horn_3117_00167055(1-18GHz)	Polarity: Horizontal
EUT: RTSA04NU	Power: AC 120V/60Hz
Note: Mode 3 Transmit at 802.11n20 CH2437	



No	Mark	Frequency (MHz)	Measure Level (dBuV/m)	Reading Level (dBuV)	Over Limit (dB)	Limit (dBuV/m)	Factor (dB)	Type
1		2390.000	38.917	1.054	-15.083	54.000	37.863	AV
2	*	2429.000	93.386	55.456	39.386	54.000	37.930	AV
3		2483.500	39.777	1.739	-14.223	54.000	38.038	AV

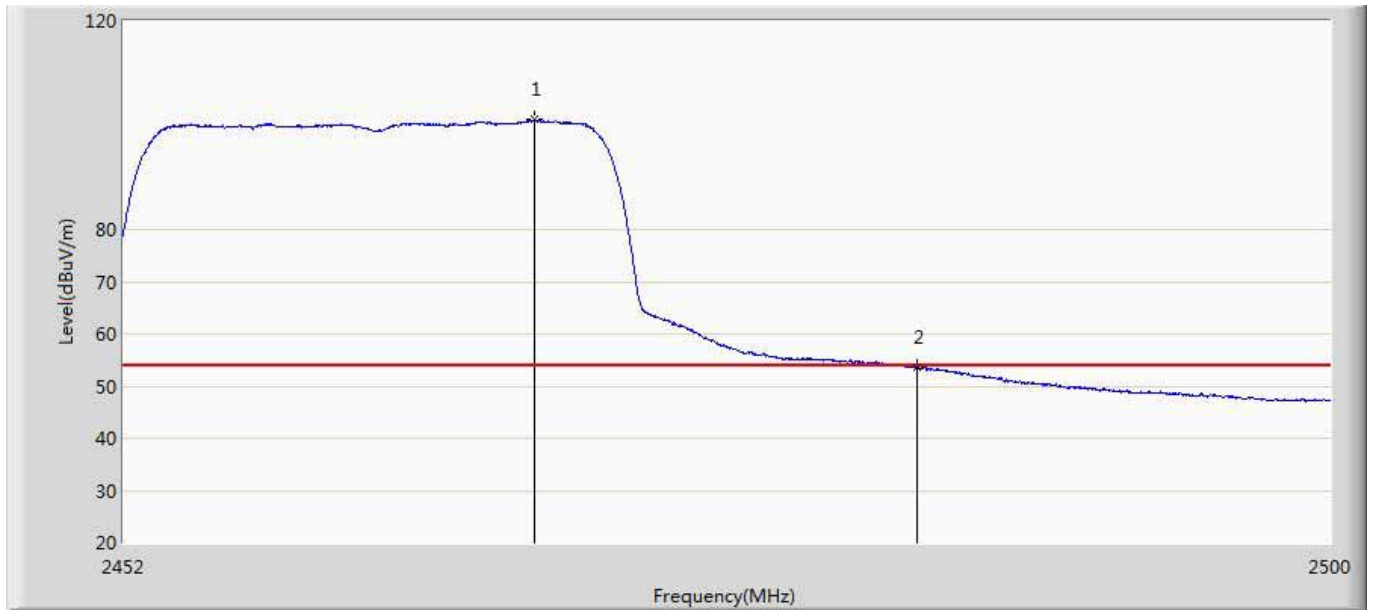
Site: AC5	Time: 2015/11/04 - 20:59
Limit: FCC_Part15.209_RE(3m)	Margin: 0
Probe: Horn_3117_00167055(1-18GHz)	Polarity: Vertical
EUT: RTSA04NU	Power: AC 120V/60Hz
Note: Mode 3 Transmit at 802.11n20 CH2462	



No	Mark	Frequency (MHz)	Measure Level (dBuV/m)	Reading Level (dBuV)	Over Limit (dB)	Limit (dBuV/m)	Factor (dB)	Type
1	*	2458.336	113.020	75.027	39.020	N/A	N/A	PK
2		2483.500	71.699	33.661	-2.301	74.000	38.038	PK

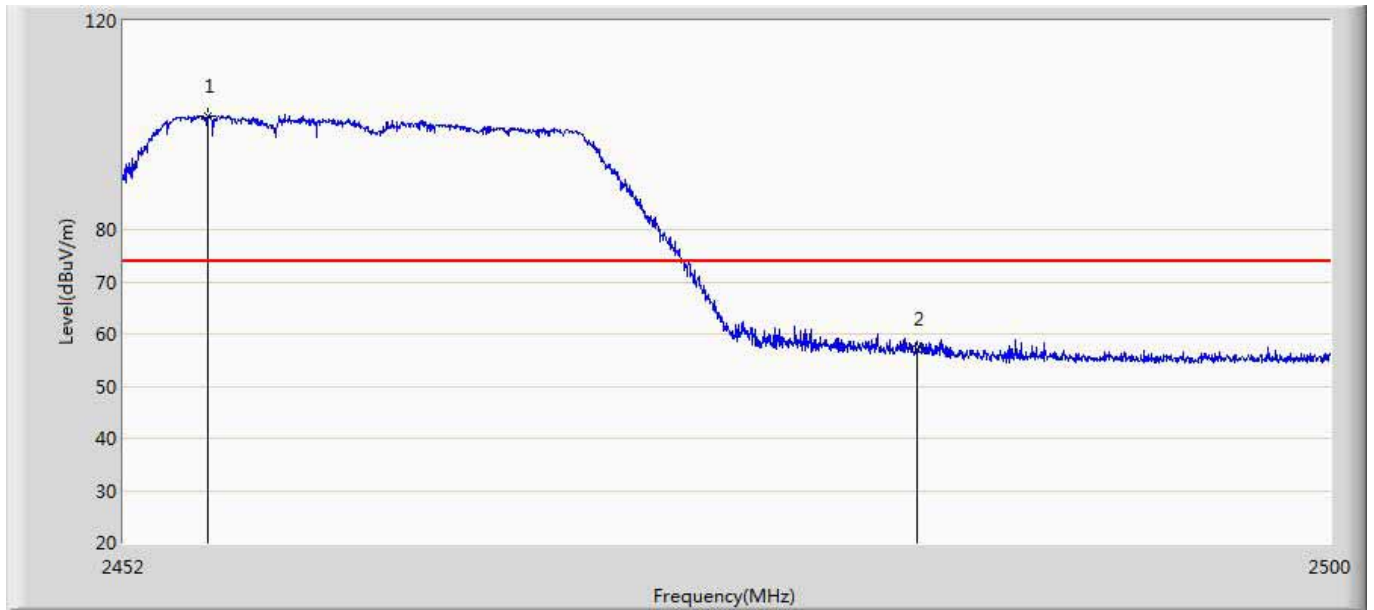


Site: AC5	Time: 2015/11/04 - 21:00
Limit: FCC_Part15.209_RE(3m)	Margin: 0
Probe: Horn_3117_00167055(1-18GHz)	Polarity: Vertical
EUT: RTSA04NU	Power: AC 120V/60Hz
Note: Mode 3 Transmit at 802.11n20 CH2462	



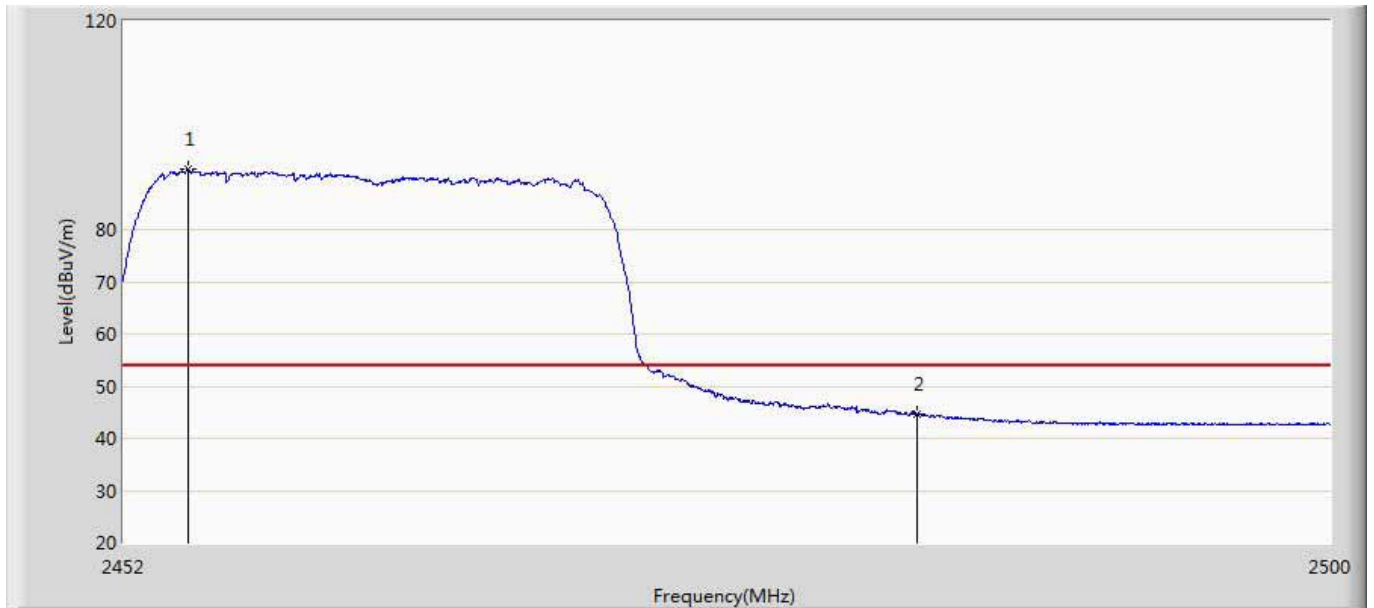
No	Mark	Frequency (MHz)	Measure Level (dBuV/m)	Reading Level (dBuV)	Over Limit (dB)	Limit (dBuV/m)	Factor (dB)	Type
1	*	2468.248	101.019	63.012	47.019	N/A	N/A	AV
2		2483.500	53.713	15.675	-0.287	54.000	38.038	AV

Site: AC5	Time: 2015/11/04 - 21:05
Limit: FCC_Part15.209_RE(3m)	Margin: 0
Probe: Horn_3117_00167055(1-18GHz)	Polarity: Horizontal
EUT: RTSA04NU	Power: AC 120V/60Hz
Note: Mode 3 Transmit at 802.11n20 CH2462	



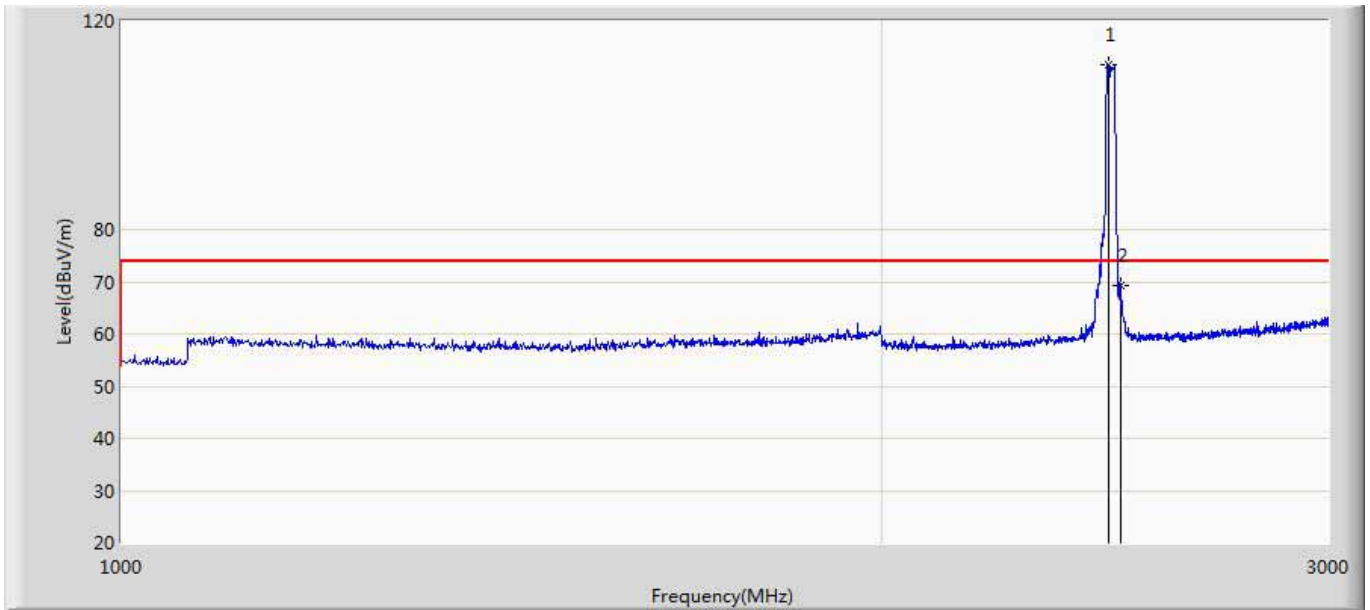
No	Mark	Frequency (MHz)	Measure Level (dBuV/m)	Reading Level (dBuV)	Over Limit (dB)	Limit (dBuV/m)	Factor (dB)	Type
1	*	2455.360	101.856	63.875	27.856	N/A	N/A	PK
2		2483.500	57.170	19.132	-16.830	74.000	38.038	PK

Site: AC5	Time: 2015/11/04 - 21:06
Limit: FCC_Part15.209_RE(3m)	Margin: 0
Probe: Horn_3117_00167055(1-18GHz)	Polarity: Horizontal
EUT: RTSA04NU	Power: AC 120V/60Hz
Note: Mode 3 Transmit at 802.11n20 CH2462	



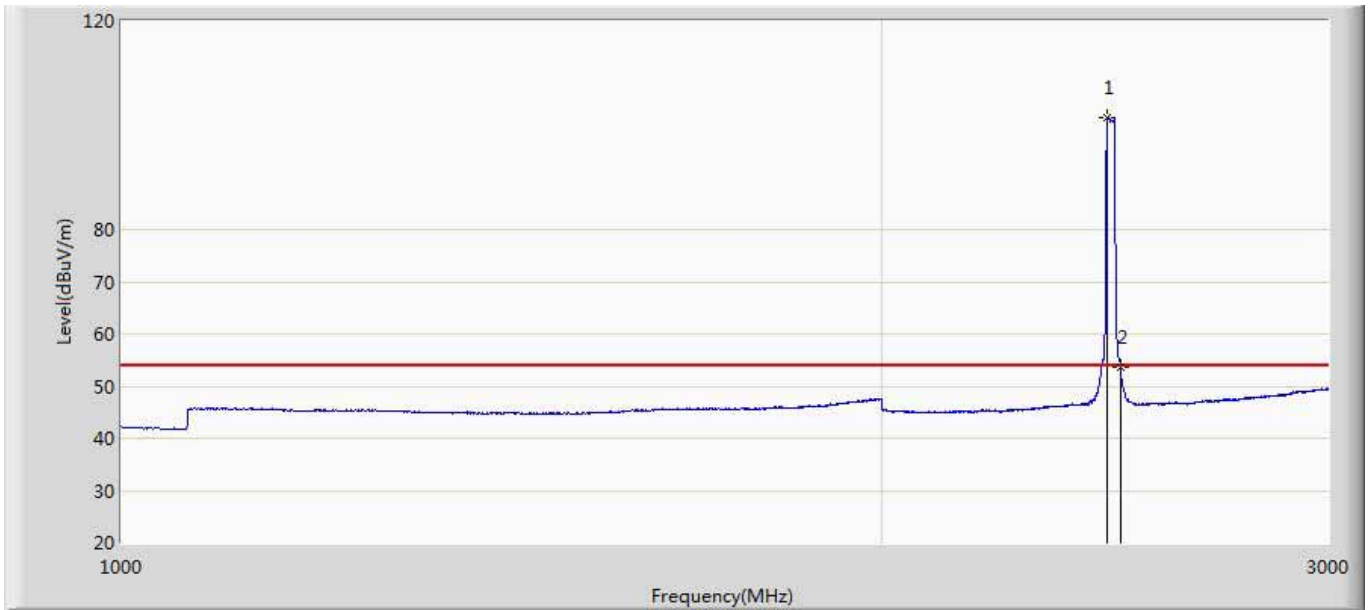
No	Mark	Frequency (MHz)	Measure Level (dBuV/m)	Reading Level (dBuV)	Over Limit (dB)	Limit (dBuV/m)	Factor (dB)	Type
1	*	2454.568	91.481	53.503	37.481	N/A	N/A	AV
2		2483.500	44.631	6.593	-9.369	54.000	38.038	AV

Site: AC5	Time: 2015/11/04 - 21:08
Limit: FCC_Part15.209_RE(3m)	Margin: 0
Probe: Horn_3117_00167055(1-18GHz)	Polarity: Vertical
EUT: RTSA04NU	Power: AC 120V/60Hz
Note: Mode 3 Transmit at 802.11n20 CH2462	



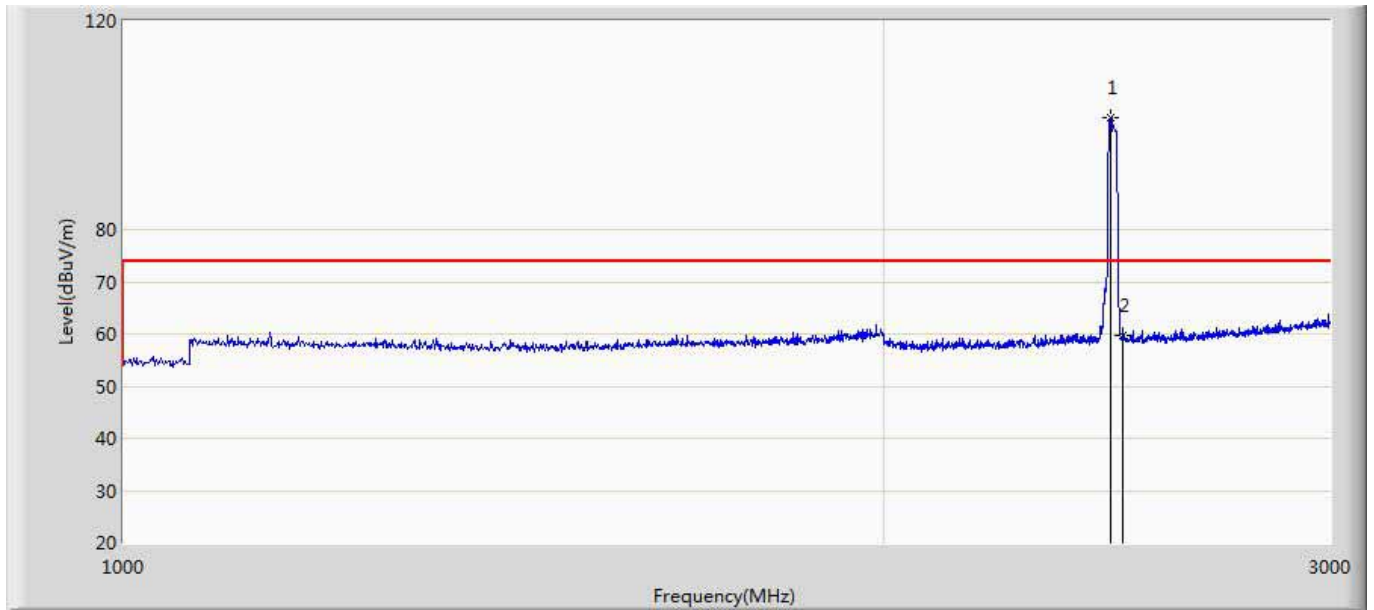
No	Mark	Frequency (MHz)	Measure Level (dBuV/m)	Reading Level (dBuV)	Over Limit (dB)	Limit (dBuV/m)	Factor (dB)	Type
1	*	2456.000	111.493	73.509	37.493	N/A	N/A	PK
2		2483.500	69.265	31.227	-4.735	74.000	38.038	PK

Site: AC5	Time: 2015/11/04 - 21:10
Limit: FCC_Part15.209_RE(3m)	Margin: 0
Probe: Horn_3117_00167055(1-18GHz)	Polarity: Vertical
EUT: RTSA04NU	Power: AC 120V/60Hz
Note: Mode 3 Transmit at 802.11n20 CH2462	



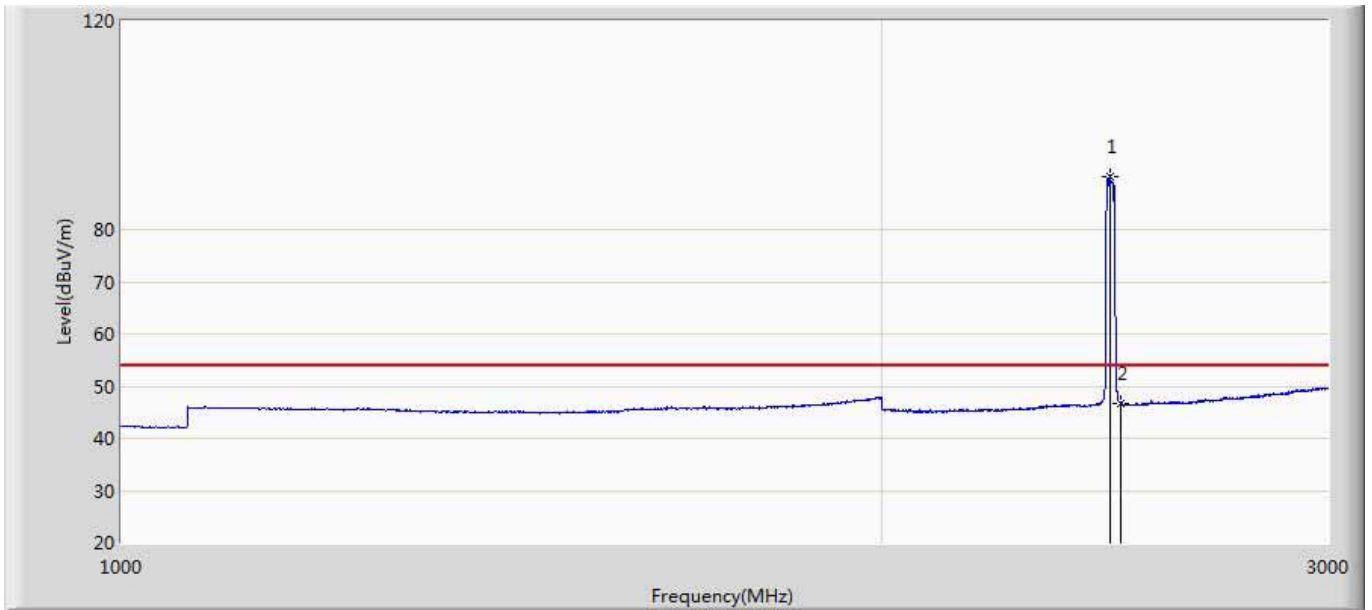
No	Mark	Frequency (MHz)	Measure Level (dBuV/m)	Reading Level (dBuV)	Over Limit (dB)	Limit (dBuV/m)	Factor (dB)	Type
1	*	2455.000	101.380	63.400	47.380	N/A	N/A	AV
2		2483.500	53.734	15.696	-0.266	54.000	38.038	AV

Site: AC5	Time: 2015/11/04 - 21:11
Limit: FCC_Part15.209_RE(3m)	Margin: 0
Probe: Horn_3117_00167055(1-18GHz)	Polarity: Horizontal
EUT: RTSA04NU	Power: AC 120V/60Hz
Note: Mode 3 Transmit at 802.11n20 CH2462	



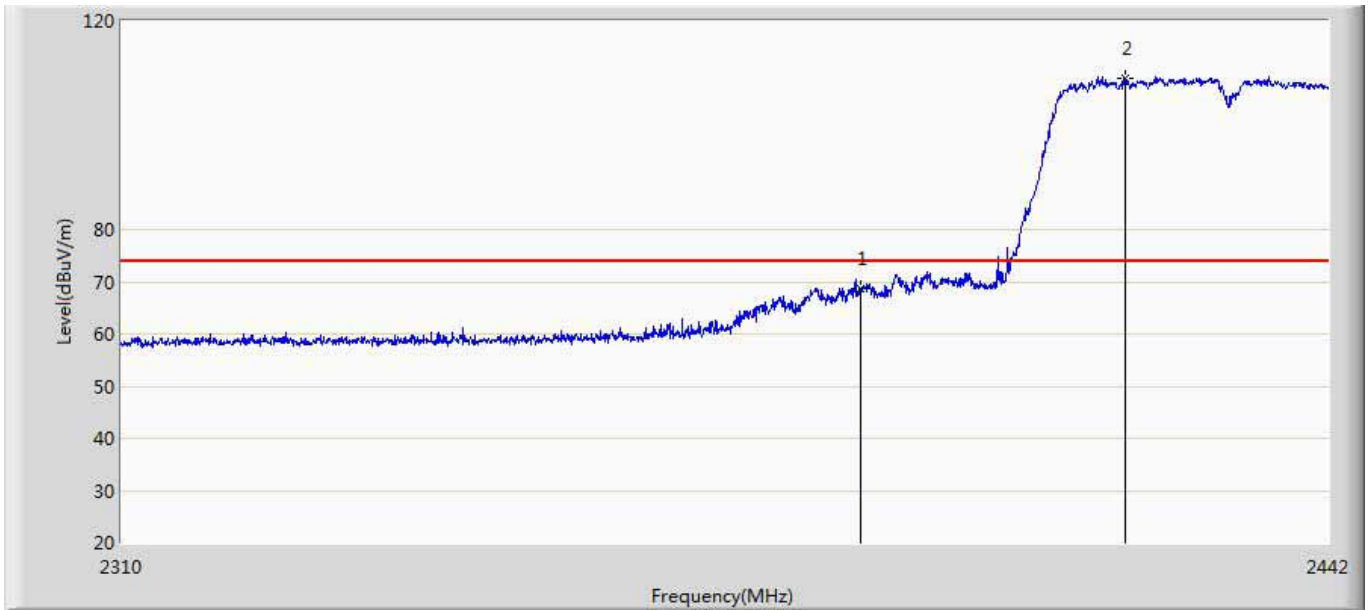
No	Mark	Frequency (MHz)	Measure Level (dBuV/m)	Reading Level (dBuV)	Over Limit (dB)	Limit (dBuV/m)	Factor (dB)	Type
1	*	2456.000	101.326	63.342	27.326	N/A	N/A	PK
2		2483.500	59.725	21.687	-14.275	74.000	38.038	PK

Site: AC5	Time: 2015/11/04 - 21:13
Limit: FCC_Part15.209_RE(3m)	Margin: 0
Probe: Horn_3117_00167055(1-18GHz)	Polarity: Horizontal
EUT: RTSA04NU	Power: AC 120V/60Hz
Note: Mode 3 Transmit at 802.11n20 CH2462	



No	Mark	Frequency (MHz)	Measure Level (dBuV/m)	Reading Level (dBuV)	Over Limit (dB)	Limit (dBuV/m)	Factor (dB)	Type
1	*	2460.000	90.111	52.111	36.111	N/A	N/A	AV
2		2483.500	46.732	8.694	-7.268	54.000	38.038	AV

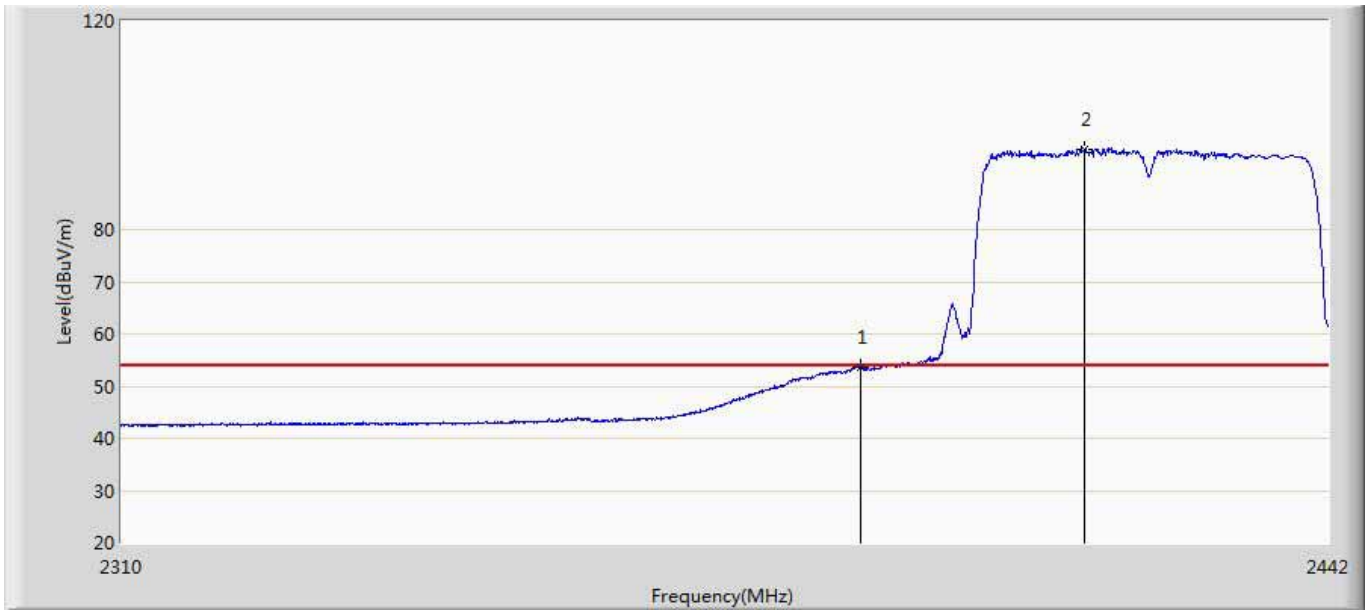
Site: AC5	Time: 2015/11/04 - 21:17
Limit: FCC_Part15.209_RE(3m)	Margin: 0
Probe: Horn_3117_00167055(1-18GHz)	Polarity: Vertical
EUT: RTSA04NU	Power: AC 120V/60Hz
Note: Mode 4 Transmit at 802.11n40 CH2422	



No	Mark	Frequency (MHz)	Measure Level (dBuV/m)	Reading Level (dBuV)	Over Limit (dB)	Limit (dBuV/m)	Factor (dB)	Type
1		2390.000	68.599	30.736	-5.401	74.000	37.863	PK
2	*	2419.296	108.864	70.985	34.864	N/A	N/A	PK

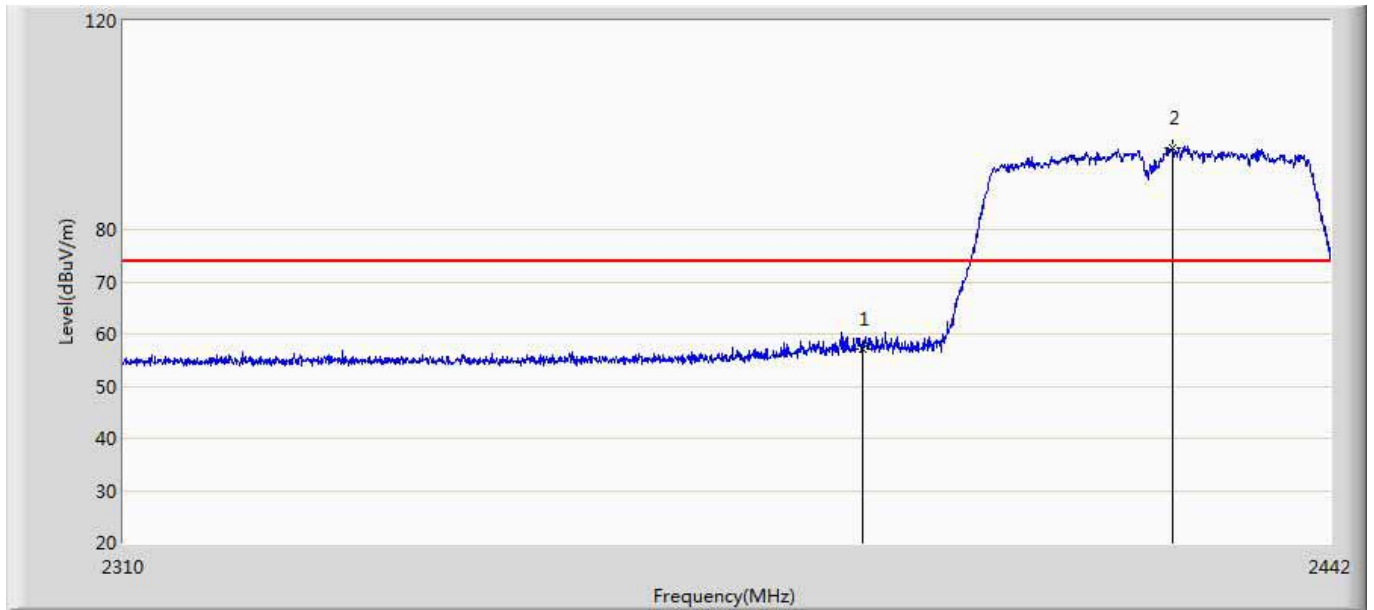


Site: AC5	Time: 2015/11/04 - 21:19
Limit: FCC_Part15.209_RE(3m)	Margin: 0
Probe: Horn_3117_00167055(1-18GHz)	Polarity: Vertical
EUT: RTSA04NU	Power: AC 120V/60Hz
Note: Mode 4 Transmit at 802.11n40 CH2422	



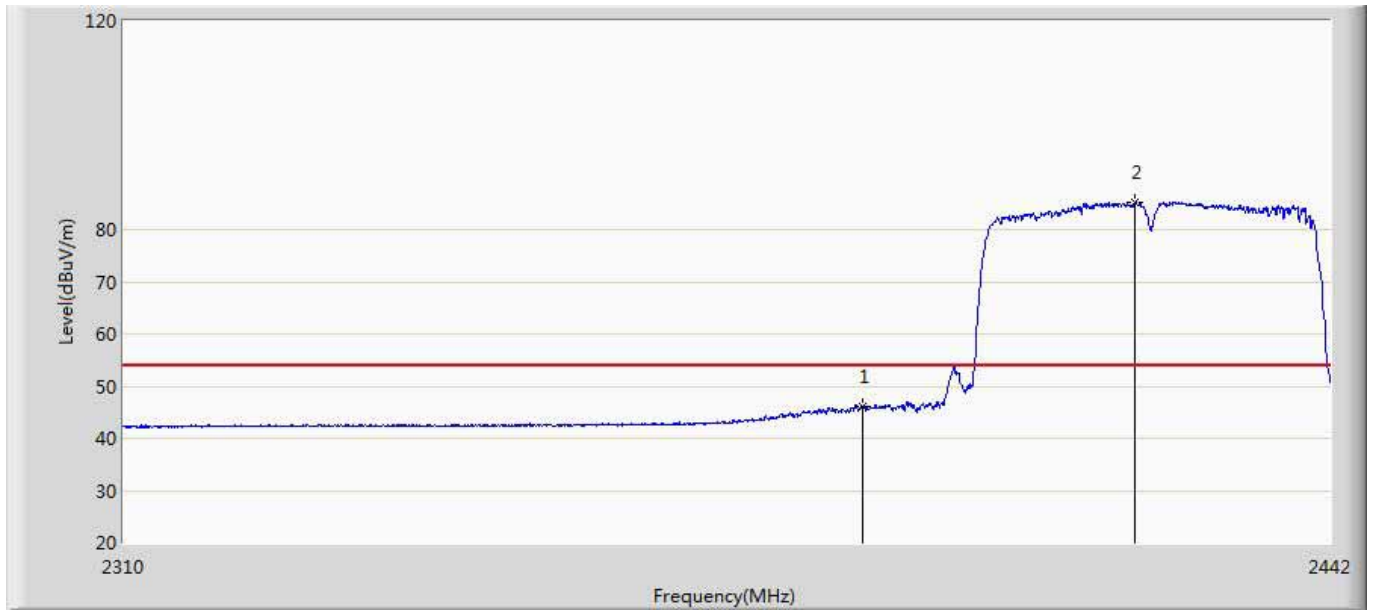
No	Mark	Frequency (MHz)	Measure Level (dBuV/m)	Reading Level (dBuV)	Over Limit (dB)	Limit (dBuV/m)	Factor (dB)	Type
1		2390.000	53.624	15.761	-0.376	54.000	37.863	AV
2	*	2414.808	95.402	57.549	41.402	N/A	N/A	AV

Site: AC5	Time: 2015/11/04 - 21:26
Limit: FCC_Part15.209_RE(3m)	Margin: 0
Probe: Horn_3117_00167055(1-18GHz)	Polarity: Horizontal
EUT: RTSA04NU	Power: AC 120V/60Hz
Note: Mode 4 Transmit at 802.11n40 CH2422	



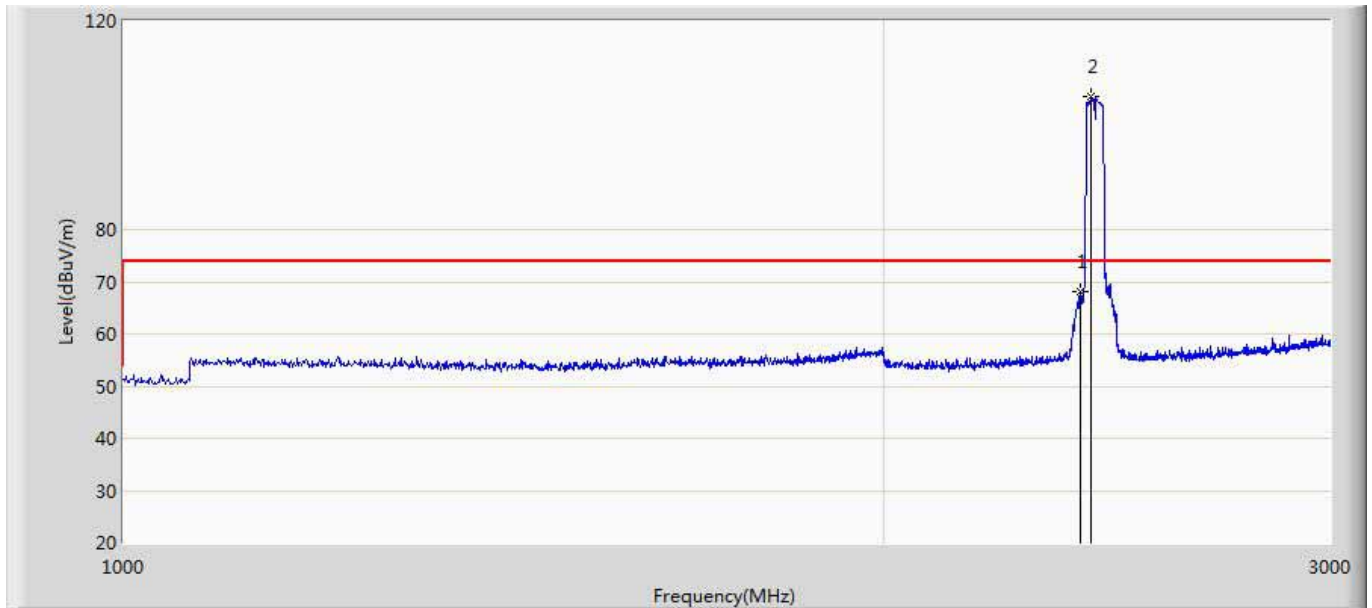
No	Mark	Frequency (MHz)	Measure Level (dBuV/m)	Reading Level (dBuV)	Over Limit (dB)	Limit (dBuV/m)	Factor (dB)	Type
1		2390.000	57.049	19.186	-16.951	74.000	37.863	PK
2	*	2424.312	95.691	57.783	21.691	N/A	N/A	PK

Site: AC5	Time: 2015/11/04 - 21:26
Limit: FCC_Part15.209_RE(3m)	Margin: 0
Probe: Horn_3117_00167055(1-18GHz)	Polarity: Horizontal
EUT: RTSA04NU	Power: AC 120V/60Hz
Note: Mode 4 Transmit at 802.11n40 CH2422	



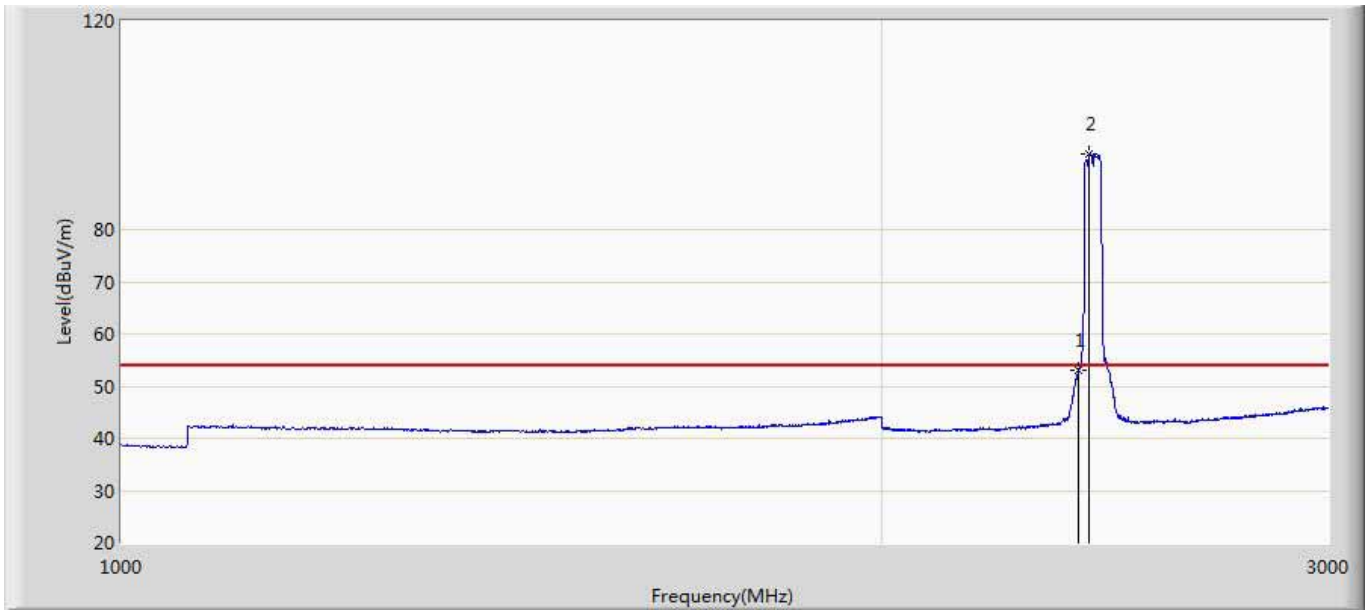
No	Mark	Frequency (MHz)	Measure Level (dBuV/m)	Reading Level (dBuV)	Over Limit (dB)	Limit (dBuV/m)	Factor (dB)	Type
1		2390.000	45.962	8.099	-8.038	54.000	37.863	AV
2	*	2420.220	85.085	47.201	31.085	N/A	N/A	AV

Site: AC5	Time: 2015/11/04 - 21:27
Limit: FCC_Part15.209_RE(3m)	Margin: 0
Probe: Horn_3117_00167055(1-18GHz)	Polarity: Vertical
EUT: RTSA04NU	Power: AC 120V/60Hz
Note: Mode 4 Transmit at 802.11n40 CH2422	



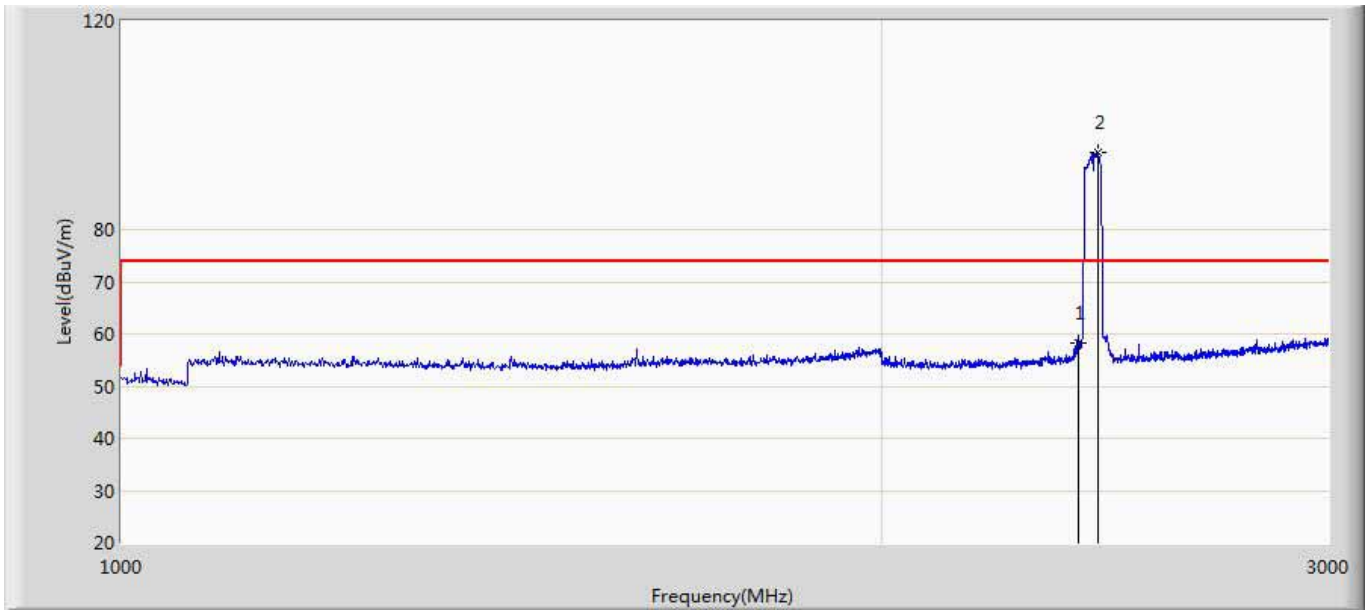
No	Mark	Frequency (MHz)	Measure Level (dBuV/m)	Reading Level (dBuV)	Over Limit (dB)	Limit (dBuV/m)	Factor (dB)	Type
1		2390.000	68.223	30.360	-5.777	74.000	37.863	PK
2	*	2414.000	105.409	67.560	31.409	N/A	N/A	PK

Site: AC5	Time: 2015/11/04 - 21:28
Limit: FCC_Part15.209_RE(3m)	Margin: 0
Probe: Horn_3117_00167055(1-18GHz)	Polarity: Vertical
EUT: RTSA04NU	Power: AC 120V/60Hz
Note: Mode 4 Transmit at 802.11n40 CH2422	



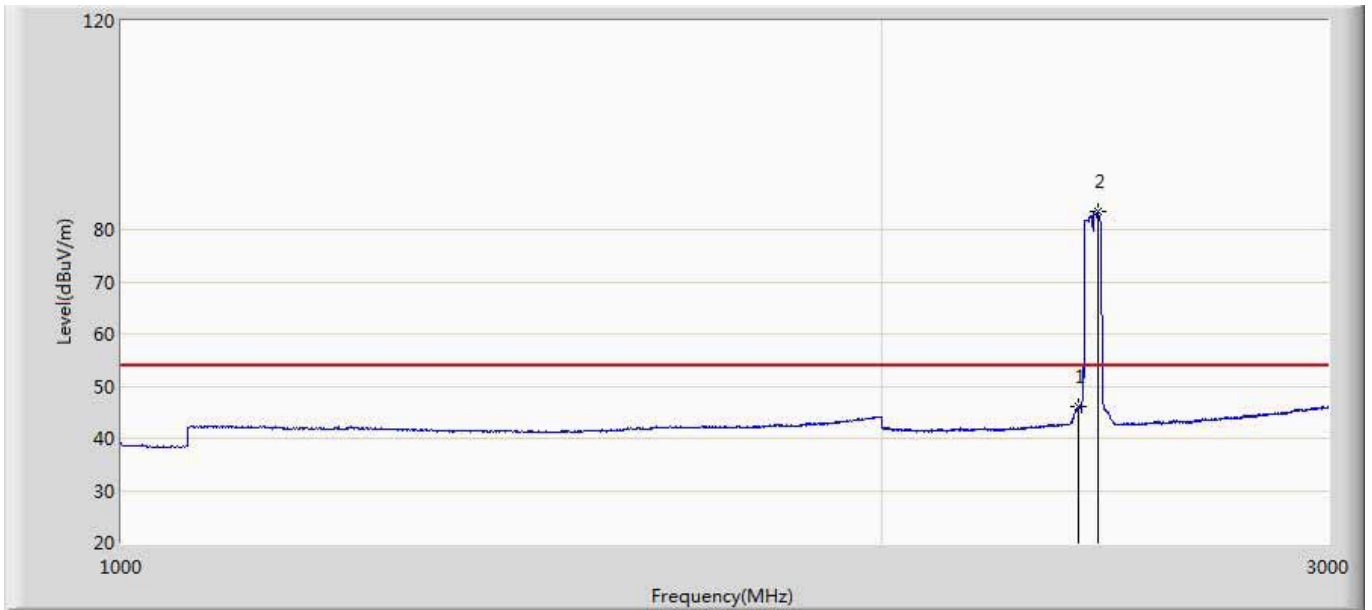
No	Mark	Frequency (MHz)	Measure Level (dBuV/m)	Reading Level (dBuV)	Over Limit (dB)	Limit (dBuV/m)	Factor (dB)	Type
1		2390.000	52.974	15.111	-1.026	54.000	37.863	AV
2	*	2415.000	94.437	56.583	40.437	N/A	N/A	AV

Site: AC5	Time: 2015/11/04 - 21:29
Limit: FCC_Part15.209_RE(3m)	Margin: 0
Probe: Horn_3117_00167055(1-18GHz)	Polarity: Horizontal
EUT: RTSA04NU	Power: AC 120V/60Hz
Note: Mode 4 Transmit at 802.11n40 CH2422	



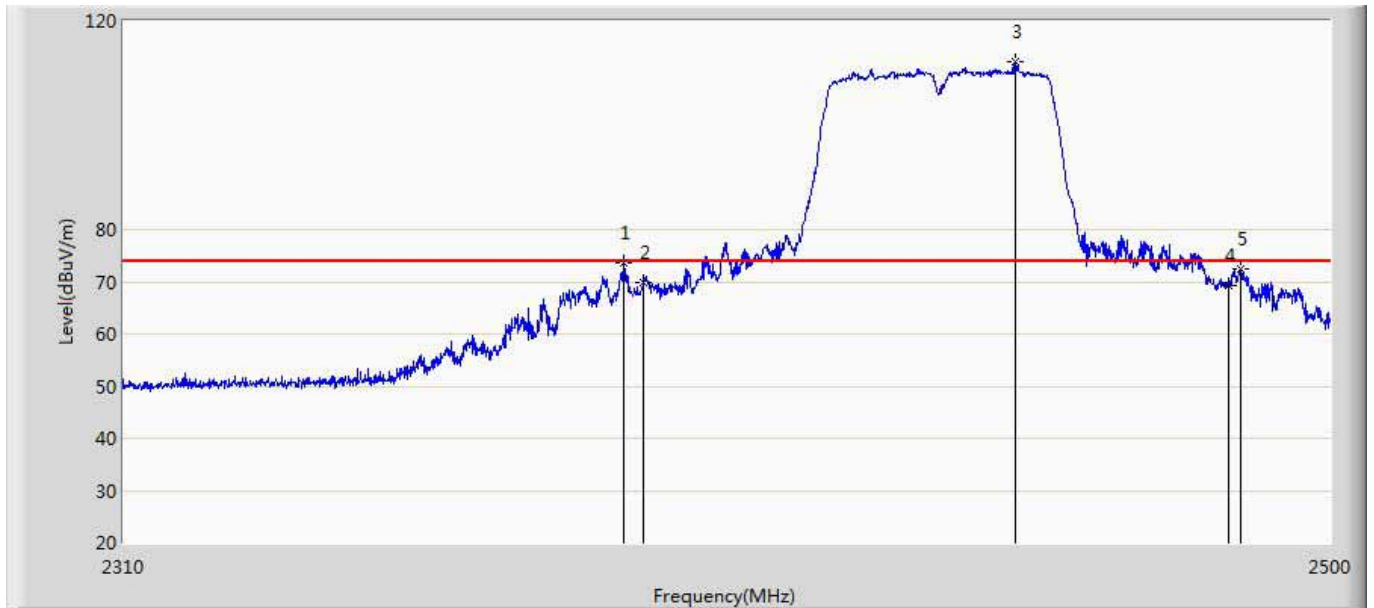
No	Mark	Frequency (MHz)	Measure Level (dBuV/m)	Reading Level (dBuV)	Over Limit (dB)	Limit (dBuV/m)	Factor (dB)	Type
1		2390.000	58.261	20.398	-15.739	74.000	37.863	PK
2	*	2434.000	94.767	56.834	20.767	N/A	N/A	PK

Site: AC5	Time: 2015/11/04 - 21:31
Limit: FCC_Part15.209_RE(3m)	Margin: 0
Probe: Horn_3117_00167055(1-18GHz)	Polarity: Horizontal
EUT: RTSA04NU	Power: AC 120V/60Hz
Note: Mode 4 Transmit at 802.11n40 CH2422	



No	Mark	Frequency (MHz)	Measure Level (dBuV/m)	Reading Level (dBuV)	Over Limit (dB)	Limit (dBuV/m)	Factor (dB)	Type
1		2390.000	46.103	8.240	-7.897	54.000	37.863	AV
2	*	2432.000	83.351	45.419	29.351	N/A	N/A	AV

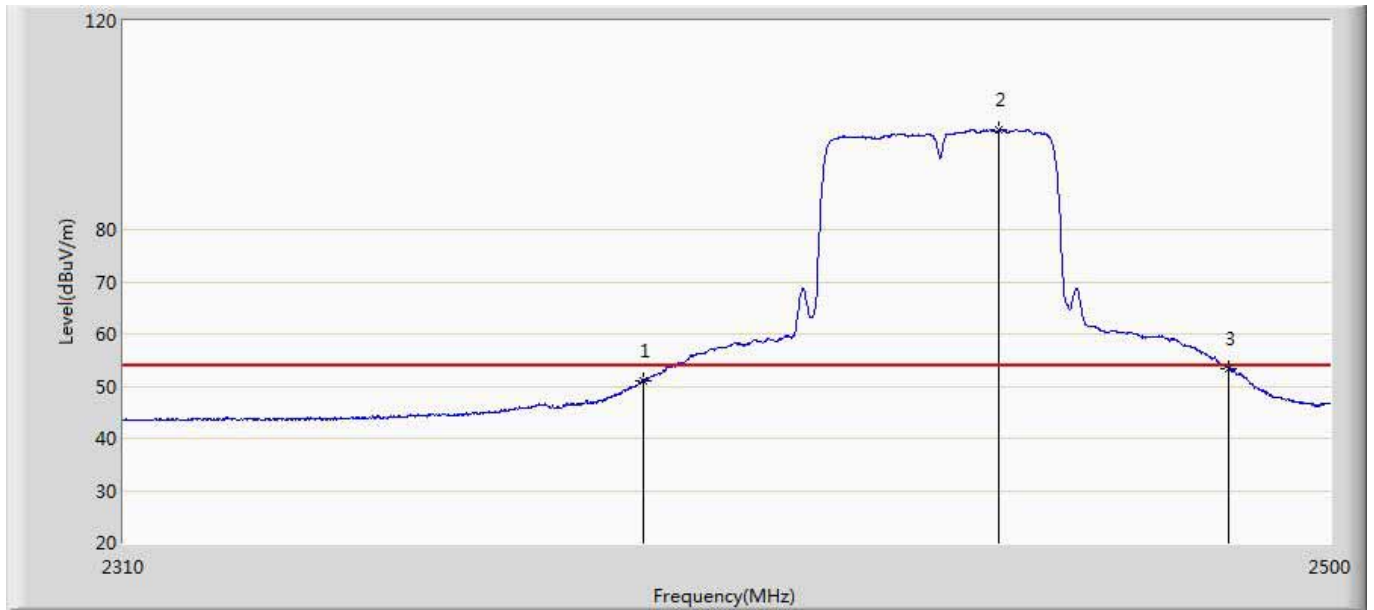
Site: AC5	Time: 2015/11/10 - 19:51
Limit: FCC_Part15.209_RE(3m)	Margin: 0
Probe: Horn_3117_00167055(1-18GHz)	Polarity: Vertical
EUT: RTSA04NU	Power: AC 120V/60Hz
Note: Mode 4 Transmit at 802.11n40 CH2437	



No	Mark	Frequency (MHz)	Measure Level (dBuV/m)	Reading Level (dBuV)	Over Limit (dB)	Limit (dBuV/m)	Factor (dB)	Type
1		2386.950	73.545	35.671	-0.455	74.000	37.874	PK
2		2390.000	69.734	31.871	-4.266	74.000	37.863	PK
3	*	2448.985	112.045	74.089	38.045	74.000	37.956	PK
4		2483.500	69.356	31.318	-4.644	74.000	38.038	PK
5		2485.465	72.480	34.428	-1.520	74.000	38.052	PK

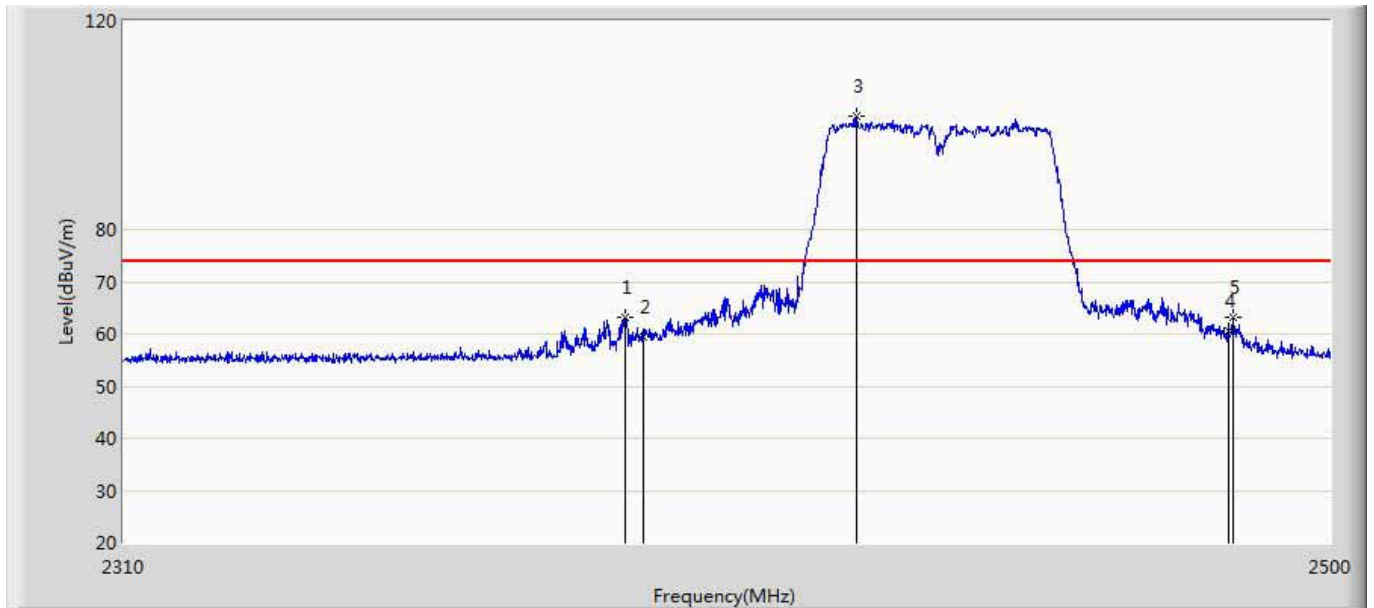


Site: AC5	Time: 2015/11/10 - 19:52
Limit: FCC_Part15.209_RE(3m)	Margin: 0
Probe: Horn_3117_00167055(1-18GHz)	Polarity: Vertical
EUT: RTSA04NU	Power: AC 120V/60Hz
Note: Mode 4 Transmit at 802.11n40 CH2437	



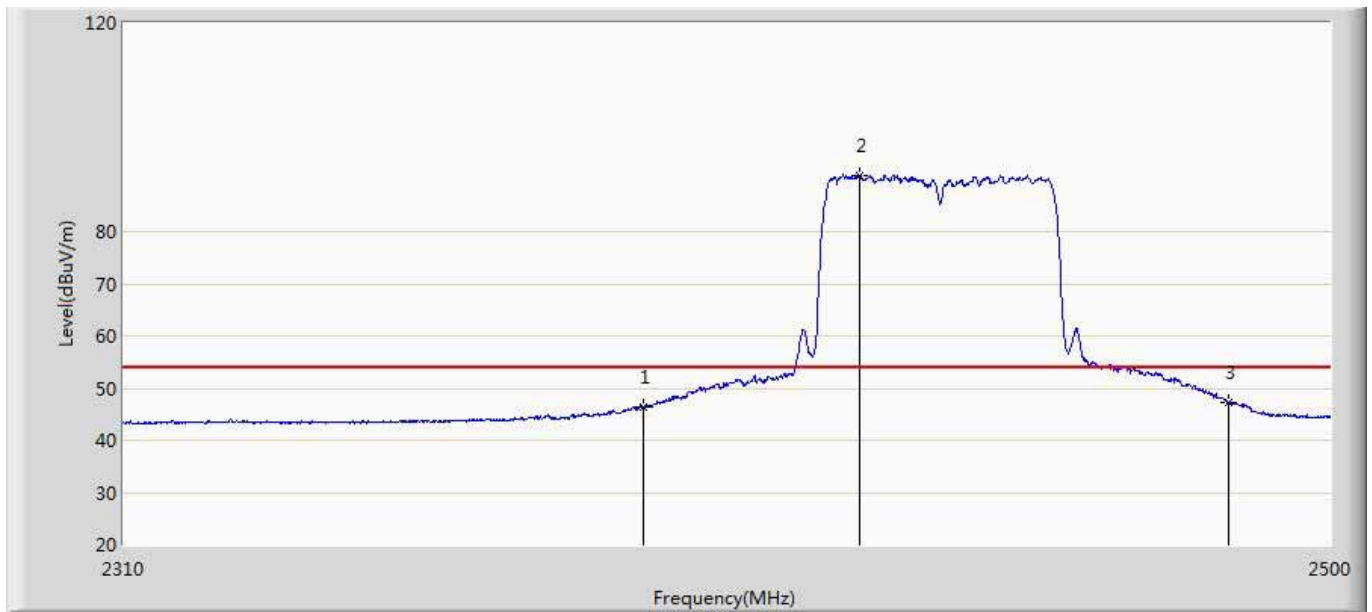
No	Mark	Frequency (MHz)	Measure Level (dBuV/m)	Reading Level (dBuV)	Over Limit (dB)	Limit (dBuV/m)	Factor (dB)	Type
1		2390.000	50.969	13.106	-3.031	54.000	37.863	AV
2	*	2446.420	99.106	61.160	45.106	54.000	37.946	AV
3		2483.500	53.356	15.318	-0.644	54.000	38.038	AV

Site: AC5	Time: 2015/11/10 - 20:03
Limit: FCC_Part15.209_RE(3m)	Margin: 0
Probe: Horn_3117_00167055(1-18GHz)	Polarity: Horizontal
EUT: RTSA04NU	Power: AC 120V/60Hz
Note: Mode 4 Transmit at 802.11n40 CH2437	



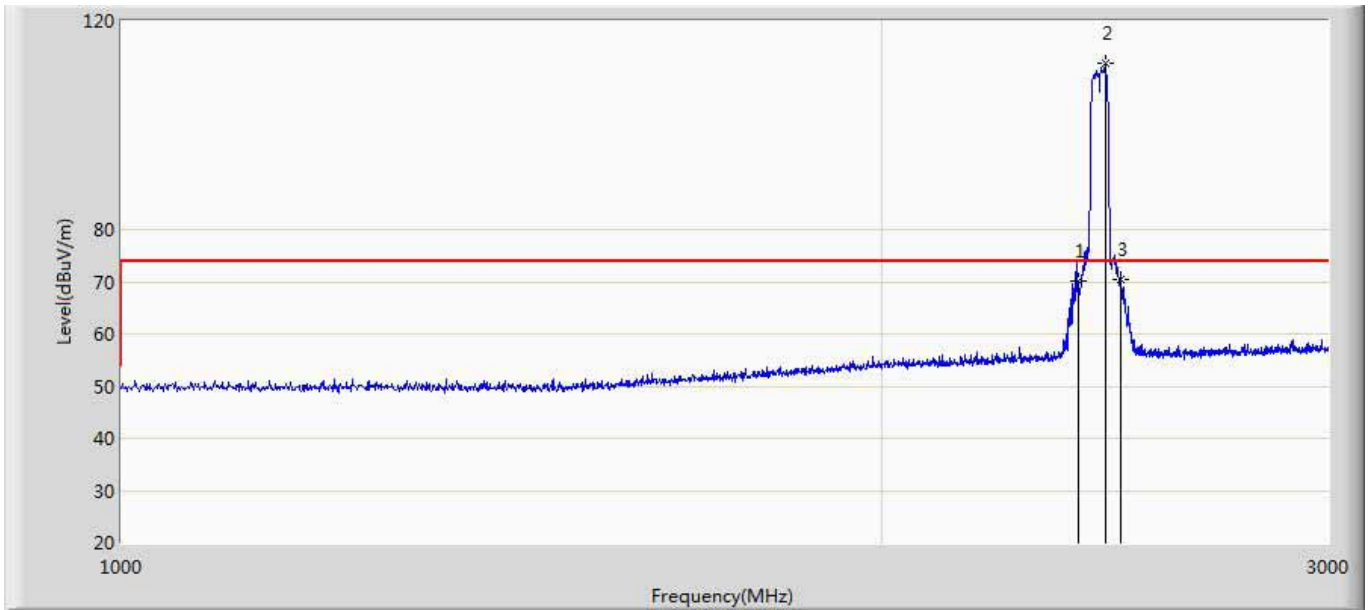
No	Mark	Frequency (MHz)	Measure Level (dBuV/m)	Reading Level (dBuV)	Over Limit (dB)	Limit (dBuV/m)	Factor (dB)	Type
1		2387.235	63.067	25.194	-10.933	74.000	37.874	PK
2		2390.000	59.344	21.481	-14.656	74.000	37.863	PK
3	*	2423.620	101.657	63.753	27.657	74.000	37.904	PK
4		2483.500	60.719	22.681	-13.281	74.000	38.038	PK
5		2484.230	63.176	25.133	-10.824	74.000	38.043	PK

Site: AC5	Time: 2015/11/10 - 20:06
Limit: FCC_Part15.209_RE(3m)	Margin: 0
Probe: Horn_3117_00167055(1-18GHz)	Polarity: Horizontal
EUT: RTSA04NU	Power: AC 120V/60Hz
Note: Mode 4 Transmit at 802.11n40 CH2437	



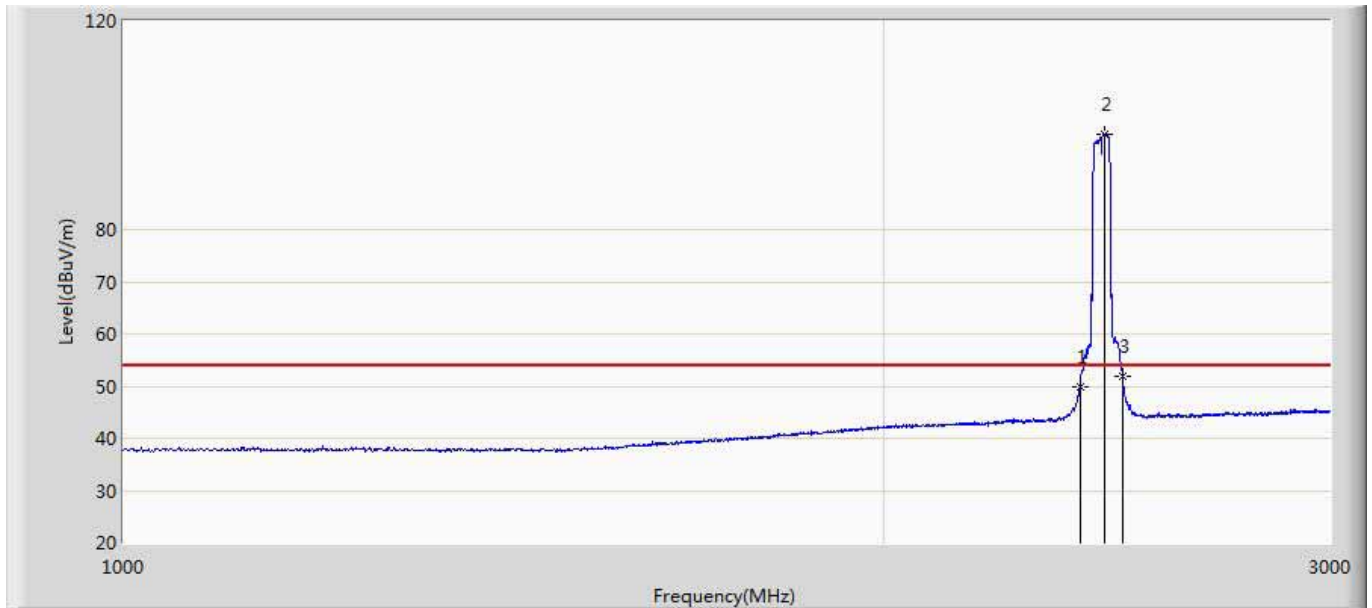
No	Mark	Frequency (MHz)	Measure Level (dBuV/m)	Reading Level (dBuV)	Over Limit (dB)	Limit (dBuV/m)	Factor (dB)	Type
1		2390.000	46.282	8.419	-7.718	54.000	37.863	AV
2	*	2424.190	90.701	52.794	36.701	54.000	37.907	AV
3		2483.500	47.114	9.076	-6.886	54.000	38.038	AV

Site: AC5	Time: 2015/11/10 - 20:08
Limit: FCC_Part15.209_RE(3m)	Margin: 0
Probe: Horn_3117_00167055(1-18GHz)	Polarity: Vertical
EUT: RTSA04NU	Power: AC 120V/60Hz
Note: Mode 4 Transmit at 802.11n40 CH2437	



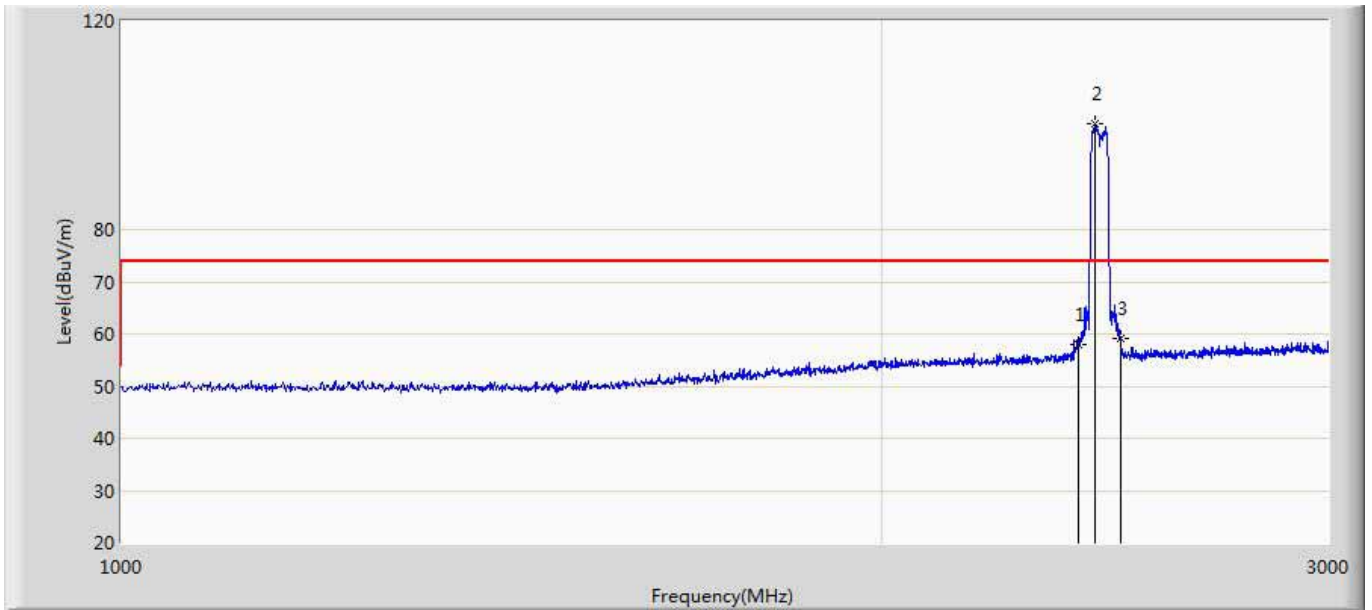
No	Mark	Frequency (MHz)	Measure Level (dBuV/m)	Reading Level (dBuV)	Over Limit (dB)	Limit (dBuV/m)	Factor (dB)	Type
1		2390.000	70.180	32.317	-3.820	74.000	37.863	PK
2	*	2449.000	111.743	73.787	37.743	74.000	37.956	PK
3		2483.500	70.525	32.487	-3.475	74.000	38.038	PK

Site: AC5	Time: 2015/11/10 - 20:10
Limit: FCC_Part15.209_RE(3m)	Margin: 0
Probe: Horn_3117_00167055(1-18GHz)	Polarity: Vertical
EUT: RTSA04NU	Power: AC 120V/60Hz
Note: Mode 4 Transmit at 802.11n40 CH2437	



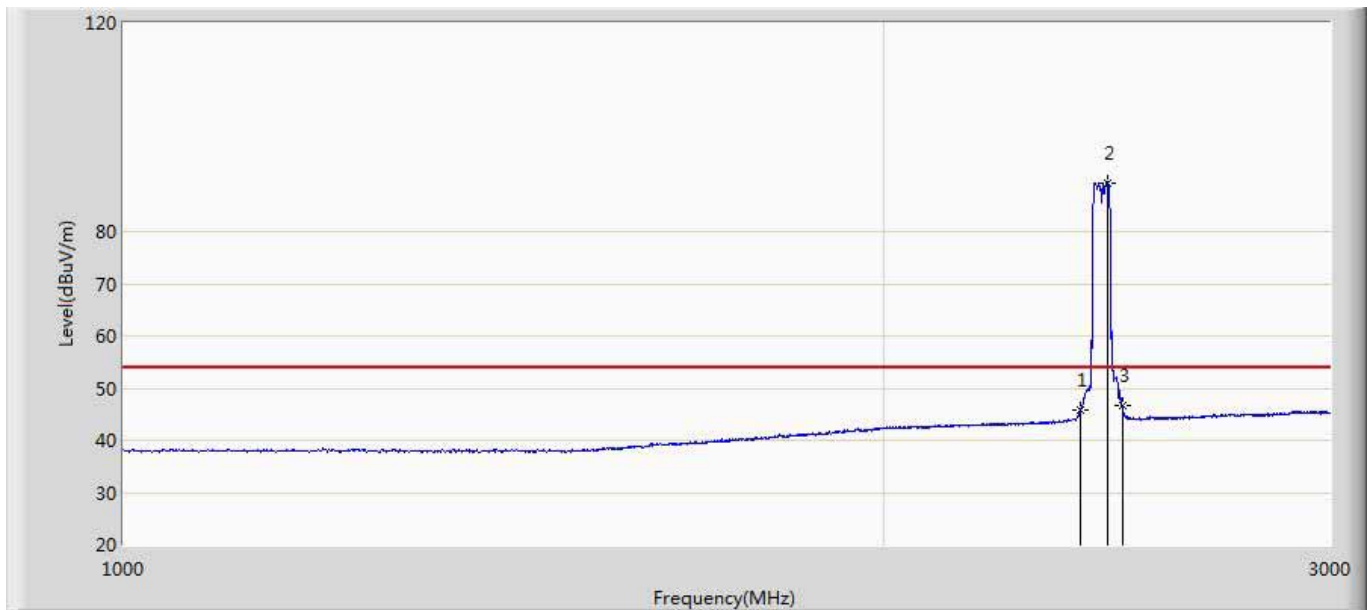
No	Mark	Frequency (MHz)	Measure Level (dBuV/m)	Reading Level (dBuV)	Over Limit (dB)	Limit (dBuV/m)	Factor (dB)	Type
1		2390.000	49.791	11.928	-4.209	54.000	37.863	AV
2	*	2443.000	98.170	60.231	44.170	54.000	37.939	AV
3		2483.500	52.003	13.965	-1.997	54.000	38.038	AV

Site: AC5	Time: 2015/11/10 - 20:14
Limit: FCC_Part15.209_RE(3m)	Margin: 0
Probe: Horn_3117_00167055(1-18GHz)	Polarity: Horizontal
EUT: RTSA04NU	Power: AC 120V/60Hz
Note: Mode 4 Transmit at 802.11n40 CH2437	



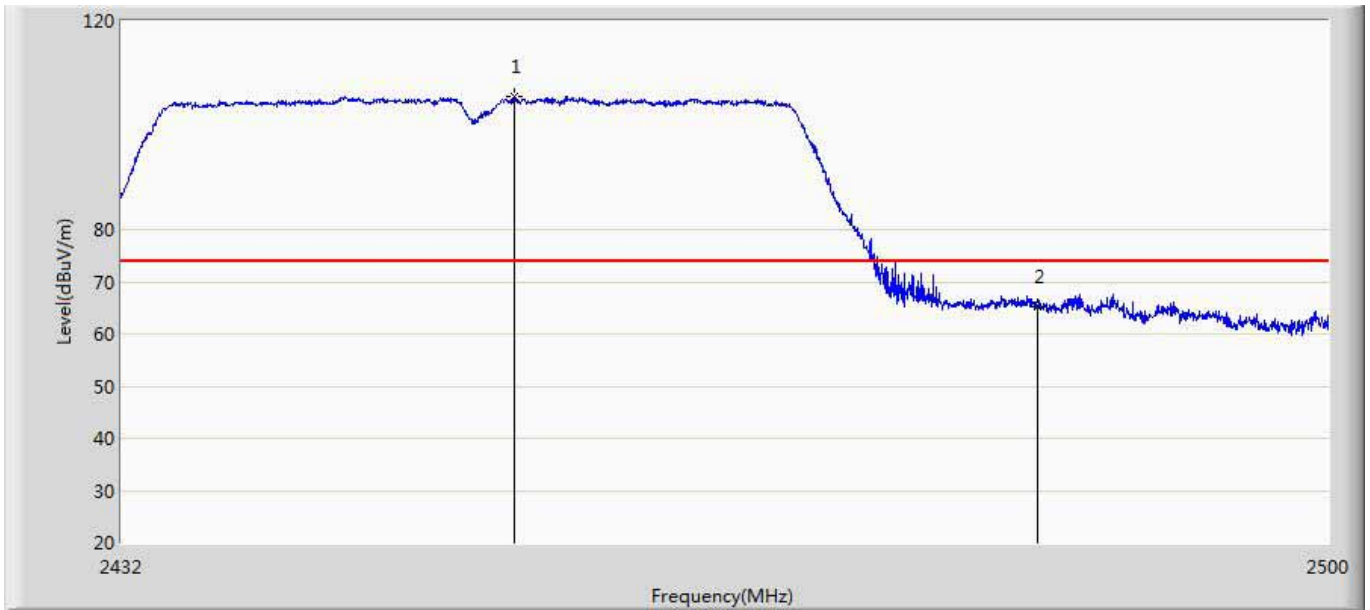
No	Mark	Frequency (MHz)	Measure Level (dBuV/m)	Reading Level (dBuV)	Over Limit (dB)	Limit (dBuV/m)	Factor (dB)	Type
1		2390.000	57.982	20.119	-16.018	74.000	37.863	PK
2	*	2426.000	100.275	62.357	26.275	74.000	37.918	PK
3		2483.500	59.101	21.063	-14.899	74.000	38.038	PK

Site: AC5	Time: 2015/11/10 - 20:16
Limit: FCC_Part15.209_RE(3m)	Margin: 0
Probe: Horn_3117_00167055(1-18GHz)	Polarity: Horizontal
EUT: RTSA04NU	Power: AC 120V/60Hz
Note: Mode 4 Transmit at 802.11n40 CH2437	



No	Mark	Frequency (MHz)	Measure Level (dBuV/m)	Reading Level (dBuV)	Over Limit (dB)	Limit (dBuV/m)	Factor (dB)	Type
1		2390.000	45.850	7.987	-8.150	54.000	37.863	AV
2	*	2449.000	89.413	51.457	35.413	54.000	37.956	AV
3		2483.500	46.722	8.684	-7.278	54.000	38.038	AV

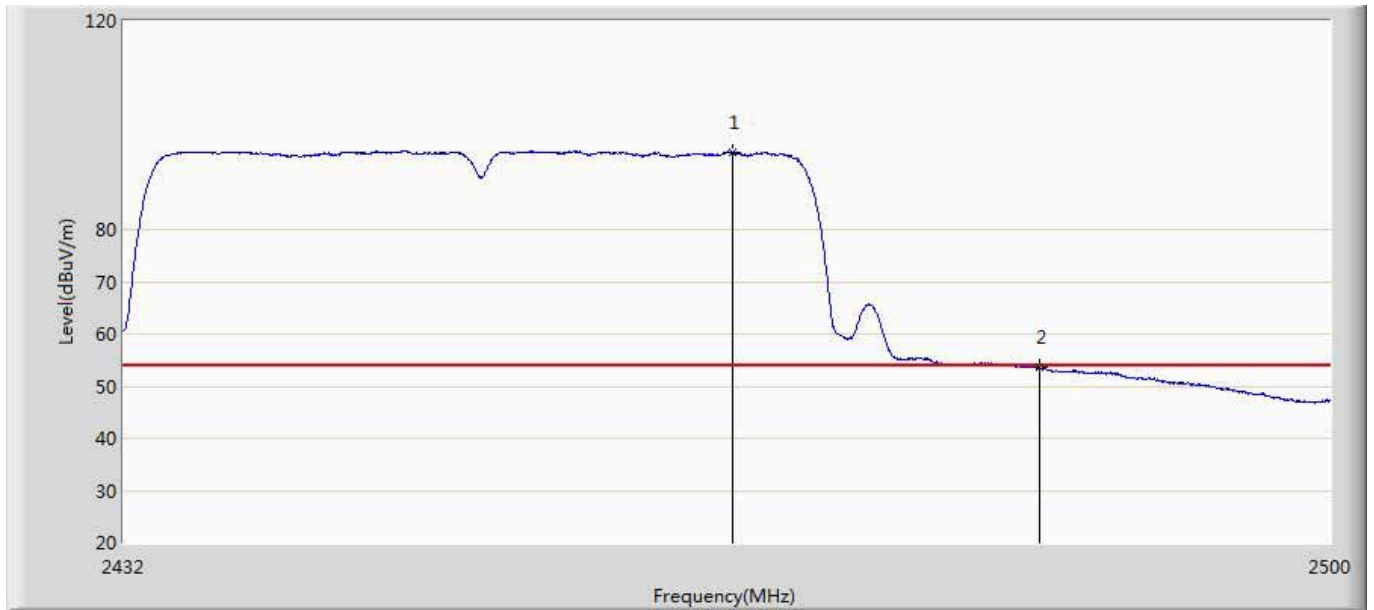
Site: AC5	Time: 2015/11/04 - 21:34
Limit: FCC_Part15.209_RE(3m)	Margin: 0
Probe: Horn_3117_00167055(1-18GHz)	Polarity: Vertical
EUT: RTSA04NU	Power: AC 120V/60Hz
Note: Mode 4 Transmit at 802.11n40 CH2452	



No	Mark	Frequency (MHz)	Measure Level (dBuV/m)	Reading Level (dBuV)	Over Limit (dB)	Limit (dBuV/m)	Factor (dB)	Type
1	*	2453.964	105.380	67.404	31.380	N/A	N/A	PK
2		2483.500	65.304	27.266	-8.696	74.000	38.038	PK

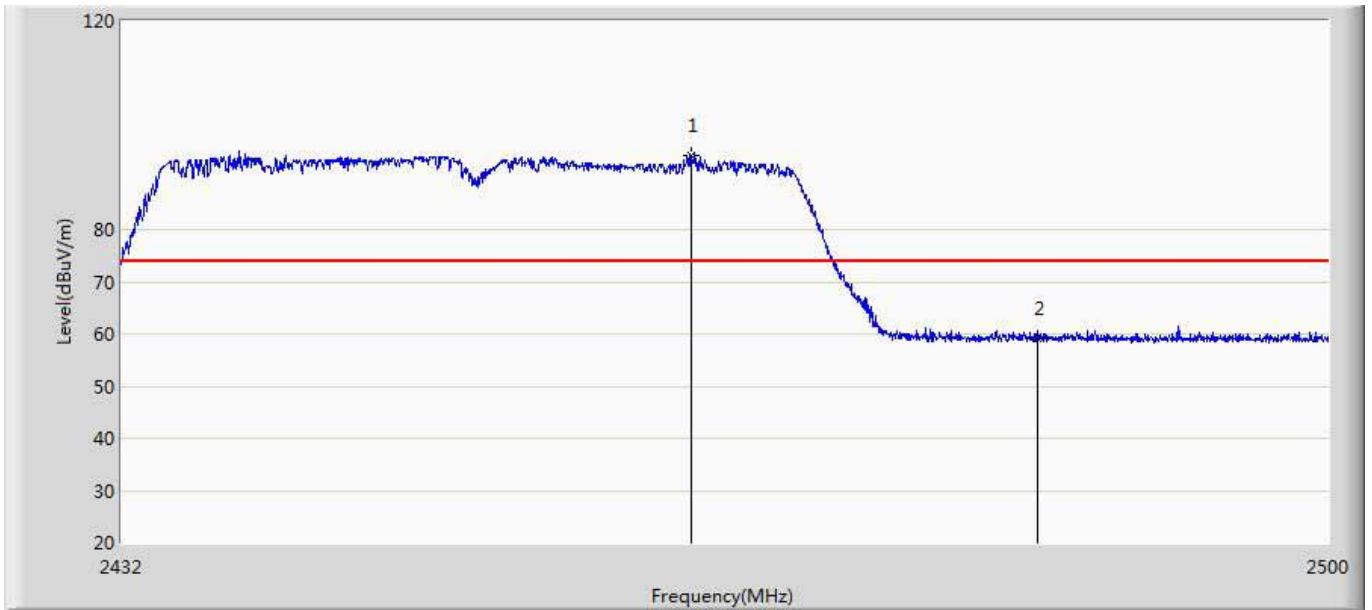


Site: AC5	Time: 2015/11/04 - 21:34
Limit: FCC_Part15.209_RE(3m)	Margin: 0
Probe: Horn_3117_00167055(1-18GHz)	Polarity: Vertical
EUT: RTSA04NU	Power: AC 120V/60Hz
Note: Mode 4 Transmit at 802.11n40 CH2452	



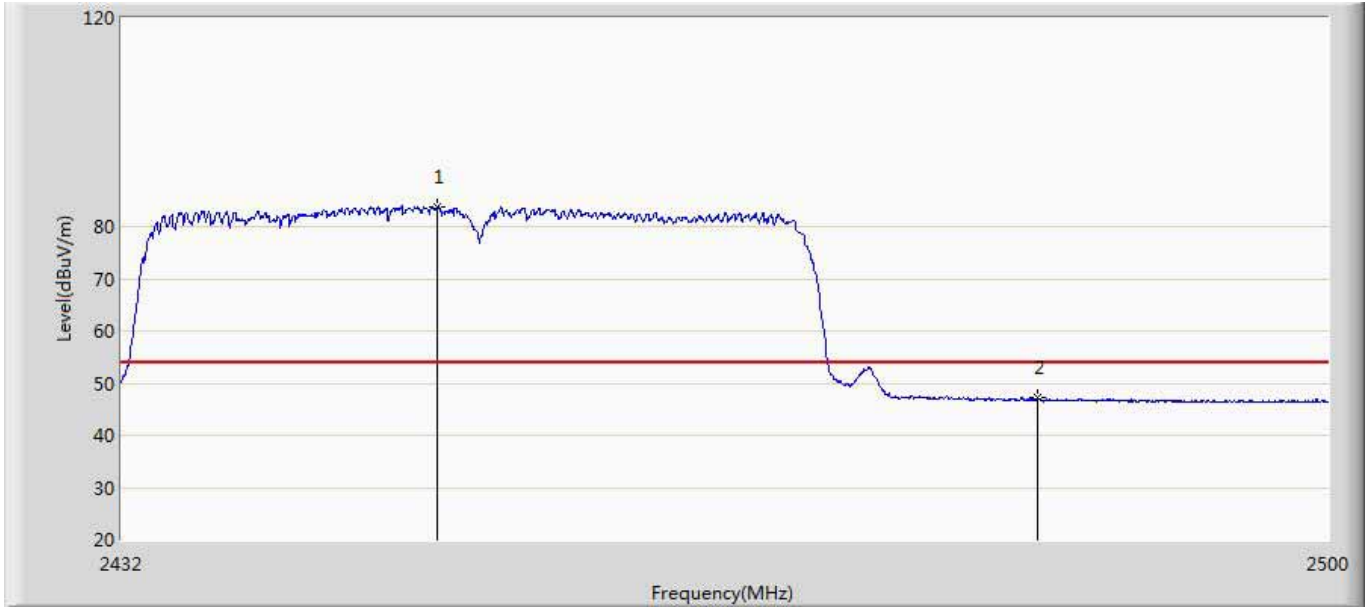
No	Mark	Frequency (MHz)	Measure Level (dBuV/m)	Reading Level (dBuV)	Over Limit (dB)	Limit (dBuV/m)	Factor (dB)	Type
1	*	2466.102	94.829	56.822	40.829	N/A	N/A	AV
2		2483.500	53.522	15.484	-0.478	54.000	38.038	AV

Site: AC5	Time: 2015/11/04 - 21:39
Limit: FCC_Part15.209_RE(3m)	Margin: 0
Probe: Horn_3117_00167055(1-18GHz)	Polarity: Horizontal
EUT: RTSA04NU	Power: AC 120V/60Hz
Note: Mode 4 Transmit at 802.11n40 CH2452	



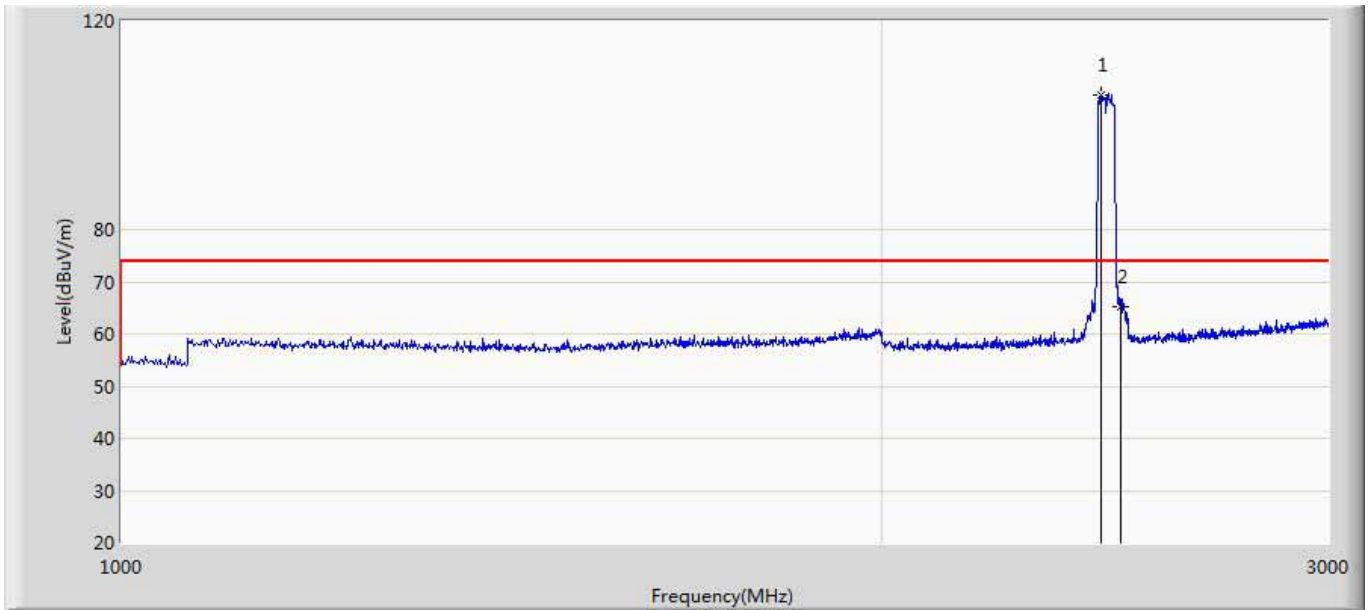
No	Mark	Frequency (MHz)	Measure Level (dBuV/m)	Reading Level (dBuV)	Over Limit (dB)	Limit (dBuV/m)	Factor (dB)	Type
1	*	2463.926	94.291	56.284	20.291	N/A	N/A	PK
2		2483.500	59.216	21.178	-14.784	74.000	38.038	PK

Site: AC5	Time: 2015/11/04 - 21:41
Limit: FCC_Part15.209_RE(3m)	Margin: 0
Probe: Horn_3117_00167055(1-18GHz)	Polarity: Horizontal
EUT: RTSA04NU	Power: AC 120V/60Hz
Note: Mode 4 Transmit at 802.11n40 CH2452	



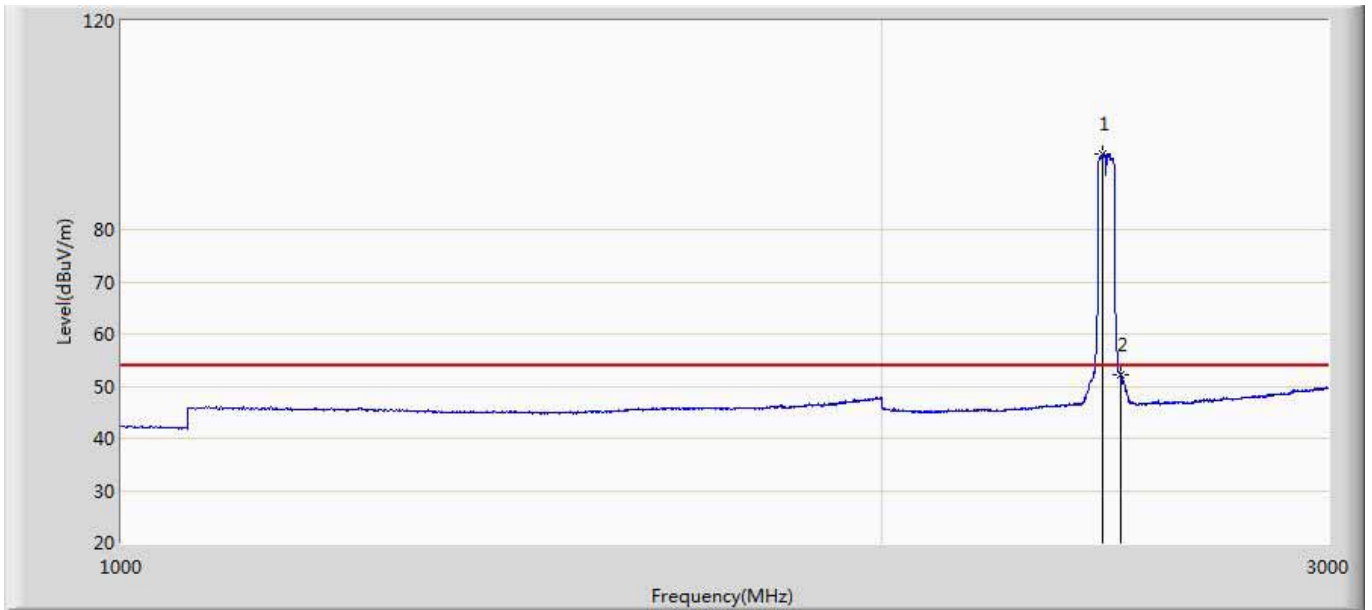
No	Mark	Frequency (MHz)	Measure Level (dBuV/m)	Reading Level (dBuV)	Over Limit (dB)	Limit (dBuV/m)	Factor (dB)	Type
1	*	2449.646	83.823	45.864	29.823	N/A	N/A	AV
2		2483.500	47.262	9.224	-6.738	54.000	38.038	AV

Site: AC5	Time: 2015/11/04 - 21:42
Limit: FCC_Part15.209_RE(3m)	Margin: 0
Probe: Horn_3117_00167055(1-18GHz)	Polarity: Vertical
EUT: RTSA04NU	Power: AC 120V/60Hz
Note: Mode 4 Transmit at 802.11n40 CH2452	



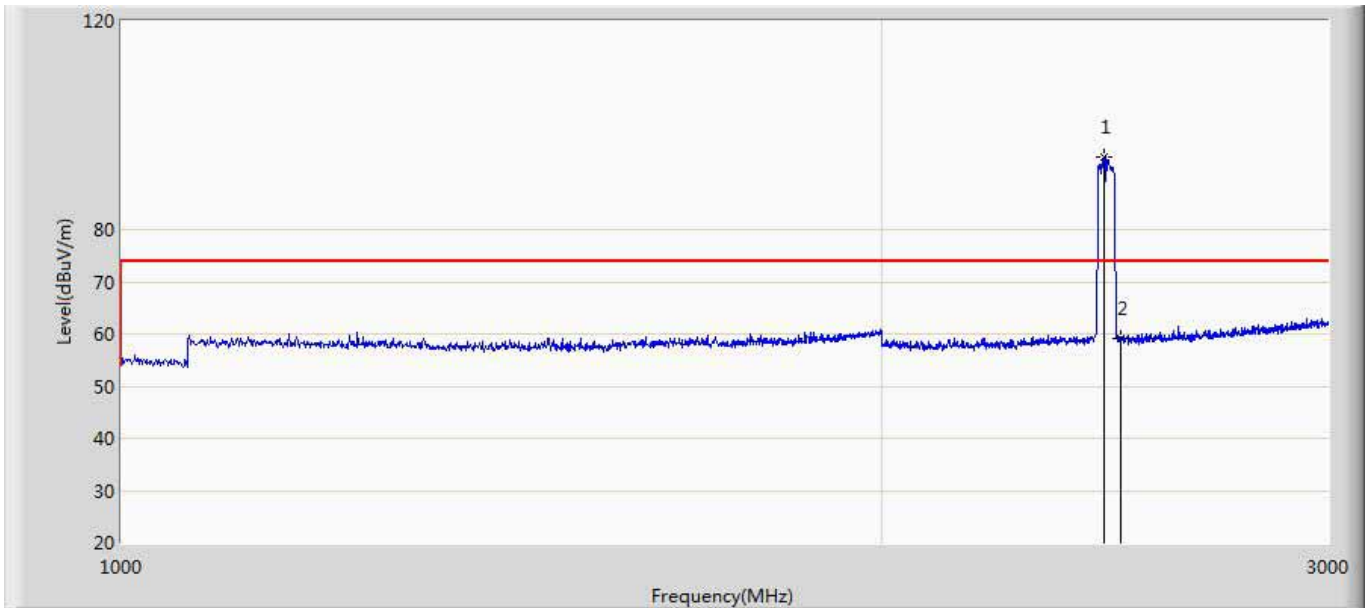
No	Mark	Frequency (MHz)	Measure Level (dBuV/m)	Reading Level (dBuV)	Over Limit (dB)	Limit (dBuV/m)	Factor (dB)	Type
1	*	2439.000	105.896	67.960	31.896	N/A	N/A	PK
2		2483.500	65.350	27.312	-8.650	74.000	38.038	PK

Site: AC5	Time: 2015/11/04 - 21:44
Limit: FCC_Part15.209_RE(3m)	Margin: 0
Probe: Horn_3117_00167055(1-18GHz)	Polarity: Vertical
EUT: RTSA04NU	Power: AC 120V/60Hz
Note: Mode 4 Transmit at 802.11n40 CH2452	



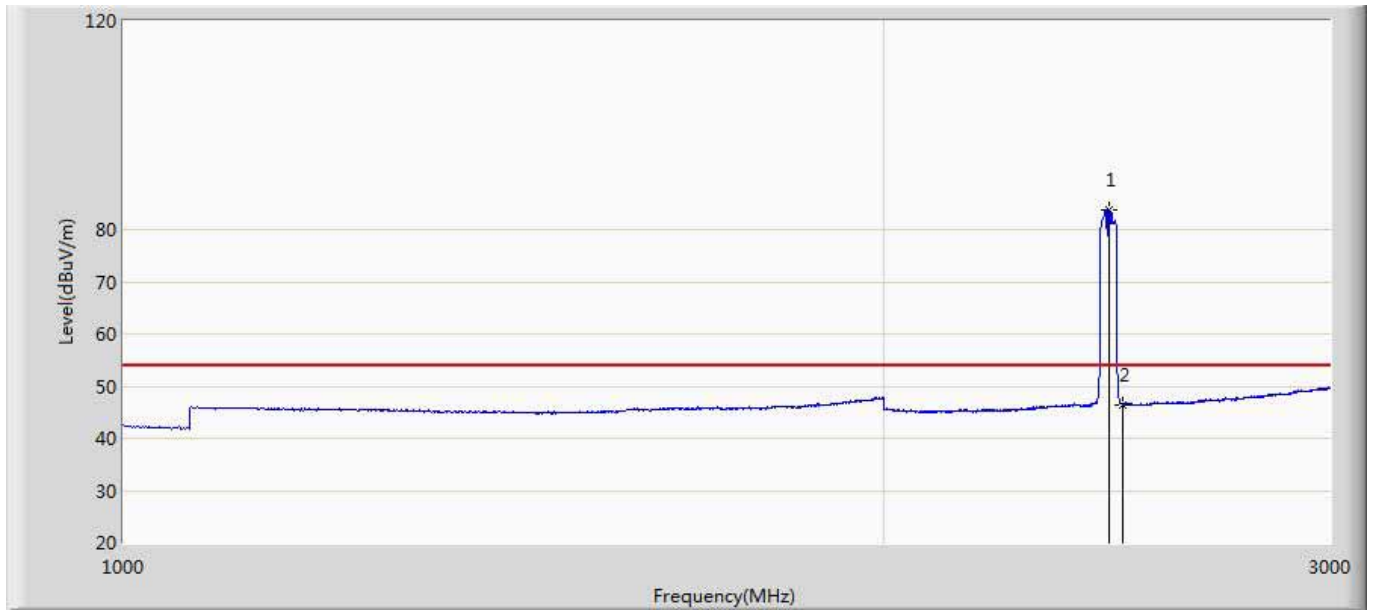
No	Mark	Frequency (MHz)	Measure Level (dBuV/m)	Reading Level (dBuV)	Over Limit (dB)	Limit (dBuV/m)	Factor (dB)	Type
1	*	2444.000	94.452	56.513	40.452	N/A	N/A	AV
2		2483.500	52.187	14.149	-1.813	54.000	38.038	AV

Site: AC5	Time: 2015/11/04 - 21:44
Limit: FCC_Part15.209_RE(3m)	Margin: 0
Probe: Horn_3117_00167055(1-18GHz)	Polarity: Horizontal
EUT: RTSA04NU	Power: AC 120V/60Hz
Note: Mode 4 Transmit at 802.11n40 CH2452	



No	Mark	Frequency (MHz)	Measure Level (dBuV/m)	Reading Level (dBuV)	Over Limit (dB)	Limit (dBuV/m)	Factor (dB)	Type
1	*	2447.000	93.804	55.856	19.804	N/A	N/A	PK
2		2483.500	59.058	21.020	-14.942	74.000	38.038	PK

Site: AC5	Time: 2015/11/04 - 21:48
Limit: FCC_Part15.209_RE(3m)	Margin: 0
Probe: Horn_3117_00167055(1-18GHz)	Polarity: Horizontal
EUT: RTSA04NU	Power: AC 120V/60Hz
Note: Mode 4 Transmit at 802.11n40 CH2452	



No	Mark	Frequency (MHz)	Measure Level (dBuV/m)	Reading Level (dBuV)	Over Limit (dB)	Limit (dBuV/m)	Factor (dB)	Type
1	*	2453.000	83.669	45.697	29.669	N/A	N/A	AV
2		2483.500	46.504	8.466	-7.496	54.000	38.038	AV

## 7. Occupied Bandwidth

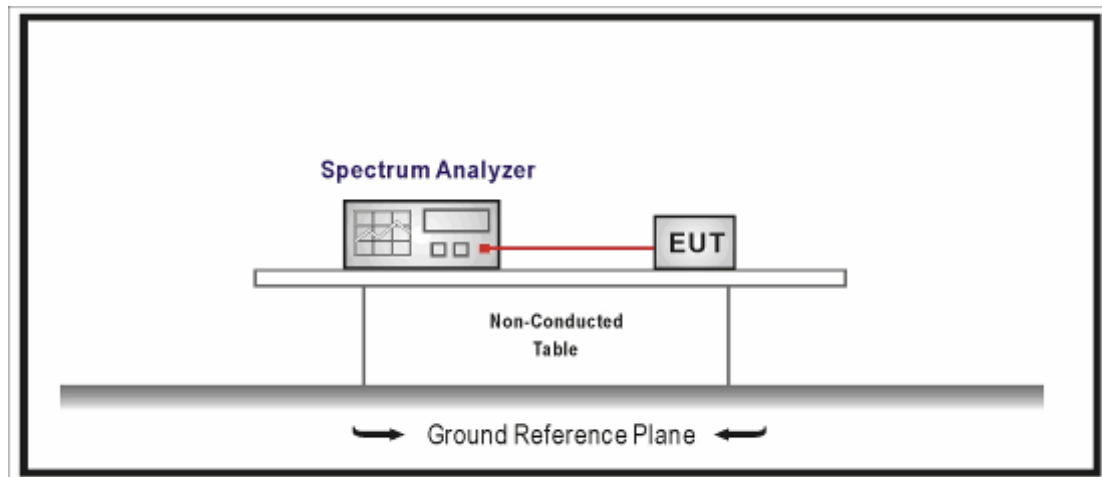
### 7.1. Test Equipment

Occupied Bandwidth / TR-8

Instrument	Manufacturer	Type No.	Serial No.	Cal. Due Date
Spectrum Analyzer	Agilent	E4446A	MY45300103	2016.01.07
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.

### 7.2. Test Setup



### 7.3. Limit

According to ANSI C63.10 11.2 c) test 99% occupied bandwidth. Should be less than the nominal bandwidth.

### 7.4. Test Procedure

The EUT was setup according to ANSI C63.4: 2014; tested according to DTS test procedure of ANSI C63.10 requirements.

When the average power is exercised, the measured power is to be referenced to the OBW (99% occupied bandwidth) rather than to the DTS bandwidth according to Clause 11.9.2.1 of ANSI C63.10.

The 99% bandwidth test is using ANSI C63.10 Section 6.9.3 method.

- 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 function of the instrument (if available) and report the measured bandwidth.

## **7.5. Uncertainty**

The measurement uncertainty is defined as  $\pm 1$  kHz

**7.6. Test Result**

Product	:	ROUTER WI-FI ADSL2+
Test Item	:	99% Occupied Bandwidth
Test Mode	:	Mode 1: Transmit by 802.11b

Channel No.	Frequency (MHz)	Occupied Bandwidth (kHz)		6dB Occupied Bandwidth (kHz)		Limit (kHz)	Result
		Ant1	Ant2	Ant1	Ant2		
01	2412	15056	15047	9159	9592	500	Pass
06	2437	15158	15076	9592	9599	500	Pass
11	2462	15127	15039	9600	9600	500	Pass

**Channel 01 (2412MHz) Ant1**



### Channel 06 (2437MHz) Ant1



### Channel 11 (2462MHz) Ant1



### Channel 01 (2412MHz) Ant2



### Channel 06 (2437MHz) Ant2



### Channel 11 (2462MHz) Ant2



Product	:	ROUTER WI-FI ADSL2+
Test Item	:	99% Occupied Bandwidth
Test Mode	:	Mode 2: Transmit by 802.11g

Channel No.	Frequency (MHz)	Occupied Bandwidth (kHz)		6dB Occupied Bandwidth (kHz)		Limit (kHz)	Result
		Ant1	Ant2	Ant1	Ant2		
01	2412	16510	16514	16380	16390	500	Pass
06	2437	16850	16590	16380	16410	500	Pass
11	2462	16525	16552	16390	16440	500	Pass

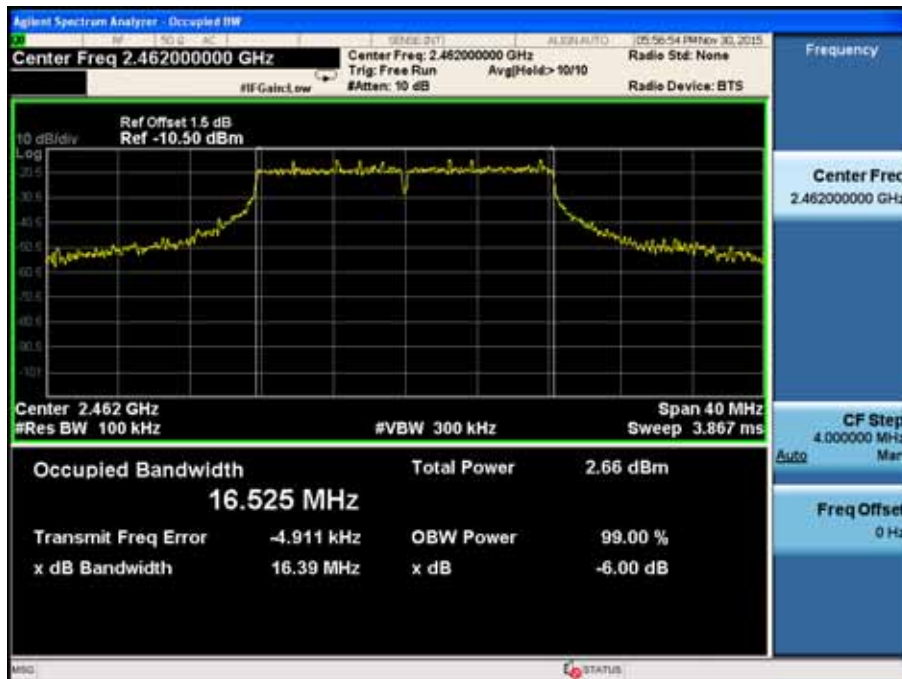
**Channel 01 (2412MHz) Ant1**



### Channel 06 (2437MHz) Ant1

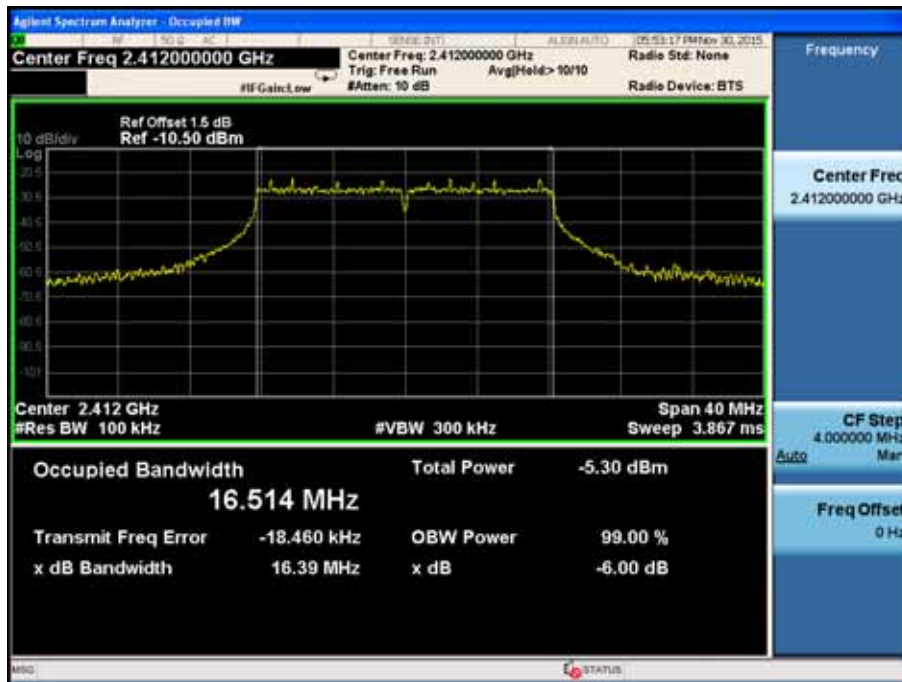


### Channel 11 (2462MHz) Ant1

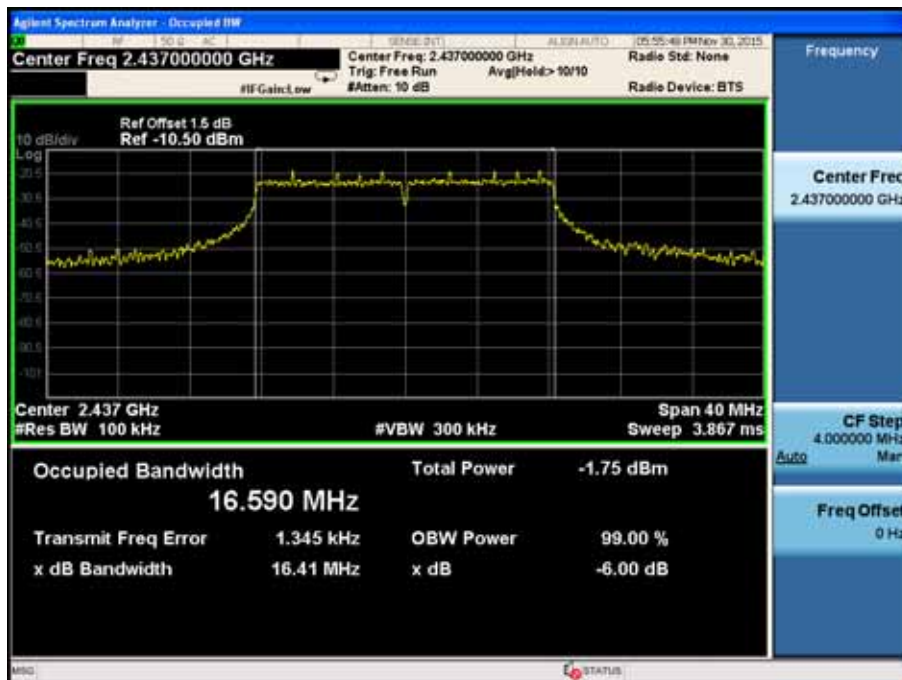




### Channel 01 (2412MHz) Ant2



### Channel 06 (2437MHz) Ant2





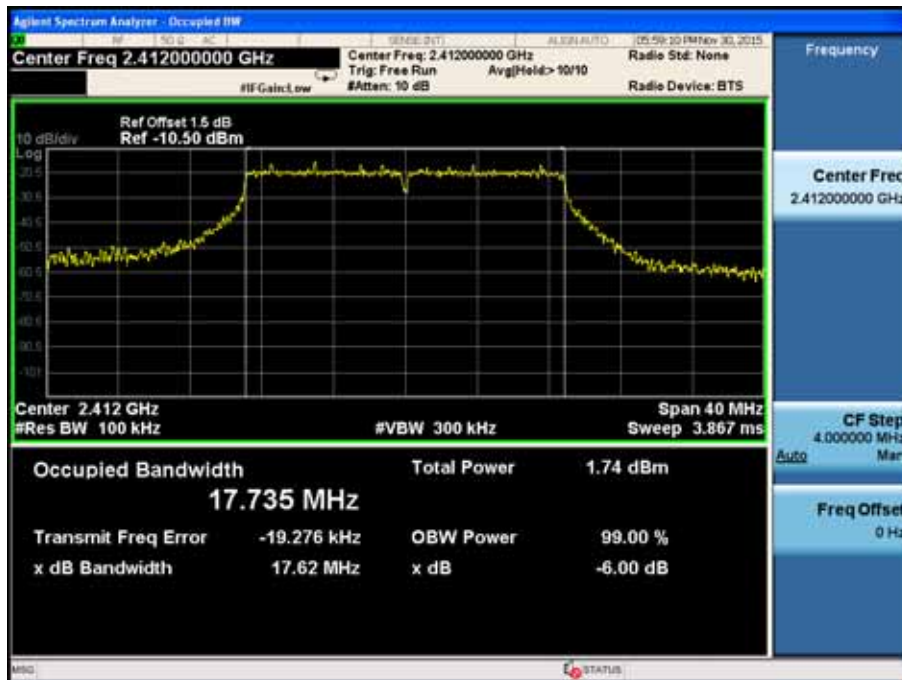
### Channel 11 (2462MHz) Ant2



Product	:	ROUTER WI-FI ADSL2+
Test Item	:	99% Occupied Bandwidth
Test Mode	:	Mode 3: Transmit by 802.11n(20MHz)

Channel No.	Frequency (MHz)	Occupied Bandwidth (kHz)		6dB Occupied Bandwidth (kHz)		Limit (kHz)	Result
		Ant1	Ant2	Ant1	Ant2		
01	2412	17735	17720	17620	17530	500	Pass
06	2437	18457	20790	17650	17610	500	Pass
11	2462	17735	17717	17610	17580	500	Pass

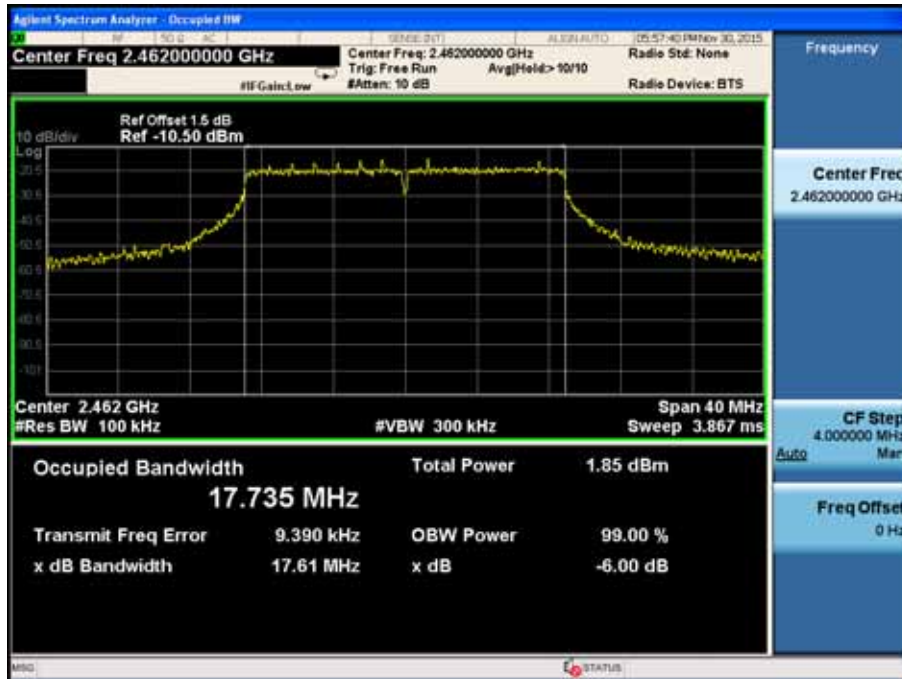
**Channel 01 (2412MHz) Ant1**



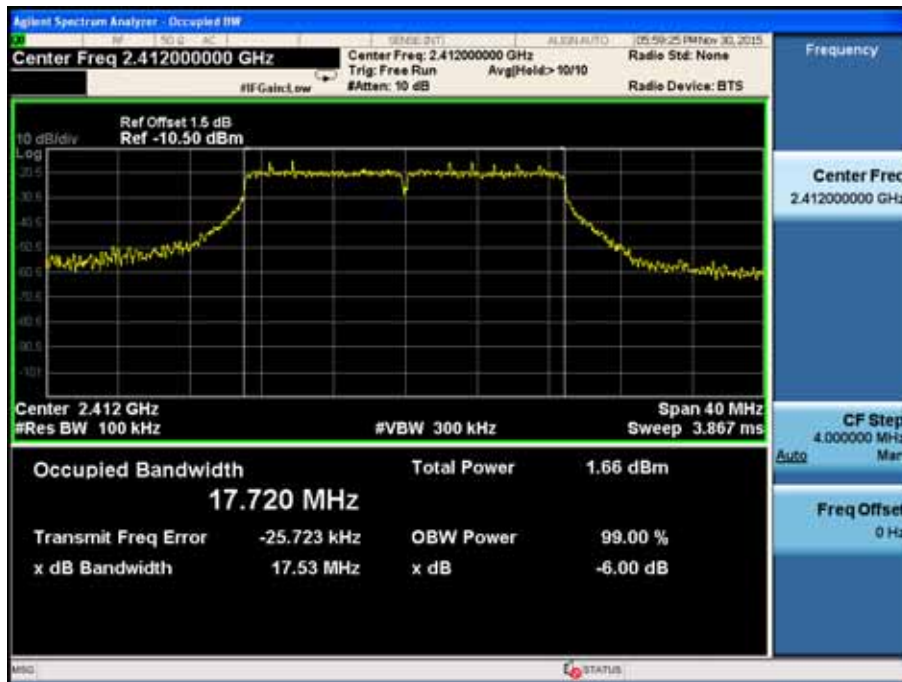
### Channel 06 (2437MHz) Ant1



### Channel 11 (2462MHz) Ant1



### Channel 01 (2412MHz) Ant2



### Channel 06 (2437MHz) Ant2



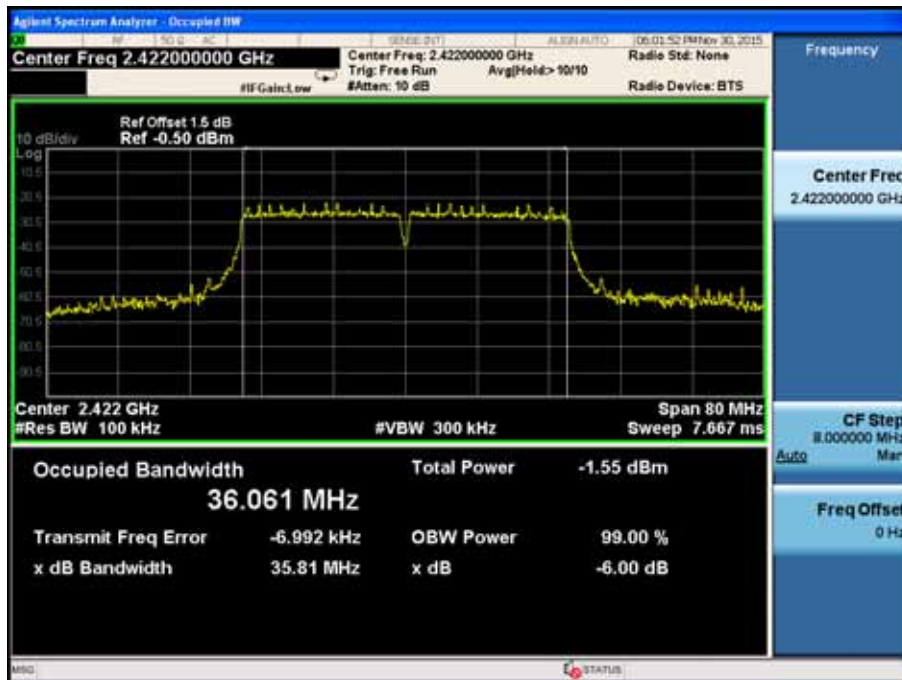
### Channel 11 (2462MHz) Ant2



Product	:	ROUTER WI-FI ADSL2+
Test Item	:	99% Occupied Bandwidth
Test Mode	:	Mode 4: Transmit by 802.11n(40MHz)

Channel No.	Frequency (MHz)	Occupied Bandwidth (kHz)		6dB Occupied Bandwidth (kHz)		Limit (kHz)	Result
		Ant1	Ant2	Ant1	Ant2		
01	2422	36016	36090	35810	35740	500	Pass
06	2437	36439	44192	35820	36120	500	Pass
11	2452	36083	36086	35310	35680	500	Pass

**Channel 03 (2422MHz) Ant1**

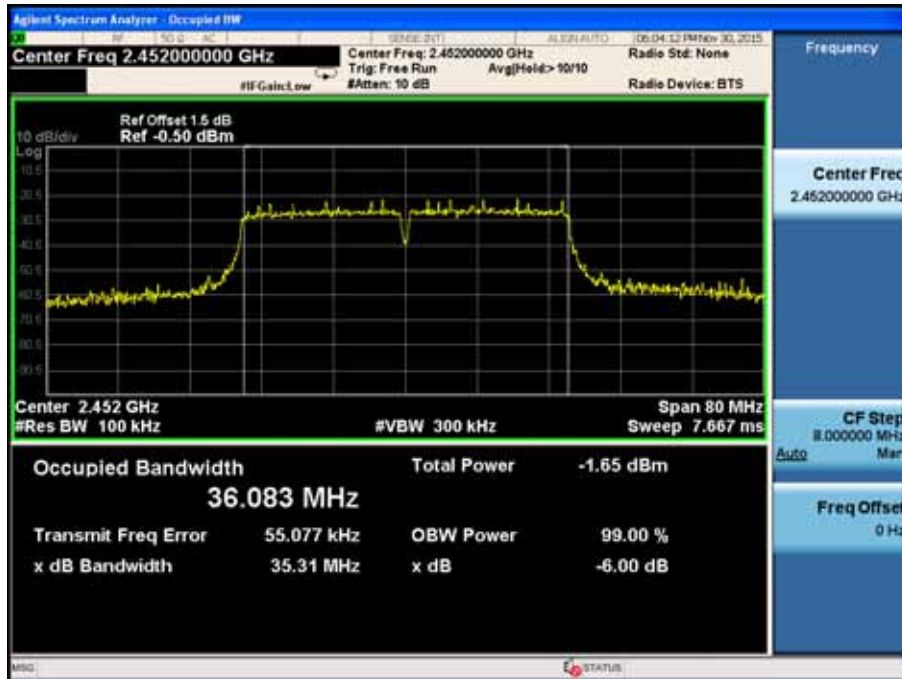




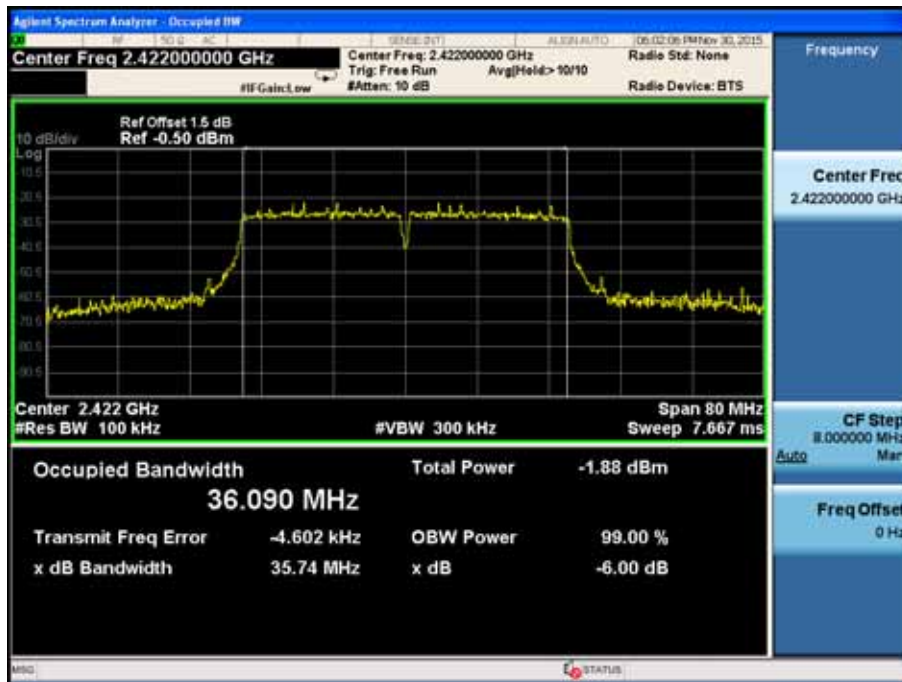
### Channel 06 (2437MHz) Ant1



### Channel 09 (2452MHz) Ant1



### Channel 03 (2422MHz) Ant2

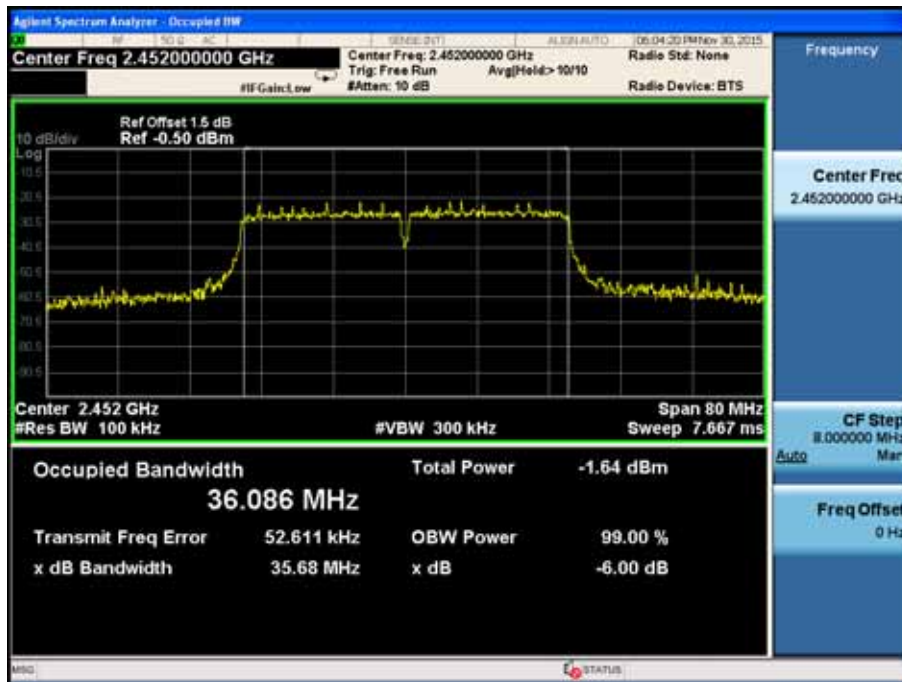


### Channel 06 (2437MHz) Ant2





### Channel 09 (2452MHz) Ant2



## 8. Power Output

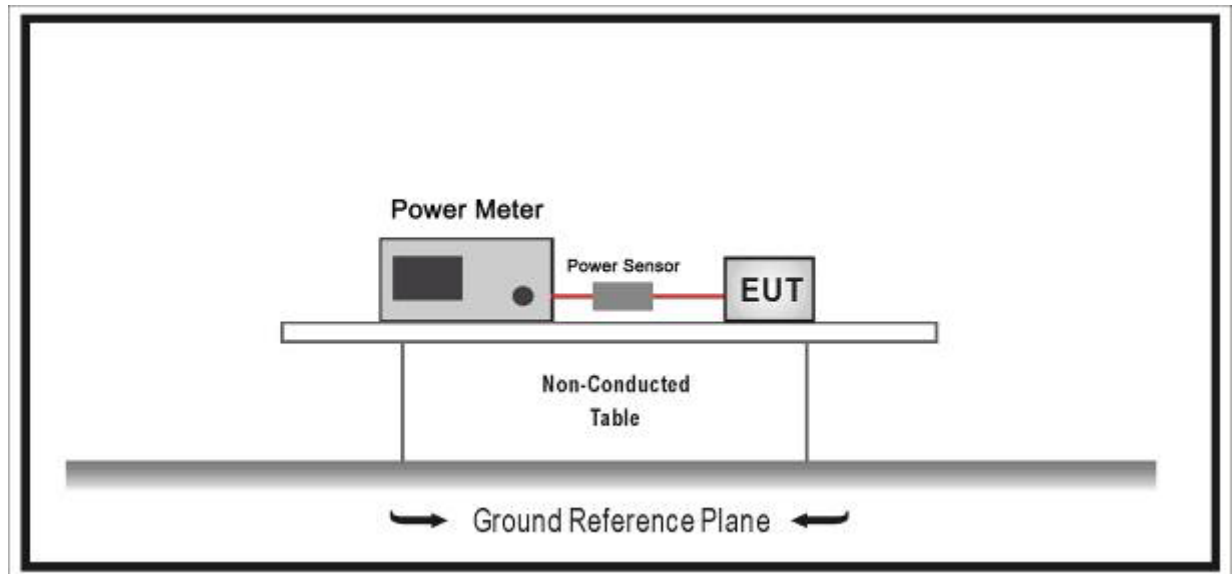
### 8.1. Test Equipment

Power Output / TR-8

Instrument	Manufacturer	Type No.	Serial No.	Cal. Due Date
Wideband Peak Power Meter	Anritsu	ML2495A	0905006	2016.11.10
Power Sensor	Anritsu	MA2411B	0846014	2016.11.10
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.

### 8.2. Test Setup



### 8.3. Limit

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.

Systems operating in the 2400-2483.5 MHz band that are used exclusively for fixed, point-to-point operations may employ transmitting antennas with directional gain greater than 6 dBi provided the maximum conducted output power of the intentional radiator is reduced by 1 dB for every 3 dB that the directional gain of the antenna exceeds 6 dBi.

## 8.4. Test Procedure

The EUT was tested according to DTS test procedure of ANSI C63.10 for compliance to FCC 47CFR 15.247 requirements. The maximum conducted output power using ANSI C63.10 section 11.9.2.3 AVGPM Average power meter method.

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 average detector to test.

## 8.5. Uncertainty

The measurement uncertainty is defined as  $\pm 1.27$  dB

### 8.6. 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	Average Power (dBm)
802.11b(Ant 1)	20	2437	6	1	21.61
				5.5	20.98
				11	20.51
802.11g(Ant 1)	20	2437	6	6	22.29
				24	21.18
				54	20.86
802.11n (Ant 1)	20	2437	6	MCS0	22.18
				MCS4	21.65
				MCS7	21.03
802.11n (Ant 1)	40	2437	6	MCS0	21.51
				MCS4	20.96
				MCS7	20.01

Product	:	ROUTER WI-FI ADSL2+
Test Item	:	Power Output
Test Site	:	TR8
Test Mode	:	Mode 1: Transmit by 802.11b

Channel No.	Frequency (MHz)	Measurement Power Output (Average) (dBm)		Total Power (dBm)	Limit (dBm)	Result
		Ant 1	Ant 2			
1	2412	18.56	18.89	21.74	30.00	Pass
6	2437	19.68	19.85	22.78	30.00	Pass
11	2462	19.78	20.56	23.20	30.00	Pass

Product	:	ROUTER WI-FI ADSL2+
Test Item	:	Power Output
Test Site	:	TR8
Test Mode	:	Mode 2: Transmit by 802.11g

Channel No.	Frequency (MHz)	Measurement Power Output (Average) (dBm)		Total Power (dBm)	Limit (dBm)	Result
		Ant 1	Ant 2			
1	2412	16.29	16.38	19.35	30.00	Pass
6	2437	21.21	21.76	24.50	30.00	Pass
11	2462	16.65	17.61	20.17	30.00	Pass

Product	:	ROUTER WI-FI ADSL2+
Test Item	:	Power Output
Test Site	:	TR8
Test Mode	:	Mode 3: Transmit by 802.11n(20MHz)

Channel No.	Frequency (MHz)	Measurement Power Output (Average) (dBm)		Total Power (dBm)	Limit (dBm)	Result
		Ant 1	Ant 2			
1	2412	15.28	15.85	18.58	30.00	Pass
6	2437	21.56	21.78	24.68	30.00	Pass
11	2462	16.68	17.16	19.94	30.00	Pass

Product	:	ROUTER WI-FI ADSL2+
Test Item	:	Power Output
Test Site	:	TR8
Test Mode	:	Mode 4: Transmit by 802.11n(40MHz)

Channel No.	Frequency (MHz)	Measurement Power Output (Average) (dBm)		Total Power (dBm)	Limit (dBm)	Result
		Ant 1	Ant 2			
1	2422	12.62	12.98	15.81	30.00	Pass
6	2437	15.68	16.11	18.91	30.00	Pass
11	2452	12.88	13.43	16.17	30.00	Pass

## 9. Power Spectral Density

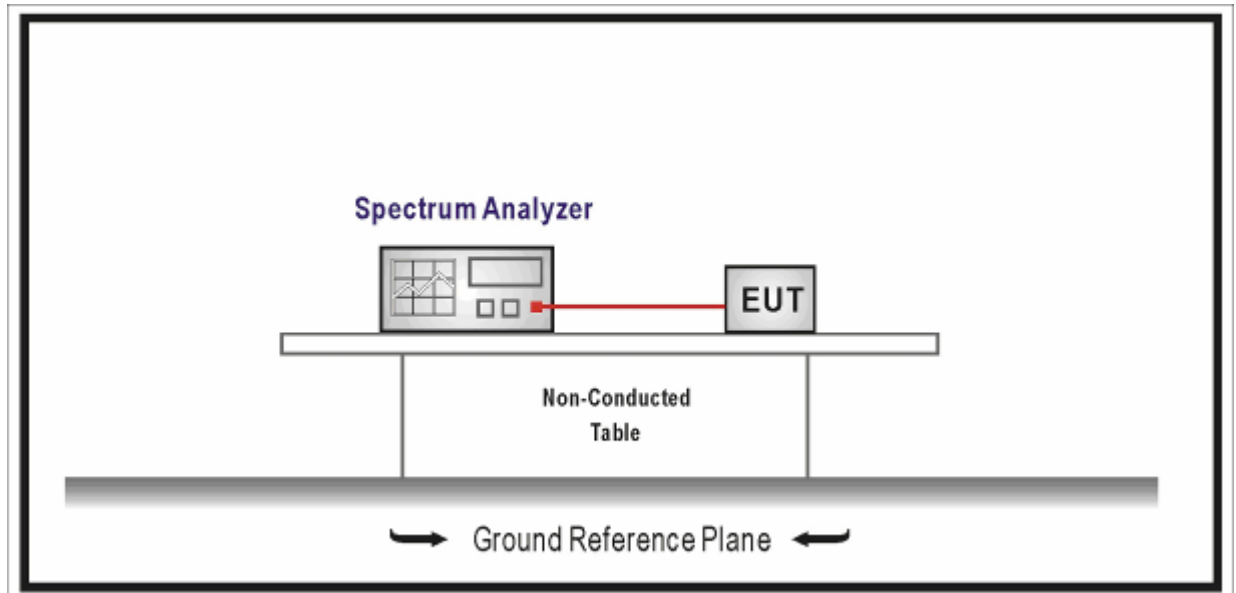
### 9.1. Test Equipment

Power Spectral Density / TR-8

Instrument	Manufacturer	Type No.	Serial No.	Cal. Due Date
Spectrum Analyzer	Agilent	E4446A	MY45300103	2016.01.07
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 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.

## 9.4. Test Procedure

The EUT was setup according to ANSI C63.4, 2014; tested according to DTS test procedure of KDB 558074 for compliance to FCC 47CFR 15.247 requirements.

The maximum power spectral density using KDB 558074 section 10.2 PKPSD (peak PSD) method.

- 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.

## 9.5. Uncertainty

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



**9.6. Test Result**

Product	:	ROUTER WI-FI ADSL2+
Test Item	:	Power Spectral Density
Test Site	:	TR-8
Test Mode	:	Mode 1: Transmit by 802.11b

Channel No.	Frequency (MHz)	Measurement PPSD (dBm)		Total PPSD (dBm)	Limit (dBm)	Result
		Ant 1	Ant 2			
01	2412	-3.253	3.912	4.68	8	Pass
06	2437	-2.415	-0.818	1.47	8	Pass
11	2462	-2.408	0.362	2.20	8	Pass

**Channel 01 (2412MHz) Ant 1**



### Channel 06 (2437MHz) Ant 1



### Channel 11 (2462MHz) Ant 1



### Channel 01 (2412MHz) Ant 2



### Channel 06 (2437MHz) Ant 2

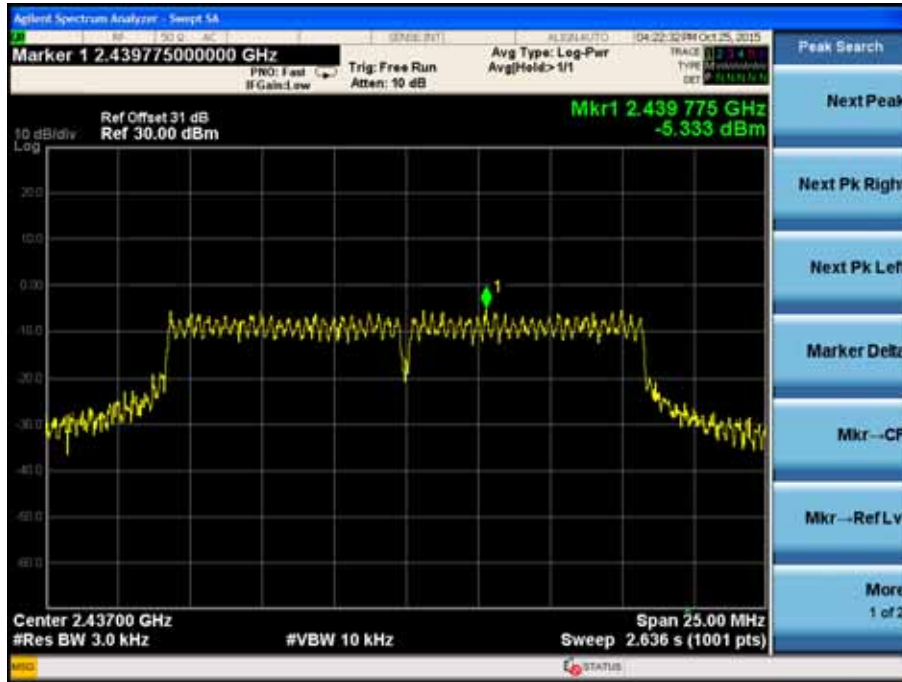


### Channel 11 (2462MHz) Ant 2

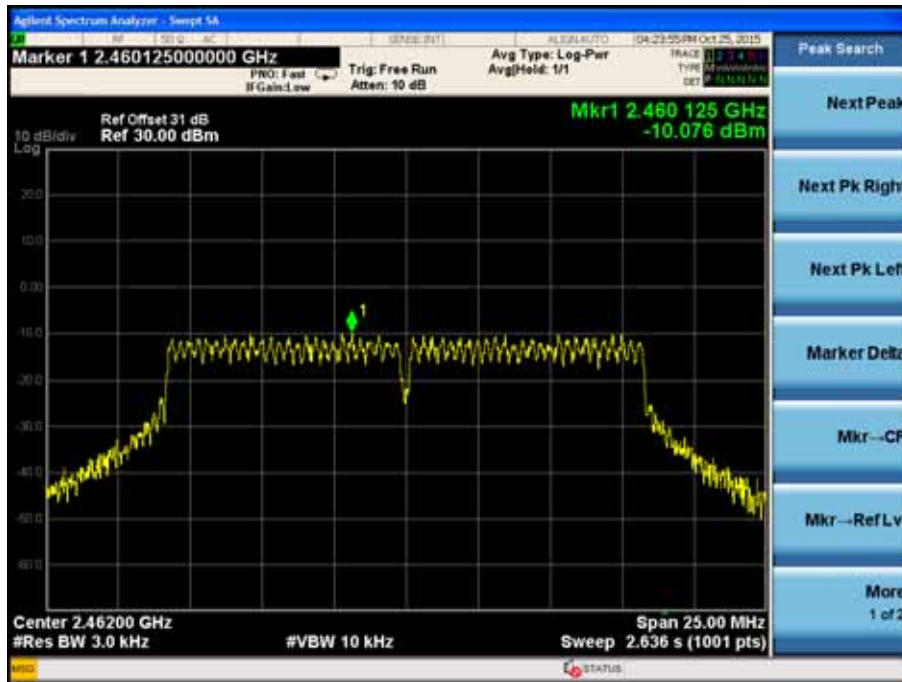




### Channel 06 (2437MHz) Ant 1



### Channel 11 (2462MHz) Ant 1

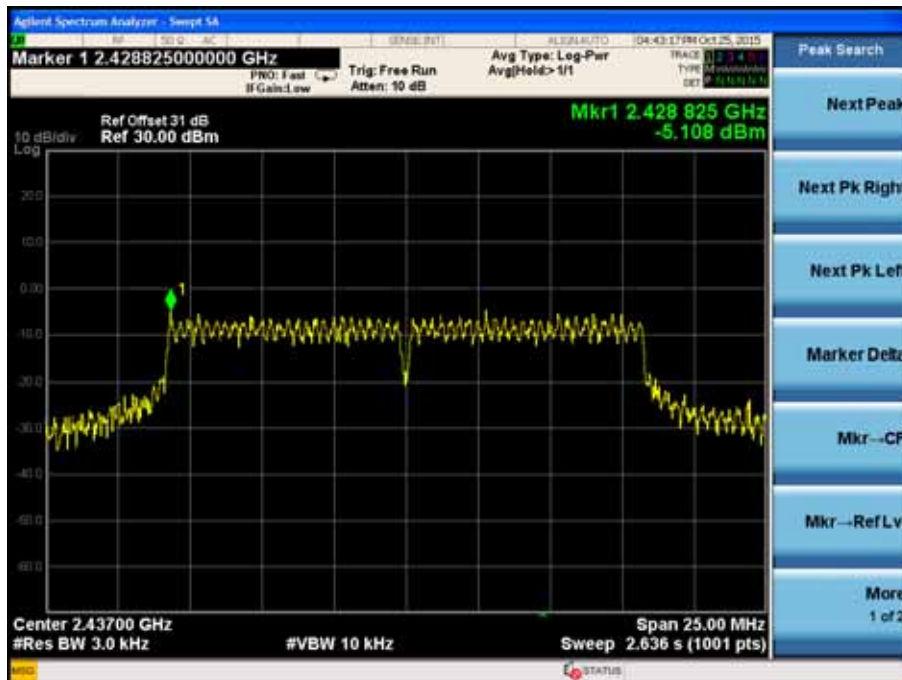




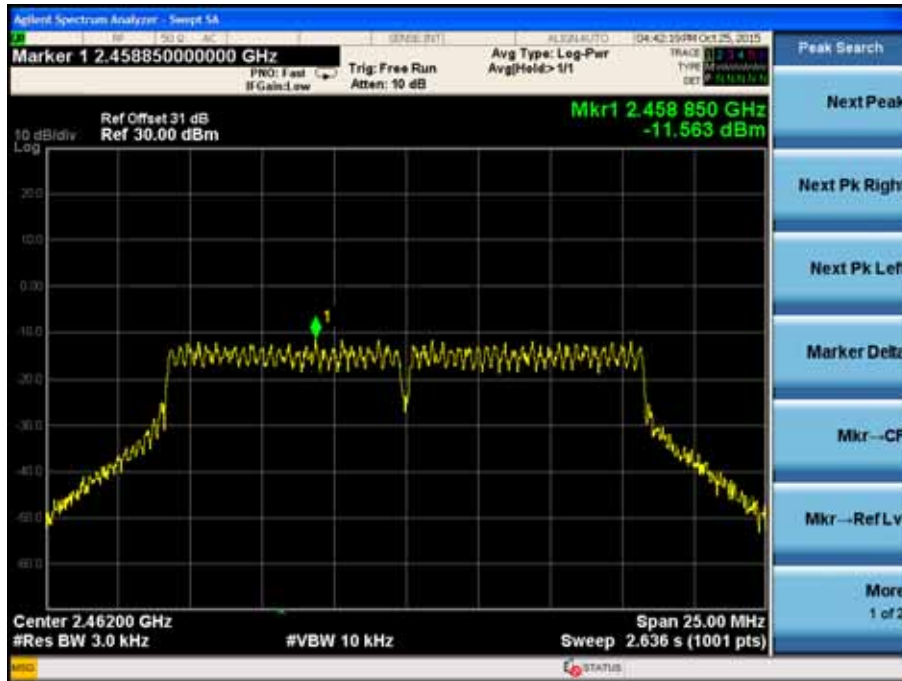
### Channel 01 (2412MHz) Ant 2



### Channel 06 (2437MHz) Ant 2



### Channel 11 (2462MHz) Ant 2

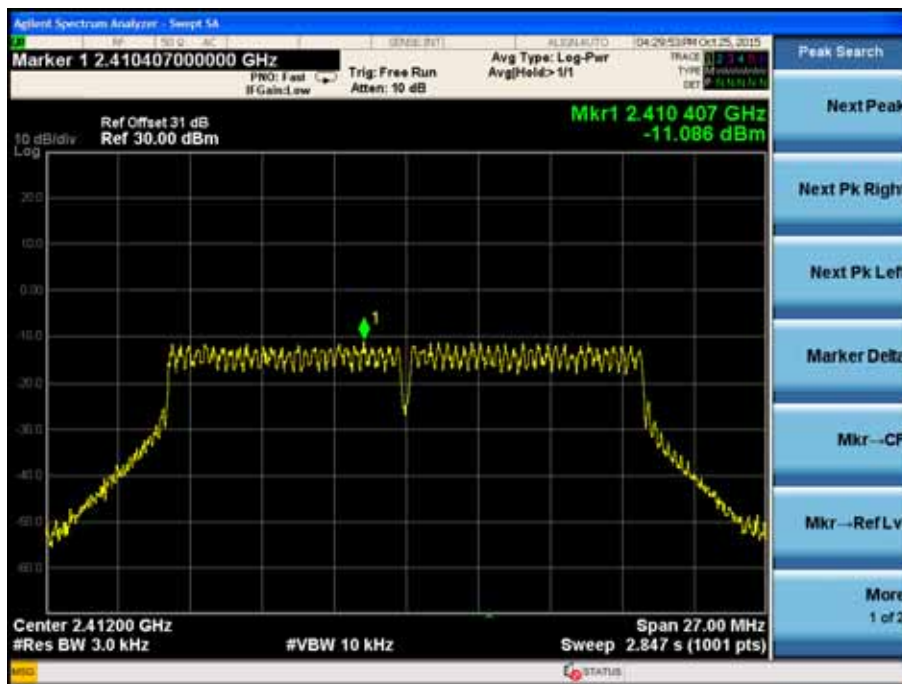




Product	:	ROUTER WI-FI ADSL2+
Test Item	:	Power Spectral Density
Test Site	:	TR-8
Test Mode	:	Mode 3: Transmit by 802.11n(20MHz)

Channel No.	Frequency (MHz)	Measurement PPSD (dBm)		Total PPSD (dBm)	Limit (dBm)	Result
		Ant 1	Ant 2			
01	2412	-11.086	-11.605	-8.33	8	Pass
06	2437	-4.401	-4.074	-1.22	8	Pass
11	2462	-10.339	-11.080	-7.68	8	Pass

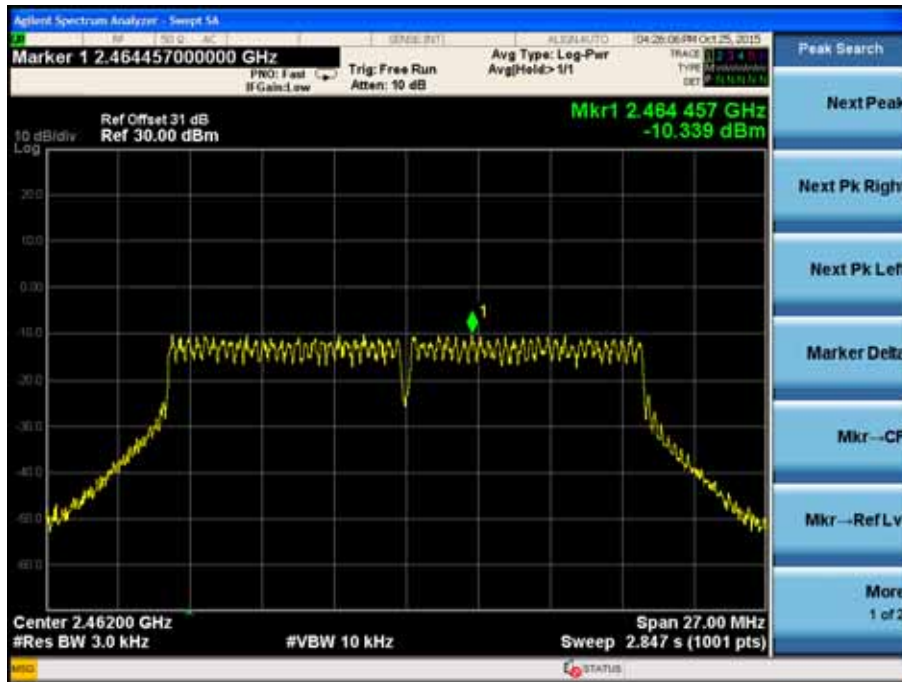
**Channel 01 (2412MHz) Ant 1**



### Channel 06 (2437MHz) Ant 1



### Channel 11 (2462MHz) Ant 1



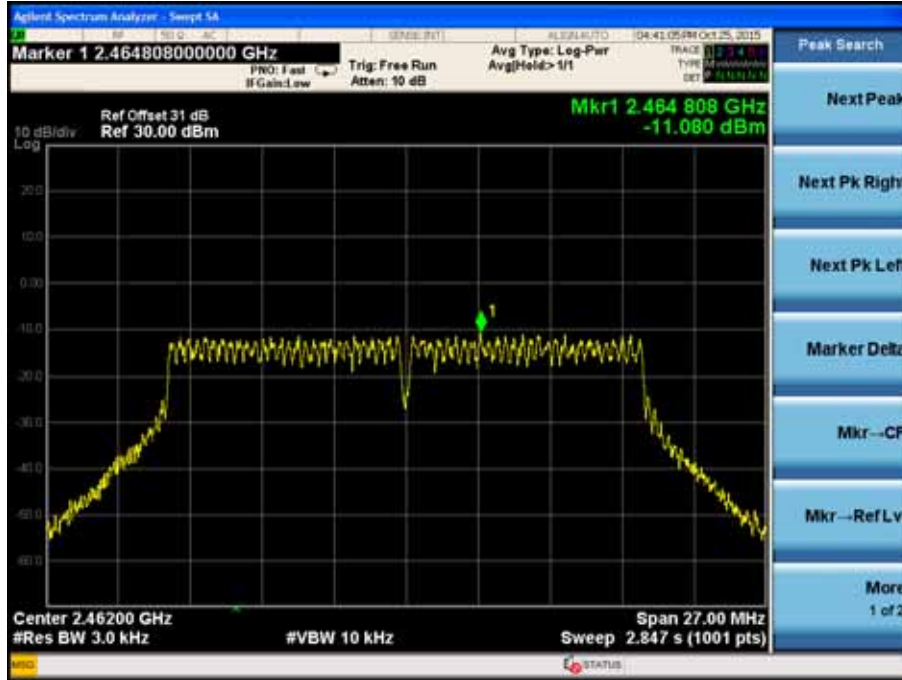
### Channel 01 (2412MHz) Ant 2



### Channel 06 (2437MHz) Ant 2

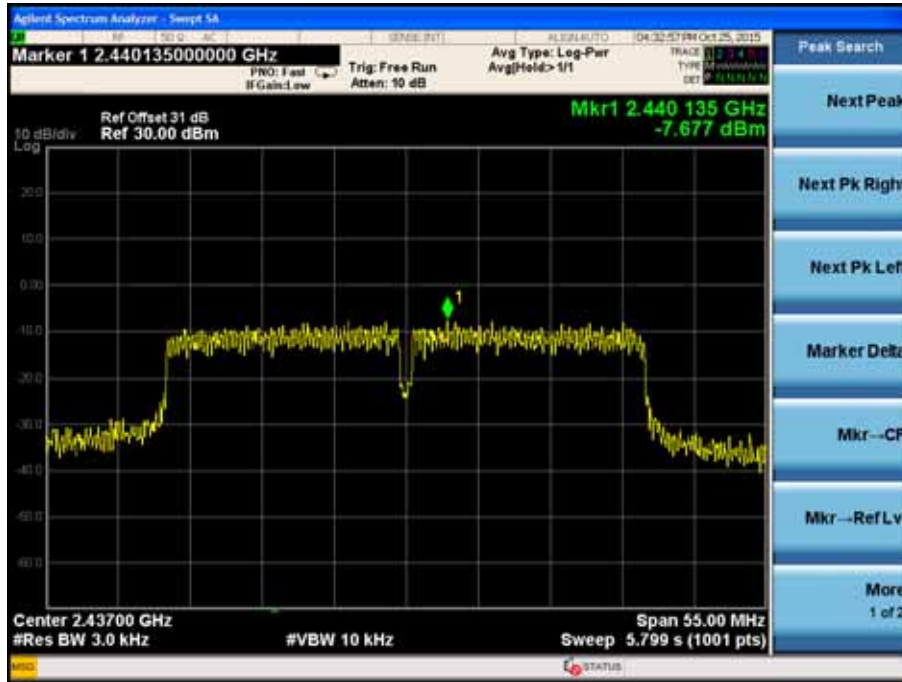


### Channel 11 (2462MHz) Ant 2

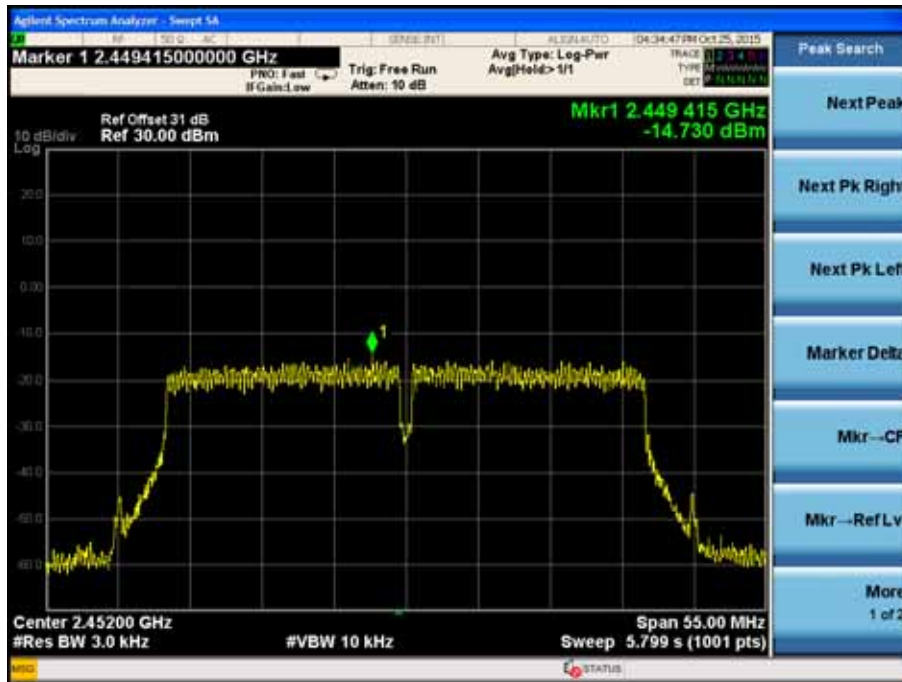




### Channel 06 (2437MHz) Ant 1



### Channel 09 (2452MHz) Ant 1





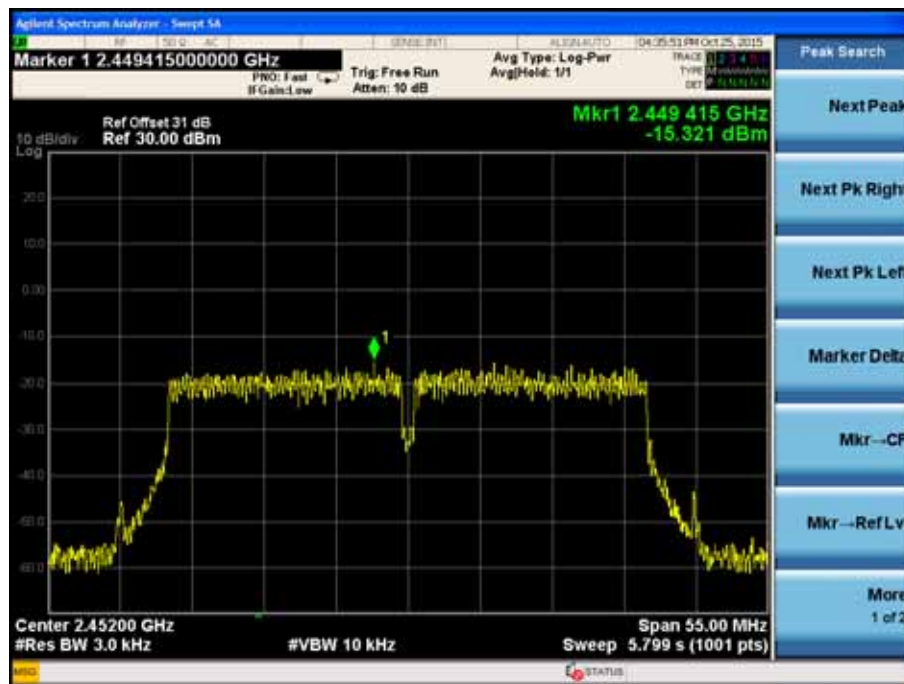
### Channel 03 (2422MHz) Ant 2



### Channel 06 (2437MHz) Ant 2



### Channel 09 (2452MHz) Ant 2



The End