

Product

FCC ID

Trade mark

Serial Number

**Report Number** 

Date of Issue

Test result

**Test Standards** 

Model/Type reference

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Yarbo Wi-Fi Module

Yarbo

- : WF1
- : N/A
- : EED32O81789101
- : 2A9JF-HY0915-YARBO
- : Dec. 10, 2022
- : 47 CFR Part 15 Subpart C

: PASS

Prepared for:

Shenzhen Hanyang Technology Co., Ltd. Room 12KLM, Building 6B, Baoneng Science and Technology Park, Qinghu Community, Longhua Street, Longhua District, Shenzhen

	re Testing Intern gwei Industrial Z Shenzhen, Gu TEL: +86-7	one, Bao'an	70 District, hina 8	
Compiled by:	Mark Chen Aaron Ma Aaron Ma	Reviewed by: Date:	Tom Chen Dec. 10, 2022 Check No.: 535511	1122
Report Seal				





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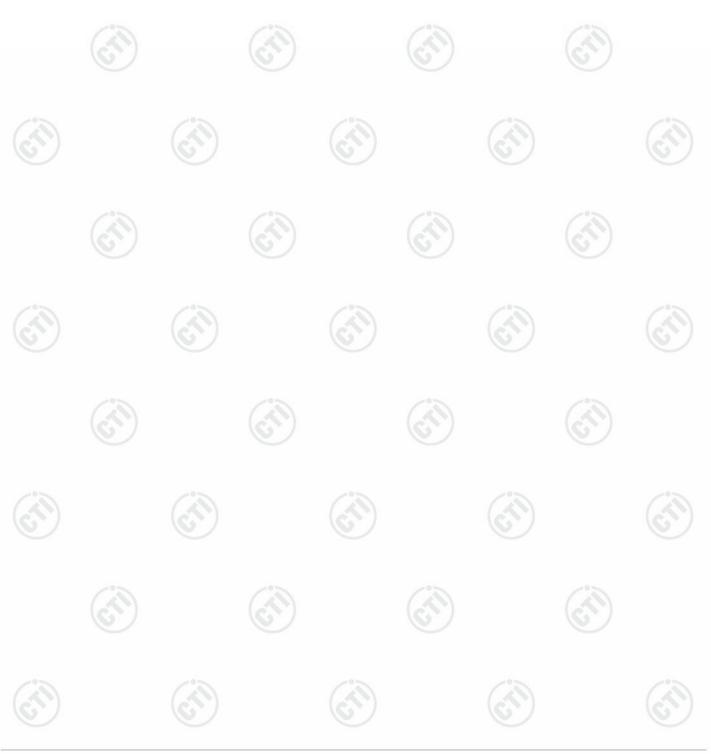
2 CONTENT			•••••		
3 VERSION					
4 TEST SUMMARY					
<b>5 GENERAL INFORM</b>	IATION				
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			<b>c</b>		





### **3 Version**

	Version No.	Date	C	Description	)
	00	Dec. 10, 2022		Original	
5		200	10	~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~	13
	6		28	$(\mathcal{S})$	(2)





## 4 Test Summary



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+ Test Summary	(4)	
Test Item	Test Requirement	Result
Antenna Requirement	47 CFR Part 15 Subpart C Section 15.203/15.247 (c)	PASS
AC Power Line Conducted Emission	47 CFR Part 15 Subpart C Section 15.207	PASS
DTS Bandwidth	47 CFR Part 15 Subpart C Section 15.247 (a)(2)	PASS
Maximum Conducted Output Power	47 CFR Part 15 Subpart C Section 15.247 (b)(3)	PASS
Maximum Power Spectral Density	47 CFR Part 15 Subpart C Section 15.247 (e)	PASS
Band edge measurements	47 CFR Part 15 Subpart C Section 15.247(d)	PASS
Conducted Spurious Emissions	47 CFR Part 15 Subpart C Section 15.247(d)	PASS
Radiated Spurious Emission & Restricted bands	47 CFR Part 15 Subpart C Section 15.205/15.209	PASS

#### Remark:

Company Name and Address shown on Report, the sample(s) and sample Information were provided by the applicant who should be responsible for the authenticity which CTI hasn't verified.





## **5** General Information

## 5.1 Client Information

Applicant:	Shenzhen Hanyang Technology Co., Ltd.
Address of Applicant:	Room 12KLM, Building 6B, Baoneng Science and Technology Park, Qinghu Community, Longhua Street, Longhua District, Shenzhen
Manufacturer:	Shenzhen Hanyang Technology Co., Ltd.
Address of Manufacturer:	Room 12KLM, Building 6B, Baoneng Science and Technology Park, Qinghu Community, Longhua Street, Longhua District, Shenzhen
Factory:	Shenyang Robotics (Huizhou) Co., Ltd.
Address of Factory:	7th Floor, Building 2, Huizhou Shenghong Electric Industrial Park, No. 31, Huifeng West 2nd Road, Huihuan Street, Zhongkai High-tech District, Huizhou City, Guangdong Province

## 5.2 General Description of EUT

Product Name:	Yarbo Wi-Fi Module	
Model No.(EUT):	WF1	
Trade mark:	Yarbo	
Product Type:	Mobile      Portable      Fix Location	(CT)
Operation Frequency:	IEEE 802.11b/g/n(HT20): 2412MHz to 2462MHz IEEE 802.11n(HT40): 2422MHz to 2452MHz	
Modulation Type:	IEEE for 802.11b:DSSS(CCK,DQPSK,DBPSK) IEEE for 802.11g:OFDM(64QAM, 16QAM, QPSK, BPSK) IEEE for 802.11n(HT20/HT40): OFDM (64QAM, 16QAM, 0	
Number of Channel:	IEEE 802.11b/g, IEEE 802.11n HT20: 11 Channels IEEE 802.11n HT40: 7 Channels	
Channel Separation:	5MHz	1
Antenna Type:	FPC Antenna	(25)
Antenna Gain:	ANT1:1.82dBi,ANT2:1.82dBi MIMO technology Directional gain: 4.83dBi	
Function		10.5
Power Supply:	DC 12V	<u>()</u>
Test Voltage:	DC 12V	$\mathcal{O}$
Sample Received Date:	Nov. 11, 2022	
Sample tested Date:	Nov. 11, 2022 to Nov. 28, 2022	

#### Remark:

MIMO technology Directional gain=G<sub>ANT</sub>+10 log(N<sub>ANT</sub>) dBi;





Channel	Frequency	Channel	Frequency	Channel	Frequency	Channel	Frequency
1	2412MHz	4	2427MHz	7	2442MHz	10	2457MHz
2	2417MHz	5	2432MHz	8	2447MHz	11	2462MHz
3	2422MHz	6	2437MHz	9	2452MHz		6
Operation	Frequency ea	ch of chann	el (802.11n HT	40)			
Channe	l Frequ	ency	Channel	Frequence	cy Char	nnel F	requency
3	2422	MHz	6	2437MH	z 9	120	2452MHz
4	2427	MHz	7	2442MH	z		
5	2432	MHz	8	2447MH	7		

#### Note:

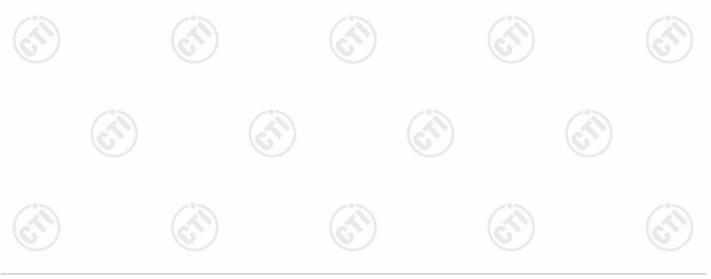
In section 15.31(m), regards to the operating frequency range over 10 MHz, the lowest frequency, the middle frequency, and the highest frequency of channel were selected to perform the test, and the selected channel see below:

#### 802.11b/g/n (HT20)

Channel	Frequency
The lowest channel	2412MHz
The middle channel	2437MHz
The highest channel	2462MHz

#### 802.11n (HT40)

Channel	Frequency
The lowest channel	2422MHz
The middle channel	2437MHz
The highest channel	2452MHz







## 5.3 Test Configuration

EUT Test Software Settings: Software:	QATool Dbg			
EUT Power Grade:	Default			
Use test software to set the lowe	est frequency, the middle	e frequency and	the highest frequency kee	ep 🚽
transmitting of the EUT.				(1)
Test Mode:				
We have verified the constructio the EUT in transmitting operatior <b>Per-scan all kind of data rate i</b>	n, which was shown in t	nis test report an	d defined as follows:	
the EUT in transmitting operation	n, which was shown in t	nis test report an	d defined as follows:	
the EUT in transmitting operatior Per-scan all kind of data rate in	n, which was shown in t	nis test report an	d defined as follows:	
the EUT in transmitting operatior Per-scan all kind of data rate in was worst case.	n, which was shown in t	nis test report an	d defined as follows: v list which it	
the EUT in transmitting operation Per-scan all kind of data rate in was worst case. Mode	n, which was shown in t	nis test report an	d defined as follows: <b>v list which it</b> Data rate	
the EUT in transmitting operation Per-scan all kind of data rate in was worst case. Mode 802.11b	n, which was shown in the new shown in the new standard shown in the new standard shown in the new shown ine	nis test report an	d defined as follows: <b>v list which it</b> Data rate 1Mbps	
the EUT in transmitting operation Per-scan all kind of data rate in was worst case. Mode 802.11b 802.11g	n, which was shown in the normal shown in the	nis test report an	d defined as follows: v list which it Data rate 1Mbps 6Mbps	

## 5.4 Test Environment

	Operating Environment	:					
	Radiated Spurious Emi	ssions:					
	Temperature:	22~25.0 °C		(U)		S	
	Humidity:	50~56 % RH					
	Atmospheric Pressure:	1010mbar	222		-		5.5 4
	Conducted Emissions:	·					
)	Temperature:	22~25.0 °C	67)		6)		67)
	Humidity:	50~56 % RH	$\smile$				
	Atmospheric Pressure:	1010mbar					
	RF Conducted:						
	Temperature:	22~25.0 °C		$(c^{\gamma})$		$(\mathcal{C})$	
	Humidity:	50~56 % RH		S		U	
	Atmospheric Pressure:	1010mbar					







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## 5.5 Description of Support Units

The EUT has been tested with associated equipment below. Support equipment

Description	Manufacturer	Model No.	Certification	Supplied by
Netbook	DELL	Latitude 3490	FCC&CE	CTI

## 5.6 Test Location

All tests were performed at:

Centre Testing International Group Co., Ltd

Building C, Hongwei Industrial Park Block 70, Bao'an District, Shenzhen, China Telephone: +86 (0) 755 33683668 Fax:+86 (0) 755 33683385 No tests were sub-contracted.

FCC Designation No.: CN1164

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

No.	Item	Measurement Uncertainty		
1	Radio Frequency	7.9 x 10 <sup>-8</sup>		
	PE nower conducted	0.46dB (30MHz-1GHz)		
2	RF power, conducted	0.55dB (1GHz-40GHz)		
3		3.3dB (9kHz-30MHz)		
	Dedicted Sourious optication test	4.3dB (30MHz-1GHz) 4.5dB (1GHz-18GHz) 3.4dB (18GHz-40GHz)		
	Radiated Spurious emission test			
4	Conduction emission	3.5dB (9kHz to 150kHz)		
4	Conduction emission	3.1dB (150kHz to 30MHz)		
5	Temperature test	0.64°C		
6	Humidity test	3.8%		
7	DC power voltages	0.026%		











## 6 Equipment List

software

RF test system								
Equipment	Manufacturer	Mode No. Serial Number		Cal. Date (mm-dd-yyyy)	Cal. Due date (mm-dd-yyyy)			
Communication tset set	R&S	CMW500	107929	07-06-2022	07-05-2023			
Signal Generator	R&S	SMBV100A	1407.6004K02- 262149-CV	09-09-2022	09-08-2023			
Spectrum Analyzer	R&S	FSV40	101200	08-01-2022	07-31-2023			
RF control unit(power unit)	MWRF-test	MW100-RFCB	MW220620CTI-42	07-06-2022	07-05-2023			
high-low temperature test chamber	Dong Guang Qin Zhuo	LK-80GA	QZ20150611879	12-24-2021	12-23-2022			
Temperature/ Humidity Indicator	biaozhi	НМ10	1804186	06-16-2022	06-15-2023			
BT&WI-FI Automatic test	MWRF-test	MTS 8310	2.0.0.0	Co-	- (2			

Conducted disturbance Test									
Equipment	Manufacturer	Model No.	Serial Number	Cal. date (mm-dd-yyyy)	Cal. Due date (mm-dd-yyyy)				
Receiver	R&S	ESCI	100435	05-06-2022	05-05-2023				
Temperature/ Humidity Indicator	Defu	TH128	/						
LISN	R&S	ENV216	100098	09-27-2022	09-26-2023				
Barometer	changchun	DYM3	1188	$(\mathcal{A})$	(~~				



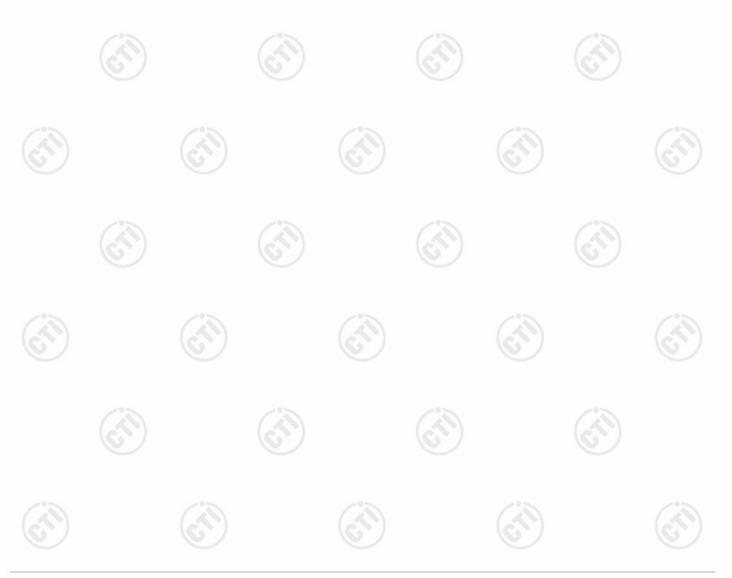






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		3M Sem	i/full-anechoic Cham	ber			
	Equipment	Manufacturer	Model No.	Serial Number	Cal. Date (mm-dd-yyyy)	Cal. Due date (mm-dd-yyyy)	
2	3M Chamber & Accessory Equipment	ТДК	SAC-3	(3)	05-22-2022	05-21-2025	
s)	TRILOG Broadband Antenna	Schwarzbeck	VULB9163	9163-618	05-22-2022	05-21-2025	
	Receiver	R&S	ESCI7	100938-003	09-28-2022	09-27-2023	
	Multi device Controller	maturo	NCD/070/10711112				
	Horn Antenna	ETS-LINGREN	BBHA 9120D	9120D-1869	04-15-2021	04-14-2024	
2	Loop Antenna	Schwarzbeck	FMZB 1519B	1519B-076	04-15-2021	04-14-2024	
$\mathcal{D}$	Microwave Preamplifier	Agilent	8449B	3008A02425	06-20-2022	06-19-2023	







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		3M full-anechoic	Chamber		
Equipment	Manufacturer	Model No.	Serial Number	Cal. Date (mm-dd-yyyy)	Cal. Due date (mm-dd-yyyy)
RSE Automatic test software	JS Tonscend	JS36-RSE	10166		
Receiver	Keysight	N9038A	MY57290136	03-01-2022	02-28-2023
Spectrum Analyzer	Keysight	N9020B	MY57111112	03-01-2022	02-28-2023
Spectrum Analyzer	Keysight	N9030B	MY57140871	03-01-2022	02-28-2023
TRILOG Broadband Antenna	Schwarzbeck	VULB 9163	9163-1148	04-28-2021	04-27-2024
Horn Antenna	Schwarzbeck	BBHA 9170	9170-832	04-15-2021	04-14-2024
Horn Antenna	ETS-LINDGREN	3117	57407	07-04-2021	07-03-2024
Preamplifier	EMCI	EMC184055SE	980597	04-20-2022	04-19-2023
Preamplifier	EMCI	EMC001330	980563	04-13-2022	04-12-2023
Preamplifier	JS Tonscend	TAP-011858	AP21B806112	12-24-2021	12-23-2022
Communication test set	R&S	CMW500	102898	12-24-2021	12-23-2022
Temperature/ Humidity Indicator	biaozhi	GM1360	EE1186631	02-21-2022	02-20-2023
Fully Anechoic Chamber	TDK	FAC-3		01-09-2021	01-08-2024
Cable line	Times	SFT205-NMSM-2.50M	394812-0001		
Cable line	Times	SFT205-NMSM-2.50M	394812-0002		(2
Cable line	Times	SFT205-NMSM-2.50M	394812-0003		
Cable line	Times	SFT205-NMSM-2.50M	393495-0001		
Cable line	Times	EMC104-NMNM-1000	SN160710	(	<u>)</u>
Cable line	Times	SFT205-NMSM-3.00M	394813-0001		<u> </u>
Cable line	Times	SFT205-NMNM-1.50M	381964-0001		
Cable line	Times	SFT205-NMSM-7.00M	394815-0001		(2
Cable line	Times	HF160-KMKM-3.00M	393493-0001		2













## 7 Test results and Measurement Data

## 7.1 Antenna Requirement

#### Standard requirement: 47 CFR Part 15C Section 15.203 /247(c)

#### 15.203 requirement:

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. The use of a permanently attached antenna or of an antenna that uses a unique coupling to the intentional radiator, the manufacturer may design the unit so that a broken antenna can be replaced by the user, but the use of a standard antenna jack or electrical connector is prohibited.

15.247(b) (4) requirement:

The conducted output power limit specified in paragraph (b) of this section is based on the use of antennas with directional gains that do not exceed 6 dBi. Except as shown in paragraph (c) of this section, if transmitting antennas of directional gain greater than 6 dBi are used, the conducted output power from the intentional radiator shall be reduced below the stated values in paragraphs (b)(1), (b)(2), and (b)(3) of this section, as appropriate, by the amount in dB that the directional gain of the antenna exceeds 6 dBi.

#### EUT Antenna:

Please see Internal photos

The antenna is FPC antenna, The best case gain of the antenna 1 is 1.82dBi, The best case gain of the antenna 2 is 1.82dBi.MIMO technology Directional gain: 4.83dBi.





















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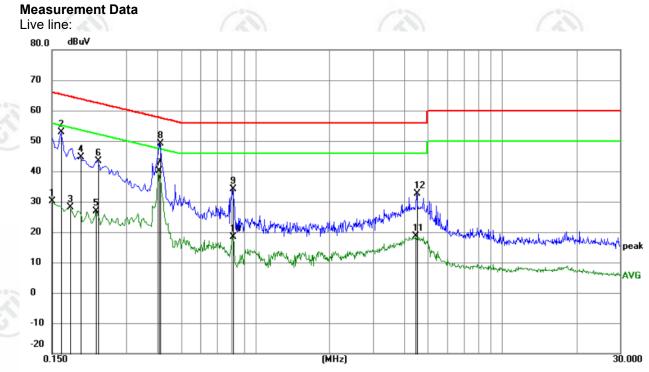
## 7.2 AC Power Line Conducted Emissions

Test Requirement:	47 CFR Part 15C Section 15.2	07						
Test Method:	ANSI C63.10: 2013							
Test Frequency Range:								
Receiver setup:	RBW=9 kHz, VBW=30 kHz, Sv	veep time=auto						
Limit:		Limit (dB	uV)					
	Frequency range (MHz)	Quasi-peak	Average					
	0.15-0.5	66 to 56*	56 to 46*					
	0.5-5	56	46					
	5-30	60	50					
	* Decreases with the logarithm		50					
Test Setup:		or the frequency.	2°2					
	Shielding Room	AE E5 98 LISN2 + AC Mains	Test Receiver					
		Ground Reference Plane						
Test Procedure:	<ol> <li>The mains terminal disturbation.</li> <li>The EUT was connected Impedance Stabilization Netimpedance. The power of connected to a second LISI plane in the same way as multiple socket outlet stription single LISN provided the rail of the tabletop EUT was placed.</li> </ol>	to AC power source to etwork) which provides a cables of all other up N 2, which was bonded is the LISN 1 for the up was used to connect mut ting of the LISN was no	hrough a LISN 1 (Lin a $50\Omega/50\mu$ H + $5\Omega$ lines nits of the EUT wer to the ground reference unit being measured. ultiple power cables to t exceeded.					
	<ul> <li>ground reference plane. Ar placed on the horizontal gro</li> <li>4) The test was performed with the EUT shall be 0.4 m f vertical ground reference reference plane. The LISN unit under test and bond mounted on top of the grout the closest points of the LI and associated equipment (5) In order to find the maximu and all of the interface cab ANSI C63.10: 2013 on conditional statement (1997).</li> </ul>	Ind for floor-standing array ound reference plane. In a vertical ground refer rom the vertical groun plane was bonded to 1 was placed 0.8 m fr led to a ground refer nd reference plane. Thi SN 1 and the EUT. All was at least 0.8 m from m emission, the relative les must be changed ac	angement, the EUT wa rence plane. The rear d reference plane. The the horizontal groun om the boundary of the rence plane for LISN s distance was betweed l other units of the EU the LISN 2.					
Test Mode:	All modes were tested, only the		lad in the report					
rest mode.								





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No. Mk.	Freq.	Reading Level	Correct Factor	Measure- ment	Limit	Margin		
	MHz	dBuV	dB	dBuV	dBuV	dB	Detector	Comment
1	0.1500	20.16	9.87	30.03	56.00	-25.97	AVG	
2	0.1635	43.09	9.87	52.96	65.28	-12.32	QP	
3	0.1770	18.18	9.87	28.05	54.63	-26.58	AVG	
4	0.1955	34.67	9.87	44.54	63.80	-19.26	QP	
5	0.2265	17.04	9.92	26.96	52.58	-25.62	AVG	
6	0.2310	33.35	9.93	43.28	62.41	-19.13	QP	
7 *	0.4065	30.17	9.97	40.14	47.72	-7.58	AVG	
8	0.4110	39.11	9.97	49.08	57.63	-8.55	QP	
9	0.8115	24.23	9.85	34.08	56.00	-21.92	QP	
10	0.8115	8.52	9.85	18.37	46.00	-27.63	AVG	
11	4.4610	8.95	9.78	18.73	46.00	-27.27	AVG	
12	4.5015	22.90	9.78	32.68	56.00	-23.32	QP	

#### Remark:

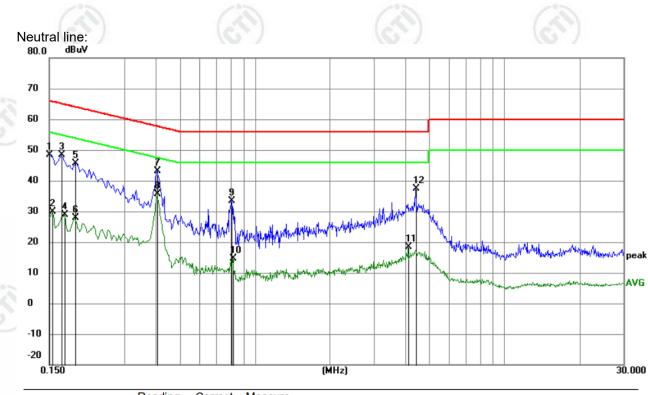
1. The following Quasi-Peak and Average measurements were performed on the EUT:

- 2. Final Test Level =Receiver Reading + LISN Factor + Cable Loss.
- 3. If the Peak value under Average limit, the Average value is not recorded in the report.





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No. Mk.	Freq.	Reading Level	Correct Factor	Measure- ment	Limit	Margin		
	MHz	dBuV	dB	dBuV	dBuV	dB	Detector	Comment
1	0.1500	38.56	9.87	48.43	66.00	-17.57	QP	
2	0.1545	20.03	9.87	29.90	55.75	-25.85	AVG	
3	0.1680	38.46	9.87	48.33	65.06	-16.73	QP	
4	0.1725	19.06	9.87	28.93	54.84	-25.91	AVG	
5	0.1905	35.81	9.87	45.68	64.01	-18.33	QP	
6	0.1905	17.96	9.87	27.83	54.01	-26.18	AVG	
7	0.4065	33.09	9.97	43.06	57.72	-14.66	QP	
8 *	0.4065	25.62	9.97	35.59	47.72	-12.13	AVG	
9	0.8070	23.64	9.85	33.49	56.00	-22.51	QP	
10	0.8160	4.82	9.85	14.67	46.00	-31.33	AVG	
11	4.1325	8.64	9.78	18.42	46.00	-27.58	AVG	
12	4.4250	27.65	9.78	37.43	56.00	-18.57	QP	

#### Remark:

- 1. The following Quasi-Peak and Average measurements were performed on the EUT:
- 2. Final Test Level =Receiver Reading + LISN Factor + Cable Loss.
- 3. If the Peak value under Average limit, the Average value is not recorded in the report.





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## 7.3 Maximum Conducted Output Power

	Test Requirement:	47 CFR Part 15C Section 15.247 (b)(3)							
	Test Method:	ANSI C63.10 2013							
8	Test Setup:								
		C orderd C orderd C orderd ports) Power Supply Temperature Cabnet Table RF test System Instrument							
5	Test Procedure:	1. PKPM1 Peak power meter measurement							
		<ul> <li>The maximum peak conducted output power may be measured using a broadband peak RF power meter. The power meter shall have a video bandwidth that is greater than or equal to the DTS bandwidth and shall use a fast-responding diode detector.</li> <li>2. Method AVGPM-G Average power measurement</li> <li>Method AVGPM-G is a measurement using a gated RF average power meter. Alternatively, measurements may be performed using a wideband gated RF power meter provided that the gate parameters are adjusted such that the power is measured only when the EUT is transmitting at its maximum power control level. Because the measurement is made only during the ON time of the transmitter, no duty cycle correction factor is required.</li> </ul>							
	Limit:	<ul> <li>The Maximum Conducted Output Power is 30dBm, however if the antenna gain is &gt;6 dBi, the limit is reduced by the MIMO Directional Antenna Gain -6 dBi.</li> <li>In this case:</li> <li>MIMO Directional Antenna gain = 7.09 dBi.</li> </ul>							
	Test Mode:	Refer to clause 5.3							
	Test Results:	Refer to Appendix 2.4G WIFI							









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## 7.4 DTS Bandwidth

Test Requirement:	47 CFR Part 15C Section 15.247 (a)(2)
Test Method:	ANSI C63.10 2013
Test Setup:	
	Control Computer Dever Supply Teble RF test System Instrument
	Remark: Offset=Cable loss+ attenuation factor.
Test Procedure:	<ul> <li>a) Set RBW = 100 kHz.</li> <li>b) Set the VBW ≥[3 × RBW].</li> <li>c) Detector = peak.</li> <li>d) Trace mode = max hold.</li> <li>e) Sweep = auto couple.</li> <li>f) Allow the trace to stabilize.</li> <li>g) Measure the maximum width of the emission that is constrained by the frequencies associated with the two outermost amplitude points (upper and lower frequencies) that are attenuated by 6 dB relative to the maximum level measured in the fundamental emission.</li> </ul>
Limit:	≥ 500 kHz
Test Mode:	Refer to clause 5.3
Test Results:	Refer to Appendix 2.4G WIFI







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## 7.5 Maximum Power Spectral Density

	Test Requirement:	47 CFR Part 15C Section 15.247 (e)
	Test Method:	ANSI C63.10 2013
2	Test Setup:	
		Control Computer Power Supply TEMPERATURE CABNET Table
0		Remark: Offset=Cable loss+ attenuation factor.
	Test Procedure:	<ul> <li>a) Set analyzer center frequency to DTS channel center frequency.</li> <li>b) Set the span to 1.5 times the DTS bandwidth.</li> <li>c) Set the RBW to 3 kHz &lt; RBW &lt; 100 kHz.</li> <li>d) Set the VBW &gt; [3 × RBW].</li> <li>e) Detector = peak.</li> <li>f) Sweep time = auto couple.</li> <li>g) Trace mode = max hold.</li> <li>h) Allow trace to fully stabilize.</li> <li>i) Use the peak marker function to determine the maximum amplitude level within the RBW.</li> <li>j) If measured value exceeds requirement, then reduce RBW (but no less than 3 kHz) and repeat.</li> </ul>
	Limit:	The maximum permissible power density is 8dBm/3kHz, however if the antenna gain is >6 dBi, the limit is reduced by the MIMO Directional Antenna Gain -6 dBi. In this case: MIMO Directional Antenna gain = 7.09 dBi. Limit = 6.91dBm/3kHz
	Test Mode:	Refer to clause 5.3
	Test Results:	Refer to Appendix 2.4G WIFI

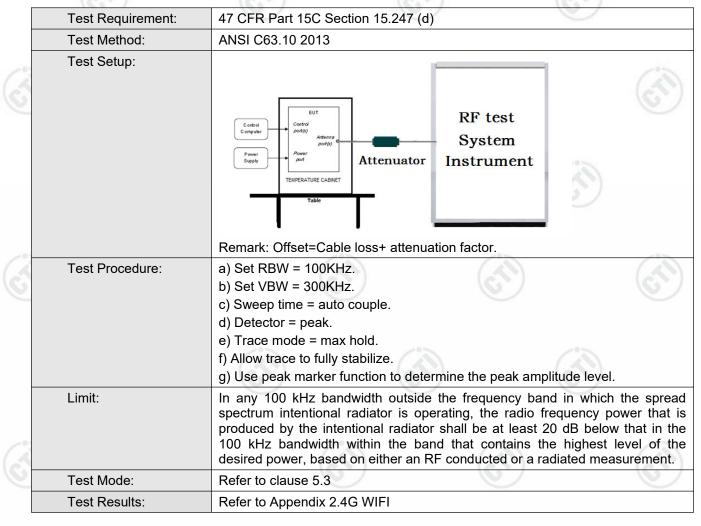






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## 7.6 Band Edge Measurements and Conducted Spurious Emission











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## 7.7 Radiated Spurious Emission & Restricted bands

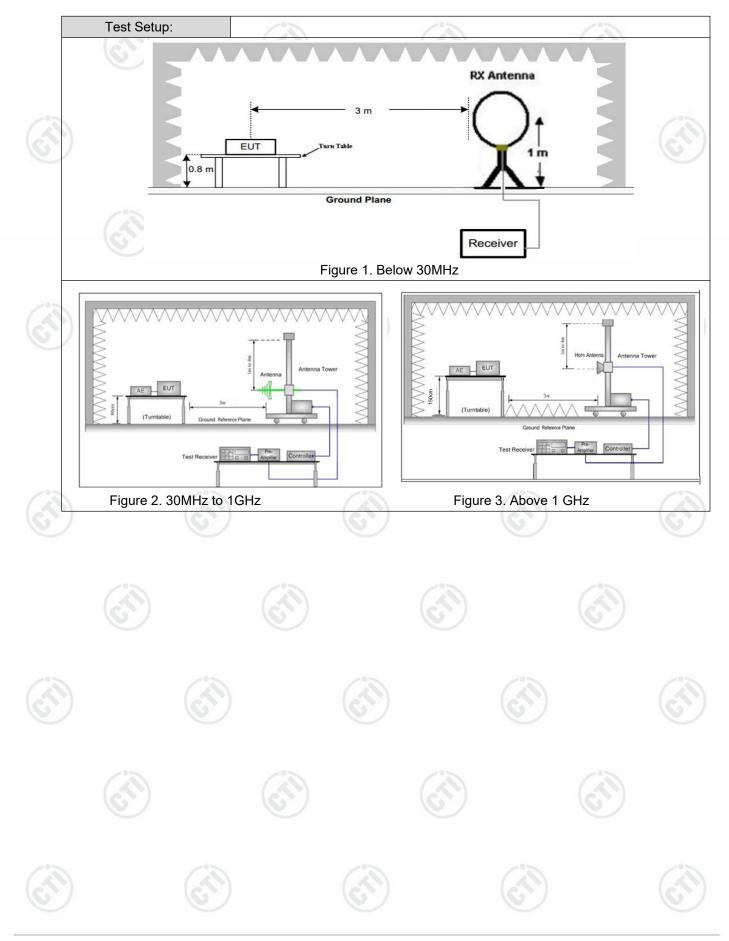
	Test Requirement:	47 CFR Part 15C Secti	on 1	5.209 and 15	.205		C					
	Test Method:	ANSI C63.10 2013										
	Test Site:	Measurement Distance	Measurement Distance: 3m (Semi-Anechoic Chamber)									
	Receiver Setup:	Frequency	2	Detector	RBW	1	VBW	Remark				
(U)		0.009MHz-0.090MH	z	Peak	10kHz	z	30kHz	Peak				
		0.009MHz-0.090MH	z	Average	10kHz	z	30kHz	Average				
		0.090MHz-0.110MH	Z	Quasi-peak	10kHz	z	30kHz	Quasi-peak				
		0.110MHz-0.490MH	Z	Peak	10kHz	z	30kHz	Peak				
		0.110MHz-0.490MH	z	Average	10kHz	z	30kHz	Average				
		0.490MHz -30MHz		Quasi-peak	10kHz	z	30kHz	Quasi-peak Quasi-peak				
		30MHz-1GHz		Quasi-peak	100 kH	lz	300kHz					
13			2	Peak	1MHz		3MHz	Peak				
S I		Above 1GHz		Peak	1MHz		10kHz	Average				
	Limit:	Frequency		eld strength crovolt/meter)	Limit (dBuV/m)		Remark	Measuremer distance (m				
		0.009MHz-0.490MHz	2	400/F(kHz)	-		-75	300				
		0.490MHz-1.705MHz	24	1000/F(kHz)	-		- (2)	30				
		1.705MHz-30MHz	30		-	<u> </u>		30				
		30MHz-88MHz		100	40.0	Quasi-peak		3				
		88MHz-216MHz		150	43.5	Q	uasi-peak	3				
		216MHz-960MHz	9	200	46.0	Quasi-peak		3				
S.		960MHz-1GHz	)	500	54.0	Q	uasi-peak	3				
		Above 1GHz		500	54.0		Average	3				
		Note: 15.35(b), frequency emissions is limit applicable to the e peak emission level rac	20d quip	B above the oment under t	maximum est. This p	pei	mitted ave	erage emission				







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# CTI华测检测

Report No. : EED32O81789101



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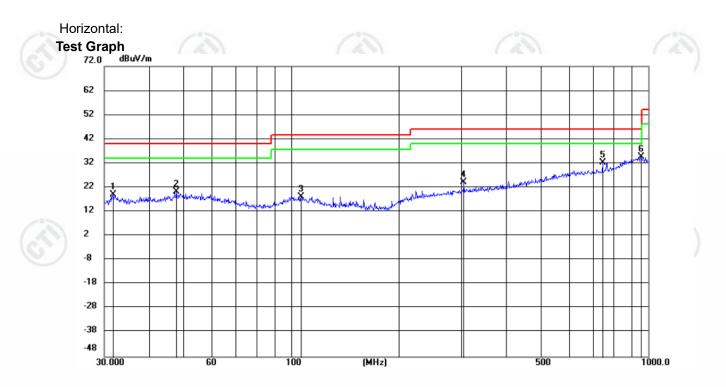
Test Procedure:	<ul> <li>a. 1) Below 1G: The EUT was placed on the top of a rotating table 0.8 meters above the ground at a 3 meter semi-anechoic camber. The table was rotated 360 degrees to determine the position of the highest radiation.</li> <li>2) Above 1G: The EUT was placed on the top of a rotating table 1.5 meters above the ground at a 3 meter semi-anechoic camber. The table was rotated 360 degrees to determine the position of the highest radiation.</li> </ul>
	Note: For the radiated emission test above 1GHz:
	Place the measurement antenna away from each area of the EUT determined to be a source of emissions at the specified measurement distance, while keeping the measurement antenna aimed at the source of emissions at each frequency of significant emissions, with polarization oriented for maximum response. The measurement antenna may have to be higher or lower than the EUT, depending on the radiation pattern of the emission and staying aimed at the emission source for receiving the maximum signal. The final measurement antenna elevation shall be that which maximizes the emissions. The measurement antenna elevation for maximum emissions shall be restricted to a range of heights of from 1 m to 4 m above the ground or reference ground plane.
	b. The EUT was set 3 meters away from the interference-receiving antenna, which was mounted on the top of a variable-height antenna tower.
	c. The antenna height is varied from one meter to four meters above the ground to determine the maximum value of the field strength. Both horizontal and vertical polarizations of the antenna are set to make the measurement.
	<ul> <li>d. For each suspected emission, the EUT was arranged to its worst case and then the antenna was tuned to heights from 1 meter to 4 meters (for the test frequency of below 30MHz, the antenna was tuned to heights 1 meter) and the rotatable table was turned from 0 degrees to 360 degrees to find the maximum reading.</li> </ul>
	e. The test-receiver system was set to Peak Detect Function and Specified Bandwidth with Maximum Hold Mode.
	f. If the emission level of the EUT in peak mode was 10dB lower than the limit specified, then testing could be stopped and the peak values of the EUT would be reported. Otherwise the emissions that did not have 10dB margin would be re-tested one by one using peak, quasi-peak or average method as specified and then reported in a data sheet.
	g. Test the EUT in the lowest channel (2402MHz),the middle channel (2440MHz),the Highest channel (2480MHz)
	h. The radiation measurements are performed in X, Y, Z axis positioning for Transmitting mode, and found the X axis positioning which it is the worst case.
	i. Repeat above procedures until all frequencies measured was complete.
Test Mode:	Refer to clause 5.3
Test Results:	Pass



#### **Radiated Spurious Emission below 1GHz:**

During the test, the Radiates Emission from 30MHz to 1GHz was performed in all modes, only the worst case lowest channel of 1Mbps of antenna 1 of 802.11b was recorded in the report.

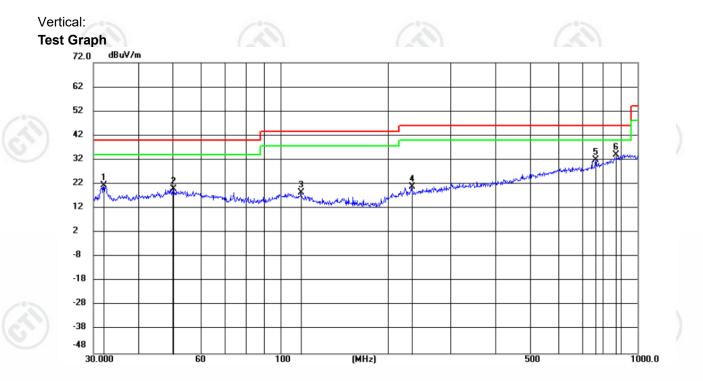
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No. N	lk. F	req.	Reading Level	Correct Factor	Measure- ment	Limit	Margin		Antenna Height	Table Degree	
	N	IHz	dBuV	dB	dBuV/m	dBuV/m	dB	Detector	cm	degree	Comment
1	31.	7312	6.22	12.76	18.98	40.00	-21.02	QP	200	242	
2	47.8	3260	5.93	14.44	20.37	40.00	-19.63	QP	200	202	
3	106.	7587	4.64	13.57	18.21	43.50	-25.29	QP	200	162	
4	304.6	6099	7.17	16.92	24.09	46.00	-21.91	QP	100	4	
5	744.8	3660	8.13	24.10	32.23	46.00	-13.77	QP	200	123	
6 *	955.4	1381	6.48	28.16	34.64	46.00	-11.36	QP	100	49	







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	No.	Mk.	Freq.	Reading Level	Correct Factor	Measure- ment	Limit	Margin		Antenna Height	Table Degree	
_			MHz	dBuV	dB	dBuV/m	dBuV/m	dB	Detector	cm	degree	Comment
_	1		32.0667	8.63	12.78	21.41	40.00	-18.59	QP	100	7	
_	2		50.2324	5.28	14.74	20.02	40.00	-19.98	QP	100	356	
	3		114.1138	5.16	13.17	18.33	43.50	-25.17	QP	200	193	
	4		233.3487	6.72	14.20	20.92	46.00	-25.08	QP	200	305	
_	5	*	763.3757	7.59	24.50	32.09	46.00	-13.91	QP	100	300	
	6		1000.0000	6.07	28.11	34.18	54.00	-19.82	QP	100	356	





#### **Radiated Spurious Emission above 1GHz:**

For SISO mode, the Antenna 1 was the worst case, only the worst case was recorded in the report.

Mode	:		802.11 b Tran	smitting		Channe	el:	2412MHz	
NO	Freq. [MHz]	Factor [dB]	Reading [dBµV]	Level [dBµV/m]	Limit [dBµV/m]	Margin [dB]	Result	Polarity	Remark
1	1184.8185	0.80	40.14	40.94	74.00	33.06	PASS	Н	PK
2	2035.1035	4.67	39.09	43.76	74.00	30.24	PASS	Н	PK
3	4824.0216	-16.22	62.72	46.50	74.00	27.50	PASS	Н	PK
4	5917.3945	-13.49	52.73	39.24	74.00	34.76	PASS	Н	PK
5	7485.299	-11.15	52.51	41.36	74.00	32.64	PASS	Н	PK
6	9929.462	-7.12	50.84	43.72	74.00	30.28	PASS	Н	PK
7	1202.2202	0.80	40.55	41.35	74.00	32.65	PASS	V	PK
8	2108.9109	4.78	39.09	43.87	74.00	30.13	PASS	V	PK
9	4824.0216	-16.22	56.92	40.70	74.00	33.30	PASS	V	PK
10	6122.1581	-13.17	52.07	38.90	74.00	35.10	PASS	V	PK
11	9018.1012	-8.51	50.82	42.31	74.00	31.69	PASS	V	PK
12	10765.4177	-6.32	50.93	44.61	74.00	29.39	PASS	V	PK

							> )	1.1		
	Mode	:		802.11 b Tran	smitting		Channe	el:	2437MH	Z
	NO	Freq. [MHz]	Facto [dB]	r Reading [dBµV]	Level [dBµV/m]	Limit [dBµV/m]	Margin [dB]	Result	Polarity	Remark
	1	1223.0223	0.86	41.15	42.01	74.00	31.99	PASS	Н	PK
2	2	2074.7075	4.79	38.60	43.39	74.00	30.61	PASS	Н	PK
	3	4874.0749	-16.21	58.87	42.66	74.00	31.34	PASS	Н	PK
	4	6210.564	-13.18	3 52.65	39.47	74.00	34.53	PASS	Н	PK
	5	8966.7478	-8.71	50.78	42.07	74.00	31.93	PASS	Н	PK
	6	10814.821	-6.25	49.46	43.21	74.00	30.79	PASS	Н	PK
	7	1185.6186	0.81	40.57	41.38	74.00	32.62	PASS	V	PK
	8	2064.7065	4.76	39.23	43.99	74.00	30.01	PASS	V	PK
	9	4874.0749	-16.21	55.19	38.98	74.00	35.02	PASS	V	PK
23	10	6780.652	-12.43	3 51.84	39.41	74.00	34.59	PASS	V	PK
5	11	8386.9091	-11.00	) 53.32	42.32	74.00	31.68	PASS	V	PK
2	12	11875.6917	-5.90	52.57	46.67	74.00	27.33	PASS	V	PK

















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	2 ° -			127						
	Mode	:	80	02.11 b Tran	smitting		Channe	el:	2462MH	Z
	NO	Freq. [MHz]	Factor [dB]	Reading [dBµV]	Level [dBµV/m]	Limit [dBµV/m]	Margin [dB]	Result	Polarity	Remark
	1	1331.8332	1.16	40.22	41.38	74.00	32.62	PASS	Н	PK
	2	1894.6895	3.99	38.85	42.84	74.00	31.16	PASS	Н	PK
	3	4924.1283	-16.11	60.60	44.49	74.00	29.51	PASS	Н	PK
	4	6523.8849	-12.72	52.03	39.31	74.00	34.69	PASS	Н	PK
	5	8709.9807	-10.07	51.74	41.67	74.00	32.33	PASS	Н	PK
	6	10246.6831	-6.81	50.38	43.57	74.00	30.43	PASS	Н	PK
	7	1309.0309	1.09	40.13	41.22	74.00	32.78	PASS	V	PK
	8	1845.0845	3.62	39.22	42.84	74.00	31.16	PASS	V	PK
	9	4924.1283	-16.11	55.68	39.57	74.00	34.43	PASS	V	PK
	10	6490.7327	-12.70	52.32	39.62	74.00	34.38	PASS	V	PK
3	11	8738.5826	-9.88	51.07	41.19	74.00	32.81	PASS	V	PK
	12	10231.0821	-6.93	50.95	44.02	74.00	29.98	PASS	V	PK
	1									

Mode	e:	8	302.11 n(HT4	0) Transmitti	ng	Channe	el:	2422MHz		
NO	Freq. [MHz]	Factor [dB]	Reading [dBµV]	Level [dBµV/m]	Limit [dBµV/m]	Margin [dB]	Result	Polarity	Remark	
1	1190.419	0.80	41.45	42.25	74.00	31.75	PASS	Н	PK	
2	1787.0787	3.23	39.73	42.96	74.00	31.04	PASS	Н	PK	
3	4256.5338	-17.57	54.80	37.23	74.00	36.77	PASS	Н	PK	
4	5722.3815	-13.84	53.43	39.59	74.00	34.41	PASS	Н	PK	
5	7736.8658	-11.16	53.10	41.94	74.00	32.06	PASS	Н	PK	
6	9854.707	-7.21	49.98	42.77	74.00	31.23	PASS	Н	PK	
7	1101.4101	0.85	41.24	42.09	74.00	31.91	PASS	V	PK	
8	1734.2734	3.06	39.31	42.37	74.00	31.63	PASS	V	PK	
9	3385.4757	-20.15	56.37	36.22	74.00	37.78	PASS	V	PK	
10	5498.1165	-14.51	52.53	38.02	74.00	35.98	PASS	V	PK	
11	6850.8567	-12.12	51.71	39.59	74.00	34.41	PASS	V	PK	
12	8599.4733	-10.35	51.48	41.13	74.00	32.87	PASS	V	PK	











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	100		10.		1.5			10.	
Mode:		8	802.11 n(HT4	0) Transmitti	ng	Channe	el:	2437MH	z
NO	Freq. [MHz]	Factor [dB]	Reading [dBµV]	Level [dBµV/m]	Limit [dBµV/m]	Margin [dB]	Result	Polarity	Remark
1	1277.2277	1.00	40.61	41.61	74.00	32.39	PASS	Н	PK
2	1951.6952	4.30	38.17	42.47	74.00	31.53	PASS	Н	PK
3	4150.5767	-18.10	55.33	37.23	74.00	36.77	PASS	Н	PK
4	5785.4357	-13.62	52.87	39.25	74.00	34.75	PASS	Н	PK
5	7167.4278	-11.75	52.09	40.34	74.00	33.66	PASS	Н	PK
6	9604.4403	-7.36	50.19	42.83	74.00	31.17	PASS	Н	PK
7	1214.6215	0.83	40.72	41.55	74.00	32.45	PASS	V	PK
8	1652.0652	2.62	40.61	43.23	74.00	30.77	PASS	V	PK
9	3291.8695	-19.84	57.13	37.29	74.00	36.71	PASS	V	PK
10	5803.6369	-13.57	53.02	39.45	74.00	34.55	PASS	V	PK
11	7461.8975	-11.25	51.83	40.58	74.00	33.42	PASS	V	PK
12	9851.4568	-7.22	50.15	42.93	74.00	31.07	PASS	V	PK

Mode	:	80	02.11 n(HT4	0) Transmitti	ng	Channe	el:	2452MHz	
NO	Freq. [MHz]	Factor [dB]	Reading [dBµV]	Level [dBµV/m]	Limit [dBµV/m]	Margin [dB]	Result	Polarity	Remark
1	1239.624	0.90	40.27	41.17	74.00	32.83	PASS	Н	PK
2	1863.2863	3.76	38.85	42.61	74.00	31.39	PASS	Н	PK
3	3939.3126	-19.02	54.91	35.89	74.00	38.11	PASS	Н	PK
4	5359.0073	-14.65	53.25	38.60	74.00	35.40	PASS	Н	PK
5	7498.2999	-11.10	51.29	40.19	74.00	33.81	PASS	Н	PK
6	9211.8141	-7.89	51.75	43.86	74.00	30.14	PASS	Н	PK
7	1137.0137	0.83	40.90	41.73	74.00	32.27	PASS	V	PK
8	2297.3297	3.96	39.13	43.09	74.00	30.91	PASS	V	PK
9	4896.1764	-16.20	54.00	37.80	74.00	36.20	PASS	V	PK
10	7833.0722	-11.22	51.81	40.59	74.00	33.41	PASS	V	PK
11	9714.2976	-7.66	50.32	42.66	74.00	31.34	PASS	V	PK
12	10724.465	-6.42	50.85	44.43	74.00	29.57	PASS	V	PK
<u> </u>			•						















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For M	IIMO:		102		123		- 2	0	
Mode	:		802.11 n(HT2	0) Transmitt	ing	Chann	el:	2412MH	z
NO	Freq. [MHz]	Facto [dB]	r Reading [dBµV]	Level [dBµV/m]	Limit [dBµV/m]	Margin [dB]	Result	Polarity	Remark
1	1271.0271	0.98	40.92	41.90	74.00	32.10	PASS	Н	PK
2	1911.4911	4.09	39.66	43.75	74.00	30.25	PASS	Н	PK
3	3519.3846	-20.08	56.45	36.37	74.00	37.63	PASS	Н	PK
4	4837.0225	-16.22	2 54.18	37.96	74.00	36.04	PASS	Н	PK
5	7074.4716	-11.65	5 51.70	40.05	74.00	33.95	PASS	Н	PK
6	9192.3128	-7.94	50.64	42.70	74.00	31.30	PASS	Н	PK
7	1149.615	0.83	40.65	41.48	74.00	32.52	PASS	V	PK
8	1931.2931	4.20	38.36	42.56	74.00	31.44	PASS	V	PK
9	3261.3174	-20.02	2 56.83	36.81	74.00	37.19	PASS	V	PK
10	4442.4462	-17.01	55.55	38.54	74.00	35.46	PASS	V	PK
11	6854.757	-12.09	52.43	40.34	74.00	33.66	PASS	V	PK
12	10211.5808	-7.05	51.25	44.20	74.00	29.80	PASS	V	PK

<b>;</b>		802.11 n(HT2	0) Transmitti	ing	Channel:		2437MHz	
Freq. [MHz]	Factor [dB]	r Reading [dBµV]	Level [dBµV/m]	Limit [dBµV/m]	Margin [dB]	Result	Polarity	Remark
1237.6238	0.90	40.71	41.61	74.00	32.39	PASS	Н	PK
1827.4827	3.48	39.57	43.05	74.00	30.95	PASS	Н	PK
3893.1595	-19.11	55.22	36.11	74.00	37.89	PASS	Н	PK
5367.4578	-14.63	52.33	37.70	74.00	36.30	PASS	Н	PK
7496.3498	-11.10	51.54	40.44	74.00	33.56	PASS	Н	PK
10451.4468	-6.40	49.76	43.36	74.00	30.64	PASS	Н	PK
1400.8401	1.39	39.79	41.18	74.00	32.82	PASS	V	PK
1775.2775	3.20	39.89	43.09	74.00	30.91	PASS	V	PK
3277.5685	-19.92	56.88	36.96	74.00	37.04	PASS	V	PK
4995.633	-15.84	54.29	38.45	74.00	35.55	PASS	V	PK
7348.1399	-11.60	52.72	41.12	74.00	32.88	PASS	V	PK
10806.3704	-6.24	50.59	44.35	74.00	29.65	PASS	V	PK
	Freq. [MHz] 1237.6238 1827.4827 3893.1595 5367.4578 7496.3498 10451.4468 1400.8401 1775.2775 3277.5685 4995.633 7348.1399	Freq. [MHz]         Factor [dB]           1237.6238         0.90           1827.4827         3.48           3893.1595         -19.11           5367.4578         -14.63           7496.3498         -11.10           10451.4468         -6.40           1400.8401         1.39           1775.2775         3.20           3277.5685         -19.92           4995.633         -15.84           7348.1399         -11.60	Freq. [MHz]Factor [dB]Reading [dBµV]1237.62380.9040.711827.48273.4839.573893.1595-19.1155.225367.4578-14.6352.337496.3498-11.1051.5410451.4468-6.4049.761400.84011.3939.791775.27753.2039.893277.5685-19.9256.884995.633-15.8454.297348.1399-11.6052.72	Freq. [MHz]Factor [dB]Reading [dBµV]Level [dBµV]1237.62380.9040.7141.611827.48273.4839.5743.053893.1595-19.1155.2236.115367.4578-14.6352.3337.707496.3498-11.1051.5440.4410451.4468-6.4049.7643.361400.84011.3939.7941.181775.27753.2039.8943.093277.5685-19.9256.8836.964995.633-15.8454.2938.457348.1399-11.6052.7241.12	Freq. [MHz]Factor [dB]Reading [dBµV]Level [dBµV/m]Limit [dBµV/m]1237.62380.9040.7141.6174.001827.48273.4839.5743.0574.003893.1595-19.1155.2236.1174.005367.4578-14.6352.3337.7074.007496.3498-11.1051.5440.4474.0010451.4468-6.4049.7643.3674.001400.84011.3939.7941.1874.003277.5685-19.9256.8836.9674.004995.633-15.8454.2938.4574.007348.1399-11.6052.7241.1274.00	Freq. [MHz]Factor [dB]Reading [dBµV]Level [dBµV/m]Limit [dBµV/m]Margin [dB]1237.62380.9040.7141.6174.0032.391827.48273.4839.5743.0574.0030.953893.1595-19.1155.2236.1174.0037.895367.4578-14.6352.3337.7074.0036.307496.3498-11.1051.5440.4474.0033.5610451.4468-6.4049.7643.3674.0030.641400.84011.3939.7941.1874.0032.821775.27753.2039.8943.0974.0030.913277.5685-19.9256.8836.9674.0037.044995.633-15.8454.2938.4574.0032.827348.1399-11.6052.7241.1274.0032.88	Freq. [MHz]Factor [dB]Reading [dBµV]Level [dBµV/m]Limit [dBµV/m]Margin [dB]Result1237.62380.9040.7141.6174.0032.39PASS1827.48273.4839.5743.0574.0030.95PASS3893.1595-19.1155.2236.1174.0037.89PASS5367.4578-14.6352.3337.7074.0036.30PASS7496.3498-11.1051.5440.4474.0033.56PASS10451.4468-6.4049.7643.3674.0030.64PASS1400.84011.3939.7941.1874.0032.82PASS3277.5685-19.9256.8836.9674.0037.04PASS4995.633-15.8454.2938.4574.0032.88PASS7348.1399-11.6052.7241.1274.0032.88PASS	Freq. [MHz]Factor [dB]Reading [dBµV]Level [dBµV/m]Limit [dBµV/m]Margin [dB]ResultPolarity1237.62380.9040.7141.6174.0032.39PASSH1827.48273.4839.5743.0574.0030.95PASSH3893.1595-19.1155.2236.1174.0037.89PASSH5367.4578-14.6352.3337.7074.0036.30PASSH7496.3498-11.1051.5440.4474.0033.56PASSH10451.4468-6.4049.7643.3674.0030.64PASSH1400.84011.3939.7941.1874.0030.91PASSV3277.5685-19.9256.8836.9674.0037.04PASSV4995.633-15.8454.2938.4574.0032.88PASSV7348.1399-11.6052.7241.1274.0032.88PASSV















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	10-			1000						
	Mode	:		802.11 n(HT	20) Transmitt	ing	Chann	el:	2462MH	Z
	NO	Freq. [MHz]	Facto [dB]		Level [dBµV/m]	Limit [dBµV/m]	Margin [dB]	Result	Polarity	Remark
	1	1327.4327	1.15	40.51	41.66	74.00	32.34	PASS	Н	PK
	2	1787.6788	3.24	39.93	43.17	74.00	30.83	PASS	Н	PK
	3	3873.0082	-19.14	4 56.73	37.59	74.00	36.41	PASS	Н	PK
	4	5377.8585	-14.60	0 53.08	38.48	74.00	35.52	PASS	Н	PK
	5	7437.1958	-11.3	5 52.07	40.72	74.00	33.28	PASS	Н	PK
	6	10155.027	-7.07	7 50.81	43.74	74.00	30.26	PASS	Н	PK
	7	1316.0316	1.12	40.90	42.02	74.00	31.98	PASS	V	PK
	8	1911.8912	4.09	38.79	42.88	74.00	31.12	PASS	V	PK
	9	3831.4054	-19.19	9 55.14	35.95	74.00	38.05	PASS	V	PK
	10	5186.0957	-14.6	5 53.66	39.01	74.00	34.99	PASS	V	PK
3	11	8048.2365	-11.17	7 52.96	41.79	74.00	32.21	PASS	V	PK
	12	10397.4932	-6.28	3 50.14	43.86	74.00	30.14	PASS	V	PK
_	/	•							•	

Mode	:		802.11 n(HT4	0) Transmitti	ing	Channe	el:	2422MH	z
NO	Freq. [MHz]	Factor [dB]	Reading [dBµV]	Level [dBµV/m]	Limit [dBµV/m]	Margin [dB]	Result	Polarity	Remark
1	1330.033	1.16	40.96	42.12	74.00	31.88	PASS	Н	PK
2	1777.4777	3.20	39.63	42.83	74.00	31.17	PASS	Н	PK
3	4084.2723	-18.30	56.29	37.99	74.00	36.01	PASS	Н	PK
4	5379.1586	-14.60	53.82	39.22	74.00	34.78	PASS	Н	PK
5	8039.1359	-11.27	52.01	40.74	74.00	33.26	PASS	Н	PK
6	11351.1067	-6.38	50.32	43.94	74.00	30.06	PASS	Н	PK
7	1263.4263	0.96	40.88	41.84	74.00	32.16	PASS	V	PK
8	1892.8893	3.97	38.82	42.79	74.00	31.21	PASS	V	PK
9	3462.1808	-20.09	56.73	36.64	74.00	37.36	PASS	V	PK
10	4842.8729	-16.22	53.78	37.56	74.00	36.44	PASS	V	PK
11	6709.7973	-12.48	52.73	40.25	74.00	33.75	PASS	V	PK
12	9289.1693	-7.94	51.57	43.63	74.00	30.37	PASS	V	PK













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					18		1	100	
Mode	<b>;</b>		802.11 n(HT4	0) Transmitt	ng	Channe	el:	2437MH	Z
NO	Freq. [MHz]	Factor [dB]	Reading [dBµV]	Level [dBµV/m]	Limit [dBµV/m]	Margin [dB]	Result	Polarity	Remark
1	1409.2409	1.40	40.20	41.60	74.00	32.40	PASS	н	PK
2	1968.4968	4.38	39.33	43.71	74.00	30.29	PASS	Н	PK
3	3495.9831	-20.03	56.02	35.99	74.00	38.01	PASS	Н	PK
4	5014.4843	-15.80	53.07	37.27	74.00	36.73	PASS	Н	PK
5	7417.0445	-11.44	52.28	40.84	74.00	33.16	PASS	Н	PK
6	10423.4949	-6.33	49.22	42.89	74.00	31.11	PASS	Н	PK
7	1438.8439	1.42	40.20	41.62	74.00	32.38	PASS	V	PK
8	1936.0936	4.22	39.19	43.41	74.00	30.59	PASS	V	PK
9	3506.3838	-20.04	56.86	36.82	74.00	37.18	PASS	V	PK
10	5001.4834	-15.82	53.53	37.71	74.00	36.29	PASS	V	PK
11	6995.8164	-11.82	52.58	40.76	74.00	33.24	PASS	V	PK
12	9188.4126	-7.98	52.35	44.37	74.00	29.63	PASS	V	PK

Mode	:	8	02.11 n(HT4	0) Transmitti	ng	Channe	el:	2452MH	z
NO	Freq. [MHz]	Factor [dB]	Reading [dBµV]	Level [dBµV/m]	Limit [dBµV/m]	Margin [dB]	Result	Polarity	Remark
1	1260.8261	0.96	41.04	42.00	74.00	32.00	PASS	Н	PK
2	1652.6653	2.63	39.61	42.24	74.00	31.76	PASS	Н	PK
3	3871.7081	-19.14	55.51	36.37	74.00	37.63	PASS	Н	PK
4	5481.8655	-14.52	53.14	38.62	74.00	35.38	PASS	Н	PK
5	7514.551	-11.11	52.17	41.06	74.00	32.94	PASS	Н	PK
6	9935.3124	-7.13	50.55	43.42	74.00	30.58	PASS	Н	PK
7	1261.2261	0.96	41.10	42.06	74.00	31.94	PASS	V	PK
8	1949.895	4.29	38.57	42.86	74.00	31.14	PASS	V	PK
9	3325.6717	-19.90	57.03	37.13	74.00	36.87	PASS	V	PK
10	5035.9357	-15.77	53.31	37.54	74.00	36.46	PASS	V	PK
11	7287.6858	-11.71	52.75	41.04	74.00	32.96	PASS	V	PK
12	9931.4121	-7.12	50.92	43.80	74.00	30.20	PASS	V	PK

#### Remark:

1) The field strength is calculated by adding the Antenna Factor, Cable Factor & Preamplifier. The basic equation with a sample calculation is as follows:

Final Test Level =Receiver Reading + Factor

Factor=Antenna Factor + Cable Factor – Preamplifier Factor

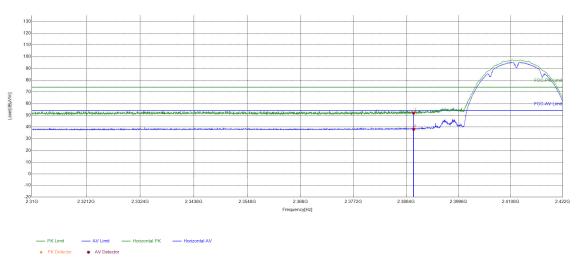
2) Scan from 9kHz to 25GHz, the disturbance above 10GHz and below 30MHz was very low. As shown in this section, for frequencies above 1GHz, the field strength limits are based on average limits. However, the peak field strength of any emission shall not exceed the maximum permitted average limits specified above by more than 20 dB under any condition of modulation. So, only the peak measurements were shown in the report.



#### Test plot as follows:

Mode:	802.11 b Transmitting	Test Frequency:	2412MHz
Widde.	002.11 b Transmitting	rest_rrequeriey.	2412101112

**Test Graph** 



Suspecte	<b>d List</b> Freq. [MHz]	Factor [dB]	Reading [dBµV]	Level [dBµV/m]	Limit [dBµV/m]	Margin [dB]	Result	Polarity	Remark
1	2390	13.75	38.20	51.95	74.00	22.05	PASS	Horizontal	PK
2	2390	13.75	24.42	38.17	54.00	15.83	PASS	Horizontal	AV
(ć.	(*)		$(\sim)$		$(a^{\prime})$			$(\mathcal{A})$	









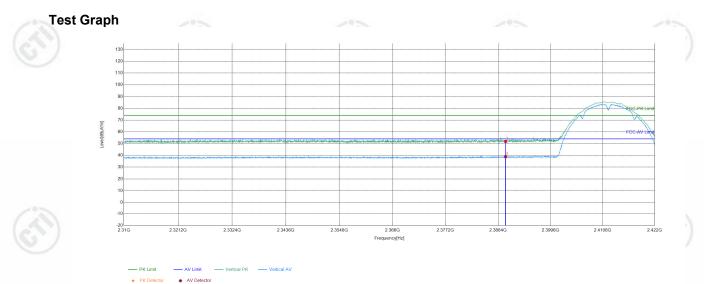






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Mode:	802.11 b Transmitting	Test_Frequency:	2412MHz
Remark:	SISO_ANT1	÷	



Suspecte	d List								
NO	Freq. [MHz]	Factor [dB]	Reading [dBµV]	Level [dBµV/m]	Limit [dBµV/m]	Margin [dB]	Result	Polarity	Remark
1	2390	13.75	38.16	51.91	74.00	22.09	PASS	Vertical	PK
2	2390	13.75	25.11	38.86	54.00	15.14	PASS	Vertical	AV
1		GT /		67)		G			GU

















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Mode:	802.11 b Transmitting	Test_Frequency:	2462MHz
Remark:	SISO_ANT1		



	1	200		1°2		<">>			1°2	
	Suspecte	d List								
	NO	Freq. [MHz]	Factor [dB]	Reading [dBµV]	Level [dBµV/m]	Limit [dBµV/m]	Margin [dB]	Result	Polarity	Remark
	1	2483.5	6.57	38.85	45.42	74.00	28.58	PASS	Horizontal	PK
	2	2483.5	6.57	25.48	32.05	54.00	21.95	PASS	Horizontal	AV
2	)		G )		67)				•	(C)











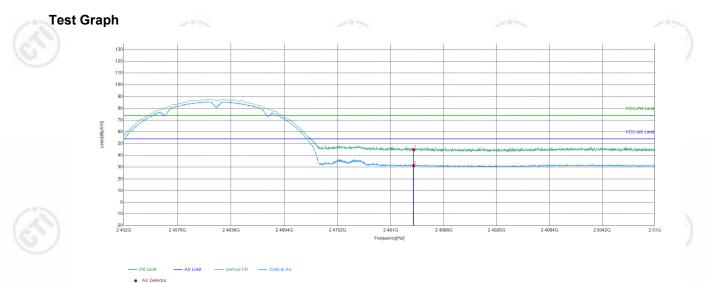






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Mode:	802.11 b Transmitting	Test_Frequency:	2462MHz
Remark:	SISO_ANT1		4



	12							<u></u>	
Suspecte	ed List								
NO	Freq. [MHz]	Factor [dB]	Reading [dBµV]	Level [dBµV/m]	Limit [dBµV/m]	Margin [dB]	Result	Polarity	Remark
1	2483.5	6.57	38.33	44.90	74.00	29.10	PASS	Vertical	PK
2	2483.5	6.57	24.73	31.30	54.00	22.70	PASS	Vertical	AV
1		GT /	•	(C)		LC.		•	G













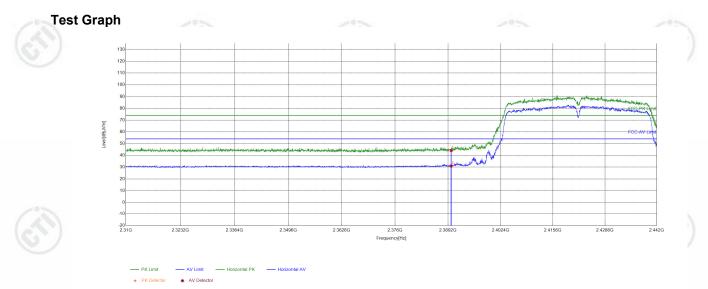






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Mode:	802.11 n(HT40) Transmitting	Test_Frequency:	2422MHz
Remark:	SISO_ANT1		



Suspecte	ed List								
NO	Freq. [MHz]	Factor [dB]	Reading [dBµV]	Level [dBµV/m]	Limit [dBµV/m]	Margin [dB]	Result	Polarity	Remark
1	2390	5.77	38.43	44.20	74.00	29.80	PASS	Horizontal	PK
2	2390	5.77	25.18	30.95	54.00	23.05	PASS	Horizontal	AV
)		G )		(J)				•	G













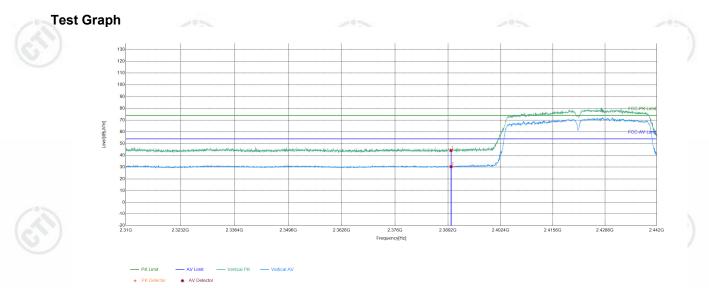






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Mode:	802.11 n(HT40) Transmitting	Test_Frequency:	2422MHz
Remark:	SISO_ANT1		



Suspecte	d List								
NO	Freq. [MHz]	Factor [dB]	Reading [dBµV]	Level [dBµV/m]	Limit [dBµV/m]	Margin [dB]	Result	Polarity	Remark
1	2390	5.77	38.41	44.18	74.00	29.82	PASS	Vertical	PK
2	2390	5.77	24.60	30.37	54.00	23.63	PASS	Vertical	AV
1		G J		67)		G			G















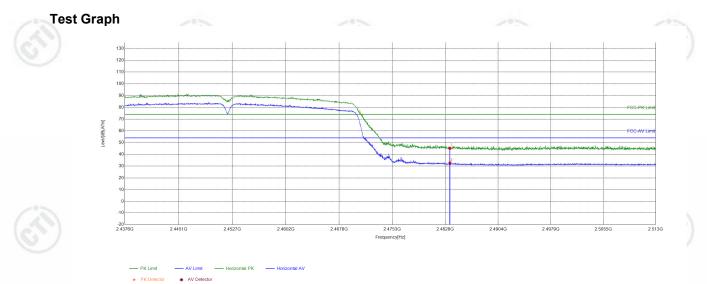


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Mode:	802.11 n(HT40) Transmitting	Test_Frequency:	2452MHz
Remark:	SISO_ANT1		



Suspecte	ed List								
NO	Freq. [MHz]	Factor [dB]	Reading [dBµV]	Level [dBµV/m]	Limit [dBµV/m]	Margin [dB]	Result	Polarity	Remark
1	2483.5	6.57	38.64	45.21	74.00	28.79	PASS	Horizontal	PK
2	2483.5	6.57	26.00	32.57	54.00	21.43	PASS	Horizontal	AV
1		G I		(GT)		G			G













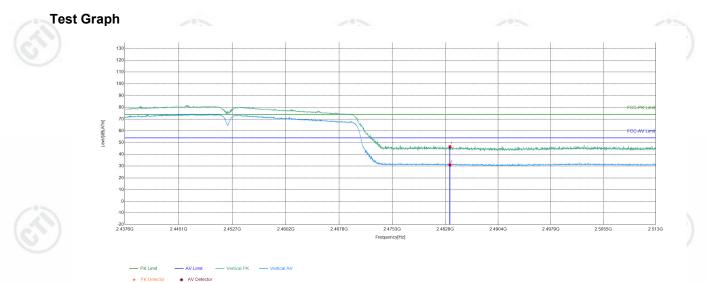






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Mode:	802.11 n(HT40) Transmitting	Test_Frequency:	2452MHz
Remark:	SISO_ANT1		·



Suspecte	ed List								
NO	Freq. [MHz]	Factor [dB]	Reading [dBµV]	Level [dBµV/m]	Limit [dBµV/m]	Margin [dB]	Result	Polarity	Remark
1	2483.5	6.57	39.97	46.54	74.00	27.46	PASS	Vertical	PK
2	2483.5	6.57	24.36	30.93	54.00	23.07	PASS	Vertical	AV
7		GT	•	(C)		G			G













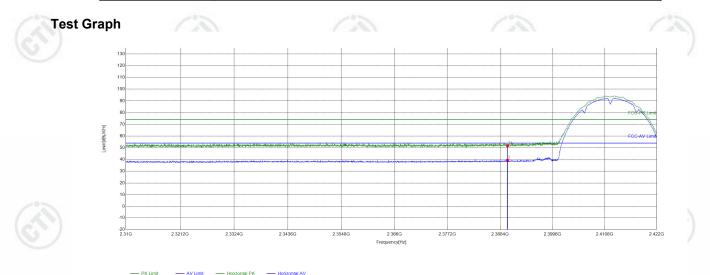






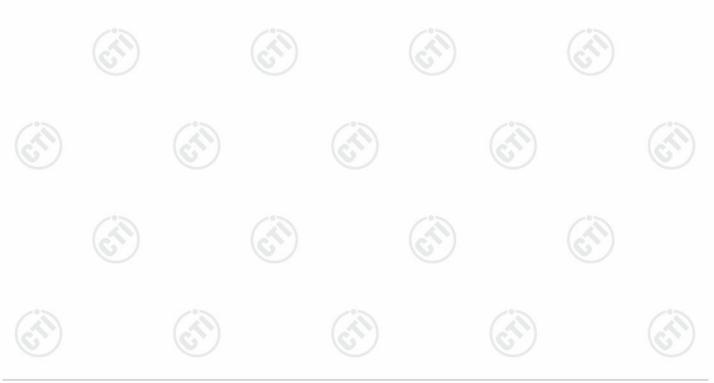
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Mode:	802.11 b Transmitting	Test_Frequency:	2412MHz
Remark:	SISO_ANT2	·	



## PKDetector AV Detector Suspected List

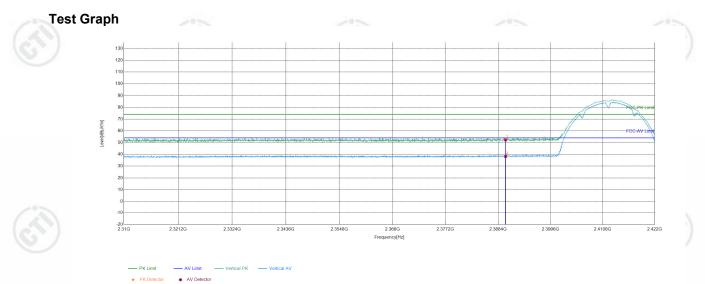
	Suspected List											
	NO	Freq. [MHz]	Factor [dB]	Reading [dBµV]	Level [dBµV/m]	Limit [dBµV/m]	Margin [dB]	Result	Polarity	Remark		
100	1	2390	13.75	38.14	51.89	74.00	22.11	PASS	Horizontal	PK		
$( \land )$	2	2390	13.75	25.48	39.23	54.00	14.77	PASS	Horizontal	AV		
	1											





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Mode:	802.11 b Transmitting	Test_Frequency:	2412MHz
Remark:	SISO_ANT2	·	



Suspecte	ed List								
NO	Freq. [MHz]	Factor [dB]	Reading [dBµV]	Level [dBµV/m]	Limit [dBµV/m]	Margin [dB]	Result	Polarity	Remark
1	2390	13.75	38.54	52.29	74.00	21.71	PASS	Vertical	PK
2	2390	13.75	24.48	38.23	54.00	15.77	PASS	Vertical	AV
)		GT		67)					GU



















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Mode:	802.11 b Transmitting	Test_Frequency:	2462MHz
Remark:	SISO_ANT2		



Suspecte	ed List								
NO	Freq. [MHz]	Factor [dB]	Reading [dBµV]	Level [dBµV/m]	Limit [dBµV/m]	Margin [dB]	Result	Polarity	Remark
1	2483.5	6.57	38.11	44.68	74.00	29.32	PASS	Horizontal	PK
2	2483.5	6.57	24.52	31.09	54.00	22.91	PASS	Horizontal	AV
7		GT/	•	67)		G			(C)















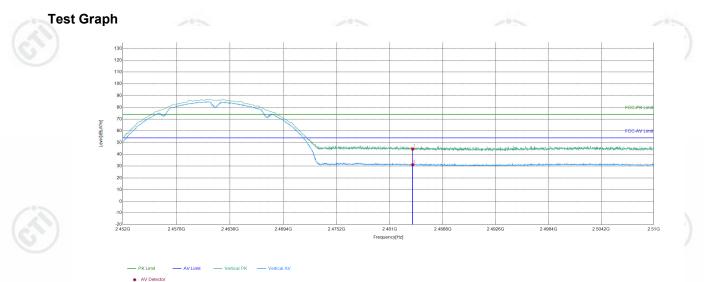


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Mode:	802.11 b Transmitting	Test_Frequency:	2462MHz
Remark:	SISO_ANT2	·	



Suspecte	ed List							2°2	
NO	Freq. [MHz]	Factor [dB]	Reading [dBµV]	Level [dBµV/m]	Limit [dBµV/m]	Margin [dB]	Result	Polarity	Remark
1	2483.5	6.57	38.00	44.57	74.00	29.43	PASS	Vertical	PK
2	2483.5	6.57	24.59	31.16	54.00	22.84	PASS	Vertical	AV
1		GT /		(C)		C.			G











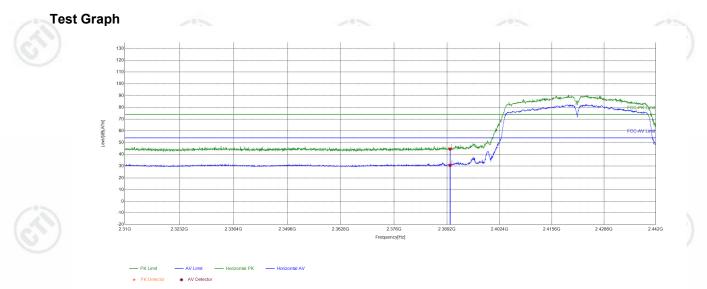






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Mode:	802.11 n(HT40) Transmitting	Test_Frequency:	2422MHz
Remark:	SISO_ANT2		



	·							1°2	
Suspecte	ed List								
NO	Freq. [MHz]	Factor [dB]	Reading [dBµV]	Level [dBµV/m]	Limit [dBµV/m]	Margin [dB]	Result	Polarity	Remark
1	2390	5.77	38.78	44.55	74.00	29.45	PASS	Horizontal	PK
2	2390	5.77	24.89	30.66	54.00	23.34	PASS	Horizontal	AV
7		GT		(GT)		(G			S















