Test report

REP156216-03R1TRFEMC

Date of issue: April 16, 2026

Applicant:

CalAmp

Product:

Vehicle Telematics Device

Model:	Variant(s):
TTU3640LAB	N/A

FCC ID:	ISED certification number:
APV-TTU3640LAB	5843C-TTU3640LAB

Specifications:

- Multi-transmitter evaluation per:
  FCC 47 CFR Part 15.207 and 15.209
  ISED RSS-GEN

Lab and test locations

Company name	Nemko USA Inc.
Address	2210 Faraday Ave, Suite 150
City	Carlsbad
State	California
Postal code	92008
Country	USA
Telephone	+1 760 444 3500
Website	www.nemko.com
FCC Site Number	Test Firm Registration Number: 214630; Designation Number: US3165
ISED Test Site	2040B

Tested by	Ka Poon, Wireless Test Engineer
Reviewed by	James Cunningham, EMC/WL Manager
Review date	April 16, 2026
Reviewer signature	James.Cunningham Digitally signed by James.Cunningham DN: cn=James.Cunningham, email=James.Cunningham@nemko.com Reason: I am approving this document Date: 2026.04.16 09:12:50 -07'00'

Limits of responsibility

Note that the results contained in this report relate only to the items tested and were obtained in the period between the date of initial receipt of samples and the date of issue of the report.
This test report has been completed in accordance with the requirements of ISO/IEC 17025. All results contain in this report are within Nemko USA's ISO/IEC 17025 accreditation.

Copyright notification

Table of Contents

Section 1 Report summary

1.1 Test specifications

FCC 47 CFR Part 15.207 and 15.209	Conducted limits Radiated emissions; general requirements
RSS-GEN, Issue 5 (April 2018)	General Requirements for Compliance of Radio Apparatus – Clause 8.9: Transmitter emission limits

1.2 Exclusions

None.

1.3 Statement of compliance

Testing was performed against all relevant requirements of the test standard(s).

Results obtained indicate that the product under test complies in full with the tested requirements.

The test results relate only to the item(s) tested.

See "Section 2 Summary of test results" for full details.

1.4 Test report revision history

Table 1.4-1: *Test report revision history*

Revision #	Issue Date	Details of changes made to test report
REP156216-03TRFEMC	April 15, 2026	Original report issued
REP156216-03R1TRFEMC	April 16, 2026	Added ISED requirements

Section 2 Summary of test results

2.1 Sample information

Receipt date	19-Mar-2026
Nemko sample ID number	REP156216

2.2 Testing period

Test start date	20-Mar-2026
Test end date	20-Mar-2026

2.3 Emissions test results

Table 2.3-1: *FCC 47 CFR Part 15.207 and 15.209 results*

Standard	Clause	Test description	Verdict
FCC 47 CFR Part 15, Subpart C	§15.209	Radiated emissions; general requirements	Pass
FCC 47 CFR Part 15, Subpart C	§15.207	Conducted limits	Not applicable [1]

Notes: [1] The EUT is DC powered

Table 2.3-2: *ISED RSS-GEN results*

Standard	Clause	Test description	Verdict
RSS-GEN	8.9	Transmitter emission limits	Pass

Section 3 Equipment under test (EUT) details

3.1 Disclaimer

This section contains information provided by the applicant and has been utilized to support the test plan. Inaccurate information provided by the applicant can affect the validity of the results within this test report. Nemko accepts no responsibility for the information contained within this section and the impact it may have on the test plan and resulting measurements.

3.2 Applicant

Company name	CalAmp
Address	2200 Faraday Avenue, Suite 220
City	Carlsbad
State	California
Postal/Zip code	92008
Country	United States of America

3.3 Manufacturer

Company name	CalAmp
Address	2200 Faraday Avenue, Suite 220
City	Carlsbad
State	California
Postal/Zip code	92008
Country	United States of America

3.4 EUT information

Product name	Vehicle Telematics Device
Model	TTU3640LAB
Variant(s)	N/A
Serial number	4674533413
Part number	TTU3640LAB
Power requirements	12/24 VDC
Description/theory of operation	EUT is a vehicle / trailer tracking and telematics device.
Operational frequencies	LTE: Bands B1, B2, B3, B4, B5/B26, B8, B12/B13/B28, B18/B19/B20, B39/B25 GSM/GPRS: 850/900/1800/1900 MHz Bluetooth Low Energy: 2400 – 2480 MHz
Software details	87d
Multiple transmitter details	LTE and Bluetooth Low Energy radios operate simultaneously

3.5 EUT exercise and monitoring details

EUT description of the methods used to exercise the EUT and all relevant ports:

- The Bluetooth Low Energy transmitter was commanded to operate on a fixed channel at maximum nominal power via client-provided AT-command interface.
- The LTE-M1 transmitter was controlled and commanded to operate on a fixed channel at maximum nominal power via connection to a suitable LTE-M1 call box.

EUT setup/configuration rationale:

- The EUT setup in a configuration that was expected to produce the highest amplitude emissions relative to the limit and that satisfy normal operation/installation practice by the end user.
- The type and construction of cables used in the measurement set-up were consistent with normal or typical use. Cables with mitigation features (for example, screening, tighter/more twists per length, ferrite beads) have been noted below:
  - None
- The EUT was setup in a manner that was consistent with its typical arrangement and use. The measurement arrangement of the EUT, local ancillary equipment and associated cabling was representative of normal practice. Any deviations from typical arrangements have been noted below:
  - None

3.6 EUT setup details

Table 3.6-1: *EUT sub assemblies*

Description	Brand name	Model/Part number	Serial number	Rev.
N/A	N/A			

Table 3.6-2: *EUT interface ports*

Description	Qty.
N/A	

Table 3.6-3: *Support equipment*

Description	Brand name	Model/Part number	Serial number	Rev.
Laptop	Dell	N/A	N/A	
DC Power Supply	Topward	3303D	736346	N/A

Table 3.6-4: *Inter-connection cables*

Cable description	From	To	Length (m)
DC cable	**EUT DC input**	**DC source**	**>3**
USB	EUT USB	Laptop USB	>3

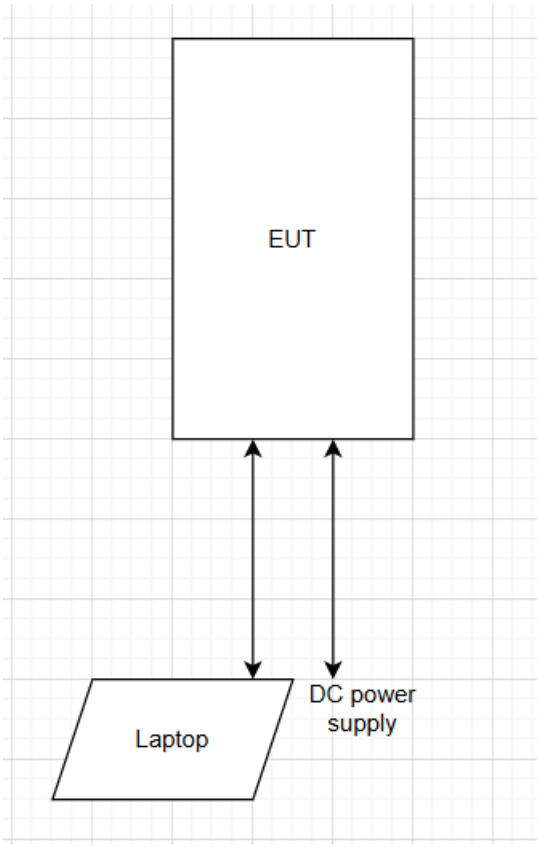

Figure 3.6-1: Test setup diagram

Section 4 Engineering considerations

4.1 Modifications incorporated in the EUT

None.

4.2 Technical judgement

None.

4.3 Deviations from laboratory test procedures

None.

Section 5 Test conditions

5.1 Atmospheric conditions

Temperature	15–30 °C
Relative humidity	20–75 %
Air pressure	86–106 kPa

When it is impracticable to carry out tests under these conditions, a note to this effect stating the ambient temperature and relative humidity during the tests shall be recorded and stated.

5.2 Power supply range

The normal test voltage for equipment to be connected to the mains shall be the nominal mains voltage. For the purpose of the present document, the nominal voltage shall be the declared voltage, or any of the declared voltages ±5 %, for which the equipment was designed.

Section 6 Measurement uncertainty

6.1 Uncertainty of measurement

Nemko USA Inc. has calculated measurement uncertainty and is documented in EMC/MUC/001 "Uncertainty in EMC measurements." Measurement uncertainty was calculated using the methods described in CISPR 16-4-2 Specification for radio disturbance and immunity measuring apparatus and methods – Part 4-2: Uncertainties, statistics, and limit modelling – Measurement instrumentation uncertainty. The expression of Uncertainty in EMC testing. Measurement uncertainty calculations assume a coverage factor of K=2 with 95% certainty.

Table 6.1-1: *Measurement uncertainty calculations*

Measurement		**U_{cispr} dB**	**U_{lab} dB**
Conducted disturbance at AC mains and other port power using a V-AMN	9 kHz to 150 kHz	3.8	2.9
	150 kHz to 30 MHz	3.4	2.3
Conducted disturbance at telecommunication port using AAN	150 kHz to 30 MHz	5.0	4.3
Conducted disturbance at telecommunication port using CVP	150 kHz to 30 MHz	3.9	2.9
Conducted disturbance at telecommunication port using CP	150 kHz to 30 MHz	2.9	1.4
Conducted disturbance at telecommunication port using CP and CVP	150 kHz to 30 MHz	4.0	3.1
Radiated disturbance (electric field strength in a SAC)	30 MHz to 1 GHz	6.3	5.5
Radiated disturbance (electric field strength in a FAR)	1 GHz to 6 GHz	5.2	4.7
Radiated disturbance (electric field strength in a FAR)	6 GHz to 18 GHz	5.5	5.0

Notes: Compliance assessment:

If U_{lab} is less than or equal to U_{cispr} then:

- compliance is deemed to occur if no measured disturbance level exceeds the disturbance limit;
- non-compliance is deemed to occur if any measured disturbance level exceeds the disturbance limit

If U_{lab} is greater than U_{cispr} then:

- compliance is deemed to occur if no measured disturbance level, increased by (U_{lab} - U_{cispr}), exceeds the disturbance limit;
- non-compliance is deemed to occur if any measured disturbance level, increased by (U_{lab} - U_{cispr}), exceeds the disturbance limit

V-AMN: V type artificial mains network
AAN: Asymmetric artificial network
CP: Current probe
CVP: Capacitive voltage probe
SAC: Semi-anechoic chamber
FAR: Fully anechoic room

Conformity with the specified requirements is determined by comparing the measured results directly to the applicable limits. Measurement uncertainty is not applied to adjust or attribute to the measured value for the purpose of compliance determination.

Section 7 Test equipment

7.1 Test equipment list

Table 7.1-1: *Test Equipment List*

Equipment	Manufacturer	Model no.	Asset no.	Cal cycle	Next cal.
Active Loop H Field Antenna	EMCO - HP	6502	E1267	1 Year	08-Aug-2026
Biconilog antenna (Type 7), 30 MHz - 6 GHz	ETS Lindgren	3142E	E1371	2 Years	20-Aug-2026
Standard Gain Horn Antenna	Eravant	SAZ-2410-42-S1	Ew107	1 Year	11-Feb-2026
DRG Horn (medium)	ETS-Lindgren	3117-PA	E1139	2 Years	11-Jan-2026
Preamplifier	Sonoma	310N	E1155	1 Year	18-Jun-2026
EMI Test Receiver	Rohde & Schwarz	ESU40	E1121	1 Year	08-Jan-2027

Notes: NCR: no calibration required
VBU: verify before use

7.2 Test software list

Table 7.2-1: *Test Software*

Manufacturer	Details
Rohde & Schwarz	EMC 32 V10.60.15 (radiated emissions)

Section 8 Testing data

8.1 Radiated emissions

8.1.1 References and limits

- FCC 47 CFR Part 15, Subpart B: §15.209
- ISED RSS-GEN, §8.9
- Test method: ANSI C63.10 §6.5, 6.6 (radiated emissions in restricted bands)

Table 8.1-1: *FCC §15.209 – Radiated emission limits*

Frequency, MHz	Field strength of emissions		Measurement distance, m
	µV/m	dBµV/m	
0.009–0.490	2400/F	$67.6 - 20 \times \log_{10}(F)$	300
0.490–1.705	24000/F	$87.6 - 20 \times \log_{10}(F)$	30
1.705–30.0	30	29.5	30
30–88	100	40.0	3
88–216	150	43.5	3
216–960	200	46.0	3
above 960	500	54.0	3

Notes: In the emission table above, the tighter limit applies at the band edges.
For frequencies above 1 GHz the limit on peak RF emissions is 20 dB above the maximum permitted average emission limit applicable to the equipment under test.

Table 8.1-2: *FCC restricted frequency bands*

MHz	MHz	MHz	GHz
0.090–0.110	16.42–16.423	399.9–410	4.5–5.15
0.495–0.505	16.69475–16.69525	608–614	5.35–5.46
2.1735–2.1905	16.80425–16.80475	960–1240	7.25–7.75
4.125–4.128	25.5–25.67	1300–1427	8.025–8.5
4.17725–4.17775	37.5–38.25	1435–1626.5	9.0–9.2
4.20725–4.20775	73–74.6	1645.5–1646.5	9.3–9.5
6.215–6.218	74.8–75.2	1660–1710	10.6–12.7
6.26775–6.26825	108–121.94	1718.8–1722.2	13.25–13.4
6.31175–6.31225	123–138	2200–2300	14.47–14.5
8.291–8.294	149.9–150.05	2310–2390	15.35–16.2
8.362–8.366	156.52475–156.52525	2483.5–2500	17.7–21.4
8.37625–8.38675	156.7–156.9	2690–2900	22.01–23.12
8.41425–8.41475	162.0125–167.17	3260–3267	23.6–24.0
12.29–12.293	167.72–173.2	3332–3339	31.2–31.8
12.51975–12.52025	240–285	3345.8–3358	36.43–36.5
12.57675–12.57725	322–335.4	3600–4400	Above 38.6
13.36–13.41			

8.1.2 Test summary

Verdict	Pass		
Test date	March 19, 2026 March 20, 2026	Temperature	20.1 °C 19 °C
Test engineer	Ka Poon, Wireless Test Engineer	Air pressure	1005.2 mbar 1006 mbar
Test location	☐ Wireless bench (conducted tests) ☐ 10 m semi-anechoic chamber (radiated tests) ☒ 3 m semi-anechoic chamber (radiated tests) ☐ Other:	Relative humidity	57 % 57 %

8.1.3 Notes

The spectral plots within this section have been corrected with all relevant transducer factors.

The following simultaneous operational modes were assessed:

1. Bluetooth Low Energy (mid channel) + LTE band 2 operation
2. Bluetooth Low Energy (mid channel) + LTE band 5 operation
3. Bluetooth Low Energy (mid channel) + LTE band 12 operation

The emissions limits were chosen as the worst-case between the requirements for Bluetooth Low Energy and LTE.

8.1.4 Setup details

Port under test	Enclosure port
EUT power input during test	12 V DC
EUT setup configuration	☒ Table-top ☐ Floor standing ☐ Other:
Measuring distance	☐ 10m ☒ 3m ☐ Other:
Antenna height variation	1 – 4 m
Turn table position	0 – 360°
Measurement details	Preview measurements were performed with the receiver in continuous scan or sweep mode. Emissions detected within 6 dB or above limit (minimum of 6 frequencies) were maximized by rotating the EUT and adjusting the antenna height and polarization. At the position of maximum emission, the signal was measured with the appropriate detector against the corresponding limit and recorded as the final measurement.

Receiver/spectrum analyzer settings for frequencies below 1 GHz:

Resolution bandwidth	120 kHz
Detector mode	– Peak (Preview measurement) – Quasi-peak (Final measurement)
Trace mode	Max Hold
Measurement time	– 100 ms (Peak preview measurement) – 5000 ms (Quasi-peak final measurement)

Receiver/spectrum analyzer settings for frequencies above 1 GHz:

Resolution bandwidth	1 MHz
Detector mode	Peak (Preview measurement) Peak and Average (Final measurement)
Trace mode	Max Hold
Measurement time	– 100 ms (Peak preview measurement) – 5000 ms (Peak and Average final measurement)

8.1.5 Test data

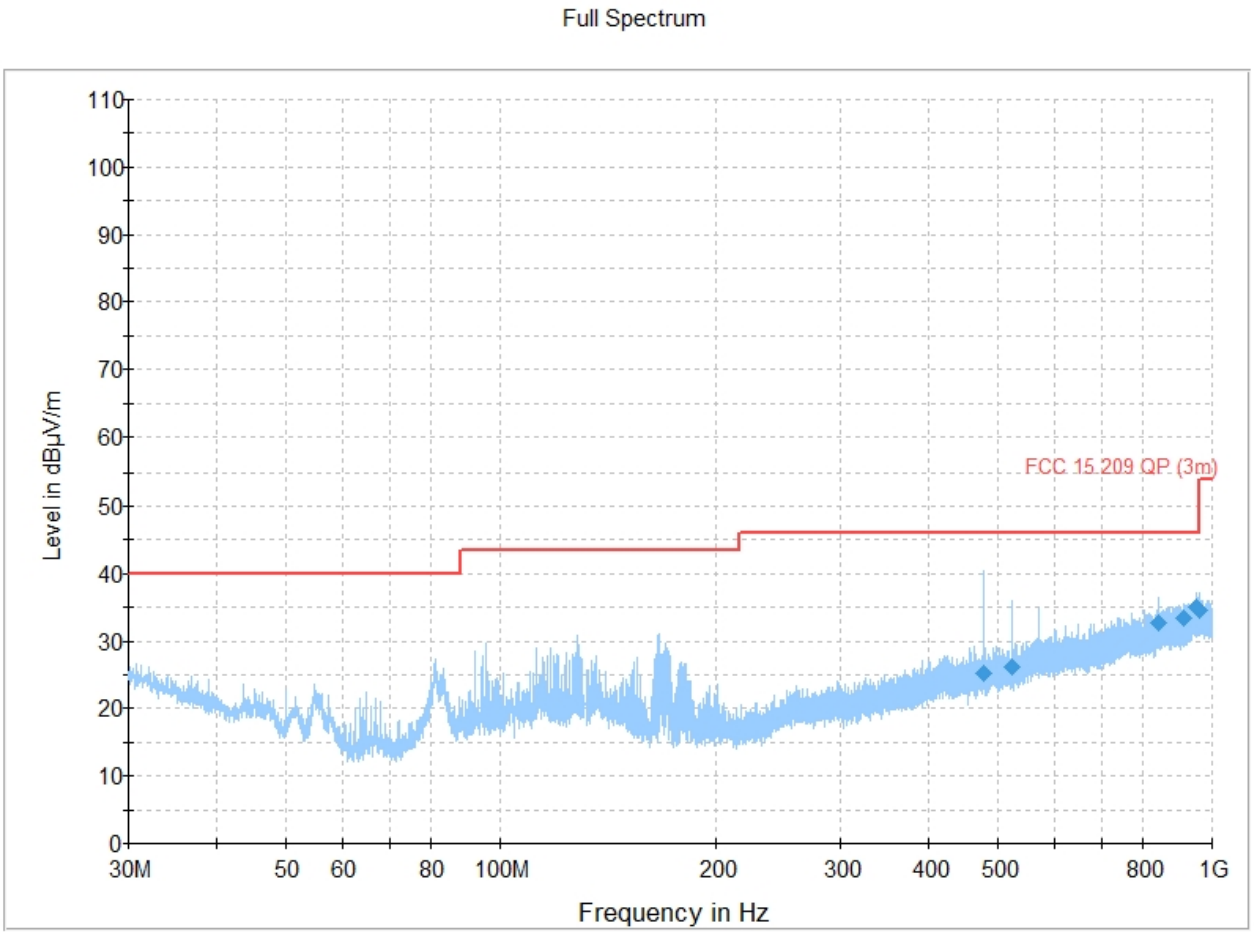

Figure 8.1-1: *Radiated emissions spectral plot (30 MHz - 1 GHz): BLE Mid Channel + LTE FDD Band 2*

Table 8.1-3*: Radiated emissions results*

Frequency (MHz)	QuasiPeak (dBµV/m)	Limit (dBµV/m)	Margin (dB)	Meas. Time (ms)	Bandwidth (kHz)	Height (cm)	Pol	Azimuth (deg)	Corr. (dB/m)
478.244333	25.25	46.00	20.75	5000.0	120.000	164.0	H	243.0	26.8
523.428333	26.11	46.00	19.89	5000.0	120.000	295.0	H	308.0	27.6
838.995667	32.75	46.00	13.25	5000.0	120.000	272.0	H	171.0	32.9
912.133000	33.39	46.00	12.61	5000.0	120.000	258.0	H	227.0	33.4
951.809333	34.92	46.00	11.08	5000.0	120.000	390.0	H	318.0	35.0
959.703000	34.66	46.00	11.34	5000.0	120.000	377.0	H	0.0	34.7

Notes: [1] Field strength (dBµV/m) = receiver/spectrum analyzer value (dBµV) + correction factor (dB)
[2] Correction factors = antenna factor ACF (dB) + cable loss (dB)
[3] Emissions that were continuously present for a minimum of 1 second and occurred more than once for every 15 seconds observation period were considered valid emissions. The maximum value of valid emissions has been recorded.

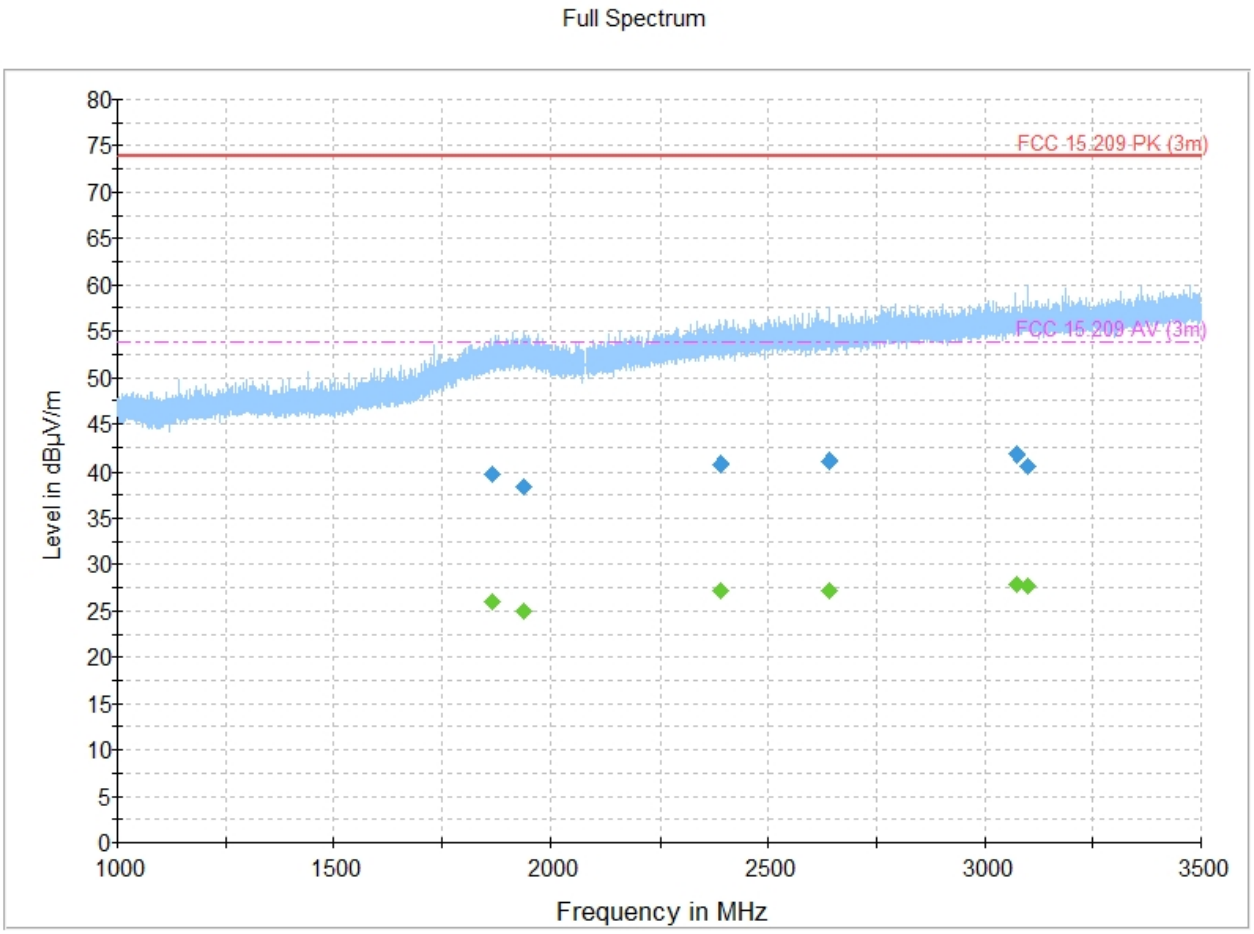

Figure 8.1-2: *Radiated emissions spectral plot (1 GHz - 3.5 GHz): BLE Mid Channel + LTE FDD band 2*

Table 8.1-4*: Radiated emissions results*

Frequency (MHz)	MaxPeak (dBµV/m)	CAverage (dBµV/m)	Limit (dBµV/m)	Margin (dB)	Meas. Time (ms)	Bandwidth (kHz)	Height (cm)	Pol	Azimuth (deg)	Corr. (dB/m)
1865.966667	39.73	---	73.90	34.17	5000.0	1000.000	139.0	V	134.0	-5.7
1865.966667	---	26.04	53.90	27.86	5000.0	1000.000	139.0	V	134.0	-5.7
1940.633333	---	24.93	53.90	28.97	5000.0	1000.000	379.0	H	119.0	-5.3
1940.633333	38.37	---	73.90	35.53	5000.0	1000.000	379.0	H	119.0	-5.3
2391.616667	---	27.25	53.90	26.65	5000.0	1000.000	263.0	H	230.0	-4.0
2391.616667	40.79	---	73.90	33.11	5000.0	1000.000	263.0	H	230.0	-4.0
2640.133333	41.13	---	73.90	32.77	5000.0	1000.000	336.0	H	118.0	-3.3
2640.133333	---	27.11	53.90	26.79	5000.0	1000.000	336.0	H	118.0	-3.3
3075.400000	---	27.91	53.90	25.99	5000.0	1000.000	343.0	H	255.0	-1.9
3075.400000	41.70	---	73.90	32.20	5000.0	1000.000	343.0	H	255.0	-1.9
3099.866667	---	27.64	53.90	26.26	5000.0	1000.000	263.0	H	76.0	-1.8
3099.866667	40.66	---	73.90	33.24	5000.0	1000.000	263.0	H	76.0	-1.8

Notes: [1] Field strength (dBµV/m) = receiver/spectrum analyzer value (dBµV) + correction factor (dB)
[2] Correction factors = antenna factor ACF (dB) + cable loss (dB)
[3] Emissions that were continuously present for a minimum of 1 second and occurred more than once for every 15 seconds observation period were considered valid emissions. The maximum value of valid emissions has been recorded.
Notch filters were used to suppress the fundamental emissions of the Bluetooth and LTE transmitters so as to avoid overloading the measurement equipment.

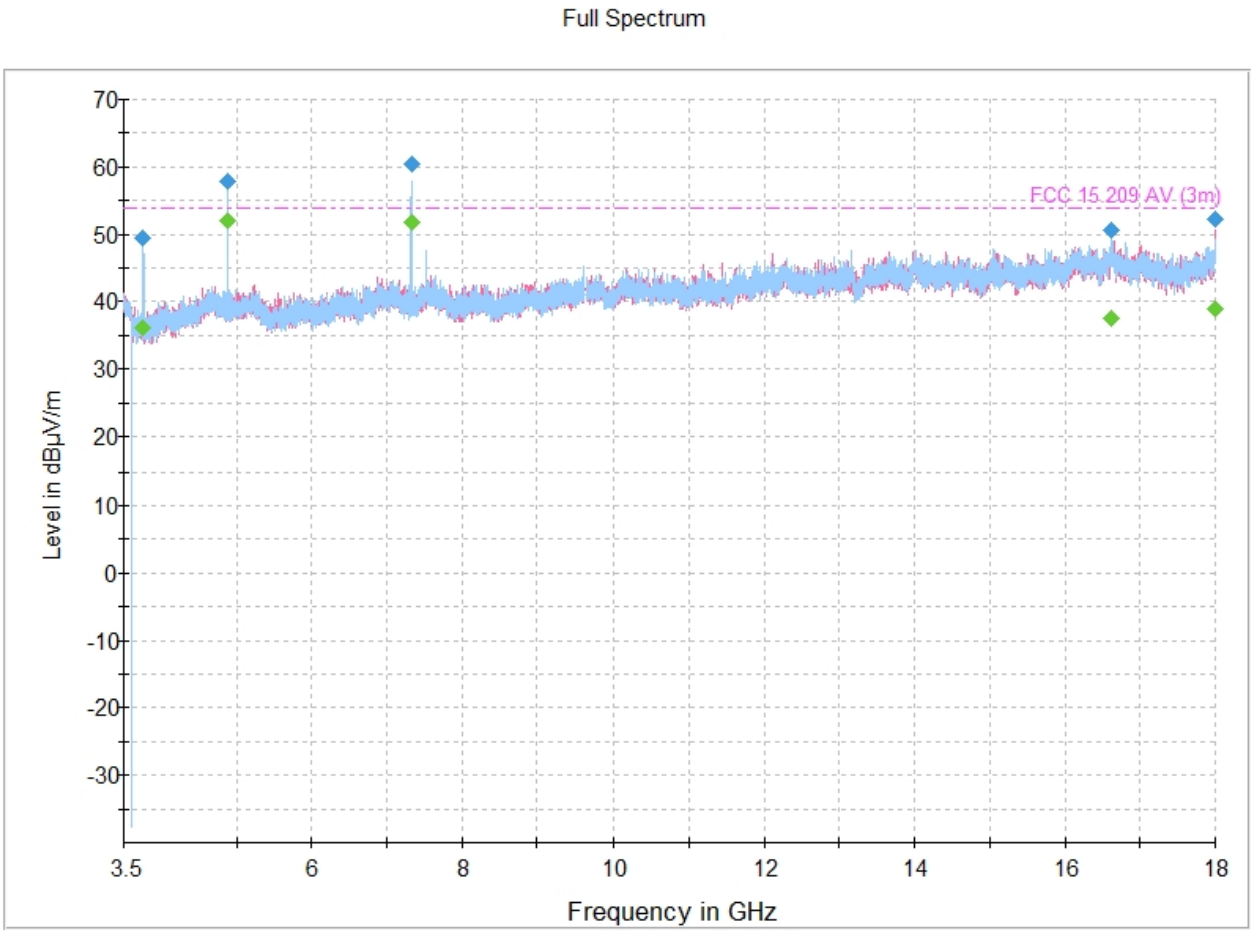

Figure 8.1-3: *Radiated emissions spectral plot (3.5 GHz - 18 GHz): BLE Mid Channel + LTE FDD band 2*

Table 8.1-5*: Radiated emissions results*

Frequency (MHz)	MaxPeak (dBµV/m)	CAverage (dBµV/m)	Limit (dBµV/m)	Margin (dB)	Meas. Time (ms)	Bandwidth (kHz)	Height (cm)	Pol	Azimuth (deg)	Corr. (dB/m)
3759.625000	49.52	---	73.90	24.38	5000.0	1000.000	245.0	V	169.0	-0.6
3759.625000	---	36.17	53.90	17.73	5000.0	1000.000	245.0	V	169.0	-0.6
4883.700000	---	51.94	53.90	1.96	5000.0	1000.000	145.0	H	0.0	1.9
4883.700000	57.88	---	73.90	16.02	5000.0	1000.000	145.0	H	0.0	1.9
7325.425000	---	51.84	53.90	2.06	5000.0	1000.000	148.0	H	335.0	6.2
7325.425000	60.36	---	73.90	13.54	5000.0	1000.000	148.0	H	335.0	6.2
16613.075000	---	37.57	53.90	16.33	5000.0	1000.000	376.0	H	154.0	23.3
16613.075000	50.52	---	73.90	23.38	5000.0	1000.000	376.0	H	154.0	23.3
17996.000000	52.24	---	73.90	21.66	5000.0	1000.000	165.0	V	0.0	24.9
17996.000000	---	38.89	53.90	15.01	5000.0	1000.000	165.0	V	0.0	24.9

Notes: [1] Field strength (dBµV/m) = receiver/spectrum analyzer value (dBµV) + correction factor (dB)
[2] Correction factors = antenna factor ACF (dB) + cable loss (dB)
[3] Emissions that were continuously present for a minimum of 1 second and occurred more than once for every 15 seconds observation period were considered valid emissions. The maximum value of valid emissions has been recorded.
A high pass filter (3.5 GHZ cut-off) was used to suppress the fundamental transmitter carriers so as to avoid overloading the measurement equipment.

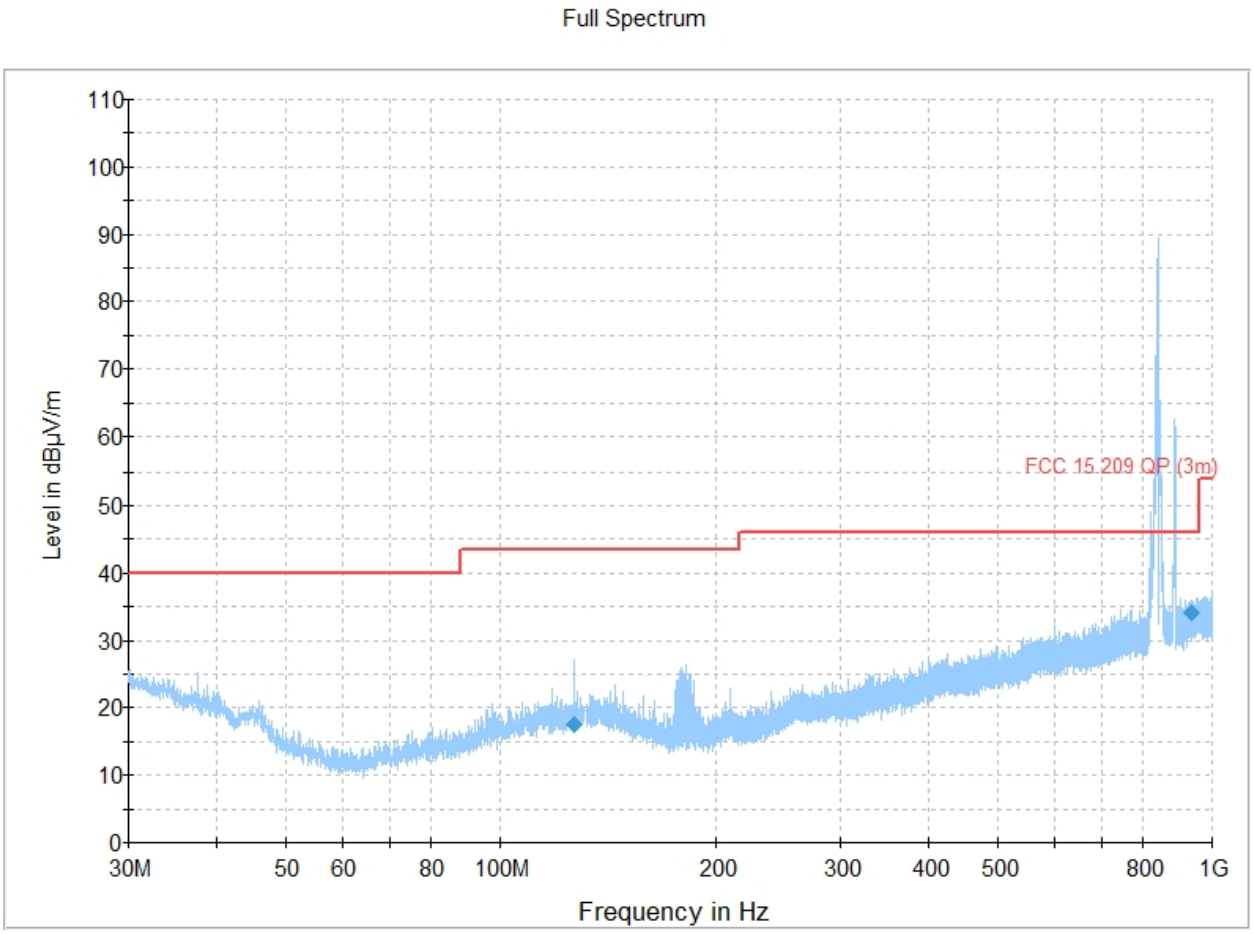

Figure 8.1-4: *Radiated emissions spectral plot (30 MHz - 1 GHz): BLE Mid Channel + LTE FDD Band 5*

Table 8.1-6*: Radiated emissions results*

Frequency (MHz)	QuasiPeak (dBµV/m)	Limit (dBµV/m)	Margin (dB)	Meas. Time (ms)	Bandwidth (kHz)	Height (cm)	Pol	Azimuth (deg)	Corr. (dB/m)
127.398667	17.44	43.50	26.06	5000.0	120.000	398.0	H	290.0	19.8
934.346667	34.08	46.00	11.92	5000.0	120.000	163.0	H	185.0	34.2

Notes: [1] Field strength (dBµV/m) = receiver/spectrum analyzer value (dBµV) + correction factor (dB)
[2] Correction factors = antenna factor ACF (dB) + cable loss (dB)
[3] Emissions that were continuously present for a minimum of 1 second and occurred more than once for every 15 seconds observation period were considered valid emissions. The maximum value of valid emissions has been recorded.
A tunable notch filter was used to reduce the level of the fundamental LTE transmitter to avoid overloading the measurement equipment.

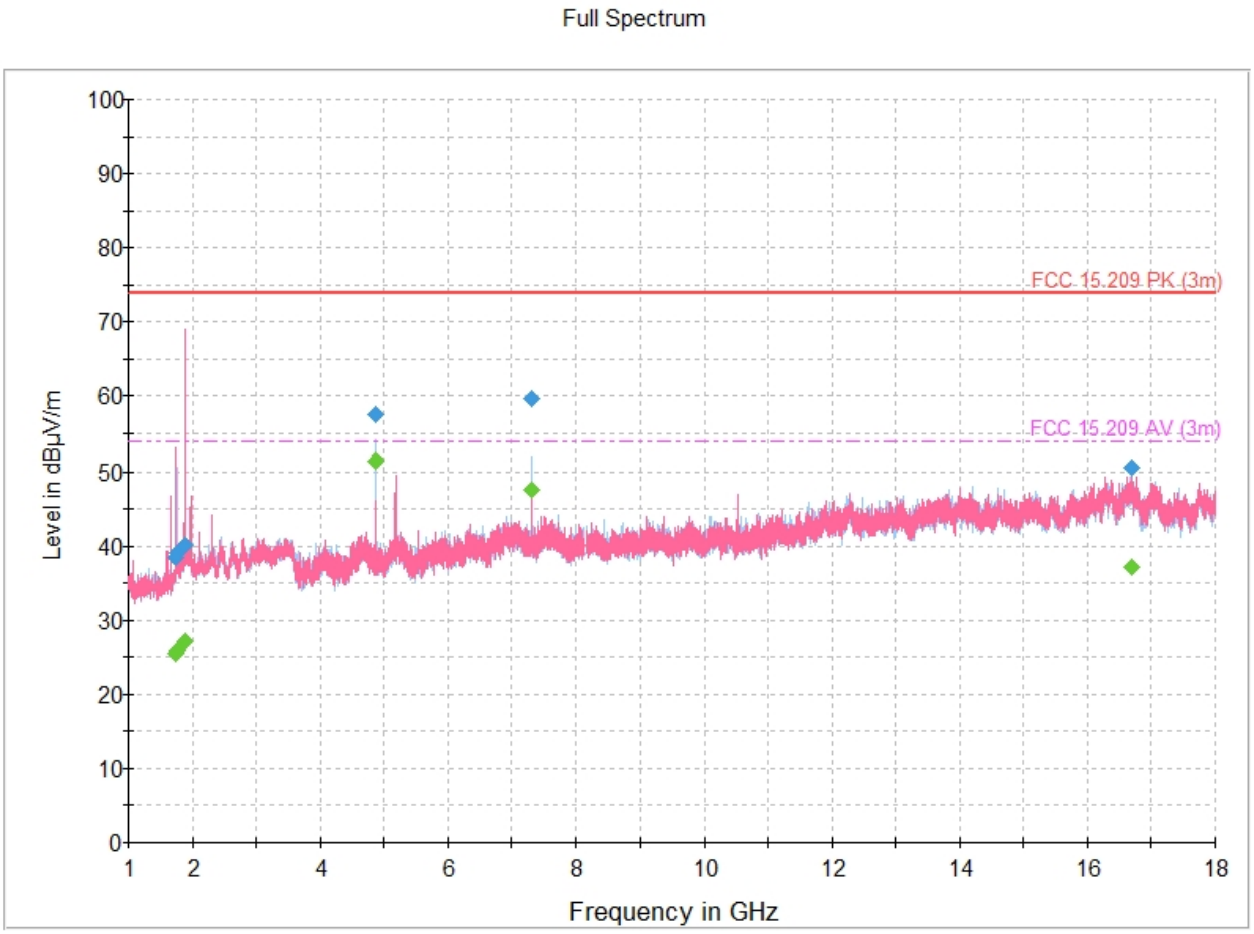

Figure 8.1-5: *Radiated emissions spectral plot (1 GHz - 18 GHz): BLE Mid Channel + LTE FDD Band 5*

Table 8.1-7*: Radiated emissions results*

Frequency (MHz)	MaxPeak (dBµV/m)	CAverage (dBµV/m)	Limit (dBµV/m)	Margin (dB)	Meas. Time (ms)	Bandwidth (kHz)	Height (cm)	Pol	Azimuth (deg)	Corr. (dB/m)
1749.200000	38.34	---	73.90	35.56	5000.0	1000.000	401.0	V	0.0	-7.6
1749.200000	---	25.39	53.90	28.51	5000.0	1000.000	401.0	V	0.0	-7.6
1766.100000	39.10	---	73.90	34.80	5000.0	1000.000	401.0	H	0.0	-7.3
1766.100000	---	25.94	53.90	27.96	5000.0	1000.000	401.0	H	0.0	-7.3
1892.650000	40.05	---	73.90	33.85	5000.0	1000.000	189.0	V	173.0	-5.5
1892.650000	---	27.17	53.90	26.73	5000.0	1000.000	189.0	V	173.0	-5.5
4883.800000	57.51	---	73.90	16.39	5000.0	1000.000	134.0	H	354.0	1.9
4883.800000	---	51.45	53.90	2.45	5000.0	1000.000	134.0	H	354.0	1.9
7324.700000	59.63	---	73.90	14.27	5000.0	1000.000	142.0	H	139.0	6.2
7324.700000	---	47.49	53.90	6.41	5000.0	1000.000	142.0	H	139.0	6.2
16700.300000	50.52	---	73.90	23.38	5000.0	1000.000	401.0	V	236.0	23.1
16700.300000	---	37.15	53.90	16.75	5000.0	1000.000	401.0	V	236.0	23.1

Notes: [1] Field strength (dBµV/m) = receiver/spectrum analyzer value (dBµV) + correction factor (dB)
[2] Correction factors = antenna factor ACF (dB) + cable loss (dB)
[3] Emissions that were continuously present for a minimum of 1 second and occurred more than once for every 15 seconds observation period were considered valid emissions. The maximum value of valid emissions has been recorded.
A 2.4 GHz notch filter was used to suppress the Bluetooth Low Energy fundamental signal to prevent overloading of the measurement equipment.

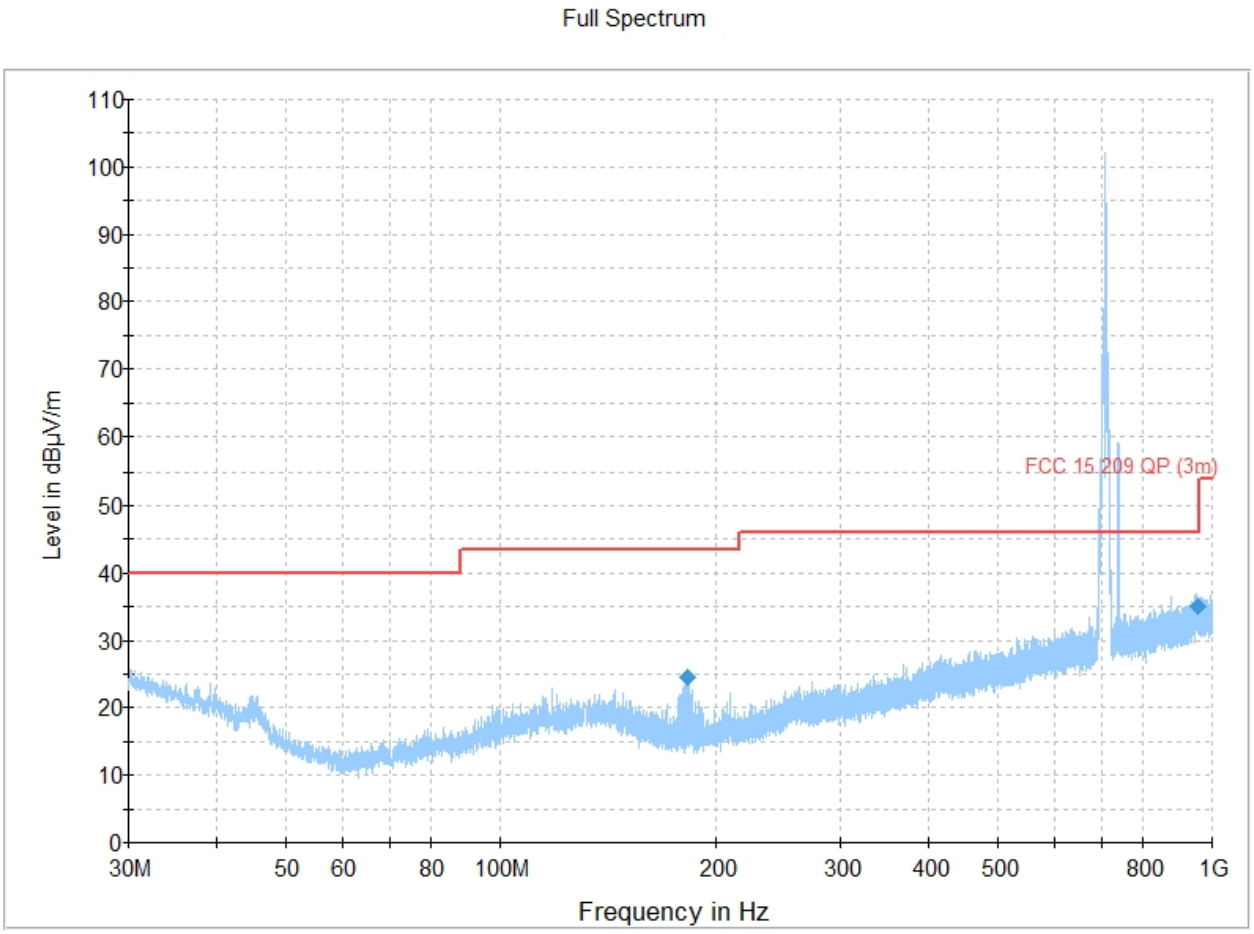

Figure 8.1-6: *Radiated emissions spectral plot (30 MHz - 1 GHz): BLE Mid Channel + LTE FDD Band 12*

Table 8.1-8*: Radiated emissions results*

Frequency (MHz)	QuasiPeak (dBµV/m)	Limit (dBµV/m)	Margin (dB)	Meas. Time (ms)	Bandwidth (kHz)	Height (cm)	Pol	Azimuth (deg)	Corr. (dB/m)
182.728667	24.53	43.50	18.97	5000.0	120.000	162.0	H	70.0	17.5
953.035333	34.98	46.00	11.02	5000.0	120.000	398.0	H	128.0	35.0

Notes: [1] Field strength (dBµV/m) = receiver/spectrum analyzer value (dBµV) + correction factor (dB)
[2] Correction factors = antenna factor ACF (dB) + cable loss (dB)
[3] Emissions that were continuously present for a minimum of 1 second and occurred more than once for every 15 seconds observation period were considered valid emissions. The maximum value of valid emissions has been recorded.
A tunable notch filter was used to reduce the level of the fundamental LTE transmitter to avoid overloading the measurement equipment.

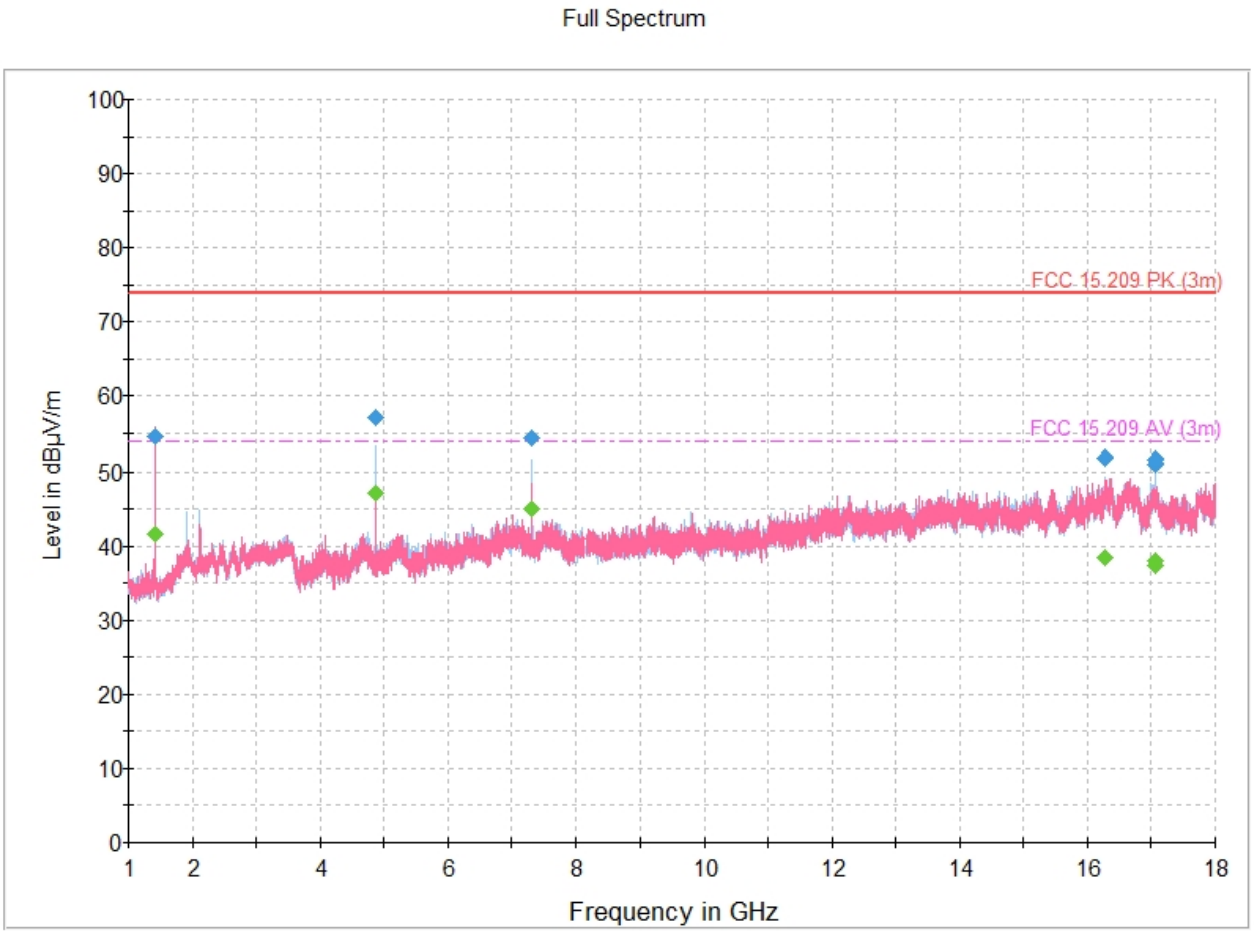

Figure 8.1-7: *Radiated emissions spectral plot (1 GHz - 18 GHz): BLE Mid Channel + LTE FDD Band 12*

Table 8.1-9*: Radiated emissions results*

Frequency (MHz)	MaxPeak (dBµV/m)	CAverage (dBµV/m)	Limit (dBµV/m)	Margin (dB)	Meas. Time (ms)	Bandwidth (kHz)	Height (cm)	Pol	Azimuth (deg)	Corr. (dB/m)
1412.000000	54.49	---	73.90	19.41	5000.0	1000.000	126.0	V	196.0	-10.5
1412.000000	---	41.59	53.90	12.31	5000.0	1000.000	126.0	V	196.0	-10.5
4884.200000	57.03	---	73.90	16.87	5000.0	1000.000	115.0	H	0.0	1.9
4884.200000	---	47.05	53.90	6.85	5000.0	1000.000	115.0	H	0.0	1.9
7325.500000	54.38	---	73.90	19.52	5000.0	1000.000	124.0	H	331.0	6.2
7325.500000	---	45.09	53.90	8.81	5000.0	1000.000	124.0	H	331.0	6.2
16283.450000	51.83	---	73.90	22.07	5000.0	1000.000	401.0	H	0.0	23.5
16283.450000	---	38.52	53.90	15.38	5000.0	1000.000	401.0	H	0.0	23.5
17064.850000	---	37.34	53.90	16.56	5000.0	1000.000	202.0	H	11.0	20.3
17064.850000	50.94	---	73.90	22.96	5000.0	1000.000	202.0	H	11.0	20.3
17072.850000	---	38.01	53.90	15.89	5000.0	1000.000	401.0	H	248.0	20.3
17072.850000	51.68	---	73.90	22.22	5000.0	1000.000	401.0	H	248.0	20.3

Notes: [1] Field strength (dBµV/m) = receiver/spectrum analyzer value (dBµV) + correction factor (dB)
[2] Correction factors = antenna factor ACF (dB) + cable loss (dB)
[3] Emissions that were continuously present for a minimum of 1 second and occurred more than once for every 15 seconds observation period were considered valid emissions. The maximum value of valid emissions has been recorded.
A 2.4 GHz notch filter was used to suppress the Bluetooth Low Energy fundamental signal to prevent overloading of the measurement equipment.

8.1.6 Setup photos

Figure 8.1-8: *Radiated emissions setup for 30MHz-1GHz, BLE + LTE coexistence test (rear view)*

Figure 8.1-9: *Radiated emissions setup for 30MHz-1GHz, BLE+LTE coexistence test (front view)*

Figure 8.1-10: *Radiated emissions setup for 1-18 GHz, BLE+LTE coexistence test (rear view)*

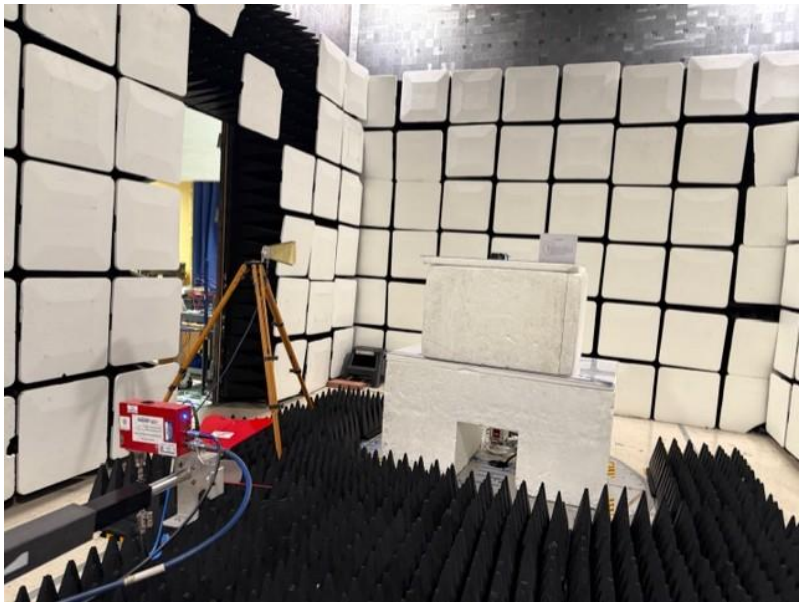

Figure 8.1-11: *Radiated emissions setup for 1-18 GHz, BLE+LTE coexistence test (front view)*

Section 9 EUT photos

9.1 External photos

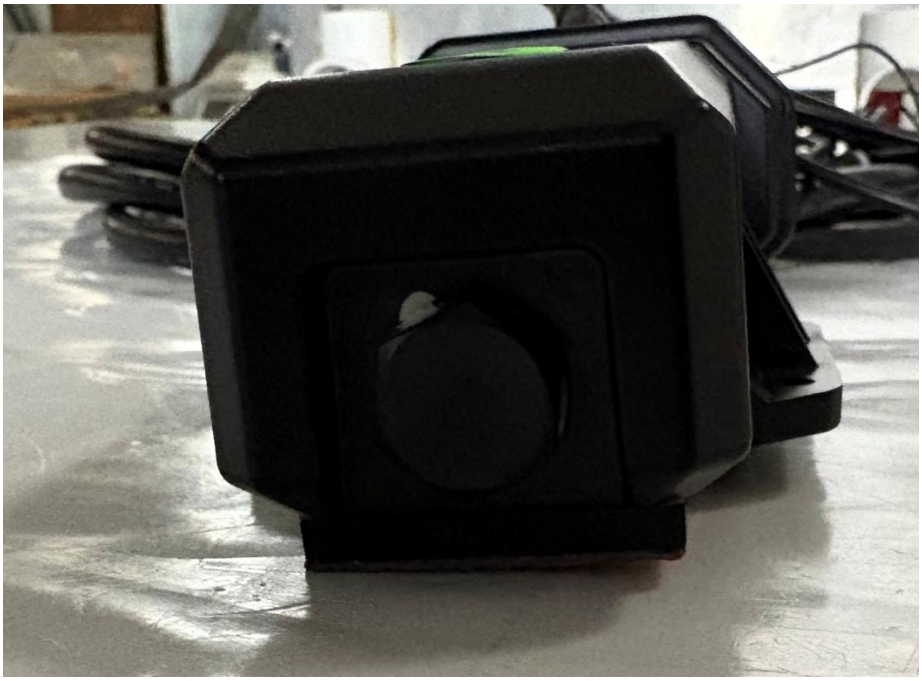

Figure 9.1-1: *Front view photo*

Figure 9.1-2: *Rear view photo*

Figure 9.1-3: *Side view photo*

Figure 9.1-4: *Side view photo*

Figure 9.1-5: *Top view photo*

Figure 9.1-6: *Bottom view photo*

End of test report