CE

Declaration of Conformity

The product is herewith confirmed to comply with the requirements set out in the Council Directive on the Approximation of the laws of the Member States relating to Radio Equipment Directive (2014/53/EU) and Electromagnetic Compatibility Directive (2014/30/EU) and Low Voltage Directive (2014/35/EU).

The following Equipment:

Product : Fluorescence Illuminator

Model Number : Hyper S350

Company Name : YODN Lighting Corp.

The listed standards as below were applied:

EMC:

EN 61000-6-3:2007+A1:2011/AC:2012 : Generic standards - Emission standard for residential, commercial and light-industrial environments (Conducted Emission / Radiated Emission Below 1 GHz)

EN 61000-6-1:2007 : Electrostatic Discharge

IEC 61000-4-2 Ed.2.0:2008 : Electromagnetic compatibility (EMC)

Safety :

EN/IEC 61010-1:2010 : Safety requirements for electrical equipment for measurement, control, and laboratory use - Part 1: General requirements

RoHS:

2011/65/EU

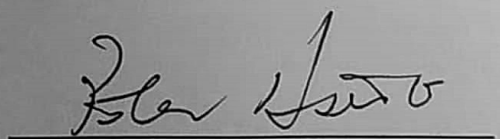
The following importer/manufacturer is responsible for this declaration:

Company Name : YODN Lighting Corp.

Company Address : 6F, No. 1, Creation Rd. II, Science-Based Industrial Park, Hsin-chu City, 30077 Taiwan

Telephone : +886-3-563-7218 Facsimile: +886-3-579-4581

Person is responsible for marking this declaration:

Peter Hsiao	President
Name (Full Name)	Position/ Title
2024/05/02	
Date	Legal Signature

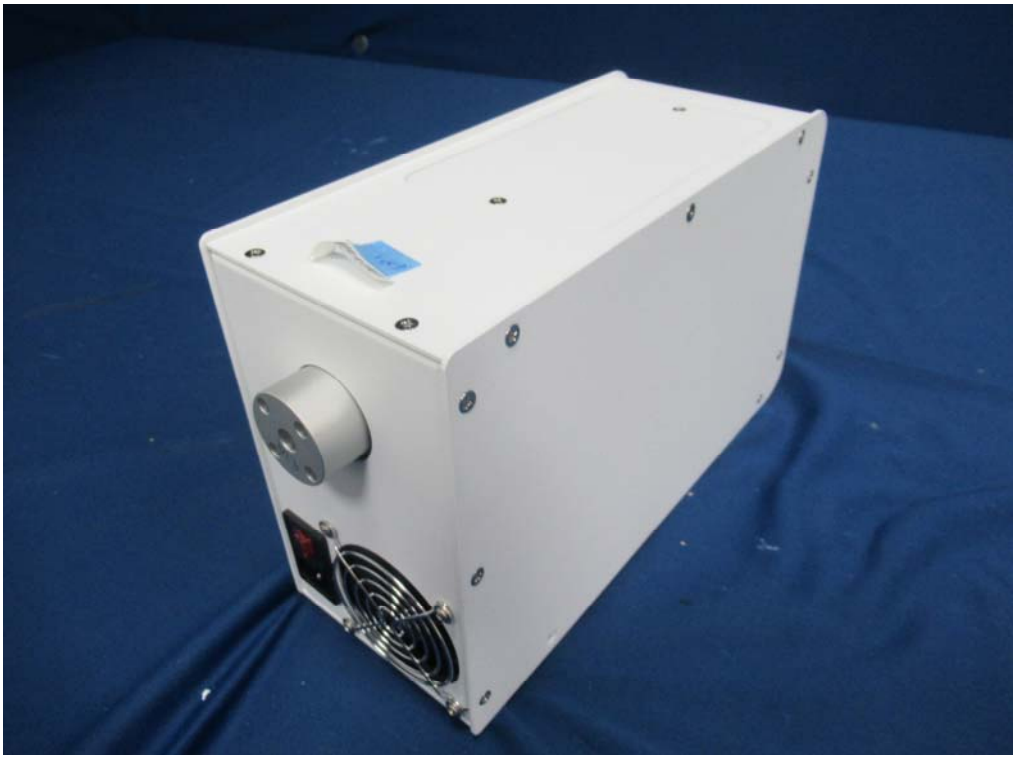
Product Photos

Product Name ： Fluorescence Illuminator

Model No. ： Hyper S350

(1) EUT Photo

(2) EUT Photo



(3) EUT Photo (Power Cord)

Test Report No:

2440448R-0E3012300018-1

EMC TEST REPORT

Product Name	Fluorescence Illuminator
Model and /or type reference	Hyper S350
Applicant´s name / address	YODN Lighting Corp. 6F., No.1, Creation Rd. II, Science-Based Industrial Park, Hsin-chu City, 30077 Taiwan
Manufacturer´s name / address	YODN Lighting Corp. 6F., No.1, Creation Rd. II, Science-Based Industrial Park, Hsin-chu City, 30077 Taiwan
Test method requested, standard	EN 61000-6-3:2007+A1:2011/AC:2012 (Conducted Emission / Radiated Emission Up to 1 GHz) EN 61000-6-1:2007 (Electrostatic Discharge) IEC 61000-4-2 Ed. 2.0:2008
Verdict Summary	IN COMPLIANCE
Documented By (Senior Adm. Specialist / Carol Tsai)	
Approved By (Manager / Arthur Liu)	
Date of Receipt	2024/04/16
Date of Issue	2024/04/30
Report No.	2440448R-0E3012300018-1
Report Version	V1.0

INDEX

Competences and Guarantees

DEKRA is a testing laboratory competent to carry out the tests described in this report.

In order to assure the traceability to other national and international laboratories, DEKRA has a calibration and maintenance program for its measurement equipment.

DEKRA guarantees the reliability of the data presented in this report, which is the result of the measurements and the tests performed to the item under test on the date and under the conditions stated in the report and it is based on the knowledge and technical facilities available at DEKRA at the time of performance of the test.

DEKRA is liable to the client for the maintenance of the confidentiality of all information related to the item under test and the results of the test.

The results presented in this Test Report apply only to the particular item under test established in this document.

General conditions

1. The test results relate only to the samples tested.
2. The test results shown in the test report are traceable to the national/international standard through the calibration report of the equipment and evaluated measurement uncertainty herein.
3. This report must not be used to claim product endorsement by TAF or any agency of the government.
4. The test report shall not be reproduced without the written approval of DEKRA Testing and Certification Co., Ltd.
5. Measurement uncertainties evaluated for each testing system and associated connections are given here to provide the system information for reference. Compliance determinations do not take into account measurement uncertainties for each testing system, but are based on the results of the compliance measurement.

Laboratory information

We, **DEKRA Testing and Certification Co., Ltd**., are an independent EMC and safety testing provider that was established the whole facility in our laboratories. The test facility has been accredited in compliance with ISO/IEC 17025.

Test Laboratory	DEKRA Testing and Certification Co., Ltd.
	Hsin Chu Laboratory
Address	No.372-2, Sec. 4, Zhongxing Rd., Zhudong Township, Hsinchu County 310, Taiwan, R.O.C.
Phone number	+886-3-582-8001
Fax number	+886-3-582-8958
Test Site	1. No.372-2, Sec. 4, Zhongxing Rd., Zhudong Township, Hsinchu County 310, Taiwan, R.O.C. 2. No.372, Sec. 4, Zhongxing Rd., Zhudong Township, Hsinchu County 310, Taiwan, R.O.C.

Revision History

Version	Description	Issued Date
V1.0	Initial issue of report	2024/04/30

1. General Information

1.1. EUT Description

Product Name	Fluorescence Illuminator
Model No.	Hyper S350
Highest working frequency	350 kHz
EUT Rated Voltage	AC 100-240V, AC 50/60Hz, 100W
Test Voltage	AC 230V/50Hz

Accessories Information	
Power Cord	Non-Shielded, 1.85m

Notes:

1. This EUT is a Fluorescence Illuminator.
2. Model No.: Hyper S350 was selected as representative model for the test and its data was recorded in this report.

1.2. Mode of Operation

DEKRA has verified the construction and function in typical operation. All the test modes were carried out with the EUT in normal operation, which was shown in this test report and defined as:

Evaluation of Test Mode	
Mode 1: Normal Operation	
Final Test Mode	
Emission	
Conducted Emissions / Radiated Emissions (Up to 1 GHz)	Mode 1: Normal Operation
Immunity	
Electrostatic Discharge	Mode 1: Normal Operation

1.3. List of Test Equipment

Conducted Emissions / HC-SR02

Instrument	Manufacturer	Model No.	Serial No.	Cal. Date	Next Cal. Date
EMI Test Receiver	R&S	ESR3	102608	2023/09/19	2024/09/18
Artificial Mains Network	R&S	ENV 4200	848411/010	2023/12/15	2024/12/14
Two-Line V-Network	R&S	ENV216	100096	2023/06/02	2024/06/01
Coaxial Cable(9 m)	Harbour	RG-400	HC-SR02	2023/08/15	2024/08/14
EMI Testing System	Audix	e3 210616 dekra V9	HC-SR02	N/A	N/A

Radiated Emissions / HC-CB01 (Below 1 GHz)

Instrument	Manufacturer	Model No.	Serial No.	Cal. Date	Next Cal. Date
EMI Test Receiver	R&S	ESR7	101762	2023/10/27	2024/10/26
EMI Test Receiver	R&S	ESR7	101761	2023/10/03	2024/10/02
Trilog Broadband Antenna	Schwarzbeck	VULB 9168	9168-792	2023/06/26	2024/06/25
Trilog Broadband Antenna	Schwarzbeck	VULB 9168	9168-793	2023/09/11	2024/09/10
Pre-Amplifier	SGH	SGH0301	20210701-4	2024/03/22	2025/03/21
Pre-Amplifier	SGH	SGH0301	20210701-2	2024/03/22	2025/03/21
Coaxial Cable(30 m)	Suhner	SF104_SP600_CFD400	HC-CB01_10mH	2023/08/15	2024/08/14
Coaxial Cable(30 m)	Suhner	SF104_SP600_CFD400	HC-CB01_10mV	2023/08/15	2024/08/14
Coaxial Cable(22.5 m)	Suhner	SF104_SF106_CFD400	HC-CB01_3mH	2023/08/15	2024/08/14
Coaxial Cable(22.5 m)	Suhner	SF104_SP600_CFD400	HC-CB01_3mV	2023/08/15	2024/08/14
EMI Testing System	Audix	e3 210616 dekra V9	HC-CB01	N/A	N/A

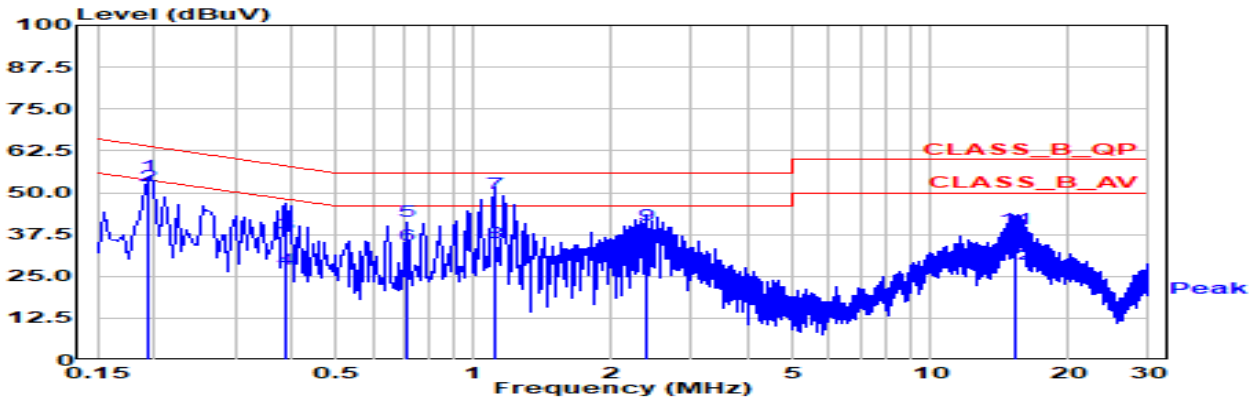
Electrostatic Discharge / HC-SR08

Instrument	Manufacturer	Model No.	Serial No.	Cal. Date	Next Cal. Date
Electrostatic Simulator Discharge	NoiseKen	ESS-2002	ESS04Z3759	2023/04/21	2024/04/20
Horizontal Coupling Plane (HCP)	QuieTek	HCP AL50	N/A	N/A	N/A
Vertical Coupling Plane (VCP)	QuieTek	VCP AL50	N/A	N/A	N/A

2. Conducted Emissions

2.1. Test Result

Model No	Hyper S350	Site	HC-SR02
Test Voltage	AC 230V/50Hz	Test Date	2024-04-18
Test Mode	Mode 1	Engineer	Mia Lee
Phase	L	Temperature (℃)	23.9
Test Condition		Humidity (%RH)	67



No	Frequency (MHz)	Emission Level (dBuV)	Limit (dBuV)	Margin (dB)	Reading Level (dBuV)	Correct Factor (dB)	Detector Type
1	0.194	55.17	63.86	-8.69	45.56	9.61	QP
*2	0.194	52.16	53.86	-1.70	42.55	9.61	AV
3	0.389	37.78	58.10	-20.32	28.14	9.64	QP
4	0.389	27.03	48.10	-21.06	17.39	9.64	AV
5	0.713	41.49	56.00	-14.51	31.81	9.67	QP
6	0.713	34.25	46.00	-11.75	24.58	9.67	AV
*7	1.107	49.74	56.00	-6.26	40.04	9.71	QP
8	1.107	35.04	46.00	-10.96	25.33	9.71	AV
9	2.394	40.38	56.00	-15.62	30.61	9.77	QP
10	2.394	33.49	46.00	-12.51	23.72	9.77	AV
11	15.345	39.42	60.00	-20.58	29.19	10.24	QP
12	15.345	28.61	50.00	-21.39	18.37	10.24	AV

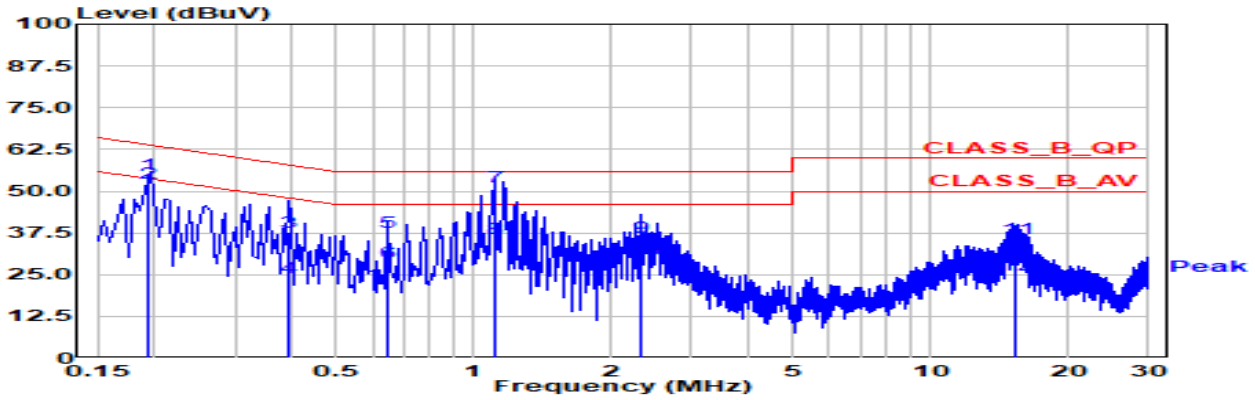
Remark:

1. "*" means this data is the worst emission level.

2. Emission Level = Reading Level + Correct Factor (Correct Factor = LISN Insertion Loss + Cable Loss).

3. Margin = Emission Level - Limit.

Model No	Hyper S350	Site	HC-SR02
Test Voltage	AC 230V/50Hz	Test Date	2024-04-18
Test Mode	Mode 1	Engineer	Mia Lee
Phase	N	Temperature (℃)	23.9
Test Condition		Humidity (%RH)	67



No	Frequency (MHz)	Emission Level (dBuV)	Limit (dBuV)	Margin (dB)	Reading Level (dBuV)	Correct Factor (dB)	Detector Type
1	0.194	55.10	63.85	-8.75	45.48	9.61	QP
*2	0.194	52.33	53.85	-1.52	42.71	9.61	AV
3	0.393	37.71	58.00	-20.29	28.08	9.63	QP
4	0.393	24.17	48.00	-23.83	14.53	9.63	AV
5	0.649	37.89	56.00	-18.11	28.23	9.66	QP
6	0.649	28.80	46.00	-17.20	19.14	9.66	AV
*7	1.108	51.47	56.00	-4.53	41.77	9.71	QP
8	1.108	35.75	46.00	-10.25	26.04	9.71	AV
9	2.327	36.15	56.00	-19.85	26.39	9.77	QP
10	2.327	29.44	46.00	-16.56	19.67	9.77	AV
11	15.408	35.83	60.00	-24.17	25.48	10.35	QP
12	15.408	24.76	50.00	-25.24	14.41	10.35	AV

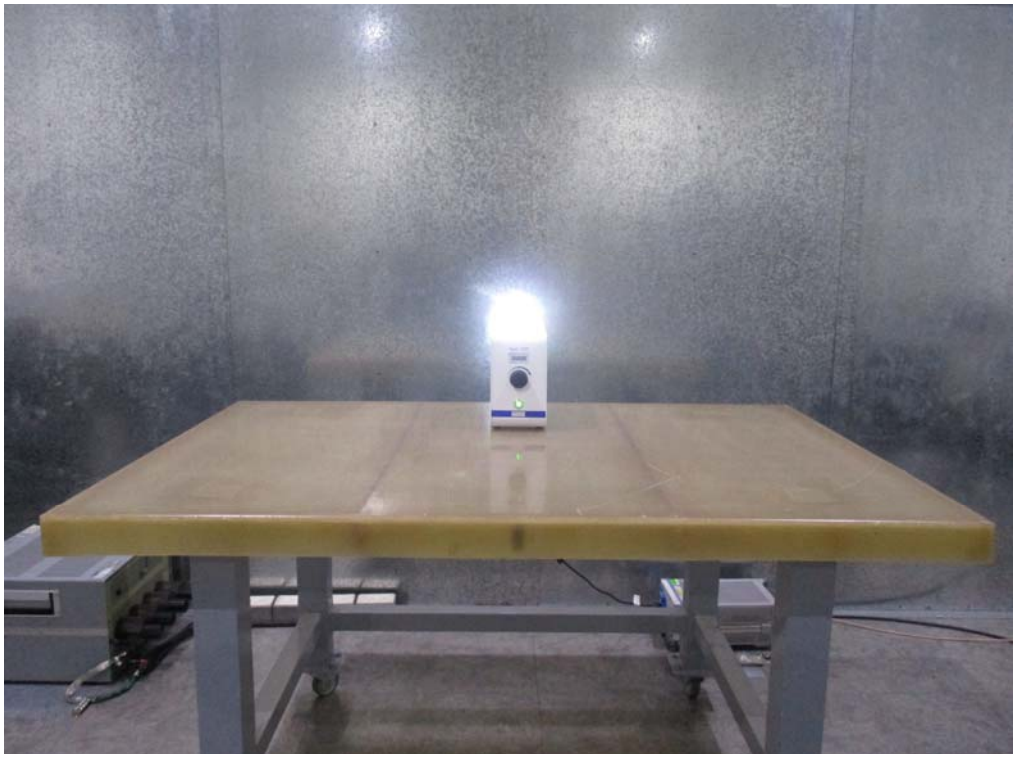
Remark:

1. "*" means this data is the worst emission level.
2. Emission Level = Reading Level + Correct Factor (Correct Factor = LISN Insertion Loss + Cable Loss).
3. Margin = Emission Level - Limit.

2.2. Test Photograph

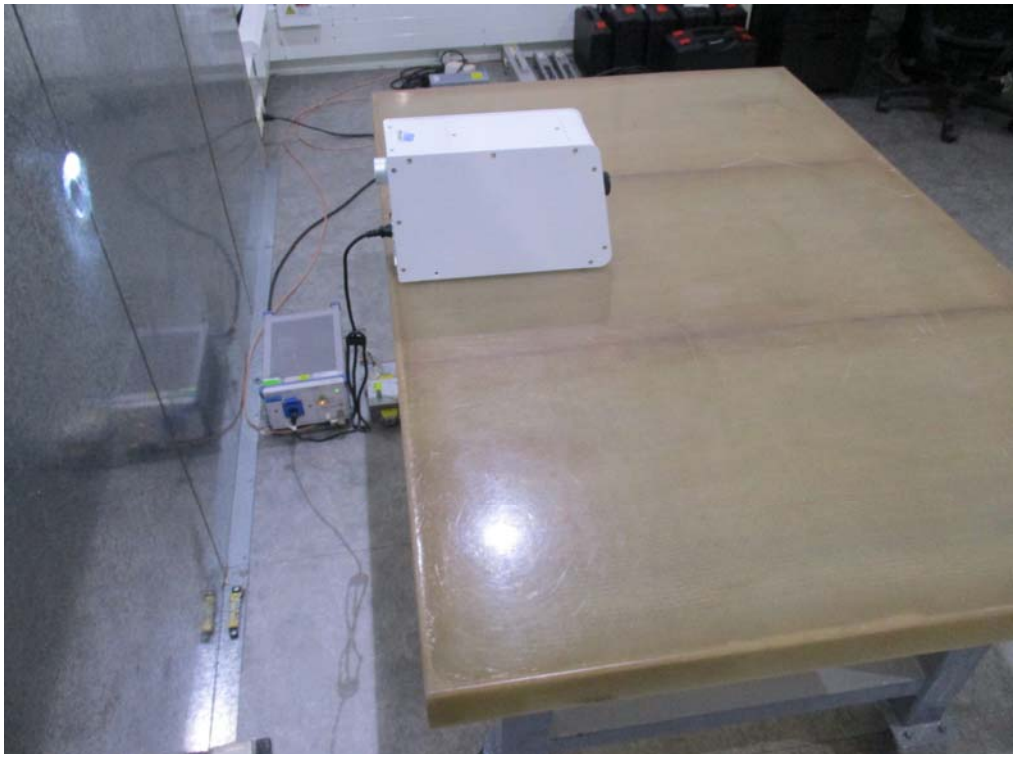
Test Mode : Mode 1

Description : Conducted Emissions Test Setup



Test Mode : Mode 1

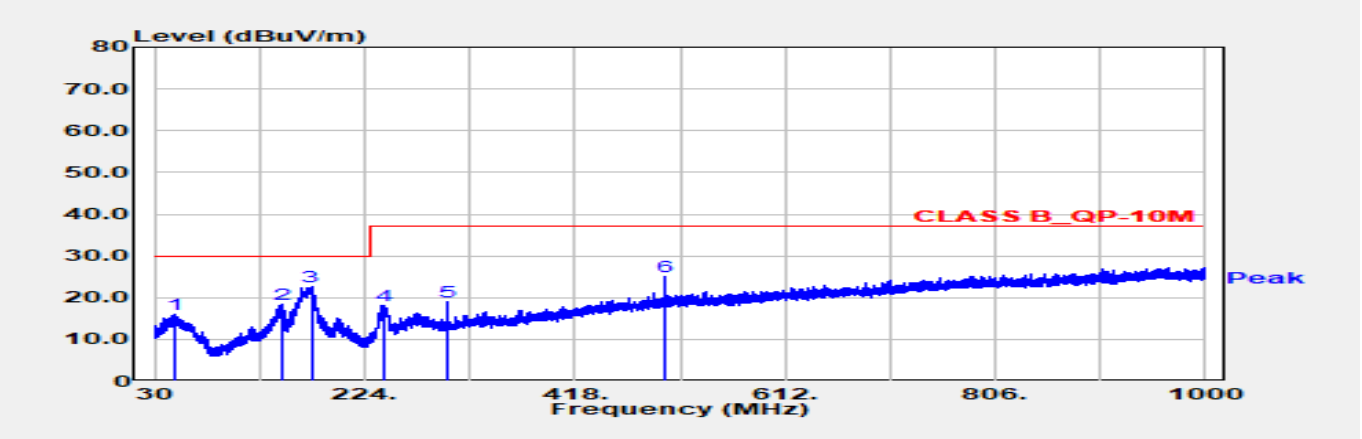
Description : Conducted Emissions Test Setup



3. Radiated Emissions (Up to 1 GHz)

3.1. Test Result

Model No	Hyper S350	Site	HC-CB01
Test Voltage	AC 230V/50Hz	Test Date	2024-04-17
Test Mode	Mode 1	Engineer	Sam Yang
Polarity	Horizontal	Temperature (℃)	21.7
Test Condition		Humidity (%RH)	55



No	Frequency (MHz)	Emission Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Reading Level (dBuV)	Correct Factor (dB/m)	Detector Type
1	48.673	15.93	30.00	-14.07	39.06	-23.12	QP
2	148.098	18.30	30.00	-11.70	41.99	-23.70	QP
*3	174.530	22.50	30.00	-7.50	46.75	-24.25	QP
4	242.551	18.08	37.00	-18.92	42.57	-24.49	QP
5	300.024	19.01	37.00	-17.99	41.30	-22.29	QP
6	499.965	25.18	37.00	-11.82	41.10	-15.92	QP

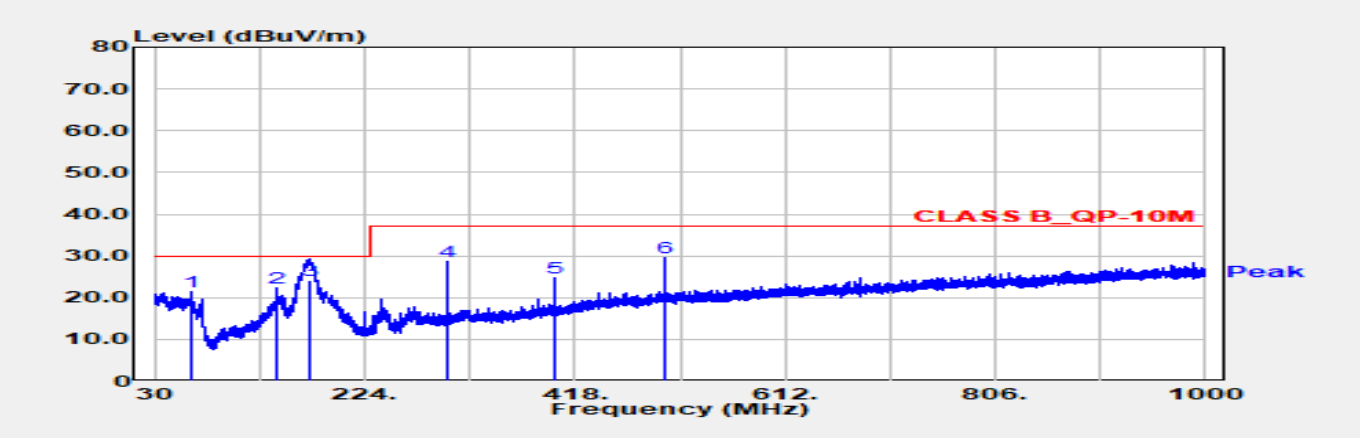
Remark:

1. "*" means this data is the worst emission level.

2. Emission Level = Reading Level + Correct Factor (Correct Factor = Ant Factor + Cable Loss - Pre-Amp).

3. Margin = Emission Level - Limit.

Model No	Hyper S350	Site	HC-CB01
Test Voltage	AC 230V/50Hz	Test Date	2024-04-17
Test Mode	Mode 1	Engineer	Sam Yang
Polarity	Vertical	Temperature (℃)	21.7
Test Condition		Humidity (%RH)	55



No	Frequency (MHz)	Emission Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Reading Level (dBuV)	Correct Factor (dB/m)	Detector Type
1	63.950	21.36	30.00	-8.64	46.06	-24.69	QP
2	143.975	22.26	30.00	-7.74	45.79	-23.53	QP
*3	173.925	24.06	30.00	-5.94	48.39	-24.33	QP
4	300.024	28.67	37.00	-8.33	50.87	-22.20	QP
5	399.934	24.75	37.00	-12.25	44.45	-19.70	QP
6	499.965	29.50	37.00	-7.50	45.65	-16.15	QP

Remark:

1. "*" means this data is the worst emission level.

2. Emission Level = Reading Level + Correct Factor (Correct Factor = Ant Factor + Cable Loss - Pre-Amp).

3. Margin = Emission Level - Limit.

3.2. Test Photograph

Test Mode : Mode 1

Description : Radiated Emissions Test Setup (Up to 1 GHz)

Test Mode : Mode 1

Description : Radiated Emissions Test Setup (Up to 1 GHz)

4. Electrostatic Discharge

4.1. Test Result

Model No	Hyper S350		
Test Mode	Mode 1	Test Voltage	AC 230V/50Hz
Date of Test	2024/04/18	Test Site	HC-SR08
Environmental Condition	22.5(℃) ; 64.0(%RH) ; 996.5(mbar)	Engineer	Mia Lee

EN 61000-6-1

Item	Amount of Discharge	Voltage kV	Required Criteria	Complied to Criteria	Test Result
Air Discharge	10	+8	B	A	Pass
	10	-8	B	A	Pass
Contact Discharge	10	+4	B	A	Pass
	10	-4	B	A	Pass
Indirect Discharge	10	+4	B	A	Pass
(HCP)	10	-4	B	A	Pass
Indirect Discharge	10	+4	B	A	Pass
(VCP: Front/Rear/Left/Right)	10	-4	B	A	Pass

☒ Meet criteria A: Operate as intended during and after the test

☐ Meet criteria B: Operate as intended after the test

☐ Meet criteria C: Loss/Error of function

Remark:

1. The testing performed is from lowest level up to the highest level as required by standard, but only highest level is shown on the report.

4.2. Test Photograph

Test Mode : Mode 1

Description : Electrostatic Discharge (ESD) Test Setup