



Report No: FCC 1709051-01 File reference No: 2017-09-16

Applicant: GLORY STAR TECHNICS (SHENZHEN) CO., LTD.

Product: 15.6' Advertising Displayer

Model No: NEB156-01

Trademark: N/A

Test Standards: FCC Part 15.247

Test result:

It is herewith confirmed and found to comply with the

requirements set up by ANSI C63.10, FCC Part 15.247 for the

evaluation of electromagnetic compatibility

Approved By

# Jack Chung

Jack Chung

Manager

Dated: September 16, 2017

Results appearing herein relate only to the sample tested

The technical reports is issued errors and omissions exempt and is subject to withdrawal at

## SHENZHEN TIMEWAY TESTING LABORATORIES

Room 512-519, 5/F., East Tower, Building 4, Anhua Industrial Zone, Futian District, Shenzhen, Guangdong, China

Tel (755) 83448688, Fax (755) 83442996, E-Mail:info@timeway-lab.com

Date: 2017-09-16



# **Special Statement:**

The testing quality ability of our laboratory meet with "Quality Law of People's Republic of China" Clause 19.

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The testing quality system of our laboratory meet with ISO/IEC-17025 requirements, which is approved by CNAL. This approval result is accepted by MRA of APLAC.

Our test facility is recognized, certified, or accredited by the following organizations:

### **CNAL-LAB Code: L2292**

The EMC Laboratory has been assessed and in compliance with CNAL/AC01:2002 accreditation criteria for testing Laboratories (identical to ISO/IEC 17025:1999 General Requirements) for the Competence of testing Laboratories.

### FCC-Registration No.: 899988

The EMC Laboratory has been registered and fully described in a report filed with the (FCC) Federal Communications commission. The acceptance letter from the FCC is maintained in our files. Registration No.: 899988.

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### **Test Report Conclusion**

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# 1.0 General Details

### 1.1 Test Lab Details

Name: SHENZHEN TIMEWAY TESTING LABORATORIES.

Address: Room 512-519,5/F., East Tower, Building 4, Anhua Industrial Zone, Futian District, Shenzhen,

Guangdong China

Telephone: (755) 83448688 Fax: (755) 83442996

Site on File with the Federal Communications Commission – United Sates

Registration Number: 899988

For 3m & 10 m OATS

Site Listed with Industry Canada of Ottawa, Canada

Registration Number: IC: 5205A-02

For 3m & 10 m OATS

## 1.2 Applicant Details

Applicant: GLORY STAR TECHNICS (SHENZHEN) CO., LTD.

Address: 4/Floor, west block, Longzhu Road, Xin WuCun Industry Building, NanShan District, ShenZhen

Telephone: (755)-26001808-305 Fax: (755)-26002933

### 1.3 Description of EUT

Product: 15.6' Advertising Displayer

Manufacturer: GLORY STAR TECHNICS (SHENZHEN) CO., LTD.

Address: 4/Floor, west block, Longzhu Road, Xin WuCun Industry Building, NanShan

District, Shen Zhen

Brand Name: N/A

Model Number: NEB156-01

Additional Model Number: N/A

Type of Modulation IEEE 802.11b : DSSS (CCK, QPSK, DBPSK)

IEEE 802.11g/n (HT20/HT40) : OFDM(64QAM, 16QAM, QPSK, BPSK)

Frequency range IEEE 802.11b/g/n (HT20): 2412-2462MHz; IEEE 802.11n (HT40): 2422-2452MHz;

Channel Spacing 5MHz for IEEE 802.11b/g/n(HT20/HT40)

Air Data Rate IEEE 802.11b : 11, 5.5, 2, 1 Mbps

IEEE 802.11g: 54, 48,36, 24, 18, 12, 9, 6 Mbps

IEEE 802.11n HT20/HT40: mcs0-mcs7

Frequency Selection By software

Channel Number IEEE 802.11b/g/n (HT20): 11 Channels; IEEE 802.11n (HT40): 7 Channels

Antenna: Integral Antenna and the maximum Gain of this antenna is 2.0dBi;

Power Adapter Model: LYD1205000UA;

Input: 100-240V, 50/60Hz, 1.6A; Output: 12V, 5A

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Submitted Sample: 2 Samples

Test Duration 1.5

2017-06-25 to 2017-07-05

1.6 Test Uncertainty Conducted Emissions Uncertainty =3.6dB

Radiated Emissions Uncertainty =4.7dB

1.7 Test Engineer

The sample tested by

Print Name: Terry Tang

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2.0 Test Equipment					
Instrument Type	Manufacturer	Model	Serial No.	Date of Cal.	Due Date
ESPI Test Receiver	R&S	ESPI 3	100379	2016-08-22	2017-08-21
TWO Line-V-NETW	R&S	EZH3-Z5	100294	2016-08-22	2017-08-21
TWO Line-V-NETW	R&S	EZH3-Z5	100253	2016-08-22	2017-08-21
Ultra Broadband ANT	R&S	HL562	100157	2016-08-23	2017-08-22
ESDV Test Receiver	R&S	ESDV	100008	2016-08-22	2017-08-21
Impuls-Begrenzer	R&S	ESH3-Z2	100281	2016-08-22	2017-08-21
System Controller	CT	SC100	-		
Printer	EPSON	РНОТО ЕХЗ	CFNH234850		
Computer	IBM	8434	1S8434KCE99BLXLO*	-	-
Loop Antenna	EMCO	6502	00042960	2016-08-23	2017-08-22
ESPI Test Receiver	R&S	ESI26	838786/013	2016-08-22	2017-08-21
3m OATS			N/A	2016-08-24	2017-08-23
Horn Antenna	R&S	BBHA 9170	BBHA9170265	2016-08-24	2017-08-23
Horn Antenna	R&S	BBHA 9120D	9120D-631	2016-08-24	2017-08-23
Power meter	Anritsu	ML2487A	6K00003613	2016-08-22	2017-08-21
Power sensor	Anritsu	MA2491A	32263	2016-08-22	2017-08-21
Bilog Antenna	Schwarebeck	VULB9163	9163/340	2016-08-23	2017-08-21
LISN	AFJ	LS16C	10010947251	2016-08-22	2017-08-21
LISN (Three Phase)	Schwarebeck	NSLK 8126	8126453	2016-08-23	2017-08-22
9*6*6 Anechoic			N/A	2016-08-24	2017-08-23
EMI Test Receiver	RS	ESCS30	100139	2016-08-22	2017-08-21
RF Cable	SCHWARZBEC K			2016-08-23	2017-08-22
Pre-Amplifier	НР	8447D	2727A05017	2016-08-05	2017-08-04
Pre-Amplifier	EM	EM30265		2016-08-05	2017-08-04

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### 3. DESCRIPTION OF TEST MODES

### IEEE 802.11b, 802.11g, 802.11n (HT20) mode

The EUT had been tested under operating condition. There are three channels have been tested as following:

Channel	Frequency (MHz)
Low	2412
Middle	2437
High	2462

IEEE 802.11b mode: 1Mbps data rate (worst case) was chosen for full testing. IEEE 802.11g mode: 6Mbps data rate (worst case) was chosen for full testing. IEEE 802.11n (HT20) mode: mcs0 data rate (worst case) were chosen for full testing (dutycycle>98%)

### IEEE 802.11n (HT40) mode

The EUT had been tested under operating condition. There are three channels have been tested as following:

Channel	Frequency (MHz)
Low	2422
Middle	2437
High	2452

IEEE 802.11n (HT40) mode: mcs0 data rate (worst case) were chosen for full testing (dutycycle>98%)

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### 3.0 **Technical Details**

### 3.1 Summary of test results

The EUT has been tested ac	cording to the following speci	ncations:	
Standard	Test Type	Result	Notes
FCC Part 15, Paragraph 15.107 & 15.207	<b>Conducted Emission Test</b>	PASS	Complies
FCC Part 15 Subpart C Paragraph 15.247(a)(2) Limit	Spectrum bandwidth of a Orthogonal Frequency Division Multiplex System Limit: 6dB bandwidth>500kHz	PASS	Complies
FCC Part 15, Paragraph 15.247(b)	Maximum peak output power Limit: max. 30dBm	PASS	Complies
FCC Part 15, Paragraph 15.109,15.205 & 15.209	Transmitter Radiated Emission Limit: Table 15.209	PASS	Complies
FCC Part 15, Paragraph 15.247(e)	Power Spectral Density Limit: max. 8dBm	PASS	Complies
FCC Part 15, Paragraph 15.247(d)	Out of Band Emission and Restricted Band Radiation Limit: 20dB less than peak value of fundamental frequency Restricted band limit: Table 15.209	PASS	Complies

### 3.2 **Test Standards**

FCC Part 15 Subpart & Subpart C, Paragraph 15.247; ANSI C63.10-2013

### **EUT Modification** 4.0

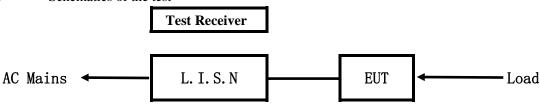
No modification by SHENZHEN TIMEWAY TESTING LABORATORIES.

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### 5.0 Power Line Conducted Emission Test

### 5.1 Schematics of the test

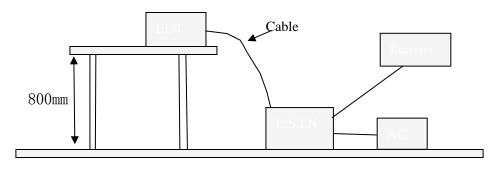


EUT: Equipment Under Test

### 5.2 Test Method and test Procedure

The EUT was tested according to ANSI C63.10-2013. The Frequency spectrum From 0.15MHz to 30MHz was investigated. The LISN used was 50ohm/50uH as specified by section 5.1 of ANSI C63.10-2013.

Test Voltage: 120V~, 60Hz Block diagram of Test setup



## 5.3 Configuration of The EUT

The EUT was configured according to ANSI C63.10-2013. All interface ports were connected to the Appropriate peripherals. All peripherals and cables are listed below.

### A. EUT

Device	Manufacturer	Model	FCC ID
15.6' Advertising	GLORY STAR TECHNICS	NED156 01	24 A CC NED 15 ( 01
Displayer	(SHENZHEN) CO., LTD.	NEB156-01	2AACS-NEB156-01

### B. Internal Device

Device	Manufacturer	Model	FCC ID/DOC
N/A			

### C. Peripherals

Device	Manufacturer	Model	FCC ID/DOC	Cable

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### 5.4 EUT Operating Condition

Operating condition is according to ANSI C63.10-2013.

- A Setup the EUT and simulators as shown on follow
- B Enable AF signal and confirm EUT active to normal condition

### 5.5 Power line conducted Emission Limit according to Paragraph 15.207 and 15.107

Frequency	Class A Lim	its (dB µ V)	Class B Limits (dB µ V)		
(MHz)	Quasi-peak Level	Average Level	Quasi-peak Level	Average Level	
0.15 ~ 0.50	79.0	66.0	66.0~56.0*	56.0~46.0*	
$0.50 \sim 5.00$	73.0	60.0	56.0	46.0	
$5.00 \sim 30.00$	73.0	60.0	60.0	50.0	

Notes:

- 1. \*Decreasing linearly with logarithm of frequency.
- 2. The tighter limit shall apply at the transition frequencies

### 5.6 Test Results

The frequency spectrum from 0.15MHz to 30MHz was investigated. All reading are quasi-peak values with a resolution bandwidth of 9kHz.

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### A: Conducted Emission on Live Terminal (150kHz to 30MHz)

**EUT Operating Environment** 

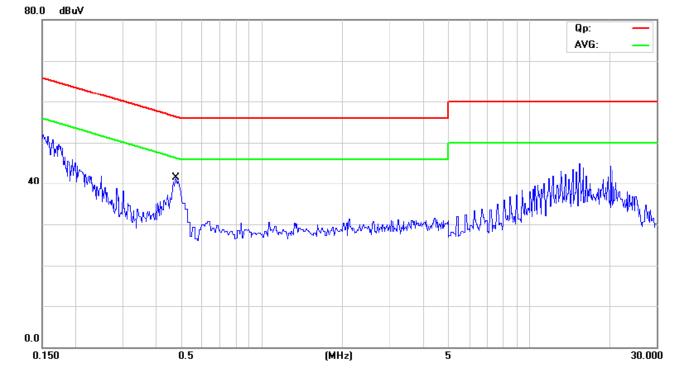
Temperature: 26°C Humidity: 65%RH Atmospheric Pressure: 101 KPa

**EUT set Condition: Keep WIFI Transmitting** 

**Equipment Level: Class B** 

**Results: PASS** 

Please refer to following diagram for individual



No. Mk.	Freq.	Reading Level		Measure- ment	Limit	Over		
	MHz	dBuV	dB	dBuV	dBuV	dB	Detector	Comment
1 *	0.4712	27.60	10.24	37.84	56.49	-18.65	QP	
2	0.4712	16.30	10.24	26.54	46.49	-19.95	AVG	

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### B: Conducted Emission on Neutral Terminal (150kHz to 30MHz)

**EUT Operating Environment** 

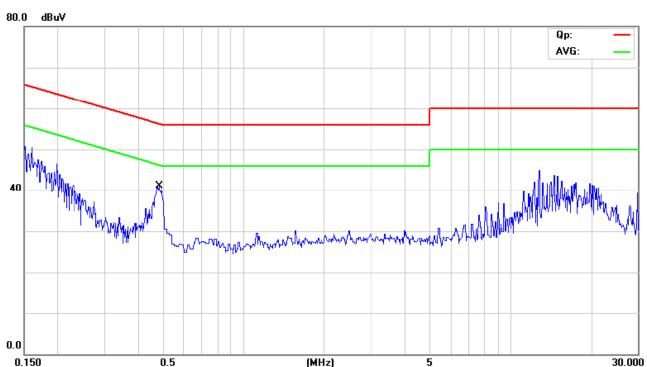
Temperature: 26°C Humidity: 65%RH Atmospheric Pressure: 101 KPa

**EUT set Condition: Keep WIFI Transmitting** 

**Equipment Level: Class B** 

**Results: Pass** 

Please refer to following diagram for individual



No.	Mk.	Freq.	Reading Level		Measure- ment	Limit	Over		
		MHz	dBuV	dB	dBuV	dBu∀	dB	Detector	Comment
1	*	0.4804	27.90	10.25	38.15	56.33	-18.18	QP	
2		0.4804	14.00	10.25	24.25	46.33	-22.08	AVG	

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### 6 Radiated Emission Test

6.1 Test Method and test Procedure:

- (1) The EUT was tested according to ANSI C63.10-2013. The radiated test was performed at Timeway EMC Laboratory. This site is on file with the FCC laboratory division, Registration No. 8999988
- (2) The EUT, peripherals were put on the turntable which table size is 1m x 1.5 m, table high 0.8 m. All set up is according to ANSI C63.10-2013.
- (3) The frequency spectrum from 30 MHz to 25 GHz was investigated. All readings from 30 MHz to 1 GHz are Quasi-peak values with a resolution bandwidth of 120 kHz. F For measurement above 1GHz, peak values with RBW=1MHz VBW=3MHz and PK detector. AV value with RBW=1MHz, VBW=3MHz and RMS detector. Measurements were made at 3 meters.
- (4) The antenna high is varied from 1 m to 4 m high to find the maximum emission for each frequency.
- (5) Maximizing procedure was performed on the six (6) highest emissions to ensure EUT compliance is with all installation combinations. All data was recorded in the peak detection mode. Quasi-peak readings was performed only when an emission was found to be marginal (within -4 dB of specification limit), and are distinguished with a "QP" in the data table.
- (6) The antenna polarization: Vertical polarization and Horizontal polarization.

# Distance = 3m Computer Pre –Amplifier Furn-table Receiver

6.2 Configuration of The EUT

Same as section 5.3 of this report

**Block diagram of Test setup** 

6.3 EUT Operating Condition
Same as section 5.4 of this report.

The report refers only to the sample tested and does not apply to the bulk.

Ground Plane

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### 6.4 Radiated Emission Limit

All emission from a digital device, including any network of conductors and apparatus connected thereto, shall not exceed the level of field strength specified below:

### Frequencies in restricted band are complied to limit on Paragraph 15.209 and 15.109

	-	
Frequency Range (MHz)	Distance (m)	Field strength (dB $\mu$ V/m)
30-88	3	40.0
88-216	3	43.5
216-960	3	46.0
Above 960	3	54.0

Note:

- 1. RF Voltage  $(dBuV) = 20 \log RF \text{ Voltage } (uV)$
- 2. In the Above Table, the higher limit applies at the band edges.
- 3. Distance refers to the distance in meters between the measuring instrument antenna and the EUT

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### Test result

# General Radiated Emission Data and Harmonics Radiated Emission Data Radiated Emission In Horizontal/Vertical (30MHz----1000MHz)

**EUT** set Condition: **Keep WIFI Transmitting** 

**Results: Pass** 

Frequency (MHz)	Level@3m (dB \u03b4 V/m)	Antenna Polarity	Limit@3m (dB \mu V/m)
375.040	34.88	Н	46.00
840.040	40.89	Н	46.00
240.000	41.89	Н	46.00
625.040	42.35	V	46.00
720.040	42.72	V	46.00
240.040	33.52	V	46.00
375.040	32.75	V	46.00

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### Test Figure:

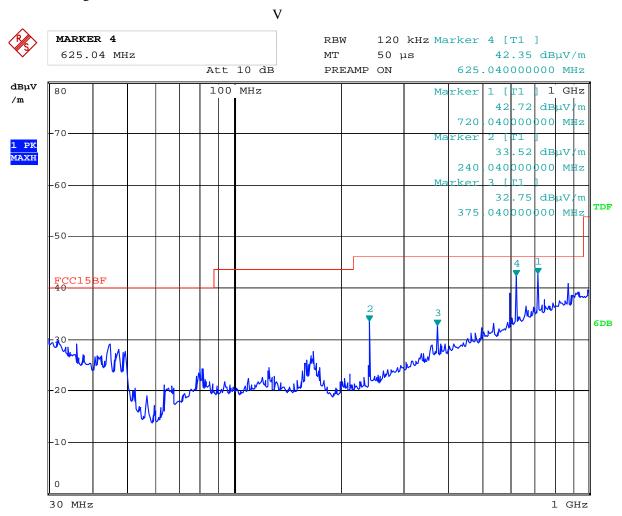
H MARKER 3 RBW 120 kHz Marker 3 [T1 ] 375.04 MHz 50 µs 34.88 dBµV/m MТ 375.040000000 MHz Att 10 dB PREAMP ON dΒμV 100 MHz Marker /m 40 89 dBuV 840 040000000 MHz 1 PK MAXH 41.89 dΒμV 240,000000000 MHz -60 TDF -50 6DB Mundaman Land WILLY VILLE 30 MHz 1 GHz

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### Test Figure:



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### Operation Mode: Transmitting under CH01 for 11b at 1Mbps

Frequency (MHz)	Level@3m (dB \u03b4 V/m)	Antenna Polarity	Limit@3m (dB \mu V/m)
4824.00	52.32 (PK)	Н	74(Peak)/ 54(AV)
4824.00	52.59 (PK)	V	74(Peak)/ 54(AV)
7236.00		H/V	74(Peak)/ 54(AV)
9648.00		H/V	74(Peak)/ 54(AV)
12060		H/V	74(Peak)/ 54(AV)
14472		H/V	74(Peak)/ 54(AV)
16684		H/V	74(Peak)/ 54(AV)
19296		H/V	74(Peak)/ 54(AV)
21708		H/V	74(Peak)/ 54(AV)
24120		H/V	74(Peak)/ 54(AV)

Note: 1. Level = Reading + AF + Cable - Preamp + Filter - Dist, Margin = Level - Limit

- 2. Remark "---" means that the emissions level is too low to be measured
- 3. For 802.11b mode 1Mbps

## Operation Mode: Transmitting under CH06 for 11b at 1Mbps

Frequency (MHz)	Level@3m (dB \u03b4 V/m)	Antenna Polarity	Limit@3m (dB \( \mu \)V/m)
4874.00	48.01 (PK)	Н	74(Peak)/ 54(AV)
4874.00	50.08 (PK)	V	74(Peak)/ 54(AV)
7311.00		H/V	74(Peak)/ 54(AV)
9748.00		H/V	74(Peak)/ 54(AV)
12185		H/V	74(Peak)/ 54(AV)
14622		H/V	74(Peak)/ 54(AV)
17059		H/V	74(Peak)/ 54(AV)
19496		H/V	74(Peak)/ 54(AV)
21933		H/V	74(Peak)/ 54(AV)
24370		H/V	74(Peak)/ 54(AV)

Note: 1. Level = Reading + AF + Cable - Preamp + Filter - Dist, Margin = Level - Limit

- 2. Remark "---" means that the emissions level is too low to be measured
- 3. For 802.11b mode 1Mbps

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### Operation Mode: Transmitting under CH11 for 11b at 1Mbps

	U		
Frequency (MHz)	Level@3m (dB \mu V/m)	Antenna Polarity	Limit@3m (dB \mu V/m)
4924	51.29 (PK)	Н	74(Peak)/ 54(AV)
4924	51.13 (PK)	V	74(Peak)/ 54(AV)
7368		H/V	74(Peak)/ 54(AV)
9848		H/V	74(Peak)/ 54(AV)
12310		H/V	74(Peak)/ 54(AV)
14772		H/V	74(Peak)/ 54(AV)
17234		H/V	74(Peak)/ 54(AV)
19696		H/V	74(Peak)/ 54(AV)
22158		H/V	74(Peak)/ 54(AV)
24620		H/V	74(Peak)/ 54(AV)

Note: 1. Level = Reading + AF + Cable - Preamp + Filter - Dist, Margin = Level - Limit

<sup>2.</sup> Remark "---" means that the emissions level is too low to be measured

<sup>3.</sup> For 802.11b mode at 1Mbps

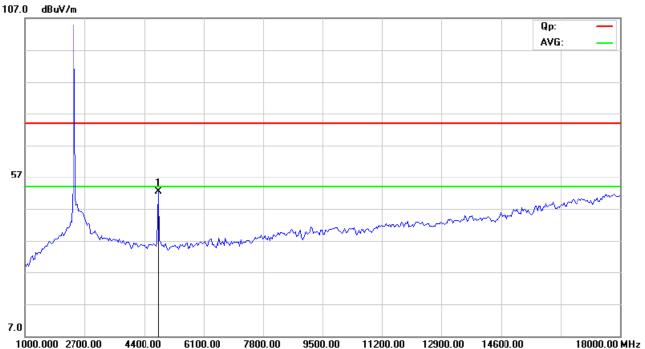
Date: 2017-09-16



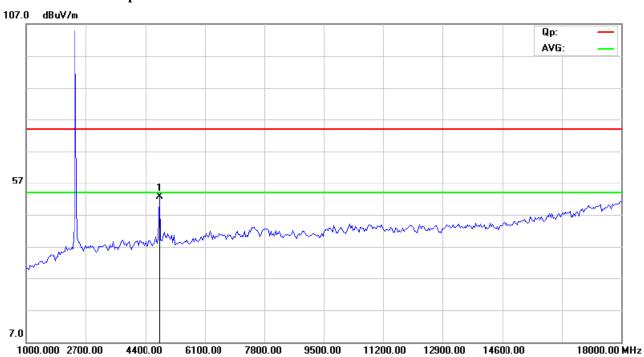
Please refer to the following test plots for details:

## CH01 for 11b at 1Mbps: Horizontal





### CH01 for 11b at 1Mbps: Vertical



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### CH06 for 11b at 1Mbps: Vertical



### CH06 for 11b at 1Mbps: Horizontal



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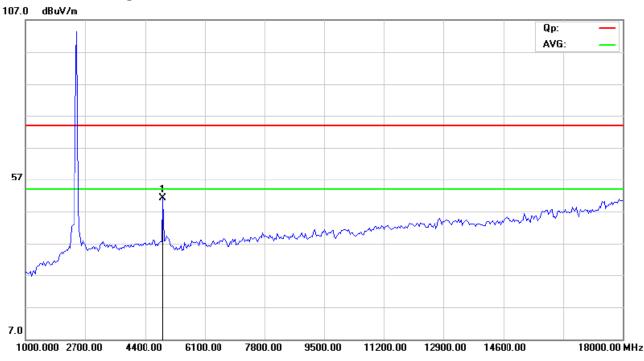
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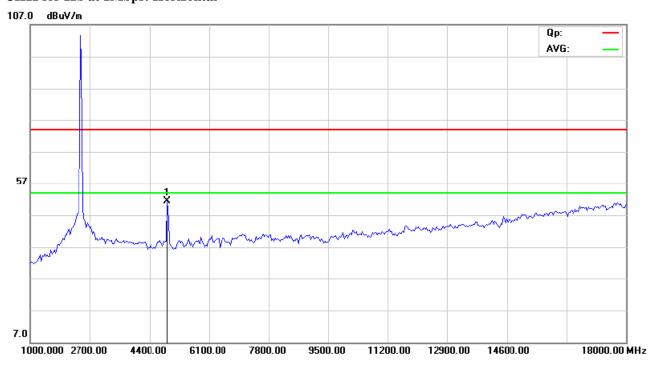
Date: 2017-09-16



### CH11 for 11b at 1Mbps: Vertical



### CH11 for 11b at 1Mbps: Horizontal



Note: For radiated Emissions from 18-25GHz, it is only the floor noise.

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### Operation Mode: Transmitting under CH01 for 11g at 6Mbps

Frequency (MHz)	Level@3m (dB \mu V/m)	Antenna Polarity	Limit@3m (dB \mu V/m)
4824.00	50.78 (PK)	Н	74(Peak)/ 54(AV)
4824.00	50.82 (PK)	V	74(Peak)/ 54(AV)
7236.00		H/V	74(Peak)/ 54(AV)
9648.00		H/V	74(Peak)/ 54(AV)
12060		H/V	74(Peak)/ 54(AV)
14472		H/V	74(Peak)/ 54(AV)
16884		H/V	74(Peak)/ 54(AV)
19296		H/V	74(Peak)/ 54(AV)
21708		H/V	74(Peak)/ 54(AV)
24120		H/V	74(Peak)/ 54(AV)

Note: 1. Level = Reading + AF + Cable - Preamp + Filter - Dist, Margin = Level - Limit

<sup>2.</sup> Remark "---" means that the emissions level is too low to be measured

<sup>3.</sup> For 802.11g mode 6Mbps

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### Operation Mode: Transmitting under CH06 for 11g at 6Mbps

	8	<u> </u>	
Frequency (MHz)	Level@3m (dB \u03b4 V/m)	Antenna Polarity	Limit@3m (dB \mu V/m)
4874.00	51.20 (PK)	V	74(Peak)/ 54(AV)
4874.00	51.65 (PK)	Н	74(Peak)/ 54(AV)
7311.00		H/V	74(Peak)/ 54(AV)
9748.00		H/V	74(Peak)/ 54(AV)
12185		H/V	74(Peak)/ 54(AV)
14622		H/V	74(Peak)/ 54(AV)
17059		H/V	74(Peak)/ 54(AV)
19496		H/V	74(Peak)/ 54(AV)
21933		H/V	74(Peak)/ 54(AV)
24370		H/V	74(Peak)/ 54(AV)

Note: 1. Level = Reading + AF + Cable - Preamp + Filter - Dist, Margin = Level - Limit

- 2. Remark "---" means that the emissions level is too low to be measured
- 3. For 802.11g mode 6Mbps

### Operation Mode: Transmitting under CH11 for 11g at 6Mbps

Frequency (MHz)	Level@3m (dB \u03b4 V/m)	Antenna Polarity	Limit@3m (dB \( \mu \)V/m)
4924	52.58 (PK)	Н	74(Peak)/ 54(AV)
4924	52.14 (PK)	V	74(Peak)/ 54(AV)
7368	1	H/V	74(Peak)/ 54(AV)
9848		H/V	74(Peak)/ 54(AV)
12310	1	H/V	74(Peak)/ 54(AV)
14772	1	H/V	74(Peak)/ 54(AV)
17234		H/V	74(Peak)/ 54(AV)
19696		H/V	74(Peak)/ 54(AV)
22158		H/V	74(Peak)/ 54(AV)
24620		H/V	74(Peak)/ 54(AV)

Note: 1. Level = Reading + AF + Cable - Preamp + Filter - Dist, Margin = Level - Limit

- 2. Remark "---" means that the emissions level is too low to be measured
- 3. For 802.11g mode at 6Mbps

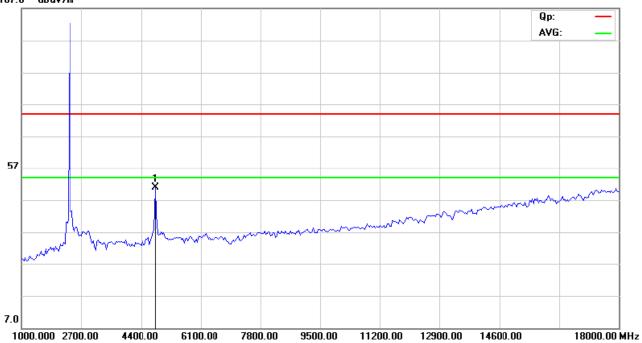
Date: 2017-09-16



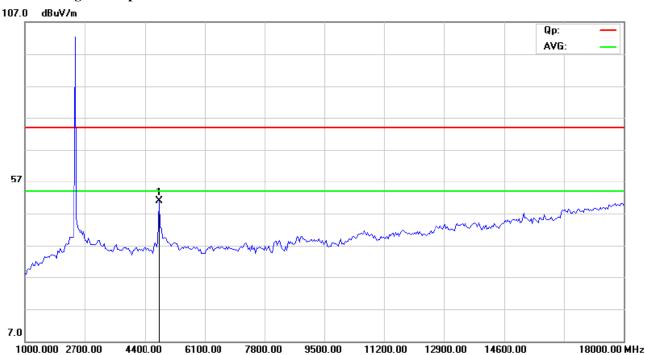
Please refer to the following test plots for details:

## CH01 for 11g at 6Mbps: Horizontal

### 107.0 dBuV/m



### CH01 for 11g at 6Mbps: Vertical



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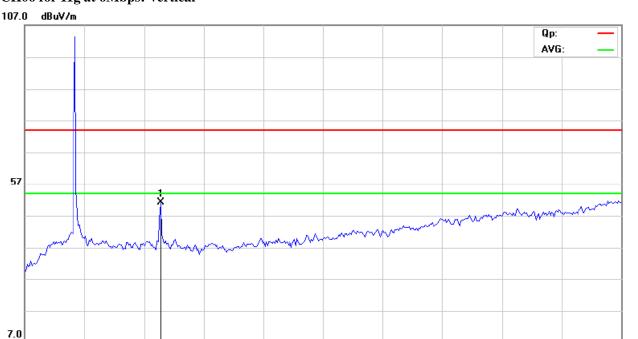
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### CH06 for 11g at 6Mbps: Vertical



9500.00

11200.00

12900.00

14600.00

18000.00 MHz

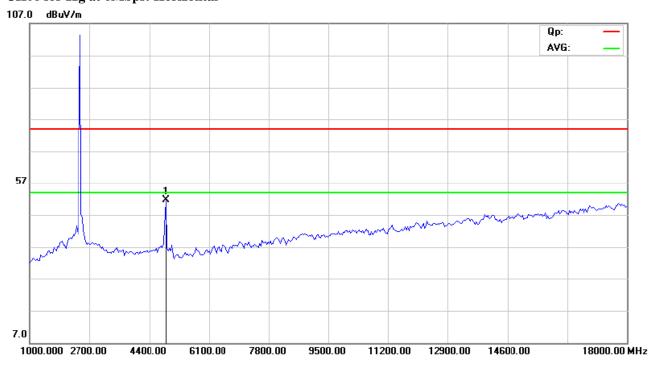
### CH06 for 11g at 6Mbps: Horizontal

4400.00

6100.00

7800.00

1000.000 2700.00



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### CH11 for 11g at 6Mbps: Vertical





4400.00

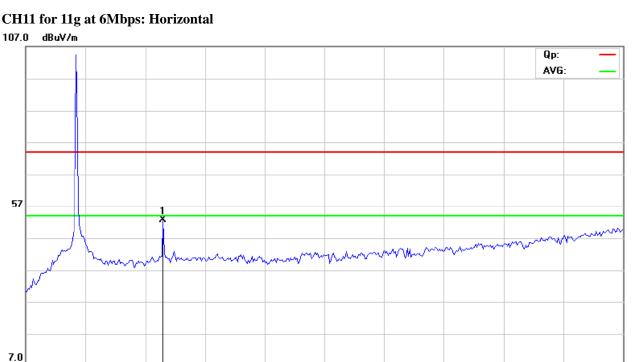
6100.00

7800.00

7.0

1000.000 2700.00

1000.000 2700.00



9500.00

11200.00

12900.00

14600.00

18000.00 MHz

18000.00 MHz

Note: For radiated Emissions from 18-25GHz, it is only the floor noise.

7800.00

6100.00

The report refers only to the sample tested and does not apply to the bulk.

4400.00

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9500.00

11200.00

12900.00

14600.00

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### Operation Mode: Transmitting under CH01 for 11n HT20 at mcs0

Frequency (MHz)	Level@3m (dB \u03b4 V/m)	Antenna Polarity	Limit@3m (dB \mu V/m)
4824.00	50.85 (PK)	Н	74(Peak)/ 54(AV)
4824.00	50.59 (PK)	V	74(Peak)/ 54(AV)
7236.00		H/V	74(Peak)/ 54(AV)
9648.00		H/V	74(Peak)/ 54(AV)
12060		H/V	74(Peak)/ 54(AV)
14472		H/V	74(Peak)/ 54(AV)
16684		H/V	74(Peak)/ 54(AV)
19296		H/V	74(Peak)/ 54(AV)
21708		H/V	74(Peak)/ 54(AV)
24120		H/V	74(Peak)/ 54(AV)

Note: 1. Level = Reading + AF + Cable - Preamp + Filter - Dist, Margin = Level - Limit

- 2. Remark "---" means that the emissions level is too low to be measured
- 3. For 802.11n (HT20) mode mcs0

### Operation Mode: Transmitting under CH06 for 11n HT20 at mcs0

Frequency (MHz)	Level@3m (dB \u03b4 V/m)	Antenna Polarity	Limit@3m (dB $\mu$ V/m)
4874.00	51.54 (PK)	Н	74(Peak)/ 54(AV)
4874.00	51.69 (PK)	V	74(Peak)/ 54(AV)
7311.00		H/V	74(Peak)/ 54(AV)
9748.00		H/V	74(Peak)/ 54(AV)
12185		H/V	74(Peak)/ 54(AV)
14622	-	H/V	74(Peak)/ 54(AV)
17059		H/V	74(Peak)/ 54(AV)
19496		H/V	74(Peak)/ 54(AV)
21933		H/V	74(Peak)/ 54(AV)
24370		H/V	74(Peak)/ 54(AV)

Note: 1. Level = Reading + AF + Cable - Preamp + Filter - Dist, Margin = Level - Limit

- 2. Remark "---" means that the emissions level is too low to be measured
- 3. For 802.11n (HT20) mode mcs0

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### Operation Mode: Transmitting under CH11 for 11n HT20 at mcs0

_			
Frequency (MHz)	Level@3m (dB \u03b4 V/m)	Antenna Polarity	Limit@3m (dB \mu V/m)
4924	52.69 (PK)	Н	74(Peak)/ 54(AV)
4924	52.14 (PK)	V	74(Peak)/ 54(AV)
7368		H/V	74(Peak)/ 54(AV)
9848		H/V	74(Peak)/ 54(AV)
12310		H/V	74(Peak)/ 54(AV)
14772		H/V	74(Peak)/ 54(AV)
17234		H/V	74(Peak)/ 54(AV)
19696		H/V	74(Peak)/ 54(AV)
22158		H/V	74(Peak)/ 54(AV)
24620		H/V	74(Peak)/ 54(AV)

Note: 1. Level = Reading + AF + Cable - Preamp + Filter - Dist, Margin = Level - Limit

<sup>2.</sup> Remark "---" means that the emissions level is too low to be measured

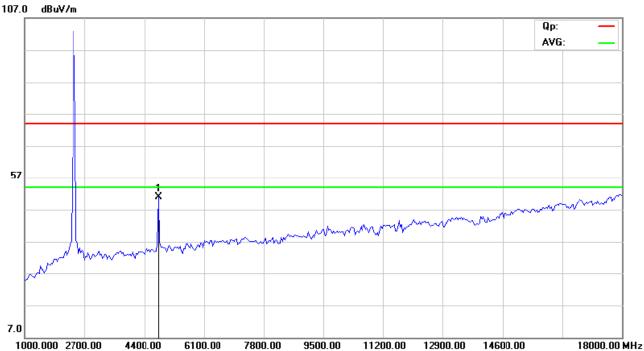
<sup>3.</sup> For 802.11n (HT20) mode mcs0

Date: 2017-09-16

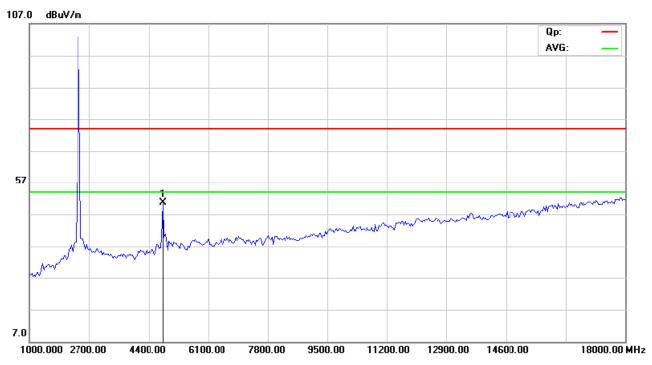


Please refer to the following test plots for details:

## CH01 for 11n HT20 at mcs0: Horizontal



### CH01 for 11n HT20 at mcs0: Vertical



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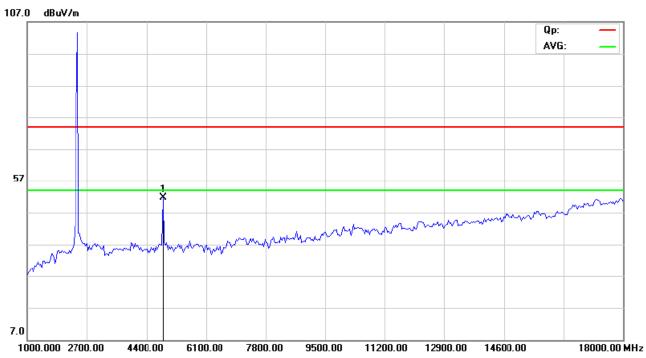
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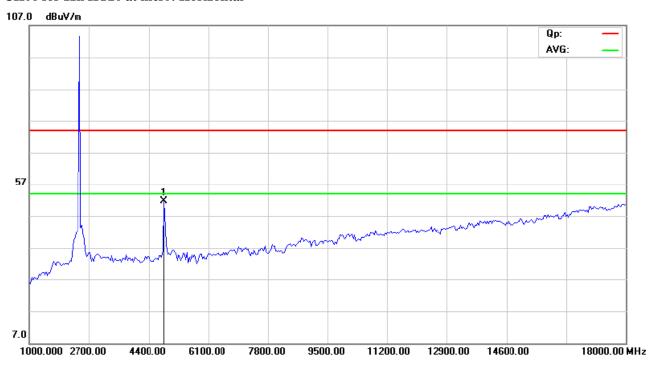
Date: 2017-09-16



### CH06 for 11n HT20 at mcs0: Vertical



### CH06 for 11n HT20 at mcs0: Horizontal



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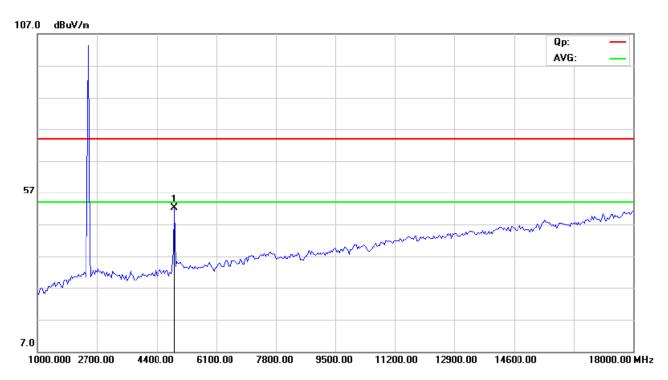
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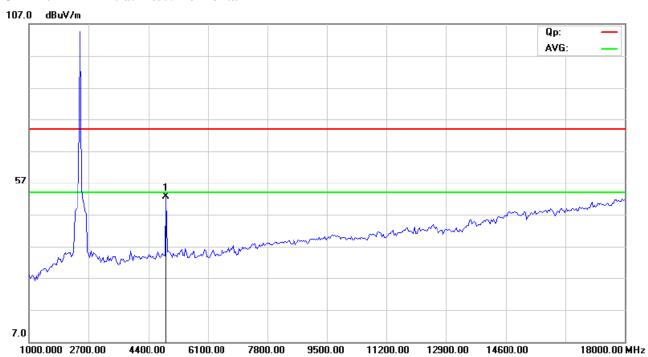
Date: 2017-09-16



### CH11 for 11n HT20 at mcs0: Vertical



### CH11 for 11n HT20 at mcs0: Horizontal



Note: For radiated Emissions from 18-25GHz, it is only the floor noise.

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### Operation Mode: Transmitting under CH01 for 11n HT40 at mcs0

Frequency (MHz)	Level@3m (dB \u03b4 V/m)	Antenna Polarity	Limit@3m (dB \u03b4 V/m)
4844.00	50.51 (PK)	Н	74(Peak)/ 54(AV)
4844.00	50.27 (PK)	V	74(Peak)/ 54(AV)
7266.00	1	H/V	74(Peak)/ 54(AV)
9688.00	1	H/V	74(Peak)/ 54(AV)
12110		H/V	74(Peak)/ 54(AV)
14532	-	H/V	74(Peak)/ 54(AV)
16954	1	H/V	74(Peak)/ 54(AV)
19376		H/V	74(Peak)/ 54(AV)
21798		H/V	74(Peak)/ 54(AV)
24220		H/V	74(Peak)/ 54(AV)

Note: 1. Level = Reading + AF + Cable - Preamp + Filter - Dist, Margin = Level - Limit

- 2. Remark "---" means that the emissions level is too low to be measured
- 3. For 802.11n (HT40) mode mcs0

## Operation Mode: Transmitting under CH04 for 11n HT40 at mcs0

Frequency (MHz)	Level@3m (dB \u03b4 V/m)	Antenna Polarity	Limit@3m (dB $\mu$ V/m)
4874.00	50.66 (PK)	Н	74(Peak)/ 54(AV)
4874.00	49.53 (PK)	V	74(Peak)/ 54(AV)
7311.00		H/V	74(Peak)/ 54(AV)
9748.00		H/V	74(Peak)/ 54(AV)
12185		H/V	74(Peak)/ 54(AV)
14622		H/V	74(Peak)/ 54(AV)
17059		H/V	74(Peak)/ 54(AV)
19496		H/V	74(Peak)/ 54(AV)
21933		H/V	74(Peak)/ 54(AV)
24370		H/V	74(Peak)/ 54(AV)

Note: 1. Level = Reading + AF + Cable - Preamp + Filter - Dist, Margin = Level - Limit

- 2. Remark "---" means that the emissions level is too low to be measured
- 3. For 802.11n (HT40) mode mcs0

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### Operation Mode: Transmitting under CH07 for 11n HT40 at mcs0

	8		
Frequency (MHz)	Level@3m (dB \u03b4 V/m)	Antenna Polarity	Limit@3m (dB \mu V/m)
4904	49.82 (PK)	Н	74(Peak)/ 54(AV)
4904	49.58 (PK)	V	74(Peak)/ 54(AV)
7356		H/V	74(Peak)/ 54(AV)
9808		H/V	74(Peak)/ 54(AV)
12260		H/V	74(Peak)/ 54(AV)
14712		H/V	74(Peak)/ 54(AV)
17164		H/V	74(Peak)/ 54(AV)
19616		H/V	74(Peak)/ 54(AV)
22068		H/V	74(Peak)/ 54(AV)
24520		H/V	74(Peak)/ 54(AV)

Note: 1. Level = Reading + AF + Cable - Preamp + Filter - Dist, Margin = Level - Limit

<sup>2.</sup> Remark "---" means that the emissions level is too low to be measured

<sup>3.</sup> For 802.11n (HT40) mode mcs0

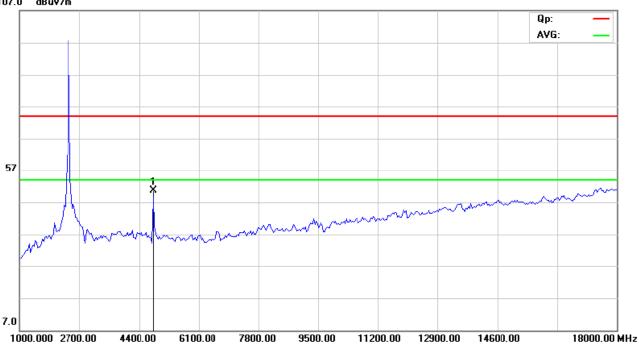
Date: 2017-09-16



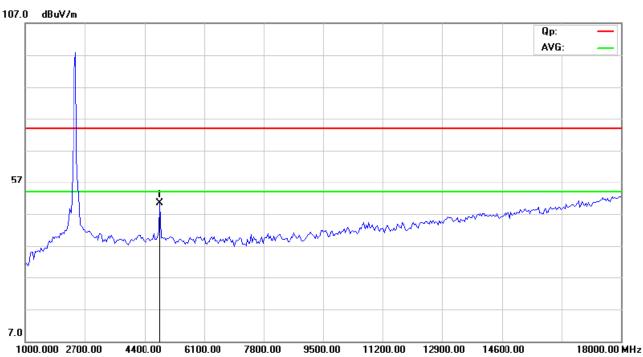
Please refer to the following test plots for details:

## CH01 for 11n HT40 at mcs0: Horizontal

107.0 dBuV/m



### CH01 for 11n HT40 at mcs0: Vertical



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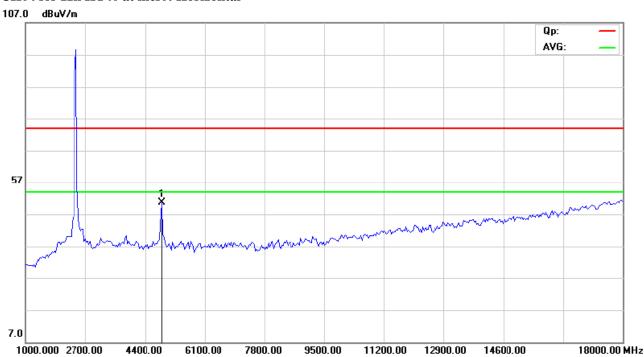
Date: 2017-09-16



### CH04 for 11n HT40 at mcs0: Vertical



### CH04 for 11n HT40 at mcs0: Horizontal



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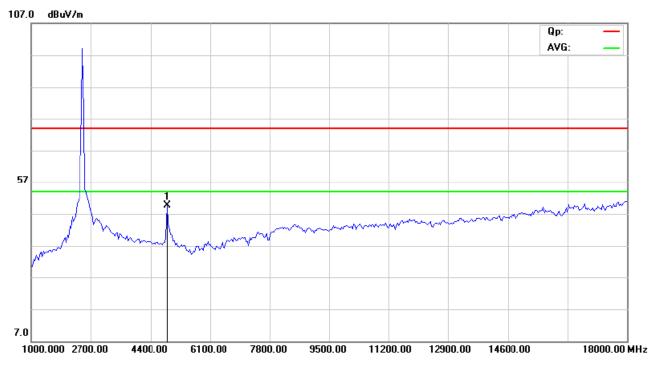
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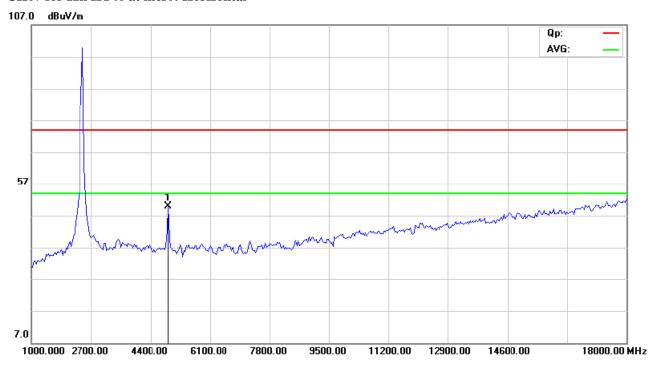
Date: 2017-09-16



#### CH07 for 11n HT40 at mcs0: Vertical



#### CH07 for 11n HT40 at mcs0: Horizontal



Note: For radiated Emissions from 18-25GHz, it is only the floor noise.

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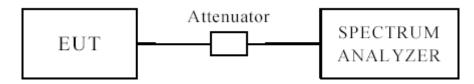
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# 7.0 6dB Bandwidth Measurement

# 7.1 Test Setup



#### 7.2 Limits of 6dB Bandwidth Measurement

The minimum of 6dB Bandwidth Measurement is >500 kHz

#### 7.3 Test Procedure

- 1. Set resolution bandwidth (RBW) = 100 kHz
- 2. Set the video bandwidth  $(VBW) \ge 3 \times RBW$ .
- 3. Detector = Peak.
- 4. Trace mode = max hold.
- 5. Sweep = auto couple.
- 6. Allow the trace to stabilize.
- 7. Measure the maximum width of the emission that is constrained by the frequencies associated with the two outermost amplitude points (upper and lower) that are attenuated by 6 dB relative to the maximum level measured in the fundamental emission.

#### 7.4 Test Result

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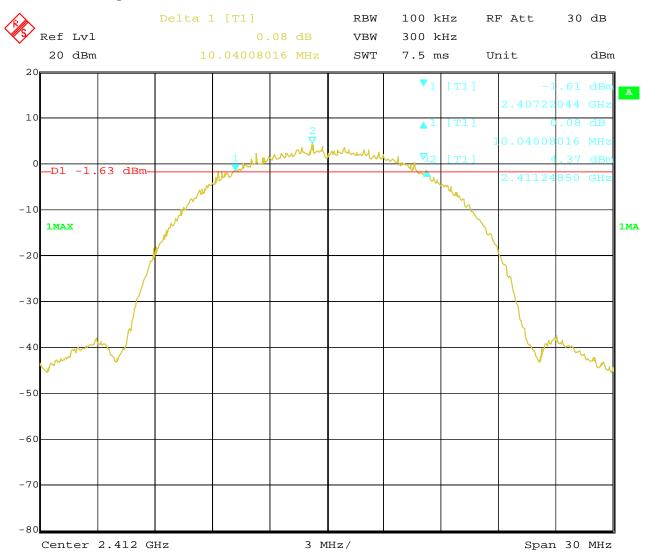
# 6dB Occupied Bandwidth

EUT		15.6' Adve	ertising Dis	player	Model		NEB	156-01
Mode		8	302.11b		Input Vol	tage	120	0V~
Temperat	ure	24	4 deg. C,		Humidity	,	56%	6 RH
Channel		el Frequency (MHz)	Data Transfer Rate (Mbps)		ndwidth Hz)		num Limit MHz)	Pass/ Fail
1		2412	11	10.04		0.5		Pass
6		2437	11	10.04			0.5	Pass
11		2462	11	10.04			0.5	Pass
1		2412 1		10	.04	0.5		Pass
6		2437 1		10	10.04		0.5	Pass
11	2462		1	10	.04		0.5	Pass

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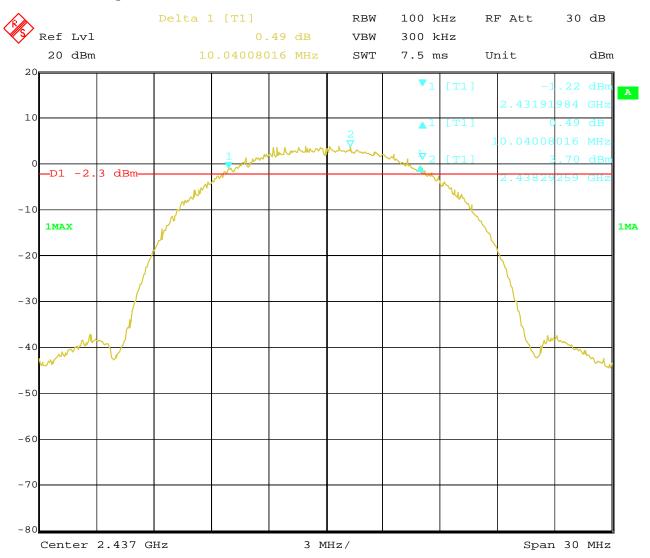




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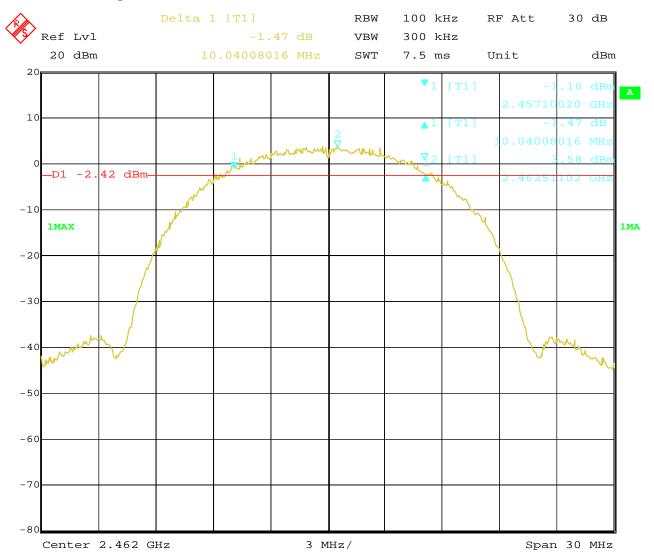




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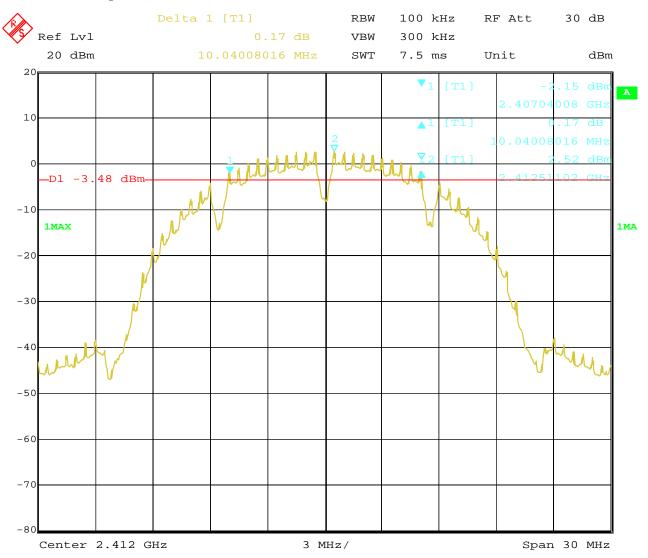




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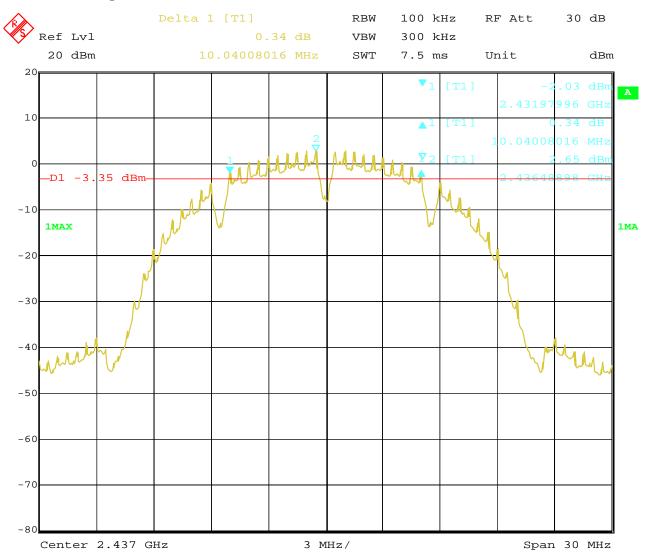




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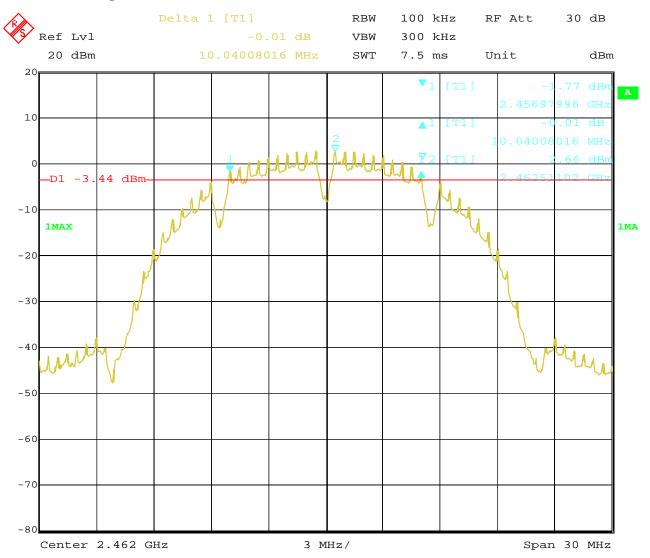




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# 6dB Occupied Bandwidth

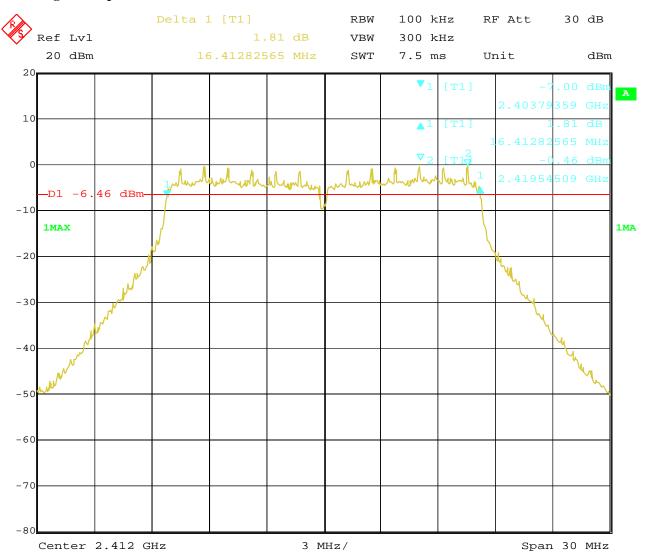
EUT		15.6' Adve	ertising Dis	player	Model		NE	EB156-01
Mode		8	302.11g		Input Vol	tage		120V~
Temperat	ure	24	4 deg. C,		Humidity	,	5	6% RH
Channel		el Frequency (MHz)	Data Transfer Rate (Mbps)		andwidth Hz)		Minimum Limit (MHz)  Pass/ Fail	
1		2412	6	16	5.41		0.5	Pass
6		2437	6	16	5.41	0.5		Pass
11		2462	6	16	5.41		0.5	Pass

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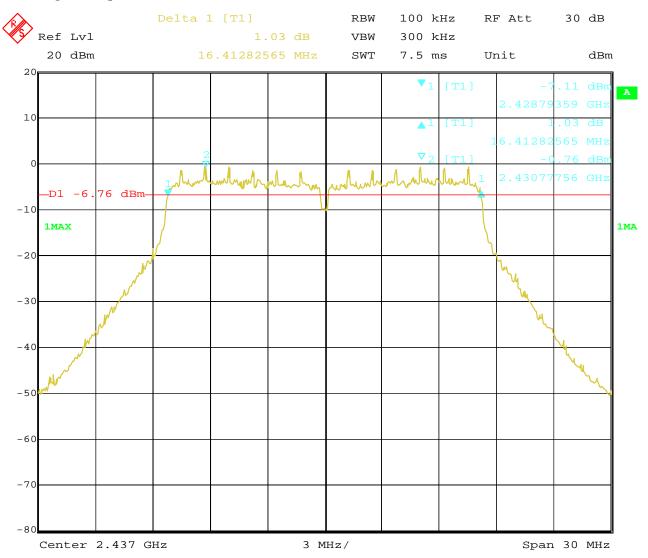
#### **Test Plots:**



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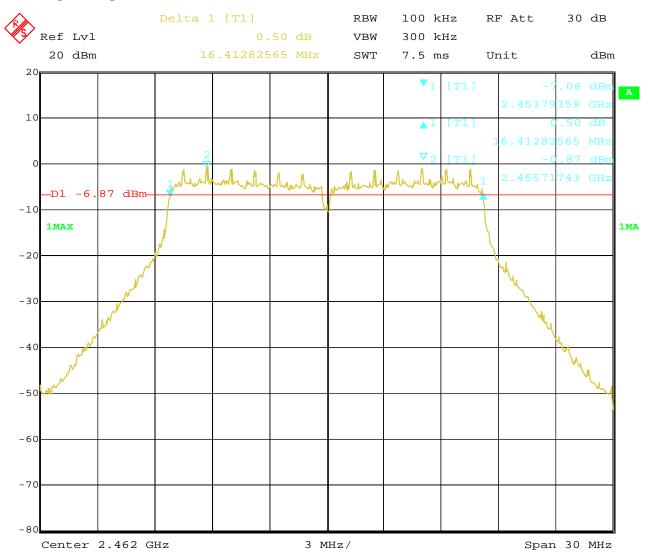




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# 6dB Occupied Bandwidth

EUT		15.6' Adve	ertising Dis	player	Model		NEB	156-01
Mode		802	.11n HT20		Input Vol	tage	12	0V~
Temperati	ure	24	4 deg. C,		Humidity		56%	6 RH
Channel		el Frequency (MHz)	Data Transfer Rate (Mbps)		indwidth Hz)		num Limit MHz)	Pass/ Fail
1		2412	mcs0	17	.56		0.5	Pass
6		2437	mcs0	17	.56	0.5		Pass
11		2462	mcs0	17	.56		0.5	Pass

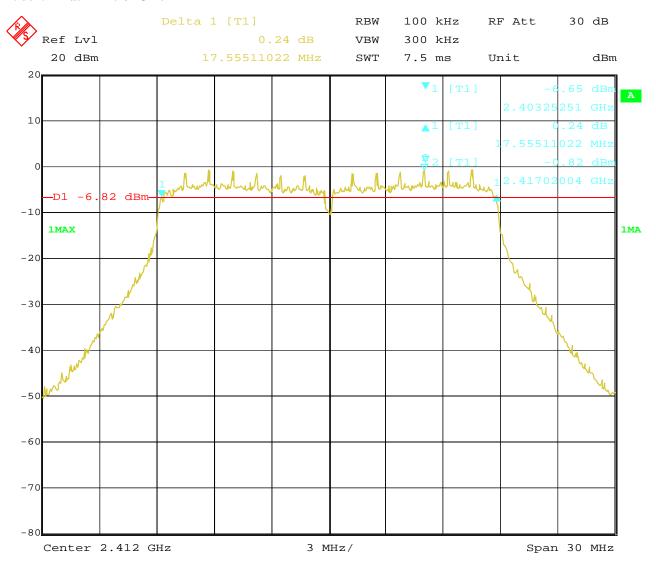
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#### **Test Plots:**

## 1. 802.11n at HT20 of CH01

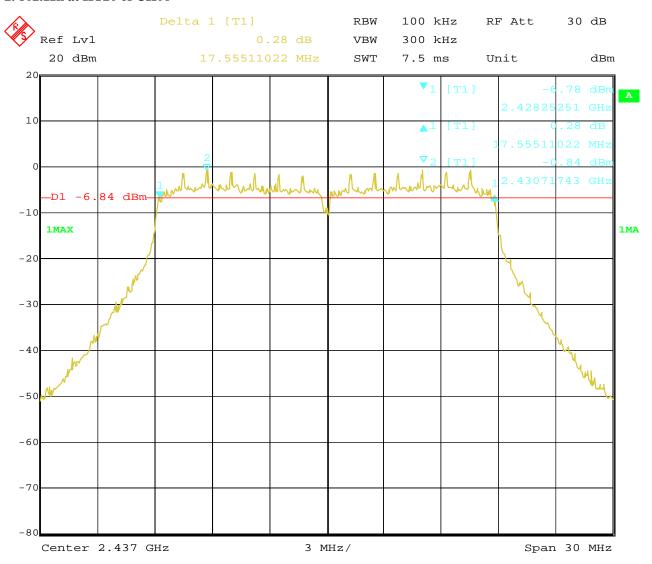


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#### 2. 802.11n at HT20 of CH06

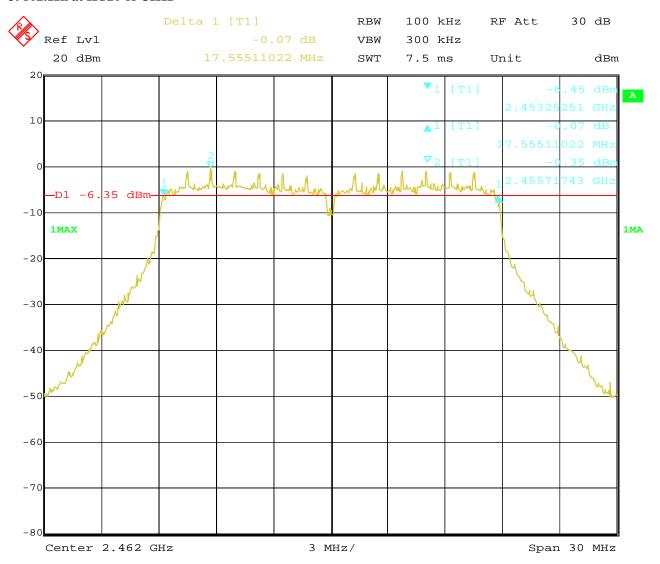


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#### 3. 802.11n at HT20 of CH11



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## 6dB Occupied Bandwidth

EUT		15.6' Adve	ertising Dis	player	Model		NEB	156-01
Mode		802	.11n HT40		Input Vol	age 12		0V~
Temperat	ure	24	4 deg. C,		Humidity		56%	6 RH
Channel		el Frequency (MHz)	Data Transfer Rate (Mbps)		ndwidth Hz)		mum Limit MHz)	Pass/ Fail
1		2422	mcs0	36	.39		0.5	Pass
4		2437	mcs0	36	.39		0.5	Pass
7		2452	mcs0	36	.39		0.5	Pass

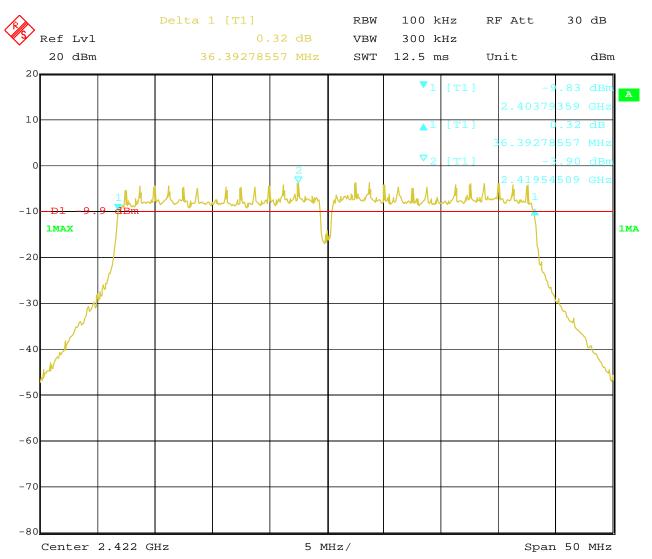
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#### **Test Plots:**

## 1. 802.11n at HT40 of CH01

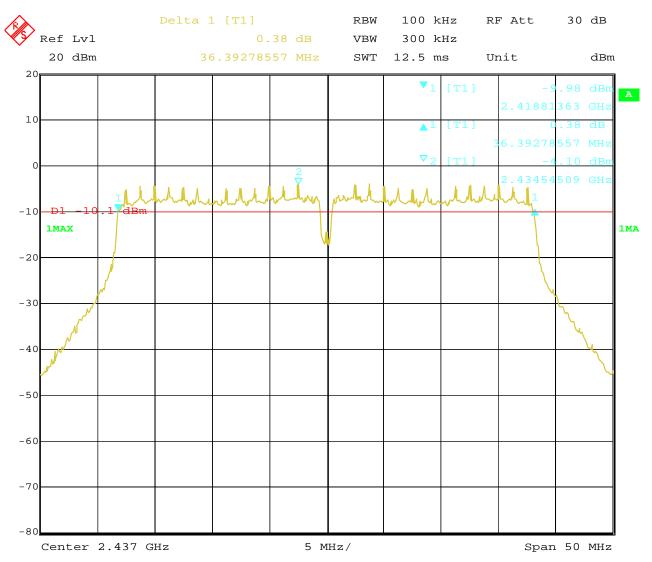


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#### 2. 802.11n at HT40 of CH04

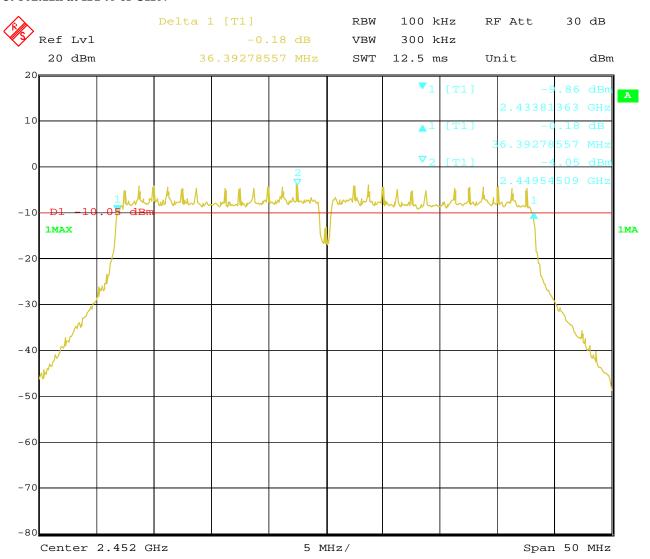


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#### 3. 802.11n at HT40 of CH07



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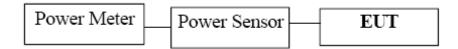
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# 8. Maximum Output Power

# 8.1 Test Setup



#### 8.2 Limits of Maximum Output Power

The Maximum Output Power Measurement is 30dBm.

#### **8.3 Test Procedure**

The RF power output was measured with a Power meter connected to the RF Antenna connector (conducted measurement) while EUT was operating in transmit mode at the appropriate centre frequency.

Note: Peak power was measured

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#### **8.4Test Results**

EUT		15.6' Advertisi	ng Displayer	M	odel	-	NEB156-01	
Mode	Mode 802.		1b	Input Voltage			120V~	
Temperat	Temperature 24 de		g. C, Hum		midity		56% RH	
Channel	Cha	annel Frequency (MHz)	Max. Power Output (dBm)		Power (dB		Pass/ Fail	
		(WITIZ)	Peak		(ub	111)		
1		2412	18.28		30		Pass	
6	2437		18.62		30		Pass	
11	11 2462		18.55		30	)	Pass	

Note: 1. At finial test to get the worst-case emission at 1Mbps for CH01, CH06 and CH11

2. The result basic equation calculation as follow:

Max. Power Output = Power Reading + Cable loss + Attenuator

3. The worse case was recorded

EUT		15.6' Advertisi	ng Displayer	M	odel	1	NEB156-01
Mode	Mode		802.11g		Input Voltage		120V~
Temperat	ure	24 deg. C,		Humidity			56% RH
Channel	nel Channel Frequency (MHz)		Max. Power Output (dBm)		Power (dB		Pass/ Fail
1	1 2412		Peak 18.83		30		Pass
6	6 2437		18.81		30		Pass
11	11 2462		18.46		3(	)	Pass

Note: 1. At finial test to get the worst-case emission at 6Mbps for CH01, CH06 and CH11

2. The result basic equation calculation as follow:

Max. Power Output = Power Reading + Cable loss + Attenuator

3. The worse case was recorded

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EUT		15.6' Advertisi	ng Displayer	M	odel		NEB156-01
Mode	Mode 802.11n		(HT20)	Input Voltage		120V~	
Temperati	Temperature 24 d		g. C, Hum		midity		56% RH
Channel	Channel Frequency		Max. Power Output (dBm)		Power (dB		Pass/ Fail
		(MHz)	Peak		(ub	111)	
1	2412		18.99		30	)	Pass
6	6 2437		18.81		30	)	Pass
11	11 2462		18.76		30	)	Pass

Note: 1. At finial test to get the worst-case emission at mcs0 of 11n HT20 for CH01, CH06 and CH11

2. The result basic equation calculation as follow: Max. Power Output = Power Reading + Cable loss + Attenuator

3. The worse case was recorded

EUT		15.6' Advertisi	ng Displayer	M	odel		NEB156-01
Mode	Mode 802.11n		(HT40)	Input Voltage		120V~	
Temperature		24 deg	24 deg. C,		Humidity		56% RH
Channel	Channel Frequency (MHz)		Max. Power Output (dBm)		Power (dB		Pass/ Fail
		(WHIZ)	Peak		(ub	111)	
1	2422		18.11		30		Pass
4	4 2437		17.80		30	)	Pass
7	7 2452		18.03		30	)	Pass

Note: 1. At finial test to get the worst-case emission at mcs0 of 11n HT40 for CH01, CH04 and CH07

2. The result basic equation calculation as follow: Max. Power Output = Power Reading + Cable loss + Attenuator

3. The worse case was recorded

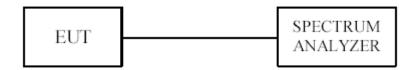
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## 9. Power Spectral Density Measurement

# 9.1 Test Setup



#### 9.2 Limits of Power Spectral Density Measurement

The Maximum Power Spectral Density Measurement is 8dBm.

#### 9.3 Test Procedure

- 1. Use this procedure when the maximum peak conducted output power in the fundamental emission is used to demonstrate compliance.
- 2. Set the RBW = 10 kHz.
- 3. Set the VBW  $\geq$  30 kHz.
- 4. Set the span to 1.5 times the DTS channel bandwidth.
- 5. Detector = peak.
- 6. Sweep time = auto couple.
- 7. Trace mode = max hold.
- 8. Allow trace to fully stabilize.
- 9. Use the peak marker function to determine the maximum amplitude level.
- 10. If measured value exceeds limit, reduce RBW (no less than 3 kHz) and repeat.
- 11. The resulting peak PSD level must be  $\leq 8$  dBm.

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#### 9.4Test Result

EUT		15.6' Advertisi	ng Displayer	M	odel		NEB156-01
Mode		802.11b		Input Voltage			120V~
Temperati	ıre	24 deg	g. C,	Hur	Humidity		56% RH
Channel	Cha	annel Frequency	Final RF Po		Maximu		Pass/ Fail
		(MHz)	Level in (dI	3m)	(dB	m)	
			11Mbps				
1		2412	-6.72		8		Pass
6		2437	-6.23		8		Pass
11		2462	-5.70		8		Pass
			1Mbps	l			
1		2412	-6.32		8		Pass
6	2437		-5.14		8		Pass
11		2462	-3.89		8		Pass

EUT		15.6' Advertisi	ng Displayer	M	odel		NEB156-01
Mode	Mode 802.11g		6Mbps Inpu		out Voltage		120V~
Temperat	ure	24 deg	g. C,	Humidity			56% RH
Channel	Cha	annel Frequency	Final RF Power		Maximum Limit		Pass/ Fail
Channel		(MHz)	Level in (dI	Bm)	(dB	m)	
			6Mbps				
1		2412	-8.09		8		Pass
6	2437		-8.06		8		Pass
11	2462		-7.99		8		Pass

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EUT		15.6' Advertisi	ng Displayer	M	odel		NEB156-01
Mode		802.11n HT20 mcs0		Input Voltage		120V~	
Temperat	erature 24 deg. C, Humidity			56% RH			
Channel	Channel Frequency		Final RF Power		Maximum Limit		Pass/ Fail
Chamie		(MHz)	Level (dBm)		(dB	m)	
			HT20				
1		2412	-8.43		8		Pass
6	2437		-8.57		8		Pass
11		2462	-8.04		8		Pass

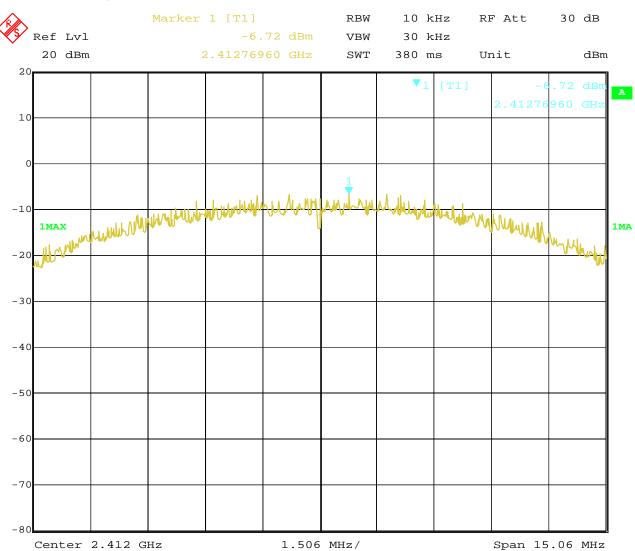
EUT		15.6' Advertisi	ng Displayer Moo		odel		NEB156-01	
Mode		802.11n HT40 mcs0 Input Voltage			120V~			
Temperat	ure	24 deg	g. C,	Hur	nidity		56% RH	
Channel	Cha	annel Frequency	Final RF Power		Maximum Limit		Pass/ Fail	
Chamiei		(MHz)	Level (dB	m)	(dB	m)		
			HT40					
1		2422	-11.73		8		Pass	
4	4 2437		-12.56		8		Pass	
7		2452	-12.13		8		Pass	

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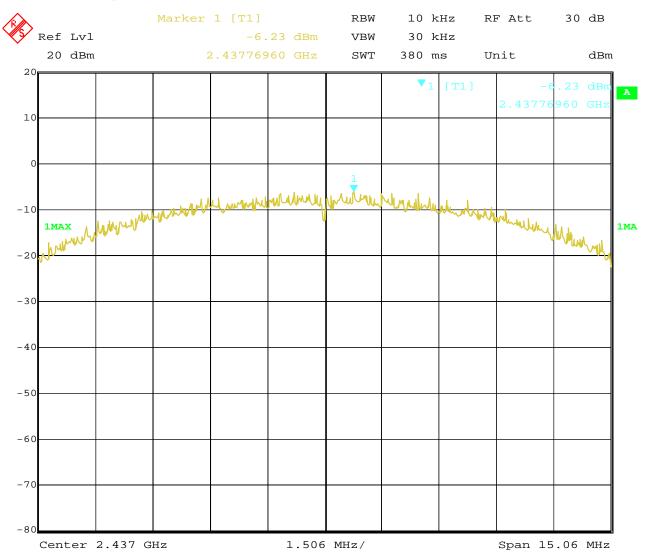
## 9.5 Photo of Power Spectral Density Measurement



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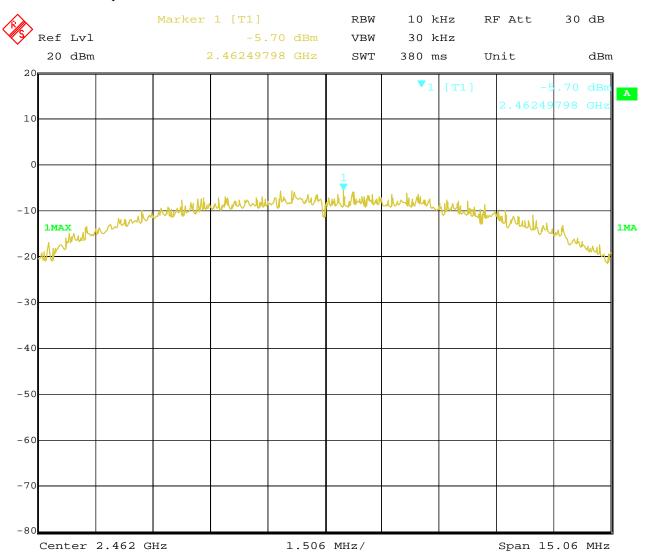




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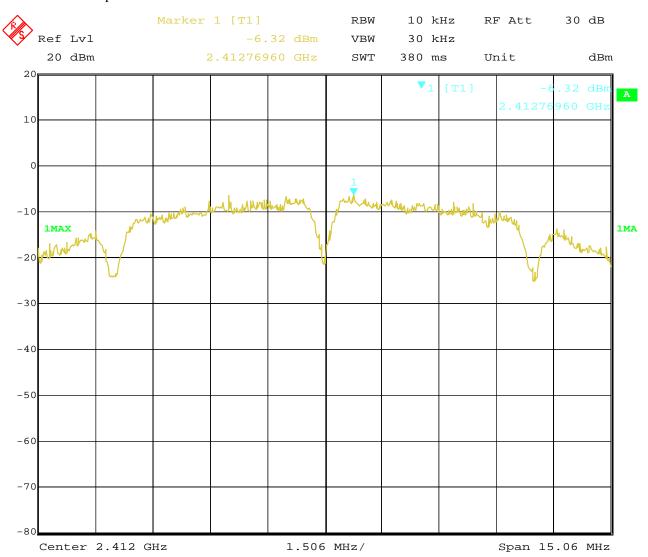


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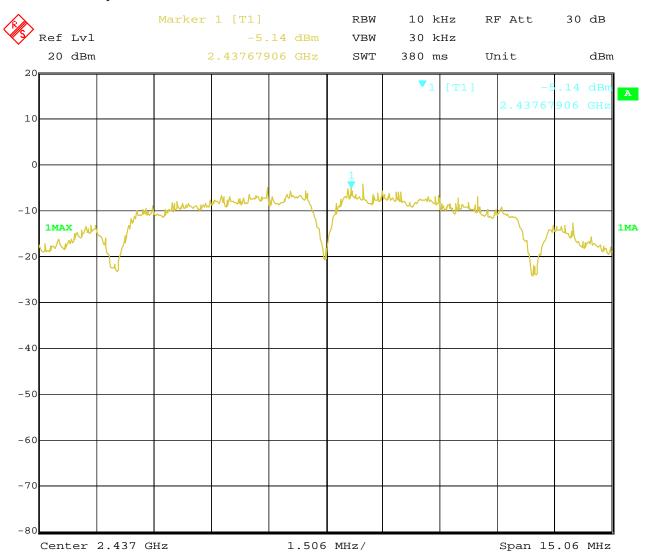


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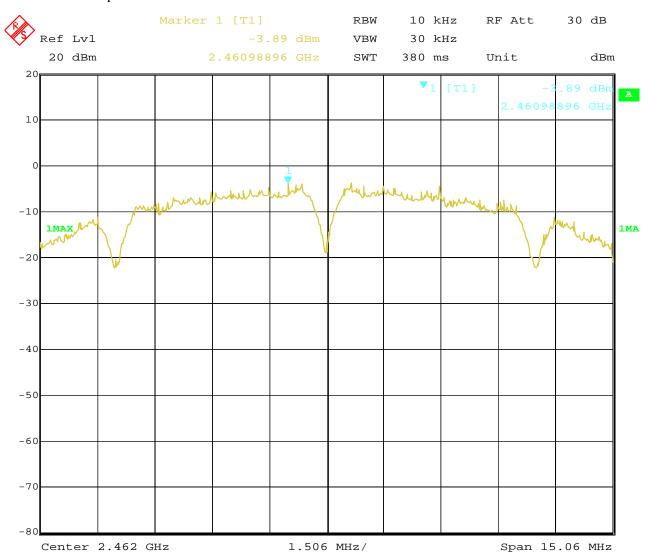


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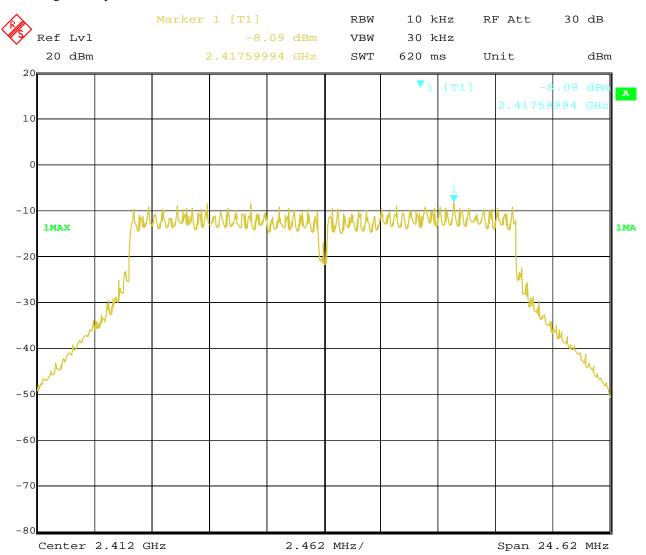


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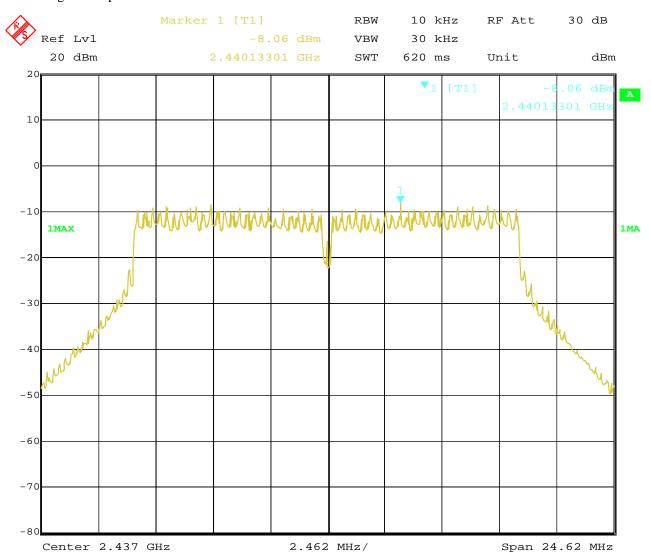




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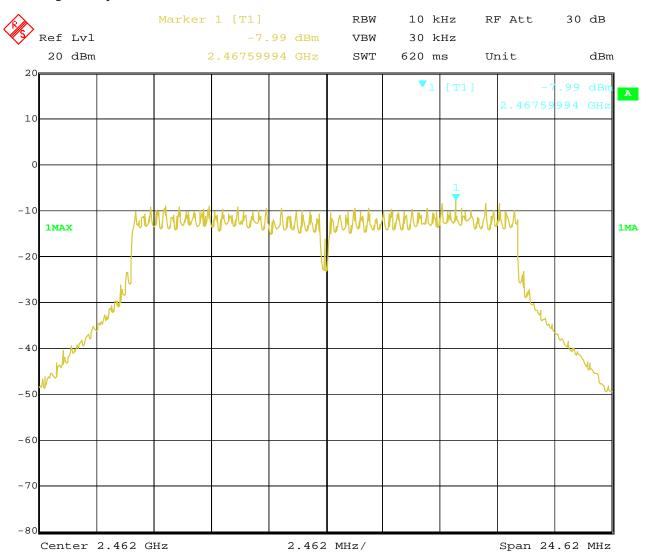




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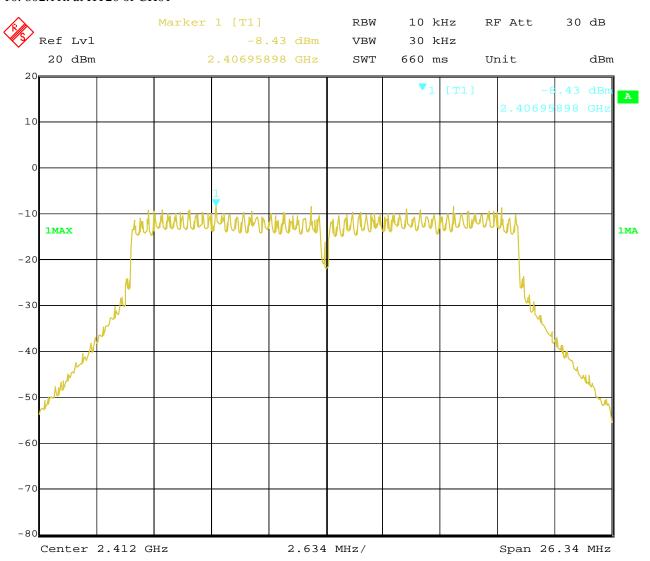


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#### 10. 802.11n at HT20 of CH01

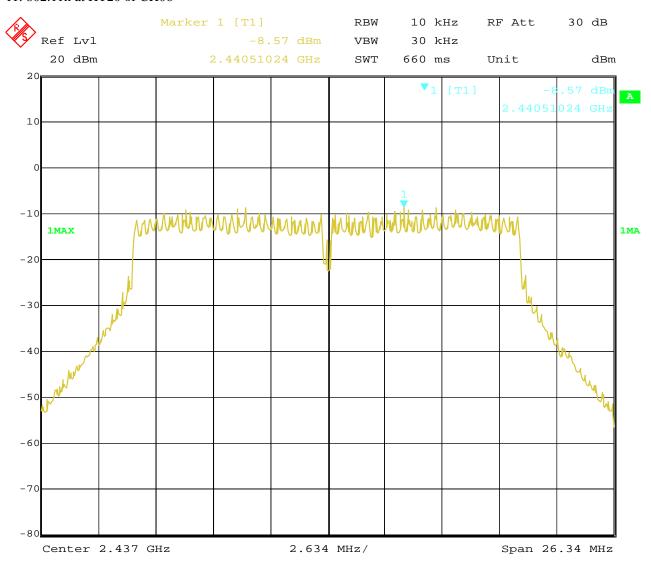


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#### 11. 802.11n at HT20 of CH06

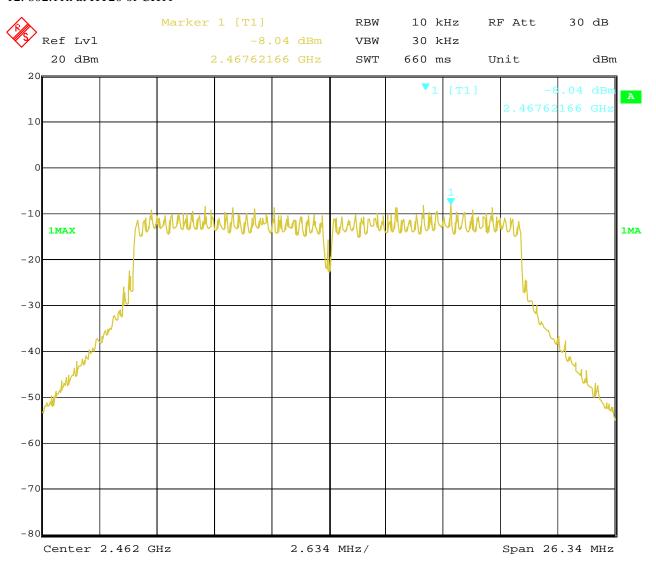


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#### 12. 802.11n at HT20 of CH11

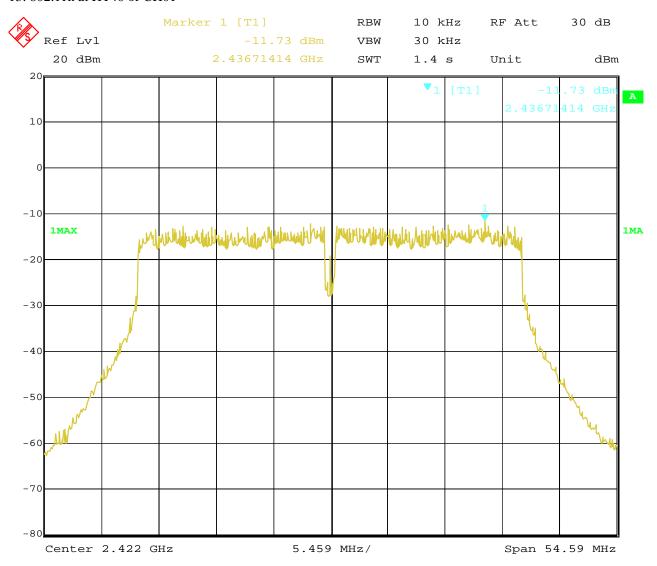


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#### 13. 802.11n at HT40 of CH01

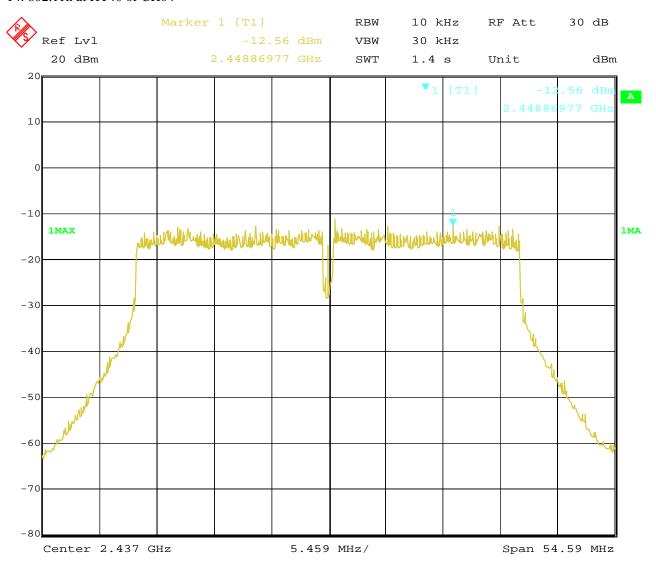


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#### 14. 802.11n at HT40 of CH04

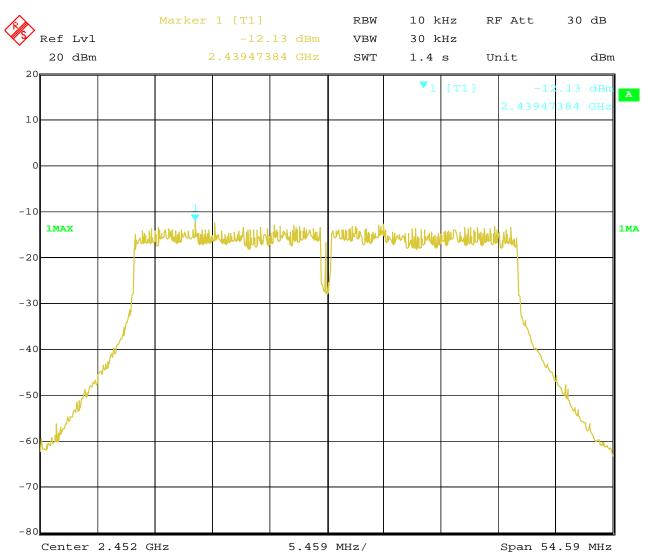


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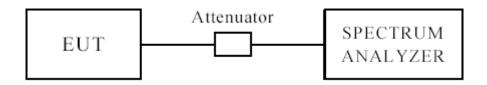
#### 15. 802.11n at HT40 of CH07



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# 10 Out of Band Measurement 10.1 Test Setup for band edge



The restricted band requirement based on radiated emission test; please see the clause 6 for the test setup

#### 10.2 Limits of Out of Band Emissions Measurement

- 1. Below –20dB of the highest emission level of operating band (in 100kHz Resolution Bandwidth).
- 2. Fall in the restricted bands listed in section 15.205. The maximum permitted average field strength is listed in section 15.209.

#### **10.3 Test Procedure**

For signals in the restricted bands above and below the 2.4-2.483GHz allocated band a measurement was made of radiated emission test.( Peak values with RBW=1MHz VBW=3MHz and PK detector. AV value with RMS detector)

For bandage test, the spectrum set as follows: RBW=100kHz, VBW=300 kHz. A conducted measurement used

#### 10.4 Test Result

Please see next pages

Note: 1. this is a handhold device. The radiated emissions should be tested under 3-axes position (Lying, Side, and Stand), after pre-test. It was found that the worse radiated emission was get at the lying position. the worse case was recorded

2. For band-edge measurement, the frequency from 30MHz-25GHz was tested. And It met the FCC rule.

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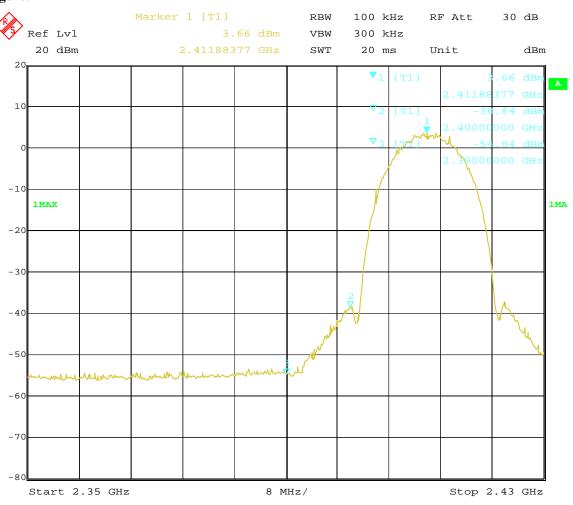
### For 802.11b mode

# CH01 at 11Mbps

### 10.4 Band-edge and Restricted band Measurement

EUT	15.6' Advertising Displayer		Model	NEB156-01
Mode	Keeping Transmitting		Input Voltage	120V~
Temperature	24 deg. C,		Humidity	56% RH
Test Result:	Pass		Detector	PK
2400	PK (dBµV/m)	61.3	Limit	$74(dB\mu V/m)$
	AV $(dB\mu V/m)$	39.4	Limit	54(dBμV/m)
2390	PK (dBµV/m)	46.7	- Limit	74(dBμV/m)
	AV $(dB\mu V/m)$		Lillit	54(dBµV/m)

# **Test Figure:**



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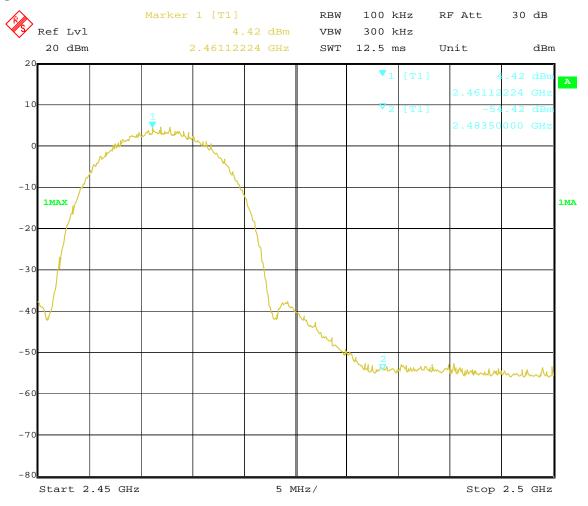


# CH11 at 11Mbps

#### 10.4 Band-edge and Restricted band Measurement

EUT	15.6' Advertising Displayer		Model	NEB156-01
Mode	Keeping Transmitting		Input Voltage	120V~
Temperature	24 deg. C,		Humidity	56% RH
Test Result:	Pass		Detector	PK
2483.5	PK (dBμV/m) 47.1	T,	$74(dB\mu V/m)$	
	AV ( $dB\mu V/m$ )		Limit	$54(dB\mu V/m)$

# **Test Figure:**



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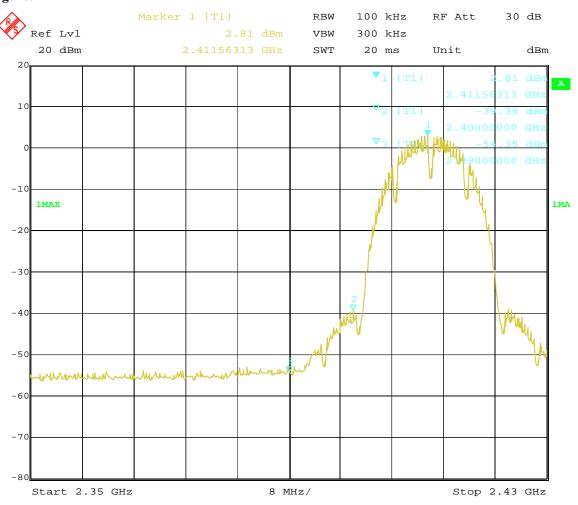
### For 802.11b mode

CH01 at 1Mbps

10.4 Band-edge and Restricted band Measurement

EUT	15.6' Advertising Displayer		Model	NEB156-01
Mode	Keeping Transmitting		Input Voltage	120V~
Temperature	24 deg. C,		Humidity	56% RH
Test Result:	Pass		Detector	PK
2400	PK (dBµV/m)	62.7	T ::	$74(dB\mu V/m)$
	AV $(dB\mu V/m)$	43.2	Limit	$54(dB\mu V/m)$
2390	PK (dBµV/m)	46.5	- Limit	$74(dB\mu V/m)$
	AV ( $dB\mu V/m$ )	<del></del>	Lillit	54(dBµV/m)

# **Test Figure:**



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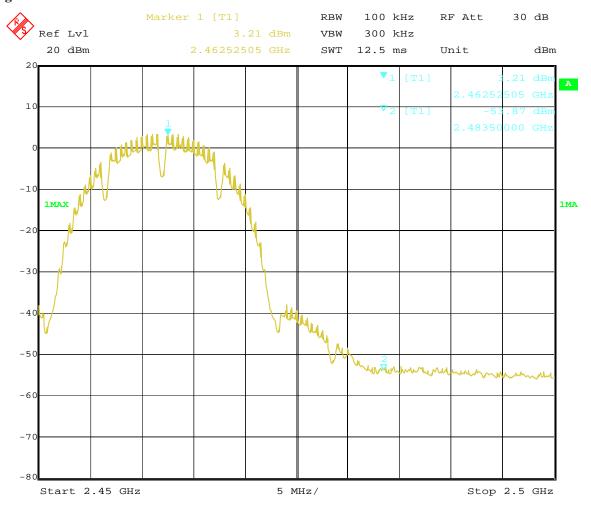


# CH11 at 1Mbps

#### 10.4 Band-edge and Restricted band Measurement

EUT	15.6' Advertising Displayer		Model	NEB156-01
Mode	Keeping Transmitting		Input Voltage	120V~
Temperature	24 deg. C,		Humidity	56% RH
Test Result:	Pass		Detector	PK
2483.5		T * **	$74(dB\mu V/m)$	
	AV ( $dB\mu V/m$ )		Limit	$54(dB\mu V/m)$

# **Test Figure:**



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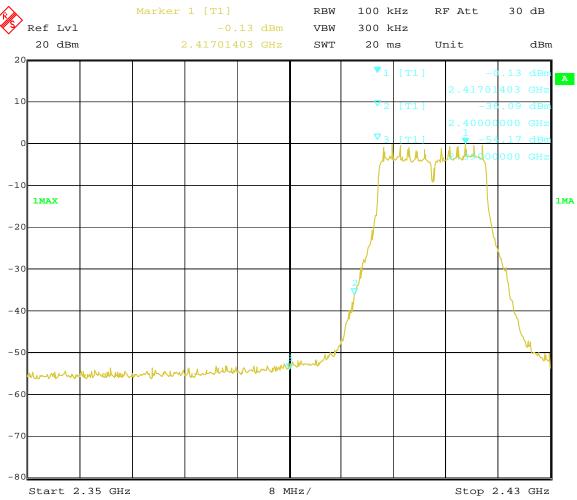
### For 802.11g mode

# CH01 at 6Mbps

### 10.4 Band-edge and Restricted band Measurement

	ı		1	
EUT	15.6' Advertising Displayer		Model	NEB156-01
Mode	Keeping	g Transmitting	Input Voltage	120V~
Temperature	24 deg. C,		Humidity	56% RH
Test Result:	Pass		Detector	PK
2400	PK (dBµV/m)	64.6	T :!4	$74(dB\mu V/m)$
	AV $(dB\mu V/m)$	43.5	Limit	$54(dB\mu V/m)$
2390	PK (dBµV/m)	47.9	Limit	74(dBμV/m)
	AV (dBμV/m)		Lillit	54(dBμV/m)

# **Test Figure:**



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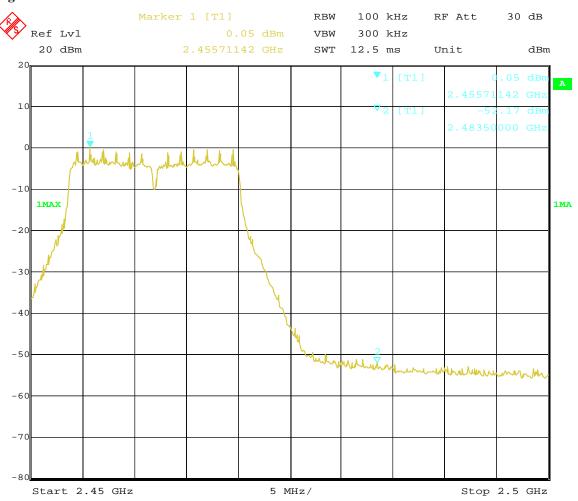


### CH11 at 6Mbps

#### 10.4 Band-edge and Restricted band Measurement

EUT	15.6' Advertising Displayer		Mod	lel	NEB156-01
Mode	Keeping Transmitting		Input V	oltage	120V~
Temperature	24 deg. C,		Humi	dity	56% RH
Test Result:	Pass		Detec	ctor	PK
2483.5	PK (dBµV/m)	48.6	T ::4	74(dBμV/m)	
	AV ( $dB\mu V/m$ )		Limit	54(dBµV/m)	

# **Test Figure:**



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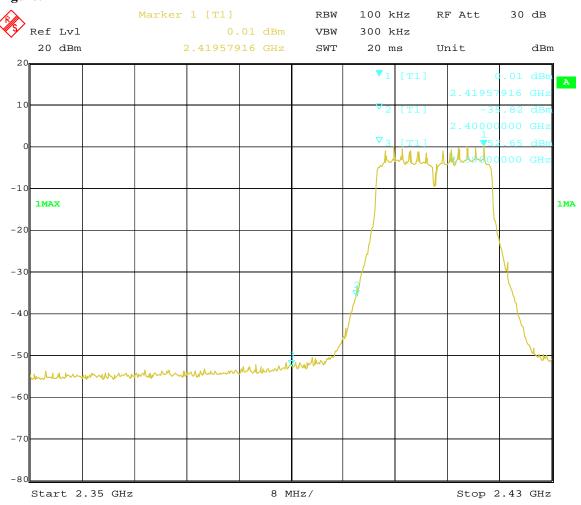
### For 802.11n (HT20) mode

CH01 at mcs0

#### 10.4 Band-edge and Restricted band Measurement

EUT	15.6' Advertising Displayer		Model	NEB156-01
Mode	Keeping Transmitting		Input Voltage	120V~
Temperature	24 deg. C,		Humidity	56% RH
Test Result:	Pass		Detector	PK
2400	PK (dBµV/m)	66.2	T :	$74(dB\mu V/m)$
	AV ( $dB\mu V/m$ )	45.2	Limit	$54(dB\mu V/m)$
2390	PK (dBμV/m)	48.7	Limit	$74(dB\mu V/m)$
	AV (dBμV/m)		Lillit	54(dBµV/m)

# **Test Figure:**



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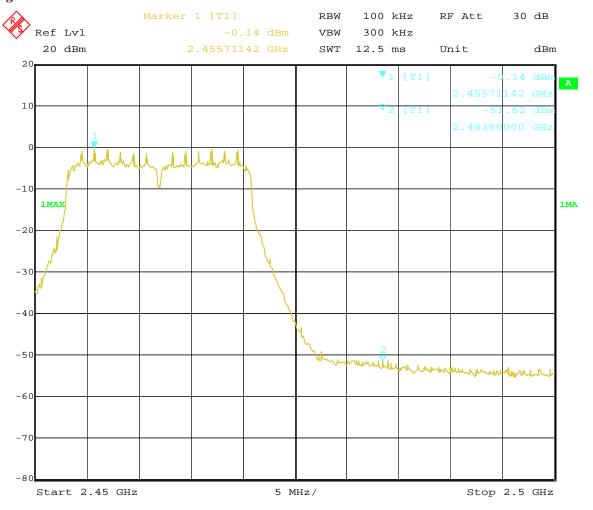


#### CH11 at mcs0

#### 10.4 Band-edge and Restricted band Measurement

EUT	15.6' Advertising Displayer		Model	NEB156-01
Mode	Keeping Transmitting		Input Voltage	120V~
Temperature	24 deg. C,		Humidity	56% RH
Test Result:	Pass		Detector	PK
2483.5	PK (dBµV/m)	50.2	T * *,	$74(dB\mu V/m)$
	AV ( $dB\mu V/m$ )		Limit	$54(dB\mu V/m)$

# **Test Figure:**



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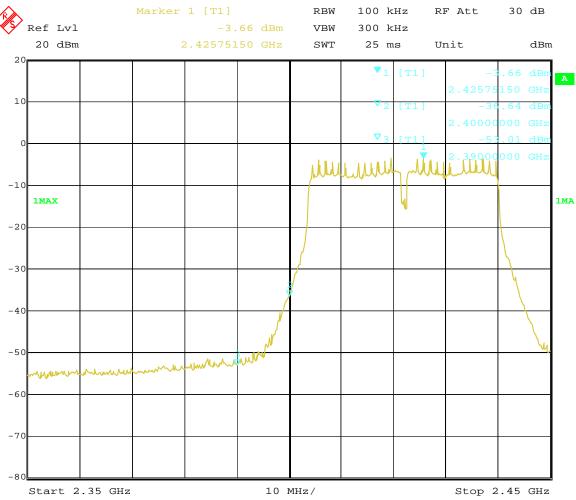
### For 802.11n (HT40) mode

CH01 at mcs0

# 10.4 Band-edge and Restricted band Measurement

EUT	15.6' Advertising Displayer		Model	NEB156-01
Mode	Keeping Transmitting		Input Voltage	120V~
Temperature	24 deg. C,		Humidity	56% RH
Test Result:		Pass	Detector	PK
2400	PK (dBμV/m)	69.5	I :m:i4	$74(dB\mu V/m)$
	AV (dBμV/m)	49.3	Limit	$54(dB\mu V/m)$
2390	PK (dBµV/m)	52.1	- Limit	$74(dB\mu V/m)$
	AV (dBμV/m)	33.4	Lillit	$54(dB\mu V/m)$

# **Test Figure:**



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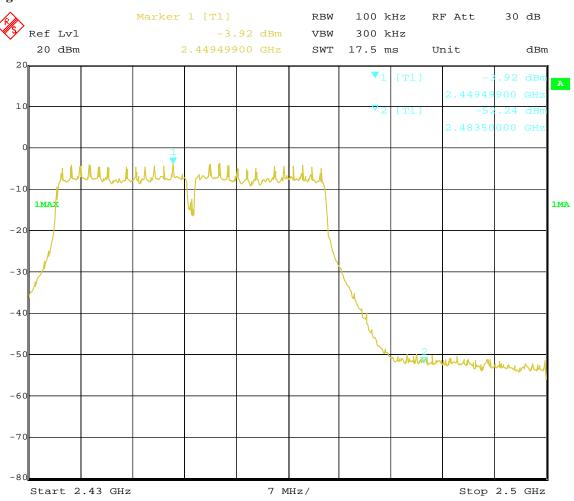


#### CH7 at mcs0

#### 10.4 Band-edge and Restricted band Measurement

EUT	15.6' Advertising Displayer		Model	NEB156-01
Mode	Keeping Transmitting		Input Voltage	120V~
Temperature	24 deg. C,		Humidity	56% RH
Test Result:	Pass		Detector	PK
2483.5	83.5 PK (dBμV/m) 54.6	T * *,	$74(dB\mu V/m)$	
	AV (dBμV/m)	34.8	Limit	$54(dB\mu V/m)$

# **Test Figure:**



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# 11.0 Antenna Requirement

# 11.1 Standard Applicable

For intentional device, according to FCC 47 CFR Section 15.203, an intentional radiator shall be designed to ensure that no antenna other than that furnished by the responsible party shall be used with the device.

And according to FCC 47 CFR Section 15.247 (b), if transmitter antennas of directional gain greater than 6 dBi are used, the power shall be reduced by the mount in dB that the directional gain of the antenna exceeds 6 dBi.

### 11.2 Antenna Connected construction

Integral antenna used. The maximum Gain of the antennas is 2.0dBi.

Date: 2017-09-16



#### 12.0 FCC ID Label

# FCC ID: 2AACS-NEB156-01

This device complies with part 15 of the FCC rules. Operation is subject to the following two conditions (1) this device may not cause harmful interference, and (2) this device must accept any interference received, including interference that may cause undesired operation.

The label must not be a stick-on paper label. The label on these products must be permanently affixed to the product and readily visible at the time of purchase and must last the expected lifetime of the equipment not be readily detachable.

#### Mark Location:



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#### 13.0 Photo of testing

Conducted Emission Test Setup:



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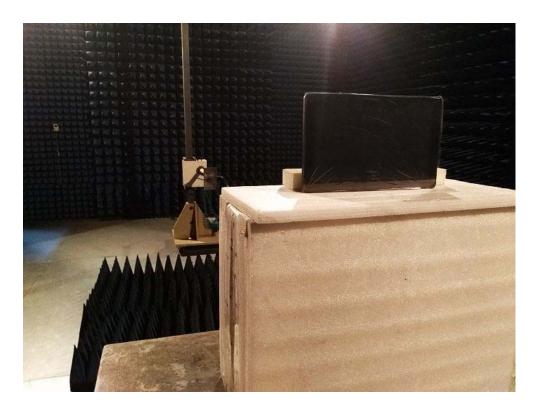
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## Radiated Emission Test Setup:





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# Photographs - EUT





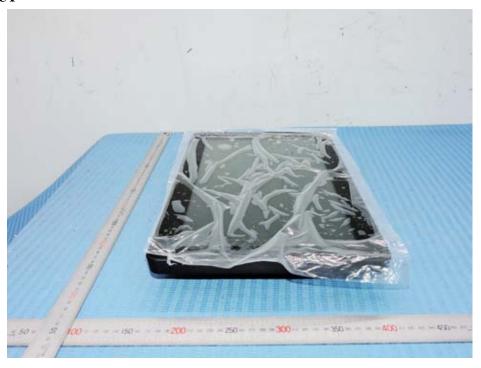
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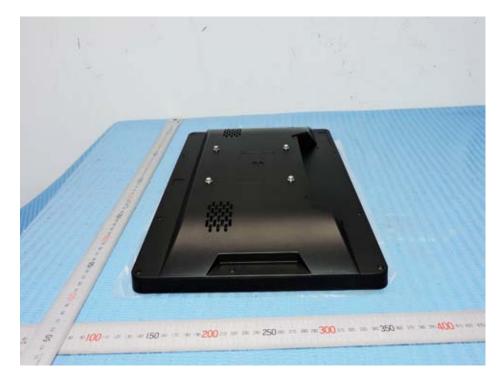
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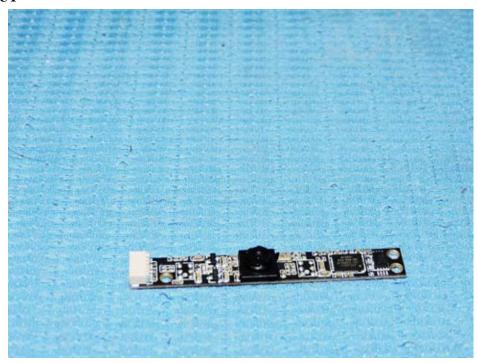
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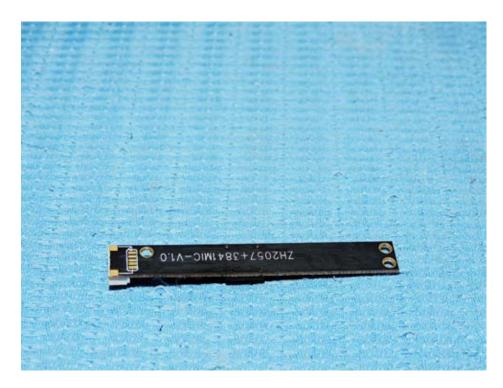
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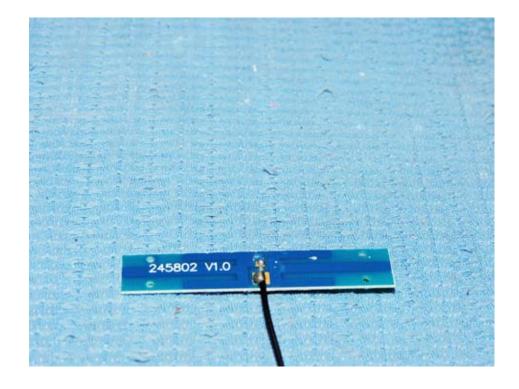
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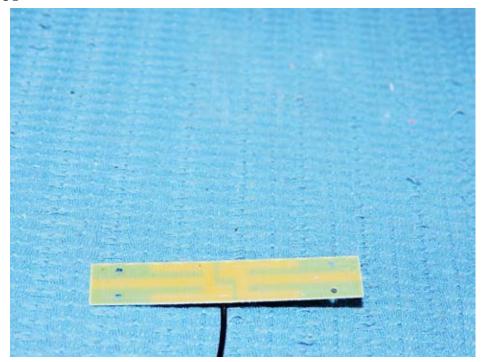
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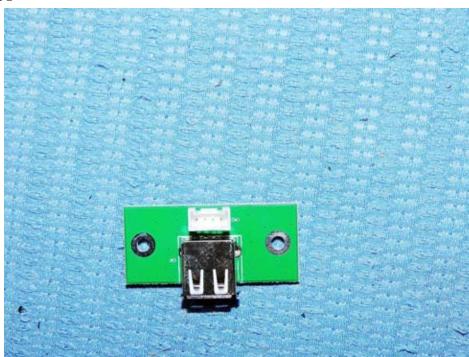


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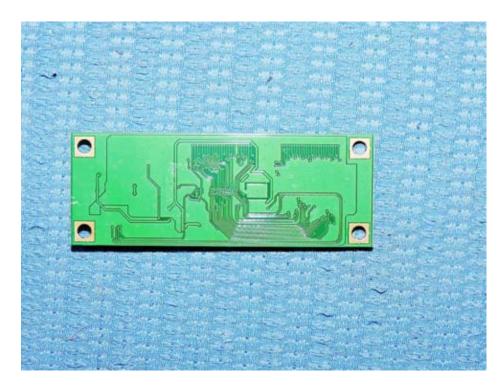
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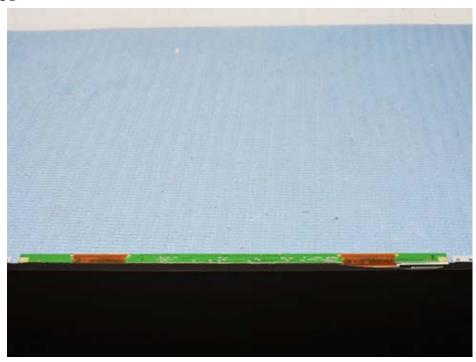
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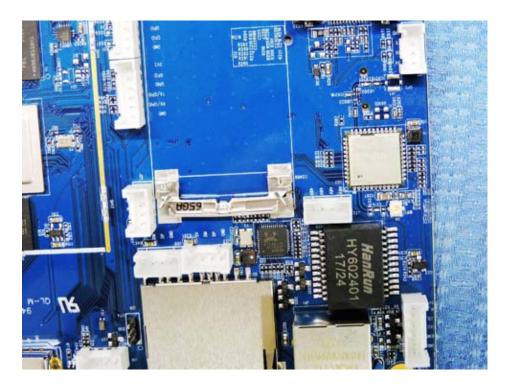
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End of the report