

FCC Test Report

FCC ID : XV4-MT7601

Equipment : WiFi Cube Network Camera

Model No. : C3033-W (please refer to item 1.1.1 for more

details)

Brand Name : Brickcom (please refer to item 1.1.1 for more

details)

Applicant : Brickcom Corporation

Address : No.1 Jen Ai Road, Hsinchu Industrial Park,

Hukou, Hsinchu, Taiwan, R.O.C. 303

Standard : 47 CFR FCC Part 15.247

Received Date : Oct. 03, 2013

Tested Date : Nov. 14 ~ Nov. 20, 2013

We, International Certification Corp., would like to declare that the tested sample has been evaluated and in compliance with the requirement of the above standards. The test results contained in this report refer exclusively to the product. It may be duplicated completely for legal use with the approval of the applicant. It shall not be reproduced except in full without the written approval of our laboratory.

Approved & Reviewed by:

Gary Chang / Manager

lac MRA



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Report No.: FR3O0301 Report Version: Rev. 01



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Release Record

Report No.	Version	Description	Issued Date
FR3O0301	Rev. 01	Initial issue	Feb. 05, 2014

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Summary of Test Results

FCC Rules	Test Items	Measured	Result
15.207	Conducted Emissions	[dBuV]: 19.706MHz 42.44 (Margin -7.56dB) - AV	Pass
15.247(d) 15.209	Radiated Emissions	[dBuV/m at 3m]: 249.22MHz 45.00 (Margin -1.00dB) – QP [dBuV/m at 3m]: 3249.33MHz 53.00 (Margin -1.00dB) – AV [dBuV/m at 3m]: 2390.00MHz 73.00 (Margin -1.00dB) – PK [dBuV/m at 3m]: 2390.00MHz 53.00 (Margin -1.00dB) – AV	Pass
15.247(b)(3)	Fundamental Emission Output Power	Power [dBm]: 11b: 26.15 11g: 26.31 HT20: 26.42 HT40: 23.98	Pass
15.247(a)(2)	6dB Bandwidth	Meet the requirement of limit	Pass
15.247(e)	Power Spectral Density	Meet the requirement of limit	Pass
15.203	Antenna Requirement	Meet the requirement of limit	Pass

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1 General Description

1.1 Information

1.1.1 Product Details

Please refer to the following table for the model differences. Model C3033-W, WCB-200Af and WCB-040AF had been tested during the pretest. After pretest, Model WCB-200Af was the worst for radiated below 1GHz test, and Model C3033-W was the worst for radiated above 1GHz and other tests.

Resolution	Brand Name	Model name	IR LED	PIR	Micro SD	MIC	Speaker	WiFi	DI/DO
VGA	Brickcom	C3033-W	v		V	V	V	٧	V
1	Brickcom	C3103-W	٧		V	V	V	V	V
1.3	Brickcom	C3133-W	٧		V	V	V	V	V
2	Brickcom	C3203-W	٧		V	V	V	V	V
VGA	Brickcom	WCB-030Af		V	V	V	V	V	V
1	Brickcom	WCB-100Af	V	V	V	V	V	V	V
1.3	Brickcom	WCB-130Af	٧	V	V	V	V	V	V
2	Brickcom	WCB-200Af	٧	V	V	V	V	V	V
VGA	Brickcom	WCB-040Af				V	V	٧	V
1	Airlink101	AHD1500-W	V		V	٧	V	V	V
VGA	Kiwatch	KW-3030	V	V	٧	٧	V	V	V

Note: Different resolution of camera is by software setting not hardware change.

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1.1.2 Specification of the Equipment under Test (EUT)

RF General Information							
Frequency Range (MHz)	IEEE Std. 802.11	Ch. Freq. (MHz)	Channel Number	Transmit Chains (N _{TX})	Data Rate / MCS		
2400-2483.5	b	2412-2462	1-11 [11]	1	1-11 Mbps		
2400-2483.5	g	2412-2462	1-11 [11]	1	6-54 Mbps		
2400-2483.5	n (HT20)	2412-2462	1-11 [11]	1	MCS 0-7		
2400-2483.5	n (HT40)	2422-2452	3-9 [7]	1	MCS 0-7		

Note 1: RF output power specifies that Maximum Peak Conducted Output Power.

Note 2: 802.11b uses a combination of DSSS-DBPSK, DQPSK, CCK modulation.

Note 3: 802.11g/n uses a combination of OFDM-BPSK, QPSK, 16QAM, 64QAM modulation.

1.1.3 Antenna Details

Ant. No.	Туре	Gain (dBi)	Connector	Remark
1	PCB	1.37	N/A	

1.1.4 EUT Operational Condition

Supply Voltage		□ DC	
Type of DC Source	☐ Internal DC supply	☐ External DC adapter	☐ 5Vdc from Host

1.1.5 Accessories

	Accessories				
No.	Equipment	Description			
		Brand Name: OEM			
		Model Name: ADS0128-W 120100			
1	AC Adapter 1	Power Rating: I/P: 100-240Vac, 50-60Hz, 0.5A O/P: 12Vdc, 1A			
		Power Line: 1.8m non-shielded cable w/o core			
2	RJ45 cable	1.5m non-shielded cable with one core.			

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1.1.6 Channel List

Frequency	band (MHz)	2400~	2483.5	
802.11 b /	g / n HT20	802.11n HT40		
Channel	Channel Frequency(MHz)		Frequency(MHz)	
1	2412	3	2422	
2	2417	4	2427	
3	2422	5	2432	
4	2427	6	2437	
5	2432	7	2442	
6	2437	8	2447	
7	2442	9	2452	
8	2447			
9	2452			
10	2457			
11	2462			

1.1.7 Test Tool and Duty Cycle

Test Tool	Hyperterminal, V5.1			
	Mode	Duty cycle (%)	Duty factor (dB)	
	11b	98.32%	0.07	
Duty Cycle and Duty Factor	11g	88.22%	0.54	
	HT20	87.97%	0.56	
	HT40	77.44%	1.11	

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1.1.8 Power Setting

Modulation Mode	Test Frequency (MHz)	Power Set
11b	2412	16
11b	2437	29
11b	2462	22
11g	2412	2
11g	2437	25
11g	2462	16
HT20	2412	0
HT20	2437	24
HT20	2462	12
HT40	2422	0
HT40	2437	7
HT40	2452	8

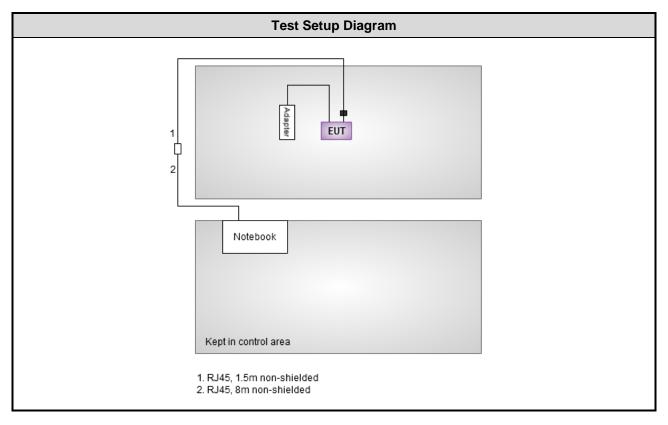
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1.2 Local Support Equipment List

Support Equipment List						
No.	No. Equipment Brand Model S/N FCC ID Signal cable / Length (m)					
1	Notebook	DELL	E6430		DoC	RJ45, 1.5m non-shielded with 1 core.

1.3 Test Setup Chart



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1.4 The Equipment List

onduction room 1 / (C	O01-WS)										
Manufacturer		Conduction room 1 / (CO01-WS)									
	Model No.	Manufacturer Model No. Serial No.									
R&S	ESCS 30	100169	Oct. 15, 2013	Oct. 14, 2014							
SCHWARZBECK MESS-ELEKTRONIK	Schwarzbeck 8127	8127-667	Dec. 04, 2012	Dec. 03, 2013							
SCHWARZBECK MESS-ELEKTRONIK	Schwarzbeck 8127	8127-666	Dec. 04, 2012	Dec. 03, 2013							
TESEQ	ISN T800	34406	Apr. 08, 2013	Apr. 07, 2014							
TESEQ	ISN T200A	30494	Apr. 09, 2013	Apr. 08, 2014							
TESEQ	ISN ST08	22589	Jan. 24, 2013	Jan. 23, 2014							
FCC	F-33-4	121630	Dec. 04, 2012	Dec. 03, 2013							
Woken	CFD200-NL	CFD200-NL-001	Dec. 25, 2012	Dec. 24, 2013							
R&S	ESH3-Z6	100951	Jan. 30, 2013	Jan. 29, 2014							
R&S	ENV216	101579	Jan. 07, 2013	Jan. 06, 2014							
NA	50	01	Apr. 22, 2013	Apr. 21, 2014							
NA	50	02	Apr. 22, 2013	Apr. 21, 2014							
NA	50	03	Apr. 22, 2013	Apr. 21, 2014							
NA	50	04	Apr. 22, 2013	Apr. 21, 2014							
NA	50	04	Apr. 22, 2013	Apr. 21, 2014							
STATE OF THE STATE	SCHWARZBECK ESS-ELEKTRONIK TESEQ TESEQ FCC Woken R&S R&S NA NA NA NA NA	SCHWARZBECK ESS-ELEKTRONIK Schwarzbeck 8127 TESEQ ISN T800 TESEQ ISN T200A TESEQ ISN ST08 FCC F-33-4 Woken CFD200-NL R&S ESH3-Z6 R&S ENV216 NA 50 NA 50 NA 50 NA 50 NA 50 NA 50 NA 50	SCHWARZBECK ESS-ELEKTRONIK Schwarzbeck 8127 8127-666 TESEQ ISN T800 34406 TESEQ ISN T200A 30494 TESEQ ISN ST08 22589 FCC F-33-4 121630 Woken CFD200-NL CFD200-NL-001 R&S ESH3-Z6 100951 R&S ENV216 101579 NA 50 01 NA 50 02 NA 50 03 NA 50 04 NA 50 04	SCHWARZBECK ESS-ELEKTRONIK Schwarzbeck 8127 8127-666 Dec. 04, 2012 TESEQ ISN T800 34406 Apr. 08, 2013 TESEQ ISN T200A 30494 Apr. 09, 2013 TESEQ ISN ST08 22589 Jan. 24, 2013 FCC F-33-4 121630 Dec. 04, 2012 Woken CFD200-NL CFD200-NL-001 Dec. 25, 2012 R&S ESH3-Z6 100951 Jan. 30, 2013 R&S ENV216 101579 Jan. 07, 2013 NA 50 01 Apr. 22, 2013 NA 50 02 Apr. 22, 2013 NA 50 03 Apr. 22, 2013 NA 50 04 Apr. 22, 2013 NA 50 04 Apr. 22, 2013 NA 50 04 Apr. 22, 2013							

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Test Item	Radiated Emission ab	Radiated Emission above 1GHz									
Test Site	966 chamber 2 / (03C	966 chamber 2 / (03CH02-WS)									
Instrument	Manufacturer Model No. Serial No. Calibration Date				Calibration Until						
3m semi-anechoic chamber	CHAMPRO	SAC-03	03CH02-WS	Jan. 02, 2013	Jan. 01, 2014						
Spectrum Analyzer	R&S	FSV40	101499	Jan. 28, 2013	Jan. 27, 2014						
Receiver	R&S	ESR3	101657	Jan. 30, 2013	Jan. 29, 2014						
Bilog Antenna	ScHwarzbeck	VULB9168	VULB9168-524	Jan. 11, 2013	Jan. 10, 2014						
Horn Antenna 1G-18G	SCHWARZBECK	BBHA 9120D	BBHA 9120 D 1095	Jan. 29, 2013	Jan. 28,2014						
Horn Antenna 18G-40G	SCHWARZBECK	BBHA 9170	BBHA 9170517	Jan. 14, 2013	Jan. 13, 2014						
Amplifier	Burgeon	BPA-530	100218	Dec. 14, 2012	Dec. 13, 2013						
Amplifier	Agilent	83017A	MY39501309	Dec. 18, 2012	Dec. 17, 2013						
RF Cable	HUBER+SUHNER	SUCOFLEX104	MY16140/4	Dec. 25, 2012	Dec. 24, 2013						
RF Cable	HUBER+SUHNER	SUCOFLEX104	MY16018/4	Dec. 25, 2012	Dec. 24, 2013						
RF Cable	HUBER+SUHNER	SUCOFLEX104	MY16015/4	Dec. 25, 2012	Dec. 24, 2013						
RF Cable-R03m	Woken	CFD400NL-LW	CFD400NL-003	Dec. 25, 2012	Dec. 24, 2013						
RF Cable-R10m	Woken	CFD400NL-LW	CFD400NL-004	Dec. 25, 2012	Dec. 24, 2013						
control	EM Electronics	EM1000	060608	N/A	N/A						
Note: Calibration Inter	val of instruments listed	l above is one year.									

Loop Antenna	R&S	HFH2-Z2	100330	Nov. 15, 2012	Nov. 14, 2014
Amplifier	Amplifier MITEQ		9121372	Apr. 19, 2013	Apr. 18, 2015
Note: Calibration Interv	al of instruments listed	d above is two year.			

Test Item	RF Conducted								
Test Site	(TH01-WS)								
Instrument	Manufacturer	Model No.	Serial No.	Calibration Date	Calibration Until				
Spectrum Analyzer	R&S	FSV 40	101063	Feb. 18, 2013	Feb. 17, 2014				
TEMP&HUMIDITY CHAMBER	GIANT FORCE	GCT-225-40-SP-SD	MAF1212-002	Nov. 29, 2012	Nov. 28, 2013				
Power Meter	Anritsu	ML2495A	1241002	Oct. 24, 2013	Oct. 23, 2014				
Power Sensor	Anritsu	MA2411B	1027366	Oct. 24, 2013	Oct. 23, 2014				
Signal Generator	R&S	SMB100A	175727	Jan. 14, 2013	Jan. 13, 2014				
Note: Calibration Interval of instruments listed above is one year.									

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1.5 Test Standards

According to the specification of EUT, the EUT must comply with following standards and KDB documents.

47 CFR FCC Part 15.247

ANSI C63.10-2009

FCC KDB 558074 D01 DTS Meas Guidance v03r01

Note: The EUT has been tested and complied with FCC part 15B requirement. FCC Part 15B test results are issued to another report.

1.6 Measurement Uncertainty

ISO/IEC 17025 requires that an estimate of the measurement uncertainties associated with the emissions test results be included in the report. The measurement uncertainties given below are based on a 95% confidence level (based on a coverage factor (k=2)

Measurement Uncertainty							
Parameters	Uncertainty						
Bandwidth	±35.286 Hz						
Conducted power	±0.536 dB						
Frequency error	±35.286 Hz						
Temperature	±0.3 °C						
Conducted emission	±2.946 dB						
AC conducted emission	±2.43 dB						
Radiated emission	±2.49 dB						

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2 Test Configuration

2.1 Testing Condition

Test Item	Test Site	Ambient Condition	Tested By
AC Conduction	CO01-WS	20°C / 58%	Skys Huang
Radiated Emissions ≤ 1GHz	03CH02-WS	24°C / 68%	Anderson Hong
Radiated Emissions > 1GHz	03CH02-WS	23°C / 67%	Aska Huang
RF Conducted	TH01-WS	21°C / 60%	Felix Sung

FCC site registration No.: 657002IC site registration No.: 10807A-2

2.2 The Worst Test Modes and Channel Details

Test item	Modulation Mode	Test Frequency (MHz)	Data rate (Mbps) / MCS	Test Configuration
Conducted Emissions	HT20	2437	MCS 0	
Radiated Emissions ≤ 1GHz	HT20	2437	MCS 0	
Radiated Emissions > 1GHz	11b 11g HT20 HT40	2412 / 2437 / 2462 2412 / 2437 / 2462 2412 / 2437 / 2462 2422 / 2437 / 2452	1 Mbps 6 Mbps MCS 0 MCS 0	
Fundamental Emission Output Power	11b	2412 / 2437 / 2462	1 Mbps	
6dB bandwidth	11g HT20 HT40	2412 / 2437 / 2462 2412 / 2437 / 2462	6 Mbps MCS 0	
Power spectral density		2422 / 2437 / 2452	MCS 0	

NOTE:

Model WCB-200Af was for radiated below 1GHz test, and **Model C3033-W** was for radiated above 1GHz and other tests.

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3 Transmitter Test Results

3.1 Conducted Emissions

3.1.1 Limit of Conducted Emissions

Conducted Emissions Limit								
Frequency Emission (MHz)	Quasi-Peak	Average						
0.15-0.5	66 - 56 *	56 - 46 *						
0.5-5	56	46						
5-30	60	50						
Note 1: * Decreases with the logarith	m of the frequency.							

3.1.2 Test Procedures

- 1. The device is placed on a test table, raised 80 cm above the reference ground plane. The vertical conducting plane is located 40 cm to the rear of the device.
- 2. The device is connected to line impedance stabilization network (LISN) and other accessories are connected to other LISN. Measured levels of AC power line conducted emission are across the 50 Ω LISN port.
- 3. AC conducted emission measurements is made over frequency range from 150 kHz to 30 MHz.
- 4. This measurement was performed with AC 120V / 60Hz.

3.1.3 Test Setup



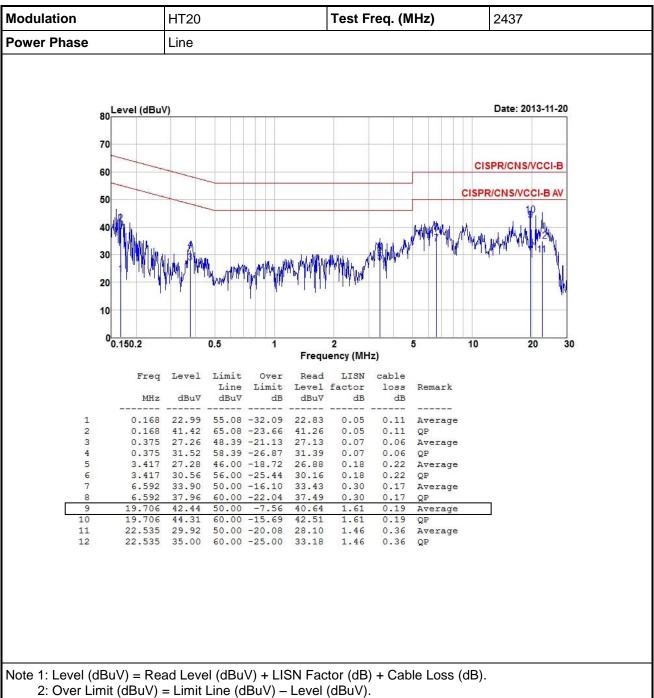
Note: 1. Support units were connected to second LISN.

Both of LISNs (AMN) are 80 cm from EUT and at least 80 cm from other units and other metal planes

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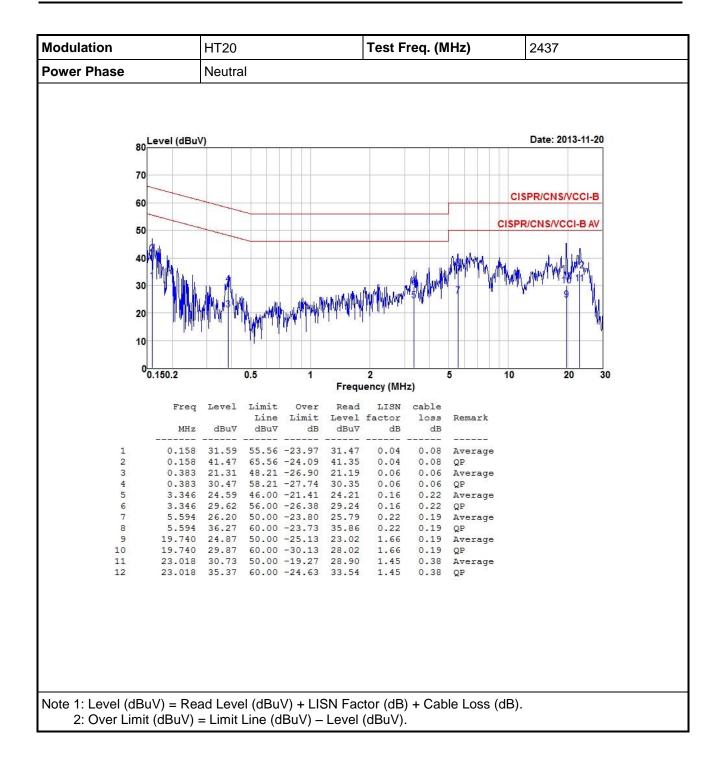


Test Result of Conducted Emissions 3.1.4



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3.2 6dB and Occupied Bandwidth

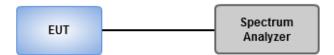
3.2.1 Limit of 6dB Bandwidth

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

3.2.2 Test Procedures

- 1. Set resolution bandwidth (RBW) = 100 kHz, Video bandwidth = 300 kHz.
- 2. Detector = Peak, Trace mode = max hold.
- 3. Sweep = auto couple, Allow the trace to stabilize.
- 4. Measure the maximum width of the emission that is constrained by the frequencies associated with the two outermost amplitude points (upper and lower) that are attenuated by 6dB relative to the maximum level measured in the fundamental emission.

3.2.3 Test Setup

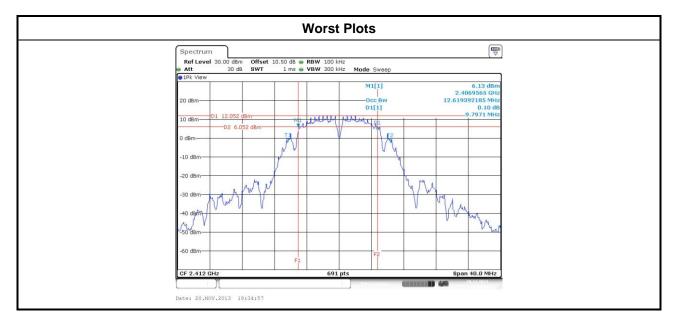


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3.2.4 Test Result of 6dB and Occupied Bandwidth

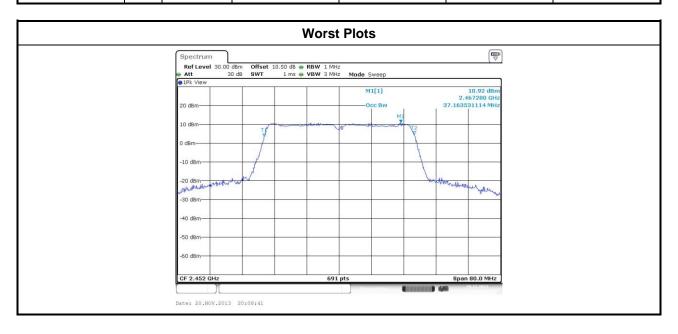
Modulation	N	Eros (MU=)		6dB Bandwidth (MHz) Chain 0 Chain 1 Chain 2 Chain 3		Limit (IrLI=)	
Mode	N _{TX}	Freq. (MHz)	Chain 0			Chain 3	Limit (kHz)
11b	1	2412	9.80				500
11b	1	2437	10.09				500
11b	1	2462	10.03				500
11g	1	2412	16.35				500
11g	1	2437	16.35				500
11g	1	2462	16.35				500
HT20	1	2412	17.10				500
HT20	1	2437	17.33				500
HT20	1	2462	17.51				500
HT40	1	2422	36.06				500
HT40	1	2437	36.06				500
HT40	1	2452	36.06				500



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Modulation	N	Freq.	99% Occupied Bandwidth (MHz)					
Mode	N _{TX}	(MHz)	Chain 0	Chain 1	Chain 2	Chain 3		
11b	1	2412	12.50					
11b	1	2437	15.34					
11b	1	2462	13.08					
11g	1	2412	16.85					
11g	1	2437	24.43					
11g	1	2462	17.08					
HT20	1	2412	17.71					
HT20	1	2437	25.24					
HT20	1	2462	17.83					
HT40	1	2422	37.05					
HT40	1	2437	37.05					
HT40	1	2452	37.16					



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3.3 RF Output Power

3.3.1 Limit of RF Output Power

Conducted power shall not exceed 1Watt.

Antenna gain <= 6dBi, no any corresponding reduction is in output power limit.

Antenna gain > 6dBi

Non Fixed, point to point operations.
The conducted output power from the intentional radiator shall be reduced by the amount in dB that the directional gain of the antenna exceeds 6 dB

Fixed, point to point operations
Systems operating in the 2400–2483.5 MHz band that are used exclusively for fixed, point-to-point Operations, maximum peak output power of the intentional radiator is reduced by 1 dB for every 3 dB that the directional gain of the antenna exceeds 6 dBi.

Systems operating in the 5725–5850 MHz band that are used exclusively for fixed, point-to-point operations, no any corresponding reduction is in transmitter peak output power

3.3.2 Test Procedures

Maximum Peak Conducted Output Power

- 1. Set RBW = 1MHz, VBW = 3MHz, Detector = Peak.
- 2. Sweep time = auto, Trace mode = max hold, Allow trace to fully stabilize.
- 3. Use the spectrum analyzer channel power measurement function with the band limits set equal to the DTS bandwidth edges.

Nower meter

- A broadband Peak RF power meter is used for output power measurement. The video bandwidth of power meter is greater than DTS bandwidth of EUT. If duty cycle of test signal is not 100 %, trigger and gating function of power meter will be enabled to capture transmission burst for measuring output power.
- Maximum Conducted Output Power (For reference only)

Nower meter

 A broadband Average RF power meter is used for output power measurement. The video bandwidth of power meter is greater than DTS bandwidth of EUT. If duty cycle of test signal is not 100 %, trigger and gating function of power meter will be enabled to capture transmission burst for measuring output power.

3.3.3 Test Setup



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3.3.4 Test Result of Maximum Output Power

Modulation Mode	N _{TX}	Freq. (MHz)	Peak		ed output power Bm)		Total Power	Total Power	Limit
Wode		(IVITIZ)	Chain 0	Chain 1	Chain 2	Chain 3	(mW)	(dBm)	(dBm)
11b	1	2412	24.48				280.543	24.48	30
11b	1	2437	26.15				412.098	26.15	30
11b	1	2462	25.27				336.512	25.27	30
11g	1	2412	22.95				197.242	22.95	30
11g	1	2437	26.31				427.563	26.31	30
11g	1	2462	25.64				366.438	25.64	30
HT20	1	2412	22.49				177.419	22.49	30
HT20	1	2437	26.42				438.531	26.42	30
HT20	1	2462	25.22				332.660	25.22	30
HT40	1	2422	20.80				120.226	20.80	30
HT40	1	2437	23.92				246.604	23.92	30
HT40	1	2452	23.98				250.035	23.98	30

Modulation Mode	N _{TX}	Freq.	Conduc	Conducted (average) output power (dBm)			Total Power	Total Power	Limit
Wiode		(MHz)	Chain 0	Chain 1	Chain 2	Chain 3	(mW)	(dBm)	(dBm)
11b	1	2412	21.63				145.546	21.63	30
11b	1	2437	24.68				293.765	24.68	30
11b	1	2462	22.96				197.697	22.96	30
11g	1	2412	14.51				28.249	14.51	30
11g	1	2437	22.83				191.867	22.83	30
11g	1	2462	19.52				89.536	19.52	30
HT20	1	2412	13.41				21.928	13.41	30
HT20	1	2437	22.63				183.231	22.63	30
HT20	1	2462	17.82				60.534	17.82	30
HT40	1	2422	12.15				16.406	12.15	30
HT40	1	2437	16.11				40.832	16.11	30
HT40	1	2452	16.32				42.855	16.32	30

Note: Conducted average output power is for reference only.

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3.4 Power Spectral Density

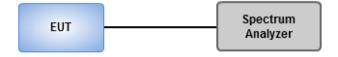
3.4.1 Limit of Power Spectral Density

Power spectral density shall not be greater than 8 dBm in any 3 kHz band.

3.4.2 Test Procedures

- Maximum peak conducted output power was used to demonstrate compliance to the fundamental output power limit.
 - Set the RBW = 3kHz, VBW = 10kHz.
 - Detector = Peak, Sweep time = auto couple.
 - 3. Trace mode = max hold, allow trace to fully stabilize.
 - 4. Use the peak marker function to determine the maximum amplitude level.
- Maximum (average) conducted output power was used to demonstrate compliance to the fundamental output power limit.
 - 1. Set the RBW = 100kHz, VBW = 300 kHz.
 - 2. Detector = RMS, Sweep time = auto couple.
 - 3. Set the sweep time to: ≥ 10 x (number of measurement points in sweep) x (maximum data rate per stream).
 - 4. Perform the measurement over a single sweep.
 - 5. Use the peak marker function to determine the maximum amplitude level.

3.4.3 Test Setup

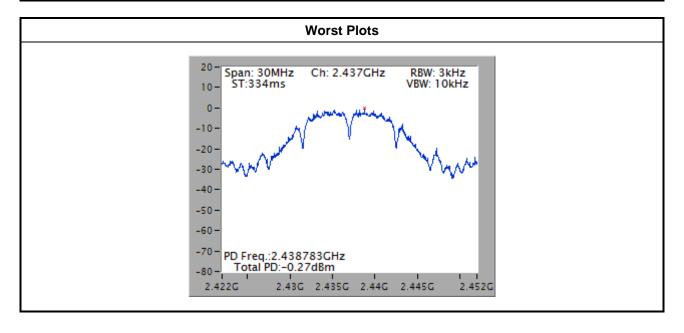


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3.4.4 Test Result of Power Spectral Density

Modulation Mode	N _{TX}	Freq. (MHz)	Total Power Spectral Density (dBm/3kHz)	Limit (dBm/3kHz)
11b	1	2412	-2.72	8
11b	1	2437	-0.27	8
11b	1	2462	-1.52	8
11g	1	2412	-13.16	8
11g	1	2437	-4.45	8
11g	1	2462	-8.06	8
HT20	1	2412	-12.47	8
HT20	1	2437	-4.61	8
HT20	1	2462	-8.11	8
HT40	1	2422	-15.88	8
HT40	1	2437	-13.04	8
HT40	1	2452	-12.57	8



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3.5 Unwanted Emissions into Restricted Frequency Bands

3.5.1 Limit of Unwanted Emissions into Restricted Frequency Bands

	Restricted Band	Emissions Limit	
Frequency Range (MHz)	Field Strength (uV/m)	Field Strength (dBuV/m)	Measure Distance (m)
0.009~0.490	2400/F(kHz)	48.5 - 13.8	300
0.490~1.705	24000/F(kHz)	33.8 - 23	30
1.705~30.0	30	29	30
30~88	100	40	3
88~216	150	43.5	3
216~960	200	46	3
Above 960	500	54	3

Note 1:

Qusai-Peak value is measured for frequency below 1GHz except for 9–90 kHz, 110–490 kHz frequency band. Peak and average value are measured for frequency above 1GHz. The limit on average radio frequency emission is as above table. The limit on peak radio frequency emissions is 20 dB above the maximum permitted average emission limit

Measurements may be performed at a distance other than what is specified provided. When performing measurements at a distance other than that specified, the results shall be extrapolated to the specified distance using an extrapolation factor as below, Frequency at or above 30 MHz: 20 dB/decade Frequency below 30 MHz: 40 dB/decade.

3.5.2 Test Procedures

- 1. Measurement is made at a semi-anechoic chamber that incorporates a turntable allowing a EUT rotation of 360°. A continuously-rotating, remotely-controlled turntable is installed at the test site to support the EUT and facilitate determination of the direction of maximum radiation for each EUT emission frequency. The EUT is placed at a height of 0.8 m test table above the ground plane.
- 2. Measurement is made with the antenna positioned in both the horizontal and vertical planes of polarization. The measurement antenna is varied in height (1m ~ 4m) above the reference ground plane to obtain the maximum signal strength. Distance between EUT and antenna is 3 m.
- 3. This investigation is performed with the EUT rotated 360°, the antenna height scanned between 1 m and 4 m, and the antenna rotated to repeat the measurements for both the horizontal and vertical antenna polarizations.

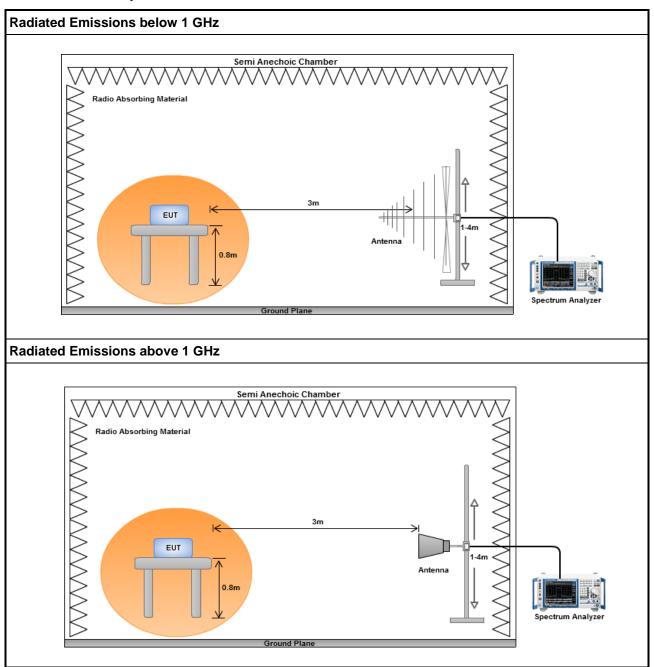
Note:

- 1. 120kHz measurement bandwidth of test receiver and Quasi-peak detector is for radiated emission below 1GHz.
- 2. RBW=1MHz, VBW=3MHz and Peak detector is for peak measured value of radiated emission above 1GHz.
- 3. RBW=1MHz, VBW=1/T and Peak detector is for average measured value of radiated emission above 1GHz.

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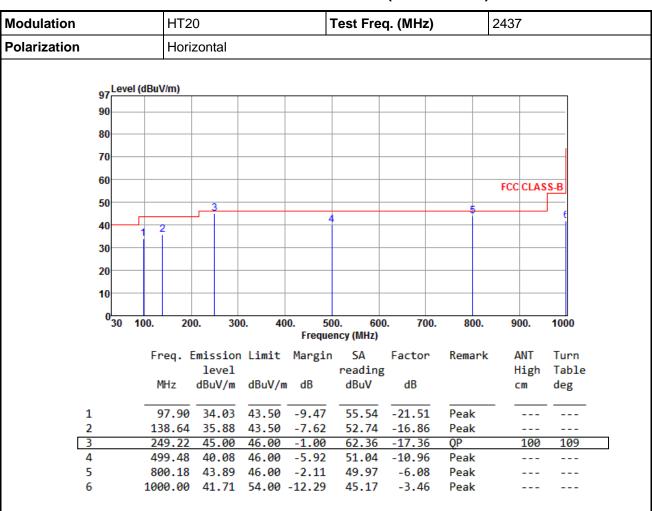
3.5.3 Test Setup



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3.5.4 Transmitter Radiated Unwanted Emissions (Below 1GHz)



Note 1: Emission Level (dBuV/m) = SA Reading (dBuV/m) + Factor* (dB)

*Factor includes antenna factor, cable loss and amplifier gain

Note 2: Margin (dB) = Emission level (dBuV/m) - Limit (dBuV/m).

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Modulation				HT2	0		-	Test Fre	q. (MHz)		2437		
Polarization				Verti	cal						•		
	97	Leve	el (dBu	ıV/m)									_
	90												
	80												-
	70												-
	60												
	00										FCC C	LAS <u>S-B</u>	
	50												-
	40	12	3		J 4								_
	30												-
	20												-
	10												
		$ \ \ $											
	0	30	100.	20	0. 30	0. 40		0. 60	0. 700	. 800.	900). 10	000
								ncy (MHz)					
			F	req. E		n Limit	Margin		Factor	Remark			urn
				MHz	level	4D. M/-		reading dBuV	g dB			_	able
			ا	МПΖ	abuv/m	dBuV/n	i ab	abuv	ab		cm	ı a	eg
	1		_	46.49	38.30	40.00	-1.70	54.31	-16.01	QP		.00	4
	2			64.92	38.85	40.00	-1.15		-17.65	QP		.00	86
	3			85.29	38.34		-1.66	60.10		QР			130
	4		2	49.22	41.93	46.00	-4.07	59.29	-17.36	Peak	-		
	5			99.48	36.67	46.00	-9.33	47.63		Peak	-		
•	6		8	00.18	42.91	46.00	-3.09	48.99	-6.08	Peak	-		

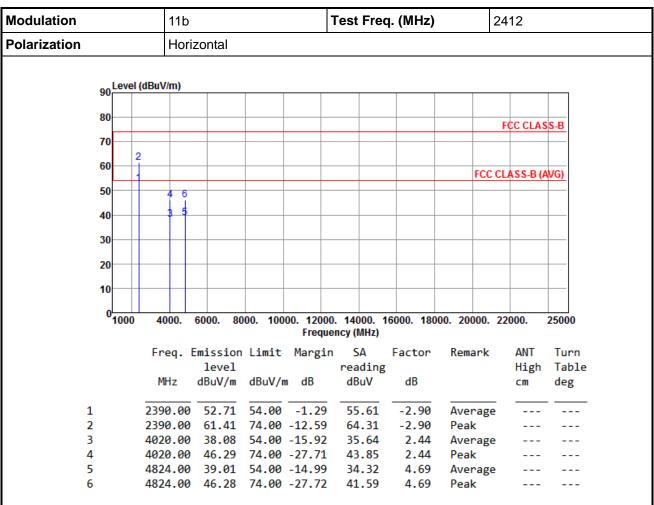
Note 1: Emission Level (dBuV/m) = SA Reading (dBuV/m) + Factor* (dB) *Factor includes antenna factor , cable loss and amplifier gain

Note 2: Margin (dB) = Emission level (dBuV/m) – Limit (dBuV/m).

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3.5.5 Transmitter Radiated Unwanted Emissions (Above 1GHz) for 11b



Note 1: Emission Level (dBuV/m) = SA Reading (dBuV/m) + Factor* (dB)

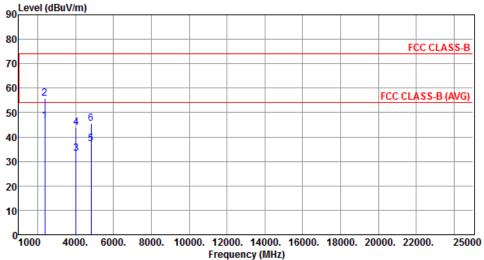
*Factor includes antenna factor, cable loss and amplifier gain

Note 2: Margin (dB) = Emission level (dBuV/m) – Limit (dBuV/m).

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Modulation	11b	Test Freq. (MHz)	2412
Polarization	Vertical		
90 Level (dBu	//m)		



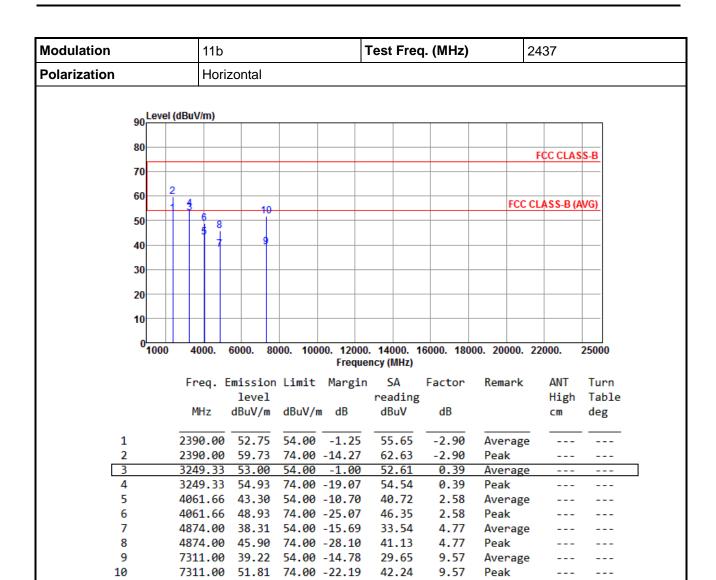
	Freq. MHz	Emission level dBuV/m	Limit dBuV/m	Ū	SA reading dBuV	Factor dB	Remark	ANT High cm	Turn Table deg
1	2390.00	46.47	54.00	-7.53	49.37	-2.90	Average		
2	2390.00	55.94	74.00	-18.06	58.84	-2.90	Peak		
3	4020.00	33.23	54.00	-20.77	30.79	2.44	Average		
4	4020.00	43.76	74.00	-30.24	41.32	2.44	Peak		
5	4824.00	37.18	54.00	-16.82	32.49	4.69	Average		
6	4824.00	45.62	74.00	-28.38	40.93	4.69	Peak		

*Factor includes antenna factor, cable loss and amplifier gain

Note 2: Margin (dB) = Emission level (dBuV/m) – Limit (dBuV/m).

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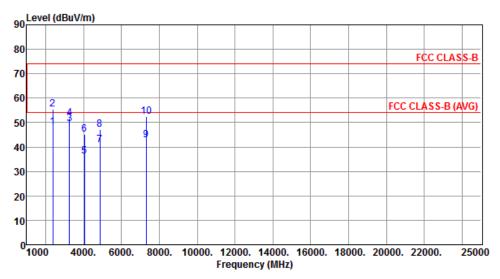
*Factor includes antenna factor , cable loss and amplifier gain

Note 2: Margin (dB) = Emission level (dBuV/m) – Limit (dBuV/m).

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Modulation	11b	Test Freq. (MHz)	2437
Polarization	Vertical		



	Freq.	Emission level	Limit	Margin	SA reading	Factor	Remark	ANT High	Turn Table
	MHz	dBuV/m	dBuV/m	dB	dBuV	dB		cm	deg
1	2390.00	48.24	54.00	-5.76	51.14	-2.90	Average		
2	2390.00	55.33	74.00	-18.67	58.23	-2.90	Peak		
3	3249.33	49.42	54.00	-4.58	49.03	0.39	Average		
4	3249.33	51.84	74.00	-22.16	51.45	0.39	Peak		
5	4061.66	36.36	54.00	-17.64	33.78	2.58	Average		
6	4061.66	45.06	74.00	-28.94	42.48	2.58	Peak		
7	4874.00	40.77	54.00	-13.23	36.00	4.77	Average		
8	4874.00	47.31	74.00	-26.69	42.54	4.77	Peak		
9	7311.00	42.84	54.00	-11.16	33.27	9.57	Average		
10	7311.00	52.58	74.00	-21.42	43.01	9.57	Peak		

*Factor includes antenna factor, cable loss and amplifier gain

Note 2: Margin (dB) = Emission level (dBuV/m) – Limit (dBuV/m).

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Modulation	11b			Test Fred	q. (MHz)	2	462	•
Polarization	Hori	zontal		•		•		
90 Level (dBuV/m)							
80								
							FCC CLAS	S-B
70	,							
60	4	_				FCC C	CLASS-B (A	WG)
50	3 6	8						
40	5	+						
30								
20								
10								
01000	4000.	6000. 80	00. 10000. 120	000. 14000. 1	16000. 1800	00. 20000. 2	22000.	25000
			Fred	quency (MHz)				
	Freq. E		Limit Marg		Factor	Remark	ANT	Turn
	MHz	level dBuV/m	dBuV/m dB	reading dBuV	dB		High cm	Table deg
1	2483.50				-2.42	Average		
2	2483.50		74.00 -13.4 54.00 -5.7		-2.42 2.73	Peak Average		

50.12

34.24

2.73

4.86

4.86

9.68

9.68

Peak

Peak

Peak

Average

Average

Note 1: Emission Level (dBuV/m) = SA Reading (dBuV/m) + Factor* (dB)

*Factor includes antenna factor , cable loss and amplifier gain

4103.33 52.85 74.00 -21.15

4924.00 39.10 54.00 -14.90

4924.00 47.71 74.00 -26.29 42.85

7386.00 38.01 54.00 -15.99 28.33

7386.00 50.43 74.00 -23.57 40.75

Note 2: Margin (dB) = Emission level (dBuV/m) – Limit (dBuV/m).

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6

7



odulation		11b					Test I	Freq.	(MHz	<u>z</u>)	24	62	
olarization	Vertical												
90 Lev	el (dBu\	//m)											
80											F	CC CLAS	S-B
70													
60	2										FCC CI	ASS-B (A	VC
50	1	4 6		8							FCC CE	A33-D (A	wuj
		Į š											
40		ŤŤ											
30													
20		\perp											
10													
0100	0 4	000.	6000.	8000.	1000		000. 1400 Juency (M		000. 1	8000. 2	20000. 22	2000.	250

	Freq. MHz	Emission level dBuV/m	Limit dBuV/m	Ū	SA reading dBuV	Factor dB	Remark	ANT High cm	Turn Table deg
1	2483.50	49.35	54.00	-4.65	51.77	-2.42	Average		
2	2483.50	56.17	74.00	-17.83	58.59	-2.42	Peak		
3	4103.33	39.57	54.00	-14.43	36.84	2.73	Average		
4	4103.33	47.05	74.00	-26.95	44.32	2.73	Peak		
5	4924.00	40.71	54.00	-13.29	35.85	4.86	Average		
6	4924.00	47.11	74.00	-26.89	42.25	4.86	Peak		
7	7386.00	37.71	54.00	-16.29	28.03	9.68	Average		
8	7386.00	51.35	74.00	-22.65	41.67	9.68	Peak		

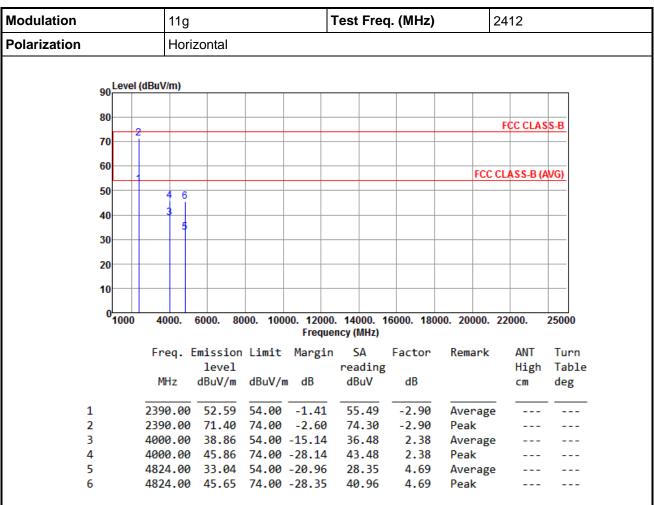
Note 1: Emission Level (dBuV/m) = SA Reading (dBuV/m) + Factor* (dB) *Factor includes antenna factor , cable loss and amplifier gain

Note 2: Margin (dB) = Emission level (dBuV/m) – Limit (dBuV/m).

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3.5.6 Transmitter Radiated Unwanted Emissions (Above 1GHz) for 11g



Note 1: Emission Level (dBuV/m) = SA Reading (dBuV/m) + Factor* (dB)

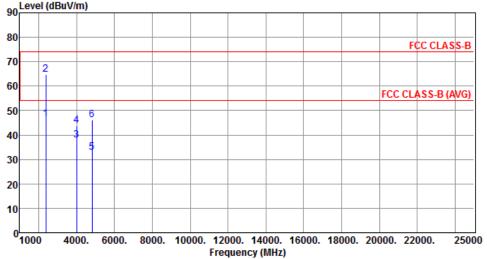
*Factor includes antenna factor, cable loss and amplifier gain

Note 2: Margin (dB) = Emission level (dBuV/m) – Limit (dBuV/m).

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Modulation		11g			Test	Freq.	(MHz))	24	12
Polarization	Diarization Vertical									
0.0	Level (dE	uV/m)								
90	Level (dE	uV/m)								



	Freq. MHz	Emission level dBuV/m	Limit dBuV/m	Ū	SA reading dBuV	Factor dB	Remark	ANT High cm	Turn Table deg
1	2390.00	46.43	54.00	-7.57	49.33	-2.90	Average		
2	2390.00		74.00		67.53	-2.90	Peak		
3	4000.00	37.80	54.00	-16.20	35.42	2.38	Average		
4	4000.00	43.97	74.00	-30.03	41.59	2.38	Peak		
5	4824.00	32.83	54.00	-21.17	28.14	4.69	Average		
6	4824.00	46.01	74.00	-27.99	41.32	4.69	Peak		

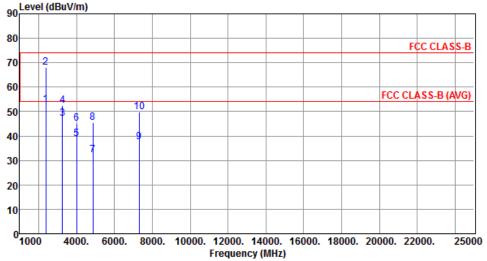
*Factor includes antenna factor, cable loss and amplifier gain

Note 2: Margin (dB) = Emission level (dBuV/m) - Limit (dBuV/m).

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Modulation	11g	11g			Test Freq. (MHz)				2437			
Polarization	Horizontal	Horizontal										
90 Level (dBuV/m)												
90												



	Freq.	Emission level	Limit	Margin	SA reading	Factor	Remark	ANT High	Turn Table
	MHz	dBuV/m	dBuV/m	dB	dBuV	dB		cm	deg
1	2390.00	52.79	54.00	-1.21	55.69	-2.90	Average		
2	2390.00	68.00	74.00	-6.00	70.90	-2.90	Peak		
3	3249.33	47.21	54.00	-6.79	46.82	0.39	Average		
4	3249.33	52.63	74.00	-21.37	52.24	0.39	Peak		
5	4000.00	39.00	54.00	-15.00	36.62	2.38	Average		
6	4000.00	45.32	74.00	-28.68	42.94	2.38	Peak		
7	4874.00	32.19	54.00	-21.81	27.42	4.77	Average		
8	4874.00	45.36	74.00	-28.64	40.59	4.77	Peak		
9	7311.00	37.37	54.00	-16.63	27.80	9.57	Average		
10	7311.00	49.81	74.00	-24.19	40.24	9.57	Peak		

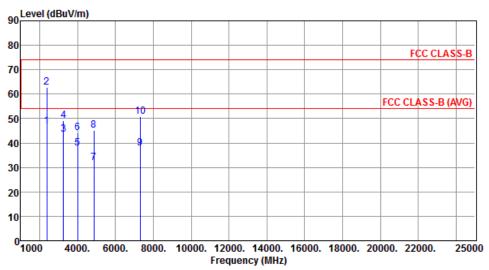
*Factor includes antenna factor, cable loss and amplifier gain

Note 2: Margin (dB) = Emission level (dBuV/m) – Limit (dBuV/m).

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Modulation	11g	Test Freq. (MHz)	2437
Polarization	Vertical		



	Freq.	Emission level	Limit	Margin	SA reading	Factor	Remark	ANT High	Turn Table
	MHz	dBuV/m	dBuV/m	dB	dBuV	dB		cm	deg
1	2390.00	46.82	54.00	-7.18	49.72	-2.90	Average		
2	2390.00	62.89	74.00	-11.11	65.79	-2.90	Peak		
3	3249.33	43.58	54.00	-10.42	43.19	0.39	Average		
4	3249.33	49.18	74.00	-24.82	48.79	0.39	Peak		
5	4000.00	37.84	54.00	-16.16	35.46	2.38	Average		
6	4000.00	44.17	74.00	-29.83	41.79	2.38	Peak		
7	4874.00	31.99	54.00	-22.01	27.22	4.77	Average		
8	4874.00	45.15	74.00	-28.85	40.38	4.77	Peak		
9	7311.00	37.76	54.00	-16.24	28.19	9.57	Average		
10	7311.00	50.97	74.00	-23.03	41.40	9.57	Peak		

*Factor includes antenna factor, cable loss and amplifier gain

Note 2: Margin (dB) = Emission level (dBuV/m) – Limit (dBuV/m).

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Modulation	11g	-	Γest Freq.	(MHz)	2	462	
Polarization	Horizontal	<u> </u>					
90 Level (d	BuV/m)						
80						FCC CLAS	S-B
70							
60							
00					FCC C	LASS-B (A	VG)
50	4 6						<u></u>
40	3 7						
40	5]						
30							
20							
20							
10							
0			44000 400			2222	
1000	4000. 6000. 80	000. 10000. 12000 Freque	. 14000. 160 ncy (MHz)	00. 18000.	20000. 2	2000.	25000
	Freq. Emission	Limit Margin	SA F	actor	Remark	ANT	Turn
	level	· ·	reading			High	Table
	MHz dBuV/m	dBuV/m dB	dBuV	dB		cm	deg
1	2483.50 52.79	54.00 -1.21	55.21	-2.42	Average		
		74.00 -1.18			Peak		
	4000.00 39.23		36.85		Average		
		74.00 -27.85	43.77		Peak		
		54.00 -21.62	27.52		Average		
_	4924.00 45.50 7386.00 37.84	74.00 -28.50	40.64 28.16		Peak Average		
•	7386.00 50.34		20.16 40.66		Average Peak		

9.68 Peak

Note 1: Emission Level (dBuV/m) = SA Reading (dBuV/m) + Factor* (dB)

*Factor includes antenna factor, cable loss and amplifier gain

7386.00 50.34 74.00 -23.66 40.66

Note 2: Margin (dB) = Emission level (dBuV/m) – Limit (dBuV/m).

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Modulation		11g			-	Test Fred	q. (MHz)	2	462	
Polarization		Vert	ical					•		
		l .								
	90 Leve	l (dBuV/m)								
	30									
	80								FCC CLAS	S_R
	70	2							TOO CENS	5-5
		Ī								
	60							FCC C	LASS-B (A	WG)
	50	1	8							
		4 6								
	40	1 3 1								
	30	—								
	20									
	10									
	01000	4000.	6000. 80	000. 100			6000. 180	00. 20000. 2	22000.	25000
						ncy (MHz)				
		Freq. I		Limit	Margin		Factor	Remark	ANT	Turn
		MII-	level	JD. 377	- 40	reading			High	Table
		MHz	dBuV/m	abuv/i	п ав	dBuV	dB		CM	deg
1		2483.50	47.98	54.00	-6.02	50.40	-2.42	Average		
2		2483.50				70.09	-2.42	Peak		
3		4000.00	37.85	54.00	-16.15	35.47	2.38	Average		
4		4000.00	43.37	74.00	-30.63	40.99	2.38	Peak		
5		4924.00				27.43	4.86	Average		
6		4924.00				40.36	4.86	Peak		
7		7386 00	22 1/	5/1 00	15 96	28 46	0 68	Λυοροσο		

7386.00 38.14 54.00 -15.86 28.46

7386.00 50.27 74.00 -23.73 40.59

9.68

9.68

Average

Peak

Note 1: Emission Level (dBuV/m) = SA Reading (dBuV/m) + Factor* (dB)

*Factor includes antenna factor, cable loss and amplifier gain

Note 2: Margin (dB) = Emission level (dBuV/m) – Limit (dBuV/m).

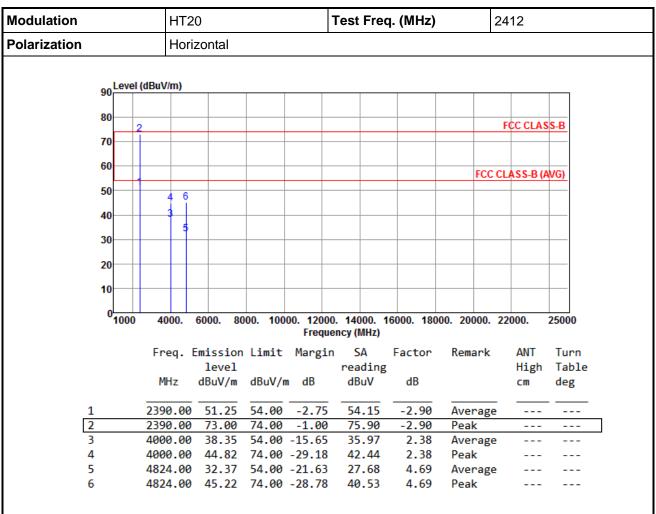
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3.5.7 Transmitter Radiated Unwanted Emissions (Above 1GHz) for HT20



Note 1: Emission Level (dBuV/m) = SA Reading (dBuV/m) + Factor* (dB)

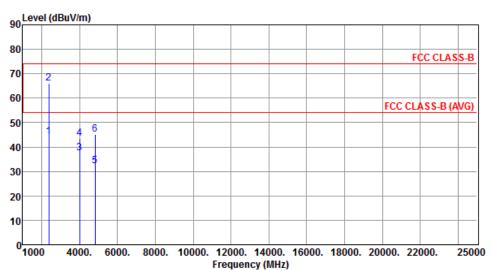
*Factor includes antenna factor, cable loss and amplifier gain

Note 2: Margin (dB) = Emission level (dBuV/m) – Limit (dBuV/m).

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Modulation	HT20	Test Freq. (MHz)	2412
Polarization	Vertical		



	Freq. MHz	Emission level dBuV/m	Limit dBuV/m	Ū	SA reading dBuV	Factor dB	Remark	ANT High cm	Turn Table deg
1	2390.00	44.30	54.00	-9.70	47.20	-2.90	Average		
2	2390.00	66.25	74.00	-7.75	69.15	-2.90	Peak		
3	4000.00	37.65	54.00	-16.35	35.27	2.38	Average		
4	4000.00	43.56	74.00	-30.44	41.18	2.38	Peak		
5	4824.00	32.35	54.00	-21.65	27.66	4.69	Average		
6	4824.00	45.06	74.00	-28.94	40.37	4.69	Peak		

*Factor includes antenna factor, cable loss and amplifier gain

Note 2: Margin (dB) = Emission level (dBuV/m) – Limit (dBuV/m).

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Modulation	HT20	Γ	Test Freq. (MHz)	2437	
Polarization	Horizontal				
90 Level (c	iBuV/m)				
30					
80				FCC CLAS	e D
70				FCC CLAS	3-D
70					
60				FCC CLASS-B (A)	(C)
50	1 -	10		FCC CLASS-B (A	<u>va)</u>
50	3 6 8				
40	5	9			
	7				
30					
20					
10					_
0					
1000	4000. 6000.		. 14000. 16000. 1800 ncy (MHz)	0. 20000. 22000. 2	25000
	Freq. Emissi	on Limit Margin	SA Factor	Remark ANT	Turn
	leve	_	reading	High	Table
	MHz dBuV/	m dBuV/m dB	dBuV dB	cm	deg
1	2390.00 52.6	3 54.00 -1.37	55.53 -2.90	Average	
2	2390.00 72.9		75.86 -2.90	Peak	
3	3249.00 45.8	3 54.00 -8.17	45.44 0.39	Average	
4	3249.00 52.0	7 74.00 -21.93	51.68 0.39	Peak	
		1 54.00 -14.89	36.73 2.38	Average	
6	4000.00 45.2	6 74.00 -28.74	42.88 2.38	Peak	

4.77

4.77

9.57

9.57

Average

Average

Peak

Peak

Note 1: Emission Level (dBuV/m) = SA Reading (dBuV/m) + Factor* (dB)

*Factor includes antenna factor , cable loss and amplifier gain

4874.00 32.32 54.00 -21.68 27.55

4874.00 45.53 74.00 -28.47 40.76

7311.00 37.98 54.00 -16.02 28.41

7311.00 50.20 74.00 -23.80 40.63

Note 2: Margin (dB) = Emission level (dBuV/m) – Limit (dBuV/m).

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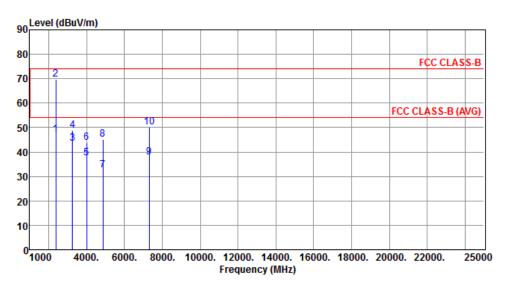
8

9

10



Modulation	HT20	Test Freq. (MHz)	2437
Polarization	Vertical		



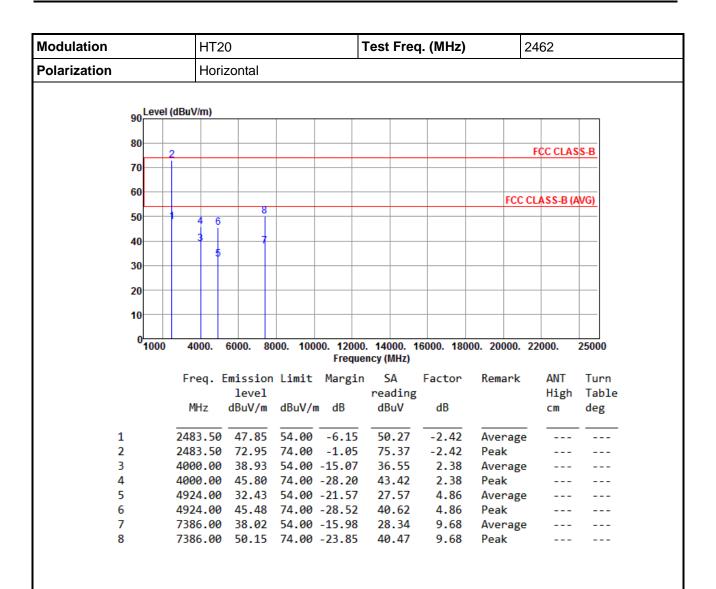
	Freq.	Emission level	Limit	Margin	SA reading	Factor	Remark	ANT High	Turn Table
	MHz	dBuV/m	dBuV/m	dB	dBuV	dB		cm	deg
1	2390.00	47.00	54.00	-7.00	49.90	-2.90	Average		
2	2390.00	69.74	74.00	-4.26	72.64	-2.90	Peak		
3	3249.33	43.51	54.00	-10.49	43.12	0.39	Average		
4	3249.33	48.86	74.00	-25.14	48.47	0.39	Peak		
5	4000.00	37.64	54.00	-16.36	35.26	2.38	Average		
6	4000.00	43.76	74.00	-30.24	41.38	2.38	Peak		
7	4874.00	32.50	54.00	-21.50	27.73	4.77	Average		
8	4874.00	45.24	74.00	-28.76	40.47	4.77	Peak		
9	7311.00	37.80	54.00	-16.20	28.23	9.57	Average		
10	7311.00	50.15	74.00	-23.85	40.58	9.57	Peak		

*Factor includes antenna factor, cable loss and amplifier gain

Note 2: Margin (dB) = Emission level (dBuV/m) – Limit (dBuV/m).

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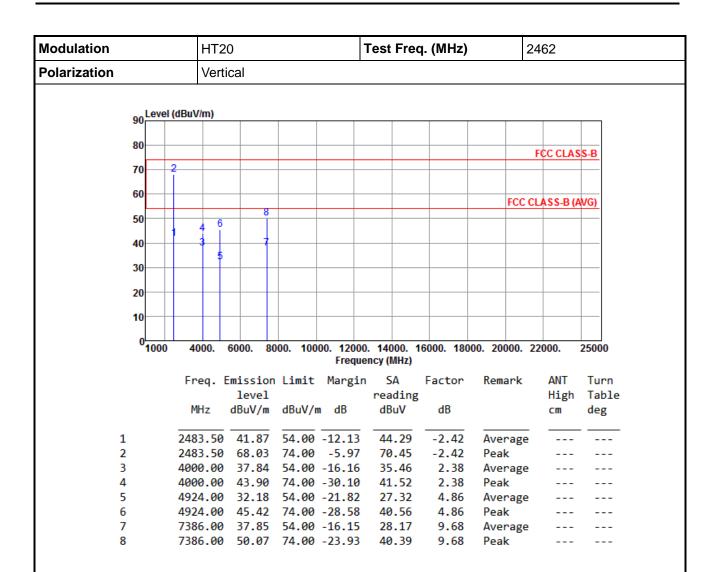


*Factor includes antenna factor , cable loss and amplifier gain

Note 2: Margin (dB) = Emission level (dBuV/m) – Limit (dBuV/m).

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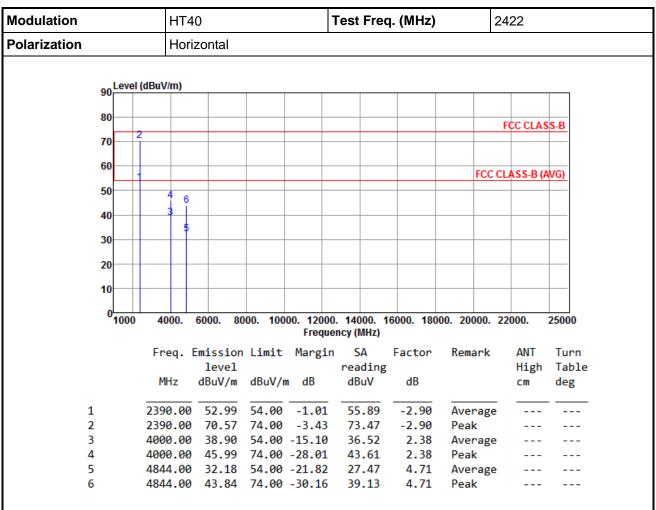
Note 1: Emission Level (dBuV/m) = SA Reading (dBuV/m) + Factor* (dB) *Factor includes antenna factor, cable loss and amplifier gain

Note 2: Margin (dB) = Emission level (dBuV/m) – Limit (dBuV/m).

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3.5.8 Transmitter Radiated Unwanted Emissions (Above 1GHz) for HT40



Note 1: Emission Level (dBuV/m) = SA Reading (dBuV/m) + Factor* (dB)

*Factor includes antenna factor, cable loss and amplifier gain

Note 2: Margin (dB) = Emission level (dBuV/m) – Limit (dBuV/m).

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Modulation			HT	40			Test Fre	q. (MHz)	2	2422	
Polarization			Ver	tical					'		
	90 <mark>l</mark>	Level ((dBuV/m)								$\overline{}$
	80										
	70									FCC CLAS	SS-B
		آ									
	60								FCC (CLASS-B (AVG)
	50		4 6								
	40										
	30										
	20										
	10										+-
	0	1000	4000.	6000.	8000. 1				00. 20000.	22000.	25000
			-	.			ency (MHz)		ь .	ANT	_
			Freq.	leve		t Margi	n SA readin	Factor	Remark	ANT High	Turn Table
			MHz	dBuV/	m dBu\	//m dB	dBuV	dB		cm	deg
1	1		2390.00	51.0	7 54.6	00 -2.93	53.97	-2.90	Average		
	2		2390.00						Peak		
	3		4000.00			0 -15.74			Average		
	4					0 -30.23 0 -21.53					
	5					10 -21.53 10 -29.07			Average Peak		

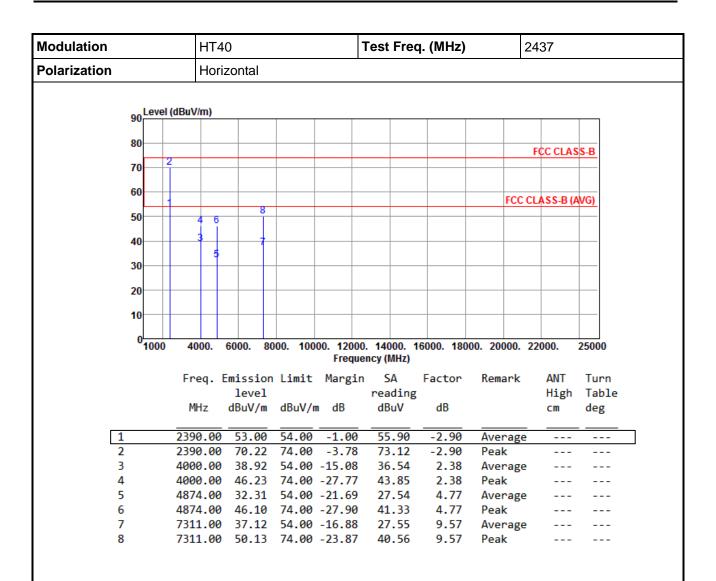
Note 1: Emission Level (dBuV/m) = SA Reading (dBuV/m) + Factor* (dB) *Factor includes antenna factor, cable loss and amplifier gain

Note 2: Margin (dB) = Emission level (dBuV/m) – Limit (dBuV/m).

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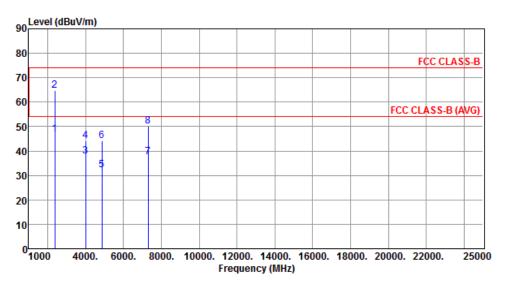
*Factor includes antenna factor , cable loss and amplifier gain

Note 2: Margin (dB) = Emission level (dBuV/m) – Limit (dBuV/m).

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Modulation	HT40	Test Freq. (MHz)	2437
Polarization	Vertical		



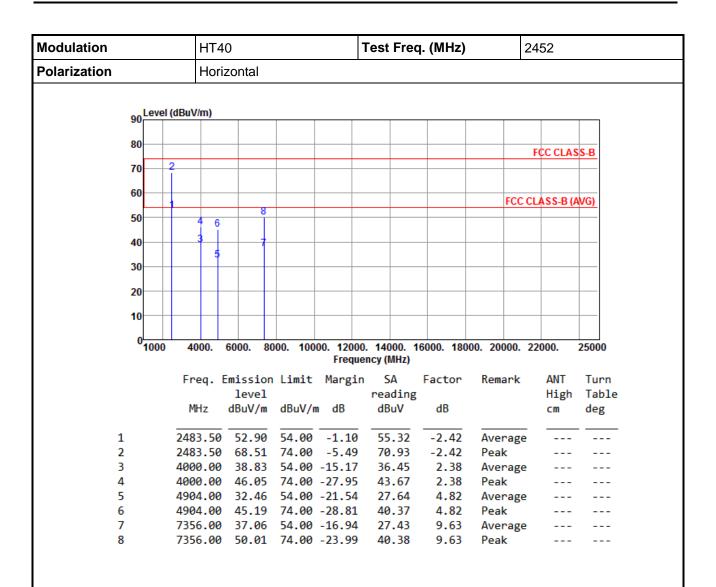
	Freq.	Emission level	Limit	Margin	SA reading	Factor	Remark	ANT High	Turn Table
	MHz	dBuV/m	dBuV/m	dB	dBuV	dB		cm	deg
1	2390.00	46.73	54.00	-7.27	49.63	-2.90	Average		
2	2390.00	64.66	74.00	-9.34	67.56	-2.90	Peak		
3	4000.00	37.82	54.00	-16.18	35.44	2.38	Average		
4	4000.00	44.33	74.00	-29.67	41.95	2.38	Peak		
5	4874.00	32.25	54.00	-21.75	27.48	4.77	Average		
6	4874.00	44.09	74.00	-29.91	39.32	4.77	Peak		
7	7311.00	37.39	54.00	-16.61	27.82	9.57	Average		
8	7311.00	49.99	74.00	-24.01	40.42	9.57	Peak		

*Factor includes antenna factor, cable loss and amplifier gain

Note 2: Margin (dB) = Emission level (dBuV/m) – Limit (dBuV/m).

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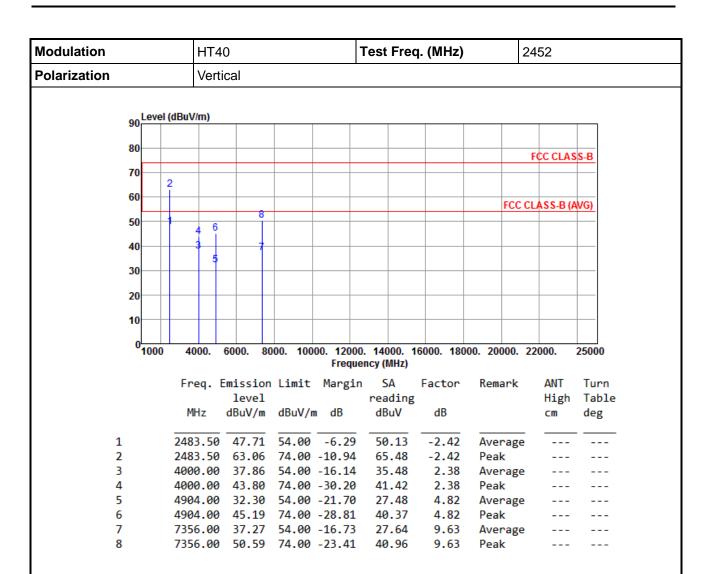


Note 1: Emission Level (dBuV/m) = SA Reading (dBuV/m) + Factor* (dB) *Factor includes antenna factor, cable loss and amplifier gain

Note 2: Margin (dB) = Emission level (dBuV/m) – Limit (dBuV/m).

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Note 1: Emission Level (dBuV/m) = SA Reading (dBuV/m) + Factor* (dB) *Factor includes antenna factor, cable loss and amplifier gain

Note 2: Margin (dB) = Emission level (dBuV/m) – Limit (dBuV/m).

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3.6 Emissions in Non-Restricted Frequency Bands

3.6.1 Emissions in Non-Restricted Frequency Bands Limit

Peak power in any 100 kHz bandwidth outside of the authorized frequency band shall be attenuated by at least 30 dB relative to the maximum in-band peak PSD level in 100 kHz

3.6.2 Measuring Instruments

Refer a test equipment and calibration data table in this test report.

3.6.3 Test Procedures

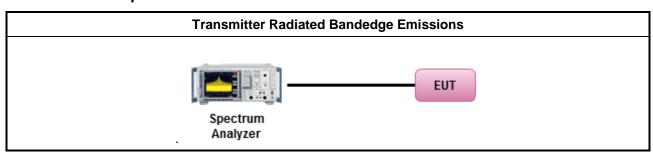
Reference level measurement

- 1. Set RBW=100kHz, VBW = 300kHz, Detector = Peak, Sweep time = Auto
- 2. Trace = max hold, Allow Trace to fully stabilize
- 3. Use the peak marker function to determine the maximum PSD level

Emission level measurement

- Set RBW=100kHz, VBW = 300kHz, Detector = Peak, Sweep time = Auto
- 2. Trace = max hold, Allow Trace to fully stabilize
- 3. Scan Frequency range is up to 25GHz
- 4. Use the peak marker function to determine the maximum amplitude level

3.6.4 Test Setup



3.6.5 Test Result of Emissions in non-restricted frequency bands

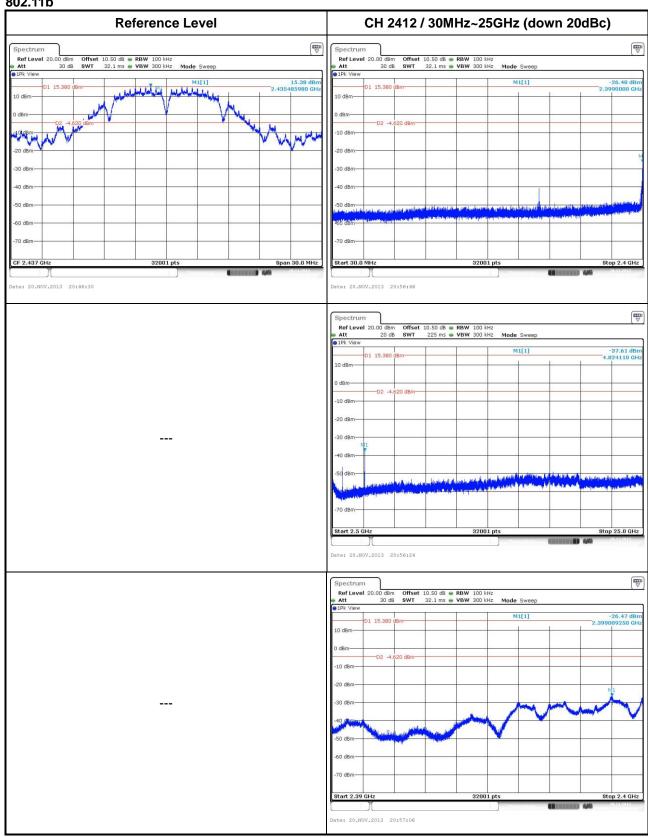
This test item is performed on each TX output individually without summing or adding 10 $log(N_{ANT})$ since measurements are made relative to the in-band emissions on the individual outputs. Only worst test result of each operating mode is presented.

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3.6.6 Unwanted Emissions into Non-Restricted Frequency Bands

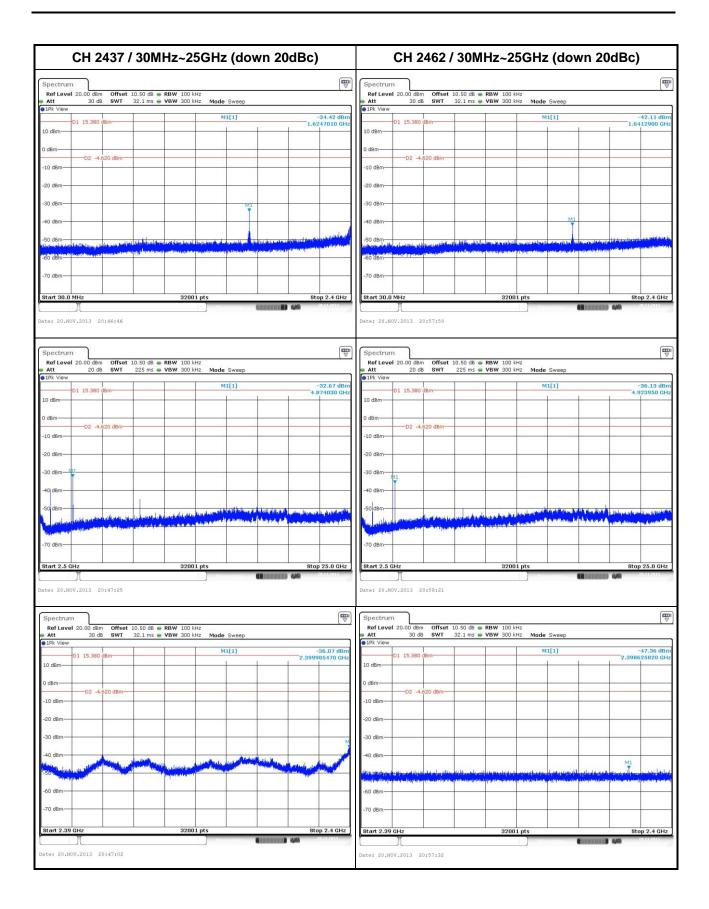
802.11b



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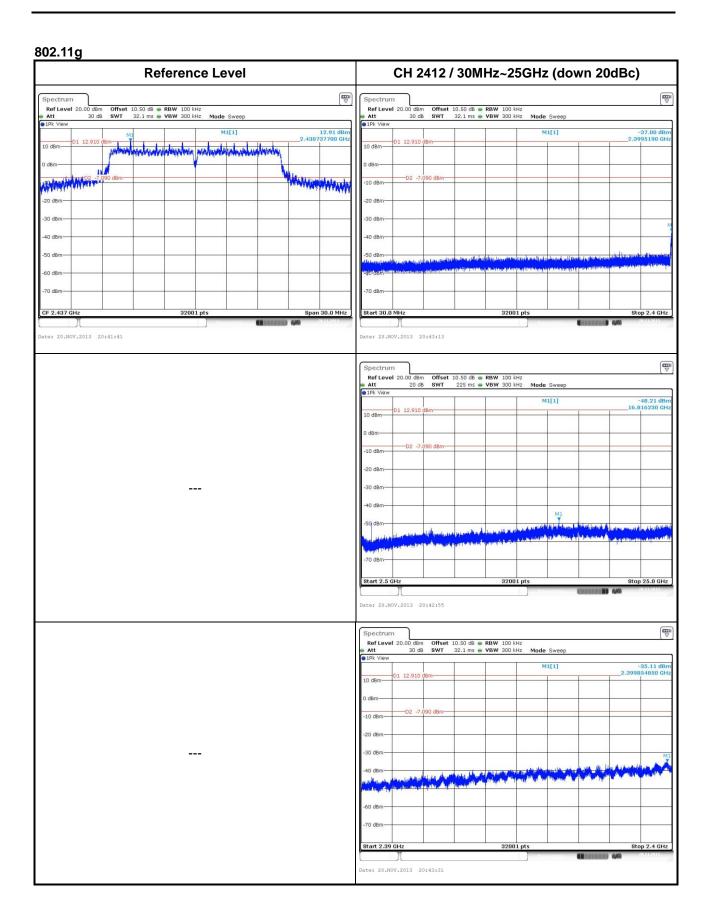
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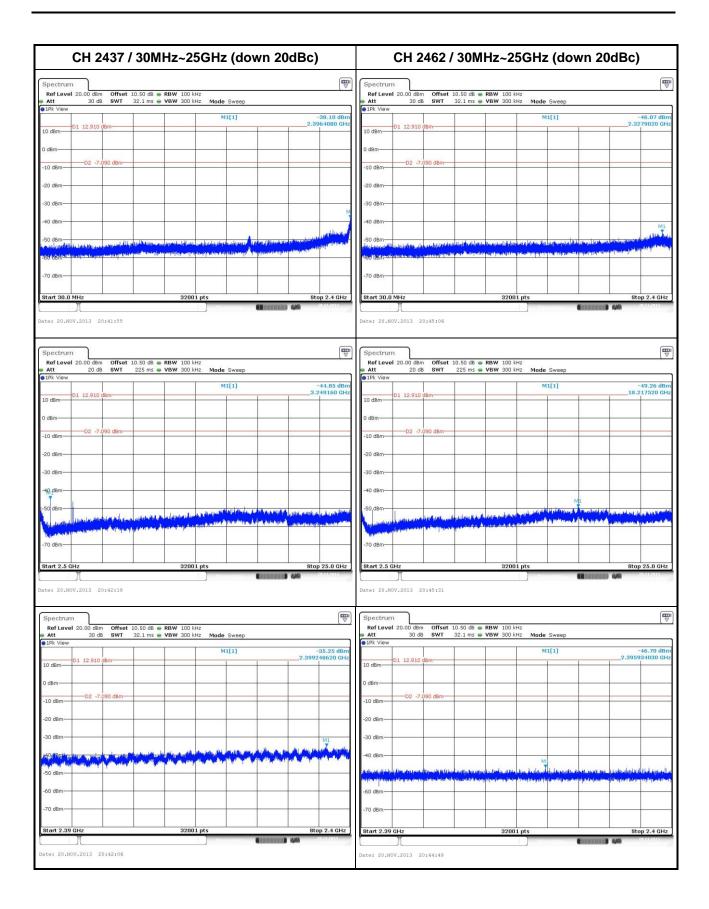
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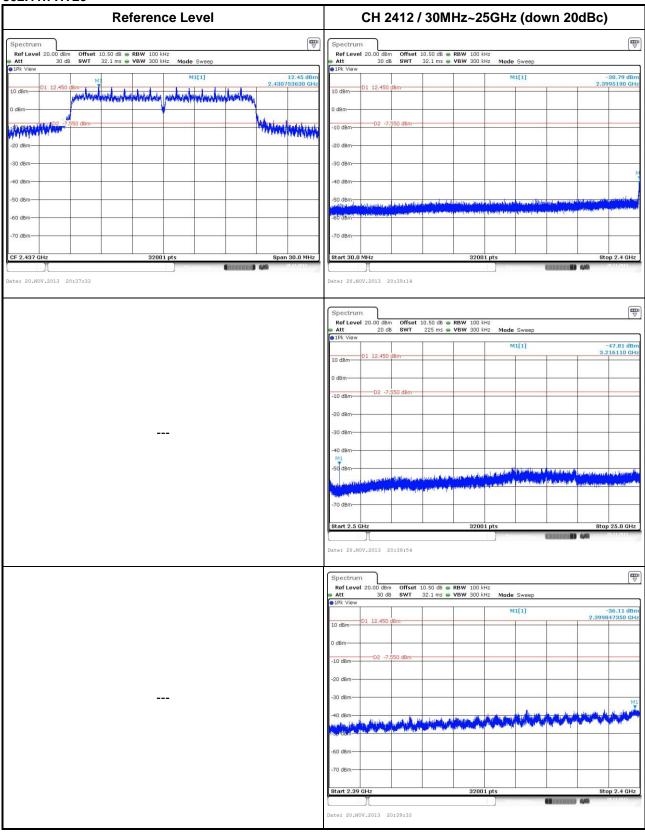




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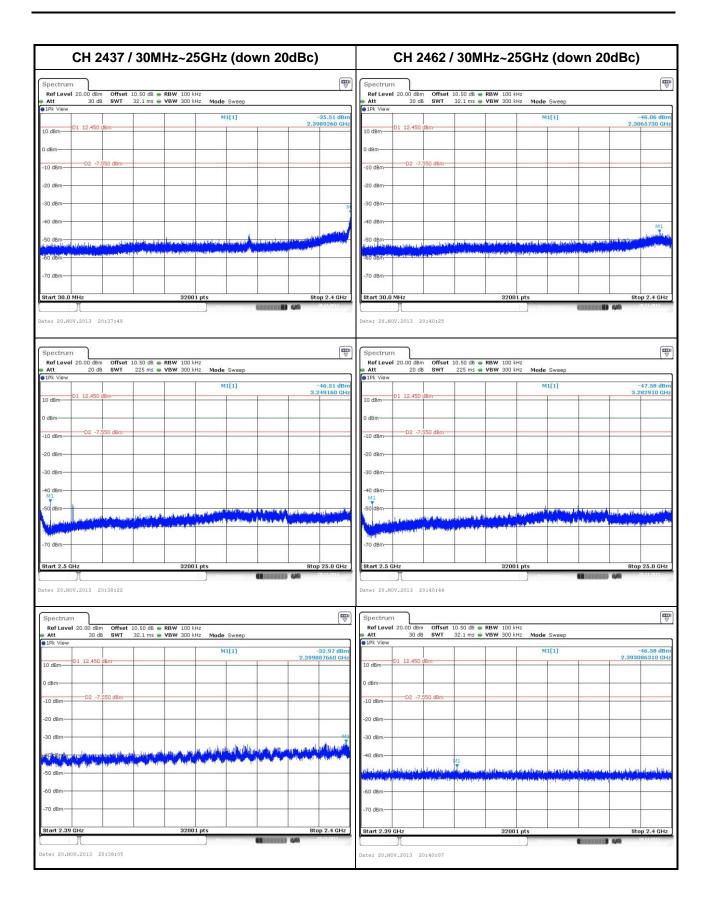


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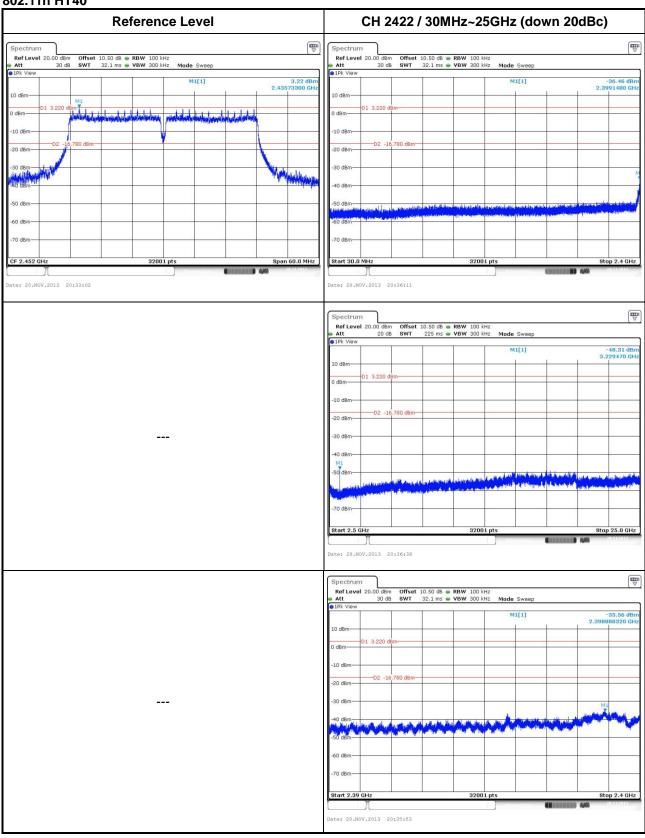




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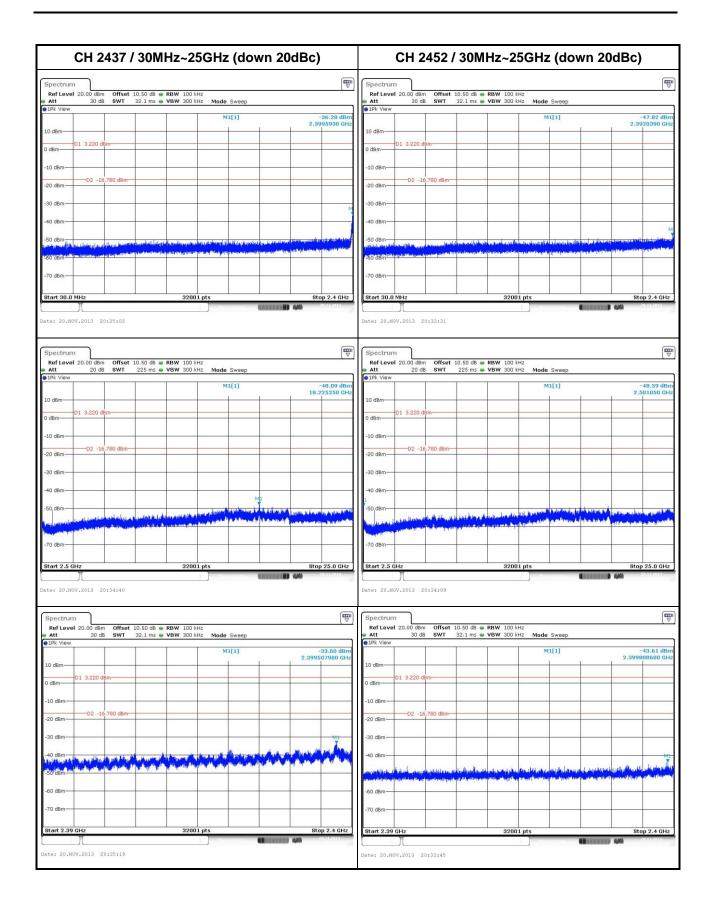


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4 Test laboratory information

Established in 2012, ICC provides foremost EMC & RF Testing and advisory consultation services by our skilled engineers and technicians. Our services employ a wide variety of advanced edge test equipment and one of the widest certification extents in the business.

International Certification Corp, it is our definitive objective is to institute long term, trust-based associations with our clients. The expectation we set up with our clients is based on outstanding service, practical expertise and devotion to a certified value structure. Our passion is to grant our clients with best EMC / RF services by oriented knowledgeable and accommodating staff.

Our Test sites are located at Linkou District and Kwei Shan Hsiang. Location map can be found on our website http://www.icertifi.com.tw.

Linkou Kwei Shan

Tel: 886-2-2601-1640 Tel: 886-3-271-8666

No. 30-2, Ding Fwu Tsuen, Lin Kou District, New Taipei
City, Taiwan, R.O.C.

No. 3-1, Lane 6, Wen San 3rd St., Kwei Shan
Hsiang, Tao Yuan Hsien 333, Taiwan, R.O.C.

If you have any suggestion, please feel free to contact us as below information

Tel: 886-3-271-8666 Fax: 886-3-318-0155

Email: ICC_Service@icertifi.com.tw

==END==

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