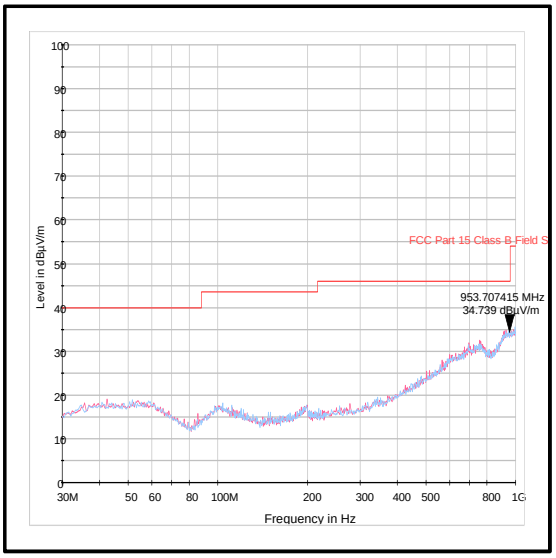
Transmitter Out of Band Radiated Emissions - 2.4 GHz WLAN (SISO) bottom channel / 5 GHz WLAN (MIMO) top channel (continued)

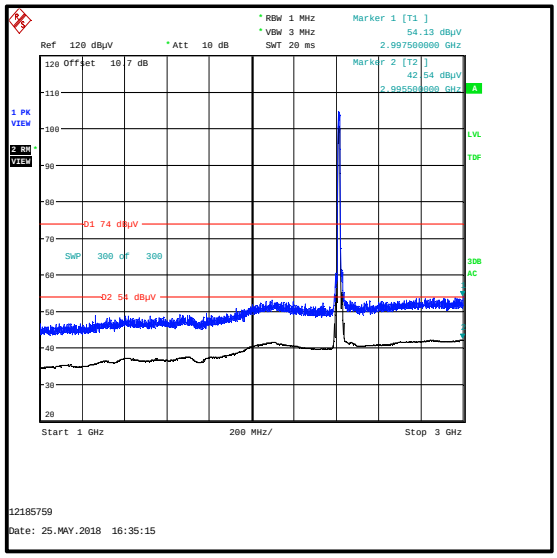
Results: Peak

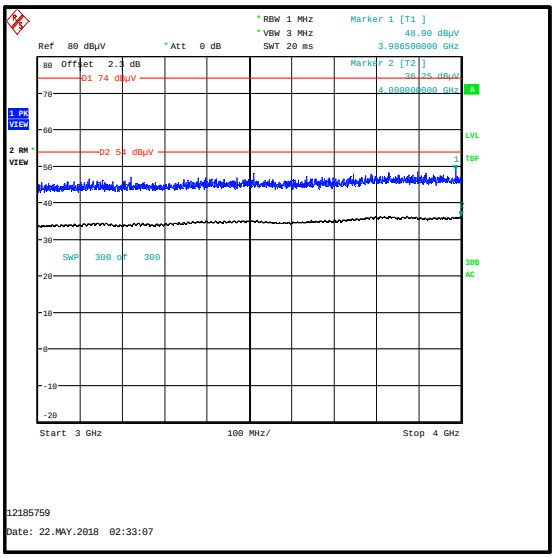
Frequency (MHz)	Antenna Polarity	Peak Level (dBµV/m)	Peak Limit (dBµV/m)	Margin (dB)	Result
See Note 1					

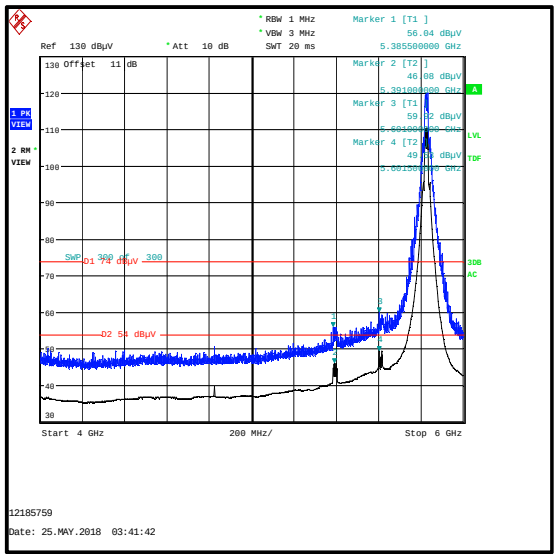
Results: Average

Frequency (MHz)	Antenna Polarity	Average Level (dBµV/m)	Average Limit (dBµV/m)	Margin (dB)	Result
See Note 1					

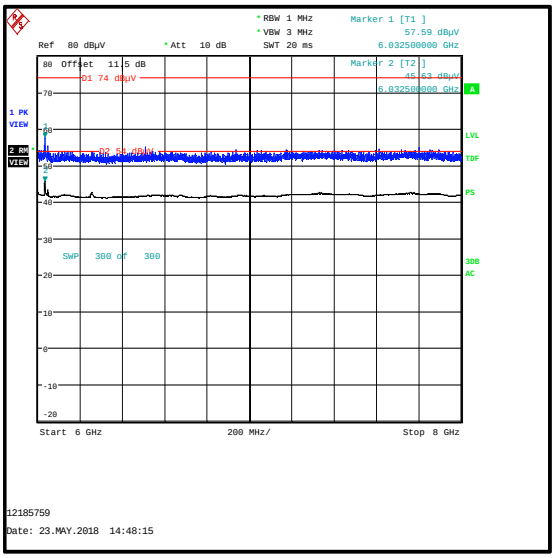


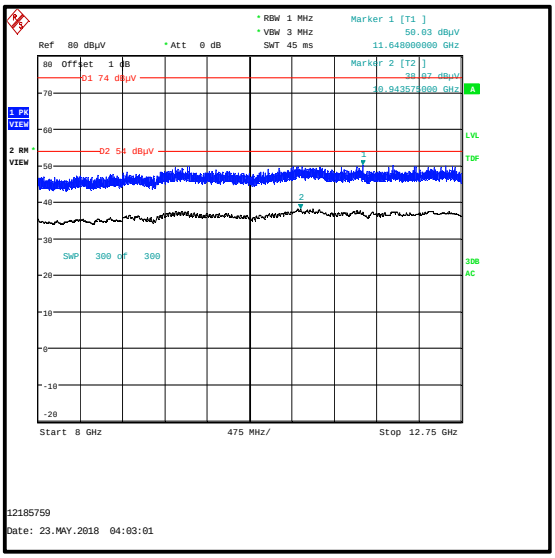


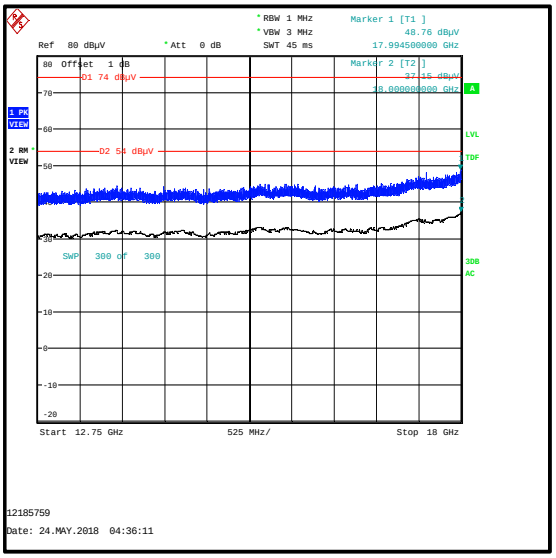


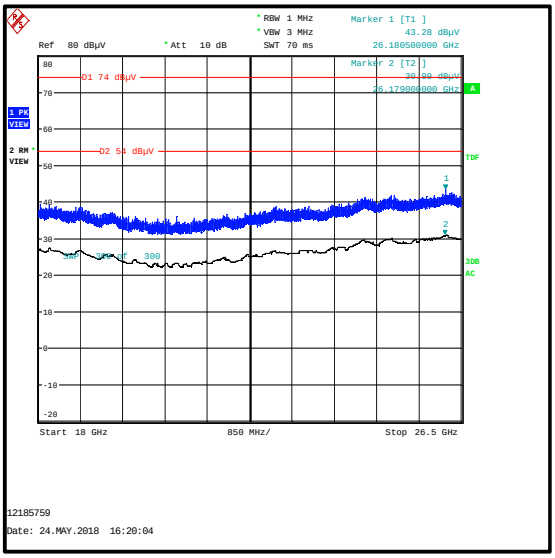


Transmitter Out of Band Radiated Emissions - 2.4 GHz WLAN (SISO) bottom channel / 5 GHz WLAN (MIMO) top channel (continued)

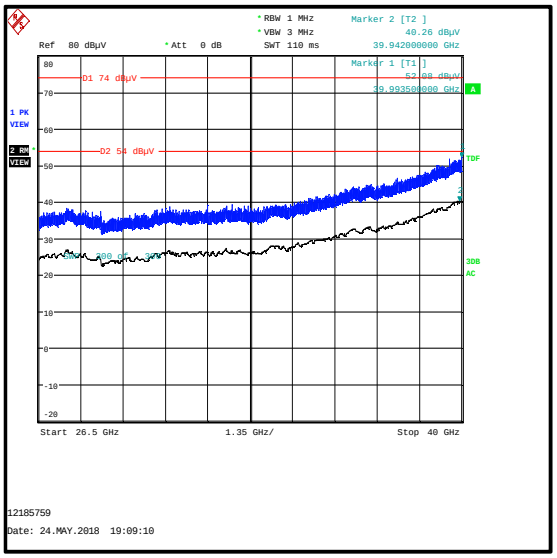








Transmitter Out of Band Radiated Emissions - 2.4 GHz WLAN (SISO) bottom channel / 5 GHz WLAN (MIMO) top channel (continued)



4.20. Transmitter Out of Band Radiated Emissions - 2.4 GHz WLAN (SISO) top channel / 5 GHz WLAN (MIMO) top channel

Test Summary:

Test Engineers:	Nicholas Steele, Marco Zunarelli, Mohamed Toubella, Alan Withers & Mark Perry	**Test Dates:**	17 May 2018 to 25 May 2018
Test Sample Serial Numbers:	C02VP00AJLDY, C02WC00DJMFL		

FCC Reference:	Parts 15.33, 15.205(a), 15.209(a), 15.247(d) & 15.407(b)
ISED Canada Reference:	RSS-Gen 6.13 & 8.9 / RSS-247 5.5 & 6.2.4.2
Test Method Used:	ANSI C63.10 Sections 6.3, 6.5, 6.6, 11.11, 11.12.2.4 & 11.12.2.5.1, KDB 558074 Sections 11, 12.2.4 & 12.2.5.1, KDB 789033 II.G
Frequency Range:	30 MHz to 40 GHz
Configuration:	2.4 GHz WLAN (SISO) top channel / 5 GHz WLAN (3Tx MIMO) top channel

Environmental Conditions:

Temperature (°C):	22 to 26
Relative Humidity (%):	38 to 48

Note(s):

1. All intermodulation products were below the noise floor level or greater than 20 dB from the specification limit.
2. The 2.4 GHz WLAN fundamental is shown on the 1 GHz to 3 GHz plot.
3. The 5 GHz WLAN fundamental is shown on the 4 GHz to 6 GHz plot.
4. Pre-scans were made against the FCC Part 15 general limits for radiated emissions.
5. The emissions at approximately 5391.000 MHz, 5618.500 MHz and 6034.500 MHz are not intermodulation products and were therefore not measured.
6. The test receiver resolution bandwidth was set to 120 kHz and video bandwidth to 500 kHz, for measurements below 1 GHz. For measurements above 1 GHz the resolution bandwidth was set to 1 MHz and video bandwidth to 3 MHz, with the sweep time set to auto. Markers were placed on the highest measured level.
7. Measurements below 1 GHz were performed in a semi-anechoic chamber (Asset Number K0001) at a distance of 3 metres. The EUT was placed at a height of 80 cm above the reference ground plane in the centre of the chamber turntable. Maximum emission levels were determined by height searching the measurement antenna over the range 1 metre to 4 metres.
8. Measurements above 1 GHz were performed in a fully anechoic chamber (Asset Number K0002) 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 fully anechoic chamber (Asset Number K0017) at a distance of 3 metres. The EUT was placed at a height of 1.5 m above the reference ground plane in the centre of the chamber turntable. Maximum emission levels were determined by height searching the measurement antenna over the range 1 metre to 4 metres.

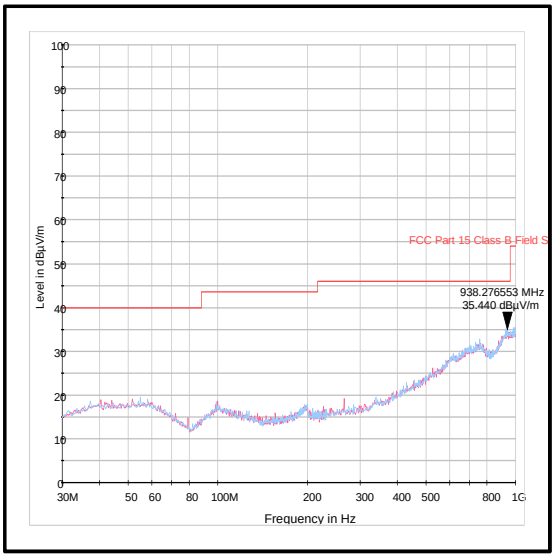
Transmitter Out of Band Radiated Emissions - 2.4 GHz WLAN (SISO) top channel / 5 GHz WLAN (MIMO) bottom channel (continued)

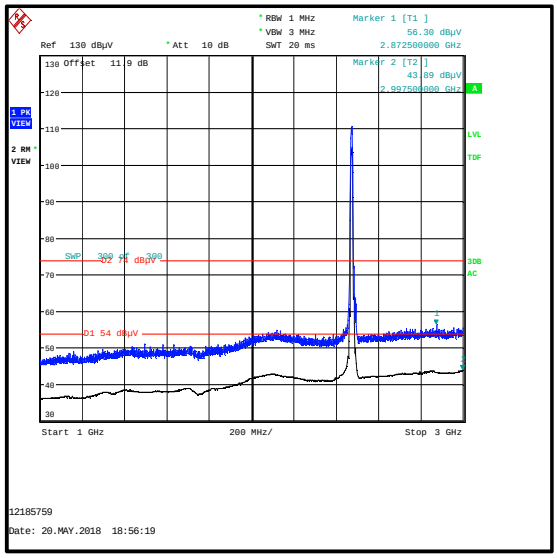
Results: Peak

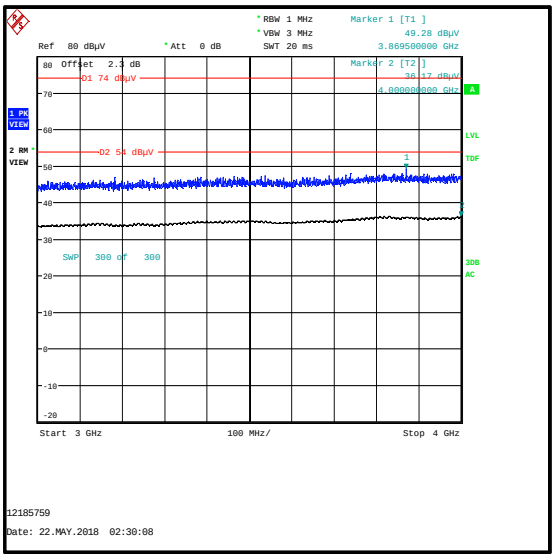
Frequency (MHz)	Antenna Polarity	Peak Level (dBµV/m)	Peak Limit (dBµV/m)	Margin (dB)	Result
See Note 1					

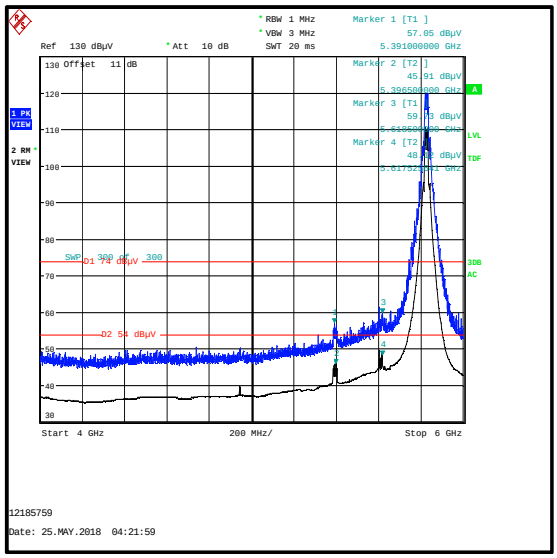
Results: Average

Frequency (MHz)	Antenna Polarity	Average Level (dBµV/m)	Average Limit (dBµV/m)	Margin (dB)	Result
See Note 1					

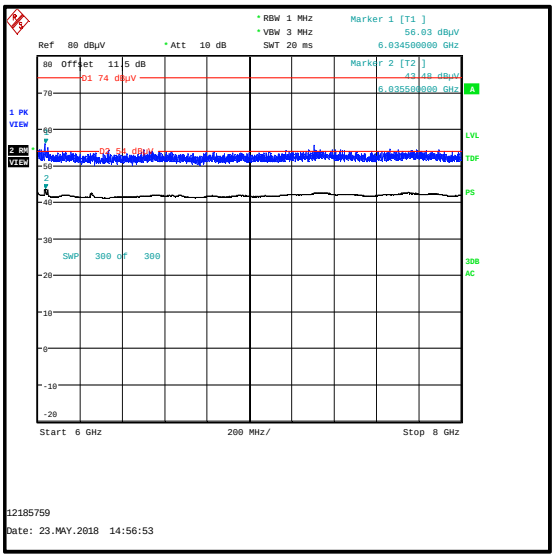


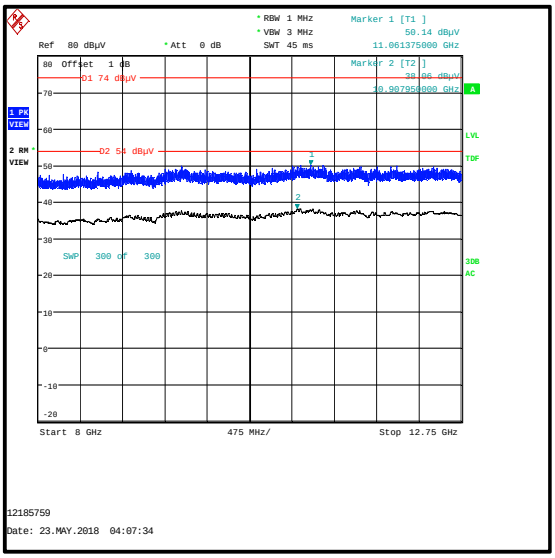


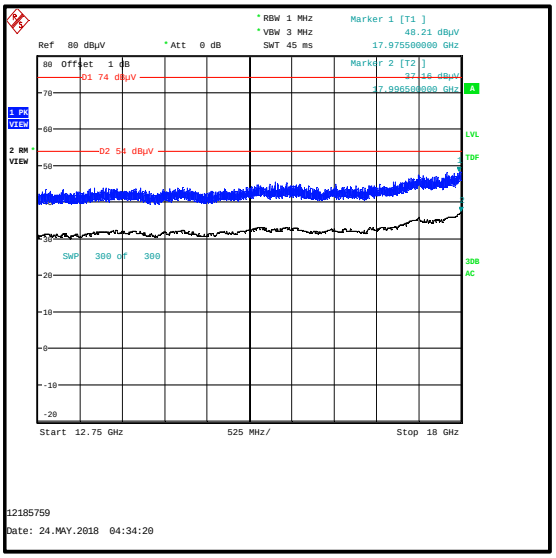


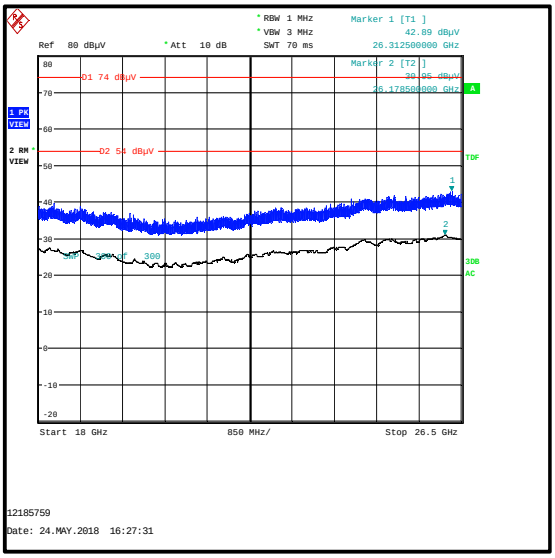


Transmitter Out of Band Radiated Emissions - 2.4 GHz WLAN (SISO) top channel / 5 GHz WLAN (MIMO) bottom channel (continued)

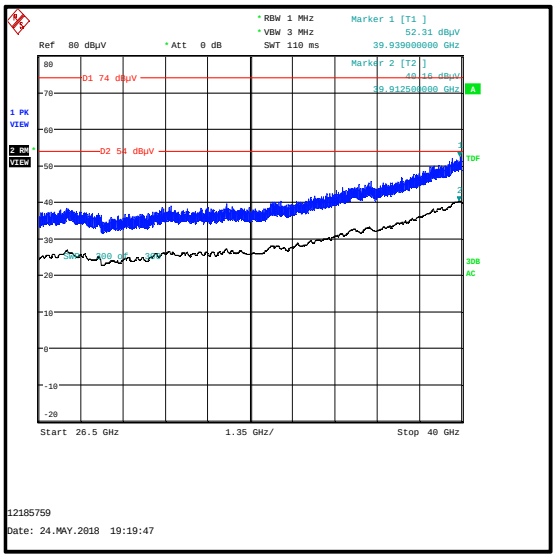








Transmitter Out of Band Radiated Emissions - 2.4 GHz WLAN (SISO) top channel / 5 GHz WLAN (MIMO) bottom channel (continued)



4.21. Transmitter Out of Band Radiated Emissions - *Bluetooth* Basic Rate bottom channel / 2.4 GHz WLAN (SISO) top channel / 5 GHz WLAN (MIMO) bottom channel

Test Summary:

Test Engineers:	Nicholas Steele, Marco Zunarelli, Mohamed Toubella, Alan Withers & Mark Perry	**Test Dates:**	17 May 2018 to 02 June 2018
Test Sample Serial Numbers:	C02VP00AJLDY, C02WC00DJMFL		

FCC Reference:	Parts 15.33, 15.205(a), 15.209(a), 15.247(d) & 15.407(b)
ISED Canada Reference:	RSS-Gen 6.13 & 8.9 / RSS-247 5.5, 6.2.1.2
Test Method Used:	ANSI C63.10 Sections 6.3, 6.5, 6.6, 11.11, 11.12.2.4 & 11.12.2.5.1, KDB 558074 Sections 11, 12.2.4, 12.2.5.1, 12.7, KDB 789033 II.G
Frequency Range:	30 MHz to 40 GHz
Configuration:	*Bluetooth* Basic Rate bottom channel / 2.4 GHz WLAN (SISO) top channel / 5 GHz WLAN (3Tx MIMO) bottom channel

Environmental Conditions:

Temperature (°C):	22 to 26
Relative Humidity (%):	38 to 50

Note(s):

1. All intermodulation products were below the noise floor level or greater than 20 dB from the specification limit.
2. The *Bluetooth* and 2.4 GHz WLAN fundamentals are shown on the 1 GHz to 3 GHz plot.
3. The 5 GHz WLAN fundamental is shown on the 4 GHz to 6 GHz plot.
4. Pre-scans were made against the FCC Part 15 general limits for radiated emissions.
5. The emissions at approximately 4748.500 MHz and 5612.000 MHz are not intermodulation products and were therefore not measured.
6. The test receiver resolution bandwidth was set to 120 kHz and video bandwidth to 500 kHz, for measurements below 1 GHz. For measurements above 1 GHz the resolution bandwidth was set to 1 MHz and video bandwidth to 3 MHz, with the sweep time set to auto. Markers were placed on the highest measured level.
7. Measurements below 1 GHz were performed in a semi-anechoic chamber (Asset Number K0001) at a distance of 3 metres. The EUT was placed at a height of 80 cm above the reference ground plane in the centre of the chamber turntable. Maximum emission levels were determined by height searching the measurement antenna over the range 1 metre to 4 metres.
8. Measurements above 1 GHz were performed in a fully anechoic chamber (Asset Number K0002) 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 fully anechoic chamber (Asset Number K0017) at a distance of 3 metres. The EUT was placed at a height of 1.5 m above the reference ground plane in the centre of the chamber turntable. Maximum emission levels were determined by height searching the measurement antenna over the range 1 metre to 4 metres.

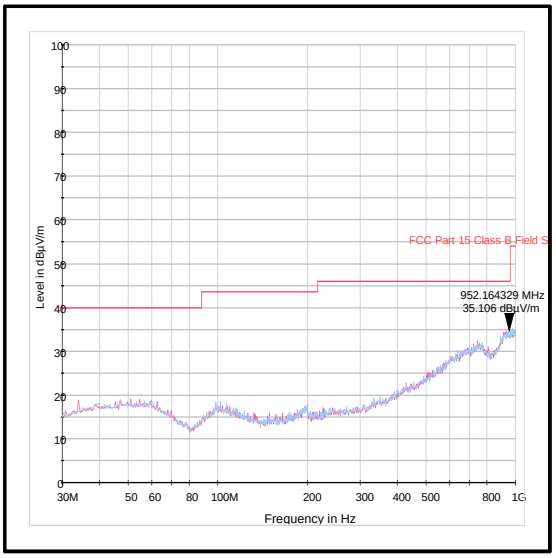
Transmitter Out of Band Radiated Emissions - *Bluetooth* Basic Rate bottom channel / 2.4 GHz WLAN (SISO) top channel / 5 GHz WLAN (MIMO) bottom channel (continued)

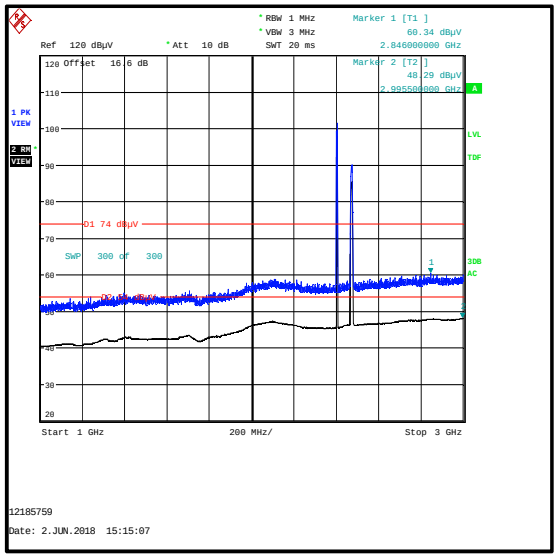
Results: Peak

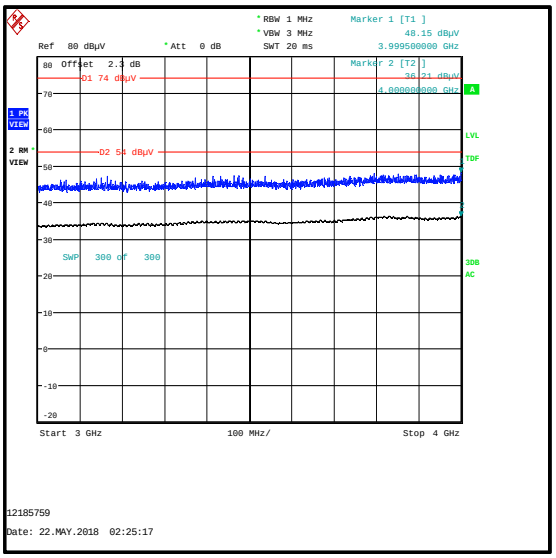
Frequency (MHz)	Antenna Polarity	Peak Level (dBµV/m)	Peak Limit (dBµV/m)	Margin (dB)	Result
See Note 1					

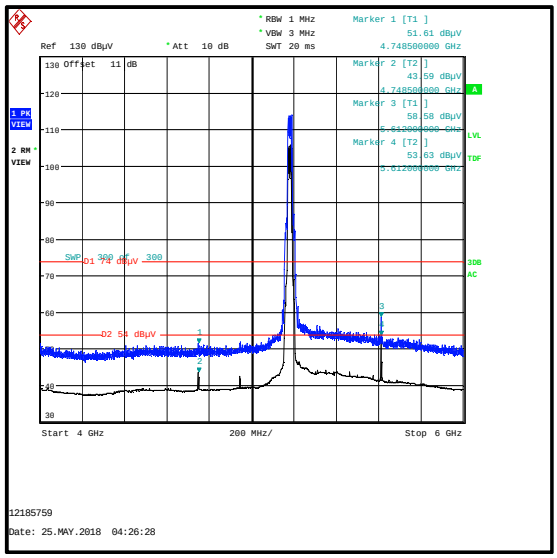
Results: Average

Frequency (MHz)	Antenna Polarity	Average Level (dBµV/m)	Average Limit (dBµV/m)	Margin (dB)	Result
See Note 1					

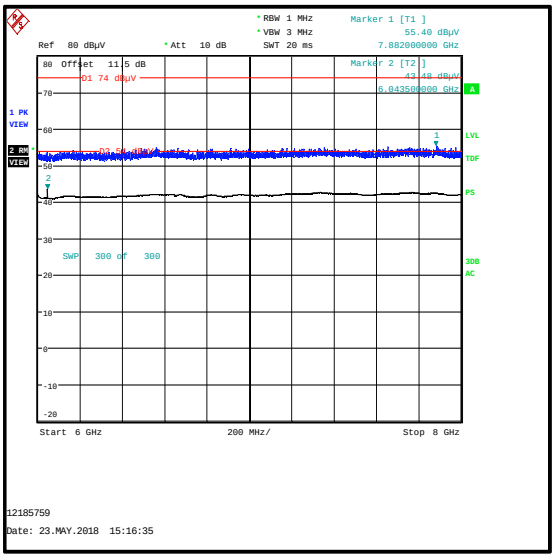


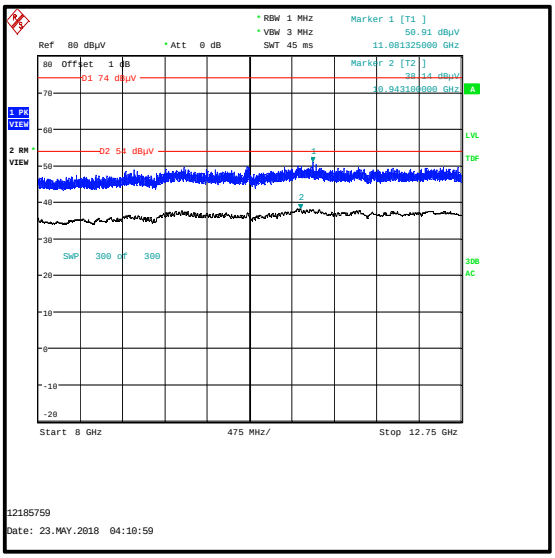


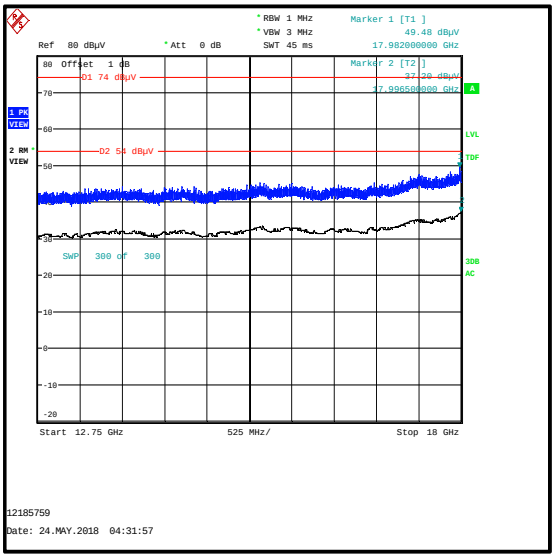


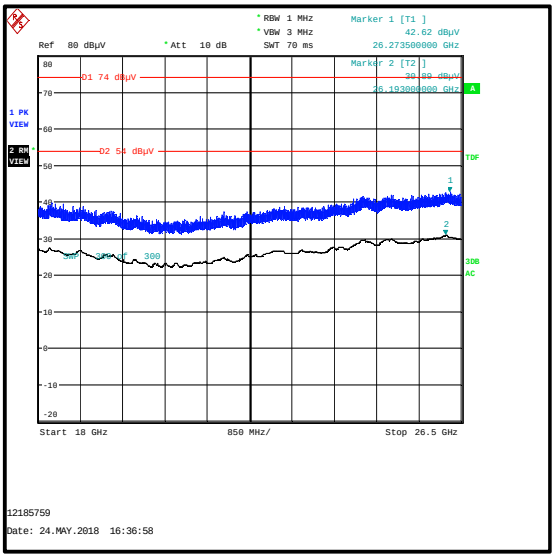


Transmitter Out of Band Radiated Emissions - *Bluetooth* Basic Rate bottom channel / 2.4 GHz WLAN (SISO) top channel / 5 GHz WLAN (MIMO) bottom channel (continued)

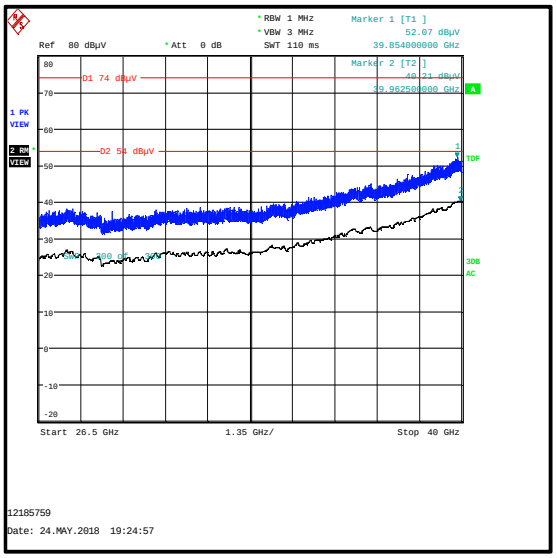








Transmitter Out of Band Radiated Emissions - *Bluetooth* Basic Rate bottom channel / 2.4 GHz WLAN (SISO) top channel / 5 GHz WLAN (MIMO) bottom channel (continued)



4.22. Transmitter Out of Band Radiated Emissions - *Bluetooth* Basic Rate bottom channel / 2.4 GHz WLAN (SISO) top channel / 5 GHz WLAN (MIMO) top channel

Test Summary:

Test Engineers:	Nicholas Steele, Marco Zunarelli, Mohamed Toubella, Alan Withers & Mark Perry	**Test Dates:**	17 May 2018 to 02 June 2018
Test Sample Serial Numbers:	C02VP00AJLDY, C02WC00DJMFL		

FCC Reference:	Parts 15.33, 15.205(a), 15.209(a), 15.247(d) & 15.407(b)
ISED Canada Reference:	RSS-Gen 6.13 & 8.9 / RSS-247 5.5, 6.2.4.2
Test Method Used:	ANSI C63.10 Sections 6.3, 6.5, 6.6, 11.11, 11.12.2.4 & 11.12.2.5.1, KDB 558074 Sections 11, 12.2.4, 12.2.5.1, 12.7, KDB 789033 II.G
Frequency Range:	30 MHz to 40 GHz
Configuration:	*Bluetooth* Basic Rate bottom channel / 2.4 GHz WLAN (SISO) top channel / 5 GHz WLAN (3Tx MIMO) top channel

Environmental Conditions:

Temperature (°C):	22 to 26
Relative Humidity (%):	38 to 50

Note(s):

1. All other intermodulation products were below the noise floor level or greater than 20 dB from the specification limit.
2. The *Bluetooth* and 2.4 GHz WLAN fundamentals are shown on the 1 GHz to 3 GHz plot.
3. The 5 GHz WLAN fundamental is shown on the 4 GHz to 6 GHz plot.
4. Pre-scans were made against the FCC Part 15 general limits for radiated emissions.
5. The emissions at approximately 5616.000 MHz and 6032.500 MHz are not intermodulation products and were therefore not measured.
6. The test receiver resolution bandwidth was set to 120 kHz and video bandwidth to 500 kHz, for measurements below 1 GHz. For measurements above 1 GHz the resolution bandwidth was set to 1 MHz and video bandwidth to 3 MHz, with the sweep time set to auto. Markers were placed on the highest measured level.
7. Measurements below 1 GHz were performed in a semi-anechoic chamber (Asset Number K0001) at a distance of 3 metres. The EUT was placed at a height of 80 cm above the reference ground plane in the centre of the chamber turntable. Maximum emission levels were determined by height searching the measurement antenna over the range 1 metre to 4 metres.
8. Measurements above 1 GHz were performed in a fully anechoic chamber (Asset Number K0002) 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 fully anechoic chamber (Asset Number K0017) at a distance of 3 metres. The EUT was placed at a height of 1.5 m above the reference ground plane in the centre of the chamber turntable. Maximum emission levels were determined by height searching the measurement antenna over the range 1 metre to 4 metres.to 4 metres.

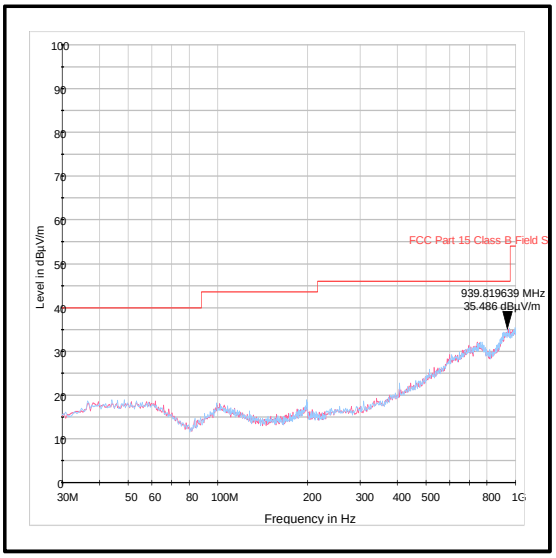
Transmitter Out of Band Radiated Emissions - Bluetooth Basic Rate bottom channel / 2.4 GHz WLAN (SISO) top channel / 5 GHz WLAN (MIMO) top channel (continued)

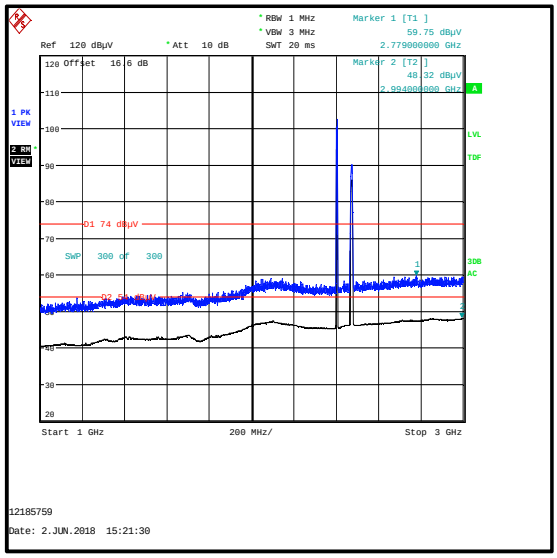
Results: Peak

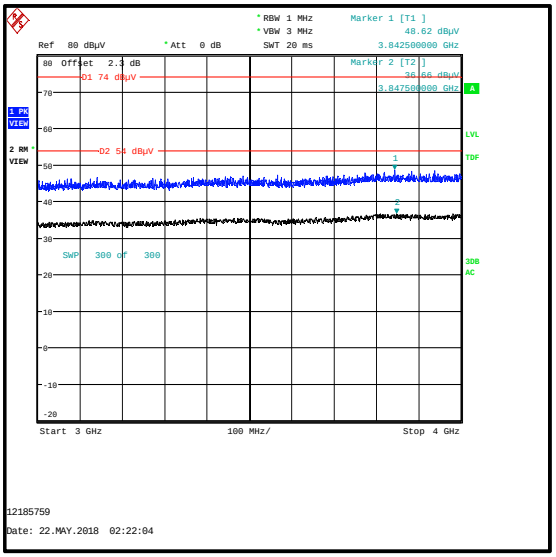
Frequency (MHz)	Antenna Polarity	Peak Level (dBµV/m)	Peak Limit (dBµV/m)	Margin (dB)	Result
5393.400	Vertical	58.2	74.0	15.8	Complied

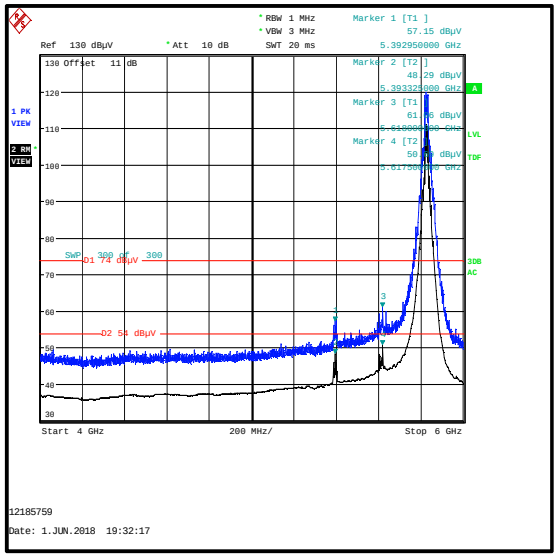
Results: Average

Frequency (MHz)	Antenna Polarity	Average Level (dBµV/m)	Average Limit (dBµV/m)	Margin (dB)	Result
5393.300	Vertical	48.2	54.0	5.8	Complied

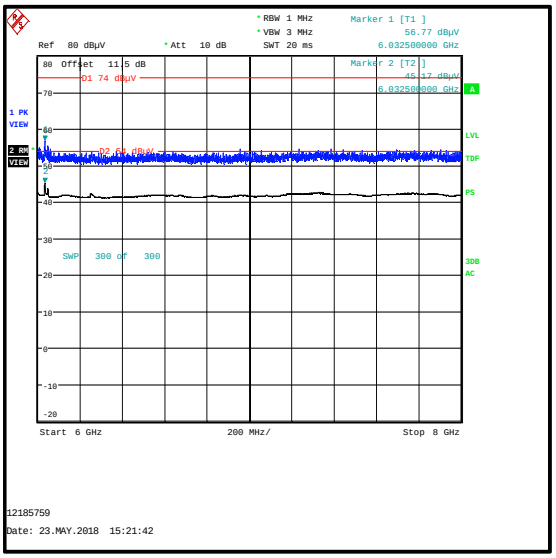


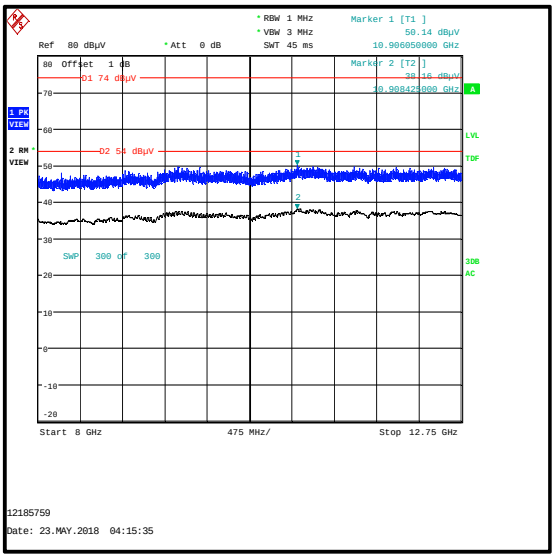


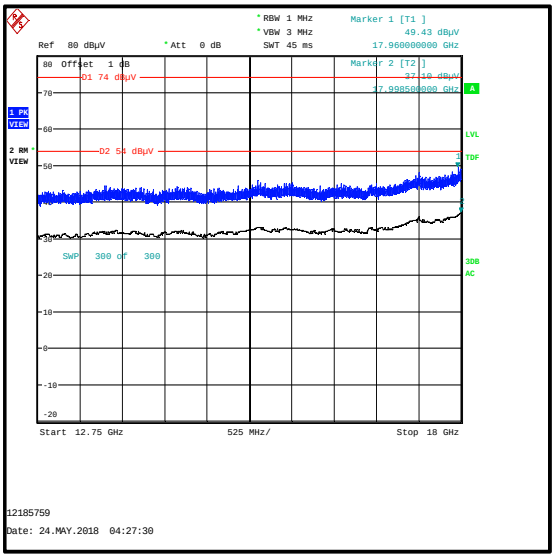


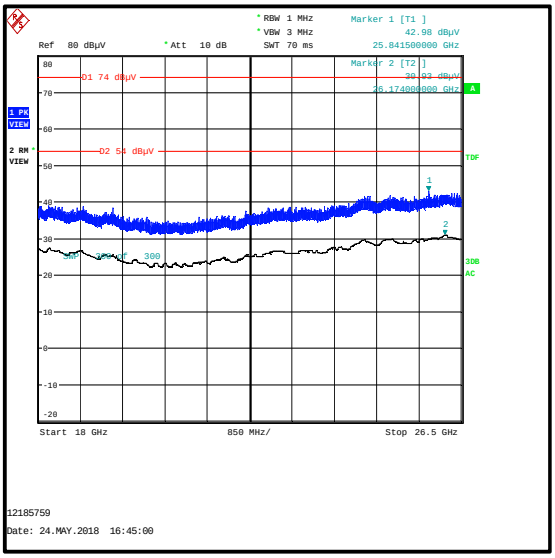


Transmitter Out of Band Radiated Emissions - Bluetooth Basic Rate bottom channel / 2.4 GHz WLAN (SISO) top channel / 5 GHz WLAN (MIMO) top channel (continued)

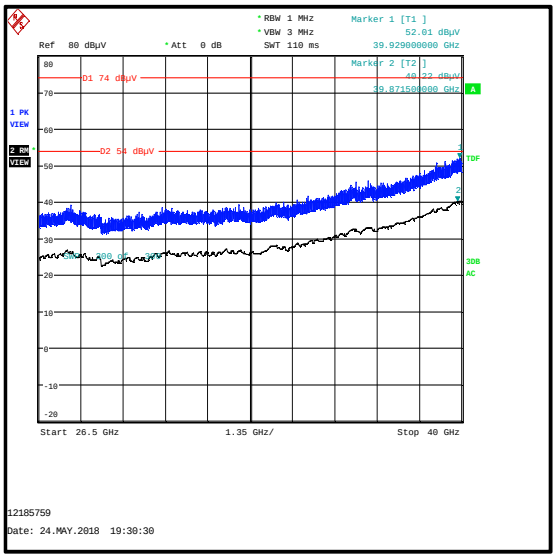








Transmitter Out of Band Radiated Emissions - Bluetooth Basic Rate bottom channel / 2.4 GHz WLAN (SISO) top channel / 5 GHz WLAN (MIMO) top channel (continued)



4.23. Transmitter Out of Band Radiated Emissions - *Bluetooth* Basic Rate top channel / 2.4 GHz WLAN (SISO) bottom channel / 5 GHz WLAN (MIMO) bottom channel

Test Summary:

Test Engineers:	Nicholas Steele, Marco Zunarelli, Mohamed Toubella, Alan Withers & Mark Perry	**Test Dates:**	17 May 2018 to 03 June 2018
Test Sample Serial Numbers:	C02VP00AJLDY, C02WC00DJMFL, C02WC006JTGW		

FCC Reference:	Parts 15.33, 15.205(a), 15.209(a), 15.247(d) & 15.407(b)
ISED Canada Reference:	RSS-Gen 6.13 & 8.9 / RSS-247 5.5, 6.2.1.2
Test Method Used:	ANSI C63.10 Sections 6.3, 6.5, 6.6, 11.11, 11.12.2.4 & 11.12.2.5.1, KDB 558074 Sections 11, 12.2.4, 12.2.5.1, 12.7, KDB 789033 II.G
Frequency Range:	30 MHz to 40 GHz
Configuration:	*Bluetooth* Basic Rate top channel / 2.4 GHz WLAN (SISO) bottom channel / 5 GHz WLAN (3Tx MIMO) bottom channel

Environmental Conditions:

Temperature (°C):	22 to 26
Relative Humidity (%):	38 to 50

Note(s):

1. All other intermodulation products were below the noise floor level or greater than 20 dB from the specification limit.
2. The *Bluetooth* and 2.4 GHz WLAN fundamentals are shown on the 1 GHz to 3 GHz plot.
3. The 5 GHz WLAN fundamental is shown on the 4 GHz to 6 GHz plot.
4. Pre-scans were made against the FCC Part 15 general limits for radiated emissions.
5. The emission at approximately 4824.000MHz is the second harmonic of the 2.4GHz WLAN signal and was therefore not measured.
6. The emission at approximately 5612.000 MHz is not an intermodulation product and was therefore not measured.
7. The test receiver resolution bandwidth was set to 120 kHz and video bandwidth to 500 kHz, for measurements below 1 GHz. For measurements above 1 GHz the resolution bandwidth was set to 1 MHz and video bandwidth to 3 MHz, with the sweep time set to auto. Markers were placed on the highest measured level.
8. Measurements below 1 GHz were performed in a semi-anechoic chamber (Asset Number K0001) at a distance of 3 metres. The EUT was placed at a height of 80 cm above the reference ground plane in the centre of the chamber turntable. Maximum emission levels were determined by height searching the measurement antenna over the range 1 metre to 4 metres.

Transmitter Out of Band Radiated Emissions - *Bluetooth* Basic Rate top channel / 2.4 GHz WLAN (SISO) bottom channel / 5 GHz WLAN (MIMO) bottom channel (continued)

9. Measurements above 1 GHz were performed in a fully anechoic chamber (Asset Number K0002) 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 fully anechoic chamber (Asset Number K0017) at a distance of 3 metres. The EUT was placed at a height of 1.5 m above the reference ground plane in the centre of the chamber turntable. Maximum emission levels were determined by height searching the measurement antenna over the range 1 metre to 4 metres.to 4 metres.

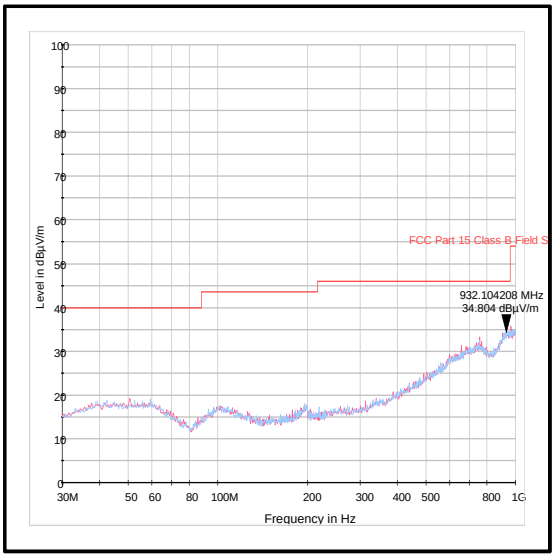
Transmitter Out of Band Radiated Emissions - *Bluetooth* Basic Rate top channel / 2.4 GHz WLAN (SISO) bottom channel / 5 GHz WLAN (MIMO) bottom channel (continued)

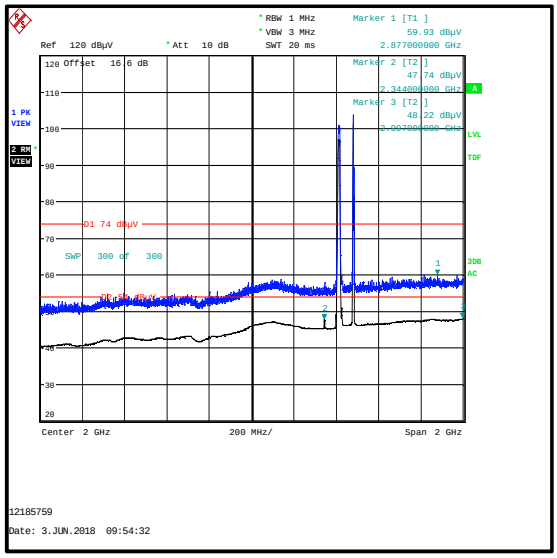
Results: Peak

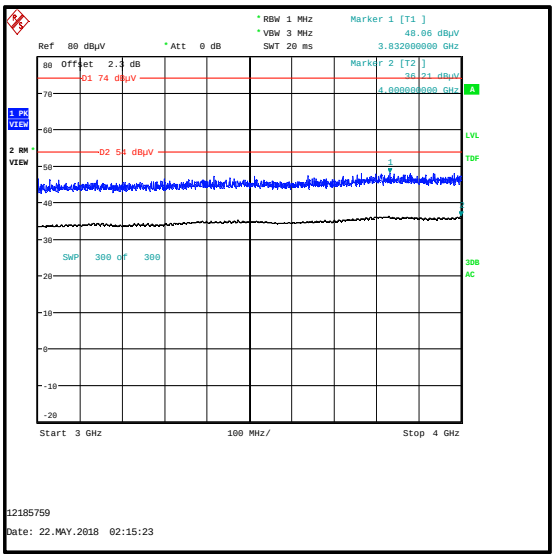
Frequency (MHz)	Antenna Polarity	Peak Level (dBµV/m)	Peak Limit (dBµV/m)	Margin (dB)	Result
2344.550	Vertical	58.4	74.0	15.6	Complied

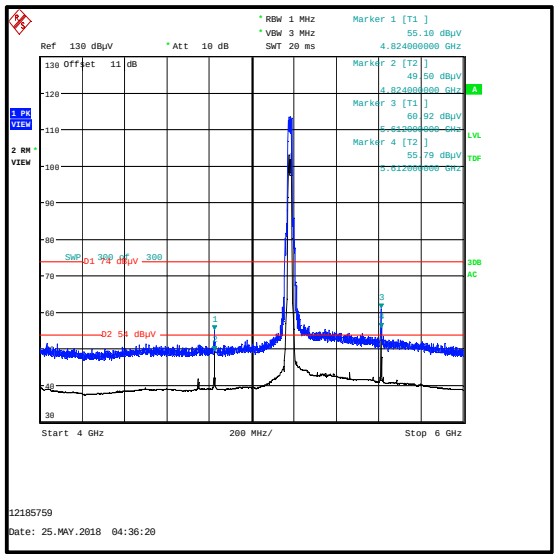
Results: Average

Frequency (MHz)	Antenna Polarity	Average Level (dBµV/m)	Average Limit (dBµV/m)	Margin (dB)	Result
2343.915	Vertical	47.9	54.0	6.1	Complied

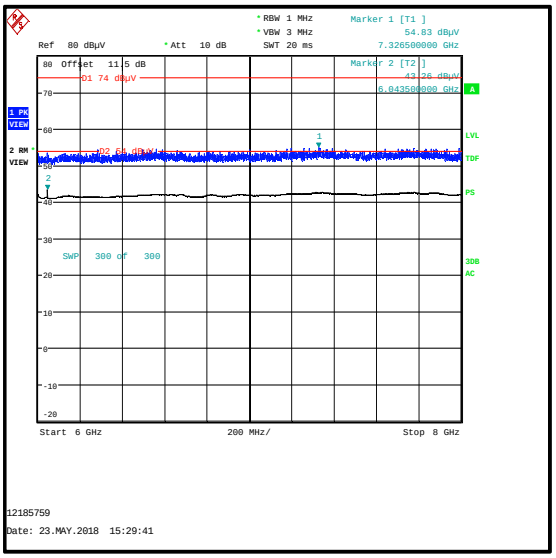


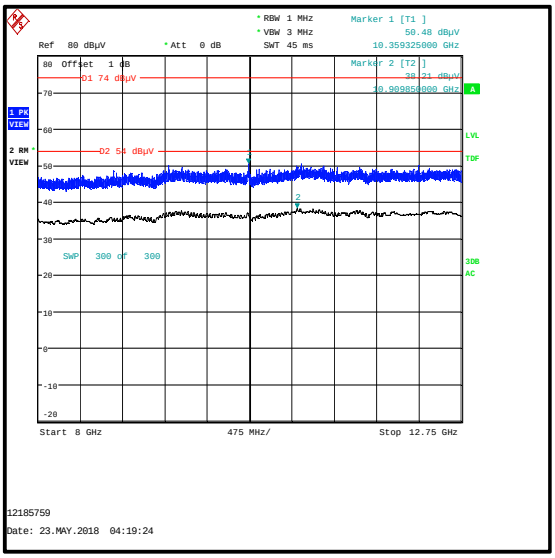


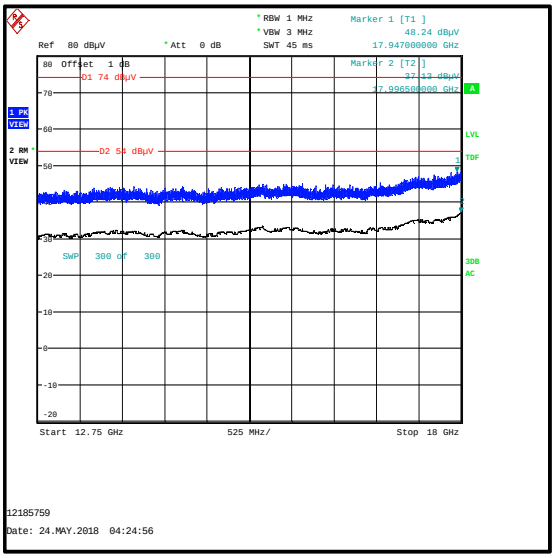


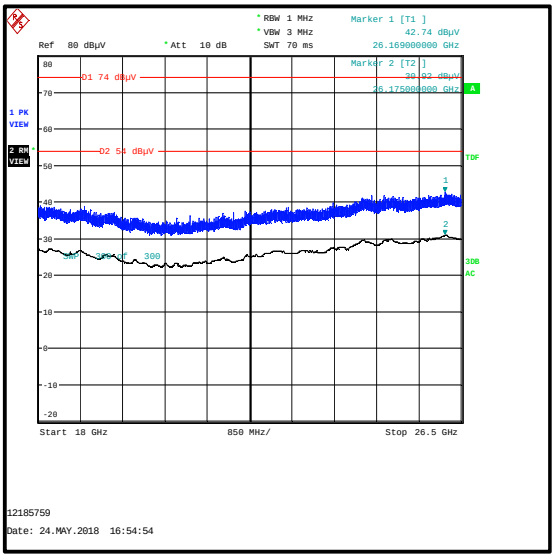


Transmitter Out of Band Radiated Emissions - *Bluetooth* Basic Rate top channel / 2.4 GHz WLAN (SISO) bottom channel / 5 GHz WLAN (MIMO) bottom channel (continued)

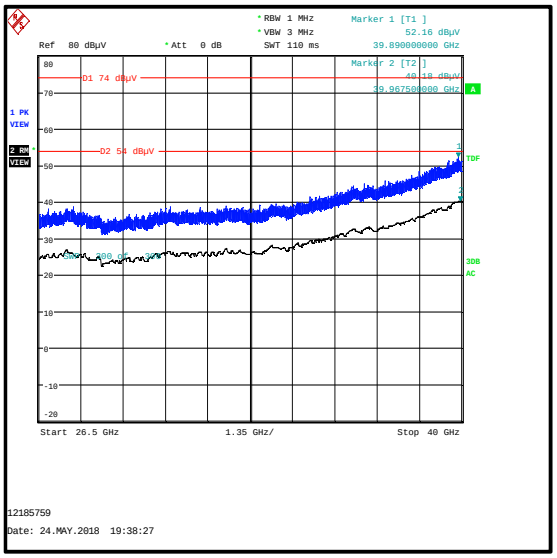








Transmitter Out of Band Radiated Emissions - *Bluetooth* Basic Rate top channel / 2.4 GHz WLAN (SISO) bottom channel / 5 GHz WLAN (MIMO) bottom channel (continued)



4.24. Transmitter Out of Band Radiated Emissions - *Bluetooth* Basic Rate top channel / 2.4 GHz WLAN (SISO) bottom channel / 5 GHz WLAN (MIMO) top channel

Test Summary:

Test Engineers:	Nicholas Steele, Marco Zunarelli, Mohamed Toubella, Alan Withers & Mark Perry	**Test Dates:**	17 May 2018 to 03 June 2018
Test Sample Serial Numbers:	C02VP00AJLDY, C02WC00DJMFL, C02WC006JTGW		

FCC Reference:	Parts 15.33, 15.205(a), 15.209(a), 15.247(d) & 15.407(b)
ISED Canada Reference:	RSS-Gen 6.13 & 8.9 / RSS-247 5.5, 6.2.4.2
Test Method Used:	ANSI C63.10 Sections 6.3, 6.5, 6.6, 11.11, 11.12.2.4 & 11.12.2.5.1, KDB 558074 Sections 11, 12.2.4, 12.2.5.1, 12.7, KDB 789033 II.G
Frequency Range:	30 MHz to 40 GHz
Configuration:	*Bluetooth* Basic Rate top channel / 2.4 GHz WLAN (SISO) bottom channel / 5 GHz WLAN (3Tx MIMO) top channel

Environmental Conditions:

Temperature (°C):	22 to 26
Relative Humidity (%):	38 to 50

Note(s):

1. All other intermodulation products were below the noise floor level or greater than 20 dB from the specification limit.
2. The *Bluetooth* and 2.4 GHz WLAN fundamentals are shown on the 1 GHz to 3 GHz plot.
3. The 5 GHz WLAN fundamental is shown on the 4 GHz to 6 GHz plot.
4. Pre-scans were made against the FCC Part 15 general limits for radiated emissions.
5. The emissions at approximately 5394.000 MHz, 5618.000 MHz and 6035.500 MHz are not intermodulation products and were therefore not measured.
6. The test receiver resolution bandwidth was set to 120 kHz and video bandwidth to 500 kHz, for measurements below 1 GHz. For measurements above 1 GHz the resolution bandwidth was set to 1 MHz and video bandwidth to 3 MHz, with the sweep time set to auto. Markers were placed on the highest measured level.
7. Measurements below 1 GHz were performed in a semi-anechoic chamber (Asset Number K0001) at a distance of 3 metres. The EUT was placed at a height of 80 cm above the reference ground plane in the centre of the chamber turntable. Maximum emission levels were determined by height searching the measurement antenna over the range 1 metre to 4 metres.
8. Measurements above 1 GHz were performed in a fully anechoic chamber (Asset Number K0002) 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 fully anechoic chamber (Asset Number K0017) at a distance of 3 metres. The EUT was placed at a height of 1.5 m above the reference ground plane in the centre of the chamber turntable. Maximum emission levels were determined by height searching the measurement antenna over the range 1 metre to 4 metres.to 4 metres.to 4 metres.

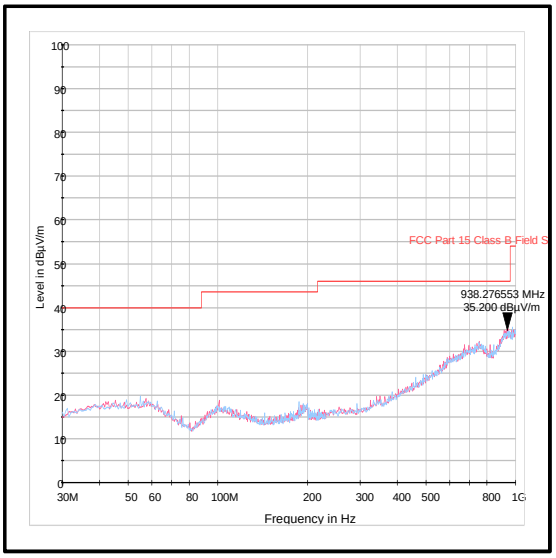
Transmitter Out of Band Radiated Emissions - *Bluetooth* Basic Rate top channel / 2.4 GHz WLAN (SISO) bottom channel / 5 GHz WLAN (MIMO) top channel (continued)

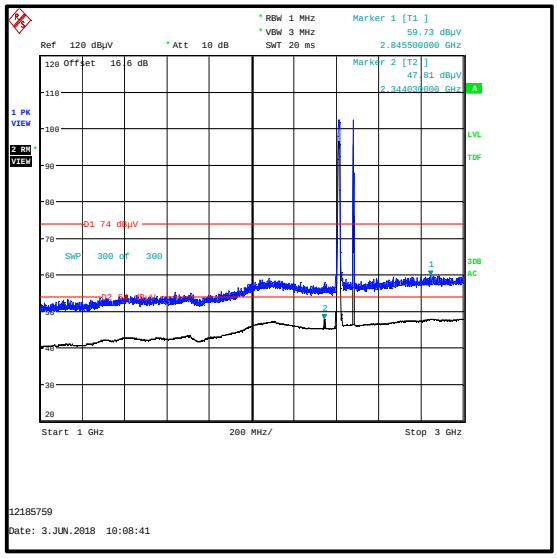
Results: Peak

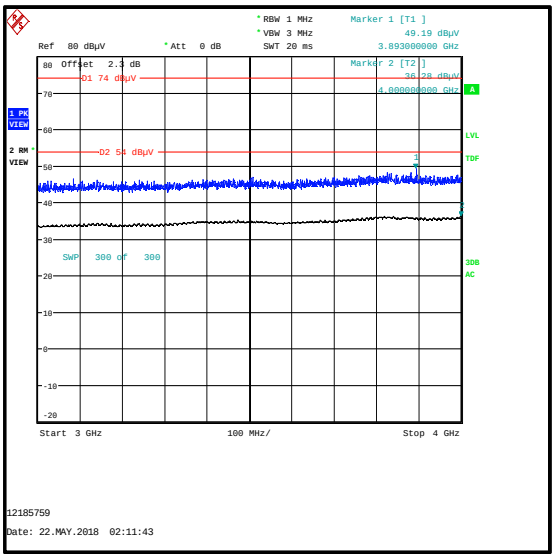
Frequency (MHz)	Antenna Polarity	Peak Level (dBµV/m)	Peak Limit (dBµV/m)	Margin (dB)	Result
2344.075	Vertical	59.0	74.0	15.0	Complied

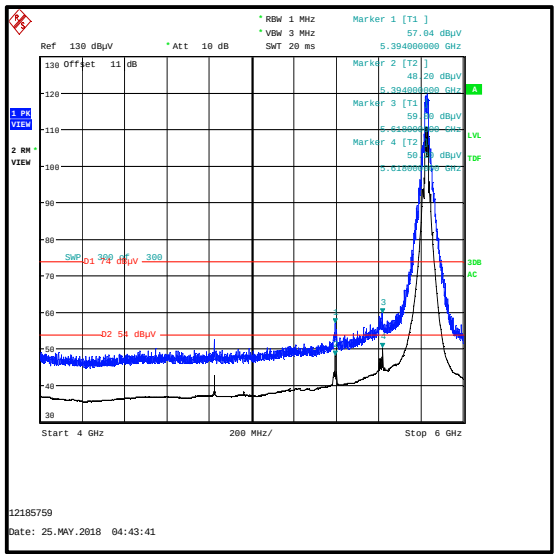
Results: Average

Frequency (MHz)	Antenna Polarity	Average Level (dBµV/m)	Average Limit (dBµV/m)	Margin (dB)	Result
2344.030	Vertical	49.1	54.0	4.9	Complied

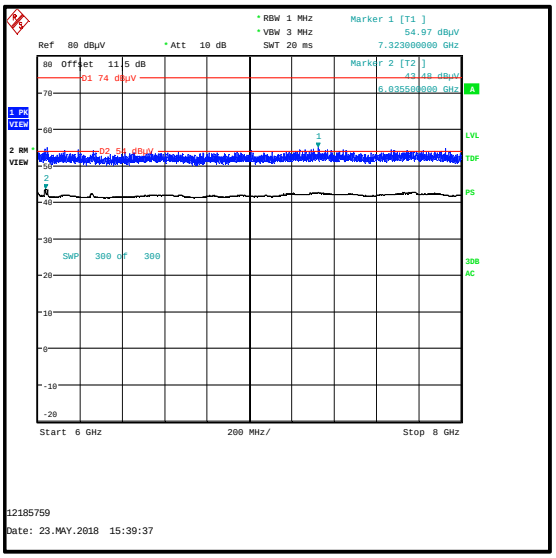


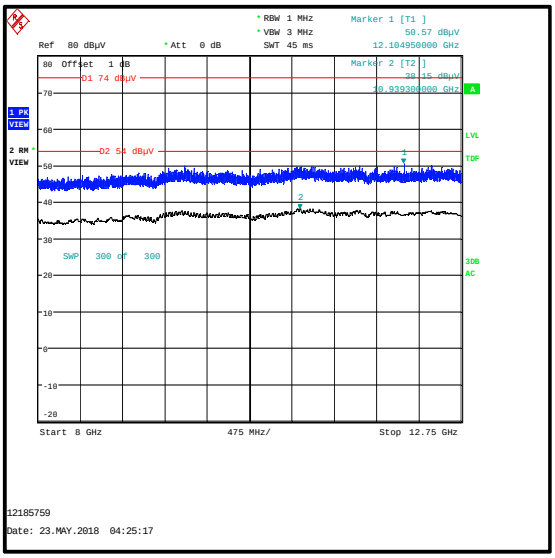


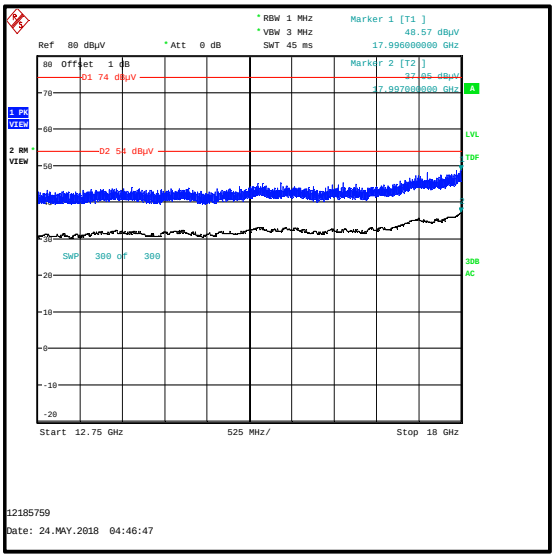


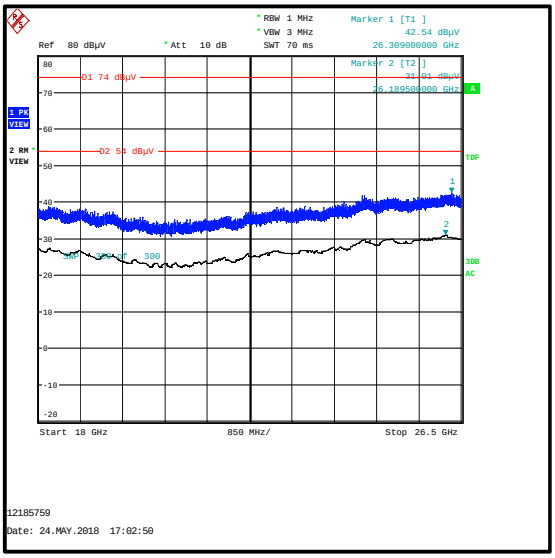


Transmitter Out of Band Radiated Emissions - *Bluetooth* Basic Rate top channel / 2.4 GHz WLAN (SISO) bottom channel / 5 GHz WLAN (MIMO) top channel (continued)

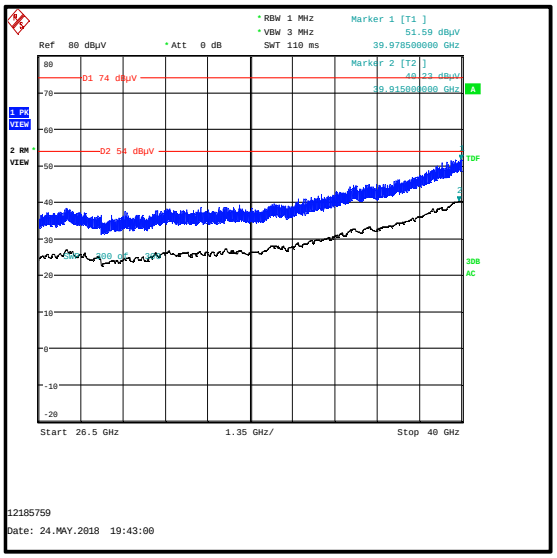








Transmitter Out of Band Radiated Emissions - *Bluetooth* Basic Rate top channel / 2.4 GHz WLAN (SISO) bottom channel / 5 GHz WLAN (MIMO) top channel (continued)



4.25. Transmitter Out of Band Radiated Emissions - *Bluetooth* LE bottom channel / 2.4 GHz WLAN (SISO) top channel / 5 GHz WLAN (MIMO) bottom channel

Test Summary:

Test Engineers:	Nicholas Steele, Marco Zunarelli, Mohamed Toubella, Alan Withers& Mark Perry	**Test Dates:**	17 May 2018 to 03 June 2018
Test Sample Serial Numbers:	C02VP00AJLDY, C02WC00DJMFL, C02WC006JTGW		

FCC Reference:	Parts 15.33, 15.205(a), 15.209(a), 15.247(d) & 15.407(b)
ISED Canada Reference:	RSS-Gen 6.13 & 8.9 / RSS-247 5.5, 6.2.1.2
Test Method Used:	ANSI C63.10 Sections 6.3, 6.5, 6.6, 11.11, 11.12.2.4 & 11.12.2.5.1, KDB 558074 Sections 11, 12.2.4, 12.2.5.1, 12.7 KDB 789033 II.G
Frequency Range:	30 MHz to 40 GHz
Configuration:	*Bluetooth* LE bottom channel / 2.4 GHz WLAN (SISO) top channel / 5 GHz WLAN (3Tx MIMO) bottom channel

Environmental Conditions:

Temperature (°C):	22 to 26
Relative Humidity (%):	38 to 50

Note(s):

1. All intermodulation products were below the noise floor level or greater than 20 dB from the specification limit.
2. The *Bluetooth* LE and 2.4 GHz WLAN fundamentals are shown on the 1 GHz to 3 GHz plot.
3. The 5 GHz WLAN fundamental is shown on the 4 GHz to 6 GHz plot.
4. Pre-scans were made against the FCC Part 15 general limits for radiated emissions.
5. The emission at approximately 4944.000 MHz is the second harmonic of the 2.4GHz WLAN signal and was therefore not measured.
6. The emission at approximately 5612.000 MHz is not an intermodulation product and were therefore not measured.
7. The test receiver resolution bandwidth was set to 120 kHz and video bandwidth to 500 kHz, for measurements below 1 GHz. For measurements above 1 GHz the resolution bandwidth was set to 1 MHz and video bandwidth to 3 MHz, with the sweep time set to auto. Markers were placed on the highest measured level.
8. Measurements below 1 GHz were performed in a semi-anechoic chamber (Asset Number K0001) at a distance of 3 metres. The EUT was placed at a height of 80 cm above the reference ground plane in the centre of the chamber turntable. Maximum emission levels were determined by height searching the measurement antenna over the range 1 metre to 4 metres.

Transmitter Out of Band Radiated Emissions - *Bluetooth* LE bottom channel / 2.4 GHz WLAN (SISO) top channel / 5 GHz WLAN (MIMO) bottom channel (continued)

9. Measurements above 1 GHz were performed in a fully anechoic chamber (Asset Number K0002) 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 fully anechoic chamber (Asset Number K0017) at a distance of 3 metres. The EUT was placed at a height of 1.5 m above the reference ground plane in the centre of the chamber turntable. Maximum emission levels were determined by height searching the measurement antenna over the range 1 metre to 4 metres.to 4 metres.to 4 metres.

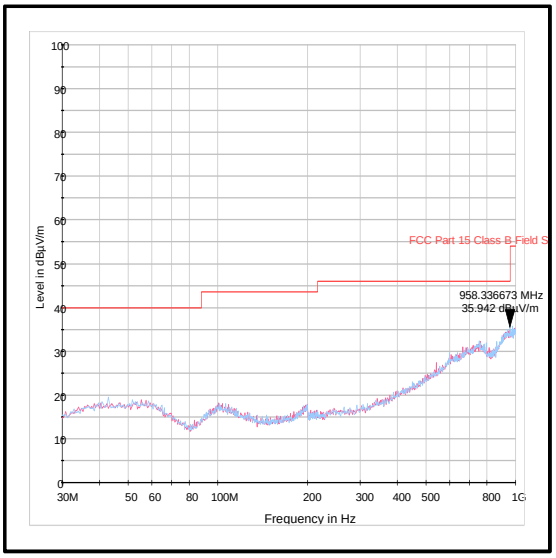
Transmitter Out of Band Radiated Emissions - *Bluetooth* LE bottom channel / 2.4 GHz WLAN (SISO) top channel / 5 GHz WLAN (MIMO) bottom channel (continued)

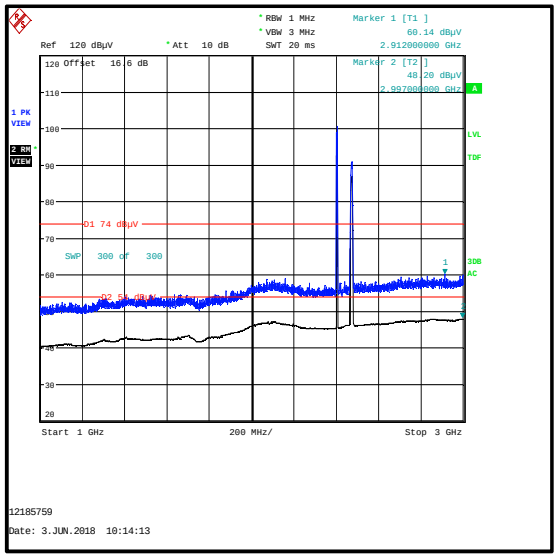
Results: Peak

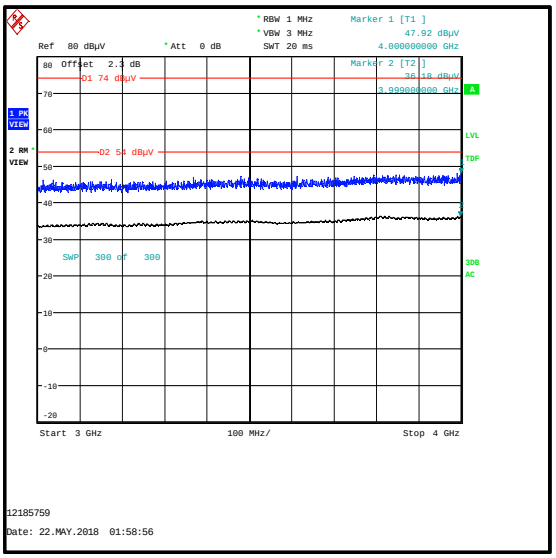
Frequency (MHz)	Antenna Polarity	Peak Level (dBµV/m)	Peak Limit (dBµV/m)	Margin (dB)	Result
See Note 1					

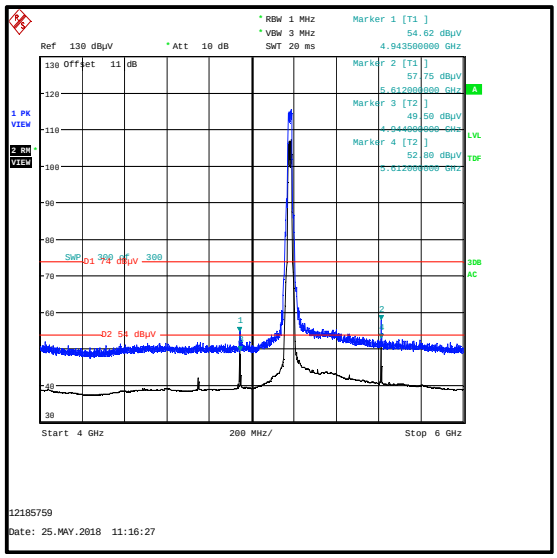
Results: Average

Frequency (MHz)	Antenna Polarity	Average Level (dBµV/m)	Average Limit (dBµV/m)	Margin (dB)	Result
See Note 1`					

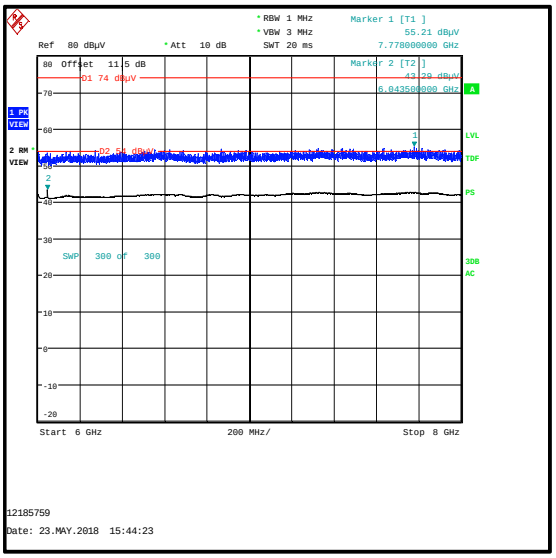


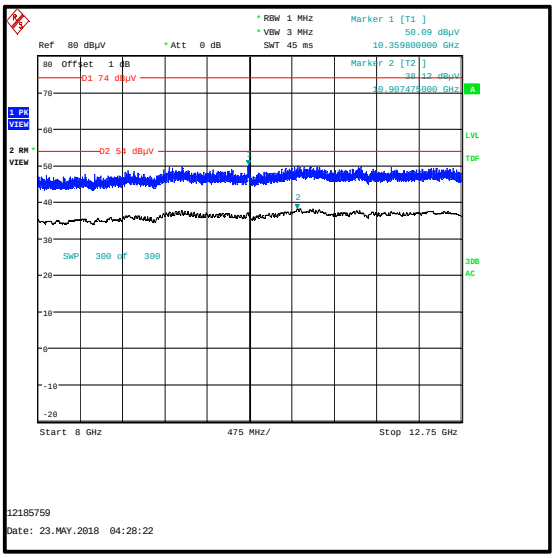


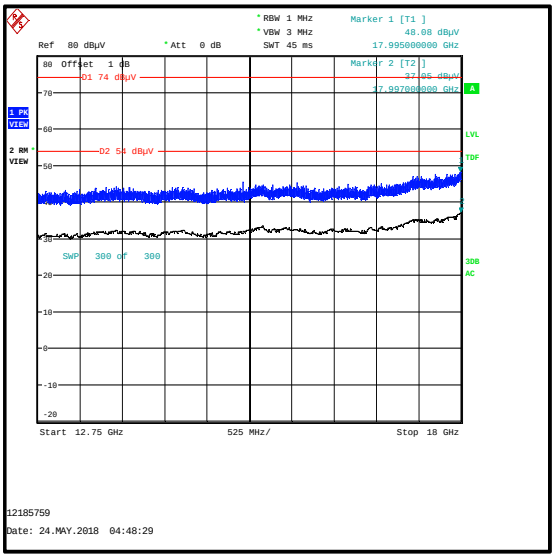


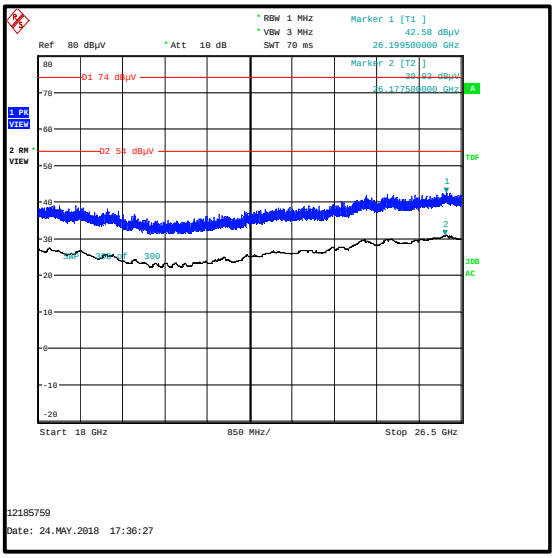


Transmitter Out of Band Radiated Emissions - *Bluetooth* LE bottom channel / 2.4 GHz WLAN (SISO) top channel / 5 GHz WLAN (MIMO) bottom channel (continued)

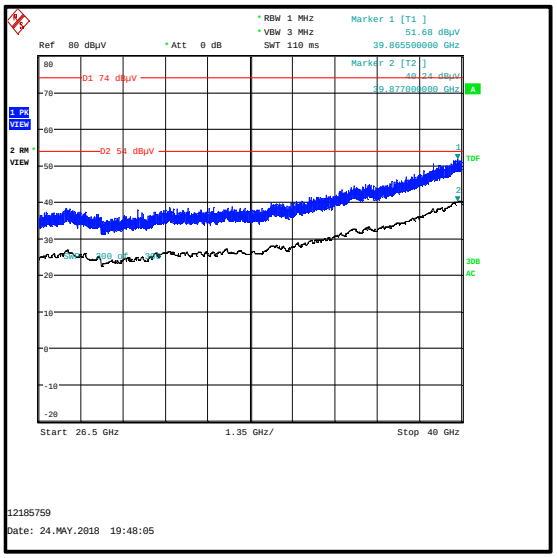








Transmitter Out of Band Radiated Emissions - *Bluetooth* LE bottom channel / 2.4 GHz WLAN (SISO) top channel / 5 GHz WLAN (MIMO) bottom channel (continued)



4.26. Transmitter Out of Band Radiated Emissions - *Bluetooth* LE bottom channel / 2.4 GHz WLAN (SISO) top channel / 5 GHz WLAN (MIMO) top channel

Test Summary:

Test Engineers:	Nicholas Steele, Marco Zunarelli, Mohamed Toubella, Alan Withers & Mark Perry	**Test Dates:**	17 May 2018 to 02 June 2018
Test Sample Serial Numbers:	C02VP00AJLDY, C02WC00DJMFL, C02WC006JTGW		

FCC Reference:	Parts 15.33, 15.205(a), 15.209(a), 15.247(d) & 15.407(b)
ISED Canada Reference:	RSS-Gen 6.13 & 8.9 / RSS-247 5.5, 6.2.4.2
Test Method Used:	ANSI C63.10 Sections 6.3, 6.5, 6.6, 11.11, 11.12.2.4 & 11.12.2.5.1, KDB 558074 Sections 11, 12.2.4, 12.2.5.1, 12.7, KDB 789033 II.G
Frequency Range:	30 MHz to 40 GHz
Configuration:	*Bluetooth* LE bottom channel / 2.4 GHz WLAN (SISO) top channel / 5 GHz WLAN (3Tx MIMO) top channel

Environmental Conditions:

Temperature (°C):	22 to 26
Relative Humidity (%):	38 to 50

Note(s):

1. All other intermodulation products were below the noise floor level or greater than 20 dB from the specification limit.
2. The *Bluetooth* LE and 2.4 GHz WLAN fundamentals are shown on the 1 GHz to 3 GHz plot.
3. The 5 GHz WLAN fundamental is shown on the 4 GHz to 6 GHz plot.
4. Pre-scans were made against the FCC Part 15 general limits for radiated emissions.
5. The emission at approximately 5618.000 MHz and 6032.000 MHz are not intermodulation products and were therefore not measured
6. The test receiver resolution bandwidth was set to 120 kHz and video bandwidth to 500 kHz, for measurements below 1 GHz. For measurements above 1 GHz the resolution bandwidth was set to 1 MHz and video bandwidth to 3 MHz, with the sweep time set to auto. Markers were placed on the highest measured level.
7. Measurements below 1 GHz were performed in a semi-anechoic chamber (Asset Number K0001) at a distance of 3 metres. The EUT was placed at a height of 80 cm above the reference ground plane in the centre of the chamber turntable. Maximum emission levels were determined by height searching the measurement antenna over the range 1 metre to 4 metres.
8. Measurements above 1 GHz were performed in a fully anechoic chamber (Asset Number K0002) 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 fully anechoic chamber (Asset Number K0017) at a distance of 3 metres. The EUT was placed at a height of 1.5 m above the reference ground plane in the centre of the chamber turntable. Maximum emission levels were determined by height searching the measurement antenna over the range 1 metre to 4 metres.to 4 metres.to 4 metres.

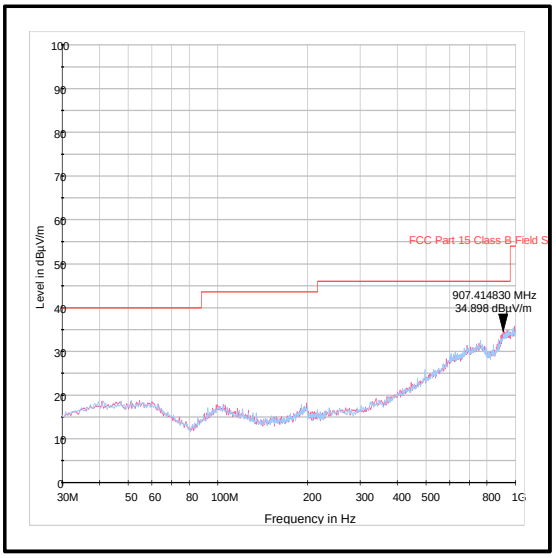
Transmitter Out of Band Radiated Emissions - *Bluetooth* LE bottom channel / 2.4 GHz WLAN (SISO) top channel / 5 GHz WLAN (MIMO) top channel (continued)

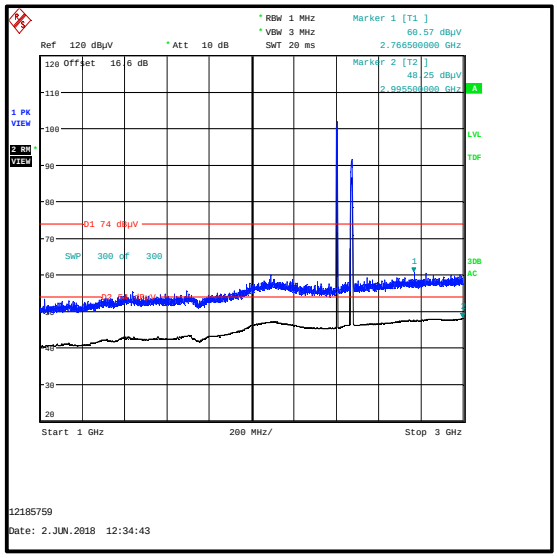
Results: Peak

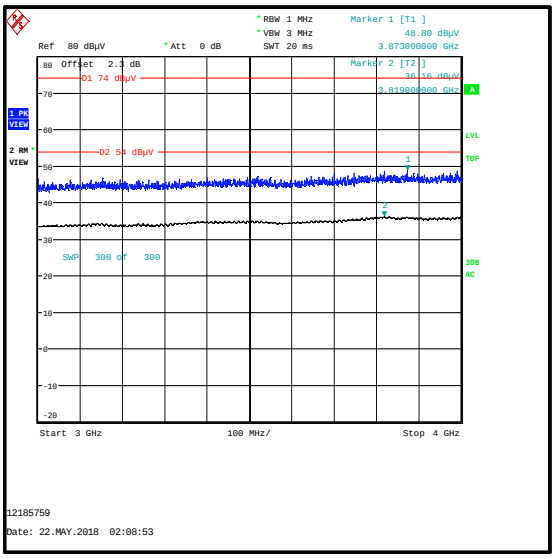
Frequency (MHz)	Antenna Polarity	Peak Level (dBµV/m)	Peak Limit (dBµV/m)	Margin (dB)	Result
5392.950	Vertical	58.7	74.0	15.3	Complied

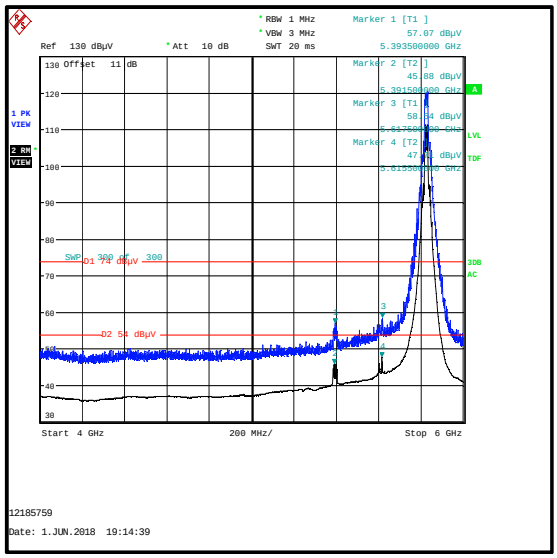
Results: Average

Frequency (MHz)	Antenna Polarity	Average Level (dBµV/m)	Average Limit (dBµV/m)	Margin (dB)	Result
5393.325	Vertical	47.9	54.0	6.1	Complied

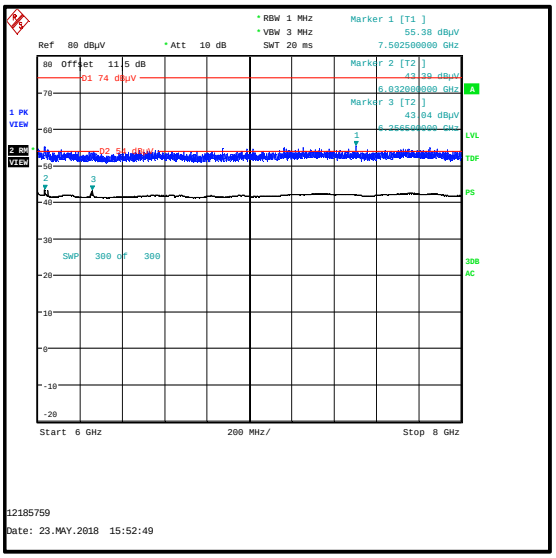


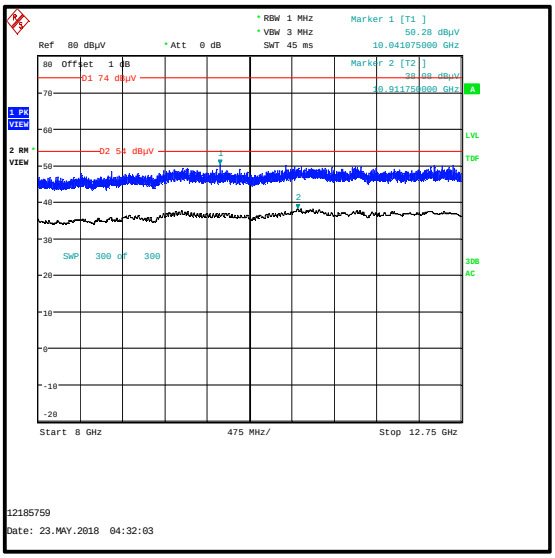


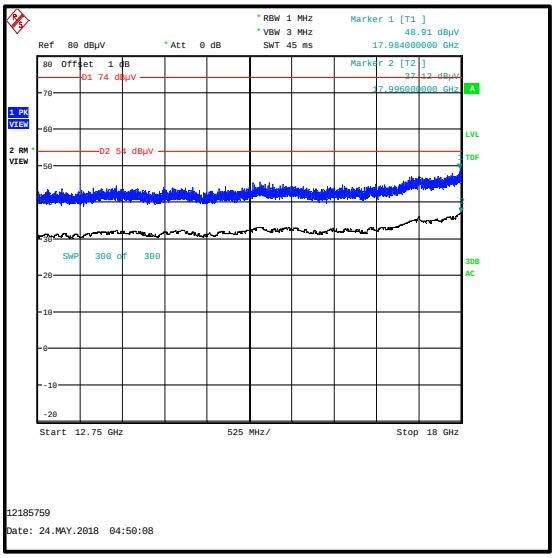


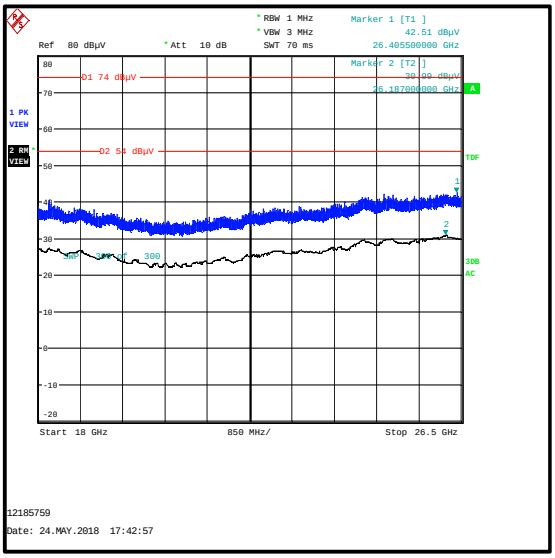


Transmitter Out of Band Radiated Emissions - *Bluetooth* LE bottom channel / 2.4 GHz WLAN (SISO) top channel / 5 GHz WLAN (MIMO) top channel (continued)

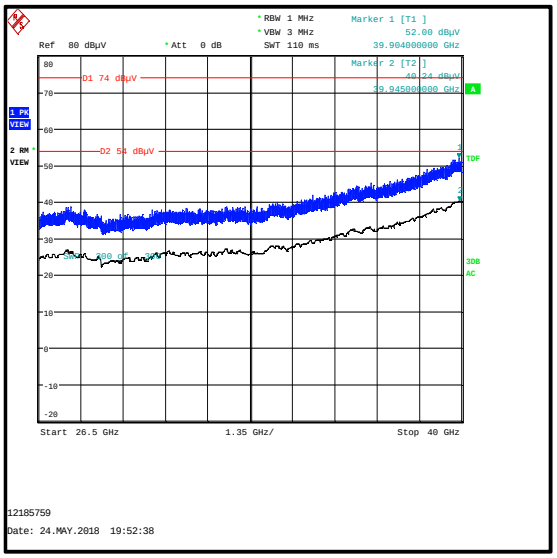








Transmitter Out of Band Radiated Emissions - *Bluetooth* LE bottom channel / 2.4 GHz WLAN (SISO) top channel / 5 GHz WLAN (MIMO) top channel (continued)



4.27. Transmitter Out of Band Radiated Emissions - *Bluetooth* LE top channel / 2.4 GHz WLAN (SISO) bottom channel / 5 GHz WLAN (MIMO) bottom channel

Test Summary:

Test Engineers:	Nicholas Steele, Marco Zunarelli, Mohamed Toubella, Alan Withers & Mark Perry	**Test Dates:**	17 May 2018 to 02 June 2018
Test Sample Serial Numbers:	C02VP00AJLDY, C02WC00DJMFL, C02WC006JTGW		

FCC Reference:	Parts 15.33, 15.205(a), 15.209(a), 15.247(d) & 15.407(b)
ISED Canada Reference:	RSS-Gen 6.13 & 8.9 / RSS-247 5.5, 6.2.1.2
Test Method Used:	ANSI C63.10 Sections 6.3, 6.5, 6.6, 11.11, 11.12.2.4 & 11.12.2.5.1, KDB 558074 Sections 11, 12.2.4, 12.2.5.1, 12.7, KDB 789033 II.G
Frequency Range:	30 MHz to 40 GHz
Configuration:	*Bluetooth* LE top channel / 2.4 GHz WLAN (SISO) bottom channel / 5 GHz WLAN (3Tx MIMO) bottom channel

Environmental Conditions:

Temperature (°C):	22 to 26
Relative Humidity (%):	38 to 50

Note(s):

1. All other intermodulation products were below the noise floor level or greater than 20 dB from the specification limit.
2. The *Bluetooth* LE and 2.4 GHz WLAN fundamentals are shown on the 1 GHz to 3 GHz plot.
3. The 5 GHz WLAN fundamental is shown on the 4 GHz to 6 GHz plot.
4. Pre-scans were made against the FCC Part 15 general limits for radiated emissions.
5. The emission at approximately 4824.000 MHz is the second harmonic of the 2.4GHz WLAN signal and was therefore not measured.
6. The emission at approximately 5612.000 MHz is not an intermodulation product and was therefore not measured.
7. The test receiver resolution bandwidth was set to 120 kHz and video bandwidth to 500 kHz, for measurements below 1 GHz. For measurements above 1 GHz the resolution bandwidth was set to 1 MHz and video bandwidth to 3 MHz, with the sweep time set to auto. Markers were placed on the highest measured level.
8. Measurements below 1 GHz were performed in a semi-anechoic chamber (Asset Number K0001) at a distance of 3 metres. The EUT was placed at a height of 80 cm above the reference ground plane in the centre of the chamber turntable. Maximum emission levels were determined by height searching the measurement antenna over the range 1 metre to 4 metres.

Transmitter Out of Band Radiated Emissions - *Bluetooth* LE top channel / 2.4 GHz WLAN (SISO) bottom channel / 5 GHz WLAN (MIMO) bottom channel (continued)

9. Measurements above 1 GHz were performed in a fully anechoic chamber (Asset Number K0002) 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 fully anechoic chamber (Asset Number K0017) at a distance of 3 metres. The EUT was placed at a height of 1.5 m above the reference ground plane in the centre of the chamber turntable. Maximum emission levels were determined by height searching the measurement antenna over the range 1 metre to 4 metres.to 4 metres.to 4 metres.

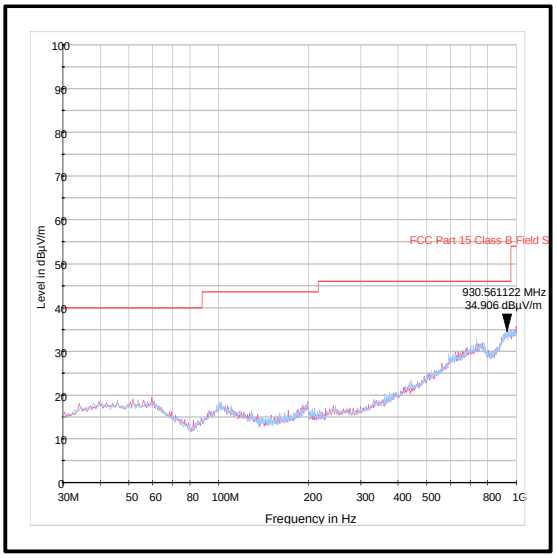
Transmitter Out of Band Radiated Emissions - *Bluetooth* LE top channel / 2.4 GHz WLAN (SISO) bottom channel / 5 GHz WLAN (MIMO) bottom channel (continued)

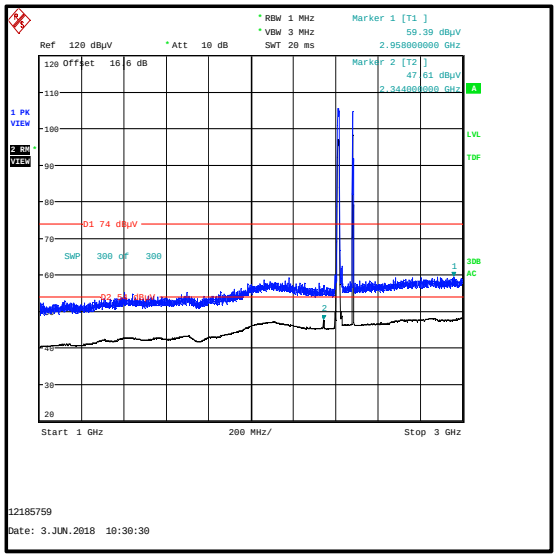
Results: Peak

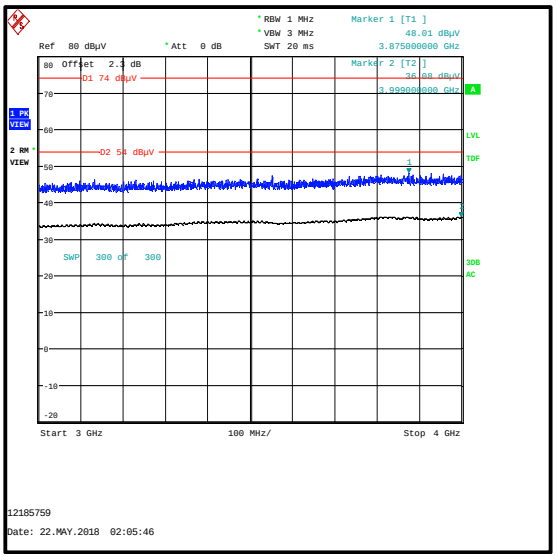
Frequency (MHz)	Antenna Polarity	Peak Level (dBµV/m)	Peak Limit (dBµV/m)	Margin (dB)	Result
2344.100	Vertical	58.7	74.0	15.3	Complied

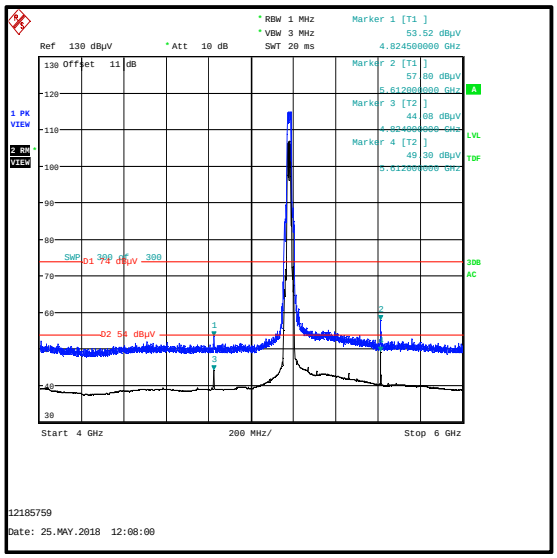
Results: Average

Frequency (MHz)	Antenna Polarity	Average Level (dBµV/m)	Average Limit (dBµV/m)	Margin (dB)	Result
2344.100	Vertical	48.1	54.0	5.9	Complied

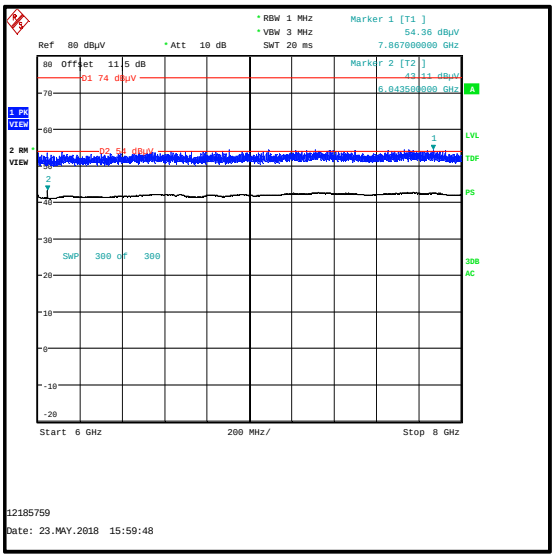


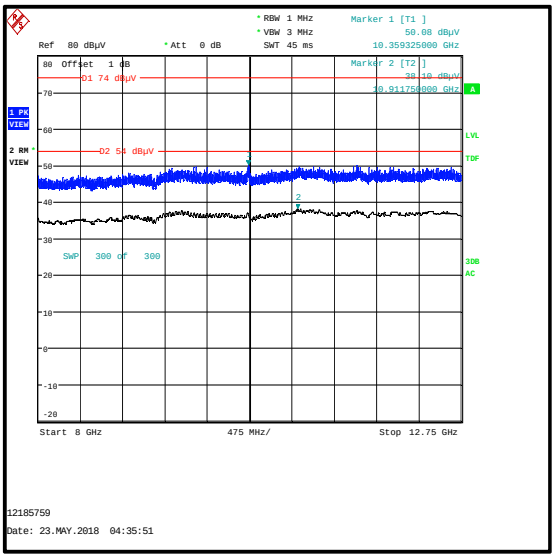


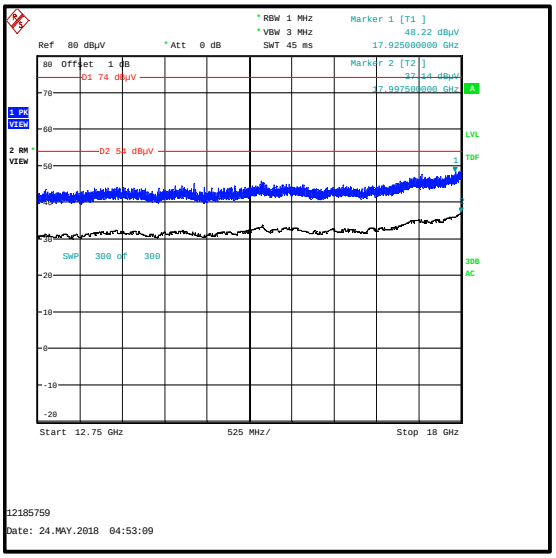


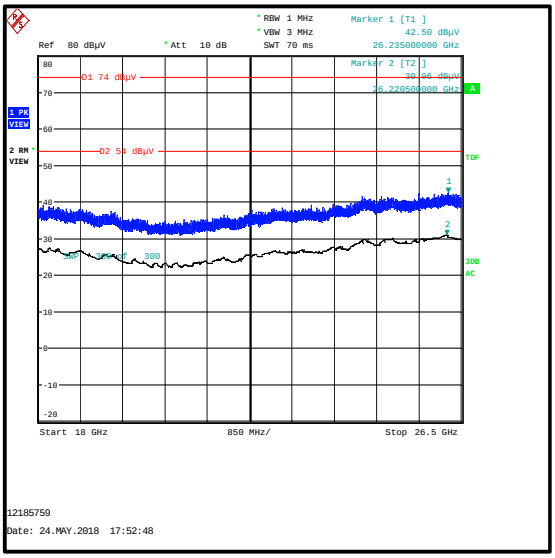


Transmitter Out of Band Radiated Emissions - *Bluetooth* LE top channel / 2.4 GHz WLAN (SISO) bottom channel / 5 GHz WLAN (MIMO) bottom channel (continued)

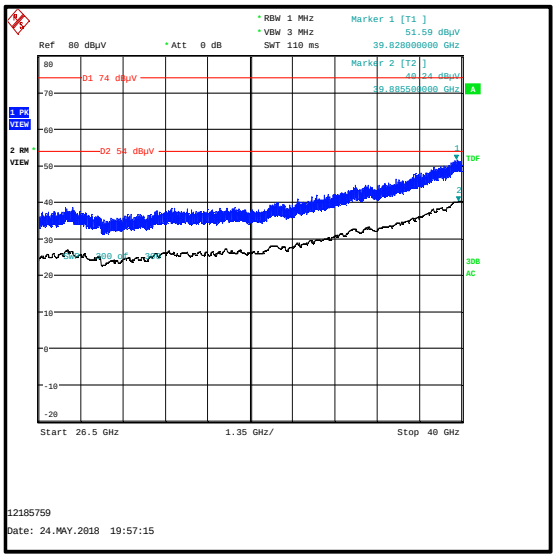








Transmitter Out of Band Radiated Emissions - *Bluetooth* LE top channel / 2.4 GHz WLAN (SISO) bottom channel / 5 GHz WLAN (MIMO) bottom channel (continued)



4.28. Transmitter Out of Band Radiated Emissions - *Bluetooth* LE top channel / 2.4 GHz WLAN (SISO) bottom channel / 5 GHz WLAN (MIMO) top channel

Test Summary:

Test Engineers:	Nicholas Steele, Marco Zunarelli, Mohamed Toubella, Alan Withers & Mark Perry	**Test Dates:**	17 May 2018 to 03 June 2018
Test Sample Serial Numbers:	C02VP00AJLDY, C02WC00DJMFL, C02WC006JTGW		

FCC Reference:	Parts 15.33, 15.205(a), 15.209(a), 15.247(d) & 15.407(b)
ISED Canada Reference:	RSS-Gen 6.13 & 8.9 / RSS-247 5.5, 6.2.4.2
Test Method Used:	ANSI C63.10 Sections 6.3, 6.5, 6.6, 11.11, 11.12.2.4 & 11.12.2.5.1, KDB 558074 Sections 11, 12.2.4, 12.2.5.1, 12.7, KDB 789033 II.G
Frequency Range:	30 MHz to 40 GHz
Configuration:	*Bluetooth* LE top channel / 2.4 GHz WLAN (SISO) bottom channel / 5 GHz WLAN (3Tx MIMO) top channel

Environmental Conditions:

Temperature (°C):	22 to 26
Relative Humidity (%):	38 to 50

Note(s):

1. All other intermodulation products were below the noise floor level or greater than 20 dB from the specification limit.
2. The *Bluetooth* LE and 2.4 GHz WLAN fundamentals are shown on the 1 GHz to 3 GHz plot.
3. The 5 GHz WLAN fundamental is shown on the 4 GHz to 6 GHz plot.
4. Pre-scans were made against the FCC Part 15 general limits for radiated emissions.
5. The emissions at approximately 5396.500 MHz and 5601.500 MHz are not intermodulation products and was therefore not measured.
6. The test receiver resolution bandwidth was set to 120 kHz and video bandwidth to 500 kHz, for measurements below 1 GHz. For measurements above 1 GHz the resolution bandwidth was set to 1 MHz and video bandwidth to 3 MHz, with the sweep time set to auto. Markers were placed on the highest measured level.
7. Measurements below 1 GHz were performed in a semi-anechoic chamber (Asset Number K0017) at a distance of 3 metres. The EUT was placed at a height of 80 cm above the reference ground plane in the centre of the chamber turntable. Maximum emission levels were determined by height searching the measurement antenna over the range 1 metre to 4 metres.
8. Measurements above 1 GHz were performed in a fully anechoic chamber (Asset Number K0002) 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 fully anechoic chamber (Asset Number K0017) at a distance of 3 metres. The EUT was placed at a height of 1.5 m above the reference ground plane in the centre of the chamber turntable. Maximum emission levels were determined by height searching the measurement antenna over the range 1 metre to 4 metres.to 4 metres.to 4 metres.

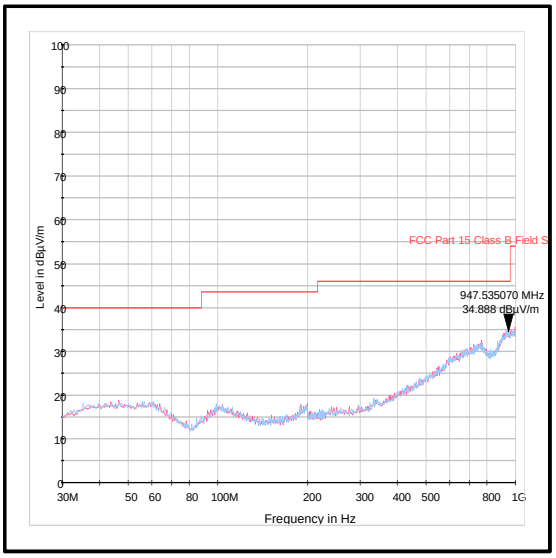
Transmitter Out of Band Radiated Emissions - *Bluetooth* LE top channel / 2.4 GHz WLAN (SISO) bottom channel / 5 GHz WLAN (MIMO) top channel (continued)

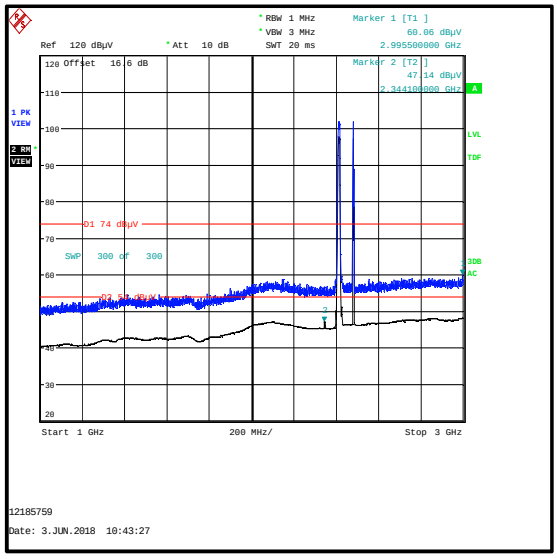
Results: Peak

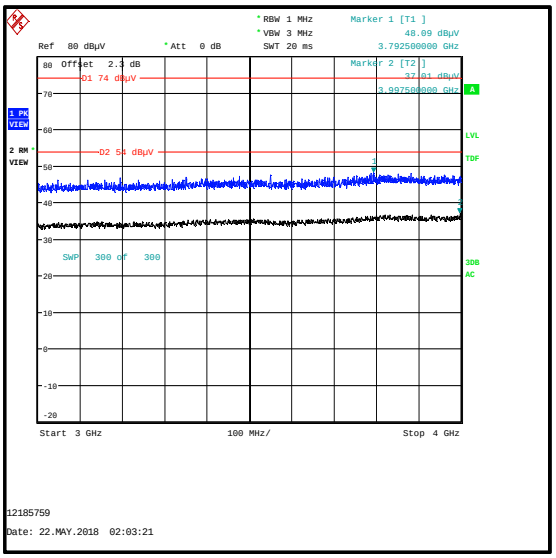
Frequency (MHz)	Antenna Polarity	Peak Level (dBµV/m)	Peak Limit (dBµV/m)	Margin (dB)	Result
2343.610	Vertical	59.4	74.0	14.6	Complied

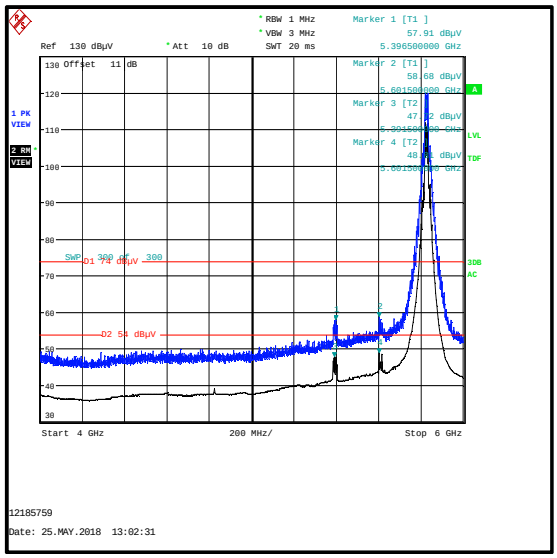
Results: Average

Frequency (MHz)	Antenna Polarity	Average Level (dBµV/m)	Average Limit (dBµV/m)	Margin (dB)	Result
2344.100	Vertical	49.2	54.0	4.8	Complied

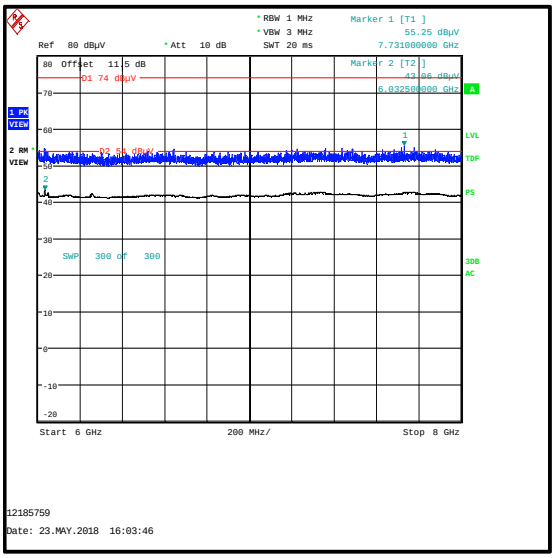


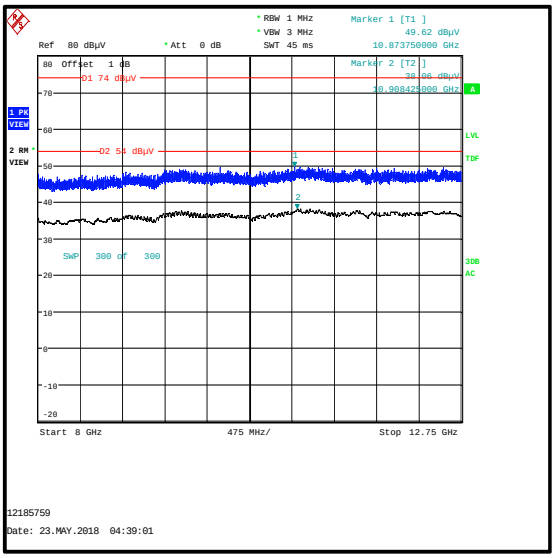


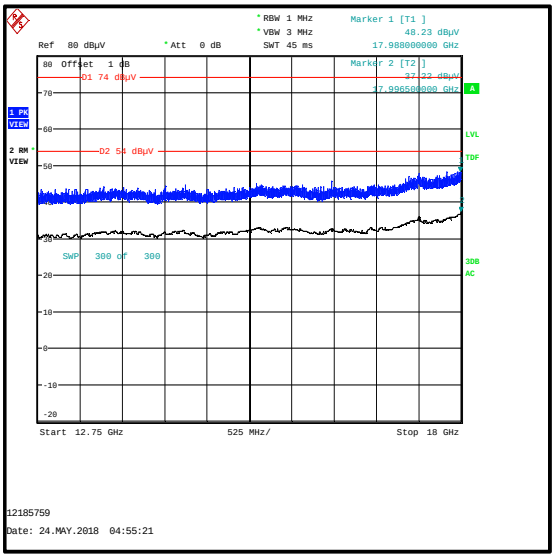


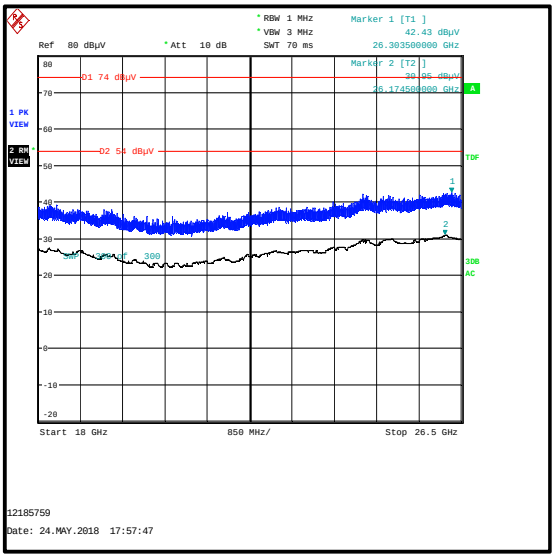


Transmitter Out of Band Radiated Emissions - *Bluetooth* LE top channel / 2.4 GHz WLAN (SISO) bottom channel / 5 GHz WLAN (MIMO) top channel (continued)

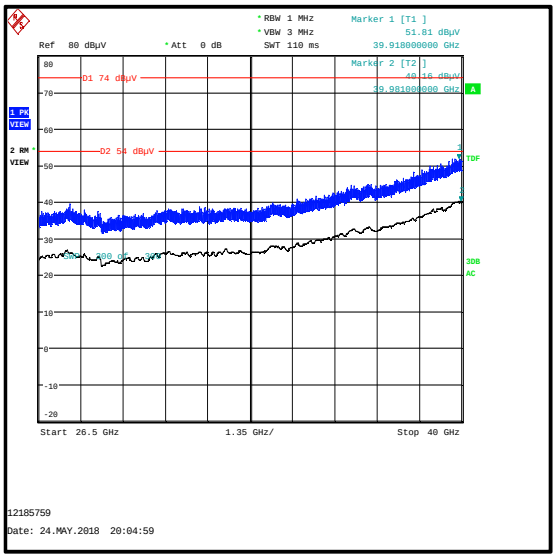








Transmitter Out of Band Radiated Emissions - *Bluetooth* LE top channel / 2.4 GHz WLAN (SISO) bottom channel / 5 GHz WLAN (MIMO) top channel (continued)



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