FCC TEST REPORT

For

Xi'AN OPT Communication Co., Ltd.

Product Name:Fiber Optical Cable

Model No.: GYTS

Prepared for	:	Xi'AN OPT Communication Co., Ltd.
Address	:	Building 4, Free Trade Industrial Park, No. 2168, Zhenghe Fourth Road, Fengdong new town, XI'AN, China
Prepared by	:	SHENZHEN POCE TECHNOLOGY CO., LTD.
Address	:	102 Building H1 & 1/F., Building H, Hongfa Science & Technology Park, Tangtou, Shiyan, Bao'an District, Shenzhen, Guangdong, China
Report No.	:	POCE220923712GRE
Date of Receiver	:	Sep. 20, 2022
Number of tested samples	:	1
Date of Test	:	Sep. 20, 2022–Sep. 28, 2022
Date of Report	:	Sep. 28, 2022

Note: *This test report is limited to the above client company and the product model only. It may not be duplicated without prior written consent of Shenzhen POCE Technology Co., Ltd*

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Test Report Description Page

1. GENERAL INFORMATION

1.1.Description of Device (EUT)

EUT	:	Fiber Optical Cable
Trade Mark	:	N/A
Model	:	GYTS
Supplementary Model	:	FTTH Drop Cable, Round Drop Cable, Flat Drop Cable, GYXTW, GYTS/A, GYTA53, GYFTY, ADSS, GYTC8S, GYXTC8S
Test Voltage	:	DC 5V
Rating	:	/
Applicant	:	Xi'AN OPT Communication Co., Ltd.
Address	:	Building 4, Free Trade Industrial Park, No. 2168, Zhenghe Fourth Road, Fengdong new town, XI'AN, China
Manufacturer	:	Xi'AN OPT Communication Co., Ltd.
Address	:	Building 4, Free Trade Industrial Park, No. 2168, Zhenghe Fourth Road, Fengdong new town, XI'AN, China
Test Standards	:	FCC 47 CFR Part 15 Subpart B, Class B(SDoC), ANSI C63.4-2014
Test Result	:	PASS
Test Engineer	:	
Reviewed By	:	

1.2. Test Standards

√ Indicates that the test is applicable
× Indicates that the test is not applicable

Standard	Test Items	Status
FCC 47 CFR Part 15 Subpart B, Class B(SDoC), ANSI C63.4-2014	Disturbance Voltage at The Mains Terminals (150KHz To 30MHz)	×
	Radiated Disturbances (30MHz To 1000MHz)	√

1.3.Test Methodology

All measurements contained in this report were conducted with CISPR 16-1, radio disturbance and immunity measuring apparatus, and CISPR16-2, Method of measurement of disturbances and immunity.
All measurement required was performed at laboratory of Shenzhen POCE Technology Co., Ltd., at 102 Building H1 & 1/F., Building H, Hongfa Science & Technology Park, Tangtou, Shiyan, Bao'an District, Shenzhen, Guangdong, China

1.4.Test Facility

The test facility is recognized, certified, or accredited by the following organizations:

CNAS Registration Number. is L8229

The facility also complies with the radiated and AC line conducted test site criteria set forth in CISPR 16-1, CISPR16-2.

2. MEASURING DEVICE AND TEST EQUIPMENT

2.1.For Power Line Conducted Emission

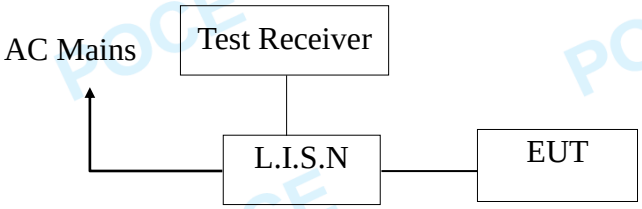
Item	Equipment	Manufacturer	Model No.	Factory Number	Last Cal.	Valid
1.	Test Receiver	Rohde& Schwarz	ESPI TEST RECEIVER	ID:1164.6607K03-102109-MH	Dec. 27, 2021	1 year
2.	L.I.S.N	Rohde& Schwarz	ESH3-Z5.831.5518.52	9561-G071	Dec. 27, 2021	1 year
3.	50ΩCoaxial Switch	Anritsu	MP59B	M20531	N/A	1 year
4.	Pulse Limiter	SCHWARZ BECK	VTSD 9561-F Pulse limiter 10dB Ateennator	561-G071	Dec. 27, 2021	1 year
5.	Cable	SCHWARZ BECK	N/A	N/A	Dec. 27, 2021	1 year

2.2.For Radiated Emission Measurement

Item	Equipment	Manufacturer	Model No.	Factory Number	Last Cal.	Valid
1.	Test Receiver	Rohde & Schwarz	ESPI TEST RECEIVER	ID:1164.6607K03-102109-MH	Dec. 27, 2021	1 year
2.	Bilog Antenna	Sunol Sciences	Model JB6 Antenna	A090414	Dec. 27, 2021	1 year
3.	50ΩCoaxial Switch	Anritsu	MP59B	M20531	N/A	1 year
4.	control	Positioning Controller	Model MF-7802	MF780208362	Dec. 27, 2021	1 year
5.	Cable	SCHWARZ BECK	N/A	N/A	Dec. 27, 2021	1 year
6.	EMI Test software-EZ-EMC	Farad	V1.1.42	V1.1.42	N/A	N/A

3. POWER LINE CONDUCTED EMISSION MEASUREMENT

3.1.Block Diagram of Test Setup



(EUT:Fiber Optical Cable)

3.2.Measuring Standard

FCC 47 CFR Part 15 Subpart B, Class B(SDoC), ANSI C63.4-2014
Power Line Conducted Emission Limits (Class B)

Frequency (MHz)	Limit (dBμV)	
	Quasi-Peak Level	Average Level
0.15 ~ 0.50	66.0 ~ 56.0 *	56.0 ~ 46.0 *
0.50 ~ 5.00	56.0	46.0
5.00 ~ 30.00	60.0	50.0
NOTE1-The lower limit shall apply at the transition frequencies. NOTE2-The limit decreases linearly with the logarithm of the frequency in the range 0.15MHz to 0.50MHz.		

3.3.EUT Configuration on Measurement

The following equipments are installed on Conducted Emission Measurement to meet FCC Part 15B requirements and operating in a manner which tends to maximize its emission characteristics in a normal application.

3.4.Test Procedure

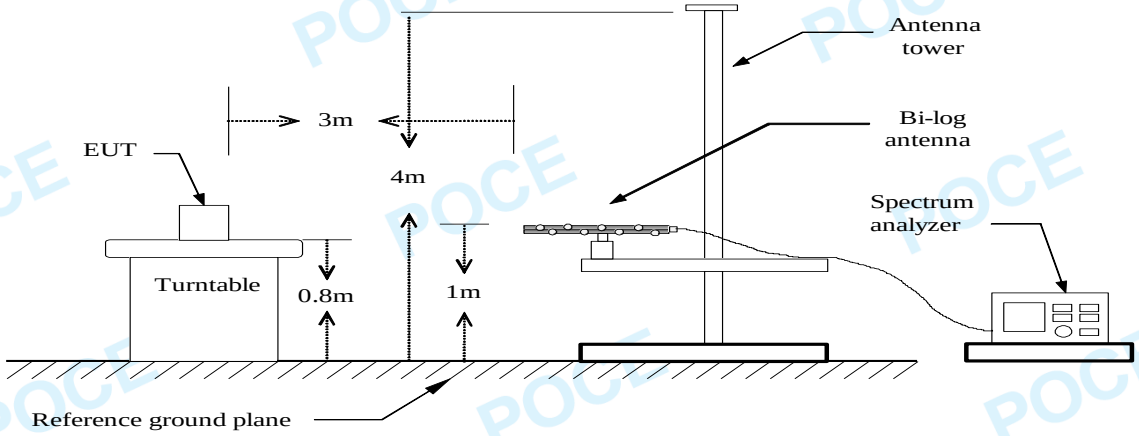
The EUT is put on the plane 0.8m high above the ground by insulating support and connected to the AC mains through Line Impedance Stability Network (L.I.S.N). This provided a 50ohm coupling impedance for the tested equipments. Both sides of AC line are investigated to find out the maximum conducted emission according to the FCC Part 15B regulations during conducted emission measurement.
The bandwidth of the field strength meter (R&S Test Receiver ESCS30) is set at 9KHz in 150KHz~30MHz and 200Hz in 9KHz~150KHz.
The frequency range from 150kHz to 30MHz is investigated .
Conduction Uncertainty: Uc = ± 2.72 dB

4. RADIATED EMISSION MEASUREMENT

4.1.Block Diagram of Test

4.1.1.Block diagram of test setup (In chamber)

ANTENNA ELEVATION VARIES FROM 1 TO 4 METERS



Below 1000MHz

4.2.Measuring Standard

FCC 47 CFR Part 15 Subpart B, Class B(SDoC), ANSI C63.4-2014
Radiated Emission Limits
All emanations from a class B device or system, including any network of conductors and apparatus connected thereto, shall not exceed the level of field strengths specified below:

FREQUENCY MHz	DISTANCE Meters	FIELD STRENGTHS LIMIT	
		V/m	dB(V)/m
30 ~ 88	3	100	40.0
88 ~ 216	3	150	43.5
216 ~ 960	3	200	46.0
960 ~ 1000	3	500	54.0

Note: (1) The smaller limit shall apply at the combination point between two frequency bands.
(2) Distance refers to the distance in meters between the measuring instrument antenna and the closed point of any part of the EUT.

4.3.EUT Configuration on Test

The FCC Part 15B regulations test method must be used to find the maximum emission during radiated emission measurement.

4.4.Test Procedure

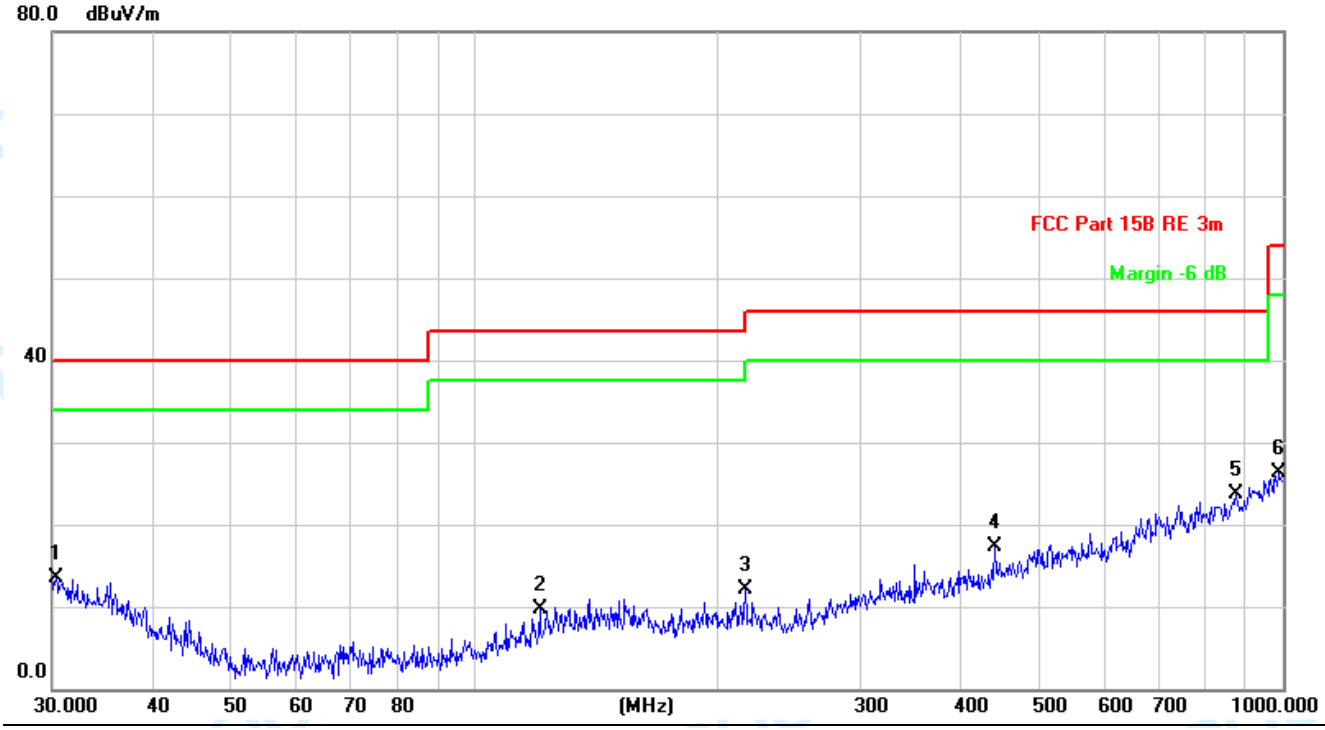
The EUT is placed on a turn table which is 0.8 meter high above the ground. The turn table can rotate 360 degrees to determine the position of the maximum emission level. The EUT is set 3 meters away from the receiving antenna which is mounted on a antenna tower. The antenna can be moved up and down from 1 to 4 meters to find out the maximum emission level. Bilog antenna (calibrated by Dipole Antenna) is used as a receiving antenna. Both horizontal and vertical polarization of the antenna are set on test.

The bandwidth of the Receiver (ESCS30) is set at 120kHz.
The frequency range from 30MHz to 1000MHz is investigated.

Radiation Uncertainty: Ur = ± 3.84 dB

Radiated Emission Test Data

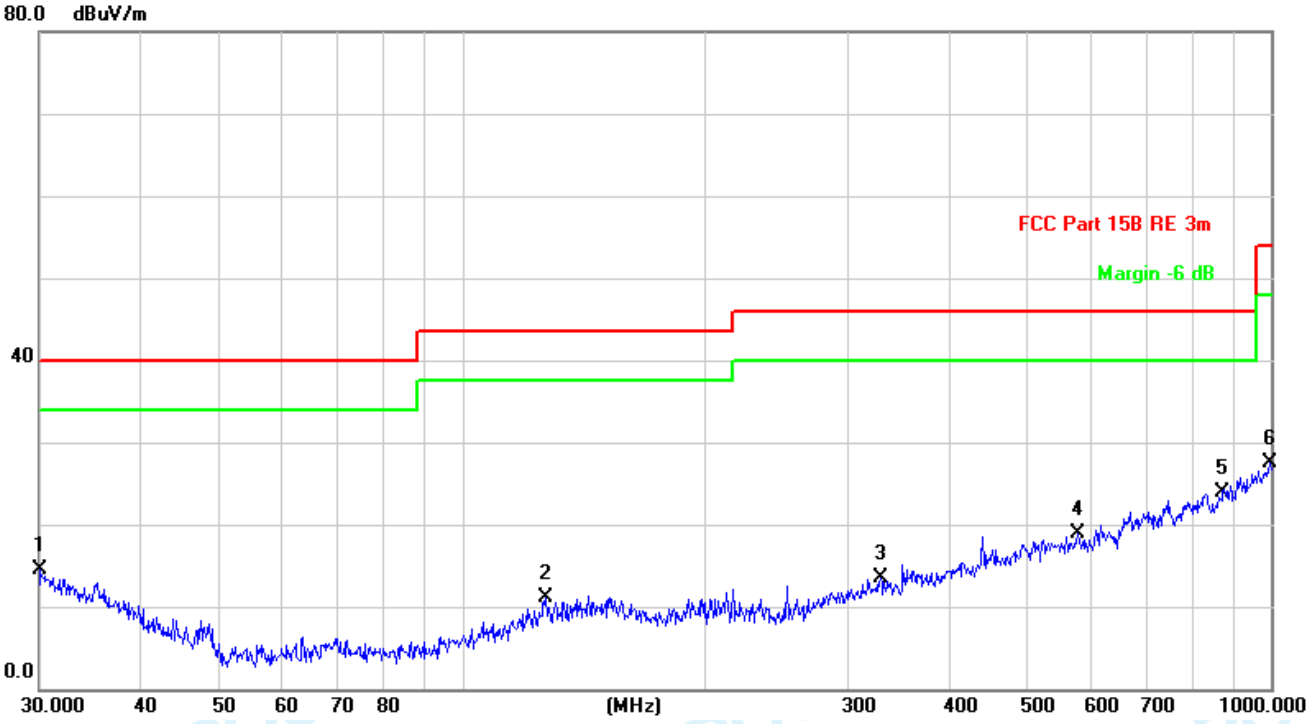
EUT :	Fiber Optical Cable	Temperature:	20℃
M/N :	GYTS	Humidity :	50％
Test Voltage :	DC 5V	Test Mode :	On
Test Engineer :	Bill	Polarization :	Horizontal



No.	Mk.	Freq.	Reading Level	Correct Factor	Measure-ment	Limit	Over		Antenna Height	Table Degree	
		MHz	dBuV	dB/m	dBuV/m	dBuV/m	dB	Detector	cm	degree	Comment
1		30.3173	18.34	-4.77	13.57	40.00	-26.43	QP			
2		120.2766	20.27	-10.62	9.65	43.50	-33.85	QP			
3		216.0240	22.37	-10.24	12.13	46.00	-33.87	QP			
4		440.1963	22.11	-4.73	17.38	46.00	-28.62	QP			
5	*	875.2470	20.66	3.04	23.70	46.00	-22.30	QP			
6		989.5355	20.40	5.97	26.37	54.00	-27.63	QP			

Radiated Emission Test Data

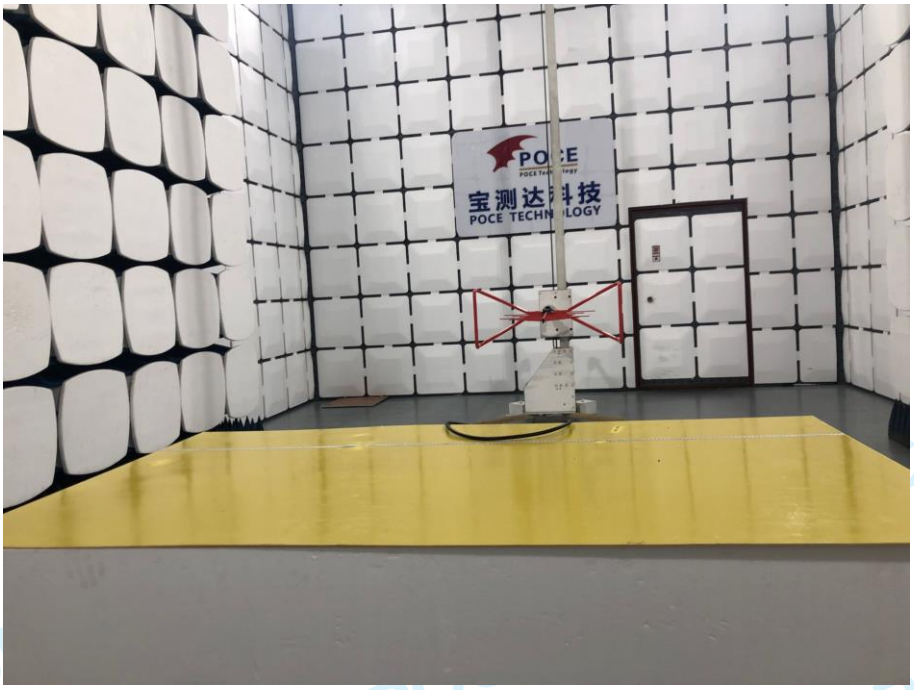
EUT :	Fiber Optical Cable	Temperature:	20℃
M/N :	GYTS	Humidity :	50％
Test Voltage :	DC 5V	Test Mode :	On
Test Engineer :	Bill	Polarization :	Vertical



No.	Mk.	Freq.	Reading Level	Correct Factor	Measure-ment	Limit	Over		Antenna Height	Table Degree	
		MHz	dBuV	dB/m	dBuV/m	dBuV/m	dB	Detector	cm	degree	Comment
1		30.1054	19.07	-4.65	14.42	40.00	-25.58	QP			
2		126.7723	21.46	-10.38	11.08	43.50	-32.42	QP			
3		329.0390	20.96	-7.39	13.57	46.00	-32.43	QP			
4		576.6443	21.33	-2.38	18.95	46.00	-27.05	QP			
5	*	872.1832	20.92	3.00	23.92	46.00	-22.08	QP			
6		996.4996	21.31	6.16	27.47	54.00	-26.53	QP			

5. PHOTOGRAPH

5.1.Photo of Radiated Emission



PHOTOGRAPHS OF EUT

Fig.1

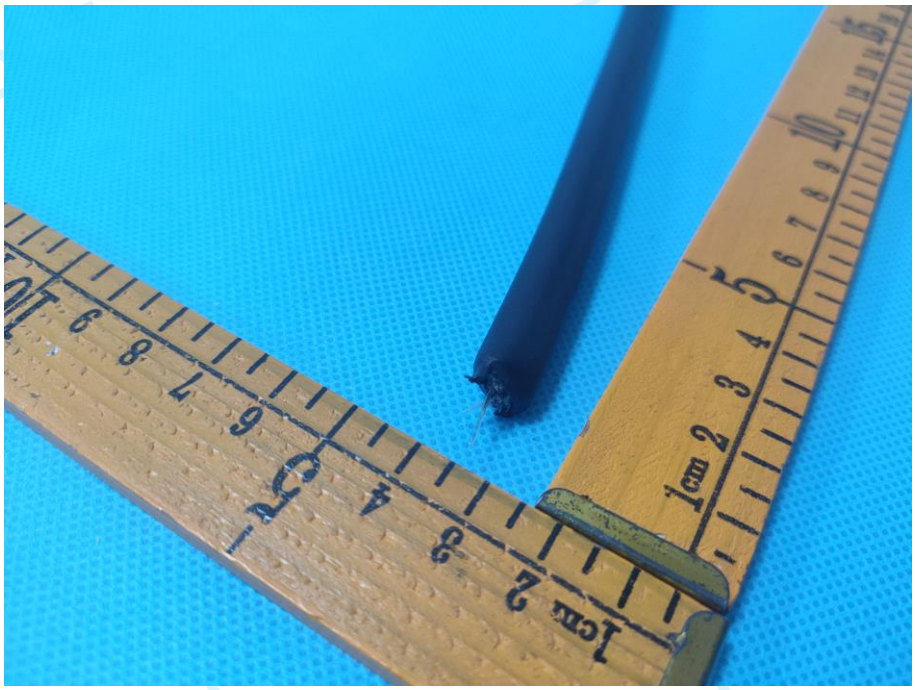


Fig.2

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