

FCC TEST REPORT

The device described below is tested by Dongguan Nore Testing Center Co., Ltd. to determine the maximum emission levels emanating from the device, the severe levels which the device can endure and E.U.T.'s performance criterion. The test results are contained in this test report. Dongguan Nore Testing Center Co., Ltd. is assumed of full responsibility for the accuracy and completeness of these tests.

Applicant/ Manufacturer : SHENZHEN GOSPELL DIGITAL TECHNOLOGY CO., LTD.
Address : E. of 5F, Zone A, 1st Ind. Area, Fenghuanggang, Sou. BaoTian 1Rd., Xixiang, St., Bao An District, Shenzhen, Guangdong 518102, P.R.China
Factory 1 : SHENZHEN GOSPELL DIGITAL TECHNOLOGY CO., LTD.
Address 1 : E. of 5F, Zone A, 1st Ind. Area, Fenghuanggang, Sou. BaoTian 1Rd., Xixiang, St., Bao An District, Shenzhen, Guangdong 518102, P.R.China
Address 2 : West of the 1F to 4F, Block A, Sou. Baotian 1Rd. (Xinghong Science and Technology Park), XiXiang Street, Bao An District, Shenzhen, Guangdong 518102, P.R.China.
Factory 2 : ChenZhou LiYuan Technology Co., Ltd.
Address : 3/F, 1 Building, Gospell Industrial Park, SuXian District, ChenZhou City, Hunan Province, China, 423000.
Factory 3 : GOSPOWER ELECTRIC TECHNOLOGY CO., LTD.
Address : Block 1, No.5 XingYe Road, SongShan Lake Park, DongGuan City, 523000 Guangdong, P.R. China.
E.U.T. : I.T.E.POWER SUPPLY (POWER OVERETHERNET INJECTOR)
Brand Name : GOSPOWER
Model No. : G0720-560-053, G0720-360-075, G0720-240-100, G0720-xxx-yyy
(For model difference refer to section 2.1)
Measurement Standard : 47 CFR FCC Part 15, Subpart B, Class B
Canadian ICES-003 Issue 6, Class B
Date of Receiver : March 10, 2020
Date of Test : March 11, 2020 to April 22, 2020
Date of Report : April 23, 2020
This Test Report is Issued Under the Authority of :

Prepared by



Steven Wu / Engineer

Approved & Authorized Signer



Iori Fan / Authorized Signatory

This report shows that the E.U.T. is technically compliant with the 47 CFR FCC Part 15, Subpart B, Class B and Canadian ICES-003 Issue 6 Class B. This report applies to above tested sample only and shall not be reproduced in part without written approval of Dongguan Nore Testing Center Co., Ltd.

TABLE OF CONTENTS

1. SUMMARY OF TEST RESULTS	4
2. GENERAL INFORMATION.....	5
2.1 Details of E.U.T.	5
2.2 Description of Support Device	7
2.3 Block Diagram of Test Setup	7
2.4 Test Facility	8
2.5 Deviations and Abnormalities from Standard Conditions	8
2.6 Documentation Requirements	9
3. MEASURING DEVICES AND TEST EQUIPMENT	12
3.1 For Mains Terminals Disturbance Voltage Test	12
3.2 For Radiated Emission Measurement	12
4. MAINS TERMINAL DISTURBANCE VOLTAGE MEASUREMENT	13
4.1 Block Diagram of Test Setup.....	13
4.2 Limit of Mains Terminal Disturbance Voltage Measurement	13
4.3 Test Procedure	14
4.4 Operating Condition of E.U.T.	14
4.5 Mains Terminal Disturbance Voltage Test Results.....	14
5. RADIATED EMISSION MEASUREMENT	21
5.1 Block Diagram of Test	21
5.2 Limit of Radiated Emission Measurement	21
5.3 Test Procedure	22
5.4 Operating Condition of E.U.T.	22
5.5 Radiated Emission Measurement Result	22
6. PHOTOGRAPH.....	29
6.1 Photo of Conducted Emission Measurement	29
6.2 Photo of Radiated Emission Measurement	29

Appendix I (Photos of E.U.T.) (8 pages)

Revision History of This Test Report

Report Number	Description	Issued Date
NTC2003090FV00	Initial Issue	2020-04-23

1. SUMMARY OF TEST RESULTS

The E.U.T. has been tested according to the following specifications:

EMISSION				
Standard	Test Type	Result	Limit	Remarks
47 CFR FCC Part 15, Subpart B, Class B & Canadian ICES-003 Issue 6, Class B; ANSI C63.4-2014	Mains Terminal Disturbance Voltage Test	PASS	§15.107(a)	Uncertainty: ±2.52dB
	Radiated Emission Test (30-1000MHz)	PASS	§15.109(a)	Uncertainty: ±4.60dB

2. GENERAL INFORMATION

2.1 Details of E.U.T.

E.U.T.	: I.T.E.POWER SUPPLY(POWER OVERETHERNET INJECTOR)
Main Model Name	: G0720-xxx-yyy(See table A and B for details)
Additional Model Name	: G0720-240-zzz, 740-64214-001, LV-G1P-1G24, LV-G1P-1G24V1A(See table A and B for details)
Rating	: AC100-240V~50/60Hz, Max 0.75A
Adapter	: N/A
E.U.T. Type	: Class B
Operation Frequency	: Below 108MHz (Declaration by manufacturer)
Test Voltage	: AC 120V 60Hz, AC 240V 50Hz (Only the worst case was recorded in this report)
Cable	: N/A
Description of Model Difference	: These models have the same circuitry, PCB layout, electrical mechanical and physical construction. The differences are model number, output voltage, output current, appearance of color and output power due to marketing purpose, details refer to pages 7. For more information refer to the circuit diagram and instruction manual.
Note	: According to the model difference, all tests were performed on models G0720-560-053, G0720-360-075 and G0720-240-100.
Remark	: N/A

Table A:

Model No.	Output voltage(Vdc)	Output current(A)	Max output power(W)	Transformer
G0720-xxx-yyy	36-56	0.01-0.75	30	LT00783V01
G0720-240-zzz	24	0.01-10	24	
740-64214-001	48	05	24	
LV-G1P-1G24	48	0.5	24	
LV-G1P-1G24V21A	24	1	14	

Table B:

Variable	Output voltage(Vdc)	Content
xxx	360-560	3 digits, dividing by 10 of output voltage in volt. Eg: 360=36Vdc, 560=56Vdc
yyy	001-075	3 digits, multiply 10 times of output current in mA. Eg: 001=10mA, 100=1000mA
zzz	001-100	3 digits, multiply 10 times of output current in mA. Eg: 001=10mA, 100=1000mA

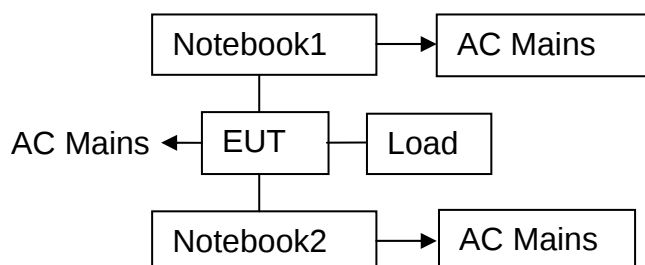
2.2 Description of Support Device

Notebook 1	:	Manufacturer: Lenovo Model: R720-151KBN S/N: PF0Z35FH
Adapter (For Notebook)	:	Manufacturer: Delta Model: ADL135NDC3A I/P: AC 100-240V 50-60Hz, 1.5A O/P: DC 20V 6.75A
Notebook 1	:	Manufacturer: IBM Corporation M/N: R50e S/N: L3-HZNGO P/N: 1834KDC
Adapter (For Notebook)	:	Manufacturer: IBM Corporation M/N: 08K8210 Input: AC100-240V 50/60Hz 0.5-1.0A Output: DC 16V 4.5A
Load	:	Provided by laboratory

2.3 Block Diagram of Test Setup

Block diagram of connection between the E.U.T. and simulators

Test mode: Full Load(POE+LAN)



2.4 Test Facility

EMC Lab	: Listed by CNAS, August 13, 2018 The certificate is valid until August 13, 2024 The Laboratory has been assessed and proved to be in compliance with CNAS/CL01 The Certificate Registration Number is L5795. Listed by A2LA, November 01, 2017 The certificate is valid until December 31, 2021 The Laboratory has been assessed and proved to be in compliance with ISO17025 The Certificate Registration Number is 4429.01 Listed by FCC, November 06, 2017 The Designation Number is CN1214 Test Firm Registration Number: 907417 Listed by Industry Canada, June 08, 2017 The Certificate Registration Number. Is 46405-9743A
Name of Firm	: Dongguan Nore Testing Center Co., Ltd. (Dongguan NTC Co., Ltd.)
Site Location	: Building D, Gaosheng Science and Technology park, Hongtu road, Nancheng district, Dongguan city, Guangdong province, China

2.5 Deviations and Abnormalities from Standard Conditions

No additions, deviations and exclusions from the standard.

2.6 Documentation Requirements

Label requirements:

a) In addition to the requirements in part 2 of this chapter, a device subject to certification, or Supplier's Declaration of Conformity shall be labeled as follows:

1) Receivers associated with the operation of a licensed radio service, e.g., FM broadcast under part 73 of this chapter, land mobile operation under part 90, etc., shall bear the following statement in a conspicuous location on the device:

This device complies with part 15 of the FCC Rules. Operation is subject to the condition that this device does not cause harmful interference.

(2) A stand-alone cable input selector switch, shall bear the following statement in a conspicuous location on the device:

This device complies with part 15 of the FCC Rules for use with cable television service.

(3) All other devices shall bear the following statement in a conspicuous location on the device:

This device complies with part 15 of the FCC Rules. Operation is subject to the following two conditions: (1) This device may not cause harmful interference, and (2) this device must accept any interference received, including interference that may cause undesired operation.

(4) Where a device is constructed in two or more sections connected by wires and marketed together, the statement specified under paragraph (a) of this section is required to be affixed only to the main control unit.

(5) When the device is so small or for such use that it is impracticable to label it with the statement specified under paragraph (a) of this section in a font that is four-point or larger, and the device does not have a display that can show electronic labeling, then the information required by this paragraph shall be placed in the user manual and must also either be placed on the device packaging or on a removable label attached to the device.

Identification:

(a) Devices subject only to Supplier's Declaration of Conformity shall be uniquely identified by the party responsible for marketing or importing the equipment within the United States. However, the identification shall not be of a format which could be confused with the FCC Identifier required on certified equipment. The responsible party shall maintain adequate identification records to facilitate positive identification for each device.

(b) Devices subject to authorization under Supplier's Declaration of Conformity may be labeled with the following logo on a voluntary basis as a visual indication that the product complies with the applicable FCC requirements. The use of the logo on the device does not alleviate the requirement to provide the compliance information required by §2.1077.



User's Manual requirements (Information to user) :

(a) For a Class A digital device or peripheral, the instructions furnished the user shall include the following or similar statement, placed in a prominent location in the text of the manual:

NOTE: This equipment has been tested and found to comply with the limits for a Class A digital device, pursuant to part 15 of the FCC Rules. These limits are designed to provide reasonable protection against harmful interference when the equipment is operated in a commercial environment. This equipment generates, uses, and can radiate radio frequency energy and, if not installed and used in accordance with the instruction manual, may cause harmful interference to radio communications. Operation of this equipment in a residential area is likely to cause harmful interference in which case the user will be required to correct the interference at his own expense.

(b) For a Class B digital device or peripheral, the instructions furnished the user shall include the following or similar statement, placed in a prominent location in the text of the manual:

NOTE: This equipment has been tested and found to comply with the limits for a Class B digital device, pursuant to part 15 of the FCC Rules. These limits are designed to provide reasonable protection against harmful interference in a residential installation. This equipment generates, uses and can radiate radio frequency energy and, if not installed and used in accordance with the instructions, may cause harmful interference to radio communications. However, there is no guarantee that interference will not occur in a particular installation. If this equipment does cause harmful interference to radio or television reception, which can be determined by turning the equipment off and on, the user is encouraged to try to correct the interference by one or more of the following measures:

- Reorient or relocate the receiving antenna.*
- Increase the separation between the equipment and receiver.*
- Connect the equipment into an outlet on a circuit different from that to which the receiver is connected.*
- Consult the dealer or an experienced radio/TV technician for help.*

Notice: The changes or modifications not expressly approved by the party responsible for compliance could void the user's authority to operate the equivalent.

If the EUT was tested with special shielded cables the operator's manual for such product shall also contain the following statements or their equivalent:

Shielded interface cables and/or AC power cord, if any, must be used in order to comply with the emission limits.

Compliance Information Statement:

Identification of Product :
Applicable compliance statements :
Responsible Party (In USA) Name :
ADDRESS :
Telephone :
Internet Contact Information :
Responsible Party Website :

- Note: 1. The information above may include in user's manual or separate sheet.
2. Identification of product: e.g., name and model number;
3. Applicable compliance statements: e.g. for part 15 devices see §15.19(a)(3)
4. Responsible Party (In USA) Name : e.g. Manufacturer, assembler, importer, or retailer. The responsible party must be located within the United States.

Compliance Information Statement for products assembled from modular components that are themselves SDoC or Certified :

Identification of Assembled Product :
Identification of Modular Components used :
Applicable compliance statements :
Responsible Party that assembled product (In USA) Name :
ADDRESS :
Telephone :
Internet Contact Information :
Responsible Party Website :
Copied of compliance state

- Note: 1. The information above may include in user's manual or separate sheet.
2. Identification of product: e.g., name and model number;
3. Applicable compliance statements: e.g. for part 15 devices see §15.19(a)(3)
4. Responsible Party (In USA) Name : e.g. Manufacturer, assembler, importer, or retailer. The responsible party must be located within the United States.
5. Identification of Modular Components used: e.g. AS identified on it's SDoC, or Name and Model and FCC ID if certified.
6. Copies of compliance statement for each SDoC modular components used must be included.
7. The responsible party must be located in the United States. The information above may be provided electronically per §2.935

3. MEASURING DEVICES AND TEST EQUIPMENT

3.1 For Mains Terminals Disturbance Voltage Test

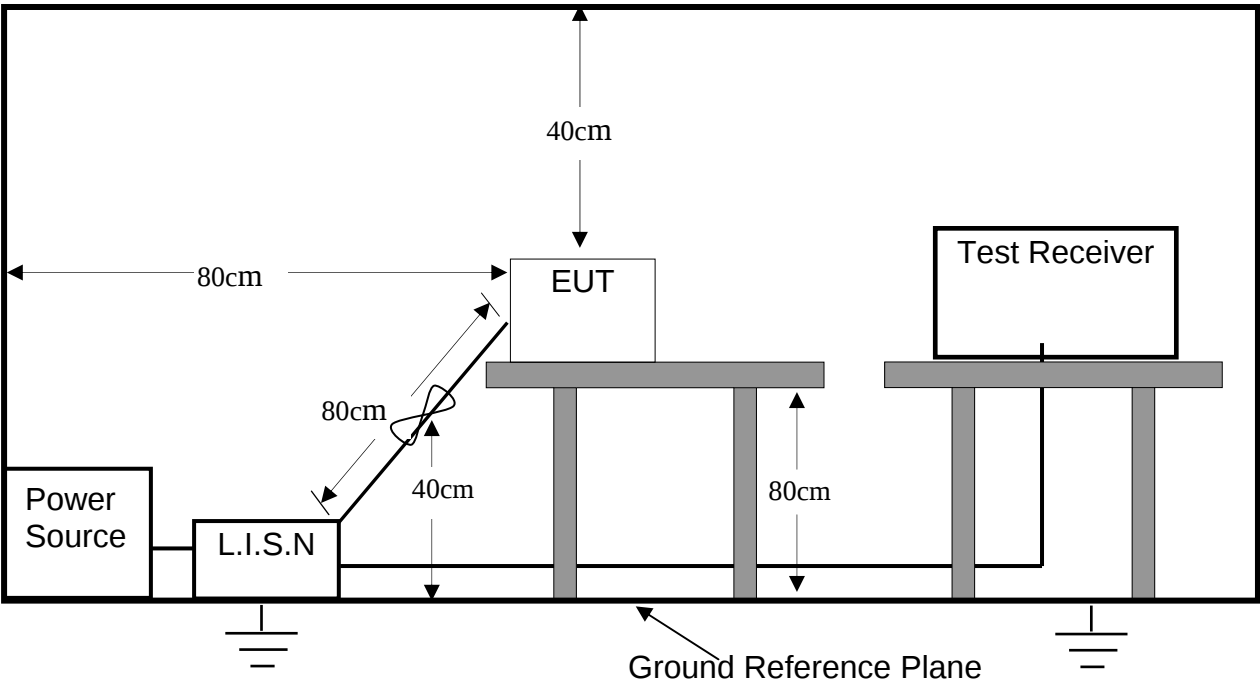
Item	Equipment	Manufacturer	Model No.	Serial No.	Last Cal.	Cal. Interval
1.	Test Receiver	Rohde & Schwarz	ESCI	101152	Mar. 14, 2020	1 Year
2.	L.I.S.N	Rohde & Schwarz	ENV 216	101317	Mar. 14, 2020	1 Year
3.	RF Switching Unit	Compliance Direction Systems Inc.	RSU-M2	38311	Mar. 14, 2020	1 Year
4.	Test Software	EZ	EZ_EMC	N/A	N/A	N/A

3.2 For Radiated Emission Measurement

Item	Equipment	Manufacturer	Model No.	Serial No.	Last Cal.	Cal. Interval
1.	Test Receiver	Rohde & Schwarz	ESCI7	100837	Mar. 14, 2020	1 Year
2.	Antenna	Schwarzbeck	VULB9162	9162-010	Mar. 23, 2020	1 Year
3.	Positioning Controller	UC	UC 3000	N/A	N/A	N/A
4.	Color Monitor	SUNSPO	SP-140A	N/A	N/A	N/A
5.	Single Phase Power Line Filter	SAEMC	PF201A-32	110210	N/A	N/A
6.	3 Phase Power Line Filter	SAEMC	PF401A-200	110318	N/A	N/A
7.	DC Power Filter	SAEMC	PF301A-200	110245	N/A	N/A
8.	Spectrum Analyzer	Rohde & Schwarz	FSU26	200409/026	Mar. 14, 2020	1 Year
9.	Horn Antenna	COM-Power	AH-118	071078	Mar. 23, 2020	1 Year
10.	Loop Antenna	Schwarzbeck	FMZB 1513	1513-272	Apr. 24, 2019	1 Year
11.	Pre-Amplifier	HP	HP 8449B	3008A00964	Mar. 14, 2020	1 Year
12.	Pre-Amplifier	HP	HP 8447D	1145A00203	Mar. 14, 2020	1 Year
13.	Test Software	EZ	EZ_EMC	N/A	N/A	N/A

4. MAINS TERMINAL DISTURBANCE VOLTAGE MEASUREMENT

4.1 Block Diagram of Test Setup



4.2 Limit of Mains Terminal Disturbance Voltage Measurement

Test Standard: 47 CFR FCC Part 15, Subpart B, Class B
Canadian ICES-003 Issue 6, Class B

Frequency range (MHz)	Limits (dB(uV))	
	Quasi-peak	Average
0.15 to 0.5	66 to 56	56 to 46
0.5 to 5	56	46
5 to 30	60	50

- Note:
1. The lower limit shall apply at the transition frequencies.
 2. The limit decreases linearly with the logarithm of the frequency in the range 0.15 MHz to 0.5 MHz.

4.3 Test Procedure

The E.U.T. is put on the 80cm high table and connected to the AC mains through a Artificial Mains Network (AMN). This provided a 50ohm coupling impedance for the tested equipments. Both sides of AC line are checked to find out the maximum conducted emission levels according to the FCC ANSI C63.4-2014 regulations during conducted emission test.

The bandwidth of the test receiver (R&S Test Receiver ESCI) is set at 9 KHz.

4.4 Operating Condition of E.U.T.

4.4.1 Setup the E.U.T. and simulators as shown in Section 2.3.

4.4.2 Turn on the power of all equipments.

4.4.3 Let the E.U.T. work in test mode (Full Load(POE+LAN)) and test it.

4.5 Mains Terminal Disturbance Voltage Test Results

PASS.

Please refer to the following pages.



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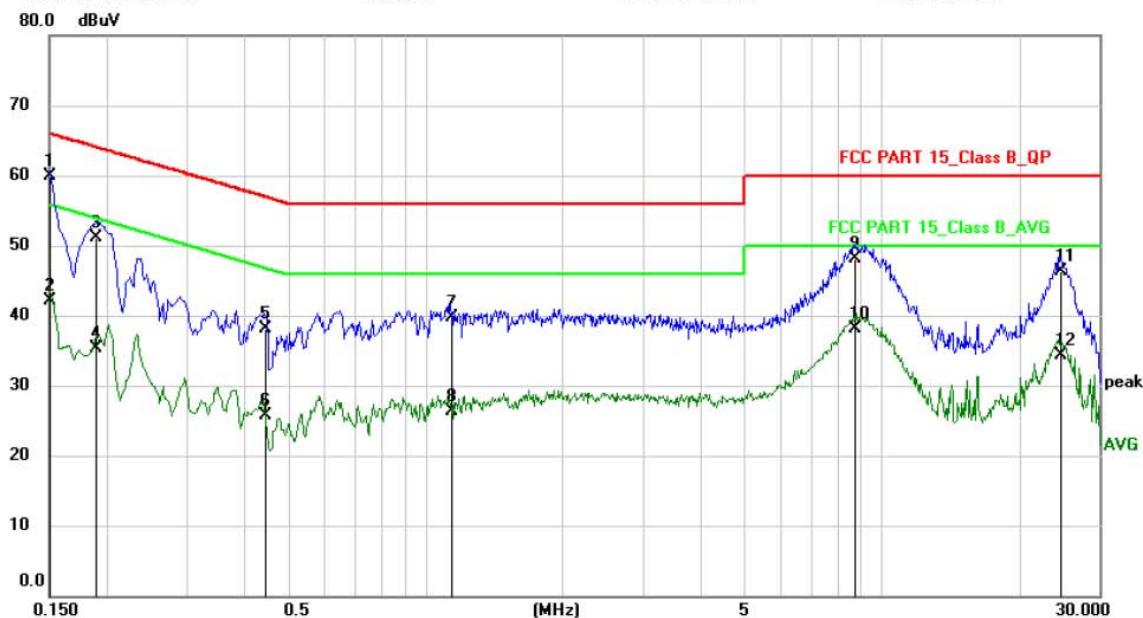
Conducted Emission Measurement

File :G0720-240-100

Data :#5

Date: 2020/3/13

Time: 10:42:35



Site: _____ Phase: **L1** Temperature: 26
Limit: FCC PART 15_Class B_QP Power: AC120V/60Hz Humidity: 50 %
EUT: _____
M/N: G0720-240-100
Mode: Full Load(POE+LAN)
Note: I.T.E.P POWER SUPPLY(POWER OVER ETHERNET INJECTOR)

No.	Mk.	Freq.	Reading Level	Correct Factor	Measurement	Limit	Over	Detector	Comment
		MHz	dBuV	dB	dBuV	dBuV	dB		
1	*	0.1500	49.30	10.60	59.90	66.00	-6.10	QP	
2		0.1500	31.60	10.60	42.20	56.00	-13.80	AVG	
3		0.1900	40.60	10.60	51.20	64.04	-12.84	QP	
4		0.1900	24.70	10.60	35.30	54.04	-18.74	AVG	
5		0.4460	27.58	10.62	38.20	56.95	-18.75	QP	
6		0.4460	15.08	10.62	25.70	46.95	-21.25	AVG	
7		1.1380	29.00	10.70	39.70	56.00	-16.30	QP	
8		1.1380	15.70	10.70	26.40	46.00	-19.60	AVG	
9		8.6899	37.37	10.73	48.10	60.00	-11.90	QP	
10		8.6899	27.47	10.73	38.20	50.00	-11.80	AVG	
11		24.5419	35.52	10.78	46.30	60.00	-13.70	QP	
12		24.5419	23.62	10.78	34.40	50.00	-15.60	AVG	



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Conducted Emission Measurement

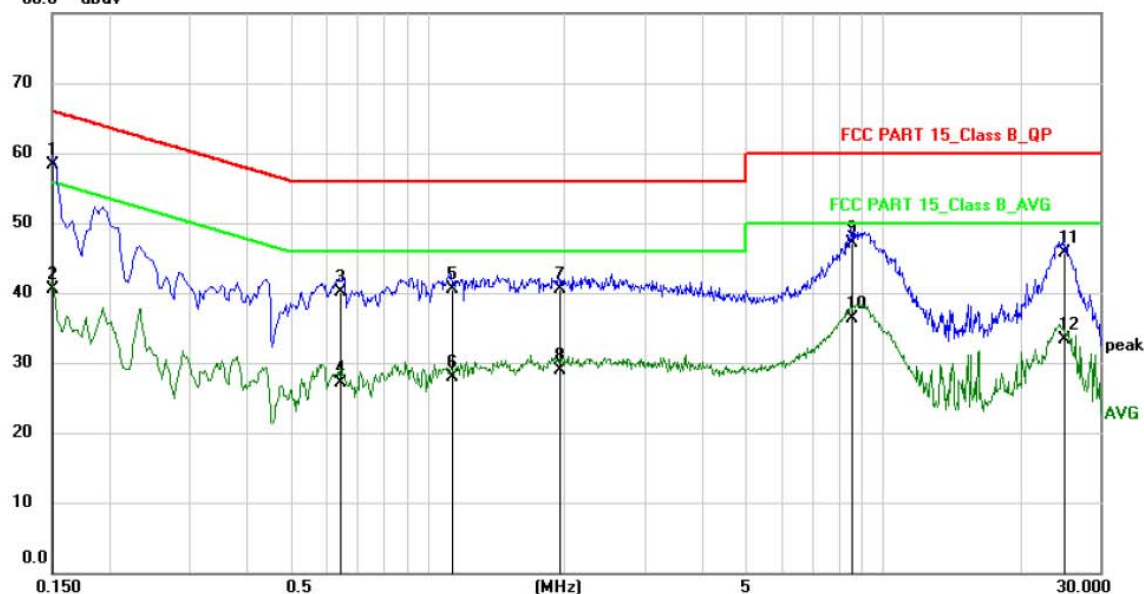
File : G0720-240-100

Data : #6

Date: 2020/3/13

Time: 10:49:27

80.0 dBuV



Site

Phase: **N**

Temperature: 26

Limit: FCC PART 15_Class B_QP

Power: AC120V/60Hz

Humidity: 50 %

EUT:

M/N: G0720-240-100

Mode: Full Load(POE+LAN)

Note: I.T.E.P POWER SUPPLY(POWER OVER ETHERNET INJECTOR)

No.	Mk.	Freq. MHz	Reading Level dBuV	Correct Factor dB	Measure- ment dBuV	Limit dBuV	Over dB	Detector	Comment
1	*	0.1500	47.80	10.60	58.40	66.00	-7.60	QP	
2		0.1500	30.00	10.60	40.60	56.00	-15.40	AVG	
3		0.6419	29.45	10.65	40.10	56.00	-15.90	QP	
4		0.6419	16.45	10.65	27.10	46.00	-18.90	AVG	
5		1.1340	29.90	10.70	40.60	56.00	-15.40	QP	
6		1.1340	17.30	10.70	28.00	46.00	-18.00	AVG	
7		1.9460	29.80	10.70	40.50	56.00	-15.50	QP	
8		1.9460	18.30	10.70	29.00	46.00	-17.00	AVG	
9		8.5419	36.47	10.73	47.20	60.00	-12.80	QP	
10		8.5419	25.67	10.73	36.40	50.00	-13.60	AVG	
11		25.0140	34.92	10.78	45.70	60.00	-14.30	QP	
12		25.0140	22.62	10.78	33.40	50.00	-16.60	AVG	



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Conducted Emission Measurement

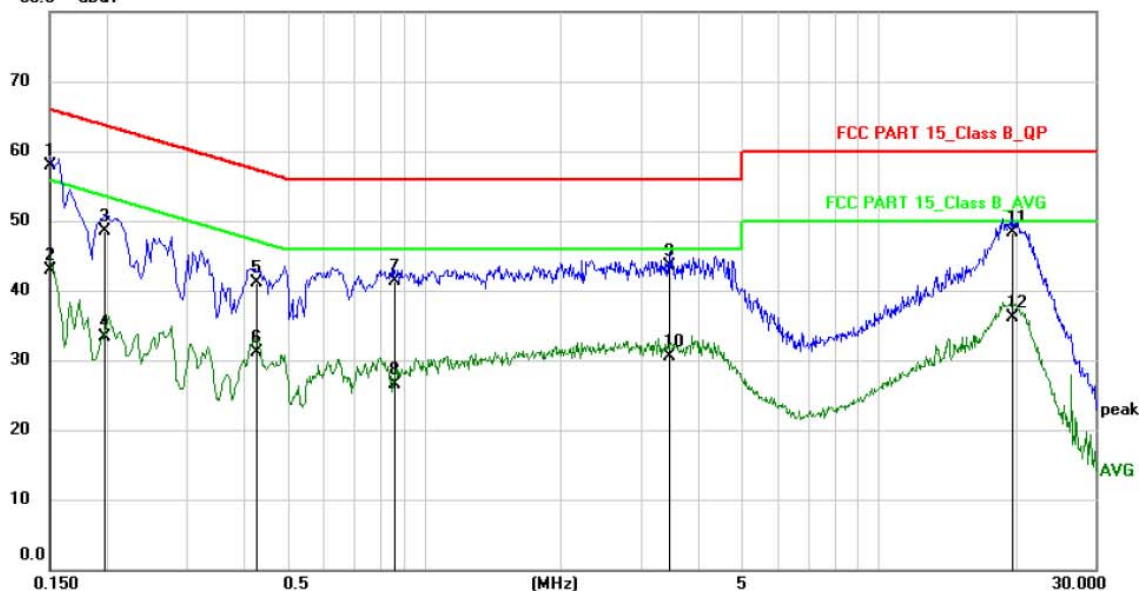
File :G0720-360-075

Data :#4

Date: 2020/4/3

Time: 15:10:45

80.0 dBuV



Site

Phase: **L1**

Temperature: 26

Limit: FCC PART 15_Class B_QP

Power: AC120V/60Hz

Humidity: 50 %

EUT:

M/N: G0720-360-075

Mode: Full Load(POE+LAN)

Note: I.T.E.P POWER SUPPLY(POWER OVER ETHERNET INJECTOR)

No.	Mk.	Freq. MHz	Reading Level dBuV	Correct Factor dB	Measure- ment dBuV	Limit dBuV	Over dB	Detector	Comment
1	*	0.1500	47.30	10.60	57.90	66.00	-8.10	QP	
2		0.1500	32.30	10.60	42.90	56.00	-13.10	AVG	
3		0.1980	38.00	10.60	48.60	63.69	-15.09	QP	
4		0.1980	22.80	10.60	33.40	53.69	-20.29	AVG	
5		0.4260	30.48	10.62	41.10	57.33	-16.23	QP	
6		0.4260	20.48	10.62	31.10	47.33	-16.23	AVG	
7		0.8580	30.72	10.68	41.40	56.00	-14.60	QP	
8		0.8580	15.92	10.68	26.60	46.00	-19.40	AVG	
9		3.4700	32.79	10.71	43.50	56.00	-12.50	QP	
10		3.4700	19.79	10.71	30.50	46.00	-15.50	AVG	
11		19.7099	37.64	10.76	48.40	60.00	-11.60	QP	
12		19.7099	25.34	10.76	36.10	50.00	-13.90	AVG	



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Conducted Emission Measurement

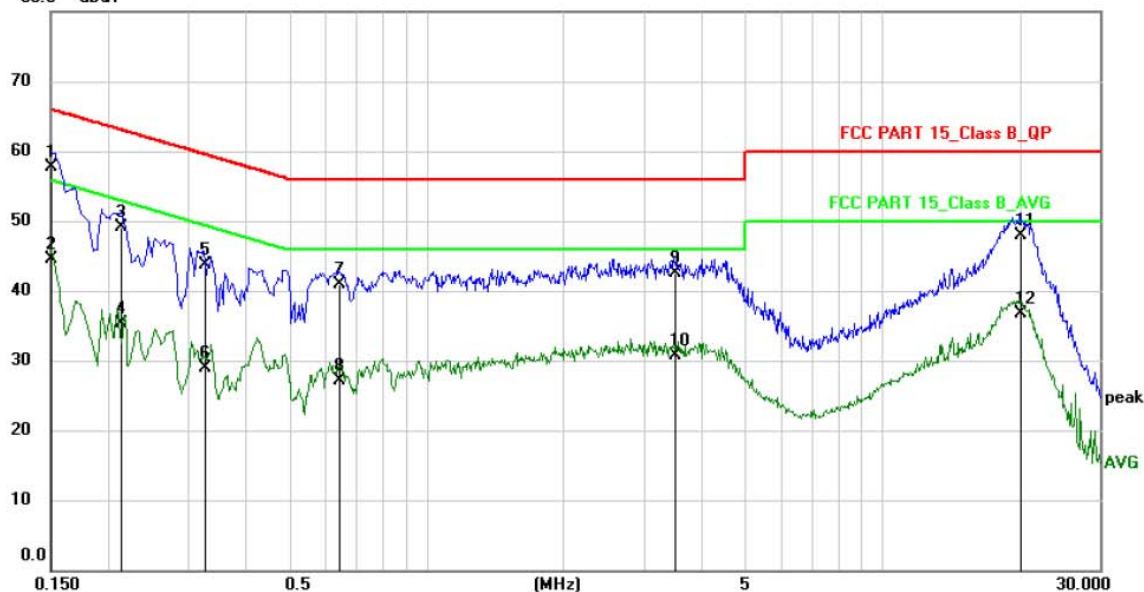
File :G0720-360-075

Data :#3

Date: 2020/4/3

Time: 15:03:38

80.0 dBuV



Site

Phase: **N**

Temperature: 26

Limit: FCC PART 15_Class B_QP

Power: AC120V/60Hz

Humidity: 50 %

EUT:

M/N: G0720-360-075

Mode: Full Load(POE+LAN)

Note: I.T.E.P POWER SUPPLY(POWER OVER ETHERNET INJECTOR)

No.	Mk.	Freq. MHz	Reading Level dBuV	Correct Factor dB	Measure- ment dBuV	Limit dBuV	Over dB	Detector	Comment
1	*	0.1500	47.20	10.60	57.80	66.00	-8.20	QP	
2		0.1500	34.00	10.60	44.60	56.00	-11.40	AVG	
3		0.2139	38.60	10.60	49.20	63.05	-13.85	QP	
4		0.2139	24.80	10.60	35.40	53.05	-17.65	AVG	
5		0.3260	33.10	10.60	43.70	59.55	-15.85	QP	
6		0.3260	18.30	10.60	28.90	49.55	-20.65	AVG	
7		0.6419	30.25	10.65	40.90	56.00	-15.10	QP	
8		0.6419	16.55	10.65	27.20	46.00	-18.80	AVG	
9		3.4980	31.89	10.71	42.60	56.00	-13.40	QP	
10		3.4980	19.99	10.71	30.70	46.00	-15.30	AVG	
11		20.0659	37.23	10.77	48.00	60.00	-12.00	QP	
12		20.0659	25.93	10.77	36.70	50.00	-13.30	AVG	



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Conducted Emission Measurement

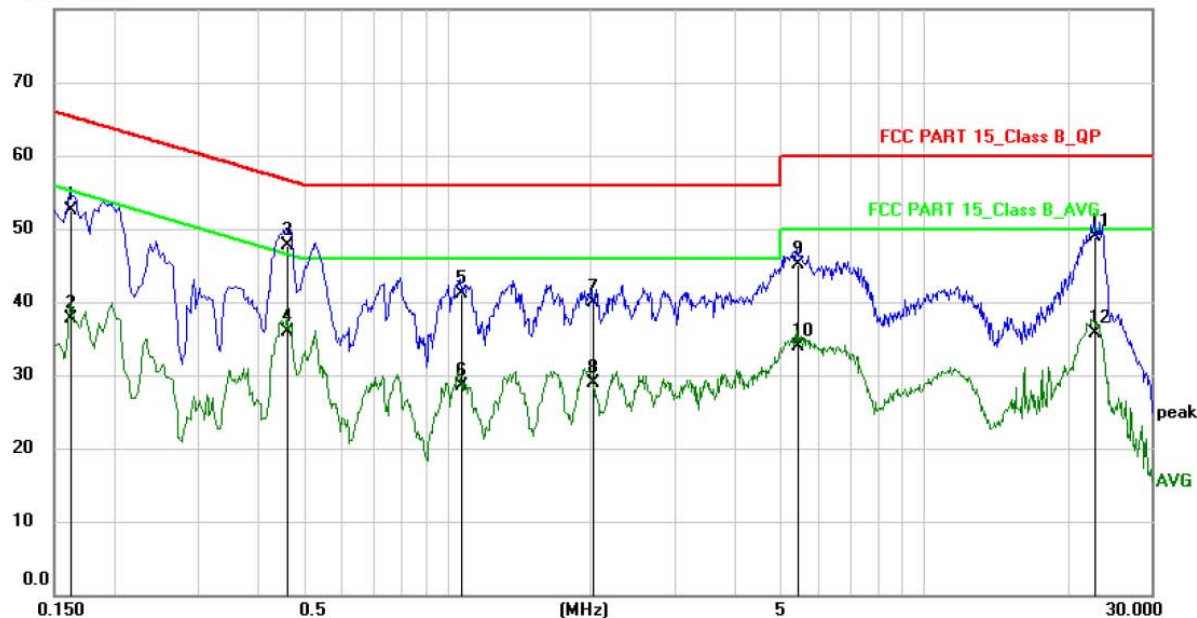
File :G0720-560-053

Data :#8

Date: 2020/3/12

Time: 17:26:05

80.0 dBuV



Site

Phase: **L1**

Temperature: 26

Limit: FCC PART 15_Class B_QP

Power: AC240V/50Hz

Humidity: 50 %

EUT:

M/N: G0720-560-053

Mode: Full Load(POE+LAN)

Note: I.T.E.P POWER SUPPLY(POWER OVER ETHERNET INJECTOR)

No.	Mk.	Freq.	Reading Level	Correct Factor	Measurement	Limit	Over	Detector	Comment
		MHz	dBuV	dB	dBuV	dBuV	dB		
1		0.1620	42.00	10.60	52.60	65.36	-12.76	QP	
2		0.1620	27.20	10.60	37.80	55.36	-17.56	AVG	
3	*	0.4620	37.18	10.62	47.80	56.66	-8.86	QP	
4		0.4620	25.38	10.62	36.00	46.66	-10.66	AVG	
5		1.0660	30.40	10.70	41.10	56.00	-14.90	QP	
6		1.0660	17.80	10.70	28.50	46.00	-17.50	AVG	
7		2.0180	29.20	10.70	39.90	56.00	-16.10	QP	
8		2.0180	18.20	10.70	28.90	46.00	-17.10	AVG	
9		5.4219	34.48	10.72	45.20	60.00	-14.80	QP	
10		5.4219	23.28	10.72	34.00	50.00	-16.00	AVG	
11		22.7939	38.12	10.78	48.90	60.00	-11.10	QP	
12		22.7939	24.92	10.78	35.70	50.00	-14.30	AVG	



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Conducted Emission Measurement

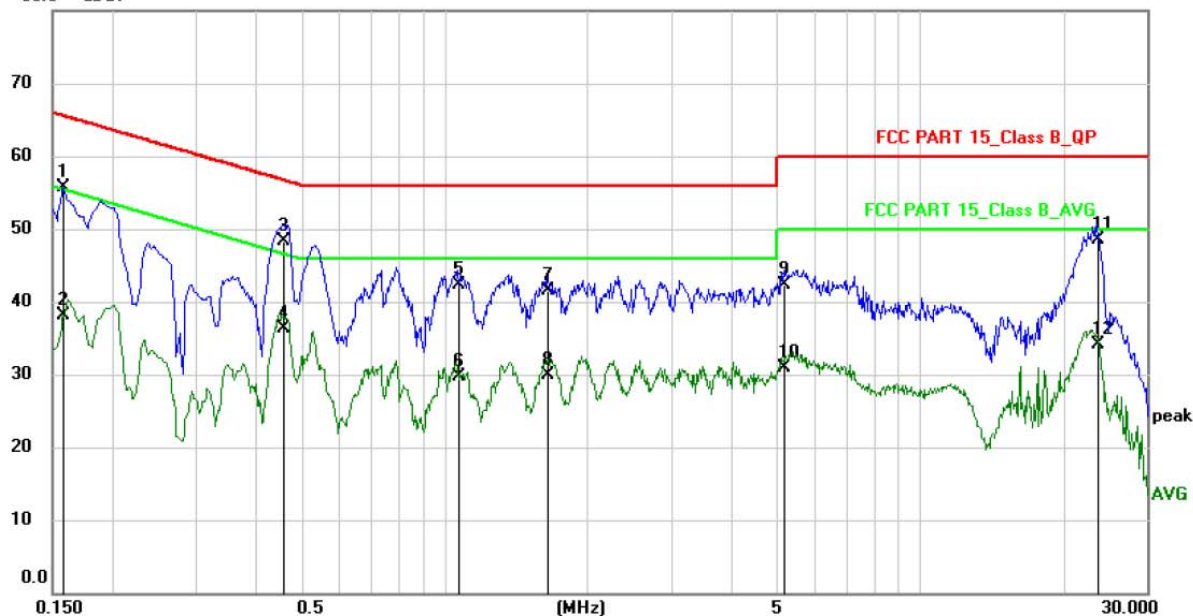
File :G0720-560-053

Data :#7

Date: 2020/3/12

Time: 17:12:07

80.0 dBuV



Site

Phase: **N**

Temperature: 26

Limit: FCC PART 15_Class B_QP

Power: AC240V/50Hz

Humidity: 50 %

EUT:

M/N: G0720-560-053

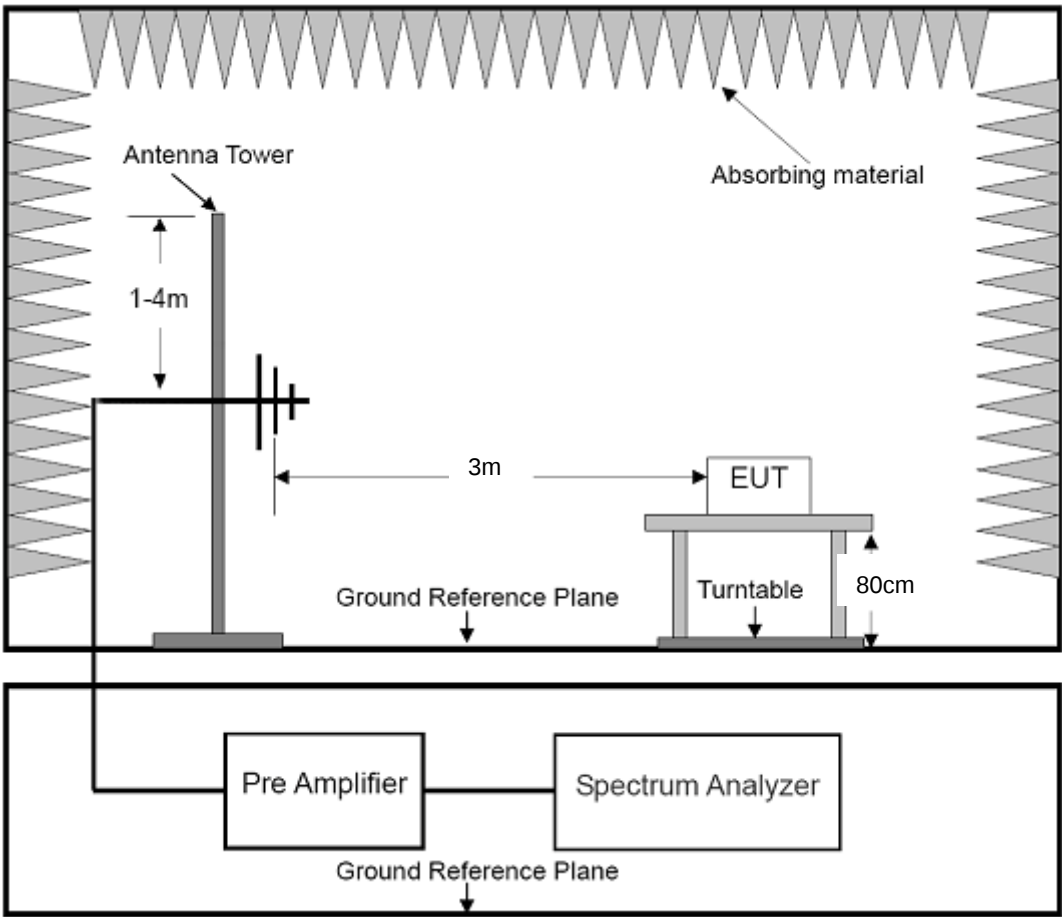
Mode: Full Load(POE+LAN)

Note: I.T.E.P POWER SUPPLY(POWER OVER ETHERNET INJECTOR)

No.	Mk.	Freq. MHz	Reading Level dBuV	Correct Factor dB	Measure- ment dBuV	Limit dBuV	Over dB	Detector	Comment
1		0.1580	45.20	10.60	55.80	65.57	-9.77	QP	
2		0.1580	27.60	10.60	38.20	55.57	-17.37	AVG	
3	*	0.4580	37.78	10.62	48.40	56.73	-8.33	QP	
4		0.4580	25.78	10.62	36.40	46.73	-10.33	AVG	
5		1.0660	31.60	10.70	42.30	56.00	-13.70	QP	
6		1.0660	19.00	10.70	29.70	46.00	-16.30	AVG	
7		1.6500	30.80	10.70	41.50	56.00	-14.50	QP	
8		1.6500	19.30	10.70	30.00	46.00	-16.00	AVG	
9		5.1779	31.69	10.71	42.40	60.00	-17.60	QP	
10		5.1779	20.29	10.71	31.00	50.00	-19.00	AVG	
11		23.5740	37.82	10.78	48.60	60.00	-11.40	QP	
12		23.5740	23.32	10.78	34.10	50.00	-15.90	AVG	

5. RADIATED EMISSION MEASUREMENT

5.1 Block Diagram of Test



5.2 Limit of Radiated Emission Measurement

Test Standard: 47 CFR FCC Part 15, Subpart B, Class B
Canadian ICES-003 Issue 6, Class B

Frequency range MHz	Distance Meters	Field Strengths Limit
		dB(μV)/m
30 ~ 88	3	40.0
88 ~ 216	3	43.5
216 ~ 960	3	46.0
960 ~ 1000	3	50.0

- Remark : (1) The smaller limit shall apply at the cross point between two frequency bands.
- (2) Distance is the distance in meters between the measuring instrument, antenna and the closest point of any part of the device or system.

5.3 Test Procedure

E.U.T. and its simulators are placed on a turntable, which is 80cm meter high above ground. The turntable can rotate 360 degrees to determine the position of the maximum emission level. E.U.T. is set 3.0 meters away from the receiving antenna, which is mounted on a antenna tower. The antenna can be moved up and down between 1.0 meter and 4 meters to find out the maximum emission level. Broadband antenna (calibrated bilog antenna) is used as receiving antenna. Both horizontal and vertical polarization of the antenna is set on measurement. In order to find the maximum emission levels, all of the interface cables must be manipulated according to FCC ANSI C63.4-2014 on radiated emission measurement.

Below 1GHz, the bandwidth of the EMI test receiver (R&S ESCI7) is set at 120 KHz.

Above 1GHz, the bandwidth of the EMI test is set at 1MHz.

The frequency range from 30 MHz to 1000 MHz is checked.

5.4 Operating Condition of E.U.T.

5.4.1 Setup the E.U.T. and simulators as shown in Section 2.3.

5.4.2 Turn on the power of all equipments.

5.4.3 Let the E.U.T. work in test mode (Full Load(POE+LAN)) and test it.

5.5 Radiated Emission Measurement Result

PASS.

Please refer to the following pages.



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Radiated Emission Measurement

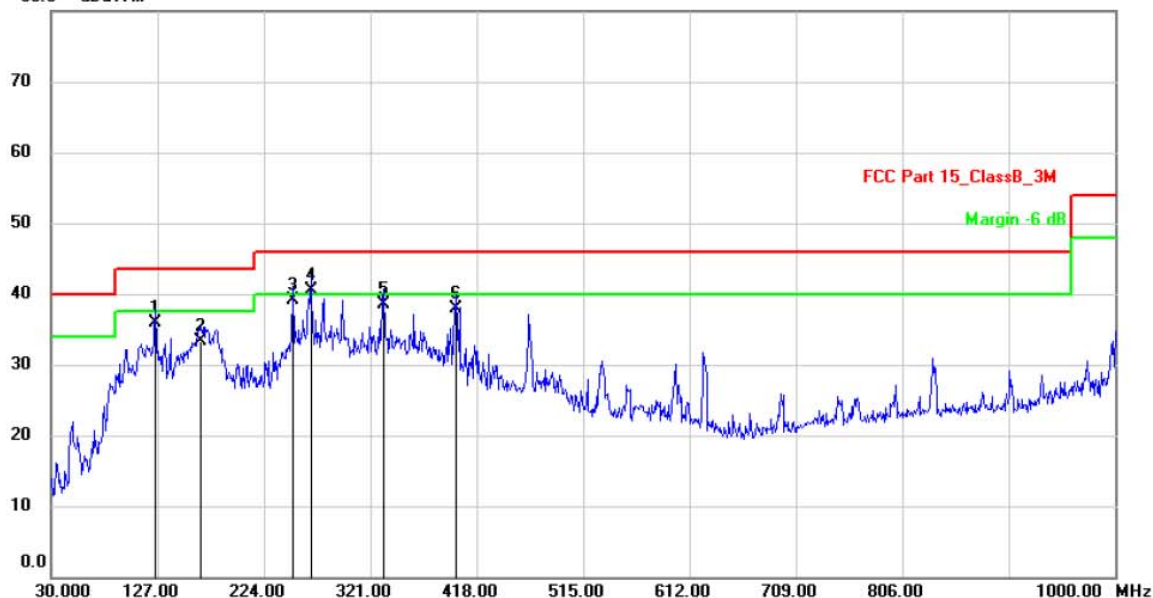
File :G0720-240-100

Data :#4

Date: 2020/3/14

Time: 10:28:34

80.0 dBuV/m



Site

Polarization: **Horizontal**

Temperature: 26

Limit: FCC Part 15_ClassB_3M

Power: AC120V/60Hz

Humidity: 47 %

EUT:

Distance: 3m

M/N: G0720-240-100

Mode: Full Load(POE+LAN)

Note: I.T.E.P POWER SUPPLY(POWER OVER ETHERNET INJECTOR)

No.	Mk.	Freq.	Reading Level	Correct Factor	Measurement	Limit	Over	Antenna Height	Table Degree	
		MHz	dBuV	dB	dBuV/m	dBuV/m	dB	cm	degree	Comment
1		125.0600	50.62	-14.62	36.00	43.50	-7.50	QP		
2		166.7700	48.22	-14.92	33.30	43.50	-10.20	QP		
3		250.1900	50.79	-11.69	39.10	46.00	-6.90	QP		
4	*	266.6800	51.77	-11.27	40.50	46.00	-5.50	QP		
5		332.6400	48.12	-9.52	38.60	46.00	-7.40	QP		
6		399.5700	47.11	-9.11	38.00	46.00	-8.00	QP		



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Radiated Emission Measurement

File :G0720-240-100

Data :#3

Date: 2020/3/14

Time: 10:20:38

80.0 dBuV/m



Site

Polarization: **Vertical**

Temperature: 26

Limit: FCC Part 15_ClassB_3M

Power: AC120V/60Hz

Humidity: 47 %

EUT:

Distance: 3m

M/N: G0720-240-100

Mode: Full Load(POE+LAN)

Note: I.T.E.P POWER SUPPLY(POWER OVER ETHERNET INJECTOR)

No.	Mk.	Freq. MHz	Reading Level dBuV	Correct Factor dB	Measure- ment dBuV/m	Limit dBuV/m	Over dB	Antenna Height cm	Table Degree degree	Comment
1	*	33.8800	50.07	-15.57	34.50	40.00	-5.50	QP		
2		92.0800	45.85	-16.45	29.40	43.50	-14.10	QP		
3		199.7500	46.73	-16.43	30.30	43.50	-13.20	QP		
4		264.7400	43.51	-13.31	30.20	46.00	-15.80	QP		
5		332.6400	43.42	-11.52	31.90	46.00	-14.10	QP		
6		398.6000	46.81	-11.11	35.70	46.00	-10.30	QP		



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Radiated Emission Measurement

File : G0720-360-075

Data : #16

Date: 2020/4/21

Time: 11:43:04

80.0 dBuV/m



Site

Polarization: **Horizontal**

Temperature: 26

Limit: FCC Part 15_ClassB_3M

Power: AC120V/60Hz

Humidity: 47 %

EUT:

Distance: 3m

M/N: G0720-360-075

Mode: Full Load(POE+LAN)

Note: I.T.E.P POWER SUPPLY(POWER OVER ETHERNET INJECTOR)

No.	Mk.	Freq.	Reading Level	Correct Factor	Measurement	Limit	Over	Antenna Height	Table Degree	
		MHz	dBuV	dB	dBuV/m	dBuV/m	dB	cm	degree	Comment
1	*	52.3100	36.17	-7.17	29.00	40.00	-11.00	QP		
2		94.9900	39.70	-8.20	31.50	43.50	-12.00	QP		
3		191.0200	40.49	-8.19	32.30	43.50	-11.20	QP		
4		256.0100	33.34	-6.24	27.10	46.00	-18.90	QP		
5		312.2700	31.18	-5.18	26.00	46.00	-20.00	QP		
6		414.1200	27.60	-3.10	24.50	46.00	-21.50	QP		



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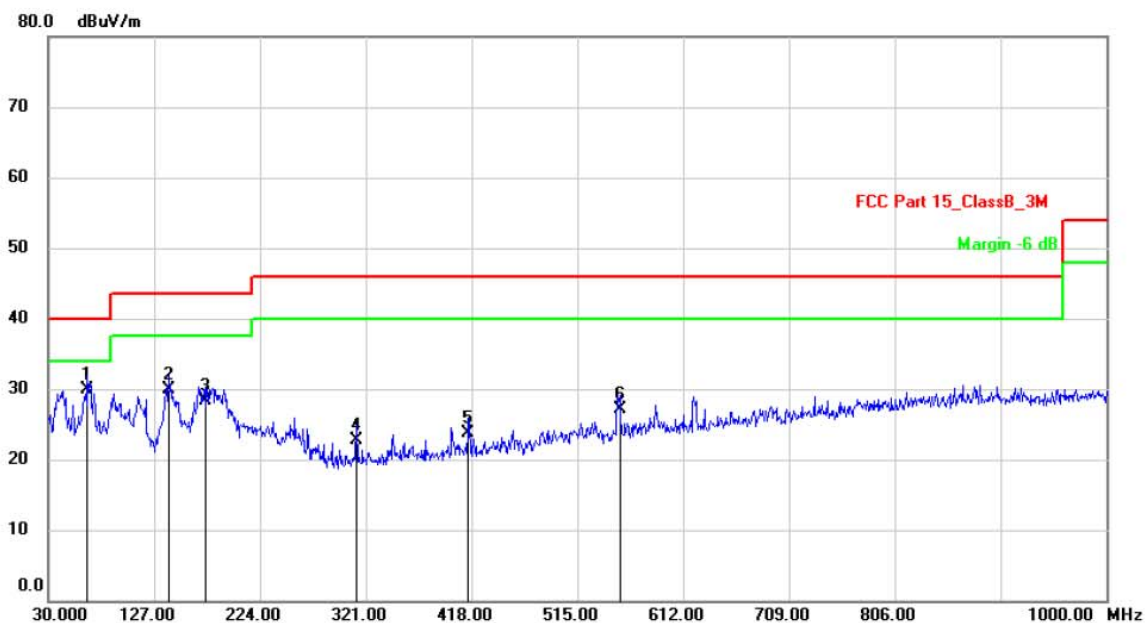
Radiated Emission Measurement

File : G0720-360-075

Data : #15

Date: 2020/4/21

Time: 11:36:38



Site

Polarization: **Vertical**

Temperature: 26

Limit: FCC Part 15_ClassB_3M

Power: AC120V/60Hz

Humidity: 47 %

EUT:

Distance: 3m

M/N: G0720-360-075

Mode: Full Load(POE+LAN)

Note: I.T.E.P POWER SUPPLY(POWER OVER ETHERNET INJECTOR)

No.	Mk.	Freq.	Reading Level	Correct Factor	Measure-ment	Limit	Over	Antenna Height	Table Degree	
		MHz	dBuV	dB	dBuV/m	dBuV/m	dB	cm	degree	Comment
1	*	65.8900	39.53	-9.63	29.90	40.00	-10.10	QP		
2		140.5800	41.40	-11.50	29.90	43.50	-13.60	QP		
3		173.5600	38.27	-9.97	28.30	43.50	-15.20	QP		
4		312.2700	28.98	-6.18	22.80	46.00	-23.20	QP		
5		415.0900	27.88	-4.08	23.80	46.00	-22.20	QP		
6		553.8000	28.79	-1.69	27.10	46.00	-18.90	QP		



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Radiated Emission Measurement

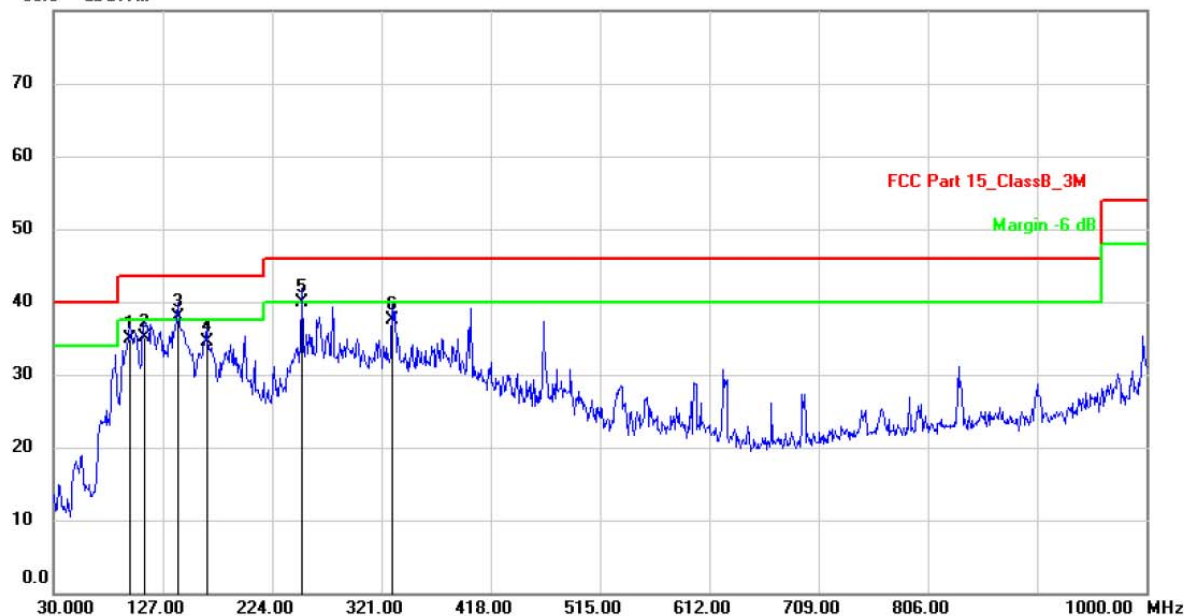
File : G0720-560-053

Data : #1

Date: 2020/3/14

Time: 10:34:14

80.0 dBuV/m



Site

Polarization: **Horizontal**

Temperature: 26

Limit: FCC Part 15_ClassB_3M

Power: AC120V/60Hz

Humidity: 47 %

EUT:

Distance: 3m

M/N: G0720-560-053

Mode: Full Load(POE+LAN)

Note: I.T.E.P POWER SUPPLY(POWER OVER ETHERNET INJECTOR)

No.	Mk.	Freq.	Reading Level	Correct Factor	Measurement	Limit	Over	Antenna Height	Table Degree	
		MHz	dBuV	dB	dBuV/m	dBuV/m	dB	cm	degree	Comment
1		97.9000	47.40	-12.40	35.00	43.50	-8.50	QP		
2		110.5100	47.46	-12.26	35.20	43.50	-8.30	QP		
3	*	140.5800	53.60	-15.60	38.00	43.50	-5.50	QP		
4		165.8000	49.45	-14.95	34.50	43.50	-9.00	QP		
5		250.1900	51.59	-11.69	39.90	46.00	-6.10	QP		
6		330.7000	47.20	-9.60	37.60	46.00	-8.40	QP		



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Radiated Emission Measurement

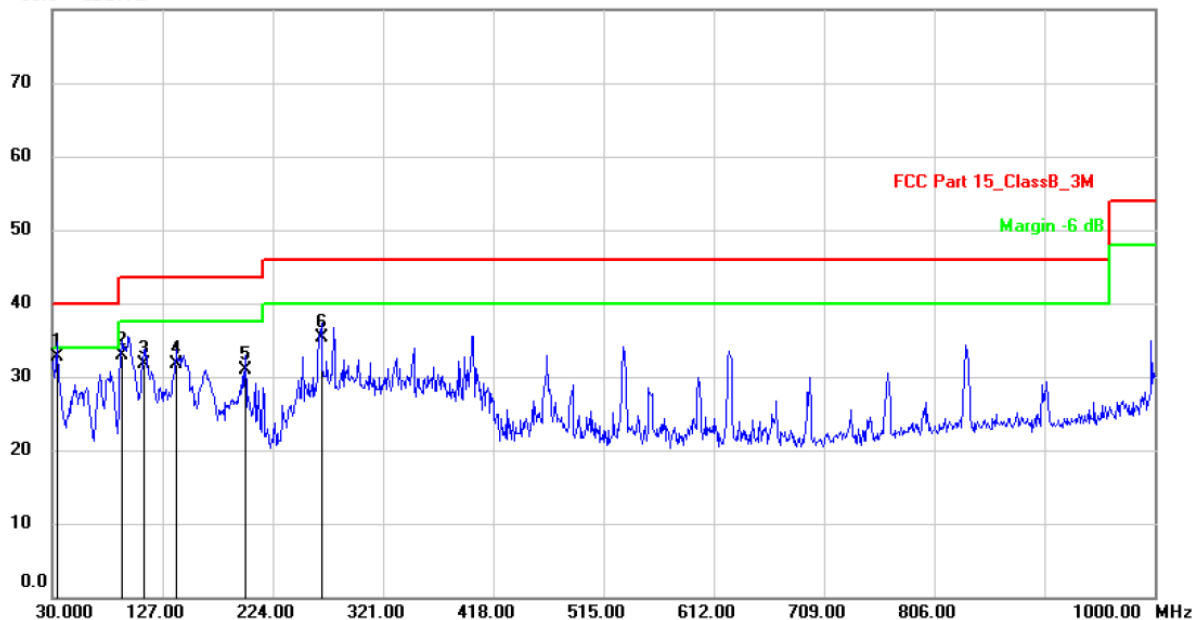
File : G0720-560-053

Data : #2

Date: 2020/3/14

Time: 10:41:10

80.0 dBuV/m



Site

Polarization: **Vertical**

Temperature: 26

Limit: FCC Part 15_ClassB_3M

Power: AC120V/60Hz

Humidity: 47 %

EUT:

Distance: 3m

M/N: G0720-560-053

Mode: Full Load(POE+LAN)

Note: I.T.E.P POWER SUPPLY(POWER OVER ETHERNET INJECTOR)

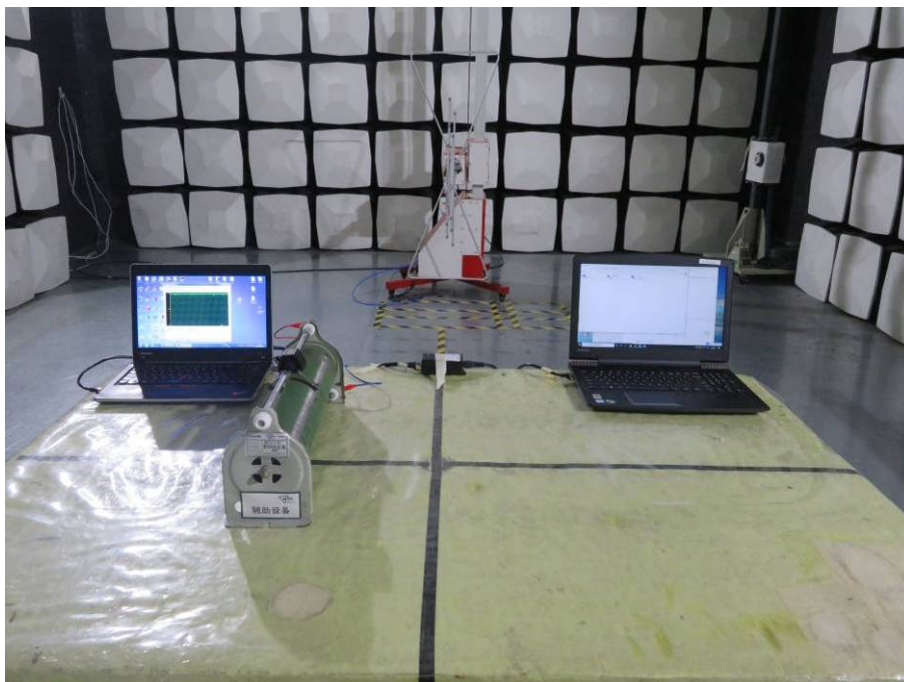
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		MHz	dBuV	dB	dBuV/m	dBuV/m	dB	cm	degree	Comment
1	*	33.8800	48.27	-15.57	32.70	40.00	-7.30	QP		
2		91.1100	49.66	-16.66	33.00	43.50	-10.50	QP		
3		110.5100	47.96	-16.16	31.80	43.50	-11.70	QP		
4		138.6400	50.23	-18.53	31.70	43.50	-11.80	QP		
5		199.7500	47.33	-16.43	30.90	43.50	-12.60	QP		
6		266.6800	48.57	-13.27	35.30	46.00	-10.70	QP		

6. PHOTOGRAPH

6.1 Photo of Conducted Emission Measurement



6.2 Photo of Radiated Emission Measurement

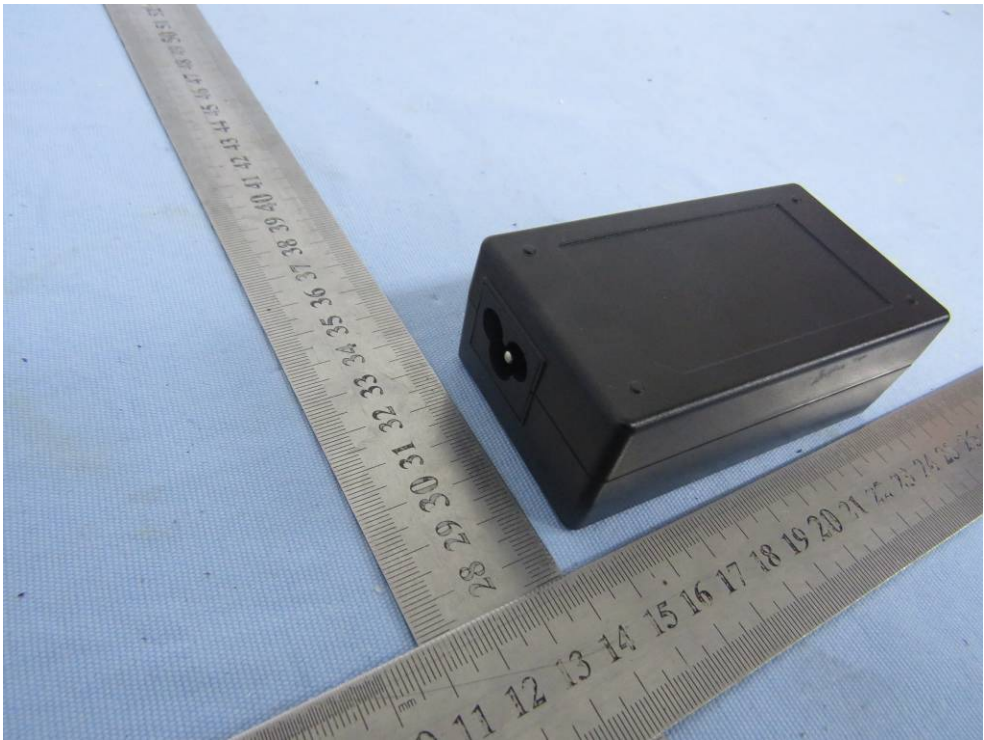


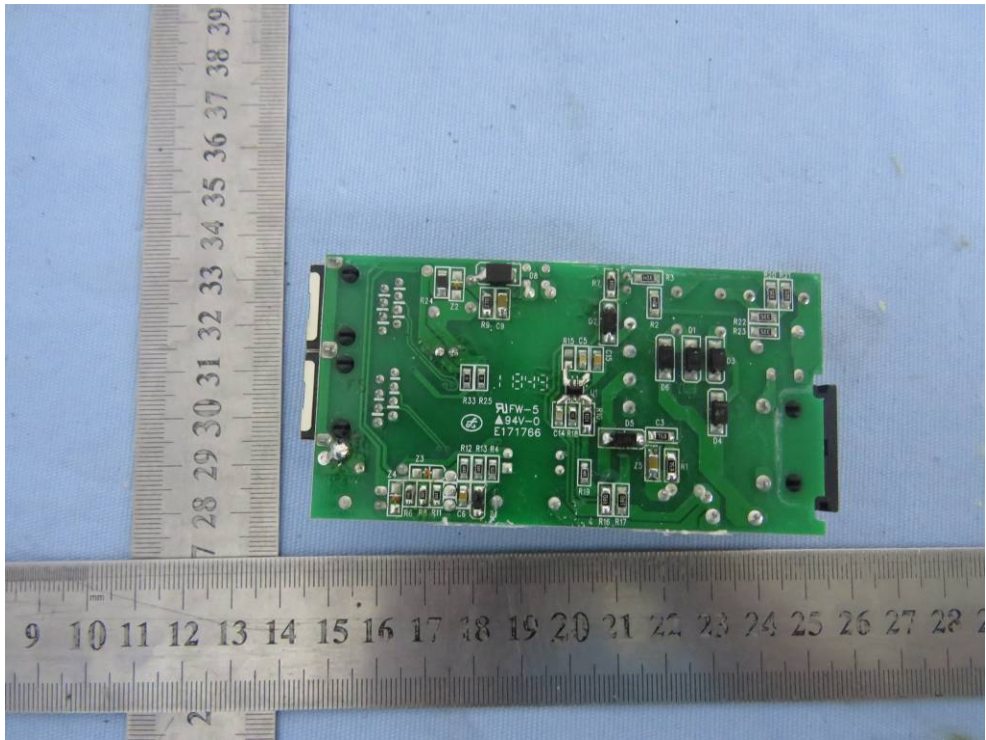
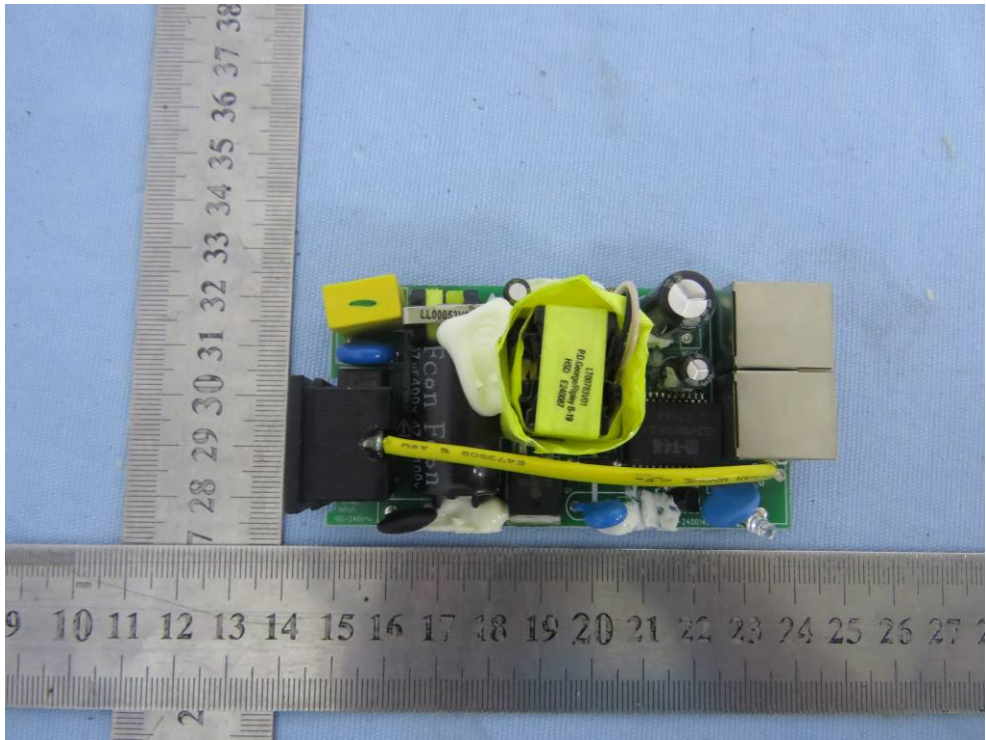
APPENDIX I (Photos of E.U.T.)

General Appearance of the E.U.T.

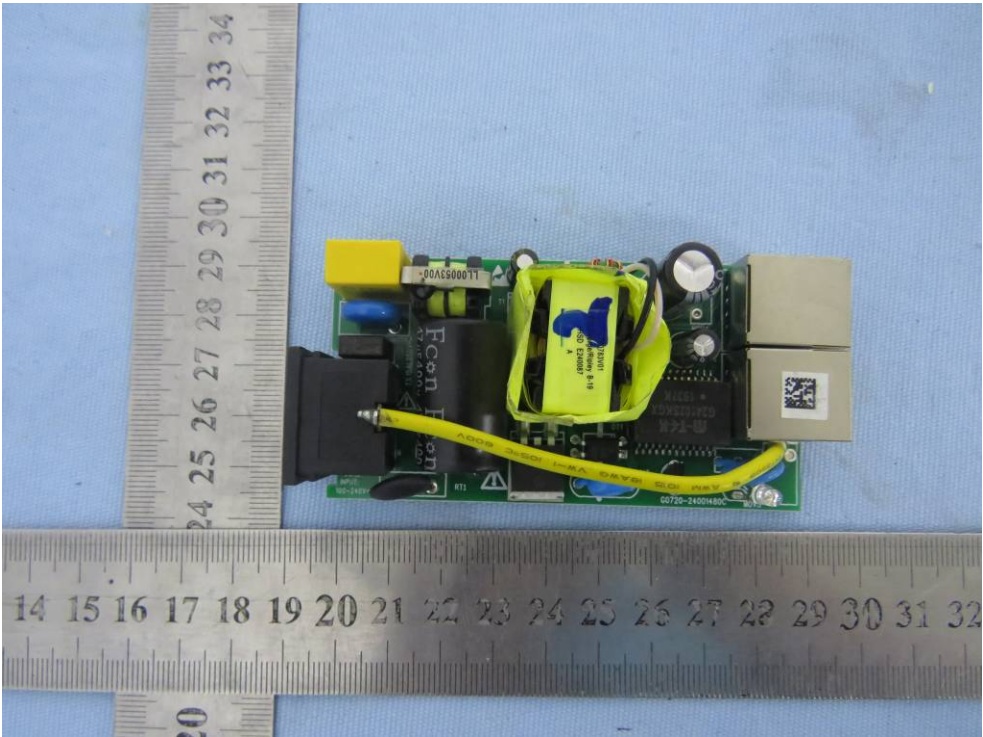
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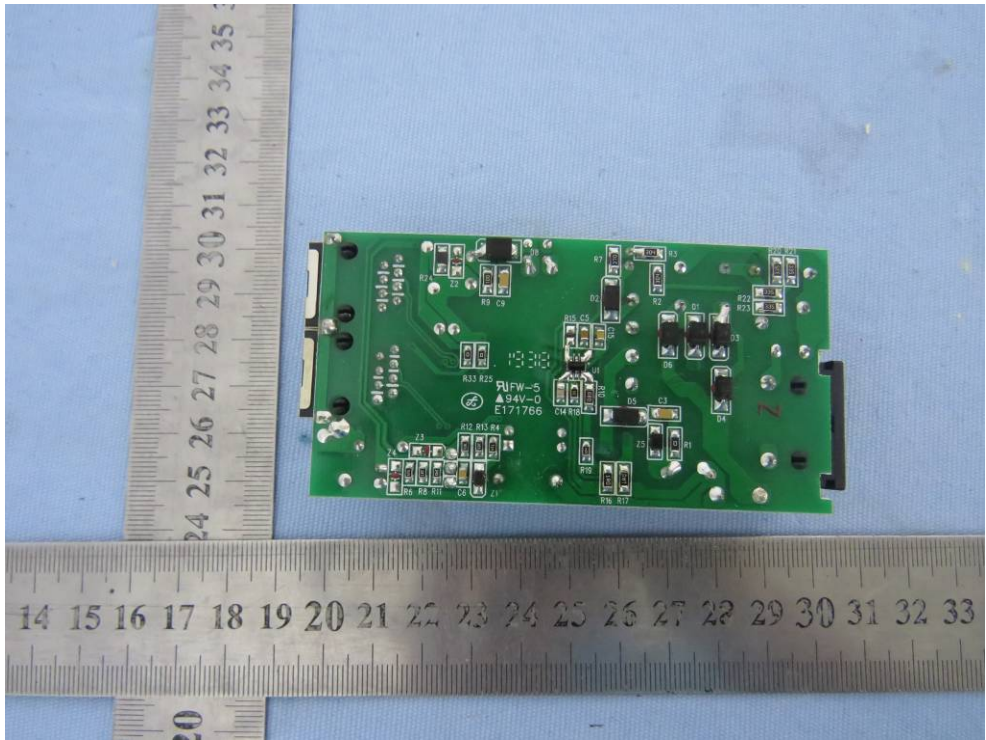






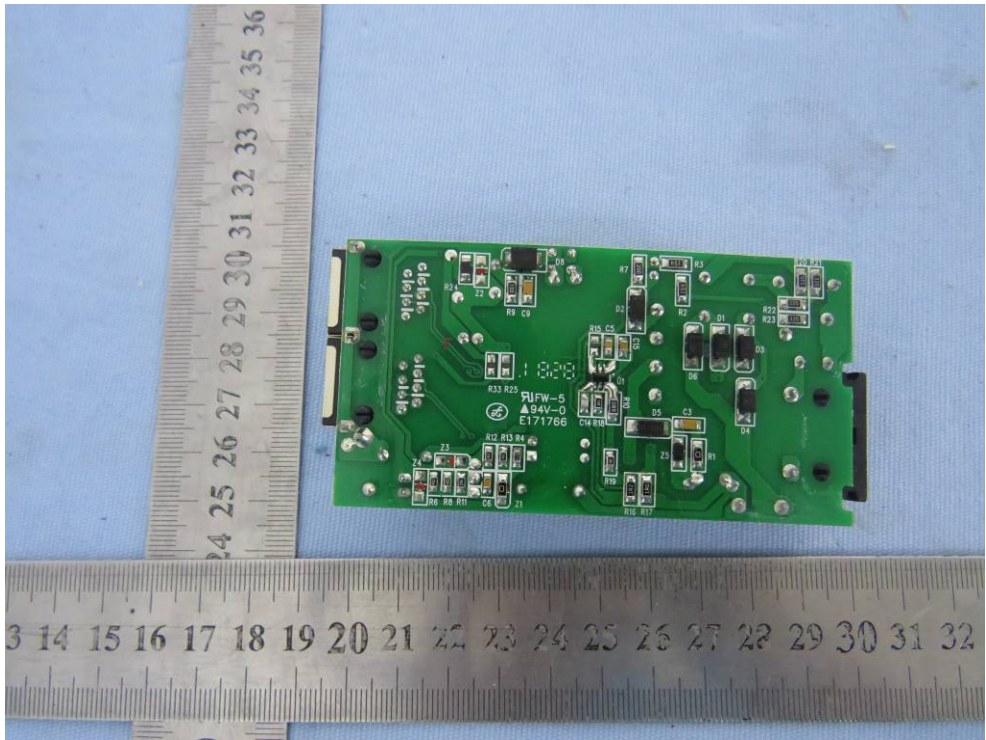
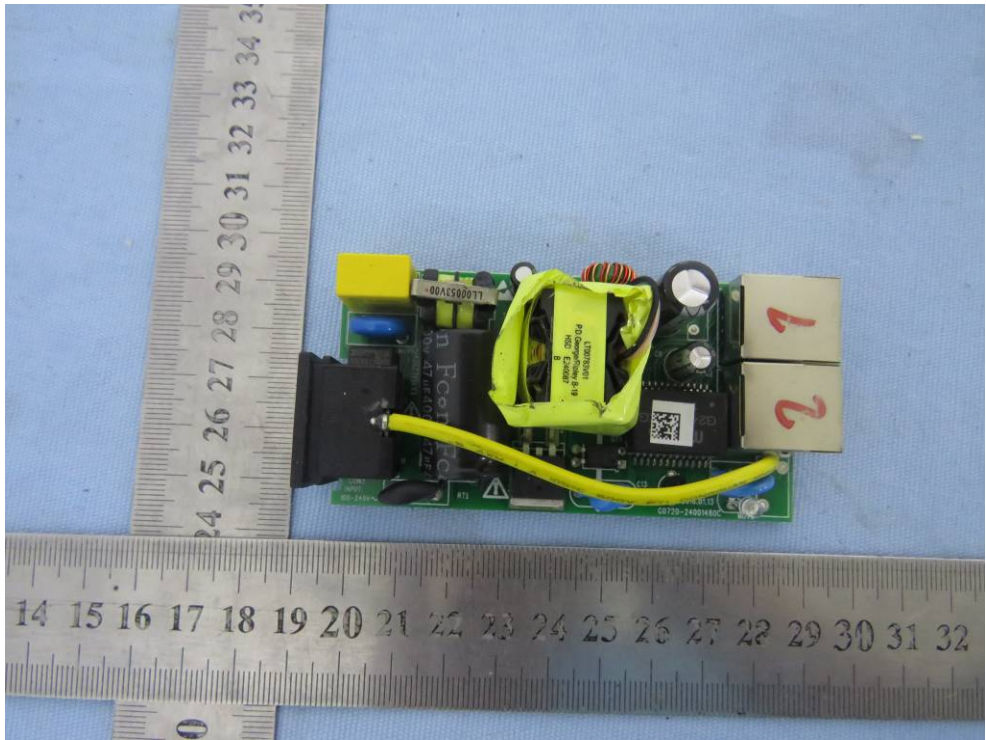
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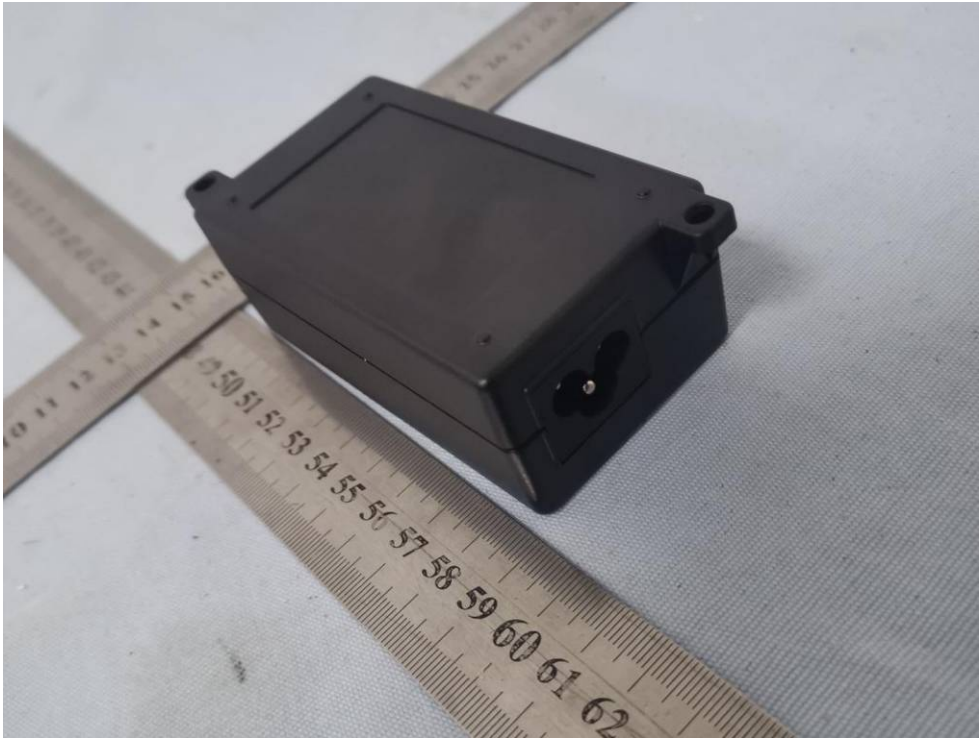
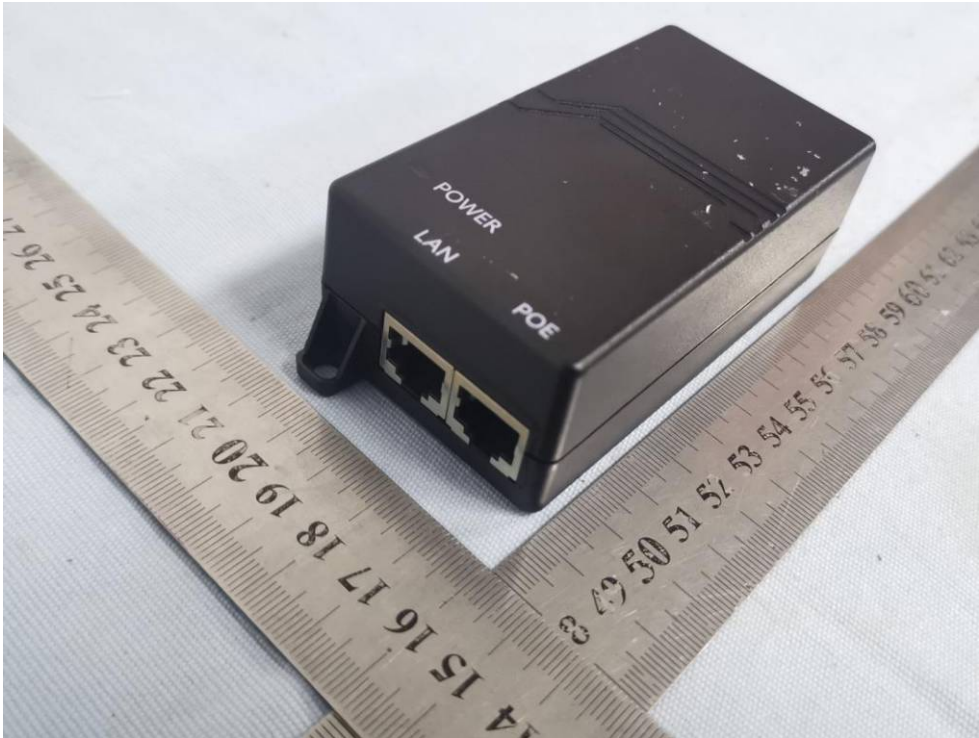


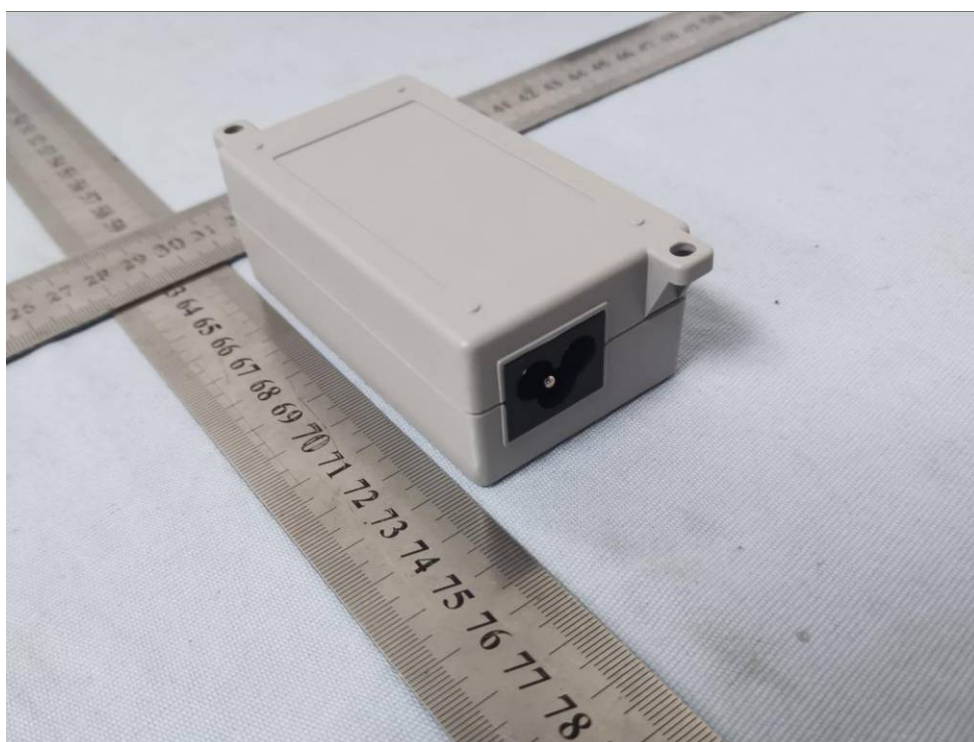


M/N: G0720-240-100









---End---