



FCC Test Report

FCC ID: 2AEZV-ICI101T

Product: DIGITAL ADVERTISEMENT SCREEN
Trade Mark: ICI
Model Number: ICI101
Serial Model: N/A
Report No.: SER170918278003E

Prepared for

ICI Technology Shenzhen Co., Ltd.
2A826, Xinludao Building, Nanshan Street and Guimiao Road,
Nanshan District, Shenzhen, China.

Prepared by

Shenzhen NTEK Testing Technology Co., Ltd.
1/F, Building E, Fenda Science Park, Sanwei Community,
Xixiang Street Bao'an District, Shenzhen P.R. China
Tel.: +86-755-6115 9388
Fax.: +86-755-6115 6599
Website: <http://www.ntek.org.cn>

TEST RESULT CERTIFICATION

Applicant's name : ICI Technology Shenzhen Co., Ltd.

Address..... : 2A826, Xinludao Building, Nanshan Street and Guimiao Road,
Nanshan District, Shenzhen, China.

Manufacturer's Name : ICI Technology Shenzhen Co., Ltd.

Address..... : 2A826, Xinludao Building, Nanshan Street and Guimiao Road,
Nanshan District, Shenzhen, China.

Product description

Product name..... : DIGITAL ADVERTISEMENT SCREEN

Model and/or type reference : ICI101

FCC Part15B:Apr 11.2017

Standards : ANSI C63.4:2014

This device described above has been tested by NTEK, and the test results show that the equipment under test (EUT) is in compliance with Part 15 of FCC Rules. And it is applicable only to the tested sample identified in the report.

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Date of Test :

Date (s) of performance of tests..... : 14 Jun. 2017 ~ 29 Sep 2017

Date of Issue : 29 Sep 2017

Test Result..... : **Pass**

Testing Engineer : 
(Susan Su)

Technical Manager : 
(Jason Chen)

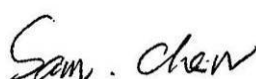
Authorized Signatory : 
(Sam Chen)

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1. TEST SUMMARY

Test procedures according to the technical standards:

EMC Emission				
Standard	Test Item	Limit	Judgment	Remark
FCC Part15B:2017 ANSI C63.4: 2014	Conducted Emission	Class B	PASS	
	Radiated Emission	Class B	PASS	

NOTE:

- (1) 'N/A' denotes test is not applicable in this Test Report
- (2) For client's request and manual description, the test will not be executed.

1.1 TEST FACILITY

Shenzhen NTEK Testing Technology Co., Ltd

Add. : 1/F, Building E, Fenda Science Park, Sanwei Community, Xixiang Street, Bao'an District, Shenzhen 518126 P.R. China.

FCC Registration Number: 463705; IC Registration Number:9270A-1

CNAS Registration Number:L5516

1.2 MEASUREMENT UNCERTAINTY

The reported uncertainty of measurement $y \pm U$, where expended uncertainty U is based on a standard uncertainty multiplied by a coverage factor of $k=2$, providing a level of confidence of approximately **95** %.

A. Conducted Measurement :

Test Site	Method	Measurement Frequency Range	U, (dB)	NOTE
NTEKC01	ANSI	150 KHz ~ 30MHz	3.2	

B. Radiated Measurement :

Test Site	Method	Measurement Frequency Range	U, (dB)	NOTE
NTEKA01	ANSI	30MHz ~ 1000MHz	4.7	
		1GHz ~12.4GHz	5.0	

2. GENERAL INFORMATION

2.1 GENERAL DESCRIPTION OF EUT

Equipment	DIGITAL ADVERTISEMENT SCREEN	
Trade Mark	ICI	
Model Name	ICI101	
Serial Model	N/A	
Model Difference	N/A	
Product Description	The EUT is a DIGITAL ADVERTISEMENT SCREEN.	
	Connecting I/O port:	USB, DC in, HDMI, RJ45, SD Card, SPKR, ETH
	Operation Frequency:	BT:2402~2480 MHz WIFI:802.11b/g/n20:2412~2462MHz 802.11n40MHz: 2422-2452MHz
	Modulation Type:	BT(1Mbps)/BLE: GFSK BT EDR(2Mbps): $\pi/4$ -DQPSK BT EDR(3Mbps): 8-DPSK IEEE 802.11b : DSSS (CCK, DQPSK, DBPSK) IEEE 802.11g/n (HT20/HT40) : OFDM (64QAM, 16QAM, QPSK, BPSK)
Power Source	DC 12V from adapter or DC 48V from POE	
Adapter	N/A	
Battery	N/A	
HW Version	N/A	
SW Version	N/A	

2.1.1 DESCRIPTION OF TEST MODES

To investigate the maximum EMI emission characteristics generates from EUT, the test system was pre-scanning tested base on the consideration of following EUT operation mode or test configuration mode which possible have effect on EMI emission level. Each of these EUT operation mode(s) or test configuration mode(s) mentioned above was evaluated respectively.

Pretest Mode	Description
Mode 1	SD card Playing
Mode 2	USB Playing
Mode 3	LAN
Mode 4	BT
Mode 5	WIFI

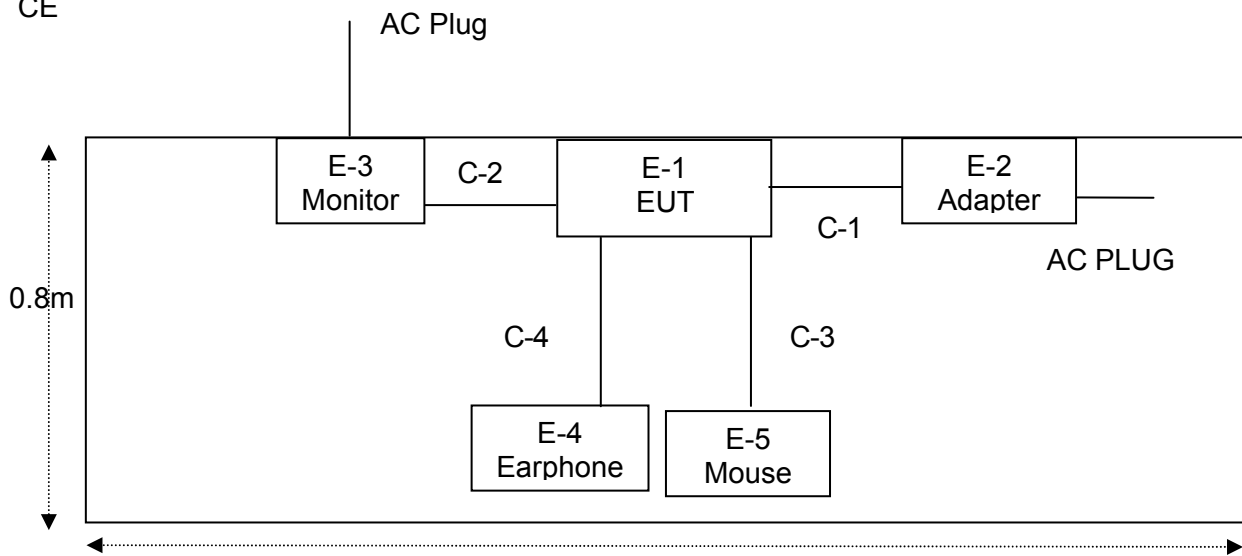
For Conducted Test	
Final Test Mode	Description
Mode 1	SD card Playing
Mode 2	USB Playing
Mode 3	LAN
Mode 4	BT
Mode 5	WIFI

For Radiated Test	
Final Test Mode	Description
Mode 1	SD card Playing
Mode 2	USB Playing
Mode 3	LAN
Mode 4	BT
Mode 5	WIFI

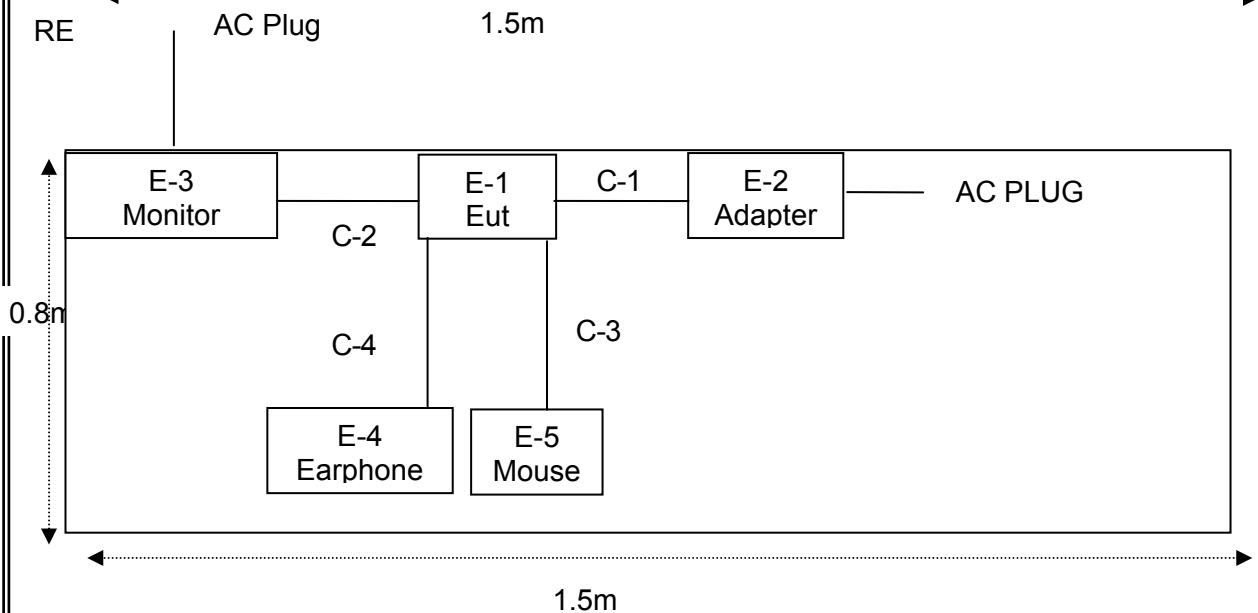
Note: Final Test Mode: Through Pre-scan, find the mode 1 is the worst case.
Only the worst case mode is recorded in the report.

2.2 DESCRIPTION OF TEST SETUP

CE

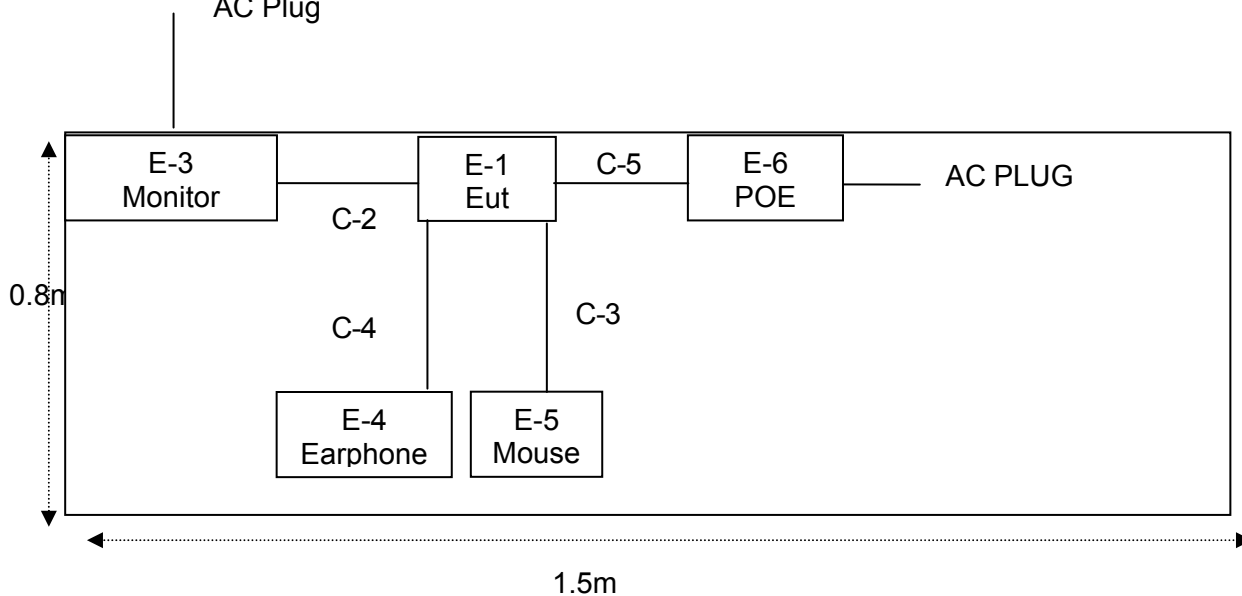


RE



Telecommunication Port

AC Plug



2.3 DESCRIPTION TEST PERIPHERAL AND EUT PERIPHERAL

The EUT has been tested as an independent unit together with other necessary accessories or support units. The following support units or accessories were used to form a representative test configuration during the tests.

Item	Equipment	Brand	Model/Type No.	Series No.	Note
E-1	DIGITAL ADVERTISEMENT SCREEN	ICI	ICI101	N/A	EUT
E-2	Adapter	N/A	P24090250 US	N/A	Peripherals
E-3	Monitor	SONY	KDL-24EX520	N/A	
E-4	Earphone	N/A	2688	N/A	Peripherals
E-5	Mouse	DELL	MS111-P	cn-011d3v-71581-11e-1th 7	Peripherals
E-6	POE	N/A	PSE5416E	N/A	

Item	Cable Type	Shielded Type	Ferrite Core	Length	Note
C-1	USB Cable	NO	NO	1.5m	
C-2	HDMI Cable	NO	NO	1.0m	
C-3	Mouse Cable	NO	NO	1.2m	
C-4	Earphone Cable	NO	NO	1.2m	
C-5	RJ45 Cable	NO	NO	1.5m	

Note:

- (1) The support equipment was authorized by Declaration of Confirmation.
- (2) For detachable type I/O cable should be specified the length in cm in 『Length』 column.
- (3) “YES” means “shielded” “with core”; “NO” means “unshielded” “without core”.

2.4 MEASUREMENT INSTRUMENTS LIST

Radiation Test equipment

Item	Kind of Equipment	Manufacturer	Type No.	Serial No.	Last calibration	Calibrated until	Calibration period
1	Spectrum Analyzer	Agilent	E4407B	MY45108040	2017.06.06	2018.06.05	1 year
2	Test Receiver	R&S	ESPI	101318	2017.06.06	2018.06.05	1 year
3	Bilog Antenna	TESEQ	CBL6111D	31216	2017.04.09	2018.04.08	1 year
4	50Ω Coaxial Switch	Anritsu	MP59B	6200264416	2017.06.06	2018.06.05	1 year
5	Spectrum Analyzer	ADVANTEST	R3132	150900201	2017.06.06	2018.06.05	1 year
6	Horn Antenna	EM	EM-AH-10180	2011071402	2017.04.09	2018.04.08	1 year
7	Horn Ant	Schwarzbeck	BBHA 9170	9170-181	2017.07.06	2018.07.05	1 year
8	Amplifier	EMC	EMC051835SE	980246	2017.08.09	2018.08.08	1 year
9	Loop Antenna	ARA	PLA-1030/B	1029	2017.06.06	2018.06.05	1 year
10	Power Meter	DARE	RPR3006W	15I00041S NO84	2017.08.09	2018.08.08	1 year
11	Power Sensor	R&S	URV5-Z4	0395.1619.05	2017.07.06	2018.07.05	1 year
12	Test Cable (30MHz-1GHz)	N/A	R-02	N/A	2017.04.21	2020.04.20	3 year
13	High Test Cable(1G-40 GHz)	N/A	R-03	N/A	2017.04.21	2020.04.20	3 year
14	High Test Cable(1G-40 GHz)	N/A	R-04	N/A	2017.04.21	2020.04.20	3 year

Conduction Test equipment

Item	Kind of Equipment	Manufacturer	Type No.	Serial No.	Last calibration	Calibrated until	Calibration period
1	Test Receiver	R&S	ESCI	101160	2017.06.06	2018.06.05	1 year
2	LISN	R&S	ENV216	101313	2017.04.19	2018.04.18	1 year
3	LISN	SCHWARZBECK	NNLK 8129	8129245	2017.06.06	2018.06.05	1 year
4	50Ω Coaxial Switch	ANRITSU CORP	MP59B	6200983704	2017.06.06	2018.06.05	1 year
5	Test Cable (9KHz-30MHz)	N/A	C01	N/A	2017.04.21	2020.04.20	3 year
6	Test Cable (9KHz-30MHz)	N/A	C02	N/A	2017.04.21	2020.04.20	3 year
7	Test Cable (9KHz-30MHz)	N/A	C03	N/A	2017.04.21	2020.04.20	3 year

3. EMC EMISSION TEST

3.1 CONDUCTED EMISSION MEASUREMENT

3.1.1 POWER LINE CONDUCTED EMISSION (Frequency Range 150KHz-30MHz)

FREQUENCY (MHz)	Class A (dBuV)		Class B (dBuV)	
	Quasi-peak	Average	Quasi-peak	Average
0.15 -0.5	79.00	66.00	66 - 56 *	56 - 46 *
0.50 -5.0	73.00	60.00	56.00	46.00
5.0 -30.0	73.00	60.00	60.00	50.00

Note:

- (1) The tighter limit applies at the band edges.
- (2) The limit of " * " marked band means the limitation decreases linearly with the logarithm of the frequency in the range.

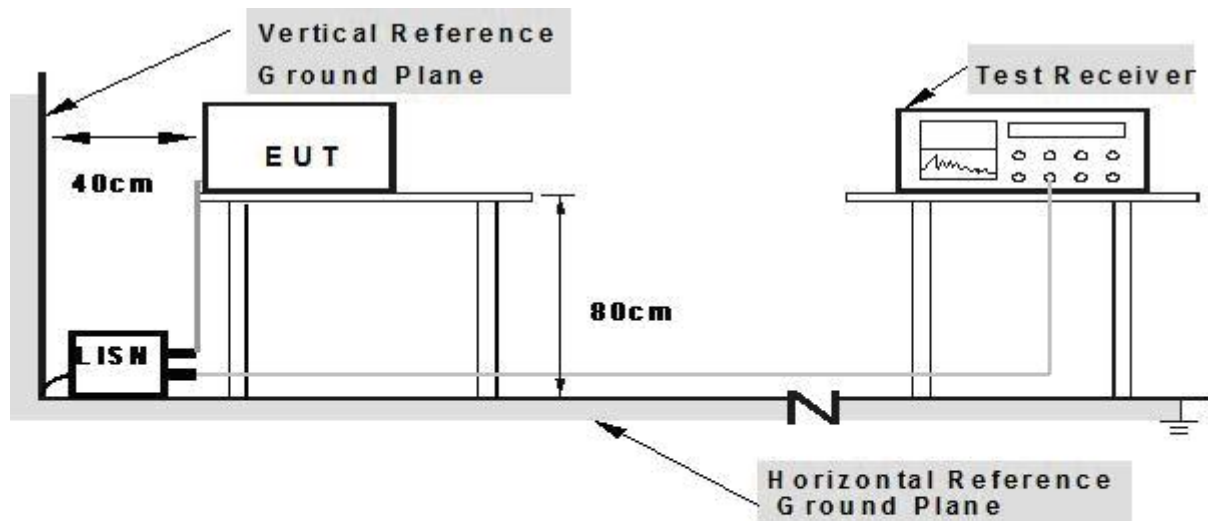
The following table is the setting of the receiver

Receiver Parameters	Setting
Attenuation	10 dB
Start Frequency	0.15 MHz
Stop Frequency	30 MHz
IF Bandwidth	9 kHz

3.1.2 TEST PROCEDURE

- The EUT was placed 0.8 meters from the horizontal ground plane with EUT being connected to the power mains through a line impedance stabilization network (LISN). All other support equipments powered from additional LISN(s). The LISN provide 50 Ohm/ 50uH of coupling impedance for the measuring instrument.
- Interconnecting cables that hang closer than 40 cm to the ground plane shall be folded back and forth in the center forming a bundle 30 to 40 cm long.
- I/O cables that are not connected to a peripheral shall be bundled in the center. The end of the cable may be terminated, if required, using the correct terminating impedance. The overall length shall not exceed 1 m.
- LISN at least 80 cm from nearest part of EUT chassis.
- For the actual test configuration, please refer to the related Item –EUT Test Photos.

3.1.3 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 cm from other units and other metal planes

3.1.4 EUT OPERATING CONDITIONS

The EUT tested system was configured as the statements of 2.3 Unless otherwise a special operating condition is specified in the follows during the testing.

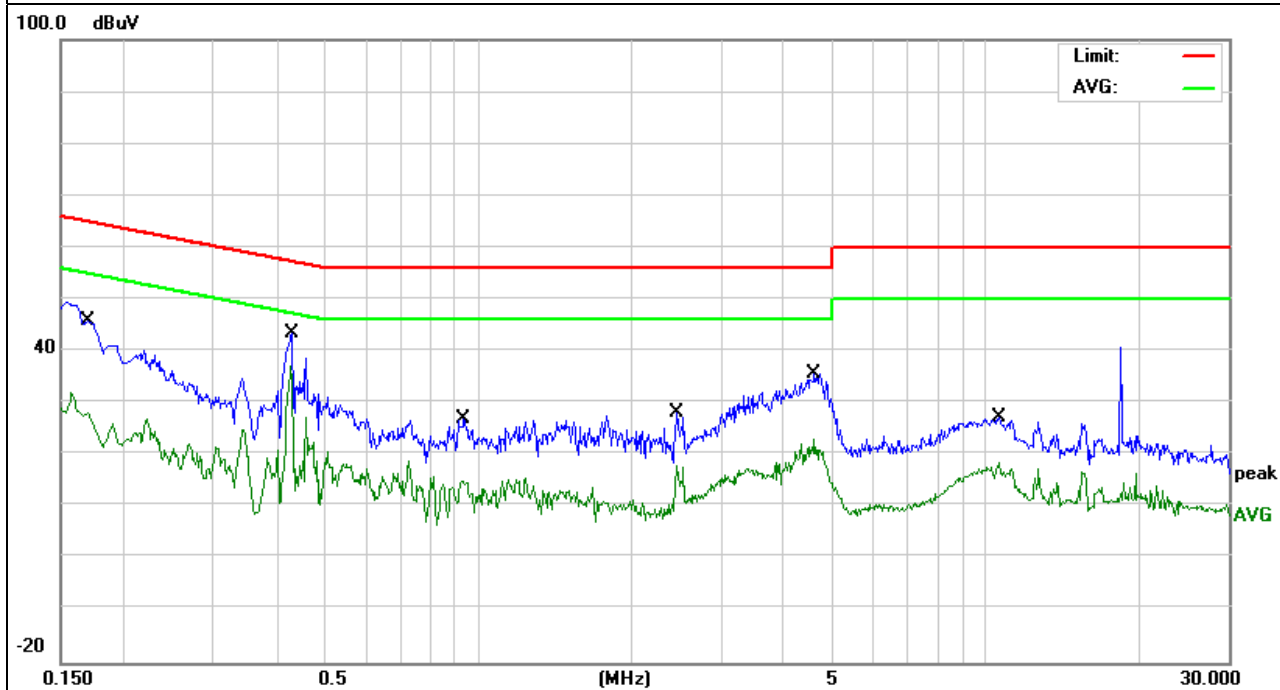
3.1.5 TEST RESULTS

EUT:	DIGITAL ADVERTISEMENT SCREEN	Model Name. :	ICI101
Temperature:	26 °C	Relative Humidity:	54%
Pressure:	1010hPa	Test Date:	2017-9-18
Test Mode:	Mode 1	Phase :	L
Test Voltage:	DC 12V from Adapter AC120V/60Hz		

Frequency (MHz)	Reading Level (dBμV)	Correct Factor (dB)	Measure-ment (dBμV)	Limits (dBμV)	Margin (dB)	Remark
0.17	36.04	9.7	45.74	64.96	-19.22	QP
0.17	18.35	9.7	28.05	54.96	-26.91	AVG
0.4299	33.71	9.71	43.42	57.25	-13.83	QP
0.4299	27.35	9.71	37.06	47.25	-10.19	AVG
0.934	17.13	9.8	26.93	56.00	-29.07	QP
0.934	5.1	9.8	14.9	46.00	-31.10	AVG
2.458	18.27	9.83	28.1	56.00	-27.90	QP
2.458	8.03	9.83	17.86	46.00	-28.14	AVG
4.5739	25.83	9.97	35.8	56.00	-20.20	QP
4.5739	13.07	9.97	23.04	46.00	-22.96	AVG
10.5655	17.48	9.92	27.4	60.00	-32.60	QP
10.5655	8.55	9.92	18.47	50.00	-31.53	AVG

Remark:

1. All readings are Quasi-Peak and Average values.
2. Factor = Insertion Loss + Cable Loss.

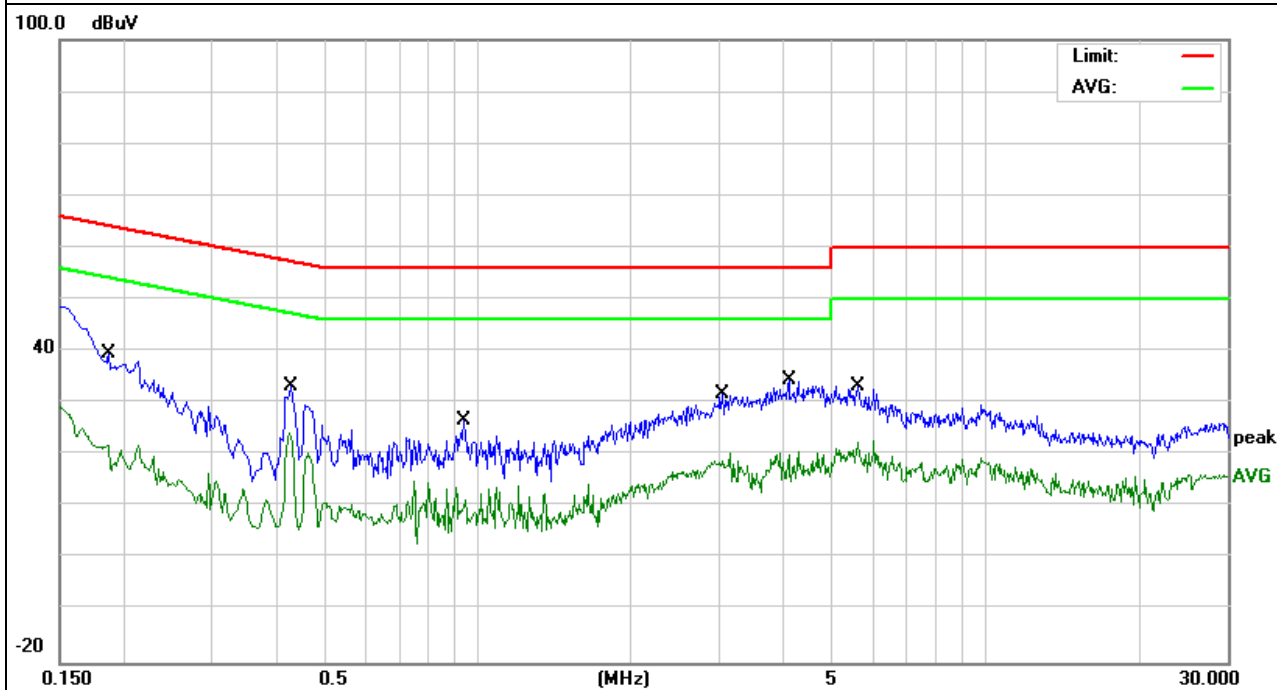


EUT:	DIGITAL ADVERTISEMENT SCREEN	Model Name. :	IC1101
Temperature:	26 °C	Relative Humidity:	54%
Pressure:	1010hPa	Test Date:	2017-9-18
Test Mode:	Mode 1	Phase :	N
Test Voltage:	DC 12V from Adapter AC120V/60Hz		

Frequency	Reading Level	Correct Factor	Measure-ment	Limits	Margin	Remark
(MHz)	(dBμV)	(dB)	(dBμV)	(dBμV)	(dB)	
0.1872	29.79	9.8	39.59	64.16	-24.57	QP
0.1872	11.94	9.8	21.74	54.16	-32.42	AVG
0.4299	23.29	9.81	33.1	57.25	-24.15	QP
0.4299	13.45	9.81	23.26	47.25	-23.99	AVG
0.9415	16.79	9.82	26.61	56.00	-29.39	QP
0.9415	0.04	9.82	9.86	46.00	-36.14	AVG
3.0259	21.84	9.85	31.69	56.00	-24.31	QP
3.0259	9.13	9.85	18.98	46.00	-27.02	AVG
4.1097	24.64	9.86	34.5	56.00	-21.50	QP
4.1097	6.94	9.86	16.8	46.00	-29.20	AVG
5.6017	23.5	9.9	33.4	60.00	-26.60	QP
5.6017	12.43	9.9	22.33	50.00	-27.67	AVG

Remark:

1. All readings are Quasi-Peak and Average values.
2. Factor = Insertion Loss + Cable Loss.

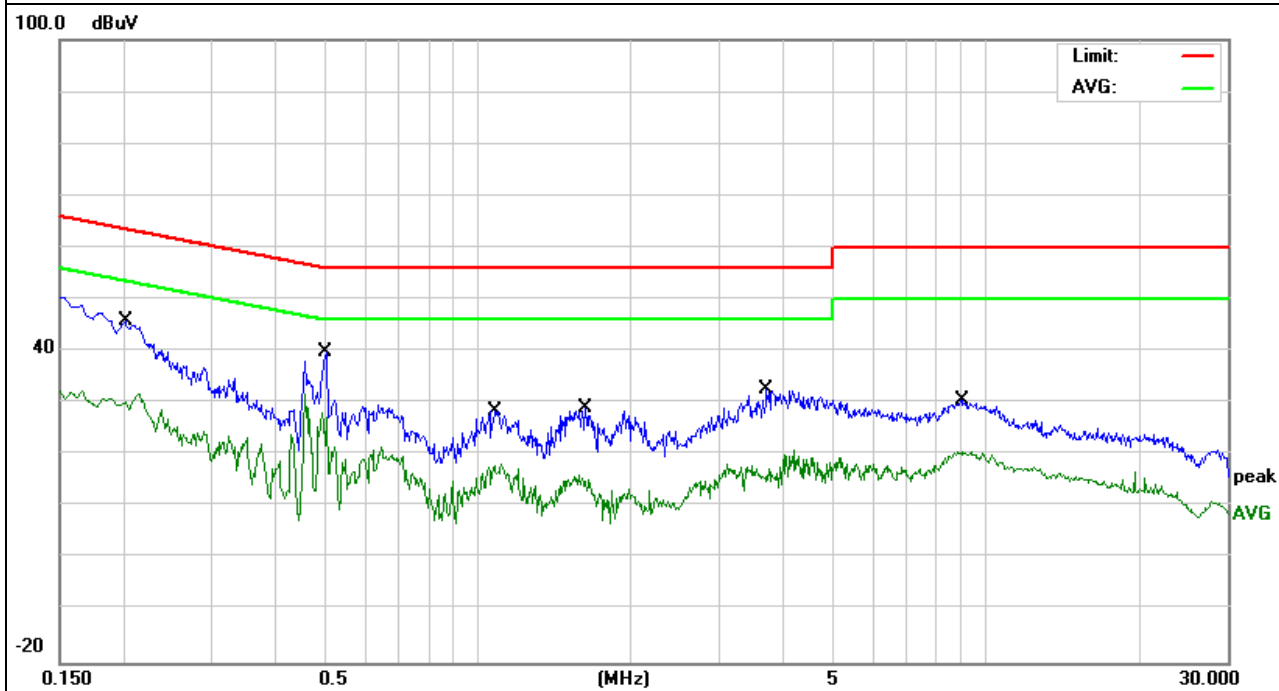


EUT:	DIGITAL ADVERTISEMENT SCREEN	Model Name. :	ICI101
Temperature:	26 °C	Relative Humidity:	54%
Pressure:	1010hPa	Test Date:	2017-9-18
Test Mode:	Mode 1	Phase :	L
Test Voltage:	DC 12V from Adapter AC240V/60Hz		

Frequency	Reading Level	Correct Factor	Measure-ment	Limits	Margin	Remark
(MHz)	(dBμV)	(dB)	(dBμV)	(dBμV)	(dB)	
0.202	36.03	9.7	45.73	63.52	-17.79	QP
0.202	20.27	9.7	29.97	53.52	-23.55	AVG
0.502	30.19	9.71	39.9	56.00	-16.10	QP
0.502	17.35	9.71	27.06	46.00	-18.94	AVG
1.082	18.74	9.81	28.55	56.00	-27.45	QP
1.082	6.7	9.81	16.51	46.00	-29.49	AVG
1.6294	19.43	9.77	29.2	56.00	-26.80	QP
1.6294	4.28	9.77	14.05	46.00	-31.95	AVG
3.7139	22.62	9.96	32.58	56.00	-23.42	QP
3.7139	5.39	9.96	15.35	46.00	-30.65	AVG
9.0457	20.71	9.89	30.6	60.00	-29.40	QP
9.0457	10.6	9.89	20.49	50.00	-29.51	AVG

Remark:

1. All readings are Quasi-Peak and Average values.
2. Factor = Insertion Loss + Cable Loss.

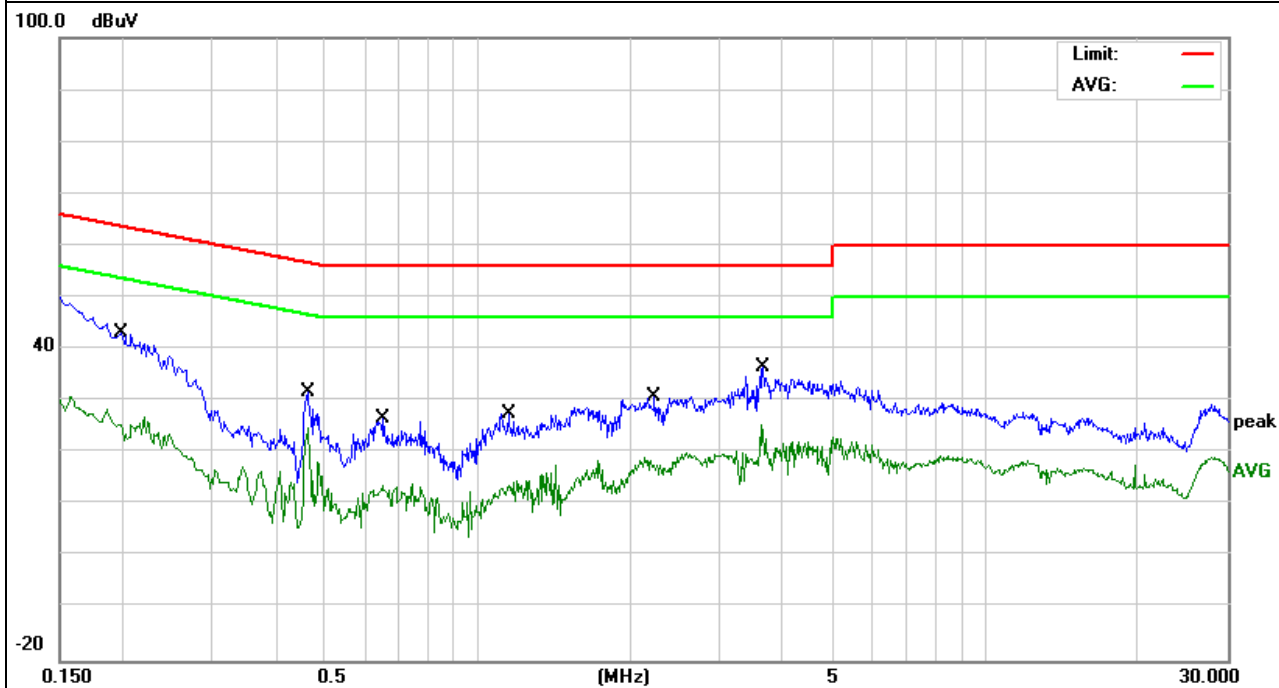


EUT:	DIGITAL ADVERTISEMENT SCREEN	Model Name. :	ICI101
Temperature:	26 °C	Relative Humidity:	54%
Pressure:	1010hPa	Test Date:	2017-9-18
Test Mode:	Mode 1	Phase :	N
Test Voltage:	DC 12V from Adapter AC240V/60Hz		

Frequency	Reading Level	Correct Factor	Measure-ment	Limits	Margin	Remark
(MHz)	(dBμV)	(dB)	(dBμV)	(dBμV)	(dB)	
0.1985	33.34	9.8	43.14	63.67	-20.53	QP
0.1985	15.67	9.8	25.47	53.67	-28.20	AVG
0.462	21.95	9.81	31.76	56.66	-24.90	QP
0.462	11.7	9.81	21.51	46.66	-25.15	AVG
0.654	16.74	9.81	26.55	56.00	-29.45	QP
0.654	2.78	9.81	12.59	46.00	-33.41	AVG
1.1495	17.65	9.82	27.47	56.00	-28.53	QP
1.1495	3.57	9.82	13.39	46.00	-32.61	AVG
2.2259	20.95	9.83	30.78	56.00	-25.22	QP
2.2259	7.54	9.83	17.37	46.00	-28.63	AVG
3.6539	26.74	9.86	36.6	56.00	-19.40	QP
3.6539	14.64	9.86	24.5	46.00	-21.50	AVG

Remark:

1. All readings are Quasi-Peak and Average values.
2. Factor = Insertion Loss + Cable Loss.

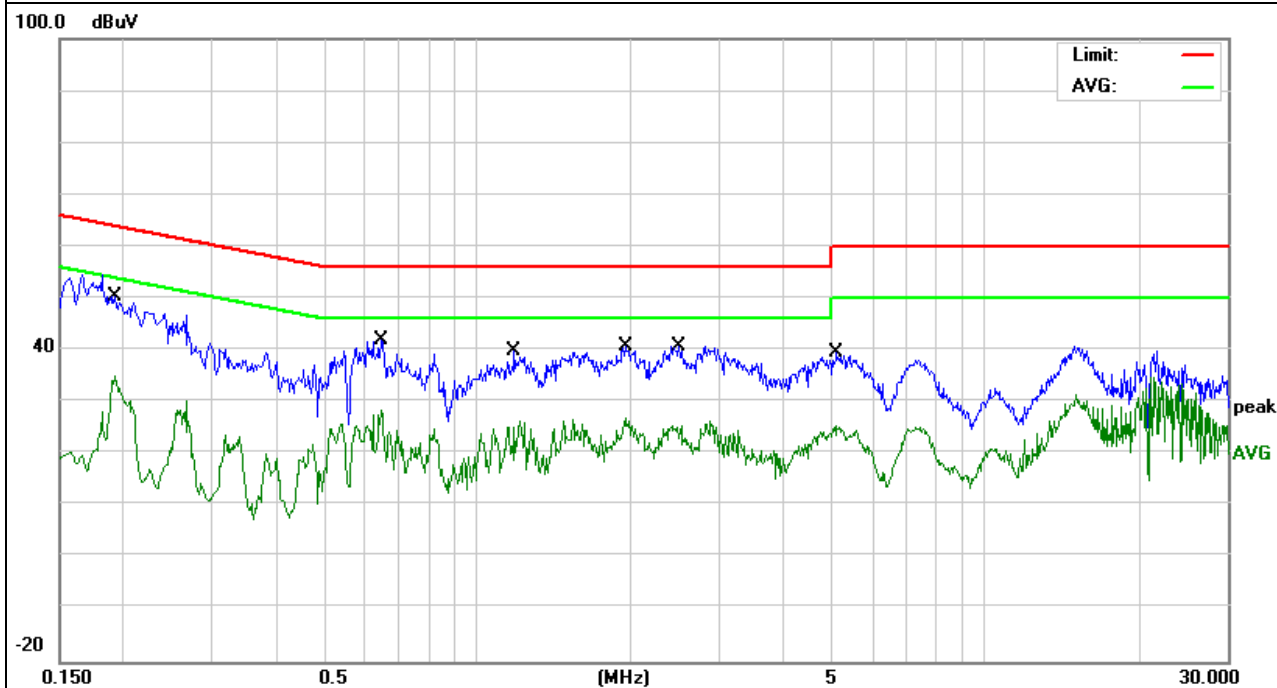


EUT:	DIGITAL ADVERTISEMENT SCREEN	Model Name. :	ICI101
Temperature:	26 °C	Relative Humidity:	54%
Pressure:	1010hPa	Test Date:	2017-9-18
Test Mode:	Mode 1	Phase :	L
Test Voltage:	DC 48V from POE AC120V/60Hz		

Frequency	Reading Level	Correct Factor	Measure-ment	Limits	Margin	Remark
(MHz)	(dBμV)	(dB)	(dBμV)	(dBμV)	(dB)	
0.1943	39.48	9.82	49.3	63.85	-14.55	QP
0.1943	22.38	9.82	32.2	53.85	-21.65	AVG
0.646	32.07	9.83	41.9	56.00	-14.10	QP
0.646	16.01	9.83	25.84	46.00	-20.16	AVG
1.1818	29.99	9.91	39.9	56.00	-16.10	QP
1.1818	10.57	9.91	20.48	46.00	-25.52	AVG
1.9498	30.84	9.84	40.68	56.00	-15.32	QP
1.9498	16.2	9.84	26.04	46.00	-19.96	AVG
2.49	30.72	9.94	40.66	56.00	-15.34	QP
2.49	14.27	9.94	24.21	46.00	-21.79	AVG
5.0979	29.43	10.06	39.49	60.00	-20.51	QP
5.0979	15.29	10.06	25.35	50.00	-24.65	AVG

Remark:

1. All readings are Quasi-Peak and Average values.
2. Factor = Insertion Loss + Cable Loss.

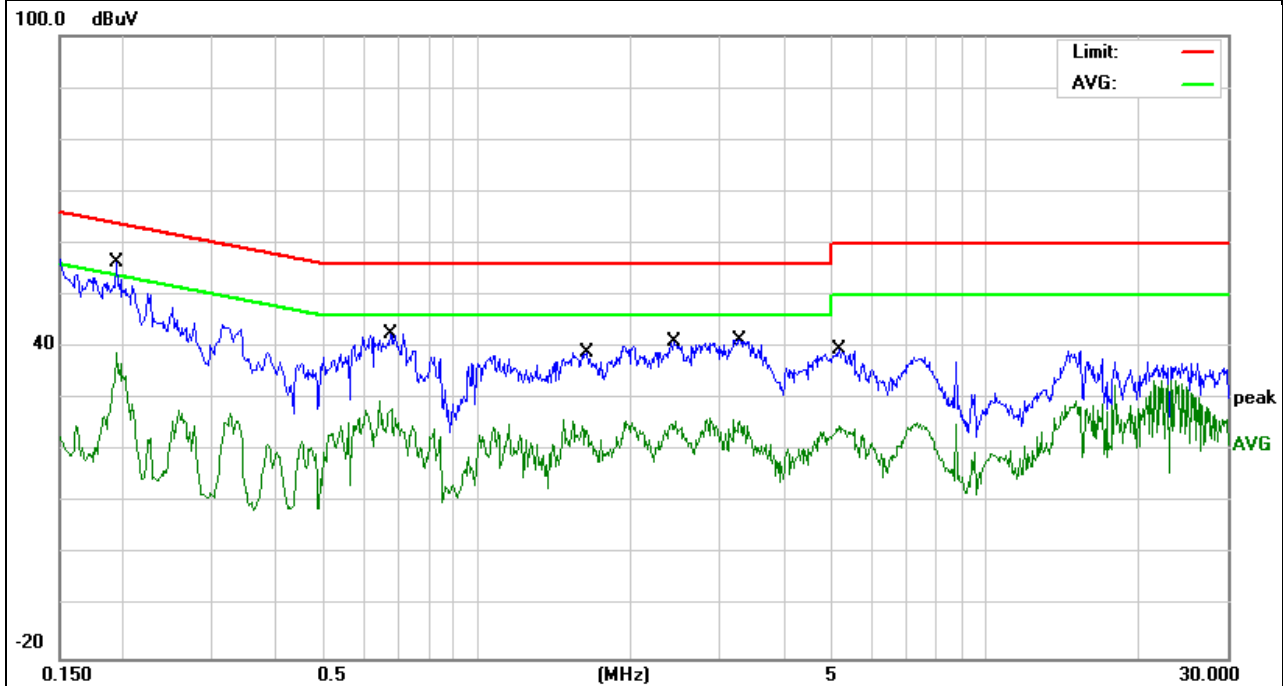


EUT:	DIGITAL ADVERTISEMENT SCREEN	Model Name. :	ICI101
Temperature:	26 °C	Relative Humidity:	54%
Pressure:	1010hPa	Test Date:	2017-9-18
Test Mode:	Mode 1	Phase :	N
Test Voltage:	DC 48V from POE AC120V/60Hz		

Frequency	Reading Level	Correct Factor	Measure-ment	Limits	Margin	Remark
(MHz)	(dBμV)	(dB)	(dBμV)	(dBμV)	(dB)	
0.1943	46.31	9.92	56.23	63.85	-7.62	QP
0.1943	25.26	9.92	35.18	53.85	-18.67	AVG
0.674	32.57	9.93	42.5	56.00	-13.50	QP
0.674	18.06	9.93	27.99	46.00	-18.01	AVG
1.6378	29.13	9.94	39.07	56.00	-16.93	QP
1.6378	14.06	9.94	24	46.00	-22.00	AVG
2.446	31.09	9.94	41.03	56.00	-14.97	QP
2.446	14.35	9.94	24.29	46.00	-21.71	AVG
3.29	31.42	9.95	41.37	56.00	-14.63	QP
3.29	15.67	9.95	25.62	46.00	-20.38	AVG
5.1657	29.5	9.97	39.47	60.00	-20.53	QP
5.1657	14.09	9.97	24.06	50.00	-25.94	AVG

Remark:

1. All readings are Quasi-Peak and Average values.
2. Factor = Insertion Loss + Cable Loss.

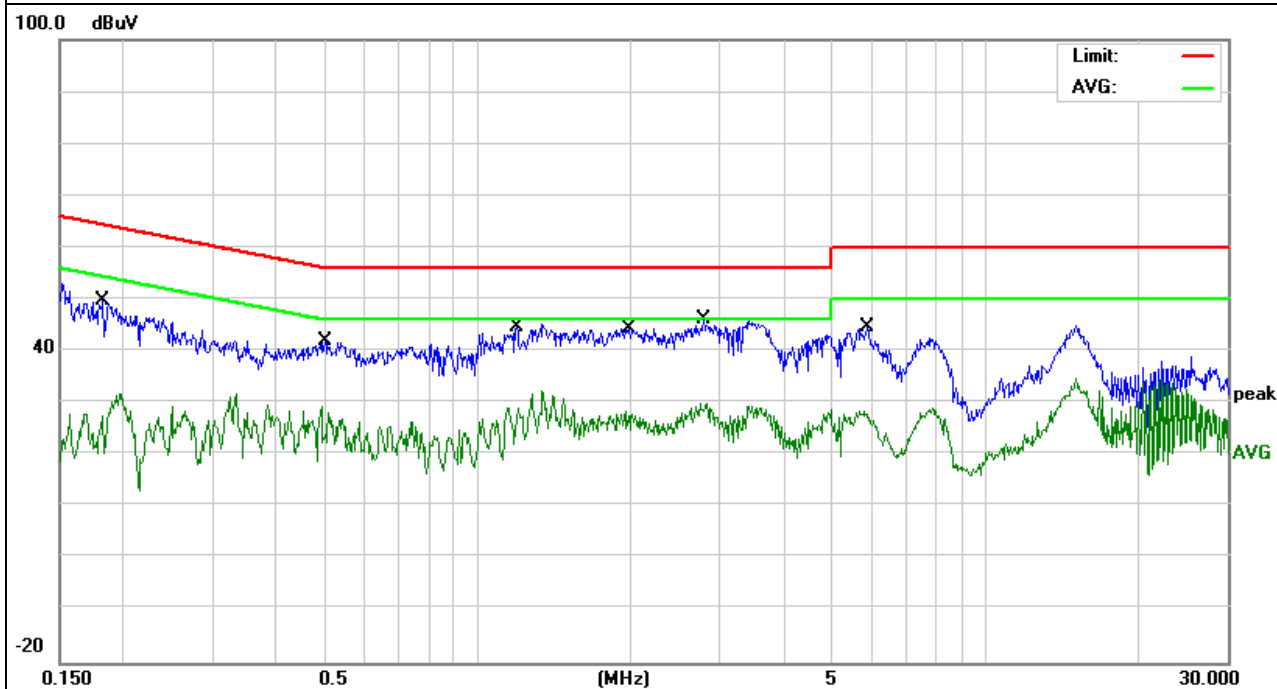


EUT:	DIGITAL ADVERTISEMENT SCREEN	Model Name. :	ICI101
Temperature:	26 °C	Relative Humidity:	54%
Pressure:	1010hPa	Test Date:	2017-9-18
Test Mode:	Mode 1	Phase :	L
Test Voltage:	DC 48V from POE AC240V/60Hz		

Frequency	Reading Level	Correct Factor	Measure-ment	Limits	Margin	Remark
(MHz)	(dBμV)	(dB)	(dBμV)	(dBμV)	(dB)	
0.1824	39.98	9.82	49.8	64.37	-14.57	QP
0.1824	17.36	9.82	27.18	54.37	-27.19	AVG
0.502	32.07	9.83	41.9	56.00	-14.10	QP
0.502	13.25	9.83	23.08	46.00	-22.92	AVG
1.1937	34.6	9.91	44.51	56.00	-11.49	QP
1.1937	14.86	9.91	24.77	46.00	-21.23	AVG
1.9818	34.51	9.84	44.35	56.00	-11.65	QP
1.9818	17.32	9.84	27.16	46.00	-18.84	AVG
2.786	36.04	10.01	46.05	56	-9.95	QP
2.786	19.75	10.01	29.76	46.00	-16.24	AVG
5.8459	34.5	10.02	44.52	60.00	-15.48	QP
5.8459	17.91	10.02	27.93	50.00	-22.07	AVG

Remark:

1. All readings are Quasi-Peak and Average values.
2. Factor = Insertion Loss + Cable Loss.

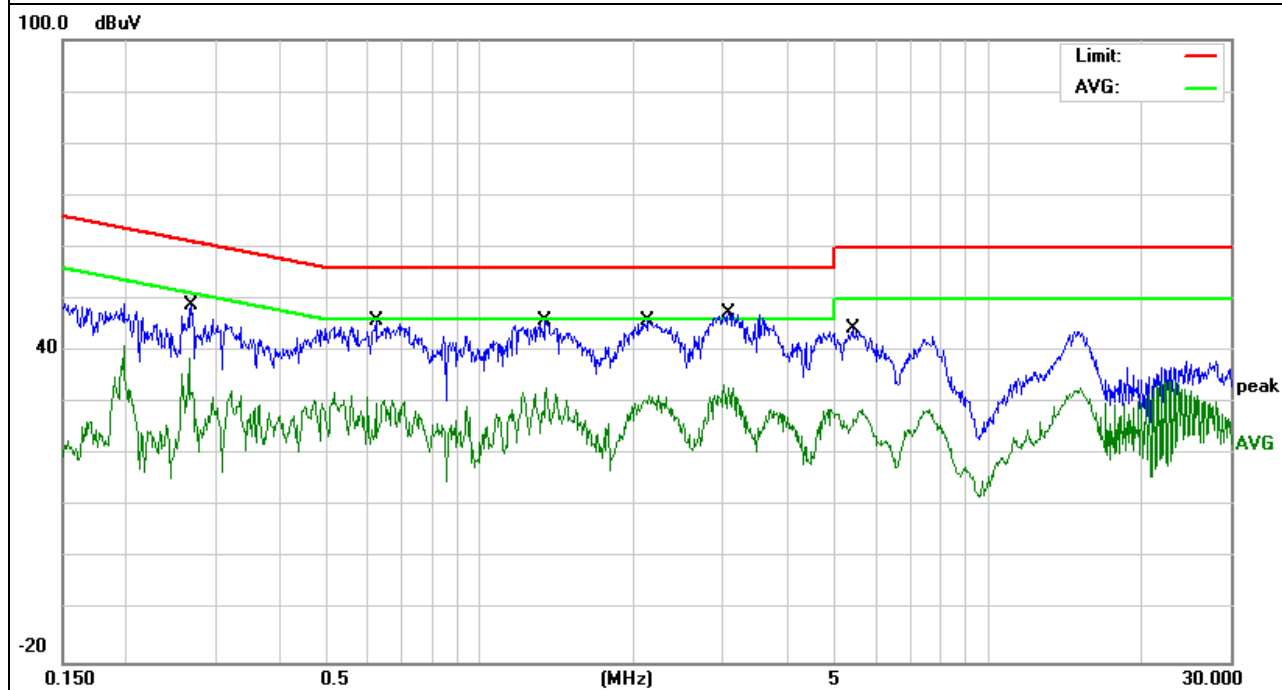


EUT:	DIGITAL ADVERTISEMENT SCREEN	Model Name. :	ICI101
Temperature:	26 °C	Relative Humidity:	54%
Pressure:	1010hPa	Test Date:	2017-9-18
Test Mode:	Mode 1	Phase :	N
Test Voltage:	DC 48V from POE AC240V/60Hz		

Frequency	Reading Level	Correct Factor	Measure-ment	Limits	Margin	Remark
(MHz)	(dBμV)	(dB)	(dBμV)	(dBμV)	(dB)	
0.27	38.9	9.92	48.82	61.12	-12.30	QP
0.27	22.04	9.92	31.96	51.12	-19.16	AVG
0.6219	35.87	9.93	45.8	56.00	-10.20	QP
0.6219	13.99	9.93	23.92	46.00	-22.08	AVG
1.342	35.83	9.93	45.76	56.00	-10.24	QP
1.342	21.16	9.93	31.09	46.00	-14.91	AVG
2.1419	35.98	9.94	45.92	56.00	-10.08	QP
2.1419	20.04	9.94	29.98	46.00	-16.02	AVG
3.0739	37.45	9.95	47.4	56	-8.6	QP
3.0739	23.02	9.95	32.97	46.00	-13.03	AVG
5.3939	34.25	9.98	44.23	60.00	-15.77	QP
5.3939	16.92	9.98	26.9	50.00	-23.10	AVG

Remark:

1. All readings are Quasi-Peak and Average values.
2. Factor = Insertion Loss + Cable Loss.



3.2 RADIATED EMISSION MEASUREMENT

3.2.1 LIMITS OF RADIATED EMISSION MEASUREMENT

FREQUENCY (MHz)	Class A (at 10m)	Class B (at 3m)
	dBuV/m	dBuV/m
30 ~ 88	39.0	40.0
88 ~ 216	43.5	43.5
216 ~ 960	46.5	46.0
Above 960	49.5	54.0

Notes:

- (1) The limit for radiated test was performed according to as following:
FCC PART 15B /ICES-003.
- (2) The tighter limit applies at the band edges.
- (3) Emission level (dBuV/m)=20log Emission level (uV/m).

3.2.2 TEST PROCEDURE

Test Arrangement for Radiated Emissions up to 1 GHz

- a. The EUT was placed on the top of a rotating table 0.8 meters above the ground at an accredited test facility. The table was rotated 360 degrees to determine the position of the highest radiation.
- b. The EUT was set 3 meters away from the interference-receiving antenna, which was mounted on the top of a variable-height antenna tower.
- c. The antenna is a broadband antenna, and its height is varied from one meter to four meters above the ground to determine the maximum value of the field strength. Both horizontal and vertical polarizations of the antenna are set to make the measurement.
- d. For each suspected emission, the EUT was arranged to its worst case and then the antenna was tuned to heights from 1 meter to 4 meters and the rotatable table was turned from 0 degrees to 360 degrees to find the maximum reading.

Note: The resolution bandwidth and video bandwidth of test receiver/spectrum analyzer is 120kHz for quasi-peak detection (QP) at frequency below 1GHz.

Test Arrangement for Radiated Emissions above 1 GHz.

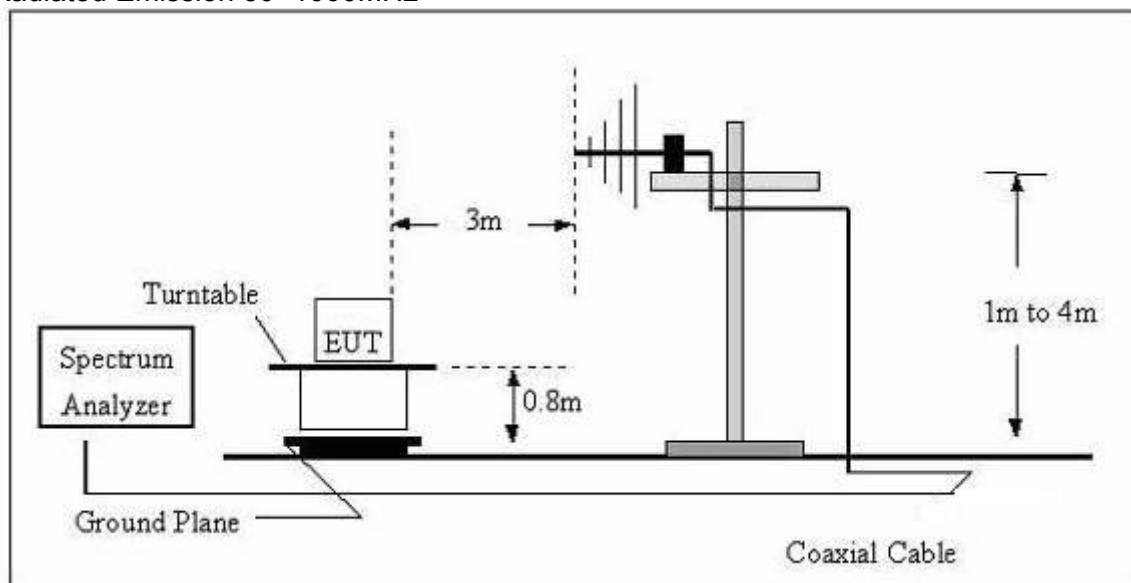
- a. The EUT was placed on the top of a rotating table 0.8 meters above the ground at an accredited chamber room. The table was rotated 360 degrees to determine the position of the highest radiation.
- b. The EUT was set 3 meters away from the interference-receiving antenna, which was mounted on the top of a variable-height antenna tower.
- c. The height of antenna can be varied from one meter to four meters, the height of adjustment depends on the EUT height and the antenna 3dB beamwidth both, to detect the maximum value of the field strength.Both horizontal and vertical polarizations of the antenna are set to make the measurement.
- d. For each suspected emission, the EUT was arranged to its worst case and then the antenna was tuned to heights and the rotatable table was turned from 0 degrees to 360 degrees to find the maximum reading.

Note: For the hand-held device, the EUT should be measured for all 3 axes and only the worst case is recorded in the report
During the radiated emission test, the Spectrum Analyzer was set with the following configurations:

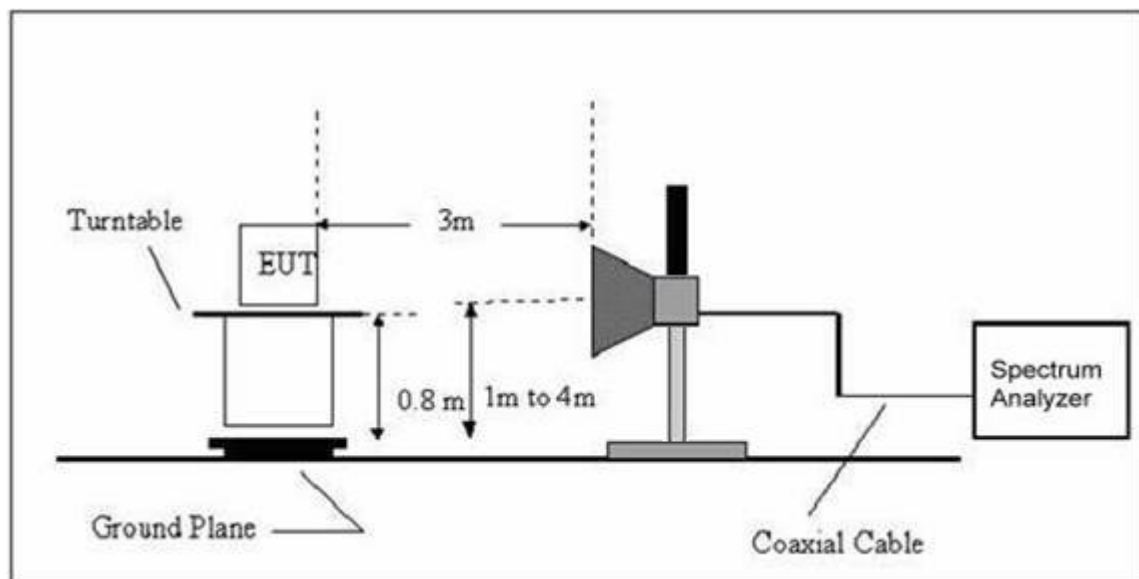
Frequency Band (MHz)	Function	Resolution bandwidth	Video Bandwidth
30 to 1000	QP	120 kHz	300 kHz
Above 1000	Peak	1 MHz	1 MHz
	Avg	1 MHz	10 Hz

3.2.3 TEST SETUP

For Radiated Emission 30~1000MHz



(B) Radiated Emission Test Set-Up Frequency Above 1GHz



3.2.4 TEST RESULTS

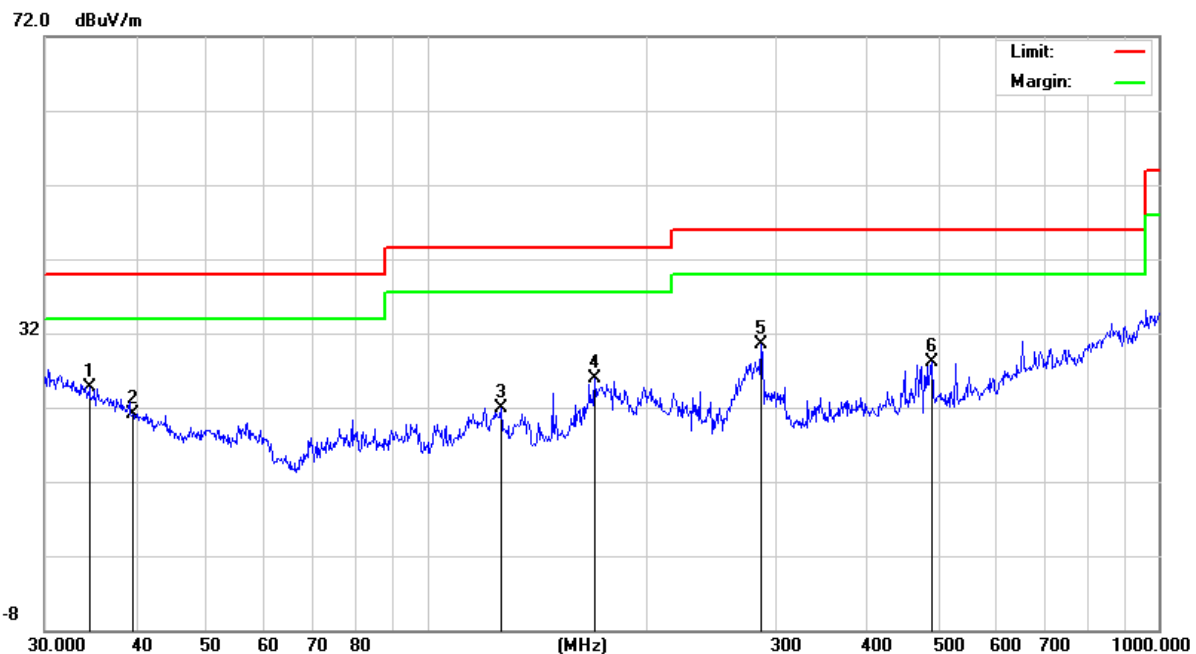
TEST RESULTS (30~1000 MHz)

EUT:	DIGITAL ADVERTISEMENT SCREEN	Model Name:	ICI101
Temperature:	24 °C	Relative Humidity:	54%
Pressure:	1010 hPa	Test Date :	2017-9-18
Test Mode :	Mode 1	Polarization :	Horizontal
Test Power :	DC 12V from Adapter AC120V/60Hz		

Polar (H/V)	Frequency	Meter Reading	Factor	Emission Level	Limits	Margin	Remark
	(MHz)	(dBuV)	(dB)	(dBuV/m)	(dBuV/m)	(dB)	
H	34.5172	5.5	19.14	24.64	40	-15.36	QP
H	39.5756	4.58	16.53	21.11	40	-18.89	QP
H	126.3285	11.45	10.55	22	43.5	-21.5	QP
H	169.5988	13.21	12.64	25.85	43.5	-17.65	QP
H	285.9778	16.43	14.07	30.5	46	-15.5	QP
H	490.7447	10.78	17.32	28.1	46	-17.9	QP

Remark:

Factor = Antenna Factor + Cable Loss - Amplifier.

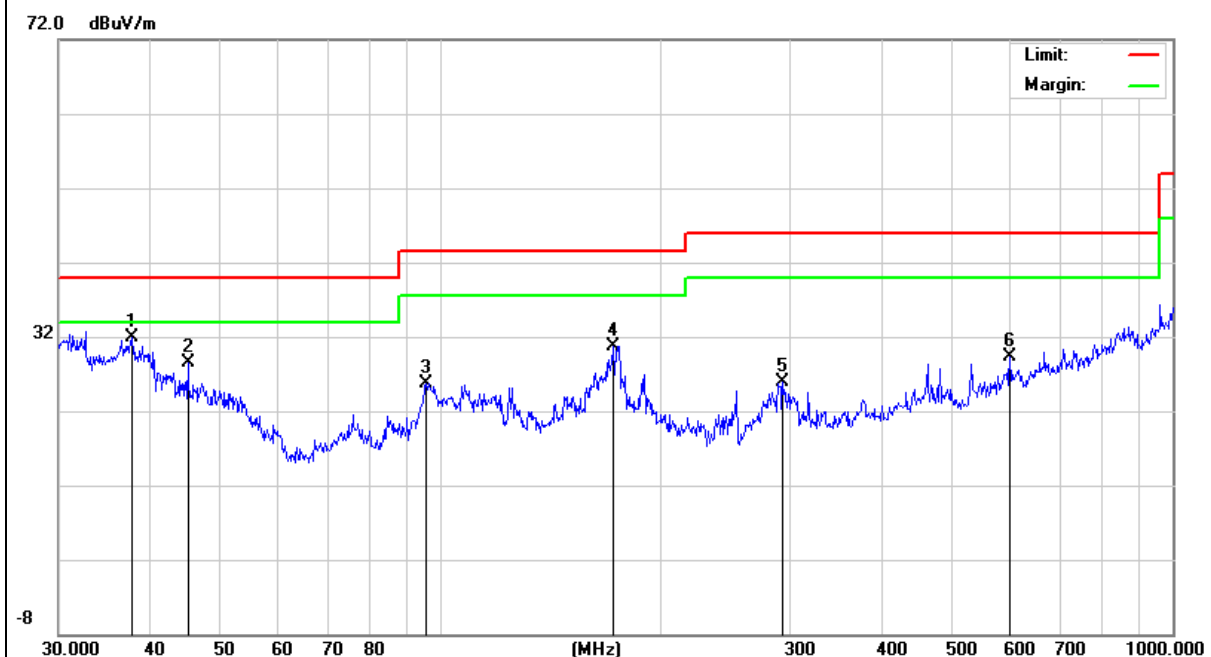


EUT:	DIGITAL ADVERTISEMENT SCREEN	Model Name :	ICI101
Temperature:	24 °C	Relative Humidity:	54%
Pressure:	1010 hPa	Test Date :	2017-9-18
Test Mode :	Mode 1	Polarization :	Vertical
Test Power :	DC 12V from Adapter AC120V/60Hz		

Polar (H/V)	Frequency (MHz)	Meter Reading (dBuV)	Factor (dB)	Emission Level (dBuV/m)	Limits (dBuV/m)	Margin (dB)	Remark
V	37.8121	14.42	17.57	31.99	40	-8.01	QP
V	45.0583	14.76	13.68	28.44	40	-11.56	QP
V	95.427	13.73	12.07	25.8	43.5	-17.7	QP
V	171.9944	18.15	12.65	30.8	43.5	-12.7	QP
V	293.0842	11.46	14.38	25.84	46	-20.16	QP
V	599.3211	10.61	18.69	29.3	46	-16.7	QP

Remark:

Factor = Antenna Factor + Cable Loss - Amplifier.

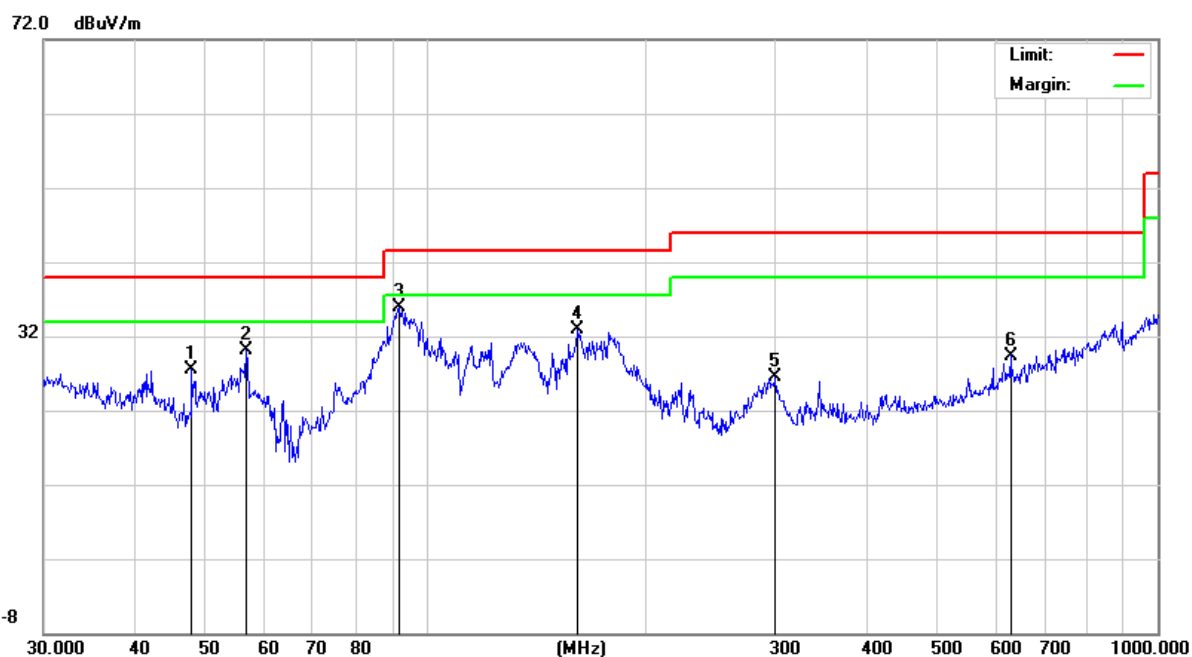


EUT:	DIGITAL ADVERTISEMENT SCREEN	Model Name:	ICI101
Temperature:	24 °C	Relative Humidity:	54%
Pressure:	1010 hPa	Test Date :	2017-9-18
Test Mode :	Mode 1	Polarization :	Horizontal
Test Power :	DC 48V from POE AC120V/60Hz		

Polar (H/V)	Frequency	Meter Reading	Factor	Emission Level	Limits	Margin	Remark
	(MHz)	(dBuV)	(dB)	(dBuV/m)	(dBuV/m)	(dB)	
H	47.826	14.15	13.35	27.5	40	-12.5	QP
H	56.7916	18.21	11.99	30.2	40	-9.8	QP
H	91.8161	23.96	11.89	35.85	43.5	-7.65	QP
H	160.9088	20.49	12.32	32.81	43.5	-10.69	QP
H	300.3672	11.76	14.67	26.43	46	-19.57	QP
H	629.4772	9.27	20.13	29.4	46	-16.6	QP

Remark:

Factor = Antenna Factor + Cable Loss - Amplifier.

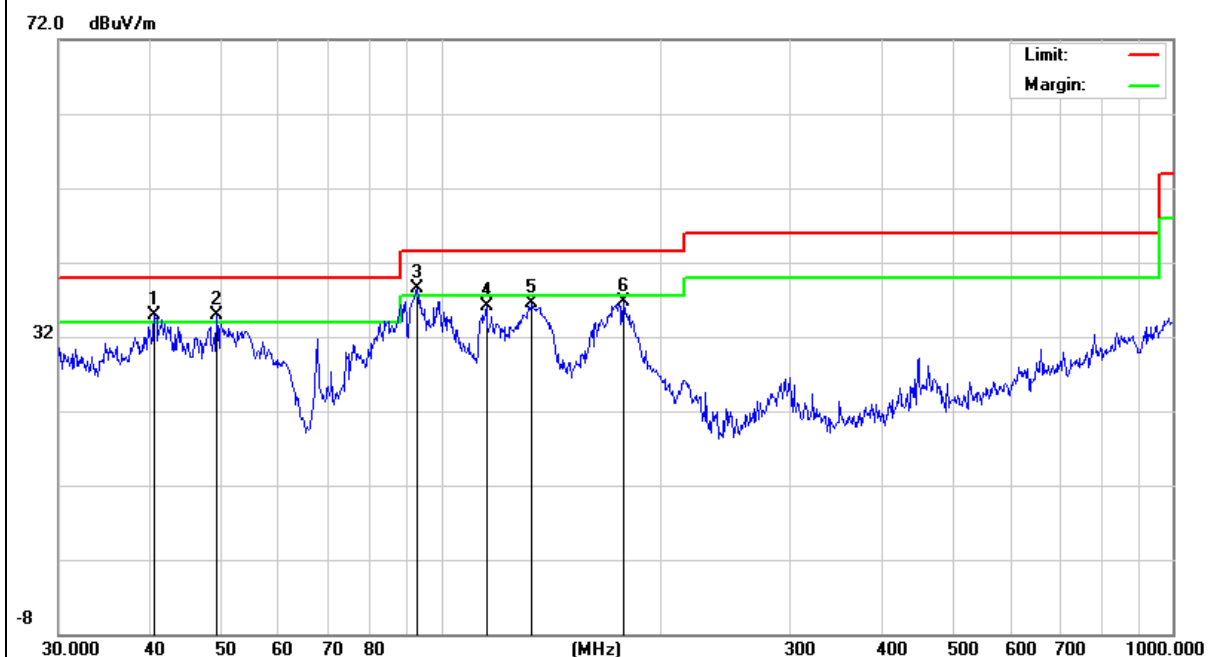


EUT:	DIGITAL ADVERTISEMENT SCREEN	Model Name :	ICI101
Temperature:	24 °C	Relative Humidity:	54%
Pressure:	1010 hPa	Test Date :	2017-9-18
Test Mode :	Mode 1	Polarization :	Vertical
Test Power :	DC 48V from POE AC120V/60Hz		

Polar (H/V)	Frequency (MHz)	Meter Reading (dBuV)	Factor (dB)	Emission Level (dBuV/m)	Limits (dBuV/m)	Margin (dB)	Remark
V	40.5591	18.84	16.06	34.9	40	-5.1	QP
V	49.3594	21.53	13.35	34.88	40	-5.12	QP
V	92.787	26.5	11.97	38.47	43.5	-5.03	QP
V	115.3204	26.11	10.09	36.2	43.5	-7.3	QP
V	133.1511	25.16	11.25	36.41	43.5	-7.09	QP
V	177.5089	23.99	12.69	36.68	43.5	-6.82	QP

Remark:

Factor = Antenna Factor + Cable Loss - Amplifier.



3.2.5 TEST RESULTS(1000~6000MHz)

EUT:	DIGITAL ADVERTISEMENT SCREEN	Model Name :	ICI101
Temperature:	24 °C	Relative Humidity:	54%
Pressure:	1010 hPa	Test Date :	2017-9-18
Test Mode :	Mode 1		
Test Power :	DC 12V from Adapter AC120V/60Hz		

All the modulation modes have been tested, and the worst result was report as below:

Polar (H/V)	Frequency (MHz)	Reading (dBuV/m)	Correct (dB/m)	Result (dBuV/m)	Limit (dBuV/m)	Over Limit (dB)	Remark
V	1512.15	53	-8.99	44.01	74	-29.99	Pk
V	1512.15	35.13	-8.99	26.14	54	-27.86	AV
V	1753.47	51.58	-8.49	43.09	74	-30.91	Pk
V	1753.47	34.21	-8.49	25.72	54	-28.28	AV
H	1815.15	58.39	-8.4	49.99	74	-24.01	Pk
H	1815.15	37.15	-8.4	28.75	54	-25.25	AV
H	2748.74	45.72	-4.69	41.03	74	-32.97	Pk
H	2748.74	31.24	-4.69	26.55	54	-27.45	AV

EUT:	DIGITAL ADVERTISEMENT SCREEN	Model Name :	ICI101
Temperature:	24 °C	Relative Humidity:	54%
Pressure:	1010 hPa	Test Date :	2017-9-18
Test Mode :	Mode 1		
Test Power :	DC 48V from POE AC120V/60Hz		

All the modulation modes have been tested, and the worst result was report as below:

Polar (H/V)	Frequency (MHz)	Reading (dBuV/m)	Correct (dB/m)	Result (dBuV/m)	Limit (dBuV/m)	Over Limit (dB)	Remark
V	1545.49	53.24	-8.99	44.25	74	-29.75	Pk
V	1545.49	35.12	-8.99	26.13	54	-27.87	AV
V	1912.25	47.04	-7.9	39.14	74	-34.86	Pk
V	1912.25	32.36	-7.9	24.46	54	-29.54	AV
H	1612.54	54.49	-8.42	46.07	74	-27.93	Pk
H	1612.54	36.22	-8.49	27.73	54	-26.27	AV
H	2745.43	49.45	-5.09	44.36	74	-29.64	Pk
H	2745.43	30.38	-5.09	25.29	54	-28.71	AV

Remark: Absolute Level= ReadingLevel+ Factor, Margin= Absolute Level - Limit

Note: Only the worst results data points are reported in the report.