

- ☐ The emissions are below the measurement system noise floor or 20 dB or more below the limit
- ☒ Final measurements for emissions that are above -20 dB from the applicable limits are shown below (at least 6 worst frequencies):

Final Measurement Table

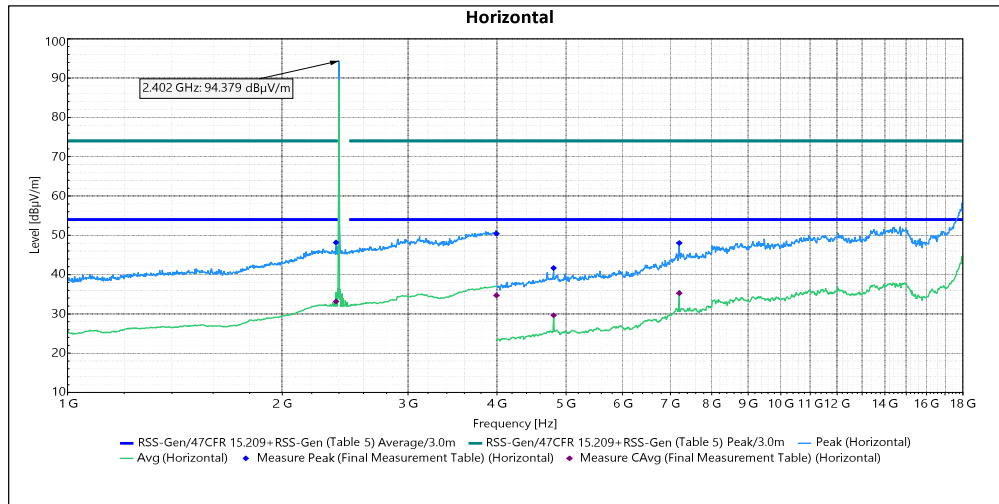
Frequency	Measure Peak (dBuV/m)	Measure QPeak (dBuV/m)	Limit QPeak (dBuV/m)	Margin QPeak (dB)	Max height (m)	Max angle (°)	Polarization	RBW (Hz)	Meas.Time (s)	Comments	Correction (dB)
223.98 MHz	42.54	35.98	46.02	-10.04	1.36	358.2	Horizontal	120 k	5	Pass	16.68
253.62 MHz	37.9	30.98	46.02	-15.04	1.1	125	Horizontal	120 k	5	Pass	18.86
370.68 MHz	37.62	29.78	46.02	-16.24	1	358.5	Horizontal	120 k	5	Pass	22.31
471.54 MHz	36.17	28.78	46.02	-17.24	1.8	61.8	Horizontal	120 k	5	Pass	25.09
546.45 MHz	43.19	36.67	46.02	-9.35	1.49	304	Horizontal	120 k	5	Pass	26.21
863.04 MHz	33.2	23.03	46.02	-22.99	1.77	98.2	Horizontal	120 k	5	Pass	31.12
56.88 MHz	35.24	28.55	40	-11.45	1.12	193.7	Vertical	120 k	5	Pass	19.76
63.39 MHz	35.09	28.5	40	-11.5	1.01	288	Vertical	120 k	5	Pass	19.02
93.06 MHz	27.42	24.33	43.52	-19.19	1.38	281.8	Vertical	120 k	5	Pass	14.2
104.43 MHz	29.17	26.11	43.52	-17.41	1.01	260.9	Vertical	120 k	5	Pass	16.1
221.64 MHz	30.01	22.12	46.02	-23.9	1.79	118.3	Vertical	120 k	5	Pass	16.74
549.93 MHz	38.39	30.39	46.02	-15.63	1.03	196.6	Vertical	120 k	5	Pass	26.25
841.11 MHz	34.04	23.08	46.02	-22.94	1.42	264.7	Vertical	120 k	5	Pass	31.05

6.2.2 Transmitter Radiated Emission > 1 GHz

Tested by:	Matteo Borghesi
Test date:	2025-07-04 to 2025-07-07
Test location (stand):	Area 9: SAC 5-3.0 (RF emission) 1-18 GHz Area 8: SAC 3-1.2 (RF emission) 18-26 GHz
Ambient temperature:	23 °C
Relative humidity:	55 to 57 %
Atmospheric pressure:	985 to 1001 mbar
FCC Reference:	Parts 15.247(d) & 15.209(a)
ISED Canada Reference:	RSS-Gen 6.13 & 8.9 / RSS-247 5.5
Test Method Used	ANSI C63.10 Sections 6.3 and 6.6
Frequency Range	1 GHz to 26 GHz
Used mains voltage/frequency:	5 Vdc (worst case)
Test item:	834422
Supplementary information:	Test performed in the following worst case: • Worst case of data rate resulting from Transmitter Maximum Peak Output Power has been used for this test • Worst condition orientation of EUT: Horizontal orientation

Results:

Operating mode	1
Verdict	Pass
Instrument settings	Start Frequency: 1 GHz; Stop Frequency: 4 GHz; Step: 250 kHz; Sweep Time: 20 ms/Step; RF Attenuation: Auto; RBW: 1 MHz; VBW: Auto; Preamplifier: ON; Preselector: ON Start Frequency: 4 GHz; Stop Frequency: 18 GHz; Step: 250 kHz; Sweep Time: 20 ms/Step; RF Attenuation: Auto; RBW: 1 MHz; VBW: Auto; Preamplifier: OFF; Preselector: ON

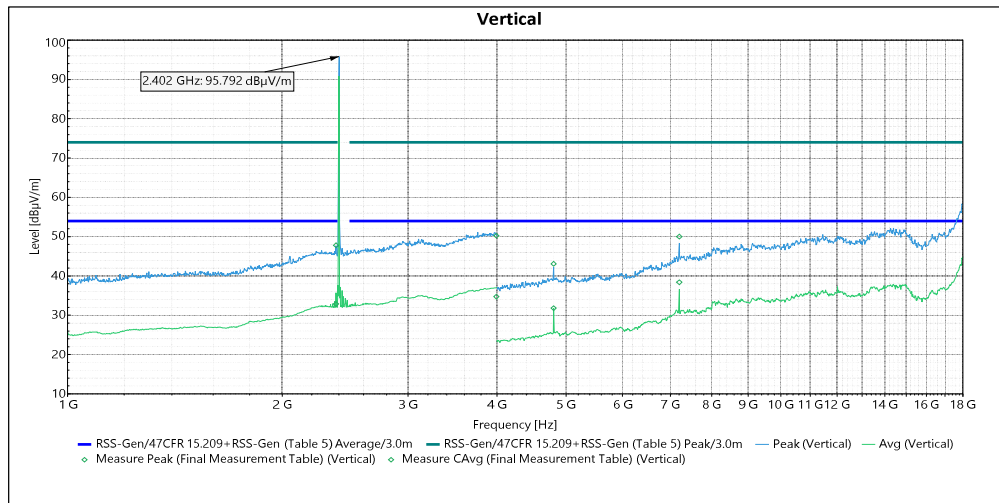


- ☐ The emissions are below the measurement system noise floor or 20 dB or more below the limit
☒ Final measurements for emissions that are above -20 dB from the applicable limits are shown below (at least 6 worst frequencies):

Final Measurement Table

Frequency	Measure Peak (dBμV/m)	Limit Peak (dBμV/m)	Margin Peak (dB)	Measure CAvg (dBμV/m)	Duty Cycle correction	Limit Avg (dBμV/m)	Margin Avg (dB)	Height (m)	Angle (°)	Polarization	RBW (MHz)	Meas.Time (s)	Comments	Correction (dB)
2.378 GHz	48.15	74	-25.85	33.18	35.3	54	-18.7	3.97	220.4	Horizontal	1	5	Pass	32.46
3.994 GHz	50.42	74	-23.58	34.71	36.83	54	-17.17	2.74	339.1	Horizontal	1	5	Pass	35.89
4.804 GHz	41.67	74	-32.33	29.65	31.77	54	-22.23	3.99	95.8	Horizontal	1	5	Pass	-2.75
7.206 GHz	48.05	74	-25.95	35.28	37.4	54	-16.6	1.05	56.5	Horizontal	1	5	Pass	5.03

Operating mode.....	1
Verdict.....	Pass
Instrument settings	Start Frequency: 1 GHz; Stop Frequency: 4 GHz; Step: 250 kHz; Sweep Time: 20 ms/Step; RF Attenuation: Auto; RBW: 1 MHz; VBW: Auto; Preamplifier: ON; Preselector: ON Start Frequency: 4 GHz; Stop Frequency: 18 GHz; Step: 250 kHz; Sweep Time: 20 ms/Step; RF Attenuation: Auto; RBW: 1 MHz; VBW: Auto; Preamplifier: OFF; Preselector: ON

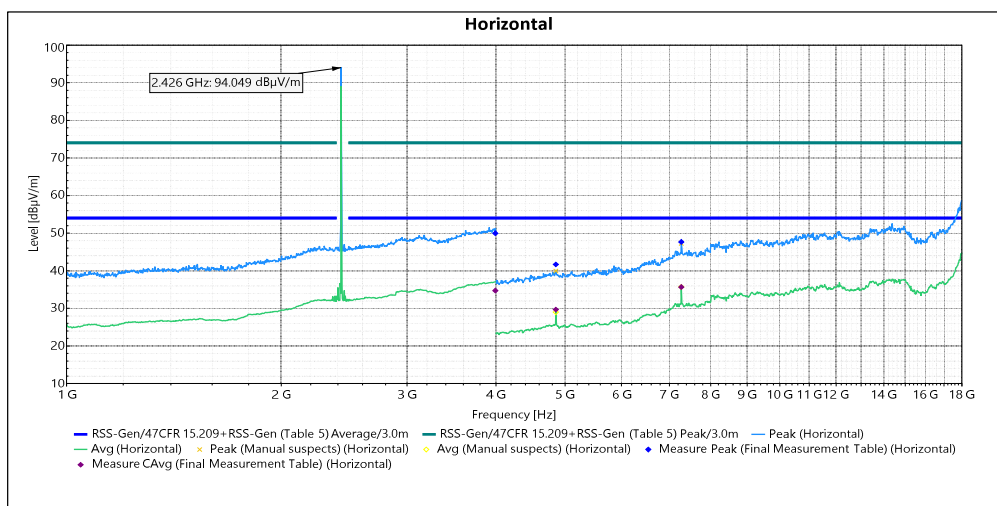


- ☐ The emissions are below the measurement system noise floor or 20 dB or more below the limit
- ☒ Final measurements for emissions that are above -20 dB from the applicable limits are shown below (at least 6 worst frequencies):

Final Measurement Table

Frequency	Measure Peak (dBμV/m)	Limit Peak (dBμV/m)	Margin Peak (dB)	Measure CAvg (dBμV/m)	Duty Cycle correction	Limit Avg (dBμV/m)	Margin Avg (dB)	Height (m)	Angle (°)	Polarization	RBW (MHz)	Meas.Time (s)	Comments	Correction (dB)
2.378 GHz	47.82	74	-26.18	32.87	34.99	54	-19.01	1.25	138.5	Vertical	1	5	Pass	32.46
3.994 GHz	50.22	74	-23.78	34.73	36.85	54	-17.15	2.67	20	Vertical	1	5	Pass	35.89
4.804 GHz	43.08	74	-30.92	31.79	33.91	54	-20.09	1	43.8	Vertical	1	5	Pass	-2.75
7.206 GHz	50.01	74	-23.99	38.4	40.52	54	-13.48	1.06	173	Vertical	1	5	Pass	5.03

Operating mode.....	2
Verdict.....	Pass
Instrument settings	Start Frequency: 1 GHz; Stop Frequency: 4 GHz; Step: 250 kHz; Sweep Time: 20 ms/Step; RF Attenuation: Auto; RBW: 1 MHz; VBW: Auto; Preamplifier: ON; Preselector: ON Start Frequency: 4 GHz; Stop Frequency: 18 GHz; Step: 250 kHz; Sweep Time: 20 ms/Step; RF Attenuation: Auto; RBW: 1 MHz; VBW: Auto; Preamplifier: OFF; Preselector: ON

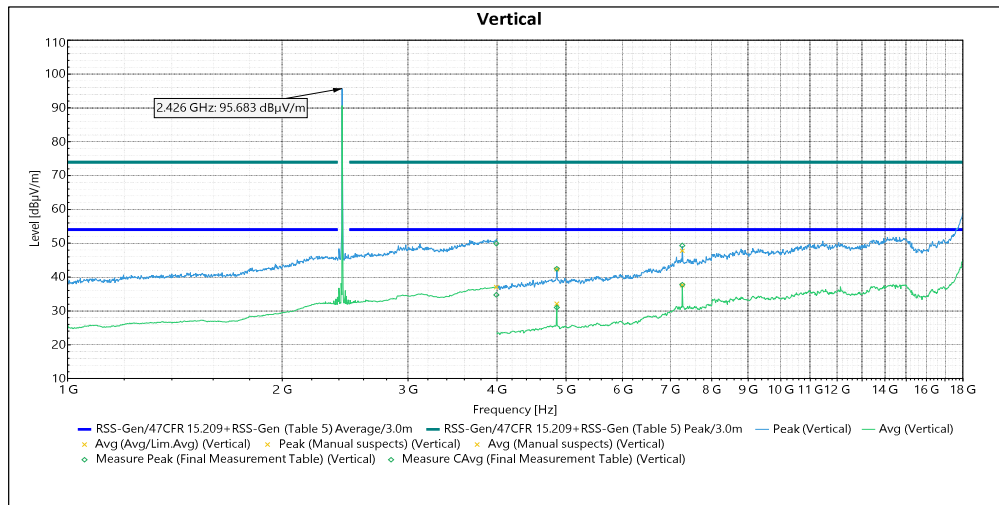


- ☐ The emissions are below the measurement system noise floor or 20 dB or more below the limit
- ☒ Final measurements for emissions that are above -20 dB from the applicable limits are shown below (at least 6 worst frequencies):

Final Measurement Table

Frequency	Measure Peak (dBμV/m)	Limit Peak (dBμV/m)	Margin Peak (dB)	Measure CAvg (dBμV/m)	Duty Cycle correction	Limit Avg (dBμV/m)	Margin Avg (dB)	Height (m)	Angle (°)	Polarization	RBW (MHz)	Meas. Time (s)	Comments	Correction (dB)
3.991 GHz	49.99	74	-24.01	34.74	36.86	54	-17.14	3.66	318.3	Horizontal	1	5	Pass	35.88
4.852 GHz	41.69	74	-32.31	29.7	31.82	54	-22.18	3.99	101.6	Horizontal	1	5	Pass	-2.76
7.278 GHz	47.69	74	-26.31	35.68	37.8	54	-16.2	1.01	59.3	Horizontal	1	5	Pass	5.12

Operating mode.....	2
Verdict.....	Pass
Instrument settings	Start Frequency: 1 GHz; Stop Frequency: 4 GHz; Step: 250 kHz; Sweep Time: 20 ms/Step; RF Attenuation: Auto; RBW: 1 MHz; VBW: Auto; Preamplifier: ON; Preselector: ON Start Frequency: 4 GHz; Stop Frequency: 18 GHz; Step: 250 kHz; Sweep Time: 20 ms/Step; RF Attenuation: Auto; RBW: 1 MHz; VBW: Auto; Preamplifier: OFF; Preselector: ON

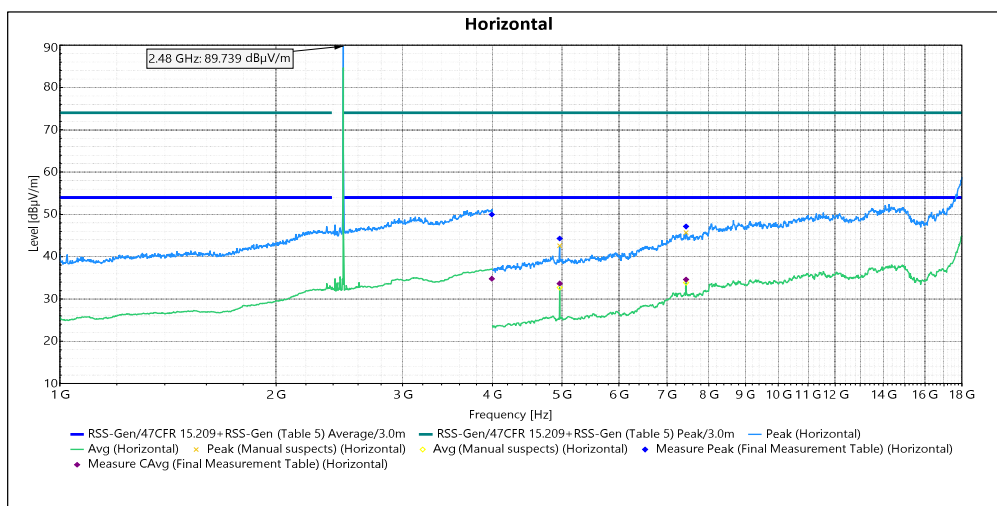


- ☐ The emissions are below the measurement system noise floor or 20 dB or more below the limit
- ☒ Final measurements for emissions that are above -20 dB from the applicable limits are shown below (at least 6 worst frequencies):

Final Measurement Table

Frequency	Measure Peak (dBμV/m)	Limit Peak (dBμV/m)	Margin Peak (dB)	Measure CAvg (dBμV/m)	Duty Cycle correction	Limit Avg (dBμV/m)	Margin Avg (dB)	Height (m)	Angle (°)	Polarization	RBW (MHz)	Meas.Time (s)	Comments	Correction (dB)
3.992 GHz	49.9	74	-24.1	34.74	36.86	54	-17.14	1.25	290.8	Vertical	1	5	Pass	35.88
4.852 GHz	42.44	74	-31.56	31	33.12	54	-20.88	1.28	58.1	Vertical	1	5	Pass	-2.76
7.278 GHz	49.32	74	-24.68	37.72	39.84	54	-14.16	3.99	147.9	Vertical	1	5	Pass	5.12

Operating mode.....	3
Verdict.....	Pass
Instrument settings	Start Frequency: 1 GHz; Stop Frequency: 4 GHz; Step: 250 kHz; Sweep Time: 20 ms/Step; RF Attenuation: Auto; RBW: 1 MHz; VBW: Auto; Preamplifier: ON; Preselector: ON Start Frequency: 4 GHz; Stop Frequency: 18 GHz; Step: 250 kHz; Sweep Time: 20 ms/Step; RF Attenuation: Auto; RBW: 1 MHz; VBW: Auto; Preamplifier: OFF; Preselector: ON

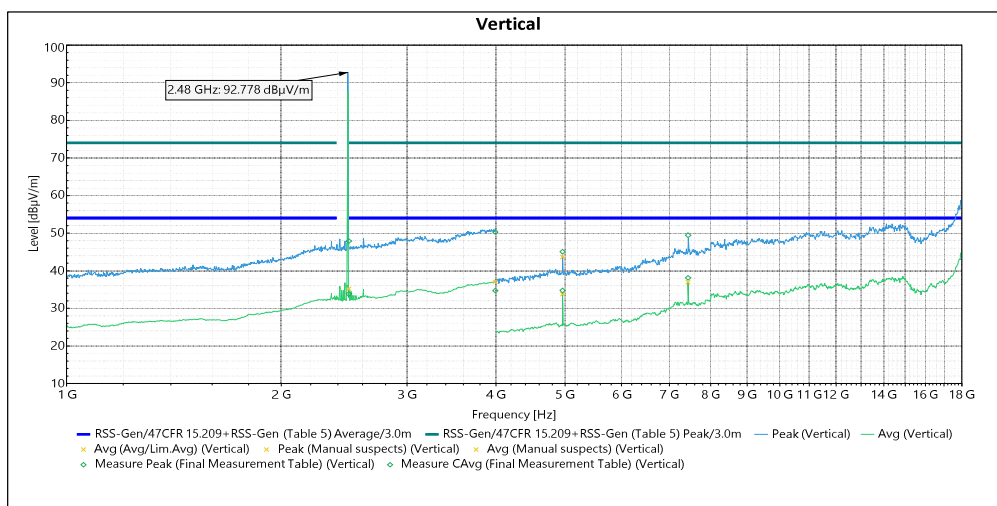


- ☐ The emissions are below the measurement system noise floor or 20 dB or more below the limit
- ☒ Final measurements for emissions that are above -20 dB from the applicable limits are shown below (at least 6 worst frequencies):

Final Measurement Table

Frequency	Measure Peak (dBμV/m)	Limit Peak (dBμV/m)	Margin Peak (dB)	Measure CAvg (dBμV/m)	Duty Cycle correction	Limit Avg (dBμV/m)	Margin Avg (dB)	Height (m)	Angle (°)	Polarization	RBW (MHz)	Meas. Time (s)	Comments	Correction (dB)
3.994 GHz	49.98	74	-24.02	34.78	36.9	54	-17.1	2.92	136.7	Horizontal	1	5	Pass	35.89
4.96 GHz	44.29	74	-29.71	33.65	35.77	54	-18.23	3.99	228.7	Horizontal	1	5	Pass	-2.62
7.44 GHz	47.16	74	-26.84	34.61	36.73	54	-17.27	2.82	99.3	Horizontal	1	5	Pass	5.55

Operating mode.....	3
Verdict.....	Pass
Instrument settings	Start Frequency: 1 GHz; Stop Frequency: 4 GHz; Step: 250 kHz; Sweep Time: 20 ms/Step; RF Attenuation: Auto; RBW: 1 MHz; VBW: Auto; Preamplifier: ON; Preselector: ON Start Frequency: 4 GHz; Stop Frequency: 18 GHz; Step: 250 kHz; Sweep Time: 20 ms/Step; RF Attenuation: Auto; RBW: 1 MHz; VBW: Auto; Preamplifier: OFF; Preselector: ON

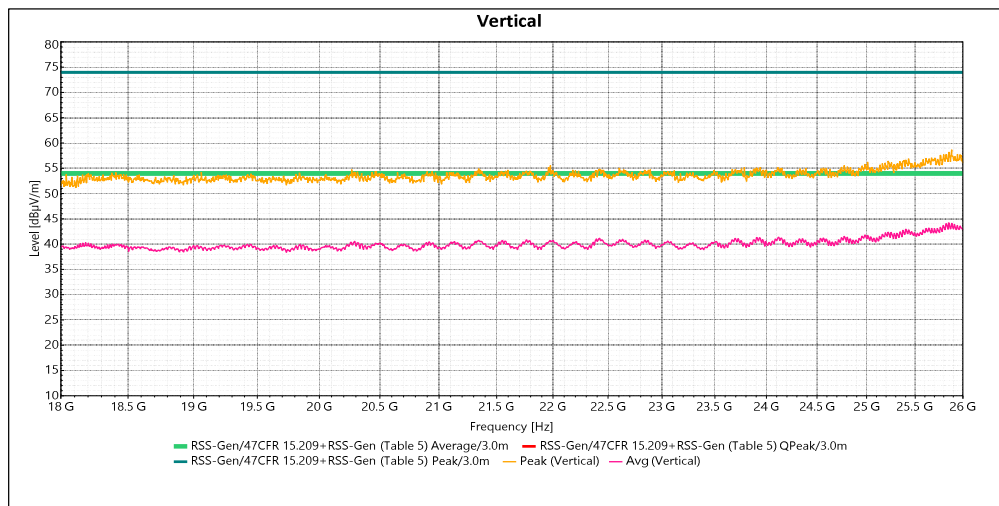
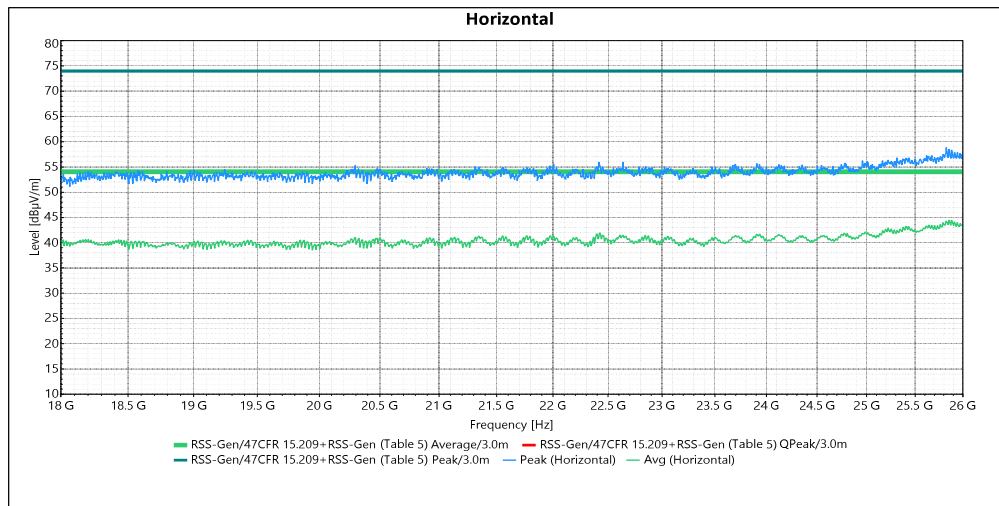


- ☐ The emissions are below the measurement system noise floor or 20 dB or more below the limit
- ☒ Final measurements for emissions that are above -20 dB from the applicable limits are shown below (at least 6 worst frequencies):

Final Measurement Table

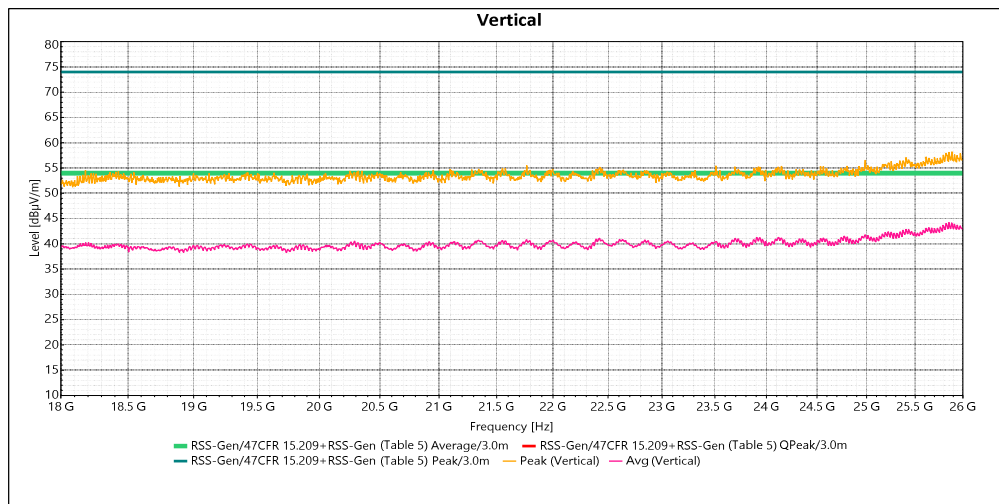
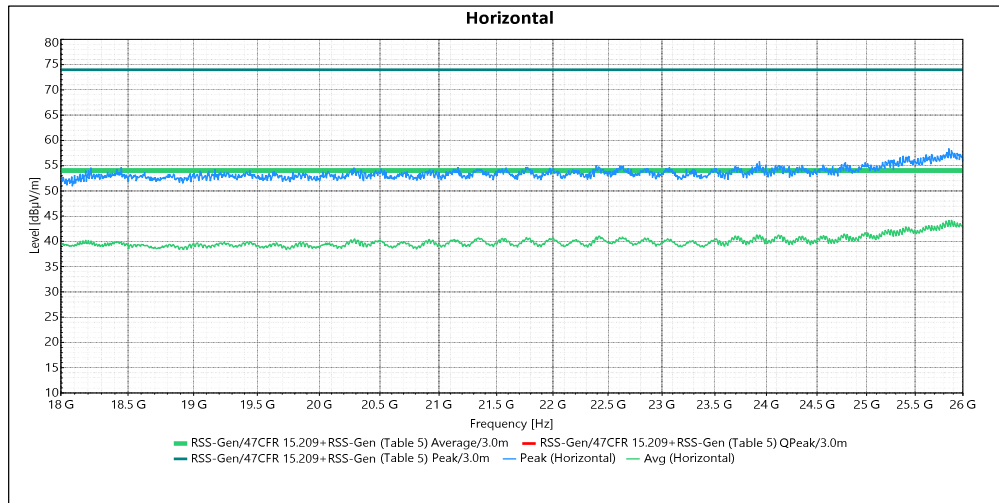
Frequency	Measure Peak (dBμV/m)	Limit Peak (dBμV/m)	Margin Peak (dB)	Measure CAvg (dBμV/m)	Duty Cycle correction	Limit Avg (dBμV/m)	Margin Avg (dB)	Height (m)	Angle (°)	Polarization	RBW (MHz)	Meas.Time (s)	Comments	Correction (dB)
2.488 GHz	47.91	74	-26.09	33.84	35.96	54	-18.04	3.61	187.1	Vertical	1	5	Pass	32.41
3.992 GHz	50.31	74	-23.69	34.75	36.87	54	-17.13	2.06	145.7	Vertical	1	5	Pass	35.88
4.96 GHz	45.08	74	-28.92	34.77	36.89	54	-17.11	1	68.4	Vertical	1	5	Pass	-2.62
7.44 GHz	49.46	74	-24.54	38.13	40.25	54	-13.75	3.95	217.7	Vertical	1	5	Pass	5.55

Operating mode	1
Verdict	Pass
Instrument settings	Start Frequency: 18 GHz; Stop Frequency: 26 GHz; Step: 250 kHz; Sweep Time: 20 ms/Step; RF Attenuation: Auto; RBW: 1 MHz; VBW: Auto; Preamplifier: OFF; Preselector: ON



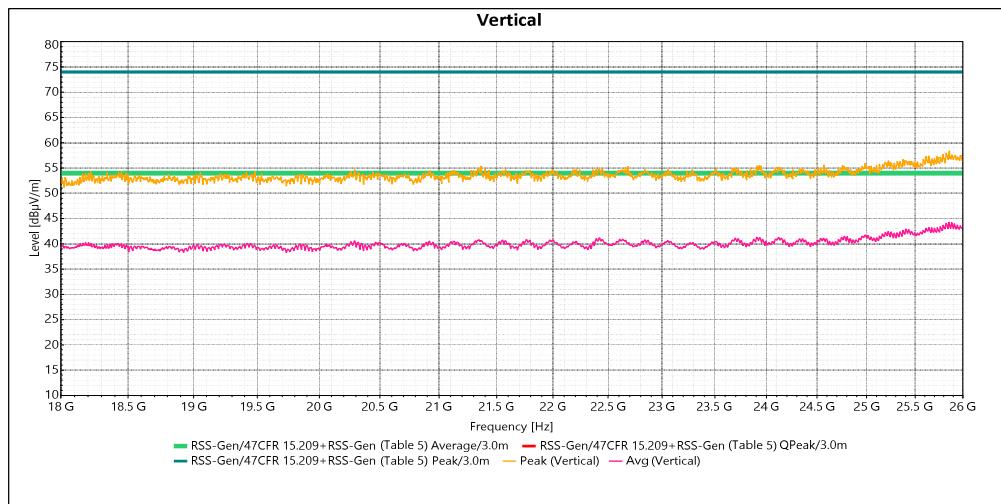
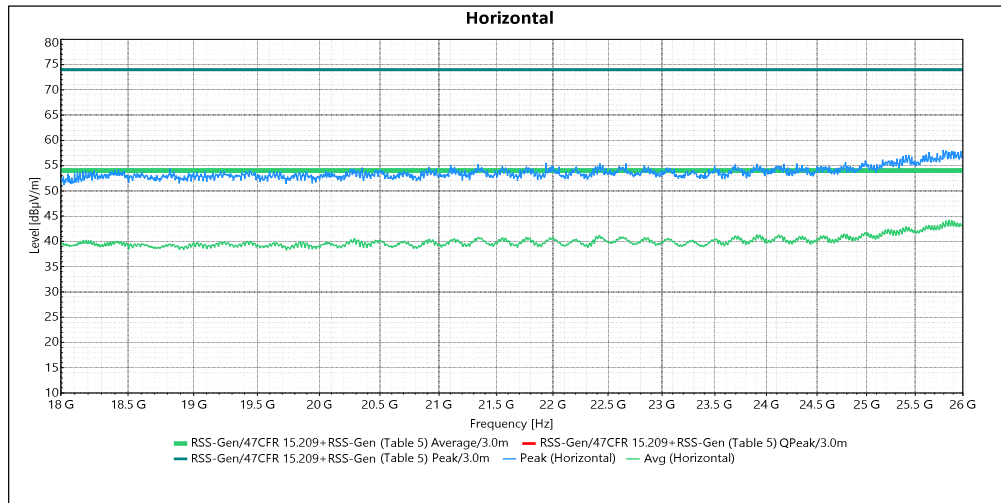
- ☒ The emissions are below the measurement system noise floor or 20 dB or more below the limit
- ☐ Final measurements for emissions that are above -20 dB from the applicable limits are shown below (at least 6 worst frequencies):

Operating mode.....	2
Verdict.....	Pass
Instrument settings	Start Frequency: 18 GHz; Stop Frequency: 26 GHz; Step: 250 kHz; Sweep Time: 20 ms/Step; RF Attenuation: Auto; RBW: 1 MHz; VBW: Auto; Preamplifier: OFF; Preselector: ON



- ☒ The emissions are below the measurement system noise floor or 20 dB or more below the limit
- ☐ Final measurements for emissions that are above -20 dB from the applicable limits are shown below (at least 6 worst frequencies):

Operating mode.....	3
Verdict.....	Pass
Instrument settings	Start Frequency: 18 GHz; Stop Frequency: 26 GHz; Step: 250 kHz; Sweep Time: 20 ms/Step; RF Attenuation: Auto; RBW: 1 MHz; VBW: Auto; Preamplifier: OFF; Preselector: ON



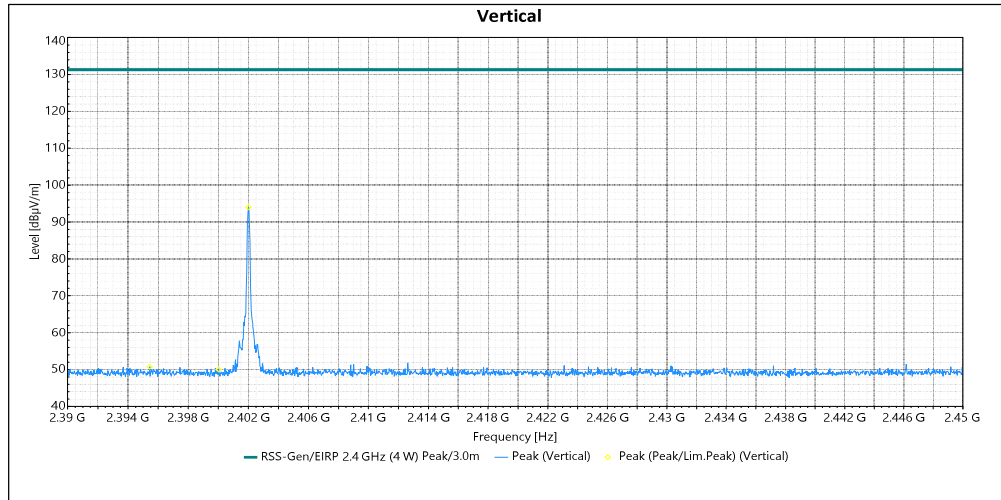
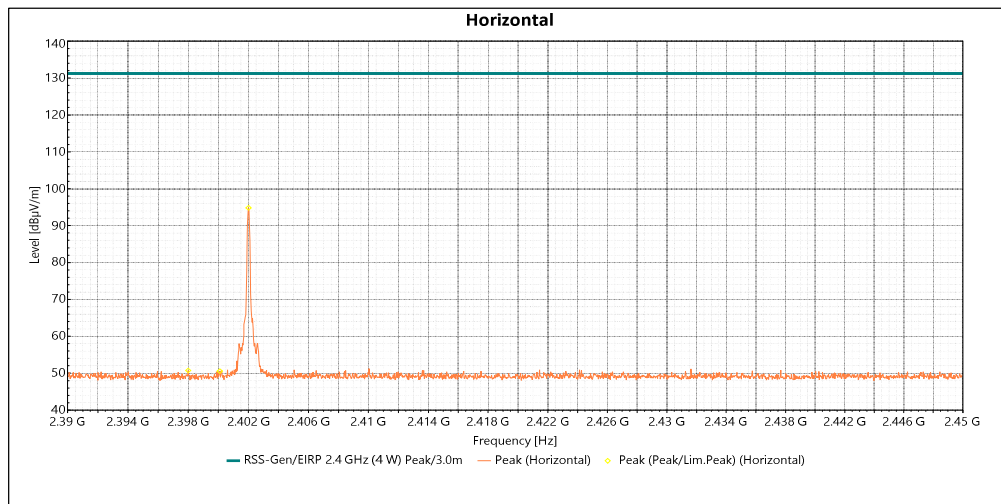
- ☒ The emissions are below the measurement system noise floor or 20 dB or more below the limit
- ☐ Final measurements for emissions that are above -20 dB from the applicable limits are shown below (at least 6 worst frequencies):

6.2.3 Transmitter Band Edge Radiated Emission and restricted band evaluation

Tested by:	Matteo Borghesi
Test date:	2025-07-08
Test location (stand):	Area 8: SAC 3-1.2 (RF emission)
Ambient temperature:	23 °C
Relative humidity:	55 %
Atmospheric pressure:	988 mbar
FCC Reference:	Parts 15.247(d) & 15.209(a)
ISED Canada Reference:	RSS-Gen 6.13 / RSS-247 5.5
Test Method Used	KDB 558074 Section 8.7 referencing ANSI C63.10 Sections 11.11 & 11.12
Test item:	834422
Used mains voltage/frequency:	5 Vdc (worst case)
Supplementary information:	Test performed in the following worst case: - Worst case of data rate resulting from Transmitter Maximum Peak Output Power has been used for this test - Worst condition orientation of EUT: Horizontal orientation

Results of band edge measurements

Operating mode	1
Verdict.....	Pass
Instrument settings	Start Frequency: 2.39 GHz; Stop Frequency: 2.45 GHz; Step: 20000 Pts; Sweep Time: 1 s; RF Attenuation: 10 dB; RBW: 100 kHz; VBW: 300 kHz; Preamplifier: ON; Preselector: ON



- ☐ The emissions are below the measurement system noise floor or 20 dB or more below the limit
- ☒ Final measurements for emissions that are above -20 dB from the applicable limits are shown below (at least 6 worst frequencies):

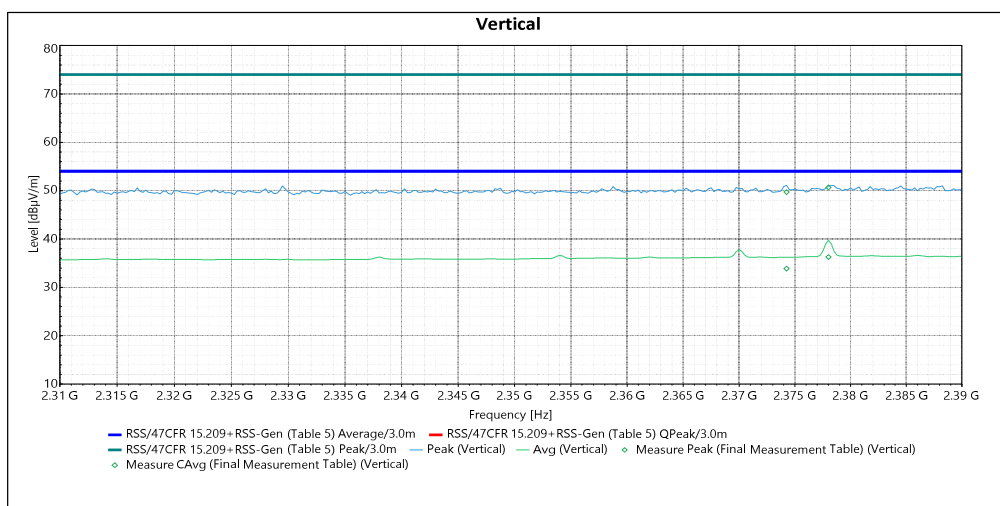
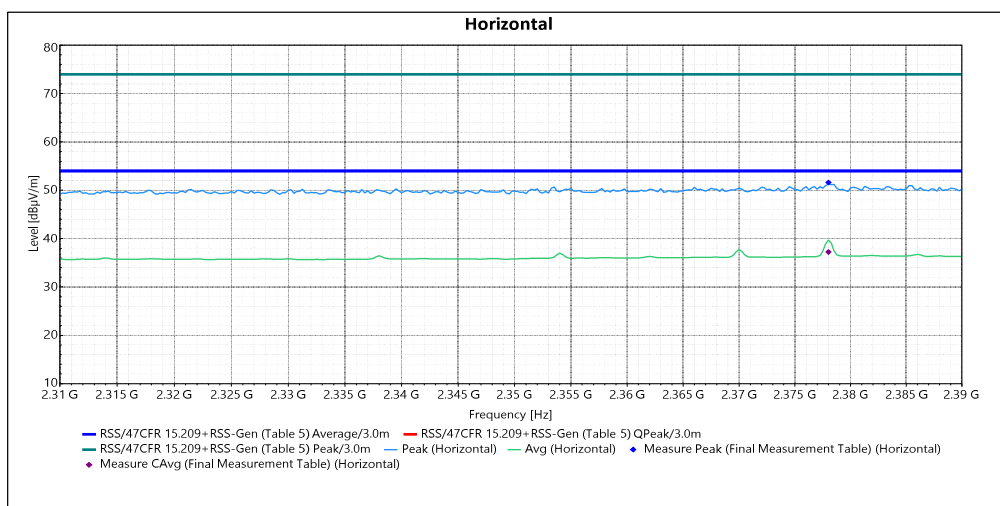
Final measurement table

Channel	Max peak of in-band emission (dBμv/m)	Frequency of max peak at the band edge (MHz)	Max peak of Carrier (dBμv/m)	Delta (dB)	Polarization	Margin (dB)	Result
Bottom	50.74	2398	94.84	44.1	Horizontal	>20 dB	Pass
Bottom	50.55	2400	94.84	44.29	Horizontal	>20 dB	Pass
Bottom	50.78	2395.5	94.01	43.23	Vertical	>20 dB	Pass
Bottom	50.03	2400	94.01	43.98	Vertical	>20 dB	Pass

NOTE: 20 dB margin applied because conducted output power was measured using Peak detector.

Results of restricted band measurement

Operating mode	1
Verdict	Pass
Instrument settings	Start Frequency: 2.31 GHz; Stop Frequency: 2.39 GHz; Step: 250 kHz; Sweep Time: 500 ms/Step; RF Attenuation: Auto; RBW: 1 MHz; VBW: Auto; Preamplifier: ON; Preselector: ON

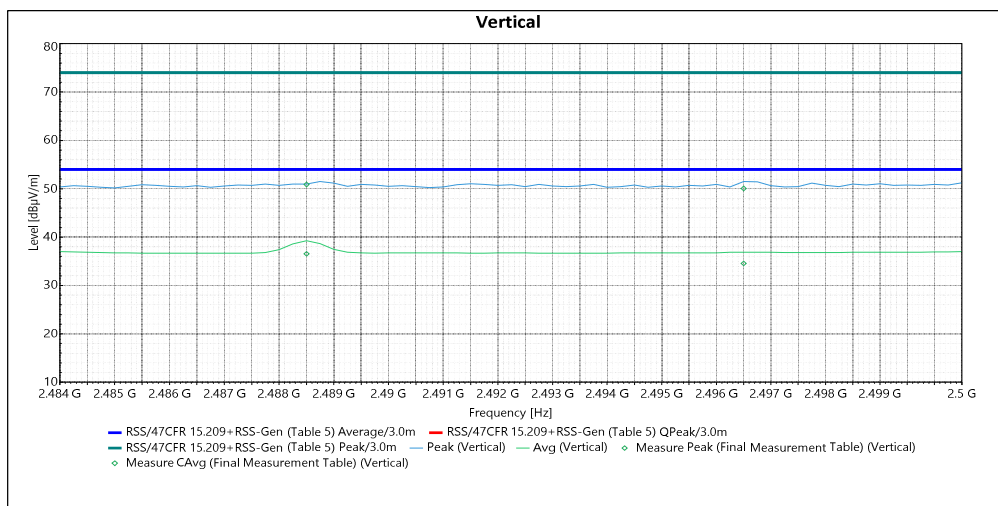
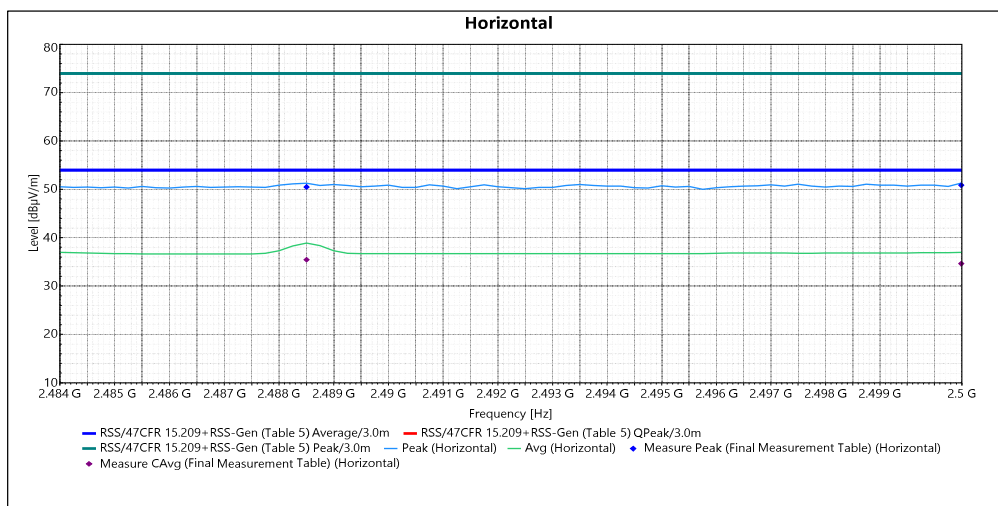


- ☐ The emissions are below the measurement system noise floor or 20 dB or more below the limit
- ☒ Final measurements for emissions that are above -20 dB from the applicable limits are shown below (at least 6 worst frequencies):

Final Measurement Table

Frequency	Measure Peak (dBμV/m)	Limit Peak (dBμV/m)	Margin Peak (dB)	Measure CAvg (dBμV/m)	CAvg + DC Correction (dBμV/m)	Limit Avg (dBμV/m)	Margin Avg (dB)	Height (m)	Angle (°)	Polarization	RBW (Hz)	Meas.Time (s)	Comments	Correction (dB)
2.378 GHz	51.6	74	-22.4	37.22	39.27	54	-14.73	1.48	162	Horizontal	1 M	5	Pass	36.75
2.374 GHz	49.7	74	-24.3	33.88	35.93	54	-18.07	3.07	303.1	Vertical	1 M	5	Pass	36.71
2.378 GHz	50.66	74	-23.34	36.25	38.3	54	-15.7	3.63	33.1	Vertical	1 M	5	Pass	36.75

Operating mode.....	3
Verdict.....	Pass
Instrument settings	Start Frequency: 2.4835 GHz; Stop Frequency: 2.5 GHz; Step: 250 kHz; Sweep Time: 500 ms/Step; RF Attenuation: Auto; RBW: 1 MHz; VBW: Auto; Preamplifier: ON; Preselector: ON



- ☐ The emissions are below the measurement system noise floor or 20 dB or more below the limit
- ☒ Final measurements for emissions that are above -20 dB from the applicable limits are shown below (at least 6 worst frequencies):

Final Measurement Table

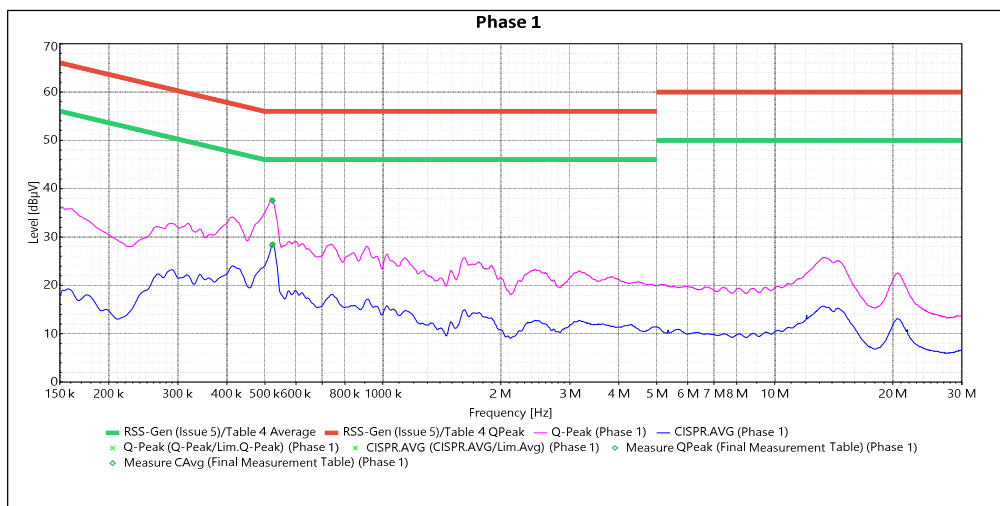
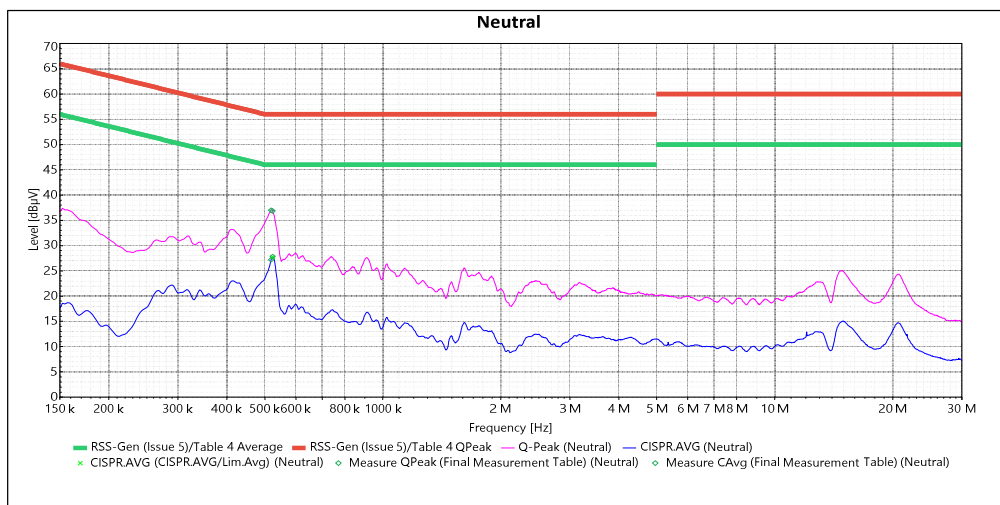
Frequency	Measure Peak (dBμV/m)	Limit Peak (dBμV/m)	Margin Peak (dB)	Measure CAvg (dBμV/m)	CAvg + DC Correction (dBμV/m)	Limit Avg (dBμV/m)	Margin Avg (dB)	Height (m)	Angle (°)	Polarization	RBW (Hz)	Meas.Time (s)	Comments	Correction (dB)
2.488 GHz	50.51	74	-23.49	35.45	37.5	54	-16.5	3.51	2	Horizontal	1 M	5	Pass	37.01
2.5 GHz	50.85	74	-23.15	34.64	36.69	54	-17.31	2.38	218.9	Horizontal	1 M	5	Pass	37.11
2.488 GHz	50.88	74	-23.12	36.53	38.58	54	-15.42	1.64	44.7	Vertical	1 M	5	Pass	37.01
2.496 GHz	50.05	74	-23.95	34.56	36.61	54	-17.39	3.92	134.8	Vertical	1 M	5	Pass	37.08

6.3 Transmitter AC Conducted Emissions

Tested by:	Andrea Giovanni Galbiati	
Test date:	2025-07-15	
Test location (stand):	Area 11: SR2 (RF emission)	
Ambient temperature:	23 °C	
Relative humidity:	59 %	
Atmospheric pressure:	994 mbar	
Test set-up description:	☒	Set-up Type A (40 cm distance to vertical ground plane and 80 cm to horizontal ground plane)
	☐	Set-up Type B (40 cm distance to horizontal ground plane)
	☐	Floor standing equipment set-up (10 cm over ground plane)
	☐	80 cm to horizontal ground plane (vertical ground plane not used according to ANSI C63.4-2014 clause 5.2.3)
	☐	Artificial hand applied
	☐	Other:
FCC Reference:	Part 15.207	
ISED Canada Reference:	RSS-Gen 8.8	
Test Method Used	ANSI C63.10 Section 6.2 / FCC KDB 174176 and notes below	
Test item:	834422	
Used mains voltage/frequency: (according to 174176 D01 Line Conducted FAQ v01r01)	AC Input: 120 V; 60 Hz with DC input of EUT= 5 Vdc (AC/DC adapter model S024DP0500300) AC Input: 120 V; 60 Hz with DC input of EUT= 24 Vdc (AC/DC adapter model PSU100C) AC Input: 240 V; 60 Hz with DC input of EUT= 5 Vdc (AC/DC adapter model S024DP0500300) AC Input: 240 V; 60 Hz with DC input of EUT= 24 Vdc (AC/DC adapter model PSU100C)	
Supplementary information:	Worst case of data rate resulting from Transmitter Maximum Peak Output Power has been used for this test Preliminary measurements were performed at both 50 Hz and 60 Hz supply frequencies. There was no change to the observed emissions.	

Results

Operating mode	1
Port	AC mains
Used mains voltage/frequency ...	120 V; 60 Hz
DC input of EUT	5 Vdc
Verdict.....	Pass
Instrument settings	Start Frequency: 150 kHz; Stop Frequency: 30 MHz; Step: 2.25 kHz; Sweep Time: 1 s/Step; RF Attenuation: Auto; 10 dB min attenuation: ON; RBW: 9 kHz; Preamplifier: OFF; Preselector: ON



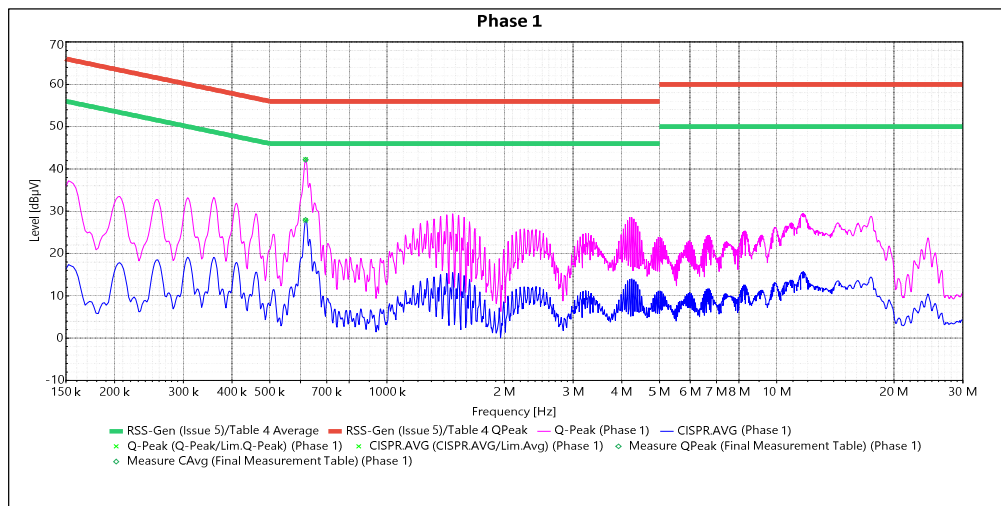
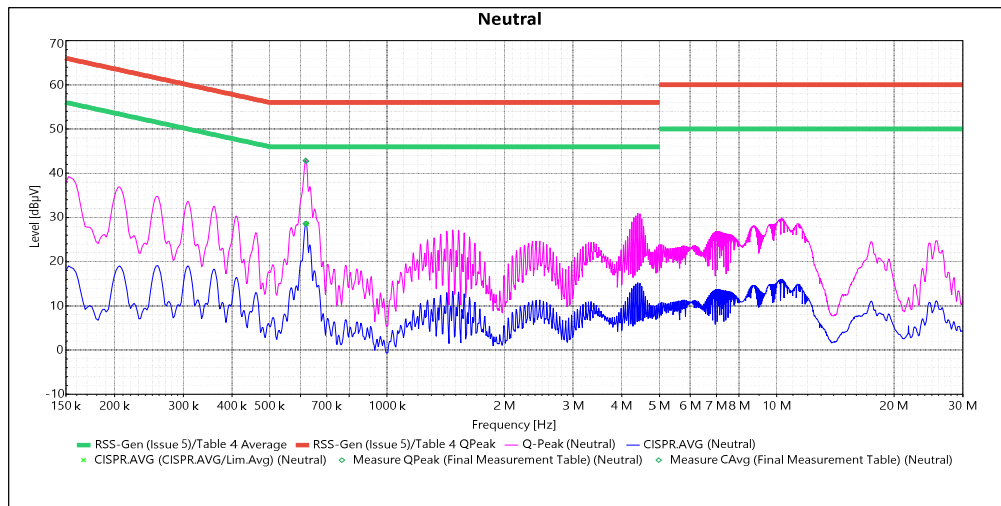
☐ The emissions are below the measurement system noise floor or 20 dB or more below the limit

☒ Final measurements for emissions that are above -20 dB from the applicable limits are shown below (at least 6 worst frequencies):

Final Measurement Table

Frequency	Measure QPeak (dBµV)	Limit QPeak (dBµV)	Margin QPeak (dB)	Measure CAvg (dBµV)	Limit Avg (dBµV)	Margin Avg (dB)	RBW (Hz)	Meas.Time (s)	Comments	Correction (dB)
519 kHz	36.99	56	-19.01	27.2	46	-18.8	9 kHz	5	Pass	10.22
523.5 kHz	36.85	56	-19.15	27.81	46	-18.19	9 kHz	5	Pass	10.22
521.25 kHz	37.61	56	-18.39	28.25	46	-17.75	9 kHz	5	Pass	10.22
523.5 kHz	37.46	56	-18.54	28.52	46	-17.48	9 kHz	5	Pass	10.22

Operating mode	1
Port	AC mains
Used mains voltage/frequency ...	120 V; 60 Hz
DC input of EUT	24 Vdc
Verdict.....	Pass
Instrument settings	Start Frequency: 150 kHz; Stop Frequency: 30 MHz; Step: 2.25 kHz; Sweep Time: 1 s/Step; RF Attenuation: Auto; 10 dB min attenuation: ON; RBW: 9 kHz; Preamp: OFF; Preselector: ON



☐ The emissions are below the measurement system noise floor or 20 dB or more below the limit

☒ Final measurements for emissions that are above -20 dB from the applicable limits are shown below (at least 6 worst frequencies):

Final Measurement Table

Frequency	Measure QPeak (dBμV)	Limit QPeak (dBμV)	Margin QPeak (dB)	Measure CAvg (dBμV)	Limit Avg (dBμV)	Margin Avg (dB)	RBW (Hz)	Meas.Time (s)	Comments	Correction (dB)
618 kHz	42.86	56	-13.14	28.58	46	-17.42	9 kHz	5	Pass	10.22
620.25 kHz	42.7	56	-13.3	28.63	46	-17.37	9 kHz	5	Pass	10.22
618 kHz	42.17	56	-13.83	27.92	46	-18.08	9 kHz	5	Pass	10.22