

Test Report

Applicant : GLAZERO INTERNATIONAL INC
Address : 8 The Green, Suite A in the City of Dover. Zip code 19901.
Product Name : aosu Wi-Fi HomeBase H2L
Brand Mark : AOSU, DEKCO, Saato
Model : H2L
Series model : DH2L, H2E, H2F, H2G, H2H, H2I, H2S, DH2E, DH2F, DH2G, DH2H, DH2I, DH2S
Report Number : BLA-EMC-202503-A3002
FCC ID : 2BACU-H2L
Date of Receipt : Mar.04, 2025
Date of Test : Mar.11, 2025 to Apr.02, 2025
Test Standard : 47 CFR Part 15, Subpart C 15.247
Test Result : Pass

Compiled by:

charlie

Review by:

Xavier

Approved by:

J. Zheng

Issued Date:

Apr.07, 2025



BlueAsia of Technical Services(Shenzhen) Co.,Ltd.

Address: Building C, No. 107, Shihuan Road, Shiyan Sub-District, Baoan District,
Shenzhen, Guangdong Province, China



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Revise Record

Version No.	Date	Description
01	Apr.07, 2025	Original

1 General information

1.1 General information

Applicant	GLAZERO INTERNATIONAL INC
Address	8 The Green,Suite A in the City of Dover.Zip code 19901.
Manufacturer	GLAZERO INTERNATIONAL INC
Address	8 The Green,Suite A in the City of Dover.Zip code 19901.
Factory ¹	Dongguan Luxshare Precision Industry Co., Ltd.
Address	NO.313 Beihuan Road, Qingxi Town, Dongguan City, Guangdong Province, China
Factory ²	Dongguan Anran Smart Technology Co., Ltd.
Address	Building 6, No.10 Hongniu Road, Huangjiang Town, Dongguan, Guangdong, China

1.2 General description of EUT

Product Name	aosu Wi-Fi HomeBase H2L
Model No.	H2L
Series model	DH2L, H2E, H2F, H2G, H2H, H2I, H2S, DH2E, DH2F, DH2G, DH2H, DH2I, DH2S
Desc of series model	The software and hardware of the product are consistent between the reported model and the main certification model, and the difference is only used to distinguish different sales channels and internal wiring are identical,Only the model name are different.
Operation Frequency	802.11b/g/n(HT20): 2412MHz to 2462MHz 802.11n(HT40): 2422MHz to 2452MHz
Modulation Type	802.11b: DSSS (CCK, DQPSK, DBPSK) 802.11g/n: OFDM (64QAM, 16QAM, QPSK, BPSK)
Nominal Bandwidth	20MHz&40MHz
Channel Spacing	5MHz
Number of Channels	802.11b/g/n(HT20): 11 802.11n(HT40):7
Antenna Type	FPC antenna
Antenna Gain	WIFI (ANT3/7) 1: 4.23dBi WIFI (ANT4/8) 2: 3.54dBi
Function	☒ SISO ☒ 2x2 MIMO ☐ TPC
Power supply or adapter information	Input: 100-240V~50/60Hz 0.35A Output: 12V= 1A
Hardware version	V1.2

Software version	V0.5.74
Engineer sample no	BLA-EMC-202503-A30
<i>Note: For a more detailed description, please refer to Specification or User's Manual supplied by the applicant and/or manufacturer.</i>	
<i>This model has two adapter tests, namely Adapter 1 (FLYPOWER) and Adapter 2 (TEKA). Both adapters have been tested and the results are reflected in the report</i>	

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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	Conducted Peak Output Power	§15.247 (b)(3)	ANSI C63.10-2013, Clause 11.9.1.3	Pass
4	Minimum 6dB Bandwidth	§15.247 (a)(2)	ANSI C63.10-2013, Clause 11.8.1	Pass
5	Power Spectrum Density	§15.247 (e)	ANSI C63.10-2013, Clause 11.10.2	Pass
6	Conducted Band Edges Measurement	§15.247(d)	ANSI C63.10-2013, Clause 11.13.3.2	Pass
7	Conducted Spurious Emissions	§15.247(d)	ANSI C63.10-2013, Clause 11.11	Pass
8	Radiated Spurious Emissions	§15.247 (d) §15.209	ANSI C63.10-2013 Clause 6.4&6.5&6.6	Pass
9	Radiated Emissions which fall in the restricted bands	§15.247 (d) §15.205	ANSI C63.10-2013 Clause 6.10.5	Pass

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%)
RX	Keep the EUT in receiving mode
TX Low channel	Keep the EUT in continuously transmitting mode in low channel
TX middle channel	Keep the EUT in continuously transmitting mode in middle channel
TX high channel	Keep the EUT in continuously transmitting mode in high channel

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 or Rx 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.

Note 3: When test RE and RSE, 802.11b, 802.11g are in SISO mode (ANT 1 and 2 all have been tested, only report worse case); and 802.11n20/n40 are in MIMO mode.

For MIMO mode, Directional gain=10log{[10^(4.23/20)+10^(3.54/20)]^2/2}dBi=6.9dBi

Power level setup in software			
Test Software Name	SecureCRT		
Mode	Channel	Frequency (MHz)	Soft Set
802.11b/g/n20	CH1	2412MHz	TX level : tacitly approve
	CH6	2437MHz	
	CH11	2462MHz	
802.11n40	CH3	2422MHz	TX level : tacitly approve
	CH6	2437MHz	
	CH9	2452MHz	

Run Software

```
Serial-COM5 - SecureCRT
文件(F) 编辑(E) 查看(V) 选项(O) 传输(T) 脚本(S) 工具(U) 帮助(H)
[ 图标栏 ]
Serial-COM5
1
[01-01 18:16:52] TUYA_EA [!ot_httpc.c:1504] fail to get cloud url -2050
gethostname_r error: Unknown host
[01-01 18:16:53] TUYA_EA [!unt_network.c:360] fail to gethostname 146
[01-01 18:16:53] TUYA_EA [!httpc.c:465] No entry for host h2.iot-dns.com found. -5
[01-01 18:16:53] TUYA_EA [!httpc.c:551] Socket creation for h2.iot-dns.com:443 failed
[01-01 18:16:53] TUYA_EA [!http_inf.c:51] open session failed: https://h2.iot-dns.com/v1/u
l_config (-15)
[01-01 18:16:53] TUYA_EA [!ot_httpc.c:1504] fail to get cloud url -2050
!wprv wlan0 mp_ctx stop
# 294.430000] Stop continuous TX
# #wprv wlan0 mp_bandwidth 40M=0,shortG=0
# # 294.460000] shortG = 0
# # 294.460000] CurrentchanceRate: 20MHz
# [ 294.460000] tty50: 4 input overrun(s)
#wprv wlan0 mp_ #wprv wlan0 mp_wprv wlan0 mp_ant_tx a
# invalid command : mp_wprv
# #wprv wlan0 mp_rate 22
# [ 294.500000] Set data rate to 11 Mbps
# #wprv wlan0 mp_txpower pathA=38 pathB=38
# [ 294.520000] =====Set 8197G power level pathA:38 pathB:38=====
#wprv wlan0 mp_ #wprv wlan0 mp_
# #gethostname_r error: Unknown host
[01-01 18:16:54] TUYA_EA [!unt_network.c:360] fail to gethostname 146
[01-01 18:16:54] TUYA_EA [!httpc.c:465] No entry for host h2.iot-dns.com found. -5
[01-01 18:16:54] TUYA_EA [!httpc.c:551] Socket creation for h2.iot-dns.com:443 failed
[01-01 18:16:54] TUYA_EA [!http_inf.c:51] open session failed: https://h2.iot-dns.com/v1/u
l_config (-15)
[01-01 18:16:55] TUYA_EA [!ot_httpc.c:1504] fail to get cloud url -2050
[01-01 18:16:55] TUYA_EA [!tuya_devos_netlink.c:1116] get ip fail-11
```

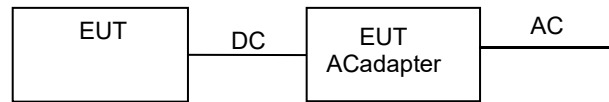
3.2 Operation Frequency each of channel

Operation Frequency each of channel(802.11b/g/n HT20/n HT40)					
Channel	Frequency	Channel	Frequency	Channel	Frequency
1	2412MHz	5	2432MHz	9	2452MHz
2	2417MHz	6	2437MHz	10	2457MHz
3	2422MHz	7	2442MHz	11	2462MHz
4	2427MHz	8	2447MHz	--	--

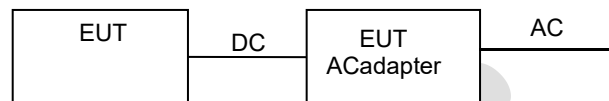
(802.11b/g/n HT20)		(802.11n HT40)	
Channel	Frequency	Channel	Frequency
The lowest channel	2412MHz	The lowest channel	2422MHz
The middle channel	2437MHz	The middle channel	2437MHz
The Highest channel	2462MHz	The Highest channel	2452MHz

3.3 Configuration diagram of EUT

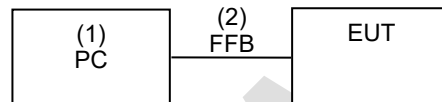
Radiated emission:



Conducted emissions:



RF Test:



Note: see test photographs attached in APPENDIX A for the actual connections between Product and support equipment.

Support equipment

Name	Device type	Brand	Model	Series No	Remark
(1)	PC	lenovo	E460C	N/A	N/A
(2)	Fixed frequency board	N/A	N/A	N/A	N/A

Note: See test photographs attached in APPENDIX A for the actual connections between Product and support equipment.

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	DC 12V

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 at AC power line (150 kHz-30 MHz)

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	AKK1806000003	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 Record

Software No.	Software Name	Manufacture	Software version	Test site
BLA-EMC-S001	EZ-EMC	EZ	EEMC-3A1+	RE
BLA-EMC-S002	EZ-EMC	EZ	EEMC-3A1+	RE
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

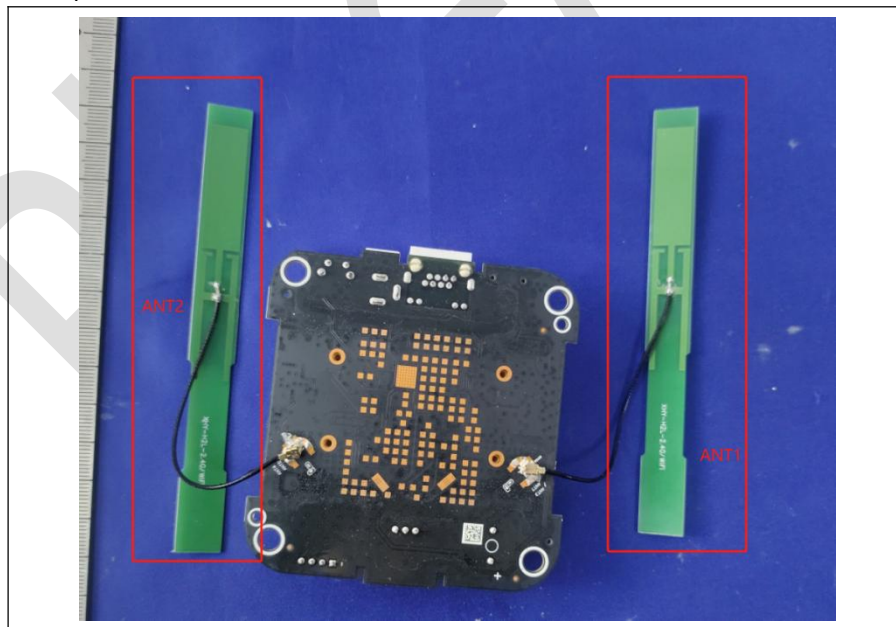
Test Standard	47 CFR Part 15, Subpart C 15.247
Test Method	N/A

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 internal FPC antenna. The best case gain of the antenna is WIFI (ANT3/7) 1: 4.23dBi;WIFI (ANT4/8) 2: 3.54dBi from 2412~2462MHz



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

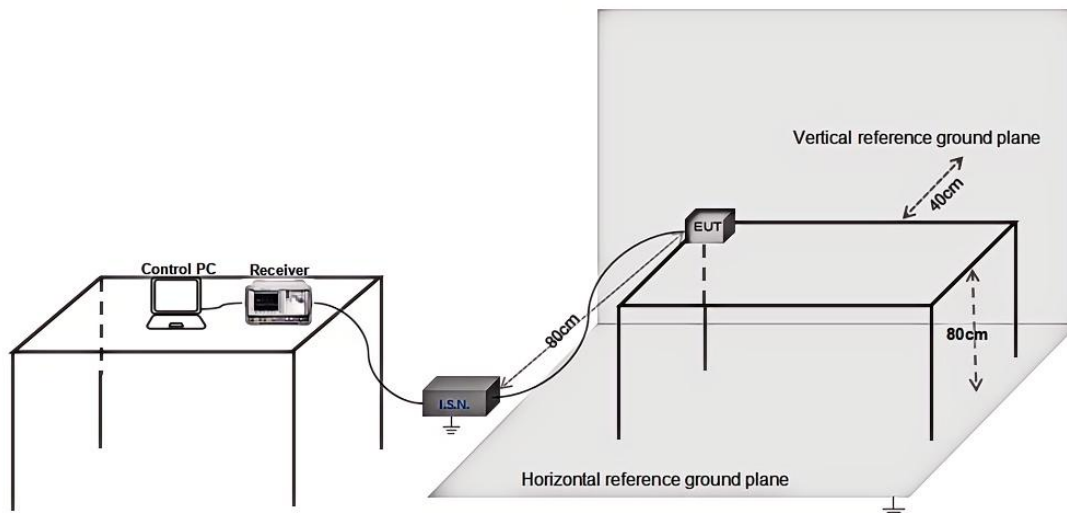
Test Standard	47 CFR Part 15, Subpart C 15.247
Test Method	ANSI C63.10 (2013) Section 6.2
Test Mode (Pre-Scan)	TX
Test Mode (Final Test)	TX

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

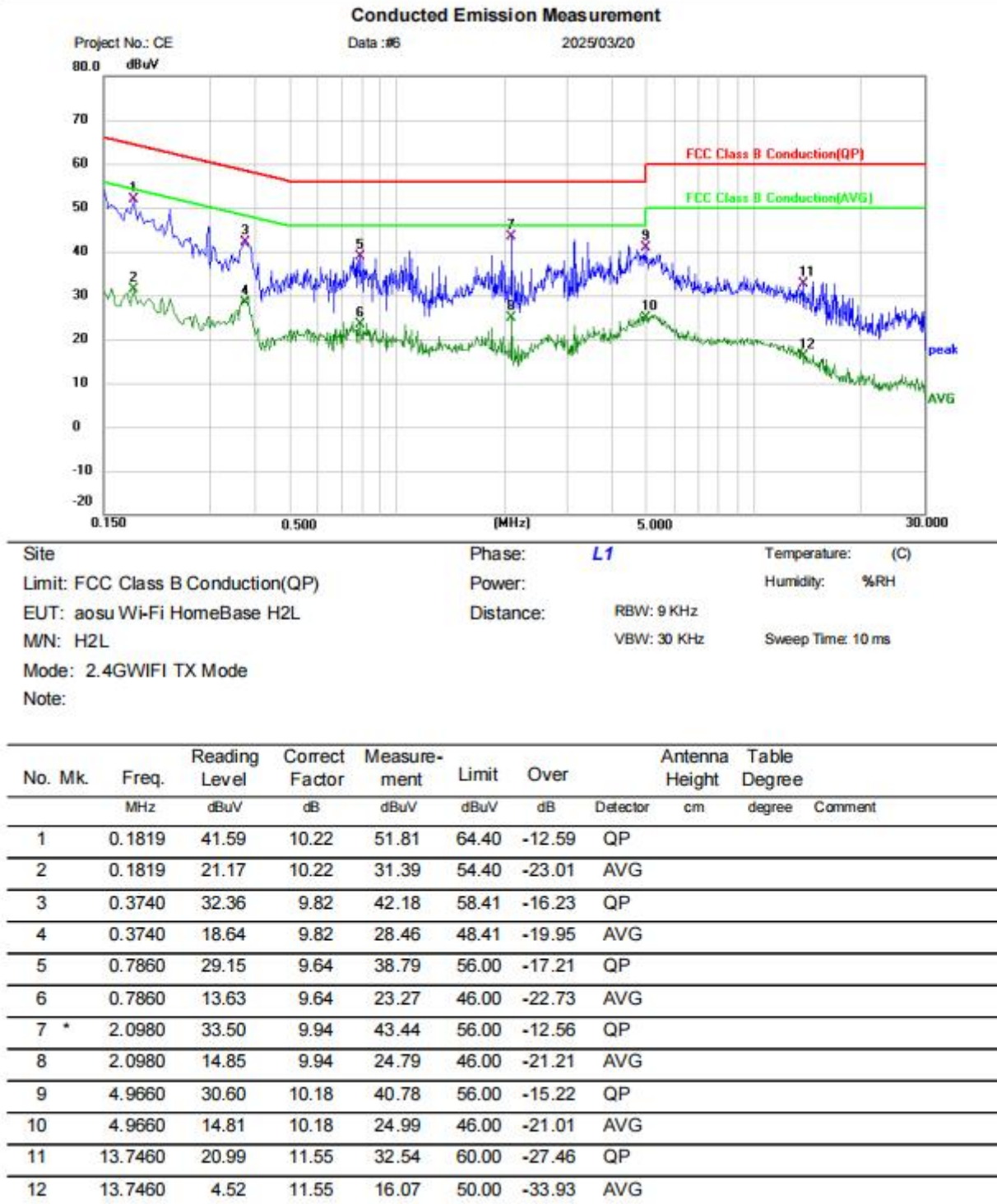
- 1) The mains terminal disturbance voltage test was conducted in a shielded room.
- 2) The EUT was connected to AC power source through a LISN 1 (Line Impedance Stabilization Network) which provides a 50ohm/50H + 5ohm linear impedance. The power cables of all other units of the EUT were connected to 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

Adapter 1 (FLYPOWER):

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



Test Result: Pass

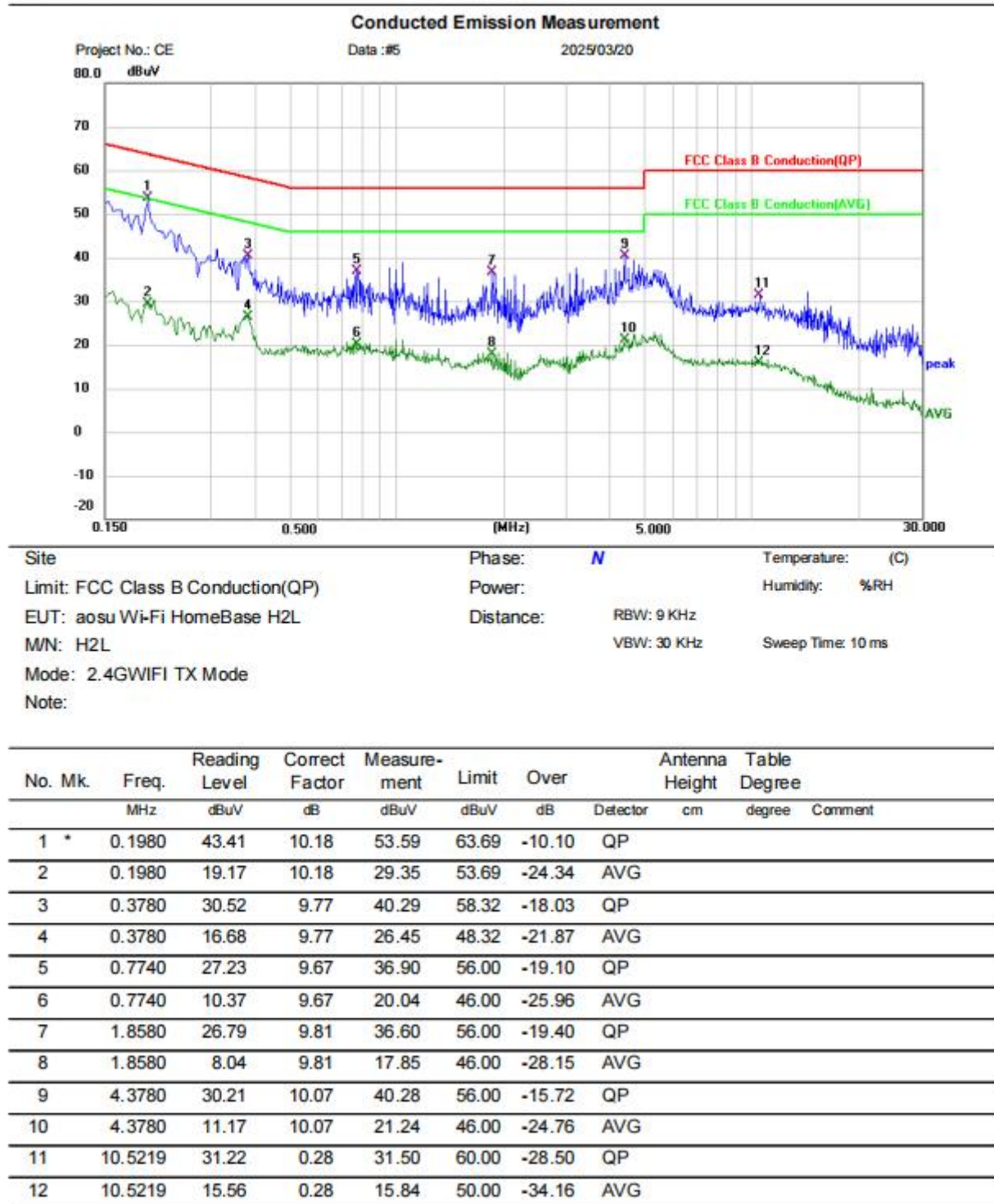
BlueAsia of Technical Services (Shenzhen) Co.,Ltd.

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Email: marketing@cblueasia.com www.cblueasia.com

Version:v1.2

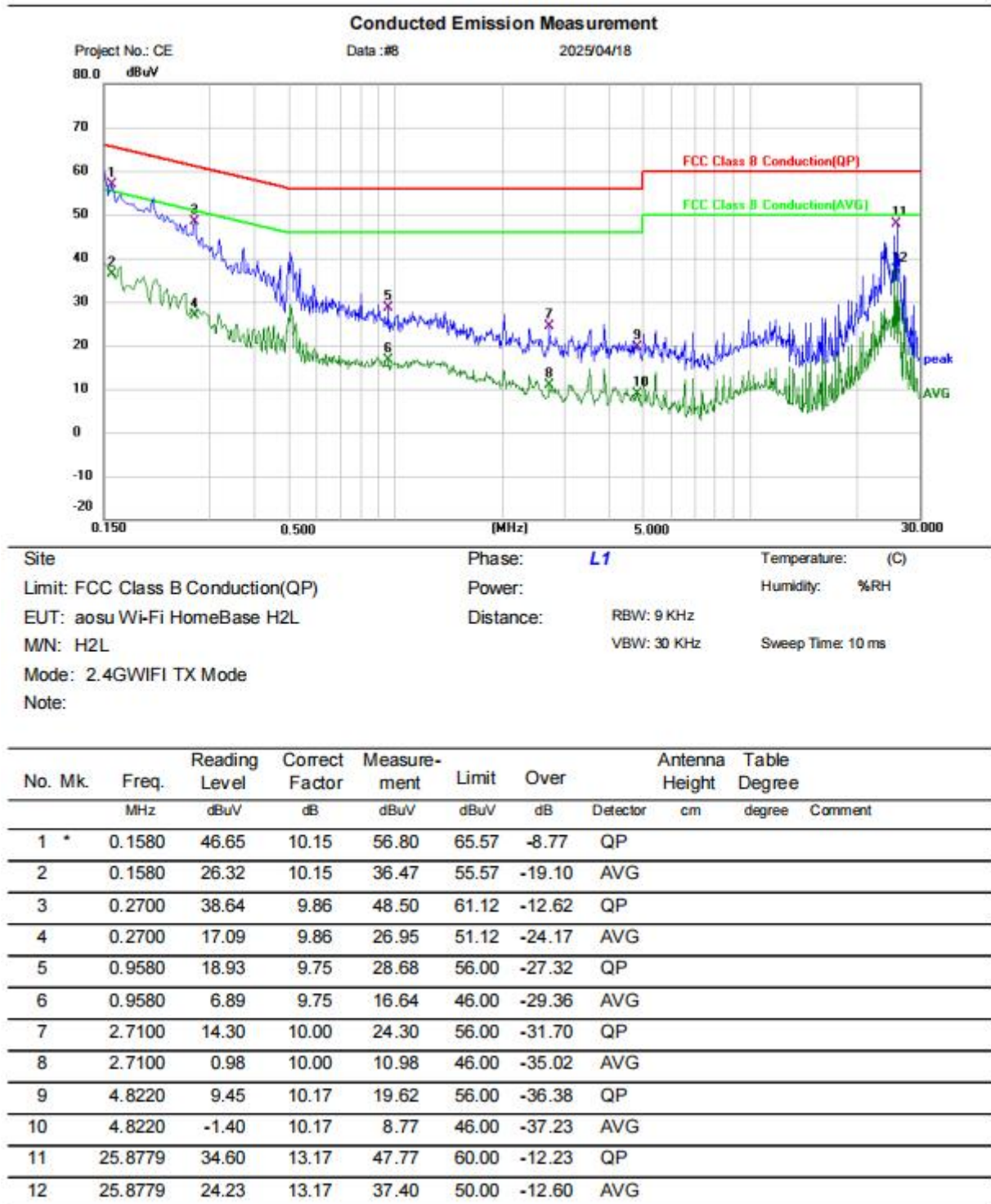
[Test Mode: TX mode]; [Line: Neutral] ;[Power:AC120V/60Hz]



Test Result: Pass

Adapter 2 (TEKA):

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



Test Result: Pass

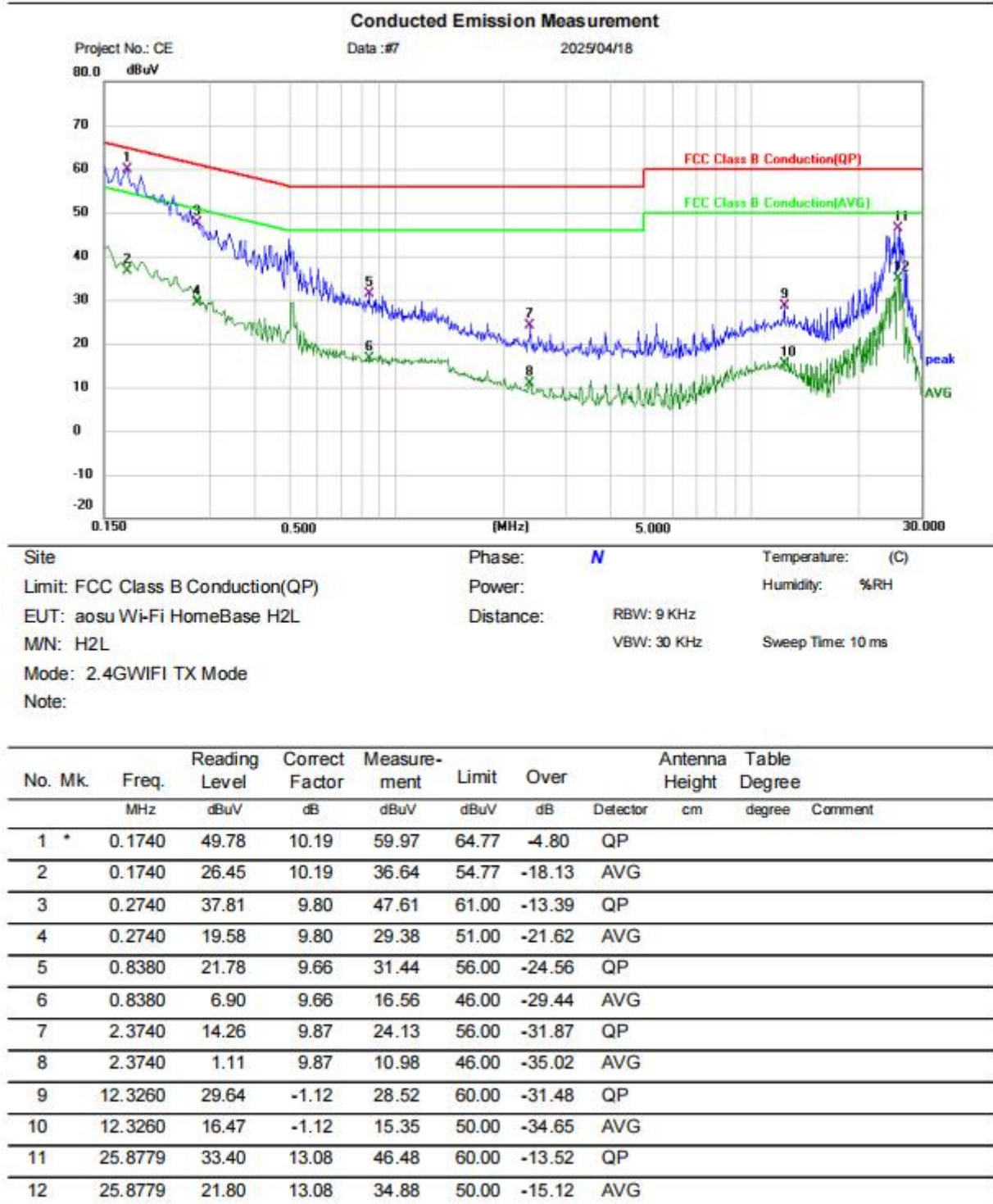
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Tel: +86-755-23059481

Email: marketing@cblueasia.com www.cblueasia.com

Version:v1.2

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



Test Result: Pass