PSE TEST REPORT

For

ShowTop（Shenzhen ShowTop Technology Co., Ltd）

Product Name:	Intelligent terminal-ShowTop splicing machine 3.5mm
Brand Name:	N/A
Model Number:	ST49V8-L1
Prepared For:	ShowTop（Shenzhen ShowTop Technology Co., Ltd）
Address:	506-8,Changhong Science and Technology Building, Science and Technology South 12th Road,Nanshan District, Shenzhen
Prepared By:	DL Certification & Testing Co., Ltd.
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Report No.:	DL-2019051461E

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TEST RESULT CERTIFICATION

Applicant	:	ShowTop（Shenzhen ShowTop Technology Co., Ltd）
Address	:	506-8,Changhong Science and Technology Building, Science and Technology South 12th Road,Nanshan District, Shenzhen
Manufacturer	:	Shenzhen Hualinuo Display Technology Co., Ltd.
Address	:	No.3 Lingbei No.4 Road, Fenghuang No.1 Industrial Zone, Fuyong Town, Baoan District, Shenzhen City
EUT	:	Intelligent terminal-ShowTop splicing machine 3.5mm
Brand Name:	:	N/A
Model Number	:	ST49V8-L1
Date of Receipt:	:	May. 31, 2019
Test Date	:	May. 31, 2019 - Jun. 04, 2019
Date of Report	:	Jun. 04, 2019
Test Result:	:	The equipment under test was found to be compliance with the requirements of the standards applied.

Test Procedure Used:

EMI	:	J55032(H29)

Prepared by(Engineer): Kiko Zeng

Reviewer(Supervisor): Neo Wang

Approved(Manager): Jade Yang

This test report is based on a single evaluation of one sample of above mentioned products. It is not permitted to be duplicated in extracts without written approval of DL Certification & Testing Co., Ltd.

1. GENERAL INFORMATION

1.1 Description of Device (EUT)

EUT	:	Intelligent terminal-ShowTop splicing machine 3.5mm
Brand Name	:	N/A
Model Number	:	--
Model Difference	:	ST49V8-L1
Power Supply	:	AC 100~240V, 450W

1.2 Tested System Details

None.

1.3 Test Uncertainty

Conducted Emission Uncertainty	:	±2.57dB
Radiated Emission Uncertainty	:	±4.51dB

2. TEST INSTRUMENT USED

For Conducted Emission at the mains terminals Test

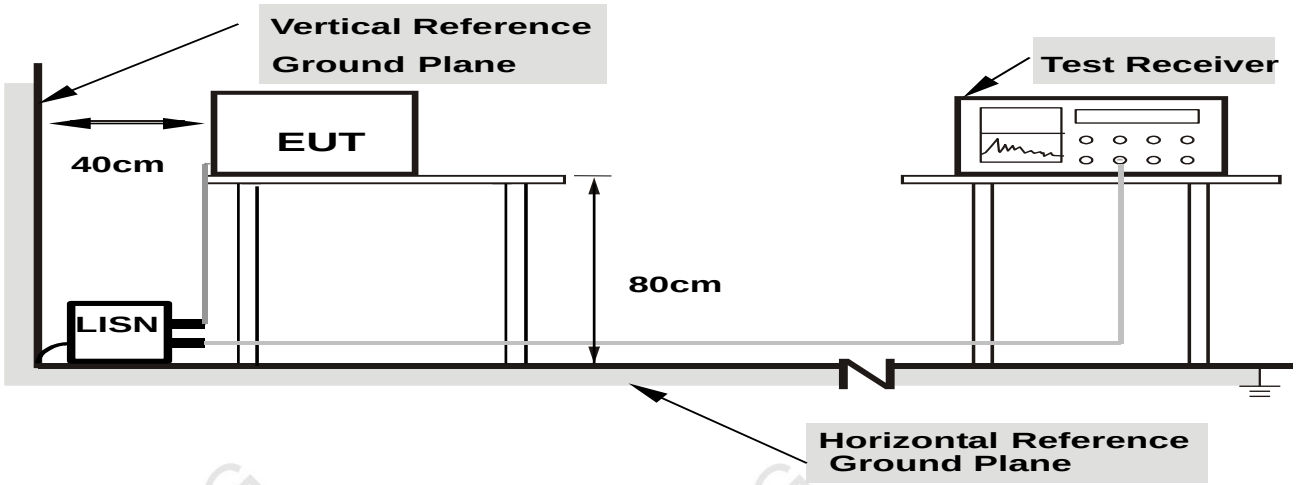
Conducted Emission Test (854 --- site)					
Equipment	**Manufacturer**	**Model#**	**Serial#**	**Last Cal.**	**Next Cal.**
843 Shielded Room	ChengYu	843 Room	843	Aug. 25, 2018	Aug. 24, 2019
EMI Receiver	R&S	ESCI	101421	Aug. 27, 2018	Aug. 26, 2019
LISN	SCHWARZBECK	NSLK8127	812779	Sep. 07, 2018	Sep. 06, 2019

For Radiated Emission Test

Radiation Emission Test (966 chamber)					
Equipment	**Manufacturer**	**Model#**	**Serial#**	**Last Cal.**	**Next Cal.**
966 chamber	ChengYu	966 Room	966	Aug. 25, 2018	Aug. 24, 2019
Spectrum Analyzer	Agilent	E4407B	MY45109572	Aug. 27, 2018	Aug. 26, 2019
Amplifier	Schwarzbeck	BBV9743	9743-119	Aug. 25, 2018	Aug. 24, 2019
Amplifier	Schwarzbeck	BBV9718	9718-270	Aug. 25, 2018	Aug. 24, 2019
Log-periodic Antenna	Schwarzbeck	VULB9160	VULB9160-3369	Sep. 07, 2018	Sep. 06, 2019
EMI Receiver	R&S	ESCI	101421	Aug. 27, 2018	Aug. 26, 2019
Horn Antenna	Schwarzbeck	BBHA9120D	9120D-1275	Aug. 25, 2018	Aug. 24, 2019
966 Cable 1#	CHENGYU	966	004	Aug. 25, 2018	Aug. 24, 2019
966 Cable 2#	CHENGYU	966	003	Aug. 25, 2018	Aug. 24, 2019

3. CONDUCTED EMISSION AT THE MAINS TERMINALS TEST

3.1 Block Diagram Of Test Setup



Note: 1.Support units were connected to second LISN.
2.Both of LISNs (AMN) are 80 cm from EUT and at least 80 from other units and other metal planes

3.2 Test Standard

J55032(H29)

3.3 Power Line Conducted Emission Limit

Frequency MHz	Limits dB(μV)	
	Quasi-peak Level	Average Level
0.15 ~ 0.50	66 ~ 56*	59 ~ 46*
0.50 ~ 5.00	56	46
5.00 ~ 30.00	60	50

Notes: 1. *Decreasing linearly with logarithm of frequency.
2. The lower limit shall apply at the transition frequencies.

3.4 EUT Configuration on Test

The following equipment's are installed on conducted emission test to meet J55032(H29)requirement and operating in a manner which tends to maximize its emission characteristics in a normal application.

3.5 Operating Condition of EUT

3.5.1 Setup the EUT and simulators as shown in Section 3.1.
3.5.2 Turn on the power of all equipments.
3.5.3 Let the EUT work in test modes and test it.

3.6 Test Procedure

The EUT is put on the ground 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 **J55032(H29)**regulations during conducted emission test.

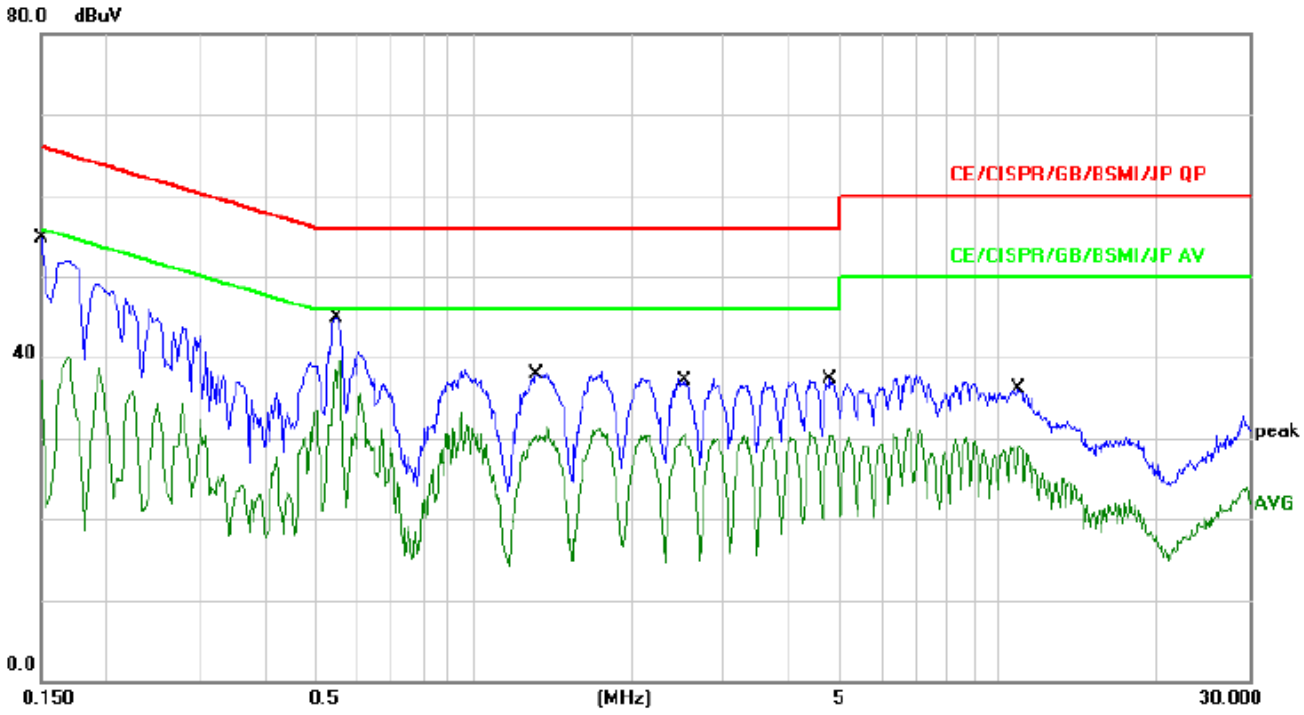
The bandwidth of the test receiver (R&S Test Receiver ESCI) is set at 10KHz.

The frequency range from 150 KHz to 30 MHz is investigated.

3.7 Test Result

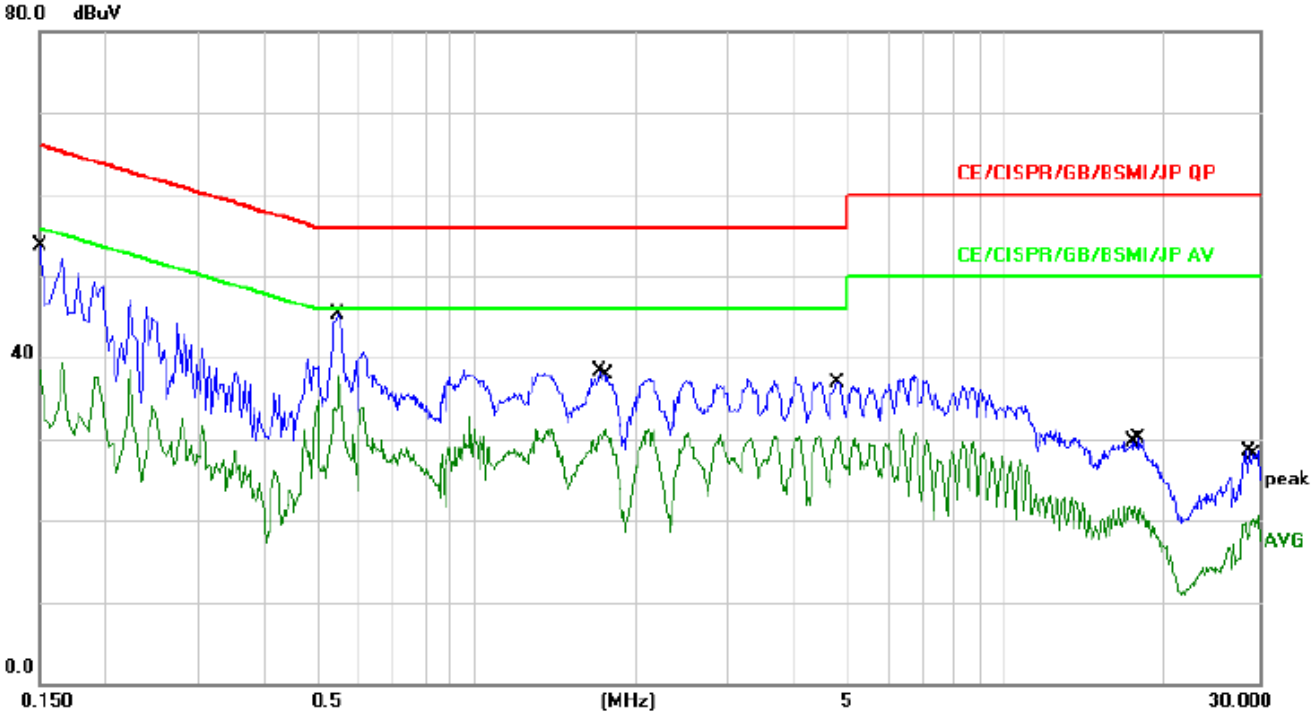
PASS
Please refer to the following page.

Conducted Emission Test Data			
Temperature:	24.5 ℃	Relative Humidity:	54%
Pressure:	1009hPa	Phase :	Line
Test Voltage :	AC 100V/50Hz	Test Mode:	ON Mode



No.	Mk.	Freq.	Reading Level	Correct Factor	Measure-ment	Limit	Over		
		MHz	dBuV	dB	dBuV	dBuV	dB	Detector	Comment
1		0.1500	41.96	10.05	52.01	65.99	-13.98	QP	
2		0.1500	27.08	10.05	37.13	55.99	-18.86	AVG	
3		0.5500	34.85	10.12	44.97	56.00	-11.03	QP	
4	*	0.5500	29.47	10.12	39.59	46.00	-6.41	AVG	
5		1.3180	27.64	10.17	37.81	56.00	-18.19	QP	
6		1.3180	21.28	10.17	31.45	46.00	-14.55	AVG	
7		2.5260	26.92	10.19	37.11	56.00	-18.89	QP	
8		2.5260	20.25	10.19	30.44	46.00	-15.56	AVG	
9		4.7860	27.11	10.15	37.26	56.00	-18.74	QP	
10		4.7860	20.16	10.15	30.31	46.00	-15.69	AVG	
11		10.9620	26.04	10.13	36.17	60.00	-23.83	QP	
12		10.9620	18.89	10.13	29.02	50.00	-20.98	AVG	

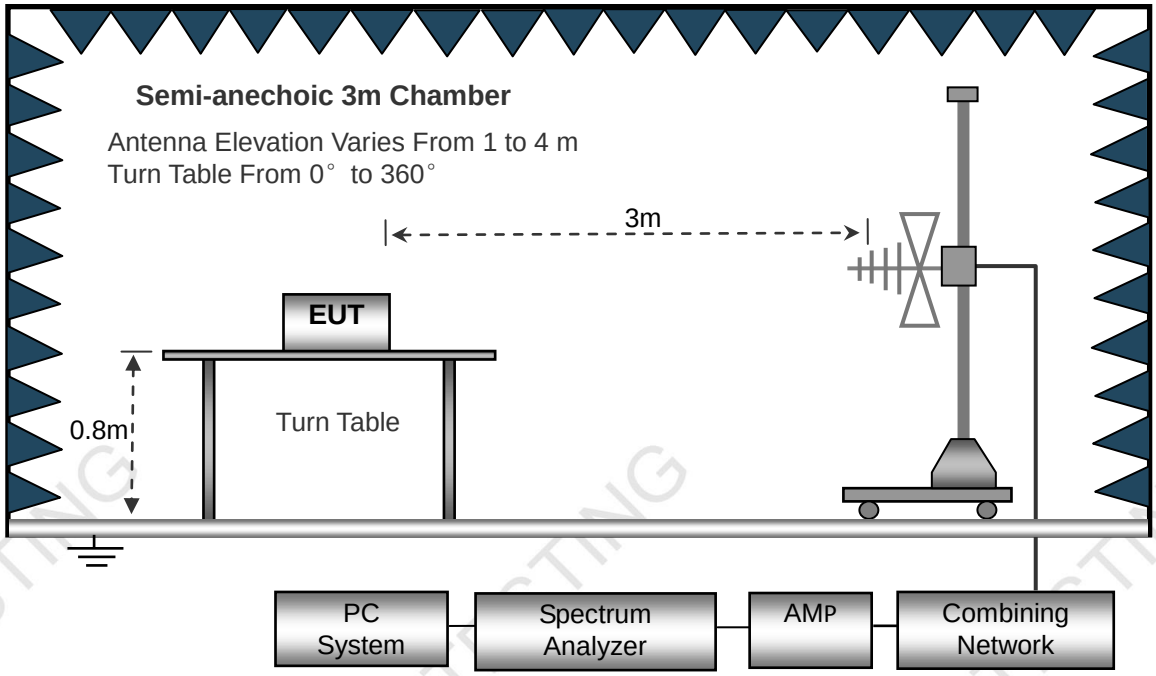
Conducted Emission Test Data			
Temperature:	24.5 ℃	Relative Humidity:	54%
Pressure:	1009hPa	Phase :	Neutral
Test Voltage :	AC 100V/50Hz	Test Mode:	ON Mode



No.	Mk.	Freq.	Reading Level	Correct Factor	Measure-ment	Limit	Over		
		MHz	dBuV	dB	dBuV	dBuV	dB	Detector	Comment
1		0.1500	43.60	10.05	53.65	65.99	-12.34	QP	
2		0.1500	28.36	10.05	38.41	55.99	-17.58	AVG	
3		0.5500	35.16	10.12	45.28	56.00	-10.72	QP	
4	*	0.5500	27.54	10.12	37.66	46.00	-8.34	AVG	
5		1.7100	28.05	10.18	38.23	56.00	-17.77	QP	
6		1.7540	21.22	10.18	31.40	46.00	-14.60	AVG	
7		4.8100	26.70	10.15	36.85	56.00	-19.15	QP	
8		4.8460	20.13	10.15	30.28	46.00	-15.72	AVG	
9		17.4980	11.58	10.16	21.74	50.00	-28.26	AVG	
10		17.7860	19.90	10.16	30.06	60.00	-29.94	QP	
11		28.6780	18.33	10.22	28.55	60.00	-31.45	QP	
12		29.3140	10.11	10.22	20.33	50.00	-29.67	AVG	

4. RADIATION EMISSION TEST

4.1 Block Diagram of Test Setup



4.2 Test Standard

J55032(H29)

4.3 Radiation Limit

Frequency MHz	Distance (Meters)	Field Strengths Limits dB(μV)/m
30 ～ 230	3	40.0
230 ～ 1000	3	47.0

Remark:

(1) Emission level (dB(μV)/m) = 20 log Emission level (μV/m)

(2) The smaller limit shall apply at the cross point between two frequency bands.

(3) Distance refers to the distance in meters between the measuring instrument, antenna and the closed point of any part of the device or system.

4.4 EUT Configuration on Test

The J55032(H29) regulations test method must be used to find the maximum emission during radiated emission test.

The configuration of EUT is the same as used in conducted emission test.

Please refer to Section 2.2.

4.5 Operating Condition of EUT

Same as conducted emission test, which is listed in Section 2.2 except the test set up replaced as Section 4.1.

4.6 Test Procedure

1) The radiated emissions test was conducted in a semi-anechoic chamber.

2) The tabletop EUT was placed upon a non-metallic table 0.8m above the ground reference plane. And for floor-standing arrangement, the EUT was placed on the horizontal ground reference plane, but separated from metallic contact with the ground reference plane by 0.1m of insulation.

3) Before final measurements of radiated emissions, a pre-scan was performed in the spectrum mode with the peak detector to find out the maximum emissions spectrum plots of the EUT.

4) The frequencies of maximum emission were determined in the final radiated emissions measurement. At each frequency, the EUT was rotated 360°, and the antenna was raised and lowered from 1 to 4 meters in order to determine the maximum disturbance. Measurements were performed for both horizontal and vertical antenna polarization.

5) The bandwidth setting on the field strength meter (R&S Test Receiver ESCI) is set at 120KHz.

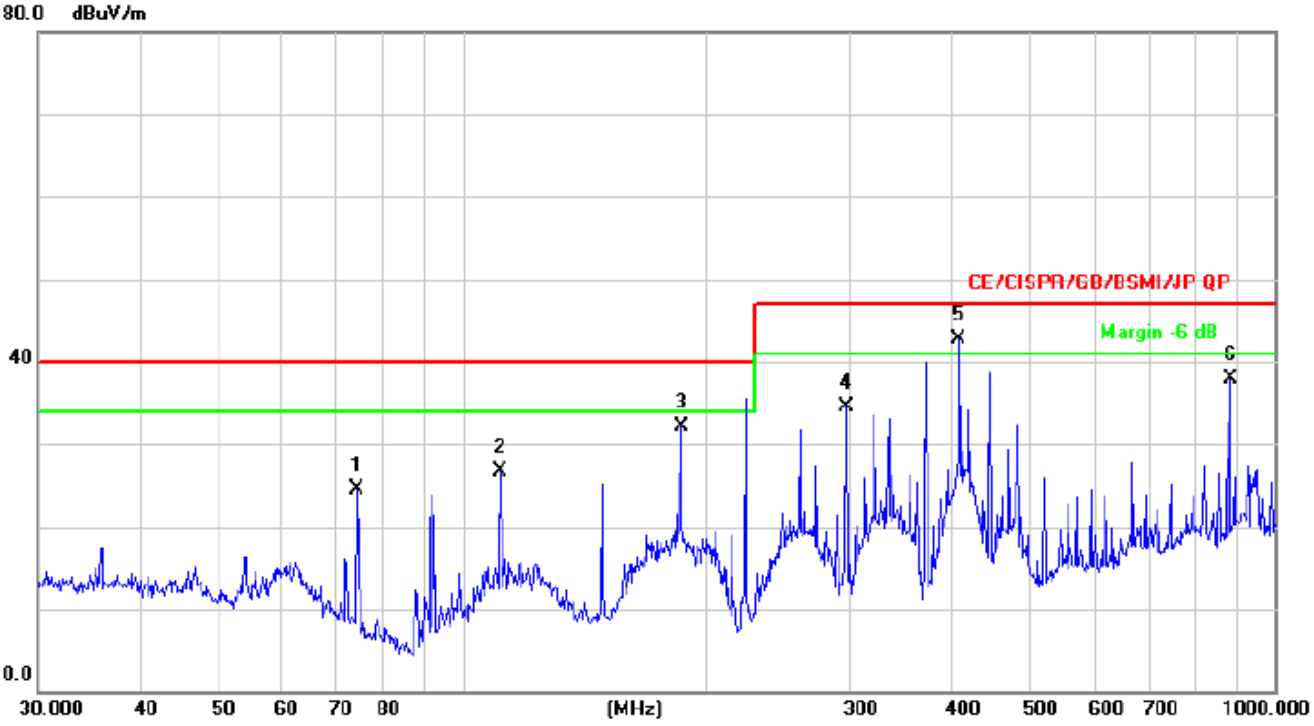
6) The frequency range from 30MHz to 1000MHz is checked.

4.7 Test Result

PASS

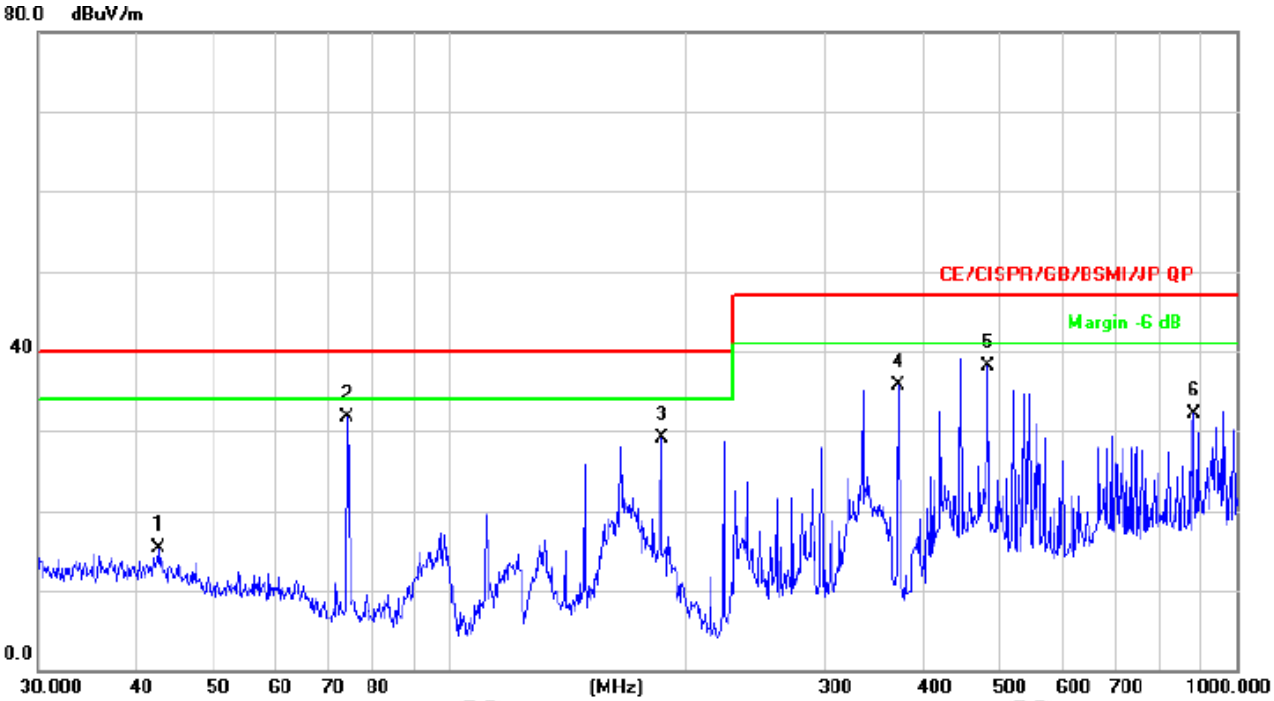
Please refer to the following page.

Radiation Emission Test Data			
Temperature:	24.5 ℃	Relative Humidity:	54%
Pressure:	1009hPa	Phase :	Horizontal
Test Voltage :	AC 100V/50Hz	Test Mode:	ON Mode



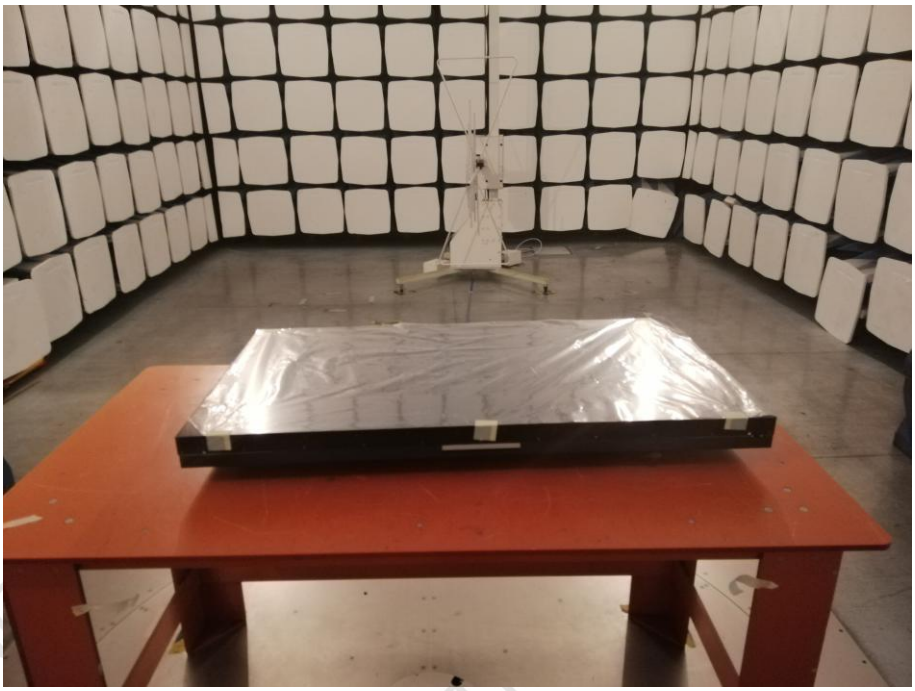
No.	Mk.	Freq.	Reading Level	Correct Factor	Measure-ment	Limit	Over		Antenna Height	Table Degree	
		MHz	dBuV	dB/m	dBuV/m	dBuV/m	dB	Detector	cm	degree	Comment
1		74.1350	40.50	-16.02	24.48	40.00	-15.52	QP			
2		111.3468	42.14	-15.53	26.61	40.00	-13.39	QP			
3		185.7881	47.14	-15.05	32.09	40.00	-7.91	QP			
4		297.2241	47.26	-12.66	34.60	47.00	-12.40	QP			
5	*	408.9460	52.65	-9.99	42.66	47.00	-4.34	QP			
6		881.4067	39.59	-1.68	37.91	47.00	-9.09	QP			

Radiation Emission Test Data			
Temperature:	24.5 ℃	Relative Humidity:	54%
Pressure:	1009hPa	Phase :	Vertical
Test Voltage :	AC 100V/50Hz	Test Mode:	ON Mode

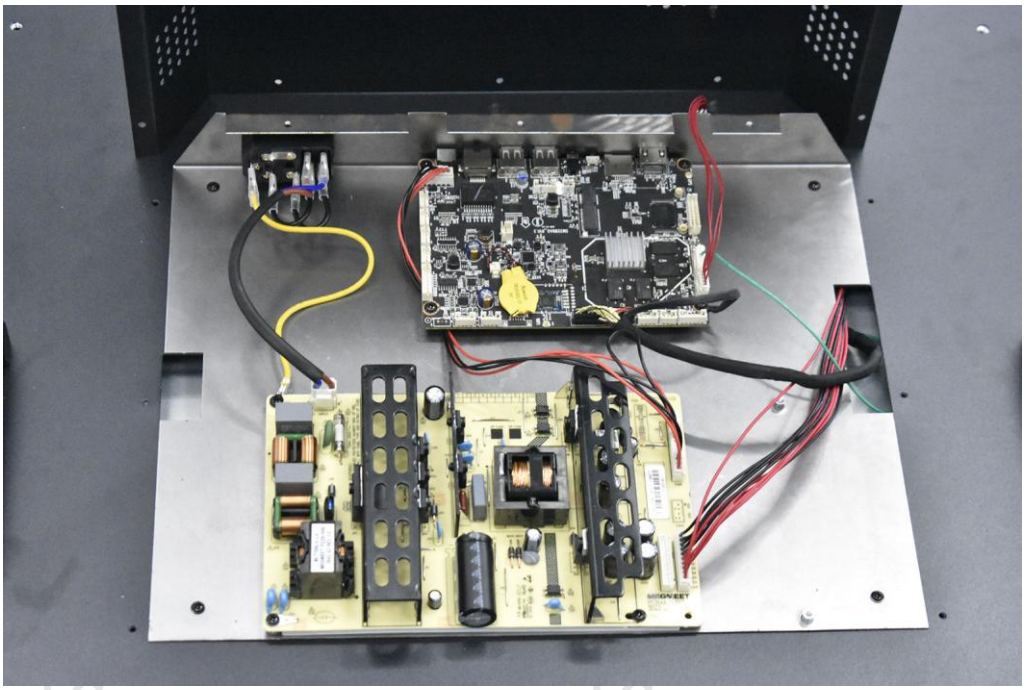


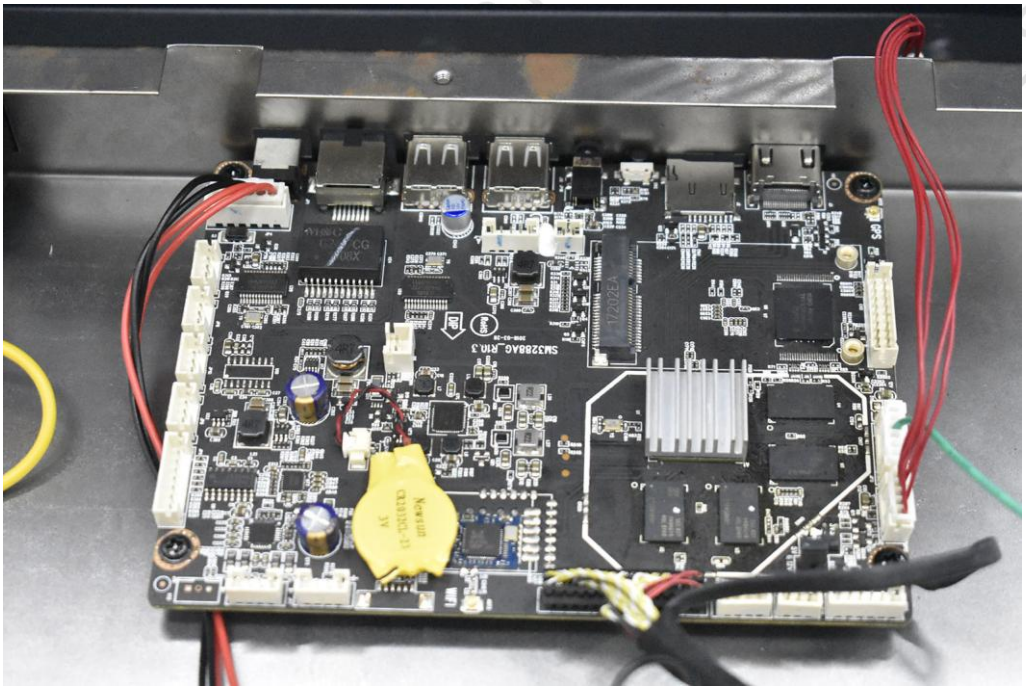
No.	Mk.	Freq.	Reading Level	Correct Factor	Measure-ment	Limit	Over		Antenna Height	Table Degree	
		MHz	dBuV	dB/m	dBuV/m	dBuV/m	dB	Detector	cm	degree	Comment
1		42.7496	24.49	-9.18	15.31	40.00	-24.69	QP			
2	*	74.1351	47.70	-16.02	31.68	40.00	-8.32	QP			
3		185.7882	44.20	-15.05	29.15	40.00	-10.85	QP			
4		372.0045	46.68	-10.88	35.80	47.00	-11.20	QP			
5		483.9094	46.50	-8.39	38.11	47.00	-8.89	QP			
6		881.4067	33.71	-1.68	32.03	47.00	-14.97	QP			

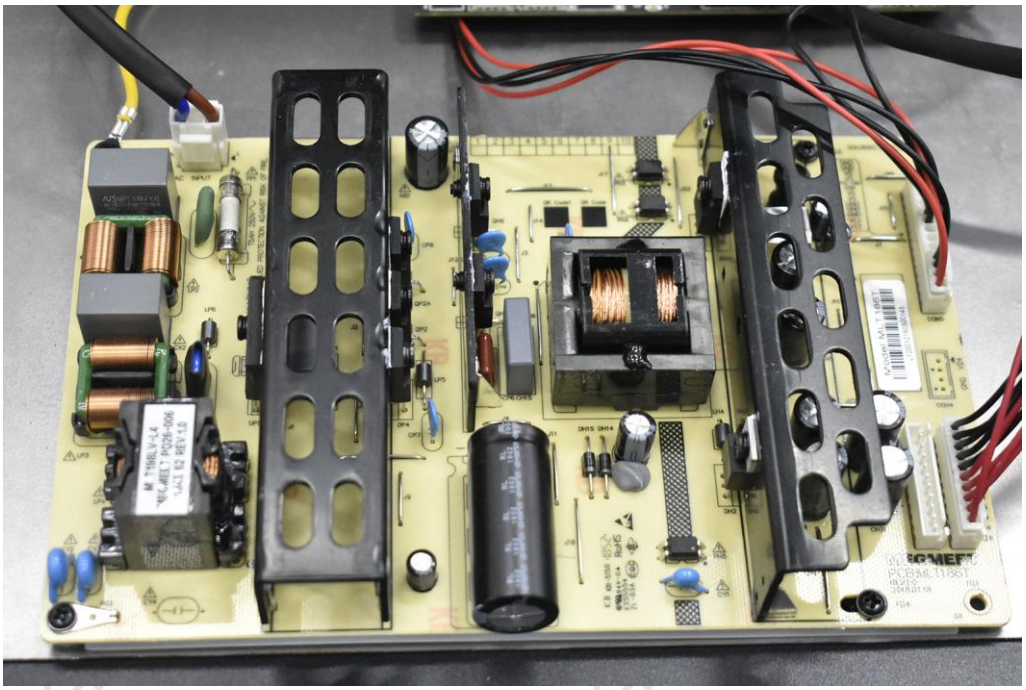
5 SETUP PHOTOGRAPHS



6 EUT PHOTOGRAPHS







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