





# **TEST REPORT**

Applicant Name: Address: Report Number: FCC ID: Grandstream Networks, Inc. 126 Brookline Ave., 3rd Floor Boston, MA 02215, USA 2401V38737E-EM-00 YZZGWN7822P

## Test Standard (s)

FCC Part 15, Subpart B (Class A)

## **Sample Description**

Product Type:	Layer 3 Multi-Gigabit Network Switch
Model No.:	GWN7822P
Multiple Model(s) No.:	N/A
Trade Mark:	GRANDSTREAM
Date Received:	2024/07/29
Issue Date:	2024/09/12

Test Result:

Pass▲

▲ In the configuration tested, the EUT complied with the standards above.

#### Prepared and Checked By:

oson Xiao

Joson Xiao EMC Engineer

## **Approved By:**

MoonLine

Moon Liu EMC Supervisor

Note: The information marked # is provided by the applicant, the laboratory is not responsible for its authenticity and this information can affect the validity of the result in the test report. Customer model name, addresses, names, trademarks etc. are included.

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#### Bay Area Compliance Laboratories Corp. (Shenzhen)

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Bay Area Compliance Laboratories Corp. (Shenzhen)

## **DOCUMENT REVISION HISTORY**

Revision Number	Report Number	Description of Revision	Date of Revision
0	2401V38737E-EM-00	Original Report	2024/09/12

## **GENERAL INFORMATION**

Product	Layer 3 Multi-Gigabit Network Switch
Tested Model	GWN7822P
Multiple Model(s)	N/A
Voltage Range	AC 100-240V
Highest operating frequency <sup>#</sup>	800MHz (Provided by the applicant)
Equipment Class	Class A
Sample number	2P5H-1 (Assigned by BACL, Shenzhen)
Sample/EUT Status	Good condition
Adapter Information	N/A

#### **Product Description for Equipment under Test (EUT)**

#### Objective

This test report is in accordance with Part 2-Subpart J, Part 15B Subparts A and B of the Federal Communication Commissions rules.

The objective of the manufacturer is to determine the compliance of the EUT with FCC Part 15B.

#### **Measurement Uncertainty**

Item	Frequenc	y Range	Expanded Measurement uncertainty		
Conducted Emissions	AC Mains	150 kHz ~30MHz	3.84dB(k=2, 95% level of confidence)		
	30MHz~200MHz	Horizontal	4.48dB(k=2, 95% level of confidence)		
	30MHz~200MHz Vertical		4.55dB(k=2, 95% level of confidence)		
	200MHz~1000MHz Horizontal		4.85dB(k=2, 95% level of confidence)		
Radiated Disturbance	200MHz~1000MHz	Vertical	5.05dB(k=2, 95% level of confidence)		
Distarbuilde	1GHz~6GHz	/	5.35dB(k=2, 95% level of confidence)		
	6GHz~18GHz	/	5.44dB(k=2, 95% level of confidence)		
	18GHz~40GHz	/	5.16dB(k=2, 95% level of confidence)		

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

#### **Test Facility**

The Test site used by Bay Area Compliance Laboratories Corp. (Shenzhen) to collect test data is located on the 5F(B-West), 6F, 7F, the 3rd Phase of Wan Li Industrial Building D, Shihua Rd, FuTian Free Trade Zone, Shenzhen, 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. : 715558, the FCC Designation No. : CN5045.

Each test item follows test standards and with no deviation.

## SYSTEM TEST CONFIGURATION

#### **Description of Test Configuration**

The system was configured for testing in worst case condition.

Test Mode: Full load & data transmitting

#### **EUT exercise software**

No exercise software was used.

#### **Equipment Modifications**

No modification was made to the EUT tested.

#### **Support Equipment List and Details**

Manufacturer	Description Model		Serial Number
Grandstream	POE Load	/	/
Dachuan	Adapter1	DCT24W120200CN-A0	/
LITEON	Adapter	PA-1301-66C3	66C32334000021

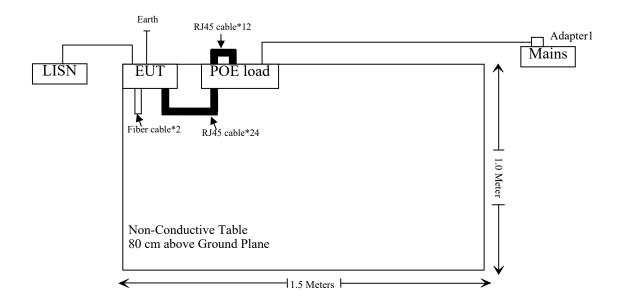
#### **External I/O Cable**

Cable Description	Length (m)	From/Port	То
Un-shielded detachable AC cable	1.0	EUT	LISN/Mains
Un-shielded detachable AC cable	1.0	Adapter	LISN/Mains
Un-shielded Un-detachable DC cable	1.8	Adapter	EUT
Un-shielded detachable fiber cable*2	1.0	EUT	EUT
Un-shielded detachable earth cable	1.0	EUT	Earth
Un-shielded detachable RJ45 cable*14	1.0	EUT	POE Load
Un-shielded detachable RJ45 cable*24	1.0	EUT	POE Load
Un-shielded detachable RJ45 cable*5	0.6	EUT	EUT
Un-shielded detachable RJ45 cable*7	0.2	POE Load	POE Load
Un-shielded detachable RJ45 cable*12	0.2	POE Load	POE Load
Un-shielded Un-detachable DC cable	1.2	POE Load	Adapter1

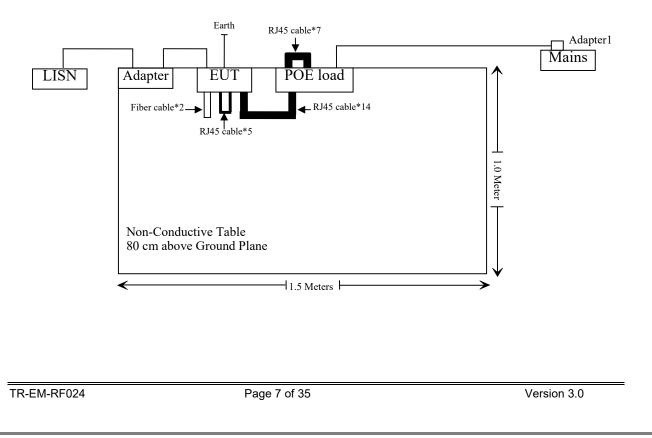
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#### **Block Diagram of Test Setup**

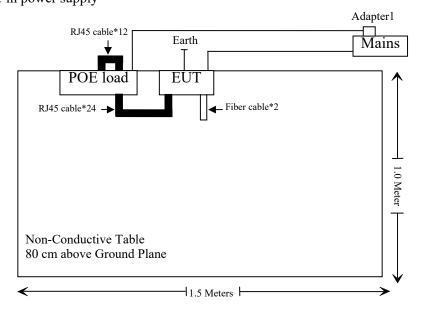
Conducted Emission: For Built-in power supply



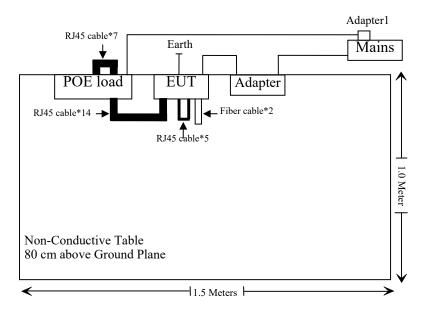
#### For External power supply



#### Radiated Emission: For Built-in power supply



For External power supply



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## SUMMARY OF TEST RESULTS

FCC Rules	Description of Test	Results
§15.107	AC Line Conducted Emissions	Compliant
§15.109	Radiated Emissions	Compliant

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## **TEST EQUIPMENT LIST**

Manufacturer	Description	Model	Serial Number	Calibration Date	Calibration Due Date			
AC Line Conducted Emission Test								
Rohde & Schwarz	EMI Test Receiver	ESCI	101120	2024/01/16	2025/01/15			
Rohde & Schwarz	LISN	ENV216	101613	2024/01/16	2025/01/15			
Rohde & Schwarz	Transient Limiter	ESH3Z2	DE25985	2024/05/21	2025/05/20			
Unknown	CE Cable	Unknown	UF A210B-1- 0720-504504	2024/05/21	2025/05/20			
Audix	EMI Test software	E3	191218(V9)	NCR	NCR			
	F	Radiated Emission	n Test					
Rohde & Schwarz	EMI Test Receiver	ESR3	102455	2024/01/16	2025/01/15			
Sonoma instrument Pre-amplifier		310 N 186238		2024/05/21	2025/05/20			
Sunol Sciences	Sunol Sciences Broadband Antenna		A040904-1	2023/07/20	2026/07/19			
Unknown Cable		Chamber A Cable 1 N/A		2024/06/18	2025/06/17			
Unknown	Unknown Cable		J-10M-A	2024/06/18	2025/06/17			
Audix	EMI Test software	E3	19821b(V9)	NCR	NCR			
Rohde & Schwarz	Spectrum Analyzer	FSV40	101605	2024/03/27	2025/03/26			
COM-POWER	Pre-amplifier	PA-122	181919	2024/06/18	2025/06/17			
Schwarzbeck	Schwarzbeck Horn Antenna		1143	2023/07/26	2026/07/25			
Unknown	RF Cable	KMSE	735	2024/06/18	2025/06/17			
Unknown	RF Cable	UFA147	219661	2024/06/18	2025/06/17			
Audix EMI Test software		E3	191218(V9)	NCR	NCR			

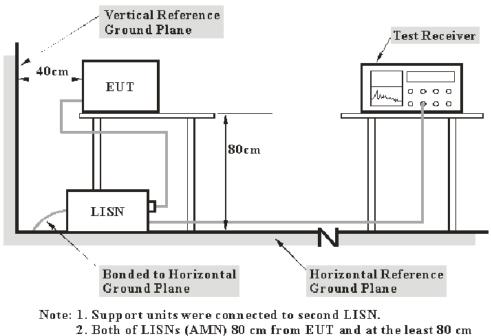
\* **Statement of Traceability:** Bay Area Compliance Laboratories Corp. (Shenzhen) attests that all calibrations have been performed in accordance to requirements that traceable to National Primary Standards and International System of Units (SI).

## FCC §15.107 - AC LINE CONDUCTED EMISSIONS

#### Applicable Standard

According to FCC§15.107

#### **EUT Setup**



from other units and other metal planes support units.

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

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 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**

Maximizing procedure was performed on the six (6) highest emissions of the EUT.

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

## Level & Over Limit Calculation

The Level is calculated by adding the LISN Factor, Cable Loss and the Read Level. The basic equation is as follows:

Level (dBuV) =Read Level (dBuV) +LISN Factor +Cable Loss

The "**Over limit**" column of the following data tables indicates the degree of compliance with the applicable limit.

Over Limit (dB) =Level (dBuV) -Limit Line (dBuV)

Note: The term "cable loss" refers to the combination of a cable and a 10dB transient limiter (attenuator).

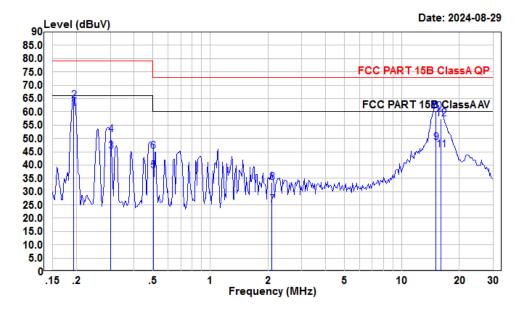
#### **Test Data**

#### **Environmental Conditions**

Temperature:	26 °C		
<b>Relative Humidity:</b>	67~73 %		
ATM Pressure:	101 kPa		

The testing was performed by Macy Shi from 2024-08-22 to 2024-08-29.

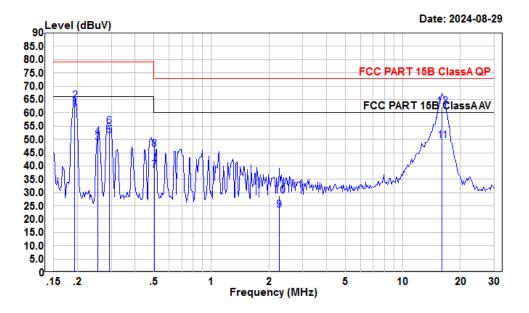
Test Mode: Full load & data transmitting For Built-in power supply D1602-F420S54-A AC 120V/60 Hz, Line



Condition: Line Project : 2401V38737E-EM test Mode: Full load&data transmitting tester : Macy.shi

		Read		LISN	Cable	Limit	0ver	
	Freq	Level	Level	Factor	Loss	Line	Limit	Remark
	MHz	dBuV	dBuV	dB	dB	dBuV	dB	
1	0.193	40.69	61.18	10.40	10.09	66.00	-4.82	Average
2	0.193	43.79	64.28	10.40	10.09	79.00	-14.72	QP
3	0.302	24.76	45.18	10.31	10.11	66.00	-20.82	Average
4	0.302	31.02	51.44	10.31	10.11	79.00	-27.56	QP
5	0.502	17.37	37.71	10.20	10.14	60.00	-22.29	Average
6	0.502	24.82	45.16	10.20	10.14	73.00	-27.84	QP
7	2.099	4.64	25.14	10.31	10.19	60.00	-34.86	Average
8	2.099	13.07	33.57	10.31	10.19	73.00	-39.43	QP
9	15.066	27.98	48.51	10.31	10.22	60.00	-11.49	Average
10	15.066	39.69	60.22	10.31	10.22	73.00	-12.78	QP
11	16.055	25.10	45.70	10.39	10.21	60.00	-14.30	Average
12	16.055	36.70	57.30	10.39	10.21	73.00	-15.70	QP

#### AC 120V/60 Hz, Neutral

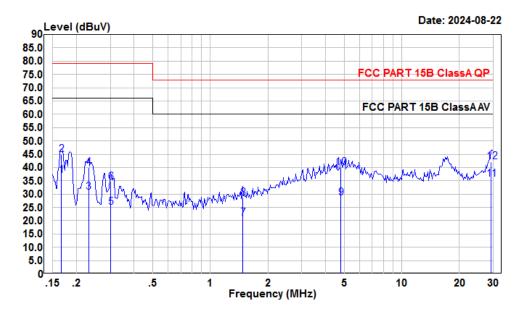


```
Condition: Neutral
Project : 2401V38737E-EM
test Mode: Full load&data transmitting
tester : Macy.shi
```

		Read		LISN	Cable	Limit	0ver	
	Freq	Level	Level	Factor	Loss	Line	Limit	Remark
	MHz	dBuV	dBuV	dB	dB	dBuV	dB	
1	0.193	40.79	61.43	10.55	10.09	66.00	-4.57	Average
2	0.193	43.87	64.51	10.55	10.09	79.00	-14.49	QP
3	0.255	27.91	48.64	10.65	10.08	66.00	-17.36	Average
4	0.255	30.11	50.84	10.65	10.08	79.00	-28.16	QP
5	0.292	30.55	51.34	10.68	10.11	66.00	-14.66	Average
6	0.292	34.17	54.96	10.68	10.11	79.00	-24.04	QP
7	0.502	17.52	38.46	10.80	10.14	60.00	-21.54	Average
8	0.502	25.23	46.17	10.80	10.14	73.00	-26.83	QP
9	2.261	3.19	23.52	10.15	10.18	60.00	-36.48	Average
10	2.261	8.62	28.95	10.15	10.18	73.00	-44.05	QP
11	16.055	28.90	49.46	10.35	10.21	60.00	-10.54	Average
12	16.055	41.75	62.31	10.35	10.21	73.00	-10.69	QP

For Built-in power supply G1766-0400W

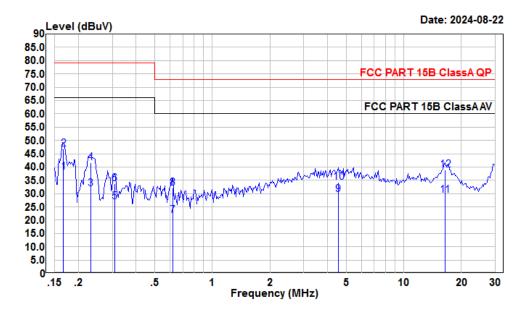
#### AC 120V/60 Hz, Line



Condition: Line Project : 2401V38737E-EM test Mode: Full load&data transmitting tester : Macy.shi

	Freq	Read Level	Level	LISN Factor	Cable Loss	Limit Line	Over Limit	Remark
	MHz	dBuV	dBuV	dB	dB	dBuV	dB	
1	0.167	16.39	36.89	10.40	10.10	66.00	-29.11	Average
2	0.167	24.24	44.74	10.40	10.10	79.00	-34.26	QP
3	0.232	10.33	30.78	10.37	10.08	66.00	-35.22	Average
4	0.232	19.61	40.06	10.37	10.08	79.00	-38.94	QP
5	0.302	4.62	25.04	10.31	10.11	66.00	-40.96	Average
6	0.302	14.16	34.58	10.31	10.11	79.00	-44.42	QP
7	1.480	0.49	21.08	10.43	10.16	60.00	-38.92	Average
8	1.480	7.91	28.50	10.43	10.16	73.00	-44.50	QP
9	4.797	8.04	28.69	10.46	10.19	60.00	-31.31	Average
10	4.797	19.43	40.08	10.46	10.19	73.00	-32.92	QP
11	29.371	14.71	35.54	10.61	10.22	60.00	-24.46	Average
12	29.371	21.41	42.24	10.61	10.22	73.00	-30.76	QP

#### AC 120V/60 Hz, Neutral

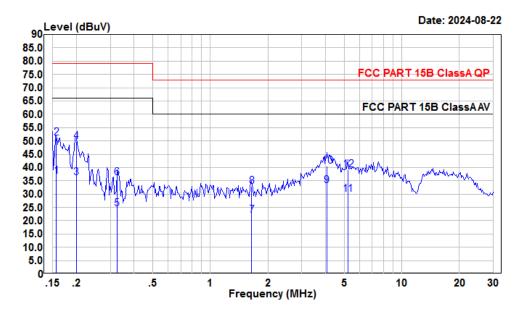


```
Condition: Neutral
Project : 2401V38737E-EM
test Mode: Full load&data transmitting
tester : Macy.shi
```

		Read		LISN	Cable	Limit	0ver	
	Freq	Level	Level	Factor	Loss	Line	Limit	Remark
	MHz	dBuV	dBuV	dB	dB	dBuV	dB	
1	0.167	17.51	37.96	10.35	10.10	66.00	-28.04	Average
2	0.167	26.27	46.72	10.35	10.10	79.00	-32.28	QP
3	0.232	11.09	31.80	10.63	10.08	66.00	-34.20	Average
4	0.232	20.93	41.64	10.63	10.08	79.00	-37.36	QP
5	0.308	6.18	26.98	10.69	10.11	66.00	-39.02	Average
6	0.308	12.95	33.75	10.69	10.11	79.00	-45.25	QP
7	0.621	0.90	21.64	10.61	10.13	60.00	-38.36	Average
8	0.621	11.28	32.02	10.61	10.13	73.00	-40.98	QP
9	4.549	9.14	29.73	10.40	10.19	60.00	-30.27	Average
10	4.549	13.76	34.35	10.40	10.19	73.00	-38.65	QP
11	16.398	8.95	29.50	10.34	10.21	60.00	-30.50	Average
12	16.398	18.32	38.87	10.34	10.21	73.00	-34.13	QP

For External power supply PA-1301-66C3

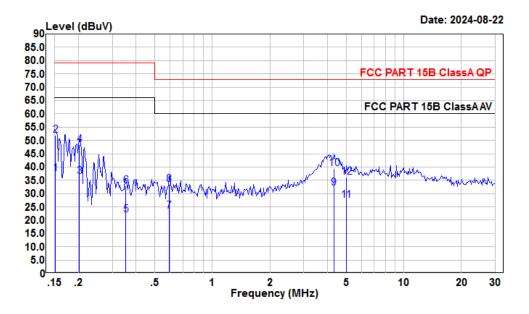
#### AC 120V/60 Hz, Line



Condition: Line Project : 2401V38737E-EM test Mode: Full load&data transmitting tester : Macy.shi

	Freq	Read Level	Level	LISN Factor	Cable Loss	Limit Line	Over Limit	Remark
	MHz	dBuV	dBuV	dB	dB	dBuV	dB	
1	0.156	16.14	36.66	10.40	10.12	66.00	-29.34	Average
2	0.156	30.65	51.17	10.40	10.12	79.00	-27.83	QP
3	0.200	15.67	36.16	10.40	10.09	66.00	-29.84	Average
4	0.200	29.25	49.74	10.40	10.09	79.00	-29.26	QP
5	0.325	4.16	24.57	10.29	10.12	66.00	-41.43	Average
6	0.325	15.65	36.06	10.29	10.12	79.00	-42.94	QP
7	1.645	1.44	21.99	10.38	10.17	60.00	-38.01	Average
8	1.645	12.29	32.84	10.38	10.17	73.00	-40.16	QP
9	4.049	12.60	33.21	10.40	10.21	60.00	-26.79	Average
10	4.049	20.02	40.63	10.40	10.21	73.00	-32.37	QP
11	5.221	9.18	29.86	10.50	10.18	60.00	-30.14	Average
12	5.221	18.44	39.12	10.50	10.18	73.00	-33.88	QP

#### AC 120V/60 Hz, Neutral



```
Condition: Neutral
Project : 2401V38737E-EM
test Mode: Full load&data transmitting
tester : Macy.shi
```

		Read		LISN	Cable	Limit	0ver	
	Freq	Level	Level	Factor	Loss	Line	Limit	Remark
	MHz	dBuV	dBuV	dB	dB	dBuV	dB	
1	0.152	17.32	37.66	10.21	10.13	66.00	-28.34	Average
2	0.152	31.49	51.83	10.21	10.13	79.00	-27.17	QP
3	0.202	15.72	36.41	10.60	10.09	66.00	-29.59	Average
4	0.202	27.80	48.49	10.60	10.09	79.00	-30.51	QP
5	0.354	1.19	22.03	10.72	10.12	66.00	-43.97	Average
6	0.354	11.97	32.81	10.72	10.12	79.00	-46.19	QP
7	0.595	2.60	23.37	10.65	10.12	60.00	-36.63	Average
8	0.595	12.66	33.43	10.65	10.12	73.00	-39.57	QP
9	4.315	11.41	32.01	10.40	10.20	60.00	-27.99	Average
10	4.315	18.90	39.50	10.40	10.20	73.00	-33.50	QP
11	5.005	6.91	27.49	10.40	10.18	60.00	-32.51	Average
12	5.005	15.56	36.14	10.40	10.18	73.00	-36.86	QP

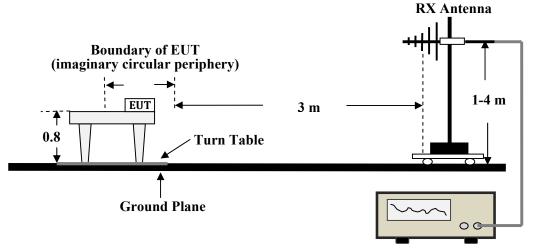
## FCC §15.109 - RADIATED EMISSIONS

#### **Applicable Standard**

FCC §15.109

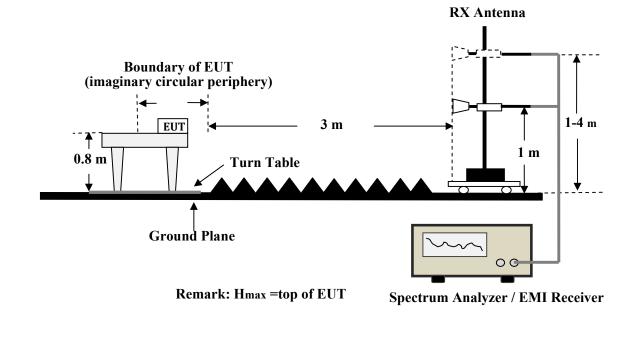
## **EUT Setup**

#### **Below 1GHz for Radiated Emissions**

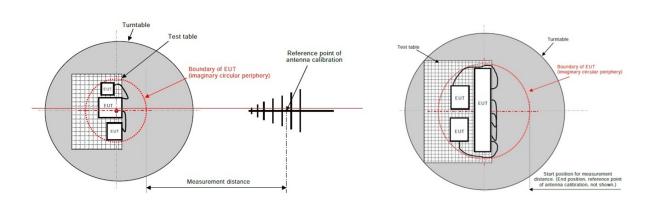


Spectrum Analyzer / EMI Receiver

#### Above 1GHz for Radiated Emissions



#### **Radiated Emissions Setup Configuration**



The radiated emission tests were performed in the 3 meters chamber test site, using the setup accordance with the ANSI C63.4-2014. The related limit was specified in FCC Part 15B.

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 and Spectrum analyzer Setup

During the radiated emission test, the EMI test receiver and spectrum analyzer setup was set with the following configurations:

Frequency Range	RBW	Video B/W	IF B/W	Measurement
30 MHz – 1000 MHz	100 kHz	300 kHz	120 kHz	QP
Above 1 GHz	1MHz	3 MHz	/	РК
ADOVE I GHZ	1MHz	10 Hz	/	Ave.

#### **Test Procedure**

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

If emission level of the EUT in Peak measurement mode is 20dB lower than peak limit line (that means the emission level in Peak measurement mode complies with both Peak and average limit lines) then only Peak measurement result is reported .Otherwise, Emission in average measurement mode shall be measured, and reported for frequency range above 1GHz.

Bay Area Compliance Laboratories Corp. (Shenzhen)

#### Level & Over Limit Calculation

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

Factor = Antenna Factor + Cable Loss - Amplifier Gain

Level = Read Level + Factor

The "Over limit" column of the following data tables indicates the degree of compliance with the applicable limit. For example, an Over limit of -6 dB means the emission is 6dB below the limit for Class A. The equation for Over Limit calculation is as follows:

Over limit = Level– Limit

#### **Test Data**

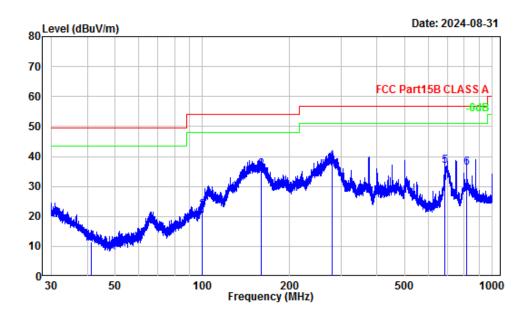
#### **Environmental Conditions**

Temperature:	23~26 ℃
<b>Relative Humidity:</b>	51~53%
ATM Pressure:	101~101.2 kPa

*The testing was performed by Anson Su from 2024-08-31 to 2024-09-04 for below 1GHz and Dylan Yang on 2024-09-02 for above 1GHz.* 

*Test Mode: Full load & data transmitting For Built-in power supply D1602-F420S54-A* 

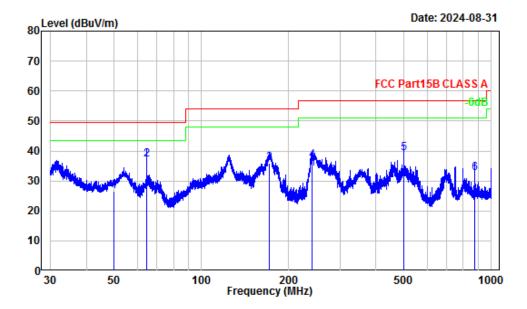
#### 30 MHz~1 GHz



Site	:	Chamber A	
Condition	:	3m Horizontal	
Project Number	:	2401V38737E-EM	
Test Mode	:	Full load&data	transmitting
Tester	:	Anson Su	

	Freq	Factor			Limit Line		Remark
	MHz	dB/m	dBuV	dBuV/m	dBuV/m	dB	
1	41.20	-13.23	24.67	11.44	49.54	-38.10	QP
2	99.83	-15.94	38.11	22.17	53.98	-31.81	QP
3	159.71	-12.72	48.45	35.73	53.98	-18.25	QP
4	279.04	-11.25	49.73	38.48	56.90	-18.42	QP
5	687.75	-3.67	40.56	36.89	56.90	-20.01	QP
6	812.76	-2.04	38.36	36.32	56.90	-20.58	QP

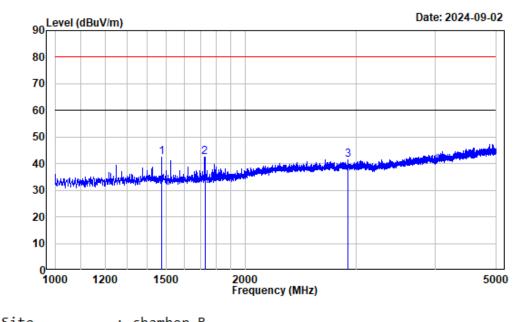




Site	:	Chamber A	
Condition	:	3m Vertical	
Project Number	:	2401V38737E-EM	
Test Mode	:	Full load&data	transmitting
Tester	:	Anson Su	

	Freq	Factor			Limit Line		Remark
	MHz	dB/m	dBuV	dBuV/m	dBuV/m	dB	
1	49.79	-17.88	44.40	26.52	49.54	-23.02	QP
2	64.74	-18.00	55.27	37.27	49.54	-12.27	QP
3	170.87	-13.18	49.16	35.98	53.98	-18.00	QP
4	240.94	-13.30	50.03	36.73	56.90	-20.17	QP
5	500.08	-5.76	44.90	39.14	56.90	-17.76	QP
6	875.25	-1.52	34.25	32.73	56.90	-24.17	QP

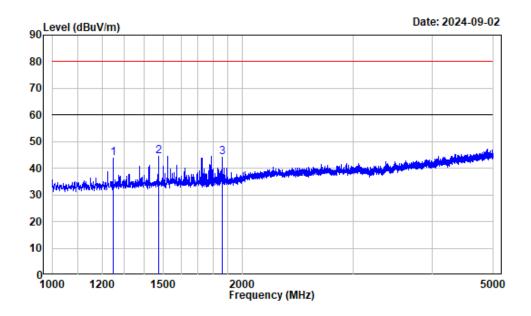
#### $1\sim 5~GHz$



Site :	chamber B
Condition :	Horizontal
Project Number:	2401V38737E-EM
Test Mode :	Full load&data transmitting
Tester :	Dylan.Yang

	_				Limit		
	Freq	Factor	Level	Level	Line	Limit	Remark
		dB/m	dBuild			dp	
	nnz	ub/m	ubuv	ubuv/m	ubuv/m	ub	
1	1475.000	-7.14	49.61	42.47	80.00	-37.53	Peak
2	1726.875	-6.58	49.09	42.51	80.00	-37.49	Peak
3	2910.625	-2.88	44.20	41.32	80.00	-38.68	Peak



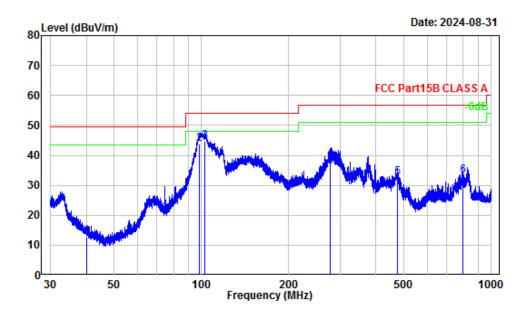


Site	:	chamber B	
Condition	:	Vertical	
Project Number	:	2401V38737E-EM	
Test Mode	:	Full load&data	transmitting
Tester	:	Dylan.Yang	

	Freq	Factor			Limit Line		Remark
	MHz	dB/m	dBuV	dBuV/m	dBuV/m	dB	
1	1250.000	-7.52	51.33	43.81	80.00	-36.19	Peak
2	1475.000	-7.14	51.56	44.42	80.00	-35.58	Peak
3	1859.375	-6.31	50.60	44.29	80.00	-35.71	Peak

For Built-in power supply G1766-0400W

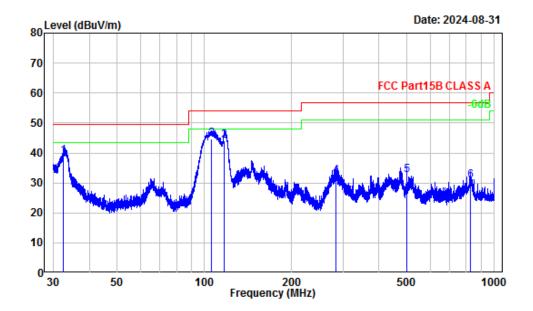
#### 30 MHz~1 GHz



Site	:	Chamber A	
Condition	:	3m Horizontal	
Project Number	:	2401V38737E-EM	
Test Mode	:	Full load&data	transmitting
Tester	:	Anson Su	

	Freq	Factor		Level			Remark
-	MHz	dB/m	dBuV	dBuV/m	dBuV/m	dB	
1	40.26	-12.55	25.23	12.68	49.54	-36.86	QP
2	98.01	-16.50	60.24	43.74	53.98	-10.24	QP
3	102.81	-15.12	59.70	44.58	53.98	-9.40	QP
4	277.58	-11.29	50.37	39.08	56.90	-17.82	QP
5	475.08	-6.50	39.13	32.63	56.90	-24.27	QP
6	795.49	-2.23	35.43	33.20	56.90	-23.70	QP

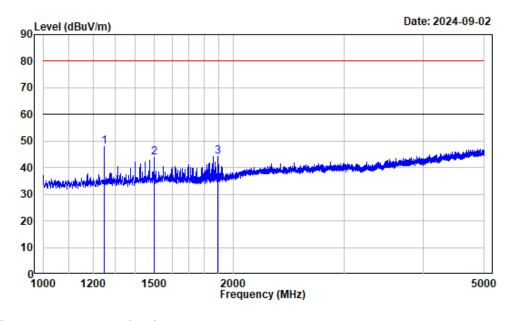




Site	:	Chamber A	
Condition	:	3m Vertical	
Project Number	:	2401V38737E-EM	
Test Mode	:	Full load&data	transmitting
Tester	:	Anson Su	

	Freq	Factor			Limit Line		Remark
-	MHz	dB/m	dBuV	dBuV/m	dBuV/m	dB	
1	32.62	-7.39	46.30	38.91	49.54	-10.63	QP
	105.64	-14.24	58.80	44.56	53.98	-9.42	QP
3	117.21	-11.77	55.98	44.21	53.98	-9.77	QP
4	283.85	-11.23	43.66	32.43	56.90	-24.47	QP
5	500.08	-5.76	38.26	32.50	56.90	-24.40	QP
6	825.32	-1.94	32.76	30.82	56.90	-26.08	QP

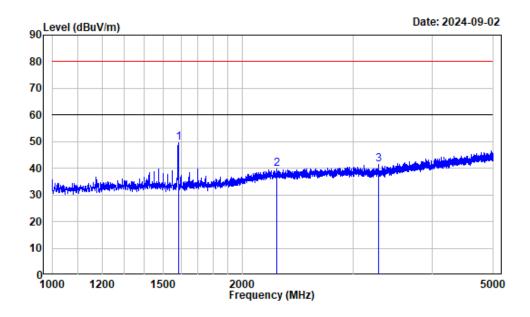
#### $1\sim 5~GHz$



Site :	:	chamber B	
Condition :	:	Horizontal	
Project Number:	:	2401V38737E-EM	
Test Mode :	:	Full load&data	transmitting
Tester :	:	Dylan.Yang	

	Freq	Factor			Limit Line		Remark
		dB/m			-	dB	
1	1250.000	-7.52	55.37	47.85	80.00	-32.15	Peak
2	1500.000	-7.26	51.09	43.83	80.00	-36.17	Peak
3	1890.625	-6.24	50.30	44.06	80.00	-35.94	Peak



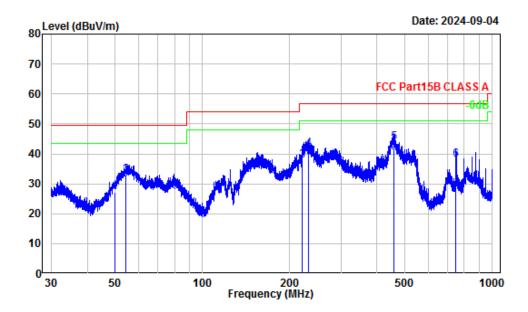


Site	:	chamber B	
Condition	:	Vertical	
Project Number	:	2401V38737E-EM	
Test Mode	:	Full load&data	transmitting
Tester	:	Dylan.Yang	

	Freq	Factor		Level		Over Limit	Remark
	MHz	dB/m	dBuV	dBuV/m	dBuV/m	dB	
1	1585.625	-7.12	56.71	49.59	80.00	-30.41	Peak
2	2268.125	-3.30	42.97	39.67	80.00	-40.33	Peak
3	3289.375	-2.77	44.27	41.50	80.00	-38.50	Peak

For External power supply PA-1301-66C3

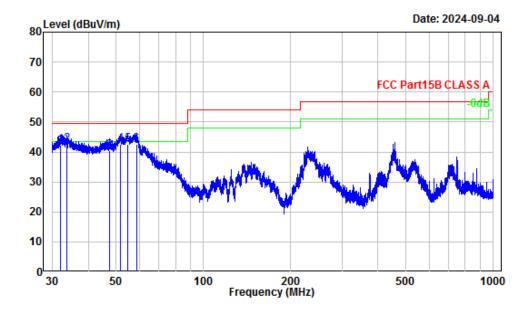
#### 30 MHz~1 GHz



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	Freq	Factor			Limit Line		Remark
-	MHz	dB/m	dBuV	dBuV/m	dBuV/m	dB	
1	49.79	-17.88	44.90	27.02	49.54	-22.52	QP
2	54.50	-18.31	51.23	32.92	49.54	-16.62	QP
3	220.81	-14.17	51.89	37.72	56.90	-19.18	QP
4		-13.76	55.35	41.59	56.90	-15.31	QP
5	458.71	-7.16	51.05	43.89	56.90	-13.01	QP
6		-2.88	41.07	38.19	56.90	-18.71	QP

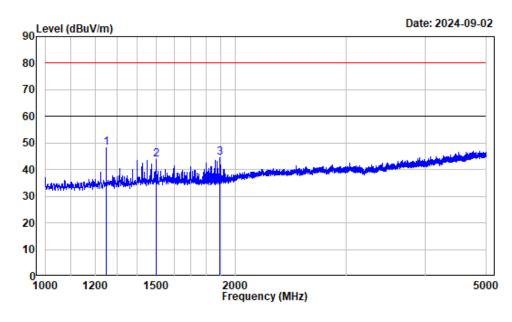




Site :		Chamber A			
Condition :		3m Vertical			
Project Number	:	2401V38737E-EM			
Test Mode	:	Full load&data	transmitting		
Tester	:	Anson Su			

	_				Limit		
	Freq	Factor	Level	Level	Line	Limit	Remark
-	MHz	dB/m	dBuV	dBuV/m	dBuV/m	dB	
1	32.01	-7.08	49.30	42.22	49.54	-7.32	QP
2	33.80	-8.14	50.60	42.46	49.54	-7.08	QP
3	47.49	-17.15	57.55	40.40	49.54	-9.14	QP
4	51.77	-18.20	60.91	42.71	49.54	-6.83	QP
5	54.57	-18.31	60.95	42.64	49.54	-6.90	QP
6	58.64	-18.22	60.80	42.58	49.54	-6.96	QP

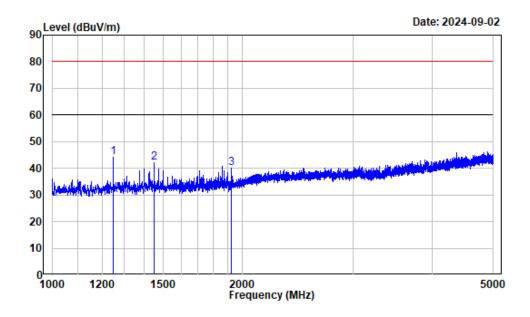
#### $1\sim 5~GHz$



Site :		chamber B				
Condition :		Horizontal				
Project Number	:	2401V38737E-EM				
Test Mode :		Full load&data	transmitting			
Tester :		Dylan.Yang				

	Freq	Factor			Limit Line		Remark
	MHz	dB/m	dBuV	dBuV/m	dBuV/m	dB	
1	1250.000	-7.52	55.88	48.36	80.00	-31.64	Peak
2	1500.000	-7.26	51.18	43.92	80.00	-36.08	Peak
3	1890.625	-6.24	50.69	44.45	80.00	-35.55	Peak





Site	:	chamber B	
Condition	:	Vertical	
Project Number	:	2401V38737E-EM	
Test Mode	:	Full load&data	transmitting
Tester	:	Dylan.Yang	

	Freq	Factor			Limit Line		Remark
	MHz	dB/m	dBuV	dBuV/m	dBuV/m	dB	
1	1250.000	-7.52	51.80	44.28	80.00	-35.72	Peak
2	1450.000	-7.02	48.98	41.96	80.00	-38.04	Peak
3	1921.875	-5.99	46.18	40.19	80.00	-39.81	Peak

## **EUT PHOTOGRAPHS**

Please refer to the attachment 2401V38737E-EM External photo and 2401V38737E-EM Internal photo.

Bay Area Compliance Laboratories Corp. (Shenzhen)

## **TEST SETUP PHOTOGRAPHS**

Please refer to the attachment 2401V38737E-EM Test Setup photo.

#### \*\*\*\*\* END OF REPORT \*\*\*\*\*

TR-EM-RF024