



TEST REPORT

Applicant: Grandstream Networks, Inc.

Address: 126 Brookline Ave., 3rd Floor Boston, MA 02215, USA

FCC ID: YZZGWN7816

Product Name: Enterprise Layer 3 Managed Network Switch

Standard(s): 47 CFR Part 15 Subpart B

ANSI C63.4-2014

The above equipment has been tested and found compliant with the requirement of the relative standards by China Certification ICT Co., Ltd (Dongguan)

Report Number: CR230848277-00A

Date Of Issue: 2023/9/25

Reviewed By: Calvin Chen

Title: RF Engineer

Calvin Chen
Sun Zhong **Approved By: Sun Zhong**

Title: Manager

Test Laboratory: China Certification ICT Co., Ltd (Dongguan)

No. 113, Pingkang Road, Dalang Town, Dongguan,

Guangdong, China Tel: +86-769-82016888

Test Facility

The Test site used by China Certification ICT Co., Ltd (Dongguan) to collect test data is located on the No. 113, Pingkang Road, Dalang Town, Dongguan, Guangdong, China.

The lab has been recognized as the FCC accredited lab under the KDB 974614 D01 and is listed in the FCC Public Access Link (PAL) database, FCC Registration No.: 442868, the FCC Designation No.: CN1314.

The lab has been recognized by Innovation, Science and Economic Development Canada to test to Canadian radio equipment requirements, the CAB identifier: CN0123.

Declarations

China Certification ICT Co., Ltd (Dongguan) is not responsible for the authenticity of any test data provided by the applicant. Data included from the applicant that may affect test results are marked with a triangle symbol "\(\Lambda \)". Customer model name, addresses, names, trademarks etc. are not considered data.

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

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CONTENTS

TEST FACILITY	2
DECLARATIONS	2
DOCUMENT REVISION HISTORY	4
1. GENERAL INFORMATION	5
1.1 PRODUCT DESCRIPTION FOR EQUIPMENT UNDER TEST (EUT)	5
1.2 DESCRIPTION OF TEST CONFIGURATION	
1.2.2 Support Equipment List and Details	
1.2.3 Support Cable List and Details	
1.2.4 Block Diagram of Test Setup	 &
2. SUMMARY OF TEST RESULTS	9
3. REQUIREMENTS AND TEST PROCEDURES	10
3.1 AC LINE CONDUCTED EMISSIONS	10
3.1.1 EUT Setup	10
3.1.2 EMI Test Receiver Setup	
3.1.3 Test Procedure	
3.1.4 Corrected Amplitude & Margin Calculation	
3.2 RADIATION SPURIOUS EMISSIONS 3.2.1 EUT Setup	
3.2.2 Equipment Setup	
3.2.3 Test Procedure	
3.2.4 Corrected Amplitude & Margin Calculation	13
4. TEST DATA AND RESULTS	14
4.1 AC LINE CONDUCTED EMISSIONS	14
4.2 RADIATION SPURIOUS EMISSIONS	
5. EUT PHOTOGRAPHS	34
6 TEST SETUP PHOTOGRAPHS	35

China Certification ICT Co., Ltd (Dongguan)

DOCUMENT REVISION HISTORY

Revision Number	Report Number	Description of Revision	Date of Revision
1.0	CR230848277-00A	Original Report	2023/9/25

1. GENERAL INFORMATION

1.1 Product Description for Equipment under Test (EUT)

Product Name:	Enterprise Layer 3 Managed Network Switch	
Test Model:	GWN7816	
Highest Operation Frequency:	1000 MHz	
Rated Input Voltage:	AC 120V/60Hz	
Serial Number:	2A4Q-1	
EUT Received Date:	2023/8/5	
EUT Received Status:	Good	

Accessory Information:

Accessory Description	Manufacturer	Model
/	/	/

1.2 Description of Test Configuration

1.2.1 EUT Operation Condition:

EUT Operation Mode:	The system was configured for testing in Typical Use Mode, which was provided by the manufacturer. Test Mode: M1: PSU1 input& LAN Port Loop transmission M2: PSU2 input& LAN Port Loop transmission M3: PSU1& PSU2 input& LAN Port Loop transmission
Equipment Modifications:	No
EUT Exercise Software:	No

1.2.2 Support Equipment List and Details

Manufacturer	ufacturer Description Model		Serial Number
ASPOWER	Powe supply(PSU1)	U1A-H10070-DRB	Unknown

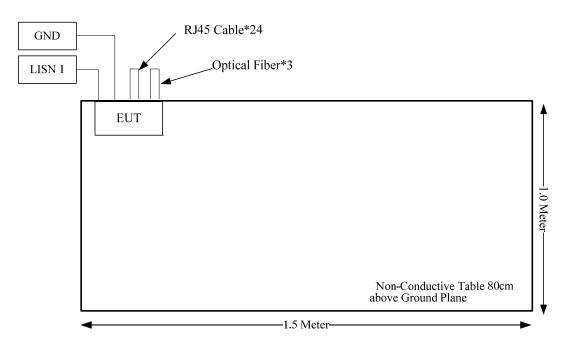
1.2.3 Support Cable List and Details

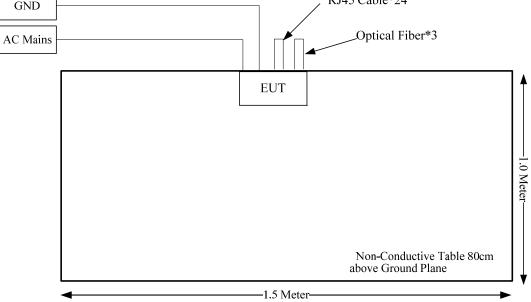
Cable Description	Shielding Type	Ferrite Core	Length (m)	From Port	То
RJ45 Cable*24	No	No	0.1	EUT	POE Load
Optical Fiber *3	No	No	1.2	EUT	EUT
Earth Line	No	No	1.5	EUT	GND
Power Cable*2	No	No	1	LISN	EUT

1.2.4 Block Diagram of Test Setup

Conducted emissions:

M1-M3:





1.3 Measurement Uncertainty

Otherwise required by the applicant or Product Regulations, Decision Rule in this report did not consider the uncertainty. The extended uncertainty given in this report is obtained by combining the standard uncertainty times the coverage factor K with the 95% confidence interval.

Parameter	Measurement Uncertainty		
Unwanted Emissions, radiated	30M~200MHz: 4.15 dB,200M~1GHz: 5.61 dB,1G~6GHz: 5.14 dB, 6G~18GHz: 5.93 dB,18G~26.5G:5.47 dB,26.5G~40G:5.63 dB		
Temperature	±1 ℃		
Humidity	±5%		
AC Power Lines Conducted Emission	2.8 dB (150 kHz to 30 MHz)		

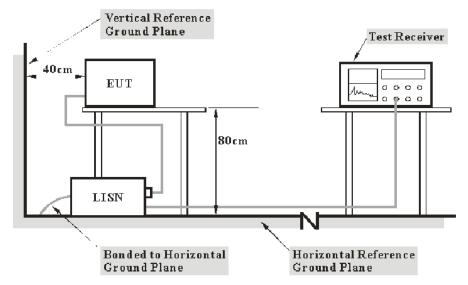
2. SUMMARY OF TEST RESULTS

Standard(s) Section	Description of Test	Result
§15.107	Conducted emissions	Compliant
§15.109	Radiated emissions	Compliant

3. REQUIREMENTS AND TEST PROCEDURES

3.1 AC Line Conducted Emissions

3.1.1 EUT Setup



Note: 1. Support units were connected to second LISN.
2. Both of LISNs (AMN) 80 cm from EUT and at the least 80 cm from other units and other metal planes support units.

The setup of EUT is according with per ANSI C63.4-2014 measurement procedure. The specification used was with the FCC Part 15 B Class A limits.

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

3.1.2 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	

3.1.3 Test Procedure

During the conducted emission test, the adapter was connected to the outlet of the first LISN and the other support equipments were connected to the outlet of the second LISN.

Maximizing procedure was performed on the six (6) highest emissions of the EUT, the report shall list the six emissions with the smallest margin relative to the limit, unless the margin is greater than 20 dB.

All data was recorded in the Quasi-peak and average detection mode.

The report shall list the six emissions with the smallest margin relative to the limit, unless the margin is greater than 20 dB.

3.1.4 Corrected Amplitude & Margin Calculation

The basic equation is as follows:

Result = Reading + Factor

Factor = attenuation caused by cable loss + voltage division factor of AMN

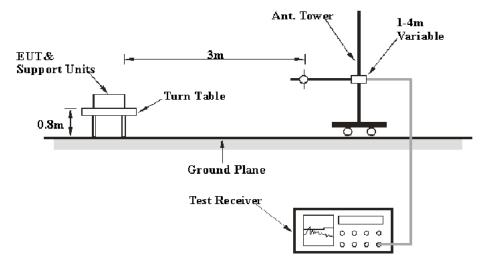
The "**Margin**" column of the following data tables indicates the degree of compliance within the applicable limit. The equation for margin calculation is as follows:

Margin = Limit - Result

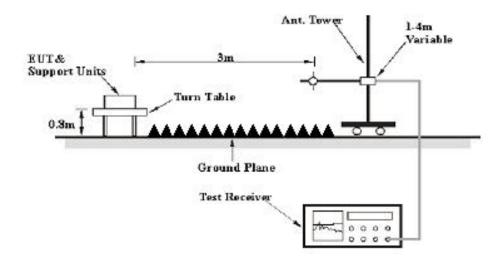
3.2 Radiation Spurious Emissions

3.2.1 EUT Setup

Below 1GHz:



Above 1GHz:



The radiated emission were performed in the 3 meters chamber test site, using the setup accordance with the ANSI C63.4-2014. The specification used was with the FCC Part 15 B Class A limits.

3.2.2 Equipment Setup

The system was investigated from 30 MHz to 5 GHz.

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

Frequency Range	RBW	Video B/W	IF B/W	Measurement
30 MHz – 1000 MHz	120 kHz	300 kHz	120 kHz	QP
Above 1 CHz	1 MHz	3 MHz	/	Peak
Above 1 GHz	1 MHz	10Hz	/	AVG

If the maximized peak measured value complies with under the limit more than 6dB, then it is unnecessary to perform an QP/Average measurement.

3.2.3 Test Procedure

During the radiated emissions, the adapter was connected to the first AC floor outlet and the other support equipments were connected to the second AC floor outlet.

Maximizing procedure was performed on the highest emissions to ensure that the EUT complied with all installation combinations.

The data was recorded in the Quasi-peak detection mode for below 1 GHz.

All emissions under the average limit and under the noise floor have not recorded in the report.

3.2.4 Corrected Amplitude & Margin Calculation

The basic equation is as follows:

Result = Reading + Factor

Factor = Antenna Factor + Cable Loss- Amplifier Gain

The "**Margin**" column of the following data tables indicates the degree of compliance within the applicable limit. The equation for margin calculation is as follows:

Margin = Limit - Result

4. TEST DATA AND RESULTS

4.1 AC Line Conducted Emissions

Serial Number:	2A4Q-1	Test Date:	2023/9/1
Test Site:	CE	Test Mode:	M1, M2, M3
Tester:	David Huang	Test Result:	Pass

Environmental Conditions:						
Temperature: $(^{\circ}\mathbb{C})$	27.1	Relative Humidity: (%)	64	ATM Pressure: (kPa)	99.7	

Test Equipment List and Details:

Manufacturer	Description	Model	Serial Number	Calibration Date	Calibration Due Date	
R&S	LISN	ENV216	101134	2023/03/31	2024/03/30	
R&S	EMI Test Receiver	ESR3	102726	2023/03/31	2024/03/30	
MICRO-COAX	Coaxial Cable	UTIFLEX	C-0200-01	2023/08/06	2024/08/05	
Audix	Test Software	E3	190306 (V9)	N/A	N/A	

^{*} Statement of Traceability: China Certification ICT Co., Ltd (Dongguan) attests that all calibrations have been performed, traceable to National Primary Standards and International System of Units (SI).

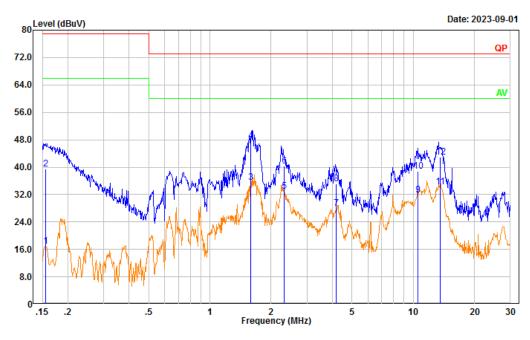
Test Data:

M1:

Project No.: CR230848277-EM Tester: David Huang

Test Mode: PSU1 input& LAN Port Loop transmission

Port: Line Note:

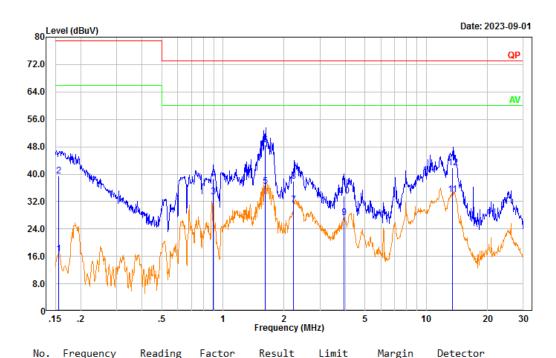


No.	Frequency (MHz)	Reading (dBμV)	Factor (dB)	Result (dBμV)	Limit (dBμV)	Margin (dB)	Detector
1	0.156	7.38	9.61	16.99	66.00	49.01	Average
2	0.156	29.92	9.61	39.53	79.00	39.47	QP
3	1.587	25.95	9.63	35.58	60.00	24.42	Average
4	1.587	38.04	9.63	47.67	73.00	25.33	QP
5	2.311	23.34	9.64	32.98	60.00	27.02	Average
6	2.311	30.67	9.64	40.31	73.00	32.69	QP
7	4.189	18.36	9.65	28.01	60.00	31.99	Average
8	4.189	25.47	9.65	35.12	73.00	37.88	QP
9	10.538	22.22	9.67	31.89	60.00	28.11	Average
10	10.538	29.18	9.67	38.85	73.00	34.15	QP
11	13.576	24.63	9.68	34.31	60.00	25.69	Average
12	13.576	33.17	9.68	42.85	73.00	30.15	QP

Project No.: CR230848277-EM Tester: David Huang

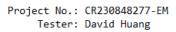
Test Mode: PSU1 input& LAN Port Loop transmission

Port: neutral Note:



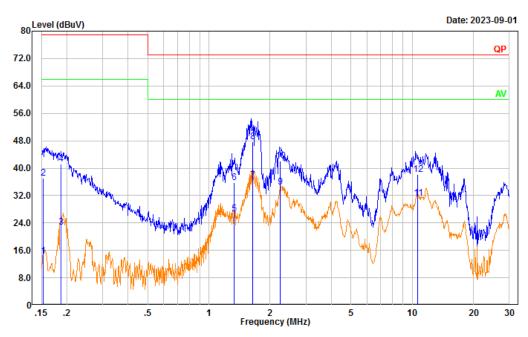
NO.	(MHz)	(dBµV)	(dB)	(dBµV)	(dBµV)	(dB)	Detector
1	0.156	7.05	9.61	16.66	66.00	49.34	Average
2	0.156	29.89	9.61	39.50	79.00	39.50	QP
3	0.899	23.72	9.62	33.34	60.00	26.66	Average
4	0.899	29.03	9.62	38.65	73.00	34.35	QP
5	1.614	26.76	9.63	36.39	60.00	23.61	Average
6	1.614	38.94	9.63	48.57	73.00	24.43	QP
7	2.221	21.30	9.63	30.93	60.00	29.07	Average
8	2.221	28.27	9.63	37.90	73.00	35.10	QP
9	3.950	17.60	9.65	27.25	60.00	32.75	Average
10	3.950	23.90	9.65	33.55	73.00	39.45	QP
11	13.418	24.39	9.68	34.07	60.00	25.93	Average
12	13.418	32.06	9.68	41.74	73.00	31.26	QP

M2:



Test Mode: PSU2 input& LAN Port Loop transmission

Port: Line Note:



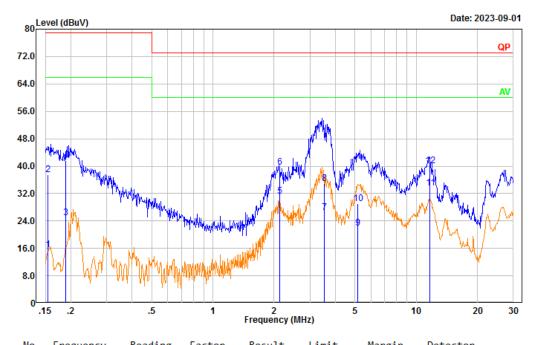
No.	Frequency (MHz)	Reading (dBμV)	Factor (dB)	Result (dBμV)	Limit (dBμV)	Margin (dB)	Detector
1	0.153	4.66	9.61	14.27	66.00	51.73	Average
2	0.153	27.51	9.61	37.12	79.00	41.88	QP
3	0.187	13.12	9.61	22.73	66.00	43.27	Average
4	0.187	31.62	9.61	41.23	79.00	37.77	QP
5	1.336	17.12	9.62	26.74	60.00	33.26	Average
6	1.336	26.23	9.62	35.85	73.00	37.15	QP
7	1.639	26.73	9.63	36.36	60.00	23.64	Average
8	1.639	38.16	9.63	47.79	73.00	25.21	QP
9	2.238	24.83	9.63	34.46	60.00	25.54	Average
10	2.238	32.44	9.63	42.07	73.00	30.93	QP
11	10.660	21.62	9.67	31.29	60.00	28.71	Average
12	10.660	28.51	9.67	38.18	73.00	34.82	OP

Project No.: CR230848277-EM Tester: David Huang

Test Mode: PSU2 input& LAN Port Loop transmission

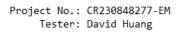
Port: neutral





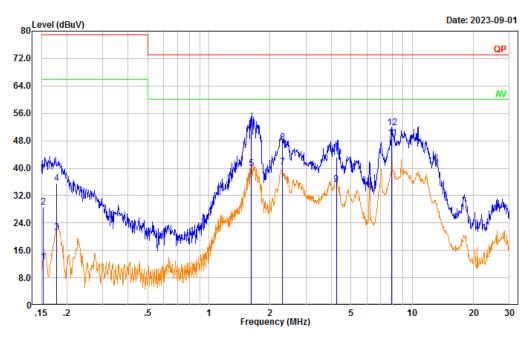
1 0.155 5.97 9.61 15.58 66.00 50.42 Average 2 0.155 27.91 9.61 37.52 79.00 41.48 QP 3 0.189 15.33 9.61 24.94 66.00 41.06 Average 4 0.189 32.00 9.61 41.61 79.00 37.39 QP 5 2.132 21.60 9.63 31.23 60.00 28.77 Average 6 2.132 30.02 9.63 39.65 73.00 33.35 QP 7 3.523 16.89 9.65 26.54 60.00 33.46 Average 8 3.523 25.15 9.65 34.80 73.00 38.20 QP 9 5.164 12.30 9.66 21.96 60.00 38.04 Average 10 5.164 19.36 9.66 29.02 73.00 43.98 QP 11 11.693 23.94 9.67 33.61 60.00 26.39 Average 12 11.693 30.47 9.67 40.14 73.00 32.86 QP		No.	(MHz)	Reading (dBμV)	(dB)	Result (dBμV)	Limit (dBμV)	Margin (dB)	Detector
2 0.155 27.91 9.61 37.52 79.00 41.48 QP 3 0.189 15.33 9.61 24.94 66.00 41.06 Average 4 0.189 32.00 9.61 41.61 79.00 37.39 QP 5 2.132 21.60 9.63 31.23 60.00 28.77 Average 6 2.132 30.02 9.63 39.65 73.00 33.35 QP 7 3.523 16.89 9.65 26.54 60.00 33.46 Average 8 3.523 25.15 9.65 34.80 73.00 38.20 QP 9 5.164 12.30 9.66 21.96 60.00 38.04 Average 10 5.164 19.36 9.66 29.02 73.00 43.98 QP 11 11.693 23.94 9.67 33.61 60.00 26.39 Average	Ī								
3 0.189 15.33 9.61 24.94 66.00 41.06 Average 4 0.189 32.00 9.61 41.61 79.00 37.39 QP 5 2.132 21.60 9.63 31.23 60.00 28.77 Average 6 2.132 30.02 9.63 39.65 73.00 33.35 QP 7 3.523 16.89 9.65 26.54 60.00 33.46 Average 8 3.523 25.15 9.65 34.80 73.00 38.20 QP 9 5.164 12.30 9.66 21.96 60.00 38.04 Average 10 5.164 19.36 9.66 29.02 73.00 43.98 QP 11 11.693 23.94 9.67 33.61 60.00 26.39 Average		1	0.155	5.97	9.61	15.58	66.00	50.42	Average
4 0.189 32.00 9.61 41.61 79.00 37.39 QP 5 2.132 21.60 9.63 31.23 60.00 28.77 Average 6 2.132 30.02 9.63 39.65 73.00 33.35 QP 7 3.523 16.89 9.65 26.54 60.00 33.46 Average 8 3.523 25.15 9.65 34.80 73.00 38.20 QP 9 5.164 12.30 9.66 21.96 60.00 38.04 Average 10 5.164 19.36 9.66 29.02 73.00 43.98 QP 11 11.693 23.94 9.67 33.61 60.00 26.39 Average		2	0.155	27.91	9.61	37.52	79.00	41.48	QP
5 2.132 21.60 9.63 31.23 60.00 28.77 Average 6 2.132 30.02 9.63 39.65 73.00 33.35 QP 7 3.523 16.89 9.65 26.54 60.00 33.46 Average 8 3.523 25.15 9.65 34.80 73.00 38.20 QP 9 5.164 12.30 9.66 21.96 60.00 38.04 Average 10 5.164 19.36 9.66 29.02 73.00 43.98 QP 11 11.693 23.94 9.67 33.61 60.00 26.39 Average		3	0.189	15.33	9.61	24.94	66.00	41.06	Average
6 2.132 30.02 9.63 39.65 73.00 33.35 QP 7 3.523 16.89 9.65 26.54 60.00 33.46 Average 8 3.523 25.15 9.65 34.80 73.00 38.20 QP 9 5.164 12.30 9.66 21.96 60.00 38.04 Average 10 5.164 19.36 9.66 29.02 73.00 43.98 QP 11 11.693 23.94 9.67 33.61 60.00 26.39 Average		4	0.189	32.00	9.61	41.61	79.00	37.39	QP
7 3.523 16.89 9.65 26.54 60.00 33.46 Average 8 3.523 25.15 9.65 34.80 73.00 38.20 QP 9 5.164 12.30 9.66 21.96 60.00 38.04 Average 10 5.164 19.36 9.66 29.02 73.00 43.98 QP 11 11.693 23.94 9.67 33.61 60.00 26.39 Average		5	2.132	21.60	9.63	31.23	60.00	28.77	Average
8 3.523 25.15 9.65 34.80 73.00 38.20 QP 9 5.164 12.30 9.66 21.96 60.00 38.04 Average 10 5.164 19.36 9.66 29.02 73.00 43.98 QP 11 11.693 23.94 9.67 33.61 60.00 26.39 Average		6	2.132	30.02	9.63	39.65	73.00	33.35	QP
9 5.164 12.30 9.66 21.96 60.00 38.04 Average 10 5.164 19.36 9.66 29.02 73.00 43.98 QP 11 11.693 23.94 9.67 33.61 60.00 26.39 Average		7	3.523	16.89	9.65	26.54	60.00	33.46	Average
10 5.164 19.36 9.66 29.02 73.00 43.98 QP 11 11.693 23.94 9.67 33.61 60.00 26.39 Average		8	3.523	25.15	9.65	34.80	73.00	38.20	QP
11 11.693 23.94 9.67 33.61 60.00 26.39 Average		9	5.164	12.30	9.66	21.96	60.00	38.04	Average
		10	5.164	19.36	9.66	29.02	73.00	43.98	QP
12 11.693 30.47 9.67 40.14 73.00 32.86 QP		11	11.693	23.94	9.67	33.61	60.00	26.39	Average
		12	11.693	30.47	9.67	40.14	73.00	32.86	QP

M3:



Test Mode: PSU1& PSU2 input& LAN Port Loop transmission

Port: Line Note:



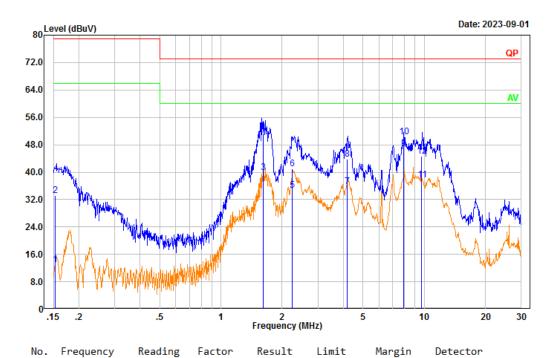
No.	Frequency (MHz)	Reading (dBμV)	Factor (dB)	Result (dBμV)	Limit (dBμV)	Margin (dB)	Detector
1	0.154	3.05	9.61	12.66	66.00	53.34	Average
2	0.154	18.92	9.61	28.53	79.00	50.47	QP
3	0.178	11.73	9.61	21.34	66.00	44.66	Average
4	0.178	25.87	9.61	35.48	79.00	43.52	QP
5	1.613	30.17	9.63	39.80	60.00	20.20	Average
6	1.613	41.89	9.63	51.52	73.00	21.48	QP
7	2.299	30.66	9.64	40.30	60.00	19.70	Average
8	2.299	37.86	9.64	47.50	73.00	25.50	QP
9	4.230	25.73	9.65	35.38	60.00	24.62	Average
10	4.230	33.49	9.65	43.14	73.00	29.86	QP
11	7.945	39.02	9.67	48.69	60.00	11.31	Average
12	7.945	42.07	9.67	51.74	73.00	21.26	OP

Project No.: CR230848277-EM Tester: David Huang

Test Mode: PSU1& PSU2 input& LAN Port Loop transmission

Port: neutral





	(MHz)	(dBµV)	(dB)	(dBµV)	(dBµV)	(dB)	beteetoi
1	0.153	3.39	9.61	13.00	66.00	53.00	Average
2	0.153	23.48	9.61	33.09	79.00	45.91	QP
3	1.614	30.16	9.63	39.79	60.00	20.21	Average
4	1.614	41.80	9.63	51.43	73.00	21.57	QP
5	2.233	25.00	9.63	34.63	60.00	25.37	Average
6	2.233	31.44	9.63	41.07	73.00	31.93	QP
7	4.170	26.19	9.65	35.84	60.00	24.16	Average
8	4.170	34.08	9.65	43.73	73.00	29.27	QP
9	7.940	37.11	9.67	46.78	60.00	13.22	Average
10	7.940	40.64	9.67	50.31	73.00	22.69	QP
11	9.714	28.16	9.67	37.83	60.00	22.17	Average
12	9.714	35.03	9.67	44.70	73.00	28.30	QP

4.2 Radiation Spurious Emissions

Serial Number:	2A4Q-1	Test Date:	2023/9/1~2023/9/11
Test Site:	966-1, 966-2	Test Mode:	M1, M2, M3
Tester:	Vic Du, Mack Huang	Test Result:	Pass

Environmental	Conditions:				
Temperature: $(^{\circ}\mathbb{C})$	25~26.2	Relative Humidity: (%)	53~63	ATM Pressure: (kPa)	100.1

Test Equipment List and Details:

Manufacturer	Description	Model I i i I		Calibration Date	Calibration Due Date
Sunol Sciences	Antenna	JB6	A082520-5	2020/10/19	2023/10/18
R&S	EMI Test Receiver	ESR3	102724	2023/3/31	2024/3/30
TIMES MICROWAVE	Coaxial Cable	LMR-600- UltraFlex	C-0470-02	2023/7/16	2024/7/15
TIMES MICROWAVE	Coaxial Cable	LMR-600- UltraFlex	C-0780-01	2023/7/16	2024/7/15
Sonoma	Amplifier	310N	186165 2023/7/1		2024/7/15
Audix	Test Software	E3	201021 (V9)	N/A	N/A
ETS-Lindgren	Horn Antenna	3115	9912-5985	2020/10/13	2023/10/12
R&S	Spectrum Analyzer	FSV40	101591	2023/3/31	2024/3/30
MICRO-COAX	Coaxial Cable	UFA210A-1- 1200-70U300	217423-008	2023/8/6	2024/8/5
MICRO-COAX	Coaxial Cable	UFA210A-1- 2362-300300	235780-001	2023/8/6	2024/8/5
Mini	Pre-amplifier	ZVA-183-S+	5969001149	2022/11/9	2023/11/8

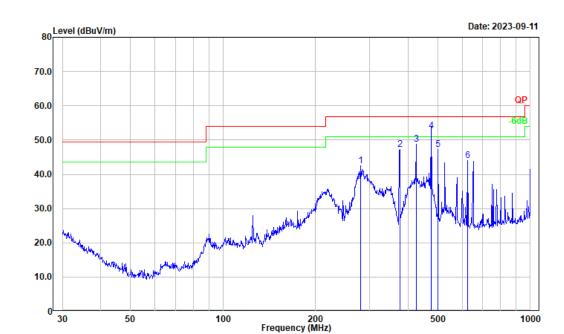
^{*} Statement of Traceability: China Certification ICT Co., Ltd (Dongguan) attests that all calibrations have been performed, traceable to National Primary Standards and International System of Units (SI).

Test Data:

1) 30MHz-1GHz:

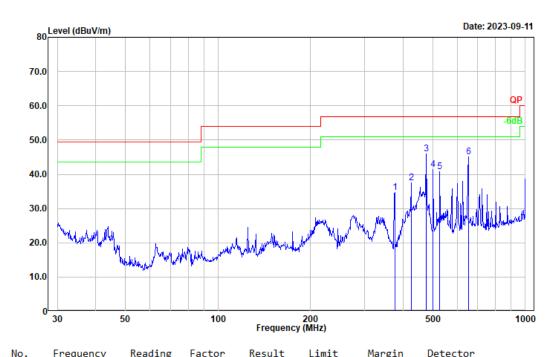
M1:





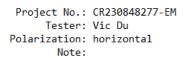
No.	Frequency (MHz)	Reading (dBμV)	Factor (dB/m)	Result (dBμV/m)	Limit (dBμV/m)	Margin (dB)	Detector	
1	281.008	54.16	-11.60	42.56	56.90	14.34	Peak	
2	375.939	56.65	-9.29	47.36	56.90	9.54	Peak	
3	425.028	56.45	-7.71	48.74	56.90	8.16	Peak	
4	475.499	59.05	-6.28	52.77	56.90	4.13	QP	
5	501.179	53.22	-5.99	47.23	56.90	9.67	Peak	
6	625 078	48 65	-4 60	44 05	56 90	12 85	Peak	

Project No.: CR230848277-EM Tester: Vic Du Polarization: vertical

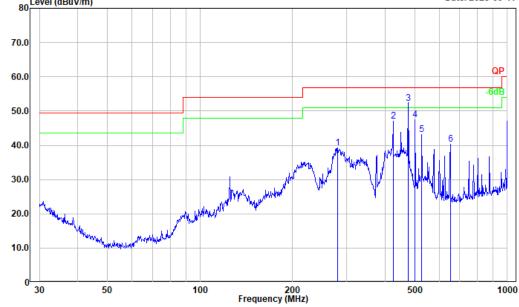


NO.	(MHz)	(dBµV)	(dB/m)	(dBµV/m)	(dBμV/m)	(dB)	betector	
1	375.939	43.92	-9.29	34.63	56.90	22.27	Peak	
2	425.028	45.22	-7.71	37.51	56.90	19.39	Peak	
3	475.499	52.19	-6.28	45.91	56.90	10.99	Peak	
4	501.179	47.33	-5.99	41.34	56.90	15.56	Peak	
5	526.397	46.68	-5.91	40.77	56.90	16.13	Peak	
6	651 9/12	49 38	_/ 19	45 19	56 90	11 71	Poak	

M2:

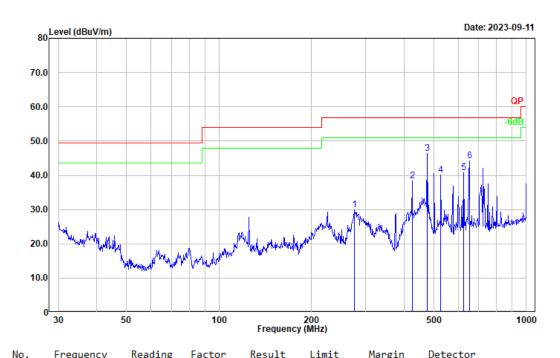






No.	Frequency (MHz)	Reading (dBμV)	Factor (dB/m)	Result (dBμV/m)	Limit (dBμV/m)	Margin (dB)	Detector
1	281.008	50.87	-11.60	39.27	56.90	17.63	Peak
2	425.028	54.74	-7.71	47.03	56.90	9.87	Peak
3	474.986	58.60	-6.29	52.31	56.90	4.59	QP
4	501.179	53.48	-5.99	47.49	56.90	9.41	Peak
5	526.397	49.04	-5.91	43.13	56.90	13.77	Peak
6	651.942	44.53	-4.19	40.34	56.90	16.56	Peak

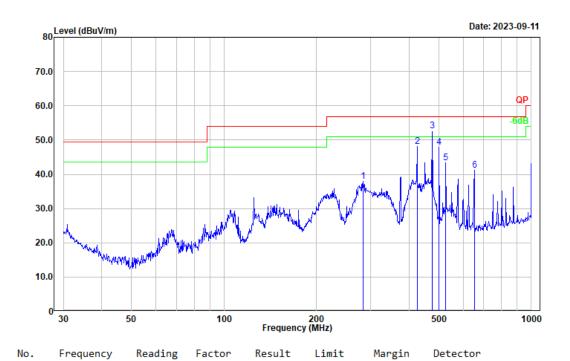
Project No.: CR230848277-EM Tester: Vic Du Polarization: vertical



	(MHz)	(dBµV)	(dB/m)	(dBµV/m)	(dBμV/m)	(dB)	Detector	_
1	275.157	41.90	-11.89	30.01	56.90	26.89	Peak	
2	425.028	46.07	-7.71	38.36	56.90	18.54	Peak	
3	475.499	52.66	-6.28	46.38	56.90	10.52	Peak	
4	526.397	46.03	-5.91	40.12	56.90	16.78	Peak	
5	625.078	45.42	-4.60	40.82	56.90	16.08	Peak	
6	651.942	48.48	-4.19	44.29	56.90	12.61	Peak	

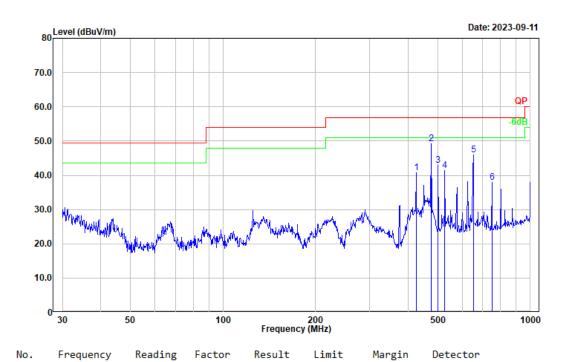
M3:

Project No.: CR230848277-EM Tester: Vic Du Polarization: horizontal



	(MHz)	(dBμV)	(dB/m)	(dBμV/m)	(dBμV/m)	(dB)		
1	282.985	49.34	-11.47	37.87	56.90	19.03	Peak	
2	425.028	55.79	-7.71	48.08	56.90	8.82	Peak	
3	475.005	58.99	-6.29	52.70	56.90	4.20	QP	
4	501.179	53.90	-5.99	47.91	56.90	8.99	Peak	
5	526.397	49.19	-5.91	43.28	56.90	13.62	Peak	
6	651.942	45.32	-4.19	41.13	56.90	15.77	Peak	

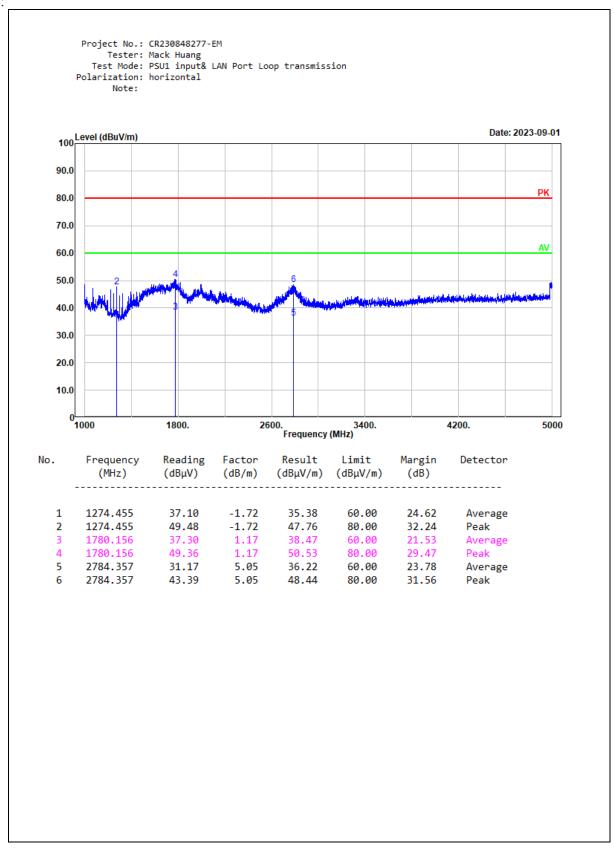
Project No.: CR230848277-EM Tester: Vic Du Polarization: vertical



	(MHz)	(dBμV)	(dB/m)	$(dB\mu V/m)$	$(dB\mu V/m)$	(dB)		
1	425.028	48.37	-7.71	40.66	56.90	16.24	Peak	
2	475.499	55.60	-6.28	49.32	56.90	7.58	Peak	
3	501.179	48.90	-5.99	42.91	56.90	13.99	Peak	
4	526.397	47.28	-5.91	41.37	56.90	15.53	Peak	
5	651.942	50.22	-4.19	46.03	56.90	10.87	Peak	
6	750.108	40.94	-3.00	37.94	56.90	18.96	Peak	

2) Above 1GHz:

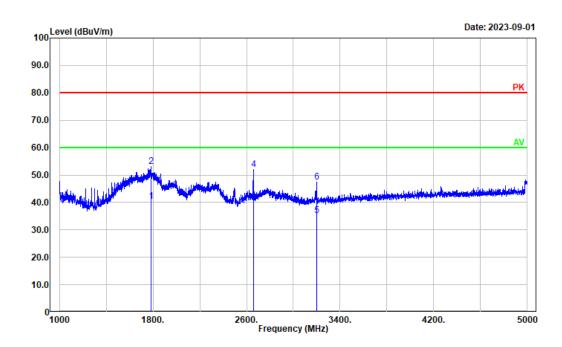
M1:



Project No.: CR230848277-EM

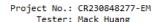
Tester: Mack Huang Test Mode: PSU1 input& LAN Port Loop transmission

Polarization: vertical



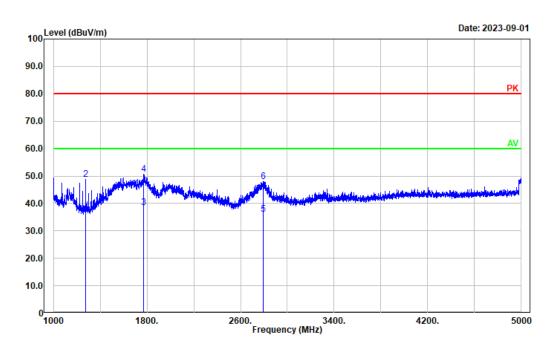
No.	Frequency (MHz)	Reading (dBμV)	Factor (dB/m)	Result (dBμV/m)	Limit (dBμV/m)	Margin (dB)	Detector
1	1780.956	39.34	1.16	40.50	60.00	19.50	Average
2	1780.956	51.83	1.16	52.99	80.00	27.01	Peak
3	2657.932	35.59	4.48	40.07	60.00	19.93	Average
4	2657.932	47.66	4.48	52.14	80.00	27.86	Peak
5	3197.240	28.41	6.75	35.16	60.00	24.84	Average
6	3197.240	40.57	6.75	47.32	80.00	32.68	Peak

M2:



Tester: Mack Huang Test Mode: PSU2 input& LAN Port Loop transmission

Polarization: horizontal

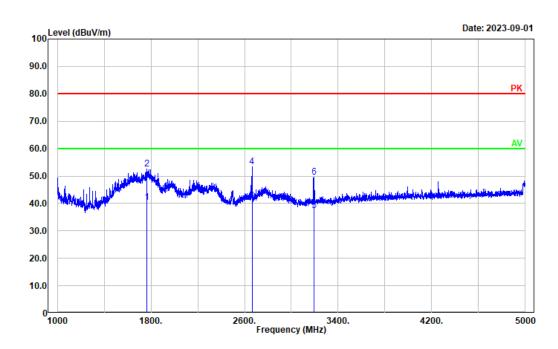


No.	Frequency (MHz)	Reading (dBµV)	Factor (dB/m)	Result (dBµV/m)	Limit (dBμV/m)	Margin (dB)	Detector
1	1274.455	38.11	-1.72	36.39	60.00	23.61	Average
2	1274.455	50.50	-1.72	48.78	80.00	31.22	Peak
3	1772.955	37.23	1.12	38.35	60.00	21.65	Average
4	1772.955	49.57	1.12	50.69	80.00	29.31	Peak
5	2791.558	30.95	5.07	36.02	60.00	23.98	Average
6	2791.558	42.96	5.07	48.03	80.00	31.97	Peak

Project No.: CR230848277-EM

Tester: Mack Huang Test Mode: PSU2 input& LAN Port Loop transmission

Polarization: vertical



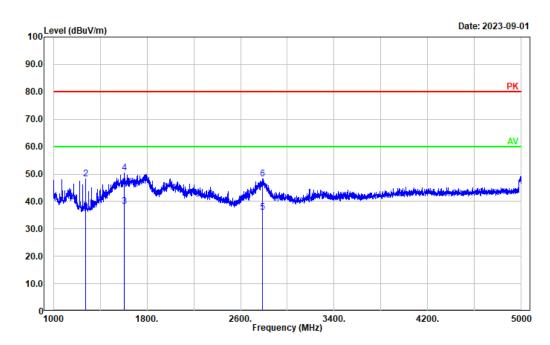
No.	Frequency (MHz)	Reading (dBμV)	Factor (dB/m)	Result (dBμV/m)	Limit (dBμV/m)	Margin (dB)	Detector
1	1767.354	39.16	1.09	40.25	60.00	19.75	Average
2	1767.354	51.40	1.09	52.49	80.00	27.51	Peak
3	2663.533	36.69	4.52	41.21	60.00	18.79	Average
4	2663.533	48.90	4.52	53.42	80.00	26.58	Peak
5	3193.239	30.53	6.74	37.27	60.00	22.73	Average
6	3193.239	42.80	6.74	49.54	80.00	30.46	Peak

M3:

Project No.: CR230848277-EM

Tester: Mack Huang Test Mode: PSU1& PSU2 input& LAN Port Loop transmission

Polarization: horizontal

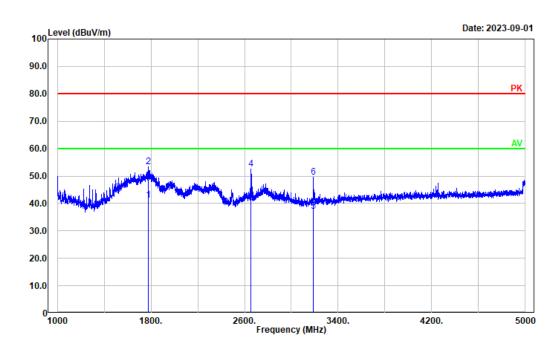


No.	Frequency (MHz)	Reading (dBµV)	Factor (dB/m)	Result (dBμV/m)	Limit (dBμV/m)	Margin (dB)	Detector
1	1274.455	37.86	-1.72	36.14	60.00	23.86	Average
2	1274.455	50.05	-1.72	48.33	80.00	31.67	Peak
3	1607.321	37.94	0.27	38.21	60.00	21.79	Average
4	1607.321	50.14	0.27	50.41	80.00	29.59	Peak
5	2787.558	31.10	5.06	36.16	60.00	23.84	Average
6	2787.558	43.26	5.06	48.32	80.00	31.68	Peak

Project No.: CR230848277-EM

Tester: Mack Huang Test Mode: PSU1& PSU2 input& LAN Port Loop transmission

Polarization: vertical



No.	Frequency (MHz)	Reading (dBμV)	Factor (dB/m)	Result (dBμV/m)	Limit (dBμV/m)	Margin (dB)	Detector
1	1777.755	40.08	1.15	41.23	60.00	18.77	Average
2	1777.755	52.31	1.15	53.46	80.00	26.54	Peak
3	2655.531	35.85	4.47	40.32	60.00	19.68	Average
4	2655.531	48.16	4.47	52.63	80.00	27.37	Peak
5	3187.637	30.52	6.73	37.25	60.00	22.75	Average
6	3187.637	42.77	6.73	49.50	80.00	30.50	Peak

China Certification ICT Co., Ltd (Dongguan)	Report No.: CR230848277-001			
S. EUT PHOTOGRAPHS				
ease refer to the attachment CR230848277-EXP EUT EXTERNAL PHOTOGRAPHS and CR230848277-IP EUT INTERNAL PHOTOGRAPHS BY EUT INTERNAL PHOTOGRAPHS A second content of the second c				
NP EUT INTERNAL PHOTOGRAPHS				

Please refer to the attachment CR230848277-00A-TSP TEST SETUP PHOTOGRAPHS. ****** END OF REPORT ****** *****************************	277-00A
***** END OF REPORT *****	