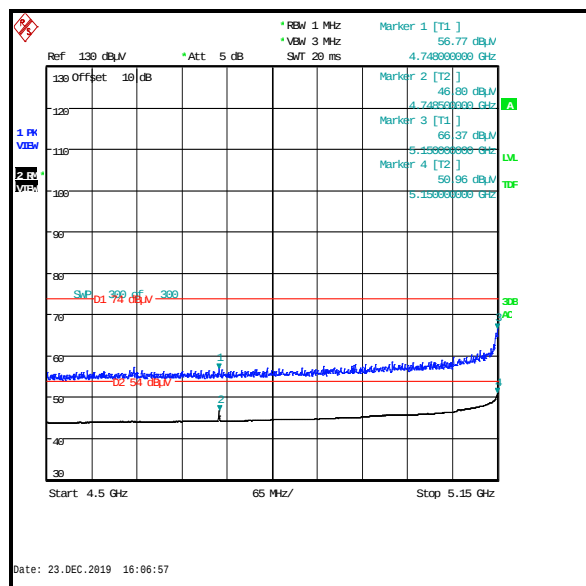
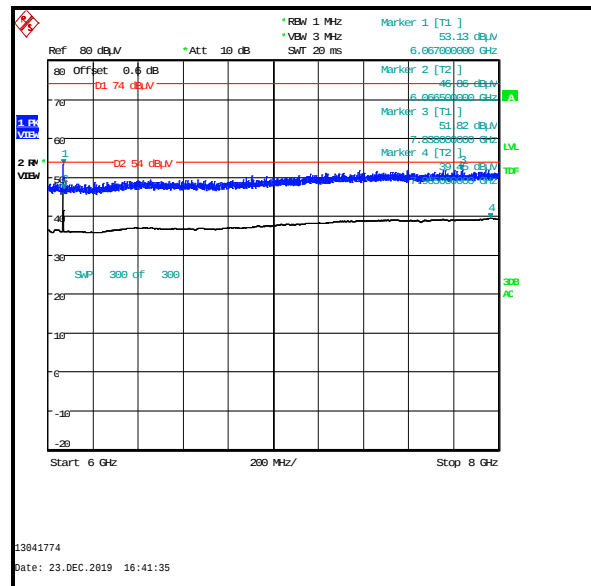
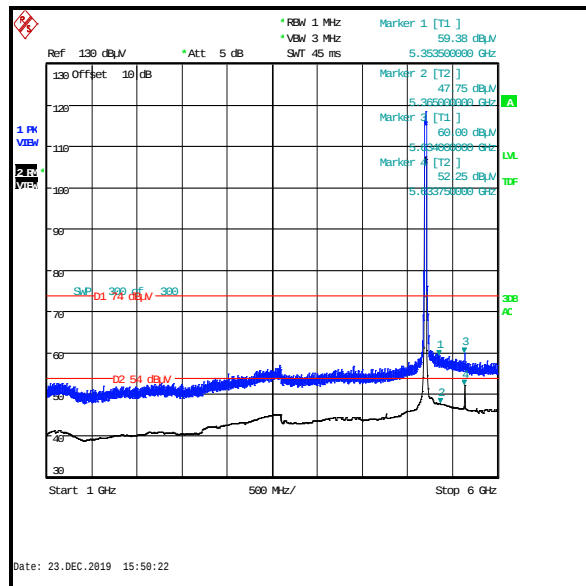
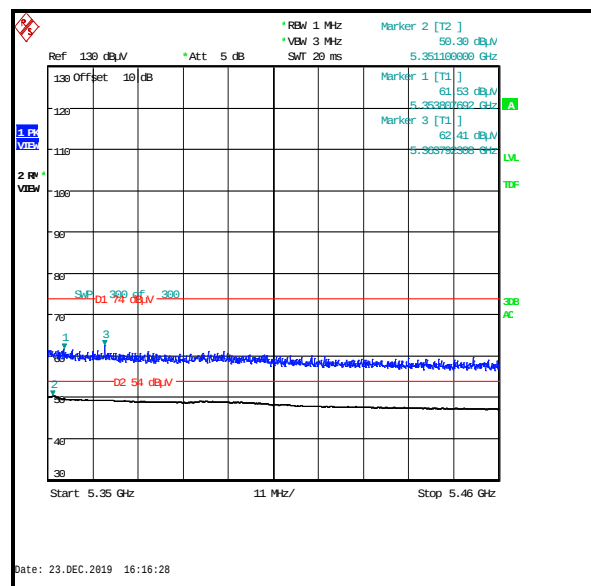
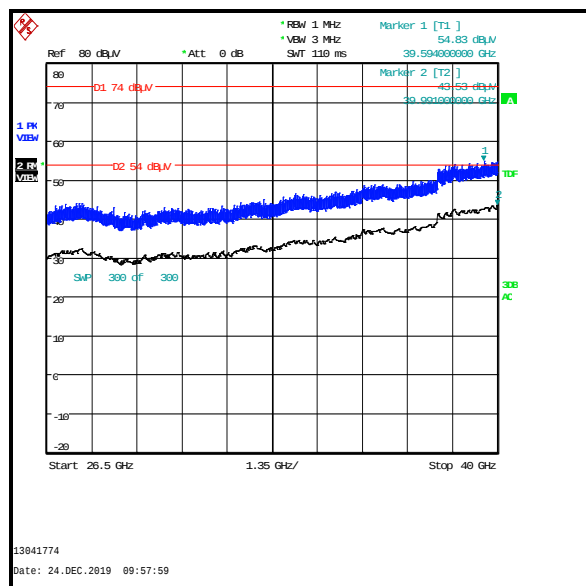
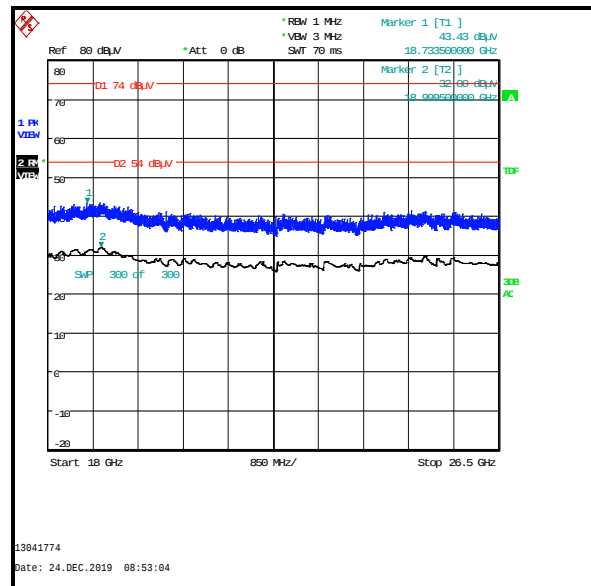
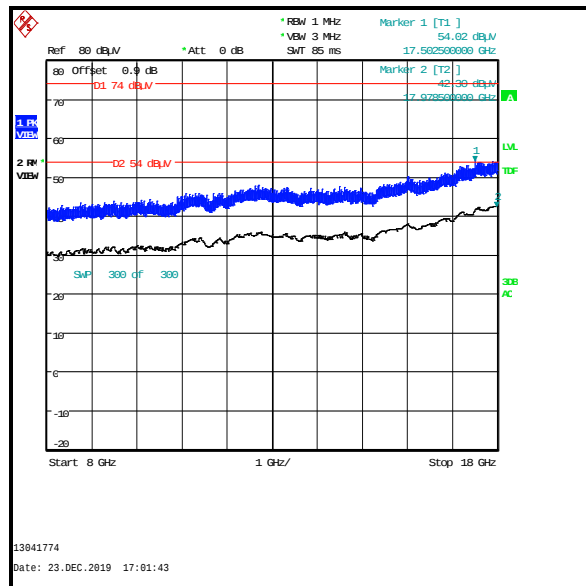


Transmitter Out of Band Radiated Emissions (5.15-5.25 GHz band operation) (continued)**Restricted Band 4.5 GHz to 5.15 GHz****Restricted Band 5.35 GHz to 5.46 GHz**

Transmitter Out of Band Radiated Emissions (5.15-5.25 GHz band operation) (continued)

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

5.2.2. 5.25-5.35 GHz band**Transmitter Out of Band Radiated Emissions (5.25-5.35 GHz band operation)****Test Summary:**

Test Engineers:	Mohamed Toubella & Andrew Edwards	Test Dates:	23 December 2019 & 24 December 2019
Test Sample Serial Numbers:	C02ZG00KP22J & C02ZG00UP22J		

FCC Reference:	Part 15.407(b)(2),(7) & 15.209(a)
Test Method Used:	KDB 789033 II.G. & ANSI C63.10 Sections 6.3 and 6.6
Frequency Range:	1 GHz to 40 GHz

Environmental Conditions:

Temperature (°C):	19 to 22
Relative Humidity (%):	38

Note(s):

1. FCC Part 15.407(b)(2) states for transmitters operating in the band 5.25 to 5.35 GHz: all emissions outside of the 5.15-5.35 GHz band will not exceed -27 dBm/MHz. Part(b)(7) states the provisions of 15.205 apply e.g. restricted bands of operation.
2. Pre-scans were performed with the EUT transmitting in the band 5.15 to 5.25 GHz band on the middle channel. An inquiry was made to the FCC and the response was pre-scans could be performed in the band with the highest output power and all final measurements should be performed on any emissions seen in each band.
3. In accordance with ANSI C63.10 section 5.6.2.2, radiated emissions measurements were performed on the mode which had the highest PSD (802.11n / HT20 / MCS0 / MIMO / 3Tx CDD) and the mode which had the highest output power (802.11n / HT20 / MCS0 / MIMO / 3Tx SDM). Pre-scans were performed on both modes. Plots in the report are for the worst case mode with final measurements on any emissions seen being performed on both modes in all bands.
4. The final measured value, for the given emission in the result tables, incorporates the calibrated antenna factor and cable loss.
5. All other emissions shown on the pre-scan plot were investigated and found to be ambient or >20 dB below the applicable limit or below the measurement system noise floor.
6. Appropriate RF filters and attenuators were used during pre-scans and final measurements. Insertion losses were entered on the spectrum analyser as RF levels offsets.
7. In accordance with KDB 789033 Section II.G.1.c) if the peak measurement is below the average limit, it is not necessary to perform a separate average measurement.
8. Pre-scans above 1 GHz were performed in a fully anechoic chamber (Asset Number K0001 or 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 K0001). Maximum emission levels were determined by height searching the measurement antenna over the range 1 metre to 4 metres.

Transmitter Out of Band Radiated Emissions (5.25-5.35 GHz band operation) (continued)**Results: Bottom Channel / EIRP / MIMO / 3Tx CDD**

Frequency (MHz)	Antenna Polarity	Level (dBm)	Limit (dBm)	Margin (dB)	Result
4821.603	Vertical	-42.1	-27.0	15.1	Complied
5698.377	Vertical	-36.8	-27.0	9.8	Complied
6136.763	Vertical	-39.4	-27.0	12.4	Complied

Results: Bottom Channel / Field Strength / MIMO / 3Tx CDD

Frequency (MHz)	Antenna Polarity	Peak Level (dB μ V/m)	Average Limit (dB μ V/m)	Margin (dB)	Result
4821.603	Vertical	53.1	54.0	0.9	Complied

Results: Middle Channel / EIRP / MIMO / 3Tx CDD

Frequency (MHz)	Antenna Polarity	Level (dBm)	Limit (dBm)	Margin (dB)	Result
4840.074	Vertical	-41.4	-27.0	14.4	Complied
5719.955	Vertical	-37.4	-27.0	10.4	Complied
6159.962	Vertical	-40.4	-27.0	13.4	Complied

Results: Middle Channel / Field Strength / MIMO / 3Tx CDD

Frequency (MHz)	Antenna Polarity	Peak Level (dB μ V/m)	Average Limit (dB μ V/m)	Margin (dB)	Result
4840.074	Vertical	53.8	54.0	0.2	Complied

Results: Top Channel / EIRP / MIMO / 3Tx CDD

Frequency (MHz)	Antenna Polarity	Level (dBm)	Limit (dBm)	Margin (dB)	Result
4787.862	Vertical	-45.5	-27.0	18.5	Complied
5586.010	Vertical	-38.5	-27.0	11.5	Complied
5985.156	Vertical	-41.3	-27.0	14.3	Complied

Results: Top Channel / Field Strength / MIMO / 3Tx CDD

Frequency (MHz)	Antenna Polarity	Peak Level (dB μ V/m)	Average Limit (dB μ V/m)	Margin (dB)	Result
4787.862	Vertical	49.7	54.0	4.3	Complied

Transmitter Out of Band Radiated Emissions (5.25-5.35 GHz band operation) (continued)**Results: Bottom Channel / EIRP / MIMO / 3Tx SDM**

Frequency (MHz)	Antenna Polarity	Level (dBm)	Limit (dBm)	Margin (dB)	Result
4821.603	Vertical	-42.3	-27.0	15.3	Complied
5698.377	Vertical	-35.5	-27.0	8.5	Complied
6136.763	Vertical	-39.8	-27.0	12.8	Complied

Results: Bottom Channel / Field Strength / MIMO / 3Tx SDM

Frequency (MHz)	Antenna Polarity	Peak Level (dB μ V/m)	Average Limit (dB μ V/m)	Margin (dB)	Result
4821.603	Vertical	52.9	54.0	1.1	Complied

Results: Middle Channel / EIRP / MIMO / 3Tx SDM

Frequency (MHz)	Antenna Polarity	Level (dBm)	Limit (dBm)	Margin (dB)	Result
4840.074	Vertical	-41.4	-27.0	14.4	Complied
5719.955	Vertical	-37.9	-27.0	10.9	Complied
6159.962	Vertical	-40.5	-27.0	13.5	Complied

Results: Middle Channel / Field Strength / MIMO / 3Tx SDM

Frequency (MHz)	Antenna Polarity	Peak Level (dB μ V/m)	Average Limit (dB μ V/m)	Margin (dB)	Result
4840.074	Vertical	53.8	54.0	0.2	Complied

Results: Top Channel / EIRP / MIMO / 3Tx SDM

Frequency (MHz)	Antenna Polarity	Level (dBm)	Limit (dBm)	Margin (dB)	Result
4787.862	Vertical	-45.6	-27.0	18.6	Complied
5586.010	Vertical	-35.2	-27.0	8.2	Complied
5985.156	Vertical	-42.2	-27.0	15.2	Complied

Results: Top Channel / Field Strength / MIMO / 3Tx SDM

Frequency (MHz)	Antenna Polarity	Peak Level (dB μ V/m)	Average Limit (dB μ V/m)	Margin (dB)	Result
4787.862	Vertical	49.6	54.0	4.4	Complied

5.2.3. 5.47-5.725 GHz band**Transmitter Out of Band Radiated Emissions (5.47-5.725 GHz band operation)****Test Summary:**

Test Engineers:	Mohamed Toubella & Andrew Edwards	Test Dates:	23 December 2019 & 24 December 2019
Test Sample Serial Numbers:	C02ZG00KP22J & C02ZG00UP22J		

FCC Reference:	Part 15.407(b)(3),(7) & 15.209(a)
Test Method Used:	KDB 789033 II.G. & ANSI C63.10 Sections 6.3 and 6.6
Frequency Range:	1 GHz to 40 GHz

Environmental Conditions:

Temperature (°C):	19 to 22
Relative Humidity (%):	38

Note(s):

1. FCC Part 15.407(b)(3) states for transmitters operating in the band 5.47 to 5.725 GHz: all emissions outside of the band will not exceed -27 dBm/MHz. Part(b)(7) states the provisions of 15.205 apply e.g. restricted bands of operation.
2. Pre-scans were performed with the EUT transmitting in the band 5.15 to 5.25 GHz band on the middle channel. An inquiry was made to the FCC and the response was pre-scans could be performed in the band with the highest output power and all final measurements should be performed on any emissions seen in each band.
3. In accordance with ANSI C63.10 section 5.6.2.2, radiated emissions measurements were performed on the mode which had the highest PSD (802.11n / HT20 / MCS0 / MIMO / 3Tx CDD) and the mode which had the highest output power (802.11n / HT20 / MCS0 / MIMO / 3Tx SDM). Pre-scans were performed on both modes. Plots in the report are for the worst case mode with final measurements on any emissions seen being performed on both modes in all bands.
4. The final measured value, for the given emission in the result tables, incorporates the calibrated antenna factor and cable loss.
5. All other emissions shown on the pre-scan plot were investigated and found to be ambient or >20 dB below the applicable limit or below the measurement system noise floor.
6. Appropriate RF filters and attenuators were used during pre-scans and final measurements. Insertion losses were entered on the spectrum analyser as RF levels offsets.
7. In accordance with KDB 789033 Section II.G.1.c) if the peak measurement is below the average limit, it is not necessary to perform a separate average measurement.
8. Pre-scans above 1 GHz were performed in a fully anechoic chamber (Asset Number K0001 or 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 K0001). Maximum emission levels were determined by height searching the measurement antenna over the range 1 metre to 4 metres.

Transmitter Out of Band Radiated Emissions (5.47-5.725 GHz band operation) (continued)**Results: Bottom Channel / EIRP / MIMO / 3Tx CDD**

Frequency (MHz)	Antenna Polarity	Level (dBm)	Limit (dBm)	Margin (dB)	Result
4812.429	Vertical	-44.8	-27.0	17.8	Complied
5270.904	Vertical	-40.5	-27.0	13.5	Complied

Results: Bottom Channel / Field Strength / MIMO / 3Tx CDD

Frequency (MHz)	Antenna Polarity	Peak Level (dB μ V/m)	Average Limit (dB μ V/m)	Margin (dB)	Result
4812.429	Vertical	50.4	54.0	3.6	Complied

Results: Middle Channel / EIRP / MIMO / 3Tx CDD

Frequency (MHz)	Antenna Polarity	Level (dBm)	Limit (dBm)	Margin (dB)	Result
4835.968	Vertical	-43.3	-27.0	16.3	Complied
5207.609	Vertical	-42.6	-27.0	15.6	Complied
5951.939	Vertical	-38.2	-27.0	11.2	Complied

Results: Middle Channel / Field Strength / MIMO / 3Tx CDD

Frequency (MHz)	Antenna Polarity	Peak Level (dB μ V/m)	Average Limit (dB μ V/m)	Margin (dB)	Result
4835.968	Vertical	51.9	54.0	2.1	Complied

Results: Top Channel / EIRP / MIMO / 3Tx CDD

Frequency (MHz)	Antenna Polarity	Level (dBm)	Limit (dBm)	Margin (dB)	Result
4855.304	Vertical	-44.9	-27.0	17.9	Complied
5277.577	Vertical	-41.3	-27.0	14.3	Complied
5903.593	Vertical	-39.7	-27.0	12.7	Complied

Results: Top Channel / Field Strength / MIMO / 3Tx CDD

Frequency (MHz)	Antenna Polarity	Peak Level (dB μ V/m)	Average Limit (dB μ V/m)	Margin (dB)	Result
4855.304	Vertical	50.3	54.0	3.7	Complied

Transmitter Out of Band Radiated Emissions (5.47-5.725 GHz band operation) (continued)**Results: Bottom Channel / EIRP / MIMO / 3Tx SDM**

Frequency (MHz)	Antenna Polarity	Level (dBm)	Limit (dBm)	Margin (dB)	Result
4812.429	Vertical	-45.7	-27.0	18.7	Complied
5270.904	Vertical	-38.7	-27.0	11.7	Complied

Results: Bottom Channel / Field Strength / MIMO / 3Tx SDM

Frequency (MHz)	Antenna Polarity	Peak Level (dB μ V/m)	Average Limit (dB μ V/m)	Margin (dB)	Result
4812.429	Vertical	49.5	54.0	4.5	Complied

Results: Middle Channel / EIRP / MIMO / 3Tx SDM

Frequency (MHz)	Antenna Polarity	Level (dBm)	Limit (dBm)	Margin (dB)	Result
4835.968	Vertical	-43.4	-27.0	16.4	Complied
5207.609	Vertical	-42.1	-27.0	15.1	Complied
5951.939	Vertical	-37.8	-27.0	10.8	Complied

Results: Middle Channel / Field Strength / MIMO / 3Tx SDM

Frequency (MHz)	Antenna Polarity	Peak Level (dB μ V/m)	Average Limit (dB μ V/m)	Margin (dB)	Result
4835.968	Vertical	51.8	54.0	2.2	Complied

Results: Top Channel / EIRP / MIMO / 3Tx SDM

Frequency (MHz)	Antenna Polarity	Level (dBm)	Limit (dBm)	Margin (dB)	Result
4855.304	Vertical	-45.9	-27.0	18.9	Complied
5277.577	Vertical	-39.4	-27.0	12.4	Complied
5903.593	Vertical	-39.4	-27.0	12.4	Complied

Results: Top Channel / Field Strength / MIMO / 3Tx SDM

Frequency (MHz)	Antenna Polarity	Peak Level (dB μ V/m)	Average Limit (dB μ V/m)	Margin (dB)	Result
4855.304	Vertical	49.3	54.0	4.7	Complied

5.2.4. Channels that straddle the U-NII-2C and U-NII-3 bands at 5725 MHz**Transmitter Out of Band Radiated Emissions (Channels that straddle the U-NII-2C and U-NII-3 bands at 5725 MHz)****Test Summary:**

Test Engineers:	Mohamed Toubella & Andrew Edwards	Test Dates:	23 December 2019 & 24 December 2019
Test Sample Serial Numbers:	C02ZG00KP22J & C02ZG00UP22J		

FCC Reference:	Part 15.407(b)(3),(4)(i),(7) & 15.209(a)
Test Method Used:	KDB 789033 II.G. & ANSI C63.10 Sections 6.3 and 6.6
Frequency Range:	1 GHz to 40 GHz

Environmental Conditions:

Temperature (°C):	19 to 22
Relative Humidity (%):	38

Note(s):

1. KDB 789033 Section III.B.2.b)(iii) states "Straddle channels are considered to be operating in both U-NII-2C and U-NII-3. The worst case out of band emission i.e. -27 dBm/MHz peak EIRP, applies at the band edges. The band edges are considered to be 5.47 GHz and 5.85 GHz."
2. Pre-scans were performed with the EUT transmitting in the band 5.15 to 5.25 GHz band on the middle channel. An inquiry was made to the FCC and the response was pre-scans could be performed in the band with the highest output power and all final measurements should be performed on any emissions seen in each band.
3. In accordance with ANSI C63.10 section 5.6.2.2, radiated emissions measurements were performed on the mode which had the highest PSD (802.11n / HT20 / MCS0 / MIMO / 3Tx CDD) and the mode which had the highest output power (802.11n / HT20 / MCS0 / MIMO / 3Tx SDM). Pre-scans were performed on both modes. Plots in the report are for the worst case mode with final measurements on any emissions seen being performed on both modes in all bands.
4. The final measured value, for the given emission in the result tables, incorporates the calibrated antenna factor and cable loss.
5. All other emissions shown on the pre-scan plot were investigated and found to be ambient or >20 dB below the applicable limit or below the measurement system noise floor.
6. Appropriate RF filters and attenuators were used during pre-scans and final measurements. Insertion losses were entered on the spectrum analyser as RF levels offsets.
7. Pre-scans above 1 GHz were performed in a fully anechoic chamber (Asset Number K0001 or 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 K0001). Maximum emission levels were determined by height searching the measurement antenna over the range 1 metre to 4 metres.

Transmitter Out of Band Radiated Emissions (Channels that straddle the U-NII-2C and U-NII-3 bands at 5725 MHz) (continued)**Results: Straddle Channel / EIRP / MIMO / 3Tx CDD**

Frequency (MHz)	Antenna Polarity	Level (dBm)	Limit (dBm)	Margin (dB)	Result
5296.308	Vertical	-37.3	-27.0	10.3	Complied

Results: Straddle Channel / EIRP / MIMO / 3Tx SDM

Frequency (MHz)	Antenna Polarity	Level (dBm)	Limit (dBm)	Margin (dB)	Result
5296.308	Vertical	-38.0	-27.0	11.0	Complied

5.2.5. 5.725-5.85 GHz band**Transmitter Out of Band Radiated Emissions (5.725-5.85 GHz band operation)****Test Summary:**

Test Engineers:	Mohamed Toubella & Andrew Edwards	Test Dates:	23 December 2019 & 24 December 2019
Test Sample Serial Numbers:	C02ZG00KP22J & C02ZG00UP22J		

FCC Reference:	Part 15.407(b)(4)(i),(7) & 15.209(a)
Test Method Used:	KDB 789033 II.G. & ANSI C63.10 Sections 6.3 and 6.6
Frequency Range:	1 GHz to 40 GHz

Environmental Conditions:

Temperature (°C):	19 to 22
Relative Humidity (%):	38

Note(s):

1. FCC Part 15.407(b)(4)(i) states for transmitters operating in the band 5.725 to 5.85 GHz: all emissions shall be limited to a level of -27 dBm/MHz at 75 MHz or more above or below the band edge increasing linearly to 10 dBm/MHz at 25 MHz above or below the band edge, and from 25 MHz above or below the band edge increasing linearly to a level of 15.6 dBm/MHz at 5 MHz above or below the band edge, and from 5 MHz above or below the band edge increasing linearly to a level of 27 dBm/MHz at the band edge. Part(b)(7) states the provisions of 15.205 apply e.g. restricted bands of operation.
2. Pre-scans were performed with the EUT transmitting in the band 5.15 to 5.25 GHz band on the middle channel. An inquiry was made to the FCC and the response was pre-scans could be performed in the band with the highest output power and all final measurements should be performed on any emissions seen in each band.
3. In accordance with ANSI C63.10 section 5.6.2.2, radiated emissions measurements were performed on the mode which had the highest PSD (802.11n / HT20 / MCS0 / MIMO / 3Tx CDD) and the mode which had the highest output power (802.11n / HT20 / MCS0 / MIMO / 3Tx SDM). Pre-scans were performed on both modes. Plots in the report are for the worst case mode with final measurements on any emissions seen being performed on both modes in all bands.
4. The final measured value, for the given emission in the result tables, incorporates the calibrated antenna factor and cable loss.
5. All other emissions shown on the pre-scan plot were investigated and found to be ambient or >20 dB below the applicable limit or below the measurement system noise floor.
6. Appropriate RF filters and attenuators were used during pre-scans and final measurements. Insertion losses were entered on the spectrum analyser as RF levels offsets.
7. Pre-scans above 1 GHz were performed in a fully anechoic chamber (Asset Number K0001 or 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 K0001). Maximum emission levels were determined by height searching the measurement antenna over the range 1 metre to 4 metres.

Transmitter Out of Band Radiated Emissions (5.725-5.85 GHz band operation) (continued)**Results: Bottom Channel / EIRP / MIMO / 3Tx CDD**

Frequency (MHz)	Antenna Polarity	Level (dBm)	Limit (dBm)	Margin (dB)	Result
5319.545	Vertical	-41.3	-27.0	14.3	Complied
5532.310	Vertical	-40.2	-27.0	13.2	Complied
5949.904	Vertical	-38.6	-27.0	11.6	Complied

Results: Middle Channel / EIRP / MIMO / 3Tx CDD

Frequency (MHz)	Antenna Polarity	Level (dBm)	Limit (dBm)	Margin (dB)	Result
5356.400	Vertical	-38.8	-27.0	11.8	Complied
5578.077	Vertical	-38.5	-27.0	11.5	Complied
5991.637	Vertical	-40.3	-27.0	13.3	Complied

Results: Middle Channel / Field Strength / Peak / MIMO / 3Tx CDD

Frequency (MHz)	Antenna Polarity	Level (dB μ V/m)	Limit (dB μ V/m)	Margin (dB)	Result
5356.400	Vertical	56.4	74.0	17.6	Complied

Results: Middle Channel / Field Strength / Average / MIMO / 3Tx CDD

Frequency (MHz)	Antenna Polarity	Level (dB μ V/m)	Limit (dB μ V/m)	Margin (dB)	Result
5356.400	Vertical	51.8	54.0	2.2	Complied

Results: Top Channel / EIRP / MIMO / 3Tx CDD

Frequency (MHz)	Antenna Polarity	Level (dBm)	Limit (dBm)	Margin (dB)	Result
5393.481	Vertical	-39.9	-27.0	12.9	Complied
5617.712	Vertical	-39.6	-27.0	12.6	Complied
6032.712	Vertical	-40.0	-27.0	13.0	Complied

Results: Top Channel / Field Strength / Peak / MIMO / 3Tx CDD

Frequency (MHz)	Antenna Polarity	Level (dB μ V/m)	Limit (dB μ V/m)	Margin (dB)	Result
5393.481	Vertical	55.3	74.0	18.7	Complied

Results: Top Channel / Field Strength / Average / MIMO / 3Tx CDD

Frequency (MHz)	Antenna Polarity	Level (dB μ V/m)	Limit (dB μ V/m)	Margin (dB)	Result
5393.481	Vertical	49.3	54.0	4.7	Complied

Transmitter Out of Band Radiated Emissions (5.725-5.85 GHz band operation) (continued)**Results: Bottom Channel / EIRP / MIMO / 3Tx SDM**

Frequency (MHz)	Antenna Polarity	Level (dBm)	Limit (dBm)	Margin (dB)	Result
5319.545	Vertical	-41.6	-27.0	14.6	Complied
5532.310	Vertical	-39.1	-27.0	12.1	Complied
5949.904	Vertical	-40.2	-27.0	13.2	Complied

Results: Middle Channel / EIRP / MIMO / 3Tx SDM

Frequency (MHz)	Antenna Polarity	Level (dBm)	Limit (dBm)	Margin (dB)	Result
5356.400	Vertical	-40.3	-27.0	13.3	Complied
5578.077	Vertical	-39.1	-27.0	12.1	Complied
5991.637	Vertical	-40.9	-27.0	13.9	Complied

Results: Middle Channel / Field Strength / Peak / MIMO / 3Tx SDM

Frequency (MHz)	Antenna Polarity	Level (dB μ V/m)	Limit (dB μ V/m)	Margin (dB)	Result
5356.400	Vertical	54.9	74.0	19.1	Complied

Results: Middle Channel / Field Strength / Average / MIMO / 3Tx SDM

Frequency (MHz)	Antenna Polarity	Level (dB μ V/m)	Duty Cycle correction factor (dB)	Corrected Level (dB μ V/m)	Limit (dB μ V/m)	Margin (dB)	Result
5356.400	Vertical	48.2	0.1	48.3	54.0	5.7	Complied

Results: Top Channel / EIRP / MIMO / 3Tx SDM

Frequency (MHz)	Antenna Polarity	Level (dBm)	Limit (dBm)	Margin (dB)	Result
5393.481	Vertical	-40.0	-27.0	13.0	Complied
5617.712	Vertical	-39.8	-27.0	12.8	Complied
6032.712	Vertical	-41.0	-27.0	14.0	Complied

Results: Top Channel / Field Strength / Peak / MIMO / 3Tx SDM

Frequency (MHz)	Antenna Polarity	Level (dB μ V/m)	Limit (dB μ V/m)	Margin (dB)	Result
5393.481	Vertical	55.2	74.0	18.8	Complied

Results: Top Channel / Field Strength / Average / MIMO / 3Tx SDM

Frequency (MHz)	Antenna Polarity	Level (dB μ V/m)	Duty Cycle correction factor (dB)	Corrected Level (dB μ V/m)	Limit (dB μ V/m)	Margin (dB)	Result
5393.481	Vertical	49.3	0.1	49.4	54.0	4.6	Complied

5.3. Transmitter Band Edge Radiated Emissions**5.3.1. 5.15-5.25 GHz band****Test Summary:**

Test Engineers:	Marco Zunarelli, Mark Perry Andrew Harding, James O'Reilly & John Ferdinand	Test Dates:	21 October 2019 to 20 January 2020
Test Sample Serial Numbers:	C02ZG00FP22J, C02ZG00KP22J & C02ZH00BP1YX		

FCC Reference:	Parts 15.407(b)(1),(7), 15.205 & 15.209(a)
Test Method Used:	ANSI C63.10 Section 6.10 & KDB 789033 II.G.

Environmental Conditions:

Temperature (°C):	22 to 25
Relative Humidity (%):	33 to 45

Transmitter Band Edge Radiated Emissions (5.15-5.25 GHz band operation) (continued)**Note(s):**

1. The following modes were tested:

- o 802.11a - BPSK / 6 Mbps / Core 0
- o 802.11n HT20 / SISO - BPSK / MCS0 / Core 0
- o 802.11n HT40 / SISO - BPSK / MCS0 / Core 0
- o 802.11ac VHT80 / SISO – BPSK / MCS0x1 / Core 0
- o 802.11n HT20 / MIMO / 2Tx CDD - BPSK / MCS0
- o 802.11n HT40 / MIMO / 2Tx CDD - BPSK / MCS0
- o 802.11ac VHT80 / MIMO / 2Tx CDD - BPSK / MCS0x1
- o 802.11n HT20 / MIMO / 2Tx SDM - BPSK / MCS8
- o 802.11n HT40 / MIMO / 2Tx SDM - BPSK / MCS8
- o 802.11ac VHT80 / MIMO / 2Tx SDM - BPSK / MCS0x2
- o 802.11n HT20 / MIMO / 2Tx TXBF - BPSK / MCS0
- o 802.11n HT40 / MIMO / 2Tx TXBF - BPSK / MCS0
- o 802.11ac VHT80 / MIMO / 2Tx TXBF - BPSK / MCS0x1
- o 802.11n HT20 / MIMO / 3Tx CDD - BPSK / MCS0
- o 802.11n HT40 / MIMO / 3Tx CDD - BPSK / MCS0
- o 802.11ac VHT80 / MIMO / 3Tx CDD - BPSK / MCS0x1
- o 802.11n HT20 / MIMO / 3Tx SDM - BPSK / MCS16
- o 802.11n HT40 / MIMO / 3Tx SDM - BPSK / MCS16
- o 802.11ac VHT80 / MIMO / 3Tx SDM - BPSK / MCS0x3
- o 802.11n HT20 / MIMO / 3Tx TXBF - BPSK / MCS0
- o 802.11n HT40 / MIMO / 3Tx TXBF - BPSK / MCS0
- o 802.11ac VHT80 / MIMO / 3Tx TXBF - BPSK / MCS0x1

2. Lower band edge measurements were performed with the EUT transmitting on the bottom channel. Upper band edge measurements were performed with the EUT transmitting on the top channel.

3. For transmitters operating in the 5.15-5.25 GHz band: all emissions outside of the 5.15-5.35 GHz band shall not exceed an EIRP of -27 dBm/MHz. However, there are restricted bands of operation below the lower band edge at 4.5-5.15 GHz and also above the upper band edge at 5.35-5.46 GHz therefore the provisions of FCC Part 15.205 apply. Tests were performed in these restricted bands of operation, the results are included in the transmitter 5.15 to 5.25 GHz band radiated spurious emission section of this test report.

4. Field strength measurements using peak and average detectors were performed in the restricted bands below 5.15 GHz and above 5.35 GHz. Field strength and EIRP results were found to be compliant with the restricted band limits and Part 15.407 out-of-band limits.

5. For all average measurements in this section, 300 sweeps were used. This satisfies the requirement for the minimum number of sweep points, as stated in KDB 789033 Section II.G.6.c) Method AD (vi).

6. In accordance with KDB 789033 Section II.G.6.c) Method AD (vii), for average measurements, data rates where the EUT was transmitting <98% duty cycle, the duty cycle correction factor calculated in section 4.1 was added to the measured result.

Transmitter Band Edge Radiated Emissions (5.15-5.25 GHz band operation) (continued)**Results: 802.11a / 20 MHz / SISO / BPSK / 6 Mbps / Core 0****Results: Lower Band Edge / Peak**

Frequency (MHz)	Level (dB μ V/m)	Limit (dB μ V/m)	Margin (dB)	Result
5149.615	65.0	74.0	9.0	Complied
5150	63.1	74.0	10.9	Complied

Results: Upper Band Edge / Peak

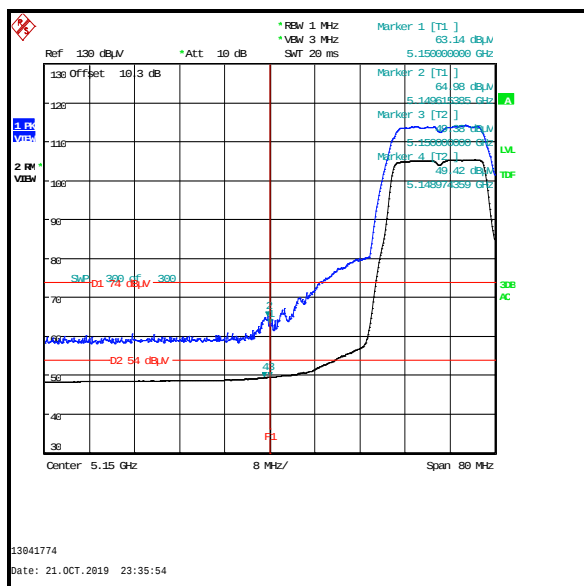
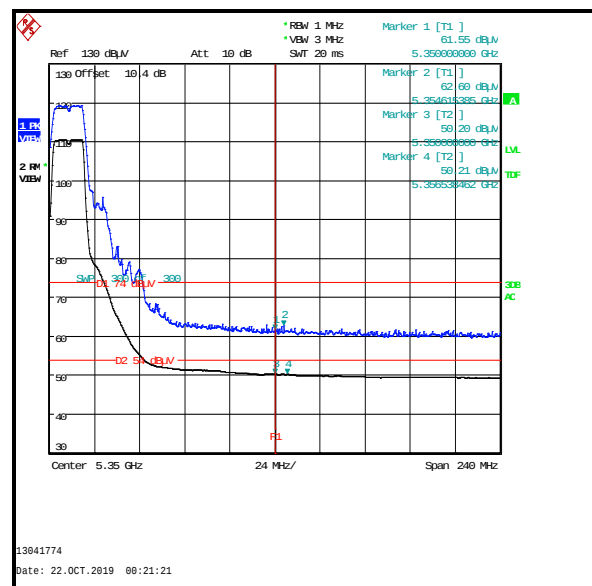
Frequency (MHz)	Level (dB μ V/m)	Limit (dB μ V/m)	Margin (dB)	Result
5350	61.6	74.0	12.4	Complied
5354.615	62.6	74.0	11.4	Complied

Results: Lower Band Edge / Average

Frequency (MHz)	Level (dB μ V/m)	Limit (dB μ V/m)	Margin (dB)	Result
5150	49.4	54.0	4.6	Complied

Results: Upper Band Edge / Average

Frequency (MHz)	Level (dB μ V/m)	Limit (dB μ V/m)	Margin (dB)	Result
5350	50.2	54.0	3.8	Complied

**Lower Band Edge****Upper Band Edge**

Transmitter Band Edge Radiated Emissions (5.15-5.25 GHz band operation) (continued)**Results: 802.11n / 20 MHz / SISO / BPSK / MCS0 / Core 0****Results: Lower Band Edge / Peak**

Frequency (MHz)	Level (dB μ V/m)	Limit (dB μ V/m)	Margin (dB)	Result
5149.615	66.5	74.0	7.5	Complied
5150	66.2	74.0	7.8	Complied

Results: Upper Band Edge / Peak

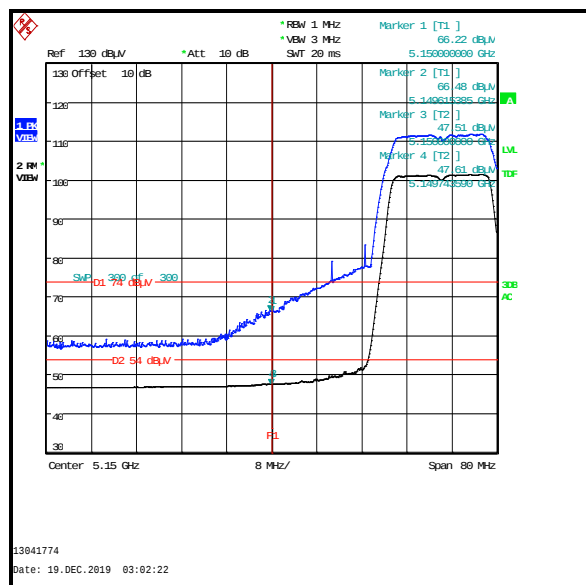
Frequency (MHz)	Level (dB μ V/m)	Limit (dB μ V/m)	Margin (dB)	Result
5350	61.8	74.0	12.2	Complied
5355.385	62.4	74.0	11.6	Complied

Results: Lower Band Edge / Average

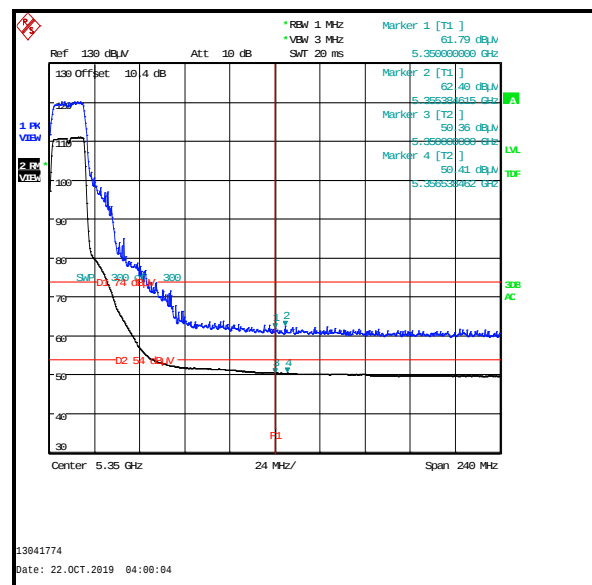
Frequency (MHz)	Level (dB μ V/m)	Limit (dB μ V/m)	Margin (dB)	Result
5149.743	47.6	54.0	6.4	Complied
5150	47.5	54.0	6.5	Complied

Results: Upper Band Edge / Average

Frequency (MHz)	Level (dB μ V/m)	Limit (dB μ V/m)	Margin (dB)	Result
5350	50.4	54.0	3.6	Complied



Lower Band Edge



Upper Band Edge

Transmitter Band Edge Radiated Emissions (5.15-5.25 GHz band operation) (continued)**Results: 802.11n / 40 MHz / SISO / BPSK / MCS0 / Core 0****Results: Lower Band Edge / Peak**

Frequency (MHz)	Level (dB μ V/m)	Limit (dB μ V/m)	Margin (dB)	Result
5149.808	68.7	74.0	5.3	Complied
5150	68.0	74.0	6.0	Complied

Results: Upper Band Edge / Peak

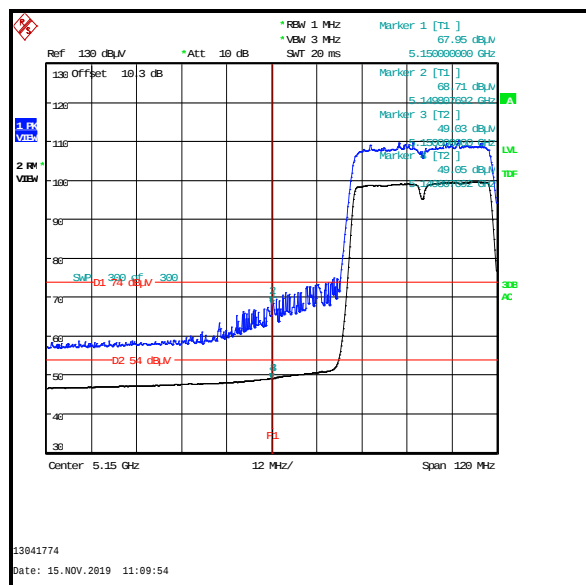
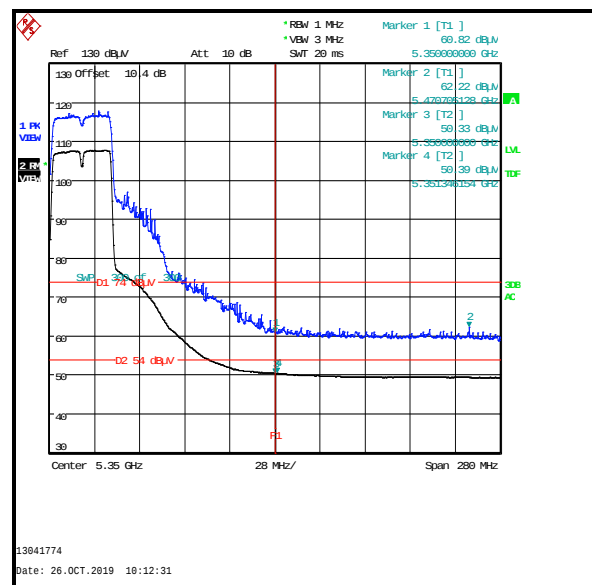
Frequency (MHz)	Level (dB μ V/m)	Limit (dB μ V/m)	Margin (dB)	Result
5350	60.8	74.0	13.2	Complied
5470.705	62.2	68.2	6.0	Complied

Results: Lower Band Edge / Average

Frequency (MHz)	Level (dB μ V/m)	Duty Cycle correction factor (dB)	Corrected Level (dB μ V/m)	Limit (dB μ V/m)	Margin (dB)	Result
5149.3	49.1	0.1	49.2	54.0	4.8	Complied
5150	49.0	0.1	49.1	54.0	4.9	Complied

Results: Upper Band Edge / Average

Frequency (MHz)	Level (dB μ V/m)	Duty Cycle correction factor (dB)	Corrected Level (dB μ V/m)	Limit (dB μ V/m)	Margin (dB)	Result
5350	50.3	0.1	50.4	54.0	3.6	Complied
5351.346	50.4	0.1	50.5	54.0	3.5	Complied

**Lower Band Edge****Upper Band Edge**

Transmitter Band Edge Radiated Emissions (5.15-5.25 GHz band operation) (continued)**Results: 802.11ac / 80 MHz / SISO / BPSK / MCS0x1 / Core 0****Results: Lower Band Edge / Peak**

Frequency (MHz)	Level (dB μ V/m)	Limit (dB μ V/m)	Margin (dB)	Result
5150	64.9	74.0	9.1	Complied

Results: Upper Band Edge / Peak

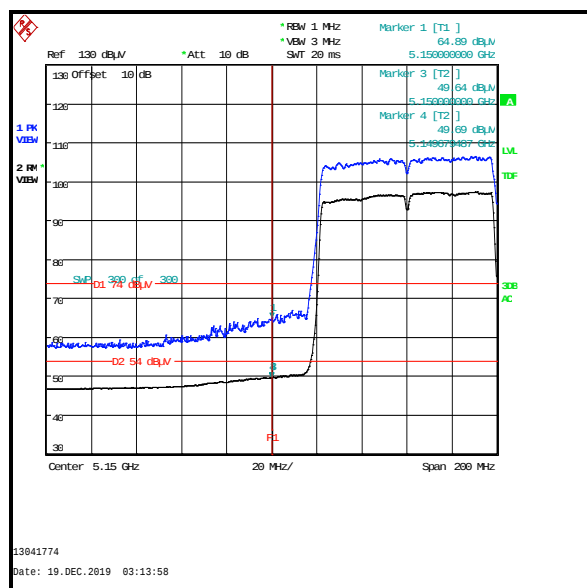
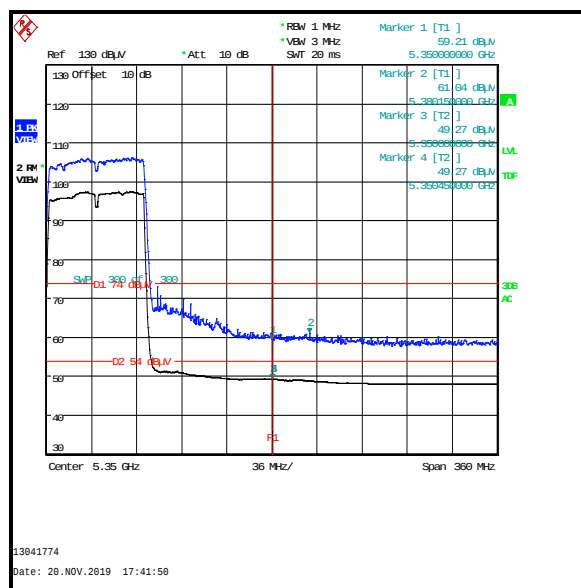
Frequency (MHz)	Level (dB μ V/m)	Limit (dB μ V/m)	Margin (dB)	Result
5350	59.2	74.0	14.8	Complied
5380.150	61.0	74.0	13.0	Complied

Results: Lower Band Edge / Average

Frequency (MHz)	Level (dB μ V/m)	Duty Cycle correction factor (dB)	Corrected Level (dB μ V/m)	Limit (dB μ V/m)	Margin (dB)	Result
5149.679	49.7	0.2	49.9	54.0	4.1	Complied
5150	49.6	0.2	49.8	54.0	4.2	Complied

Results: Upper Band Edge / Average

Frequency (MHz)	Level (dB μ V/m)	Duty Cycle correction factor (dB)	Corrected Level (dB μ V/m)	Limit (dB μ V/m)	Margin (dB)	Result
5150	49.3	0.2	49.5	54.0	4.5	Complied

**Lower Band Edge****Upper Band Edge**

Transmitter Band Edge Radiated Emissions (5.15-5.25 GHz band operation) (continued)**Results: 802.11n / 20 MHz / MIMO / 2Tx CDD / BPSK / MCS0****Results: Lower Band Edge / Peak**

Frequency (MHz)	Level (dB μ V/m)	Limit (dB μ V/m)	Margin (dB)	Result
5148.205	69.5	74.0	4.5	Complied
5150	68.6	74.0	5.4	Complied

Results: Upper Band Edge / Peak

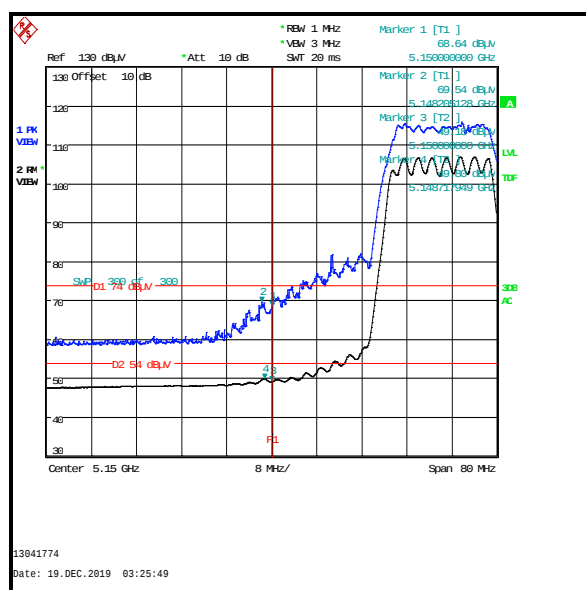
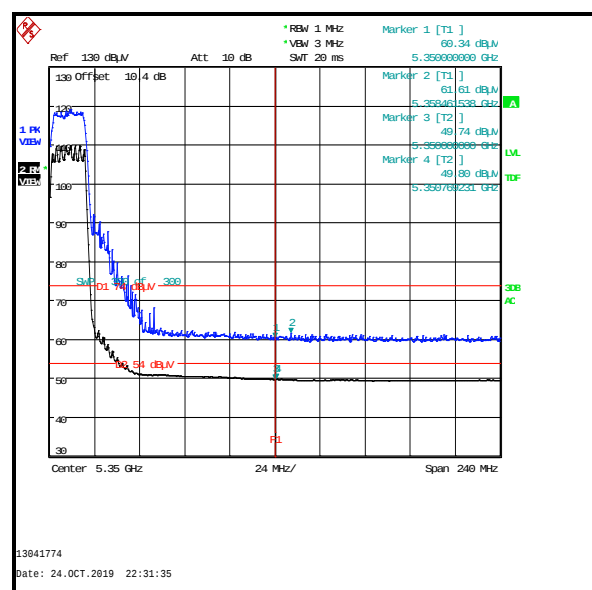
Frequency (MHz)	Level (dB μ V/m)	Limit (dB μ V/m)	Margin (dB)	Result
5350	60.3	74.0	13.7	Complied
5358.462	61.6	74.0	12.4	Complied

Results: Lower Band Edge / Average

Frequency (MHz)	Level (dB μ V/m)	Limit (dB μ V/m)	Margin (dB)	Result
5148.717	49.8	54.0	4.2	Complied
5150	49.2	54.0	4.8	Complied

Results: Upper Band Edge / Average

Frequency (MHz)	Level (dB μ V/m)	Limit (dB μ V/m)	Margin (dB)	Result
5350	49.7	54.0	4.3	Complied
5350.769	49.8	54.0	4.2	Complied

**Lower Band Edge****Upper Band Edge**

Transmitter Band Edge Radiated Emissions (5.15-5.25 GHz band operation) (continued)**Results: 802.11n / 40 MHz / MIMO / 2Tx CDD / BPSK / MCS0****Results: Lower Band Edge / Peak**

Frequency (MHz)	Level (dB μ V/m)	Limit (dB μ V/m)	Margin (dB)	Result
5146.153	65.3	74.0	8.7	Complied
5150	61.5	74.0	12.5	Complied

Results: Upper Band Edge / Peak

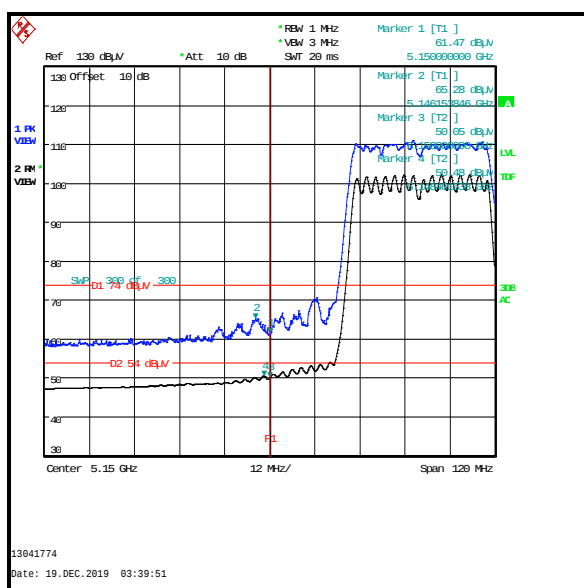
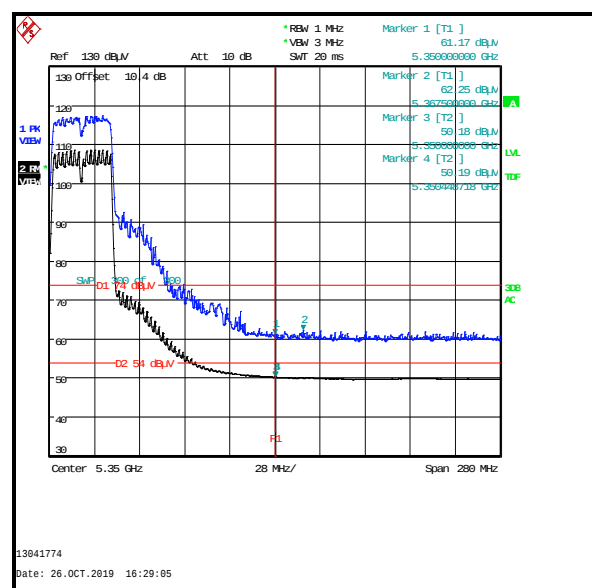
Frequency (MHz)	Level (dB μ V/m)	Limit (dB μ V/m)	Margin (dB)	Result
5350	61.2	74.0	12.8	Complied
5367.500	62.3	74.0	11.7	Complied

Results: Lower Band Edge / Average

Frequency (MHz)	Level (dB μ V/m)	Duty Cycle correction factor (dB)	Corrected Level (dB μ V/m)	Limit (dB μ V/m)	Margin (dB)	Result
5148.461	50.5	0.1	50.6	54.0	3.4	Complied
5150	50.1	0.1	50.2	54.0	3.8	Complied

Results: Upper Band Edge / Average

Frequency (MHz)	Level (dB μ V/m)	Duty Cycle correction factor (dB)	Corrected Level (dB μ V/m)	Limit (dB μ V/m)	Margin (dB)	Result
5350	50.2	0.1	50.3	54.0	3.7	Complied

**Lower Band Edge****Upper Band Edge**

Transmitter Band Edge Radiated Emissions (5.15-5.25 GHz band operation) (continued)**Results: 802.11ac / 80 MHz / MIMO / 2Tx CDD / BPSK / MCS0x1****Results: Lower Band Edge / Peak**

Frequency (MHz)	Level (dB μ V/m)	Limit (dB μ V/m)	Margin (dB)	Result
5136.538	63.6	74.0	10.4	Complied
5150	61.3	74.0	12.7	Complied

Results: Upper Band Edge / Peak

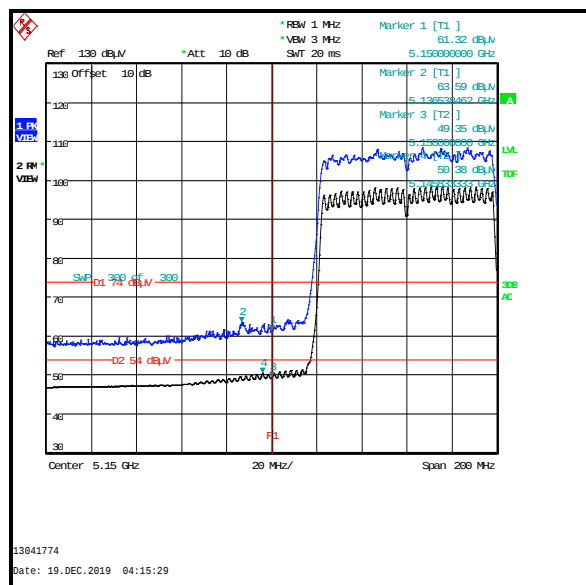
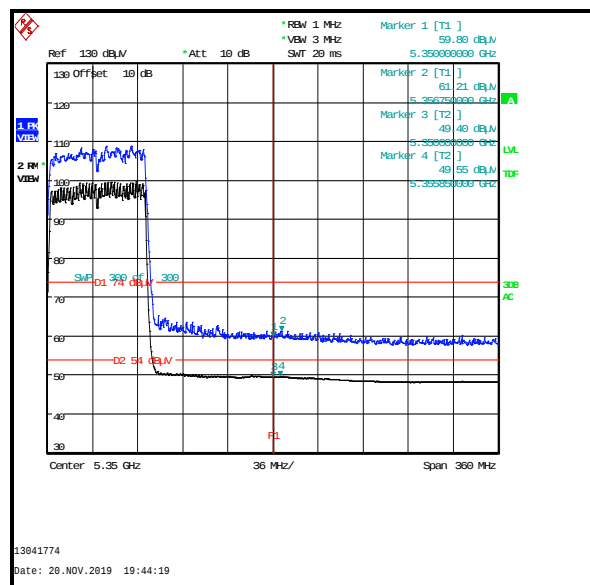
Frequency (MHz)	Level (dB μ V/m)	Limit (dB μ V/m)	Margin (dB)	Result
5350	59.8	74.0	14.2	Complied
5356.750	61.2	74.0	12.8	Complied

Results: Lower Band Edge / Average

Frequency (MHz)	Level (dB μ V/m)	Duty Cycle correction factor (dB)	Corrected Level (dB μ V/m)	Limit (dB μ V/m)	Margin (dB)	Result
5145.833	50.4	0.2	50.6	54.0	3.4	Complied
5150	49.4	0.2	49.6	54.0	4.4	Complied

Results: Upper Band Edge / Average

Frequency (MHz)	Level (dB μ V/m)	Duty Cycle correction factor (dB)	Corrected Level (dB μ V/m)	Limit (dB μ V/m)	Margin (dB)	Result
5350	49.4	0.2	49.6	54.0	4.4	Complied
5355.850	49.6	0.2	49.8	54.0	4.2	Complied

**Lower Band Edge****Upper Band Edge**

Transmitter Band Edge Radiated Emissions (5.15-5.25 GHz band operation) (continued)**Results: 802.11n / 20 MHz / MIMO / 2Tx SDM / BPSK / MCS8****Results: Lower Band Edge / Peak**

Frequency (MHz)	Level (dB μ V/m)	Limit (dB μ V/m)	Margin (dB)	Result
5149.615	61.8	74.0	12.2	Complied
5150	61.6	74.0	12.4	Complied

Results: Upper Band Edge / Peak

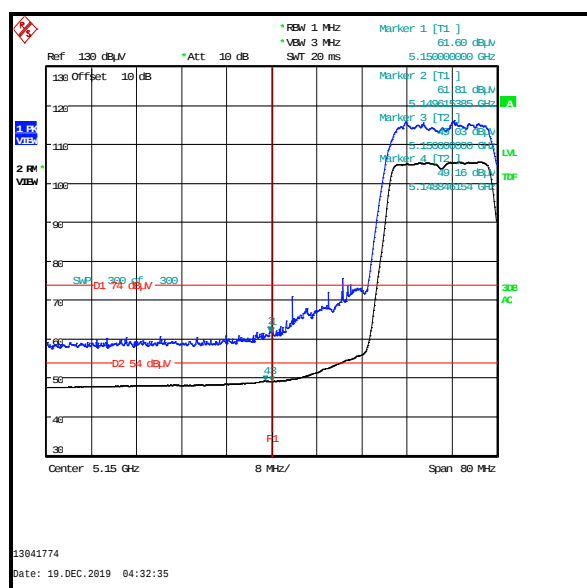
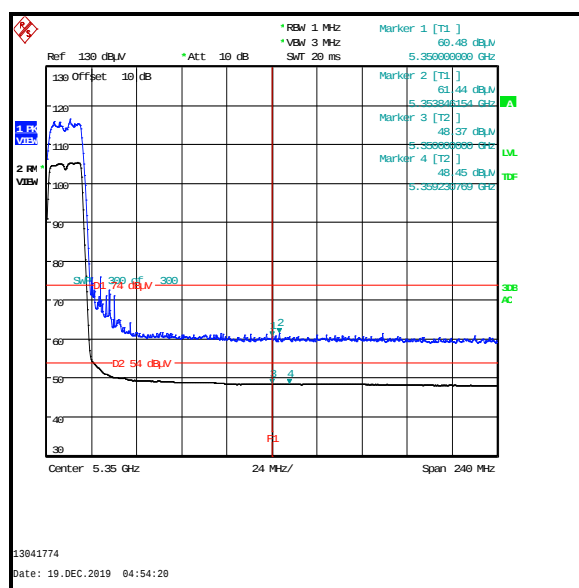
Frequency (MHz)	Level (dB μ V/m)	Limit (dB μ V/m)	Margin (dB)	Result
5350	60.5	74.0	13.5	Complied
5353.846	61.4	74.0	12.6	Complied

Results: Lower Band Edge / Average

Frequency (MHz)	Level (dB μ V/m)	Duty Cycle correction factor (dB)	Corrected Level (dB μ V/m)	Limit (dB μ V/m)	Margin (dB)	Result
5148.846	49.2	0.1	49.3	54.0	4.7	Complied
5150	49.0	0.1	49.1	54.0	4.9	Complied

Results: Upper Band Edge / Average

Frequency (MHz)	Level (dB μ V/m)	Duty Cycle correction factor (dB)	Corrected Level (dB μ V/m)	Limit (dB μ V/m)	Margin (dB)	Result
5350	48.4	0.1	48.5	54.0	5.5	Complied
5359.230	48.5	0.1	48.6	54.0	5.4	Complied

**Lower Band Edge****Upper Band Edge**

Transmitter Band Edge Radiated Emissions (5.15-5.25 GHz band operation) (continued)**Results: 802.11n / 40 MHz / MIMO / 2Tx SDM / BPSK / MCS8****Results: Lower Band Edge / Peak**

Frequency (MHz)	Level (dB μ V/m)	Limit (dB μ V/m)	Margin (dB)	Result
5144.230	63.0	74.0	11.0	Complied
5150	61.5	74.0	12.5	Complied

Results: Upper Band Edge / Peak

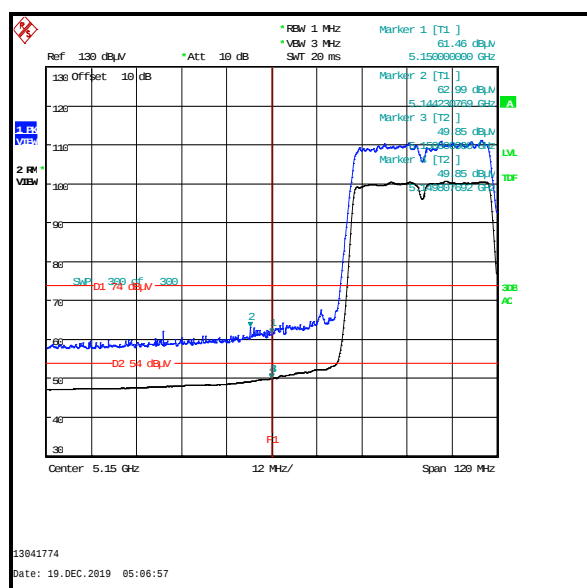
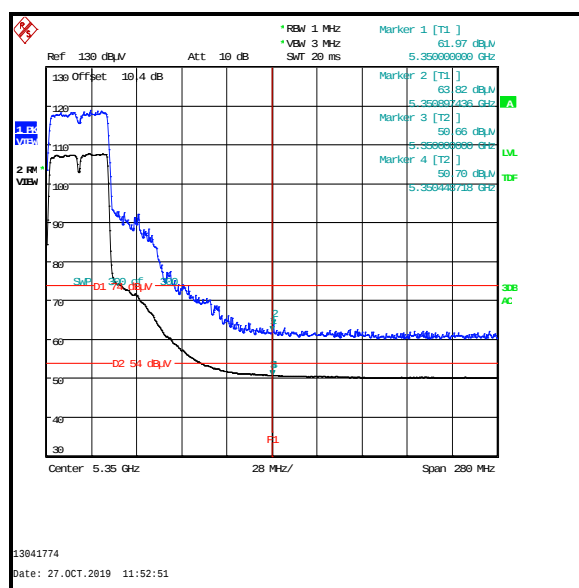
Frequency (MHz)	Level (dB μ V/m)	Limit (dB μ V/m)	Margin (dB)	Result
5350	62.0	74.0	12.0	Complied
5350.897	63.8	74.0	10.2	Complied

Results: Lower Band Edge / Average

Frequency (MHz)	Level (dB μ V/m)	Duty Cycle correction factor (dB)	Corrected Level (dB μ V/m)	Limit (dB μ V/m)	Margin (dB)	Result
5150	49.9	0.2	50.1	54.0	3.9	Complied

Results: Upper Band Edge / Average

Frequency (MHz)	Level (dB μ V/m)	Duty Cycle correction factor (dB)	Corrected Level (dB μ V/m)	Limit (dB μ V/m)	Margin (dB)	Result
5350	50.7	0.2	50.9	54.0	3.1	Complied

**Lower Band Edge****Upper Band Edge**

Transmitter Band Edge Radiated Emissions (5.15-5.25 GHz band operation) (continued)**Results: 802.11ac / 80 MHz / MIMO / 2Tx SDM / BPSK / MCS0x2****Results: Lower Band Edge / Peak**

Frequency (MHz)	Level (dB μ V/m)	Limit (dB μ V/m)	Margin (dB)	Result
5146.153	63.8	74.0	10.2	Complied
5150	61.3	74.0	12.7	Complied

Results: Upper Band Edge / Peak

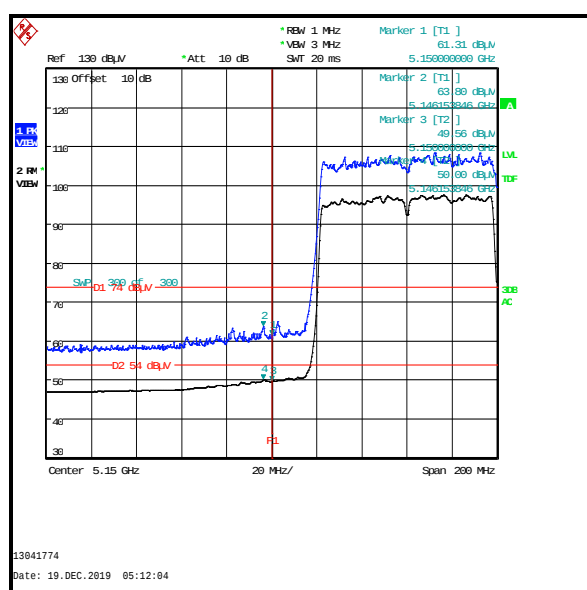
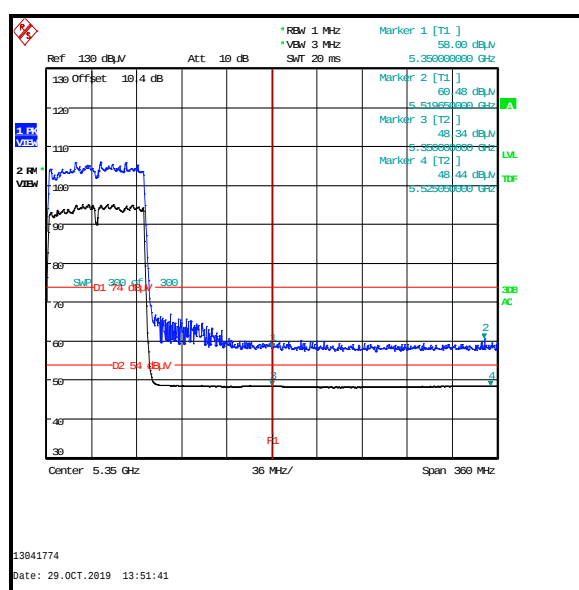
Frequency (MHz)	Level (dB μ V/m)	Limit (dB μ V/m)	Margin (dB)	Result
5350	58.0	74.0	16.0	Complied
5519.650	60.5	68.2	7.7	Complied

Results: Lower Band Edge / Average

Frequency (MHz)	Level (dB μ V/m)	Duty Cycle correction factor (dB)	Corrected Level (dB μ V/m)	Limit (dB μ V/m)	Margin (dB)	Result
5146.153	50.0	0.4	50.4	54.0	3.6	Complied
5150	49.6	0.4	50.0	54.0	4.0	Complied

Results: Upper Band Edge / Average

Frequency (MHz)	Level (dB μ V/m)	Duty Cycle correction factor (dB)	Corrected Level (dB μ V/m)	Limit (dB μ V/m)	Margin (dB)	Result
5350	48.3	0.4	48.7	54.0	5.3	Complied

**Lower Band Edge****Upper Band Edge**

Transmitter Band Edge Radiated Emissions (5.15-5.25 GHz band operation) (continued)**Results: 802.11n / 20 MHz / MIMO / 2Tx TXBF / BPSK / MCS0****Results: Lower Band Edge / Peak**

Frequency (MHz)	Level (dB μ V/m)	Limit (dB μ V/m)	Margin (dB)	Result
5149.103	61.9	74.0	12.1	Complied
5150	60.4	74.0	13.6	Complied

Results: Upper Band Edge / Peak

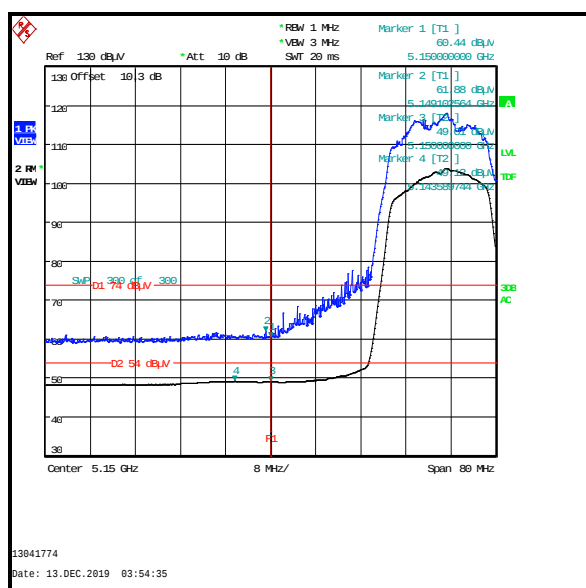
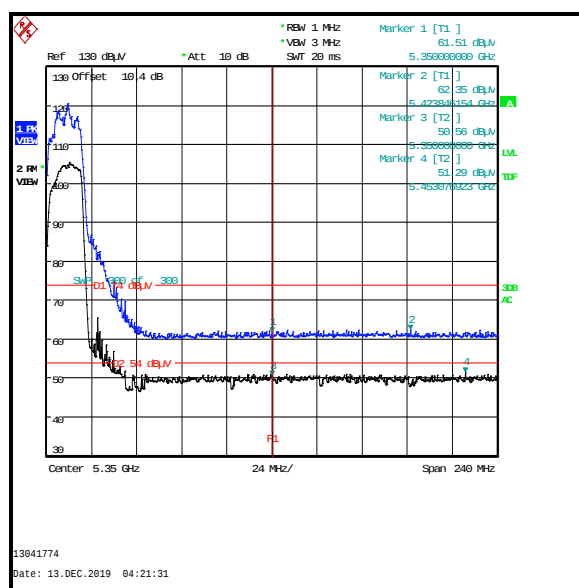
Frequency (MHz)	Level (dB μ V/m)	Limit (dB μ V/m)	Margin (dB)	Result
5350	61.5	74.0	12.5	Complied
5423.846	62.4	74.0	11.6	Complied

Results: Lower Band Edge / Average

Frequency (MHz)	Level (dB μ V/m)	Duty Cycle correction factor (dB)	Corrected Level (dB μ V/m)	Limit (dB μ V/m)	Margin (dB)	Result
5143.590	49.1	0.1	49.2	54.0	4.8	Complied
5150	49.0	0.1	49.1	54.0	4.9	Complied

Results: Upper Band Edge / Average

Frequency (MHz)	Level (dB μ V/m)	Duty Cycle correction factor (dB)	Corrected Level (dB μ V/m)	Limit (dB μ V/m)	Margin (dB)	Result
5350	50.6	0.1	50.7	54.0	3.3	Complied
5453.077	51.3	0.1	51.4	54.0	2.6	Complied

**Lower Band Edge****Upper Band Edge**

Transmitter Band Edge Radiated Emissions (5.15-5.25 GHz band operation) (continued)**Results: 802.11n / 40 MHz / MIMO / 2Tx TXBF / BPSK / MCS0****Results: Lower Band Edge / Peak**

Frequency (MHz)	Level (dB μ V/m)	Limit (dB μ V/m)	Margin (dB)	Result
5147.692	64.0	74.0	10.0	Complied
5150	59.3	74.0	14.7	Complied

Results: Upper Band Edge / Peak

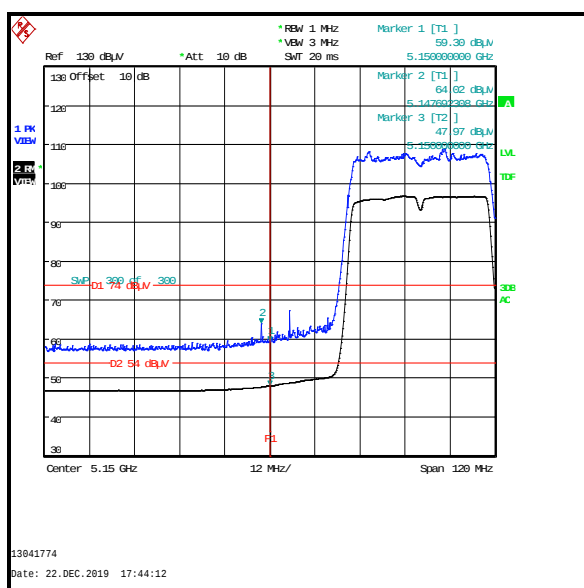
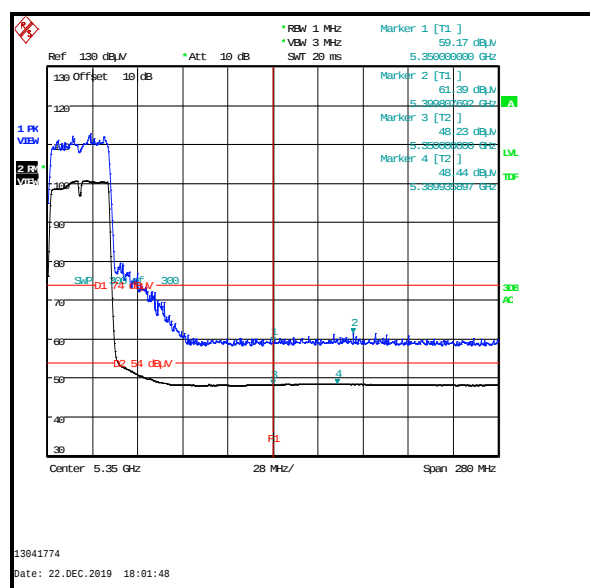
Frequency (MHz)	Level (dB μ V/m)	Limit (dB μ V/m)	Margin (dB)	Result
5350	59.2	74.0	14.8	Complied
5399.808	61.4	74.0	12.6	Complied

Results: Lower Band Edge / Average

Frequency (MHz)	Level (dB μ V/m)	Duty Cycle correction factor (dB)	Corrected Level (dB μ V/m)	Limit (dB μ V/m)	Margin (dB)	Result
5150	48.0	0.1	48.1	54.0	5.9	Complied

Results: Upper Band Edge / Average

Frequency (MHz)	Level (dB μ V/m)	Duty Cycle correction factor (dB)	Corrected Level (dB μ V/m)	Limit (dB μ V/m)	Margin (dB)	Result
5350	48.2	0.1	48.3	54.0	5.7	Complied
5389.936	48.4	0.1	48.5	54.0	5.5	Complied

**Lower Band Edge****Upper Band Edge**

Transmitter Band Edge Radiated Emissions (5.15-5.25 GHz band operation) (continued)**Results: 802.11ac / 80 MHz / MIMO / 2Tx TXBF / BPSK / MCS0x1****Results: Lower Band Edge / Peak**

Frequency (MHz)	Level (dB μ V/m)	Limit (dB μ V/m)	Margin (dB)	Result
5147.756	65.0	74.0	9.0	Complied
5150	60.5	74.0	13.5	Complied

Results: Upper Band Edge / Peak

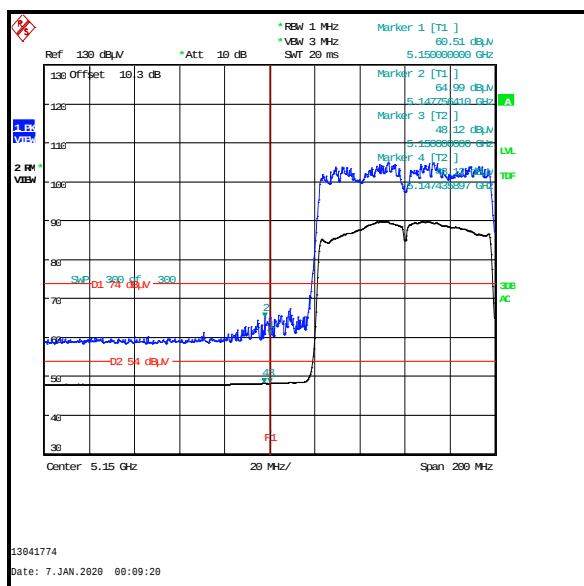
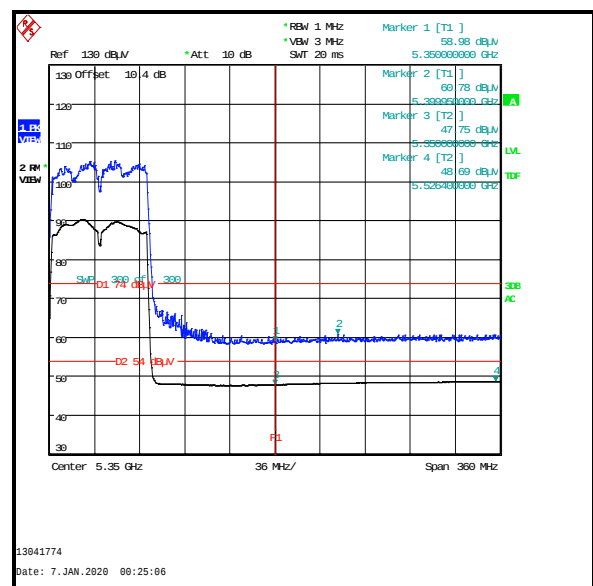
Frequency (MHz)	Level (dB μ V/m)	Limit (dB μ V/m)	Margin (dB)	Result
5350	59.0	74.0	15.0	Complied
5399.950	60.8	74.0	13.2	Complied

Results: Lower Band Edge / Average

Frequency (MHz)	Level (dB μ V/m)	Duty Cycle correction factor (dB)	Corrected Level (dB μ V/m)	Limit (dB μ V/m)	Margin (dB)	Result
5150	48.1	0.1	48.2	54.0	5.8	Complied

Results: Upper Band Edge / Average

Frequency (MHz)	Level (dB μ V/m)	Duty Cycle correction factor (dB)	Corrected Level (dB μ V/m)	Limit (dB μ V/m)	Margin (dB)	Result
5350	47.8	0.1	47.9	54.0	6.1	Complied

**Lower Band Edge****Upper Band Edge**

Transmitter Band Edge Radiated Emissions (5.15-5.25 GHz band operation) (continued)**Results: 802.11n / 20 MHz / MIMO / 3Tx CDD / BPSK / MCS0****Results: Lower Band Edge / Peak**

Frequency (MHz)	Level (dB μ V/m)	Limit (dB μ V/m)	Margin (dB)	Result
5148.333	66.9	74.0	7.1	Complied
5150	66.2	74.0	7.8	Complied

Results: Upper Band Edge / Peak

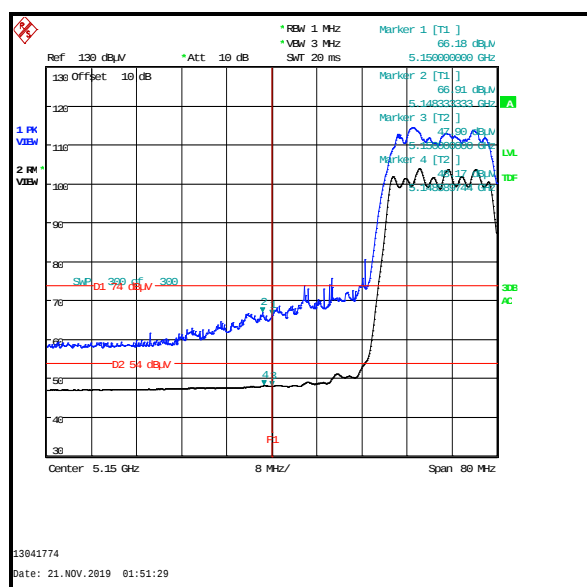
Frequency (MHz)	Level (dB μ V/m)	Limit (dB μ V/m)	Margin (dB)	Result
5350	60.5	74.0	13.5	Complied
5403.846	61.9	74.0	12.1	Complied

Results: Lower Band Edge / Average

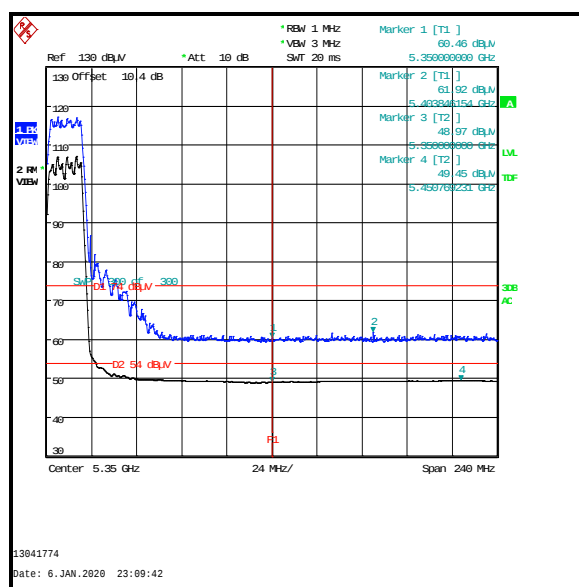
Frequency (MHz)	Level (dB μ V/m)	Limit (dB μ V/m)	Margin (dB)	Result
5148.590	48.2	54.0	5.8	Complied
5150	47.9	54.0	6.1	Complied

Results: Upper Band Edge / Average

Frequency (MHz)	Level (dB μ V/m)	Limit (dB μ V/m)	Margin (dB)	Result
5350	49.0	54.0	5.0	Complied
5450.769	49.5	54.0	4.5	Complied



Lower Band Edge



Upper Band Edge

Transmitter Band Edge Radiated Emissions (5.15-5.25 GHz band operation) (continued)**Results: 802.11n / 40 MHz / MIMO / 3Tx CDD / BPSK / MCS0****Results: Lower Band Edge / Peak**

Frequency (MHz)	Level (dB μ V/m)	Limit (dB μ V/m)	Margin (dB)	Result
5146.346	63.8	74.0	10.2	Complied
5150	63.5	74.0	10.5	Complied

Results: Upper Band Edge / Peak

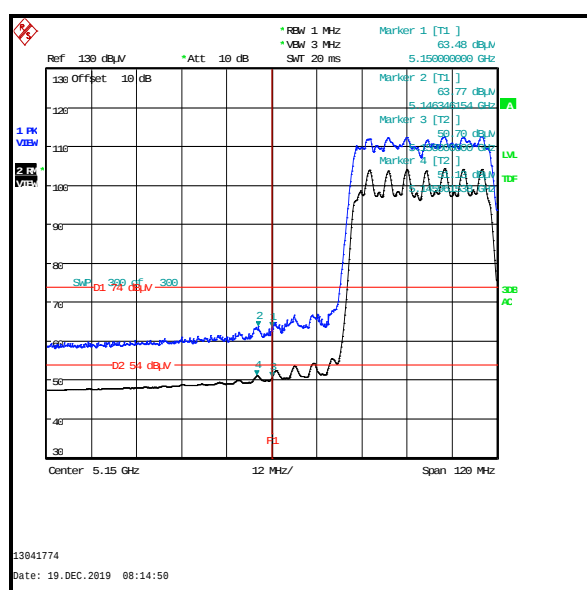
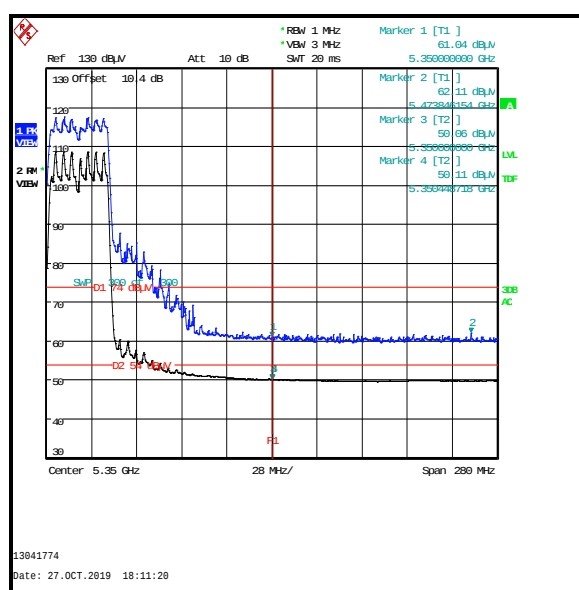
Frequency (MHz)	Level (dB μ V/m)	Limit (dB μ V/m)	Margin (dB)	Result
5350	61.0	74.0	13.0	Complied
5473.846	62.1	68.2	6.1	Complied

Results: Lower Band Edge / Average

Frequency (MHz)	Level (dB μ V/m)	Duty Cycle correction factor (dB)	Corrected Level (dB μ V/m)	Limit (dB μ V/m)	Margin (dB)	Result
5145.962	51.1	0.1	51.2	54.0	2.8	Complied
5150	50.7	0.1	50.8	54.0	3.2	Complied

Results: Upper Band Edge / Average

Frequency (MHz)	Level (dB μ V/m)	Duty Cycle correction factor (dB)	Corrected Level (dB μ V/m)	Limit (dB μ V/m)	Margin (dB)	Result
5350	50.1	0.1	50.2	54.0	3.8	Complied

**Lower Band Edge****Upper Band Edge**

Transmitter Band Edge Radiated Emissions (5.15-5.25 GHz band operation) (continued)**Results: 802.11ac / 80 MHz / MIMO / 3Tx CDD / BPSK / MCS0x1****Results: Lower Band Edge / Peak**

Frequency (MHz)	Level (dB μ V/m)	Limit (dB μ V/m)	Margin (dB)	Result
5145.192	63.6	74.0	10.4	Complied
5150	62.3	74.0	11.7	Complied

Results: Upper Band Edge / Peak

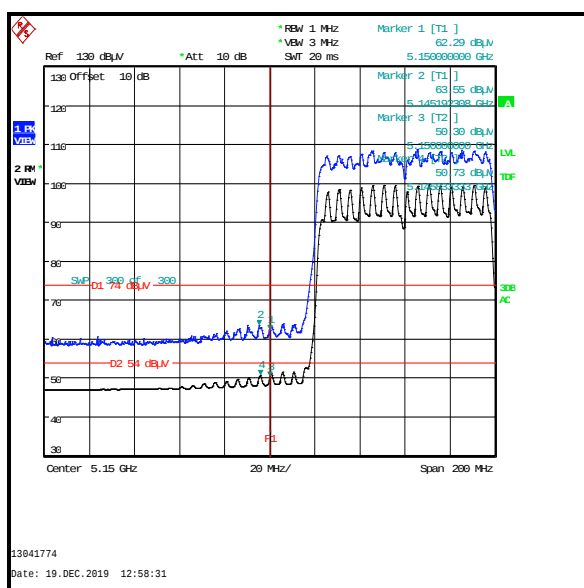
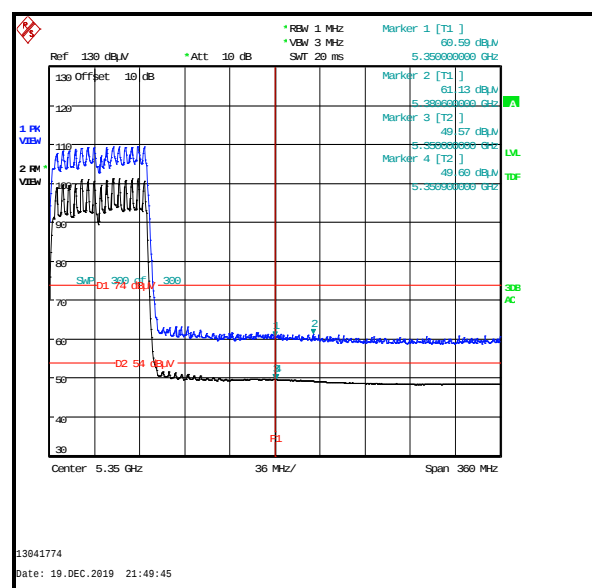
Frequency (MHz)	Level (dB μ V/m)	Limit (dB μ V/m)	Margin (dB)	Result
5350	60.6	74.0	13.4	Complied
5380.600	61.1	74.0	12.9	Complied

Results: Lower Band Edge / Average

Frequency (MHz)	Level (dB μ V/m)	Duty Cycle correction factor (dB)	Corrected Level (dB μ V/m)	Limit (dB μ V/m)	Margin (dB)	Result
5145.833	50.7	0.2	50.9	54.0	3.1	Complied
5150	50.3	0.2	50.5	54.0	3.5	Complied

Results: Upper Band Edge / Average

Frequency (MHz)	Level (dB μ V/m)	Duty Cycle correction factor (dB)	Corrected Level (dB μ V/m)	Limit (dB μ V/m)	Margin (dB)	Result
5350	49.6	0.2	49.8	54.0	4.2	Complied

**Lower Band Edge****Upper Band Edge**

Transmitter Band Edge Radiated Emissions (5.15-5.25 GHz band operation) (continued)**Results: 802.11n / 20 MHz / MIMO / 3Tx SDM / BPSK / MCS16****Results: Lower Band Edge / Peak**

Frequency (MHz)	Level (dB μ V/m)	Limit (dB μ V/m)	Margin (dB)	Result
5150	62.1	74.0	11.9	Complied

Results: Upper Band Edge / Peak

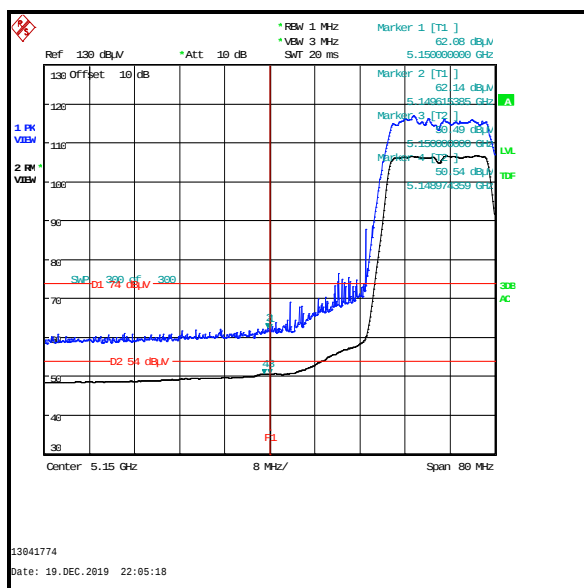
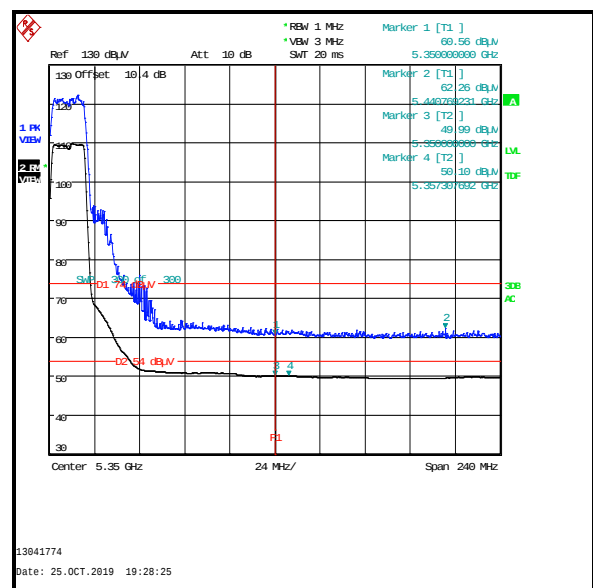
Frequency (MHz)	Level (dB μ V/m)	Limit (dB μ V/m)	Margin (dB)	Result
5350	60.6	74.0	13.4	Complied
5440.769	62.3	74.0	11.7	Complied

Results: Lower Band Edge / Average

Frequency (MHz)	Level (dB μ V/m)	Duty Cycle correction factor (dB)	Corrected Level (dB μ V/m)	Limit (dB μ V/m)	Margin (dB)	Result
5150	50.5	0.1	50.6	54.0	3.4	Complied

Results: Upper Band Edge / Average

Frequency (MHz)	Level (dB μ V/m)	Duty Cycle correction factor (dB)	Corrected Level (dB μ V/m)	Limit (dB μ V/m)	Margin (dB)	Result
5350	50.0	0.1	50.1	54.0	3.9	Complied
5357.308	50.1	0.1	50.2	54.0	3.8	Complied

**Lower Band Edge****Upper Band Edge**

Transmitter Band Edge Radiated Emissions (5.15-5.25 GHz band operation) (continued)**Results: 802.11n / 40 MHz / MIMO / 3Tx SDM / BPSK / MCS16****Results: Lower Band Edge / Peak**

Frequency (MHz)	Level (dB μ V/m)	Limit (dB μ V/m)	Margin (dB)	Result
5134.808	64.6	74.0	9.4	Complied
5150	62.2	74.0	11.8	Complied

Results: Upper Band Edge / Peak

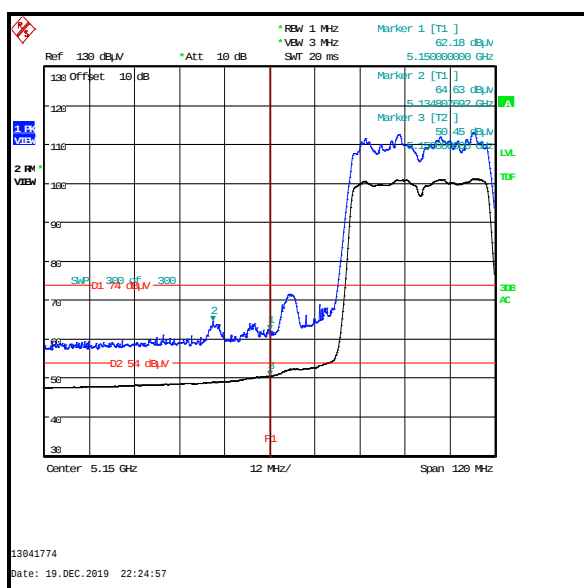
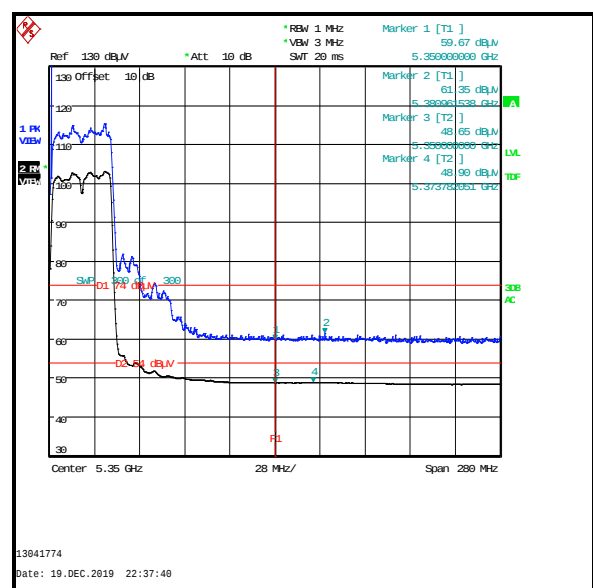
Frequency (MHz)	Level (dB μ V/m)	Limit (dB μ V/m)	Margin (dB)	Result
5350	59.7	74.0	14.3	Complied
5380.962	61.4	74.0	12.6	Complied

Results: Lower Band Edge / Average

Frequency (MHz)	Level (dB μ V/m)	Duty Cycle correction factor (dB)	Corrected Level (dB μ V/m)	Limit (dB μ V/m)	Margin (dB)	Result
5150	50.5	0.3	50.8	54.0	3.2	Complied

Results: Upper Band Edge / Average

Frequency (MHz)	Level (dB μ V/m)	Duty Cycle correction factor (dB)	Corrected Level (dB μ V/m)	Limit (dB μ V/m)	Margin (dB)	Result
5350	48.7	0.3	49.0	54.0	5.0	Complied
5373.782	48.9	0.3	49.2	54.0	4.8	Complied

**Lower Band Edge****Upper Band Edge**

Transmitter Band Edge Radiated Emissions (5.15-5.25 GHz band operation) (continued)**Results: 802.11ac / 80 MHz / MIMO / 3Tx SDM / BPSK / MCS0x3****Results: Lower Band Edge / Peak**

Frequency (MHz)	Level (dB μ V/m)	Limit (dB μ V/m)	Margin (dB)	Result
5141.667	65.1	74.0	8.9	Complied
5150	62.3	74.0	11.7	Complied

Results: Upper Band Edge / Peak

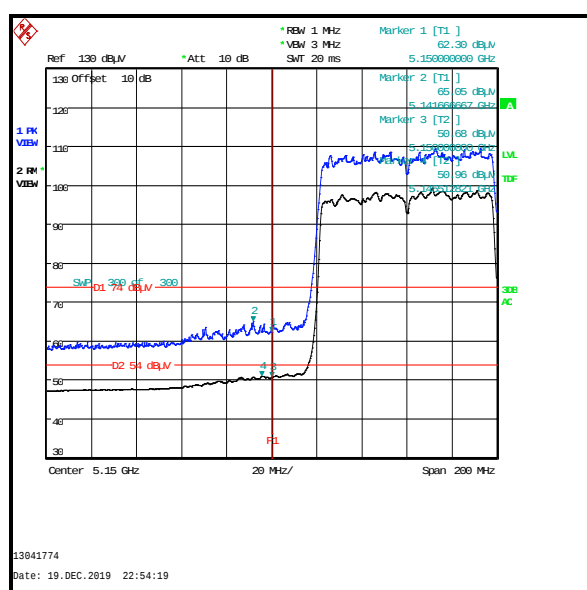
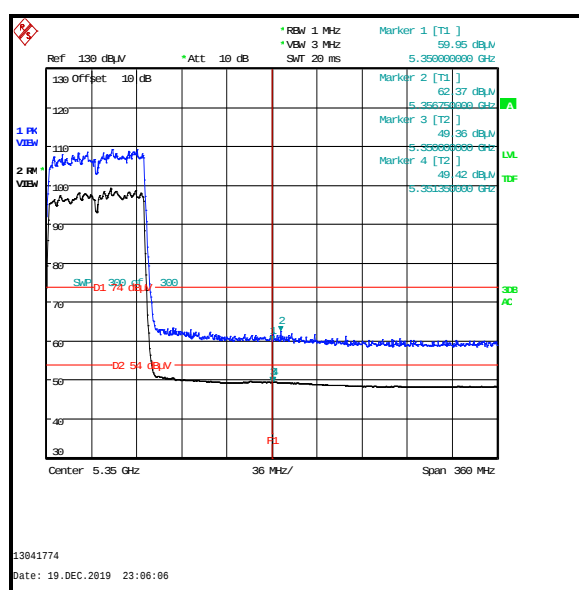
Frequency (MHz)	Level (dB μ V/m)	Limit (dB μ V/m)	Margin (dB)	Result
5350	60.0	74.0	14.0	Complied
5356.750	62.4	74.0	11.6	Complied

Results: Lower Band Edge / Average

Frequency (MHz)	Level (dB μ V/m)	Duty Cycle correction factor (dB)	Corrected Level (dB μ V/m)	Limit (dB μ V/m)	Margin (dB)	Result
5145.513	51.0	0.5	51.5	54.0	2.5	Complied
5150	50.7	0.5	51.2	54.0	2.8	Complied

Results: Upper Band Edge / Average

Frequency (MHz)	Level (dB μ V/m)	Duty Cycle correction factor (dB)	Corrected Level (dB μ V/m)	Limit (dB μ V/m)	Margin (dB)	Result
5350	49.4	0.5	49.9	54.0	4.1	Complied

**Lower Band Edge****Upper Band Edge**

Transmitter Band Edge Radiated Emissions (5.15-5.25 GHz band operation) (continued)**Results: 802.11n / 20 MHz / MIMO / 3Tx TXBF / BPSK / MCS0****Results: Lower Band Edge / Peak**

Frequency (MHz)	Level (dB μ V/m)	Limit (dB μ V/m)	Margin (dB)	Result
5148.872	63.1	74.0	10.9	Complied
5150	61.6	74.0	12.4	Complied

Results: Upper Band Edge / Peak

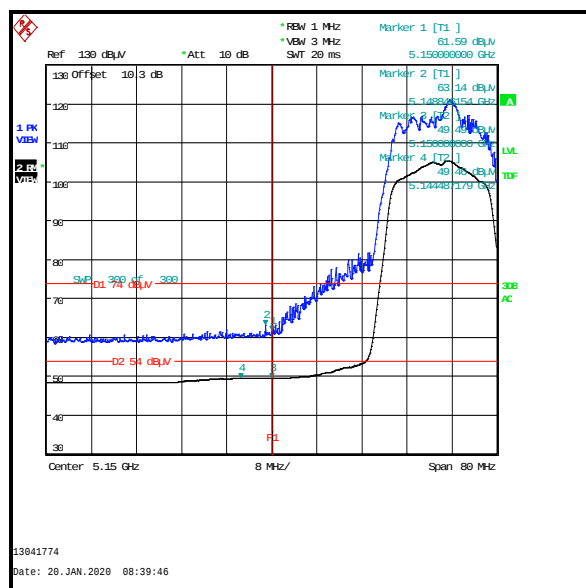
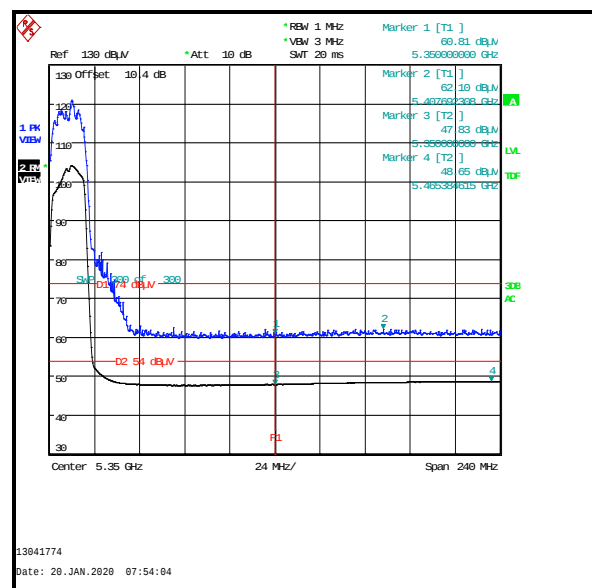
Frequency (MHz)	Level (dB μ V/m)	Limit (dB μ V/m)	Margin (dB)	Result
5350	60.8	74.0	13.2	Complied
5407.692	62.1	74.0	11.9	Complied

Results: Lower Band Edge / Average

Frequency (MHz)	Level (dB μ V/m)	Duty Cycle correction factor (dB)	Corrected Level (dB μ V/m)	Limit (dB μ V/m)	Margin (dB)	Result
5150	49.5	0.1	49.6	54.0	4.4	Complied

Results: Upper Band Edge / Average

Frequency (MHz)	Level (dB μ V/m)	Duty Cycle correction factor (dB)	Corrected Level (dB μ V/m)	Limit (dB μ V/m)	Margin (dB)	Result
5350	47.8	0.1	47.9	54.0	6.1	Complied

**Lower Band Edge****Upper Band Edge**

Transmitter Band Edge Radiated Emissions (5.15-5.25 GHz band operation) (continued)**Results: 802.11n / 40 MHz / MIMO / 3Tx TXBF / BPSK / MCS0****Results: Lower Band Edge / Peak**

Frequency (MHz)	Level (dB μ V/m)	Limit (dB μ V/m)	Margin (dB)	Result
5149.615	62.1	74.0	11.9	Complied
5150	61.2	74.0	12.8	Complied

Results: Upper Band Edge / Peak

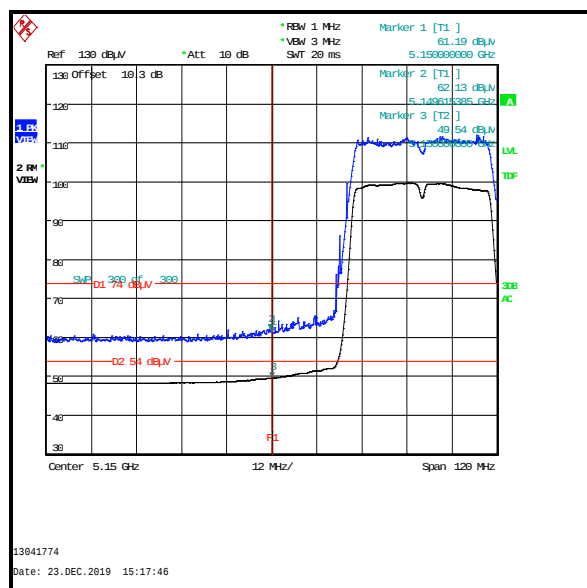
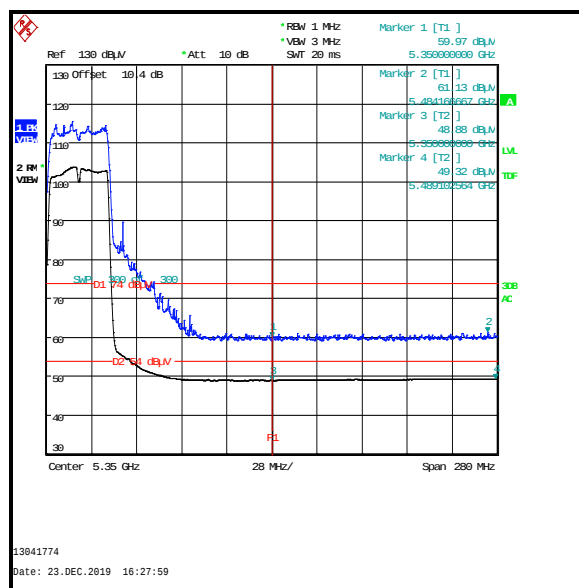
Frequency (MHz)	Level (dB μ V/m)	Limit (dB μ V/m)	Margin (dB)	Result
5350	60.0	74.0	14.0	Complied
5484.167	61.1	68.2	7.1	Complied

Results: Lower Band Edge / Average

Frequency (MHz)	Level (dB μ V/m)	Duty Cycle correction factor (dB)	Corrected Level (dB μ V/m)	Limit (dB μ V/m)	Margin (dB)	Result
5150	49.5	0.1	49.6	54.0	4.4	Complied

Results: Upper Band Edge / Average

Frequency (MHz)	Level (dB μ V/m)	Duty Cycle correction factor (dB)	Corrected Level (dB μ V/m)	Limit (dB μ V/m)	Margin (dB)	Result
5350	48.9	0.1	49.0	54.0	5.0	Complied

**Lower Band Edge****Upper Band Edge**

Transmitter Band Edge Radiated Emissions (5.15-5.25 GHz band operation) (continued)**Results: 802.11ac / 80 MHz / MIMO / 3Tx TXBF / BPSK / MCS0x1****Results: Lower Band Edge / Peak**

Frequency (MHz)	Level (dB μ V/m)	Limit (dB μ V/m)	Margin (dB)	Result
5149.679	69.3	74.0	4.7	Complied
5150	66.9	74.0	7.1	Complied

Results: Upper Band Edge / Peak

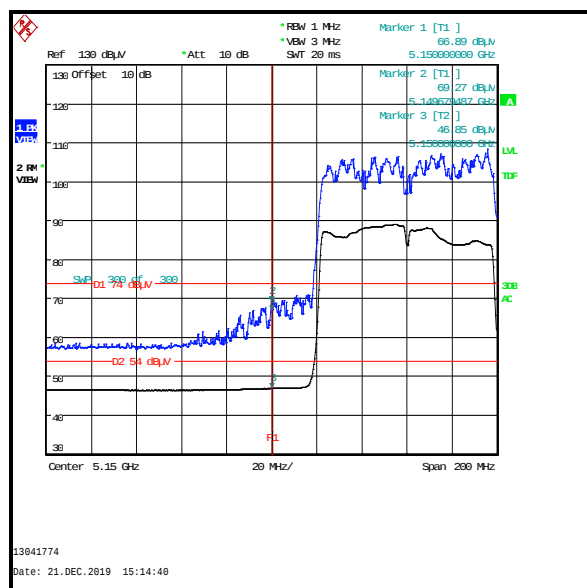
Frequency (MHz)	Level (dB μ V/m)	Limit (dB μ V/m)	Margin (dB)	Result
5350	58.9	74.0	15.1	Complied
5388.700	60.1	74.0	13.9	Complied

Results: Lower Band Edge / Average

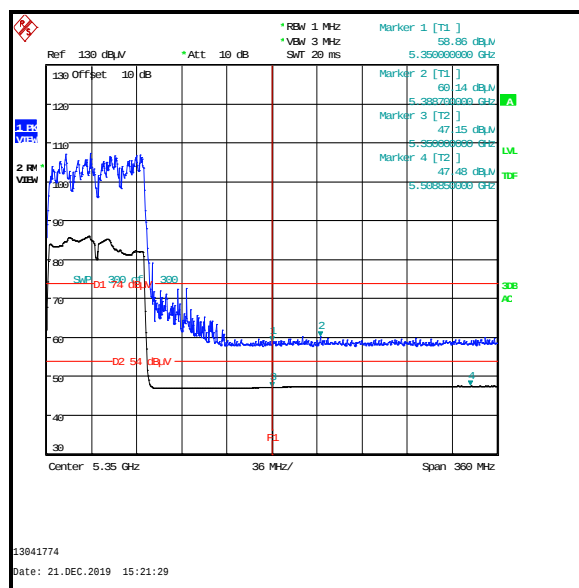
Frequency (MHz)	Level (dB μ V/m)	Duty Cycle correction factor (dB)	Corrected Level (dB μ V/m)	Limit (dB μ V/m)	Margin (dB)	Result
5150	46.9	0.1	47.0	54.0	7.0	Complied

Results: Upper Band Edge / Average

Frequency (MHz)	Level (dB μ V/m)	Duty Cycle correction factor (dB)	Corrected Level (dB μ V/m)	Limit (dB μ V/m)	Margin (dB)	Result
5350	47.2	0.1	47.3	54.0	6.7	Complied



Lower Band Edge



Upper Band Edge

Transmitter Band Edge Radiated Emissions (5.25-5.35 GHz band)**5.3.2. 5.25-5.35 GHz band****Test Summary:**

Test Engineers:	Marco Zunarelli, Mark Perry Andrew Harding, Mohamed Toubella & John Ferdinand	Test Dates:	22 October 2019 to 20 January 2020
Test Sample Serial Numbers:	C02ZG00FP22J, C02ZG00KP22J & C02ZH00BP1YX		

FCC Reference:	Parts 15.407(b)(2),(7), 15.205 & 15.209(a)
Test Method Used:	ANSI C63.10 Section 6.10 & KDB 789033 II.G.

Environmental Conditions:

Temperature (°C):	21 to 25
Relative Humidity (%):	31 to 46

Transmitter Band Edge Radiated Emissions (5.25-5.35 GHz band operation) (continued)**Note(s):**

1. The following modes were tested:

- o 802.11a - BPSK / 6 Mbps / Core 0
- o 802.11n HT20 / SISO - BPSK / MCS0 / Core 0
- o 802.11n HT40 / SISO - BPSK / MCS0 / Core 0
- o 802.11ac VHT80 / SISO – BPSK / MCS0x1 / Core 0
- o 802.11n HT20 / MIMO / 2Tx CDD - BPSK / MCS0
- o 802.11n HT40 / MIMO / 2Tx CDD - BPSK / MCS0
- o 802.11ac VHT80 / MIMO / 2Tx CDD - BPSK / MCS0x1
- o 802.11n HT20 / MIMO / 2Tx SDM - BPSK / MCS8
- o 802.11n HT40 / MIMO / 2Tx SDM - BPSK / MCS8
- o 802.11ac VHT80 / MIMO / 2Tx SDM - BPSK / MCS0x2
- o 802.11n HT20 / MIMO / 2Tx TXBF - BPSK / MCS0
- o 802.11n HT40 / MIMO / 2Tx TXBF - BPSK / MCS0
- o 802.11ac VHT80 / MIMO / 2Tx TXBF - BPSK / MCS0x1
- o 802.11n HT20 / MIMO / 3Tx CDD - BPSK / MCS0
- o 802.11n HT40 / MIMO / 3Tx CDD - BPSK / MCS0
- o 802.11ac VHT80 / MIMO / 3Tx CDD - BPSK / MCS0x1
- o 802.11n HT20 / MIMO / 3Tx SDM - BPSK / MCS16
- o 802.11n HT40 / MIMO / 3Tx SDM - BPSK / MCS16
- o 802.11ac VHT80 / MIMO / 3Tx SDM - BPSK / MCS0x3
- o 802.11n HT20 / MIMO / 3Tx TXBF - BPSK / MCS0
- o 802.11n HT40 / MIMO / 3Tx TXBF - BPSK / MCS0
- o 802.11ac VHT80 / MIMO / 3Tx TXBF - BPSK / MCS0x1

2. Lower band edge measurements were performed with the EUT transmitting on the bottom channel. Upper band edge measurements were performed with the EUT transmitting on the top channel.
3. For transmitters operating in the 5.25-5.35 GHz band: all emissions outside of the 5.15-5.35 GHz band shall not exceed an EIRP of -27 dBm/MHz. However, there are restricted bands of operation below the lower band edge at 4.5-5.15 GHz and also above the upper band edge at 5.35-5.46 GHz therefore the provisions of FCC Part 15.205 apply. Tests were performed in these restricted bands of operation with the EUT transmitting on the bottom and top channels within 5.25-5.35 GHz band, the results are included in the transmitter 5.15-5.25 GHz band radiated spurious emissions section of this test report.
4. Field strength measurements using peak and average detectors were performed in the restricted bands below 5.15 GHz and above 5.35 GHz. Field strength and EIRP results were found to be compliant with the restricted band limits and Part 15.407 out-of-band limits.
5. For all average measurements in this section, 300 sweeps were used. This satisfies the requirement for the minimum number of sweep points, as stated in KDB 789033 Section II.G.6.c) Method AD (vi).
6. In accordance with KDB 789033 Section II.G.6.c) Method AD (vii), for average measurements, data rates where the EUT was transmitting <98% duty cycle, the duty cycle correction factor calculated in section 4.1 was added to the measured result.

Transmitter Band Edge Radiated Emissions (5.25-5.35 GHz band operation) (continued)**Results: 802.11a / 20 MHz / BPSK / 6 Mbps / Core 0****Results: Lower Band Edge / Peak**

Frequency (MHz)	Level (dB μ V/m)	Limit (dB μ V/m)	Margin (dB)	Result
5139.231	59.8	74.0	14.2	Complied
5150	58.2	74.0	15.8	Complied

Results: Upper Band Edge / Peak

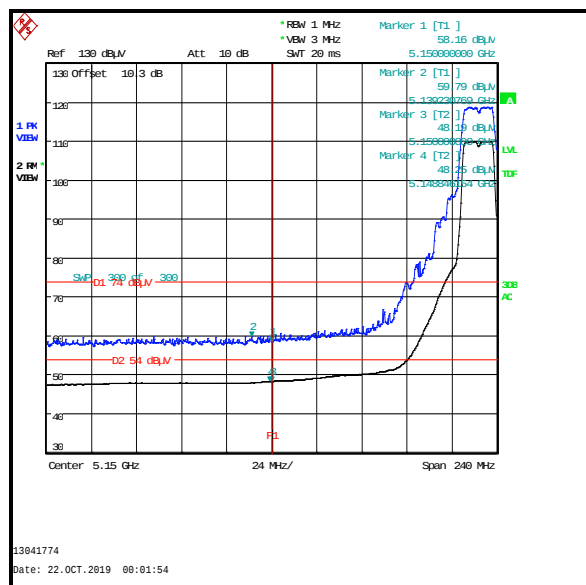
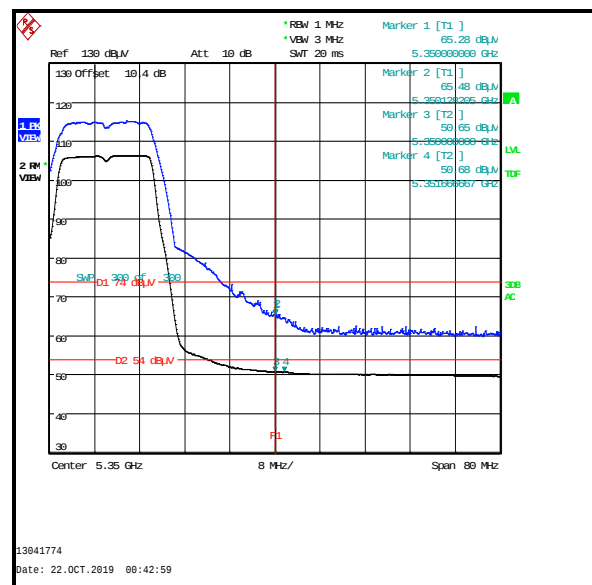
Frequency (MHz)	Level (dB μ V/m)	Limit (dB μ V/m)	Margin (dB)	Result
5350	65.3	74.0	8.7	Complied
5350.128	65.5	74.0	8.5	Complied

Results: Lower Band Edge / Average

Frequency (MHz)	Level (dB μ V/m)	Limit (dB μ V/m)	Margin (dB)	Result
5148.846	48.3	54.0	5.7	Complied
5150	48.2	54.0	5.8	Complied

Results: Upper Band Edge / Average

Frequency (MHz)	Level (dB μ V/m)	Limit (dB μ V/m)	Margin (dB)	Result
5350	50.7	54.0	3.3	Complied

**Lower Band Edge****Upper Band Edge**

Transmitter Band Edge Radiated Emissions (5.25-5.35 GHz band operation) (continued)**Results: 802.11n / 20 MHz / SISO / BPSK / MCS0 / Core 0****Results: Lower Band Edge / Peak**

Frequency (MHz)	Level (dB μ V/m)	Limit (dB μ V/m)	Margin (dB)	Result
5118.462	59.4	74.0	14.6	Complied
5150	58.4	74.0	15.6	Complied

Results: Upper Band Edge / Peak

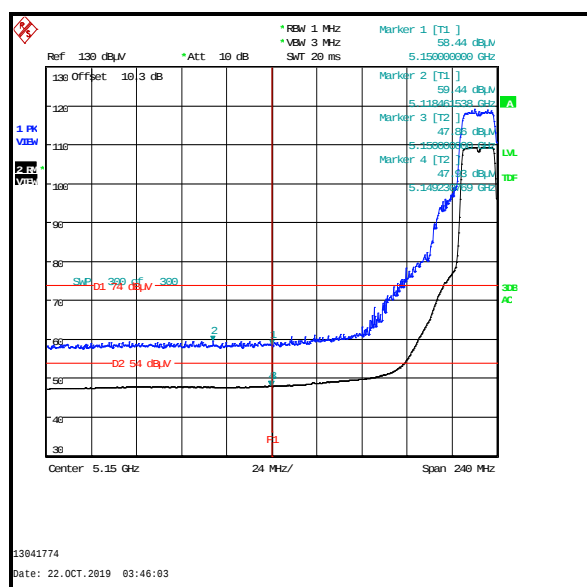
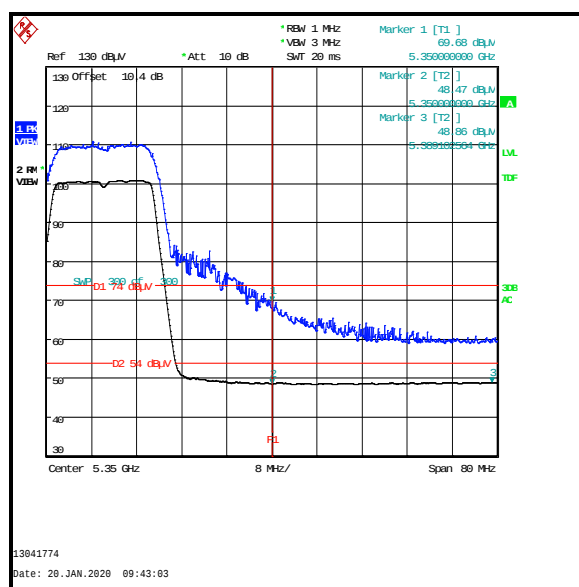
Frequency (MHz)	Level (dB μ V/m)	Limit (dB μ V/m)	Margin (dB)	Result
5350	69.7	74.0	4.3	Complied

Results: Lower Band Edge / Average

Frequency (MHz)	Level (dB μ V/m)	Limit (dB μ V/m)	Margin (dB)	Result
5150	47.9	54.0	6.1	Complied

Results: Upper Band Edge / Average

Frequency (MHz)	Level (dB μ V/m)	Limit (dB μ V/m)	Margin (dB)	Result
5350	48.5	54.0	5.5	Complied
5389.103	48.8	54.0	5.2	Complied

**Lower Band Edge****Upper Band Edge**

Transmitter Band Edge Radiated Emissions (5.25-5.35 GHz band operation) (continued)**Results: 802.11n / 40 MHz / SISO / BPSK / MCS0 / Core 0****Results: Lower Band Edge / Peak**

Frequency (MHz)	Level (dB μ V/m)	Limit (dB μ V/m)	Margin (dB)	Result
5146.410	60.3	74.0	13.7	Complied
5150	59.5	74.0	14.5	Complied

Results: Upper Band Edge / Peak

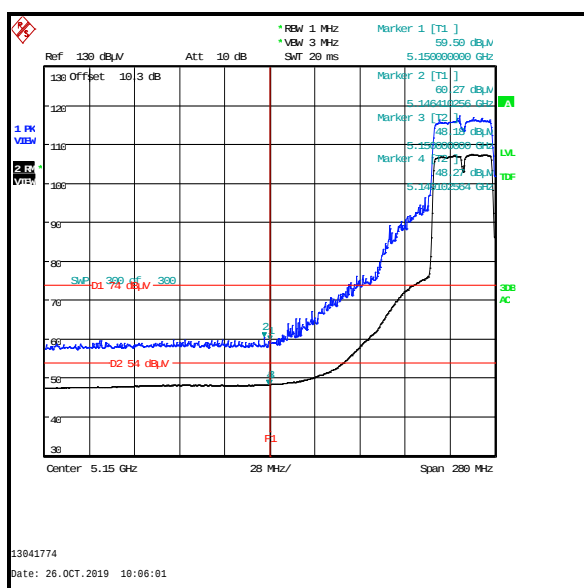
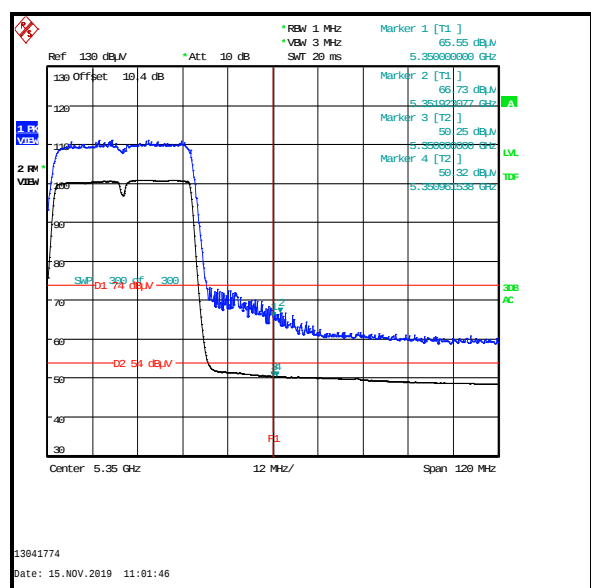
Frequency (MHz)	Level (dB μ V/m)	Limit (dB μ V/m)	Margin (dB)	Result
5350	65.6	74.0	8.4	Complied
5351.923	66.7	74.0	7.3	Complied

Results: Lower Band Edge / Average

Frequency (MHz)	Level (dB μ V/m)	Duty Cycle correction factor (dB)	Corrected Level (dB μ V/m)	Limit (dB μ V/m)	Margin (dB)	Result
5148.103	48.3	0.1	48.4	54.0	5.6	Complied
5150	48.2	0.1	48.3	54.0	5.7	Complied

Results: Upper Band Edge / Average

Frequency (MHz)	Level (dB μ V/m)	Duty Cycle correction factor (dB)	Corrected Level (dB μ V/m)	Limit (dB μ V/m)	Margin (dB)	Result
5350	50.3	0.1	50.4	54.0	3.6	Complied

**Lower Band Edge****Upper Band Edge**

Transmitter Band Edge Radiated Emissions (5.25-5.35 GHz band operation) (continued)**Results: 802.11ac / 80 MHz / SISO / BPSK / MCS0x1 / Core 0****Results: Lower Band Edge / Peak**

Frequency (MHz)	Level (dB μ V/m)	Limit (dB μ V/m)	Margin (dB)	Result
5141.900	59.8	74.0	14.2	Complied
5150	58.7	74.0	15.3	Complied

Results: Upper Band Edge / Peak

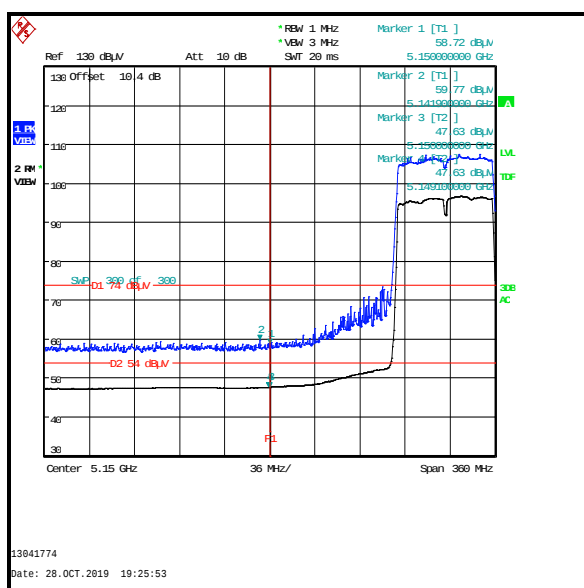
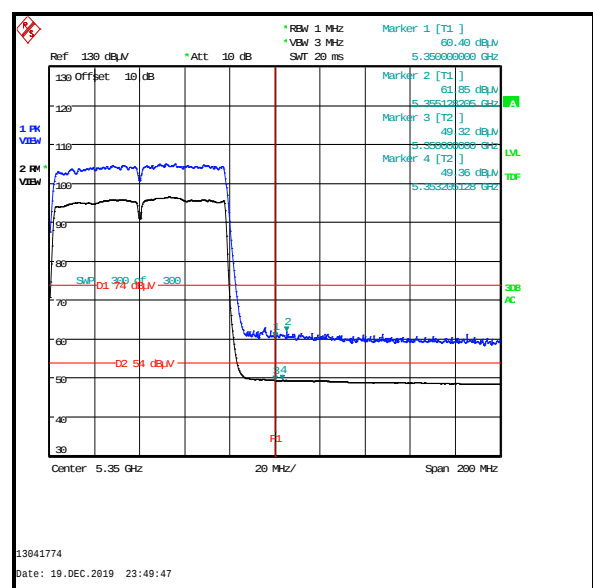
Frequency (MHz)	Level (dB μ V/m)	Limit (dB μ V/m)	Margin (dB)	Result
5350	60.4	74.0	13.6	Complied
5355.128	61.9	74.0	12.1	Complied

Results: Lower Band Edge / Average

Frequency (MHz)	Level (dB μ V/m)	Duty Cycle correction factor (dB)	Corrected Level (dB μ V/m)	Limit (dB μ V/m)	Margin (dB)	Result
5150	47.6	0.2	47.8	54.0	6.2	Complied

Results: Upper Band Edge / Average

Frequency (MHz)	Level (dB μ V/m)	Duty Cycle correction factor (dB)	Corrected Level (dB μ V/m)	Limit (dB μ V/m)	Margin (dB)	Result
5350	49.3	0.2	49.5	54.0	4.5	Complied
5353.205	49.4	0.2	49.6	54.0	4.4	Complied

**Lower Band Edge****Upper Band Edge**

Transmitter Band Edge Radiated Emissions (5.25-5.35 GHz band operation) (continued)**Results: 802.11n / 20 MHz / MIMO / 2Tx CDD / BPSK / MCS0****Results: Lower Band Edge / Peak**

Frequency (MHz)	Level (dB μ V/m)	Limit (dB μ V/m)	Margin (dB)	Result
5131.154	59.4	74.0	14.6	Complied
5150	58.8	74.0	15.2	Complied

Results: Upper Band Edge / Peak

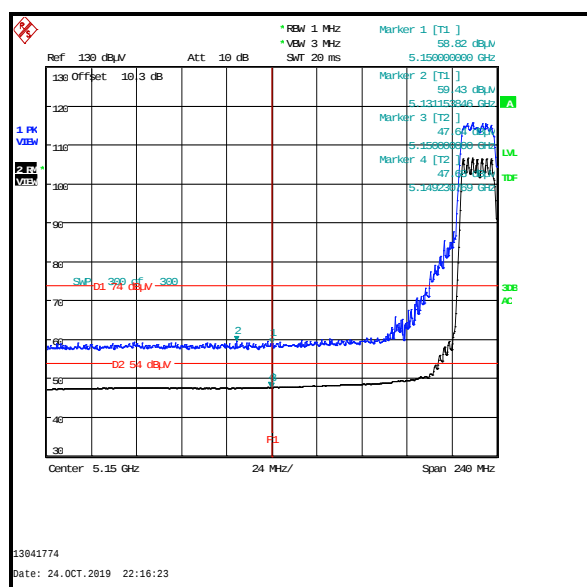
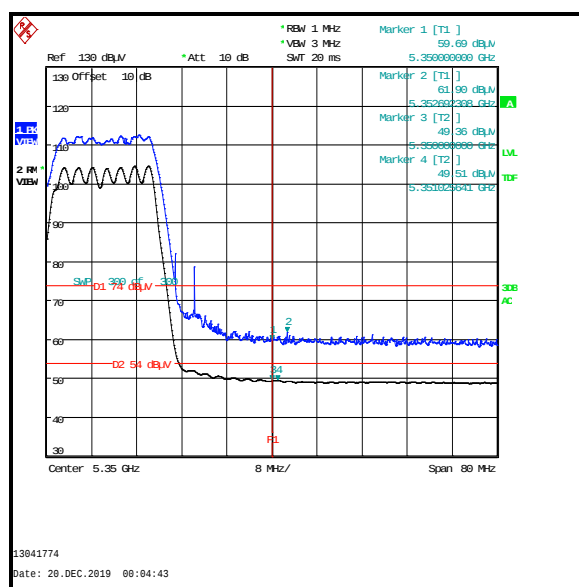
Frequency (MHz)	Level (dB μ V/m)	Limit (dB μ V/m)	Margin (dB)	Result
5350	59.7	74.0	14.3	Complied
5352.692	61.9	74.0	12.1	Complied

Results: Lower Band Edge / Average

Frequency (MHz)	Level (dB μ V/m)	Limit (dB μ V/m)	Margin (dB)	Result
5149.231	47.7	54.0	6.3	Complied
5150	47.6	54.0	6.4	Complied

Results: Upper Band Edge / Average

Frequency (MHz)	Level (dB μ V/m)	Limit (dB μ V/m)	Margin (dB)	Result
5350	49.4	54.0	4.6	Complied
5351.026	49.5	54.0	4.5	Complied

**Lower Band Edge****Upper Band Edge**

Transmitter Band Edge Radiated Emissions (5.25-5.35 GHz band operation) (continued)**Results: 802.11n / 40 MHz / MIMO / 2Tx CDD / BPSK / MCS0****Results: Lower Band Edge / Peak**

Frequency (MHz)	Level (dB μ V/m)	Limit (dB μ V/m)	Margin (dB)	Result
5073.269	60.2	74.0	13.8	Complied
5150	58.5	74.0	15.5	Complied

Results: Upper Band Edge / Peak

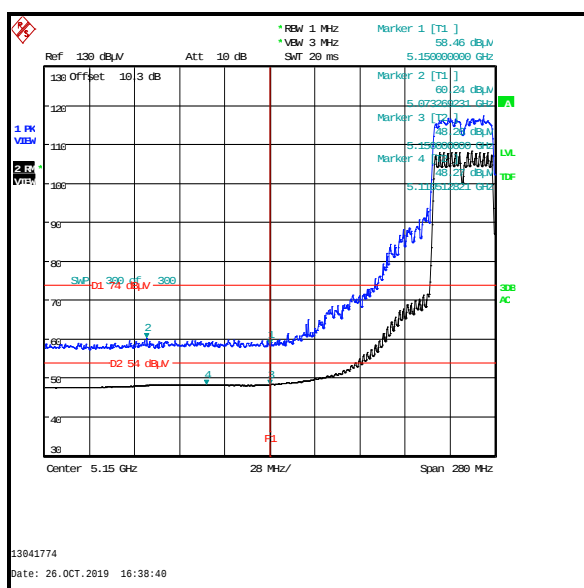
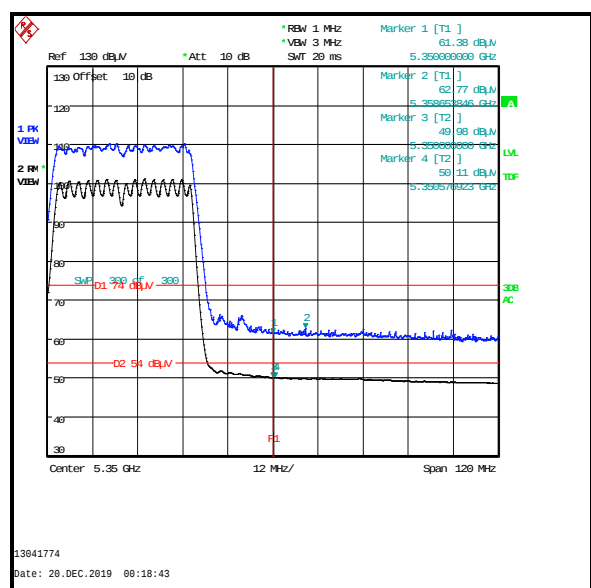
Frequency (MHz)	Level (dB μ V/m)	Limit (dB μ V/m)	Margin (dB)	Result
5350	61.4	74.0	12.6	Complied
5358.654	62.8	74.0	11.2	Complied

Results: Lower Band Edge / Average

Frequency (MHz)	Level (dB μ V/m)	Duty Cycle correction factor (dB)	Corrected Level (dB μ V/m)	Limit (dB μ V/m)	Margin (dB)	Result
5150	48.3	0.1	48.4	54.0	5.6	Complied

Results: Upper Band Edge / Average

Frequency (MHz)	Level (dB μ V/m)	Duty Cycle correction factor (dB)	Corrected Level (dB μ V/m)	Limit (dB μ V/m)	Margin (dB)	Result
5350	50.0	0.1	50.1	54.0	3.9	Complied
5350.577	50.1	0.1	50.2	54.0	3.8	Complied

**Lower Band Edge****Upper Band Edge**

Transmitter Band Edge Radiated Emissions (5.25-5.35 GHz band operation) (continued)**Results: 802.11ac / 80 MHz / MIMO / 2Tx CDD / BPSK / MCS0x1****Results: Lower Band Edge / Peak**

Frequency (MHz)	Level (dB μ V/m)	Limit (dB μ V/m)	Margin (dB)	Result
5064.050	60.1	74.0	13.9	Complied
5150	58.0	74.0	16.0	Complied

Results: Upper Band Edge / Peak

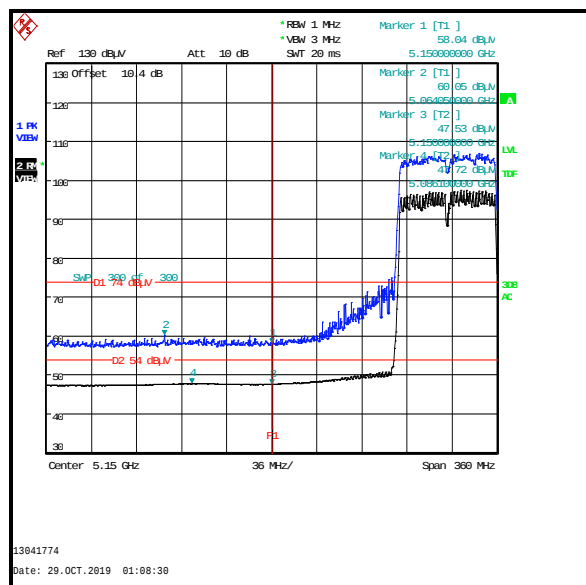
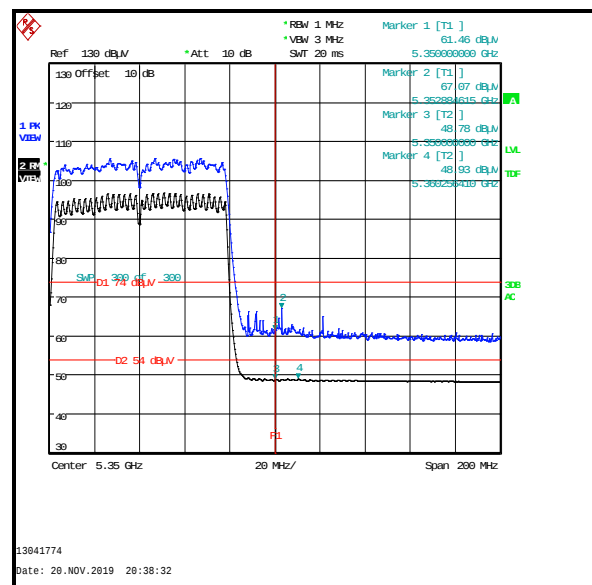
Frequency (MHz)	Level (dB μ V/m)	Limit (dB μ V/m)	Margin (dB)	Result
5350	61.5	74.0	12.5	Complied
5352.885	67.1	74.0	6.9	Complied

Results: Lower Band Edge / Average

Frequency (MHz)	Level (dB μ V/m)	Duty Cycle correction factor (dB)	Corrected Level (dB μ V/m)	Limit (dB μ V/m)	Margin (dB)	Result
5086.100	47.7	0.2	47.9	54.0	6.1	Complied
5150	47.5	0.2	47.7	54.0	6.3	Complied

Results: Upper Band Edge / Average

Frequency (MHz)	Level (dB μ V/m)	Duty Cycle correction factor (dB)	Corrected Level (dB μ V/m)	Limit (dB μ V/m)	Margin (dB)	Result
5350	48.8	0.2	49.0	54.0	5.0	Complied
5360.256	48.9	0.2	49.1	54.0	4.9	Complied

**Lower Band Edge****Upper Band Edge**

Transmitter Band Edge Radiated Emissions (5.25-5.35 GHz band operation) (continued)**Results: 802.11n / 20 MHz / MIMO / 2Tx SDM / BPSK / MCS8****Results: Lower Band Edge / Peak**

Frequency (MHz)	Level (dB μ V/m)	Limit (dB μ V/m)	Margin (dB)	Result
5121.154	60.8	74.0	13.2	Complied
5150	58.8	74.0	15.2	Complied

Results: Upper Band Edge / Peak

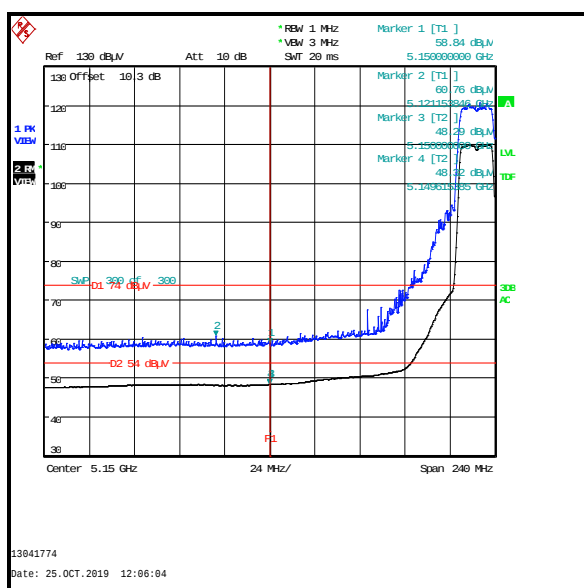
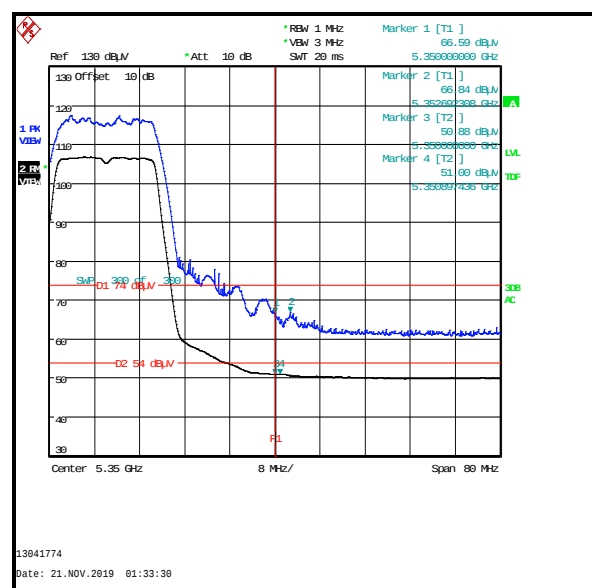
Frequency (MHz)	Level (dB μ V/m)	Limit (dB μ V/m)	Margin (dB)	Result
5350	66.6	74.0	7.4	Complied
5352.692	66.8	74.0	7.2	Complied

Results: Lower Band Edge / Average

Frequency (MHz)	Level (dB μ V/m)	Duty Cycle correction factor (dB)	Corrected Level (dB μ V/m)	Limit (dB μ V/m)	Margin (dB)	Result
5150	48.3	0.1	48.4	54.0	5.6	Complied

Results: Upper Band Edge / Average

Frequency (MHz)	Level (dB μ V/m)	Duty Cycle correction factor (dB)	Corrected Level (dB μ V/m)	Limit (dB μ V/m)	Margin (dB)	Result
5350	50.9	0.1	51.0	54.0	3.0	Complied
5350.897	51.0	0.1	51.1	54.0	2.9	Complied

**Lower Band Edge****Upper Band Edge**

Transmitter Band Edge Radiated Emissions (5.25-5.35 GHz band operation) (continued)**Results: 802.11n / 40 MHz / MIMO / 2Tx SDM / BPSK / MCS8****Results: Lower Band Edge / Peak**

Frequency (MHz)	Level (dB μ V/m)	Limit (dB μ V/m)	Margin (dB)	Result
5083.141	60.3	74.0	13.7	Complied
5150	59.5	74.0	14.5	Complied

Results: Upper Band Edge / Peak

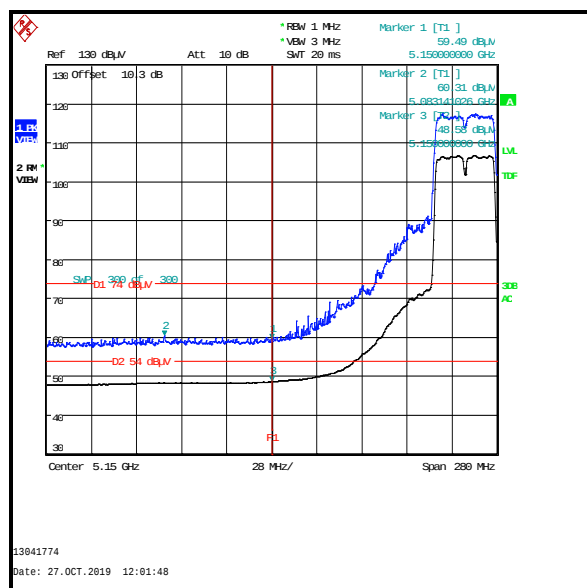
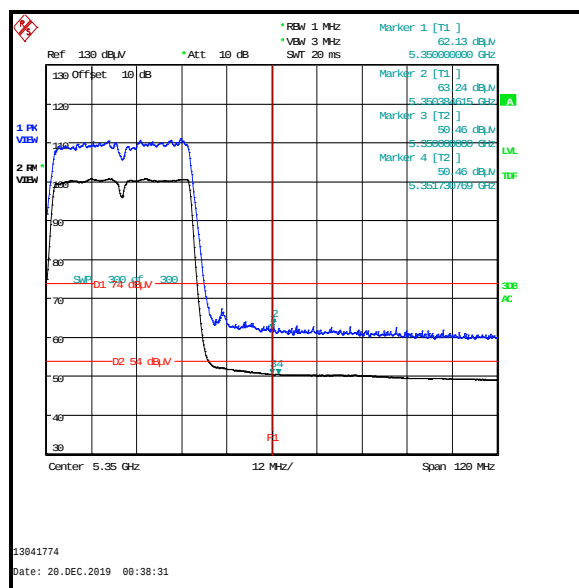
Frequency (MHz)	Level (dB μ V/m)	Limit (dB μ V/m)	Margin (dB)	Result
5350	62.1	74.0	11.9	Complied
5350.385	63.2	74.0	10.8	Complied

Results: Lower Band Edge / Average

Frequency (MHz)	Level (dB μ V/m)	Duty Cycle correction factor (dB)	Corrected Level (dB μ V/m)	Limit (dB μ V/m)	Margin (dB)	Result
5150	48.6	0.2	48.8	54.0	5.2	Complied

Results: Upper Band Edge / Average

Frequency (MHz)	Level (dB μ V/m)	Duty Cycle correction factor (dB)	Corrected Level (dB μ V/m)	Limit (dB μ V/m)	Margin (dB)	Result
5350	50.5	0.2	50.7	54.0	3.3	Complied

**Lower Band Edge****Upper Band Edge**

Transmitter Band Edge Radiated Emissions (5.25-5.35 GHz band operation) (continued)**Results: 802.11ac / 80 MHz / MIMO / 2Tx SDM / BPSK / MCS0x2****Results: Lower Band Edge / Peak**

Frequency (MHz)	Level (dB μ V/m)	Limit (dB μ V/m)	Margin (dB)	Result
5102.300	59.2	74.0	14.8	Complied
5150	57.6	74.0	16.4	Complied

Results: Upper Band Edge / Peak

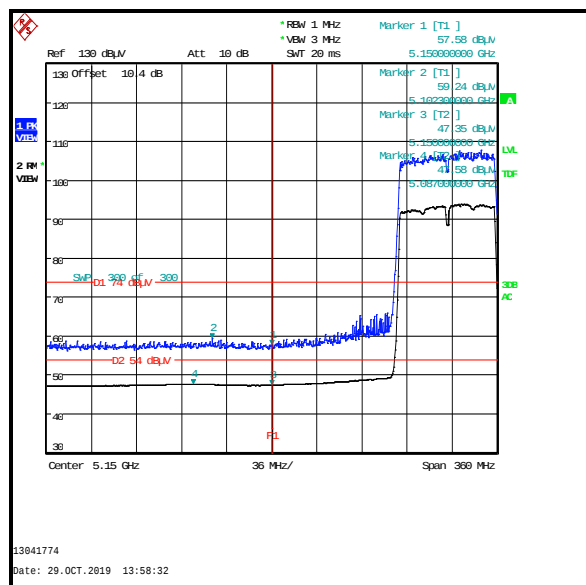
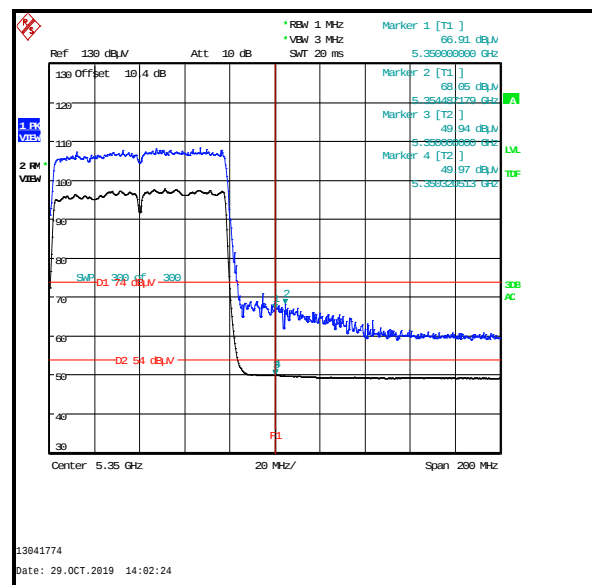
Frequency (MHz)	Level (dB μ V/m)	Limit (dB μ V/m)	Margin (dB)	Result
5350	66.9	74.0	7.1	Complied
5354.487	68.1	74.0	5.9	Complied

Results: Lower Band Edge / Average

Frequency (MHz)	Level (dB μ V/m)	Duty Cycle correction factor (dB)	Corrected Level (dB μ V/m)	Limit (dB μ V/m)	Margin (dB)	Result
5087.000	47.6	0.4	48.0	54.0	6.0	Complied
5150	47.4	0.4	47.8	54.0	6.2	Complied

Results: Upper Band Edge / Average

Frequency (MHz)	Level (dB μ V/m)	Duty Cycle correction factor (dB)	Corrected Level (dB μ V/m)	Limit (dB μ V/m)	Margin (dB)	Result
5350	49.9	0.4	50.3	54.0	3.7	Complied
5350.321	50.0	0.4	50.4	54.0	3.6	Complied

**Lower Band Edge****Upper Band Edge**

Transmitter Band Edge Radiated Emissions (5.25-5.35 GHz band operation) (continued)**Results: 802.11n / 20 MHz / MIMO / 2Tx TXBF / BPSK / MCS0****Results: Lower Band Edge / Peak**

Frequency (MHz)	Level (dB μ V/m)	Limit (dB μ V/m)	Margin (dB)	Result
5090.769	59.6	74.0	14.4	Complied
5150	58.6	74.0	15.4	Complied

Results: Upper Band Edge / Peak

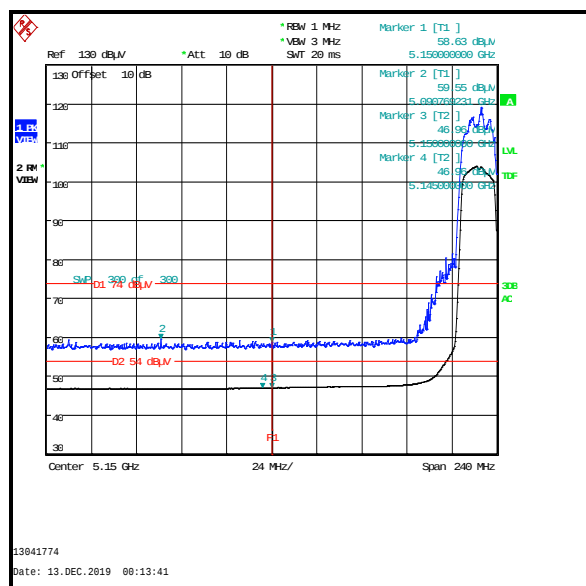
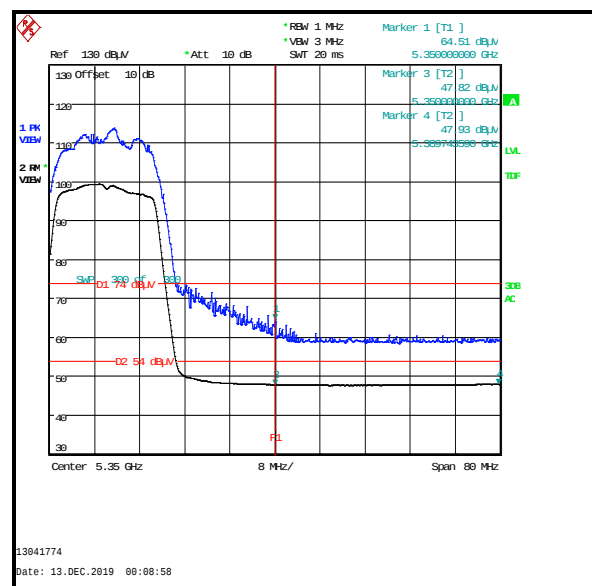
Frequency (MHz)	Level (dB μ V/m)	Limit (dB μ V/m)	Margin (dB)	Result
5350	64.5	74.0	9.5	Complied

Results: Lower Band Edge / Average

Frequency (MHz)	Level (dB μ V/m)	Duty Cycle correction factor (dB)	Corrected Level (dB μ V/m)	Limit (dB μ V/m)	Margin (dB)	Result
5150	47.0	0.1	47.1	54.0	6.9	Complied

Results: Upper Band Edge / Average

Frequency (MHz)	Level (dB μ V/m)	Duty Cycle correction factor (dB)	Corrected Level (dB μ V/m)	Limit (dB μ V/m)	Margin (dB)	Result
5350	47.8	0.1	47.9	54.0	6.1	Complied
5389.744	47.9	0.1	48.0	54.0	6.0	Complied

**Lower Band Edge****Upper Band Edge**

Transmitter Band Edge Radiated Emissions (5.25-5.35 GHz band operation) (continued)**Results: 802.11n / 40 MHz / MIMO / 2Tx TXBF / BPSK / MCS0****Results: Lower Band Edge / Peak**

Frequency (MHz)	Level (dB μ V/m)	Limit (dB μ V/m)	Margin (dB)	Result
5046.346	58.5	74.0	15.5	Complied
5150	56.4	74.0	17.6	Complied

Results: Upper Band Edge / Peak

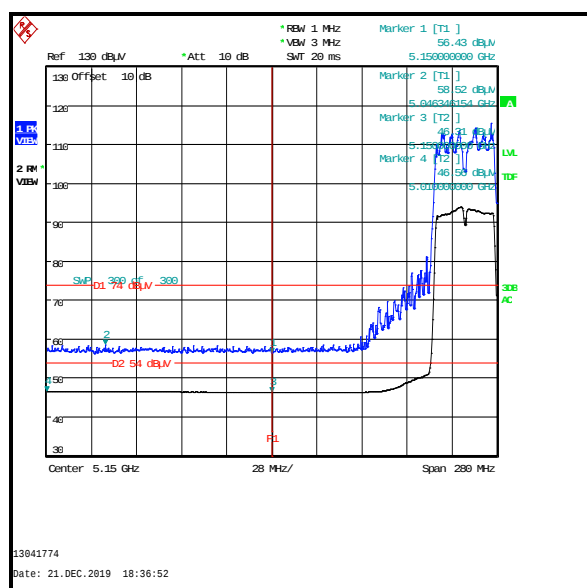
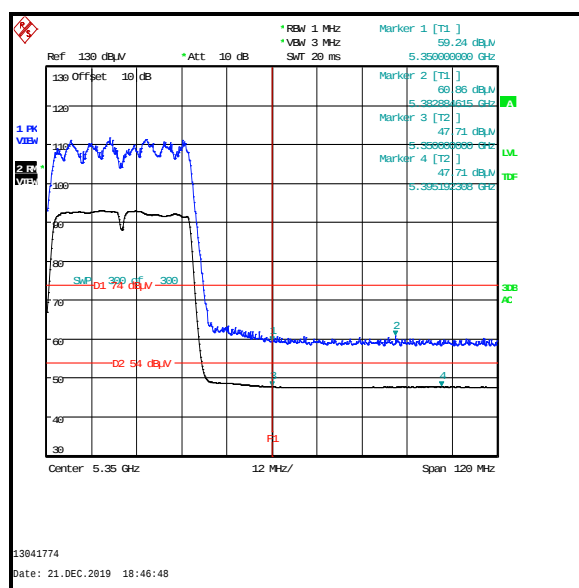
Frequency (MHz)	Level (dB μ V/m)	Limit (dB μ V/m)	Margin (dB)	Result
5350	59.2	74.0	14.8	Complied
5382.885	60.9	74.0	13.1	Complied

Results: Lower Band Edge / Average

Frequency (MHz)	Level (dB μ V/m)	Duty Cycle correction factor (dB)	Corrected Level (dB μ V/m)	Limit (dB μ V/m)	Margin (dB)	Result
5010.000	46.6	0.1	46.7	54.0	7.3	Complied
5150	46.3	0.1	46.4	54.0	7.6	Complied

Results: Upper Band Edge / Average

Frequency (MHz)	Level (dB μ V/m)	Duty Cycle correction factor (dB)	Corrected Level (dB μ V/m)	Limit (dB μ V/m)	Margin (dB)	Result
5350	47.7	0.1	47.8	54.0	6.2	Complied

**Lower Band Edge****Upper Band Edge**

Transmitter Band Edge Radiated Emissions (5.25-5.35 GHz band operation) (continued)**Results: 802.11ac / 80 MHz / MIMO / 2Tx TXBF / BPSK / MCS0x1****Results: Lower Band Edge / Peak**

Frequency (MHz)	Level (dB μ V/m)	Limit (dB μ V/m)	Margin (dB)	Result
5077.550	59.4	74.0	14.6	Complied
5150	58.0	74.0	16.0	Complied

Results: Upper Band Edge / Peak

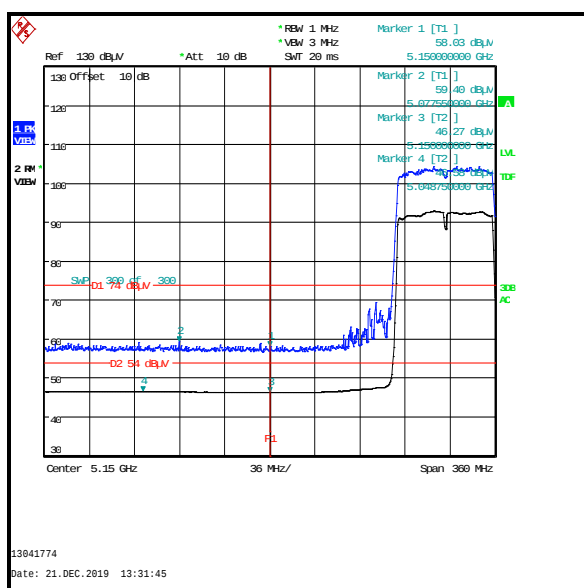
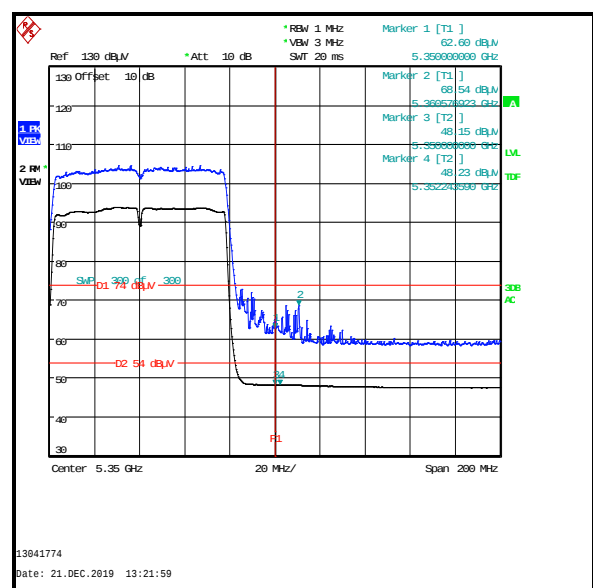
Frequency (MHz)	Level (dB μ V/m)	Limit (dB μ V/m)	Margin (dB)	Result
5350	62.6	74.0	11.4	Complied
5360.577	68.5	74.0	5.5	Complied

Results: Lower Band Edge / Average

Frequency (MHz)	Level (dB μ V/m)	Duty Cycle correction factor (dB)	Corrected Level (dB μ V/m)	Limit (dB μ V/m)	Margin (dB)	Result
5048.750	46.6	0.1	46.7	54.0	7.3	Complied
5150	46.3	0.1	46.4	54.0	7.6	Complied

Results: Upper Band Edge / Average

Frequency (MHz)	Level (dB μ V/m)	Duty Cycle correction factor (dB)	Corrected Level (dB μ V/m)	Limit (dB μ V/m)	Margin (dB)	Result
5350	48.2	0.1	48.3	54.0	5.7	Complied

**Lower Band Edge****Upper Band Edge**

Transmitter Band Edge Radiated Emissions (5.25-5.35 GHz band operation) (continued)**Results: 802.11n / 20 MHz / MIMO / 3Tx CDD / BPSK / MCS0****Results: Lower Band Edge / Peak**

Frequency (MHz)	Level (dB μ V/m)	Limit (dB μ V/m)	Margin (dB)	Result
5145.385	60.4	74.0	13.6	Complied
5150	59.0	74.0	15.0	Complied

Results: Upper Band Edge / Peak

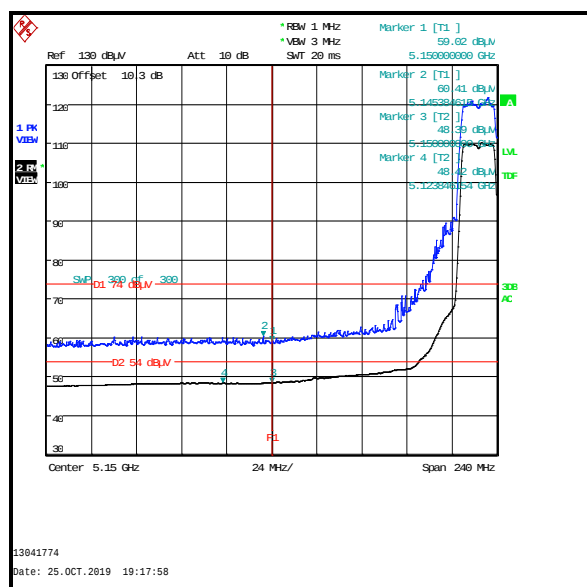
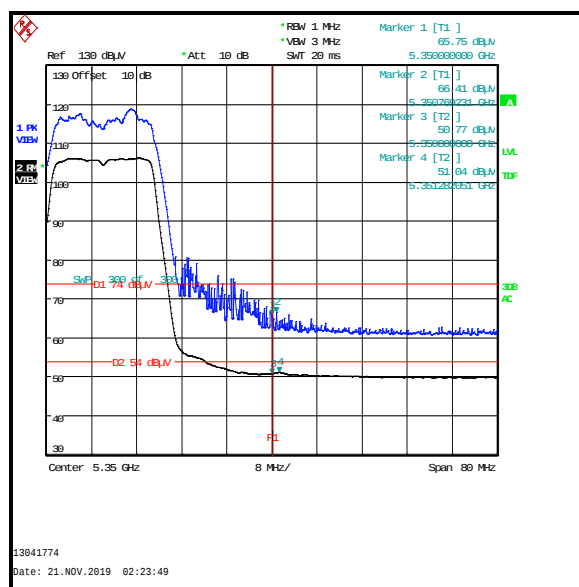
Frequency (MHz)	Level (dB μ V/m)	Limit (dB μ V/m)	Margin (dB)	Result
5350	65.8	74.0	8.2	Complied
5350.769	66.4	74.0	7.6	Complied

Results: Lower Band Edge / Average

Frequency (MHz)	Level (dB μ V/m)	Limit (dB μ V/m)	Margin (dB)	Result
5150	48.4	54.0	5.6	Complied

Results: Upper Band Edge / Average

Frequency (MHz)	Level (dB μ V/m)	Limit (dB μ V/m)	Margin (dB)	Result
5350	50.8	54.0	3.2	Complied
5351.282	51.0	54.0	3.0	Complied

**Lower Band Edge****Upper Band Edge**

Transmitter Band Edge Radiated Emissions (5.25-5.35 GHz band operation) (continued)**Results: 802.11n / 40 MHz / MIMO / 3Tx CDD / BPSK / MCS0****Results: Lower Band Edge / Peak**

Frequency (MHz)	Level (dB μ V/m)	Limit (dB μ V/m)	Margin (dB)	Result
5145.513	60.8	74.0	13.2	Complied
5150	59.6	74.0	14.4	Complied

Results: Upper Band Edge / Peak

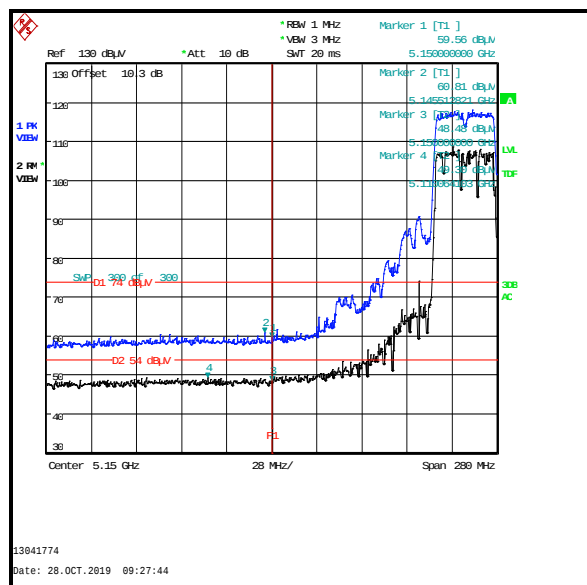
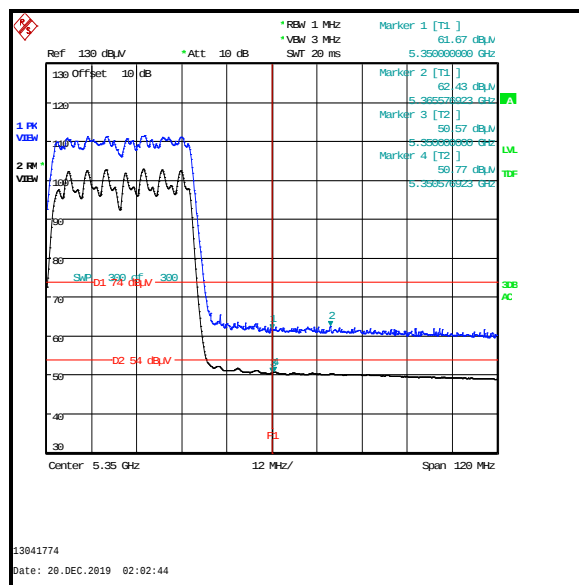
Frequency (MHz)	Level (dB μ V/m)	Limit (dB μ V/m)	Margin (dB)	Result
5350	61.7	74.0	12.3	Complied
5365.577	62.4	74.0	11.6	Complied

Results: Lower Band Edge / Average

Frequency (MHz)	Level (dB μ V/m)	Duty Cycle correction factor (dB)	Corrected Level (dB μ V/m)	Limit (dB μ V/m)	Margin (dB)	Result
5110.064	49.3	0.1	49.4	54.0	4.6	Complied
5150	48.5	0.1	48.6	54.0	5.4	Complied

Results: Upper Band Edge / Average

Frequency (MHz)	Level (dB μ V/m)	Duty Cycle correction factor (dB)	Corrected Level (dB μ V/m)	Limit (dB μ V/m)	Margin (dB)	Result
5350	50.6	0.1	50.7	54.0	3.3	Complied
5350.577	50.8	0.1	50.9	54.0	3.1	Complied

**Lower Band Edge****Upper Band Edge**

Transmitter Band Edge Radiated Emissions (5.25-5.35 GHz band operation) (continued)**Results: 802.11ac / 80 MHz / MIMO / 3Tx CDD / BPSK / MCS0x1****Results: Lower Band Edge / Peak**

Frequency (MHz)	Level (dB μ V/m)	Limit (dB μ V/m)	Margin (dB)	Result
4977.650	59.8	74.0	14.2	Complied
5150	57.4	74.0	16.6	Complied

Results: Upper Band Edge / Peak

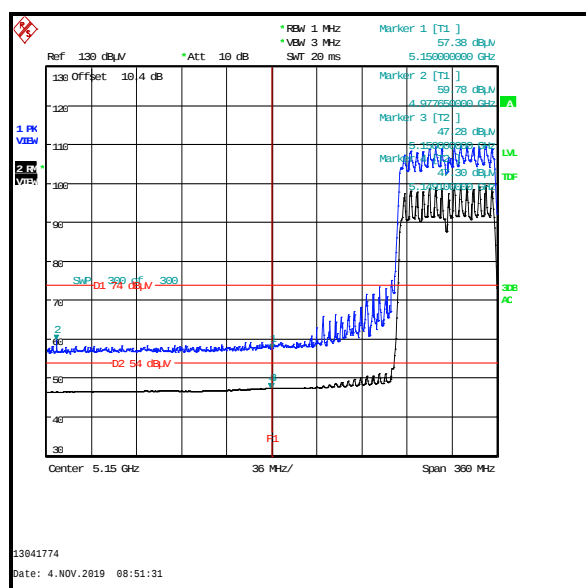
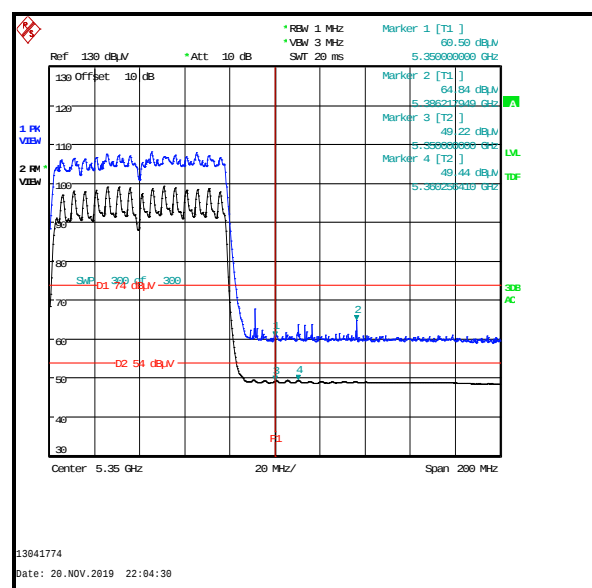
Frequency (MHz)	Level (dB μ V/m)	Limit (dB μ V/m)	Margin (dB)	Result
5350	60.5	74.0	13.5	Complied
5386.218	64.8	74.0	9.2	Complied

Results: Lower Band Edge / Average

Frequency (MHz)	Level (dB μ V/m)	Duty Cycle correction factor (dB)	Corrected Level (dB μ V/m)	Limit (dB μ V/m)	Margin (dB)	Result
5150	47.3	0.2	47.5	54.0	6.5	Complied

Results: Upper Band Edge / Average

Frequency (MHz)	Level (dB μ V/m)	Duty Cycle correction factor (dB)	Corrected Level (dB μ V/m)	Limit (dB μ V/m)	Margin (dB)	Result
5350	49.2	0.2	49.4	54.0	4.6	Complied
5360.256	49.4	0.2	49.6	54.0	4.4	Complied

**Lower Band Edge****Upper Band Edge**

Transmitter Band Edge Radiated Emissions (5.25-5.35 GHz band operation) (continued)**Results: 802.11n / 20 MHz / MIMO / 3Tx SDM / BPSK / MCS16****Results: Lower Band Edge / Peak**

Frequency (MHz)	Level (dB μ V/m)	Limit (dB μ V/m)	Margin (dB)	Result
5145.385	60.4	74.0	13.6	Complied
5150	59.0	74.0	15.0	Complied

Results: Upper Band Edge / Peak

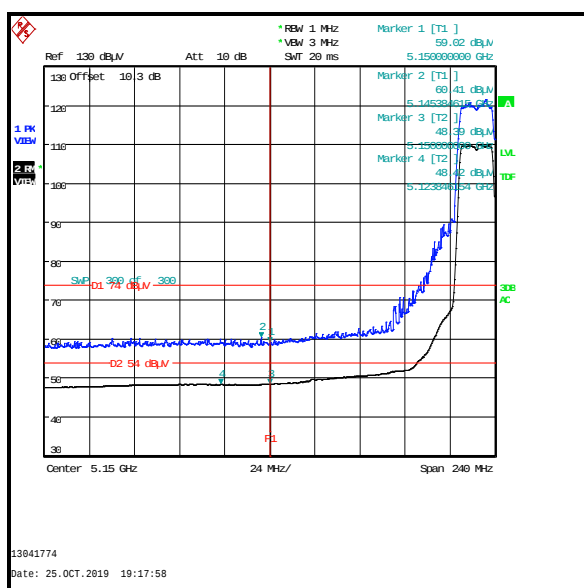
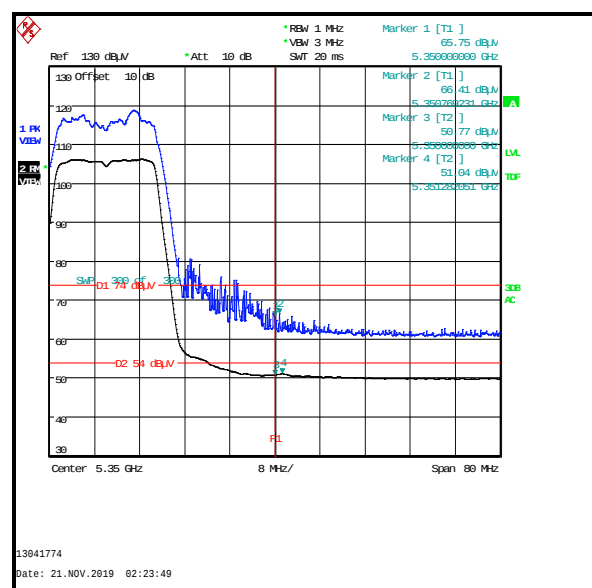
Frequency (MHz)	Level (dB μ V/m)	Limit (dB μ V/m)	Margin (dB)	Result
5350	65.8	74.0	8.2	Complied
5350.769	66.4	74.0	7.6	Complied

Results: Lower Band Edge / Average

Frequency (MHz)	Level (dB μ V/m)	Duty Cycle correction factor (dB)	Corrected Level (dB μ V/m)	Limit (dB μ V/m)	Margin (dB)	Result
5150	48.4	0.1	48.5	54.0	5.5	Complied

Results: Upper Band Edge / Average

Frequency (MHz)	Level (dB μ V/m)	Duty Cycle correction factor (dB)	Corrected Level (dB μ V/m)	Limit (dB μ V/m)	Margin (dB)	Result
5350	50.8	0.1	50.9	54.0	3.1	Complied
5351.282	51.0	0.1	51.1	54.0	2.9	Complied

**Lower Band Edge****Upper Band Edge**

Transmitter Band Edge Radiated Emissions (5.25-5.35 GHz band operation) (continued)**Results: 802.11n / 40 MHz / MIMO / 3Tx SDM / BPSK / MCS16****Results: Lower Band Edge / Peak**

Frequency (MHz)	Level (dB μ V/m)	Limit (dB μ V/m)	Margin (dB)	Result
5145.513	60.8	74.0	13.2	Complied
5150	59.6	74.0	14.4	Complied

Results: Upper Band Edge / Peak

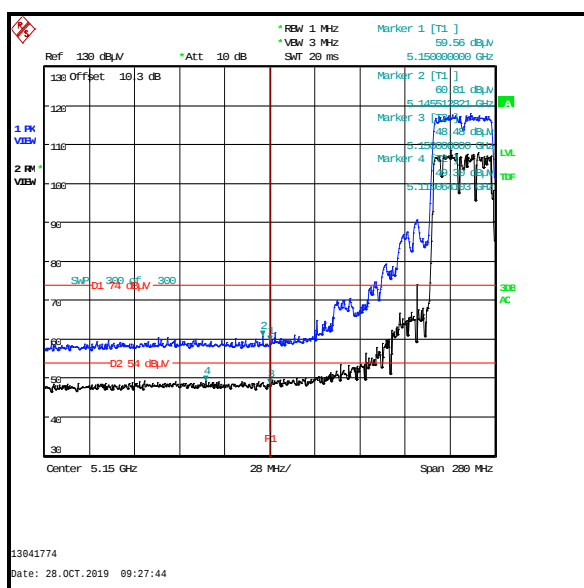
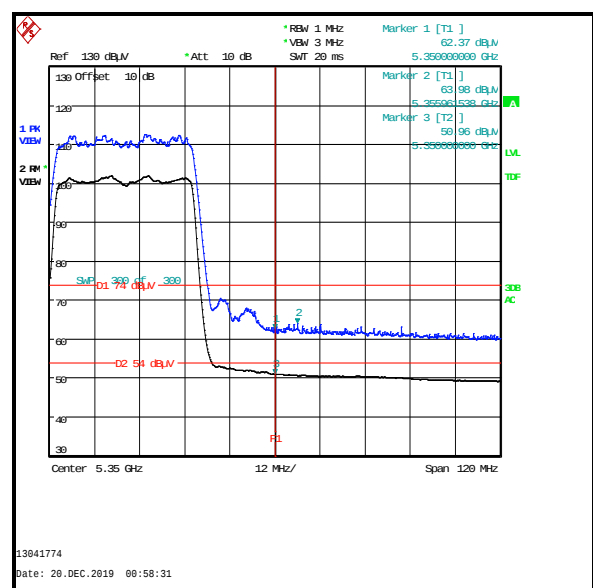
Frequency (MHz)	Level (dB μ V/m)	Limit (dB μ V/m)	Margin (dB)	Result
5350	62.4	74.0	11.6	Complied
5355.962	64.0	74.0	10.0	Complied

Results: Lower Band Edge / Average

Frequency (MHz)	Level (dB μ V/m)	Duty Cycle correction factor (dB)	Corrected Level (dB μ V/m)	Limit (dB μ V/m)	Margin (dB)	Result
5110.064	49.3	0.3	49.6	54.0	4.4	Complied
5150	48.5	0.3	48.8	54.0	5.2	Complied

Results: Upper Band Edge / Average

Frequency (MHz)	Level (dB μ V/m)	Duty Cycle correction factor (dB)	Corrected Level (dB μ V/m)	Limit (dB μ V/m)	Margin (dB)	Result
5350	51.0	0.1	51.1	54.0	2.9	Complied

**Lower Band Edge****Upper Band Edge**

Transmitter Band Edge Radiated Emissions (5.25-5.35 GHz band operation) (continued)**Results: 802.11ac / 80 MHz / MIMO / 3Tx SDM / BPSK / MCS0x3****Results: Lower Band Edge / Peak**

Frequency (MHz)	Level (dB μ V/m)	Limit (dB μ V/m)	Margin (dB)	Result
5150	59.3	74.0	14.7	Complied

Results: Upper Band Edge / Peak

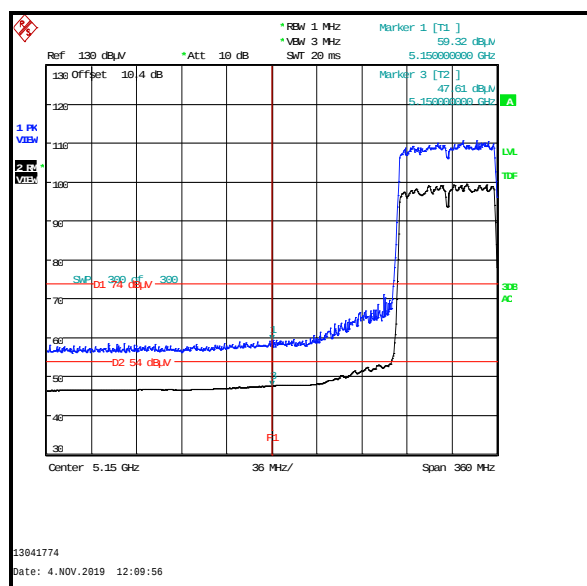
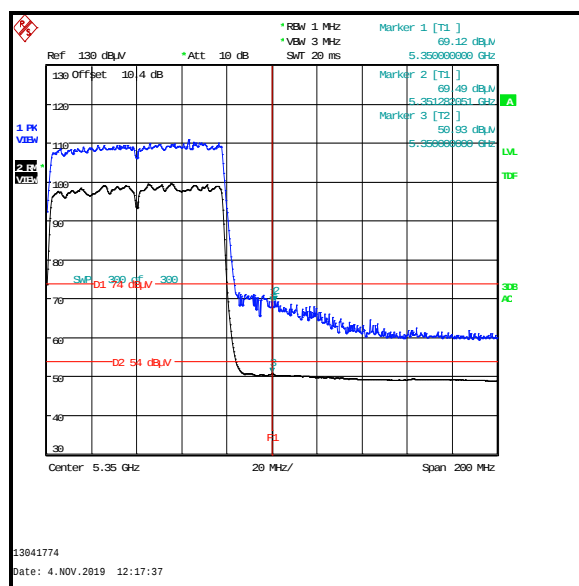
Frequency (MHz)	Level (dB μ V/m)	Limit (dB μ V/m)	Margin (dB)	Result
5350	69.1	74.0	4.9	Complied
5351.282	69.5	74.0	4.5	Complied

Results: Lower Band Edge / Average

Frequency (MHz)	Level (dB μ V/m)	Duty Cycle correction factor (dB)	Corrected Level (dB μ V/m)	Limit (dB μ V/m)	Margin (dB)	Result
5150	47.6	0.5	48.1	54.0	5.9	Complied

Results: Upper Band Edge / Average

Frequency (MHz)	Level (dB μ V/m)	Duty Cycle correction factor (dB)	Corrected Level (dB μ V/m)	Limit (dB μ V/m)	Margin (dB)	Result
5350	50.9	0.5	51.4	54.0	2.6	Complied

**Lower Band Edge****Upper Band Edge**

Transmitter Band Edge Radiated Emissions (5.25-5.35 GHz band operation) (continued)**Results: 802.11n / 20 MHz / MIMO / 3Tx TXBF / BPSK / MCS0****Results: Lower Band Edge / Peak**

Frequency (MHz)	Level (dB μ V/m)	Limit (dB μ V/m)	Margin (dB)	Result
5133.077	61.3	74.0	12.7	Complied
5150	58.1	74.0	15.9	Complied

Results: Upper Band Edge / Peak

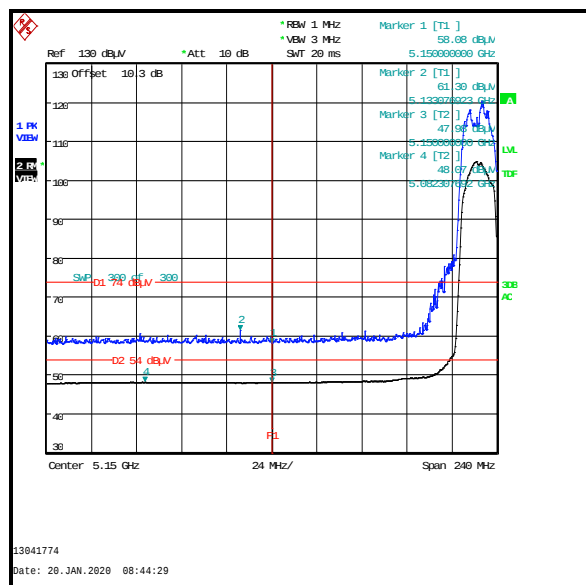
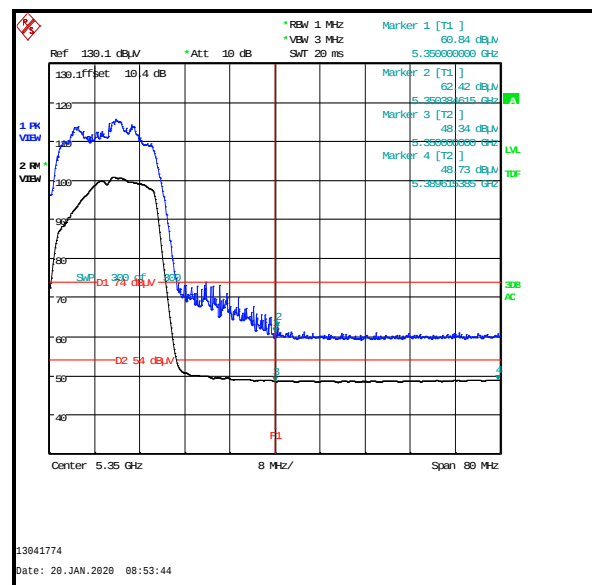
Frequency (MHz)	Level (dB μ V/m)	Limit (dB μ V/m)	Margin (dB)	Result
5350	60.8	74.0	13.2	Complied
5350.385	62.4	74.0	11.6	Complied

Results: Lower Band Edge / Average

Frequency (MHz)	Level (dB μ V/m)	Duty Cycle correction factor (dB)	Corrected Level (dB μ V/m)	Limit (dB μ V/m)	Margin (dB)	Result
5150	48.0	0.1	48.1	54.0	5.9	Complied
5082.308	48.1	0.1	48.2	54.0	5.8	Complied

Results: Upper Band Edge / Average

Frequency (MHz)	Level (dB μ V/m)	Duty Cycle correction factor (dB)	Corrected Level (dB μ V/m)	Limit (dB μ V/m)	Margin (dB)	Result
5350	48.3	0.1	48.4	54.0	5.6	Complied
5389.615	48.7	0.1	48.8	54.0	5.2	Complied

**Lower Band Edge****Upper Band Edge**

Transmitter Band Edge Radiated Emissions (5.25-5.35 GHz band operation) (continued)**Results: 802.11n / 40 MHz / MIMO / 3Tx TXBF / BPSK / MCS0****Results: Lower Band Edge / Peak**

Frequency (MHz)	Level (dB μ V/m)	Limit (dB μ V/m)	Margin (dB)	Result
5041.859	60.0	74.0	14.0	Complied
5150	58.5	74.0	15.5	Complied

Results: Upper Band Edge / Peak

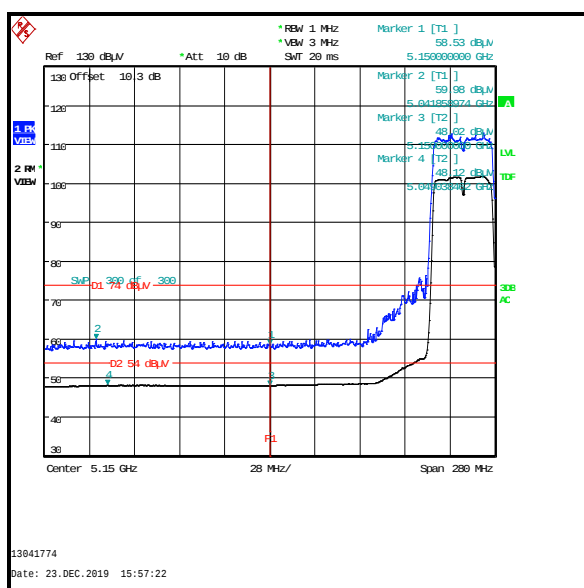
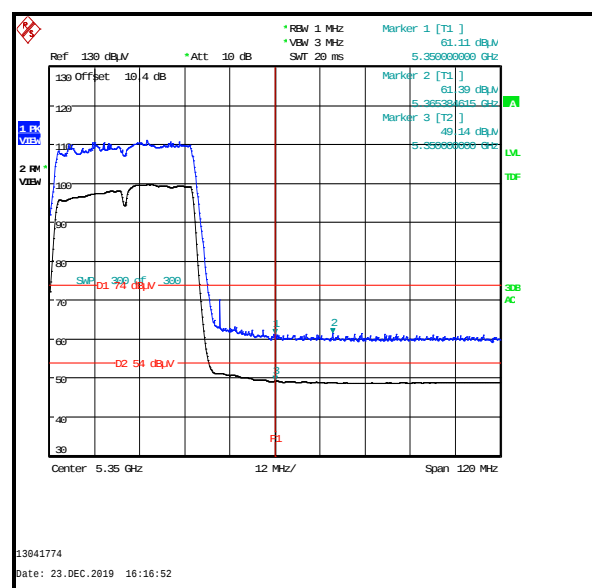
Frequency (MHz)	Level (dB μ V/m)	Limit (dB μ V/m)	Margin (dB)	Result
5350	61.1	74.0	12.9	Complied
5365.385	61.4	74.0	12.6	Complied

Results: Lower Band Edge / Average

Frequency (MHz)	Level (dB μ V/m)	Duty Cycle correction factor (dB)	Corrected Level (dB μ V/m)	Limit (dB μ V/m)	Margin (dB)	Result
5049.038	48.1	0.1	48.2	54.0	5.8	Complied
5150	48.0	0.1	48.1	54.0	5.9	Complied

Results: Upper Band Edge / Average

Frequency (MHz)	Level (dB μ V/m)	Duty Cycle correction factor (dB)	Corrected Level (dB μ V/m)	Limit (dB μ V/m)	Margin (dB)	Result
5350	49.1	0.1	49.2	54.0	4.8	Complied

**Lower Band Edge****Upper Band Edge**

Transmitter Band Edge Radiated Emissions (5.25-5.35 GHz band operation) (continued)**Results: 802.11ac / 80 MHz / MIMO / 3Tx TXBF / BPSK / MCS0x1****Results: Lower Band Edge / Peak**

Frequency (MHz)	Level (dB μ V/m)	Limit (dB μ V/m)	Margin (dB)	Result
4992.500	60.6	74.0	13.4	Complied
5150	58.0	74.0	16.0	Complied

Results: Upper Band Edge / Peak

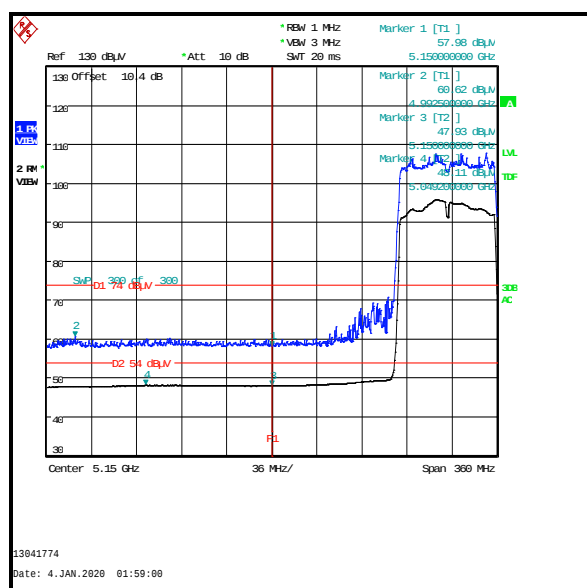
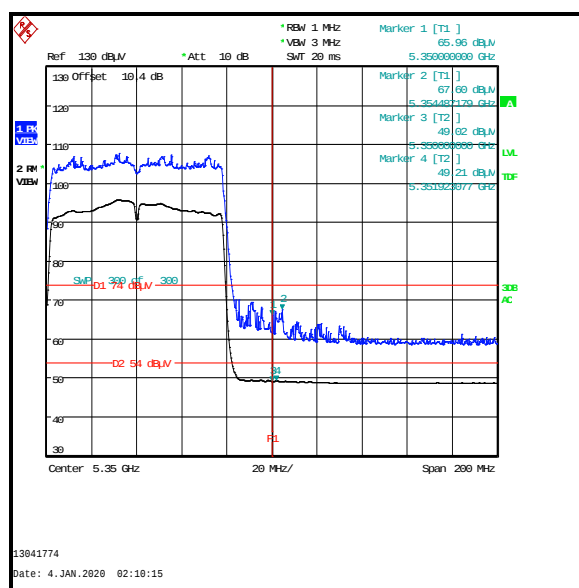
Frequency (MHz)	Level (dB μ V/m)	Limit (dB μ V/m)	Margin (dB)	Result
5350	66.0	74.0	8.0	Complied
5354.487	67.6	74.0	6.4	Complied

Results: Lower Band Edge / Average

Frequency (MHz)	Level (dB μ V/m)	Duty Cycle correction factor (dB)	Corrected Level (dB μ V/m)	Limit (dB μ V/m)	Margin (dB)	Result
5049.200	48.1	0.1	48.2	54.0	5.8	Complied
5150	47.9	0.1	48.0	54.0	6.0	Complied

Results: Upper Band Edge / Average

Frequency (MHz)	Level (dB μ V/m)	Duty Cycle correction factor (dB)	Corrected Level (dB μ V/m)	Limit (dB μ V/m)	Margin (dB)	Result
5350	49.0	0.1	49.1	54.0	4.9	Complied
5351.923	49.2	0.1	49.3	54.0	4.7	Complied

**Lower Band Edge****Upper Band Edge**

Transmitter Band Edge Radiated Emissions (5.47-5.725 GHz band)**5.3.3. 5.47-5.725 GHz band****Test Summary:**

Test Engineers:	Andrew Harding, Marco Zunarelli, Mark Perry, John Ferdinand, Mohamed Toubella & Nick Steele	Test Dates:	22 October 2019 to 20 January 2020
Test Sample Serial Numbers:	C02ZG00FP22J, C02ZG00KP22J & C02ZH00BP1YX		

FCC Reference:	Parts 15.407(b)(3),(7), 15.205 & 15.209(a)
Test Method Used:	ANSI C63.10 Section 6.10 & KDB 789033 II.G.

Environmental Conditions:

Temperature (°C):	21 to 25
Relative Humidity (%):	33 to 46

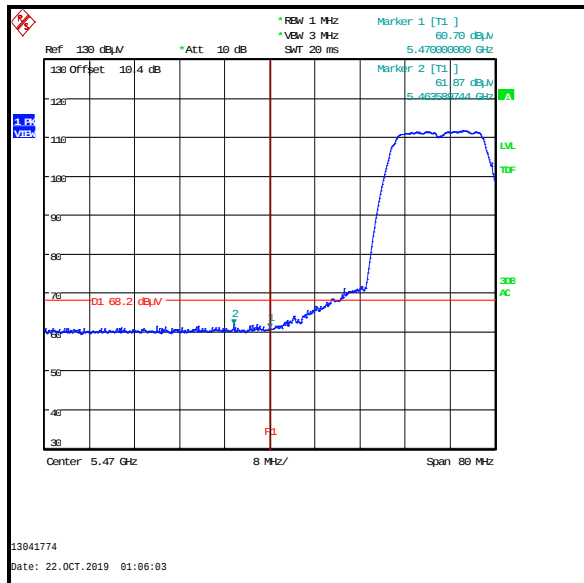
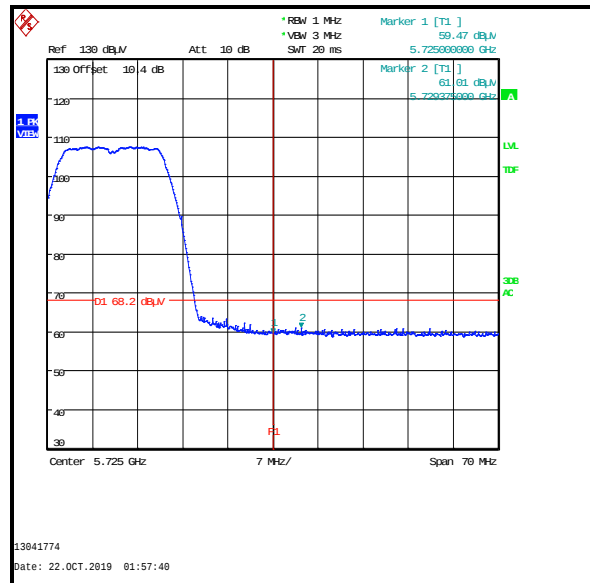
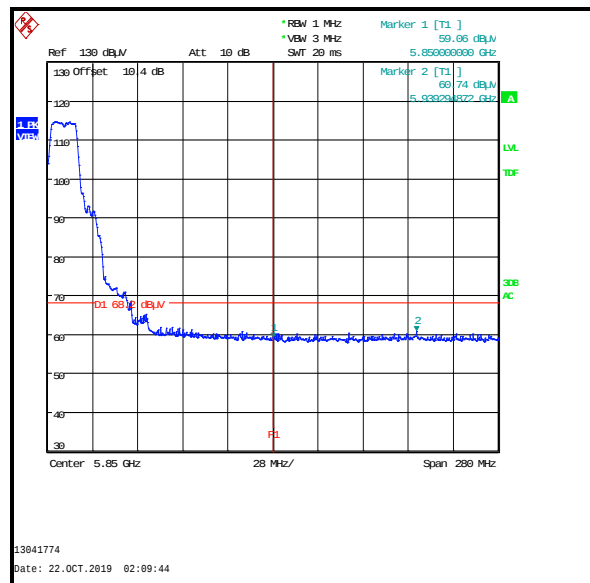
Transmitter Band Edge Radiated Emissions (5.47-5.725 GHz band operation) (continued)**Note(s):**

1. The following modes were tested:
 - o 802.11a - BPSK / 6 Mbps / Core 0
 - o 802.11n HT20 / SISO - BPSK / MCS0 / Core 0
 - o 802.11n HT40 / SISO - BPSK / MCS0 / Core 0
 - o 802.11ac VHT80 / SISO – BPSK / MCS0x1 / Core 0
 - o 802.11n HT20 / MIMO / 2Tx CDD - BPSK / MCS0
 - o 802.11n HT40 / MIMO / 2Tx CDD - BPSK / MCS0
 - o 802.11ac VHT80 / MIMO / 2Tx CDD - BPSK / MCS0x1
 - o 802.11n HT20 / MIMO / 2Tx SDM - BPSK / MCS8
 - o 802.11n HT40 / MIMO / 2Tx SDM - BPSK / MCS8
 - o 802.11ac VHT80 / MIMO / 2Tx SDM - BPSK / MCS0x2
 - o 802.11n HT20 / MIMO / 2Tx TXBF - BPSK / MCS0
 - o 802.11n HT40 / MIMO / 2Tx TXBF - BPSK / MCS0
 - o 802.11ac VHT80 / MIMO / 2Tx TXBF - BPSK / MCS0x1
 - o 802.11n HT20 / MIMO / 3Tx CDD - BPSK / MCS0
 - o 802.11n HT40 / MIMO / 3Tx CDD - BPSK / MCS0
 - o 802.11ac VHT80 / MIMO / 3Tx CDD - BPSK / MCS0x1
 - o 802.11n HT20 / MIMO / 3Tx SDM - BPSK / MCS16
 - o 802.11n HT40 / MIMO / 3Tx SDM - BPSK / MCS16
 - o 802.11ac VHT80 / MIMO / 3Tx SDM - BPSK / MCS0x3
 - o 802.11n HT20 / MIMO / 3Tx TXBF - BPSK / MCS0
 - o 802.11n HT40 / MIMO / 3Tx TXBF - BPSK / MCS0
 - o 802.11ac VHT80 / MIMO / 3Tx TXBF - BPSK / MCS0x1
2. Lower band edge measurements were performed with the EUT transmitting on the bottom channel. Upper band edge measurements were performed with the EUT transmitting on the top channel.
3. For transmitters operating in the 5.47-5.725 GHz band: all emissions outside of the 5.47-5.725 GHz band shall not exceed an EIRP of -27 dBm/MHz. However, there are restricted bands of operation below the lower band edge at 4.5-5.15 GHz and also at 5.35-5.46 GHz therefore the provisions of FCC Part 15.205 apply. Tests were performed in these restricted bands of operation with the EUT transmitting on the bottom and top channels within 5.47-5.725 GHz band, the results are included in the transmitter 5.15-5.25 GHz band radiated spurious emissions section of this test report.
4. For completeness, results are also shown as EIRP in dBm and also as field strength in dBμV/m. Measured field strength was converted to EIRP in accordance with KDB 789033 II.G.2.c)(iii) using a conversion factor of 95.2.
5. As straddle channels overlap the upper band edge at 5725 MHz, additional testing was performed in accordance with KDB 789033 III.B.2.b)(iii) which required compliance of overlapping channels to an unwanted emission level of -27 dBm/MHz at 5850 MHz instead of 5725 MHz.

Transmitter Band Edge Radiated Emissions (5.47-5.725 GHz band operation) (continued)**Results: 802.11a / 20 MHz / SISO / BPSK / 6 Mbps / Core 0 / Peak**

Frequency (MHz)	Level (dBm)	Limit (dBm)	Margin (dB)	Result
5463.590	-33.3	-27.0	6.3	Complied
5470	-34.5	-27.0	7.5	Complied
5725	-35.7	-27.0	8.7	Complied
5729.375	-34.2	-27.0	7.2	Complied
5850	-36.1	-27.0	9.1	Complied
5939.295	-34.5	-27.0	7.5	Complied

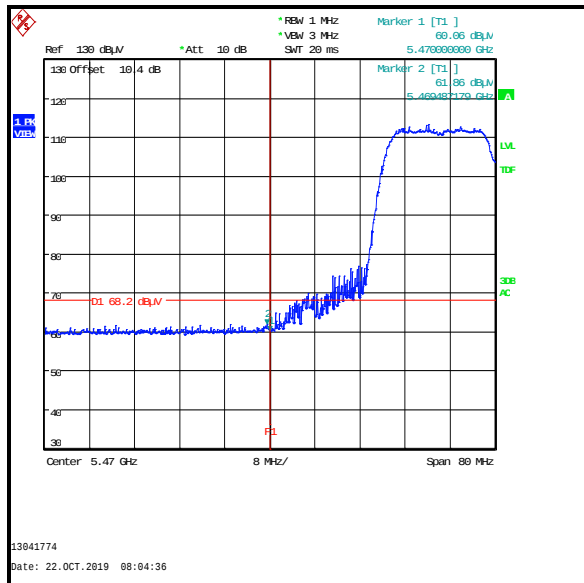
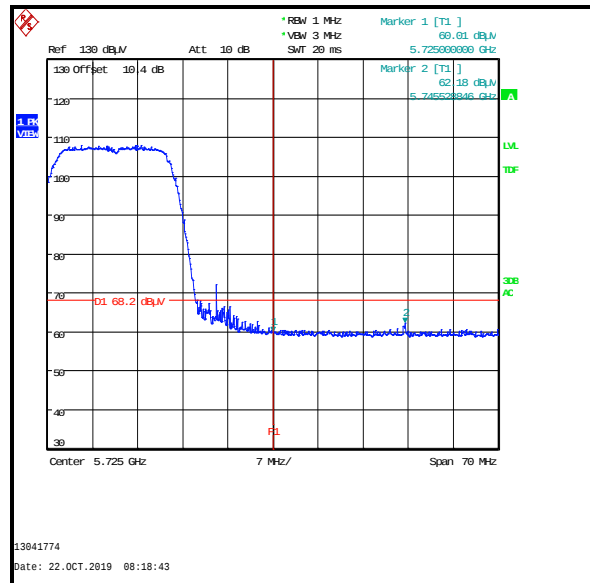
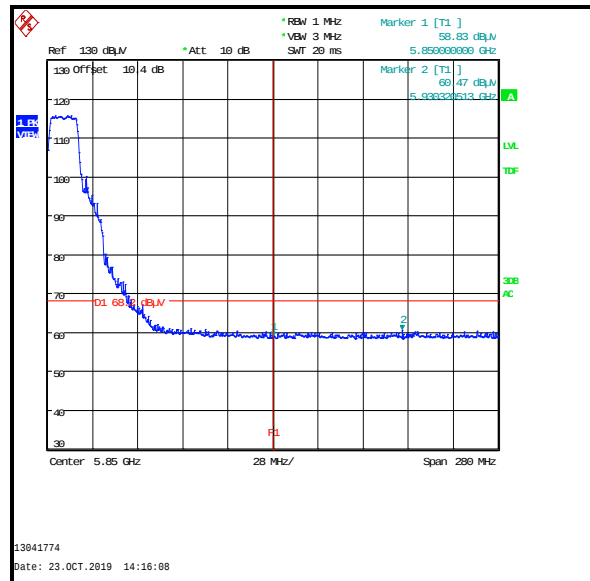
Frequency (MHz)	Level (dB μ V/m)	Limit (dB μ V/m)	Margin (dB)	Result
5463.590	61.9	68.2	6.3	Complied
5470	60.7	68.2	7.5	Complied
5725	59.5	68.2	8.7	Complied
5729.375	61.0	68.2	7.2	Complied
5850	59.1	68.2	9.1	Complied
5939.295	60.7	68.2	7.5	Complied

Transmitter Band Edge Radiated Emissions (5.47-5.725 GHz band operation) (continued)**Results: 802.11a / 20 MHz / SISO / BPSK / 6 Mbps / Core 0 / Peak****Lower Band Edge****Upper Band Edge****Straddle Channel emission level at 5850 MHz**

Transmitter Band Edge Radiated Emissions (5.47-5.725 GHz band operation) (continued)**Results: 802.11n / 20 MHz / SISO / BPSK / MCS0 / Core 0 / Peak**

Frequency (MHz)	Level (dBm)	Limit (dBm)	Margin (dB)	Result
5469.487	-33.3	-27.0	6.3	Complied
5470	-35.1	-27.0	8.1	Complied
5725	-35.2	-27.0	8.2	Complied
5745.529	-33.0	-27.0	6.0	Complied
5850	-36.4	-27.0	9.4	Complied
5930.321	-34.7	-27.0	7.7	Complied

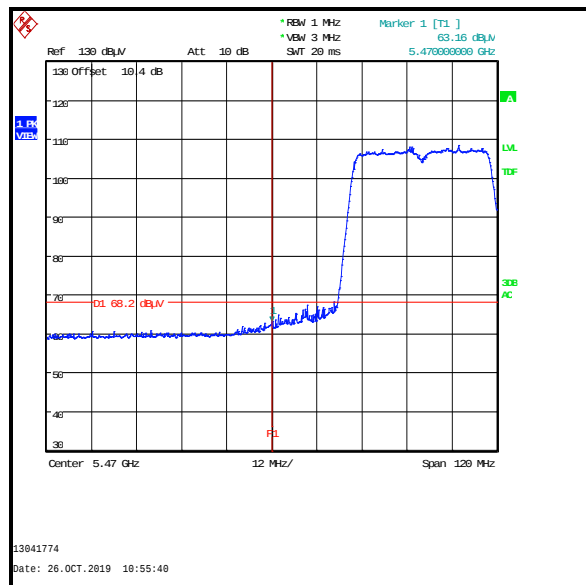
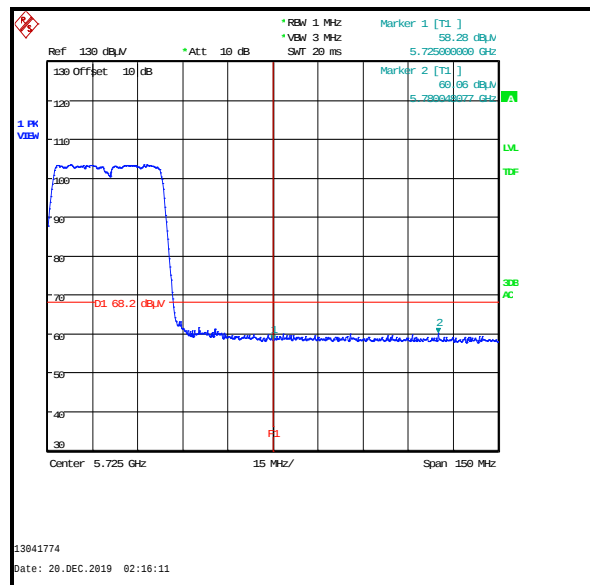
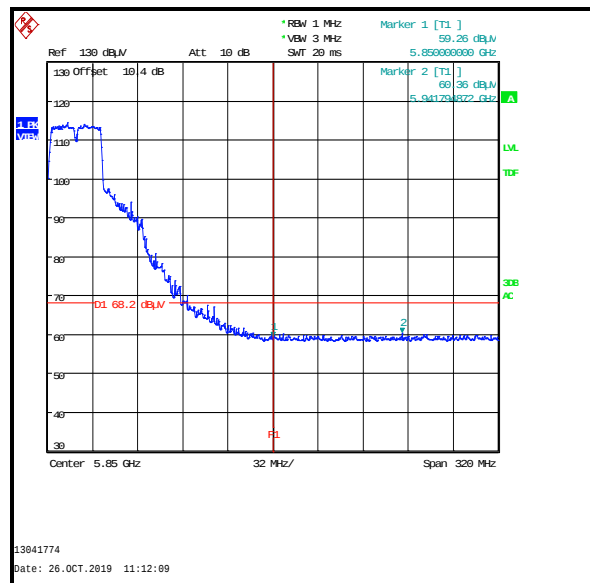
Frequency (MHz)	Level (dB μ V/m)	Limit (dB μ V/m)	Margin (dB)	Result
5469.487	61.9	68.2	6.3	Complied
5470	60.1	68.2	8.1	Complied
5725	60.0	68.2	8.2	Complied
5745.529	62.2	68.2	6.0	Complied
5850	58.8	68.2	9.4	Complied
5930.321	60.5	68.2	7.7	Complied

Transmitter Band Edge Radiated Emissions (5.47-5.725 GHz band operation) (continued)**Results: 802.11n / 20 MHz / SISO / BPSK / MCS0 / Core 0 / Peak****Lower Band Edge****Upper Band Edge****Straddle Channel emission level at 5850 MHz**

Transmitter Band Edge Radiated Emissions (5.47-5.725 GHz band operation) (continued)**Results: 802.11n / 40 MHz / SISO / BPSK / MCS0 / Core 0 / Peak**

Frequency (MHz)	Level (dBm)	Limit (dBm)	Margin (dB)	Result
5470	-32.0	-27.0	5.0	Complied
5725	-36.9	-27.0	9.9	Complied
5780.048	-35.1	-27.0	8.1	Complied
5850	-35.9	-27.0	8.9	Complied
5941.795	-34.8	-27.0	7.8	Complied

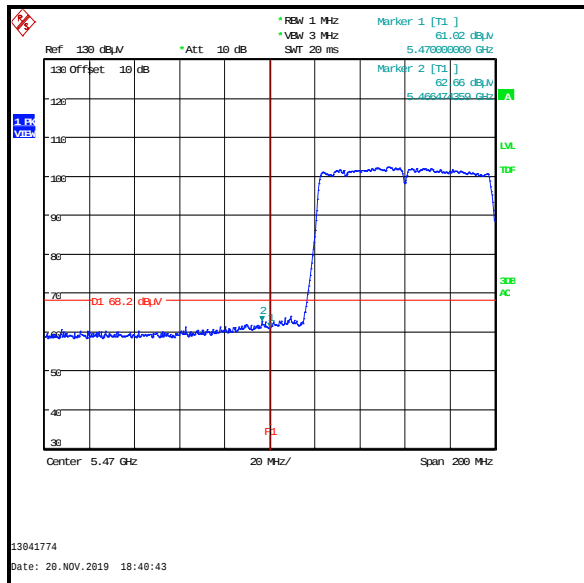
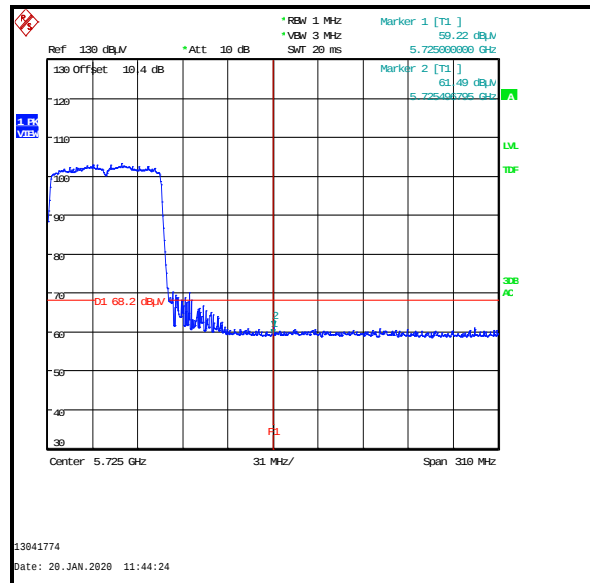
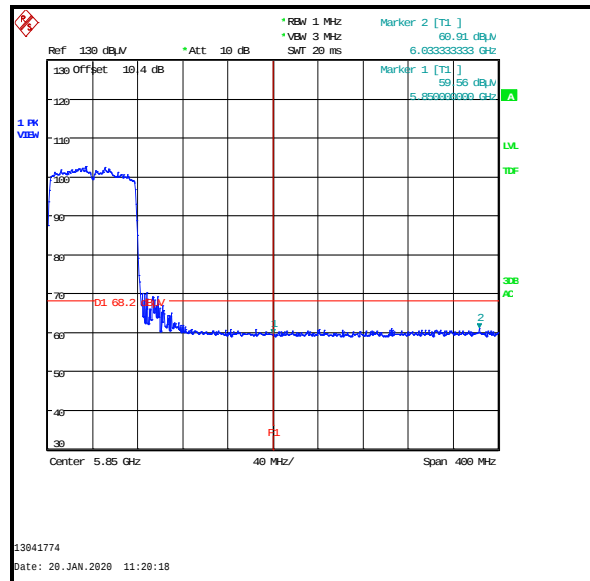
Frequency (MHz)	Level (dB μ V/m)	Limit (dB μ V/m)	Margin (dB)	Result
5470	63.2	68.2	5.0	Complied
5725	58.3	68.2	9.9	Complied
5780.048	60.1	68.2	8.1	Complied
5850	59.3	68.2	8.9	Complied
5941.795	60.4	68.2	7.8	Complied

Transmitter Band Edge Radiated Emissions (5.47-5.725 GHz band operation) (continued)**Results: 802.11n / 40 MHz / SISO / BPSK / MCS0 / Core 0 / Peak****Lower Band Edge****Upper Band Edge****Straddle Channel emission level at 5850 MHz**

Transmitter Band Edge Radiated Emissions (5.47-5.725 GHz band operation) (continued)**Results: 802.11ac / 80 MHz / SISO / BPSK / MCS0 / Core 0 / Peak**

Frequency (MHz)	Level (dBm)	Limit (dBm)	Margin (dB)	Result
5466.474	-32.5	-27.0	5.5	Complied
5470	-34.2	-27.0	7.2	Complied
5725	-36.0	-27.0	9.0	Complied
5726.490	-33.7	-27.0	6.7	Complied
5850	-35.6	-27.0	8.6	Complied
5989.102	-34.3	-27.0	7.3	Complied

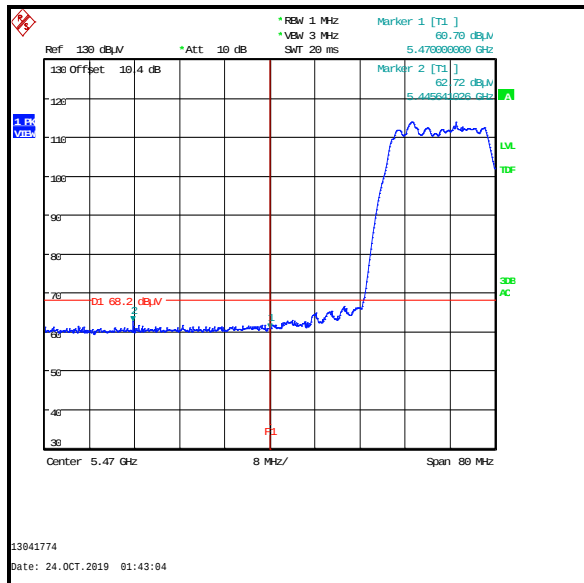
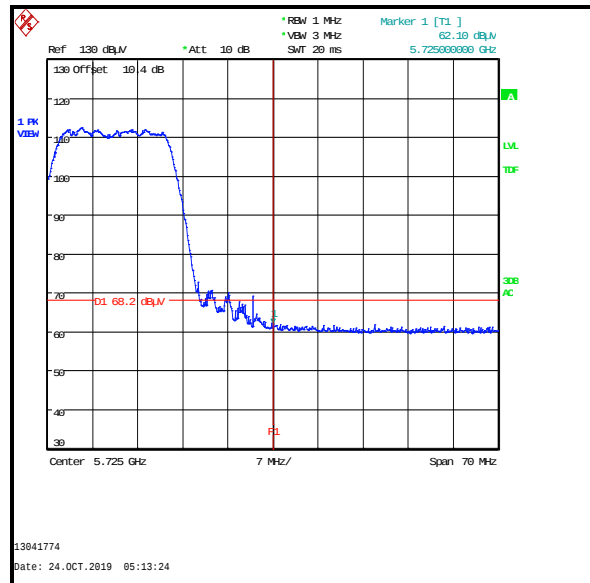
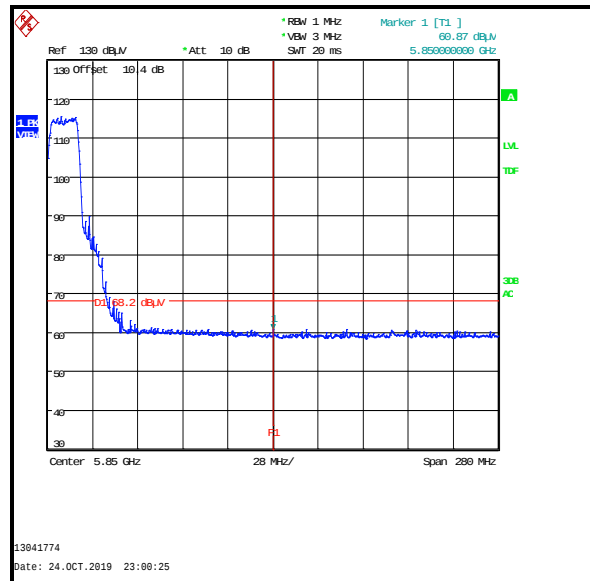
Frequency (MHz)	Level (dB μ V/m)	Limit (dB μ V/m)	Margin (dB)	Result
5466.474	62.7	68.2	5.5	Complied
5470	61.0	68.2	7.2	Complied
5725	59.2	68.2	9.0	Complied
5725.497	61.5	68.2	6.7	Complied
5850	59.6	68.2	8.6	Complied
6033.333	60.9	68.2	7.3	Complied

Transmitter Band Edge Radiated Emissions (5.47-5.725 GHz band operation) (continued)**Results: 802.11ac / 80 MHz / SISO / BPSK / MCS0 / Core 0 / Peak****Lower Band Edge****Upper Band Edge****Straddle Channel emission level at 5850 MHz**

Transmitter Band Edge Radiated Emissions (5.47-5.725 GHz band operation) (continued)**Results: 802.11n / 20 MHz / MIMO / 2Tx CDD / BPSK / MCS0 / Peak**

Frequency (MHz)	Level (dBm)	Limit (dBm)	Margin (dB)	Result
5445.641	-32.5	-27.0	5.5	Complied
5470	-34.5	-27.0	7.5	Complied
5725	-33.1	-27.0	6.1	Complied
5850	-34.3	-27.0	7.3	Complied

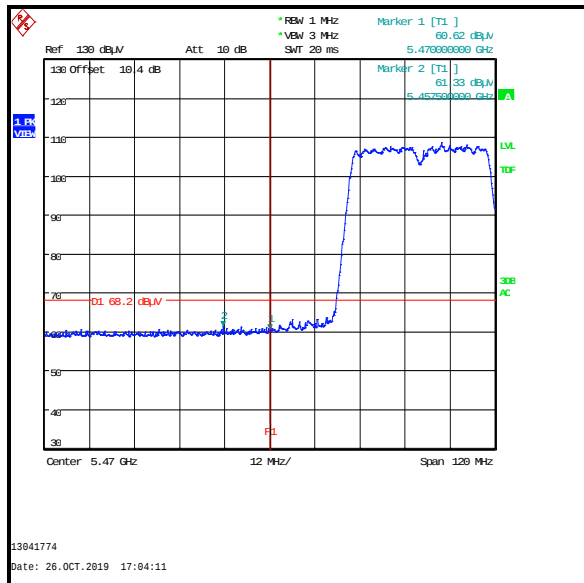
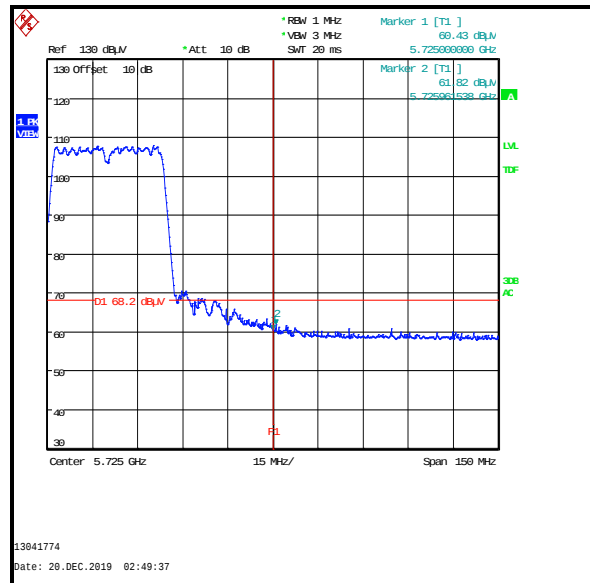
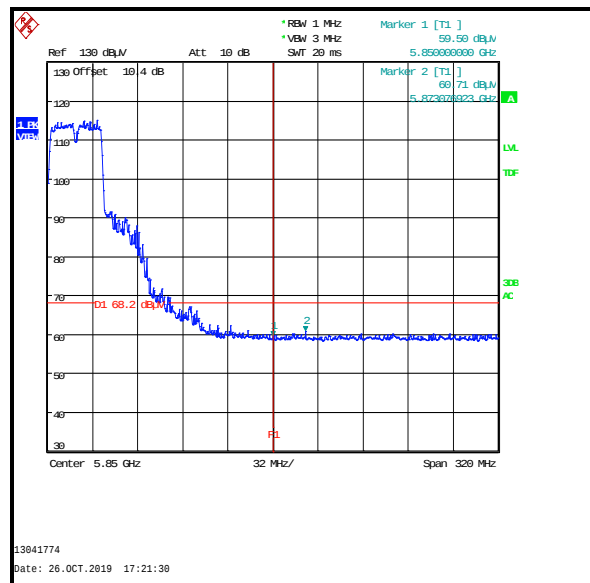
Frequency (MHz)	Level (dB μ V/m)	Limit (dB μ V/m)	Margin (dB)	Result
5445.641	62.7	68.2	5.5	Complied
5470	60.7	68.2	7.5	Complied
5725	62.1	68.2	6.1	Complied
5850	60.9	68.2	7.3	Complied

Transmitter Band Edge Radiated Emissions (5.47-5.725 GHz band operation) (continued)**Results: 802.11n / 20 MHz / MIMO / 2Tx CDD / BPSK / MCS0 / Peak****Lower Band Edge****Upper Band Edge****Straddle Channel emission level at 5850 MHz**

Transmitter Band Edge Radiated Emissions (5.47-5.725 GHz band operation) (continued)**Results: 802.11n / 40 MHz / MIMO / 2Tx CDD / BPSK / MCS0 / Peak**

Frequency (MHz)	Level (dBm)	Limit (dBm)	Margin (dB)	Result
5457.500	-33.9	-27.0	6.9	Complied
5470	-34.6	-27.0	7.6	Complied
5725	-34.8	-27.0	7.8	Complied
5725.962	-33.4	-27.0	6.4	Complied
5850	-35.7	-27.0	8.7	Complied
5873.077	-34.5	-27.0	7.5	Complied

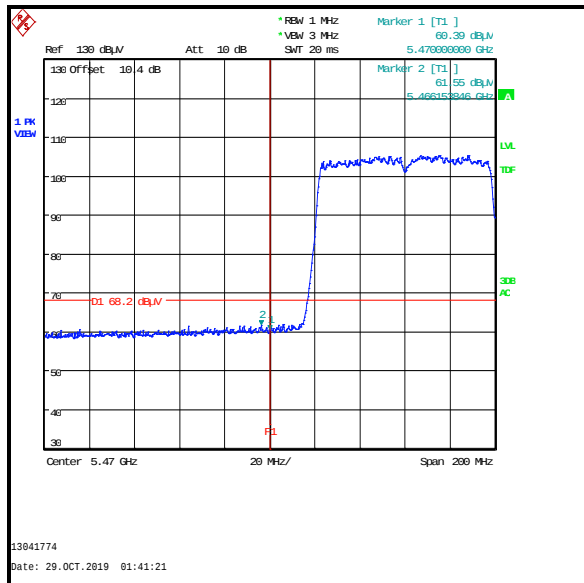
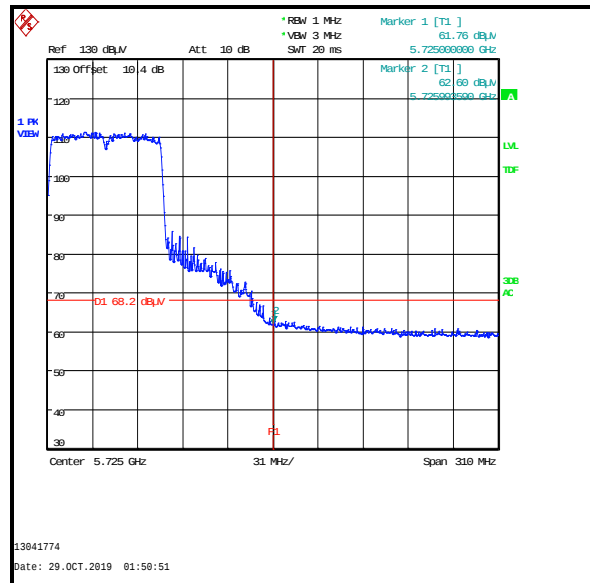
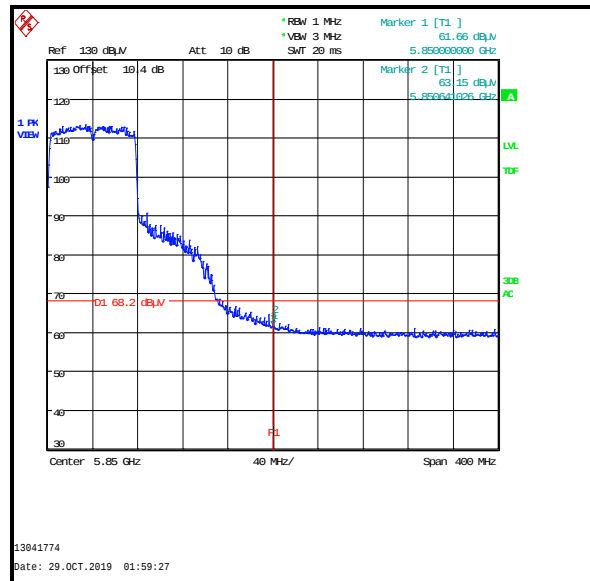
Frequency (MHz)	Level (dB μ V/m)	Limit (dB μ V/m)	Margin (dB)	Result
5457.500	61.3	68.2	6.9	Complied
5470	60.6	68.2	7.6	Complied
5725	60.4	68.2	7.8	Complied
5725.962	61.8	68.2	6.4	Complied
5850	59.5	68.2	8.7	Complied
5873.077	60.7	68.2	7.5	Complied

Transmitter Band Edge Radiated Emissions (5.47-5.725 GHz band operation) (continued)**Results: 802.11n / 40 MHz / MIMO / 2Tx CDD / BPSK / MCS0 / Peak****Lower Band Edge****Upper Band Edge****Straddle Channel emission level at 5850 MHz**

Transmitter Band Edge Radiated Emissions (5.47-5.725 GHz band operation) (continued)**Results: 802.11ac / 80 MHz / MIMO / 2Tx CDD / BPSK / MCS0x1 / Peak**

Frequency (MHz)	Level (dBm)	Limit (dBm)	Margin (dB)	Result
5466.154	-33.6	-27.0	6.6	Complied
5470	-34.8	-27.0	7.8	Complied
5725	-33.4	-27.0	6.4	Complied
5725.994	-32.6	-27.0	5.6	Complied
5850	-33.5	-27.0	6.5	Complied
5850.641	-32.0	-27.0	5.0	Complied

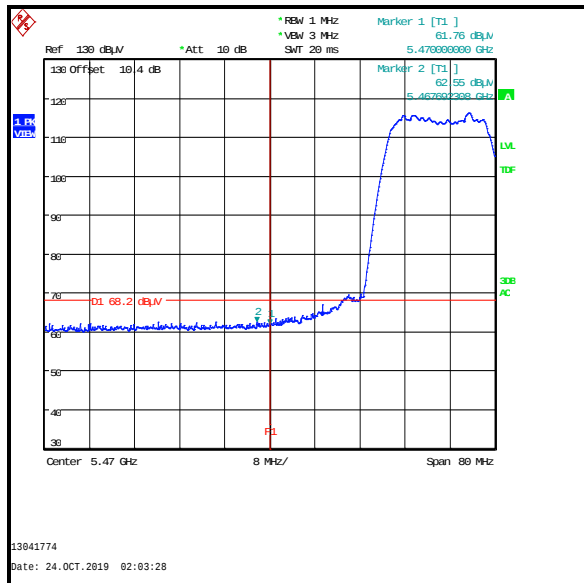
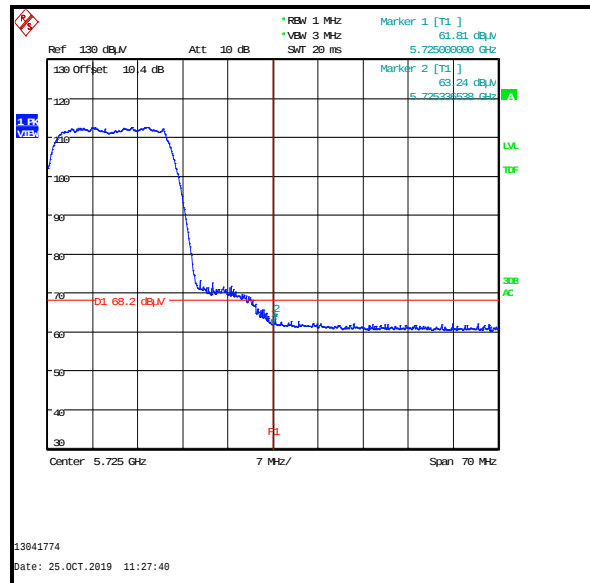
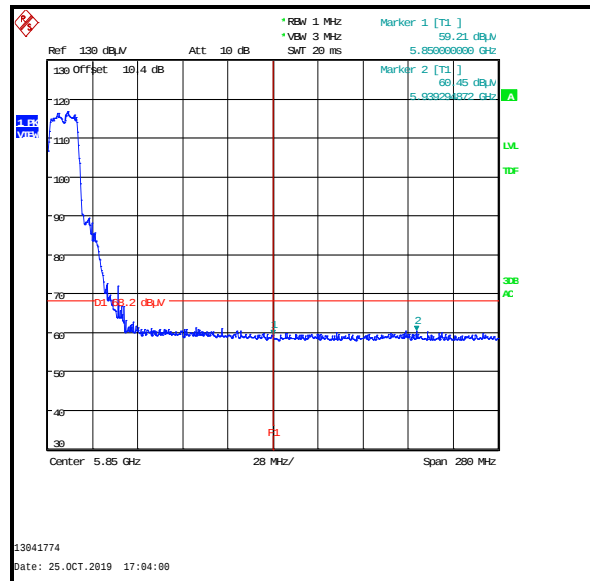
Frequency (MHz)	Level (dB μ V/m)	Limit (dB μ V/m)	Margin (dB)	Result
5466.154	61.6	68.2	6.6	Complied
5470	60.4	68.2	7.8	Complied
5725	61.8	68.2	6.4	Complied
5725.994	62.6	68.2	5.6	Complied
5850	61.7	68.2	6.5	Complied
5850.641	63.2	68.2	5.0	Complied

Transmitter Band Edge Radiated Emissions (5.47-5.725 GHz band operation) (continued)**Results: 802.11ac / 80 MHz / MIMO / 2Tx CDD / BPSK / MCS0x1 / Peak****Lower Band Edge****Upper Band Edge****Straddle Channel emission level at 5850 MHz**

Transmitter Band Edge Radiated Emissions (5.47-5.725 GHz band operation) (continued)**Results: 802.11n / 20 MHz / MIMO / 2Tx SDM / BPSK / MCS8 / Peak**

Frequency (MHz)	Level (dBm)	Limit (dBm)	Margin (dB)	Result
5467.692	-32.6	-27.0	5.6	Complied
5470	-33.4	-27.0	6.4	Complied
5725	-33.4	-27.0	6.4	Complied
5725.337	-32.0	-27.0	5.0	Complied
5850	-36.0	-27.0	9.0	Complied
5939.295	-34.7	-27.0	7.7	Complied

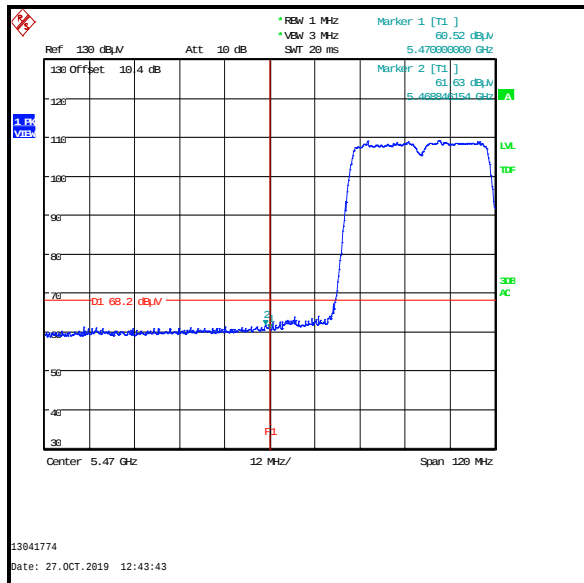
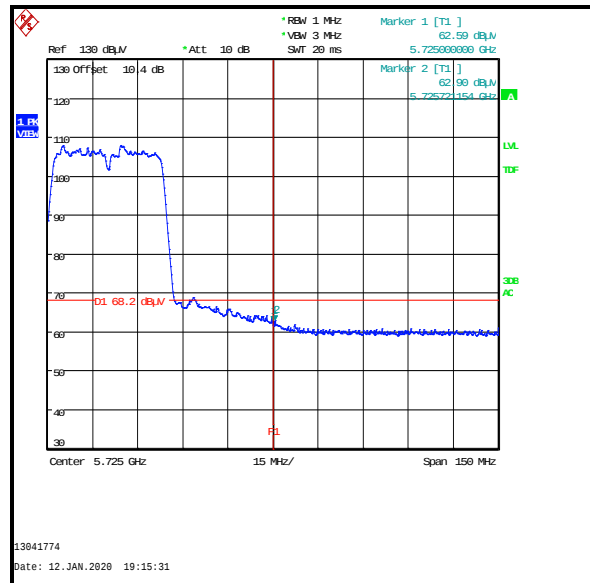
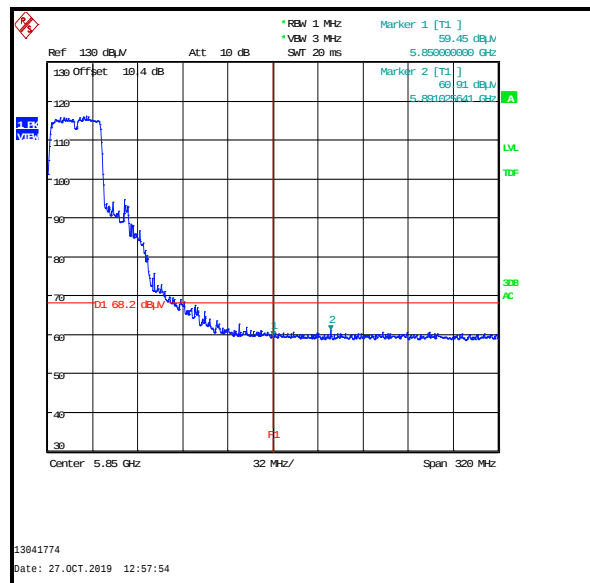
Frequency (MHz)	Level (dB μ V/m)	Limit (dB μ V/m)	Margin (dB)	Result
5467.692	62.6	68.2	5.6	Complied
5470	61.8	68.2	6.4	Complied
5725	61.8	68.2	6.4	Complied
5725.337	63.2	68.2	5.0	Complied
5850	59.2	68.2	9.0	Complied
5939.295	60.5	68.2	7.7	Complied

Transmitter Band Edge Radiated Emissions (5.47-5.725 GHz band operation) (continued)**Results: 802.11n / 20 MHz / MIMO / 2Tx SDM / BPSK / MCS8 / Peak****Lower Band Edge****Upper Band Edge****Straddle Channel emission level at 5850 MHz**

Transmitter Band Edge Radiated Emissions (5.47-5.725 GHz band operation) (continued)**Results: 802.11n / 40 MHz / MIMO / 2Tx SDM / BPSK / MCS8 / Peak**

Frequency (MHz)	Level (dBm)	Limit (dBm)	Margin (dB)	Result
5468.846	-33.6	-27.0	6.6	Complied
5470	-34.7	-27.0	7.7	Complied
5725	-32.6	-27.0	5.6	Complied
5725.721	-32.3	-27.0	5.3	Complied
5850	-35.7	-27.0	8.7	Complied
5891.026	-34.3	-27.0	7.3	Complied

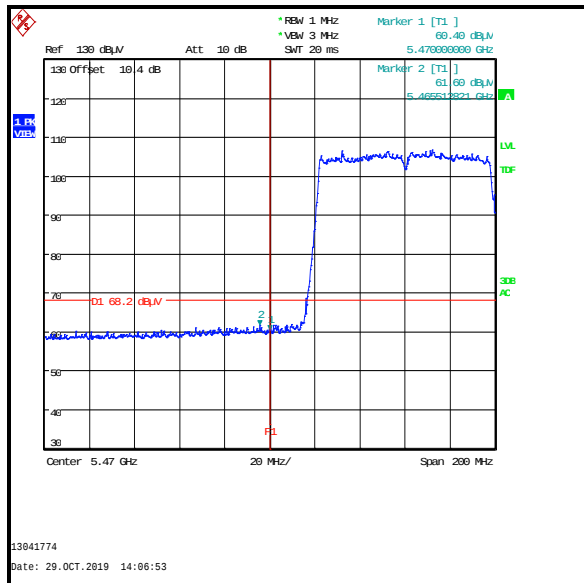
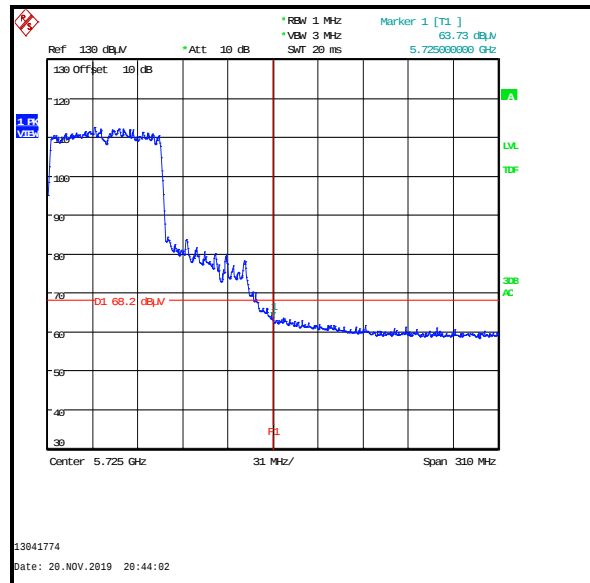
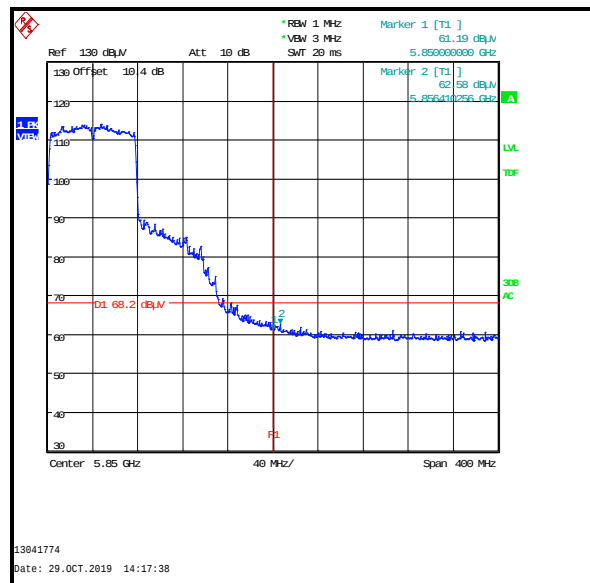
Frequency (MHz)	Level (dB μ V/m)	Limit (dB μ V/m)	Margin (dB)	Result
5468.846	61.6	68.2	6.6	Complied
5470	60.5	68.2	7.7	Complied
5725	62.6	68.2	5.6	Complied
5725.721	62.9	68.2	5.3	Complied
5850	59.5	68.2	8.7	Complied
5891.026	60.9	68.2	7.3	Complied

Transmitter Band Edge Radiated Emissions (5.47-5.725 GHz band operation) (continued)**Results: 802.11n / 40 MHz / MIMO / 2Tx SDM / BPSK / MCS8 / Peak****Lower Band Edge****Upper Band Edge****Straddle Channel emission level at 5850 MHz**

Transmitter Band Edge Radiated Emissions (5.47-5.725 GHz band operation) (continued)**Results: 802.11ac / 80 MHz / MIMO / 2Tx SDM / BPSK / MCS0x2 / Peak**

Frequency (MHz)	Level (dBm)	Limit (dBm)	Margin (dB)	Result
5465.513	-33.6	-27.0	6.6	Complied
5470	-34.8	-27.0	7.8	Complied
5725	-31.5	-27.0	4.5	Complied
5850	-34.0	-27.0	7.0	Complied
5856.410	-32.6	-27.0	5.6	Complied

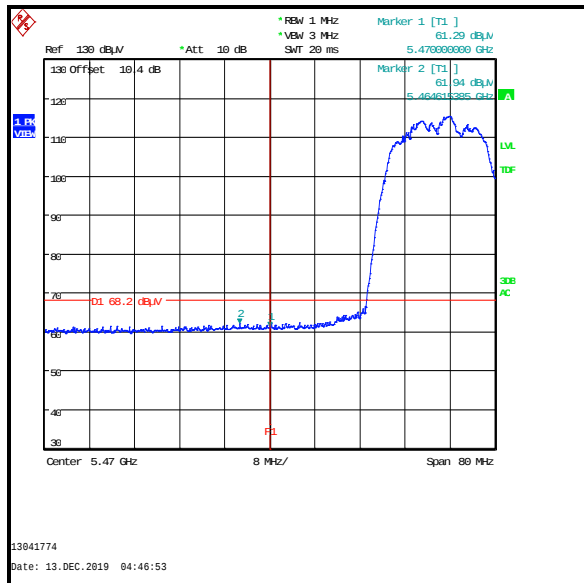
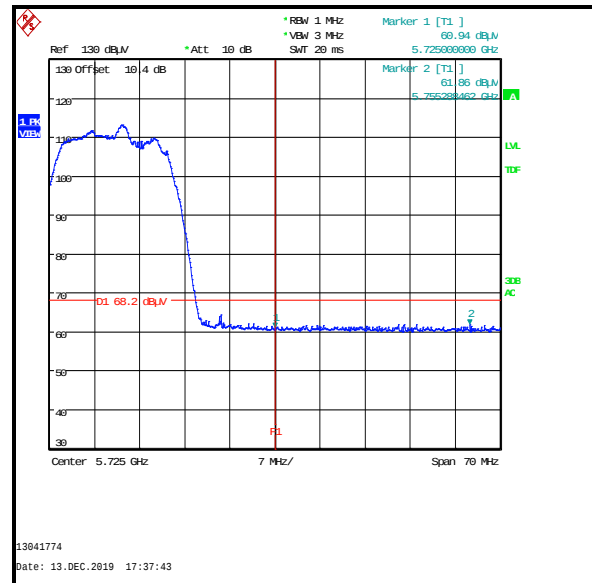
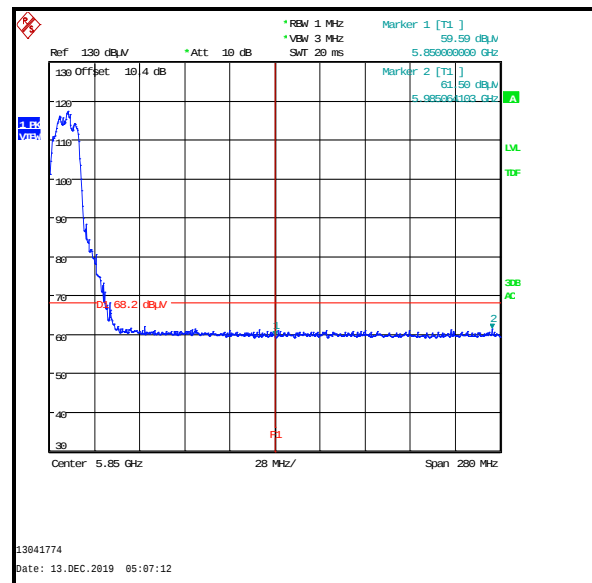
Frequency (MHz)	Level (dB μ V/m)	Limit (dB μ V/m)	Margin (dB)	Result
5465.513	61.6	68.2	6.6	Complied
5470	60.4	68.2	7.8	Complied
5725	63.7	68.2	4.5	Complied
5850	61.2	68.2	7.0	Complied
5856.410	62.6	68.2	5.6	Complied

Transmitter Band Edge Radiated Emissions (5.47-5.725 GHz band operation) (continued)**Results: 802.11ac / 80 MHz / MIMO / 2Tx SDM / BPSK / MCS0x2 / Peak****Lower Band Edge****Upper Band Edge****Straddle Channel emission level at 5850 MHz**

Transmitter Band Edge Radiated Emissions (5.47-5.725 GHz band operation) (continued)**Results: 802.11n / 20 MHz / MIMO / 2Tx TXBF / BPSK / MCS0 / Peak**

Frequency (MHz)	Level (dBm)	Limit (dBm)	Margin (dB)	Result
5464.615	-33.3	-27.0	6.3	Complied
5470	-33.9	-27.0	6.9	Complied
5725	-34.3	-27.0	7.3	Complied
5755.288	-33.3	-27.0	6.3	Complied
5850	-35.6	-27.0	8.6	Complied
5985.064	-33.7	-27.0	6.7	Complied

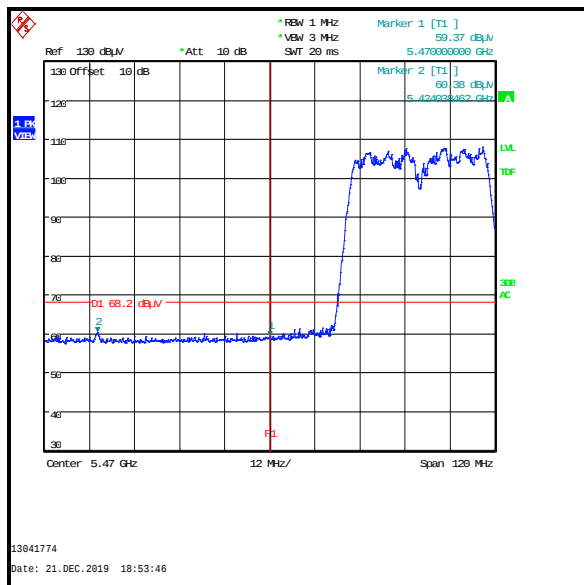
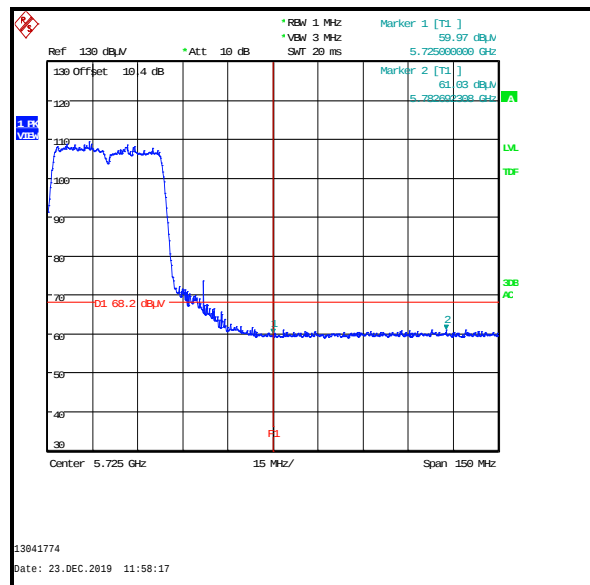
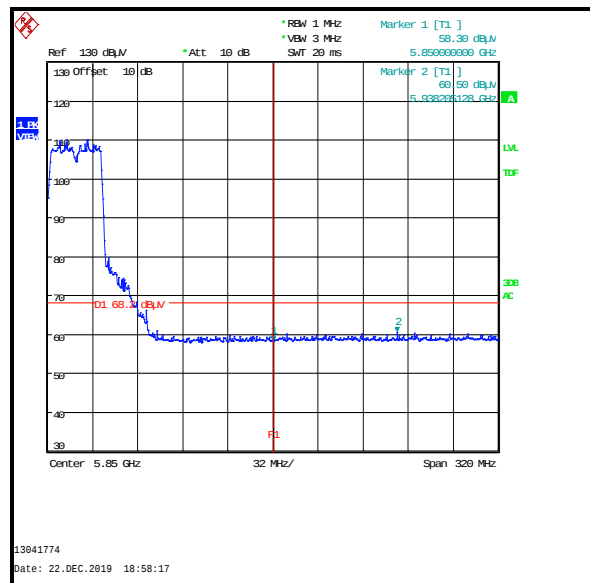
Frequency (MHz)	Level (dB μ V/m)	Limit (dB μ V/m)	Margin (dB)	Result
5464.615	61.9	68.2	6.3	Complied
5470	61.3	68.2	6.9	Complied
5725	60.9	68.2	7.3	Complied
5755.288	61.9	68.2	6.3	Complied
5850	59.6	68.2	8.6	Complied
5985.064	61.5	68.2	6.7	Complied

Transmitter Band Edge Radiated Emissions (5.47-5.725 GHz band operation) (continued)**Results: 802.11n / 20 MHz / MIMO / 2Tx TXBF / BPSK / MCS0 / Peak****Lower Band Edge****Upper Band Edge****Straddle Channel emission level at 5850 MHz**

Transmitter Band Edge Radiated Emissions (5.47-5.725 GHz band operation) (continued)**Results: 802.11n / 40 MHz / MIMO / 2Tx TXBF / BPSK / MCS0 / Peak**

Frequency (MHz)	Level (dBm)	Limit (dBm)	Margin (dB)	Result
5424.038	-34.8	-27.0	7.8	Complied
5470	-35.8	-27.0	8.8	Complied
5725	-35.2	-27.0	8.2	Complied
5782.692	-34.2	-27.0	7.2	Complied
5850	-36.9	-27.0	9.9	Complied
5938.205	-34.7	-27.0	7.7	Complied

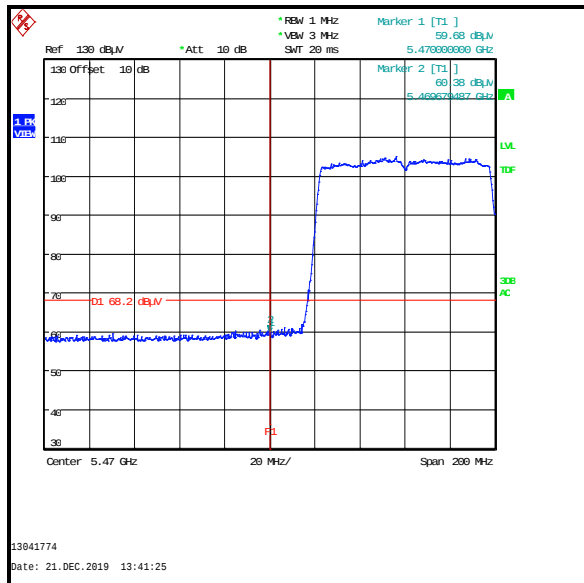
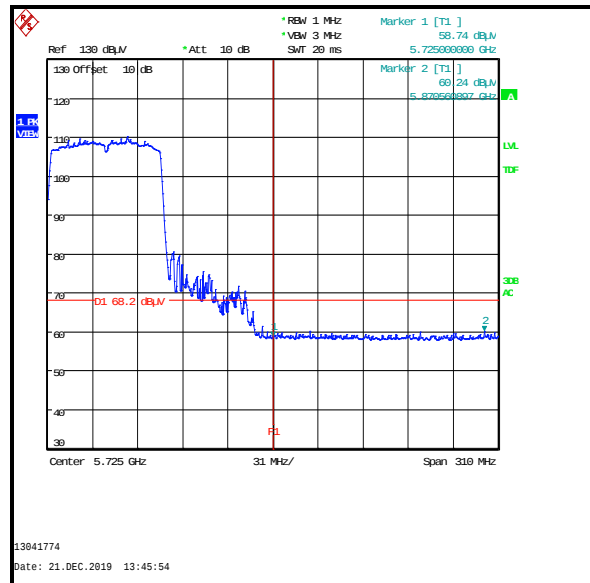
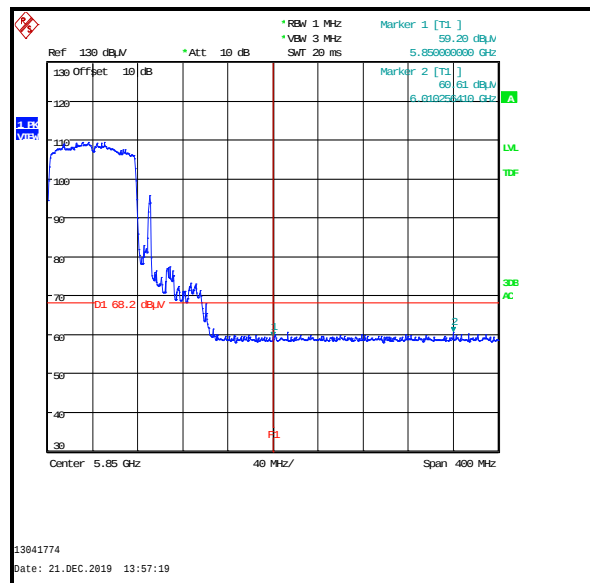
Frequency (MHz)	Level (dB μ V/m)	Limit (dB μ V/m)	Margin (dB)	Result
5424.038	60.4	68.2	7.8	Complied
5470	59.4	68.2	8.8	Complied
5725	60.0	68.2	8.2	Complied
5782.692	61.0	68.2	7.2	Complied
5850	58.3	68.2	9.9	Complied
5938.205	60.5	68.2	7.7	Complied

Transmitter Band Edge Radiated Emissions (5.47-5.725 GHz band operation) (continued)**Results: 802.11n / 40 MHz / MIMO / 2Tx TXBF / BPSK / MCS0 / Peak****Lower Band Edge****Upper Band Edge****Straddle Channel emission level at 5850 MHz**

Transmitter Band Edge Radiated Emissions (5.47-5.725 GHz band operation) (continued)**Results: 802.11ac / 80 MHz / MIMO / 2Tx TXBF / BPSK / MCS0x1 / Peak**

Frequency (MHz)	Level (dBm)	Limit (dBm)	Margin (dB)	Result
5469.679	-34.8	-27.0	7.8	Complied
5470	-35.5	-27.0	8.5	Complied
5725	-36.5	-27.0	9.5	Complied
5870.561	-35.0	-27.0	8.0	Complied
5850	-36.0	-27.0	9.0	Complied
6010.256	-34.6	-27.0	7.6	Complied

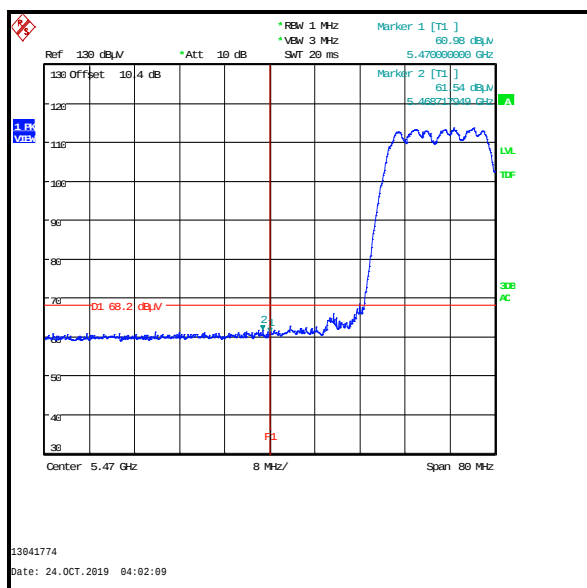
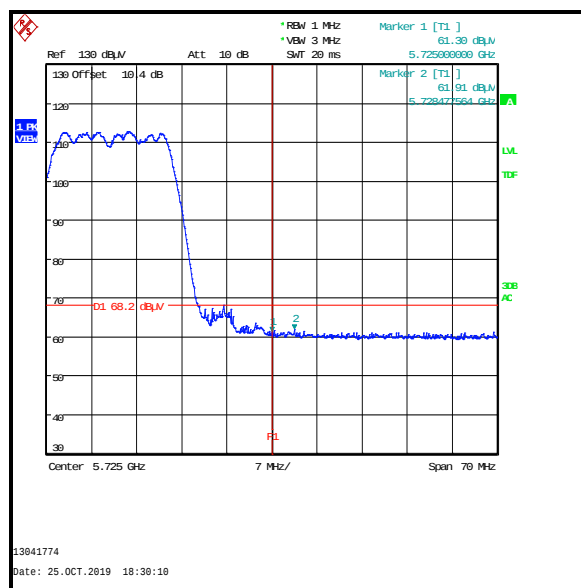
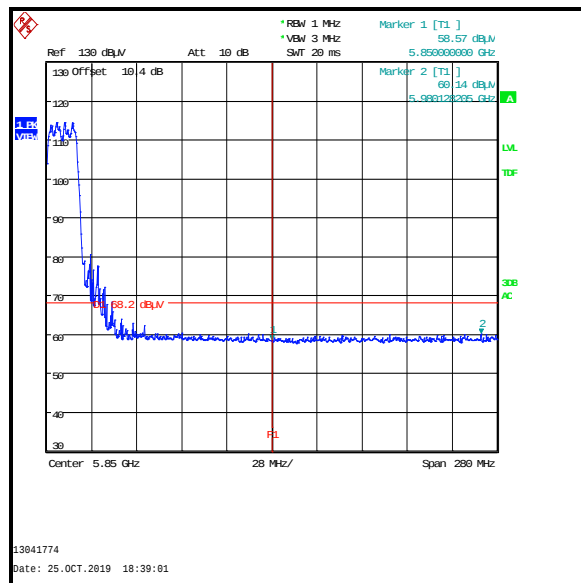
Frequency (MHz)	Level (dB μ V/m)	Limit (dB μ V/m)	Margin (dB)	Result
5469.679	60.4	68.2	7.8	Complied
5470	59.7	68.2	8.5	Complied
5725	58.7	68.2	9.5	Complied
5870.561	60.2	68.2	8.0	Complied
5850	59.2	68.2	9.0	Complied
6010.256	60.6	68.2	7.6	Complied

Transmitter Band Edge Radiated Emissions (5.47-5.725 GHz band operation) (continued)**Results: 802.11ac / 80 MHz / MIMO / 2Tx TXBF / BPSK / MCS0x1 / Peak****Lower Band Edge****Upper Band Edge****Straddle Channel emission level at 5850 MHz**

Transmitter Band Edge Radiated Emissions (5.47-5.725 GHz band operation) (continued)**Results: 802.11n / 20 MHz / MIMO / 3Tx CDD / BPSK / MCS0 / Peak**

Frequency (MHz)	Level (dBm)	Limit (dBm)	Margin (dB)	Result
5468.718	-33.7	-27.0	6.7	Complied
5470	-34.2	-27.0	7.2	Complied
5725	-33.9	-27.0	6.9	Complied
5728.478	-33.3	-27.0	6.3	Complied
5850	-36.6	-27.0	9.6	Complied
5980.128	-35.1	-27.0	8.1	Complied

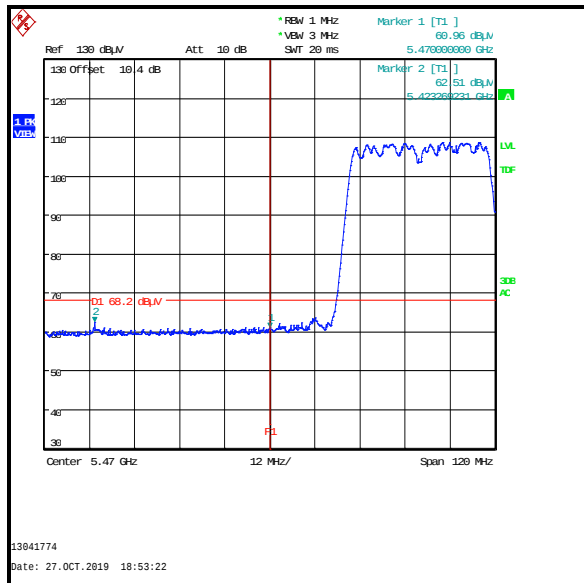
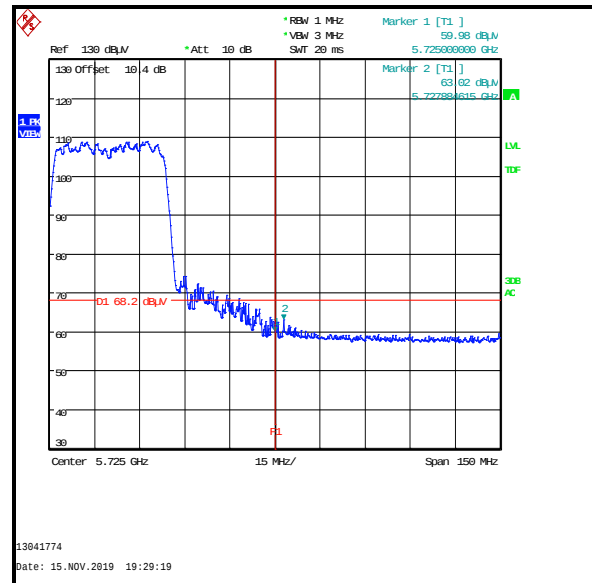
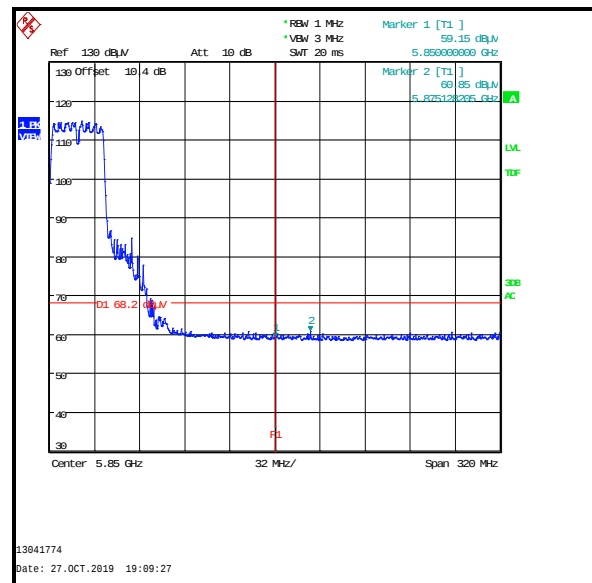
Frequency (MHz)	Level (dB μ V/m)	Limit (dB μ V/m)	Margin (dB)	Result
5468.718	61.5	68.2	6.7	Complied
5470	61.0	68.2	7.2	Complied
5725	61.3	68.2	6.9	Complied
5728.478	61.9	68.2	6.3	Complied
5850	58.6	68.2	9.6	Complied
5980.128	60.1	68.2	8.1	Complied

Transmitter Band Edge Radiated Emissions (5.47-5.725 GHz band operation) (continued)**Results: 802.11n / 20 MHz / MIMO / 3Tx CDD / BPSK / MCS0 / Peak****Lower Band Edge****Upper Band Edge****Straddle Channel emission level at 5850 MHz**

Transmitter Band Edge Radiated Emissions (5.47-5.725 GHz band operation) (continued)**Results: 802.11n / 40 MHz / MIMO / 3Tx CDD / BPSK / MCS0 / Peak**

Frequency (MHz)	Level (dBm)	Limit (dBm)	Margin (dB)	Result
5423.269	-32.7	-27.0	5.7	Complied
5470	-34.2	-27.0	7.2	Complied
5725	-35.2	-27.0	8.2	Complied
5727.885	-32.2	-27.0	5.2	Complied
5850	-36.0	-27.0	9.0	Complied
5875.128	-34.3	-27.0	7.3	Complied

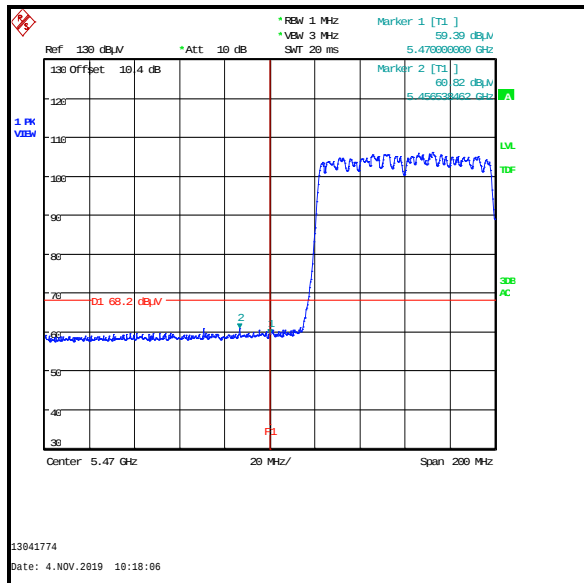
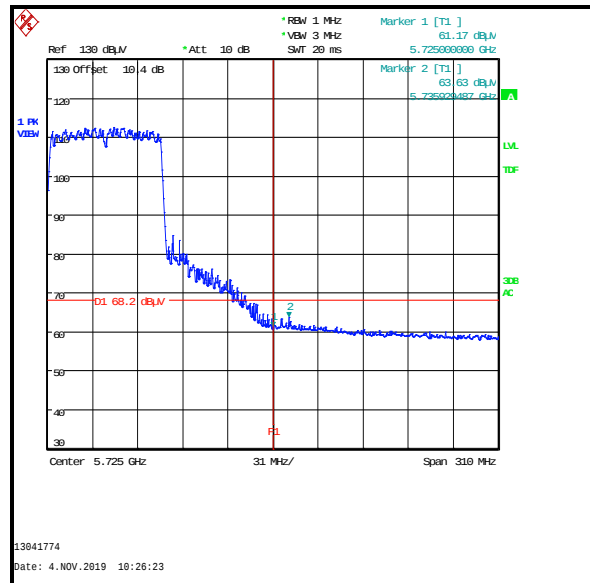
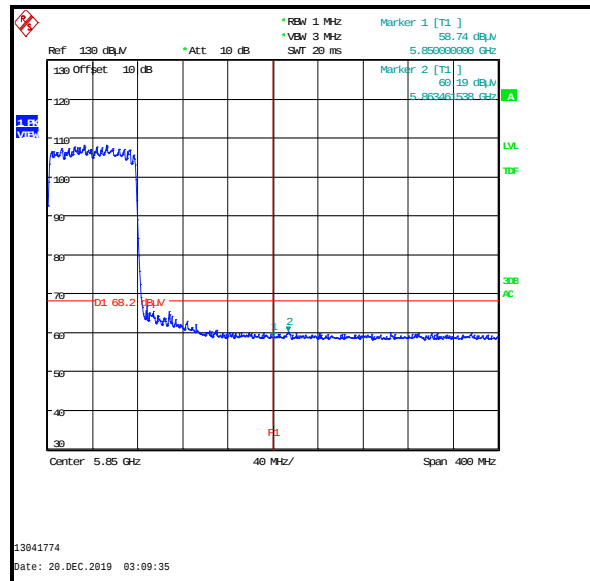
Frequency (MHz)	Level (dB μ V/m)	Limit (dB μ V/m)	Margin (dB)	Result
5423.269	62.5	68.2	5.7	Complied
5470	61.0	68.2	7.2	Complied
5725	60.0	68.2	8.2	Complied
5727.885	63.0	68.2	5.2	Complied
5850	59.2	68.2	9.0	Complied
5875.128	60.9	68.2	7.3	Complied

Transmitter Band Edge Radiated Emissions (5.47-5.725 GHz band operation) (continued)**Results: 802.11n / 40 MHz / MIMO / 3Tx CDD / BPSK / MCS0 / Peak****Lower Band Edge****Upper Band Edge****Straddle Channel emission level at 5850 MHz**

Transmitter Band Edge Radiated Emissions (5.47-5.725 GHz band operation) (continued)**Results: 802.11ac / 80 MHz / MIMO / 3Tx CDD / BPSK / MCS0x1 / Peak**

Frequency (MHz)	Level (dBm)	Limit (dBm)	Margin (dB)	Result
5456.538	-34.4	-27.0	7.4	Complied
5470	-35.8	-27.0	8.8	Complied
5725	-34.0	-27.0	7.0	Complied
5735.929	-31.6	-27.0	4.6	Complied
5850	-36.5	-27.0	9.5	Complied
5863.462	-35.0	-27.0	8.0	Complied

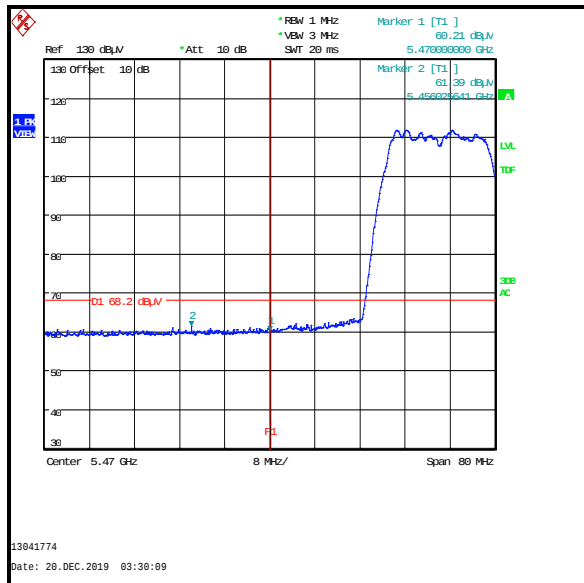
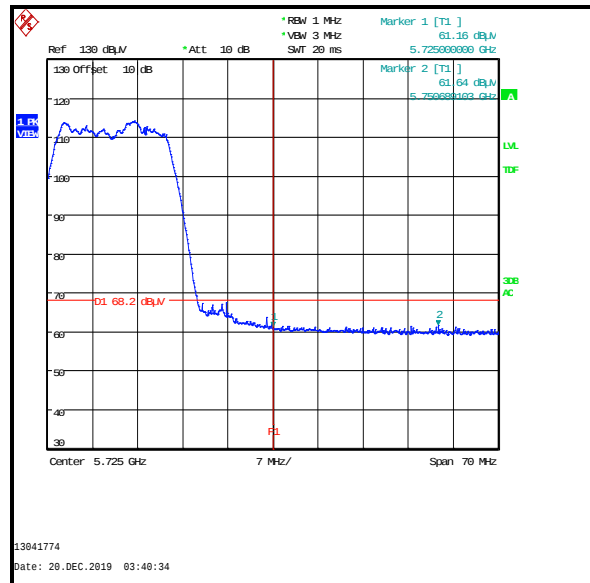
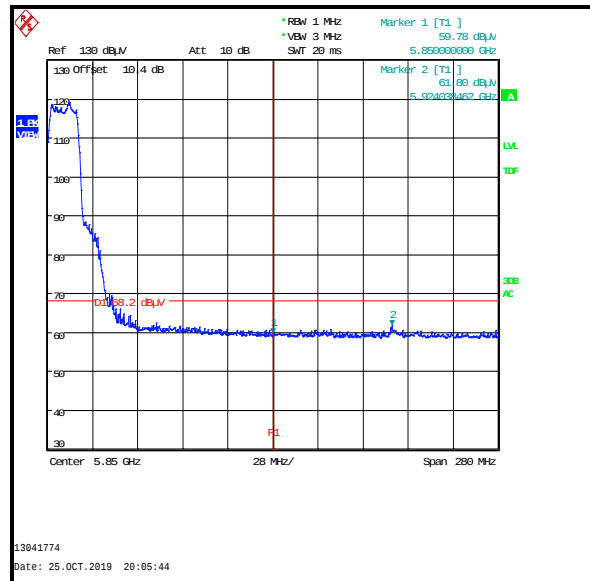
Frequency (MHz)	Level (dB μ V/m)	Limit (dB μ V/m)	Margin (dB)	Result
5456.538	60.8	68.2	7.4	Complied
5470	59.4	68.2	8.8	Complied
5725	61.2	68.2	7.0	Complied
5735.929	63.6	68.2	4.6	Complied
5850	58.7	68.2	9.5	Complied
5863.462	60.2	68.2	8.0	Complied

Transmitter Band Edge Radiated Emissions (5.47-5.725 GHz band operation) (continued)**Results: 802.11ac / 80 MHz / MIMO / 3Tx CDD / BPSK / MCS0x1 / Peak****Lower Band Edge****Upper Band Edge****Straddle Channel emission level at 5850 MHz**

Transmitter Band Edge Radiated Emissions (5.47-5.725 GHz band operation) (continued)**Results: 802.11n / 20 MHz / MIMO / 3Tx SDM / BPSK / MCS16 / Peak**

Frequency (MHz)	Level (dBm)	Limit (dBm)	Margin (dB)	Result
5456.026	-33.8	-27.0	6.8	Complied
5470	-35.0	-27.0	8.0	Complied
5725	-34.0	-27.0	7.0	Complied
5750.689	-33.6	-27.0	6.6	Complied
5850	-35.4	-27.0	8.4	Complied
5924.038	-33.4	-27.0	6.4	Complied

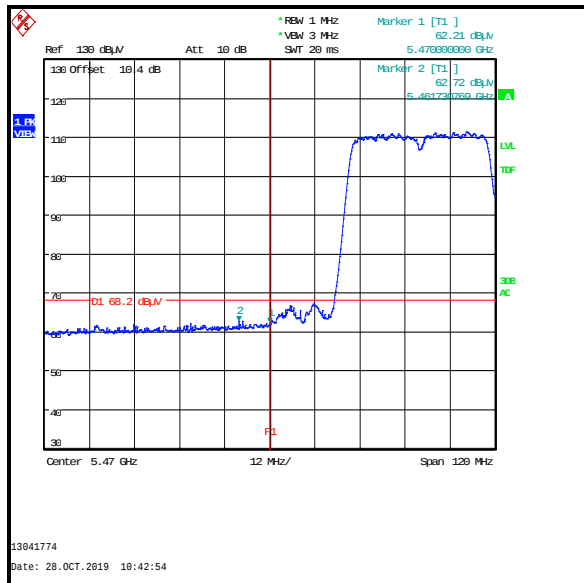
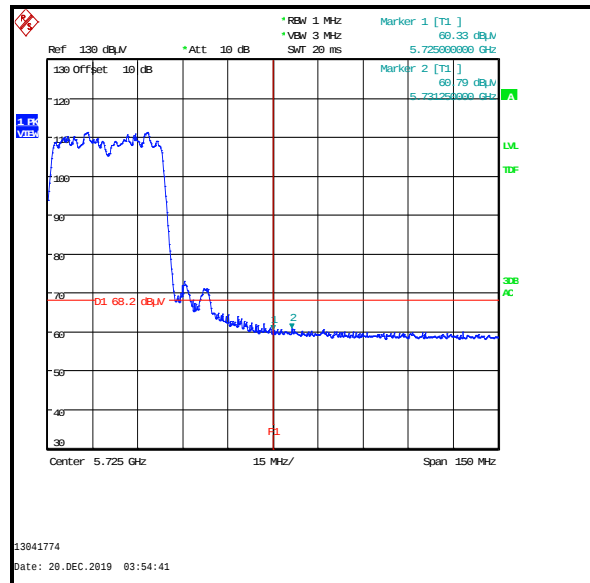
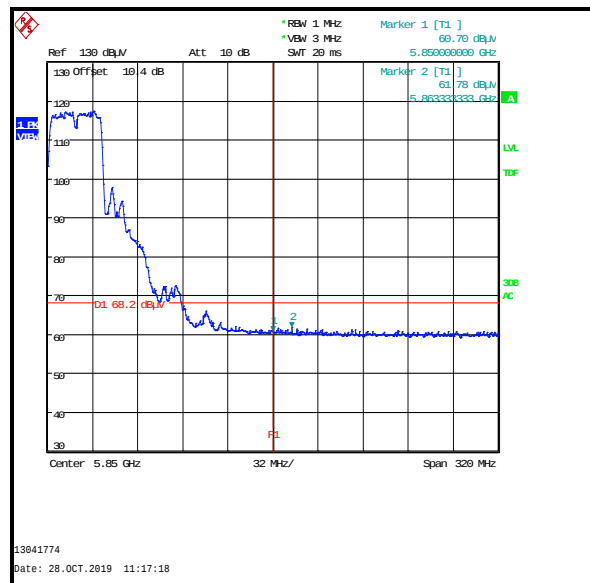
Frequency (MHz)	Level (dB μ V/m)	Limit (dB μ V/m)	Margin (dB)	Result
5456.026	61.4	68.2	6.8	Complied
5470	60.2	68.2	8.0	Complied
5725	61.2	68.2	7.0	Complied
5750.689	61.6	68.2	6.6	Complied
5850	59.8	68.2	8.4	Complied
5924.038	61.8	68.2	6.4	Complied

Transmitter Band Edge Radiated Emissions (5.47-5.725 GHz band operation) (continued)**Results: 802.11n / 20 MHz / MIMO / 3Tx SDM / BPSK / MCS16 / Peak****Lower Band Edge****Upper Band Edge****Straddle Channel emission level at 5850 MHz**

Transmitter Band Edge Radiated Emissions (5.47-5.725 GHz band operation) (continued)**Results: 802.11n / 40 MHz / MIMO / 3Tx SDM / BPSK / MCS16 / Peak**

Frequency (MHz)	Level (dBm)	Limit (dBm)	Margin (dB)	Result
5461.731	-32.5	-27.0	5.5	Complied
5470	-33.0	-27.0	6.0	Complied
5725	-34.9	-27.0	7.9	Complied
5731.250	-34.4	-27.0	7.4	Complied
5850	-34.5	-27.0	7.5	Complied
5863.333	-33.4	-27.0	6.4	Complied

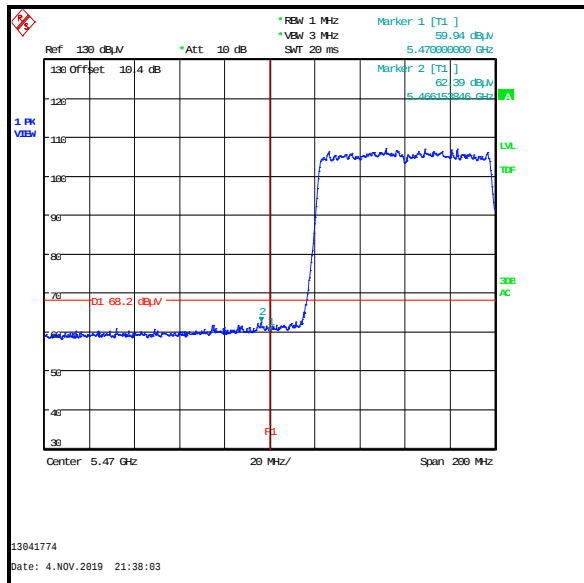
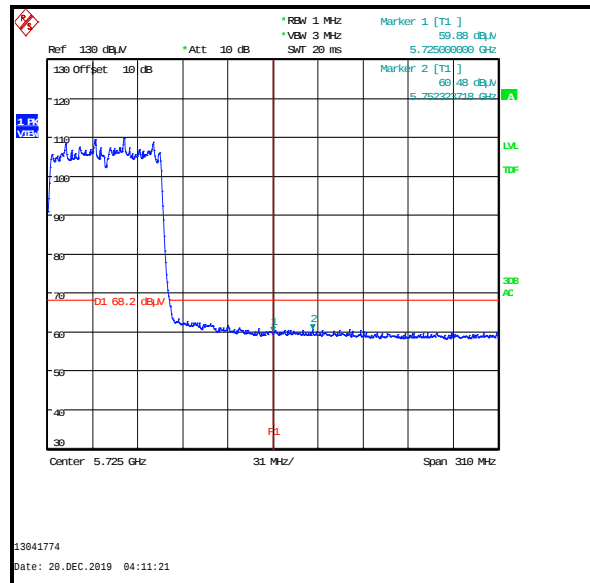
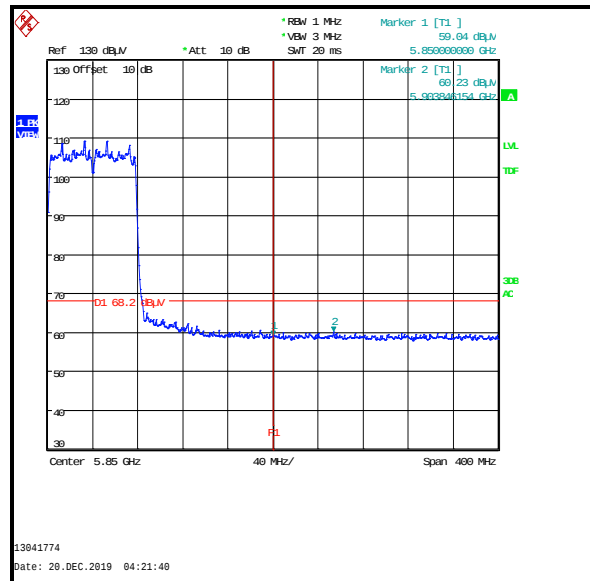
Frequency (MHz)	Level (dB μ V/m)	Limit (dB μ V/m)	Margin (dB)	Result
5461.731	62.7	68.2	5.5	Complied
5470	62.2	68.2	6.0	Complied
5725	60.3	68.2	7.9	Complied
5731.250	60.8	68.2	7.4	Complied
5850	60.7	68.2	7.5	Complied
5863.333	61.8	68.2	6.4	Complied

Transmitter Band Edge Radiated Emissions (5.47-5.725 GHz band operation) (continued)**Results: 802.11n / 40 MHz / MIMO / 3Tx SDM / BPSK / MCS16 / Peak****Lower Band Edge****Upper Band Edge****Straddle Channel emission level at 5850 MHz**

Transmitter Band Edge Radiated Emissions (5.47-5.725 GHz band operation) (continued)**Results: 802.11ac / 80 MHz / MIMO / 3Tx SDM / BPSK / MCS0x3 / Peak**

Frequency (MHz)	Level (dBm)	Limit (dBm)	Margin (dB)	Result
5466.154	-32.8	-27.0	5.8	Complied
5470	-35.3	-27.0	8.3	Complied
5725	-35.3	-27.0	8.3	Complied
5752.324	-34.7	-27.0	7.7	Complied
5850	-36.2	-27.0	9.2	Complied
5903.846	-35.0	-27.0	8.0	Complied

Frequency (MHz)	Level (dB μ V/m)	Limit (dB μ V/m)	Margin (dB)	Result
5466.154	62.4	68.2	5.8	Complied
5470	59.9	68.2	8.3	Complied
5725	59.9	68.2	8.3	Complied
5752.324	60.5	68.2	7.7	Complied
5850	59.0	68.2	9.2	Complied
5903.846	60.2	68.2	8.0	Complied

Transmitter Band Edge Radiated Emissions (5.47-5.725 GHz band operation) (continued)**Results: 802.11ac / 80 MHz / MIMO / 3Tx SDM / BPSK / MCS0x3 / Peak****Lower Band Edge****Upper Band Edge****Straddle Channel emission level at 5850 MHz**

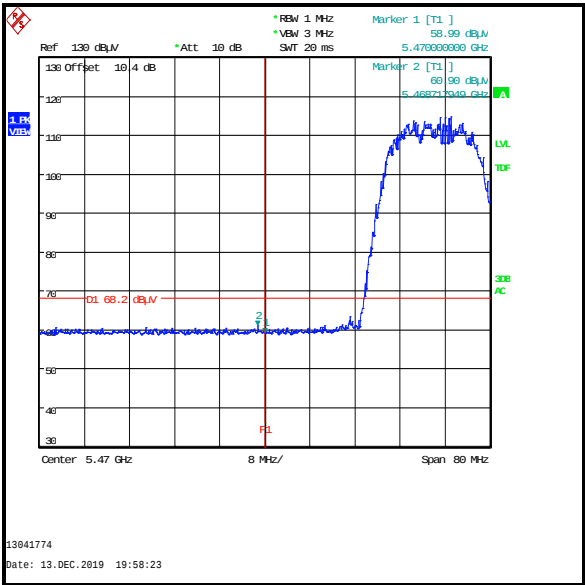
Transmitter Band Edge Radiated Emissions (5.47-5.725 GHz band operation) (continued)**Results: 802.11n / 20 MHz / MIMO / 3Tx TXBF / BPSK / MCS0 / Peak**

Frequency (MHz)	Level (dBm)	Limit (dBm)	Margin (dB)	Result
5468.718	-34.3	-27.0	7.3	Complied
5470	-36.2	-27.0	9.2	Complied
5725	-34.9	-27.0	7.9	Complied
5734.423	-33.4	-27.0	6.4	Complied
5850	-35.5	-27.0	8.5	Complied
5944.231	-34.2	-27.0	7.2	Complied

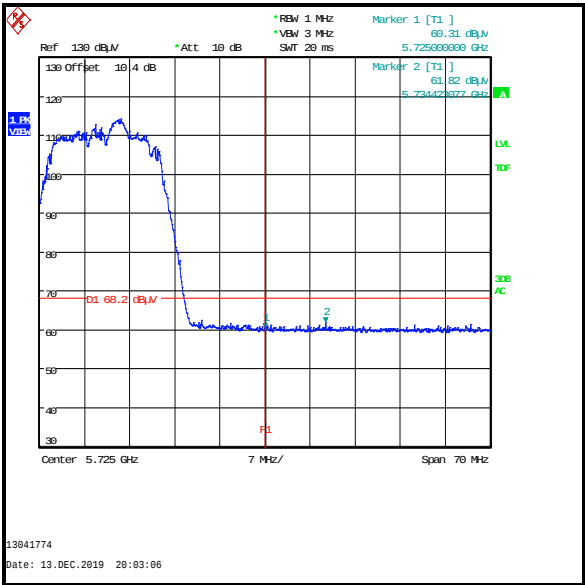
Frequency (MHz)	Level (dB μ V/m)	Limit (dB μ V/m)	Margin (dB)	Result
5468.718	60.9	68.2	7.3	Complied
5470	59.0	68.2	9.2	Complied
5725	60.3	68.2	7.9	Complied
5734.423	61.8	68.2	6.4	Complied
5850	59.7	68.2	8.5	Complied
5944.231	61.0	68.2	7.2	Complied

Transmitter Band Edge Radiated Emissions (5.47-5.725 GHz band operation) (continued)

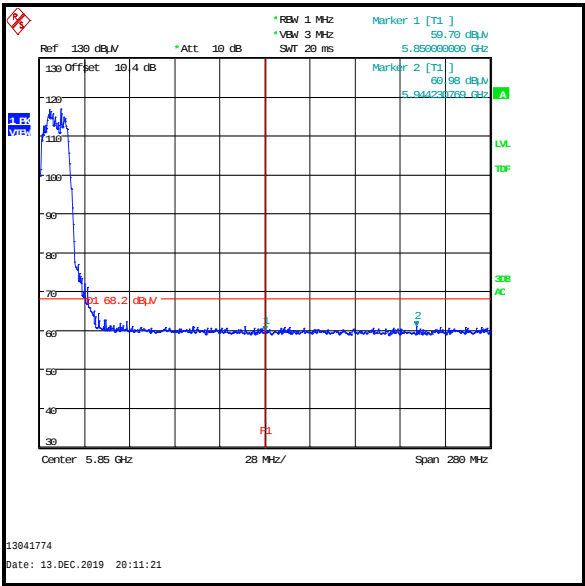
Results: 802.11n / 20 MHz / MIMO / 3Tx TXBF / BPSK / MCS0 / Peak



Lower Band Edge



Upper Band Edge

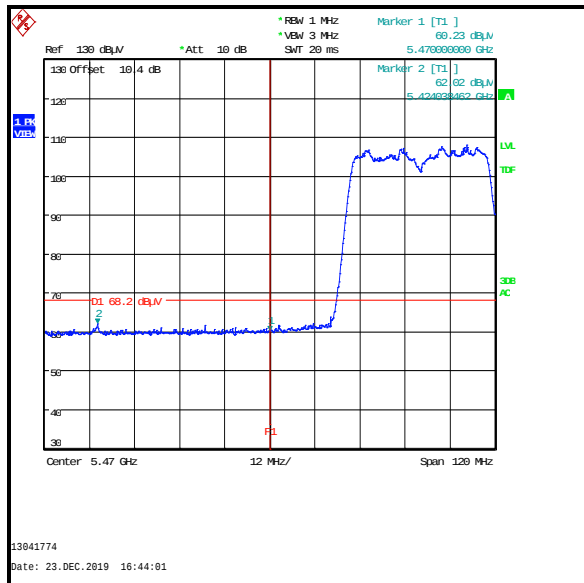
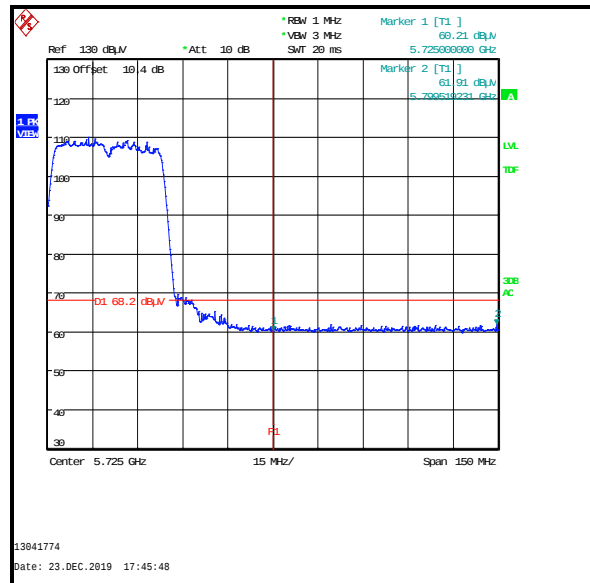
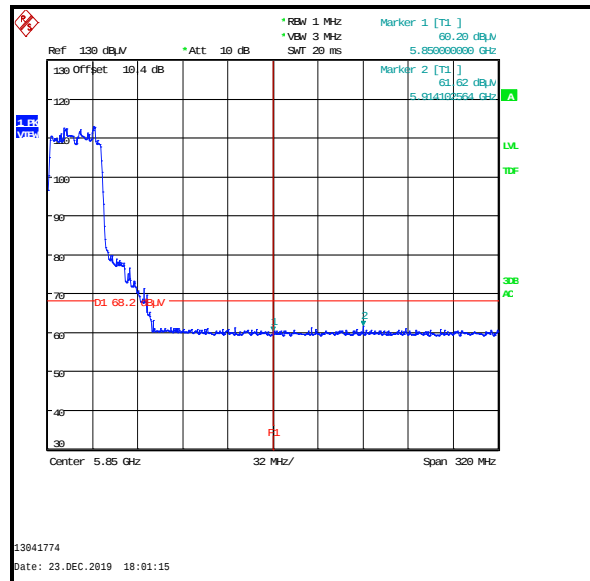


Straddle Channel emission level at 5850 MHz

Transmitter Band Edge Radiated Emissions (5.47-5.725 GHz band operation) (continued)**Results: 802.11n / 40 MHz / MIMO / 3Tx TXBF / BPSK / MCS0 / Peak**

Frequency (MHz)	Level (dBm)	Limit (dBm)	Margin (dB)	Result
5424.038	-33.2	-27.0	6.2	Complied
5470	-35.0	-27.0	8.0	Complied
5725	-35.0	-27.0	8.0	Complied
5799.519	-33.3	-27.0	6.3	Complied
5850	-35.0	-27.0	8.0	Complied
5914.103	-33.6	-27.0	6.6	Complied

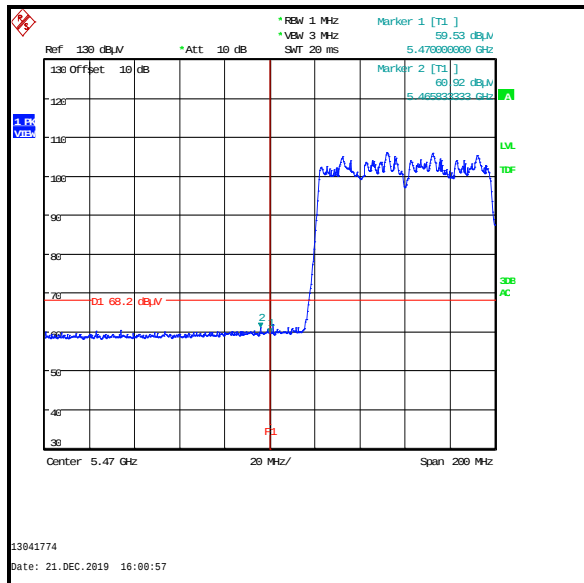
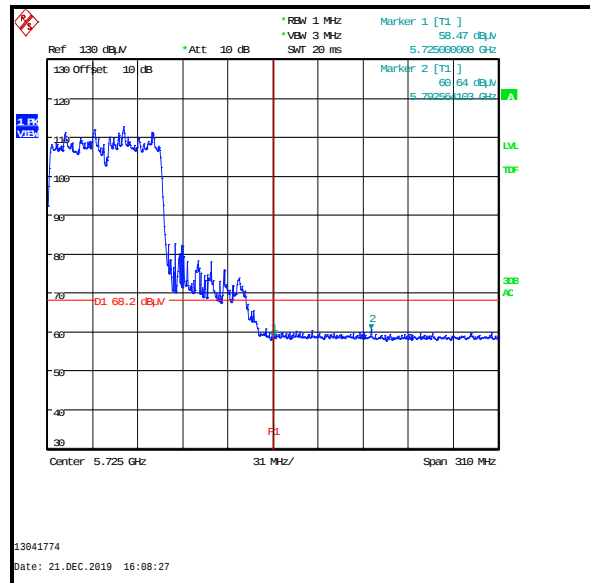
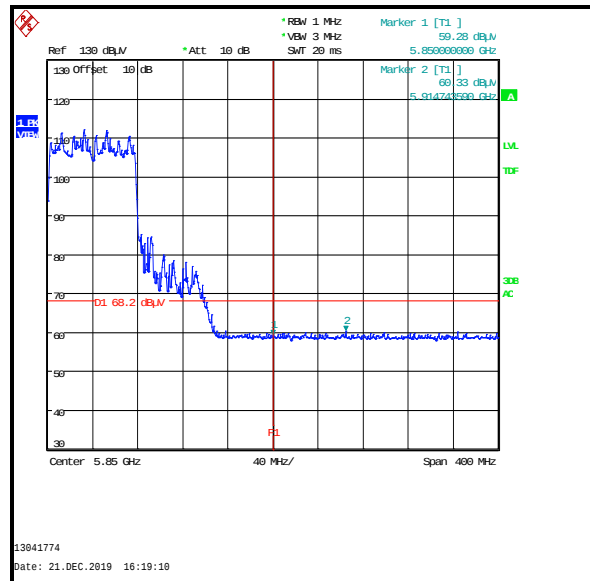
Frequency (MHz)	Level (dB μ V/m)	Limit (dB μ V/m)	Margin (dB)	Result
5424.038	62.0	68.2	6.2	Complied
5470	60.2	68.2	8.0	Complied
5725	60.2	68.2	8.0	Complied
5799.519	61.9	68.2	6.3	Complied
5850	60.2	68.2	8.0	Complied
5914.103	61.6	68.2	6.6	Complied

Transmitter Band Edge Radiated Emissions (5.47-5.725 GHz band operation) (continued)**Results: 802.11n / 40 MHz / MIMO / 3Tx TXBF / BPSK / MCS0 / Peak****Lower Band Edge****Upper Band Edge****Straddle Channel emission level at 5850 MHz**

Transmitter Band Edge Radiated Emissions (5.47-5.725 GHz band operation) (continued)**Results: 802.11ac / 80 MHz / MIMO / 3Tx TXBF / BPSK / MCS0x1 / Peak**

Frequency (MHz)	Level (dBm)	Limit (dBm)	Margin (dB)	Result
5465.833	-34.3	-27.0	7.3	Complied
5470	-35.7	-27.0	8.7	Complied
5725	-36.7	-27.0	9.7	Complied
5792.564	-34.6	-27.0	7.6	Complied
5850	-35.9	-27.0	8.9	Complied
5914.744	-34.9	-27.0	7.9	Complied

Frequency (MHz)	Level (dB μ V/m)	Limit (dB μ V/m)	Margin (dB)	Result
5465.833	60.9	68.2	7.3	Complied
5470	59.5	68.2	8.7	Complied
5725	58.5	68.2	9.7	Complied
5792.564	60.6	68.2	7.6	Complied
5850	59.3	68.2	8.9	Complied
5914.744	60.3	68.2	7.9	Complied

Transmitter Band Edge Radiated Emissions (5.47-5.725 GHz band operation) (continued)**Results: 802.11ac / 80 MHz / MIMO / 3Tx TXBF / BPSK / MCS0x1 / Peak****Lower Band Edge****Upper Band Edge****Straddle Channel emission level at 5850 MHz**

Transmitter Band Edge Radiated Emissions (5.725-5.85 GHz band)**5.3.4. 5.725-5.85 GHz band****Test Summary:**

Test Engineers:	Andrew Harding, Mark Perry, Mohamed Toubella & James O'Reilly	Test Dates:	22 October 2019 to 10 January 2020
Test Sample Serial Numbers:	C02ZG00FP22J & C02ZG00KP22J		

FCC Reference:	Parts 15.407(b)(4)(i),(7), 15.205 & 15.209(a)
Test Method Used:	ANSI C63.10 Section 6.10 & KDB 789033 II.G.

Environmental Conditions:

Temperature (°C):	22 to 25
Relative Humidity (%):	34 to 45

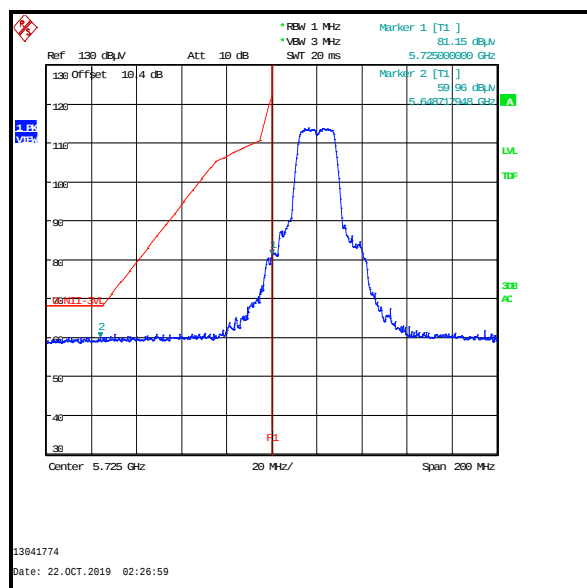
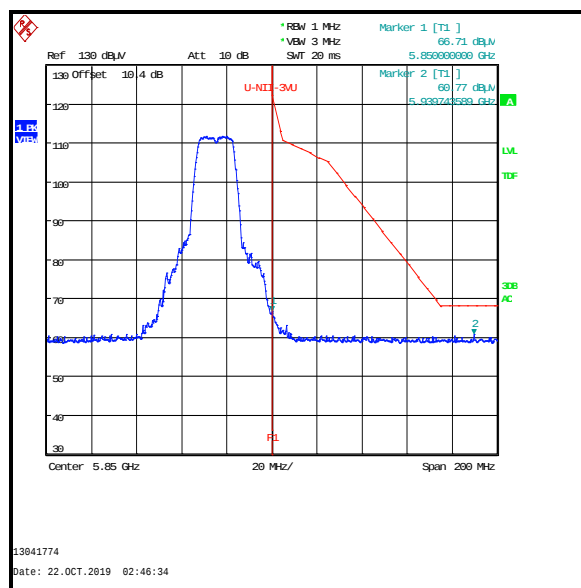
Transmitter Band Edge Radiated Emissions (5.725-5.85 GHz band operation) (continued)**Note(s):**

1. The following modes were tested:
 - o 802.11a - BPSK / 6 Mbps / Core 0
 - o 802.11n HT20 / SISO - BPSK / MCS0 / Core 0
 - o 802.11n HT40 / SISO - BPSK / MCS0 / Core 0
 - o 802.11ac VHT80 / SISO – BPSK / MCS0x1 / Core 0
 - o 802.11n HT20 / MIMO / 2Tx CDD - BPSK / MCS0
 - o 802.11n HT40 / MIMO / 2Tx CDD - BPSK / MCS0
 - o 802.11ac VHT80 / MIMO / 2Tx CDD - BPSK / MCS0x1
 - o 802.11n HT20 / MIMO / 2Tx SDM - BPSK / MCS8
 - o 802.11n HT40 / MIMO / 2Tx SDM - BPSK / MCS8
 - o 802.11ac VHT80 / MIMO / 2Tx SDM - BPSK / MCS0x2
 - o 802.11n HT20 / MIMO / 2Tx TXBF - BPSK / MCS0
 - o 802.11n HT40 / MIMO / 2Tx TXBF - BPSK / MCS0
 - o 802.11ac VHT80 / MIMO / 2Tx TXBF - BPSK / MCS0x1
 - o 802.11n HT20 / MIMO / 3Tx CDD - BPSK / MCS0
 - o 802.11n HT40 / MIMO / 3Tx CDD - BPSK / MCS0
 - o 802.11ac VHT80 / MIMO / 3Tx CDD - BPSK / MCS0x1
 - o 802.11n HT20 / MIMO / 3Tx SDM - BPSK / MCS16
 - o 802.11n HT40 / MIMO / 3Tx SDM - BPSK / MCS16
 - o 802.11ac VHT80 / MIMO / 3Tx SDM - BPSK / MCS0x3
 - o 802.11n HT20 / MIMO / 3Tx TXBF - BPSK / MCS0
 - o 802.11n HT40 / MIMO / 3Tx TXBF - BPSK / MCS0
 - o 802.11ac VHT80 / MIMO / 3Tx TXBF - BPSK / MCS0x1
2. Lower band edge measurements were performed with the EUT transmitting on the bottom channel. Upper band edge measurements were performed with the EUT transmitting on the top channel.
3. For completeness, results are also shown as EIRP in dBm and also as field strength in dBμV/m. Measured field strength was converted to EIRP in accordance with KDB 789033 G.2.c)(iii) using a conversion factor of 95.2.

Transmitter Band Edge Radiated Emissions (5.725-5.85 GHz band operation) (continued)**Results: 802.11a / 20 MHz / SISO / BPSK / 6 Mbps / Core 0 / Peak**

Frequency (MHz)	Level (dBm)	Limit (dBm/MHz)	Margin (dB)	Result
5648.718	-35.2	-27.0	8.2	Complied
5725	-14.0	27.0	41.0	Complied
5850	-28.5	27.0	55.5	Complied
5939.744	-34.4	-27.0	7.4	Complied

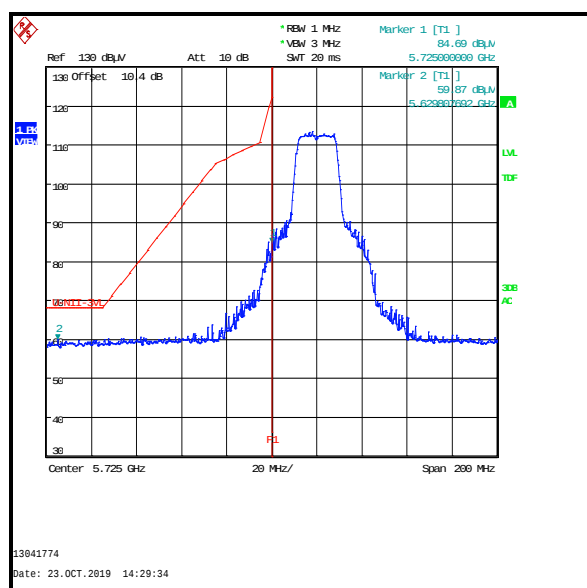
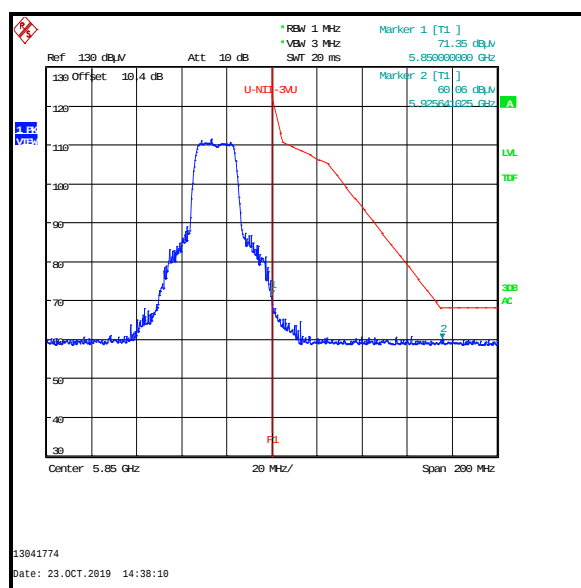
Frequency (MHz)	Level (dBμV/m)	Limit (dBμV/m)	Margin (dB)	Result
5648.718	60.0	68.2	8.2	Complied
5725	81.2	122.2	41.0	Complied
5850	66.7	122.2	55.5	Complied
5939.744	60.8	68.2	7.4	Complied

**Lower Band Edge****Upper Band Edge**

Transmitter Band Edge Radiated Emissions (5.725-5.85 GHz band operation) (continued)**Results: 802.11n / 20 MHz / SISO / BPSK / MCS0 / Core 0 / Peak**

Frequency (MHz)	Level (dBm)	Limit (dBm/MHz)	Margin (dB)	Result
5629.808	-35.3	-27.0	8.3	Complied
5725	-10.5	27.0	37.5	Complied
5850	-23.8	27.0	50.8	Complied
5925.641	-35.1	-27.0	8.1	Complied

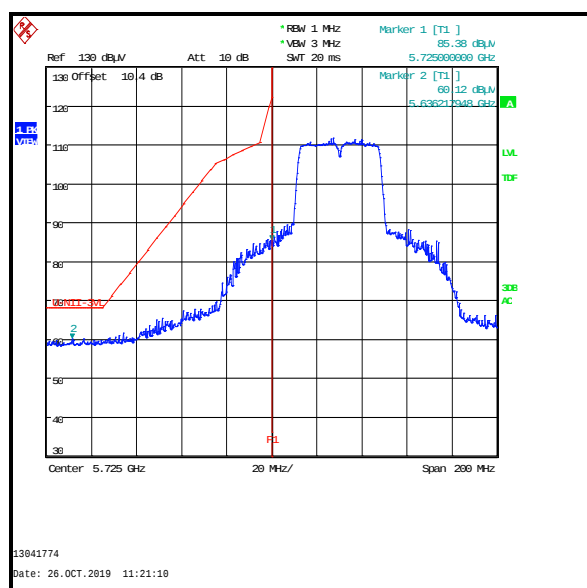
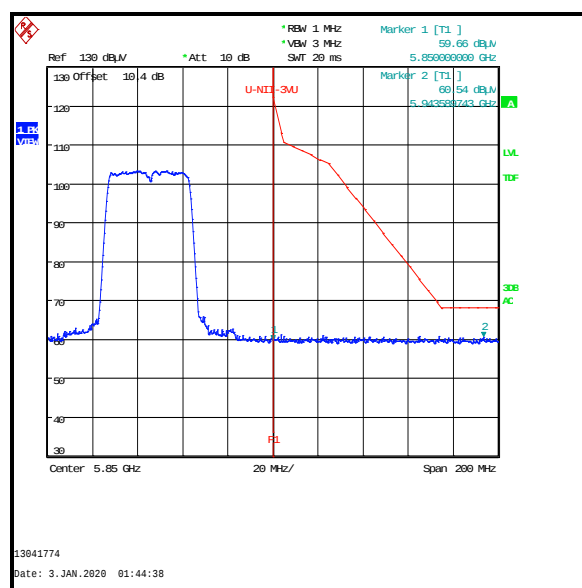
Frequency (MHz)	Level (dBμV/m)	Limit (dBμV/m)	Margin (dB)	Result
5629.808	59.9	68.2	8.3	Complied
5725	84.7	122.2	37.5	Complied
5850	71.4	122.2	50.8	Complied
5925.641	60.1	68.2	8.1	Complied

**Lower Band Edge****Upper Band Edge**

Transmitter Band Edge Radiated Emissions (5.725-5.85 GHz band operation) (continued)**Results: 802.11n / 40 MHz / SISO / BPSK / MCS0 / Core 0 / Peak**

Frequency (MHz)	Level (dBm)	Limit (dBm/MHz)	Margin (dB)	Result
5636.218	-35.1	-27.0	8.1	Complied
5725	-9.8	27.0	36.8	Complied
5850	-35.5	27.0	62.5	Complied
5943.590	-34.7	-27.0	7.7	Complied

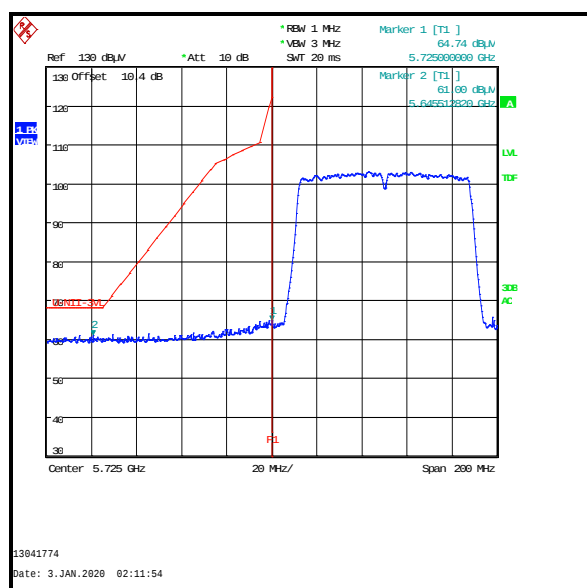
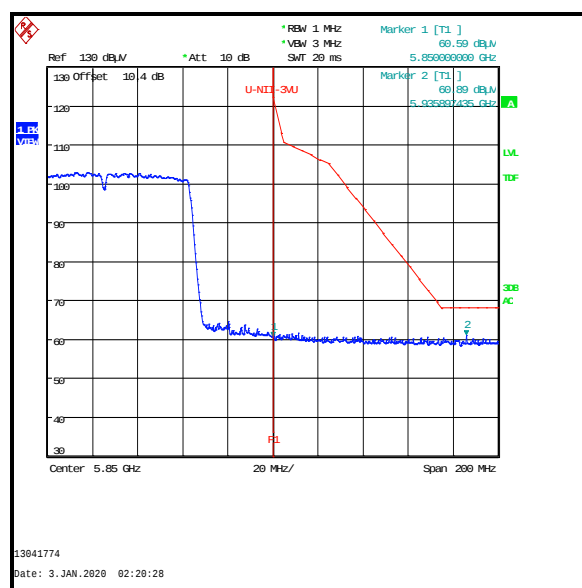
Frequency (MHz)	Level (dBμV/m)	Limit (dBμV/m)	Margin (dB)	Result
5636.218	60.1	68.2	8.1	Complied
5725	85.4	122.2	36.8	Complied
5850	59.7	122.2	62.5	Complied
5943.590	60.5	68.2	7.7	Complied

**Lower Band Edge****Upper Band Edge**

Transmitter Band Edge Radiated Emissions (5.725-5.85 GHz band operation) (continued)**Results: 802.11ac / 80 MHz / SISO / BPSK / MCS0x1 / Core 0 / Peak**

Frequency (MHz)	Level (dBm)	Limit (dBm/MHz)	Margin (dB)	Result
5645.513	-34.2	-27.0	7.2	Complied
5725	-30.5	27.0	57.5	Complied
5850	-34.6	27.0	61.6	Complied
5935.897	-34.3	-27.0	7.3	Complied

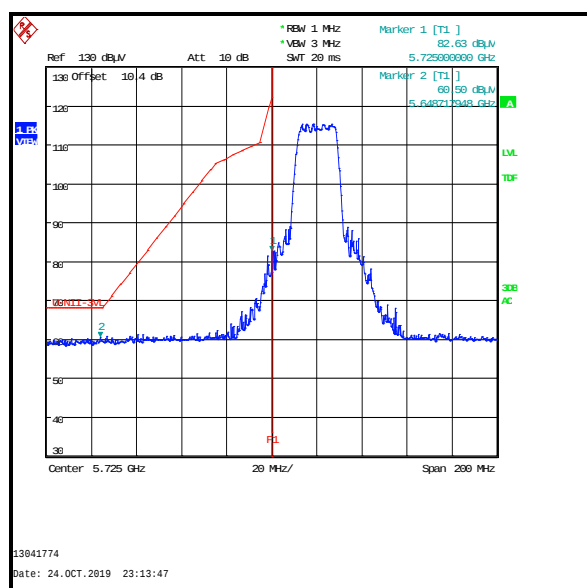
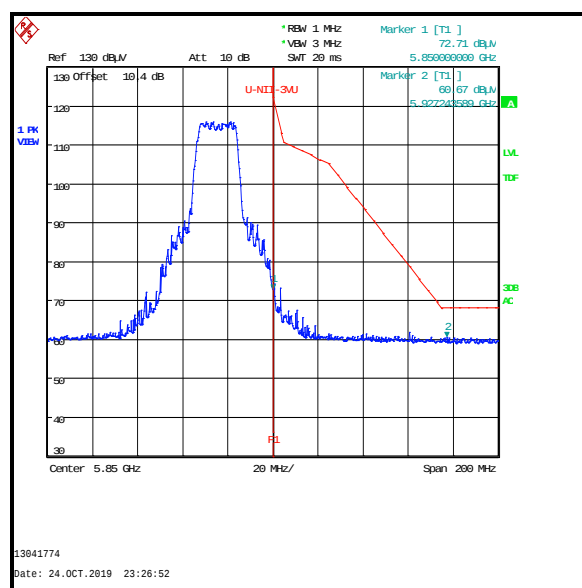
Frequency (MHz)	Level (dB μ V/m)	Limit (dB μ V/m)	Margin (dB)	Result
5645.513	61.0	68.2	7.2	Complied
5725	64.7	122.2	57.5	Complied
5850	60.6	122.2	61.6	Complied
5935.897	60.9	68.2	7.3	Complied

**Lower Band Edge****Upper Band Edge**

Transmitter Band Edge Radiated Emissions (5.725-5.85 GHz band operation) (continued)**Results: 802.11n / 20 MHz / MIMO / 2Tx CDD / BPSK / MCS0 / Peak**

Frequency (MHz)	Level (dBm)	Limit (dBm/MHz)	Margin (dB)	Result
5648.718	-34.7	-27.0	7.7	Complied
5725	-12.6	27.0	39.6	Complied
5850	-22.5	27.0	49.5	Complied
5927.244	-34.5	-27.0	7.5	Complied

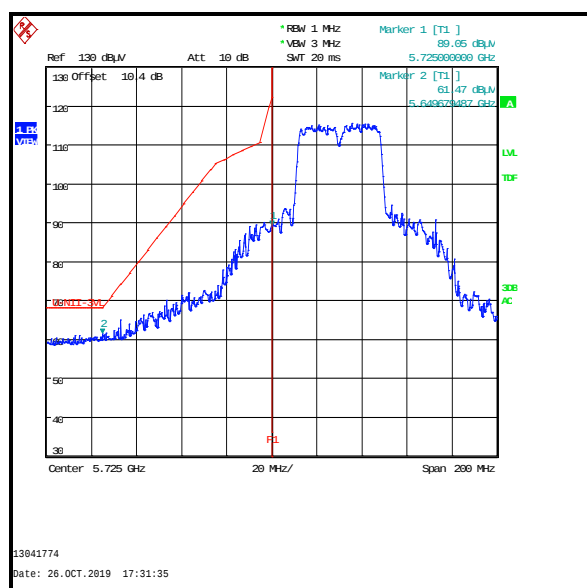
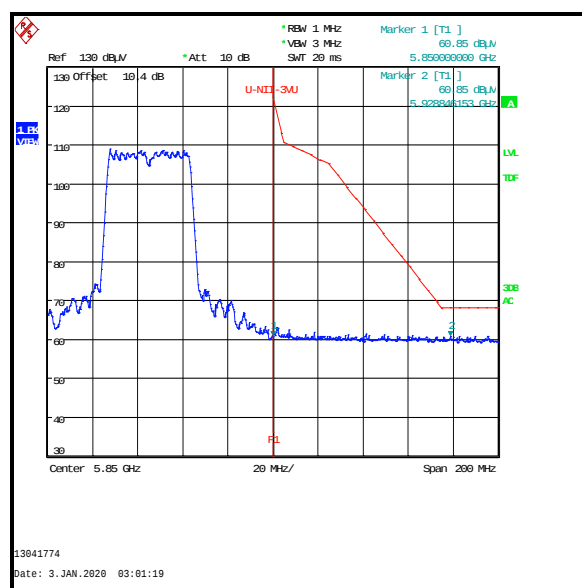
Frequency (MHz)	Level (dBμV/m)	Limit (dBμV/m)	Margin (dB)	Result
5648.718	60.5	68.2	7.7	Complied
5725	82.6	122.2	39.6	Complied
5850	72.7	122.2	49.5	Complied
5927.244	60.7	68.2	7.5	Complied

**Lower Band Edge****Upper Band Edge**

Transmitter Band Edge Radiated Emissions (5.725-5.85 GHz band operation) (continued)**Results: 802.11n / 40 MHz / MIMO / 2Tx CDD / BPSK / MCS0 / Peak**

Frequency (MHz)	Level (dBm)	Limit (dBm/MHz)	Margin (dB)	Result
5649.679	-33.7	-27.0	6.7	Complied
5725	-6.1	27.0	33.1	Complied
5850	-34.3	27.0	61.3	Complied
5928.846	-34.3	-27.0	7.3	Complied

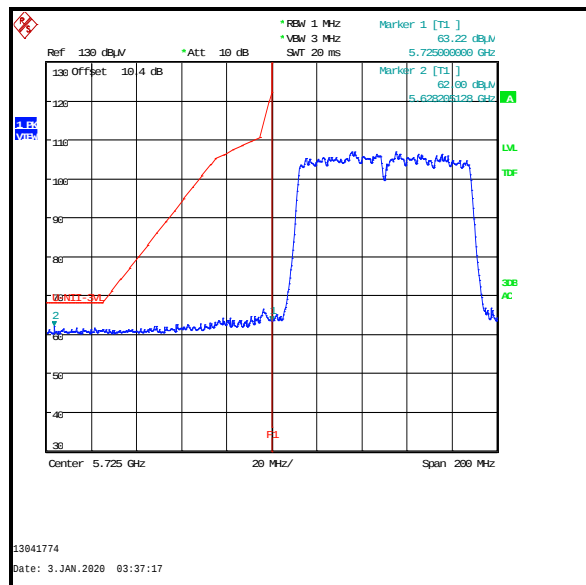
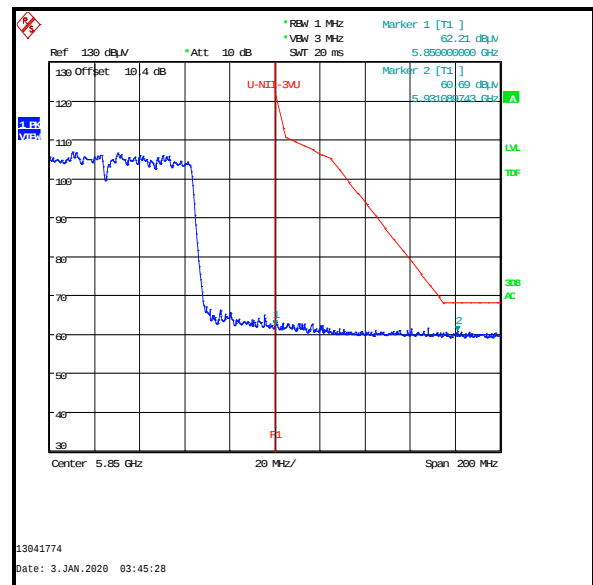
Frequency (MHz)	Level (dBμV/m)	Limit (dBμV/m)	Margin (dB)	Result
5649.679	61.5	68.2	6.7	Complied
5725	89.1	122.2	33.1	Complied
5850	60.9	122.2	61.3	Complied
5928.846	60.9	68.2	7.3	Complied

**Lower Band Edge****Upper Band Edge**

Transmitter Band Edge Radiated Emissions (5.725-5.85 GHz band operation) (continued)**Results: 802.11ac / 80 MHz / MIMO / 2Tx CDD / BPSK / MCS0x1 / Peak**

Frequency (MHz)	Level (dBm)	Limit (dBm/MHz)	Margin (dB)	Result
5628.205	-33.2	-27.0	6.2	Complied
5725	-32.0	27.0	59.0	Complied
5850	-33.0	27.0	60.0	Complied
5931.090	-34.5	-27.0	7.5	Complied

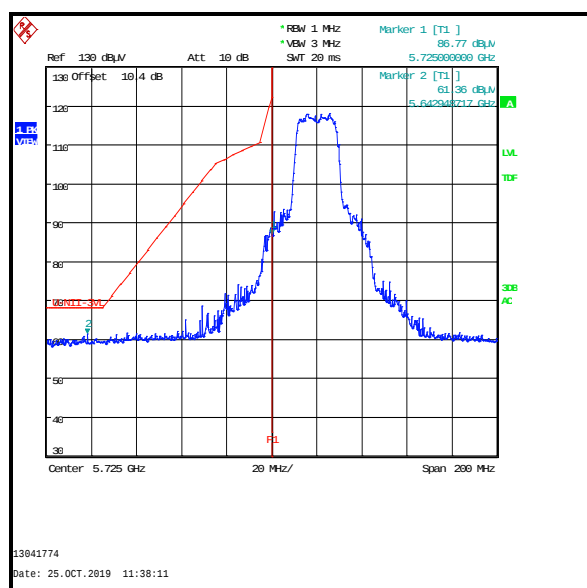
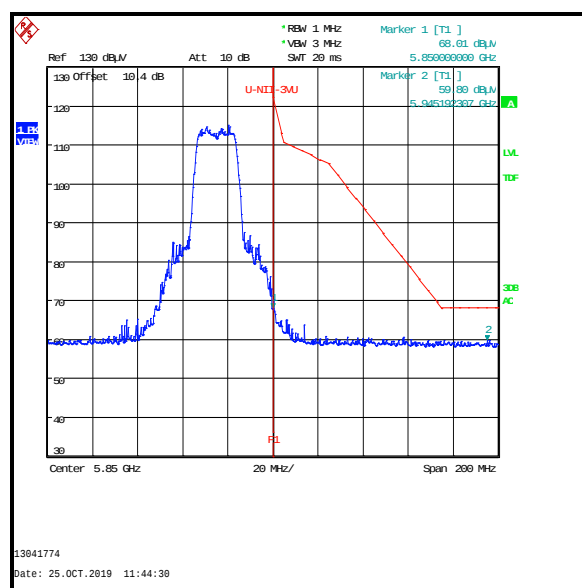
Frequency (MHz)	Level (dBμV/m)	Limit (dBμV/m)	Margin (dB)	Result
5628.205	62.0	68.2	6.2	Complied
5725	63.2	122.2	59.0	Complied
5850	62.2	122.2	60.0	Complied
5931.090	60.7	68.2	7.5	Complied

**Lower Band Edge****Upper Band Edge**

Transmitter Band Edge Radiated Emissions (5.725-5.85 GHz band operation) (continued)**Results: 802.11n / 20 MHz / MIMO / 2Tx SDM / BPSK / MCS8 / Peak**

Frequency (MHz)	Level (dBm)	Limit (dBm/MHz)	Margin (dB)	Result
5642.949	-33.8	-27.0	6.8	Complied
5725	-8.4	27.0	35.4	Complied
5850	-27.2	27.0	54.2	Complied
5945.192	-35.4	-27.0	8.4	Complied

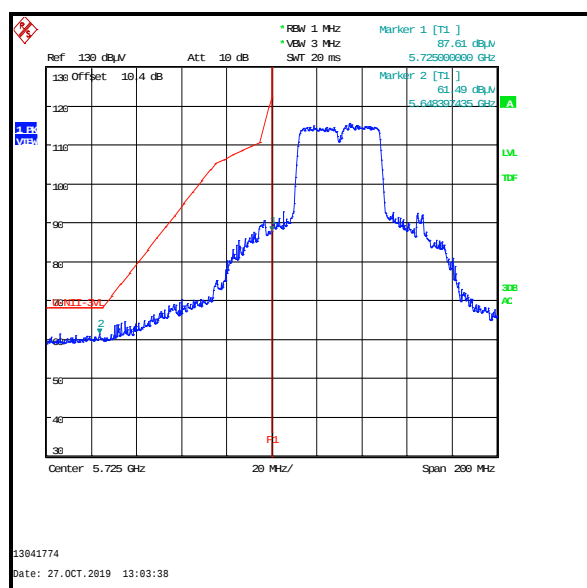
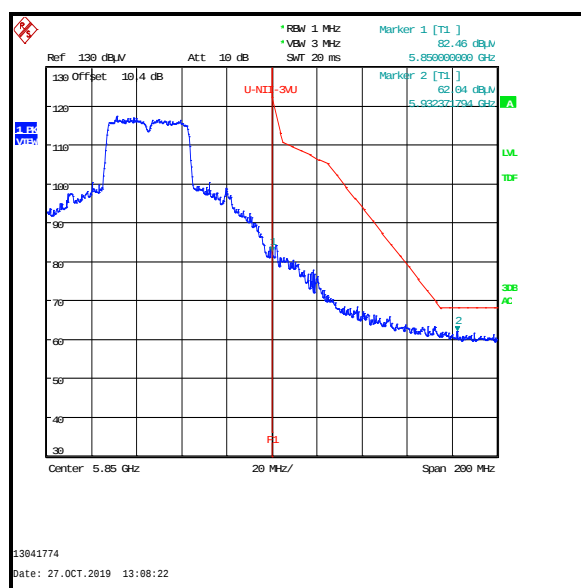
Frequency (MHz)	Level (dBμV/m)	Limit (dBμV/m)	Margin (dB)	Result
5642.949	61.4	68.2	6.8	Complied
5725	86.8	122.2	35.4	Complied
5850	68.0	122.2	54.2	Complied
5945.192	59.8	68.2	8.4	Complied

**Lower Band Edge****Upper Band Edge**

Transmitter Band Edge Radiated Emissions (5.725-5.85 GHz band operation) (continued)**Results: 802.11n / 40 MHz / MIMO / 2Tx SDM / BPSK / MCS8 / Peak**

Frequency (MHz)	Level (dBm)	Limit (dBm/MHz)	Margin (dB)	Result
5648.397	-33.7	-27.0	6.7	Complied
5725	-7.6	27.0	34.6	Complied
5850	-12.7	27.0	39.7	Complied
5932.718	-33.2	-27.0	6.2	Complied

Frequency (MHz)	Level (dBμV/m)	Limit (dBμV/m)	Margin (dB)	Result
5648.397	61.5	68.2	6.7	Complied
5725	87.6	122.2	34.6	Complied
5850	82.5	122.2	39.7	Complied
5932.718	62.0	68.2	6.2	Complied

**Lower Band Edge****Upper Band Edge**