

ELECTROMAGNETIC EMISSIONS COMPLIANCE REPORT

OF

INTENTIONAL RADIATOR CERTIFICATION TO FCC PART 15 SUBPART C AND INDUSTRY CANADA RSS 247 REQUIREMENT

	•••
FCC Applicant:	Honeywell International Inc.
IC Applicant:	9680 Old Bailes Road, Fort Mill, SC 29707, USA Honeywell International Inc.
	9680 Old Bailes Road, Fort Mill, SC 29707, USA
Product Name:	Vehicle Mount Computer
Brand Name:	Honeywell
Model No.:	VM1A-L0N
Model Difference:	N/A
FCC ID:	HD5-VM1AL0N
IC:	1693B-VM1AL0N
Report Number:	ER/2018/90025
FCC Rule Part:	§15.247, Cat: DTS
IC Rule Part:	RSS-247 issue 2 Feb 2017
Issue Date:	Nov. 08, 2018
Date of Test:	Sep. 12, 2018 ~ Oct. 02, 2018
Date of EUT Received:	Sep. 04, 2018
We hereby certify that:	

The above equipment was tested by SGS Taiwan Ltd. Electronics & Communication Laboratory The test data, data evaluation, test procedures, and equipment configurations shown in this report were made in accordance with the procedures given in ANSI C63.10:2013 and the energy emitted by the sample EUT tested as described in this report is in compliance with conducted and radiated emission limits. The test results of this report relate only to the tested sample identified in this report.

Tested By:

Approved By:

Louis Chen / Sr. Engineer

CHUN-CHIEH CHEN / Asst. Supervisor



Testing Laboratory 0513

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Revision History

Report Number	Revision	Description	Effected Page	Issue Date	Revised By
ER/2018/90025	Rev.00	Initial creation of docu- ment	All	Oct. 05, 2018	Elle Chang
ER/2018/90025	Rev. 01	Section 1.1, 11 &14 & 15	5, 57~176, 183~186	Nov. 08, 2018	Allen Tsai

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GENERAL INFORMATION 1

1.1 Product description

General:

Product Name:	Vehicle Mo	Vehicle Mount Computer		
Brand Name:	Honeywell	Honeywell		
Model No.:	VM1A-L0N	1		
Model Difference:	N/A			
Product HW/SW version:	VM1AL0N / 85.00.00-0322			
Radio HW/SW version:	V1.0 / V5.1	1.1.28U		
	10.8Vdc fro Adapter.	om Rechargeable Li-ion Battery or 15Vdc from AC/DC		
Power Supply:	Battery:	Model No.: 163176-0001 Rev C / OVT310L1R00 C, Supplier: TOTEX		
	Adapter:	Model No.: GT-46600-6015-T3, Supplier: GlobTek, Inc.		

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WLAN 2.4GHz:

Wi-Fi	Frequency Range	Channels	Rated Power in dBm (Peak)	Rated Power in dBm (EIRP)	Type of Emission	Modulation Technology
802.11b			25.84	29.04	13M8G1D	DSSS,
802.11g	2412-2462	11	27.68	24.28	16M9D1D	
802.11n HT20			27.67	25.20	18M1D1D	OFDM
802.11n HT40	2422-2452	9	25.60	22.35	36M9D1D	
Modulation type: CCK, DQPSK, DBPSK 64QAM, 16QAM, QPS						
Transitio	n Rate:	802.11 b: 1/2/5.5/11 Mbps 802.11 g: 6/9/12/18/24/36/48/54 Mbps 802.11 n_20MHz: 6.5 – 144.4Mbps 802.11 n_40MHz: 13.5 – 300.0Mbps				

Antenna Designation

Antenna Type	Supplier	Antenna Model No.	Freq. (MHz)	Transmitter Chain	Peak Antenna Gain (dBi)	MIMO An- tenna Gain (dBi)	Worst An- tenna Gain
External Di pala	LARSEN	R380500314	2.4GHz	Ch 0 & Ch 1	1.6	4.61	
Di-pole antenna	LAIRD	WTS 2450	2.4GHz	Ch 0 & Ch 1	2.1	5.11	V
Internal	N/A	N/A	2.4GHz	Ch0	1.1	4.00	
Printed Antenna	N/A	N/A	2.4GHz	Ch1	2.7	4.98	

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1.2 Test Methodology of Applied Standards

FCC Part 15, Subpart C §15.247

FCC KDB 558074 D01 DTS Meas. Guidance v05

FCC KDB 662911 D01 Multiple Transmitter Output v02r01

RSS-247 issue 2 Feb. 2017

RSS-Gen. issue 5 Apr. 2018

ANSI C63.10:2013

Note: All test items have been performed and record as per the above standards.

1.3 Test Facility

SGS Taiwan Ltd. Electronics & Communication Laboratory No.134, Wu Kung Road, New Taipei Industrial Park, Wuku District, New Taipei City, Taiwan 24803

(TAF code 0513)

FCC Registration and Designation number are: 509634 / TW0001

Canada Registration Number: 4620A-4

1.4 Special Accessories

There are no special accessories used while test was conducted.

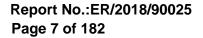
1.5 Equipment Modifications

There was no modification incorporated into the EUT.

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2 SYSTEM TEST CONFIGURATION

2.1 EUT Configuration

The EUT configuration for testing is installed on RF field strength measurement to meet the Commissions requirement and operating in a manner which intends to maximize its emission characteristics in a continuous normal application.

2.2 EUT Exercise

An engineering test mode (software/firmware) that applicant provided was utilized to manipulate the EUT into transmit, selection of the test channel, and modulation scheme.

2.3 Test Procedure

2.3.1 Conducted Emissions

The EUT is a placed on as turn table which is 0.8 m above ground plane. Conducted emissions from the EUT measured in the frequency range between 0.15 MHz and 30MHz,. The CISPR Quasi-Peak and Average detector mode is employed according to §15.207 & RSS-Gen §8.8. The two LISNs provide 50 ohm/ 50uH of coupling impedance for the measuring instrument. Both lines of the power mains connected to the EUT were checked for maximum conducted interference.

2.3.2 Radiated Emissions

The EUT is a placed on as turn table. For emissions testing at or below 1 GHz, the table height shall be 0.8 m above the reference ground plane. For emission measurements above 1 GHz, the table height shall be 1.5 m. The turn table shall rotate 360 degrees to determine the position of maximum emission level. EUT is set 3m away from the receiving antenna which varied from 1m to 4m to find out the highest emission. And also, each emission was to be maximized by changing the polarization of receiving antenna both horizontal and vertical. In order to find out the max. emission, the relative positions of this transmitter (EUT) was rotated through three orthogonal axes and measurement procedures for electric field radiated emissions above 1 GHz the EUT measurement is to be made "while keeping the antenna in the 'cone of radiation' from that area and pointed at the area both in azimuth and elevation, with polarization oriented for maximum response." is still within the 3dB illumination BW of the measurement antenna.

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2.4 Measurement Results Explanation Example

For all conducted test items:

The offset level is set in the spectrum analyzer to compensate the RF cable loss and attenuation factor between EUT conducted port and spectrum analyzer. With the offset compensation, the spectrum analyzer reading level is exactly EUT RF output level. **Note:**

The spectrum analyzer offset is derived from RF cable loss and attenuator factor. Following shows an offset computation example with cable loss and attenuator.

2.5 Configuration of Tested System

Fig. 2-1 Radiated Emission Configuration

EUT

Fig.2-3 Conducted Emission (Antenna Port) Configuration



Fig. 2-2 Conducted Emission (AC Power Line) Configuration

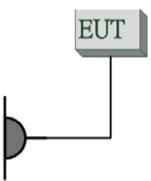


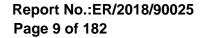
Table	2-1	Equipment	Used in	Tested	System
IUNIC	~ .	Equipment		100100	Oystenn

ltem	Equipment	Mfr/Brand	Model/Type No.	Series No.	Data Cable	Power Cord
1	WLAN Test Software	N/A	N/A	N/A	N/A	N/A

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3 SUMMARY OF TEST RESULTS

FCC Rules	IC Rules	Description Of Test	Result
§15.207(a)	RSS-Gen §8.8	AC Power Line Conducted Emission	Compliant
§15.247(b) (3)	RSS-247 §5.4(4)	Peak Output Power	Compliant
§15.247(a)(2)	RSS-247 §5.1 (1) RSS-Gen §6.7	6dB & 99% Emission Bandwidth	Compliant
§15.247(d)	RSS-247 §5.5 RSS-Gen §8.10	Conducted Band Edge and Spurious Emission	Compliant
§15.247(d)	RSS-247 §5.5 RSS-Gen §8.9 RSS-Gen §8.10 RSS-Gen §6.13	Radiated Band Edge and Spurious Emission	Compliant
§15.247(e)	RSS-247 §5.2(2)	Power Spectral Density	Compliant
§15.203 §15.247(b)	RSS- Gen §6.8	Antenna Requirement	Compliant

4 DESCRIPTION OF TEST MODES

4.1 Operated in 2400 ~ 2483.5MHz Band

11 channels are provided for 802.11b, 802.11g and 802.11n_HT20

CHANNEL	FREQUENCY	CHANNEL	FREQUENCY
1	2412 MHz	7	2442 MHz
2	2417 MHz	8	2447 MHz
3	2422 MHz	9	2452 MHz
4	2427 MHz	10	2457 MHz
5	2432 MHz	11	2462 MHz
6	2437 MHz		

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4.2 The Worst Test Modes and Channel Details

- 1. The EUT has been tested under operating condition.
- 2. Test program used to control the EUT for staying in continuous transmitting and receiving mode is programmed.
- 3. Investigation has been done on all the possible configurations for searching the worst case.

RADIATED EMISSION TEST:

RADIATED EMISSION TEST (BELOW 1 GHz)						
MODE	AVAILABLE CHANNEL	TESTED CHANNEL	MODULATION	DATA RATE (Mbps)	ANTENNA PORT	
802.11g	1 to 11	1,6,11	OFDM	6	2TX	

RADIATED EMISSION TEST (ABOVE 1 GHz)							
MODE	AVAILABLE CHANNEL	TESTED CHANNEL	MODULATION	DATA RATE (Mbps)	ANTENNA PORT		
802.11b	1 to 11	1, 6, 11	DSSS	1	2TX		
802.11g	1 to 11	1, 6, 11	OFDM	6	2TX		
802.11n (HT20)	1 to 11	1, 6, 11	OFDM	MCS 8	MIMO		
802.11n (HT40)	3 to 9	3, 6, 9	OFDM	MCS 8	MIMO		

Note:

The field strength of radiation emission was measured as EUT stand-up position (H mode) and lie down position (E1, E2 mode) for 802.11b/g/n WLAN Transmitter for channel Low, Mid and High, the worst case E2 position was reported.

ANTENNA PORT CONDUCTED MEASUREMENT:

CONDUCTED TEST									
MODE	AVAILABLE CHANNEL	CHANNEL MODULATION		DATA RATE (Mbps)	ANTENNA PORT				
802.11b	1 to 11	1, 6, 11	DSSS	11	2TX				
802.11g	1 to 11	1, 6, 11	OFDM	54	2TX				
802.11n (HT20)	1 to 11	1, 6, 11	OFDM	MCS 8	MIMO				
802.11n (HT40)	3 to 9	3, 6, 9	OFDM	MCS 8	MIMO				

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MEASUREMENT UNCERTAINTY 5

Test Items	Uncertainty		
AC Power Line Conducted Emission	+/- 2.586 dB		
Peak Output Power	+/- 0.84 dB		
6dB Bandwidth	+/- 51.33 Hz		
100 KHz Bandwidth Of Frequency Band Edge	+/- 0.84 dB		
Peak Power Density	+/- 1.3 dB		
Temperature	+/- 0.65 °C		
Humidity	+/- 4.6 %		
DC / AC Power Source	DC= +/- 0.13%, AC= +/- 0.2%		

Radiated Spurious Emission:

	9kHz-30MHz: +/-2.87dB				
	30MHz - 180MHz: +/- 3.37dB				
Measurement uncertainty	180MHz -417MHz: +/- 3.19dB				
(Polarization : Vertical)	0.417GHz-1GHz: +/- 3.19dB				
	1GHz - 18GHz: +/- 4.04dB				
	18GHz - 40GHz: +/- 4.04dB				

	9kHz-30MHz: +/-2.87dB
	30MHz - 167MHz: +/- 4.22dB
Measurement uncertainty	167MHz -500MHz: +/- 3.44dB
(Polarization : Horizontal)	0.5GHz-1GHz: +/- 3.39dB
	1GHz - 18GHz: +/- 4.08dB
	18GHz - 40GHz: +/- 4.08dB

This uncertainty represents an expanded uncertainty expressed at approximately the 95% confidence level using a coverage factor of k=2.

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6 CONDUCTED EMISSION TEST

6.1 Standard Applicable

Frequency range within 150kHz to 30MHz shall not exceed the Limit table as below.

Frequency range	Limits dB(uV)							
MHz	Quasi-peak	Average						
0.15 to 0.50	66 to 56	56 to 46						
0.50 to 5	56	46						
5 to 30	60	50						
Note								
1. The lower limit shall apply at the transition frequencies								
2. The limit decreases linearly wit	2. The limit decreases linearly with the logarithm of the frequency in the range 0.15 MHz to 0.50							

MHz.

6.2 Measurement Equipment Used

Conducted Emission Test Site									
EQUIPMENT	MFR	MODEL	SERIAL	LAST	CAL DUE.				
TYPE		NUMBER	NUMBER	CAL.					
EMI Test Receiver	R&S	ESCI7	100335	02/02/2018	02/01/2019				
LISN	SCHWARZ BECK	NSLK 8127	8127-649	05/18/2018	05/17/2019				

6.3 EUT Setup

- 1. The conducted emission tests were performed in the test site, using the setup in accordance with the ANSI 63.10:2013.
- 2. The AC/DC Power adaptor of EUT was plug-in LISN. The EUT was placed flushed with the rear of the table.
- 3. The LISN was connected with 120Vac/60Hz power source.

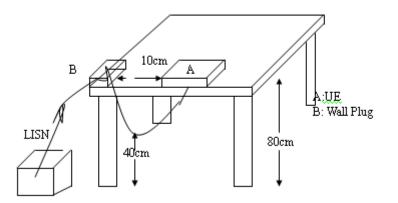
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6.4 Test SET-UP (Block Diagram of Configuration)



6.5 Measurement Procedure

- 1. The EUT was placed on a table which is 0.8m above ground plane.
- 2. Maximum procedure was performed on the six highest emissions to ensure EUT compliance.
- 3. Repeat above procedures until all phases of power being supplied by given UE are completed

6.6 Measurement Result

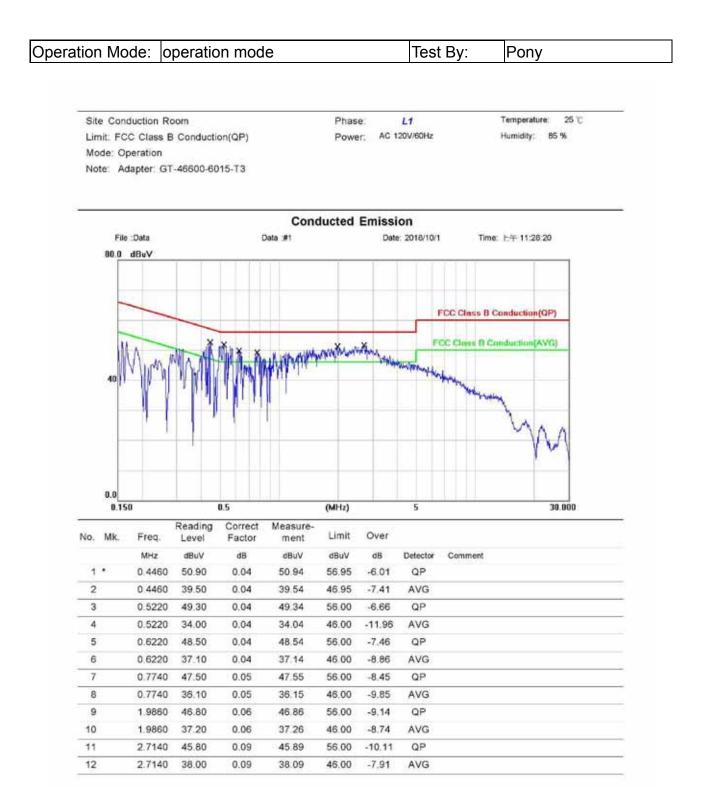
Note: Refer to next page for measurement data and plots. Note2: The * reveals the worst-case results that closet to the limit

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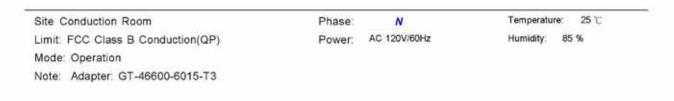
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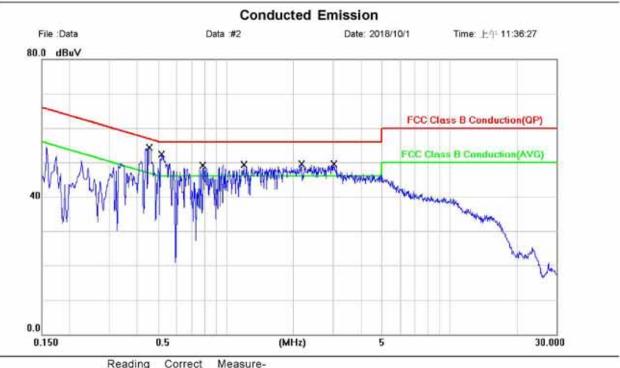
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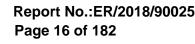
No.	Mk.	Freq.	Level	Factor	ment	Limit	Over		
		MHz	dBuV	dB	dBuV	dBuV	dB	Detector	Comment
1		0.4540	53.20	0.04	53.24	56.80	-3.56	QP	
2	•	0.4540	44.50	0.04	44.54	46.80	-2.26	AVG	
3		0.5180	50.10	0.04	50.14	56.00	-5.86	QP	
4		0.5180	42.60	0.04	42.64	46.00	-3.36	AVG	
5		0.7900	44.00	0.05	44.05	56.00	-11.95	QP	
6		0.7900	31,50	0.05	31.55	46.00	-14.45	AVG	
7		1.1980	43.50	0.05	43.55	56.00	-12,45	QP	
8		1.1980	36.00	0.05	36.05	46.00	-9.95	AVG	
9		2.1700	43.10	0.08	43.18	56.00	-12.82	QP	
10		2.1700	37.60	0.08	37.68	46.00	-8.32	AVG	
11		3.0260	42.70	0.11	42.81	56.00	-13,19	QP	
12		3.0260	36.80	0.11	36.91	46.00	-9.09	AVG	

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ボチカオ 就切り 近れ ぎち 木 ぼ オ 利 払く体 節 貝 見 ・ ロッチレ (本の主 広 中 ロ シル ~ チ 水 石 予 水 空 本 公 り 音 迎 マ コ ・ イ う い か 人 み * This document is issued by the Company subject to its General Conditions of Service printed overleaf, available on request or accessible at <u>www.sgs.com/terms_and_conditions.htm</u> and, for electronic format documents, subject to Terms and Conditions for Electronic Documents at <u>www.sgs.com/terms_e-document.htm</u>. Attention is drawn to the limitation of liability, indemnification and jurisdiction issues defined therein. Any holder of this document is advised that information contained hereon reflects the Company's findings at the time of its intervention only and within the limits of Client's instructions, if any. The Company's sole responsibility is to its Client and this document does not exonerate parties to a transaction from exercising all their rights and obligations under the transaction documents. This document cannot be reproduced except in full, without prior written approval of the Company. Any unauthorized alteration, forgery or falsification of the content or appearance of this document is unlawful and offenders may be prosecuted to the fullest extent of the law.

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7 DUTY CYCLE OF TEST SIGNAL

Pre-analysis Check: While conducting average power measurement, duty cycle of each mode shall be checked to ensure its duty cycle in order to compensate for the loss due to insufficient ratio of duty cycle.

All duty cycle is pre-scanned, and result as obtained below shows only the most representative ones where duty cycle is conducted as the given transmission with given virtual operation that expresses the percentage.

Formula:

Duty Cycle = Ton / (Ton+Toff)

Measurement Procedure:

- 1. Set span = Zero
- 2. RBW = 8MHz
- 3. VBW = 8MHz,
- 4. Detector = Peak

Duty Cycle:

	Duty Cycle (%)	Duty Factor (dB)	1/T (kHz)	VBW setting (kHz)
802.11b	99.36	0.03	0.08	1.00
802.11g	95.21	0.21	0.48	1.00
802.11n_20	90.73	0.42	1.02	2.00
802.11n_40	84.28	0.74	2.02	3.00

b = 99.36%, g = 95.21%, $n_ht_20 = 90.73\%$ $n_ht_40 = 84.28\%$

Duty Cycle Factor: 10 * log(1/0.9936) = 0.03 Duty Cycle Factor: 10 * log(1/0.9521) = 0.21 Duty Cycle Factor: 10 * log(1/0.9073) = 0.42 Duty Cycle Factor: 10 * log(1/0.8428) = 0.74

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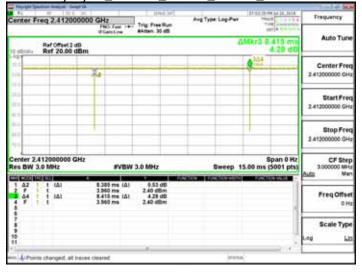
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7.1 DUTY CYCLE TEST SIGNAL Measurement Result

Duty Cycle_802.11b_20MHz_Chain0_2412MHz



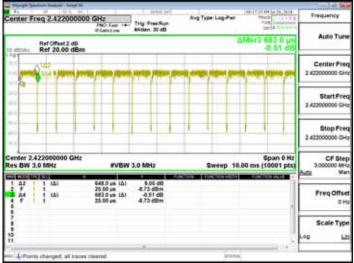
Duty Cycle_802.11g_20MHz_Chain0_2412MHz

Frequency	17-12-12-14 to Ja. 2014 14-02 7-02 027 4 12 12 12	e Log-Pur	Avg	Run	Trig Free	Hz NO Fast +++ GainLog	000000	2.4120	req 2	er F	ent
Auto Tun	Ref Offwet 2 dB AMkr3 1,428 ma dimire Ref 20.00 dBm 4.51 dB								110		
Center Free 2.413000000 GH	and a spectrum	-	-	-	-	-			-	4	
Start Free 2.412000000 GH										-	
Stop Free 2.412000000 GH	1				1			1			
CF Step 3.000000 MH	Span 0 Hz 00 ms (10001 pts)	weep 10.	-		3.0 MHz	#VBW	GHz		4120 .0 M	BW :	es
Freq Offse 0 H			** 15-11	dB Im dB	2.41 -0.50 di -0.50 di	192 ms (Δ) 3.00 μs 425 ms (Δ) 3.00 μs		(<u>A</u>) (<u>A</u>)	1	12	1
Scale Type											67 8901
		(atoma)			_	red :	f haire ch	ngéit, a	s che	Print	4

Duty Cycle_802.11n_20MHz_Chain0_2412MHz



Duty Cycle_802.11n_40MHz_Chain0_2422MHz



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8 PEAK OUTPUT POWER MEASUREMENT

8.1 Standard Applicable

For systems using digital modulation in the 2400-2483.5 MHz bands, the limit for peak output power is 1Watt.

Per RSS-247 §5.4(4)

For DTSs employing digital modulation techniques operating in the bands 902-928 MHz and 2400-2483.5 MHz, the maximum peak conducted output power shall not exceed 1W. Except as provided in Section 5.4(5), the e.i.r.p. shall not exceed 4 W.

If the transmitting antenna of directional gain greater than 6dBi are used the peak output power form the intentional radiator shall be reduced below the above stated value by the amount in dB that the directional gain of the Antenna exceeds 6dBi.

In case of point-to-point operation, the limit has to be reduced by 1dB for every 3dB that the directional gain of Antenna exceeds 6dBi.

As per FCC KDB 662911 D01

a) Basic methodology with NANT transmit antennas, each with the same directional gain GANT dBi, being driven by NANT transmitter outputs of equal power. Directional gain is to be computed as follows:

If any transmit signals are correlated with each other,

(i) Directional gain = GANT + 10 log(NANT) dBi

Frequency (MHz)	Effective Legacy Gain (dBi)	Conducted Power Limit (dBm)
2412~2462	5.11	30

The antenna gain is not grater than 6 dBi. Therefore, reduction of power is not required.

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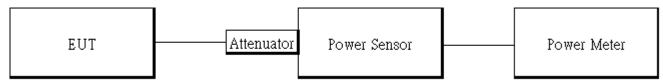


8.2 Measurement Equipment Used

Conducted Emission Test Site										
EQUIPMENT TYPE	MFR	MODEL NUMBER	SERIAL NUMBER	LAST CAL.	CAL DUE.					
EXA Spectrum An- alyzer	Agilent	N9010A	MY50420195	05/03/2018	05/02/2019					
Attenuator	Mini-Circuit	BW-S10W2+	2	01/02/2018	01/01/2019					
DC Block	Mini-Circuits	BLK-18-S+	1	01/02/2018	01/01/2019					
Coaxial Cables	N/A	WK CE Cable	N/A	01/02/2018	01/01/2019					
Power Meter	Anritsu	ML2496A	1804001	02/01/2018	01/31/2019					
Power Sensor	Anritsu	MA2411B	1726104	02/01/2018	01/31/2019					
Power Sensor	Anritsu	MA2411B	1726107	02/01/2018	01/31/2019					

8.3 Test Set-up

Power Meter:



8.4 Measurement Procedure

- 1. Place the EUT on the table and set it in transmitting mode.
- 2. The testing follows the Measurement Procedure of FCC KDB 558074 D01 DTS Meas. Guidance.
- 3. Remove the antenna from the EUT and then connect a low loss RF cable from the antenna port to the power meter.

Power Meter:

It is used as the auxiliary test equipment to conduct the output power measurement.

4. Record the max. Reading as observed from Spectrum or Power Meter.

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8.5 Measurement Result

Antenna Chain 0

802.1	1b Ch0						
СН	Freq. (MHz)	Data Rate	Peak Output Power (dBm)	Limit		RESULT	
1	2412	1	22.90	1 Watt =	30.00	dBm	PASS
6	2437	1	22.71	1 Watt =	30.00	dBm	PASS
11	2462	1	21.86	1 Watt =	30.00	dBm	PASS
802.1	1b Ch0						
СН	Freq. (MHz)	Data Rate	Max. Avg. Output include tune up tolerance Power (dBm)		Limit		RESULT
1	2412	1	20.30	1 Watt =	30.00	dBm	PASS
6	2437	1	20.24	1 Watt =	30.00	dBm	PASS
11	2462	1	19.20	1 Watt =	30.00	dBm	PASS
802.1	1g Ch0						
СН	Freq. (MHz)	Data Rate	Peak Output Power (dBm)		Limit		RESULT
1	2412	6	23.04	1 Watt =	30.00	dBm	PASS
6	2437	6	24.83	1 Watt =	30.00	dBm	PASS
11	2462	6	22.94	1 Watt =	30.00	dBm	PASS
802.1	1g Ch0						
сн	Freq. (MHz)	Data Rate	Max. Avg. Output include tune up tolerance Power (dBm)	Limit			RESULT
1	2412	6	13.87	1 Watt =	30.00	dBm	PASS
6	2437	6	15.63	1 Watt =	30.00	dBm	PASS
11	2462	6	13.63	1 Watt =	30.00	dBm	PASS

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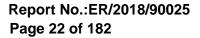


802.1	1n_HT20	M Ch0								
СН	Freq. (MHz)	Data Rate	Peak Output Power (dBm)		RESULT					
1	2412	MCS0	24.33	1 Watt =	dBm	PASS				
6	2437	MCS0	24.81	1 Watt =	30.00	dBm	PASS			
11	2462	MCS0	22.75	1 Watt =	30.00	dBm	PASS			
802.1	1n_HT20	M Ch0								
СН	Freq. (MHz)	Data Rate	Max. Avg. Output include tune up tolerance Power (dBm)	Limit RESUL						
1	2412	MCS0	12.18	1 Watt =	30.00	dBm	PASS			
6	2437	MCS0	16.61	1 Watt =	30.00	dBm	PASS			
11										

802.1	1n_HT40	M Ch0					
СН	Freq. (MHz)	Data Rate	Peak Output Power (dBm)		Limit		RESULT
3	2422	MCS0	20.53	1 Watt =	30.00	dBm	PASS
6	2437	MCS0	20.83	1 Watt =	30.00	dBm	PASS
9	2452	MCS0	22.98	1 Watt =	30.00	dBm	PASS
802.1	1n_HT40	M Ch0					
СН	Freq. (MHz)	Data Rate	Max. Avg. Output include tune up tolerance Power (dBm)		RESULT		
3	2422	MCS0	11.25	1 Watt =	30.00	dBm	PASS
6	2437	MCS0	12.22	1 Watt =	30.00	dBm	PASS
9	2452	MCS0	14.06	1 Watt =	30.00	dBm	PASS

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Antenna Chain 1

802.1	1b Ch1						
СН	Freq. (MHz)	Data Rate	Peak Output Power (dBm)		Limit		RESULT
1	2412	1	22.96	1 Watt =	30.00	dBm	PASS
6	2437	1	22.94	1 Watt =	30.00	dBm	PASS
11	2462	1	22.25	1 Watt = 30.00 dBm			PASS
802.1	1b Ch1			-			
СН	Freq. (MHz)	Data Rate	Max. Avg. Output include tune up tolerance Power (dBm)	Limit			RESULT
1	2412	1	20.47	1 Watt =	30.00	dBm	PASS
6	2437	1	20.34	1 Watt =	30.00	dBm	PASS
11	2462	1	19.62	1 Watt =	30.00	dBm	PASS
802.1	1g Ch1						
СН	Freq. (MHz)	Data Rate	Peak Output Power (dBm)		Limit		RESULT
1	2412	6	23.09	1 Watt =	30.00	dBm	PASS
6	2437	6	24.98	1 Watt =	30.00	dBm	PASS
11	2462	6	23.14	1 Watt =	30.00	dBm	PASS
802.1	1g Ch1						
сн	Freq. (MHz)	Data Rate	Max. Avg. Output include tune up tolerance Power (dBm)		RESULT		
1	2412	6	13.97	1 Watt =	30.00	dBm	PASS
6	2437	6	15.80	1 Watt =	30.00	dBm	PASS
11	2462	6	13.79	1 Watt =	30.00	dBm	PASS

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802.1	1n_HT20	M Ch1					
СН	Freq. (MHz)	Data Rate	Peak Output Power (dBm)		RESULT		
1	2412	MCS0	21.32	1 Watt =	30.00	dBm	PASS
6	2437	MCS0	25.01	1 Watt =	30.00	dBm	PASS
11	2462	MCS0	22.89	1 Watt =	30.00	dBm	PASS
802.1	1n_HT20	M Ch1					
СН	Freq. (MHz)	Data Rate	Max. Avg. Output include tune up tolerance Power (dBm)		RESULT		
1	2412	MCS0	12.21	1 Watt =	30.00	dBm	PASS
6	2437	MCS0	16.91	1 Watt =	30.00	dBm	PASS
11	2462	MCS0	13.93	1 Watt =	30.00	dBm	PASS

802.1	1n_HT40	M Ch1							
СН	Freq. (MHz)	Data Rate	Peak Output Power (dBm)		Limit		RESULT		
3	2422	MCS0	20.07	1 Watt =	30.00	dBm	PASS		
6	2437	MCS0	20.43	1 Watt =	30.00	dBm	PASS		
9	2452	MCS0	22.66	1 Watt =	30.00	dBm	PASS		
802.1	1n_HT40	M Ch1							
СН	Freq. (MHz)	Data Rate	Max. Avg. Output include tune up tolerance Power (dBm)		RESULT				
3	2422	MCS0	11.20	1 Watt =	30.00	dBm	PASS		
6	2437	MCS0	12.45	1 Watt =	30.00	dBm	PASS		
9									

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MIMO

802.1	1b_2TX									
СН	Freq. (MHz)	Data Rate	Pov (de	Sutput wer Rm)	Total Peak Output Power	Total Peak Output Power		Limit		RESULT
	、 ,		CH 0	CH 1	(dBm)	(mW)				
1	2412	1	22.66	22.98	25.83	383.11	1 Watt =	30.00	dBm	PASS
6	2437	1	22.82	22.84	25.84	383.73	1 Watt =	30.00	dBm	PASS
11	2462	1	21.72	22.11	24.93	311.15	1 Watt =	30.00	dBm	PASS
802.1	1b_2TX									
СН	сні чі	Data Rate	(I=)		Max. Avg. Output include tune up tolerance Power	Max. Avg. Output include tune up tolerance Power		RESULT		
			CH 0	CH 1	(dBm)	(mW)				
1	2412	1	20.20	20.37	23.32	214.98	1 Watt =	30.00	dBm	PASS
6	2437	1	20.36	20.22	23.33	215.22	1 Watt =	30.00	dBm	PASS
11	2462	1	19.24	19.39	22.35	171.94	1 Watt =	30.00	dBm	PASS
				-						
802.1	1g_2TX									
СН	Freq.	Data Pate	Po	Output wer 3m)	Total Peak Output Power	Total Peak Output Power	Limit		RESULT	

СН	Freq. (MHz)	Data Rate	Power (dBm)		(dBm)		ate (dBm) Output Power		Total Peak Output Power		Limit		RESULT
	、 ,		CH 0	CH 1	(dBm)	(mW)							
1	2412	6	22.79	22.87	25.84	383.75	1 Watt =	30.00	dBm	PASS			
6	2437	6	24.64	24.69	27.68	585.51	1 Watt =	30.00	dBm	PASS			
11	2462	6	22.76	22.83	25.81	380.67	1 Watt =	30.00	dBm	PASS			
802.1	1g_2TX												
СН	Freq. (MHz)	Data Rate	Po	Dutput wer Bm)	Max. Avg. Output include tune up tolerance Power	Max. Avg. Output include tune up tolerance Power	Limit		RESULT				
			CH 0	CH 1	(dBm)	(mW)							
1	0.1.1.0		10 / 4	10 50	14.04	48.29	1 Watt =	30.00	dBm	PASS			
1	2412	6	13.64	13.59	16.84	40.29	i vvali –	30.00	ubiii	17100			
6	2412 2437	6	13.64 15.23	13.59 15.46	18.57	40.29 71.94	1 Watt =	30.00	dBm	PASS			

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	1n_HT20									
СН	Freq. (MHz)	Data Rate	(dE	wer sm)	Total Peak Output Power	Total Peak Output Power		Limit		RESULT
	(11112)		CH 0	CH 1	(dBm)	(mW)				
1	2412	MCS8	24.56	20.59	26.02	400.31	1 Watt =	30.00	dBm	PASS
6	2437	MCS8	24.63	24.69	27.67	584.84	1 Watt =	30.00	dBm	PASS
11	2462	MCS8	22.76	22.12	25.46	351.73	1 Watt = 30.00 dBm			PASS
802.1	1n_HT20	M MIMC)							
СН	Freq. (MHz)	Data Rate	Avg. Output Power (dBm) CH 0 CH 1		Max. Avg. Output include tune up tolerance Power (dBm)	Max. Avg. Output include tune up tolerance Power (mW)		Limit		RESULT
1	0.410	11000				. ,	1 14/-11	20.00		DAGG
1	2412	MCS8	11.57	11.42	14.93	31.11	1 Watt =	30.00	dBm	PASS
6	2437	MCS8	15.89	16.22	19.49	88.94	1 Watt =	30.00	dBm	PASS
11	2462	MCS8	13.19	13.28	16.67	46.43	1 Watt =	30.00	dBm	PASS
802.1	1n_HT40	M MIMC)							
СН	Freq. (MHz)	Data Rate	Peak Output Power (dBm)		Total Peak Output Power	Total Peak Output Power		Limit		RESULT
			CH 0	CH 1	(dBm)	(mW)				
3	2422	MCS8	CH 0 20.23	CH 1 19.77	(dBm) 23.02	(mW) 200.28	1 Watt =	30.00	dBm	PASS
3 6	2422 2437	MCS8 MCS8			• •		1 Watt = 1 Watt =	30.00 30.00	dBm dBm	PASS PASS
			20.23	19.77	23.02	200.28				
6 9	2437	MCS8 MCS8	20.23 20.61 22.54	19.77 20.03	23.02 23.34	200.28 215.77	1 Watt =	30.00	dBm	PASS
6 9	2437 2452	MCS8 MCS8	20.23 20.61 22.54 Avg. (Por	19.77 20.03	23.02 23.34	200.28 215.77	1 Watt = 1 Watt =	30.00	dBm	PASS
6 9 802.1	2437 2452 1n_HT40 Freq.	MCS8 MCS8 M MIMC Data	20.23 20.61 22.54 Avg. (Pov (dE	19.77 20.03 22.63 Dutput wer Bm)	23.02 23.34 25.60 Max. Avg. Output include tune up tolerance Power	200.28 215.77 362.70 Max. Avg. Output include tune up tolerance Power	1 Watt = 1 Watt =	30.00 30.00	dBm	PASS PASS
6 9 802.1 CH	2437 2452 1n_HT40 Freq. (MHz)	MCS8 MCS8 M MIMC Data Rate	20.23 20.61 22.54 Avg. C Pov (dE CH 0	19.77 20.03 22.63 Dutput wer Bm) CH 1	23.02 23.34 25.60 Max. Avg. Output include tune up tolerance Power (dBm)	200.28 215.77 362.70 Max. Avg. Output include tune up tolerance Power (mW)	1 Watt = 1 Watt =	30.00 30.00	dBm dBm	PASS PASS RESULT

* Note: The duty cycle factor is compensated to obtain the maximum value of measurement in average.

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EIRP Antenna <u>Chain 0</u>

802.1	1b Ch0								
СН	Freq. (MHz)	Data Rate	Avg. Output Power (dBm)	Antenna Gain (dBi)	EIRP (dBm)		Limit		RESULT
1	2412	1	20.30	2.70	23.00	4W= 36 dBm			PASS
6	2437	1	20.24	2.70	22.94	4W=	36	dBm	PASS
11	2462	1	19.20	2.70	21.90	4W=	36	dBm	PASS
802.1	1g Ch0								
СН	Freq. (MHz)	Data Rate	Avg. Output Power (dBm)	Antenna Gain (dBi)	EIRP (dBm)	Limit			RESULT
1	2412	6	13.87	2.70	16.57	4W=	36	dBm	PASS
6	2437	6	15.63	2.70	18.33	4W=	36	dBm	PASS
11	2462	6	13.63	2.70	16.33	4W=	36	dBm	PASS
802.1	1n_HT201	VI Ch0							
СН	Freq.	Data	Avg. Output	Antenna Gain	EIRP	Limit			RESULT
	(MHz)	Rate	Power (dBm)	(dBi)	(dBm)		Limit		RESOLI
1	(MHz) 2412	Rate MCS0			(dBm) 14.88	4W=	21mit 36	dBm	PASS
	. ,		(dBm)	(dBi)		4W= 4W=		dBm dBm	
1	2412	MCS0	(dBm) 12.18	(dBi) 2.70	14.88		36		PASS

802.1	802.11n_HT40M Ch0											
СН	Freq. (MHz)	Data Rate	Avg. Output Power (dBm)	Antenna Gain (dBi)	EIRP (dBm)		Limit		RESULT			
3	2422	MCS0	11.25	2.70	13.95	4W=	36	dBm	PASS			
6	2437	MCS0	12.22	2.70	14.92	4W= 36 dBm		PASS				
9	2452	MCS0	14.06	2.70	16.76	4W=	36	dBm	PASS			

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Antenna Chain 1

802.1	1b Ch1										
СН	Freq. (MHz)	Data Rate	Avg. Output Power (dBm)	Antenna Gain (dBi)	EIRP (dBm)	Limit	RESULT				
1	2412	1	20.47	2.70	23.17	4W= 36 dBm	PASS				
6	2437	1	20.34	2.70	23.04	4W= 36 dBm	PASS				
11	2462	1	19.62	2.70	22.32	4W= 36 dBm	PASS				
802.11g Ch1											
СН	Freq. (MHz)	Data Rate	Avg. Output Power (dBm)	Antenna Gain (dBi)	EIRP (dBm)	Limit	RESULT				
1	2412	6	13.97	2.70	16.67	4W= 36 dBm	PASS				
6	2437	6	15.80	2.70	18.50	4W= 36 dBm	PASS				
11	2462	6	13.79	2.70	16.49	4W= 36 dBm	PASS				
802.1	1n_HT201	M Ch1									
СН	Freq. (MHz)	Data Rate	Avg. Output Power (dBm)	Antenna Gain (dBi)	EIRP (dBm)	Limit	RESULT				
1	2412	MCS0	12.21	2.70	14.91	4W= 36 dBm	PASS				
6	2437	MCS0	16.91	2.70	19.61	4W= 36 dBm	PASS				
11	2462	MCS0	13.93	2.70	16.63	4W= 36 dBm	PASS				
002.1	1n UT40										
0UZ. I	1n_HT40		Avg.								
СН	Freq. (MHz)	Data Rate	Output Power (dBm)	Antenna Gain (dBi)	EIRP (dBm)	Limit	RESULT				

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MCS0

MCS0

MCS0

11.20

12.45

14.17

2.70

2.70

2.70

13.90

15.15

16.87

4W=

4W=

4W=

36

36

36

dBm

dBm

dBm

PASS PASS

PASS

3

6

9

2422

2437

2452



MIMO

802.1	lb_2TX											
СН	Freq. (MHz)	Data Rate	Po	Dutput wer 3m)	Avg. Output Power	Total Peak Output Power	Antenna Gain (dBi)	EIRP (dBm)		Limit		RESULT
			CH 0	CH 1	(dBm)	(mW)	(ubly					
1	2412	1	20.20	20.37	23.32	214.98	5.11	28.43	4W=	36	dBm	PASS
6	2437	1	20.36	20.22	23.33	215.22	5.11	28.44	4W=	36	dBm	PASS
11	2462	1	19.24	19.39	22.35	171.94	5.11	27.46	4W=	36	dBm	PASS
802.1	1g_2TX											
СН	Freq. (MHz)	Data Rate	Po	Dutput wer 3m)	Avg. Output Power	Total Peak Output Power	Antenna Gain (dBi)	EIRP (dBm)	Limit		RESULT	
			CH 0	CH 1	(dBm)	(mW)	(ubly					
1	2412	6	13.64	13.59	16.84	48.29	5.11	21.95	4W=	36	dBm	PASS
6	2437	6	15.23	15.46	18.57	71.94	5.11	23.68	4W=	36	dBm	PASS
11	2462	6	13.34	13.42	16.60	45.75	5.11	21.71	4W=	36	dBm	PASS
802.1 ⁻	1n_HT20N	M MIMO										
СН	Freq. (MHz)	Data Rate	Po	Dutput wer 3m)	Avg. Output Power	Total Peak Output Power	Antenna Gain (dBi)	EIRP (dBm)		Limit		RESULT
			CH 0	CH 1	(dBm)	(mW)						
1	2412	MCS8	11.57	11.42	14.93	31.11	5.11	20.04	4W=	36	dBm	PASS
6	2437	MCS8	15.89	16.22	19.49	88.94	5.11	24.60	4W=	36	dBm	PASS
11	2462	MCS8	13.19	13.28	16.67	46.43	5.11	21.78	4W=	36	dBm	PASS
802.1	1n_HT40N											
502. I			Ava. (Dutput	Ava.	Total Peak						

СН	Freq. (MHz)	Data Rate	Pov (dE	Output wer Bm)	Avg. Output Power (dBm)	Total Peak Output Power (mW)	Antenna Gain (dBi)	EIRP (dBm)		Limit		RESULT
			CH 0	CH 1	(ubiii)	(11100)						
3	2422	MCS8	10.17	10.11	13.89	24.51	5.11	19.00	4W=	36	dBm	PASS
6	2437	MCS8	11.08	11.29	14.94	31.18	5.11	20.05	4W=	36	dBm	PASS
9	2452	MCS8	12.84	12.93	16.64	46.11	5.11	21.75	4W=	36	dBm	PASS

* Note: EIRP = Average Power + Gain

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9 6DB & 99% BANDWIDTH MEASUREMENT

9.1 Standard Applicable

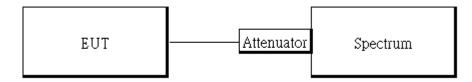
The minimum 6 dB bandwidth shall be at least 500 kHz.

The occupied bandwidth or the "99% emission bandwidth" is defined as the frequency range between two points, one above and the other below the carrier frequency, within which 99% of the total transmitted power of the fundamental transmitted emission is contained. The occupied bandwidth shall be reported for all equipment in addition to the specified bandwidth required in the applicable RSSs

9.2 Measurement Equipment Used

	Conducted Emission Test Site						
EQUIPMENT TYPE	MFR	MODEL NUMBER	SERIAL NUMBER	LAST CAL.	CAL DUE.		
EXA Spectrum An- alyzer	Agilent	N9010A	MY50420195	05/03/2018	05/02/2019		
Attenuator	Mini-Circuit	BW-S10W2+	2	01/02/2018	01/01/2019		
DC Block	Mini-Circuits	BLK-18-S+	1	01/02/2018	01/01/2019		
Coaxial Cables	N/A	WK CE Cable	N/A	01/02/2018	01/01/2019		
Power Meter	Anritsu	ML2496A	1804001	02/01/2018	01/31/2019		
Power Sensor	Anritsu	MA2411B	1726104	02/01/2018	01/31/2019		
Power Sensor	Anritsu	MA2411B	1726107	02/01/2018	01/31/2019		

9.3 Test Set-up



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9.4 Measurement Procedure

- 1. Place the EUT on the table and set it in transmitting mode.
- 2. The testing follows the Measurement Procedure of FCC KDB 558074 D01 DTS Meas. Guidance .
- 3. Remove the antenna from the EUT and then connect a low loss RF cable from the antenna port to the spectrum analyzer.
- 4. For 6dB Bandwidth:

Set the spectrum analyzer as RBW = 100 kHz, VBW = 3*RBW, Span = 30M/50MHz, Detector=peak, Sweep=auto.

- 5. Mark the peak frequency and –6dB (upper and lower) frequency.
- 6. For 99% Bandwidth:

Set the spectrum analyzer as RBW=1%, VBW = 3*RBW, Span = 30M/50MHz, Detector=Sample, Sweep=auto.

- 7. Turn on the 99% bandwidth function, max reading.
- 8. Repeat above procedures until all frequency of interest measured was complete.

9.5 Measurement Result

6dB Bandwidth Antenna Chain 0

802.11b Ch0				
Freq.	6dB BW	Limit	Result	
(MHz)	(kHz)	(kHz)	Result	
2412	8081.00	> 500	PASS	
2437	7594.00	> 500	PASS	
2462	7116.00	> 500	PASS	

Freq.	6dB BW	Limit	Result
(MHz)	(kHz)	(kHz)	Result
2412	16390.00	> 500	PASS
2437	16140.00	> 500	PASS
2462	16130.00	> 500	PASS

802.11_n_HT20 Ch0

Freq. (MHz)	6dB BW (kHz)	Limit (kHz)	Result
2412	17610.00	> 500	PASS
2437	17190.00	> 500	PASS
2462	16980.00	> 500	PASS

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802.11_n_HT40 Ch0

Freq.	6dB BW	Limit	Result
(MHz)	(kHz)	(kHz)	Result
2422	35940.00	> 500	PASS
2437	35730.00	> 500	PASS
2452	36360.00	> 500	PASS

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Antenna Chain 1

802.11b Ch1

Freq.	6dB BW	Limit	Result
(MHz)	(kHz)	(kHz)	Result
2412	8068.00	> 500	PASS
2437	8057.00	> 500	PASS
2462	8079.00	> 500	PASS

802.11a Ch1

<u></u>	-		
Freq.	6dB BW	Limit	Result
(MHz)	(kHz)	(kHz)	Result
2412	16400.00	> 500	PASS
2437	16390.00	> 500	PASS
2462	16400.00	> 500	PASS

802.11_n_HT20 Ch1

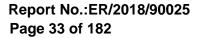
Freq. (MHz)	6dB BW (kHz)	Limit (kHz)	Result
2412	17630.00	> 500	PASS
2437	17600.00	> 500	PASS
2462	17600.00	> 500	PASS

802.11_n_HT40 Ch1

Freq.	6dB BW	Limit	Result
(MHz)	(kHz)	(kHz)	Resuit
2422	36290.00	> 500	PASS
2437	36380.00	> 500	PASS
2452	36380.00	> 500	PASS

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99% Bandwidth Antenna Chain 0

802.11b Ch0				
Freq.	99% BW			
(MHz)	(MHz)			
2412	13.653			
2437	13.759			
2462	13.000			

802.11g Ch0					
Freq.	99% BW				
(MHz)	(MHz)				
2412	16.872				
2437	16.806				
2462	16.852				

802.11n_HT20M Ch0					
Freq.	99% BW				
(MHz)	(MHz)				
2412	18.132				
2437	17.983				
2462	18.099				

802.11n_HT40M Ch0					
Freq. 99% BW					
(MHz)	(MHz)				
2422	36.497				
2437	36.437				
2452	36.872				

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Antenna Chain 1

802.11b Ch1					
Freq.	99% BW				
(MHz)	(MHz)				
2412	13.253				
2437	13.397				
2462	13.107				

802.11g Ch1					
Freq.	99% BW				
(MHz)	(MHz)				
2412	16.617				
2437	16.730				
2462	16.602				

802.11n_HT20M Ch1					
Freq.	99% BW				
(MHz)	(MHz)				
2412	17.795				
2437	17.947				
2462	17.778				
802.11n_H ⁻					
Freq.	99% BW				
(MHz)	(MHz)				
2422	36.291				
2437	36.365				

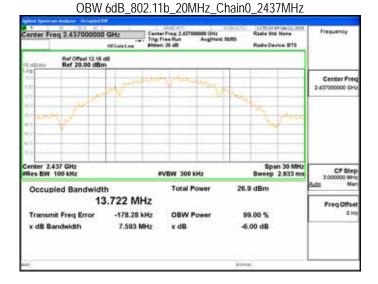
*Refer to next page for plots

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(新年方方) 就例 「近報考验未僅有利気(人体的資質」)「同時式体的運貨体制的)で、参照考末型本公司 音道 中了 「不可能力技衰。 This document is issued by the Company subject to its General Conditions of Service printed overleaf, available on request or accessible at <u>www.sqs.com/terms and conditions.htm</u> and, for elec-tronic format document is issued by the Company subject to its General Conditions of Service printed overleaf, available on request or accessible at <u>www.sqs.com/terms and conditions.htm</u> and, for elec-tronic format documents, subject to Terms and Conditions for Electronic Documents at <u>www.sqs.com/terms e-document.htm</u>. Attention is drawn to the limitation of liability, indemnification and jurisdiction issues defined therein. Any holder of this document is advised that information contained hereon reflects the Company's findings at the time of its intervention only and within the limits of Client's instructions, if any. The Company's sole responsibility is to its Client and this document does not exonerate parties to a transaction from exercising all their rights and obligations under the transaction documents. This document cannot be reproduced except in full, without prior written approval of the Company. Any unauthorized alteration, forgery or falsification of the content or ap-pearance of this document is unlawful and offenders may be prosecuted to the fullest extent of the law.

OBW 6dB_802.11b_20MHz_Chain0_2412MHz

Center Fre	rq 2.4120000	00 01 N	lentari Frang 2.8120 rigi Frans Rum Attan: 20 dili	AvgPiele Soto	Radio Stat No Radio Device	ete Frequency
Ref 0fteet 12.16 dS Ref 20.00 dBm						
		w.M. and	***	any no	~	Center Fre 2.41200000 GH
Center 2.4			#VBW 300	kHz	Span 3 Sweep 2.	30 MHz C# Ste 933 ms 3.00000 Mi
Occup	Occupied Bandwidth 13.658 MHz		Total F	lower 3	27.5 dBm	Auto Me
	it Freq Error ndwidth	91.913 kH 8.081 MH	1.00000	ower	99,00 % -6.00 dB	0
					intra .	



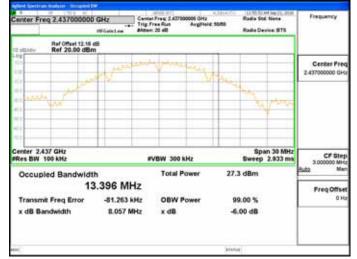
OBW 6dB_802.11b_20MHz_Chain0_2462MHz



OBW 6dB_802.11b_20MHz_Chain1_2412MHz

Center Freq	2.412000000	GHz r#Gaister	Center Freg 2.4120 Trig Free Run #Atten: 20 dB		Rada	Stat Name Device: 813	Frequency
12 stEasty	Ref 0ffset 12.16 d Ref 20.00 dBm						
	Not a series	Wat		and the	and the second	</th <th>Center Freq 2.41200000 GHz</th>	Center Freq 2.41200000 GHz
Center 2.412 Res BW 10			IVBW 300	KHZ		ipan 30 MHz Ip 2.933 ms	CF Step 3.00000 MHz
Occupied	upled Bandwidth Total Power 27.5 dBm		Ê.	Auto Men			
Transmit I x dB Band	Freq Error	285 MH 97.029 ki 8.068 M	Hz OBW	Power	99.00 % -6.00 dB	C 1	Freq Offset 0 Hz
-					(alsona)		

OBW 6dB_802.11b_20MHz_Chain1_2437MHz



OBW 6dB_802.11b_20MHz_Chain1_2462MHz



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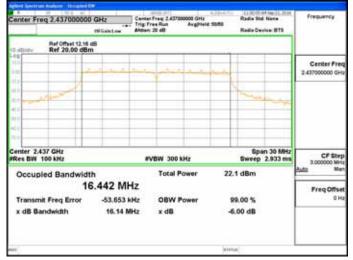
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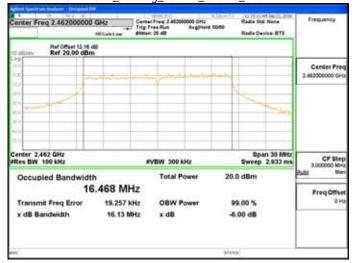
OBW 6dB_802.11g_20MHz_Chain0_2412MHz

Center Freq 2.412000000 GHz			Center Freg 2.41200000 GH2 Trig Free Run AvgPleid: 5088 #Atten: 20 48			Radio Stat. None Radio Device: 873		Frequency
12 Million								
1000 1000	-		-		-	-		Center Freq 2.412000000 GH
10 0 10 0	-				N	-	-	
42								
Center 2.4	112 GHz		_			Spi	in 30 MHz	
Res BW	es BW 100 kHz #VBW 300 kHz Sweep 2.933 ms				2.933 ms	C# Step 3.000000 MH		
Occup	led Bandwidt 16	h 5.488 MHz			20.5			Auto Men
	ilt Freq Error Indwidth	Freq Error -11,517 kHz OBW Power 99		99,	99.00 % -6.00 dB		0H	
and Restored	sell Completed				antes a			



OBW 6dB_802.11g_20MHz_Chain0_2437MHz

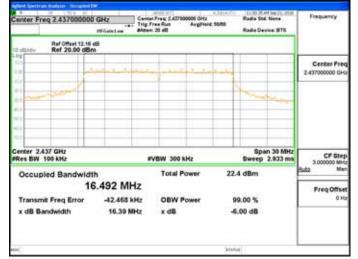
OBW 6dB_802.11g_20MHz_Chain0_2462MHz



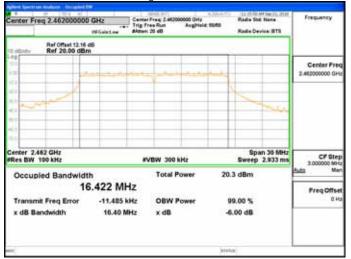
OBW 6dB_802.11g_20MHz_Chain1_2412MHz

Senter Fre	enter Freq 2.412000000 GHz rFGalater			Center Freg 2.41200000 GH2 Trig Free Run ArgPleid: 5088 #Atten: 20 48			of Sector 2010 of Note evice 873	Frequency
the states	Ref 0ffset 12.16 d Ref 20.00 dBn							
100	-	-	-	بيسجيه	-			Center Freq 2.412000000 GHz
- mar	hand					-	-	
center 2.4	12 GHz					Sp	an 30 MHz	
Res BW 1	100 kHz		IVBW :	300 kHz		Sweep	2.933 ms	CF Step 3.000000 MHz
Occupi	ed Bandwidt		1.	al Power	20.	5 dBm		Auto Men
	16	6.436 MH	z					Freq Offset
	t Freq Error	11.219 kł		W Power		9.00 %		0 Hz
x d8 Ba	ndwidth	16.40 M	łz xd	0	-6	8b 00.		
					ini a fa			2

OBW 6dB_802.11g_20MHz_Chain1_2437MHz



OBW 6dB_802.11g_20MHz_Chain1_2462MHz



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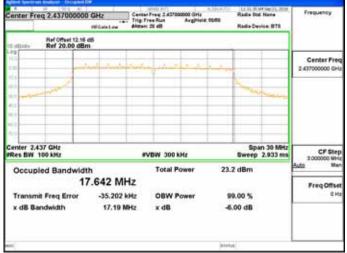
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OBW 6dB_802.11n_20MHz_Chain0_2412MHz

Center Fre	q 2.412000000		freg 2.41200 is Run 20 dB	AvgPteid	5050	Radio Davise 813		Frequency	
Ref Offset 12.16 dB Ref 20.00 dBm									
10.00 10.00	-					~			Center Freq 2.412000000 GHu
10 0 10 0 10 0 40 0							-	min	
10 0 ed 0 10 10									
Center 2.4			ev.	BW 300 K	Hz			an 30 MHz 2.933 ms	C# Step 3.000000 MHs
Occupi	ed Bandwidt	h 7.692 MH	1.	Total P	ower	18.	7 dBm		Auto Men
	Transmit Freq Error 14.6		2011 - Carta Statutor		99.00 % -6.00 dB			Freq Offset 0 Ho	
						at a factor			



OBW 6dB_802.11n_20MHz_Chain0_2437MHz

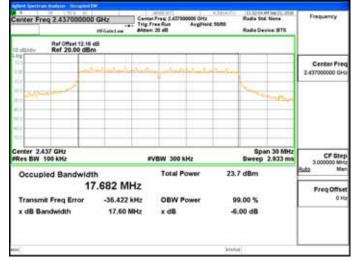
OBW 6dB_802.11n_20MHz_Chain0_2462MHz



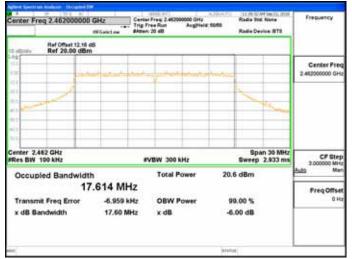
OBW 6dB_802.11n_20MHz_Chain1_2412MHz

Center Freq 2.412000000	GHz r#Galation	Center Free 2.4 Trig Free Run Bitten: 20 dB	12000000 GH2 Avg/tei	6.004/01 4.5058	Radio Stat None Frequence Radio Device 813		Frequency
Ref Offset 12.16 o Ref 20.00 dBn							
دهور ۱۹۵۹ ۱۹۵۹	-	and and a start of the	A state				Center Freq 2.412000000 GHu
00 60 60 60					1	~	
Center 2.412 GHz Res BW 100 kHz		IVBW 3	DO KHZ			an 30 MHz 2.933 ms	C# Step 3.000000 MH
Occupied Bandwidt			I Power	18.	9 dBm		Auto Mer
17 Transmit Freq Error x dB Bandwidth	11.205 k 17.63 M	Hz OBV	V Power L		9.00 % .00 dB		Freq Offset 0 Ho
				inter-			

OBW 6dB_802.11n_20MHz_Chain1_2437MHz



OBW 6dB_802.11n_20MHz_Chain1_2462MHz



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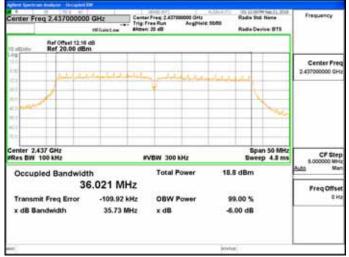
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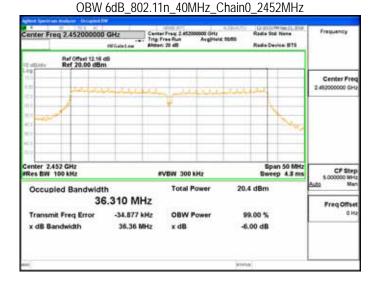
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OBW 6dB_802.11n_40MHz_Chain0_2422MHz





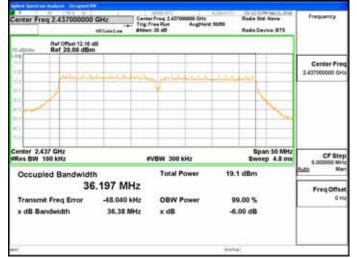
OBW 6dB 802.11n 40MHz Chain0 2437MHz



OBW 6dB_802.11n_40MHz_Chain1_2422MHz



OBW 6dB 802.11n 40MHz Chain1 2437MHz



OBW 6dB_802.11n_40MHz_Chain1_2452MHz



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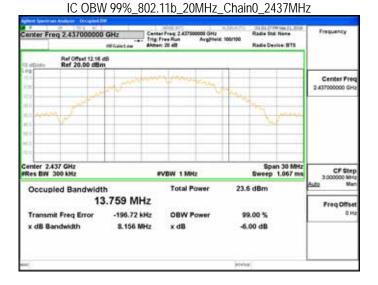
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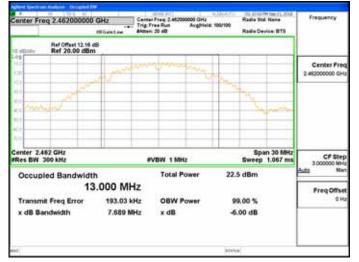
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IC OBW 99%_802.11b_20MHz_Chain0_2412MHz

Center Freq	r Freq 2.412000000 GHz				reg 2.41200 Run 5 dit		00/100	Radio De	Frequency	
Ref 0ftvel 12.16 dB Ref 20.00 dBm										
	30				/*****		New York	2	June	Center Freq 2.41200000 GHa
Center 2.412 Res BW 30				eve	W 1 MH	2			in 30 MHz 1.067 ms	CF Step 3.00000 MHz
Occupied	d Bandv		53 MH	,	Total P	ower	24.1	dBm		Auto Men
Transmit I x dB Band	10 H THE R.	r 1	04.03 kH 8.118 MH	łz	OBW P x dB	ower	120	00 % 00 dB		Freq Offset 0 Ho
ent.							ja internet			



IC OBW 99%_802.11b_20MHz_Chain0_2462MHz



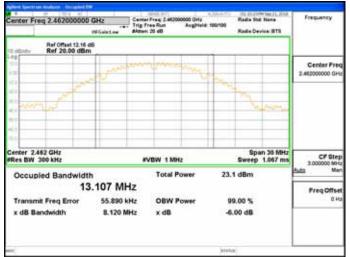
IC OBW 99%_802.11b_20MHz_Chain1_2412MHz

Center Freq 2.41200000	Trip Trip	nai Frag 2.812000000 GH2 Fraa Run Avgitteld an 20 dB	100/100	Radio De	Frequency	
Ref Offset 12.16 Ref 20.00 dBs						
на на ка	an marine	al manage	-			Center Freq 2.412000000 GHz
				2	June	
Center 2,412 GHz				Spi	in 30 MHz	
Res BW 300 kHz		#VBW 1 MHz			1.067 mis	CF Step 3.000000 MHz Auto Man
Occupied Bandwidt		Total Power	24.	0 dBm		5400 Million
Transmit Freq Error x dB Bandwidth	81.160 kHz 81.160 kHz 8.102 MHz	OBW Power x dB		9.00 % .00 dB		Freq Offset 0 Hz
-			istan.			

IC OBW 99%_802.11b_20MHz_Chain1_2437MHz



IC OBW 99%_802.11b_20MHz_Chain1_2462MHz



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IC OBW 99%_802.11g_20MHz_Chain0_2412MHz

Center Freq 2.4120000	enter Freq 2.412000000 GHz			AvgPloid	106/100		Radio Stal None Freque Radio Device: 813	
Ref Offset 12 Ref 20.00 d								
100 100 600	_				-			Center Freq 2.412000000 GHa
Center 2,412 GHz		-	DW 1 MH				in 30 MHz 1.067 ms	C# Step
Occupied Bandwi			Total P	-	20.	2 dBm		3.000000 MHz Auto Men
Transmit Freq Error x dB Bandwidth	선생님님은 전해서 많은 것 이상이 많을 것이다.		OBW P x dB	ower		99.00 %		Freq Offset 0 Hz
					istan.			



IC OBW 99%_802.11g_20MHz_Chain0_2437MHz

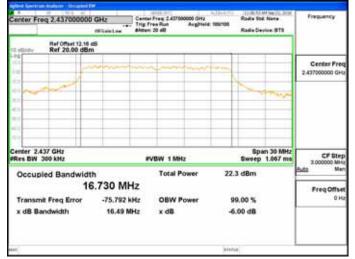
IC OBW 99%_802.11g_20MHz_Chain0_2462MHz

inter Freq 2.462000000 GHz			Free 2.462000 Yes Run : 20 48		100/100	Radio De	Frequency	
Ref Offset Ref 20.0								
10 00					-			Center Freq 2.46200000 GHz
						1	Sec.	
10								
			-					
enter 2.462 GHz Res BW 300 kHz			VBW 1 MHz	8			1.067 ms	C# Step 3.000000 MHz
Occupied Band	width 16.852 N	1Hz	Total Po	wor	19.	6 dBm		Auto Men Freq Offset
Transmit Freq Err x dB Bandwidth	or -) 16.40	MHz			99.00 % -6.00 dB			0 Hz

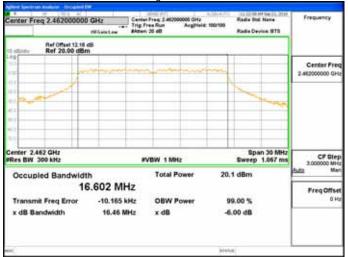
IC OBW 99%_802.11g_20MHz_Chain1_2412MHz

Center Fred	2.412000000	GHz	Center Freq 2.4120 Trig: Free Run Almen: 20 dB	aaaaa aha Avgittele toortoo	Radio Sta Radio De	Frequency			
the states	Ref 20.00 dBm								
100 100	1						Center Freq 2.412000000 GHz		
ne	-				-	-			
enter 2.41	2 GHz		_		Spi	in 30 MHz			
Res BW 3			IVBW 1 MP	tz		1.067 ms	C# Step 2.000000 MHz		
Occupie	ed Bandwidt		Total P	ower 20	.3 dBm		Auto Men		
	16	5.617 MH	z				Freq Offset		
	Freq Error	33.265 kH			99.00 %		ů Ha		
x dB Ban	idwidth	16.43 MH	z xdB	<u>_</u>	5.00 dB				
				later					

IC OBW 99%_802.11g_20MHz_Chain1_2437MHz



IC OBW 99%_802.11g_20MHz_Chain1_2462MHz



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IC OBW 99%_802.11n_20MHz_Chain0_2412MHz

Center Fred	enter Freq 2.412000000 GHz			Frag 2.41200 Ha Run 20 dB	Avgitteld	100/100	Radio Stat None Frequent Radio Device 813		Frequency
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10 0 10 0	-	_							
4 5 10 0									
Center 2.41				BW 1 MH				in 30 MHz 1.067 ms	C# Step
	ed Bandwid			Total P	-	18.	0 dBm	1.007 min	3.000000 MHs Auto Men
Transmit	1 Freq Error	8.132 MH 91.766 k	376 - L	OBW P	COMPE		9.00 %		Freq Offset
x dB Ban	STOP 100 100 100 100 100 100 100 100 100 10	17,86 M		x dB	C. I. C.		.00 dB		
						at at	-		



IC OBW 99%_802.11n_20MHz_Chain0_2437MHz

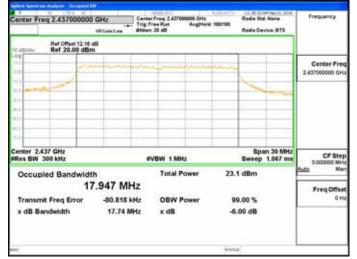
IC OBW 99%_802.11n_20MHz_Chain0_2462MHz

Senter Fre	inter Freq 2.462000000 GHz			Free 2.462000 ee Run 20.48		100/100	Radio Sol None Freque Radio Device 813		Frequency
the states	Ref 20.00 dBm								
10.0	1		-				-		Center Freq 2.452000000 GHu
								1	
enter 2.4									
Res BW			ev.	BW 1 MHz	1			n 30 MHz 1.067 ms	CF Step 3.000000 MHz
Occup	Occupied Bandwidth 18.099 N Transmit Freq Error 141.69 x dB Bandwidth 17.82		lz	Total Po	wer	19.5	5 dBm		Auto Men
						9.00 % 00 dB		014	
						jate to	•		

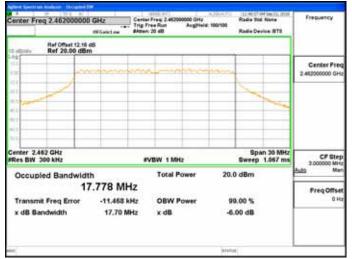
IC OBW 99%_802.11n_20MHz_Chain1_2412MHz

Center Freq 2		GHz r#Galacter	Centel Free Trig Free Ro #Atten: 20 di	2.412000		100/100	Radio Device 873		Frequency
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IC OBW 99%_802.11n_20MHz_Chain1_2437MHz



IC OBW 99%_802.11n_20MHz_Chain1_2462MHz



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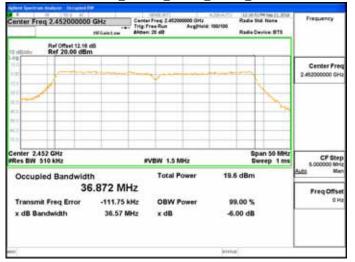
IC OBW 99%_802.11n_40MHz_Chain0_2422MHz

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-							X	
412							~	
Center 2.422 GHz								
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IC OBW 99%_802.11n_40MHz_Chain0_2437MHz

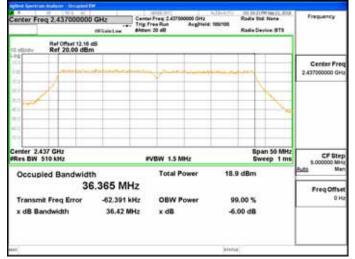
IC OBW 99%_802.11n_40MHz_Chain0_2452MHz



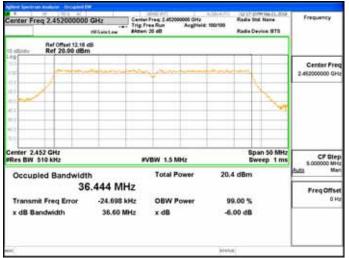
IC OBW 99%_802.11n_40MHz_Chain1_2422MHz

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Res BW 5				/BW 1.5 MHz		Sweep 1 m	S.000000 MHg
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					inter-		

IC OBW 99%_802.11n_40MHz_Chain1_2437MHz



IC OBW 99%_802.11n_40MHz_Chain1_2452MHz



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10 CONDUCTED BAND EDGE AND SPURIOUS EMISSION MEASUREMENT

10.1 Standard Applicable

In any 100 kHz bandwidth outside the frequency band in which the spread spectrum or digitally modulated intentional radiator is operating, the radio frequency power that is produced by the intentional radiator shall be at least 20 dB below that in the 100 kHz bandwidth within the band that contains the highest level of the desired power, based on either an RF conducted or a radiated measurement, provided the transmitter demonstrates compliance with the peak conducted power limits.

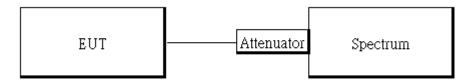
In addition, radiated emissions which fall in the restricted bands, as defined in §15.205(a) & RSS-Gen §8.10, must also comply with the radiated emission limits specified in §15.209(a) & RSS-Gen §8.9.

If the transmitter complies with the conducted power limits based on the use of root-mean-square averaging over a time interval, as permitted under Section 5.4(d), the attenuation required shall be 30 dB instead of 20 dB. Attenuation below the general field strength limits specified in RSS-Gen is not required.

Conducted Emission Test Site								
EQUIPMENT TYPE	MFR	MODEL NUMBER	SERIAL NUMBER	LAST CAL.	CAL DUE.			
EXA Spectrum Analyzer	Agilent	N9010A	MY5042019 5	05/03/2018	05/02/2019			
Attenuator	Mini-Circuit	BW-S10W2+	2	01/02/2018	01/01/2019			
DC Block	Mini-Circuits	BLK-18-S+	1	01/02/2018	01/01/2019			
Coaxial Cables	N/A	WK CE Ca- ble	N/A	01/02/2018	01/01/2019			
Power Meter	Anritsu	ML2496A	1804001	02/01/2018	01/31/2019			
Power Sensor	Anritsu	MA2411B	1726104	02/01/2018	01/31/2019			
Power Sensor	Anritsu	MA2411B	1726107	02/01/2018	01/31/2019			

10.2 Measurement Equipment Used

10.3 Test SET-UP



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10.4 Measurement Procedure

Conducted Band Edge Limt

- 1. Set analyzer center frequency to DTS channel center frequency.
- 2. The testing follows the Measurement Procedure of FCC KDB 558074 D01 DTS Meas. Guidance & ANSI C63.10.
- 3. Set the span to 1.5 times the DTS channel bandwidth.
- 4. Set the RBW = 100kHz & VBW = 300 kHz.
- 5. Detector = peak.
- 6. Sweep time = auto couple.
- 7. Trace mode = max hold.
- 8.Allow trace to fully stabilize.

9.Use the peak marker function to determine the maximum amplitude level.

Conducted Band Edge:

- 1. To connect Antenna Port of EUT to Spectrum.
- 2. The testing follows the Measurement Procedure of FCC KDB 558074 D01 DTS Meas. Guidance & ANSI C63.10.
- 3. Remove the antenna from the EUT and then connect a low loss RF cable from the antenna port to the spectrum analyzer.
- 4. Set start to edge frequency, and stop frequency of spectrum analyzer so as to encompass the spectrum to be examined.
- 5. Set the spectrum analyzer as RBW=100 kHz, VBW=300 kHz, Detector = Peak, Sweep = auto
- 6. Mark the highest reading of the emission as the reference level measurement.
- 7. Set DL as the limit = reading on marker 1 20dBm
- 8. Marker on frequency, 2.3999GHz and 2.4836GHz, and examine shall 100 kHz immediately outside the authorized (2400~2483.5) be attenuated by 20dB at least relative to the maximum emission of power.
- 9. Repeat above procedures until all default test channel (low, middle, and high) was complete.

Conducted Spurious Emission:

- 1. To connect Antenna Port of EUT to Spectrum
- 2. The testing follows the Measurement Procedure of FCC KDB 558074 D01 DTS Meas. Guidance & ANSI C63.10.
- 3. Set RBW = 100 kHz & VBW= 300 kHz, Detector =Peak, Sweep = Auto.
- 4. Allow trace to fully stabilize.
- 5. Use the peak marker function to determine the maximum power level in any 100 kHz band segment within the fundamental EBW.
- 6. Repeat above procedures until all default test channel measured were complete.

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10.5 **Measurement Result**

Reference Level of Limit 802.11b mode			Reference Level of Limit 802.11g mode		
Freq.	PSD	Reference Level of Limit	Freq.	PSD	Reference Level of Limit
(MHz)	(dBm)	(dBm)	(MHz)	(dBm)	(dBm)
2412	15.56	-4.44	2412	5.20	-14.80
2437	15.11	-4.89	2437	7.38	-12.62
2462	14.12	-5.88	2462	5.75	-14.25

Reference	ce Level	of Limit 802.11n20 mode	Referenc	e Level o	of Limit 802.11n40 MODE
Freq.	PSD	Reference Level of Limit	Freq.	PSD	Reference Level of Limit
(MHz)	(dBm)	(dBm)	(MHz)	(dBm)	(dBm)
2412	3.50	-16.50	2422	-0.09	-20.09
2437	8.53	-11.47	2437	1.51	-18.49
2462	5.99	-14.01	2452	3.65	-16.35

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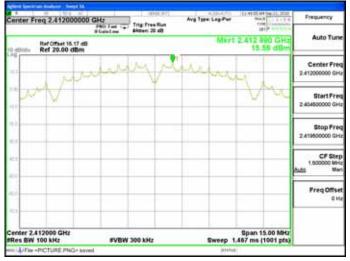
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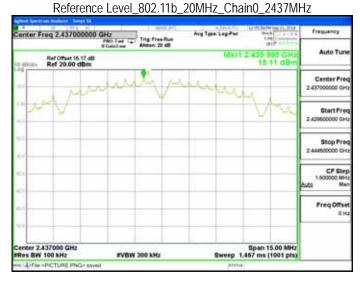
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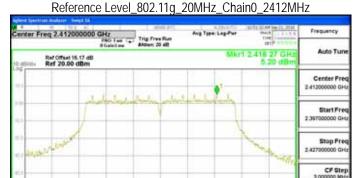
Reference Level_802.11b_20MHz_Chain0_2412MHz







Reference Level_802.11b_20MHz_Chain0_2462MHz



enter 2.41206 GHz Bpan 30.00 MHz Res BW 100 kHz SWeep 2.933 ms (1001 pts) Indefine +PCTURE PNG+ saved Internet

Reference Level_802.11g_20MHz_Chain0_2437MHz



Reference Level_802.11g_20MHz_Chain0_2462MHz



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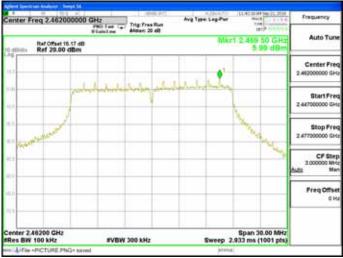


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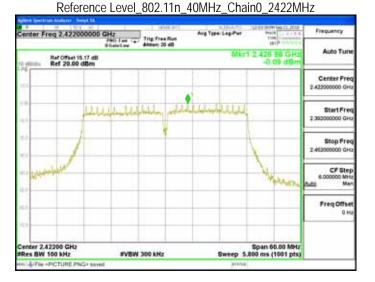


Reference Level_802.11n_20MHz_Chain0_2437MHz





Reference Level_802.11n_20MHz_Chain0_2462MHz



Reference Level_802.11n_40MHz_Chain0_2437MHz



Reference Level_802.11n_40MHz_Chain0_2452MHz



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Band Edge_802.11b_20MHz_Chain0_2412MHz

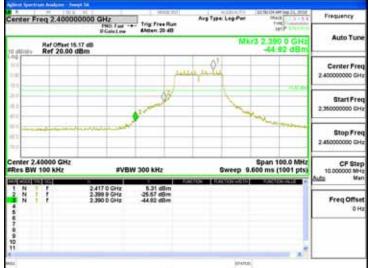
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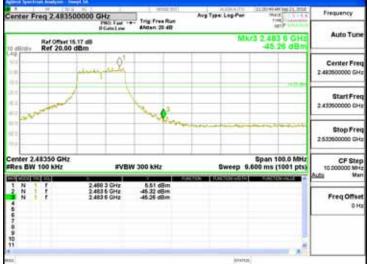
Band Edge_802.11b_20MHz_Chain0_2462MHz



Band Edge_802.11g_20MHz_Chain0_2412MHz



Band Edge_802.11g_20MHz_Chain0_2462MHz



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Band Edge_802.11n_20MHz_Chain0_2462MHz



Band Edge_802.11n_40MHz_Chain0_2422MHz



Band Edge_802.11n_40MHz_Chain0_2452MHz



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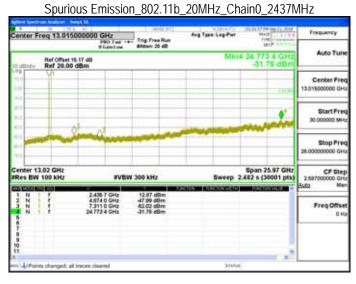
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Spurious Emission_802.11b_20MHz_Chain0_2412MHz





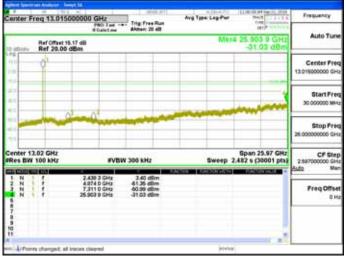
Spurious Emission_802.11b_20MHz_Chain0_2462MHz



Spurious Emission_802.11g_20MHz_Chain0_2412MHz



Spurious Emission_802.11g_20MHz_Chain0_2437MHz



Spurious Emission_802.11g_20MHz_Chain0_2462MHz



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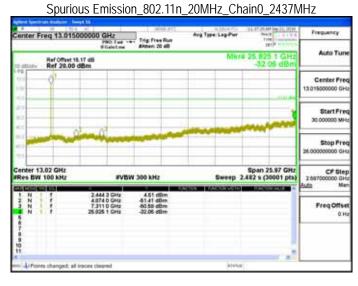
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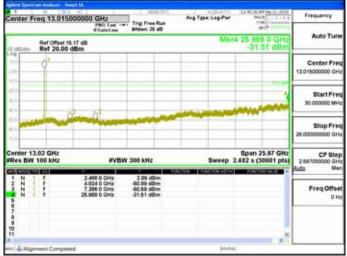


Spurious Emission_802.11n_20MHz_Chain0_2412MHz





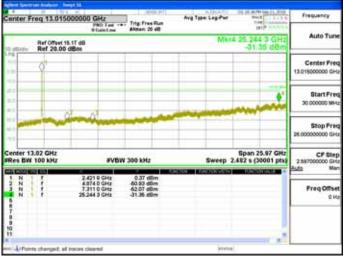
Spurious Emission_802.11n_20MHz_Chain0_2462MHz



Spurious Emission_802.11n_40MHz_Chain0_2422MHz



Spurious Emission_802.11n_40MHz_Chain0_2437MHz



Spurious Emission_802.11n_40MHz_Chain0_2452MHz



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11 RADIATED BANDEDGE AND SPURIOUS EMISSION MEASUREMENT

11.1 Standard Applicable

In any 100 kHz bandwidth outside the frequency band in which the spread spectrum or digitally modulated intentional radiator is operating, the radio frequency power that is produced by the intentional radiator shall be at least 20 dB below that in the 100 kHz bandwidth within the band that contains the highest level of the desired power, based on either an RF conducted or a radiated measurement, provided the transmitter demonstrates compliance with the peak conducted power limits. In addition, radiated emissions which fall in the restricted bands must also comply with the RSS-Gen §8.10 Table 7.

And according to 15.33(a)(1) & RSS-Gen §6.13(a) for an intentional radiator operates below 10GHz, the frequency range of measurements: to the tenth harmonic of the highest fundamental frequency or to 40GHz, whichever is lower.

According to RSS-Gen §8.9 Table 5 & 6 Except where otherwise indicated in the applicable RSS, radiated emissions shall comply with the field strength limits shown in table 5 and table 6. Additionally, the level of any transmitter unwanted emission shall not exceed the level of the transmitter's fundamental emission

Frequency (MHz)	Field strength (microvolts/meter)	Distance (meters)
0.009-0.490	2400/F(kHz)	300
0.490-1.705	24000/F(kHz)	30
1.705-30	30	30
30-88	100	3
88-216	150	3
216-960	200	3
Above 960	500	3

Note:

1. The lower limit shall apply at the transition frequencies.

2. Emission level ($dB\mu V/m$) = 20 log Emission level ($dB\mu V/m$)

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11.2 Measurement Equipment Used:

	966 Chamber								
EQUIPMENT TYPE	MFR	MODEL NUMBER	SERIAL NUMBER	LAST CAL.	CAL DUE.				
Bi-log Antenna	SCHWAZBECK	VULB9168	378	12/29/2017	12/28/2018				
Horn Antenna	Schwarzbeck	BBHA9120D	1441	08/16/2018	08/15/2019				
Horn Antenna	Schwarzbeck	BBHA9170	184	12/12/2017	12/11/2018				
Loop Antenna	ETS.LINDGREN	6502	148045	09/25/2018	09/24/2019				
3m Site NSA	SGS	966 chamber	N/A	01/02/2018	01/01/2019				
Spectrum Analyz- er	Agilent	E4446A	MY51100003	05/15/2018	05/14/2019				
EMI Test Receiver	R&S	ESCI7	100335	02/02/2018	02/01/2019				
Pre-Amplifier	HP	8449B	3008A00578	01/02/2018	01/01/2019				
Pre-Amplifier	HP	8447D	2944A07676	01/02/2018	01/01/2019				
Pre-Amplifier	EMC Instru- ments	EMC184045B	980135	10/27/2017	10/26/2018				
Attenuator	Mini-Circuit	BW-S10W2+	2	01/02/2018	01/01/2019				
Filter 2400-2483.5 MHz	EWT	EWT-14-0166	M1	01/02/2018	01/01/2019				
Low Loss Cable	Huber Suhner	966_RX	9	01/02/2018	01/01/2019				

NOTE: N.C.R refers to Not Calibrated Required.

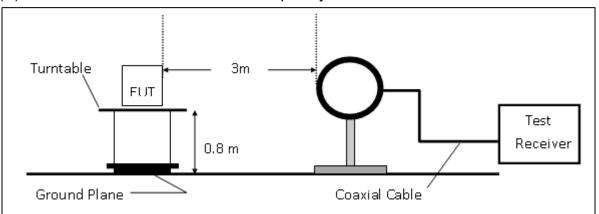
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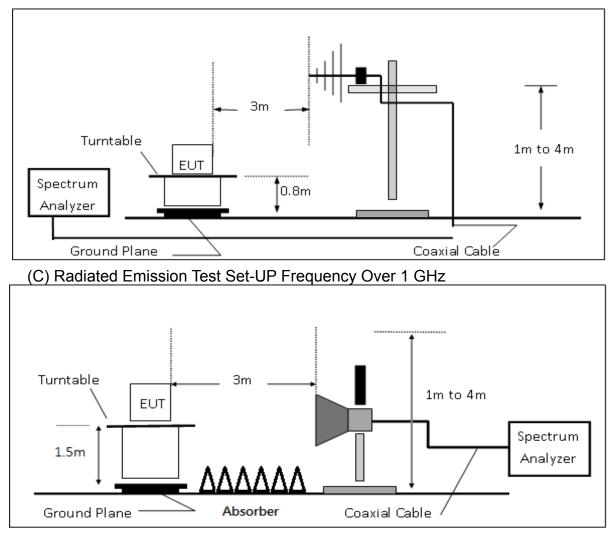


11.3 Test SET-UP

(A) Radiated Emission Test Set-UP Frequency Below 30MHz.



(B) Radiated Emission Test Set-Up, Frequency form 30MHz to 1000MHz



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11.4 Measurement Procedure

- 1. The testing follows the Measurement Procedure of FCC KDB 558074 D01 DTS Meas. Guidance & ANSI C63.10.
- 2. The EUT was placed on a turn table with 0.8m for frequency< 1GHz and 1.5m for frequency> 1GHz above ground plane.
- 3. The turn table shall rotate 360 degrees to determine the position of maximum emission level.
- 4. EUT is set 3m away from the receiving antenna which varied from 1m to 4m to find out the highest emissions.
- 5. When measurement procedures for electric field radiated emissions above 1 GHz the EUT measurement is to be made "while keeping the antenna in the 'cone of radiation' from that area and pointed at the area both in azimuth and elevation, with polarization oriented for maximum response." is still within the 3dB illumination BW of the measurement antenna.
- 6. Set the spectrum analyzer as RBW=120 kHz and VBW=300 kHz for Peak Detector (PK) and Quasi-peak (QP) at frequency below 1 GHz.
- 7. Set the spectrum analyzer as RBW=1 MHz, VBW=3 MHz for Peak Detector at frequency above 1 GHz.
- 8. Set the spectrum analyzer as RBW=1 MHz, VBW=10 Hz (Duty cycle > 98%) or VBW ≥ 1/T (Duty cycle < 98%) for Average Detector at frequency above 1 GHz.
- 9. The test-receiver system was set to quasi-peak detect function and specified bandwidth with maximum hold mode when the test frequency is below 1 GHz.
- 10. Maximum procedure was performed on the six highest emissions to ensure EUT compliance.
- 11. And also, each emission was to be maximized by changing the polarization of receiving antenna both horizontal and vertical. On spectrum, change spectrum mode in linear display mode, and reduce VBW = 10Hz if average reading is measured.
- 12. Repeat above procedures until all default test channel measured were complete.

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11.5 Field Strength Calculation

The field strength is calculated by adding the Antenna Factor and Cable Factor and subtracting the Amplifier Gain and Duty Cycle Correction Factor (if any) from the measured reading. The basic equation with a sample calculation is as follows:

FS = RA + AF + CL - AG

Where	5	CL = Cable Attenuation Factor (Cable Loss)
	RA = Reading Amplitude	AG = Amplifier Gain
	AF = Antenna Factor	

Actual FS(dB μ V/m) = SPA. Reading level(dB μ V) + Factor(dB)

Factor(dB) = Antenna Factor(dB μ V/m) + Cable Loss(dB) – Pre_Amplifier Gain(dB)

11.6 Test Results of Radiated Spurious Emissions form 9 kHz to 30 MHz

The low frequency, which started from 9 kHz to 30MHz, was pre-scanned and the result which was 20dB lower than the limit per 15.31(o) was not reported.

11.7 Measurement Result

Note: Refer to next page spectrum analyzer data chart and tabular data sheets.

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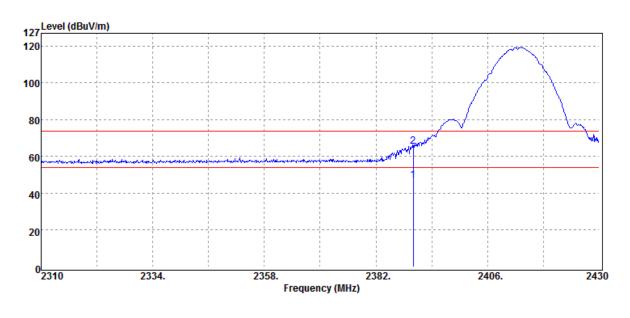
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Radiated Band Edge Measurement Result

External Antenna (Type: Dipole antenna, Model no: WTS2405)

Operation Band	:802.11b	Test Date	:2018-09-17
Fundamental Frequency	:2412 MHz	Temp./Humi.	:21 deg C / 62 RH
Operation Mode	:Bandedge CH LOW	Engineer	:Wei
EUT Pol.	:E2 Plane	Measurement Antenna Pol.	
		measurement Antenna i Oi.	.VERTICAL



Freq.	Detector	Spectrum	Factor	Actual	Limit	Margin
	Mode	Reading Level		FS	@3m	_
MHz	PK/QP/AV	dBµV	dB	dBµV/m	dBµV/m	dB
2390.00	Average	46.98	0.20	47.18	54.00	-6.82
2390.00	Peak	65.47	0.20	65.67	74.00	-8.33

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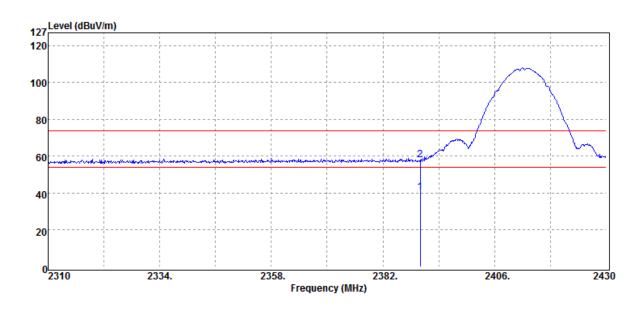
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Operation Band : Fundamental Frequency : Operation Mode : EUT Pol. :

:802.11b :2412 MHz :Bandedge CH LOW :E2 Plane Test Date:2Temp./Humi.:2Engineer:VMeasurement Antenna Pol.:H

:2018-09-17 :21 deg_C / 62 RH :Wei :HORIZONTAL



Freq.	Detector	Spectrum	Factor	Actual	Limit	Margin
	Mode	Reading Level		FS	@3m	
MHz	PK/QP/AV	dBµV	dB	dBµV/m	dBµV/m	dB
2390.00	Average	40.04	0.20	40.24	54.00	-13.76
2390.00	Peak	57.76	0.20	57.96	74.00	-16.04

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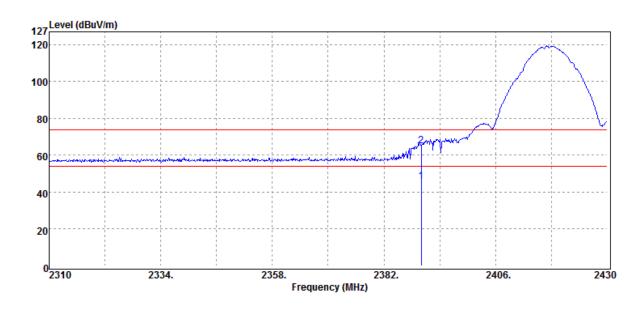


Operation Band Fundamental Frequency **Operation Mode** EUT Pol.

:802.11b :2417 MHz :Bandedge CH LOW :E2 Plane

Test Date Temp./Humi. Engineer :Wei Measurement Antenna Pol.

:2018-09-17 :21 deg_C / 62 RH :VERTICAL



Freq.	Detector	Spectrum	Factor	Actual	Limit	Margin
	Mode	Reading Level		FS	@3m	
MHz	PK/QP/AV	dBµV	dB	dBµV/m	dBµV/m	dB
2390.00	Average	45.46	0.20	45.66	54.00	-8.34
2390.00	Peak	64.65	0.20	64.85	74.00	-9.15

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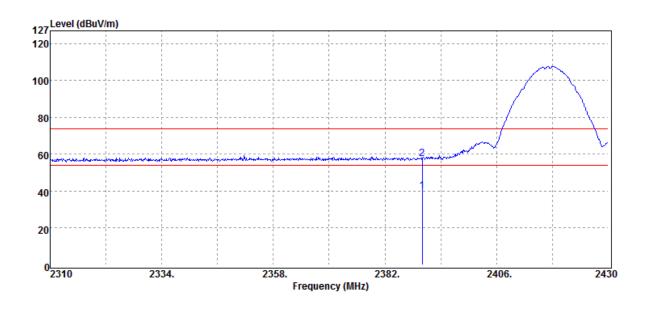
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Operation Band : Fundamental Frequency : Operation Mode : EUT Pol. :

:802.11b :2417 MHz :Bandedge CH LOW :E2 Plane Test Date:2018Temp./Humi.:21 deEngineer:WeiMeasurement Antenna Pol.:HOR

:2018-09-17 :21 deg_C / 62 RH :Wei :HORIZONTAL



Freq.	Detector	Spectrum	Factor	Actual	Limit	Margin
	Mode	Reading Level		FS	@3m	
MHz	PK/QP/AV	dBµV	dB	dBµV/m	dBµV/m	dB
2390.00	Average	39.60	0.20	39.80	54.00	-14.20
2390.00	Peak	57.36	0.20	57.56	74.00	-16.44

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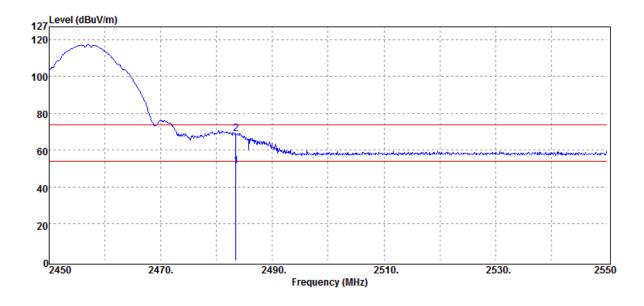
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Operation Band :: Fundamental Frequency :: Operation Mode :: EUT Pol. :

:802.11b :2457 MHz :Bandedge CH HIGH :E2 Plane Test Date:2018-09Temp./Humi.:21 deg_Engineer:WeiMeasurement Antenna Pol.:VERTIC

:2018-09-17 :21 deg_C / 62 RH :Wei :VERTICAL



Freq.	Detector	Spectrum	Factor	Actual	Limit	Margin
	Mode	Reading Level		FS	@3m	
MHz	PK/QP/AV	dBµV	dB	dBµV/m	dBµV/m	dB
2483.50	Average	50.68	0.53	51.21	54.00	-2.79
2483.50	Peak	68.54	0.53	69.07	74.00	-4.93

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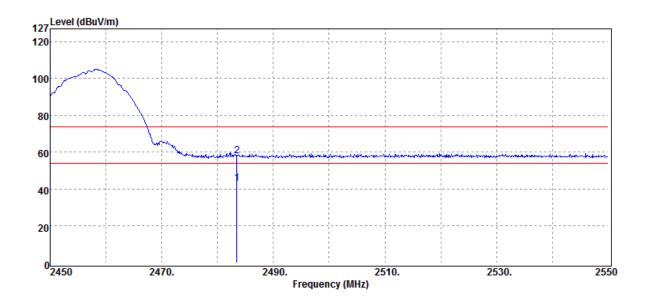
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Operation Band:8Fundamental Frequency:2Operation Mode:EEUT Pol.:E

:802.11b :2457 MHz :Bandedge CH HIGH :E2 Plane Test Date:20Temp./Humi.:2Engineer:WMeasurement Antenna Pol.:H

:2018-09-17 :21 deg_C / 62 RH :Wei :HORIZONTAL



Freq.	Detector	Spectrum	Factor	Actual	Limit	Margin
	Mode	Reading Level		FS	@3m	
MHz	PK/QP/AV	dBµV	dB	dBµV/m	dBµV/m	dB
2483.50	Average	42.71	0.53	43.24	54.00	-10.76
2483.50	Peak	57.68	0.53	58.21	74.00	-15.79

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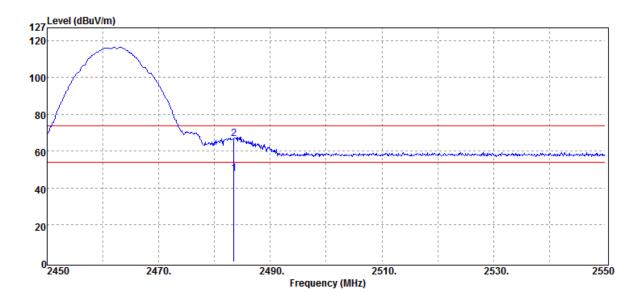
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Operation Band :: Fundamental Frequency :: Operation Mode :: EUT Pol. ::

:802.11b :2462 MHz :Bandedge CH HIGH :E2 Plane Test Date:2018-09Temp./Humi.:21 degEngineer:WeiMeasurement Antenna Pol.:VERTIO

:2018-09-17 :21 deg_C / 62 RH :Wei :VERTICAL



Freq.	Detector	Spectrum	Factor	Actual	Limit	Margin
	Mode	Reading Level		FS	@3m	
MHz	PK/QP/AV	dBµV	dB	dBµV/m	dBµV/m	dB
2483.50	Average	47.44	0.53	47.97	54.00	-6.03
2483.50	Peak	66.41	0.53	66.94	74.00	-7.06

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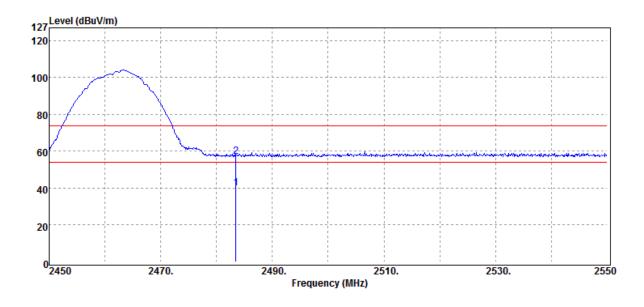
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Operation Band:8Fundamental Frequency:2Operation Mode:1EUT Pol.:1

:802.11b :2462 MHz :Bandedge CH HIGH :E2 Plane Test Date:20Temp./Humi.:2Engineer:WMeasurement Antenna Pol.:H

:2018-09-17 :21 deg_C / 62 RH :Wei :HORIZONTAL



Freq.	Detector	Spectrum	Factor	Actual	Limit	Margin
	Mode	Reading Level		FS	@3m	
MHz	PK/QP/AV	dBµV	dB	dBµV/m	dBµV/m	dB
2483.50	Average	39.47	0.53	40.00	54.00	-14.00
2483.50	Peak	56.74	0.53	57.27	74.00	-16.73

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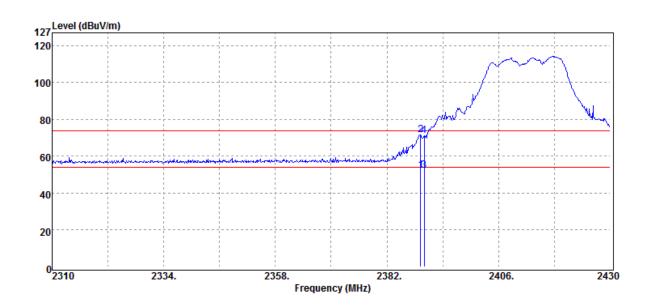
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Operation Band Fundamental Frequency Operation Mode EUT Pol.

:802.11g :2412 MHz :Bandedge CH LOW :E2 Plane Test Date:2018-Temp./Humi.:21 deEngineer:WeiMeasurement Antenna Pol.:VERT

:2018-09-17 :21 deg_C / 62 RH :Wei :VERTICAL



Freq.	Detector	Spectrum	Factor	Actual	Limit	Margin
	Mode	Reading Level		FS	@3m	
MHz	PK/QP/AV	dBµV	dB	dBµV/m	dBµV/m	dB
2389.20	Average	51.90	0.20	52.10	54.00	-1.90
2389.20	Peak	71.50	0.20	71.70	74.00	-2.30
2390.00	Average	52.01	0.20	52.21	54.00	-1.79
2390.00	Peak	70.89	0.20	71.09	74.00	-2.91

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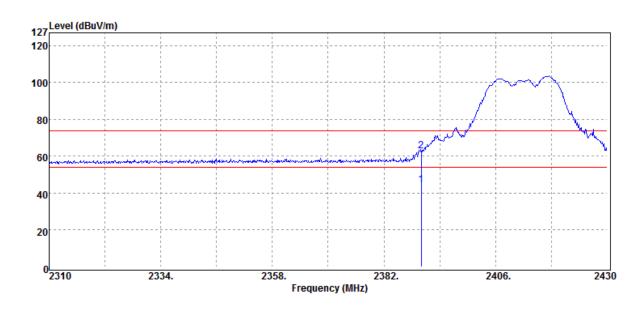
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Operation Band Fundamental Frequency Operation Mode EUT Pol.

:802.11g :2412 MHz :Bandedge CH LOW :E2 Plane Test Date:2Temp./Humi.:2Engineer:VMeasurement Antenna Pol.:H

:2018-09-17 :21 deg_C / 62 RH :Wei :HORIZONTAL



Freq.	Detector	Spectrum	Factor	Actual	Limit	Margin
	Mode	Reading Level		FS	@3m	
MHz	PK/QP/AV	dBµV	dB	dBµV/m	dBµV/m	dB
2390.00	Average	44.17	0.20	44.37	54.00	-9.63
2390.00	Peak	62.72	0.20	62.92	74.00	-11.08

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除非另有說明,此報告結果僅對測試之樣品負責,同時此樣品僅保留90天。本報告未經本公司書面許可,不可部份複製。

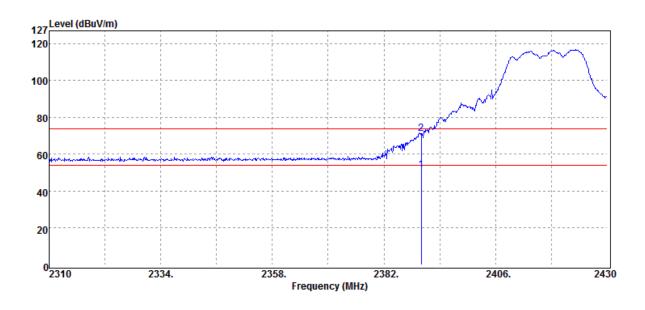
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Operation Band Fundamental Frequency Operation Mode EUT Pol.

:802.11g :2417 MHz :Bandedge CH LOW :E2 Plane Test Date:2018-0Temp./Humi.:21 degEngineer:WeiMeasurement Antenna Pol.:VERTION

:2018-09-17 :21 deg_C / 62 RH :Wei :VERTICAL



Freq.	Detector	Spectrum	Factor	Actual	Limit	Margin
	Mode	Reading Level		FS	@3m	
MHz	PK/QP/AV	dBµV	dB	dBµV/m	dBµV/m	dB
2390.00	Average	51.38	0.20	51.58	54.00	-2.42
2390.00	Peak	70.88	0.20	71.08	74.00	-2.92

Unless otherwise stated the results shown in this test report refer only to the sample(s) tested and such sample(s) are retained for 90 days only.

除非另有說明,此報告結果僅對測試之樣品負責,同時此樣品僅保留90天。本報告未經本公司書面許可,不可部份複製。

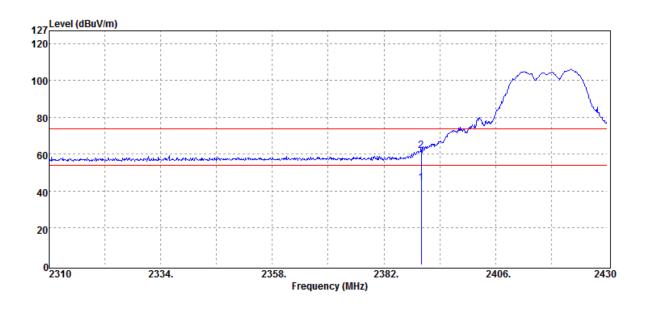
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Operation Band Fundamental Frequency Operation Mode EUT Pol.

:802.11g :2417 MHz :Bandedge CH LOW :E2 Plane Test Date:201Temp./Humi.:21 cEngineer:WeiMeasurement Antenna Pol.:HOI

:2018-09-17 :21 deg_C / 62 RH :Wei :HORIZONTAL



Freq.	Detector	Spectrum	Factor	Actual	Limit	Margin
	Mode	Reading Level		FS	@3m	
MHz	PK/QP/AV	dBµV	dB	dBµV/m	dBµV/m	dB
2390.00	Average	44.07	0.20	44.27	54.00	-9.73
2390.00	Peak	61.65	0.20	61.85	74.00	-12.15

Unless otherwise stated the results shown in this test report refer only to the sample(s) tested and such sample(s) are retained for 90 days only.

除非另有說明,此報告結果僅對測試之樣品負責,同時此樣品僅保留90天。本報告未經本公司書面許可,不可部份複製。

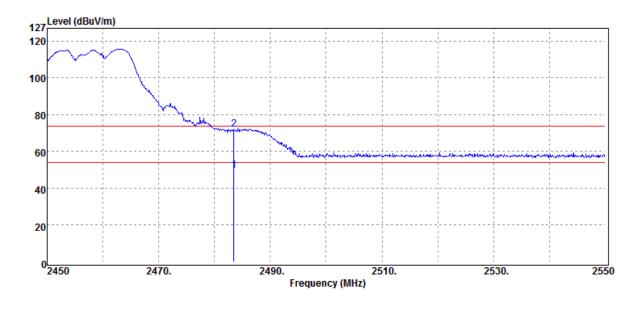
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Operation Band:80Fundamental Frequency:24Operation Mode:BaEUT Pol.:E2

:802.11g :2457 MHz :Bandedge CH HIGH :E2 Plane Test Date:2018-09Temp./Humi.:21 deg_Engineer:WeiMeasurement Antenna Pol.:VERTIC

:2018-09-17 :21 deg_C / 62 RH :Wei :VERTICAL



Freq.	Detector	Spectrum	Factor	Actual	Limit	Margin
	Mode	Reading Level		FS	@3m	
MHz	PK/QP/AV	dBµV	dB	dBµV/m	dBµV/m	dB
2483.50	Average	48.97	0.53	49.50	54.00	-4.50
2483.50	Peak	71.60	0.53	72.13	74.00	-1.87

Unless otherwise stated the results shown in this test report refer only to the sample(s) tested and such sample(s) are retained for 90 days only.

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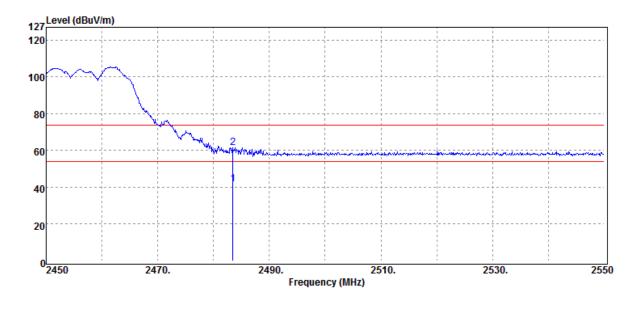
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Operation Band:80Fundamental Frequency:24Operation Mode:BaEUT Pol.:E2

:802.11g :2457 MHz :Bandedge CH HIGH :E2 Plane Test Date:2Temp./Humi.:2Engineer:1Measurement Antenna Pol.:1

:2018-09-17 :21 deg_C / 62 RH :Wei :HORIZONTAL



Freq.	Detector	Spectrum	Factor	Actual	Limit	Margin
	Mode	Reading Level		FS	@3m	
MHz	PK/QP/AV	dBµV	dB	dBµV/m	dBµV/m	dB
2483.50	Average	41.15	0.53	41.68	54.00	-12.32
2483.50	Peak	60.79	0.53	61.32	74.00	-12.68

Unless otherwise stated the results shown in this test report refer only to the sample(s) tested and such sample(s) are retained for 90 days only.

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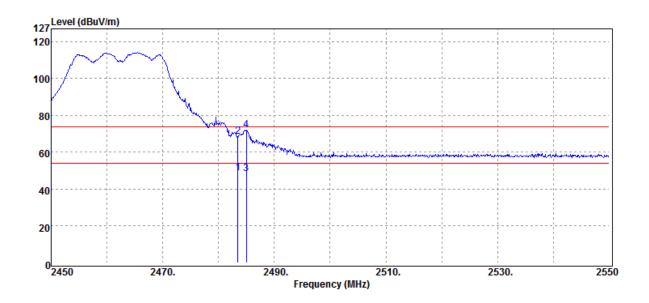
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Operation Band : Fundamental Frequency : Operation Mode : EUT Pol. :

:802.11g :2462 MHz :Bandedge CH HIGH :E2 Plane Test Date:2018-09Temp./Humi.:21 deg_Engineer:WeiMeasurement Antenna Pol.:VERTIC

:2018-09-17 :21 deg_C / 62 RH :Wei :VERTICAL



Freq.	Detector Mode	Spectrum Reading Level	Factor	Actual FS	Limit @3m	Margin
MHz	PK/QP/AV	dBµV	dB	dBµV/m	dBµV/m	dB
2483.50	Average	48.39	0.53	48.92	54.00	-5.08
2483.50	Peak	67.96	0.53	68.49	74.00	-5.51
2485.00	Average	47.98	0.53	48.51	54.00	-5.49
2485.00	Peak	71.56	0.53	72.09	74.00	-1.91

Unless otherwise stated the results shown in this test report refer only to the sample(s) tested and such sample(s) are retained for 90 days only.

除非另有說明,此報告結果僅對測試之樣品負責,同時此樣品僅保留90天。本報告未經本公司書面許可,不可部份複製。

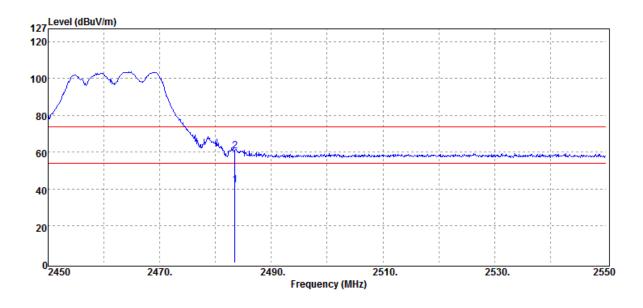
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Operation Band :8 Fundamental Frequency :2 Operation Mode :E EUT Pol. :E

:802.11g :2462 MHz :Bandedge CH HIGH :E2 Plane Test Date:20Temp./Humi.:2Engineer:WMeasurement Antenna Pol.:H

:2018-09-17 :21 deg_C / 62 RH :Wei :HORIZONTAL



Freq.	Detector	Spectrum	Factor	Actual	Limit	Margin
	Mode	Reading Level		FS	@3m	
MHz	PK/QP/AV	dBµV	dB	dBµV/m	dBµV/m	dB
2483.50	Average	41.47	0.53	42.00	54.00	-12.00
2483.50	Peak	60.23	0.53	60.76	74.00	-13.24

Unless otherwise stated the results shown in this test report refer only to the sample(s) tested and such sample(s) are retained for 90 days only.

除非另有說明,此報告結果僅對測試之樣品負責,同時此樣品僅保留90天。本報告未經本公司書面許可,不可部份複製。

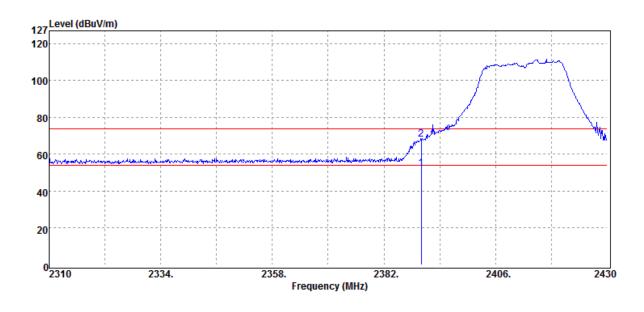
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Operation Band :: Fundamental Frequency :: Operation Mode :: EUT Pol. :

:802.11n20 :2412 MHz :Bandedge CH LOW :E2 Plane Test Date:2018-09Temp./Humi.:21 deg_Engineer:WeiMeasurement Antenna Pol.:VERTIC

:2018-09-17 :21 deg_C / 62 RH :Wei :VERTICAL



Freq.	Detector	Spectrum	Factor	Actual	Limit	Margin
	Mode	Reading Level		FS	@3m	
MHz	PK/QP/AV	dBµV	dB	dBµV/m	dBµV/m	dB
2390.00	Average	52.09	0.20	52.29	54.00	-1.71
2390.00	Peak	67.88	0.20	68.08	74.00	-5.92

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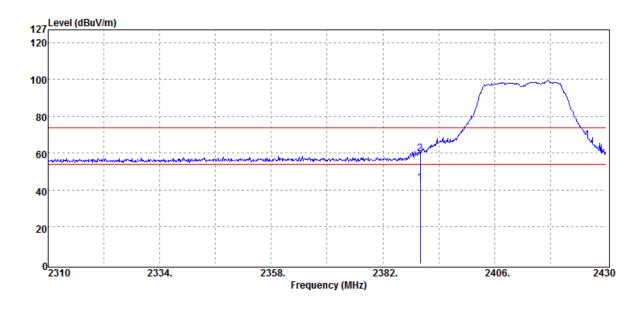
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Operation Band :8 Fundamental Frequency :2 Operation Mode :E EUT Pol. :6

:802.11n20 :2412 MHz :Bandedge CH LOW :E2 Plane Test Date:20Temp./Humi.:21Engineer:WeMeasurement Antenna Pol.:HC

:2018-09-17 :21 deg_C / 62 RH :Wei :HORIZONTAL



Freq.	Detector	Spectrum	Factor	Actual	Limit	Margin
	Mode	Reading Level		FS	@3m	
MHz	PK/QP/AV	dBµV	dB	dBµV/m	dBµV/m	dB
2390.00	Average	43.93	0.20	44.13	54.00	-9.87
2390.00	Peak	59.46	0.20	59.66	74.00	-14.34

Unless otherwise stated the results shown in this test report refer only to the sample(s) tested and such sample(s) are retained for 90 days only.

除非另有說明,此報告結果僅對測試之樣品負責,同時此樣品僅保留90天。本報告未經本公司書面許可,不可部份複製。

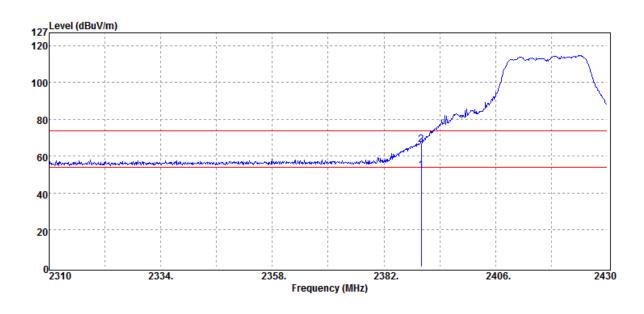
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Operation Band : Fundamental Frequency : Operation Mode : EUT Pol. :

:802.11n20 :2417 MHz :Bandedge CH LOW :E2 Plane Test Date:2018-Temp./Humi.:21 deEngineer:WeiMeasurement Antenna Pol.:VERT

:2018-09-17 :21 deg_C / 62 RH :Wei :VERTICAL



Freq.	Detector	Spectrum	Factor	Actual	Limit	Margin
	Mode	Reading Level		FS	@3m	
MHz	PK/QP/AV	dBµV	dB	dBµV/m	dBµV/m	dB
2390.00	Average	51.94	0.20	52.14	54.00	-1.86
2390.00	Peak	66.38	0.20	66.58	74.00	-7.42

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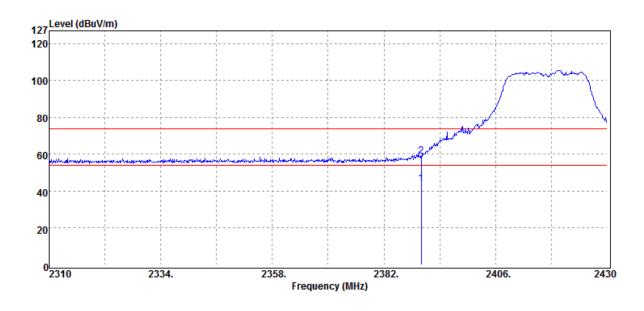
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Operation Band : Fundamental Frequency : Operation Mode : EUT Pol. :

:802.11n20 :2417 MHz :Bandedge CH LOW :E2 Plane Test Date:201Temp./Humi.:21 cEngineer:WeiMeasurement Antenna Pol.:HOI

:2018-09-17 :21 deg_C / 62 RH :Wei :HORIZONTAL



Freq.	Detector	Spectrum	Factor	Actual	Limit	Margin
	Mode	Reading Level		FS	@3m	
MHz	PK/QP/AV	dBµV	dB	dBµV/m	dBµV/m	dB
2390.00	Average	43.58	0.20	43.78	54.00	-10.22
2390.00	Peak	58.79	0.20	58.99	74.00	-15.01

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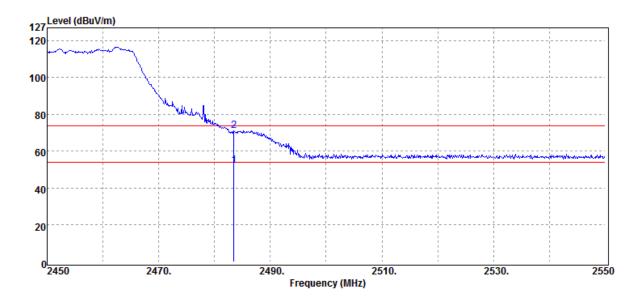
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Operation Band:80Fundamental Frequency:24Operation Mode:BaseEUT Pol.:East

:802.11n20 :2457 MHz :Bandedge CH HIGH :E2 Plane Test Date:2018-0Temp./Humi.:21 degEngineer:WeiMeasurement Antenna Pol.:VERT

:2018-09-17 :21 deg_C / 62 RH :Wei :VERTICAL



Freq.	Detector	Spectrum	Factor	Actual	Limit	Margin
	Mode	Reading Level		FS	@3m	
MHz	PK/QP/AV	dBµV	dB	dBµV/m	dBµV/m	dB
2483.50	Average	51.80	0.53	52.33	54.00	-1.67
2483.50	Peak	70.63	0.53	71.16	74.00	-2.84

Unless otherwise stated the results shown in this test report refer only to the sample(s) tested and such sample(s) are retained for 90 days only.

除非另有說明,此報告結果僅對測試之樣品負責,同時此樣品僅保留90天。本報告未經本公司書面許可,不可部份複製。

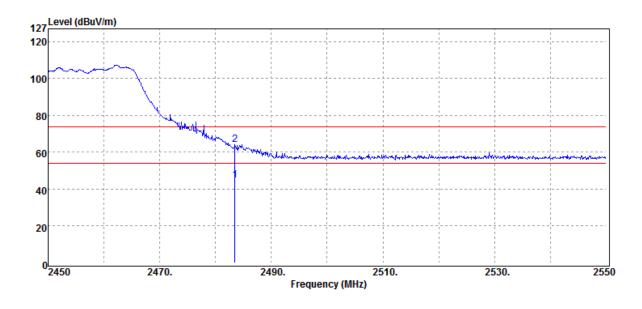
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Operation Band:aFundamental Frequency:aOperation Mode:aEUT Pol.:a

:802.11n20 :2457 MHz :Bandedge CH HIGH :E2 Plane Test Date:2Temp./Humi.:2Engineer:VMeasurement Antenna Pol.:H

:2018-09-17 :21 deg_C / 62 RH :Wei :HORIZONTAL



Freq.	Detector	Spectrum	Factor	Actual	Limit	Margin
	Mode	Reading Level		FS	@3m	
MHz	PK/QP/AV	dBµV	dB	dBµV/m	dBµV/m	dB
2483.50	Average	44.32	0.53	44.85	54.00	-9.15
2483.50	Peak	63.50	0.53	64.03	74.00	-9.97

Unless otherwise stated the results shown in this test report refer only to the sample(s) tested and such sample(s) are retained for 90 days only.

除非另有說明,此報告結果僅對測試之樣品負責,同時此樣品僅保留90天。本報告未經本公司書面許可,不可部份複製。

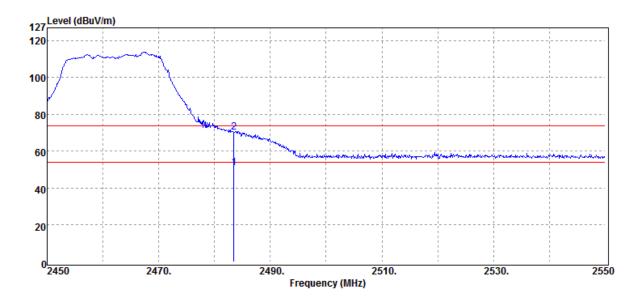
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Operation Band:8Fundamental Frequency:2Operation Mode:EEUT Pol.:E

:802.11n20 :2462 MHz :Bandedge CH HIGH :E2 Plane Test Date:2018-0Temp./Humi.:21 degEngineer:WeiMeasurement Antenna Pol.:VERTIO

:2018-09-17 :21 deg_C / 62 RH :Wei :VERTICAL



Freq.	Detector	Spectrum	Factor	Actual	Limit	Margin
	Mode	Reading Level		FS	@3m	
MHz	PK/QP/AV	dBµV	dB	dBµV/m	dBµV/m	dB
2483.50	Average	50.47	0.53	51.00	54.00	-3.00
2483.50	Peak	69.60	0.53	70.13	74.00	-3.87

Unless otherwise stated the results shown in this test report refer only to the sample(s) tested and such sample(s) are retained for 90 days only.

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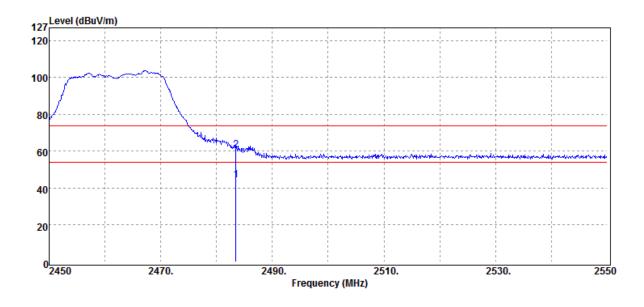
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Operation Band : Fundamental Frequency : Operation Mode : EUT Pol. :

:802.11n20 :2462 MHz :Bandedge CH HIGH :E2 Plane Test Date:20Temp./Humi.:22Engineer:WMeasurement Antenna Pol.:H

:2018-09-17 :21 deg_C / 62 RH :Wei :HORIZONTAL



Freq.	Detector	Spectrum	Factor	Actual	Limit	Margin
	Mode	Reading Level		FS	@3m	
MHz	PK/QP/AV	dBµV	dB	dBµV/m	dBµV/m	dB
2483.50	Average	43.78	0.53	44.31	54.00	-9.69
2483.50	Peak	60.32	0.53	60.85	74.00	-13.15

Unless otherwise stated the results shown in this test report refer only to the sample(s) tested and such sample(s) are retained for 90 days only.

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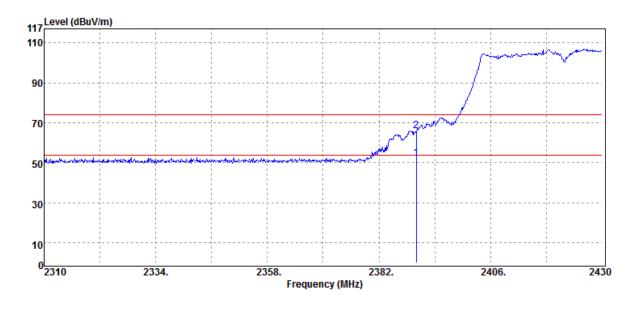
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Operation Band Fundamental Frequency Operation Mode EUT Pol.

:802.11n40 :2422 MHz :Bandedge CH LOW :E2 Plane Test Date:20'Temp./Humi.:21Engineer:WeMeasurement Antenna Pol.:VE

:2018-09-17 :21 deg_C / 62 RH :Wei :VERTICAL



Freq.	Detector	Spectrum	Factor	Actual	Limit	Margin
	Mode	Reading Level		FS	@3m	
MHz	PK/QP/AV	dBµV	dB	dBµV/m	dBµV/m	dB
2390.00	Average	52.20	0.20	52.40	54.00	-1.60
2390.00	Peak	65.63	0.20	65.83	74.00	-8.17

Unless otherwise stated the results shown in this test report refer only to the sample(s) tested and such sample(s) are retained for 90 days only.

除非另有說明,此報告結果僅對測試之樣品負責,同時此樣品僅保留90天。本報告未經本公司書面許可,不可部份複製。

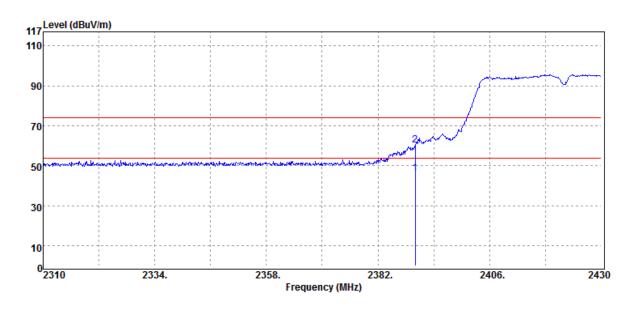
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Operation Band Fundamental Frequency Operation Mode EUT Pol.

:802.11n40 :2422 MHz :Bandedge CH LOW :E2 Plane Test Date:Temp./Humi.:Engineer:Measurement Antenna Pol.:

:2018-09-17 :21 deg_C / 62 RH :Wei :HORIZONTAL



Freq.	Detector	Spectrum	Factor	Actual	Limit	Margin
	Mode	Reading Level		FS	@3m	
MHz	PK/QP/AV	dBµV	dB	dBµV/m	dBµV/m	dB
2390.00	Average	46.15	0.20	46.35	54.00	-7.65
2390.00	Peak	60.18	0.20	60.38	74.00	-13.62

Unless otherwise stated the results shown in this test report refer only to the sample(s) tested and such sample(s) are retained for 90 days only.

除非另有說明,此報告結果僅對測試之樣品負責,同時此樣品僅保留90天。本報告未經本公司書面許可,不可部份複製。

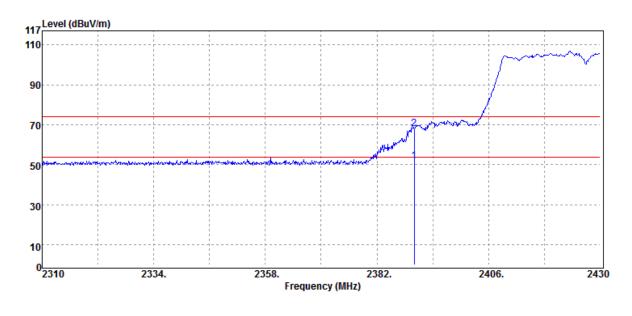
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Operation Band Fundamental Frequency Operation Mode EUT Pol.

:802.11n40 :2427 MHz :Bandedge CH LOW :E2 Plane Test Date:2018Temp./Humi.:21 dEngineer:WeiMeasurement Antenna Pol.:VER

:2018-09-17 :21 deg_C / 62 RH :Wei :VERTICAL



Freq.	Detector	Spectrum	Factor	Actual	Limit	Margin
	Mode	Reading Level		FS	@3m	
MHz	PK/QP/AV	dBµV	dB	dBµV/m	dBµV/m	dB
2390.00	Average	51.76	0.20	51.96	54.00	-2.04
2390.00	Peak	67.89	0.20	68.09	74.00	-5.91

Unless otherwise stated the results shown in this test report refer only to the sample(s) tested and such sample(s) are retained for 90 days only.

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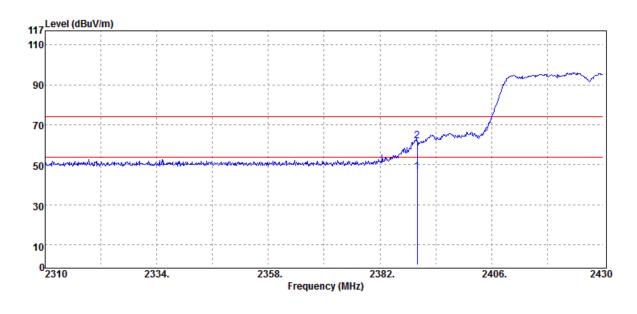
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Operation Band Fundamental Frequency Operation Mode EUT Pol.

:802.11n40 :2427 MHz :Bandedge CH LOW :E2 Plane Test Date:2Temp./Humi.:2Engineer:VMeasurement Antenna Pol.:H

:2018-09-17 :21 deg_C / 62 RH :Wei :HORIZONTAL



Freq.	Detector	Spectrum	Factor	Actual	Limit	Margin
	Mode	Reading Level		FS	@3m	
MHz	PK/QP/AV	dBµV	dB	dBµV/m	dBµV/m	dB
2390.00	Average	46.17	0.20	46.37	54.00	-7.63
2390.00	Peak	61.61	0.20	61.81	74.00	-12.19

Unless otherwise stated the results shown in this test report refer only to the sample(s) tested and such sample(s) are retained for 90 days only.

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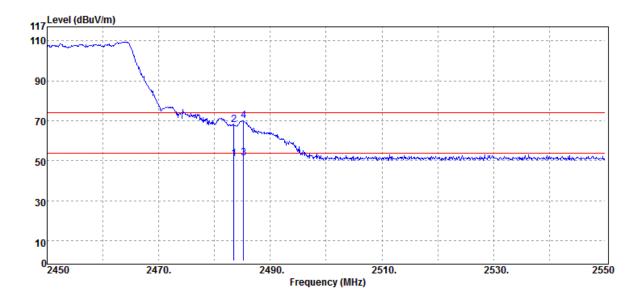
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Operation Band Fundamental Frequency Operation Mode EUT Pol.

:802.11n40 :2447 MHz :Bandedge CH HIGH :E2 Plane Test Date:2018-Temp./Humi.:21 deEngineer:WeiMeasurement Antenna Pol.:VERT

:2018-09-17 :21 deg_C / 62 RH :Wei :VERTICAL



Freq.	Detector Mode	Spectrum Reading Level	Factor	Actual FS	Limit @3m	Margin
MHz	PK/QP/AV	dBµV	dB	dBµV/m	dBµV/m	dB
2483.50	Average	50.57	0.53	51.10	54.00	-2.90
2483.50	Peak	67.47	0.53	68.00	74.00	-6.00
2485.20	Average	50.97	0.53	51.50	54.00	-2.50
2485.20	Peak	69.59	0.53	70.12	74.00	-3.88

Unless otherwise stated the results shown in this test report refer only to the sample(s) tested and such sample(s) are retained for 90 days only.

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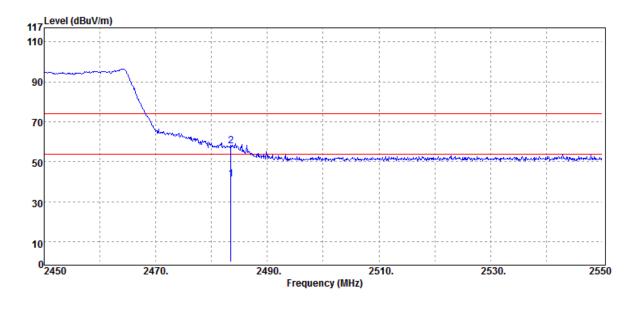
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Operation Band Fundamental Frequency Operation Mode EUT Pol.

:802.11n40 :2447 MHz :Bandedge CH HIGH :E2 Plane Test Date:20Temp./Humi.:27Engineer:WMeasurement Antenna Pol.:H

:2018-09-17 :21 deg_C / 62 RH :Wei :HORIZONTAL



Spectrum	Factor	Actual	Limit	Margin
Reading Level		FS	@3m	_
dBµV	dB	dBµV/m	dBµV/m	dB
40.81	0.53	41.34	54.00	-12.66
57.27	0.53	57.80	74.00	-16.20
	Reading Level dBµV 40.81	Reading Level dBµV dB 40.81 0.53	Reading Level FS dBµV dB dBµV/m 40.81 0.53 41.34	Reading Level FS @3m dBµV dB dBµV/m dBµV/m 40.81 0.53 41.34 54.00

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除非另有說明,此報告結果僅對測試之樣品負責,同時此樣品僅保留90天。本報告未經本公司書面許可,不可部份複製。

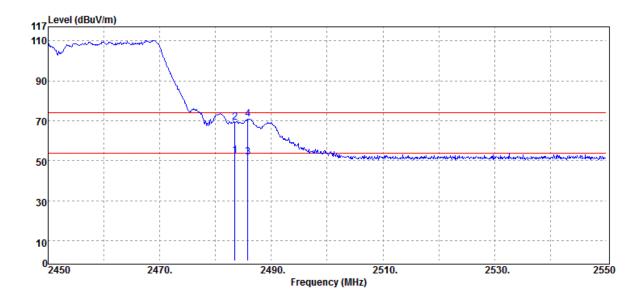
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Operation Band::Fundamental Frequency::Operation Mode::EUT Pol.::

:802.11n40 :2452 MHz :Bandedge CH HIGH :E2 Plane Test Date:2018-09Temp./Humi.:21 deg_Engineer:WeiMeasurement Antenna Pol.:VERTIC

:2018-09-17 :21 deg_C / 62 RH :Wei :VERTICAL



Freq.	Detector Mode	Spectrum Reading Level	Factor	Actual FS	Limit @3m	Margin
MHz	PK/QP/AV	dBµV	dB	dBµV/m	dBµV/m	dB
2483.50	Average	52.24	0.53	52.77	54.00	-1.23
2483.50	Peak	68.66	0.53	69.19	74.00	-4.81
2485.80	Average	51.21	0.54	51.75	54.00	-2.25
2485.80	Peak	70.45	0.54	70.99	74.00	-3.01

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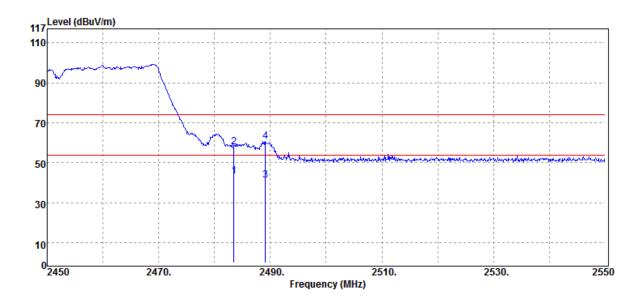
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Operation Band Fundamental Frequency Operation Mode EUT Pol.

:802.11n40 :2452 MHz :Bandedge CH HIGH :E2 Plane Test Date:20Temp./Humi.:21Engineer:WMeasurement Antenna Pol.:H0

:2018-09-17 :21 deg_C / 62 RH :Wei :HORIZONTAL



Freq.	Detector Mode	Spectrum Reading Level	Factor	Actual FS	Limit @3m	Margin
MHz	PK/QP/AV	dBµV	dB	dBµV/m	dBµV/m	dB
2483.50	Average	42.94	0.53	43.47	54.00	-10.53
2483.50	Peak	57.53	0.53	58.06	74.00	-15.94
2489.10	Average	40.83	0.54	41.37	54.00	-12.63
2489.10	Peak	60.32	0.54	60.86	74.00	-13.14

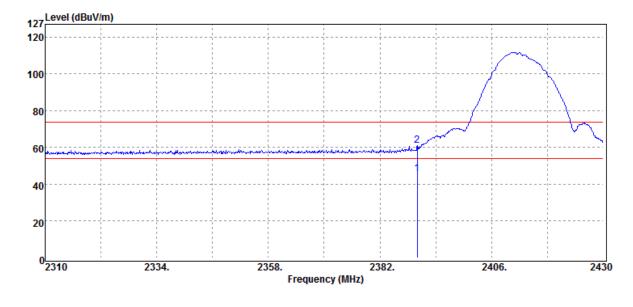
Unless otherwise stated the results shown in this test report refer only to the sample(s) tested and such sample(s) are retained for 90 days only.

除非另有說明,此報告結果僅對測試之樣品負責,同時此樣品僅保留90天。本報告未經本公司書面許可,不可部份複製。



Internal Antenna (Type: Printed antenna, Model no: N/A)

Operation Band Fundamental Frequency Operation Mode EUT Pol. :802.11b :2412 MHz :Bandedge CH LOW :E2 Plane Test Date:2018-09-25Temp./Humi.:21 deg_C / 62 RHEngineer:WeiMeasurement Antenna Pol.:VERTICAL



Freq.	Detector	Spectrum	Factor	Actual	Limit	Margin
	Mode	Reading Level		FS	@3m	
MHz	PK/QP/AV	dBµV	dB	dBµV/m	dBµV/m	dB
2390.00	Average	45.29	0.20	45.49	54.00	-8.51
2390.00	Peak	61.08	0.20	61.28	74.00	-12.72

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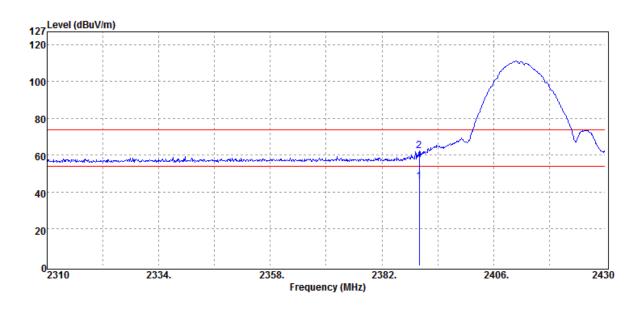
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Operation Band:aFundamental Frequency:aOperation Mode:aEUT Pol.:a

:802.11b :2412 MHz :Bandedge CH LOW :E2 Plane Test Date:2Temp./Humi.:2Engineer:VMeasurement Antenna Pol.:H

:2018-09-25 :21 deg_C / 62 RH :Wei :HORIZONTAL



Freq.	Detector	Spectrum	Factor	Actual	Limit	Margin
	Mode	Reading Level		FS	@3m	
MHz	PK/QP/AV	dBµV	dB	dBµV/m	dBµV/m	dB
2390.00	Average	45.29	0.20	45.49	54.00	-8.51
2390.00	Peak	62.00	0.20	62.20	74.00	-11.80

Unless otherwise stated the results shown in this test report refer only to the sample(s) tested and such sample(s) are retained for 90 days only.

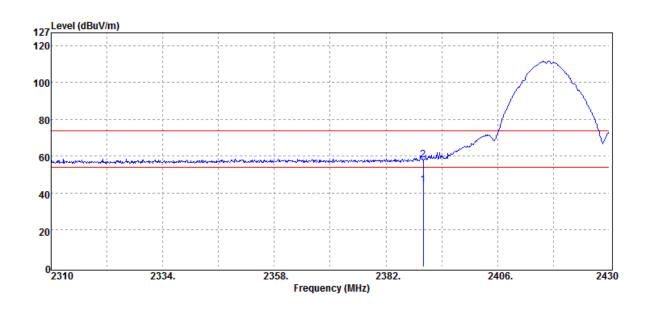
除非另有說明,此報告結果僅對測試之樣品負責,同時此樣品僅保留90天。本報告未經本公司書面許可,不可部份複製。

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Operation Band : Fundamental Frequency : Operation Mode : EUT Pol. :

:802.11b :2417 MHz :Bandedge CH LOW :E2 Plane Test Date:2018-09-25Temp./Humi.:21 deg_C / 62 RHEngineer:WeiMeasurement Antenna Pol.:VERTICAL



Freq.	Detector	Spectrum	Factor	Actual	Limit	Margin
	Mode	Reading Level		FS	@3m	
MHz	PK/QP/AV	dBµV	dB	dBµV/m	dBµV/m	dB
2390.00	Average	44.07	0.20	44.27	54.00	-9.73
2390.00	Peak	57.82	0.20	58.02	74.00	-15.98

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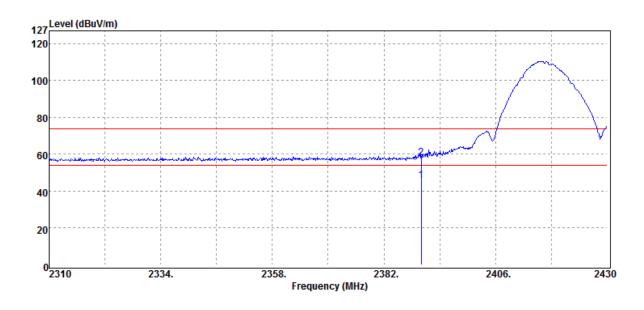
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Operation Band : Fundamental Frequency : Operation Mode : EUT Pol. :

:802.11b :2417 MHz :Bandedge CH LOW :E2 Plane Test Date:201Temp./Humi.:21Engineer:WeMeasurement Antenna Pol.:HO

:2018-09-25 :21 deg_C / 62 RH :Wei :HORIZONTAL



Freq.	Detector	Spectrum	Factor	Actual	Limit	Margin
	Mode	Reading Level		FS	@3m	
MHz	PK/QP/AV	dBµV	dB	dBµV/m	dBµV/m	dB
2390.00	Average	45.46	0.20	45.66	54.00	-8.34
2390.00	Peak	57.69	0.20	57.89	74.00	-16.11

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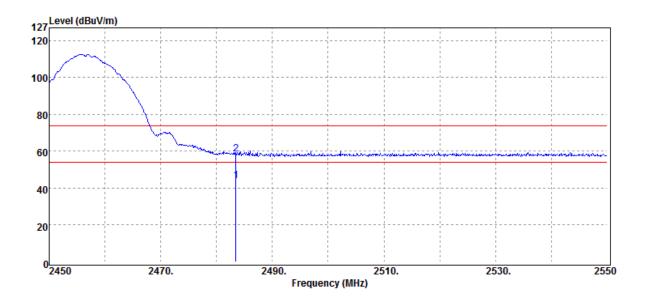
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Operation Band:8Fundamental Frequency:2Operation Mode:EEUT Pol.:E

:802.11b :2457 MHz :Bandedge CH HIGH :E2 Plane Test Date:2018-0Temp./Humi.:21 degEngineer:WeiMeasurement Antenna Pol.:VERTIO

:2018-09-26 :21 deg_C / 62 RH :Wei :VERTICAL



Freq.	Detector	Spectrum	Factor	Actual	Limit	Margin
	Mode	Reading Level		FS	@3m	
MHz	PK/QP/AV	dBµV	dB	dBµV/m	dBµV/m	dB
2483.50	Average	43.35	0.53	43.88	54.00	-10.12
2483.50	Peak	57.91	0.53	58.44	74.00	-15.56

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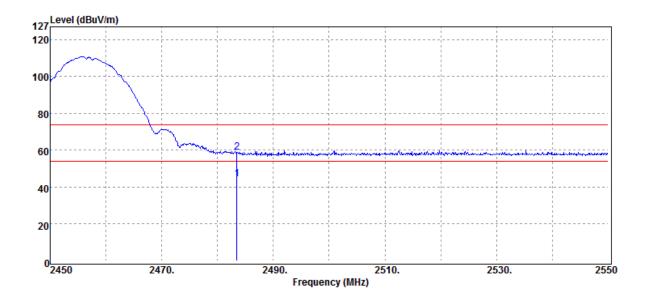
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Operation Band :8 Fundamental Frequency :2 Operation Mode :E EUT Pol. :E

:802.11b :2457 MHz :Bandedge CH HIGH :E2 Plane Test Date:2Temp./Humi.:2Engineer:VMeasurement Antenna Pol.:H

:2018-09-26 :21 deg_C / 62 RH :Wei :HORIZONTAL



Freq.	Detector	Spectrum	Factor	Actual	Limit	Margin
	Mode	Reading Level		FS	@3m	
MHz	PK/QP/AV	dBµV	dB	dBµV/m	dBµV/m	dB
2483.50	Average	43.95	0.53	44.48	54.00	-9.52
2483.50	Peak	58.19	0.53	58.72	74.00	-15.28

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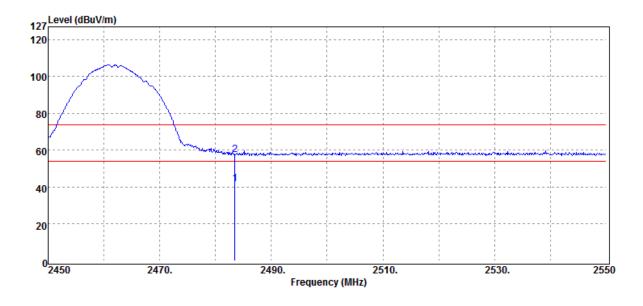
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Operation Band : Fundamental Frequency : Operation Mode : EUT Pol. :

:802.11b :2462 MHz :Bandedge CH HIGH :E2 Plane Test Date:2018-0Temp./Humi.:21 degEngineer:WeiMeasurement Antenna Pol.:VERTIN

:2018-09-26 :21 deg_C / 62 RH :Wei :VERTICAL



Freq.	Detector	Spectrum	Factor	Actual	Limit	Margin
	Mode	Reading Level		FS	@3m	
MHz	PK/QP/AV	dBµV	dB	dBµV/m	dBµV/m	dB
2483.50	Average	41.31	0.53	41.84	54.00	-12.16
2483.50	Peak	56.97	0.53	57.50	74.00	-16.50

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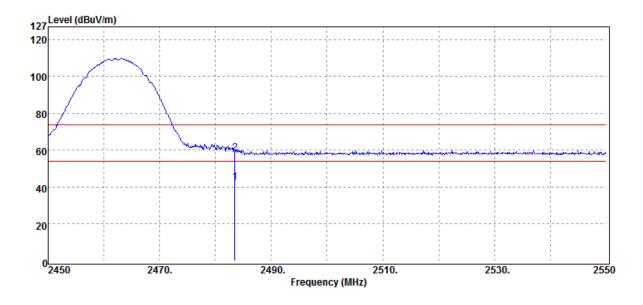
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Operation Band :: Fundamental Frequency :: Operation Mode :: EUT Pol. ::

:802.11b :2462 MHz :Bandedge CH HIGH :E2 Plane Test Date:2Temp./Humi.:2Engineer:VMeasurement Antenna Pol.:H

:2018-09-26 :21 deg_C / 62 RH :Wei :HORIZONTAL



Freq.	Detector	Spectrum	Factor	Actual	Limit	Margin
	Mode	Reading Level		FS	@3m	
MHz	PK/QP/AV	dBµV	dB	dBµV/m	dBµV/m	dB
2483.50	Average	42.06	0.53	42.59	54.00	-11.41
2483.50	Peak	57.99	0.53	58.52	74.00	-15.48

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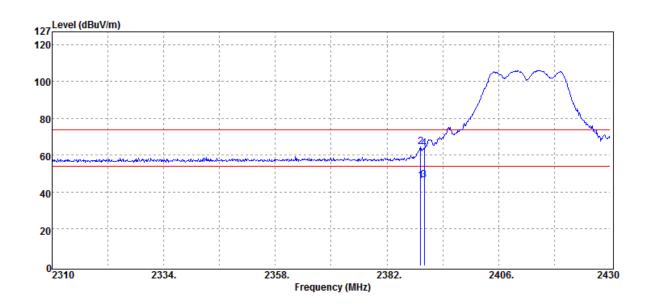
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Operation Band Fundamental Frequency Operation Mode EUT Pol.

:802.11g :2412 MHz :Bandedge CH LOW :E2 Plane Test Date:2018-09Temp./Humi.:21 deg_Engineer:WeiMeasurement Antenna Pol.:VERTIC

:2018-09-26 :21 deg_C / 62 RH :Wei :VERTICAL



Freq.	Detector Mode	Spectrum Reading Level	Factor	Actual FS	Limit @3m	Margin
MHz	PK/QP/AV	dBµV	dB	dBµV/m	dBµV/m	dB
2389.20	Average	45.83	0.20	46.03	54.00	-7.97
2389.20	Peak	64.55	0.20	64.75	74.00	-9.25
2390.00	Average	46.27	0.20	46.47	54.00	-7.53
2390.00	Peak	63.49	0.20	63.69	74.00	-10.31

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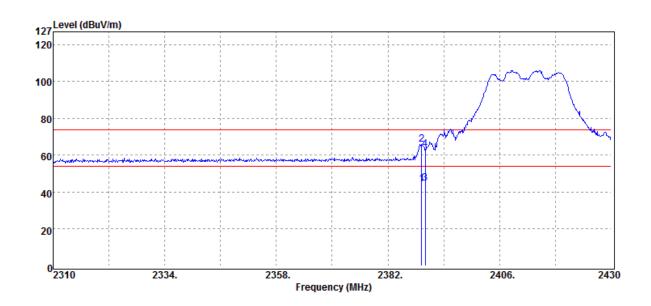
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Operation Band Fundamental Frequency Operation Mode EUT Pol.

:802.11g :2412 MHz :Bandedge CH LOW :E2 Plane Test Date::Temp./Humi.::Engineer:'Measurement Antenna Pol.:'

:2018-09-26 :21 deg_C / 62 RH :Wei :HORIZONTAL



Freq.	Detector Mode	Spectrum Reading Level	Factor	Actual FS	Limit @3m	Margin
MHz	PK/QP/AV	dBµV	dB	dBµV/m	dBµV/m	dB
2389.20	Average	44.37	0.20	44.57	54.00	-9.43
2389.20	Peak	65.80	0.20	66.00	74.00	-8.00
2390.00	Average	44.53	0.20	44.73	54.00	-9.27
2390.00	Peak	63.25	0.20	63.45	74.00	-10.55

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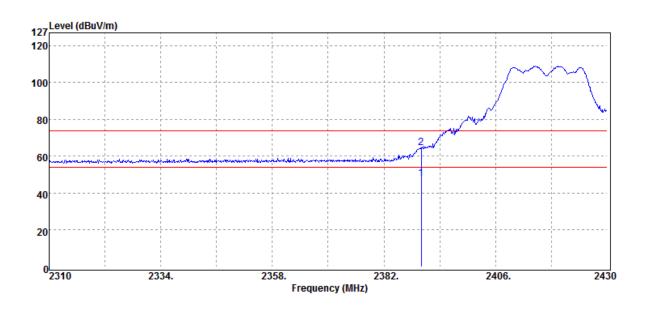
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Operation Band Fundamental Frequency Operation Mode EUT Pol.

:802.11g :2417 MHz :Bandedge CH LOW :E2 Plane Test Date:2018-09-Temp./Humi.:21 deg_0Engineer:WeiMeasurement Antenna Pol.:VERTICA

:2018-09-26 :21 deg_C / 62 RH :Wei :VERTICAL



Freq.	Detector	Spectrum	Factor	Actual	Limit	Margin
	Mode	Reading Level		FS	@3m	
MHz	PK/QP/AV	dBµV	dB	dBµV/m	dBµV/m	dB
2390.00	Average	47.75	0.20	47.95	54.00	-6.05
2390.00	Peak	64.42	0.20	64.62	74.00	-9.38

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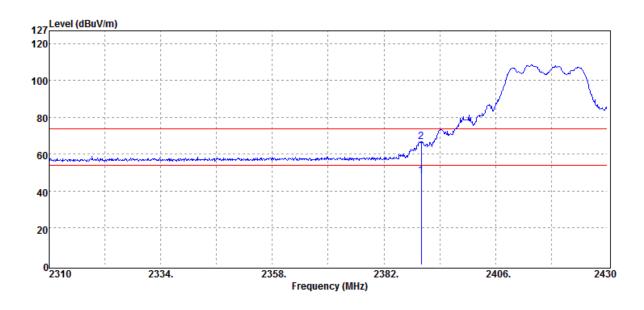
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Operation Band Fundamental Frequency Operation Mode EUT Pol.

:802.11g :2417 MHz :Bandedge CH LOW :E2 Plane Test Date:20Temp./Humi.:21Engineer:WMeasurement Antenna Pol.:H0

:2018-09-26 :21 deg_C / 62 RH :Wei :HORIZONTAL



Freq.	Detector	Spectrum	Factor	Actual	Limit	Margin
	Mode	Reading Level		FS	@3m	
MHz	PK/QP/AV	dBµV	dB	dBµV/m	dBµV/m	dB
2390.00	Average	47.96	0.20	48.16	54.00	-5.84
2390.00	Peak	66.69	0.20	66.89	74.00	-7.11

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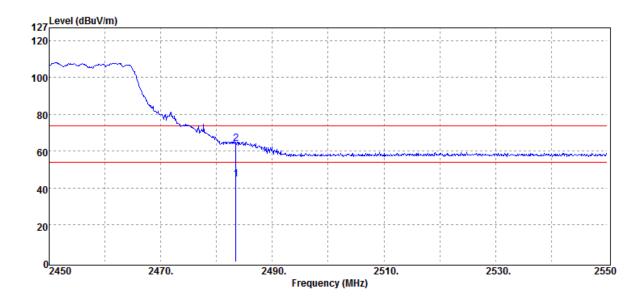
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Operation Band :8 Fundamental Frequency :2 Operation Mode :E EUT Pol. :E

:802.11g :2457 MHz :Bandedge CH HIGH :E2 Plane Test Date:2018-09Temp./Humi.:21 degEngineer:WeiMeasurement Antenna Pol.:VERTIO

:2018-09-26 :21 deg_C / 62 RH :Wei :VERTICAL



Freq.	Detector	Spectrum	Factor	Actual	Limit	Margin
	Mode	Reading Level		FS	@3m	
MHz	PK/QP/AV	dBµV	dB	dBµV/m	dBµV/m	dB
2483.50	Average	44.48	0.53	45.01	54.00	-8.99
2483.50	Peak	63.75	0.53	64.28	74.00	-9.72

Unless otherwise stated the results shown in this test report refer only to the sample(s) tested and such sample(s) are retained for 90 days only.

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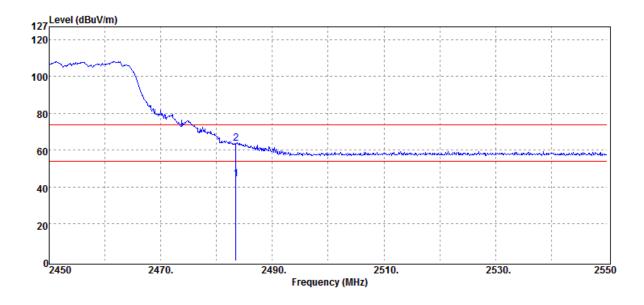
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Operation Band:8Fundamental Frequency:2Operation Mode:1EUT Pol.:1

:802.11g :2457 MHz :Bandedge CH HIGH :E2 Plane Test Date:20Temp./Humi.:22Engineer:WMeasurement Antenna Pol.:H

:2018-09-26 :21 deg_C / 62 RH :Wei :HORIZONTAL



Freq.	Detector	Spectrum	Factor	Actual	Limit	Margin
	Mode	Reading Level		FS	@3m	
MHz	PK/QP/AV	dBµV	dB	dBµV/m	dBµV/m	dB
2483.50	Average	43.91	0.53	44.44	54.00	-9.56
2483.50	Peak	63.07	0.53	63.60	74.00	-10.40

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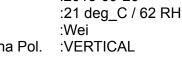
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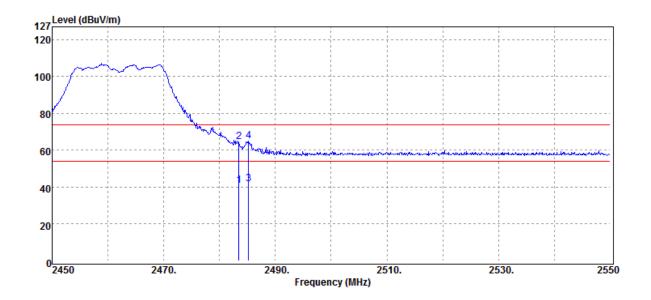


Operation Band Fundamental Frequency Operation Mode EUT Pol.

:802.11g :2462 MHz :Bandedge CH HIGH :E2 Plane

Test Date :2018-09-26 Temp./Humi. Engineer :Wei Measurement Antenna Pol.





Freq.	Detector Mode	Spectrum Reading Level	Factor	Actual FS	Limit @3m	Margin
MHz	PK/QP/AV	dBµV	dB	dBµV/m	dBµV/m	dB
2483.50	Average	40.56	0.53	41.09	54.00	-12.91
2483.50	Peak	64.23	0.53	64.76	74.00	-9.24
2485.20	Average	41.34	0.53	41.87	54.00	-12.13
2485.20	Peak	64.33	0.53	64.86	74.00	-9.14

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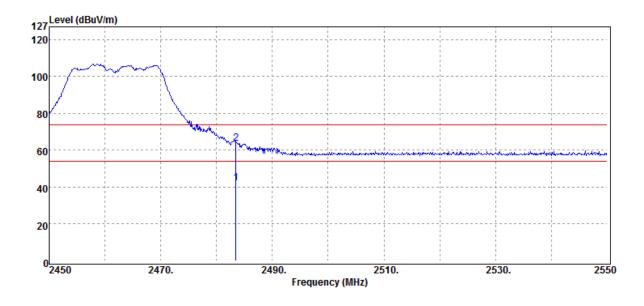
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Operation Band Fundamental Frequency Operation Mode EUT Pol.

:802.11g :2462 MHz :Bandedge CH HIGH :E2 Plane Test Date:20Temp./Humi.:27Engineer:WMeasurement Antenna Pol.:H

:2018-09-26 :21 deg_C / 62 RH :Wei :HORIZONTAL



Freq.	Detector	Spectrum	Factor	Actual	Limit	Margin
	Mode	Reading Level		FS	@3m	
MHz	PK/QP/AV	dBµV	dB	dBµV/m	dBµV/m	dB
2483.50	Average	41.64	0.53	42.17	54.00	-11.83
2483.50	Peak	63.10	0.53	63.63	74.00	-10.37

Unless otherwise stated the results shown in this test report refer only to the sample(s) tested and such sample(s) are retained for 90 days only.

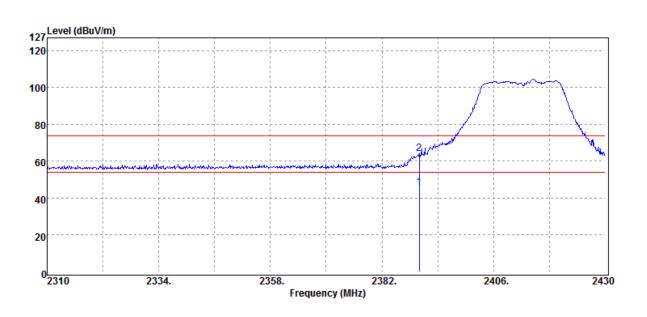
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Operation Band:aFundamental Frequency:aOperation Mode:aEUT Pol.:a

:802.11n20 :2412 MHz :Bandedge CH LOW :E2 Plane Test Date:2018-09-26Temp./Humi.:21 deg_C / 62 RHEngineer:WeiMeasurement Antenna Pol.:VERTICAL



Freq.	Detector	Spectrum	Factor	Actual	Limit	Margin
	Mode	Reading Level		FS	@3m	
MHz	PK/QP/AV	dBµV	dB	dBµV/m	dBµV/m	dB
2390.00	Average	45.51	0.20	45.71	54.00	-8.29
2390.00	Peak	64.12	0.20	64.32	74.00	-9.68

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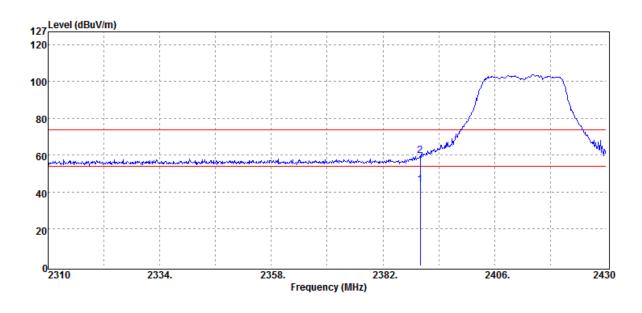
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Operation Band:8Fundamental Frequency:2Operation Mode:EEUT Pol.:E

:802.11n20 :2412 MHz :Bandedge CH LOW :E2 Plane Test Date:20Temp./Humi.:21Engineer:WMeasurement Antenna Pol.:H0

:2018-09-26 :21 deg_C / 62 RH :Wei :HORIZONTAL



Freq.	Detector	Spectrum	Factor	Actual	Limit	Margin
	Mode	Reading Level		FS	@3m	
MHz	PK/QP/AV	dBµV	dB	dBµV/m	dBµV/m	dB
2390.00	Average	43.65	0.20	43.85	54.00	-10.15
2390.00	Peak	59.60	0.20	59.80	74.00	-14.20

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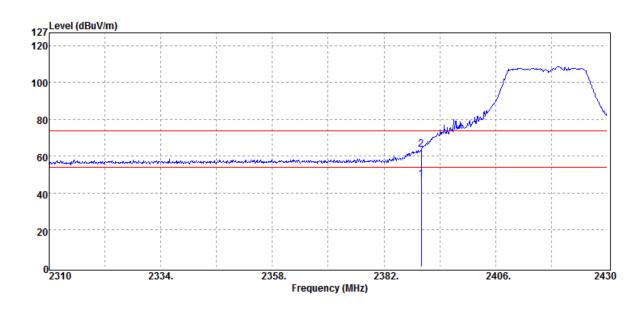
Report No.:ER/2018/90025 Page 107 of 182



Operation Band Fundamental Frequency Operation Mode EUT Pol.

:802.11n20 :2417 MHz :Bandedge CH LOW :E2 Plane Test Date:2018-09Temp./Humi.:21 deg_Engineer:WeiMeasurement Antenna Pol.:VERTIC

:2018-09-26 :21 deg_C / 62 RH :Wei :VERTICAL



Freq.	Detector	Spectrum	Factor	Actual	Limit	Margin
	Mode	Reading Level		FS	@3m	
MHz	PK/QP/AV	dBµV	dB	dBµV/m	dBµV/m	dB
2390.00	Average	47.14	0.20	47.34	54.00	-6.66
2390.00	Peak	63.64	0.20	63.84	74.00	-10.16

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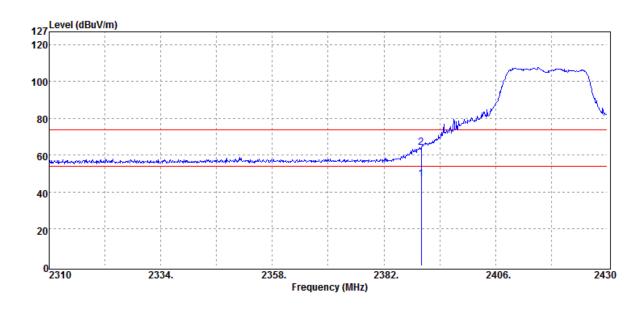
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Operation Band Fundamental Frequency Operation Mode EUT Pol.

:802.11n20 :2417 MHz :Bandedge CH LOW :E2 Plane Test Date:20Temp./Humi.:27Engineer:WMeasurement Antenna Pol.:H

:2018-09-26 :21 deg_C / 62 RH :Wei :HORIZONTAL



Freq.	Detector	Spectrum	Factor	Actual	Limit	Margin
	Mode	Reading Level		FS	@3m	
MHz	PK/QP/AV	dBµV	dB	dBµV/m	dBµV/m	dB
2390.00	Average	46.84	0.20	47.04	54.00	-6.96
2390.00	Peak	64.11	0.20	64.31	74.00	-9.69

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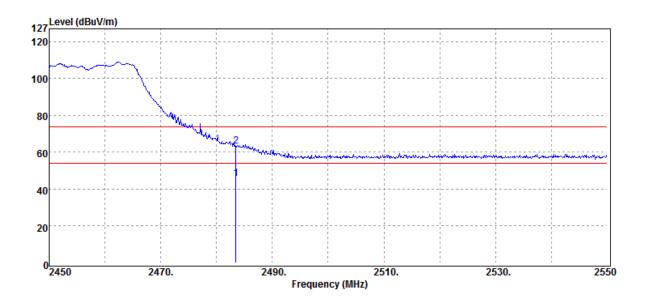
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Operation Band:8Fundamental Frequency:2Operation Mode:EEUT Pol.:E

:802.11n20 :2457 MHz :Bandedge CH HIGH :E2 Plane Test Date:2018-09Temp./Humi.:21 deg_Engineer:WeiMeasurement Antenna Pol.:VERTIC

:2018-09-26 :21 deg_C / 62 RH :Wei :VERTICAL



Freq.	Detector	Spectrum	Factor	Actual	Limit	Margin
	Mode	Reading Level		FS	@3m	
MHz	PK/QP/AV	dBµV	dB	dBµV/m	dBµV/m	dB
2483.50	Average	45.18	0.53	45.71	54.00	-8.29
2483.50	Peak	62.56	0.53	63.09	74.00	-10.91

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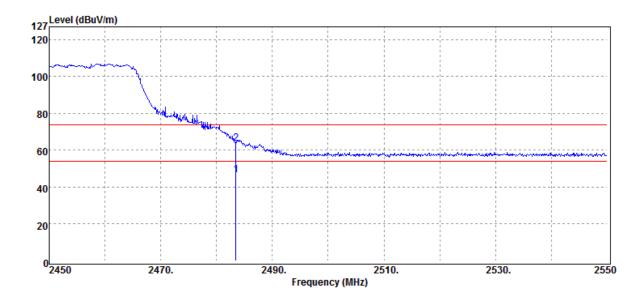
Report No.:ER/2018/90025 Page 110 of 182



Operation Band:8Fundamental Frequency:2Operation Mode:8EUT Pol.:8

:802.11n20 :2457 MHz :Bandedge CH HIGH :E2 Plane Test Date:2Temp./Humi.:2Engineer:WMeasurement Antenna Pol.:H

:2018-09-26 :21 deg_C / 62 RH :Wei :HORIZONTAL



Freq.	Detector	Spectrum	Factor	Actual	Limit	Margin
	Mode	Reading Level		FS	@3m	
MHz	PK/QP/AV	dBµV	dB	dBµV/m	dBµV/m	dB
2483.50	Average	46.16	0.53	46.69	54.00	-7.31
2483.50	Peak	63.30	0.53	63.83	74.00	-10.17

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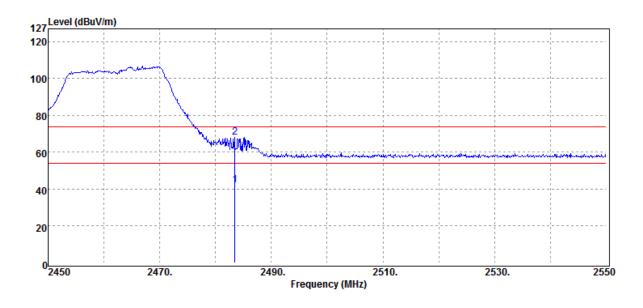
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Operation Band:aFundamental Frequency:aOperation Mode:aEUT Pol.:a

:802.11n20 :2462 MHz :Bandedge CH HIGH :E2 Plane Test Date:2018-09Temp./Humi.:21 degEngineer:WeiMeasurement Antenna Pol.:VERTIO

:2018-09-26 :21 deg_C / 62 RH :Wei :VERTICAL



Freq.	Detector	Spectrum	Factor	Actual	Limit	Margin
	Mode	Reading Level		FS	@3m	
MHz	PK/QP/AV	dBµV	dB	dBµV/m	dBµV/m	dB
2483.50	Average	41.79	0.53	42.32	54.00	-11.68
2483.50	Peak	67.42	0.53	67.95	74.00	-6.05

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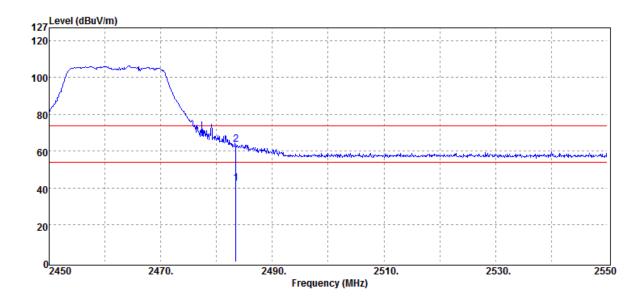
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Operation Band : Fundamental Frequency : Operation Mode : EUT Pol. :

:802.11n20 :2462 MHz :Bandedge CH HIGH :E2 Plane Test Date:2Temp./Humi.:2Engineer:WMeasurement Antenna Pol.:H

:2018-09-26 :21 deg_C / 62 RH :Wei :HORIZONTAL



Freq.	Detector	Spectrum	Factor	Actual	Limit	Margin
	Mode	Reading Level		FS	@3m	
MHz	PK/QP/AV	dBµV	dB	dBµV/m	dBµV/m	dB
2483.50	Average	41.98	0.53	42.51	54.00	-11.49
2483.50	Peak	63.27	0.53	63.80	74.00	-10.20

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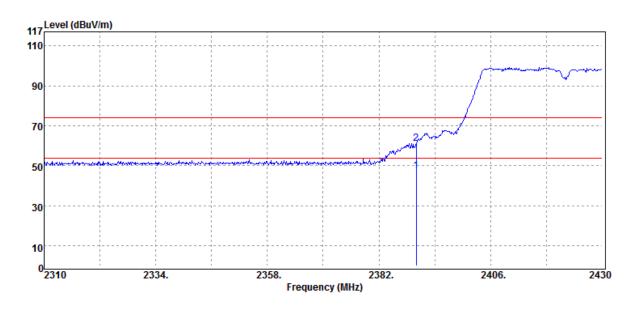
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Operation Band : Fundamental Frequency : Operation Mode : EUT Pol. :

:802.11n40 :2422 MHz :Bandedge CH LOW :E2 Plane Test Date:2018Temp./Humi.:21 dEngineer:WeiMeasurement Antenna Pol.:VER

:2018-09-26 :21 deg_C / 62 RH :Wei :VERTICAL



Freq.	Detector	Spectrum	Factor	Actual	Limit	Margin
	Mode	Reading Level		FS	@3m	
MHz	PK/QP/AV	dBµV	dB	dBµV/m	dBµV/m	dB
2390.00	Average	47.00	0.20	47.20	54.00	-6.80
2390.00	Peak	60.94	0.20	61.14	74.00	-12.86

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除非另有說明,此報告結果僅對測試之樣品負責,同時此樣品僅保留90天。本報告未經本公司書面許可,不可部份複製。

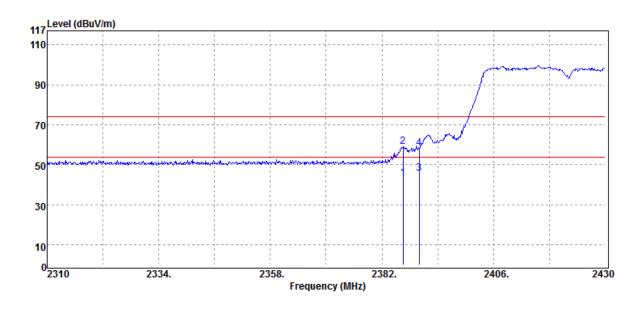
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Operation Band Fundamental Frequency Operation Mode EUT Pol.

:802.11n40 :2422 MHz :Bandedge CH LOW :E2 Plane Test Date Temp./Humi. Engineer Measurement Antenna Pol.

:2018-09-26 :21 deg_C / 62 RH :Wei :HORIZONTAL



Freq.	Detector	Spectrum	Factor	Actual	Limit	Margin
	Mode	Reading Level		FS	@3m	
MHz	PK/QP/AV	dBµV	dB	dBµV/m	dBµV/m	dB
2386.56	Average	43.01	0.19	43.20	54.00	-10.80
2386.56	Peak	58.84	0.19	59.03	74.00	-14.97
2390.00	Average	45.55	0.20	45.75	54.00	-8.25
2390.00	Peak	58.13	0.20	58.33	74.00	-15.67

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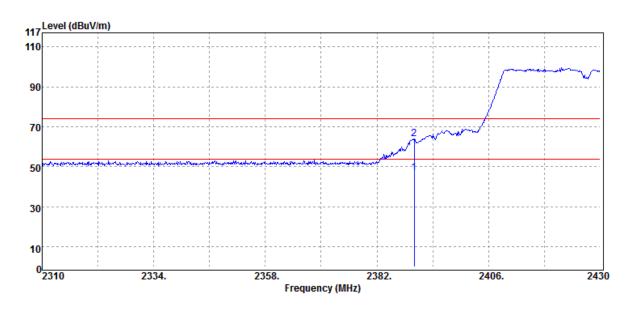
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Operation Band Fundamental Frequency Operation Mode EUT Pol.

:802.11n40 :2427 MHz :Bandedge CH LOW :E2 Plane Test Date:2018Temp./Humi.:21 deEngineer:WeiMeasurement Antenna Pol.:VERT

:2018-09-26 :21 deg_C / 62 RH :Wei :VERTICAL



Freq.	Detector	Spectrum	Factor	Actual	Limit	Margin
	Mode	Reading Level		FS	@3m	
MHz	PK/QP/AV	dBµV	dB	dBµV/m	dBµV/m	dB
2390.00	Average	46.83	0.20	47.03	54.00	-6.97
2390.00	Peak	63.90	0.20	64.10	74.00	-9.90

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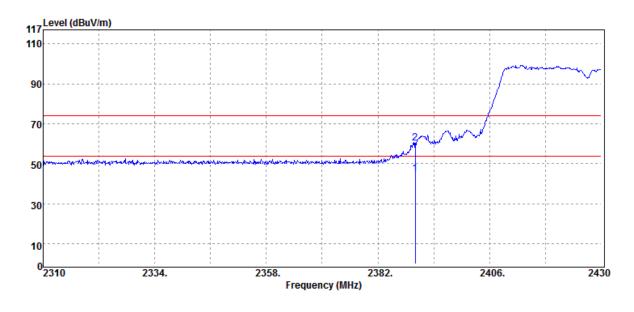
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Operation Band Fundamental Frequency Operation Mode EUT Pol.

:802.11n40 :2427 MHz :Bandedge CH LOW :E2 Plane Test Date:2Temp./Humi.:2Engineer:1Measurement Antenna Pol.:1

:2018-09-26 :21 deg_C / 62 RH :Wei :HORIZONTAL



Freq.	Detector	Spectrum	Factor	Actual	Limit	Margin
	Mode	Reading Level		FS	@3m	
MHz	PK/QP/AV	dBµV	dB	dBµV/m	dBµV/m	dB
2390.00	Average	44.82	0.20	45.02	54.00	-8.98
2390.00	Peak	60.07	0.20	60.27	74.00	-13.73

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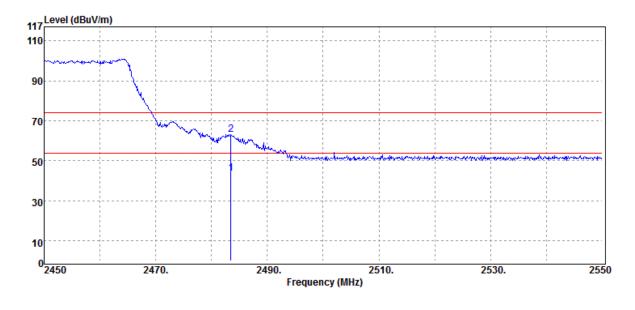
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Operation Band Fundamental Frequency Operation Mode EUT Pol.

:802.11n40 :2447 MHz :Bandedge CH HIGH :E2 Plane Test Date:2018Temp./Humi.:21 dEngineer:WeiMeasurement Antenna Pol.:VER

:2018-09-26 :21 deg_C / 62 RH :Wei :VERTICAL



Freq.	Detector	Spectrum	Factor	Actual	Limit	Margin
	Mode	Reading Level		FS	@3m	
MHz	PK/QP/AV	dBµV	dB	dBµV/m	dBµV/m	dB
2483.50	Average	43.38	0.53	43.91	54.00	-10.09
2483.50	Peak	62.42	0.53	62.95	74.00	-11.05

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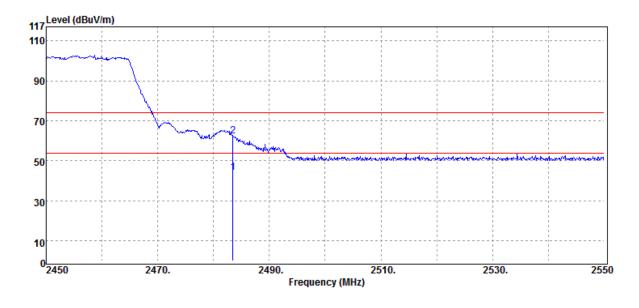
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Operation Band Fundamental Frequency Operation Mode EUT Pol.

:802.11n40 :2447 MHz :Bandedge CH HIGH :E2 Plane Test Date:20Temp./Humi.:21Engineer:WMeasurement Antenna Pol.:H0

:2018-09-26 :21 deg_C / 62 RH :Wei :HORIZONTAL



Freq.	Detector	Spectrum	Factor	Actual	Limit	Margin
	Mode	Reading Level		FS	@3m	
MHz	PK/QP/AV	dBµV	dB	dBµV/m	dBµV/m	dB
2483.50	Average	43.48	0.53	44.01	54.00	-9.99
2483.50	Peak	61.81	0.53	62.34	74.00	-11.66

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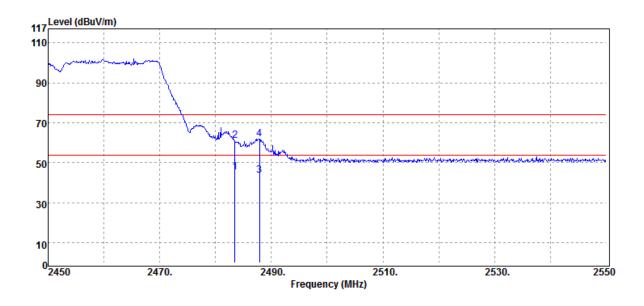
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Operation Band:8Fundamental Frequency:2Operation Mode:8EUT Pol.:8

:802.11n40 :2452 MHz :Bandedge CH HIGH :E2 Plane Test Date:2018-09Temp./Humi.:21 deg_Engineer:WeiMeasurement Antenna Pol.:VERTIC

:2018-09-26 :21 deg_C / 62 RH :Wei :VERTICAL



Freq.	Detector	Spectrum	Factor	Actual	Limit	Margin
	Mode	Reading Level		FS	@3m	
MHz	PK/QP/AV	dBµV	dB	dBµV/m	dBµV/m	dB
2483.50	Average	44.76	0.53	45.29	54.00	-8.71
2483.50	Peak	60.78	0.53	61.31	74.00	-12.69
2487.90	Average	43.11	0.54	43.65	54.00	-10.35
2487.90	Peak	61.58	0.54	62.12	74.00	-11.88

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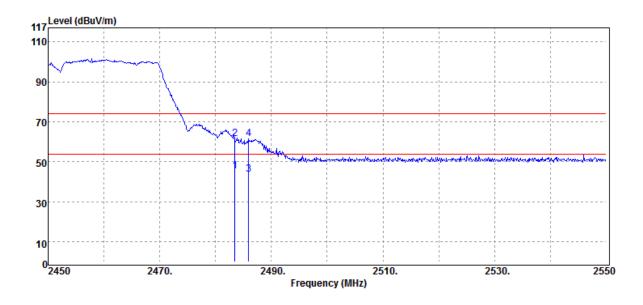
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Operation Band : Fundamental Frequency : Operation Mode : EUT Pol. :

:802.11n40 :2452 MHz :Bandedge CH HIGH :E2 Plane Test Date:20Temp./Humi.:27Engineer:WMeasurement Antenna Pol.:H0

:2018-09-26 :21 deg_C / 62 RH :Wei :HORIZONTAL



Freq.	Detector Mode	Spectrum Reading Level	Factor	Actual FS	Limit @3m	Margin
MHz	PK/QP/AV	dBµV	dB	dBµV/m	dBµV/m	dB
2483.50	Average	44.70	0.53	45.23	54.00	-8.77
2483.50	Peak	60.90	0.53	61.43	74.00	-12.57
2485.90	Average	43.20	0.54	43.74	54.00	-10.26
2485.90	Peak	61.03	0.54	61.57	74.00	-12.43

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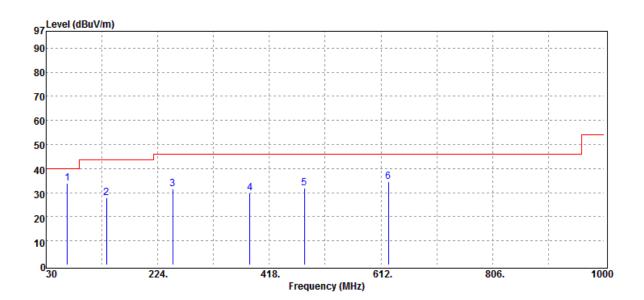


Below 1GHz Worst-Case Data:

Radiated Spurious Emission Measurement Result

External Antenna (Type: Dipole antenna, Model no: WTS2405)

Operation Band	:802.11g	Test Date	:2018-09-27
Fundamental Frequency	:2437 MHz	Temp./Humi.	:21 deg_C / 62 RH
Operation Mode	:Tx CH MID	Engineer	:Wei
EUT Pol.	:E2 Plane	Measurement Antenna Pol.	:VERTICAL



Freq.	Detector Mode	Spectrum Reading Level	Factor	Actual FS	Limit @3m	Margin
MHz	PK/QP/AV	dBµV	dB	dBµV/m	dBµV/m	dB
66.86	Peak	43.17	-9.42	33.75	40.00	-6.25
134.76	Peak	36.32	-8.55	27.77	43.50	-15.73
250.19	Peak	39.09	-7.40	31.69	46.00	-14.31
384.05	Peak	33.63	-3.79	29.84	46.00	-16.16
479.11	Peak	34.12	-2.10	32.02	46.00	-13.98
624.61	Peak	33.80	0.71	34.51	46.00	-11.49

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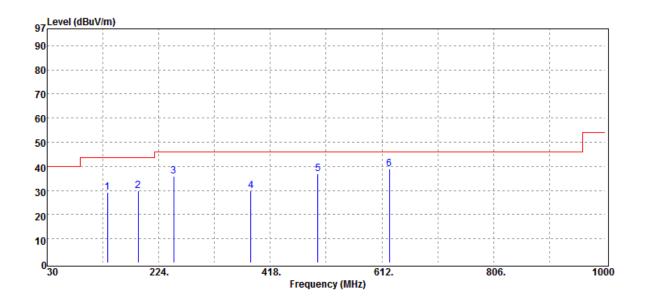
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Operation Band:802.11gFundamental Frequency:2437 MHzOperation Mode:Tx CH MIDEUT Pol.:E2 Plane

Test Date:2018Temp./Humi.:21 deEngineer:WeiMeasurement Antenna Pol.:HOR

:2018-09-27 :21 deg_C / 62 RH :Wei :HORIZONTAL



Freq.	Detector Mode	Spectrum Reading Level	Factor	Actual FS	Limit @3m	Margin
MHz	PK/QP/AV	dBµV	dB	dBµV/m	dBµV/m	dB
134.76	Peak	37.71	-8.55	29.16	43.50	-14.34
188.11	Peak	38.81	-8.84	29.97	43.50	-13.53
250.19	Peak	43.37	-7.40	35.97	46.00	-10.03
384.05	Peak	33.68	-3.79	29.89	46.00	-16.11
500.45	Peak	39.44	-2.36	37.08	46.00	-8.92
624.61	Peak	38.39	0.71	39.10	46.00	-6.90

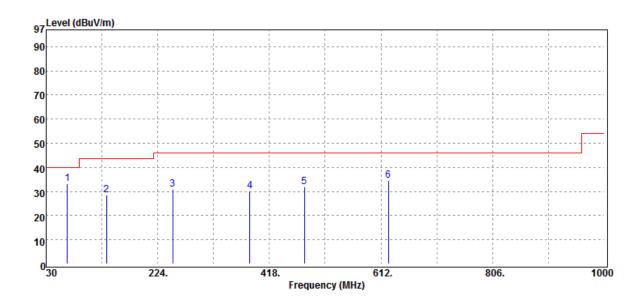
Unless otherwise stated the results shown in this test report refer only to the sample(s) tested and such sample(s) are retained for 90 days only.

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:802.11n40 **Operation Band** Test Date :2018-09-27 **Fundamental Frequency** :21 deg_C / 62 RH :2437 MHz Temp./Humi. **Operation Mode** :Tx CH MID Engineer :Wei EUT Pol. :E2 Plane Measurement Antenna Pol. :VERTICAL



Freq.	Detector Mode	Spectrum Reading Level	Factor	Actual FS	Limit @3m	Margin
MHz	PK/QP/AV	dBµV	dB	dBµV/m	dBµV/m	dB
66.86	Peak	42.74	-9.42	33.32	40.00	-6.68
134.76	Peak	37.05	-8.55	28.50	43.50	-15.00
250.19	Peak	38.20	-7.40	30.80	46.00	-15.20
384.05	Peak	34.03	-3.79	30.24	46.00	-15.76
479.11	Peak	33.94	-2.10	31.84	46.00	-14.16
624.61	Peak	33.74	0.71	34.45	46.00	-11.55

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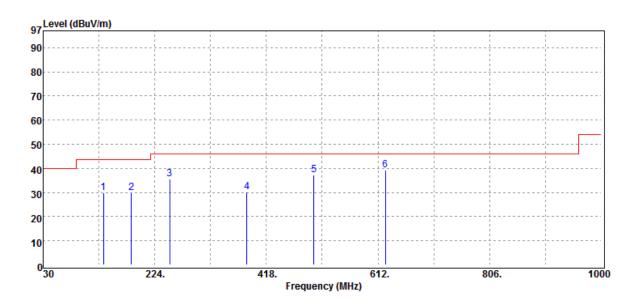
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Operation Band:802.11n40Test DateFundamental Frequency:2437 MHzTemp./Humi.Operation Mode:Tx CH MIDEngineerEUT Pol.:E2 PlaneMeasurement Antenna Pol.

:2018-09-27 :21 deg_C / 62 RH :Wei :HORIZONTAL

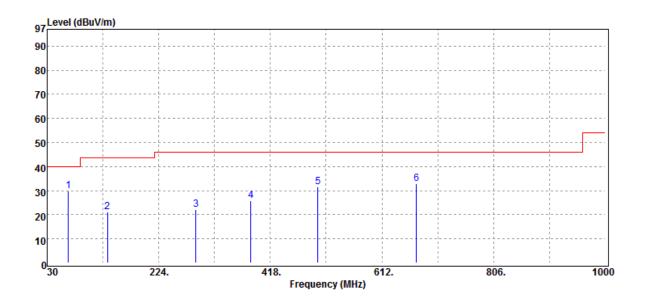


Freq.	Detector Mode	Spectrum Reading Level	Factor	Actual FS	Limit @3m	Margin
MHz	PK/QP/AV	dBµV	dB	dBµV/m	dBµV/m	dB
134.76	Peak	38.40	-8.55	29.85	43.50	-13.65
183.26	Peak	38.20	-8.47	29.73	43.50	-13.77
250.19	Peak	43.08	-7.40	35.68	46.00	-10.32
384.05	Peak	34.12	-3.79	30.33	46.00	-15.67
500.45	Peak	39.49	-2.36	37.13	46.00	-8.87
624.61	Peak	38.51	0.71	39.22	46.00	-6.78

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Internal Antenna (Type: Printed antenna, Model no: N/A)



Freq.	Detector Mode	Spectrum Reading Level	Factor	Actual FS	Limit @3m	Margin
MHz	PK/QP/AV	dBµV	dB	dBµV/m	dBµV/m	dB
66.86	Peak	39.45	-9.42	30.03	40.00	-9.97
134.76	Peak	29.55	-8.55	21.00	43.50	-22.50
288.99	Peak	27.86	-5.86	22.00	46.00	-24.00
384.05	Peak	29.65	-3.79	25.86	46.00	-20.14
500.45	Peak	33.94	-2.36	31.58	46.00	-14.42
672.14	Peak	31.96	0.99	32.95	46.00	-13.05

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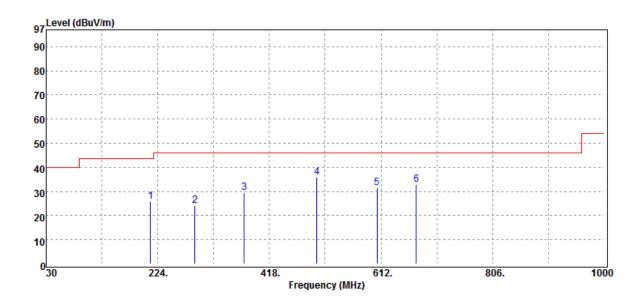
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Operation Band:802.11gFundamental Frequency:2437 MHzOperation Mode:Tx CH MIDEUT Pol.:E2 Plane

Test Date:20'Temp./Humi.:21Engineer:WeMeasurement Antenna Pol.:HC

:2018-09-28 :21 deg_C / 62 RH :Wei :HORIZONTAL



Freq.	Detector Mode	Spectrum Reading Level	Factor	Actual FS	Limit @3m	Margin
MHz	PK/QP/AV	dBµV	dB	dBµV/m	dBµV/m	dB
211.39	Peak	34.97	-9.23	25.74	43.50	-17.76
288.99	Peak	29.88	-5.86	24.02	46.00	-21.98
374.35	Peak	33.60	-3.96	29.64	46.00	-16.36
500.45	Peak	38.44	-2.36	36.08	46.00	-9.92
605.21	Peak	32.38	-0.66	31.72	46.00	-14.28
673.11	Peak	31.74	1.11	32.85	46.00	-13.15

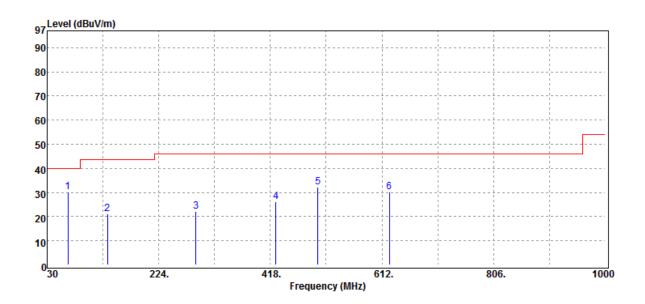
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:802.11n40 **Operation Band** Test Date :2018-09-28 **Fundamental Frequency** :21 deg_C / 62 RH :2437 MHz Temp./Humi. **Operation Mode** :Tx CH MID Engineer :Wei EUT Pol. :E2 Plane Measurement Antenna Pol. :VERTICAL



Freq.	Detector Mode	Spectrum Reading Level	Factor	Actual FS	Limit @3m	Margin
MHz	PK/QP/AV	dBµV	dB	dBµV/m	dBµV/m	dB
65.89	Peak	39.25	-9.20	30.05	40.00	-9.95
134.76	Peak	29.76	-8.55	21.21	43.50	-22.29
288.99	Peak	28.06	-5.86	22.20	46.00	-23.80
427.70	Peak	28.98	-2.88	26.10	46.00	-19.90
500.45	Peak	34.45	-2.36	32.09	46.00	-13.91
624.61	Peak	29.41	0.71	30.12	46.00	-15.88

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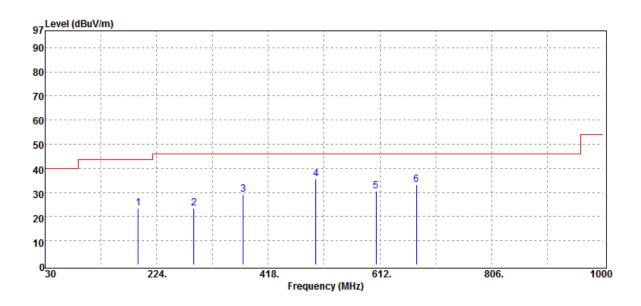
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Operation Band:802.11n40Test DateFundamental Frequency:2437 MHzTemp./Humi.Operation Mode:Tx CH MIDEngineerEUT Pol.:E2 PlaneMeasurement Antenna Pol.

:2018-09-28 :21 deg_C / 62 RH :Wei :HORIZONTAL



Freq.	Detector Mode	Spectrum Reading Level	Factor	Actual FS	Limit @3m	Margin
MHz	PK/QP/AV	dBµV	dB	dBµV/m	dBµV/m	dB
191.99	Peak	32.59	-9.03	23.56	43.50	-19.94
288.99	Peak	29.28	-5.86	23.42	46.00	-22.58
374.35	Peak	33.25	-3.96	29.29	46.00	-16.71
500.45	Peak	38.04	-2.36	35.68	46.00	-10.32
605.21	Peak	31.26	-0.66	30.60	46.00	-15.40
675.05	Peak	31.85	1.37	33.22	46.00	-12.78

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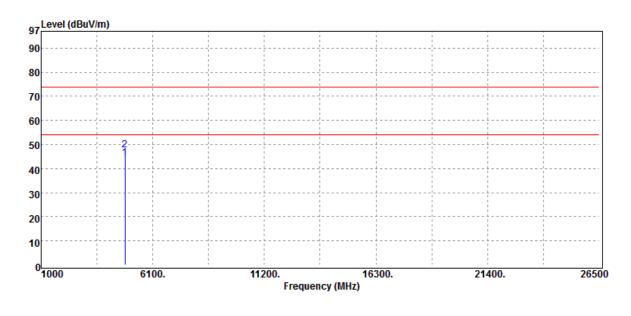


Above 1GHz Data:

Radiated Spurious Emission Measurement Result

External Antenna (Type: Dipole antenna, Model no: WTS2405)

Operation Band	:802.11b	Test Date	:2018-09-18
Fundamental Frequency	:2412 MHz	Temp./Humi.	:21 deg_C / 62 RH
Operation Mode	:Tx CH LOW	Engineer	:Wei
EUT Pol.	:E2 Plane	Measurement Antenna Pol.	:VERTICAL



Freq.	Detector	Spectrum	Factor	Actual	Limit	Margin
	Mode	Reading Level		FS	@3m	
MHz	PK/QP/AV	dBµV	dB	dBµV/m	dBµV/m	dB
4824.00	Average	38.55	5.61	44.16	54.00	-9.84
4824.00	Peak	42.11	5.61	47.72	74.00	-26.28

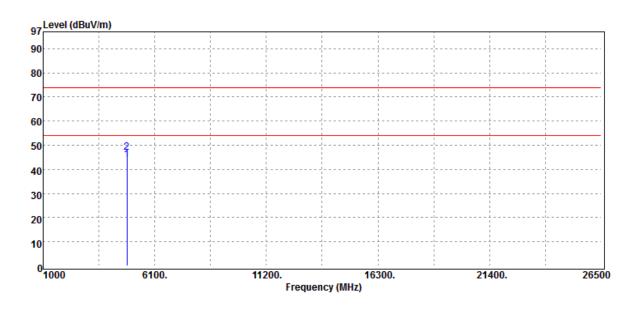
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Operation Band :802.11b Test Date :2018-09-18 **Fundamental Frequency** :21 deg_C / 62 RH :2412 MHz Temp./Humi. **Operation Mode** :Tx CH LOW Engineer :Wei EUT Pol. :E2 Plane Measurement Antenna Pol. :HORIZONTAL



Freq.	Detector	Spectrum	Factor	Actual	Limit	Margin
	Mode	Reading Level		FS	@3m	
MHz	PK/QP/AV	dBµV	dB	dBµV/m	dBµV/m	dB
4824.00	Average	38.25	5.61	43.86	54.00	-10.14
4824.00	Peak	41.23	5.61	46.84	74.00	-27.16

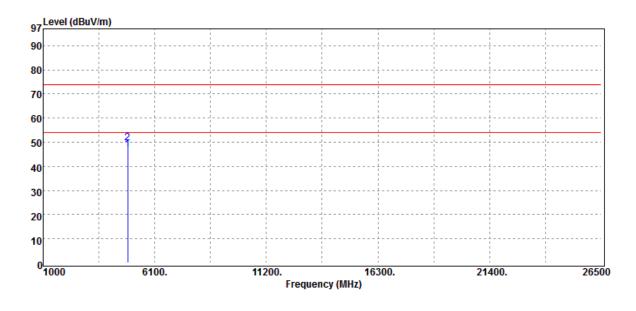
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Operation Band	:802.11b	Test Date	:2018-09-18
Fundamental Frequency	:2437 MHz	Temp./Humi.	:21 deg_C / 62 RH
Operation Mode	:Tx CH MID	Engineer	:Wei
EUT Pol.	:E2 Plane	Measurement Antenna Pol.	:VERTICAL



Freq.	Detector	Spectrum	Factor	Actual	Limit	Margin
	Mode	Reading Level		FS	@3m	
MHz	PK/QP/AV	dBµV	dB	dBµV/m	dBµV/m	dB
4874.00	Average	41.18	5.85	47.03	54.00	-6.97
4874.00	Peak	43.75	5.85	49.60	74.00	-24.40

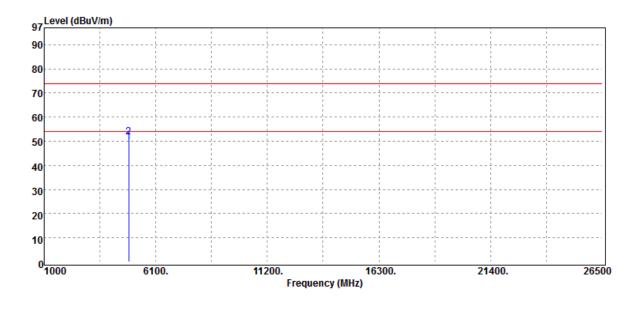
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Operation Band	:802.11b	Test Date	:2018-09-18
Fundamental Frequency	:2437 MHz	Temp./Humi.	:21 deg_C / 62 RH
Operation Mode	:Tx CH MID	Engineer	:Wei
EUT Pol.	:E2 Plane	Measurement Antenna Pol.	:HORIZONTAL



Freq.	Detector	Spectrum	Factor	Actual	Limit	Margin
	Mode	Reading Level		FS	@3m	
MHz	PK/QP/AV	dBµV	dB	dBµV/m	dBµV/m	dB
4874.00	Average	43.85	5.85	49.70	54.00	-4.30
4874.00	Peak	45.97	5.85	51.82	74.00	-22.18

Unless otherwise stated the results shown in this test report refer only to the sample(s) tested and such sample(s) are retained for 90 days only.

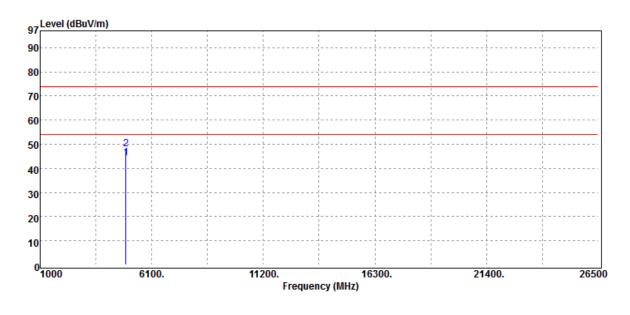
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Operation Band	:802.11b	Test Date
Fundamental Frequency	:2462 MHz	Temp./Humi.
Operation Mode	:Tx CH HIGH	Engineer
EUT Pol.	:E2 Plane	Measurement Antenna Pol.

:2018-09-18 :21 deg_C / 62 RH :Wei :VERTICAL



Freq.	Detector	Spectrum	Factor	Actual	Limit	Margin
	Mode	Reading Level		FS	@3m	
MHz	PK/QP/AV	dBµV	dB	dBµV/m	dBµV/m	dB
4924.00	Average	38.37	5.82	44.19	54.00	-9.81
4924.00	Peak	42.22	5.82	48.04	74.00	-25.96

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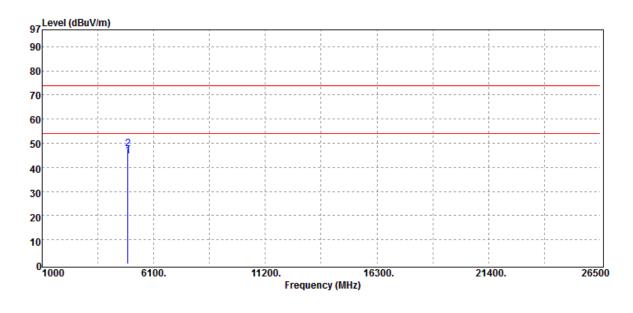
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Operation Band:802.11bFundamental Frequency:2462 MHzOperation Mode:Tx CH HIGHEUT Pol.:E2 Plane

Test Date:20Temp./Humi.:21Engineer:WMeasurement Antenna Pol.:H0

:2018-09-18 :21 deg_C / 62 RH :Wei :HORIZONTAL



Freq.	Detector	Spectrum	Factor	Actual	Limit	Margin
	Mode	Reading Level		FS	@3m	
MHz	PK/QP/AV	dBµV	dB	dBµV/m	dBµV/m	dB
4924.00	Average	38.97	5.82	44.79	54.00	-9.21
4924.00	Peak	41.87	5.82	47.69	74.00	-26.31

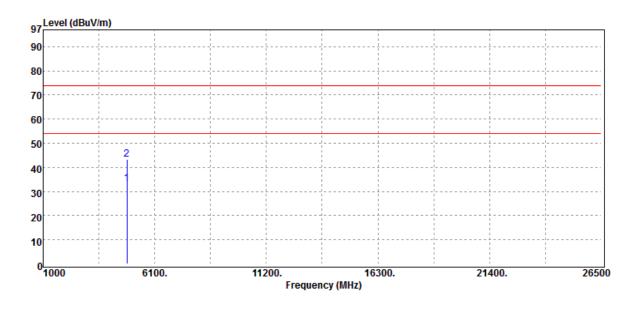
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RH





Freq.	Detector	Spectrum	Factor	Actual	Limit	Margin
	Mode	Reading Level		FS	@3m	
MHz	PK/QP/AV	dBµV	dB	dBµV/m	dBµV/m	dB
4824.00	Average	27.64	5.61	33.25	54.00	-20.75
4824.00	Peak	37.73	5.61	43.34	74.00	-30.66

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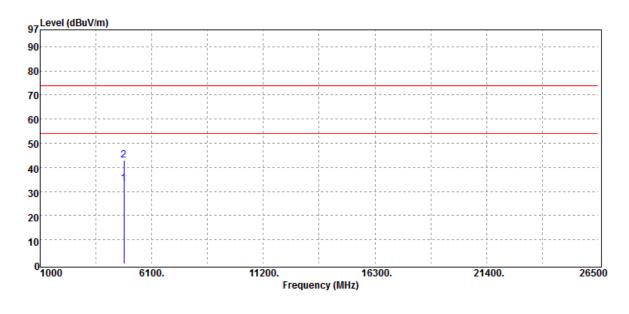
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Operation Band:802.11gTest DateFundamental Frequency:2412 MHzTemp./Humi.Operation Mode:Tx CH LOWEngineerEUT Pol.:E2 PlaneMeasurement Antenna Pol.

:2018-09-18 :21 deg_C / 62 RH :Wei :HORIZONTAL



Freq.	Detector	Spectrum	Factor	Actual	Limit	Margin
	Mode	Reading Level		FS	@3m	
MHz	PK/QP/AV	dBµV	dB	dBµV/m	dBµV/m	dB
4824.00	Average	27.70	5.61	33.31	54.00	-20.69
4824.00	Peak	37.39	5.61	43.00	74.00	-31.00

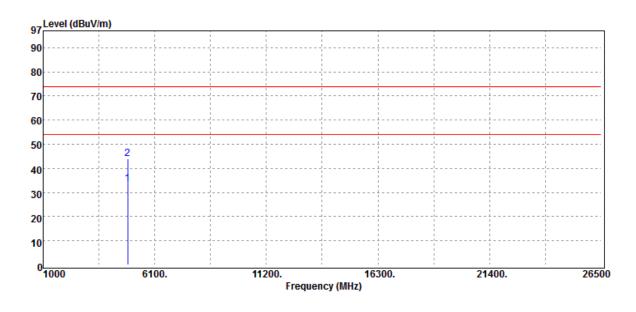
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Operation Band :802.11g Test Date :2018-09-18 **Fundamental Frequency** :2437 MHz Temp./Humi. :21 deg_C / 62 RH **Operation Mode** :Tx CH MID Engineer :Wei EUT Pol. :E2 Plane Measurement Antenna Pol. :VERTICAL



Freq.	Detector	Spectrum	Factor	Actual	Limit	Margin
	Mode	Reading Level		FS	@3m	
MHz	PK/QP/AV	dBµV	dB	dBµV/m	dBµV/m	dB
4874.00	Average	27.62	5.85	33.47	54.00	-20.53
4874.00	Peak	37.96	5.85	43.81	74.00	-30.19

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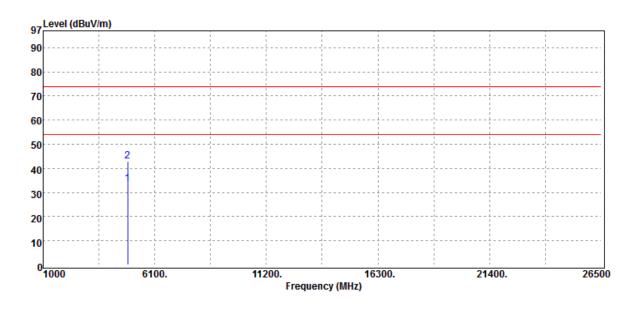
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Operation Band :802.11g Test Date :2018-09-18 **Fundamental Frequency** :2437 MHz Temp./Humi. :21 deg_C / 62 RH **Operation Mode** :Tx CH MID Engineer :Wei EUT Pol. :E2 Plane Measurement Antenna Pol. :HORIZONTAL



Freq.	Detector	Spectrum	Factor	Actual	Limit	Margin
	Mode	Reading Level		FS	@3m	
MHz	PK/QP/AV	dBµV	dB	dBµV/m	dBµV/m	dB
4874.00	Average	27.72	5.85	33.57	54.00	-20.43
4874.00	Peak	37.26	5.85	43.11	74.00	-30.89

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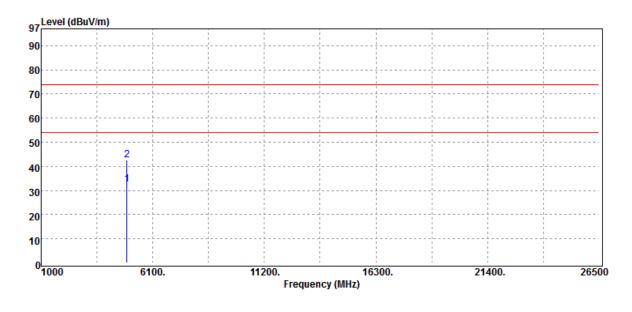
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Operation Band :802.11g **Fundamental Frequency** :2462 MHz :Tx CH HIGH **Operation Mode** EUT Pol. :E2 Plane

Test Date Temp./Humi. Engineer :Wei Measurement Antenna Pol. :VERTICAL

:2018-09-18 :21 deg_C / 62 RH



Freq.	Detector	Spectrum	Factor	Actual	Limit	Margin
	Mode	Reading Level		FS	@3m	
MHz	PK/QP/AV	dBµV	dB	dBµV/m	dBµV/m	dB
4924.00	Average	26.74	5.82	32.56	54.00	-21.44
4924.00	Peak	36.81	5.82	42.63	74.00	-31.37

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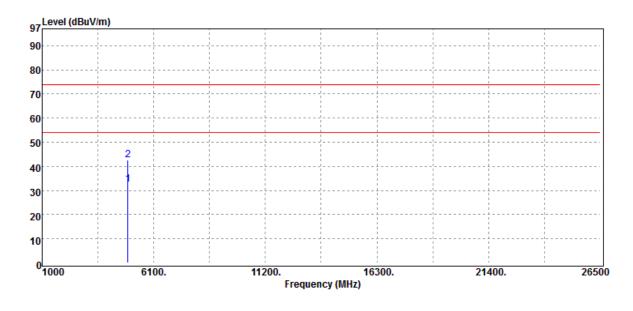
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Operation Band:802.11gFundamental Frequency:2462 MHzOperation Mode:Tx CH HIGHEUT Pol.:E2 Plane

Test Date:20Temp./Humi.:21Engineer:WMeasurement Antenna Pol.:H0

:2018-09-18 :21 deg_C / 62 RH :Wei :HORIZONTAL



Freq.	Detector	Spectrum	Factor	Actual	Limit	Margin
	Mode	Reading Level		FS	@3m	
MHz	PK/QP/AV	dBµV	dB	dBµV/m	dBµV/m	dB
4924.00	Average	26.69	5.82	32.51	54.00	-21.49
4924.00	Peak	36.74	5.82	42.56	74.00	-31.44

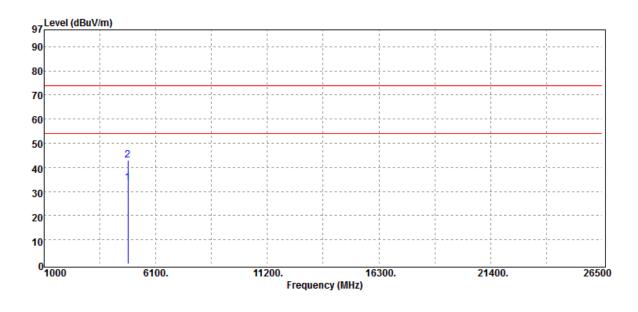
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Operation Band	:802.11n20	Test Date	:2018-09-18
Fundamental Frequency	:2412 MHz	Temp./Humi.	:21 deg_C / 62 RH
Operation Mode	:Tx CH LOW	Engineer	:Wei
EUT Pol.	:E2 Plane	Measurement Antenna Pol.	:VERTICAL



Freq.	Detector	Spectrum	Factor	Actual	Limit	Margin
	Mode	Reading Level		FS	@3m	
MHz	PK/QP/AV	dBµV	dB	dBµV/m	dBµV/m	dB
4824.00	Average	27.85	5.61	33.46	54.00	-20.54
4824.00	Peak	37.29	5.61	42.90	74.00	-31.10

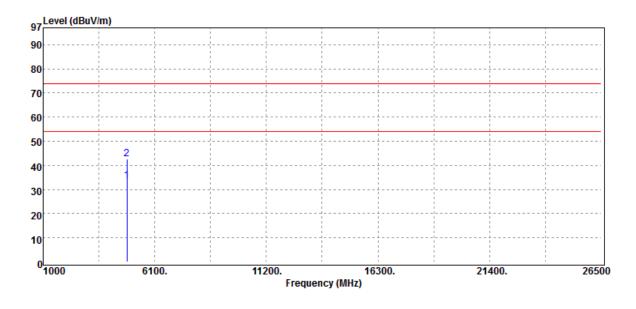
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Operation Mode :Tx CH LOW Engineer :Wei EUT Pol. :E2 Plane Measurement Antenna Pol. :HORIZONTAL	Operation Band Fundamental Frequency Operation Mode EUT Pol.	:802.11n20 :2412 MHz :Tx CH LOW :E2 Plane	Test Date Temp./Humi. Engineer Measurement Antenna Pol.	:2018-09-18 :21 deg_C / 62 RH :Wei :HORIZONTAL
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Freq.	Detector	Spectrum	Factor	Actual	Limit	Margin
	Mode	Reading Level		FS	@3m	
MHz	PK/QP/AV	dBµV	dB	dBµV/m	dBµV/m	dB
4824.00	Average	27.80	5.61	33.41	54.00	-20.59
4824.00	Peak	37.06	5.61	42.67	74.00	-31.33

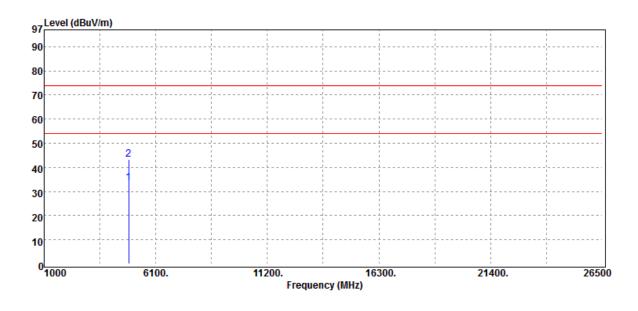
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Operation Band	:802.11n20	Test Date	:2018-09-18
Fundamental Frequency	:2437 MHz	Temp./Humi.	:21 deg_C / 62 RH
Operation Mode	:Tx CH MID	Engineer	:Wei
EUT Pol.	:E2 Plane	Measurement Antenna Pol.	:VERTICAL



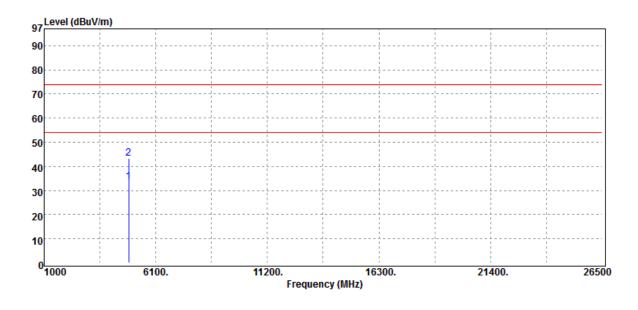
Freq.	Detector	Spectrum	Factor	Actual	Limit	Margin
	Mode	Reading Level		FS	@3m	
MHz	PK/QP/AV	dBµV	dB	dBµV/m	dBµV/m	dB
4874.00	Average	27.72	5.85	33.57	54.00	-20.43
4874.00	Peak	37.31	5.85	43.16	74.00	-30.84

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Freq.	Detector	Spectrum	Factor	Actual	Limit	Margin
	Mode	Reading Level		FS	@3m	
MHz	PK/QP/AV	dBµV	dB	dBµV/m	dBµV/m	dB
4874.00	Average	27.82	5.85	33.67	54.00	-20.33
4874.00	Peak	37.43	5.85	43.28	74.00	-30.72

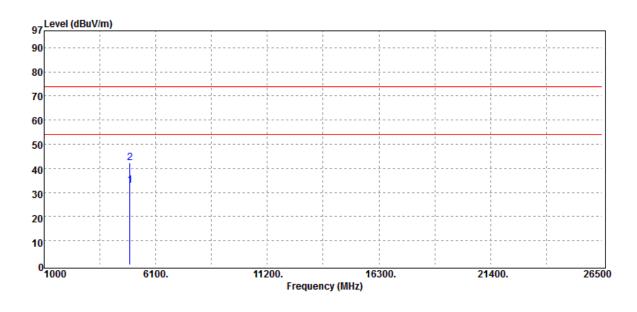
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:802.11n20 **Operation Band** Test Date :2018-09-18 Fundamental Frequency :2462 MHz Temp./Humi. :21 deg_C / 62 RH **Operation Mode** :Tx CH HIGH :Wei Engineer EUT Pol. :E2 Plane Measurement Antenna Pol. :VERTICAL



Freq.	Detector	Spectrum	Factor	Actual	Limit	Margin
	Mode	Reading Level		FS	@3m	
MHz	PK/QP/AV	dBµV	dB	dBµV/m	dBµV/m	dB
4924.00	Average	26.93	5.82	32.75	54.00	-21.25
4924.00	Peak	36.59	5.82	42.41	74.00	-31.59

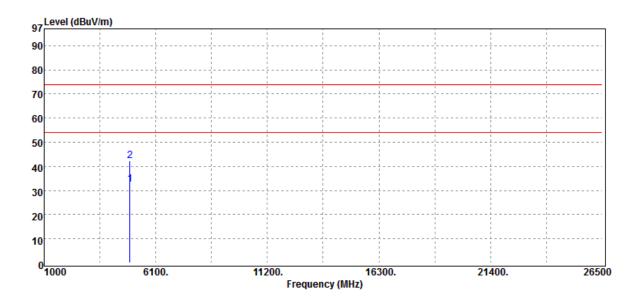
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Operation Band	:802.11n20	Test Date	:2018-09-18
Fundamental Frequency	:2462 MHz	Temp./Humi.	:21 deg_C / 62 RH
Operation Mode	:Tx CH HIGH	Engineer	:Wei
EUT Pol.	:E2 Plane	Measurement Antenna Pol.	:HORIZONTAL
EUT Pol.	:E2 Plane	Measurement Antenna Pol.	:HORIZONTAL



Freq.	Detector	Spectrum	Factor	Actual	Limit	Margin
	Mode	Reading Level		FS	@3m	
MHz	PK/QP/AV	dBµV	dB	dBµV/m	dBµV/m	dB
4924.00	Average	26.75	5.82	32.57	54.00	-21.43
4924.00	Peak	36.43	5.82	42.25	74.00	-31.75

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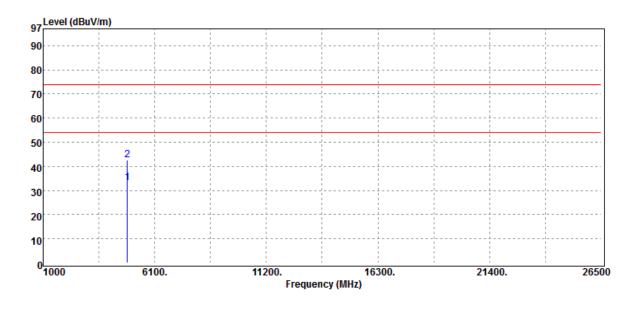
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Operation Band	:802.11n40	Test Date	:2018-09-18
Fundamental Frequency	:2422 MHz	Temp./Humi.	:21 deg_C / 62 RH
Operation Mode	:Tx CH LOW	Engineer	:Wei
EUT Pol.	:E2 Plane	Measurement Antenna Pol.	:VERTICAL



Freq.	Detector	Spectrum	Factor	Actual	Limit	Margin
	Mode	Reading Level		FS	@3m	
MHz	PK/QP/AV	dBµV	dB	dBµV/m	dBµV/m	dB
4844.00	Average	27.71	5.60	33.31	54.00	-20.69
4844.00	Peak	37.18	5.60	42.78	74.00	-31.22

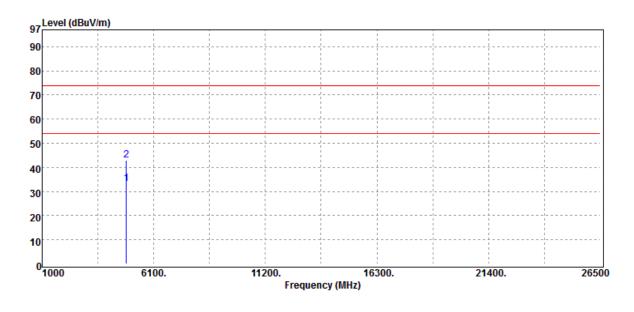
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:802.11n40 **Operation Band** Test Date :2018-09-18 Fundamental Frequency :2422 MHz :21 deg_C / 62 RH Temp./Humi. **Operation Mode** :Tx CH LOW Engineer :Wei EUT Pol. :E2 Plane Measurement Antenna Pol. :HORIZONTAL



Freq.	Detector	Spectrum	Factor	Actual	Limit	Margin
	Mode	Reading Level		FS	@3m	
MHz	PK/QP/AV	dBµV	dB	dBµV/m	dBµV/m	dB
4844.00	Average	27.65	5.60	33.25	54.00	-20.75
4844.00	Peak	37.43	5.60	43.03	74.00	-30.97

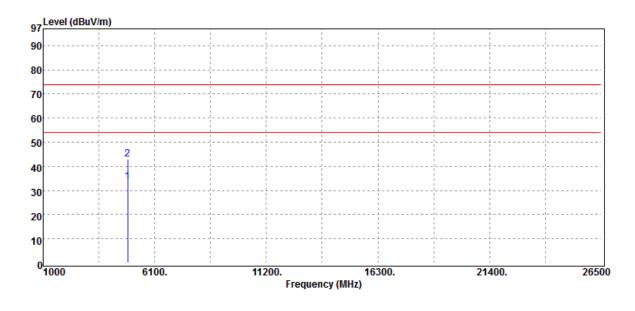
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:802.11n40 :2437 MHz :Tx CH MID :E2 Plane	Test Date Temp./Humi. Engineer Measurement Antenna Pol.	:2018-09-18 :21 deg_C / 62 RH :Wei :VERTICAL
	:2437 MHz :Tx CH MID	:2437 MHz Temp./Humi. :Tx CH MID Engineer



Freq.	Detector	Spectrum	Factor	Actual	Limit	Margin
	Mode	Reading Level		FS	@3m	
MHz	PK/QP/AV	dBµV	dB	dBµV/m	dBµV/m	dB
4874.00	Average	27.81	5.85	33.66	54.00	-20.34
4874.00	Peak	37.23	5.85	43.08	74.00	-30.92

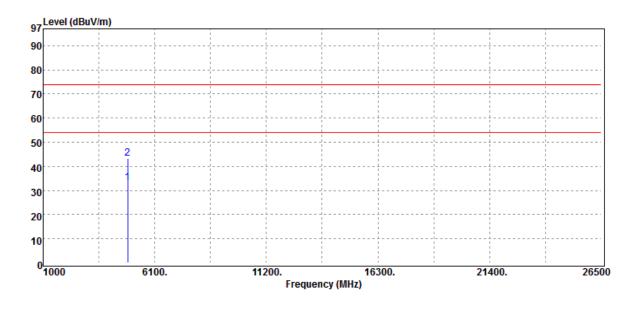
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Operation Band Fundamental Frequency Operation Mode	:802.11n40 :2437 MHz :Tx CH MID :52 Plana	Test Date Temp./Humi. Engineer Maggurgmont Antonno Dol	:2018-09-18 :21 deg_C / 62 RH :Wei
EUT Pol.	:E2 Plane	Measurement Antenna Pol.	:HORIZONTAL



Freq.	Detector	Spectrum	Factor	Actual	Limit	Margin
	Mode	Reading Level		FS	@3m	
MHz	PK/QP/AV	dBµV	dB	dBµV/m	dBµV/m	dB
4874.00	Average	27.21	5.85	33.06	54.00	-20.94
4874.00	Peak	37.58	5.85	43.43	74.00	-30.57

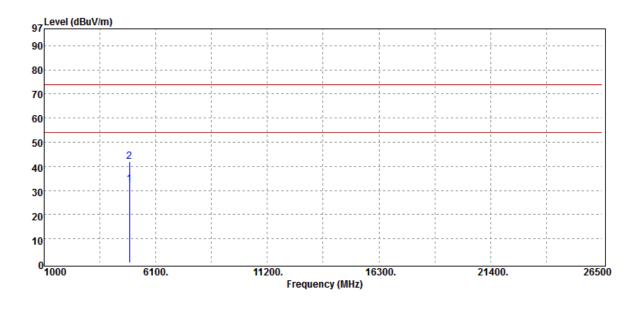
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:802.11n40 :2452 MHz :Tx CH HIGH :E2 Plane	Test Date Temp./Humi. Engineer Measurement Antenna Pol.	:2018-09-18 :21 deg_C / 62 RH :Wei :VERTICAL
	:2452 MHz :Tx CH HIGH	:2452 MHz Temp./Humi. :Tx CH HIGH Engineer



Freq.	Detector	Spectrum	Factor	Actual	Limit	Margin
	Mode	Reading Level		FS	@3m	
MHz	PK/QP/AV	dBµV	dB	dBµV/m	dBµV/m	dB
4904.00	Average	26.59	5.85	32.44	54.00	-21.56
4904.00	Peak	36.17	5.85	42.02	74.00	-31.98

Unless otherwise stated the results shown in this test report refer only to the sample(s) tested and such sample(s) are retained for 90 days only.

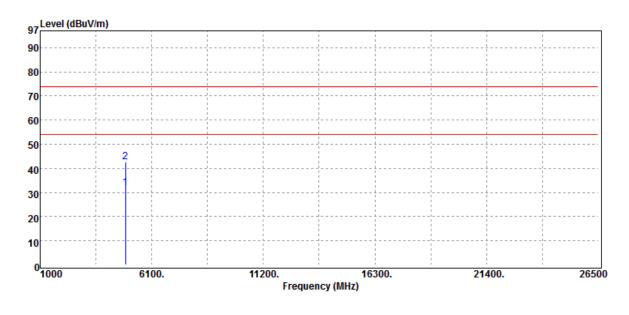
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Operation Band:802.11n40Test DateFundamental Frequency:2452 MHzTemp./Humi.Operation Mode:Tx CH HIGHEngineerEUT Pol.:E2 PlaneMeasurement Antenna Pol.

:2018-09-18 :21 deg_C / 62 RH :Wei :HORIZONTAL



Freq.	Detector	Spectrum	Factor	Actual	Limit	Margin
	Mode	Reading Level		FS	@3m	
MHz	PK/QP/AV	dBµV	dB	dBµV/m	dBµV/m	dB
4904.00	Average	26.18	5.85	32.03	54.00	-21.97
4904.00	Peak	36.82	5.85	42.67	74.00	-31.33

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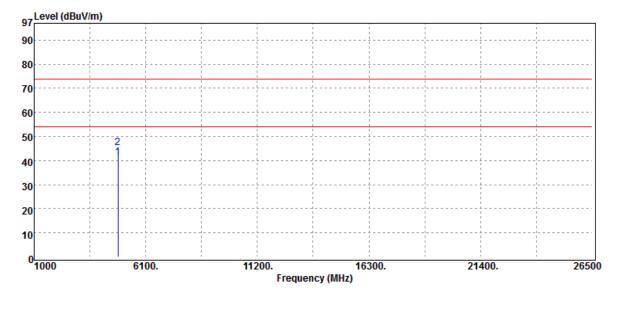


Antenna Pol.

Internal Antenna (Type: Printed antenna, Model no: N/A)

Fundamental Frequency:2412 MHzOperation Mode:Tx CH LOWEUT Pol.:E2 Plane	Temp./Humi. Engineer Measurement /
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:2018-09-28 :21 deg_C / 62 RH :Wei :VERTICAL



	Freq.	Detector	Spectrum	Factor	Actual	Limit	Margin	
		Mode	Reading Level		FS	@3m	_	
_	MHz	PK/QP/AV	dBµV	dB	dBµV/m	dBµV/m	dB	_
	4824.00	Average	35.57	5.61	41.18	54.00	-12.82	-
	4824.00	Peak	39.66	5.61	45.27	74.00	-28.73	

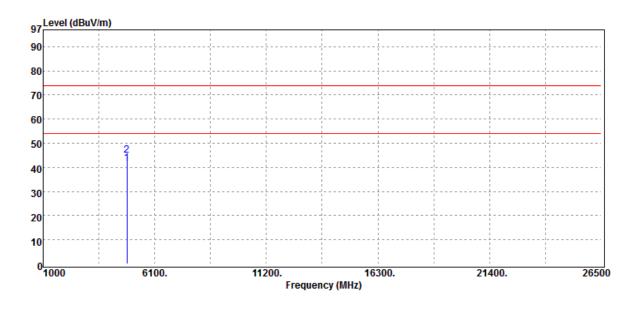
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Operation Band	:802.11b	Test Date	:2018-09-28
Fundamental Frequency	:2412 MHz	Temp./Humi.	:21 deg_C / 62 RH
Operation Mode	:Tx CH LOW	Engineer	:Wei
EUT Pol.	:E2 Plane	Measurement Antenna Pol.	:HORIZONTAL



Freq.	Detector	Spectrum	Factor	Actual	Limit	Margin
	Mode	Reading Level		FS	@3m	
MHz	PK/QP/AV	dBµV	dB	dBµV/m	dBµV/m	dB
4824.00	Average	35.94	5.61	41.55	54.00	-12.45
4824.00	Peak	39.30	5.61	44.91	74.00	-29.09

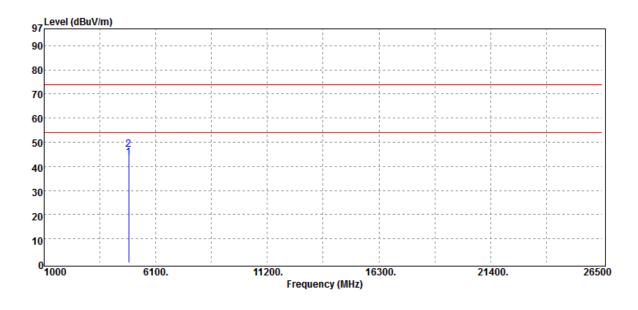
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Operation Band	:802.11b	Test Date	:2018-09-28
Fundamental Frequency	:2437 MHz	Temp./Humi.	:21 deg_C / 62 RH
Operation Mode	:Tx CH MID	Engineer	:Wei
EUT Pol.	:E2 Plane	Measurement Antenna Pol.	:VERTICAL



Freq.	Detector	Spectrum	Factor	Actual	Limit	Margin
	Mode	Reading Level		FS	@3m	
MHz	PK/QP/AV	dBµV	dB	dBµV/m	dBµV/m	dB
4874.00	Average	37.86	5.85	43.71	54.00	-10.29
4874.00	Peak	41.30	5.85	47.15	74.00	-26.85

Unless otherwise stated the results shown in this test report refer only to the sample(s) tested and such sample(s) are retained for 90 days only.

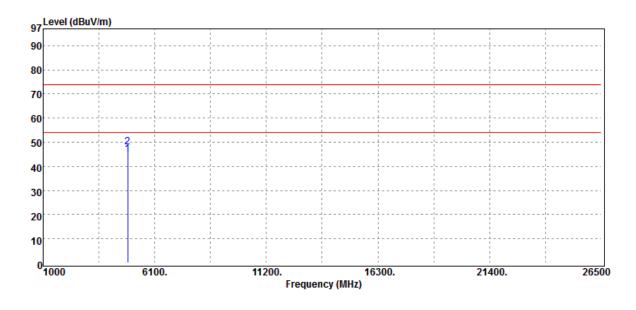
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Operation Mode:Tx CH MIDEngineer:WeiEUT Pol.:E2 PlaneMeasurement Antenna Pol.:HORIZONTAL		_	0	-
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Freq.	Detector	Spectrum	Factor	Actual	Limit	Margin
	Mode	Reading Level		FS	@3m	
MHz	PK/QP/AV	dBµV	dB	dBµV/m	dBµV/m	dB
4874.00	Average	39.14	5.85	44.99	54.00	-9.01
4874.00	Peak	42.30	5.85	48.15	74.00	-25.85

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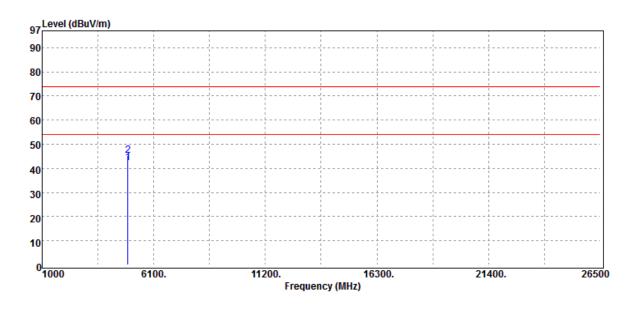
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Operation Band:802.11bTest DateFundamental Frequency:2462 MHzTemp./Humi.Operation Mode:Tx CH HIGHEngineerEUT Pol.:E2 PlaneMeasurement Antenna Pol.

:2018-09-28 :21 deg_C / 62 RH :Wei :VERTICAL



Freq.	Detector	Spectrum	Factor	Actual	Limit	Margin
	Mode	Reading Level		FS	@3m	
MHz	PK/QP/AV	dBµV	dB	dBµV/m	dBµV/m	dB
4924.00	Average	36.36	5.82	42.18	54.00	-11.82
4924.00	Peak	39.59	5.82	45.41	74.00	-28.59

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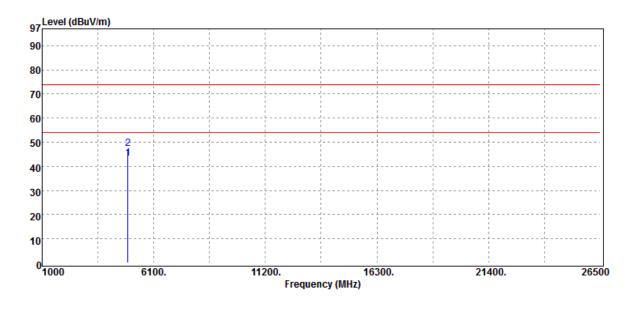
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Operation Band:802.11bFundamental Frequency:2462 MHzOperation Mode:Tx CH HIGHEUT Pol.:E2 Plane

Test Date:20Temp./Humi.:27Engineer:WMeasurement Antenna Pol.:H

:2018-09-28 :21 deg_C / 62 RH :Wei :HORIZONTAL



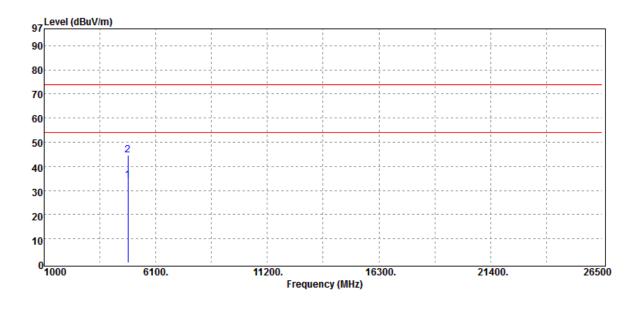
Freq.	Detector	Spectrum	Factor	Actual	Limit	Margin
	Mode	Reading Level		FS	@3m	
MHz	PK/QP/AV	dBµV	dB	dBµV/m	dBµV/m	dB
4924.00	Average	37.35	5.82	43.17	54.00	-10.83
4924.00	Peak	41.43	5.82	47.25	74.00	-26.75

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Freq.	Detector	Spectrum	Factor	Actual	Limit	Margin
	Mode	Reading Level		FS	@3m	
MHz	PK/QP/AV	dBµV	dB	dBµV/m	dBµV/m	dB
4824.00	Average	28.74	5.61	34.35	54.00	-19.65
4824.00	Peak	38.97	5.61	44.58	74.00	-29.42

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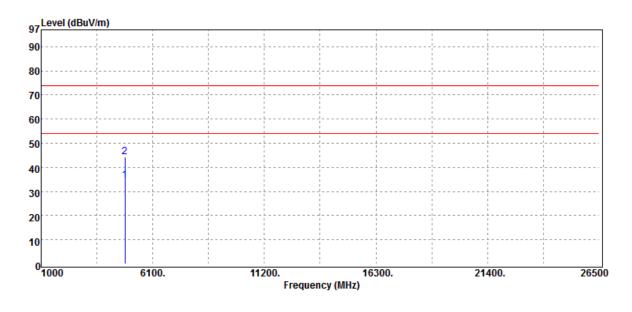
Report No.:ER/2018/90025 Page 160 of 182



Operation Band:802.11gTestFundamental Frequency:2412 MHzTertOperation Mode:Tx CH LOWEngEUT Pol.:E2 PlaneMe

Test Date:20Temp./Humi.:21Engineer:WMeasurement Antenna Pol.:H0

:2018-09-28 :21 deg_C / 62 RH :Wei :HORIZONTAL



Freq.	Detector	Spectrum	Factor	Actual	Limit	Margin
	Mode	Reading Level		FS	@3m	
MHz	PK/QP/AV	dBµV	dB	dBµV/m	dBµV/m	dB
4824.00	Average	28.92	5.61	34.53	54.00	-19.47
4824.00	Peak	38.58	5.61	44.19	74.00	-29.81

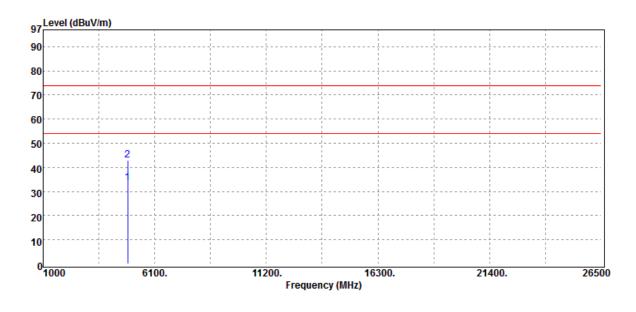
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Freq.	Detector	Spectrum	Factor	Actual	Limit	Margin
	Mode	Reading Level		FS	@3m	
MHz	PK/QP/AV	dBµV	dB	dBµV/m	dBµV/m	dB
4874.00	Average	27.77	5.85	33.62	54.00	-20.38
4874.00	Peak	37.28	5.85	43.13	74.00	-30.87

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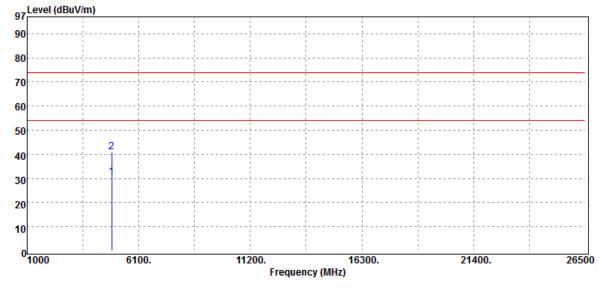
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Operation Band :802.11g Test Date :2018-09-28 Fundamental Frequency :2437 MHz Temp./Humi. **Operation Mode** :Tx CH MID Engineer EUT Pol. :E2 Plane Measurement Antenna Pol.

:21 deg_C / 62 RH :Wei :HORIZONTAL



Freq.	Detector	Spectrum	Factor	Actual	Limit	Margin
	Mode	Reading Level		FS	@3m	
MHz	PK/QP/AV	dBµV	dB	dBµV/m	dBµV/m	dB
4874.00	Average	24.82	5.85	30.67	54.00	-23.33
4874.00	Peak	34.98	5.85	40.83	74.00	-33.17

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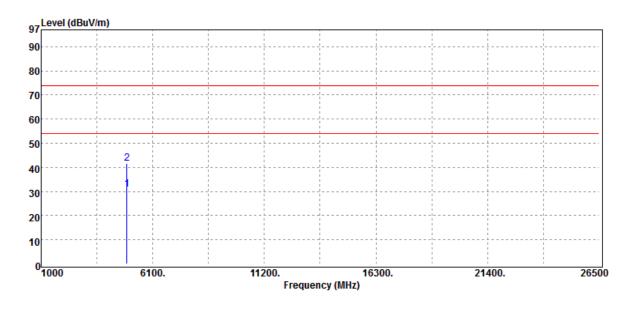
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Operation Band :802.11g Fundamental Frequency :2462 MHz :Tx CH HIGH **Operation Mode** EUT Pol. :E2 Plane

Test Date :2018-09-28 Temp./Humi. Engineer :Wei Measurement Antenna Pol. :VERTICAL

:21 deg_C / 62 RH



Freq.	Detector	Spectrum	Factor	Actual	Limit	Margin
	Mode	Reading Level		FS	@3m	
MHz	PK/QP/AV	dBµV	dB	dBµV/m	dBµV/m	dB
4924.00	Average	25.22	5.82	31.04	54.00	-22.96
4924.00	Peak	35.63	5.82	41.45	74.00	-32.55

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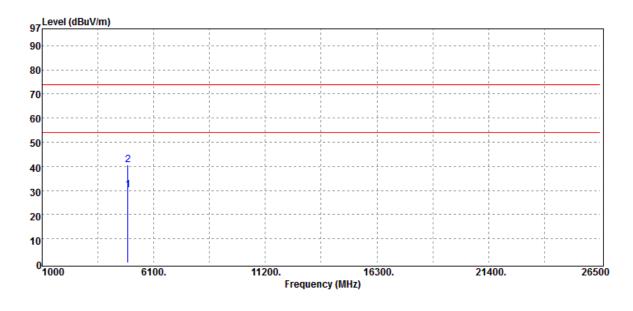
Report No.:ER/2018/90025 Page 164 of 182



Operation Band:802.11gFundamental Frequency:2462 MHzOperation Mode:Tx CH HIGHEUT Pol.:E2 Plane

Test Date:20Temp./Humi.:21Engineer:WMeasurement Antenna Pol.:H0

:2018-09-28 :21 deg_C / 62 RH :Wei :HORIZONTAL



Freq.	Detector	Spectrum	Factor	Actual	Limit	Margin
	Mode	Reading Level		FS	@3m	
MHz	PK/QP/AV	dBµV	dB	dBµV/m	dBµV/m	dB
4924.00	Average	24.49	5.82	30.31	54.00	-23.69
4924.00	Peak	34.83	5.82	40.65	74.00	-33.35

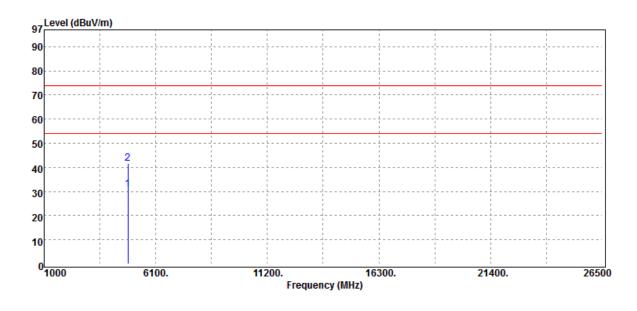
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Operation Band Fundamental Frequency Operation Mode EUT Pol.	:802.11n20 :2412 MHz :Tx CH LOW :E2 Plane	Test Date Temp./Humi. Engineer Measurement Antenna Pol.	:2018-09-28 :21 deg_C / 62 RH :Wei :VERTICAL
EOTTOI:		Measurement Antenna i oi.	VERTICAL
Operation Mode	:Tx CH LOW	Engineer	:Wei



Freq.	Detector	Spectrum	Factor	Actual	Limit	Margin
	Mode	Reading Level		FS	@3m	
MHz	PK/QP/AV	dBµV	dB	dBµV/m	dBµV/m	dB
4824.00	Average	25.22	5.61	30.83	54.00	-23.17
4824.00	Peak	35.92	5.61	41.53	74.00	-32.47

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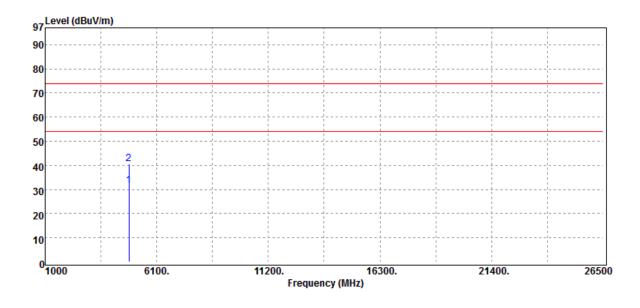
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EUT POI. EZ Plane Measurement Antenna POI. HORIZONTAL	Operation Band	:802.11n20	Test Date	:2018-09-28
	Fundamental Frequency	:2412 MHz	Temp./Humi.	:21 deg_C / 62 RH
	Operation Mode	:Tx CH LOW	Engineer	:Wei
	EUT Pol.	:E2 Plane	Measurement Antenna Pol.	:HORIZONTAL



Freq.	Detector	Spectrum	Factor	Actual	Limit	Margin
	Mode	Reading Level		FS	@3m	
MHz	PK/QP/AV	dBµV	dB	dBµV/m	dBµV/m	dB
4824.00	Average	25.86	5.61	31.47	54.00	-22.53
4824.00	Peak	34.98	5.61	40.59	74.00	-33.41

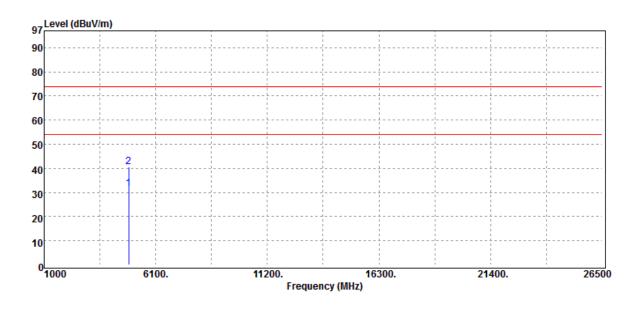
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Operation Band	:802.11n20	Test Date	:2018-09-28
Fundamental Frequency	:2437 MHz	Temp./Humi.	:21 deg_C / 62 RH
Operation Mode	:Tx CH MID	Engineer	:Wei
EUT Pol.	:E2 Plane	Measurement Antenna Pol.	:VERTICAL
EUT Pol.	:E2 Plane	Measurement Antenna Pol.	:VERTICAL



Freq.	Detector	Spectrum	Factor	Actual	Limit	Margin
	Mode	Reading Level		FS	@3m	
MHz	PK/QP/AV	dBµV	dB	dBµV/m	dBµV/m	dB
4874.00	Average	25.82	5.85	31.67	54.00	-22.33
4874.00	Peak	34.70	5.85	40.55	74.00	-33.45

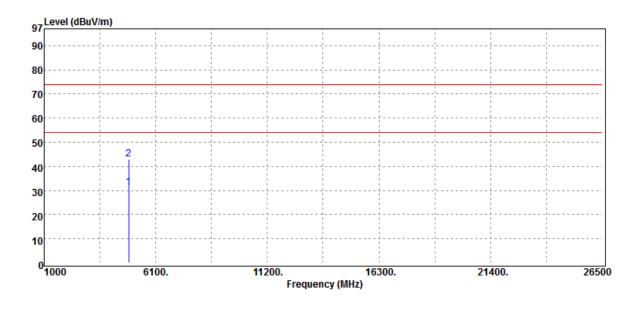
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Operation Band	:802.11n20	Test Date	:2018-09-28
Fundamental Frequency	:2437 MHz	Temp./Humi.	:21 deg_C / 62 RH
Operation Mode	:Tx CH MID	Engineer	:Wei
EUT Pol.	:E2 Plane	Measurement Antenna Pol.	:HORIZONTAL



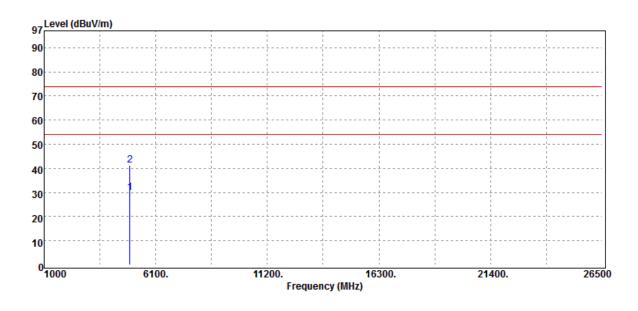
Freq.	Detector	Spectrum	Factor	Actual	Limit	Margin
	Mode	Reading Level		FS	@3m	
MHz	PK/QP/AV	dBµV	dB	dBµV/m	dBµV/m	dB
4874.00	Average	25.52	5.85	31.37	54.00	-22.63
4874.00	Peak	36.95	5.85	42.80	74.00	-31.20

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Freq.	Detector	Spectrum	Factor	Actual	Limit	Margin
	Mode	Reading Level		FS	@3m	
MHz	PK/QP/AV	dBµV	dB	dBµV/m	dBµV/m	dB
4924.00	Average	24.03	5.82	29.85	54.00	-24.15
4924.00	Peak	35.43	5.82	41.25	74.00	-32.75

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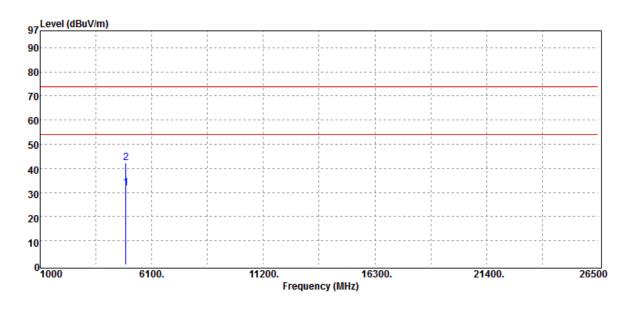
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Operation Band:802.11n20Test DateFundamental Frequency:2462 MHzTemp./Humi.Operation Mode:Tx CH HIGHEngineerEUT Pol.:E2 PlaneMeasurement Antenna Pol.

:2018-09-28 :21 deg_C / 62 RH :Wei :HORIZONTAL



Freq.	Detector	Spectrum	Factor	Actual	Limit	Margin
	Mode	Reading Level		FS	@3m	
MHz	PK/QP/AV	dBµV	dB	dBµV/m	dBµV/m	dB
4924.00	Average	26.20	5.82	32.02	54.00	-21.98
4924.00	Peak	36.42	5.82	42.24	74.00	-31.76

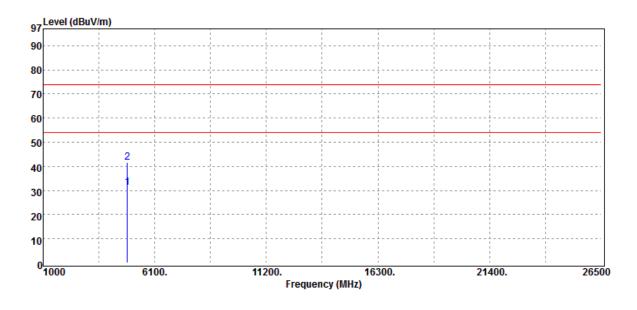
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EUT Pol. :E2 Plane Measurement Antenna Pol. :VERTICAL	Fundamental Frequency :2422 Operation Mode :Tx C	MHz Ten H LOW Eng	np./Humi.	:2018-09-28 :21 deg_C / 62 RH :Wei :VERTICAL
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Freq.	Detector	Spectrum	Factor	Actual	Limit	Margin
	Mode	Reading Level		FS	@3m	
MHz	PK/QP/AV	dBµV	dB	dBµV/m	dBµV/m	dB
4844.00	Average	25.50	5.60	31.10	54.00	-22.90
4844.00	Peak	35.99	5.60	41.59	74.00	-32.41

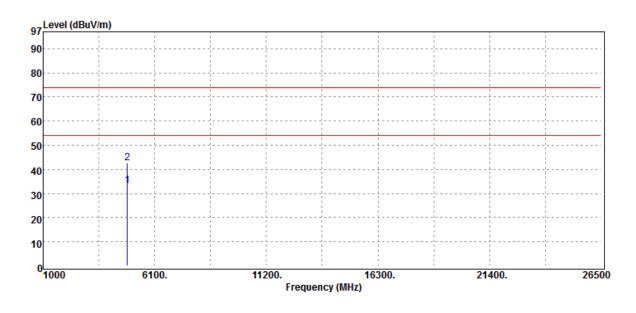
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:802.11n40 **Operation Band** Test Date :2018-09-28 Fundamental Frequency :2422 MHz :21 deg_C / 62 RH Temp./Humi. **Operation Mode** :Wei :Tx CH LOW Engineer EUT Pol. :E2 Plane Measurement Antenna Pol. :HORIZONTAL



Freq.	Detector	Spectrum	Factor	Actual	Limit	Margin
	Mode	Reading Level		FS	@3m	
MHz	PK/QP/AV	dBµV	dB	dBµV/m	dBµV/m	dB
4844.00	Average	27.50	5.60	33.10	54.00	-20.90
4844.00	Peak	37.02	5.60	42.62	74.00	-31.38

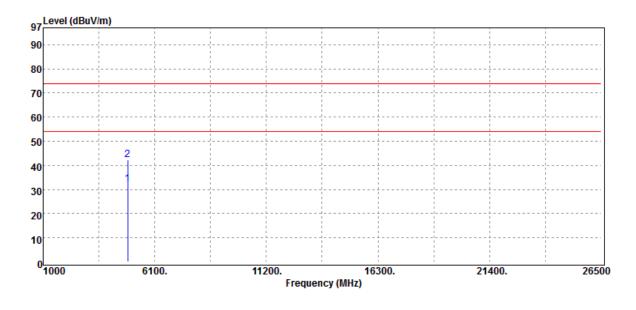
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Operation Band	:802.11n40	Test Date	:2018-09-28
Fundamental Frequency	:2437 MHz	Temp./Humi.	:21 deg_C / 62 RH
Operation Mode	:Tx CH MID	Engineer	:Wei
EUT Pol.	:E2 Plane	Measurement Antenna Pol.	:VERTICAL
2011 0			



Freq.	Detector	Spectrum	Factor	Actual	Limit	Margin
	Mode	Reading Level		FS	@3m	
MHz	PK/QP/AV	dBµV	dB	dBµV/m	dBµV/m	dB
4874.00	Average	26.21	5.85	32.06	54.00	-21.94
4874.00	Peak	36.46	5.85	42.31	74.00	-31.69

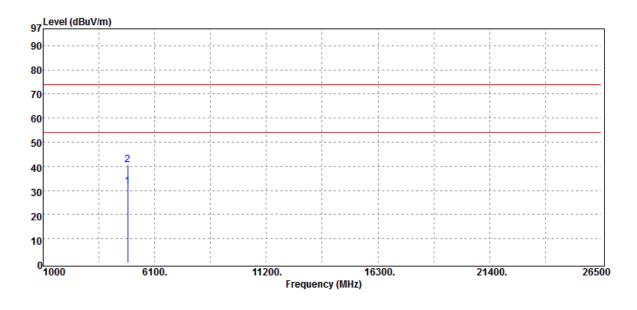
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Operation Band	:802.11n40	Test Date	:2018-09-28
Fundamental Frequency	:2437 MHz	Temp./Humi.	:21 deg_C / 62 RH
Operation Mode	:Tx CH MID	Engineer	:Wei
EUT Pol.	:E2 Plane	Measurement Antenna Pol.	:HORIZONTAL



Freq.	Detector	Spectrum	Factor	Actual	Limit	Margin
	Mode	Reading Level		FS	@3m	
MHz	PK/QP/AV	dBµV	dB	dBµV/m	dBµV/m	dB
4874.00	Average	25.72	5.85	31.57	54.00	-22.43
4874.00	Peak	34.89	5.85	40.74	74.00	-33.26

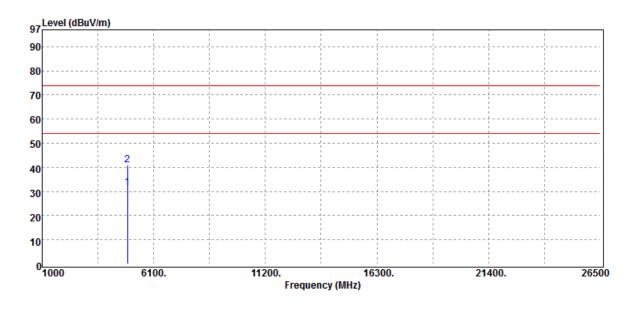
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:802.11n40 **Operation Band** Test Date :2018-09-28 Fundamental Frequency :2452 MHz Temp./Humi. :21 deg_C / 62 RH **Operation Mode** :Tx CH HIGH :Wei Engineer EUT Pol. :E2 Plane Measurement Antenna Pol. :VERTICAL



Freq.	Detector	Spectrum	Factor	Actual	Limit	Margin
	Mode	Reading Level		FS	@3m	
MHz	PK/QP/AV	dBµV	dB	dBµV/m	dBµV/m	dB
4904.00	Average	25.79	5.85	31.64	54.00	-22.36
4904.00	Peak	35.26	5.85	41.11	74.00	-32.89

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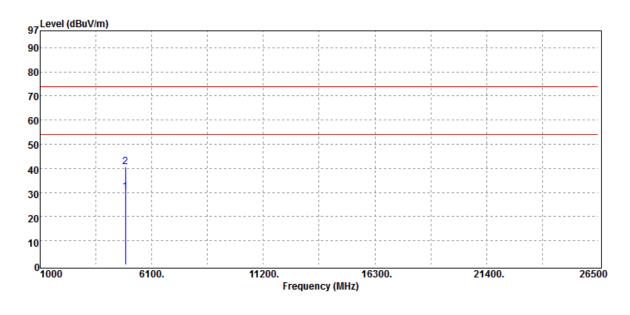
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Operation Band:802.11n40Test DateFundamental Frequency:2452 MHzTemp./Humi.Operation Mode:Tx CH HIGHEngineerEUT Pol.:E2 PlaneMeasurement Antenna Pol.

:2018-09-28 :21 deg_C / 62 RH :Wei :HORIZONTAL



Freq.	Detector	Spectrum	Factor	Actual	Limit	Margin
	Mode	Reading Level		FS	@3m	
MHz	PK/QP/AV	dBµV	dB	dBµV/m	dBµV/m	dB
4904.00	Average	24.26	5.85	30.11	54.00	-23.89
4904.00	Peak	34.60	5.85	40.45	74.00	-33.55

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12 PEAK POWER SPECTRAL DENSITY

12.1 Standard Applicable

Per Part 15.247 (e)

The power spectral density conducted from the intentional radiator to the antenna shall not be greater than 8dBm in any 3 kHz band during any time interval of continuous transmission.

This power spectral density shall be determined in accordance with the provisions of paragraph (b) of this section. The same method of determining the conducted output power shall be used to determine the power spectral density.

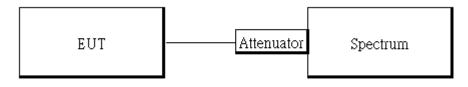
Per RSS-247 section 5.4 d

For DTSs employing digital modulation techniques operating in the bands 902-928 MHz and 2400-2483.5 MHz, the maximum peak conducted output power shall not exceed 1 W. The e.i.r.p. shall not exceed 4 W, except as provided in section 5.4(e).

Conducted Emission Test Site EQUIPMENT MFR MODEL SFRIAL LAST CAL DUE. TYPE NUMBER NUMBER CAL. EXA Spectrum MY5042019 05/03/2018 05/02/2019 N9010A Agilent Analyzer 5 Mini-Circuit BW-S10W2+ 2 01/02/2018 01/01/2019 Attenuator 01/02/2018 01/01/2019 DC Block Mini-Circuits BLK-18-S+ 1 WK CE Ca-01/02/2018 01/01/2019 Coaxial Cables N/A N/A ble **Power Meter** Anritsu ML2496A 1804001 02/01/2018 01/31/2019 Power Sensor Anritsu MA2411B 1726104 02/01/2018 01/31/2019 02/01/2018 01/31/2019 Power Sensor Anritsu MA2411B 1726107

12.2 Measurement Equipment Used

12.3 Test Set-up



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12.4 Measurement Procedure

- 1. Set analyzer center frequency to DTS channel center frequency.
- 2. The testing follows the Measurement Procedure of FCC KDB 558074 D01 DTS Meas. Guidance & ANSI C63.10.
- 3. Set the span to 1.5 times the DTS channel bandwidth.
- 4. Set the RBW = 3 kHz. & the VBW = 10 kHz
- For defining Restricted Band Edge Limit: Set the RBW = 100kHz & VBW = 300 kHz.
- 6. Detector = peak.
- 7. Sweep time = auto couple.
- 8. Trace mode = max hold.
- 9. Allow trace to fully stabilize.
- 10. Use the peak marker function to determine the maximum amplitude level.

As per FCC KDB 662911 D01

Unequal antenna gains, with equal transmit powers. For antenna gains given by G1, G2, ..., GN dBi.

(i) If transmit signals are correlated, then Directional gain

= $10 \log[(10^{G1/20} + 10^{G2/20} + ... + 10^{GN/20})^2/N_{ANT}] dBi$

[Note the "20"s in the denominator of each exponent and the square of the sum of terms; the object is to combine the signal levels coherently.].

The antenna gain is not grater than 6 dBi. Therefore, reduction of power is not required.

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12.5 Measurement Result

	POWER DENSITY 802.11b						
Freq.	PPSD	Offect	PPSD	Limit	Docult		
(MHz)	(dBm)	Offset	(dBm)	(dBm)	Result		
2412	-2.32	15.17	-2.32	8.00	PASS		
2437	-2.80	15.17	-2.80	8.00	PASS		
2462	-3.08	15.17	-3.08	8.00	PASS		

	POWER DENSITY 802.11g						
Freq.	PPSD	Offset	PPSD	Limit	Result		
(MHz)	(dBm)	Unset	(dBm)	(dBm)	Result		
2412	-11.52	15.17	-11.31	8.00	PASS		
2437	-9.39	15.17	-9.18	8.00	PASS		
2462	-11.34	15.17	-11.13	8.00	PASS		

	POWER DENSITY 802.11n HT20							
Freq.	PPSD	Offset	PPSD	Limit	Result			
(MHz)	(dBm)		(dBm)	(dBm)				
2412	-13.08	15.17	-12.66	8.00	PASS			
2437	-7.48	15.17	-7.06	8.00	PASS			
2462	-10.43	15.17	-10.01	8.00	PASS			

	POWER DENSITY 802.11n HT40						
Freq.	PPSD	Offset	PPSD	Limit	Result		
(MHz)	(dBm)	Unset	(dBm)	(dBm)			
2422	-16.32	15.17	-15.58	8.00	PASS		
2437	-14.33	15.17	-13.59	8.00	PASS		
2452	-13.81	15.17	-13.07	8.00	PASS		

offset 14.01 dB for MIMO mode

*Refer to next page for plots

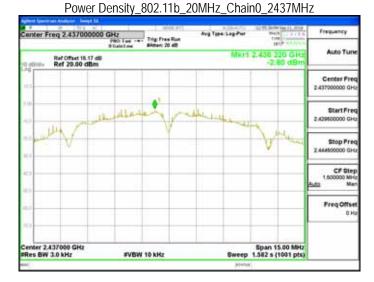
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Power Density_802.11b_20MHz_Chain0_2412MHz

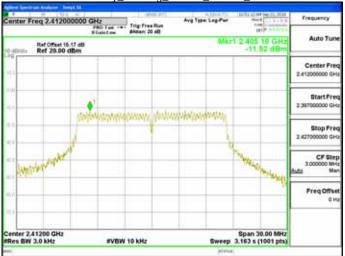




Power Density_802.11b_20MHz_Chain0_2462MHz



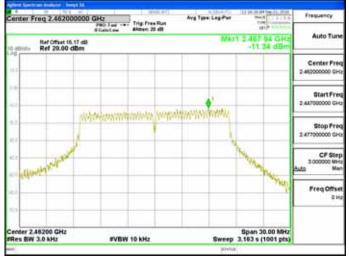
Power Density_802.11g_20MHz_Chain0_2412MHz



Power Density_802.11g_20MHz_Chain0_2437MHz



Power Density_802.11g_20MHz_Chain0_2462MHz



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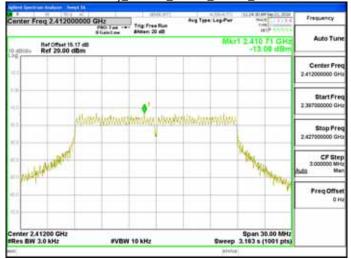
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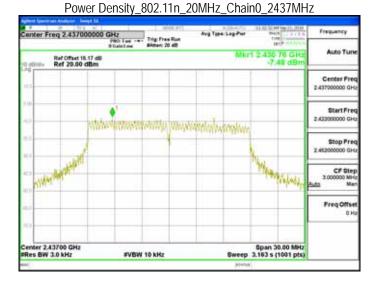
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f (886-2) 2298-0488

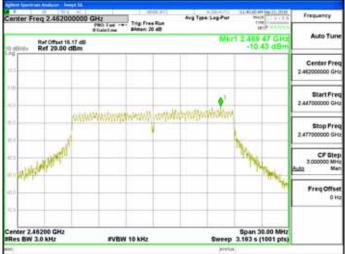


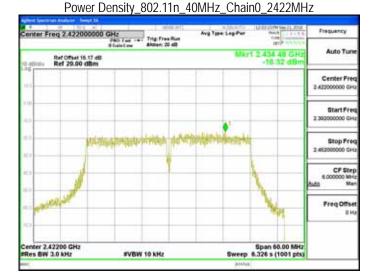
Power Density_802.11n_20MHz_Chain0_2412MHz



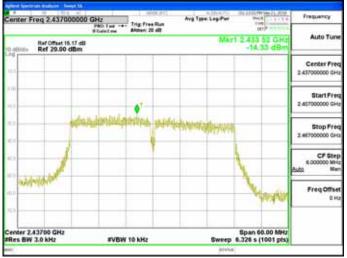


Power Density_802.11n_20MHz_Chain0_2462MHz

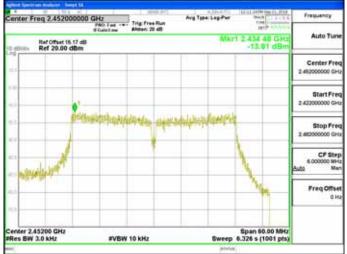




Power Density_802.11n_40MHz_Chain0_2437MHz



Power Density_802.11n_40MHz_Chain0_2452MHz



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13 ANTENNA REQUIREMENT

13.1 Standard Applicable

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

If the transmitting antenna is greater than 6dBi, the power shall be reduced by the same level in dB comparing to gain minus 6dBi.

13.2 Antenna Connected Construction

The antenna is designed with unique RF connector and no consideration of replacement. Please see EUT photo for details.

~ End of Report ~

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