

No. 1 Workshop, M-10, Middle section, Science & Technology Park,

Shenzhen, Guangdong, China 518057

Telephone: +86 (0) 755 2601 2053 Report No.: SZEM171001115503

Fax: +86 (0) 755 2671 0594 Page: 1 of 25

TEST REPORT

Application No.: SZEM1710011155CR

Applicant: Zmodo Technology Shenzhen Corp., Ltd

Address of Applicant: 25/F, Office Tower A, Financial Technology Building, 11 Keyuan Road,

Nanshan District, Shenzhen, China

Manufacturer: Zmodo Technology Shenzhen Corp., Ltd

Address of Manufacturer: 25/F, Office Tower A, Financial Technology Building, 11 Keyuan Road,

Nanshan District, Shenzhen, China

Factory: Zmodo Technology Shenzhen Corp., Ltd

Address of Factory: 25/F, Office Tower A, Financial Technology Building, 11 Keyuan Road,

Nanshan District, Shenzhen, China

Equipment Under Test (EUT):

EUT Name: Tune

Model No.: SD-H2401, SD-HXXXX(The X is variables, X=0 TO 9) .

Please refer to section 2 of this report which indicates which model was

actually tested and which were electrically identical.

FCC ID: ZK8-H2401

Standard(s): 47 CFR Part 15, Subpart C 15.249

Date of Receipt: 2017-11-13

Date of Test: 2017-11-15 to 2017-12-26

Date of Issue: 2017-12-29

Test Result: Pass*



Jack Zhang EMC Laboratory Manager

The manufacturer should ensure that all products in series production are in conformity with the product sample detailed in this report. If the product in this report is used in any configuration other than that detailed in the report, the manufacturer must ensure the new system complies with all relevant standards. Any mention of SGS International Electrical Approvals or testing done by SGS International Electrical Approvals in connection with, distribution or use of the product described in this report must be approved by SGS International Electrical Approvals in writing.

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^{*} In the configuration tested, the EUT complied with the standards specified above.



Report No.: SZEM171001115503

Page: 2 of 25

	Revision Record					
Version	Chapter	Date	Modifier	Remark		
01		2017-12-29		Original		

Authorized for issue by:		
	Peter. Gang	
	Peter Geng /Project Engineer	
	EvicFa	
	Eric Fu /Reviewer	



Report No.: SZEM171001115503

Page: 3 of 25

2 Test Summary

Radio Spectrum Technical Requirement					
Item	Standard	Method	Requirement	Result	
Antenna Requirement	47 CFR Part 15, Subpart C 15.249	N/A	47 CFR Part 15, Subpart C 15.203	Pass	

Radio Spectrum Matter Part					
Item	Standard	Method	Requirement	Result	
Conducted Emissions at AC Power Line (150kHz-30MHz)	47 CFR Part 15, Subpart C 15.249	ANSI C63.10 (2013) Section 6.2	47 CFR Part 15, Subpart C 15.207	Pass	
20dB Bandwidth	47 CFR Part 15, Subpart C 15.249	ANSI C63.10 (2013) Section 6.9	47 CFR Part 15, Subpart C 15.215	Pass	
Field Strength of the Fundamental Signal (15.249(a))	47 CFR Part 15, Subpart C 15.249	ANSI C63.10 (2013) Section 6.5&6.6	47 CFR Part 15, Subpart C 15.249(a)	Pass	
Radiated Emissions	47 CFR Part 15, Subpart C 15.249	ANSI C63.10 (2013) Section 6.4&6.5&6.6	47 CFR Part 15, Subpart C 15.209 & 15.249 (a),(d)	Pass	

Remark:

Model No.: SD-H2401, SD-HXXXX(The X is variables, X=0 TO 9)

Only the model SD-H2401 was tested, since the electrical circuit design, layout, components used, internal wiring and functions were identical for all the above models, with only difference on model name and colour.



Report No.: SZEM171001115503

Page: 4 of 25

3 Contents

		Page
1	COVER PAGE	1
2	2 TEST SUMMARY	2
2	Z TEST SUMMARY	3
3	CONTENTS	4
4	GENERAL INFORMATION	E
4		
	4.1 DETAILS OF E.U.T.	
	4.2 DESCRIPTION OF SUPPORT UNITS	
	4.3 MEASUREMENT UNCERTAINTY	
	4.5 TEST FACILITY	
	4.6 DEVIATION FROM STANDARDS	
	4.7 ABNORMALITIES FROM STANDARD CONDITIONS	
5		
J	CON MENT LIST	
6	RADIO SPECTRUM TECHNICAL REQUIREMENT	9
	6.1 ANTENNA REQUIREMENT	
	6.1.1 Test Requirement:	
	6.1.2 Conclusion	
7	RADIO SPECTRUM MATTER TEST RESULTS	10
	7.1 CONDUCTED EMISSIONS AT AC POWER LINE (150kHz-30MHz)	10
	7.1.1 E.U.T. Operation	
	7.1.2 Measurement Procedure and Data	
	7.2 20DB BANDWIDTH	13
	7.2.1 E.U.T. Operation	
	7.2.2 Test Setup Diagram	
	7.2.3 Measurement Procedure and Data	
	7.3 FIELD STRENGTH OF THE FUNDAMENTAL SIGNAL (15.249(A))	
	7.3.2 Test Setup Diagram	
	7.3.3 Measurement Procedure and Data	
	7.4 RADIATED EMISSIONS	
	7.4.1 E.U.T. Operation	
	7.4.2 Test Setup Diagram	18
	7.4.3 Measurement Procedure and Data	18
8	PHOTOGRAPHS	24
	8.1 CONDUCTED EMISSIONS AT AC POWER LINE (150kHz-30MHz) TEST SETUP	24
	8.2 RADIATED EMISSIONS (ABOVE 1GHz) TEST SETUP	
	8.3 RADIATED EMISSIONS (BELOW 1GHz) TEST SETUP	



Report No.: SZEM171001115503

Page: 5 of 25

4 General Information

4.1 Details of E.U.T.

Power supply:	AC 24V
Operation frequency:	915MHz
Channel number:	1
Modulation type:	GFSK
Antenna type:	Integral antenna

4.2 Description of Support Units

The EUT has been tested as an independent unit.

4.3 Measurement Uncertainty

No.	Item	Measurement Uncertainty	
1	Radio Frequency	7.25 x 10 ⁻⁸	
2	Duty cycle	0.37%	
3	Occupied Bandwidth	3%	
4	RF conducted power	0.75dB	
5	RF power density	2.84dB	
6	Conducted Spurious emissions	0.75dB	
7	DE Dadiated mayor	4.5dB (below 1GHz)	
/	RF Radiated power	4.8dB (above 1GHz)	
0	Dediated Courieus emission test	4.5dB (Below 1GHz)	
8	Radiated Spurious emission test	4.8dB (Above 1GHz)	
9	Temperature test	1°C	
10	Humidity test	3%	
11	Supply voltages	1.5%	
12	Time	3%	



Report No.: SZEM171001115503

Page: 6 of 25

4.4 Test Location

All tests were performed at:

SGS-CSTC Standards Technical Services Co., Ltd., Shenzhen Branch

No. 1 Workshop, M-10, Middle Section, Science & Technology Park, Shenzhen, Guangdong, China. 518057.

Tel: +86 755 2601 2053 Fax: +86 755 2671 0594

No tests were sub-contracted.

4.5 Test Facility

The test facility is recognized, certified, or accredited by the following organizations:

CNAS (No. CNAS L2929)

CNAS has accredited SGS-CSTC Standards Technical Services Co., Ltd. Shenzhen Branch EMC Lab to ISO/IEC 17025:2005 General Requirements for the Competence of Testing and Calibration Laboratories (CNAS-CL01 Accreditation Criteria for the Competence of Testing and Calibration Laboratories) for the competence in the field of testing.

• A2LA (Certificate No. 3816.01)

SGS-CSTC Standards Technical Services Co., Ltd., Shenzhen EMC Laboratory is accredited by the American Association for Laboratory Accreditation(A2LA). Certificate No. 3816.01.

VCCI

The 3m Fully-anechoic chamber for above 1GHz, 10m Semi-anechoic chamber for below 1GHz, Shielded Room for Mains Port Conducted Interference Measurement and Telecommunication Port Conducted Interference Measurement of SGS-CSTC Standards Technical Services Co., Ltd. have been registered in accordance with the Regulations for Voluntary Control Measures with Registration No.: G-20026, R-14188, C-12383 and T-11153 respectively.

• FCC -Designation Number: CN1178

SGS-CSTC Standards Technical Services Co., Ltd., Shenzhen EMC Laboratory has been recognized as an accredited testing laboratory.

Designation Number: CN1178. Test Firm Registration Number: 406779.

• Industry Canada (IC)

Two 3m Semi-anechoic chambers and the 10m Semi-anechoic chamber of SGS-CSTC Standards Technical Services Co., Ltd. Shenzhen Branch EMC Lab have been registered by Certification and Engineering Bureau of Industry Canada for radio equipment testing with Registration No.: 4620C-1, 4620C-2, 4620C-3.

4.6 Deviation from Standards

None

4.7 Abnormalities from Standard Conditions

None



Report No.: SZEM171001115503

Page: 7 of 25

5 Equipment List

Conducted Emissions at AC Power Line (150kHz-30MHz)					
Equipment	Manufacturer	Model No	Inventory No	Cal Date	Cal Due Date
Shielding Room	ZhongYu Electron	GB-88	SEM001-06	2017-05-10	2018-05-09
Measurement Software	AUDIX	e3 V5.4.1221d	N/A	N/A	N/A
Coaxial Cable	SGS	N/A	SEM024-01	2017-07-13	2018-07-12
LISN	Rohde & Schwarz	ENV216	SEM007-01	2017-09-27	2018-09-26
LISN	ETS-LINDGREN	3816/2	SEM007-02	2017-04-14	2018-04-13
EMI Test Receiver	Rohde & Schwarz	ESCI	SEM004-02	2017-04-14	2018-04-13

20dB Bandwidth					
Equipment	Manufacturer	Model No	Inventory No	Cal Date	Cal Due Date
DC Power Supply	ZhaoXin	RXN-305D	SEM011-02	2017-09-27	2018-09-26
Spectrum Analyzer	Rohde & Schwarz	FSU43	SEM004-08	2017-04-14	2018-04-13
Measurement Software	JS Tonscend	JS1120-2 BT/WIFI V2.	N/A	N/A	N/A
Coaxial Cable	SGS	N/A	SEM031-01	2017-07-13	2018-07-12
Attenuator	Weinschel Associates	WA41	SEM021-09	N/A	N/A
Signal Generator	KEYSIGHT	N5173B	SEM006-05	2017-09-27	2018-09-26
Power Meter	Rohde & Schwarz	NRVS	SEM014-02	2017-09-27	2018-09-26



Report No.: SZEM171001115503

Page: 8 of 25

Restricted Band Around	•			0.15.4	0.10.0.1
Equipment	Manufacturer	Model No	Inventory No	Cal Date	Cal Due Date
3m Semi-Anechoic Chamber	AUDIX	N/A	SEM001-02	2017-05-02	2020-05-01
Measurement Software	AUDIX	e3 V8.2014-6- 27	N/A	N/A	N/A
Coaxial Cable	SGS	N/A	SEM026-01	2017-07-13	2018-07-12
Spectrum Analyzer	Rohde & Schwarz	FSU43	SEM004-08	2017-04-14	2018-04-13
BiConiLog Antenna (26- 3000MHz)	ETS-Lindgren	3142C	SEM003-01	2017-06-27	2020-06-26
Horn Antenna (1- 18GHz)	Rohde & Schwarz	HF907	SEM003-07	2015-06-14	2018-06-13
Horn Antenna(15GHz- 40GHz)	Schwarzbeck	BBHA 9170	SEM003-15	2017-10-17	2020-10-16
Pre-amplifier (0.1- 1300MHz)	HP	8447D	SEM005-02	2017-09-27	2018-09-26
Low Noise Amplifier(100MHz- 18GHz)	Black Diamond Series	BDLNA-0118- 352810	SEM005-05	2017-09-27	2018-09-27
Pre-amplifier(18-26GHz)	Rohde & Schwarz	CH14-H052	SEM005-17	2017-12-04	2018-12-03
Pre-amplifier(26GHz- 40GHz)	Compliance Directions Systems Inc.	PAP-2640-50	SEM005-08	2017-04-14	2018-04-13
DC Power Supply	Zhao Xin	RXN-305D	SEM011-02	2017-09-27	2018-09-26
Active Loop Antenna	ETS-Lindgren	6502	SEM003-08	2017-08-22	2020-08-21
Band filter	N/A	N/A	SEM023-01	N/A	N/A

General used equipmen	t				
Equipment	Manufacturer	Model No	Inventory No	Cal Date	Cal Due Date
Humidity/ Temperature Indicator	Shanghai Meteorological Industry Factory	ZJ1-2B	SEM002-03	2017-09-29	2018-09-28
Humidity/ Temperature Indicator	Shanghai Meteorological Industry Factory	ZJ1-2B	SEM002-04	2017-09-29	2018-09-28
Humidity/ Temperature Indicator	Mingle	N/A	SEM002-08	2017-09-29	2018-09-28
Barometer	Changchun Meteorological Industry Factory	DYM3	SEM002-01	2017-04-18	2018-04-17



Report No.: SZEM171001115503

Page: 9 of 25

6 Radio Spectrum Technical Requirement

6.1 Antenna Requirement

6.1.1 Test Requirement:

47 CFR Part 15, Subpart C 15.203 Limit:

15.203 requirement:

An intentional radiator shall be designed to ensure that no antenna other than that furnished by the responsible party shall be used with the device. The use of a permanently attached antenna or of an antenna that uses a unique coupling to the intentional radiator, the manufacturer may design the unit so that a broken antenna can be replaced by the user, but the use of a standard antenna jack or electrical connector is prohibited.

6.1.2 Conclusion

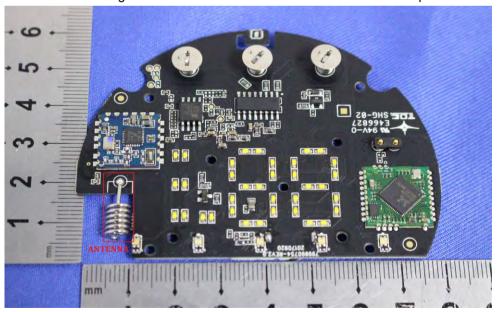
Standard Requirement:

An intentional radiator shall be designed to ensure that no antenna other than that furnished by the responsible party shall be used with the device. The use of a permanently

attached antenna or of an antenna that uses a unique coupling to the intentional radiator, the manufacturer may design the unit so that a broken antenna can be replaced by the user, but the use of a standard antenna jack or electrical connector is prohibited.

EUT Antenna:

The antenna is integrated on the main PCB and no consideration of replacement.





Report No.: SZEM171001115503

Page: 10 of 25

7 Radio Spectrum Matter Test Results

7.1 Conducted Emissions at AC Power Line (150kHz-30MHz)

Test Requirement 47 CFR Part 15, Subpart C 15.207 Test Method: ANSI C63.10 (2013) Section 6.2

Limit:

Fraguency range (MHz)	Limit (dBuV)		
Frequency range (MHz)	Quasi-peak	Average	
0.15-0.5	66 to 56*	56 to 46*	
0.5-5	56	46	
5-30	60	50	

^{*} Decreases with the logarithm of the frequency.

7.1.1 E.U.T. Operation

Operating Environment:

Temperature: 25 °C Humidity: 45 % RH Atmospheric Pressure: 1015 mbar

Test mode b:TX mode_Keep the EUT in transmitting with modulation mode.

7.1.2 Measurement Procedure and Data

- 1) The mains terminal disturbance voltage test was conducted in a shielded room.
- 2) The EUT was connected to AC power source through a LISN 1 (Line Impedance Stabilization Network) which provides a $50 \text{ohm}/50 \mu\text{H} + 5 \text{ohm}$ linear impedance. The power cables of all other units of the EUT were connected to a second LISN 2, which was bonded to the ground reference plane in the same way as the LISN 1 for the unit being measured. A multiple socket outlet strip was used to connect multiple power cables to a single LISN provided the rating of the LISN was not exceeded.
- 3) The tabletop EUT was placed upon a non-metallic table 0.8m above the ground reference plane. And for floor-standing arrangement, the EUT was placed on the horizontal ground reference plane,
- 4) The test was performed with a vertical ground reference plane. The rear of the EUT shall be 0.4 m from the vertical ground reference plane. The vertical ground reference plane was bonded to the horizontal ground reference plane. The LISN 1 was placed 0.8 m from the boundary of the unit under test and bonded to a ground reference plane for LISNs mounted on top of the ground reference plane. This distance was between the closest points of the LISN 1 and the EUT. All other units of the EUT and associated equipment was at least 0.8 m from the LISN 2.
- 5) In order to find the maximum emission, the relative positions of equipment and all of the interface cables must be changed according to ANSI C63.10 on conducted measurement.

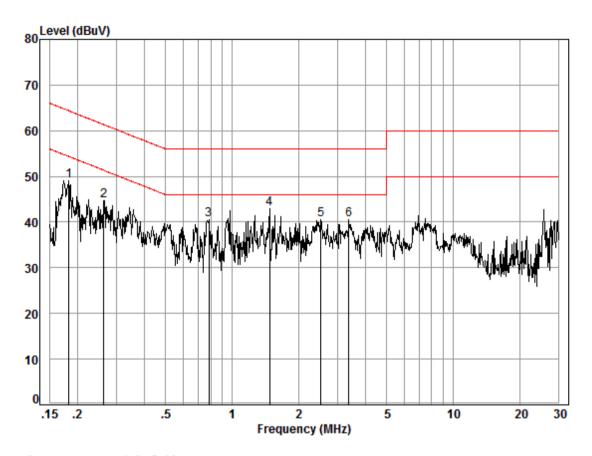
Remark: LISN=Read Level+ Cable Loss+ LISN Factor



Report No.: SZEM171001115503

Page: 11 of 25

Mode:b; Line:Live Line



Site : Shielding Room

Condition: Line Job No. : 11155CR

Test mode: b

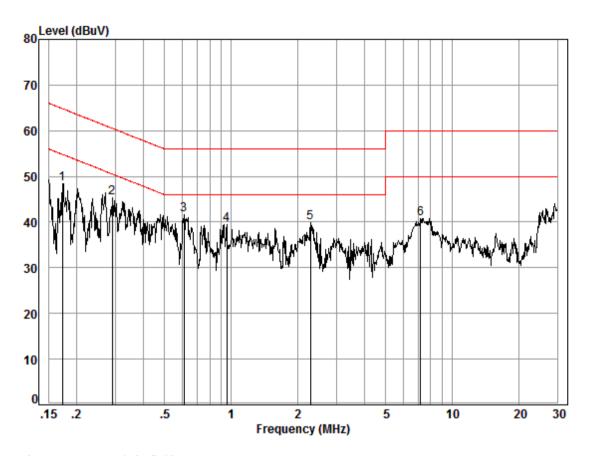
		Cable	LISN	Read		Limit	0ver	
	Freq	Loss	Factor	Level	Level	Line	Limit	Remark
	MHz	dB	dB	dBuV	dBuV	dBuV	dB	
1	0.18	0.02	9.51	39.48	49.01	54.37	-5.36	Peak
2	0.26	0.01	9.51	35.21	44.73	51.34	-6.61	Peak
3	0.78	0.02	9.50	31.06	40.58	46.00	-5.42	Peak
4	1.48	0.02	9.51	33.46	42.99	46.00	-3.01	Peak
5	2.53	0.02	9.52	31.05	40.59	46.00	-5.41	Peak
6	3.38	0.02	9.55	31.06	40.63	46.00	-5.37	Peak



Report No.: SZEM171001115503

Page: 12 of 25

Mode:b; Line:Neutral Line



Site : Shielding Room

Condition: Neutral Job No. : 11155CR

Test mode: b

		Cable	LISN	Read		Limit	0ver	
	Freq	Loss	Factor	Level	Level	Line	Limit	Remark
	MHz	dB	dB	dBuV	dBuV	dBuV	dB	
	0.47		0.50	20.70	40.30	F4 04		
1	0.17	0.02	9.59	38./8	48.39	54.81	-6.42	Peak
2	0.29	0.01	9.58	35.82	45.41	50.54	-5.13	Peak
3	0.61	0.02	9.62	31.91	41.55	46.00	-4.45	Peak
4	0.96	0.02	9.62	29.87	39.51	46.00	-6.49	Peak
5	2.28	0.02	9.64	30.28	39.94	46.00	-6.06	Peak
6	7.21	0.01	9.73	31.08	40.82	50.00	-9.18	Peak



Report No.: SZEM171001115503

Page: 13 of 25

7.2 20dB Bandwidth

Test Requirement 47 CFR Part 15, Subpart C 15.215 Test Method: ANSI C63.10 (2013) Section 6.9

Limit: N/A

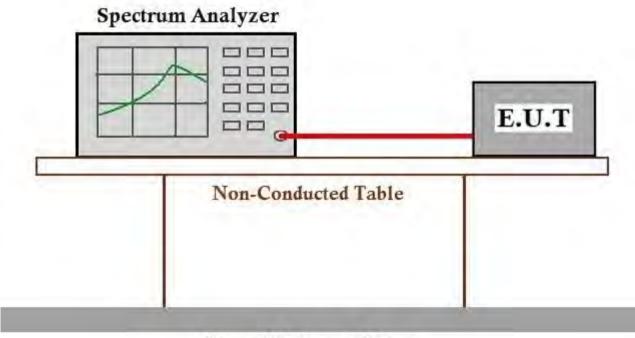
7.2.1 E.U.T. Operation

Operating Environment:

Temperature: 23 °C Humidity: 54 % RH Atmospheric Pressure: 1015 mbar

Test mode b:TX mode Keep the EUT in transmitting with modulation mode.

7.2.2 Test Setup Diagram



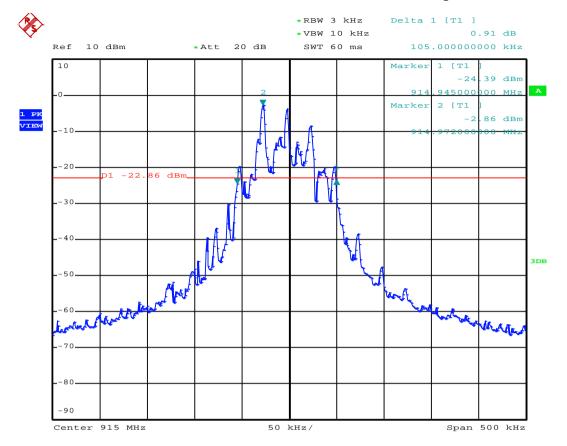
Ground Reference Plane

7.2.3 Measurement Procedure and Data



Report No.: SZEM171001115503

Page: 14 of 25





Report No.: SZEM171001115503

Page: 15 of 25

7.3 Field Strength of the Fundamental Signal (15.249(a))

Test Requirement 47 CFR Part 15, Subpart C 15.249(a)
Test Method: ANSI C63.10 (2013) Section 6.5&6.6

Measurement Distance: 3m

Limit:

Frequency	Limit (dBuV/m @3m)	Remark
2400MU- 2492 EMU-	94.0	Average Value
2400MHz-2483.5MHz	114.0	Peak Value

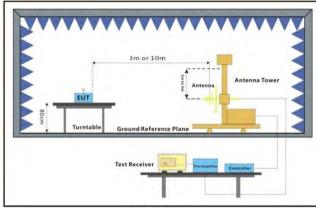
7.3.1 E.U.T. Operation

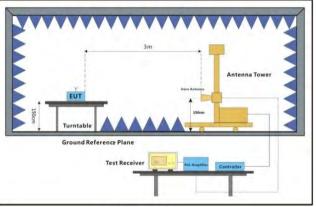
Operating Environment:

Temperature: 24 °C Humidity: 54 % RH Atmospheric Pressure: 1015 mbar

Test mode b:TX mode_Keep the EUT in transmitting with modulation mode.

7.3.2 Test Setup Diagram





30MHz-1GHz Above 1GHz



Report No.: SZEM171001115503

Page: 16 of 25

7.3.3 Measurement Procedure and Data

a. For below 1GHz, the EUT was placed on the top of a rotating table 0.8 meters above the ground at a 3 or 10 meter semi-anechoic chamber. The table was rotated 360 degrees to determine the position of the highest radiation.

- b. For above 1GHz, the EUT was placed on the top of a rotating table 1.5 meters above the ground at a 3 meter fully-anechoic chamber. The table was rotated 360 degrees to determine the position of the highest radiation.
- c. The EUT was set 3 or 10 meters away from the interference-receiving antenna, which was mounted on the top of a variable-height antenna tower.
- d. The antenna height is varied from one meter to four meters above the ground to determine the maximum value of the field strength. Both horizontal and vertical polarizations of the antenna are set to make the measurement.
- e. For each suspected emission, the EUT was arranged to its worst case and then the antenna was tuned to heights from 1 meter to 4 meters (for the test frequency of below 30MHz, the antenna was tuned to heights 1 meter) and the rotatable table was turned from 0 degrees to 360 degrees to find the maximum reading.
- f. The test-receiver system was set to Peak Detect Function and Specified Bandwidth with Maximum Hold Mode.
- g. If the emission level of the EUT in peak mode was 10dB lower than the limit specified, then testing could be stopped and the peak values of the EUT would be reported. Otherwise the emissions that did not have 10dB margin would be re-tested one by one using peak, quasi-peak or average method as specified and then reported in a data sheet.
- h. Test the EUT in the lowest channel, the middle channel, the Highest channel.
- i. The radiation measurements are performed in X, Y, Z axis positioning for Transmitting mode, and found the X axis positioning which it is the worst case.
- j. Repeat above procedures until all frequencies measured was complete.

Remark: Level= Read Level+ Cable Loss+ Antenna Factor- Preamp Factor

Test Data

Frequency	Cable	Antenna	Preamp	Read	Level	Limit	Over	Detector	Polarity
(MHz)	loss	factor	factor	level	(dBuV/m)	(dBuV/m)	limit	(peak/AV)	(H/V)
	(dB)	(dB/m)	(dB)	(dBuV)			(dB)		
915.00	3.62	23.26	26.71	87.90	88.07	94.00	5.93	AV	Н
915.00	3.62	23.26	26.71	93.97	94.14	114.00	19.86	peak	Н
915.00	3.62	23.26	26.71	83.60	83.77	94.00	10.23	AV	V
915.00	3.62	23.26	26.71	88.90	89.07	114.00	24.93	peak	V



Report No.: SZEM171001115503

Page: 17 of 25

7.4 Radiated Emissions

Test Requirement 47 CFR Part 15, Subpart C 15.209 & 15.249 (a),(d)

Test Method: ANSI C63.10 (2013) Section 6.4&6.5&6.6

Measurement Distance: 3m

Limit:

Frequency(MHz)	Field strength (microvolts/meter)	Limit (dBuV/m)	Detector	Measurement Distance (meters)
0.009-0.490	2400/F(kHz)	-	-	300
0.490-1.705	24000/F(kHz)	-	-	30
1.705-30	30	-	-	30
30-88	100	40.0	QP	3
88-216	150	43.5	QP	3
216-960	200	46.0	QP	3
960-1000	500	54.0	QP	3
Above 1000	500	54.0	AV	3



Report No.: SZEM171001115503

Page: 18 of 25

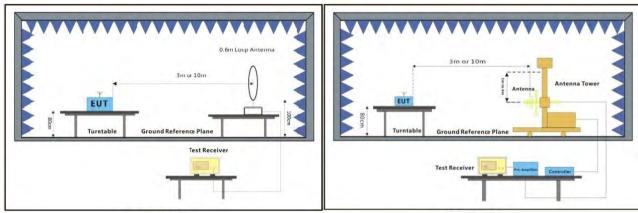
7.4.1 E.U.T. Operation

Operating Environment:

Temperature: 24 °C Humidity: 52 % RH Atmospheric Pressure: 1015 mbar

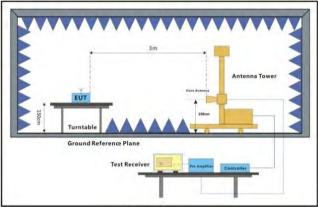
Test mode b:TX mode Keep the EUT in transmitting with modulation mode.

7.4.2 Test Setup Diagram



Below 30MHz

30MHz-1GHz



Above 1GHz

7.4.3 Measurement Procedure and Data

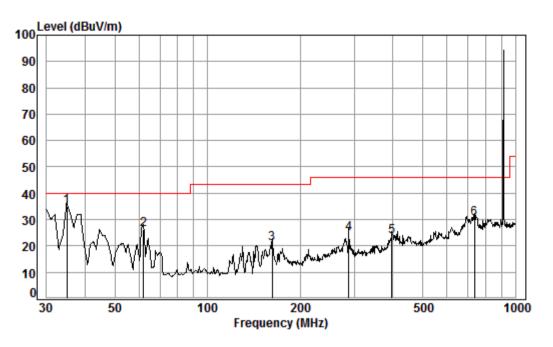
For testing performed with the loop antenna, the center of the loop was positioned 1 m above the ground and positioned with its plane vertical at the specified distance from the EUT. During testing the loop was rotated about its vertical axis for maximum response at each azimuth and also investigated with the loop positioned in the horizontal plane. Only the worst position of vertical was shown in the report.



Report No.: SZEM171001115503

Page: 19 of 25

Mode:b; Polarization:Horizontal;



Condition: 3m HORIZONTAL

Job No. : 11155CR

Test mode: b

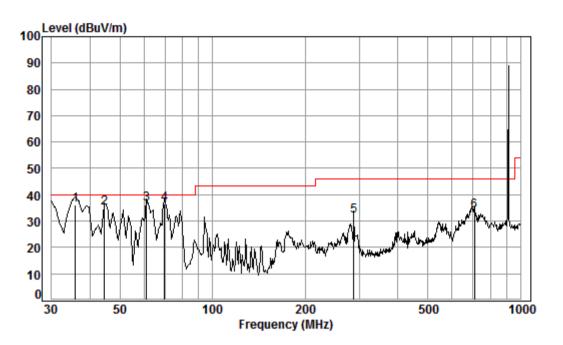
		Cable	Ant	Preamp	Read		Limit	0ver
	Freq	Loss	Factor	Factor	Level	Level	Line	Limit
-	MHz	——dB		dB		dBuV/m	dBuV/m	——dB
	11112	ub	ub/iii	ub.	abav	ubuv/iii	abav/iii	ub
1 pp	34.88	0.60	15.97	27.34	45.67	34.90	40.00	-5.10
2	62.00	0.80	7.14	27.26	45.53	26.21	40.00	-13.79
3	162.04	1.34	9.58	26.85	36.85	20.92	43.50	-22.58
4	287.99	1.85	13.37	26.43	35.90	24.69	46.00	-21.31
5	396.24	2.19	16.25	27.11	32.23	23.56	46.00	-22.44
6	737.07	3.02	21.65	27.37	33.11	30.41	46.00	-15.59



Report No.: SZEM171001115503

Page: 20 of 25

Mode:b; Polarization:Vertical;



Condition: 3m VERTICAL

Job No. : 11155CR

Test mode: b

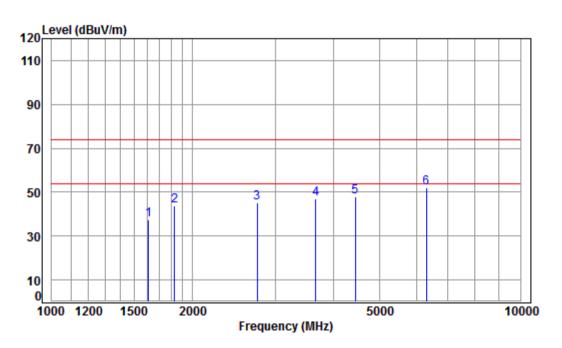
		Cable	Ant	Preamp	Read		Limit	0ver
	Freq	Loss	Factor	Factor	Level	Level	Line	Limit
_	MHz	dB	dB/m	dB	dBuV	dBuV/m	dBuV/m	dB
1	35.87	0.60	15.41	27.33	47.50	36.18	40.00	-3.82
2	44.59	0.70	11.08	27.31	50.50	34.97	40.00	-5.03
3 pp	61.13	0.80	7.17	27.26	55.83	36.54	40.00	-3.46
4	69.84	0.80	6.90	27.25	56.00	36.45	40.00	-3.55
5	287.99	1.85	13.37	26.43	43.22	32.01	46.00	-13.99
6	709.18	2.93	21.60	27.40	36.55	33.68	46.00	-12.32



Report No.: SZEM171001115503

Page: 21 of 25

Model: 915 TX SE; Polarization: Horizontal;



Condition: 3m Horizontal

Job No : 11155CR Mode : 915 TX SE

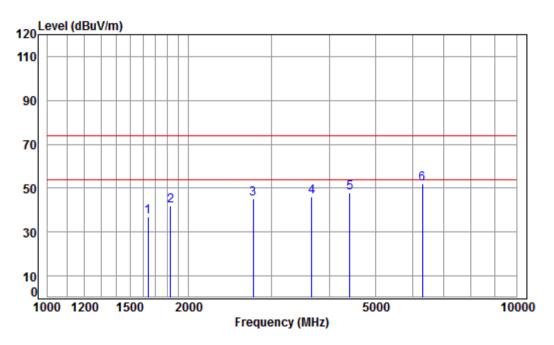
		Cable	Ant	Preamp	Read		Limit	0ver	
	Freq	Loss	Factor	Factor	Level	Level	Line	Limit	Remark
	MHz	dB	dB/m	dB	dBuV	dBuV/m	dBuV/m	dB	
1	1610.646	5.34	26.29	37.73	43.65	37.55	74.00	-36.45	peak
2	1830.000	5.08	27.18	37.71	49.30	43.85	74.00	-30.15	peak
3	2745.000	5.80	30.37	37.62	46.68	45.23	74.00	-28.77	peak
4	3660.000	6.63	32.67	37.25	44.89	46.94	74.00	-27.06	peak
5	4446.313	7.50	33.60	37.19	44.20	48.11	74.00	-25.89	peak
6	pp 6309.573	11.18	34.95	37.80	43.90	52.23	74.00	-21.77	peak



Report No.: SZEM171001115503

Page: 22 of 25

Model: 915 TX SE; Polarization: Vertical;



Condition: 3m VERTICAL Job No : 11155CR Mode : 915 TX SE

out	_		IN JE							
			Cable	Ant	Preamp	Read		Limit	0ver	
		Freq	Loss	Factor	Factor	Level	Level	Line	Limit	Remark
	_									
		MHz	dB	dB/m	dB	dBuV	dBuV/m	dBuV/m	dB	
1		1636.817	5.30	26.41	37.73	42.79	36.77	74.00	-37.23	peak
2		1830.000	5.08	27.18	37.71	47.28	41.83	74.00	-32.17	peak
3		2745.000	5.80	30.37	37.62	46.41	44.96	74.00	-29.04	peak
4		3660.000	6.63	32.67	37.25	43.90	45.95	74.00	-28.05	peak
5		4415.705	7.47	33.60	37.19	44.09	47.97	74.00	-26.03	peak
6	pp	6309.573	11.18	34.95	37.80	43.54	51.87	74.00	-22.13	peak



Report No.: SZEM171001115503

Page: 23 of 25

Remark:

1) The field strength is calculated by adding the Antenna Factor, Cable Factor & Preamplifier. The basic equation with a sample calculation is as follows:

Final Test Level =Receiver Reading + Antenna Factor + Cable Factor - Preamplifier Factor

- 2) Scan from 9kHz to 10GHz, the below 30MHz was very low, and the above harmonics were the highest point could be found when testing, so only the above harmonics had been displayed. The amplitude of spurious emissions from the radiator which are attenuated more than 20dB below the limit need not be reported.
- 3) As shown in this section, for frequencies above 1GHz, the field strength limits are based on average limits. However, the peak field strength of any emission shall not exceed the maximum permitted average limits specified above by more than 20 dB under any condition of modulation. So, only the peak measurements were shown in the report.



Report No.: SZEM171001115503

Page: 24 of 25

8 Photographs

8.1 Conducted Emissions at AC Power Line (150kHz-30MHz) Test Setup



8.2 Radiated Emissions (above 1GHz) Test Setup



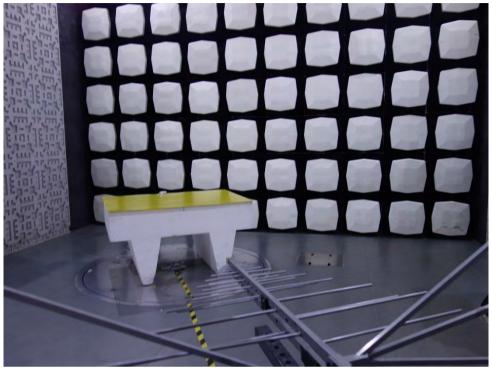
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Report No.: SZEM171001115503

Page: 25 of 25

8.3 Radiated Emissions (below 1GHz) Test Setup



- End of the Report -