EMC TEST REPORT

Architectural Flexible Linear Lighting

Test model : FlexWash-06_3525-48

Additional model: Refer to model list

Applicant's name	:	Shanghai Jingtou Intelligent Technology Co., Ltd.
Address	:	Building 1, No.5601, Yanqian Highway, Fengxian District, Shanghai, China 201414
Name of testing laboratory preparing the report	:	Shenzhen Southern LCS Compliance Testing Co., Ltd.
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Date of receipt of test sample	:	October 26, 2025
Number of tested samples	:	1
Date of test	:	October 26, 2025 - November 07, 2025
Date of issue	:	November 07, 2025

EMC TEST REPORT

EN IEC 55015:2019+A11:2020

Emission - Electrical lighting and similar equipment

EN IEC 61547:2023

Equipment for general lighting purposes - EMC immunity requirements

Testing Laboratory.....:	Shenzhen Southern LCS Compliance Testing Co., Ltd. 101-201, Building 39, Xialang Industrial Zone, Heshuikou Community, Matian Street, Guangming District, Shenzhen, China.	
Test Specification: **Standard.....:**	 EN IEC 55015:2019+A11:2020 EN IEC 61547:2023	
Equipment Under Test.....:	**Architectural Flexible Linear Lighting**	
Trademark.....:	N/A	
Test Model/Type.....:	FlexWash-06_3525-48	
Rating.....:	DC24V, 48W	
Test Results .....:	**PASS**	
Tested by.....:	Zom Zhang (Engineer)	Zom Zhang
Supervised by.....:	Kris Mai (Engineer)	Kris.Mai
Check by.....:	Amy Liu (Technique principal)	Amy Liu
Approved by .....:	Dm Gu (Manager)	Dmgu
Test Report Form No.....:	TRF-4-E-014 Ver. A/1	
TRF Originator.....:	Shenzhen Southern LCS Compliance Testing Co., Ltd.	
Master TRF.....:	/	

EMC - TEST REPORT

Test Report No.....:	**LCSB09265021E**

Applicant.....: Address.....: Telephone.....: Fax.....:	**Shanghai Jingtou Intelligent Technology Co., Ltd.** Building 1, No.5601, Yanqian Highway, Fengxian District, Shanghai, China 201414 / /
Manufacturer.....: Address.....: Telephone.....: Fax.....:	**Shanghai Jingtou Intelligent Technology Co., Ltd.** Building 1, No.5601, Yanqian Highway, Fengxian District, Shanghai, China 201414 / /
Factory.....: Address.....: Telephone.....: Fax.....:	**Shanghai Jingtou Intelligent Technology Co., Ltd.** Building 1, No.5601, Yanqian Highway, Fengxian District, Shanghai, China 201414 / /

General disclaimer:

The applicant and manufacturer information, product name, model, trademark and other information in this report are all provided by the applicant, and this laboratory is not responsible for verifying its authenticity. It is not permitted to copy extracts of these test result without the written permission of the test laboratory. The test report merely corresponds to the test sample.

ENVIRONMENTAL CONDITIONS

The climatic conditions during the test are within the limits specified by the manufacturer for the operation of the EUT and the test equipment. the climatic conditions during the test were in the following Limits:

Ambient temperature	15℃ - 30℃
Relative Humidity air	30% - 60%
Atmospheric pressure	86 kPa - 106 kPa

Climate values will be recorded and recorded separately if specifically required in the base standard or application product/product series standard.

POSSIBLE TEST CASE VERDICTS

Test cases does not apply to test object	N/A
Test object does meet requirement	P(Pass) / PASS
Test object does not meet requirement	F(Fail) / FAIL
Not measured	N/M

DEFINITION OF SYMBOLS USED IN THIS TEST REPORT

☒	Indicate that the conditions, standards or equipment listed is applicable to this report / test / EUT.
☐	Indicate that the conditions, standards or equipment listed is not applicable to this report / test / EUT.

REVISION HISTORY

Revision	Issue Date	Revision Content	Revised by
000	November 07, 2025	Initial Issue	-

Remark:
000) : “---”

TABLE OF CONTENTS

1. GENERAL INFORMATION

1.1. GENERAL DESCRIPTION OF THE ITEM(S)

Equipment Under Test	Architectural Flexible Linear Lighting
Test Model/Type	FlexWash-06_3525-48
Additional Models/Type	NeonLine-X_Y-Z, FlexGround-X_Y-Z, FlexWash-X_Y-Z, FlexLine-X_Y-Z, ArchFlex-X_Y-Z；GlowLine-X_Y-Z （Remark: X=01,02,03,04,05,06,07,08,09,10… Y= 3525, 2620, 2527, 2420, 2222, 2020, 1616, 3020, 2222, 2020,2016, 2014, 1220, 1018, 1617, 1616, 1615, 1515, 1414, 1313, 1212, 1010, 4965, 4073, 2163,dia50,dia40,dia25,dia18,dia16, dia13, dia8… Z= 48W,42w,40w,36w,32w,28w,24w,20w,18w, 15w,12w,10w,8w,6w,5w...）
Description of Model difference	-
Rating	DC24V,48W
Road and street lighting equipment	☐ Yes ☒ No
Protection Class	☐ Class I ☐ Class II ☒ Class III

1.2. OPERATING MODE(S) USED OF TESTS

During the tests, the following operating mode(s) has(have) been used.

Operating Mode	Operating Mode description	Used for testing	
		Emission	Immunity
1	Lighting on mode	☒	☒
2	Maximum light	☐	☐
3	Minimum light	☐	☐
4	Charging+Lighting	☐	☐

1.3. SUPPORT / AUXILIARY EQUIPMENT FOR THE EUT

EUT has been tested using the following auxiliary equipment :

Auxeq	Model/Type	Manufacturer	Supplied by
--			

1.4. DESCRIPTION OF TEST FACILITY

Test Location	Shenzhen Southern LCS Compliance Testing Co., Ltd. 101-201, Building 39, Xialang Industrial Zone, Heshuikou Community, Matian Street, Guangming District, Shenzhen, China. CNAS Registration Number is L10160.

2. STATEMENT OF THE MEASUREMENT UNCERTAINTY

The data and results referenced in this document are true and accurate. the reader is cautioned that there may be errors within the calibration limits of the equipment and facilities. the measurement uncertainty was calculated for all measurements listed in this test report acc. to CISPR 16 - 4 “Specification for radio disturbance and immunity measuring apparatus and methods - Part 4: Uncertainty in EMC Measurements” and is documented in the LCS quality system acc. to DIN EN ISO/IEC 17025. Furthermore, component and process variability of devices similar to that tested may result in additional deviation. the manufacturer has the sole responsibility of continued compliance of the device.

Measurement	Uncertainty (U_{lab})
Conducted disturbance (9kHz - 30MHz)	± 2.80 dB
Magnetic field disturbance (9kHz - 30MHz)	± 3.46 dB
Radiated disturbance (30MHz - 200MHz)	± 4.66 dB
Radiated disturbance (200MHz - 1GHz)	± 4.64 dB

Supplementary information:

The reported expanded uncertainty of measurement is stated as the standard uncertainty of measurement multiplied by the coverage factor of k=2, which for a normal distribution corresponds to a coverage probability of approximately 95%.

3. MEASURING DEVICES AND TEST EQUIPMENT

CONDUCTED DISTURBANCE						
Item	Test equipment	Manufacturer	Model No.	Serial No.	Cal Date	Due Date
1	No. 1 shielded Room	CHENGYU	843	/	2023-04-26	2026-04-25
2	EMI Test Receiver	R&S	ESCI	101142	2025-04-18	2026-04-17
3	10dB Attenuator	SCHWARZBECK	VTSD9561-F	9561-F159	2025-04-18	2026-04-17
4	Artificial Mains Network	SCHWARZBECK	NSLK 8127	8127716	2025-04-18	2026-04-17
5	Artificial Mains Network	SCHWARZBECK	NSLK 8163	00043	2025-04-18	2026-04-17
6	Impedance Stabilization Network	SCHWARZBECK	NTFM 8158	NTFM8158#120	2025-04-18	2026-04-17
7	Voltage Probe	SCHWARZBECK	KT 9420	9420401	2025-04-18	2026-04-17
8	Current Probe	R&S	EZ-17	101921	2025-02-21	2026-02-20
9	EMI Test Software	EZ	EZ_EMC	N/A	/	/

RADIATED DISTURBANCE (9KHz - 30MHz)						
Item	Test equipment	Manufacturer	Model No.	Serial No.	Cal Date	Due Date
1	No. 1 shielded Room	CHENGYU	843	/	2023-04-26	2026-04-25
2	EMI Test Receiver	R&S	ESCI	101142	2025-04-18	2026-04-17
3	10dB Attenuator	SCHWARZBECK	VTSD9561-F	9561-F159	2025-04-18	2026-04-17
4	Triple-loop Antenna	EVERFINE	LLA-2	11050003	2025-04-18	2026-04-17
5	EMI Test Software	EZ	EZ_EMC	N/A	/	/

RADIATED DISTURBANCE (above 30MHz)						
Item	Test equipment	Manufacturer	Model No.	Serial No.	Cal Date	Due Date
1	3m Semi Anechoic Chamber	SIDT FRANKONIA	SAC-3M	03CH03-HY	2024-04-28	2027-04-27
2	EMI Test Receiver	R&S	ESCI3	101010	2025-04-18	2026-04-17
3	Log-periodic Antenna	SCHWARZBECK	VULB9163	5094	2025-04-19	2026-04-18
4	Coupling Decoupling Network	SCHWARZBECK	CDNE M2	00251	2025-04-18	2026-04-17
5	Coupling Decoupling Network	SCHWARZBECK	CDNE M3	00248	2025-04-18	2026-04-17
6	EMI Test Software	EZ	EZ_EMC	N/A	/	/
7	Controller system	SKET	SKC1000	N/A	/	/

ELECTROSTATIC DISCHARGE						
Item	Test equipment	Manufacturer	Model No.	Serial No.	Cal Date	Due Date
1	ESD Simulator	TESEQ	NSG 437	1615	2025-02-21	2026-02-20

ELECTRICAL FAST TRANSIENT / BURST						
Item	Test equipment	Manufacturer	Model No.	Serial No.	Cal Date	Due Date
1	Electrical Fast Transient Generator	HTEC	HEFT51	162201	2025-04-18	2026-04-17
2	EFT Coupling Clamp	HTEC	H3C	163701	2025-05-08	2026-05-07

INJECTED CURRENTS (RADIO-FREQUENCY COMMON MODE)						
Item	Test equipment	Manufacturer	Model No.	Serial No.	Cal Date	Due Date
1	No. 2 shielded room	CHENGYU	743	/	2023-04-26	2026-04-25
2	Conducted Susceptibility Generator	HTEC	CDG6000	126A140012016	2025-04-18	2026-04-17
3	CDN	HTEC	CDN-M2+M3	A22/0382/2016	2025-04-18	2026-04-17
4	6dB attenuator	HTEC	ATT6	HA1601	2025-04-18	2026-04-17
5	Electromagnetic clamp	LUTHI	EM101	35535	2025-04-18	2026-04-17

POWER FREQUENCY MAGNETIC FIELD						
Item	Test equipment	Manufacturer	Model No.	Serial No.	Cal Date	Due Date
1	Power Frequency Mag-Field Generator System	HTEC	HPFMF100	100-2400	2025-04-18	2026-04-17

RADIO-FREQUENCY ELECTROMAGNETIC FIELDS						
Item	Test equipment	Manufacturer	Model No.	Serial No.	Cal Date	Due Date
1	3m Semi Anechoic Chamber	SIDT FRANKONIA	SAC-3M	03CH03-HY	2023-03-02	2026-03-01
2	RF signal generator	Agilent	8648B	3847M00804	2025-02-21	2026-02-20
3	Power amplifier	SKET	LPA 0810-150	202302457	2025-02-21	2026-02-20
4	Field generating antenna	SKET	STLP 9129 Plus	/	/	/
5	Power probe	R&S	NRP-Z11	115232	2025-02-21	2026-02-20
6	Power probe	R&S	NRP-Z11	117755	2025-02-21	2026-02-20
7	Test Software	SKET	EMC-S	N/A	/	/

4. VERDICT SUMMARY SECTION

This chapter present an overview of the standards and results. Refer the next chapter for details of measured test results and applied test levels.

4.1. STANDARD(S)

EN IEC 55015:2019+A11:2020 - Limits and methods of measurement of radio disturbance characteristics of electrical lighting and similar equipment.

EN IEC 61547:2023 - Equipment for general lighting purposes — EMC immunity requirements.

4.2. OVERVIEW OF RESULTS

EMISSION TESTS - EN IEC 55015		
Requirement - Test case	**Limit**	**Verdict**
Conducted Disturbance - electric power supply	Table 1, Table 4	N/A
Conducted Disturbance - wired network ports at other than power supply	Table 2, Table 3	N/A
Conducted Disturbance - local wired ports at other than electrical power supply interface of ELV lamp	Table 5, Table 6	PASS
Assessment of the enclosure port	---	---
Radiated Disturbance in the frequency range 9 kHz to 30 MHz	Table 8, Table 9	PASS
Radiated Disturbance in the frequency range 30 MHz to 1 GHz	Table 10	PASS
IMMUNITY TESTS - EN IEC 61547		
Requirement - Test case	**Basic Standard(s)**	**Verdict**
Electrostatic Discharge	IEC/EN 61000-4-2	PASS
Radio-Frequency Electromagnetic Fields	IEC/EN 61000-4-3	PASS
Electrical Fast Transient / Burst	IEC/EN 61000-4-4	PASS
Surge	IEC/EN 61000-4-5	N/A
Injected Currents (Radio-Frequency Common Mode)	IEC/EN 61000-4-6	PASS
Power Frequency Magnetic Field [1]	IEC/EN 61000-4-8	N/A
Voltage Dips and Short Interruptions	IEC/EN 61000-4-11	N/A

Supplementary information:

1) Only need to be applied to equipment containing components susceptible to magnetic fields.

5. EMISSION TESTS

5.1. CONDUCTED DISTURBANCE

Standard	EN IEC 55015:2019+A11:2020
Basic Standard(s)	CISPR 16-2-1

Disturbance voltage limits at the electric power supply interface

Frequency range [MHz]	Limit: Quasi-peak [dB(μV)]	Limit: Average[dB(μV)]	IF BW
0,009 - 0,05	110	N/A	200 Hz
0,05 - 0,15	90 - 80	N/A	200 Hz
0,15 - 0,5	66 - 56	56 - 46	9 kHz
0,5 - 5,0	56	46	9 kHz
5,0 - 30	60	50	9 kHz

1) At the transition frequency, the lower limit applies.
2) The limit decreases linearly with the logarithm of the frequency in the ranges 50 kHz to 150 kHz and 150 kHz to 0,5 MHz.
3) If the EUT is non-restricted ELV lamps, the limits add 26dB.

Disturbance voltage limits at wired network interfaces other than power supply

Frequency range [MHz]	Limit: Quasi-peak [dB(μV)]	Limit: Average[dB(μV)]	IF BW
0,15 - 5,0	84 - 74	74 - 64	9 kHz
5,0 - 30	74	64	9 kHz

1) The limits decrease linearly with the logarithm of the frequency in the range 0.15 MHz to 0.5 MHz.
2) The disturbance voltage limits are derived for use with an artificial asymmetrical network (AAN) which presents a common mode (asymmetric mode) impedance of 150 Ω to the measured interface.

Disturbance current limits at wired network interfaces other than power supply

Frequency range [MHz]	Limit: Quasi-peak [dB(μA)]	Limit: Average[dB(μA)]	IF BW
0,15 - 5,0	40 - 30	30 - 20	9 kHz
5,0 - 30	30	20	9 kHz

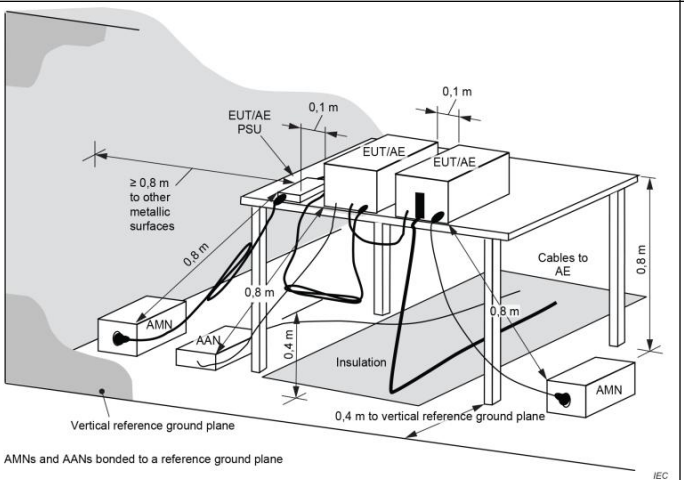
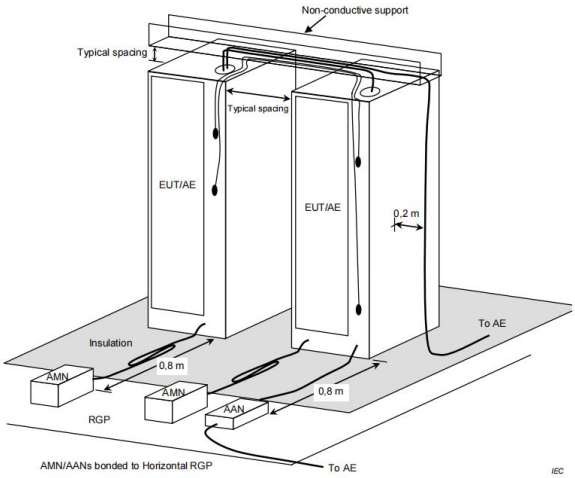
1) The limits decrease linearly with the logarithm of the frequency in the range 0.15MHz to 0.5 MHz.

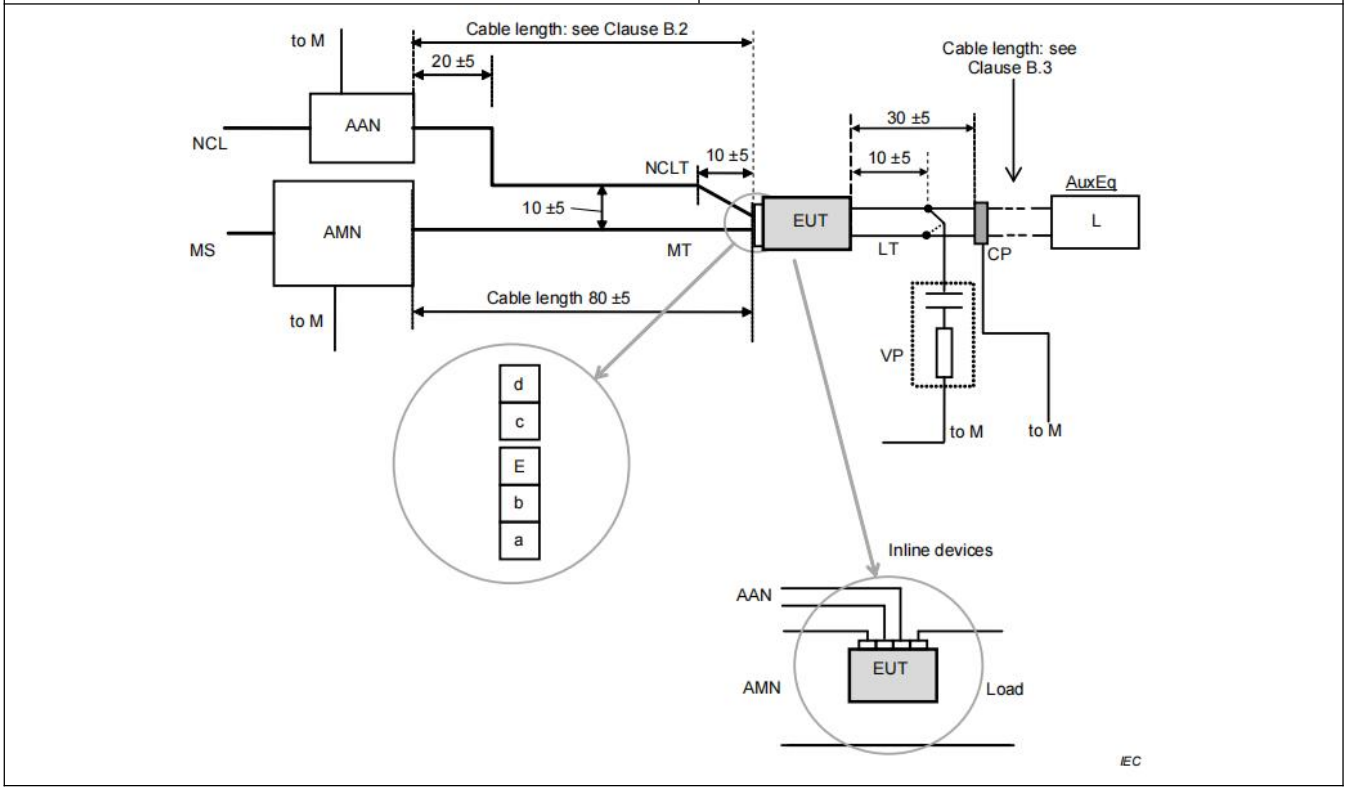
Disturbance voltage limits at local wired ports: local wired ports other than electrical power supply interface of ELV lamp

Frequency range [MHz]	Limit: Quasi-peak [dB(μV)]	Limit: Average[dB(μV)]	IF BW
0,15 - 5,0	80	70	9 kHz
5,0 - 30	74	64	9 kHz

1) At the transition frequency, the lower limit applies.

Test configuration

Test Setup for table-top	Test Setup for Floor standing
	



Test Procedure Description

For Table-top, EUT shall be placed at (0,8 ± 0,05) m above the reference plane of the test site selected for measurement. for Floor standing, EUT shall be placed at (0,12 ± 0,04) m above the reference plane of the test site selected for measurement.
and connected to the AC mains through artificial mains network (LISN). EUT is powered by V-type artificial power network,and the distance from LISN or ANN is 0,8m. the part of the EUT power cord exceeding 0,8m folds in parallel to form a 0,3-0,4 m eights harness.

Test Results refer to Annex A.1

5.2. RADIATED DISTURBANCE (9KHz - 30MHz)

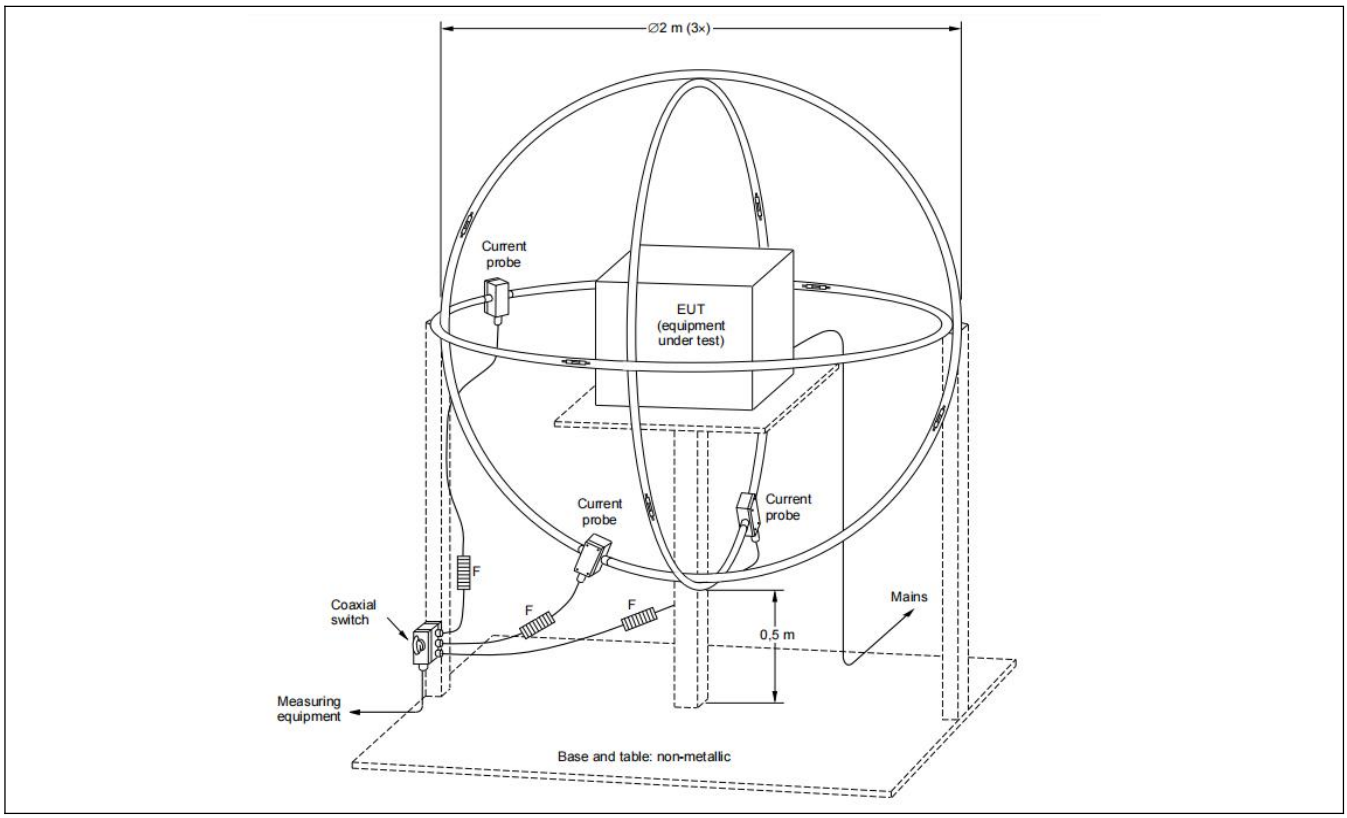
Standard	EN IEC 55015:2019+A11:2020
Basic Standard(s)	CISPR 16-2-3
Test method	Large Loop Antenna (LLA)

LLAS Radiated disturbance limits (2m)

Frequency range [MHz]	Limit: Quasi-peak [dB(μA)]	IF BW
0,009 - 0,07	88	200 Hz
0,07 - 0,15	88 - 58	200 Hz
0,15 - 3,0	58 - 22	9 kHz
3,0 - 30	22	9 kHz

1) At the transition frequency the lower limit applies.
2) Decreasing linearly with logarithm of the frequency.

Test configuration



Test Procedure Description

The EUT is placed on a wood table in the center of a loop antenna. the induced current in the loop antenna is measured by means of a current probe and the test receiver. Three field components are checked by means of a coaxial switch.

Test Results refer to Annex A.2

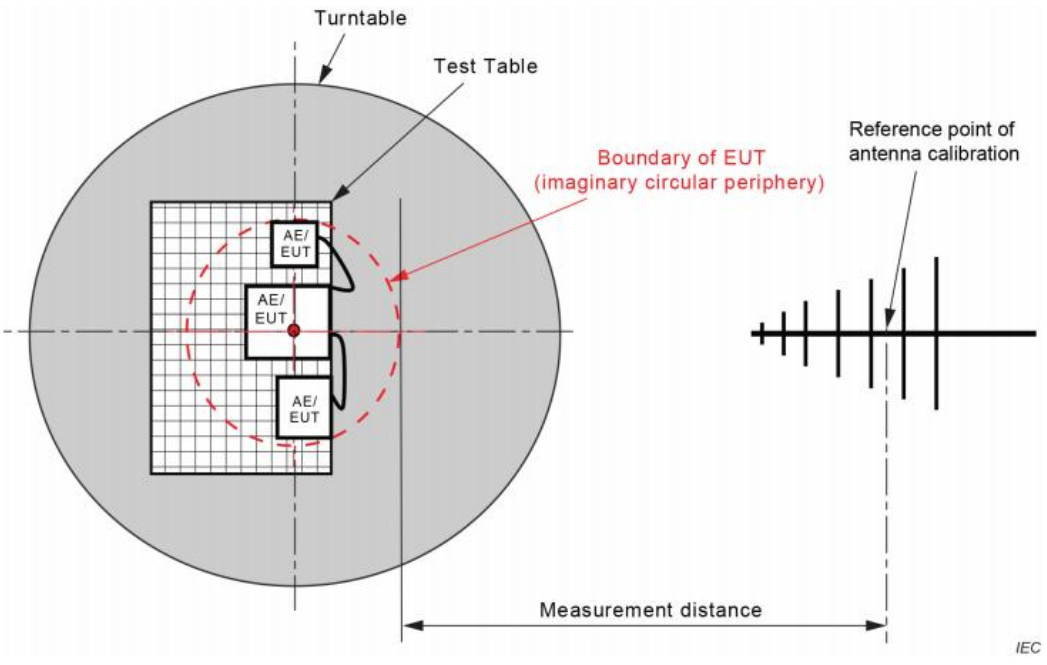
5.3. RADIATED DISTURBANCE (30MHz - 1GHz)

Standard	EN IEC 55015:2019+A11:2020
Basic Standard(s)	CISPR 16-2-3
Test method	Semi Anechoic Chamber (SAC)

SAC Radiated disturbance limit

Frequency range [MHz]	Limit: Quasi-peak [dB(μV/m)]		IF BW
	3 m distance	10 m distance	
30 - 230	40	30	120 KHz
230 - 1000	47	37	120 KHz
1) At the transition frequency, the lower limit applies. 2) Distance refers to the distance in meters between the measuring instrument antenna geometric center and the closed point of any part of the EUT.			

Test configuration



Test Procedure Description

The radiated disturbance test was conducted in a 3m Semi Anechoic Chamber and conforming to CISPR 16-2-3. the EUT is placed on a turntable, which is 0.8 meter high above the ground. the turntable 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 an antenna tower. the antenna can be moved up and down from 1 to 4 meters to find out the maximum emission level. Log-periodic Antenna (calibrated by Dipole antenna) is used as a receiving antenna. both horizontal and vertical polarization of the antenna is set on test.

Test Results refer to Annex A.3

6. IMMUNITY TESTS

6.1. PERFORMANCE CRITERIA

Standard	EN IEC 61547:2023

For the various immunity tests that apply, the performance of the following functions shall be assessed, as far as applicable or specified by the manufacturer:

– the luminous intensity of the luminaire or of the light source(s);

– the control function, for example on/off switching, light level setting, colour adjustment, wireless control.

Performance criterion A: during the test, no change of the luminous intensity shall be observed and the regulating control, if any, shall operate during the test as intended.

Performance criterion B: during the test, the luminous intensity may change to any value. after the test, the luminous intensity shall be restored to its initial value within 1 min(30 min for high pressure gas discharge lamps) regulating controls need not function during the test, but after the test, the mode of the control shall be the same as before the test provided that during the test no mode changing commands were given.

Performance criterion C: during and after the test, any change of the luminous intensity is allowed and the lamp(s) may be extinguished. after the test, within 30 min, all functions shall return to normal, if necessary by temporary interruption of the mains supply and / or operating the regulating control.

Electronic lighting equipment		Tests and performance criteria							
		5.2 (ESD)	5.3 (RS)	5.4 (PFMF)	5.5 (EFT)	5.6 (CS)	5.7 (Surge)	5.8 (Dips)	5.8 (Interruption)
☐	Self-ballasted lamps	B	A	A	B	A	C	B	B
☒	Lighting equipment (excluding self-ballasted lamps) Module in host	B	A	A	B	A	C	B	B[1]
☐	Luminaire for emergency lighting	B[2]	A	A	B[2]	A	B[2]	See[3]	See[3]

Supplementary information:

1) For ballasts where the lamp is not able to restart within 1 min, due to the physical constraints of the lamp, performance criterion C applies.

2) Luminaires for emergency lighting shall be tested in both the normal and emergency mode of operation.

3) These tests do not apply as they are covered by the test in IEC 60598-2-22.

4) For emergency luminaires designed to operate in high-risk task areas, after the test, the luminous intensity shall be restored to its initial value within 0,5 s.

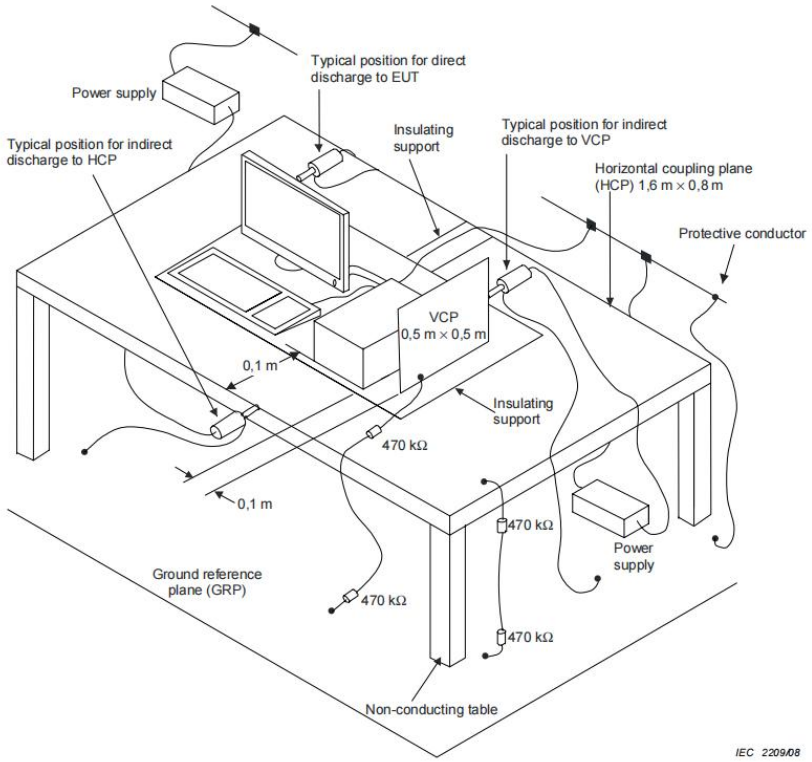
6.2. ELECTROSTATIC DISCHARGE

Electrostatic discharge (ESD) is the result of accumulated static electricity from a person or object, for example, walking on a synthetic carpet. ESD can indirectly affect the operation of equipment or damage its electronic components through direct discharge or coupling. both effects were simulated during the test. contact discharge is the preferred test method. twenty discharges (10 with positive and 10 with negative polarity) shall be applied on each accessible metallic part of the enclosure (terminals are excluded). air discharges shall be used where contact discharges cannot be applied. discharges shall be applied on the horizontal or vertical coupling planes.

Requirements

Standard	EN IEC 61547:2023							
Basic standard	EN 61000-4-2							
Port under test	Enclosure							
Contact discharge	☒	± 2 kV	☒	± 4 kV	☐	±8 kV	☐	±15 kV
Air discharge	☒	± 2 kV	☒	± 4 kV	☒	±8 kV	☐	±15 kV
Number of discharges	≥ 10 per polarity with ≥ 1 sec interval							
Note : Road and street lighting equipment shall be tested for air discharge at ±15 kV and for contact discharge at ±8 kV. This is to simulate the phenomenon of static charging during thunderstorms.								

Test configuration



Test Results refer to Annex A.4

6.3. RADIO-FREQUENCY ELECTROMAGNETIC FIELDS

During the test it is verified if the EUT has sufficient immunity against radiated electromagnetic fields.

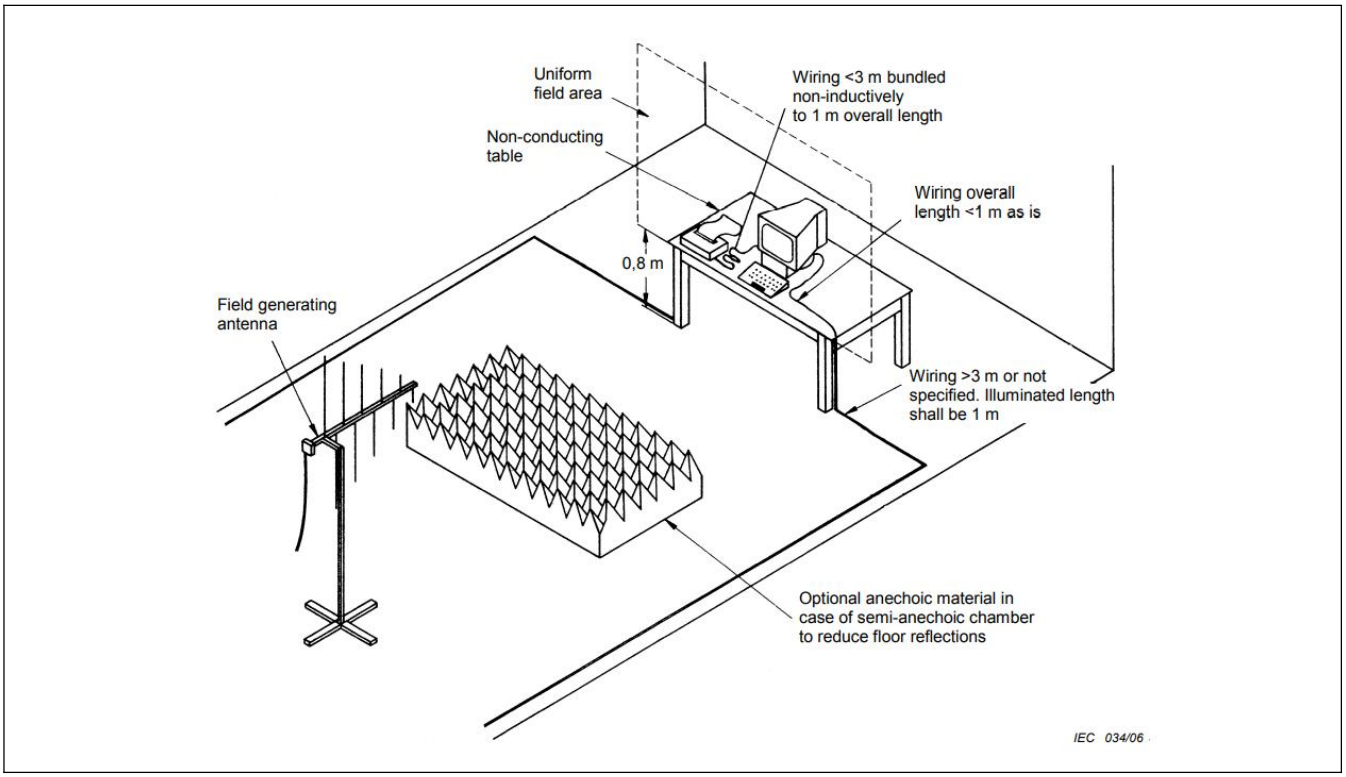
The test was carried out in a half-wave anechoic chamber with absorbent material attached to a reflective ground plate, Before the test, the test field strength needs to be calibrated. during the calibration, the corresponding relationship between the target field strength and the forward power applied to the transmitting antenna is established.during the test, except for EUT, the indoor layout is consistent with the calibration.

The EUT and its simulators are placed on a turn table which is 0,8 meter above ground. EUT is set 3 meter away from the transmitting antenna which is mounted on an antenna tower. both horizontal and vertical polarization of the antenna are set on test. each of the four sides of EUT must be faced this transmitting antenna and measured individually. in order to judge the EUT performance, a CCD camera is used to monitor EUT screen.

Requirements

Standard	EN IEC 61547:2023			
Basic standard	EN 61000-4-3			
Port under test	Enclosure			
Frequency range	Test level	Modulation	Dwell time	Step size
80 - 1000 MHz	3 V/m	1 kHz, 80 % AM	≥ 0,5 s	≤ 1%

Test configuration



Test Results refer to Annex A.4

6.4. ELECTRICAL FAST TRANSIENT / BURST

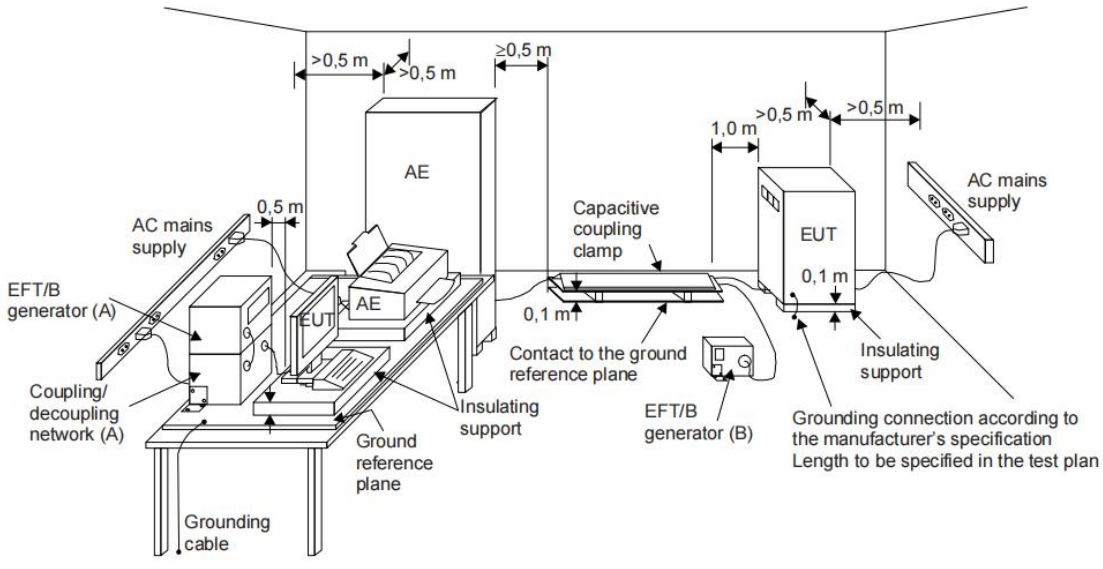
The EFT immunity test simulates the disturbances by caused of very short transient bursts.

The EUT is put on the Insulating support which is 0.1 meter high above the ground reference plane. the minimum distance between EUT and all other conductive structure, except the ground plane beneath the EUT, shall be more than 0.5 m. both polarities of the test voltage should be applied during test, fast transients are carried out with a minimum duration of 2 min with a positive polarity and a minimum of 2 min with a negative polarity.

Requirements

Standard		EN IEC 61547:2023		
Basic standard		EN 61000-4-4		
Pulse characteristics		5/50 ns		
Port under test		Test level	Repetition frequency	Duration
☐	AC input / output power	± 1000 V	5 kHz	2 min / polarity
☒	DC input / output power ²	± 500 V	5 kHz	2 min / polarity
☐	Signal / control lines and load¹ ports	± 500 V	5 kHz	2 min / polarity
1) Only applicable to ports interfacing with cables whose whose total length may exceed 3 m. 2) Not applicable to equipment not connected to the mains while in use.				

Test configuration



Test Results refer to Annex A.4

6.5. INJECTED CURRENTS (RADIO-FREQUENCY COMMON MODE)

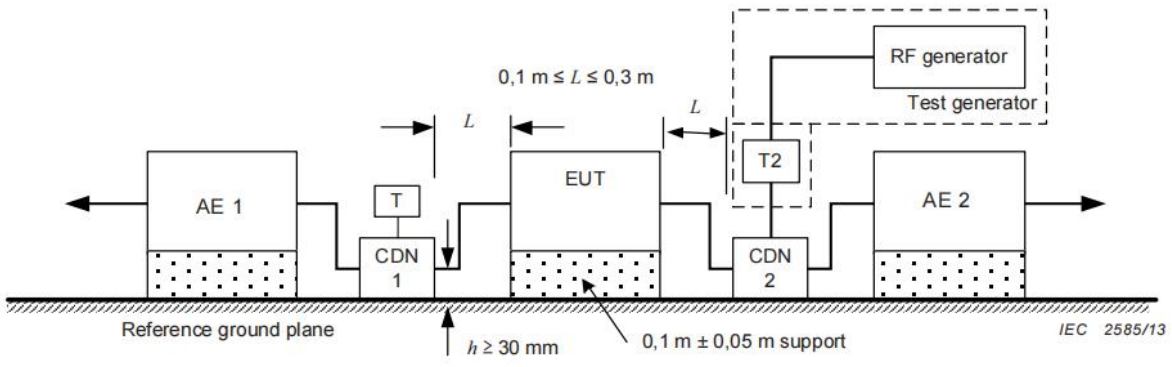
During the test the immunity of the EUT for conducted electromagnetic fields is checked .

The equipment to be tested is placed on an insulating support of 0,1 m ± 0,05 m height above a reference ground plane. a non conductive roller / caster in the range of 0,1 m ± 0,05 m above the reference ground plane can be used as an alternative to an insulating support. all cables exiting the EUT shall be supported at a height of at least 30 mm above the reference ground plane.The coupling and decoupling devices shall be placed on the reference ground plane, making direct contact with it at a distance of 0,1 m to 0,3 m from the EUT.

Requirements

Standard		EN IEC 61547:2023			
Basic standard		EN 61000-4-6			
Frequency range		0,15 - 80 MHz			
Port under test		Test level	Modulation	Dwell time	Step size
☐	AC input / output power	3 V	1 kHz, 80 % AM	≥ 0,5 s	≤ 1%
☒	DC input / output power [1] [2]	3 V	1 kHz, 80 % AM	≥ 0,5 s	≤ 1%
☐	Signal / control line [2]	3 V	1 kHz, 80 % AM	≥ 0,5 s	≤ 1%
1) Not applicable to equipment not connected to the mains while in use. 2) Only applicable to ports interfacing with cables whose whose total length may exceed 3 m.					

Test configuration



Test Results refer to Annex A.4

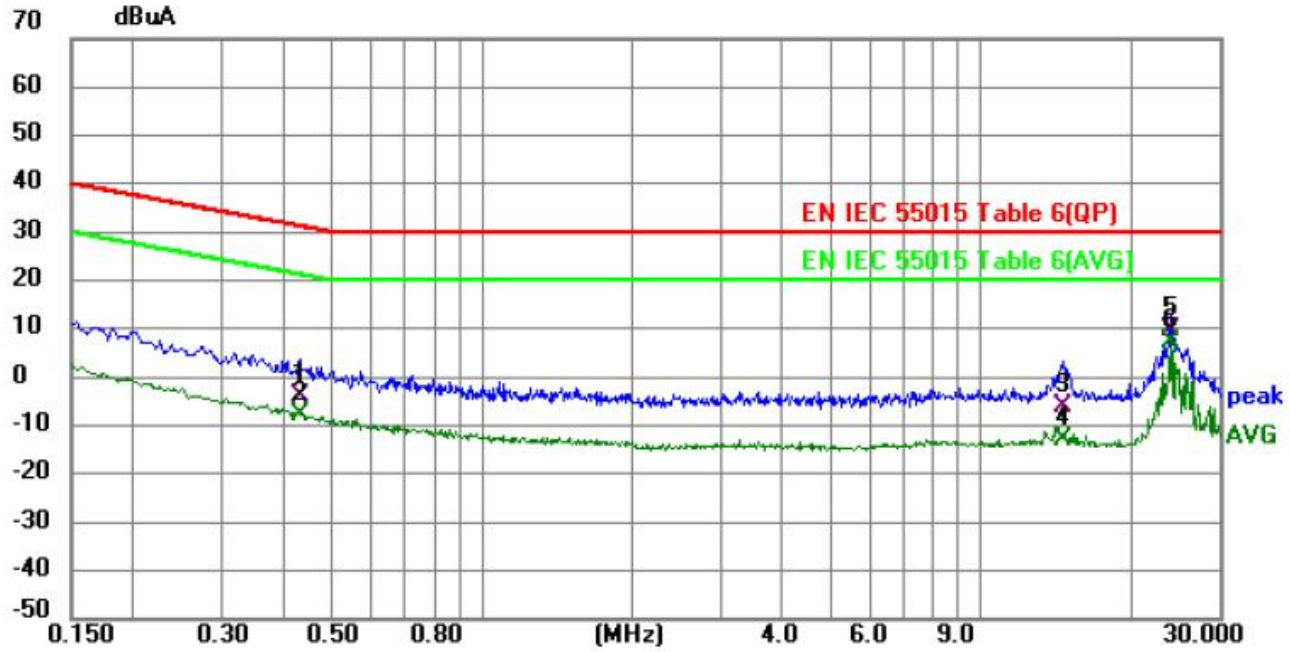
ANNEX A - TEST RESULTS

A.1. CONDUCTED DISTURBANCE TEST RESULTS

This Test Environment Conditions: 24.4℃, 52%RH

M/N: FlexWash-06_3525-48
Input voltage: DC24V
Operating mode: Mode 1 (worst case)

Pol:	P



No.	Frequency (MHz)	Reading (dBuA)	Factor (dB)	Level (dBuA)	Limit (dBuA)	Margin (dB)	Detector	P/F	Remark
1	0.4300	-44.91	41.15	-3.76	31.25	-35.01	QP	P	
2	0.4300	-49.11	41.15	-7.96	21.25	-29.21	AVG	P	
3	14.5620	-40.46	34.28	-6.18	30.00	-36.18	QP	P	
4	14.5620	-47.12	34.28	-12.84	20.00	-32.84	AVG	P	
5	24.0020	-24.54	34.28	9.74	30.00	-20.26	QP	P	
6 *	24.0020	-26.98	34.28	7.30	20.00	-12.70	AVG	P	

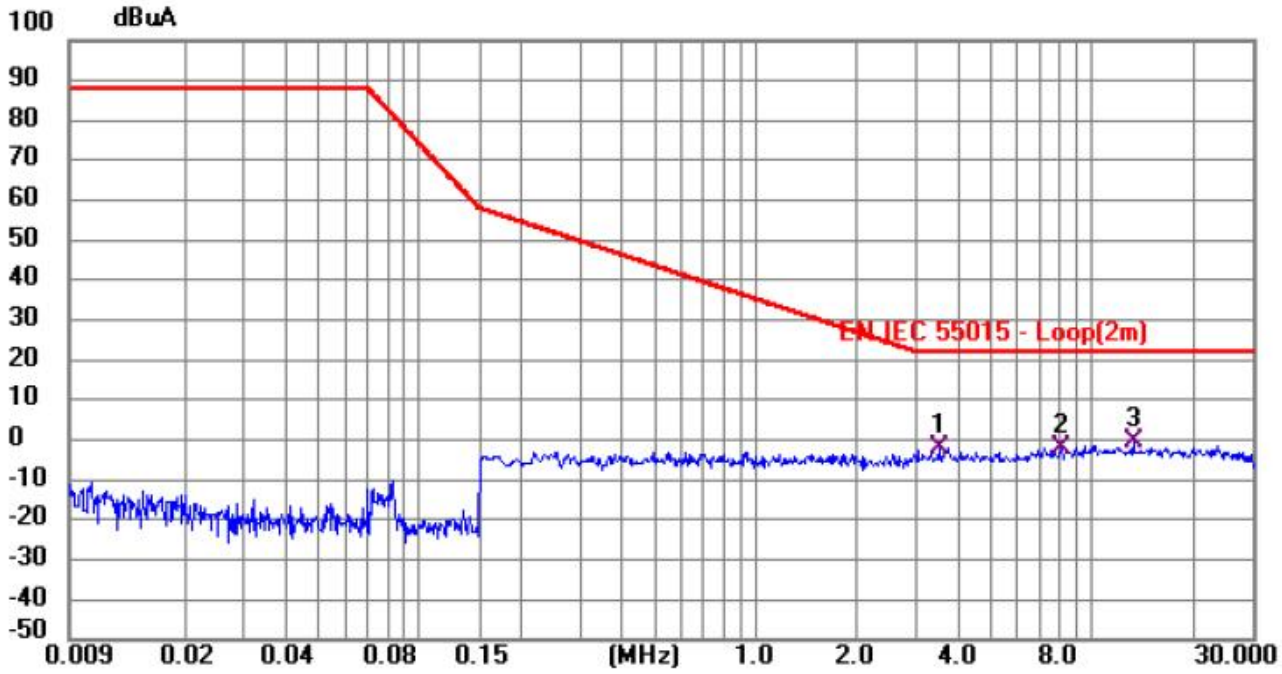
Remark:
Level=Reading Level + Correction Factor
Correction Factor=Cable Loss + CP Factor
(The Reading Level is recorded by software which is not shown in the sheet)

A.2. RADIATED DISTURBANCE TEST RESULTS (9kHz - 30MHz)

This Test Environment Conditions: 24.4℃, 52%RH

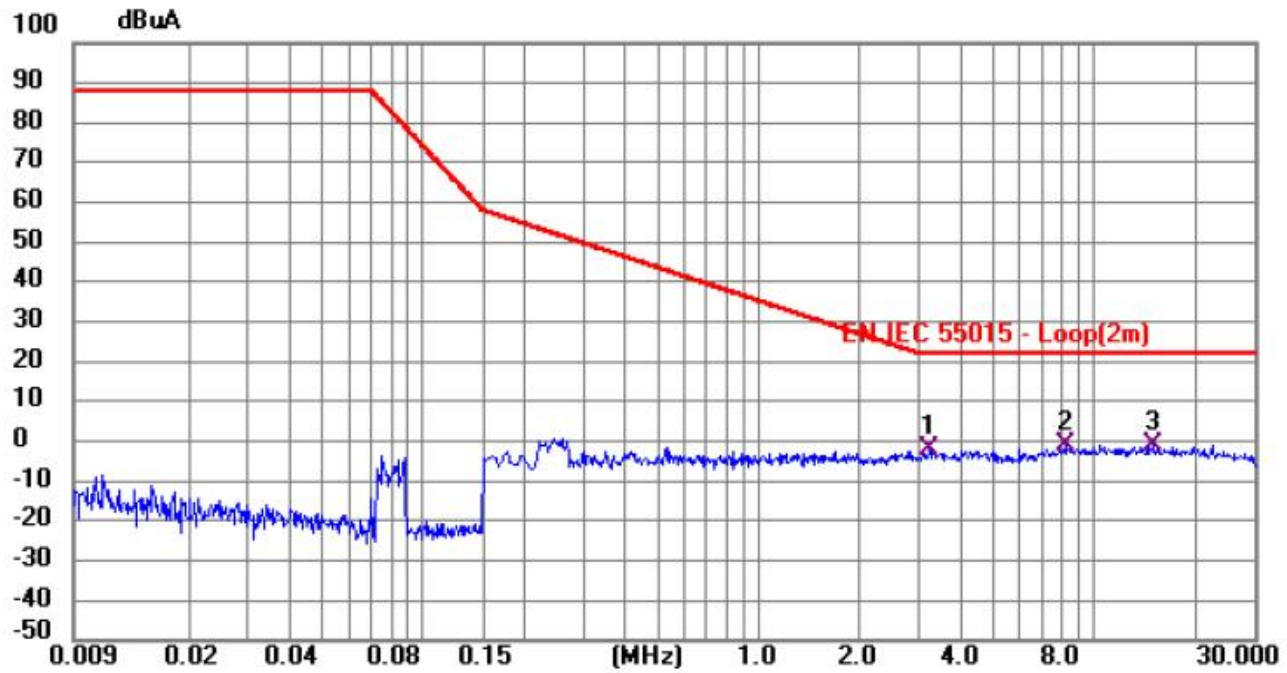
M/N: FlexWash-06_3525-48
Input voltage: DC24V
Operating mode: Mode 1 (worst case)

Pol:	X



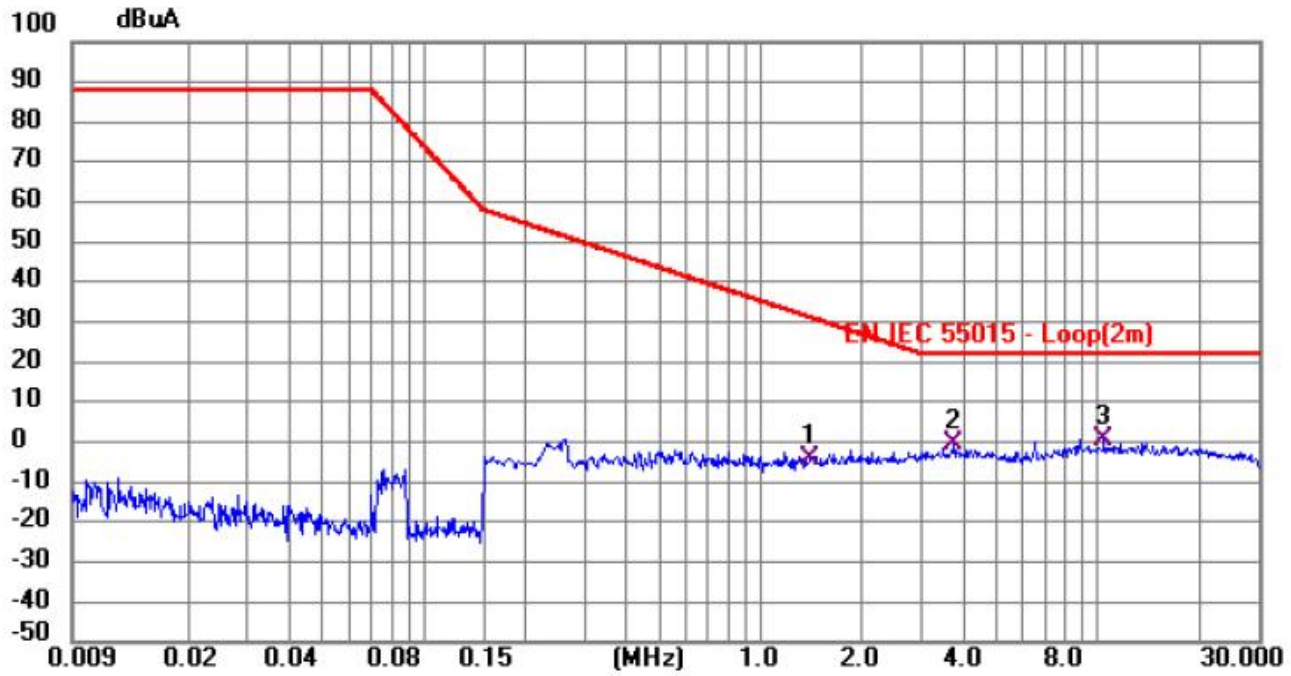
No.	Frequency (MHz)	Reading (dBuA)	Factor (dB)	Level (dBuA)	Limit (dBuA)	Margin (dB)	Detector	P/F	Remark
1	3.4980	-26.97	25.07	-1.90	22.00	-23.90	QP	P	
2	8.1735	-27.51	25.29	-2.22	22.00	-24.22	QP	P	
3 *	13.2810	-26.56	25.87	-0.69	22.00	-22.69	QP	P	

Pol:	Y



No.	Frequency (MHz)	Reading (dBuA)	Factor (dB)	Level (dBuA)	Limit (dBuA)	Margin (dB)	Detector	P/F	Remark
1	3.2370	-27.67	25.83	-1.84	22.00	-23.84	QP	P	
2	8.3040	-27.21	26.15	-1.06	22.00	-23.06	QP	P	
3 *	15.1170	-26.83	25.99	-0.84	22.00	-22.84	QP	P	

Pol:	Z



No.	Frequency (MHz)	Reading (dBuA)	Factor (dB)	Level (dBuA)	Limit (dBuA)	Margin (dB)	Detector	P/F	Remark
1	1.4010	-29.21	24.88	-4.33	31.15	-35.48	QP	P	
2	3.7545	-26.71	26.35	-0.36	22.00	-22.36	QP	P	
3 *	10.5090	-26.31	26.94	0.63	22.00	-21.37	QP	P	

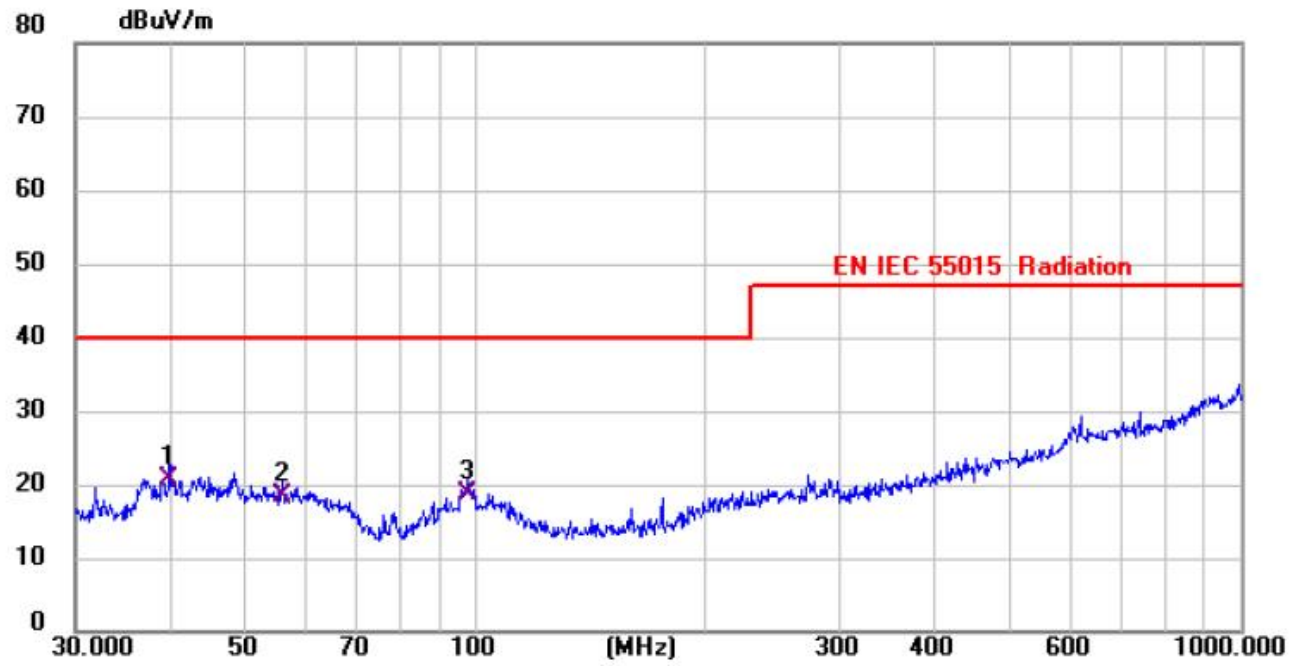
Remark:
Level=Reading Level + Correction Factor
Correction Factor=Antenna Factor + Cable Loss
(The Reading Level is recorded by software which is not shown in the sheet)

A.3. RADIATED DISTURBANCE TEST RESULTS (30MHz - 1GHz)

This Test Environment Conditions: 24.3℃, 53%RH

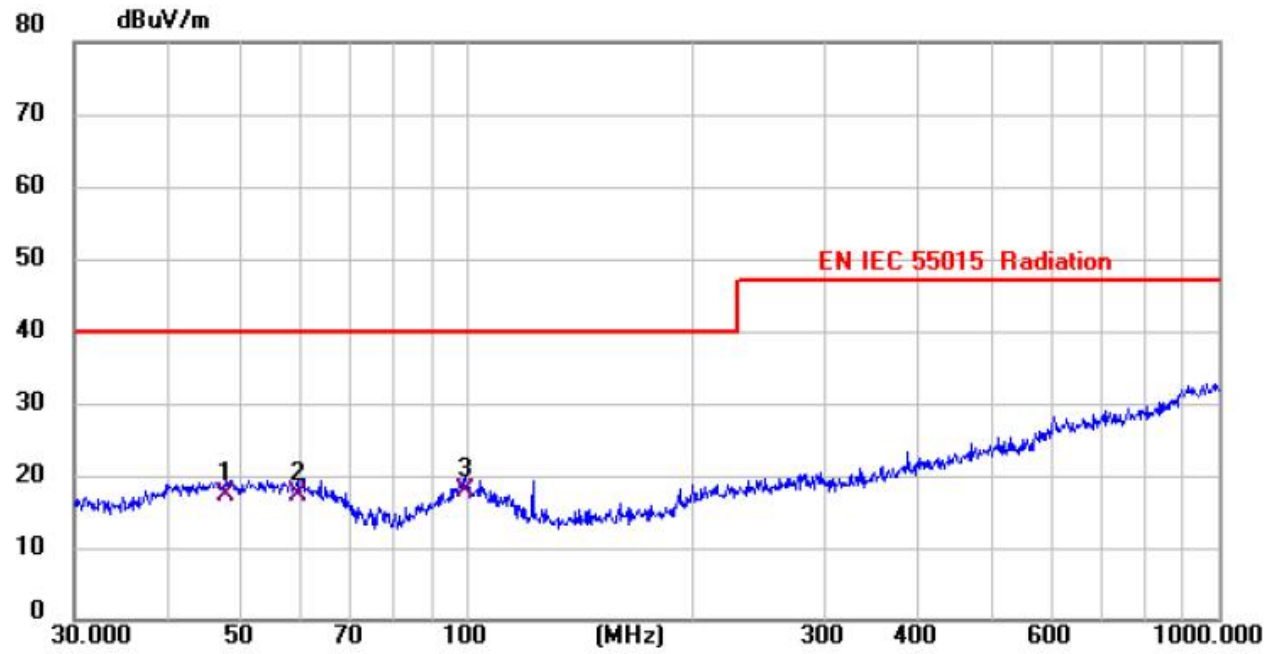
M/N: FlexWash-06_3525-48
Input voltage: DC24V
Operating mode: Mode 1 (worst case)

Pol:	Vertical



No.	Frequency (MHz)	Reading (dBuV)	Factor (dB/m)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Detector	Height (cm)	Azimuth (deg.)	P/F	Remark
1 *	39.9942	7.12	13.47	20.59	40.00	-19.41	QP			P	
2	56.0007	4.19	14.15	18.34	40.00	-21.66	QP			P	
3	98.0988	5.34	13.30	18.64	40.00	-21.36	QP			P	

Pol:	Horizontal



No.	Frequency (MHz)	Reading (dBuV)	Factor (dB/m)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Detector	Height (cm)	Azimuth (deg.)	P/F	Remark
1	47.8889	2.93	14.27	17.20	40.00	-22.80	QP			P	
2	59.5710	3.31	14.05	17.36	40.00	-22.64	QP			P	
3 *	99.7902	4.20	13.55	17.75	40.00	-22.25	QP			P	

Remark:
Level=Reading Level + Correction Factor
Correction Factor=Antenna Factor + Cable Loss
(The Reading Level is recorded by software which is not shown in the sheet)

A.4. IMMUNITY TEST RESULTS

ELECTROSTATIC DISCHARGE TEST RESULTS					
Test model	FlexWash-06_3525-48		Temperature	23.5℃	
Test mode	Mode 1		Humidity	52%	
Input voltage	DC24V		Pressure	1010mbar	
Discharge Mode	**Test Points**	**Test Valtage (kV) & polarity**	**Number of discharges/polarity**	**Discharge interval (s)**	**Performance Criteria**
Contact Discharge	Conductive surfaces	± 4	10	1	B
Air Discharge	Insulating surfaces	± 2&4&8	10	1	B
VCP	-	± 4	10	1	B
HCP	-	± 4	10	1	B
Note :					

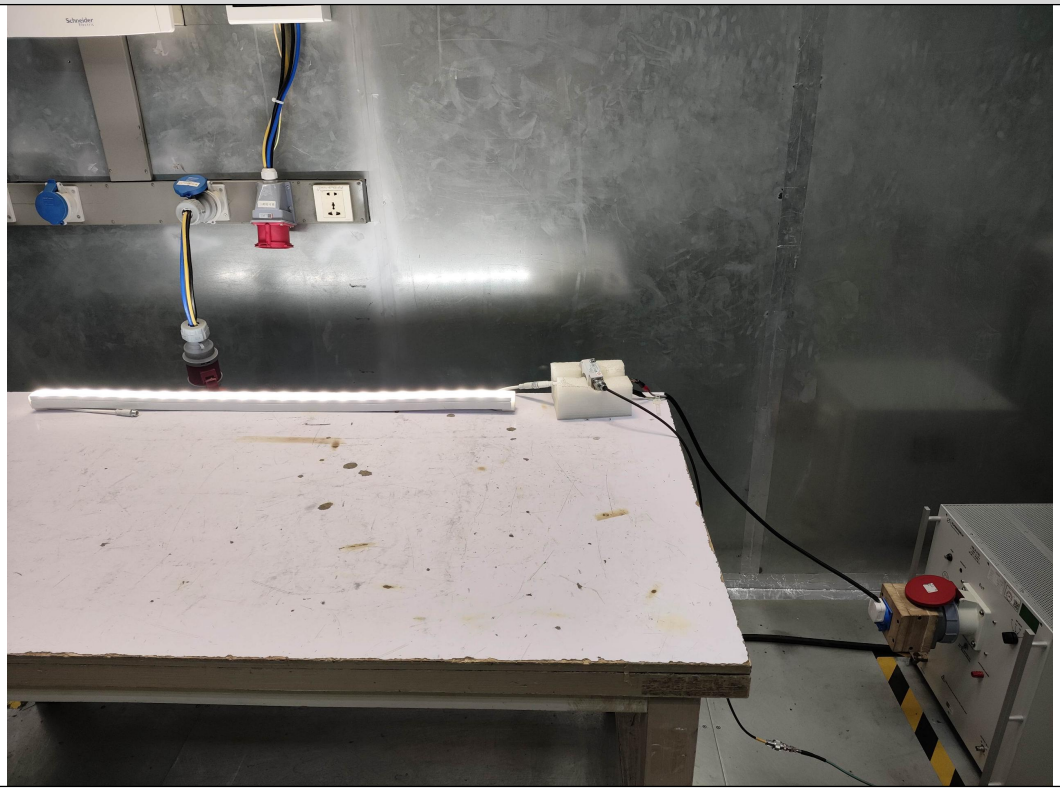
RADIO-FREQUENCY ELECTROMAGNETIC FIELD TEST RESULTS				
Test model	FlexWash-06_3525-48		Temperature	24.5℃
Test mode	Mode 1		Humidity	53%
Input voltage	DC24V		Pressure	1010mbar
Angle of EUT	**Antenna polarization**	**Frequency Range**	**Test Level**	**Performance Criteria**
0°	Vertical, Horizontal	80 - 1000 MHz	3 V/m	A
90°	Vertical, Horizontal	80 - 1000 MHz	3 V/m	A
180°	Vertical, Horizontal	80 - 1000 MHz	3 V/m	A
270°	Vertical, Horizontal	80 - 1000 MHz	3 V/m	A
Note : (1) Modulation:1kHz, 80% AM.				

ELECTRICAL FAST TRANSIENT/BURST TEST RESULTS				
Test model	FlexWash-06_3525-48		Temperature	24.0℃
Test mode	Mode 1		Humidity	54%
Input voltage	DC24V		Pressure	1010mbar
Port under test	**Test Level&polarity**	**Repetition Frequency**	**Test duration /polarity**	**Performance Criteria**
AC input power				
DC input power	± 0.5 kV	5 kHz	2min	B
Signal/control/load				
Note :				

INJECTED CURRENTS (RADIO-FREQUENCY COMMON MODE) TEST RESULTS				
Test model	FlexWash-06_3525-48		Temperature	24.0℃
Test mode	Mode 1		Humidity	54%
Input voltage	DC24V		Pressure	1010mbar
Port under test	**Test Level**	**Coupling method**	**Dwell time**	**Performance Criteria**
AC input power				
DC input power	3 V	CDN	1 seconds	A
Signal/control				
Note: (1) Frequency range:0.15MHz - 80MHz.				

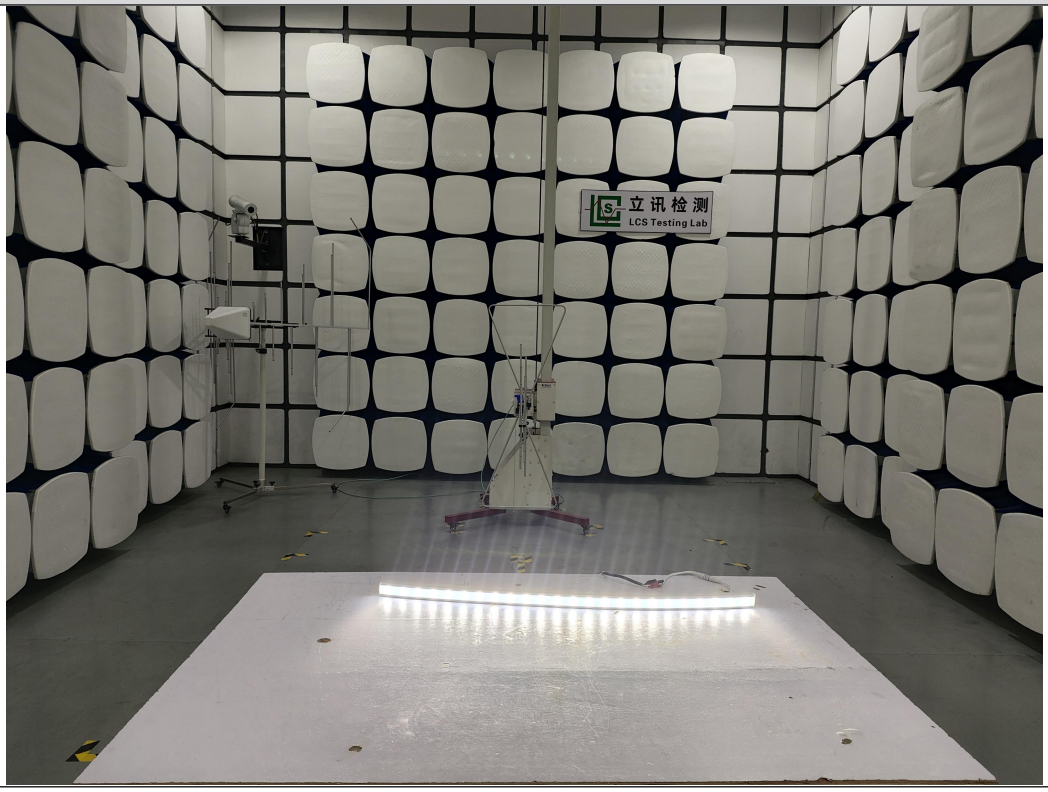
ANNEX B - TEST PHOTOS

B.1. Conducted Disturbance

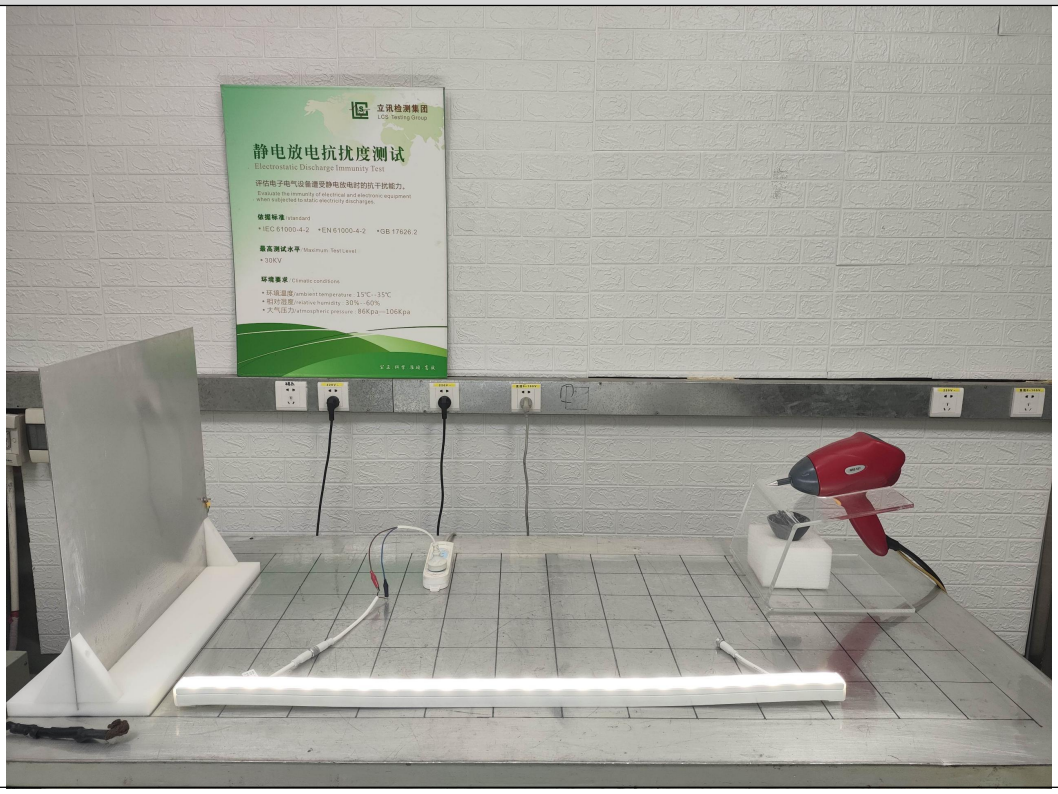


B.2. Radiated Disturbance (9kHz - 30MHz)

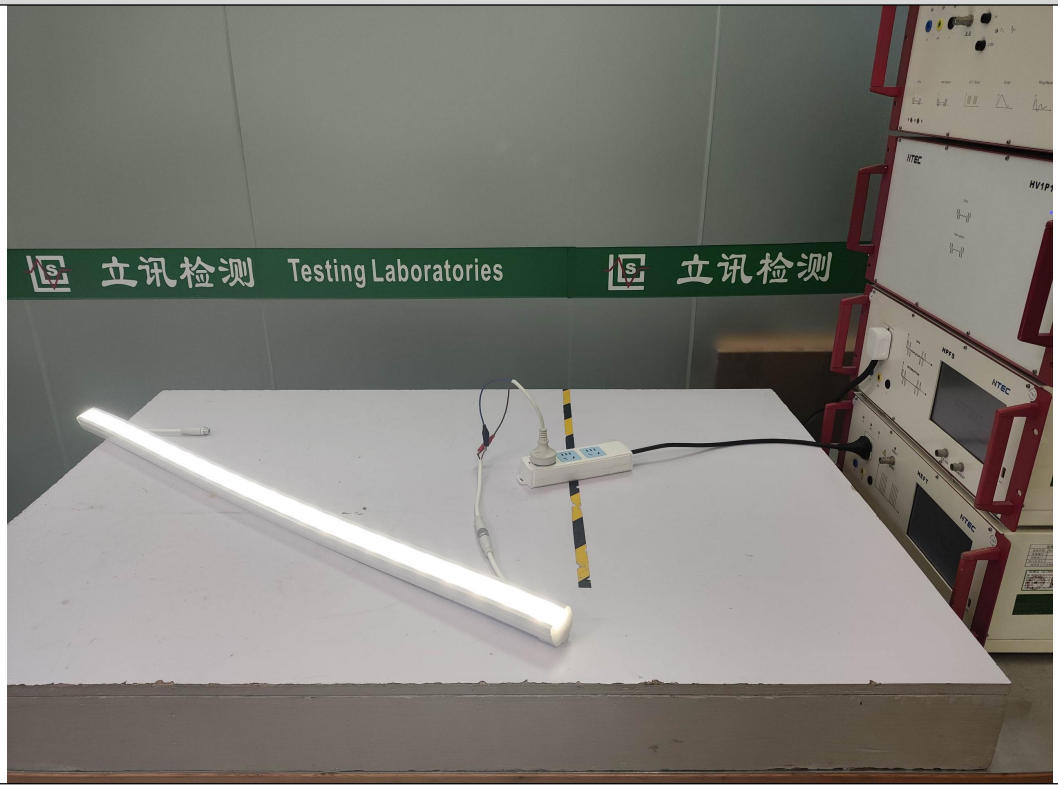
B.3. Radiated Disturbance (30MHz to 1GHz) & Radio-Frequency Electromagnetic Fields



B.4. Electrostatic Discharge



B.5. Electrical Fast Transient / Burst



B.6. Injected Currents (Radio-Frequency Common Mode)

ANNEX C - EXTERNAL AND INTERNAL PHOTOS OF THE EUT

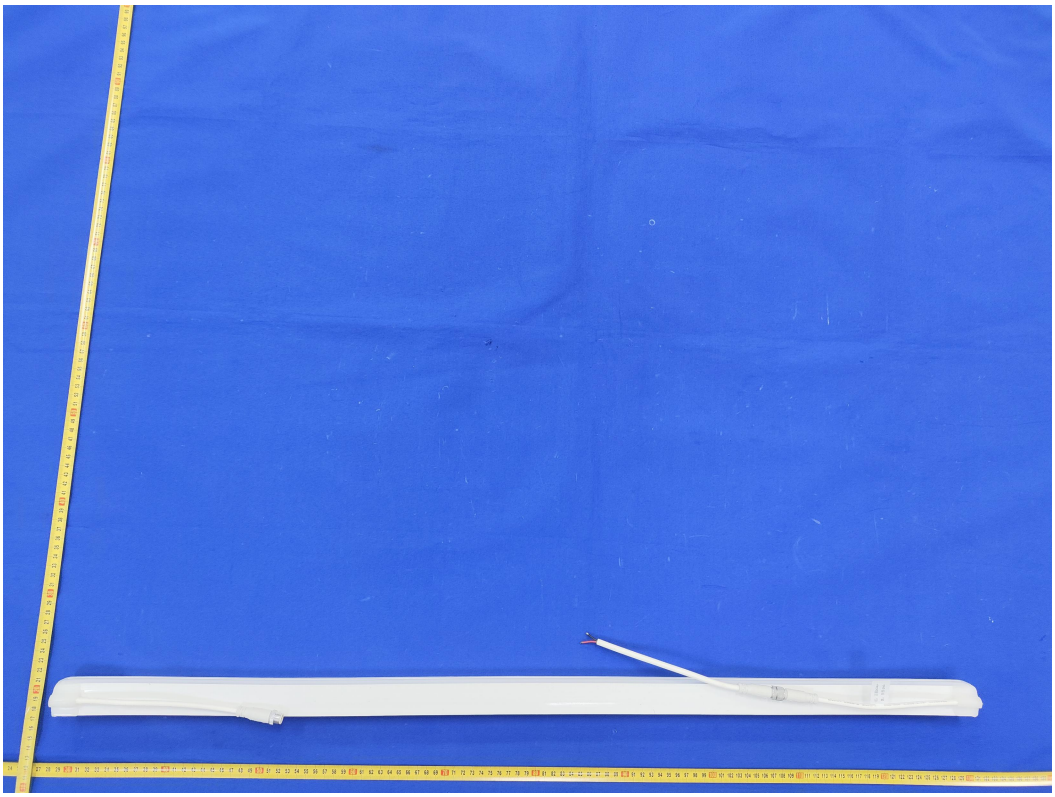


Photo.1

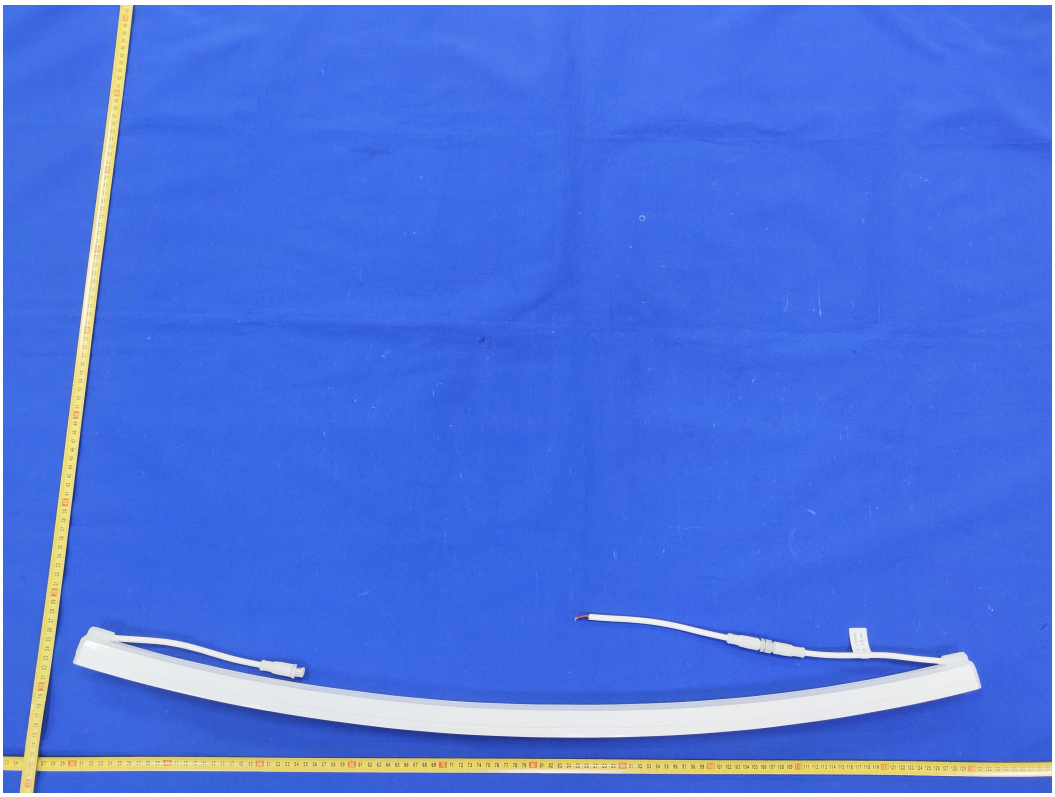


Photo.2

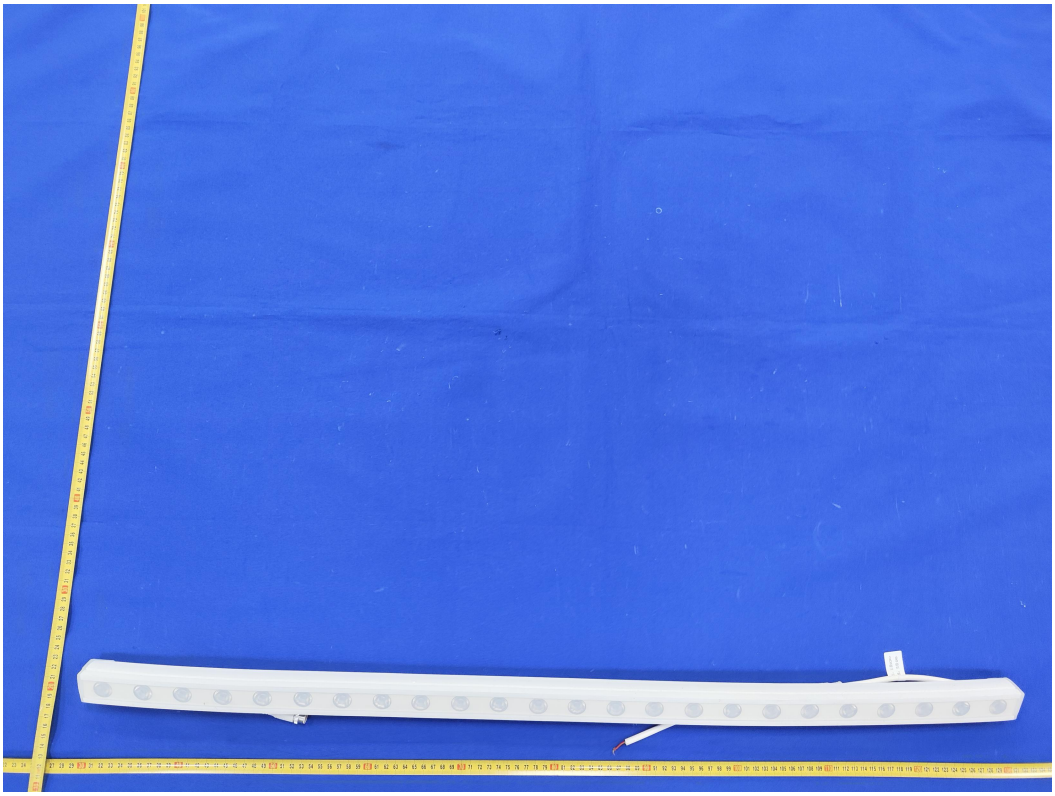


Photo.3

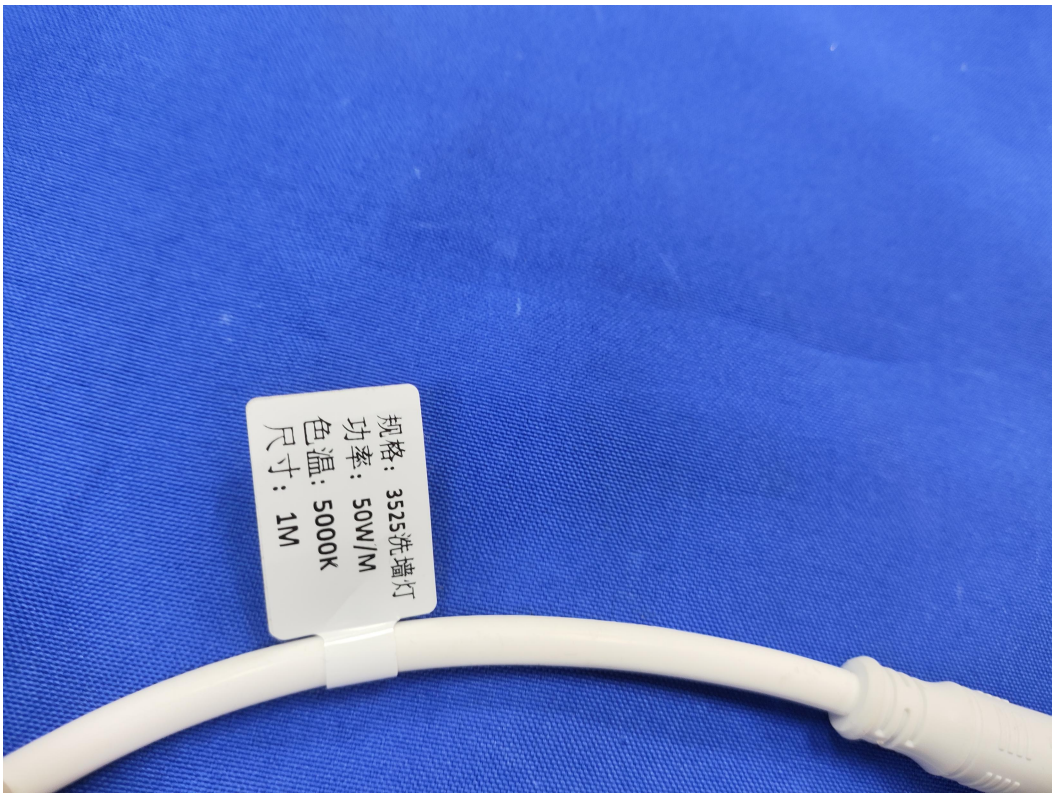


Photo.4

Photo.5

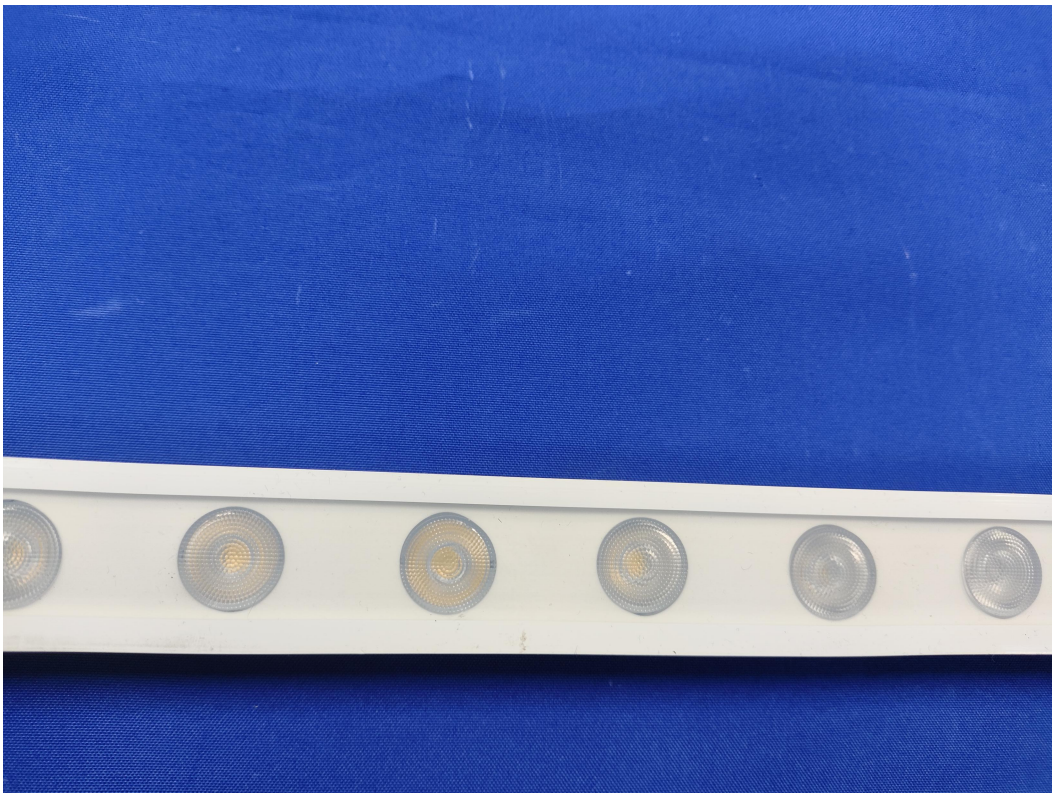


Photo.6

Photo.7

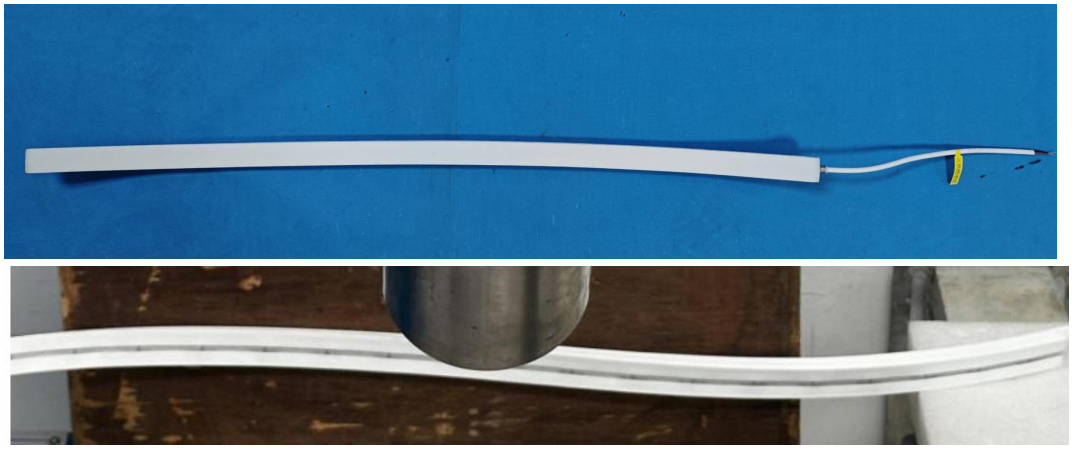


Photo.8

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