TEST REPORT

Applicant:	Shenzhen ArtFast Tech Co., Ltd
Address:	502 Building 11, Longjun Industrial Estate, Longping Community, Dalang subdistrict, Longhua District, Shenzhen, China
Equipment Type:	Synido SW100
Model Name:	SW100
Brand Name:	Synido
FCC ID:	2BA7V-SY00925
Test Standard:	47 CFR Part 15 Subpart E (refer to section 3.1)
Sample Arrival Date:	Sep. 29, 2025
Test Date:	Nov. 12, 2025 - Nov. 25, 2025
Date of Issue:	Dec. 09, 2025

ISSUED BY:

Shenzhen BALUN Technology Co., Ltd.

Tested by: Yang Wenxuan **Checked by:** Ye Hongji **Approved by:** Tolan Tu (Testing Director)

Revision History

Version	Issue Date	Revisions
Rev. 01	Dec. 09, 2025	Initial Issue

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1 GENERAL INFORMATION

1.1 Test Laboratory

Name	Shenzhen BALUN Technology Co., Ltd.
Address	Block B, 1/F, Baisha Science and Technology Park, Shahe Xi Road, Nanshan District, Shenzhen, Guangdong Province, P. R. China
Phone Number	+86 755 6685 0100

1.2 Test Location

Name	Shenzhen BALUN Technology Co., Ltd.
Location	☐ Block B, 1/F, Baisha Science and Technology Park, Shahe Xi Road, Nanshan District, Shenzhen, Guangdong Province, P. R. China
	☑ 1/F, Building B, Ganghongji High-tech Intelligent Industrial Park, No. 1008, Songbai Road, Yangguang Community, Xili Sub-district, Nanshan District, Shenzhen, Guangdong Province, P. R. China
Accreditation Certificate	The laboratory is a testing organization accredited by FCC as a accredited testing laboratory. The designation number is CN1196.

2 PRODUCT INFORMATION

2.1 Applicant Information

Applicant	Shenzhen ArtFast Tech Co., Ltd
Address	502 Building 11, Longjun Industrial Estate, Longping Community, Dalang subdistrict, Longhua District, Shenzhen, China

2.2 Manufacturer Information

Manufacturer	Shenzhen ArtFast Tech Co., Ltd
Address	502 Building 11, Longjun Industrial Estate, Longping Community, Dalang subdistrict, Longhua District, Shenzhen, China

2.3 General Description for Equipment under Test (EUT)

EUT Name	Synido SW100
Model Name Under Test	SW100
Series Model Name	N/A
Description of Model name differentiation	N/A
Hardware Version	SY009-TX-V01-20250716
Software Version	KuaiYi_SY009_kt1801_sdk_1.5.14_V1.0.23_Release_6D1FCE38.bin
Dimensions (Approx.)	N/A
Weight (Approx.)	N/A

2.4 Technical Information

Network and Wireless connectivity	5.8G ISM Band

The requirement for the following technical information of the EUT was tested in this report:

Frequency Range	5.8G ISM Band: 5725 MHz to 5850 MHz
Product Type	☒ Mobile ☐ Portable ☐ Fix Location
Maximum Output Power	5.8G ISM Band: 3.32 mW
Antenna System (eg., MIMO, Smart Antenna)	N/A
Categorization as Correlated or Completely Uncorrelated	N/A
Test Channel	Low Channel (5727 MHz), Middle Channel (5787 MHz), High Channel (5847 MHz)
Antenna Type	Ceramic Antenna
Antenna Gain	5.8G ISM Band: 2.87 dBi
About the Product	The equipment is Synido SW100, intended for used with information technology equipment.

Note: The above EUT information in section 2.4 was declared by manufacturer and for more detailed features description, please refer to the manufacturer's specifications or user's manual.

3 SUMMARY OF TEST RESULTS

3.1 Test Standards

No.	Identity	Document Title
1	47 CFR Part 15 Subpart E	Unlicensed National Information Infrastructure Devices
2	KDB Publication 789033 D02v02r01	Guidelines for Compliance Testing of Unlicensed National Information Infrastructure (U-NII) Devices Part 15, Subpart E
3	ANSI C63.10-2020	American National Standard of Procedures for Compliance Testing of Unlicensed Wireless Devices

3.2 Test Verdict

No.	Description	FCC Part No.	Test Result	Verdict
1	Antenna Requirement	15.203	--	Pass[Note1]
2	RF Output Power	15.407(a)	ANNEX A.1	Pass
3	Emission Bandwidth & 99% Occupied Bandwidth	15.407(a)	ANNEX A.2	Pass
4	6 dB bandwidth	15.407(e)	ANNEX A.3	Pass
5	Power Spectral Density	15.407(a)	ANNEX A.4	Pass
6	Conducted Emission	15.207	ANNEX A.5	Pass
7	Radiated Spurious Emissions and Band Edge (Restricted-band)	15.407(b)	ANNEX A.6	Pass

Note [1]: The EUT has a permanently and irreplaceable attached antenna, which complies with the requirement FCC 15.203.

Note [2]: Under all normal operating conditions specified in the user manual, frequency stability can keep radiation within the operating frequency band.

4 GENERAL TEST CONFIGURATIONS

4.1 Test Environments

During the measurement, the normal environmental conditions were within the listed ranges:

Relative Humidity	46% to 68%	
Atmospheric Pressure	100 kPa to 102 kPa	
Temperature	NT (Normal Temperature)	+20.7℃ to +25.4℃
Working Voltage of the EUT	NV (Normal Voltage)	3.7 V

4.2 Test Equipment List

Description	Manufacturer	Model	Serial No.	Cal. Date	Cal. Due
Spectrum Analyzer	KEYSIGHT	N9020A	MY54420186	2025.05.21	2026.05.20
Power meter	R&S	NRP8S	101498	2025.07.07	2026.07.06
Spectrum Analyzer	R&S	FSV40	101544	2024.12.16	2025.12.15
Test Antenna-Horn	A-INFO	LB-180400KF	J211060273	2024.06.15	2027.06.14
Test Antenna-Bi-Log	Schwarzbeck	VULB 9163	01414	2023.11.03	2026.11.02
Test Antenna-Horn	Schwarzbeck	BBHA 9120D	02459	2023.10.26	2026.10.25
Test Antenna-Loop	Schwarzbeck	FMZB 1513-60	00015	2024.05.07	2026.05.06
Anechoic Chamber	YIHENG	C8-966	N/A	2024.05.15	2027.05.11
EMI Receiver	Keysight	N9038A	MY55330121	2025.04.16	2026.04.15
EMI Receiver	keysight	N9038B	MY61380132	2025.04.01	2026.03.31
LISN	SCHWARZBECK MESS-ELEKTRONIK	NSLK8127	01009	2025.07.15	2026.07.14
Shielded Enclosure	YiHeng Electronic Co., Ltd	4.3m*2.9m*2.4 m	235	2024.11.05	2027.11.04
EMI Receiver	ROHDE&SCHWARZ	ESRP	101036	2025.06.16	2026.06.15
Test Antenna-Loop	SCHWARZBECK	FMZB 1519	1519-037	2024.01.23	2027.01.22
Amplifier	COM-MV	ZT30-1000M	B2018054558	2024.11.28	2025.11.27
Anechoic Chamber	EMC Electronic Co., Ltd	20.10*11.60*7. 35m	130	2024.07.13	2027.07.12

4.3 Test Software List

Description	Manufacturer	Software Version	Serial No.	Applicable test Setup
BL410R	BALUN	V2.1.1.488	N/A	The section 4.5.1
BL410E	BALUN	V22.930	N/A	The section 4.5.2&4.5.3&4.5.4&4.5.5

4.4 Measurement Uncertainty

The following measurement uncertainty levels have been estimated for tests performed on the EUT as specified in CISPR 16-4-2.

This uncertainty represents an expanded uncertainty expressed at approximately the 95% confidence level using a coverage factor of k=2.

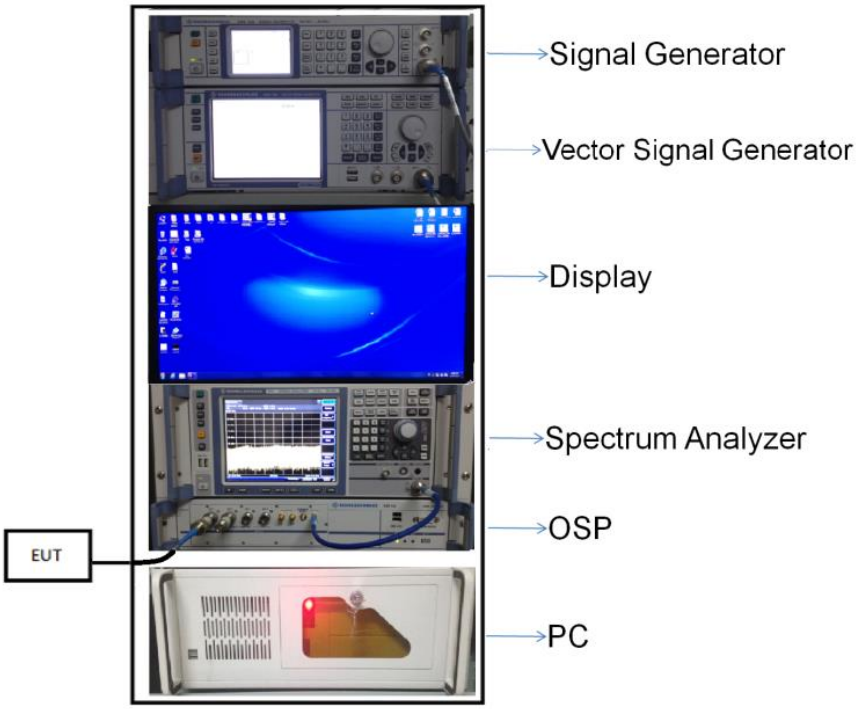
Parameters	Uncertainty
Occupied Channel Bandwidth	2.8%
RF output power, conducted	1.28 dB
Power Spectral Density, conducted	1.30 dB
Unwanted Emissions, conducted	1.84 dB
All emissions, radiated	5.36 dB
Temperature	0.8°C
Humidity	4%

4.5 Description of Test Setup

4.5.1 For Antenna Port Test

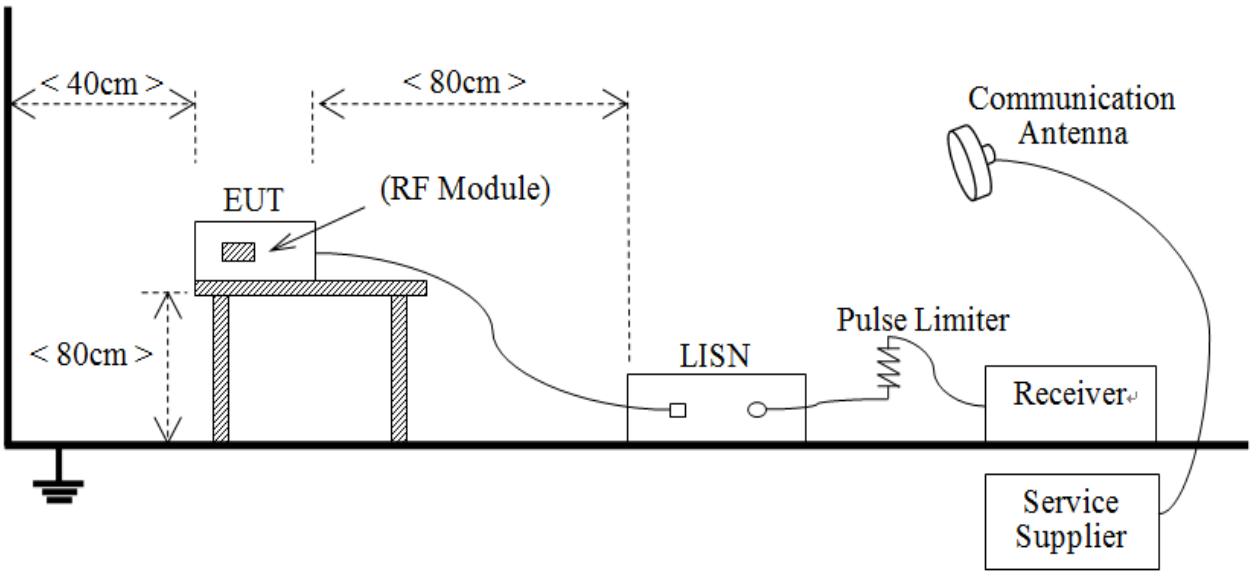
Conducted value (dBm) = Measurement value (dBm) + cable loss (dB)

For example: the measurement value is 10 dBm and the cable 0.5dBm used, then the final result of EUT:
Conducted value (dBm) = 10 dBm + 0.5 dB = 10.5 dBm



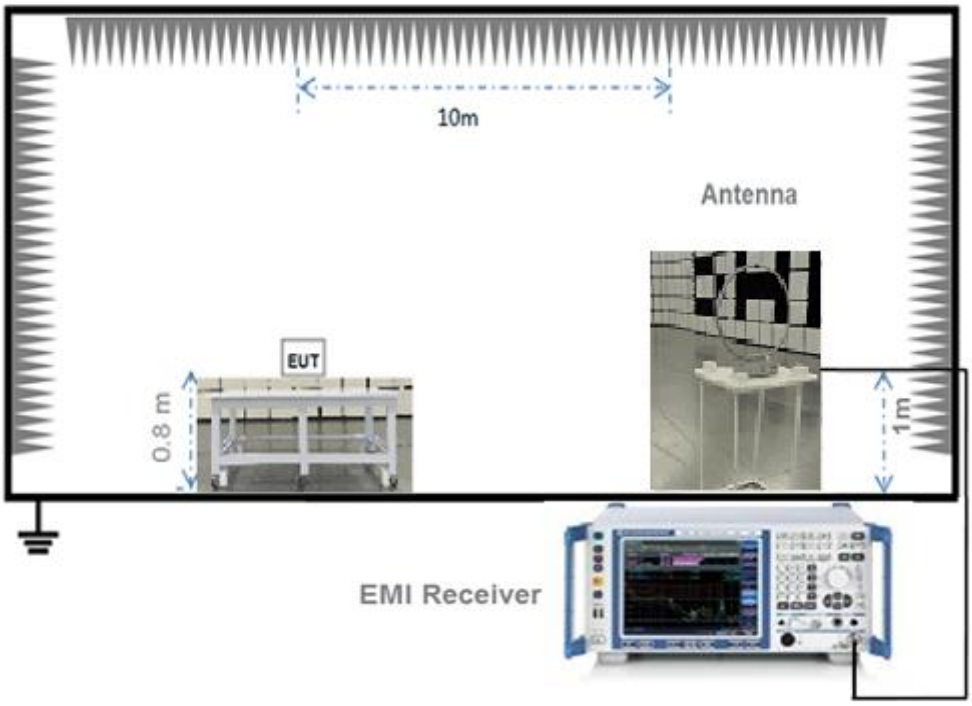
(Diagram 1)

4.5.2 For AC Power Supply Port Test



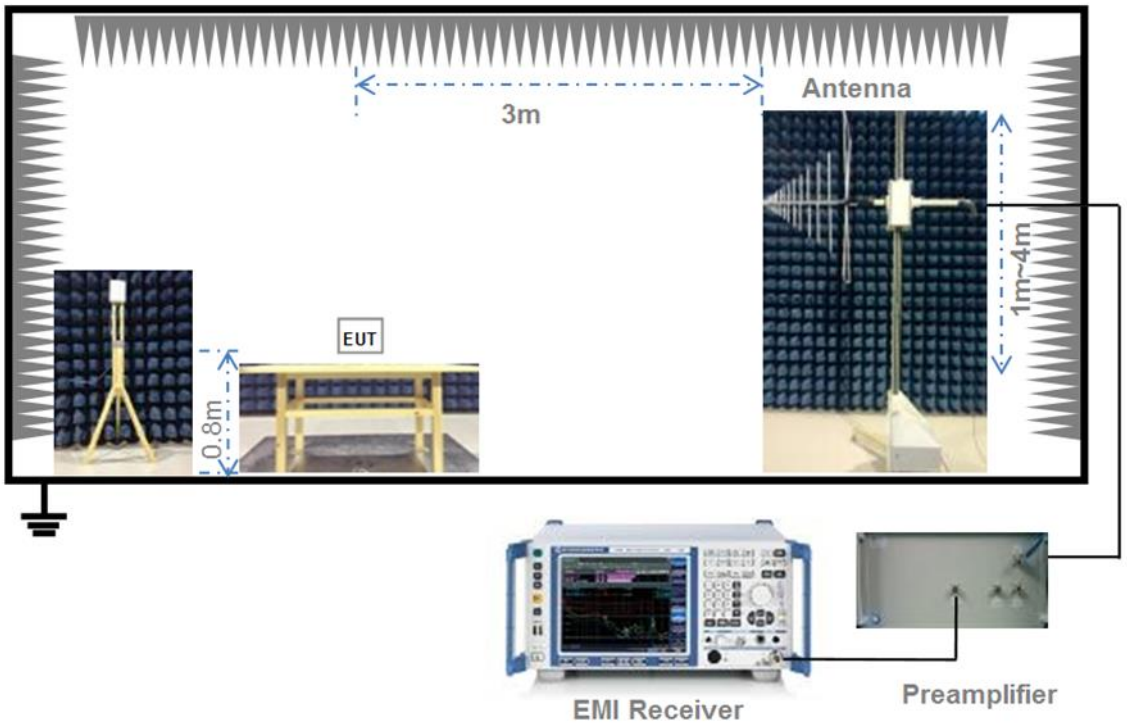
(Diagram 2)

4.5.3 For Radiated Test (Below 30 MHz)



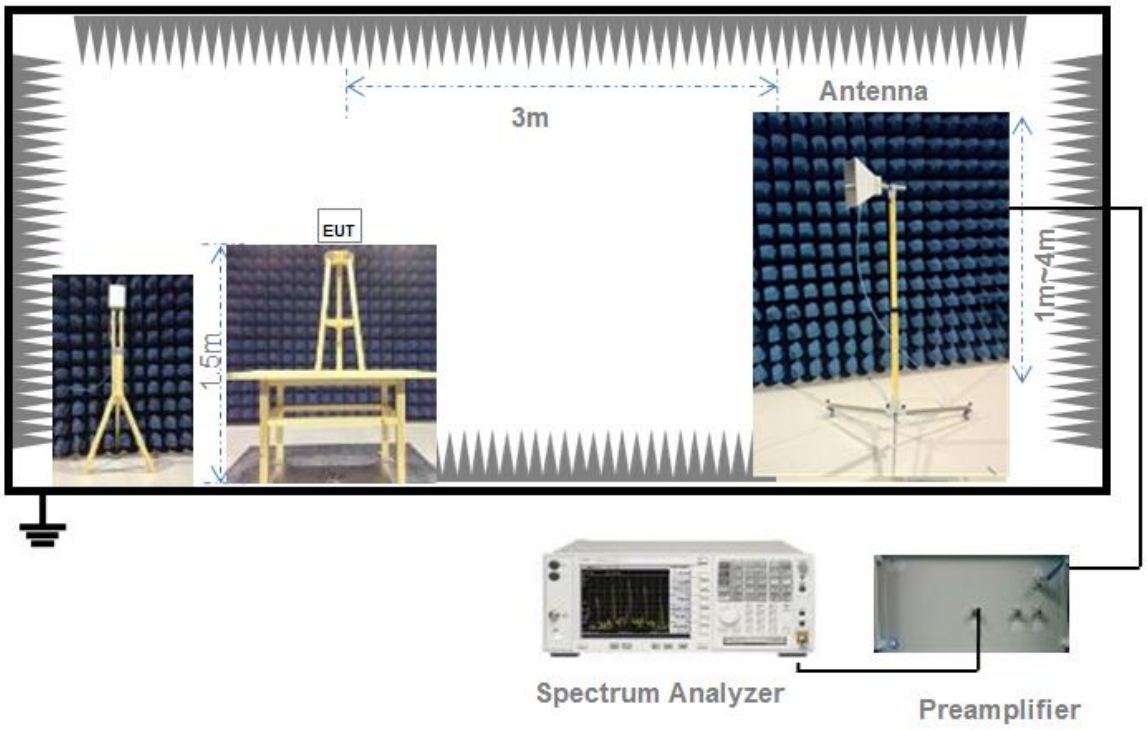
(Diagram 3)

4.5.4 For Radiated Test (30 MHz-1 GHz)



(Diagram 4)

4.5.5 For Radiated Test (Above 1 GHz)



(Diagram 5)

5 TEST ITEMS

5.1 RF Output Power

5.1.1 Test Limit

FCC §15.407(a)

The maximum conducted output power should not exceed:

Frequency Band (MHz)	Limit
5150-5250	250 mW
5250-5350	250 mW or 11 dBm + 10log B, whichever is less.
5470-5725	250 mW or 11 dBm + 10log B, whichever is less.
5725-5850	1 W
Note: Where “B” is the 26 dB emissions bandwidth in MHz.	

5.1.2 Test Setup

The section 4.5.1 (Diagram 1) test setup description was used for this test. The photo of test setup please refer to ANNEX B.

5.1.3 Test Procedure

Maximum conducted (average) output power

a) Measurements may be performed using a wideband RF power meter with a thermocouple detector or equivalent if all of the conditions listed below are satisfied.

1) The EUT is configured to transmit continuously or to transmit with a constant duty cycle.

2) At all times when the EUT is transmitting, it shall be transmitting at its maximum power control level.

3) The integration period of the power meter exceeds the repetition period of the transmitted signal by at least a factor of five.

b) If the transmitter does not transmit continuously, measure the duty cycle (x) of the transmitter output signal.

c) Measure the average power of the transmitter. This measurement is an average over both the on and off periods of the transmitter.

d) Adjust the measurement in dBm by adding 10 log (1/x) where x is the duty cycle.

Measurements of duty cycle

The zero-span mode on a spectrum analyzer or EMI receiver if the response time and spacing between bins on the sweep are sufficient to permit accurate measurements of the on and off times of the transmitted signal.

Set the center frequency of the instrument to the center frequency of the transmission.

Set RBW ≥ OBW if possible; otherwise, set RBW to the largest available value.

Set VBW ≥ RBW. Set detector = peak or average.

The zero-span measurement method shall not be used unless both RBW and VBW are > 50/T and the number of sweep points across duration T exceeds 100. (For example, if VBW and/or RBW are limited to 3 MHz, then the zero-span method of measuring duty cycle shall not be used if T ≤ 16.7 microseconds.)

The E.I.R.P used radiated test method. At a test site that has been validated using the procedures of ANSI C63.10 or the latest CISPR 16-1-4 for measurements above 1 GHz, so as to simulate a near free-space environment.

5.1.4 Test Result

Please refer to ANNEX A.1.

5.2 Emission Bandwidth and 6 dB Bandwidth

5.2.1 Limit

FCC §15.407(a)

Within the 5.725-5.85 GHz band, the minimum 6 dB bandwidth of U-NII devices shall be at least 500 kHz.

5.2.2 Test Setup

The test setup photo please refer to 4.5.1 (Diagram 1) test setup description was used for this test. The photo of test setup please refer to ANNEX B.

5.2.3 Test Procedure

Emission bandwidth

1. Set RBW = approximately 1% of the emission bandwidth.

2. Set VBW ≥ 3*RBW,

3. Detector = Peak.

4. Trace mode = Max hold.

5. Measure the maximum width of the emission that is 26 dB down from the peak of the emission.

Occupied Bandwidth

1. Set Span = 1.5 times to 5.0 times the OBW

2. Set RBW = 1% to 5% of the OBW.

3. Set VBW ≥ 3*RBW, Detector = Peak.

4. Trace mode = Max hold.

5. Use the 99% power bandwidth function of the instrument.

6 dB bandwidth

1. Set RBW = 100 kHz, VBW = 300 kHz.

2. Detector = Peak.Trace mode = Max hold.

3. Allow the trace to stabilize.

4. Measure the maximum width of the emission that is constrained by the frequencies associated with the two outermost amplitude points (upper and lower frequencies) that are attenuated by 6 dB relative to the maximum level measured in the fundamental emission.

5.2.4 Test Result

Please refer to ANNEX A.2 and ANNEX A.3.

5.3 Power Spectral density (PSD)

5.3.1 Limit

FCC §15.407(a)

The maximum power spectral density should not exceed:

Frequency Band (MHz)	Limit
5150-5250	11 dBm/MHz
5250-5350	11 dBm/MHz
5470-5725	11 dBm/MHz
5725-5850	30 dBm/500kHz

5.3.2 Test Setup

The section 4.5.1 (Diagram 1) test setup description was used for this test. The photo of test setup please refer to ANNEX B.

5.3.3 Test Procedure

Set the spectrum analyzer or EMI receiver span to view the entire emission bandwidth.
1. Set RBW = 510 kHz/1 MHz, VBW ≥ 3*RBW, Sweep time = Auto, Detector = RMS.
2. Allow the sweeps to continue until the trace stabilizes.
3. Use the peak marker function to determine the maximum amplitude level.
4. The E.I.R.P spectral density used radiated test method. At a test site that has been validated using the procedures of ANSI C63.10 or the latest CISPR 16-1-4 for measurements above 1 GHz, so as to simulate a near free-space environment.

5.3.4 Test Result

Please refer to ANNEX A.4.

5.4 Conducted Emission

5.4.1 Limit

FCC §15.207

For an intentional radiator that is designed to be connected to the public utility (AC) power line, the radio frequency voltage that is conducted back onto the AC power line on any frequency within the U-NII-150 kHz to 30 MHz shall not exceed the limits in the following table, as measured using a 50μH/50Ω line impedance stabilization network (LISN).

Frequency range (MHz)	Conducted Limit (dBμV)	
	Quai-peak	Average
0.15 - 0.50	66 to 56	56 to 46
0.50 - 5	56	46
0.50 - 30	60	50

5.4.2 Test Setup

The section 4.5.2 (Diagram 2) test setup description was used for this test. The photo of test setup please refer to ANNEX B.

5.4.3 Test Procedure

The maximum conducted interference is searched using Peak (PK), if the emission levels more than the AV and QP limits, and that have narrow margins from the AV and QP limits will be re-measured with AV and QP detectors. Tests for both L phase and N phase lines of the power mains connected to the EUT are performed. Refer to recorded points and plots below.

5.4.4 Test Result

Please refer to ANNEX A.5.

5.5 Radiated Spurious Emissions and Band Edge (Restricted-band)

5.5.1 Limit

FCC §15.209 & 15.407(b)

Frequency (MHz)	Field Strength (μV/m)	Measurement Distance (m)
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 Limit for radiated test was performed according to FCC Part 15C
Note [2]: The tighter limit applies at the band edge.

5.5.2 Test Setup

The section 4.5.3-4.5.5 (Diagram 3 - Diagram 5) test setup description was used for this test. The photo of test setup please refer to ANNEX B.

5.5.3 Test Procedure

Since the emission limits are specified in terms of radiated field strength levels, measurements performed to demonstrate compliance have traditionally relied on a radiated test configuration. Radiated measurements remain the principal method for demonstrating compliance to the specified limits; however antenna-port conducted measurements are also now acceptable to demonstrate compliance (see below for details). When radiated measurements are utilized, test site requirements and procedures for maximizing and measuring radiated emissions that are described in ANSI C63.10 shall be followed.

Antenna-port conducted measurements may also be used as an alternative to radiated measurements for demonstrating compliance in the restricted frequency bands. If conducted measurements are performed, then proper impedance matching must be ensured and an additional radiated test for cabinet/case spurious emissions is required.

General Procedure for conducted measurements in restricted bands

a) Measure the conducted output power (in dBm) using the detector specified (see guidance regarding measurement procedures for determining quasi-peak, peak, and average conducted output power, respectively).

b) Add the appropriate maximum ground reflection factor to the EIRP level (6 dB for frequencies ≤ 30 MHz, 4.7 dB for frequencies between 30 MHz and 1000 MHz, inclusive and 0 dB for frequencies > 1000 MHz).

c) For devices with multiple antenna-ports, measure the power of each individual chain and sum the EIRP of all chains in linear terms (e.g., Watts, mW).

d) Convert the resultant EIRP level to an equivalent electric field strength using the following relationship:

E = EIRP – 20log D + 104.8

where:

E = electric field strength in dBμV/m,

EIRP = equivalent isotropic radiated power in dBm

D = specified measurement distance in meters.

e) Compare the resultant electric field strength level to the applicable limit.

f) Perform radiated spurious emission test.

Quasi-Peak measurement procedure

The specifications for measurements using the CISPR quasi-peak detector can be found in Publication 16 of the International Special Committee on Radio Frequency Interference (CISPR) of the International Electrotechnical Commission.

As an alternative to CISPR quasi-peak measurement, compliance can be demonstrated to the applicable emission limits using a peak detector.

Peak power measurement procedure

Peak emission levels are measured by setting the instrument as follows:

a) RBW = as specified in Table 1.

b) VBW ≥ 3 x RBW.

c) Detector = Peak.

d) Sweep time = auto.

e) Trace mode = max hold.

f) Allow sweeps to continue until the trace stabilizes. (Note that the required measurement time may be longer for low duty cycle applications).

Table 1—RBW as a function of frequency

Frequency	RBW
9-150 kHz	200-300 Hz
0.15-30 MHz	9-10 kHz
30-1000 MHz	100-120 kHz
> 1000 MHz	1 MHz

If the peak-detected amplitude can be shown to comply with the average limit, then it is not necessary to perform a separate average measurement.

Trace averaging across on and off times of the EUT transmissions followed by duty cycle correction

If continuous transmission of the EUT (i.e., duty cycle ≥ 98 percent) cannot be achieved and the duty cycle is constant (i.e., duty cycle variations are less than ± 2 percent), then the following procedure shall be used:

a) The EUT shall be configured to operate at the maximum achievable duty cycle.

b) Measure the duty cycle, x, of the transmitter output signal as described in section 6.0.

c) RBW = 1 MHz (unless otherwise specified).

d) VBW ≥ 3 x RBW.

e) Detector = RMS, if span/(# of points in sweep) ≤ (RBW/2). Satisfying this condition may require increasing the number of points in the sweep or reducing the span. If this condition cannot be satisfied, then the detector mode shall be set to peak.

f) Averaging type = power (i.e., RMS).

1) As an alternative, the detector and averaging type may be set for linear voltage averaging.

2) Some instruments require linear display mode in order to use linear voltage averaging. Log or dB averaging shall not be used.

g) Sweep time = auto.

h) Perform a trace average of at least 100 traces.

i) A correction factor shall be added to the measurement results prior to comparing to the emission limit in order to compute the emission level that would have been measured had the test been performed at 100 percent duty cycle. The correction factor is computed as follows:

1) If power averaging (RMS) mode was used in step f), then the applicable correction factor is 10 log(1/x), where x is the duty cycle.

2) If linear voltage averaging mode was used in step f), then the applicable correction factor is 20 log(1/x), where x is the duty cycle.

3) If a specific emission is demonstrated to be continuous (≥ 98 percent duty cycle) rather than turning on and off with the transmit cycle, then no duty cycle correction is required for that emission.

NOTE: Reduction of the measured emission amplitude levels to account for operational duty factor is not permitted. Compliance is based on emission levels occurring during transmission - not on an average across on and off times of the transmitter.

Determining the applicable transmit antenna gain

A conducted power measurement will determine the maximum output power associated with a restricted band emission; however, in order to determine the associated EIRP level, the gain of the transmitting antenna (in dBi) must be added to the measured output power (in dBm).

Since the out-of-band characteristics of the EUT transmit antenna will often be unknown, the use of a conservative antenna gain value is necessary. Thus, when determining the EIRP based on the measured conducted power, the upper bound on antenna gain for a device with a single RF output shall be selected as the maximum in-band gain of the antenna across all operating bands, or 2 dBi, whichever is greater. However, for devices that operate in multiple frequency bands while using the same transmit antenna, the highest gain of the antenna within the operating band nearest in frequency to the restricted band emission being measured may be used in lieu of the overall highest gain when the emission is at a frequency that

is within 20 percent of the nearest band edge frequency, but in no case shall a value less than 2 dBi be used.

See KDB 662911 for guidance on calculating the additional array gain term when determining the effective antenna gain for a EUT with multiple outputs occupying the same or overlapping frequency ranges in the same band.

Radiated spurious emission test

An additional consideration when performing conducted measurements of restricted band emissions is that unwanted emissions radiating from the EUT cabinet, control circuits, power leads, or intermediate circuit elements will likely go undetected in a conducted measurement configuration. To address this concern, a radiated test shall be performed to ensure that emissions emanating from the EUT cabinet (rather than the antenna port) also comply with the applicable limits.

For these cabinet radiated spurious emission measurements the EUT transmit antenna may be replaced with a termination matching the nominal impedance of the antenna. Procedures for performing radiated measurements are specified in ANSI C63.10. All detected emissions shall comply with the applicable limits.

The measurement frequency range is from 30 MHz to the 10th harmonic of the fundamental frequency. The Turn Table is actuated to turn from 0° to 360°, and both horizontal and vertical polarizations of the Test Antenna are used to find the maximum radiated power. Mid channels on all channel bandwidth verified. Only the worst RB size/offset presented.

The power of the EUT transmitting frequency should be ignored.

All Spurious Emission tests were performed in X, Y, Z axis direction. And only the worst axis test condition was recorded in this test report.

Use the following spectrum analyzer settings:

Span = wide enough to fully capture the emission being measured
RBW = 1 MHz for f ≥ 1 GHz, 100 kHz for f < 1 GHz
VBW ≥ RBW
Sweep = auto
Detector function = peak
Trace = max hold

5.5.4 Test Result

Please refer to ANNEX A.6.

ANNEX A TEST RESULT

A.1 RF Output Power

Note: For FCC standard, if transmitting antennas of directional gain greater than 6 dBi are used, all band maximum conducted output power shall be reduced by the amount in dB that the directional gain of the antenna exceeds 6 dBi.

Duty Cycle

Test Mode	On Time (ms)	On+Off time (ms)	Duty Cycle	Duty Factor
5.8G ISM Band	1.05	1.25	83.88%	0.76

Test Data

Conducted Power

5.8G ISM Band (5725 - 5850 MHz)				
Channel	Conducted Power (dBm)	Conducted Power (mW)	FCC Limit (mW)	Verdict
5727	5.21	3.32	1000	Pass
5787	4.17	2.61	1000	Pass
5847	3.27	2.12	1000	Pass

A.2 Emission Bandwidth & 99% Bandwidth

Note: Test plots please refer to the document “Annex No.: BL-SZ2591532-601 Data Part 1.pdf”.

Test Data

5.8G ISM Band (5725 - 5850 MHz)		
Channel	26 dB Bandwidth (MHz)	99% Bandwidth (MHz)
5727	2.12	2.12
5787	2.13	2.14
5847	2.14	2.13

A.3 6 dB Bandwidth

Note: Test plots please refer to the document “Annex No.: BL-SZ2591532-601 Data Part 2.pdf”.

Test Data

5.8G ISM Band (5725 - 5850 MHz)			
Channel	6 dB Bandwidth (MHz)	Limit (kHz)	Verdict
5727	1.24	500.00	Pass
5787	1.20	500.00	Pass
5847	1.22	500.00	Pass

A.4 Power Spectral Density

Note: Test plots please refer to the document “Annex No.: BL-SZ2591532-601 Data Part 3.pdf”.

Test Data

5.8G ISM Band (5725 - 5850 MHz)			
Channel	PSD (dBm/500kHz)	FCC Limit (dBm/500kHz)	Verdict
5727	3.33	30.00	Pass
5787	2.31	30.00	Pass
5847	1.38	30.00	Pass

A.5 Conducted Emissions

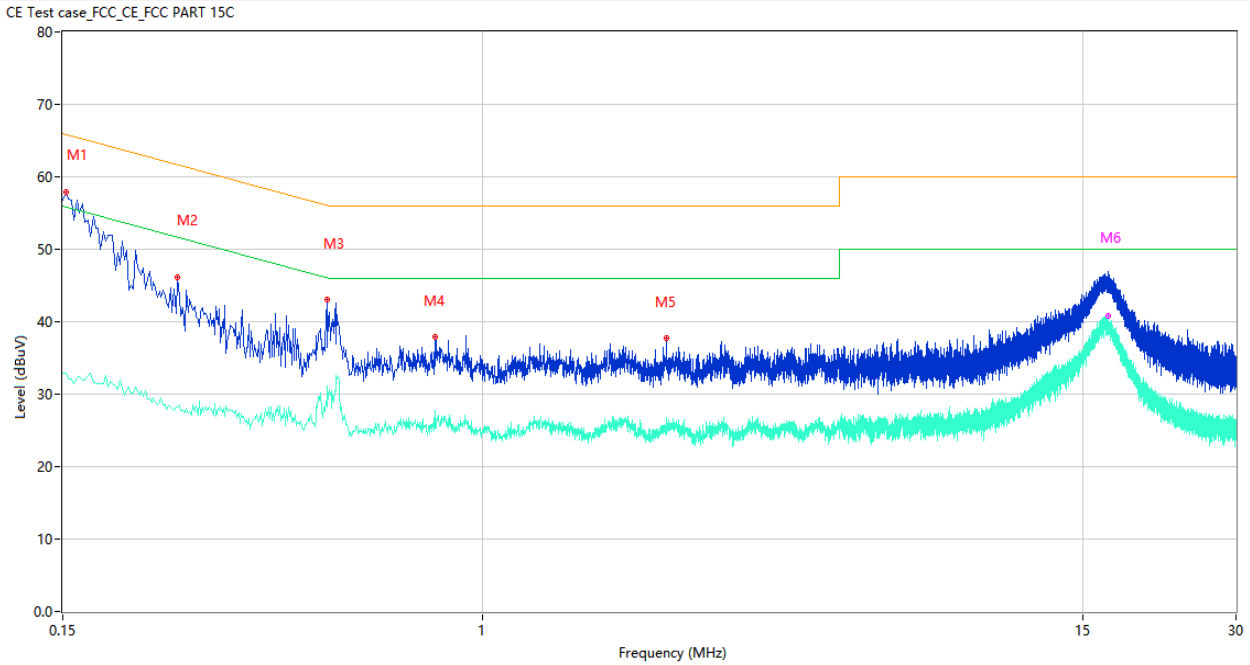
Note [1]: The EUT is working in the Normal link mode. All modes have been tested and normal link mode is worst.

Note [2]: Devices subject to Part 15 must be tested for all available U.S. voltages and frequencies (such as a nominal 120 VAC, 60 Hz and 240 VAC, 50 Hz) for which the device is capable of operation. So, The configuration 120 VAC, 60 Hz and 240 VAC, 50 Hz were tested respectively, but only the worst configuration (120 VAC, 60 Hz) shown here.

Note [3]: Results (dBuV) = Original reading level of Spectrum Analyzer (dBuV) + Factor (dB)

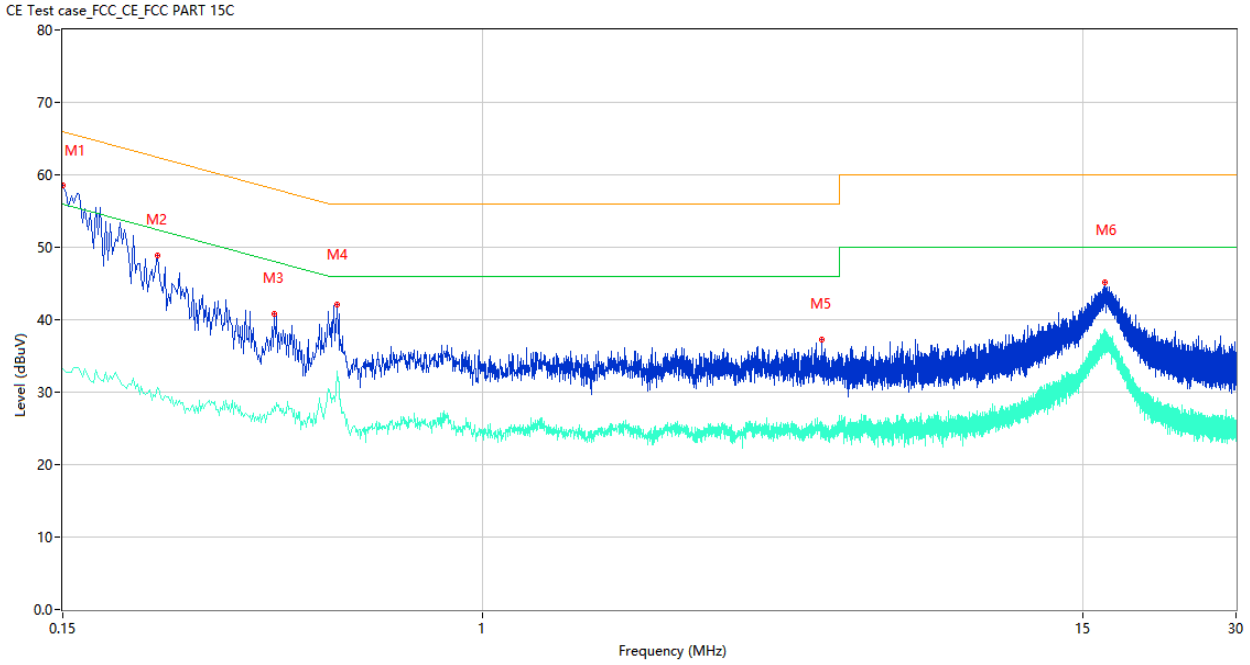
Test Data and Plots

PHASE L



No.	Frequency (MHz)	Results (dBuV)	Factor (dB)	Limit (dBuV)	Margin (dB)	Detector	Line	Verdict
1	0.152	57.93	9.86	65.89	7.96	Peak	L	Pass
1**	0.152	32.84	9.86	55.89	23.05	AV	L	Pass
2	0.252	46.09	9.82	61.69	15.60	Peak	L	Pass
2**	0.252	28.21	9.82	51.69	23.48	AV	L	Pass
3	0.496	43.11	10.04	56.07	12.96	Peak	L	Pass
3**	0.496	31.14	10.04	46.07	14.93	AV	L	Pass
4	0.806	37.84	10.59	56.00	18.16	Peak	L	Pass
4**	0.806	27.73	10.59	46.00	18.27	AV	L	Pass
5	2.288	37.77	10.35	56.00	18.23	Peak	L	Pass
5**	2.288	25.93	10.35	46.00	20.07	AV	L	Pass
6	16.820	45.36	10.96	60.00	14.64	Peak	L	Pass
6**	16.820	40.85	10.96	50.00	9.15	AV	L	Pass

PHASE N



No.	Frequency (MHz)	Results (dBuV)	Factor (dB)	Limit (dBuV)	Margin (dB)	Detector	Line	Verdict
1	0.150	58.47	9.86	66.00	7.53	Peak	N	Pass
1**	0.150	33.19	9.86	56.00	22.81	AV	N	Pass
2	0.230	48.94	9.83	62.45	13.51	Peak	N	Pass
2**	0.230	30.71	9.83	52.45	21.74	AV	N	Pass
3	0.390	40.73	10.65	58.06	17.33	Peak	N	Pass
3**	0.390	28.04	10.65	48.06	20.02	AV	N	Pass
4	0.518	42.05	10.06	56.00	13.95	Peak	N	Pass
4**	0.518	32.98	10.06	46.00	13.02	AV	N	Pass
5	4.624	37.29	10.43	56.00	18.71	Peak	N	Pass
5**	4.624	24.90	10.43	46.00	21.10	AV	N	Pass
6	16.608	45.16	11.10	60.00	14.84	Peak	N	Pass
6**	16.608	37.81	11.10	50.00	12.19	AV	N	Pass

A.6 Radiated Spurious Emissions and Band Edge (Restricted-band)

Note [1]: The symbol of "--" in the table which means not application.

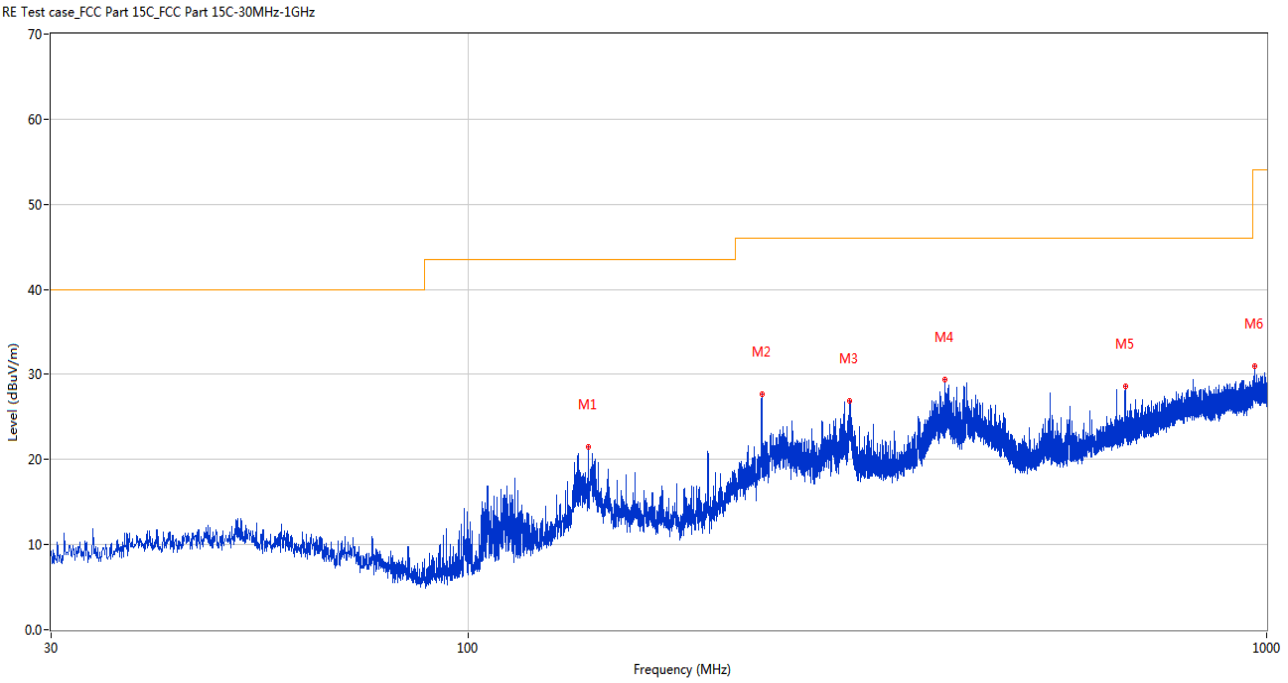
Note [2]: For the test data above 1 GHz， According the ANSI C63.10, where limits are specified for both average and peak (or quasi-peak) detector functions, if the peak (or quasi-peak) measured value complies with the average limit, it is unnecessary to perform an average measurement.

Note [3]: The low frequency, which started from 9 kHz to 30 MHz, was pre-scanned and the result which was 20 dB lower than the limit line per 15.31(o) was not reported.

Note [4]: The EUT is working in the Normal link mode below 1 GHz. All modes have been tested and normal link mode is worst.

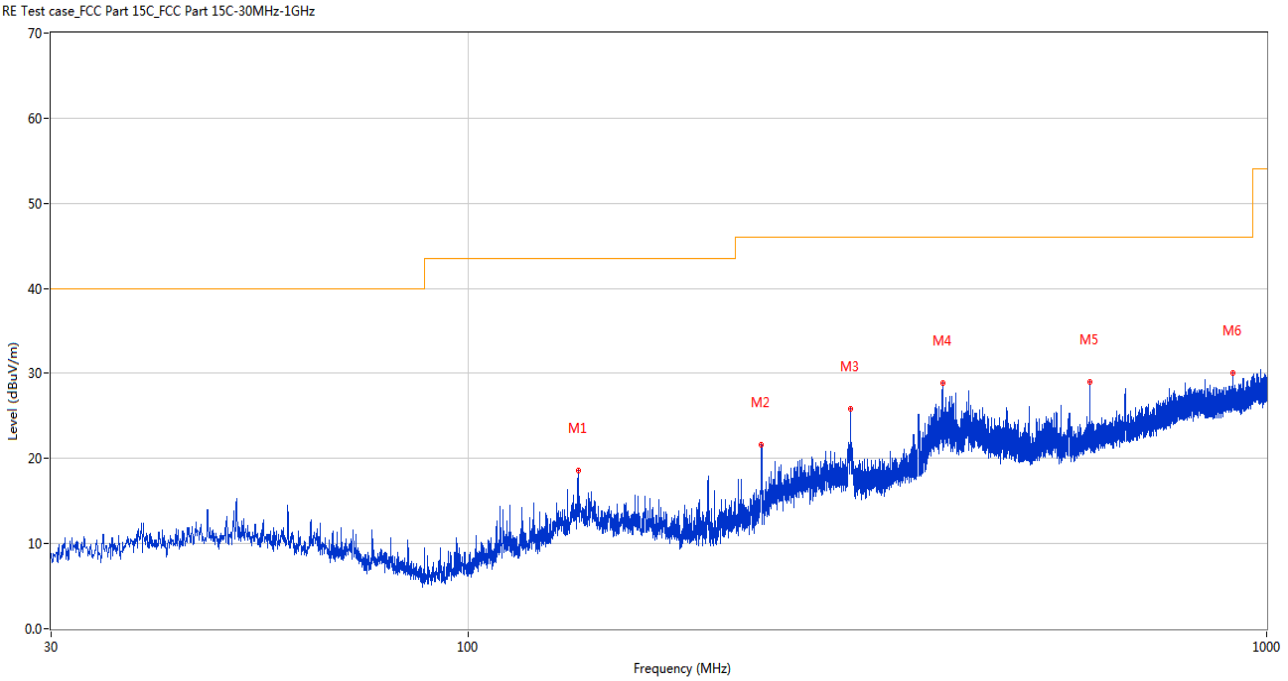
Test Data and Plots

30 MHz to 1 GHz, ANT H



No.	Frequency (MHz)	Results (dBuV/m)	Factor (dB/m)	Limit (dBuV/m)	Margin (dB)	Detector	Table (Degree)	Height (cm)	Antenna	Verdict
1	141.307	21.44	-25.44	43.5	22.06	Peak	194.00	200	Horizontal	Pass
2	233.215	27.65	-26.82	46.0	18.35	Peak	229.00	100	Horizontal	Pass
3	299.951	26.86	-23.67	46.0	19.14	Peak	229.00	100	Horizontal	Pass
4	395.254	29.39	-20.70	46.0	16.61	Peak	139.00	100	Horizontal	Pass
5	666.417	28.56	-14.46	46.0	17.44	Peak	288.00	100	Horizontal	Pass
6	965.759	30.99	-9.66	54.0	23.01	Peak	272.00	200	Horizontal	Pass

30 MHz to 1 GHz, ANT V



No.	Frequency (MHz)	Results (dBuV/m)	Factor (dB/m)	Limit (dBuV/m)	Margin (dB)	Detector	Table (Degree)	Height (cm)	Antenna	Verdict
1	137.234	18.62	-25.70	43.5	24.88	Peak	210.00	200	Vertical	Pass
2	232.536	21.67	-26.85	46.0	24.33	Peak	128.00	100	Vertical	Pass
3	300.921	25.85	-23.72	46.0	20.15	Peak	298.00	200	Vertical	Pass
4	393.410	28.92	-20.84	46.0	17.08	Peak	159.00	100	Vertical	Pass
5	599.972	29.03	-15.40	46.0	16.97	Peak	128.00	100	Vertical	Pass
6	908.238	29.99	-10.68	46.0	16.01	Peak	49.00	100	Vertical	Pass

Note: The spurious above 18G is noise only, do not show on the report.

5.8G ISM Band, 1 GHz to 18 GHz, Low Channel, ANT H

No.	Frequency (MHz)	Results (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Detector	Table (Degree)	Height (cm)	Antenna	Verdict
1	1551.900	37.62	74.0	36.38	Peak	360.00	200	Horizontal	Pass
1**	1551.900	27.13	54.0	26.87	AV	360.00	200	Horizontal	Pass
2	4304.200	47.42	74.0	26.58	Peak	326.00	300	Horizontal	Pass
2**	4304.200	37.59	54.0	16.41	AV	326.00	300	Horizontal	Pass
3	5727.400	106.48	--	--	Peak	155.00	100	Horizontal	Pass
3**	5727.400	104.28	--	--	AV	155.00	100	Horizontal	N/A
4	7319.413	45.59	74.0	28.41	Peak	214.00	400	Horizontal	Pass
4**	7319.413	37.13	54.0	16.87	AV	214.00	400	Horizontal	Pass
5	11453.950	49.03	74.0	24.97	Peak	190.00	150	Horizontal	Pass
5**	11453.950	44.36	54.0	9.64	AV	190.00	150	Horizontal	Pass
6	17179.426	58.62	68.2	9.58	Peak	310.00	150	Horizontal	Pass
6**	17179.426	52.85	--	--	AV	310.00	150	Horizontal	N/A

5.8G ISM Band, 1 GHz to 18 GHz, Low Channel, ANT V

No.	Frequency (MHz)	Results (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Detector	Table (Degree)	Height (cm)	Antenna	Verdict
1	1491.000	37.74	74.0	36.26	Peak	264.00	300	Vertical	Pass
1**	1491.000	27.89	54.0	26.11	AV	264.00	300	Vertical	Pass
2	4379.000	47.46	74.0	26.54	Peak	99.00	100	Vertical	Pass
2**	4379.000	38.76	54.0	15.24	AV	99.00	100	Vertical	Pass
3	5726.600	95.46	--	--	Peak	82.00	100	Vertical	N/A
3**	5726.600	91.58	--	--	AV	82.00	100	Vertical	N/A
4	7569.825	45.79	74.0	28.21	Peak	37.00	100	Vertical	Pass
4**	7569.825	36.54	54.0	17.46	AV	37.00	100	Vertical	Pass
5	11454.238	51.51	74.0	22.49	Peak	37.00	150	Vertical	Pass
5**	11454.238	48.60	54.0	5.40	AV	37.00	150	Vertical	Pass
6	17179.426	58.18	68.2	10.02	Peak	29.00	150	Vertical	Pass
6**	17179.426	52.47	--	--	AV	29.00	150	Vertical	N/A

5.8G ISM Band, 1 GHz to 18 GHz, Middle Channel, ANT H

No.	Frequency (MHz)	Results (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Detector	Table (Degree)	Height (cm)	Antenna	Verdict
1	1459.200	37.27	74.0	36.73	Peak	126.00	400	Horizontal	Pass
1**	1459.200	27.66	54.0	26.34	AV	126.00	400	Horizontal	Pass
2	3737.600	47.52	74.0	26.48	Peak	277.00	300	Horizontal	Pass
2**	3737.600	37.24	54.0	16.76	AV	277.00	300	Horizontal	Pass
3	5786.400	105.77	--	--	Peak	324.00	100	Horizontal	N/A
3**	5786.400	101.05	--	--	AV	324.00	100	Horizontal	N/A
4	7526.987	45.82	74.0	28.18	Peak	130.00	100	Horizontal	Pass
4**	7526.987	36.96	54.0	17.04	AV	130.00	100	Horizontal	Pass
5	11574.125	48.47	74.0	25.53	Peak	205.00	150	Horizontal	Pass
5**	11574.125	43.53	54.0	10.47	AV	205.00	150	Horizontal	Pass
6	17358.975	58.57	68.2	9.63	Peak	360.00	150	Horizontal	Pass
6**	17358.975	50.14	--	--	AV	360.00	150	Horizontal	N/A

5.8G ISM Band, 1 GHz to 18 GHz, Middle Channel, ANT V

No.	Frequency (MHz)	Results (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Detector	Table (Degree)	Height (cm)	Antenna	Verdict
1	1540.200	37.82	74.0	36.18	Peak	352.00	400	Vertical	Pass
1**	1540.200	27.91	54.0	26.09	AV	352.00	400	Vertical	Pass
2	4136.400	47.69	74.0	26.31	Peak	73.00	300	Vertical	Pass
2**	4136.400	38.28	54.0	15.72	AV	73.00	300	Vertical	Pass
3	5787.400	97.63	--	--	Peak	231.00	200	Vertical	N/A
3**	5787.400	95.84	--	--	AV	231.00	200	Vertical	N/A
4	7303.025	45.77	74.0	28.23	Peak	162.00	200	Vertical	Pass
4**	7303.025	36.40	54.0	17.60	AV	162.00	200	Vertical	Pass
5	11574.125	51.30	74.0	22.70	Peak	237.00	150	Vertical	Pass
5**	11574.125	47.93	54.0	6.07	AV	237.00	150	Vertical	Pass
6	17358.975	53.67	68.2	14.53	Peak	115.00	150	Vertical	Pass
6**	17358.975	44.92	--	--	AV	115.00	150	Vertical	N/A

5.8G ISM Band, 1 GHz to 18 GHz, High Channel, ANT H

No.	Frequency (MHz)	Results (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Detector	Table (Degree)	Height (cm)	Antenna	Verdict
1	1609.800	37.24	74.0	36.76	Peak	351.00	300	Horizontal	Pass
1**	1609.800	28.42	54.0	25.58	AV	351.00	300	Horizontal	Pass
2	4316.000	48.23	74.0	25.77	Peak	355.00	200	Horizontal	Pass
2**	4316.000	38.72	54.0	15.28	AV	355.00	200	Horizontal	Pass
3	5846.400	105.10	--	--	Peak	324.00	100	Horizontal	N/A
3**	5846.400	99.89	--	--	AV	324.00	100	Horizontal	N/A
4	7543.950	45.68	74.0	28.32	Peak	219.00	400	Horizontal	Pass
4**	7543.950	35.57	54.0	18.43	AV	219.00	400	Horizontal	Pass
5	11304.450	49.48	74.0	24.52	Peak	18.00	100	Horizontal	Pass
5**	11304.450	38.75	54.0	15.25	AV	18.00	100	Horizontal	Pass
6	15806.550	51.03	74.0	22.97	Peak	360.00	150	Horizontal	Pass
6**	15806.550	43.11	54.0	10.89	AV	360.00	150	Horizontal	Pass

5.8G ISM Band, 1 GHz to 18 GHz, High Channel, ANT V

No.	Frequency (MHz)	Results (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Detector	Table (Degree)	Height (cm)	Antenna	Verdict
1	1486.800	37.15	74.0	36.85	Peak	360.00	100	Vertical	Pass
1**	1486.800	27.81	54.0	26.19	AV	360.00	100	Vertical	Pass
2	4344.200	47.15	74.0	26.85	Peak	96.00	300	Vertical	Pass
2**	4344.200	38.12	54.0	15.88	AV	96.00	300	Vertical	Pass
3	5846.400	95.35	--	--	Peak	228.00	100	Vertical	N/A
3**	5846.400	90.43	--	--	AV	228.00	100	Vertical	N/A
4	7263.638	45.54	74.0	28.46	Peak	188.00	200	Vertical	Pass
4**	7263.638	36.33	54.0	17.67	AV	188.00	200	Vertical	Pass
5	11694.300	48.56	74.0	25.44	Peak	237.00	150	Vertical	Pass
5**	11694.300	45.27	54.0	8.73	AV	237.00	150	Vertical	Pass
6	15561.900	51.30	74.0	22.70	Peak	246.00	400	Vertical	Pass
6**	15561.900	42.13	54.0	11.87	AV	246.00	400	Vertical	Pass

A.6.2 Band Edge (Restricted-band)

Test Band	Channel	Verdict
5.8G ISM Band	Low	Pass
	High	Pass

Note: Both horizontal and vertical directions were pre tested, only the worst configuration has been reported in this report.

Test Data

5.8G ISM Band Low Channel

No.	Frequency (MHz)	Results (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Detector	Table (Degree)	Height (cm)	Antenna	Verdict
1	5631.333	55.05	68.2	13.15	Peak	225.00	150	Horizontal	Pass
2	5650.000	52.91	68.2	15.29	Peak	0.00	150	Horizontal	Pass

5.8G ISM Band High Channel

No.	Frequency (MHz)	Results (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Detector	Table (Degree)	Height (cm)	Antenna	Verdict
1	5924.833	52.82	68.3	15.48	Peak	128.00	100	Horizontal	Pass
2	5943.166	55.37	68.2	12.83	Peak	268.00	200	Horizontal	Pass

ANNEX B TEST SETUP PHOTOS

Please refer the document “BL-SZ2591532-AR.PDF”.

ANNEX C EUT EXTERNAL PHOTOS

Please refer the document “BL-SZ2591532-AW.PDF”.

ANNEX D EUT INTERNAL PHOTOS

Please refer the document “BL-SZ2591532-AI.PDF”.

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--END OF REPORT--