



# **FCC EMC Test Report**

## **FCC ID:LNQSBWD950A**

**Product:** ScreenBeam Pro Enterprise Edition

**Trade Name:** Actiontec

**Model Number:** SBWD950A

**Serial Model :** N/A

**Report No. :** NTEK-2015NT06182085F1

### **Prepared for**

Actiontec Electronics, Inc.

760 North Mary Ave., Sunnyvale, California 94085 United States

### **Prepared by**

Shenzhen NTEK Testing Technology Co., Ltd.

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Website: [www.ntek.org.cn](http://www.ntek.org.cn)

## TEST RESULT CERTIFICATION

**Applicant's name** ..... : Actiontec Electronics, Inc.

Address ..... : 760 North Mary Ave., Sunnyvale, California 94085 United States

**Manufacturer's Name** ..... : Actiontec Electronics, Inc.

Address ..... : 760 North Mary Ave., Sunnyvale, California 94085 United States

**Product description**

Product name ..... : ScreenBeam Pro Enterprise Edition

Model and/or type reference : SBWD950A

FCC Part15B:01 Oct.2014

**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 ..... : 18 Jun. 2015 ~31 Jul. 2015

Date of Issue..... : 31 Jul. 2015

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

Testing Engineer : Jason Chen  
(Jason Chen)

Technical Manager : Eileen Liu  
(Eileen Liu)

Authorized Signatory : Sam Chen  
(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:2014 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

NTEK Testing Technology Co., Ltd

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

FCC Registration Number:238937; IC Registration Number:9270A-1

CNAS Registration Number:L5516

1.2 MEASUREMENT UNCERTAINTY

The reported uncertainty of measurement  $y \pm U$ , where expanded 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	3.6	

B. Radiated Measurement :

Test Site	Method	Measurement Frequency Range	U , (dB)	NOTE
NTEKA01	ANSI	30MHz ~ 1000MHz	4.8	
		1GHz ~6GHz	4.5	

## 2. GENERAL INFORMATION

### 2.1 GENERAL DESCRIPTION OF EUT

Equipment	ScreenBeam Pro Enterprise Edition	
Model Name	SBWD950A	
Additional Model Number(s)	N/A	
Model Difference	N/A	
Product Description	The EUT is a ScreenBeam Pro Enterprise Edition.	
	Connecting I/O port:	RJ-45, VGA, HDMI, USB
	Operation Frequency:	BT:2402~2480 MHz WIFI: 802.11b/g/n(20MHz): 2412~2462MHz 802.11n(40MHz):2422~2452MHz 802.11a/ac/n(20M/40M):5725 ~ 5850 MHz; 5180 MHz ~ 5240 MHz
	Modulation Type:	BT(1Mbps)/4.0: GFSK BT EDR(2Mbps): $\pi/4$ -DQPSK BT EDR(3Mbps): 8-DPSK IEEE 802.11b : DSSS (CCK, QPSK, DBPSK) IEEE 802.11g/n (HT20/HT40) : OFDM (64QAM, 16QAM, QPSK, BPSK) 802.11a/ac/n(20M/40M): OFDM
Power Source	DC Voltage	
Adapter	Adapter 1 Mode: WA-10P05FU Input: 100-240V~, 50/60Hz, 0.3A MAX Output: 5.0V $\overline{\text{---}}$ , 2.0A Adapter 2 Mode: KSAS0120500200HU Input: 100-240V~, 50/60Hz, 0.4A Output: 5.0V $\overline{\text{---}}$ , 2.0A	

## 2.2 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	Ethernet+HDMI Output
Mode 2	VGA Input+VGA Output

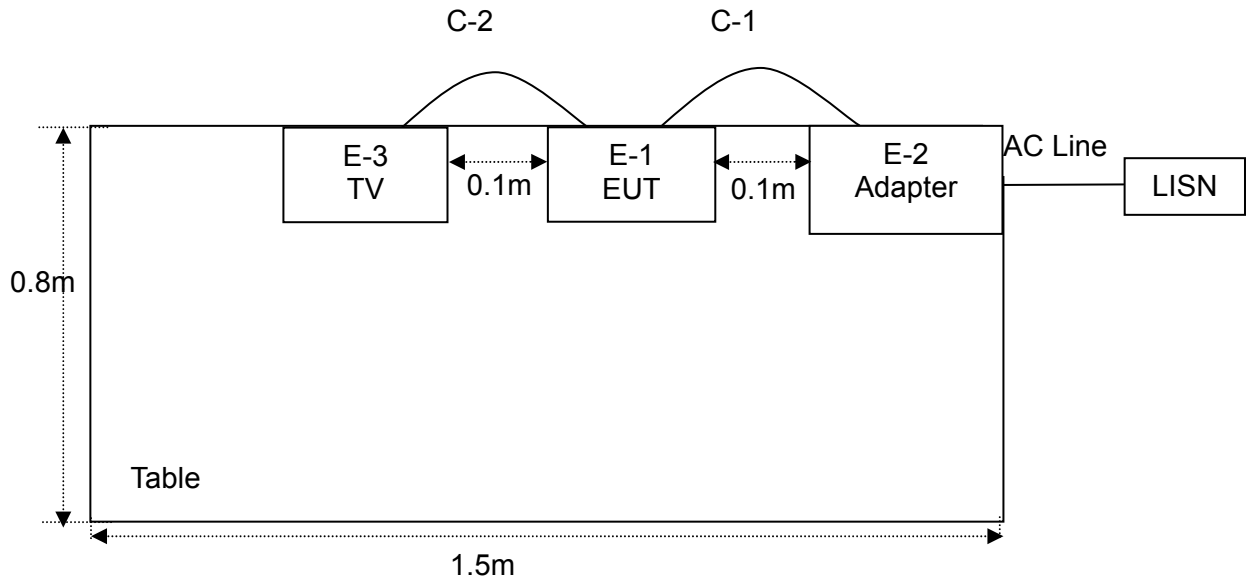
For Conducted Test	
Final Test Mode	Description
Mode 1	Ethernet+HDMI Output
Mode 2	VGA Input+VGA Output

For Radiated Test	
Final Test Mode	Description
Mode 1	Ethernet+HDMI Output
Mode 2	VGA Input+VGA Output

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

### 2.3 DESCRIPTION OF TEST SETUP

Mode RE: WIFI





## 2.4 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	ScreenBeam Pro Enterprise Edition	Actiontec	SBWD950A	N/A	EUT
E-2	Adapter 1	Actiontec	WA-10P05FU	N/A	
E-2	Adapter 2	Actiontec	KSAS0120500200HU	N/A	
E-3	TV	SONY	KDL-24EX520	6450730	

Item	Shielded Type	Ferrite Core	Length	Note
C-1	NO	NO	120cm	
C-2	YES	YES	100cm	

**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”.

## 2.5 MEASUREMENT INSTRUMENTS LIST

### 2.5.1 CONDUCTED TEST SITE

Item	Kind of Equipment	Manufacturer	Type No.	Serial No.	Last calibration	Calibrated until	Calibration period
1	LISN	R&S	ENV216	101313	Jul. 06, 2015	Jul. 05, 2016	1 year
2	LISN	SCHWARZBECK	NNLK 8129	8129245	Dec. 25, 2014	Dec. 24, 2015	1 year
3	Pulse Limiter	SCHWARZBECK	VTSD 9561F	9716	Dec. 25, 2014	Dec. 24, 2015	1 year
4	50Ω Switch	ANRITSU CORP	MP59B	6200983704	Jul. 06, 2015	Jul. 05, 2016	1 year
5	Test Cable	N/A	C01	N/A	Jul. 06, 2015	Jul. 05, 2016	1 year
6	Test Cable	N/A	C02	N/A	Jul. 06, 2015	Jul. 05, 2016	1 year
7	Test Cable	N/A	C03	N/A	Jul. 06, 2015	Jul. 05, 2016	1 year
8	EMI Test Receiver	R&S	ESCI	101160	Jul. 06, 2015	Jul. 05, 2016	1 year
9	Passive Voltage Probe	ESH2-Z3	R&S	100196	Jul. 06, 2015	Jul. 05, 2016	1 year
10	Absorbing Clamp	R&S	MDS-21	100423	Jul. 08, 2015	Jul. 07, 2016	1 year

Item	Kind of Equipment	Manufacturer	Type No.	Serial No.	Last calibration	Calibrated until	Calibration period
1	LISN	R&S	ENV216	101313	Jul. 06, 2014	Jul. 05, 2015	1 year
4	50Ω Switch	ANRITSU CORP	MP59B	6200983704	Jul. 06, 2014	Jul. 05, 2015	1 year
5	Test Cable	N/A	C01	N/A	Jul. 06, 2014	Jul. 05, 2015	1 year
6	Test Cable	N/A	C02	N/A	Jul. 06, 2014	Jul. 05, 2015	1 year
7	Test Cable	N/A	C03	N/A	Jul. 06, 2014	Jul. 05, 2015	1 year
8	EMI Test Receiver	R&S	ESCI	101160	Jul. 06, 2014	Jul. 05, 2015	1 year
9	Passive Voltage Probe	ESH2-Z3	R&S	100196	Jul. 06, 2014	Jul. 05, 2015	1 year
10	Absorbing Clamp	R&S	MDS-21	100423	Jul. 08, 2014	Jul. 07, 2015	1 year

2.5.2 RADIATED TEST SITE

Item	Kind of Equipment	Manufacturer	Type No.	Serial No.	Last calibration	Calibrated until	Calibration period
1	Bilog Antenna	TESEQ	CBL6111D	31216	Jul. 06, 2015	Jul. 05, 2016	1 year
2	Test Cable	N/A	R-01	N/A	Dec. 25, 2014	Dec. 24, 2015	1 year
3	Test Cable	N/A	R-02	N/A	Dec. 25, 2014	Dec. 24, 2015	1 year
4	EMI Test Receiver	R&S	ESCI-7	101318	Jul. 06, 2015	Jul. 05, 2016	1 year
5	Antenna Mast	EM	SC100_1	N/A	N/A	N/A	N/A
6	Turn Table	EM	SC100	060531	N/A	N/A	N/A
7	50Ω Switch	Anritsu Corp	MP59B	6200983705	Jul. 06, 2015	Jul. 05, 2016	1 year
8	Spectrum Analyzer	Aglient	E4407B	MY45108040	Jul. 06, 2015	Jul. 05, 2016	1 year
9	Horn Antenna	EM	EM-AH-10180	2011071402	Jul. 06, 2015	Jul. 05, 2016	1 year
10	Amplifier	EM	EM-30180	060538	Jul. 06, 2015	Jul. 05, 2016	1 year
11	Loop Antenna	ARA	PLA-1030/B	1029	Jul. 06, 2015	Jul. 05, 2016	1 year

Item	Kind of Equipment	Manufacturer	Type No.	Serial No.	Last calibration	Calibrated until	Calibration period
1	Bilog Antenna	TESEQ	CBL6111D	31216	Jul. 06, 2014	Jul. 05, 2015	1 year
4	EMI Test Receiver	R&S	ESCI-7	101318	Jul. 06, 2014	Jul. 05, 2015	1 year
7	50Ω Switch	Anritsu Corp	MP59B	6200983705	Jul. 06, 2014	Jul. 05, 2015	1 year
8	Spectrum Analyzer	Aglient	E4407B	MY45108040	Jul. 06, 2014	Jul. 05, 2015	1 year
9	Horn Antenna	EM	EM-AH-10180	2011071402	Jul. 06, 2014	Jul. 05, 2015	1 year
10	Amplifier	EM	EM-30180	060538	Jul. 06, 2014	Jul. 05, 2015	1 year
11	Loop Antenna	ARA	PLA-1030/B	1029	Jul. 06, 2014	Jul. 05, 2015	1 year

### 3. EMC EMISSION TEST

#### 3.1 CONDUCTED EMISSION MEASUREMENT

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

FREQUENCY (MHz)	<input type="checkbox"/> Class A (dB $\mu$ V)		<input checked="" type="checkbox"/> Class B (dB $\mu$ V)	
	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.

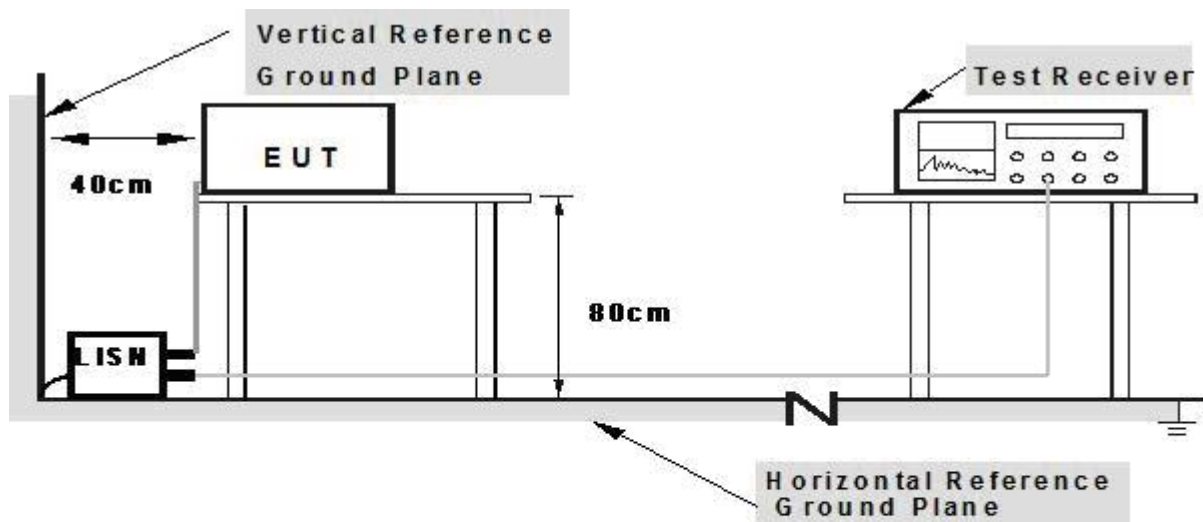
The following table is the setting of the receiver

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

### 3.1.2 TEST PROCEDURE

- a. 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.
- b. 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.
- c. 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.
- d. LISN at least 80 cm from nearest part of EUT chassis.
- e. 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 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.

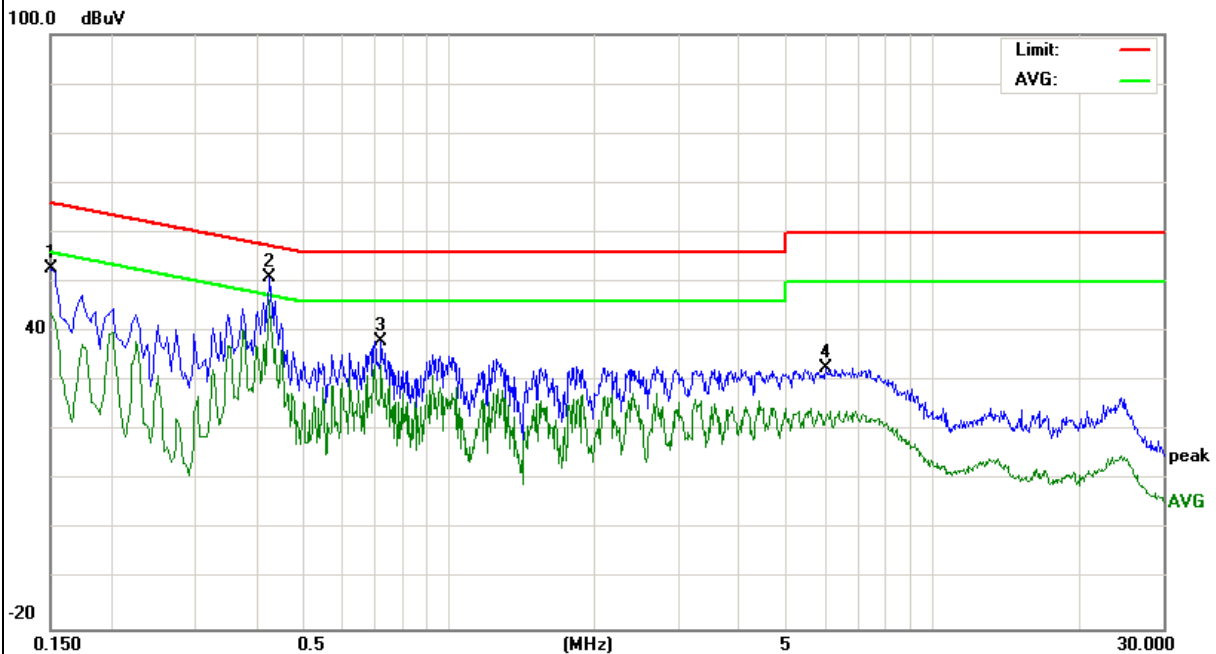
### 3.1.5 TEST RESULTS

EUT:	ScreenBeam Pro Enterprise Edition	Model Name. :	SBWD950A
Temperature:	26°C	Relative Humidity:	54%
Pressure:	1010hPa	Test Date:	2015-7-25
Test Mode:	WIFI	Phase:	L-Adapter 1
Test Voltage:	DC 5V from Adapter AC 120V/60Hz		

Freq. (MHz)	Reading (dBμV)	Factor (dB)	Measurement (dBμV)	Limit (dBμV)	Over (dB)	Detector
0.1499	43.18	9.63	52.81	66.00	-13.19	QP
0.4260	41.47	9.46	50.93	57.33	-6.40	QP
0.7260	28.38	9.77	38.15	56.00	-17.85	QP
6.0379	22.93	9.70	32.63	60.00	-27.37	QP
0.1499	34.15	9.63	43.78	56.00	-12.22	AVG
0.4260	37.07	9.46	46.53	47.33	-0.80	AVG
0.7260	23.54	9.77	33.31	46.00	-12.69	AVG

Remark:

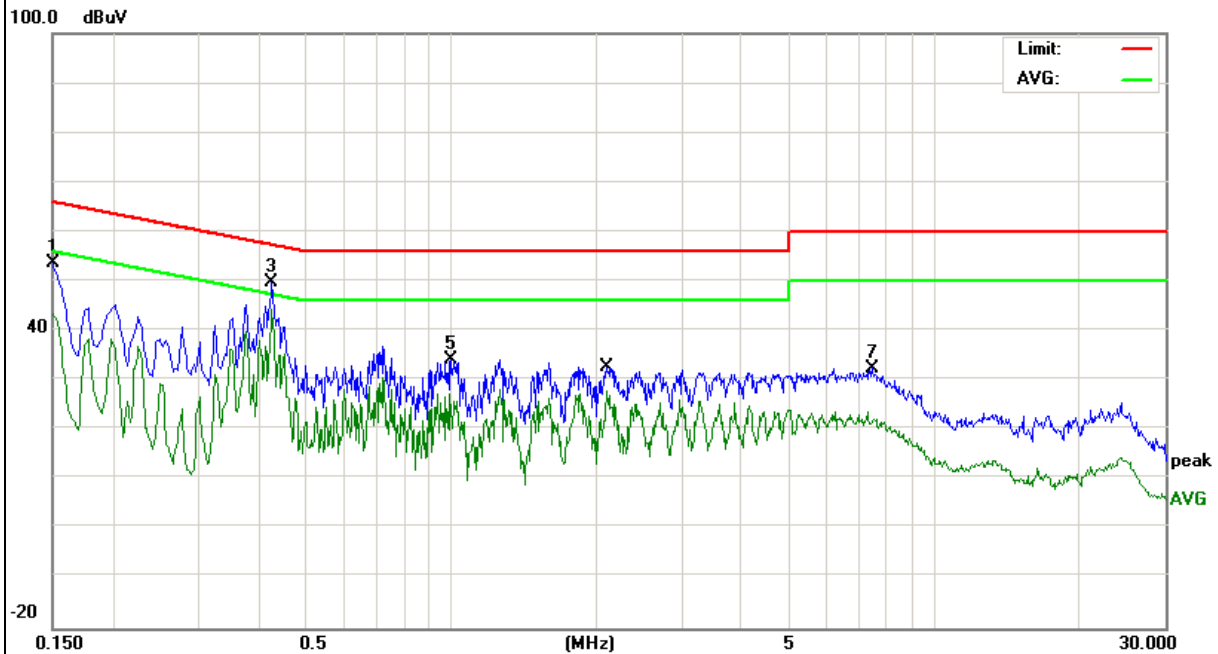
Factor = Insertion Loss + Cable Loss.



EUT:	ScreenBeam Pro Enterprise Edition	Model Name. :	SBWD950A
Temperature:	26°C	Relative Humidity:	54%
Pressure:	1010hPa	Test Date:	2015-7-25
Test Mode:	WIFI	Phase:	N-Adapter 1
Test Voltage:	DC 5V from Adapter AC 120V/60Hz		

Freq. (MHz)	Reading (dBμV)	Factor (dB)	Measurement (dBμV)	Limit (dBμV)	Over (dB)	Detector
0.1499	44.05	9.60	53.65	66.00	-12.35	QP
0.1499	33.82	9.60	43.42	56.00	-12.58	AVG
0.4260	40.22	9.65	49.87	57.33	-7.46	QP
0.4260	34.61	9.65	44.26	47.33	-3.07	AVG
1.0020	24.69	9.61	34.30	56.00	-21.70	QP
2.1100	18.30	9.54	27.84	46.00	-18.16	AVG
7.4099	22.97	9.53	32.50	60.00	-27.50	QP

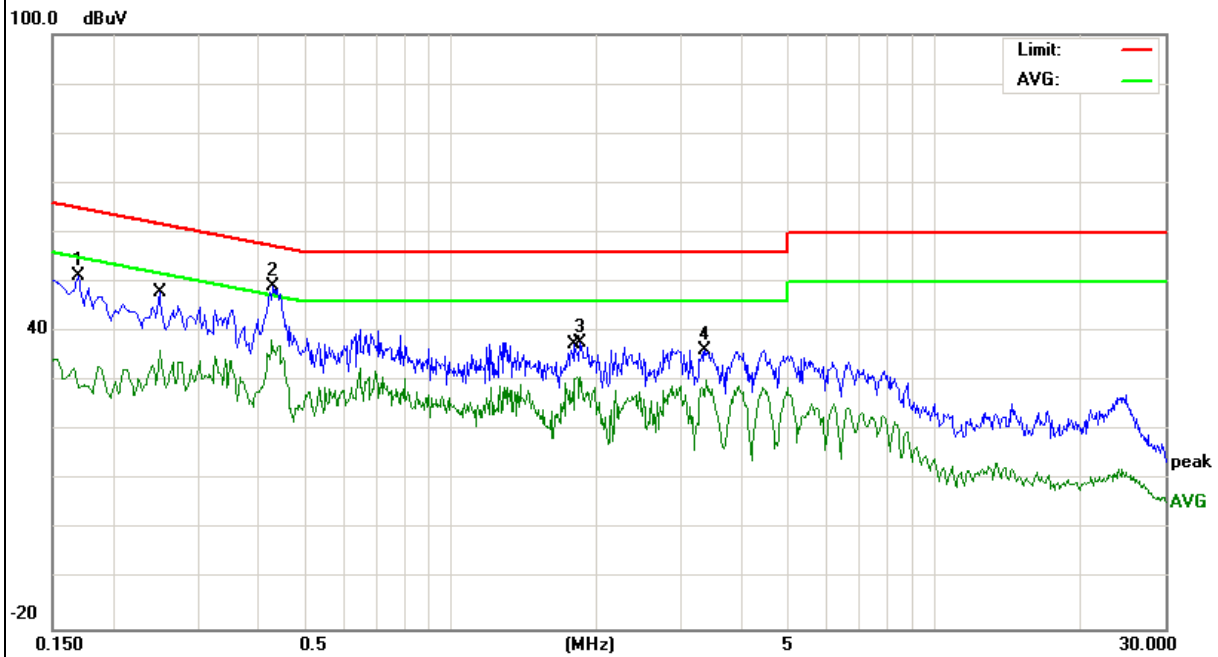
Remark:  
Factor = Insertion Loss + Cable Loss.



EUT:	ScreenBeam Pro Enterprise Edition	Model Name. :	SBWD950A
Temperature:	26°C	Relative Humidity:	54%
Pressure:	1010hPa	Test Date:	2015-7-25
Test Mode:	WIFI	Phase:	L-Adapter 1
Test Voltage:	DC 5V from Adapter AC 240V/60Hz		

Freq. (MHz)	Reading (dBμV)	Factor (dB)	Measurement (dBμV)	Limit (dBμV)	Over (dB)	Detector
0.1700	41.54	9.62	51.16	64.96	-13.80	QP
0.4300	39.70	9.48	49.18	57.25	-8.07	QP
1.8500	28.19	9.66	37.85	56.00	-18.15	QP
3.3500	26.55	9.68	36.23	56.00	-19.77	QP
0.2500	26.67	9.67	36.34	51.75	-15.41	AVG
0.4260	29.00	9.46	38.46	47.33	-8.87	AVG
1.8260	21.31	9.66	30.97	46.00	-15.03	AVG

Remark:  
Factor = Insertion Loss + Cable Loss.

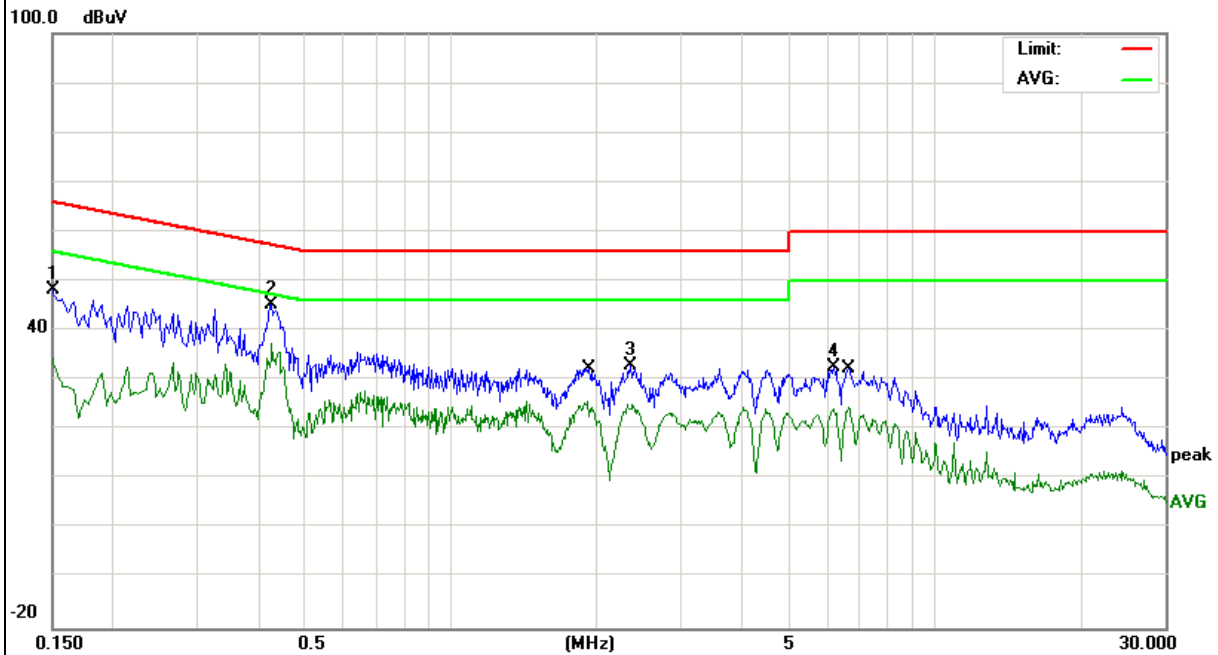




EUT:	ScreenBeam Pro Enterprise Edition	Model Name. :	SBWD950A
Temperature:	26°C	Relative Humidity:	54%
Pressure:	1010hPa	Test Date:	2015-7-25
Test Mode:	WIFI	Phase:	N-Adapter 1
Test Voltage:	DC 5V from Adapter AC 240V/60Hz		

Freq. (MHz)	Reading (dBμV)	Factor (dB)	Measurement (dBμV)	Limit (dBμV)	Over (dB)	Detector
0.1499	38.68	9.60	48.28	66.00	-17.72	QP
0.4260	35.57	9.65	45.22	57.33	-12.11	QP
2.3540	23.31	9.53	32.84	56.00	-23.16	QP
6.1939	23.06	9.51	32.57	60.00	-27.43	QP
0.1499	24.76	9.60	34.36	56.00	-21.64	AVG
0.4260	27.83	9.65	37.48	47.33	-9.85	AVG
1.9260	16.16	9.55	25.71	46.00	-20.29	AVG
6.6459	15.09	9.51	24.60	50.00	-25.40	AVG

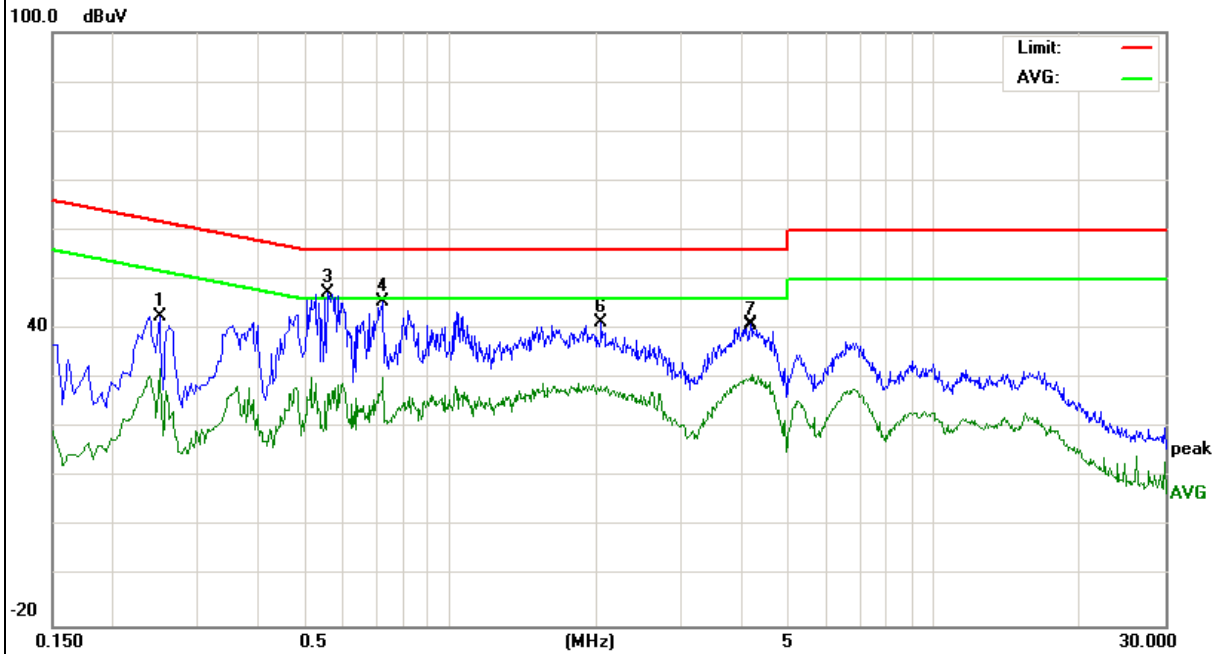
Remark:  
Factor = Insertion Loss + Cable Loss.



EUT:	ScreenBeam Pro Enterprise Edition	Model Name. :	SBWD950A
Temperature:	26°C	Relative Humidity:	54%
Pressure:	1010hPa	Test Date:	2015-7-25
Test Mode:	WIFI	Phase:	L-Adapter 2
Test Voltage:	DC 5V from Adapter AC 120V/60Hz		

Freq. (MHz)	Reading (dBμV)	Factor (dB)	Measurement (dBμV)	Limit (dBμV)	Over (dB)	Detector
0.2500	33.02	9.67	42.69	61.75	-19.06	QP
0.2500	22.42	9.67	32.09	51.75	-19.66	AVG
0.5580	37.56	9.78	47.34	56.00	-8.66	QP
0.7260	35.76	9.77	45.53	56.00	-10.47	QP
0.7260	20.42	9.77	30.19	46.00	-15.81	AVG
2.0460	31.68	9.65	41.33	56.00	-14.67	QP
4.1579	31.20	9.70	40.90	56.00	-15.10	QP
4.1898	21.20	9.70	30.90	46.00	-15.10	AVG

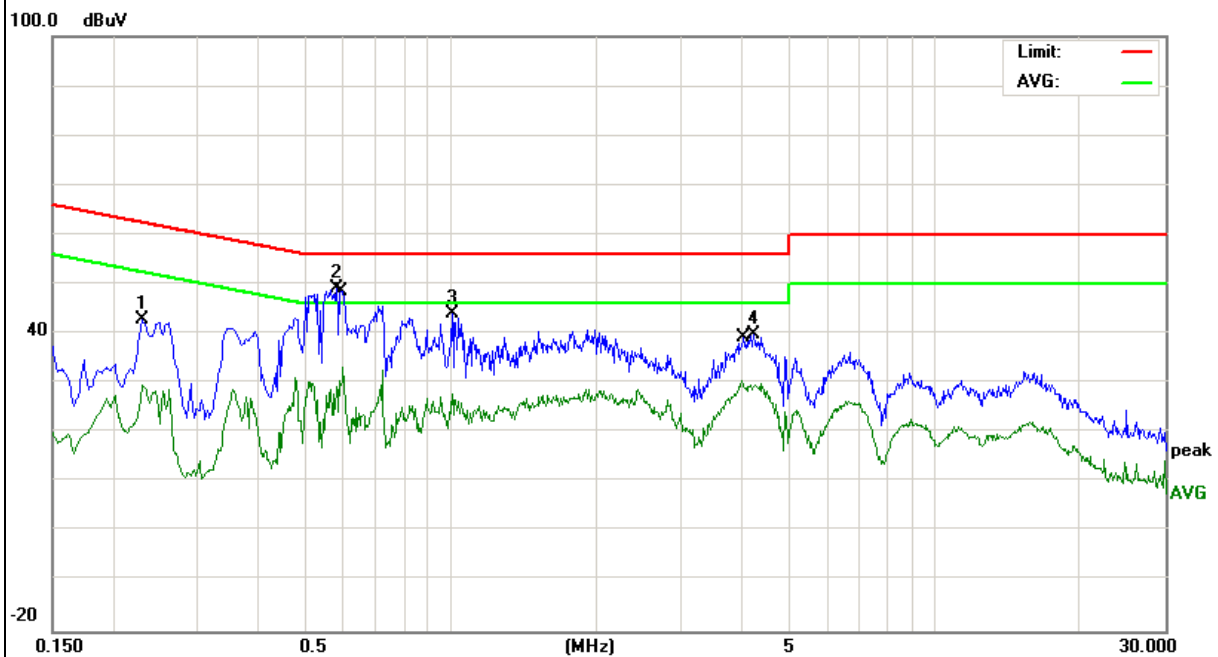
Remark:  
Factor = Insertion Loss + Cable Loss.



EUT:	ScreenBeam Pro Enterprise Edition	Model Name. :	SBWD950A
Temperature:	26°C	Relative Humidity:	54%
Pressure:	1010hPa	Test Date:	2015-7-25
Test Mode:	WIFI	Phase:	N-Adapter 2
Test Voltage:	DC 5V from Adapter AC 120V/60Hz		

Freq. (MHz)	Reading (dBμV)	Factor (dB)	Measurement (dBμV)	Limit (dBμV)	Over (dB)	Detector
0.2300	33.12	9.61	42.73	62.45	-19.72	QP
0.5820	39.36	9.66	49.02	56.00	-6.98	QP
1.0100	34.58	9.61	44.19	56.00	-11.81	QP
4.2299	30.32	9.51	39.83	56.00	-16.17	QP
0.2300	19.92	9.61	29.53	52.45	-22.92	AVG
0.5980	23.60	9.66	33.26	46.00	-12.74	AVG
4.0060	20.96	9.51	30.47	46.00	-15.53	AVG

Remark:  
Factor = Insertion Loss + Cable Loss.

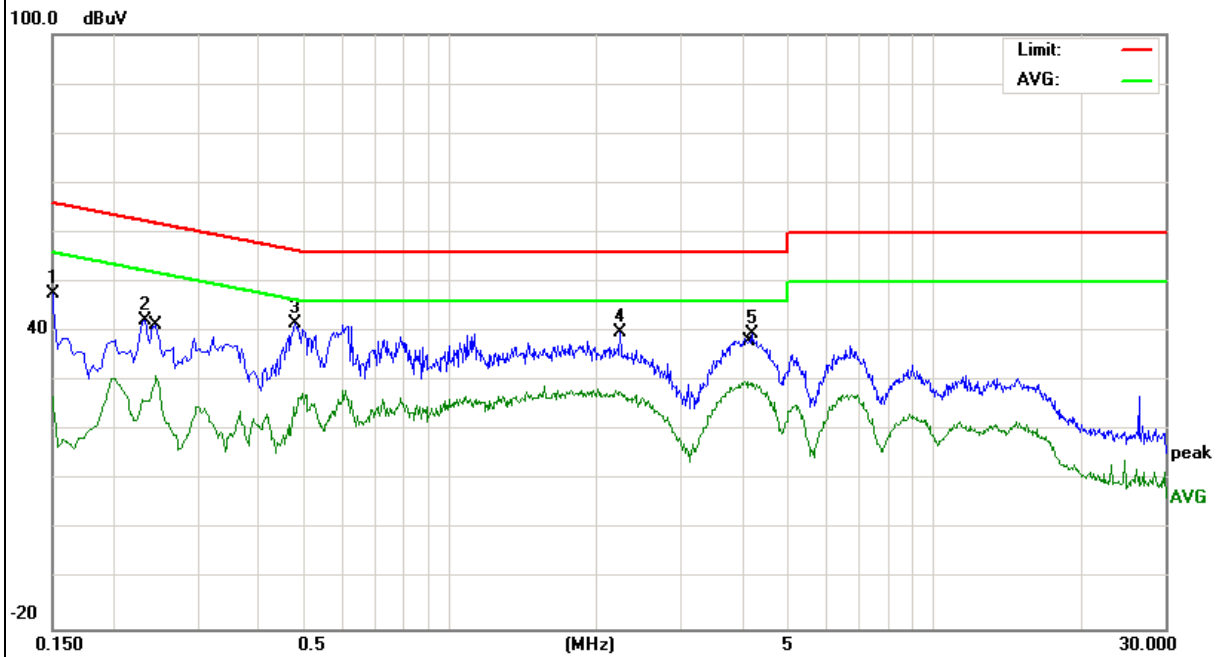


EUT:	ScreenBeam Pro Enterprise Edition	Model Name. :	SBWD950A
Temperature:	26°C	Relative Humidity:	54%
Pressure:	1010hPa	Test Date:	2015-7-25
Test Mode:	WIFI	Phase:	L-Adapter 2
Test Voltage:	DC 5V from Adapter AC 240V/60Hz		

Freq. (MHz)	Reading (dBμV)	Factor (dB)	Measurement (dBμV)	Limit (dBμV)	Over (dB)	Detector
0.1499	38.10	9.63	47.73	66.00	-18.27	QP
0.2340	32.58	9.65	42.23	62.30	-20.07	QP
0.4780	31.83	9.68	41.51	56.37	-14.86	QP
2.2460	30.13	9.65	39.78	56.00	-16.22	QP
4.1859	29.90	9.70	39.60	56.00	-16.40	QP
0.2460	21.53	9.67	31.20	51.89	-20.69	AVG
4.1139	20.32	9.70	30.02	46.00	-15.98	AVG

Remark:

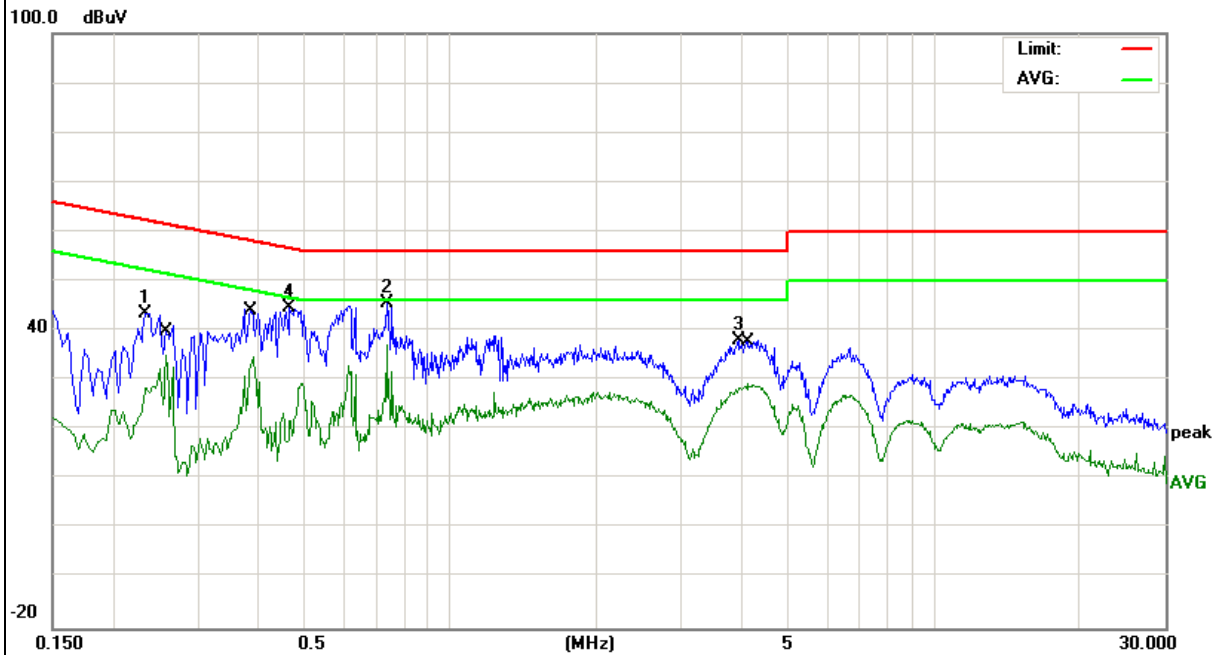
Factor = Insertion Loss + Cable Loss.



EUT:	ScreenBeam Pro Enterprise Edition	Model Name. :	SBWD950A
Temperature:	26°C	Relative Humidity:	54%
Pressure:	1010hPa	Test Date:	2015-7-25
Test Mode:	WIFI	Phase:	N-Adapter 2
Test Voltage:	DC 5V from Adapter AC 240V/60Hz		

Freq. (MHz)	Reading (dBμV)	Factor (dB)	Measurement (dBμV)	Limit (dBμV)	Over (dB)	Detector
0.2340	33.90	9.61	43.51	62.30	-18.79	QP
0.7380	35.90	9.63	45.53	56.00	-10.47	QP
3.9300	28.68	9.51	38.19	56.00	-17.81	QP
0.4660	34.97	9.66	44.63	56.58	-11.95	QP
0.2580	25.55	9.62	35.17	51.49	-16.32	AVG
0.3899	25.24	9.64	34.88	48.06	-13.18	AVG
0.7380	27.58	9.63	37.21	46.00	-8.79	AVG
4.1179	19.79	9.51	29.30	46.00	-16.70	AVG

Remark:  
Factor = Insertion Loss + Cable Loss.



### 3.2 RADIATED EMISSION MEASUREMENT

#### 3.2.1 LIMITS OF RADIATED EMISSION MEASUREMENT

FREQUENCY (MHz)	<input type="checkbox"/> Class A (at 3m)	<input checked="" type="checkbox"/> Class B (at 3m)
	dBµV/m	
30 ~ 88	49.0	40.0
88 ~ 216	53.5	43.5
216 ~ 960	56.5	46.0
Above 960	59.5	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 (dBµV/m)=20log Emission level (uV/m).

#### 3.2.2 TEST PROCEDURE

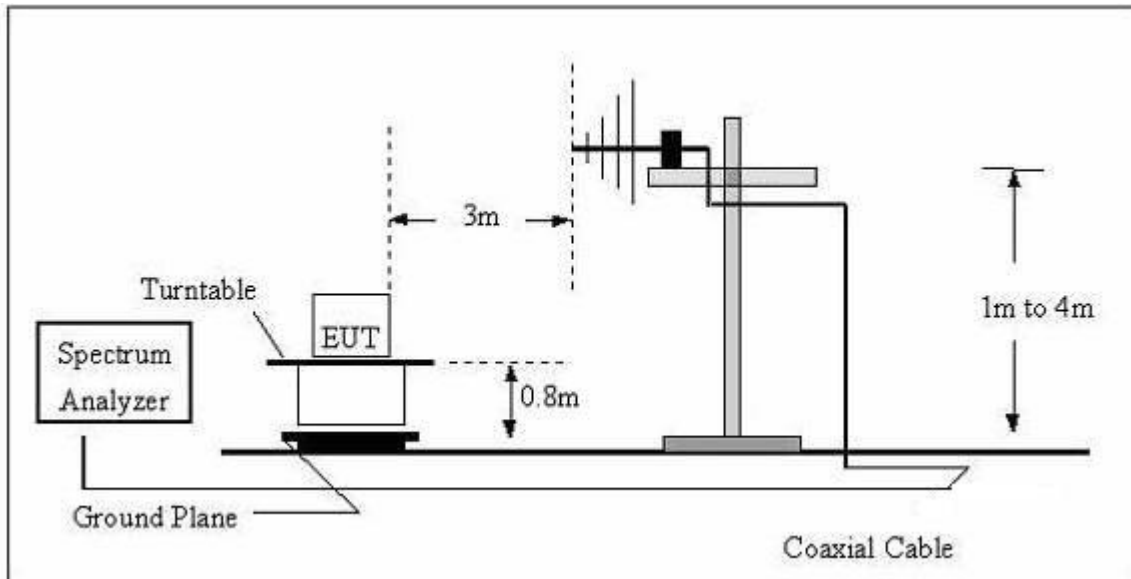
- a. The measuring distance of at 10 m shall be used for measurements at frequency up to 1GHz. For frequencies above 1GHz, any suitable measuring distance may be used.
- b. The EUT was placed on the top of a rotating table 0.8 meters above the ground at a 10 meter open area test site. The table was rotated 360 degrees to determine the position of the highest radiation.
- c. The height of the equipment or of the substitution antenna shall be 0.8 m; the height of the test antenna shall vary between 1 m to 4 m. Both horizontal and vertical polarizations of the antenna are set to make the measurement.
- d. The initial step in collecting conducted emission data is a spectrum analyzer peak detector mode pre-scanning the measurement frequency range. Significant peaks are then marked and then Quasi Peak detector mode re-measured, above 1G Average detector mode will be instead.
- e. If the Peak Mode measured value compliance with and lower than Quasi Peak Mode Limit, the EUT shall be deemed to meet QP(AV) Limits and then no additional QP Mode measurement performed.
- f. For the actual test configuration, please refer to the related Item –EUT Test Photos.

During the radiated emission test, the Spectrum Analyzer was set with the following configurations:

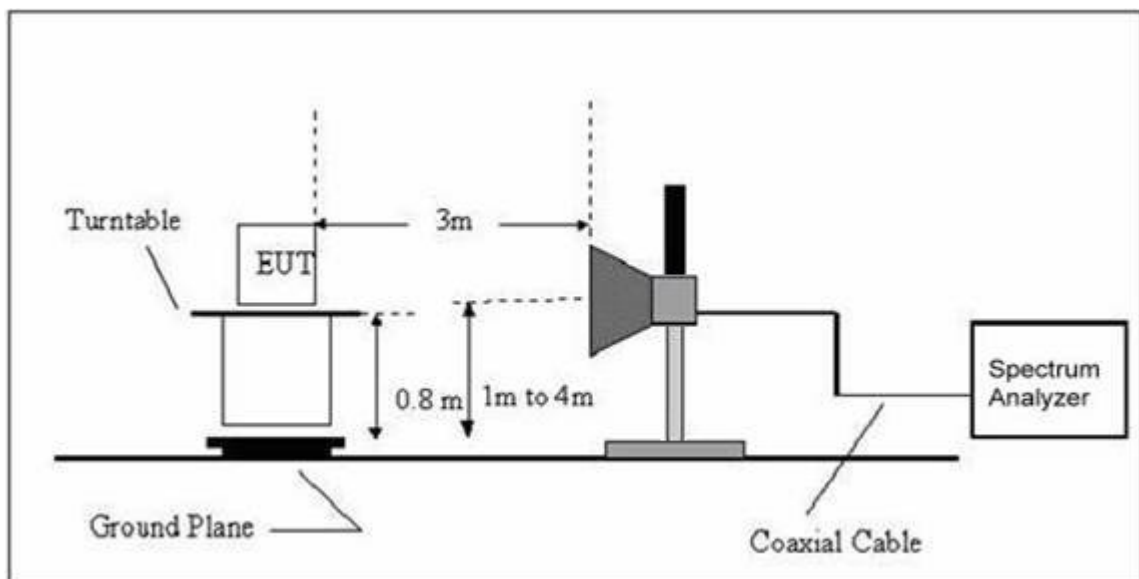
Frequency Band (MHz)	Function	Resolution bandwidth	Video Bandwidth
30 to 1000	QP	120 kHz	300 kHz
Above 1000	Peak	1 MHz	1 MHz
	Peak	1 MHz	10 Hz

3.2.3 TEST SETUP

(A) Radiated Emission Test Set-Up Frequency Below 1 GHz



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



3.2.4 EUT OPERATING CONDITIONS

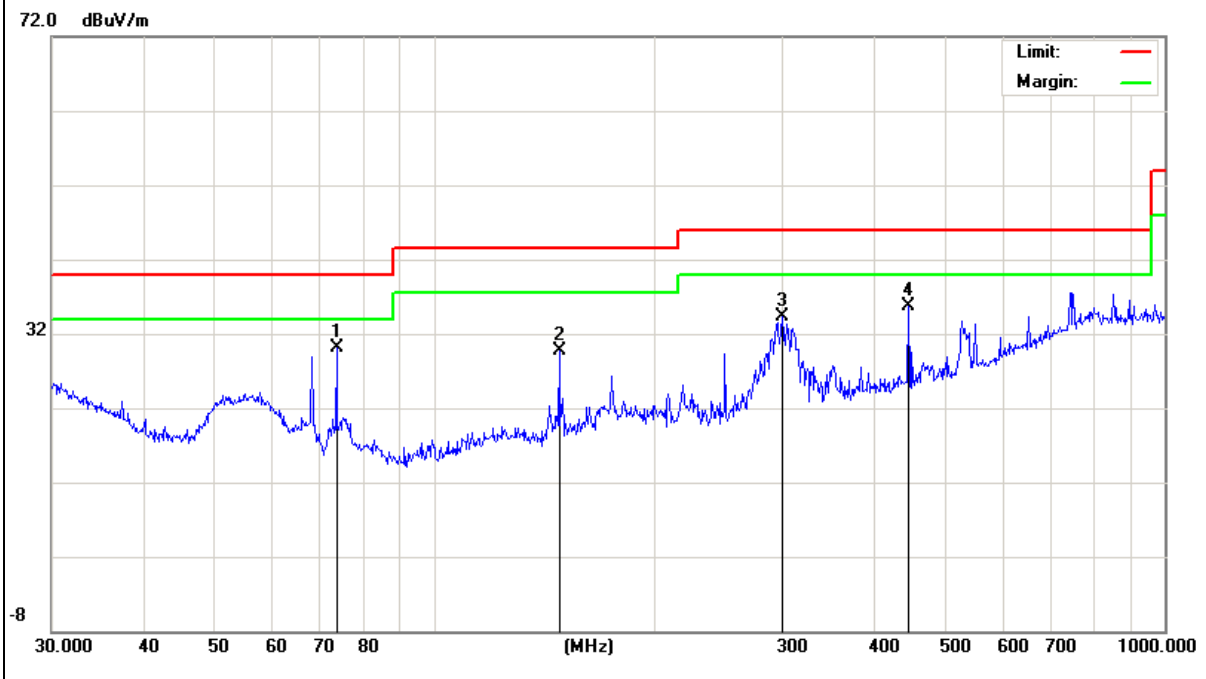
The EUT tested system was configured as the statements of 2.3 Unless otherwise a special operating condition is specified in the follows during the testing.

### 3.2.5 TEST RESULTS

EUT:	ScreenBeam Pro Enterprise Edition	Model Name :	SBWD950A
Temperature:	24°C	Relative Humidity:	54%
Pressure:	1010hPa	Test Date:	2015-7-25
Test Mode:	WIFI	Polarization:	Horizontal
Test Power:	DC 5V from Adapter AC 120V/60Hz		

Freq. (MHz)	Reading (dBμV/m)	Factor (dB)	Measurement (dBμV/m)	Limit (dBμV/m)	Over (dB)	Detector
73.617	24.51	5.66	30.17	40.00	-9.83	QP
148.441	19.16	10.57	29.73	43.50	-13.77	QP
300.3672	20.19	14.16	34.35	46.00	-11.65	QP
446.4141	16.55	19.23	35.78	46.00	-10.22	QP

Remark:  
Factor = Antenna Factor + Cable Loss.



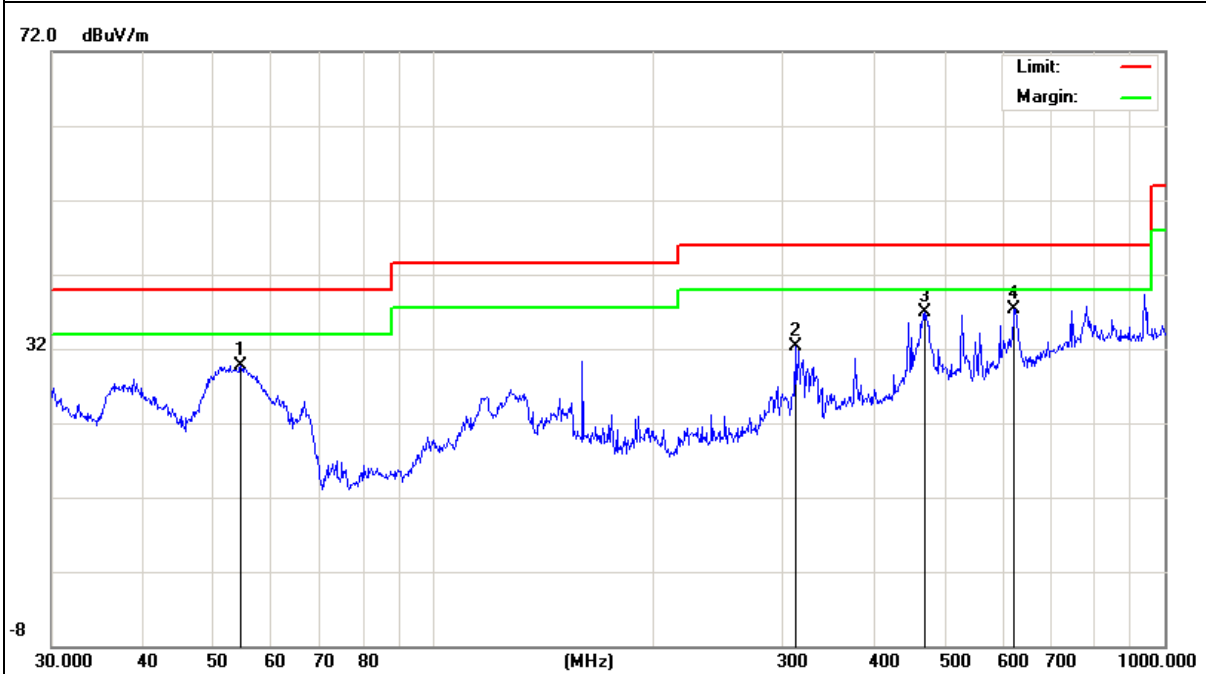


EUT:	ScreenBeam Pro Enterprise Edition	Model Name :	SBWD950A
Temperature:	24°C	Relative Humidity:	54%
Pressure:	1010hPa	Test Date:	2015-7-25
Test Mode:	WIFI	Polarization:	Vertical
Test Power:	DC 5V from Adapter AC 120V/60Hz		

Freq. (MHz)	Reading (dBμV/m)	Factor (dB)	Measurement (dBμV/m)	Limit (dBμV/m)	Over (dB)	Detector
54.4516	20.19	9.42	29.61	40.00	-10.39	QP
312.1794	17.57	14.66	32.23	46.00	-13.77	QP
470.5232	17.13	19.70	36.83	46.00	-9.17	QP
622.8900	14.41	22.87	37.28	46.00	-8.72	QP

Remark:

Factor = Antenna Factor + Cable Loss.



3.2.6 TEST RESULTS(Above 1GHz)

Polar (H/V)	Frequency	Meter Reading	Factor	Emission Level	Limits	Margin	Remark
	(MHz)	(dBm)	(dB)	(dBm)	(dBm)	(dB)	
V	1894.621	85.96	-17.15	68.81	74.00	-5.19	peak
V	1894.621	60.82	-17.15	43.67	54.00	-10.33	AVG
V	2657.389	82.37	-15.76	66.61	74.00	-7.39	peak
V	2657.389	59.34	-15.76	43.58	54.00	-10.42	AVG
V	4013.629	76.71	-11.22	65.49	74.00	-8.51	peak
V	4013.629	53.98	-11.22	42.76	54.00	-11.24	AVG
H	1896.351	81.81	-17.14	64.67	74.00	-9.33	peak
H	1896.351	58.40	-17.14	41.26	54.00	-12.74	AVG
H	3116.378	82.03	-15.54	66.49	74.00	-7.51	peak
H	3116.378	58.51	-15.54	42.97	54.00	-11.03	AVG
H	4361.254	75.44	-10.13	65.31	74.00	-8.69	peak
H	4361.254	51.49	-10.13	41.36	54.00	-12.64	AVG

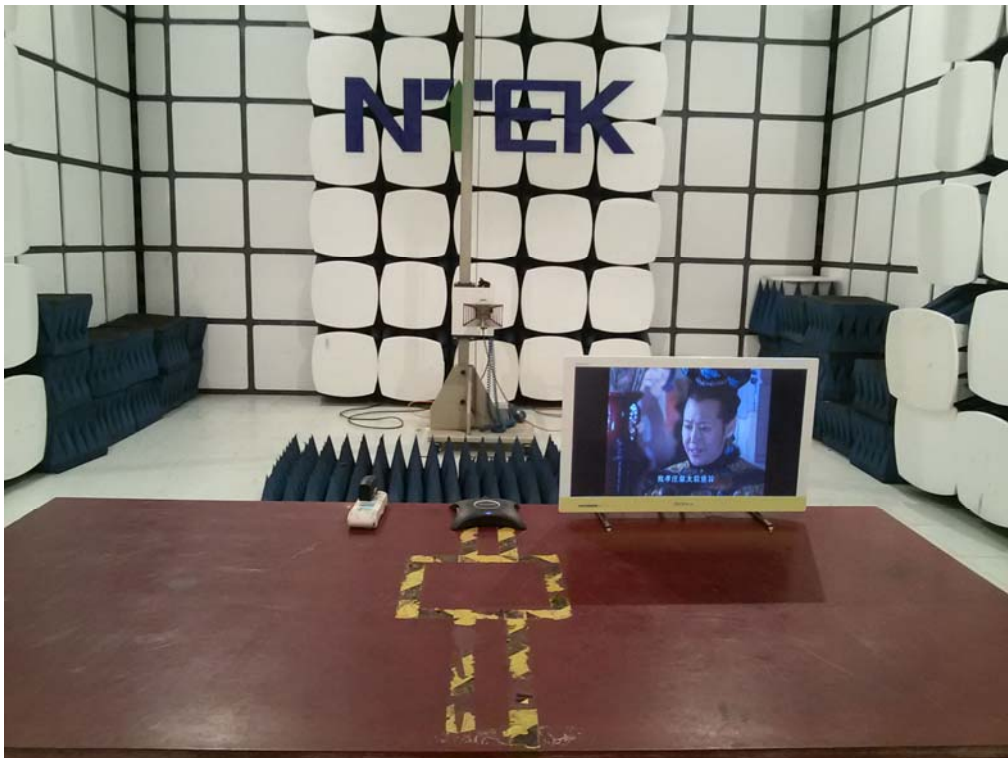
**Remark:**

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

Note: Only the worst case mode is recorded in the report.

#### 4. EUT TEST PHOTO

**Radiated Measurement Photos**



**Conducted Measurement Photos**

