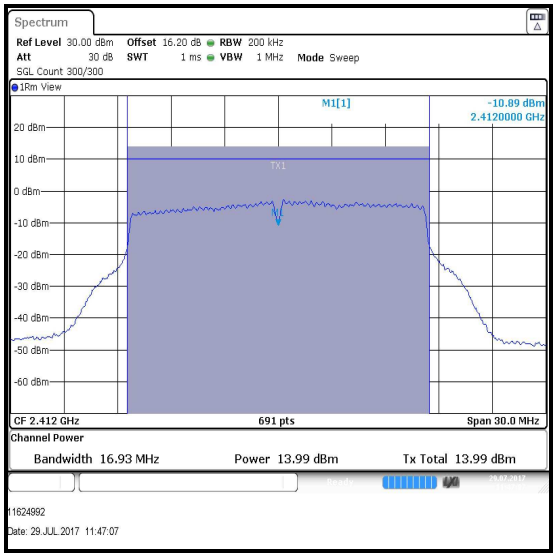
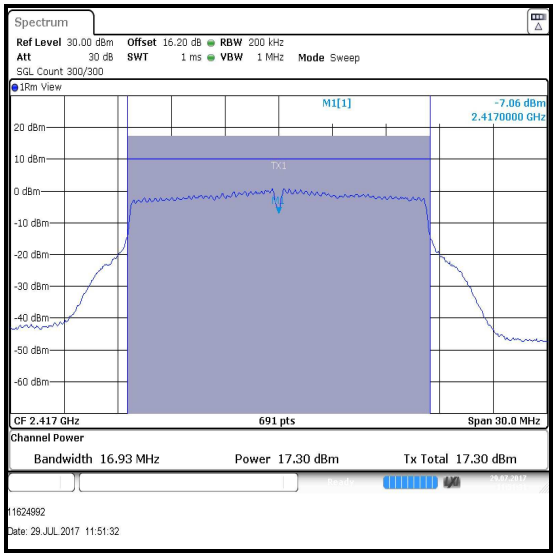
Transmitter Maximum (Average) Output Power (continued)

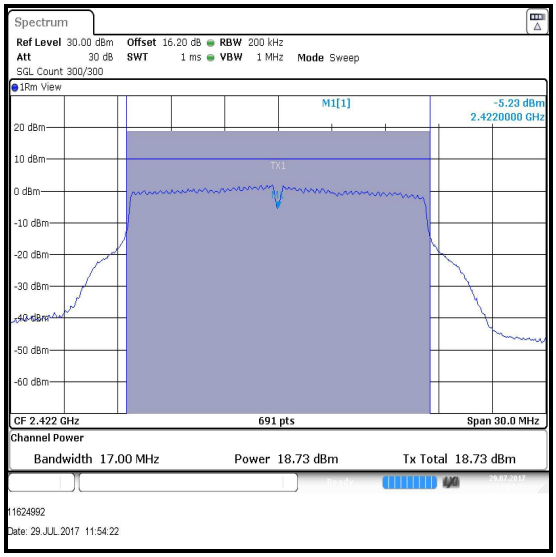
Results: 802.11g / 20 MHz / BPSK / 6 Mbit/s / Port 1



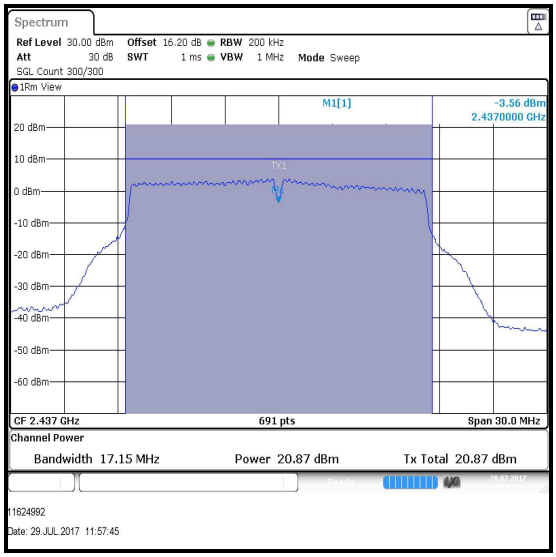
Channel 1



Channel 2



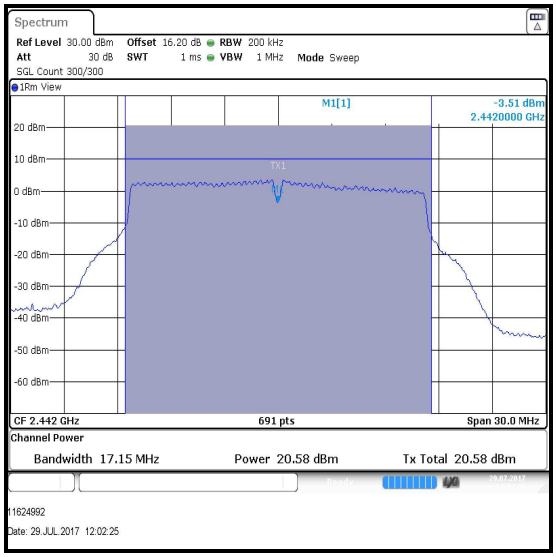
Channel 3



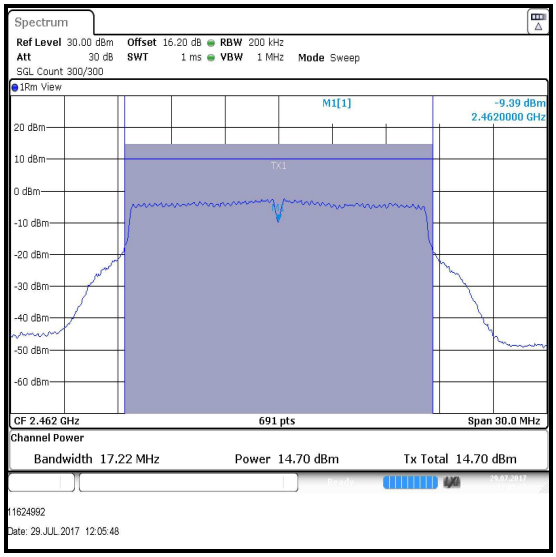
Channel 6

Transmitter Maximum (Average) Output Power (continued)

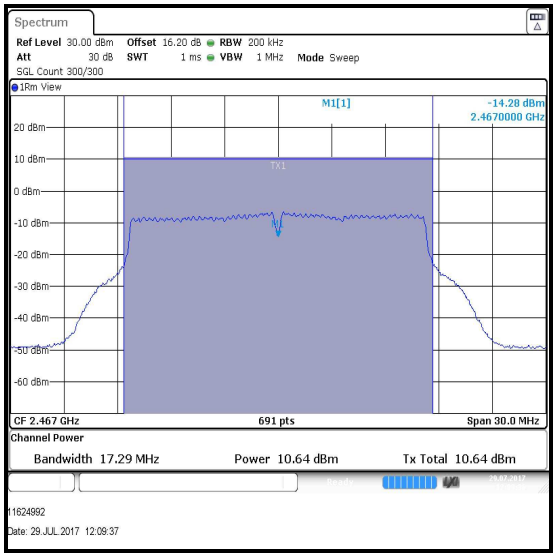
Results: 802.11g / 20 MHz / BPSK / 6 Mbit/s / Port 1



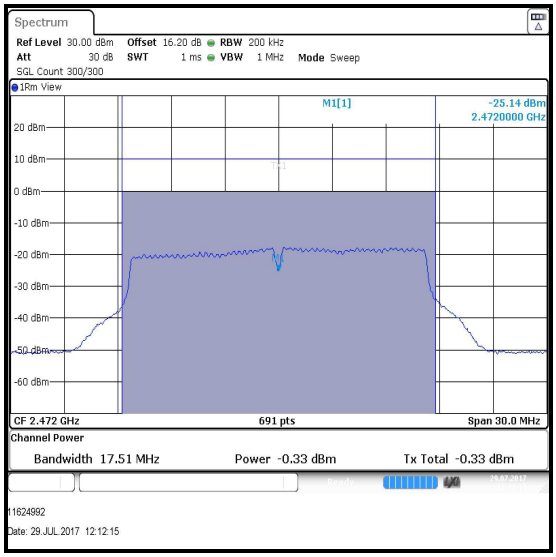
Channel 7



Channel 11



Channel 12



Channel 13

Transmitter Maximum (Average) Output Power (continued)

Results: 802.11n / 20 MHz / BPSK / MCS0 / SISO / Port 1

Conducted Peak Limit Comparison

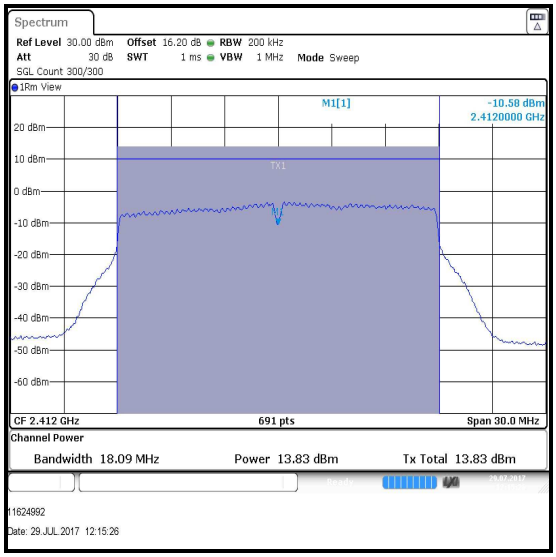
Channel	Conducted Power (dBm)	Conducted Power Limit (dBm)	Margin (dB)	Result
1	13.8	30.0	16.2	Complied
2	17.2	30.0	12.8	Complied
3	18.9	30.0	11.1	Complied
6	20.7	30.0	9.3	Complied
7	20.8	30.0	9.2	Complied
11	14.9	30.0	15.1	Complied
12	10.8	30.0	19.2	Complied
13	-0.3	30.0	30.3	Complied

EIRP Limit Comparison

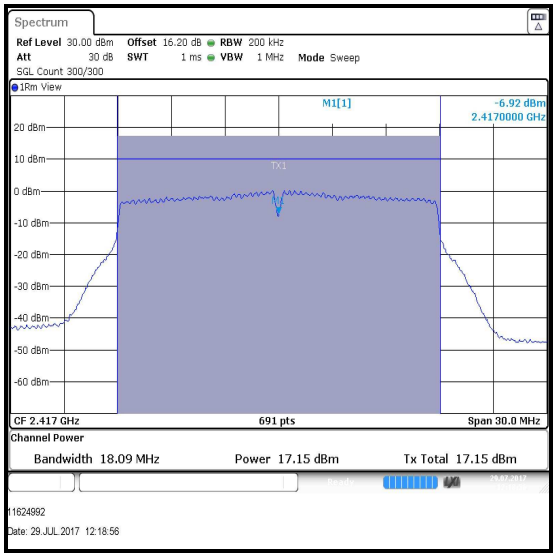
Channel	Conducted Power (dBm)	Declared Antenna Gain (dBi)	EIRP (dBm)	De Facto EIRP Limit (dBm)	Margin (dB)	Result
1	13.8	0.9	14.7	36.0	21.3	Complied
2	17.2	0.9	18.1	36.0	17.9	Complied
3	18.9	0.9	19.8	36.0	16.2	Complied
6	20.7	0.9	21.6	36.0	14.4	Complied
7	20.8	0.9	21.7	36.0	14.3	Complied
11	14.9	0.9	15.8	36.0	20.2	Complied
12	10.8	0.9	11.7	36.0	24.3	Complied
13	-0.3	0.9	0.6	36.0	35.4	Complied

Transmitter Maximum (Average) Output Power (continued)

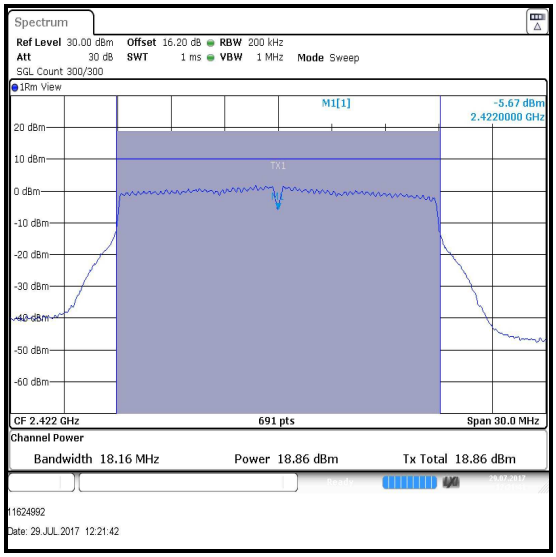
Results: 802.11n / 20 MHz / BPSK / MCS0 / SISO / Port 1



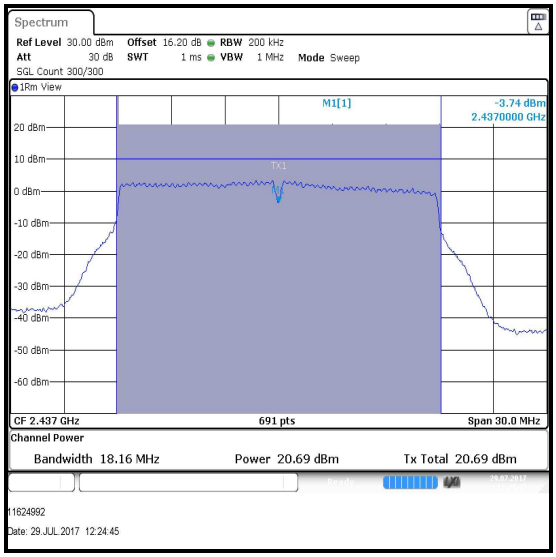
Channel 1



Channel 2



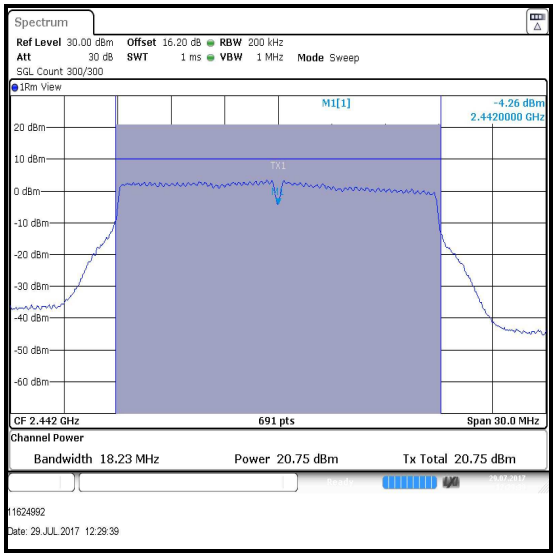
Channel 3



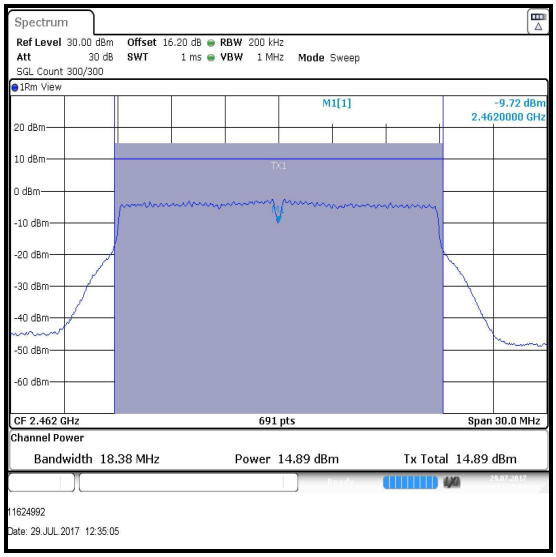
Channel 6

Transmitter Maximum (Average) Output Power (continued)

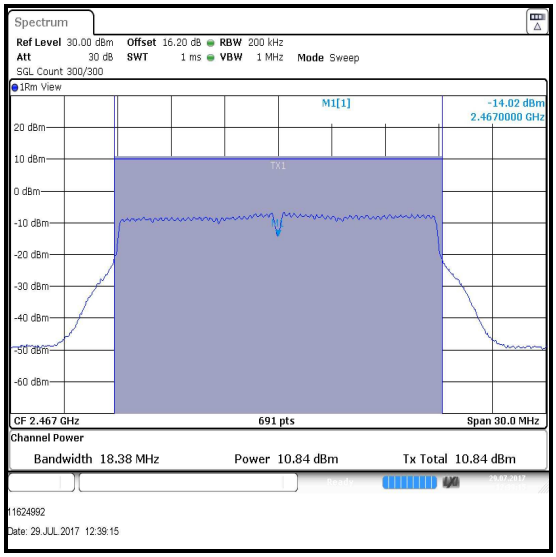
Results: 802.11n / 20 MHz / BPSK / MCS0 / SISO / Port 1



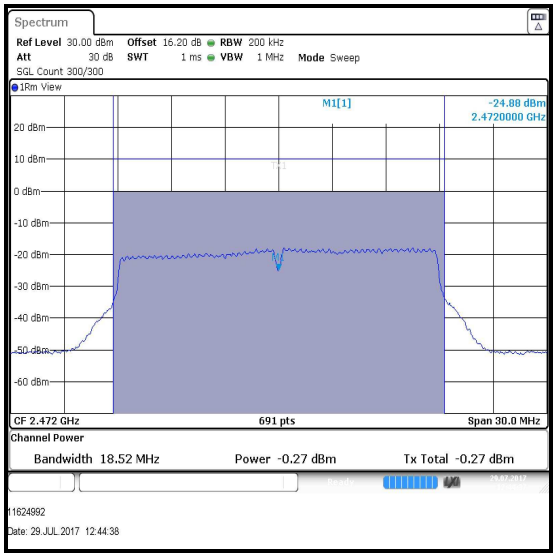
Channel 7



Channel 11



Channel 12



Channel 13

Transmitter Maximum (Average) Output Power (continued)

Results: 802.11n / 20 MHz / BPSK / MCS0 / MIMO (2Tx CDD)

Conducted Peak Limit Comparison

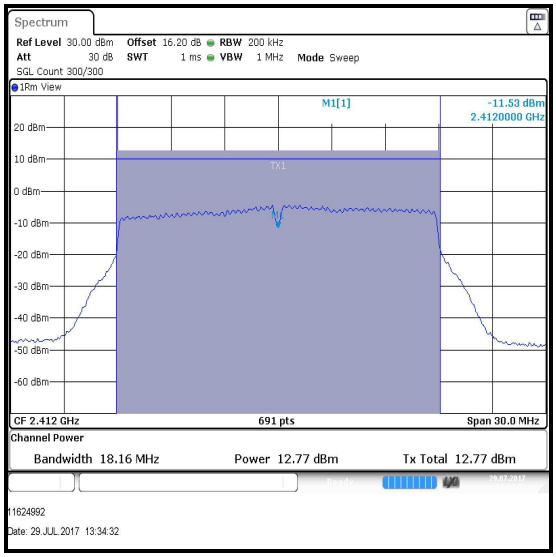
Channel	Conducted Peak Power Port 1 (dBm)	Conducted Peak Power Port 2 (dBm)	Combined Conducted Peak Power (dBm)	Conducted Peak Power Limit (dBm)	Margin (dB)	Result
1	12.8	12.6	15.7	30.0	14.3	Complied
2	16.4	16.3	19.4	30.0	10.6	Complied
3	18.3	18.2	21.3	30.0	8.7	Complied
6	19.2	19.4	22.3	30.0	7.7	Complied
7	19.3	19.5	22.4	30.0	7.6	Complied
11	13.4	13.4	16.4	30.0	13.6	Complied
12	10.0	9.8	12.9	30.0	17.1	Complied
13	-0.2	-0.4	2.7	30.0	27.3	Complied

EIRP Limit Comparison

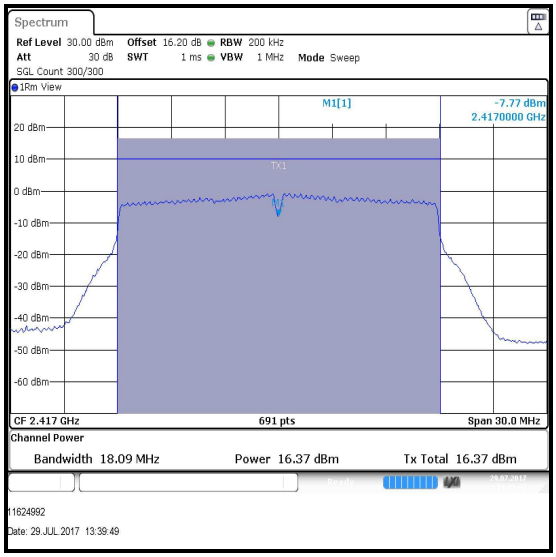
Channel	Combined Conducted Peak Power (dBm)	Directional Antenna Gain (dBi)	EIRP (dBm)	De Facto EIRP Limit (dBm)	Margin (dB)	Result
1	15.7	3.4	19.1	36.0	16.9	Complied
2	19.4	3.4	22.8	36.0	13.2	Complied
3	21.3	3.4	24.7	36.0	11.3	Complied
6	22.3	3.4	25.7	36.0	10.3	Complied
7	22.4	3.4	25.8	36.0	10.2	Complied
11	16.4	3.4	19.8	36.0	16.2	Complied
12	12.9	3.4	16.3	36.0	19.7	Complied
13	2.7	3.4	6.1	36.0	29.9	Complied

Transmitter Maximum (Average) Output Power (continued)

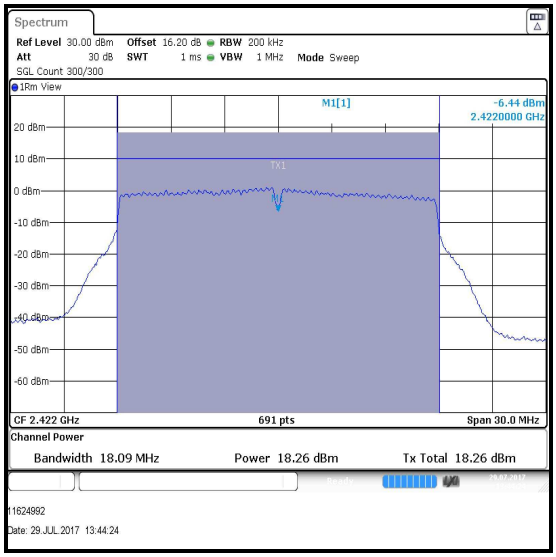
Results: 802.11n / 20 MHz / BPSK / MCS0 / MIMO (2Tx CDD) / Port 1



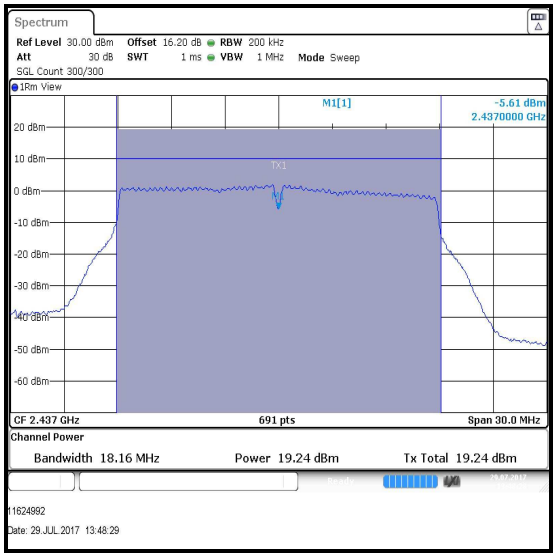
Channel 1



Channel 2



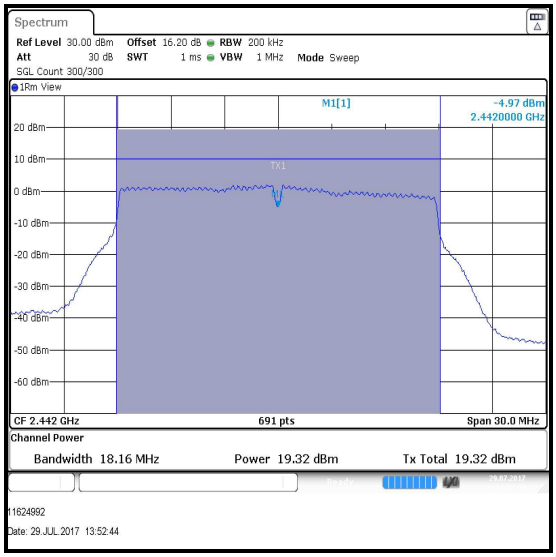
Channel 3



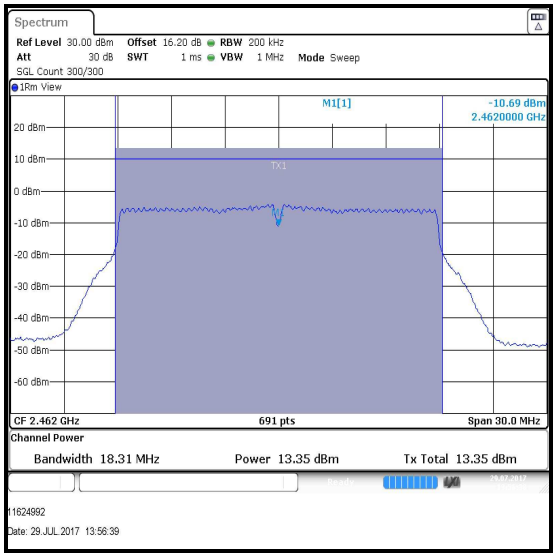
Channel 6

Transmitter Maximum (Average) Output Power (continued)

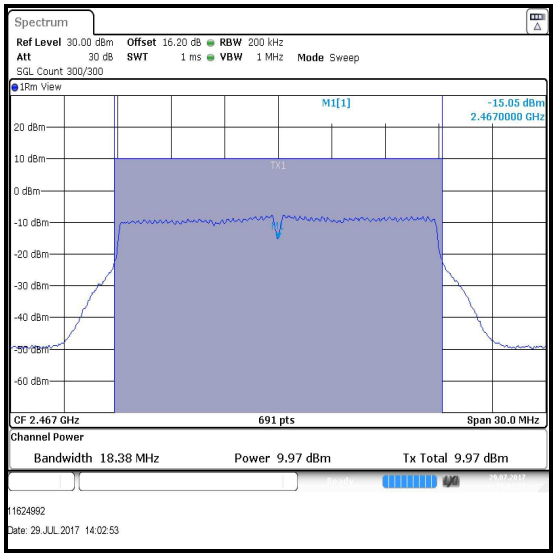
Results: 802.11n / 20 MHz / BPSK / MCS0 / MIMO (2Tx CDD) / Port 1



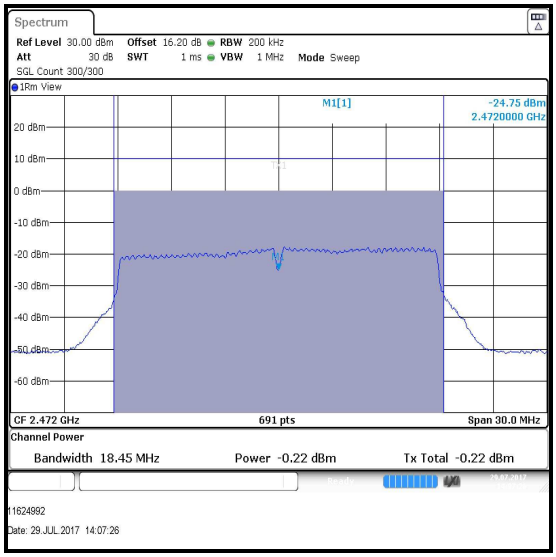
Channel 7



Channel 11



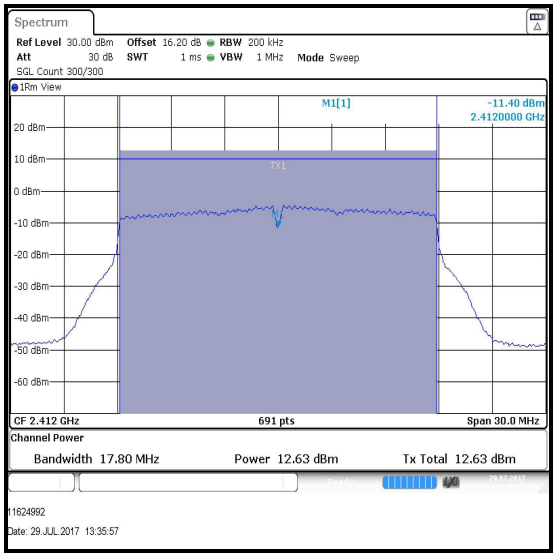
Channel 12



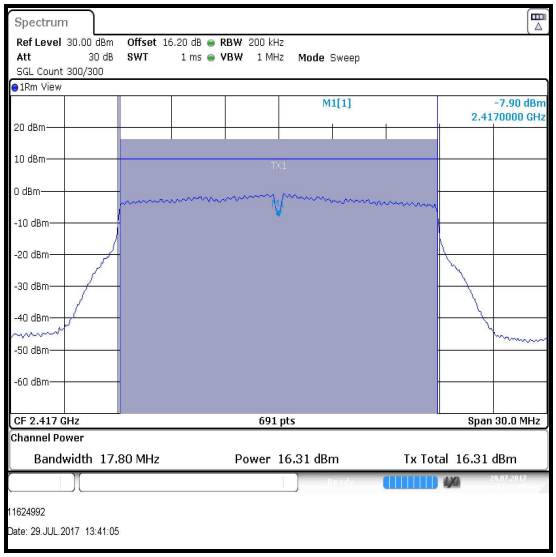
Channel 13

Transmitter Maximum (Average) Output Power (continued)

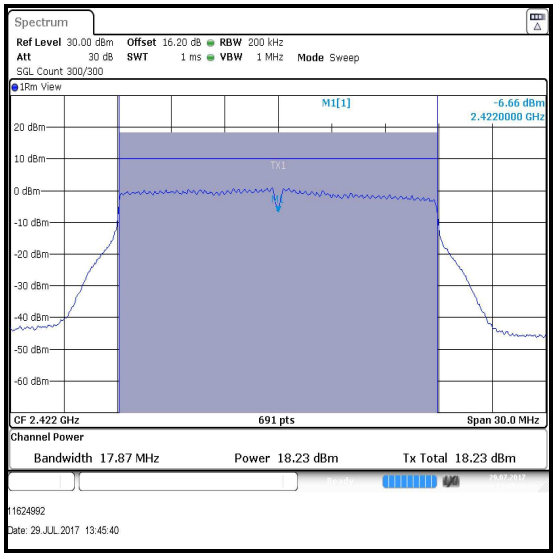
Results: 802.11n / 20 MHz / BPSK / MCS0 / MIMO (2Tx CDD) / Port 2



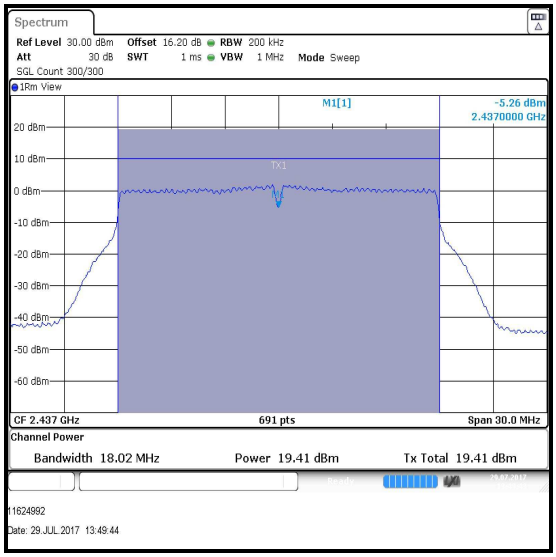
Channel 1



Channel 2



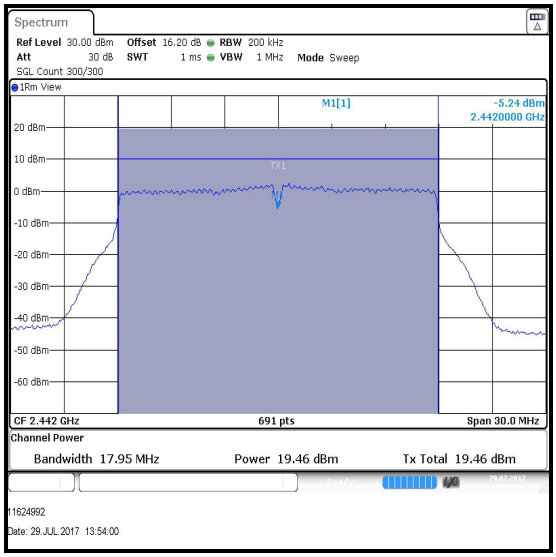
Channel 3



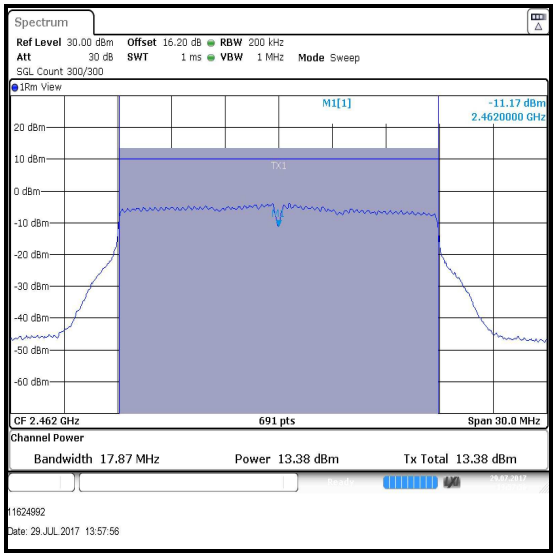
Channel 6

Transmitter Maximum (Average) Output Power (continued)

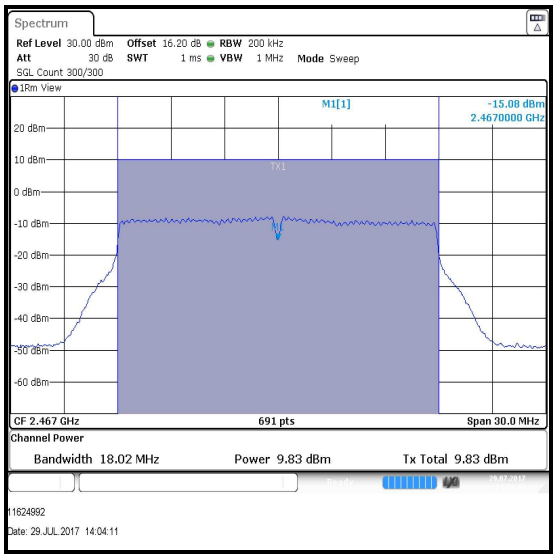
Results: 802.11n / 20 MHz / BPSK / MCS0 / MIMO (2Tx CDD) / Port 2



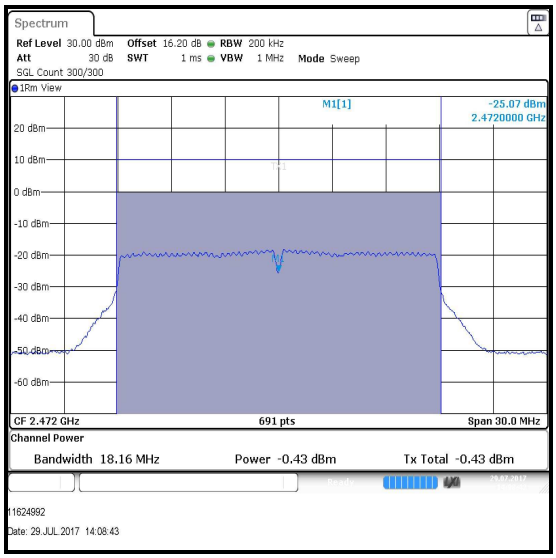
Channel 7



Channel 11



Channel 12



Channel 13

5. Radiated Test Results

5.1. Transmitter Radiated Emissions <1 GHz SISO

Test Summary:

Test Engineer:	Alan Withers	**Test Date:**	04 July 2017
Test Sample Serial Number:	C07TK007J4C6		

FCC Reference:	Parts 15.247(d) & 15.209(a)
Test Method Used:	ANSI C63.10 Sections 6.3 and 6.5
Frequency Range	30 MHz to 1000 MHz

Environmental Conditions:

Temperature (°C):	25
Relative Humidity (%):	45

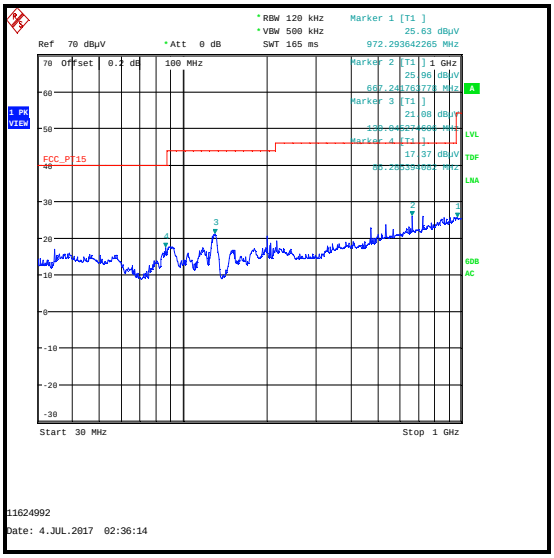
Note(s):

1. The final measured value, for the given emission, in the table below incorporates the calibrated antenna factor and cable loss.
2. The preliminary scans showed similar emission levels below 1 GHz, for each channel of operation. Therefore final radiated emissions measurements were performed with the EUT set to the middle channel only.
3. All emissions shown on the pre-scan plots were investigated and found to be ambient, or >20 dB below the applicable limit or below the measurement system noise floor. Therefore the highest peak noise floor reading of the measuring receiver was recorded in the table below.
4. Measurements below 1 GHz were performed in a semi-anechoic chamber (Asset Number K0017) at a distance of 3 metres. The EUT was placed at a height of 80 cm above the reference ground plane in the centre of the chamber turntable. Maximum emission levels were determined by height searching the measurement antenna over the range 1 metre to 4 metres.
5. Pre-scans were performed and markers placed on the highest measured levels. The test receiver resolution bandwidth was set to 120 kHz and video bandwidth 500 kHz. A peak detector was used, sweep time was set to auto and trace mode was Max Hold.
6. Testing was performed with the EUT transmitting 802.11b SISO – BPSK / 1 Mbit/s / Port 1

Transmitter Radiated Emissions (continued)

Results: Middle Channel / 802.11b / SISO / BPSK / 1 Mbit/s / Port 1

Frequency (MHz)	Antenna Polarity	Level (dBµV/m)	Limit (dBµV/m)	Margin (dB)	Result
667.242	Vertical	26.0	46.0	20.0	Complied



5.2. Transmitter Radiated Emissions >1 GHz SISO

Test Summary:

Test Engineers:	Alan Withers & John Ferdinand	**Test Dates:**	04 July 2017, 05 July 2017 & 25 July 2017
Test Sample Serial Number:	C07TK026J4C7		

FCC Reference:	Parts 15.247(d) & 15.209(a)
Test Method Used:	ANSI C63.10 Sections 6.3 and 6.6 & FCC KDB 558074 Sections 11, 12.2.4 & 12.2.5.2
Frequency Range	1 GHz to 25 GHz

Environmental Conditions:

Temperature (°C):	24 to 25
Relative Humidity (%):	42 to 45

Note(s):

1. The final measured value, for the given emission, in the table below incorporates the calibrated antenna factor and cable loss.
2. All other emissions shown on the pre-scan plot were investigated and found to be ambient or >20 dB below the appropriate limit or below the measurement system noise floor.
3. Testing was performed with the EUT transmitting 802.11b SISO – BPSK / 1 Mbit/s / Port 1.
4. The emission shown approximately at 2441 MHz on the 1 GHz to 3 GHz plot is the EUT fundamental.
5. Pre-scans above 1 GHz were performed in a fully anechoic chamber (Asset Number K0017) at a distance of 3 metres. The EUT was placed at a height of 1.5 metres above the test chamber floor in the centre of the chamber turntable. All measurement antennas were placed at a fixed height of 1.5 metres above the test chamber floor, in line with the EUT. Final measurements above 1 GHz were performed in a semi-anechoic chamber (Asset Number K0017) at a distance of 3 metres. The EUT was placed at a height of 1.5 m above the reference ground plane in the centre of the chamber turntable. Maximum emission levels were determined by height searching the measurement antenna over the range 1 metre to 4 metres.
6. Pre-scans were performed and a marker placed on the highest measured level of the appropriate plot. The test receiver resolution bandwidth was set to 1 MHz and video bandwidth 3 MHz. The sweep time was set to auto.
7. **-30 dBc limit applies in non-restricted bands as the conducted average maximum output power was previously measured.

Transmitter Radiated Emissions (continued)

802.11b SISO – BPSK / 1 Mbit/s / Port 1

Results: Peak/ Bottom Channel

Frequency (MHz)	Antenna Polarity	Peak Level (dBµV/m)	Peak Limit (dBµV/m)	Margin (dB)	Result
14472.220	Vertical	49.2	74.0	24.8	Complied
16886.419	Vertical	56.4	78.5**	22.1	Complied

Results: Average/ Bottom Channel

Frequency (MHz)	Antenna Polarity	Average Level (dBµV/m)	Average Limit (dBµV/m)	Margin (dB)	Result
14472.665	Vertical	46.1	54.0	7.9	Complied

Results: Peak/ Middle Channel

Frequency (MHz)	Antenna Polarity	Peak Level (dBµV/m)	Peak Limit (dBµV/m)	Margin (dB)	Result
12185.124	Vertical	49.6	74.0	24.4	Complied
14622.337	Vertical	51.2	78.5**	27.3	Complied
17058.320	Vertical	54.8	78.5**	23.7	Complied

Results: Average/ Middle Channel

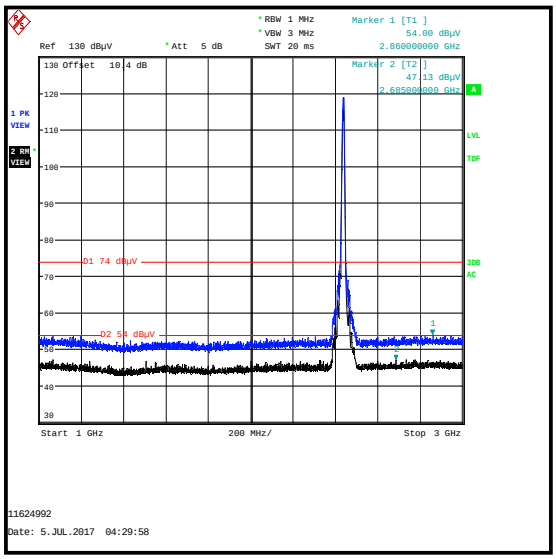
Frequency (MHz)	Antenna Polarity	Average Level (dBµV/m)	Average Limit (dBµV/m)	Margin (dB)	Result
12185.980	Vertical	44.8	54.0	9.2	Complied

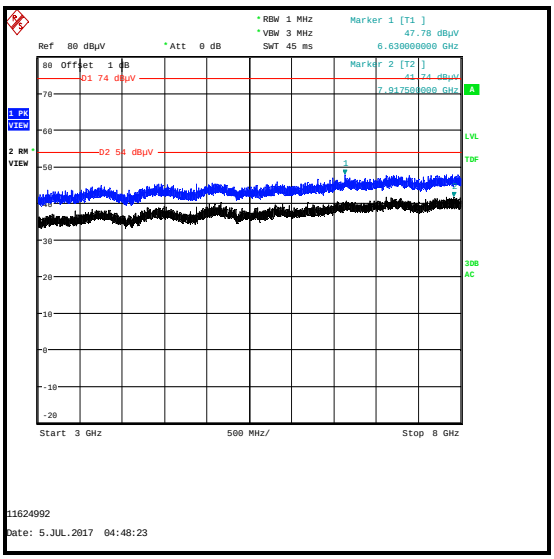
Results: Peak/ Top Channel

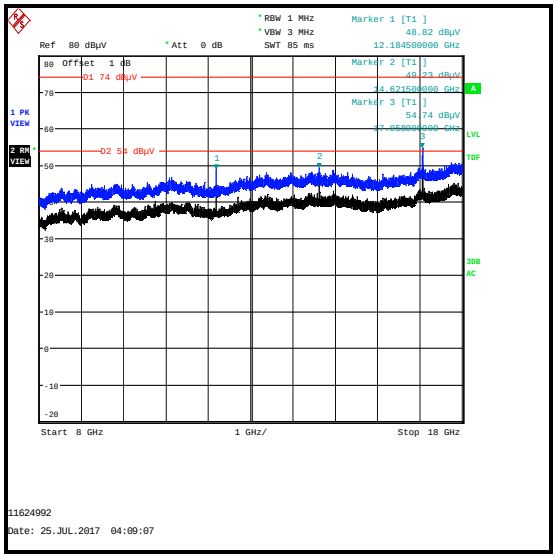
Frequency (MHz)	Antenna Polarity	Peak Level (dBµV/m)	Peak Limit (dBµV/m)	Margin (dB)	Result
14832.145	Vertical	53.3	78.5**	25.2	Complied

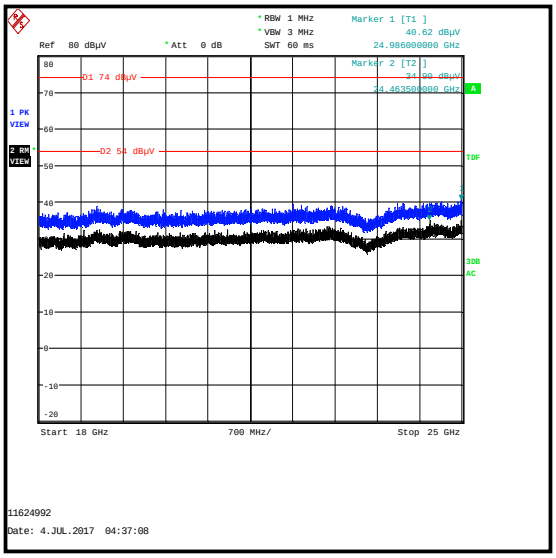
Transmitter Radiated Emissions (continued)

802.11b SISO – BPSK / 1 Mbit/s / Port 1









Note: These plots are pre-scans and for indication purposes only. For final measurements, see accompanying tables.

5.3. Transmitter Radiated Emissions <1 GHz MIMO

Test Summary:

Test Engineer:	Alan Withers	**Test Date:**	04 July 2017
Test Sample Serial Number:	C07TK007J4C6		

FCC Reference:	Parts 15.247(d) & 15.209(a)
Test Method Used:	ANSI C63.10 Sections 6.3 and 6.5
Frequency Range	30 MHz to 1000 MHz

Environmental Conditions:

Temperature (°C):	25
Relative Humidity (%):	45

Note(s):

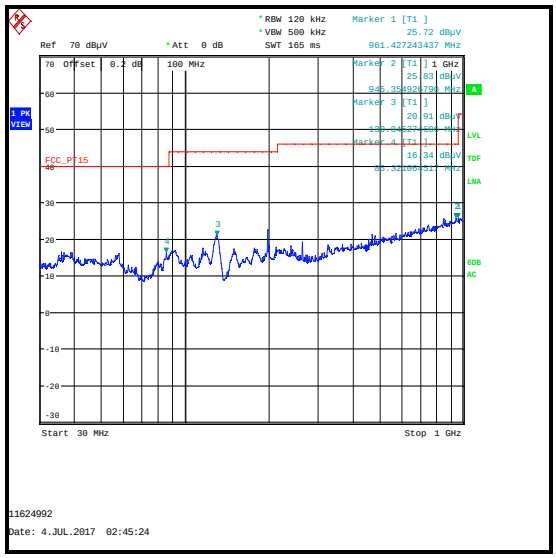
1. The final measured value, for the given emission, in the table below incorporates the calibrated antenna factor and cable loss.
2. The preliminary scans showed similar emission levels below 1 GHz, for each channel of operation. Therefore final radiated emissions measurements were performed with the EUT set to the middle channel only.
3. All emissions shown on the pre-scan plots were investigated and found to be ambient, or >20 dB below the applicable limit or below the measurement system noise floor. Therefore the highest peak noise floor reading of the measuring receiver was recorded in the table below.
4. Measurements below 1 GHz were performed in a semi-anechoic chamber (Asset Number K0017) at a distance of 3 metres. The EUT was placed at a height of 80 cm above the reference ground plane in the centre of the chamber turntable. Maximum emission levels were determined by height searching the measurement antenna over the range 1 metre to 4 metres.
5. Pre-scans were performed and markers placed on the highest measured levels. The test receiver resolution bandwidth was set to 120 kHz and video bandwidth 500 kHz. A peak detector was used, sweep time was set to auto and trace mode was Max Hold.
6. Testing was performed with the EUT transmitting 802.11n HT20 / MIMO – BPSK / 6.5 Mbit/s / MCS0 / Port 1 & 2.

Transmitter Radiated Emissions (continued)

Middle Channel / 802.11n / MIMO / CDD / 6.5 Mbit/s / MCS 0 / Port 1 & 2

Results:

Frequency (MHz)	Antenna Polarity	Level (dBµV/m)	Limit (dBµV/m)	Margin (dB)	Result
945.355	Vertical	25.8	46.0	20.2	Complied



5.4. Transmitter Radiated Emissions >1 GHz MIMO

Test Summary:

Test Engineers:	Alan Withers & John Ferdinand	**Test Dates:**	04 July 2017, 05 July 2017 & 25 July 2017
Test Sample Serial Number:	C07TK026J4C7		

FCC Reference:	Parts 15.247(d) & 15.209(a)
Test Method Used:	ANSI C63.10 Sections 6.3 and 6.6 & FCC KDB 558074 Sections 11, 12.2.4 & 12.2.5.2
Frequency Range	1 GHz to 25 GHz

Environmental Conditions:

Temperature (°C):	24 to 25
Relative Humidity (%):	42 to 45

Note(s):

1. The final measured value, for the given emission, in the table below incorporates the calibrated antenna factor and cable loss.
2. All other emissions shown on the pre-scan plots were investigated and found to be ambient or >20 dB below the appropriate limit or below the measurement system noise floor.
3. Testing was performed with the EUT transmitting 802.11n HT20 / MIMO – BPSK / 6.5 Mbit/s / MCS0 / Port 1 & 2.
4. The emission shown approximately at 2441 MHz on the 1 GHz to 3 GHz plot is the EUT fundamental.
5. Pre-scans above 1 GHz were performed in a fully anechoic chamber (Asset Number K0017) at a distance of 3 metres. The EUT was placed at a height of 1.5 metres above the test chamber floor in the centre of the chamber turntable. All measurement antennas were placed at a fixed height of 1.5 metres above the test chamber floor, in line with the EUT. Final measurements above 1 GHz were performed in a semi-anechoic chamber (Asset Number K0017) at a distance of 3 metres. The EUT was placed at a height of 1.5 m above the reference ground plane in the centre of the chamber turntable. Maximum emission levels were determined by height searching the measurement antenna over the range 1 metre to 4 metres.
6. Pre-scans were performed and a marker placed on the highest measured level of the appropriate plot. The test receiver resolution bandwidth was set to 1 MHz and video bandwidth 3 MHz. The sweep time was set to auto.
7. **-30 dBc limit applies in non-restricted bands as the conducted average maximum output power was previously measured.
8. The reference level for emissions in non-restricted bands was established following KDB 558074 Section 11.2 procedure.

Transmitter Radiated Emissions (continued)

Middle Channel / 802.11n / MIMO / CDD / 6.5 Mbit/s / MCS 0 / Port 1 & 2

Results: Peak/ Bottom Channel

Frequency (MHz)	Antenna Polarity	Peak Level (dBµV/m)	Peak Limit (dBµV/m)	Margin (dB)	Result
9639.080	Vertical	41.6	78.5**	36.9	Complied
16883.690	Vertical	45.9	78.5**	32.6	Complied

Results: Peak/ Middle Channel

Frequency (MHz)	Antenna Polarity	Peak Level (dBµV/m)	Peak Limit (dBµV/m)	Margin (dB)	Result
9736.895	Vertical	50.1	78.5**	28.4	Complied
17042.247	Vertical	52.0	78.5**	26.5	Complied

Results: Peak/ Top Channel

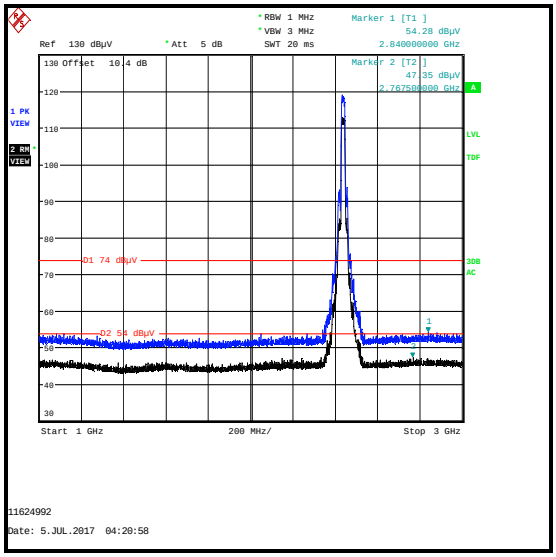
Frequency (MHz)	Antenna Polarity	Peak Level (dBµV/m)	Peak Limit (dBµV/m)	Margin (dB)	Result
17787.000	Vertical	50.8	74.0	23.2	Complied

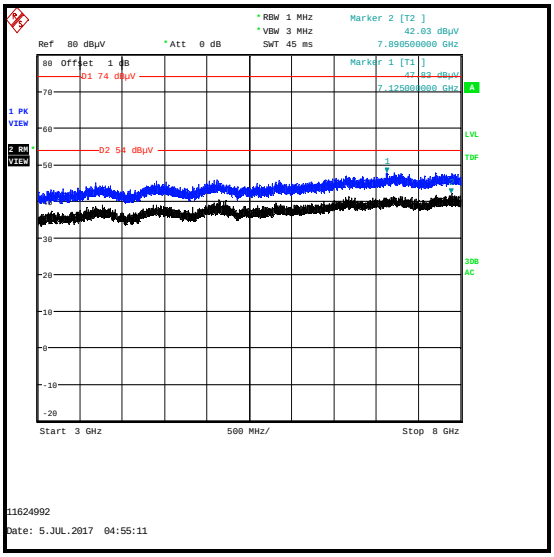
Results: Average/ Top Channel

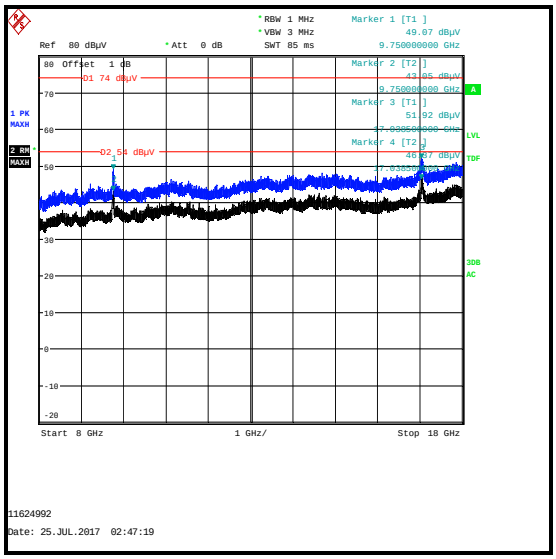
Frequency (MHz)	Antenna Polarity	Average Level (dBµV/m)	Average Limit (dBµV/m)	Margin (dB)	Result
17787.500	Vertical	45.5	54.0	8.5	Complied

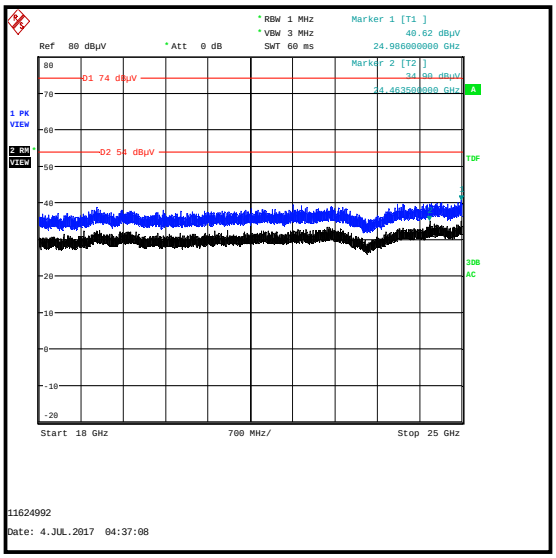
Transmitter Radiated Emissions (continued)

Middle Channel / 802.11n / MIMO / CDD / 6.5 Mbit/s / MCS 0 / Port 1 & 2









Note: These plots are pre-scans and for indication purposes only. For final measurements, see accompanying tables.

5.5. Transmitter Band Edge Radiated Emissions

Test Summary:

Test Engineers:	David Doyle, John Ferdinand & Alan Withers	**Test Dates:**	09 May 2017 to 18 May 2017
Test Sample Serial Number:	C07TK02MJ4C7 & C07TK002J4C6		

FCC Reference:	Parts 15.247(d) & 15.209(a)
Test Method Used:	ANSI C63.10 Section 6.10 & FCC KDB 558074 Sections 11 & 12

Environmental Conditions:

Temperature (°C):	23 to 25
Relative Humidity (%):	33 to 44

Transmitter Band Edge Radiated Emissions

Note(s):

1. The customer requested the following configurations to be used for all band edge measurements:
    - 802.11b – BPSK / 1 Mbit/s / Port 1
    - 802.11g – BPSK / 6 Mbit/s / Port 1
    - 802.11n HT20 / SISO – BPSK / 6.5 Mbit/s / MCS0 / Port 1
    - 802.11n HT20 / MIMO – BPSK / 6.5 Mbit/s / MCS0 / Port 1 & 2

    Final measurements were performed with the above configurations.
2. For 802.11n HT20 SISO, the EUT was transmitting from Port 1 only as this Port emits the highest output power level and was therefore deemed to be worst case. For 802.11n MIMO, the EUT was transmitting from both ports.
3. The final measured value, for the given emission, in the table below incorporates the calibrated antenna factor and cable loss.
4. The maximum conducted (average) output power was previously measured. In accordance with FCC KDB 558074 Section 11.1(b), the lower band edge measurement should be performed with a peak detector and the -30 dBc limit applied.
5. As the lower band edge is adjacent to a non-restricted band, only peak measurements are required. In accordance with FCC KDB 558074 Section 11.1, the test method in Section 11.3 was followed: the test receiver resolution bandwidth was set to 100 kHz and video bandwidth 300 kHz. A peak detector was used, sweep time was set to auto and trace mode was Max Hold. The test receiver was left to sweep for a sufficient length of time in order to maximise the carrier level and out-of-band emissions. A marker and corresponding reference level line were placed on the peak of the carrier. As the maximum conducted (average) output power was measured using an RMS detector in accordance with FCC KDB 558074 Section 9.2.2.4 an out-of-band limit line was placed 30 dB (FCC KDB 558074 Section 11.1(b)) below the peak level. A marker was placed on the band edge spot frequencies and a second marker placed on the highest emission level in the adjacent non-restricted band of operation (where a higher level emission was present). Marker frequencies and levels were recorded.
6. As the upper band edge is adjacent to a restricted band both peak and average measurements were recorded by placing a marker at the edge of the band. For peak measurements the test receiver resolution bandwidth was set to 1 MHz and the video bandwidth 3 MHz. A peak detector was used, sweep time was set to auto and trace mode was Max Hold. For average measurements the test receiver resolution bandwidth was set to 1 MHz and the video bandwidth 3 MHz. An RMS detector was used, sweep time was set to auto and trace mode was trace averaging over 300 sweeps. A marker was placed on the band edge spot frequencies and a second marker placed on the highest emission level in the adjacent restricted band of operation (where a higher level emission was present). Marker frequencies and levels were recorded.
7. There is a restricted band 10 MHz below the lower band edge. The test receiver was set up as follows: the RBW set to 1 MHz, the VBW set to 3 MHz, with the sweep time set to auto couple. Peak and average measurements were performed with their respective detectors. Markers were placed on the highest point on each trace.

Transmitter Band Edge Radiated Emissions

Results: 802.11b / 20 MHz / BPSK / 1 Mbit/s / Ant 1

Results: Lower Band Edge / Channel 1

Frequency (MHz)	Antenna Polarity	Level (dBµV/m)	-30 dBc Limit (dBµV/m)	Margin (dB)	Result
2395.994	Vertical	61.5	78.5	17.0	Complied
2400.000	Vertical	56.6	78.5	21.9	Complied

Results: Upper Band Edge / Peak / Channel 11

Frequency (MHz)	Antenna Polarity	Level (dBµV/m)	Limit (dBµV/m)	Margin (dB)	Result
2483.500	Vertical	63.0	74.0	11.0	Complied
2483.740	Vertical	66.0	74.0	8.0	Complied

Results: Upper Band Edge / Average / Channel 11

Frequency (MHz)	Antenna Polarity	Level (dBµV/m)	Limit (dBµV/m)	Margin (dB)	Result
2483.500	Vertical	48.7	54.0	5.3	Complied
2487.667	Vertical	51.7	54.0	2.3	Complied

Results: Upper Band Edge / Peak / Channel 12

Frequency (MHz)	Antenna Polarity	Level (dBµV/m)	Limit (dBµV/m)	Margin (dB)	Result
2483.500	Vertical	62.0	74.0	12.0	Complied
2483.580	Vertical	62.2	74.0	11.8	Complied

Results: Upper Band Edge / Average / Channel 12

Frequency (MHz)	Antenna Polarity	Level (dBµV/m)	Limit (dBµV/m)	Margin (dB)	Result
2483.500	Vertical	51.2	54.0	2.8	Complied

Results: Upper Band Edge / Peak / Channel 13

Frequency (MHz)	Antenna Polarity	Level (dBµV/m)	Limit (dBµV/m)	Margin (dB)	Result
2483.500	Vertical	58.8	74.0	15.2	Complied
2486.785	Vertical	60.5	74.0	13.5	Complied

Results: Upper Band Edge / Average / Channel 13

Frequency (MHz)	Antenna Polarity	Level (dBµV/m)	Limit (dBµV/m)	Margin (dB)	Result
2483.500	Vertical	48.3	54.0	5.7	Complied
2486.385	Vertical	50.9	54.0	3.1	Complied

Transmitter Band Edge Radiated Emissions (continued)

Results: 802.11b / 20 MHz / BPSK / 1 Mbit/s / Ant 1

Results: 2310 MHz to 2390 MHz Restricted Band / Peak

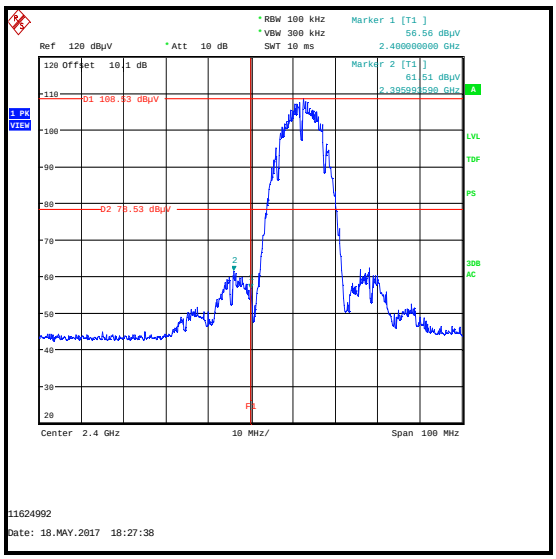
Frequency (MHz)	Antenna Polarity	Level (dBµV/m)	Limit (dBµV/m)	Margin (dB)	Result
2390.000	Vertical	62.9	74.0	11.1	Complied

Results: 2310 MHz to 2390 MHz Restricted Band / Average

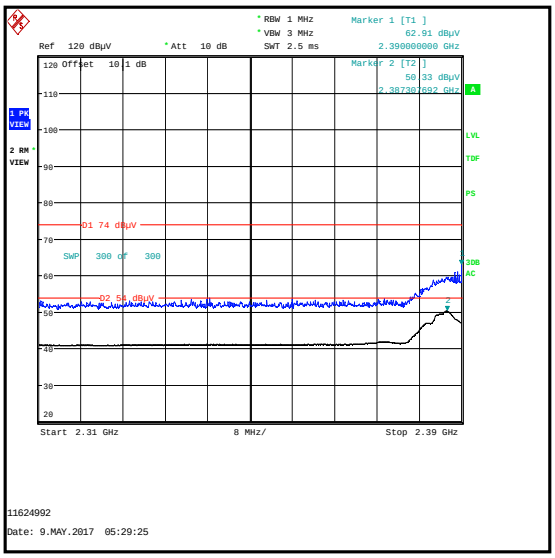
Frequency (MHz)	Antenna Polarity	Level (dBµV/m)	Limit (dBµV/m)	Margin (dB)	Result
2387.308	Vertical	50.3	54.0	3.7	Complied

Transmitter Band Edge Radiated Emissions (continued)

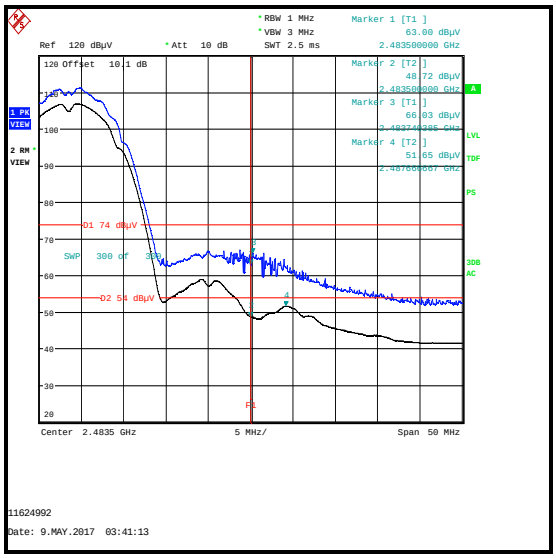
Results: 802.11b / 20 MHz / BPSK / 1 Mbit/s / Port 1



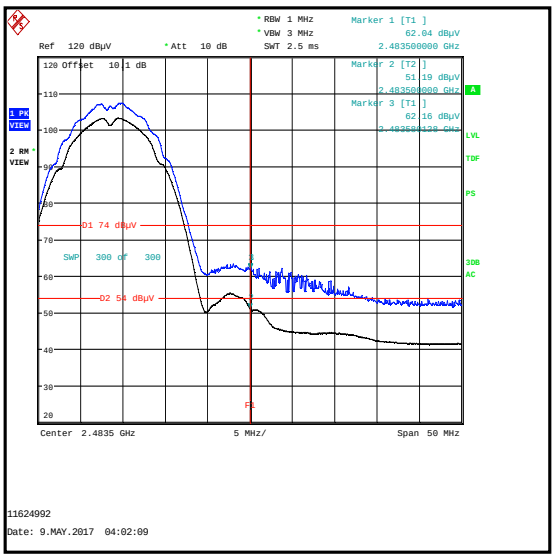
Lower Band Edge
Channel 1



2310 MHz to 2390 MHz Restricted Band



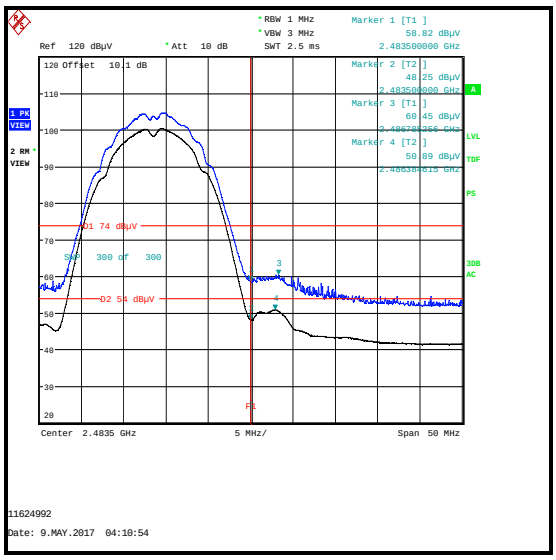
Upper Band Edge
Channel 11



Upper Band Edge
Channel 12

Transmitter Band Edge Radiated Emissions (continued)

Results: 802.11b / 20 MHz / BPSK / 1 Mbit/s / Port 1



Upper Band Edge
Channel 13

Transmitter Band Edge Radiated Emissions

802.11g HT20 / BPSK / 6 Mbit/s / Port 1

Results: Lower Band Edge / Channel 1

Frequency (MHz)	Antenna Polarity	Level (dBµV/m)	-30 dBc Limit (dBµV/m)	Margin (dB)	Result
2396.955	Vertical	60.8	70.8	10.0	Complied
2400.000	Vertical	59.4	70.8	11.4	Complied

Results: Upper Band Edge / Peak / Channel 11

Frequency (MHz)	Antenna Polarity	Level (dBµV/m)	Limit (dBµV/m)	Margin (dB)	Result
2483.500	Vertical	62.2	74.0	11.8	Complied
2483.981	Vertical	63.3	74.0	10.7	Complied

Results: Upper Band Edge / Average / Channel 11

Frequency (MHz)	Antenna Polarity	Level (dBµV/m)	Limit (dBµV/m)	Margin (dB)	Result
2483.500	Vertical	51.2	54.0	2.8	Complied

Results: Upper Band Edge / Peak / Channel 12

Frequency (MHz)	Antenna Polarity	Level (dBµV/m)	Limit (dBµV/m)	Margin (dB)	Result
2483.500	Vertical	62.5	74.0	11.5	Complied
2484.542	Vertical	63.3	74.0	10.7	Complied

Results: Upper Band Edge / Average / Channel 12

Frequency (MHz)	Antenna Polarity	Level (dBµV/m)	Limit (dBµV/m)	Margin (dB)	Result
2483.500	Vertical	51.2	54.0	2.8	Complied

Results: Upper Band Edge / Peak / Channel 13

Frequency (MHz)	Antenna Polarity	Level (dBµV/m)	Limit (dBµV/m)	Margin (dB)	Result
2483.500	Vertical	68.9	74.0	5.1	Complied

Results: Upper Band Edge / Average / Channel 13

Frequency (MHz)	Antenna Polarity	Level (dBµV/m)	Limit (dBµV/m)	Margin (dB)	Result
2483.500	Vertical	50.8	54.0	3.2	Complied

Transmitter Band Edge Radiated Emissions (continued)

802.11g HT20 / BPSK / 6 Mbit/s / Port 1

Results: 2310 MHz to 2390 MHz Restricted Band / Peak

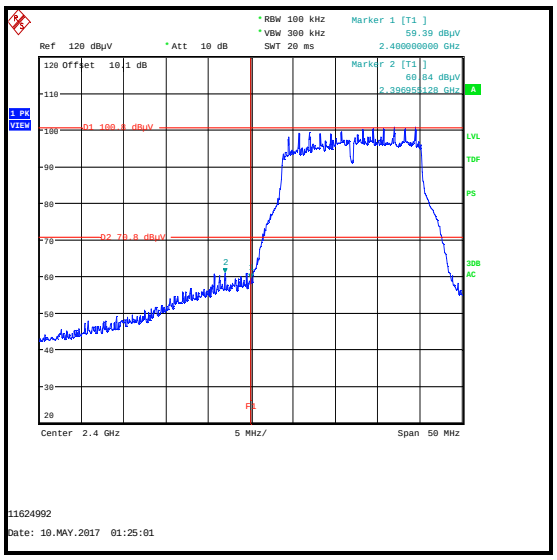
Frequency (MHz)	Antenna Polarity	Level (dBµV/m)	Limit (dBµV/m)	Margin (dB)	Result
2390.000	Vertical	64.7	74.0	9.3	Complied

Results: 2310 MHz to 2390 MHz Restricted Band / Average

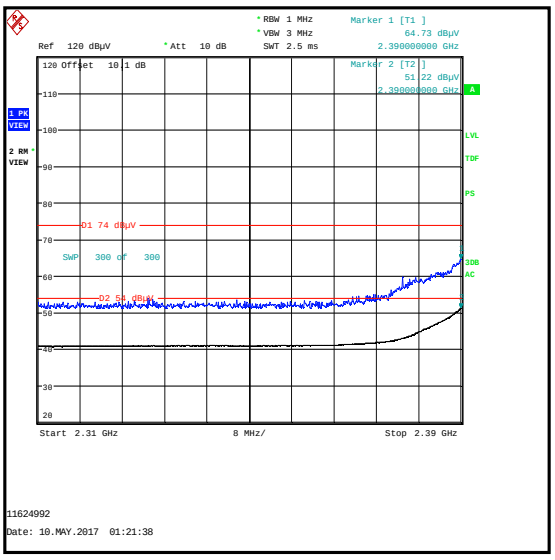
Frequency (MHz)	Antenna Polarity	Level (dBµV/m)	Limit (dBµV/m)	Margin (dB)	Result
2390.000	Vertical	51.2	54.0	2.8	Complied

Transmitter Band Edge Radiated Emissions SISO g Mode (continued)

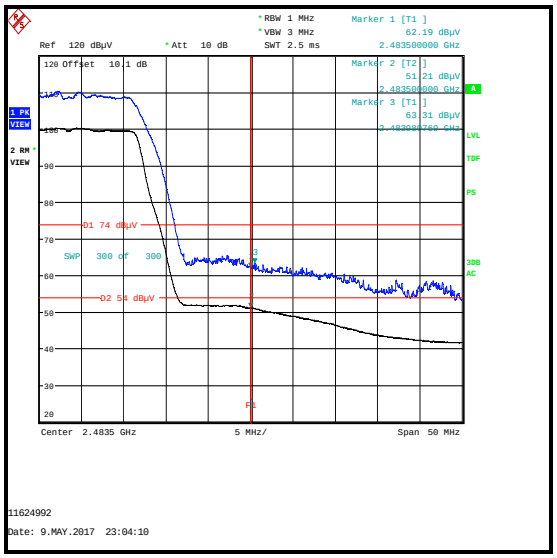
Results: 802.11g HT20 / BPSK / 6 Mbit/s / Port 1



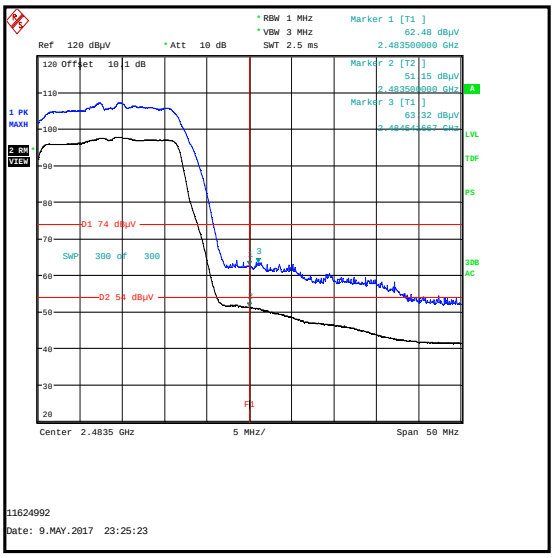
Lower Band Edge
Channel 1



2310 MHz to 2390 MHz Restricted Band



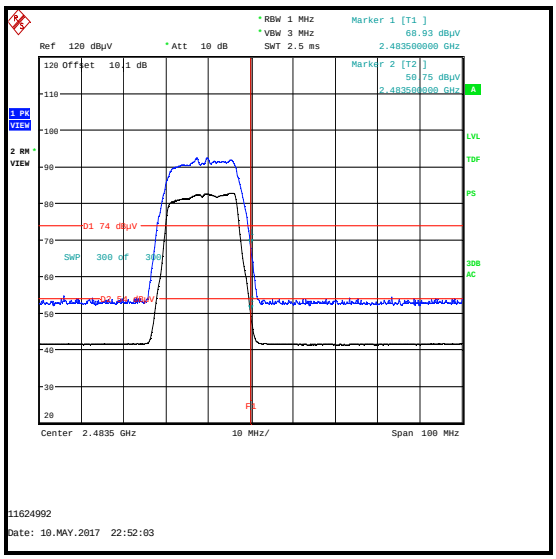
Upper Band Edge
Channel 11



Upper Band Edge
Channel 12

Transmitter Band Edge Radiated Emissions (continued)

Results: 802.11g HT20 / BPSK / 6 Mbit/s / Port 1



Upper Band Edge
Channel 13

Transmitter Band Edge Radiated Emissions

802.11n / 20 MHz / BPSK / 6.5 Mbit/s / MCS0 / Ant 1

Results: Lower Band Edge / Channel 1

Frequency (MHz)	Antenna Polarity	Level (dBµV/m)	-30 dBc Limit (dBµV/m)	Margin (dB)	Result
2400.000	Vertical	59.1	70.8	11.7	Complied

Results: Upper Band Edge / Peak / Channel 11

Frequency (MHz)	Antenna Polarity	Level (dBµV/m)	Limit (dBµV/m)	Margin (dB)	Result
2483.500	Vertical	64.3	74.0	9.7	Complied
2495.038	Vertical	68.8	74.0	5.2	Complied

Results: Upper Band Edge / Average / Channel 11

Frequency (MHz)	Antenna Polarity	Level (dBµV/m)	Limit (dBµV/m)	Margin (dB)	Result
2483.500	Vertical	50.7	54.0	3.3	Complied

Results: Upper Band Edge / Peak / Channel 12

Frequency (MHz)	Antenna Polarity	Level (dBµV/m)	Limit (dBµV/m)	Margin (dB)	Result
2483.500	Vertical	65.5	74.0	8.5	Complied
2484.542	Vertical	66.5	74.0	7.5	Complied

Results: Upper Band Edge / Average / Channel 12

Frequency (MHz)	Antenna Polarity	Level (dBµV/m)	Limit (dBµV/m)	Margin (dB)	Result
2483.500	Vertical	50.9	54.0	3.1	Complied

Results: Upper Band Edge / Peak / Channel 13

Frequency (MHz)	Antenna Polarity	Level (dBµV/m)	Limit (dBµV/m)	Margin (dB)	Result
2483.500	Vertical	68.5	74.0	5.5	Complied

Results: Upper Band Edge / Average / Channel 13

Frequency (MHz)	Antenna Polarity	Level (dBµV/m)	Limit (dBµV/m)	Margin (dB)	Result
2483.500	Vertical	50.8	54.0	3.2	Complied

Transmitter Band Edge Radiated Emissions (continued)

802.11n / 20 MHz / BPSK / 6.5 Mbit/s / Ant 1

Results: 2310 MHz to 2390 MHz Restricted Band / Peak

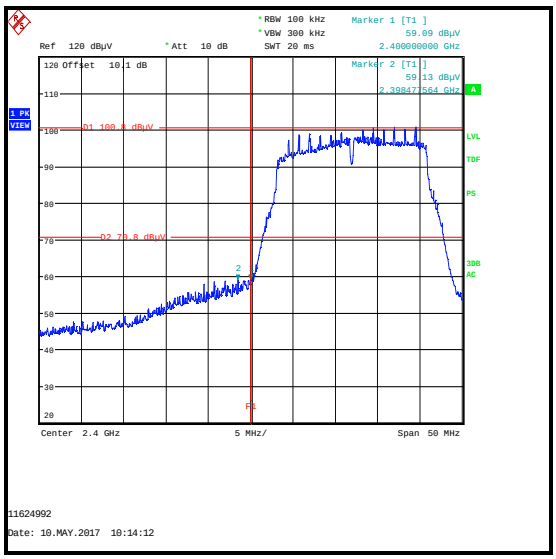
Frequency (MHz)	Antenna Polarity	Level (dBµV/m)	Limit (dBµV/m)	Margin (dB)	Result
2389.744	Vertical	67.7	74.0	6.3	Complied

Results: 2310 MHz to 2390 MHz Restricted Band / Average

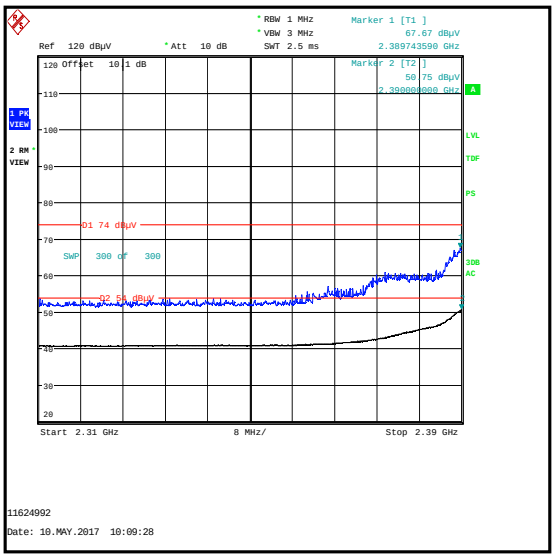
Frequency (MHz)	Antenna Polarity	Level (dBµV/m)	Limit (dBµV/m)	Margin (dB)	Result
2390.000	Vertical	50.8	54.0	3.2	Complied

Transmitter Band Edge Radiated Emissions (continued)

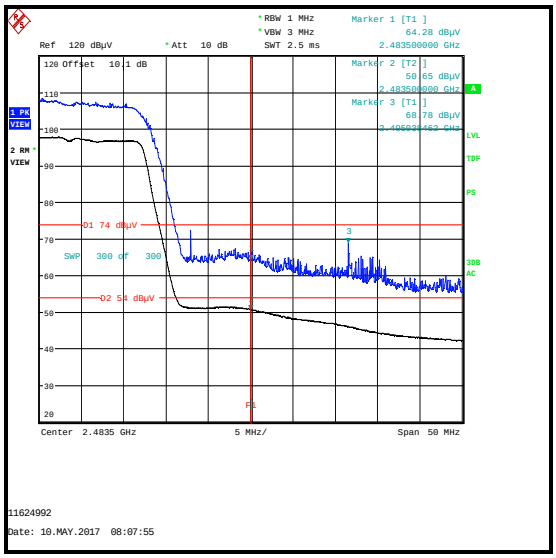
Results: 802.11n / 20 MHz / BPSK / 6.5 Mbit/s / Ant 1



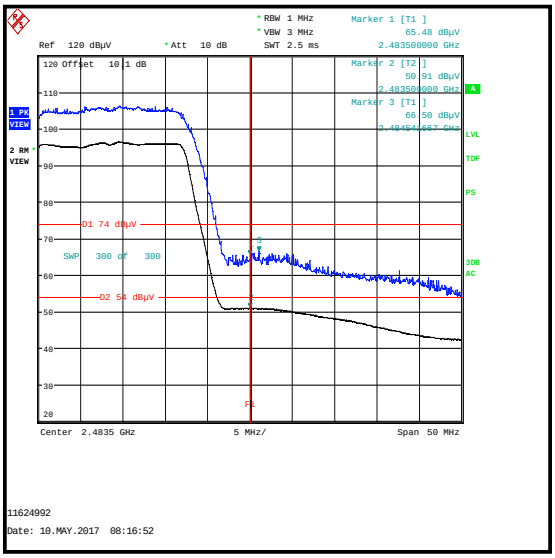
Lower Band Edge
Channel 1



2310 MHz to 2390 MHz Restricted Band



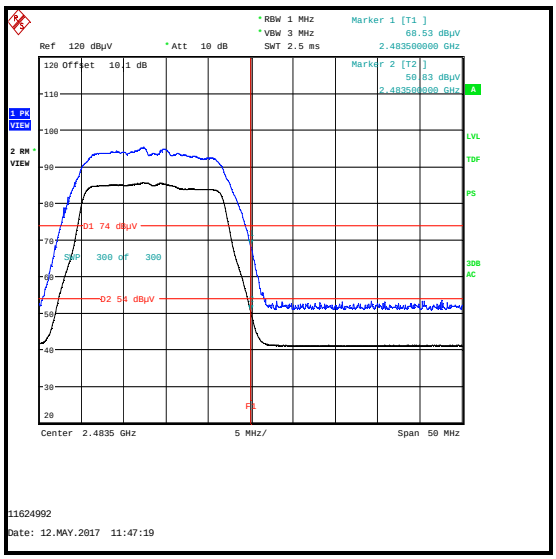
Upper Band Edge
Channel 11



Upper Band Edge
Channel 12

Transmitter Band Edge Radiated Emissions (continued)

Results: 802.11n / 20 MHz / BPSK / 6.5 Mbit/s / Ant 1



Upper Band Edge
Channel 13

Transmitter Band Edge Radiated Emissions

802.11n HT20 / MIMO / BPSK / 6.5 Mbit/s / MCS0 / Ant 1 & 2

Results: Lower Band Edge / Channel 1

Frequency (MHz)	Antenna Polarity	Level (dBµV/m)	-30 dBc Limit (dBµV/m)	Margin (dB)	Result
2396.955	Vertical	61.6	78.5	16.9	Complied
2400.000	Vertical	59.0	78.5	19.5	Complied

Results: Upper Band Edge / Restricted Band / Peak / Channel 11

Frequency (MHz)	Antenna Polarity	Level (dBµV/m)	Limit (dBµV/m)	Margin (dB)	Result
2483.500	Vertical	65.6	74.0	8.4	Complied

Results: Upper Band Edge / Restricted Band / Average / Channel 11

Frequency (MHz)	Antenna Polarity	Level (dBµV/m)	Limit (dBµV/m)	Margin (dB)	Result
2483.500	Vertical	50.9	54.0	3.1	Complied

Results: Upper Band Edge / Peak / Channel 12

Frequency (MHz)	Antenna Polarity	Level (dBµV/m)	Limit (dBµV/m)	Margin (dB)	Result
2483.500	Vertical	63.6	74.0	10.4	Complied
2483.821	Vertical	64.0	74.0	10.0	Complied

Results: Upper Band Edge / Average / Channel 12

Frequency (MHz)	Antenna Polarity	Level (dBµV/m)	Limit (dBµV/m)	Margin (dB)	Result
2483.500	Vertical	51.0	54.0	3.0	Complied

Results: Upper Band Edge / Peak / Channel 13

Frequency (MHz)	Antenna Polarity	Level (dBµV/m)	Limit (dBµV/m)	Margin (dB)	Result
2483.500	Vertical	68.0	74.0	6.0	Complied

Results: Upper Band Edge / Average / Channel 13

Frequency (MHz)	Antenna Polarity	Level (dBµV/m)	Limit (dBµV/m)	Margin (dB)	Result
2483.500	Vertical	50.6	54.0	3.4	Complied

Transmitter Band Edge Radiated Emissions (continued)

802.11n HT20 / MIMO / BPSK / 6.5 Mbit/s / MCS0 / Ant 1 & 2

Results: 2310 MHz to 2390 MHz Restricted Band / Peak

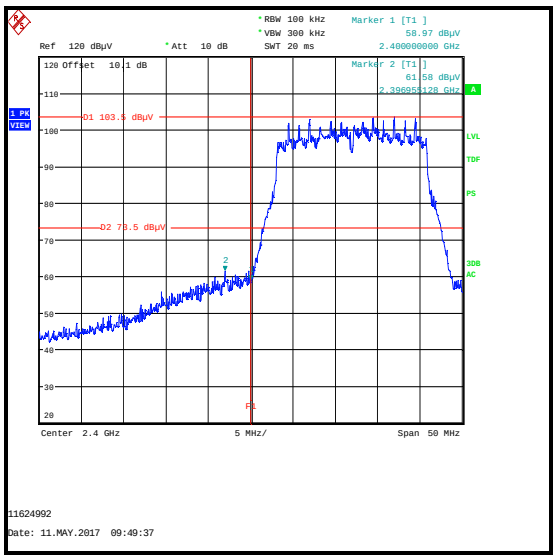
Frequency (MHz)	Antenna Polarity	Level (dBµV/m)	Limit (dBµV/m)	Margin (dB)	Result
2389.744	Vertical	68.8	74.0	5.2	Complied

Results: 2310 MHz to 2390 MHz Restricted Band / Average

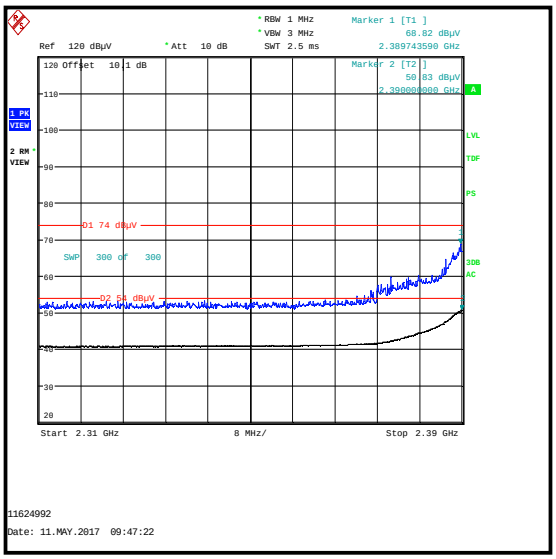
Frequency (MHz)	Antenna Polarity	Level (dBµV/m)	Limit (dBµV/m)	Margin (dB)	Result
2390.000	Vertical	50.8	54.0	3.2	Complied

Transmitter Band Edge Radiated Emissions (continued)

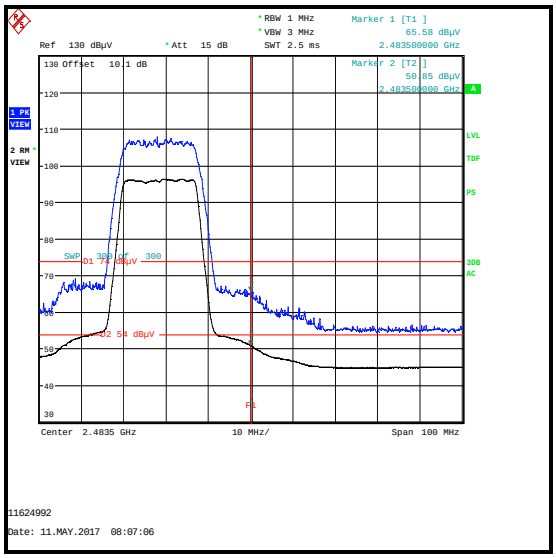
Results: 802.11n HT20 / MIMO / BPSK / 6.5 Mbit/s / MCS0 / Ant 1 & 2



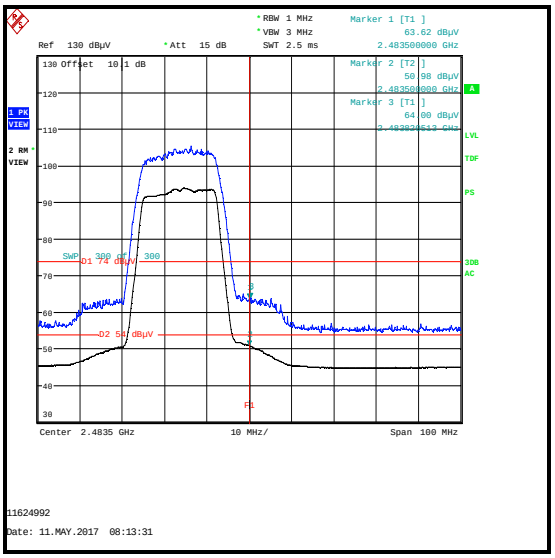
Lower Band Edge
Channel 1



2310 MHz to 2390 MHz Restricted Band



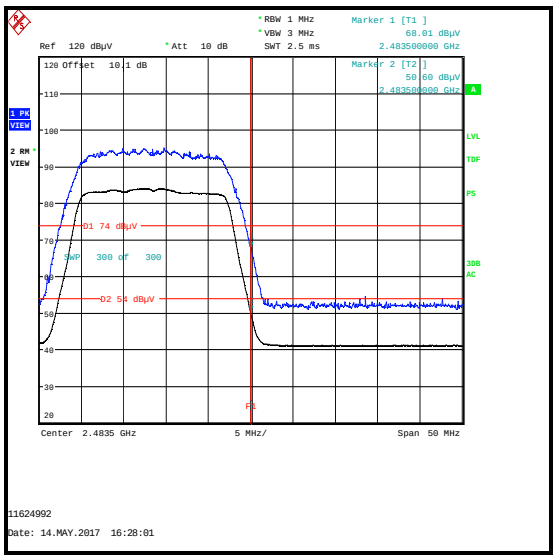
Upper Band Edge
Channel 11



Upper Band Edge
Channel 12

Transmitter Band Edge Radiated Emissions (continued)

Results: 802.11n HT20 / MIMO / BPSK / 6.5 Mbit/s / MCS0 / Ant 1 & 2



Upper Band Edge
Channel 13

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