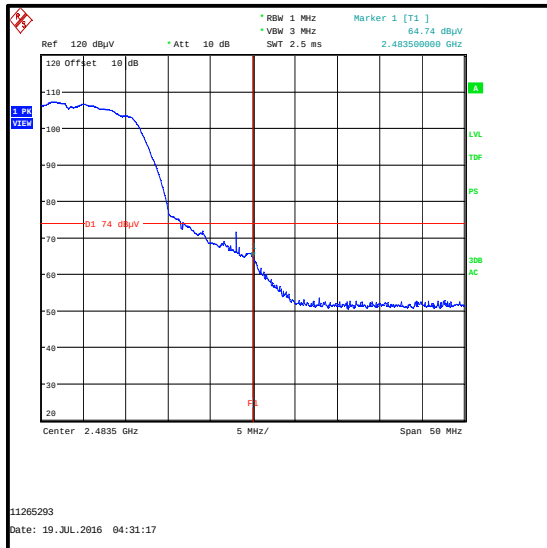
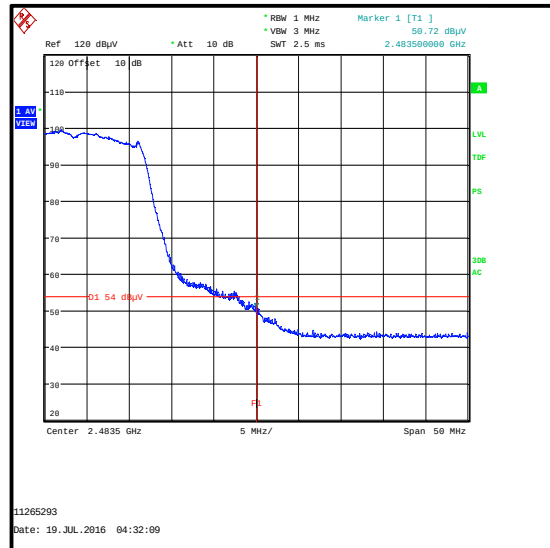
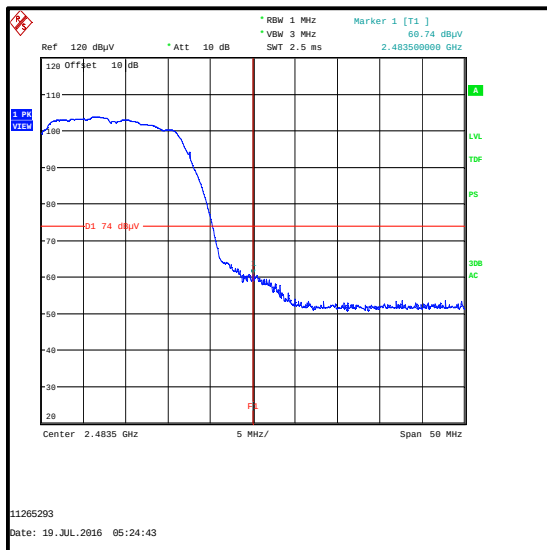


Transmitter Band Edge Radiated Emissions (continued)**Results: 802.11g / 20 MHz / BPSK / 6 Mbps / Port 1**

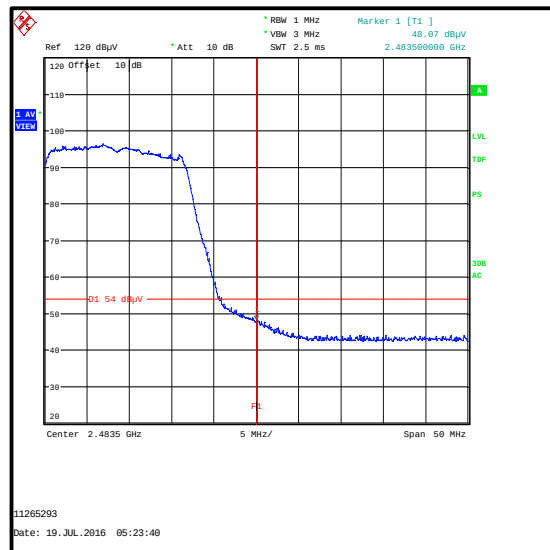
**Upper Band Edge Peak Measurement
Channel 11**



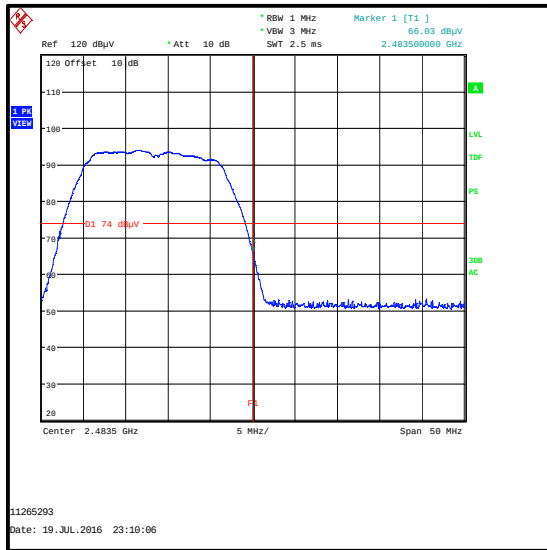
**Upper Band Edge Average Measurement
Channel 11**



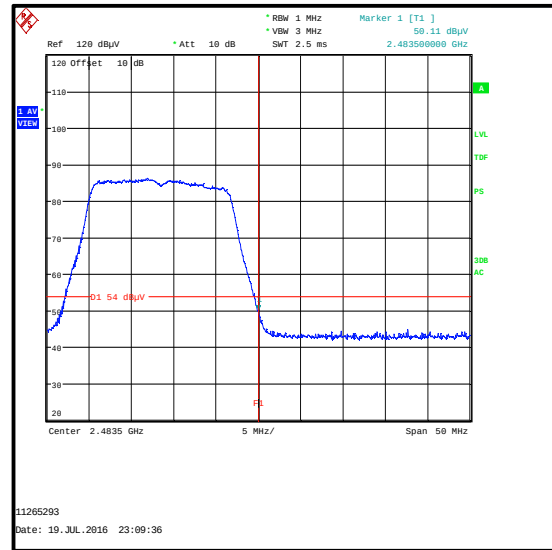
**Upper Band Edge Peak Measurement
Channel 12**



**Upper Band Edge Average Measurement
Channel 12**

Transmitter Band Edge Radiated Emissions (continued)**Results: 802.11g / 20 MHz / BPSK / 6 Mbps / Port 1**

**Upper Band Edge Peak Measurement
Channel 13**



**Upper Band Edge Average Measurement
Channel 13**

Transmitter Band Edge Radiated Emissions (continued)**Results: 802.11n HT20 / SISO / BPSK / 6.5 Mbps / Port 1****Results: Lower Band Edge / Channel 1**

Frequency (MHz)	Level (dBμV/m)	-30 dBc Limit (dBμV/m)	Margin (dB)	Result
2398.558	57.5	66.7	9.2	Complied
2400	54.2	66.7	12.5	Complied

Results: Lower Band Edge / Restricted Band / Peak / Channel 1

Frequency (MHz)	Level (dBμV/m)	Limit (dBμV/m)	Margin (dB)	Result
2388.974	58.6	74.0	15.4	Complied

Results: Lower Band Edge / Restricted Band / Average / Channel 1

Frequency (MHz)	Level (dBμV/m)	Limit (dBμV/m)	Margin (dB)	Result
2389.744	43.7	54.0	10.3	Complied

Results: Lower Band Edge / Channel 2

Frequency (MHz)	Level (dBμV/m)	-30 dBc Limit (dBμV/m)	Margin (dB)	Result
2397.212	55.4	67.8	12.4	Complied
2400	55.1	67.8	12.7	Complied

Results: Lower Band Edge / Channel 3

Frequency (MHz)	Level (dBμV/m)	-30 dBc Limit (dBμV/m)	Margin (dB)	Result
2399.551	58.4	69.3	10.9	Complied
2400	56.6	69.3	12.7	Complied

Results: Upper Band Edge / Peak / Channel 9

Frequency (MHz)	Level (dBμV/m)	Limit (dBμV/m)	Margin (dB)	Result
2483.5	69.9	74.0	4.1	Complied

Results: Upper Band Edge / Average / Channel 9

Frequency (MHz)	Level (dBμV/m)	Limit (dBμV/m)	Margin (dB)	Result
2483.5	48.9	54.0	5.1	Complied

Transmitter Band Edge Radiated Emissions (continued)**Results: 802.11n HT20 / SISO / BPSK / 6.5 Mbps / Port 1****Results: Upper Band Edge / Peak / Channel 10**

Frequency (MHz)	Level (dBµV/m)	Limit (dBµV/m)	Margin (dB)	Result
2483.5	65.8	74.0	8.2	Complied
2484.143	66.3	74.0	7.7	Complied

Results: Upper Band Edge / Average / Channel 10

Frequency (MHz)	Level (dBµV/m)	Limit (dBµV/m)	Margin (dB)	Result
2483.5	47.5	54.0	6.5	Complied
2484.782	47.9	54.0	6.1	Complied

Results: Upper Band Edge / Peak / Channel 11

Frequency (MHz)	Level (dBµV/m)	Limit (dBµV/m)	Margin (dB)	Result
2483.5	66.9	74.0	7.1	Complied
2483.580	69.5	74.0	4.5	Complied

Results: Upper Band Edge / Average / Channel 11

Frequency (MHz)	Level (dBµV/m)	Limit (dBµV/m)	Margin (dB)	Result
2483.5	44.8*	54.0	9.2	Complied

Results: Upper Band Edge / Peak / Channel 12

Frequency (MHz)	Level (dBµV/m)	Limit (dBµV/m)	Margin (dB)	Result
2483.5	62.6	74.0	11.4	Complied
2484.420	64.2	74.0	9.8	Complied

Results: Upper Band Edge / Average / Channel 12

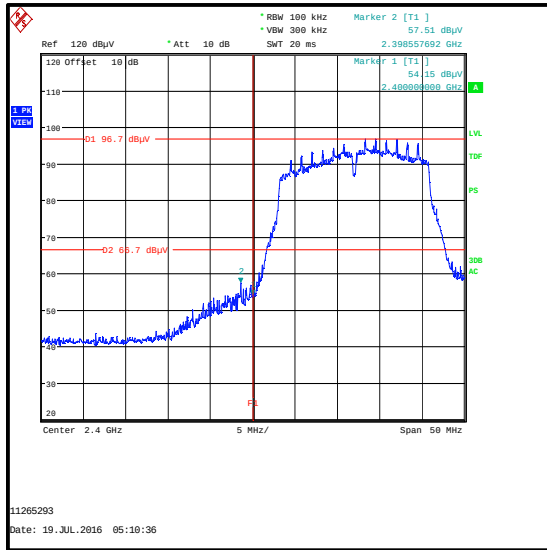
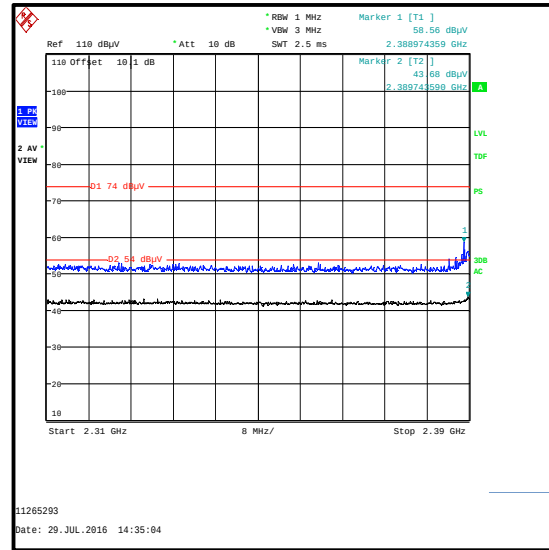
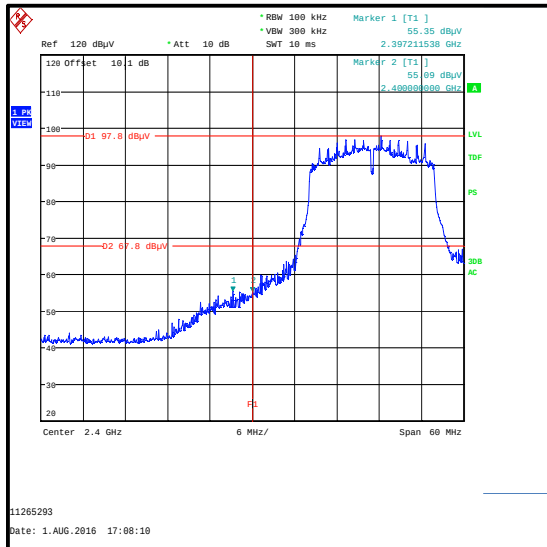
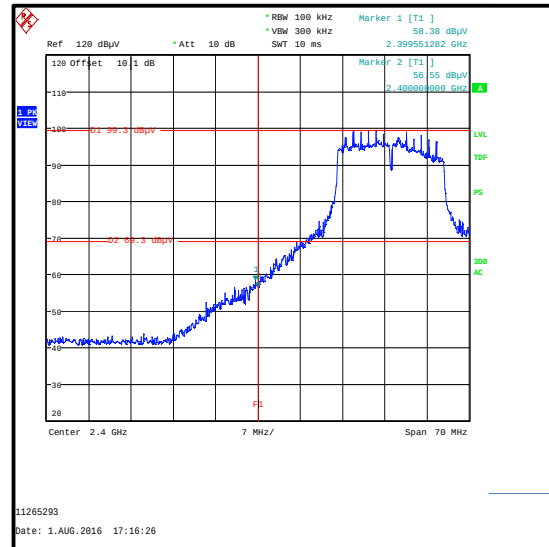
Frequency (MHz)	Level (dBµV/m)	Limit (dBµV/m)	Margin (dB)	Result
2483.5	48.9	54.0	5.1	Complied
2485.221	49.1	54.0	4.9	Complied

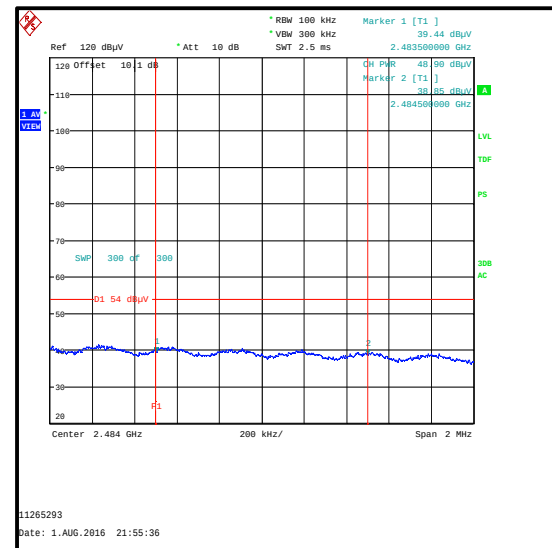
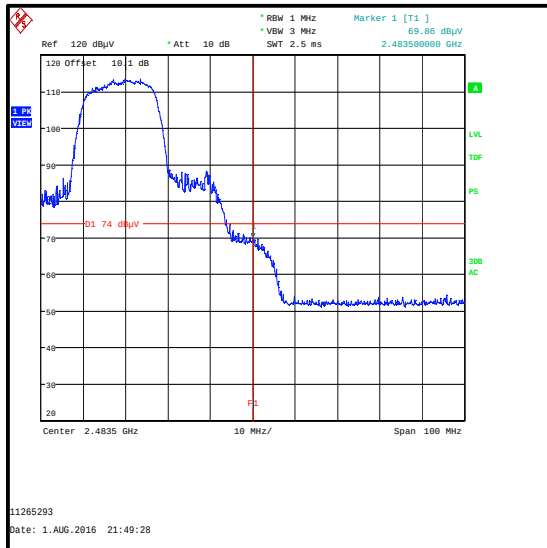
Results: Upper Band Edge / Peak / Channel 13

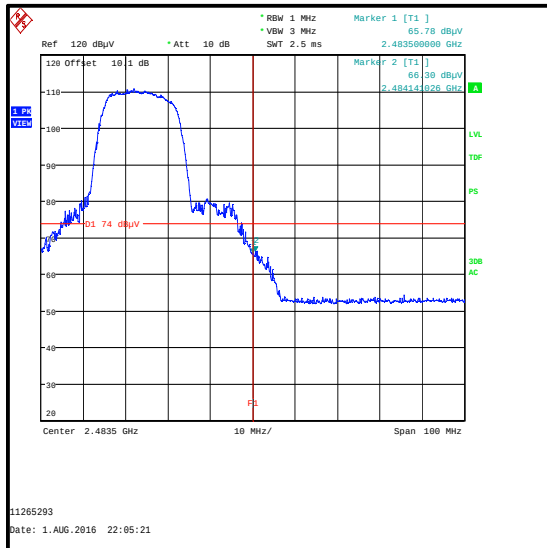
Frequency (MHz)	Level (dBµV/m)	Limit (dBµV/m)	Margin (dB)	Result
2483.5	67.0	74.0	7.0	Complied

Transmitter Band Edge Radiated Emissions (continued)**Results: 802.11n HT20 / SISO / BPSK / 6.5 Mbps / Port 1****Results: Upper Band Edge / Average / Channel 13**

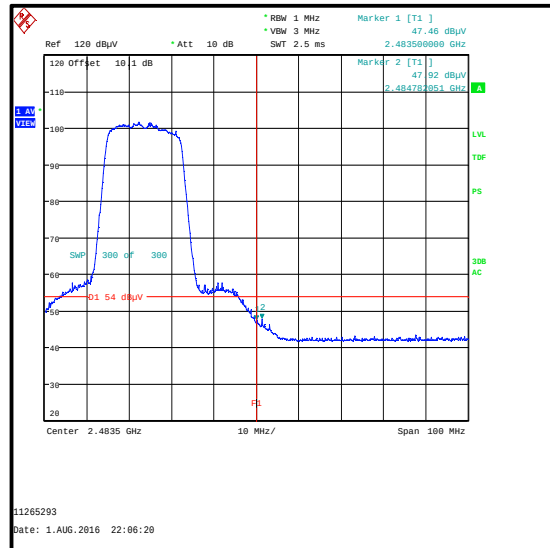
Frequency (MHz)	Level (dBμV/m)	Limit (dBμV/m)	Margin (dB)	Result
2483.5	48.8	54.0	5.2	Complied

**Lower Band Edge Peak Measurement
Channel 1****2310 MHz to 2390 MHz Restricted Band Plot****Lower Band Edge Peak Measurement
Channel 2****Lower Band Edge Peak Measurement
Channel 3**

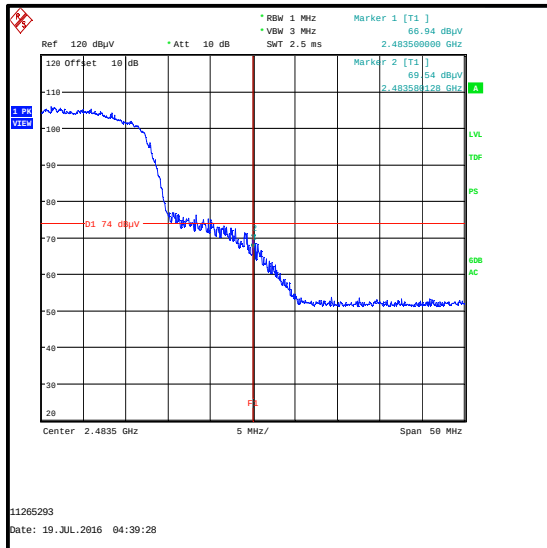
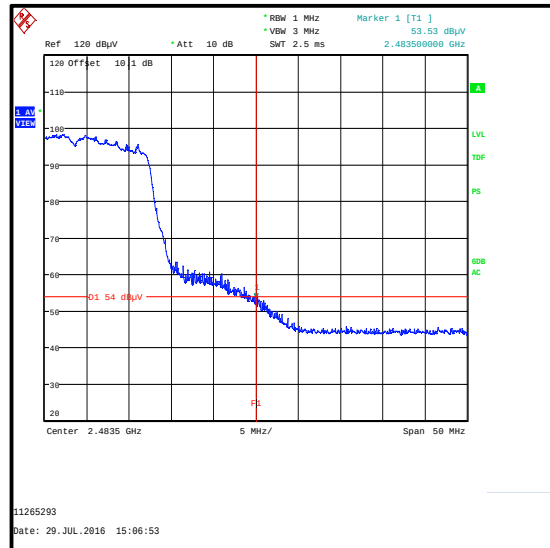
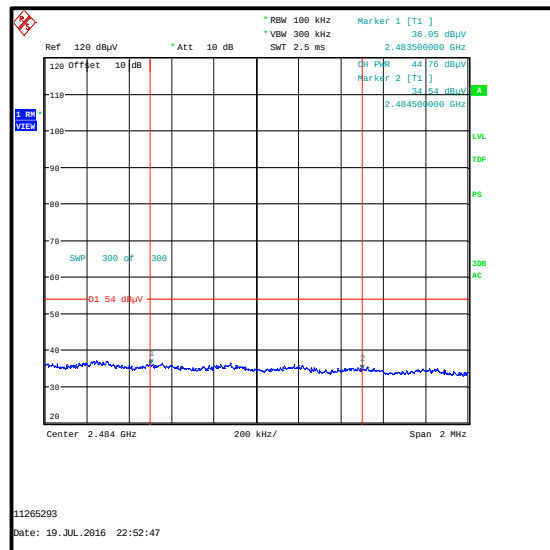
Transmitter Band Edge Radiated Emissions (continued)**Results: 802.11n HT20 / SISO / BPSK / 6.5 Mbps / Port 1**

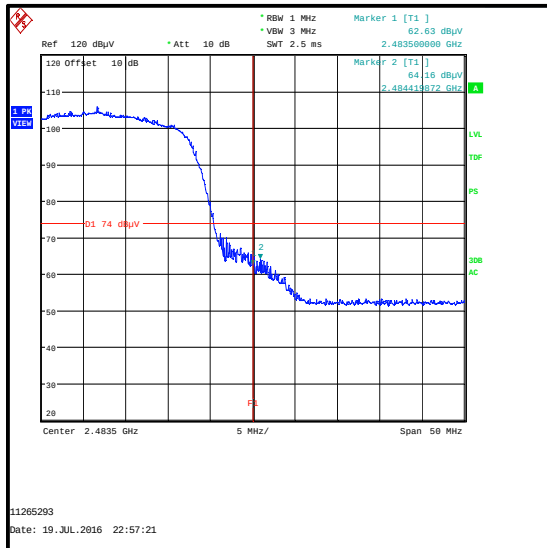
Transmitter Band Edge Radiated Emissions (continued)**Results: 802.11n HT20 / SISO / BPSK / 6.5 Mbps / Port 1**

**Upper Band Edge Peak Measurement
Channel 10**

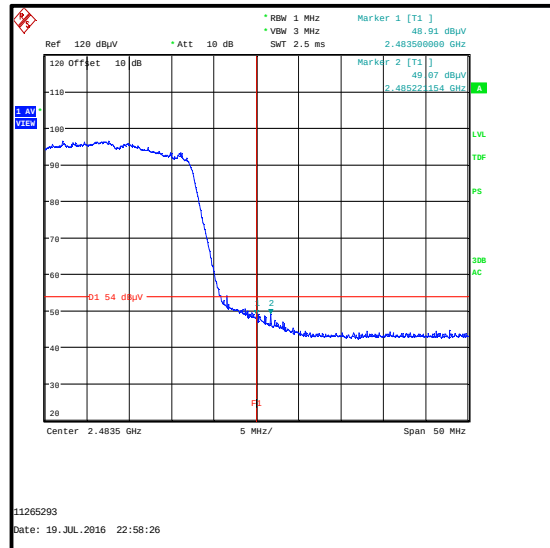


**Upper Band Edge Average Measurement
Channel 10**

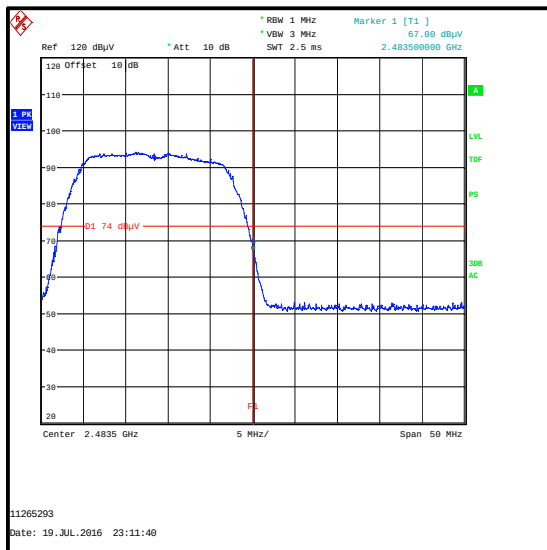
Transmitter Band Edge Radiated Emissions (continued)**Results: 802.11n HT20 / SISO / BPSK / 6.5 Mbps / Port 1****Upper Band Edge Peak Measurement
Channel 11****Upper Band Edge Average Measurement
Channel 11****Upper Band Edge Average Measurement
Channel 11 / Integration Method at 2483.5 MHz**

Transmitter Band Edge Radiated Emissions (continued)**Results: 802.11n HT20 / SISO / BPSK / 6.5 Mbps / Port 1**

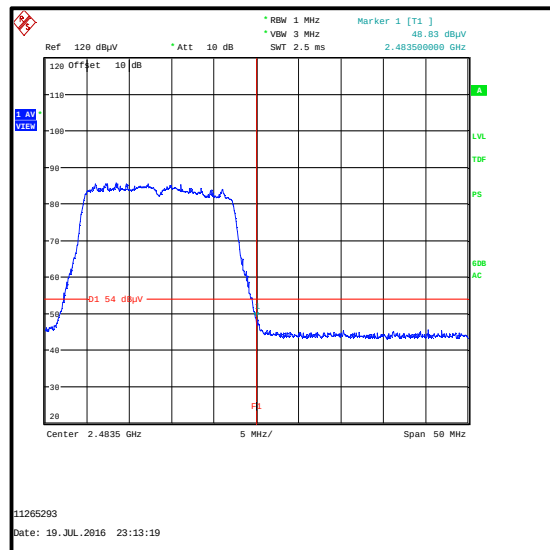
**Upper Band Edge Peak Measurement
Channel 12**



**Upper Band Edge Average Measurement
Channel 12**



**Upper Band Edge Peak Measurement
Channel 13**



**Upper Band Edge Average Measurement
Channel 13**

Transmitter Band Edge Radiated Emissions (continued)**Results: 802.11n HT20 / MIMO / BPSK / MCS0****Results: Lower Band Edge / Channel 1**

Frequency (MHz)	Level (dBμV/m)	-30 dBc Limit (dBμV/m)	Margin (dB)	Result
2398.157	59.9	69.1	9.2	Complied
2400	55.5	69.1	13.6	Complied

Results: Lower Band Edge / Restricted Band / Peak / Channel 1

Frequency (MHz)	Level (dBμV/m)	Limit (dBμV/m)	Margin (dB)	Result
2389.744	62.1	74.0	11.9	Complied

Results: Lower Band Edge / Restricted Band / Average / Channel 1

Frequency (MHz)	Level (dBμV/m)	Limit (dBμV/m)	Margin (dB)	Result
2389.872	45.3	54.0	8.7	Complied

Results: Lower Band Edge / Channel 2

Frequency (MHz)	Level (dBμV/m)	-30 dBc Limit (dBμV/m)	Margin (dB)	Result
2399.808	62.3	70.2	7.9	Complied
2400	57.9	70.2	12.3	Complied

Results: Lower Band Edge / Channel 3

Frequency (MHz)	Level (dBμV/m)	-30 dBc Limit (dBμV/m)	Margin (dB)	Result
2398.205	60.6	72.5	11.9	Complied
2400	57.5	72.5	15.0	Complied

Results: Upper Band Edge / Peak / Channel 9

Frequency (MHz)	Level (dBμV/m)	Limit (dBμV/m)	Margin (dB)	Result
2483.5	68.9	74.0	5.1	Complied
2485.423	69.5	74.0	4.5	Complied

Results: Upper Band Edge / Average / Channel 9

Frequency (MHz)	Level (dBμV/m)	Limit (dBμV/m)	Margin (dB)	Result
2483.5	47.4	54.0	6.6	Complied

Transmitter Band Edge Radiated Emissions (continued)**Results: 802.11n HT20 / MIMO / BPSK / MCS0****Results: Upper Band Edge / Peak / Channel 10**

Frequency (MHz)	Level (dBμV/m)	Limit (dBμV/m)	Margin (dB)	Result
2483.5	67.2	74.0	6.8	Complied

Results: Upper Band Edge / Average / Channel 10

Frequency (MHz)	Level (dBμV/m)	Limit (dBμV/m)	Margin (dB)	Result
2483.5	48.2	54.0	5.8	Complied

Results: Upper Band Edge / Peak / Channel 11

Frequency (MHz)	Level (dBμV/m)	Limit (dBμV/m)	Margin (dB)	Result
2483.5	67.3	74.0	6.7	Complied

Results: Upper Band Edge / Average / Channel 11

Frequency (MHz)	Level (dBμV/m)	Limit (dBμV/m)	Margin (dB)	Result
2483.5	44.5*	54.0	9.5	Complied

Results: Upper Band Edge / Peak / Channel 12

Frequency (MHz)	Level (dBμV/m)	Limit (dBμV/m)	Margin (dB)	Result
2483.5	64.2	74.0	9.8	Complied
2484.141	64.5	74.0	9.5	Complied

Results: Upper Band Edge / Average / Channel 12

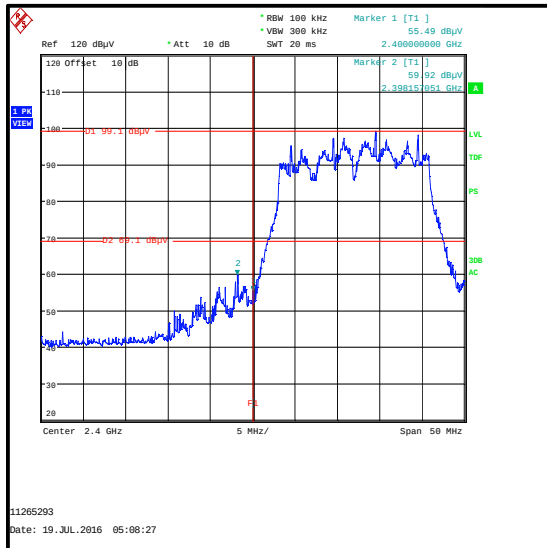
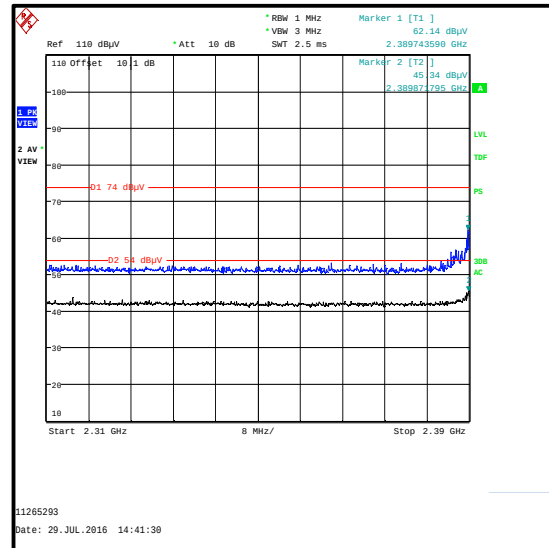
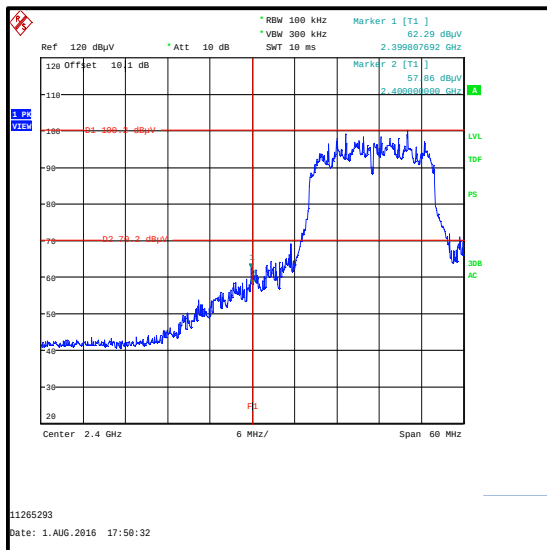
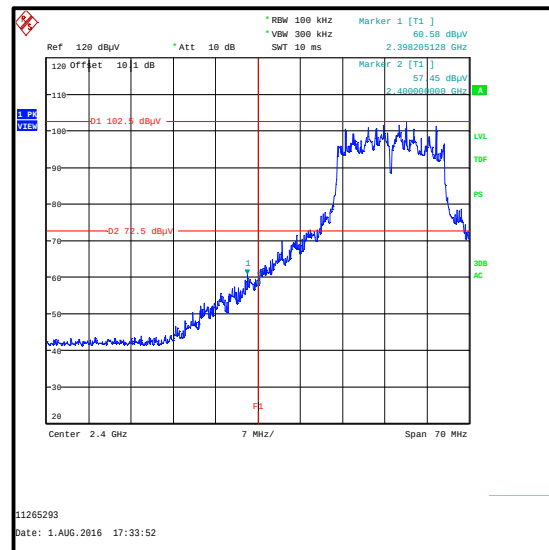
Frequency (MHz)	Level (dBμV/m)	Limit (dBμV/m)	Margin (dB)	Result
2483.5	50.4	54.0	3.6	Complied

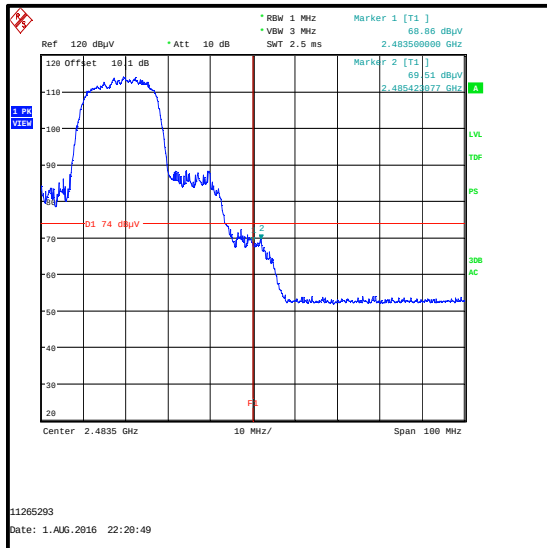
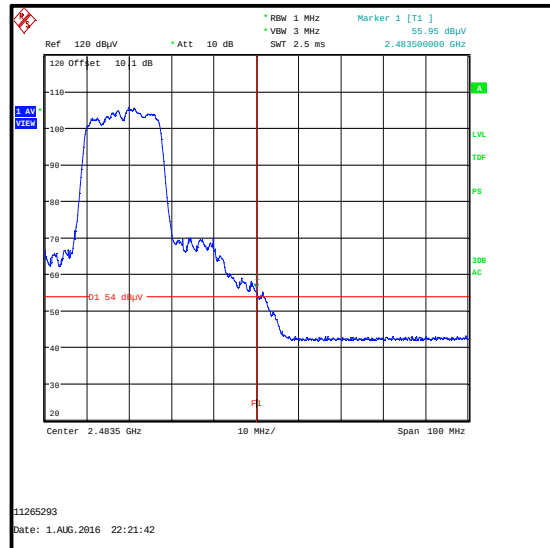
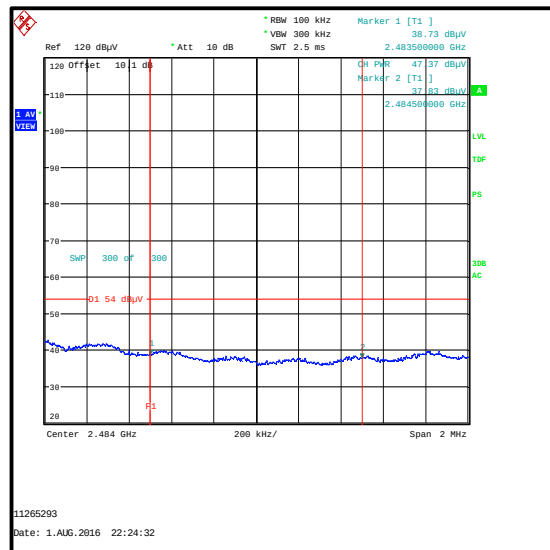
Results: Upper Band Edge / Peak / Channel 13

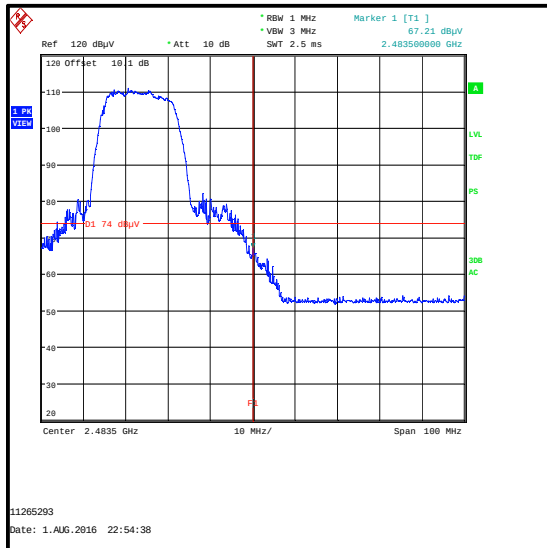
Frequency (MHz)	Level (dBμV/m)	Limit (dBμV/m)	Margin (dB)	Result
2483.5	67.5	74.0	6.5	Complied

Results: Upper Band Edge / Average / Channel 13

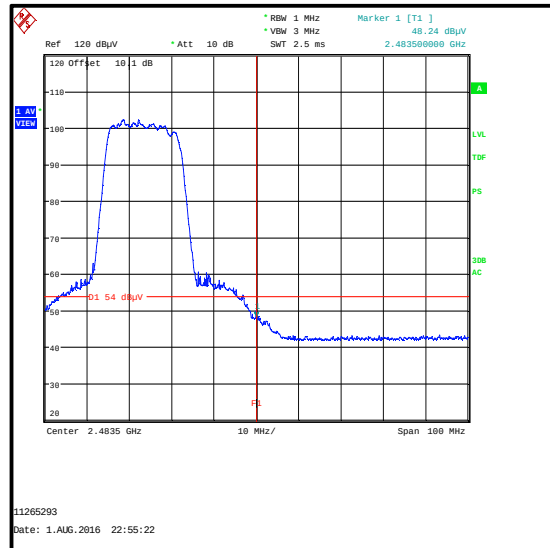
Frequency (MHz)	Level (dBμV/m)	Limit (dBμV/m)	Margin (dB)	Result
2483.5	50.8	54.0	3.2	Complied

Transmitter Band Edge Radiated Emissions (continued)**Results: 802.11n HT20 / MIMO / BPSK / MCS0****Lower Band Edge Peak Measurement
Channel 1****2310 MHz to 2390 MHz Restricted Band Plot****Lower Band Edge Peak Measurement
Channel 2****Lower Band Edge Peak Measurement
Channel 3**

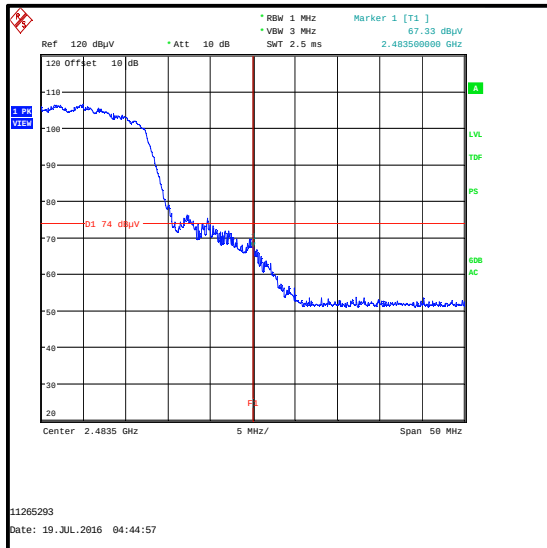
Transmitter Band Edge Radiated Emissions (continued)**Results: 802.11n HT20 / MIMO / BPSK / MCS0****Upper Band Edge Peak Measurement
Channel 9****Upper Band Edge Average Measurement
Channel 9****Upper Band Edge Average Measurement
Channel 9 / Integration Method at 2483.5 MHz**

Transmitter Band Edge Radiated Emissions (continued)**Results: 802.11n HT20 / MIMO / BPSK / MCS0**

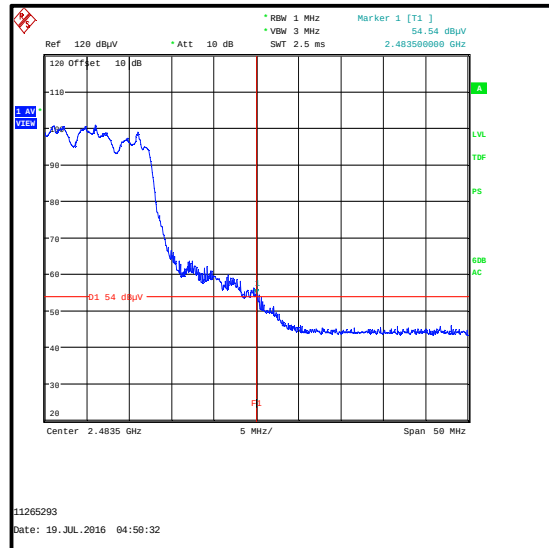
**Upper Band Edge Peak Measurement
Channel 10**



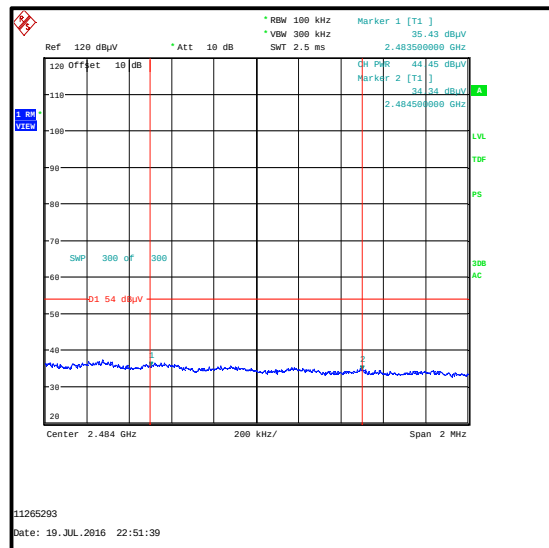
**Upper Band Edge Average Measurement
Channel 10**

Transmitter Band Edge Radiated Emissions (continued)**Results: 802.11n HT20 / MIMO / BPSK / MCS0**

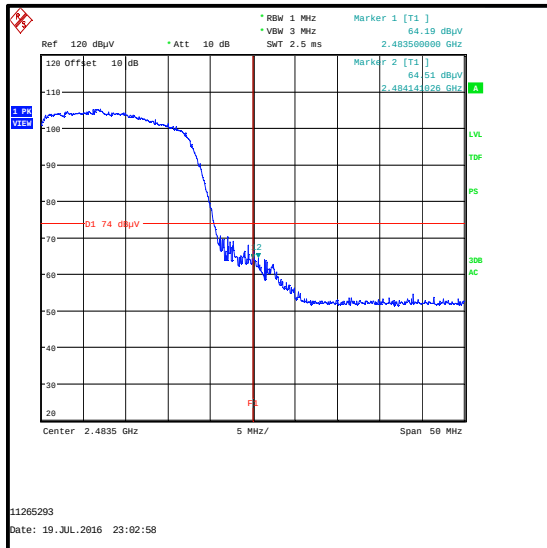
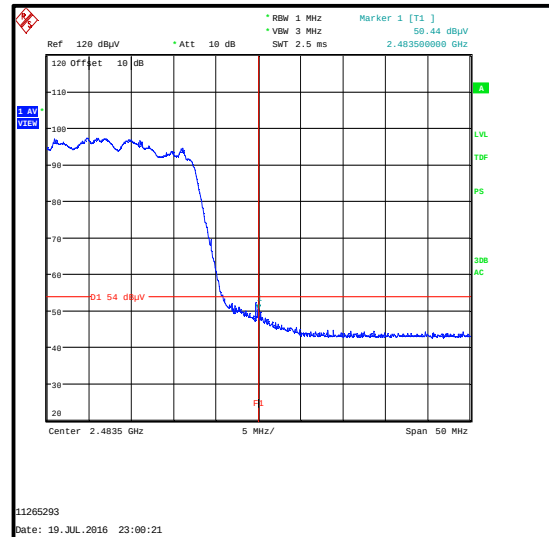
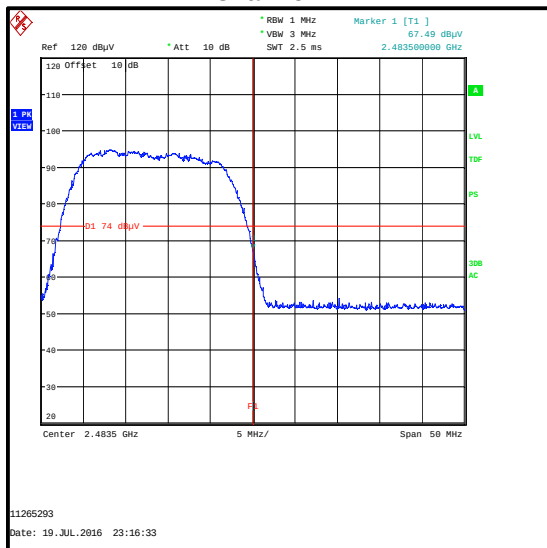
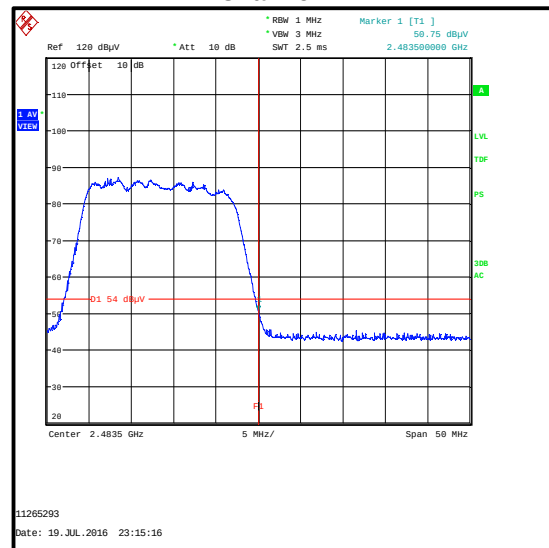
**Upper Band Edge Peak Measurement
Channel 11**



**Upper Band Edge Average Measurement
Channel 11**



**Upper Band Edge Average Measurement
Channel 11 / Integration Method at 2483.5 MHz**

Transmitter Band Edge Radiated Emissions (continued)**Results: 802.11n HT20 / MIMO / BPSK / MCS0****Upper Band Edge Peak Measurement
Channel 12****Upper Band Edge Average Measurement
Channel 12****Upper Band Edge Peak Measurement
Channel 13****Upper Band Edge Average Measurement
Channel 13**

Transmitter Band Edge Radiated Emissions (continued)**Test Equipment Used:**

Asset No.	Instrument	Manufacturer	Type No.	Serial No.	Date Calibration Due	Cal. Interval (Months)
M1656	Thermohygrometer	JM Handelspunkt	30.5015.13	Not stated	07 Apr 2017	12
K0002	3m RSE Chamber	Rainford EMC	N/A	N/A	21 Dec 2016	12
M1886	Test Receiver	Rohde & Schwarz	ESU26	100554	21 Mar 2017	12
A1534	Pre Amplifier	Hewlett Packard	8449B	3008A00405	19 Dec 2016	12
A1818	Antenna	EMCO	3115	00075692	17 Dec 2016	12
A1396	Attenuator	Huber & Suhner	6810.17.B	757987	26 Apr 2017	12
A2523	Attenuator	AtlanTecRF	AN18W5-10	832827#1	Calibrated before use	-
M1252	Signal Generator	Hewlett Packard	83640A	3119A00489	26 Oct 2017	24

6. Measurement Uncertainty

No measurement or test can ever be perfect and the imperfections give rise to error of measurement in the results. Consequently the result of a measurement is only an approximation to the value of the measurand (the specific quantity subject to measurement) and is only complete when accompanied by a statement of the uncertainty of the approximation.

The expression of uncertainty of a measurement result allows realistic comparison of results with reference values and limits given in specifications and standards.

The uncertainty of the result may need to be taken into account when interpreting the measurement results.

The reported expanded uncertainties below are based on a standard uncertainty multiplied by an appropriate coverage factor such that a confidence level of approximately 95% is maintained. For the purposes of this document "approximately" is interpreted as meaning "effectively" or "for most practical purposes".

Measurement Type	Range	Confidence Level (%)	Calculated Uncertainty
Minimum 6 dB Bandwidth	2.4 GHz to 2.4835 GHz	95%	±4.59 %
Duty Cycle	2.4 GHz to 2.4835 GHz	95%	±1.14 %
Spectral Power Density	2.4 GHz to 2.4835 GHz	95%	±1.13 dB
Conducted Maximum Output Power	2.4 GHz to 2.4835 GHz	95%	±1.13 dB
Radiated Spurious Emissions	30 MHz to 1 GHz	95%	±5.65 dB
Radiated Spurious Emissions	1 GHz to 25 GHz	95%	±2.94 dB

The methods used to calculate the above uncertainties are in line with those recommended within the various measurement specifications. Where measurement specifications do not include guidelines for the evaluation of measurement uncertainty the published guidance of the appropriate accreditation body is followed.

7. Report Revision History

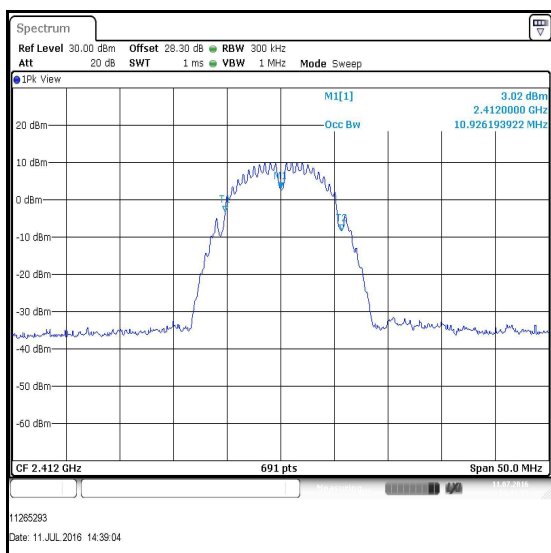
Version Number	Revision Details		
	Page No(s)	Clause	Details
1.0	-	-	Initial Version
2.0	-	-	Updates as requested by the TCB

8. Appendix 1

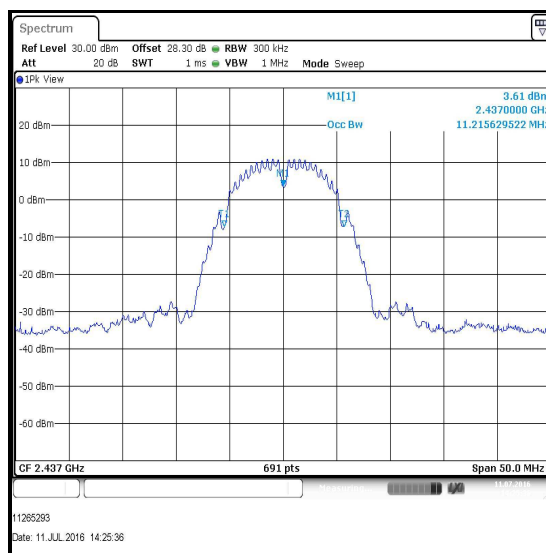
Transmitter 99% Emission Bandwidth Reference Plots

Results: 802.11b / DBPSK / 1 Mbps

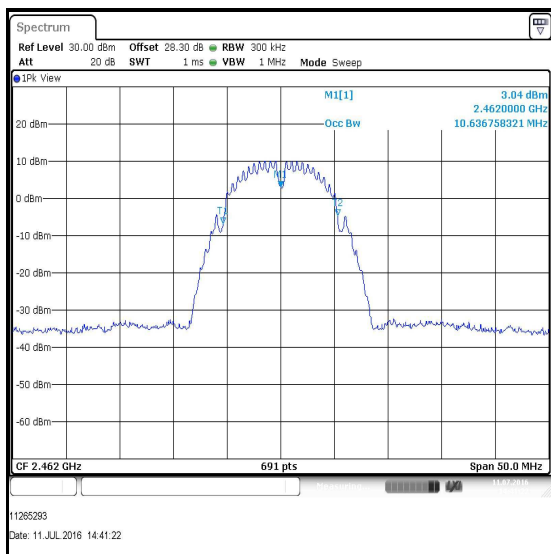
Channel	Frequency (MHz)	99% Emission Bandwidth (MHz)
1	2412	10.926
6	2437	11.216
11	2462	10.637
12	2467	10.781
13	2472	11.143



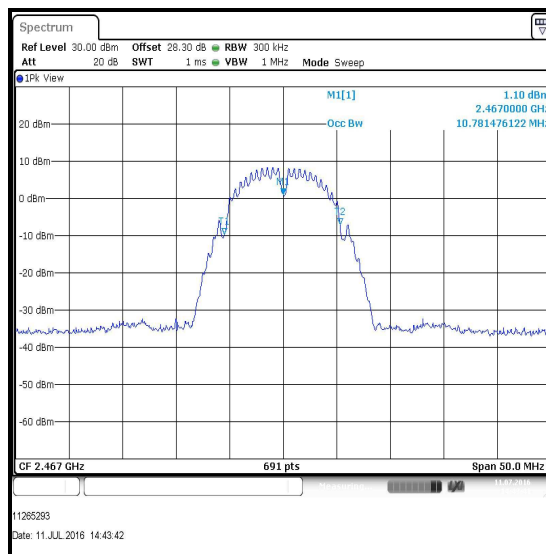
Channel 1



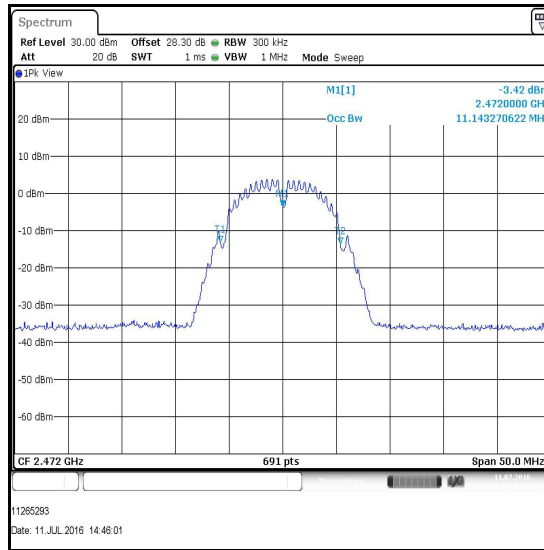
Channel 6



Channel 11

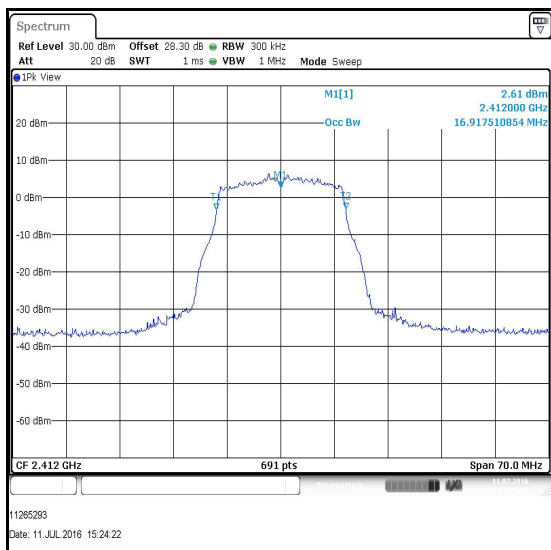
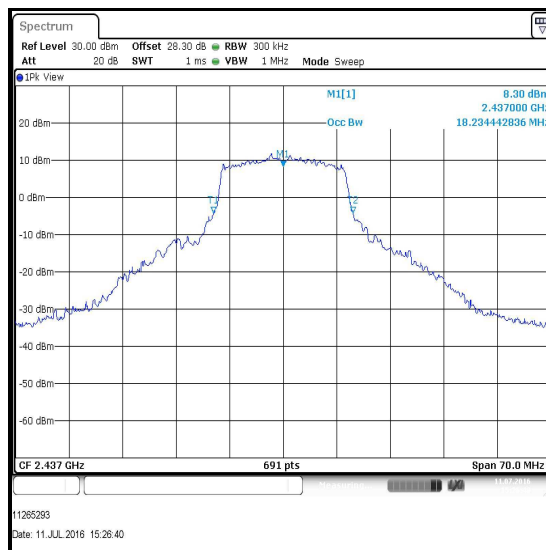
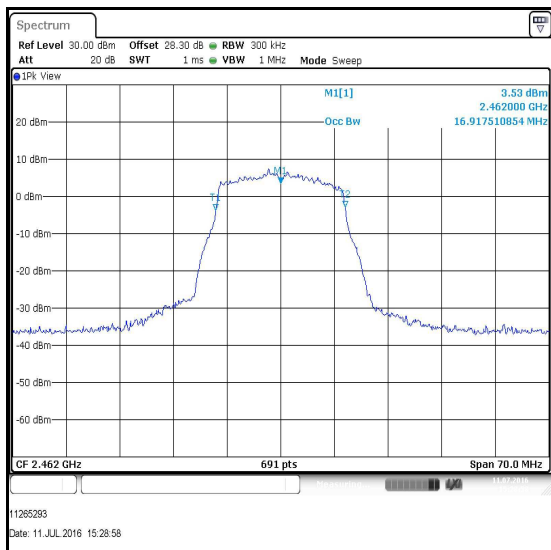
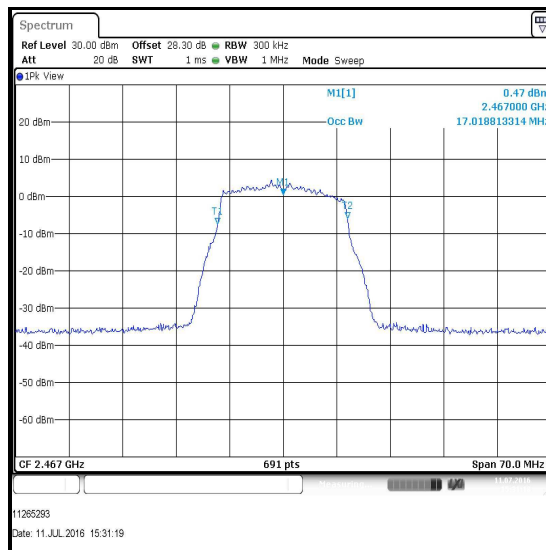


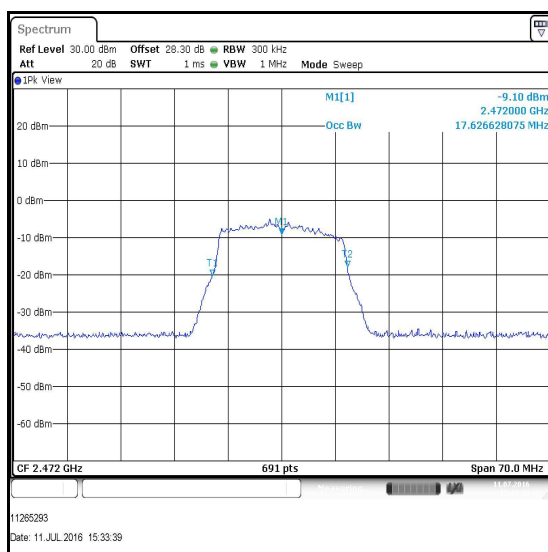
Channel 12

Transmitter 99% Emission Bandwidth Reference Plots (continued)**Results: 802.11b / DBPSK / 1 Mbps****Channel 13**

Transmitter 99% Emission Bandwidth Reference Plots (continued)**Results: 802.11g / BPSK / 6 Mbps**

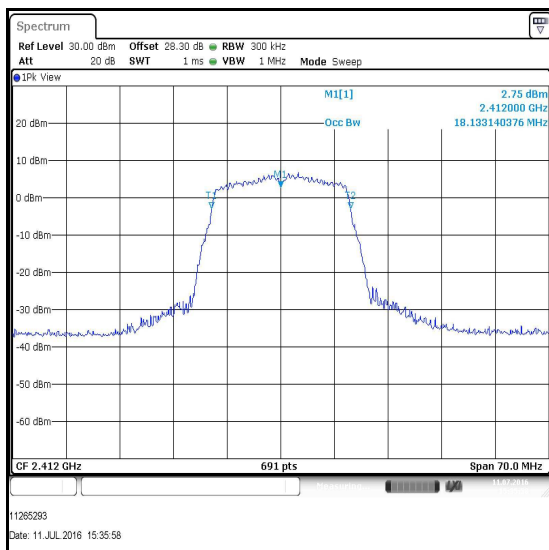
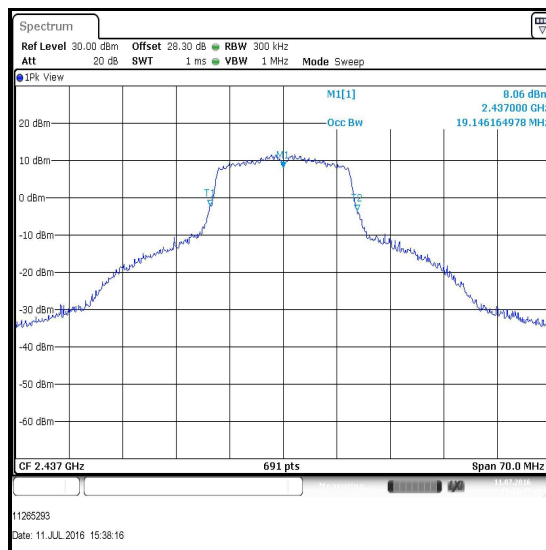
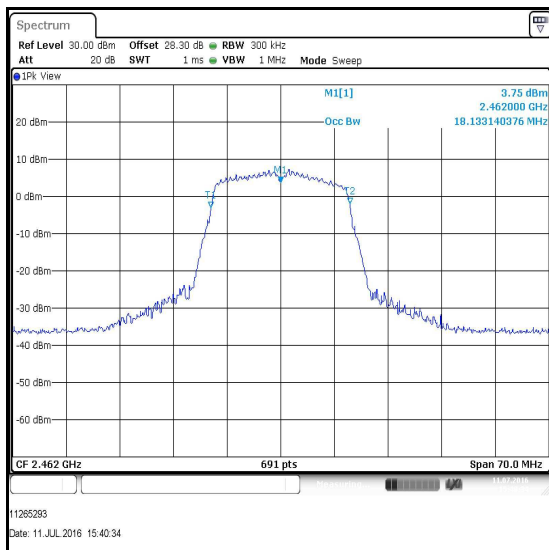
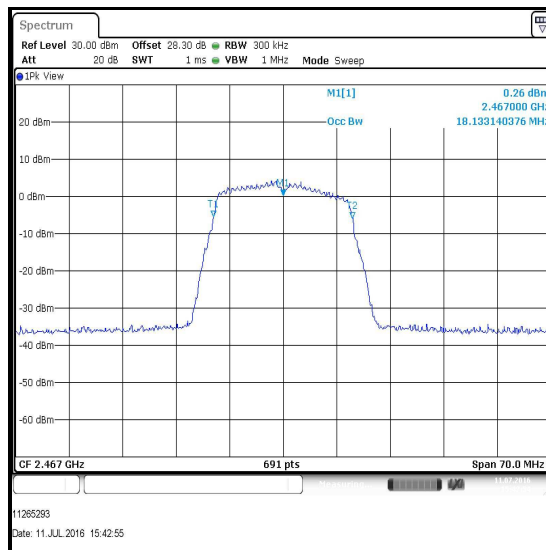
Channel	Frequency (MHz)	99% Emission Bandwidth (MHz)
1	2412	16.918
6	2437	18.234
11	2462	16.918
12	2467	17.019
13	2472	17.627

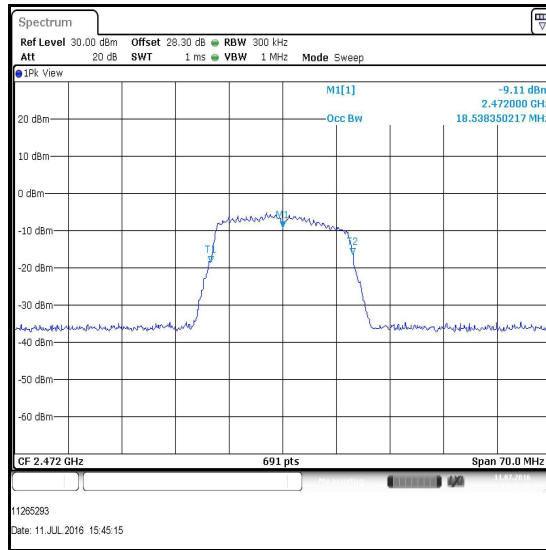
**Channel 1****Channel 6****Channel 11****Channel 12**

Transmitter 99% Emission Bandwidth Reference Plots (continued)**Results: 802.11g / BPSK / 6 Mbps****Channel 13**

Transmitter 99% Emission Bandwidth Reference Plots (continued)**Results: 802.11n / SISO**

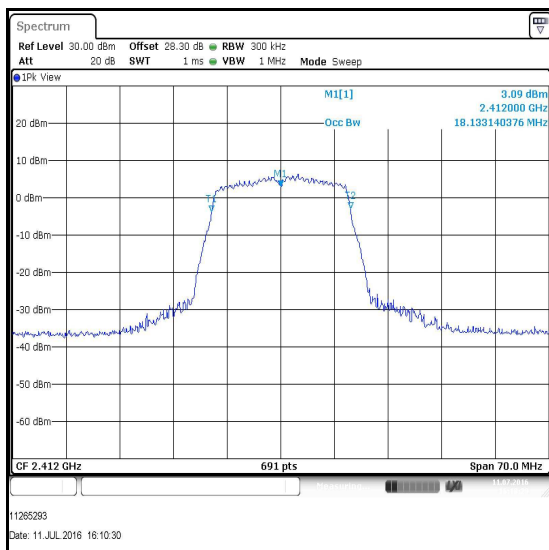
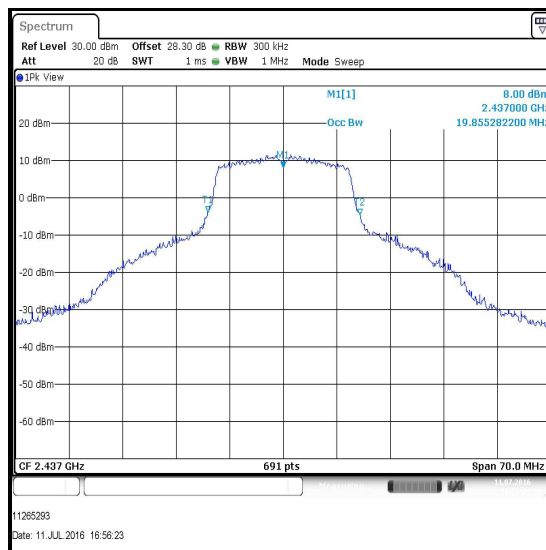
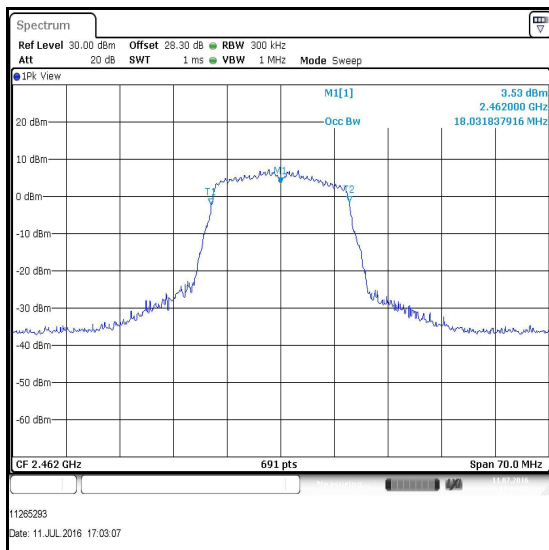
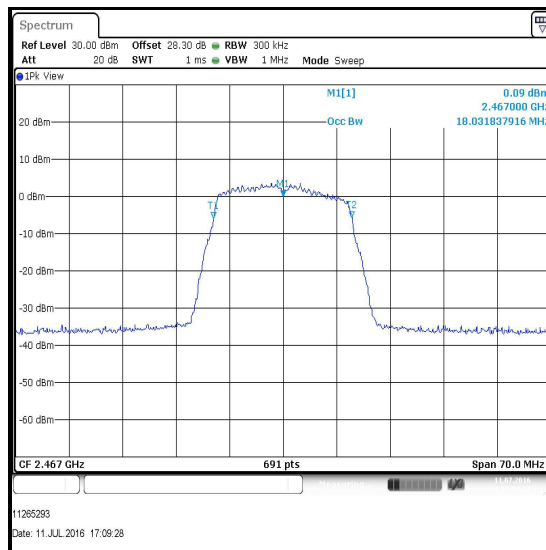
Channel	Frequency (MHz)	99% Emission Bandwidth (MHz)
1	2412	18.133
6	2437	19.146
11	2462	18.133
12	2467	18.133
13	2472	18.538

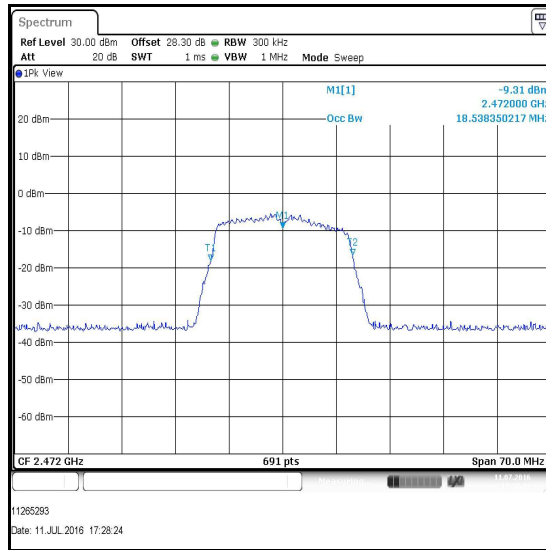
**Channel 1****Channel 6****Channel 11****Channel 12**

Transmitter 99% Emission Bandwidth Reference Plots (continued)**Results: 802.11n / SISO****Channel 13**

Transmitter 99% Emission Bandwidth Reference Plots (continued)**Results: 802.11n / MIMO / Port 1**

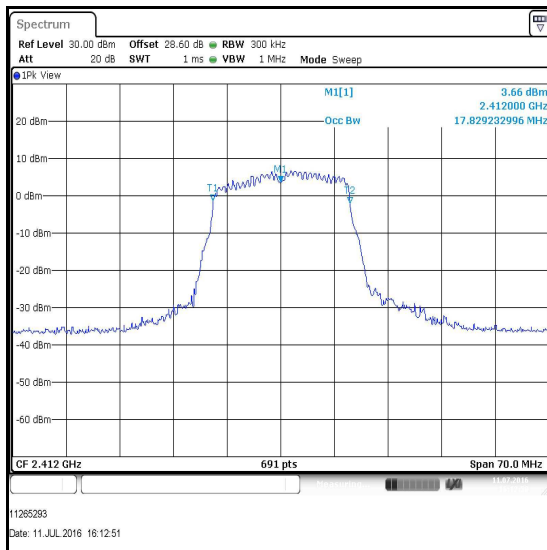
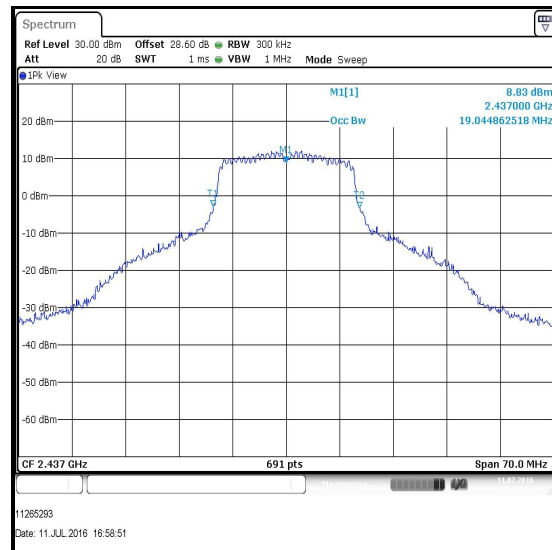
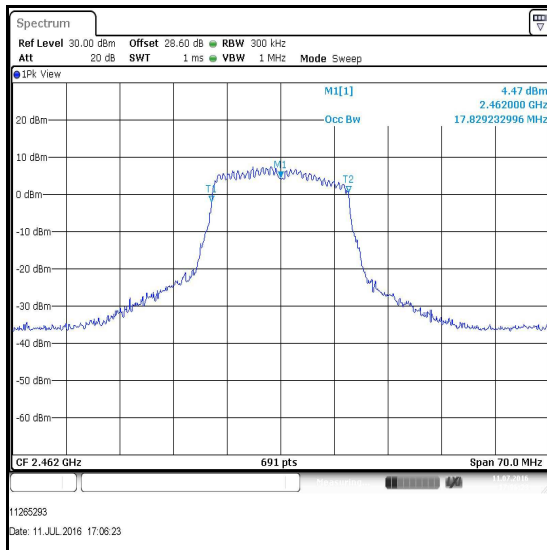
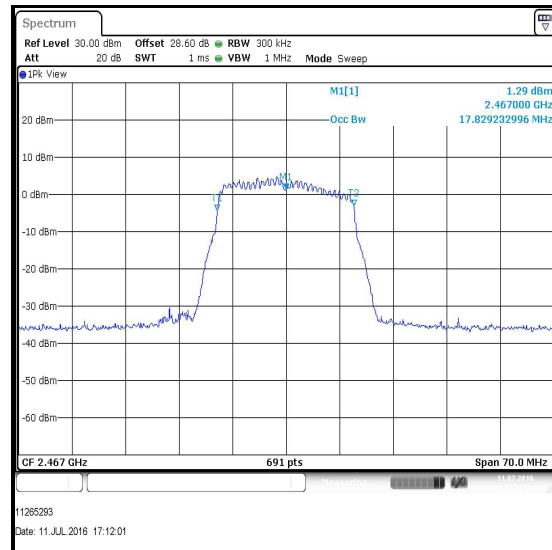
Channel	Frequency (MHz)	99% Emission Bandwidth (MHz)
1	2412	18.133
6	2437	19.855
11	2462	18.032
12	2467	18.032
13	2472	18.538

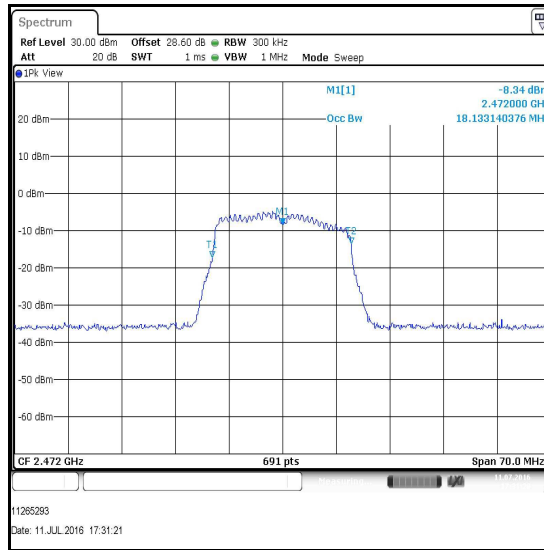
**Channel 1****Channel 6****Channel 11****Channel 12**

Transmitter 99% Emission Bandwidth Reference Plots (continued)**Results: 802.11n / MIMO / Port 1****Channel 13**

Transmitter 99% Emission Bandwidth Reference Plots (continued)**Results: 802.11n / MIMO / Port 2**

Channel	Frequency (MHz)	99% Emission Bandwidth (MHz)
1	2412	17.829
6	2437	19.045
11	2462	17.829
12	2467	17.829
13	2472	18.133

**Channel 1****Channel 6****Channel 11****Channel 12**

Transmitter 99% Emission Bandwidth Reference Plots (continued)**Results: 802.11n / MIMO / Port 2****Channel 13****--- END OF REPORT ---**