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TEST REPORT

Report No.: 24061269HKG-001

Nuance Hearing LTD.

Application For Original Grant of 47 CFR Part 15 Certification

Single New of RSS-247 Issue 3 Certification

TABLE MICROPHONE

FCC ID: 2AS2V-LE10

IC: 24964-LE10

Prepared and Checked by:	**Approved by:**
Signed on File Leung Chun Ning, Peter Assistant Engineer	Digitally signed by Herbert Wong Location: Intertek Testing Services Hong Kong Limited Wong Cheuk Ho, Herbert Assistant Manager Date: February 10, 2025

TEST REPORT

GENERAL INFORMATION

Grantee:	Nuance Hearing LTD.
Grantee Address:	Raoul Wallenberg 24, Building A1, Floor 3 Tel Aviv Israel.
Manufacturer Name:	Nuance Hearing LTD.
Manufacturer Address:	Raoul Wallenberg 24, Building A1, Floor 3 Tel Aviv Israel.
FCC Specification Standard:	FCC Part 15, October 1, 2022 Edition
FCC ID:	2AS2V-LE10
FCC Model(s):	TABLE MICROPHONE
IC Specification Standard:	RSS-247 Issue 3, August 2023 RSS-Gen Issue 5 Amendment 2, February 2021
IC:	24964-LE10
HVIN:	LE10
PMN:	TABLE MICROPHONE
Type of EUT:	Spread Spectrum Transmitter
Description of EUT:	TABLE MICROPHONE
Brand Name:	Not Applicable
Sample Receipt Date:	July 25, 2024
Date of Test:	July 25, 2024 to August 02, 2024
Report Date:	February 10, 2025
Environmental Conditions:	Temperature: +10 to 40°C Relative Humidity: 10 to 90%
Conclusion:	Test was conducted by client submitted sample. The submitted sample as received complied with the 47 CFR Part 15 / RSS-247 Issue 3 Certification.

TEST REPORT

SUMMARY OF TEST RESULT

Test Items	FCC Part 15 Section	RSS-247 / RSS-Gen# Section	Results
Antenna Requirement	15.203	7.1.2#	Complied
Max. Conducted Output Power (Peak)	15.247(b)(3)&(4)	5.4(4)	Complied
Min. 6dB RF Bandwidth	15.247(a)(2)	5.2(1)	Complied
Max. Power Density (Average)	15.247(e)	5.2(2)	Complied
Out of Band Antenna Conducted Emission	15.247(d)	5.5	Complied
Radiated Emission in Restricted Bands and Spurious Emissions	15.247(d), 15.209 & 15.109	5.5	Complied
AC Power Line Conducted Emission	15.207 & 15.107	7.2.4#	Complied

Note: Pursuant to FCC Part 15 Section 15.215(c), the 20dB bandwidth of the emission was contained within the frequency band designated (mentioned as above) which the EUT operated. The effects, if any, from frequency sweeping, frequency hopping, other modulation techniques and frequency stability over expected variations in temperature and supply voltage were considered.

For all technical data, which can be referred to Annex B – Report cover sheet.
For electronic filing, the Annex B – Report cover sheet is saved with filename: Annex B.pdf.

The equipment under test is found to be complying with the following standards:

FCC Part 15, October 1, 2022 Edition
RSS-247 Issue 3, August 2023
RSS-Gen Issue 5 Amendment 2, February 2021

TEST REPORT

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TEST REPORT

EXHIBIT 1 GENERAL DESCRIPTION

1.1 Product Description

The Equipment Under Test (EUT), is a 2.4GHz Bluetooth BLE (2Mbps) Transceiver for a Bluetooth voice selector converse. The sample supplied operated on 40 channels, normally at 2402 – 2480MHz. The channels are separated with 2MHz spacing.

The EUT is powered by 120VAC. After switching on the EUT, it can be paired up with a pair of earphone and will be used to perform hearing aid function.

The antenna(s) used in the EUT is integral, and the test sample is a prototype.
Peak Antenna Gain: 0dBi

The circuit description is saved with filename: descri.pdf.

1.2 Test Methodology

Both AC power line-conducted and radiated emission measurements were performed according to the procedures in ANSI C63.10 (2013). Preliminary radiated scans and all radiated measurements were performed in radiated emission test sites. All Radiated tests were performed at an antenna to EUT distance of 3 meters, unless stated otherwise in the "**Justification Section**" of this Application.
Antenna port conducted measurements were performed according to ANSI C63.10 (2013) and KDB Publication No. 558074 D01 v05r02 (April 02, 2019) All other measurements were made in accordance with the procedures in 47 CFR Part 2 and RSS-Gen Issue 5 Amendment 2, February 2021.

1.3 Test Facility

The radiated emission test site and antenna port conducted measurement facility used to collect the radiated data and conductive data are at Workshop No. 3, G/F., World-Wide Industrial Centre, 43-47 Shan Mei Street, Fo Tan, Sha Tin, N.T., Hong Kong SAR, China. This test facility and site measurement data have been fully placed on file with the FCC and Industry Canada No.: 2042H, CABID is “HKAP01”.

1.4 Related Submittal(s) Grants

This is a single application for certification of a transceiver (Bluetooth BLE (2Mbps) Portion).

TEST REPORT

EXHIBIT 2 SYSTEM TEST CONFIGURATION

2.1 Justification

For radiated emissions testing, the equipment under test (EUT) was setup to transmit / receive continuously to simplify the measurement methodology. Care was taken to ensure proper power supply voltages during testing. During testing, all cables (if any) were manipulated to produce worst case emissions.

The EUT was powered by 120VAC during test.

For the measurements, the EUT was attached to a plastic stand if necessary and placed on the wooden turntable at 0.8m height from the ground plane for emission testing at or below 1GHz and 1.5m for emission measurements above 1GHz. If the base unit attached to peripherals, they were connected and operational (as typical as possible).

The signal was maximized through rotation and placement in the three orthogonal axes. The antenna height and polarization were varied during the search for maximum signal level. The antenna height was varied from 1 to 4 meters. Radiated emissions were taken at three meters unless the signal level was too low for measurement at that distance. If necessary, a pre-amplifier was used and/or the test was conducted at a closer distance.

For any intentional radiator powered by AC power line, measurements of the radiated signal level of the fundamental frequency component of the emission was performed with the supply voltage varied between 85% and 115% of the nominal rated supply voltage.

Radiated emission measurement for transmitter were performed from the lowest radio frequency signal generated in the device which is greater than 9 kHz to the tenth harmonic of the highest fundamental frequency or to 40 GHz, whichever is lower.

Emission that are directly caused by digital circuits in the transmit path and transmitter portion were measured, and the limit are according to FCC Part 15 Section 15.209 / RSS-247 2.5. Digital circuitries used to control additional functions other than the operation of the transmitter are subject to FCC Part 15 Section 15.109 / RSS-247 Section 5.5 Limits.

Detector function for radiated emissions was in peak mode. Average readings, when required, were taken by measuring the duty cycle of the equipment under test and subtracting the corresponding amount in dB from the measured peak readings. A detailed description for the calculation of the average factor can be found in section 4.8.3.

Determination of pulse desensitization was made according to *Hewlett Packard Application Note 150-2, Spectrum Analysis... Pulsed RF.* The effective period (Teff) was referred to Exhibit 4.8.3. With the resolution bandwidth 3MHz and spectrum analyzer IF bandwidth 3dB, the pulse desensitization factor was 0dB.

For AC power line-conducted emission test, the EUT along with its peripherals were placed on a 1.0m(W)x1.5m(L) and 0.8m in height wooden table and the EUT was adjusted to maintain a 0.4 meter space from a vertical reference plane. The EUT was connected to power mains through a line impedance stabilization network (LISN), which provided 50ohm coupling impedance for measuring instrument. The LISN housing, measuring instrument case, reference ground plane, and vertical ground plane were bounded together. The excess power cable between the EUT and the LISN was bundled.

TEST REPORT

All connecting cables of EUT and peripherals were manipulated to find the maximum emission.

All relevant operation modes have been tested, and the worst-case data is included in this report.

2.2 EUT Exercising Software

The EUT exercise program (Direct Test Mode v2.1.0) used during radiated and conducted testing was designed to exercise the various system components in a manner similar to a typical use.

2.3 Supporting Equipment List and Description

Description	Remark
Earphone	Provided by Applicant
AC/DC Adaptor (Model: S005CAU0500100; Input: 100-240VAC 50/60Hz 200mA; Output: 5.0VDC 1000mA)	Provided by Applicant

2.4 Measurement Uncertainty

Decision Rule for compliance: For FCC/IC standard, the measured value must be within the limits of applicable standard without accounting for the measurement uncertainty. For EN/IEC/HKTA/HKTC standard, conformity rules will be used as per standard directly excepted EN/IEC 61000-3-2, EN/IEC 61000-3-3, HKTA1004, HKCA1008, HKTA1019, HKTA1020, HKTA1041 and HKTA1044.

Uncertainty and Compliance - Unless the standard specifically states that measured values are to be extended by the measurement uncertainty in determining compliance, all compliance determinations are based on the actual measured value.

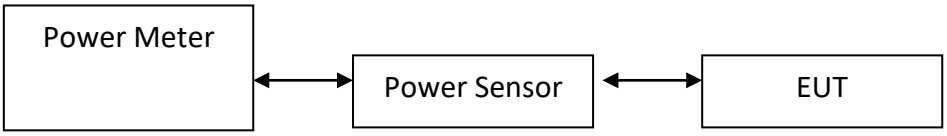
TEST REPORT

EXHIBIT 3 TEST RESULTS

3.1 Maximum Conducted (Peak) Output Power at Antenna Terminals

RF Conduct Measurement Test Setup

The figure below shows the test setup, which is utilized to make these measurements.



The antenna port of the EUT was connected to the input of a spectrum analyzer.

☒ The antenna power of the EUT was connected to the input of a power meter. Power was read directly and cable loss correction was added to the reading to the obtain power at the EUT antenna terminals. The measurement procedure 8.3.2.3 was used.

☐ The EUT should be configured to transmit continuously (at a minimum duty cycle of 98%) at full power over the measurement duration. The measurement procedure AVG1 was used.

BLE, 2 Mbps Peak Antenna Gain = 0 dBi (Refer to Test Data.pdf)

Frequency (MHz)	Output in dBm	Output in mW
Low Channel: 2402 (P.9)	-3.12	0.5
Middle Channel: 2440 (P.28)	-4.23	0.4
High Channel: 2480 (P.45)	-5.20	0.3

Cable loss: 0.5 dB External Attenuation: 0 dB

Cable loss, external attenuation: ☒ included in OFFSET function
☐ added to SA raw reading

BLE, 2 Mbps
Max. Conducted (Peak) Output Level = -3.12 dBm

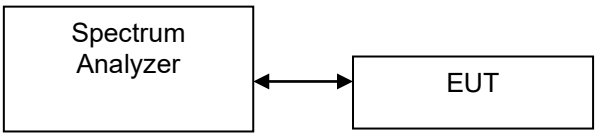
Limits:

1W (30dBm) for antennas with gains of 6dBi or less.

TEST REPORT

3.2 Minimum 6dB RF Bandwidth

The figure below shows the test setup, which is utilized to make these measurements.



The antenna port of the EUT was connected to the input of a spectrum analyzer. The EBW measurement procedure was used. A PEAK output reading was taken, a DISPLAY line was drawn 6dB lower than PEAK level. The 6dB bandwidth was determined from where the channel output spectrum intersected the display line.

BLE, 2 Mbps (Refer to Test Data.pdf)

Frequency (MHz)	6dB Bandwidth (kHz)
Low Channel: 2402 (P.4)	1149
Middle Channel: 2440 (P.26)	1188
High Channel: 2480 (P.43)	1109

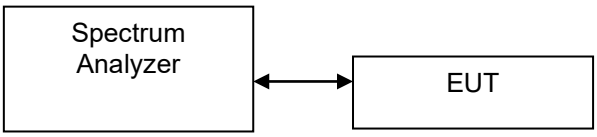
Limits:

6dB bandwidth shall be at least 500kHz.

TEST REPORT

3.3 Minimum Power Spectral Density

The figure below shows the test setup, which is utilized to make these measurements.



Antenna output of the EUT was coupled directly to spectrum analyzer. The measurement procedure 10.2 PKPSD was used. If an external attenuator and/or cable was used, these losses are compensated for using the OFFSET function of the analyser.

BLE, 2 Mbps (Refer to Test Data.pdf)

Frequency (MHz)	PSD in 100kHz (dBm)
Low Channel: 2402 (P.10)	-3.275
Middle Channel: 2440 (P.32)	-4.484
High Channel: 2480 (P.49)	-5.377

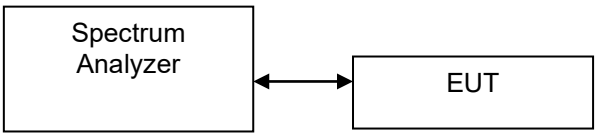
Cable Loss: 0.5dB

Limit: 8dBm in 3kHz

TEST REPORT

3.4 Out of Band Conducted Emissions

The figure below shows the test setup, which is utilized to make these measurements.



The maximum conducted (peak) output power was used to demonstrate compliance as described in 9.1. Then the display line (in red) shown in the following plots denotes the limit at 20dB below maximum measured in-band peak PSD level in 100 KHz bandwidth.

The measurement procedures under sections 11 of KDB558074 D01 v05r02 (April 2, 2019) were used.

Furthermore, delta measurement technique for measuring bandedge emissions was incorporated in the test of the edge at 2483.5MHz.

Limits:

All spurious emission and up to the tenth harmonic was measured and they were found to be at least 20dB below the maximum measured in-band peak PSD level.

BLE, 2 Mbps (Refer to Test Data.pdf)

Frequency (MHz)	Out of Band Conducted Emissions	Band Edge
Low Channel: 2402	P.18	P.12
Middle Channel: 2440	P.35	N/A
High Channel: 2480	P.57	P.51

TEST REPORT

3.5 Field Strength Calculation

The field strength is calculated by adding the reading on the Spectrum Analyzer to the factors associated with preamplifiers (if any), antennas, cables, pulse desensitization and average factors (when specified limit is in average and measurements are made with peak detectors). A sample calculation is included below.

FS = RA + AF + CF - AG + PD + AV

Where
- FS = Field Strength in dBμV/m
- RA = Receiver Amplitude (including preamplifier) in dBμV
- CF = Cable Attenuation Factor in dB
- AF = Antenna Factor in dB
- AG = Amplifier Gain in dB
- PD = Pulse Desensitization in dB
- AV = Average Factor in -dB

In the radiated emission table which follows, the reading shown on the data table may reflects the preamplifier gain. An example of the calculations, where the reading does not reflect the preamplifier gain, follows:

FS = RA + AF + CF - AG + PD + AV

Example:

Assume a receiver reading of 62.0 dBμV is obtained. The antenna factor of 7.4 dB and cable factor of 1.6 dB is added. The amplifier gain of 29.0 dB is subtracted. The pulse desensitization factor of the spectrum analyzer is 0.0 dB, and the resultant average factor is -10.0 dB. The net field strength for comparison to the appropriate emission limit is 32.0 dBμV/m. This value in dBμV/m is converted to its corresponding level in μV/m.

RA = 62.0 dBμV
AF = 7.4 dB
CF = 1.6 dB
AG = 29.0 dB
PD = 0.0 dB
AV = -10.0 dB
FS = 62.0 + 7.4 + 1.6 – 29.0 + 0.0 + -10.0) = 32.0 dBμV/m

Level in μV/m = Common Antilogarithm [(32.0 dBμV/m)/20] = 39.8 μV/m

TEST REPORT

3.6 Transmitter Radiated Emissions in Restricted Bands and Spurious Emissions

Data is included of the worst-case configuration (the configuration which resulted in the highest emission levels). A sample calculation, configuration photographs and data tables of the emissions are included.

The data on the following pages list the significant emission frequencies, the limit and the margin of compliance.

3.6.1 Radiated Emission Configuration Photograph

Worst Case Restricted Band Radiated Emission at 14640 MHz

The worst case radiated emission configuration photographs are saved with filename:
Setup Photos.pdf

3.6.2 Radiated Emission Data

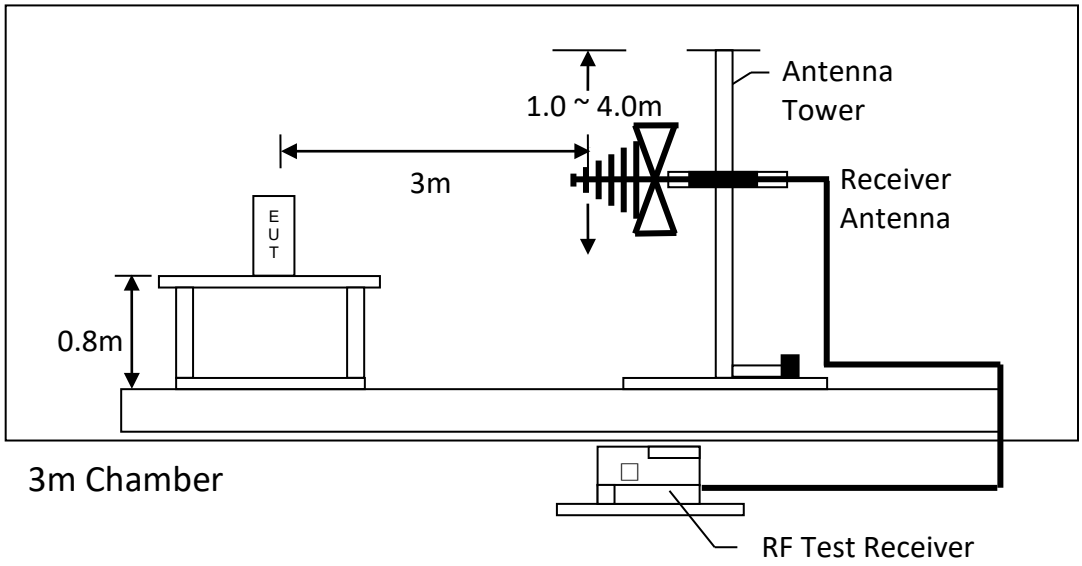
The data in tables 1-4 list the significant emission frequencies, the limit and the margin of compliance.

Judgement:
Passed by 11.4 dB margin

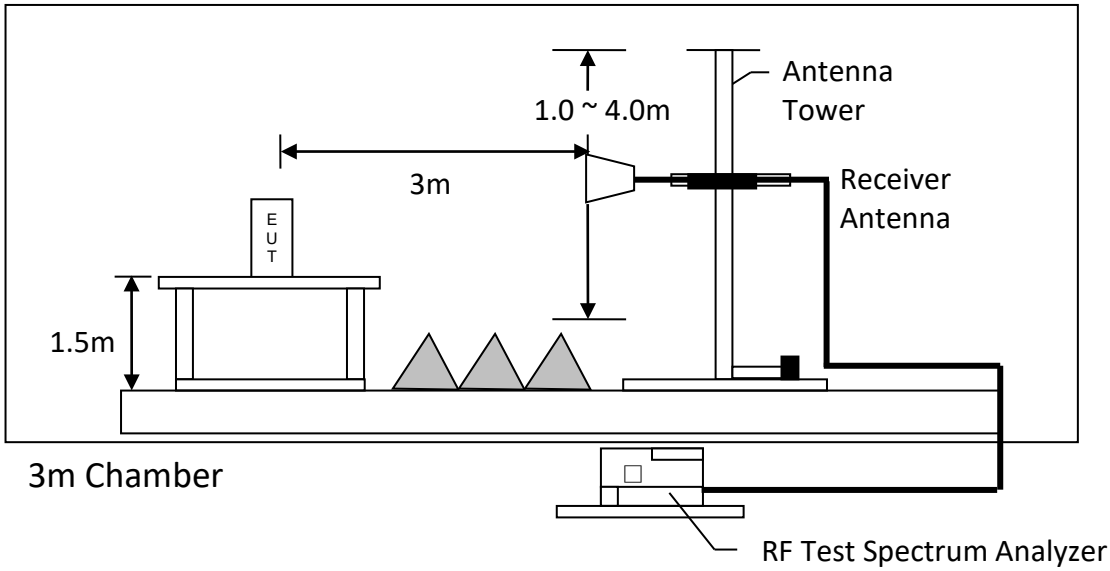
TEST REPORT

3.6.3 Radiated Emission Test Setup

The figure below shows the test setup, which is utilized to make these measurements.



Test setup of radiated emissions up to 1GHz



Test setup of radiated emissions above 1GHz

TEST REPORT

RADIATED EMISSION DATA

Mode: TX-Channel 2402

Table 1, BLE 2Mbps

Polari-zation	Frequency (MHz)	Reading (dBµV)	Pre-Amp Gain (dB)	Antenna Factor (dB)	Net at 3m (average) (dBµV/m)	Average Limit at 3m (dBµV/m)	Margin (dB)
H	2390.000	39.8	33	29.4	36.2	54.0	-17.8
H	4804.000	29.0	33	34.9	30.9	54.0	-23.1
H	7206.000	29.7	33	37.9	34.6	54.0	-19.4
V	9608.000	30.0	33	40.4	37.4	54.0	-16.6
V	12010.000	33.0	33	40.5	40.5	54.0	-13.5
V	14412.000	35.3	33	40.0	42.3	54.0	-11.7

Polari-zation	Frequency (MHz)	Reading (dBµV)	Pre-Amp Gain (dB)	Antenna Factor (dB)	Net at 3m - Peak (dBµV/m)	Peak Limit at 3m (dBµV/m)	Margin (dB)
H	2390.000	54.0	33	29.4	50.4	74.0	-23.6
H	4804.000	42.3	33	34.9	44.2	74.0	-29.8
H	7206.000	43.5	33	37.9	48.4	74.0	-25.6
V	9608.000	43.5	33	40.4	50.9	74.0	-23.1
V	12010.000	46.2	33	40.5	53.7	74.0	-20.3
V	14412.000	48.8	33	40.0	55.8	74.0	-18.2

Notes:
1. Peak detector is used for the emission measurement.
2. Average detector is used for the average data of emission measurement.
3. All measurements were made at 3 meters.
4. Negative value in the margin column shows emission below limit.
5. Horn antenna is used for the emission over 1000MHz.
6. Emissions within the restricted band meets the requirement of FCC Part 15 Section 15.205 / RSS-Gen Section 8.10.
7. Measurement Uncertainty is ±5.3dB at a level of confidence of 95%.

TEST REPORT

RADIATED EMISSION DATA

Mode: TX-Channel 2440

Table 2, BLE 2Mbps

Polari-zation	Frequency (MHz)	Reading (dBµV)	Pre-Amp Gain (dB)	Antenna Factor (dB)	Net at 3m (average) (dBµV/m)	Average Limit at 3m (dBµV/m)	Margin (dB)
V	4880.000	29.1	33	34.9	31.0	54.0	-23.0
V	7320.000	30.2	33	37.9	35.1	54.0	-18.9
H	9760.000	31.3	33	40.4	38.7	54.0	-15.3
H	12200.000	33.4	33	40.5	40.9	54.0	-13.1
V	14640.000	37.2	33	38.4	42.6	54.0	-11.4

Polari-zation	Frequency (MHz)	Reading (dBµV)	Pre-Amp Gain (dB)	Antenna Factor (dB)	Net at 3m - Peak (dBµV/m)	Peak Limit at 3m (dBµV/m)	Margin (dB)
V	4880.000	42.1	33	34.9	44.0	74.0	-30.0
V	7320.000	43.4	33	37.9	48.3	74.0	-25.7
H	9760.000	45.1	33	40.4	52.5	74.0	-21.5
H	12200.000	47.1	33	40.5	54.6	74.0	-19.4
V	14640.000	51.1	33	38.4	56.5	74.0	-17.5

Notes:
1. Peak detector is used for the emission measurement.
2. Average detector is used for the average data of emission measurement.
3. All measurements were made at 3 meters.
4. Negative value in the margin column shows emission below limit.
5. Horn antenna is used for the emission over 1000MHz.
6. Emissions within the restricted band meets the requirement of FCC Part 15 Section 15.205 / RSS-Gen Section 8.10.
7. Measurement Uncertainty is ±5.3dB at a level of confidence of 95%.

TEST REPORT

RADIATED EMISSION DATA

Mode: TX-Channel 2480

Table 3, BLE 2Mbps

Polari-zation	Frequency (MHz)	Reading (dBµV)	Pre-Amp Gain (dB)	Antenna Factor (dB)	Net at 3m (average) (dBµV/m)	Average Limit at 3m (dBµV/m)	Margin (dB)
H	2483.500	40.5	33	29.4	36.9	54.0	-17.1
V	4960.000	29.5	33	34.9	31.4	54.0	-22.6
V	7440.000	29.8	33	37.9	34.7	54.0	-19.3
H	9920.000	31.3	33	40.4	38.7	54.0	-15.3
H	12400.000	34.1	33	40.5	41.6	54.0	-12.4
V	14880.000	37.1	33	38.4	42.5	54.0	-11.5

Polari-zation	Frequency (MHz)	Reading (dBµV)	Pre-Amp Gain (dB)	Antenna Factor (dB)	Net at 3m - Peak (dBµV/m)	Peak Limit at 3m (dBµV/m)	Margin (dB)
H	2483.500	53.8	33	29.4	50.2	74.0	-23.8
V	4960.000	43.0	33	34.9	44.9	74.0	-29.1
V	7440.000	43.0	33	37.9	47.9	74.0	-26.1
H	9920.000	44.4	33	40.4	51.8	74.0	-22.2
H	12400.000	47.7	33	40.5	55.2	74.0	-18.8
V	14880.000	50.9	33	38.4	56.3	74.0	-17.7

Notes:
1. Peak detector is used for the emission measurement.
2. Average detector is used for the average data of emission measurement.
3. All measurements were made at 3 meters.
4. Negative value in the margin column shows emission below limit.
5. Horn antenna is used for the emission over 1000MHz.
6. Emissions within the restricted band meets the requirement of FCC Part 15 Section 15.205 / RSS-Gen Section 8.10.
7. Measurement Uncertainty is ±5.3dB at a level of confidence of 95%.

TEST REPORT

RADIATED EMISSION DATA

Mode: BLE Operating

Table 4, BLE 2Mbps

Polarization	Frequency (MHz)	Reading (dBµV)	Pre-amp (dB)	Antenna Factor (dB)	Net at 3m (dBµV/m)	Limit at 3m (dBµV/m)	Margin (dB)
V	61.404	23.8	16	10.0	17.8	40.0	-22.2
V	109.783	20.0	16	14.0	18.0	43.5	-25.5
V	166.164	20.7	16	17.0	21.7	43.5	-21.8
V	196.598	18.9	16	16.0	18.9	43.5	-24.6
H	393.144	14.1	16	25.0	23.1	46.0	-22.9
H	910.881	17.3	16	33.0	34.3	46.0	-11.7

Notes:
1. Peak detector are used for the emission measurement.
2. All measurements were made at 3 meters.
3. Negative value in the margin column shows emission below limit.
4. Emissions within the restricted band meets the requirement of FCC Part 15 Section 15.205 / RSS-Gen Section 8.10.
5. Measurement Uncertainty is ±5.3dB at a level of confidence of 95%.

TEST REPORT

3.7 Transmitter Duty Cycle Calculation

Not Applicable – No average factor is required

3.8 AC Power Line Conducted Emission

☐ Not Applicable – EUT is only powered by battery for operation.

☒ EUT connects to AC power line. Emission Data is listed in following pages.

☐ Base Unit connects to AC power line and has transmission. Handset connects to AC power line but has no transmission. Emission Data of Base Unit is listed in following pages.

3.8.1 AC Power Line Conducted Emission Configuration Photograph

Worst Case Line-Conducted Configuration at 0.375 MHz.

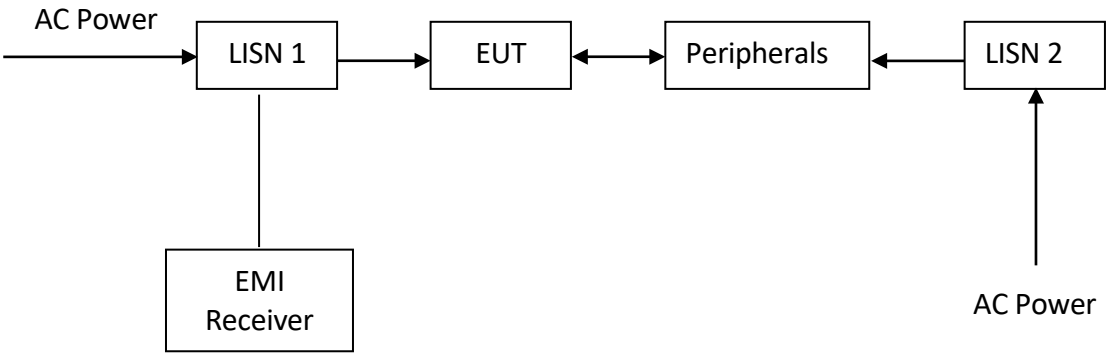
The worst-case line conducted configuration photographs are attached in the Appendix and saved with filename: Setup Photos.pdf.

3.8.2 AC Power Line Conducted Emission Data

The plot(s) and data in the following pages list the significant emission frequencies, the limit and the margin of compliance.

Passed by 2.08 dB margin

3.8.3 Conducted Emission Test Setup



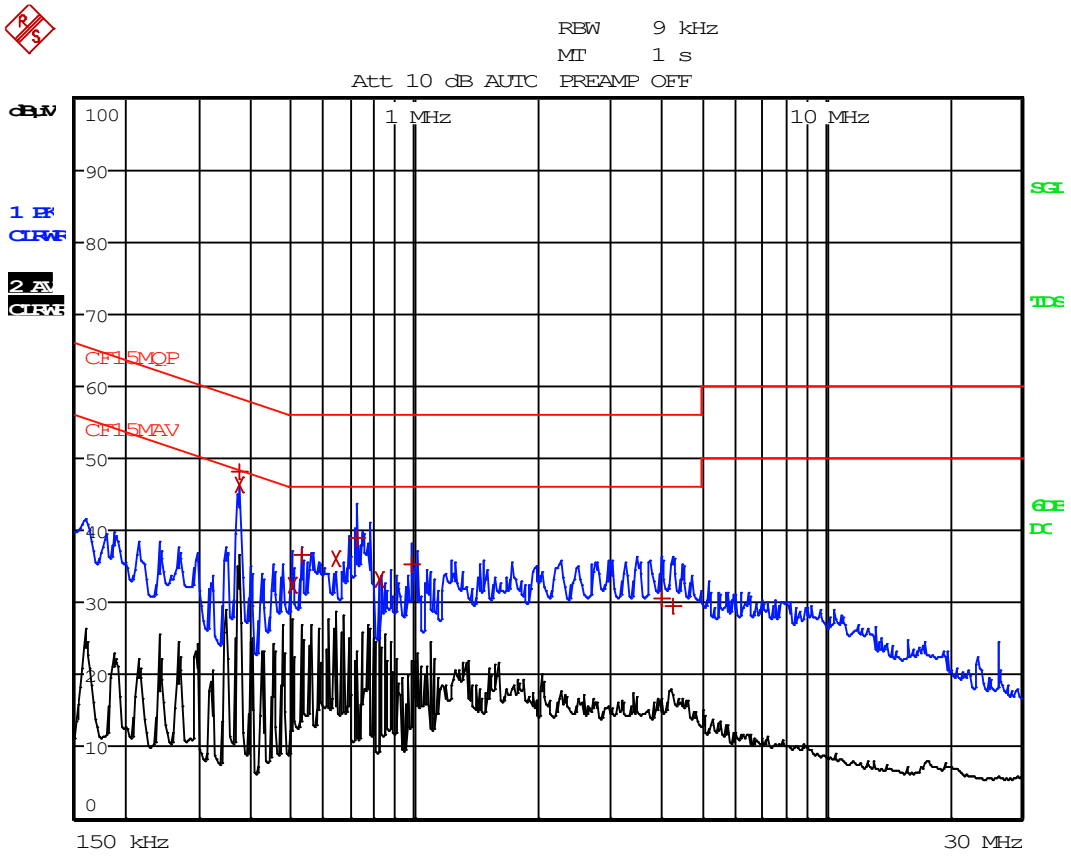
The EUT along with its peripherals were placed on a 1.0m(W)×1.5m(L) and 0.8m in height wooden table and the EUT was adjusted to maintain a 0.4 meter space from a vertical reference plane. The EUT was connected to power mains through a line impedance stabilization network (LISN), which provided 50 ohm coupling impedance for measuring instrument and the chassis ground was bounded to the horizontal ground plane of shielded room. The excess power cable between the EUT and the LISN was bundled.

All connecting cables of EUT and peripherals were moved to find the maximum emission.

TEST REPORT

AC POWER LINE CONDUCTED EMISSION

Worst Case: BLE Operating



TEST REPORT

AC POWER LINE CONDUCTED EMISSION

Worst Case: BLE Operating

EDIT PEAK LIST (Final Measurement Results)

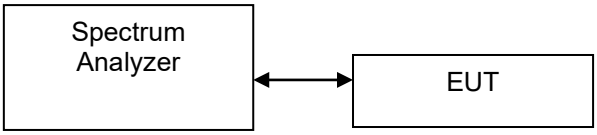
Trace1: CF15MQP
Trace2: CF15MAV
Trace3: ---

	TRACE	FREQUENCY	LEVEL dBµV		DELTA LIMIT dB
1	Quasi Peak	375 kHz	48.26	N	-10.12
2	CISPR Average	375 kHz	46.30	N	-2.08
2	CISPR Average	505.5 kHz	32.41	N	-13.58
1	Quasi Peak	532.5 kHz	36.72	N	-19.27
2	CISPR Average	640.5 kHz	36.20	N	-9.79
1	Quasi Peak	721.5 kHz	39.10	N	-16.89
2	CISPR Average	825 kHz	33.32	N	-12.67
1	Quasi Peak	987 kHz	35.17	N	-20.82
1	Quasi Peak	4.011 MHz	30.60	N	-25.40
1	Quasi Peak	4.2765 MHz	29.63	N	-26.36

TEST REPORT

OCCUPIED BANDWIDTH

The figure below shows the test setup, which is utilized to make these measurements.



Occupied Bandwidth Results: (BLE 2Mbps) (Refer to Test Data.pdf)

Frequency (MHz)	Occupied Bandwidth (MHz)
Low Channel: 2402 (P.6)	2.139
Middle Channel: 2440 (P.29)	2.139
High Channel: 2480 (P.46)	2.099

TEST REPORT

EXHIBIT 4 EQUIPMENT LIST

1) Radiated Emissions Test

Equipment	EMI Test Receiver (9kHz to 26.5GHz)	Biconical Antenna (30MHz to 300MHz)	Log Periodic Antenna
Registration No.	EW-3156	EW-3242	EW-3243
Manufacturer	ROHDESCHWARZ	EMCO	EMCO
Model No.	ESR26	3110C	3148B
Calibration Date	January 31, 2024	April 26, 2022	October 30, 2022
Calibration Due Date	January 31, 2025	July 26, 2024	July 30, 2024

Equipment	Double Ridged Guide Antenna (1GHz - 18GHz)	Active Loop Antenna (H-field) (9kHz to 30MHz)	RF Preamplifier (9kHz to 6000MHz)
Registration No.	EW-0194	EW-3326	EW-3006b
Manufacturer	EMCO	EMCO	SCHWARZBECK
Model No.	3115	6502	BBV9718
Calibration Date	May 10, 2023	January 05, 2024	October 20, 2023
Calibration Due Date	November 10, 2024	July 05, 2025	October 20, 2024

Equipment	2.4GHz Notch Filter	14m Double Shield RF Cable (9kHz - 6GHz)	RF Cable 14m (1GHz to 26.5GHz)
Registration No.	EW-3435	EW-2376	EW-2781
Manufacturer	MICROWAVE	RADIALL	GREATBILLION
Model No.	N0324413	n m/br56/bnc m 14m	SMA m/SHF5MPU /SMA m ra14m,26G
Calibration Date	September 26, 2023	September 19, 2023	January 16, 2024
Calibration Due Date	September 26, 2024	September 19, 2024	January 16, 2025

Equipment	12 metre RF Cable (1-40)GHz	Pyramidal Horn Antenna
Registration No.	EW-2774	EW-0905
Manufacturer	GREATBILLION	EMCO
Model No.	SMA m-m ra 12m 40G outdoor	3160-09
Calibration Date	January 16, 2024	December 15, 2023
Calibration Due Date	January 16, 2025	June 15, 2025

TEST REPORT

EXHIBIT 4 EQUIPMENT LIST (CONT'D)

2) Conducted Emissions Test

Equipment	RF Cable 240cm (RG142) (9kHz to 30MHz)	Artificial Mains Network	EMI Test Receiver (9kHz to 3GHz)
Registration No.	EW-2454	EW-3360	EW-3095
Manufacturer	RADIALL	ROHDESCHWARZ	ROHDESCHWARZ
Model No.	Bnc m st / 142 / bnc mra 240cm	ENV-216	ESCI
Calibration Date	June 13, 2023	April 07, 2024	January 18, 2024
Calibration Due Date	September 13, 2024	April 07, 2025	January 18, 2025

3) Conductive Measurement Test

Equipment	RF Power Meter with Power Sensor (N1921A)	EMI Test Receiver (9kHz to 26.5GHz)
Registration No.	EW-3309	EW-3156
Manufacturer	ROHDESCHWARZ	ROHDESCHWARZ
Model No.	NRP-Z81	ESR26
Calibration Date	February 14, 2023	January 31, 2024
Calibration Due Date	August 14, 2024	January 31, 2025

4) Control Software for Radiated Emission

Software Information	
Software Name	EMC32
Manufacturer	ROHDESCHWARZ
Software version	10.50.40

END OF TEST REPORT