FCC 47 CFR PART 15 SUBPART E AND ANSI C63.10:2009 TEST REPORT

For

Computer

Trade Name: ADVANTECH

Issued for

Advantech Co. Ltd.

No.1, Alley 20, Lane 26, Rueiguang Road, Neihu District, Taipei 114, Taiwan, R.O.C.

Issued by

Compliance Certification Services Inc. Hsinchu Lab.

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Issued Date: January 22, 2015



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Revision History

Rev.	Issue Date	Revisions	Effect Page	Revised By
00	10/22/2014	Initial Issue	All Page 180	Michelle Chiu
01	01/15/2015	Revised	P.56-57 & P.62-63 & P.169 & P.172	Gloria Chang
02	01/22/2015	Revised	All Page 185, P.56-57 & P.115-116 & P.118 & P.160 & P.167 & P.174	Gloria Chang

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1. TEST REPORT CERTIFICATION

Applicant : Advantech Co. Ltd.

Address : No.1, Alley 20, Lane 26, Rueiguang Road, Neihu District,

Taipei 114, Taiwan, R.O.C.

Equipment Under Test: Computer

(where "X" may be any alphanumeric character, "-" or blank)

Trade Name : ADVANTECH

Tested Date : August 07 ~ October 22, 2014; January 20, 2015

APPLICABLE STANDARD		
Standard	Test Result	
FCC Part 15 Subpart E AND ANSI C63.10:2009	PASS	

WE HEREBY CERTIFY THAT: The above equipment has been tested by Compliance Certification Services Inc., and found compliance with the requirements set forth in the technical standards mentioned above. The results of testing in this report apply only to the product/system, which was tested. Other similar equipment will not necessarily produce the same results due to production tolerance and measurement uncertainties.

Approved by:

Sb. Lu

Sr. Engineer

Reviewed by:

Gundam Lin

Sr. Engineer

2. EUT DESCRIPTION

Product Name	Computer	
Model Number	TREK-674 ; TREK-674XXXXXXXXXXXXXXXX	
Woder Number	(where "X" may be any alphanumeric character , "-" or blank)	
Identify Number	T140807L10	
Received Date	August 07, 2014	
	UNII Band 1:	
	IEEE 802.11a, 802.11an HT20 : 5180MHz ~ 5240MHz	
	IEEE 802.11an HT40 : 5190MHz ~ 5230MHz	
	UNII Band 2A:	
	IEEE 802.11a, 802.11an HT20 : 5260MHz ~ 5320MHz	
Fraguency Bongo	IEEE 802.11an HT40 : 5270MHz ~ 5310MHz	
Frequency Range	UNII Band 2C:	
	IEEE 802.11a, 802.11an HT20 : 5500MHz ~ 5700MHz	
	IEEE 802.11an HT40 : 5510MHz ~ 5670MHz	
	UNII Band 3:	
	IEEE 802.11a, 802.11an HT20 : 5745MHz ~ 5825MHz	
	IEEE 802.11an HT40 : 5755MHz ~ 5795MHz	
	UNII Band 1:	
	IEEE 802.11a : 21.53dBm (0.1422W)	
	IEEE 802.11an HT20 : 21.69dBm (0.1476W)	
	IEEE 802.11an HT40 : 23.13dBm (0.2056W)	
	UNII Band 2A:	
	IEEE 802.11a : 21.38dBm (0.1374W)	
	IEEE 802.11an HT20 : 21.43dBm (0.1390W)	
Transmit Power	IEEE 802.11an HT40 : 22.80dBm (0.1905W)	
Transmit Power	UNII Band 2C:	
	IEEE 802.11a : 21.67dBm (0.1469W)	
	IEEE 802.11an HT20 : 21.99dBm (0.1581W)	
	IEEE 802.11an HT40 : 23.31dBm (0.2143W)	
	UNII Band 3:	
	IEEE 802.11a : 21.97dBm (0.1574W)	
	IEEE 802.11an HT20 : 22.08dBm (0.1614W)	
	IEEE 802.11an HT40 : 22.03dBm (0.1596W)	

	IEEE 802.11a, 802.11an HT20 : 20MHz	
Channel Spacing	IEEE 802.11an HT40 : 40MHz	
	IEEE 802.11a, 802.11an HT20 :	
	5150MHz ~ 5250MHz : 4 Channels	
	5150MHz ~ 5250MHz : 4 Channels	
Ob annual Normalian	5470MHz ~ 5725MHz : 8 Channels	
Channel Number	5725MHz ~ 5850MHz : 5 Channels	
	IEEE 802.11an HT40 : 5150MHz ~ 5250MHz : 2 Channels	
	5250MHz ~ 5350MHz : 2 Channels	
	5470MHz ~ 5725MHz : 3 Channels	
	5725MHz ~ 5850MHz : 2 Channels	
	IEEE 802.11a : 54, 48, 36, 24, 18, 12, 9, 6 Mbps	
Transmit Data Rate	IEEE 802.11an HT20 : 144.44, 130, 117, 115.56, 104, 86.7, 78, 72.2, 65, 58.5, 57.8, 52, 43.3, 39, 28.9, 26, 21.7, 19.5, 14.4, 13, 7.2, 6.5	
	Mbps	
	IEEE 802.11an HT40 : 300 ,270, 243, 240, 216, 180, 162, 150, 135, 121.5, 120, 108, 90, 81, 60, 54, 45, 40.5, 30, 27, 15, 13.5Mbps	
	IEEE 802.11a : OFDM (64QAM, 16QAM, QPSK, BPSK)	
Type of Modulation	IEEE 802.11an HT20/40 : OFDM (64QAM, 16QAM, QPSK, BPSK)	
Antenna Type	Dipole Antenna × 2, Antenna Gain : -5.96dBi	
Power Rating	9-32Vdc	
Test Voltage	120Vac, 60Hz	
DC Power Cable Type	Non-shielded cable, 2.3m × 1 (Detachable)	
I/O Port	EUT : RJ-45 Port × 2, USB Port × 2, Power Port × 1, RS232 Port × 2, VGA Port × 2, DVI Port × 1, Signal Port × 2	
	Panel : Signal Port × 1, USB Port × 1	
	Shielded signal cable 2m × 1 (Detachable), with two ferrite core	
Signal Cable	Shielded signal cable 2.1m × 1 (Detachable)	
	Shielded DVI cable 0.3m x 1 (Detachable)	
	` '	

TREK674 Report No. : T140807L10-RP1-2

The difference of the series model

Model Number	Difference
TREK-674	For marketing purpose only.
TREK-674XXXXXXXXXXXXXXXXXX	2. where "X" may be any alphanumeric character, " - " or blank

Remark:

- 1. The sample selected for test was engineering sample that approximated to production product and was provided by manufacturer.
- 2. For more details, please refer to the User's manual of the EUT.
- 3. The model TREK-674 was considered the main model for testing.
- 4. This submittal(s) (test report) is intended for FCC ID: M82-TREK674 filing to comply with Section 15.207, 15.209 and 15.407 of the FCC Part 15, Subpart E Rules.

3. DESCRIPTION OF TEST MODES

The EUT is an 802.11n transceiver in Computer form factor.

For IEEE 802.11a, 802.11an HT20/HT40 mode (2TX / 2RX):

Chain 0 & Chain 1 transmit/receive.

For Bluetooth: Chain 0 transmit/receive.



Conducted Emission / Radiated Emission Test (Below 1 GHz)

1. The following test modes were scanned during the preliminary test:

No.	Pre-Test Mode
1	TX Mode

2. After the preliminary scan, the following test mode was found to produce the highest emission level.

Final Test I	Mode	
Emission	Radiated Emission	TX Mode
	Conducted Emission	N/A

Remark: Then, the above highest emission mode of the configuration of the EUT and cable was chosen for all final test items.

Conducted / Radiated Emission Test (Above 1 GHz)

IEEE 802.11a, 802.11an HT20 mode

The EUT had been tested under operating condition.

There are three channels have been tested as following:

UNII Band 1:

Channel	Frequency (MHz)
Low	5180
Middle	5220
High	5240

UNII Band 2A:

Channel	Frequency (MHz)
Low	5260
Middle	5280
High	5320

UNII Band 2C:

Channel	Frequency (MHz)
Low	5500
Middle	5580
High	5700

UNII Band 3:

Channel	Frequency (MHz)
Low	5745
Middle	5785
High	5825

IEEE 802.11a mode: 6Mbps data rate (worst case) were chosen for full testing.

IEEE 802.11an HT20 mode: 6.5Mbps data rate (worst case) were chosen for full testing.

IEEE 802.11an HT40 mode

The EUT had been tested under operating condition.

There are two or three channels have been tested as following:

UNII Band 1:

Channel	Frequency (MHz)	
Low	5190	
High	5230	

UNII Band 2A:

Channel	Frequency (MHz)
Low	5270
High	5310

UNII Band 2C:

Channel	Frequency (MHz)	
Low	5510	
Moddle	5550	
High	5670	

UNII Band 3:

Channel	Frequency (MHz)	
Low	5755	
High	5795	

IEEE 802.11an HT40 mode: 13.5Mbps data rate (worst case) were chosen for full testing.

4. TEST METHODOLOGY

The tests documented in this report were performed in accordance with ANSI C63.10: 2009 and FCC CFR 47, 15.207, 15.209 and 15. 407.

5. FACILITIES AND ACCREDITATION

5.1 FACILITIES

All measurement facilities used to collect the measurement data are located at

NO. 989-1 Wen Shan Rd., Shang Shan Village, Qionglin Shiang Hsinchu County 30741, Taiwan, R.O.C

The sites are constructed in conformance with the requirements of ANSI C63.10:2009 and CISPR 22. All receiving equipment conforms to CISPR 16-1-1, CISPR 16-1-2, CISPR 16-1-3, CISPR 16-1-4, CISPR 16-1-5.

5.2 ACCREDITATIONS

Our laboratories are accredited and approved by the following approval agencies according to ISO/IEC 17025.

> **Taiwan** TAF

The measuring facility of laboratories has been authorized or registered by the following approval agencies.

> Canada **INDUSTRY CANADA VCCI** Japan **BSMI Taiwan USA FCC MRA**

Copies of granted accreditation certificates are available for downloading from our web site, http:///www.ccsrf.com

Remark: FCC Designation Number TW1027.

5.3 MEASUREMENT UNCERTAINTY

The following table is for the measurement uncertainty, which is calculated as per the document CISPR 16-4-2.

PARAMETER	UNCERTAINTY
Semi Anechoic Chamber (966 Chamber_B) / Radiated Emission, 30 to 1000 MHz	+/- 3.97
Semi Anechoic Chamber (966 Chamber_B) / Radiated Emission, 1 to 18GHz	+/- 3.58
Semi Anechoic Chamber (966 Chamber_B) / Radiated Emission, 18 to 26 GHz	+/- 3.59
Semi Anechoic Chamber (966 Chamber_B) / Radiated Emission, 26 to 40 GHz	+/- 3.81
Conducted Emission (Mains Terminals), 9kHz to 30MHz	+/- 2.48

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

Consistent with industry standard (e.g. CISPR 22, clause 11, Measurement Uncertainty) determining compliance with the limits shall be base on the results of the compliance measurement. Consequently the measure emissions being less than the maximum allowed emission result in this be a compliant test or passing test.

The acceptable measurement uncertainty value without requiring revision of the compliance statement is base on conducted and radiated emissions being less than U_{CISPR} which is 3.6dB and 5.2dB respectively. CCS values (called U_{Lab} in CISPR 16-4-2) is less than U_{CISPR} as shown in the table above. Therefore, MU need not be considered for compliance.

6. SETUP OF EQUIPMENT UNDER TEST

SUPPORT EQUIPMENT

No.	Product	Manufacturer	Model No.	Serial No.
1	Notebook PC	HP	ProBook 4421s	CNF03242PJ
2	DC Power Supply	Rohde & Schwarz	NGSM 32/10	100232

No.	Signal Cable Description
1	Non-shielded RJ-45 cable, 12m x 1
2	Non-shielded power cable, 1m × 1

SETUP DIAGRAM FOR TESTS

EUT & peripherals setup diagram is shown in appendix setup photos.

EUT OPERATING CONDITION

- 1. EUT & peripherals setup diagram is shown in appendix setup photos.
- 2. TX Mode:
 - ⇒ Tx Data Rate: 6Mbps Bandwidth 20 (IEEE 802.11a mode)
 6.5Mbps Bandwidth 20 (IEEE 802.11an HT20 mode)
 13.5Mbps Bandwidth 40 (IEEE 802.11an HT40 mode)
 - **⇒** Power control

IEEE 802.11a Channel Low (5180MHz) Chain0/Chain1 Power set 19.5
IEEE 802.11a Channel Mid (5220MHz) Chain0/Chain1 Power set 20
IEEE 802.11a Channel High (5240MHz) Chain0/Chain1 Power set 20
IEEE 802.11an HT20 Channel Low (5180MHz) Chain0/Chain1 Power set 19.5
IEEE 802.11an HT20 Channel Mid (5220MHz) Chain0/Chain1 Power set 20
IEEE 802.11an HT20 Channel High (5240MHz) Chain0/Chain1 Power set 20
IEEE 802.11an HT40 Channel Low (5190MHz) Chain0/Chain1 Power set 15
IEEE 802.11an HT40 Channel High (5230MHz) Chain0/Chain1 Power set 22.5

IEEE 802.11a Channel Low (5260MHz) Chain0/Chain1 Power set 20
IEEE 802.11a Channel Mid (5280MHz) Chain0/Chain1 Power set 20
IEEE 802.11a Channel High (5320MHz) Chain0/Chain1 Power set 19.5
IEEE 802.11an HT20 Channel Low (5260MHz) Chain0/Chain1 Power set 20
IEEE 802.11an HT20 Channel Mid (5280MHz) Chain0/Chain1 Power set 20
IEEE 802.11an HT20 Channel High (5320MHz) Chain0/Chain1 Power set 19
IEEE 802.11an HT40 Channel Low (5270MHz) Chain0/Chain1 Power set 22
IEEE 802.11an HT40 Channel High (5310MHz) Chain0/Chain1 Power set 14.5

IEEE 802.11a Channel Low (5500MHz) Chain0/Chain1 Power set 21.5
IEEE 802.11a Channel Mid (5580MHz) Chain0/Chain1 Power set 21
IEEE 802.11a Channel High (5700MHz) Chain0/Chain1 Power set 21.5
IEEE 802.11an HT20 Channel Low (5500MHz) Chain0/Chain1 Power set 22
IEEE 802.11an HT20 Channel Mid (5580MHz) Chain0/Chain1 Power set 21.5
IEEE 802.11an HT20 Channel High (5700MHz) Chain0/Chain1 Power set 22
IEEE 802.11an HT40 Channel Low (5510MHz) Chain0/Chain1 Power set 18
IEEE 802.11an HT40 Channel Mid (5550MHz) Chain0/Chain1 Power set 24.5
IEEE 802.11an HT40 Channel High (5670MHz) Chain0/Chain1 Power set 25

IEEE 802.11a Channel Low (5745MHz) Chain0/Chain1 Power set 25
IEEE 802.11a Channel Mid (5785MHz) Chain0/Chain1 Power set 22.5
IEEE 802.11a Channel High (5825MHz) Chain0/Chain1 Power set 18
IEEE 802.11an HT20 Channel Low (5745MHz) Chain0/Chain1 Power set 25
IEEE 802.11an HT20 Channel Mid (5785MHz) Chain0/Chain1 Power set 24
IEEE 802.11an HT20 Channel High (5825MHz) Chain0/Chain1 Power set 18.5
IEEE 802.11an HT40 Channel Low (5755MHz) Chain0/Chain1 Power set 25
IEEE 802.11an HT40 Channel High (5795MHz) Chain0/Chain1 Power set 25

- 3. All of the functions are under run.
- 4. Start test.

7. FCC PART 15.407 REQUIREMENTS

7.1 26dB BANDWIDTH

LIMITS

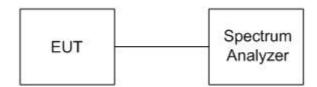
§ 15.303 (c), For purposes of this subpart, the emission bandwidth shall be determined by measuring the width of the signal between two points, one below the carrier center frequency and one above the carrier center frequency, that are 26 dB down relative to the maximum level of the modulated carrier. Determination of the emissions bandwidth is based on the use of measurement instrumentation employing a peak detector function with an instrument resolutions bandwidth approximately equal to 1.0 percent of the emission bandwidth of the device under measurement.

TEST EQUIPMENT

Name of Equipment	Manufacturer	Model	Serial Number	Calibration Due
Spectrum Analyzer	Agilent	E4446A	MY43360132	06/10/2015

Remark: Each piece of equipment is scheduled for calibration once a year.

TEST SETUP



TEST PROCEDURE

- 1. Set RBW = approximately 1% of the emission bandwidth.
- 2. Set the VBW > RBW.
- 3. Detector = Peak.
- 4. Trace mode = max hold.
- 5. Measure the maximum width of the emission that is 26 dB down from the peak of the emission. Compare this with the RBW setting of the analyzer. Readjust RBW and repeat measurement as needed until the RBW/EBW ratio is approximately 1%.

TEST RESULTS

IEEE 802.11a Mode (Two TX)

U-NII	Channel	Channel Frequency (MHz)	26dB Bandwidth (MHz)	
			Chain 0	Chain 1
	Low	5260	44.52	38.83
Band 2A	Middle	5280	43.44	40.14
	High	5320	43.02	39.93
	Low	5500	43.65	43.44
Band 2C	Middle	5580	44.34	40.84
	High	5700	45.76	45.61

IEEE 802.11an HT20 Mode (Two TX)

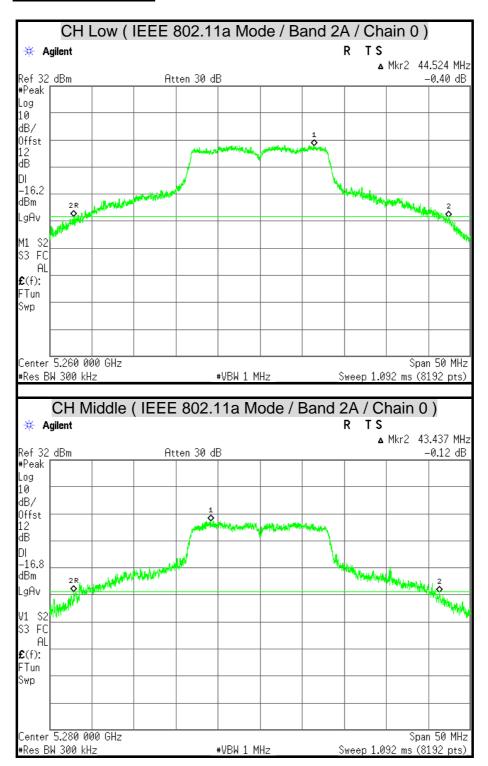
U-NII	Channel	Channel Frequency	26dB Bandwidth (MHz)	
		(MHz)	Chain 0	Chain 1
	Low	5260	43.48	43.04
Band 2A	Middle	5280	45.53	44.32
	High	5320	46.34	41.65
	Low	5500	46.13	44.24
Band 2C	Middle	5580	47.83	47.27
	High	5700	50.82	51.72

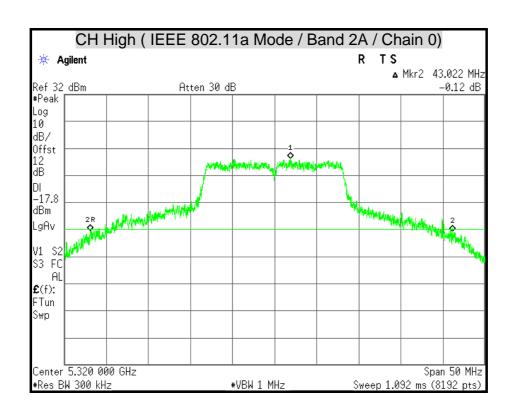
IEEE 802.11an HT40 Mode (Two TX)

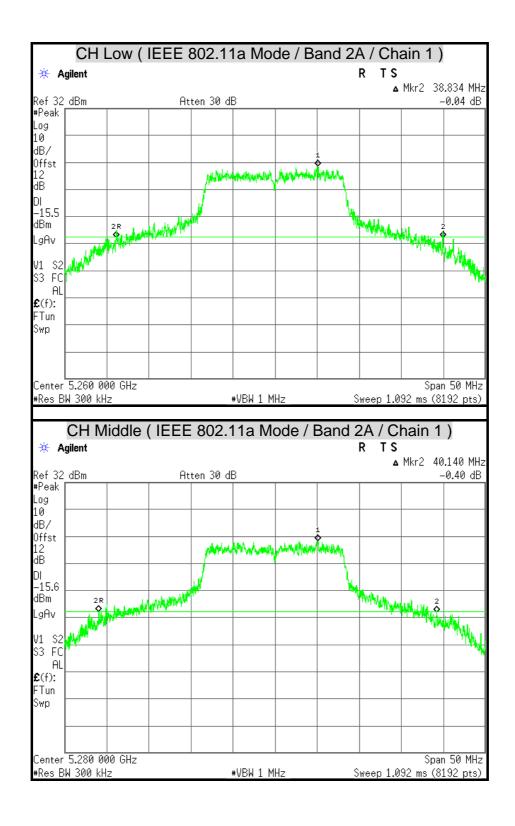
U-NII	U-NII Channel	Channel Frequency (MHz)	26dB Bandwidth (MHz)	
			Chain 0	Chain 1
Band 2A	Low	5270	84.92	86.36
	High	5310	51.93	44.85
	Low	5510	71.47	63.90
Band 2C	Middle	5550	100.13	100.22
	High	5670	98.21	92.87

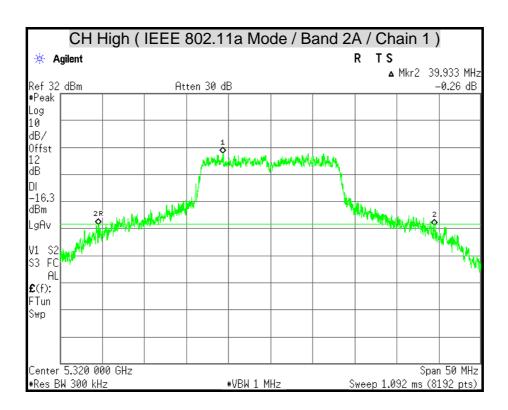


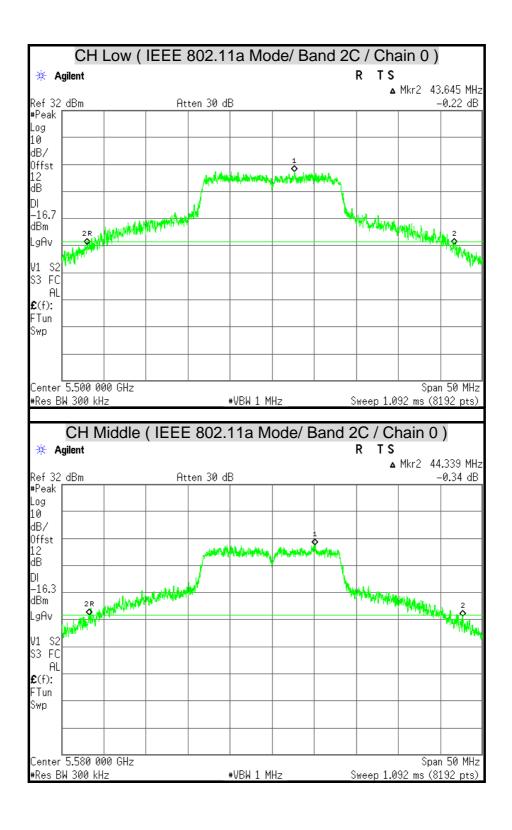
26dB BANDWIDTH

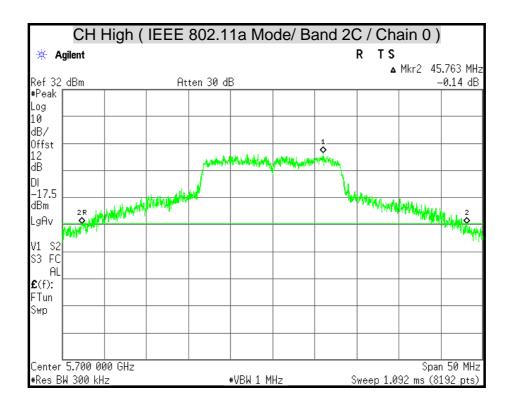




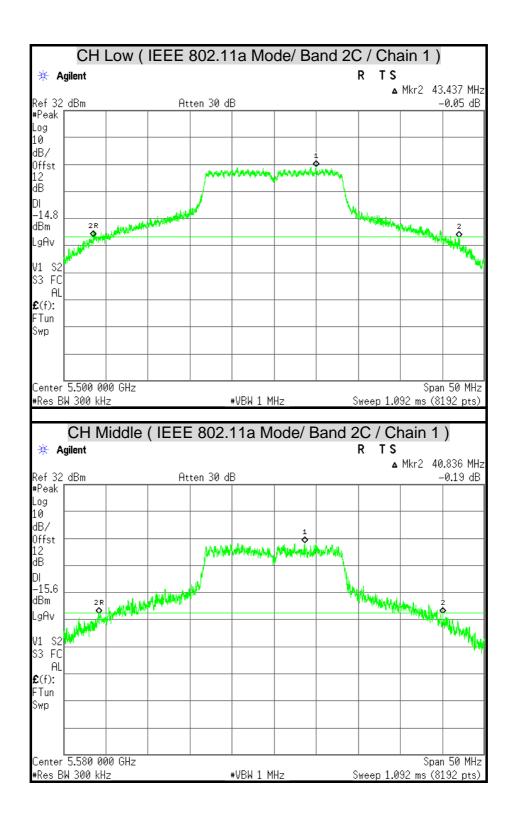


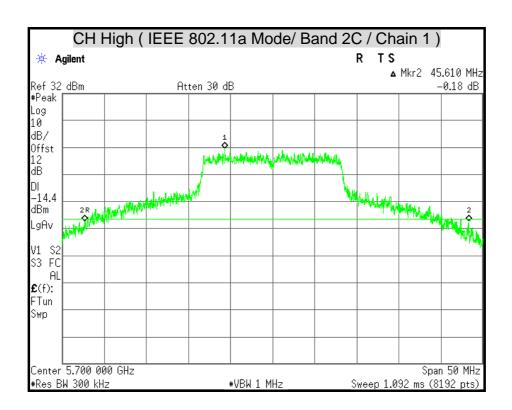


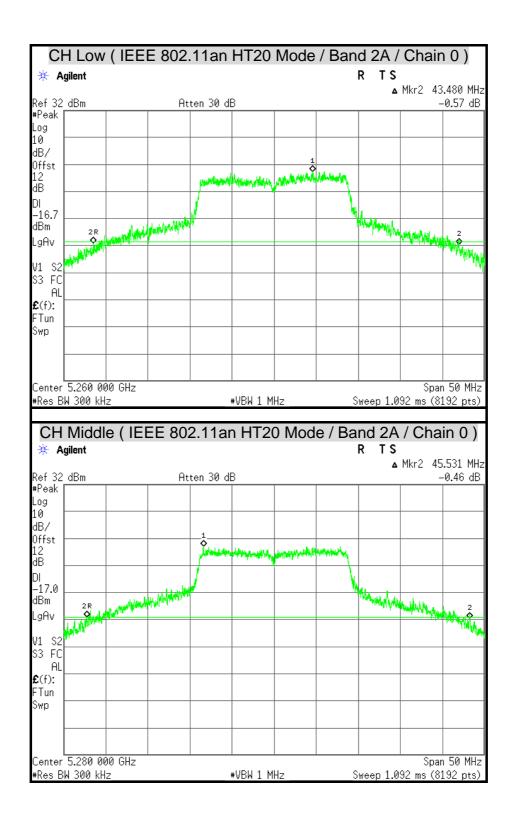


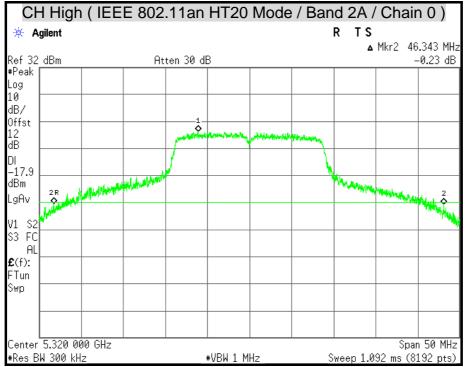


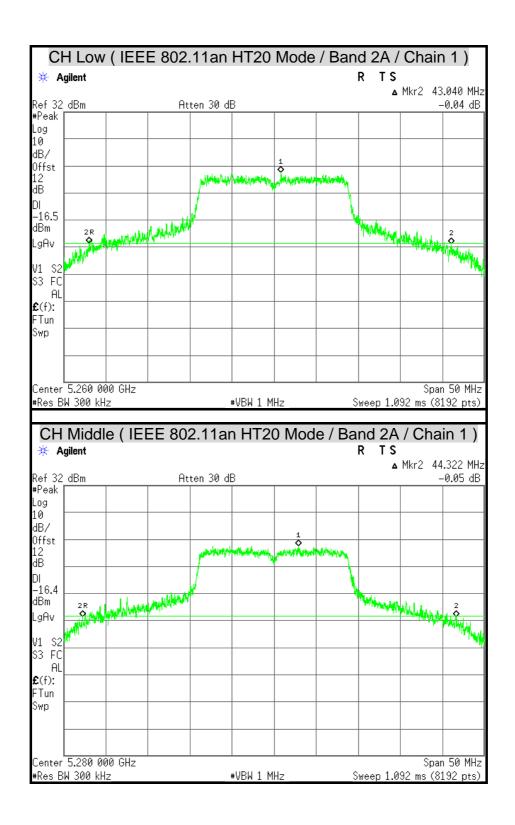
FCC ID: M82-TREK674







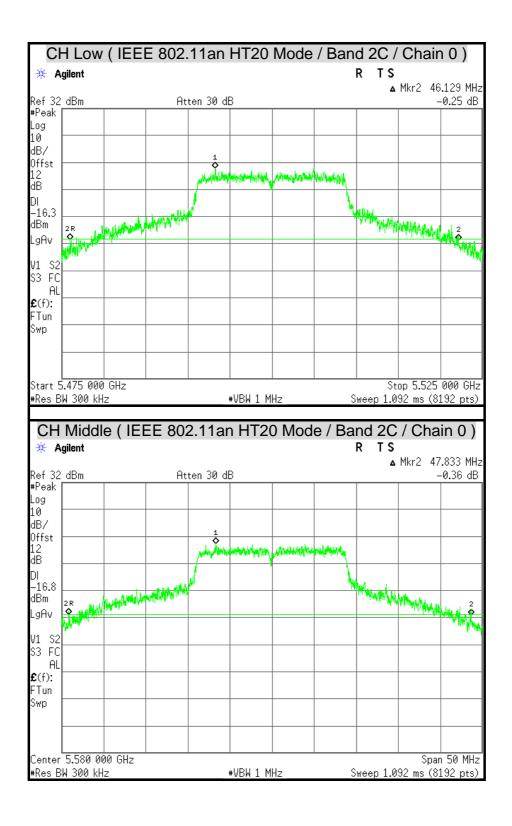




FCC ID: M82-TREK674

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CH High (IEEE 802.11an HT20 Mode / Band 2A / Chain 1) R TS * Agilent ▲ Mkr2 41.654 MHz Ref 32 dBm Atten 30 dB -0.27 dB #Peak Log 10 dB/ Offst 12 dB 2 k Mary Mary Market –17.5 dBm LgAv V1 S2 S3 FC **£**(f): FTun Swp Center 5.320 000 GHz Span 50 MHz #Res BW 300 kHz #VBW 1 MHz Sweep 1.092 ms (8192 pts)



Center 5.700 000 GHz

#Res BW 300 kHz

FCC ID: M82-TREK674

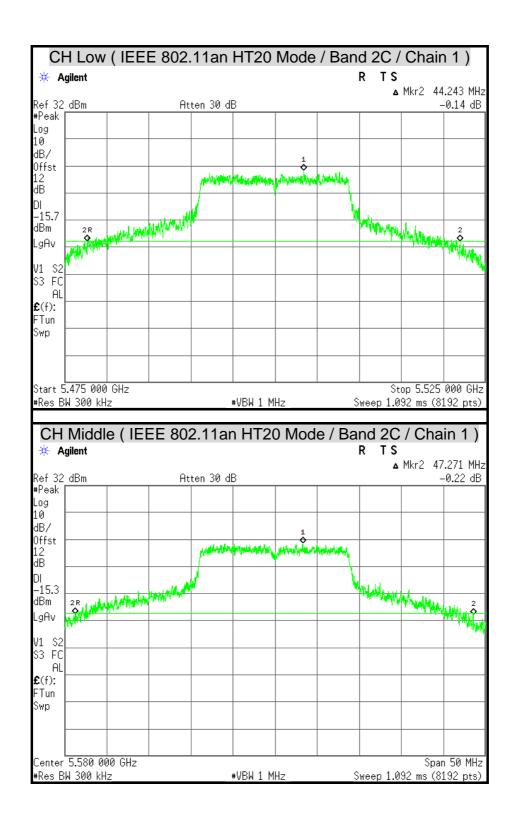
Report No.: T140807L10-RP1-2

Span 60 MHz

Sweep 1.092 ms (8192 pts)

CH High (IEEE 802.11an HT20 Mode / Band 2C / Chain 0) R TS * Agilent ▲ Mkr2 50.821 MHz Ref 32 dBm Atten 30 dB -0.38 dB #Peak Log 10 dB/ Offst Ŷ 12 dB Providence September 2 2 2R Whatham Hilliam Chilliam Ch –17.7 dBm LgAv V1 S2 S3 FC **£**(f): FTun Swp

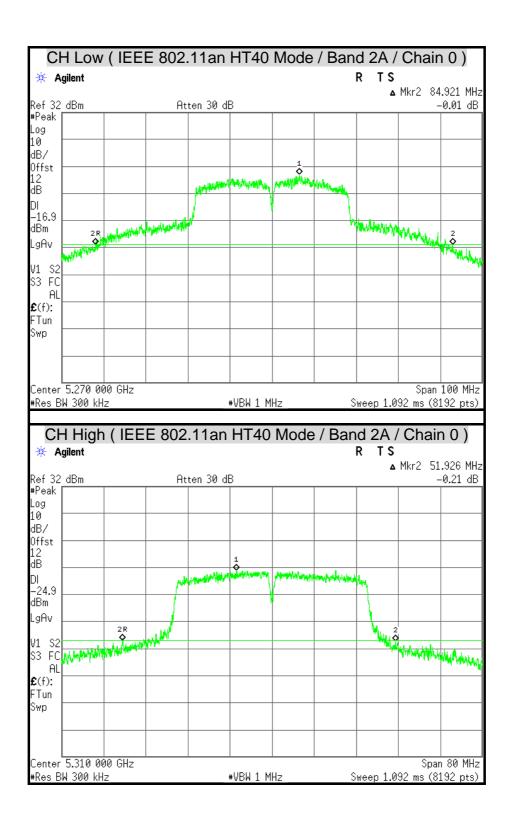
#VBW 1 MHz

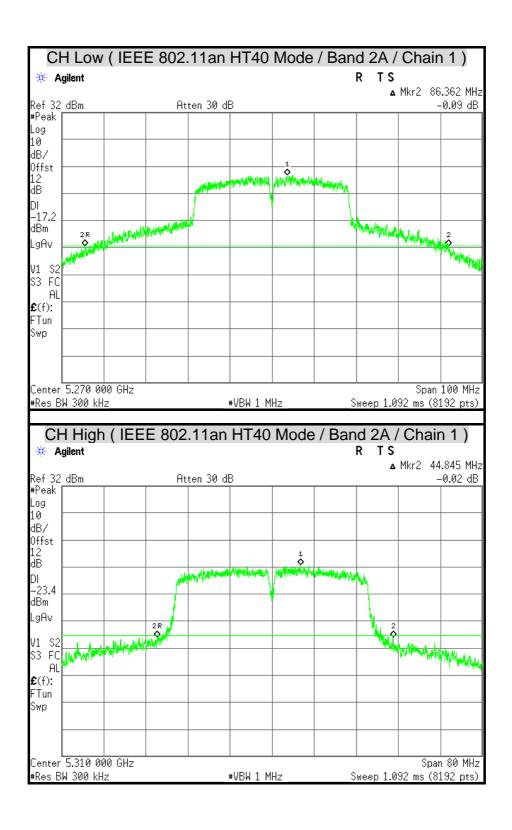


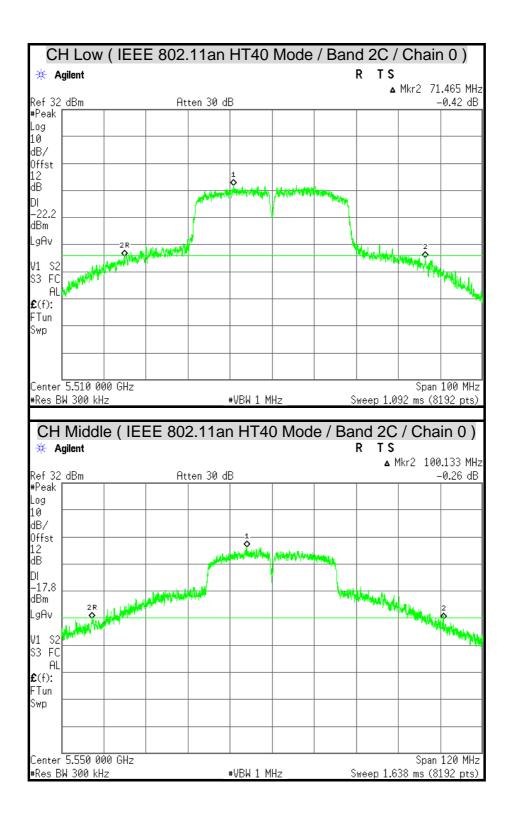
FCC ID: M82-TREK674

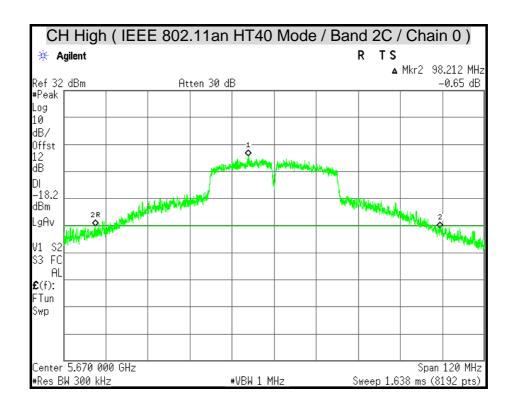
Report No.: T140807L10-RP1-2

CH High (IEEE 802.11an HT20 Mode / Band 2C / Chain 1) R TS * Agilent ▲ Mkr2 51.715 MHz Ref 32 dBm Atten 30 dB -0.41 dB #Peak Log 10 dB/ Offst 12 dB When the particular and the part 2R –15.6 dBm LgAv V1 S2 S3 FC **£**(f): FTun Swp Center 5.700 000 GHz Span 60 MHz #Res BW 300 kHz #VBW 1 MHz Sweep 1.092 ms (8192 pts)

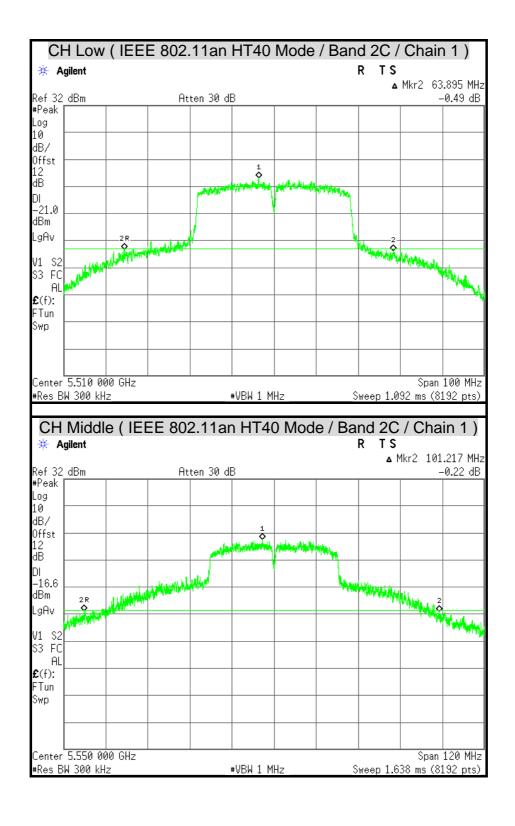




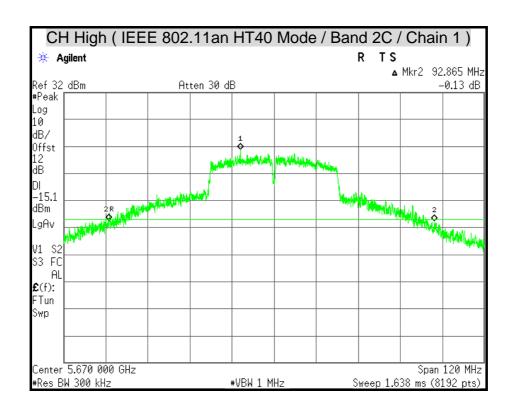




Report No.: T140807L10-RP1-2



Report No.: T140807L10-RP1-2



7.2 6dB BANDWIDTH

LIMITS

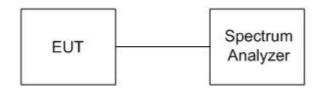
According to § 15.407 (e), within the 5.725-5.85 GHz band, the minimum 6 dB bandwidth of U-NII devices shall be at least 500 kHz.

TEST EQUIPMENT

Name of Equipment	Manufacturer	Model	Serial Number	Calibration Due
Spectrum Analyzer	Agilent	E4446A	MY43360132	06/10/2015

Remark: Each piece of equipment is scheduled for calibration once a year.

TEST SETUP



TEST PROCEDURE

- 1. Place the EUT on the table and set it in the transmitting mode.
- 2. Remove the antenna from the EUT and then connect a low loss RF cable from the antenna port to the spectrum analyzer.
- 3. Set the spectrum analyzer as RBW = 100kHz, VBW = 300kHz, Sweep = auto, Span = 30MHz (IEEE 802.11a, IEEE 802.11n HT20) or Span = 60MHz (IEEE 802.11n HT40) or Span = 120MHz (IEEE 802.11ac HT80).
- 4. Mark the peak frequency and –6dB (upper and lower) frequency.
- 5. Repeat until all the rest channels are investigated.

Report No.: T140807L10-RP1-2

TEST RESULTS

IEEE 802.11a Mode (Two TX)

U-NII	Channel	Channel Frequency	6dB Bandwidth (MHz)		
		(MHz)	Chain 0	Chain 1	
Band 3	Low	5745	16.38	16.33	
	Middle	5785	16.48	15.91	
	High	5825	16.30	16.35	

IEEE 802.11an HT20 Mode (Two TX)

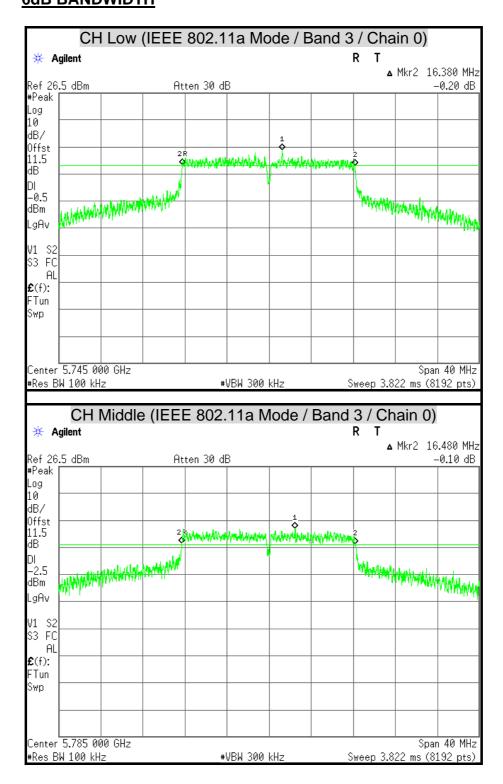
U-NII	Channel	Channel Frequency	6dB Bandwidth (MHz)		
		(MHz)	Chain 0	Chain 1	
	Low	5745	17.60	17.54	
Band 3	Middle	5785	17.57	17.55	
	High	5825	17.59	17.28	

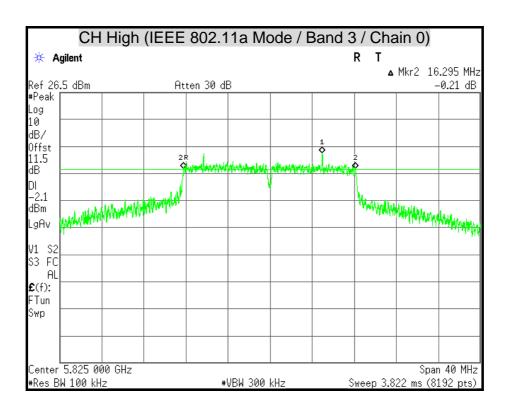
IEEE 802.11an HT40 Mode (Two TX)

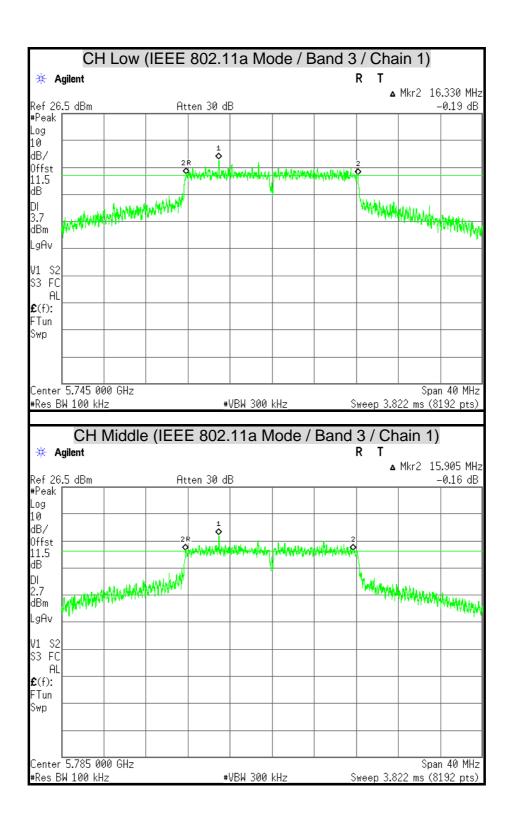
U-NII	Channel	Channel Frequency	6dB Bandwidth (MHz)		
		(MHz)	Chain 0	Chain 1	
Pand 2	Low	5755	35.68	32.00	
Band 3	High	5795	30.01	30.07	

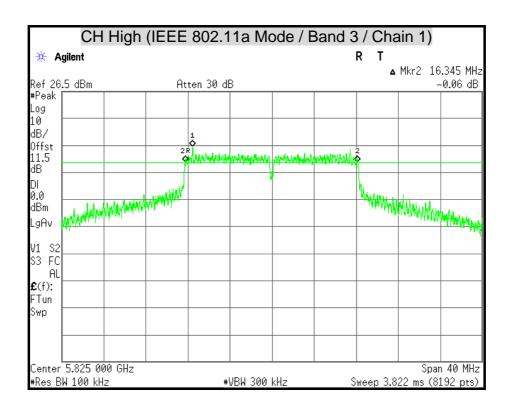
Report No.: T140807L10-RP1-2

6dB BANDWIDTH

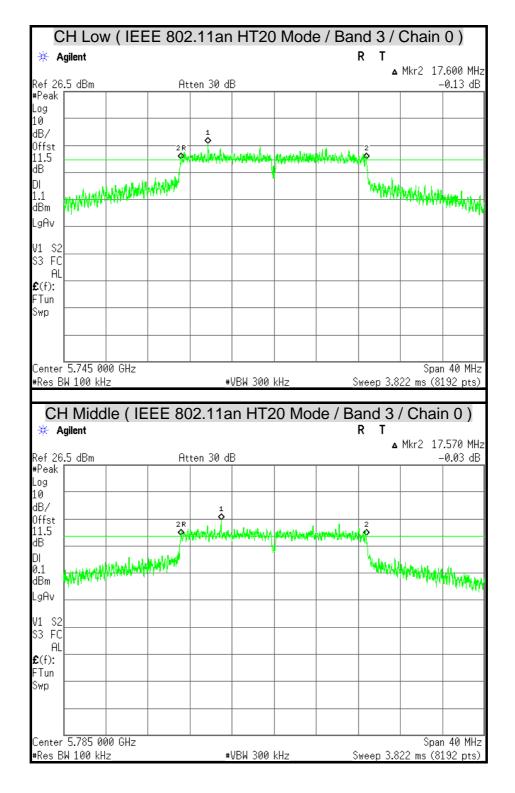




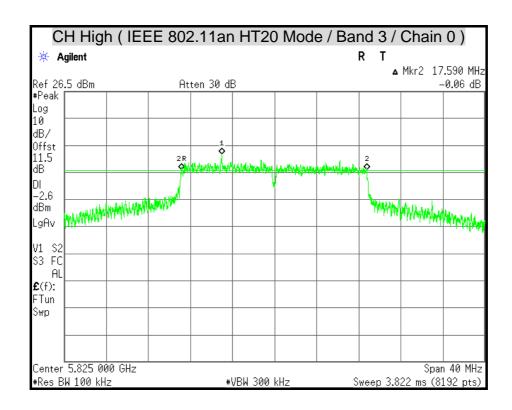




Report No. : T140807L10-RP1-2

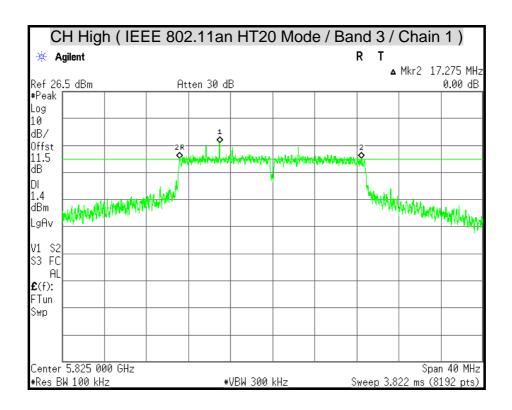


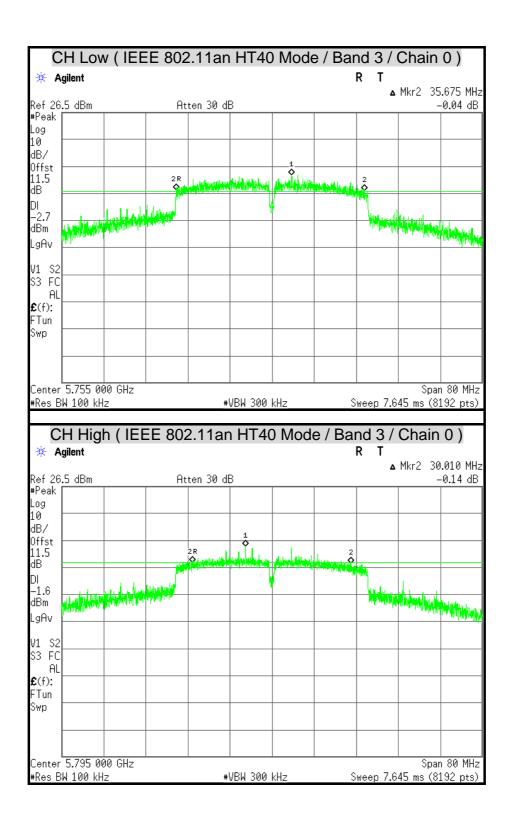
Report No.: T140807L10-RP1-2



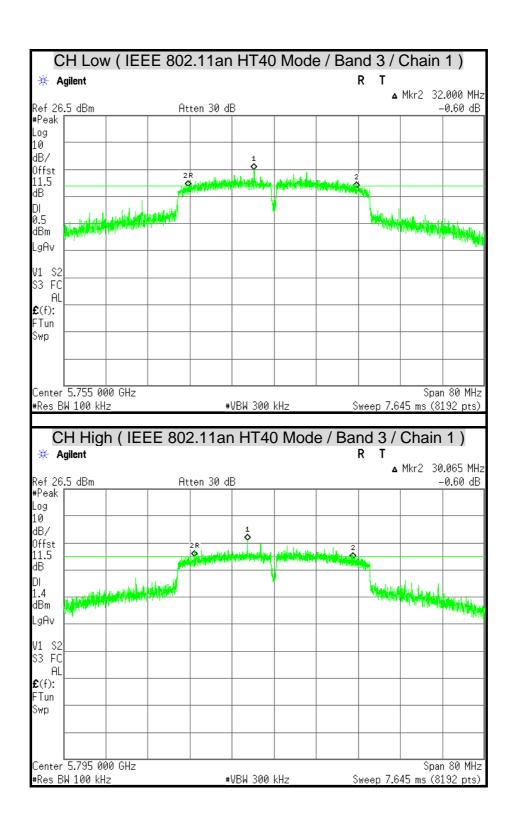


CH Low (IEEE 802.11an HT20 Mode / Band 3 / Chain 1) 🔆 Agilent R ▲ Mkr2 17.540 MHz Ref 26.5 dBm Atten 30 dB -0.07 dB #Peak Log 10 dB/ Offst 11.5 dΒ way had for the factor of the forest of the factor of the "Married Hambarder of the House DI 3.4 dBm LgAv V1 S2 S3 FC ΑL **£**(f): FTun Swp Center 5.745 000 GHz Span 40 MHz #Res BW 100 kHz #VBW 300 kHz <u>Sweep 3.822 ms (</u>8192 pts) CH Middle (IEEE 802.11an HT20 Mode / Band 3 / Chain 1) 🔅 Agilent ▲ Mkr2 17.545 MHz Ref 26.5 dBm Atten 30 dB -0.01 dB #Peak _og 10 dB/ Offst 11.5 dΒ Maria property of the second White personal property for the sent series DΙ 2.6 dBm LgAv V1 S2 S3 FC ΑL **£**(f): FTun Swp Center **5.**78**5** 000 GHz Span 40 MHz #Res BW 100 kHz #VBW 300 kHz Sweep 3.822 ms (8192 pts)









Report No.: T140807L10-RP1-2

7.3 MAXIMUM CONDUCTED OUTPUT POWER

LIMITS

§ 15.407(a)

- (1) For the band 5.15-5.25 GHz,
 - (I) For an outdoor access point operating in the band 5.15-5.25 GHz, the maximum conducted output power over the frequency band of operation shall not exceed 1W provided the maximum antenna gain does not exceed 6 dBi. In addition, the maximum power spectral density shall not exceed 17 dBm in any 1 megahertz band. If transmitting antennas of directional gain greater than 6 dBi are used, both the maximum conducted output power and the maximum power spectral density shall be reduced by the amount in dB that the directional gain of the antenna exceeds 6 dBi. The maximum e.i.r.p. at any elevation angle above 30 degrees as measured from the horizon must not exceed 125 mW (21 dBm).
 - (II)For an indoor access point operating in the band 5.15-5.25 GHz, the maximum conducted output power over the frequency band of operation shall not exceed 1W provided the maximum antenna gain does not exceed 6 dBi. In addition, the maximum power spectral density shall not exceed 17dBm in any 1 megahertz band. If transmitting antennas of directional gain greater than 6dBi are used, both the maximum conducted output power and the maximum power spectral density shall be reduced by the amount in dB that the directional gain of the antenna exceeds 6dBi.
 - (III) For fixed point-to-point access points operating in the band 5.15-5.25 GHz, the maximum conducted output power over the frequency band of operation shall not exceed 1 W. Fixed point-to-point U-NII devices may employ antennas with directional gain up to 23 dBi without any corresponding reduction in the maximum conducted output power or maximum power spectral density. For fixed point-to-point transmitters that employ a directional antenna gain greater than 23 dBi, a 1 dB reduction in maximum conducted output power and maximum power spectral density is required for each 1 dB of antenna gain in excess of 23 dBi. Fixed, point-to-point operations exclude the use of point-to-multipoint systems, omnidirectional applications, and multiple collocated transmitters transmitting the same information. The operator of the U-NII device, or if the equipment is professionally installed, the installer, is responsible for ensuring that systems employing high gain directional antennas are used exclusively for fixed, point-to-point operations.

Compliance Certification Services Inc.

FCC ID: M82-TREK674 Report No.: T140807L10-RP1-2

(IV) For mobile and portable client devices in the 5.15-5.25 GHz band, the maximum conducted output power over the frequency band of operation shall not exceed 250 mW provided the maximum antenna gain does not exceed 6 dBi. In addition, the maximum power spectral density shall not exceed 11 dBm in any 1 megahertz band. If transmitting antennas of directional gain greater than 6 dBi are used, both the maximum conducted output power and the maximum power spectral density shall be reduced by the amount in dB that the directional gain of the antenna exceeds 6 dBi.

- (2) For the 5.25-5.35 GHz and 5.47-5.725 GHz bands, the maximum conducted output power over the frequency bands of operation shall not exceed the lesser of 250 mW or 11 dBm 10 log B, where B is the 26 dB emission bandwidth in megahertz. In addition, the maximum power spectral density shall not exceed 11 dBm in any 1 megahertz band. If transmitting antennas of directional gain greater than 6 dBi are used, both the maximum conducted output power and the maximum power spectral density shall be reduced by the amount in dB that the directional gain of the antenna exceeds 6 dBi.
- (3) For the band 5.725-5.85 GHz, the maximum conducted output power over the frequency band of operation shall not exceed 1 W. In addition, the maximum power spectral density shall not exceed 30 dBm in any 500-kHz band. If transmitting antennas of directional gain greater than 6 dBi are used, both the maximum conducted output power and the maximum power spectral density shall be reduced by the amount in dB that the directional gain of the antenna exceeds 6 dBi. However, fixed point-to-point U-NII devices operating in this band may employ transmitting antennas with directional gain greater than 6 dBi without any corresponding reduction in transmitter conducted power. Fixed, point-to-point operations exclude the use of point-to-multipoint systems, omnidirectional applications, and multiple collocated transmitters transmitting the same information. The operator of the U-NII device, or if the equipment is professionally installed, the installer, is responsible for ensuring that systems employing high gain directional antennas are used exclusively for fixed, point-to-point operations.

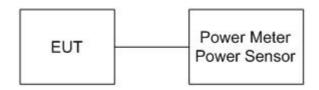
Report No.: T140807L10-RP1-2

TEST EQUIPMENT

Name of Equipment	pment Manufacturer Model		Serial Number	Calibration Due
Power Meter	ANRITSU	ML2495A	1149001	12/06/2014
Power Sensor	ANRITSU	MA2411B	1126148	12/06/2014

Remark: Each piece of equipment is scheduled for calibration once a year.

TEST SETUP



TEST PROCEDURE

The transmitter output is connected to the Power Meter. The Power Meter is set to the power detection.

TEST RESULTS

The power shall not exceeded the limit as follows:

IEEE 802.11a Mode / UNII Band 2A

Channel	Channel Frequency (MHz)	26dB Bandwidth (B) (MHz)		10 Log B (dB)		11dBm + 10 Log B (dBm)		Maximum Conducted Output Power Limit
	` ,	Chain 0	Chain 1	Chain 0	Chain 1	Chain 0	Chain 1	(dBm)
Low	5260	44.52	38.83	16.48594	15.89212	27.48594	26.89212	24
Middle	5280	43.44	40.14	16.37860	16.03577	27.37860	27.03577	24
High	5320	43.02	39.93	16.33691	16.01332	27.33691	27.01332	24

IEEE 802.11a Mode / UNII Band 2C

Channel	Channel Frequency (MHz)	26dB Bandwidth (B) (MHz)			og B B)	11dBm + 10 Log B (dBm)		Maximum Conducted Output Power Limit
	(**************************************	Chain 0	Chain 1	Chain 0	Chain 1	Chain 0	Chain 1	(dBm)
Low	5500	43.65	43.44	16.39934	16.37860	27.39934	27.37860	24
Middle	5580	44.34	40.84	16.46786	16.11043	27.46786	27.11043	24
High	5700	45.76	45.61	16.60514	16.59060	27.60514	27.59060	24

IEEE 802.11an HT20 Mode/ UNII Band 2A

Channel	Channel Frequency (MHz)	26dB Bandwidth (B) (MHz)		10 Log B (dB)		11dBm + 10 Log B (dBm)		Maximum Conducted Output Power Limit
	` ′	Chain 0	Chain 1	Chain 0	Chain 1	Chain 0	Chain 1	(dBm)
Low	5260	43.48	43.04	16.38290	16.33872	27.38290	27.33872	24
Middle	5280	45.53	44.32	16.58307	16.46619	27.58307	27.46619	24
High	5320	46.34	41.65	16.65984	16.19657	27.65984	27.19657	24

IEEE 802.11an HT20 Mode/ UNII Band 2C

Channel	Channel Frequency (MHz)	26dB Bandwidth (B) (MHz)		10 Log B (dB)		11dBm + 10 Log B (dBm)		Maximum Conducted Output Power Limit
	` ′	Chain 0	Chain 1	Chain 0	Chain 1	Chain 0	Chain 1	(dBm)
Low	5500	46.13	44.24	16.63974	16.45845	27.63974	27.45845	24
Middle	5580	47.83	47.27	16.79728	16.74595	27.79728	27.74595	24
High	5700	50.82	51.72	17.06043	17.13617	28.06043	28.13617	24

IEEE 802.11an HT40 Mode/ UNII Band 2A

Channel	Channel Frequency (MHz)	26dB Bandwidth (B) (MHz)		10 Log B (dB)		11dBm + 10 Log B (dBm)		Maximum Conducted Output Power Limit
	, ,	Chain 0	Chain 1	Chain 0	Chain 1	Chain 0	Chain 1	(dBm)
Low	5270	84.92	86.36	19.29015	19.36323	30.29015	30.36323	24
High	5310	51.93	44.85	17.15385	16.51714	28.15385	27.51714	24

IEEE 802.11an HT40 Mode/ UNII Band 2C

Channel	Channel Frequency (MHz)	26dB Bandwidth (B) (MHz)		10 Log B (dB)		11dBm + 10 Log B (dBm)		Maximum Conducted Output Power Limit
	` ′	Chain 0	Chain 1	Chain 0	Chain 1	Chain 0	Chain 1	(dBm)
Low	5510	71.47	63.90	18.54093	18.05467	29.54093	29.05467	24
Middle	5550	100.13	100.22	20.00577	20.00941	31.00577	31.00941	24
High	5670	98.21	92.87	19.92165	19.67852	30.92165	30.67852	24

IEEE 802.11a Mode / UNII Band 1 (Two TX)

Channel	Channel	Power (dBm)		Power Total		Powe	r Limit	Pass / Fail
Channel Frequency (MHz)	Chain 0	Chain 1	(dBm)	(W)	(dBm)	(W)	1 433 / 1 411	
Low	5180	16.86	18.90	21.01	0.1262	24	0.25	PASS
Middle	5220	18.06	18.93	21.53	0.1422	24	0.25	PASS
High	5240	18.00	18.99	21.53	0.1422	24	0.25	PASS

Remark:

- 1. At finial test to get the worst-case emission at 6Mbps.
- 2. The cable assembly insertion loss of 12dB (including 10 dB pad and 2dB cable) was Entered as an offset in the power meter to allow for direct reading of power.
- 3. The maximum antenna gain for the MIMO mode is -2.95dBi which is less than 6dBi, the limit should be 0.2512W.
- 4. Total power = Chain 0 + Chain 1.

IEEE 802.11an HT20 Mode / UNII Band 1 (Two TX)

Channel	Channel Frequency (dBm)			Power Total		Power Limit		Pass / Fail
Onamici	(MHz)	Chain 0	Chain 1	(dBm)	(W)	(dBm)	(W)	1 433 / 1 411
Low	5180	17.03	19.01	21.14	0.1300	24	0.25	PASS
Middle	5220	18.20	18.94	21.60	0.1445	24	0.25	PASS
High	5240	18.46	18.90	21.69	0.1476	24	0.25	PASS

- 1. At finial test to get the worst-case emission at 6.5Mbps.
- 2. The cable assembly insertion loss of 12dB (including 10 dB pad and 2dB cable) was Entered as an offset in the power meter to allow for direct reading of power.
- 3. The maximum antenna gain for the MIMO mode is -2.95dBi which is less than 6dBi, the limit should be 0.2512W.
- 4. Total power = Chain 0 + Chain 1.

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IEEE 802.11an HT40 Mode / UNII Band 1 (Two TX)

Channel	Channel	Channel requency (dBm)		Power Total		Power Limit		Pass / Fail
Onamie	(MHz)	Chain 0	Chain 1	(dBm)	(W)	(dBm)	(W)	1 455 / 1 411
Low	5190	12.94	14.62	16.87	0.0486	24	0.25	PASS
High	5230	19.28	20.82	23.13	0.2056	24	0.25	PASS

- 1. At finial test to get the worst-case emission at 13.5Mbps.
- 2. The cable assembly insertion loss of 12dB (including 10 dB pad and 2dB cable) was Entered as an offset in the power meter to allow for direct reading of power.
- 3. The maximum antenna gain for the MIMO mode is -2.95dBi which is less than 6dBi, the limit should be 0.2512W.
- 4. Total power = Chain 0 + Chain 1.

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IEEE 802.11a Mode / UNII Band 2A (Two TX)

Channel	Channel Frequency (dBm)			Power Total		Power Limit		Pass / Fail
Onamici	(MHz)	Chain 0	Chain 1	(dBm)	(W)	(dBm)	(W)	1 455 / 1 411
Low	5260	18.02	18.59	21.32	0.1355	24	0.25	PASS
Middle	5280	18.13	18.60	21.38	0.1374	24	0.25	PASS
High	5320	16.93	18.34	20.70	0.1175	24	0.25	PASS

Remark:

- 1. At finial test to get the worst-case emission at 6Mbps.
- 2. The cable assembly insertion loss of 12dB (including 10 dB pad and 2dB cable) was Entered as an offset in the power meter to allow for direct reading of power.
- 3. The maximum antenna gain for the MIMO mode is -2.95dBi which is less than 6dBi, the limit should be 0.2512W.
- 4. Total power = Chain 0 + Chain 1.

IEEE 802.11an HT20 Mode / UNII Band 2A (Two TX)

Channel	Channel Frequency (dBm)			Power Total		Power Limit		Pass / Fail
Onamici	(MHz)	Chain 0	Chain 1	(dBm)	(W)	(dBm)	(W)	1 433 / 1 411
Low	5260	18.29	18.50	21.41	0.1384	24	0.25	PASS
Middle	5280	17.98	18.82	21.43	0.1390	24	0.25	PASS
High	5320	16.56	18.19	20.46	0.1112	24	0.25	PASS

- 1. At finial test to get the worst-case emission at 6.5Mbps.
- 2. The cable assembly insertion loss of 12dB (including 10 dB pad and 2dB cable) was Entered as an offset in the power meter to allow for direct reading of power.
- 3. The maximum antenna gain for the MIMO mode is -2.95dBi which is less than 6dBi, the limit should be 0.2512W.
- 4. Total power = Chain 0 + Chain 1.

IEEE 802.11an HT40 Mode / UNII Band 2A (Two TX)

Channel	Channel	Power (dBm)		Power Total		Power Limit		Pass / Fail
Onamici	nannel Frequency (MHz)		Chain 1	(dBm)	(W)	(dBm)	(W)	1 433 / 1 411
Low	5270	19.32	20.22	22.80	0.1905	24	0.25	PASS
High	5310	12.72	13.63	16.21	0.0418	24	0.25	PASS

- 1. At finial test to get the worst-case emission at 13.5Mbps.
- 2. The cable assembly insertion loss of 12dB (including 10 dB pad and 2dB cable) was Entered as an offset in the power meter to allow for direct reading of power.
- 3. The maximum antenna gain for the MIMO mode is -2.95dBi which is less than 6dBi, the limit should be 0.2512W.
- 4. Total power = Chain 0 + Chain 1.

IEEE 802.11a Mode / UNII Band 2C (Two TX)

Channel	Channel		wer Bm)	Power Total		Power Limit		Pass / Fail
Gridinio	(MHz)	Chain 0	Chain 1	(dBm)	(W)	(dBm)	(W)	1 455 / 1 411
Low	5500	18.47	18.85	21.67	0.1469	24	0.25	PASS
Middle	5580	18.19	19.09	21.67	0.1469	24	0.25	PASS
High	5700	17.08	19.49	21.46	0.1400	24	0.25	PASS

Remark:

- 1. At finial test to get the worst-case emission at 6Mbps.
- 2. The cable assembly insertion loss of 12dB (including 10 dB pad and 2dB cable) was Entered as an offset in the power meter to allow for direct reading of power.
- 3. The maximum antenna gain for the MIMO mode is -2.95dBi which is less than 6dBi, the limit should be 0.2512W.
- 4. Total power = Chain 0 + Chain 1.

IEEE 802.11an HT20 Mode / UNII Band 2C (Two TX)

Channel	Channel Frequency (dBm)			Power Total		Power Limit		Pass / Fail
Onamici	(MHz)	Chain 0	Chain 1	(dBm)	(W)	(dBm)	(W)	1 433 / 1 411
Low	5500	18.76	19.18	21.99	0.1581	24	0.25	PASS
Middle	5580	18.52	19.32	21.95	0.1567	24	0.25	PASS
High	5700	17.31	19.63	21.63	0.1455	24	0.25	PASS

- 1. At finial test to get the worst-case emission at 6.5Mbps.
- 2. The cable assembly insertion loss of 12dB (including 10 dB pad and 2dB cable) was Entered as an offset in the power meter to allow for direct reading of power.
- 3. The maximum antenna gain for the MIMO mode is -2.95dBi which is less than 6dBi, the limit should be 0.2512W.
- 4. Total power = Chain 0 + Chain 1.

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IEEE 802.11an HT40 Mode / UNII Band 2C (Two TX)

Channel	Channel Frequency (dBm			Power Total		Power Limit		Pass / Fail
Onamici	(MHz)	Chain 0	Chain 1	(dBm)	(W)	(dBm)	(W)	1 433 / 1 411
Low	5510	15.26	15.89	18.60	0.0724	24	0.25	PASS
Middle	5550	19.52	20.96	23.31	0.2143	24	0.25	PASS
High	5670	18.31	20.65	22.65	0.1841	24	0.25	PASS

- 1. At finial test to get the worst-case emission at 13.5Mbps.
- 2. The cable assembly insertion loss of 12dB (including 10 dB pad and 2dB cable) was Entered as an offset in the power meter to allow for direct reading of power.
- 3. The maximum antenna gain for the MIMO mode is -2.95dBi which is less than 6dBi, the limit should be 0.2512W.
- 4. Total power = Chain 0 + Chain 1.

IEEE 802.11a Mode / UNII Band 3 (Two TX)

Channel	Channel Frequency	(dE	Power (dBm)		Power Total		r Limit	Pass / Fail
Onamici	(MHz)	Chain 0	Chain 1	(dBm)	(W)	(dBm)	(W)	1 433 / 1 411
Low	5745	17.88	19.83	21.97	0.1574	30	1	PASS
Middle	5785	16.71	19.02	21.03	0.1268	30	1	PASS
High	5825	14.32	17.46	19.18	0.0828	30	1	PASS

Remark:

- 1. At finial test to get the worst-case emission at 6Mbps.
- 2. The cable assembly insertion loss of 12dB (including 10 dB pad and 2dB cable) was Entered as an offset in the power meter to allow for direct reading of power.
- 3. The maximum antenna gain for the MIMO mode is -2.95dBi which is less than 6dBi, the limit should be 1W.
- 4. Total power = Chain 0 + Chain 1.

IEEE 802.11an HT20 Mode / UNII Band 3 (Two TX)

Channel	Channel Frequency (dE		Power		Total Powe		r Limit	Pass / Fail
Onamici	(MHz)	Chain 0	Chain 1	(dBm)	(W)	(dBm)	(W)	1 433 / 1 411
Low	5745	17.86	20.02	22.08	0.1614	30	1	PASS
Middle	5785	17.14	19.69	21.61	0.1449	30	1	PASS
High	5825	14.30	17.68	19.32	0.0855	30	1	PASS

- 1. At finial test to get the worst-case emission at 6.5Mbps.
- 2. The cable assembly insertion loss of 12dB (including 10 dB pad and 2dB cable) was Entered as an offset in the power meter to allow for direct reading of power.
- 3. The maximum antenna gain for the MIMO mode is -2.95dBi which is less than 6dBi, the limit should be 1W.
- 4. Total power = Chain 0 + Chain 1.

IEEE 802.11an HT40 Mode / UNII Band 3 (Two TX)

Channel	Channel Frequency	/dPm\		Power Total		Power Limit		Pass / Fail
Onamier	(MHz)	Chain 0	Chain 1	(dBm)	(W)	(dBm)	(W)	1 433 / 1 411
Low	5755	17.83	19.96	22.03	0.1596	30	1	PASS
High	5795	17.42	19.94	21.87	0.1538	30	1	PASS

- 1. At finial test to get the worst-case emission at 13.5Mbps.
- 2. The cable assembly insertion loss of 12dB (including 10 dB pad and 2dB cable) was Entered as an offset in the power meter to allow for direct reading of power.
- 3. The maximum antenna gain for the MIMO mode is -2.95dBi which is less than 6dBi, the limit should be 1W.
- 4. Total power = Chain 0 + Chain 1.

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7.4 PEAK POWER SPECTRAL DENSITY

LIMITS

§ 15.407 (a)

- (1) For the band 5.15-5.25 GHz
 - (I) For an outdoor access point operating in the band 5.15-5.25 GHz, the maximum conducted output power over the frequency band of operation shall not exceed 1 W provided the maximum antenna gain does not exceed 6 dBi. In addition, the maximum power spectral density shall not exceed 17 dBm in any 1 megahertz band. If transmitting antennas of directional gain greater than 6 dBi are used, both the maximum conducted output power and the maximum power spectral density shall be reduced by the amount in dB that the directional gain of the antenna exceeds 6dBi. The maximum e.i.r.p. at any elevation angle above 30 degrees as measured from the horizon must not exceed 125 mW (21 dBm).
 - (II) For an indoor access point operating in the band 5.15-5.25 GHz, the maximum conducted output power over the frequency band of operation shall not exceed 1 W provided the maximum antenna gain does not exceed 6 dBi. In addition, the maximum power spectral density shall not exceed 17 dBm in any 1 megahertz band. If transmitting antennas of directional gain greater than 6 dBi are used, both the maximum conducted output power and the maximum power spectral density shall be reduced by the amount in dB that the directional gain of the antenna exceeds 6dBi.
 - (IV) For mobile and portable client devices in the 5.15-5.25 GHz band, the maximum conducted output power over the frequency band of operation shall not exceed 250 mW provided the maximum antenna gain does not exceed 6 dBi. In addition, the maximum power spectral density shall not exceed 11 dBm in any 1 megahertz band. If transmitting antennas of directional gain greater than 6 dBi are used, both the maximum conducted output power and the maximum power spectral density shall be reduced by the amount in dB that the directional gain of the antenna exceeds 6dBi.

- (2) For the 5.25-5.35 GHz and 5.47-5.725 GHz bands, the maximum conducted output power over the frequency bands of operation shall not exceed the lesser of 250 mW or 11 dBm 10 log B, where B is the 26 dB emission bandwidth in megahertz. In addition, the maximum power spectral density shall not exceed 11 dBm in any 1 megahertz band. If transmitting antennas of directional gain greater than 6 dBi are used, both the maximum conducted output power and the maximum power spectral density shall be reduced by the amount in dB that the directional gain of the antenna exceeds 6 dBi.
- (3) For the band 5.725-5.85 GHz, the maximum conducted output power over the frequency band of operation shall not exceed 1 W. In addition, the maximum power spectral density shall not exceed 30 dBm in any 500-kHz band. If transmitting antennas of directional gain greater than 6 dBi are used, both the maximum conducted output power and the maximum power spectral density shall be reduced by the amount in dB that the directional gain of the antenna exceeds 6 dBi. However, fixed point-to-point U-NII devices operating in this band may employ transmitting antennas with directional gain greater than 6 dBi without any corresponding reduction in transmitter conducted power. Fixed, point-to-point operations exclude the use of point-to-multipoint systems, omnidirectional applications, and multiple collocated transmitters transmitting the same information. The operator of the U-NII device, or if the equipment is professionally installed, the installer, is responsible for ensuring that systems employing high gain directional antennas are used exclusively for fixed, point-to-point operations.

TEST EQUIPMENT

Name of Equipment	Manufacturer	Model	Serial Number	Calibration Due
Spectrum Analyzer	Agilent	E4446A	MY43360132	06/10/2015

Remark: Each piece of equipment is scheduled for calibration once a year.

TEST SETUP



TEST PROCEDURE

- Place the EUT on the table and set it in transmitting mode.
 Remove the antenna from the EUT and then connect a low loss RF cable from the antenna port to the spectrum analyzer.
- 2. Set the spectrum analyzer as RBW = 1MHz, VBW = 3MHz, Span = Sweep= AUTO
- 3. Record the max. reading.
- 4. Repeat the above procedure until the measurements for all frequencies are completed.

TEST RESULTS

IEEE 802.11a Mode (Two TX)

	Ta Mode (1110 171					
U-NII	Channel	Channel Frequency (MHz)		PSD Bm) Chain 1	PSD Total (dBm)	Minimum Limit (dBm/MHz)	Pass / Fail
	Low	5180	6.37	7.83	10.17	11	PASS
Band 1	Middle	5220	7.22	7.76	10.51	11	PASS
	High	5240	7.72	7.78	10.76	11	PASS
Band 2A	Low	5260	7.19	7.25	10.23	11	PASS
	Middle	5280	7.20	7.97	10.61	11	PASS
	High	5320	6.19	7.34	9.81	11	PASS
Band 2C	Low	5500	7.12	7.70	10.43	11	PASS
	Middle	5580	7.00	7.92	10.49	11	PASS
	High	5700	6.23	8.29	10.39	11	PASS

- 1. At finial test to get the worst-case emission at 6Mbps.
- 2. The cable assembly insertion loss of 12 dB (including 10 dB pad and 2 dB cable) was Entered as an offset in the spectrum analyzer to allow for direct reading of power.
- 3. The maximum antenna gain for the MIMO mode is -2.95dBi which is less than 6dBi, the limit should be 11dBm.
- 4. Total power spectral density = Chain 0 + Chain 1.

IEEE 802.11an HT20 Mode (Two TX)

U-NII	Channel	Channel Frequency	PPSD (dBm)		PSD Total	Minimum Limit	Pass /
5 1		(MHz)	Chain 0	Chain 1	(dBm)	(dBm)	Fail
	Low	5180	6.12	7.40	9.82	11	PASS
Band 1	Middle	5220	7.36	7.33	10.36	11	PASS
	High	5240	7.33	7.70	10.53	11	PASS
	Low	5260	6.97	7.25	10.12	11	PASS
Band 2A	Middle	5280	6.92	7.57	10.27	11	PASS
	High	5320	5.66	6.69	9.22	11	PASS
Band 2C	Low	5500	7.21	7.48	10.36	11	PASS
	Middle	5580	6.97	8.27	10.68	11	PASS
	High	5700	6.39	8.01	10.29	11	PASS

- 1. At finial test to get the worst-case emission at 6.5Mbps.
- 2. The cable assembly insertion loss of 12 dB (including 10 dB pad and 2 dB cable) was Entered as an offset in the spectrum analyzer to allow for direct reading of power.
- 3. The maximum antenna gain for the MIMO mode is -2.95dBi which is less than 6dBi, the limit should be 11dBm.
- 4. Total power spectral density = Chain 0 + Chain 1.

IEEE 802.11n HT40 Mode (Two TX)

U-NII	Channel	Channel Frequency	PPSD (dBm)		PSD Total	Minimum Limit	Pass /
5 1		(MHz)	Chain 0	Chain 1	(dBm)	(dBm)	Fail
Dond 1	Low	5190	0.02	0.44	3.25	11	PASS
Band 1	High	5230	5.85	6.97	9.46	11	PASS
Band 2A	Low	5270	5.82	6.14	8.99	11	PASS
	High	5310	-0.96	0.25	2.70	11	PASS
	Low	5510	1.52	1.51	4.53	11	PASS
Band 2C	Middle	5550	5.30	7.09	9.30	11	PASS
	High	5670	4.54	6.85	8.86	11	PASS

- 1. At finial test to get the worst-case emission at 13.5Mbps.
- 2. The cable assembly insertion loss of 12 dB (including 10 dB pad and 2 dB cable) was Entered as an offset in the spectrum analyzer to allow for direct reading of power.
- 3. The maximum antenna gain for the MIMO mode is -2.95dBi which is less than 6dBi, the limit should be 11dBm.
- 4. Total power spectral density = Chain 0 + Chain 1.

IEEE 802.11a Mode (Two TX)

U-NII	Channel	Channel annel Frequency		PPSD (dBm)		Minimum Limit	Pass /
		(MHz)	Chain 0	Chain 1	Total (dBm)	(dBm/500kHz)	Fail
Band 3	Low	5745	4.31	6.06	8.28	30	PASS
	Middle	5785	2.75	5.14	7.12	30	PASS
	High	5825	0.92	3.69	5.53	30	PASS

Remark:

- 1. At finial test to get the worst-case emission at 6Mbps.
- 2. The cable assembly insertion loss of 12 dB (including 10 dB pad and 2 dB cable) was Entered as an offset in the spectrum analyzer to allow for direct reading of power.
- 3. The maximum antenna gain for the MIMO mode is -2.95dBi which is less than 6dBi, the limit should be 30dBm.
- 4. Total power spectral density = Chain 0 + Chain 1.

IEEE 802.11an HT20 Mode (Two TX)

U-NII	Channel	Channel Frequency (MHz)	PPSD (dBm)		PSD Total	Minimum Limit	Pass /
			Chain 0	Chain 1	(dBm)	(dBm/500kHz)	Fail
Band 3	Low	5745	3.88	5.64	7.86	30	PASS
	Middle	5785	2.98	5.32	7.32	30	PASS
	High	5825	0.53	3.68	5.39	30	PASS

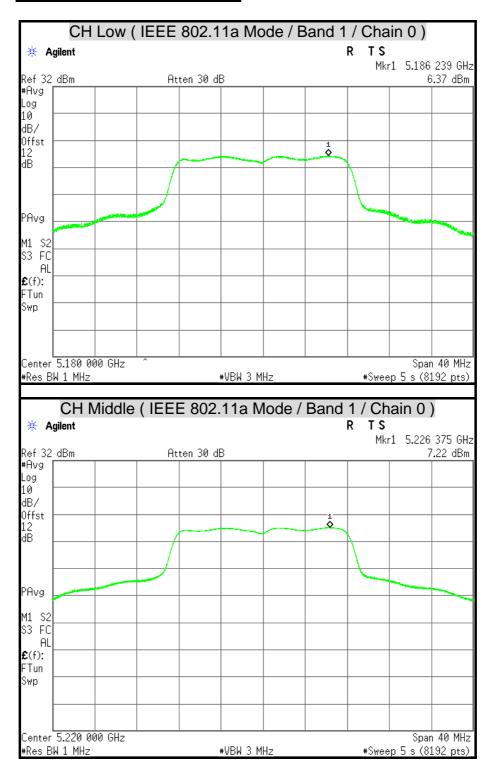
- 1. At finial test to get the worst-case emission at 6.5Mbps.
- 2. The cable assembly insertion loss of 12 dB (including 10 dB pad and 2 dB cable) was Entered as an offset in the spectrum analyzer to allow for direct reading of power.
- 3. The maximum antenna gain for the MIMO mode is -2.95dBi which is less than 6dBi, the limit should be 30dBm.
- 4. Total power spectral density = Chain 0 + Chain 1.

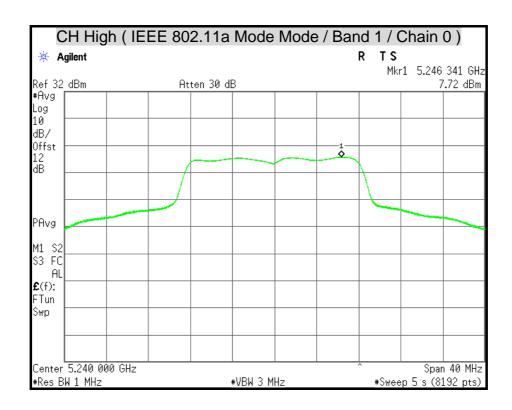
IEEE 802.11an HT40 Mode (Two TX)

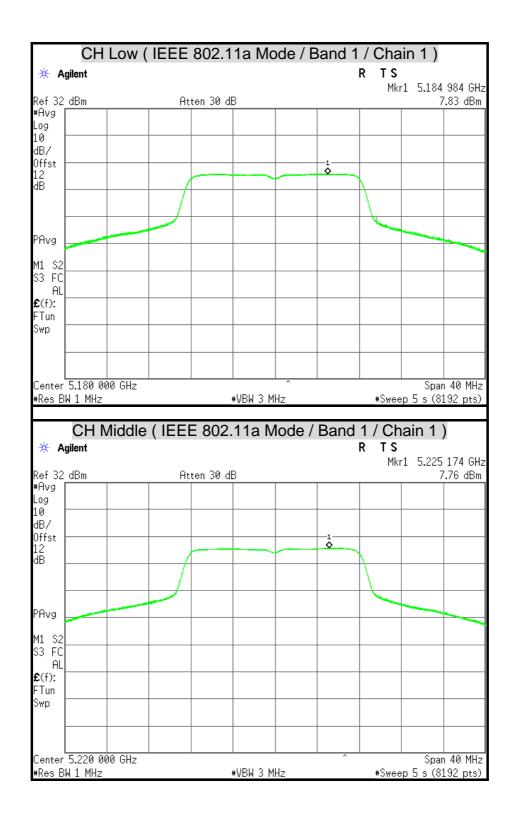
U-NII	Channel	Channel Frequency	(dF	SD Bm)	PSD Minimum Total Limit		Pass /
	Onamici	(MHz)	Chain 0	Chain 1	(dBm)	(dBm/500kHz)	Fail
Band 3	Low	5755	1.31	3.53	5.57	30	PASS
	High	5795	0.49	3.35	5.16	30	PASS

- 1. At finial test to get the worst-case emission at 13.5Mbps.
- 2. The cable assembly insertion loss of 12 dB (including 10 dB pad and 2 dB cable) was Entered as an offset in the spectrum analyzer to allow for direct reading of power.
- 3. The maximum antenna gain for the MIMO mode is -2.95dBi which is less than 6dBi, the limit should be 30dBm.
- 4. Total power spectral density = Chain 0 + Chain 1.

POWER SPECTRAL DENSITY



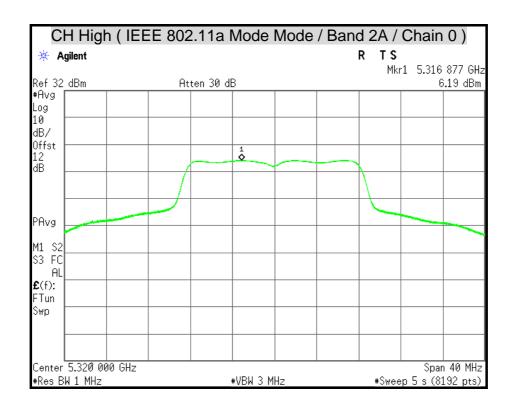


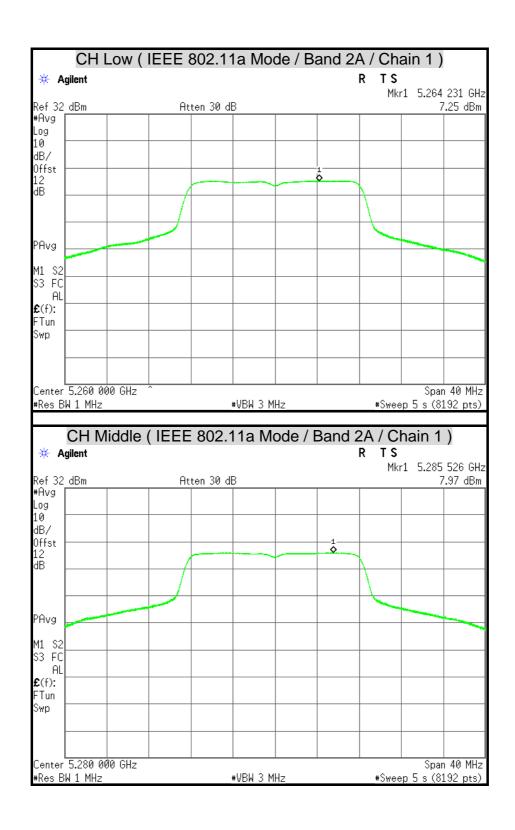


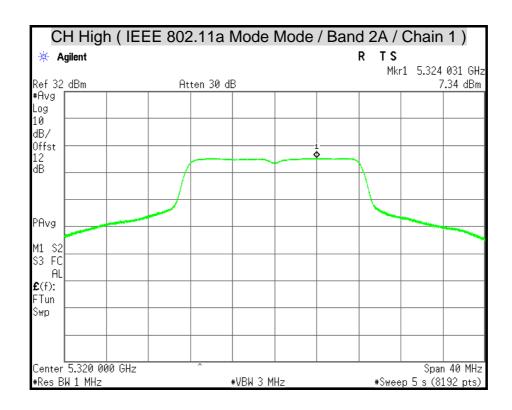
CH High (IEEE 802.11a Mode Mode / Band 1 / Chain 1) * Agilent TS Mkr1 5.244 813 GHz Ref 32 dBm Atten 30 dB 7.78 dBm #Avg Log 10 dB/ Offst 12 dB PAvg S3 FC ΑL **£**(f): FTun Swp Center 5.240 000 GHz Span 40 MHz #Sweep 5 s (8192 pts) #Res BW 1 MHz #VBW 3 MHz

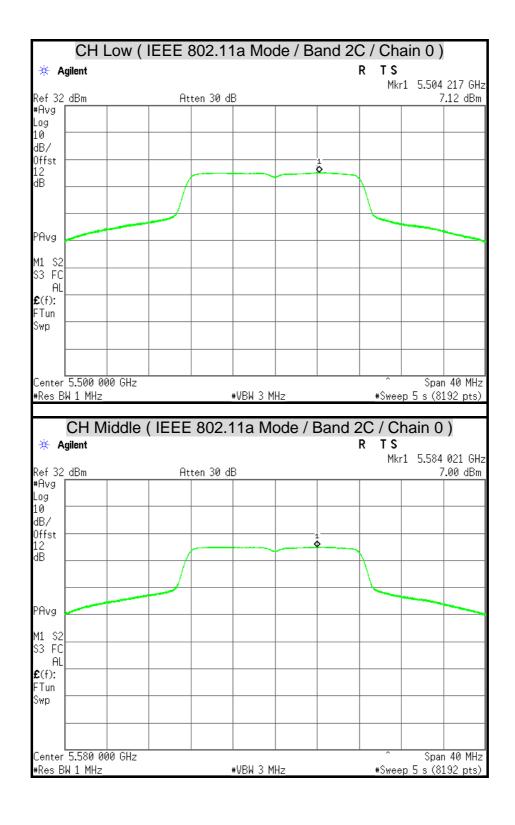
CH Low (IEEE 802.11a Mode / Band 2A / Chain 0) R TS * Agilent Mkr1 5.266 458 GHz Ref 32 dBm Atten 30 dB 7.19 dBm #Avg Log 10 dB/ Offst ٥ 12 dB PAvg S3 FC ΑL **£**(f): FTun Swp Center 5.260 000 GHz Span 40 MHz #Sweep 5 s (8192 pts) #VBW 3 MHz #Res BW 1 MHz CH Middle (IEEE 802.11a Mode / Band 2A / Chain 0) 🔅 Agilent ΤS Mkr1 5.274 401 GHz Ref 32 dBm Atten 30 dB 7.20 dBm #Avg Log 10 dB/ Offst 12 dB PAvg S3 FC ΑL £(f): FTun Swp Center 5.280 000 GHz Span 40 MHz #Sweep 5 s (8192 pts) #Res BW 1 MHz #VBW 3 MHz

Compliance Certification Services Inc. FCC ID: M82-TREK674









Center 5.700 000 GHz

#Res BW 1 MHz

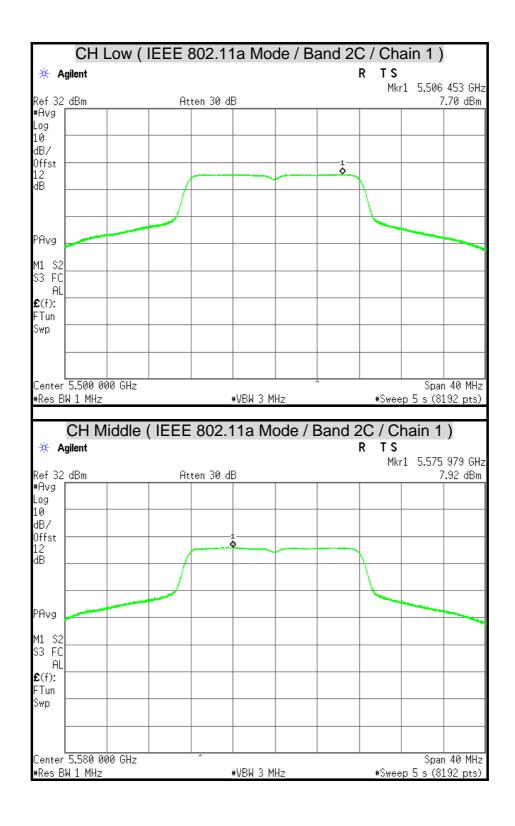
CH High (IEEE 802.11a Mode Mode / Band 2C / Chain 0) * Agilent R TS Mkr1 5.695 690 GHz Ref 32 dBm Atten 30 dB 6.23 dBm #Avg Log dB/ Offst 12 dB PAvg M1 S2 S3 FC ΑL **£**(f): FTun Swp

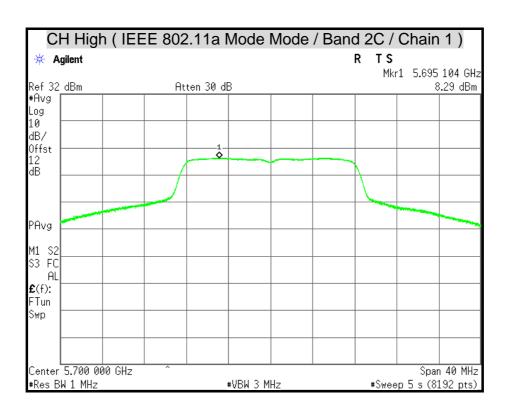
#VBW 3 MHz

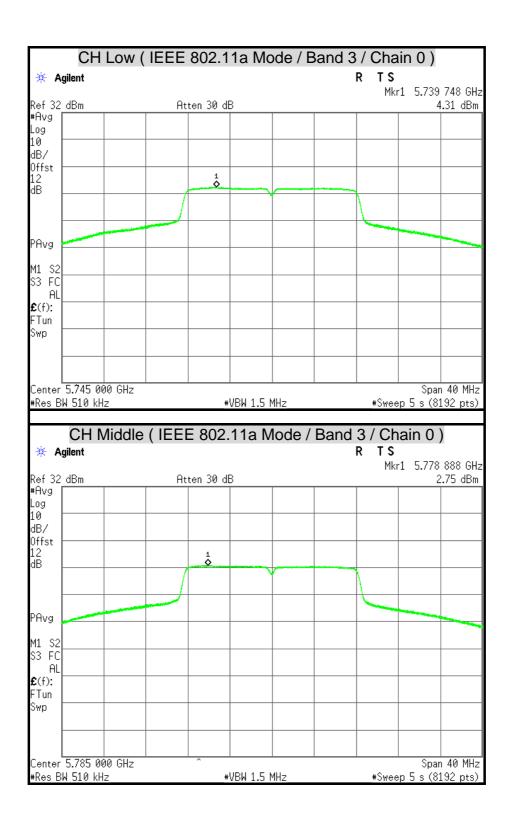
Report No.: T140807L10-RP1-2

Span 40 MHz

#Sweep 5 s (8192 pts)







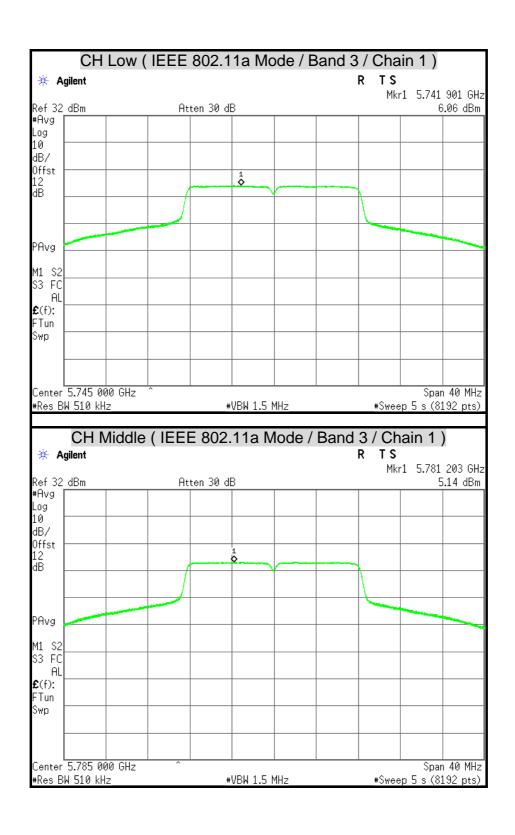
#Res BW 510 kHz

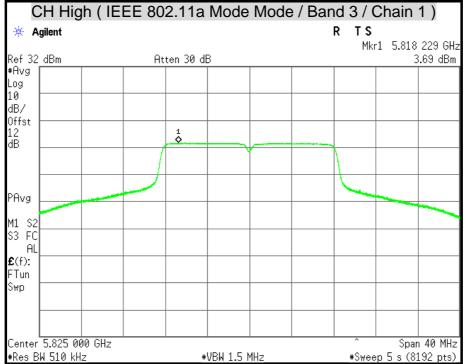
CH High (IEEE 802.11a Mode Mode / Band 3 / Chain 0) * Agilent R TS Mkr1 5.818 112 GHz Ref 32 dBm Atten 30 dB 0.92 dBm #Avg Log 10 dB/ Offst 12 dB PAvg S3 FC ΑL **£**(f): FTun Swp Center 5.825 000 GHz Span 40 MHz

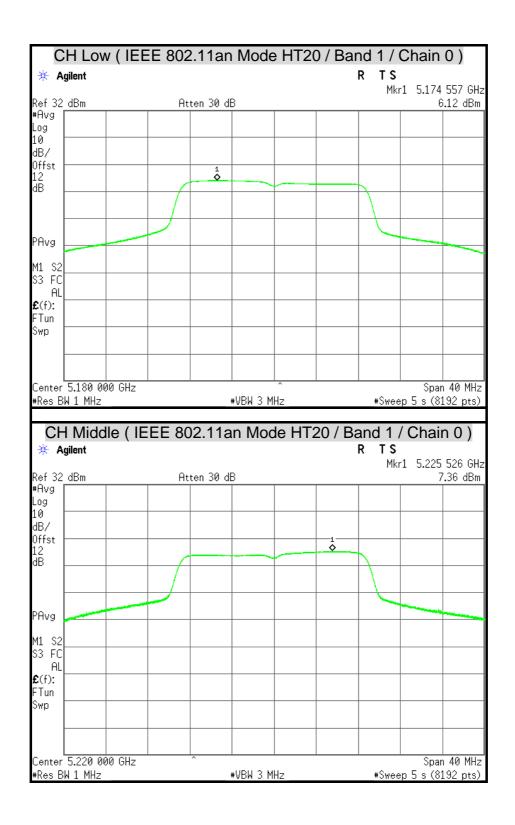
#VBW 1.5 MHz

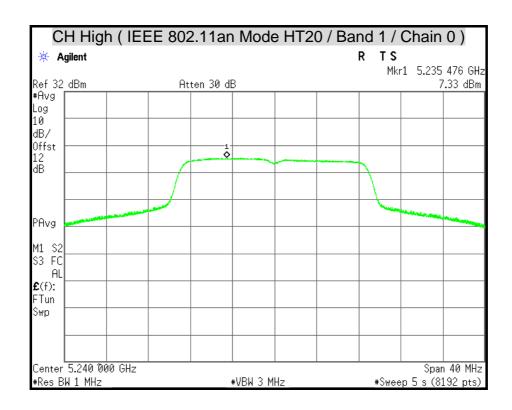
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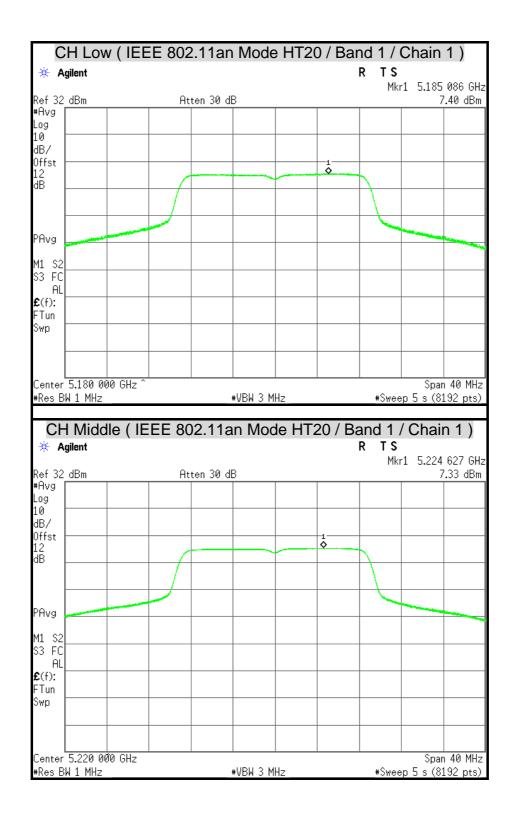
#Sweep 5 s (8192 pts)

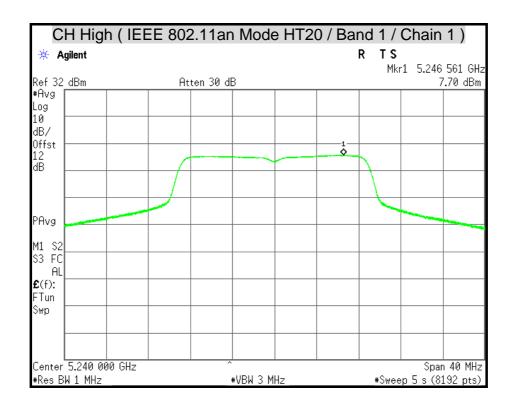


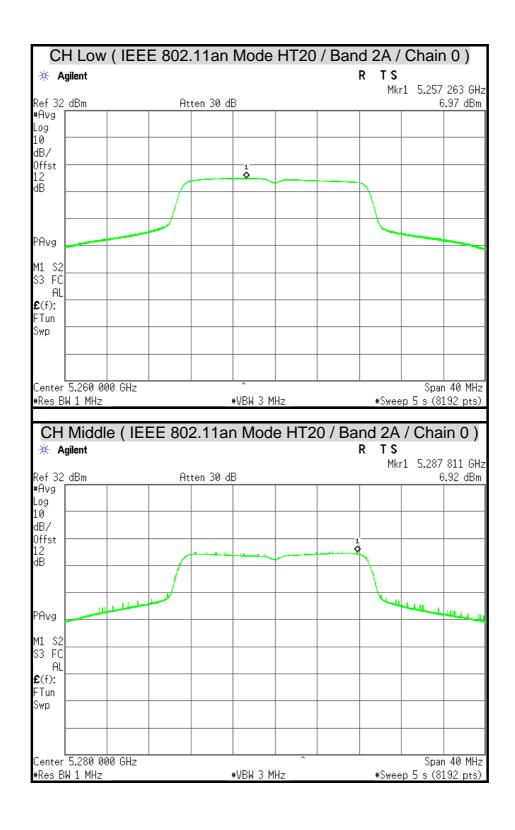




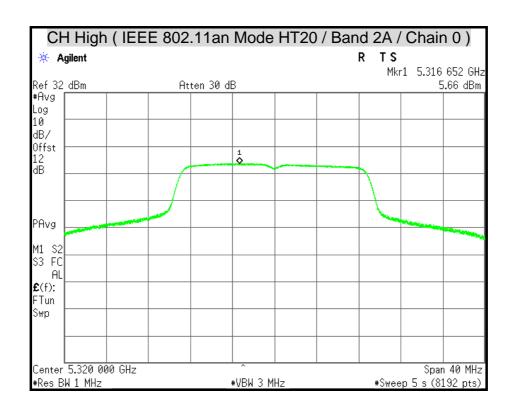


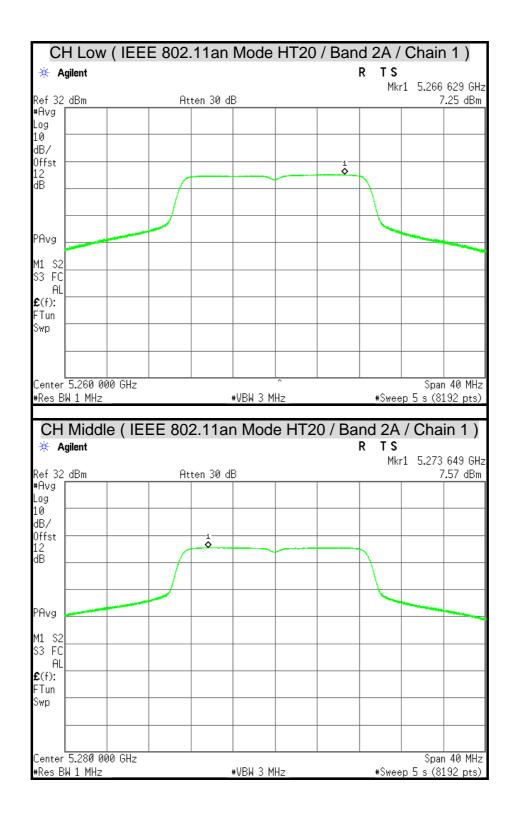


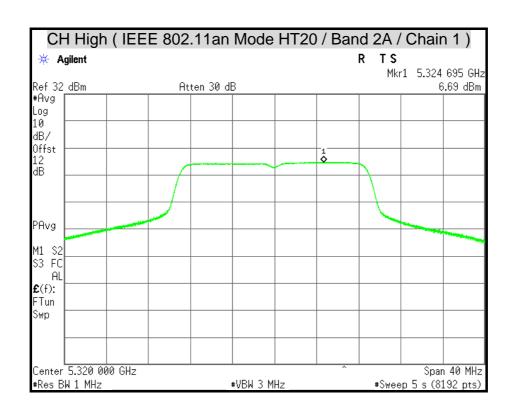


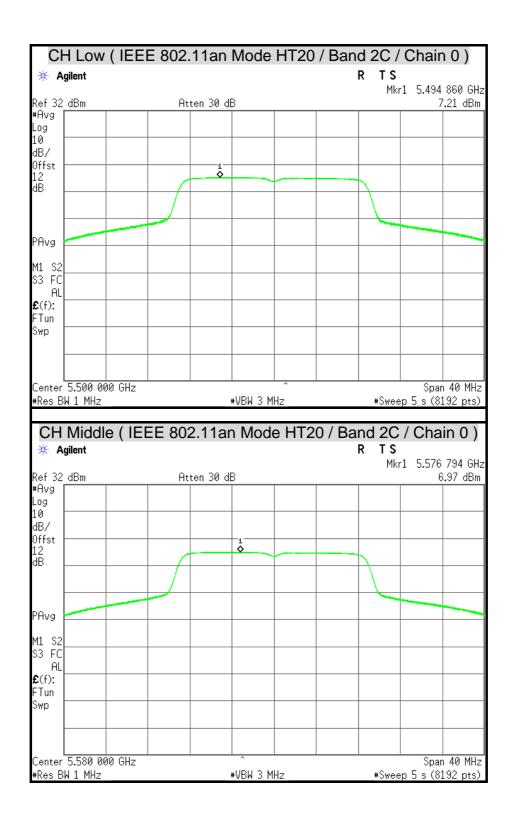


CC ID: M82-TREK674 Report No.: T140807L10-RP1-2

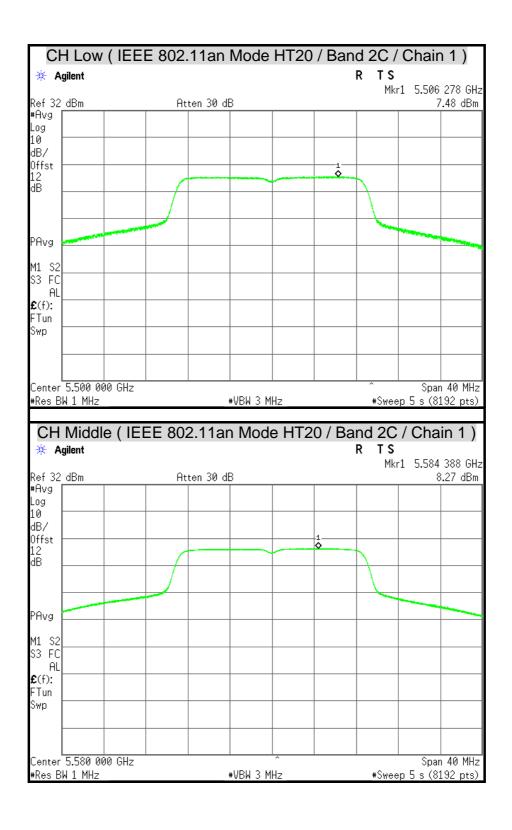


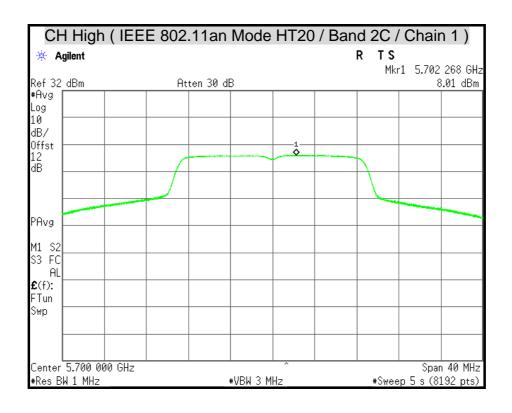


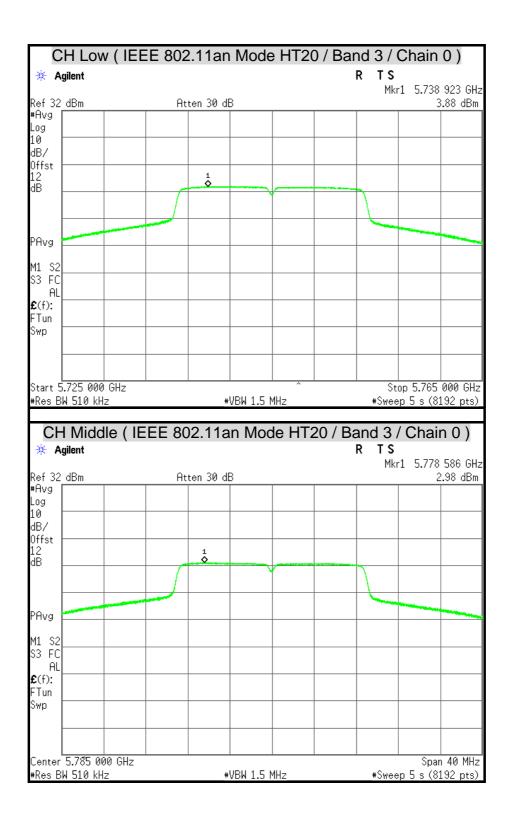




CH High (IEEE 802.11an Mode HT20 / Band 2C / Chain 0) * Agilent R TS Mkr1 5.704 788 GHz Ref 32 dBm Atten 30 dB 6.39 dBm #Avg Log dB/ Offst 12 dB PAvg M1 S2 S3 FC ΑL **£**(f): FTun Swp Center 5.700 000 GHz Span 40 MHz #Sweep 5 s (8192 pts) #Res BW 1 MHz #VBW 3 MHz







#Res BW 510 kHz

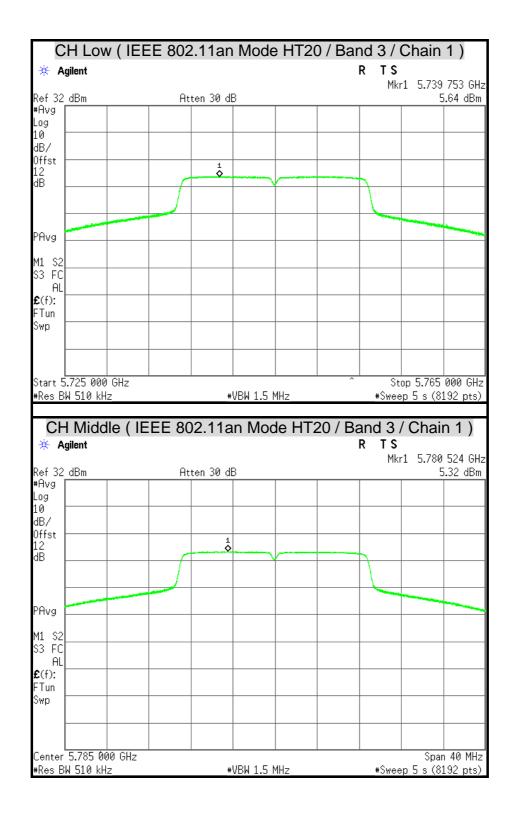
CH High (IEEE 802.11an Mode HT20 / Band 3 / Chain 0) * Agilent R TS Mkr1 5.818 752 GHz Ref 32 dBm Atten 30 dB 0.53 dBm #Avg Log dB/ Offst 12 dB PAvg S3 FC ΑL **£**(f): FTun Swp Center 5.825 000 GHz Span 40 MHz

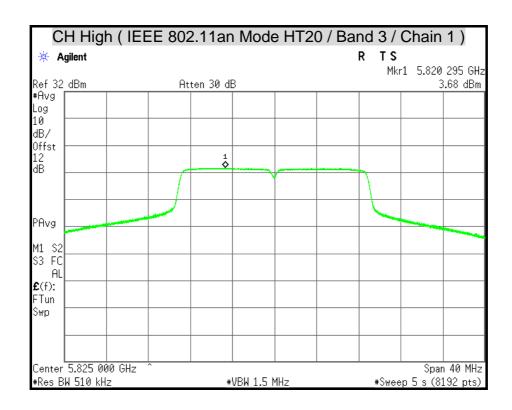
#VBW 1.5 MHz

Report No.: T140807L10-RP1-2

#Sweep 5 s (8192 pts)

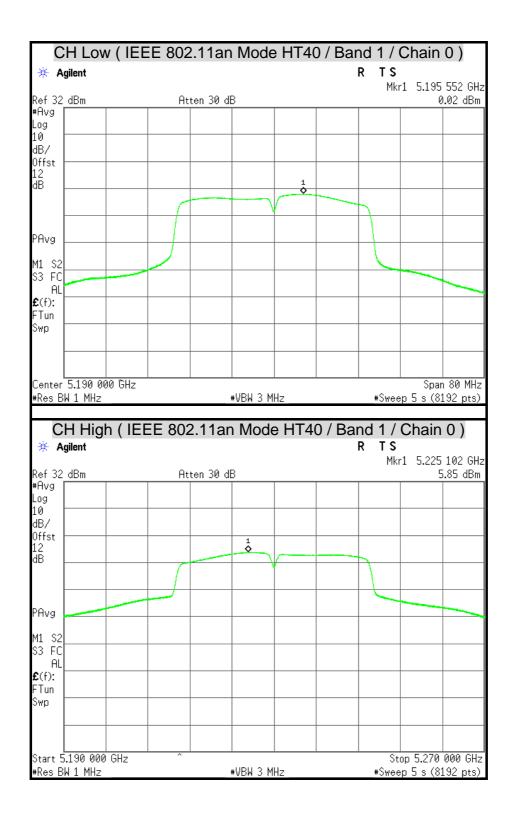
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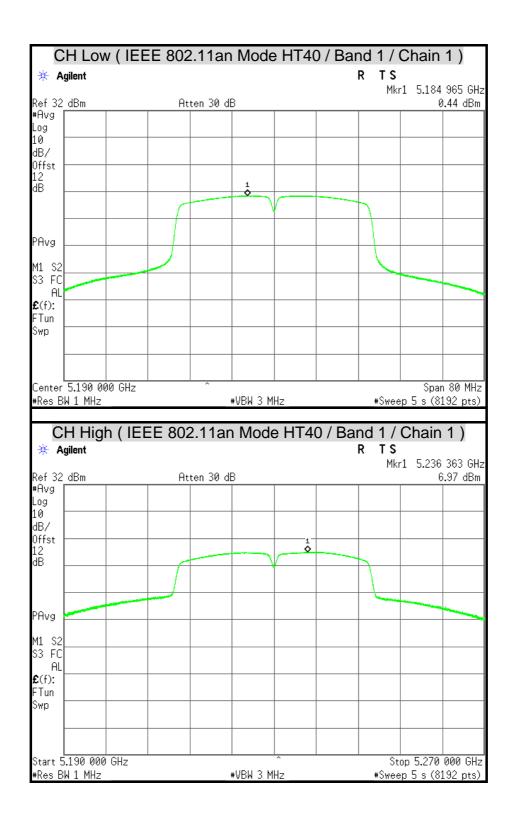




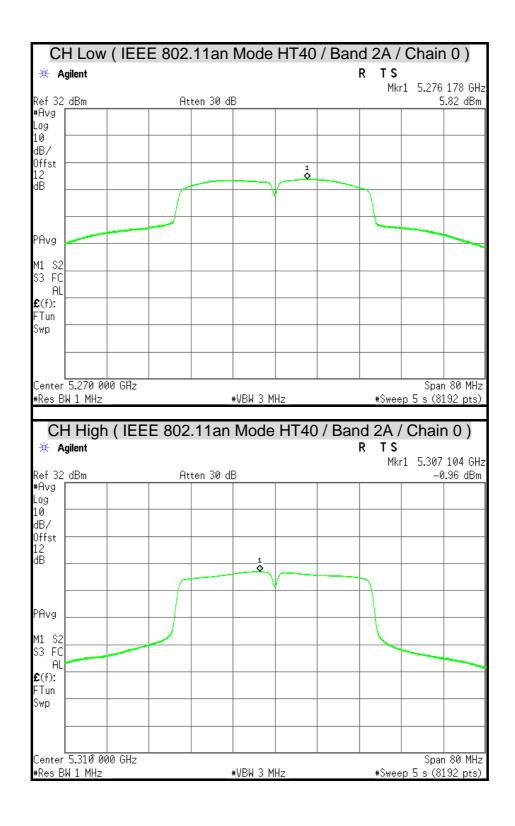


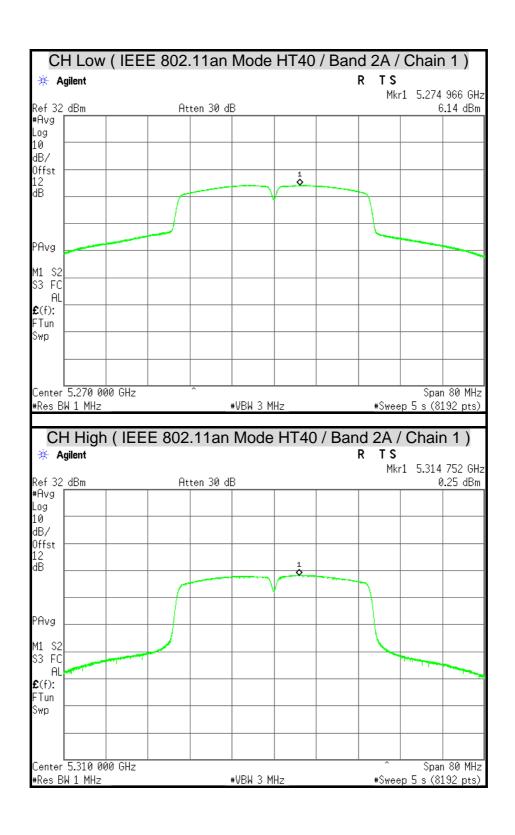
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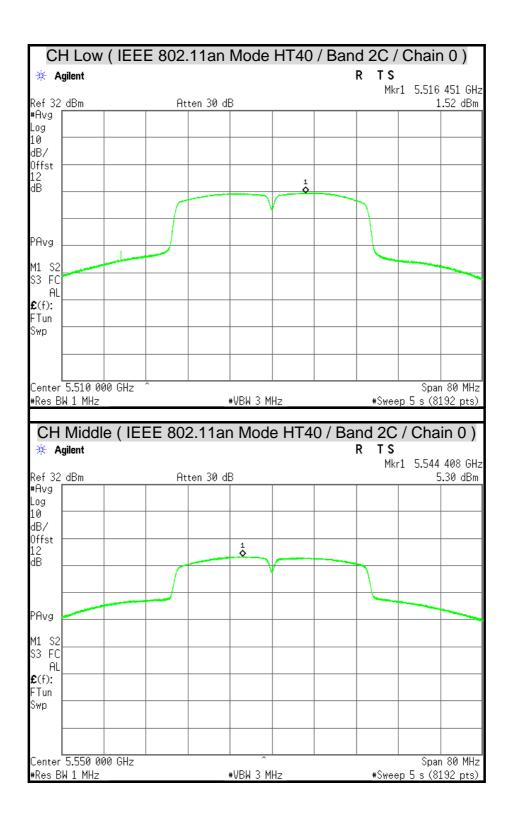


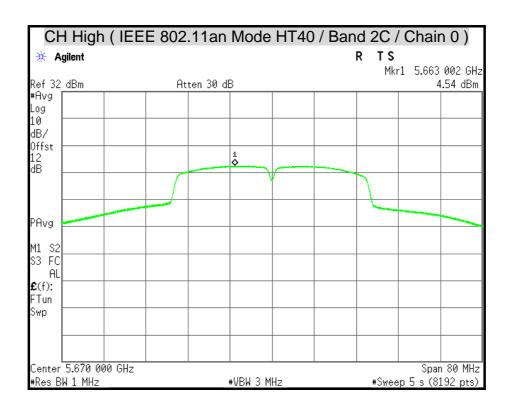


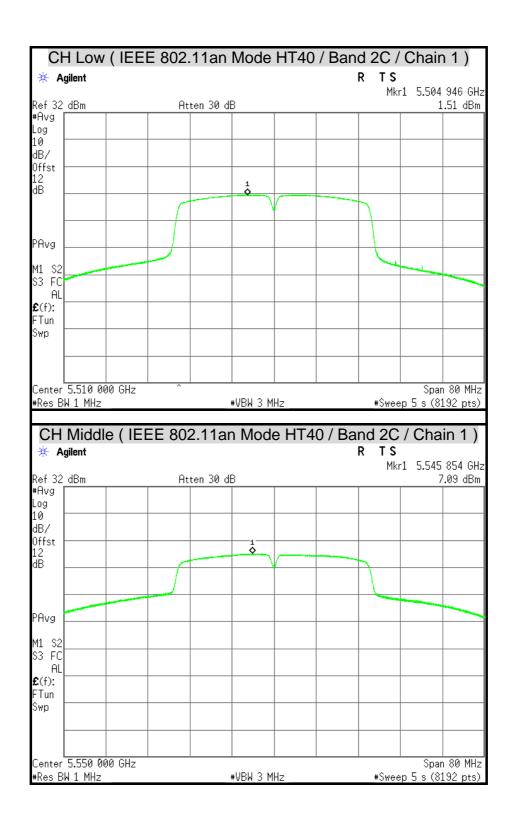
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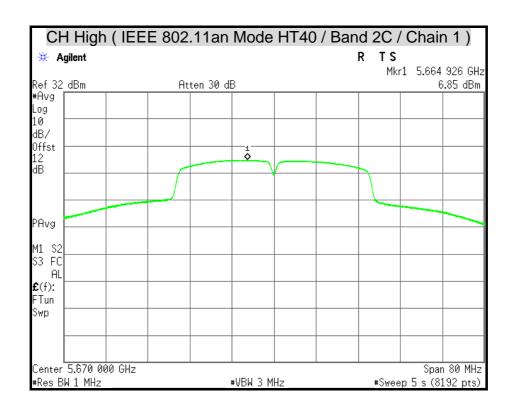






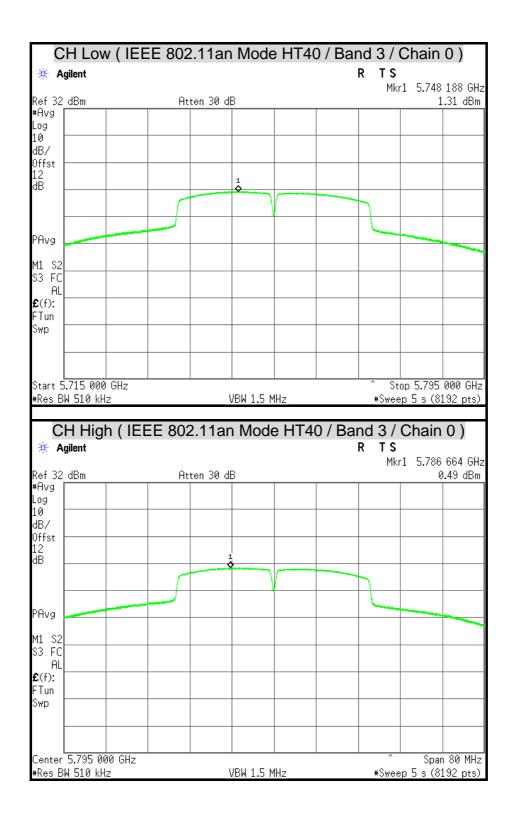






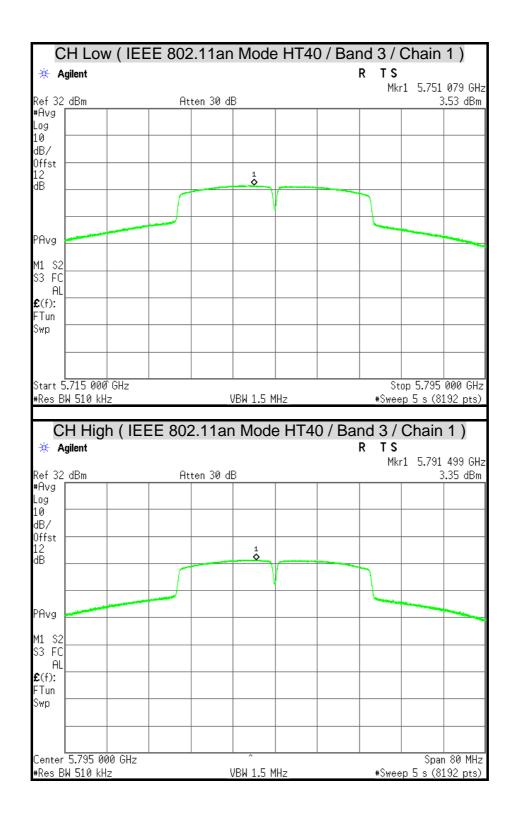
FCC ID: M82-TREK674

Report No.: T140807L10-RP1-2



FCC ID: M82-TREK674

Report No.: T140807L10-RP1-2



7.5 RADIATED EMISSION

LIMITS

(1) According to § 15.205 (a) Except as shown in paragraph (d) of this section, only spurious emissions are permitted in any of the frequency bands listed below:

MHz	MHz	MHz	GHz
0.090 - 0.110	16.42 - 16.423	399.9 - 410	4.5 - 5.15
¹ 0.495 - 0.505	16.69475 - 16.69525	608 - 614	5.35 - 5.46
2.1735 - 2.1905	16.80425 - 16.80475	960 - 1240	7.25 - 7.75
4.125 - 4.128	25.5 - 25.67	1300 - 1427	8.025 - 8.5
4.17725 - 4.17775	37.5 - 38.25	1435 - 1626.5	9.0 - 9.2
4.20725 - 4.20775	73 - 74.6	1645.5 - 1646.5	9.3 - 9.5
6.215 - 6.218	74.8 - 75.2	1660 -1710	10.6 -12.7
6.26775 - 6.26825	108 -121.94	1718.8 - 1722.2	13.25 -13.4
6.31175 - 6.31225	123 - 138	2200 - 2300	14.47 – 14.5
8.291 - 8.294	149.9 - 150.05	2310 - 2390	15.35 -16.2
8.362 - 8.366	156.52475 - 156.52525	2483.5 - 2500	17.7 - 21.4
8.37625 - 8.38675	156.7 - 156.9	2655 - 2900	22.01 - 23.12
8.41425 - 8.41475	162.0125 - 167.17	3260 - 3267	23.6 - 24.0
12.29 - 12.293	167.72 - 173.2	3332 - 3339	31.2 - 31.8
12.51975 - 12.52025	240 - 285	3345.8 - 3338	36.43 - 36.5
12.57675 - 12.57725	322 -335.4	3600 - 4400	(²)
13.36 - 13.41			

Remark:

(2) According to § 15.205 (b) Except as provided in paragraphs (d) and (e) of this section, the field strength of emissions appearing within these frequency bands shall not exceed the limits shown in §15.209. At frequencies equal to or less than 1000 MHz, compliance with the limits in §15.209 shall be demonstrated using measurement instrumentation employing a CISPR quasi-peak detector. Above 1000 MHz, compliance with the emission limits in §15.209 shall be demonstrated based on the average value of the measured emissions. The provisions in §15.35 apply to these measurements.

^{1. 1} Until February 1, 1999, this restricted band shall be 0.490-0.510 MHz.

^{2. &}lt;sup>2</sup> Above 38.6

(3) According to § 15.209 (a) Except as provided elsewhere in this Subpart, the emissions from an intentional radiator shall not exceed the field strength levels specified in the following table :

Frequency (MHz)	Field Strength (microvolts/meter)	Measurement Distance (meters)
0.009 - 0.490	2400/F(KHz)	300
0.490 – 1.705	24000/F(KHz)	30
1.705 – 30.0	30	30
30 - 88	100 **	3
88 - 216	150 **	3
216 - 960	200 **	3
Above 960	500	3

Remark: **Except as provided in paragraph (g), fundamental emissions from intentional radiators operating under this Section shall not be located in the frequency bands 54-72 MHz, 76-88 MHz, 174-216 MHz or 470-806 MHz. However, operation within these frequency bands is permitted under other sections of this Part, e.g., Sections 15.231 and 15.241.

(4) According to § 15.209 (b) In the emission table above, the tighter limit applies at the band edges.

(5)

Applicable To	Limit (dBµV/m)		
789033 D02 General UNII Test	Field Strength at 3m		
Procedures New Rules v01	74 (Peak)	54 (Average)	

Applicable To	EIRP Limit (dBm/MHz)	Equivalent Field Strength at 3m (dBµV/m)	
UNII Band 1			
UNII Band 2A	-27 (Peak)	68.2 (Peak)	
UNII Band 2C			
UNII Band 3	-27 (Peak) ¹ -17 (Peak) ²	68.2 (Peak) ¹ 78.2 (Peak) ²	

Remark: 1. Beyond 10MHz of the bandedge

- 2. Within 10MHz of bandedge
- 3. As specified in 15.407(b), emissions above 1000 MHz that are outside of the restricted bands are subject to a peak emission limit of -27 dBm/MHz (or -17 dBm/MHz as specified in 15.407(b)(4)). However, an out-of-band emission that complies with both the average and peak limits of 15.209 is not required to satisfy the -27 dBm/MHz or -17 dBm/MHz peak emission limit.

TEST EQUIPMENT

Radiated Emission / 966Chamber_B

Name of Equipment	Manufacture	Model	Serial Number	Calibration Due
Spectrum Analyzer	Agilent	E4446A	MY46180323	04/15/2015
EMI Test Receiver	ROHDE & SCHWARZ	ESCS 30	835418/008	10/14/2015
Bi-log Antenna	SCHWARZBECK	VULB 9168	9168-250	08/21/2015
Broad-Band Horn Antenna	SCHWARZBECK	BBHA 9120 D	9120D-778	08/19/2015
Double-Ridged Waveguide Horn	ETS-LINDGREN	3117	00078733	12/05/2014
Horn Antenna	COM-POWER	AH-840	03077	12/18/2014
Pre-Amplifier	Agilent	8447D	2944A10052	07/15/2015
Pre-Amplifier	Agilent	8449B	3008A01916	07/15/2015
LOOP Antenna	COM-POWER	AL-130	121051	01/12/2015
Notch Filters Band Reject	Micro-Tronics		026	N.C.R.
Band Reject Filter	Micro-Tronics	BRC50703-01	004	N.C.R.
Band Reject Filter	Micro-Tronics	BRC50704-01	004	N.C.R.
Band Reject Filter	Micro-Tronics	BRC50705-01	007	N.C.R.

Remark: 1. Each piece of equipment is scheduled for calibration once a year.

Conducted Emission

Name of Equipment	Manufacturer	Model	Serial Number	Calibration Due
Spectrum Analyzer	Agilent	E4446A	MY43360132	06/10/2015

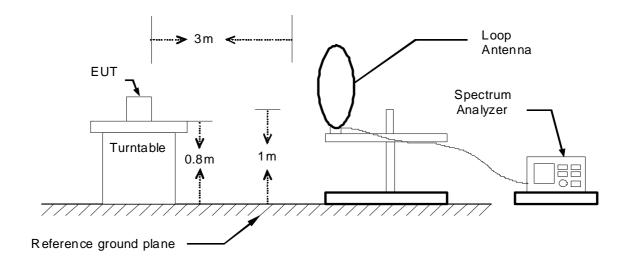
Remark: Each piece of equipment is scheduled for calibration once a year.

^{2.} N.C.R = No Calibration Request.

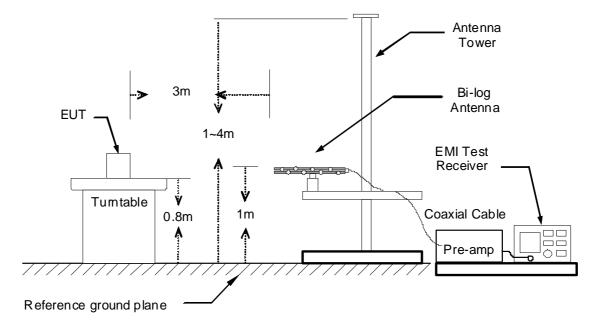
TEST SETUP

The diagram below shows the test setup that is utilized to make the measurements for emission below 1GHz.

9kHz ~ 30MHz

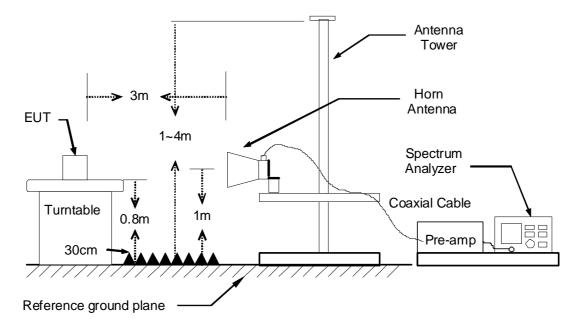


30MHz ~ 1GHz



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The diagram below shows the test setup that is utilized to make the measurements for emission above 1GHz.



Conducted Emission



TEST PROCEDURE

- 1. The EUT was placed on the top of a rotating table 0.8 meters above the ground. The table was rotated 360 degrees to determine the position of the highest radiation.
- 2. While measuring the radiated emission below 1GHz, the EUT was set 3 meters away from the interference-receiving antenna, which was mounted on the top of a variable-height antenna tower. While measuring the radiated emission above 1GHz, the EUT was set 3 meters away from the interference-receiving antenna.
- 3. The antenna is a broadband antenna, and its height is varied from one meter to four meters above the ground to determine the maximum value of the field strength. Both horizontal and vertical polarization of the antenna are set to make the measurement.
- 4. For each suspected emission, the EUT was arranged to its worst case and then the antenna was tuned to heights from 1 meter to 4 meters and the table was turned from 0 degrees to 360 degrees to find the maximum reading.
- 5. The test-receiver system was set to Peak Detect Function and Specified Bandwidth with Maximum Hold Mode.
- 6. If the emission level of the EUT in peak mode was 10 dB lower than the limit specified, then testing could be stopped and the peak values of the EUT would be reported. Otherwise the emissions that did not have 10 dB margin would be re-tested one by one using peak, quasi-peak or average method as specified and then reported in a data sheet.

Remark:

- 1. The resolution bandwidth and video bandwidth of test receiver/spectrum analyzer is 120 KHz for Peak detection (PK) and Quasi-peak detection (QP) at frequency below 1GHz.
- 2. The resolution bandwidth and video bandwidth of test receiver/spectrum analyzer is 1 MHz for Peak detection and frequency above 1GHz.
- 3. The resolution bandwidth of test receiver/spectrum analyzer is 1 MHz and the video bandwidth is 10 Hz for Average detection (AV) at frequency above 1GHz.

TEST RESULTS

Below 1 GHz (9kHz ~ 30MHz)

No emission found between lowest internal used/generated frequency to 30MHz.

Below 1 GHz (30MHz ~ 1GHz)

Product Name	Computer	Test By	Rex Chiu
Test Model	TREK-674	Test Date	2014/10/21
Test Mode	TX Mode	Temp. & Humidity	28°C, 52%

966 Chamber_B at 3Meter / Horizontal									
Frequency (MHz)	Reading (dBµV)	Correction Factor (dB/m)	Result (dBµV/m)	Limit (dBµV/m)	Margin (dB)	Remark			
132.82	40.22	-14.71	25.50	43.50	-18.00	Peak			
351.07	44.79	-10.87	33.92	46.00	-12.08	Peak			
405.39	51.30	-9.81	41.49	46.00	-4.51	Peak			
431.58	51.18	-9.25	41.93	46.00	-4.07	Peak			
485.90	46.62	-8.38	38.23	46.00	-7.77	Peak			
623.64	44.93	-5.81	39.12	46.00	-6.88	Peak			
		966 Chamb	er_B at 3Met	er / Vertical					
Frequency (MHz)	Reading (dBµV)	Correction Factor (dB/m)	Result (dBµV/m)	Limit (dBµV/m)	Margin (dB)	Remark			
60.07	42.44	-14.03	28.41	40.00	-11.59	Peak			
324.88	46.91	-11.40	35.51	46.00	-10.49	Peak			
405.39	47.98	-9.81	38.17	46.00	-7.83	Peak			

Remark:

431.58

485.90

623.64

46.63

46.59

48.11

- 1. Quasi-peak test would be performed if the peak result were greater than the quasi-peak limit.
- 2. Data of measurement within this frequency range shown " --- " in the table above means the reading of emissions are attenuated more than 20dB below the permissible limits or the field strength is too small to be measured.

37.38

38.21

42.30

46.00

46.00

46.00

-8.62

-7.79

-3.70

Peak

Peak

Peak

- 3. Correction Factor (dB/m) = Antenna Factor (dB/m) + Cable Loss (dB) PreAmp.Gain (dB)
- 4. Result (dBuV/m) = Reading (dBuV) + Correction Factor (dB/m)
- 5. Margin (dB) = Remark result (dBuV/m) Quasi-peak limit (dBuV/m).

-9.25

-8.38

-5.81

Report No.: T140807L10-RP1-2

Above 1 GHz

Product Name	Computer	Test By	Rex Chiu
Test Model	TREK-674	Test Date	2014/10/21
Test Mode	UNII Band 1/ IEEE 802.11a TX / CH Low	Temp. & Humidity	28°C, 52%

966 Chamber_B at 3Meter / Horizontal									
Frequency (MHz)	Reading- PK (dBuV)	Reading- AV (dBuV)	Correction Factor (dB/m)	Result-PK (dBuV/m)	Result-AV (dBuV/m)	Limit-PK (dBuV/m)	Limit-AV (dBuV/m)	Margin (dB)	Remark
3350.00	42.42		4.37	46.79		74.00	54.00	-7.21	Peak
3910.00	40.76		5.61	46.38		74.00	54.00	-7.62	Peak
5460.00	39.41		9.24	48.65		74.00	54.00	-5.35	Peak
6600.00	38.76		12.24	51.00		74.00	54.00	-3.00	Peak
7404.00	38.67		13.38	52.06		74.00	54.00	-1.94	Peak
7776.00	38.79		13.45	52.24		74.00	54.00	-1.76	Peak
	OCC Chambar D at 2Mater / Vertical								

	966 Chamber_B at 3Meter / Vertical									
Frequency (MHz)	Reading- PK (dBuV)	Reading- AV (dBuV)	Correction Factor (dB/m)	Result-PK (dBuV/m)	Result-AV (dBuV/m)	Limit-PK (dBuV/m)	Limit-AV (dBuV/m)	Margin (dB)	Remark	
3455.00	43.26		4.45	47.71		74.00	54.00	-6.29	Peak	
3985.00	41.23		5.82	47.05		74.00	54.00	-6.95	Peak	
5475.00	39.67		9.27	48.93		74.00	54.00	-5.07	Peak	
7236.00	39.24		12.86	52.10		74.00	54.00	-1.90	Peak	
8400.00	37.70		13.65	51.36		74.00	54.00	-2.64	Peak	
9324.00	37.40		14.80	52.19		74.00	54.00	-1.81	Peak	

Remark:

- 1. Measuring frequencies from 1 GHz to the 10th harmonic of highest fundamental frequency.
- 2. Average test would be performed if the peak result were greater than the average limit.
- 3. Data of measurement within this frequency range shown "---" in the table above means the reading of emissions are attenuated more than 20dB below the permissible limits or the field strength is too small to be measured.
- 4. Measurements above show only up to 6 maximum emissions noted, or would be lesser, with " N/A " remark, if no specific emissions from the EUT are recorded (ie: margin>20dB from the applicable limit) and considered that's already beyond the background noise floor.
- 5. Result = Reading + Correction Factor

Margin = Result - Limit

 $Remark\ Peak = Result(PK) - Limit(AV)$

Product Name	Computer	Test By	Rex Chiu
Test Model	TREK-674	Test Date	2014/10/21
Test Mode	UNII Band 1/ IEEE 802.11a TX / CH Middle	Temp. & Humidity	28°C, 52%

	966 Chamber_B at 3Meter / Horizontal										
Frequency (MHz)	Reading- PK (dBuV)	Reading- AV (dBuV)	Correction Factor (dB/m)	Result-PK (dBuV/m)	Result-AV (dBuV/m)		Limit-AV (dBuV/m)	Margin (dB)	Remark		
3250.00	42.16		4.28	46.44		74.00	54.00	-7.56	Peak		
4550.00	41.42		7.51	48.93		74.00	54.00	-5.07	Peak		
5865.00	39.11		10.40	49.50		74.00	54.00	-4.50	Peak		
6384.00	38.21		11.93	50.14		74.00	54.00	-3.86	Peak		
7464.00	38.42		13.57	51.99		74.00	54.00	-2.01	Peak		
8652.00	38.18		14.03	52.21		74.00	54.00	-1.79	Peak		

	966 Chamber_B at 3Meter / Vertical										
Frequency (MHz)	Reading- PK (dBuV)	Reading- AV (dBuV)	Correction Factor (dB/m)	Result-PK (dBuV/m)	Result-AV (dBuV/m)		Limit-AV (dBuV/m)	Margin (dB)	Remark		
3480.00	42.37		4.47	46.85		74.00	54.00	-7.15	Peak		
5150.00	53.71	41.23	8.70	62.41	49.93	74.00	54.00	-4.07	AVG		
5450.00	39.21		9.22	48.44		74.00	54.00	-5.56	Peak		
6828.00	38.21		12.18	50.39		74.00	54.00	-3.61	Peak		
7416.00	38.65		13.42	52.07		74.00	54.00	-1.93	Peak		
8772.00	37.58		14.26	51.84		74.00	54.00	-2.16	Peak		

Remark:

- 1. Measuring frequencies from 1 GHz to the 10th harmonic of highest fundamental frequency.
- 2. Average test would be performed if the peak result were greater than the average limit.
- 3. Data of measurement within this frequency range shown "---" in the table above means the reading of emissions are attenuated more than 20dB below the permissible limits or the field strength is too small to be measured.
- 4. Measurements above show only up to 6 maximum emissions noted, or would be lesser, with " N/A " remark, if no specific emissions from the EUT are recorded (ie: margin>20dB from the applicable limit) and considered that's already beyond the background noise floor.
- 5. Result = Reading + Correction Factor

Margin = Result - Limit

Remark Peak = Result(PK) - Limit(AV)

Product Name	Computer	Test By	Rex Chiu
Test Model	TREK-674	Test Date	2014/10/21
Test Mode	UNII Band 1/ IEEE 802.11a TX / CH High	Temp. & Humidity	28°C, 52%

	966 Chamber_B at 3Meter / Horizontal										
Frequency (MHz)	Reading- PK (dBuV)	Reading- AV (dBuV)	Correction Factor (dB/m)	Result-PK (dBuV/m)	Result-AV (dBuV/m)	Limit-PK (dBuV/m)		Margin (dB)	Remark		
3920.00	40.70		5.64	46.35		74.00	54.00	-7.65	Peak		
4785.00	40.15		8.00	48.15		74.00	54.00	-5.85	Peak		
5425.00	38.53		9.18	47.71		74.00	54.00	-6.29	Peak		
6360.00	38.60		11.86	50.46		74.00	54.00	-3.54	Peak		
7524.00	38.07		13.66	51.73		74.00	54.00	-2.27	Peak		
8556.00	38.16		13.85	52.01		74.00	54.00	-1.99	Peak		
				_							

	966 Chamber_B at 3Meter / Vertical										
Frequency (MHz)	Reading- PK (dBuV)	Reading- AV (dBuV)	Correction Factor (dB/m)	Result-PK (dBuV/m)	Result-AV (dBuV/m)		Limit-AV (dBuV/m)	Margin (dB)	Remark		
3495.00	43.26		4.49	47.75		74.00	54.00	-6.25	Peak		
5150.00	43.84		8.70	52.54		74.00	54.00	-1.46	Peak		
5590.00	38.95		9.58	48.53		74.00	54.00	-5.47	Peak		
6612.00	37.75		12.24	49.99		74.00	54.00	-4.01	Peak		
7596.00	38.26		13.60	51.87		74.00	54.00	-2.13	Peak		
8736.00	37.87		14.19	52.06		74.00	54.00	-1.94	Peak		

Remark:

- 1. Measuring frequencies from 1 GHz to the 10th harmonic of highest fundamental frequency.
- 2. Average test would be performed if the peak result were greater than the average limit.
- 3. Data of measurement within this frequency range shown "---" in the table above means the reading of emissions are attenuated more than 20dB below the permissible limits or the field strength is too small to be measured.
- 4. Measurements above show only up to 6 maximum emissions noted, or would be lesser, with " N/A " remark, if no specific emissions from the EUT are recorded (ie: margin>20dB from the applicable limit) and considered that's already beyond the background noise floor.
- 5. Result = Reading + Correction Factor

Margin = Result - Limit

Remark Peak = Result(PK) - Limit(AV)

M82-TREK674 Report No. : T140807L10-RP1-2

Product Name	Computer	Test By	Rex Chiu
Test Model	TREK-674	Test Date	2014/10/21
Test Mode	UNII Band 1/ IEEE 802.11an HT20 TX / CH Low	Temp. & Humidity	28°C, 52%

	966 Chamber_B at 3Meter / Horizontal											
Frequency (MHz)	Reading- PK (dBuV)	Reading- AV (dBuV)	Correction Factor (dB/m)	Result-PK (dBuV/m)	Result-AV (dBuV/m)	Limit-PK (dBuV/m)	Limit-AV (dBuV/m)	Margin (dB)	Remark			
3220.00	42.92		4.26	47.18		74.00	54.00	-6.82	Peak			
3990.00	41.16		5.83	47.00		74.00	54.00	-7.00	Peak			
5395.00	39.62		9.13	48.75		74.00	54.00	-5.25	Peak			
6828.00	39.17		12.18	51.34		74.00	54.00	-2.66	Peak			
7368.00	38.94		13.27	52.21		74.00	54.00	-1.79	Peak			
8844.00	37.61		14.39	52.00		74.00	54.00	-2.00	Peak			
		9	66 Chaml	oor Bat ?	RMeter / V	ortical						

	966 Chamber_B at 3Meter / Vertical										
Frequency (MHz)	Reading- PK (dBuV)	Reading- AV (dBuV)	Correction Factor (dB/m)	Result-PN	Result-AV (dBuV/m)		Limit-AV (dBuV/m)	Margin (dB)	Remark		
3175.00	42.43		4.22	46.65		74.00	54.00	-7.35	Peak		
3455.00	43.71		4.45	48.16		74.00	54.00	-5.84	Peak		
5475.00	39.25		9.27	48.52		74.00	54.00	-5.48	Peak		
6144.00	38.17		11.22	49.39		74.00	54.00	-4.61	Peak		
7344.00	38.78		13.20	51.97		74.00	54.00	-2.03	Peak		
8772.00	37.44		14.26	51.70		74.00	54.00	-2.30	Peak		

Remark:

- 1. Measuring frequencies from 1 GHz to the 10th harmonic of highest fundamental frequency.
- 2. Average test would be performed if the peak result were greater than the average limit.
- 3. Data of measurement within this frequency range shown "---" in the table above means the reading of emissions are attenuated more than 20dB below the permissible limits or the field strength is too small to be measured.
- 4. Measurements above show only up to 6 maximum emissions noted, or would be lesser, with " N/A " remark, if no specific emissions from the EUT are recorded (ie: margin>20dB from the applicable limit) and considered that's already beyond the background noise floor.
- 5. Result = Reading + Correction Factor

Margin = Result - Limit

Remark Peak = Result(PK) - Limit(AV)

Product Name	Computer	Test By	Rex Chiu
Test Model	TREK-674	Test Date	2014/10/21
Test Mode	UNII Band 1/ IEEE 802.11an HT20 TX / CH Middle	Temp. & Humidity	28°C, 52%

		96	6 Chambe	er_B at 3N	/leter / Ho	rizontal			
Frequency (MHz)	Reading- PK (dBuV)	Reading- AV (dBuV)	Correction Factor (dB/m)	Result-PK (dBuV/m)	Result-AV (dBuV/m)	Limit-PK (dBuV/m)	Limit-AV (dBuV/m)	Margin (dB)	Remark
3225.00	42.11		4.26	46.38		74.00	54.00	-7.62	Peak
4635.00	40.59		7.69	48.28		74.00	54.00	-5.72	Peak
5400.00	39.38		9.14	48.51		74.00	54.00	-5.49	Peak
6648.00	38.38		12.23	50.61		74.00	54.00	-3.39	Peak
7464.00	38.13		13.57	51.70		74.00	54.00	-2.30	Peak
8760.00	37.25		14.23	51.49		74.00	54.00	-2.51	Peak
966 Chamber_B at 3Meter / Vertical									
Frequency	Reading-	Reading-	Correction	Result-PK	Result-AV	Limit-PK	Limit-AV	Margin	

	966 Chamber_B at 3Meter / Vertical										
Frequency (MHz)	Reading- PK (dBuV)	Reading- AV (dBuV)	Correction Factor (dB/m)	Result-PK (dBuV/m)		Limit-PK (dBuV/m)	Limit-AV (dBuV/m)	Margin (dB)	Remark		
3225.00	42.71		4.26	46.98		74.00	54.00	-7.02	Peak		
5150.00	51.73	38.96	8.70	60.44	47.66	74.00	54.00	-6.34	AVG		
5495.00	39.21		9.30	48.51		74.00	54.00	-5.49	Peak		
7644.00	38.01		13.56	51.57		74.00	54.00	-2.43	Peak		
8568.00	38.02		13.88	51.90		74.00	54.00	-2.10	Peak		
9624.00	37.05		15.37	52.42		74.00	54.00	-1.58	Peak		

Remark:

- 1. Measuring frequencies from 1 GHz to the 10th harmonic of highest fundamental frequency.
- 2. Average test would be performed if the peak result were greater than the average limit.
- 3. Data of measurement within this frequency range shown "---" in the table above means the reading of emissions are attenuated more than 20dB below the permissible limits or the field strength is too small to be measured.
- 4. Measurements above show only up to 6 maximum emissions noted, or would be lesser, with " N/A " remark, if no specific emissions from the EUT are recorded (ie: margin>20dB from the applicable limit) and considered that's already beyond the background noise floor.
- 5. Result = Reading + Correction Factor

Margin = Result - Limit

Remark Peak = Result(PK) - Limit(AV)

Product Name	Computer	Test By	Rex Chiu
Test Model	TREK-674	Test Date	2014/10/21
Test Mode	UNII Band 1/ IEEE 802.11an HT20 TX / CH High	Temp. & Humidity	28°C, 52%

	966 Chamber_B at 3Meter / Horizontal											
Frequency (MHz)	Reading- PK (dBuV)	Reading- AV (dBuV)	Correction Factor (dB/m)	Result-PK (dBuV/m)	Result-AV (dBuV/m)	Limit-PK (dBuV/m)	Limit-AV (dBuV/m)	Margin (dB)	Remark			
4000.00	40.95		5.86	46.81		74.00	54.00	-7.19	Peak			
4695.00	41.31		7.81	49.12		74.00	54.00	-4.88	Peak			
5425.00	39.22		9.18	48.40		74.00	54.00	-5.60	Peak			
7080.00	38.83		12.38	51.20		74.00	54.00	-2.80	Peak			
7944.00	38.75		13.32	52.07		74.00	54.00	-1.93	Peak			
9084.00	37.56		14.71	52.27		74.00	54.00	-1.73	Peak			
	966 Chamber_B at 3Meter / Vertical											
Frequency (MHz)	Reading- PK (dBuV)	Reading- AV (dBuV)	Correction Factor (dB/m)	Result-PK (dBuV/m)		Limit-PK (dBuV/m)	Limit-AV (dBuV/m)	Margin (dB)	Remark			
3495 00	42 61		4 49	47 10		74 00	54 00	-6.90	Peak			

	966 Chamber_B at 3Meter / Vertical											
Frequency (MHz)	Reading- PK (dBuV)	Reading- AV (dBuV)	Correction Factor (dB/m)	Result-PK	Result-AV (dBuV/m)		Limit-AV (dBuV/m)	Margin (dB)	Remark			
3495.00	42.61		4.49	47.10		74.00	54.00	-6.90	Peak			
5145.00	46.94	34.13	8.69	55.64	42.82	74.00	54.00	-11.18	AVG			
5350.00	45.75	32.96	9.05	54.80	42.01	74.00	54.00	-11.99	AVG			
6612.00	38.30		12.24	50.54		74.00	54.00	-3.46	Peak			
7464.00	37.69		13.57	51.26		74.00	54.00	-2.74	Peak			
9036.00	37.78		14.69	52.47		74.00	54.00	-1.53	Peak			

Remark:

- 1. Measuring frequencies from 1 GHz to the 10th harmonic of highest fundamental frequency.
- 2. Average test would be performed if the peak result were greater than the average limit.
- 3. Data of measurement within this frequency range shown "---" in the table above means the reading of emissions are attenuated more than 20dB below the permissible limits or the field strength is too small to be measured.
- 4. Measurements above show only up to 6 maximum emissions noted, or would be lesser, with " N/A " remark, if no specific emissions from the EUT are recorded (ie: margin>20dB from the applicable limit) and considered that's already beyond the background noise floor.
- 5. Result = Reading + Correction Factor

Margin = Result - Limit

Remark Peak = Result(PK) - Limit(AV)

Product Name	Computer	Test By	Rex Chiu
Test Model	TREK-674	Test Date	2014/10/21
Test Mode	UNII Band 1/ IEEE 802.11an HT40 TX / CH Low	Temp. & Humidity	28°C, 52%

		96	6 Chambe	er_B at 3	Meter / Ho	rizontal					
Frequency (MHz)	Reading- PK (dBuV)	Reading- AV (dBuV)	Correction Factor (dB/m)	Result-PK (dBuV/m)	Result-AV (dBuV/m)	Limit-PK (dBuV/m)	Limit-AV (dBuV/m)	Margin (dB)	Remark		
3240.00	42.22		4.28	46.50		74.00	54.00	-7.50	Peak		
4365.00	41.25		6.99	48.24		74.00	54.00	-5.76	Peak		
5540.00	39.22		9.43	48.65		74.00	54.00	-5.35	Peak		
6672.00	38.68		12.22	50.90		74.00	54.00	-3.10	Peak		
7440.00	38.00		13.49	51.50		74.00	54.00	-2.50	Peak		
8568.00	38.51		13.88	52.38		74.00	54.00	-1.62	Peak		
		,	<u>, </u>			,					
	966 Chamber_B at 3Meter / Vertical										
Frequency	Reading- PK	Reading- AV	Correction Factor	Result-PK	Result-AV	Limit-PK	Limit-AV	Margin	Remark		

	966 Chamber_B at 3Meter / Vertical											
Frequency (MHz)	Reading- PK (dBuV)	Reading- AV (dBuV)	Correction Factor (dB/m)	Result-PK (dBuV/m)		Limit-PK (dBuV/m)	Limit-AV (dBuV/m)	Margin (dB)	Remark			
3245.00	41.81		4.28	46.09		74.00	54.00	-7.91	Peak			
3930.00	41.48		5.67	47.15		74.00	54.00	-6.85	Peak			
5550.00	39.33		9.46	48.79		74.00	54.00	-5.21	Peak			
6348.00	37.46		11.82	49.29		74.00	54.00	-4.71	Peak			
7404.00	38.42		13.38	51.81		74.00	54.00	-2.19	Peak			
8808.00	37.79		14.32	52.12		74.00	54.00	-1.88	Peak			

Remark:

- 1. Measuring frequencies from 1 GHz to the 10th harmonic of highest fundamental frequency.
- 2. Average test would be performed if the peak result were greater than the average limit.
- 3. Data of measurement within this frequency range shown "---" in the table above means the reading of emissions are attenuated more than 20dB below the permissible limits or the field strength is too small to be measured.
- 4. Measurements above show only up to 6 maximum emissions noted, or would be lesser, with " N/A " remark, if no specific emissions from the EUT are recorded (ie: margin>20dB from the applicable limit) and considered that's already beyond the background noise floor.
- 5. Result = Reading + Correction Factor

Margin = Result - Limit

Remark Peak = Result(PK) - Limit(AV)

Report No.: T140807L10-RP1-2

Product Name	Computer	Test By	Rex Chiu
Test Model	TREK-674	Test Date	2014/10/21
Test Mode	UNII Band 1/ IEEE 802.11an HT40 TX / CH High	Temp. & Humidity	28°C, 52%

	966 Chamber_B at 3Meter / Horizontal											
Frequency (MHz)	Reading- PK (dBuV)	Reading- AV (dBuV)	Correction Factor (dB/m)	Result-PK (dBuV/m)	Result-AV (dBuV/m)	Limit-PK (dBuV/m)	Limit-AV (dBuV/m)	Margin (dB)	Remark			
3200.00	41.79		4.24	46.03		74.00	54.00	-7.97	Peak			
5150.00	47.23	34.42	8.70	55.93	43.12	74.00	54.00	-10.88	AVG			
5985.00	38.85		10.76	49.61		74.00	54.00	-4.39	Peak			
6768.00	39.20		12.19	51.39		74.00	54.00	-2.61	Peak			
7548.00	38.09		13.64	51.73		74.00	54.00	-2.27	Peak			
9384.00	37.48		14.82	52.29		74.00	54.00	-1.71	Peak			
		9	66 Chaml	ber_B at 3	BMeter / V	ertical						
Frequency (MHz)	Reading- PK (dBuV)	Reading- AV (dBuV)	Correction Factor (dB/m)	Result-PK (dBuV/m)	Result-AV (dBuV/m)	Limit-PK (dBuV/m)	Limit-AV (dBuV/m)	Margin (dB)	Remark			
3865.00	41.49		5.49	46.98		74.00	54.00	-7.02	Peak			
5150.00	57.59	44.64	8.70	66.29	53.34	74.00	54.00	-0.66	AVG			
5350.00	44.78	31.98	9.05	53.82	41.03	74.00	54.00	-12.97	AVG			
6216.00	38.37		11.44	49.80		74.00	54.00	-4.20	Peak			

Remark:

7200.00

8724.00

- 1. Measuring frequencies from 1 GHz to the 10th harmonic of highest fundamental frequency.
- 2. Average test would be performed if the peak result were greater than the average limit.

12.75

14.17

3. Data of measurement within this frequency range shown "---" in the table above means the reading of emissions are attenuated more than 20dB below the permissible limits or the field strength is too small to be measured.

51.54

51.47

74.00

74.00

54.00

54.00

-2.46

-2.53

Peak

Peak

- 4. Measurements above show only up to 6 maximum emissions noted, or would be lesser, with " N/A " remark, if no specific emissions from the EUT are recorded (ie: margin>20dB from the applicable limit) and considered that's already beyond the background noise floor.
- 5. Result = Reading + Correction Factor Margin = Result – Limit

38.79

37.30

Remark Peak = Result(PK) - Limit(AV)

Product Name	Computer	Test By	Rex Chiu
Test Model	TREK-674	Test Date	2014/10/21
Test Mode	UNII Band 2A / IEEE 802.11a TX / CH Low	Temp. & Humidity	28°C, 52%

	966 Chamber_B at 3Meter / Horizontal												
Frequency (MHz)	Reading- PK (dBuV)	Reading- AV (dBuV)	Correction Factor (dB/m)	Result-PK (dBuV/m)	Result-AV (dBuV/m)	Limit-PK (dBuV/m)	Limit-AV (dBuV/m)	Margin (dB)	Remark				
3845.00	41.22		5.44	46.66		74.00	54.00	-7.34	Peak				
4625.00	40.42		7.67	48.09		74.00	54.00	-5.91	Peak				
5415.00	39.36		9.16	48.53		74.00	54.00	-5.47	Peak				
6648.00	38.42		12.23	50.65		74.00	54.00	-3.35	Peak				
7200.00	38.15		12.75	50.90		74.00	54.00	-3.10	Peak				
9348.00	37.66		14.81	52.46		74.00	54.00	-1.54	Peak				
	966 Chamber_B at 3Meter / Vertical												

	966 Chamber_B at 3Meter / Vertical											
Frequency (MHz)	Reading- PK (dBuV)	Reading- AV (dBuV)	Correction Factor (dB/m)	Result-PN	Result-AV (dBuV/m)		Limit-AV (dBuV/m)	Margin (dB)	Remark			
3220.00	43.17		4.26	47.43		74.00	54.00	-6.57	Peak			
4605.00	40.99		7.63	48.61		74.00	54.00	-5.39	Peak			
5350.00	43.49		9.05	52.54		74.00	54.00	-1.46	Peak			
6552.00	38.62		12.26	50.88		74.00	54.00	-3.12	Peak			
7464.00	38.18		13.57	51.75		74.00	54.00	-2.25	Peak			
9504.00	37.00		14.88	51.88		74.00	54.00	-2.12	Peak			

Remark:

- 1. Measuring frequencies from 1 GHz to the 10th harmonic of highest fundamental frequency.
- 2. Average test would be performed if the peak result were greater than the average limit.
- 3. Data of measurement within this frequency range shown "---" in the table above means the reading of emissions are attenuated more than 20dB below the permissible limits or the field strength is too small to be measured.
- 4. Measurements above show only up to 6 maximum emissions noted, or would be lesser, with " N/A " remark, if no specific emissions from the EUT are recorded (ie: margin>20dB from the applicable limit) and considered that's already beyond the background noise floor.
- 5. Result = Reading + Correction Factor

Margin = Result - Limit

Remark Peak = Result(PK) - Limit(AV)

Product Name	Computer	Test By	Rex Chiu
Test Model	TREK-674	Test Date	2014/10/21
Test Mode	UNII Band 2A / IEEE 802.11a TX / CH Middle	Temp. & Humidity	28°C, 52%

	966 Chamber_B at 3Meter / Horizontal												
Frequency (MHz)	Reading- PK (dBuV)	Reading- AV (dBuV)	Correction Factor (dB/m)	Result-PK (dBuV/m)	Result-AV (dBuV/m)		Limit-AV (dBuV/m)	Margin (dB)	Remark				
3710.00	42.09		5.07	47.16		74.00	54.00	-6.84	Peak				
4670.00	40.05		7.76	47.81		74.00	54.00	-6.19	Peak				
5350.00	39.83		9.05	48.87		74.00	54.00	-5.13	Peak				
6840.00	39.06		12.17	51.23		74.00	54.00	-2.77	Peak				
7608.00	38.79		13.59	52.39		74.00	54.00	-1.61	Peak				
8736.00	37.84		14.19	52.03		74.00	54.00	-1.97	Peak				

	966 Chamber_B at 3Meter / Vertical									
Frequency (MHz)	Reading- PK (dBuV)	Reading- AV (dBuV)	Correction Factor (dB/m)	Result-PK (dBuV/m)	Result-AV (dBuV/m)		Limit-AV (dBuV/m)	Margin (dB)	Remark	
4010.00	41.51		5.89	47.40		74.00	54.00	-6.60	Peak	
4650.00	40.52		7.72	48.24		74.00	54.00	-5.76	Peak	
5350.00	51.06	39.25	9.05	60.10	48.30	74.00	54.00	-5.70	AVG	
6540.00	38.53		12.26	50.79		74.00	54.00	-3.21	Peak	
7464.00	37.81		13.57	51.38		74.00	54.00	-2.62	Peak	
8652.00	37.88		14.03	51.91		74.00	54.00	-2.09	Peak	

Remark:

- 1. Measuring frequencies from 1 GHz to the 10th harmonic of highest fundamental frequency.
- 2. Average test would be performed if the peak result were greater than the average limit.
- 3. Data of measurement within this frequency range shown "---" in the table above means the reading of emissions are attenuated more than 20dB below the permissible limits or the field strength is too small to be measured.
- 4. Measurements above show only up to 6 maximum emissions noted, or would be lesser, with " N/A " remark, if no specific emissions from the EUT are recorded (ie: margin>20dB from the applicable limit) and considered that's already beyond the background noise floor.
- 5. Result = Reading + Correction Factor

Margin = Result - Limit

Remark Peak = Result(PK) - Limit(AV)

M82-TREK674 Report No. : T140807L10-RP1-2

Product Name	Computer	Test By	Rex Chiu
Test Model	TREK-674	Test Date	2014/10/21
Test Mode	UNII Band 2A / IEEE 802.11a TX / CH High	Temp. & Humidity	28°C, 52%

		96	6 Chambe	er_B at 3N	/leter / Ho	rizontal			
Frequency (MHz)	Reading- PK (dBuV)	Reading- AV (dBuV)	Correction Factor (dB/m)	Result-PK (dBuV/m)	Result-AV (dBuV/m)		Limit-AV (dBuV/m)	Margin (dB)	Remark
3915.00	40.66		5.63	46.28		74.00	54.00	-7.72	Peak
4690.00	40.09		7.80	47.89		74.00	54.00	-6.11	Peak
5965.00	38.05		10.70	48.74		74.00	54.00	-5.26	Peak
7092.00	39.25		12.42	51.67		74.00	54.00	-2.33	Peak
7428.00	38.91		13.46	52.37		74.00	54.00	-1.63	Peak
8928.00	37.51		14.55	52.05		74.00	54.00	-1.95	Peak

	966 Chamber_B at 3Meter / Vertical									
Frequency (MHz)	Reading- PK (dBuV)	Reading- AV (dBuV)	Correction Factor (dB/m)	Result-PK (dBuV/m)			Limit-AV (dBuV/m)	Margin (dB)	Remark	
3480.00	42.15		4.47	46.62		74.00	54.00	-7.38	Peak	
4665.00	40.43		7.75	48.18		74.00	54.00	-5.82	Peak	
6000.00	37.71		10.80	48.51		74.00	54.00	-5.49	Peak	
6468.00	38.61		12.18	50.78		74.00	54.00	-3.22	Peak	
7200.00	39.03		12.75	51.78		74.00	54.00	-2.22	Peak	
8688.00	38.01		14.10	52.11		74.00	54.00	-1.89	Peak	

Remark:

- 1. Measuring frequencies from 1 GHz to the 10th harmonic of highest fundamental frequency.
- 2. Average test would be performed if the peak result were greater than the average limit.
- 3. Data of measurement within this frequency range shown "---" in the table above means the reading of emissions are attenuated more than 20dB below the permissible limits or the field strength is too small to be measured.
- 4. Measurements above show only up to 6 maximum emissions noted, or would be lesser, with " N/A " remark, if no specific emissions from the EUT are recorded (ie: margin>20dB from the applicable limit) and considered that's already beyond the background noise floor.
- 5. Result = Reading + Correction Factor

Margin = Result - Limit

Remark Peak = Result(PK) - Limit(AV)

74.00

74.00

74.00

74.00

42.31

54.00

54.00

54.00

54.00

AVG

Peak

Peak

Peak

-11.69

-3.55

-2.47

-2.29

Product Name	Product Name Computer		Rex Chiu
Test Model	TREK-674	Test Date	2014/10/21
Test Mode	UNII Band 2A / IEEE 802.11an HT20 TX / CH Low	Temp. & Humidity	28°C, 52%

		96	6 Chambe	er_B at 3N	Meter / Ho	rizontal			
Frequency (MHz)	Reading- PK (dBuV)	Reading- AV (dBuV)	Correction Factor (dB/m)	Result-PK (dBuV/m)	Result-AV (dBuV/m)	Limit-PK (dBuV/m)	Limit-AV (dBuV/m)	Margin (dB)	Remark
3280.00	42.71		4.31	47.02		74.00	54.00	-6.98	Peak
4760.00	40.27		7.95	48.22		74.00	54.00	-5.78	Peak
5535.00	39.63		9.41	49.04		74.00	54.00	-4.96	Peak
6360.00	37.97		11.86	49.83		74.00	54.00	-4.17	Peak
7164.00	39.24		12.64	51.88		74.00	54.00	-2.12	Peak
8640.00	38.40		14.01	52.41		74.00	54.00	-1.59	Peak
		9	66 Chaml	ber_B at 3	3Meter / V	ertical			
Frequency (MHz)	Reading- PK (dBuV)	Reading- AV (dBuV)	Correction Factor (dB/m)	Result-PK (dBuV/m)	Result-AV (dBuV/m)	Limit-PK (dBuV/m)	Limit-AV (dBuV/m)	Margin (dB)	Remark
3860.00	41.53		5.48	47.01		74.00	54.00	-6.99	Peak
4665.00	40.71		7.75	48.46		74.00	54.00	-5.54	Peak

Remark:

5355.00

6288.00

7380.00

9036.00

- 1. Measuring frequencies from 1 GHz to the 10th harmonic of highest fundamental frequency.
- 2. Average test would be performed if the peak result were greater than the average limit.

9.06

11.65

13.31

14.69

3. Data of measurement within this frequency range shown " --- " in the table above means the reading of emissions are attenuated more than 20dB below the permissible limits or the field strength is too small to be measured.

54.23

50.45

51.53

51.71

- 4. Measurements above show only up to 6 maximum emissions noted, or would be lesser, with " N/A " remark, if no specific emissions from the EUT are recorded (ie: margin>20dB from the applicable limit) and considered that's already beyond the background noise floor.
- 5. Result = Reading + Correction Factor

45.17

38.80

38.23

37.02

33.25

Margin = Result - Limit

Remark Peak = Result(PK) - Limit(AV)

Product Name	Computer	Test By	Rex Chiu
Test Model	TREK-674	Test Date	2014/10/21
Test Mode	UNII Band 2A / IEEE 802.11an HT20 TX / CH Middle	Temp. & Humidity	28°C, 52%

R	966 Chamber_B at 3Meter / Horizontal									
(MHz)	leading- PK (dBuV)	Reading- AV (dBuV)	Correction Factor (dB/m)	Result-PK (dBuV/m)			Limit-AV (dBuV/m)	Margin (dB)	Remark	
3890.00	42.31		5.56	47.87		74.00	54.00	-6.13	Peak	
4730.00	40.71		7.88	48.60		74.00	54.00	-5.40	Peak	
5350.00	39.68		9.05	48.72		74.00	54.00	-5.28	Peak	
6696.00	39.07		12.22	51.28		74.00	54.00	-2.72	Peak	
7344.00	38.92		13.20	52.12		74.00	54.00	-1.88	Peak	
8688.00	38.18		14.10	52.28		74.00	54.00	-1.72	Peak	

	966 Chamber_B at 3Meter / Vertical										
Frequency (MHz)	Reading- PK (dBuV)	Reading- AV (dBuV)	Correction Factor (dB/m)	Result-PK (dBuV/m)			Limit-AV (dBuV/m)	Margin (dB)	Remark		
3830.00	41.95		5.39	47.35		74.00	54.00	-6.65	Peak		
4620.00	40.83		7.66	48.49		74.00	54.00	-5.51	Peak		
5350.00	53.54	32.87	9.05	62.59	41.92	74.00	54.00	-12.08	AVG		
6636.00	38.56		12.23	50.80		74.00	54.00	-3.20	Peak		
7140.00	39.14		12.56	51.70		74.00	54.00	-2.30	Peak		
8280.00	38.10		13.54	51.64		74.00	54.00	-2.36	Peak		

Remark:

- 1. Measuring frequencies from 1 GHz to the 10th harmonic of highest fundamental frequency.
- 2. Average test would be performed if the peak result were greater than the average limit.
- 3. Data of measurement within this frequency range shown "---" in the table above means the reading of emissions are attenuated more than 20dB below the permissible limits or the field strength is too small to be measured.
- 4. Measurements above show only up to 6 maximum emissions noted, or would be lesser, with " N/A " remark, if no specific emissions from the EUT are recorded (ie: margin>20dB from the applicable limit) and considered that's already beyond the background noise floor.
- 5. Result = Reading + Correction Factor

Margin = Result - Limit

Remark Peak = Result(PK) - Limit(AV)

74.00

74.00

74.00

74.00

74.00

54.00

54.00

54.00

54.00

54.00

-5.76

-4.68

-1.57

-2.25

-1.57

Peak

Peak

Peak

Peak

Peak

Product Name	Computer	Test By	Rex Chiu
Test Model	TREK-674	Test Date	2014/10/21
Test Mode	UNII Band 2A / IEEE 802.11an HT20 TX / CH High	Temp. & Humidity	28°C, 52%

	966 Chamber_B at 3Meter / Horizontal									
Frequency (MHz)	Reading- PK (dBuV)	Reading- AV (dBuV)	Correction Factor (dB/m)	Result-PK (dBuV/m)	Result-AV (dBuV/m)	Limit-PK (dBuV/m)	Limit-AV (dBuV/m)	Margin (dB)	Remark	
3730.00	41.51		5.12	46.63		74.00	54.00	-7.37	Peak	
4735.00	41.07		7.89	48.96		74.00	54.00	-5.04	Peak	
5970.00	38.10		10.71	48.81		74.00	54.00	-5.19	Peak	
6708.00	38.45		12.21	50.67		74.00	54.00	-3.33	Peak	
7752.00	38.31		13.47	51.78		74.00	54.00	-2.22	Peak	
8772.00	38.08		14.26	52.34		74.00	54.00	-1.66	Peak	
		9	66 Chaml	ber_B at 3	3Meter / V	ertical				
Frequency (MHz)	Reading- PK (dBuV)	Reading- AV (dBuV)	Correction Factor (dB/m)	Result-PK (dBuV/m)		Limit-PK (dBuV/m)	Limit-AV (dBuV/m)	Margin (dB)	Remark	
3865.00	41.88		5.49	47.37		74.00	54.00	-6.63	Peak	

Remark:

4795.00

5985.00

7476.00

8592.00

9480.00

- 1. Measuring frequencies from 1 GHz to the 10th harmonic of highest fundamental frequency.
- 2. Average test would be performed if the peak result were greater than the average limit.

8.02

10.76

13.61

13.92

14.85

3. Data of measurement within this frequency range shown "---" in the table above means the reading of emissions are attenuated more than 20dB below the permissible limits or the field strength is too small to be measured.

48.24

49.32

52.43

51.75

52.43

- 4. Measurements above show only up to 6 maximum emissions noted, or would be lesser, with " N/A " remark, if no specific emissions from the EUT are recorded (ie: margin>20dB from the applicable limit) and considered that's already beyond the background noise floor.
- 5. Result = Reading + Correction Factor

40.22

38.57

38.82

37.83

37.58

Margin = Result - Limit

Remark Peak = Result(PK) - Limit(AV)

Product Name	Computer	Test By	Rex Chiu
Test Model	TREK-674	Test Date	2014/10/21
Test Mode	UNII Band 2A / IEEE 802.11an HT40 TX / CH Low	Temp. & Humidity	28°C, 52%

	966 Chamber_B at 3Meter / Horizontal											
Frequency (MHz)	Reading- PK (dBuV)	Reading- AV (dBuV)	Correction Factor (dB/m)	Result-PK (dBuV/m)	Result-AV (dBuV/m)	Limit-PK (dBuV/m)	Limit-AV (dBuV/m)	Margin (dB)	Remark			
3215.00	42.27		4.26	46.53		74.00	54.00	-7.47	Peak			
4680.00	40.10		7.78	47.88		74.00	54.00	-6.12	Peak			
5350.00	42.38		9.05	51.43		74.00	54.00	-2.57	Peak			
6300.00	38.26		11.68	49.95		74.00	54.00	-4.05	Peak			
7728.00	38.20		13.49	51.69		74.00	54.00	-2.31	Peak			
8616.00	37.65		13.97	51.62		74.00	54.00	-2.38	Peak			
		9	66 Chaml	ber_B at 3	3Meter / V	ertical						
Frequency (MHz)	Reading- PK (dBuV)	Reading- AV (dBuV)	Correction Factor (dB/m)	Result-PK (dBuV/m)	Result-AV (dBuV/m)	Limit-PK (dBuV/m)	Limit-AV (dBuV/m)	Margin (dB)	Remark			
3225.00	42.78		4.26	47.05		74.00	54.00	-6.95	Peak			
5150.00	50.31	34.59	8.70	59.01	43.29	74.00	54.00	-10.71	AVG			
5350.00	59.45	43.51	9.05	68.49	52.56	74.00	54.00	-1.44	AVG			

6144.00

7440.00

8580.00

- 1. Measuring frequencies from 1 GHz to the 10th harmonic of highest fundamental frequency.
- 2. Average test would be performed if the peak result were greater than the average limit.

11.22

13.49

13.90

3. Data of measurement within this frequency range shown " --- " in the table above means the reading of emissions are attenuated more than 20dB below the permissible limits or the field strength is too small to be measured.

49.92

51.70

52.03

74.00

74.00

74.00

-4.08

-2.30

-1.97

Peak

Peak

Peak

54.00

54.00

54.00

- 4. Measurements above show only up to 6 maximum emissions noted, or would be lesser, with " N/A " remark, if no specific emissions from the EUT are recorded (ie: margin>20dB from the applicable limit) and considered that's already beyond the background noise floor.
- 5. Result = Reading + Correction Factor Margin = Result - Limit

38.69

38.21

38.13

Remark Peak = Result(PK) - Limit(AV)

Product Name	Computer	Test By	Rex Chiu
Test Model	TREK-674	Test Date	2014/10/21
Test Mode	UNII Band 2A / IEEE 802.11an HT40 TX / CH High	Temp. & Humidity	28°C, 52%

	966 Chamber_B at 3Meter / Horizontal												
Frequency (MHz)	Reading- PK (dBuV)	Reading- AV (dBuV)	Correction Factor (dB/m)	Result-PK (dBuV/m)		Limit-PK (dBuV/m)		Margin (dB)	Remark				
3200.00	42.43		4.24	46.67		74.00	54.00	-7.33	Peak				
4525.00	41.42		7.46	48.88		74.00	54.00	-5.12	Peak				
4765.00	40.73		7.96	48.68		74.00	54.00	-5.32	Peak				
6192.00	38.23		11.36	49.59		74.00	54.00	-4.41	Peak				
7500.00	38.03		13.68	51.71		74.00	54.00	-2.29	Peak				
9240.00	37.37		14.77	52.14		74.00	54.00	-1.86	Peak				
	966 Chamber_B at 3Meter / Vertical												
	Reading-	Reading-	Correction										

	966 Chamber_B at 3Meter / Vertical													
Frequency (MHz)	Reading- PK (dBuV)	Reading- AV (dBuV)	Correction Factor (dB/m)	Result-PK (dBuV/m)	Result-AV (dBuV/m)		Limit-AV (dBuV/m)	Margin (dB)	Remark					
3170.00	41.99		4.22	46.21		74.00	54.00	-7.79	Peak					
4620.00	41.36		7.66	49.02		74.00	54.00	-4.98	Peak					
5480.00	40.00		9.28	49.27		74.00	54.00	-4.73	Peak					
6924.00	38.78		12.15	50.93		74.00	54.00	-3.07	Peak					
7752.00	38.70		13.47	52.17		74.00	54.00	-1.83	Peak					
9348.00	37.35		14.81	52.16		74.00	54.00	-1.84	Peak					

Remark:

- 1. Measuring frequencies from 1 GHz to the 10th harmonic of highest fundamental frequency.
- 2. Average test would be performed if the peak result were greater than the average limit.
- 3. Data of measurement within this frequency range shown "---" in the table above means the reading of emissions are attenuated more than 20dB below the permissible limits or the field strength is too small to be measured.
- 4. Measurements above show only up to 6 maximum emissions noted, or would be lesser, with " N/A " remark, if no specific emissions from the EUT are recorded (ie: margin>20dB from the applicable limit) and considered that's already beyond the background noise floor.
- 5. Result = Reading + Correction Factor

Margin = Result - Limit

Remark Peak = Result(PK) - Limit(AV)

Product Name	Computer	Test By	Rex Chiu
Test Model	TREK-674	Test Date	2014/10/21
Test Mode	UNII Band 2C / IEEE 802.11a TX / CH Low	Temp. & Humidity	28°C, 52%

	966 Chamber B at 3Meter / Horizontal												
Frequency (MHz)	Reading- PK (dBuV)		Correction			Limit-PK	Limit-AV (dBuV/m)	Margin (dB)	Remark				
3145.00	42.16		4.20	46.36		74.00	54.00	-7.64	Peak				
3855.00	41.88		5.46	47.34		74.00	54.00	-6.66	Peak				
4675.00	40.53		7.77	48.30		74.00	54.00	-5.70	Peak				
6468.00	37.39		12.18	49.56		74.00	54.00	-4.44	Peak				
7716.00	38.86		13.50	52.37		74.00	54.00	-1.63	Peak				
8688.00	38.06		14.10	52.16		74.00	54.00	-1.84	Peak				
			'						L				
	966 Chamber B at 3Meter / Vertical												
	Reading-	Reading-	Correction										

	966 Chamber_B at 3Meter / Vertical												
Frequency (MHz)	Reading- PK (dBuV)	Reading- AV (dBuV)	Correction Factor (dB/m)	Result-PK (dBuV/m)			Limit-AV (dBuV/m)	Margin (dB)	Remark				
3075.00	42.93		4.14	47.07		74.00	54.00	-6.93	Peak				
3940.00	41.44		5.70	47.14		74.00	54.00	-6.86	Peak				
4735.00	40.97		7.89	48.86		74.00	54.00	-5.14	Peak				
6600.00	38.03		12.24	50.28		74.00	54.00	-3.72	Peak				
7356.00	38.48		13.23	51.71		74.00	54.00	-2.29	Peak				
9336.00	37.70		14.80	52.50		74.00	54.00	-1.50	Peak				

Remark:

- 1. Measuring frequencies from 1 GHz to the 10th harmonic of highest fundamental frequency.
- 2. Average test would be performed if the peak result were greater than the average limit.
- 3. Data of measurement within this frequency range shown "---" in the table above means the reading of emissions are attenuated more than 20dB below the permissible limits or the field strength is too small to be measured.
- 4. Measurements above show only up to 6 maximum emissions noted, or would be lesser, with " N/A " remark, if no specific emissions from the EUT are recorded (ie: margin>20dB from the applicable limit) and considered that's already beyond the background noise floor.
- 5. Result = Reading + Correction Factor

Margin = Result - Limit

Remark Peak = Result(PK) - Limit(AV)

74.00

74.00

74.00

74.00

54.00

54.00

54.00

54.00

AVG

Peak

Peak

Peak

-5.83

-4.13

-2.64

-2.16

Product Name	Computer	Test By	Rex Chiu
Test Model TREK-674		Test Date	2014/10/21
Test Mode	UNII Band 2C / IEEE 802.11a TX / CH Middle	Temp. & Humidity	28°C, 52%

	966 Chamber_B at 3Meter / Horizontal											
Frequency (MHz)	Reading- PK (dBuV)	Reading- AV (dBuV)	Correction Factor (dB/m)	Result-PK (dBuV/m)	Result-AV (dBuV/m)	Limit-PK (dBuV/m)	Limit-AV (dBuV/m)	Margin (dB)	Remark			
3870.00	42.41		5.50	47.91		74.00	54.00	-6.09	Peak			
4605.00	40.48		7.63	48.11		74.00	54.00	-5.89	Peak			
5395.00	38.99		9.13	48.11		74.00	54.00	-5.89	Peak			
6432.00	37.71		12.07	49.78		74.00	54.00	-4.22	Peak			
7548.00	38.42		13.64	52.06		74.00	54.00	-1.94	Peak			
8556.00	38.09		13.85	51.95		74.00	54.00	-2.05	Peak			
		9	66 Chaml	ber_B at 3	3Meter / V	ertical						
Frequency (MHz)	Reading- PK (dBuV)	Reading- AV (dBuV)	Correction Factor (dB/m)	Result-PK (dBuV/m)	Result-AV (dBuV/m)	Limit-PK (dBuV/m)	Limit-AV (dBuV/m)	Margin (dB)	Remark			
3200.00	42.79		4.24	47.04		74.00	54.00	-6.96	Peak			
4665.00	40.34		7.75	48.09		74.00	54.00	-5.91	Peak			

48.17

49.87

51.36

51.84

Remark:

5410.00

6300.00

7440.00

8796.00

- 1. Measuring frequencies from 1 GHz to the 10th harmonic of highest fundamental frequency.
- 2. Average test would be performed if the peak result were greater than the average limit.

9.15

11.68

13.49

14.30

- 3. Data of measurement within this frequency range shown " --- " in the table above means the reading of emissions are attenuated more than 20dB below the permissible limits or the field strength is too small to be measured.
- 4. Measurements above show only up to 6 maximum emissions noted, or would be lesser, with " N/A " remark, if no specific emissions from the EUT are recorded (ie: margin>20dB from the applicable limit) and considered that's already beyond the background noise floor.
- 5. Result = Reading + Correction Factor

39.02

38.19

37.87

37.54

Margin = Result - Limit

Remark Peak = Result(PK) - Limit(AV)

Product Name	Computer	Test By	Rex Chiu
Test Model	TREK-674	Test Date	2014/10/21
Test Mode	UNII Band 2C / IEEE 802.11a TX / CH High	Temp. & Humidity	28°C, 52%

	966 Chamber_B at 3Meter / Horizontal												
Frequency (MHz)	Reading- PK (dBuV)	Reading- AV (dBuV)	Correction Factor (dB/m)	Result-PK (dBuV/m)	Result-AV (dBuV/m)		Limit-AV (dBuV/m)	Margin (dB)	Remark				
3940.00	41.27		5.70	46.97		74.00	54.00	-7.03	Peak				
4685.00	41.39		7.79	49.18		74.00	54.00	-4.82	Peak				
5420.00	39.15		9.17	48.32		74.00	54.00	-5.68	Peak				
7464.00	37.44		13.57	51.01		74.00	54.00	-2.99	Peak				
9096.00	37.05		14.71	51.77		74.00	54.00	-2.23	Peak				
11400.00	39.56	30.78	19.74	59.30	50.52	74.00	54.00	-3.48	AVG				

	966 Chamber_B at 3Meter / Vertical												
Frequency (MHz)	Reading- PK (dBuV)	Reading- AV (dBuV)	Correction Factor (dB/m)	Result-PN	Result-AV (dBuV/m)		Limit-AV (dBuV/m)	Margin (dB)	Remark				
3950.00	40.90		5.72	46.63		74.00	54.00	-7.37	Peak				
4755.00	40.33		7.94	48.27		74.00	54.00	-5.73	Peak				
5425.00	40.23		9.18	49.41		74.00	54.00	-4.59	Peak				
7356.00	39.24		13.23	52.48		74.00	54.00	-1.52	Peak				
8760.00	37.50		14.23	51.74		74.00	54.00	-2.26	Peak				
11400.00	39.41	30.65	19.74	59.15	50.39	74.00	54.00	-3.61	AVG				

Remark:

- 1. Measuring frequencies from 1 GHz to the 10th harmonic of highest fundamental frequency.
- 2. Average test would be performed if the peak result were greater than the average limit.
- 3. Data of measurement within this frequency range shown "---" in the table above means the reading of emissions are attenuated more than 20dB below the permissible limits or the field strength is too small to be measured.
- 4. Measurements above show only up to 6 maximum emissions noted, or would be lesser, with " N/A " remark, if no specific emissions from the EUT are recorded (ie: margin>20dB from the applicable limit) and considered that's already beyond the background noise floor.
- 5. Result = Reading + Correction Factor

Margin = Result - Limit

Remark Peak = Result(PK) - Limit(AV)

74.00

74.00

74.00

54.00

54.00

54.00

-3.50

-1.44

-1.60

Peak

Peak

AVG

Product Name	Computer	Test By	Rex Chiu
Test Model	TREK-674	Test Date	2014/10/21
Test Mode	UNII Band 2C / IEEE 802.11an HT20 TX / CH Low	Temp. & Humidity	28°C, 52%

	966 Chamber_B at 3Meter / Horizontal								
Frequency (MHz)	Reading- PK (dBuV)	Reading- AV (dBuV)	Correction Factor (dB/m)	Result-PK (dBuV/m)	Result-AV (dBuV/m)	Limit-PK (dBuV/m)	Limit-AV (dBuV/m)	Margin (dB)	Remark
3200.00	42.44		4.24	46.68		74.00	54.00	-7.32	Peak
4750.00	40.31		7.92	48.23		74.00	54.00	-5.77	Peak
5955.00	38.36		10.67	49.03		74.00	54.00	-4.97	Peak
6936.00	39.12		12.15	51.26		74.00	54.00	-2.74	Peak
7548.00	37.72		13.64	51.36		74.00	54.00	-2.64	Peak
9036.00	37.28		14.69	51.97		74.00	54.00	-2.03	Peak
		9	66 Chaml	ber_B at 3	3Meter / V	ertical			
Frequency (MHz)	Reading- PK (dBuV)	Reading- AV (dBuV)	Correction Factor (dB/m)	Result-PK (dBuV/m)	Result-AV (dBuV/m)	Limit-PK (dBuV/m)	Limit-AV (dBuV/m)	Margin (dB)	Remark
3865.00	42.30		5.49	47.79		74.00	54.00	-6.21	Peak
4685.00	40.10		7.79	47.89		74.00	54.00	-6.11	Peak
5995.00	38.35		10.79	49.13		74.00	54.00	-4.87	Peak

Remark:

6276.00

7740.00

9228.00

- 1. Measuring frequencies from 1 GHz to the 10th harmonic of highest fundamental frequency.
- 2. Average test would be performed if the peak result were greater than the average limit.

11.61

13.48

14.76

3. Data of measurement within this frequency range shown " --- " in the table above means the reading of emissions are attenuated more than 20dB below the permissible limits or the field strength is too small to be measured.

50.50

52.56

52.40

- 4. Measurements above show only up to 6 maximum emissions noted, or would be lesser, with " N/A " remark, if no specific emissions from the EUT are recorded (ie: margin>20dB from the applicable limit) and considered that's already beyond the background noise floor.
- 5. Result = Reading + Correction Factor

38.89

39.07

37.64

Margin = Result - Limit

Remark Peak = Result(PK) - Limit(AV)

Report No.: T140807L10-RP1-2

Product Name	Computer	Test By	Rex Chiu
Test Model	TREK-674	Test Date	2014/10/21
Test Mode	UNII Band 2C / IEEE 802.11an HT20 TX / CH Middle	Temp. & Humidity	28°C, 52%

		96	6 Chambe	er_B at 3N	Meter / Ho	rizontal			
Frequency (MHz)	Reading- PK (dBuV)	Reading- AV (dBuV)	Correction Factor (dB/m)	Result-PK (dBuV/m)	Result-AV (dBuV/m)	Limit-PK (dBuV/m)	Limit-AV (dBuV/m)	Margin (dB)	Remark
3115.00	42.67		4.17	46.84		74.00	54.00	-7.16	Peak
4705.00	40.53		7.83	48.36		74.00	54.00	-5.64	Peak
5425.00	40.15		9.18	49.33		74.00	54.00	-4.67	Peak
6972.00	39.57		12.14	51.71		74.00	54.00	-2.29	Peak
8184.00	38.68		13.45	52.12		74.00	54.00	-1.88	Peak
9144.00	36.94		14.73	51.67		74.00	54.00	-2.33	Peak
		9	66 Chaml	ber_B at 3	3Meter / V	ertical			
Frequency (MHz)	Reading- PK (dBuV)	Reading- AV (dBuV)	Correction Factor (dB/m)	Result-PK (dBuV/m)	Result-AV (dBuV/m)	Limit-PK (dBuV/m)	Limit-AV (dBuV/m)	Margin (dB)	Remark
3195.00	42.31		4.24	46.55		74.00	54.00	-7.45	Peak
4735.00	40.22		7.89	48.12		74.00	54.00	-5.88	Peak
5380.00	38.58		9.10	47.68		74.00	54.00	-6.32	Peak
6216.00	38.42		11.44	49.85		74.00	54.00	-4.15	Peak
7440.00	38.60		13.49	52.10		74.00	54.00	-1.90	Peak

8556.00

- 1. Measuring frequencies from 1 GHz to the 10th harmonic of highest fundamental frequency.
- 2. Average test would be performed if the peak result were greater than the average limit.

13.85

3. Data of measurement within this frequency range shown " --- " in the table above means the reading of emissions are attenuated more than 20dB below the permissible limits or the field strength is too small to be measured.

74.00

54.00

-2.20

Peak

51.80

- 4. Measurements above show only up to 6 maximum emissions noted, or would be lesser, with " N/A " remark, if no specific emissions from the EUT are recorded (ie: margin>20dB from the applicable limit) and considered that's already beyond the background noise floor.
- 5. Result = Reading + Correction Factor Margin = Result - Limit

37.94

Remark Peak = Result(PK) - Limit(AV)

74.00

74.00

74.00

74.00

54.00

54.00

54.00

54.00

-5.33

-3.25

-2.36

-2.27

Peak

Peak

Peak

Peak

Product Name	Computer	Test By	Rex Chiu
Test Model	TREK-674	Test Date	2014/10/21
Test Mode	UNII Band 2C / IEEE 802.11an HT20 TX / CH High	Temp. & Humidity	28°C, 52%

966 Chamber_B at 3Meter / Horizontal									
Frequency (MHz)	Reading- PK (dBuV)	Reading- AV (dBuV)	Correction Factor (dB/m)	Result-PK (dBuV/m)		Limit-PK (dBuV/m)	Limit-AV (dBuV/m)	Margin (dB)	Remark
3865.00	41.24		5.49	46.73		74.00	54.00	-7.27	Peak
4730.00	40.19		7.88	48.08		74.00	54.00	-5.92	Peak
5400.00	38.34		9.14	47.47		74.00	54.00	-6.53	Peak
6504.00	37.50		12.27	49.77		74.00	54.00	-4.23	Peak
7500.00	38.39		13.68	52.07		74.00	54.00	-1.93	Peak
9504.00	37.66		14.88	52.54		74.00	54.00	-1.46	Peak
		9	66 Chaml	ber_B at 3	3Meter / V	ertical			
Frequency (MHz)	Reading- PK (dBuV)	Reading- AV (dBuV)	Correction Factor (dB/m)	Result-PK (dBuV/m)		Limit-PK (dBuV/m)	Limit-AV (dBuV/m)	Margin (dB)	Remark
3800.00	42.02		5.31	47.33		74.00	54.00	-6.67	Peak
4700.00	40.73		7.82	48.55		74.00	54.00	-5.45	Peak
	· -				_				

5460.00

6516.00

7428.00

8580.00

- 1. Measuring frequencies from 1 GHz to the 10th harmonic of highest fundamental frequency.
- 2. Average test would be performed if the peak result were greater than the average limit.

9.24

12.27

13.46

13.90

3. Data of measurement within this frequency range shown " --- " in the table above means the reading of emissions are attenuated more than 20dB below the permissible limits or the field strength is too small to be measured.

48.67

50.75

51.64

51.73

- 4. Measurements above show only up to 6 maximum emissions noted, or would be lesser, with " N/A " remark, if no specific emissions from the EUT are recorded (ie: margin>20dB from the applicable limit) and considered that's already beyond the background noise floor.
- 5. Result = Reading + Correction Factor Margin = Result - Limit

39.43

38.48

38.18

37.83

Remark Peak = Result(PK) - Limit(AV)

74.00

74.00

74.00

54.00

54.00

54.00

-3.02

-2.61

-2.44

Peak

Peak

Peak

Product Name	Computer	Test By	Rex Chiu
Test Model	TREK-674	Test Date	2014/10/21
Test Mode	UNII Band 2C / IEEE 802.11an HT40 TX / CH Low	Temp. & Humidity	28°C, 52%

966 Chamber_B at 3Meter / Horizontal									
Frequency (MHz)	Reading- PK (dBuV)	Reading- AV (dBuV)	Correction Factor (dB/m)	Result-PK (dBuV/m)	Result-AV (dBuV/m)	Limit-PK (dBuV/m)	Limit-AV (dBuV/m)	Margin (dB)	Remark
3215.00	42.48		4.26	46.73		74.00	54.00	-7.27	Peak
4650.00	40.52		7.72	48.24		74.00	54.00	-5.76	Peak
5955.00	38.68		10.67	49.35		74.00	54.00	-4.65	Peak
6144.00	38.55		11.22	49.77		74.00	54.00	-4.23	Peak
7488.00	38.26		13.64	51.90		74.00	54.00	-2.10	Peak
8772.00	37.19		14.26	51.44		74.00	54.00	-2.56	Peak
		9	66 Chaml	ber_B at 3	3Meter / V	ertical			
Frequency (MHz)	Reading- PK (dBuV)	Reading- AV (dBuV)	Correction Factor (dB/m)	Result-PK (dBuV/m)	Result-AV (dBuV/m)	Limit-PK (dBuV/m)	Limit-AV (dBuV/m)	Margin (dB)	Remark
3880.00	41.99		5.53	47.52		74.00	54.00	-6.48	Peak
4615.00	40.33		7.65	47.98		74.00	54.00	-6.02	Peak
5970.00	38.53		10.71	49.24		74.00	54.00	-4.76	Peak

Remark:

6876.00

7764.00

8664.00

- 1. Measuring frequencies from 1 GHz to the 10th harmonic of highest fundamental frequency.
- 2. Average test would be performed if the peak result were greater than the average limit.

12.16

13.46

14.06

3. Data of measurement within this frequency range shown "---" in the table above means the reading of emissions are attenuated more than 20dB below the permissible limits or the field strength is too small to be measured.

50.98

51.39

51.56

- 4. Measurements above show only up to 6 maximum emissions noted, or would be lesser, with " N/A " remark, if no specific emissions from the EUT are recorded (ie: margin>20dB from the applicable limit) and considered that's already beyond the background noise floor.
- 5. Result = Reading + Correction Factor

38.82

37.92

37.51

Margin = Result - Limit

Remark Peak = Result(PK) - Limit(AV)

Product Name	Computer	Test By	Rex Chiu
Test Model	TREK-674	Test Date	2014/10/21
Test Mode	UNII Band 2C / IEEE 802.11an HT40 TX / CH Middle	Temp. & Humidity	28°C, 52%

	966 Chamber_B at 3Meter / Horizontal									
Frequency (MHz)	Reading- PK (dBuV)	Reading- AV (dBuV)	Correction Factor (dB/m)	Result-PK (dBuV/m)	Result-AV (dBuV/m)	Limit-PK (dBuV/m)	Limit-AV (dBuV/m)	Margin (dB)	Remark	
4630.00	40.78		7.68	48.46		74.00	54.00	-5.54	Peak	
5460.00	44.97	30.16	9.24	54.21	39.40	74.00	54.00	-14.60	AVG	
5990.00	37.40		10.77	48.17		74.00	54.00	-5.83	Peak	
6636.00	38.81		12.23	51.04		74.00	54.00	-2.96	Peak	
7608.00	38.12		13.59	51.71		74.00	54.00	-2.29	Peak	
9240.00	37.65		14.77	52.42		74.00	54.00	-1.58	Peak	
	966 Chamber_B at 3Meter / Vertical									

	966 Chamber_B at 3Meter / Vertical										
Frequency (MHz)	Reading- PK (dBuV)	Reading- AV (dBuV)	Correction Factor (dB/m)	Result-PN	Result-AV (dBuV/m)		Limit-AV (dBuV/m)	Margin (dB)	Remark		
4685.00	39.99		7.79	47.78		74.00	54.00	-6.22	Peak		
5460.00	60.20	44.06	9.24	69.44	53.30	74.00	54.00	-0.70	AVG		
5990.00	37.82		10.77	48.59		74.00	54.00	-5.41	Peak		
6612.00	38.92		12.24	51.16		74.00	54.00	-2.84	Peak		
7440.00	37.96		13.49	51.46		74.00	54.00	-2.54	Peak		
8940.00	37.11		14.57	51.68		74.00	54.00	-2.32	Peak		

Remark:

- 1. Measuring frequencies from 1 GHz to the 10th harmonic of highest fundamental frequency.
- 2. Average test would be performed if the peak result were greater than the average limit.
- 3. Data of measurement within this frequency range shown "---" in the table above means the reading of emissions are attenuated more than 20dB below the permissible limits or the field strength is too small to be measured.
- 4. Measurements above show only up to 6 maximum emissions noted, or would be lesser, with " N/A " remark, if no specific emissions from the EUT are recorded (ie: margin>20dB from the applicable limit) and considered that's already beyond the background noise floor.
- 5. Result = Reading + Correction Factor

Margin = Result - Limit

Remark Peak = Result(PK) - Limit(AV)

Product Name	oduct Name Computer		Rex Chiu
Test Model	TREK-674	Test Date	2014/10/21
Test Mode	UNII Band 2C / IEEE 802.11an HT40 TX / CH High	Temp. & Humidity	28°C, 52%

	966 Chamber_B at 3Meter / Horizontal											
Frequency (MHz)	Reading- PK (dBuV)	Reading- AV (dBuV)	Correction Factor (dB/m)	Result-PK (dBuV/m)	Result-AV (dBuV/m)	Limit-PK (dBuV/m)	Limit-AV (dBuV/m)	Margin (dB)	Remark			
4080.00	41.53		6.11	47.64		74.00	54.00	-6.36	Peak			
4695.00	40.83		7.81	48.64		74.00	54.00	-5.36	Peak			
5440.00	39.74		9.21	48.94		74.00	54.00	-5.06	Peak			
6684.00	38.18		12.22	50.40		74.00	54.00	-3.60	Peak			
7380.00	39.20		13.31	52.51		74.00	54.00	-1.49	Peak			
8544.00	37.45		13.83	51.28		74.00	54.00	-2.72	Peak			
966 Chamber_B at 3Meter / Vertical												
Frequency (MHz)	Reading- PK (dBuV)	Reading- AV (dBuV)	Correction Factor (dB/m)	Result-PK (dBuV/m)	Result-AV (dBuV/m)	Limit-PK (dBuV/m)	Limit-AV (dBuV/m)	Margin (dB)	Remark			

	966 Chamber_B at 3Meter / Vertical											
Frequency (MHz)	Reading- PK (dBuV)	Reading- AV (dBuV)	Correction Factor (dB/m)	Result-PK	Result-AV (dBuV/m)		Limit-AV (dBuV/m)	Margin (dB)	Remark			
3970.00	41.93		5.78	47.71		74.00	54.00	-6.29	Peak			
4760.00	40.28		7.95	48.23		74.00	54.00	-5.77	Peak			
5460.00	38.82		9.24	48.06		74.00	54.00	-5.94	Peak			
6444.00	37.45		12.11	49.56		74.00	54.00	-4.44	Peak			
7536.00	38.01		13.65	51.66		74.00	54.00	-2.34	Peak			
9348.00	37.59		14.81	52.39		74.00	54.00	-1.61	Peak			

Remark:

- 1. Measuring frequencies from 1 GHz to the 10th harmonic of highest fundamental frequency.
- 2. Average test would be performed if the peak result were greater than the average limit.
- 3. Data of measurement within this frequency range shown "---" in the table above means the reading of emissions are attenuated more than 20dB below the permissible limits or the field strength is too small to be measured.
- 4. Measurements above show only up to 6 maximum emissions noted, or would be lesser, with " N/A " remark, if no specific emissions from the EUT are recorded (ie: margin>20dB from the applicable limit) and considered that's already beyond the background noise floor.
- 5. Result = Reading + Correction Factor

Margin = Result - Limit

Remark Peak = Result(PK) - Limit(AV)

32-TREK674 Report No.: T140807L10-RP1-2

Product Name	Computer	Test By	Rex Chiu
Test Model	TREK-674	Test Date	2014/10/21
Test Mode	UNII Band 3 / IEEE 802.11a TX / CH Low	Temp. & Humidity	28°C, 52%

	966 Chamber_B at 3Meter / Horizontal											
Frequency (MHz)	Reading- PK (dBuV)	Reading- AV (dBuV)	Correction Factor (dB/m)	Result-PK (dBuV/m)			Limit-AV (dBuV/m)	Margin (dB)	Remark			
3880.00	42.58		5.53	48.11		74.00	54.00	-5.89	Peak			
4690.00	40.64		7.80	48.44		74.00	54.00	-5.56	Peak			
5465.00	39.56		9.25	48.81		74.00	54.00	-5.19	Peak			
7524.00	37.93		13.66	51.59		74.00	54.00	-2.41	Peak			
8652.00	37.64		14.03	51.67		74.00	54.00	-2.33	Peak			
11496.00	40.42	30.58	20.06	60.48	50.64	74.00	54.00	-3.36	AVG			

	966 Chamber_B at 3Meter / Vertical												
Frequency (MHz)	Reading- PK (dBuV)	Reading- AV (dBuV)	Correction Factor (dB/m)	Result-PK (dBuV/m)		Limit-PK (dBuV/m)	Limit-AV (dBuV/m)	Margin (dB)	Remark				
3830.00	42.96		5.39	48.36		74.00	54.00	-5.64	Peak				
4700.00	40.30		7.82	48.12		74.00	54.00	-5.88	Peak				
5385.00	39.39		9.11	48.50		74.00	54.00	-5.50	Peak				
6504.00	37.61		12.27	49.88		74.00	54.00	-4.12	Peak				
7356.00	38.46		13.23	51.69		74.00	54.00	-2.31	Peak				
11496.00	39.85	28.56	20.06	59.91	48.62	74.00	54.00	-5.38	AVG				

Remark:

- 1. Measuring frequencies from 1 GHz to the 10th harmonic of highest fundamental frequency.
- 2. Average test would be performed if the peak result were greater than the average limit.
- 3. Data of measurement within this frequency range shown "---" in the table above means the reading of emissions are attenuated more than 20dB below the permissible limits or the field strength is too small to be measured.
- 4. Measurements above show only up to 6 maximum emissions noted, or would be lesser, with " N/A " remark, if no specific emissions from the EUT are recorded (ie: margin>20dB from the applicable limit) and considered that's already beyond the background noise floor.
- 5. Result = Reading + Correction Factor

Margin = Result - Limit

Remark Peak = Result(PK) - Limit(AV)

Product Name	Computer	Test By	Rex Chiu
Test Model	TREK-674	Test Date	2014/10/21
Test Mode	UNII Band 3 / IEEE 802.11a TX / CH Middle	Temp. & Humidity	28°C, 52%

	966 Chamber_B at 3Meter / Horizontal											
Frequency (MHz)	Reading- PK (dBuV)	Reading- AV (dBuV)	Correction Factor (dB/m)	Result-PK (dBuV/m)	Result-AV (dBuV/m)		Limit-AV (dBuV/m)	Margin (dB)	Remark			
3880.00	40.77		5.53	46.30		74.00	54.00	-7.70	Peak			
4695.00	39.52		7.81	47.33		74.00	54.00	-6.67	Peak			
5415.00	38.91		9.16	48.07		74.00	54.00	-5.93	Peak			
7488.00	38.75		13.64	52.40		74.00	54.00	-1.60	Peak			
8604.00	38.42		13.94	52.37		74.00	54.00	-1.63	Peak			
11568.00	38.74	29.62	20.23	58.97	49.85	74.00	54.00	-4.15	AVG			

	966 Chamber_B at 3Meter / Vertical												
Frequency (MHz)	Reading- PK (dBuV)	Reading- AV (dBuV)	Correction Factor (dB/m)	Result-PK (dBuV/m)			Limit-AV (dBuV/m)	Margin (dB)	Remark				
3855.00	42.27		5.46	47.74		74.00	54.00	-6.26	Peak				
4690.00	40.49		7.80	48.30		74.00	54.00	-5.70	Peak				
5375.00	39.60		9.09	48.70		74.00	54.00	-5.30	Peak				
6684.00	39.95		12.22	52.17		74.00	54.00	-1.83	Peak				
8796.00	37.09		14.30	51.40		74.00	54.00	-2.60	Peak				
11568.00	42.84	33.03	20.23	63.06	53.26	74.00	54.00	-0.74	AVG				

Remark:

- 1. Measuring frequencies from 1 GHz to the 10th harmonic of highest fundamental frequency.
- 2. Average test would be performed if the peak result were greater than the average limit.
- 3. Data of measurement within this frequency range shown "---" in the table above means the reading of emissions are attenuated more than 20dB below the permissible limits or the field strength is too small to be measured.
- 4. Measurements above show only up to 6 maximum emissions noted, or would be lesser, with " N/A " remark, if no specific emissions from the EUT are recorded (ie: margin>20dB from the applicable limit) and considered that's already beyond the background noise floor.
- 5. Result = Reading + Correction Factor

Margin = Result - Limit

Remark Peak = Result(PK) - Limit(AV)

Product Name	Computer	Test By	Rex Chiu
Test Model	TREK-674	Test Date	2014/10/21
Test Mode	UNII Band 3 / IEEE 802.11a TX / CH High	Temp. & Humidity	28°C, 52%

	966 Chamber_B at 3Meter / Horizontal											
Frequency (MHz)	Reading- PK (dBuV)	Reading- AV (dBuV)	Correction Factor (dB/m)	Result-PK (dBuV/m)	Result-AV (dBuV/m)		Limit-AV (dBuV/m)	Margin (dB)	Remark			
3875.00	41.80		5.52	47.32		74.00	54.00	-6.68	Peak			
4615.00	40.85		7.65	48.50		74.00	54.00	-5.50	Peak			
5445.00	39.74		9.21	48.95		74.00	54.00	-5.05	Peak			
7416.00	37.88		13.42	51.30		74.00	54.00	-2.70	Peak			
9132.00	37.67		14.73	52.39		74.00	54.00	-1.61	Peak			
11652.00	39.88	30.16	20.43	60.31	50.59	74.00	54.00	-3.41	AVG			

	966 Chamber_B at 3Meter / Vertical												
Frequency (MHz)	Reading- PK (dBuV)	Reading- AV (dBuV)	Correction Factor (dB/m)	Result-PK (dBuV/m)	Result-AV (dBuV/m)		Limit-AV (dBuV/m)	Margin (dB)	Remark				
3885.00	42.16		5.54	47.70		74.00	54.00	-6.30	Peak				
4700.00	40.74		7.82	48.57		74.00	54.00	-5.43	Peak				
5425.00	39.47		9.18	48.65		74.00	54.00	-5.35	Peak				
7188.00	39.79		12.71	52.50		74.00	54.00	-1.50	Peak				
8628.00	37.78		13.99	51.76		74.00	54.00	-2.24	Peak				
11652.00	41.71	32.77	20.43	62.13	53.20	74.00	54.00	-0.80	AVG				

Remark:

- 1. Measuring frequencies from 1 GHz to the 10th harmonic of highest fundamental frequency.
- 2. Average test would be performed if the peak result were greater than the average limit.
- 3. Data of measurement within this frequency range shown "---" in the table above means the reading of emissions are attenuated more than 20dB below the permissible limits or the field strength is too small to be measured.
- 4. Measurements above show only up to 6 maximum emissions noted, or would be lesser, with " N/A " remark, if no specific emissions from the EUT are recorded (ie: margin>20dB from the applicable limit) and considered that's already beyond the background noise floor.
- 5. Result = Reading + Correction Factor

Margin = Result - Limit

Remark Peak = Result(PK) - Limit(AV)

74.00

74.00

74.00

74.00

49.90

54.00

54.00

54.00

54.00

Peak

Peak

Peak

AVG

-5.66

-1.89

-1.50

-4.10

Product Name	Computer	Test By	Rex Chiu
Test Model	TREK-674	Test Date	2014/10/21
Test Mode	UNII Band 3 / IEEE 802.11an HT20 TX / CH Low	Temp. & Humidity	28°C, 52%

966 Chamber_B at 3Meter / Horizontal									
Frequency (MHz)	Reading- PK (dBuV)	Reading- AV (dBuV)	Correction Factor (dB/m)	Result-PK (dBuV/m)	Result-AV (dBuV/m)	Limit-PK (dBuV/m)	Limit-AV (dBuV/m)	Margin (dB)	Remark
3205.00	41.68		4.25	45.93		74.00	54.00	-8.07	Peak
4745.00	40.88		7.91	48.80		74.00	54.00	-5.20	Peak
5360.00	39.10		9.07	48.17		74.00	54.00	-5.83	Peak
6504.00	37.44		12.27	49.70		74.00	54.00	-4.30	Peak
7524.00	37.66		13.66	51.32		74.00	54.00	-2.68	Peak
8916.00	37.71		14.52	52.23		74.00	54.00	-1.77	Peak
		9	66 Chaml	ber_B at 3	3Meter / V	ertical			
Frequency (MHz)	Reading- PK (dBuV)	Reading- AV (dBuV)	Correction Factor (dB/m)	Result-PK (dBuV/m)	Result-AV (dBuV/m)	Limit-PK (dBuV/m)	Limit-AV (dBuV/m)	Margin (dB)	Remark
3830.00	42.53		5.39	47.93		74.00	54.00	-6.07	Peak
4650.00	40.42		7.72	48.14		74.00	54.00	-5.86	Peak

Remark:

5440.00

7728.00

9360.00

11484.00

- 1. Measuring frequencies from 1 GHz to the 10th harmonic of highest fundamental frequency.
- 2. Average test would be performed if the peak result were greater than the average limit.

9.21

13.49

14.81

20.02

3. Data of measurement within this frequency range shown " --- " in the table above means the reading of emissions are attenuated more than 20dB below the permissible limits or the field strength is too small to be measured.

48.34

52.11

52.50

60.29

- 4. Measurements above show only up to 6 maximum emissions noted, or would be lesser, with " N/A " remark, if no specific emissions from the EUT are recorded (ie: margin>20dB from the applicable limit) and considered that's already beyond the background noise floor.
- 5. Result = Reading + Correction Factor

39.14

38.61

37.69

40.27

29.88

Margin = Result - Limit

Remark Peak = Result(PK) - Limit(AV)

Product Name	Computer	Test By	Rex Chiu
Test Model	TREK-674	Test Date	2014/10/21
Test Mode	UNII Band 3 / IEEE 802.11an HT20 TX / CH Middle	Temp. & Humidity	28°C, 52%

	966 Chamber_B at 3Meter / Horizontal										
Frequency (MHz)	Reading- PK (dBuV)	Reading- AV (dBuV)	Correction Factor (dB/m)	Result-PK (dBuV/m)	Result-AV (dBuV/m)		Limit-AV (dBuV/m)	Margin (dB)	Remark		
3215.00	43.28		4.26	47.54		74.00	54.00	-6.46	Peak		
4740.00	40.57		7.90	48.48		74.00	54.00	-5.52	Peak		
5385.00	39.29		9.11	48.40		74.00	54.00	-5.60	Peak		
7776.00	38.29		13.45	51.75		74.00	54.00	-2.25	Peak		
8616.00	38.14		13.97	52.11		74.00	54.00	-1.89	Peak		
11568.00	38.85	29.69	20.23	59.08	49.92	74.00	54.00	-4.08	AVG		
	•			•		•					

	966 Chamber_B at 3Meter / Vertical										
Frequency (MHz)	Reading- PK (dBuV)	Reading- AV (dBuV)	Correction Factor (dB/m)	Result-PK (dBuV/m)	Result-AV (dBuV/m)	Limit-PK (dBuV/m)	Limit-AV (dBuV/m)	Margin (dB)	Remark		
3855.00	42.87		5.46	48.33		74.00	54.00	-5.67	Peak		
4765.00	40.07		7.96	48.03		74.00	54.00	-5.97	Peak		
5400.00	39.11		9.14	48.24		74.00	54.00	-5.76	Peak		
7488.00	37.65		13.64	51.29		74.00	54.00	-2.71	Peak		
8784.00	37.56		14.28	51.83		74.00	54.00	-2.17	Peak		
11568.00	41.41	32.69	20.23	61.64	52.92	74.00	54.00	-1.08	AVG		

Remark:

- 1. Measuring frequencies from 1 GHz to the 10th harmonic of highest fundamental frequency.
- 2. Average test would be performed if the peak result were greater than the average limit.
- 3. Data of measurement within this frequency range shown "---" in the table above means the reading of emissions are attenuated more than 20dB below the permissible limits or the field strength is too small to be measured.
- 4. Measurements above show only up to 6 maximum emissions noted, or would be lesser, with " N/A " remark, if no specific emissions from the EUT are recorded (ie: margin>20dB from the applicable limit) and considered that's already beyond the background noise floor.
- 5. Result = Reading + Correction Factor

Margin = Result - Limit

Remark Peak = Result(PK) - Limit(AV)

Product Name	Computer	Test By	Rex Chiu
Test Model	TREK-674	Test Date	2014/10/21
Test Mode	UNII Band 3 / IEEE 802.11an HT20 TX / CH High	Temp. & Humidity	28°C, 52%

	966 Chamber_B at 3Meter / Horizontal										
Frequency (MHz)	Reading- PK (dBuV)	Reading- AV (dBuV)	Correction Factor (dB/m)	Result-PK (dBuV/m)	Result-AV (dBuV/m)		Limit-AV (dBuV/m)	Margin (dB)	Remark		
3985.00	41.11		5.82	46.93		74.00	54.00	-7.07	Peak		
4705.00	40.04		7.83	47.87		74.00	54.00	-6.13	Peak		
5485.00	39.20		9.28	48.48		74.00	54.00	-5.52	Peak		
7488.00	38.72		13.64	52.37		74.00	54.00	-1.63	Peak		
9264.00	37.66		14.78	52.43		74.00	54.00	-1.57	Peak		
11640.00	38.00	28.46	20.40	58.40	48.86	74.00	54.00	-5.14	AVG		

	966 Chamber_B at 3Meter / Vertical									
Frequency (MHz)	Reading- PK (dBuV)	Reading- AV (dBuV)	Correction Factor (dB/m)	Result-PK (dBuV/m)	Result-AV (dBuV/m)		Limit-AV (dBuV/m)	Margin (dB)	Remark	
3885.00	42.32		5.54	47.87		74.00	54.00	-6.13	Peak	
4630.00	40.90		7.68	48.58		74.00	54.00	-5.42	Peak	
5445.00	38.98		9.21	48.19		74.00	54.00	-5.81	Peak	
6648.00	37.68		12.23	49.91		74.00	54.00	-4.09	Peak	
7632.00	38.27		13.57	51.84		74.00	54.00	-2.16	Peak	
11652.00	39.80	32.75	20.43	60.23	53.18	74.00	54.00	-0.82	AVG	

Remark:

- 1. Measuring frequencies from 1 GHz to the 10th harmonic of highest fundamental frequency.
- 2. Average test would be performed if the peak result were greater than the average limit.
- 3. Data of measurement within this frequency range shown "---" in the table above means the reading of emissions are attenuated more than 20dB below the permissible limits or the field strength is too small to be measured.
- 4. Measurements above show only up to 6 maximum emissions noted, or would be lesser, with " N/A " remark, if no specific emissions from the EUT are recorded (ie: margin>20dB from the applicable limit) and considered that's already beyond the background noise floor.
- 5. Result = Reading + Correction Factor

Margin = Result - Limit

Remark Peak = Result(PK) - Limit(AV)

Product Name	Computer	Test By	Rex Chiu
Test Model	TREK-674	Test Date	2014/10/21
Test Mode	UNII Band 3 / IEEE 802.11an HT40 TX / CH Low	Temp. & Humidity	28°C, 52%

		96	6 Chambe	er_B at 3	Meter / Ho	rizontal			
Frequency (MHz)	Reading- PK (dBuV)	Reading- AV (dBuV)	Correction Factor (dB/m)	Result-PK (dBuV/m)	Result-AV (dBuV/m)	Limit-PK (dBuV/m)	Limit-AV (dBuV/m)	Margin (dB)	Remark
3950.00	40.71		5.72	46.43		74.00	54.00	-7.57	Peak
4705.00	40.04		7.83	47.88		74.00	54.00	-6.12	Peak
5460.00	39.25		9.24	48.49		74.00	54.00	-5.51	Peak
6816.00	38.52		12.18	50.71		74.00	54.00	-3.29	Peak
7728.00	39.06		13.49	52.56		74.00	54.00	-1.44	Peak
8604.00	37.74		13.94	51.69		74.00	54.00	-2.31	Peak
		9	66 Chaml	ber_B at 3	3Meter / V	ertical			
Frequency (MHz)	Reading- PK (dBuV)	Reading- AV (dBuV)	Correction Factor (dB/m)	Result-PK (dBuV/m)	Result-AV (dBuV/m)	Limit-PK (dBuV/m)	Limit-AV (dBuV/m)	Margin (dB)	Remark
3835.00	41.98		5.41	47.39		74.00	54.00	-6.61	Peak

Frequency (MHz)	Reading- PK (dBuV)	Reading- AV (dBuV)	Correction Factor (dB/m)	Result-PK (dBuV/m)	Result-AV (dBuV/m)	Limit-PK (dBuV/m)	Limit-AV (dBuV/m)	Margin (dB)	Remark
3835.00	41.98		5.41	47.39		74.00	54.00	-6.61	Peak
4665.00	40.00		7.75	47.75		74.00	54.00	-6.25	Peak
5430.00	38.62		9.19	47.81		74.00	54.00	-6.19	Peak
6228.00	38.09		11.47	49.56		74.00	54.00	-4.44	Peak
7356.00	38.47		13.23	51.70		74.00	54.00	-2.30	Peak
11496.00	38.95	30.12	20.06	59.01	50.18	74.00	54.00	-3.82	AVG

Remark:

- 1. Measuring frequencies from 1 GHz to the 10th harmonic of highest fundamental frequency.
- 2. Average test would be performed if the peak result were greater than the average limit.
- 3. Data of measurement within this frequency range shown "---" in the table above means the reading of emissions are attenuated more than 20dB below the permissible limits or the field strength is too small to be measured.
- 4. Measurements above show only up to 6 maximum emissions noted, or would be lesser, with " N/A " remark, if no specific emissions from the EUT are recorded (ie: margin>20dB from the applicable limit) and considered that's already beyond the background noise floor.
- 5. Result = Reading + Correction Factor

Margin = Result - Limit

Remark Peak = Result(PK) - Limit(AV)

2-TREK674 Report No.: T140807L10-RP1-2

Product Name	Computer	Test By	Rex Chiu
Test Model	TREK-674	Test Date	2014/10/21
Test Mode	UNII Band 3 / IEEE 802.11an HT40 TX / CH High	Temp. & Humidity	28°C, 52%

966 Chamber_B at 3Meter / Horizontal									
Frequency (MHz)	Reading- PK (dBuV)	Reading- AV (dBuV)	Correction Factor (dB/m)	Result-PK (dBuV/m)			Limit-AV (dBuV/m)	Margin (dB)	Remark
4320.00	40.47		6.85	47.32		74.00	54.00	-6.68	Peak
4780.00	40.89		7.99	48.88		74.00	54.00	-5.12	Peak
5430.00	39.08		9.19	48.27		74.00	54.00	-5.73	Peak
7464.00	38.03		13.57	51.60		74.00	54.00	-2.40	Peak
8880.00	37.09		14.46	51.55		74.00	54.00	-2.45	Peak
11604.00	38.84	29.24	20.31	59.15	49.55	74.00	54.00	-4.45	AVG

966 Chamber_B at 3Meter / Vertical									
Frequency (MHz)	Reading- PK (dBuV)	Reading- AV (dBuV)	Correction Factor (dB/m)	Result-PK (dBuV/m)	Result-AV (dBuV/m)	Limit-PK (dBuV/m)	Limit-AV (dBuV/m)	Margin (dB)	Remark
3865.00	42.43		5.49	47.92		74.00	54.00	-6.08	Peak
4595.00	40.31		7.61	47.91		74.00	54.00	-6.09	Peak
5445.00	39.99		9.21	49.21		74.00	54.00	-4.79	Peak
7500.00	38.46		13.68	52.14		74.00	54.00	-1.86	Peak
8676.00	37.62		14.08	51.70		74.00	54.00	-2.30	Peak
11604.00	41.25	31.95	20.31	61.57	52.26	74.00	54.00	-1.74	AVG

Remark:

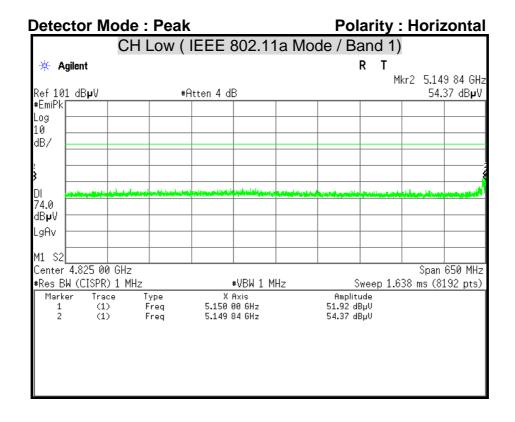
- 1. Measuring frequencies from 1 GHz to the 10th harmonic of highest fundamental frequency.
- 2. Average test would be performed if the peak result were greater than the average limit.
- 3. Data of measurement within this frequency range shown "---" in the table above means the reading of emissions are attenuated more than 20dB below the permissible limits or the field strength is too small to be measured.
- 4. Measurements above show only up to 6 maximum emissions noted, or would be lesser, with " N/A " remark, if no specific emissions from the EUT are recorded (ie: margin>20dB from the applicable limit) and considered that's already beyond the background noise floor.
- 5. Result = Reading + Correction Factor

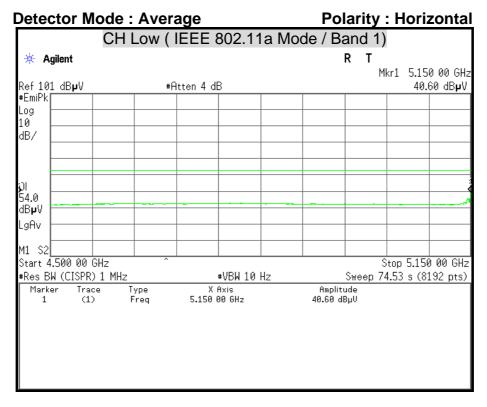
Margin = Result - Limit

Remark Peak = Result(PK) - Limit(AV)

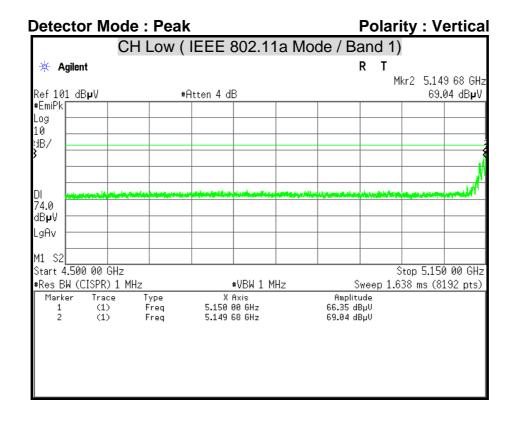
REK674 Report No. : T140807L10-RP1-2

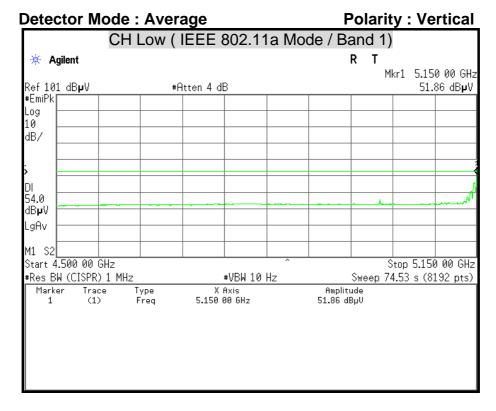
Restricted Band Edges

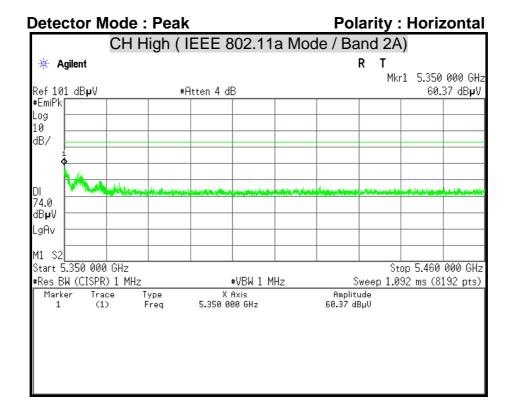


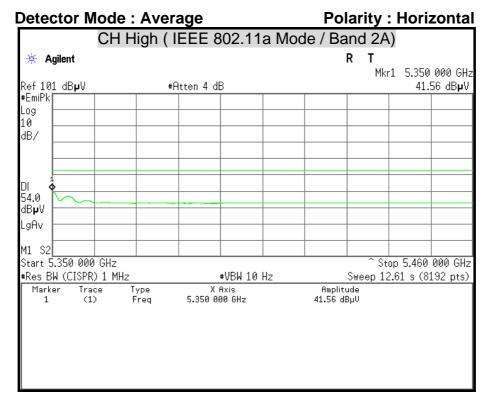


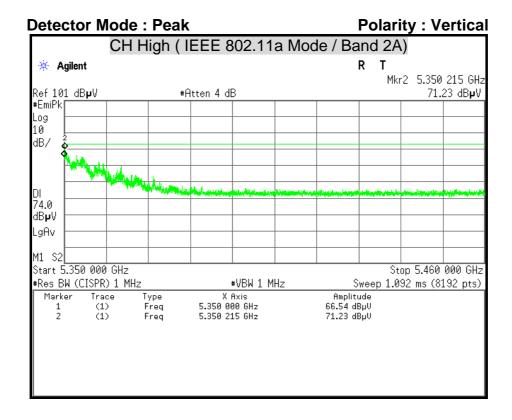
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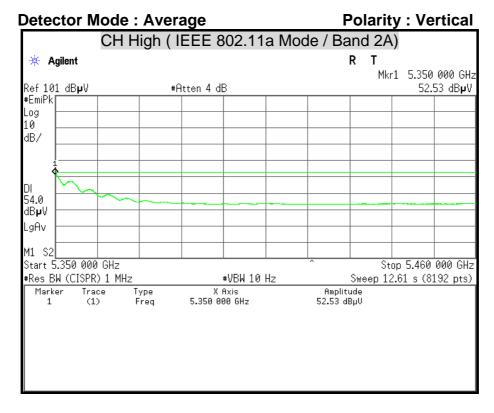


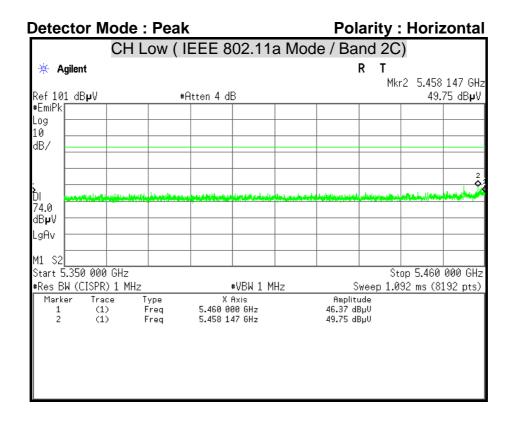


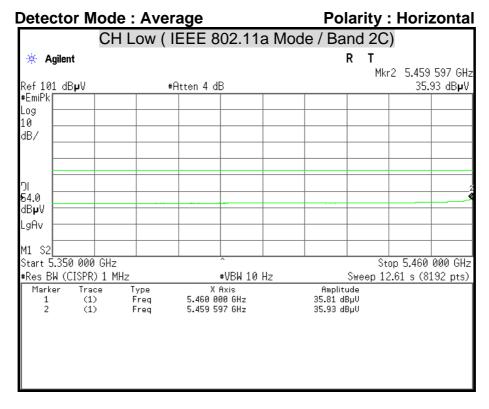


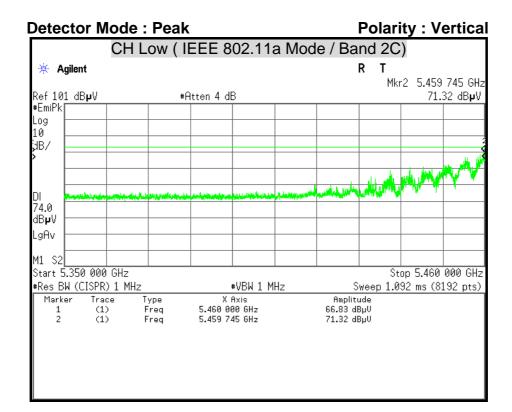


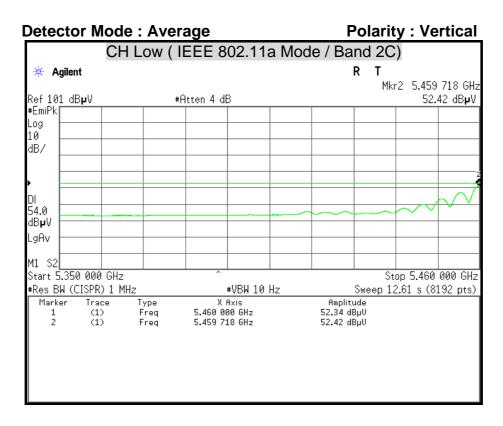




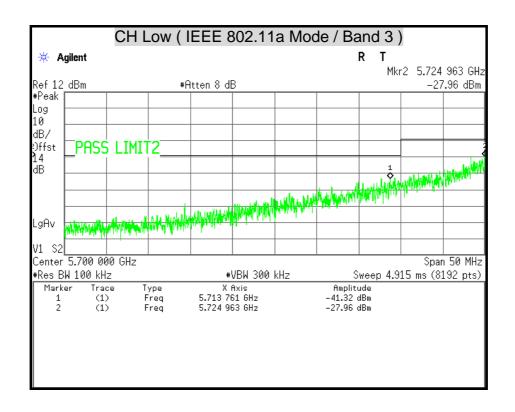


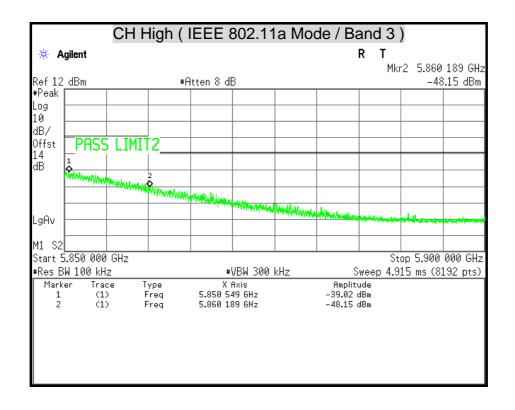


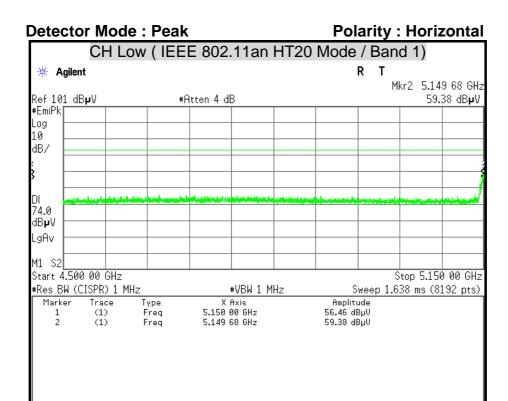


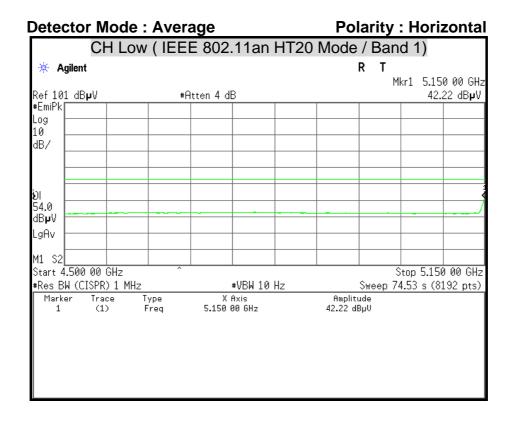


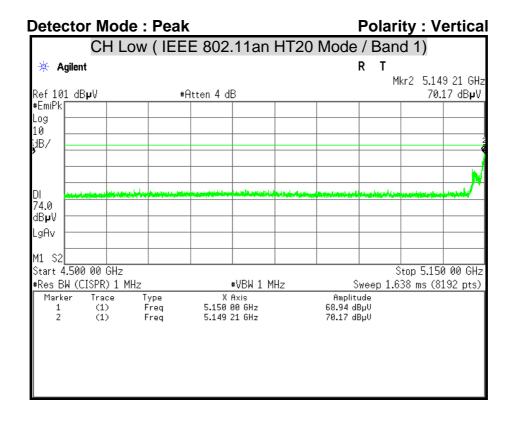
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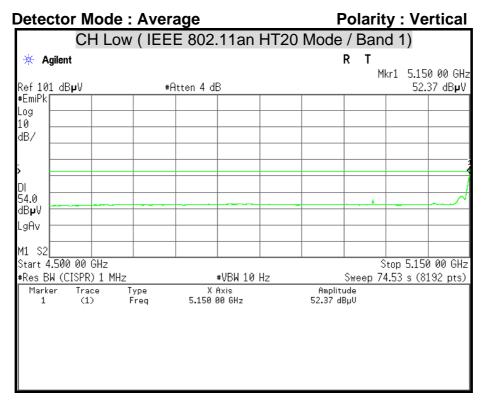


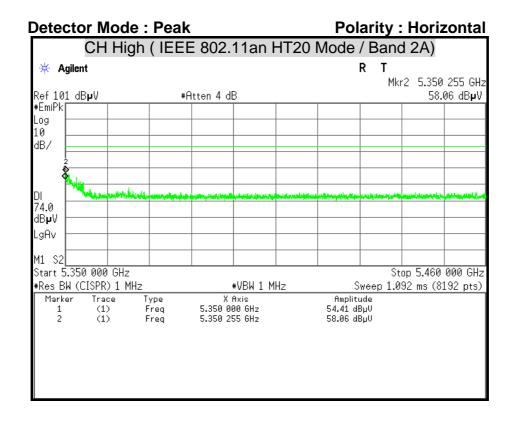


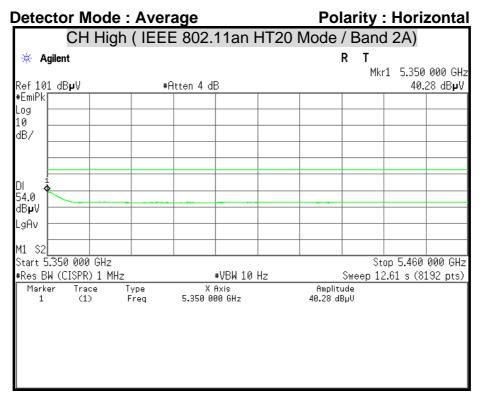




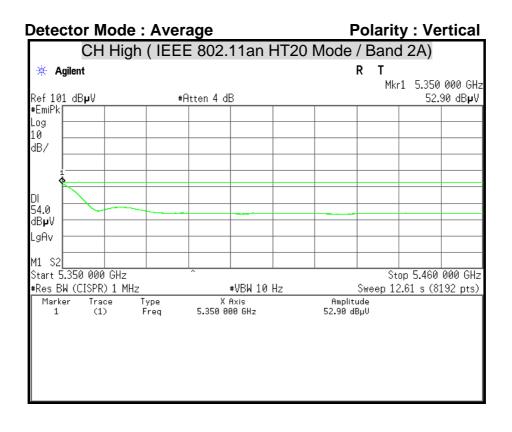


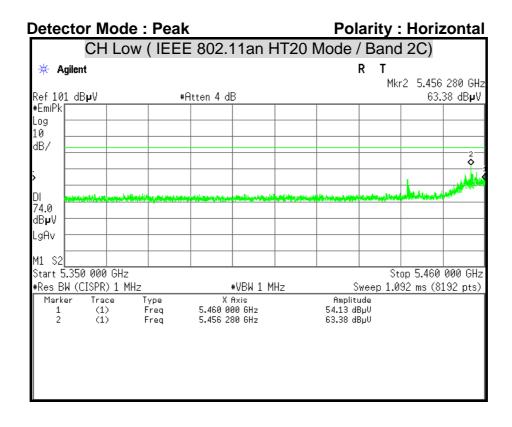


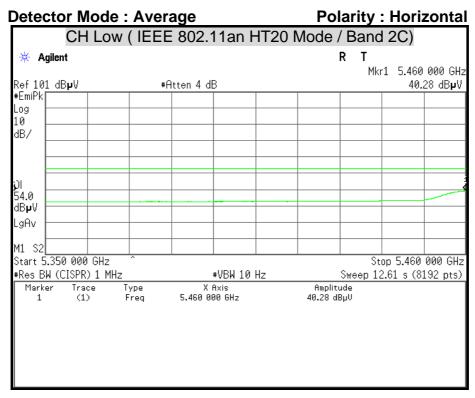




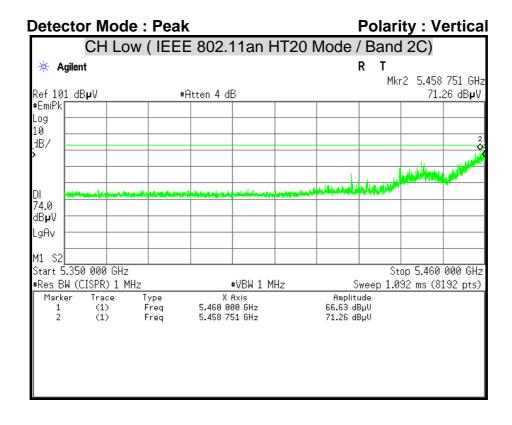
Polarity: Vertical Detector Mode: Peak CH High (IEEE 802.11an HT20 Mode / Band 2A) R 🗰 Agilent Mkr2 5.351 974 GHz 69.25 dB**µ**V Ref 101 dB**µ**V #Atten 4 dB #EmiPk Loa 10 dB/ 74.0 dB₽V LgAv M1 S2 Start 5.350 000 GHz Stop 5.460 000 GHz #Res BW (CISPR) 1 MHz #VBW 1 MHz Sweep 1.092 ms (8192 pts) X Axis 5.350 000 GHz 5.351 974 GHz Marker Trace Туре Amplitude 69.06 dBµV 69.25 dBµV (1) (1) Freq Freq

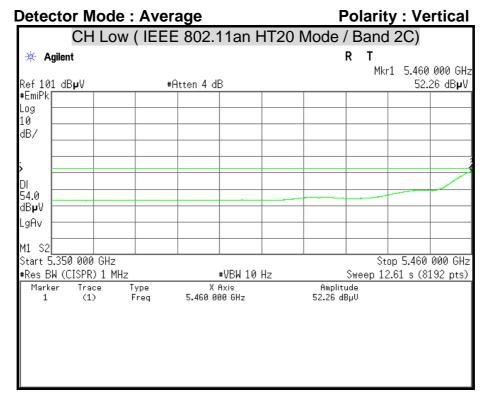


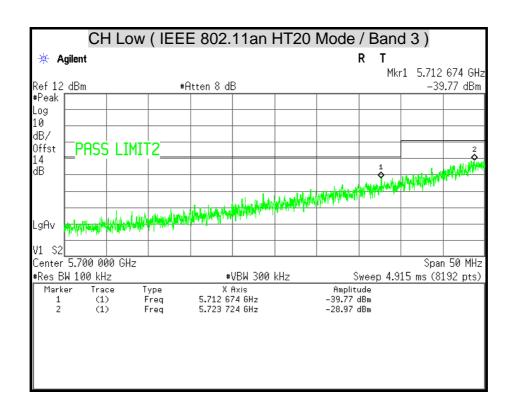


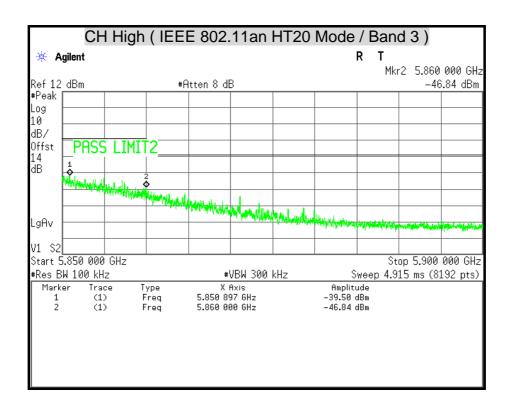


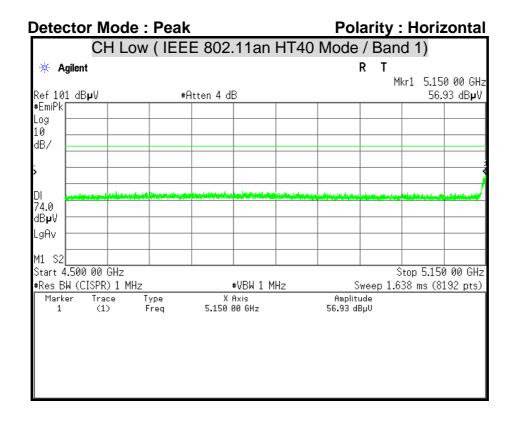
(674 Report No. : T140807L10-RP1-2

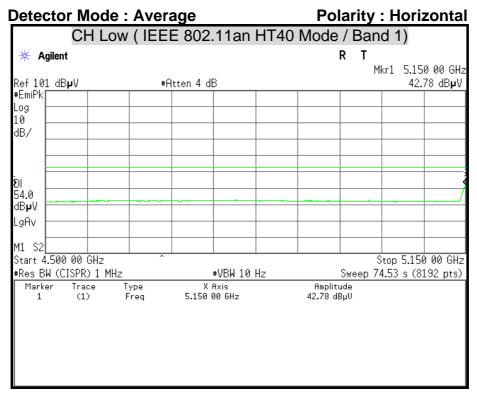


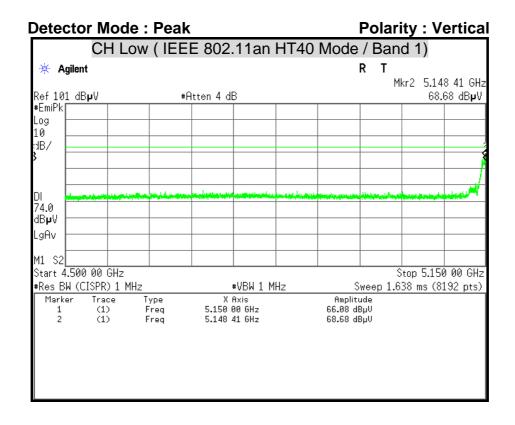


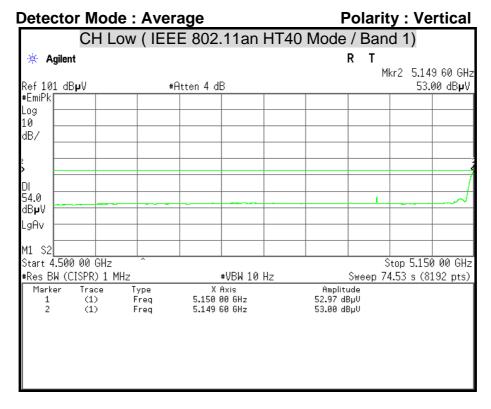






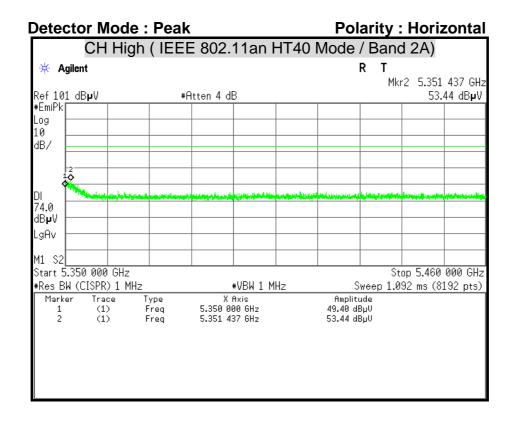


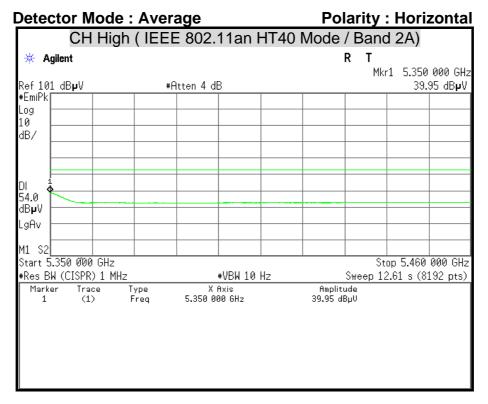


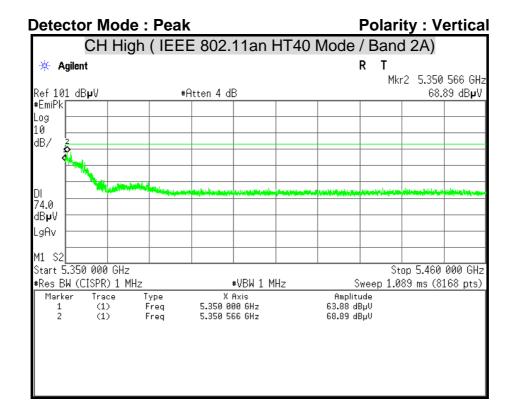


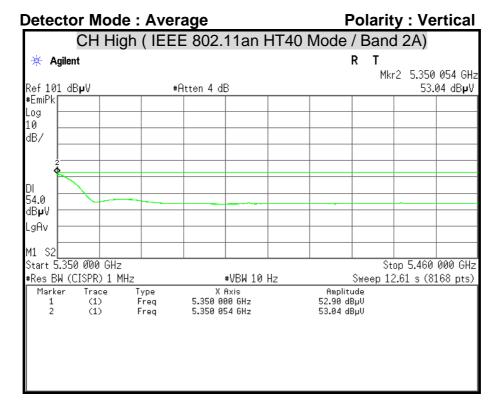
FCC ID: M82-TREK674

Report No.: T140807L10-RP1-2

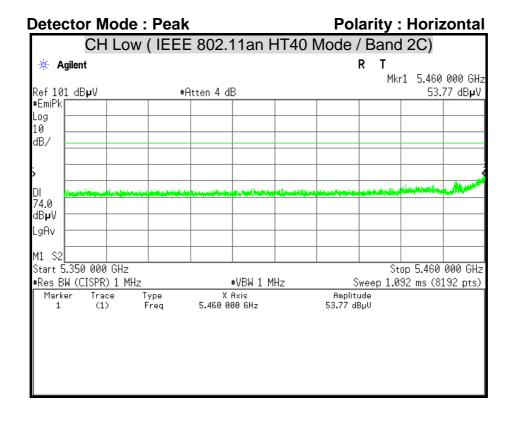


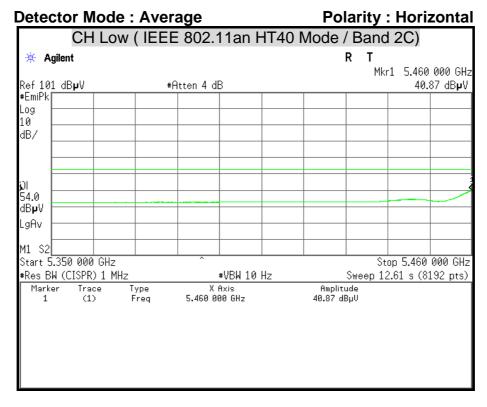


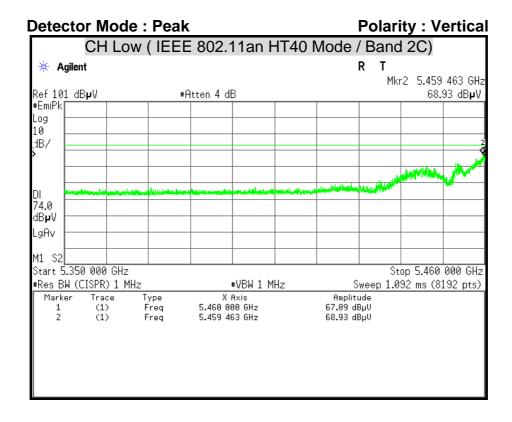


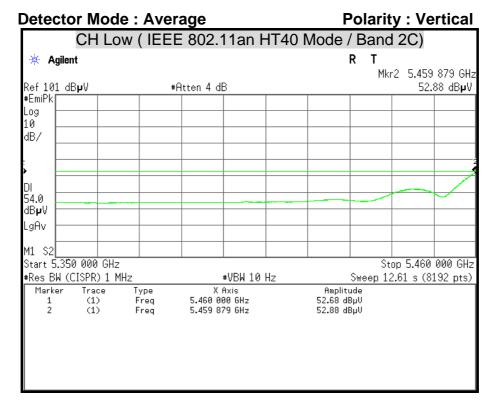


EK674 Report No. : T140807L10-RP1-2



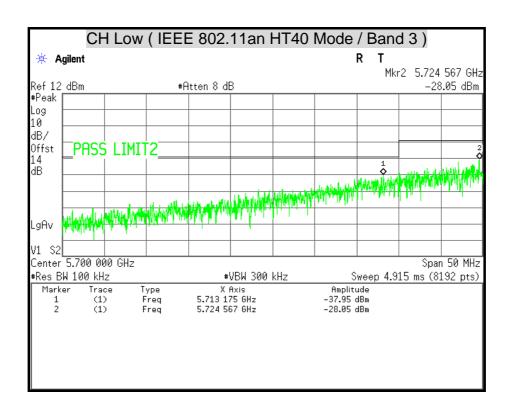


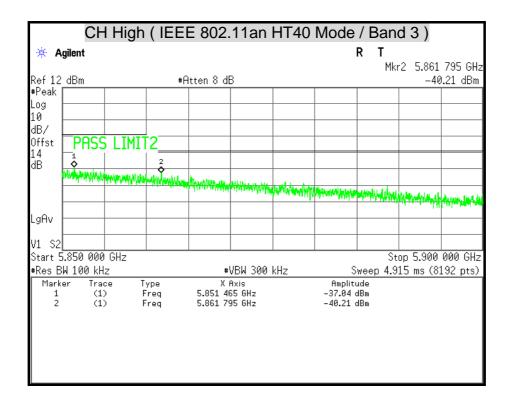




FCC ID: M82-TREK674

Report No.: T140807L10-RP1-2





7.6 CONDUCTED EMISSION

LIMITS

§ 15.207 (a) Except as shown in paragraph (b) and (c) this section, for an intentional radiator that is designed to be connected to the public utility (AC) power line, the radio frequency voltage that is conducted back onto the AC power line on any frequency or frequencies within the band 150 kHz to 30 MHz shall not exceed the limits in the following table, as measured using a 50 μ H/50 ohms line impedance stabilization network (LISN). Compliance with the provisions of this paragraph shall be based on the measurement of the radio frequency voltage between each power line and ground at the power terminal. The lower limit applies at the boundary between the frequency ranges.

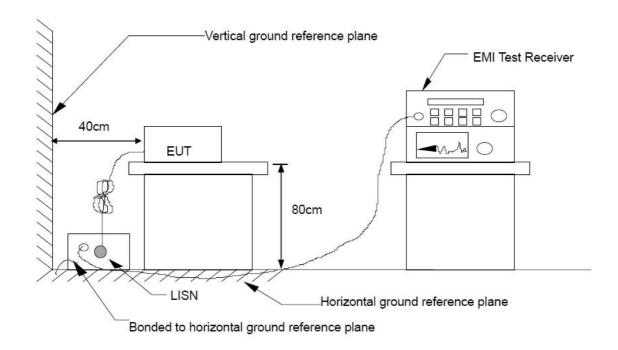
Frequency Range	Conducted Limit (dBµv)			
(MHz)	Quasi-peak	Average		
0.15 - 0.50	66 to 56	56 to 46		
0.50 - 5.00	56	46		
5.00 - 30.0	60	50		

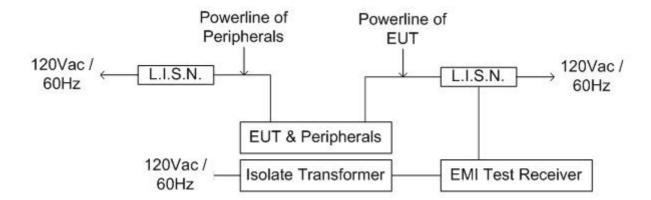
TEST EQUIPMENT

Name of Equipment	ame of Equipment Manufacturer		Serial Number	Calibration Due
L.I.S.N	SCHWARZBECK	NSLK 8127	8127-465	08/06/2015
L.I.S.N	SCHWARZBECK	NSLK 8127	8127-473	03/10/2015
EMI Receiver	ROHDE & SCHWARZ	ESCS 30	835418/008	11/07/2014
Pulse Limiter	ROHDE & SCHWARZ	ESH3-Z2	100111	06/30/2015

Remark: Each piece of equipment is scheduled for calibration once a year.

TEST SETUP





TEST PROCEDURE

The basic test procedure was in accordance with ANSI C63.10:2009.

The test procedure is performed in a $4m \times 3m \times 2.4m$ (LxWxH) shielded room.

The EUT along with its peripherals were placed on a 1.0m (W) \times 1.5m (L) and 0.8m in height wooden table and the EUT was adjusted to maintain a 0.4 meter space from a vertical reference plane.

The EUT was connected to power mains through a line impedance stabilization network (LISN) which provides 50 ohm coupling impedance for measuring instrument and the chassis ground was bounded to the horizontal ground plane of shielded room. All peripherals were connected to the second LISN and the chassis ground also bounded to the horizontal ground plane of shielded room.

The EUT was located so that the distance between the boundary of the EUT and the closest surface of the LISN is 0.8 m. Where a mains flexible cord was provided by the manufacturer shall be 1 m long, or if in excess of 1 m, the excess cable was folded back and forth as far as possible so as to form a bundle not exceeding 0.4 m in length.

TEST RESULTS

Since the EUT is powered by Car Battery Powered, this test item is not applicable.

7.7 FREQUENCY STABILITY

LIMITS

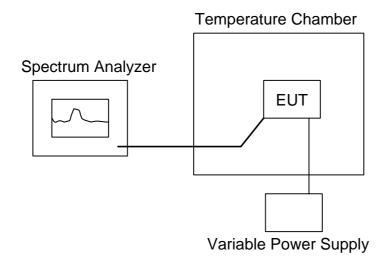
§ 15.407 (g) manufacturers of U-NII devices are responsible for ensuring frequency stability such that an emission is maintained within the band of operation under all conditions of normal operation as specified in the user's manual.

TEST EQUIPMENT

Name of Equipment	Manufacturer	Model	Serial Number	Calibration Due
Spectrum Analyzer	Agilent	E4446A	MY43360132	06/10/2015
Temp. & Humid. Chamber	TERCHY	MHC-120L	960424	09/09/2015

Remark: Each piece of equipment is scheduled for calibration once a year.

TEST SETUP



TEST PROCEDURE

- 1. Place the EUT on the table and set it in the transmitting mode.
- 2. Remove the antenna from the EUT and then connect a low loss RF cable from the antenna port to the spectrum analyzer.
- 3. Set the environment into appropriate environment.
- 4. Set the spectrum analyzer as RBW=1kHz, VBW = RBW, Span = 200kHz, Sweep = auto.
- 5. Mark the peak frequency and measure the frequency tolerance using frequency counter function.
- 6. Repeat until all the results are investigated.

TEST RESULTS

IEEE 802.11a mode

U-NII	Channel	Channel Frequency (MHz)	Measured Frequency (MHz)	Delta Frequency (kHz)	20 ppm Limit (kHz)	Margin (kHz)
	Low	5180	5179.997300	-2.70	103.60	-100.90
Band 1	Middle	5220	5200.001800	1.80	104.00	-102.20
	High	5240	5239.964800	-35.20	104.80	-69.60
	Low	5260	5259.997300	-2.70	105.20	-102.50
Band 2A	Middle	5280	5280.011200	11.20	105.60	-94.40
	High	5320	5319.957400	-42.60	106.40	-63.80
	Low	5500	5499.998200	-1.80	110.00	-108.20
Band 2C	Middle	5580	5579.990500	-9.50	111.60	-102.10
	High	5700	5700.000200	0.20	114.00	-113.80
	Low	5745	5744.967300	-32.70	114.90	-82.20
Band 3	Middle	5785	5785.012200	12.20	115.70	-103.50
	High	5825	5824.976200	-23.80	116.50	-92.70

IEEE 802.11an HT20 Mode

U-NII	Channel	Channel Frequency (MHz)	Measured Frequency (MHz)	Delta Frequency (kHz)	20 ppm Limit (kHz)	Margin (kHz)
	Low	5180	5179.996300	-3.70	103.60	-99.90
Band 1	Middle	5220	5200.001200	1.20	104.00	-102.80
	High	5240	5239.946500	-53.50	104.80	-51.30
	Low	5260	5260.003200	3.20	105.20	-102.00
Band 2A	Middle	5280	5280.012900	12.90	105.60	-92.70
	High	5320	5319.964800	-35.20	106.40	-71.20
	Low	5500	5499.999600	-0.40	110.00	-109.60
Band 2C	Middle	5580	5580.002300	2.30	111.60	-109.30
	High	5700	5700.012500	12.50	114.00	-101.50
	Low	5745	5745.000600	0.60	114.90	-114.30
Band 3	Middle	5785	5785.002000	2.00	115.70	-113.70
	High	5825	5824.945600	-54.40	116.50	-62.10

IEEE 802.11an HT40 Mode

U-NII	Channel	Channel Frequency (MHz)	Measured Frequency (MHz)	Delta Frequency (kHz)	20 ppm Limit (kHz)	Margin (kHz)
Band1	Low	5190	5190.062400	62.40	103.80	-41.40
Danui	High	5230	5230.016900	16.90	104.60	-87.70
Band 2A	Low	5270	5269.975600	-24.40	105.40	-81.00
Dallu ZA	High	5310	5310.012500	12.50	106.20	-93.70
	Low	5510	5509.995200	-4.80	110.20	-105.40
Band 2C	Middle	5550	5549.967300	-32.70	111.00	-78.30
	High	5670	5670.001800	1.80	113.40	-111.60
Davido	Low	5755	5775.019200	19.20	115.50	-96.30
Band 3	High	5795	5795.008100	8.10	115.90	-107.80