

Test Report

Applicant : SOUNDLAB TECHNOLOGY CO.,LTD
Floor 6-7, 1-3, Building#2, No. 6-2, Shangxia
Address : Middle Road, Shangxia Area, Dongjiang Science
Park, Zhongkai High-tech Zone, Huizhou
Product Name : Soundbar
Brand Mark : 
Model : SL5100
Series model : SL5100(37)
FCC ID : 2ATKO-SL5100
Report Number : BLA-EMC-202502-A3803
Date of Receipt : Feb. 14, 2025
Date of Test : Feb. 14, 2025 to Feb. 26, 2025
Test Standard : 47 CFR Part 15, Subpart E 15.407
Test Result : Pass

Compiled by: Review by: Approved by: 

Issued Date: Feb. 26, 2025

BlueAsia of Technical Services(Shenzhen) Co., Ltd.Address: Building C, No. 107, Shihuan Road, Shiyuan Sub-District, Baoan District,
Shenzhen, Guangdong Province, China

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Revise Record

Version No.	Date	Description
01	Feb. 26, 2025	Original

1 General information

1.1 General information

Applicant	SOUNDLAB TECHNOLOGY CO.,LTD
Address	Floor 6-7, 1-3, Building#2, No. 6-2, Shangxia Middle Road, Shangxia Area, Dongjiang Science Park, Zhongkai High-tech Zone, Huizhou
Manufacturer	SOUNDLAB TECHNOLOGY CO.,LTD
Address	Floor 6-7, 1-3, Building#2, No. 6-2, Shangxia Middle Road, Shangxia Area, Dongjiang Science Park, Zhongkai High-tech Zone, Huizhou
Factory	SOUNDLAB TECHNOLOGY CO.,LTD
Address	Floor 6-7, 1-3, Building#2, No. 6-2, Shangxia Middle Road, Shangxia Area, Dongjiang Science Park, Zhongkai High-tech Zone, Huizhou

1.2 General description of EUT

Product Name	Soundbar
Model No.	SL5100
Series model	SL5100(37)
Note	The above-mentioned prototype is exactly the same in terms of appearance, PCB layout, internal structure and components, except for the difference in the agent for sales.
Operation Frequency	5745MHz-5825MHz.
Channel numbers	3
Modulation Type	GFSK
Channel Spacing	1MHz
Data speed	1Mbps; 2Mbps
Antenna Type:	PCB Antenna
Antenna Gain:	Ant1: 2.85dBi Ant2: 2.85dBi (Provided by the customer)
Power supply or adapter information	Model: CW72E2003000SC Input: 100-240V~50/60Hz 1.8A MAX Output: 20.0V=3000mA
Hardware Version	N/A
Software Version	N/A
Note: For a more detailed description, please refer to Specification or User's Manual supplied by the applicant and/or manufacturer.	

2 Test summary

No.	Test item	FCC standard	Test Method (Clause)	Result
1	Antenna Requirement	§15.203	N/A	Pass
2	Conducted Emissions at AC Power Line (150kHz-30MHz)	§15.207	ANSI C63.10-2013 Clause 6.2	Pass
3	Frequency Stability	§15.407 (g)	ANSI C63.10-2013 Clause 6.8	Pass
4	Maximum Conducted output power	§15.407 (a)	KDB 789033 D02 II E	Pass
5	Transmitter Power Control	§15.407 (h)(1)	KDB 789033 D02 II E	N/A
6	Peak Power spectrum density	§15.407 (a)	KDB 789033 D02 II F	Pass
7	Minimum 6 dB bandwidth (5.725-5.85 GHz band)	§15.407 (e)	KDB 789033 D02 II C 2	Pass
8	26dB Emission bandwidth	§15.407 (a)	KDB 789033 D02 II C 1	N/A
9	99% Bandwidth	N/A	KDB 789033 II D	Pass
10	Duty Cycle	KDB 789033 D02 II B 1	KDB 789033 II B 1	Pass
11	Conducted Band Edges Measurement	§15.407 (b)(4)	ANSI C63.10-2013 Clause 11.13	Pass
12	Conducted spurious emissions	§15.407(b)	ANSI C63.10-2013 Clause 11.11	Pass
13	Radiated Emissions which fall in the restricted bands	§15.209 §15.407(b)	KDB 789033 D02 II G	Pass
14	Radiated Emissions	§15.209 §15.407(b)	KDB 789033 D02 II G	Pass
15	DFS: Channel Closing Transmission Time	§15.407((h)(2)	KDB 905462 D02 Clause 7.8.3	N/A
16	DFS: Non-occupancy period	§15.407((h)(2)	KDB 905462 D02 Clause 7.8.3	N/A

N/A: Not Applicable

3 Test Configuration

3.1 Test mode

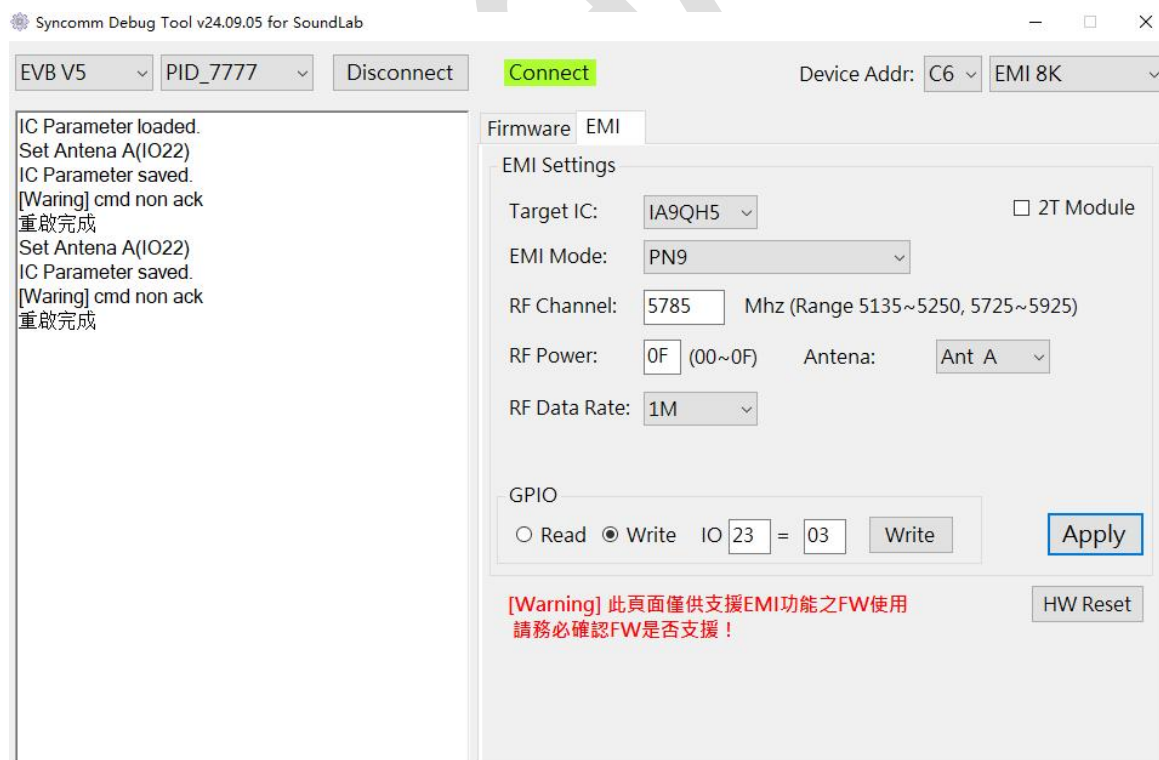
Test Mode ^{Note 1}	Description
TX	Keep the EUT in continuously transmitting mode with modulation. (Duty cycle>98%)

Note 1: The EUT was configured to measure its highest possible emission and/or immunity level. The test modes were adapted according to the operation manual for use; the EUT was operated in the engineering mode ^{Note 2} to fix the TX frequency that was for the purpose of the measurements.

Note 2: Special software is used. The software provided by client to enable the EUT under transmission condition continuously at specific channel frequencies individually.

Power level setup in software			
Test Software Name	Syncomm Debug Tool v24.09.05		
Mode	Channel	Frequency (MHz)	Soft Set
	CH149	5745	TX level : 0F
	CH157	5785	
	CH165	5825	

Run Software



The screenshot shows the Syncomm Debug Tool v24.09.05 for SoundLab interface. The top bar includes a title bar and window controls. Below the title bar, there are dropdown menus for 'EVB V5' and 'PID_7777', a 'Disconnect' button, a green 'Connect' button, and a 'Device Addr:' section with 'C6' and 'EMI 8K' dropdowns. The main interface is divided into two panes. The left pane shows a log of operations: 'IC Parameter loaded.', 'Set Antena A(IO22)', 'IC Parameter saved.', '[Warning] cmd non ack', '重啟完成', 'Set Antena A(IO22)', 'IC Parameter saved.', '[Warning] cmd non ack', '重啟完成'. The right pane is titled 'Firmware EMI' and contains 'EMI Settings' and 'GPIO' sections. The 'EMI Settings' section includes 'Target IC: IA9QH5', 'EMI Mode: PN9', 'RF Channel: 5785 Mhz (Range 5135~5250, 5725~5925)', 'RF Power: 0F (00~0F)', 'Antena: Ant A', and 'RF Data Rate: 1M'. There is a checkbox for '2T Module'. The 'GPIO' section has radio buttons for 'Read' and 'Write' (selected), a field 'IO 23 = 03', and a 'Write' button. At the bottom right, there is an 'Apply' button and a 'HW Reset' button. A red warning message at the bottom states: '[Warning] 此頁面僅供支援EMI功能之FW使用 請務必確認FW是否支援!'.

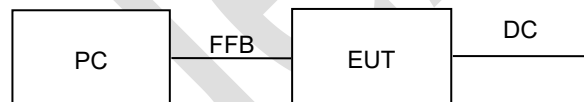
3.2 Operation frequency and test channel

Frequency (MHz):

5745	5759	5773	5787	5801	5815
5746	5760	5774	5788	5802	5816
5747	5761	5775	5789	5803	5817
5748	5762	5776	5790	5804	5818
5749	5763	5777	5791	5805	5819
5750	5764	5778	5792	5806	5820
5751	5765	5779	5793	5807	5821
5752	5766	5780	5794	5808	5822
5753	5767	5781	5795	5809	5823
5754	5768	5782	5796	5810	5824
5755	5769	5783	5797	5811	5825
5756	5770	5784	5798	5812	
5757	5771	5785	5799	5813	
5758	5772	5786	5800	5814	

Test channel: 149: 5745(MHz), 157: 5785(MHz), 165: 5825(MHz)

3.3 Configuration diagram of EUT



3.4 Auxiliary equipment

Device Type	Manufacturer	Model Name	Serial No.	Remark
PC	Lenovo	E460C	N/A	From lab (No.BLA-ZC-BS-2022005)
Note: “--” mean no any auxiliary device during testing.				

3.5 Test environment

Environment	Temperature	Voltage
Normal	25°C	AC120V

4 Laboratory information

4.1 Laboratory and accreditations

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

Company name:	BlueAsia of Technical Services(Shenzhen) Co., Ltd.
Address:	Building C, No. 107, Shihuan Road, Shiyan Sub-District, Baoan District, Shenzhen, Guangdong Province, China
CNAS accredited No.:	L9788
A2LA Cert. No.:	5071.01
FCC Designation No.:	CN1252
ISED CAB identifier No.:	CN0028
Telephone:	+86-755-28682673
FAX:	+86-755-28682673

4.2 Measurement uncertainty

This uncertainty represents an expanded uncertainty expressed at approximately the 95% confidence level using a coverage factor of $k=1.96$.

Parameter	Expanded Uncertainty
Radiated Emission(9kHz-30MHz)	$\pm 4.34\text{dB}$
Radiated Emission(30Mz-1000MHz)	$\pm 4.24\text{dB}$
Radiated Emission(1GHz-18GHz)	$\pm 4.68\text{dB}$
AC Power Line Conducted Emission(150kHz-30MHz)	$\pm 3.45\text{dB}$
Occupied Channel Bandwidth	$\pm 5\%$
RF output power, conducted	$\pm 1.5\text{ dB}$
Power Spectral Density, conducted	$\pm 3.0\text{ dB}$
Unwanted Emissions, conducted	$\pm 3.0\text{ dB}$
Temperature	$\pm 3\text{ }^{\circ}\text{C}$
Supply voltages	$\pm 3\%$
Time	$\pm 5\%$

5 Test equipment

Radiated Spurious Emissions (Below 1GHz)

Equipment	Name	Model	Manufacture	S/N	Cal. Date	Due. Date
BLA-EMC-002-01	Anechoic chamber	9*6*6 chamber	SKET	N/A	2024/3/27	2027/3/26
BLA-EMC-002-02	Control room	966 control room	SKET	N/A	2024/3/27	2027/3/26
BLA-EMC-009	EMI receiver	ESR7	R&S	101199	2024/08/08	2025/08/07
BLA-EMC-043	Loop antenna	FMZB1519B	Schwarzbeck	00102	2024/06/29	2026/06/28
BLA-EMC-065	Broadband antenna	VULB9168	Schwarzbeck	01065P	2024/06/29	2026/06/27
BLA-XC-01	Coaxial Cable	N/A	BlueAsia	V01	N/A	N/A
BLA-XC-02	Coaxial Cable	N/A	BlueAsia	V02	N/A	N/A

Radiated Spurious Emissions (Above 1GHz)

Equipment	Name	Model	Manufacture	S/N	Cal. Date	Due. Date
BLA-EMC-001-01	Anechoic chamber	9*6*6 chamber	SKET	N/A	2023/11/16	2026/11/15
BLA-EMC-001-02	Control Room	966 control room	SKET	N/A	2023/11/16	2025/11/15
BLA-EMC-008	Spectrum	FSP40	R&S	100817	2024/08/08	2025/08/07
BLA-EMC-012	Broadband antenna	VULB9168	Schwarzbeck	00836 P:00227	2022/10/12	2025/10/11
BLA-EMC-013	Horn Antenna	BBHA9120D	Schwarzbeck	01892	2024/06/29	2026/06/28
BLA-EMC-014	Amplifier	PA_000318G-45	SKET	PA201804 3003	2024/08/08	2025/08/07
BLA-EMC-046	Filter bank	2.4G/5G Filter bank	SKET	N/A	2024/06/28	2025/06/27
BLA-EMC-061	Receiver	ESPI7	R&S	101477	2024/06/28	2025/06/27
BLA-EMC-066	Amplifier	LNPA_30M01 G-30	SKET	SK202106 0801	2024/06/28	2025/06/27
BLA-EMC-086	Amplifier	LNPA_18G40 G-50dB	SKET	SK202207 1301	2024/06/28	2025/06/27
BLA-EMC-087	Horn Antenna	BBHA 9170	Schwarzbeck	1106	2024/06/29	2026/06/28
BLA-XC-03	Coaxial Cable	N/A	BlueAsia	V03	N/A	N/A
BLA-XC-04	Coaxial Cable	N/A	BlueAsia	V04	N/A	N/A

Conducted Emissions

Equipment	Name	Model	Manufacture	S/N	Cal. Date	Due. Date
BLA-EMC-003-001	Shield room	8*3*3	SKET	N/A	2023/11/16	2025/11/15
BLA-EMC-009	EMI receiver	ESR7	R&S	101199	2024/08/08	2025/08/07
BLA-EMC-011	LISN	ENV216	R&S	101372	2024/08/08	2025/08/07
BLA-EMC-033	Impedance transformer	DC-2GHz	DFXP	N/A	2024/06/28	2025/06/27
BLA-EMC-041	LISN	AT166-2	ATTEN	AKK180600003	2024/08/08	2025/08/07
BLA-EMC-045	Impedance stable network	ISNT8-cat 6	TESEQ	53580	2024/08/08	2025/08/07
BLA-EMC-095	Single-channel vehicle artificial power network	NNBM 8124	Schwarzbeck	01045	2024/06/28	2025/06/27
BLA-EMC-096	Single-channel vehicle artificial power network	NNBM 8124	Schwarzbeck	01075	2024/06/28	2025/06/27
BLA-XC-05	Coaxial Cable	N/A	BlueAsia	V05	N/A	N/A

RF conducted

Equipment	Name	Model	Manufacture	S/N	Cal. Date	Due. Date
BLA-EMC-003-003	Shield room	5*3*3	SKET	N/A	2023/11/16	2025/11/15
BLA-EMC-016	Signal Generator	N5182A	Agilent	MY52420567	2024/06/28	2025/06/27
BLA-EMC-038	Spectrum	N9020A	Agilent	MY49100060	2024/08/08	2025/08/07
BLA-EMC-042	Power sensor	RPR3006W	DARE	14I00889SN042	2024/08/08	2025/08/07
BLA-EMC-044	Radio communication tester	CMW500	R&S	132429	2024/08/08	2025/08/07
BLA-EMC-064	Signal Generator	N5182B	KEYSIGHT	MY58108892	2024/06/28	2025/06/27
BLA-EMC-079	Spectrum	N9020A	Agilent	MY54420161	2024/08/08	2025/08/07
BLA-EMC-088	Audio Analyzer	ATS-1	Audio Precision	ATS141094	2024/06/28	2025/06/27

Test software

Software No.	Software Name	Manufacture	Software version	Test site
BLA-EMC-S001	EZ-EMC	EZ	EEMC-3A1+	RE(Below 1GHz)
BLA-EMC-S002	EZ-EMC	EZ	EEMC-3A1+	RE(Above 1GHz)
BLA-EMC-S003	EZ-EMC	EZ	EEMC-3A1+	CE
BLA-EMC-S010	MTS 8310	MW	2.0.0.0	RF

6 Test result

6.1 Antenna requirement

Test Standard	47 CFR Part 15, Subpart C 15.203
Test Method	N/A

6.1.1 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 an antenna that uses a unique coupling to the intentional radiator, the manufacturer may design the unit permanently attached antenna or of a 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. The best case gain of the antenna is Ant1: 2.85 dBi, Ant2: 2.85 dBi.

6.2 Conducted emissions at AC power line (150 kHz-30 MHz)

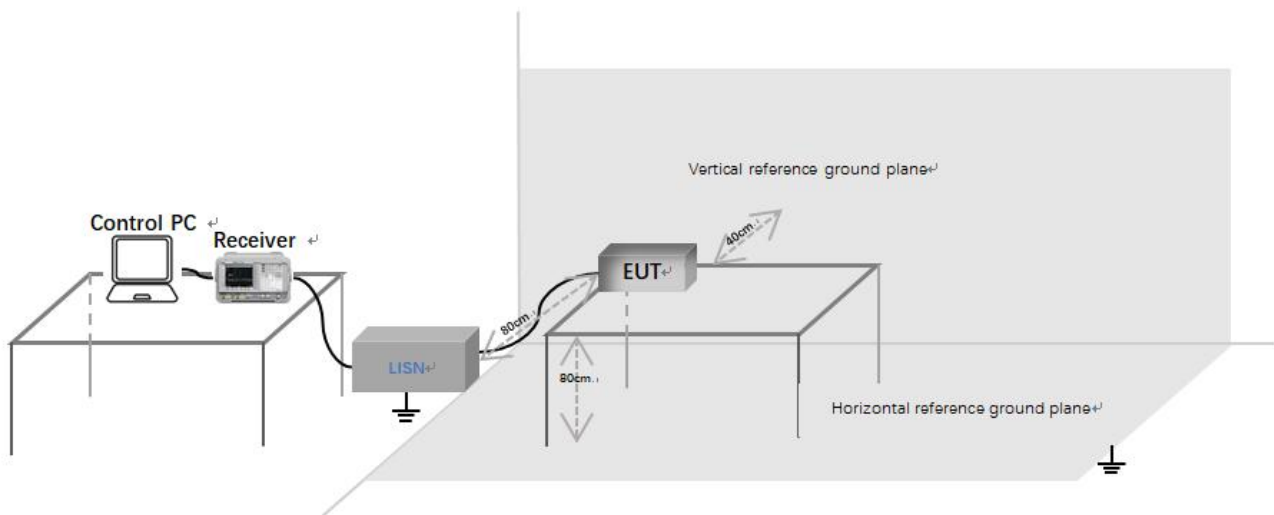
Test Standard	47 CFR Part 15, Subpart C 15.207
Test Method	ANSI C63.10-2013 Cluase6.2
Test Mode (Pre-Scan)	TX
Test Mode (Final Test)	TX

6.2.1 Limit

Frequency of emission(MHz)	Conducted limit(dBμV)	
	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.

6.2.2 Test setup



Description of test setup connection:

- Connect the control PC to the receiver through a USB to GPIB cable;
- The receiver is connected to the LISN through a coaxial line;
- Connect the power port of LISN to the EUT.

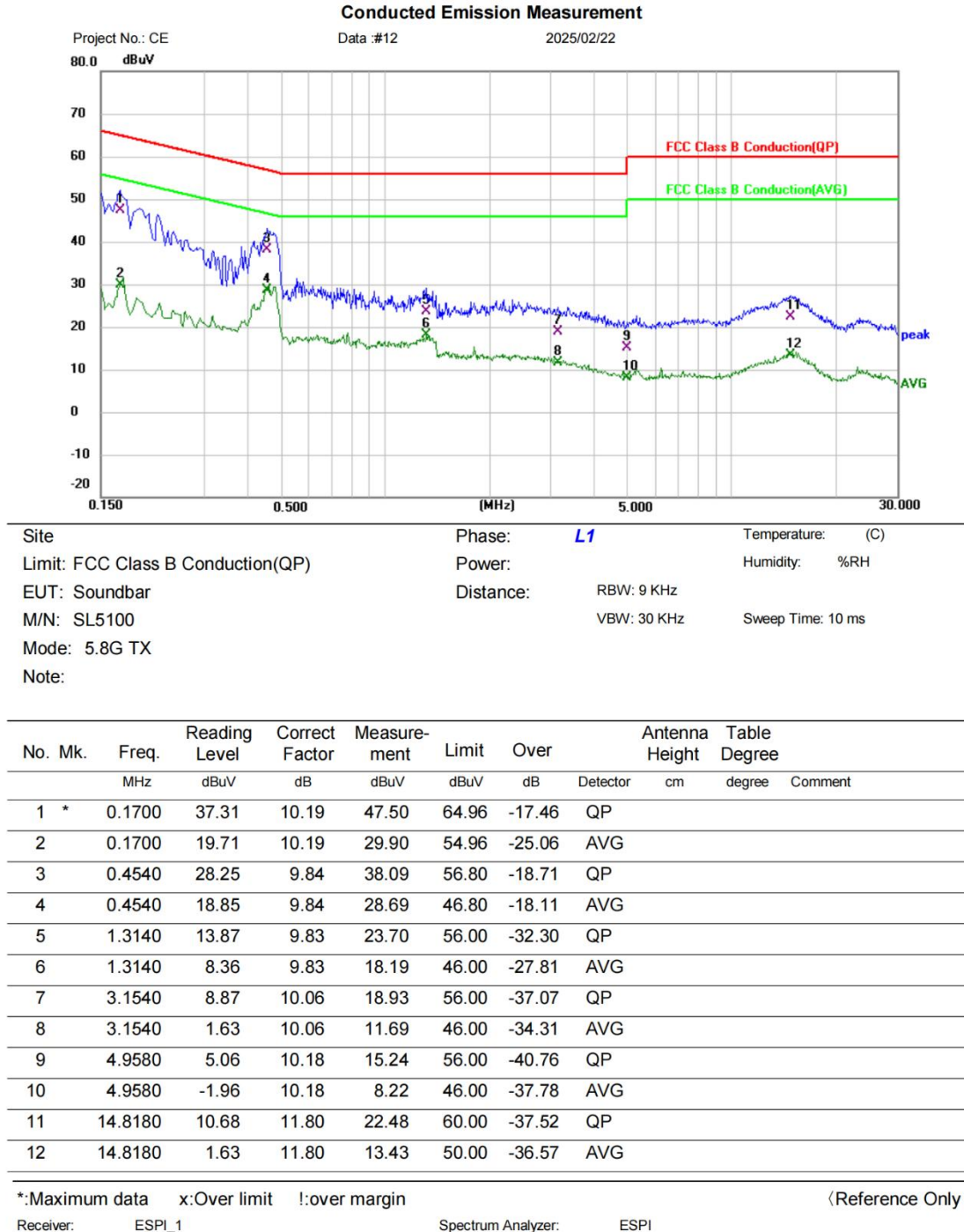
6.2.3 Procedure

- 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/50H + 5ohm 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.

LISN=Read Level+ Cable Loss+ LISN Factor

6.2.4 Test data

[Test mode: TX]; [Line: Line]; [Power: AC120V/60Hz]



Test Result: Pass

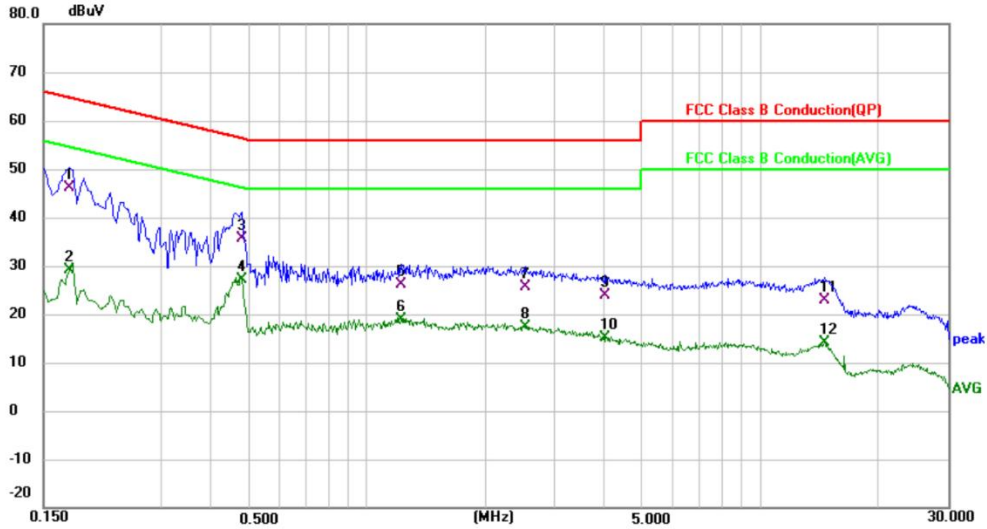
[Test mode: TX]; [Line: Neutral];[Power:AC120V/60Hz]

Conducted Emission Measurement

Project No.: CE

Data :#11

2025/02/22



Site: Phase: **N** Temperature: (C)
 Limit: FCC Class B Conduction(QP) Power: Humidity: %RH
 EUT: Soundbar Distance: RBW: 9 KHz
 M/N: SL5100 VBW: 30 KHz Sweep Time: 10 ms
 Mode: 5.8G TX
 Note:

No.	Mk.	Freq.	Reading	Correct	Measure-	Limit	Over	Antenna	Table	
		MHz	dBuV	Factor	ment	dBuV	dB	Height	Degree	
				dB	dBuV	dBuV	dB	cm	degree	Comment
1	*	0.1740	36.03	10.19	46.22	64.77	-18.55	QP		
2		0.1740	18.98	10.19	29.17	54.77	-25.60	AVG		
3		0.4780	25.84	9.79	35.63	56.37	-20.74	QP		
4		0.4780	17.28	9.79	27.07	46.37	-19.30	AVG		
5		1.2180	16.33	9.74	26.07	56.00	-29.93	QP		
6		1.2180	9.21	9.74	18.95	46.00	-27.05	AVG		
7		2.5140	15.82	9.88	25.70	56.00	-30.30	QP		
8		2.5140	7.56	9.88	17.44	46.00	-28.56	AVG		
9		4.0460	13.86	10.04	23.90	56.00	-32.10	QP		
10		4.0460	5.17	10.04	15.21	46.00	-30.79	AVG		
11		14.5780	11.11	11.71	22.82	60.00	-37.18	QP		
12		14.5780	2.40	11.71	14.11	50.00	-35.89	AVG		

*:Maximum data x:Over limit !:over margin

(Reference Only)

Receiver: ESPI_1

Spectrum Analyzer: ESPI

Test Result: Pass

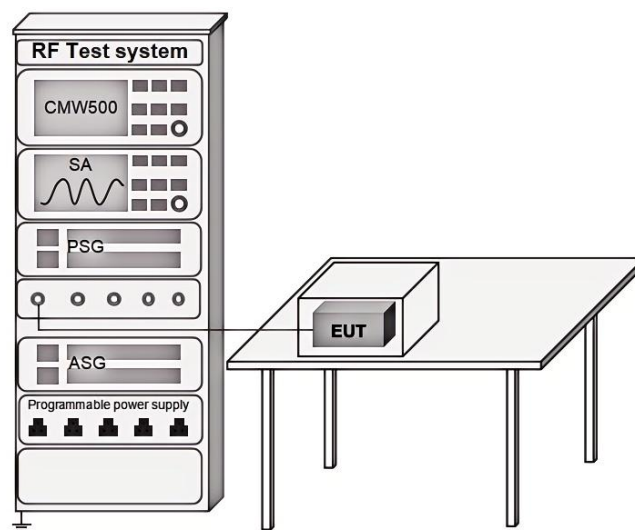
6.3 Frequency Stability

Test Standard	47 CFR Part 15, Subpart E 15.407(g)
Test Method	ANSI C63.10-2013 Cluase6.8
Test Mode (Pre-Scan)	TX
Test Mode (Final Test)	TX

6.3.1 Limit

The frequency tolerance shall be maintained within the band of operation frequency over a temperature variation of 0 degrees to 35 degrees C at normal supply voltage, and for a variation in the primary supply voltage from 85% to 115% of the rated supply voltage at a temperature of 20 degrees C.

6.3.2 Test setup



6.3.3 Test data

Pass: Please refer to appendix A for details

6.4 Maximum conducted output Power

Test Standard	47 CFR Part 15, Subpart E 15.407 (a)
Test Method	KDB 789033 D02 II E
Test Mode (Pre-Scan)	TX
Test Mode (Final Test)	TX

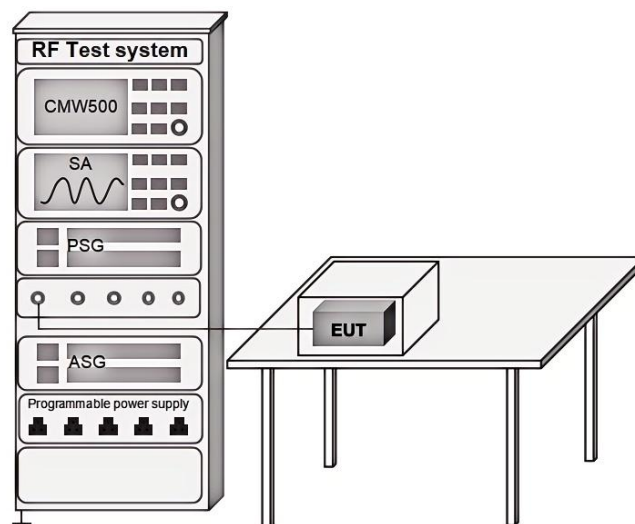
6.4.1 Limit

Frequency band(MHz)	Limit
5150-5250	≤1W(30dBm) for master device
	≤250mW(24dBm) for client device
5250-5350	≤250mW(24dBm) for client device or 11dBm+10logB*
5470-5725	≤250mW(24dBm) for client device or 11dBm+10logB*
5725-5850	≤1W(30dBm)

Remark:* Where B is the 26dB emission bandwidth in MHz.

The maximum conducted output power must be measured over any interval of continuous transmission using instrumentation calibrated in terms of an rms-equivalent voltage.

6.4.2 Test setup



6.4.3 Test data

Pass: Please refer to appendix A for details

6.5 Peak power spectrum density

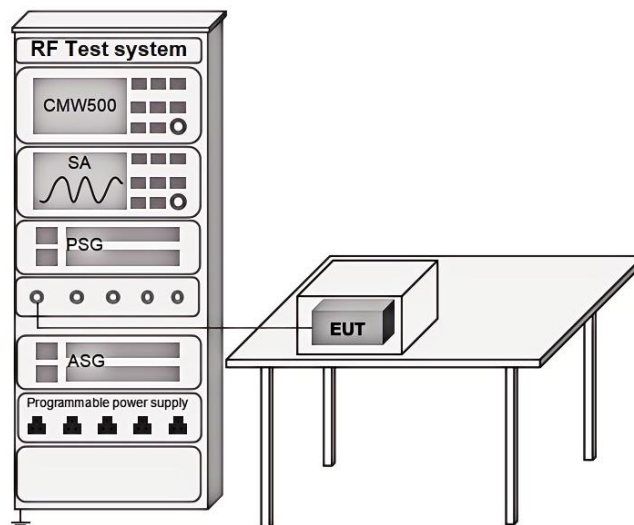
Test Standard	47 CFR Part 15, Subpart E 15.407 (a)
Test Method	KDB 789033 D02 II F
Test Mode (Pre-Scan)	TX
Test Mode (Final Test)	TX

6.5.1 Limit

Frequency band(MHz)	Limit
5150-5250	≤17dBm in 1MHz for master device
	≤11dBm in 1MHz for client device
5250-5350	≤11dBm in 1MHz for client device
5470-5725	≤11dBm in 1MHz for client device
5725-5850	≤30dBm in 500 kHz

Remark: The maximum power spectral density is measured as a conducted emission by direct connection of a calibrated test instrument to the equipment under test.

6.5.2 Test setup



6.5.3 Test data

Pass: Please refer to appendix A for details

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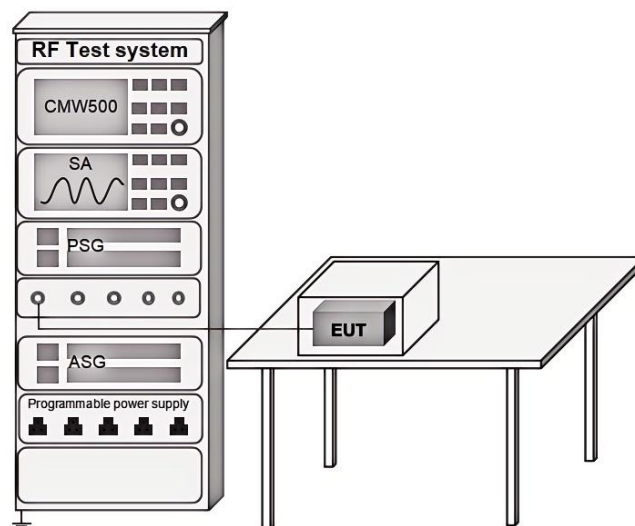
6.6 Minimum 6dB bandwidth (5.725-5.85 GHz band)

Test Standard	47 CFR Part 15, Subpart E 15.407 (e)
Test Method	KDB 789033 D02 II C 2
Test Mode (Pre-Scan)	TX
Test Mode (Final Test)	TX

6.6.1 Limit

≥500 kHz

6.6.2 Test setup



6.6.3 Test data

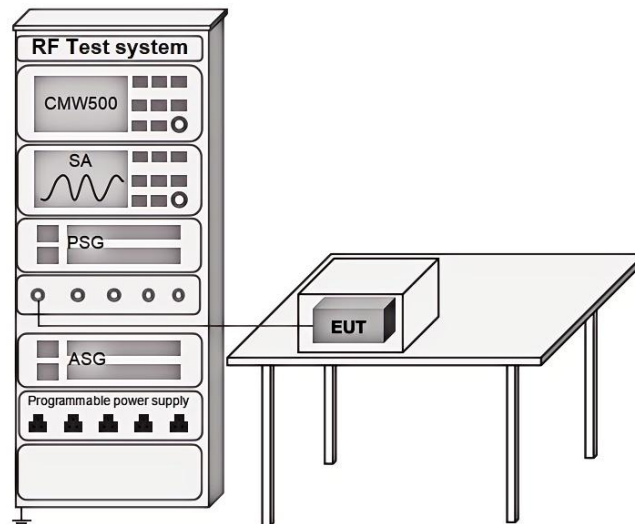
Pass: Please refer to appendix A for details

6.7 26dB Emission bandwidth

Test Standard	47 CFR Part 15, Subpart E 15.407 (a)
Test Method	KDB 789033 D02 II C 1
Test Mode (Pre-Scan)	TX
Test Mode (Final Test)	TX

6.7.1 Limit

6.7.2 Test setup



6.7.3 Test data

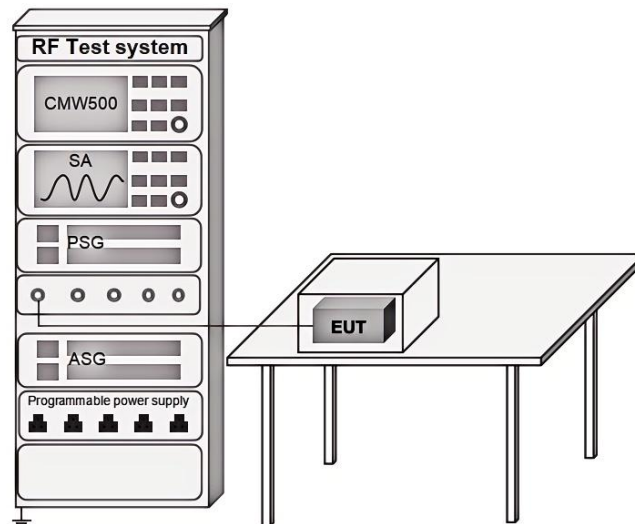
N/A

6.8 99% Bandwidth

Test Standard	N/A
Test Method	KDB 789033 II D
Test Mode (Pre-Scan)	TX
Test Mode (Final Test)	TX

6.8.1 Limit

6.8.2 Test setup



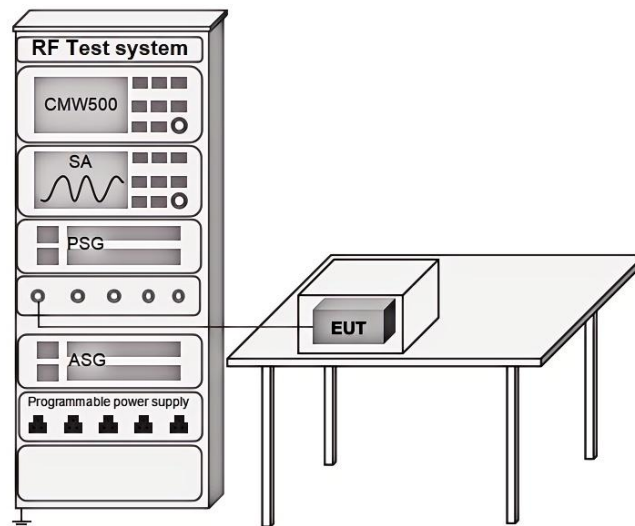
6.8.3 Test data

Pass: Please refer to appendix A for details

6.9 Duty Cycle

Test Standard	47 CFR Part 15, Subpart E 15.407
Test Method	KDB 789033 II B 1
Test Mode (Pre-Scan)	TX
Test Mode (Final Test)	TX

6.9.1 Test setup



6.9.2 Test data

Pass: Please refer to appendix A for details

6.10 Conducted Band Edges Measurement

Test Standard	47 CFR Part 15, Subpart C 15.407(b)(4)
Test Method	ANSI C63.10-2013 Cluase7.8.8 & Section 11.13.3.2
Test Mode (Pre-Scan)	TX
Test Mode (Final Test)	TX

6.10.1 Limit

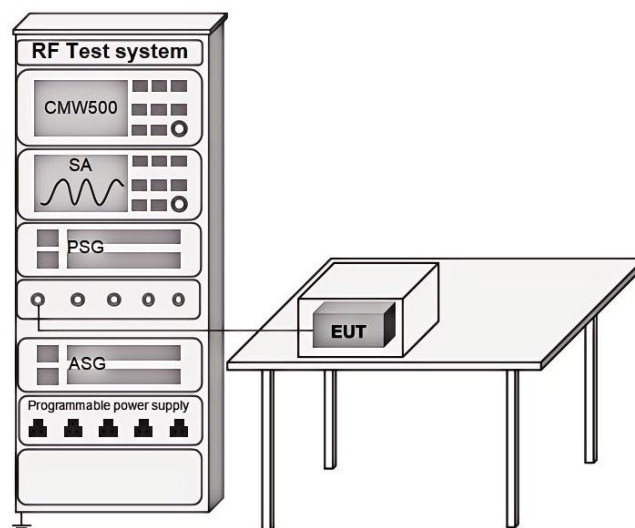
In any 100 kHz bandwidth outside the frequency band in which the spread spectrum or digitally modulated intentional radiator is operating, the radio frequency power that is produced by the intentional radiator shall be at least 20 dB below that in the 100 kHz bandwidth within the band that contains the highest level of the desired power, based on either an RF conducted or a radiated measurement, provided the transmitter demonstrates compliance with the peak conducted power limits.

If the transmitter complies with the conducted power limits based on the use of RMS averaging over a time interval, as permitted under paragraph (b)(3) of this section, the attenuation required under this paragraph shall be 30 dB instead of 20dB.

Attenuation below the general limits specified in §15.209(a) is not required.

In addition, radiated emissions which fall in the restricted bands, as defined in §15.205(a), must also comply with the radiated emission limits specified in §15.209(a) (see §15.205(c)).

6.10.2 Test setup



6.10.3 Test data

Pass: Please refer to appendix A for details

BlueAsia

6.11 Conducted spurious emissions

Test Standard	47 CFR Part 15, Subpart C 15.407
Test Method	ANSI C63.10-2013 Cluase7.8.6 & Section 11.11
Test Mode (Pre-Scan)	TX
Test Mode (Final Test)	TX

6.11.1 Limit

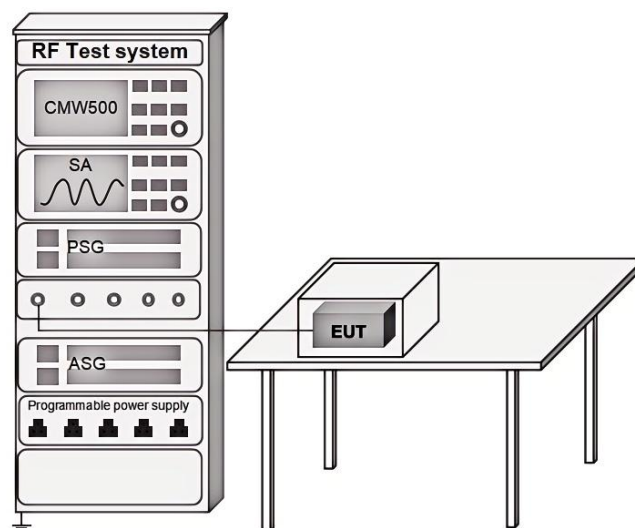
In any 100 kHz bandwidth outside the frequency band in which the spread spectrum or digitally modulated intentional radiator is operating, the radio frequency power that is produced by the intentional radiator shall be at least 20 dB below that in the 100 kHz bandwidth within the band that contains the highest level of the desired power, based on either an RF conducted or a radiated measurement, provided the transmitter demonstrates compliance with the peak conducted power limits.

If the transmitter complies with the conducted power limits based on the use of RMS averaging over a time interval, as permitted under paragraph (b)(3) of this section, the attenuation required under this paragraph shall be 30 dB instead of 20dB.

Attenuation below the general limits specified in §15.209(a) is not required.

In addition, radiated emissions which fall in the restricted bands, as defined in §15.205(a), must also comply with the radiated emission limits specified in §15.209(a) (see §15.205(c)).

6.11.2 Test setup



6.11.3 Test data

Pass: Please refer to appendix A for details

BlueAsia

6.12 Radiated emissions

Test Standard	47 CFR Part 15, Subpart E 15.407
Test Method	KDB 789033 D02 II G
Test Mode (Pre-Scan)	TX
Test Mode (Final Test)	TX

6.12.1 Limit

Frequency(MHz)	Field strength(microvolts/meter)	Measurement distance(meters)
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

Remark: The emission limits shown in the above table are based on measurements employing a CISPR quasi-peak detector except for the frequency bands 9-90kHz, 110-490kHz and above 1000MHz. Radiated emission limits in these three bands are based on measurements employing an average detector, 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.