



Report No.: FCC 1809045-01 File reference No.: 2018-12-19

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

Product: Advertising Displayer

Model No.: VEG073, VEG101

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: December 19,2018

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

Zone C, 1st Floor, Block B, Jun Xiang Da Building, Zhongshan Park Road West, Tong Le Village, Nanshan District, Shenzhen, China

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

Date: 2018-12-19



Special Statement:

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

Page 2 of 113

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.: 744189

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.: 744189.

Page 3 of 113

Report No.: FCC1809045-01

Date: 2018-12-19



Test Report Conclusion

Content

1.0	General Details	4
1.1	Test Lab Details.	4
1.2	Applicant Details	4
1.3	Description of EUT	4
1.4	Submitted Sample.	5
1.5	Test Duration.	5
1.6	Test Uncertainty.	5
1.7	Test By	5
2.0	List of Measurement Equipment	6
3.0	Technical Details	8
3.1	Summary of Test Results.	8
3.2	Test Standards.	8
4.0	EUT Modification.	8
5.0	Power Line Conducted Emission Test.	9
5.1	Schematics of the Test.	9
5.2	Test Method and Test Procedure.	9
5.3	Configuration of the EUT	9
5.4	EUT Operating Condition.	10
5.5	Conducted Emission Limit.	10
5.6	Test Result.	10
6.0	Radiated Emission test.	15
6.1	Test Method and Test Procedure.	15
6.2	Configuration of the EUT	15
6.3	EUT Operation Condition.	15
6.4	Radiated Emission Limit.	16
7.0	6dB Bandwidth Measurement.	42
8.0	Maximum Output Power	62
9.0	Power Spectral Density Measurement.	65
10.0	Out of Band Measurement.	83
11.0	Antenna Requirement.	92
12.0	FCC ID Label	93
13.0	Photo of Test Setup and EUT View	94

Date: 2018-12-19



Page 4 of 113

1.0 General Details

1.1 Test Lab Details

Name: SHENZHEN TIMEWAY TESTING LABORATORIES.

Address: Zone C, 1st Floor, Block B, Jun Xiang Da Building, Zhongshan Park Road West, Tong Le

Village, Nanshan District, Shenzhen, China

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

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: Advertising Displayer

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

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

District, ShenZhen

Brand Name: N/A
Model Number: VEG073
Additional Model Number: VEG101

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 HT20/40: msc0-msc7

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;

1.4 Submitted Sample: 2 Samples

1.5 Test Duration

2018-12-12-2018-12-18

1.6 Test Uncertainty

Conducted Emissions Uncertainty = 3.6dB

Radiated Emissions below 1GHz Uncertainty =4.7dB

Radiated Emissions above 1GHz Uncertainty =6.0dB

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

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Date: 2018-12-19



Page 5 of 113

Conducted Power Uncertainty =6.0dB Occupied Channel Bandwidth Uncertainty =5%

1.7 Test Engineer Terry (ang

The sample tested by

Print Name: Terry Tang

Page 6 of 113

Report No.: FCC1809045-01

Date: 2018-12-19



2.0 Test Equipment					
Instrument Type	Manufacturer	Model	Serial No.	Date of Cal.	Due Date
ESPI Test Receiver	R&S	ESPI 3	100379	2018-06-22	2019-06-21
TWO Line-V-NETW	R&S	EZH3-Z5	100294	2018-06-22	2019-06-21
TWO Line-V-NETW	R&S	EZH3-Z5	100253	2018-06-22	2019-06-21
Ultra Broadband ANT	R&S	HL562	100157	2018-06-18	2019-06-17
Impuls-Begrenzer	R&S	ESH3-Z2	100281	2018-06-22	2019-06-21
Loop Antenna	EMCO	6507	00078608	2018-06-25	2019-06-24
Spectrum	R&S	FSIQ26	100292	2018-06-22	2019-06-21
Horn Antenna	A-INFO	LB-180400-KF	J211060660	2018-06-25	2019-06-24
Horn Antenna	R&S	BBHA 9120D	9120D-631	2018-08-24	2019-08-23
Power meter	Anritsu	ML2487A	6K00003613	2018-08-22	2019-08-21
Power sensor	Anritsu	MA2491A	32263	2018-08-22	2019-08-21
Bilog Antenna	Schwarebeck	VULB9163	9163/340	2018-07-04	2019-07-03
9*6*6 Anechoic			N/A	2018-02-07	2021-02-06
EMI Test Receiver	RS	ESVB	826156/011	2018-06-22	2019-06-21
EMI Test Receiver	RS	ESH3	860904/006	2018-06-22	2019-06-21
Spectrum	HP/Agilent	ESA-L1500A	US37451154	2018-06-22	2019-06-21
Spectrum	HP/Agilent	E4407B	MY50441392	2018-03-27	2019-03-26
Spectrum	RS	FSP	1164.4391.38	2018-01-20	2019-01-19
RF Cable	Zhengdi	ZT26-NJ-NJ-8 M/FA		2018-05-24	2019-05-23
RF Cable	Zhengdi	7m		2018-03-17	2019-03-16
RF Switch	EM	EMSW18	060391	2018-06-22	2019-06-21
Pre-Amplifier	Schwarebeck	BBV9743	#218	2018-06-22	2019-06-21
Pre-Amplifier	HP/Agilent	8449B	3008A00160	2018-08-05	2019-08-04

Date: 2018-12-19



Page 7 of 113

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: msc0 data rate (worst case) were chosen for full testing

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: msc0 data rate (worst case) were chosen for full testing

Note: Dutycycle>98%

Page 8 of 113

Report No.: FCC1809045-01

Date: 2018-12-19



3.0 **Technical Details**

3.1 **Summary of test results**

Standard	Test Type	Result	Notes
ECC Part 15, Paragraph 15.107 & 15.207	Conducted Emission Test	PASS	Complies
	Spectrum bandwidth of a		Complies
ECC Dout 15 Submont C	Orthogonal Frequency		
FCC Part 15 Subpart C	Division Multiplex System	PASS	
Paragraph 15.247(a)(2) Limit	Limit: 6dB		
	bandwidth>500kHz		
FCC Part 15, Paragraph	Maximum peak output		
15.247(b)	power	PASS	Complies
13.247(0)	Limit: max. 30dBm		
FCC Part 15, Paragraph	Transmitter Radiated	PASS	Complies
15.109,15.205 & 15.209	Emission		
	Limit: Table 15.209		
FCC Part 15, Paragraph	Power Spectral Density	PASS	Complies
15.247(e)	Limit: max. 8dBm		
FCC Part 15, Paragraph	Out of Band Emission and	PASS	Complies
15.247(d)	Restricted Band		
	Radiation		
	Limit: 20dB less than		
	peak value of fundamental		
	frequency		
	Restricted band limit:		
	Table 15.209		

3.2 **Test Standards**

FCC Part 15 Subpart & Subpart C, Paragraph 15.247

EUT Modification 4.0

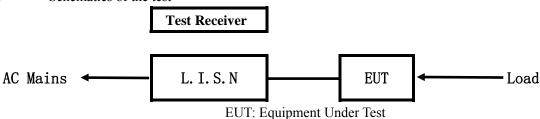
No modification by SHENZHEN TIMEWAY TESTING LABORATORIES.

Date: 2018-12-19



5.0 Power Line Conducted Emission Test

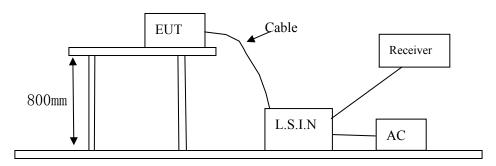
5.1 Schematics of the test



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	
A.1. and all and Director	GLORY STAR TECHNICS	VEC072 VEC101	2AACS-VEG073-101	
Advertising Displayer	(SHENZHEN) CO., LTD.	VEG073,VEG101		

B. Internal Device

Device	Manufacturer	Model	FCC ID/DOC
N/A			

C. Peripherals

Device	Manufacturer	Model	Rating
Power Supply	SOY	SUN-1200500	Input:100-240VV~, 50/60Hz, 1.7A;
			Output:DC12V,5A

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Report No.: FCC1809045-01 Page 10 of 113

Date: 2018-12-19



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	
	$0.15 \sim 0.50$	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 ~ 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.

Page 11 of 113

Report No.: FCC1809045-01

Date: 2018-12-19



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

EUT Operating Environment

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

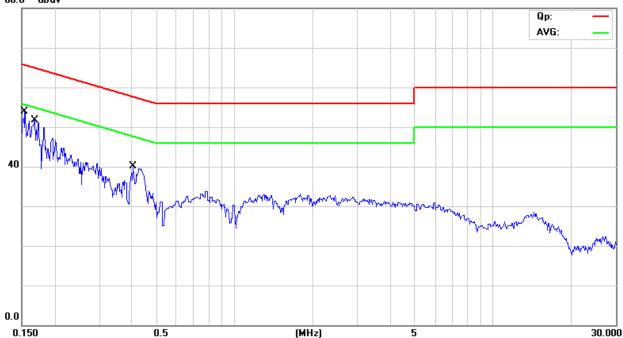
EUT set Condition: Keep WIFI Transmitting

Model: VEG073

Equipment Level: Class B

Results: PASS

Please refer to following diagram for individual



No. Mk.	Freq.	Reading Level	Correct Factor	Measure- ment	Limit	Over	
	MHz	dBuV	dB	dBuV	dBuV	dB	Detector
1	0.1530	34.00	9.84	43.84	65.84	-22.00	QP
2	0.1530	17.40	9.84	27.24	55.84	-28.60	AVG
3	0.1690	32.20	9.86	42.06	65.01	-22.95	QP
4	0.1690	13.00	9.86	22.86	55.01	-32.15	AVG
5	0.4041	27.00	10.16	37.16	57.77	-20.61	QP
6 *	0.4041	24.10	10.16	34.26	47.77	-13.51	AVG

Page 12 of 113

Report No.: FCC1809045-01

Date: 2018-12-19



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

EUT Operating Environment

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

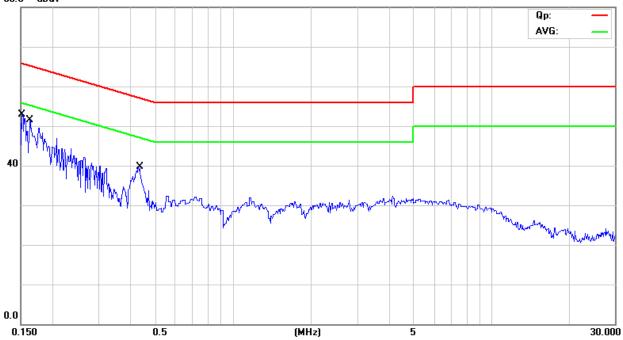
EUT set Condition: Keep WIFI Transmitting

Model: VEG073

Equipment Level: Class B

Results: Pass

Please refer to following diagram for individual



No. Mk.	Freq.	Reading Level	Correct Factor	Measure- ment	Limit	Over	
	MHz	dBuV	dB	dBuV	dBuV	dB	Detector
1	0.1514	34.70	9.84	44.54	65.92	-21.38	QP
2	0.1514	14.90	9.84	24.74	55.92	-31.18	AVG
3	0.1628	31.80	9.86	41.66	65.32	-23.66	QP
4	0.1628	11.00	9.86	20.86	55.32	-34.46	AVG
5 *	0.4323	27.00	10.19	37.19	57.21	-20.02	QP
6	0.4323	16.80	10.19	26.99	47.21	-20.22	AVG

Page 13 of 113

Report No.: FCC1809045-01

Date: 2018-12-19



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

EUT Operating Environment

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

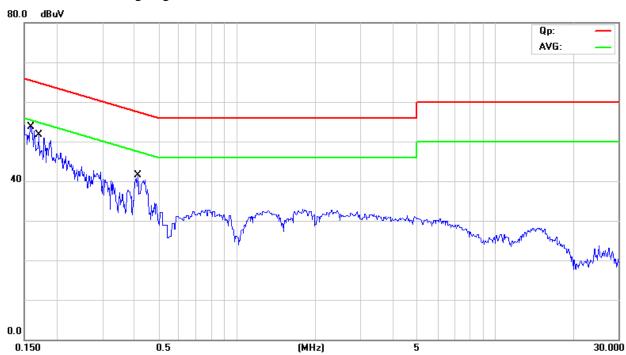
EUT set Condition: Keep WIFI Transmitting

Model: VEG101

Equipment Level: Class B

Results: PASS

Please refer to following diagram for individual



No. Mk.	Freq.	Reading Level	Correct Factor	Measure- ment	Limit	Over	
	MHz	dBuV	dB	dBuV	dBuV	dB	Detector
1 *	0.1570	35.50	9.85	45.35	65.62	-20.27	QP
2	0.1570	15.20	9.85	25.05	55.62	-30.57	AVG
3	0.1685	34.50	9.86	44.36	65.03	-20.67	QP
4	0.1685	13.40	9.86	23.26	55.03	-31.77	AVG
5	0.4120	26.80	10.17	36.97	57.61	-20.64	QP
6	0.4120	10.90	10.17	21.07	47.61	-26.54	AVG

Page 14 of 113

Report No.: FCC1809045-01

Date: 2018-12-19



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

EUT Operating Environment

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

EUT set Condition: Keep WIFI Transmitting

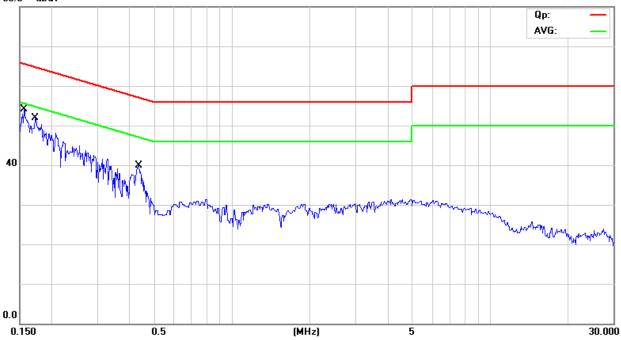
Model: VEG101

Equipment Level: Class B

Results: Pass

Please refer to following diagram for individual

80.0 dBuV



No. Mk.	Freq.	Reading Level	Correct Factor	Measure- ment	Limit	Over	
	MHz	dBuV	dB	dBuV	dBuV	dB	Detector
1	0.1550	36.90	9.85	46.75	65.73	-18.98	QP
2	0.1550	16.50	9.85	26.35	55.73	-29.38	AVG
3	0.1698	35.10	9.86	44.96	64.97	-20.01	QP
4	0.1698	11.90	9.86	21.76	54.97	-33.21	AVG
5	0.4312	27.20	10.19	37.39	57.23	-19.84	QP
6 *	0.4312	22.70	10.19	32.89	47.23	-14.34	AVG

Report No.: FCC1809045-01 Page 15 of 113

Date: 2018-12-19



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. 744189
- (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.

Block diagram of Test setup Distance = 3m Computer Pre – Amplifier EUT Turn-table Receiver

- 6.2 Configuration of The EUT
 Same as section 5.3 of this report
- 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.

Report No.: FCC1809045-01 Page 16 of 113

Date: 2018-12-19



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 and RSS-210

Frequency Range (MHz)	Distance (m)	Field strength (dB μ 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 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

Date: 2018-12-19



Page 17 of 113

Test result

General Radiated Emission Data and Harmonics Radiated Emission Data

Radiated Emission In Horizontal/Vertical (30MHz----1000MHz)

EUT set Condition: Keep Transmitting

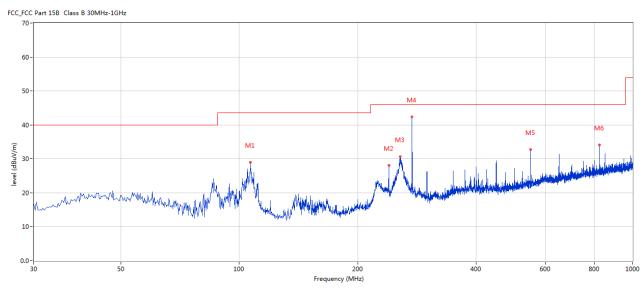
Results: Pass

Page 18 of 113 Report No.: FCC1809045-01

Date: 2018-12-19



Test Figure:



No.	Frequency	Results	Factor	Limit	Over	Detector	Table (o)	Height	ANT	Verdict
	(MHz)	(dBuV/m)	(dB)	(dBuV/m)	Limit (dB)			(cm)		
1	106.611	29.02	-13.36	43.5	-14.48	Peak	148.00	200	Н	Pass
2	239.953	28.03	-12.33	46.0	-17.97	Peak	132.00	100	Н	Pass
3	256.438	30.59	-12.01	46.0	-15.41	Peak	27.00	100	Н	Pass
4	274.864	42.30	-11.65	46.0	-3.70	Peak	135.00	200	Н	Pass
5	550.032	32.77	-6.36	46.0	-13.23	Peak	0.00	200	Н	Pass
6	824.474	34.10	-2.88	46.0	-11.90	Peak	165.00	200	Н	Pass

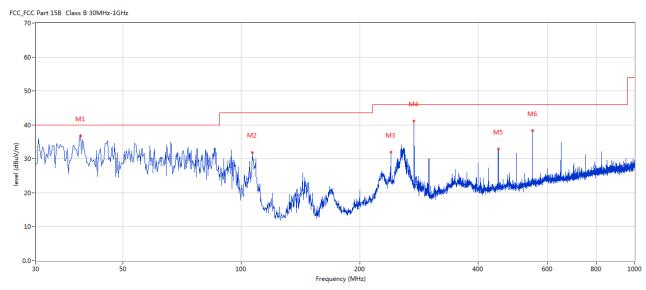
Page 19 of 113

Report No.: FCC1809045-01

Date: 2018-12-19



Test Figure:



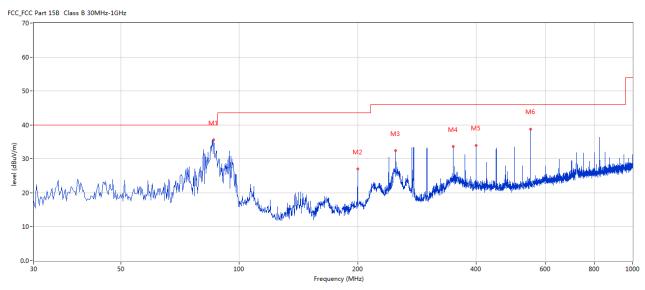
No.	Frequency	Results	Factor	Limit	Over	Detector	Table (o)	Height	ANT	Verdict
	(MHz)	(dBuV/m)	(dB)	(dBuV/m)	Limit (dB)			(cm)		
1	38.970	36.81	-12.59	40.0	-3.19	Peak	125.00	100	V	Pass
2	106.611	31.89	-13.36	43.5	-11.61	Peak	0.00	200	V	Pass
3	239.953	31.96	-12.33	46.0	-14.04	Peak	177.00	100	V	Pass
4	274.864	41.16	-11.65	46.0	-4.84	Peak	247.00	200	V	Pass
5	450.147	32.85	-8.00	46.0	-13.15	Peak	245.00	100	V	Pass
6	550.032	38.27	-6.36	46.0	-7.73	Peak	32.00	100	V	Pass

Page 20 of 113 Report No.: FCC1809045-01

Date: 2018-12-19



Test Figure:



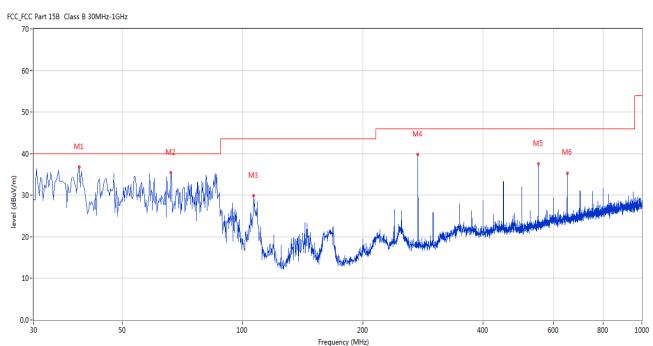
No.	Frequency	Results	Factor	Limit	Over	Detector	Table (o)	Height	ANT	Verdict
	(MHz)	(dBuV/m)	(dB)	(dBuV/m)	Limit (dB)			(cm)		
1	86.003	35.62	-16.28	40.0	-4.38	Peak	4.00	200	Н	Pass
2	199.950	27.07	-13.45	43.5	-16.43	Peak	360.00	200	Н	Pass
3	249.893	32.47	-12.08	46.0	-13.53	Peak	360.00	200	Н	Pass
4	350.020	33.60	-9.32	46.0	-12.40	Peak	209.00	100	Н	Pass
5	399.963	34.00	-8.57	46.0	-12.00	Peak	349.00	100	Н	Pass
6	550.032	38.79	-6.36	46.0	-7.21	Peak	360.00	200	Н	Pass

Page 21 of 113 Report No.: FCC1809045-01

Date: 2018-12-19



Test Figure:



No.	Frequency	Results	Factor (dB)	Limit	Over Limit	Detector	Table	Height	ANT	Verdict
	(MHz)	(dBuV/m)		(dBuV/m)	(dB)		(o)	(cm)		
1	38.970	36.76	-12.59	40.0	-3.24	Peak	120.00	100	V	Pass
2	66.123	35.41	-13.97	40.0	-4.59	Peak	360.00	200	V	Pass
3	106.611	29.86	-13.36	43.5	-13.64	Peak	360.00	200	V	Pass
4	274.864	39.76	-11.65	46.0	-6.24	Peak	234.00	200	V	Pass
5	550.032	37.57	-6.36	46.0	-8.43	Peak	84.00	100	V	Pass
6	649.918	35.37	-4.66	46.0	-10.63	Peak	166.00	100	V	Pass

Report No.: FCC1809045-01 Page 22 of 113

Date: 2018-12-19



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

Frequency (MHz)	Level@3m (dB \u03b4 V/m)	Antenna Polarity	Limit@3m (dB \(\mu \)V/m)
4824.00	49.78 (PK)	Н	74(Peak)/ 54(AV)
4824.00	48.82 (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

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

Report No.: FCC1809045-01 Page 23 of 113

Date: 2018-12-19



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

	_		
Frequency (MHz)	Level@3m (dB \u03b4 V/m)	Antenna Polarity	Limit@3m (dB \u03b4 V/m)
4874.00	50.20 (PK)	V	74(Peak)/ 54(AV)
4874.00	46.47 (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

	0	0 1	
Frequency (MHz)	Level@3m (dB \u03b4 V/m)	Antenna Polarity	Limit@3m (dB µ V/m)
4924	49.58 (PK)	Н	74(Peak)/ 54(AV)
4924	49.64 (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

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

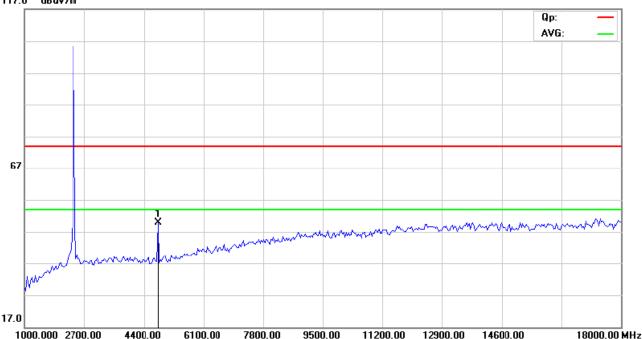
Date: 2018-12-19



Please refer to the following test plots for details:

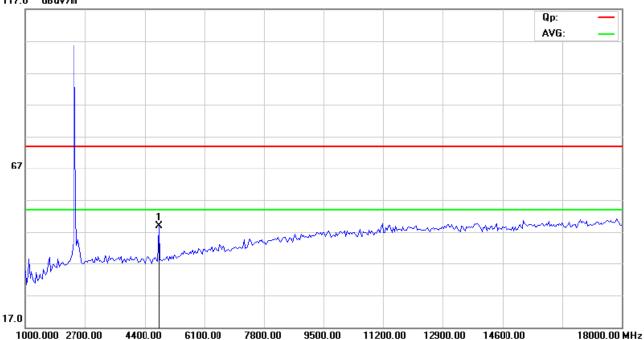
CH01 for 11g at 6Mbps: Horizontal

117.0 dBuV/m



CH01 for 11g at 6Mbps: Vertical

117.0 dBuV/m



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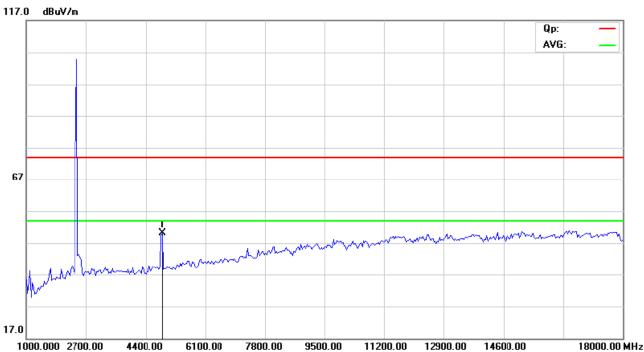
Page 25 of 113

Report No.: FCC1809045-01

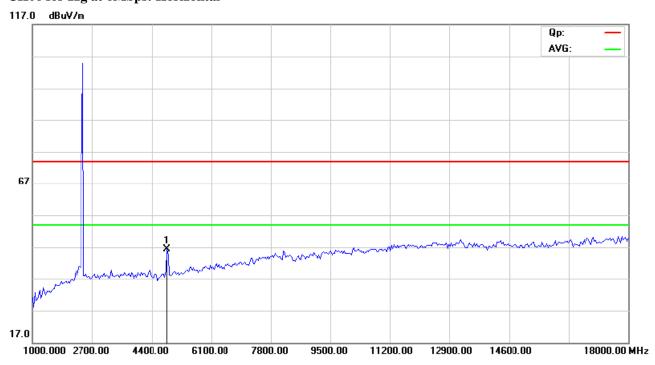
Date: 2018-12-19



CH06 for 11g at 6Mbps: Vertical



CH06 for 11g at 6Mbps: Horizontal



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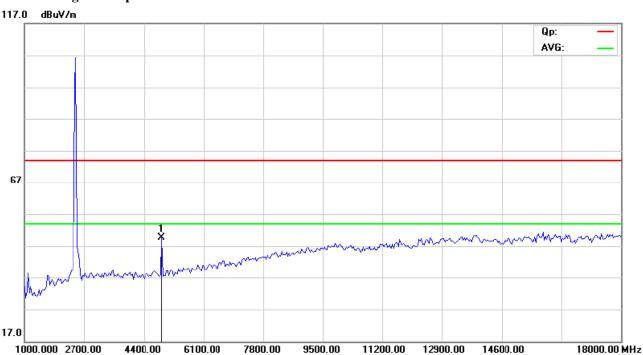
Page 26 of 113

Report No.: FCC1809045-01

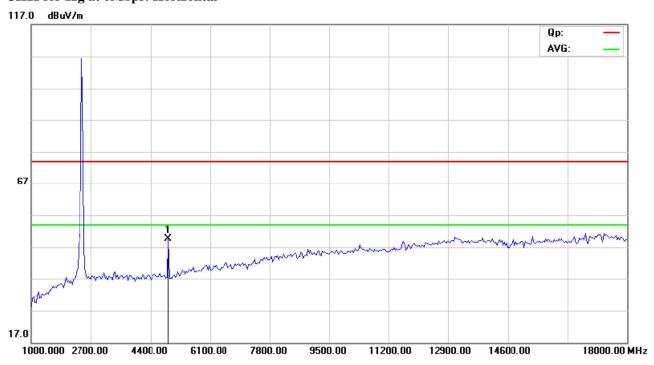
Date: 2018-12-19



CH11 for 11g at 6Mbps: Vertical



CH11 for 11g at 6Mbps: Horizontal



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

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Report No.: FCC1809045-01 Page 27 of 113

Date: 2018-12-19



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	47.82 (PK)	Н	74(Peak)/ 54(AV)
4824.00	49.59 (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 μ V/m)
4874.00	49.01 (PK)	Н	74(Peak)/ 54(AV)
4874.00	48.31 (PK)	V	74(Peak)/ 54(AV)
7311.00	1	H/V	74(Peak)/ 54(AV)
9748.00	1	H/V	74(Peak)/ 54(AV)
12185	1	H/V	74(Peak)/ 54(AV)
14622	•	H/V	74(Peak)/ 54(AV)
17059	-	H/V	74(Peak)/ 54(AV)
19496	1	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

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

Report No.: FCC1809045-01 Page 28 of 113

Date: 2018-12-19



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

	8		
Frequency (MHz)	Level@3m (dB \u03b4 V/m)	Antenna Polarity	Limit@3m (dB \(\mu \)V/m)
4924	46.79 (PK)	Н	74(Peak)/ 54(AV)
4924	50.63 (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

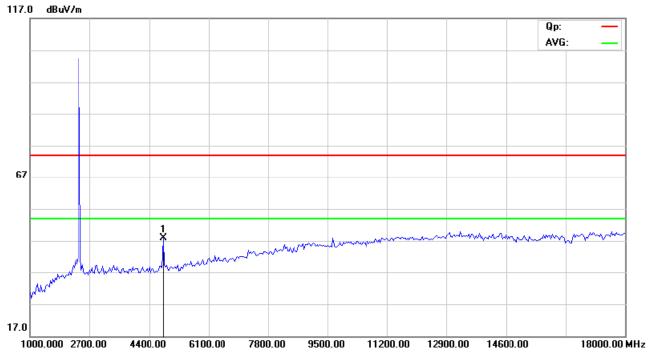
- 2. Remark "---" means that the emissions level is too low to be measured
- 3. For 802.11b mode at 1Mbps

Date: 2018-12-19



Please refer to the following test plots for details:

CH01 for 11b at 1Mbps: Horizontal



CH01 for 11b at 1Mbps: Vertical

117.0 dBuV/m Qp: AVG: 67 17.0 1000.000 2700.00 4400.00 6100.00 7800.00 9500.00 11200.00 12900.00 14600.00 18000.00 MHz

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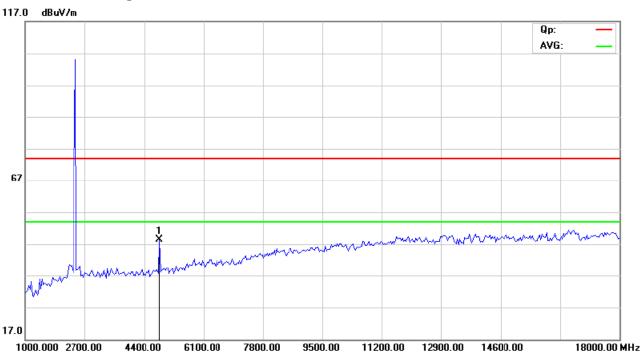
Page 30 of 113

Report No.: FCC1809045-01

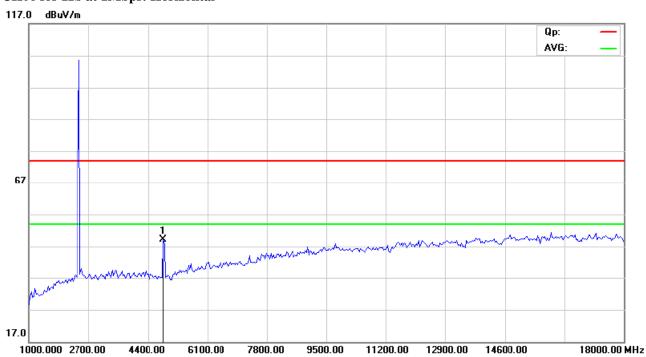
Date: 2018-12-19



CH06 for 11b at 1Mbps: Vertical



CH06 for 11b at 1Mbps: Horizontal



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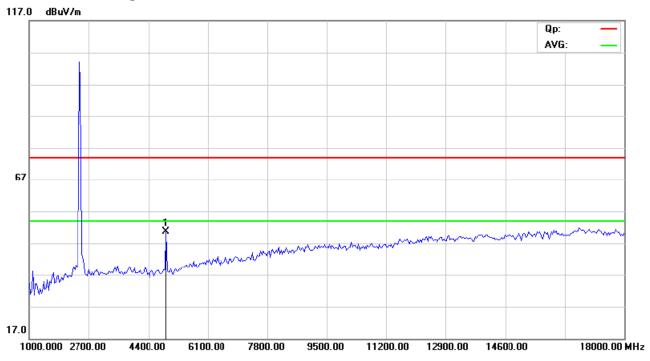
Page 31 of 113

Report No.: FCC1809045-01

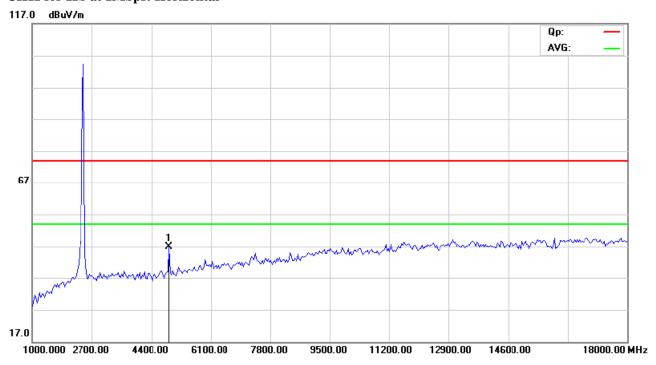
Date: 2018-12-19



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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Report No.: FCC1809045-01 Page 32 of 113

Date: 2018-12-19



Operation Mode: Transmitting under CH01 for 11n HT20 at msc0

Frequency (MHz)	Level@3m (dB \u03b4 V/m)	Antenna Polarity	Limit@3m (dB µ V/m)
4824.00	49.35 (PK)	Н	74(Peak)/ 54(AV)
4824.00	50.59 (PK)	V	74(Peak)/ 54(AV)
7236.00	1	H/V	74(Peak)/ 54(AV)
9648.00	1	H/V	74(Peak)/ 54(AV)
12060		H/V	74(Peak)/ 54(AV)
14472	1	H/V	74(Peak)/ 54(AV)
16684	1	H/V	74(Peak)/ 54(AV)
19296		H/V	74(Peak)/ 54(AV)
21708	1	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 msc0

Operation Mode: Transmitting under CH06 for 11n HT20 at msc0

Frequency (MHz)	Level@3m (dB \u03b4 V/m)	Antenna Polarity	Limit@3m (dB \(\mu \)V/m)
4874.00	48.04 (PK)	Н	74(Peak)/ 54(AV)
4874.00	50.38 (PK)	V	74(Peak)/ 54(AV)
7311.00	1	H/V	74(Peak)/ 54(AV)
9748.00	-	H/V	74(Peak)/ 54(AV)
12185	1	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 msc0

Report No.: FCC1809045-01 Page 33 of 113

Date: 2018-12-19



Operation Mode: Transmitting under CH11 for 11n HT20 at msc0

Frequency (MHz)	Level@3m (dB \u03b4 V/m)	Antenna Polarity	Limit@3m (dB \(\mu \)V/m)
4924	48.69 (PK)	Н	74(Peak)/ 54(AV)
4924	49.64 (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

- 2. Remark "---" means that the emissions level is too low to be measured
- 3. For 802.11n (HT20) mode msc0

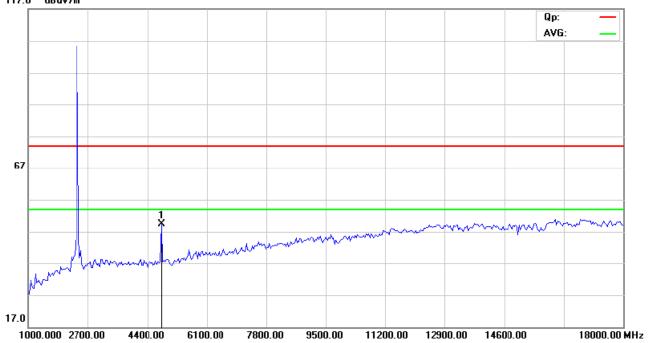
Date: 2018-12-19



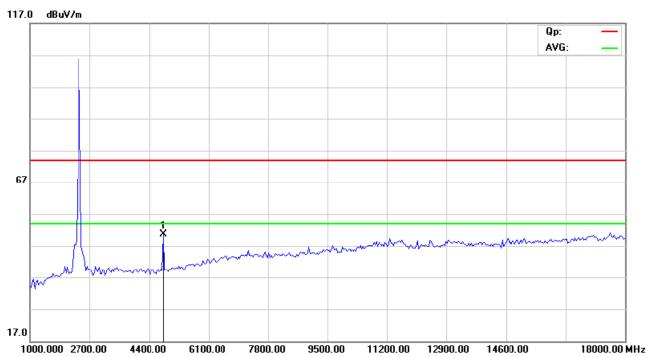
Please refer to the following test plots for details:

CH01 for 11n HT20 at msc0: Horizontal

117.0 dBuV/m



CH01 for 11n HT20 at msc0: Vertical



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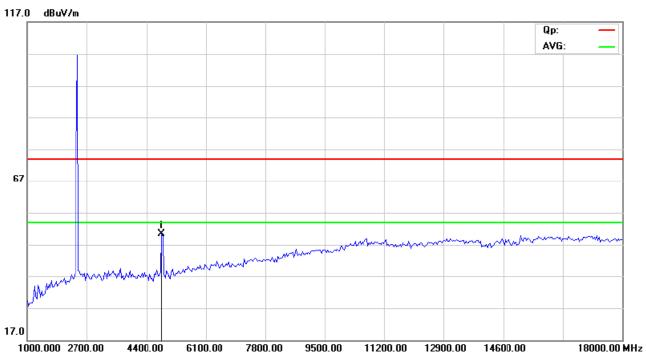
Page 35 of 113

Report No.: FCC1809045-01

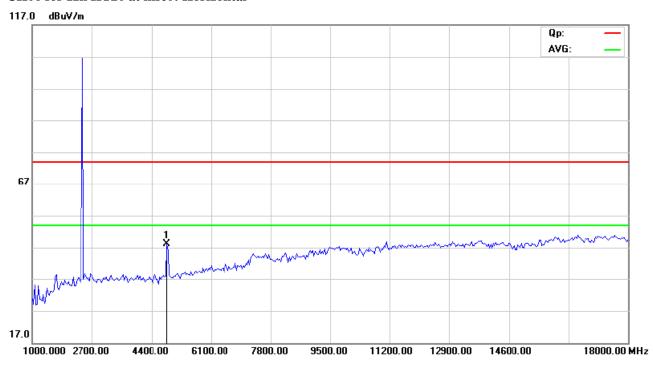
Date: 2018-12-19



CH06 for 11n HT20 at msc0: Vertical



CH06 for 11n HT20 at msc0: Horizontal



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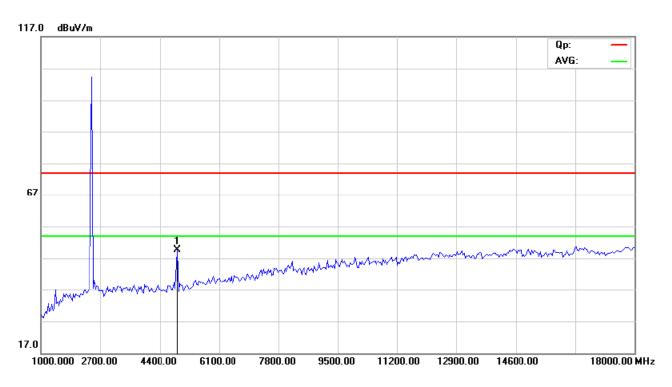
Page 36 of 113

Report No.: FCC1809045-01

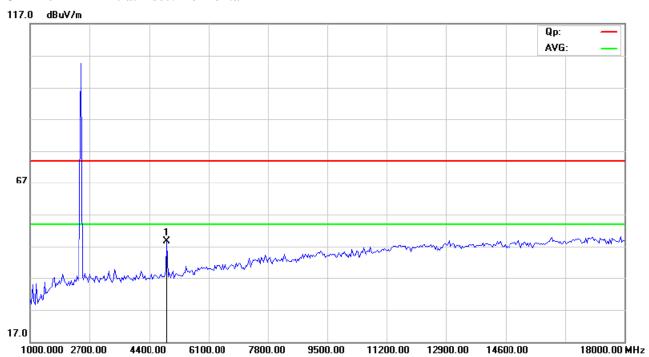
Date: 2018-12-19



CH11 for 11n HT20 at msc0: Vertical



CH11 for 11n HT20 at msc0: Horizontal



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

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Report No.: FCC1809045-01 Page 37 of 113

Date: 2018-12-19



Operation Mode: Transmitting under CH03 for 11n HT40 at msc0

Frequency (MHz)	Level@3m (dB μ V/m)	Antenna Polarity	Limit@3m (dB \(\mu \)V/m)	
4844.00	48.01 (PK)	Н	74(Peak)/ 54(AV)	
4844.00	49.27 (PK)	V	74(Peak)/ 54(AV)	
7266.00		H/V	74(Peak)/ 54(AV)	
9688.00		H/V	74(Peak)/ 54(AV)	
12110		H/V	74(Peak)/ 54(AV)	
14532		H/V	74(Peak)/ 54(AV)	
16954		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 msc0

Operation Mode: Transmitting under CH06 for 11n HT40 at msc0

Frequency (MHz)	Level@3m (dB \u03b4 V/m)	Antenna Polarity	Limit@3m (dB \(\mu \)V/m)
4874.00	50.18 (PK)	Н	74(Peak)/ 54(AV)
4874.00	50.03 (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 msc0

Report No.: FCC1809045-01 Page 38 of 113

Date: 2018-12-19



Operation Mode: Transmitting under CH09 for 11n HT40 at msc0

Frequency (MHz)	Level@3m (dB \u03b4 V/m)	Antenna Polarity	Limit@3m (dB \(\mu \)V/m)	
4904	50.23 (PK)	50.23 (PK) H		
4904	49.08 (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

- 2. Remark "---" means that the emissions level is too low to be measured
- 3. For 802.11n (HT40) mode msc0

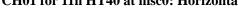
Report No.: FCC1809045-01

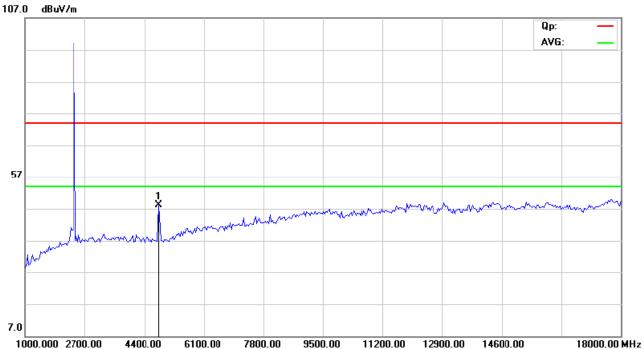
Date: 2018-12-19



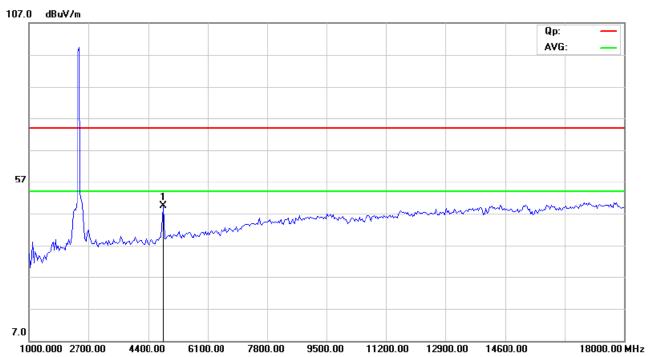
Please refer to the following test plots for details:

CH01 for 11n HT40 at msc0: Horizontal





CH01 for 11n HT40 at msc0: Vertical



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

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adopt any other remedies which may be appropriate.

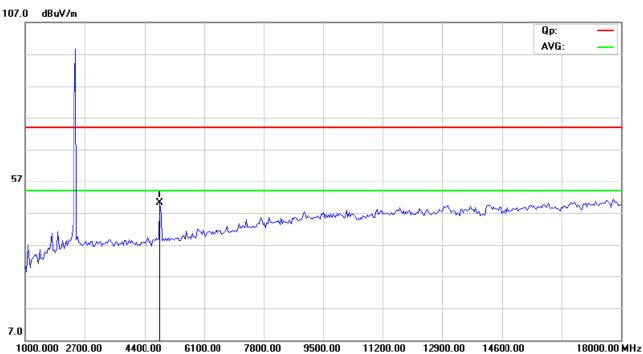
Page 40 of 113

Report No.: FCC1809045-01

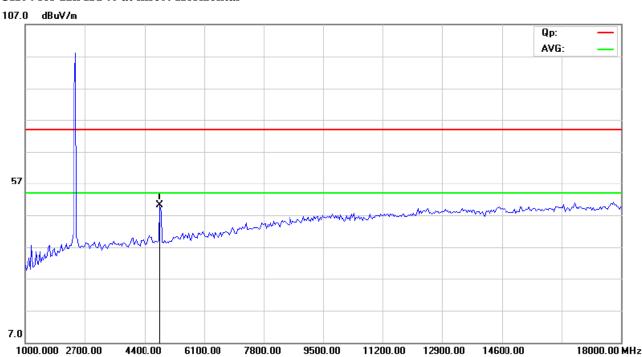
Date: 2018-12-19



CH04 for 11n HT40 at msc0: Vertical



CH04 for 11n HT40 at msc0: Horizontal



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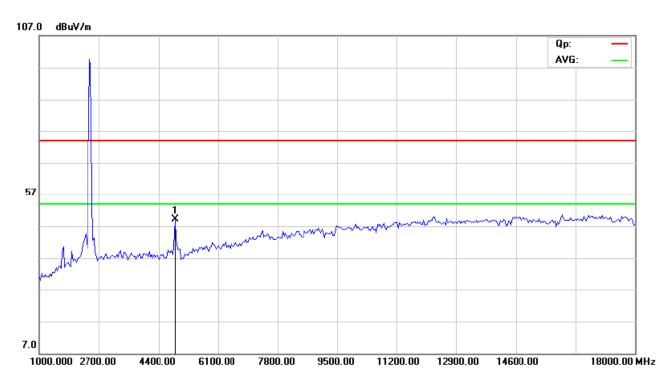
adopt any other remedies which may be appropriate.

Report No.: FCC1809045-01

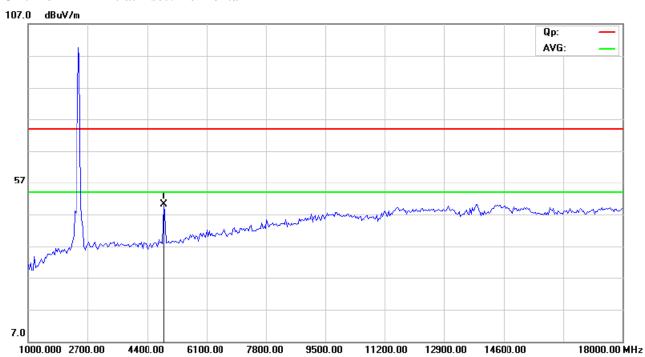
Date: 2018-12-19



CH07 for 11n HT40 at msc0: Vertical



CH07 for 11n HT40 at msc0: Horizontal



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

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

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Page 42 of 113

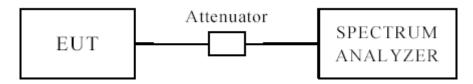
Report No.: FCC1809045-01

Date: 2018-12-19



7.0 6dB & 99%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

Page 43 of 113 Report No.: FCC1809045-01

Date: 2018-12-19



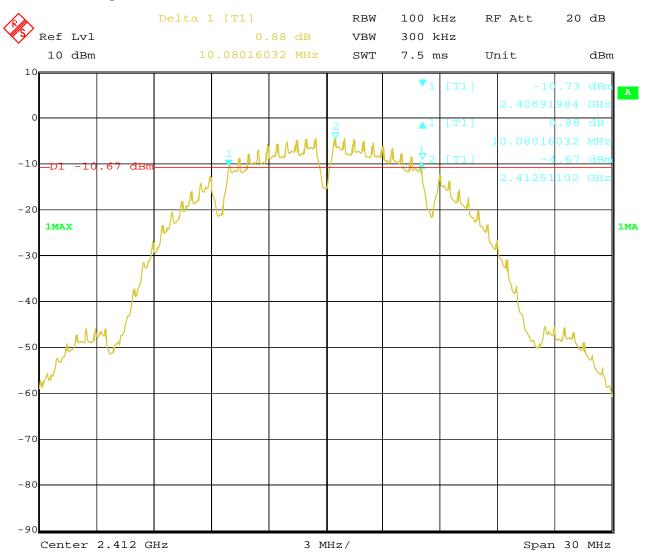
6dB Occupied Bandwidth

EUT	EUT Ad		sing Displa	yer	Model		VEG073	
Mode		8	302.11b		Input Vol	tage	DC	12V
Temperat	ure	24	4 deg. C,		Humidity	,	56%	6 RH
Channel		el Frequency (MHz)	Data Transfer Rate (Mbps)	6 dB Bandwidth (MHz)		Minimum Limit (MHz)		Pass/ Fail
1		2412	1	10.08		0.5		Pass
6		2437	1	10	10.08		0.5	Pass
11		2462	1	10	0.08 0.5		0.5	Pass
1		2412	11	9.	9.32		0.5	Pass
6		2437	11	9.32		0.32		Pass
11		2462	11	9.	32 0.5		Pass	

Report No.: FCC1809045-01 Page 44 of 113

Date: 2018-12-19

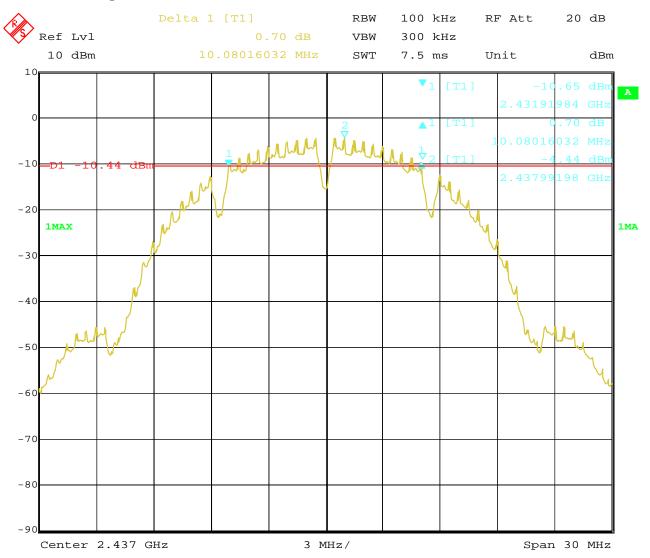




Report No.: FCC1809045-01 Page 45 of 113

Date: 2018-12-19



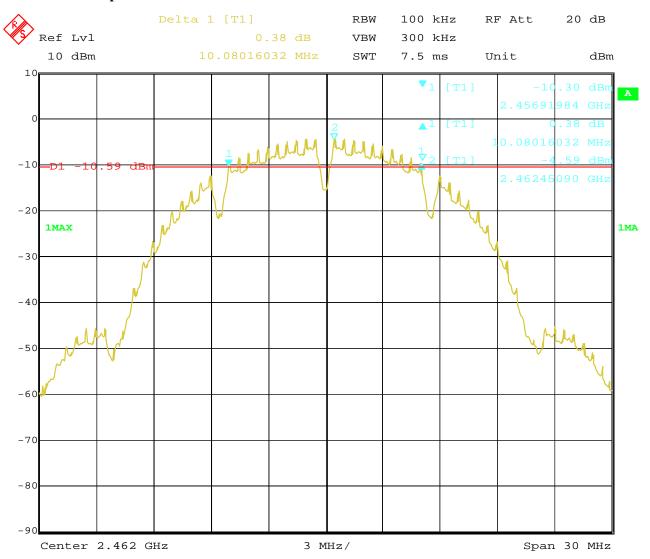


Page 46 of 113

Report No.: FCC1809045-01

Date: 2018-12-19

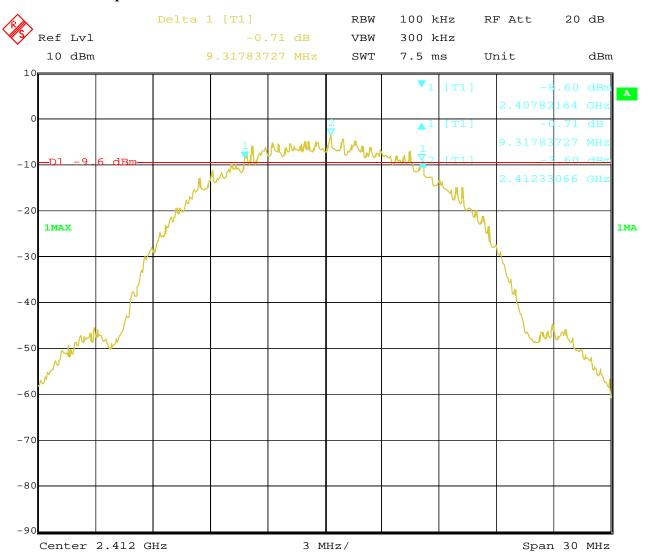




Report No.: FCC1809045-01 Page 47 of 113

Date: 2018-12-19

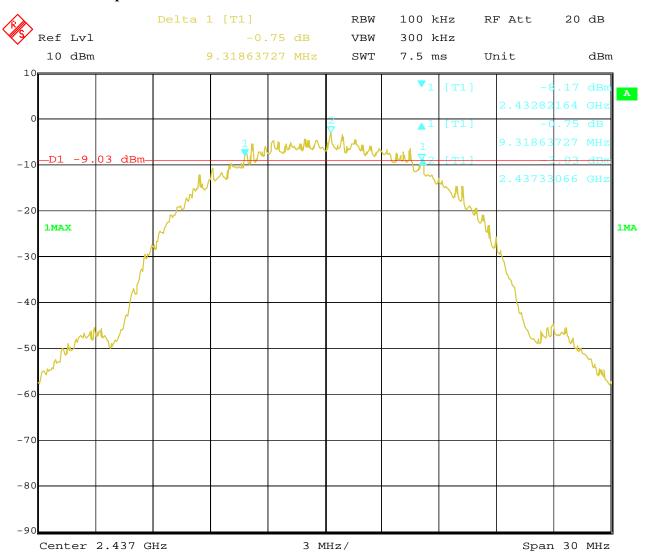




Report No.: FCC1809045-01 Page 48 of 113

Date: 2018-12-19

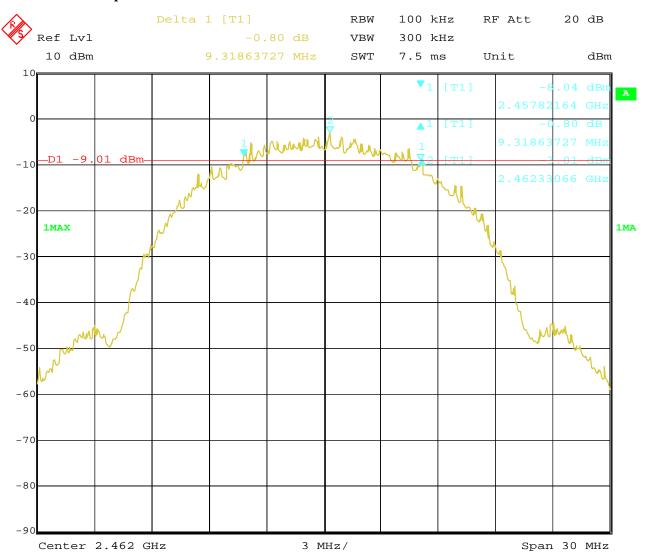




Report No.: FCC1809045-01 Page 49 of 113

Date: 2018-12-19





Page 50 of 113 Report No.: FCC1809045-01

Date: 2018-12-19



6dB Occupied Bandwidth

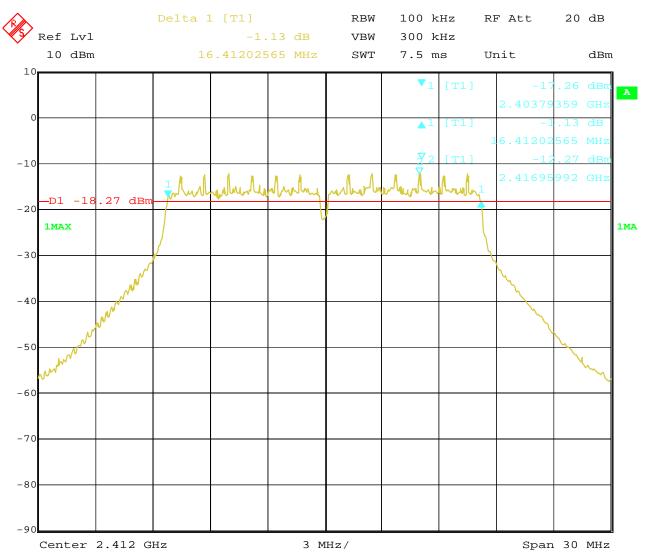
EUT		Adverti	sing Displa	yer	Model		V	VEG073
Mode		8	302.11g		Input Vol	tage	I	DC12V
Temperat	ure	24 deg. C, Humidity		56% RH				
Channel		el Frequency (MHz)	Data Transfer Rate (Mbps)		andwidth [Hz]		num Limit MHz)	Pass/ Fail
1		2412	6	16	5.41		0.5	Pass
6		2437	6	16.41			0.5	Pass
11		2462	6	16.41			0.5	Pass

Report No.: FCC1809045-01 Page 51 of 113

Date: 2018-12-19



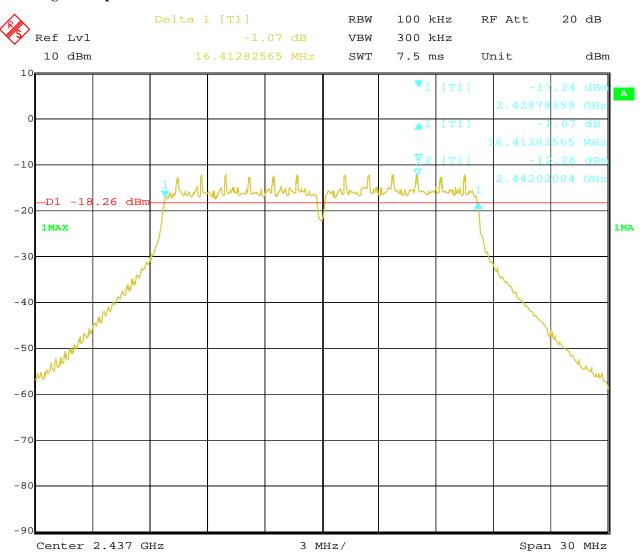
Test Plots:



Report No.: FCC1809045-01 Page 52 of 113

Date: 2018-12-19

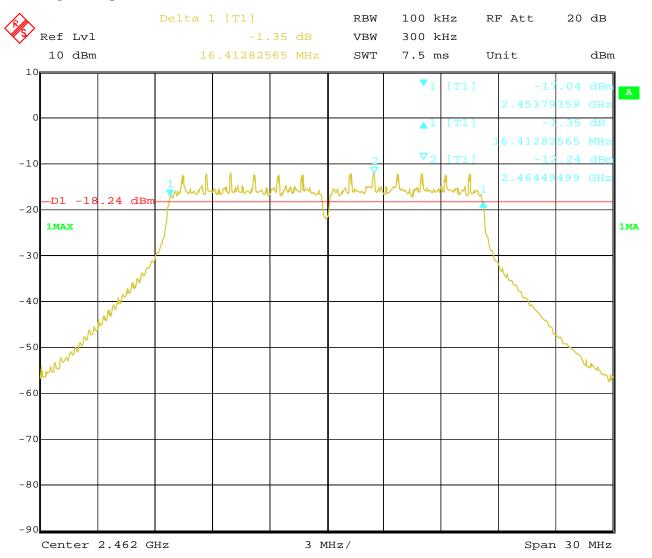




Report No.: FCC1809045-01 Page 53 of 113

Date: 2018-12-19





Page 54 of 113 Report No.: FCC1809045-01

Date: 2018-12-19



6dB Occupied Bandwidth

EUT		Adverti	sing Displa	yer	Model		VEG073	
Mode		802	.11n HT20		Input Voltage DC12V		Voltage DC12	
Temperat	ure	24	4 deg. C,		Humidity		56% RH	
Channel		el Frequency (MHz)	Data Transfer Rate (Mbps)		ndwidth Hz)	Minimum Limit (MHz)		Pass/ Fail
1		2412	mcs0	17	.56	0.5		Pass
6		2437	mcs0	17	17.56		0.5	Pass
11		2462	mcs0	17	.56		0.5	Pass

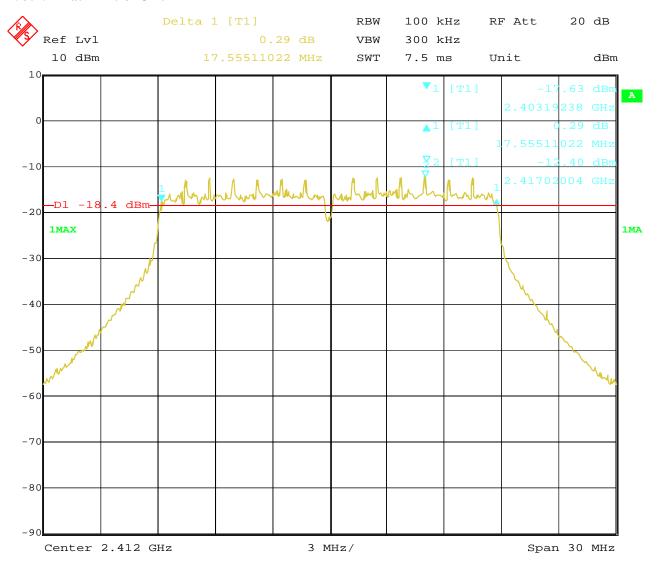
Report No.: FCC1809045-01 Page 55 of 113

Date: 2018-12-19



Test Plots:

1. 802.11n at HT20 of CH01

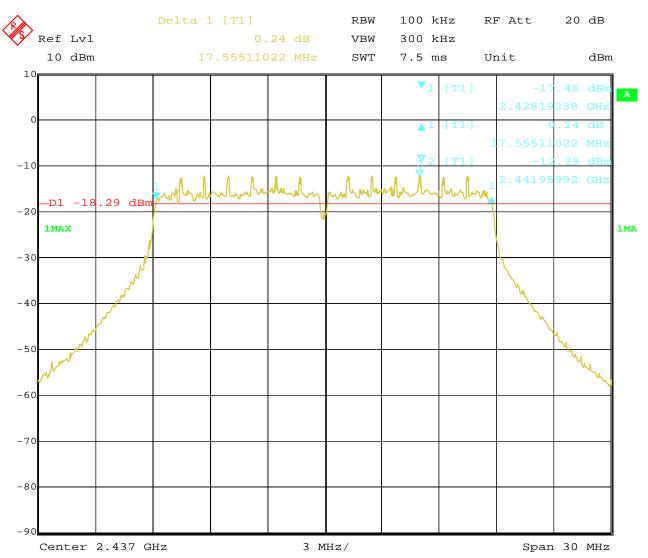


Report No.: FCC1809045-01 Page 56 of 113

Date: 2018-12-19



2. 802.11n at HT20 of CH06

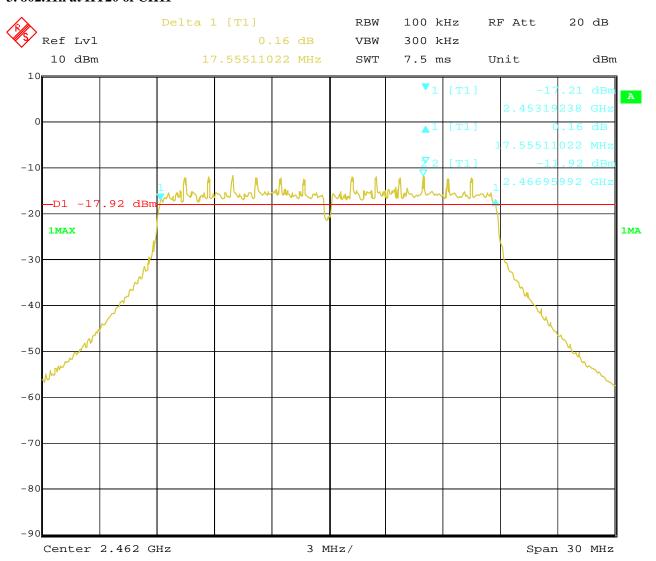


Report No.: FCC1809045-01 Page 57 of 113

Date: 2018-12-19



3. 802.11n at HT20 of CH11



Page 58 of 113 Report No.: FCC1809045-01

Date: 2018-12-19



6dB Occupied Bandwidth

EUT		Adverti	sing Displa	yer	Model		VE	G073
Mode		802	.11n HT40		Input Vol	tage	DC	C12V
Temperat	ure	24	4 deg. C,		Humidity		56%	% RH
Channel		el Frequency (MHz)	Data Transfer Rate (Mbps)		ndwidth Hz)	Minimum Limit (MHz)		Pass/ Fail
3		2422	mcs0	35	.39	0.5		Pass
6		2437	mcs0	35	35.39		0.5	Pass
9		2452	mcs0	35	5.39		0.5	

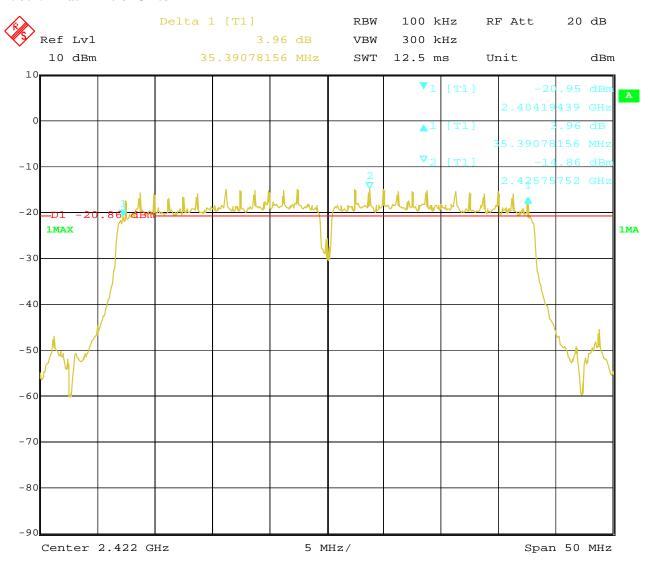
Report No.: FCC1809045-01 Page 59 of 113

Date: 2018-12-19



Test Plots:

1. 802.11n at HT40 of CH03

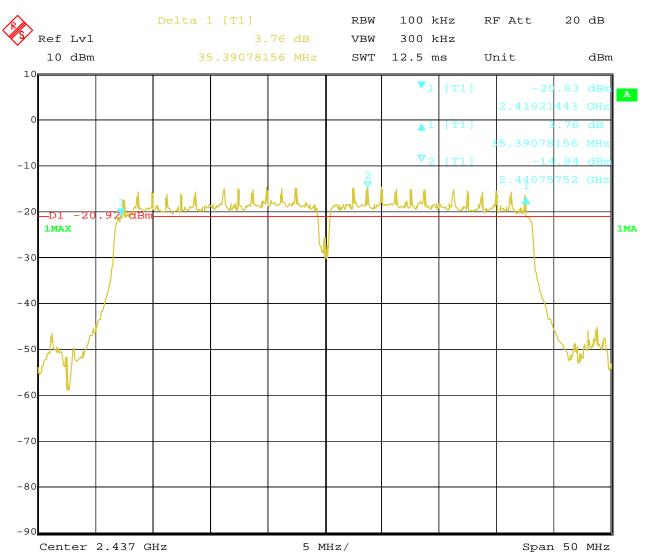


Report No.: FCC1809045-01 Page 60 of 113

Date: 2018-12-19



2. 802.11n at HT40 of CH06

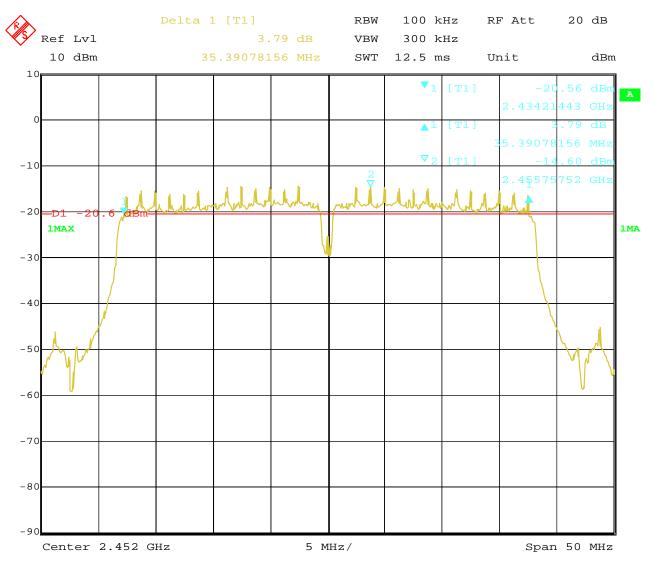


Report No.: FCC1809045-01 Page 61 of 113

Date: 2018-12-19



3. 802.11n at HT40 of CH09



Report No.: FCC1809045-01

Date: 2018-12-19



Page 62 of 113

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: PK power was measured

Page 63 of 113

Report No.: FCC1809045-01

Date: 2018-12-19



8.4Test Results

EUT	EUT Advertising		Displayer Mo		odel		VEG073
Mode	Mode 802.1		1b	Input Voltage		DC12V	
Temperat	ure	24 deg. C, Humidity			56% RH		
Channel	annel Channel Frequency (MHz)		Max. Power Output (dBm)		Power Limit (dBm)		Pass/ Fail
			PEAK				
1		2412	15.21		30		Pass
6		2437	15.33		30		Pass
11		2462	15.29		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	EUT Advertising		Displayer Mo		odel		VEG073
Mode	Mode 802.1		1g	Input Voltage			DC12V
Temperat	ure	24 deg	g. C,	Humidity		56% RH	
Channel	Cha	annel Frequency (MHz)	Max. Power Output (dBm) PEAK		Power (dB		Pass/ Fail
1		2412	12.68	12.68		30	
6		2437	12.82		30		Pass
11		2462	12.73		30		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

Page 64 of 113

Report No.: FCC1809045-01

Date: 2018-12-19



EUT	JT Advertising		Displayer Mo		odel		VEG073	
Mode	Mode 802.11n ((HT20)	Input Voltage			DC12V	
Temperati	erature 24 deg. C, Humidity		nidity	56% RH				
Channel	Channel Frequer (MHz)		Max. Power Output (dBm)		Power Limit (dBm)		Pass/ Fail	
		(WITIZ)	PEAK	(dD		111)		
1		2412	11.72		30		Pass	
6		2437	11.50		30		Pass	
11		2462	11.56		30		Pass	

Note: 1. At finial test to get the worst-case emission at msc0 of 11n HT20 for CH01, CH06 and CH11

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

3. The worse case was recorded

EUT	EUT Advertising		Displayer Mo		odel		VEG073	
Mode	Mode 802.11n ((HT40)	Input Voltage		DC12V		
Temperat	Temperature		g. C,	Humidity			56% RH	
Channel	Channel Channel Frequency (MHz)		Max. Power Output (dBm)		Power (dB		Pass/ Fail	
		(WITIZ)	PEAK	(u)		111)		
1		2422	9.87		30		Pass	
4		2437	9.96		30		Pass	
7		2452	9.85	•	30		Pass	

Note: 1. At finial test to get the worst-case emission at msc0 of 11n HT40 for CH01, CH04 and CH07

- The result basic equation calculation as follow:
 Max. Power Output = Power Reading + Cable loss + Attenuator
- 3. The worse case was recorded

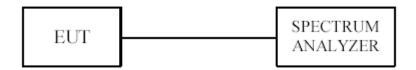
Report No.: FCC1809045-01 Page 65 of 113

Date: 2018-12-19



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 ≤ 8 dBm.

Page 66 of 113 Report No.: FCC1809045-01

Date: 2018-12-19



9.4Test Result

EUT		Advertising	Displayer Mo		odel		VEG073
Mode 802.11b 11		1Mbps Inj		Input Voltage		DC12V	
Temperat	Temperature 24 deg. C,		Hur	Humidity		56% RH	
Channel				Final RF Power Level (dBm)		m Limit m)	Pass/ Fail
			11Mbps	S			
1		2412	-14.06		8		Pass
6		2437	-13.33		8		Pass
11		2462	-13.27	8			Pass

EUT		Advertising Displayer		Model		VEG073		
Mode		802.11b 1Mbps		Input Voltage		DC12V		
Temperature		24 deg	g. C,	Humidity		56% RH		
Channel	Cha	annel Frequency	Final RF Power		Maximum Limit		Pass/ Fail	
Channel	(MHz)		Level in (dBm)		(dBm)			
1Mbps								
1		2412	-14.73	•	8		Pass	
6		2437	-14.12	8			Pass	
11		2462	-14.01				Pass	

Page 67 of 113

Report No.: FCC1809045-01

Date: 2018-12-19



EUT		Advertising Displayer		Model		VEG073		
Mode		802.11g 6Mbps		Input Voltage		DC12V		
Temperature		24 deg	g. C,		midity		56% RH	
Channel	Cha	annel Frequency (MHz)	Final RF Power Level in (dBm)		Maximum Limit (dBm)		Pass/ Fail	
6Mbps								
1		2412 -22.30			8		Pass	
6		2437	-22.58		8		Pass	
11		2462	-21.67		8		Pass	

EUT		Advertising Displayer		Model		VEG073		
Mode		802.11n HT20 msc0		Input Voltage		DC12V		
Temperature		24 deg	g. C, Hu		nidity		56% RH	
Channel	Cha	annel Frequency	Final RF Po	Power Maximu		m Limit Pass/ Fail		
Channel	(MHz)		Level (dBm)		(dBm)			
HT20								
1	2412		-21.95		8		Pass	
6		2437	-21.68		8		Pass	
11		2462	-21.36		8		Pass	

EUT		Advertising Displayer		Model		VEG073		
Mode		802.11n HT40 msc0		Input Voltage		DC12V		
Temperature		24 deg	g. C,	Humidity		56% RH		
Channel	Channel Frequency (MHz)		Final RF Power Level (dBm)		Maximum Limit (dBm)		Pass/ Fail	
HT40								
1	2422		-24.31		8		Pass	
4		2437	-23.99		8		Pass	
7		2452	-23.68	•	8		Pass	

Note: The result basic equation calculation as follow: Peak Power Output = Peak Power Reading + Cable loss

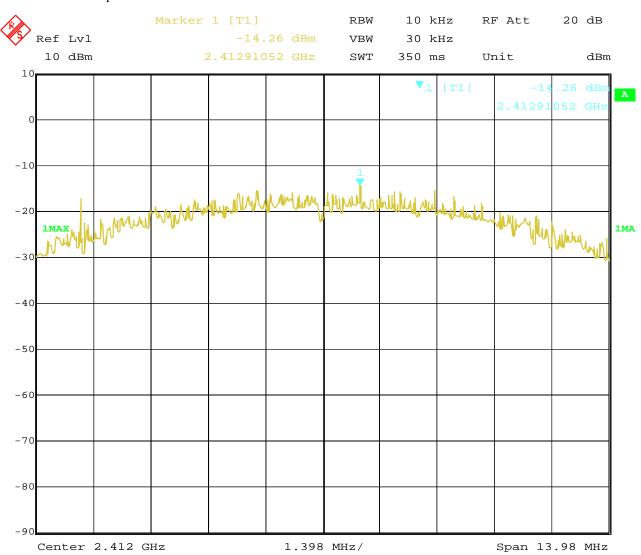
Cable loss=0.2dB

Report No.: FCC1809045-01 Page 68 of 113

Date: 2018-12-19



9.5 Photo of Power Spectral Density Measurement

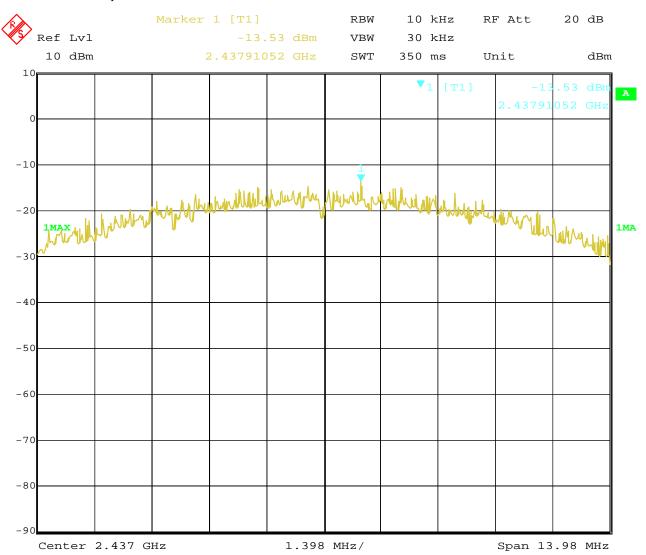


Page 69 of 113

Report No.: FCC1809045-01

Date: 2018-12-19

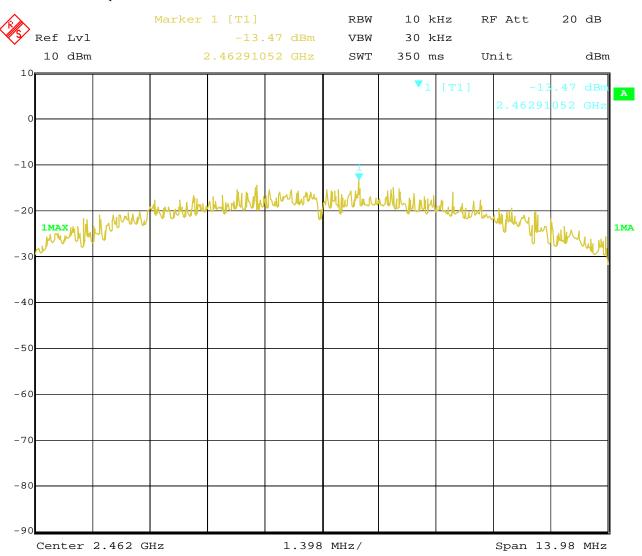




Report No.: FCC1809045-01 Page 70 of 113

Date: 2018-12-19

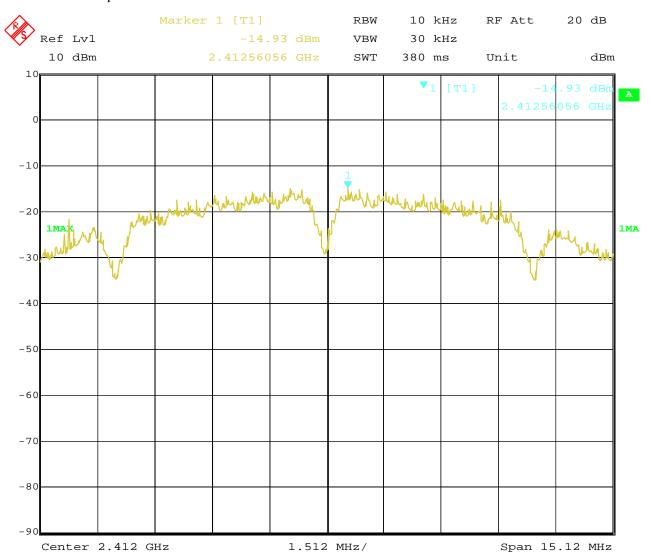




Report No.: FCC1809045-01 Page 71 of 113

Date: 2018-12-19

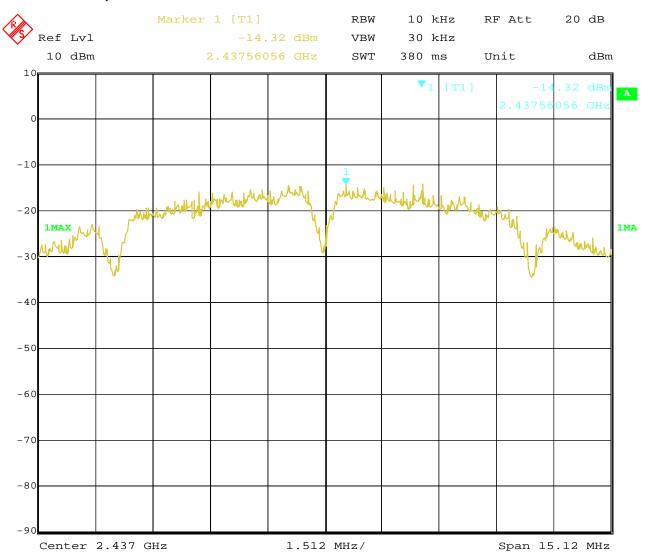




Report No.: FCC1809045-01 Page 72 of 113

Date: 2018-12-19



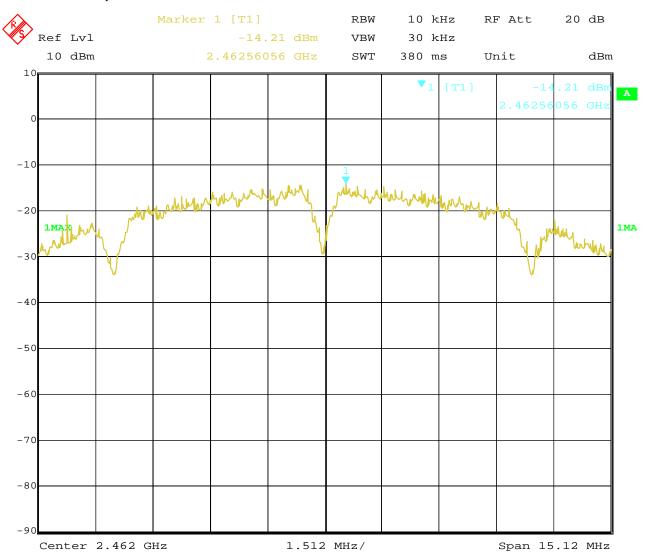


Report No.: FCC1809045-01 Page 73 of 113

Date: 2018-12-19



6. 802.11b at 1Mbps of CH11



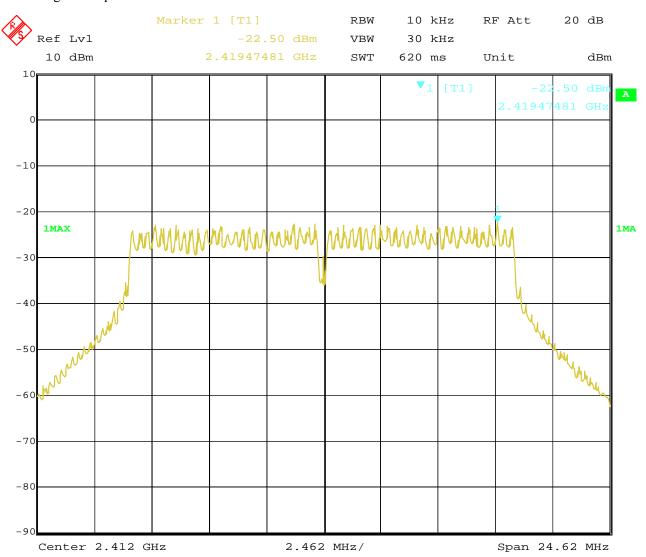
Page 74 of 113

Report No.: FCC1809045-01

Date: 2018-12-19



7. 802.11g at 6Mbps of CH1



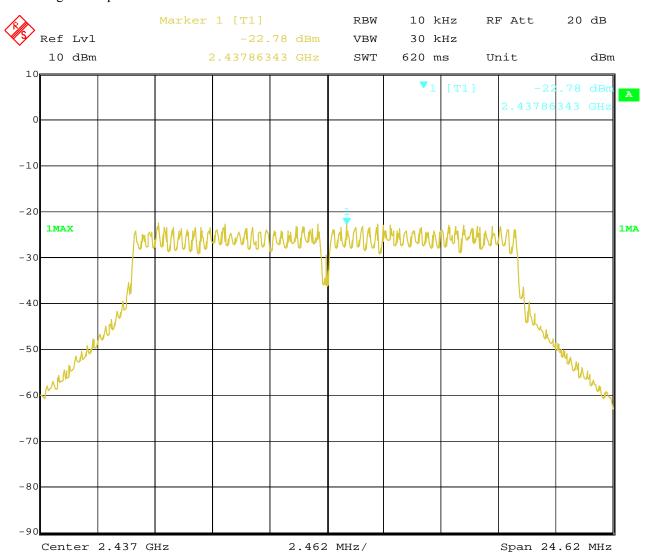
Page 75 of 113

Report No.: FCC1809045-01

Date: 2018-12-19



8. 802.11g at 6Mbps of CH6



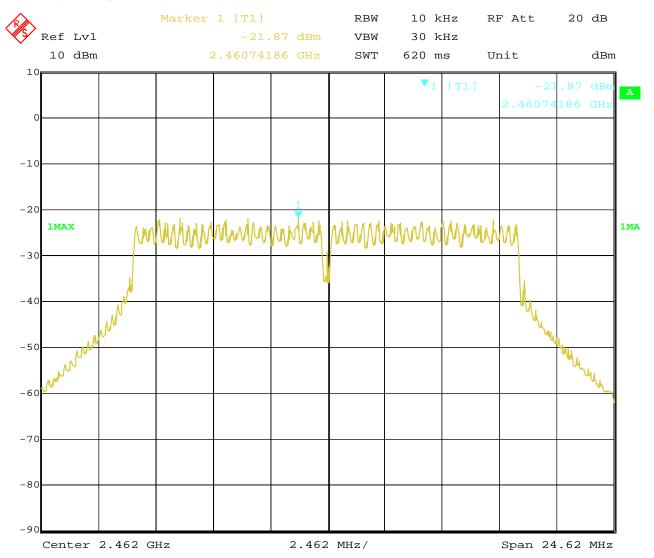
Page 76 of 113

Report No.: FCC1809045-01

Date: 2018-12-19



9. 802.11g at 6Mbps of CH11

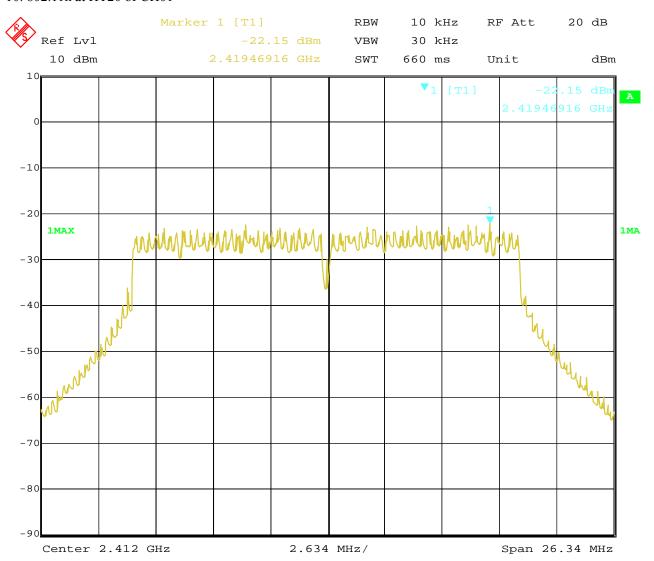


Report No.: FCC1809045-01 Page 77 of 113

Date: 2018-12-19



10. 802.11n at HT20 of CH01

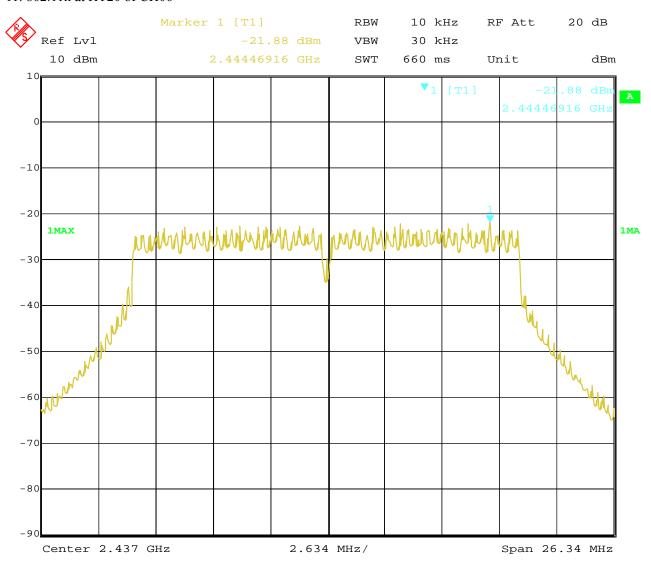


Report No.: FCC1809045-01 Page 78 of 113

Date: 2018-12-19



11. 802.11n at HT20 of CH06

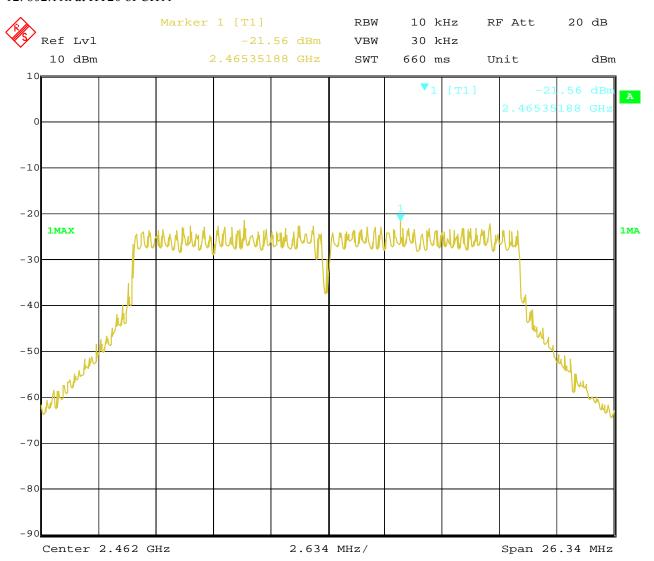


Report No.: FCC1809045-01 Page 79 of 113

Date: 2018-12-19



12. 802.11n at HT20 of CH11



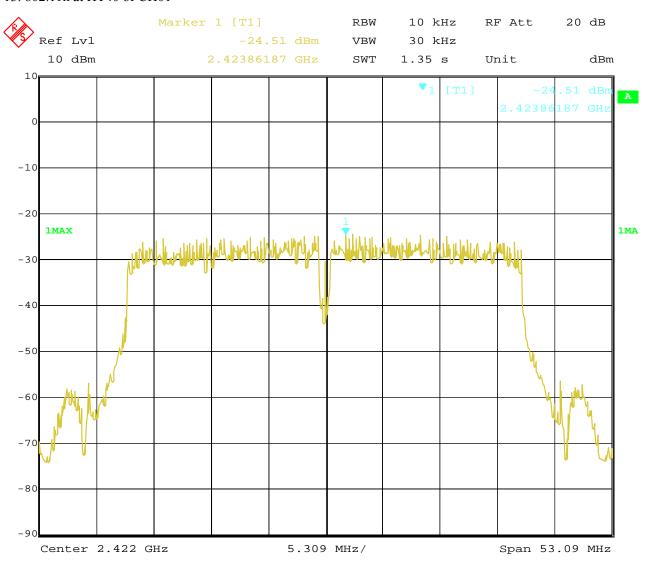
Page 80 of 113

Report No.: FCC1809045-01

Date: 2018-12-19



13. 802.11n at HT40 of CH01



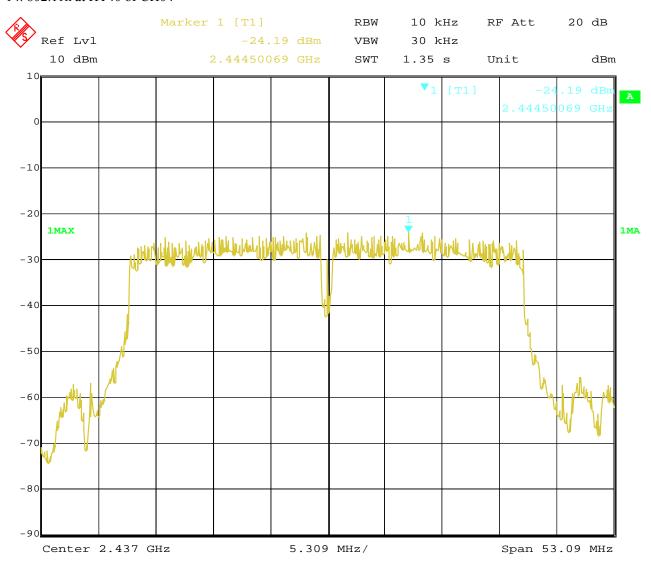
Page 81 of 113

Report No.: FCC1809045-01

Date: 2018-12-19



14. 802.11n at HT40 of CH04



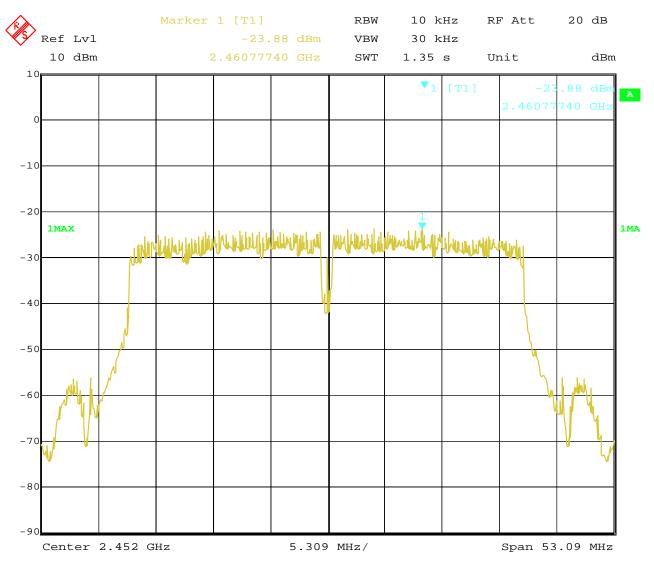
Page 82 of 113

Report No.: FCC1809045-01

Date: 2018-12-19



15. 802.11n at HT40 of CH07

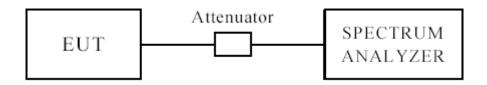


Report No.: FCC1809045-01 Page 83 of 113

Date: 2018-12-19



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 RBW=1MHz, VBW=3MHz and 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.

Page 84 of 113

Report No.: FCC1809045-01

Date: 2018-12-19



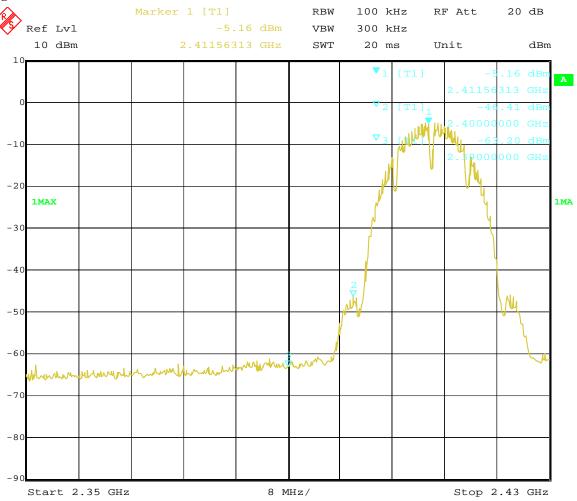
For 802.11b mode

CH01 at 1Mbps

10.4 Band-edge and Restricted band Measurement

EUT	Advertising Displayer		Model	VEG073
Mode	Keeping Transmitting		Input Voltage	DC12V
Temperature	24 deg. C,		Humidity	56% RH
Test Result:	Pass		Detector	PK
2400	PK (dBµV/m)	57.10	T ::4	$74(dB\mu V/m)$
	AV (dBμV/m)	38.93	Limit	$54(dB\mu V/m)$
2390	PK (dBµV/m)	45.19	Limit	$74(dB\mu V/m)$
	AV (dBμV/m)		Limit	54(dBµV/m)

Test Figure:



Page 85 of 113

Report No.: FCC1809045-01

Date: 2018-12-19

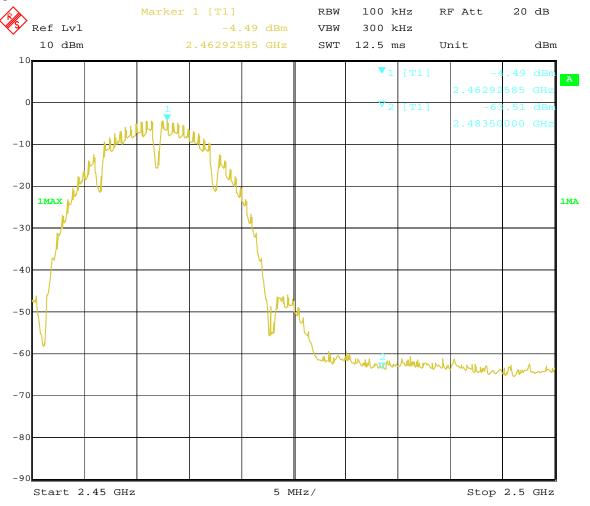


CH11 at 1Mbps

10.4 Band-edge and Restricted band Measurement

EUT	Advertising Displayer		Model	VEG073
Mode	Keeping Transmitting		Input Voltage	DC12V
Temperature	24 deg. C,		Humidity	56% RH
Test Result:	Pass		Detector	PK
2483.5	PK (dBμV/m)	45.23 Limit	T 114	74(dBμV/m)
	AV (dBμV/m)		Limit	54(dBμV/m)

Test Figure:



Page 86 of 113

Report No.: FCC1809045-01

Date: 2018-12-19



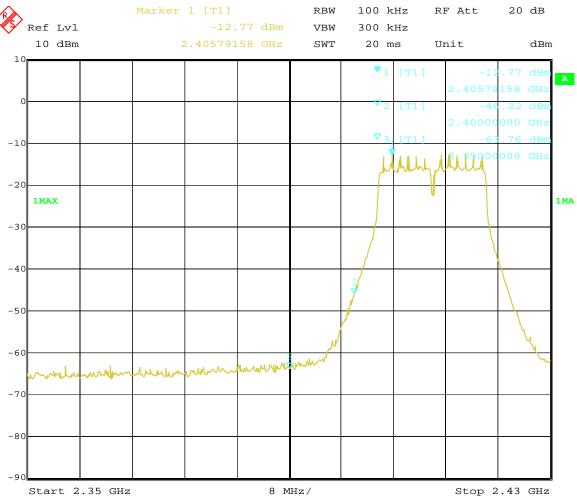
For 802.11g mode

CH01 at 6Mbps

10.4 Band-edge and Restricted band Measurement

EUT	Advertising Displayer		Model	VEG073
Mode	Keeping Transmitting		Input Voltage	DC12V
Temperature	24 deg. C,		Humidity	56% RH
Test Result:	Pass		Detector	PK
2400	PK (dBµV/m)	66.26	T ::4	$74(dB\mu V/m)$
	AV (dBμV/m)	46.40	Limit	$54(dB\mu V/m)$
2390	PK (dBµV/m)	56.76	Limit	$74(dB\mu V/m)$
	AV (dBμV/m)	38.22	Lillit	$54(dB\mu V/m)$

Test Figure:



Page 87 of 113

Report No.: FCC1809045-01

Date: 2018-12-19

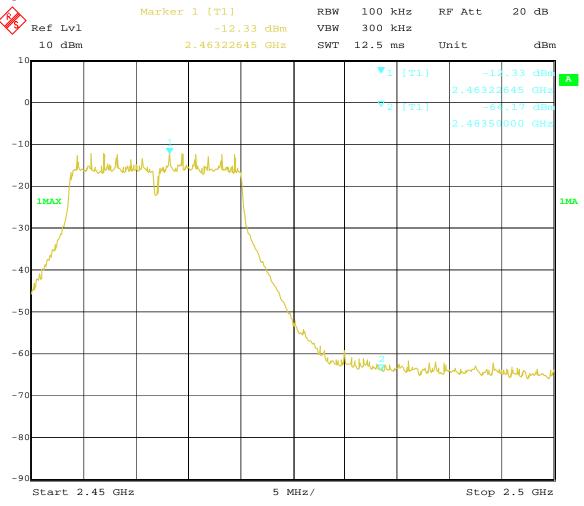


CH11 at 6Mbps

10.4 Band-edge and Restricted band Measurement

EUT	Advertising Displayer		Mod	lel	VEG073
Mode	Keeping Transmitting		Input Vo	oltage	DC12V
Temperature	24 deg. C,		Humi	dity	56% RH
Test Result:	Pass		Detec	ctor	PK
2483.5	PK (dBµV/m)	48.28	T 1 14	$74(dB\mu V/m)$ $54(dB\mu V/m)$	
	AV (dBμV/m)		Limit		

Test Figure:



Page 88 of 113

Report No.: FCC1809045-01

Date: 2018-12-19



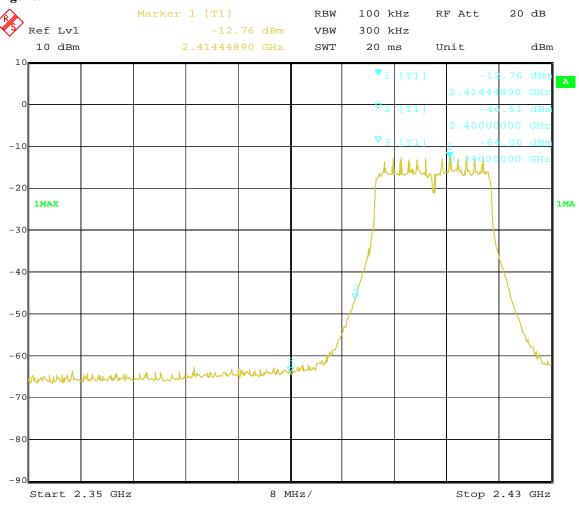
For 802.11n (HT20) mode

CH01 at msc0

10.4 Band-edge and Restricted band Measurement

EUT	Advertising Displayer		Model	VEG073
Mode	Keeping Transmitting		Input Voltage	DC12V
Temperature	24 deg. C,		Humidity	56% RH
Test Result:	Pass		Detector	PK
2400	PK (dBµV/m)	65.22	T ::4	$74(dB\mu V/m)$
	AV (dBμV/m)	46.92	Limit	54(dBμV/m)
2390	PK (dBμV/m)	48.13	Limit	74(dBμV/m)
	AV (dBμV/m)		Liffill	54(dBμV/m)

Test Figure:



Page 89 of 113

Report No.: FCC1809045-01

Date: 2018-12-19

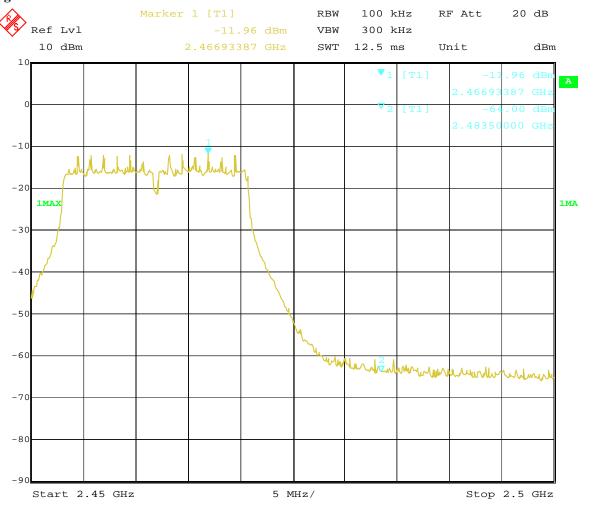


CH11 at msc0

10.4 Band-edge and Restricted band Measurement

EUT	Advertising Displayer		Model	VEG073
Mode	Keeping Transmitting		Input Voltage	DC12V
Temperature	24 deg. C,		Humidity	56% RH
Test Result:	Pass		Detector	PK
2483.5	PK (dBµV/m)	50.06	T 114	$74(dB\mu V/m)$
	AV (dBμV/m)		Limit	$54(dB\mu V/m)$

Test Figure:



Page 90 of 113

Report No.: FCC1809045-01

Date: 2018-12-19



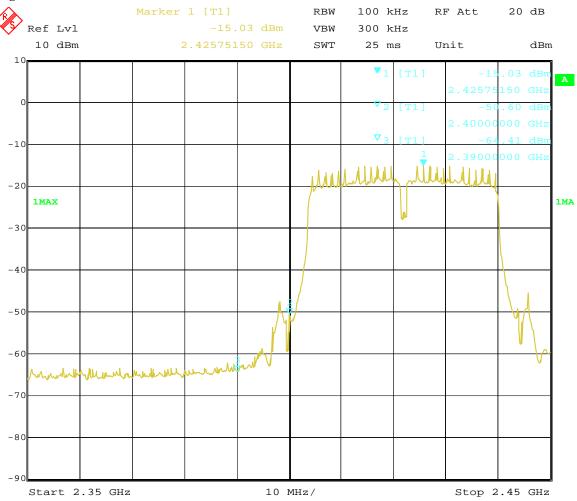
For 802.11n (HT40) mode

CH03 at msc0

10.4 Band-edge and Restricted band Measurement

EUT	Advertising Displayer		Model	VEG073
Mode	Keeping Transmitting		Input Voltage	DC12V
Temperature	24 deg. C,		Humidity	56% RH
Test Result:	Pass		Detector	PK
2400	PK (dBµV/m)	67.11	T in it	$74(dB\mu V/m)$
	AV (dBμV/m)	46.69	Limit	54(dBμV/m)
2390	PK (dBµV/m)	62.08	Limit	74(dBμV/m)
	AV (dBμV/m)	43.82	Limit	54(dBμV/m)

Test Figure:



Page 91 of 113

Report No.: FCC1809045-01

Date: 2018-12-19

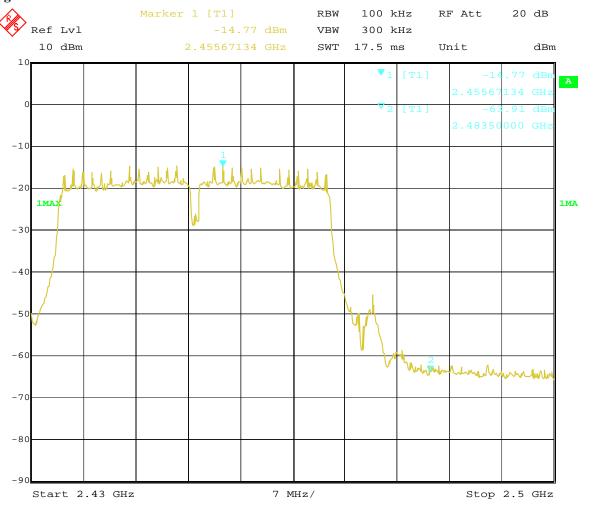


CH09 at msc0

10.4 Band-edge and Restricted band Measurement

EUT	Advertising Displayer		Model	VEG073
Mode	Keeping Transmitting		Input Voltage	DC12V
Temperature	24 deg. C,		Humidity	56% RH
Test Result:	Pass		Detector	PK
2483.5	PK (dBμV/m)	65.87	T 114	$74(dB\mu V/m)$
	AV (dBμV/m)	46.02	Limit	54(dBµV/m)

Test Figure:



Report No.: FCC1809045-01

Date: 2018-12-19



Page 92 of 113

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.

Report No.: FCC1809045-01 Page 93 of 113

Date: 2018-12-19



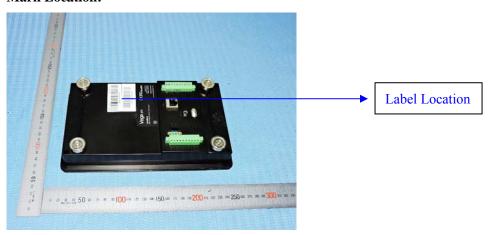
12.0 FCC ID Label

FCC ID: 2AACS-VEG073-101

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:



Page 94 of 113

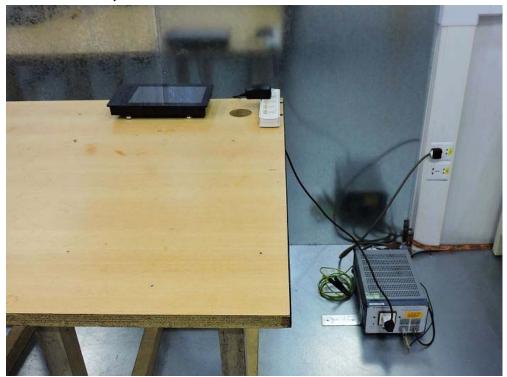
Report No.: FCC1809045-01

Date: 2018-12-19



13.0 Photo of testing

Conducted Emission Test Setup:



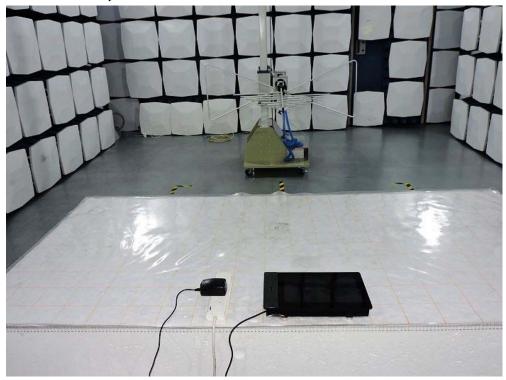
Page 95 of 113

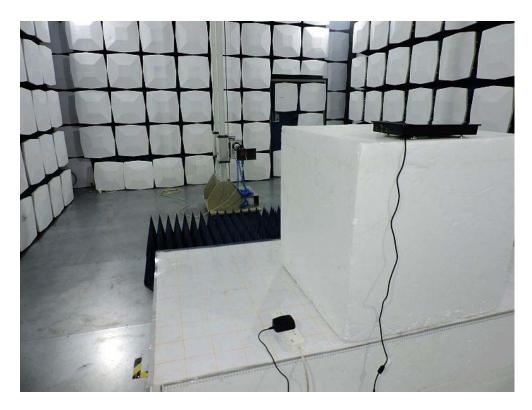
Report No.: FCC1809045-01

Date: 2018-12-19



Radiated Emission Test Setup:





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Page 96 of 113

Report No.: FCC1809045-01

Date: 2018-12-19



Photographs – EUT

Outside View -VEG101





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Page 97 of 113

Report No.: FCC1809045-01

Date: 2018-12-19



Outside View -VEG101





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Page 98 of 113

Report No.: FCC1809045-01

Date: 2018-12-19



Outside View -VEG101





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Page 99 of 113

Report No.: FCC1809045-01

Date: 2018-12-19



Outside View -VEG073





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Page 100 of 113

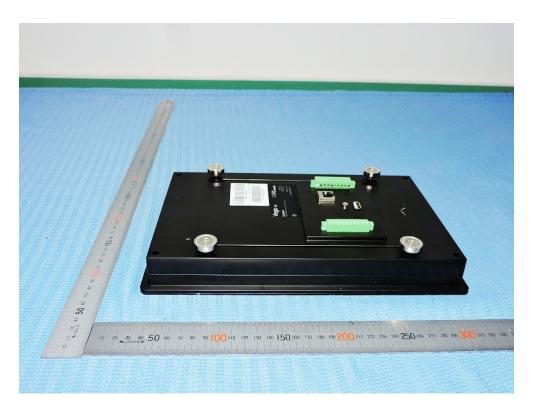
Report No.: FCC1809045-01

Date: 2018-12-19



Outside View -VEG073





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