MOTOROLA SOLUTIONS

ACCREDITED

**CERTIFICATE 2518.08**

**MOTOROLA PENANG ADV. COMM. LABORATORY**
**Motorola Solutions Malaysia Sdn Bhd**
**Plot 2A, Medan Bayan Lepas,**
**Mukim 12 SWD, 11900 Bayan Lepas**
**Penang, MALAYSIA**

**FCC / ISED TEST REPORT**
**Report Revision : Rev.A**

| | | |
|---|---|---|
| **Date/s Tested** | : | 01-November-2022 to 02-November-2022 |
| **Manufacturer/Location** | : | MOTOROLA SOLUTIONS MALAYSIA SDN BHD |
| **Manufacturer Address** | : | PLOT 2A, MEDAN BAYAN LEPAS MUKIM 12, S.W.D 11900 BAYAN LEPAS PENANG, MALAYSIA |
| **Requestor** | : | TEOW, SOO PEI |
| **Product Type** | : | Portable |
| **Model Number** | : | T478 |
| **Frequency Band** | : | 462-468MHz |
| **Applicant Name** | : | Motorola Solutions Inc |
| **Applicant Address** | : | 8000 West Sunrise Boulevard, Fort Lauderdale, Florida 33322. |
| **ISED Registrations** | : | MY0001 |
| **FCC Registrations** | : | 461337 |
| **Remark** | : | NA |

**The equipment was tested accordance to the requirement listed below:**

| | |
|---|---|
| **(LMR)**<br>**FCC 47 CFR Part 15B /**<br>**RSS Gen / ICES-003** | **PASS** |



Prepared By:

**KHAIRUL AIMAN**
**Technician**

Approve Signatory:

**ZULHAIRUDIN BIN ZULKIFLI**
**Responsible Engineer**

# Table of Contents



**Report Revision History**

| Revision History | Description | Date | Originator |
|---|---|---|---|
| Rev. A | Initial Report | 08-November-2022 | Khairul Aiman |

## 1.0. **General Information**

### EUT Description:

| | |
|---|---|
| **Technologies** | LMR |
| **Modulation Type** | FM |

The EUT was tested with following device/accessory:

| Item | Brand | Model or P/N |
|---|---|---|
| POWER SUPPLY ADAPTOR,SWITCH MODE, 3W, L6, 100 V - 240 V, MICRO USB, US/NOM/JP | MOTOROLA | PS000228A01 |
| 800MAH 3XAA NIMH RECHARGEABLE BATTERY PACK | MOTOROLA | PMNN4477A |
| T82_T47x_T8xx SERIES DUAL SLOT CHARGING TRAY | MOTOROLA | PMLN8219A |

### General Description of Applied Standards

According to the specifications of the manufacturer, the EUT is to comply with the requirements of the following standards:

**ANSI C63.4.2014**

## 2.0. **Summary of Test Results**

| FCC General Rules Part (47CFR) | IC General Rules Part | Test Item | Result |
|---|---|---|---|
| 15.109, 15.111 | RSS-Gen | Conducted Spurious Output Power | NA |
| 15.109, 15.111 | RSS-Gen | Radiated Spurious Output Power | Pass |
| 15.107 | ICES-003 6.1, RSS-Gen | AC Power Conducted Spurious Emissions | Pass |

NA → Not Applicable

## 3.0. Measurement Uncertainty

| Measurement | Frequency | Expended Uncertainty (k=1.96) (±) |
|---|---|---|
| AC Power Line Conducted Spurious Emission | 150KHz ~ 30MHz | 3.48 |
| Radiated Emissions up to 1 GHz | 30MHz ~ 200MHz | 5.88 |
| | 200MHz ~ 1000MHz | 5.88 |
| Radiated Emissions above 1 GHz | 1GHz ~ 18GHz | 5.84 |
| | 18GHz ~ 25GHz | 5.84 |
| Conducted Spurious Emissions | 9kHz ~ 12.75GHz | 2.82 |

## 4.0. **Equipment List**

### Conducted Spur Emission Ate # 1

NA

### Radiated Emission Station

| DESCRIPTION | MODEL | SERIAL NUMBER | CALIBRATION DATE | CALIBRATION DUE DATE |
|---|---|---|---|---|
| DRG HORN FREQ. | SAS-571 | 720 | 06-Apr-21 | 06-Apr-23 |
| DRG HORN FREQ. | SAS-571 | 1027 | 03-Jun-22 | 03-Jun-23 |
| DC Power Supply | N7976A | MY53410110 | 30-Jun-22 | 30-Jun-23 |
| SIGNAL GENERATOR | SMB 100A | 182511 | 4-Jun-21 | 4-Jun-24 |
| EMI TEST RECEIVER | ESW44 | 101751 | 24-Mar-22 | 24-Mar-23 |
| 5m SEMI-ANECHOIC CHAMBER | S800-HX | J2308 | No Cal. Req'd | No Cal. Req'd |
| BILOG ANTENNA | CBL6112B | 2863 | 22-Jun-22 | 22-Jun-23 |
| BILOG ANTENNA | CBL6112D | 30991 | 05-Oct-21 | 05-Jan-23 |
| DATA LOGGER THERMOHYGROMETER | SDL500 | A.016785 | 23-Jun-22 | 23-Jun-23 |
| SYSTEM CONTROLLER | SC104V | 050806-1 | No Cal. Req'd | No Cal. Req'd |
| TURNTABLE FLUSH MOUNT 2M | FM2011 | NA | No Cal. Req'd | No Cal. Req'd |
| ANTENNA POSITIONING TOWER | TLT2 | NA | No Cal. Req'd | No Cal. Req'd |
| BROAD-BAND HORN ANTENNA | BBHA9170 | BBHA9170255 | 18-Feb-22 | 18-Feb-23 |
| PREAMPLIFIER 18-40GHz | BBV9721 | 9721-007 | No Cal. Req'd | No Cal. Req'd |
| PREAMPLIFIER | PAM-0118P | 361 | 11-Sep-20 | 11-Sep-23 |
| LOOP ANTENNA | 6502 | 00203479 | 10-Feb-22 | 10-Feb-23 |
| TEST SOFTWARE | EMC_FCC_IC_BLUETOOTH_RE_TEST | | | |
| VERSION | EMC_FCC_RE_v1.6.4 | | | |

### AC Power Line Conducted Spurious Emission

| Description | Model # | Serial Number | Calibration Date | Calibration Due Date |
|---|---|---|---|---|
| ETHERNET TEMPERATURE & HUMIDITY SENSOR TRANSMITTER | iTHX-SD | M21280391 | 20-Nov-21 | 20-Nov-22 |
| V-NETWORK 2-LINE | ENV216 | 101268 | 15-Aug-22 | 15-Aug-23 |
| EMI TEST RECEIVER | ESCI | 10025 | 5-Feb-21 | 5-Nov-22 |
| POWER SUPPLY (0-300V, 2000VA) | 61604 | 616040003502 | 07-Dec-21 | 07-Dec-22 |
| TEST SOFTWARE | EMC32 | | | |
| VERSION | Ver. 10.60.10 | | | |

# 5.0. Test Condition

## 5.1 Receiver Test Conditions

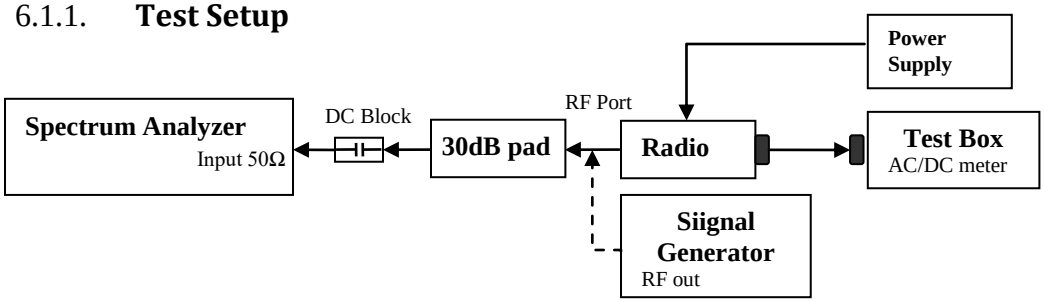
| Test Item, (Channel Spacing) | Temperature (°C) | Voltage Supply (V) | Power (W) | Modulation | Test Frequency (MHz) |
|---|---|---|---|---|---|
| Conducted Spurious Output Power (NA) | NA | NA | NA | NA | NA |
| Radiated Spurious Output Power (NA) | 25.3 | 120 | 0.54 | FM | 162.0000 |
| AC Power Line Conducted Spurious Emissions (NA) | 21.1 | 120 | 0.54 | FM | 162.0000 |

**NA → Not Applicable**

# 6.0. Receiver Test Parameters

## 6.1. Conducted Spurious Output Power

### 6.1.1. Test Setup




1) Identify the radio is high side (LO = Fc + IF) or low side injection (LO = Fc – IF).
2) To get the reference point, set sigen to 1st LO frequency with amplitude level 0dBm.
3) Set the LO frequency into PSA. Adjust the PSA RBW = 100 kHz and record the Reference level offset.
4) Replace the Sigen with the UUT.
5) At PSA, set the frequency step size to LO frequency to test from 2LO to 10LO.
6) Record or screen captures the data in dBm value.

### 6.1.2. Test Result

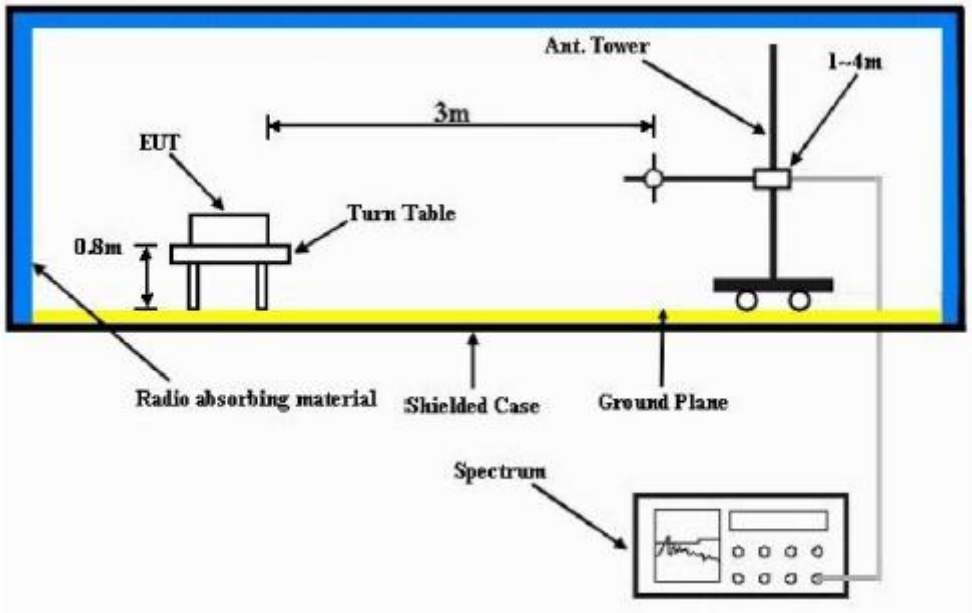
NA

### 6.1.3. Test Limit

NA

## 6.2. **Radiated Spurious Output Power**

### 6.2.1. **Test Setup**




1) The spectrum setting for scanning Radiated Emission below 1 GHz is RBW = 100 kHz, VBW = 300 kHz and above 1 GHz is RBW = 1MHz, VBW = 3MHz. Detector mode is positive peak.
2) In the semi-anechoic chamber, setup as illustrated above the EUT placed on the 0.8m height of Turn Table, rotated the table around 360 degrees to search the maximum radiation power and receiver antenna shall be rotated vertical and horizontal polarization and moved height from 1m to 4m to find the maximum polar radiated power. The “Read Value” is the spectrum reading the maximum power value.
3) The substitution antenna is substituted for EUT at the same position and signals generator (S.G) export the CW signal to the substitution antenna via a TX cable. The receiver antenna shall be rotated vertical and horizontal polarization and moved height from 1m to 4m to find the maximum radiation power. Record the power level of maximum radiation power from spectrum. So, the measured substitution value = Ref level of S.G + TX cables loss – Substituted Antenna Gain.
4) Final Radiated Spurious Emission = “Read Value” + Measured substitution value.

## 6.2.2. Test Result

**Test: SAC Receiver Radiated Emission**
**Model#: T478 S/N: 16521YS0305 EMC SR ID#: 35376-EMC-00009**
**Battery: PMNN4477A Accessory: PS000228A01-CF1, PMLN8219A-C1, Radio (16521YS0332)**
**Test Frequency: 162.0000 MHz Test Standard: ANSI C63.4-2014 Limit Class: B**

### Radiated Emission tabular data

| Vertical Radiated Emission Result | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|
| Spur Freq (MHz) | Spur level QPK (dBµV/m) | Spur level PK (dBµV/m) | Spur level AV (dBµV/m) | Limit QPK (dBµV/m) | Limit PK (dBµV/m) | Limit AV (dBµV/m) | Margin QPK (dBµV/m) | Margin PK (dBµV/m) | Margin AV (dBµV/m) | Carrier PK Power (dBµV/m) |
| 30.8427 | 23.3655 | - | - | 40.0000 | - | - | 16.6345 | - | - | - |
| 35.7050 | 30.4250 | - | - | 40.0000 | - | - | 9.5750 | - | - | - |
| 36.9194 | 23.5225 | - | - | 40.0000 | - | - | 16.4775 | - | - | - |
| 48.8952 | 26.5149 | - | - | 40.0000 | - | - | 13.4851 | - | - | - |
| 50.8060 | 27.1930 | - | - | 40.0000 | - | - | 12.8070 | - | - | - |
| 66.7701 | 17.3539 * | - | - | 40.0000 | - | - | 22.6461 | - | - | - |
| 138.4210 | 20.8958 * | - | - | 43.5000 | - | - | 22.6042 | - | - | - |
| | | | | | | | | | | |
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| | | | | | | | | | | |
| **Horizontal Radiated Emission Result** | | | | | | | | | | |
| 30.2593 | 25.4677 | - | - | 40.0000 | - | - | 14.5323 | - | - | - |
| 35.7110 | 30.8007 | - | - | 40.0000 | - | - | 9.1993 | - | - | - |
| 37.0053 | 23.4242 | - | - | 40.0000 | - | - | 16.5758 | - | - | - |
| 48.5935 | 16.6470 * | - | - | 40.0000 | - | - | 23.3530 | - | - | - |
| 50.4583 | 16.8266 * | - | - | 40.0000 | - | - | 23.1734 | - | - | - |
| 67.0688 | 9.7727 * | - | - | 40.0000 | - | - | 30.2273 | - | - | - |
| 138.1822 | 14.2655 * | - | - | 43.5000 | - | - | 29.2345 | - | - | - |
| | | | | | | | | | | |
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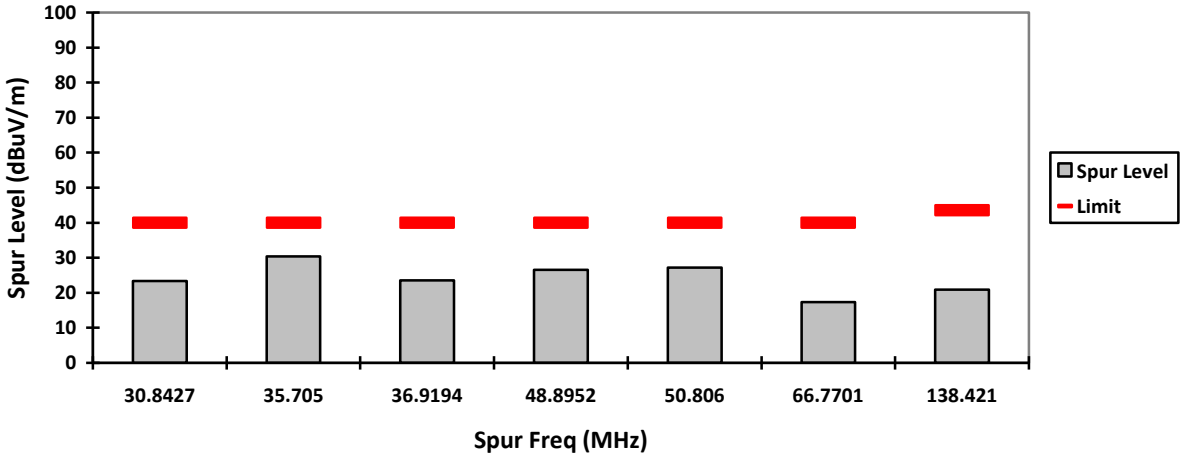
| | | | | | | | | | | |

| Remarks: Pass Result | Marginal Result | Fail Result |
|---|---|---|

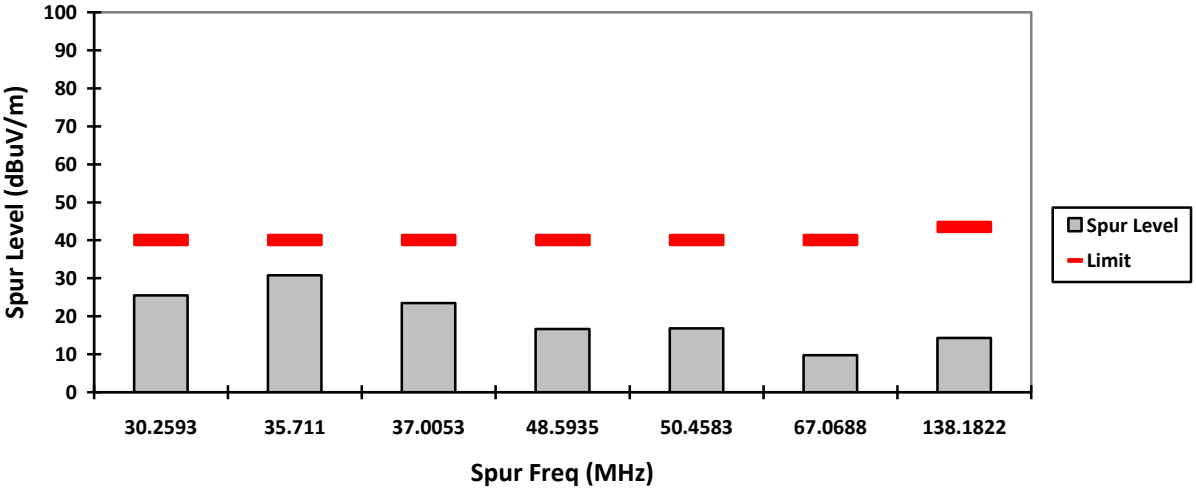
**Temperature (degC): 25.3** **Humidity (%): 67.8**
**Test Performed by: Qawiman&Nazrin** **Test Date: Wed, 2 Nov, 2022**
**System MU: 5.88 dB (30-1000MHz), 5.84 dB (1000-18000MHz), 6.02 dB (18000MHz 40000MHz)**

**Remarks: ** Indicates the spurious emission could not be detected due to noise limitations or ambient.**
***Pursuant to CFR 47 Part 2.1057 ( c ), emissions attenuated more than 20 dB below the permissible limit are not reported.**

**VERTICAL, QPK**




**HORIZONTAL, QPK**



### 6.2.3. Test Limit

(a) Except for Class A digital devices, the field strength of radiated emissions from unintentional radiators at a distance of 3 meters shall not exceed the following values:

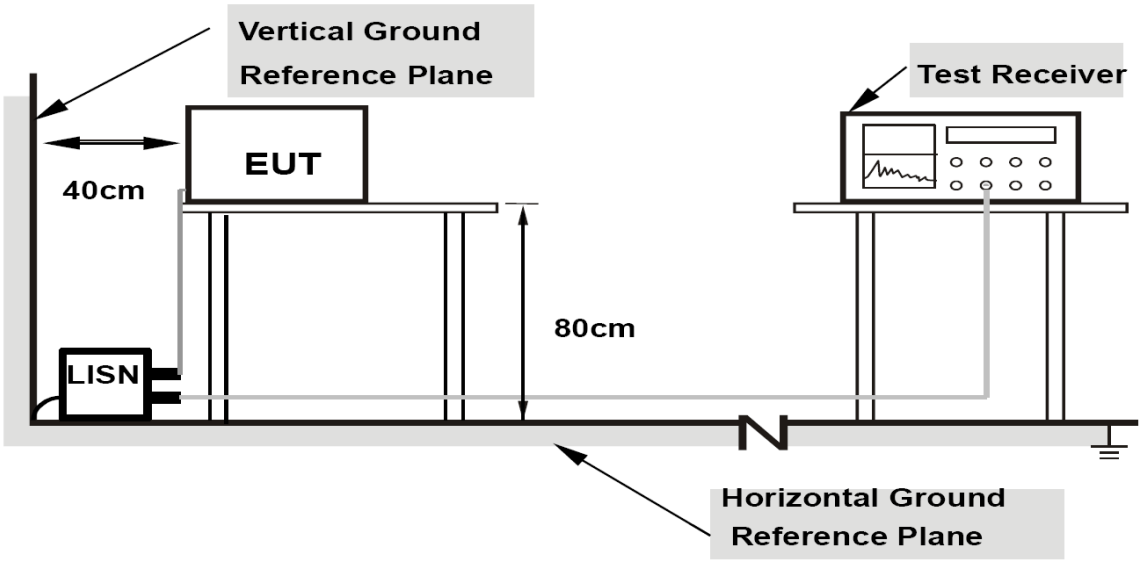
| Frequency of emission (MHz) | Field strength (microvolts/meter) |
|---|---|
| 30-88 | 100 |
| 88-216 | 150 |
| 216-960 | 200 |
| Above 960 | 500 |

(b) The field strength of radiated emissions from a Class A digital device, as determined at a distance of 10 meters, shall not exceed the following:

| Frequency of emission (MHz) | Field strength (microvolts/meter) |
|---|---|
| 30-88 | 90 |
| 88-216 | 150 |
| 216-960 | 210 |
| Above 960 | 300 |

## 6.3. **AC Power Line Conducted Spur Emissions**

### 6.3.1. **Test Setup**




1) Tests were conducted for both Receive and Transmit Mode of the EUT.
2) The EUT was placed 0.4 meters from the conducting wall of the shielded room with EUT being connected to the power mains through a line impedance stabilization network (LISN). Other support units were connected to the power mains through another LISN. The two LISNs provide 50 ohm/50uH of coupling impedance for the measuring instrument.
3) Both lines of the power mains connected to the EUT were checked for maximum conducted interference.
4) The frequency range from 150 kHz to 30MHz was measured.

### 6.3.2. Test Results

## Conducted Emission

| | | |
|---|---|---|
| Report ID.: | : | 35376-EMC-00009 |
| Ambient Temperature: | : | 21.1°C |
| Humidity: | : | 69.9 %RH |
| Tester: | : | Azil |
| Date of test: | : | 1 November 2022 |

## EMI Auto Test Template: Voltage with 2-Line-LISN

Hardware Setup: Voltage with 2-Line-LISN
Measurement Type: 2 Line LISN
Frequency Range: 150 kHz - 30 MHz
Graphics Level Range: 0 dBµV - 80 dBµV

Preview Measurements:
Scan Test Template: Voltage with 2-Line-LISN pre

Data Reduction:
Limit Line #1: FCC Part 15 Class B Voltage on Mains QP
Limit Line #2: FCC Part 15 Class B Voltage on Mains AV
Peak Search: 6 dB , Maximum Results: 20
Subrange Maxima: 10 Subranges , Maxima per Subrange: 1
Acceptance Offset: -20 dB
Maximum Number of Results: 20

Maximization Measurements:
Template for Single Meas.: Voltage with 2-Line-LISN max

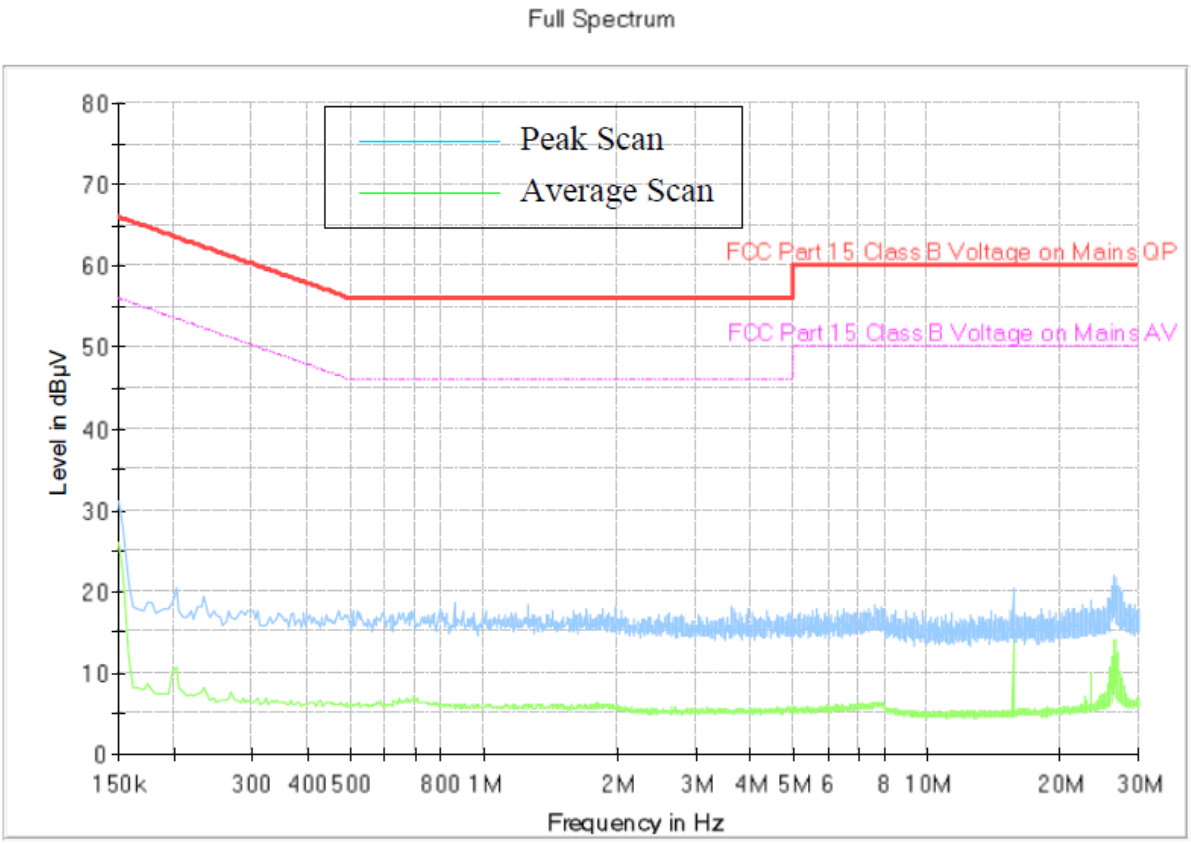
Final Measurements:
Template for Single Meas.: Voltage with 2-Line-LISN fin

| Subrange | Step Size | Detectors | IF BW | Meas. Time | Preamp |
|---|---|---|---|---|---|
| 150 kHz - 30 MHz | 4.5 kHz | QPK; CAV | 9 kHz | 1 s | 0 dB |

Receiver: [ESCI 3]

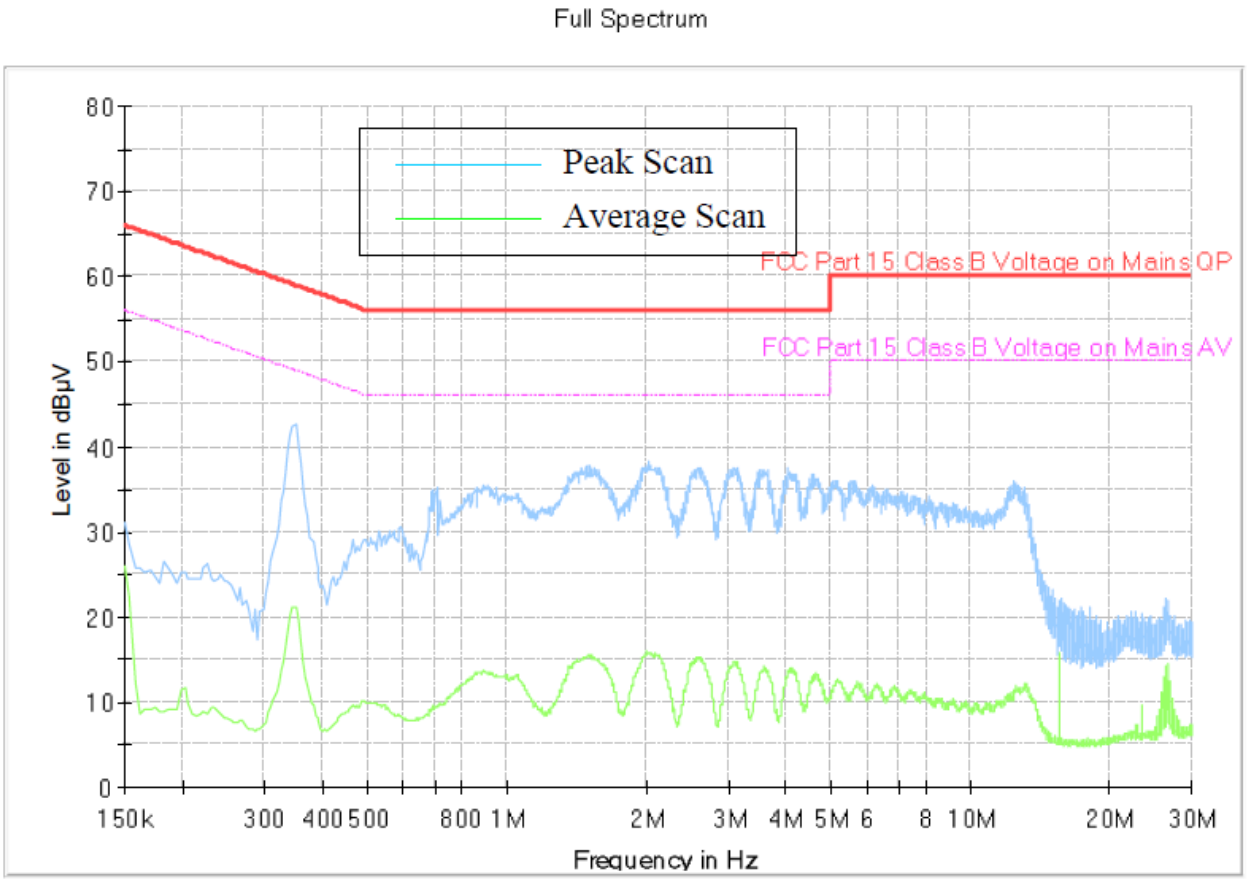
## Test Data

1) Ambient

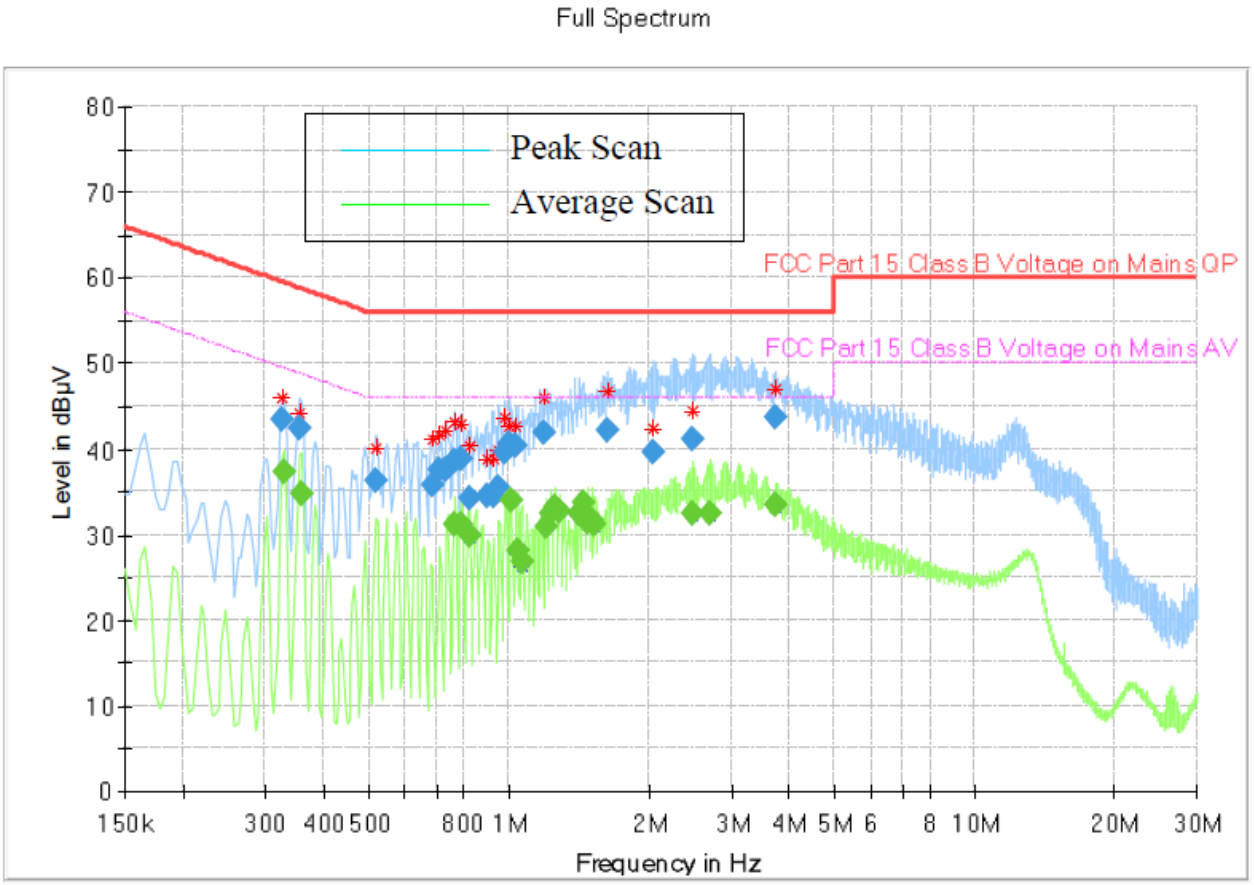


## 120VAC , 60Hz

### 1) Charger Alone



## 2) Charger + Radio Off

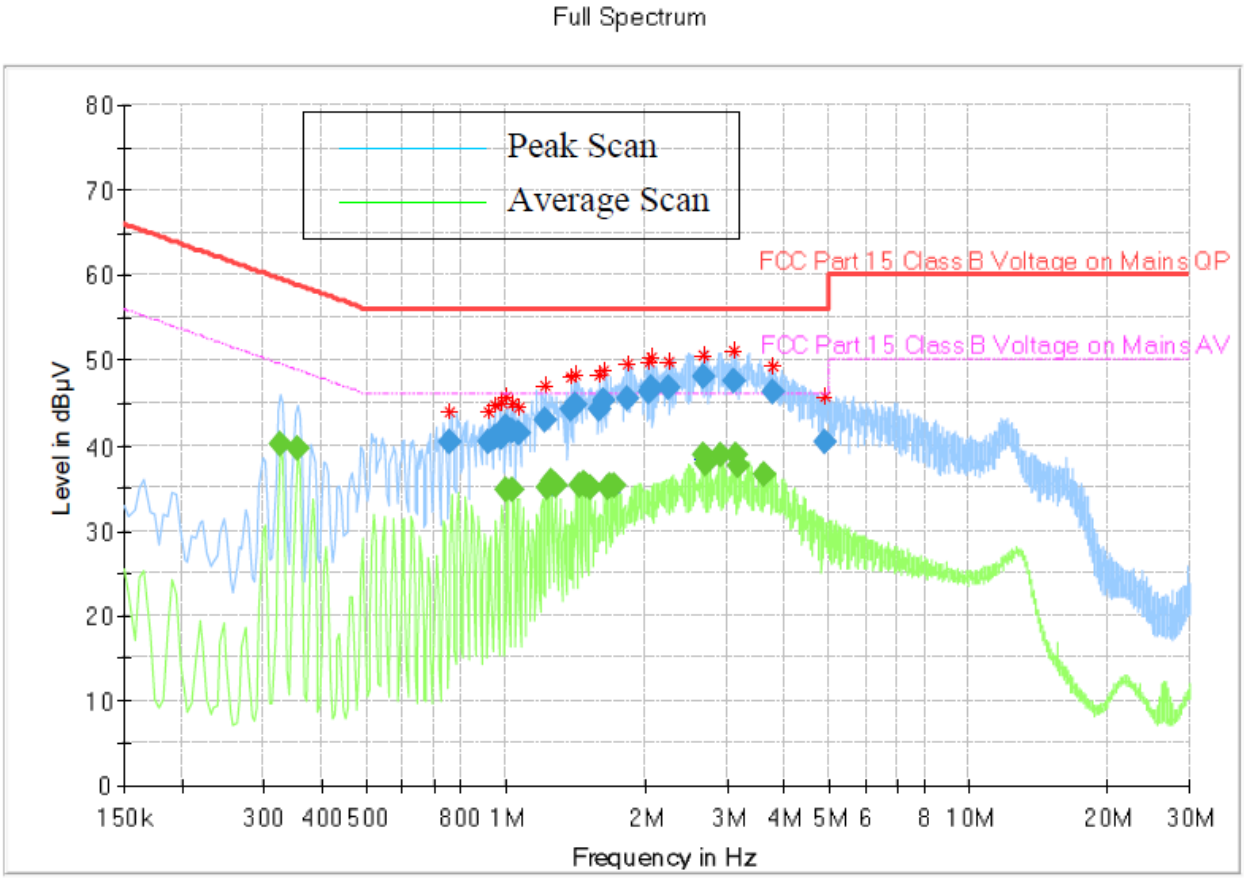


## Quasipeak and Average Measurement

| Frequency (MHz) | QuasiPeak (dBµV) | CAverage (dBµV) | Limit (dBµV) | Margin (dB) | Meas. Time (ms) | Bandwidth (kHz) | Line | Filter | Corr. (dB) | Comment |
|---|---|---|---|---|---|---|---|---|---|---|
| 0.326000 | 43.53 | --- | 59.55 | 16.02 | 1000.0 | 9.000 | N | ON | 10.3 | PASS |
| 0.330000 | --- | 37.33 | 49.45 | 12.12 | 1000.0 | 9.000 | N | ON | 10.3 | PASS |
| 0.354000 | 42.51 | --- | 58.87 | 16.35 | 1000.0 | 9.000 | N | ON | 10.3 | PASS |
| 0.358000 | --- | 34.86 | 48.78 | 13.91 | 1000.0 | 9.000 | N | ON | 10.3 | PASS |
| 0.518000 | 36.22 | --- | 56.00 | 19.78 | 1000.0 | 9.000 | N | ON | 10.3 | PASS |
| 0.686000 | 35.79 | --- | 56.00 | 20.21 | 1000.0 | 9.000 | N | ON | 10.3 | PASS |
| 0.706000 | 37.68 | --- | 56.00 | 18.32 | 1000.0 | 9.000 | N | ON | 10.3 | PASS |
| 0.734000 | 37.51 | --- | 56.00 | 18.49 | 1000.0 | 9.000 | N | ON | 10.3 | PASS |
| 0.762000 | 38.56 | --- | 56.00 | 17.44 | 1000.0 | 9.000 | N | ON | 10.3 | PASS |
| 0.766000 | --- | 31.18 | 46.00 | 14.82 | 1000.0 | 9.000 | N | ON | 10.3 | PASS |
| 0.790000 | 38.81 | --- | 56.00 | 17.19 | 1000.0 | 9.000 | N | ON | 10.3 | PASS |
| 0.794000 | --- | 31.16 | 46.00 | 14.84 | 1000.0 | 9.000 | N | ON | 10.3 | PASS |
| 0.822000 | --- | 29.88 | 46.00 | 16.12 | 1000.0 | 9.000 | N | ON | 10.3 | PASS |
| 0.826000 | 34.33 | --- | 56.00 | 21.67 | 1000.0 | 9.000 | N | ON | 10.3 | PASS |
| 0.898000 | 34.51 | --- | 56.00 | 21.49 | 1000.0 | 9.000 | N | ON | 10.3 | PASS |
| 0.926000 | 34.39 | --- | 56.00 | 21.61 | 1000.0 | 9.000 | N | ON | 10.3 | PASS |
| 0.954000 | 35.56 | --- | 56.00 | 20.44 | 1000.0 | 9.000 | N | ON | 10.3 | PASS |
| 0.978000 | 39.73 | --- | 56.00 | 16.27 | 1000.0 | 9.000 | N | ON | 10.3 | PASS |
| 1.006000 | 40.55 | --- | 56.00 | 15.45 | 1000.0 | 9.000 | N | ON | 10.2 | PASS |
| 1.010000 | --- | 34.07 | 46.00 | 11.93 | 1000.0 | 9.000 | N | ON | 10.2 | PASS |
| 1.034000 | 40.41 | --- | 56.00 | 15.59 | 1000.0 | 9.000 | N | ON | 10.2 | PASS |
| 1.042000 | --- | 28.22 | 46.00 | 17.78 | 1000.0 | 9.000 | N | ON | 10.2 | PASS |
| 1.070000 | --- | 26.79 | 46.00 | 19.21 | 1000.0 | 9.000 | N | ON | 10.2 | PASS |
| 1.194000 | 42.00 | --- | 56.00 | 14.00 | 1000.0 | 9.000 | N | ON | 10.2 | PASS |
| 1.202000 | --- | 31.02 | 46.00 | 14.98 | 1000.0 | 9.000 | N | ON | 10.2 | PASS |
| 1.230000 | --- | 32.41 | 46.00 | 13.59 | 1000.0 | 9.000 | N | ON | 10.2 | PASS |
| 1.258000 | --- | 33.14 | 46.00 | 12.86 | 1000.0 | 9.000 | N | ON | 10.2 | PASS |
| 1.286000 | --- | 32.81 | 46.00 | 13.19 | 1000.0 | 9.000 | N | ON | 10.2 | PASS |
| 1.418000 | --- | 32.34 | 46.00 | 13.66 | 1000.0 | 9.000 | N | ON | 10.2 | PASS |
| 1.446000 | --- | 33.72 | 46.00 | 12.28 | 1000.0 | 9.000 | N | ON | 10.2 | PASS |
| 1.478000 | --- | 31.31 | 46.00 | 14.69 | 1000.0 | 9.000 | N | ON | 10.2 | PASS |
| 1.506000 | --- | 31.71 | 46.00 | 14.29 | 1000.0 | 9.000 | N | ON | 10.2 | PASS |
| 1.534000 | --- | 31.08 | 46.00 | 14.92 | 1000.0 | 9.000 | N | ON | 10.2 | PASS |
| 1.630000 | 42.22 | --- | 56.00 | 13.78 | 1000.0 | 9.000 | N | ON | 10.2 | PASS |
| 2.042000 | 39.70 | --- | 56.00 | 16.30 | 1000.0 | 9.000 | N | ON | 10.2 | PASS |
| 2.474000 | --- | 32.44 | 46.00 | 13.56 | 1000.0 | 9.000 | N | ON | 10.2 | PASS |
| 2.474000 | 41.04 | --- | 56.00 | 14.96 | 1000.0 | 9.000 | N | ON | 10.2 | PASS |
| 2.694000 | --- | 32.35 | 46.00 | 13.65 | 1000.0 | 9.000 | N | ON | 10.3 | PASS |
| 3.726000 | 43.60 | --- | 56.00 | 12.40 | 1000.0 | 9.000 | N | ON | 10.3 | PASS |
| 3.750000 | --- | 33.36 | 46.00 | 12.64 | 1000.0 | 9.000 | N | ON | 10.3 | PASS |

*** Expanded Uncertainty (U) = +/- 3.48dB**

3) Charger + Radio Standby_162MHz



## Quasipeak and Average Measurement

| Frequency (MHz) | QuasiPeak (dBµV) | CAverage (dBµV) | Limit (dBµV) | Margin (dB) | Meas. Time (ms) | Bandwidth (kHz) | Line | Filter | Corr. (dB) | Comment |
|---|---|---|---|---|---|---|---|---|---|---|
| 0.326000 | --- | 40.12 | 49.55 | 9.43 | 1000.0 | 9.000 | N | ON | 10.3 | PASS |
| 0.354000 | --- | 39.61 | 48.87 | 9.26 | 1000.0 | 9.000 | N | ON | 10.3 | PASS |
| 0.758000 | 40.35 | --- | 56.00 | 15.65 | 1000.0 | 9.000 | N | ON | 10.3 | PASS |
| 0.922000 | 40.49 | --- | 56.00 | 15.51 | 1000.0 | 9.000 | N | ON | 10.3 | PASS |
| 0.950000 | 40.88 | --- | 56.00 | 15.12 | 1000.0 | 9.000 | N | ON | 10.3 | PASS |
| 0.978000 | 40.95 | --- | 56.00 | 15.05 | 1000.0 | 9.000 | N | ON | 10.3 | PASS |
| 1.002000 | 42.19 | --- | 56.00 | 13.81 | 1000.0 | 9.000 | N | ON | 10.2 | PASS |
| 1.006000 | --- | 34.73 | 46.00 | 11.27 | 1000.0 | 9.000 | N | ON | 10.2 | PASS |
| 1.030000 | 41.54 | --- | 56.00 | 14.46 | 1000.0 | 9.000 | N | ON | 10.2 | PASS |
| 1.038000 | --- | 34.87 | 46.00 | 11.13 | 1000.0 | 9.000 | N | ON | 10.2 | PASS |
| 1.070000 | 41.48 | --- | 56.00 | 14.52 | 1000.0 | 9.000 | N | ON | 10.2 | PASS |
| 1.222000 | 42.96 | --- | 56.00 | 13.04 | 1000.0 | 9.000 | N | ON | 10.2 | PASS |
| 1.226000 | --- | 35.06 | 46.00 | 10.94 | 1000.0 | 9.000 | N | ON | 10.2 | PASS |
| 1.254000 | --- | 35.73 | 46.00 | 10.27 | 1000.0 | 9.000 | N | ON | 10.2 | PASS |
| 1.282000 | --- | 35.28 | 46.00 | 10.72 | 1000.0 | 9.000 | N | ON | 10.2 | PASS |
| 1.382000 | 44.17 | --- | 56.00 | 11.83 | 1000.0 | 9.000 | N | ON | 10.2 | PASS |
| 1.410000 | 44.83 | --- | 56.00 | 11.17 | 1000.0 | 9.000 | N | ON | 10.2 | PASS |
| 1.442000 | --- | 35.32 | 46.00 | 10.68 | 1000.0 | 9.000 | N | ON | 10.2 | PASS |
| 1.470000 | --- | 35.58 | 46.00 | 10.42 | 1000.0 | 9.000 | N | ON | 10.2 | PASS |
| 1.498000 | --- | 35.26 | 46.00 | 10.74 | 1000.0 | 9.000 | N | ON | 10.2 | PASS |
| 1.530000 | --- | 35.08 | 46.00 | 10.92 | 1000.0 | 9.000 | N | ON | 10.2 | PASS |
| 1.598000 | 44.23 | --- | 56.00 | 11.77 | 1000.0 | 9.000 | N | ON | 10.2 | PASS |
| 1.626000 | 45.18 | --- | 56.00 | 10.82 | 1000.0 | 9.000 | N | ON | 10.2 | PASS |
| 1.658000 | --- | 35.08 | 46.00 | 10.92 | 1000.0 | 9.000 | N | ON | 10.2 | PASS |
| 1.686000 | --- | 35.14 | 46.00 | 10.86 | 1000.0 | 9.000 | N | ON | 10.2 | PASS |
| 1.718000 | --- | 35.21 | 46.00 | 10.79 | 1000.0 | 9.000 | N | ON | 10.2 | PASS |
| 1.842000 | 45.52 | --- | 56.00 | 10.48 | 1000.0 | 9.000 | N | ON | 10.2 | PASS |
| 2.034000 | 46.24 | --- | 56.00 | 9.76 | 1000.0 | 9.000 | N | ON | 10.2 | PASS |
| 2.062000 | 46.80 | --- | 56.00 | 9.20 | 1000.0 | 9.000 | N | ON | 10.2 | PASS |
| 2.246000 | 46.88 | --- | 56.00 | 9.12 | 1000.0 | 9.000 | N | ON | 10.2 | PASS |
| 2.682000 | 47.97 | --- | 56.00 | 8.03 | 1000.0 | 9.000 | N | ON | 10.3 | PASS |
| 2.686000 | --- | 38.76 | 46.00 | 7.24 | 1000.0 | 9.000 | N | ON | 10.3 | PASS |
| 2.710000 | --- | 37.87 | 46.00 | 8.13 | 1000.0 | 9.000 | N | ON | 10.3 | PASS |
| 2.930000 | --- | 38.80 | 46.00 | 7.20 | 1000.0 | 9.000 | N | ON | 10.3 | PASS |
| 3.114000 | 47.47 | --- | 56.00 | 8.53 | 1000.0 | 9.000 | N | ON | 10.3 | PASS |
| 3.150000 | --- | 38.88 | 46.00 | 7.12 | 1000.0 | 9.000 | N | ON | 10.3 | PASS |
| 3.174000 | --- | 37.63 | 46.00 | 8.37 | 1000.0 | 9.000 | N | ON | 10.3 | PASS |
| 3.614000 | --- | 36.47 | 46.00 | 9.53 | 1000.0 | 9.000 | N | ON | 10.3 | PASS |
| 3.770000 | 46.38 | --- | 56.00 | 9.62 | 1000.0 | 9.000 | N | ON | 10.3 | PASS |
| 4.902000 | 40.26 | --- | 56.00 | 15.74 | 1000.0 | 9.000 | N | ON | 10.3 | PASS |

*** Expanded Uncertainty (U) = +/- 3.48dB**

### 6.3.3. **Test Limits**

For AC Power Line Conducted Test Limit can be Class A or B depends on product classification.

**Limits for conducted disturbance at the mains ports of class A ITE**

| Frequency range MHz | Limits dB(µV) | |
|---|---|---|
| | Quasi-peak | Average |
| 0,15 to 0,50 | 79 | 66 |
| 0,50 to 30 | 73 | 60 |
| NOTE The lower limit shall apply at the transition frequency. | | |

**Limits for conducted disturbance at the mains ports of class B ITE**

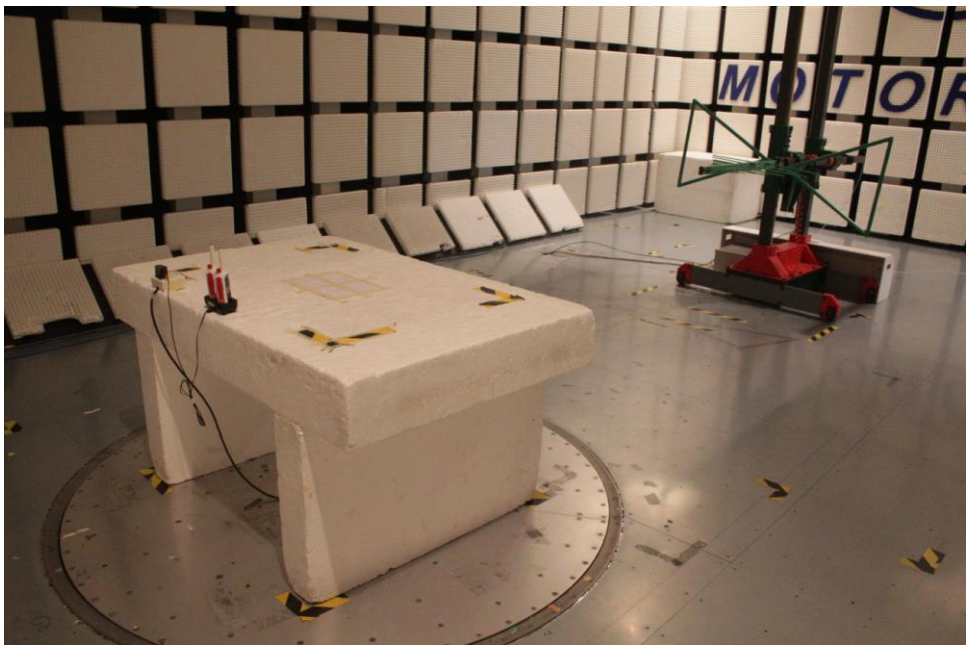
| Frequency range MHz | Limits dB(µV) | |
|---|---|---|
| | Quasi-peak | Average |
| 0,15 to 0,50 | 66 to 56 | 56 to 46 |
| 0,50 to 5 | 56 | 46 |
| 5 to 30 | 60 | 50 |
| NOTE 1 The lower limit shall apply at the transition frequencies.<br>NOTE 2 The limit decreases linearly with the logarithm of the frequency in the range 0,15 MHz to 0,50 MHz. | | |

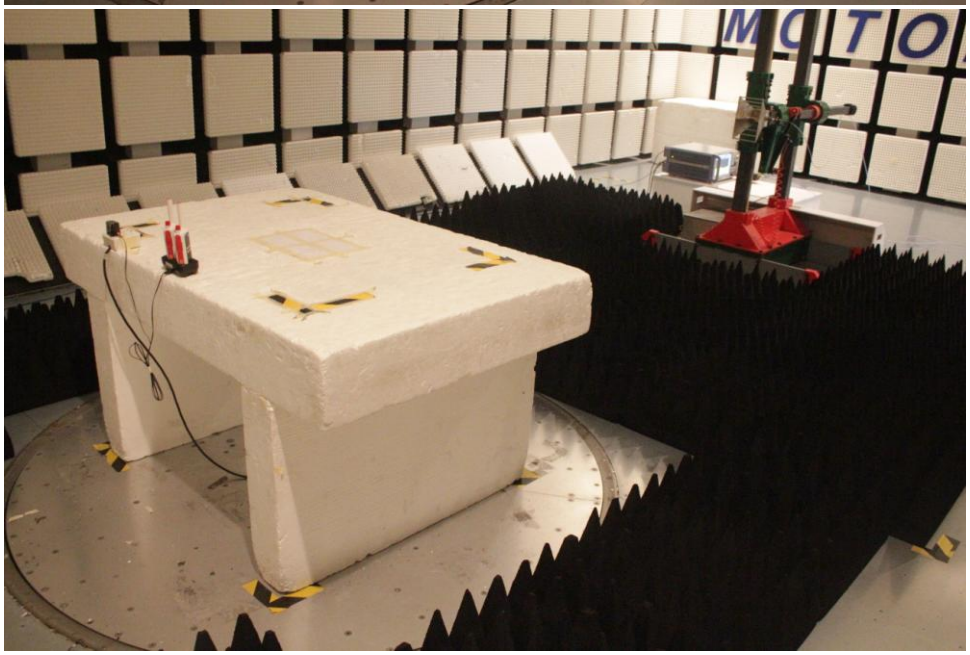
# 7.0. Appendix: Test Setup Photo

## 7.1. Conducted Spur Emission ATE Station Setup

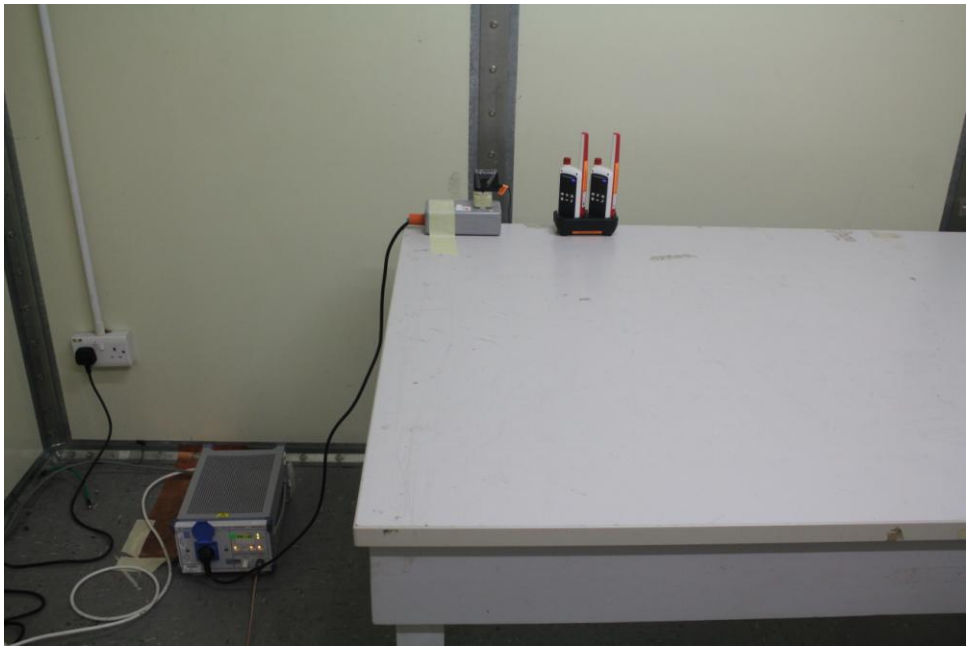
NA

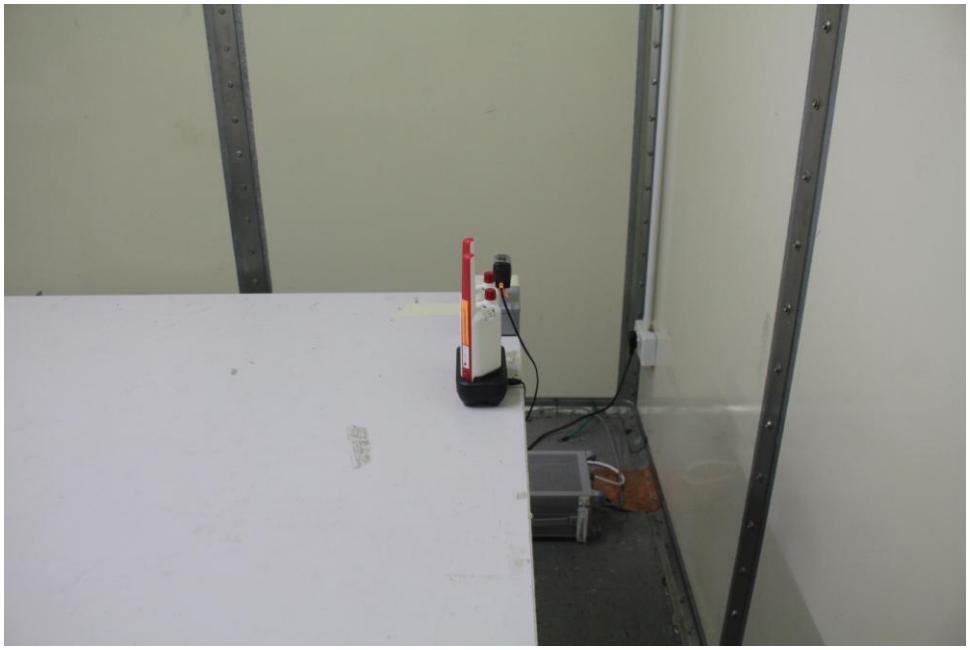
## 7.2. Radiated Spur Emission Station Setup





## 7.3. AC Power Line Conducted Emission Station Setup





## 7.4. Photographs – EUT


**Radios + Batteries + DUC + Power Supply**

**~ End of Test Report ~**