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TEST REPORT

Application No.:	SHCR2304000695EV		
FCC ID:	2BAZLBHZD-A40A		
IC:	30442-BHZD40		
Applicant:	Nlightend Smart Tech Co.,Ltd		
Address of Applicant:	No.528, Daluzhou, Meilin street, Ninghai county, Ningbo, China		
Manufacturer:	Nlightend Smart Tech Co.,Ltd		
Address of Manufacturer:	No.528, Daluzhou, Meilin street, Ninghai county, Ningbo, China		
Factory:	Nlightend Smart Tech Co.,Ltd		
Address of Factory:	No.528, Daluzhou, Meilin street, Ninghai county, Ningbo, China		
Equipment Under Test (EU	Т):		
EUT Name:	AC Charging Pile		
Model No.:	BHZD-A32A, BHZD-A40A, BHZD-A50A 🛛 🐥		
Remark .≉:	Please refer to section 2 of this report which indicates which model was actually tested and which were electrically identical.		
Standard(s):	47 CFR Part 15, Subpart C 15.225		
	RSS-210 Issue 10 December 2019		
	RSS-Gen Issue 5 Amendment 2 (February 2021)		
Date of Receipt:	2023-04-10		
Date of Test:	2023-05-05 to 2023-05-17		
Date of Issue:	2023-05-30		
Test Result:	Pass*		

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

parlan shan

Parlam Zhan Laboratory Manager



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	Revision Record				
Version	Description	Date	Remark		
00	Original	2023-05-30	/		

Authorized for issue by:			
	Bril Wu		
	Bill Wu/Project Engineer		
	parlam zhan		
	Parlam Zhan / Reviewer		



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2 Test Summary

Radio Spectrum Technical Requirement				
Item	FCC Requirement	IC Requirement	Method	Result
Antenna Requirement	47 CFR Part 15, Subpart C 15.225	N/A	RSS-210 Issue 10 December 2019	Customer Declaration

Radio Spectrum Matter Part				
ltem	FCC Requirement	IC Requirement	Method	Result
Conducted Emissions at AC Power Line (150kHz-30MHz)	47 CFR Part 15, Subpart C 15.225	RSS-210 Issue 10 December 2019	ANSI C63.10 (2013) Section 6.2	Pass
20dB Bandwidth	47 CFR Part 15, Subpart C 15.225	RSS-210 Issue 10 December 2019	ANSI C63.10 (2013) Section 6.9	Pass
Emission Mask	47 CFR Part 15, Subpart C 15.225	RSS-210 Issue 10 December 2019	ANSI C63.10 (2013) Section 6.4	*Pass
Frequency tolerance	47 CFR Part 15, Subpart C 15.225	RSS-210 Issue 10 December 2019	ANSI C63.10 (2013) Section 6.8	Pass
Radiated Emissions(9kHz- 30MHz)	47 CFR Part 15, Subpart C 15.225	RSS-210 Issue 10 December 2019	ANSI C63.10 (2013) Section 6.4&6.5	Pass
Radiated Emissions(30MHz- 1GHz)	47 CFR Part 15, Subpart C 15.225	RSS-210 Issue 10 December 2019	ANSI C63.10 (2013) Section 6.4&6.5	Pass
99% Bandwidth	-	RSS-210 Issue 10 December 2019	RSS-Gen Section 6.7	Pass

Remark *: The test level of the fundamental signal is below the limit of general spurious emission, so the test item doesn't be performed.

Note: There are series models mentioned in this report, and they are the similar in electrical and electronic characters. The maximum output current of BHZD-A32A is 32A and the maximum output current of BHZD-A40A, BHZD-A50A is 40A, hardware was same, the current is adjust by software, and different currents have no effect on RF circuits, Consider the difference only the model BHZD-A50A was tested since their differences was only the model number and maximum output current.



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4 General Information

4.1 Details of E.U.T.

AC 240V/60Hz
AC 240V/60Hz
13.56MHz
ASK
Loop antenna
1
BHZD-A40A-A1
V2.6

4.2 Description of Support Units

The EUT has been tested with associated equipment below.

Description	Manufacturer	Model No.	Serial No.
Laptop	LENOVO	L460	-
Serial port adapter plate	-	Test Plate 3	-

4.3 Measurement Uncertainty

No.	Item	Measurement Uncertainty
1	Radio Frequency	8.4 x 10 ⁻⁸
2	Timeout	2s
3	Duty cycle	0.4%
4	Occupied Bandwidth	3%
F	DE Dedicted newer	5.1dB (Below 1GHz)
5	RF Radiated power	5.9dB (Above 1GHz)
		4.2dB (Below 30MHz)
C	Dedicted Cruvieus emission test	4.5dB (30MHz-1GHz)
6	Radiated Spurious emission test	5.1dB (1GHz-6GHz)
		5.4dB (6GHz-18GHz)
7	Temperature test	1°C
8	Humidity test	3%
9	Supply voltages	1.5%
10	Time	3%
Noto:	The measurement uncertainty represents	an expanded uncertainty expresse

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



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4.4 Test Location

All tests were performed at:

SGS-CSTC Standards Technical Services (Shanghai) Co., Ltd. E&E Lab

588 West Jindu Road, Xinqiao, Songjiang, 201612 Shanghai, China

Tel: +86 21 6191 5666 Fax: +86 21 6191 5678

No tests were sub-contracted.

Note:

1. SGS is not responsible for wrong test results due to incorrect information (e.g. max. clock frequency, highest internal frequency, antenna gain, cable loss, etc.) is provided by the applicant. (if applicable).

2. SGS is not responsible for the authenticity, integrity and the validity of the conclusion based on results of the data provided by applicant. (if applicable).

4.5 Test Facility

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

• A2LA (Certificate No. 6332.01)

SGS-CSTC Standards Technical Services (Shanghai) Co., Ltd. is accredited by the American Association for Laboratory Accreditation(A2LA).

• FCC (Designation Number: CN1301)

SGS-CSTC Standards Technical Services (Shanghai) Co., Ltd. has been recognized as an accredited testing laboratory.

• ISED (CAB Identifier: CN0020)

SGS-CSTC Standards Technical Services (Shanghai) Co., Ltd. EMC Laboratory has been recognized by Innovation, Science and Economic Development Canada (ISED) as an accredited testing laboratory. Company Number: 8617A

• VCCI (Member No.: 3061)

The 3m Semi-anechoic chamber and Shielded Room of SGS-CSTC Standards Technical Services (Shanghai) Co., Ltd. has been registered in accordance with the Regulations for Voluntary Control Measures with Registration No.: R-13868, C-14336, T-12221, G-10830 respectively.

4.6 Deviation from Standards

None

4.7 Abnormalities from Standard Conditions

None



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5 Equipment List

SG:

Equipment	Manufacturer	Model No	Inventory No	Cal Date	Cal Due Date
RF Radiated Test					•
EMI test Receiver	R&S	ESU40	SHEM051-1	2022-12-20	2023-12-19
Spectrum Analyzer	R&S	FSP-30	SHEM002-1	2022-12-20	2023-12-19
Communication Tester	R&S	CMW500	SHEM268-1	2022-07-25	2023-07-24
Loop Antenna (9kHz-30MHz)	Schwarzbeck	FMZB1519	SHEM135-1	2022-12-20	2023-12-19
Antenna (25MHz-2GHz)	Schwarzbeck	VULB9168	SHEM048-1	2021-09-11	2023-09-10
Antenna (25MHz-2GHz)	Schwarzbeck	VULB9168	SHEM202-1	2021-05-07	2023-05-06
Horn Antenna (1-18GHz)	Schwarzbeck	HF906	SHEM009-1	2022/8/11	2024-08-10
Horn Antenna (1-18GHz)	Schwarzbeck	BBHA9120D	SHEM050-1	2021-09-18	2023-09-17
Horn Antenna (14-40GHz)	Schwarzbec k	BBHA 9170	SHEM049-1	2021-09-18	2023-09-17
Pre-Amplifier	HP	8447D	SHEM236-1	2022-08-02	2023-08-01
High-amplifier (14-40GHz)	Schwarzbeck	10001	SHEM049-2	2022-12-20	2023-12-19
Band Filter	LORCH	9BRX-875/X150	SHEM156-1	/	/
Band Filter	LORCH	13BRX-1950/X500	SHEM083-2	/	/
Band Filter	LORCH	5BRX-2400/X200	SHEM155-1	/	/
Band Filter	LORCH	5BRX-5500/X1000	SHEM157-2	/	/
High pass Filter	Wainwright	WHK3.0/18G	SHEM157-1	/	/
High pass Filter	Wainwright	WHKS1700	SHEM157-3	/	/
Semi/Fully Anechoic	ST	11*6*6M	SHEM078-2	2020-05-25	2023-05-24
RE test Cable	/	RE01, RE02, RE06	/	2023-01-07	2024-01-06
Test software	ESE	E3	Version: 6.111221a	/	/
Conducted Emissions at	t Mains Termi	nals (150kHz-30MI	Hz)	•	
EMI test receiver	Rohde & Schwarz	ESR7	SHEM162-1	2022/12/20	2023/12/19
Line impedance stabilization network	SCHWARZBE CK	NSLK8127	SHEM061-1	2022/12/20	2023/12/19
Line impedance stabilization network	EMCO	3816_2	SHEM019-1	2022/12/20	2023/12/19
Pulse limiter	Rohde & Schwarz	ESH3-Z2	SHEM029-1	2022/12/20	2023/12/19
Shielding Room	ZHONGYU	8*4*3M	SHEM079-2	2020/12/20	2023/12/19
CE test Cable	/	/	SHEM172-1	2022/12/20	2023/12/19



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6 Radio Spectrum Technical Requirement

6.1 Antenna Requirement

6.1.1 Test Requirement:

47 CFR Part 15, Subpart C 15.203

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 antenna that uses a unique coupling to the intentional radiator, the manufacturer may design the unit permanently attached antenna or of an 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 loop antenna integrated on the main PCB and no consideration of replacement.

Antenna location: Refer to Appendix (Internal Photos)



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7 Radio Spectrum Matter Test Results

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

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

Fraguaday ranga (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				

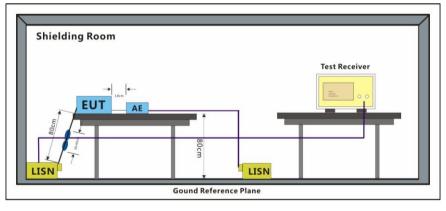
* Decreases with the logarithm of the frequency.

7.1.1 E.U.T. Operation

Operating Environment:

Temperature:22 °CHumidity:50 % RHAtmospheric Pressure:1020 mbarTest modea:TX mode_Keep the EUT in transmitting with modulation mode.

7.1.2 Test Setup Diagram





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7.1.3 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 50ohm/50 μ H + 50hm 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.

1. LISN=Read Level+ Cable Loss+ LISN Factor



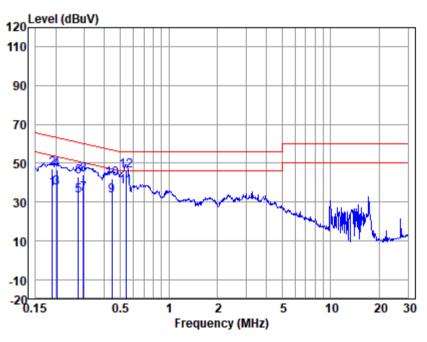
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Mode:a; Line:Live Line



LISN : LINE EUT/Project No : 00695EV Test Mode : 02

	Freq	Read level	LISN Factor	Cable Loss	Emissio Level	n Limit	Over Limit	Remark
	(MHz)	(dBuV)	(dB)	(dB)	(dBuV)	(dBuV)	(dB)	
1	0.19	26.62	0.40	9.87	36.89	54.02	-17.13	Average
2	0.19	36.63	0.40	9.87	46.90	64.02	-17.12	QP
3	0.20	27.26	0.40	9.87	37.53	53.49	-15.96	Average
4	0.20	36.34	0.40	9.87	46.61	63.49	-16.88	QP
5	0.28	23.03	0.33	9.87	33.23	50.94	-17.71	Average
6	0.28	32.85	0.33	9.87	43.05	60.94	-17.89	QP
7	0.30	23.81	0.31	9.87	33.99	50.32	-16.33	Average
8	0.30	34.05	0.31	9.87	44.23	60.32	-16.09	QP
9	0.44	23.21	0.22	9.87	33.30	46.98	-13.68	Average
10	0.44	32.16	0.22	9.87	42.25	56.98	-14.73	QP
11	0.54	27.95	0.20	9.86	38.01	46.00	-7.99	Average
12	0.54	36.28	0.20	9.86	46.34	56.00	-9.66	QP
No	tes: Emi	ssion Le	vel = Re	ad Leve	1 +LISN H	Factor +	Cable los	5



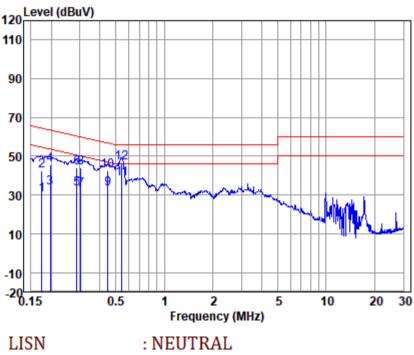
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Mode:a; Line:Neutral Line



EUT/Project No : 00695EV Test Mode : 02

	Freq	Read level	LISN Factor	Cable Loss	Emission Level	Limit	Over Limit	Remark	
	(MHz)	(dBuV)	(dB)	(dB)	(dBuV)	(dBuV)	(dB)		
1	0.17	20.11	0.32	9.87	30.30	54.72	-24.42	Average	
2	0.17	32.21	0.32	9.87	42.40	64.72	-22.32	QP	
3	0.20	23.53	0.30	9.87	33.70	53.71	-20.01	Average	
4	0.20	35.57	0.30	9.87	45.74	63.71	-17.97	QP	
5	0.29	22.84	0.30	9.87	33.01	50.59	-17.58	Average	
6	0.29	33.76	0.30	9.87	43.93	60.59	-16.66	QP	
7	0.31	22.56	0.30	9.87	32.73	50.10	-17.37	Average	
8	0.31	33.95	0.30	9.87	44.12	60.10	-15.98	QP	
9	0.45	22.81	0.30	9.87	32.98	46.93	-13.95	Average	
10	0.45	32.23	0.30	9.87	42.40	56.93	-14.53	QP	
11	0.55	28.05	0.30	9.86	38.21	46.00	-7.79	Average	
12	0.55	36.41	0.30	9.86	46.57	56.00	-9.43	QP	
No	Notes: Emission Level = Read Level +LISN Factor + Cable loss								



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7.2 20dB Bandwidth

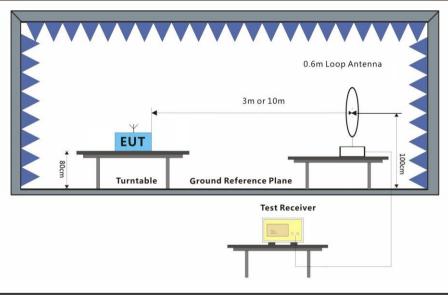
Test Requirement	47 CFR Part 15, Subpart C 15.215
Test Method:	ANSI C63.10 (2013) Section 6.9
Limit:	N/A

7.2.1 E.U.T. Operation

Operating Environment:

Temperature:22 °CHumidity:50 % RHAtmospheric Pressure:1002 mbarTest modea:TX mode_Keep the EUT in transmitting with modulation mode.

7.2.2 Test Setup Diagram



7.2.3 Measurement Procedure and Data



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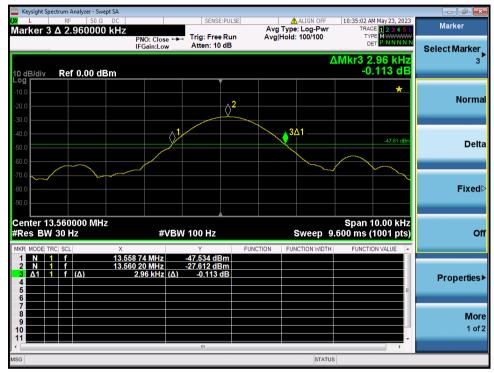
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20dB ba	andwidth (kHz)	F∟ (MHz)	Fн (MHz)	Limit(MHz)	Result
	2.96	13.55874	13.5617	13.110 – 14.010	Pass

Test plot as follows:





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7.3 Emission Mask

Test Requirement	
Test Method:	
Limit:	

47 CFR Part 15, Subpart C 15.225(a)&(b)&(C) ANSI C63.10 (2013) Section 6.4

(a) The field strength of any emissions within the band 13.553-13.567 MHz shall not exceed 15.848 microvolts/meter at 30 meters.

- (b) Within the bands 13.410-13.553 MHz and 13.567-13.710 MHz, the field strength of any emissions shall not exceed 334 microvolts/meter at 30 meters.
- (c) Within the bands 13.110-13.410 MHz and 13.710-14.010 MHz the field strength of any emissions shall not exceed 106 microvolts/meter at 30 meters.

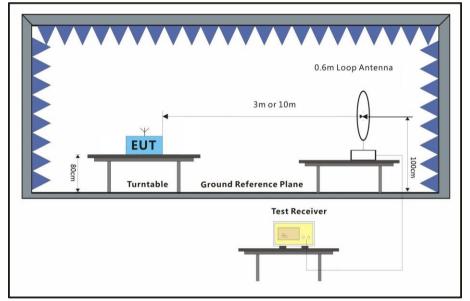
(d) The field strength of any emissions appearing outside of the 13.110-14.010 MHz band shall not exceed the general radiated emission limits in § 15.209.

7.3.1 E.U.T. Operation

Operating Environment:

Temperature:22 °CHumidity:50 % RHAtmospheric Pressure:1002 mbarTest modea:TX mode_Keep the EUT in transmitting with modulation mode.

7.3.2 Test Setup Diagram



7.3.3 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.

Note: The test level of the fundamental signal is below the limit of general spurious emission, so the test item doesn't be performed.



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7.4 Frequency tolerance

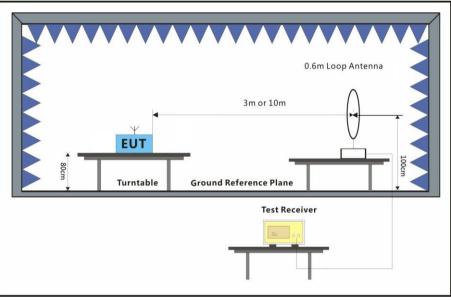
Test Requirement	47 CFR Part 15, Subpart C 15.225(e)
Test Method:	ANSI C63.10 (2013) Section 6.8
Limit:	1.356kHz

7.4.1 E.U.T. Operation

Operating Environment:

Temperature:22 °CHumidity:50 % RHAtmospheric Pressure:1002 mbarTest modea:TX mode_Keep the EUT in transmitting with modulation mode.

7.4.2 Test Setup Diagram



7.4.3 Measurement Procedure and Data



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Nominal Operation Frequency: 13.56MHz					
Test Co	nditions	Test Result	Deviation	Limit	
Temp (℃)	Volt (V AC)	(MHz)	(kHz)	(kHz)	Result
T _{nom} (-20)	V _{nom} (240)	13.56020	0.20		Pass
T _{nom} (-10)	V _{nom} (240)	13.56018	0.18		Pass
T _{nom} (0)	V _{nom} (240)	13.56015	0.15		Pass
T _{nom} (10)	V _{nom} (240)	13.56013	0.13		Pass
T _{nom} (20)	V _{nom} (240)	13.56017	0.17	±0.01%	Pass
T _{nom} (30)	V _{nom} (240)	13.56022	0.22	(1.3560kHz)	Pass
T _{nom} (40)	V _{nom} (240)	13.56019	0.19		Pass
T _{nom} (50)	V _{nom} (240)	13.56016	0.16		Pass
T (20)	V _{min} (216)	13.56023	0.23		Pass
T _{nom} (20)	V _{max} (264)	13. 56018	0.18		Pass

Note: Deviation (kHz) = (Test Result-13.56MHz)*1000



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7.5 Radiated Emissions(9kHz-30MHz)

Test Requirement	47 CFR Part 15, Subpart C 15.225(d) & 15.209
Test Method:	ANSI C63.10 (2013) Section 6.4&6.5

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			

NOTE:

(1) For test distance other than what is specified, but fulfilling the requirements of section 15.31(f) (2) the field strength is calculated by adding additionally an extrapolation factor of 40dB/decade (inverse linear distance for field strength measurements).

So the Distance Extrapolation Factor in dB is 40*log (D_{TEST} / D_{SPEC}) where D_{TEST} = Test Distance and D_{SPEC} = Specified Distance.

Field strength limit $(dB\mu V/m)@$ test distance= Field strength limit $(dB\mu V/m)@$ specified distance +Distance Extrapolation Factor

(2) The lower limit shall apply at the transition frequencies.

7.5.1 E.U.T. Operation

Operating Environment:

Temperature:	22 °C	Humidity: 50	% RH	Atmospheric Pressure:	1002	mbar
Test mode	a:TX mode_Keep the EUT in transmitting with modulation mode.					



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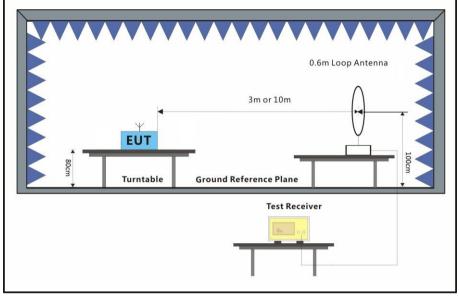
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7.5.2 Test Setup Diagram

SG:



7.5.3 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.



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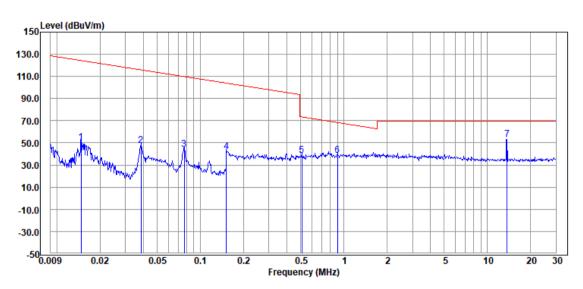
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Coaxial:

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Item	Freq.	Read Level	Antenna Factor	Cable Loss	Result Level@3m	Result Level@S PEC	Limit Line@SP EC	Over Limit	Detector
(Mark)	(MHz)	(dBµV)	(dB/m)	(dB)	(dBuV/m)	(dBuV/m)	(dBuV/m)	(dB)	
1	0.015	30.11	20.00	0.10	50.21	-29.79	44.20	-73.99	QP
2	0.038	27.42	19.90	0.10	47.42	-32.58	35.90	-68.48	QP
3	0.077	23.96	19.95	0.10	44.01	-35.99	29.84	-65.83	QP
4	0.151	21.87	20.00	0.10	41.97	-38.03	23.99	-62.02	QP
5	0.507	18.26	20.10	0.10	38.46	-1.54	33.50	-35.04	QP
6	0.902	18.29	20.20	0.10	38.59	-1.41	28.51	-29.92	QP
7	13.658	32.88	20.05	0.39	53.32	13.32	29.50	-16.18	Peak

Remark: Result Level= Read Level + Antenna Factor + Cable Loss



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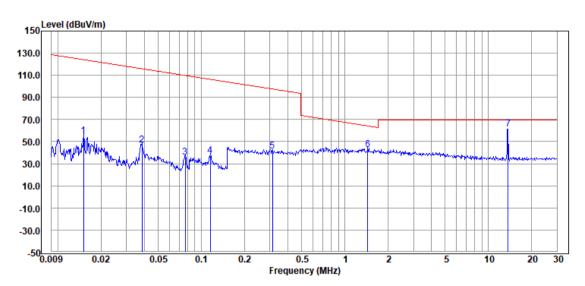
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Coplanar:

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Item	Freq.	Read Level	Antenna Factor	Cable Loss	Result Level@3m	Result Level@S PEC	Limit Line@SP EC	Over Limit	Detector
(Mark)	(MHz)	(dBµV)	(dB/m)	(dB)	(dBuV/m)	(dBuV/m)	(dBuV/m)	(dB)	
1	0.015	35.05	20.00	0.10	55.15	-24.85	43.99	-68.84	QP
2	0.038	26.96	19.90	0.10	46.96	-33.04	35.9	-68.94	QP
3	0.077	15.97	19.95	0.10	36.02	-43.98	29.84	-73.82	QP
4	0.115	17.27	20.00	0.10	37.37	-42.63	26.39	-69.02	QP
5	0.312	21.01	20.00	0.10	41.11	-38.89	17.73	-56.62	QP
6	1.444	22.35	20.25	0.12	42.72	2.72	24.44	-21.72	QP
7	13.658	41.19	20.05	0.39	61.63	21.63	29.5	-7.87	Peak

Remark: Result Level= Read Level + Antenna Factor + Cable Loss



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7.6 Radiated Emissions(30MHz-1GHz)

Test Requirement	47 CFR Part 15, Subpart C 15.225(d) & 15.209
Test Method:	ANSI C63.10 (2013) Section 6.4&6.5
Limit:	

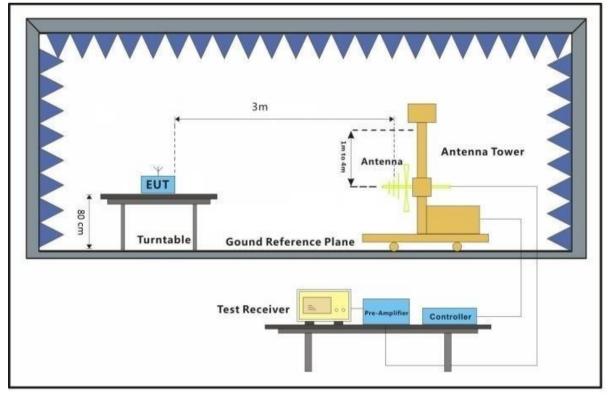
Frequency	Field strength (microvolt/meter)	Limit (dBuV/m)	Remark	Measurement distance (m)
30MHz-88MHz	100	40.0	Quasi-peak	3
88MHz-216MHz	150	43.5	Quasi-peak	3
216MHz-960MHz	200	46.0	Quasi-peak	3
960MHz-1GHz	500	54.0	Quasi-peak	3

7.6.1 E.U.T. Operation

Operating Environment:

Temperature:22 °CHumidity:50 % RHAtmospheric Pressure:1002 mbarTest modea:TX mode_Keep the EUT in transmitting with modulation mode.

7.6.2 Test Setup Diagram





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7.6.3 Measurement Procedure and Data

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

b. The EUT was set 3 meters away from the interference-receiving antenna, which was mounted on the top of a variable-height antenna tower.

c. 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.

d. 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.

e. The test-receiver system was set to Peak Detect Function and Specified Bandwidth with Maximum Hold Mode.

f. 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.

g. The radiation measurements are performed in X, Y, Z axis positioning. And found the X axis positioning which it is worse case, only the test worst case mode is recorded in the report.

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



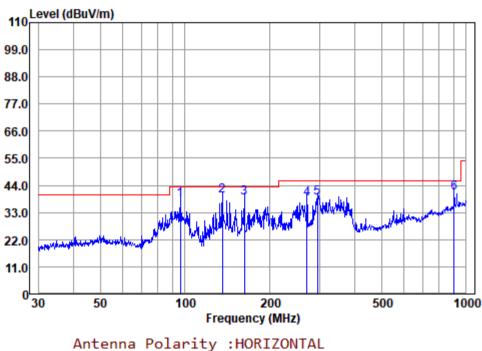
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Mode:a; Polarization:Horizontal



Antenna Polarity	:HORIZONTAL
EUT/Project	:0695EV
Test mode	:00

	Freq		Antenna Factor						Remark
		10.44		 		10.11/-	10.000		
	MHz	abuv	dB/m	aB	aB	abuv/m	aBuv/m	dB	
1	96.099	55.19	8.33	1.69	26.94	38.27	43.50	-5.23	QP
2	135.506	52.41	12.40	1.89	27.10	39.60	43.50	-3.90	QP
3	162.611	50.61	13.21	2.06	27.03	38.85	43.50	-4.65	QP
4	271.325	49.44	12.66	3.07	26.78	38.39	46.00	-7.61	QP
5	295.147	48.99	13.38	3.19	26.62	38.94	46.00	-7.06	QP
6	906.482	39.21	23.94	5.05	27.28	40.92	46.00	-5.08	QP
No	te:Emissi	on Leve	1=Read L	evel+A	ntenna	Factor+C	able los	s-Pream	p Factor



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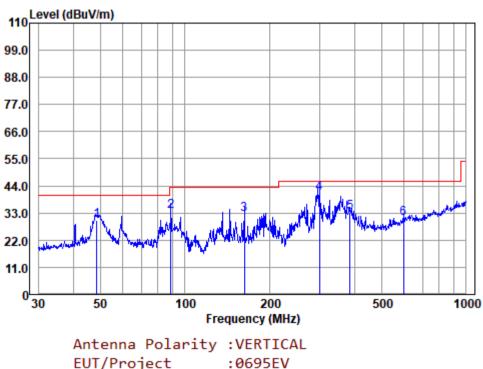
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Mode:a; Polarization:Vertical

SG



	5	
Test	mode	

	Freq		Antenna Factor						Remark
	MHz	dBuV	dB/m	dB	dB	dBuV/m	dBuV/m	dB	
1	48.502	41.39	13.83	1.44	26.49	30.17	40.00	-9.83	QP
2	88.964	50.73	7.99	1.67	26.61	33.78	43.50	-9.72	QP
3	162.611	44.36	13.21	2.06	27.03	32.60	43.50	-10.90	QP
4	300.367	51.14	13.42	3.21	26.60	41.17	46.00	-4.83	QP
5	385.281	41.76	15.41	3.44	27.14	33.47	46.00	-12.53	QP
6	599.321	34.44	19.84	3.88	27.20	30.96	46.00	-15.04	QP
No	te:Emissi	on Leve	l=Read L	evel+A	ntenna	Factor+Ca	able los	ss-Pream	p Factor

:00



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7.7 99% Bandwidth

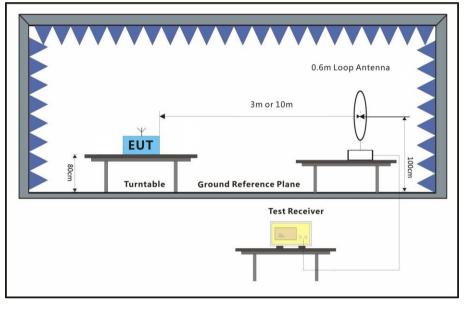
Test RequirementRSS-210 A1.3Test Method:RSS-Gen Section 6.7

7.7.1 E.U.T. Operation

Operating Environment:

Temperature:22 °CHumidity:50 % RHAtmospheric Pressure:1002 mbarTest modea:TX mode_Keep the EUT in transmitting with modulation mode.

7.7.2 Test Setup Diagram





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7.7.3 Measurement Procedure and Data

Frequency (MHz)	20dB bandwidth (kHz)
13.56	2.34





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8 Test Setup Photo

Refer to Appendix - Test Setup Photo for SHCR2304000695EV

9 EUT Constructional Details (EUT Photos)

Refer to Appendix - Photographs of EUT Constructional Details for SHCR2304000695EV

- End of the Report -



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