



EMC Test Report

Product Name: Media Facade LED Display/Stripe Curtain LED Display

Model Number: P15, P25, P31

Applicant: Guangzhou Cai Tai Electronic Technology Co., Ltd.

KeySense Testing & Certification International Co., Ltd.

1-3F, Lab Building, No.29 District, ZhongKai Hi-Tech Industrial Development Park,
Huizhou, Guangdong, China



Test Report of EMC			
Product name	Media Facade LED Display/Stripe Curtain LED Display		
Model number	P15, P25, P31		
Applicant	Name	Guangzhou Cai Tai Electronic Technology Co., Ltd.	
	Address	NO.5 NANJIANG ROAD 2, NANSHA DESTRICK, GUANGZHOU, CHINA	
Manufacturer	Name	Guangzhou Cai Tai Electronic Technology Co., Ltd.	
	Address	NO.5 NANJIANG ROAD 2, NANSHA DESTRICK, GUANGZHOU, CHINA	
Factory	Name	Guangzhou Cai Tai Electronic Technology Co., Ltd.	
	Address	NO.5 NANJIANG ROAD 2, NANSHA DESTRICK, GUANGZHOU, CHINA	
Trade Name	/		
Receipt date	Sep 06, 2018	Quantity	3
Test site	1F,Lab Building,No.29 District, ZhongKai Hi-Tech Industrial Development Park, Huizhou, Guangdong, China.		
Test period	Sep 06, 2018-Sep 18,2018	Issue date	Nov 16,2018
Test result	The equipment under test was found to be compliance with the requirements of the applicant applied.		
Tested by: Star.Wang	Sign: <i>Star.Wang</i>	Date: 2018.11.16	
Reviewed by: Jack.Li	Sign: <i>Jack.Li</i>	Date: 2018.11.16	
Approved by: Lake. Wang (Supervisor)	Sign: <i>Lake.Wang</i>	Date: 2018.11.15	

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1 GENERAL INFORMATION

1.1 Description of Device(EUT)

Description: Media Facade LED Display/Stripe Curtain LED Display

Model Number: P15, P25, P31

Input: 220-240Vac ;50/60Hz ;1.8A

Output 400W

Test Voltage : AC 230V/50 Hz



1.2 EUT operating mode(s)

To achieve compliance applied standard specification, the following mode(s) were made during compliance testing:

Operating mode 1	All White
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1.3 Tested Supporting System Details

No.	Description	KST No.	Manufacturer	Model	Serial Number
1.	/	/	/	/	/



1.4 Test Facility

Site Description: 1-3F, Lab Building, No.29 District, ZhongKai Hi-Tech Industrial Development Park, Huizhou, Guangdong, China

Name of Firm: KeySense Testing & Certification International Co., Ltd.

EMC Lab: Certificated by CNAL, CHINA

Registration No.:L9678

Date of registration: Feb 07, 2017



1.5 Measurement Uncertainty(95% confidence levels, k=2)

Test Item	Uncertainty
Uncertainty for Radiation Emission test in 10m chamber	4.1dB(30M~1GHz,Polarize:V)
	4.0dB(30M~1GHz,Polarize:H)



1.6 Test Equipments

1.6.1 For radiated emission test

Equipment	Manufacturer	Model No.	Serial No.	Last Cal.	Cal. Interval
Receiver	R&S	ESR7	101661	2018.03.11	1 year
Trilog-boardband antenna	SCHWARZBECK	VULB 9163D	9163-971	2016.10.27	3 years
Pre-amplifier (Low Freq)	Clavio	BDLNA-0001-27 2007	1600015	2016.07.26	3 years



2 RADIATED EMISSION TEST

2.1 Limits for radiated disturbance

Frequency MHz	Distance	Limits dB(μ V)/m Class B
30 ~ 140	3m	40(Quasi Peak)
140~470	3m	36(Quasi Peak)
470-1000	3m	47(Quasi Peak)
30 ~ 140	10m	30(Quasi Peak)
140~470	10m	26(Quasi Peak)
470-1000	10m	37(Quasi Peak)

2.2 Operating Condition of EUT

Test date	Ambient temperature	Relative humidity	Atmospheric pressure
Sep 18, 2018	25°C	57%	101.3kPa

2.3 Test Procedure

EUT is placed on the turntable floor. The turntable does not rotate, the EUT faces the antenna, and the EUT is 3 and 10 meters away from the receiving antenna mounted on the tower. The antenna is measured upward and downward to find the maximum emission level. It moves from 1 meters to 4 meters for horizontal and vertical polarization.

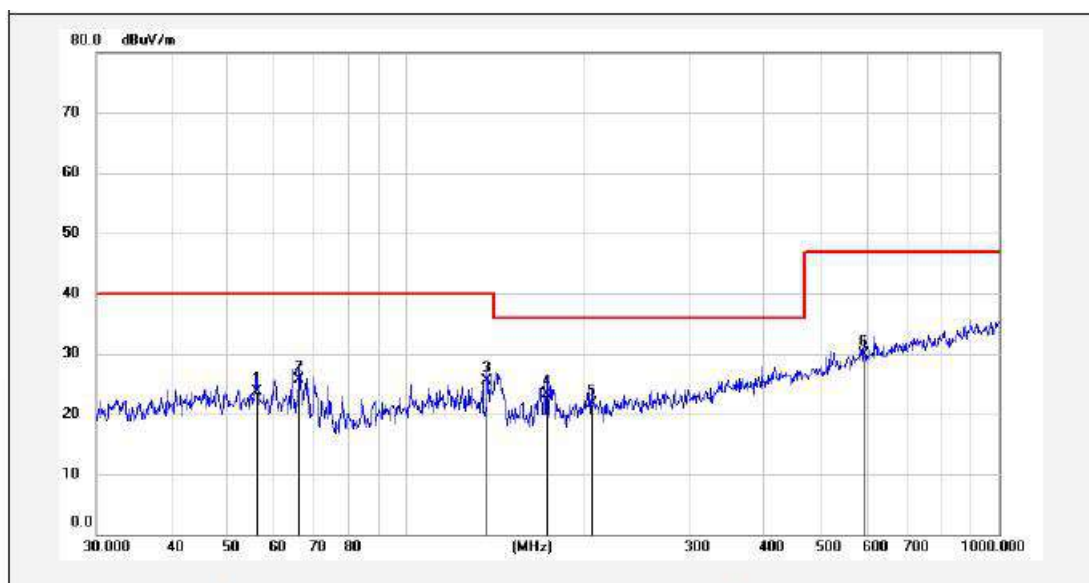
EUT was tested in the chamber. It is pre-scanned by a peak detector from the spectrum, and all final readings from the test receiver are measured by a quasi-peak detector.

The bandwidth of the test receiver is set to 120 kHz.

2.4 Test Data

30-1000MHz

EUT:	Media Facade LED Display/Stripe Curtain LED Display	Model Name:	P15
Test Mode:	All White	Test Date:	2018.9.18
Polarization:	Vertical	Test Voltage:	AC 230V /50Hz
Operator:	Star	Note:	3m Distance

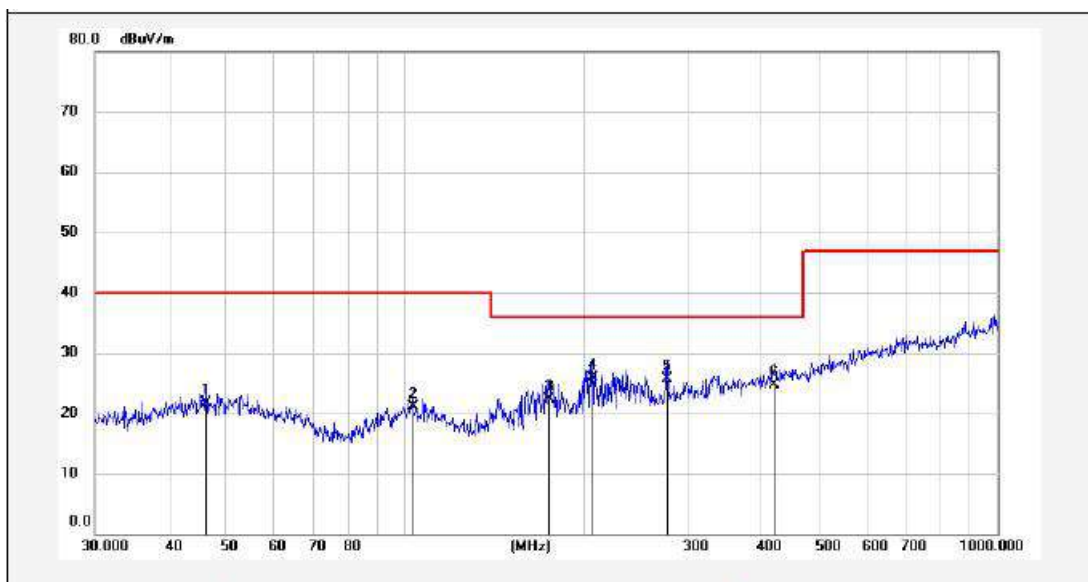


No.	Frequency (MHz)	Reading (dBuV/m)	Antenna. (dB/m)	Cable. (dB)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Detector	Remark
1	56.0007	9.16	13.76	0.88	23.80	40.00	-16.20	QP	
2	66.0342	12.85	11.89	0.96	25.70	40.00	-14.30	QP	
3	136.9391	15.73	8.53	1.34	25.60	40.00	-14.40	QP	
4	172.5988	12.52	9.23	1.55	23.30	36.00	-12.70	QP	
5	204.9550	8.89	11.18	1.73	21.80	36.00	-14.20	QP	
6	590.9737	8.96	17.99	3.05	30.00	47.00	-17.00	QP	

Remarks: 1. Result=Reading+Antenna+Cable

2. If Peak Result complies with QP limit, QP Result is deemed to comply with QP limit.

EUT:	Media Facade LED Display/Stripe Curtain LED Display	Model Name:	P15
Test Mode:	All White	Test Date:	2018.9.18
Polarization:	Horizontal	Test Voltage:	AC 230V /50Hz
Operator:	Star	Note:	3m Distance

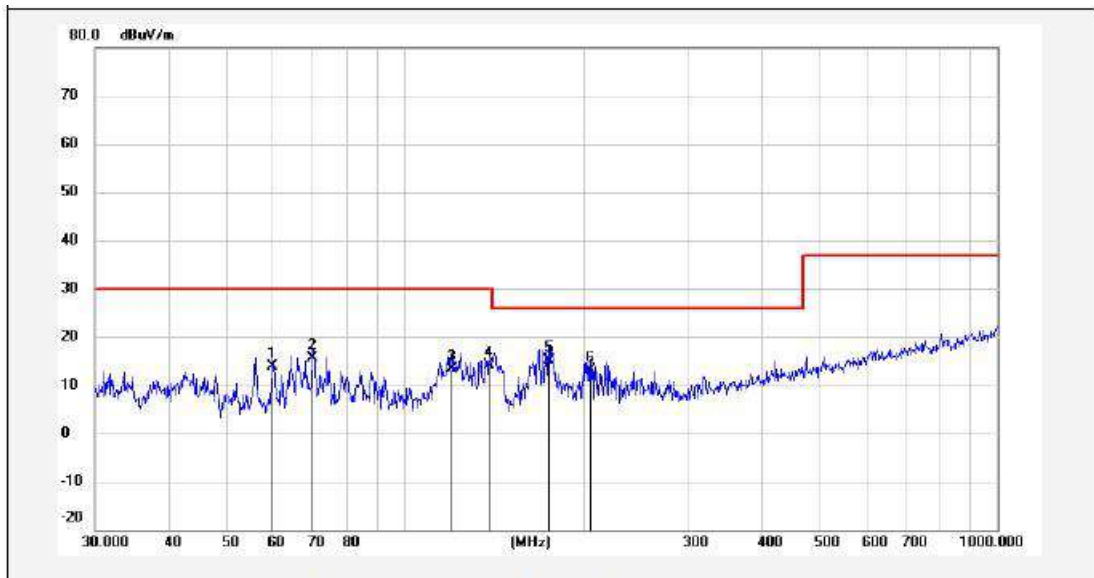


No.	Frequency (MHz)	Reading (dBuV/m)	Antenna. (dB/m)	Cable. (dB)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Detector	Remark
1	46.1779	6.40	14.48	0.82	21.70	40.00	-18.30	QP	
2	103.0800	7.44	12.41	1.25	21.10	40.00	-18.90	QP	
3	175.0363	11.43	9.31	1.56	22.30	36.00	-13.70	QP	
4	207.1226	13.17	11.09	1.74	26.00	36.00	-10.00	QP	
5	277.0935	11.09	12.66	2.05	25.80	36.00	-10.20	QP	
6	420.5803	6.92	15.38	2.5	24.80	36.00	-11.20	QP	

Remarks: 1. Result=Reading+Antenna+Cable

2. If Peak Result complies with QP limit, QP Result is deemed to comply with QP limit.

EUT:	Media Facade LED Display/Stripe Curtain LED Display	Model Name:	P15
Test Mode:	All White	Test Date:	2018.9.18
Polarization:	Vertical	Test Voltage:	AC 230V /50Hz
Operator:	Star	Note:	10m Distance

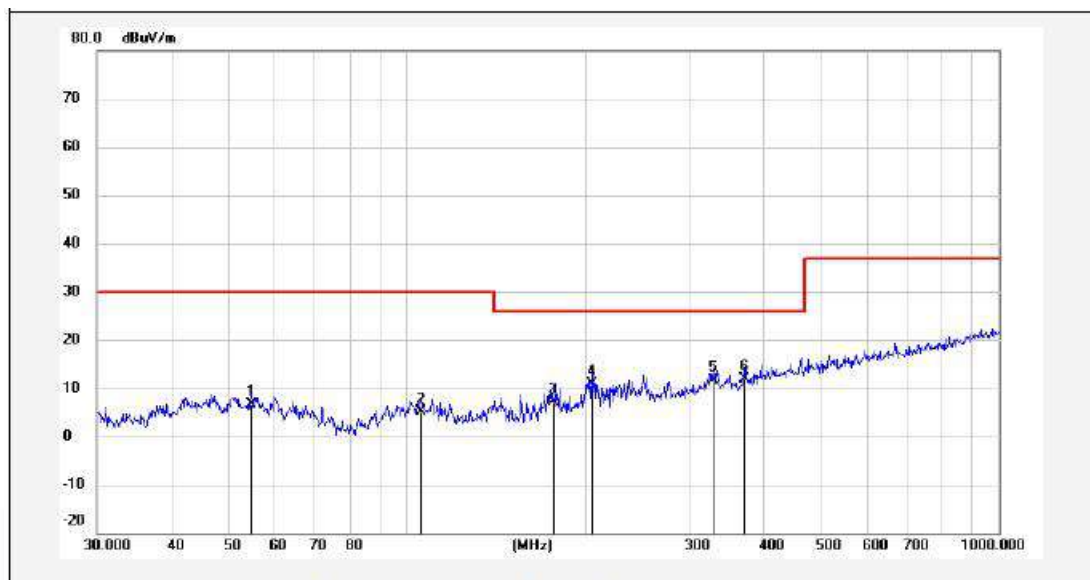


No.	Frequency (MHz)	Reading (dBuV/m)	Antenna. (dB/m)	Preamp. (dB)	Cable. (dB)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Detector	Remark
1	59.8588	30.73	12.02	30.42	1.47	13.80	30.00	-16.20	QP	
2	69.8448	35.22	9.41	30.37	1.44	15.70	30.00	-14.30	QP	
3	119.8555	31.94	9.61	30.02	1.77	13.30	30.00	-16.70	QP	
4	138.3873	34.63	7.64	29.91	1.84	14.20	30.00	-15.80	QP	
5	175.0363	34.23	8.79	29.79	1.97	15.20	26.00	-10.80	QP	
6	204.9550	29.92	10.86	29.75	2.07	13.10	26.00	-12.90	QP	

Remarks: 1. Result=Reading+Antenna-Preamp+Cable

2. If Peak Result complies with QP limit, QP Result is deemed to comply with QP limit.

EUT:	Media Facade LED Display/Stripe Curtain LED Display	Model Name:	P15
Test Mode:	All White	Test Date:	2018.9.18
Polarization:	Horizontal	Test Voltage:	AC 230V /50Hz
Operator:	Star	Note:	10m Distance

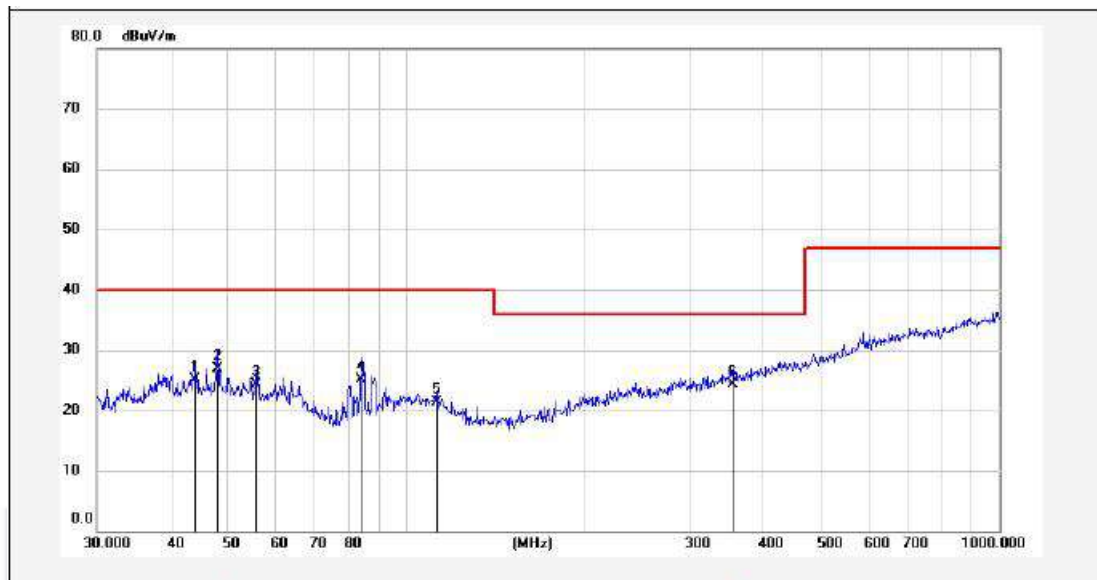


No.	Frequency (MHz)	Reading (dBuV/m)	Antenna. (dB/m)	Preamp. (dB)	Cable. (dB)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Detector	Remark
1	54.6428	22.34	13.27	30.45	1.44	6.60	30.00	-23.40	QP	
2	105.6414	21.97	11.63	30.11	1.71	5.20	30.00	-24.80	QP	
3	176.8874	26.08	8.93	29.79	1.98	7.20	26.00	-18.80	QP	
4	204.9550	27.72	10.86	29.75	2.07	10.90	26.00	-15.10	QP	
5	329.0389	25.11	13.88	29.73	2.34	11.60	26.00	-14.40	QP	
6	372.0045	24.18	14.6	29.78	2.8	11.80	26.00	-14.20	QP	

Remarks: 1. Result=Reading+Antenna+Preamp+Cable

2. If Peak Result complies with QP limit, QP Result is deemed to comply with QP limit.

EUT:	Media Facade LED Display/Stripe Curtain LED Display	Model Name:	P25
Test Mode:	All White	Test Date:	2018.9.18
Polarization:	Vertical	Test Voltage:	AC 230V /50Hz
Operator:	Star	Note:	3m Distance

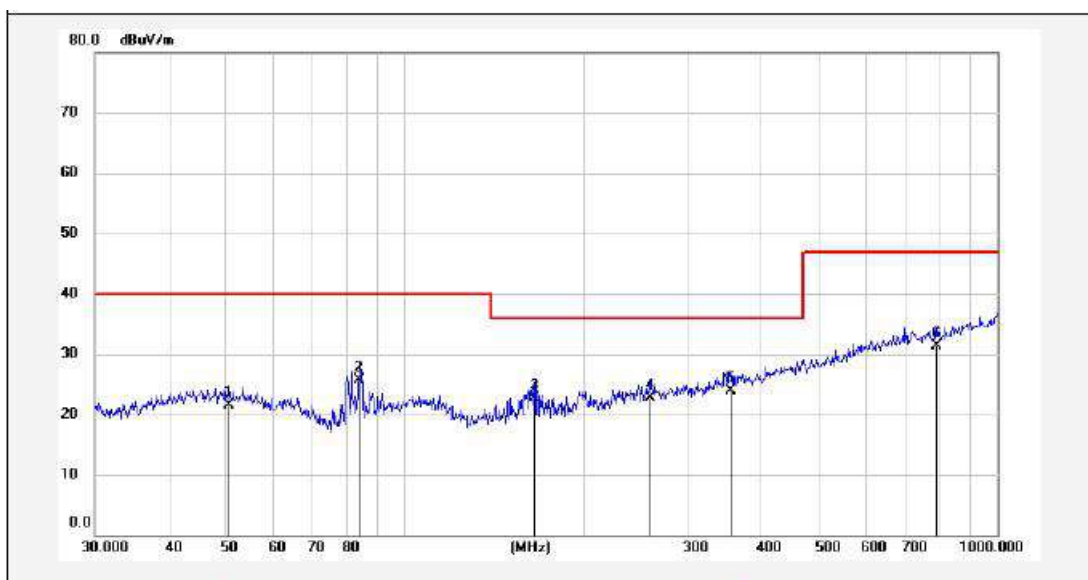


No.	Frequency (MHz)	Reading (dBuV/m)	Antenna. (dB/m)	Cable. (dB)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Detector	Remark
1	43.9658	10.02	14.37	0.81	25.20	40.00	-14.80	QP	
2	47.9940	11.67	14.51	0.82	27.00	40.00	-13.00	QP	
3	55.8046	9.61	13.81	0.88	24.30	40.00	-15.70	QP	
4	83.8156	15.10	8.99	1.11	25.20	40.00	-14.80	QP	
5	112.1303	8.25	11.8	1.25	21.30	40.00	-18.70	QP	
6	355.4273	7.66	14.43	2.31	24.40	36.00	-11.60	QP	

Remarks: 1. Result=Reading+Antenna+Cable

2. If Peak Result complies with QP limit, QP Result is deemed to comply with QP limit.

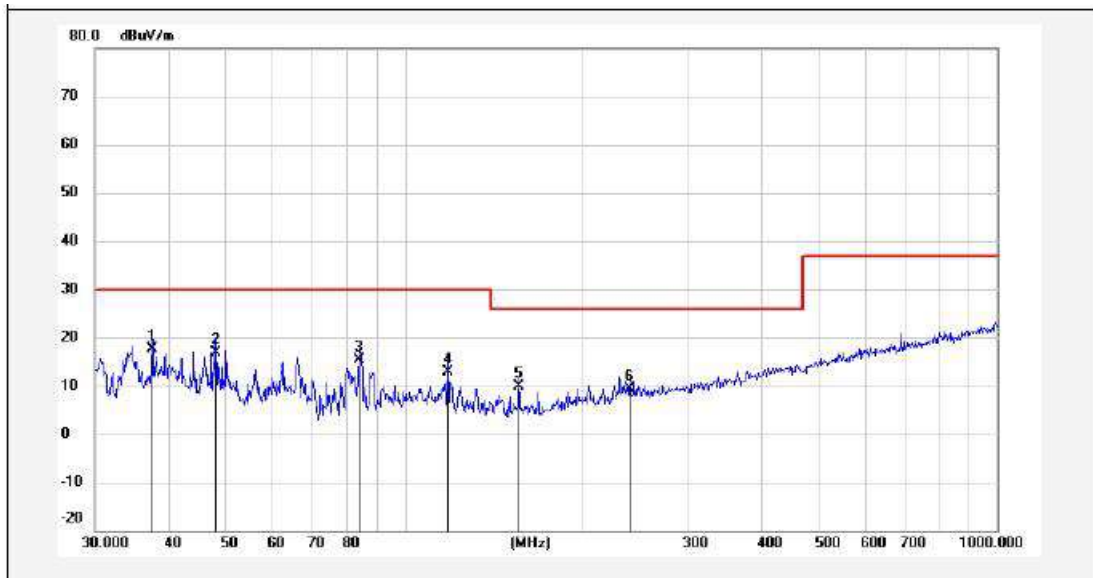
EUT:	Media Facade LED Display/Stripe Curtain LED Display	Model Name:	P25
Test Mode:	All White	Test Date:	2018.9.18
Polarization:	Horizontal	Test Voltage:	AC 230V /50Hz
Operator:	Star	Note:	3m Distance



No.	Frequency (MHz)	Reading (dBuV/m)	Antenna. (dB/m)	Cable. (dB)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Detector	Remark
1	50.5859	6.33	14.44	0.83	21.60	40.00	-18.40	QP	
2	83.8156	15.60	8.99	1.11	25.70	40.00	-14.30	QP	
3	165.4866	12.24	9.04	1.52	22.80	36.00	-13.20	QP	
4	259.2336	8.29	12.46	1.95	22.70	36.00	-13.30	QP	
5	354.1831	7.25	14.45	2.3	24.00	36.00	-12.00	QP	
6	787.8513	7.91	19.91	3.48	31.30	47.00	-15.70	QP	

Remarks: 1. Result=Reading+Antenna+Cable
 2. If Peak Result complies with QP limit, QP Result is deemed to comply with QP limit.

EUT:	Media Facade LED Display/Stripe Curtain LED Display	Model Name:	P25
Test Mode:	All White	Test Date:	2018.9.18
Polarization:	Vertical	Test Voltage:	AC 230V /50Hz
Operator:	Star	Note:	10m Distance

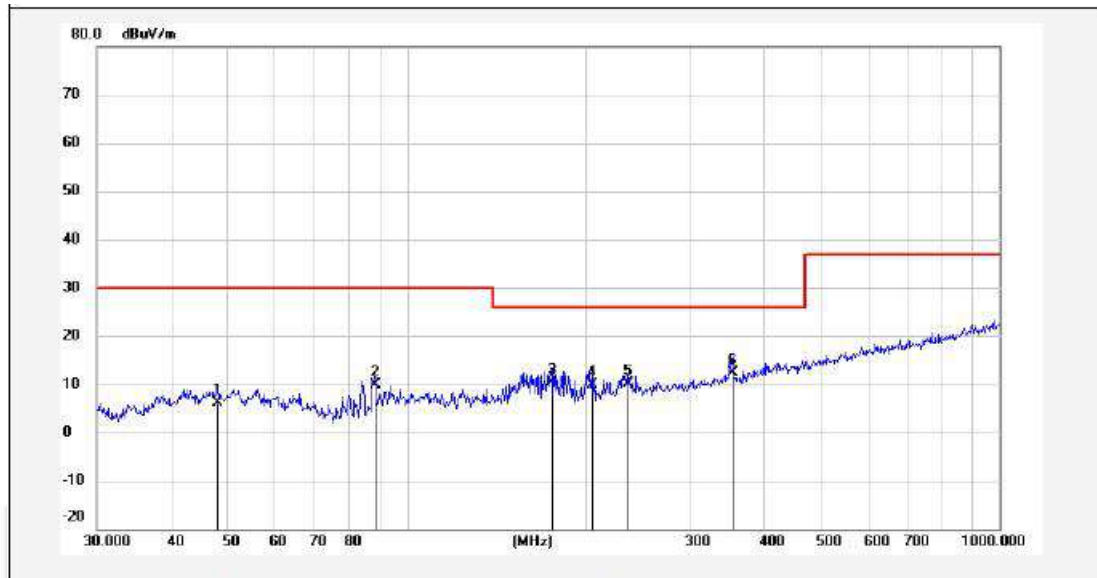


No.	Frequency (MHz)	Reading (dBuV/m)	Antenna. (dB/m)	Preamp. (dB)	Cable. (dB)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Detector	Remark
1	37.4165	34.81	12.04	30.57	1.32	17.60	30.00	-12.40	QP	
2	47.9940	32.22	13.67	30.5	1.41	16.80	30.00	-13.20	QP	
3	83.8156	36.17	8.15	30.29	1.47	15.50	30.00	-14.50	QP	
4	118.1862	31.35	9.92	30.03	1.76	13.00	30.00	-17.00	QP	
5	155.9100	29.74	7.98	29.83	1.91	9.80	26.00	-16.20	QP	
6	239.1473	25.16	11.96	29.76	2.14	9.50	26.00	-16.50	QP	

Remarks: 1. Result=Reading+Antenna-Preamp+Cable

2. If Peak Result complies with QP limit, QP Result is deemed to comply with QP limit.

EUT:	Media Facade LED Display/Stripe Curtain LED Display	Model Name:	P25
Test Mode:	All White	Test Date:	2018.9.18
Polarization:	Horizontal	Test Voltage:	AC 230V /50Hz
Operator:	Star	Note:	10m Distance

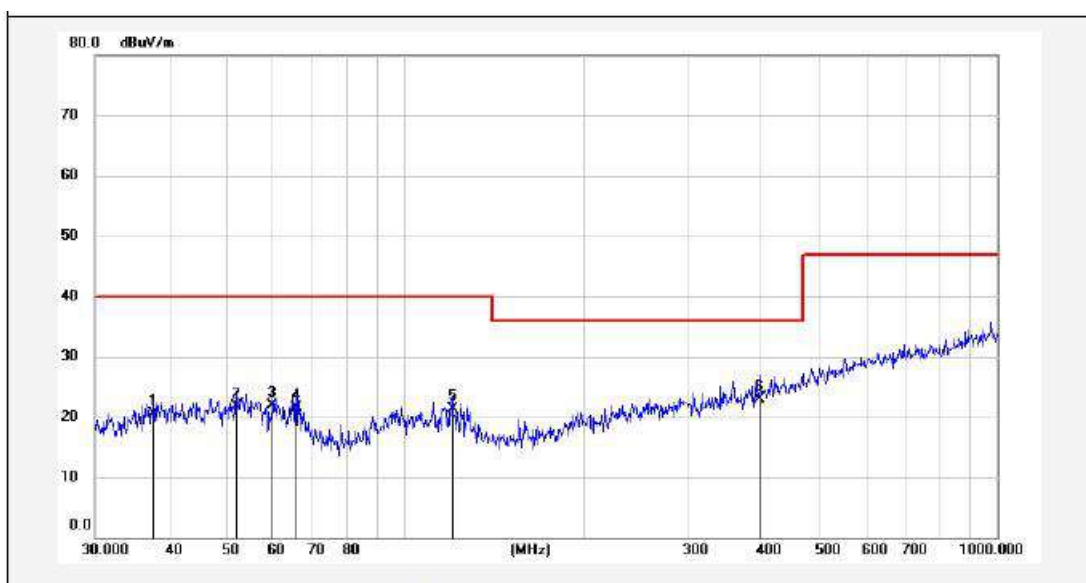


No.	Frequency (MHz)	Reading (dBuV/m)	Antenna. (dB/m)	Preamp. (dB)	Cable. (dB)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Detector	Remark
1	47.9938	21.62	13.67	30.5	1.41	6.20	30.00	-23.80	QP	
2	88.3421	29.17	9.34	30.24	1.53	9.80	30.00	-20.20	QP	
3	175.6516	29.27	8.84	29.79	1.98	10.30	26.00	-15.70	QP	
4	204.9550	26.62	10.86	29.75	2.07	9.80	26.00	-16.20	QP	
5	236.6447	25.94	11.89	29.76	2.13	10.20	26.00	-15.80	QP	
6	354.1831	24.92	14.68	29.73	2.43	12.30	26.00	-13.70	QP	

Remarks:1. Result=Reading+Antenna-Preamp+Cable

2. If Peak Result complies with QP limit, QP Result is deemed to comply with QP limit.

EUT:	Media Facade LED Display/Stripe Curtain LED Display	Model Name:	P31
Test Mode:	All White	Test Date:	2018.9.18
Polarization:	Vertical	Test Voltage:	AC 230V /50Hz
Operator:	Star	Note:	3m Distance

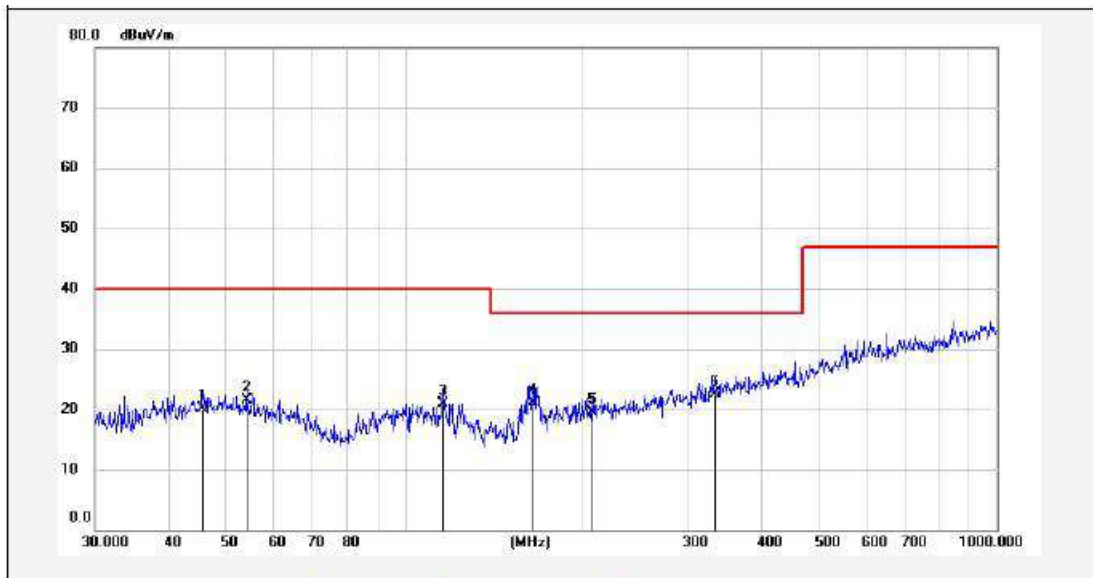


No.	Frequency (MHz)	Reading (dBuV/m)	Antenna. (dB/m)	Cable. (dB)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Detector	Remark
1	37.6798	6.84	12.97	0.79	20.60	40.00	-19.40	QP	
2	51.8430	6.52	14.43	0.85	21.80	40.00	-18.20	QP	
3	59.8588	8.13	12.86	0.91	21.90	40.00	-18.10	QP	
4	65.5725	8.52	12.02	0.96	21.50	40.00	-18.50	QP	
5	120.2766	9.70	10.36	1.24	21.30	40.00	-18.70	QP	
6	397.6333	5.69	14.91	2.4	23.00	36.00	-13.00	QP	

Remarks: 1. Result=Reading+Antenna+Cable

2. If Peak Result complies with QP limit, QP Result is deemed to comply with QP limit.

EUT:	Media Facade LED Display/Stripe Curtain LED Display	Model Name:	P31
Test Mode:	All White	Test Date:	2018.9.18
Polarization:	Horizontal	Test Voltage:	AC 230V /50Hz
Operator:	Star	Note:	3m Distance

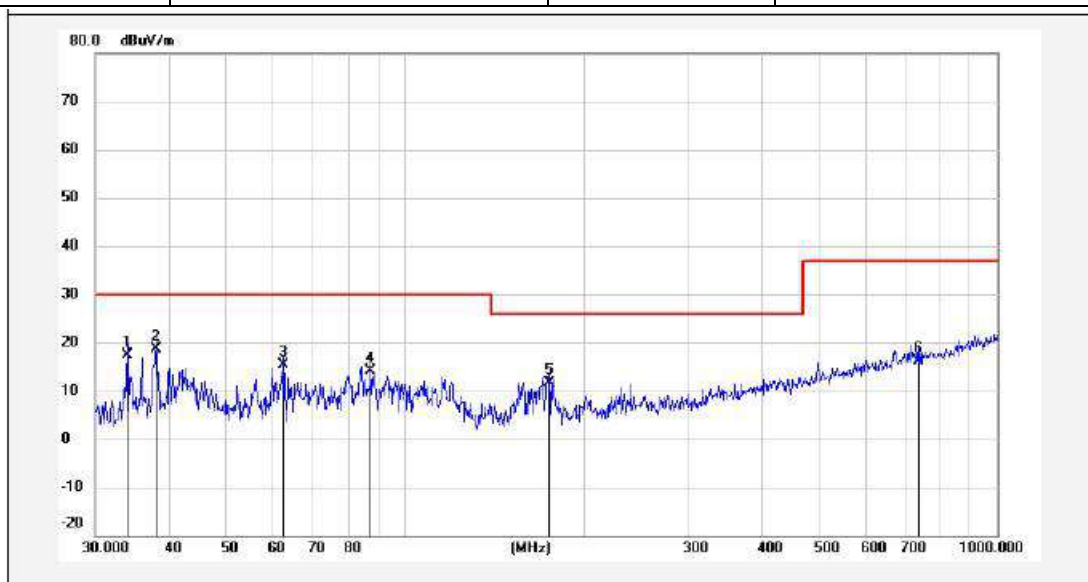


No.	Frequency (MHz)	Reading (dBuV/m)	Antenna. (dB/m)	Cable. (dB)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Detector	Remark
1	45.5347	4.93	14.46	0.81	20.20	40.00	-19.80	QP	
2	54.0711	6.48	14.26	0.86	21.60	40.00	-18.40	QP	
3	116.1321	8.62	11.14	1.24	21.00	40.00	-19.00	QP	
4	164.9075	10.65	9.03	1.52	21.20	36.00	-14.80	QP	
5	207.1226	6.67	11.09	1.74	19.50	36.00	-16.50	QP	
6	333.6865	6.50	13.91	2.19	22.60	36.00	-13.40	QP	

Remarks: 1. Result=Reading+Antenna+Cable

2. If Peak Result complies with QP limit, QP Result is deemed to comply with QP limit.

EUT:	Media Facade LED Display/Stripe Curtain LED Display	Model Name:	P31
Test Mode:	All White	Test Date:	2018.9.18
Polarization:	Vertical	Test Voltage:	AC 230V /50Hz
Operator:	Star	Note:	10m Distance

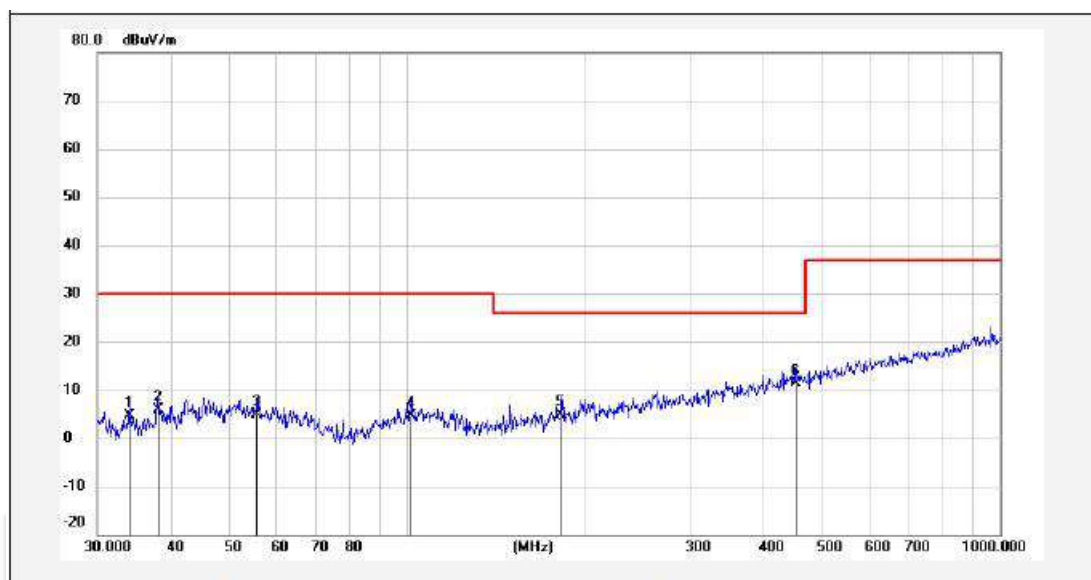


No.	Frequency (MHz)	Reading (dBuV/m)	Antenna. (dB/m)	Preamp. (dB)	Cable. (dB)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Detector	Remark
1	33.9174	36.04	10.81	30.6	1.25	17.50	30.00	-12.50	QP	
2	37.9450	35.62	12.22	30.57	1.33	18.60	30.00	-11.40	QP	
3	62.4313	32.57	11.68	30.41	1.46	15.30	30.00	-14.70	QP	
4	87.4175	33.86	9.07	30.25	1.52	14.20	30.00	-15.80	QP	
5	175.0363	30.73	8.79	29.79	1.97	11.70	26.00	-14.30	QP	
6	734.4913	22.16	20.13	30.76	4.67	16.20	37.00	-20.80	QP	

Remarks: 1. Result=Reading+Antenna-Preamp+Cable

2. If Peak Result complies with QP limit, QP Result is deemed to comply with QP limit.

EUT:	Media Facade LED Display/Stripe Curtain LED Display	Model Name:	P31
Test Mode:	All White	Test Date:	2018.9.18
Polarization:	Horizontal	Test Voltage:	AC 230V /50Hz
Operator:	Star	Note:	10m Distance



No.	Frequency (MHz)	Reading (dBuV/m)	Antenna. (dB/m)	Preamp. (dB)	Cable. (dB)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Detector	Remark
1	33.9174	23.14	10.81	30.6	1.25	4.60	30.00	-25.40	QP	
2	37.9450	22.82	12.22	30.57	1.33	5.80	30.00	-24.20	QP	
3	55.8046	20.93	12.97	30.45	1.45	4.90	30.00	-25.10	QP	
4	101.2883	21.67	11.47	30.13	1.69	4.70	30.00	-25.30	QP	
5	181.2834	23.40	9.28	29.78	2	4.90	26.00	-21.10	QP	
6	452.7196	21.89	15.95	29.85	3.51	11.50	26.00	-14.50	QP	

Remarks: 1. Result=Reading+Antenna-Preamp+Cable
 2. If Peak Result complies with QP limit, QP Result is deemed to comply with QP limit.

3 Test setup photo

Radiated Disturbance Test



3m Distance



10m Distance

..... End of Report

Statement

1. The calibration and measurement of test equipments used in our laboratory are traceable to National primary standard of measurement and BIPM.
2. The report is invalid without the special test seal of the company.
3. The test report is invalid without the signature of main tester,examiner and approver.
4. The report is invalid if altered and added or deleted.
5. The test results in this report only apply to the tested samples.
6. This test report shall not be reproduced except in full, without the written approval of our laboratory.
7. “☆”item cannot be Accredited by CNAS.
8. Any objections must be raised to KeySense within 15days since the date when report is received.

Test Laboratory: KeySense Testing & Certification International Co., Ltd.

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