FCC Test Report (Co-location)

Report No.:	FCC_IC_RF_SL19090301-EMG-009A1_Co-location
FCC ID:	2AP3N-2019EMDMVL
IC:	23978-2019EMDMVL
BT FCC ID:	SQGBT850
BT IC:	3147A-BT850
WiFi FCC:	2AATL-8112MET
Host Model:	EMD-MVL-4G
Test Model: (LTE Module)	EMD-MVL
Received Date:	01/15/2020
Test Date:	01/16/2020 - 01/17/2020
Issued Date:	01/28/2020
Applicant:	Electronic Minds Group SpA
Address:	Av. del Parque 5339, Office 112, Huechuraba - Santiago, Chile CP: 8580751
Manufacturer:	Electronic Minds Group SpA
Address:	Av. del Parque 5339, Office 112, Huechuraba - Santiago, Chile CP: 8580751
Issued By:	Bureau Veritas Consumer Products Services, Inc.
Lab Address:	775 Montague Expressway, Milpitas, CA 95035
Test Location (1):	775 Montague Expressway, Milpitas, CA 95035
FCC Registration / Designation Number:	540430/4842D

TESTING CERT # 2742-01

This report is for your exclusive use. Any copying or replication of this report to or for any other person or entity, or use of our name or trademark, is permitted only with our prior written permission. This report sets forth our findings solely with respect to the test samples identified herein. The results set forth in this report are not indicative or representative of the quality or characteristics of the lot from which a test sample was taken or any similar or identical product unless specifically and expressly noted. Our report includes all of the tests requested by you and the results thereof based upon the information that you provided to us. You have 60 days from date of issuance of this report to notify us of any material error or omission caused by our negligence, provided, however, that such notice shall be in writing and shall specifically address the issue you wish to raise. A failure to raise such issue within the prescribed time shall constitute your unqualified acceptance of the completeness of this report, the tests conducted and the correctness of the report contents. Unless specific mention, the uncertainty of measurement has been explicitly taken into account to declare the compliance or non-compliance to the specification. The report must not be used by the client to claim product certification, approval, or endorsement by TAF or any government agencies.

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Release Control Record

Issue No.	Description	Date Issued
FCC_IC_RF_SL19090301-EMG-009A1_Co-location	Original Report	01/28/2020

1 Certificate of Conformity

Product: Remote Telemetry Unit

Brand: e-minds

Test Model: EMD-MVL

Sample Status: Engineering Sample

Applicant: Electronic Minds Group SpA

Test Date: 01/16/2020 - 01/17/2019

Standards: 47 CFR FCC Part 15, Subpart C (Section 15.247)
Part 22, Part 24, Part 27
RSS-247 Issue 2, Feb 2017
RSS-130 Issue 2 Feb 2019, RSS-132 Issue 3 Jan 2013
RSS 133 Issue 6 Jan 2013, RSS-139 Issue 3 Jul 2015
RSS-199 Issue 3 Dec 2016
ANSI C63.10: 2013

The above equipment has been tested by **Bureau Veritas Consumer Products Services, Inc., Milpitas Branch**, and found compliance with the requirement of the above standards. The test record, data evaluation & Equipment Under Test (EUT) configurations represented herein are true and accurate accounts of the measurements of the sample's EMC characteristics under the conditions specified in this report.

Prepared by : Gary Chou, **Date:** 01/27/2020

Gary Chou / Compliance Engineer

Approved by : _____, **Date:** 01/28/2020

Ge Chen / Engineer Reviewer

2 Summary of Test Results

47 CFR FCC Part 15, Subpart C (SECTION 15.247)/ ISED RSS-247				
FCC Clause	RSS Section(s)	Test Item	Result	Remarks
15.205 & 15.209 & 15.247(d)	RSS-Gen[8.9] RSS-247[5.5]	Radiated Emissions & Band Edge Measurement	PASS	Meet the requirement of limit. Minimum passing margin is 0.5dB at 346.486MHz.

1. Determining compliance based on the results of the compliance measurement, not taking into account measurement instrumentation uncertainty.
2. Only worst case co-location was evaluated for this report.

2.1 Measurement Uncertainty

Where relevant, the following measurement uncertainty levels have been estimated for tests performed on the EUT as specified in CISPR 16-4-2:

Measurement	Frequency	Expanded Uncertainty (k=2) (±)
Conducted Emissions at mains ports	150kHz ~ 30MHz	3.856 dB
Radiated Emissions up to 1 GHz	30MHz ~ 1GHz	4.638 dB
Radiated Emissions above 1 GHz	Above 1GHz	4.580dB

2.2 Modification Record

There were no modifications required for compliance.

3 General Information

3.1 General Description of EUT

<table>
<tr><td>Product</td><td>Remote Telemetry Unit</td></tr>
<tr><td>Brand</td><td>e-minds</td></tr>
<tr><td>Test Model (LTE Module)</td><td>EMD-MVL</td></tr>
<tr><td>BT Module</td><td>BT850-ST</td></tr>
<tr><td>WiFi Module</td><td>FN-8112MET</td></tr>
<tr><td>Status of EUT</td><td>Engineering Sample</td></tr>
<tr><td>Power Supply Rating</td><td>8V to 32V dc</td></tr>
<tr><td>Modulation Type</td><td>BT-BDR/EDR: GFSK, π/4-DQPSK, 8DPSK, BT LE: GFSK
WLAN : CCK, DQPSK, DBPSK, BPSK, QPSK, 16QAM, 64QAM
GSM : GMSK, 8PSK
UMTS : QPSK, 16QAM
LTE : QPSK/16QAM</td></tr>
<tr><td>Modulation Technology</td><td>BT-BDR/EDR: FHSS, BTLE: DSSS
WLAN: DSSS, OFDM
GSM: GSM, GPRS, EGPRS
UMTS:OFDM
LTE: OFDM</td></tr>
<tr><td>Transfer Rate</td><td>BDR/EDR/LE: up to 10 Kbytes/s
WLAN:Max, up to 150 Mbps
WCDMA: Max, 384 kbps
LTE: Max, 375Kbps(DL)/375Kbps(UL)</td></tr>
<tr><td>Operating Frequency</td><td>BT-BDR/EDR/LE: 2402MHz ~ 2480MHz
WLAN: 2412MHz ~ 2462MHz
Cellular:
<table>
<tr><td>BAND</td><td>TX</td><td>RX</td></tr>
<tr><td>GSM850</td><td>824 to 849 MHz</td><td>869 to 894 MHz</td></tr>
<tr><td>GSM1900</td><td>1850 to 1910 MHz</td><td>1930 to 1990 MHz</td></tr>
<tr><td>UMTS BAND II</td><td>1850 to 1910 MHz</td><td>1930 to 1990 MHz</td></tr>
<tr><td>UMTS BAND IV</td><td>1710 to 1755 MHz</td><td>2110 to 2155 MHz</td></tr>
<tr><td>UMTS BAND V</td><td>824 to 849 MHz</td><td>869 to 894 MHz</td></tr>
<tr><td>LTE BAND 2</td><td>1850 to 1910 MHz</td><td>1930 to 1990 MHz</td></tr>
<tr><td>LTE BAND 4</td><td>1710 to 1755 MHz</td><td>2110 to 2155 MHz</td></tr>
<tr><td>LTE BAND 5</td><td>824 to 849 MHz</td><td>869 to 894 MHz</td></tr>
<tr><td>LTE BAND 7</td><td>2500 to 2570 MHz</td><td>2620 to 2690 MHz</td></tr>
<tr><td>LTE BAND 12</td><td>699 to 716 MHz</td><td>729 to 746 MHz</td></tr>
<tr><td>LTE BAND 13</td><td>777 to 787 MHz</td><td>746 to 756 MHz</td></tr>
<tr><td>LTE BAND 25</td><td>1850 to 1915MHz</td><td>1930 to 1995 MHz</td></tr>
<tr><td>LTE BAND 26
(814 to 824 MHz)</td><td>814 to 824MHz</td><td>859 to 869 MHz</td></tr>
<tr><td>LTE BAND 26
(824 to 849 MHz)</td><td>824 to 849 MHz</td><td>869 to 894 MHz</td></tr>
<tr><td>LTE BAND 38</td><td>2570 to 2620MHz</td><td>2570 to 2620MHz</td></tr>
<tr><td>LTE BAND 41</td><td>2496 to 2690MHz</td><td>2496 to 2690MHz</td></tr>
</table></td></tr>
</table>

Number of Channel	BT EDR/BDR:79, BLE:39, WLAN:802.11B/G/N20: 11, N40: 7
Antenna Type	BT: External Dipole Antenna, Cellular/WLAN (GSM/ WCDMA/ LTE): External, Mushroom Antenna
Antenna Connector	BT/ Cellular/ WIFI(GSM/ WCDMA/ LTE) :SMA

3.2 Description of Test Modes

40 channels are provided for BT LE (ANTENNA GAIN:2.3 dBi) mode:

Channel	Freq. (MHz)	Channel	Freq. (MHz)	Channel	Freq. (MHz)	Channel	Freq. (MHz)
0	2402	10	2422	20	2442	30	2462
1	2404	11	2424	21	2444	31	2464
2	2406	12	2426	22	2446	32	2466
3	2408	13	2428	23	2448	33	2468
4	2410	14	2430	24	2450	34	2470
5	2412	15	2432	25	2452	35	2472
6	2414	16	2434	26	2454	36	2474
7	2416	17	2436	27	2456	37	2476
8	2418	18	2438	28	2458	38	2478
9	2420	19	2440	29	2460	39	2480

79 channels are provided for BT-BDR/EDR(ANTENNA GAIN:2.3 dBi) mode:

Channel	Freq. (MHz)	Channel	Freq. (MHz)	Channel	Freq. (MHz)	Channel	Freq. (MHz)
0	2402	20	2422	40	2442	60	2462
1	2403	21	2423	41	2443	61	2463
2	2404	22	2424	42	2444	62	2464
3	2405	23	2425	43	2445	63	2465
4	2406	24	2426	44	2446	64	2466
5	2407	25	2427	45	2447	65	2467
6	2408	26	2428	46	2448	66	2468
7	2409	27	2429	47	2449	67	2469
8	2410	28	2430	48	2450	68	2470
9	2411	29	2431	49	2451	69	2471
10	2412	30	2432	50	2452	70	2472
11	2413	31	2433	51	2453	71	2473
12	2414	32	2434	52	2454	72	2474
13	2415	33	2435	53	2455	73	2475
14	2416	34	2436	54	2456	74	2476
15	2417	35	2437	55	2457	75	2477
16	2418	36	2438	56	2458	76	2478
17	2419	37	2439	57	2459	77	2479
18	2420	38	2440	58	2460	78	2480
19	2421	39	2441	59	2461		

WLAN (ANTENNA GAIN:3.9 dBi)

2.4GHz 802.11 B/G/N HT20(11Channel)		2.4GHz 802.11 N HT40(7 Channel)	
Channel	Freq. (MHz)	Channel	Freq. (MHz)
0	2412	0	2422
1	2417	1	2427
2	2422	2	2432
3	2427	3	2437
4	2432	4	2442
5	2437	5	2447
6	2442	6	2452
7	2447		
8	2452		
9	2457		
10	2462		

There are 10 LTE bands on this EUT:

LTE Band	Uplink Frequency(MHz)	Downlink Frequency(MHz)	Antenna Gain (dBi)
2	1850.7 ~ 1909.3	1930.7 ~ 1989.3	5.47
4	1710.7 ~ 1754.3	2112.5 ~ 2152.5	5.47
5	824.7 ~ 848.3	869.7 ~ 893.3	6.1
7	2502.5 ~ 2567.5	2622.5 ~ 2687.5	5.47
12	699.7 ~ 715.3	729.7 ~ 745.3	6.1
13	779.5 ~ 784.5	748.5 ~ 753.5	6.1
25	1850.7 ~ 1914.3	1930.7 ~ 1994.3	5.47
26	814.7 ~ 848.3	859.7 ~ 893.3	6.1
38	2572.5 ~ 2617.5	2572.5 ~ 2617.5	5.47
41	2498.5 ~ 2687.5	2498.5 ~ 2687.5	5.47

GSM:

Band	Uplink Frequency(MHz)	Downlink Frequency(MHz)	Antenna Gain (dBi)
GSM850	824-849	869-894	6.1
GSM1900	1850-1910	1930-1990	5.47

UMTS:

Band	Uplink Frequency(MHz)	Downlink Frequency(MHz)	Antenna Gain (dBi)
UMTS Band II	1850-1910	1930-1990	5.47
UMTS Band IV	1710-1755	2110-2155	5.47
UMTS Band V	824-849	869-894	6.1

3.2.1 Test Mode Applicability and Tested Channel Detail

EUT CONFIGURE MODE	APPLICABLE TO				DESCRIPTION
	RE≥1G	RE<1G	PLC	APCM	
-	√	√	-	-	-

Where **RE≥1G:** Radiated Emission above 1GHz **RE<1G:** Radiated Emission below 1GHz
PLC: Power Line Conducted Emission **APCM:** Antenna Port Conducted Measurement

NOTE:
1. The EUT had been pre-tested on the positions of each 3 axis. The worst case was found when positioned on **X-plane**.
2. "-" means no effect.

Radiated Emission Test (Above 1GHz):

☒ Pre-Scan has been conducted to determine the worst-case mode from all possible combinations between available modulations, data rates and antenna ports (if EUT with antenna diversity architecture).
☒ Following channel(s) was (were) selected for the final test as listed below.

EUT CONFIGURE MODE	AVAILABLE CHANNEL	TESTED CHANNEL	MODULATION TECHNOLOGY	MODULATION TYPE	PACKET TYPE
BT BDR/EDR/LE	0 to 78/ 0-39	LE,CH39	DSSS	LE	GFSK
WLAN	B/G/N HT20 CH1-CH11 N HT40 CH3-CH9	B Mode CH11	DSSS	CCK	11Mbps
LTE	B2/4/5/7/12/13/25/26/38/41	Band 41	OFDM	16QAM	N/A

Radiated Emission Test (Below 1GHz):

☒ Pre-Scan has been conducted to determine the worst-case mode from all possible combinations between available modulations, data rates and antenna ports (if EUT with antenna diversity architecture).
☒ Following channel(s) was (were) selected for the final test as listed below.

EUT CONFIGURE MODE	AVAILABLE CHANNEL	TESTED CHANNEL	MODULATION TECHNOLOGY	MODULATION TYPE	PACKET TYPE
BT BDR/EDR/LE	0 to 78/ 0-39	LE,CH39	DSSS	LE	GFSK
WIFI	B/G/N HT20 CH1-CH11 N HT40 CH3-CH9	B Mode CH11	DSSS	CCK	11Mbps
LTE	B2/4/5/7/12/13/25/26/38/41	Band 41	OFDM	16QAM	N/A

Test Condition:

APPLICABLE TO	ENVIRONMENTAL CONDITIONS	INPUT POWER	TESTED BY
RE≥1G	25deg. C, 65%RH	24 VDC	Gary Chou
RE<1G	25deg. C, 65%RH	24 VDC	Gary Chou

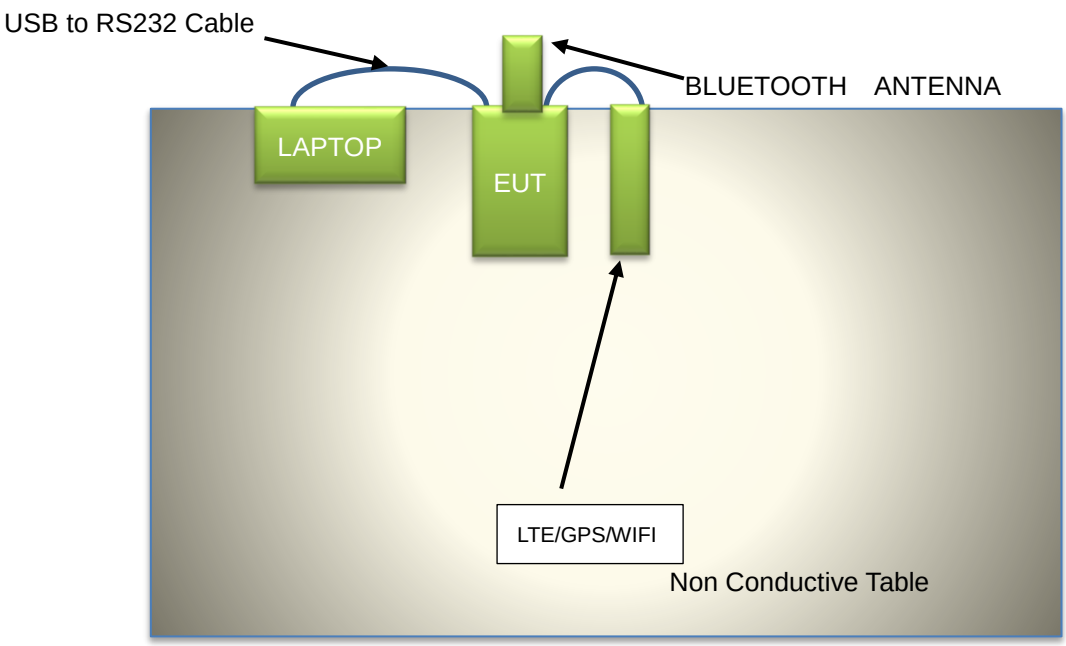
3.3 Description of Support Units

The EUT has been tested as an independent unit together with other necessary accessories or support units. The following support units or accessories were used to form a representative test configuration during the tests.

ID	Product	Brand	Model No.	Serial No.	FCC ID	Remarks
A.	Laptop	Dell	Latitude 3550	2MHWY32	N/A	Provided by Lab
B.	Wideband Radio Communicator	Rohde & Schwarz	CMW500	10SL0178	N/A	Provided by Lab

Note: The core(s) is (are) originally attached to the cable(s).

3.3.1 Configuration of System under Test



3.4 General Description of Applied Standards

The EUT is a RF Product. According to the specifications of the manufacturer, it must comply with the requirements of the following standards:

FCC Part 15, Subpart C (15.247)
FCC Part 22, Part 24
KDB 558074 D01 15.247 Meas Guidance v05r02
ISED RSS-247
ANSI C63.10-2013

All test items have been performed and recorded as per the above standards.

4 Test Types and Results

4.1 Radiated Emission and Bandedge Measurement

4.1.1 Limits of Radiated Emission and Bandedge Measurement

Radiated emissions which fall in the restricted bands must comply with the radiated emission limits specified as below table. Other emissions shall be at least 20dB below the highest level of the desired power:

Frequencies (MHz)	Field Strength (microvolts/meter)	Measurement Distance (meters)
0.009 ~ 0.490	2400/F(kHz)	300
0.490 ~ 1.705	24000/F(kHz)	30
1.705 ~ 30.0	30	30
30 ~ 88	100	3
88 ~ 216	150	3
216 ~ 960	200	3
Above 960	500	3

NOTE:

1. The lower limit shall apply at the transition frequencies.
2. Emission level (dBuV/m) = 20 log Emission level (uV/m).
3. For frequencies above 1000MHz, the field strength limits are based on average detector, however, the peak field strength of any emission shall not exceed the maximum permitted average limits, specified above by more than 20dB under any condition of modulation.

4.1.2 Test Instruments

DESCRIPTION & MANUFACTURER	MODEL NO.	SERIAL NO.	DATE OF CALIBRATION	DUE DATE OF CALIBRATION
PXA Signal Analyzer KEYSIGHT	N9030B	MY57140584	03/05/2019	03/05/2020
Horn Antenna ETS-Lindgren	3117	218554	11/06/2019	11/06/2020
Biconilog Antenna Sunol	JB1	A030702	3/9/2018	3/9/2020
Preamplifier RF BAY INC	LPA-6-30	11170601	4/27/2019	4/27/2020

NOTE:

1. The calibration interval of the above test instruments is 12 months and the calibrations are traceable to NML/ROC and NIST/USA.
2. The horn antenna and HP preamplifier (model: 3117) are used only for the measurement of emission frequency above 1GHz if tested.

TEST PROCEDURES

For Radiated emission below 30MHz

a. The EUT was placed on the top of a rotating table 0.8 meters above the ground at a 3 meter chamber room. The table was rotated 360 degrees to determine the position of the highest radiation.

b. The EUT was set 3 meters away from the interference-receiving antenna, which was mounted on the top of a variable-height antenna tower.

c. Both Parallel, perpendicular, and ground-parallel orientations of the antenna are set to make the measurement.

d. For each suspected emission, the EUT was arranged to its worst case and the rotatable table was turned from 0 degrees to 360 degrees to find the maximum reading.

e. The test-receiver system was set to Quasi-Peak Detect Function and Specified Bandwidth with Maximum Hold Mode.

NOTE:

1. The resolution bandwidth and video bandwidth of test receiver/spectrum analyzer is 9kHz at frequency below 30MHz.

For Radiated emission above 30MHz

a. The EUT was placed on the top of a rotating table 0.8 meters (for 30MHz ~ 1GHz) / 1.5 meters (for above 1GHz) above the ground at 3 meter chamber room for test. The table was rotated 360 degrees to determine the position of the highest radiation.

b. The EUT was set 3 meters away from the interference-receiving antenna, which was mounted on the top of a variable-height antenna tower.

c. The height of antenna is varied from one meter to four meters above the ground to determine the maximum value of the field strength. Both horizontal and vertical polarizations of the antenna are set to make the measurement.

d. For each suspected emission, the EUT was arranged to its worst case and then the antenna was tuned to heights from 1 meter to 4 meters and the rotatable table was turned from 0 degrees to 360 degrees to find the maximum reading.

e. The test-receiver system was set to quasi-peak detect function and specified bandwidth with maximum hold mode when the test frequency is below 1 GHz.

f. The test-receiver system was set to peak and average detect function and specified bandwidth with maximum hold mode when the test frequency is above 1 GHz. If the peak reading value also meets average limit, measurement with the average detector is unnecessary.

Note:

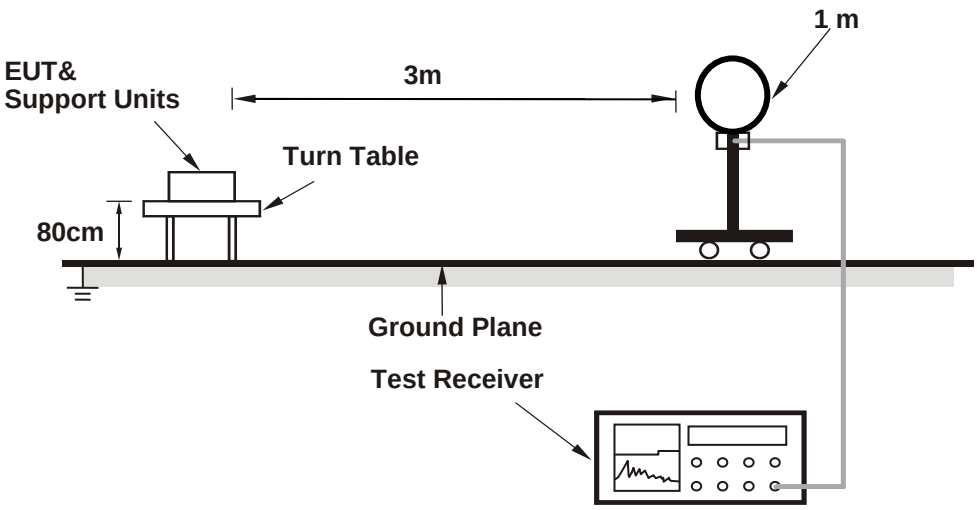
1. The resolution bandwidth and video bandwidth of test receiver/spectrum analyzer is 120kHz for Quasi-peak detection (QP) at frequency below 1GHz.
2. The resolution bandwidth of test receiver/spectrum analyzer is 1 MHz and the video bandwidth is 3 MHz for Peak detection (PK) at frequency above 1GHz.
3. The resolution bandwidth of test receiver/spectrum analyzer is 1MHz and the video bandwidth is ≥ 1/T (Duty cycle < 98%) or 10Hz (Duty cycle ≥ 98%) for Average detection (AV) at frequency above 1GHz.
4. All modes of operation were investigated and the worst-case emissions are reported.

4.1.3 Deviation from Test Standard

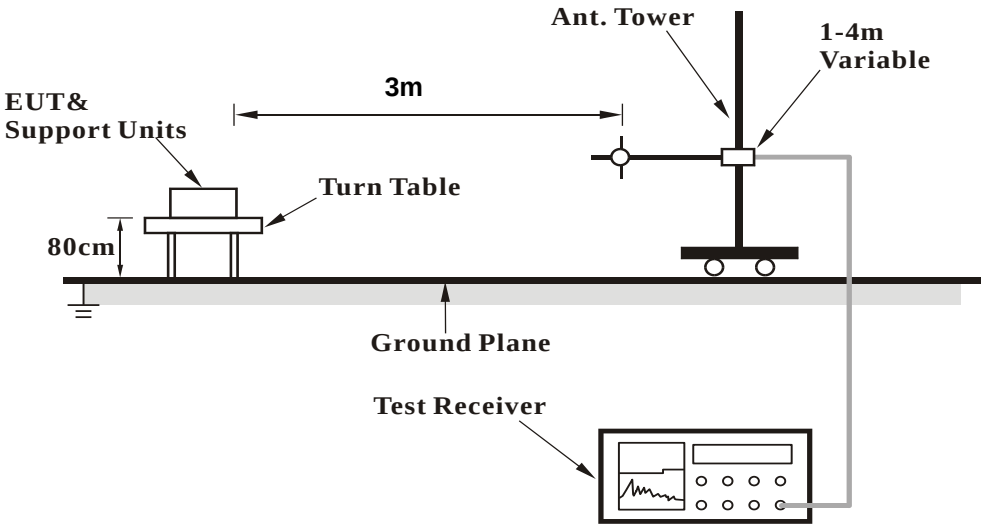
No deviation.

4.1.4 Test Setup

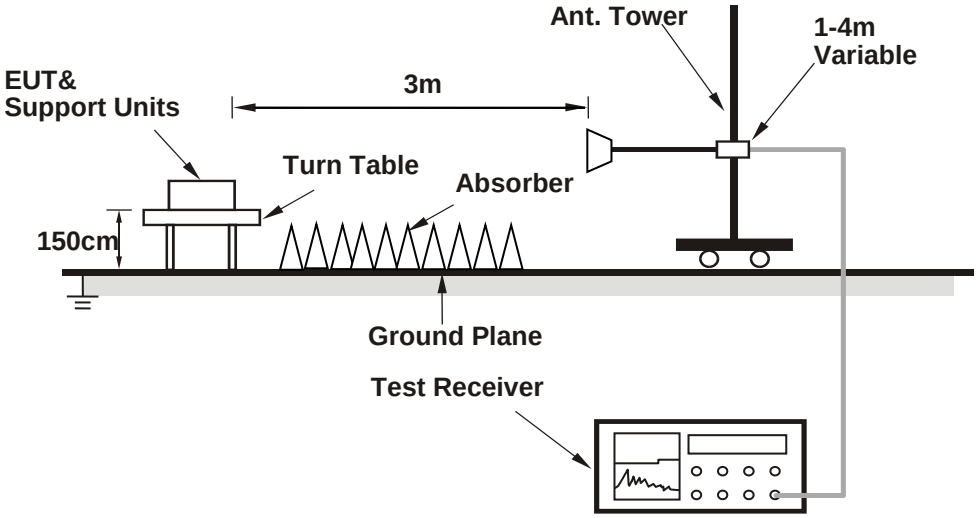
For Radiated emission below 30MHz



For Radiated emission 30MHz to 1GHz



For Radiated emission above 1GHz



For the actual test configuration, please refer to the attached file (Test Setup Photo).

4.1.5 EUT Operating Conditions

a. Connected the EUT with the Notebook Computer which is placed on remote site.
b. Controlling software has been activated to set the EUT on specific status.
c. For LTE connection, a test SIM card is inserted into the SIM card slot in the EUT. A connection is then established to a CMW500 Base Station which is attached to a transmitting antenna.

4.1.6 Test Results

Above 1GHz Data:

Frequency Range	1-18 GHz		
Input Power	24Vdc	Environmental Conditions	25 °C, 40% RH
Tested by	Gary Chou	Test Date	1/17/2020
Test Mode	WLAN, GSM and Bluetooth transmit simultaneously		

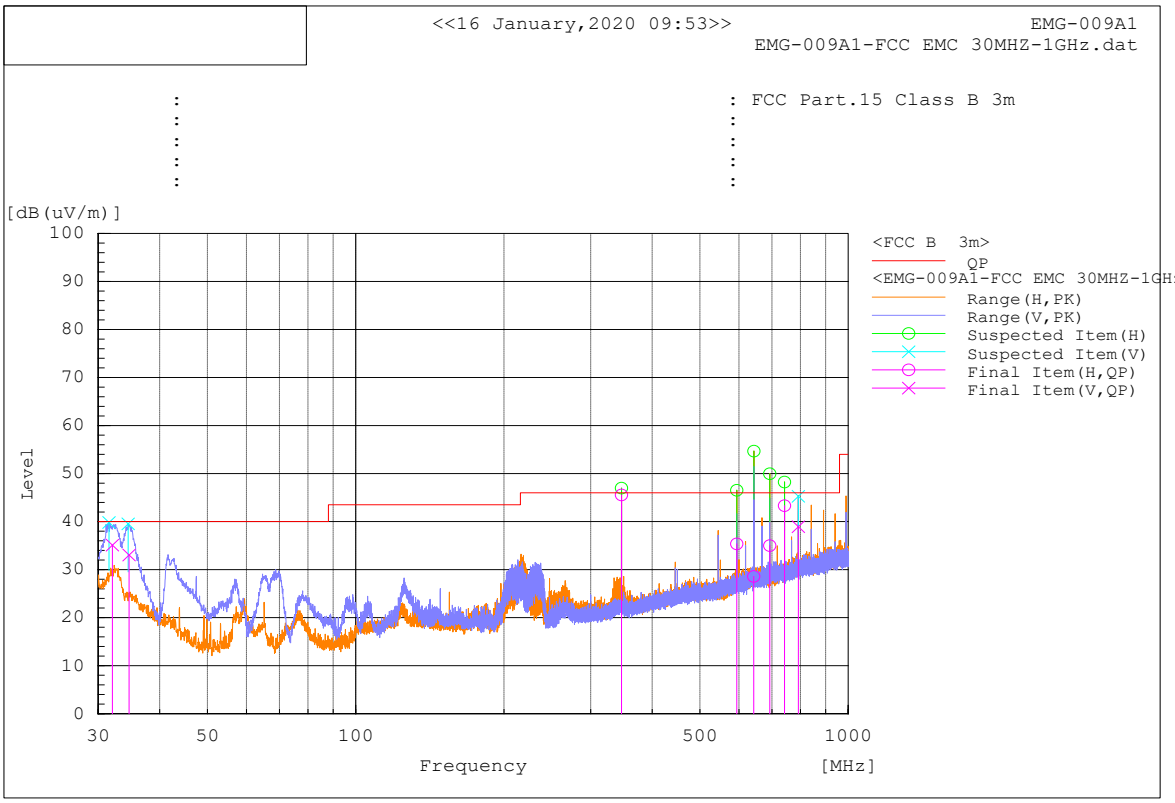
Antenna Polarity & Test Distance: Vertical and Horizontal at 3m													
Frequency (MHz)	Polarization (H/V)	Reading AV [dB(uV)]	Reading PK [dB(uV)]	Factor [dB(1/m)]	Level AV [dB(uV/m)]	Level PK dB(uV/m)	Limit\AV dB(uV/m)	Limit\PK [dB(uV/m)	Margin AV [dB]	Margin PK [dB]	Height (cm)	Angle (Deg)	Pass/ Fail
1039.579	H	46.7	58.1	-15.2	31.5	42.9	54	74	22.5	31.1	177	213.8	PASS
1255.404	H	45.4	58.3	-13.7	31.7	44.6	54	74	22.3	29.4	313	326.3	PASS
1375.888	H	45.3	58.6	-13.9	31.4	44.7	54	74	22.6	29.3	177	349.6	PASS
2014.714	V	43.1	55.3	-10	33.1	45.3	54	74	20.9	28.7	291	319.8	PASS
2641.631	V	45.2	57	-9	36.2	48	54	74	17.8	26	177	0	PASS

REMARKS:

1. Emission level (dBuV/m) = Reading QP (dBuV) + Factor (dB)
2. Factor (dB) = Antenna Factor (dB) – Cable Loss (dB).
3. The emission levels of other frequencies were less than 20dB margin against the limit.
4. Margin value = Limit Value – Emission level (dBuV/m)

Below 1GHz Data:

Frequency Range	30MHz -1 GHz		
Input Power	120 Vac, 60 Hz	Environmental Conditions	25 °C, 40% RH
Tested by	Gary Chou	Test Date	01/16/2020
Test Mode	WLAN, GSM and Bluetooth transmit simultaneously		



REMARKS:

1. Emission level (dBuV/m) = Reading QP (dBuV) + Factor (dB)
2. Factor (dB) = Antenna Factor (dB) – Cable Loss (dB).
3. The emission levels of other frequencies were less than 20dB margin against the limit.
4. Margin value = Limit Value – Emission level (dBuV/m)

Antenna Polarity & Test Distance: Vertical and Horizontal at 3m									
Frequency (MHz)	Polarization (H/V)	Reading QP [dB(uV)]	Factor [dB(1/m)]	Level QP [dB(uV/m)]	Limit\QP dB(uV/m)	Margin QP [dB]	Height (cm)	Angle (Deg)	Pass/ Fail
32.064	V	11.1	24	35.1	40	4.9	99.8	185.5	PASS
34.659	V	10.9	22.1	33	40	7	99.8	352.5	PASS
346.486	H	24.4	21.1	45.5	46	0.5	107.3	56.7	PASS
593.963	H	8.4	27	35.4	46	10.6	236.2	222.8	PASS
642.898	H	0.8	27.8	28.6	46	17.4	228.5	0	PASS
692.963	H	7.2	27.8	35	46	11	391.7	249.8	PASS

5 Pictures of Test Arrangements

Please refer to the attached file (Test Setup Photo).

Appendix – Information on the Testing Laboratories

Bureau Veritas is a global leader in testing, inspection and certification (TIC) services. We help businesses improve safety, sustainability and productivity; and our clients include the majority of leading brands in retail, manufacturing and other industries. With a presence in every major country around the world, our quality assurance and compliance solutions are vital in helping our customers enhance product quality and concept-to-consumer journeys. We also assist with increasing speed to market, profitability and brand equity throughout the supply chain. Bureau Veritas is a leading wireless/IoT testing, inspection, audit and certification provider, with a global network of test laboratories to support the IoT industry in areas of connectivity, security, interoperability as well as quality, health & safety, and environmental/chemical requirements.

If you have any comments, please feel free to contact us at the following:

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Littleton EMC/RF/Safety/Environmental Lab
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Irvine OTA/PTCRB/Bluetooth/V2X Lab
15 Musick, Irvine, CA 92618
Tel: +1 949 716 6512

Email: sales.eaw@us.bureauveritas.com
Web Site: www.cpsusa-bureauveritas.com

The address and road map of all our labs can be found in our web site also.

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