

TEST REPORT

Report No.: 18071063HKG-002

Shenzhen Kin Yat Power Electronic Co., Ltd.

Application For Certification
(Original Grant)

FCC ID: 2ARDZBLIX

IC: 24375-BLIX

Transceiver

Prepared and Checked by:

Approved by:

Signed On File
Wong Cheuk Ho, Herbert
Lead Engineer

Wong Kwok Yeung, Kenneth
Senior Lead Engineer
Date: September 07, 2018

Intertek's standard Terms and Conditions can be obtained at our website <http://www.intertek.com/terms/>.

The test report only allows to be revised within the retention period unless further standard or the requirement was noticed.

This report is for the exclusive use of Intertek's Client and is provided pursuant to the agreement between Intertek and its Client. Intertek's responsibility and liability are limited to the terms and conditions of the agreement. Intertek assumes no liability to any party, other than to the Client in accordance with the agreement, for any loss, expense or damage occasioned by the use of this report. Only the Client is authorized to permit copying or distribution of this report and then only in its entirety. Any use of the Intertek name or one of its marks for the sale or advertisement of the tested material, product or service must first be approved in writing by Intertek. The observations and test results in this report are relevant only to the sample tested. This report by itself does not imply that the material, product, or service is or has ever been under an Intertek certification program.

© 2017 Intertek

TEST REPORT

GENERAL INFORMATION

Grantee:	Shenzhen Kin Yat Power Electronic Co., Ltd.
Grantee Address:	No.5 Xiang Shan Road, The 3 rd Industrial Zone, Luo Tian Village, Song Gang Street, Shenzhen City, Bao An District, 518105, China.
Contact Person:	Wallace Lei
Tel:	755-2706 2338
Fax:	N/A
e-mail:	lt.qa.mgr03@kinyat.com
Manufacturer:	Shenzhen Kin Yat Power Electronic Co., Ltd.
Manufacturer Address:	No.5 Xiang Shan Road, The 3 rd Industrial Zone, Luo Tian Village, Song Gang Street, Shenzhen City, Bao An District, 518105, China.
Brand Name:	Blix
FCC Model:	BLX-002-BLK-USA, BLX-002-WHT-USA
HVIN:	BLX-002-BLK-CAN, BLX-002-WHT-CAN
PMN:	BLX-002-BLK-CAN, BLX-002-WHT-CAN
Type of EUT:	Transceiver
Description of EUT:	Blix Blender
Serial Number:	N/A
FCC ID / IC:	2ARDZBLIX / 24375-BLIX
Date of Sample Submitted:	July 18, 2018
Date of Test:	July 18, 2018 to September 06, 2018
Report No.:	18071063HKG-002
Report Date:	September 07, 2018
Environmental Conditions:	Temperature: +10 to 40°C Humidity: 10 to 90%

TEST REPORT

SUMMARY OF TEST RESULT

Test Specification	Reference	Results
Transmitter Field Strength Frequency Stability	15.225 / RSS-210 B.6	Pass
Radiated Emission Radiated Emission on the Bandedge	15.209 / RSS-210 4.4	Pass
Radiated Emission in Restricted Bands	15.205 / RSS-210 4.1	Pass

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

FCC Part 15, October 1, 2017 Edition

RSS-210 Issue 9, August 2016

RSS-Gen Issue 5, April 2018

- Note:
1. The EUT uses a permanently attached antenna which, in accordance to section 15.203, is considered sufficient to comply with the provisions of this section.
 2. Pursuant to FCC part 15 Section 15.215(c), the 20 dB 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 excepted variations in temperature and supply voltage were considered.

TEST REPORT

TABLE OF CONTENTS

1.0 GENERAL DESCRIPTION 5

1.1 Product Description5

1.2 Related Submittal(s) Grants.....5

1.3 Test Methodology5

1.4 Test Facility5

2.0 SYSTEM TEST CONFIGURATION..... 6

2.1 Justification.....6

2.2 EUT Exercising Software6

2.3 Special Accessories.....6

2.4 Measurement Uncertainty6

2.5 Support Equipment List and Description6

3.0 EMISSION RESULTS..... 7

3.1 Field Strength Calculation.....7

3.2 Radiated Emission Configuration Photograph.....8

3.3 Radiated Emission Data.....8

3.4 Conducted Emission Configuration Photograph8

3.5 Conducted Emission Data.....8

3.6 Frequency Stability.....12

4.0 EQUIPMENT PHOTOGRAPHS 13

5.0 PRODUCT LABELLING..... 13

6.0 TECHNICAL SPECIFICATIONS 13

7.0 INSTRUCTION MANUAL 13

8.0 MISCELLANEOUS INFORMATION 14

8.1 Measured Bandwidth.....14

8.2 Discussion of Pulse Desensitization15

8.3 Calculation of Average Factor.....15

8.4 Emissions Test Procedures16

9.0 CONFIDENTIALITY REQUEST 21

10.0 EQUIPMENT LIST 21

TEST REPORT

1.0 GENERAL DESCRIPTION

1.1 Product Description

The Equipment Under test (EUT) is a Blix Blender which equips with a 13.56MHz RFIC tag reader. The 13.56MHz RFID tag reader reads the tag on the corresponding Cup to determine the Blending program using for the particular ingredient inside the Cup. The EUT is powered by 120VAC only.

For FCC, the Model(s): BLX-002-WHT-USA is the same as the Model: BLX-002-BLK-USA in electronics/electrical designs including software & firmware, PCB layout and construction design/physical design/enclosure/color.

For IC, the Model(s): BLX-002-WHT-CAN is the same as the Model: BLX-002-BLK-CAN in electronics/electrical designs including software & firmware, PCB layout and construction design/physical design/enclosure/color.

The Model: BLX-002-BLK-CAN (being sold to Canada) is the same as the Model: BLX-002-BLK-USA (being sold to USA only). The only differences between these models is to be sold to different market.

Antenna Type: Internal, Integral

For electronic filing, the brief circuit description is saved with filename: descri.pdf.

1.2 Related Submittal(s) Grants

This is a single application for certification of a transmitter.

1.3 Test Methodology

Both AC mains line-conducted and radiated emission measurements were performed according to the procedures in ANSI C63.10 (2013). All radiated measurements were performed in an 3m Chamber. Preliminary scans were performed in the 3m Chamber only to determine worst case modes. All radiated tests were performed at an antenna to EUT distance of 3 meters, unless stated otherwise in the “**Justification Section**” of this Application.

1.4 Test Facility

The 3m Chamber and conducted measurement facility used to collect the radiated data is located at Workshop No. 3, G/F., World-Wide Industrial Centre, 43-47 Shan Mei Street, Fo Tan, Sha Tin, N.T., Hong Kong. This test facility and site measurement data have been placed on file with the FCC and IC No. 2042V-1.

TEST REPORT

2.0 SYSTEM TEST CONFIGURATION

2.1 Justification

The system was configured for testing in a typical fashion (as a customer would normally use it), and in the confines as outlined in ANSI C63.10 (2013).

The device was powered by 120VAC.

For maximizing emissions below 30 MHz, the EUT was rotated through 360°, the centre of the loop antenna was placed 1 meter above the ground, and the antenna polarization was changed. For maximizing emission at and above 30 MHz, the EUT was rotated through 360°, the antenna height was varied from 1 meter to 4 meters above the ground plane, and the antenna polarization was changed. This step by step procedure for maximizing emissions led to the data report in Exhibit 3.0.

The unit was operated standalone and placed in the center of the turntable.

The equipment under test (EUT) was configured for testing in a typical fashion (as a customer would normally use it). The EUT was mounted to a plastic stand if necessary and placed on the wooden turntable, which enabled the engineer to maximize emissions through its placement in the three orthogonal axes.

2.2 EUT Exercising Software

There was no special software to exercise the device. Once the unit is powered up, it transmits the RF signal continuously.

2.3 Special Accessories

There are no special accessories necessary for compliance of this product.

2.4 Measurement Uncertainty

When determining of the test conclusion, the Measurement Uncertainty of test has been considered.

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.

2.5 Support Equipment List and Description

N/A.

TEST REPORT

3.0 EMISSION RESULTS

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.

3.1 Field Strength Calculation

The field strength is calculated by adding the Antenna Factor and Cable Factor, and subtracting the Amplifier Gain (if any), Average Factor (optional) from the measured reading. The basic equation with a sample calculation is as follows:

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

where FS = Field Strength in dB μ V/m

RA = Receiver Amplitude (including preamplifier) in dB μ V

CF = Cable Attenuation Factor in dB

AF = Antenna Factor in dB

AG = Amplifier Gain in dB

AV = Average Factor in dB

In the following table(s), the reading shown on the data table reflects the preamplifier gain. An example for the calculations in the following table is as follows:

$$FS = RR + LF$$

where FS = Field Strength in dB μ V/m

RR = RA - AG - AV in dB μ V

LF = CF + AF in dB

Assume a receiver reading of 52.0 dB μ V is obtained. The antenna factor of 7.4 dB and cable factor of 1.6 dB are added. The amplifier gain of 29 dB and average factor of 5 dB are subtracted, giving a field strength of 32 dB μ V/m. This value in dB μ V/m was converted to its corresponding level in μ V/m.

$$RA = 52.0 \text{ dB}\mu\text{V/m}$$

$$AF = 7.4 \text{ dB}$$

$$CF = 1.6 \text{ dB}$$

$$AG = 29.0 \text{ dB}$$

$$AV = 5.0 \text{ dB}$$

$$FS = RR + LF$$

$$FS = 18 + 9 = 27 \text{ dB}\mu\text{V/m}$$

$$RR = 18.0 \text{ dB}\mu\text{V}$$

$$LF = 9.0 \text{ dB}$$

$$\text{Level in } \mu\text{V/m} = \text{Common Antilogarithm } [(27 \text{ dB}\mu\text{V/m})/20] = 22.4 \mu\text{V/m}$$

TEST REPORT

3.2 Radiated Emission Configuration Photograph

The worst case in radiated emission was found at 480.011 MHz

For electronic filing, the worst case radiated emission configuration photographs are saved with filename: radiated photos.pdf.

3.3 Radiated Emission Data

The data on the following page lists the significant emission frequencies, the limit and the margin of compliance. Numbers with a minus sign are below the limit.

Judgment: Passed by 6.0 dB

3.4 Conducted Emission Configuration Photograph

The worst case in line-conducted emission was found at 0.690 MHz

For electronic filing, the worst case line-conducted configuration photographs are saved with filename: conducted photo.pdf.

3.5 Conducted Emission Data

For electronic filing, the graph and data table of conducted emission is saved with filename: conducted.pdf.

Judgment: Pass by 3.6 dB

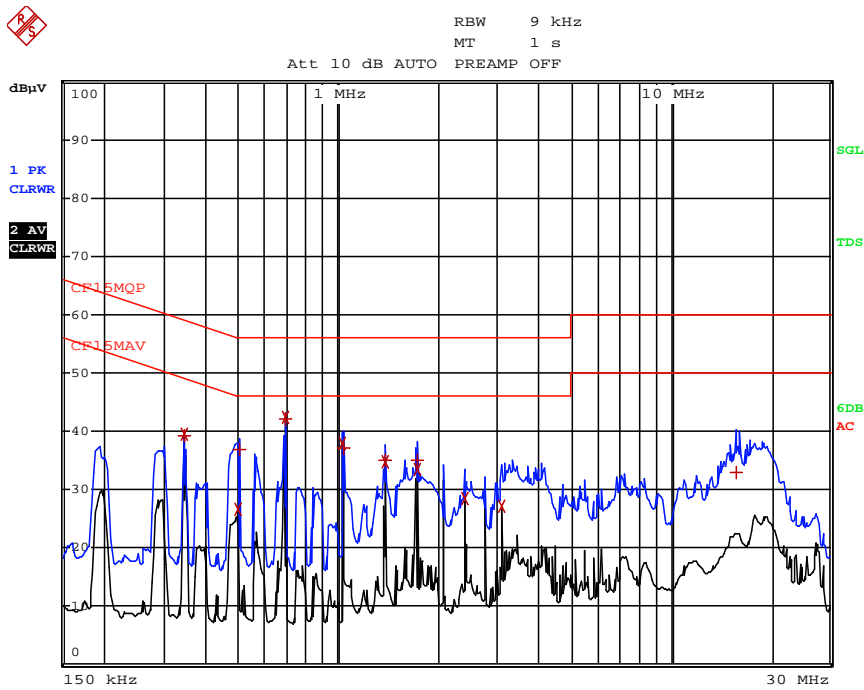
TEST REPORT

CONDUCTED EMISSION

FCC Model: BLX-002-BLK-USA / IC HVIN: BLX-002-BLK-CAN

Date of Test: September 06, 2018

Worst-Case Operating Mode: 13.56MHz Operating



EDIT PEAK LIST (Final Measurement Results)				
TRACE	FREQUENCY	LEVEL dBµV	DELTA	LIMIT dB
Trace1:	CF15MQP			
Trace2:	CF15MAV			
Trace3:	---			
TRACE	FREQUENCY	LEVEL dBµV	DELTA	LIMIT dB
1	Quasi Peak 343.5 kHz	39.21 N	-19.90	
2	CISPR Average 343.5 kHz	39.50 L1	-9.61	
2	CISPR Average 496.5 kHz	26.52 L1	-19.53	
1	Quasi Peak 501 kHz	36.80 L1	-19.20	
1	Quasi Peak 690 kHz	42.14 N	-13.85	
2	CISPR Average 690 kHz	42.40 N	-3.59	
2	CISPR Average 1.032 MHz	37.99 N	-8.00	
1	Quasi Peak 1.0365 MHz	37.20 L1	-18.79	
1	Quasi Peak 1.3785 MHz	35.12 N	-20.87	
2	CISPR Average 1.3785 MHz	34.75 N	-11.24	
1	Quasi Peak 1.725 MHz	34.92 N	-21.07	
2	CISPR Average 1.725 MHz	33.42 N	-12.57	
2	CISPR Average 2.4135 MHz	28.37 N	-17.62	
2	CISPR Average 3.102 MHz	27.12 N	-18.87	
1	Quasi Peak 15.756 MHz	32.90 L1	-27.10	

Note: Measurement Uncertainty is ± 4.2 dB at a level of confidence of 95%.

TEST REPORT

RADIATED EMISSIONS

FCC Model: BLX-002-BLK-USA / IC HVIN: BLX-002-BLK-CAN

Date of Test: September 06, 2018

Worst-Case Operating Mode: Transmitting

Table 1
Pursuant to FCC Part 15 Section 15.225 / RSS-210 B6 Requirement

Polarization	Frequency (MHz)	Reading (dB μ V)	Pre-amp (dB)	Antenna Factor (dB)	Net at 3m (dB μ V/m)	Distance Factor (-dB)	Calculated at 30m (dB μ V/m)	Limit at 30m (dB μ V/m)	Margin (dB)
O	13.560	45.2	0	10.8	56.0	40.0	16.0	84.0	-68.0
O	27.120	15.5	0	9.5	25.0	40.0	-15.0	29.5	-44.5

Polari-zation	Frequency (MHz)	Reading (dB μ V)	Pre-Amp (dB)	Antenna Factor (dB)	Net at 3m (dB μ V/m)	Limit at 3m (dB μ V/m)	Margin (dB)
V	40.680	28.4	16	10.0	21.3	40.0	-18.7
V	54.240	30.2	16	11.0	25.2	40.0	-14.8
V	67.800	34.3	16	8.0	26.4	40.0	-13.6
H	81.360	29.1	16	7.0	21.8	40.0	-18.2
H	94.920	29.7	16	11.0	23.3	43.5	-20.2
H	108.480	24.4	16	14.0	22.2	43.5	-21.3
H	122.040	27.6	16	14.0	25.4	43.5	-18.1
H	135.640	30.3	16	14.0	28.6	43.5	-14.9
H	149.210	28.1	16	14.0	26.0	43.5	-17.4

- NOTES:
1. Peak Detector Data unless otherwise stated.
 2. All measurements were made at 3 meters. Harmonic emissions not detected at the 3-meter distances were measured at 0.3-meter and an inverse proportional extrapolation was performed to compare the signal level to the 3-meter limit. No other harmonic emissions than those reported were detected at a test distance of 0.3-meter.
 3. Negative sign in the column shows value below limit.
 4. Loop antenna is used for the emissions below 30MHz.
 5. Emission (the row indicated by **bold italic**) within the restricted band meets the requirement of FCC Part 15 Section 15.205 / RSS-210 4.1.
 6. Measurement Uncertainty is ± 5.3 dB at a level of confidence of 95%.

TEST REPORT

FCC Model: BLX-002-BLK-USA / IC HVIN: BLX-002-BLK-CAN
Date of Test: September 06, 2018
Worst-Case Operating Mode: 13.56MHz Operating

Table 2
Pursuant to FCC Part 15 Section 15.209 / RSS-210 4.4 Requirement

Polarization	Frequency (MHz)	Reading (dBµV)	Pre-amp (dB)	Antenna Factor (dB)	Net at 3m (dBµV/m)	Limit at 3m (dBµV/m)	Margin (dB)
V	160.037	35.5	16	16.0	35.5	43.5	-8.0
H	245.593	31.4	16	20.0	35.4	46.0	-10.6
H	319.972	29.2	16	23.0	36.2	46.0	-9.8
V	480.011	30.0	16	26.0	40.0	46.0	-6.0
V	490.701	23.9	16	26.0	33.9	46.0	-12.1
H	640.016	20.2	16	29.0	33.2	46.0	-12.8

- NOTES:
1. Quasi-Peak Detector Data unless otherwise stated.
 2. All measurements were made at 3 meters. Harmonic emissions not detected at the 3-meter distances were measured at 0.3-meter and an inverse proportional extrapolation was performed to compare the signal level to the 3-meter limit. No other harmonic emissions than those reported were detected at a test distance of 0.3-meter.
 3. Negative sign in the column shows value below limit.
 4. Horn antenna is used for the emission over 1000MHz.
 5. Emission (the row indicated by **bold italic**) within the restricted band meets the requirement of FCC Part 15 Section 15.205 / RSS-210 4.1.
 6. Measurement Uncertainty is ±5.3dB at a level of confidence of 95%.

TEST REPORT

3.6 Frequency Stability

FCC Part 15 Section 15.225 / RSS-210 Section B.6

**Data Table
Frequency Deviation with Voltage Variation**

Operating frequency		13.560MHz		
Test Voltage (V)	Temperature (°C)	Measured frequency (MHz)	Frequency error (%)	Limit (%)
120	+ 50	13.560288	+0.00212	±0.01
120	+ 40	13.560296	+0.00218	±0.01
120	+ 30	13.560305	+0.00225	±0.01
120	+ 20	13.560308	+0.00227	±0.01
120	+ 10	13.560312	+0.00230	±0.01
120	0	13.560342	+0.00252	±0.01
120	- 10	13.560368	+0.00271	±0.01
120	- 20	13.560408	+0.00301	±0.01

Nominal frequency Temperature (°C) Humidity (%)	Voltage (V)	Frequency (MHz)	Frequency error (ppm)	Limit (ppm)	Result
25°C 50%	138	13.560304	+22.4	100	Pass
25°C 50%	120	13.560306	+22.6	100	Pass
25°C 50%	102	13.560314	+23.2	100	Pass
Min -30C 0%	138	13.560406	+29.9	100	Pass
Min -30C 0%	120	13.560412	+30.4	100	Pass
Min -30C 0%	102	13.560414	+30.5	100	Pass
Max 50C 50%	138	13.560284	+20.9	100	Pass
Max 50C 50%	120	13.560286	+21.1	100	Pass
Max 50C 50%	102	13.560298	+20.0	100	Pass

The device is deemed to comply with requirement of FCC15.225(e).

TEST REPORT

4.0 EQUIPMENT PHOTOGRAPHS

For electronic filing, the photographs are saved with filename: external photos.pdf and internal photos.pdf.

5.0 PRODUCT LABELLING

For electronics filing, the FCC ID label artwork and the label location are saved with filename: label.pdf.

6.0 TECHNICAL SPECIFICATIONS

For electronic filing, the block diagram and schematic of the tested EUT are saved with filename: block.pdf and circuit.pdf respectively.

7.0 INSTRUCTION MANUAL

For electronic filing, a preliminary copy of the Instruction Manual is saved with filename: manual.pdf.

This manual will be provided to the end-user with each unit sold/leased in the United States and Canada.

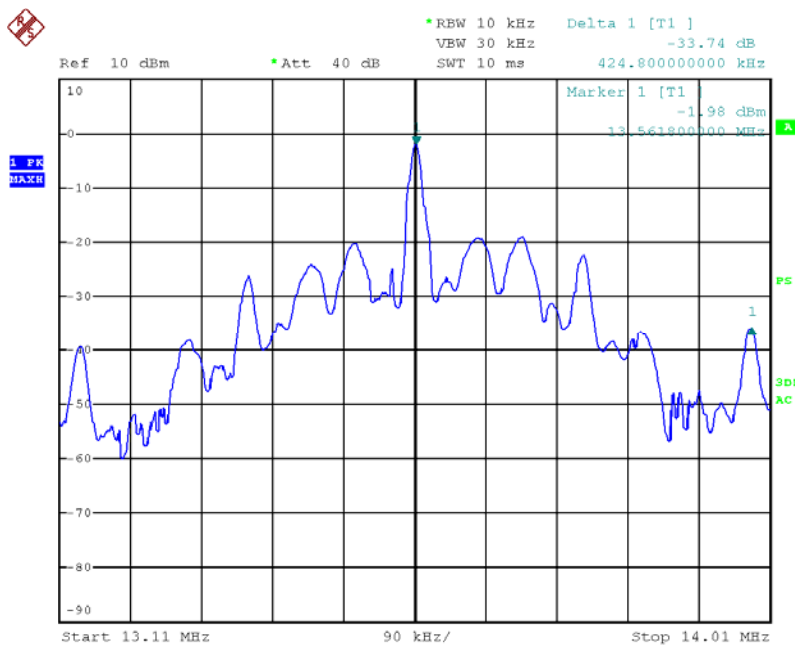
TEST REPORT

8.0 MISCELLANEOUS INFORMATION

The miscellaneous information includes details of the test procedure and measured bandwidth / calculation of factor such as pulse desensitization and averaging factor (calculation and timing diagram).

8.1 Measured Bandwidth

The plot saved in bw.pdf which shows the fundamental emission is confined in the specified band. The emission of the fundamental is 16 dBμV/m and it is below the limit of 50.5 dBμV/m in the range of (13.410-13.553MHz) and (13.710-14.010MHz) and the limit of 40.5 dBμV/m in the frequency range of (13.110-14.410MHz) and (13.710-14.010MHz). In the frequency range from 13.110-14.010MHz, we can not find any emission higher than the fundamental emission. Therefore they meet the requirement of Section 15.225(a), (b), (c), & (d).



TEST REPORT

8.2 Discussion of Pulse Desensitization

Pulse desensitivity is not applicable for this device. Since the transmitter transmits the RF signal continuously.

8.3 Calculation of Average Factor

The average factor is not applicable for this device as the transmitted signal is a continuously signal.

TEST REPORT

8.4 Emissions Test Procedures

The following is a description of the test procedure used by Intertek Testing Services Hong Kong Ltd. in the measurements of transmitter operating under the Part 15, Subpart C rules.

The transmitting equipment under test (EUT) is placed on a wooden turntable which is four feet in diameter and approximately 0.8m in height above the ground plane for emission measurement at or below 1GHz and 1.5m in height above the ground plane for emission measurement above 1GHz. During the radiated emissions test, the turntable is rotated and any cables leaving the EUT are manipulated to find the configuration resulting in maximum emissions. The EUT is adjusted through all three orthogonal axis to obtain maximum emission levels. The antenna height and polarization are also varied during the testing to search for maximum signal levels. The height of the antenna is varied from one to four meters.

Detector function for radiated emissions is in peak mode. Average readings, when required, are 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 Exhibit 8.3.

The frequency range scanned is 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 40 GHz, whichever is lower. For line conducted emissions, the range scanned is 150 kHz to 30 MHz.

TEST REPORT

8.4 Emissions Test Procedures (cont'd)

The EUT is warmed up for 15 minutes prior to the test.

AC power to the unit is varied from 85% to 115% nominal and variation in the fundamental emission field strength is recorded. If battery powered, a new, fully charged battery is used.

Conducted measurements were made as described in ANSI C63.10 (2013).

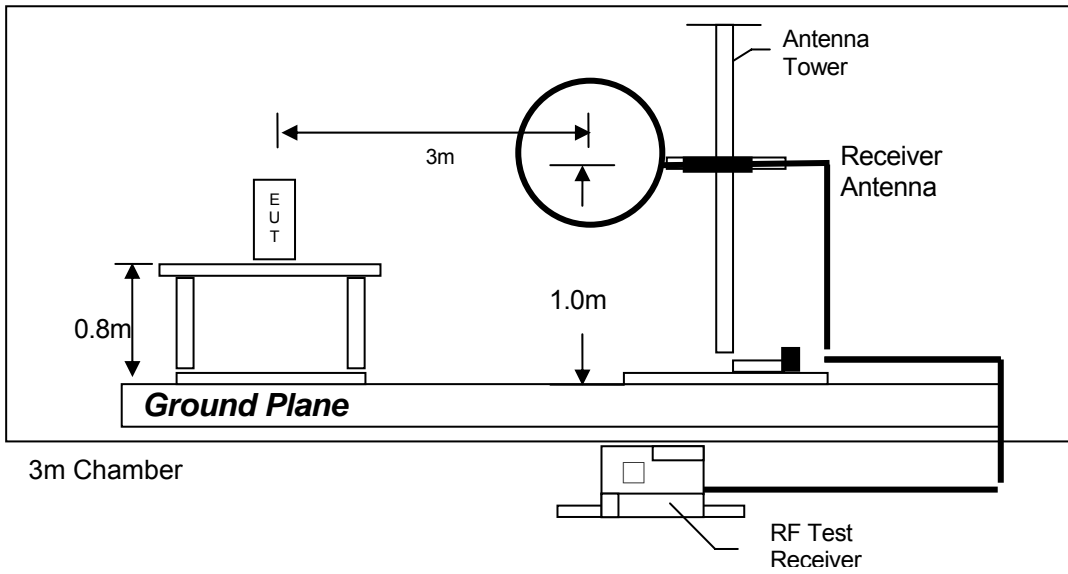
The IF bandwidth used for measurement of radiated signal strength was 100 kHz or greater when frequency is below 1000 MHz. Where pulsed transmissions of short enough pulse duration warrant, a greater bandwidth is selected according to the recommendations of Hewlett Packard Application Note 150-2. A discussion of whether pulse desensitivity is applicable to this unit is included in this report (See Exhibit 8.1). Above 1000 MHz, a resolution bandwidth of 3 MHz is used.

Transmitter measurements are normally conducted at a measurement distance of three meters. However, to assure low enough noise floor in the forbidden bands and above 1 GHz, signals are acquired at a distance of one meter or less. All measurements are extrapolated to three meters using inverse scaling, unless otherwise reported. Measurements taken at a closer distance are so marked.

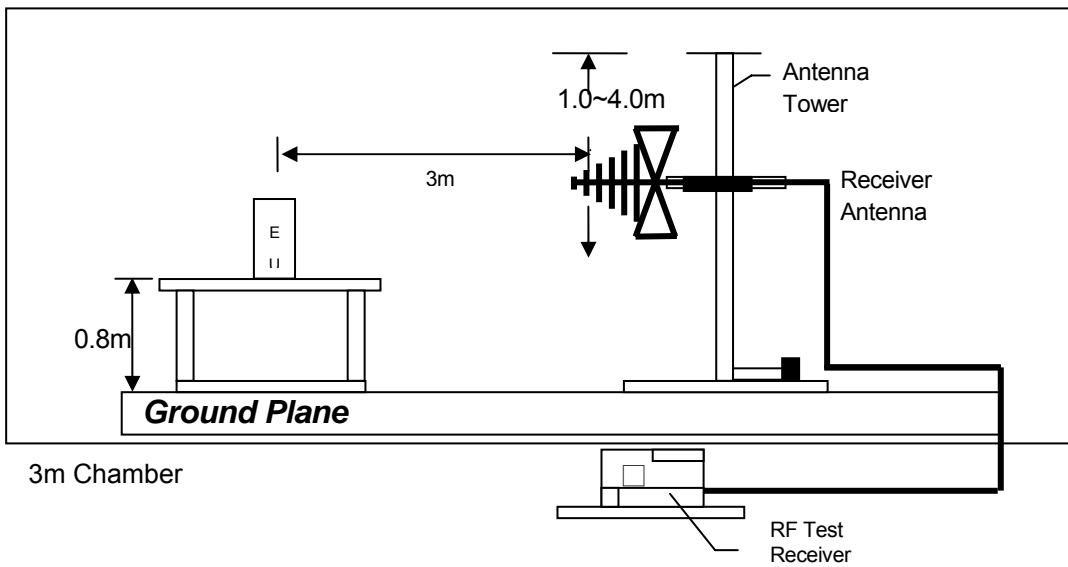
TEST REPORT

8.4.1 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 30MHz



Test setup of radiated emissions above 1GHz

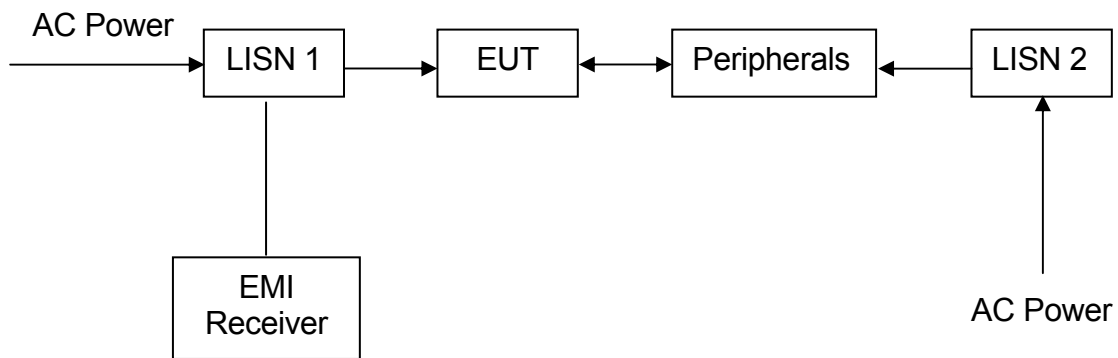
TEST REPORT

8.4.2 Conducted Emission Test Procedures

For tabletop equipment, the EUT along with its peripherals were placed on a 1.0m(W)×1.5m(L) and 0.8m in height wooden table. For floor-standing equipment, the EUT and all cables were insulated, if required, from the ground plane by up to 12 mm of insulating material. 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.

8.4.3 Conducted Emission Test Setup



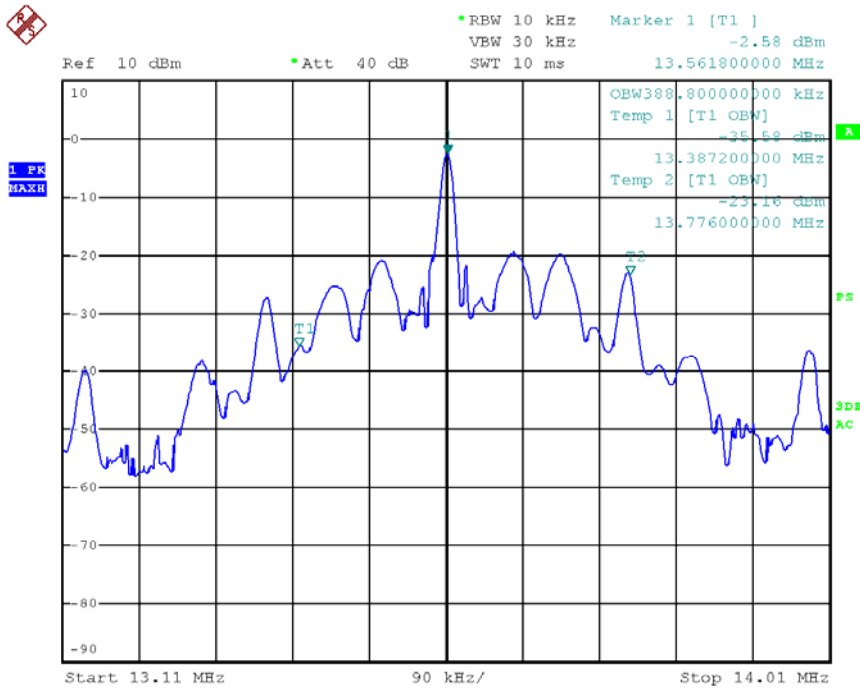
TEST REPORT

8.5 Occupied Bandwidth

Occupied Bandwidth Results:

Occupied Bandwidth (kHz)	
13.56MHz	388.8

The worst case is shown as below



TEST REPORT

9.0 CONFIDENTIALITY REQUEST

For electronic filing, a preliminary copy of the confidentiality request is saved with filename: request.pdf.

10.0 EQUIPMENT LIST

1) Radiated Emissions Test

Equipment	Emi Test Receiver	Spectrum Analyzer	Biconical Antenna
Registration No.	EW-3156	EW-3281	EW-0571
Manufacturer	R&S	ROHDESCHWARZ	EMCO
Model No.	ESCI	FSV40	3104C
Calibration Date	November 10, 2017	January 02, 2018	February 27, 2018
Calibration Due Date	November 10, 2018	January 02, 2019	August 27, 2019

Equipment	Log Periodic Antenna	Double Ridged Guide Antenna	14m Double Shield RF Cable (20MHz to 6GHz)
Registration No.	EW-0447	EW-1133	EW-2505
Manufacturer	EMCO	EMCO	RADIALL
Model No.	3148	3115	nm / br5d / sma 14m
Calibration Date	January 17, 2018	May 24, 2018	October 30, 2017
Calibration Due Date	July 17, 2019	November 24, 2018	October 30, 2018

Equipment	RF Cable 14m (1GHz to 26.5GHz)	RF Pre-amplifier 3 pcs (9kHz to 40GHz)	Solid State Low Noise Preamp Assembly (1 - 18)GHz
Registration No.	EW-2781	EW-3006	EW-3229
Manufacturer	GREATBILLION	SCHWARZBECK	BONN ELEKTRO
Model No.	SMA m/SHF5MPU /SMA m ra14m,26G	BBV 9718 BBV9744 BBV 9721	BLMA 0118-5G
Calibration Date	September 25, 2017	January 30, 2018	January 30, 2018
Calibration Due Date	September 25, 2018	January 30, 2019	January 30, 2019

Equipment	Pyramidal Horn Antenna	Active Loop H-field Antenna (9kHz to 30MHz)
Registration No.	EW-0905	EW-2313
Manufacturer	EMCO	ELECTROMETRI
Model No.	3160-09	EM-6876
Calibration Date	August 18, 2017	March 08, 2018
Calibration Due Date	February 18, 2019	September 08, 2019

TEST REPORT

2) Conducted Emissions Test

Equipment	Artificial Mains Network	RF Cable 120cm (RG142) (9kHz to 30MHz)	EMI Test Receiver
Registration No.	EW-2501	EW-2453	EW-2500
Manufacturer	ROHDESCHWARZ	RADIALL	ROHDESCHWARZ
Model No.	ENV-216	bnc m st / 142 / bnc m st	ESCI
Calibration Date	February 14, 2018	September 15, 2017	October 13, 2017
Calibration Due Date	February 14, 2019	September 15, 2018	October 13, 2018

3) Bandedge Measurement

Equipment	RF Cable (up to 40GHz) 1.5m length	Spectrum Analyzer
Registration No.	EW-3104	EW-2329
Manufacturer	N/A	R&S
Model No.	SMA-M to SMA-M	FSP3
Calibration Date	July 03, 2018	September 28, 2017
Calibration Due Date	July 03, 2019	September 28, 2018

END OF TEST REPORT