



VCCI TEST REPORT FOR

LED MODULE

Model : LED-FA012i2, LED-FA015i2, LED-FA019i2,
LED-FA023i2, LED-FA025i2, LED-FA027i2,
LED-FA031i2, LED-FA038i2

Trade Mark : **NEC**

Issued to

NEC Display Solutions, Ltd.

4-28. Mita 1-chome, Minato-ku Tokyo, 108-0073 Japan

Issued by

WH Technology Corp.

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1. GENERAL INFORMATION

Applicant : NEC Display Solutions, Ltd.

Address : 4-28. Mita 1-chome, Minato-ku Tokyo, 108-0073 Japan

Manufacturer 1 : Transtech LED Co.,Ltd.

Address : Room 201, Building A, No.1, QianWan 1st Road, ShenGang
Cooperation Zone, QianHai, SHENZHEN Guangdong 51800China

Manufacturer 2 : NEC Display Solutions, Ltd.

Address : 4-28. Mita 1-chome, Minato-ku Tokyo, 108-0073 Japan

Factory : Transtech LED Co.,Ltd.

Address : Room 201, Building A, No.1, QianWan 1st Road, ShenGang
Cooperation Zone, QianHai, SHENZHEN Guangdong 51800China

EUT : LED MODULE

Model Name : LED-FA012i2, LED-FA015i2, LED-FA019i2, LED-FA023i2,
LED-FA025i2, LED-FA027i2, LED-FA031i2, LED-FA038i2

Model Differences : All Models are identical with each other except model number,
lattice distance of LED.

MEASUREMENT PROCEDURE USED:

AGREEMENT OF VCCI : VCCI-CISPR 32

(TECHNICAL REQUIREMENTS CLASS A)

AGREEMENT OF VCCI : VCCI-CISPR 32

(INSTRUCTION FOR TEST CONDITIONS FOR EQUIPMENT UNDER TEST)

We hereby show that:

The measurements shown in this test report were made in accordance with and no deviation with the procedures indicated, and the maximum energy emitted by the equipment was found to be within the VCCI limits applicable.

This test result of this report applies to above tested sample only.

This test report shall not be reproducing in part without written approval of WH Certification Corp.



WH Technology Corp.

Date of Issue: Feb. 27, 2019
Report No. : CV19032301

Reviewed by:

Feb. 27, 2019

(Date)

A handwritten signature in blue ink, appearing to read "Mike Lee", is positioned above a horizontal line.

Mike Lee / Manager



1.1 DESCRIPTION OF THE TESTED SAMPLES

EUT

EUT Type : ☒ Engineer Type

Condition when received : ☒ Good ☐ Damage :

EUT Name : LED MODULE

Model Number : LED-FA012i2

Receipt Date : 01/18/2019

EUT Power Rating : ☒ AC Power
☐ DC Power
☐ DC 5V from PC
☐ DC 5V from Adaptor

I/O Port of EUT : AC port * 2
RJ45 * 2



1.2 SUMMARY OF TEST RESULT

Emission		
Test Standard	Test Item	Test Result
VCCI-CISPR 32:2016 Class A	Conducted Emission	Pass
VCCI-CISPR 32:2016 Class A	ISN	N/A
VCCI-CISPR 32:2016 Class A	Radiated Emission	Pass

1.3 TEST METHODOLOGY

EUT SYSTEM OPERATION

1. The EUT was configured according to ANSI C63.4 – 2003 Section 5.2, 7.1, 7.2 & CISPR 32 - 2015.
2. All I/O ports are connected to the appropriate peripherals.
3. Photos of test configuration please refer to appendix 1.
4. Perform the EMC testing procedures, and measure the maximum emission noise.



1.4 DESCRIPTION OF THE SUPPORT EQUIPMENTS

Setup Diagram

See test photographs attached in appendix I for the actual connections between EUT and support equipment.

Support Equipment

Peripherals Devices:

The EUT was configured according to V-4. All I/O ports were connected to the appropriate peripherals. All peripherals and cables are listed below (including internal device):

OUTSIDE SUPPORT EQUIPMENT							
No.	Equipment	Model	Serial No.	FCC ID/ BSMI ID	Trade name	Data Cable	Power Cord
1.	LED MODULE	LED-FA012i2	N/A	N/A	NEC	N/A	N/A
EUT							
No.	Equipment	Model	Serial No.	FCC ID/ BSMI ID	Trade name	Data Cable	Power Cord
1.	LED MODULE	LED-FA012i2	N/A	N/A	NEC	N/A	N/A

Note: All the above equipment /cable were placed in worse case position to maximize emission signals during emission test.

Grounding: Grounding was in accordance with the manufacturer's requirement and conditions for the intended use.

1.5 FEATURES OF EUT: PLEASE REFER TO USER MANUAL OR PRODUCT SPECIFICATION.



2. INSTRUMENT AND CALIBRATION

2.1 MEASURING INSTRUMENT CALIBRATION

The measuring equipment utilized to perform the tests documented in the report has been calibrated once a year or in accordance with the manufacturer's recommendations, and is traceable to recognized national standards.

2.2 TEST AND MEASUREMENT EQUIPMENT

The following list contains measurement equipment used for testing. The equipment conforms to the requirement of CISPR 16-1, ANSI C63.2 and. Other required standards.

Calibration of all test and measurement, including any accessories that may effect such calibration, is checked frequently to ensure the accuracy. Adjustments are made and correction factors are applied in accordance with the instructions contained in the respective.

TABLE LIST OF TEST AND MEASUREMENT EQUIPMENT

Test Site	Instrument	Manufacturer	Model No.	S/N	Next Cal. Date
Conduction	Spectrum (9K--3GHz)	R&S	FSP3	833387/010	2019/09/19
	EMI Receiver	R&S	ESHS10	830223/008	2019/05/21
	LISN	Rolf Heine Hochfrequenztechnik	NNB-2/16z	98062	2019/05/24
	ISN	Schwarzbeck	8-Wire ISN CAT5	CAT5-8158-00 94	2019/09/20
	RF Cable	N/A	N/A	EMI-3	2019/10/18
Radiation	Bilog antenna(30M-1G)	ETC	MCTD2786B	BLB16M0400 4/JB-5-004	2019/05/02
	Double Ridged Guide Horn antenna(1G-18G)	ETC	MCTD 1209	DRH15N0 2009	2019/11/22
	Horn antenna (18G-26G)	com-power	AH-826	81000	2019/08/14
	Pre amplifier (30M-1G)	EMC INSTRUMENT	EMC9135	980334	2019/05/03
	Microwave Preamplifier (1G-18G)	EMC INSTRUMENT	EMC051845	980108&AT -18001	2019/10/22
	Pre amplifier (18G~26G)	MITEQ	JS4-18002600-30 -5A	808329	2019/08/09
	EMI Test Receiver	R&S	ESVS30 (20M-1000MHz)	863342/012	2019/11/27
	RF Cable	EMCI	N male on end of	30m	2019/10/18



	(open site)		both sides (EMI4)		
	RF CABLE (1~26.5G)	HARBOUT INDUSTRIES	LL142MI(4M+4M)	NA	2019/03/07
	RF CABLE (1~26.5G)	HARBOUR INDUSTRIES	LL142MI(7M)	NA	2019/08/10
	Spectrum (9K--7GHz)	R&S	FSP7	830180/006	2019/02/24
	Spectrum (9K--40GHz)	AGILENT	8564EC	4046A0032	2020/01/01
Software	e3	AUDIX	N/A	N/A	N/A



2.3 TEST PERFORMED

Conducted emissions were investigated over the frequency range from 0.15MHz to 30MHz using a receiver which bandwidth is set at 9kHz.

Radiated emissions were investigated over the frequency range from 30MHz to 1000MHz using a receiver which bandwidth is set at 120kHz. 1000MHz to 6000MHz using a receiver which bandwidth is set at 1MHz, And Radiated measurement was performed at distance that from an antenna to EUT is 3meters.

2.4 APPENDIX

Appendix A: Measurement Procedure for Main Power Port Conducted Emissions

The measurements are performed in a WH lab room. The EUT was placed on non-conduction 1.0m x 1.5m table, which is 0.8 meters above an earth-grounded.

Power to the EUT was provided through the LISN which has the Impedance (50ohm/50uH) vs. Frequency Characteristic in accordance with the standard. Powers to the LISNs were filtered to eliminate ambient signal interference and these filters were bonded to the ground plane. Peripheral equipment required to provide a functional system (support equipment) for EUT testing was powered from the second LISN through a ganged, metal power outlet box which is bonded to the ground plane at the LISN.

If the EUT is supplied with a flexible power cord, the power cord length in excess of the distance separating the EUT from the LISN shall be folded back and forth at the center of the lead so as to form a bundle not exceeding 40cm in length. If the EUT is provided with a permanently coiled power cord, bundling of the cord is not required. If the EUT is supplied without a power cord, the EUT shall be connected to the LISN by a power cord of the type specified by the manufacturer which shall not be longer than 1 meter. The excess power cord shall be bundled as described above. If a non-flexible power cord is provided with the EUT, it shall be cut to the length necessary to attach the EUT to the LISN and shall not be bundled.

The interconnecting cables were arranged and moved to get the maximum measurement. Both the line of power cord, hot and neutral, was measured.



The highest emissions were analyzed in details by operating the spectrum analyzer in fixed tuned mode to determine the nature of the emissions and to provide information which could be useful in reducing their amplitude.



Appendix B: Test Procedure for Radiated Emissions

Preliminary Measurements in the Anechoic Chamber

The radiated emissions are initially measured in the anechoic chamber at a measurement distance of 3 meters. Desktop EUT are placed on a wooden stand 0.8 meter in height. The measurement antenna is 3 meters from the EUT. The test setup in anechoic chamber is the same as open site. The turntable rotated 360°. The antenna height is varied from 1-2.5m. The primary objective of the radiated measurements in the anechoic chamber is to identify the frequency spectrum in the absence of the electromagnetic environment existing on the open test site. The frequencies can then be pre-selected on the open test site to obtain the corresponding amplitude. The initial scan is made with the spectrum analyzer in automatic sweep mode. The spectrum peaks are then measured manually to determine the exact frequencies.

Measurements on the Open Site or Chamber

The radiated emissions test will then be repeated on the open site or chamber to measure the amplitudes accurately and without the multiple reflections existing in the shielded room. The EUT and support equipments are set up on the turntable. Desktop EUT are set up on a wooden stand 0.8 meter above the ground.

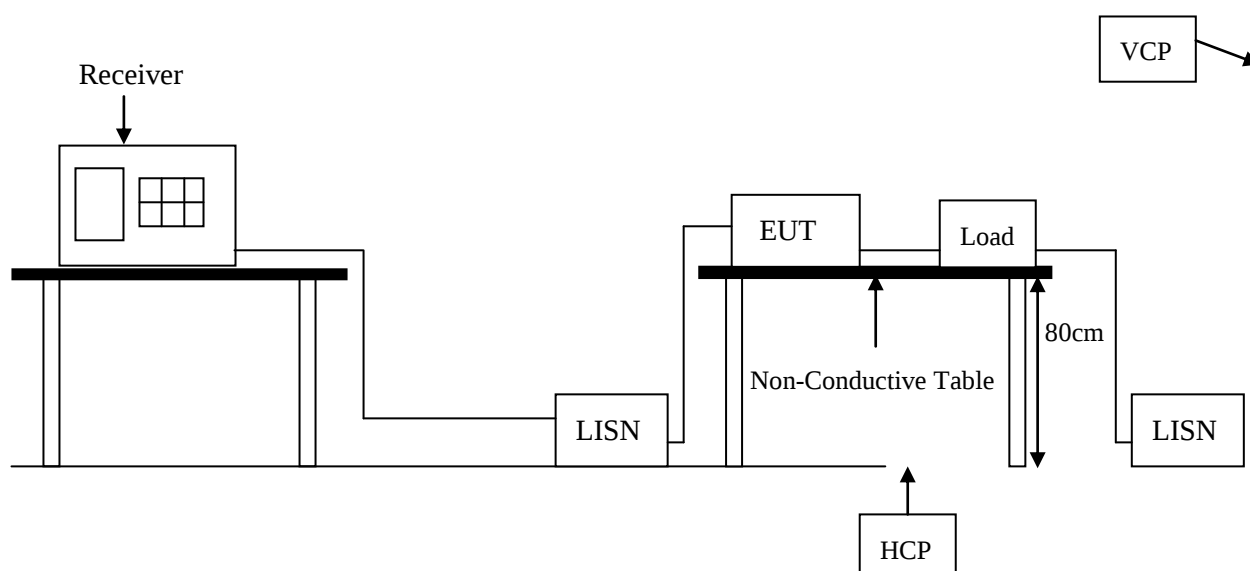
For the initial measurements, the receiving antenna is varied from 1-4 meter height and is changed in the vertical plane from vertical to horizontal polarization at each frequency. Below 1GHz reading are recorded with the quasi-peak detector with 120kHz bandwidth. Above 1GHz reading are recorded with the quasi-peak detector with 1MHz bandwidth. For frequency between 30MHz and 6000MHz, the reading is recorded with peak detector or quasi-peak detector.

At the highest amplitudes observed, the EUT is rotated in the horizontal plane while changing the antenna polarization in the vertical plane to maximize the reading. The interconnecting cables were arranged and moved to get the maximum measurement. Once the maximum reading is obtained, the antenna elevation and polarization will be varied between specified limits to maximize the readings.



3. CONDUCTED EMISSION MEASUREMENT

3.1 TEST SET-UP (PLEASE REFER TO APPENDIX 1)



3.2 LIMIT

Frequency range (MHz)	CLASS A	
	QP dB(uV)	Average dB(uV)
0.15-0.5	79 dBuV	66 dBuV
0.5-5.0	73 dBuV	60 dBuV
5.0-30.0	73 dBuV	60 dBuV

Note 1: 1 μ V/m is regarded as 0 dB.

Note 2: If the average limits is met in the measurement with quasi-peak detector, the measurement with average detector at the same frequency is unnecessary

Note 3: The lower limit shall apply at the transition frequency.

Frequency range (MHz)	CLASS B	
	QP dB(uV)	Average dB(uV)
0.15-0.5	66 - 56 dBuV	56 - 46 dBuV
0.5-5.0	56 dBuV	46 dBuV
5.0-30.0	60 dBuV	50 dBuV



Note 1: 1 $\mu\text{V/m}$ is regarded as 0 dB.

Note 2: The limits shall decrease linearly with the logarithm of the frequency in the range 150kHz - 500kHz

Note 3: If the average limit is met in the measurement with quasi-peak detector, the measurement with average detector is unnecessary.

Note 4: The lower limit shall apply at the transition frequency.

Remark: In the above table, the tighter limit applies at the band edges.

3.3 TEST PROCEDURE

The EUT and simulators are connected to the main power through a line impedance stabilization network (LISN). It provides a 50 ohm / 50 μH coupling impedance for the measuring equipment. The peripheral devices are also connected to the main power through a LISN that provides a 50 ohm / 50 μH coupling impedance with 50 ohm termination. (Please refer to the block diagram of the test setup and photograph.)

Both sides of AC line are checked for the maximum conducted emission interference. In order to find the maximum emissions, the relating positions of equipment and all of the interference cables must be changed according to Section 5.2.2 of V-3.regulation: The measurement procedure on conducted emission interference.

The resolution bandwidth of the field strength meter is set at 9kHz.

This test was performed at CDB-SJ (Conducted Interference Measurement),
Registration No. : C-4909 and Registration No. : T-2389.

3.4 TEST SPECIFICATION

AGREEMENT OF VCCI FOR INTERFERENCE BY ITE.

3.5 EUT OPERATION

All the test configurations are shown in appendix 2 as follow.



3.6 RESULT: PASSED

EMI Receiver/Spectrum Analyzer Configuration (for the frequencies tested)

Frequency Range:	150kHz--30MHz		
Detector Function:	Quasi-Peak / Average		
Resolution Bandwidth:	9kHz		
Temperature :	21 °C	Humidity :	50% RH

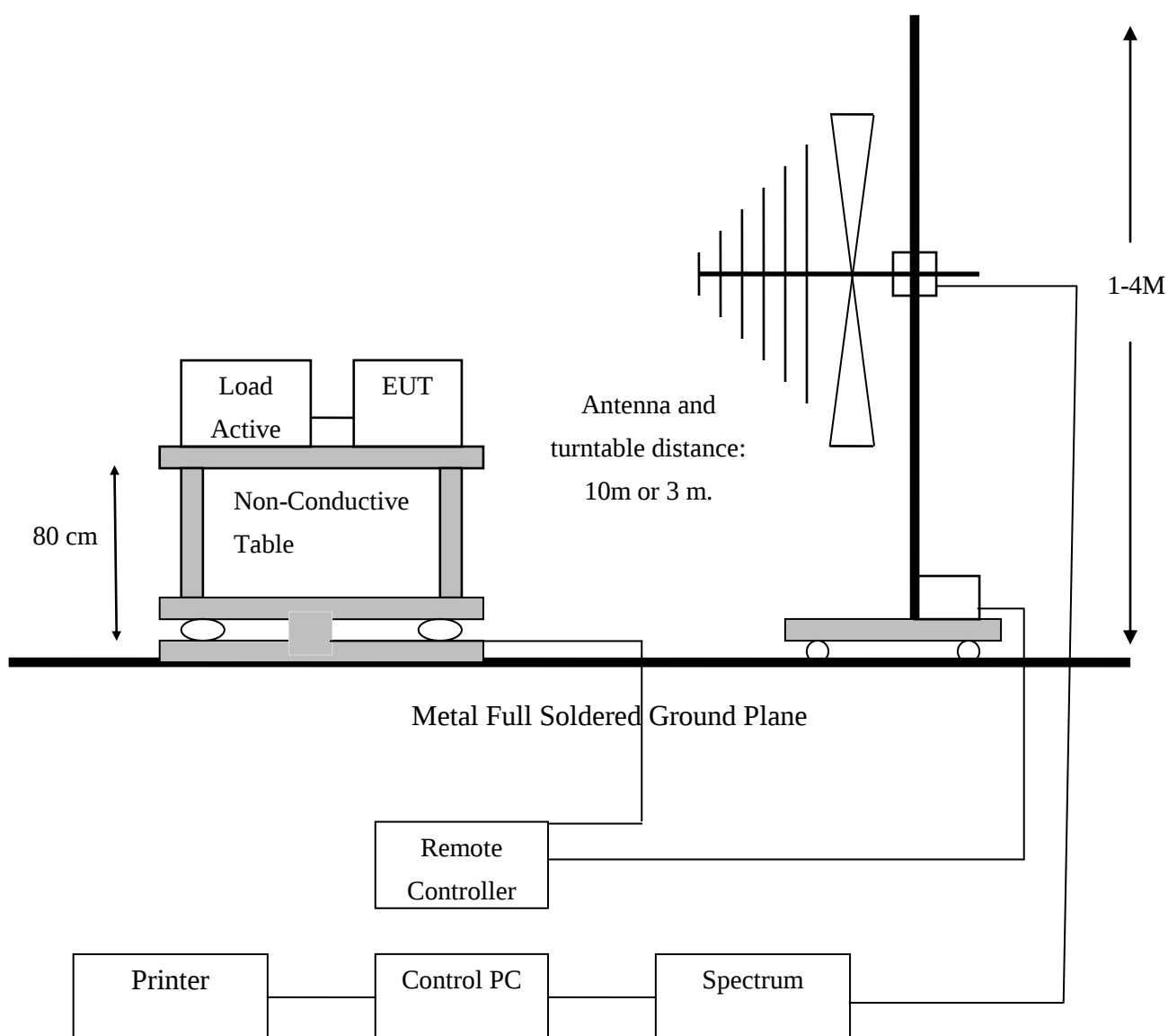
3.7 TEST DATA:

Please refer to appendix 1.



4. RADIATED EMISSION MEASUREMENT

4.1 TEST SETUP (PLEASE REFER TO APPENDIX 1)





4.2 LIMIT FOR RADIATED DISTURBANCE

4.2.1 BELOW 1 GHZ

Frequency	Class A	
MHz	Distance (Meter)	Limit dB μ V/m
30 ~ 230	10	40
230 ~ 1000	10	47
Note 1: The lower limit shall apply at the transition frequency. Note 2: A Measuring distance of 10 m is primary requirement. However, distance of either 3m or 30m may also be allowed for the measurement with facilities registered as such in accordance with the regulations for voluntary .if the measuring distance is 3m, add 10dB to the quasi-peak limit above. If the measuring distance is 30m, subtract 10dB from the quasi-peak limit above Note 3: 1 μV/m is regarded as 0 dB.		

Frequency	Class B	
MHz	Distance (Meter)	Limit dB μ V/m
30 ~ 230	10	30
230 ~ 1000	10	37
Note 1: The lower limit shall apply at the transition frequency. Note 2: A Measuring distance of 10 m is primary requirement. However, distance of either 3m or 30m may also be allowed for the measurement with facilities registered as such in accordance with the regulations for voluntary .if the measuring distance is 3m, add 10dB to the quasi-peak limit above. If the measuring distance is 30m, subtract 10dB from the quasi-peak limit above Note 3: 1 μV/m is regarded as 0 dB.		

Remark: In the above table, the tighter limit applies at the band edges



4.2.2 ABOVE 1 GHZ

Limits for radiated disturbance of Class A ITE at a measurement distance of 3 m

Frequency GHz	Average limit dB(μ V/m)	Peak limit dB(μ V/m)
1-3	56	76
3-6	60	80
NOTE 1: The lower limit applies at the transition frequency. NOTE 2: 1μV/m is regarded as 0 dB NOTE 3: If the average limit is met in the measurement with peak detector, the measurement with average detector at the same frequency is unnecessary. NOTE 4: Other than 3m(dm) measurement, use the equation followings, $E_{3m}=E_{dm}+20\log(d/3)$ dBμV/m d: measurement distance(m)		

Limits for radiated disturbance of Class B ITE at a measurement distance of 3 m

Frequency GHz	Average limit dB(μ V/m)	Peak limit dB(μ V/m)
1-3	50	70
3-6	54	74
NOTE 1: The lower limit applies at the transition frequency. NOTE 2: 1μV/m is regarded as 0 dB NOTE 3: If the average limit is met in the measurement with peak detector, the measurement with average detector at the same frequency is unnecessary. NOTE 4: Other than 3m(dm) measurement, use the equation followings, $E_{3m}=E_{dm}+20\log(d/3)$ dBμV/m d: measurement distance(m)		



4.3 TEST PROCEDURE

The EUT and its simulators are placed on turn table, non-conductive and wooden table, which is 0.8 meter above ground. The turn table rotates 360 degrees to determine the position of the maximum emission level. The EUT was positioned such that distance from antenna to the EUT is 10 meters. For the frequency range is above 1 GHz, the EUT was positioned such that distance from antenna to the EUT is 3 meters.

The antenna is moved up and down between 1 meter and 4 meters to receive the maximum emission level.

Both horizontal and vertical polarizations of the antenna are set on measurement. In order to find the maximum emission, all of the interference cables must be manipulated according to EN 55032 regulation: the test procedure of the radiated emission measurement.

The bandwidth set on the field strength is 120kHz when the frequency range is below 1GHz. The bandwidth set on the field strength is 1MHz when the frequency range is above 1GHz.

The radiated test was performed at WH Lab's Open Site (OSA-SS)
This site was authorized by VCCI, Registration No. : R-4418&G-20015.

4.4 TEST SPECIFICATION

AGREEMENT OF VCCI FOR INTERFERENCE BY ITE.

4.5 EUT OPERATION

All the test configurations are shown in appendix 2 as follow.

4.6 RESULT: PASSED



4.7 TEST DATA:

Please refer to appendix 1.



5. MEASUREMENT UNCERTAINTY

Measurement Item	Measurement Frequency	Polarization	Uncertainty
Conducted Emission	9kHz ~ 30MHz	LINE/NEUTRAL	1.78 dB
Radiated Emission	30MHz ~ 1,000MHz	Horizontal	3.59 dB
		Vertical	3.89 dB
	1,000MHz ~ 18GHz	Horizontal	5.00 dB
	1,000MHz ~ 18GHz	Vertical	4.64 dB

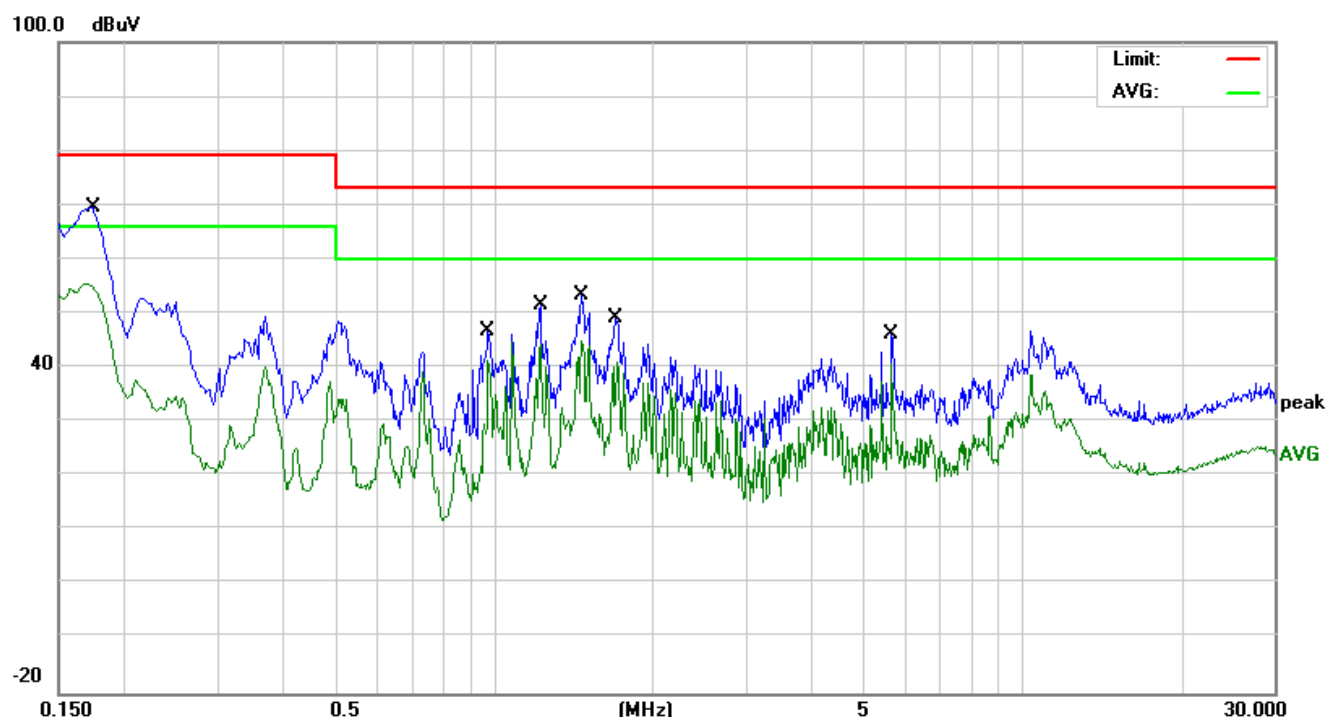


APPENDIX 1

SUMMARY OF TEST RESULT

Test Data Of Conducted Emission Measurement (LIVE)

Mode: Roll "H"

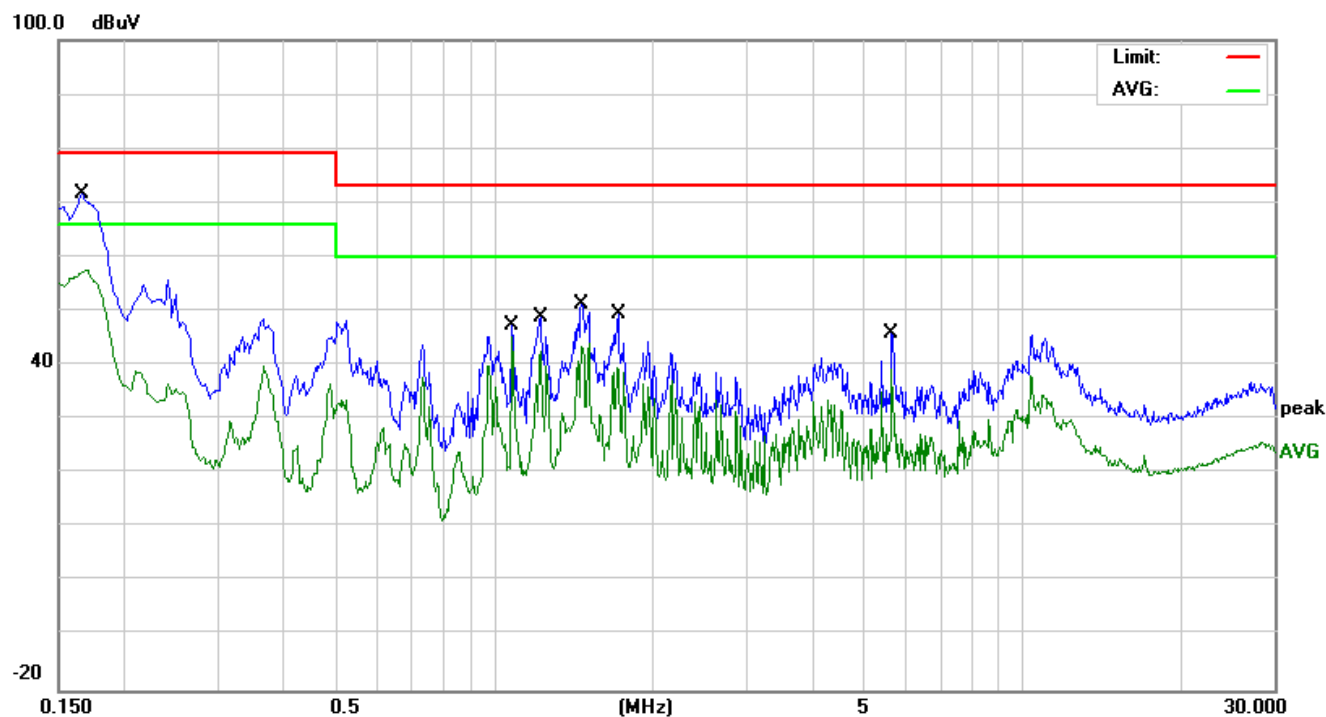


No.	Mk.	Freq.	Reading Level	Correct Factor	Measurement	Limit	Over		
		MHz	dBuV	dB	dBuV	dBuV	dB	Detector	Comment
1	*	0.1737	59.79	9.73	69.52	79.00	-9.48	QP	
2		0.1737	45.80	9.73	55.53	66.00	-10.47	AVG	
3		0.9735	36.86	9.75	46.61	73.00	-26.39	QP	
4		0.9735	31.56	9.75	41.31	60.00	-18.69	AVG	
5		1.2225	41.87	9.75	51.62	73.00	-21.38	QP	
6		1.2225	34.65	9.75	44.40	60.00	-15.60	AVG	
7		1.4638	43.60	9.77	53.37	73.00	-19.63	QP	
8		1.4638	35.32	9.77	45.09	60.00	-14.91	AVG	
9		1.6979	39.35	9.78	49.13	73.00	-23.87	QP	
10		1.6979	31.23	9.78	41.01	60.00	-18.99	AVG	
11		5.6531	36.31	9.95	46.26	73.00	-26.74	QP	
12		5.6531	30.74	9.95	40.69	60.00	-19.31	AVG	



Test Data Of Conducted Emission Measurement (NEUTRAL)

Mode: Roll "H"

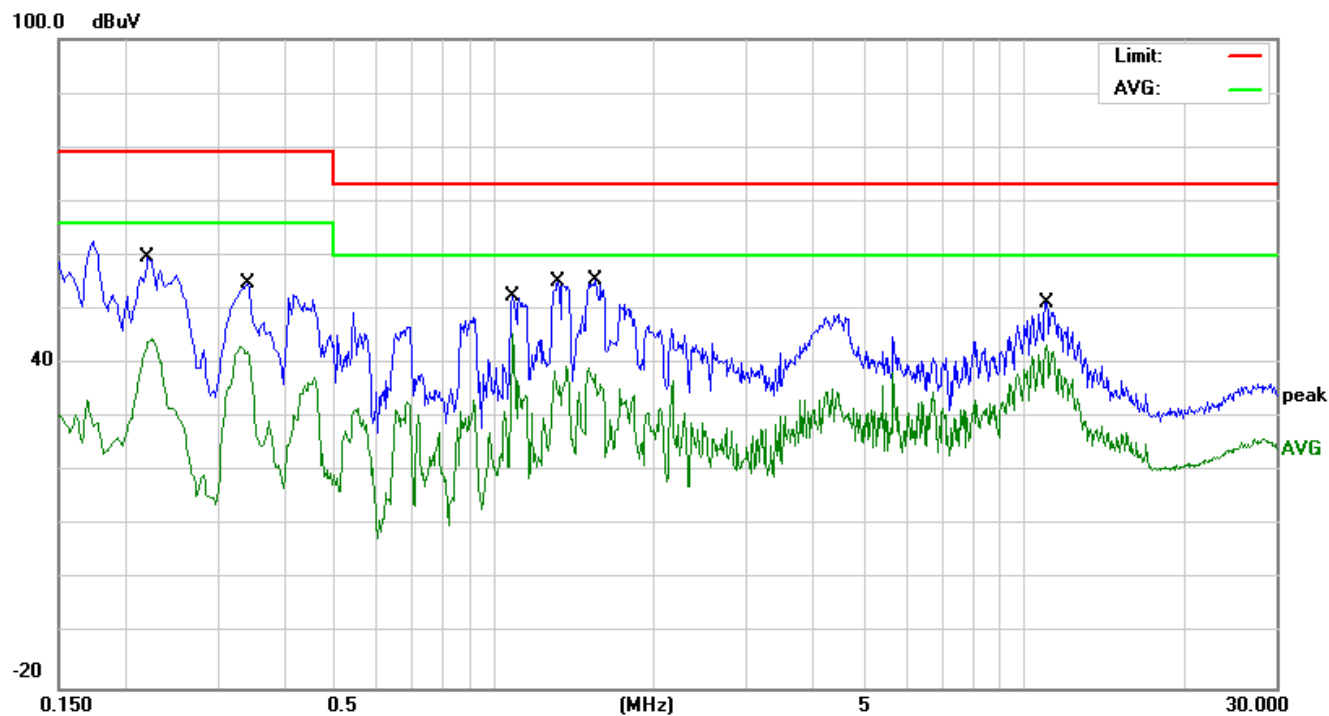


No.	Mk.	Freq. MHz	Reading Level dBuV	Correct Factor dB	Measure- ment dBuV	Limit dBuV	Over dB	Detector	Comment
1	*	0.1658	61.83	9.73	71.56	79.00	-7.44	QP	
2		0.1658	47.87	9.73	57.60	66.00	-8.40	AVG	
3		1.0823	37.53	9.75	47.28	73.00	-25.72	QP	
4		1.0823	35.42	9.75	45.17	60.00	-14.83	AVG	
5		1.2225	39.11	9.75	48.86	73.00	-24.14	QP	
6		1.2225	32.92	9.75	42.67	60.00	-17.33	AVG	
7		1.4638	41.58	9.77	51.35	73.00	-21.65	QP	
8		1.4638	34.14	9.77	43.91	60.00	-16.09	AVG	
9		1.7160	39.80	9.78	49.58	73.00	-23.42	QP	
10		1.7160	29.85	9.78	39.63	60.00	-20.37	AVG	
11		5.6531	35.83	9.95	45.78	73.00	-27.22	QP	
12		5.6531	29.36	9.95	39.31	60.00	-20.69	AVG	



Test Data Of Conducted Emission Measurement (LIVE)

Mode: White

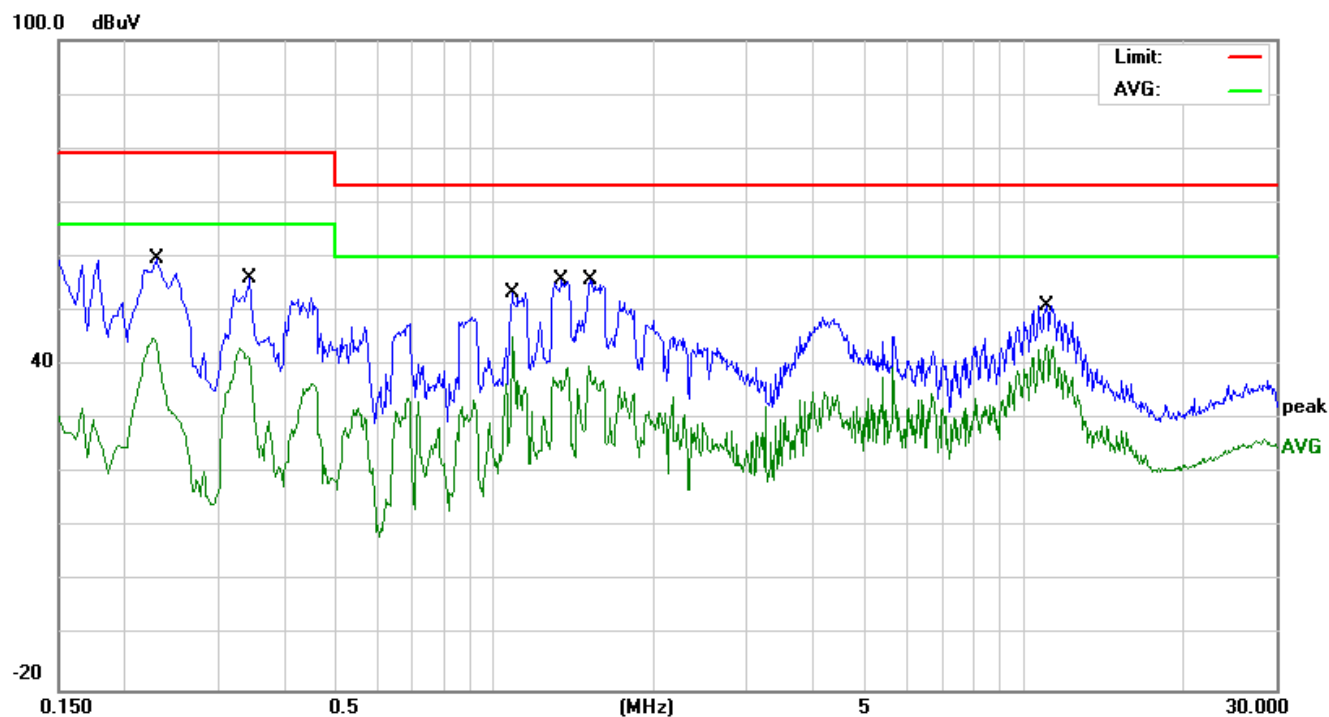


No.	Mk.	Freq.	Reading Level	Correct Factor	Measurement	Limit	Over		
		MHz	dBuV	dB	dBuV	dBuV	dB	Detector	Comment
1		0.2220	49.82	9.76	59.58	79.00	-19.42	QP	
2		0.2220	34.83	9.76	44.59	66.00	-21.41	AVG	
3		0.3420	45.25	9.73	54.98	79.00	-24.02	QP	
4		0.3420	33.54	9.73	43.27	66.00	-22.73	AVG	
5		1.0859	42.58	9.74	52.32	73.00	-20.68	QP	
6	*	1.0859	35.70	9.74	45.44	60.00	-14.56	AVG	
7		1.3180	45.31	9.75	55.06	73.00	-17.94	QP	
8		1.3180	29.84	9.75	39.59	60.00	-20.41	AVG	
9		1.5580	45.59	9.77	55.36	73.00	-17.64	QP	
10		1.5580	29.41	9.77	39.18	60.00	-20.82	AVG	
11		11.0498	41.38	10.02	51.40	73.00	-21.60	QP	
12		11.0498	33.36	10.02	43.38	60.00	-16.62	AVG	



Test Data Of Conducted Emission Measurement (NEUTRAL)

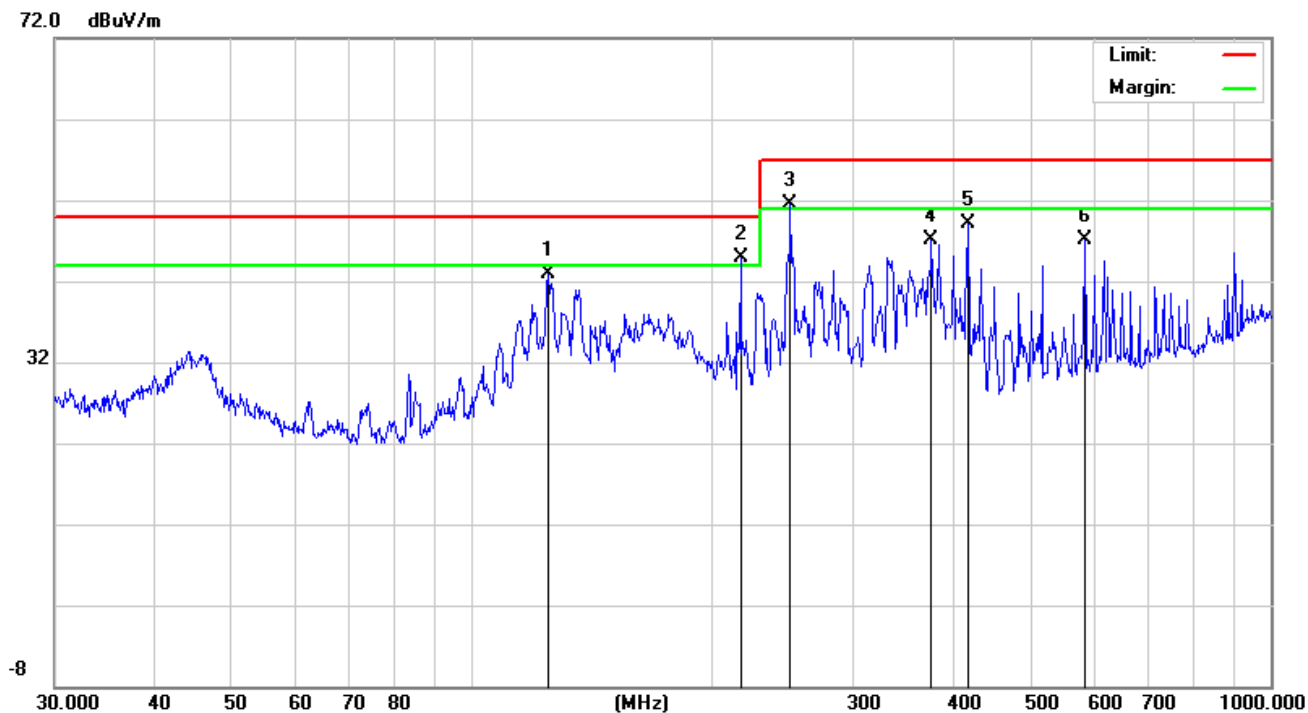
Mode: White



No.	Mk.	Freq.	Reading Level	Correct Factor	Measurement	Limit	Over		
		MHz	dBuV	dB	dBuV	dBuV	dB	Detector	Comment
1		0.2300	50.02	9.74	59.76	79.00	-19.24	QP	
2		0.2300	35.29	9.74	45.03	66.00	-20.97	AVG	
3		0.3459	46.29	9.74	56.03	79.00	-22.97	QP	
4		0.3459	33.54	9.74	43.28	66.00	-22.72	AVG	
5		1.0820	43.47	9.75	53.22	73.00	-19.78	QP	
6	*	1.0820	35.44	9.75	45.19	60.00	-14.81	AVG	
7		1.3420	45.90	9.76	55.66	73.00	-17.34	QP	
8		1.3420	29.88	9.76	39.64	60.00	-20.36	AVG	
9		1.5260	46.03	9.78	55.81	73.00	-17.19	QP	
10		1.5260	29.95	9.78	39.73	60.00	-20.27	AVG	
11		11.0498	40.93	10.05	50.98	73.00	-22.02	QP	
12		11.0498	33.66	10.05	43.71	60.00	-16.29	AVG	



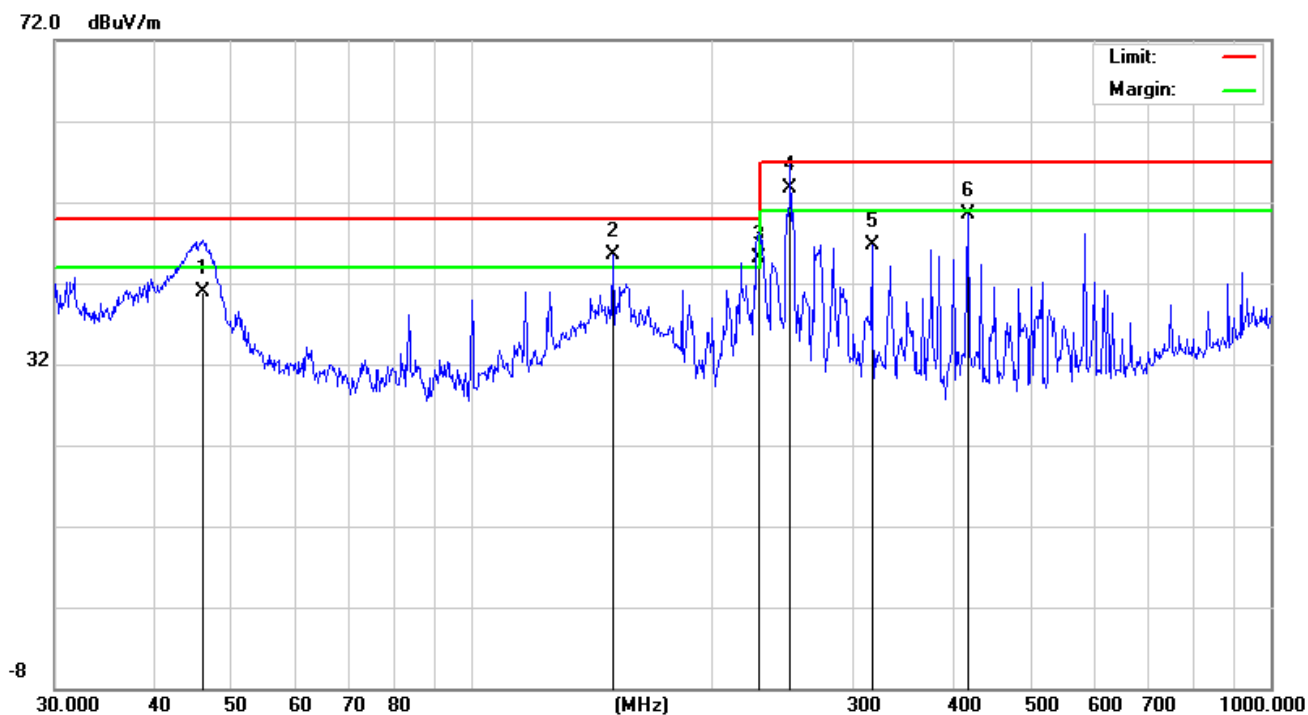
Test Data Of Radiated Emission Measurement Below 1GHz (Horizontal)
Mode: Roll "H"



No.	Mk.	Freq.	Reading	Correct	Measure-	Limit	Over	Antenna	Table	
		MHz	Level	Factor	ment			Height	Degree	
			dBuV	dB	dBuV/m	dBuV/m	dB	cm	degree	Comment
1		124.5690	29.68	13.31	42.99	50.00	-7.01	QP		
2	*	216.7828	33.60	11.28	44.88	50.00	-5.12	QP		
3	!	250.3012	36.63	14.95	51.58	57.00	-5.42	QP		
4		375.9384	28.64	18.42	47.06	57.00	-9.94	QP		
5		417.6411	28.80	20.26	49.06	57.00	-7.94	QP		
6		584.7894	23.52	23.52	47.04	57.00	-9.96	QP		



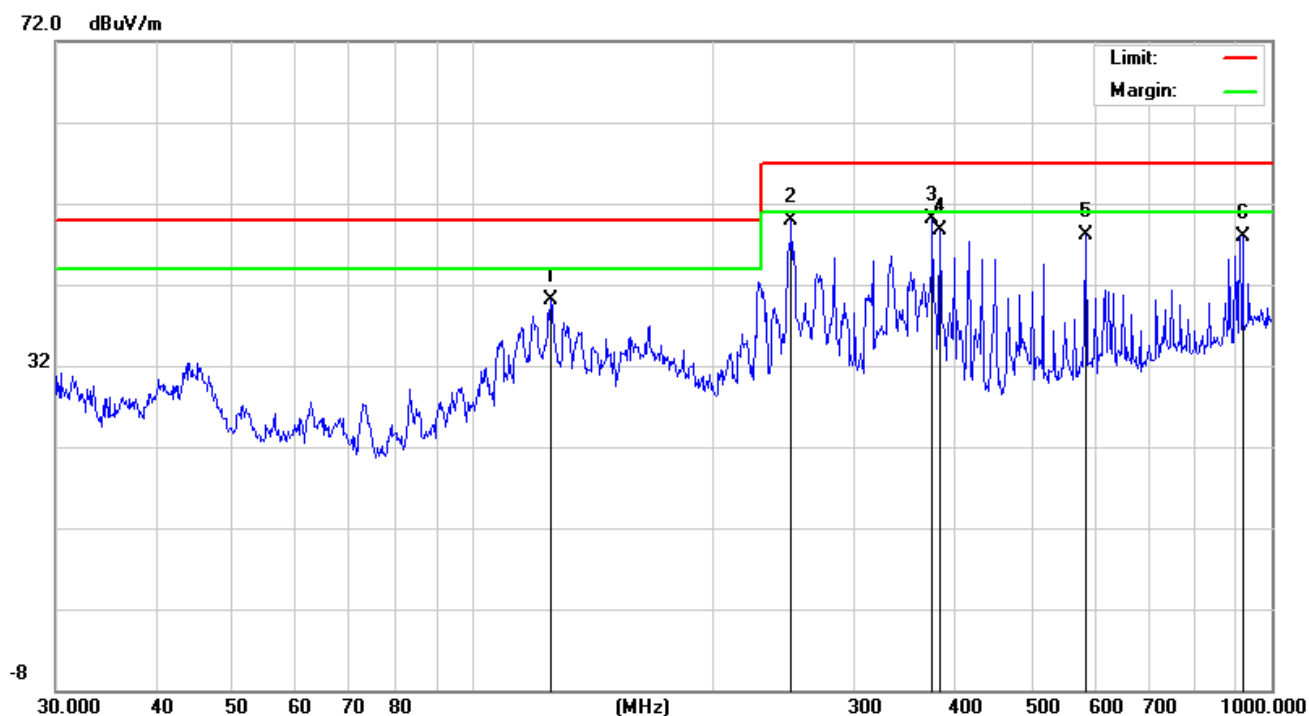
Test Data Of Radiated Emission Measurement Below 1GHz (Vertical) Mode: Roll "H"



No.	Mk.	Freq.	Reading	Correct	Measure-	Limit	Over	Antenna	Table	
		MHz	Level	Factor	ment			Height	Degree	
			dBuV	dB	dBuV/m	dBuV/m	dB	cm	degree	Comment
1		46.0164	29.66	11.24	40.90	50.00	-9.10	QP		
2	!	150.0107	32.79	12.77	45.56	50.00	-4.44	QP		
3	!	228.4904	33.12	12.08	45.20	50.00	-4.80	QP		
4	*	250.3012	38.85	14.95	53.80	57.00	-3.20	QP		
5		316.5890	30.31	16.46	46.77	57.00	-10.23	QP		
6		417.6409	30.29	20.26	50.55	57.00	-6.45	QP		



Test Data Of Radiated Emission Measurement Below 1GHz (Horizontal) Mode: White

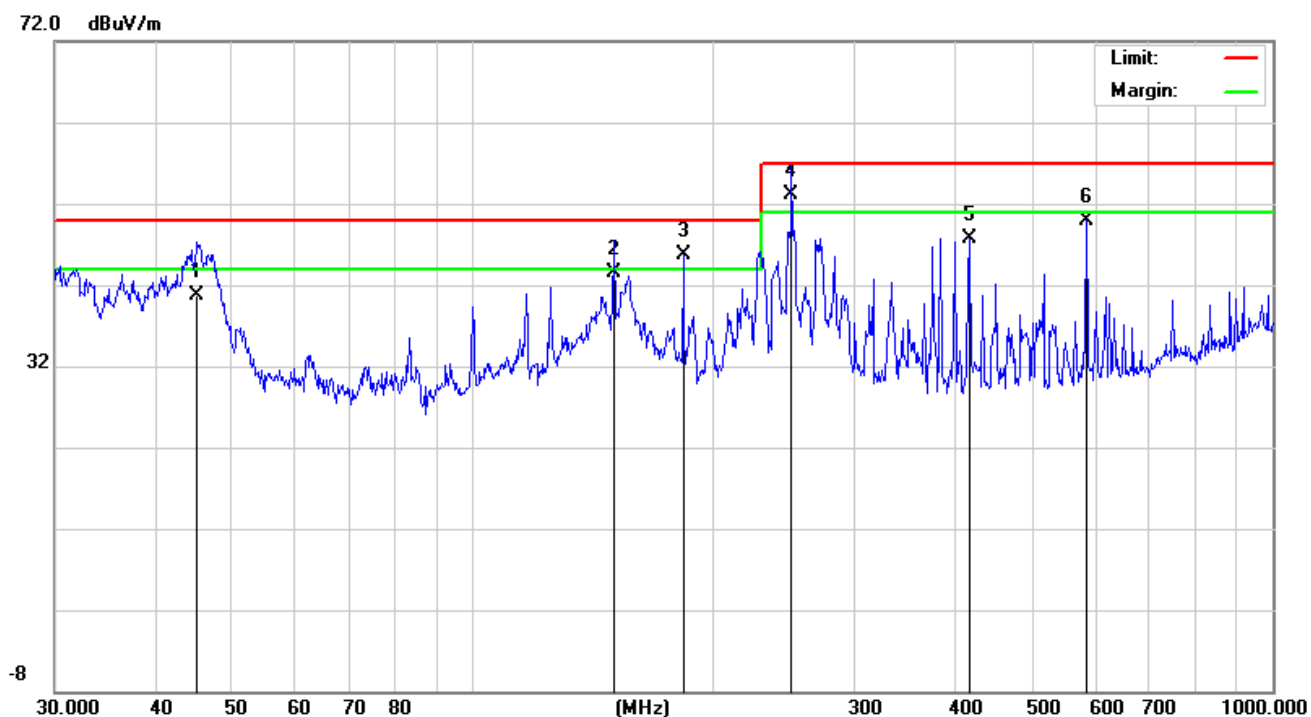


No. Mk.	Freq. MHz	Reading Level dBuV	Correct Factor dB	Measure- ment dBuV/m	Limit dBuV/m	Over dB	Antenna Height cm	Table Degree	Comment
1	125.0066	26.76	13.32	40.08	50.00	-9.92	QP		
2	250.3010	34.95	14.95	49.90	57.00	-7.10	QP		
3 *	375.9384	31.69	18.42	50.11	57.00	-6.89	QP		
4	383.9318	29.96	18.78	48.74	57.00	-8.26	QP		
5	584.7894	24.59	23.52	48.11	57.00	-8.89	QP		
6	919.2866	17.99	29.96	47.95	57.00	-9.05	QP		



Test Data Of Radiated Emission Measurement Below 1GHz (Vertical)

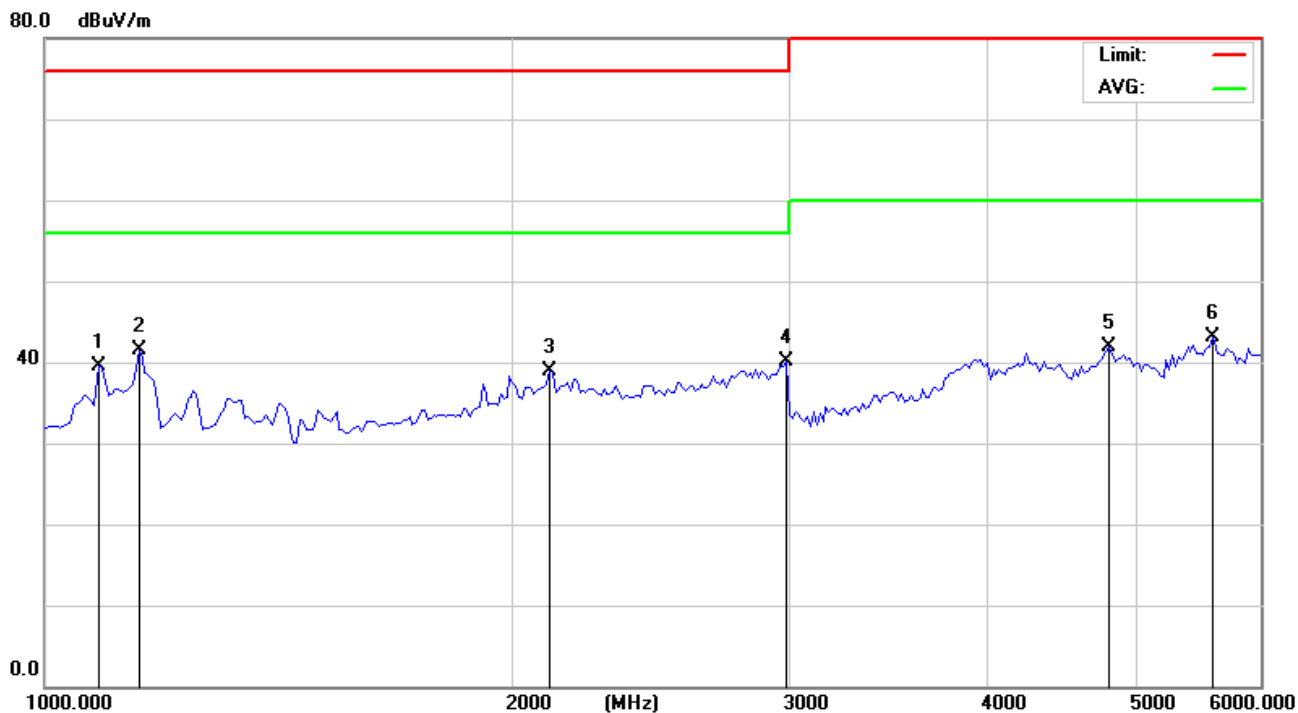
Mode: White



No.	Mk.	Freq.	Reading	Correct	Measure-	Limit	Over	Antenna	Table	
		MHz	Level	Factor	ment			Height	Degree	
			dBuV	dB	dBuV/m	dBuV/m	dB	cm	degree	Comment
1		45.2166	29.25	11.55	40.80	50.00	-9.20	QP		
2		150.0108	30.73	12.77	43.50	50.00	-6.50	QP		
3	!	183.2005	34.81	10.80	45.61	50.00	-4.39	QP		
4	*	250.3012	38.15	14.95	53.10	57.00	-3.90	QP		
5		417.6409	27.50	20.26	47.76	57.00	-9.24	QP		
6		584.7894	26.39	23.52	49.91	57.00	-7.09	QP		



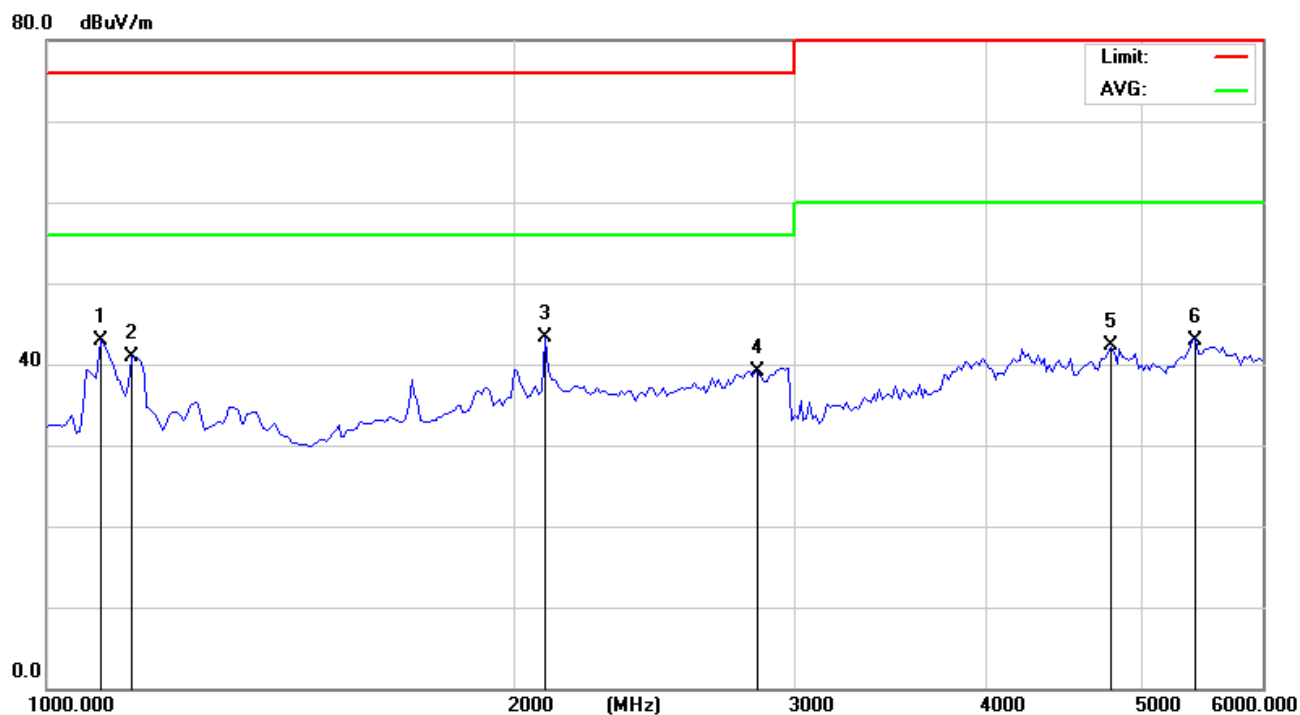
Test Data Of Radiated Emission Measurement Above 1GHz (Horizontal)
Mode: White



No.	Mk.	Freq.	Reading	Correct	Measure-	Limit	Over	Antenna	Table	
		MHz	Level	Factor	ment			Height	Degree	
			dBuV	dB	dBuV/m	dBuV/m	dB	cm	degree	Comment
1		1083.969	50.08	-10.49	39.59	76.00	-36.41	peak		
2	*	1150.000	51.36	-9.84	41.52	76.00	-34.48	peak		
3		2112.500	42.51	-3.68	38.83	76.00	-37.17	peak		
4		2987.500	42.35	-2.23	40.12	76.00	-35.88	peak		
5		4800.000	35.50	6.35	41.85	80.00	-38.15	peak		
6		5585.026	35.60	7.44	43.04	80.00	-36.96	peak		



Test Data Of Radiated Emission Measurement Above 1GHz (Vertical) Mode: White



No.	Mk.	Freq.	Reading Level	Correct Factor	Measurement	Limit	Over	Antenna Height	Table Degree	
		MHz	dBuV	dB	dBuV/m	dBuV/m	dB	Detector	cm	degree
1		1087.500	53.32	-10.48	42.84	76.00	-33.16	peak		
2		1133.628	50.97	-10.05	40.92	76.00	-35.08	peak		
3	*	2087.500	47.06	-3.83	43.23	76.00	-32.77	peak		
4		2852.453	41.89	-2.76	39.13	76.00	-36.87	peak		
5		4800.000	35.88	6.35	42.23	80.00	-37.77	peak		
6		5436.920	35.69	7.31	43.00	80.00	-37.00	peak		



APPENDIX 2 THE TEST PHOTOGRAPH

Conducted Emission Test Setup





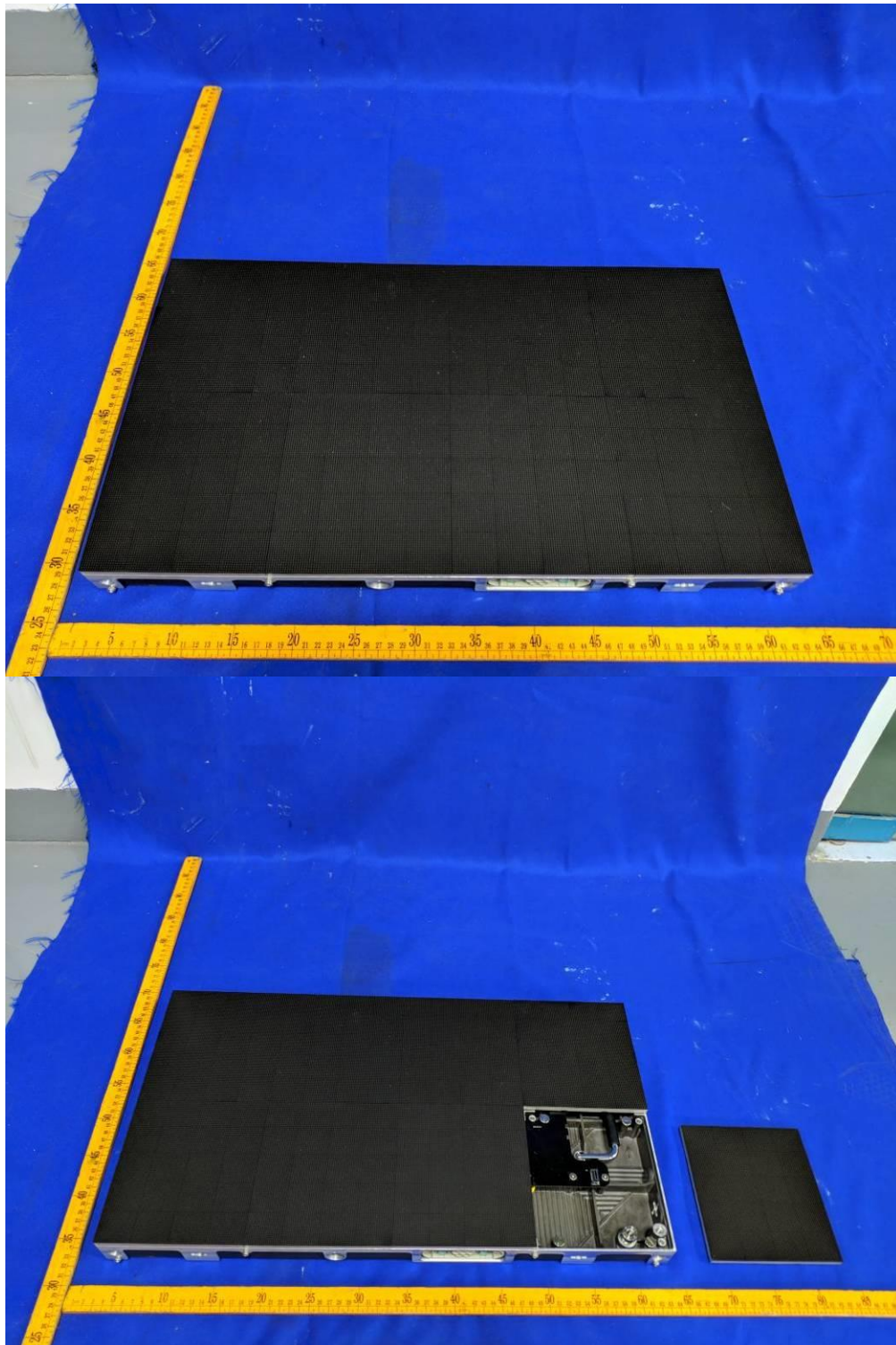
Radiated Emission Test Setup

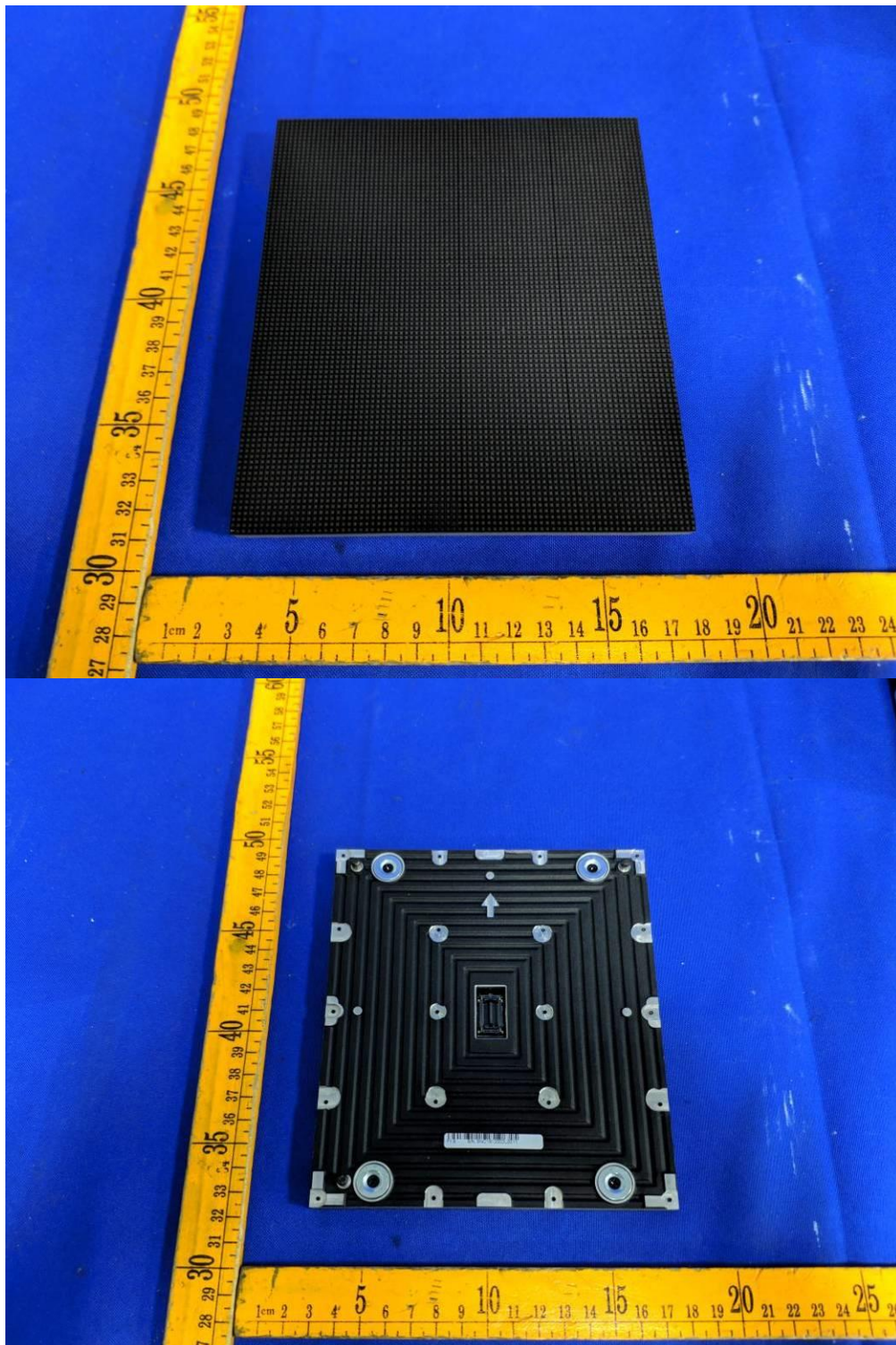


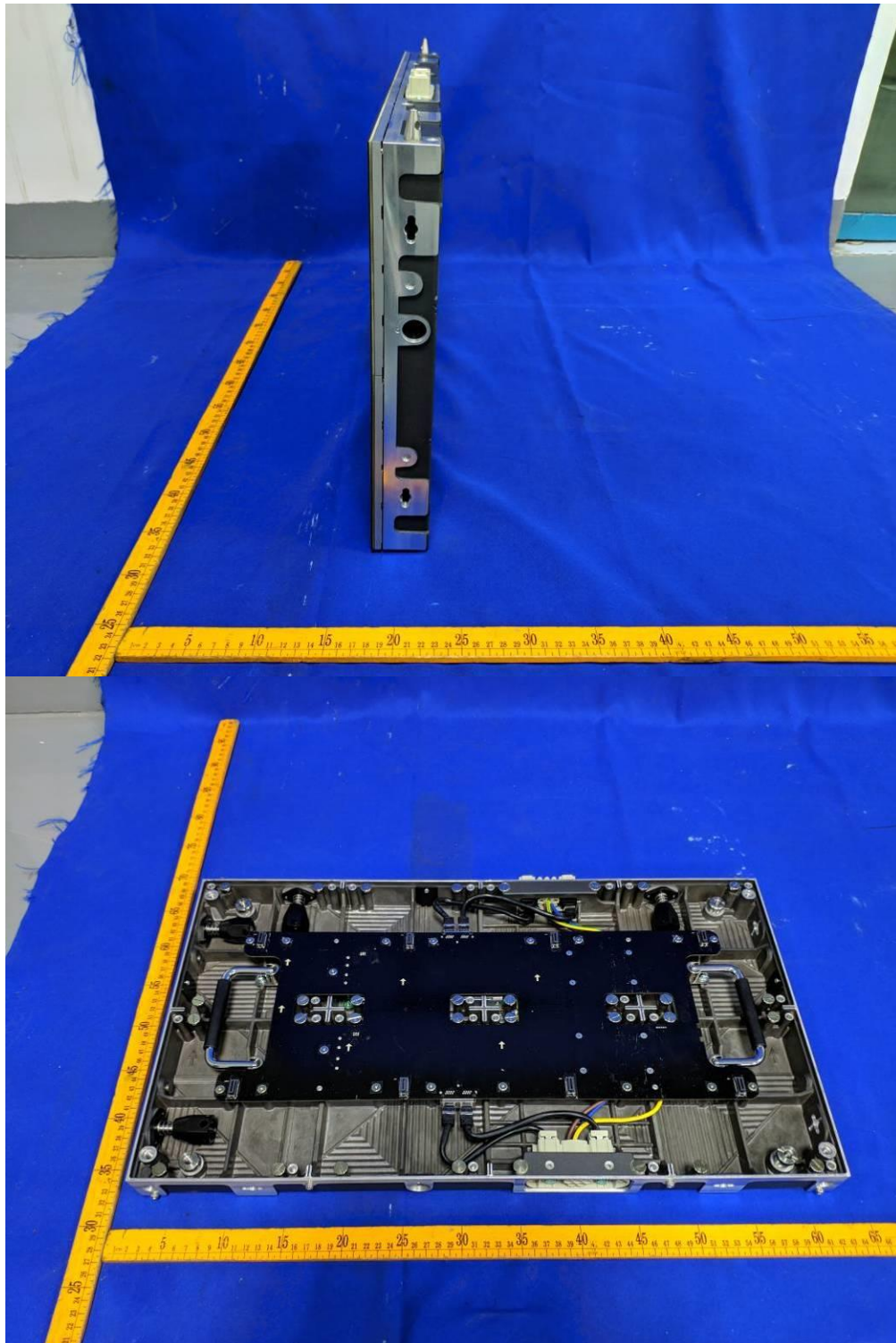


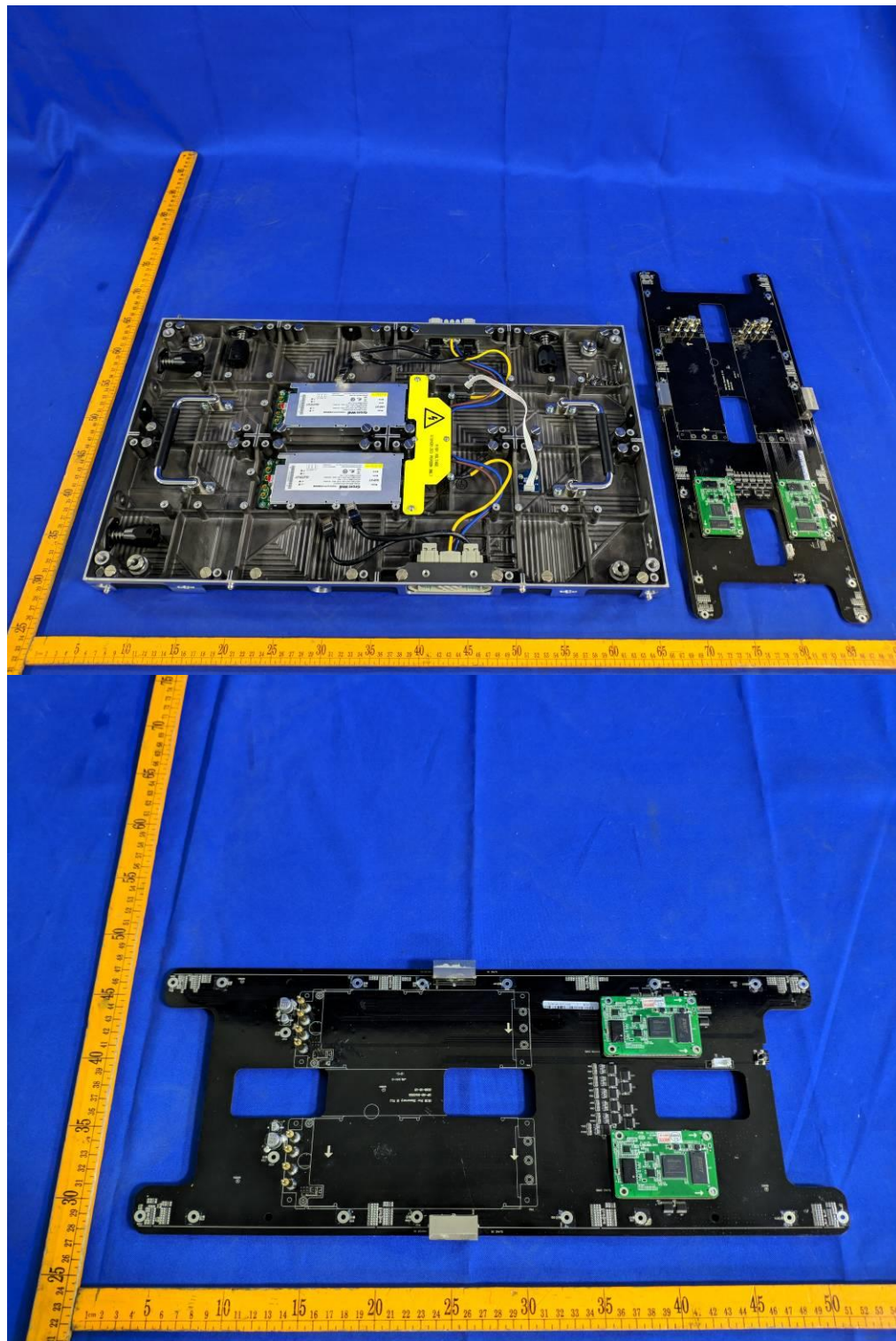
APPENDIX 3

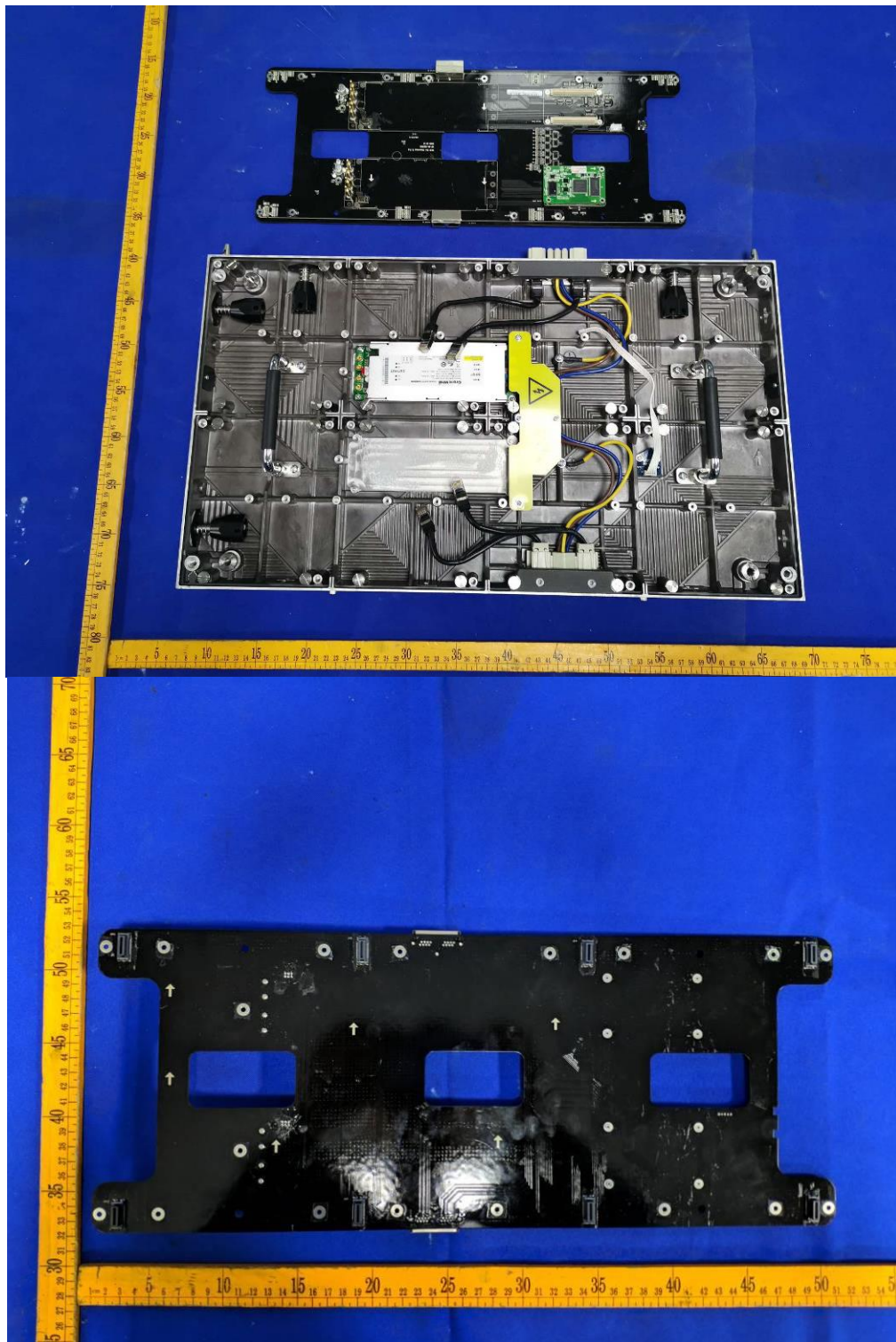
THE DETAIL PHOTOGRAPH OF EUT

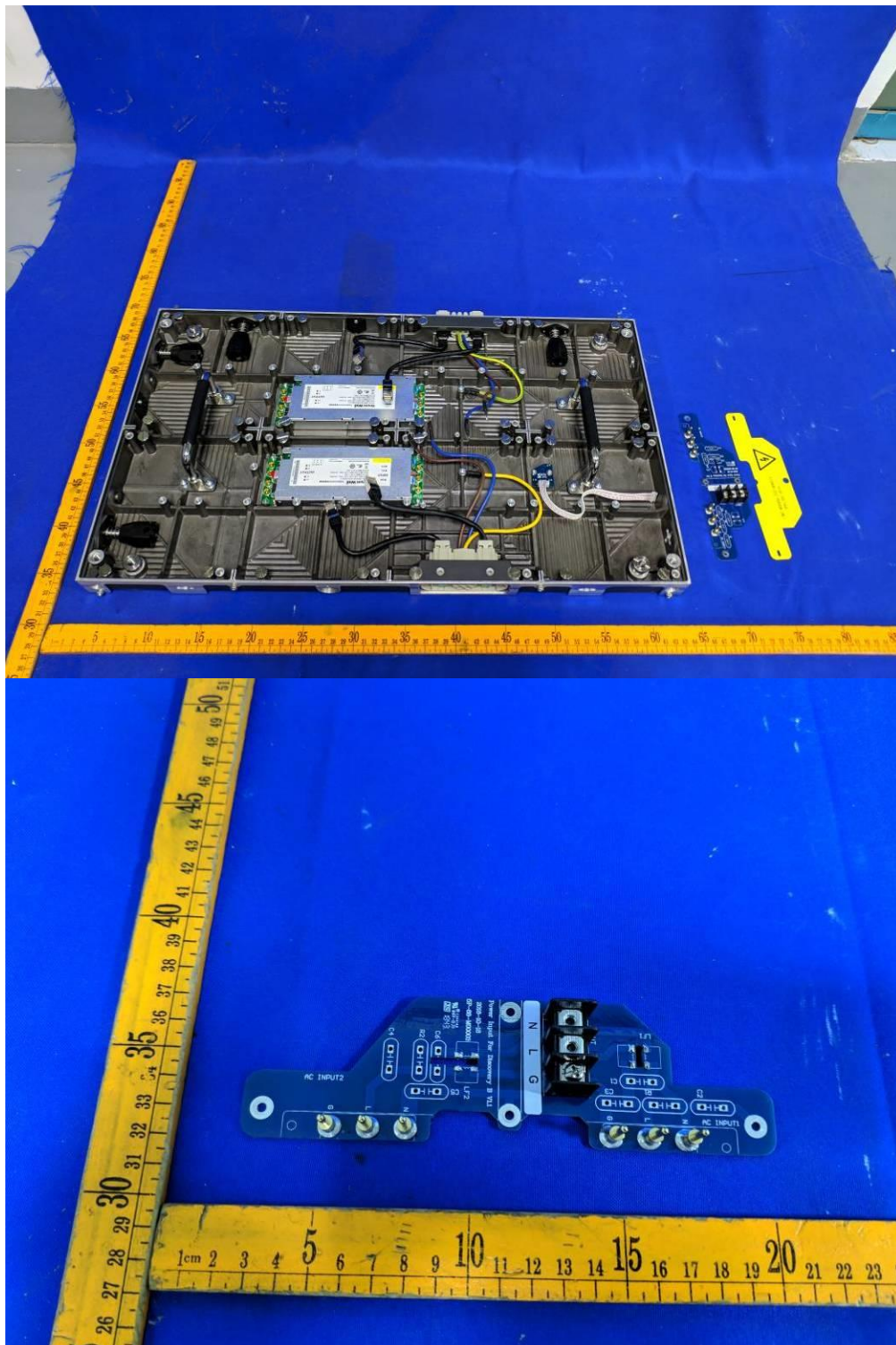


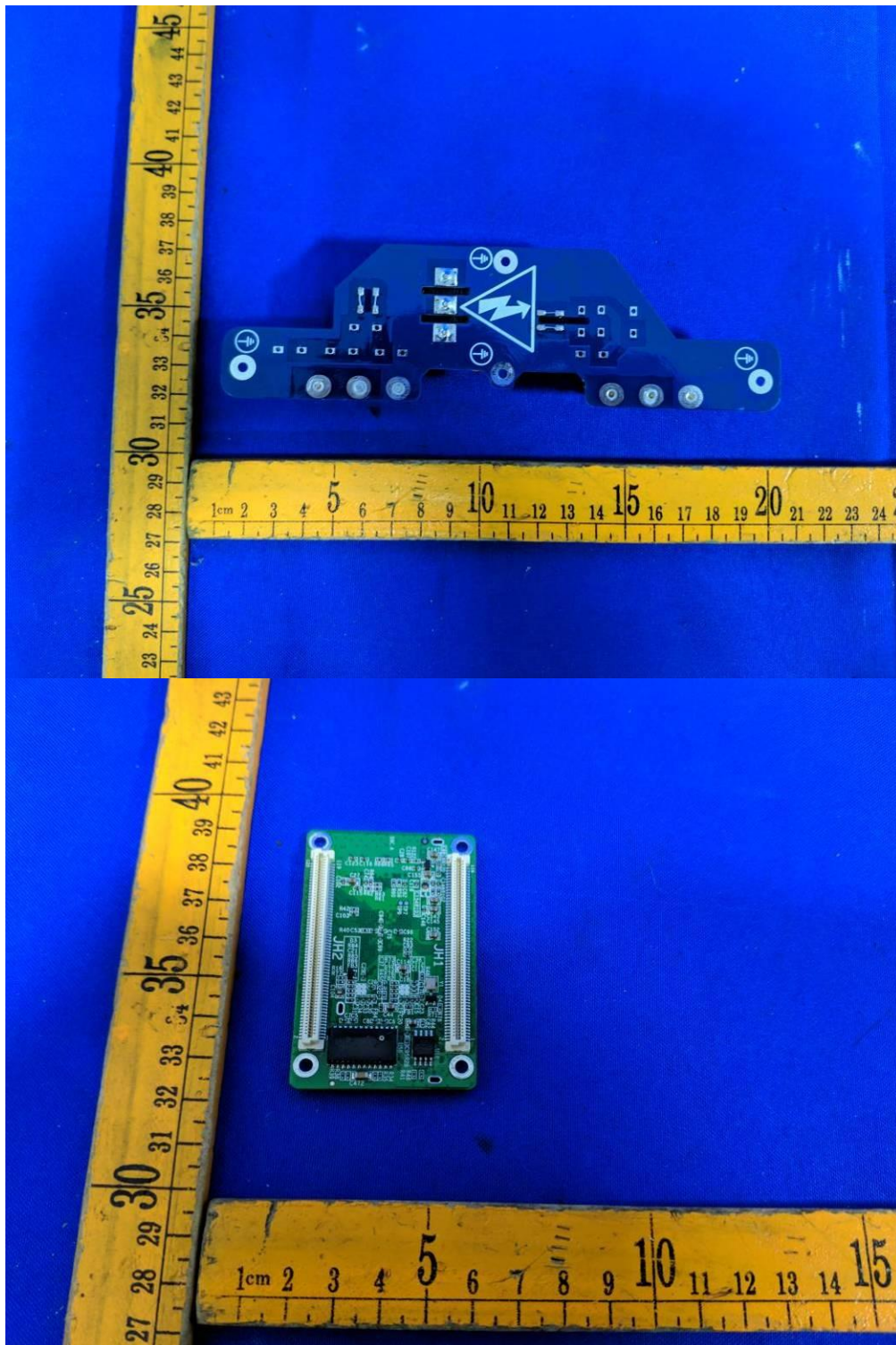


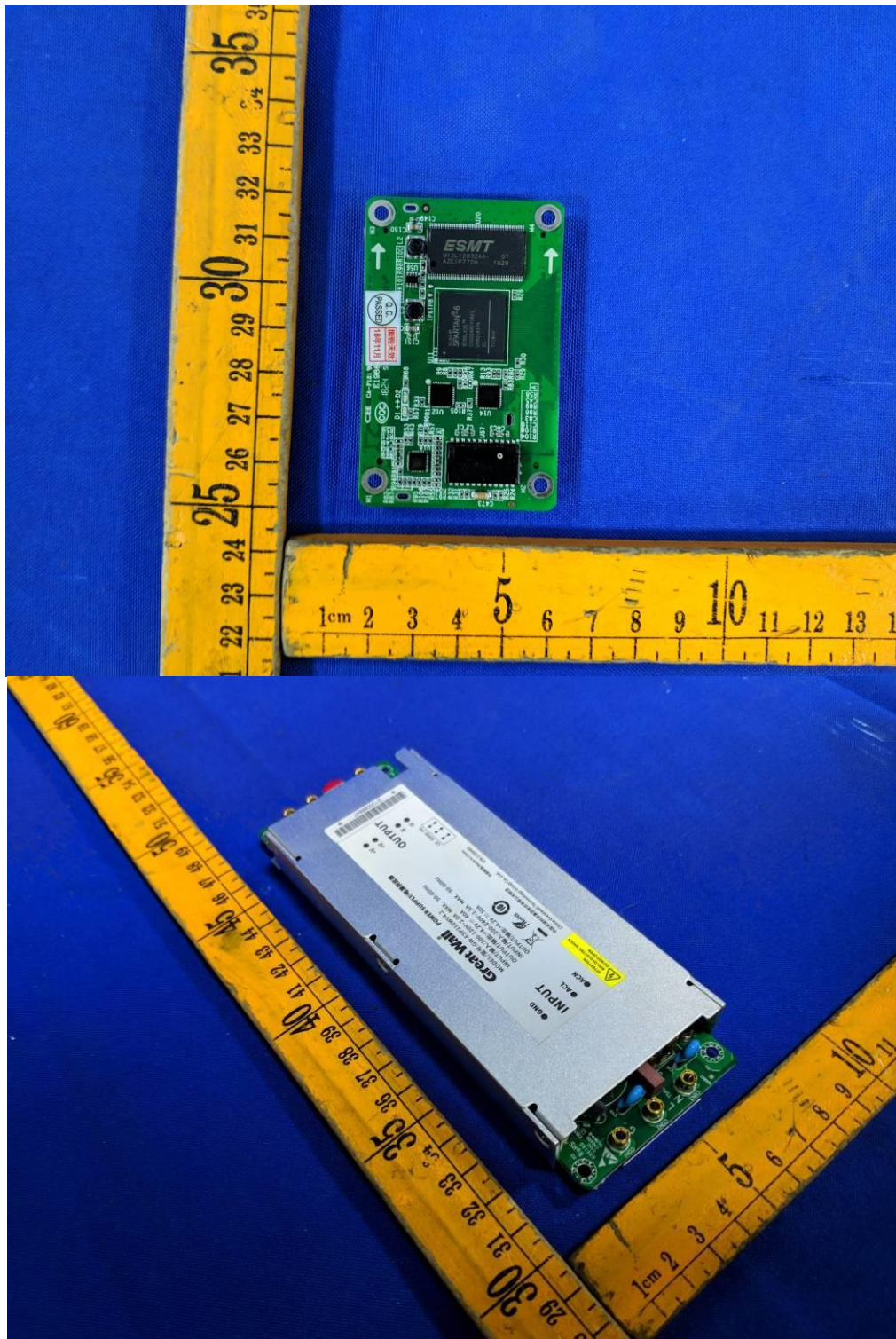


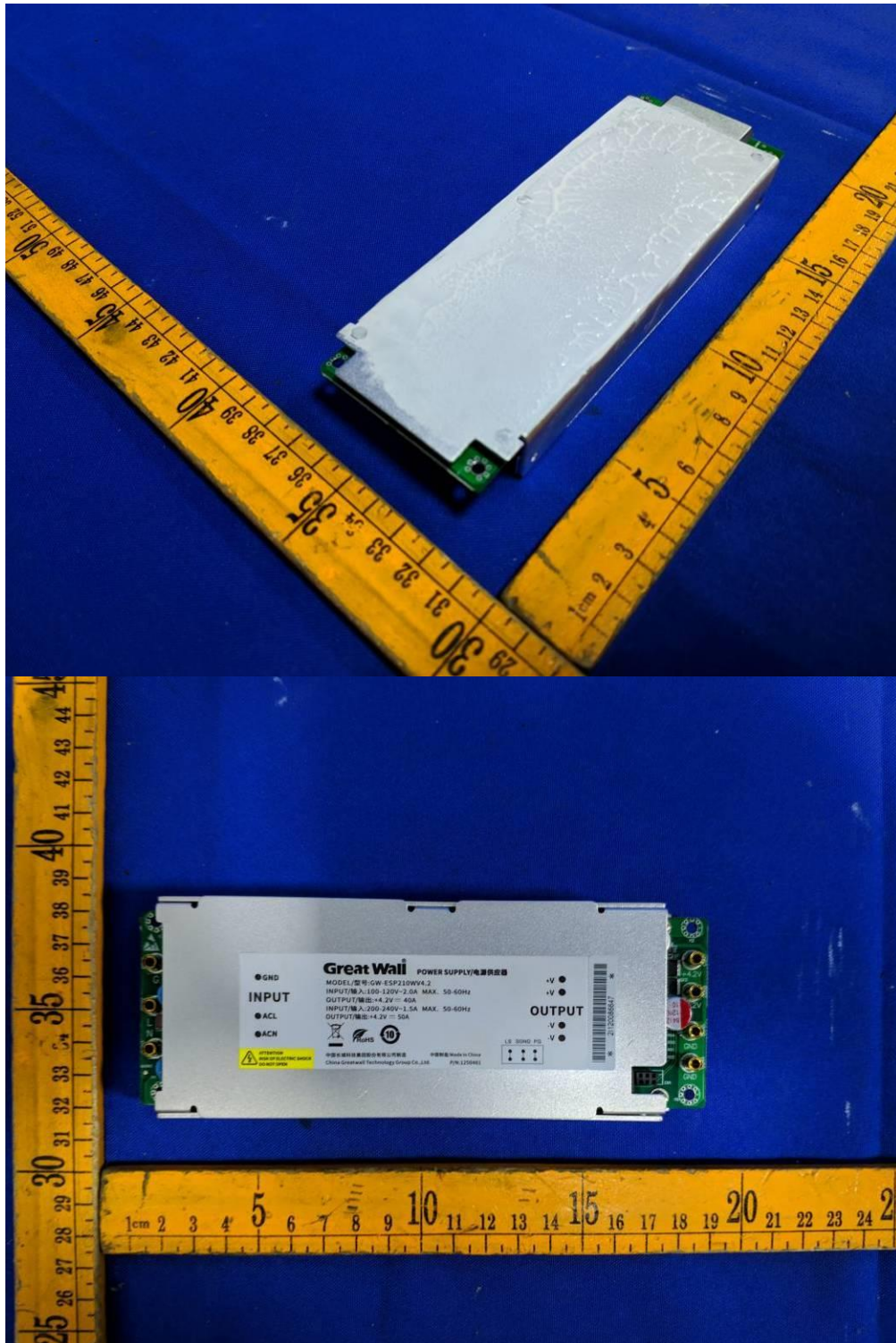


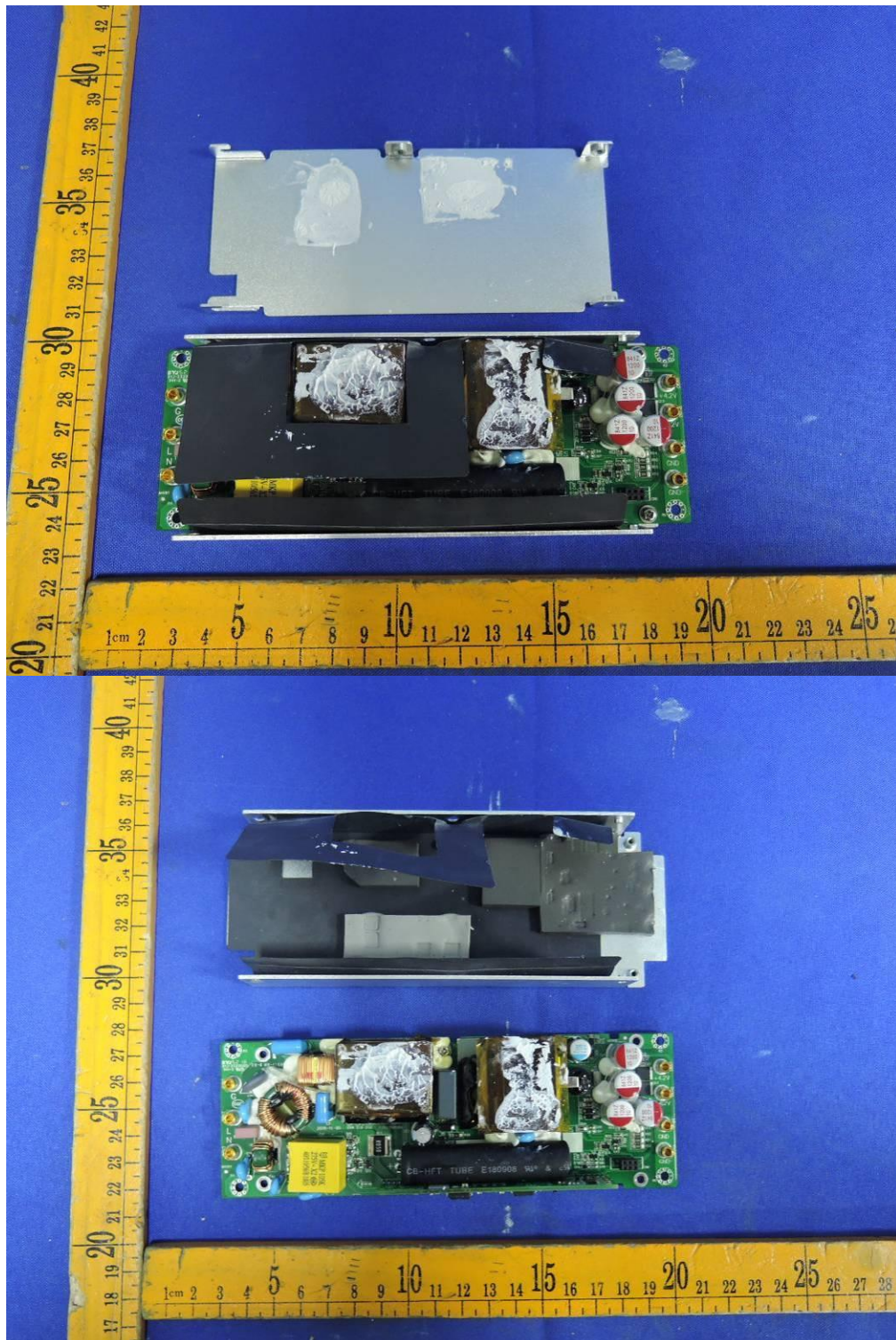


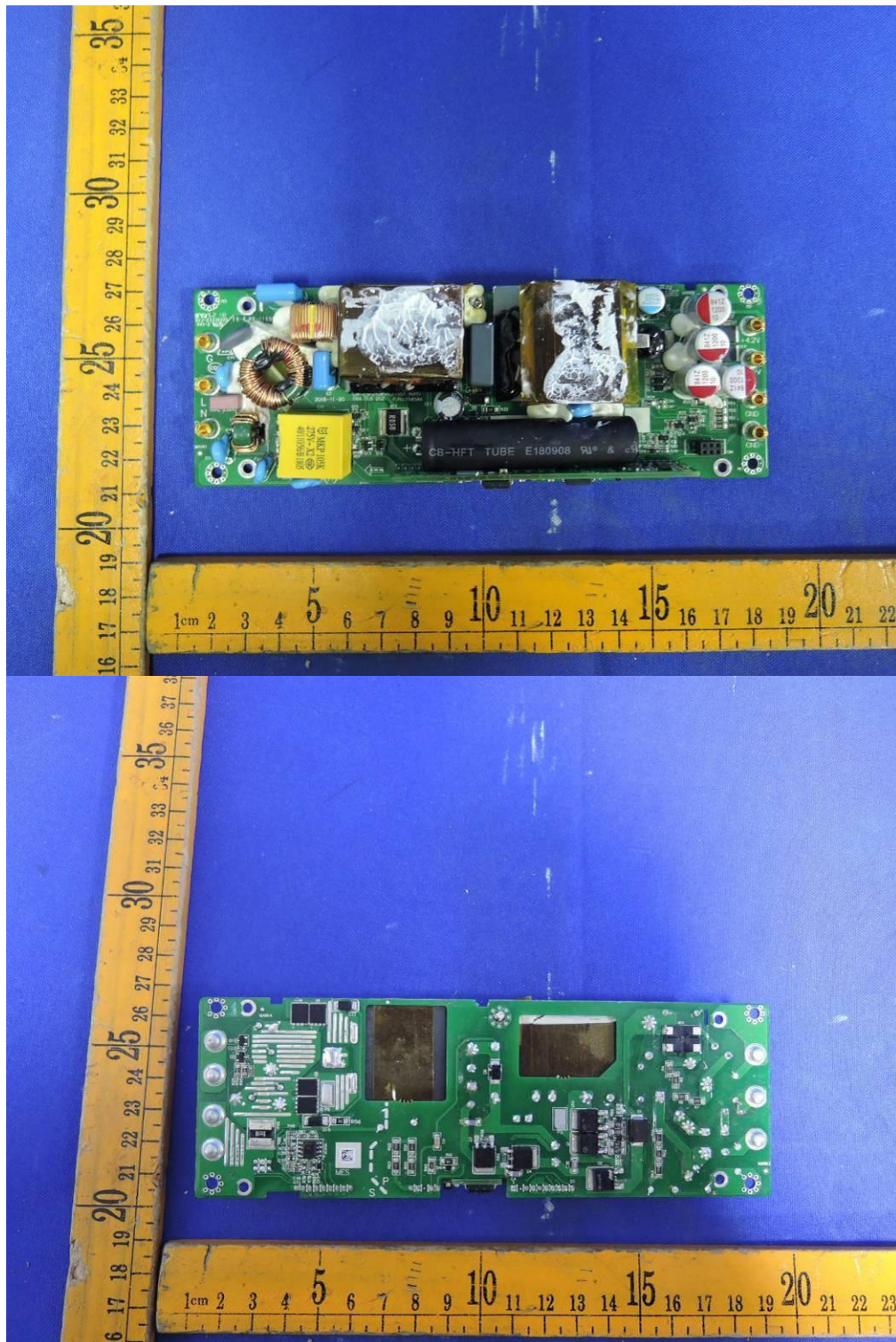
















**** EMC Test Result: The EUT has been passed the all measurements. ****

The uncertainty is calculated in accordance with CISPR16-4-2, the total uncertainty for this test is as follows:

Measurement Item	Measurement Frequency	Polarization	Uncertainty
Conducted Emission	9kHz ~ 30MHz	LINE/NEUTRAL	1.78 dB
Radiated Emission	30MHz ~ 1,000MHz	Vertical / Horizontal	1.96 dB
	1,000MHz ~ 6,000MHz	Vertical / Horizontal	3.00 dB



LABELING REQUIREMENT OF VCCI

Class B ITE shall have the following message on a visible location on each products. In the event that direct marking is difficult, a tag may be used.

