

FCC C2PC Test Report

FCC ID : TWG-SDCMSD40NBT

Equipment : 802.11abgn (1X1) + Bluetooth (2.1) module

Model No. : SDC-MSD40NBT

Brand Name : Summit

Applicant : Summit Data Communications, Inc.

Address : 526 South Main Street Suite 805 Akron, OH

44311

Standard : 47 CFR FCC Part 15.407

Received Date : Feb. 26, 2015

Tested Date : Mar. 03 ~ Mar. 31, 2015

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

Iac MRA



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Release Record

Report No.	Version	Description	Issued Date
FR522601AI	Rev. 01	Initial issue	May 13, 2015

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Summary of Test Results

FCC Rules	Test Items	Measured	Result
15.207	Conducted Emissions	[dBuV]: 0.513MHz 37.47 (Margin -8.53dB) - AV	Pass
15.407(b)	Radiated Emissions	[dBuV/m at 3m]: 5725.00MHz	Pass
15.209		77.10 (Margin -1.10dB) - PK	F455
15.407(a)	Emission Bandwidth	Meet the requirement of limit	Pass
15.407(e)	6dB bandwidth	Meet the requirement of limit	Pass
15.407(a)	RF Output Power	Max Power [dBm]: 15.72	Pass
15.407(a)	Peak Power Spectral Density	Meet the requirement of limit	Pass
15.407(g)	Frequency Stability	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

This report is prepared for FCC class II change. The modification is only concerned with the following:

- ♦ For complying with New U-NII rule requirement.
- ♦ Changing value of some resistances and capacitances of Non-RF part.

In this test report, all test items has been re-tested and its data was recorded in the following sections.

1.1.1 Specification of the Equipment under Test (EUT)

RF General Information						
Frequency Range (MHz) IEEE Std. Ch. Freq. (MHz) Channel Transmit Data Number Chains (N _{TX}) N						
5725-5850	а	5745-5805	149-161 [4]	1	6-54 Mbps	
5725-5850	n (HT20)	5745-5805	149-161 [4]	1	MCS 0-7	

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

Note 2: 802.11a/n uses a combination of OFDM-BPSK, QPSK, 16QAM, 64QAM modulation.

1.1.2 Antenna Details

Ant. No.	Brand	Model	Туре	Connector	Gain (dBi)
1	Radiall Larsen	R380.500.314	Dipole	RP-TNC plug	5

1.1.3 Power Supply Type of Equipment under Test (EUT)

Power Supply Type	3.3Vdc from host

1.1.4 Accessories

N/A

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1.1.5 Support Units

	Support Units					
No. Equipment Description						
1	PDA	Brand Name: HP				
'		Model Name: HSTNH-L05C-BT				
	Adapter for PDA	Brand Name: N/A				
		Model Name: 3A-041WE05				
2		Power Rating: I/P: 100-240Vac, 50-60Hz, 0.2A O/P: 5.0Vdc, 1.0A				
		Power Line: 1.85m non-shielded cable w/o core				

1.1.6 Channel List

802.11 a / HT20				
Channel	Frequency(MHz)			
149	5745			
153	5765			
157	5785			
161	5805			

1.1.7 Test Tool and Duty Cycle

Test Tool	LRU, Version: 3.5.1.17				
	Mode	Duty cycle (%)	Duty factor (dB)		
Duty Cycle and Duty Factor	11a	96.31%	0.16		
	VHT20	95.26%	0.21		

1.1.8 Power Setting

Modulation Mode	Test Frequency (MHz)	Power Set
11a	5745	100%
11a	5785	100%
11a	5805	100%
HT20	5745	100%
HT20	5785	100%
HT20	5805	100%

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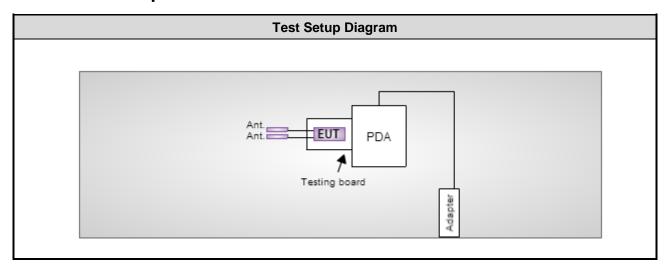


1.2 Local Support Equipment List

	Support Equipment List						
No.	No. Equipment Brand Model FCC ID Signal cable / Length (m)						
1	PDA	HP	HSTNH-L05C-BT				
2	Testing board						

Note: No.1 was supplied by applicant.

1.3 Test Setup Chart



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1.4 The Equipment List

Test Item	Conducted Emission							
Test Site	Conduction room 1 / (Conduction room 1 / (CO01-WS)						
Instrument	Instrument Manufacturer Model No. Serial No. Calibration Date Calibration Uni							
EMC Receiver	R&S	ESCS 30	100169	Oct. 17, 2014	Oct. 16, 2015			
LISN	SCHWARZBECK	Schwarzbeck 8127	8127-667	Nov. 17, 2014	Nov. 16, 2015			
LISN (Support Unit)	SCHWARZBECK	Schwarzbeck 8127	8127-666	Nov. 26, 2014	Nov. 25, 2015			
RF Cable-CON	Woken	CFD200-NL	CFD200-NL-001	Dec. 31, 2014	Dec. 30, 2015			
50 ohm terminal (Support Unit)	NA	50	04	Apr. 18, 2014	Apr. 17, 2015			
Measurement Software	AUDIX	e3	6.120210k	NA	NA			
Note: Calibration Inte	Note: Calibration Interval of instruments listed above is one year.							

Test Item	Radiated Emission				
Test Site	966 chamber 2 / (03C	H02-WS)			
Instrument	Manufacturer	Model No.	Serial No.	Calibration Date	Calibration Until
Spectrum Analyzer	R&S	FSV40	101499	Dec. 31, 2014	Dec. 30, 2015
Receiver	R&S	ESR3	101657	Jan. 15, 2015	Jan. 14, 2016
Bilog Antenna	SCHWARZBECK	VULB9168	VULB9168-524	Oct. 16, 2014	Oct. 15, 2015
Horn Antenna 1G-18G	SCHWARZBECK	BBHA 9120 D	BBHA 9120 D 1095	Oct. 14, 2014	Oct. 13, 2015
Horn Antenna 18G-40G	SCHWARZBECK	BBHA 9170	BBHA 9170517	Nov. 10, 2014	Nov. 09, 2015
Loop Antenna	R&S	HFH2-Z2	11900	Nov. 10, 2014	Nov. 09, 2015
Preamplifier	Burgeon	BPA-530	100218	Nov. 10, 2014	Nov. 09, 2015
Preamplifier	Agilent	83017A	MY39501309	Sep. 29, 2014	Sep. 28, 2015
Preamplifier	EMC	EMC184045B	980192	Aug. 26, 2014	Aug. 25, 2015
RF Cable	HUBER+SUHNER	SUCOFLEX104	MY16140/4	Dec. 16, 2014	Dec. 15, 2015
RF Cable	HUBER+SUHNER	SUCOFLEX104	MY16018/4	Dec. 16, 2014	Dec. 15, 2015
RF Cable	HUBER+SUHNER	SUCOFLEX104	MY16015/4	Dec. 16, 2014	Dec. 15, 2015
LF cable 3M	Woken	CFD400NL-LW	CFD400NL-003	Dec. 16, 2014	Dec. 15, 2015
LF cable 10M	Woken	CFD400NL-LW	CFD400NL-004	Dec. 16, 2014	Dec. 15, 2015
Measurement Software	AUDIX	e3	6.120210g	NA	NA
Note: Calibration Inter	val of instruments listed	d above is one year.			

Test Item	RF Conducted				
Test Site	(TH01-WS)				
Instrument	Manufacturer	Model No.	Serial No.	Calibration Date	Calibration Until
Spectrum Analyzer	R&S	FSV40	101063	Feb. 03, 2015	Feb. 02, 2016
TEMP&HUMIDITY CHAMBER	GIANT FORCE	GCT-225-40-SP-SD	MAF1212-002	Dec. 03, 2014	Dec. 02, 2015
Power Meter	Anritsu	ML2495A	1241002	Sep. 29, 2014	Sep. 28, 2015
Power Sensor	Anritsu	MA2411B	1207366	Sep. 29, 2014	Sep. 28, 2015
Measurement Software	Sporton	Sporton_1	1.3.30	NA	NA
Note: Calibration Inte	rval of instruments liste	d above is one year.		•	

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1.5 Testing Applied Standards

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

47 CFR FCC Part 15.407
ANSI C63.10-2013
FCC 789033 D02 General UNII Test Procedures New Rules v01
FCC KDB 412172 D01 Determining ERP and EIRP v01

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	±34.134 Hz
Conducted power	±0.808 dB
Frequency error	±34.134 Hz
Power density	±0.463 dB
Conducted emission	±2.670 dB
AC conducted emission	±2.92 dB
Radiated emission ≤ 1GHz	±3.62 dB
Radiated emission > 1GHz	±5.6 dB
Time	±0.1%
Temperature	±0.6 °C

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2 Test Configuration

2.1 Testing Condition

Test Item	Test Site	Ambient Condition	Tested By
AC Conduction	CO01-WS	23°C / 66%	Kevin Ma
Radiated Emissions	03CH02-WS	20-22°C / 63-67%	Lance Xiao Anderson Hung
RF Conducted	TH01-WS	23°C / 64%	Bard Wu

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

2.2 The Worst Test Modes and Channel Details

	For Frequer	ncy band 5725-5850 MHz		
Test item	Modulation Mode	Test Frequency (MHz)	Data Rate (Mbps) / MCS	Test Configuration
Conducted Emissions	11a	5805	MCS 0	
Radiated Emissions ≤1GHz	11a	5805	MCS 0	
RF Output Power	11a HT20	5745 / 5785 / 5805 5745 / 5785 / 5805	6 Mbps MCS 0	
Radiated Emissions >1GHz Emission Bandwidth	11a	5745 / 5785 / 5805	6 Mbps	
6dB bandwidth Peak Power Spectral Density	HT20	5745 / 5785 / 5825	MCS 0	
Frequency Stability	Un-modulation	5785		

NOTE: The EUT was pretested with 3 orientations placed on the table for the radiated emission measurement -X, Y, and Z-plane. The **X-plane** results were found as the worst case and were shown in this report.

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3 Transmitter Test Results

3.1 Conducted Emissions

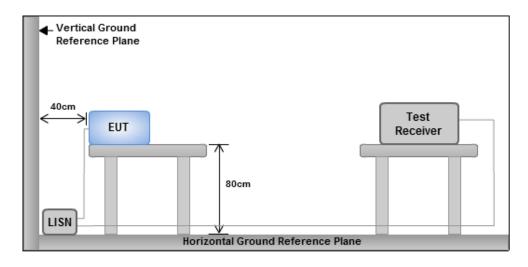
3.1.1 Limit of Conducted Emissions

	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



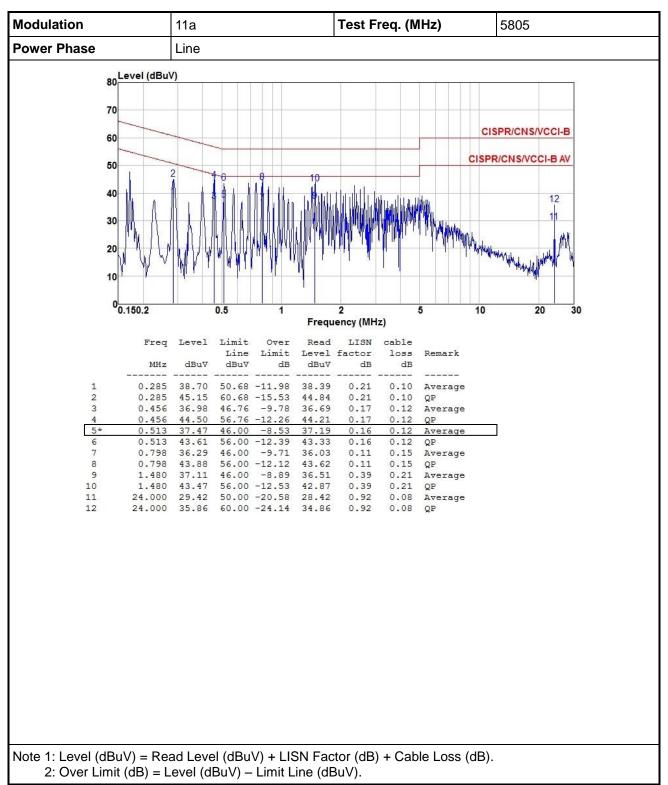
Note: 1. Support units were connected to second LISN.

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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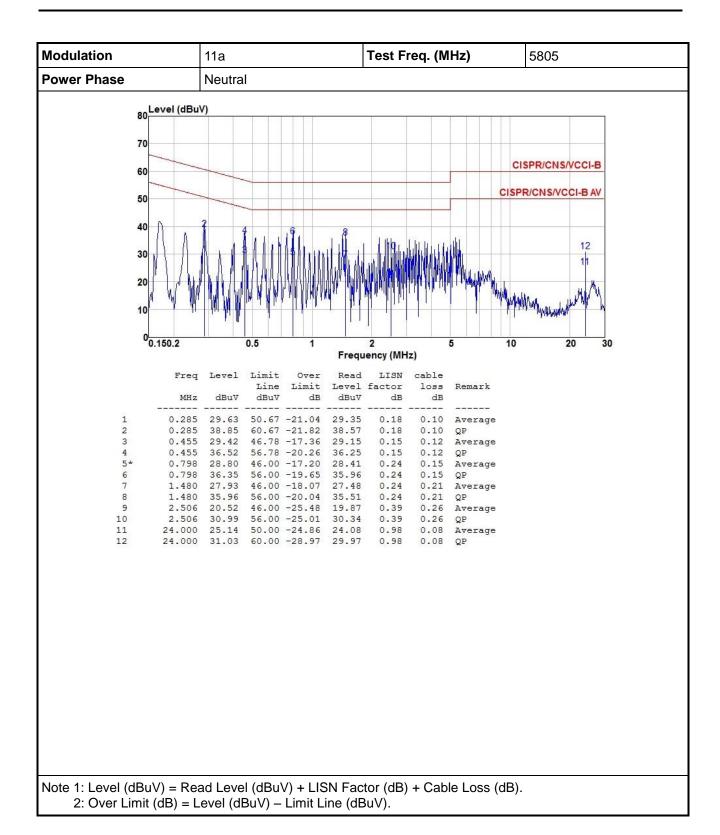


3.1.4 Test Result of Conducted Emissions



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3.2 Emission Bandwidth

3.2.1 Limit of Emission bandwidth

Within the 5.725-5.85 GHz band, the minimum 6 dB bandwidth of U-NII devices shall be at least 500 kHz.

3.2.2 Test Procedures

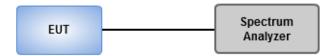
Occupied Bandwidth

- 1. Set RBW = 1 % to 5 % of the OBW
- 2. Set VBW ≥ 3 RBW
- 3. Sample detection and single sweep mode shall be used
- 4. Use the 99 % power bandwidth function of the instrument

6dB Bandwidth

- 1. Set RBW = 100kHz, VBW = 300kHz
- 2. Detector = Peak, Trace mode = max hold.
- 3. 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 frequencies) that are attenuated by 6 dB relative to the maximum level measured in the fundamental emission

3.2.3 Test Setup

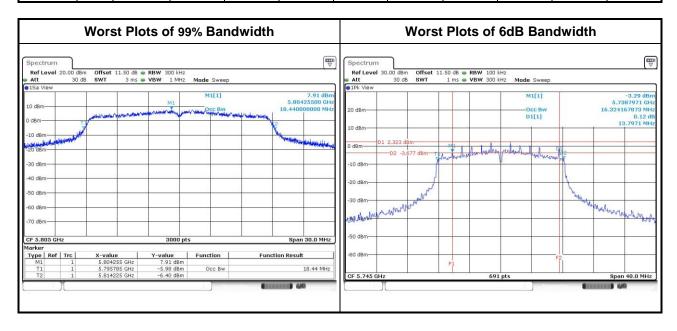


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3.2.4 Test Result of Emission Bandwidth

	Emission Bandwidth										
			0	BW Band	width (MH	z)	6dB Bandwidth (MHz)				
Mode	N _{TX}	Freq. (MHz)	Chain 0	Chain 1	Chain 2	Chain 3	Chain 0	Chain 1	Chain 2	Chain 3	6dB BW Limit (MHz)
11a	1	5745	16.60				13.80				0.5
11a	1	5785	18.12				13.86				0.5
11a	1	5805	18.26				13.86				0.5
HT20	1	5745	17.77				15.13				0.5
HT20	1	5785	18.38				15.13				0.5
HT20	1	5805	18.44				15.19				0.5



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3.3 RF Output Power

3.3.1 Limit of RF Output Power

The maximum conducted output power over the frequency band of operation shall not exceed 1 W

3.3.2 Test Procedures

Measurements may is performed using a wideband gated RF power meter provided that the gate parameters are adjusted such that the power is measured only when the EUT is transmitting at its maximum power control level. Since the measurement is made only during the ON time of the transmitter, no duty cycle correction factor is required.

3.3.3 Test Setup



3.3.4 Test Result of Maximum Conducted Output Power

	Mode N _{TX} Freq. (MHz)		C	onducted I	Power (dBn	Total	Total	Limit	
Mode			Chain 0	Chain 1	Chain 2	Chain 3	Power (mW)	Power (dBm)	(dBm)
11a	1	5745	10.97				12.503	10.97	30.00
11a	1	5785	15.41				34.754	15.41	30.00
11a	1	5805	15.72				37.325	15.72	30.00
HT20	1	5745	10.14				10.328	10.14	30.00
HT20	1	5785	15.32				34.041	15.32	30.00
HT20	1	5805	15.23				33.343	15.23	30.00

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3.4 Peak Power Spectral Density

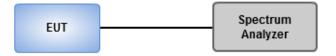
3.4.1 Limit of Peak Power Spectral Density

The maximum power spectral density shall not exceed 30 dBm in any 500 kHz band.

3.4.2 Test Procedures

- ☐ Method SA-1
 - 1. Set RBW = 500 kHz, VBW = 2 MHz, Sweep time = auto, Detector = RMS.
 - 2. Trace average 100 traces.
 - 3. Use the peak marker function to determine the maximum amplitude level.
- Method SA-2 Alternative
 - 1. Set RBW = 500 kHz, VBW = 2 MHz, Detector = RMS.
 - 2. Set sweep time ≥ 10 * (number of points in sweep) * (total on/off period of the transmitted signal).
 - 3. Perform a single sweep.
 - 4. Use the peak marker function to determine the maximum amplitude level.
 - 5. Add $10 \log(1/x)$, where x is the duty cycle.

3.4.3 Test Setup



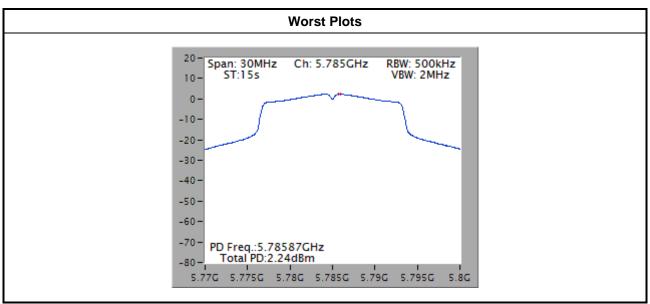
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3.4.4 Test Result of Peak Power Spectral Density

			For Frequency	band 5725-5850 MH	lz		
Co	ndition	1	Peak Power Spectral Density (dBm/500kHz)				
Modulation Mode	N _{TX}	Freq. (MHz)	PPSD w/o D.F (dBm/500kHz)	Duty Factor (dB)	PPSD with D.F (dBm/500kHz)	PPSD Limit (dBm/500kHz)	
11a	1	5745	-2.06	0.16	-1.90	30.00	
11a	1	5785	2.24	0.16	2.40	30.00	
11a	1	5805	2.14	0.16	2.30	30.00	
HT20	1	5745	-3.29	0.21	-3.08	30.00	
HT20	1	5785	1.26	0.21	1.47	30.00	
HT20	1	5805	1.18	0.21	1.39	30.00	

Note: D.F is duty factor.



Note: The plot without duty factor.

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3.5 Transmitter Radiated and Band Edge Emissions

3.5.1 Limit of Transmitter Radiated and Band Edge Emissions

	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 Note 2:

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.

	Un-restricted band emissions above 1GHz Limit
Operating Band	Limit
5.15 - 5.25 GHz	e.i.r.p27 dBm [68.2 dBuV/m@3m]
5.25 - 5.35 GHz	e.i.r.p27 dBm [68.2 dBuV/m@3m]
5.47 - 5.725 GHz	e.i.r.p27 dBm [68.2 dBuV/m@3m]
5.725 - 5.850 GHz	5.715 5.725 GHz: e.i.r.p17 dBm [78.2 dBuV/m@3m] 5.85 5.86 GHz: e.i.r.p17 dBm [78.2 dBuV/m@3m] Other un-restricted band: e.i.r.p27 dBm [68.2 dBuV/m@3m]

Note 1: Measurements may be performed at a distance other than the limit distance provided they are not performed in the near field and the emissions to be measured can be detected by the measurement equipment. When performing measurements at a distance other than that specified, the results shall be extrapolated to the specified distance using an extrapolation factor of 20 dB/decade (inverse of linear distance for field-strength measurements, inverse of linear distance-squared for power-density measurements).

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3.5.2 Test Procedures

- 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 test table. For emissions testing at or below 1 GHz, the table height is 80 cm above the reference ground plane. For emission measurements above 1 GHz, the table height is 1.5 m
- 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.

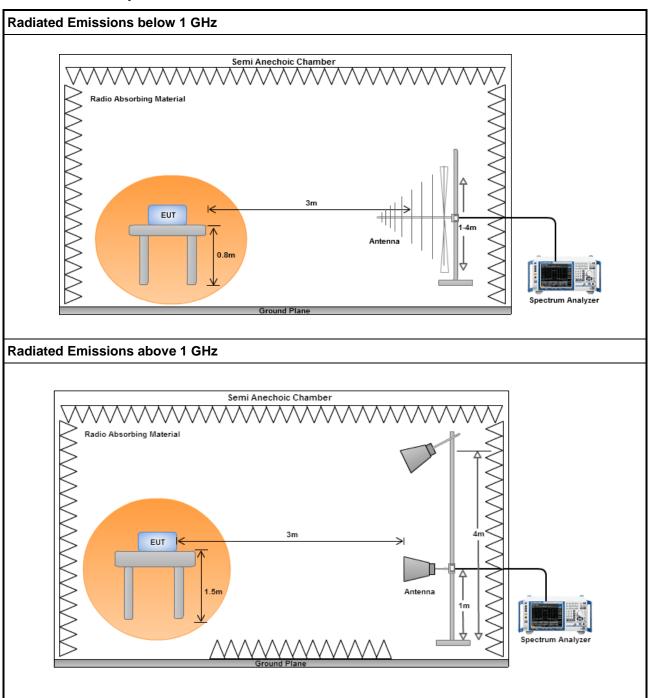
Note:

- 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.
- RBW=1MHz, VBW=1/T and Peak detector is for average measured value of radiated emission above 1GHz.

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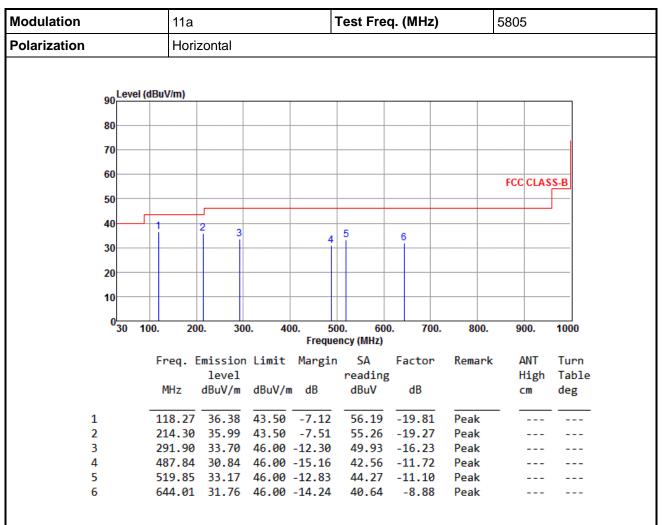
3.5.3 Test Setup



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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).

Note 3: All spurious emissions below 30MHz are more than 20 dB below the limit.

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90 Level (dBuV/m) 80 70 60 FCC CLASS-B	Modulation			11a				Test Fre	q. (MHz)		5805	
80 70 60 50 40 2 4 5 6	Polarization			Verti	cal		1					
		80— 70— 60— 50—	vel (dBu\	//m)			4	5 6			FCC CLAS	SS-B
		10										
10		030	100.	20	0. 30	0. 40			0. 700.	800.	900.	1000
10			Fr	eq. E	mission level	Limit	Margin		Factor	Remark	ANT High	Turn Table
10 0 30 100. 200. 300. 400. 500. 600. 700. 800. 900. 1000 Frequency (MHz) Freq. Emission Limit Margin SA Factor Remark ANT Turn			M	1 Hz	dBuV/m	dBuV/r	n dB	dBuV	dB		cm	deg
10 30 100. 200. 300. 400. 500. 600. 700. 800. 900. 1000 Frequency (MHz) Freq. Emission Limit Margin SA Factor Remark ANT Turn level reading High Table					33.02					Peak		
10												
10										Peak		
10	<u>:</u>	5								Peak		
10	(5	56	55.44	34.13	46.00	-11.87	44.23	-10.10	Peak		

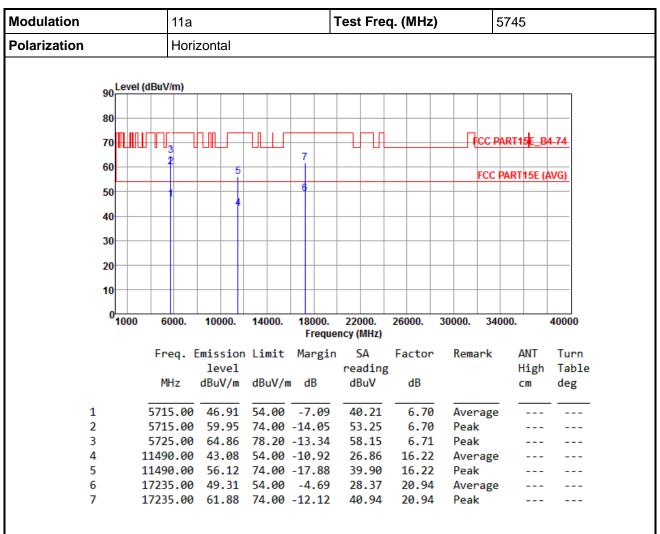
*Factor includes antenna factor , cable loss and amplifier gain Note 2: Margin (dB) = Emission level (dBuV/m) – Limit (dBuV/m).

Note 3: All spurious emissions below 30MHz are more than 20 dB below the limit.

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



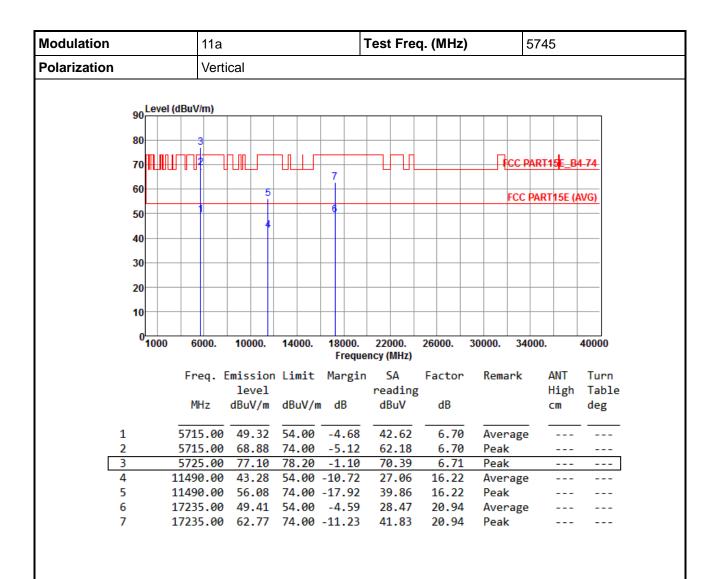
Note 1: Emission Level (dBuV/m) = SA Reading (dBuV/m) + Factor* (dB)

*Factor includes antenna factor, cable loss and amplifier gain

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

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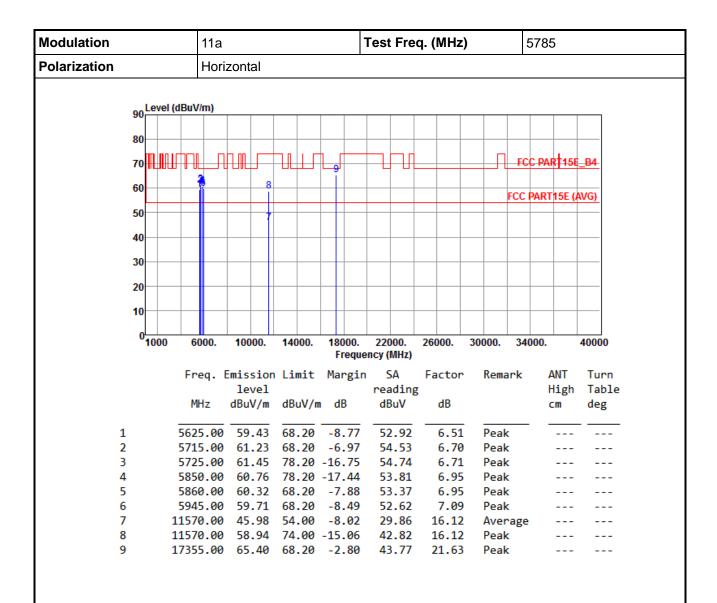


*Factor includes antenna factor, cable loss and amplifier gain

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

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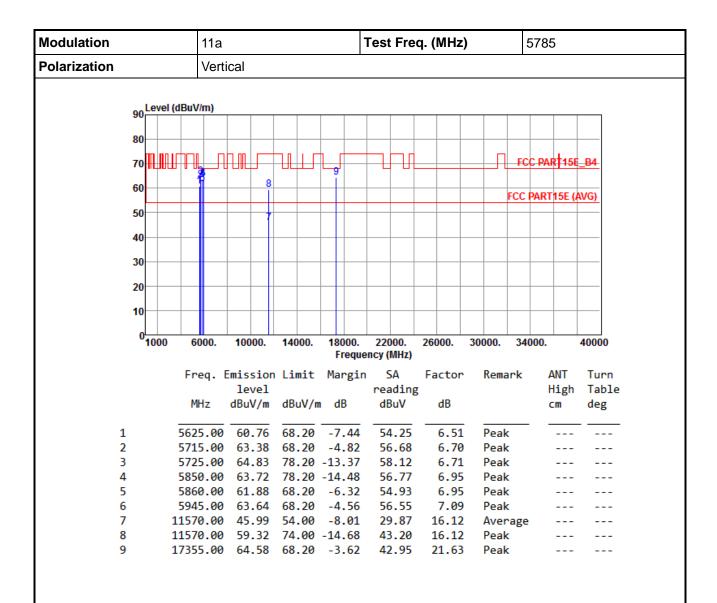


*Factor includes antenna factor, cable loss and amplifier gain

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

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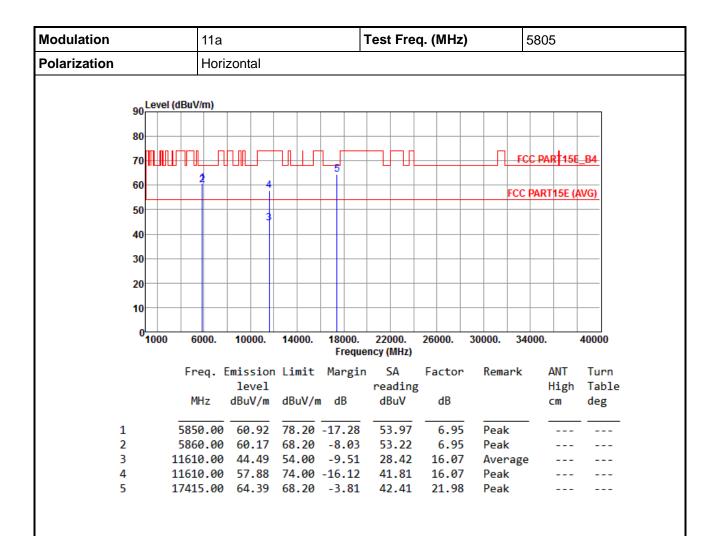


*Factor includes antenna factor, cable loss and amplifier gain

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

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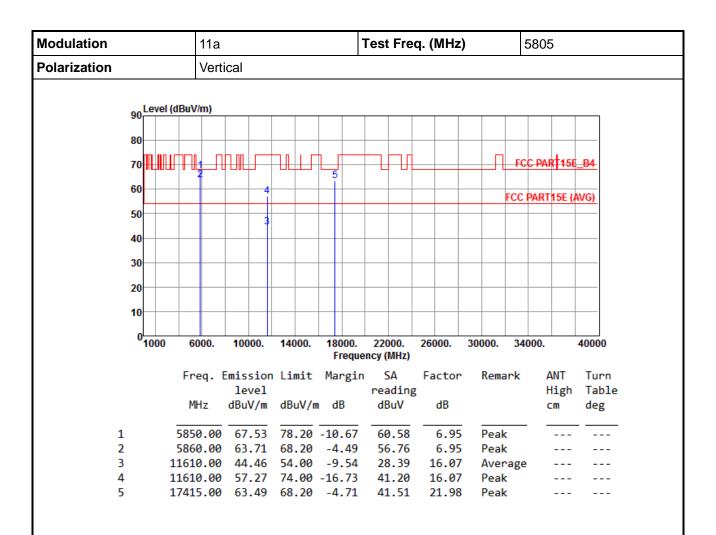


*Factor includes antenna factor, cable loss and amplifier gain

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

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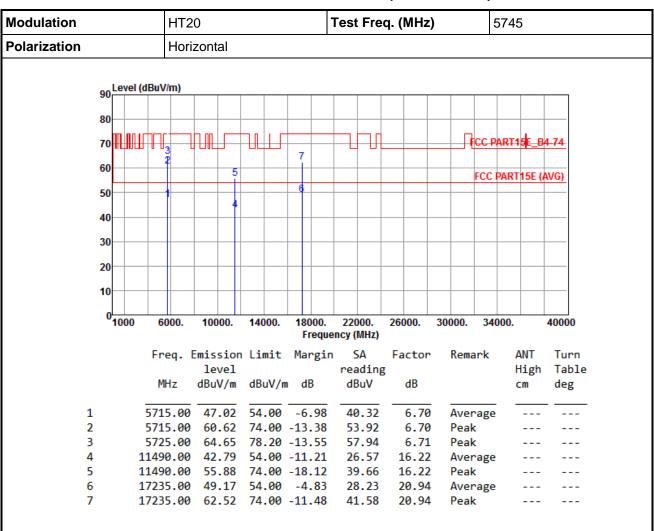
*Factor includes antenna factor, cable loss and amplifier gain

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

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



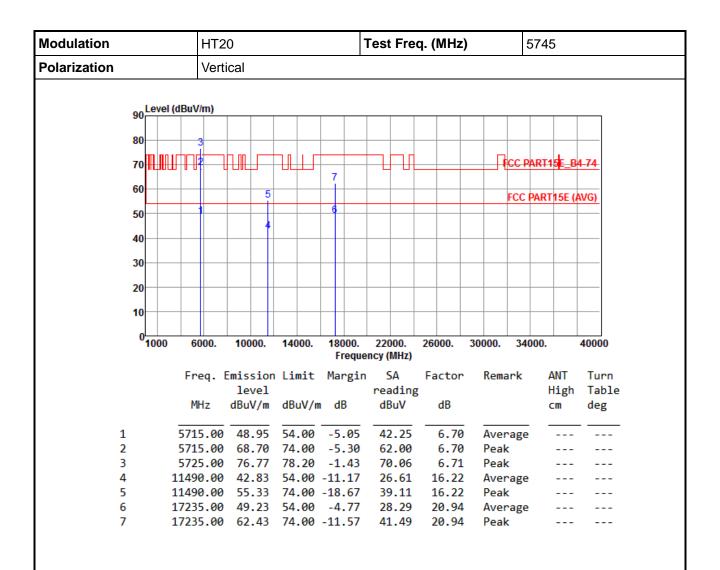
Note 1: Emission Level (dBuV/m) = SA Reading (dBuV/m) + Factor* (dB)

*Factor includes antenna factor, cable loss and amplifier gain

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

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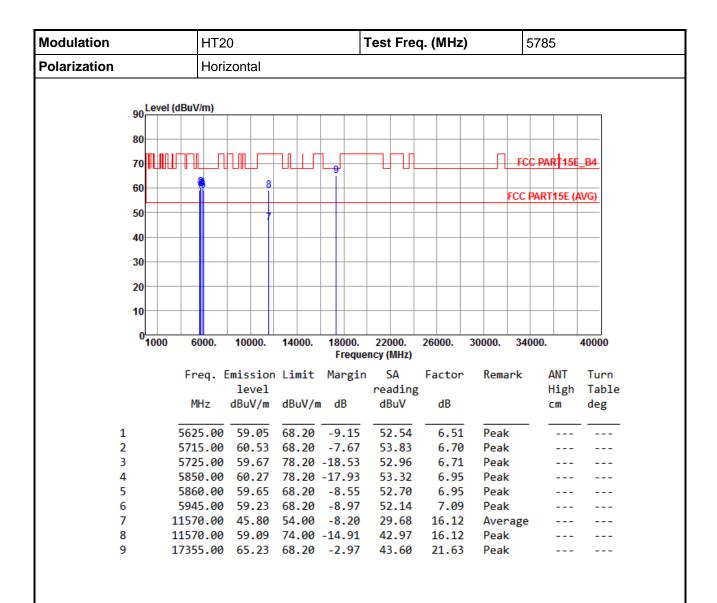


*Factor includes antenna factor, cable loss and amplifier gain

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

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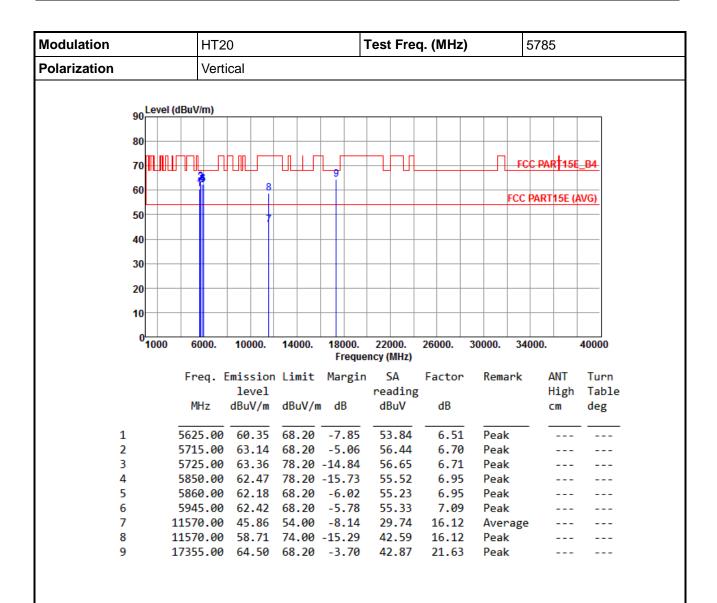


*Factor includes antenna factor, cable loss and amplifier gain

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

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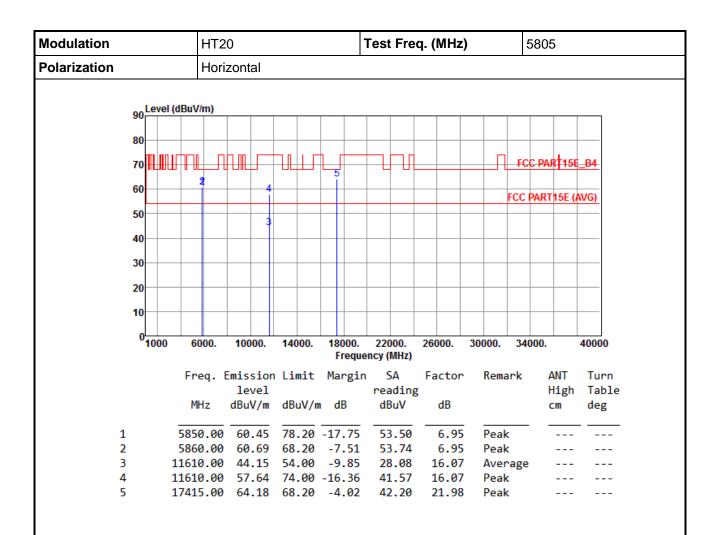


*Factor includes antenna factor, cable loss and amplifier gain

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

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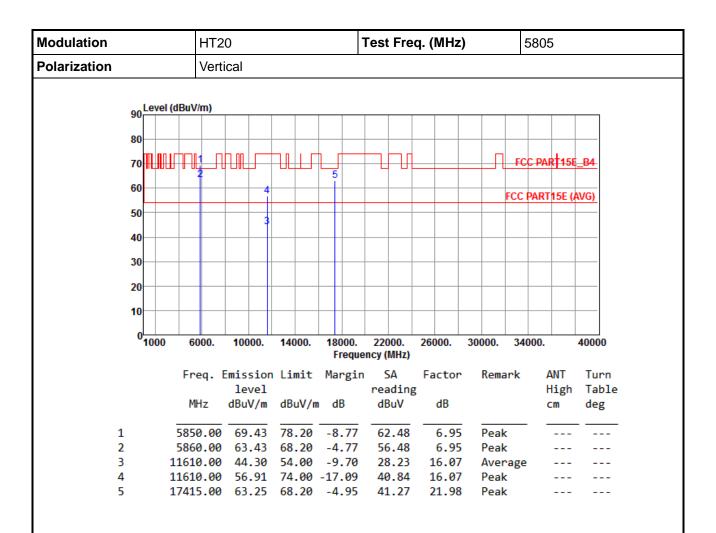


*Factor includes antenna factor, cable loss and amplifier gain

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

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*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 Frequency Stability

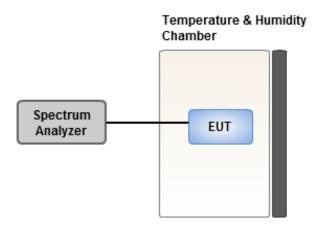
3.6.1 Limit of Frequency Stability

Manufacturers of U-NII devices are responsible for ensuring frequency stability such that an emission is maintained within the band of operation under all conditions of normal operation as specified in the user's manual.

3.6.2 Test Procedures

- 1. The EUT is installed in an environment test chamber with external power source.
- Set the chamber to operate at 50 centigrade and external power source to output at nominal voltage of EUT.
- 3. A sufficient stabilization period at each temperature is used prior to each frequency measurement.
- 4. When temperature is stabled, measure the frequency stability.
- 5. The test shall be performed under -30 to 50 centigrade and 85 to 115 percent of the nominal voltage. Change setting of chamber and external power source to complete all conditions.

3.6.3 Test Setup



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3.6.4 Test Result of Frequency Stability

Frequency: 5785 MHz	Frequency Drift (ppm)				
Temperature (°C)	0 minute	2 minutes	5 minutes	10 minutes	
T20°CVmax	0.86	0.85	0.92	0.88	
T20°CVmin	1.16	1.15	1.19	1.18	
T50°CVnom	0.76	0.78	0.74	0.67	
T40°CVnom	0.82	0.80	0.82	0.79	
T30°CVnom	0.75	0.75	0.76	0.73	
T20°CVnom	1.24	1.18	1.16	1.18	
T10°CVnom	1.19	1.22	1.19	1.18	
T0°CVnom	1.09	1.11	1.10	1.08	
T-10°CVnom	1.36	1.44	1.44	1.42	
T-20°CVnom	1.04	1.00	1.07	1.09	
T-30°CVnom	1.41	1.35	1.40	1.39	
Vnom [Vac]: 110		/max [Vac]: 126.5	Vmin [Vac]: 9	Vmin [Vac]: 93.5	
Tnom [°C]: 20		max [°C]: 50	Tmin [°C]: -30	Tmin [°C]: -30	

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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

Tel: 886-2-2601-1640

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

R.O.C.

Kwei Shan

Tel: 886-3-271-8666 No. 3-1, Lane 6, Wen San 3rd St., Kwei Shan Hsiang, Tao Yuan Hsien 333, Taiwan, R.O.C. Kwei Shan Site II

Tel: 886-3-271-8640

No. 14-1, Lane 19, 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

<u>==END</u>==

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