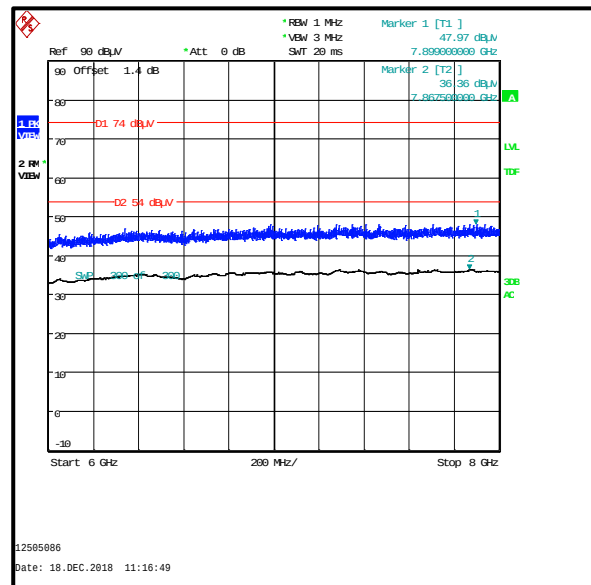
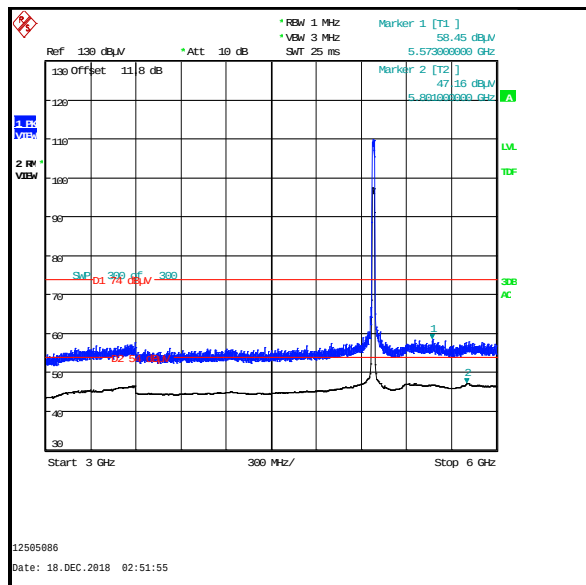
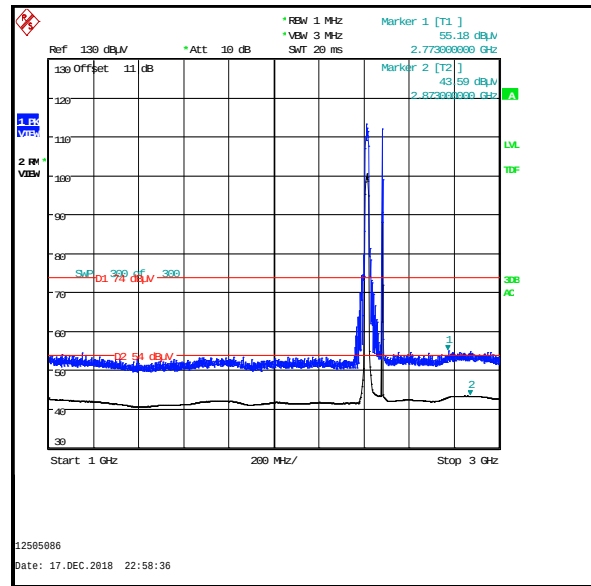
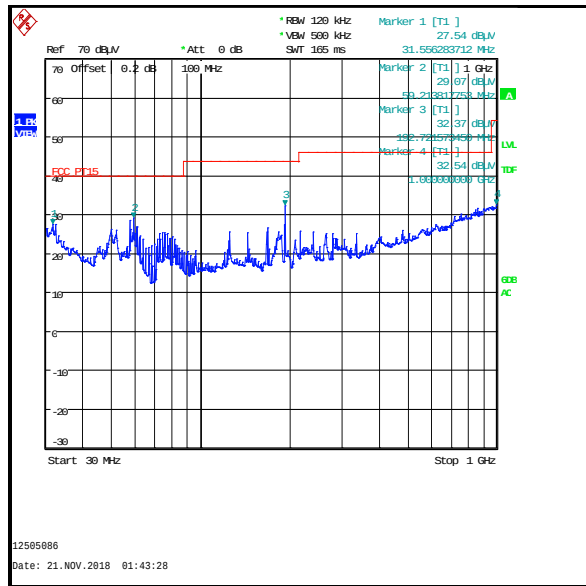
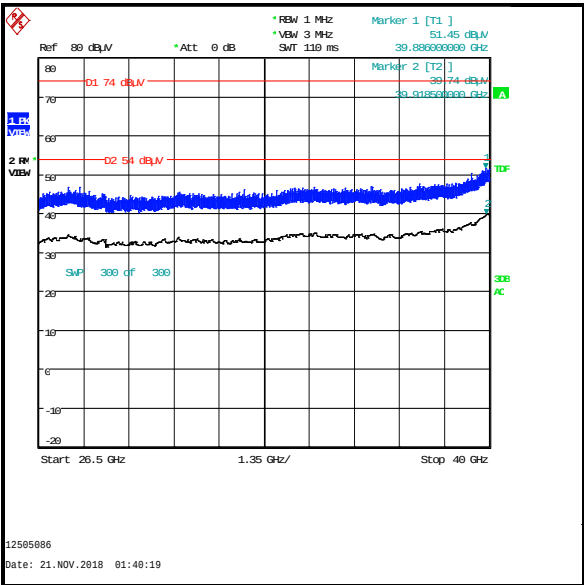
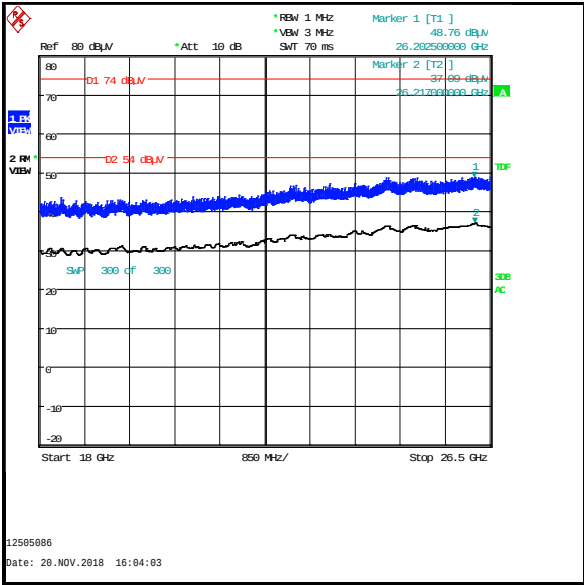
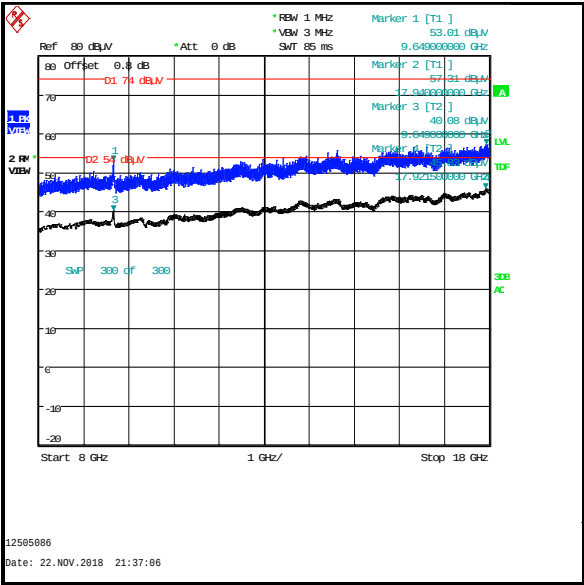


Transmitter Out of Band Radiated Emissions -Bluetooth LE top channel / 2.4 GHz WLAN (MIMO) bottom channel / 5 GHz WLAN (SISO) bottom channel (continued)

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



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

Test Summary:

Test Engineers:	Andrew Edwards, Andrew Harding, Mohamed Toubella, Tom Sleigh & Marco Zunarelli	Test Dates:	20 November 2018 to 18 December 2018
Test Sample Serial Numbers:	C02WW00PKFMM & C02X200XKFLX		

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 8.5 & 8.6 ; KDB 789033 II.G
Frequency Range:	30 MHz to 40 GHz
Configuration:	Bluetooth LE top channel / 2.4 GHz WLAN (MIMO) bottom channel / 5 GHz WLAN (SISO) top channel

Environmental Conditions:

Temperature (°C):	22 to 23
Relative Humidity (%):	34 to 41

Note(s):

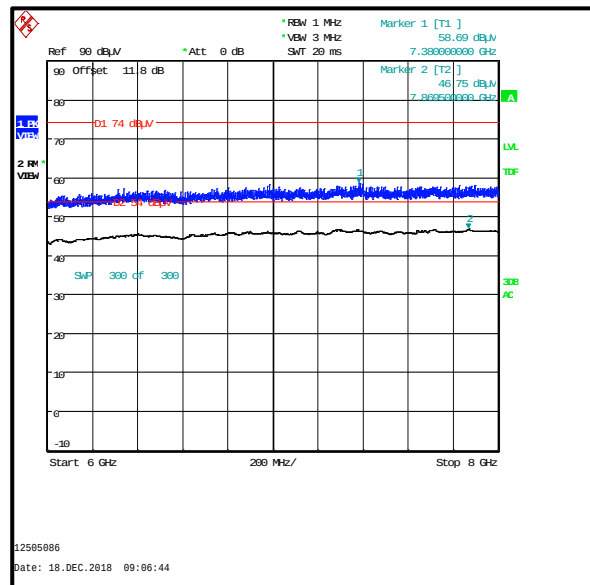
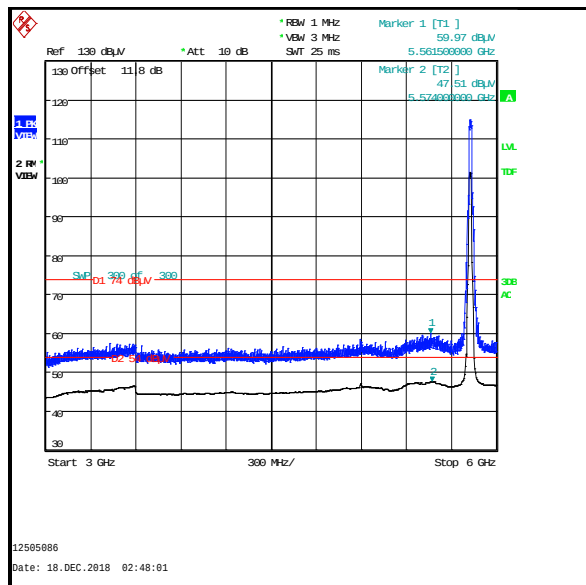
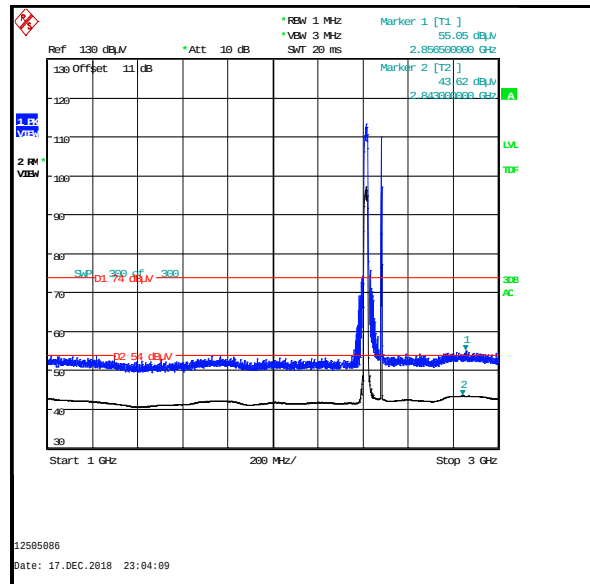
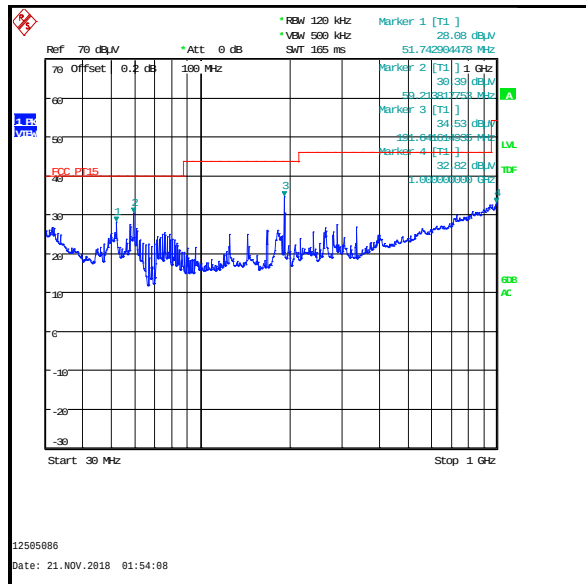
1. All intermodulation products were below the noise floor level or greater than 20 dB from the specification limit.
2. The Bluetooth LE and 2.4 GHz WLAN fundamentals are shown on the 1 GHz to 3 GHz plot.
3. The 5 GHz WLAN fundamental is shown on the 3 GHz to 6 GHz plot.
4. The emission at approximately 9648.000 MHz is the 4th harmonic of the 2.4 GHz WLAN signal and was therefore not measured.
5. Pre-scans were made against the FCC Part 15 general limits for radiated emissions.
6. The test receiver resolution bandwidth was set to 120 kHz and video bandwidth 500 kHz, for measurements below 1 GHz. For measurements above 1 GHz resolution bandwidth was set 1 MHz and video bandwidth 3 MHz, with the sweep time set to auto. Markers were placed on the highest measured level.

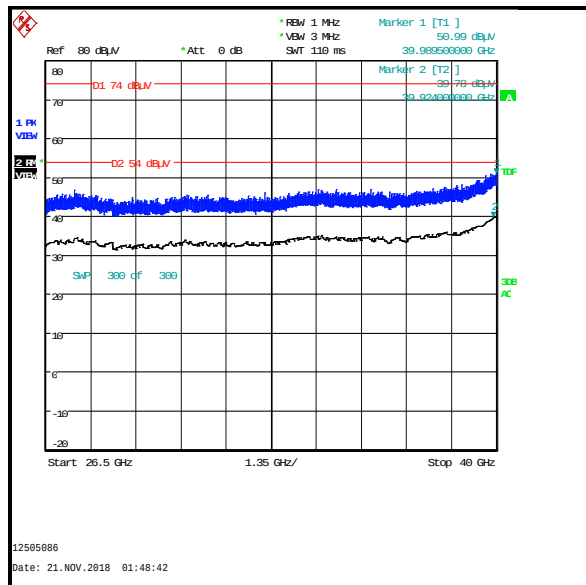
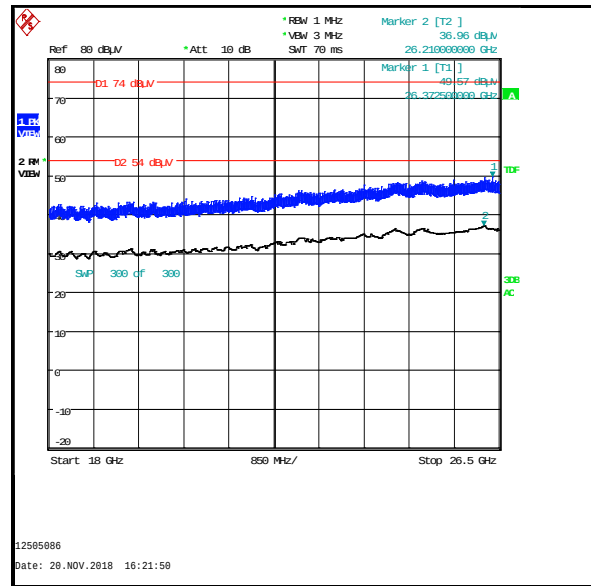
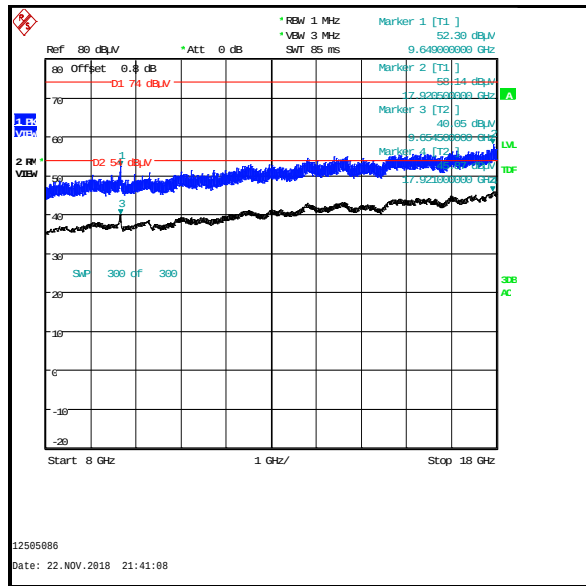
Results: Peak

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 top channel / 2.4 GHz WLAN (MIMO) bottom channel / 5 GHz WLAN (SISO) top channel (continued)

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

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

Test Summary:

Test Engineers:	Andrew Edwards, Andrew Harding, Mohamed Toubella, Tom Sleigh & Marco Zunarelli	Test Dates:	20 November 2018 to 18 December 2018
Test Sample Serial Numbers:	C02WW00PKFMM & C02X200XKFLX		

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 8.5 & 8.6 ; KDB 789033 II.G
Frequency Range:	30 MHz to 40 GHz
Configuration:	2.4 GHz WLAN (SISO) bottom channel / 5 GHz WLAN (MIMO) top channel

Environmental Conditions:

Temperature (°C):	22 to 23
Relative Humidity (%):	34 to 41

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 fundamentals are shown on the 1 GHz to 3 GHz plot.
3. The 5 GHz WLAN fundamental is shown on the 3 GHz to 6 GHz plot.
4. Pre-scans were made against the FCC Part 15 general limits for radiated emissions.
5. The test receiver resolution bandwidth was set to 120 kHz and video bandwidth 500 kHz, for measurements below 1 GHz. For measurements above 1 GHz resolution bandwidth was set 1 MHz and video bandwidth 3 MHz, with the sweep time set to auto. Markers were placed on the highest measured level.

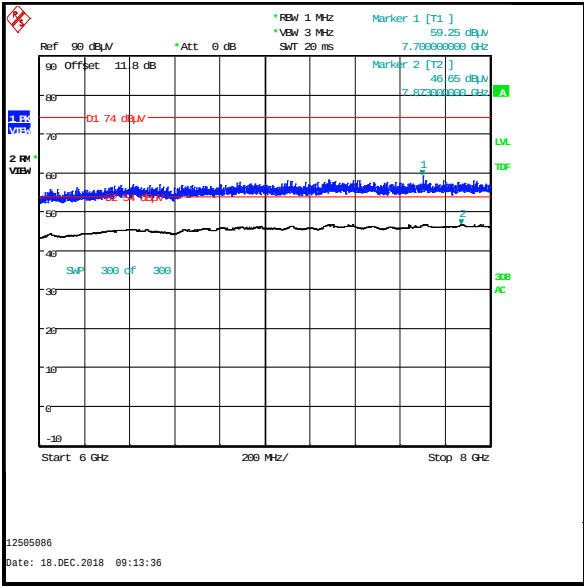
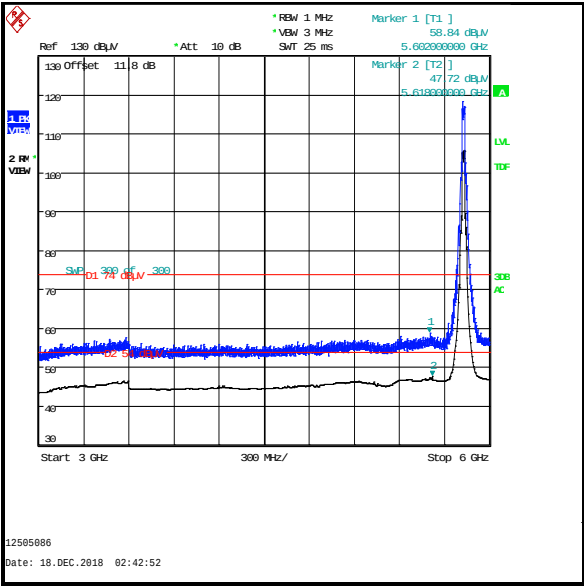
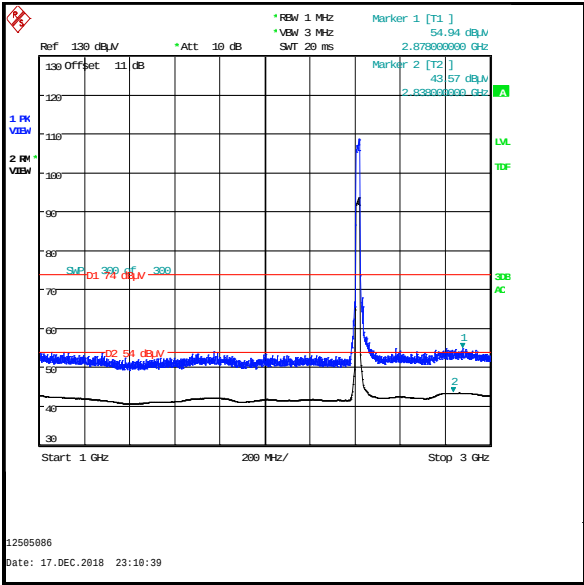
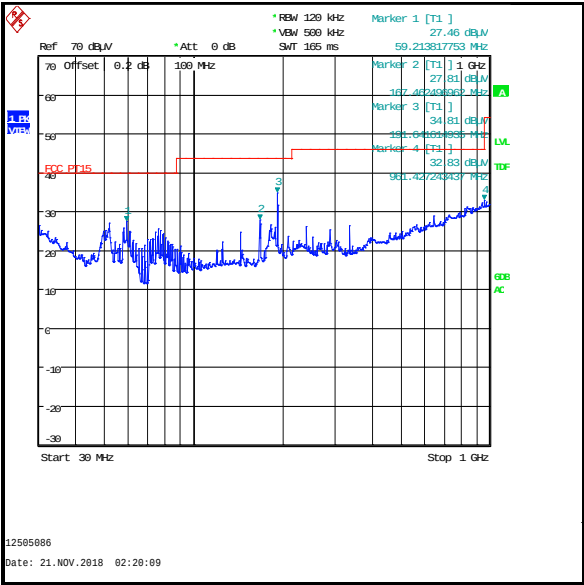
Results: Peak

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

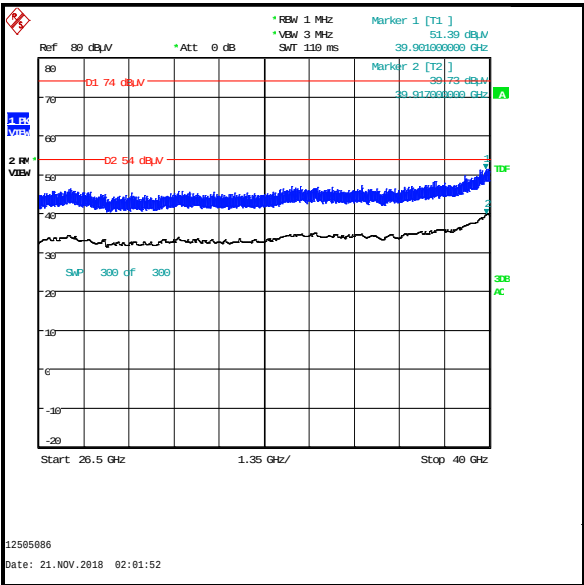
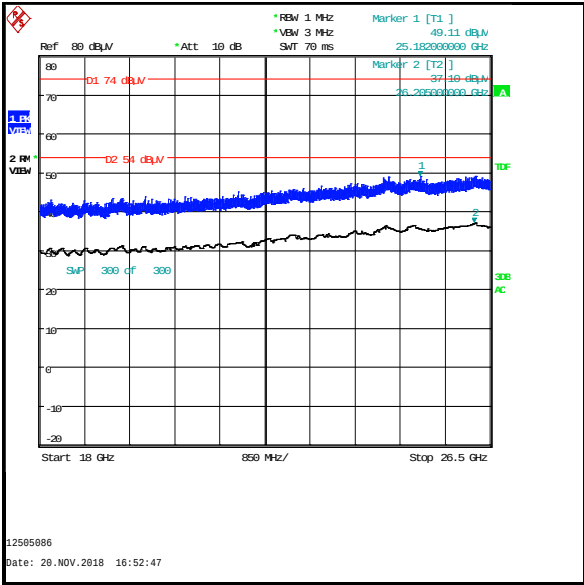
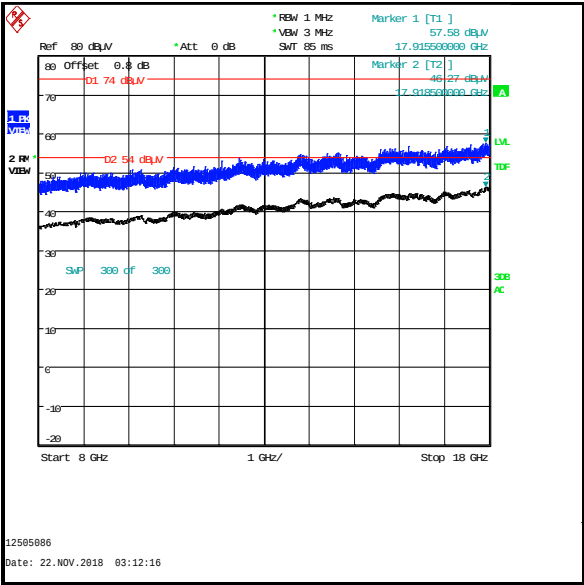
Results: Average

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) bottom channel

Test Summary:

Test Engineers:	Andrew Edwards, Andrew Harding, Mohamed Toubella, Tom Sleigh & Marco Zunarelli	Test Dates:	20 November 2018 to 18 December 2018
Test Sample Serial Numbers:	C02WW00PKFMM & C02X200XKFLX		

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 8.5 & 8.6 ; KDB 789033 II.G
Frequency Range:	30 MHz to 40 GHz
Configuration:	2.4 GHz WLAN (SISO) top channel / 5 GHz WLAN (MIMO) bottom channel

Environmental Conditions:

Temperature (°C):	22 to 23
Relative Humidity (%):	34 to 41

Note(s):

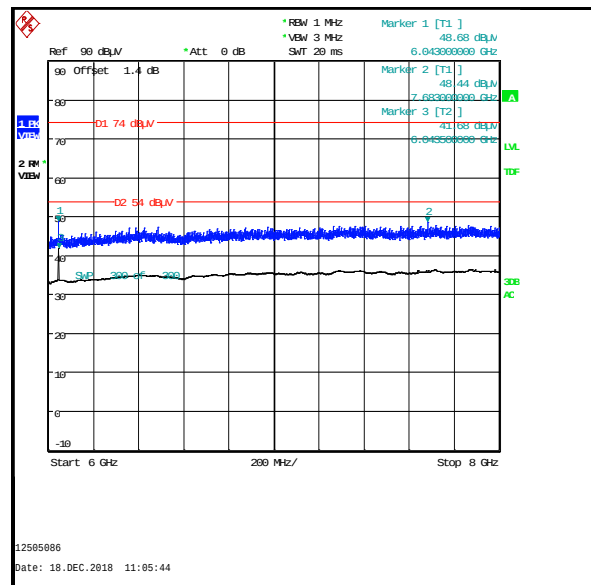
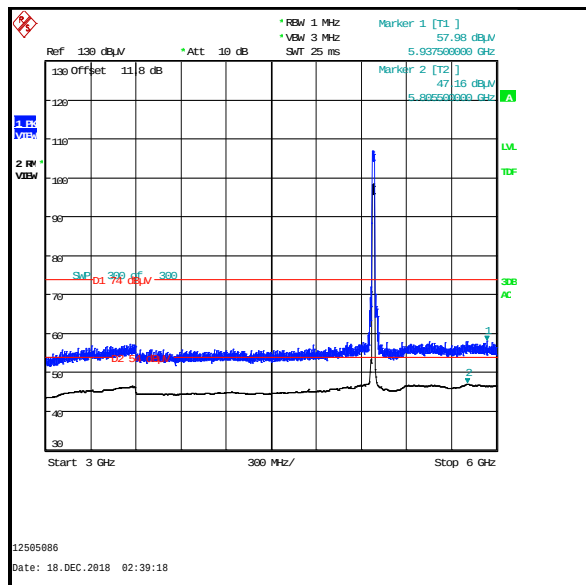
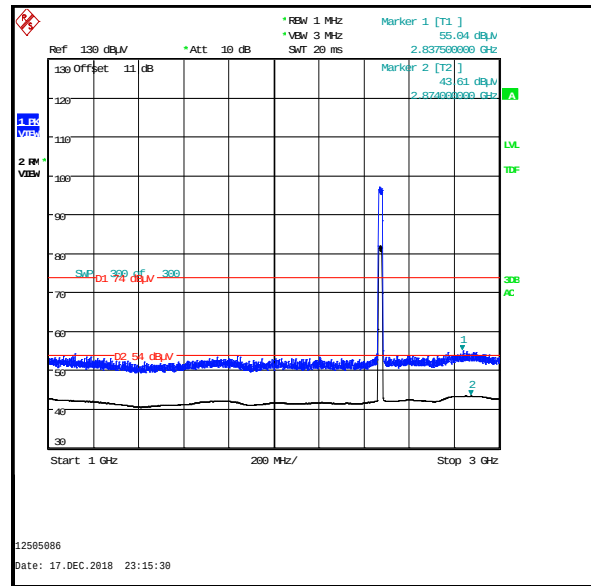
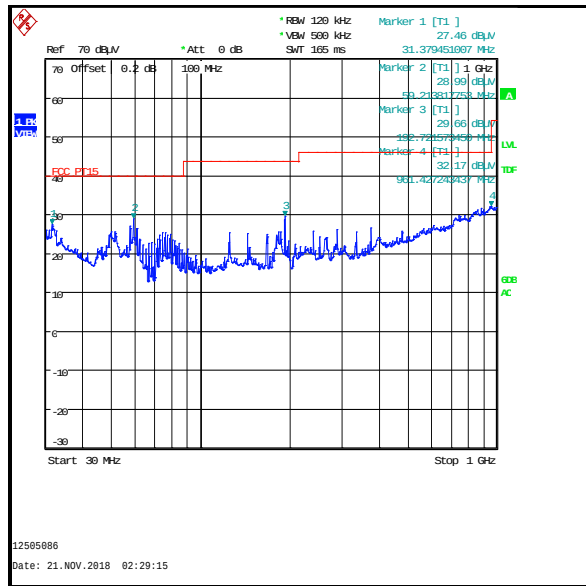
1. All intermodulation products were below the noise floor level or greater than 20 dB from the specification limit.
2. The 2.4 GHz WLAN fundamental is shown on the 1 GHz to 3 GHz plot.
3. The 5 GHz WLAN fundamental is shown on the 3 GHz to 6 GHz plot.
4. The emission at approximately 6043.500 MHz is not an intermodulation product and was therefore not measured.
5. Pre-scans were made against the FCC Part 15 general limits for radiated emissions.
6. The test receiver resolution bandwidth was set to 120 kHz and video bandwidth 500 kHz, for measurements below 1 GHz. For measurements above 1 GHz resolution bandwidth was set 1 MHz and video bandwidth 3 MHz, with the sweep time set to auto. Markers were placed on the highest measured level.

Results: Peak

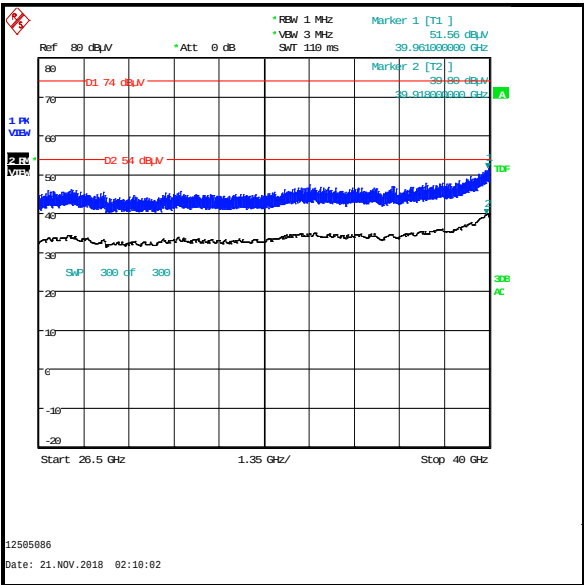
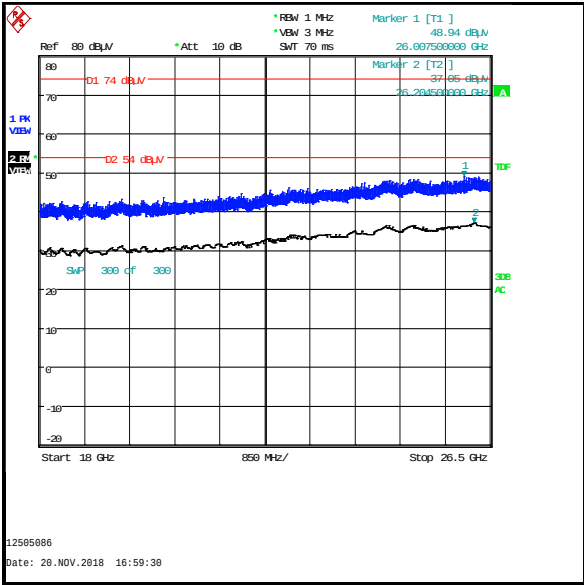
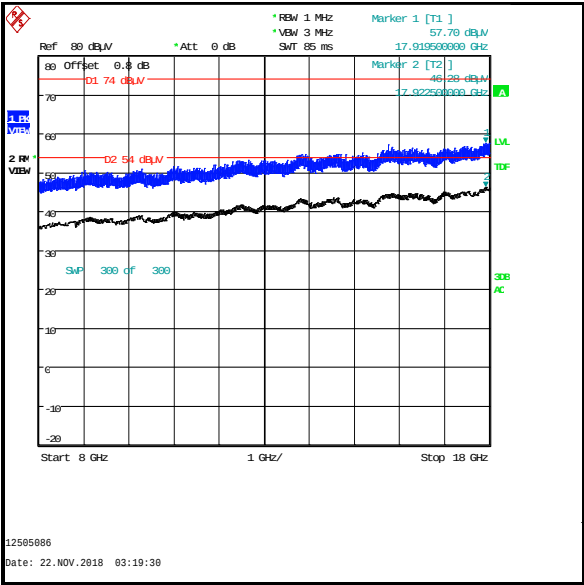
Frequency (MHz)	Antenna Polarity	Peak Level (dBμV/m)	Peak Limit (dBμV/m)	Margin (dB)	Result
See Note 1					

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:	Andrew Edwards, Andrew Harding, Mohamed Toubella, Tom Sleigh & Marco Zunarelli	Test Dates:	20 November 2018 to 18 December 2018
Test Sample Serial Numbers:	C02WW00PKFMM & C02X200XKFLX		

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 8.5 & 8.6 ; KDB 789033 II.G
Frequency Range:	30 MHz to 40 GHz
Configuration:	<i>Bluetooth</i> Basic Rate bottom channel / 2.4 GHz WLAN (SISO) top channel / 5 GHz WLAN (MIMO) bottom channel

Environmental Conditions:

Temperature (°C):	22 to 23
Relative Humidity (%):	34 to 41

Note(s):

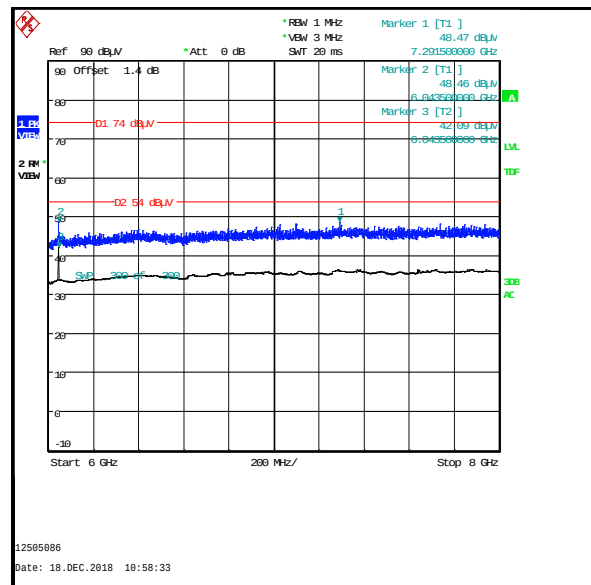
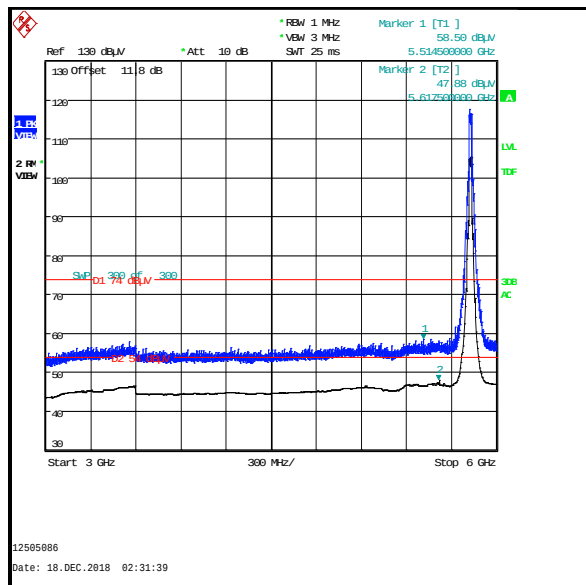
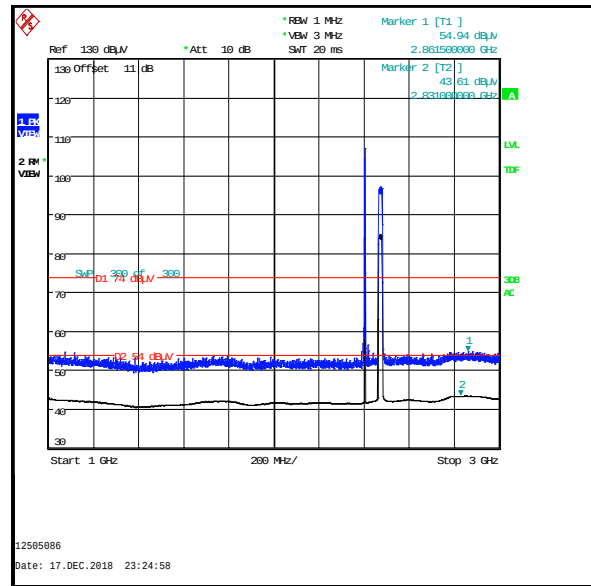
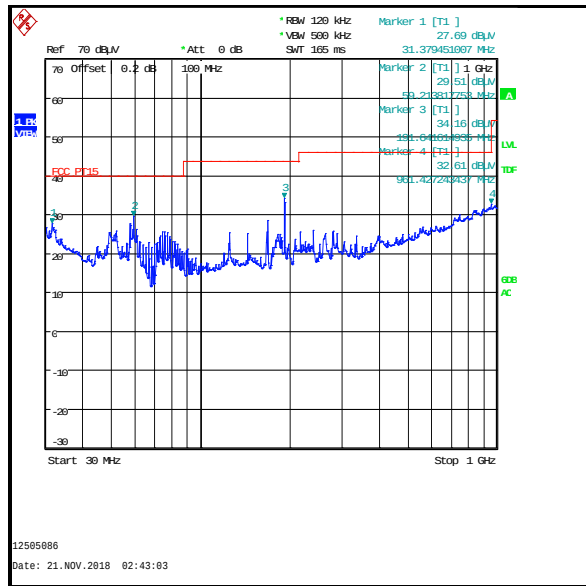
1. All intermodulation products were below the noise floor level or greater than 20 dB from the specification limit.
2. The *Bluetooth* and 2.4 GHz WLAN fundamentals are shown on the 1 GHz to 3 GHz plot.
3. The 5 GHz WLAN fundamental is shown on the 3 GHz to 6 GHz plot.
4. The emission at approximately 6043.500 MHz is not an intermodulation product and was therefore not measured.
5. Pre-scans were made against the FCC Part 15 general limits for radiated emissions.
6. The test receiver resolution bandwidth was set to 120 kHz and video bandwidth 500 kHz, for measurements below 1 GHz. For measurements above 1 GHz resolution bandwidth was set 1 MHz and video bandwidth 3 MHz, with the sweep time set to auto. Markers were placed on the highest measured level.

Results: Peak

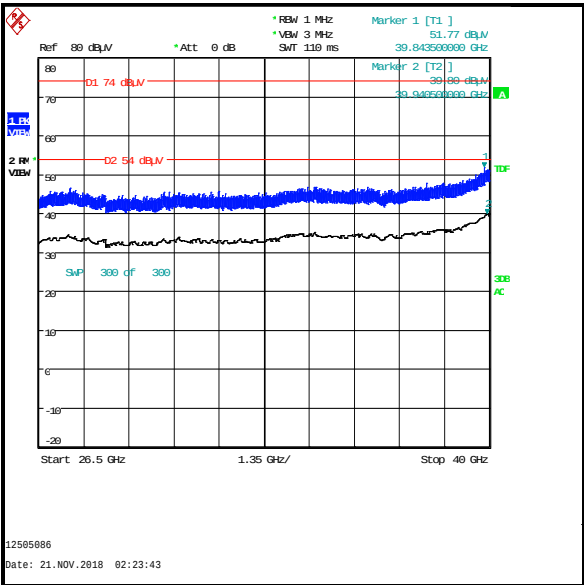
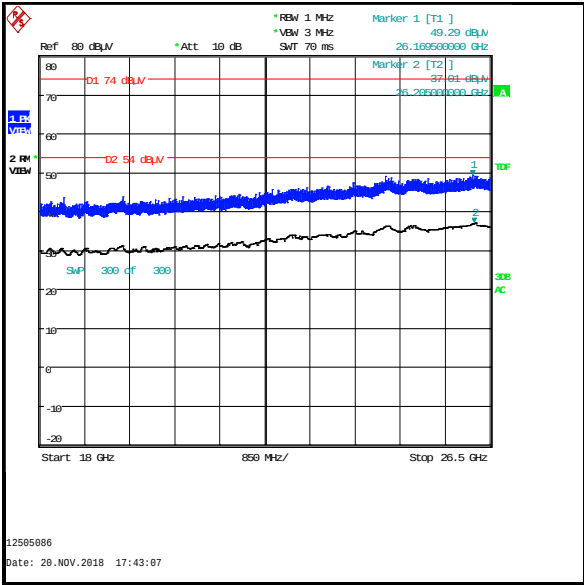
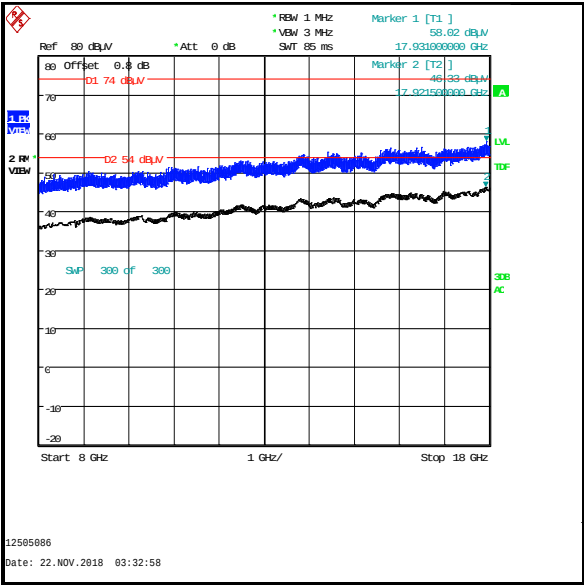
Frequency (MHz)	Antenna Polarity	Peak Level (dB μ V/m)	Peak Limit (dB μ V/m)	Margin (dB)	Result
See Note 1					

Results: Average

Frequency (MHz)	Antenna Polarity	Average Level (dB μ V/m)	Average Limit (dB μ V/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:	Andrew Edwards, Andrew Harding, Mohamed Toubella, Tom Sleigh & Marco Zunarelli	Test Dates:	20 November 2018 to 18 December 2018
Test Sample Serial Numbers:	C02WW00PKFMM & C02X200XKFLX		

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 8.5 & 8.6 ; 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 (MIMO) top channel

Environmental Conditions:

Temperature (°C):	22 to 23
Relative Humidity (%):	34 to 41

Note(s):

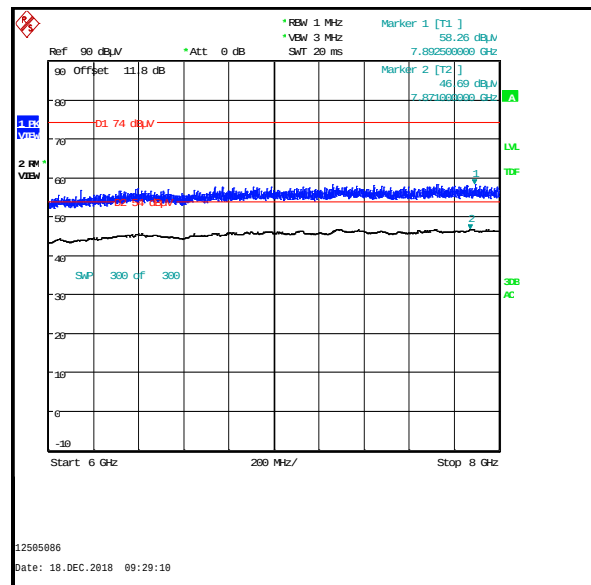
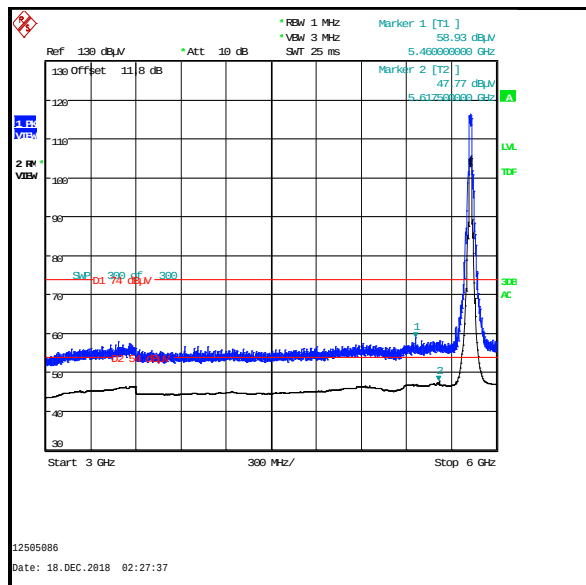
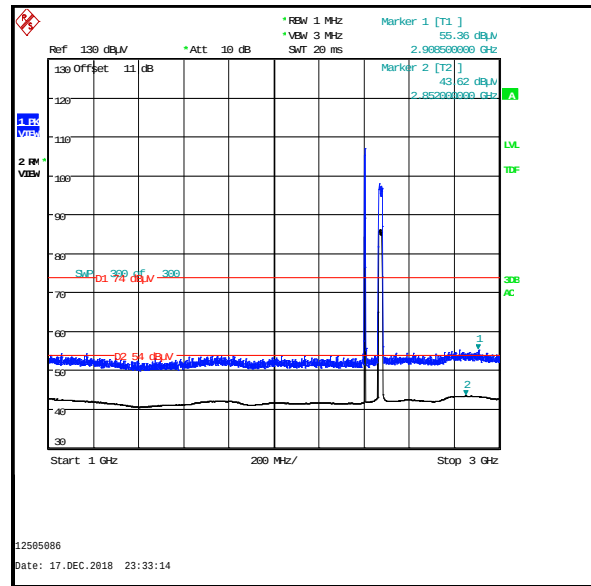
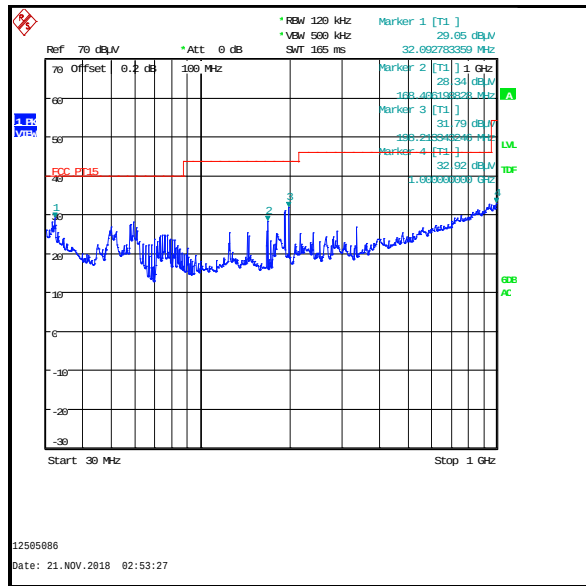
1. All intermodulation products were below the noise floor level or greater than 20 dB from the specification limit.
2. The Bluetooth and 2.4 GHz WLAN fundamentals are shown on the 1 GHz to 3 GHz plot.
3. The 5 GHz WLAN fundamental is shown on the 3 GHz to 6 GHz plot.
4. Pre-scans were made against the FCC Part 15 general limits for radiated emissions.
5. The test receiver resolution bandwidth was set to 120 kHz and video bandwidth 500 kHz, for measurements below 1 GHz. For measurements above 1 GHz resolution bandwidth was set 1 MHz and video bandwidth 3 MHz, with the sweep time set to auto. Markers were placed on the highest measured level.

Results: Peak

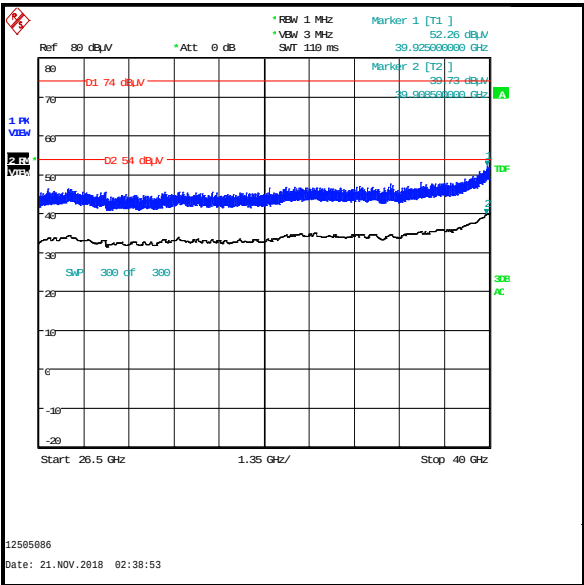
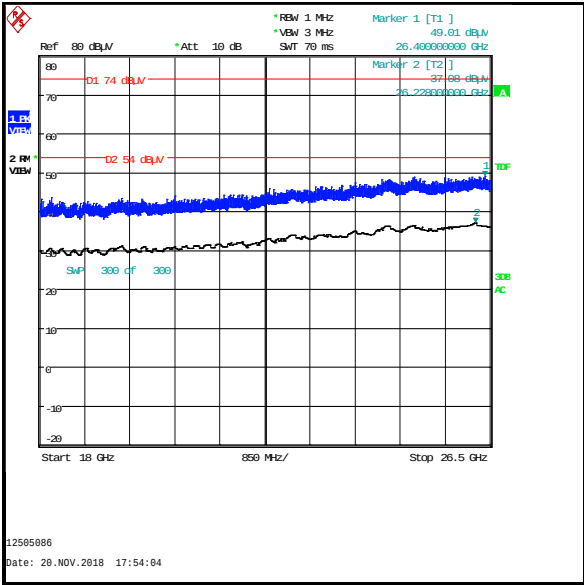
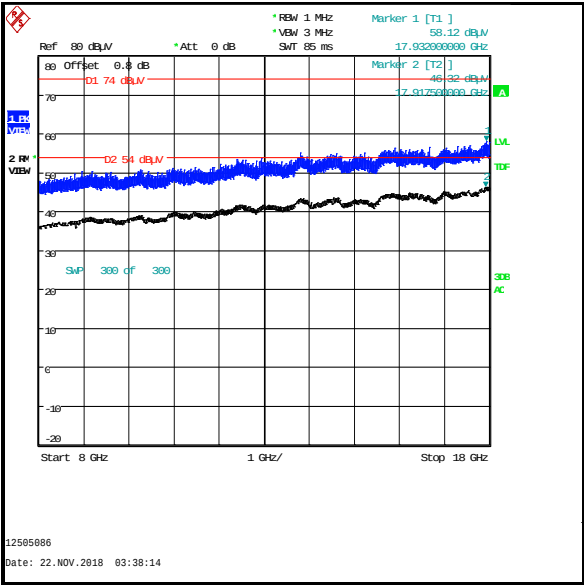
Frequency (MHz)	Antenna Polarity	Peak Level (dBμV/m)	Peak Limit (dBμV/m)	Margin (dB)	Result
See Note 1					

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) 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:	Andrew Edwards, Andrew Harding, Mohamed Toubella, Tom Sleigh & Marco Zunarelli	Test Dates:	20 November 2018 to 18 December 2018
Test Sample Serial Numbers:	C02WW00PKFMM & C02X200XKFLX		

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 8.5 & 8.6 ; KDB 789033 II.G
Frequency Range:	30 MHz to 40 GHz
Configuration:	<i>Bluetooth</i> Basic Rate top channel / 2.4 GHz WLAN (SISO) bottom channel / 5 GHz WLAN (MIMO) bottom channel

Environmental Conditions:

Temperature (°C):	22 to 23
Relative Humidity (%):	34 to 41

Note(s):

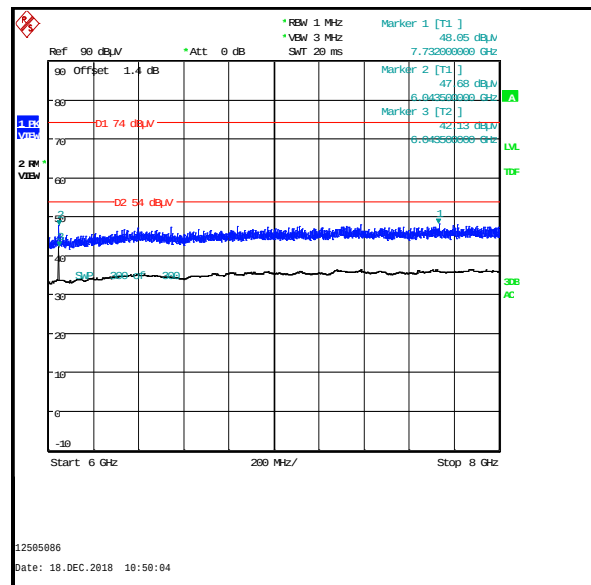
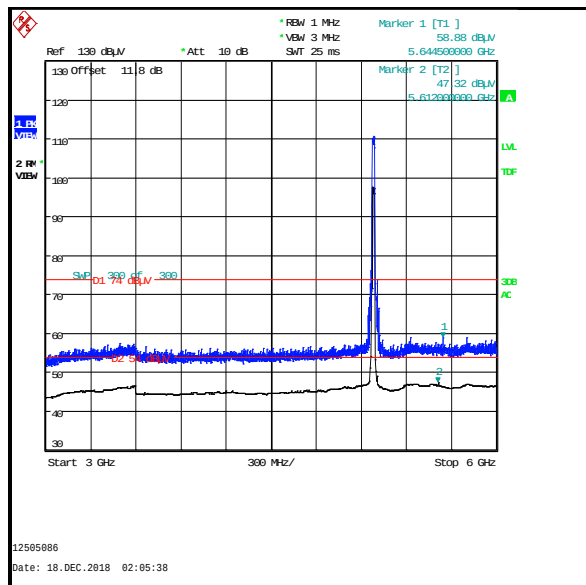
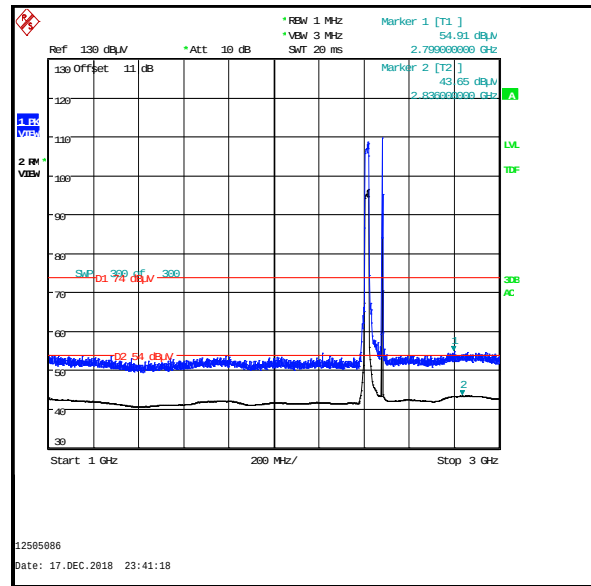
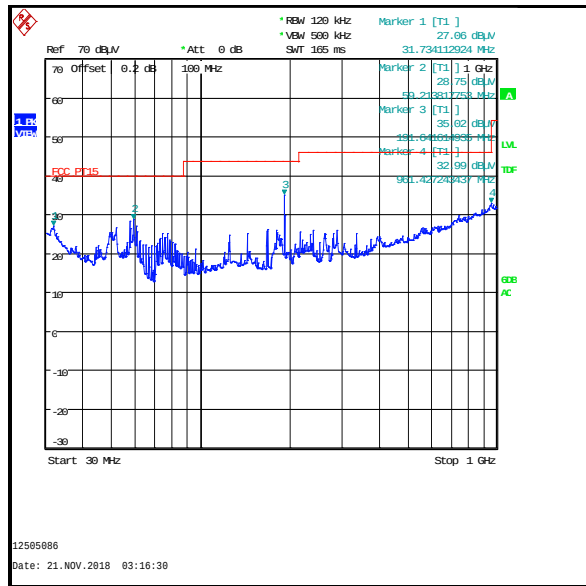
1. All intermodulation products were below the noise floor level or greater than 20 dB from the specification limit.
2. The *Bluetooth* and 2.4 GHz WLAN fundamentals are shown on the 1 GHz to 3 GHz plot. The 5 GHz WLAN fundamental is shown on the 3 GHz to 6 GHz plot.
3. The emission at approximately 6043.500 MHz is not an intermodulation product and was therefore not measured.
4. Pre-scans were made against the FCC Part 15 general limits for radiated emissions.
5. The test receiver resolution bandwidth was set to 120 kHz and video bandwidth 500 kHz, for measurements below 1 GHz. For measurements above 1 GHz resolution bandwidth was set 1 MHz and video bandwidth 3 MHz, with the sweep time set to auto. Markers were placed on the highest measured level.

Results: Peak

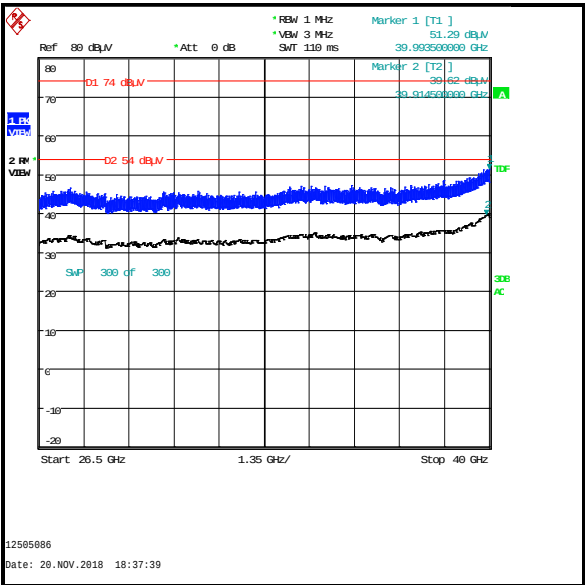
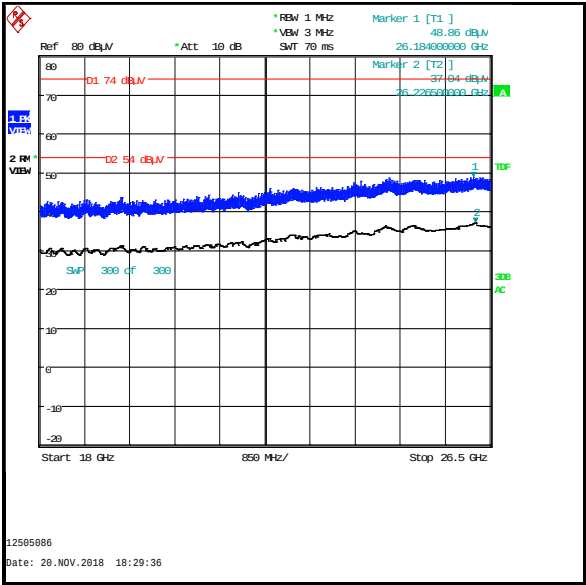
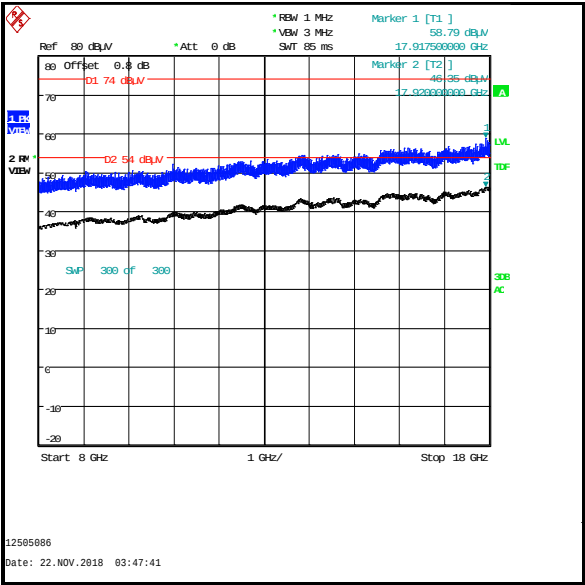
Frequency (MHz)	Antenna Polarity	Peak Level (dBμV/m)	Peak Limit (dBμV/m)	Margin (dB)	Result
See Note 1					

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 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:	Andrew Edwards, Andrew Harding, Mohamed Toubella, Tom Sleigh & Marco Zunarelli	Test Dates:	20 November 2018 to 18 December 2018
Test Sample Serial Numbers:	C02WW00PKFMM & C02X200XKFLX		

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 8.5 & 8.6 ; KDB 789033 II.G
Frequency Range:	30 MHz to 40 GHz
Configuration:	<i>Bluetooth</i> Basic Rate top channel / 2.4 GHz WLAN (SISO) bottom channel / 5 GHz WLAN (MIMO) top channel

Environmental Conditions:

Temperature (°C):	22 to 23
Relative Humidity (%):	34 to 41

Note(s):

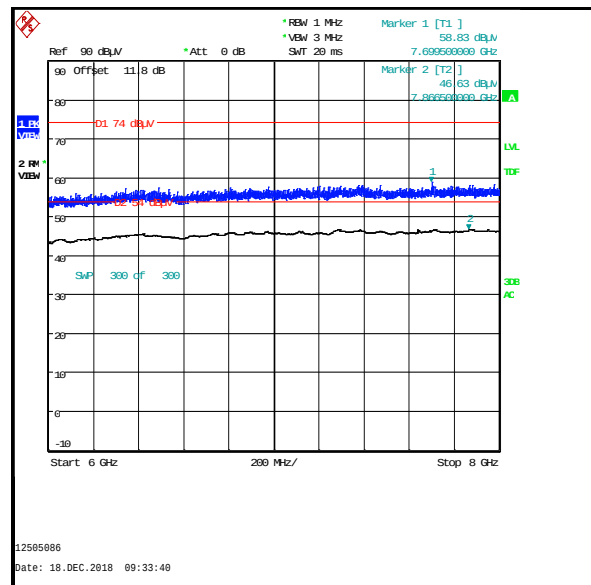
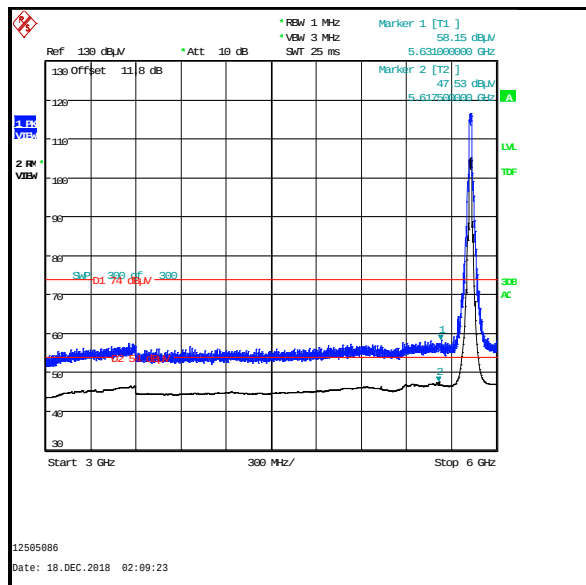
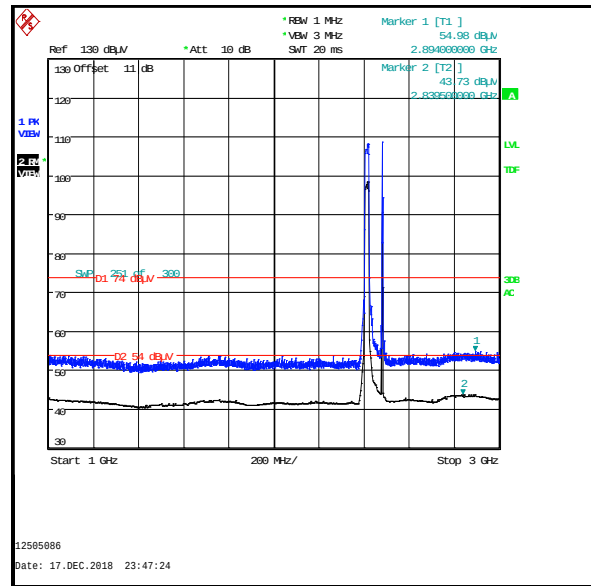
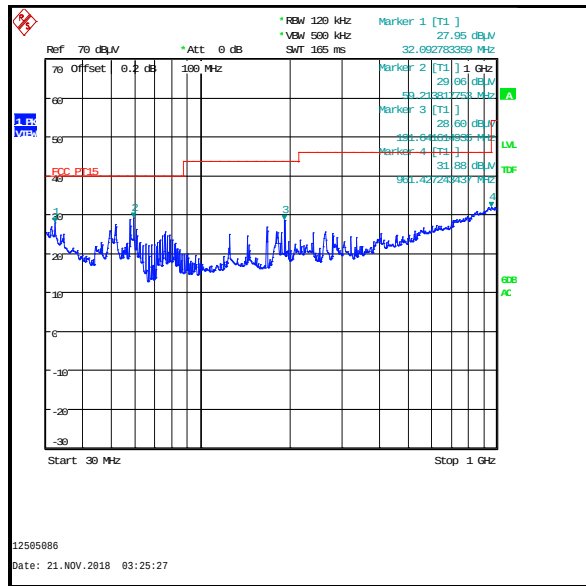
1. All intermodulation products were below the noise floor level or greater than 20 dB from the specification limit.
2. The *Bluetooth* and 2.4 GHz WLAN fundamentals are shown on the 1 GHz to 3 GHz plot.
3. The 5 GHz WLAN fundamental is shown on the 3 GHz to 6 GHz plot.
4. Pre-scans were made against the FCC Part 15 general limits for radiated emissions.
5. The test receiver resolution bandwidth was set to 120 kHz and video bandwidth 500 kHz, for measurements below 1 GHz. For measurements above 1 GHz resolution bandwidth was set 1 MHz and video bandwidth 3 MHz, with the sweep time set to auto. Markers were placed on the highest measured level.

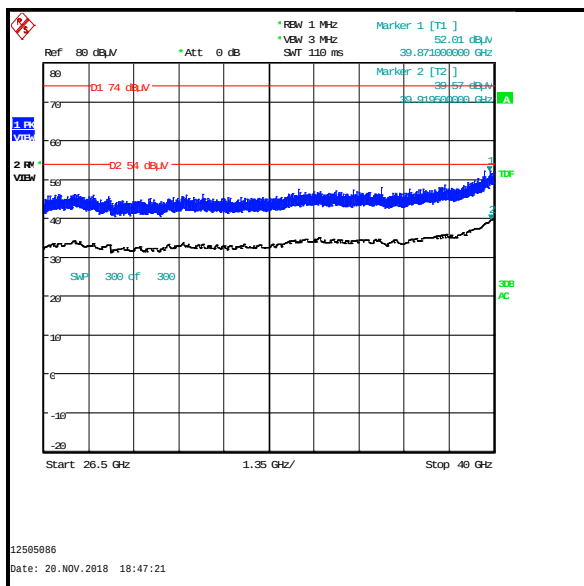
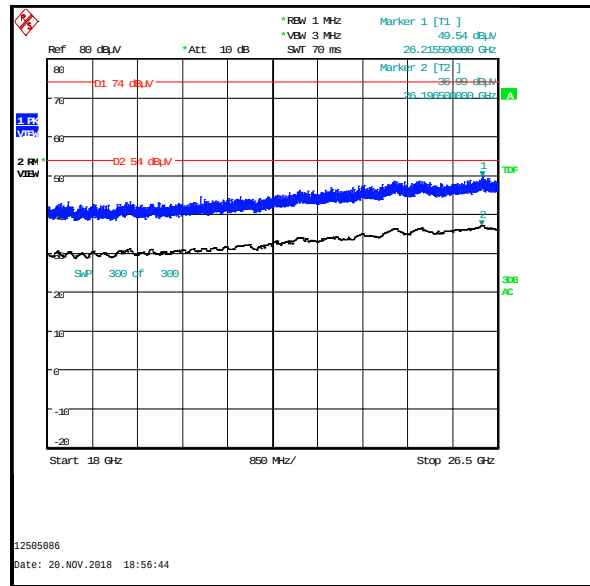
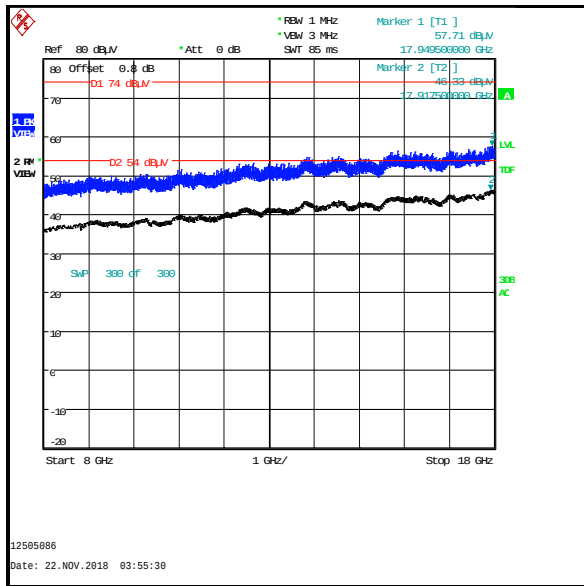
Results: Peak

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 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:	Andrew Edwards, Andrew Harding, Mohamed Toubella, Tom Sleigh & Marco Zunarelli	Test Dates:	20 November 2018 to 18 December 2018
Test Sample Serial Numbers:	C02WW00PKFMM & C02X200XKFLX		

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 8.5 & 8.6 ; KDB 789033 II.G
Frequency Range:	30 MHz to 40 GHz
Configuration:	<i>Bluetooth</i> LE bottom channel / 2.4 GHz WLAN (SISO) top channel / 5 GHz WLAN (MIMO) bottom channel

Environmental Conditions:

Temperature (°C):	22 to 23
Relative Humidity (%):	34 to 41

Note(s):

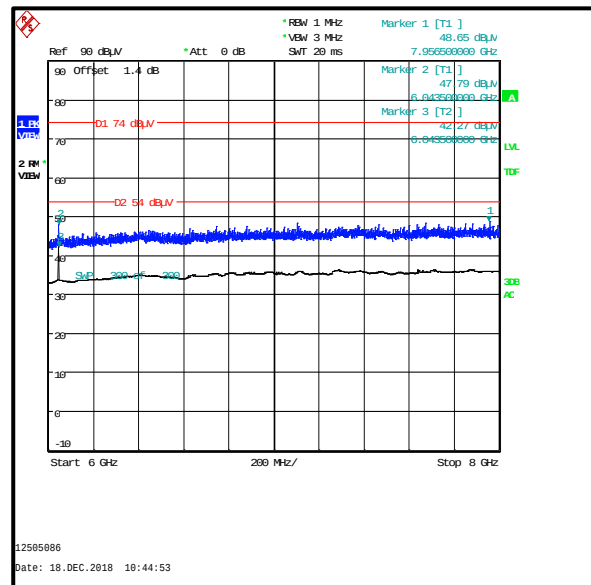
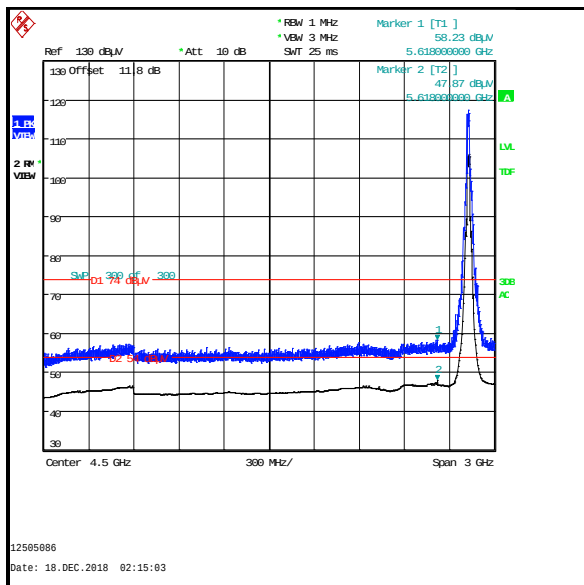
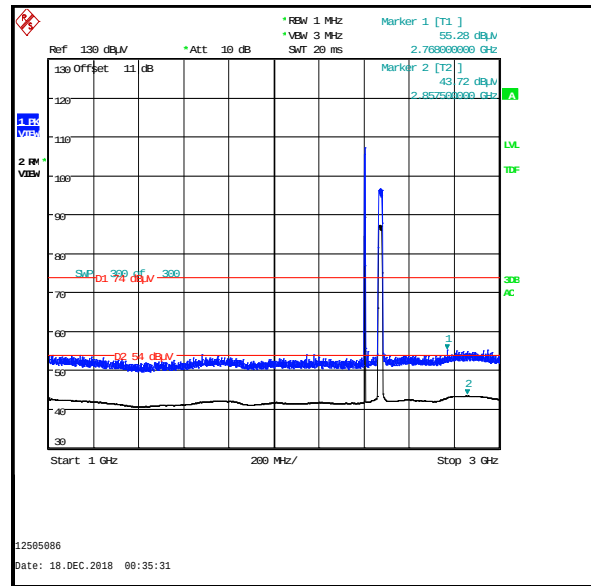
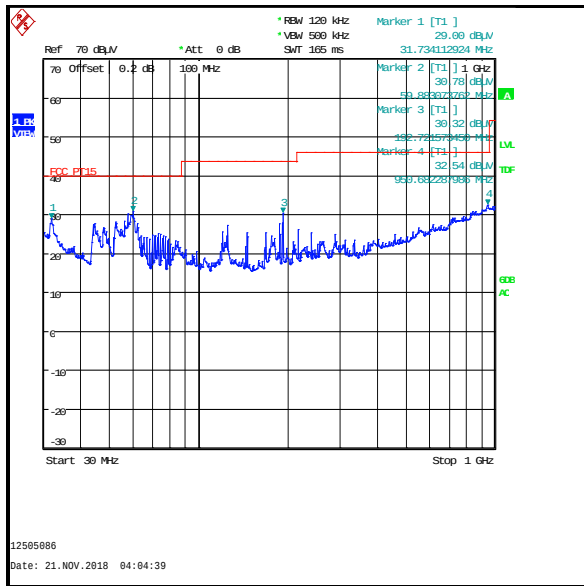
1. All intermodulation products were below the noise floor level or greater than 20 dB from the specification limit.
2. The *Bluetooth* LE and 2.4 GHz WLAN fundamentals are shown on the 1 GHz to 3 GHz plot. The 5 GHz WLAN fundamental is shown on the 3 GHz to 6 GHz plot.
3. The emissions at approximately 5612.000 MHz and 6043.000 MHz are not intermodulation products and were therefore not measured.
4. Pre-scans were made against the FCC Part 15 general limits for radiated emissions.
5. The test receiver resolution bandwidth was set to 120 kHz and video bandwidth 500 kHz, for measurements below 1 GHz. For measurements above 1 GHz resolution bandwidth was set 1 MHz and video bandwidth 3 MHz, with the sweep time set to auto. Markers were placed on the highest measured level.

Results: Peak

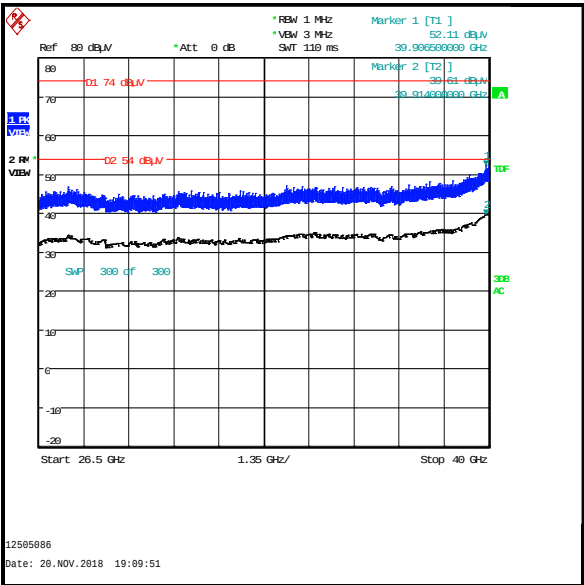
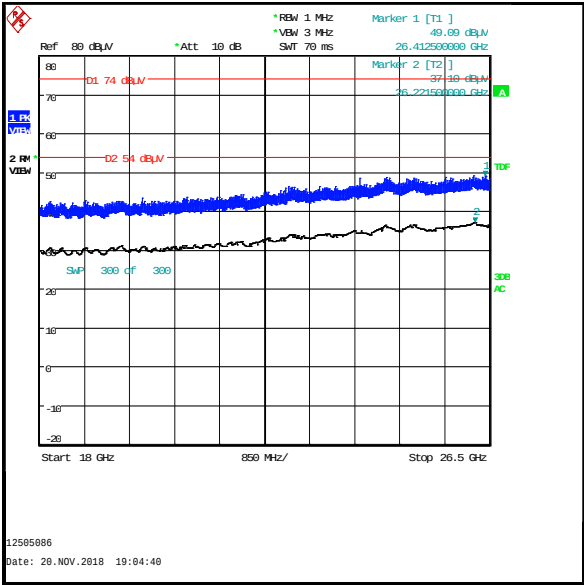
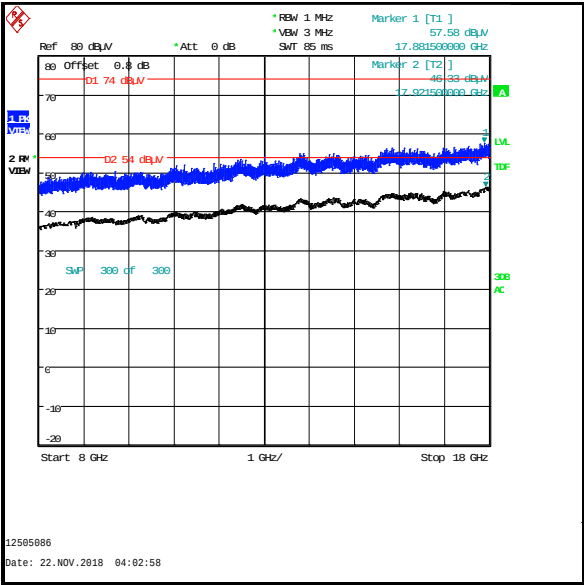
Frequency (MHz)	Antenna Polarity	Peak Level (dB μ V/m)	Peak Limit (dB μ V/m)	Margin (dB)	Result
See Note 1					

Results: Average

Frequency (MHz)	Antenna Polarity	Average Level (dB μ V/m)	Average Limit (dB μ V/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:	Andrew Edwards, Andrew Harding, Mohamed Toubella, Tom Sleigh & Marco Zunarelli	Test Dates:	20 November 2018 to 18 December 2018
Test Sample Serial Numbers:	C02WW00PKFMM & C02X200XKFLX		

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 8.5 & 8.6 ; KDB 789033 II.G
Frequency Range:	30 MHz to 40 GHz
Configuration:	<i>Bluetooth</i> LE bottom channel / 2.4 GHz WLAN (SISO) top channel / 5 GHz WLAN (MIMO) top channel

Environmental Conditions:

Temperature (°C):	22 to 23
Relative Humidity (%):	34 to 41

Note(s):

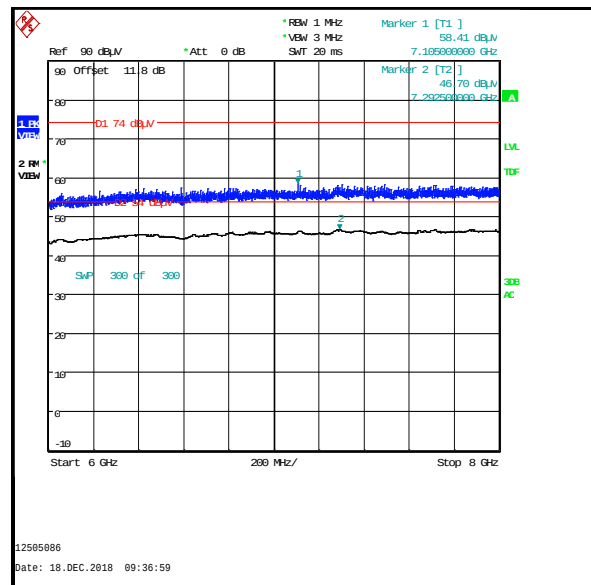
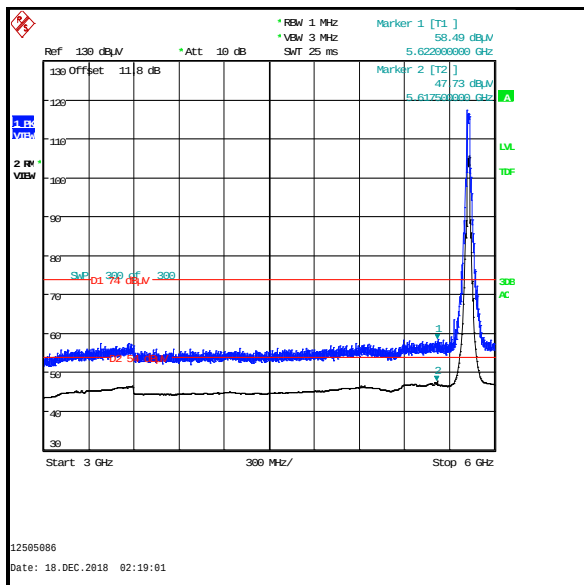
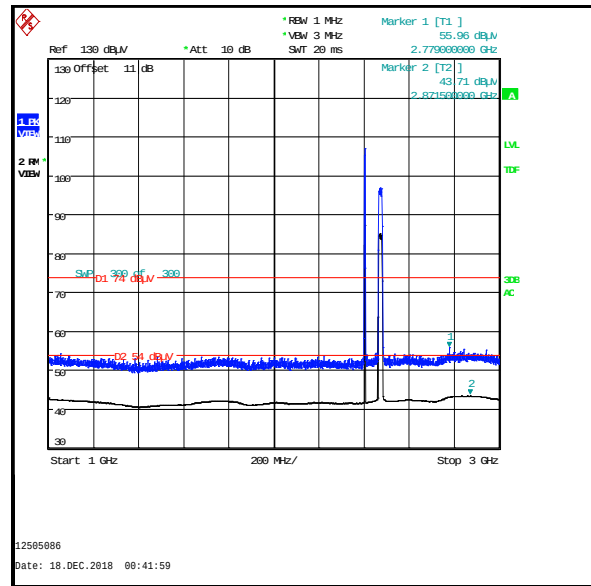
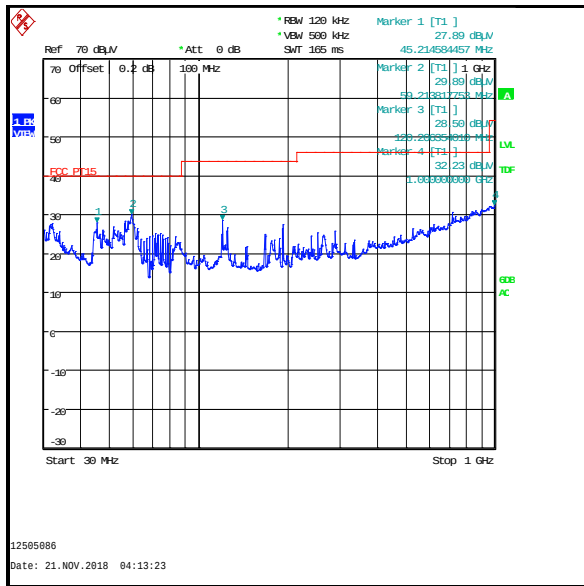
1. All intermodulation products were below the noise floor level or greater than 20 dB from the specification limit.
2. The *Bluetooth* LE and 2.4 GHz WLAN fundamentals are shown on the 1 GHz to 3 GHz plot. The 5 GHz WLAN fundamental is shown on the 3 GHz to 6 GHz plot.
3. The emission at approximately 5617.500MHz is not an intermodulation product and was therefore not measured
4. Pre-scans were made against the FCC Part 15 general limits for radiated emissions.
5. Final measurements were made using appropriate RF attenuators and filters where required.
6. The test receiver resolution bandwidth was set to 120 kHz and video bandwidth 500 kHz, for measurements below 1 GHz. For measurements above 1 GHz resolution bandwidth was set 1 MHz and video bandwidth 3 MHz, with the sweep time set to auto. Markers were placed on the highest measured level.

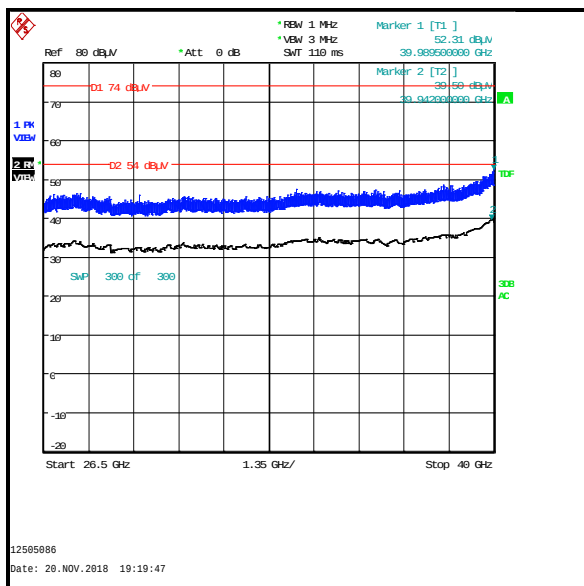
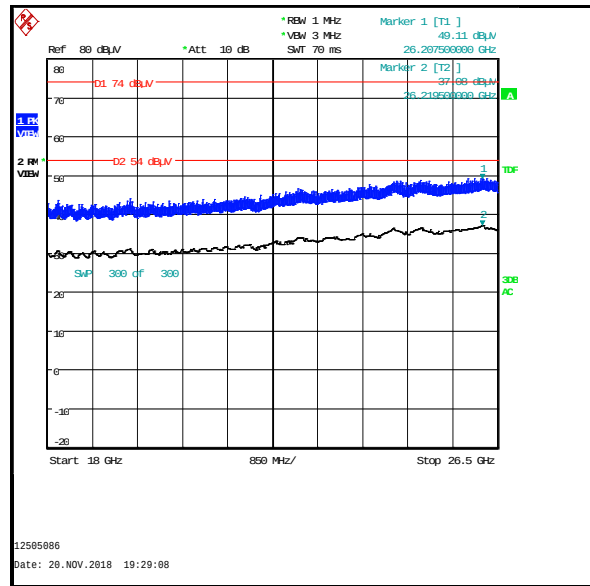
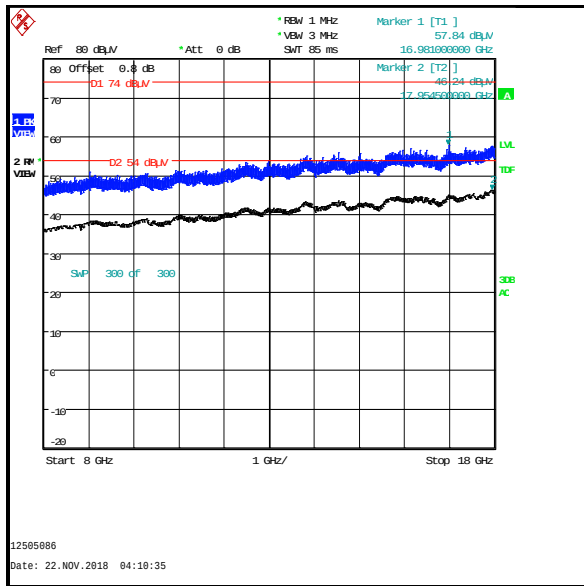
Results: Peak

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) 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:	Andrew Edwards, Andrew Harding, Mohamed Toubella, Tom Sleigh & Marco Zunarelli	Test Dates:	20 November 2018 to 18 December 2018
Test Sample Serial Numbers:	C02WW00PKFMM & C02X200XKFLX		

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 8.5 & 8.6 ; 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 (MIMO) bottom channel

Environmental Conditions:

Temperature (°C):	22 to 23
Relative Humidity (%):	34 to 41

Note(s):

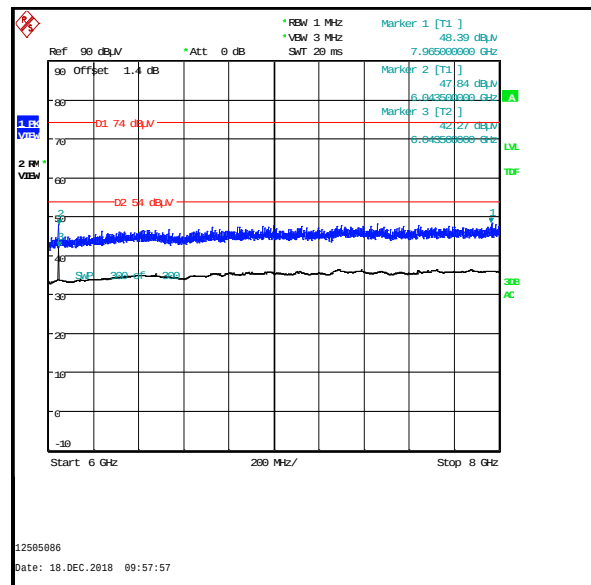
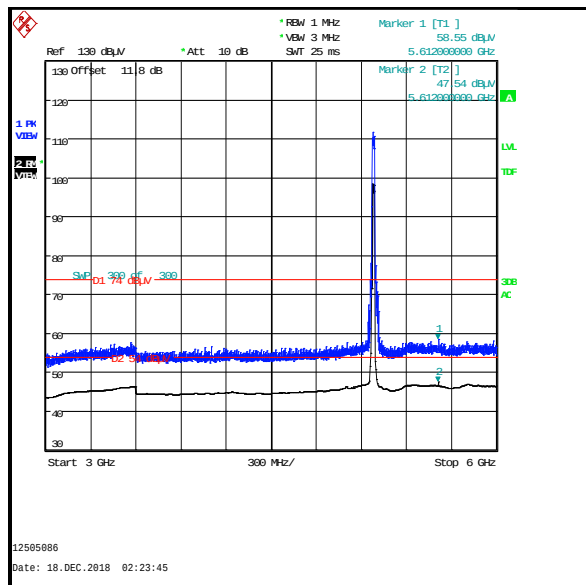
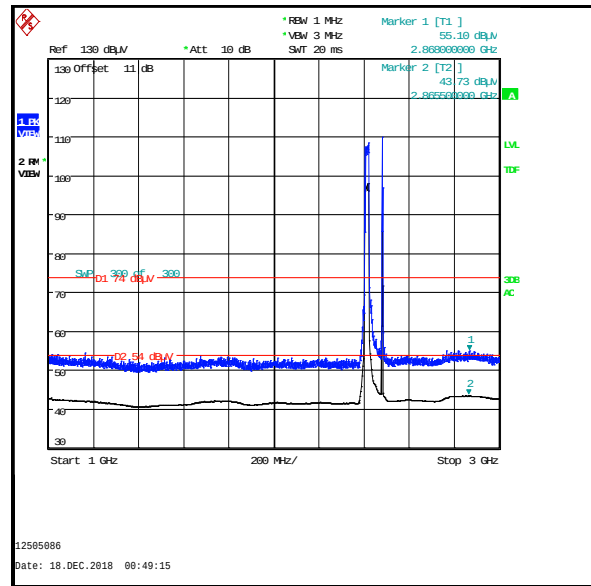
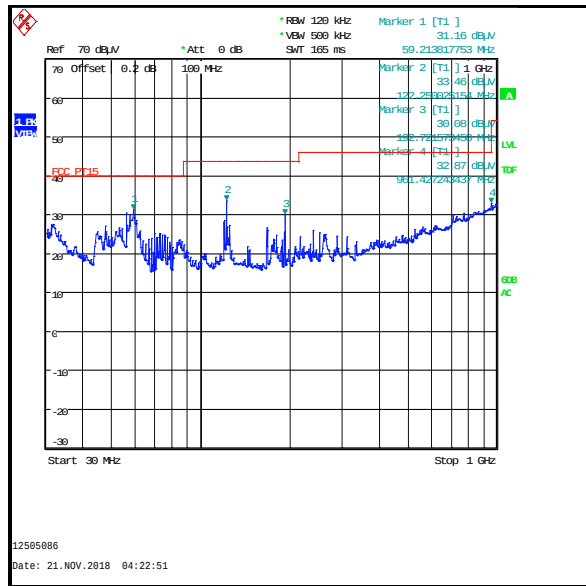
1. All intermodulation products were below the noise floor level or greater than 20 dB from the specification limit.
2. The Bluetooth LE and 2.4 GHz WLAN fundamentals are shown on the 1 GHz to 3 GHz plot. The 5 GHz WLAN fundamental is shown on the 3 GHz to 6 GHz plot.
3. The emissions at approximately 5612.000 MHz and 6043.500 MHz are not intermodulation products and were therefore not measured.
4. Pre-scans were made against the FCC Part 15 general limits for radiated emissions.
5. The test receiver resolution bandwidth was set to 120 kHz and video bandwidth 500 kHz, for measurements below 1 GHz. For measurements above 1 GHz resolution bandwidth was set 1 MHz and video bandwidth 3 MHz, with the sweep time set to auto. Markers were placed on the highest measured level.

Results: Peak

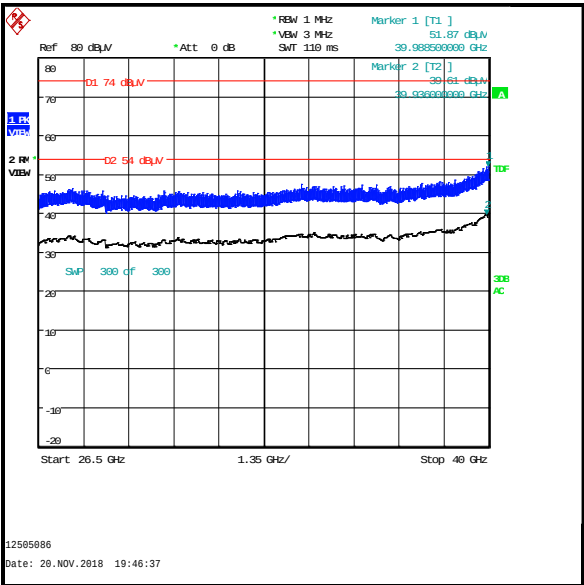
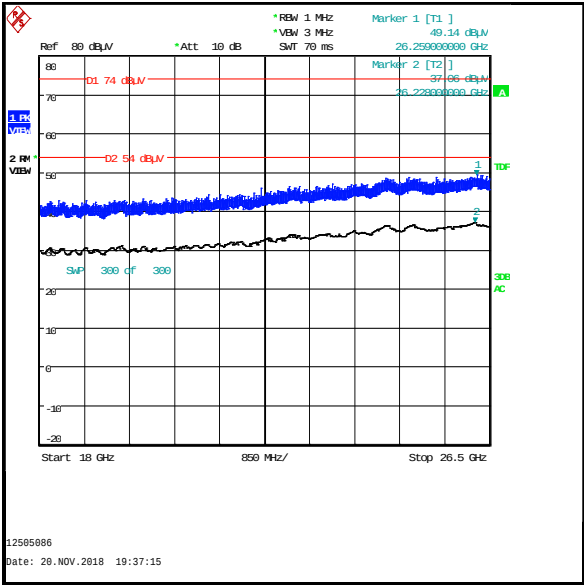
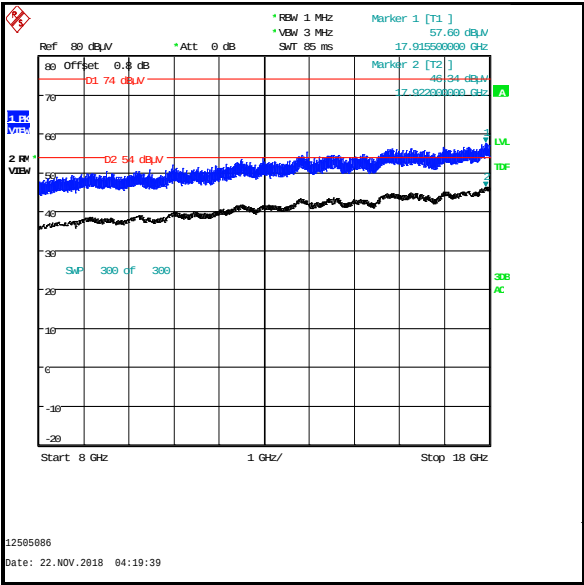
Frequency (MHz)	Antenna Polarity	Peak Level (dBμV/m)	Peak Limit (dBμV/m)	Margin (dB)	Result
See Note 1					

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 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:	Andrew Edwards, Andrew Harding, Mohamed Toubella, Tom Sleigh & Marco Zunarelli	Test Dates:	20 November 2018 to 18 December 2018
Test Sample Serial Numbers:	C02WW00PKFMM & C02X200XKFLX		

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 8.5 & 8.6 ; KDB 789033 II.G
Frequency Range:	30 MHz to 40 GHz
Configuration:	<i>Bluetooth</i> LE top channel / 2.4 GHz WLAN (SISO) bottom channel / 5 GHz WLAN (MIMO) top channel

Environmental Conditions:

Temperature (°C):	22 to 23
Relative Humidity (%):	34 to 41

Note(s):

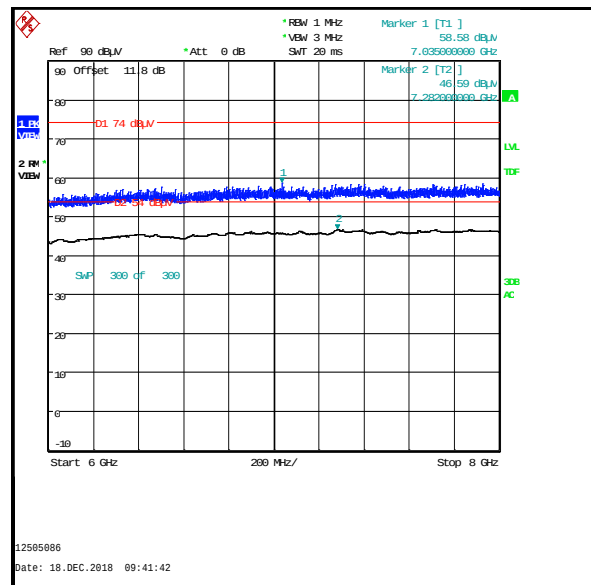
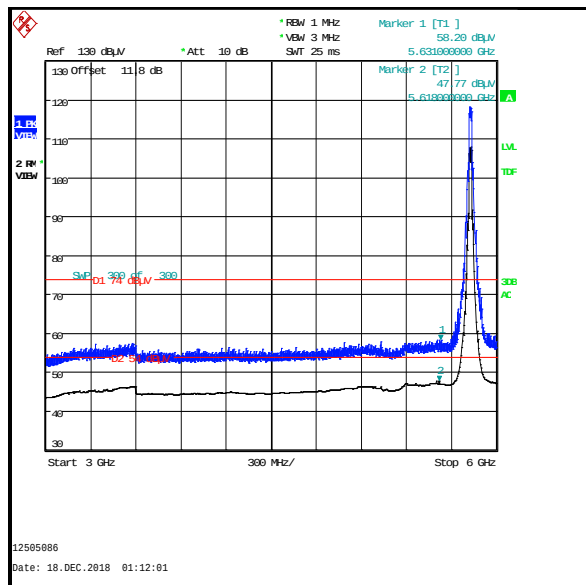
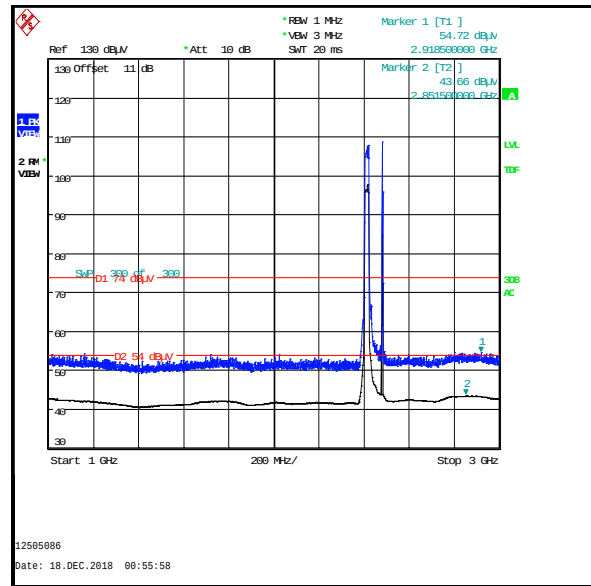
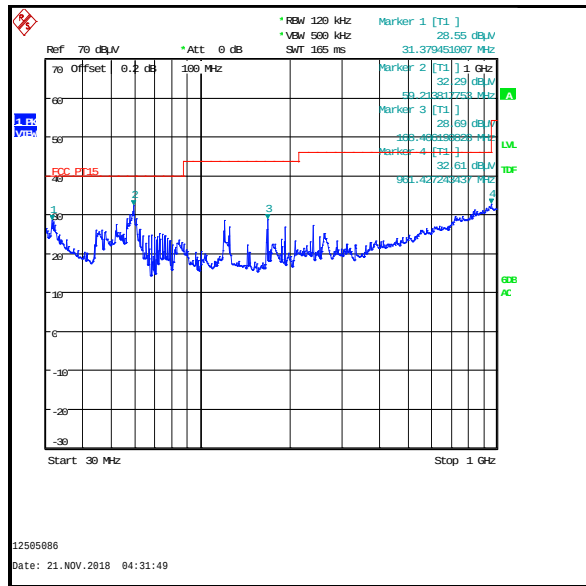
1. All intermodulation products were below the noise floor level or greater than 20 dB from the specification limit.
2. The *Bluetooth* LE and 2.4 GHz WLAN fundamentals are shown on the 1 GHz to 3 GHz plot. The 5 GHz WLAN fundamental is shown on the 3 GHz to 6 GHz plot.
3. Pre-scans were made against the FCC Part 15 general limits for radiated emissions.
4. Final measurements were made using appropriate RF attenuators and filters where required.
5. The test receiver resolution bandwidth was set to 120 kHz and video bandwidth 500 kHz, for measurements below 1 GHz. For measurements above 1 GHz resolution bandwidth was set 1 MHz and video bandwidth 3 MHz, with the sweep time set to auto. Markers were placed on the highest measured level.

Results: Peak

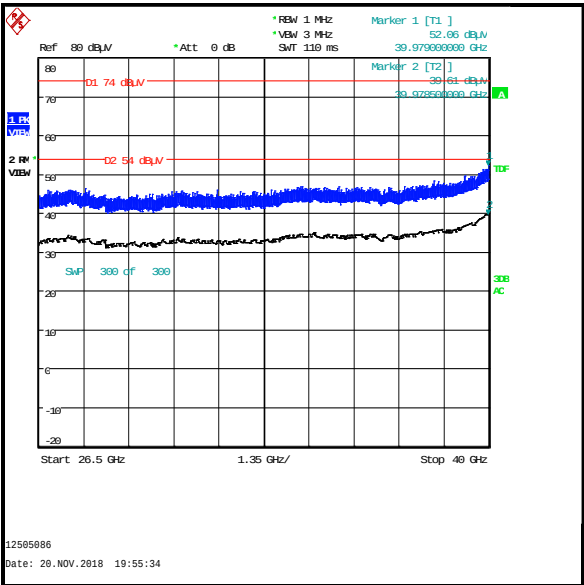
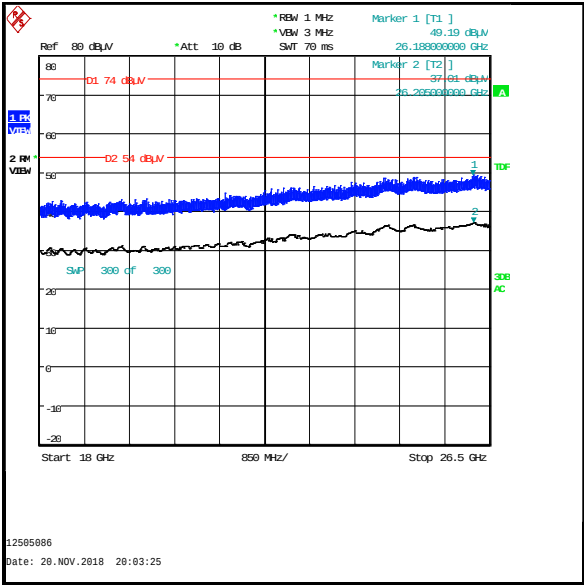
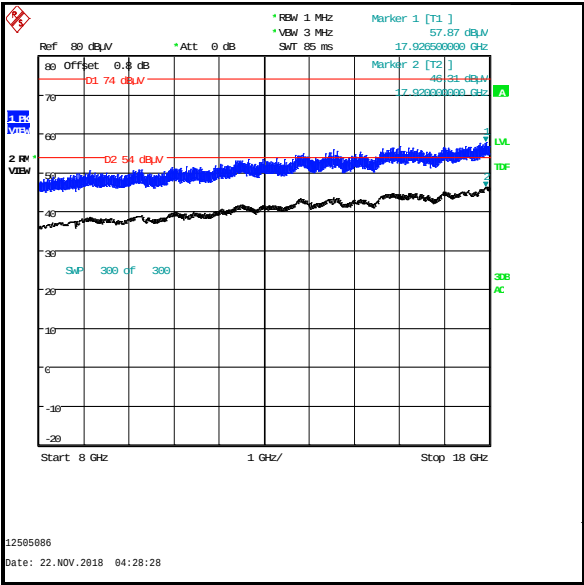
Frequency (MHz)	Antenna Polarity	Peak Level (dB μ V/m)	Peak Limit (dB μ V/m)	Margin (dB)	Result
See Note 1					

Results: Average

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

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)



--- END OF REPORT ---