



FCC PART 15B

TEST REPORT

For

Quanzhou Hengluda Electronic Technology Co.,Ltd

No.2118, Liucheng Street, Jiangbei Avenue, Quanzhou, Fujian, China

FCC ID: 2BED7-OS-8900UV

Report Type:		Product Name:
		Two way Kadio
Report Number:	2407Y24301E-E	M-01
Report Date:	2025-03-10	
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Report No.: 2407Y24301E-EM-01

TABLE OF CONTENTS

REPORT REVISION HISTORY	
GENERAL INFORMATION	4
PRODUCT DESCRIPTION FOR EQUIPMENT UNDER TEST (EUT)	4
OBJECTIVE	4
TEST FACILITY	4
SYSTEM TEST CONFIGURATION	6
TEST MODE AND VOLTAGE	6
FUT EXERCISE SOFTWARE	6
SPECIAL ACCESSORIES.	6
Equipment Modifications	6
SUPPORT EQUIPMENT LIST AND DETAILS	6
EXTERNAL I/O CABLE BLOCK DIAGDAM OF TEST SETUD	
SUMMARY OF TEST RESULTS	9
TEST EQUIPMENT LIST	
FCC §15.107 - CONDUCTED EMISSION	
APPLICABLE STANDARD	11
Test System Setup	
EMI TEST RECEIVER SETUP	
RESULT & MARGIN CALCULATION	12
TEST DATA	
ECC 815 109 - RADIATED EMISSION IN ERFOUENCY	29
Applicable Standard	29
Test System Setup	
EMI TEST RECEIVER SETUP	
Test Procedure	
RESULT & MARGIN CALCULATION	
FCC §15.121(B) – SCANNING RECEIVERS AND FREQUENCY CONVERTERS USED WITH RECEIVERS	1 SCANNING 51
ADDI ICARI E STANDARD	
Test Procedure	
Test Data	
EXHIBIT A - EUT PHOTOGRAPHS	53
EXHIBIT B – TEST SETUP PHOTOGRAPHS	

Report No.: 2407Y24301E-EM-01

REPORT REVISION HISTORY

Number of Revisions	Report No.	Version Issue Date		Description
0	2407Y24301E-EM-01	R1V1	2025-03-10	Initial Release

GENERAL INFORMATION

Product Description for Equipment under Test (EUT)

Applicant:		Quanzhou Hengluda Electronic Technology Co.,Ltd		
Product Name:		Two Way Radio		
Tested Model:		OS-8900UV		
Multiple Model(s):	OS-UV8000, OS-FT750, OS-707, OS-780		
Trade mark:		ໍ້າ846 OS ໝ=ຶ		
Power Supply:		DC 7.4V from battery or DC 5V from adapter		
	Model:	QL010-0501000UU		
Adapter Information Input:		AC 100-240V, 50/60Hz, 0.45A		
Output:		DC 5.0V, 1.0A		
★Highest Operating Frequency:		480 MHz		
EUT Receive Status:		Good		

Note:

1. The highest operating frequency is provided by the applicant.

2. The test model is identify with the series model except for the model name and sale channels, please refer to declaration letter for more detail.

3. Manufacturer declared that EUT cannot charging from charger base.

4. All measurement and test data in this report was gathered from production sample serial number:

2SFX-1 (Assigned by the BACL (Xiamen). The EUT was received on 2024-10-08).

Objective

This report is prepared for *Quanzhou Hengluda Electronic Technology Co.,Ltd* in accordance with Part 2-Subpart J, and Part 15-Subparts A and B of the Federal Communication Commission's rules.

Test Facility

The test site used by Bay Area Compliance Laboratories Corp. (Xiamen) to collect test data is located on Unit 102, No. 902 Meifeng South Road, Binhai West Avenue, Science and Technology Innovation Park, Torch High tech Zone XiaMen.

Bay Area Compliance Laboratories Corp. (Xiamen) Lab is accredited to ISO/IEC 17025 by A2LA (Certificate Number: 7134.01) and the lab has been recognized as the FCC accredited lab under the KDB 974614 D01, the FCC Designation No. : CN1384.

Measurement Uncertainty

Where relevant, the following measurement uncertainty levels have been estimated for tests performed on the product as specified in CISPR 16-4-2. This uncertainty represents expanded uncertainty expressed at 95% confidence level using a coverage factor of k=2.

$$u_{\mathsf{c}}(y) = \sqrt{\sum_{i} c_i^2 \ u^2(x_i)}$$

Item	Frequency Range	$U_{\text{lab}} = 2 u_{\text{c}} (y)$ (Confidence of 95%)
Conducted Emission	150kHz-30MHz	2.33dB
	30MHz~200MHz	4.38dB
Radiated Emission	200MHz~1GHz	4.50dB
	1GHz~6GHz	4.58dB
Unwanted Emissions	1.5dB	
Humidity	5%	
Temperatu	1°C	

SYSTEM TEST CONFIGURATION

Test Mode and Voltage

The system was configured for testing in a typical mode (as normally used by a typical user).			
Test mode:	Test Mode 1: Charging & Scanning Test Mode 2: Charging & Receiving		
Test voltage:	DC 5V from adapter (AC 120V/60Hz)		
Remark:	During all emission tests, the EUT was configured to measure its highest possible emission level and the worst case's test data was presented in this test report.		

Description of Test Configuration

Operation Modes	Operation Frequency Range (MHz)	Test Frequency (MHz)
Scanning	136-174 400-480	136-174 400-480
VHF Receiving	136-174	136.0125, 155, 173.9875
UHF Receiving	400-480	400.0125, 440, 479.9875

EUT Exercise Software

No exercise software was used to test.

Special Accessories

No special accessory was used.

Equipment Modifications

No modification was made to the EUT tested.

Support Equipment List and Details

Manufacturer	Aanufacturer Description Model		Serial Number	
HP	RF Communications test set	8920A	3524A07202	
Unknown	Antenna	Unknown	Unknown	

External I/O Cable

Cable Description	ble Description Length (m) From Port		To Port
Antenna Cable	3.0	8920A	Antenna
Power Cable	0.8	Adapter	EUT

Block Diagram of Test Setup

Conducted Emission:

Test Mode 1:



Test Mode 2:



Report No.: 2407Y24301E-EM-01

Radiated Emission:

Test Mode 1:



Test Mode 2:



FCC Part 15B

SUMMARY OF TEST RESULTS

Rule Part	Description of Test	Results
FCC§15.107	Conducted Emission	Compliant
FCC§15.109	Radiated Emission	Compliant
FCC §15.121(b)	Scanning receivers and frequency converters used with scanning receivers	Compliant

TEST EQUIPMENT LIST

				Calibration	Calibration		
Test Equipment	Manufacturer	Model	Serial Number	Date	Due Date		
		Conducted Emis	ssion				
EMI Test Receiver	Rohde & Schwarz	ESR	103105	2024/03/29	2025/03/28		
LISN	Rohde & Schwarz	ENV216	100129	2024/03/29	2025/03/28		
Pulse Limiter	Rohde & Schwarz	ESH3-Z2	0357.8810.54	2024/03/29	2025/03/28		
Coaxial Cable	XINHANGWEIBO	XH400T-N-4M	CC001	2024/03/29	2025/03/28		
Test Software	Audix	E3	18621a	N/A	N/A		
	Radia	ted Emission 30 M	Hz to 1 GHz				
EMI Test Receiver	Rohde & Schwarz	ESR	103103	2024/03/29	2025/03/28		
Antenna	Sunol Sciences	JB6	A122022-5	2023/07/27	2026/07/26		
Amplifier	Sonoma	310B	120903	2024/03/29	2025/03/28		
Coaxial Cable	XINHANGWEIBO	XH400T-N-4M	CC002	2024/03/29	2025/03/28		
Coaxial Cable	XINHANGWEIBO	XH460B-N-2M	CC006	2024/03/29	2025/03/28		
Coaxial Cable	XINHANGWEIBO	XH460B-N-12M	CC007	2024/03/29	2025/03/28		
Test Software	Audix	E3	18621a	N/A	N/A		
	Rac	liated Emission Ab	ove 1 GHz				
Spectrum Analyzer	Rohde & Schwarz	FSU	100405	2025/02/20	2026/02/19		
Horn Aantenna	EMCO	3115	9002-3355	2024/11/19	2027/11/18		
Preamplifier	A.H.Systems	PAM-0118P	489	2024/03/29	2025/03/28		
Coaxial Cable	XINHANGWEIBO	XH800A-N-6M	CC003	2024/03/29	2025/03/28		
Coaxial Cable	XINHANGWEIBO	XH800A-N-1M	CC005	2024/03/29	2025/03/28		
Test Software	Audix	E3	18621a	N/A	N/A		
	Scanning Receiver						
Coaxial Cable	N/A	N/A	N/A	Each time	Each time		
RF Communications test set	HP	8920A	3524A07202	2024/04/26	2025/04/25		
Power Splitter	narda	4426LB-2	1661	N/A	N/A		
Microwave Analog Signal Generator	Agilent	N5183A	MY47420335	2024/03/29	2025/03/28		
Attenuator	Electronic Corporation	30-WA-FFN-30	1172435	2024/03/29	2025/03/28		

Statement of Traceability: Bay Area Compliance Laboratories Corp. (Xiamen) attests that all calibrations have been performed in accordance to requirements that traceable to National Primary Standards and International System of Units (SI).

FCC §15.107 - CONDUCTED EMISSION

Applicable Standard

FCC §15.107

(a) Except for Class A digital devices, for equipment that is designed to be connected to the public utility (AC) power line, the radio frequency voltage that is conducted back onto the AC power line on any frequency or frequencies within the band 150 kHz to 30 MHz shall not exceed the limits in the following table, as measured using a 50 μ H/50 ohms line impedance stabilization network (LISN). Compliance with the provisions of this paragraph shall be based on the measurement of the radio frequency voltage between each power line and ground at the power terminal. The lower limit applies at the band edges.

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

Test System Setup



The measurement procedure of test setup is according with ANSI C63.4-2014. The related limit was specified in FCC Part 15.107 Class B limits.

The external I/O cables were draped along the test table and formed a bundle 30 to 40 cm long in the middle.

The spacing between the peripherals was 10 cm.

FCC Part 15B

EMI Test Receiver Setup

The EMI test receiver was set to investigate the spectrum from 150 kHz to 30 MHz

During the conducted emission test, the EMI test receiver was set with the following configurations:

Frequency Range	IF B/W
150 kHz – 30 MHz	9 kHz

Test Procedure

The frequency and amplitude of the six highest ac power-line conducted emissions relative to the limit, measured over all the current-carrying conductors of the EUT power cords, and the operating frequency or frequency to which the EUT is tuned (if appropriate), should be reported, unless such emissions are more than 20 dB below the limit. AC power-line conducted emissions measurements are to be separately carried out only on each of the phase ("hot") line(s) and (if used) on the neutral line(s), but not on the ground [protective earth] line(s). If less than six emission frequencies are within 20 dB of the limit, then the noise level of the measuring instrument at representative frequencies should be reported. The specific conductor of the power-line cord for each of the reported emissions should be identified. Measure the six highest emissions with respect to the limit on each current-carrying conductor of each power cord associated with the EUT (but not the power cords of associated or peripheral equipment that are part of the test configuration). Then, report the six highest emissions with respect to the limit from among all the measurements identifying the frequency and specific current carrying conductor identified with the emission. The six highest emissions should be reported for each of the current-carrying conductor identified with the emission. The six highest emissions should be reported for each of the current-carrying conductor, or the six highest emissions may be reported over all the current-carrying conductors.

Result & Margin Calculation

The Result is calculated by adding LISN VDF (Voltage Division Factor), Cable Loss and Transient Limiter Attenuation from the Meter Reading. The basic equation is as follows:

Factor (dB) = LISN VDF (dB) + Cable Loss (dB) + Transient Limiter Attenuation (dB) Result (dB μ V) = Reading (dB μ V) + Factor (dB)

The "**Margin**" column of the following data tables indicates the degree of compliance with the applicable limit. For example, a margin of 7dB means the emission is 7dB below the limit. The equation for margin calculation is as follows:

Margin (dB) = Limit (dB μ V) –Result (dB μ V)

Test Data

Project No.: 2407Y24301E-EM Test Mode: Mode 1(136-174MHz) EUT Model: OS-8900UV

Temp/Humi/ATM: 21.8°C/56%/100.1kPa Tested by: Apollo Luo Power Source: DC 5V from adapter (AC 120V/60Hz)



o 11.1.1	~ ~	
Condition:	QP	RBM

onditi	on: QP RBU AV RBU	V:9kHz V:9kHz					
Freq	Reading	Factor	Result	Limit	Margin	Phase	Remark
MHz	dBuV	dB	dBuV	dBuV	dB		
0.50	11.77	20.29	32.06	46.00	13.94	Line	Average
0.50	25.15	20.29	45.44	56.00	10.56	Line	QP
0.55	13.36	20.34	33.70	46.00	12.30	Line	Average
0.55	26.35	20.34	46.69	56.00	9.31	Line	QP
0.58	13.31	20.38	33.69	46.00	12.31	Line	Average
0.58	26.09	20.38	46.47	56.00	9.53	Line	QP
0.59	12.99	20.40	33.39	46.00	12.61	Line	Average
0.59	26.62	20.40	47.02	56.00	8.98	Line	QP
0.71	3.58	20.51	24.09	46.00	21.91	Line	Average
0.71	13.22	20.51	33.73	56.00	22.27	Line	QP
1.07	-2.03	20.94	18.91	46.00	27.09	Line	Average
1.07	17.28	20.94	38.22	56.00	17.78	Line	OP

Project No.: 2407Y24301E-EM Test Mode: Mode 1(136-174MHz) EUT Model: OS-8900UV Temp/Humi/ATM: 21.8°C/56%/100.1kPa Tested by: Apollo Luo Power Source: DC 5V from adapter (AC 120V/60Hz)



1.01

1.45

1.45

13.02

1.07

10.12

20.92

20.97

20.97

33.94

22.04

31.09

56.00

46.00

56.00

22.06

23.96

24.91

Neutral

Neutral

Neutral

QP Average

QP

Project No.: 2407Y24301E-EM Test Mode: Mode 1(400-480MHz) EUT Model: OS-8900UV Temp/Humi/ATM: 21.8°C/56%/100.1kPa Tested by: Apollo Luo Power Source: DC 5V from adapter (AC 120V/60Hz)



Remark	Phase	Margin dB	Limit dBuV	Result dBuV	Factor dB	Reading dBuV	Freq MHz
Average	Line	29.58	54.99	25.41	20.78	4.63	0.17
QP	Line	23.44	64.99	41.55	20.78	20.77	0.17
Average	Line	19.44	46.70	27.26	20.32	6.94	0.46
QP	Line	16.01	56.70	40.69	20.32	20.37	0.46
Average	Line	12.89	46.00	33.11	20.29	12.82	0.50
QP	Line	8.01	56.00	47.99	20.29	27.70	0.50
Average	Line	10.49	46.00	35.51	20.34	15.17	0.54
QP	Line	11.37	56.00	44.63	20.34	24.29	0.54
Average	Line	12.10	46.00	33.90	20.40	13.50	0.59
QP	Line	8.39	56.00	47.61	20.40	27.21	0.59
Average	Line	24.23	46.00	21.77	20.98	0.79	1.22
OP	line	17 13	56 00	38 87	20 98	17 89	1 22

Project No.: 2407Y24301E-EM Test Mode: Mode 1(400-480MHz) EUT Model: OS-8900UV Temp/Humi/ATM: 21.8°C/56%/100.1kPa Tested by: Apollo Luo Power Source: DC 5V from adapter (AC 120V/60Hz)



Project No.: 2407Y24301E-EM Test Mode: Mode 2(136.0125MHz) EUT Model: OS-8900UV



		N:9KHZ					
Freq MHz	Reading dBuV	Factor dB	Result dBuV	Limit dBuV	Margin dB	Phase	Remark
0.16	10.11	20.82	30.93	55.29	24.36	Line	Average
0.16	28.60	20.82	49.42	65.29	15.87	Line	QP
0.23	3.18	20.52	23.70	52.37	28.67	Line	Average
0.23	20.06	20.52	40.58	62.37	21.79	Line	QP
0.39	8.37	20.36	28.73	48.15	19.42	Line	Average
0.39	20.62	20.36	40.98	58.15	17.17	Line	QP
0.51	10.98	20.30	31.28	46.00	14.72	Line	Average
0.51	24.86	20.30	45.16	56.00	10.84	Line	QP
0.59	12.22	20.40	32.62	46.00	13.38	Line	Average
0.59	26.18	20.40	46.58	56.00	9.42	Line	QP
1.13	0.64	20.95	21.59	46.00	24.41	Line	Average
1.13	20.66	20.95	41.61	56.00	14.39	Line	QP

Project No.: 2407Y24301E-EM Test Mode: Mode 2(136.0125MHz) EUT Model: OS-8900UV Temp/Humi/ATM: 21.8°C/56%/100.1kPa Tested by: Apollo Luo Power Source: DC 5V from adapter (AC 120V/60Hz)



Trace: 1

Condition:	QP	RBW:9kHz
	AV	RBW:9kHz

	AV RBI	V:9kHz					
Freq	Reading	Factor	Result	Limit	Margin	Phase	Remark
MHZ	dBuV	dB	dBuV	dBuV	dB		
0.16	3.69	20.72	24.41	55.55	31.14	Neutral	Average
0.16	23.85	20.72	44.57	65.55	20.98	Neutral	QP
0.19	3.01	20.68	23.69	53.87	30.18	Neutral	Average
0.19	21.21	20.68	41.89	63.87	21.98	Neutral	QP
0.47	5.68	20.41	26.09	46.52	20.43	Neutral	Average
0.47	13.44	20.41	33.85	56.52	22.67	Neutral	QP
0.51	10.08	20.38	30.46	46.00	15.54	Neutral	Average
0.51	18.13	20.38	38.51	56.00	17.49	Neutral	QP
0.55	14.44	20.36	34.80	46.00	11.20	Neutral	Average
0.55	22.87	20.36	43.23	56.00	12.77	Neutral	QP
0.59	12.00	20.35	32.35	46.00	13.65	Neutral	Average
0.59	18.77	20.35	39.12	56.00	16.88	Neutral	OP

FCC Part 15B

Project No.: 2407Y24301E-EM Test Mode: Mode 2(155MHz) EUT Model: OS-8900UV Temp/Humi/ATM: 21.8°C/56%/100.1kPa Tested by: Apollo Luo Power Source: DC 5V from adapter (AC 120V/60Hz)



0.15	23.19	20.89	44.08	65.76	21.68	Line	QP
0.40	4.62	20.35	24.97	47.79	22.82	Line	Average
0.40	16.17	20.35	36.52	57.79	21.27	Line	QP
0.51	13.29	20.30	33.59	46.00	12.41	Line	Average
0.51	25.58	20.30	45.88	56.00	10.12	Line	QP
0.55	15.04	20.34	35.38	46.00	10.62	Line	Average
0.55	25.55	20.34	45.89	56.00	10.11	Line	QP
0.59	12.66	20.40	33.06	46.00	12.94	Line	Average
0.59	26.19	20.40	46.59	56.00	9.41	Line	QP
0.73	1.09	20.55	21.64	46.00	24.36	Line	Average
0.73	14.11	20.55	34.66	56.00	21.34	Line	OP

Project No.: 2407Y24301E-EM Test Mode: Mode 2(155MHz) EUT Model: OS-8900UV Temp/Humi/ATM: 21.8°C/56%/100.1kPa Tested by: Apollo Luo Power Source: DC 5V from adapter (AC 120V/60Hz)



Project No.: 2407Y24301E-EM Test Mode: Mode 2(173.9875MHz) EUT Model: OS-8900UV Temp/Humi/ATM: 21.8°C/56%/100.1kPa Tested by: Apollo Luo Power Source: DC 5V from adapter (AC 120V/60Hz)



Conditi	on: QP RBI AV RBI	N:9kHz N:9kHz					
Freq	Reading	Factor	Result	Limit	Margin	Phase	Remark
MHz	dBuV	dB	dBuV	dBuV	dB		
0.15	2 40	20.02	24 41	FF 07	21 56	Line	Avenage
0.15	3.49	20.92	24.41	55.97	31.50	Line	Average
0.15	21.61	20.92	42.53	65.97	23.44	Line	QP
0.38	7.18	20.37	27.55	48.33	20.78	Line	Average
0.38	18.48	20.37	38.85	58.33	19.48	Line	QP
0.51	12.09	20.30	32.39	46.00	13.61	Line	Average
0.51	25.53	20.30	45.83	56.00	10.17	Line	QP
0.55	12.61	20.35	32.96	46.00	13.04	Line	Average
0.55	26.26	20.35	46.61	56.00	9.39	Line	QP
0.59	15.73	20.40	36.13	46.00	9.87	Line	Average
0.59	24.46	20.40	44.86	56.00	11.14	Line	QP
1.27	-0.24	20.99	20.75	46.00	25.25	Line	Average
1.27	15.25	20.99	36.24	56.00	19.76	Line	QP

Project No.: 2407Y24301E-EM Test Mode: Mode 2(173.9875MHz) EUT Model: OS-8900UV



Freq MHz	Reading dBuV	Factor dB	Result dBuV	Limit dBuV	Margin dB	Phase	Remark
0.16	2.58	20.72	23.30	55.56	32.26	Neutral	Average
0.16	21.97	20.72	42.69	65.56	22.87	Neutral	QP
0.21	2.40	20.66	23.06	53.29	30.23	Neutral	Average
0.21	17.81	20.66	38.47	63.29	24.82	Neutral	QP
0.51	10.55	20.39	30.94	46.00	15.06	Neutral	Average
0.51	18.31	20.39	38.70	56.00	17.30	Neutral	QP
0.55	15.56	20.36	35.92	46.00	10.08	Neutral	Average
0.55	22.99	20.36	43.35	56.00	12.65	Neutral	QP
0.55	14.47	20.36	34.83	46.00	11.17	Neutral	Average
0.55	23.11	20.36	43.47	56.00	12.53	Neutral	QP
0.59	9.30	20.35	29.65	46.00	16.35	Neutral	Average
0 59	18.86	20.35	39,21	56.00	16.79	Neutral	OP

Project No.: 2407Y24301E-EM Test Mode: Mode 2(400.0125MHz) EUT Model: OS-8900UV Temp/Humi/ATM: 21.8°C/56%/100.1kPa Tested by: Apollo Luo Power Source: DC 5V from adapter (AC 120V/60Hz)



Conditi	on: QP RBN	V:9kHz					
	AV RBI	v:9kHz					
Freq	Reading	Factor	Result	Limit	Margin	Phase	Remark
MHz	dBuV	dB	dBuV	dBuV	dB		
0.40	3.86	20.35	24.21	47.89	23.68	Line	Average
0.40	16.73	20.35	37.08	57.89	20.81	Line	QP
0.46	6.43	20.31	26.74	46.62	19.88	Line	Average
0.46	20.71	20.31	41.02	56.62	15.60	Line	QP
0.50	14.05	20.29	34.34	46.00	11.66	Line	Average
0.50	22.63	20.29	42.92	56.00	13.08	Line	QP
0.50	13.57	20.29	33.86	46.00	12.14	Line	Average
0.50	25.53	20.29	45.82	56.00	10.18	Line	QP
0.54	12.59	20.33	32.92	46.00	13.08	Line	Average
0.54	25.60	20.33	45.93	56.00	10.07	Line	QP
0.55	12.47	20.34	32.81	46.00	13.19	Line	Average
0.55	26.73	20.34	47.07	56.00	8.93	Line	QP
0.59	14.66	20.40	35.06	46.00	10.94	Line	Average
0.59	26.71	20.40	47.11	56.00	8.89	Line	QP
1.77	-0.32	21.09	20.77	46.00	25.23	Line	Average
1.77	16.42	21.09	37.51	56.00	18.49	Line	QP

Project No.: 2407Y24301E-EM Test Mode: Mode 2(400.0125MHz) EUT Model: OS-8900UV Temp/Humi/ATM: 21.8°C/56%/100.1kPa Tested by: Apollo Luo Power Source: DC 5V from adapter (AC 120V/60Hz)



Condition:	QP	RBW:9kHz
	۸\/	DDM OLU-

	AV RBI	v:9kHz					
Freq	Reading	Factor	Result	Limit	Margin	Phase	Remark
MHZ	dBuV	dB	dBuV	dBuV	dB		
0.16	1.11	20.71	21.82	55.35	33.53	Neutral	Average
0.16	19.89	20.71	40.60	65.35	24.75	Neutral	QP
0.19	0.95	20.68	21.63	53.98	32.35	Neutral	Average
0.19	17.89	20.68	38.57	63.98	25.41	Neutral	QP
0.20	1.71	20.66	22.37	53.47	31.10	Neutral	Average
0.20	17.54	20.66	38.20	63.47	25.27	Neutral	QP
0.46	5.51	20.41	25.92	46.62	20.70	Neutral	Average
0.46	13.67	20.41	34.08	56.62	22.54	Neutral	QP
0.55	12.61	20.36	32.97	46.00	13.03	Neutral	Average
0.55	22.90	20.36	43.26	56.00	12.74	Neutral	QP
0.59	13.07	20.35	33.42	46.00	12.58	Neutral	Average
0.59	18,95	20.35	39.30	56.00	16.70	Neutral	OP

Project No.: 2407Y24301E-EM Test Mode: Mode 2(440MHz) EUT Model: OS-8900UV Temp/Humi/ATM: 21.8°C/56%/100.1kPa Tested by: Apollo Luo Power Source: DC 5V from adapter (AC 120V/60Hz)



Conditi	on: QP RBI	W:9kHz					
	AV RBI	W:9kHz	_				
Freq	Reading	Factor	Result	Limit	Margin	Phase	Remark
MHz	dBuV	dB	dBuV	dBuV	dB		
0.38	6.92	20.37	27.29	48.30	21.01	Line	Average
0.38	18.85	20.37	39.22	58.30	19.08	Line	QP
0.46	6.72	20.31	27.03	46.63	19.60	Line	Average
0.46	20.77	20.31	41.08	56.63	15.55	Line	QP
0.51	12.10	20.30	32.40	46.00	13.60	Line	Average
0.51	25.99	20.30	46.29	56.00	9.71	Line	QP
0.54	12.96	20.33	33.29	46.00	12.71	Line	Average
0.54	25.78	20.33	46.11	56.00	9.89	Line	QP
0.55	12.52	20.34	32.86	46.00	13.14	Line	Average
0.55	26.75	20.34	47.09	56.00	8.91	Line	QP
0.59	16.22	20.39	36.61	46.00	9.39	Line	Average
0.59	25.12	20.39	45.51	56.00	10.49	Line	QP
0.59	14.25	20.40	34.65	46.00	11.35	Line	Average
0.59	26.98	20.40	47.38	56.00	8.62	Line	QP
1.56	-0.69	21.06	20.37	46.00	25.63	Line	Average
1.56	16.65	21.06	37.71	56.00	18.29	Line	QP

Project No.: 2407Y24301E-EM Test Mode: Mode 2(440MHz) EUT Model: OS-8900UV Temp/Humi/ATM: 21.8°C/56%/100.1kPa Tested by: Apollo Luo Power Source: DC 5V from adapter (AC 120V/60Hz)



Condition:	QP	RBW:9kHz
	۸\/	RBM·OFH2

	AV RBI	v:9kHz					
Freq	Reading	Factor	Result	Limit	Margin	Phase	Remark
MHz	dBuV	dB	dBuV	dBuV	dB		
0.16	0.74	20.71	21.45	55.32	33.87	Neutral	Average
0.16	19.37	20.71	40.08	65.32	25.24	Neutral	QP
0.20	2.44	20.67	23.11	53.62	30.51	Neutral	Average
0.20	18.16	20.67	38.83	63.62	24.79	Neutral	QP
0.27	-6.80	20.57	13.77	51.11	37.34	Neutral	Average
0.27	11.52	20.57	32.09	61.11	29.02	Neutral	QP
0.50	9.79	20.39	30.18	46.00	15.82	Neutral	Average
0.50	18.24	20.39	38.63	56.00	17.37	Neutral	QP
0.55	13.93	20.36	34.29	46.00	11.71	Neutral	Average
0.55	23.23	20.36	43.59	56.00	12.41	Neutral	QP
0.59	11.59	20.35	31.94	46.00	14.06	Neutral	Average
0.59	19.57	20.35	39.92	56.00	16.08	Neutral	OP

Project No.: 2407Y24301E-EM Test Mode: Mode 2(479.9875MHz) EUT Model: OS-8900UV Temp/Humi/ATM: 21.8°C/56%/100.1kPa Tested by: Apollo Luo Power Source: DC 5V from adapter (AC 120V/60Hz)



Project No.: 2407Y24301E-EM Test Mode: Mode 2(479.9875MHz) EUT Model: OS-8900UV Temp/Humi/ATM: 21.8℃/56%/100.1kPa Tested by: Apollo Luo Power Source: DC 5V from adapter (AC 120V/60Hz)



lace.			
Condition:	QP	RBW:9kHz	
	۸\/	PPM·OFH-	

	AV RBI	v:9kHz					
Freq MHz	Reading dBuV	Factor dB	Result dBuV	Limit dBuV	Margin dB	Phase	Remark
0.16	2.11	20.72	22.83	55.56	32.73	Neutral	Average
0.16	20.66	20.72	41.38	65.56	24.18	Neutral	QP
0.19	1.23	20.67	21.90	53.88	31.98	Neutral	Average
0.19	18.02	20.67	38.69	63.88	25.19	Neutral	QP
0.46	4.66	20.42	25.08	46.64	21.56	Neutral	Average
0.46	13.36	20.42	33.78	56.64	22.86	Neutral	QP
0.55	14.00	20.36	34.36	46.00	11.64	Neutral	Average
0.55	23.24	20.36	43.60	56.00	12.40	Neutral	QP
0.59	11.14	20.35	31.49	46.00	14.51	Neutral	Average
0.59	19.57	20.35	39.92	56.00	16.08	Neutral	QP
1.22	1.29	20.95	22.24	46.00	23.76	Neutral	Average
1.22	13.79	20.95	34.74	56.00	21.26	Neutral	OP

FCC §15.109 - RADIATED EMISSION IN FREQUENCY

Applicable Standard

FCC§15.109

(a) Except for Class A digital devices, the field strength of radiated emissions from unintentional radiators at a distance of 3 meters shall not exceed the following values:

Frequency of emission (MHz)	Field strength (microvolts/meter)
30-88	100
88-216	150
216-960	200
Above 960	500

Test System Setup

Below 1 GHz:



Above 1 GHz:



The radiated emission tests were performed in the 3 meters chamber test site, using the setup accordance with the ANSI C63.4-2014. The specification used was the FCC Part 15.109 Class B limits.

The external I/O cables were draped along the test table and formed a bundle 30 to 40 cm long in the middle.

The spacing between the peripherals was 10 cm.

EMI Test Receiver Setup

The system was investigated from 30 MHz to 5 GHz.

During the radiated emission test, the EMI test receiver was set with the following configurations:

Frequency Range	RBW	VBW	Measurement	Detector
20 MHz 1000 MHz	100 kHz	300 kHz	PK	PK
30 MHZ – 1000 MHZ	120 kHz	/	QP	QP
Above 1 CHr	1 MHz	3 MHz	РК	РК
Above I GHZ	1 MHz	10 Hz	AV	РК

Test Procedure

The frequency and amplitude of the six highest ac power-line conducted emissions relative to the limit, measured over all the current-carrying conductors of the EUT power cords, and the operating frequency or frequency to which the EUT is tuned (if appropriate), should be reported, unless such emissions are more than 20 dB below the limit. AC power-line conducted emissions measurements are to be separately carried out only on each of the phase ("hot") line(s) and (if used) on the neutral line(s), but not on the ground [protective earth] line(s). If less than six emission frequencies are within 20 dB of the limit, then the noise level of the measuring instrument at representative frequencies should be reported. The specific conductor of the power-line cord for each of the reported emissions should be identified. Measure the six highest emissions with respect to the limit on each current-carrying conductor of each power cord associated with the EUT (but not the power cords of associated or peripheral equipment that are part of the test configuration). Then, report the six highest emissions with respect to the limit from among all the measurements identifying the frequency and specific current carrying conductor identified with the emission. The six highest emissions should be reported for each of the current-carrying conductor identified with the emission. The six highest emissions should be reported for each of the current-carrying conductor, or the six highest emissions may be reported over all the current-carrying conductors.

Result & Margin Calculation

The Result is calculated by adding the Antenna Factor and Cable Loss, and subtracting the Amplifier Gain from the Meter Reading. The basic equation is as follows:

Factor (dB/m) =Antenna Factor (dB/m) + Cable Loss (dB) - Amplifier Gain (dB) Result (dB μ V/m) = Reading (dB μ V) + Factor (dB/m)

The "**Margin**" column of the following data tables indicates the degree of compliance with the applicable limit. For example, a margin of 7dB means the emission is 7dB below the limit. The equation for margin calculation is as follows:

Margin (dB) = Limit (dB μ V/m) –Result (dB μ V/m)

Test Data

Please refer to below plots:

1) 30MHz-1GHz:

Project No.: 2407Y24301E-EM Test Mode: Mode 1(136-174MHz) EUT Model: OS-8900UV Test distance: 3m Temp/Humi/ATM: 19.5℃/57%/100.1kPa Tested by: Wlif Wu Power Source: DC 5V from Adapter (AC 120V/60Hz)



Reading dBuV	Factor dB/m	Result dBuV/m	Limit dBuV/m	Margin dB	Polarity	Remark
40.73	-17.29	23.44	40.00	16.56	Horizontal	Peak
34.61	-9.07	25.54	46.00	20.46	Horizontal	Peak
27.00	1.33	28.33	46.00	17.67	Horizontal	Peak
27.02	2.15	29.17	46.00	16.83	Horizontal	Peak
25.78	3.09	28.87	46.00	17.13	Horizontal	Peak
25.94	3.14	29.08	46.00	16.92	Horizontal	Peak
	Reading dBuV 40.73 34.61 27.00 27.02 25.78 25.94	Reading Factor dBuV dB/m 40.73 -17.29 34.61 -9.07 27.00 1.33 27.02 2.15 25.78 3.09 25.94 3.14	Reading dBuVFactor dB/mResult dBuV/m40.73-17.2923.4434.61-9.0725.5427.001.3328.3327.022.1529.1725.783.0928.8725.943.1429.08	Reading dBuVFactor dB/mResult dBuV/mLimit dBuV/m40.73-17.2923.4440.0034.61-9.0725.5446.0027.001.3328.3346.0027.022.1529.1746.0025.783.0928.8746.0025.943.1429.0846.00	Reading dBuVFactor dB/mResult dBuV/mLimit dBuV/mMargin dB40.73-17.2923.4440.0016.5634.61-9.0725.5446.0020.4627.001.3328.3346.0017.6727.022.1529.1746.0016.8325.783.0928.8746.0017.1325.943.1429.0846.0016.92	Reading dBuV Factor dB/m Result dBuV/m Limit dBuV/m Margin dB Polarity 40.73 -17.29 23.44 40.00 16.56 Horizontal 34.61 -9.07 25.54 46.00 20.46 Horizontal 27.00 1.33 28.33 46.00 17.67 Horizontal 27.02 2.15 29.17 46.00 16.83 Horizontal 25.78 3.09 28.87 46.00 17.13 Horizontal 25.94 3.14 29.08 46.00 16.92 Horizontal

Project No.: 2407Y24301E-EM Test Mode: Mode 1(136-174MHz) EUT Model: OS-8900UV Test distance: 3m



Condition: PK RBW:100kHz VBW:300kHz SWT:aut	co
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Freq MHz	Reading dBuV	Factor dB/m	Result dBuV/m	Limit dBuV/m	Margin dB	Polarity	Remark
36.50	36.88	-9.11	27.77	40.00	12.23	Vertical	Peak
86.94	51.57	-17.29	34.28	40.00	5.72	Vertical	QP
314.40	36.94	-8.91	28.03	46.00	17.97	Vertical	Peak
836.56	27.21	1.79	29.00	46.00	17.00	Vertical	Peak
888.06	26.86	2.46	29.32	46.00	16.68	Vertical	Peak
963.63	26.01	3.46	29.47	54.00	24.53	Vertical	Peak

Project No.: 2407Y24301E-EM Test Mode: Mode 1(400-480MHz) EUT Model: OS-8900UV Test distance: 3m Temp/Humi/ATM: 19.5℃/57%/100.1kPa Tested by: Wlif Wu Power Source: DC 5V from Adapter (AC 120V/60Hz)



Freq MHz	Reading dBuV	Factor dB/m	Result dBuV/m	Limit dBuV/m	Margin dB	Polarity	Remark
86.94	41.67	-17.29	24.38	40.00	15.62	Horizontal	Peak
299.76	34.88	-9.17	25.71	46.00	20.29	Horizontal	Peak
721.80	28.57	0.05	28.62	46.00	17.38	Horizontal	Peak
866.63	26.61	2.18	28.79	46.00	17.21	Horizontal	Peak
909.69	27.20	2.66	29.86	46.00	16.14	Horizontal	Peak
966.44	26.12	3.47	29.59	54.00	24.41	Horizontal	Peak

Project No.: 2407Y24301E-EM Test Mode: Mode 1(400-480MHz) EUT Model: OS-8900UV Test distance: 3m



Condition: PK RBW:100kHz VBW:300kHz SWT:aut	to
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Freq MHz	Reading dBuV	Factor dB/m	Result dBuV/m	Limit dBuV/m	Margin dB	Polarity	Remark
36.01	34.80	-8.74	26.06	40.00	13.94	Vertical	Peak
86.94	52.09	-17.29	34.80	40.00	5.20	Vertical	QP
306.26	35.34	-9.11	26.23	46.00	19.77	Vertical	Peak
929.19	26.14	2.86	29.00	46.00	17.00	Vertical	Peak
943.64	25.92	3.09	29.01	46.00	16.99	Vertical	Peak
963.92	25.85	3.47	29.32	54.00	24.68	Vertical	Peak

Project No.: 2407Y24301E-EM Test Mode: Mode 2(136.0125MHz) EUT Model: OS-8900UV Test distance: 3m



Condition: PK R	BW:100kHz	VBW:300kHz	SWT:auto
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Freq MHz	Reading dBuV	Factor dB/m	Result dBuV/m	Limit dBuV/m	Margin dB	Polarity	Remark
86.16	46.18	-17.14	29.04	40.00	10.96	Horizontal	Peak
308.10	32.76	-9.07	23.69	46.00	22.31	Horizontal	Peak
665.54	27.94	-0.73	27.21	46.00	18.79	Horizontal	Peak
781.65	28.06	1.08	29.14	46.00	16.86	Horizontal	Peak
853.05	27.24	1.95	29.19	46.00	16.81	Horizontal	Peak
982.64	26.21	3.72	29.93	54.00	24.07	Horizontal	Peak

Project No.: 2407Y24301E-EM Test Mode: Mode 2(136.0125MHz) EUT Model: OS-8900UV Test distance: 3m



Condition: P	PK	RBW:100kHz	VBW:300kHz	SWT:auto
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Freq MHz	Reading dBuV	Factor dB/m	Result dBuV/m	Limit dBuV/m	Margin dB	Polarity	Remark
35.34	35.66	-8.27	27.39	40.00	12.61	Vertical	Peak
86.75	49.15	-17.25	31.90	40.00	8.10	Vertical	QP .
320.22	33.30	-8.76	24.54	46.00	21.46	Vertical	Peak
751.87	28.23	0.52	28.75	46.00	17.25	Vertical	Peak
883.79	27.26	2.37	29.63	46.00	16.37	Vertical	Peak
915.13	26.35	2.70	29.05	46.00	16.95	Vertical	Peak

Project No.: 2407Y24301E-EM Test Mode: Mode 2(155MHz) EUT Model: OS-8900UV Test distance: 3m



Condition: P	'K	RBW:100kHz	VBW:300kHz	SWT:auto
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Freq MHz	Reading dBuV	Factor dB/m	Result dBuV/m	Limit dBuV/m	Margin dB	Polarity	Remark
86.75	41.18	-17.25	23.93	40.00	16.07	Horizontal	Peak
310.43	33.06	-9.01	24.05	46.00	21.95	Horizontal	Peak
742.27	28.31	0.38	28.69	46.00	17.31	Horizontal	Peak
914.06	26.16	2.70	28.86	46.00	17.14	Horizontal	Peak
934.23	26.04	3.04	29.08	46.00	16.92	Horizontal	Peak
964.50	26.95	3.48	30.43	54.00	23.57	Horizontal	Peak

Project No.: 2407Y24301E-EM Test Mode: Mode 2(155MHz) EUT Model: OS-8900UV Test distance: 3m



Condition: PK RBW:100kHz VBW:300kHz SWT:au	to
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Freq MHz	Reading dBuV	Factor dB/m	Result dBuV/m	Limit dBuV/m	Margin dB	Polarity	Remark
35.24	37.11	-8.21	28.90	40.00	11.10	Vertical	Peak
86.84	49.37	-17.27	32.10	40.00	7.90	Vertical	QP
347.38	32.08	-8.12	23.96	46.00	22.04	Vertical	Peak
787.38	27.69	1.10	28.79	46.00	17.21	Vertical	Peak
882.73	27.18	2.37	29.55	46.00	16.45	Vertical	Peak
941.02	26.32	3.03	29.35	46.00	16.65	Vertical	Peak

Project No.: 2407Y24301E-EM Test Mode: Mode 2(173.9875MHz) EUT Model: OS-8900UV Test distance: 3m Temp/Humi/ATM: 19.5℃/57%/100.1kPa Tested by: Wlif Wu Power Source: DC 5V from Adapter (AC 120V/60Hz)



Freq MHz	Reading dBuV	Factor dB/m	Result dBuV/m	Limit dBuV/m	Margin dB	Polarity	Remark
85.97 317.31 836.75 842.47	42.54 32.94 27.67 27.53	-17.11 -8.83 1.79 1.81	25.43 24.11 29.46 29.34	40.00 46.00 46.00 46.00	14.57 21.89 16.54 16.66	Horizontal Horizontal Horizontal Horizontal	Peak Peak Peak Peak
867.89 966.34	26.61 26.21	2.15	28.76	46.00	17.24 24.32	Horizontal Horizontal	Peak Peak

Project No.: 2407Y24301E-EM Test Mode: Mode 2(173.9875MHz) EUT Model: OS-8900UV Test distance: 3m Temp/Humi/ATM: 19.5℃/57%/100.1kPa Tested by: Wlif Wu Power Source: DC 5V from Adapter (AC 120V/60Hz)



Freq MHz	Reading dBuV	Factor dB/m	Result dBuV/m	Limit dBuV/m	Margin dB	Polarity	Remark
35.92	36.40	-8.67	27.73	40.00	12.27	Vertical	Peak
86.75	50.03	-17.25	32.78	40.00	7.22	Vertical	QP
346.71	32.23	-8.16	24.07	46.00	21.93	Vertical	Peak
814.83	27.31	1.40	28.71	46.00	17.29	Vertical	Peak
836.36	27.38	1.79	29.17	46.00	16.83	Vertical	Peak
966.05	26.55	3.48	30.03	54.00	23.97	Vertical	Peak

Project No.: 2407Y24301E-EM Test Mode: Mode 2(400.0125MHz) EUT Model: OS-8900UV Test distance: 3m



Condition: PK RBW:100kHz VBW:300kHz SWT:au	uto
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Freq MHz	Reading dBuV	Factor dB/m	Result dBuV/m	Limit dBuV/m	Margin dB	Polarity	Remark
86.55	42.38	-17.21	25.17	40.00	14.83	Horizontal	Peak
318.48	33.76	-8.80	24.96	46.00	21.04	Horizontal	Peak
788.64	27.32	1.10	28.42	46.00	17.58	Horizontal	Peak
870.89	27.06	2.15	29.21	46.00	16.79	Horizontal	Peak
908.04	26.95	2.63	29.58	46.00	16.42	Horizontal	Peak
964.30	26.57	3.48	30.05	54.00	23.95	Horizontal	Peak

Project No.: 2407Y24301E-EM Test Mode: Mode 2(400.0125MHz) EUT Model: OS-8900UV Test distance: 3m



Condition: P	K RBW:100kHz	VBW:300kHz	SWT:auto
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Freq MHz	Reading dBuV	Factor dB/m	Result dBuV/m	Limit dBuV/m	Margin dB	Polarity	Remark
35.14	33.72	-8.15	25.57	40.00	14.43	Vertical	Peak
86.45	50.69	-17.20	33.49	40.00	6.51	Vertical	QP
319.35	32.91	-8.78	24.13	46.00	21.87	Vertical	Peak
788.54	27.43	1.10	28.53	46.00	17.47	Vertical	Peak
831.71	27.87	1.77	29.64	46.00	16.36	Vertical	Peak
909.50	26.84	2.66	29.50	46.00	16.50	Vertical	Peak

Project No.: 2407Y24301E-EM Test Mode: Mode 2(440MHz) EUT Model: OS-8900UV Test distance: 3m Temp/Humi/ATM: 19.5℃/57%/100.1kPa Tested by: Wlif Wu Power Source: DC 5V from Adapter (AC 120V/60Hz)



Freq MHz	Reading dBuV	Factor dB/m	Result dBuV/m	Limit dBuV/m	Margin dB	Polarity	Remark
87.23	46.49	-17.28	29.21	40.00	10.79	Horizontal	Peak
303.15	34.47	-9.15	25.32	46.00	20.68	Horizontal	Peak
794.36	27.42	1.22	28.64	46.00	17.36	Horizontal	Peak
835.59	27.07	1.79	28.86	46.00	17.14	Horizontal	Peak
928.41	26.54	2.85	29.39	46.00	16.61	Horizontal	Peak
948.01	26.48	3.13	29.61	46.00	16.39	Horizontal	Peak

Project No.: 2407Y24301E-EM Test Mode: Mode 2(440MHz) EUT Model: OS-8900UV Test distance: 3m



Condition:	PK	RBW:100kHz	VBW:300kHz	SWT:auto
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Freq MHz	Reading dBuV	Factor dB/m	Result dBuV/m	Limit dBuV/m	Margin dB	Polarity	Remark
36.60	37.05	-9.19	27.86	40.00	12.14	Vertical	Peak
86.65	51.16	-17.23	33.93	40.00	6.07	Vertical	QP
304.61	33.80	-9.15	24.65	46.00	21.35	Vertical	Peak
757.31	28.24	0.53	28.77	46.00	17.23	Vertical	Peak
866.33	27.94	2.18	30.12	46.00	15.88	Vertical	Peak
897.67	26.87	2.48	29.35	46.00	16.65	Vertical	Peak

Project No.: 2407Y24301E-EM Test Mode: Mode 2(479.9875MHz) EUT Model: OS-8900UV Test distance: 3m Temp/Humi/ATM: 19.5℃/57%/100.1kPa Tested by: Wlif Wu Power Source: DC 5V from Adapter (AC 120V/60Hz)



Freq MHz	Reading dBuV	Factor dB/m	Result dBuV/m	Limit dBuV/m	Margin dB	Polarity	Remark
87.23	46.34	-17.28	29.06	40.00	10.94	Horizontal	QP
309.07	33.39	-9.04	24.35	46.00	21.65	Horizontal	Peak
723.94	27.91	0.06	27.97	46.00	18.03	Horizontal	Peak
861.39	26.36	2.11	28.47	46.00	17.53	Horizontal	Peak
907.37	26.29	2.62	28.91	46.00	17.09	Horizontal	Peak
999.32	25.67	4.12	29.79	54.00	24.21	Horizontal	Peak

Project No.: 2407Y24301E-EM Test Mode: Mode 2(479.9875MHz) EUT Model: OS-8900UV Test distance: 3m



Condition: PK RBW:100kHz	VBW:300kHz	SWT:auto
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Freq MHz	Reading dBuV	Factor dB/m	Result dBuV/m	Limit dBuV/m	Margin dB	Polarity	Remark
35.92	36.63	-8.67	27.96	40.00	12.04	Vertical	Peak
87.23	52.24	-17.28	34.96	40.00	5.04	Vertical	QP
307.03	34.41	-9.09	25.32	46.00	20.68	Vertical	Peak
851.11	26.40	1.94	28.34	46.00	17.66	Vertical	Peak
930.55	26.14	2.88	29.02	46.00	16.98	Vertical	Peak
952.76	26.00	3.21	29.21	46.00	16.79	Vertical	Peak

2) 1GHz - 5GHz (Worst case)

Project No.: 2407Y24301E-EM Test Mode: Mode 1(400-480MHz) EUT Model: OS-8900UV Test distance: 3m Temp/Humi/ATM: 19.5℃/57%/100.1kPa Tested by: Wlif Wu Power Source: DC 5V from Adapter (AC 120V/60Hz)



Freq MHz	Reading dBuV	Factor dB/m	Result dBuV/m	Limit dBuV/m	Margin dB	Polarity	Remark
1000.00	32.94	-15.68	17.26	54.00	36.74	horizontal	Average
1000.00	52.49	-15.68	36.81	74.00	37.19	horizontal	Peak
1150.00	31.79	-15.32	16.47	54.00	37.53	horizontal	Average
1150.00	51.48	-15.32	36.16	74.00	37.84	horizontal	Peak
3099.20	27.77	-8.76	19.01	54.00	34.99	horizontal	Average
3099.20	47.68	-8.76	38.92	74.00	35.08	horizontal	Peak
3551.60	27.52	-7.55	19.97	54.00	34.03	horizontal	Average
3551.60	47.12	-7.55	39.57	74.00	34.43	horizontal	Peak
4550.00	25.49	-5.32	20.17	54.00	33.83	horizontal	Average
4550.00	45.95	-5.32	40.63	74.00	33.37	horizontal	Peak
4993.20	27.40	-5.00	22.40	54.00	31.60	horizontal	Average
4993.20	47.07	-5.00	42.07	74.00	31.93	horizontal	Peak

Project No.: 2407Y24301E-EM Test Mode: Mode 1(400-480MHz) EUT Model: OS-8900UV Test distance: 3m Temp/Humi/ATM: 19.5℃/57%/100.1kPa Tested by: Wlif Wu Power Source: DC 5V from Adapter (AC 120V/60Hz)



Freq MHz	Reading dBuV	Factor dB/m	Result dBuV/m	Limit dBuV/m	Margin dB	Polarity	Remark
1810.00	32.73	-13.19	19.54	54.00	34.46	vertical	Average
1810.00	52.90	-13.19	39.71	74.00	34.29	vertical	Peak
3495.20	26.66	-7.57	19.09	54.00	34.91	vertical	Average
3495.20	46.94	-7.57	39.37	74.00	34.63	vertical	Peak
4194.80	25.55	-5.58	19.97	54.00	34.03	vertical	Average
4194.80	45.81	-5.58	40.23	74.00	33.77	vertical	Peak
4504.40	26.12	-5.29	20.83	54.00	33.17	vertical	Average
4504.40	46.31	-5.29	41.02	74.00	32.98	vertical	Peak
4561.60	26.49	-5.31	21.18	54.00	32.82	vertical	Average
4561.60	46.05	-5.31	40.74	74.00	33.26	vertical	Peak
4970.40	26.49	-5.08	21.41	54.00	32.59	vertical	Average
4970.40	46.95	-5.08	41.87	74.00	32.13	vertical	Peak

Project No.: 2407Y24301E-EM Test Mode: Mode 2(479.9875MHz) EUT Model: OS-8900UV Test distance: 3m Temp/Humi/ATM: 19.5℃/57%/100.1kPa Tested by: Wlif Wu Power Source: DC 5V from Adapter (AC 120V/60Hz)



Freq MHz	Reading dBuV	Factor dB/m	Result dBuV/m	Limit dBuV/m	Margin dB	Polarity	Remark
1050.00	32.89	-15.56	17.33	54.00	36.67	horizontal	Average
1050.00	52.29	-15.56	36.73	74.00	37.27	horizontal	Peak
1150.00	31.99	-15.32	16.67	54.00	37.33	horizontal	Average
1150.00	51.90	-15.32	36.58	74.00	37.42	horizontal	Peak
1810.00	27.89	-13.19	14.70	54.00	39.30	horizontal	Average
1810.00	47.98	-13.19	34.79	74.00	39.21	horizontal	Peak
4195.20	25.78	-5.57	20.21	54.00	33.79	horizontal	Average
4195.20	45.44	-5.57	39.87	74.00	34.13	horizontal	Peak
4524.40	26.69	-5.30	21.39	54.00	32.61	horizontal	Average
4524.40	46.49	-5.30	41.19	74.00	32.81	horizontal	Peak
4999.60	27.26	-4.98	22.28	54.00	31.72	horizontal	Average
4999.60	47.02	-4.98	42.04	74.00	31.96	horizontal	Peak

Project No.: 2407Y24301E-EM Test Mode: Mode 2(479.9875MHz) EUT Model: OS-8900UV Test distance: 3m Temp/Humi/ATM: 19.5℃/57%/100.1kPa Tested by: Wlif Wu Power Source: DC 5V from Adapter (AC 120V/60Hz)



Freq	Reading	Factor dB/m	Result	Limit dBuV/m	Margin dB	Polarity	Remark
19112	ubuv	ubym	abav/m	abavym	ub		
1910 00	20.02	12 10	17 72	E4 00	26.27	ventical	Avenage
1010.00	50.92	-15.19	17.75	54.00	50.27	ventical	Avenage
1810.00	50.49	-13.19	37.30	74.00	36.70	vertical	Peak
3493.60	27.64	-7.58	20.06	54.00	33.94	vertical	Average
3493.60	47.36	-7.58	39.78	74.00	34.22	vertical	Peak
4006.40	25.60	-6.49	19.11	54.00	34.89	vertical	Average
4006.40	45.87	-6.49	39.38	74.00	34.62	vertical	Peak
4238.40	25.66	-5.70	19.96	54.00	34.04	vertical	Average
4238.40	45.96	-5.70	40.26	74.00	33.74	vertical	Peak
4503.20	26.17	-5.29	20.88	54.00	33.12	vertical	Average
4503.20	46.44	-5.29	41.15	74.00	32.85	vertical	Peak
4990.80	26.88	-5.02	21.86	54.00	32.14	vertical	Average
4990.80	46.54	-5.02	41.52	74.00	32.48	vertical	Peak

FCC §15.121(b) – SCANNING RECEIVERS AND FREQUENCY CONVERTERS USED WITH SCANNING RECEIVERS

Applicable Standard

FCC §15.121(b).

(b) Except as provided in paragraph (c) of this section, scanning receivers shall reject any signals from the Cellular Radiotelephone Service frequency bands that are 38 dB or lower based upon a 12 dB SINAD measurement, which is considered the threshold where a signal can be clearly discerned from any interference that may be present.

Test Procedure

1. Connected the EUT as the below block diagram;



- 2. Apply a signal to the EUT antenna port at lowest, middle, highest channel frequencies of the operating band;
- 3. Adjust the audio output level of the EUT to it's rated value with the distortion less than 10%;
- 4. Adjust the 8920 output power to produce 12 dB SINAD without the audio output power dropping by more than 3 dB; These output level of the 8920 at each channel frequency is the sensitivity of the EUT;
- 5. Select the lowest or worst case sensitivity level for all of the bands as the reference sensitivity;
- 6. Adjust the Signal Generator output to a level of +60 dB above the reference sensitivity obtained in step 5 and its frequency to the frequency point in the Cellular Band;
- 7. Set the EUT squelch to threshold, the signal required to open the squelch must be lower than the reference sensitivity level;
- 8. Set the EUT in a scanning mode and allow it to scan through it's complete receiving range;
- 9. If the EUT un-squelched or stopped on any frequency, receiving at this frequency, then adjust the signal generator output level until 12 dB SINAD is produced, this level is the spurious value and the difference between the reference sensitivity and the spurious value is the rejection ratio and must be at least 38 dB;
- 10. Repeat above procedure at the frequencies 824, 836, 849 MHz for the mobile band, and 869, 881.5 and 894 MHz for the Cellular Base Band.

Report No.: 2407Y24301E-EM-01

Test Data

Test Mode:	Scanning	g	Test Engineer:		Lucas Lin		
Test Date:	2025-03	-07	Test Result:		Pass		
Environment Conditions:							
Temperature: (°C)	21.0	Relative Humidity: (%)	45	ATM I	Pressure: (kPa)	100.2	

Scanning Frequency Range (MHz)	Test Frequency (MHz)	Measurement Result (Worst Case) (dB)	Limit (dB)	
136-174	824, 836, 849, 869, 881.5, 895	44	>38	
400-480	824, 836, 849, 869, 881.5, 895	46	>38	

EXHIBIT A - EUT PHOTOGRAPHS

Please refer to the attachment 2407Y24301E-EM-EXP EUT EXTERNAL PHOTOGRAPHS and 2407Y24301E-EM-INP EUT INTERNAL PHOTOGRAPHS

EXHIBIT B – TEST SETUP PHOTOGRAPHS

Please refer to the attachment 2407Y24301E-EM-TSP SETUP PHOTOGRAPHS.

FCC Part 15B

Declarations

1. Bay Area Compliance Laboratories Corp. (Xiamen) is not responsible for authenticity of any information provided by the applicant. Information from the applicant that may affect test results are marked with an asterisk " \star ".

2. Unless otherwise stated, the results shown in this test report refer only to the sample(s) tested.

3. Unless required by the rule provided by the applicant or product regulations, then decision rule in this report did not consider the uncertainty.

4. The extended uncertainty given in this report is obtained by combining the standard uncertainty times the coverage factor k=2 with the 95 % confidence interval.

5. This report cannot be reproduced except in full, without prior written approval of Bay Area Compliance Laboratories Corp. (Xiamen).

6. This report is valid only with a valid digital signature. The digital signature may be available only under the adobe software above version 7.0.

*****END OF REPORT*****

FCC Part 15B