Shenzhen Certification Technology Service Co., Ltd
2F, Building B, East Area of Nanchang Second Industrial Zone, Gushu 2nd Road, Bao'an District, Shenzhen 518126, P.R. China.

TEST REPORT

FCC ID: 2ABCS-A6102

Applicant : Truly Industrial (ShanWei) Ltd

Address : Truly Industrial Area, Shanwei City, Guangdong Province, People's Republic of China

Equipment under Test (EUT):

Name : 3D PAD
Model : A6102, A6100, N103D

Standards : FCC PART 15, SUBPART C : 2013 (Section 15.247)

Report No. : STI130621090-2

Date of Test : November 10- December 2, 2013

Date of Issue : December 3, 2013

Test Result :	**PASS ***

* In the configuration tested, the EUT complied with the standards specified above

Authorized Signature

(Mark Zhu)
General Manager

The manufacture should ensure that all the products in series production are in conformity with the product sample detailed in this report.

If the product in this report is used in any configuration other than that detailed in the report, the manufacturer must ensure the new system complies with all relevant standards. Any mention of Shenzhen Certification Technology Service Co., Ltd. Or test done by Shenzhen Certification Technology Service Co., Ltd. Approvals in connection with, distribution or use of the product described in this report must be approved by Shenzhen Certification Technology Service Co., Ltd. Approvals in writing.

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1 General Information

1.1 Description of Device (EUT)

Trade Name	:	TRULY
EUT	:	3D PAD
Model No.		A6102, A6100, N103D
DIFF.	:	All model's the function, software and electric circuit are the same, only with a model named different. The test model: A6102.
Antenna Type	:	NFC: Integrated loop antenna, PK Gain: 0dBi PIFA Antenna, max gain 1 dBi for WIFI, PIFA Antenna, max gain 1 dBi for BT. PIFA Antenna, max gain 1.5 dBi for GSM PIFA Antenna, max gain 1.5 dBi for WCDMA NFC:13.56MHz
Operation Frequency	:	IEEE 802.11a: 5745MHz-5825MHz IEEE 802.11b: 2412MHz-2462MHz IEEE 802.11g: 2412MHz-2462MHz IEEE 802.11n HT20: 2412-2462MHz, IEEE 802.11n HT40:2422-2452MHz Bluetooth 4.0: 2402-2480MHz Bluetooth 2.1+EDR: 2402-2480MHz GSM 850: 824.2MHz—848.8MHz GSM 1900: 1850.2MHz—1909.8MHz WCDMA BAND II: 1852.4MHz—1907.6MHz WCDMA BAND V: 826.4MHz—846.6MHz
Modulation type	:	IEEE 802.11b: DSSS(CCK,DQPSK,DBPSK), IEEE 802.11g: OFDM(64QAM, 16QAM, QPSK, BPSK), IEEE 802.11n :OFDM(64QAM, 16QAM, QPSK, BPSK), Bluetooth 2.1+EDR: GFSK, π/4 DQPSK, 8-DPSK, Bluetooth 4.0: GFSK, GSM: GMSK, WCDMA: QPSK
Power Supply	:	DC 3.7V Supply by battery DC 5V from adapter with AC 120V/60Hz adapter
Adapter		Manufacturer: Ktec Model No.:KAS29A0500250D5
Applicant	:	Truly Industrial (ShanWei) Ltd
Address	:	Truly Industrial Area, Shanwei City, Guangdong Province, People's Republic of China
Manufacturer	:	Truly Industrial (ShanWei) Ltd
Address	:	Truly Industrial Area, Shanwei City, Guangdong Province, People's Republic of China

Note: This report only test for WIFI, for other radio test see other test report.

1.2 Description of Test Facility

Shenzhen Certification Technology Service Co., Ltd.
2F, Building B, East Area of Nanchang Second Industrial Zone,
Gushu 2nd Road, Bao'an District, Shenzhen 518126, P.R. China
FCC Registered No.:197647
IC Registered No.:8528B

2 EMC Equipment List

Equipment	Manufacture	Model No.	Serial No.	Last cal.	Cal Interval
3m Semi-Anechoic	ETS-LINDGREN	N/A	SEL0017	Nov. 16, 13	1Year
Spectrum analyzer	Agilent	E4443A	MY46185649	Oct. 30, 13	1Year
Receiver	R&S	ESCI	100492	Oct. 30, 13	1Year
Receiver	R&S	ESCI	101202	Oct. 30, 13	1Year
Bilog Antenna	Sunol	JB3	A121206	Mar.12, 13	1Year
Horn Antenna	EMCO	3115	640201028-06	Mar.12, 13	1Year
ETS Horn Antenna	ETS	3160	SEL0076	Mar.12, 13	1Year
Active Loop Antenna	Beijing Daze	ZN30900A	SEL0097	Mar.12, 13	1Year
L.I.S.N.	SCHWARZBECK	NSLK8126	8126466	Oct. 30, 13	1Year
Cable	Resenberger	N/A	No.1	Oct. 30, 13	1Year
Cable	SCHWARZBECK	N/A	No.2	Oct. 30, 13	1Year
Cable	SCHWARZBECK	N/A	No.3	Oct. 30, 13	1Year
Power Meter	Anritsu	ML2487A	6K00001491	Oct. 30, 13	1Year
Power sensor	Anritsu	ML2491A	32516	Oct. 30, 13	1Year
Pre-amplifier	SCHWARZBECK	BBV9743	9743-019	Oct. 30, 13	1Year
Pre-amplifier	Quietek	AP-180C	CHM-0602012	Oct. 30, 13	1Year

3 Test Procedure

POWER LINE CONDUCTED INTERFERENCE: The test procedure used was ANSI Standard C63.4-2003 using a 50 u H LISN. Both Lines were observed. The bandwidth of the receiver was 10kHz with an appropriate sweep speed. The ambient temperature of the EUT was 25℃ with a humidity of 58%.

RADIATION INTERFERENCE: The test procedure used was ANSI Standard C63.4-2003 using a ANRITSU spectrum analyzer with a pre-selector. The analyzer was calibrated in dB above a micro volt at the output of the antenna. The resolution bandwidth was 100kHz and the video bandwidth was 300 kHz up to 1 GHz and 1 MHz with a video BW of 3MHz above 1 GHz. The ambient temperature of the EUT was 25℃ with a humidity of 58%.

FORMULA OF CONVERSION FACTORS: The Field Strength at 3m was established by adding the meter reading of the spectrum analyzer (which is set to read in units of dBuV) to the antenna correction factor supplied by the antenna manufacturer and cable loss. The antenna correction factors and cable loss are stated in terms of dB. The gain of the Pre-selector was accounted for in the Spectrum Analyzer Meter Reading.
Example:
Freq (MHz) METER READING + ACF + CABLE = FS
33.20 dBuV + 10.36 dB + 0.9 dB= 44.46 dBuV/m @ 3m
ANSI STANDARD C63.4-2003 10.1.7 MEASUREMENT PROCEDURES: The EUT was placed on a table 80 cm high and with dimensions of 1m by 1.5m. The EUT was placed in the center of the table (1.5m side). The table used for radiated measurements is capable of continuous rotation. When an emission was found, the table was rotated to produce the maximum signal strength. At this point, the antenna was raised and lowered from 1m to 4m. The antenna was placed in both the horizontal and vertical planes. The situation was similar for the conducted measurement except that the table did not rotate. The EUT was setup as described in ANSI Standard C63.4-2003 10.1.7 with the EUT 40 cm from the vertical ground wall.

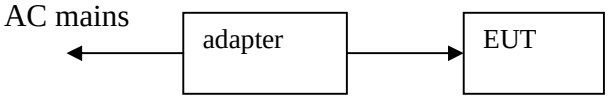
4 Summary of Measurement

4.1 Summary of test result

Test Item	Test Requirement	Standards Paragraph	Result
Spurious Emission	FCC PART 15:2013	Section 15.247&15.209	Compliance
Conduction Emission	FCC PART 15:2013	Section 15.207	Compliance
Bandwidth Test	FCC PART 15:2013	Section 15.247	Compliance
Peak Power	FCC PART 15:2013	Section 15.247	Compliance
Power Density	FCC PART 15:2013	Section 15.247	Compliance
Band Edge	FCC PART 15:2013	Section 15.247	Compliance
Antenna Requirement	FCC PART 15:2013	Section 15.203	Compliance

Note: The EUT has been tested as an independent unit. And Continual Transmitting in maximum power (The adapter be used during Test)

4.2 Test connection



4.3 Assistant equipment used for test

Description	:	Adapter
Manufacturer	:	Ktec
Model No.	:	KAS29A0500250D5

4.4 Test mode

Tested mode, channel, and data rate information			
Mode	data rate (Mpbs)(see Note)	Channel	Frequency (MHz)
IEEE 802.11a	6	Low :CH149	5745
	6	Middle:CH157	5785
	6	High:CH165	5825
IEEE 802.11b	1	Low :CH1	2412
	1	Middle: CH6	2437
	1	High: CH11	2462
IEEE 802.11g	6	Low :CH1	2412
	6	Middle: CH6	2437
	6	High: CH11	2462
IEEE 802.11 n/HT20	6.5	Low :CH1	2412
	6.5	Middle: CH6	2437
	6.5	High: CH11	2462
IEEE 802.11 n/HT40	13.5	Low :CH1	2422
	13.5	Middle:CH4	2437
	13.5	High:CH7	2452
Note: According exploratory test, EUT will have maximum output power in those data rate. so those data rate were used for all test.			

4.5 Channel list

For IEEE 802.11b/g and IEEE 802.11n/HT20					
Channel	Frequency (MHz)	Channel	Frequency (MHz)	Channel	Frequency (MHz)
CH1	2412	CH5	2432	CH9	2452
CH2	2417	CH6	2437	CH10	2457
CH3	2422	CH7	2442	CH11	2462
CH4	2427	CH8	2447		

For IEEE 802.11n/HT40					
Channel	Frequency (MHz)	Channel	Frequency (MHz)	Channel	Frequency (MHz)
CH1	2412	CH5	2432	CH9	2452
CH2	2417	CH6	2437		
CH3	2422	CH7	2442		
CH4	2427	CH8	2447		

For IEEE 802.11 a with 5.8G					
Channel	Frequency (MHz)	Channel	Frequency (MHz)	Channel	Frequency (MHz)
CH149	5745	CH157	5785	CH165	5825
CH153	5765	CH161	5805		

4.6 Test Conditions

Temperature range	21-25℃
Humidity range	40-75%
Pressure range	86-106kPa

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

Item	MU	Remark
Uncertainty for Power point Conducted Emissions Test	2.42dB	
Uncertainty for Radiation Emission test in 3m chamber (below 30MHz)	2.13 dB	Polarize: V
	2.57dB	Polarize: H
Uncertainty for Radiation Emission test in 3m chamber (30MHz to 1GHz)	3.54dB	Polarize: V
	4.1dB	Polarize: H
Uncertainty for Radiation Emission test in 3m chamber (1GHz to 25GHz)	2.08dB	Polarize: H
	2.56dB	Polarize: V
Uncertainty for radio frequency	1×10-9	
Uncertainty for conducted RF Power	0.65dB	
Uncertainty for temperature	0.2℃	
Uncertainty for humidity	1%	
Uncertainty for DC and low frequency voltages	0.06%	

5 Spurious Emission

5.1 Radiation Emission

5.1.1 Radiation Emission Limits(15.209)

Frequencies (MHz)	Field Strength (micorvolts/meter)	Measurement Distance (meters)
0.009~0.490	2400/F(KHz)	300
0.490~1.705	24000/F(KHz)	30
1.705~30.0	30	30
30~88	100	3
88~216	150	3
216~960	200	3
Above 960	500	3

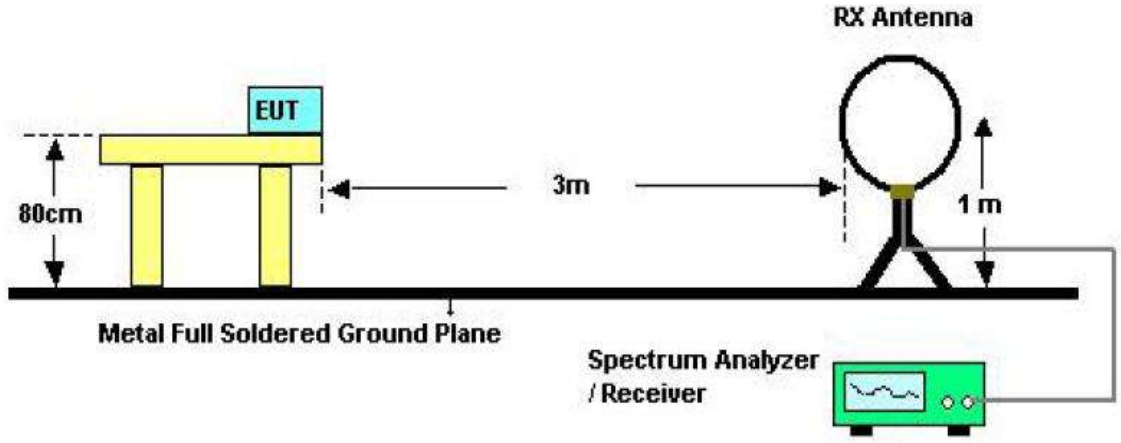
Harmonic emissions limits comply with below 54 dBuV/m at 3m. Other emissions radiated outside of the specified frequency bands, except for harmonics, shall be attenuated by at least 50 dB below the level of the fundamental or comply with the radiated emissions limits specified in section 15.209(a) limit in the table below has to be followed.

NOTE:

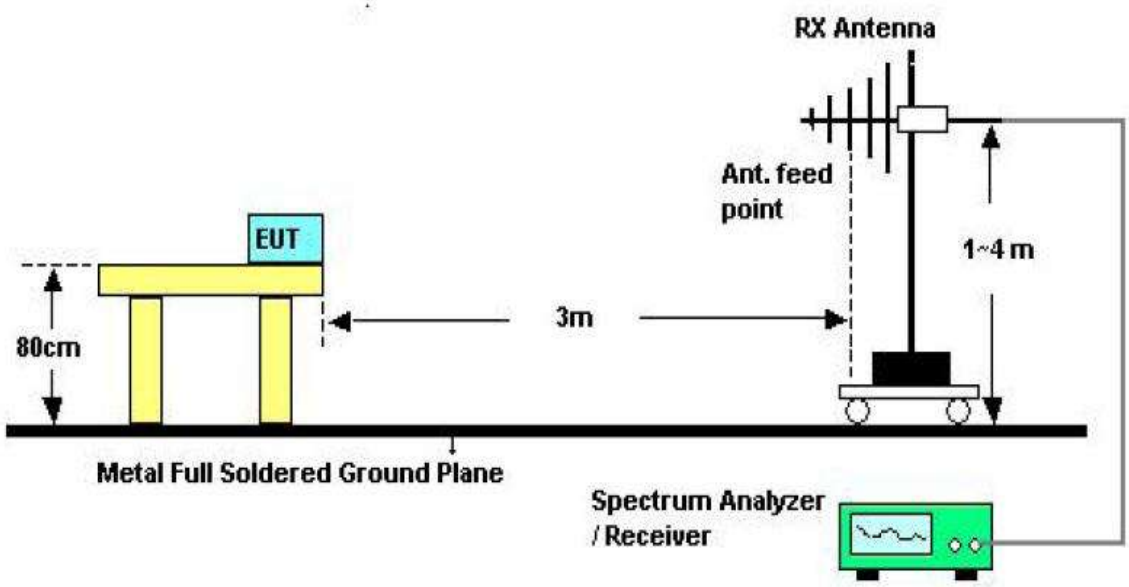
a) The tighter limit applies at the band edges.
b) Emission Level(dB uV/m)=20log Emission Level(Uv/m)

5.1.2 Test Setup

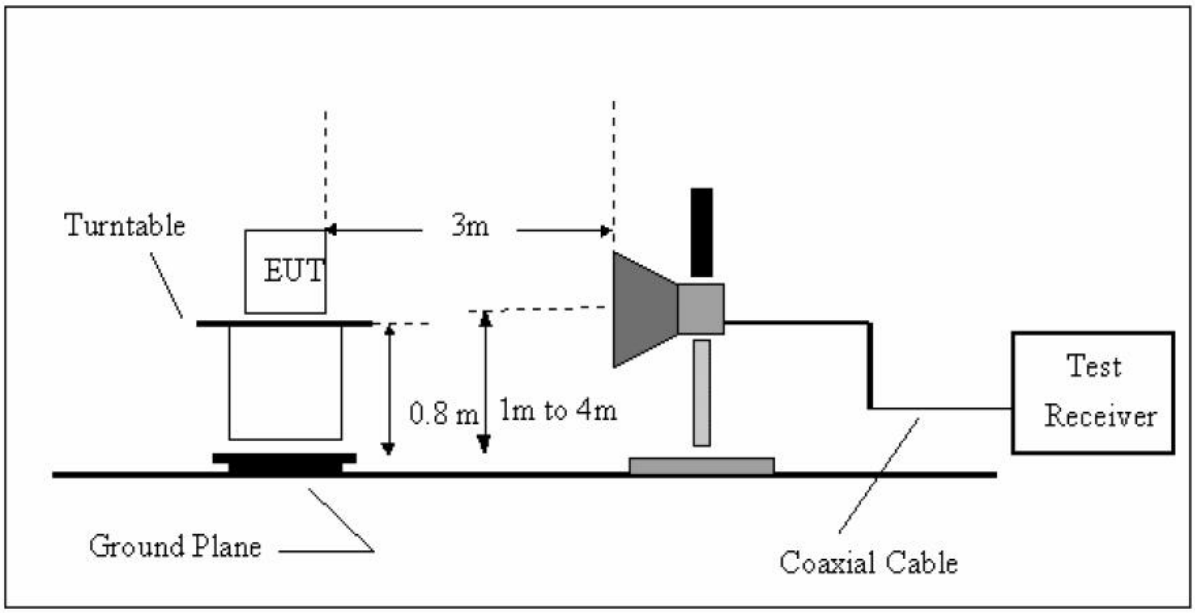
See the next page



Below 30MHz Test Setup



Above 30MHz Test Setup



Above 1GHz Test Setup

5.1.3 Test Procedure

a) The measuring distance of 3m shall be used for measurements at frequency up to 1GHz and above 1GHz, The EUT was placed on a rotating 0.8 m high above ground, The table was rotated 360 degrees to determine the position of the highest radiation
b) The Test antenna shall vary between 1m and 4m,Both Horizontal and Vertical antenna are set of make measurement.
c) The initial step in collecting conducted emission data is a spectrum analyzer Peak detector mode pre-scanning the measurement frequency range. Significant Peaks are then marked. and then Qusia Peak Detector mode premeasured
d) If Peak value comply with QP limit Below 1GHz.The EUT deemed to comply with QP limit. But the Peak value and average value both need to comply with applicable limit above 1GHz.
e) For the actual test configuration, please see the test setup photo.

5.1.4 Test Equipment Setting For emission test Result

9KHz~150KHz	RBW 200Hz	VBW1KHz
150KHz~30MHz	RBW 9KHz	VBW 30KHz
30MHZ~1GHz	RBW 120KHz	VBW 300KHz
Above 1GHz	RBW 1MHz	VBW 3MHz

5.1.5 Test Condition

Continual Transmitting in maximum power.

5.1.6 Test Result

We have scanned the 9KHz from 25GHz to the EUT.

Detailed information please see the following page.

From 9KHz to 30MHz: Conclusion: PASS

Note: The amplitude of spurious emissions which are attenuated by more than 20dB below the permissible value has no need to be reported.

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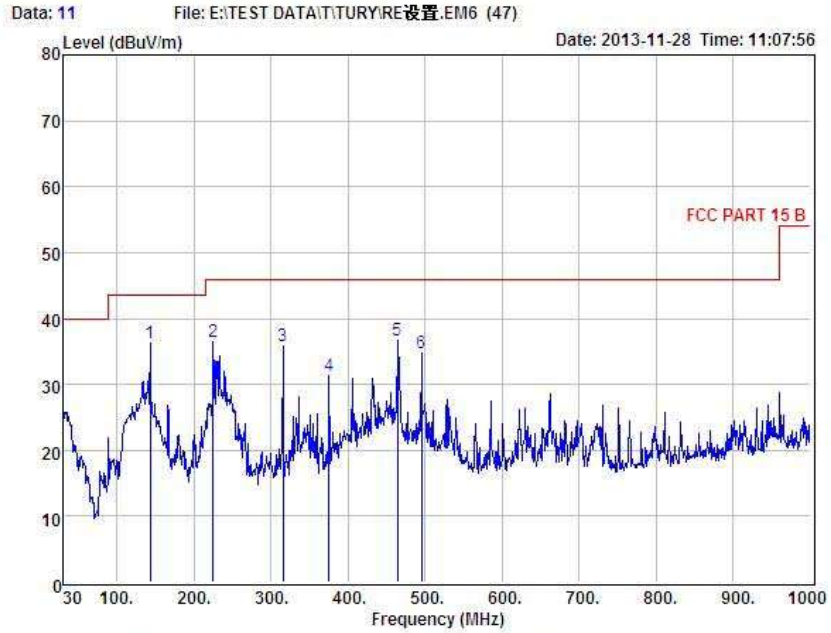

Condition : FCC PART 15 B 3m POL: HORIZONTAL
EUT : 3D PAD
Model No : A6102
Test Mode : Link mode
Power : DC 5V From Adapter AC 120V/60Hz
Test Engineer : Simple
Remark :
Temp : 24
Hum : 56%

Item	Freq	Read Level	Antenna Factor	Preamp Factor	Cable Loss	Level	Limit	Margin	Remark
	MHz	dBuV	dB	dB	dB	dBuV	dBuV	dBuV	
1	143.49	53.73	13.64	31.51	0.38	36.24	43.50	-7.26	QP
2	224.97	56.12	10.98	31.17	0.55	36.48	46.00	-9.52	QP
3	315.18	53.28	13.19	31.30	0.57	35.74	46.00	-10.26	QP
4	375.32	46.85	14.32	30.90	1.01	31.28	46.00	-14.72	QP
5	464.56	50.09	16.11	30.62	1.00	36.58	46.00	-9.42	QP
6	495.60	47.75	16.46	30.62	1.07	34.66	46.00	-11.34	QP

Remark: Level = Read Level + Antenna Factor - Preamp Factor + Cable Loss

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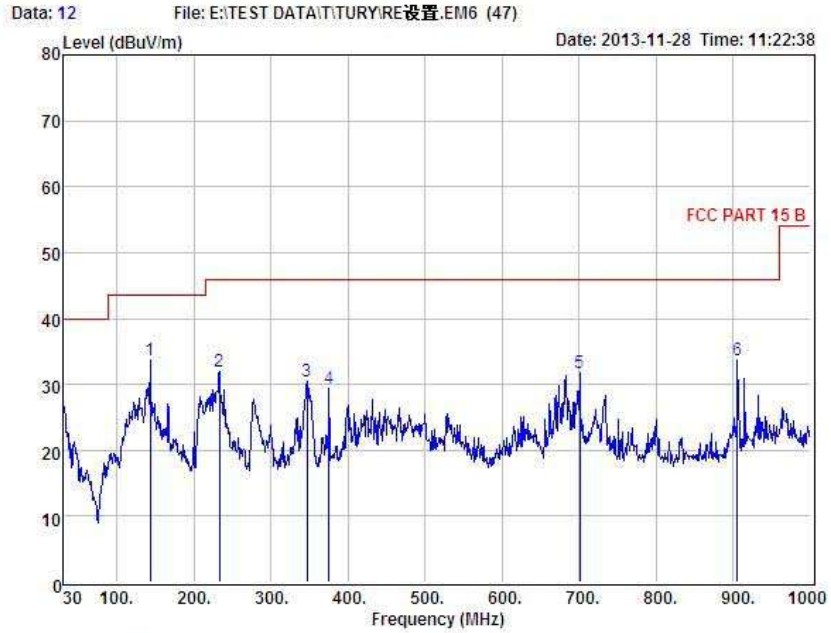

Condition : FCC PART 15 B 3m POL: VERTICAL
EUT : 3D PAD
Model No : A6102
Test Mode : Link mode
Power : DC 5V From Adapter AC 120V/60Hz
Test Engineer : Simple
Remark :
Temp : 24
Hum : 56%

Item	Freq	Read Level	Antenna Factor	Preamp Factor	Cable Loss	Level	Limit	Margin	Remark
	MHz	dBuV	dB	dB	dB	dBuV	dBuV	dBuV	
1	143.49	51.18	13.64	31.51	0.38	33.69	43.50	-9.81	QP
2	232.73	51.06	11.26	31.02	0.56	31.86	46.00	-14.14	QP
3	347.19	46.62	13.77	30.66	0.69	30.42	46.00	-15.58	QP
4	375.32	45.01	14.32	30.90	1.01	29.44	46.00	-16.56	QP
5	700.27	41.47	19.67	30.07	0.71	31.78	46.00	-14.22	QP
6	904.94	39.70	21.72	29.11	1.44	33.75	46.00	-12.25	QP

Remark: Level = Read Level + Antenna Factor - Preamp Factor + Cable Loss

IEEE 802.11a

EUT	3D PAD	Model Name	A6102
Temperature	26°C	Relative Humidity	56%
Pressure	960hPa	Test voltage	DC 5V From adapter with AC 120V/60Hz
Test Mode	TX Low		

Freq. (MHz)	Ant. Pol H/V	Peak Reading (dBuV)	AV Reading (dBuV)	Ant. / CL CF (dB)	Actual Fs		Peak Limit (dBuV/m)	AV Limit (dBuV/m)	Margin (dB)	Remark
					Peak (dBuV/m)	AV (dBuV/m)				
11490	V	38.80	---	2.36	41.16	---	74.00	54.00	-12.84	Peak
17235	V	38.90	---	4.52	43.42	---	74.00	54.00	-10.58	Peak
22980	V	39.18	---	6.14	45.32	---	74.00	54.00	-8.68	Peak
N/A										
N/A										

EUT	3D PAD	Model Name	A6102
Temperature	26°C	Relative Humidity	56%
Pressure	960hPa	Test voltage	DC 5V From adapter with AC 120V/60Hz
Test Mode	TX Low		

Freq. (MHz)	Ant. Pol H/V	Peak Reading (dBuV)	AV Reading (dBuV)	Ant. / CL CF (dB)	Actual Fs		Peak Limit (dBuV/m)	AV Limit (dBuV/m)	Margin (dB)	Remark
					Peak (dBuV/m)	AV (dBuV/m)				
11490	H	38.12	---	2.36	40.48	---	74.00	54.00	-13.52	Peak
17235	H	38.40	---	4.52	42.92	---	74.00	54.00	-11.08	Peak
22980	H	38.39	---	6.14	44.53	---	74.00	54.00	-9.47	Peak
N/A										
N/A										

Notes: AV Means AV detector test data, Peak Means Peak detector test data.
Emissions attenuated more than 20 dB below the permissible value are not reported.

EUT	3D PAD	Model Name	A6102
Temperature	26°C	Relative Humidity	56%
Pressure	960hPa	Test voltage	DC 5V From adapter with AC 120V/60Hz
Test Mode	TX Mid		

Freq. (MHz)	Ant. Pol H/V	Peak Reading (dBuV)	AV Reading (dBuV)	Ant. / CL CF (dB)	Actual Fs		Peak Limit (dBuV/m)	AV Limit (dBuV/m)	Margin (dB)	Remark
					Peak (dBuV/m)	AV (dBuV/m)				
11570	V	38.83	---	2.36	41.19	---	74.00	54.00	-12.81	Peak
17355	V	37.77	---	4.52	42.29	---	74.00	54.00	-11.71	Peak
23140	V	39.29	---	6.14	45.43	---	74.00	54.00	-8.57	Peak
N/A	V									

EUT	3D PAD	Model Name	A6102
Temperature	26°C	Relative Humidity	56%
Pressure	960hPa	Test voltage	DC 5V From adapter with AC 120V/60Hz
Test Mode	TX Mid		

Freq. (MHz)	Ant. Pol H/V	Peak Reading (dBuV)	AV Reading (dBuV)	Ant. / CL CF (dB)	Actual Fs		Peak Limit (dBuV/m)	AV Limit (dBuV/m)	Margin (dB)	Remark
					Peak (dBuV/m)	AV (dBuV/m)				
11570	H	38.43	---	2.36	40.79	---	74.00	54.00	-13.21	Peak
17355	H	38.90	---	4.52	43.42	---	74.00	54.00	-10.58	Peak
23140	H	38.29	---	6.14	44.43	---	74.00	54.00	-9.57	Peak
N/A										

Notes: AV Means AV detector test data, Peak Means Peak detector test data.
Emissions attenuated more than 20 dB below the permissible value are not reported.

EUT	3D PAD	Model Name	A6102
Temperature	26°C	Relative Humidity	56%
Pressure	960hPa	Test voltage	DC 5V From adapter with AC 120V/60Hz
Test Mode	TX High		

Freq. (MHz)	Ant. Pol H/V	Peak Reading (dBuV)	AV Reading (dBuV)	Ant. / CL CF (dB)	Actual Fs		Peak Limit (dBuV/m)	AV Limit (dBuV/m)	Margin (dB)	Remark
					Peak (dBuV/m)	AV (dBuV/m)				
11650	V	39.49	---	2.36	41.85	---	74.00	54.00	-12.15	Peak
17475	V	38.94	---	4.52	43.46	---	74.00	54.00	-10.54	Peak
23300	V	39.61	---	6.14	45.75	---	74.00	54.00	-8.25	Peak
N/A										

EUT	3D PAD	Model Name	A6102
Temperature	26°C	Relative Humidity	56%
Pressure	960hPa	Test voltage	DC 5V From adapter with AC 120V/60Hz
Test Mode	TX High		

Freq. (MHz)	Ant. Pol H/V	Peak Reading (dBuV)	AV Reading (dBuV)	Ant. / CL CF (dB)	Actual Fs		Peak Limit (dBuV/m)	AV Limit (dBuV/m)	Margin (dB)	Remark
					Peak (dBuV/m)	AV (dBuV/m)				
11650	H	38.32	---	2.36	40.68	---	74.00	54.00	-13.32	Peak
17475	H	37.72	---	4.52	42.24	---	74.00	54.00	-11.76	Peak
23300	H	39.27	---	6.14	45.41	---	74.00	54.00	-8.59	Peak
N/A										

Notes: AV Means AV detector test data, Peak Means Peak detector test data.
Emissions attenuated more than 20 dB below the permissible value are not reported.

IEEE 802.11b

EUT	3D PAD	Model Name	A6102
Temperature	26°C	Relative Humidity	56%
Pressure	960hPa	Test voltage	DC 5V From adapter with AC 120V/60Hz
Test Mode	TX Low		

Freq. (MHz)	Ant. Pol H/V	Peak Reading (dBuV)	AV Reading (dBuV)	Ant. / CL CF (dB)	Actual Fs		Peak Limit (dBuV/m)	AV Limit (dBuV/m)	Margin (dB)	Remark
					Peak (dBuV/m)	AV (dBuV/m)				
1120	V	48.72	---	-11.24	37.48	---	74.00	54.00	-16.52	Peak
1745	V	47.82	---	-9.53	38.29	---	74.00	54.00	-15.71	Peak
2289	V	48.59	---	-8.07	40.52	---	74.00	54.00	-13.48	Peak
4824	V	40.89	---	0.64	41.53	---	74.00	54.00	-12.47	Peak
N/A										

EUT	3D PAD	Model Name	A6102
Temperature	26°C	Relative Humidity	56%
Pressure	960hPa	Test voltage	DC 5V From adapter with AC 120V/60Hz
Test Mode	TX Low		

Freq. (MHz)	Ant. Pol H/V	Peak Reading (dBuV)	AV Reading (dBuV)	Ant. / CL CF (dB)	Actual Fs		Peak Limit (dBuV/m)	AV Limit (dBuV/m)	Margin (dB)	Remark
					Peak (dBuV/m)	AV (dBuV/m)				
1295	H	49.50	---	-10.96	38.54	---	74.00	54.00	-15.46	Peak
1932	H	47.88	---	-8.86	39.02	---	74.00	54.00	-14.98	Peak
2913	H	47.16	---	-5.95	41.21	---	74.00	54.00	-12.79	Peak
4824	H	41.02	---	0.64	41.66	---	74.00	54.00	-12.34	Peak
N/A										

Notes: AV Means AV detector test data, Peak Means Peak detector test data.
Emissions attenuated more than 20 dB below the permissible value are not reported.

EUT	3D PAD	Model Name	A6102
Temperature	26°C	Relative Humidity	56%
Pressure	960hPa	Test voltage	DC 5V From adapter with AC 120V/60Hz
Test Mode	TX Mid		

Freq. (MHz)	Ant. Pol H/V	Peak Reading (dBuV)	AV Reading (dBuV)	Ant. / CL CF (dB)	Actual Fs		Peak Limit (dBuV/m)	AV Limit (dBuV/m)	Margin (dB)	Remark
					Peak (dBuV/m)	AV (dBuV/m)				
1289	V	48.92	---	-10.96	37.96	---	74.00	54.00	-16.04	Peak
2042	V	47.32	---	-8.58	38.74	---	74.00	54.00	-15.26	Peak
2953	V	46.10	---	-5.86	40.24	---	74.00	54.00	-13.76	Peak
4874	V	41.39	---	0.76	42.15	---	74.00	54.00	- 11.85	Peak

EUT	3D PAD	Model Name	A6102
Temperature	26°C	Relative Humidity	56%
Pressure	960hPa	Test voltage	DC 5V From adapter with AC 120V/60Hz
Test Mode	TX Mid		

Freq. (MHz)	Ant. Pol H/V	Peak Reading (dBuV)	AV Reading (dBuV)	Ant. / CL CF (dB)	Actual Fs		Peak Limit (dBuV/m)	AV Limit (dBuV/m)	Margin (dB)	Remark
					Peak (dBuV/m)	AV (dBuV/m)				
1245	H	48.90	---	-11.52	37.38	---	74.00	54.00	-16.62	Peak
1959	H	48.47	---	-8.64	39.83	---	74.00	54.00	-14.17	Peak
3452	H	45.01	---	-4.95	40.06	---	74.00	54.00	-13.94	Peak
4874	H	38.56	---	0.76	39.32	---	74.00	54.00	-14.68	Peak

Notes: AV Means AV detector test data, Peak Means Peak detector test data.
Emissions attenuated more than 20 dB below the permissible value are not reported.

EUT	3D PAD	Model Name	A6102
Temperature	26°C	Relative Humidity	56%
Pressure	960hPa	Test voltage	DC 5V From adapter with AC 120V/60Hz
Test Mode	TX High		

Freq. (MHz)	Ant. Pol H/V	Peak Reading (dBuV)	AV Reading (dBuV)	Ant. / CL CF (dB)	Actual Fs		Peak Limit (dBuV/m)	AV Limit (dBuV/m)	Margin (dB)	Remark
					Peak (dBuV/m)	AV (dBuV/m)				
1395	V	49.15	---	-10.43	38.72	---	74.00	54.00	-15.28	Peak
2276	V	47.00	---	-8.07	38.93	---	74.00	54.00	-15.07	Peak
3112	V	45.79	---	-5.63	40.16	---	74.00	54.00	-13.84	Peak
4924	V	40.48	---	0.87	41.35	---	74.00	54.00	-12.65	Peak

EUT	3D PAD	Model Name	A6102
Temperature	26°C	Relative Humidity	56%
Pressure	960hPa	Test voltage	DC 5V From adapter with AC 120V/60Hz
Test Mode	TX High		

Freq. (MHz)	Ant. Pol H/V	Peak Reading (dBuV)	AV Reading (dBuV)	Ant. / CL CF (dB)	Actual Fs		Peak Limit (dBuV/m)	AV Limit (dBuV/m)	Margin (dB)	Remark
					Peak (dBuV/m)	AV (dBuV/m)				
1344	H	49.05	---	-10.84	38.21	---	74.00	54.00	-15.79	Peak
2387	H	46.76	---	-7.59	39.17	---	74.00	54.00	-14.83	Peak
3704	H	45.38	---	-4.24	41.14	---	74.00	54.00	-12.86	Peak
4924	H	39.39	---	0.87	40.26	---	74.00	54.00	-13.74	Peak

Notes: AV Means AV detector test data, Peak Means Peak detector test data.
Emissions attenuated more than 20 dB below the permissible value are not reported.

IEEE 802.11 g:

EUT	3D PAD	Model Name	A6102
Temperature	26°C	Relative Humidity	56%
Pressure	960hPa	Test voltage	DC 5V From adapter with AC 120V/60Hz
Test Mode	TX Low		

Freq. (MHz)	Ant. Pol H/V	Peak Reading (dBuV)	AV Reading (dBuV)	Ant. / CL CF (dB)	Actual Fs		Peak Limit (dBuV/m)	AV Limit (dBuV/m)	Margin (dB)	Remark
					Peak (dBuV/m)	AV (dBuV/m)				
1145	V	49.76	---	-11.24	38.52	---	74.00	54.00	-15.48	Peak
2586	V	47.39	---	-7.13	40.26	---	74.00	54.00	-13.74	Peak
3062	V	46.56	---	-5.74	40.82	---	74.00	54.00	-13.18	Peak
4824	V	40.72	---	0.64	41.36	---	74.00	54.00	-12.64	Peak
N/A										

EUT	3D PAD	Model Name	A6102
Temperature	26°C	Relative Humidity	56%
Pressure	960hPa	Test voltage	DC 5V From adapter with AC 120V/60Hz
Test Mode	TX Low		

Freq. (MHz)	Ant. Pol H/V	Peak Reading (dBuV)	AV Reading (dBuV)	Ant. / CL CF (dB)	Actual Fs		Peak Limit (dBuV/m)	AV Limit (dBuV/m)	Margin (dB)	Remark
					Peak (dBuV/m)	AV (dBuV/m)				
1294	H	49.59	---	-10.96	38.63	---	74.00	54.00	-15.37	Peak
2038	H	48.16	---	-8.58	39.58	---	74.00	54.00	-14.42	Peak
3483	H	44.86	---	-4.95	39.91	---	74.00	54.00	-14.09	Peak
4824	H	40.09	---	0.64	40.73	---	74.00	54.00	-13.27	Peak
N/A										

Notes: AV Means AV detector test data,Peak Means Peak detector test data.
Emissions attenuated more than 20 dB below the permissible value are not reported.

EUT	3D PAD	Model Name	A6102
Temperature	26°C	Relative Humidity	56%
Pressure	960hPa	Test voltage	DC 5V From adapter with AC 120V/60Hz
Test Mode	TX Mid		

Freq. (MHz)	Ant. Pol H/V	Peak Reading (dBuV)	AV Reading (dBuV)	Ant. / CL CF (dB)	Actual Fs		Peak Limit (dBuV/m)	AV Limit (dBuV/m)	Margin (dB)	Remark
					Peak (dBuV/m)	AV (dBuV/m)				
1374	V	47.80	---	-10.43	37.37	---	74.00	54.00	-16.63	Peak
2589	V	46.31	---	-7.13	39.18	---	74.00	54.00	-14.82	Peak
3365	V	46.25	---	-5.18	41.07	---	74.00	54.00	-12.93	Peak
4874	V	41.70	---	0.76	42.46	---	74.00	54.00	-11.54	Peak

EUT	3D PAD	Model Name	A6102
Temperature	26°C	Relative Humidity	56%
Pressure	960hPa	Test voltage	DC 5V From adapter with AC 120V/60Hz
Test Mode	TX Mid		

Freq. (MHz)	Ant. Pol H/V	Peak Reading (dBuV)	AV Reading (dBuV)	Ant. / CL CF (dB)	Actual Fs		Peak Limit (dBuV/m)	AV Limit (dBuV/m)	Margin (dB)	Remark
					Peak (dBuV/m)	AV (dBuV/m)				
1321	H	49.02	---	-10.84	38.18	---	74.00	54.00	-15.82	Peak
2314	H	47.97	---	-7.46	40.51	---	74.00	54.00	-13.49	Peak
3577	H	47.00	---	-4.76	42.24	---	74.00	54.00	-11.76	Peak
4874	H	40.77	---	0.76	41.53	---	74.00	54.00	-12.47	Peak

Notes: AV Means AV detector test data, Peak Means Peak detector test data.
Emissions attenuated more than 20 dB below the permissible value are not reported.

EUT	3D PAD	Model Name	A6102
Temperature	26°C	Relative Humidity	56%
Pressure	960hPa	Test voltage	DC 5V From adapter with AC 120V/60Hz
Test Mode	TX High		

Freq. (MHz)	Ant. Pol H/V	Peak Reading (dBuV)	AV Reading (dBuV)	Ant. / CL CF (dB)	Actual Fs		Peak Limit (dBuV/m)	AV Limit (dBuV/m)	Margin (dB)	Remark
					Peak (dBuV/m)	AV (dBuV/m)				
1302	V	50.63	---	-10.84	39.79	---	74.00	54.00	-14.21	Peak
2982	V	47.99	---	-5.86	42.13	---	74.00	54.00	-11.87	Peak
3831	V	44.32	---	-3.96	40.36	---	74.00	54.00	-13.64	Peak
4924	V	41.6	---	0.87	42.47	---	74.00	54.00	-11.53	Peak

EUT	3D PAD	Model Name	A6102
Temperature	26°C	Relative Humidity	56%
Pressure	960hPa	Test voltage	DC 5V From adapter with AC 120V/60Hz
Test Mode	TX High		

Freq. (MHz)	Ant. Pol H/V	Peak Reading (dBuV)	AV Reading (dBuV)	Ant. / CL CF (dB)	Actual Fs		Peak Limit (dBuV/m)	AV Limit (dBuV/m)	Margin (dB)	Remark
					Peak (dBuV/m)	AV (dBuV/m)				
1446	H	49.74	---	-10.29	39.45	---	74.00	54.00	-14.55	Peak
2198	H	48.52	---	-8.24	40.28	---	74.00	54.00	-13.72	Peak
3905	H	44.59	---	-3.68	40.91	---	74.00	54.00	-13.09	Peak
4924	H	40.49	---	0.87	41.36	---	74.00	54.00	-12.64	Peak

Notes: AV Means AV detector test data, Peak Means Peak detector test data.
Emissions attenuated more than 20 dB below the permissible value are not reported.

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EUT	3D PAD	Model Name	A6102
Temperature	26°C	Relative Humidity	56%
Pressure	960hPa	Test voltage	DC 5V From adapter with AC 120V/60Hz
Test Mode	TX Low		

Freq. (MHz)	Ant. Pol H/V	Peak Reading (dBuV)	AV Reading (dBuV)	Ant. / CL CF (dB)	Actual Fs		Peak Limit (dBuV/m)	AV Limit (dBuV/m)	Margin (dB)	Remark
					Peak (dBuV/m)	AV (dBuV/m)				
1492	V	49.44	---	-10.27	39.17	---	74.00	54.00	-14.83	Peak
2671	V	48.23	---	-6.94	41.29	---	74.00	54.00	-12.71	Peak
3948	V	43.33	---	-3.68	39.65	---	74.00	54.00	-14.35	Peak
4824	V	41.98	---	0.64	42.62	---	74.00	54.00	-11.38	Peak
N/A										

EUT	3D PAD	Model Name	A6102
Temperature	26°C	Relative Humidity	56%
Pressure	960hPa	Test voltage	DC 5V From adapter with AC 120V/60Hz
Test Mode	TX Low		

Freq. (MHz)	Ant. Pol H/V	Peak Reading (dBuV)	AV Reading (dBuV)	Ant. / CL CF (dB)	Actual Fs		Peak Limit (dBuV/m)	AV Limit (dBuV/m)	Margin (dB)	Remark
					Peak (dBuV/m)	AV (dBuV/m)				
1451	H	50.69	---	-10.27	40.42	---	74.00	54.00	-13.58	Peak
2839	H	47.38	---	-6.17	41.21	---	74.00	54.00	-12.79	Peak
3607	H	46.88	---	-4.52	42.36	---	74.00	54.00	-11.64	Peak
4824	H	42.83	---	0.64	43.47	---	74.00	54.00	-10.53	Peak
N/A										

Notes: AV Means AV detector test data, Peak Means Peak detector test data.
Emissions attenuated more than 20 dB below the permissible value are not reported.

EUT	3D PAD	Model Name	A6102
Temperature	26°C	Relative Humidity	56%
Pressure	960hPa	Test voltage	DC 5V From adapter with AC 120V/60Hz
Test Mode	TX Mid		

Freq. (MHz)	Ant. Pol H/V	Peak Reading (dBuV)	AV Reading (dBuV)	Ant. / CL CF (dB)	Actual Fs		Peak Limit (dBuV/m)	AV Limit (dBuV/m)	Margin (dB)	Remark
					Peak (dBuV/m)	AV (dBuV/m)				
1262	V	52.49	---	-10.96	41.53	---	74.00	54.00	-12.47	Peak
2013	V	49.22	---	-8.58	40.64	---	74.00	54.00	-13.36	Peak
3798	V	45.18	---	-4.07	41.11	---	74.00	54.00	-12.89	Peak
4874	V	41.49	---	0.76	42.25	---	74.00	54.00	-11.75	Peak

EUT	3D PAD	Model Name	A6102
Temperature	26°C	Relative Humidity	56%
Pressure	960hPa	Test voltage	DC 5V From adapter with AC 120V/60Hz
Test Mode	TX Mid		

Freq. (MHz)	Ant. Pol H/V	Peak Reading (dBuV)	AV Reading (dBuV)	Ant. / CL CF (dB)	Actual Fs		Peak Limit (dBuV/m)	AV Limit (dBuV/m)	Margin (dB)	Remark
					Peak (dBuV/m)	AV (dBuV/m)				
1511	H	49.32	---	-10.14	39.18	---	74.00	54.00	-14.82	Peak
2353	H	49.90	---	-7.59	42.31	---	74.00	54.00	-11.69	Peak
3266	H	46.01	---	-5.39	40.62	---	74.00	54.00	-13.38	Peak
4874	H	40.97	---	0.76	41.73	---	74.00	54.00	-12.27	Peak

Notes: AV Means AV detector test data,Peak Means Peak detector test data.
Emissions attenuated more than 20 dB below the permissible value are not reported.

EUT	3D PAD	Model Name	A6102
Temperature	26°C	Relative Humidity	56%
Pressure	960hPa	Test voltage	DC 5V From adapter with AC 120V/60Hz
Test Mode	TX High		

Freq. (MHz)	Ant. Pol H/V	Peak Reading (dBuV)	AV Reading (dBuV)	Ant. / CL CF (dB)	Actual Fs		Peak Limit (dBuV/m)	AV Limit (dBuV/m)	Margin (dB)	Remark
					Peak (dBuV/m)	AV (dBuV/m)				
1477	V	51.11	---	-10.27	40.84	---	74.00	54.00	-13.16	Peak
2703	V	48.56	---	-6.43	42.13	---	74.00	54.00	-11.87	Peak
3561	V	46.18	---	-4.76	41.42	---	74.00	54.00	-12.58	Peak
4924	V	41.70	---	0.87	42.57	---	74.00	54.00	-11.43	Peak

EUT	3D PAD	Model Name	A6102
Temperature	26°C	Relative Humidity	56%
Pressure	960hPa	Test voltage	DC 5V From adapter with AC 120V/60Hz
Test Mode	TX High		

Freq. (MHz)	Ant. Pol H/V	Peak Reading (dBuV)	AV Reading (dBuV)	Ant. / CL CF (dB)	Actual Fs		Peak Limit (dBuV/m)	AV Limit (dBuV/m)	Margin (dB)	Remark
					Peak (dBuV/m)	AV (dBuV/m)				
1503	H	50.41	---	-10.14	40.27	---	74.00	54.00	-13.73	Peak
3588	H	47.27	---	-4.96	42.31	---	74.00	54.00	-11.69	Peak
4153	H	44.05	---	-2.48	41.57	---	74.00	54.00	-12.43	Peak
4924	H	40.09	---	0.87	40.96	---	74.00	54.00	-13.04	Peak

Notes: AV Means AV detector test data,Peak Means Peak detector test data.
Emissions attenuated more than 20 dB below the permissible value are not reported.

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EUT	3D PAD	**Model Name**	A6102
Temperature	26°C	**Relative Humidity**	56%
Pressure	960hPa	**Test voltage**	DC 5V From adapter with AC 120V/60Hz
Test Mode	TX Low		

Freq. (MHz)	Ant. Pol H/V	Peak Reading (dBuV)	AV Reading (dBuV)	Ant. / CL CF (dB)	Actual Fs		Peak Limit (dBuV/m)	AV Limit (dBuV/m)	Margin (dB)	Remark
					Peak (dBuV/m)	AV (dBuV/m)				
1551	V	51.22	---	-10.07	41.15	---	74.00	54.00	-12.85	Peak
2695	V	49.18	---	-6.94	42.24	---	74.00	54.00	-11.76	Peak
3463	V	47.46	---	-4.95	42.51	---	74.00	54.00	-11.49	Peak
4844	V	43.22	---	0.64	43.86	---	74.00	54.00	-10.14	Peak
N/A										

EUT	3D PAD	**Model Name**	A6102
Temperature	26°C	**Relative Humidity**	56%
Pressure	960hPa	**Test voltage**	DC 5V From adapter with AC 120V/60Hz
Test Mode	TX Low		

Freq. (MHz)	Ant. Pol H/V	Peak Reading (dBuV)	AV Reading (dBuV)	Ant. / CL CF (dB)	Actual Fs		Peak Limit (dBuV/m)	AV Limit (dBuV/m)	Margin (dB)	Remark
					Peak (dBuV/m)	AV (dBuV/m)				
1542	H	49.71	---	-10.14	39.57	---	74.00	54.00	-14.43	Peak
2358	H	48.31	---	-7.59	40.72	---	74.00	54.00	-13.28	Peak
3096	H	47.57	---	-5.74	41.83	---	74.00	54.00	-12.17	Peak
4844	H	41.00	---	0.64	41.64	---	74.00	54.00	-12.36	Peak
N/A										

Notes: AV Means AV detector test data,Peak Means Peak detector test data.
Emissions attenuated more than 20 dB below the permissible value are not reported.

EUT	3D PAD	Model Name	A6102
Temperature	26°C	Relative Humidity	56%
Pressure	960hPa	Test voltage	DC 5V From adapter with AC 120V/60Hz
Test Mode	TX Mid		

Freq. (MHz)	Ant. Pol H/V	Peak Reading (dBuV)	AV Reading (dBuV)	Ant. / CL CF (dB)	Actual Fs		Peak Limit (dBuV/m)	AV Limit (dBuV/m)	Margin (dB)	Remark
					Peak (dBuV/m)	AV (dBuV/m)				
1628	V	47.17	---	-9.84	37.33	---	74.00	54.00	-16.67	Peak
2593	V	46.74	---	-7.13	39.61	---	74.00	54.00	-14.39	Peak
3301	V	46.50	---	-5.31	41.19	---	74.00	54.00	-12.81	Peak
4874	V	41.77	---	0.76	42.53	---	74.00	54.00	-11.47	Peak

EUT	3D PAD	Model Name	A6102
Temperature	26°C	Relative Humidity	56%
Pressure	960hPa	Test voltage	DC 5V From adapter with AC 120V/60Hz
Test Mode	TX Mid		

Freq. (MHz)	Ant. Pol H/V	Peak Reading (dBuV)	AV Reading (dBuV)	Ant. / CL CF (dB)	Actual Fs		Peak Limit (dBuV/m)	AV Limit (dBuV/m)	Margin (dB)	Remark
					Peak (dBuV/m)	AV (dBuV/m)				
1564	H	48.75	---	-10.07	38.68	---	74.00	54.00	-15.32	Peak
2248	H	48.94	---	-8.13	40.81	---	74.00	54.00	-13.19	Peak
3159	H	46.68	---	-5.52	41.16	---	74.00	54.00	-12.84	Peak
4874	H	41.51	---	0.76	42.27	---	74.00	54.00	-11.73	Peak

Notes: AV Means AV detector test data,Peak Means Peak detector test data.
Emissions attenuated more than 20 dB below the permissible value are not reported.

EUT	3D PAD	Model Name	A6102
Temperature	26°C	Relative Humidity	56%
Pressure	960hPa	Test voltage	DC 5V From adapter with AC 120V/60Hz
Test Mode	TX High		

Freq. (MHz)	Ant. Pol H/V	Peak Reading (dBuV)	AV Reading (dBuV)	Ant. / CL CF (dB)	Actual Fs		Peak Limit (dBuV/m)	AV Limit (dBuV/m)	Margin (dB)	Remark
					Peak (dBuV/m)	AV (dBuV/m)				
1645	V	49.56	---	-9.84	39.72	---	74.00	54.00	-14.28	Peak
2590	V	48.56	---	-7.13	41.43	---	74.00	54.00	-12.57	Peak
3851	V	46.38	---	-3.84	42.54	---	74.00	54.00	-11.46	Peak
4904	V	40.59	---	0.87	41.46	---	74.00	54.00	-12.54	Peak

EUT	3D PAD	Model Name	A6102
Temperature	26°C	Relative Humidity	56%
Pressure	960hPa	Test voltage	DC 5V From adapter with AC 120V/60Hz
Test Mode	TX High		

Freq. (MHz)	Ant. Pol H/V	Peak Reading (dBuV)	AV Reading (dBuV)	Ant. / CL CF (dB)	Actual Fs		Peak Limit (dBuV/m)	AV Limit (dBuV/m)	Margin (dB)	Remark
					Peak (dBuV/m)	AV (dBuV/m)				
1792	H	48.98	---	-9.27	39.71	---	74.00	54.00	-14.29	Peak
2804	H	46.41	---	-6.17	40.24	---	74.00	54.00	-13.76	Peak
3743	H	45.43	---	-4.24	41.19	---	74.00	54.00	-12.81	Peak
4904	H	40.65	---	0.87	41.52	---	74.00	54.00	-12.48	Peak

Notes: AV Means AV detector test data, Peak Means Peak detector test data.
Emissions attenuated more than 20 dB below the permissible value are not reported.

6 POWER LINE CONDUCTED EMISSION

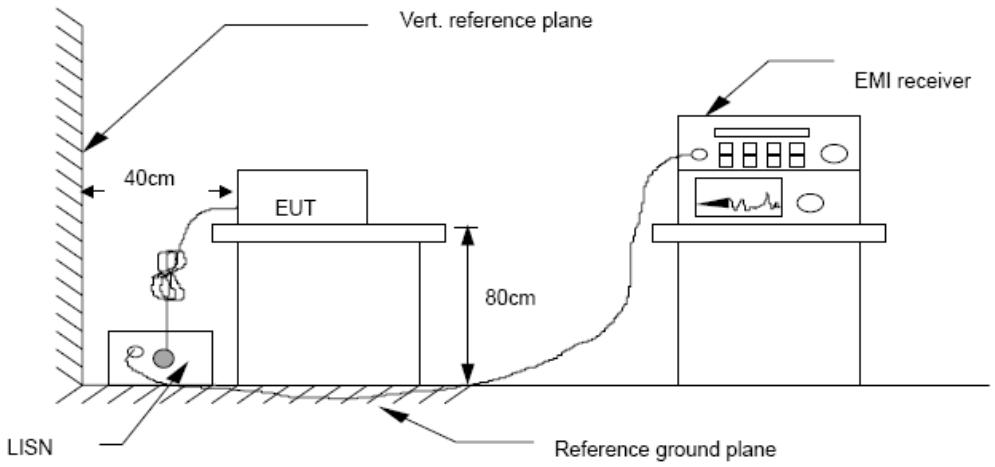
6.1 Conducted Emission Limits(15.207)

Frequency MHz	Limits dB(μV)	
	Quasi-peak Level	Average Level
0.15 -0.50	66 -56*	56 - 46*
0.50 -5.00	56	46
5.00 -30.00	60	50

Notes: 1. *Decreasing linearly with logarithm of frequency.
2. The lower limit shall apply at the transition frequencies.

3.The limit decreases in line with the logarithm of the frequency in the rang of 0.15 to 0.50 MHz.

6.2 Test Setup



6.3 Test Procedure

The EUT is put on the plane 0.8m high above the ground by insulating support and is connected to the power mains through a line impedance stabilization network (L.I.S.N.). This provides a 50ohm coupling impedance for the EUT system. Please refer the block diagram of the test setup and photographs. Both sides of AC lines are checked to find out the maximum conducted emission. In order to find the maximum emission levels, the relative positions of equipment and all of the interface cables shall be changed according to ANSI C63.4-2003 on Conducted Emission Measurement.
The bandwidth of test receiver (R & S ESCA61020) is set at 9 kHz.

6.4 Test Results

PASS

Detailed information please see the following page.

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Tel: 4006786199 Fax: +86-755-26736857
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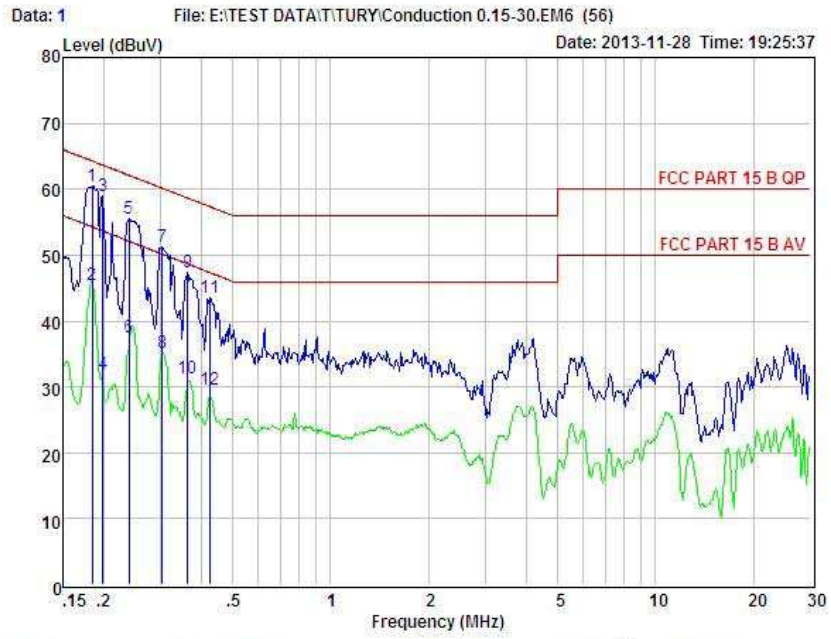
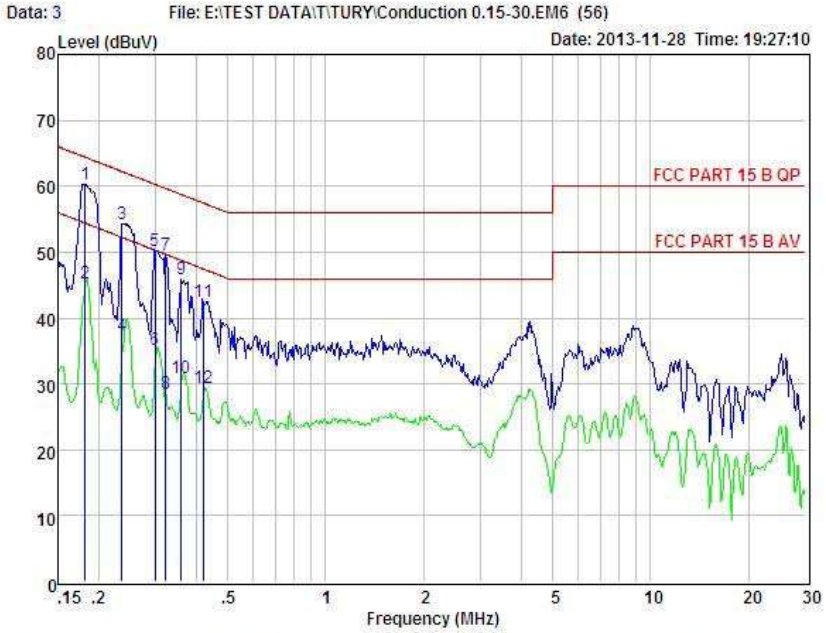


Condition : FCC PART 15 B QP POL: NEUTRAL Temp:24 ℃ Hum:56 %
EUT : 3D PAD
Model No : A6102
Test Mode : Link mode
Power : DC 5V From Adapter AC 120V/60Hz
Test Engineer: Simple
Remark :

Item	Freq	Read	LISN Factor	Preamp Factor	Cable Lose	Level	Limit	Margin	Remark
	MHz	dBuV	dB	dB	dB	dBuV	dBuV	dBuV	
1	0.184	50.54	0.03	-9.72	0.10	60.39	64.28	-3.89	QP
2	0.184	35.54	0.03	-9.72	0.10	45.39	54.28	-8.89	Average
3	0.199	49.11	0.03	-9.72	0.10	58.96	63.67	-4.71	QP
4	0.199	22.11	0.03	-9.72	0.10	31.96	53.67	-21.71	Average
5	0.239	45.63	0.03	-9.72	0.10	55.48	62.13	-6.65	QP
6	0.239	27.63	0.03	-9.72	0.10	37.48	52.13	-14.65	Average
7	0.303	41.32	0.03	-9.72	0.10	51.17	60.15	-8.98	QP
8	0.303	25.32	0.03	-9.72	0.10	35.17	50.15	-14.98	Average
9	0.363	37.56	0.03	-9.72	0.10	47.41	58.65	-11.24	QP
10	0.363	21.56	0.03	-9.72	0.10	31.41	48.65	-17.24	Average
11	0.426	33.76	0.03	-9.72	0.10	43.61	57.33	-13.72	QP
12	0.426	19.76	0.03	-9.72	0.10	29.61	47.33	-17.72	Average

Remarks: Level = Read + LISN Factor - Preamp Factor + Cable loss

Shenzhen Certification Technology Service Co., Ltd.
2F, Building B, East Area of Nanchang Second Industrial Zone,
Gushu 2nd Road, Bao'an District, Shenzhen 518126, P.R. China
Tel: 4006786199 Fax: +86-755-26736857
Website: http://www.cessz.com Email:Service@cessz.com



Condition : FCC PART 15 B QP POL: LINE Temp:24 ℃ Hum:56 %
EUT : 3D PAD
Model No : A6102
Test Mode : Link mode
Power : DC 5V From Adapter AC 120V/60Hz
Test Engineer: Simple
Remark :

Item	Freq	Read	LISN Factor	Preamp Factor	Cable Lose	Level	Limit	Margin	Remark
	MHz	dBuV	dB	dB	dB	dBuV	dBuV	dBuV	
1	0.182	50.50	0.03	-9.72	0.10	60.35	64.42	-4.07	QP
2	0.182	35.50	0.03	-9.72	0.10	45.35	54.42	-9.07	Average
3	0.237	44.47	0.03	-9.72	0.10	54.32	62.22	-7.90	QP
4	0.237	27.47	0.03	-9.72	0.10	37.32	52.22	-14.90	Average
5	0.299	40.42	0.03	-9.72	0.10	50.27	60.28	-10.01	QP
6	0.299	25.42	0.03	-9.72	0.10	35.27	50.28	-15.01	Average
7	0.322	39.72	0.03	-9.72	0.10	49.57	59.66	-10.09	QP
8	0.322	18.72	0.03	-9.72	0.10	28.57	49.66	-21.09	Average
9	0.360	36.02	0.03	-9.72	0.10	45.87	58.74	-12.87	QP
10	0.360	21.02	0.03	-9.72	0.10	30.87	48.74	-17.87	Average
11	0.419	32.58	0.03	-9.72	0.10	42.43	57.46	-15.03	QP
12	0.419	19.58	0.03	-9.72	0.10	29.43	47.46	-18.03	Average

Remarks: Level = Read + LISN Factor - Preamp Factor + Cable loss

7 Conducted Maximum Output Power

7.1 Test limit

Please refer section15.247.

Regulation 15.247(b) The limit of Maximum Peak Output Power Measurement is 1W(30dBm)

7.2 Test Procedure

Details see the KDB558074 Meas Guidance V03

7.2.1 Place the EUT on the table and set it in transmitting mode.

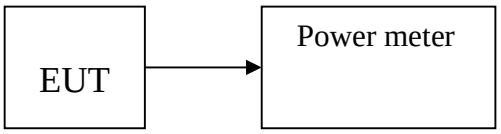
7.2.2 Connected the EUT's antenna port to peak power meter by 20dB attenuator.

7.2.3 Measure out each mode and each bands peak output power of EUT.

Note: The cable loss and attenuator loss were offset into measure device as amplitude offset.

Details see the KDB558074 DTS Meas Guidance V03

7.3 Test Setup



7.4 Test Results

PASS

Detailed information please see the following page.

EUT: 3D PAD M/N: A6102					
Test date: 2013-11-29		Test site: RF site		Tested by: Anna Fan	
Mode	Freq (MHz)	PK Output Power (dBm)	PK Output Power (mW)	Limit (dBm)	Margin (dB)
IEEE 802.11 a	CH149: 5745	14.58	28.71	30	-15.42
	CH157: 5785	14.69	29.44	30	-15.31
	CH165: 5825	14.93	31.12	30	-15.07
IEEE 802.11 b	CH1: 2412	13.79	23.93	30	-16.21
	CH6: 2437	13.85	24.27	30	-16.15
	CH11: 2462	13.81	24.04	30	-16.19
IEEE 802.11 g	CH1: 2412	11.73	14.89	30	-18.27
	CH6: 2437	11.81	15.17	30	-18.19
	CH11: 2462	11.69	14.76	30	-18.31
IEEE 802.11 n/HT20	CH1: 2412	10.42	11.02	30	-19.58
	CH6: 2437	10.53	11.30	30	-19.47
	CH11: 2462	10.37	10.89	30	-19.63
IEEE 802.11 n/HT40	CH1: 2422	10.38	10.91	30	-19.62
	CH4: 2437	10.46	11.12	30	-19.54
	CH7: 2452	10.32	10.76	30	-19.68
Conclusion: PASS					

8 PEAK POWER SPECTRAL DENSITY

8.1 Test limit

8.1.1 Please refer section15.247.

8.1.2 For direct sequence systems, the peak power spectral density conducted from the intentional radiator to the antenna shall not be greater than 8dBm in any 3kHz band during any time interval of continuous transmission.

8.1.3 The direct sequence operating of the hybrid system, with the frequency hopping operation turned off, shall comply with the power density requirements of paragraph (d) of this section.

8.2 Method of measurement

Details see the KDB558074 DTS Meas Guidance V03

8.2.1 Place the EUT on the table and set it in transmitting mode.

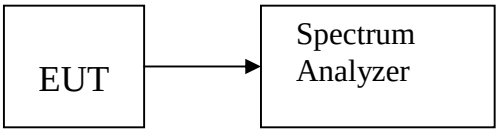
8.2.2 Remove the antenna from the EUT and then connect a low loss RF cable from the antenna port to the spectrum analyzer.

8.2.3 Set the spectrum analyzer as RBW = 3kHz, VBW = 10kHz, sweep=10s, detail see the test plot.

8.2.4 Record the max reading.

8.2.5 Repeat the above procedure until the measurements for all frequencies are completed.

8.3 Test Setup



8.4 Test Results

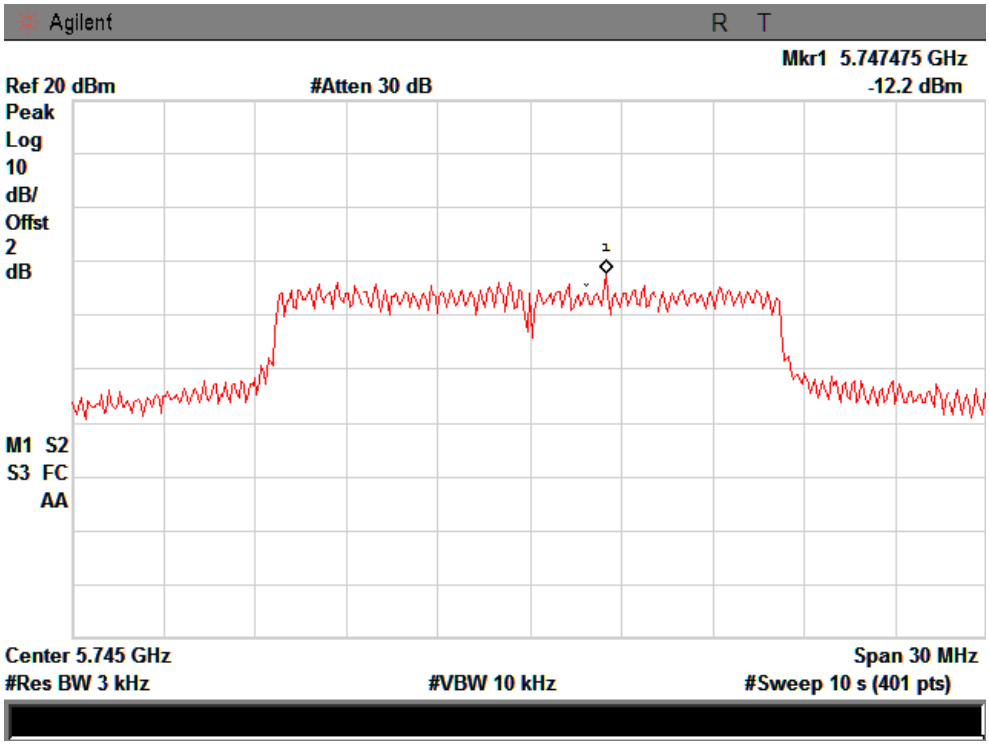
PASS.

Detailed information please see the following page.

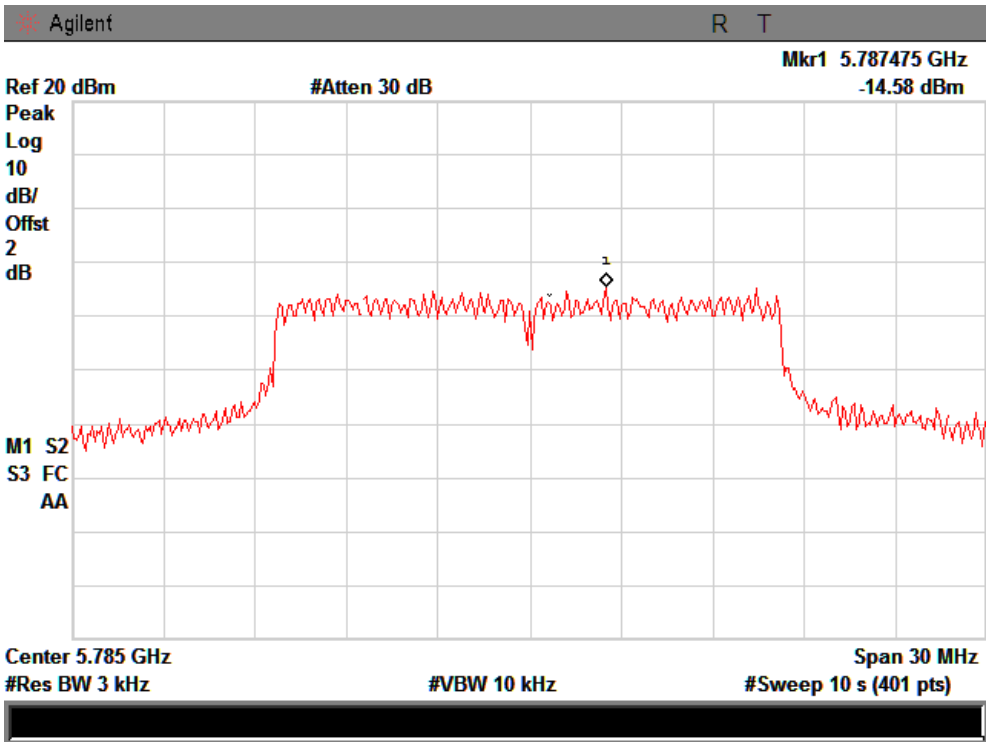
Channel	Frequency (MHz)	Power Spectral Density (dBm)	Limit (dBm)	Result
IEEE 802.11a:				
Low	5745	-12.20	8	PASS
Mid	5785	-14.58	8	PASS
High	5825	-13.25	8	PASS
EEE 802.11b:				
Low	2412	-10.53	8	PASS
Mid	2437	-10.10	8	PASS
High	2462	-10.54	8	PASS
IEEE 802.11g:				
Low	2412	-8.009	8	PASS
Mid	2437	-9.935	8	PASS
High	2462	-11.57	8	PASS
IEEE 802.11n/HT20:				
Low	2412	-8.786	8	PASS
Mid	2437	-11.55	8	PASS
High	2462	-8.345	8	PASS
IEEE 802.11n/HT40 with 2.4G:				
Low	2422	-11.53	8	PASS
Mid	2437	-11.95	8	PASS
High	2452	-12.38	8	PASS

IEEE 802.11a:

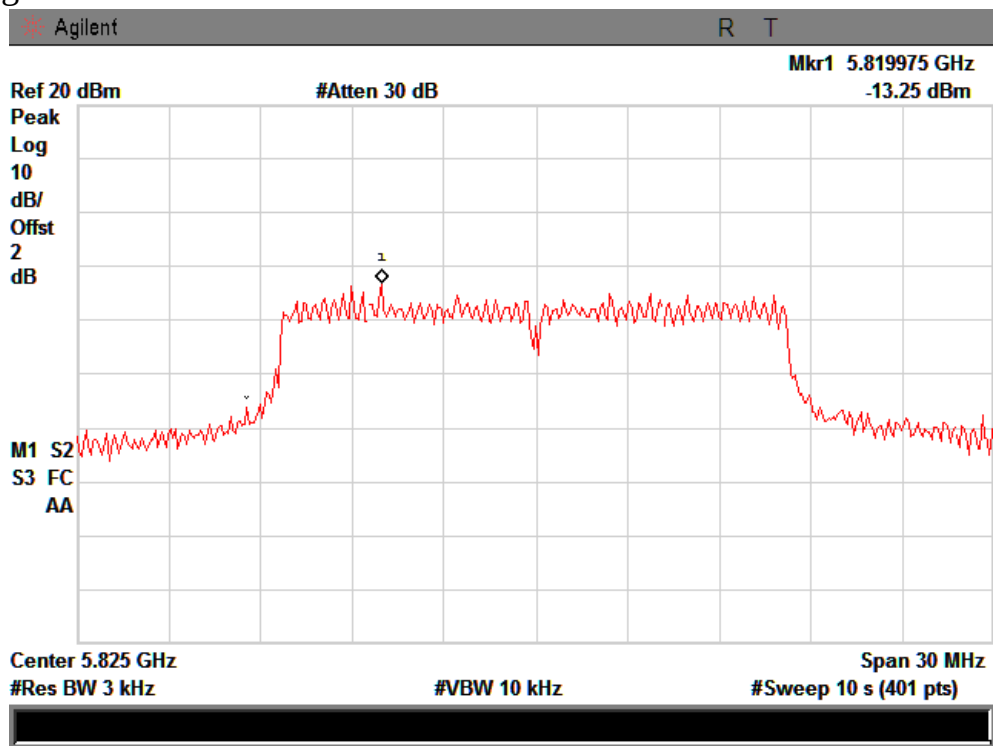
CH Low :



CH Mid :

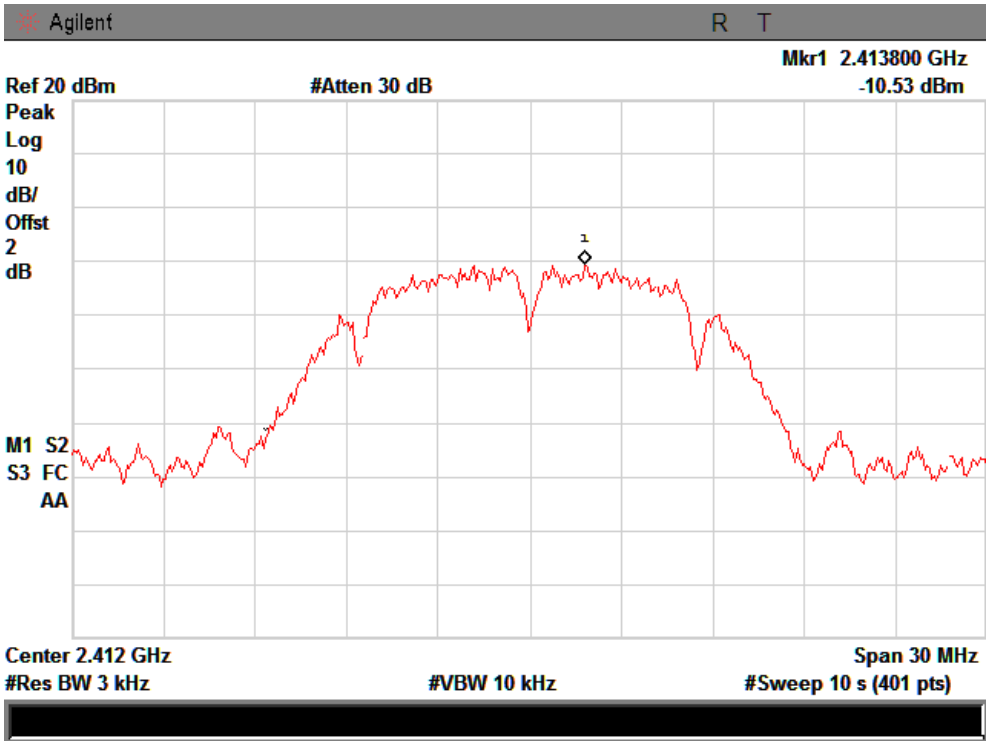


CH High :

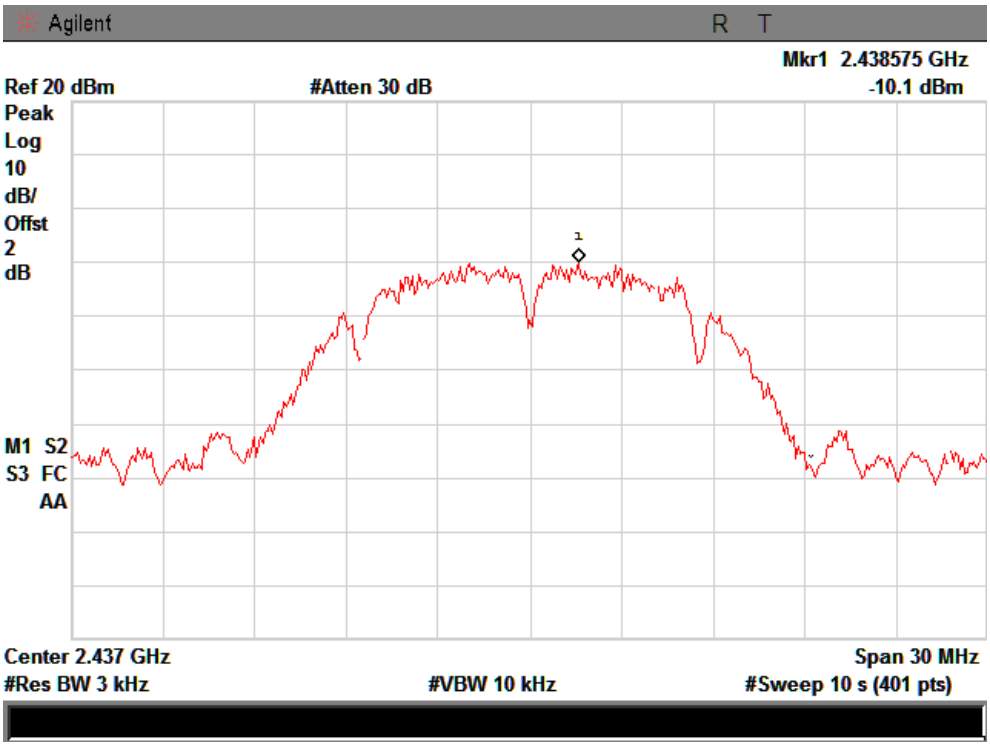


IEEE 802.11b:

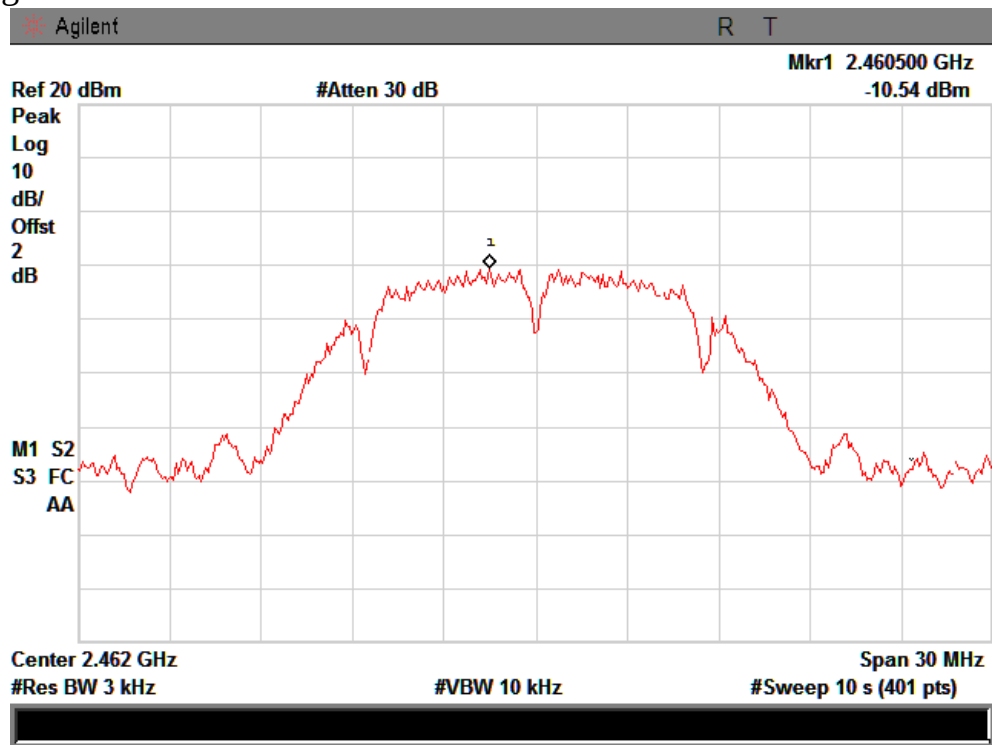
CH Low :



CH Mid :

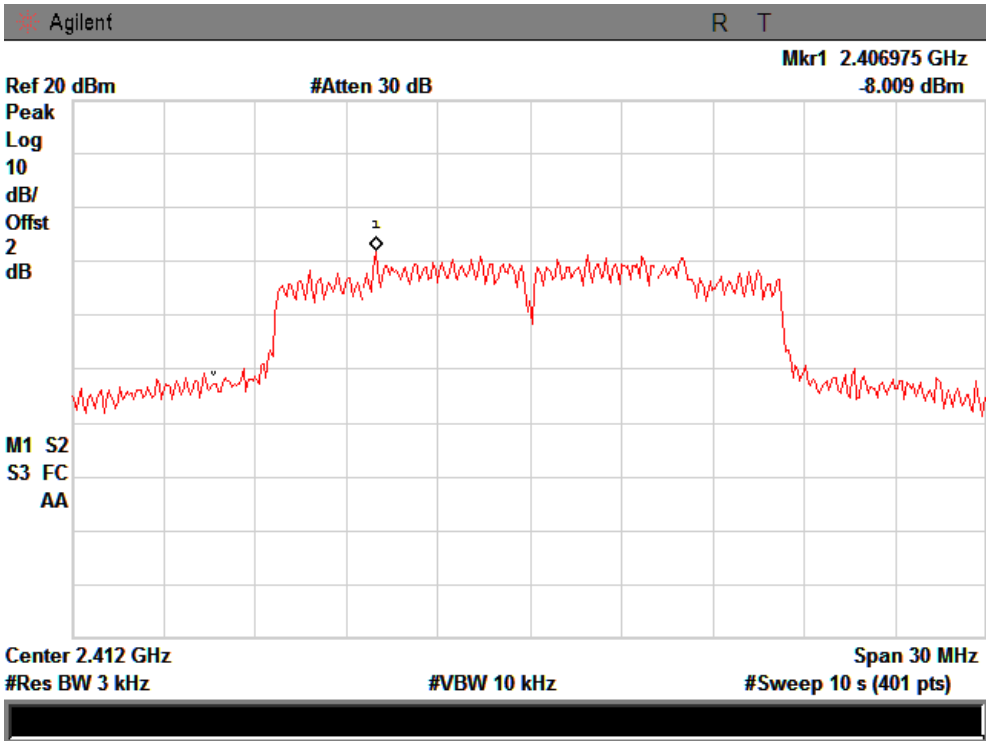


CH High :

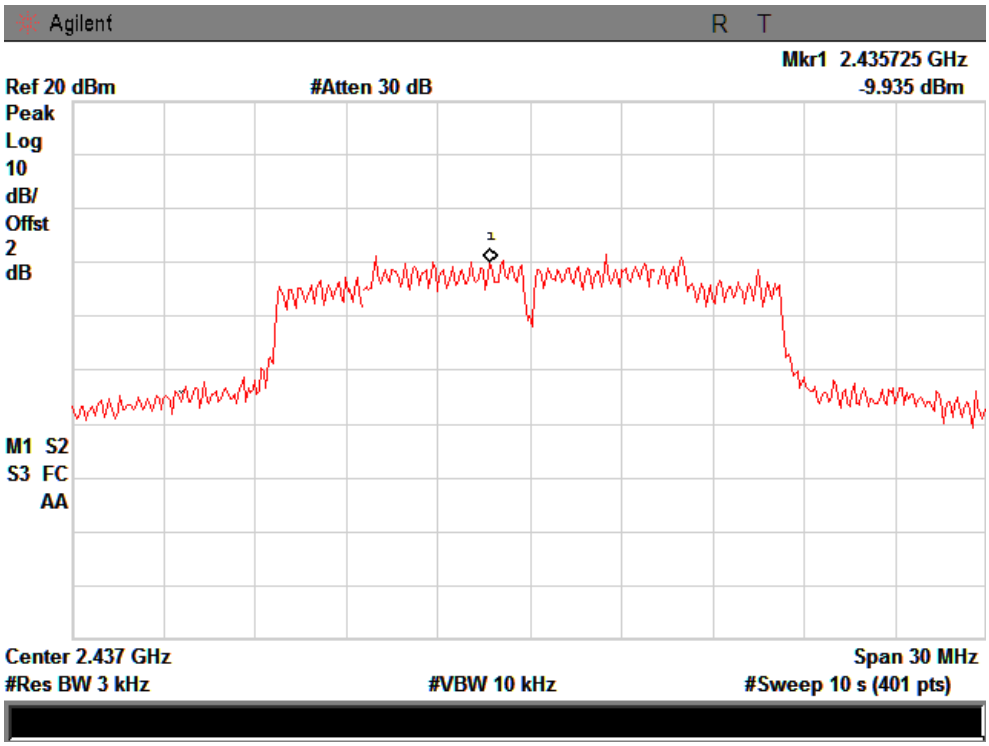


IEEE 802.11g:

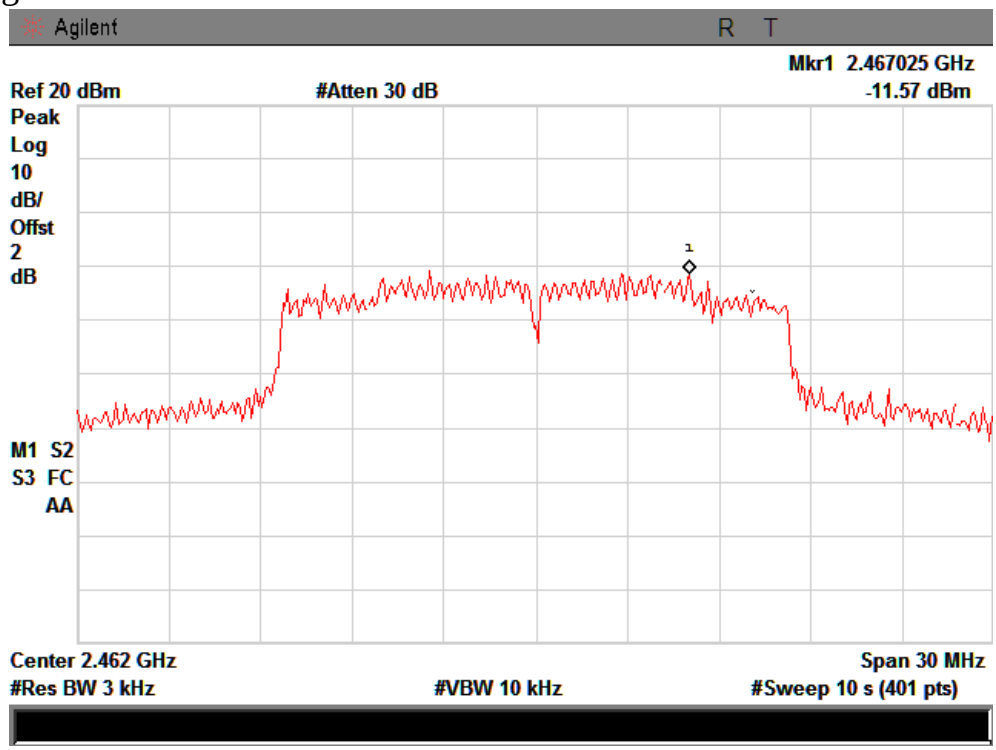
CH Low :



CH Mid :

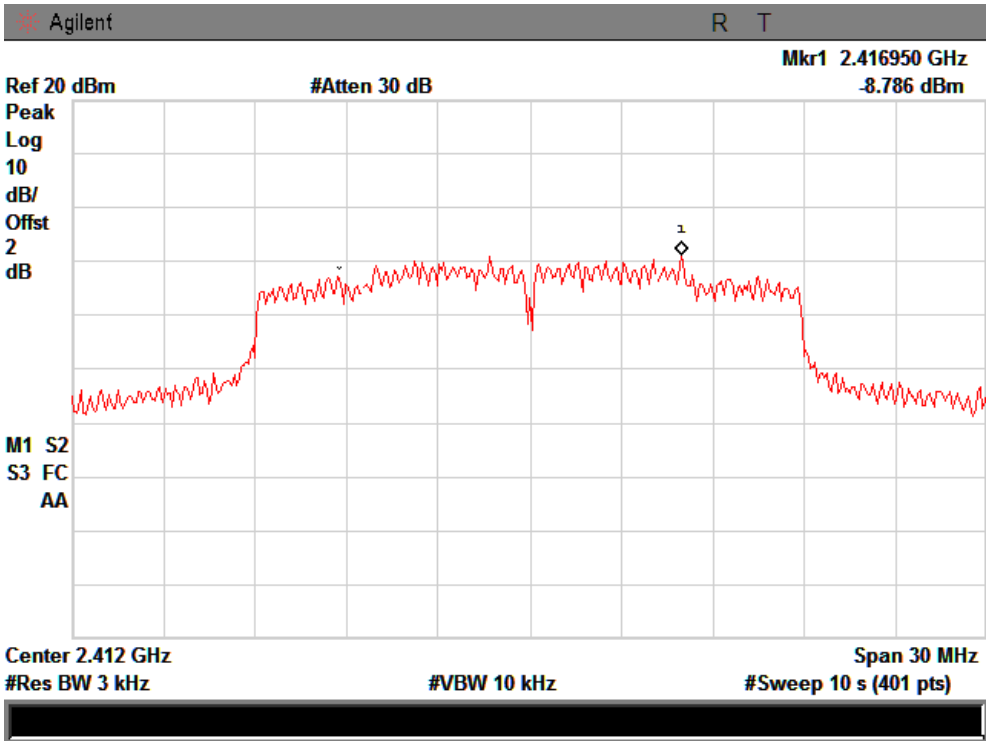


CH High :

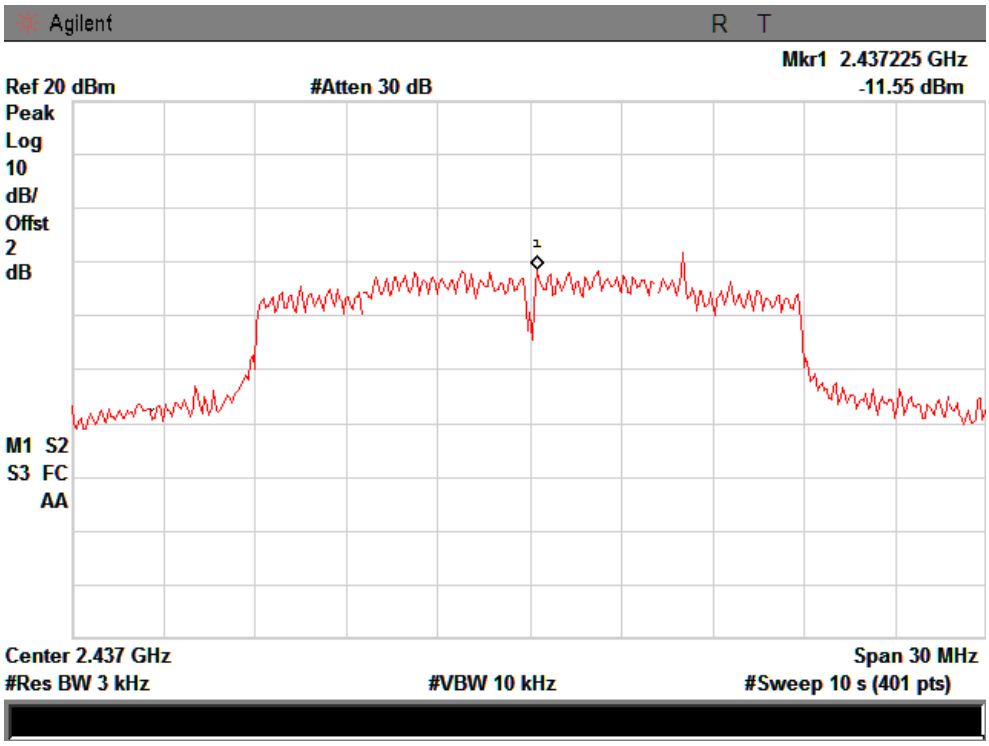


IEEE 802.11n/HT20

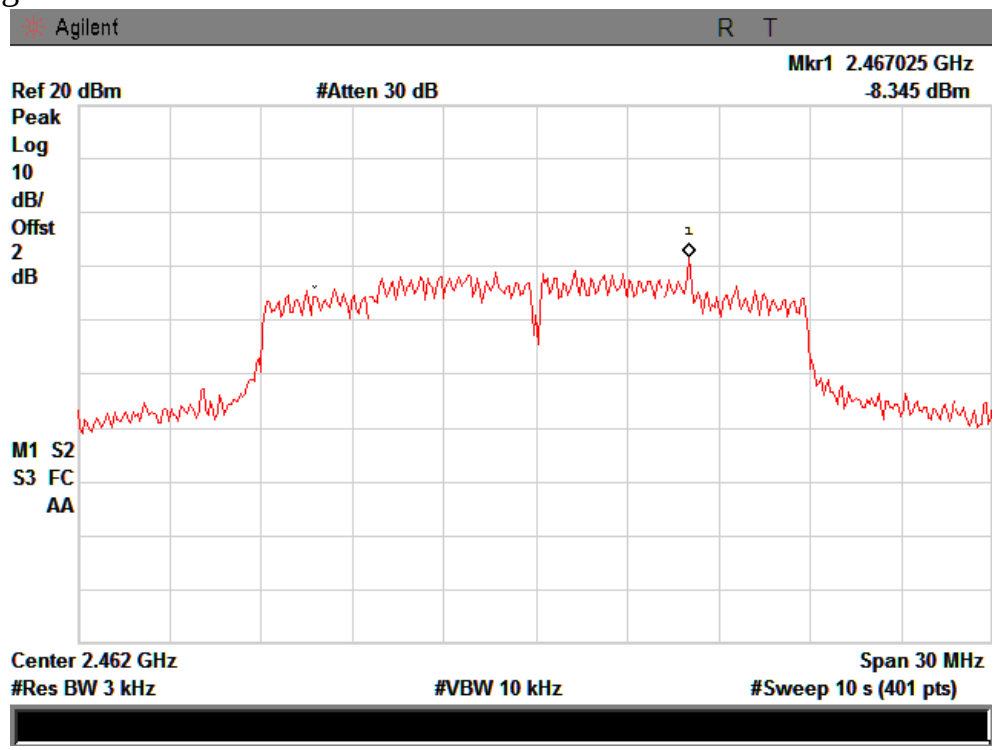
CH Low :



CH Mid :

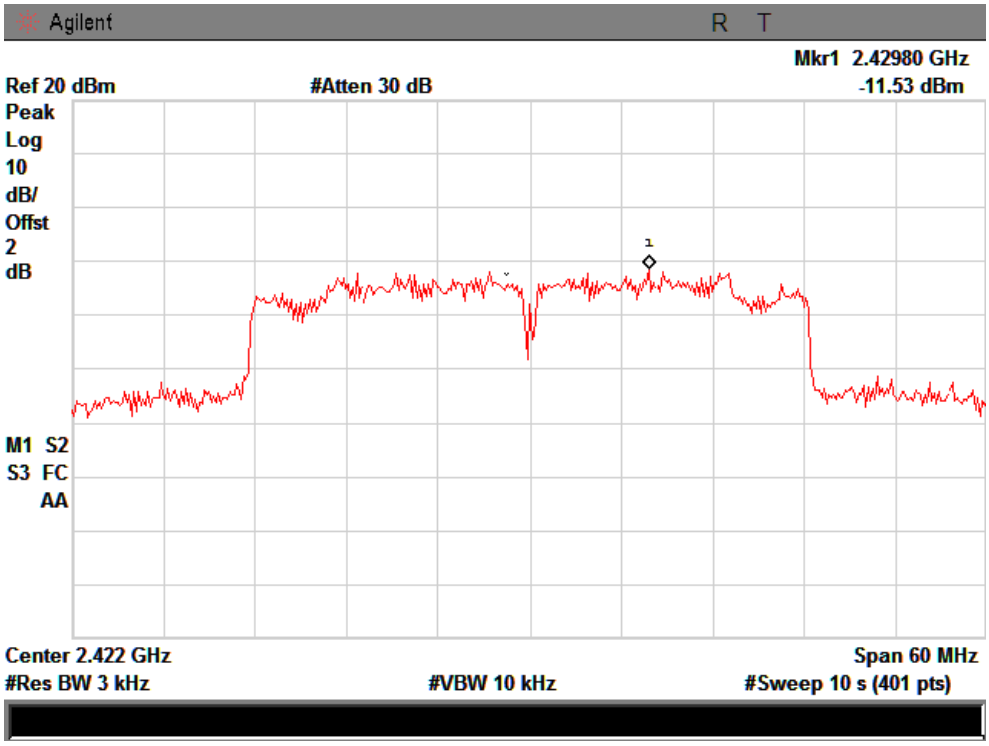


CH High :

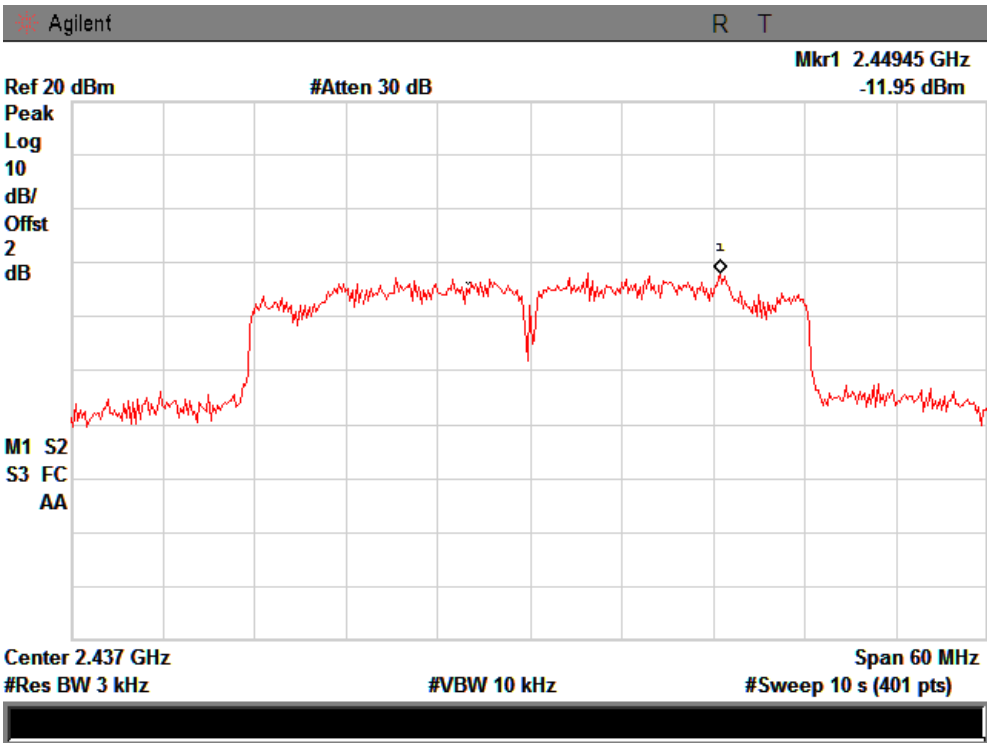


IEEE 802.11n/HT40:

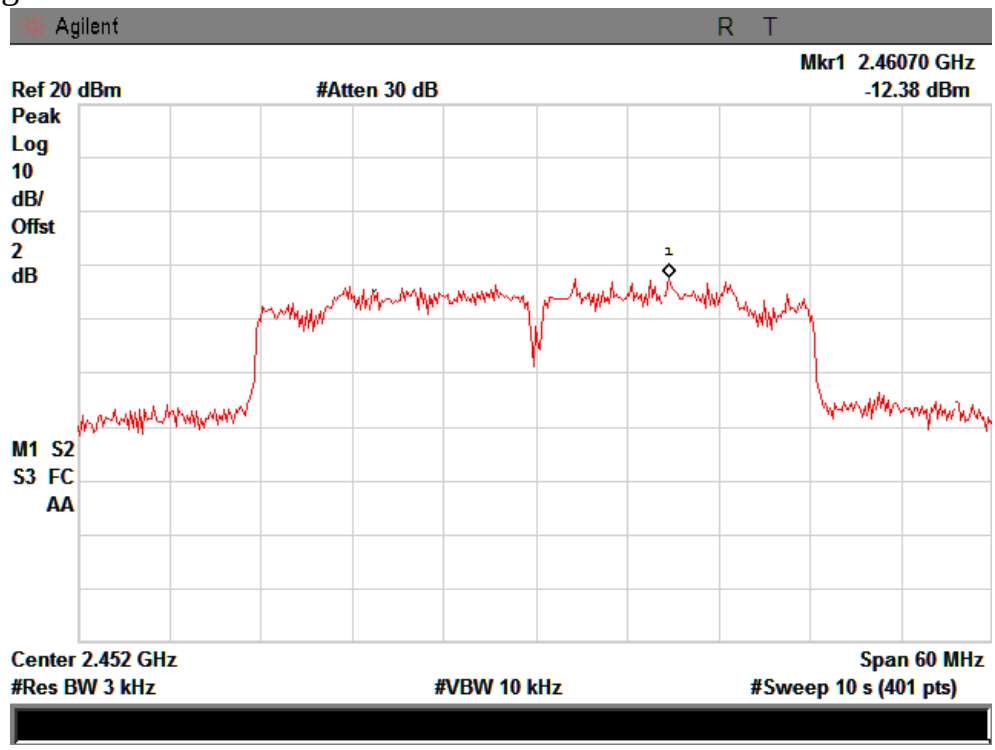
CH Low :



CH Mid :



CH High :


Agilent
R T
Mkr1 2.46070 GHz
-12.38 dBm
Ref 20 dBm
#Atten 30 dB
Peak
Log
10
dB/
Offst
2
dB
M1 S2
S3 FC
AA
Center 2.452 GHz
#Res BW 3 kHz
#VBW 10 kHz
Span 60 MHz
#Sweep 10 s (401 pts)

9 Bandwidth

9.1 Test limit

Please refer section15.247

For direct sequence systems, the minimum 6dB bandwidth shall be at least 500kHz.

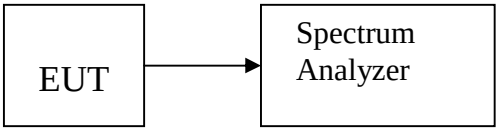
9.2 Method of measurement

Details see the KDB558074 D01 Meas Guidance

a)The bandwidth is measured at an amplitude level reduced 6dB from the reference level. The reference level is the level of the highest amplitude signal observed from the transmitter at the fundamental frequency. Once the reference level is established, the equipment is conditioned with typical modulating signal to produce the worst-case (i.e. the widest) bandwidth.

b) The test receiver set RBW = 100KHz, VBW≥3RBW, Sweep time set auto, detail see the test plot.

9.3 Test Setup



9.4 Test Results

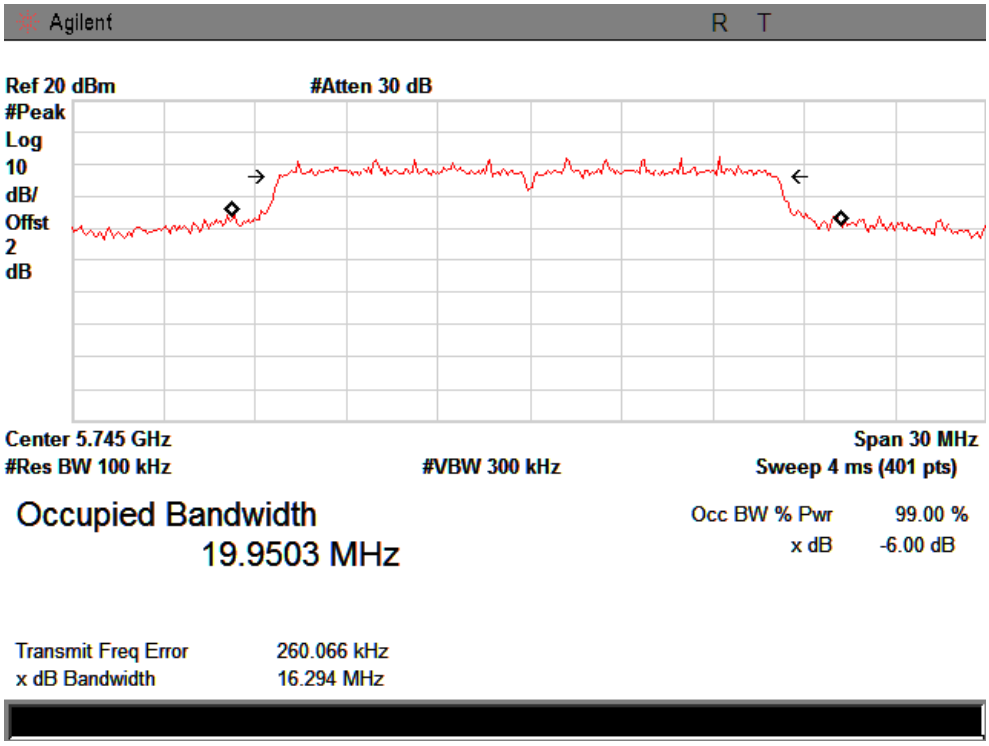
PASS.

Detailed information please see the following page.

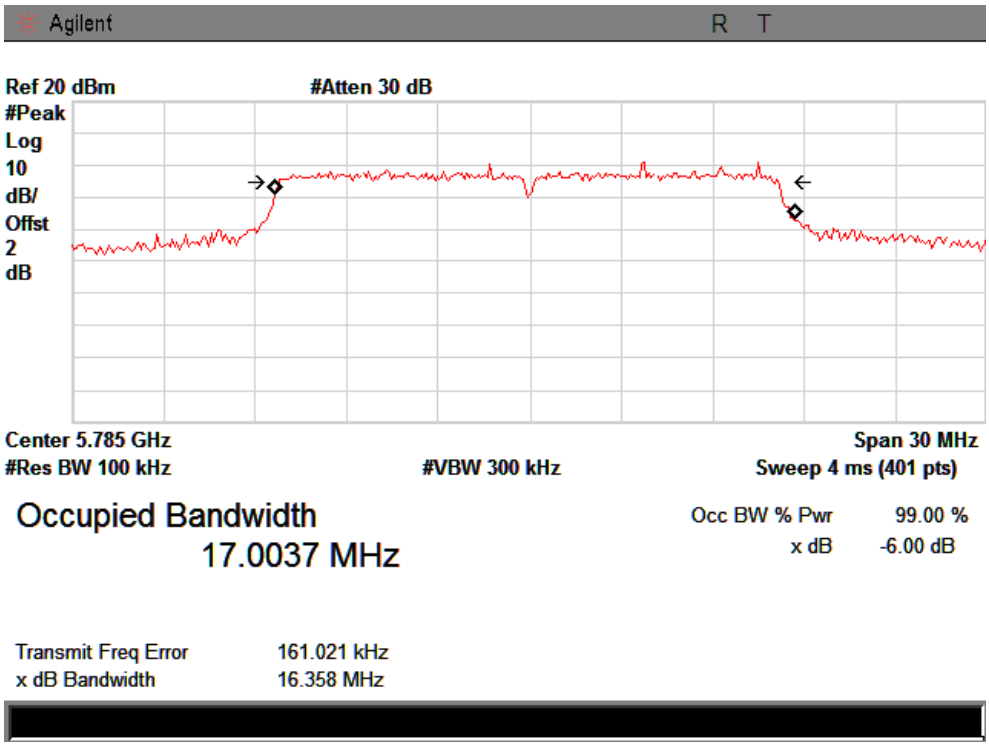
Channel	Frequency (MHz)	6dB Bandwidth (MHz)	99% Occupied Bandwidth (MHz)	Limit (MHz)	Result
IEEE 802.11a:					
Low	5745	16.29	19.95	0.5	PASS
Mid	5785	16.36	17.00	0.5	PASS
High	5825	16.39	16.65	0.5	PASS
IEEE 802.11b:					
Low	2412	10.11	13.07	0.5	PASS
Mid	2437	10.17	13.08	0.5	PASS
High	2462	10.15	13.35	0.5	PASS
IEEE 802.11g:					
Low	2412	13.91	16.88	0.5	PASS
Mid	2437	15.29	16.62	0.5	PASS
High	2462	15.36	16.58	0.5	PASS
IEEE 802.11n/HT20:					
Low	2412	15.15	17.80	0.5	PASS
Mid	2437	15.17	17.69	0.5	PASS
High	2462	15.01	17.72	0.5	PASS
IEEE 802.11n/HT40:					
Low	2422	35.19	36.16	0.5	PASS
Mid	2437	35.18	36.07	0.5	PASS
High	2452	33.88	35.99	0.5	PASS

IEEE 802.11a with 5.8G:

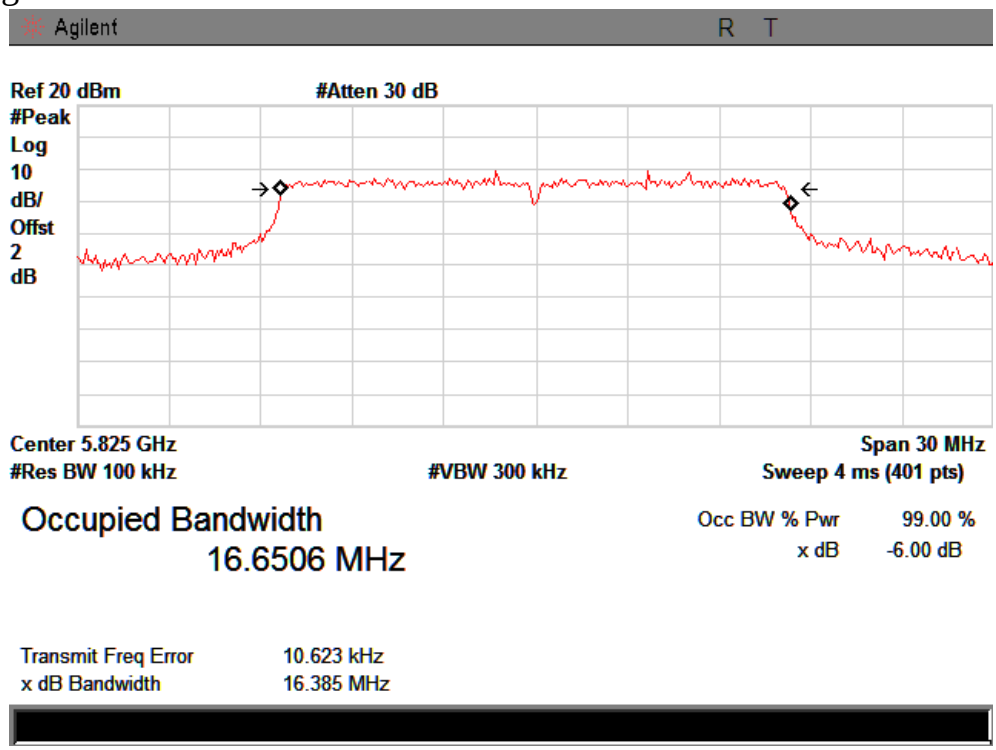
CH Low :



CH Mid :

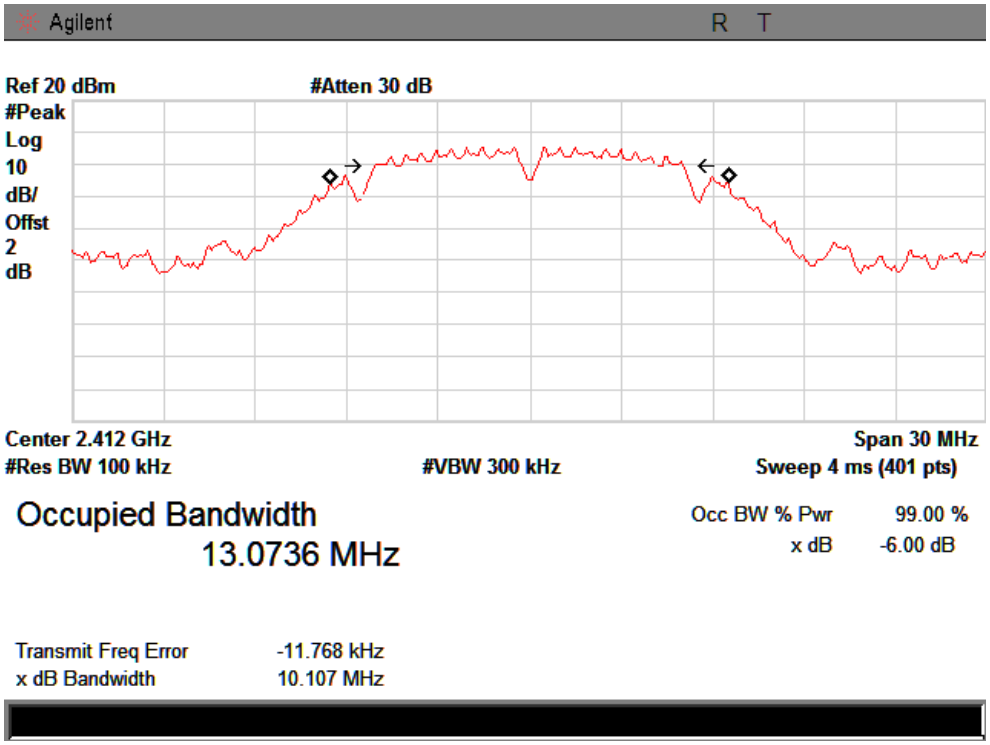


CH High :

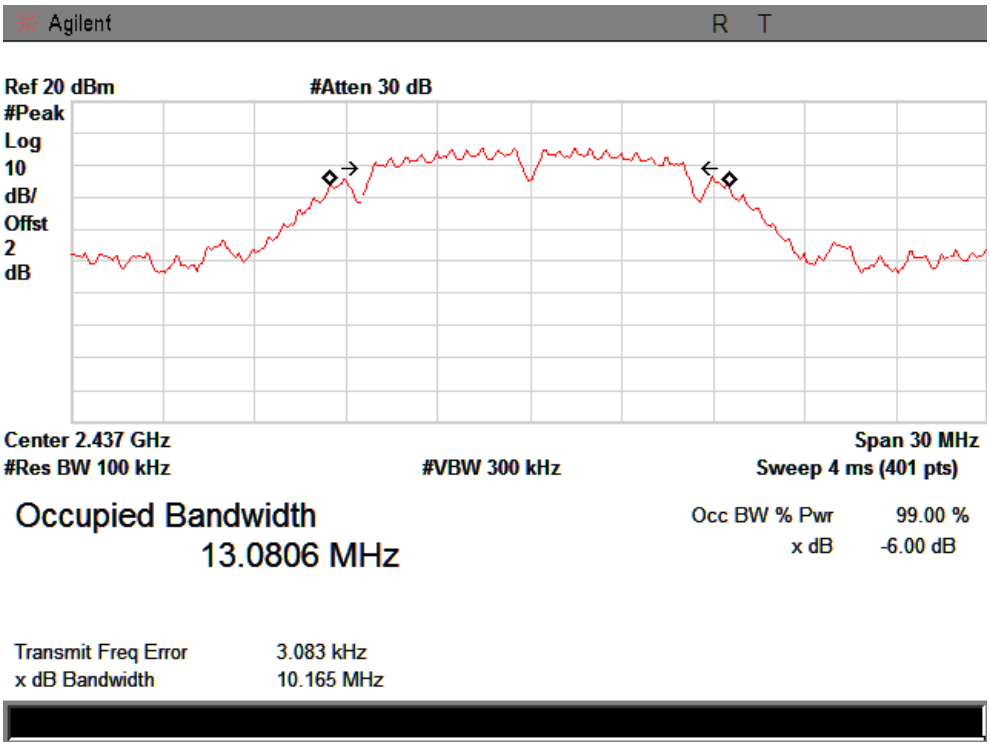


IEEE 802.11b:

CH Low :



CH Mid :



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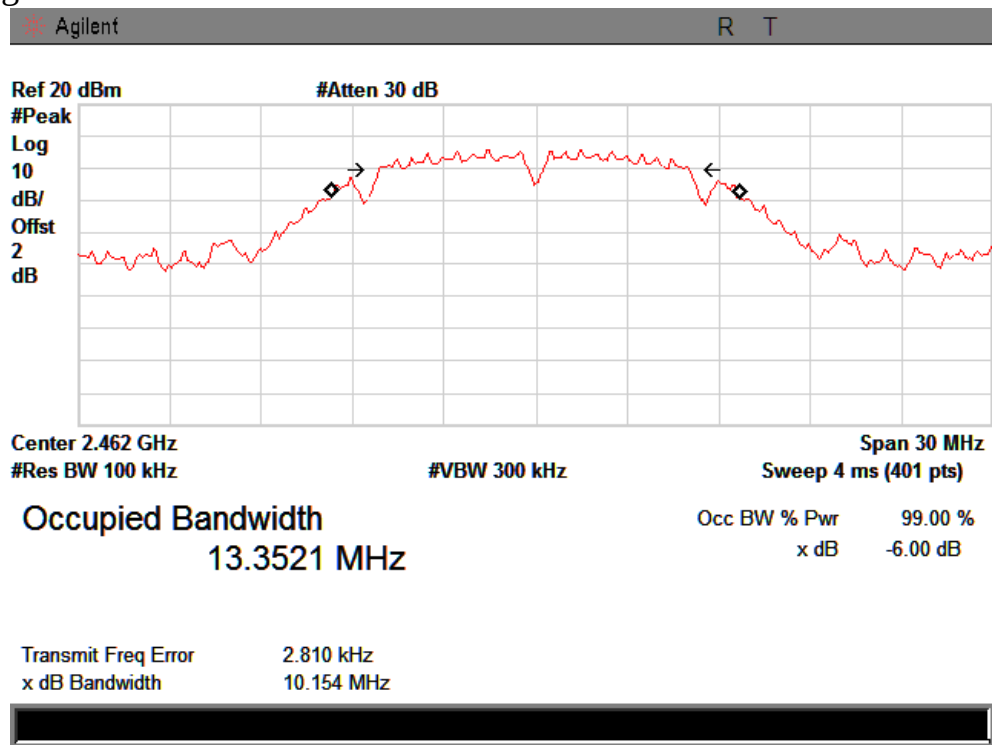
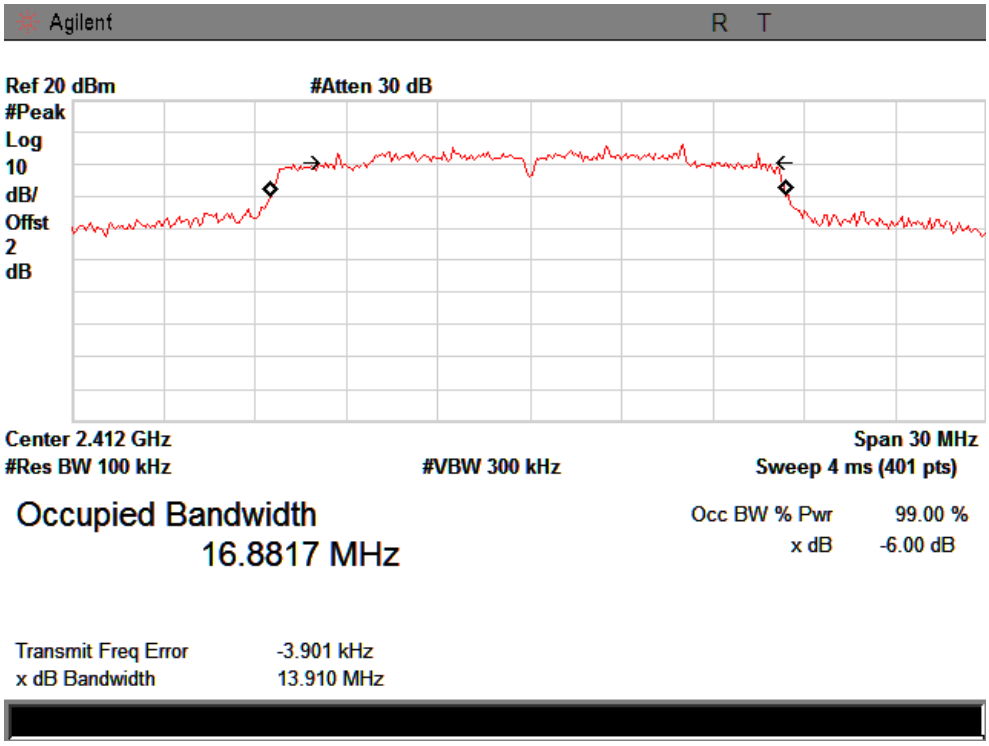
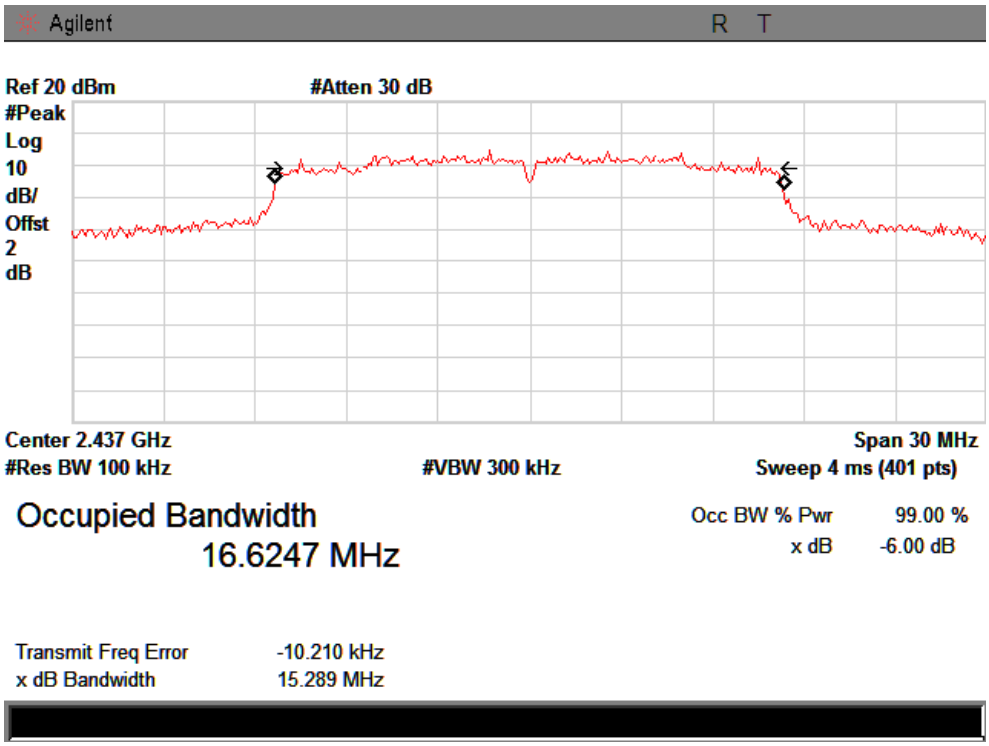


IEEE 802.11g:

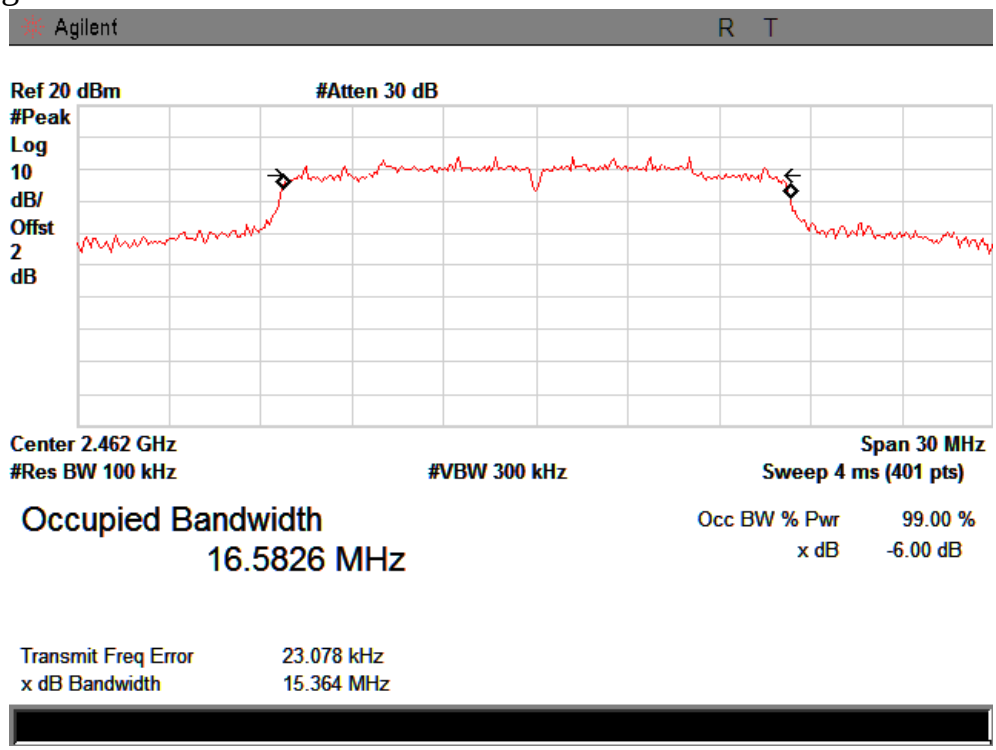
CH Low :



CH Mid :

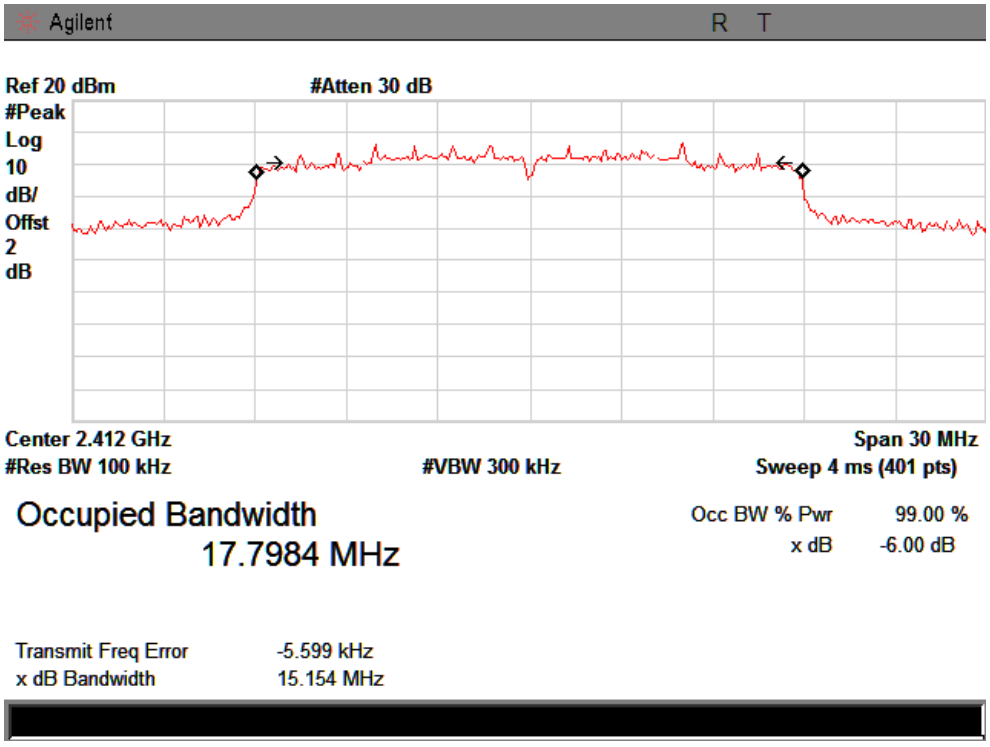


CH High :

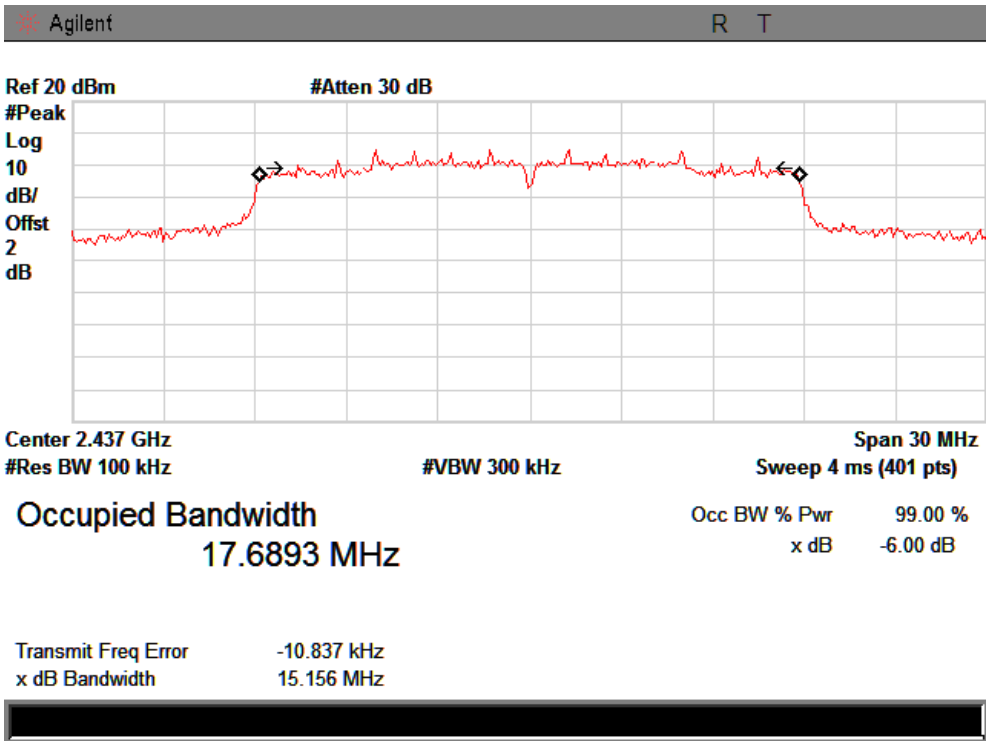


IEEE 802.11n/HT20 with 2.4G:

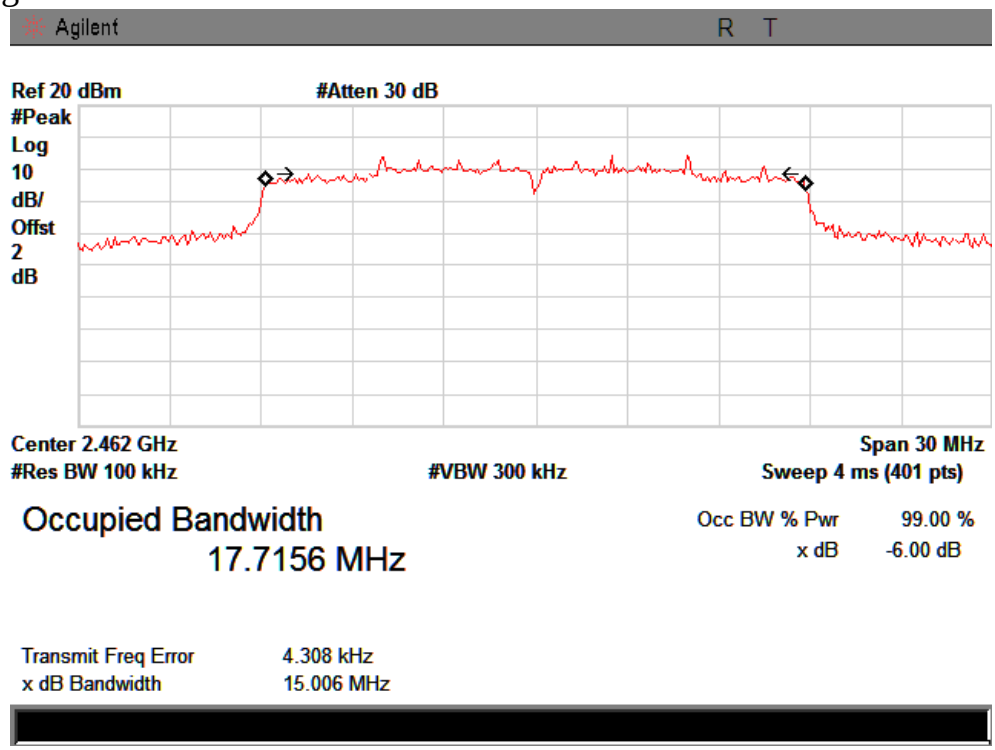
CH Low :



CH Mid :

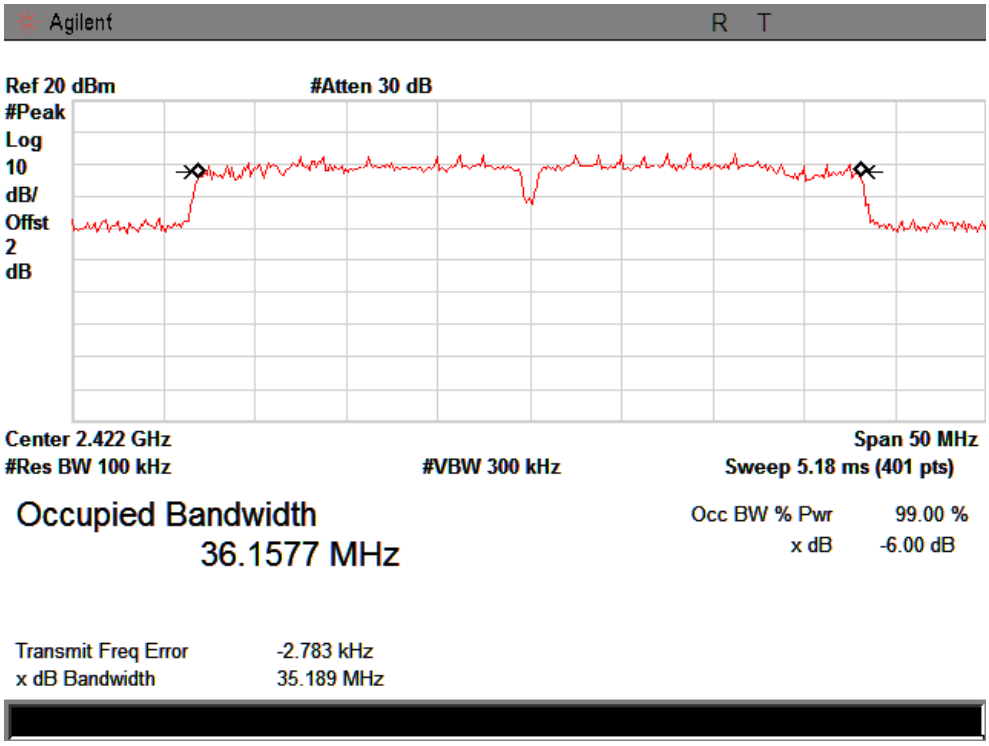


CH High :

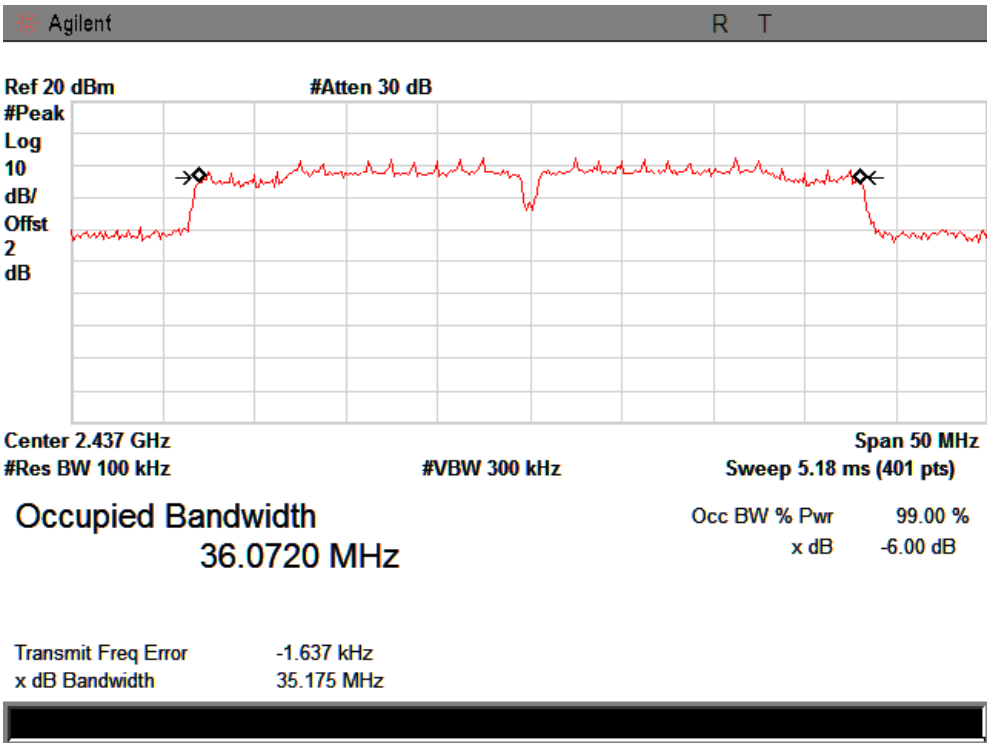


IEEE 802.11n/HT40:

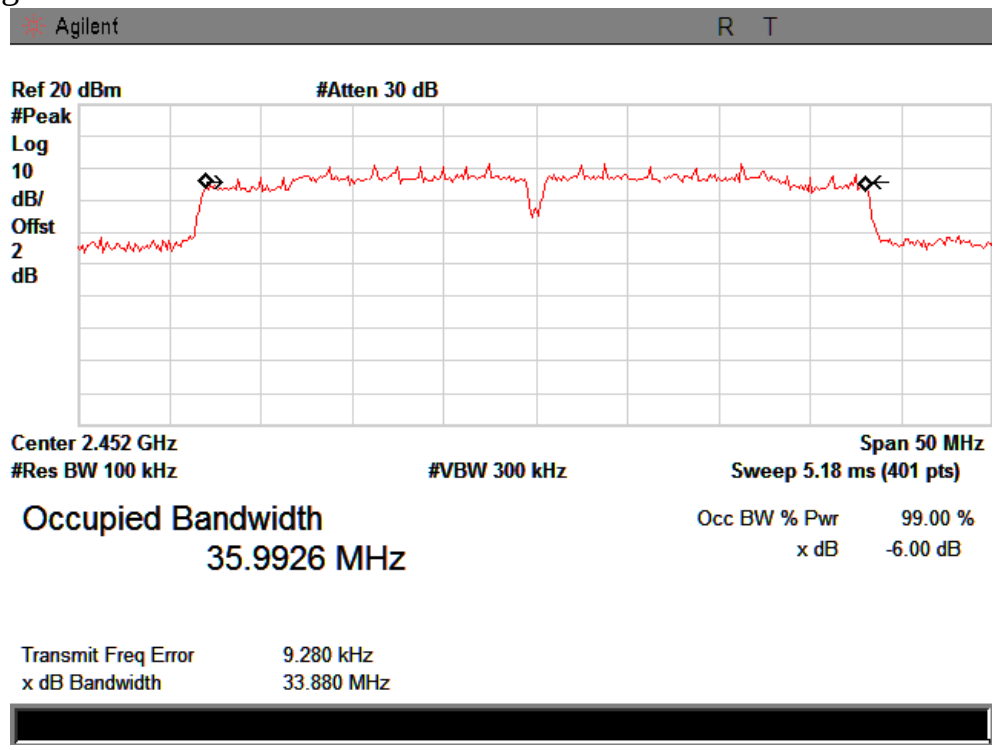
CH Low :



CH Mid :



CH High :


Agilent
R T
Ref 20 dBm
#Atten 30 dB
#Peak
Log
10
dB/
Offst
2
dB
Center 2.452 GHz
#Res BW 100 kHz
#VBW 300 kHz
Span 50 MHz
Sweep 5.18 ms (401 pts)
Occupied Bandwidth
35.9926 MHz
Occ BW % Pwr 99.00 %
x dB -6.00 dB
Transmit Freq Error 9.280 kHz
x dB Bandwidth 33.880 MHz

10 Band Edge Check

10.1 Test limit

Please refer section15.247

All the lower and upper band-edges emissions appearing within 2310MHz to 2390MHz and 2483.5MHz to 2500MHz restricted frequency bands shall not exceed the limits shown in 15.209, all the other emissions outside operation frequency band 2400MHz to 2483.5MHz and 5725MHz to 5850MHz shall be at least 20dB below the fundamental emissions, or comply with 15.209 limits.

10.2 Test Procedure

12.2.1 Put the EUT on a 0.8m high table, power on the EUT. Emissions were scanned and measured rotating the EUT to 360 degrees, Find the maximum Emission

12.2.2 Check the spurious emissions out of band.

12.2.3 RBW,VBW Setting, please see the following test plot.

10.3 Test Setup

Same as 5.2.2.

10.4 Test Result

PASS.

Detailed information please see the following page.

IEEE 802.11a with 5.8G:
CH LOW :

Shenzhen Certification Technology Service Co., Ltd.
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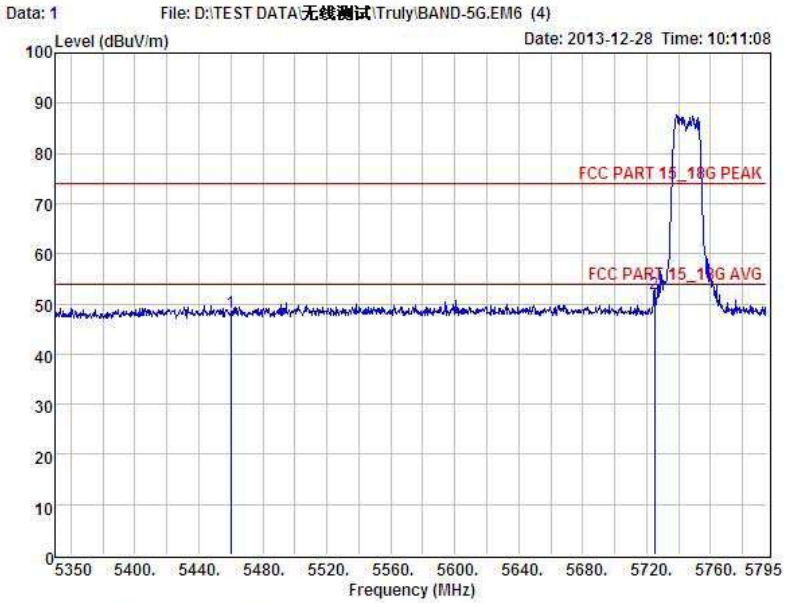
Tel: 4006786199 FAX: +86-755-26736857
Website: http://www.cessz.com Email: Service@cessz.com



Condition : FCC PART 15_18G PEAK 3m POL: VERTICAL
EUT : 3D PAD
Model No : A6102
Test Mode : IEEE 802.11 A-5745MHz
Power : DC 19V From adapter with AC 120V/60Hz
Test Engineer : Simple
Remark :
Temp : 24.2℃
Hum : 54%

Item	Freq	Read Level	Antenna Factor	Preamp Factor	Cable Loss	Level	Limit	Margin	Remark
	MHz	dBuV	dB	dB	dB	dBuV	dBuV	dBuV	
1	5460.00	44.07	31.81	33.65	6.11	48.34	74.00	-25.66	Peak
2	5725.00	46.99	32.27	33.58	6.26	51.94	74.00	-22.06	Peak

Remark: Level = Read Level + Antenna Factor - Preamp Factor + Cable Loss

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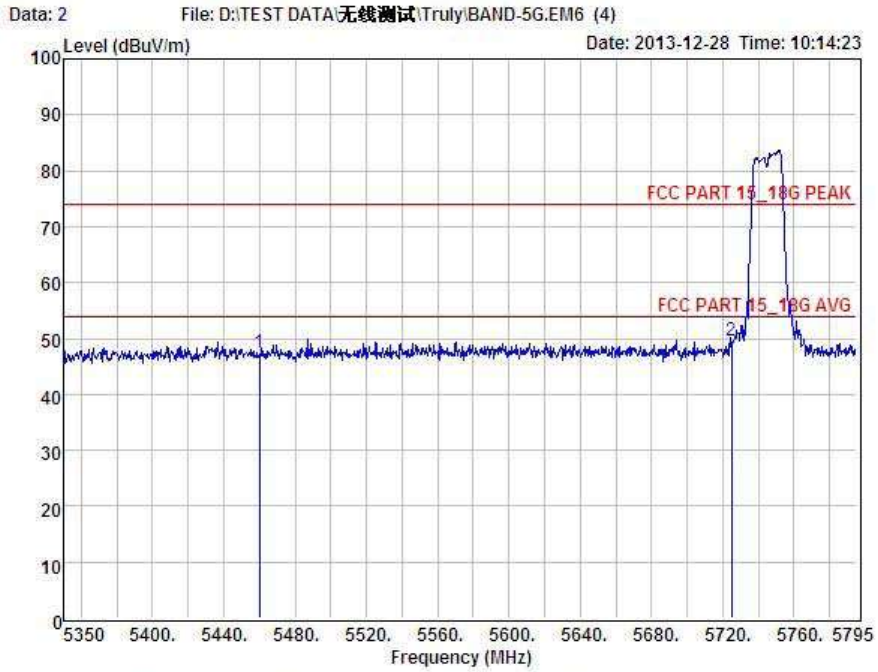
Website: http://www.cessz.com Email: Service@cessz.com



Condition : FCC PART 15_18G PEAK 3m POL: HORIZONTAL
EUT : 3D PAD
Model No : A6102
Test Mode : IEEE 802.11 A-5745MHz
Power : DC 19V From adapter with AC 120V/60Hz
Test Engineer : Simple
Remark :
Temp : 24.2℃
Hum : 54%

Item	Freq	Read Level	Antenna Factor	Preamp Factor	Cable Loss	Level	Limit	Margin	Remark
	MHz	dBuV	dB	dB	dB	dBuV	dBuV	dBuV	
1	5460.00	43.26	31.81	33.65	6.11	47.53	74.00	-26.47	Peak
2	5725.00	44.52	32.27	33.58	6.26	49.47	74.00	-24.53	Peak

Remark: Level = Read Level + Antenna Factor - Preamp Factor + Cable Loss

CH High :

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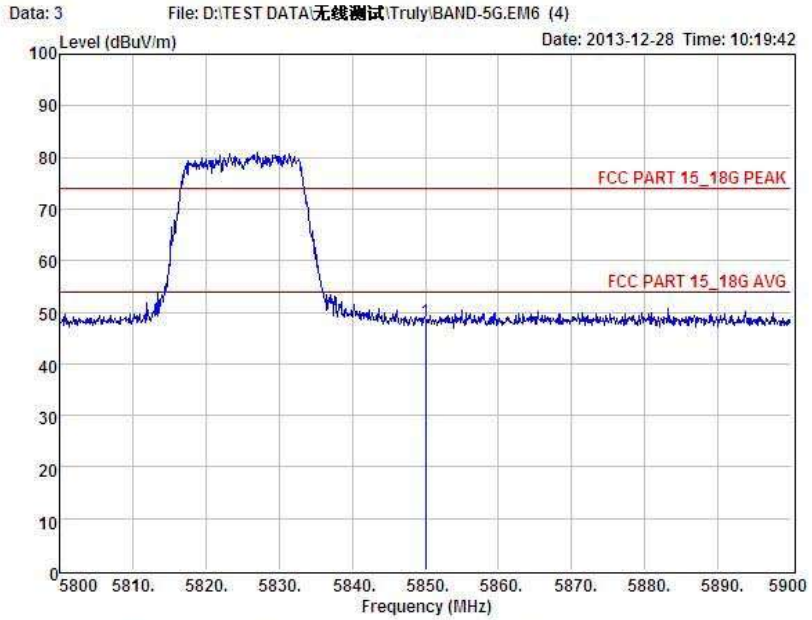
Website: http://www.cessz.com Email: Service@cessz.com



Condition : FCC PART 15_18G PEAK 3m POL: HORIZONTAL
EUT : 3D PAD
Model No : A6102
Test Mode : IEEE 802.11 A-5825MHz
Power : DC 19V From adapter with AC 120V/60Hz
Test Engineer : Simple
Remark :
Temp : 24.2℃
Hum : 54%

Item	Freq	Read Level	Antenna Factor	Preamp Factor	Cable Loss	Level	Limit	Margin	Remark
	MHz	dBuV	dB	dB	dB	dBuV	dBuV	dBuV	
1	5850.00	43.13	32.50	33.64	6.33	48.32	74.00	-25.68	Peak

Remark: Level = Read Level + Antenna Factor - Preamp Factor + Cable Loss

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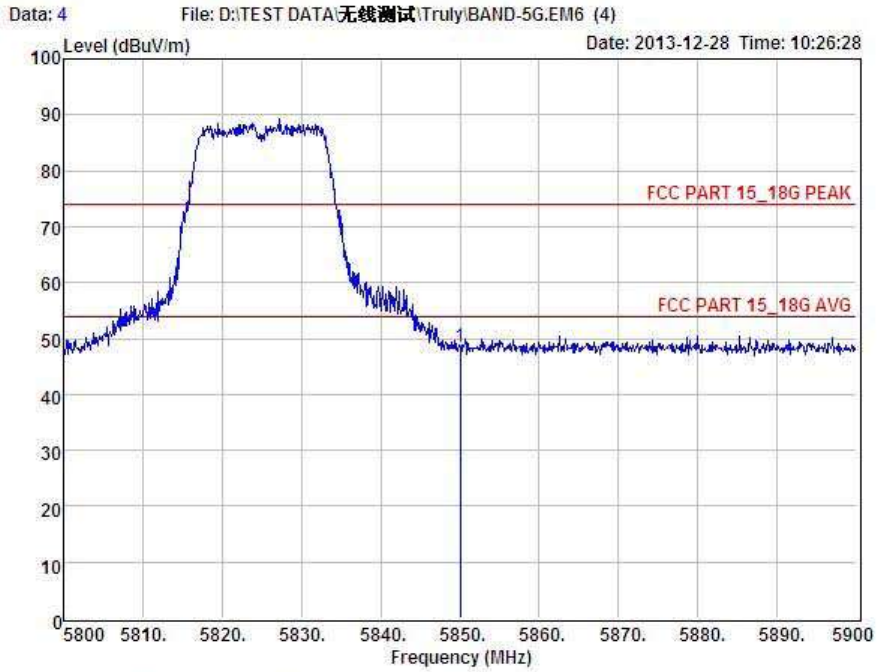
Website: http://www.cessz.com Email: Service@cessz.com



Condition : FCC PART 15_18G PEAK 3m POL: VERTICAL
EUT : 3D PAD
Model No : A6102
Test Mode : IEEE 802.11 A-5825MHz
Power : DC 19V From adapter with AC 120V/60Hz
Test Engineer : Simple
Remark :
Temp : 24.2℃
Hum : 54%

Item	Freq	Read Level	Antenna Factor	Preamp Factor	Cable Loss	Level	Limit	Margin	Remark
	MHz	dBuV	dB	dB	dB	dBuV	dBuV	dBuV	
1	5850.00	43.38	32.50	33.64	6.33	48.57	74.00	-25.43	Peak

Remark: Level = Read Level + Antenna Factor - Preamp Factor + Cable Loss

IEEE 802.11b:
CH LOW :

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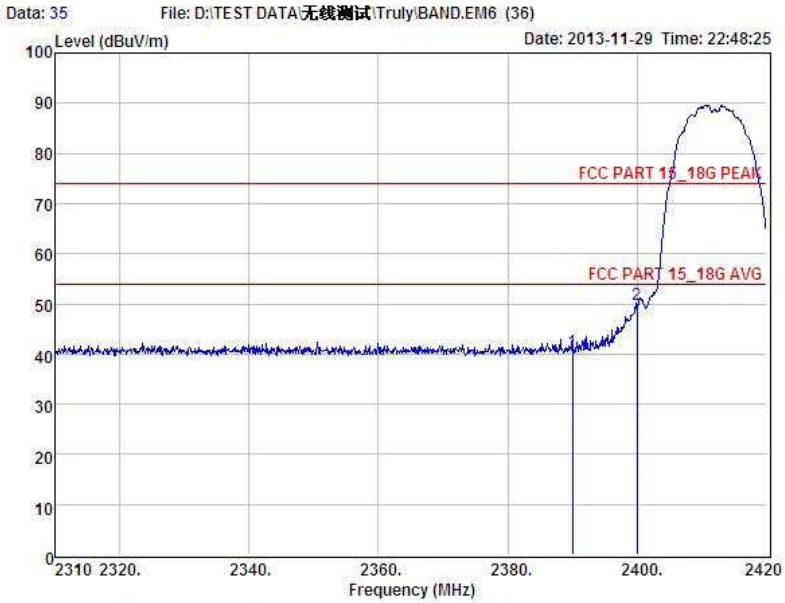
Website: http://www.cessz.com Email: Service@cessz.com



Condition : FCC PART 15_18G PEAK 3m POL: HORIZONTAL
EUT : 3D PAD
Model No : A6102
Test Mode : IEEE 802.11 B -2412MHz
Power : DC 19V From adapter with AC 120V/60Hz
Test Engineer : Simple
Remark :
Temp : 24.2℃
Hum : 54%

Item	Freq	Read Level	Antenna Factor	Preamp Factor	Cable Loss	Level	Limit	Margin	Remark
	MHz	dBuV	dB	dB	dB	dBuV	dBuV	dBuV	
1	2390.00	43.88	27.62	34.97	3.92	40.45	74.00	-33.55	Peak
2	2400.00	53.23	27.62	34.97	3.94	49.82	74.00	-24.18	Peak

Remark: Level = Read Level + Antenna Factor - Preamp Factor + Cable Loss

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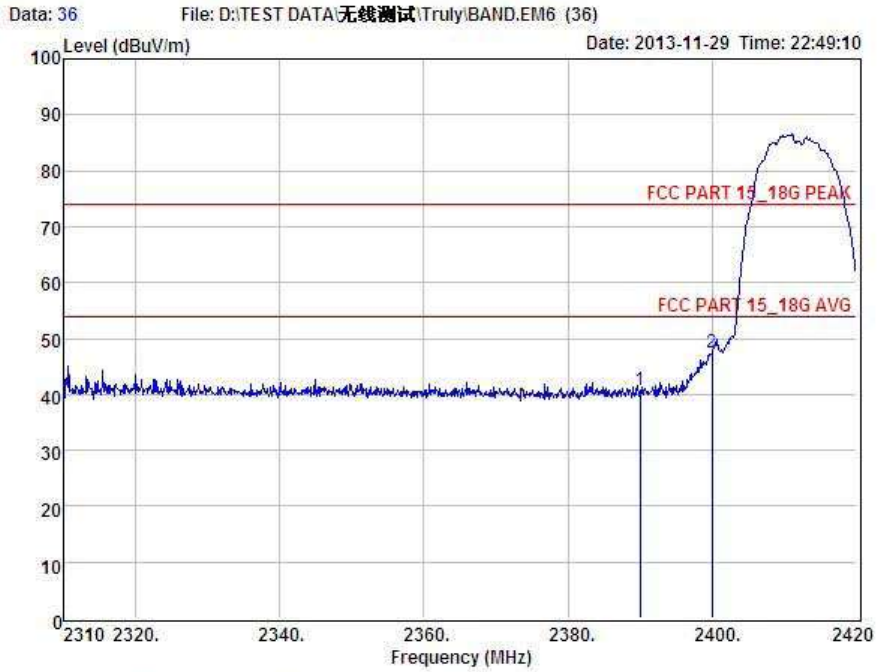
Tel: 4006786199 FAX: +86-755-26736857
Website: http://www.cessz.com Email: Service@cessz.com



Condition : FCC PART 15_18G PEAK 3m POL: VERTICAL
EUT : 3D PAD
Model No : A6102
Test Mode : IEEE 802.11 B -2412MHz
Power : DC 19V From adapter with AC 120V/60Hz
Test Engineer : Simple
Remark :
Temp : 24.2℃
Hum : 54%

Item	Freq	Read Level	Antenna Factor	Preamp Factor	Cable Loss	Level	Limit	Margin	Remark
	MHz	dBuV	dB	dB	dB	dBuV	dBuV	dBuV	
1	2390.00	44.22	27.62	34.97	3.92	40.79	74.00	-33.21	Peak
2	2400.00	50.86	27.62	34.97	3.94	47.45	74.00	-26.55	Peak

Remark: Level = Read Level + Antenna Factor - Preamp Factor + Cable Loss

CH High :

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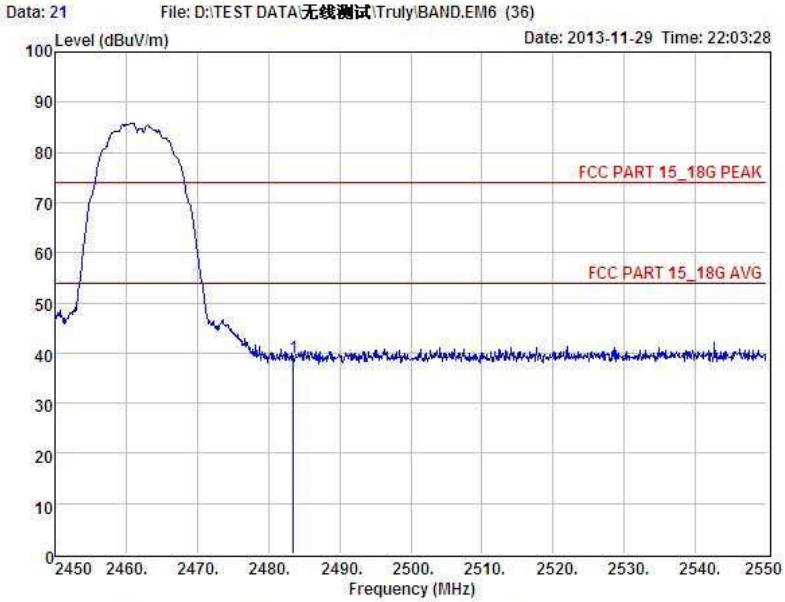
Website: http://www.cessz.com Email: Service@cessz.com




```
Condition      : FCC PART 15_18G PEAK 3m       POL: HORIZONTAL
EUT            : 3D PAD
Model No       : A6102
Test Mode      : IEEE 802.11 B -2462MHz
Power          : DC 19V From adapter with AC 120V/60Hz
Test Engineer  : Simple
Remark         :
Temp           : 24.2℃
Hum            : 54%
```

Item	Freq	Read Level	Antenna Factor	Preamp Factor	Cable Loss	Level	Limit	Margin	Remark
	MHz	dBuV	dB	dB	dB	dBuV	dBuV	dBuV	
1	2483.50	42.59	27.59	34.97	4.00	39.21	74.00	-34.79	Peak

Remark: Level = Read Level + Antenna Factor - Preamp Factor + Cable Loss

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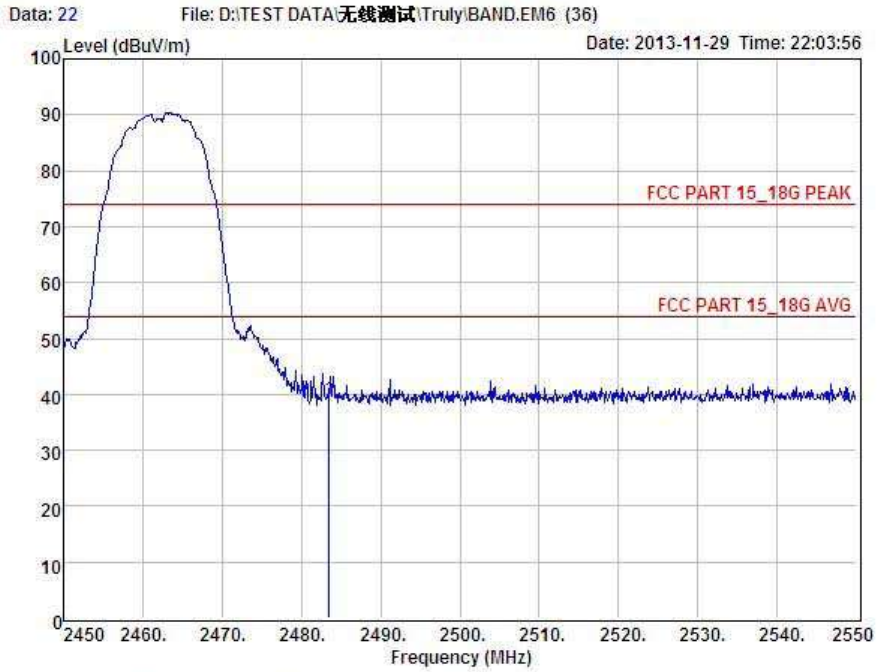
Website: http://www.cessz.com Email: Service@cessz.com



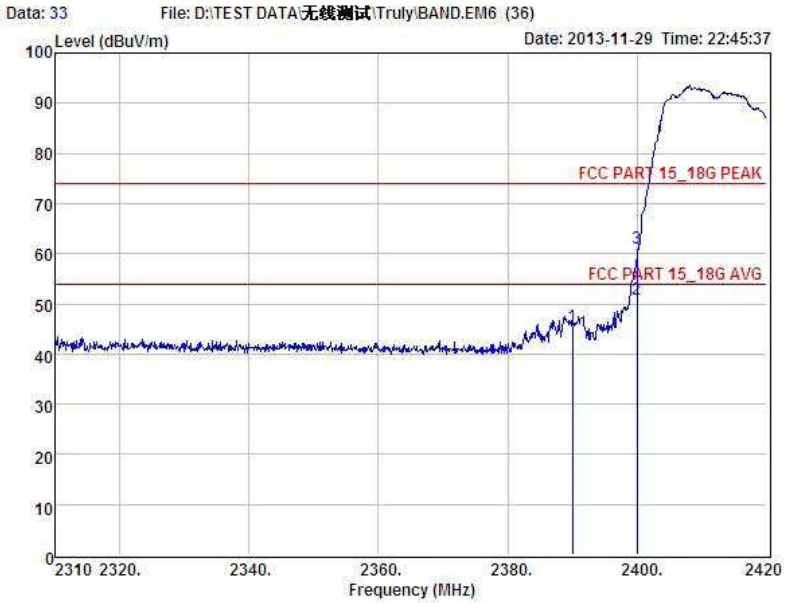

```
Condition      : FCC PART 15_18G PEAK 3m       POL: VERTICAL
EUT            : 3D PAD
Model No       : A6102
Test Mode      : IEEE 802.11 B -2462MHz
Power          : DC 19V From adapter with AC 120V/60Hz
Test Engineer  : Simple
Remark         :
Temp           : 24.2℃
Hum            : 54%
```

Item	Freq	Read Level	Antenna Factor	Preamp Factor	Cable Loss	Level	Limit	Margin	Remark
	MHz	dBuV	dB	dB	dB	dBuV	dBuV	dBuV	
1	2483.50	42.55	27.59	34.97	4.00	39.17	74.00	-34.83	Peak

Remark: Level = Read Level + Antenna Factor - Preamp Factor + Cable Loss

IEEE 802.11g:
CH LOW :

Shenzhen Certification Technology Service Co., Ltd.
2F, Building B, East Area of Nanchang Second Industrial Zone,
Gushu 2nd Road, Bao'an District, Shenzhen 518126, P.R. China
Tel: 4006786199 FAX: +86-755-26736857
Website: http://www.cessz.com Email: Service@cessz.com



Condition : FCC PART 15_18G PEAK 3m POL: VERTICAL
EUT : 3D PAD
Model No : A6102
Test Mode : IEEE 802.11 G -2412MHz
Power : DC 19V From adapter with AC 120V/60Hz
Test Engineer : Simple
Remark :
Temp : 24.2℃
Hum : 54%

Item	Freq	Read Level	Antenna Factor	Preamp Factor	Cable Loss	Level	Limit	Margin	Remark
	MHz	dBuV	dB	dB	dB	dBuV	dBuV	dBuV	
1	2390.00	49.11	27.62	34.97	3.92	45.68	74.00	-28.32	Peak
2	2400.00	54.28	27.62	34.97	3.94	50.87	54.00	-3.13	Average
3	2400.00	64.47	27.62	34.97	3.94	61.06	74.00	-12.94	Peak

Remark: Level = Read Level + Antenna Factor - Preamp Factor + Cable Loss

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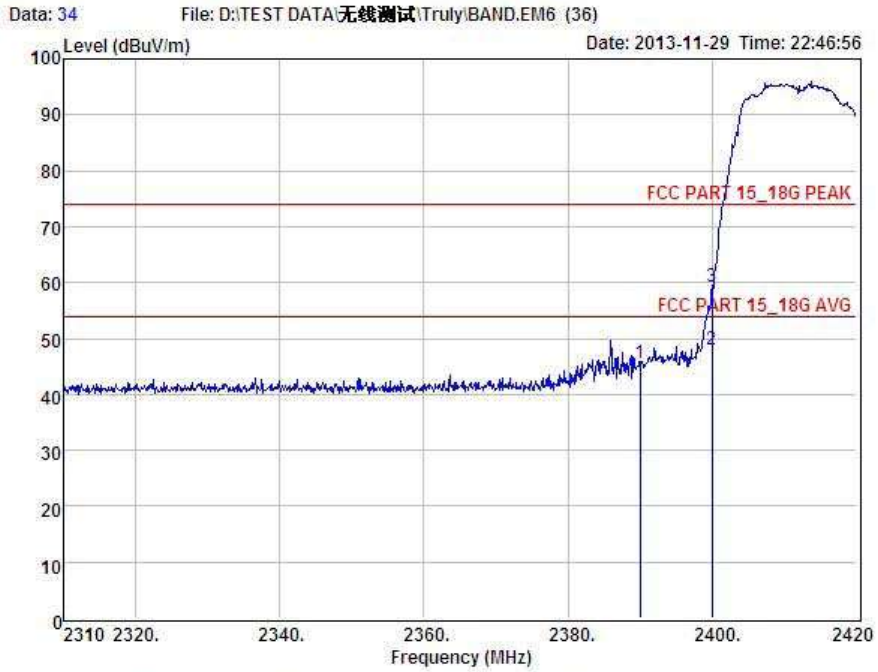
Website: http://www.cessz.com Email: Service@cessz.com



Condition : FCC PART 15_18G PEAK 3m POL: HORIZONTAL
EUT : 3D PAD
Model No : A6102
Test Mode : IEEE 802.11 G -2412MHz
Power : DC 19V From adapter with AC 120V/60Hz
Test Engineer : Simple
Remark :
Temp : 24.2℃
Hum : 54%

Item	Freq	Read Level	Antenna Factor	Preamp Factor	Cable Loss	Level	Limit	Margin	Remark
	MHz	dBuV	dB	dB	dB	dBuV	dBuV	dBuV	
1	2390.00	49.05	27.62	34.97	3.92	45.62	74.00	-28.38	Peak
2	2400.00	51.35	27.62	34.97	3.94	47.94	54.00	-6.06	Average
3	2400.00	62.55	27.62	34.97	3.94	59.14	74.00	-14.86	Peak

Remark: Level = Read Level + Antenna Factor - Preamp Factor + Cable Loss

CH High :

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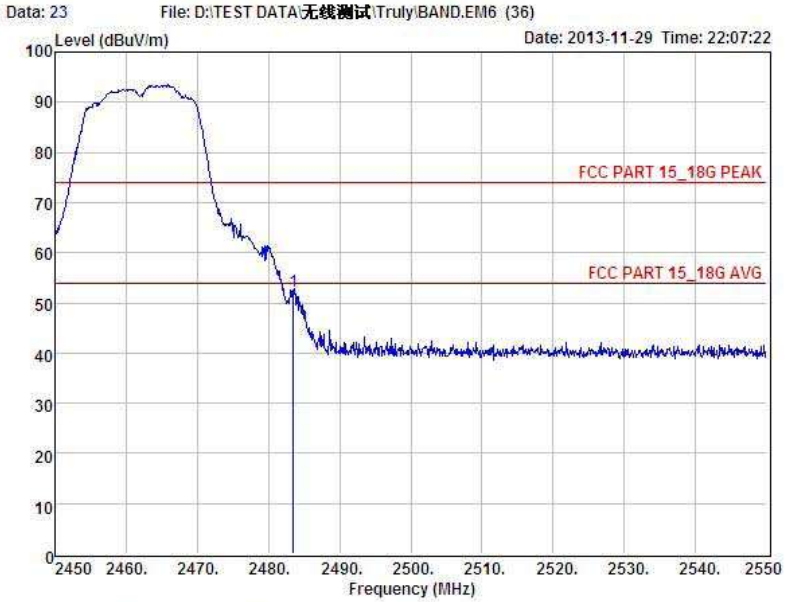
Website: http://www.cessz.com Email: Service@cessz.com




```
Condition      : FCC PART 15_18G PEAK 3m       POL: VERTICAL
EUT            : 3D PAD
Model No       : A6102
Test Mode      : IEEE 802.11 G -2462MHz
Power          : DC 19V From adapter with AC 120V/60Hz
Test Engineer  : Simple
Remark         :
Temp           : 24.2℃
Hum            : 54%
```

Item	Freq	Read Level	Antenna Factor	Preamp Factor	Cable Loss	Level	Limit	Margin	Remark
	MHz	dBuV	dB	dB	dB	dBuV	dBuV	dBuV	
1	2483.50	55.71	27.59	34.97	4.00	52.33	74.00	-21.67	Peak

Remark: Level = Read Level + Antenna Factor - Preamp Factor + Cable Loss

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Website: http://www.cessz.com Email: Service@cessz.com

Condition : FCC PART 15_18G PEAK 3m POL: HORIZONTAL
EUT : 3D PAD
Model No : A6102
Test Mode : IEEE 802.11 G -2462MHz
Power : DC 19V From adapter with AC 120V/60Hz
Test Engineer : Simple
Remark :
Temp : 24.2℃
Hum : 54%

Item	Freq	Read Level	Antenna Factor	Preamp Factor	Cable Loss	Level	Limit	Margin	Remark
	MHz	dBuV	dB	dB	dB	dBuV	dBuV	dBuV	
1	2483.50	46.23	27.59	34.97	4.00	44.85	74.00	-29.15	Peak

Remark: Level = Read Level + Antenna Factor - Preamp Factor + Cable Loss

IEEE 802.11n/HT20 with 2.4G:
CH LOW :

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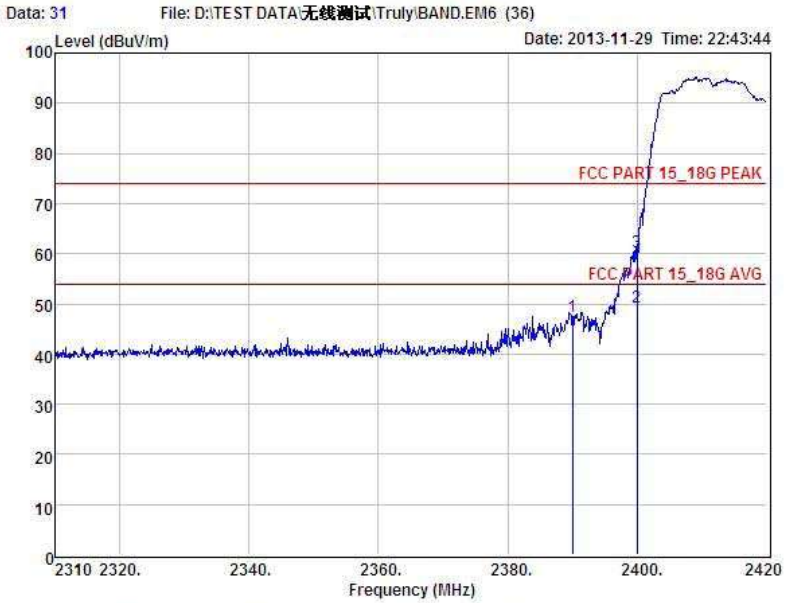
Website: http://www.cessz.com Email: Service@cessz.com



Condition : FCC PART 15_18G PEAK 3m POL: HORIZONTAL
EUT : 3D PAD
Model No : A6102
Test Mode : IEEE 802.11 N20 -2412MHz
Power : DC 19V From adapter with AC 120V/60Hz
Test Engineer : Simple
Remark :
Temp : 24.2℃
Hum : 54%

Item	Freq	Read Level	Antenna Factor	Preamp Factor	Cable Loss	Level	Limit	Margin	Remark
	MHz	dBuV	dB	dB	dB	dBuV	dBuV	dBuV	
1	2390.00	50.77	27.62	34.97	3.92	47.34	74.00	-26.66	Peak
2	2400.00	52.72	27.62	34.97	3.94	49.31	54.00	-4.69	Average
3	2400.00	63.70	27.62	34.97	3.94	60.29	74.00	-13.71	Peak

Remark: Level = Read Level + Antenna Factor - Preamp Factor + Cable Loss

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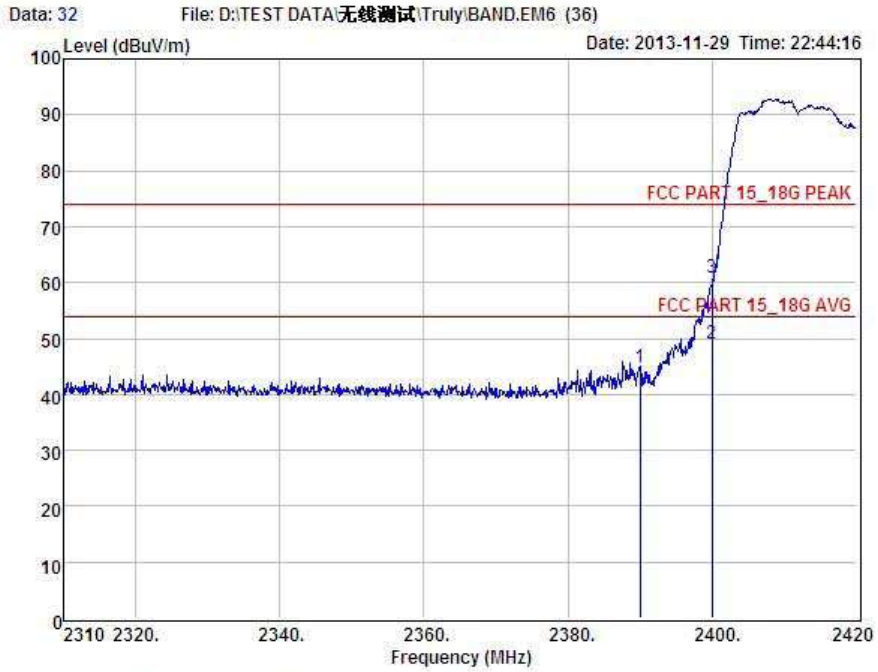
Tel: 4006786199 FAX: +86-755-26736857
Website: http://www.cessz.com Email: Service@cessz.com



Condition : FCC PART 15_18G PEAK 3m POL: VERTICAL
EUT : 3D PAD
Model No : A6102
Test Mode : IEEE 802.11 N20 -2412MHz
Power : DC 19V From adapter with AC 120V/60Hz
Test Engineer : Simple
Remark :
Temp : 24.2℃
Hum : 54%

Item	Freq	Read Level	Antenna Factor	Preamp Factor	Cable Loss	Level	Limit	Margin	Remark
	MHz	dBuV	dB	dB	dB	dBuV	dBuV	dBuV	
1	2390.00	48.14	27.62	34.97	3.92	44.71	74.00	-29.29	Peak
2	2400.00	52.57	27.62	34.97	3.94	49.16	54.00	-4.84	Average
3	2400.00	64.16	27.62	34.97	3.94	60.75	74.00	-13.25	Peak

Remark: Level = Read Level + Antenna Factor - Preamp Factor + Cable Loss

CH High :

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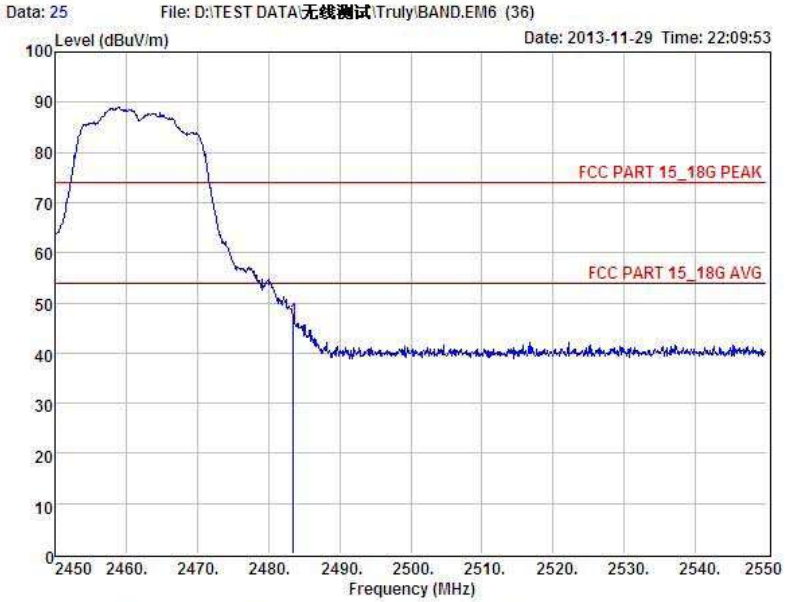
Website: http://www.cessz.com Email: Service@cessz.com




```
Condition      : FCC PART 15_18G PEAK 3m       POL: HORIZONTAL
EUT            : 3D PAD
Model No       : A6102
Test Mode      : IEEE 802.11 N20 -2462MHz
Power          : DC 19V From adapter with AC 120V/60Hz
Test Engineer  : Simple
Remark         :
Temp           : 24.2℃
Hum            : 54%
```

Item	Freq	Read Level	Antenna Factor	Preamp Factor	Cable Loss	Level	Limit	Margin	Remark
	MHz	dBuV	dB	dB	dB	dBuV	dBuV	dBuV	
1	2483.50	50.07	27.59	34.97	4.00	46.69	74.00	-27.31	Peak

Remark: Level = Read Level + Antenna Factor - Preamp Factor + Cable Loss

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Website: http://www.cessz.com Email: Service@cessz.com

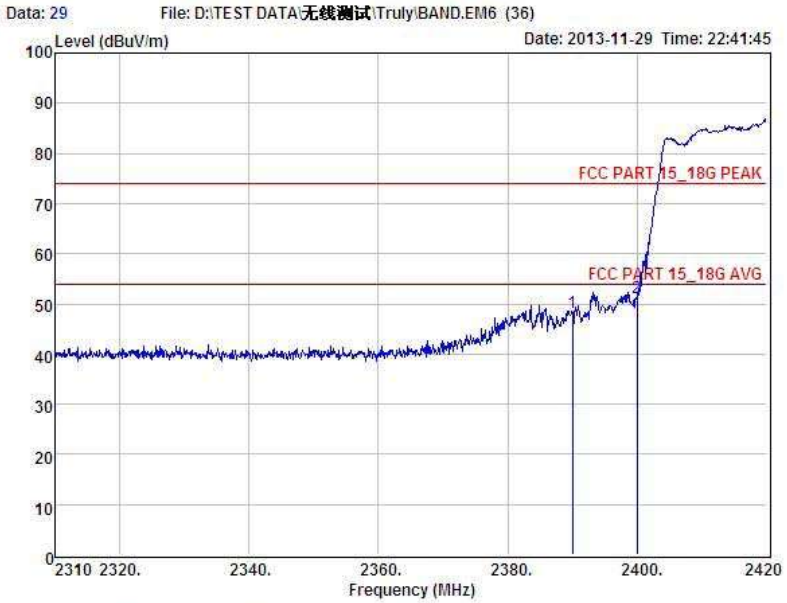

```
Condition      : FCC PART 15_18G PEAK 3m       POL: VERTICAL
EUT            : 3D PAD
Model No       : A6102
Test Mode      : IEEE 802.11 N20 -2462MHz
Power          : DC 19V From adapter with AC 120V/60Hz
Test Engineer  : Simple
Remark         :
Temp           : 24.2℃
Hum            : 54%
```

Item	Freq	Read Level	Antenna Factor	Preamp Factor	Cable Loss	Level	Limit	Margin	Remark
	MHz	dBuV	dB	dB	dB	dBuV	dBuV	dBuV	
1	2483.50	56.05	27.59	34.97	4.00	52.67	74.00	-21.33	Peak

Remark: Level = Read Level + Antenna Factor - Preamp Factor + Cable Loss

IEEE 802.11 n/HT40:
CH LOW :

Shenzhen Certification Technology Service Co., Ltd.
2F, Building B, East Area of Nanchang Second Industrial Zone,
Gushu 2nd Road, Bao'an District, Shenzhen 518126, P.R. China
Tel: 4006786199 FAX: +86-755-26736857
Website: http://www.cessz.com Email: Service@cessz.com



Condition : FCC PART 15_18G PEAK 3m POL: VERTICAL
EUT : 3D PAD
Model No : A6102
Test Mode : IEEE 802.11 N40 -2422MHz
Power : DC 19V From adapter with AC 120V/60Hz
Test Engineer : Simple
Remark :
Temp : 24.2℃
Hum : 54%

Item	Freq	Read Level	Antenna Factor	Preamp Factor	Cable Loss	Level	Limit	Margin	Remark
	MHz	dBuV	dB	dB	dB	dBuV	dBuV	dBuV	
1	2390.00	51.58	27.62	34.97	3.92	48.15	74.00	-25.85	Peak
2	2400.00	54.52	27.62	34.97	3.94	51.11	74.00	-22.89	Peak

Remark: Level = Read Level + Antenna Factor - Preamp Factor + Cable Loss

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Website: http://www.cessz.com Email: Service@cessz.com

Condition : FCC PART 15_18G PEAK 3m POL: HORIZONTAL
EUT : 3D PAD
Model No : A6102
Test Mode : IEEE 802.11 N40 -2422MHz
Power : DC 19V From adapter with AC 120V/60Hz
Test Engineer : Simple
Remark :
Temp : 24.2℃
Hum : 54%

Item	Freq	Read Level	Antenna Factor	Preamp Factor	Cable Loss	Level	Limit	Margin	Remark
	MHz	dBuV	dB	dB	dB	dBuV	dBuV	dBuV	
1	2390.00	52.80	27.62	34.97	3.92	49.37	74.00	-24.63	Peak
2	2400.00	57.19	27.62	34.97	3.94	53.78	74.00	-20.22	Peak

Remark: Level = Read Level + Antenna Factor - Preamp Factor + Cable Loss

CH High :

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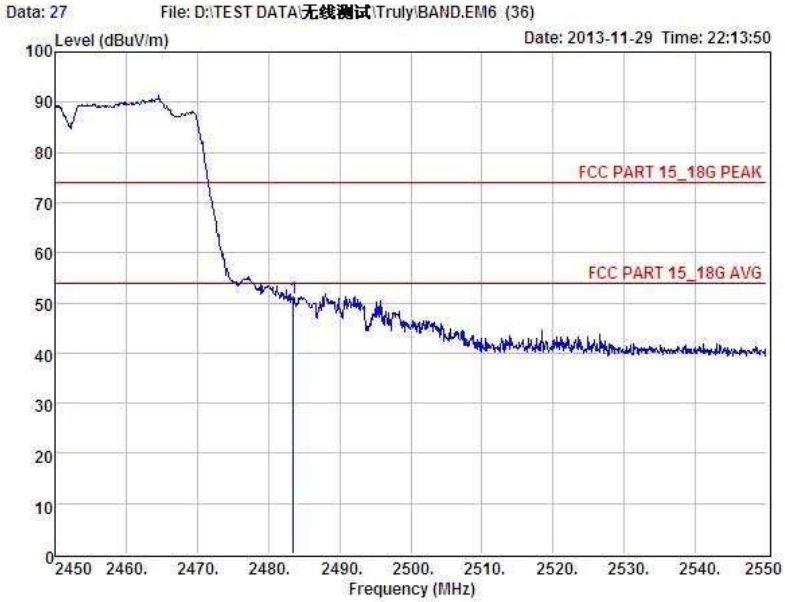

Condition : FCC PART 15_18G PEAK 3m POL: VERTICAL
EUT : 3D PAD
Model No : A6102
Test Mode : IEEE 802.11 N40 -2452MHz
Power : DC 19V From adapter with AC 120V/60Hz
Test Engineer : Simple
Remark :
Temp : 24.2℃
Hum : 54%

Item	Freq	Read Level	Antenna Factor	Preamp Factor	Cable Loss	Level	Limit	Margin	Remark
	MHz	dBuV	dB	dB	dB	dBuV	dBuV	dBuV	
1	2483.50	54.40	27.59	34.97	4.00	51.02	74.00	-22.98	Peak

Remark: Level = Read Level + Antenna Factor - Preamp Factor + Cable Loss

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Website: http://www.cessz.com Email: Service@cessz.com


```
Condition      : FCC PART 15_18G PEAK 3m       POL: HORIZONTAL
EUT            : 3D PAD
Model No       : A6102
Test Mode      : IEEE 802.11 N40 -2452MHz
Power          : DC 19V From adapter with AC 120V/60Hz
Test Engineer  : Simple
Remark         :
Temp           : 24.2℃
Hum            : 54%
```

Item	Freq	Read Level	Antenna Factor	Preamp Factor	Cable Loss	Level	Limit	Margin	Remark
	MHz	dBuV	dB	dB	dB	dBuV	dBuV	dBuV	
1	2483.50	54.05	27.59	34.97	4.00	50.67	74.00	-23.33	Peak

Remark: Level = Read Level + Antenna Factor - Preamp Factor + Cable Loss

11 Antenna Requirement

11.1 Standard Requirement

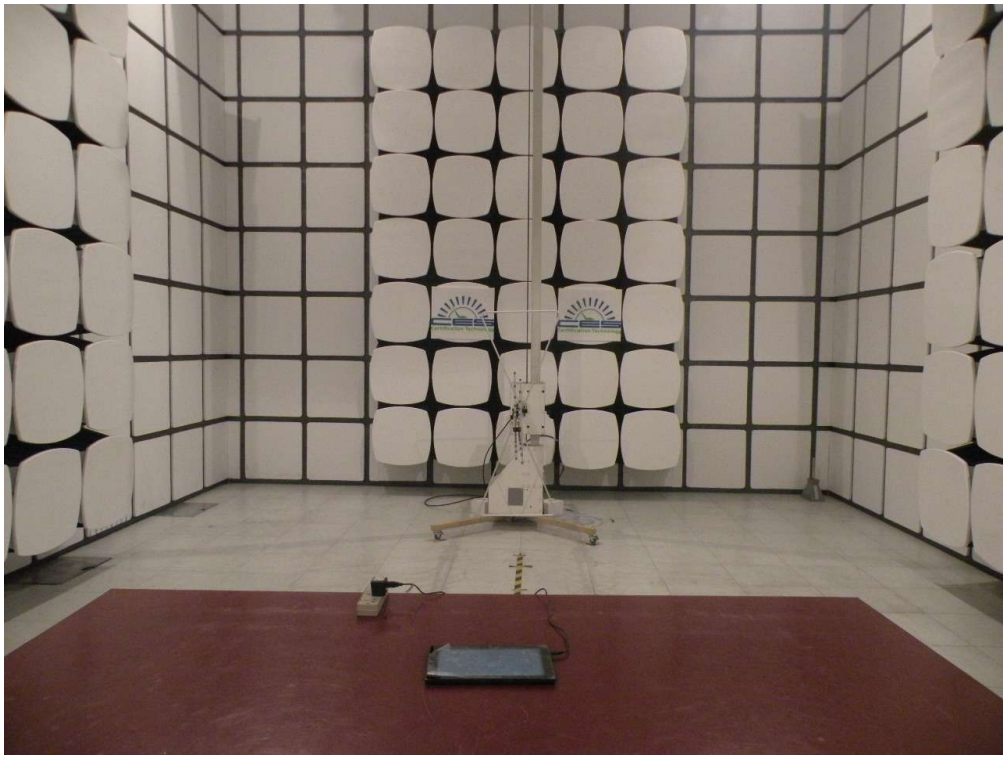
For intentional device, according to FCC 47 CFR Section 15.203, an intentional radiator shall be designed to ensure that no antenna other than that furnished by the responsible party shall be used with the device. And according to FCC 47 CFR Section 15.247 (b), if transmitting antennas of directional gain greater than 6dBi are used, the power shall be reduced by the amount in dB that the directional gain of the antenna exceeds 6dBi.

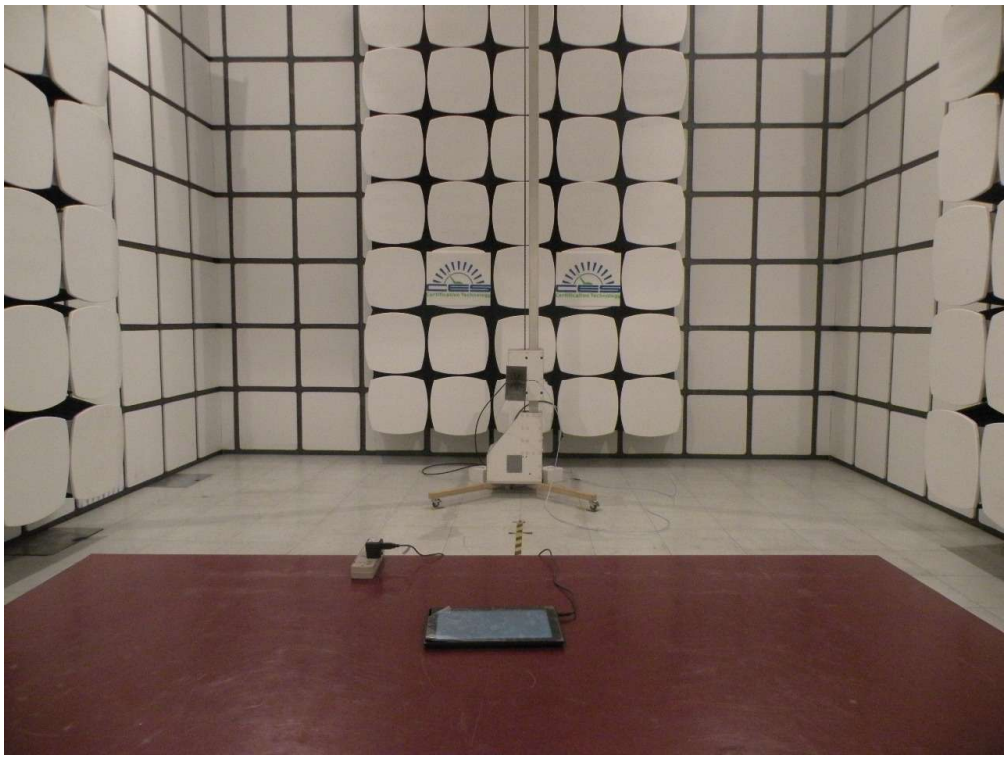
11.2 Result

The antennas used for this product are PIFA Antenna for Bluetooth/WIFI, PIFA Antenna For GSM/WCDMA and that no antenna other than that furnished by the responsible party shall be used with the device, the maximum peak gain of the transmit antenna is only 1dBi for Bluetooth/WIFI and 1.5dBi for GSM/WCDMA .

12 Test setup photo

12.1 Photos of Radiated emission



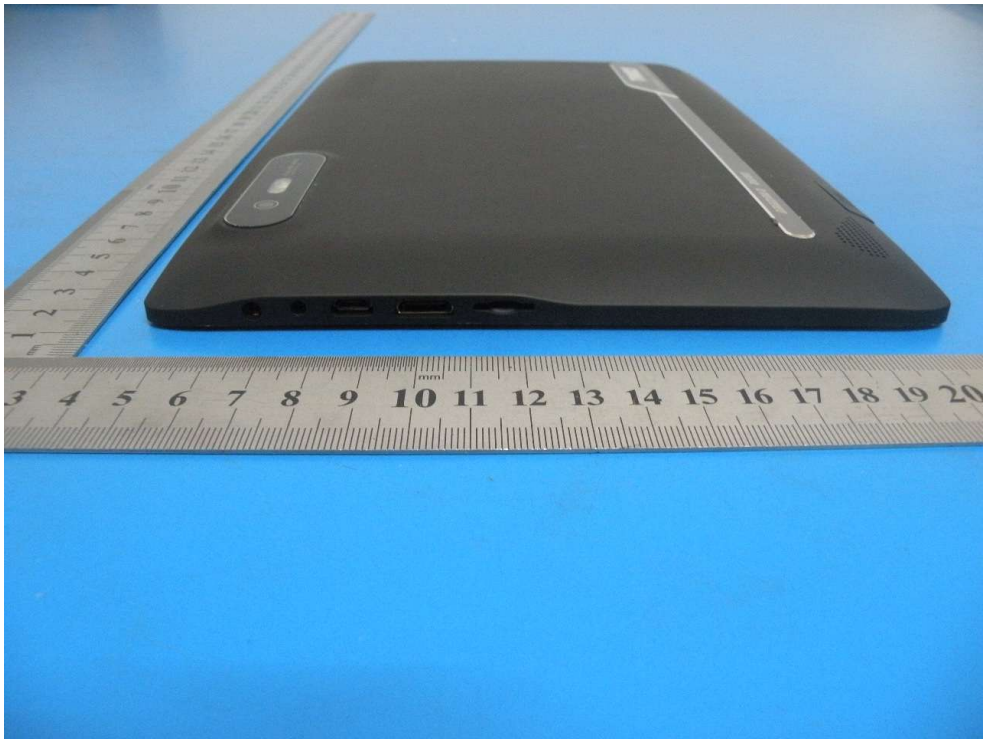


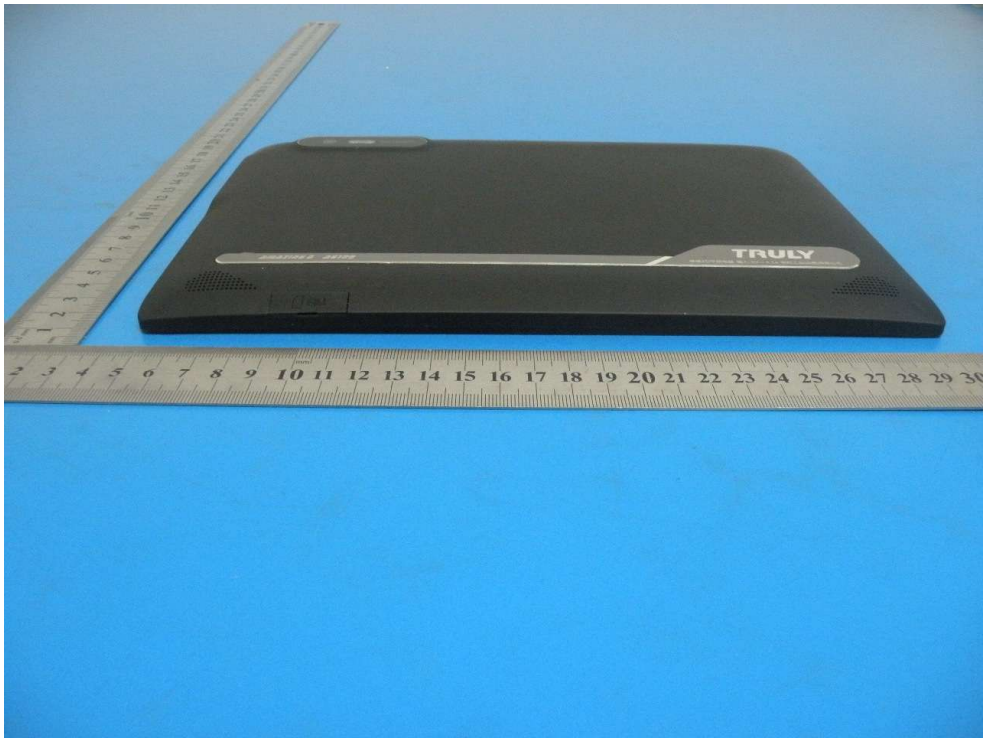
12.2 Photos of Conducted Emission test

13 Photos of EUT


TRULY


TRULY

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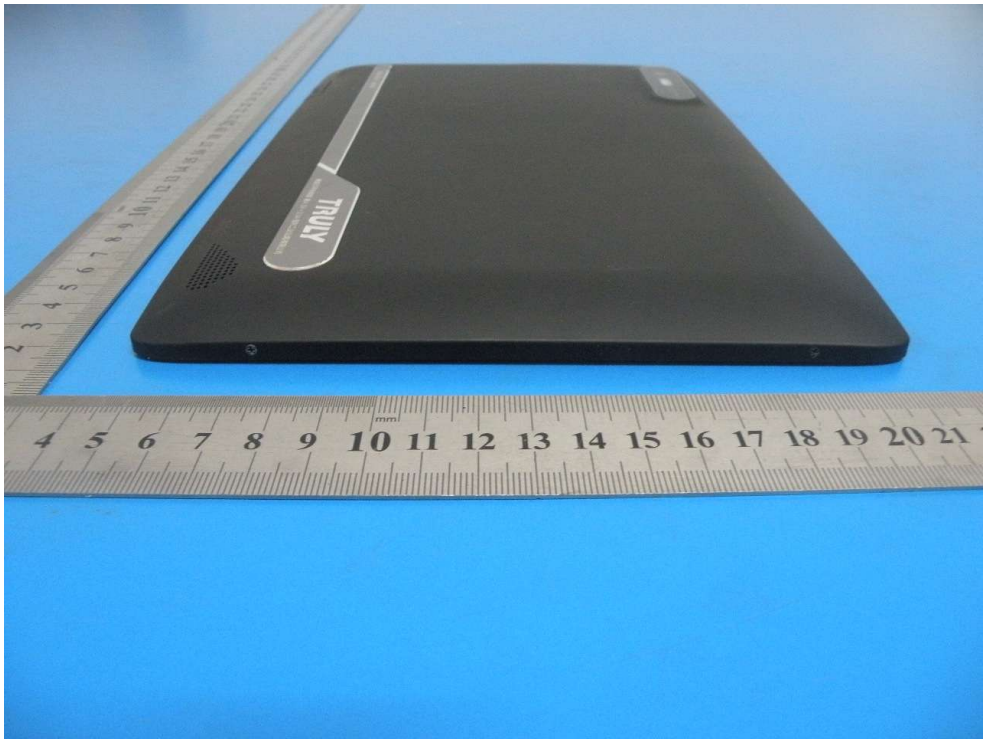
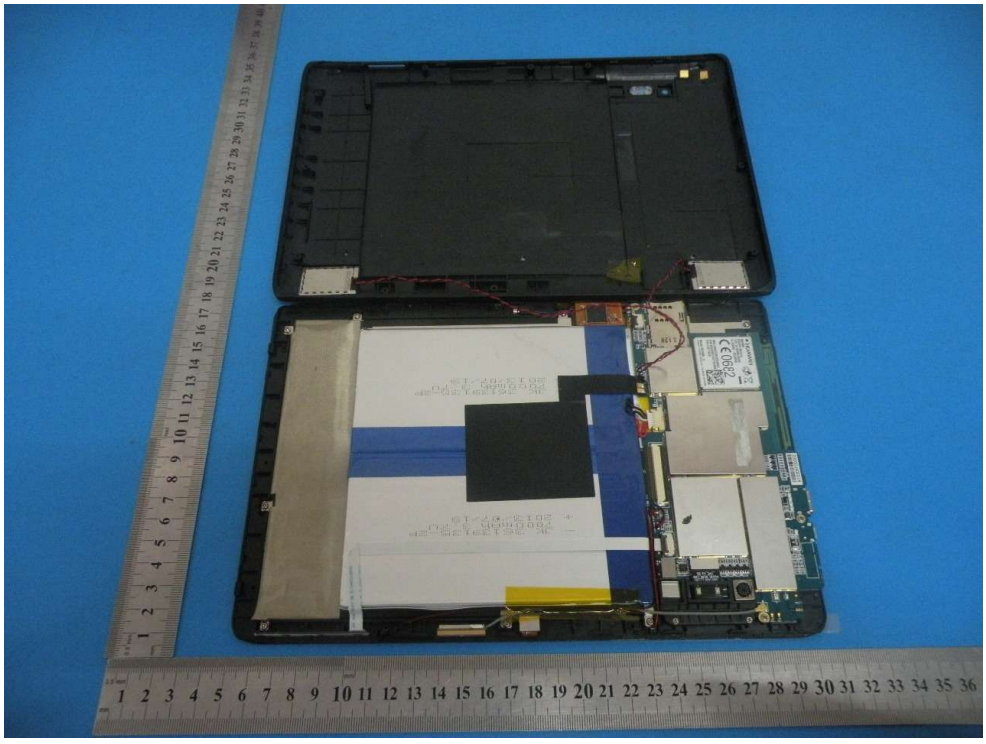

TRUST




HUAWEI
MU509
HSDPA Module
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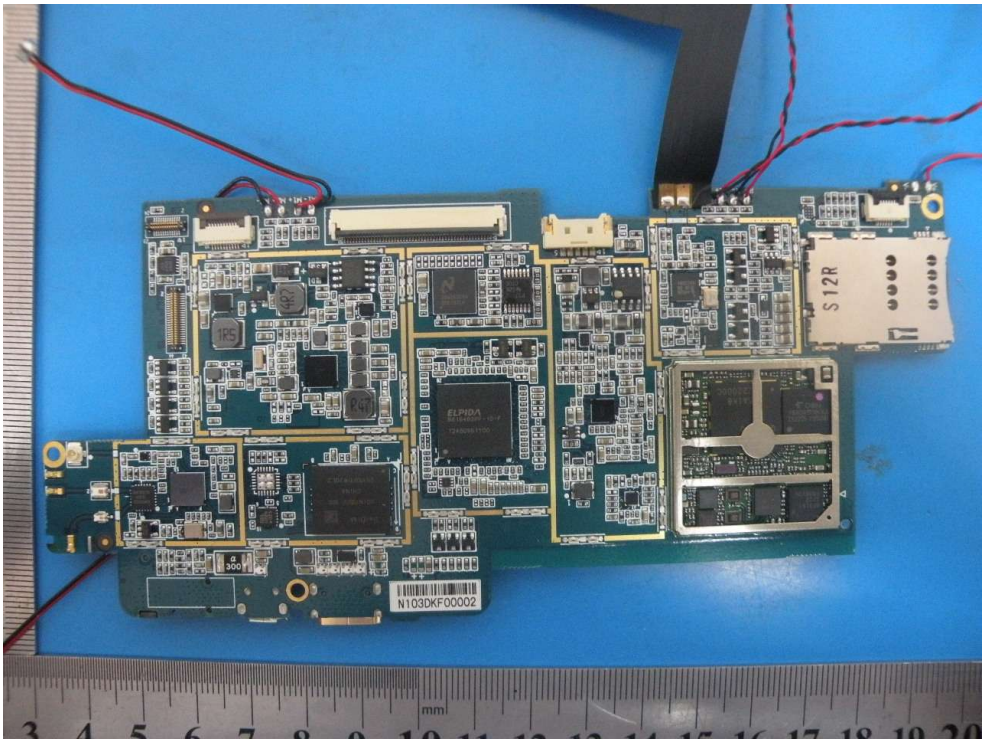
IC:6369A-MU509B
CE 0682
IMEI:354250455548O3
S/N:5GA6RB1262104408
P/N:51077828
Model:MU509-b
HUAWEI TECHNOLOGIES CO.,LTD. MADE IN CHINA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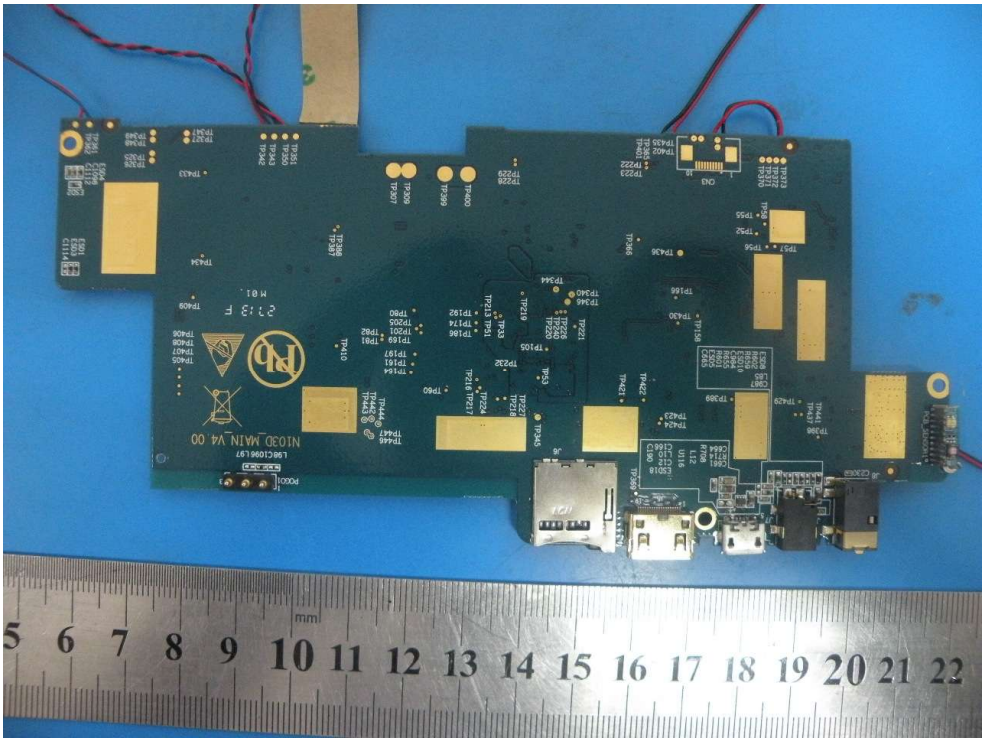
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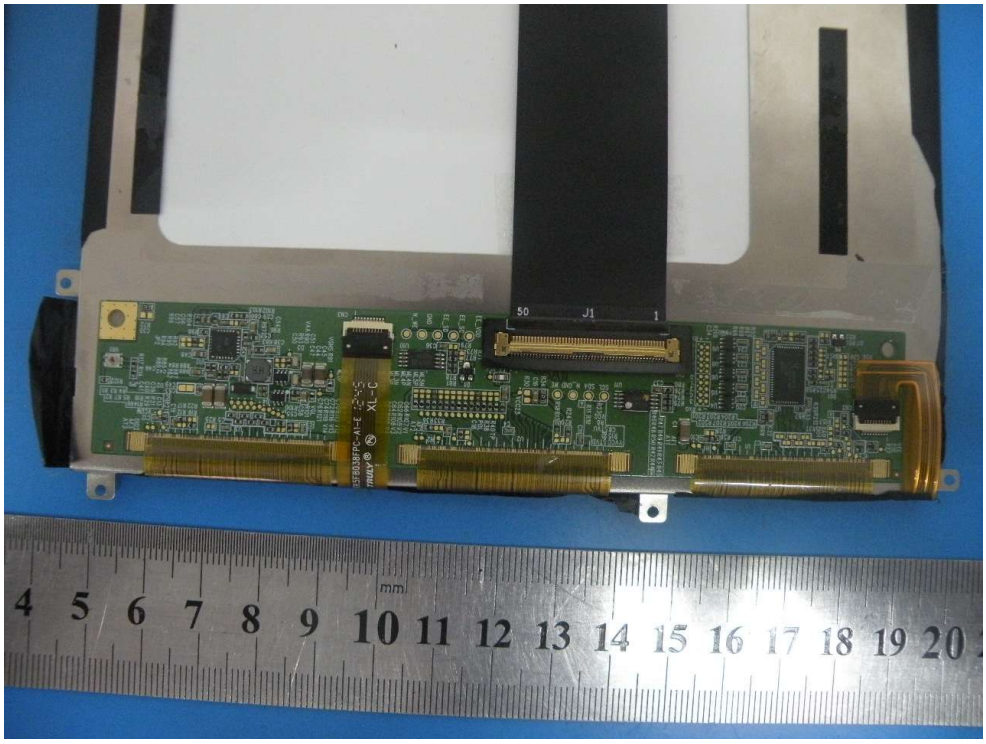
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mm
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---------END OF THE REPORT-------