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

For

Computer

Model : TREK-572 ; TREK-572XXXXXXXXXXXXXXX
(where "X" may be any alphanumeric character , "-" or blank)

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.
NO. 989-1 Wen Shan Rd., Shang Shan Village,
Qionglin Shiang Hsinchu County 30741, Taiwan, R.O.C
TEL: +886-3-5921698
FAX: +886-3-5921108

http://www.ccsrf.com
E-Mail : service@ccsrf.com

Issued Date: March 16, 2015

Testing Laboratory
0240

Note: *This report shall not be reproduced except in full, without the written approval of Compliance Certification Services Inc. This document may be altered or revised by Compliance Certification Services Inc. personnel only, and shall be noted in the revision section of the document. The client should not use it to claim product endorsement by TAF or any government agencies. The test results of this report relate only to the tested sample identified in this report.*

This report shall not be reproduced, except in full, without the written approval of Compliance Certification Services Inc.

Revision History

Rev.	Issue Date	Revisions	Effect Page	Revised By
00	03/16/2015	Initial Issue	All Page 179	Dola Hsieh

This report shall not be reproduced, except in full, without the written approval of Compliance Certification Services Inc.

TABLE OF CONTENTS

TITLE PAGE NO.

1. TEST REPORT CERTIFICATION 4

2. EUT DESCRIPTION 5

3. DESCRIPTION OF TEST MODES 7

4. TEST METHODOLOGY 10

5. FACILITIES AND ACCREDITATION 10

5.1 FACILITIES 10

5.2 ACCREDITATIONS 10

5.3 MEASUREMENT UNCERTAINTY 11

6. SETUP OF EQUIPMENT UNDER TEST 12

7. FCC PART 15.407 REQUIREMENTS 14

7.1 26dB BANDWIDTH 14

7.2 6dB BANDWIDTH 39

7.3 MAXIMUM CONDUCTED OUTPUT POWER 51

7.4 PEAK POWER SPECTRAL DENSITY 64

7.5 RADIATED EMISSION 114

7.6 CONDUCTED EMISSION 170

7.7 FREQUENCY STABILITY 173

APPENDIX SETUP PHOTOS 178

This report shall not be reproduced, except in full, without the written approval of Compliance Certification Services Inc.

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
Model	:	TREK-572 ; TREK-572XXXXXXXXXXXXXXXX (where "X" may be any alphanumeric character , "-" or blank)
Trade Name	:	ADVANTECH
Tested Date	:	September 11, 2014 ~ March 16, 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

This report shall not be reproduced, except in full, without the written approval of Compliance Certification Services Inc.

2. EUT DESCRIPTION

Product Name	Computer
Model Number	TREK-572 ; TREK-572XXXXXXXXXXXXXXX (where "X" may be any alphanumeric character , "-" or blank)
Identify Number	T140911L12-A
Received Date	September 11, 2014
Frequency Range	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
	IEEE 802.11an HT40 : 5270MHz ~ 5310MHz
	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
Transmit Power	UNII Band 1:
	IEEE 802.11a : 16.81dBm (0.0480W)
	IEEE 802.11an HT20 : 16.66dBm (0.0463W)
	IEEE 802.11an HT40 : 17.61dBm (0.0577W)
	UNII Band 2A:
	IEEE 802.11a : 16.32dBm (0.0429W)
	IEEE 802.11an HT20 : 16.43dBm (0.0440W)
	IEEE 802.11an HT40 : 17.24dBm (0.0530W)
	UNII Band 2C:
	IEEE 802.11a : 16.30dBm (0.0427W)
	IEEE 802.11an HT20 : 16.83dBm (0.0482W)
	IEEE 802.11an HT40 : 17.71dBm (0.0590W)
	UNII Band 3:
	IEEE 802.11a : 22.00dBm (0.1585W)
	IEEE 802.11an HT20 : 21.61dBm (0.1449W)
	IEEE 802.11an HT40 : 17.64dBm (0.0581W)

This report shall not be reproduced, except in full, without the written approval of Compliance Certification Services Inc.

Channel Spacing	IEEE 802.11a, 802.11an HT20 : 20MHz IEEE 802.11an HT40 : 40MHz
Channel Number	IEEE 802.11a, 802.11an HT20 : 5150MHz ~ 5250MHz : 4 Channels 5250MHz ~ 5350MHz : 4 Channels 5470MHz ~ 5725MHz : 8 Channels 5725MHz ~ 5850MHz : 5 Channels IEEE 802.11an HT40 : 5150MHz ~ 5250MHz : 2 Channels 5250MHz ~ 5350MHz : 2 Channels 5470MHz ~ 5725MHz : 3 Channels 5725MHz ~ 5850MHz : 2 Channels
Transmit Data Rate	IEEE 802.11a : up to 54 Mbps IEEE 802.11an (VHT20,800ns GI) : up to 130.00 Mbps IEEE 802.11an (VHT20,400ns GI) : up to 144.40 Mbps IEEE 802.11an (VHT40,800ns GI) : up to 270.00 Mbps IEEE 802.11an (VHT40,400ns GI) : up to 300.00 Mbps
Type of Modulation	IEEE 802.11a : OFDM (64QAM, 16QAM, QPSK, BPSK) IEEE 802.11an HT20/40 : OFDM (64QAM, 16QAM, QPSK, BPSK)
Antenna Type	Puck Antenna × 2 , Antenna Gain : 9.16 dBi
Power Rating	9-32Vdc
Test Voltage	120Vac, 60Hz
DC Power Cable Type	Non-shielded cable, 1.5m × 1 (Detachable)
I/O Port	EUT : RJ-45 Port × 1, USB Port × 1, Power Port × 1, VGA Port × 1, Audio Port × 2, Display Port × 1 Panel : Display Port × 1, USB Port × 1
Signal Cable	Shielded signal cable, 2m × 1 (Detachable), with two ferrite core

This report shall not be reproduced, except in full, without the written approval of Compliance Certification Services Inc.

The difference of the series model

Model Number	Difference
TREK-572	1. For marketing purpose only. 2. where "X" may be any alphanumeric character , "-" or blank
TREK-572XXXXXXXXXXXXXXXX	

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-572 was considered the main model for testing.
4. This submittal(s) (test report) is intended for FCC ID: M82-TREK572LTE 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.

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 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.*

This report shall not be reproduced, except in full, without the written approval of Compliance Certification Services Inc.

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.

This report shall not be reproduced, except in full, without the written approval of Compliance Certification Services Inc.

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.

Remark : *The field strength of spurious emission was measured in the following position: EUT stand-up position(Z axis), lie-down position(X, Y axis). The worst emission was found in lie-down position(X axis) and the worst case was recorded.*

This report shall not be reproduced, except in full, without the written approval of Compliance Certification Services Inc.

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
Japan	VCCI
Taiwan	BSMI
USA	FCC MRA

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

This report shall not be reproduced, except in full, without the written approval of Compliance Certification Services Inc.

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.

This report shall not be reproduced, except in full, without the written approval of Compliance Certification Services Inc.

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 × 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 16
     IEEE 802.11a Channel Mid (5220MHz) Chain0/Chain1 Power set 17
     IEEE 802.11a Channel High (5240MHz) Chain0/Chain1 Power set 17.5
     IEEE 802.11an HT20 Channel Low (5180MHz) Chain0/Chain1 Power set 16
     IEEE 802.11an HT20 Channel Mid (5220MHz) Chain0/Chain1 Power set 17
     IEEE 802.11an HT20 Channel High (5240MHz) Chain0/Chain1 Power set 17.5
     IEEE 802.11an HT40 Channel Low (5190MHz) Chain0/Chain1 Power set 13.5
     IEEE 802.11an HT40 Channel High (5230MHz) Chain0/Chain1 Power set 18

This report shall not be reproduced, except in full, without the written approval of Compliance Certification Services Inc.

IEEE 802.11a Channel Low (5260MHz) Chain0/Chain1 Power set 17
IEEE 802.11a Channel Mid (5280MHz) Chain0/Chain1 Power set 17
IEEE 802.11a Channel High (5320MHz) Chain0/Chain1 Power set 16.5
IEEE 802.11an HT20 Channel Low (5260MHz) Chain0/Chain1 Power set 17
IEEE 802.11an HT20 Channel Mid (5280MHz) Chain0/Chain1 Power set 17.5
IEEE 802.11an HT20 Channel High (5320MHz) Chain0/Chain1 Power set 17.5
IEEE 802.11an HT40 Channel Low (5270MHz) Chain0/Chain1 Power set 18
IEEE 802.11an HT40 Channel High (5310MHz) Chain0/Chain1 Power set 14

IEEE 802.11a Channel Low (5500MHz) Chain0/Chain1 Power set 16.5
IEEE 802.11a Channel Mid (5580MHz) Chain0/Chain1 Power set 17
IEEE 802.11a Channel High (5700MHz) Chain0/Chain1 Power set 16
IEEE 802.11an HT20 Channel Low (5500MHz) Chain0/Chain1 Power set 16.5
IEEE 802.11an HT20 Channel Mid (5580MHz) Chain0/Chain1 Power set 16.5
IEEE 802.11an HT20 Channel High (5700MHz) Chain0/Chain1 Power set 16
IEEE 802.11an HT40 Channel Low (5510MHz) Chain0/Chain1 Power set 17.5
IEEE 802.11an HT40 Channel Mid (5550MHz) Chain0/Chain1 Power set 18.5
IEEE 802.11an HT40 Channel High (5670MHz) Chain0/Chain1 Power set 18

IEEE 802.11a Channel Low (5745MHz) Chain0/Chain1 Power set 12.5
IEEE 802.11a Channel Mid (5785MHz) Chain0/Chain1 Power set 25
IEEE 802.11a Channel High (5825MHz) Chain0/Chain1 Power set 16.5
IEEE 802.11an HT20 Channel Low (5745MHz) Chain0/Chain1 Power set 13
IEEE 802.11an HT20 Channel Mid (5785MHz) Chain0/Chain1 Power set 25
IEEE 802.11an HT20 Channel High (5825MHz) Chain0/Chain1 Power set 15.5
IEEE 802.11an HT40 Channel Low (5755MHz) Chain0/Chain1 Power set 11
IEEE 802.11an HT40 Channel High (5795MHz) Chain0/Chain1 Power set 18

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

This report shall not be reproduced, except in full, without the written approval of Compliance Certification Services Inc.

7. FCC PART 15.407 REQUIREMENTS

7.1 26dB BANDWIDTH

LIMITS

§ 15.303 Emission bandwidth, 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%.

This report shall not be reproduced, except in full, without the written approval of Compliance Certification Services Inc.

TEST RESULTS

IEEE 802.11a Mode (Two TX)

U-NII	Channel	Channel Frequency (MHz)	26dB Bandwidth (MHz)	
			Chain 0	Chain 1
Band 2A	Low	5260	25.22	25.79
	Middle	5280	29.50	27.85
	High	5320	27.64	29.61
Band 2C	Low	5500	29.90	27.72
	Middle	5580	30.02	25.47
	High	5700	33.80	30.19

IEEE 802.11an HT20 Mode (Two TX)

U-NII	Channel	Channel Frequency (MHz)	26dB Bandwidth (MHz)	
			Chain 0	Chain 1
Band 2A	Low	5260	26.40	31.52
	Middle	5280	28.67	30.40
	High	5320	35.58	27.50
Band 2C	Low	5500	39.30	30.18
	Middle	5580	46.04	26.79
	High	5700	34.46	33.95

This report shall not be reproduced, except in full, without the written approval of Compliance Certification Services Inc.

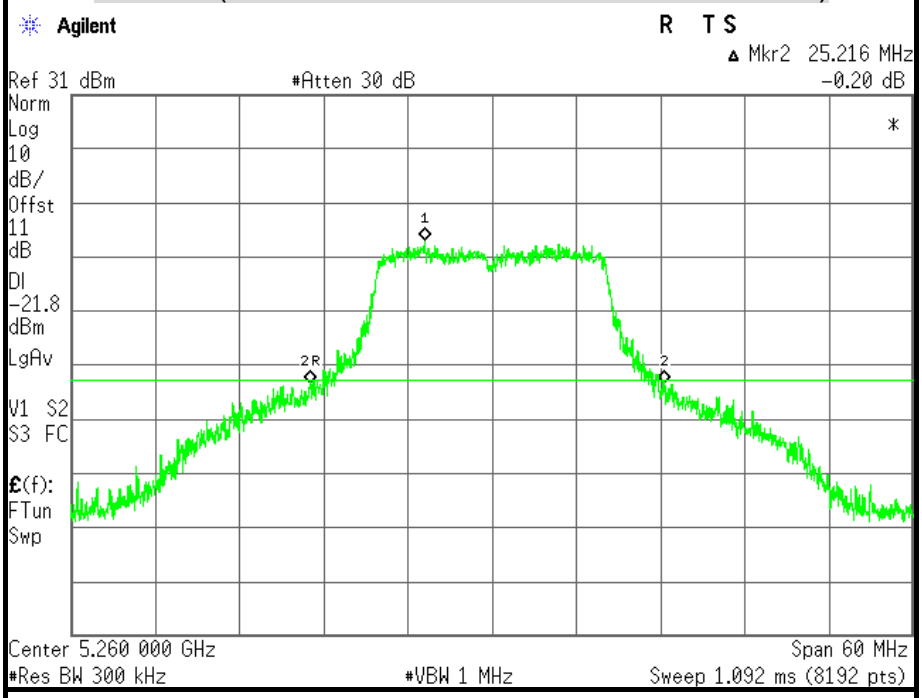
IEEE 802.11an HT40 Mode (Two TX)

U-NII	Channel	Channel Frequency (MHz)	26dB Bandwidth (MHz)	
			Chain 0	Chain 1
Band 2A	Low	5270	74.49	77.54
	High	5310	40.69	42.09
Band 2C	Low	5510	52.59	60.73
	Middle	5550	73.89	71.75
	High	5670	71.31	73.49

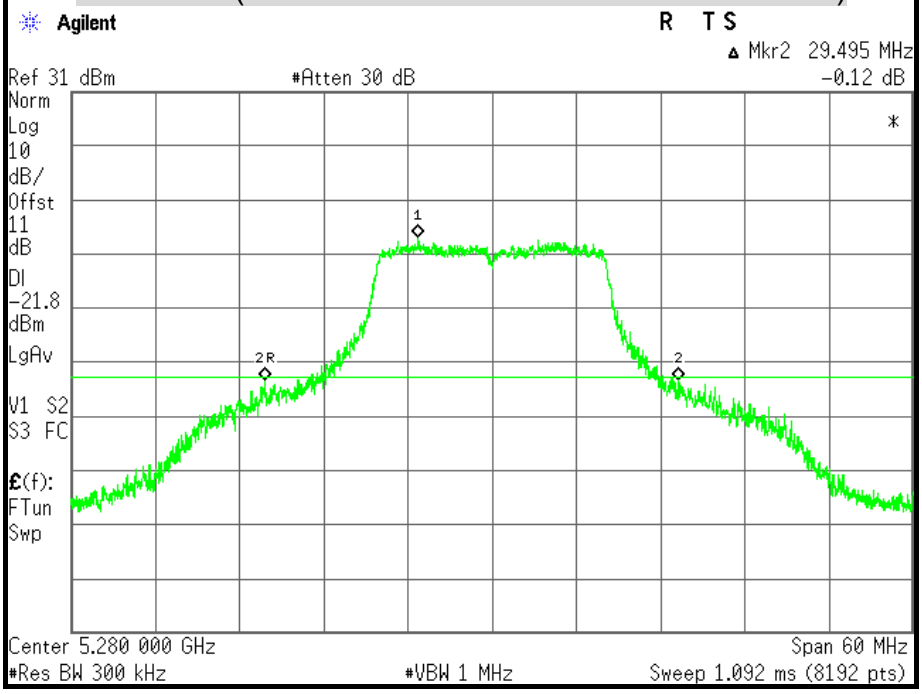
This report shall not be reproduced, except in full, without the written approval of Compliance Certification Services Inc.

26dB BANDWIDTH

CH Low (IEEE 802.11a Mode / Band 2A / Chain 0)

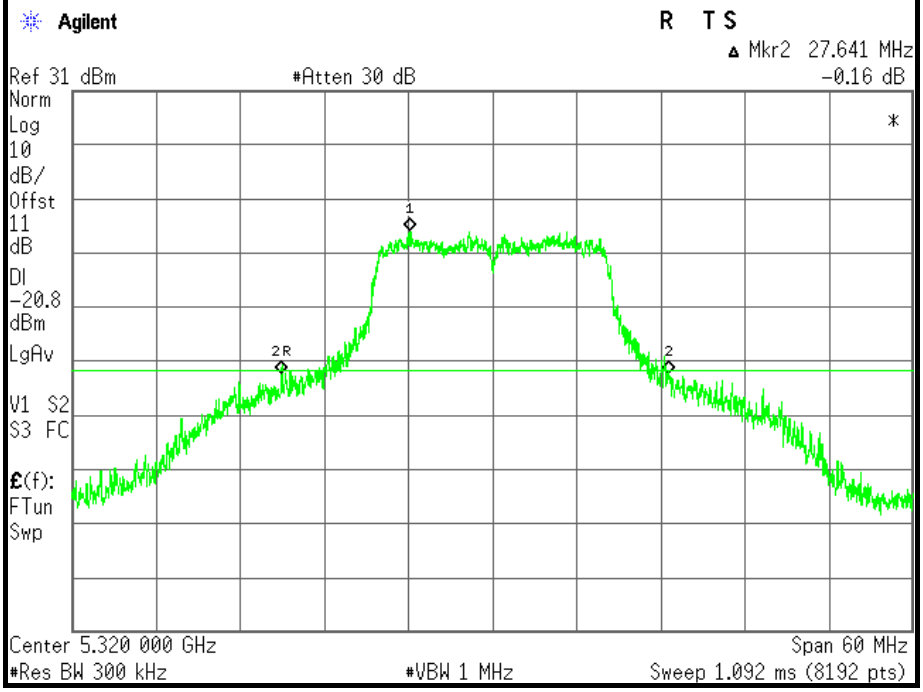


CH Middle (IEEE 802.11a Mode / Band 2A / Chain 0)



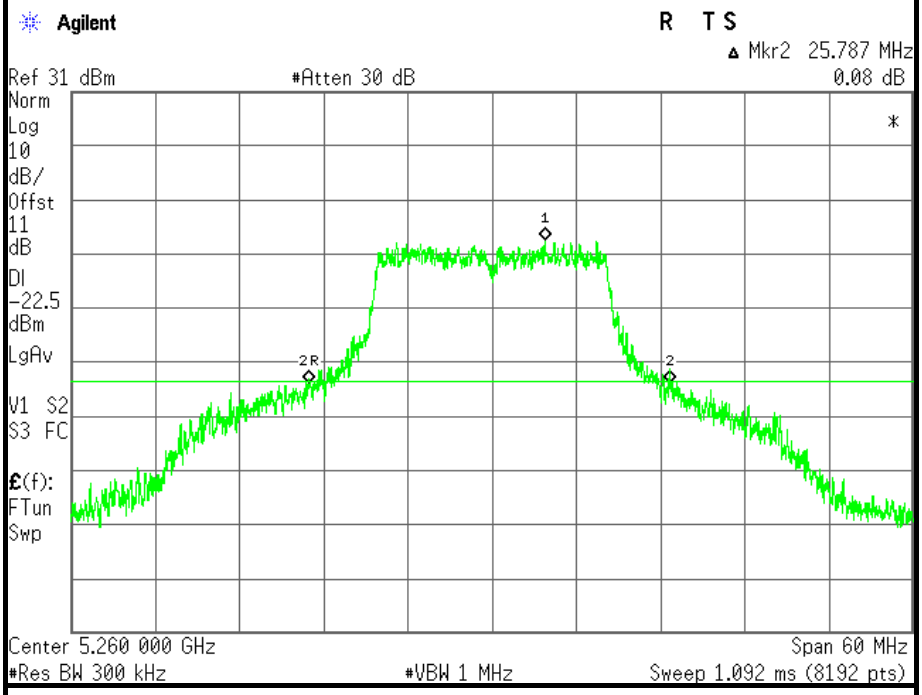
This report shall not be reproduced, except in full, without the written approval of Compliance Certification Services Inc.

CH High (IEEE 802.11a Mode / Band 2A / Chain 0)

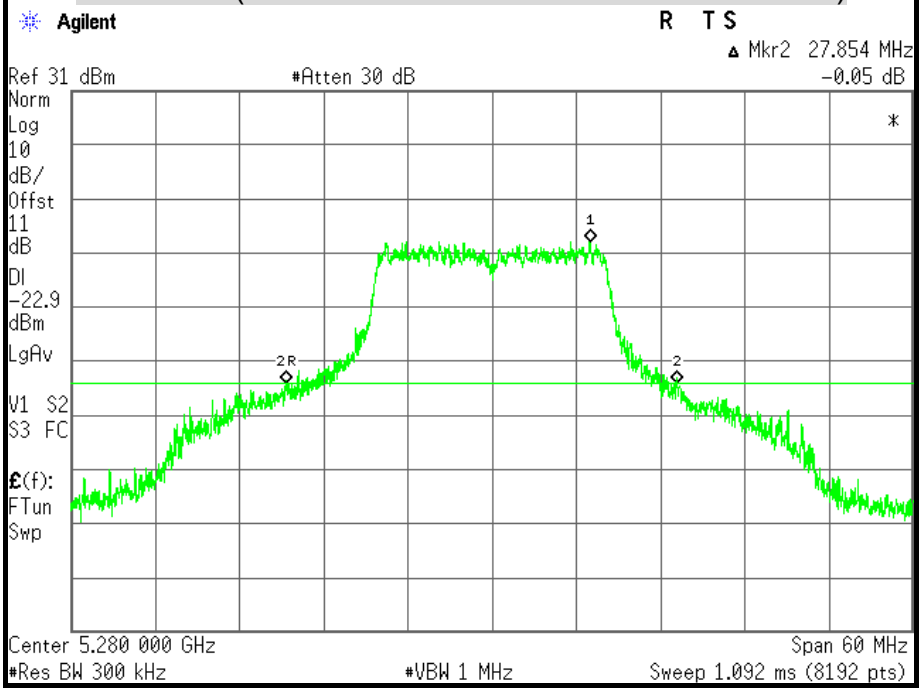


This report shall not be reproduced, except in full, without the written approval of Compliance Certification Services Inc.

CH Low (IEEE 802.11a Mode / Band 2A / Chain 1)

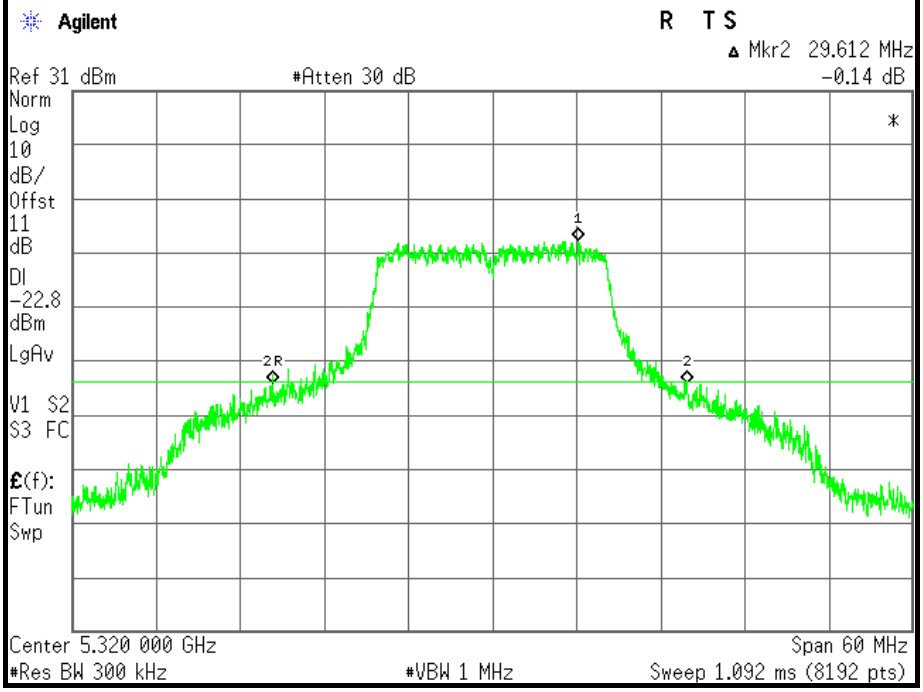


CH Middle (IEEE 802.11a Mode / Band 2A / Chain 1)



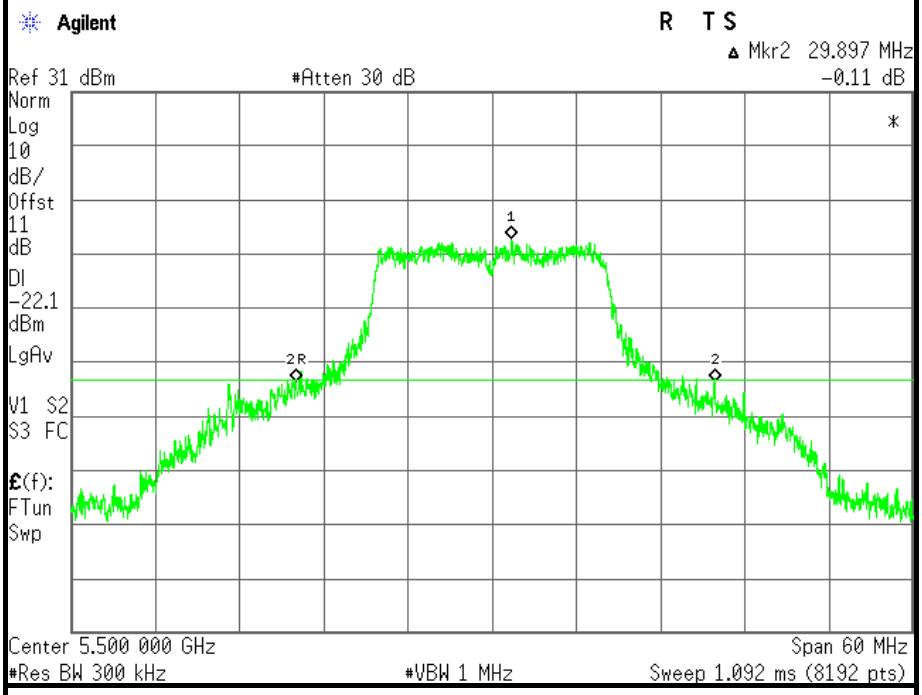
This report shall not be reproduced, except in full, without the written approval of Compliance Certification Services Inc.

CH High (IEEE 802.11a Mode / Band 2A / Chain 1)

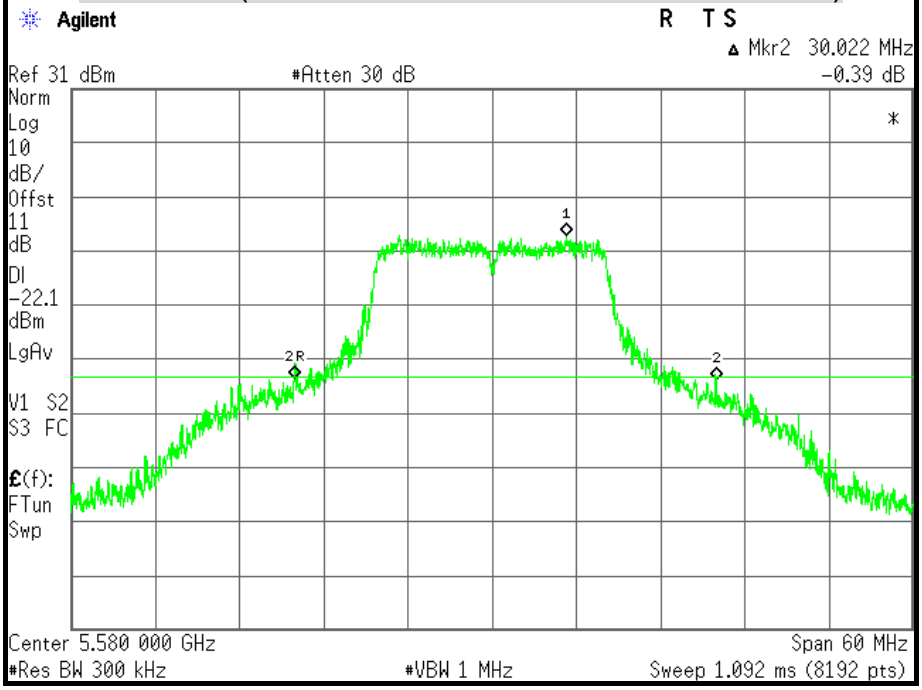


This report shall not be reproduced, except in full, without the written approval of Compliance Certification Services Inc.

CH Low (IEEE 802.11a Mode/ Band 2C / Chain 0)

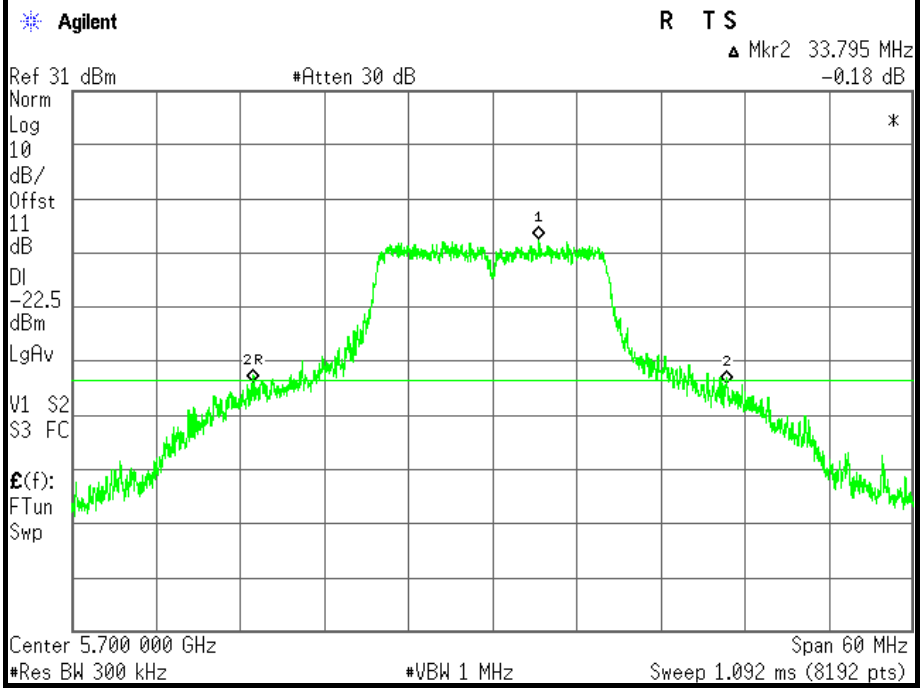


CH Middle (IEEE 802.11a Mode/ Band 2C / Chain 0)



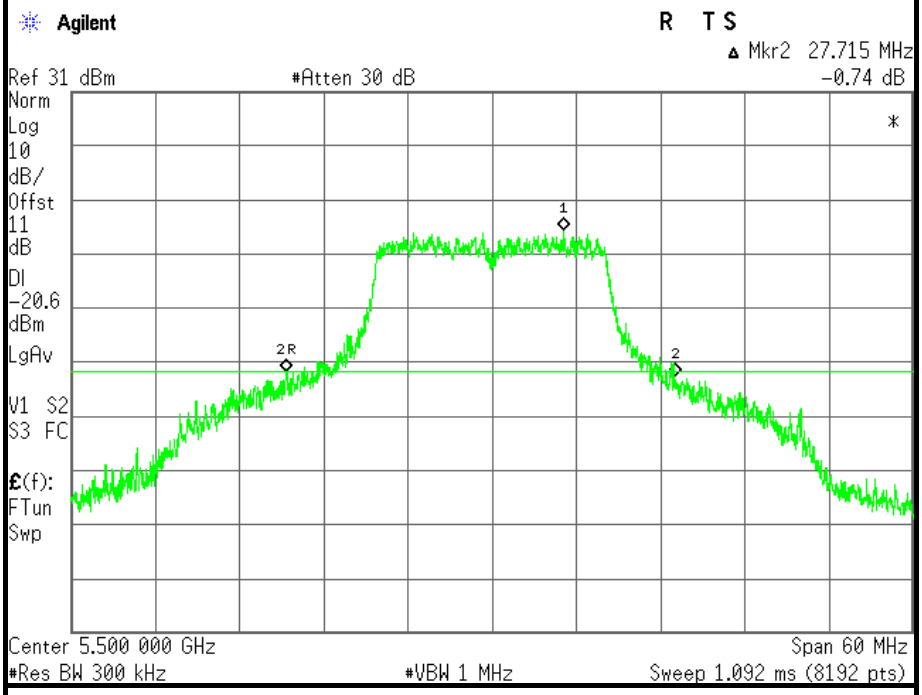
This report shall not be reproduced, except in full, without the written approval of Compliance Certification Services Inc.

CH High (IEEE 802.11a Mode/ Band 2C / Chain 0)

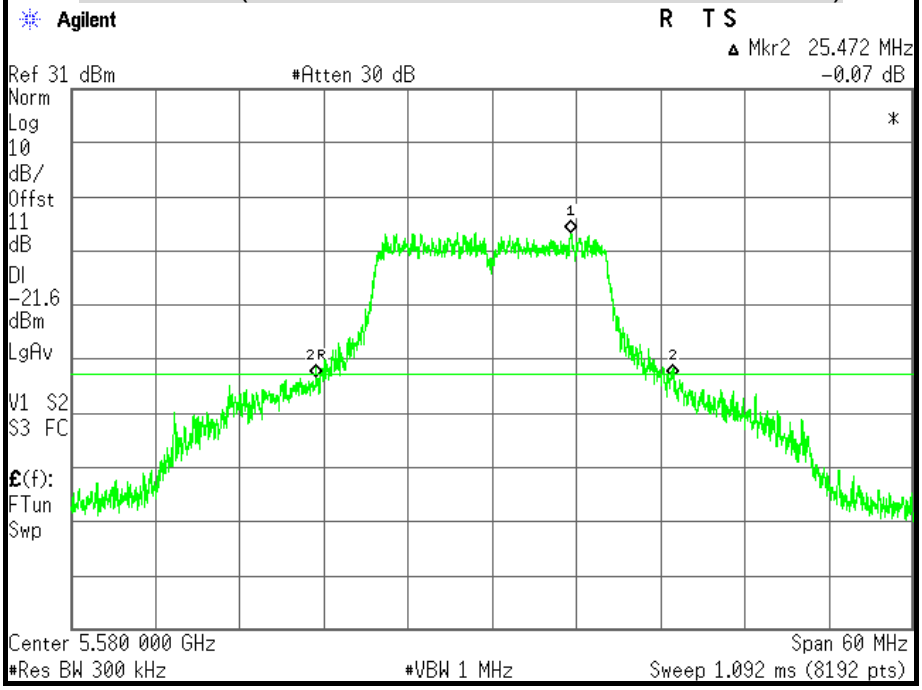


This report shall not be reproduced, except in full, without the written approval of Compliance Certification Services Inc.

CH Low (IEEE 802.11a Mode/ Band 2C / Chain 1)

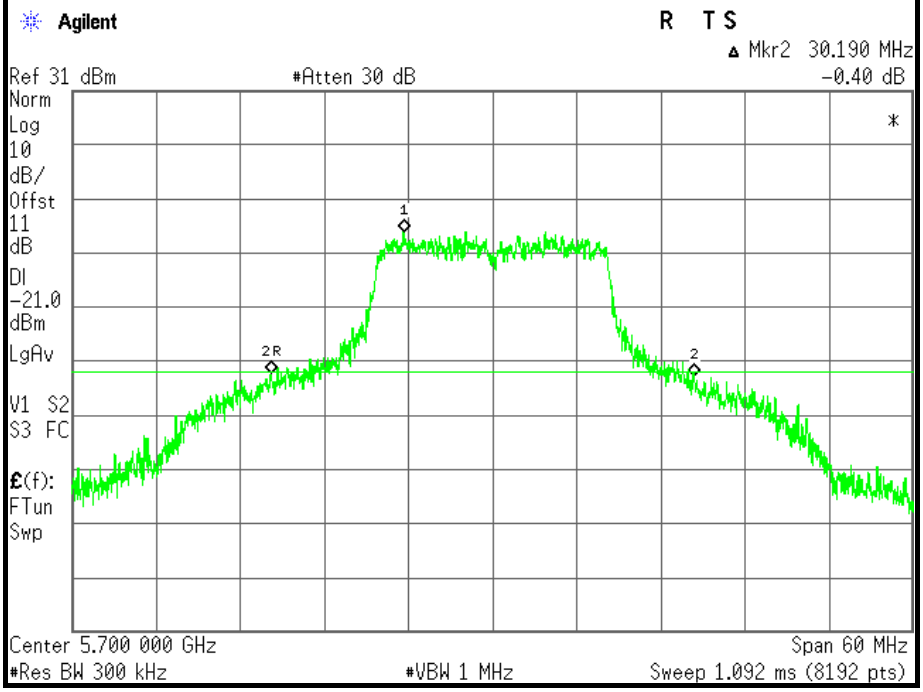


CH Middle (IEEE 802.11a Mode/ Band 2C / Chain 1)



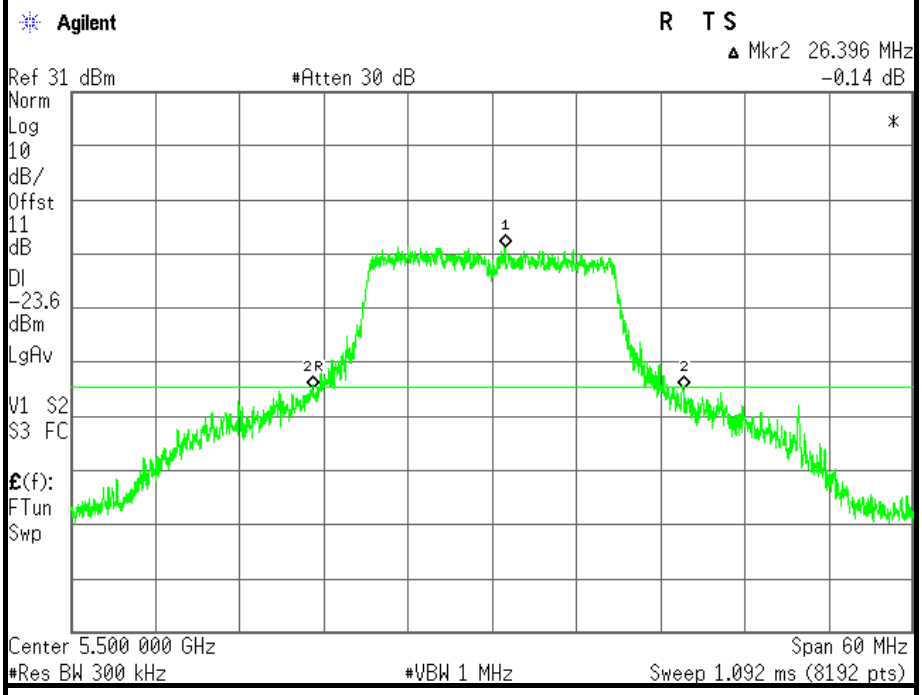
This report shall not be reproduced, except in full, without the written approval of Compliance Certification Services Inc.

CH High (IEEE 802.11a Mode/ Band 2C / Chain 1)

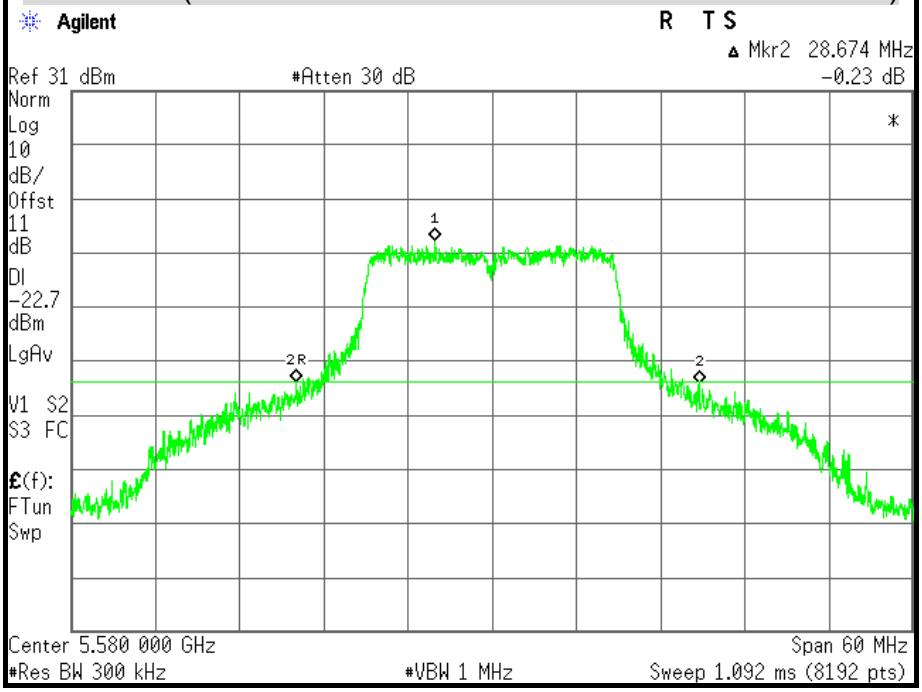


This report shall not be reproduced, except in full, without the written approval of Compliance Certification Services Inc.

CH Low (IEEE 802.11an HT20 Mode / Band 2A / Chain 0)

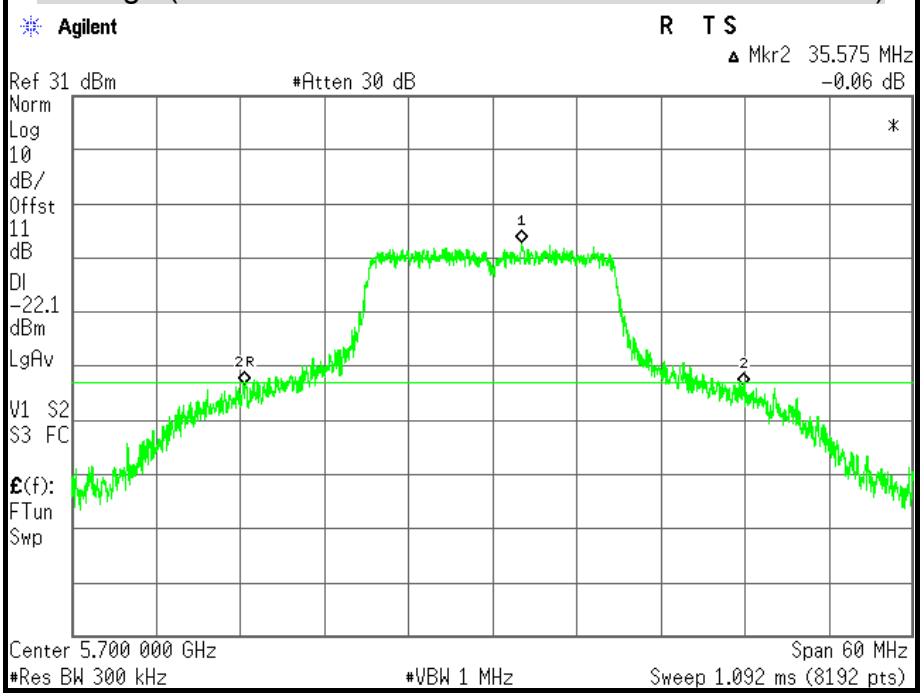


CH Middle (IEEE 802.11an HT20 Mode / Band 2A / Chain 0)



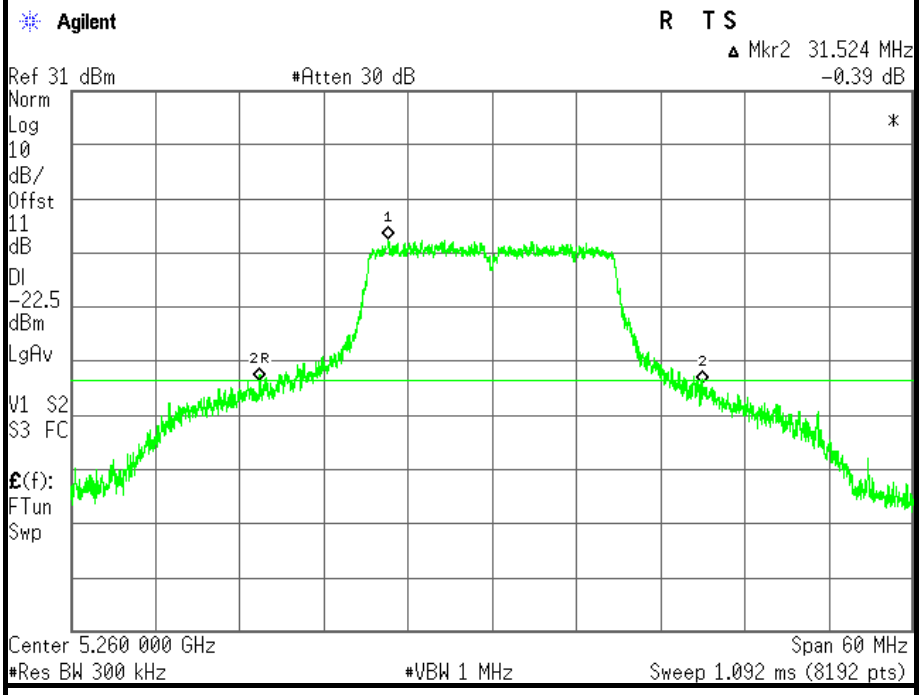
This report shall not be reproduced, except in full, without the written approval of Compliance Certification Services Inc.

CH High (IEEE 802.11an HT20 Mode / Band 2A / Chain 0)

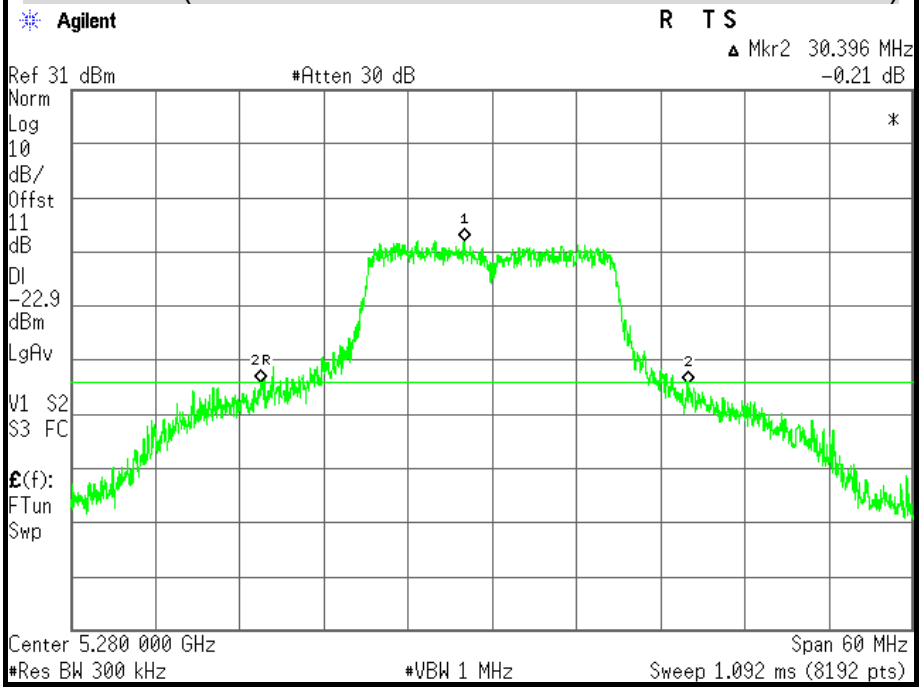


This report shall not be reproduced, except in full, without the written approval of Compliance Certification Services Inc.

CH Low (IEEE 802.11an HT20 Mode / Band 2A / Chain 1)

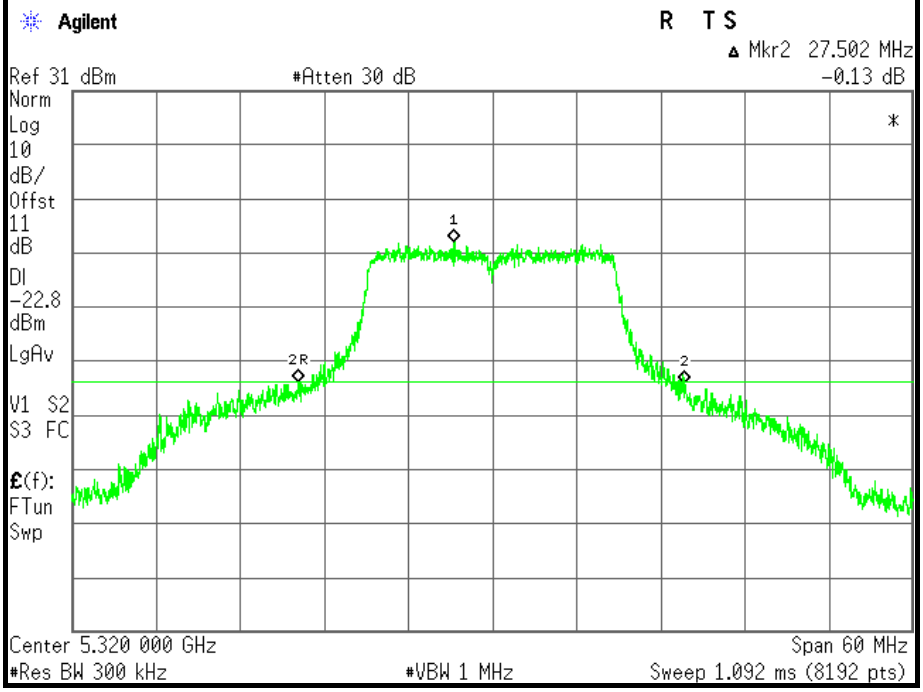


CH Middle (IEEE 802.11an HT20 Mode / Band 2A / Chain 1)



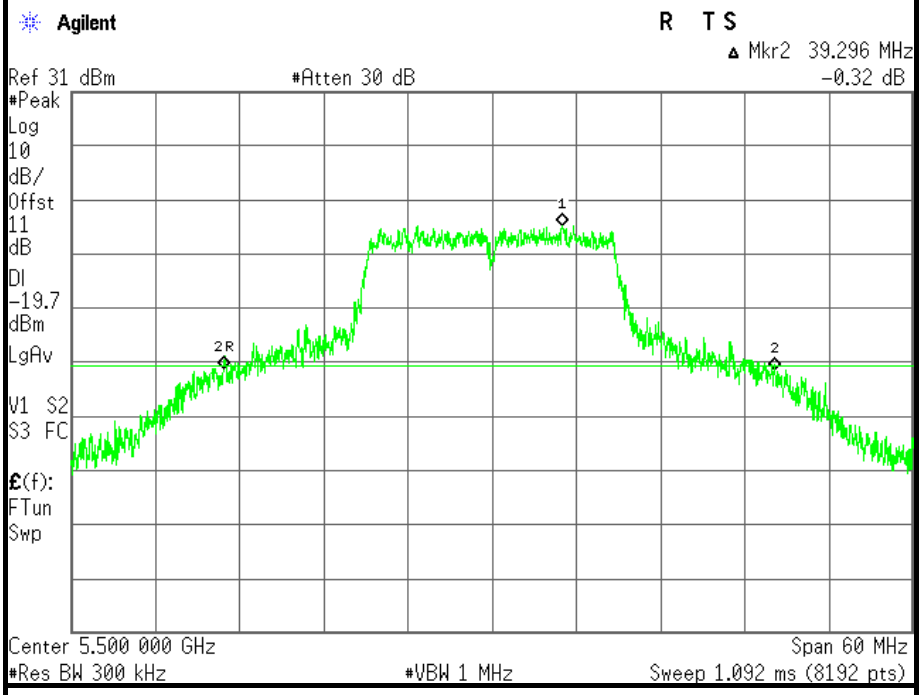
This report shall not be reproduced, except in full, without the written approval of Compliance Certification Services Inc.

CH High (IEEE 802.11an HT20 Mode / Band 2A / Chain 1)

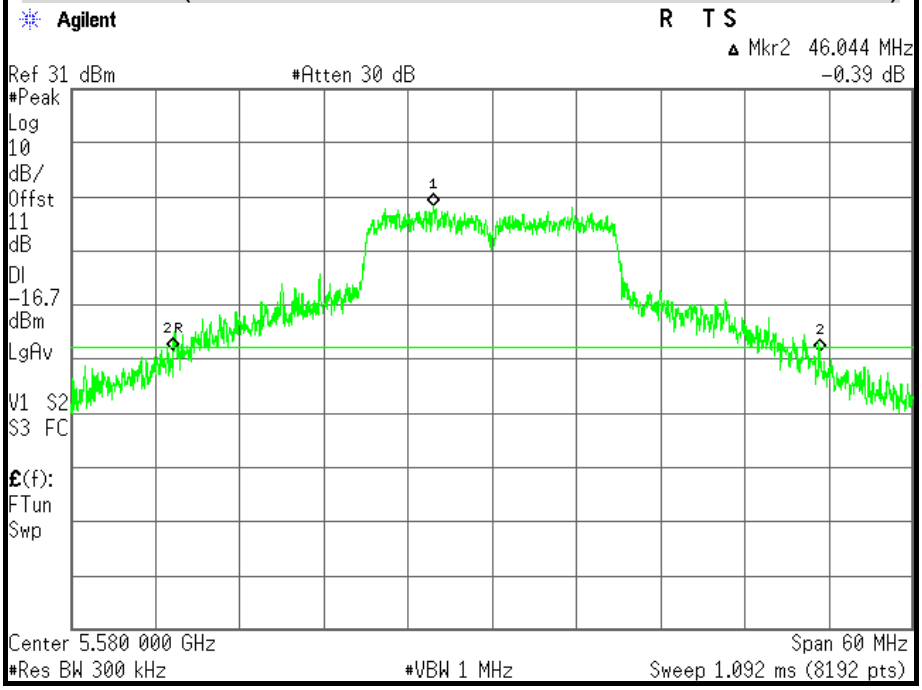


This report shall not be reproduced, except in full, without the written approval of Compliance Certification Services Inc.

CH Low (IEEE 802.11an HT20 Mode / Band 2C / Chain 0)

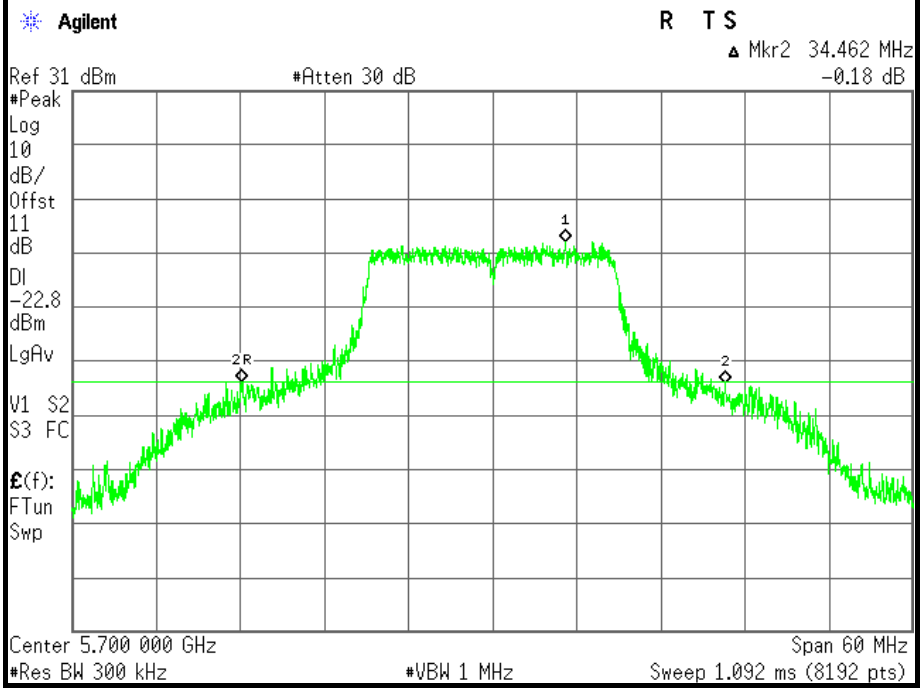


CH Middle (IEEE 802.11an HT20 Mode / Band 2C / Chain 0)



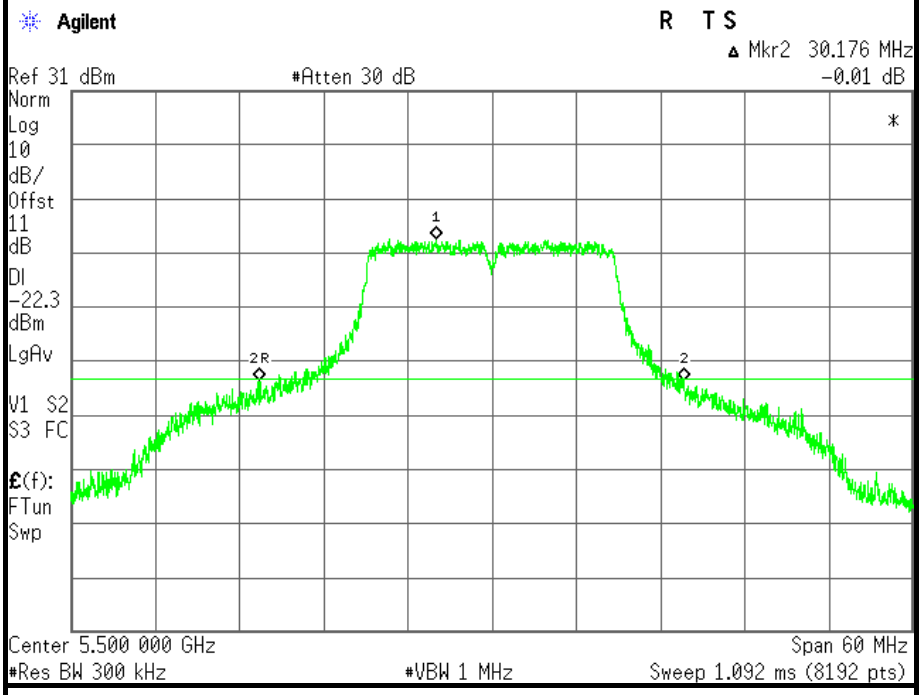
This report shall not be reproduced, except in full, without the written approval of Compliance Certification Services Inc.

CH High (IEEE 802.11an HT20 Mode / Band 2C / Chain 0)

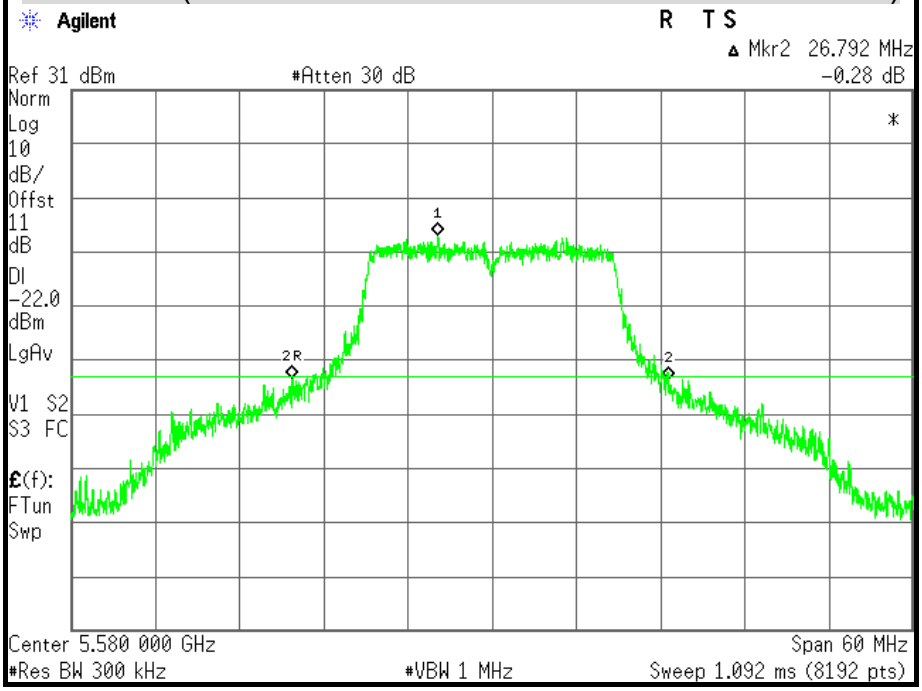


This report shall not be reproduced, except in full, without the written approval of Compliance Certification Services Inc.

CH Low (IEEE 802.11an HT20 Mode / Band 2C / Chain 1)

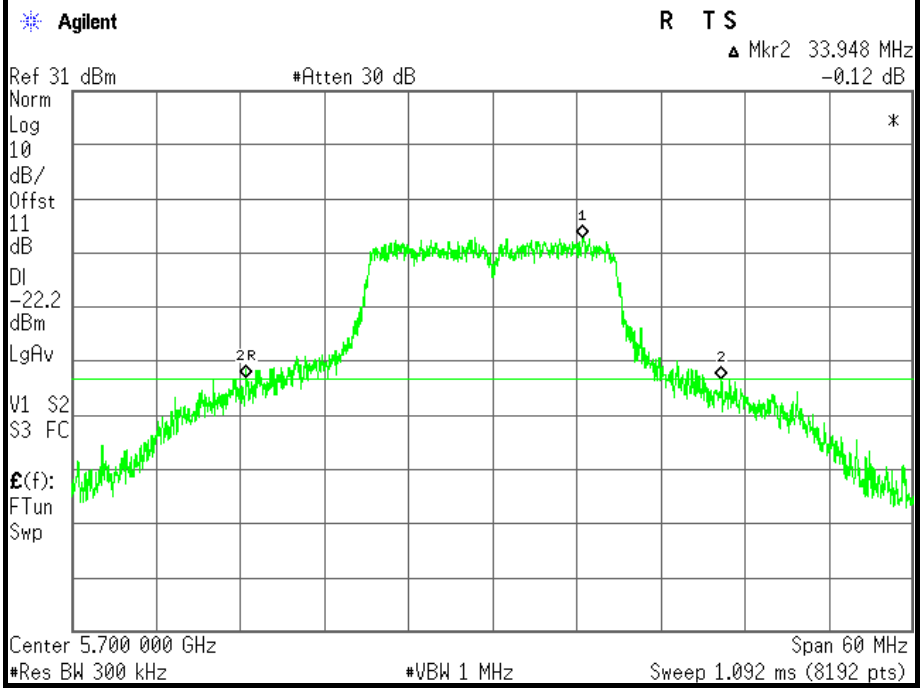


CH Middle (IEEE 802.11an HT20 Mode / Band 2C / Chain 1)



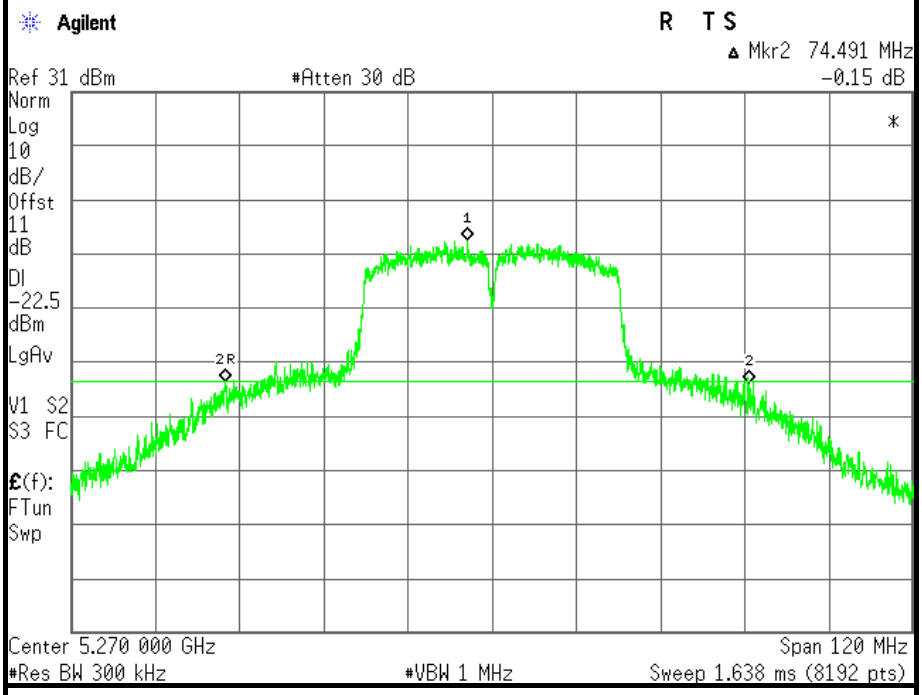
This report shall not be reproduced, except in full, without the written approval of Compliance Certification Services Inc.

CH High (IEEE 802.11an HT20 Mode / Band 2C / Chain 1)

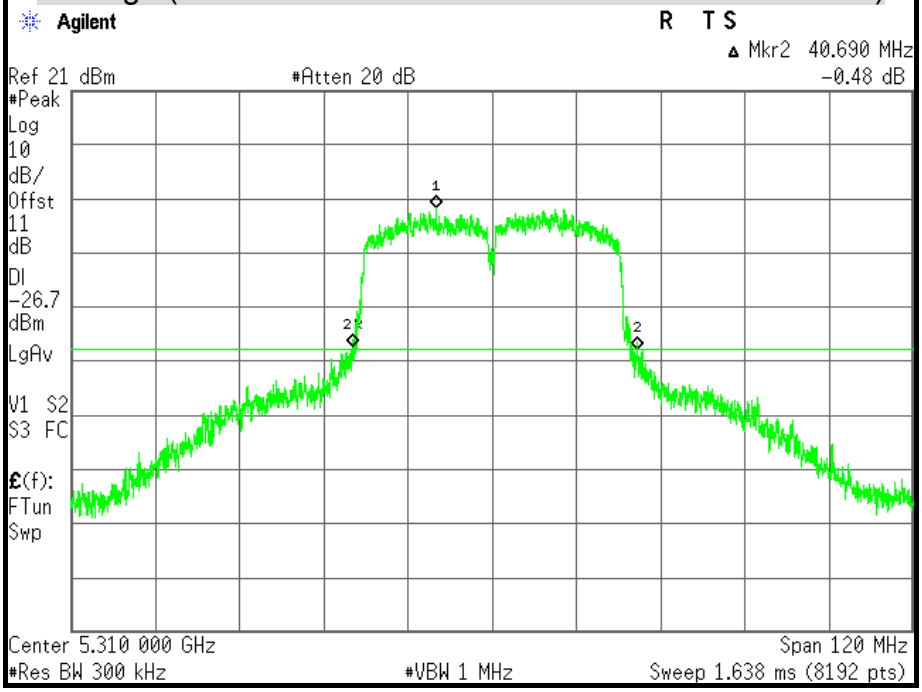


This report shall not be reproduced, except in full, without the written approval of Compliance Certification Services Inc.

CH Low (IEEE 802.11an HT40 Mode / Band 2A / Chain 0)

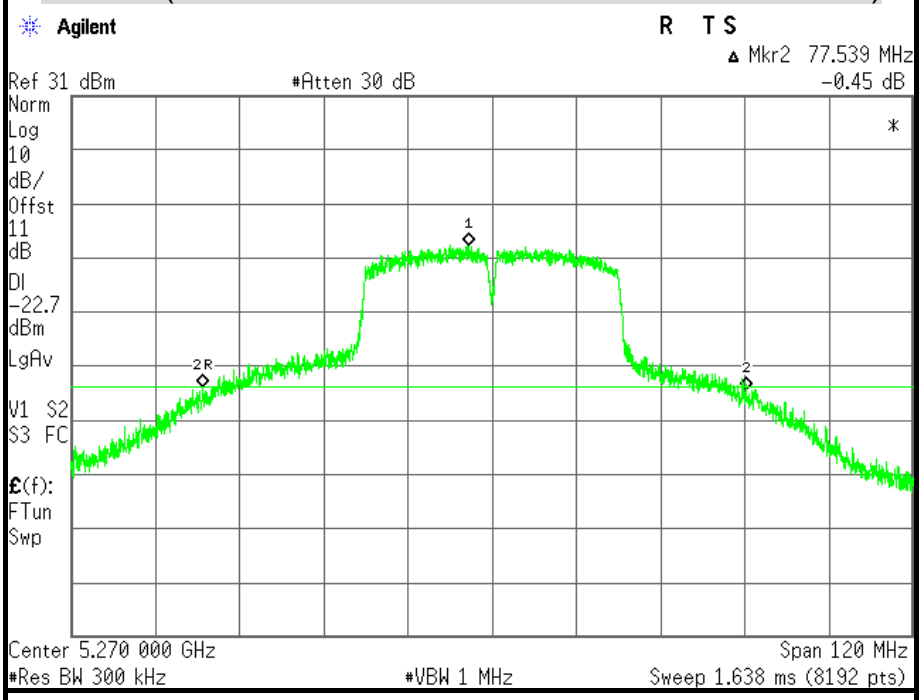


CH High (IEEE 802.11an HT40 Mode / Band 2A / Chain 0)

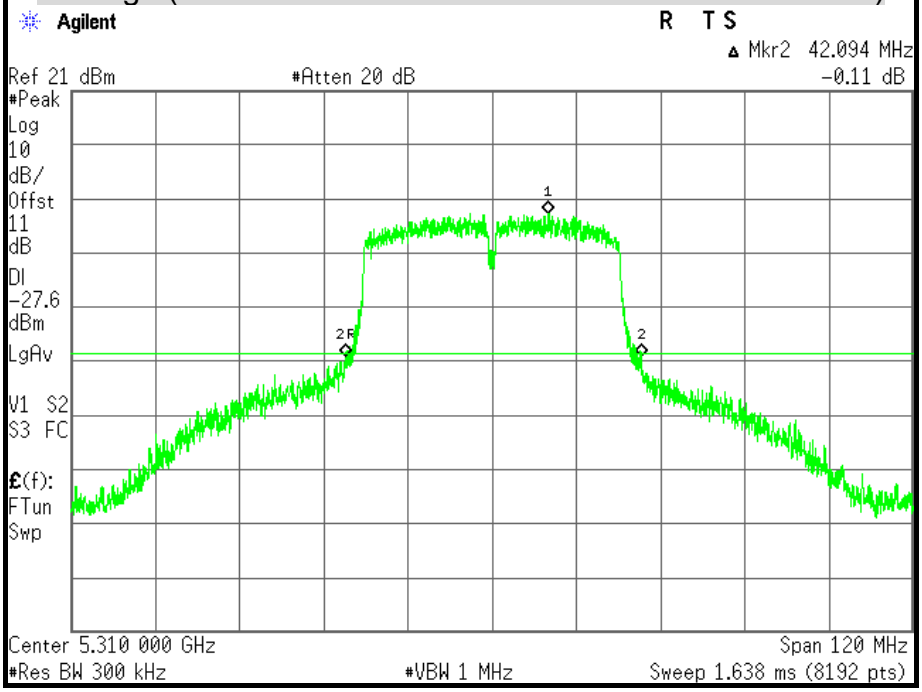


This report shall not be reproduced, except in full, without the written approval of Compliance Certification Services Inc.

CH Low (IEEE 802.11an HT40 Mode / Band 2A / Chain 1)

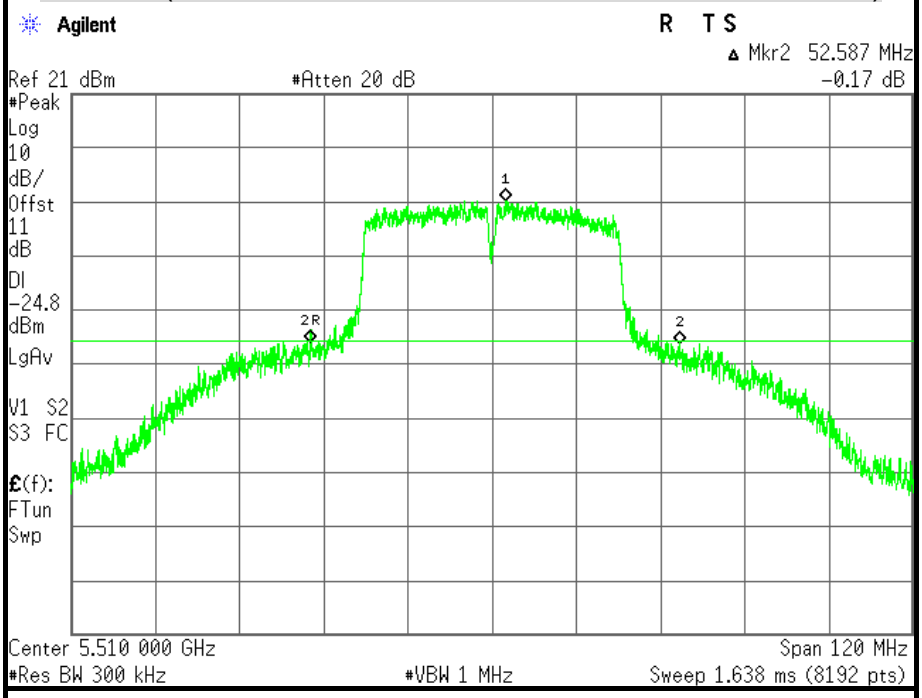


CH High (IEEE 802.11an HT40 Mode / Band 2A / Chain 1)

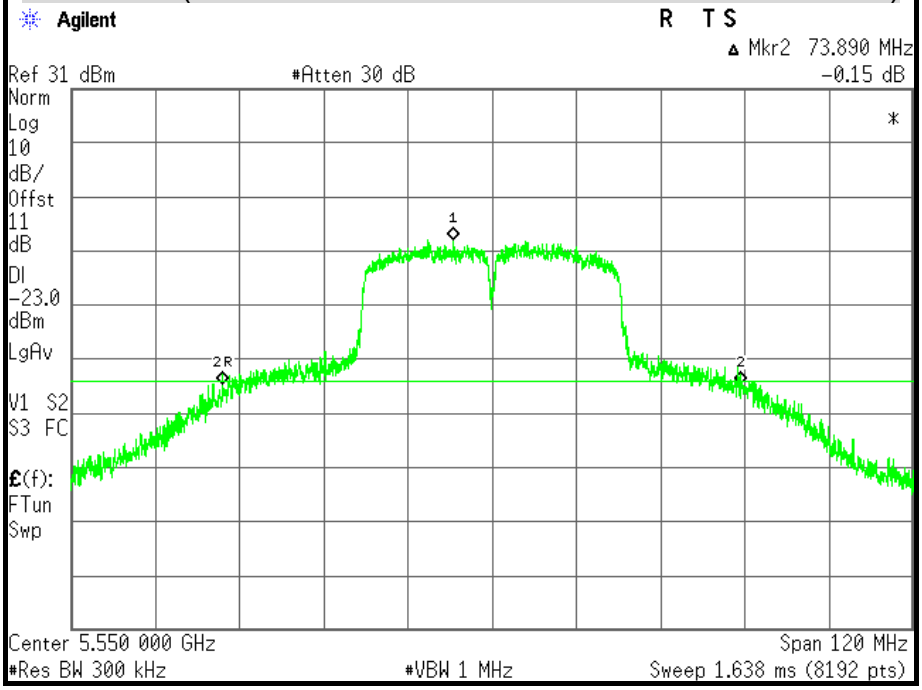


This report shall not be reproduced, except in full, without the written approval of Compliance Certification Services Inc.

CH Low (IEEE 802.11an HT40 Mode / Band 2C / Chain 0)

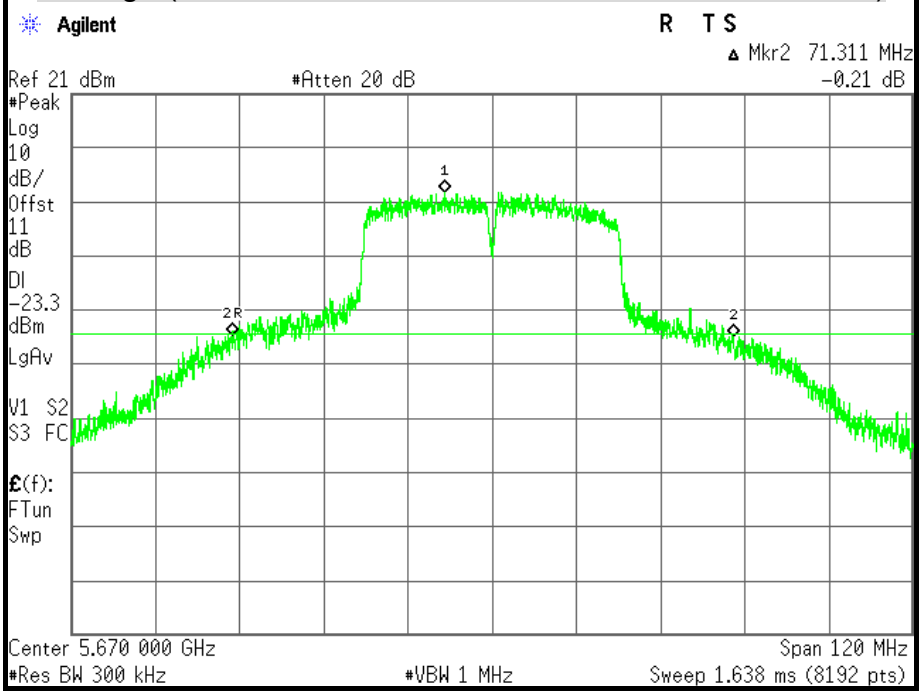


CH Middle (IEEE 802.11an HT40 Mode / Band 2C / Chain 0)



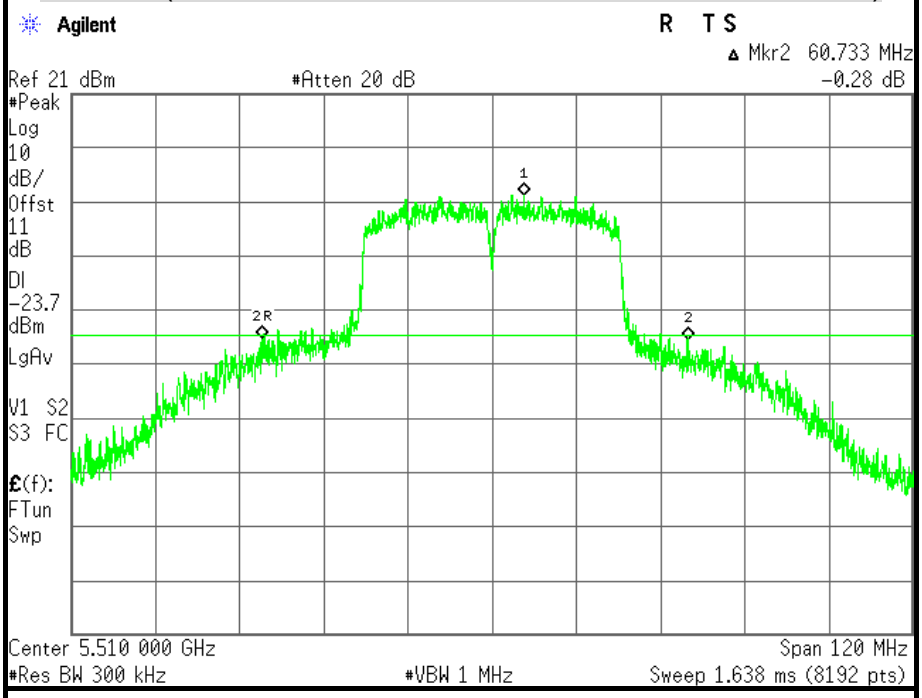
This report shall not be reproduced, except in full, without the written approval of Compliance Certification Services Inc.

CH High (IEEE 802.11an HT40 Mode / Band 2C / Chain 0)

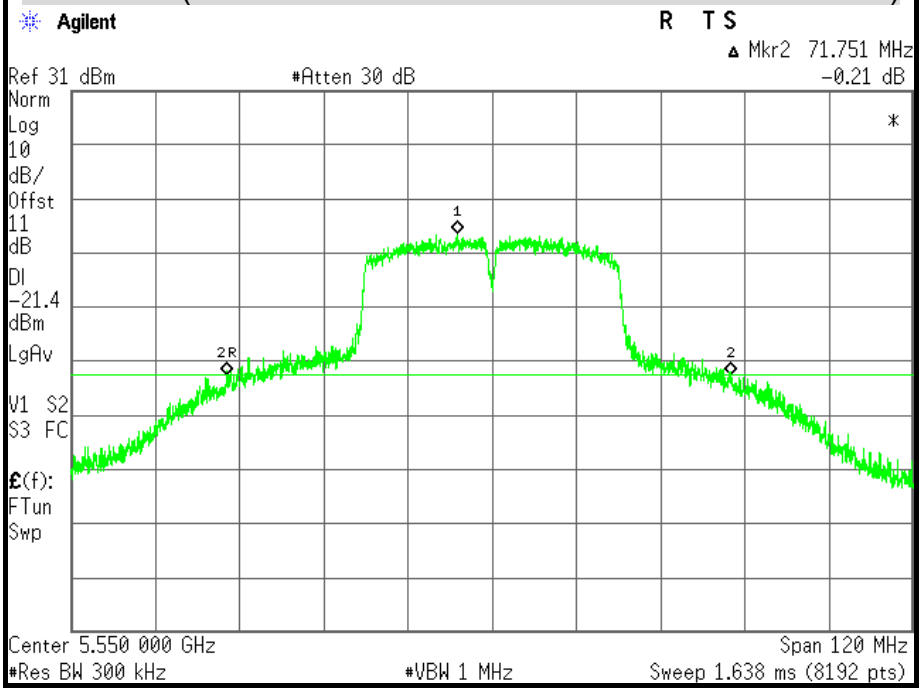


This report shall not be reproduced, except in full, without the written approval of Compliance Certification Services Inc.

CH Low (IEEE 802.11an HT40 Mode / Band 2C / Chain 1)

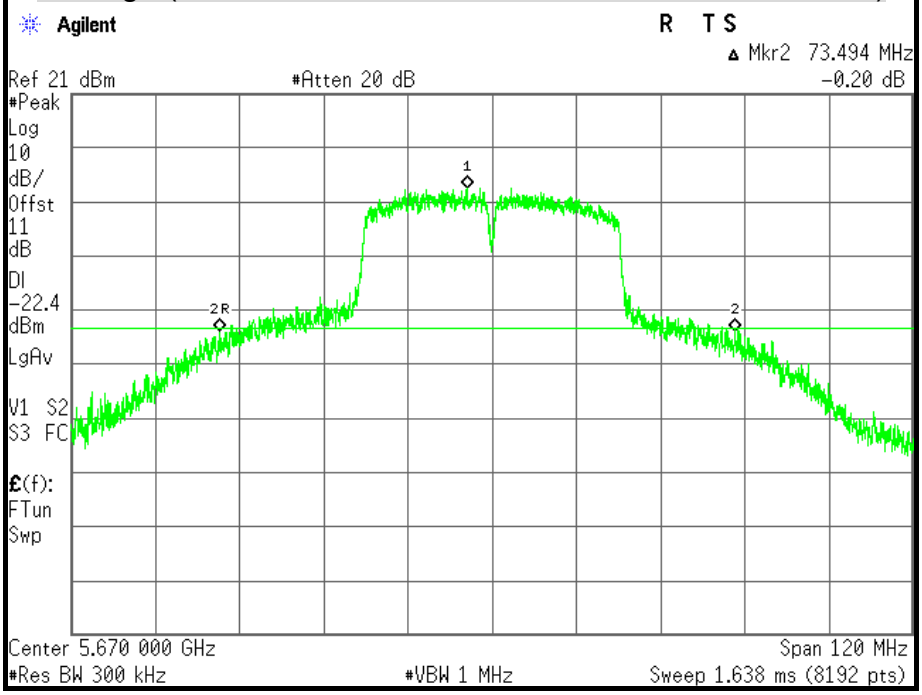


CH Middle (IEEE 802.11an HT40 Mode / Band 2C / Chain 1)



This report shall not be reproduced, except in full, without the written approval of Compliance Certification Services Inc.

CH High (IEEE 802.11an HT40 Mode / Band 2C / Chain 1)



This report shall not be reproduced, except in full, without the written approval of Compliance Certification Services Inc.

7.2 6dB BANDWIDTH

LIMITS

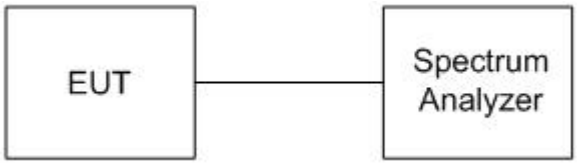
According to§ 15.407 (e), within the 5.725-5.85 GHz band, the minimum 6 dB bandwidth of U-NII devices shall be at least 500 kHz.

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.
4. Mark the peak frequency and –6dB (upper and lower) frequency.
5. Repeat until all the rest channels are investigated.

This report shall not be reproduced, except in full, without the written approval of Compliance Certification Services Inc.

TEST RESULTS

IEEE 802.11a Mode (Two TX)

U-NII	Channel	Channel Frequency (MHz)	6dB Bandwidth (MHz)	
			Chain 0	Chain 1
Band 3	Low	5745	16.35	16.35
	Middle	5785	16.27	16.30
	High	5825	16.41	16.31

IEEE 802.11an HT20 Mode (Two TX)

U-NII	Channel	Channel Frequency (MHz)	6dB Bandwidth (MHz)	
			Chain 0	Chain 1
Band 3	Low	5745	17.61	17.57
	Middle	5785	17.64	17.58
	High	5825	17.59	17.58

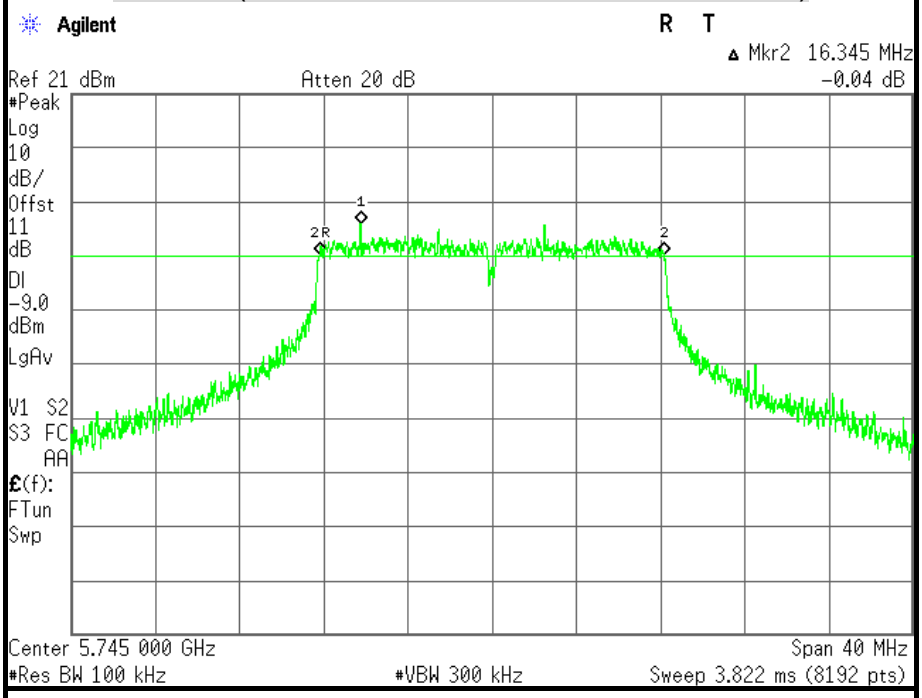
IEEE 802.11an HT40 Mode (Two TX)

U-NII	Channel	Channel Frequency (MHz)	6dB Bandwidth (MHz)	
			Chain 0	Chain 1
Band 3	Low	5755	34.18	35.02
	High	5795	32.84	33.84

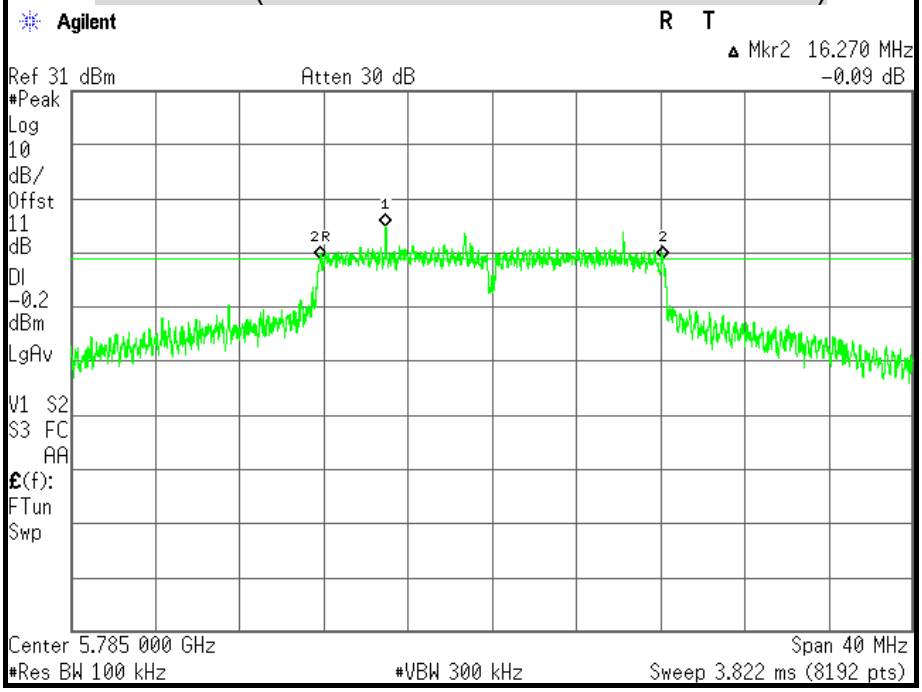
This report shall not be reproduced, except in full, without the written approval of Compliance Certification Services Inc.

6dB BANDWIDTH

CH Low (IEEE 802.11a Mode / Band 3 / Chain 0)

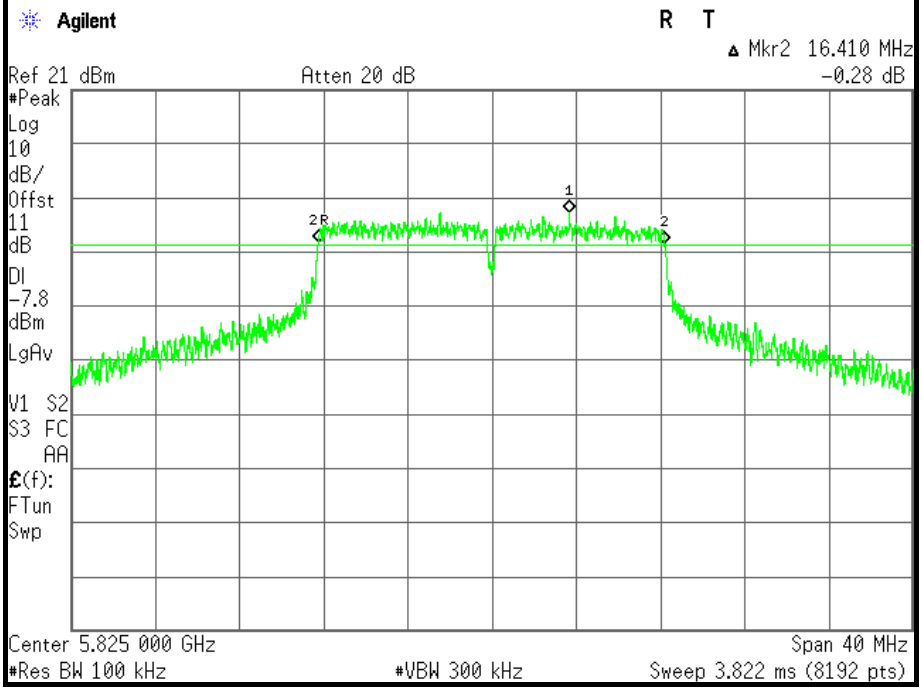


CH Middle (IEEE 802.11a Mode / Band 3 / Chain 0)



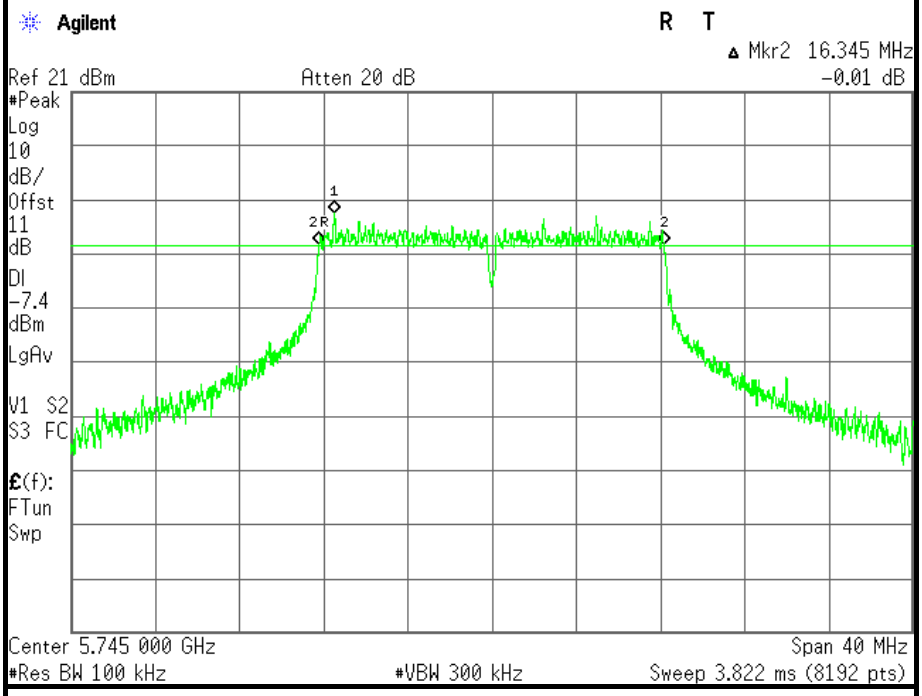
This report shall not be reproduced, except in full, without the written approval of Compliance Certification Services Inc.

CH High (IEEE 802.11a Mode / Band 3 / Chain 0)

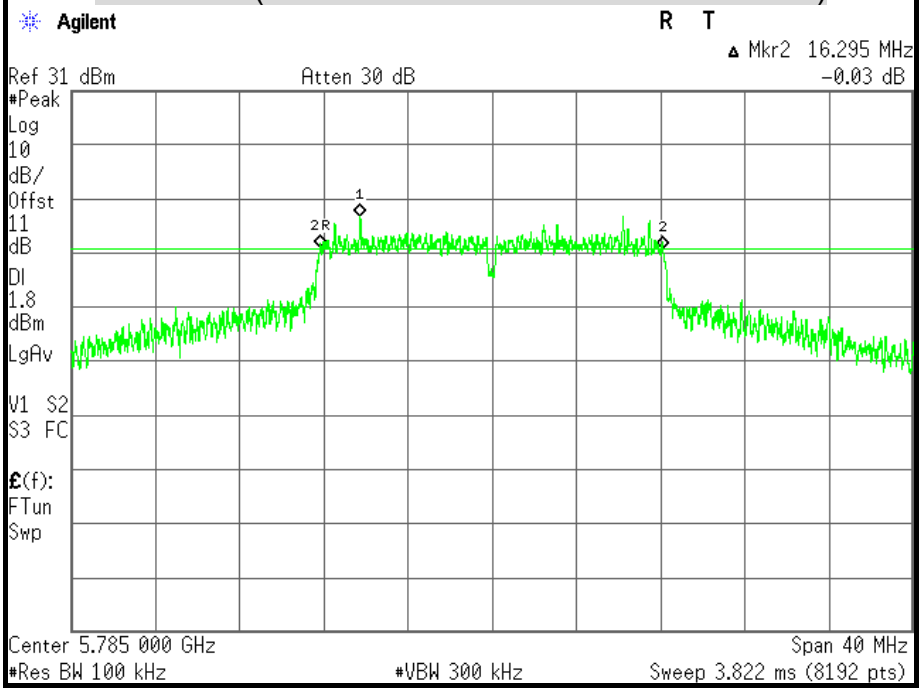


This report shall not be reproduced, except in full, without the written approval of Compliance Certification Services Inc.

CH Low (IEEE 802.11a Mode / Band 3 / Chain 1)

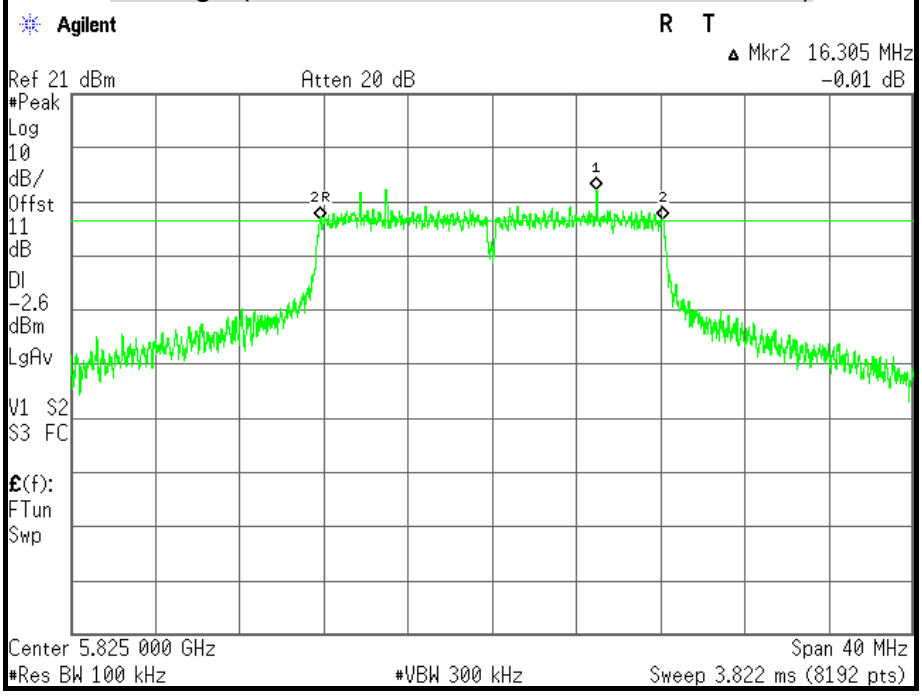


CH Middle (IEEE 802.11a Mode / Band 3 / Chain 1)



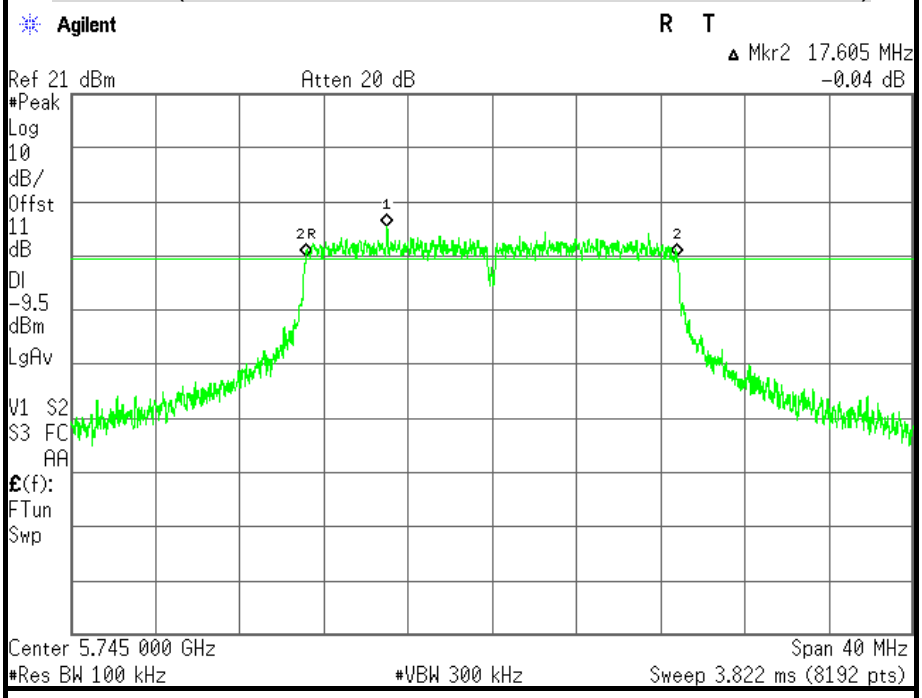
This report shall not be reproduced, except in full, without the written approval of Compliance Certification Services Inc.

CH High (IEEE 802.11a Mode / Band 3 / Chain 1)

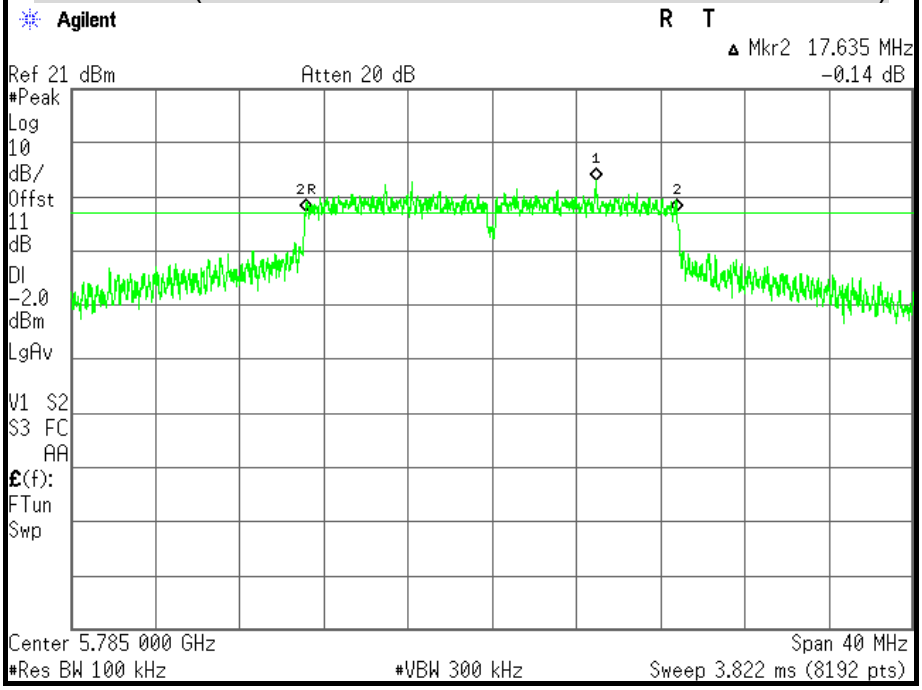


This report shall not be reproduced, except in full, without the written approval of Compliance Certification Services Inc.

CH Low (IEEE 802.11an HT20 Mode / Band 3 / Chain 0)

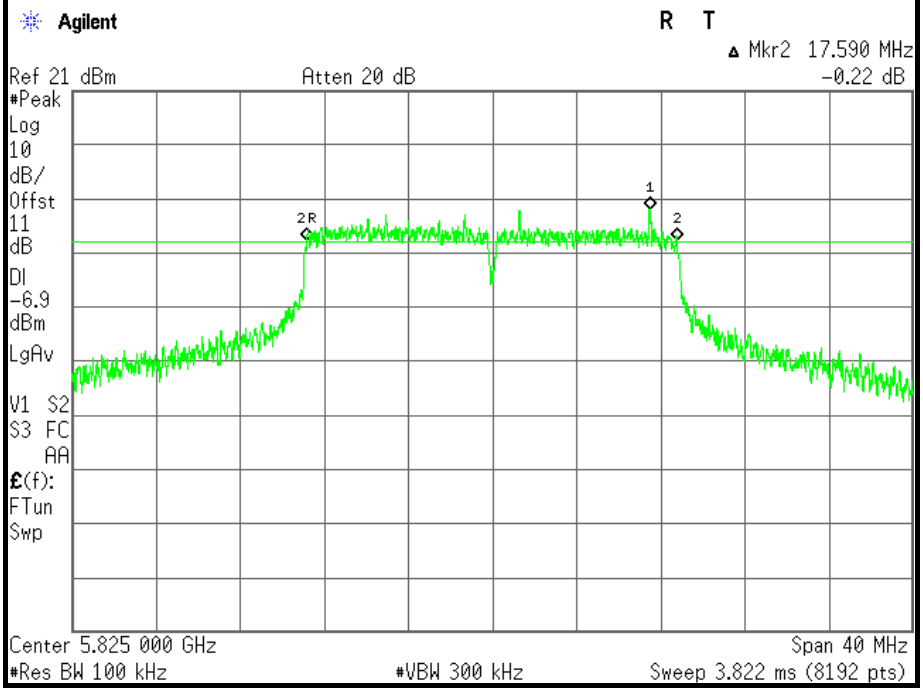


CH Middle (IEEE 802.11an HT20 Mode / Band 3 / Chain 0)



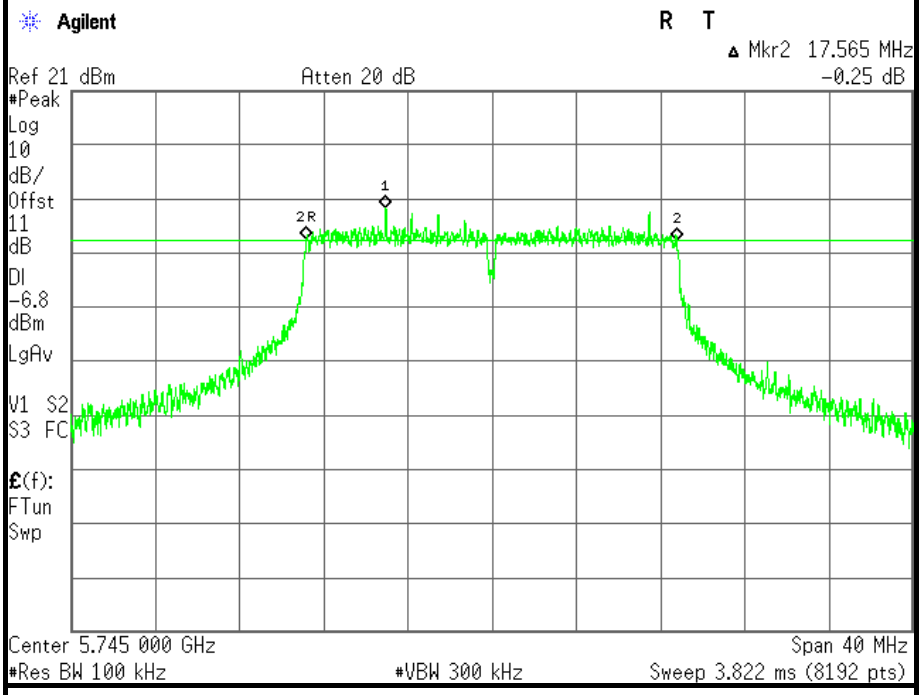
This report shall not be reproduced, except in full, without the written approval of Compliance Certification Services Inc.

CH High (IEEE 802.11an HT20 Mode / Band 3 / Chain 0)

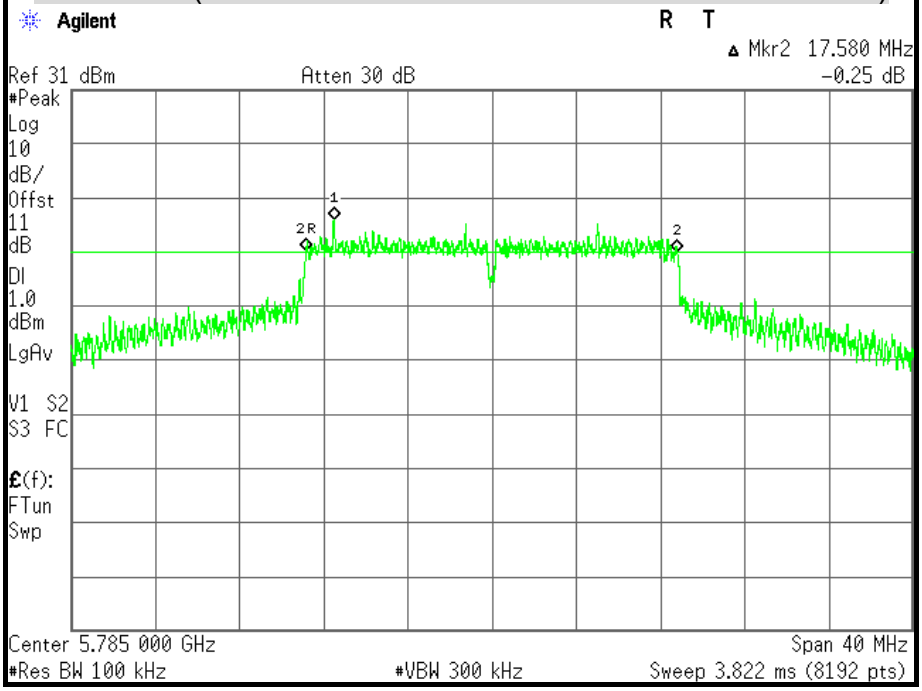


This report shall not be reproduced, except in full, without the written approval of Compliance Certification Services Inc.

CH Low (IEEE 802.11an HT20 Mode / Band 3 / Chain 1)

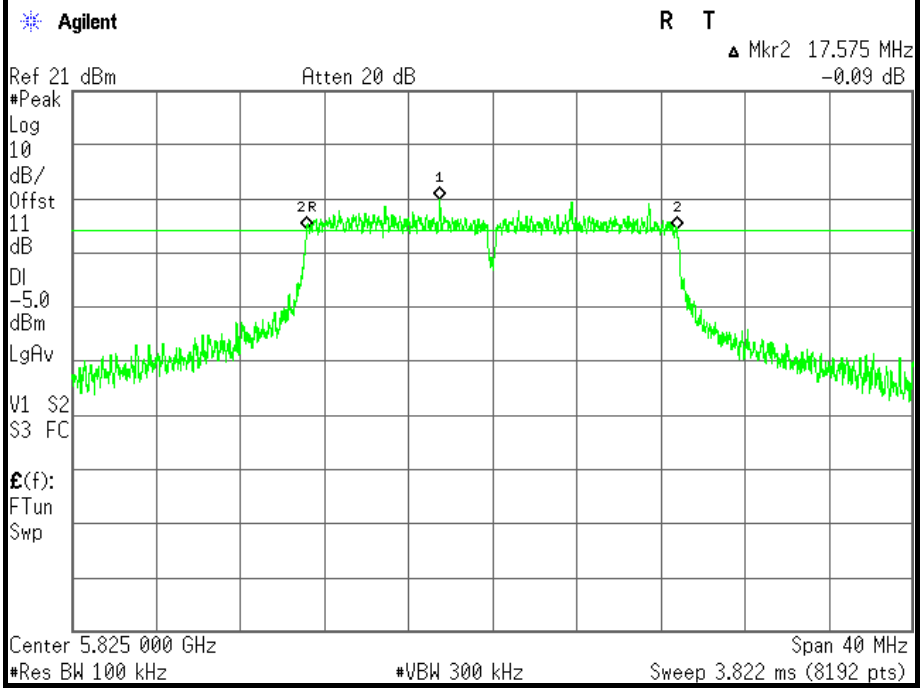


CH Middle (IEEE 802.11an HT20 Mode / Band 3 / Chain 1)



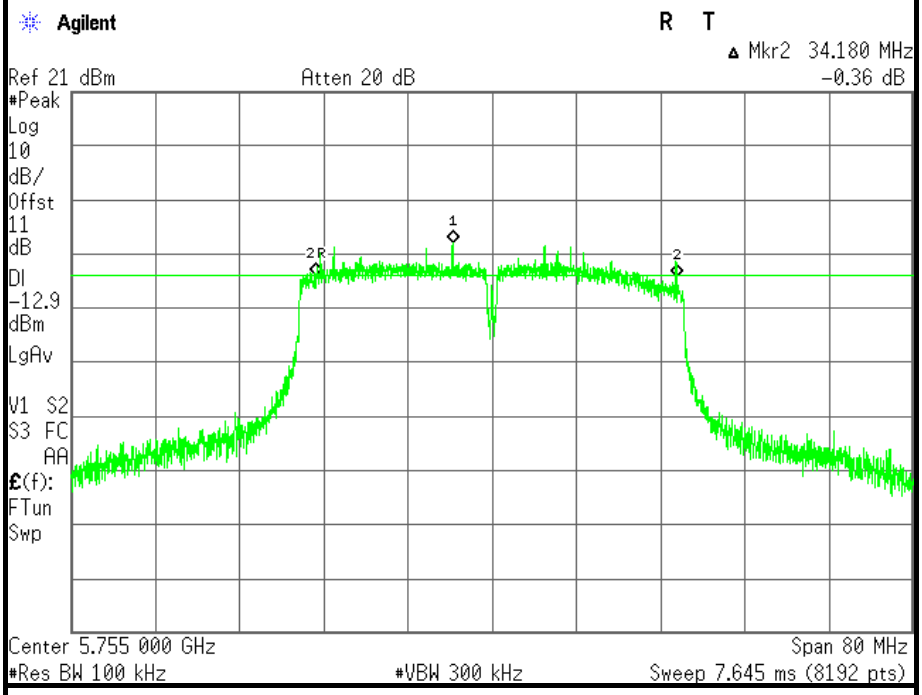
This report shall not be reproduced, except in full, without the written approval of Compliance Certification Services Inc.

CH High (IEEE 802.11an HT20 Mode / Band 3 / Chain 1)

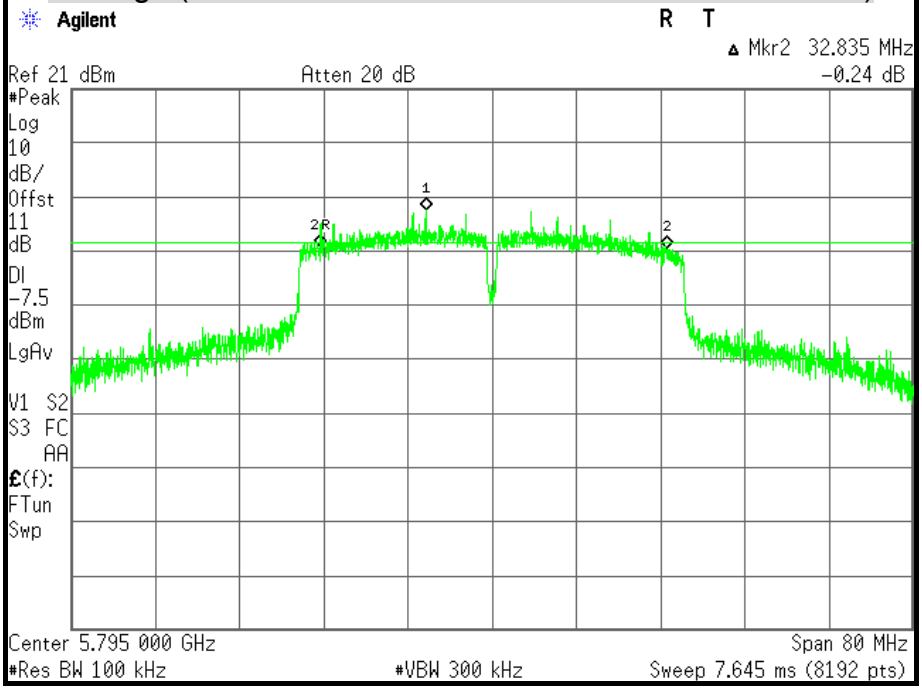


This report shall not be reproduced, except in full, without the written approval of Compliance Certification Services Inc.

CH Low (IEEE 802.11an HT40 Mode / Band 3 / Chain 0)

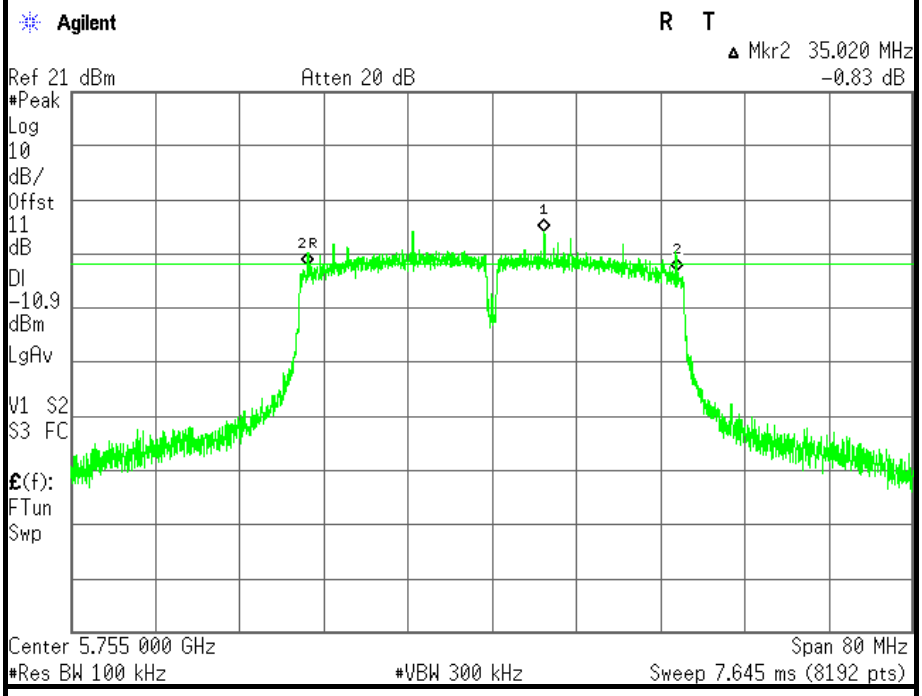


CH High (IEEE 802.11an HT40 Mode / Band 3 / Chain 0)

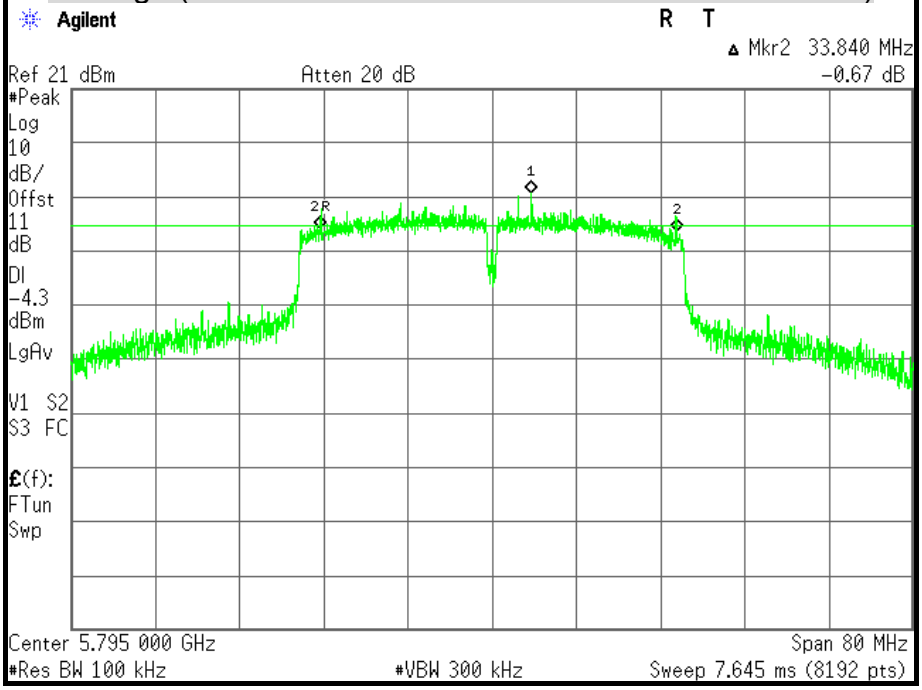


This report shall not be reproduced, except in full, without the written approval of Compliance Certification Services Inc.

CH Low (IEEE 802.11an HT40 Mode / Band 3 / Chain 1)



CH High (IEEE 802.11an HT40 Mode / Band 3 / Chain 1)



This report shall not be reproduced, except in full, without the written approval of Compliance Certification Services Inc.

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.

This report shall not be reproduced, except in full, without the written approval of Compliance Certification Services Inc.

(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.

§ KDB 662911 : For power measurements on IEEE 802.11 devices

Array Gain = 0 dB (i.e., no array gain) for $N_{ANT} \leq 4$;

Array Gain = 0 dB (i.e., no array gain) for channel widths ≥ 40 MHz for any N_{ANT} ;

Array Gain = 5 log(N_{ANT}/N_{SS}) dB or 3 dB, whichever is less for 20-MHz channel widths with $N_{ANT} \geq 5$.

This report shall not be reproduced, except in full, without the written approval of Compliance Certification Services Inc.

TEST EQUIPMENT

Name of Equipment	Manufacturer	Model	Serial Number	Calibration Due
Power Meter	ANRITSU	ML2495A	1149001	12/11/2015
Power Sensor	ANRITSU	MA2411B	1126148	12/11/2015

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.

This report shall not be reproduced, except in full, without the written approval of Compliance Certification Services Inc.

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 (dBm)
		Chain 0	Chain 1	Chain 0	Chain 1	Chain 0	Chain 1	
Low	5260	25.22	25.79	14.01676	14.11401	25.01676	25.11401	24
Middle	5280	29.50	27.85	14.69748	14.44888	25.69748	25.44888	24
High	5320	27.64	29.61	14.41554	14.71468	25.41554	25.71468	24

IEEE 802.11a 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 (dBm)
		Chain 0	Chain 1	Chain 0	Chain 1	Chain 0	Chain 1	
Low	5500	29.90	27.72	14.75628	14.42715	25.75628	25.42715	24
Middle	5580	30.02	25.47	14.77440	14.06063	25.77440	25.06063	24
High	5700	33.80	30.19	15.28852	14.79863	26.28852	25.79863	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 (dBm)
		Chain 0	Chain 1	Chain 0	Chain 1	Chain 0	Chain 1	
Low	5260	26.40	31.52	14.21538	14.98641	25.21538	25.98641	24
Middle	5280	28.67	30.40	14.57488	14.82816	25.57488	25.82816	24
High	5320	35.58	27.50	15.51145	14.39364	26.51145	25.39364	24

This report shall not be reproduced, except in full, without the written approval of Compliance Certification Services Inc.

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 (dBm)
		Chain 0	Chain 1	Chain 0	Chain 1	Chain 0	Chain 1	
Low	5500	39.30	30.18	15.94348	14.79662	26.94348	25.79662	24
Middle	5580	46.04	26.79	16.63173	14.28005	27.63173	25.28005	24
High	5700	34.46	33.95	15.37340	15.30814	26.37340	26.30814	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 (dBm)
		Chain 0	Chain 1	Chain 0	Chain 1	Chain 0	Chain 1	
Low	5270	74.49	77.54	18.72104	18.89520	29.72104	29.89520	24
High	5310	40.69	42.09	16.09488	16.24220	27.09488	27.24220	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 (dBm)
		Chain 0	Chain 1	Chain 0	Chain 1	Chain 0	Chain 1	
Low	5510	52.59	60.73	17.20878	17.83425	28.20878	28.83425	24
Middle	5550	73.89	71.75	18.68586	18.55828	29.68586	29.55828	24
High	5670	71.31	73.49	18.53157	18.66252	29.53157	29.66252	24

This report shall not be reproduced, except in full, without the written approval of Compliance Certification Services Inc.

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

Channel	Channel Frequency (MHz)	Power (dBm)		Power Total		Power Limit		Pass / Fail
		Chain 0	Chain 1	(dBm)	(W)	(dBm)	(W)	
Low	5180	13.86	13.68	16.78	0.0476	20.84	0.1213	PASS
Middle	5220	13.37	13.57	16.48	0.0445	20.84	0.1213	PASS
High	5240	13.78	13.82	16.81	0.0480	20.84	0.1213	PASS

Remark:

1. *At finial test to get the worst-case emission at 6Mbps.*
2. *The cable assembly insertion loss of 11dB (including 10 dB pad and 1dB cable) was Entered as an offset in the power meter to allow for direct reading of power.*
3. *Array gain = 0 dB for $N_{ANT} \leq 4$, power limit do not reduce.*
4. *The Directional gain = G_{ANT} + Array Gain = 9.16dBi which is more than 6dBi, the limit should be 0.1213W.*
4. *Total power = Chain 0 + Chain 1.*

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

Channel	Channel Frequency (MHz)	Power (dBm)		Power Total		Power Limit		Pass / Fail
		Chain 0	Chain 1	(dBm)	(W)	(dBm)	(W)	
Low	5180	12.64	14.14	16.46	0.0443	20.84	0.1213	PASS
Middle	5220	13.63	13.52	16.59	0.0456	20.84	0.1213	PASS
High	5240	13.56	13.74	16.66	0.0463	20.84	0.1213	PASS

Remark:

1. *At finial test to get the worst-case emission at 6.5Mbps.*
2. *The cable assembly insertion loss of 11dB (including 10 dB pad and 1dB cable) was Entered as an offset in the power meter to allow for direct reading of power.*
3. *Array gain = 0 dB for $N_{ANT} \leq 4$, power limit do not reduce.*
4. *The Directional gain = G_{ANT} + Array Gain = 9.16dBi which is more than 6dBi, the limit should be 0.1213W.*
5. *Total power = Chain 0 + Chain 1.*

This report shall not be reproduced, except in full, without the written approval of Compliance Certification Services Inc.

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

Channel	Channel Frequency (MHz)	Power (dBm)		Power Total		Power Limit		Pass / Fail
		Chain 0	Chain 1	(dBm)	(W)	(dBm)	(W)	
Low	5190	10.54	12.29	14.51	0.0282	20.84	0.1213	PASS
High	5230	14.34	14.85	17.61	0.0577	20.84	0.1213	PASS

Remark:

1. *At finial test to get the worst-case emission at 13.5Mbps.*
2. *The cable assembly insertion loss of 11dB (including 10 dB pad and 1dB cable) was Entered as an offset in the power meter to allow for direct reading of power.*
3. *Array gain = 0 dB for $N_{ANT} \leq 4$, power limit do not reduce.*
4. *The Directional gain = G_{ANT} + Array Gain = 9.16dBi which is more than 6dBi, the limit should be 0.1213W.*
5. *Total power = Chain 0 + Chain 1.*

This report shall not be reproduced, except in full, without the written approval of Compliance Certification Services Inc.

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

Channel	Channel Frequency (MHz)	Power (dBm)		Power Total		Power Limit		Pass / Fail
		Chain 0	Chain 1	(dBm)	(W)	(dBm)	(W)	
Low	5260	13.72	12.86	16.32	0.0429	20.84	0.1213	PASS
Middle	5280	13.16	12.68	15.94	0.0393	20.84	0.1213	PASS
High	5320	12.78	12.86	15.83	0.0383	20.84	0.1213	PASS

Remark:

1. *At finial test to get the worst-case emission at 6Mbps.*
2. *The cable assembly insertion loss of 11dB (including 10 dB pad and 1dB cable) was Entered as an offset in the power meter to allow for direct reading of power.*
3. *Array gain = 0 dB for $N_{ANT} \leq 4$, power limit do not reduce.*
4. *The Directional gain = G_{ANT} + Array Gain = 9.16dBi which is more than 6dBi, the limit should be 0.1213W.*
5. *Total power = Chain 0 + Chain 1.*

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

Channel	Channel Frequency (MHz)	Power (dBm)		Power Total		Power Limit		Pass / Fail
		Chain 0	Chain 1	(dBm)	(W)	(dBm)	(W)	
Low	5260	13.51	13.06	16.30	0.0427	20.84	0.1213	PASS
Middle	5280	13.69	13.13	16.43	0.0440	20.84	0.1213	PASS
High	5320	14.04	12.53	16.36	0.0433	20.84	0.1213	PASS

Remark:

1. *At finial test to get the worst-case emission at 6.5Mbps.*
2. *The cable assembly insertion loss of 11dB (including 10 dB pad and 1dB cable) was Entered as an offset in the power meter to allow for direct reading of power.*
3. *Array gain = 0 dB for $N_{ANT} \leq 4$, power limit do not reduce.*
4. *The Directional gain = G_{ANT} + Array Gain = 9.16dBi which is more than 6dBi, the limit should be 0.1213W.*
5. *Total power = Chain 0 + Chain 1.*

This report shall not be reproduced, except in full, without the written approval of Compliance Certification Services Inc.

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

Channel	Channel Frequency (MHz)	Power (dBm)		Power Total		Power Limit		Pass / Fail
		Chain 0	Chain 1	(dBm)	(W)	(dBm)	(W)	
Low	5270	14.39	14.07	17.24	0.0530	20.84	0.1213	PASS
High	5310	11.31	11.38	14.36	0.0273	20.84	0.1213	PASS

Remark:

1. *At finial test to get the worst-case emission at 13.5Mbps.*
2. *The cable assembly insertion loss of 11dB (including 10 dB pad and 1dB cable) was Entered as an offset in the power meter to allow for direct reading of power.*
3. *Array gain = 0 dB for $N_{ANT} \leq 4$, power limit do not reduce.*
4. *The Directional gain = G_{ANT} + Array Gain = 9.16dBi which is more than 6dBi, the limit should be 0.1213W.*
5. *Total power = Chain 0 + Chain 1.*

This report shall not be reproduced, except in full, without the written approval of Compliance Certification Services Inc.

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

Channel	Channel Frequency (MHz)	Power (dBm)		Power Total		Power Limit		Pass / Fail
		Chain 0	Chain 1	(dBm)	(W)	(dBm)	(W)	
Low	5500	12.74	13.57	16.19	0.0416	20.84	0.1213	PASS
Middle	5580	13.14	13.43	16.30	0.0427	20.84	0.1213	PASS
High	5700	12.67	13.35	16.03	0.0401	20.84	0.1213	PASS

Remark:

1. *At finial test to get the worst-case emission at 6Mbps.*
2. *The cable assembly insertion loss of 11dB (including 10 dB pad and 1dB cable) was Entered as an offset in the power meter to allow for direct reading of power.*
3. *Array gain = 0 dB for $N_{ANT} \leq 4$, power limit do not reduce.*
4. *The Directional gain = G_{ANT} + Array Gain = 9.16dBi which is more than 6dBi, the limit should be 0.1213W.*
5. *Total power = Chain 0 + Chain 1.*

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

Channel	Channel Frequency (MHz)	Power (dBm)		Power Total		Power Limit		Pass / Fail
		Chain 0	Chain 1	(dBm)	(W)	(dBm)	(W)	
Low	5500	12.74	13.58	16.19	0.0416	20.84	0.1213	PASS
Middle	5580	12.58	13.23	15.93	0.0392	20.84	0.1213	PASS
High	5700	13.46	14.16	16.83	0.0482	20.84	0.1213	PASS

Remark:

1. *At finial test to get the worst-case emission at 6.5Mbps.*
2. *The cable assembly insertion loss of 11dB (including 10 dB pad and 1dB cable) was Entered as an offset in the power meter to allow for direct reading of power.*
3. *Array gain = 0 dB for $N_{ANT} \leq 4$, power limit do not reduce.*
4. *The Directional gain = G_{ANT} + Array Gain = 9.16dBi which is more than 6dBi, the limit should be 0.1213W.*
5. *Total power = Chain 0 + Chain 1.*

This report shall not be reproduced, except in full, without the written approval of Compliance Certification Services Inc.

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

Channel	Channel Frequency (MHz)	Power (dBm)		Power Total		Power Limit		Pass / Fail
		Chain 0	Chain 1	(dBm)	(W)	(dBm)	(W)	
Low	5510	14.08	14.97	17.56	0.0570	20.84	0.1213	PASS
Middle	5550	14.46	14.93	17.71	0.0590	20.84	0.1213	PASS
High	5670	13.58	14.47	17.06	0.0508	20.84	0.1213	PASS

Remark:

1. *At finial test to get the worst-case emission at 13.5Mbps.*
2. *The cable assembly insertion loss of 11dB (including 10 dB pad and 1dB cable) was Entered as an offset in the power meter to allow for direct reading of power.*
3. *Array gain = 0 dB for $N_{ANT} \leq 4$, power limit do not reduce.*
4. *The Directional gain = G_{ANT} + Array Gain = 9.16dBi which is more than 6dBi, the limit should be 0.1213W.*
5. *Total power = Chain 0 + Chain 1.*

This report shall not be reproduced, except in full, without the written approval of Compliance Certification Services Inc.

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

Channel	Channel Frequency (MHz)	Power (dBm)		Power Total		Power Limit		Pass / Fail
		Chain 0	Chain 1	(dBm)	(W)	(dBm)	(W)	
Low	5745	10.24	10.82	13.55	0.0226	26.84	0.4831	PASS
Middle	5785	18.68	19.27	22.00	0.1585	26.84	0.4831	PASS
High	5825	14.07	14.97	17.55	0.0569	26.84	0.4831	PASS

Remark:

1. *At finial test to get the worst-case emission at 6Mbps.*
2. *The cable assembly insertion loss of 11dB (including 10 dB pad and 1dB cable) was Entered as an offset in the power meter to allow for direct reading of power.*
3. *Array gain = 0 dB for $N_{ANT} \leq 4$, power limit do not reduce.*
4. *The Directional gain = G_{ANT} + Array Gain = 9.16dBi which is more than 6dBi, the limit should be 0.4831W.*
5. *Total power = Chain 0 + Chain 1.*

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

Channel	Channel Frequency (MHz)	Power (dBm)		Power Total		Power Limit		Pass / Fail
		Chain 0	Chain 1	(dBm)	(W)	(dBm)	(W)	
Low	5745	10.06	11.35	13.76	0.0238	26.84	0.4831	PASS
Middle	5785	16.94	19.79	21.61	0.1449	26.84	0.4831	PASS
High	5825	12.09	13.28	15.74	0.0375	26.84	0.4831	PASS

Remark:

1. *At finial test to get the worst-case emission at 6.5Mbps.*
2. *The cable assembly insertion loss of 11dB (including 10 dB pad and 1dB cable) was Entered as an offset in the power meter to allow for direct reading of power.*
3. *Array gain = 0 dB for $N_{ANT} \leq 4$, power limit do not reduce.*
4. *The Directional gain = G_{ANT} + Array Gain = 9.16dBi which is more than 6dBi, the limit should be 0.4831W.*
5. *Total power = Chain 0 + Chain 1.*

This report shall not be reproduced, except in full, without the written approval of Compliance Certification Services Inc.

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

Channel	Channel Frequency (MHz)	Power (dBm)		Power Total		Power Limit		Pass / Fail
		Chain 0	Chain 1	(dBm)	(W)	(dBm)	(W)	
Low	5755	8.06	9.31	11.74	0.0149	26.84	0.4831	PASS
High	5795	13.07	15.78	17.64	0.0581	26.84	0.4831	PASS

Remark:

1. *At finial test to get the worst-case emission at 13.5Mbps.*
2. *The cable assembly insertion loss of 11dB (including 10 dB pad and 1dB cable) was Entered as an offset in the power meter to allow for direct reading of power.*
3. *Array gain = 0 dB for $N_{ANT} \leq 4$, power limit do not reduce.*
4. *The Directional gain = G_{ANT} + Array Gain = 9.16dBi which is more than 6dBi, the limit should be 0.4831W.*
5. *Total power = Chain 0 + Chain 1.*

This report shall not be reproduced, except in full, without the written approval of Compliance Certification Services Inc.

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.

This report shall not be reproduced, except in full, without the written approval of Compliance Certification Services Inc.

(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

This report shall not be reproduced, except in full, without the written approval of Compliance Certification Services Inc.

1. 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.

This report shall not be reproduced, except in full, without the written approval of Compliance Certification Services Inc.

TEST RESULTS

IEEE 802.11a Mode (Two TX)

U-NII	Channel	Channel Frequency (MHz)	PPSD (dBm)		PSD Total (dBm)	Minimum Limit (dBm/MHz)	Pass / Fail
			Chain 0	Chain 1			
Band 1	Low	5180	1.20	2.04	4.65	4.83	PASS
	Middle	5220	1.27	1.66	4.48	4.83	PASS
	High	5240	1.65	1.63	4.65	4.83	PASS
Band 2A	Low	5260	1.92	1.36	4.66	4.83	PASS
	Middle	5280	1.59	1.51	4.56	4.83	PASS
	High	5320	1.78	1.21	4.51	4.83	PASS
Band 2C	Low	5500	1.73	1.41	4.58	4.83	PASS
	Middle	5580	1.77	1.48	4.64	4.83	PASS
	High	5700	1.52	1.91	4.73	4.83	PASS

Remark:

1. *At finial test to get the worst-case emission at 6Mbps.*
2. *The cable assembly insertion loss of 11 dB (including 10 dB pad and 1 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 12.17 dBi which is more than 6 dBi, the limit should be 4.83 dBm.*
4. *Total power spectral density = Chain 0 + Chain 1.*

This report shall not be reproduced, except in full, without the written approval of Compliance Certification Services Inc.

IEEE 802.11an HT20 Mode (Two TX)

U-NII	Channel	Channel Frequency (MHz)	PPSD (dBm)		PSD Total (dBm)	Minimum Limit (dBm)	Pass / Fail
			Chain 0	Chain 1			
Band 1	Low	5180	1.20	2.04	4.65	4.83	PASS
	Middle	5220	1.61	1.36	4.50	4.83	PASS
	High	5240	1.44	1.73	4.60	4.83	PASS
Band 2A	Low	5260	1.86	1.50	4.69	4.83	PASS
	Middle	5280	1.99	1.21	4.63	4.83	PASS
	High	5320	2.37	0.89	4.70	4.83	PASS
Band 2C	Low	5500	1.94	1.63	4.80	4.83	PASS
	Middle	5580	1.59	1.85	4.73	4.83	PASS
	High	5700	1.09	1.49	4.30	4.83	PASS

Remark:

1. *At finial test to get the worst-case emission at 6.5Mbps.*
2. *The cable assembly insertion loss of 11 dB (including 10 dB pad and 1 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 12.17 dBi which is more than 6 dBi, the limit should be 4.83 dBm.*
4. *Total power spectral density = Chain 0 + Chain 1.*

This report shall not be reproduced, except in full, without the written approval of Compliance Certification Services Inc.

IEEE 802.11n HT40 Mode (Two TX)

U-NII	Channel	Channel Frequency (MHz)	PPSD (dBm)		PSD Total (dBm)	Minimum Limit (dBm)	Pass / Fail
			Chain 0	Chain 1			
Band 1	Low	5190	-3.23	-2.25	0.30	4.83	PASS
	High	5230	1.50	1.54	4.53	4.83	PASS
Band 2A	Low	5270	1.74	1.56	4.66	4.83	PASS
	High	5310	-3.15	-4.84	-0.90	4.83	PASS
Band 2C	Low	5510	-0.08	-0.25	2.85	4.83	PASS
	Middle	5550	1.39	1.66	4.54	4.83	PASS
	High	5670	0.26	1.13	3.73	4.83	PASS

Remark:

1. *At finial test to get the worst-case emission at 13.5Mbps.*
2. *The cable assembly insertion loss of 11 dB (including 10 dB pad and 1 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 12.17 dBi which is more than 6 dBi, the limit should be 4.83 dBm.*
4. *Total power spectral density = Chain 0 + Chain 1.*

This report shall not be reproduced, except in full, without the written approval of Compliance Certification Services Inc.

IEEE 802.11a Mode (Two TX)

U-NII	Channel	Channel Frequency (MHz)	PPSD (dBm)		PSD Total (dBm)	Minimum Limit (dBm/500kHz)	Pass / Fail
			Chain 0	Chain 1			
Band 3	Low	5745	-4.82	-3.73	-1.23	23.83	PASS
	Middle	5785	2.70	4.31	6.59	23.83	PASS
	High	5825	-1.76	-0.50	1.93	23.83	PASS

Remark:

1. *At finial test to get the worst-case emission at 6Mbps.*
2. *The cable assembly insertion loss of 11 dB (including 10 dB pad and 1 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 12.17 dBi which is more than 6 dBi, the limit should be 23.83 dBm.*
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 (dBm)	Minimum Limit (dBm/500kHz)	Pass / Fail
			Chain 0	Chain 1			
Band 3	Low	5745	-4.93	-4.02	-1.44	23.83	PASS
	Middle	5785	2.19	3.93	6.16	23.83	PASS
	High	5825	-0.90	-0.95	2.09	23.83	PASS

Remark:

1. *At finial test to get the worst-case emission at 6.5Mbps.*
2. *The cable assembly insertion loss of 11 dB (including 10 dB pad and 1 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 12.17 dBi which is more than 6 dBi, the limit should be 23.83 dBm.*
4. *Total power spectral density = Chain 0 + Chain 1.*

This report shall not be reproduced, except in full, without the written approval of Compliance Certification Services Inc.

IEEE 802.11an HT40 Mode (Two TX)

U-NII	Channel	Channel Frequency (MHz)	PPSD (dBm)		PSD Total (dBm)	Minimum Limit (dBm/500kHz)	Pass / Fail
			Chain 0	Chain 1			
Band 3	Low	5755	-9.28	-8.52	-5.87	23.83	PASS
	High	5795	-1.95	-1.77	1.15	23.83	PASS

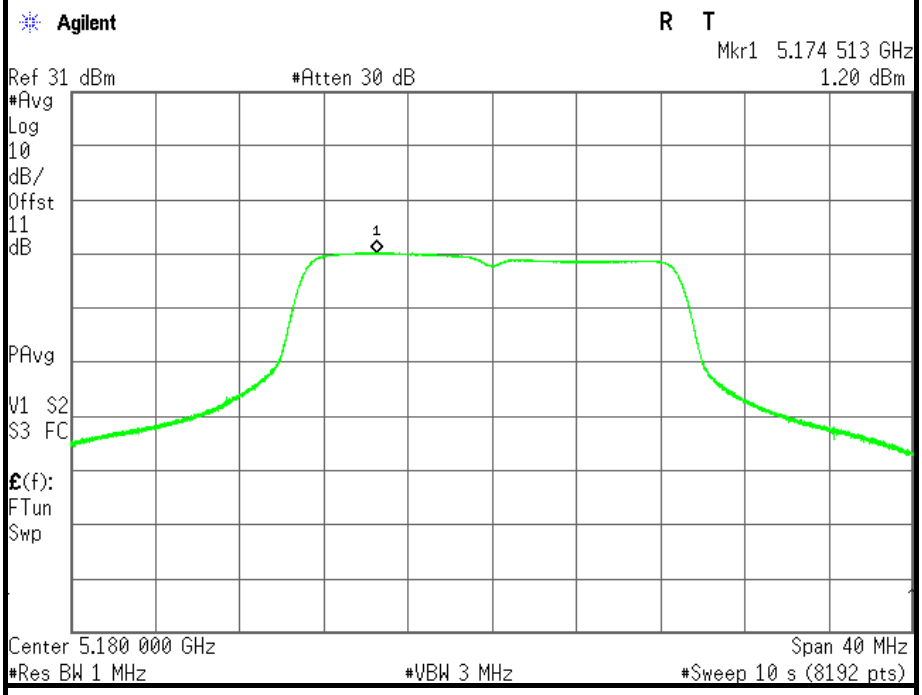
Remark:

1. *At finial test to get the worst-case emission at 13.5Mbps.*
2. *The cable assembly insertion loss of 11 dB (including 10 dB pad and 1 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 12.17 dBi which is more than 6 dBi, the limit should be 23.83 dBm.*
4. *Total power spectral density = Chain 0 + Chain 1.*

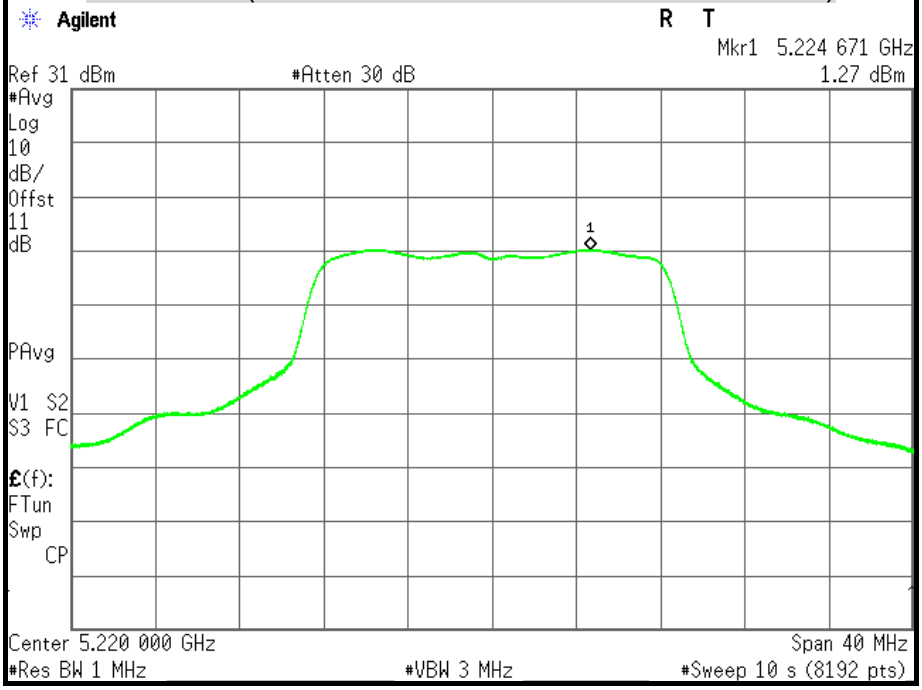
This report shall not be reproduced, except in full, without the written approval of Compliance Certification Services Inc.

POWER SPECTRAL DENSITY

CH Low (IEEE 802.11a Mode / Band 1 / Chain 0)

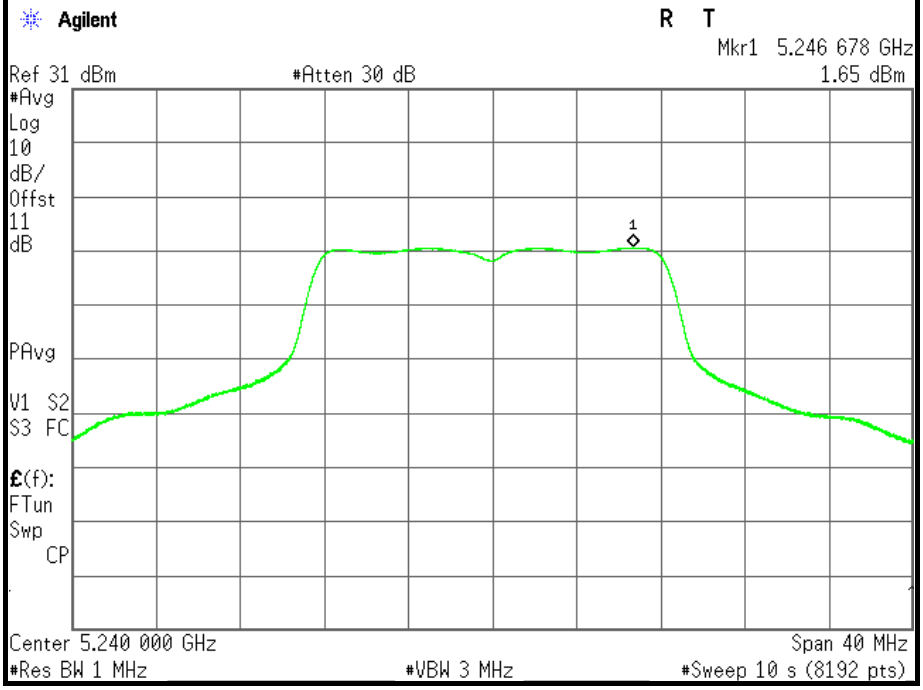


CH Middle (IEEE 802.11a Mode / Band 1 / Chain 0)



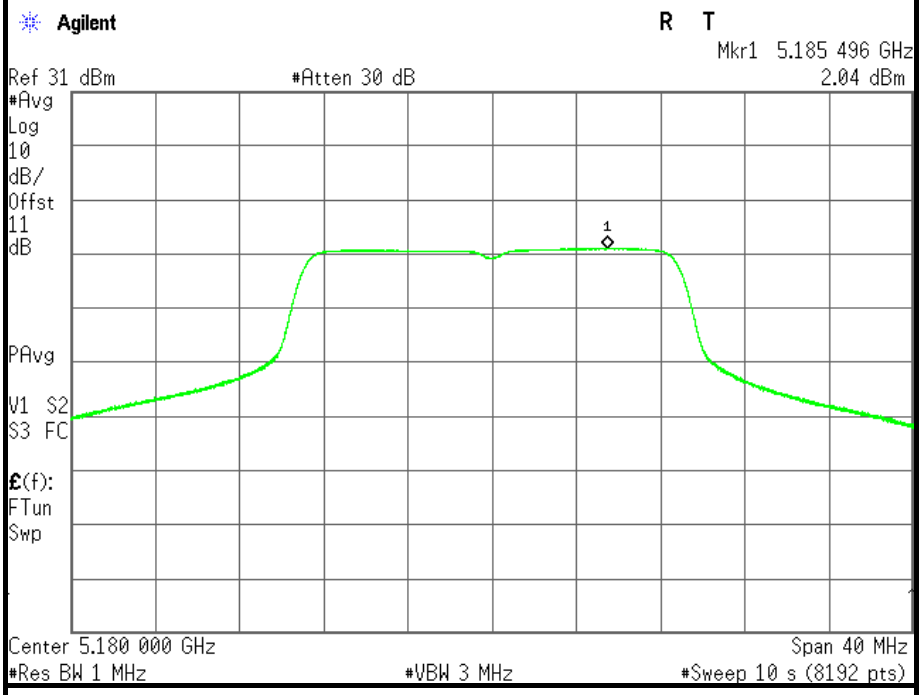
This report shall not be reproduced, except in full, without the written approval of Compliance Certification Services Inc.

CH High (IEEE 802.11a Mode Mode / Band 1 / Chain 0)

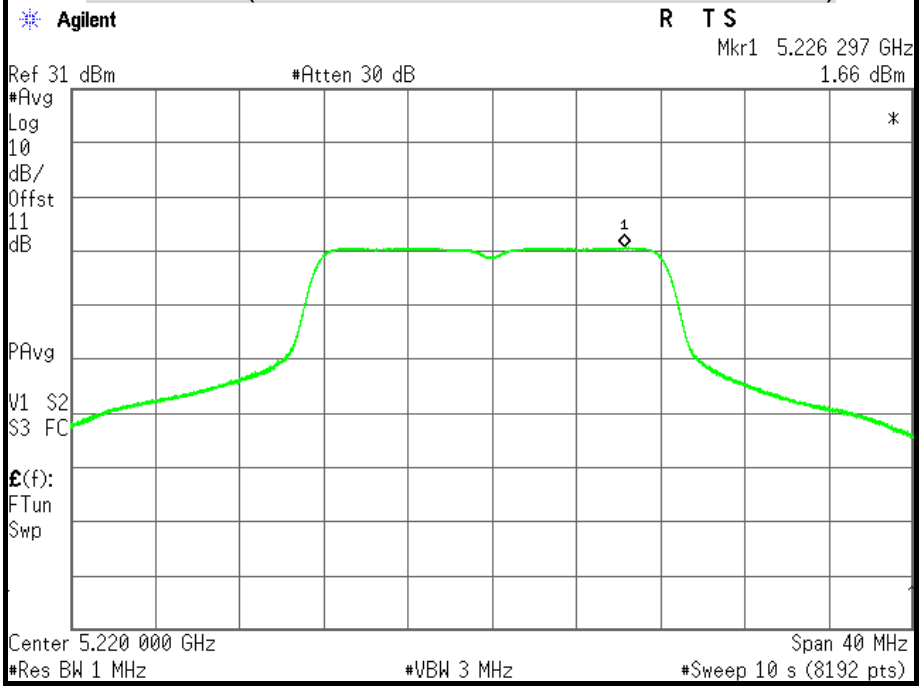


This report shall not be reproduced, except in full, without the written approval of Compliance Certification Services Inc.

CH Low (IEEE 802.11a Mode / Band 1 / Chain 1)

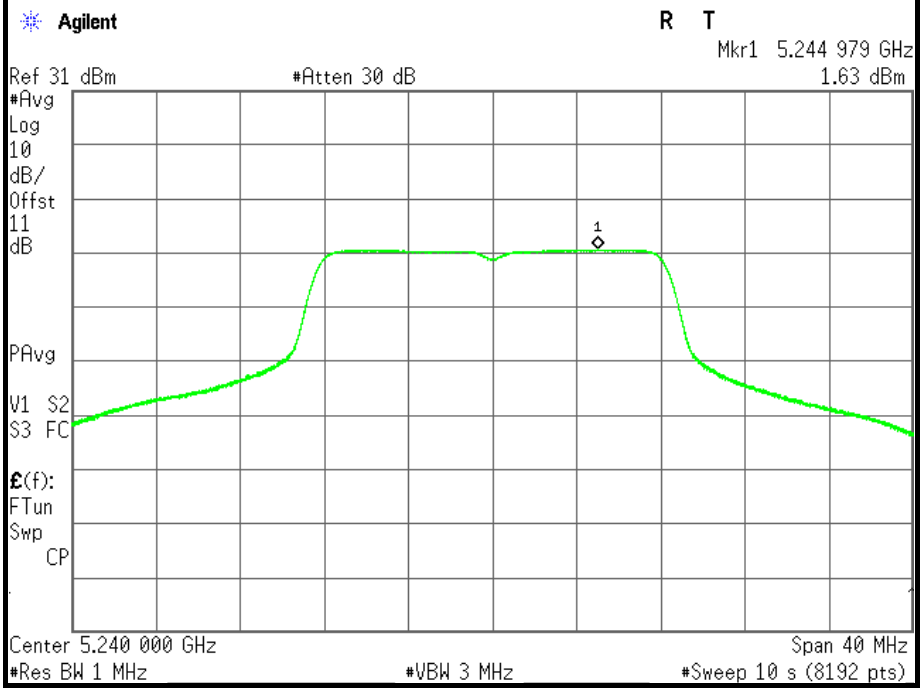


CH Middle (IEEE 802.11a Mode / Band 1 / Chain 1)



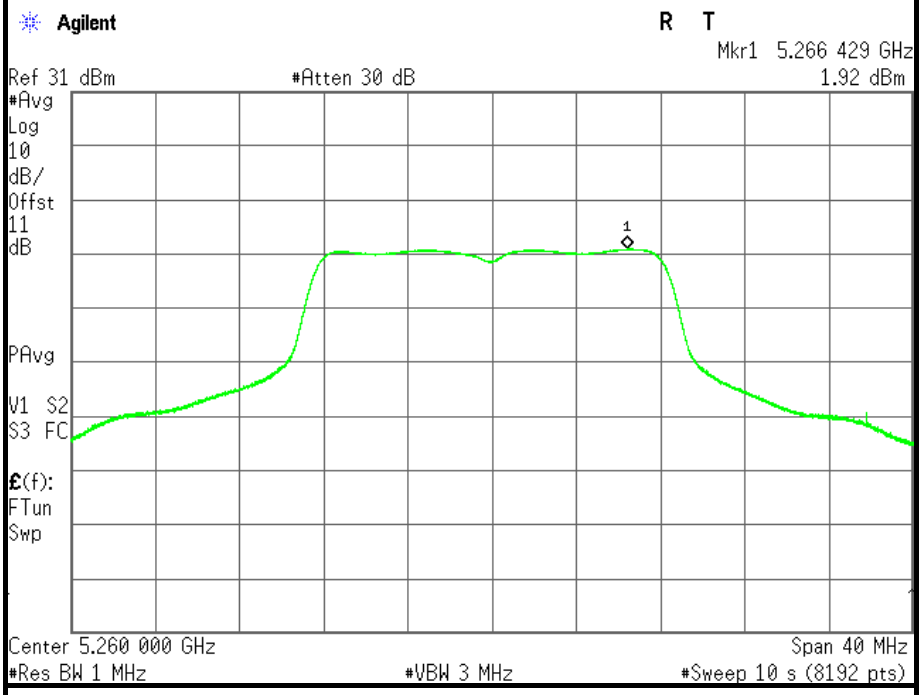
This report shall not be reproduced, except in full, without the written approval of Compliance Certification Services Inc.

CH High (IEEE 802.11a Mode Mode / Band 1 / Chain 1)

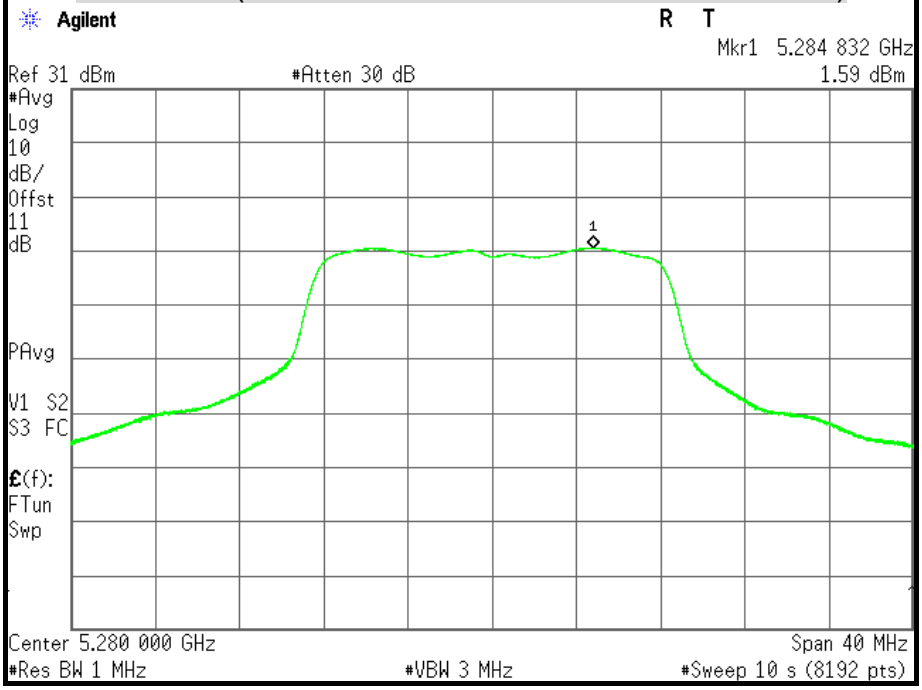


This report shall not be reproduced, except in full, without the written approval of Compliance Certification Services Inc.

CH Low (IEEE 802.11a Mode / Band 2A / Chain 0)

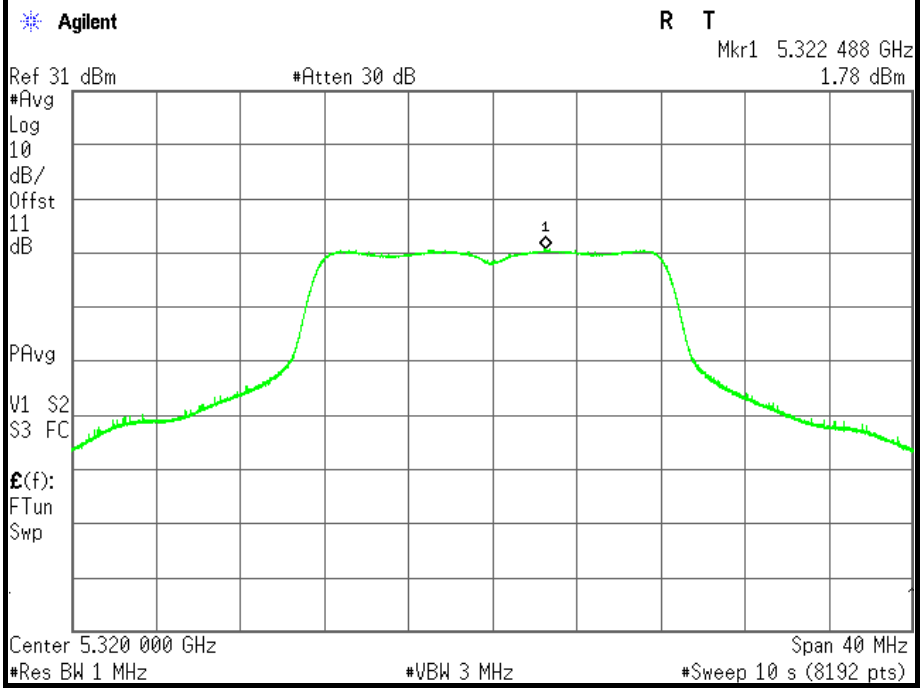


CH Middle (IEEE 802.11a Mode / Band 2A / Chain 0)



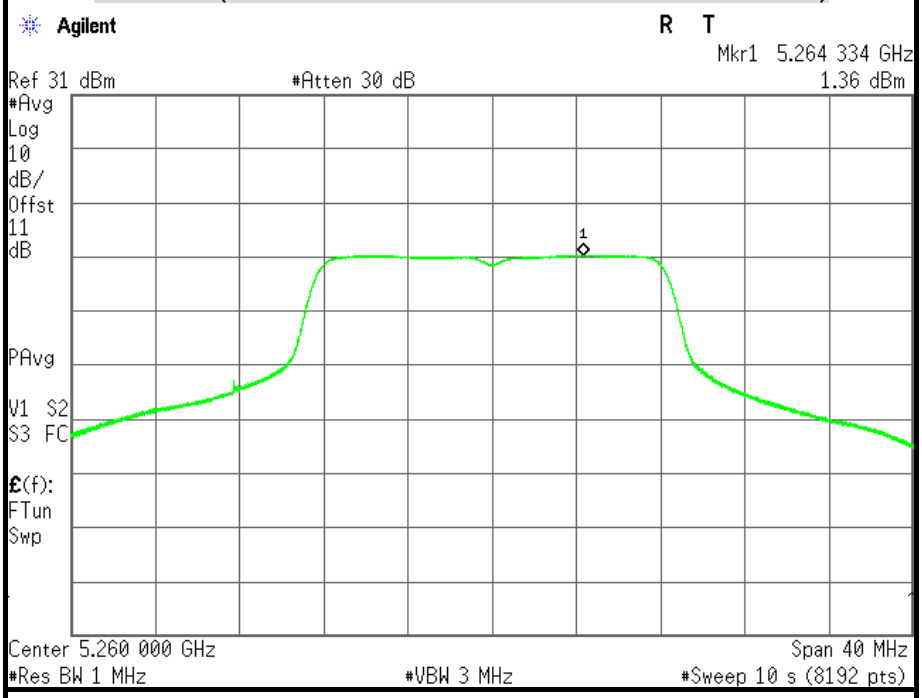
This report shall not be reproduced, except in full, without the written approval of Compliance Certification Services Inc.

CH High (IEEE 802.11a Mode Mode / Band 2A / Chain 0)

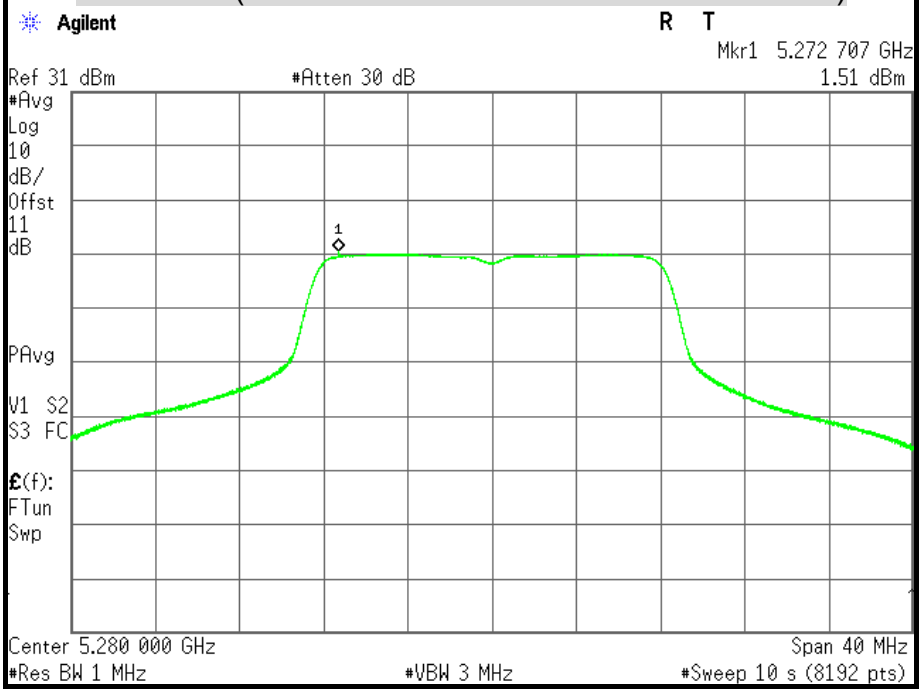


This report shall not be reproduced, except in full, without the written approval of Compliance Certification Services Inc.

CH Low (IEEE 802.11a Mode / Band 2A / Chain 1)

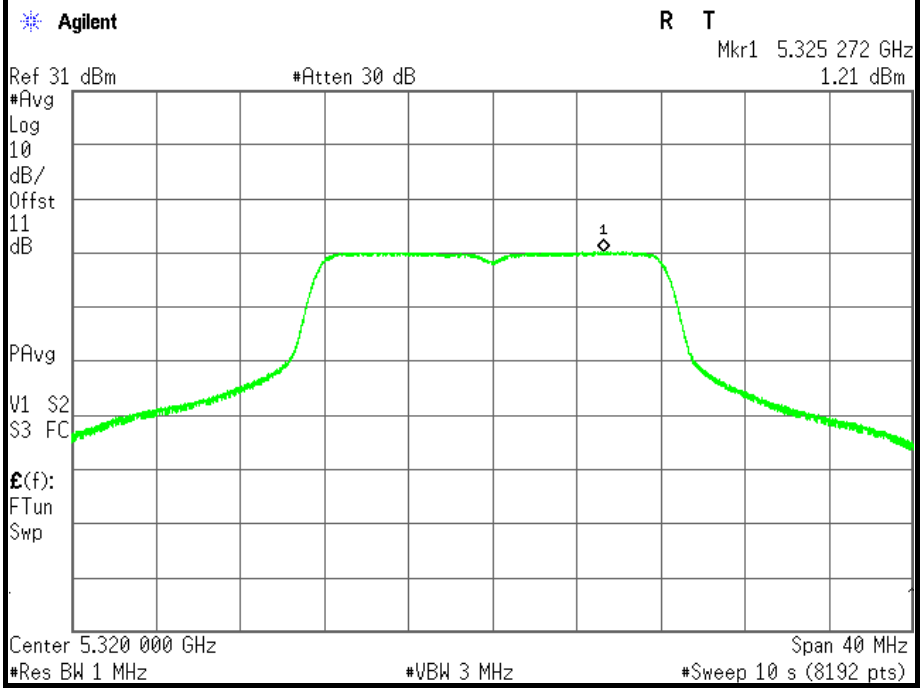


CH Middle (IEEE 802.11a Mode / Band 2A / Chain 1)



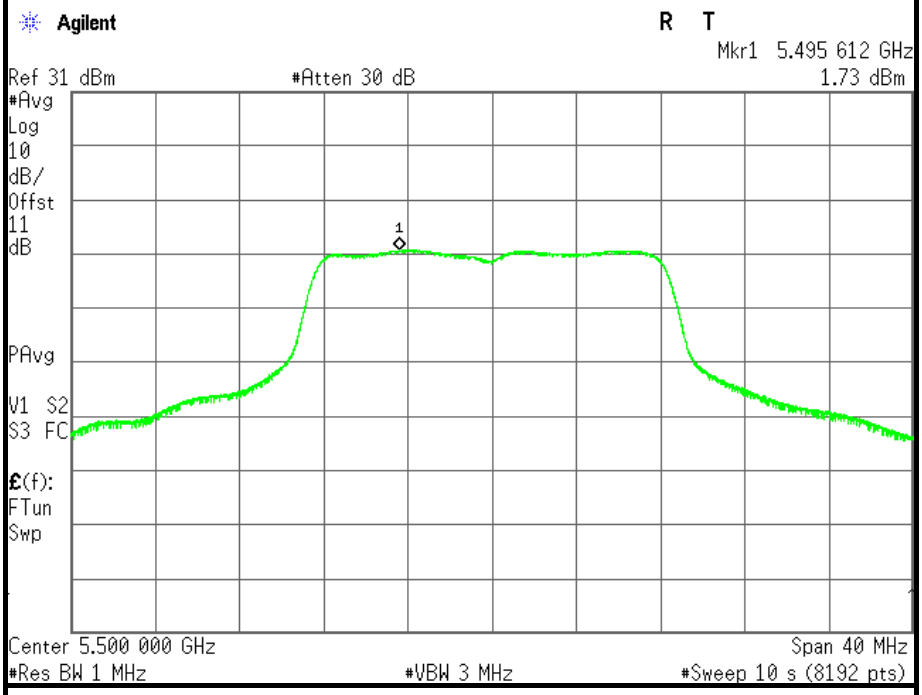
This report shall not be reproduced, except in full, without the written approval of Compliance Certification Services Inc.

CH High (IEEE 802.11a Mode Mode / Band 2A / Chain 1)

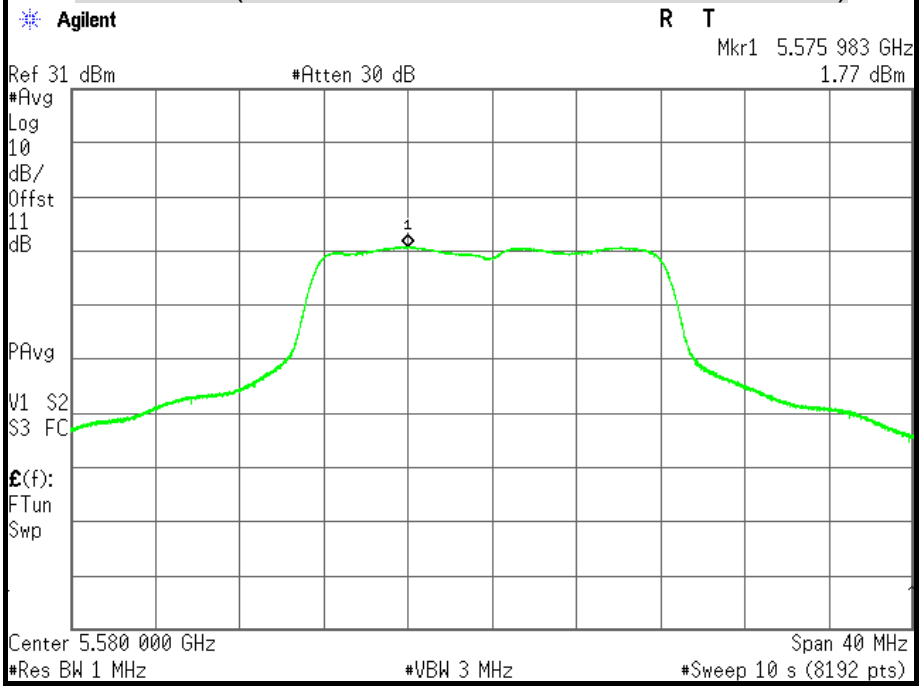


This report shall not be reproduced, except in full, without the written approval of Compliance Certification Services Inc.

CH Low (IEEE 802.11a Mode / Band 2C / Chain 0)

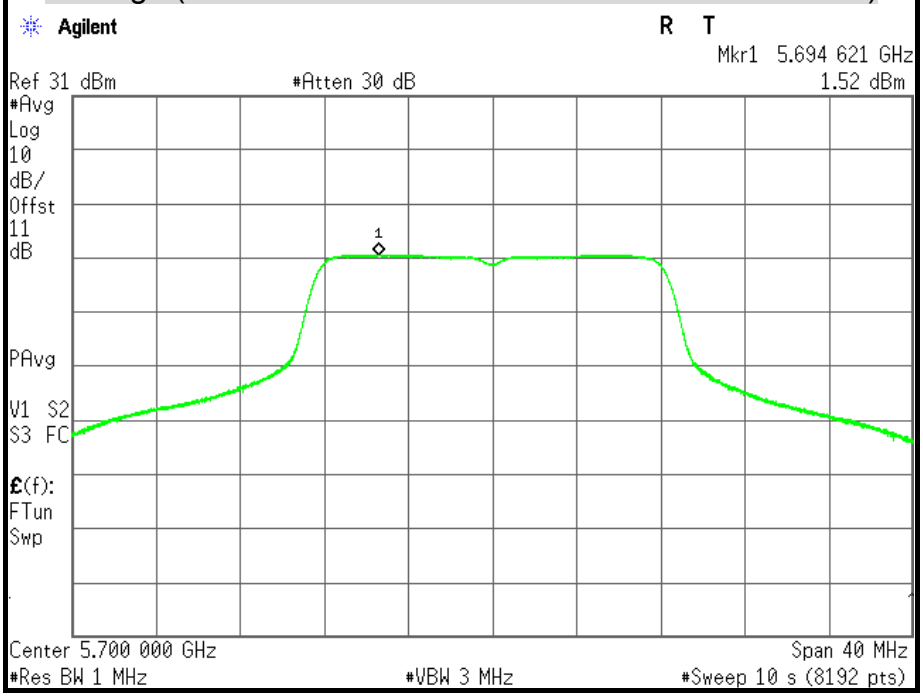


CH Middle (IEEE 802.11a Mode / Band 2C / Chain 0)



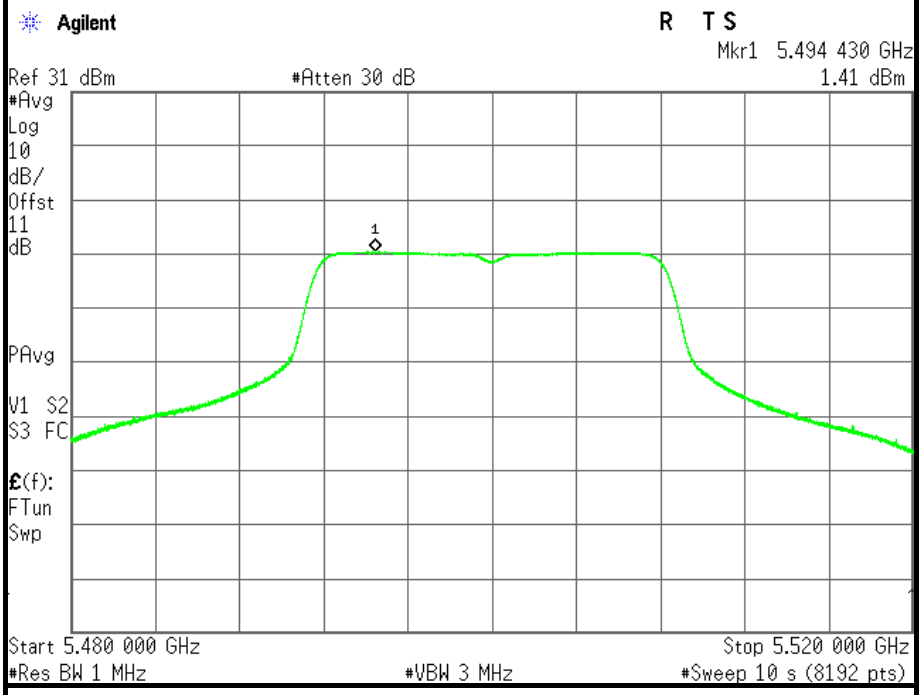
This report shall not be reproduced, except in full, without the written approval of Compliance Certification Services Inc.

CH High (IEEE 802.11a Mode Mode / Band 2C / Chain 0)

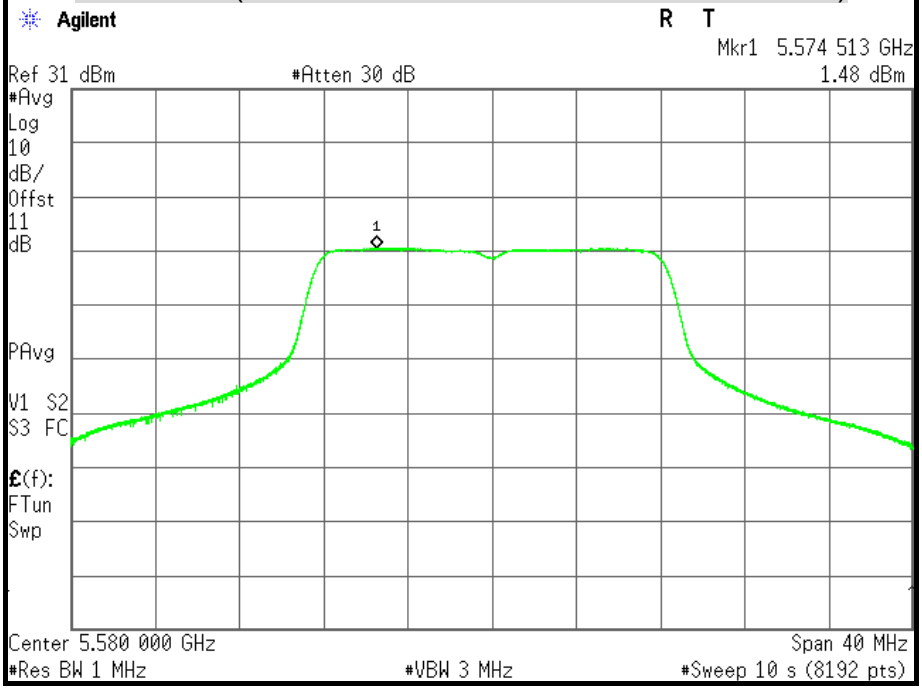


This report shall not be reproduced, except in full, without the written approval of Compliance Certification Services Inc.

CH Low (IEEE 802.11a Mode / Band 2C / Chain 1)

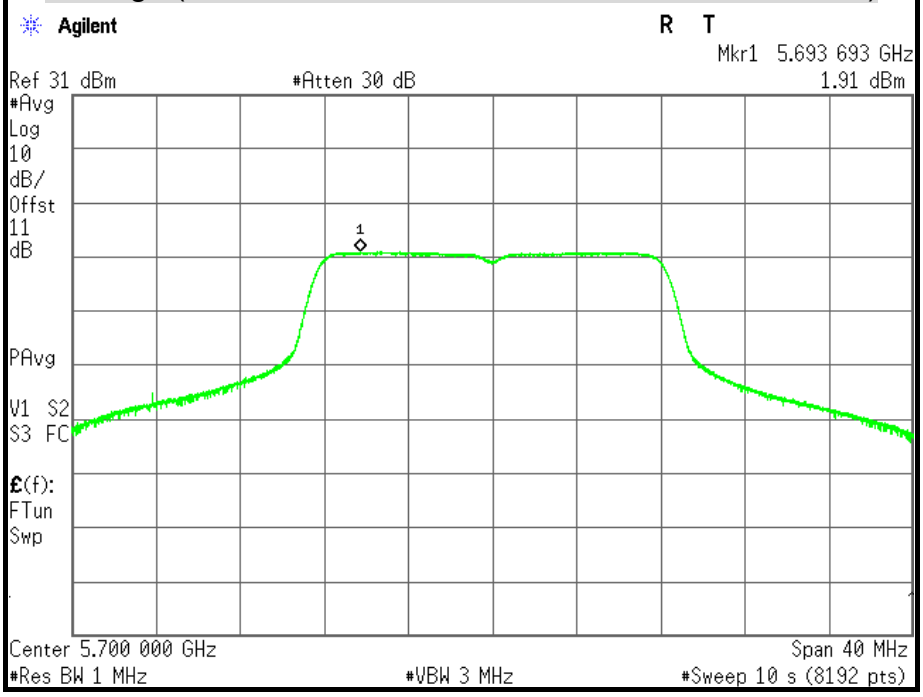


CH Middle (IEEE 802.11a Mode / Band 2C / Chain 1)



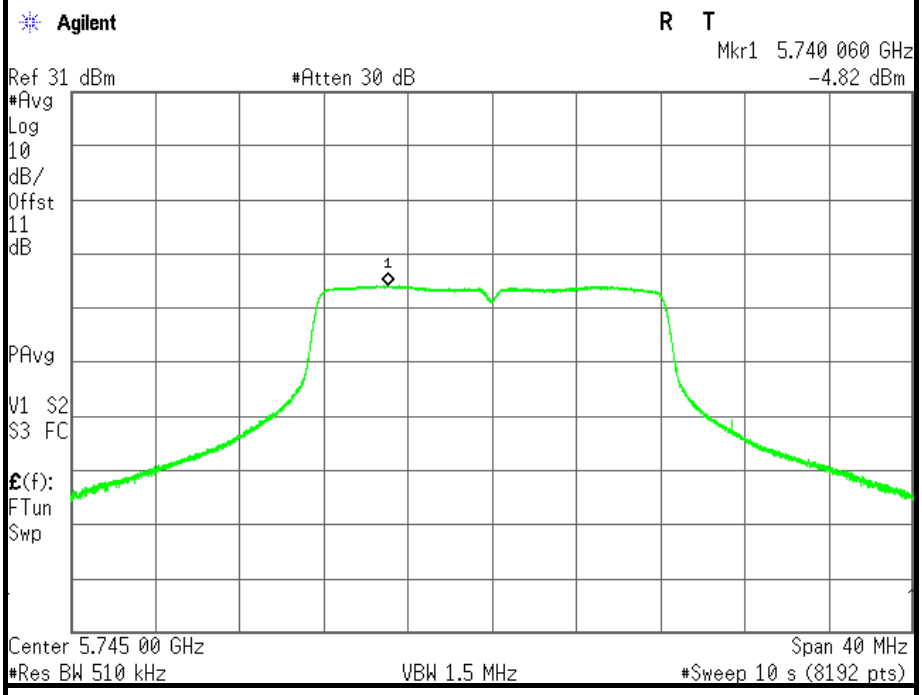
This report shall not be reproduced, except in full, without the written approval of Compliance Certification Services Inc.

CH High (IEEE 802.11a Mode Mode / Band 2C / Chain 1)

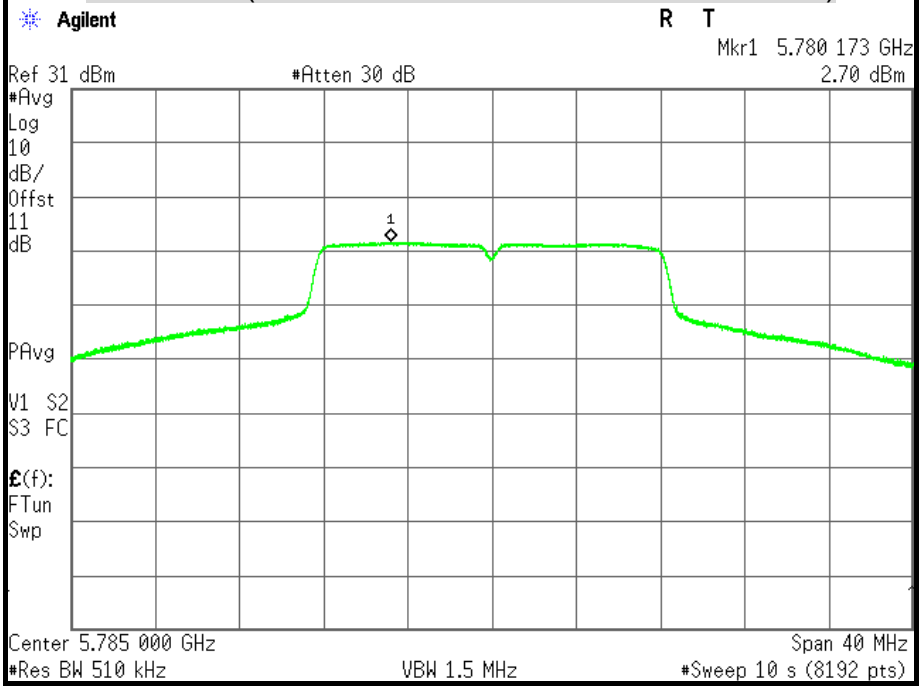


This report shall not be reproduced, except in full, without the written approval of Compliance Certification Services Inc.

CH Low (IEEE 802.11a Mode / Band 3 / Chain 0)

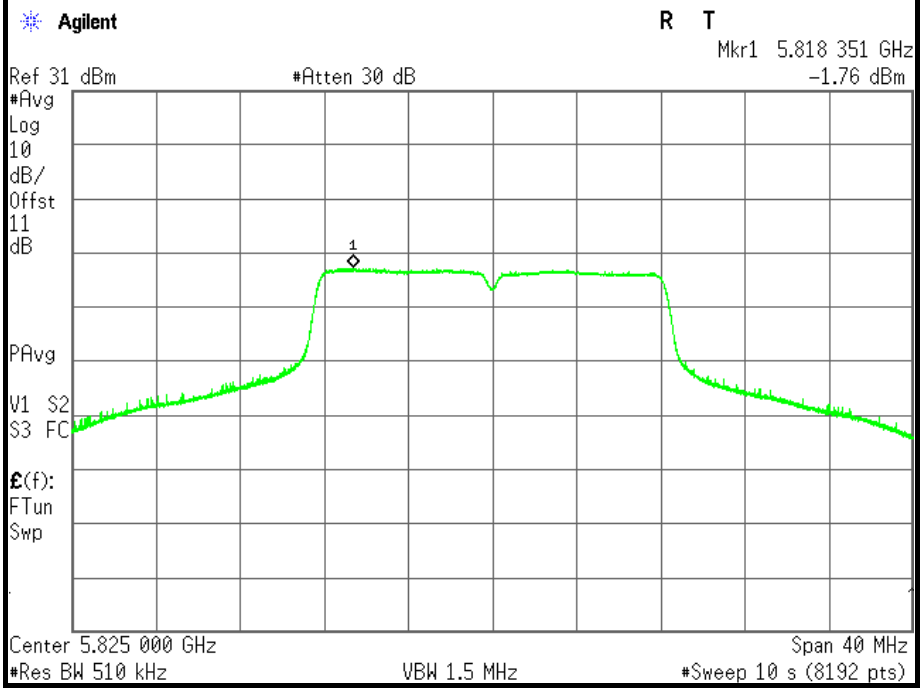


CH Middle (IEEE 802.11a Mode / Band 3 / Chain 0)



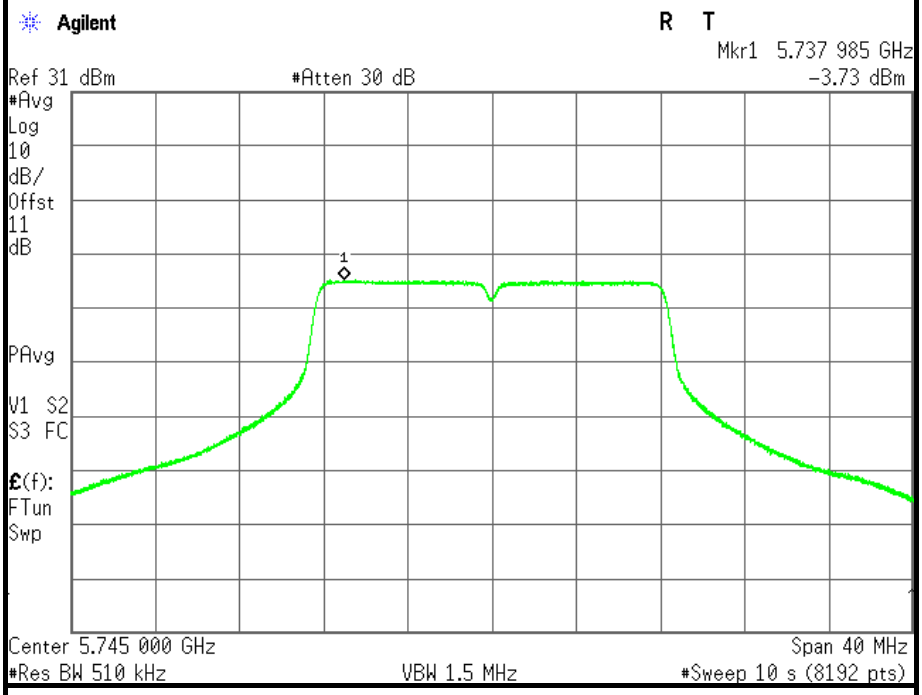
This report shall not be reproduced, except in full, without the written approval of Compliance Certification Services Inc.

CH High (IEEE 802.11a Mode Mode / Band 3 / Chain 0)

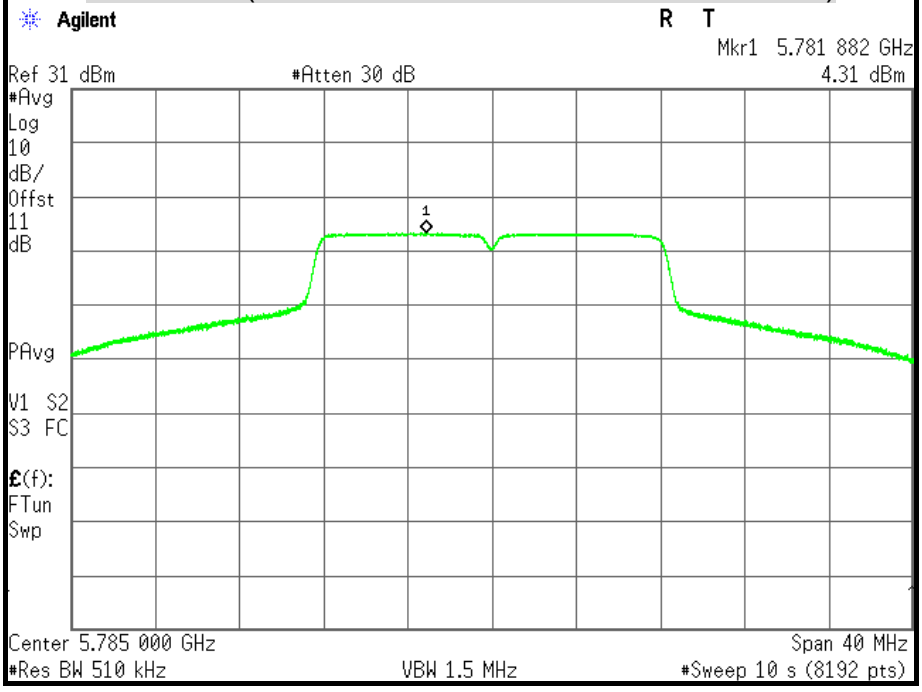


This report shall not be reproduced, except in full, without the written approval of Compliance Certification Services Inc.

CH Low (IEEE 802.11a Mode / Band 3 / Chain 1)

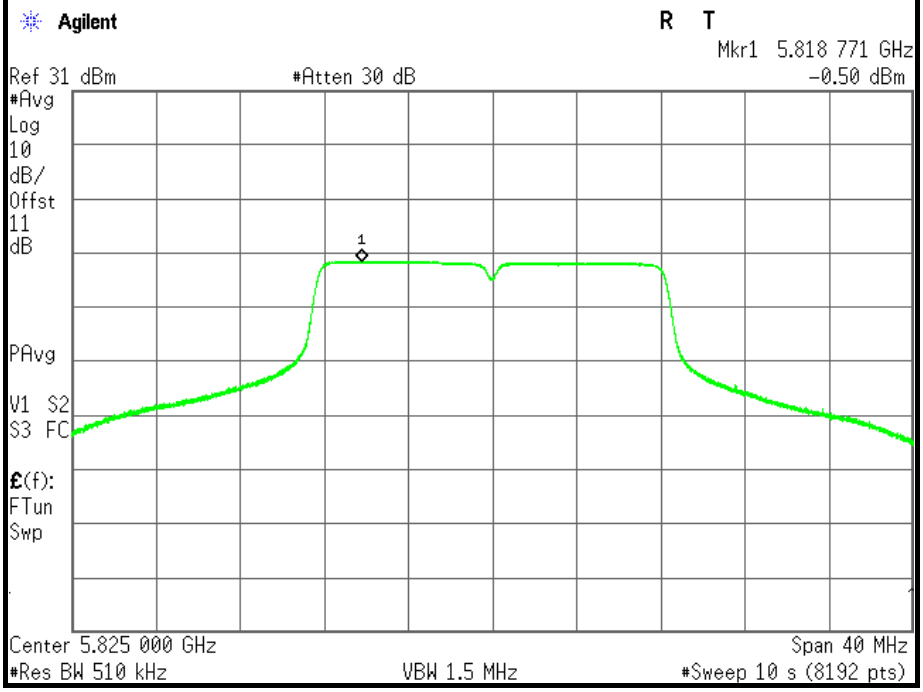


CH Middle (IEEE 802.11a Mode / Band 3 / Chain 1)



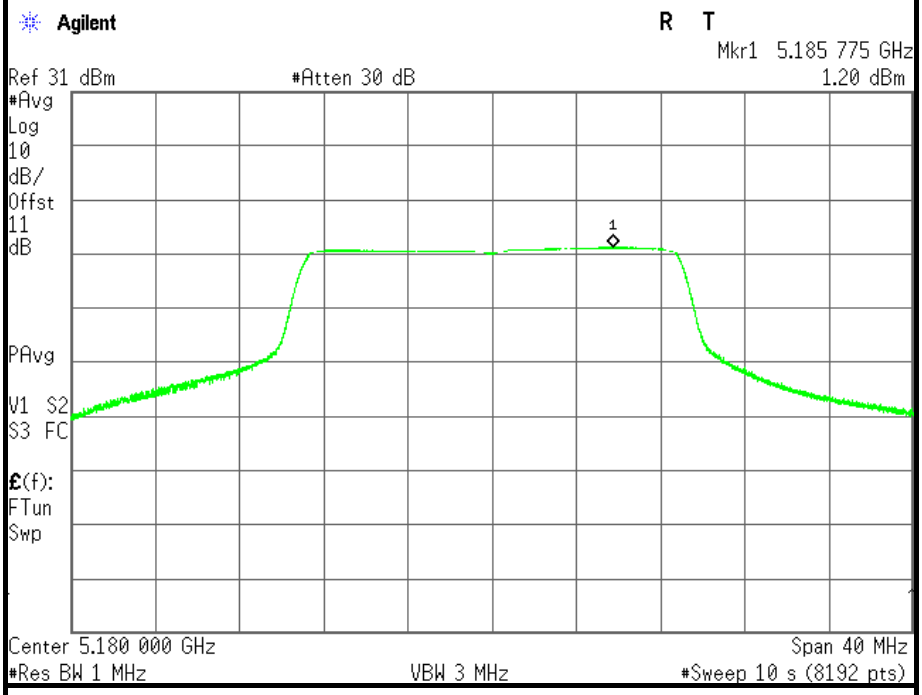
This report shall not be reproduced, except in full, without the written approval of Compliance Certification Services Inc.

CH High (IEEE 802.11a Mode Mode / Band 3 / Chain 1)

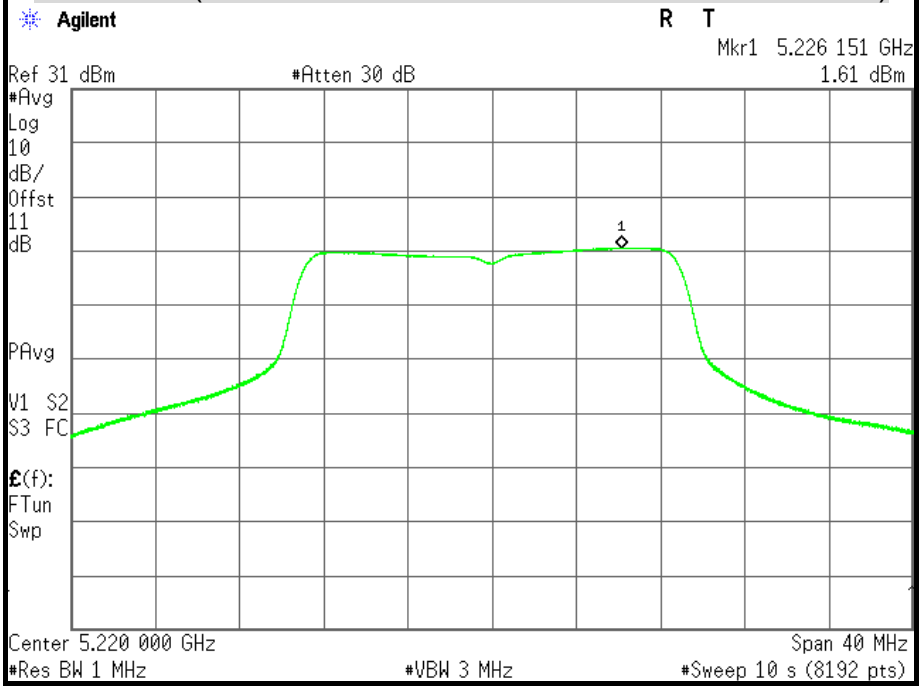


This report shall not be reproduced, except in full, without the written approval of Compliance Certification Services Inc.

CH Low (IEEE 802.11an Mode HT20 / Band 1 / Chain 0)

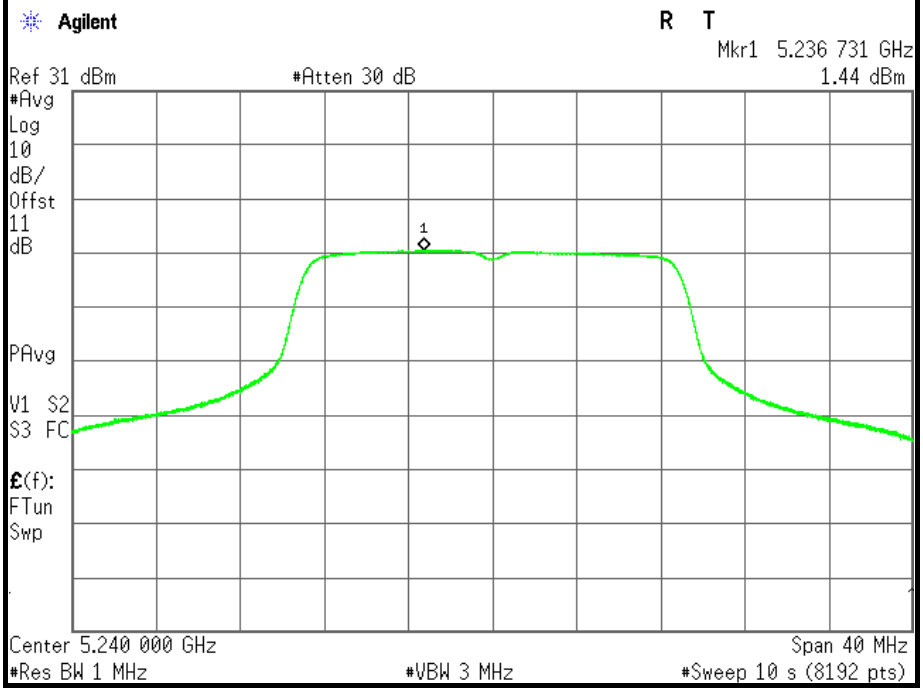


CH Middle (IEEE 802.11an Mode HT20 / Band 1 / Chain 0)



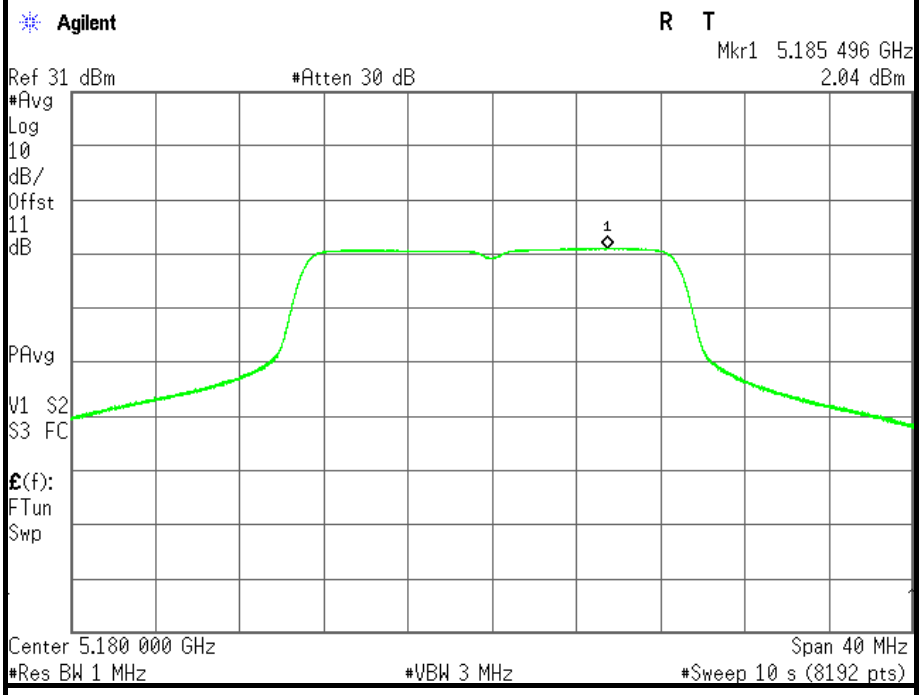
This report shall not be reproduced, except in full, without the written approval of Compliance Certification Services Inc.

CH High (IEEE 802.11an Mode HT20 / Band 1 / Chain 0)

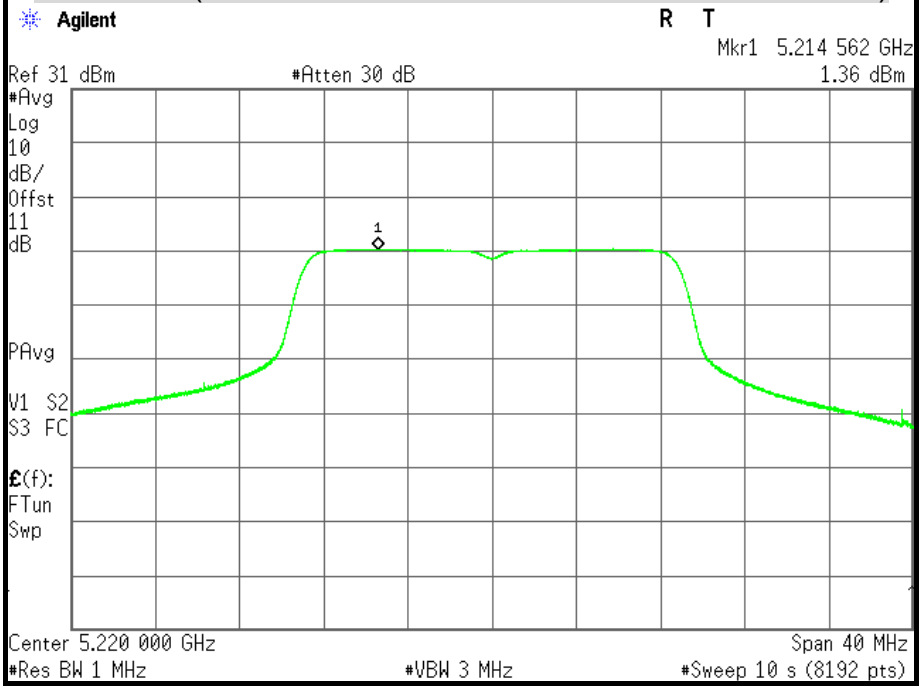


This report shall not be reproduced, except in full, without the written approval of Compliance Certification Services Inc.

CH Low (IEEE 802.11an Mode HT20 / Band 1 / Chain 1)

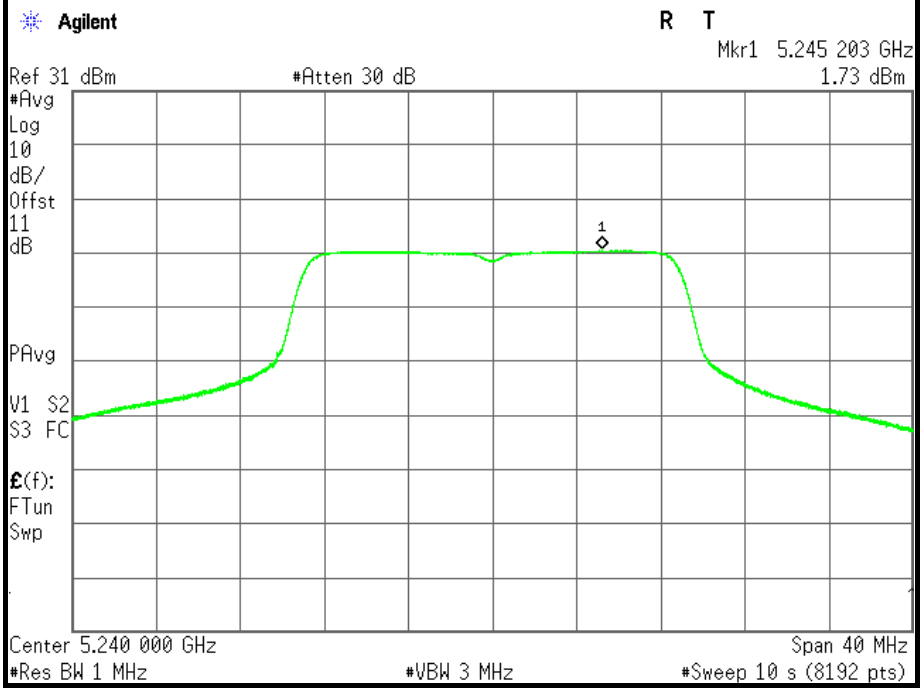


CH Middle (IEEE 802.11an Mode HT20 / Band 1 / Chain 1)



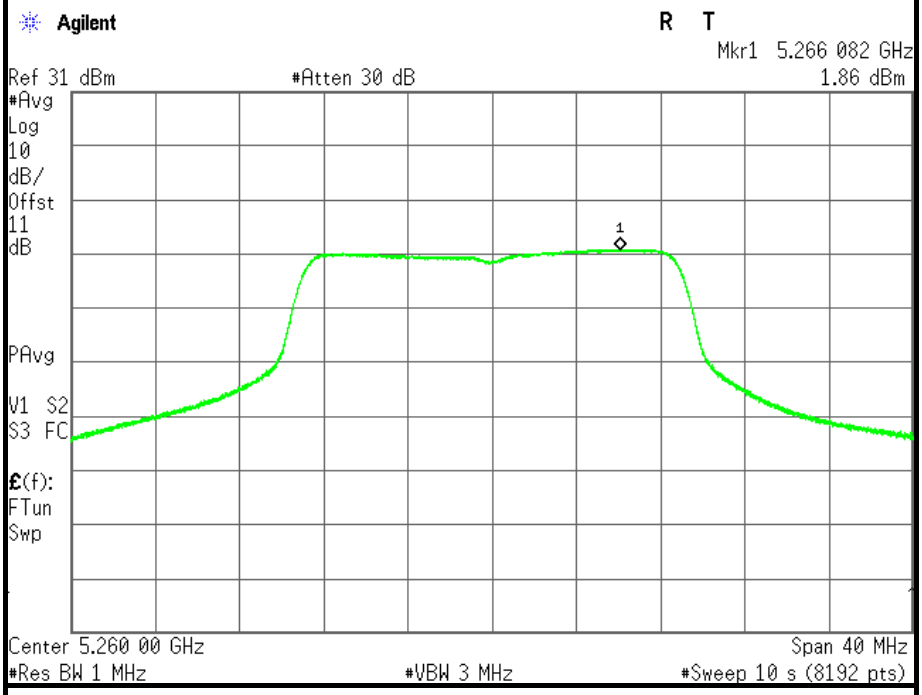
This report shall not be reproduced, except in full, without the written approval of Compliance Certification Services Inc.

CH High (IEEE 802.11an Mode HT20 / Band 1 / Chain 1)

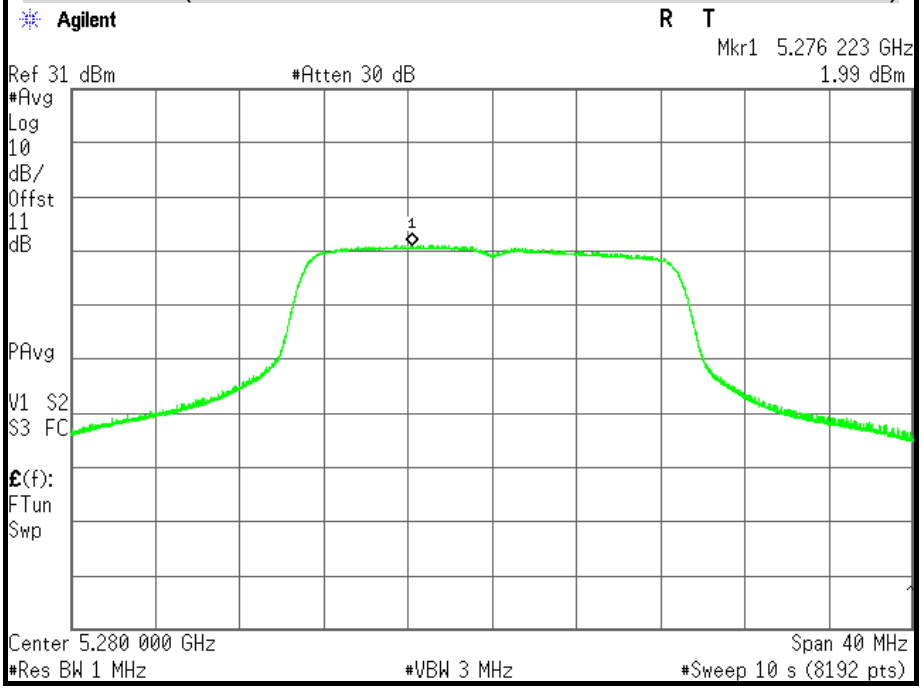


This report shall not be reproduced, except in full, without the written approval of Compliance Certification Services Inc.

CH Low (IEEE 802.11an Mode HT20 / Band 2A / Chain 0)

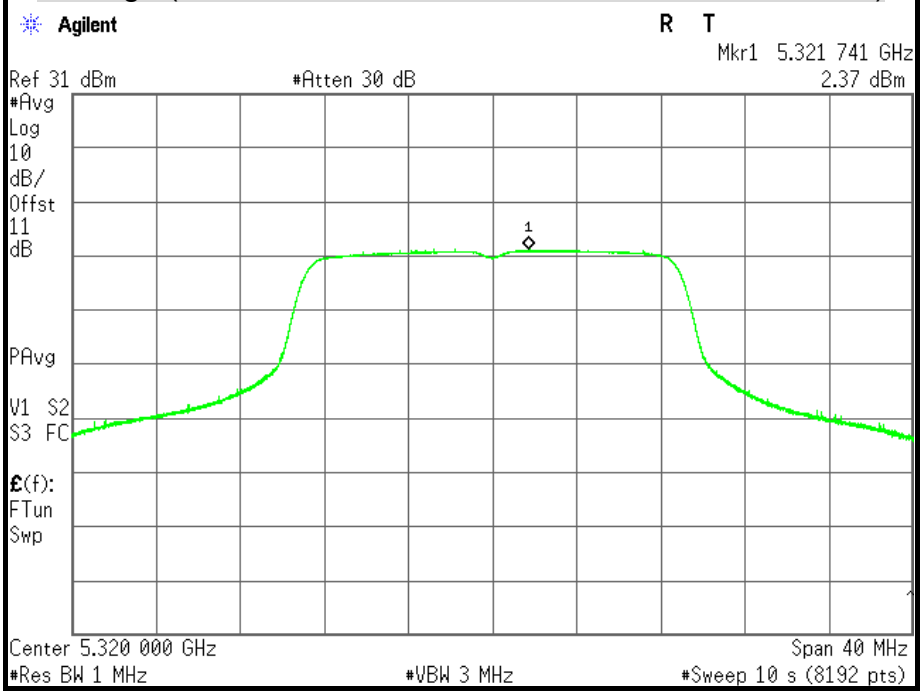


CH Middle (IEEE 802.11an Mode HT20 / Band 2A / Chain 0)



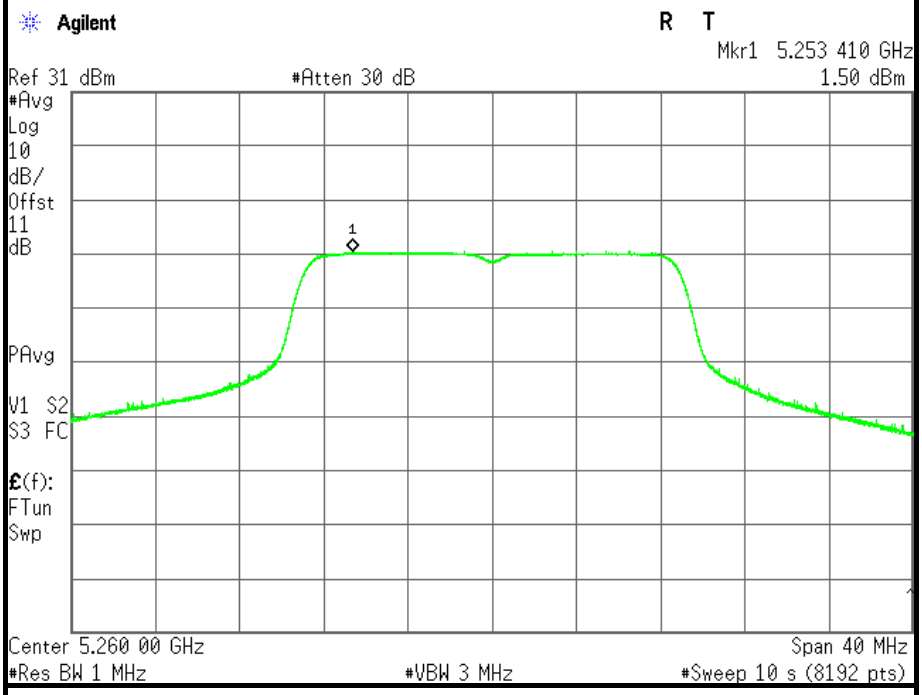
This report shall not be reproduced, except in full, without the written approval of Compliance Certification Services Inc.

CH High (IEEE 802.11an Mode HT20 / Band 2A / Chain 0)

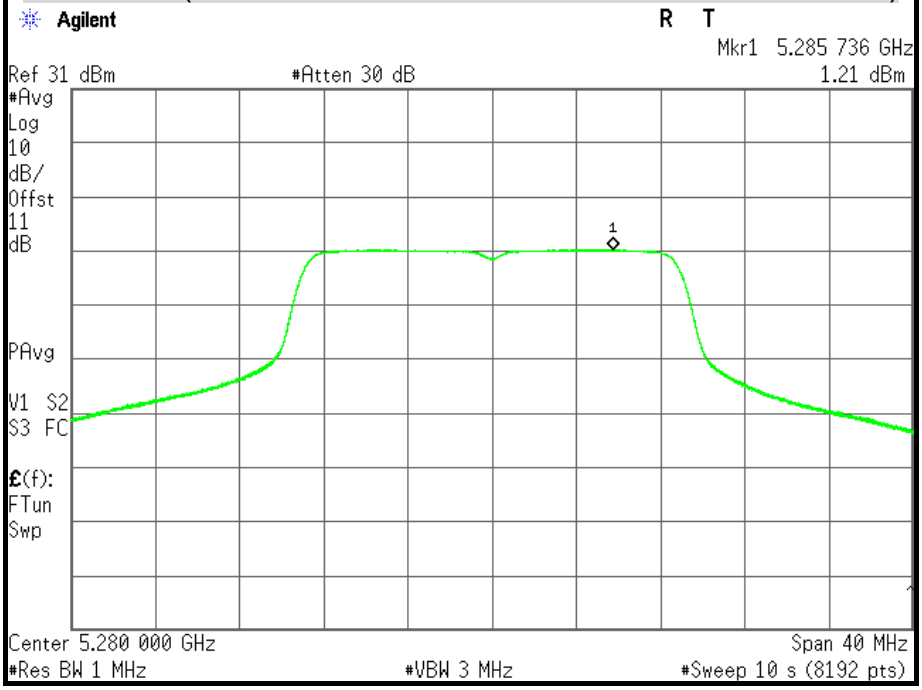


This report shall not be reproduced, except in full, without the written approval of Compliance Certification Services Inc.

CH Low (IEEE 802.11an Mode HT20 / Band 2A / Chain 1)

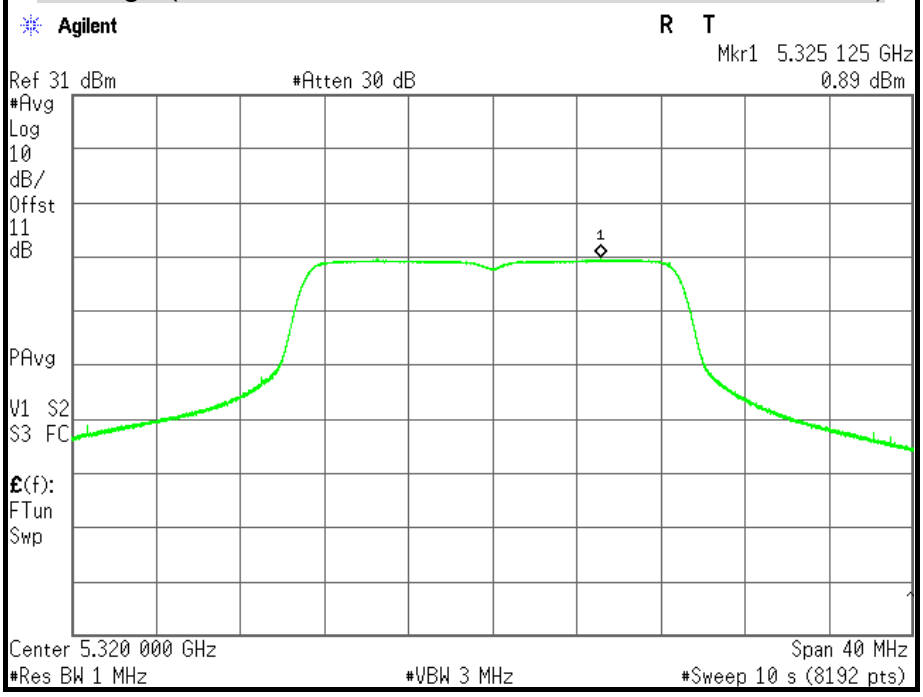


CH Middle (IEEE 802.11an Mode HT20 / Band 2A / Chain 1)



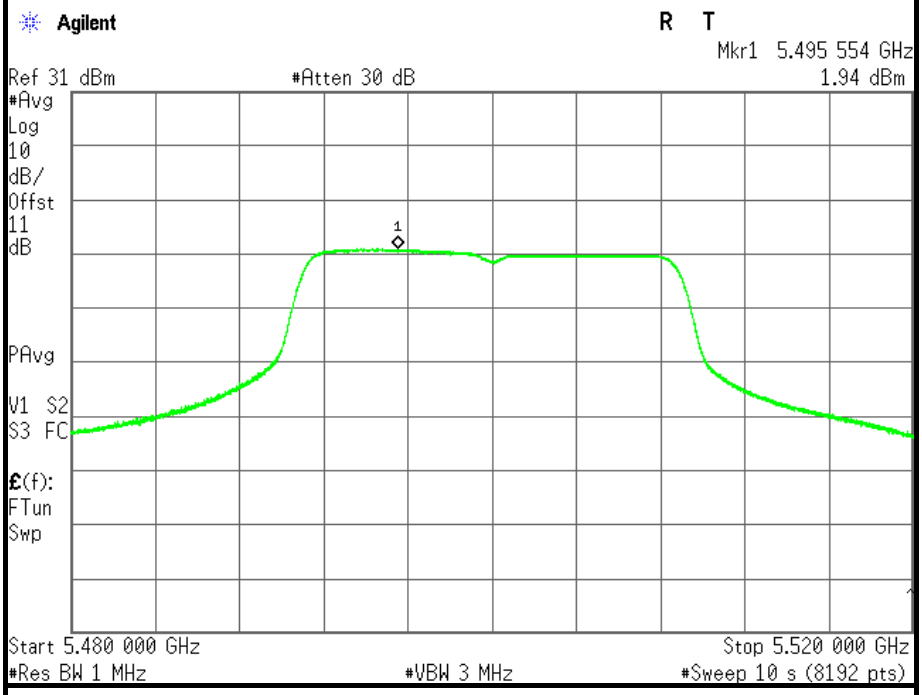
This report shall not be reproduced, except in full, without the written approval of Compliance Certification Services Inc.

CH High (IEEE 802.11an Mode HT20 / Band 2A / Chain 1)

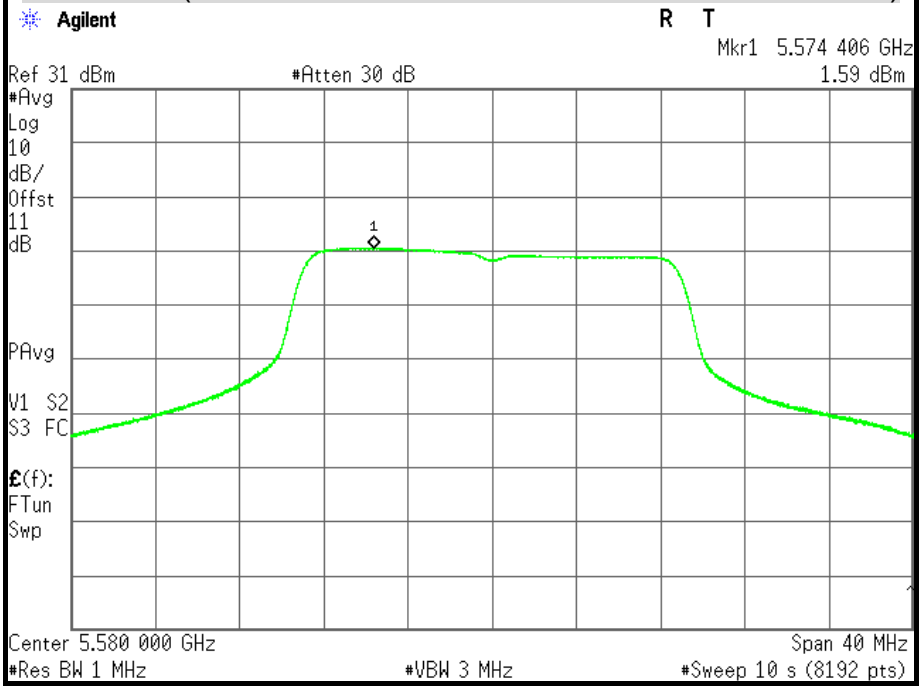


This report shall not be reproduced, except in full, without the written approval of Compliance Certification Services Inc.

CH Low (IEEE 802.11an Mode HT20 / Band 2C / Chain 0)

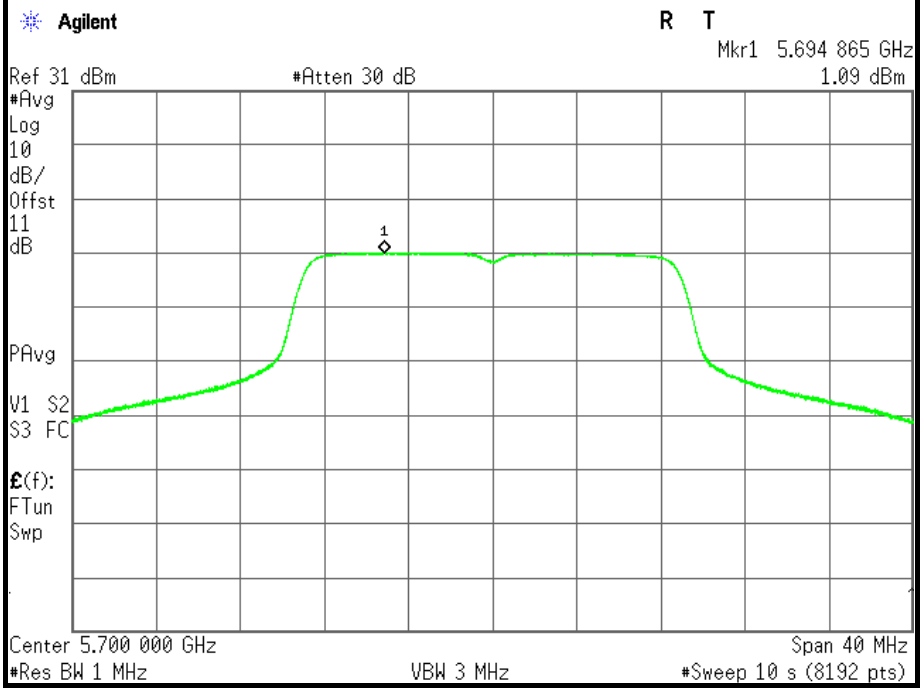


CH Middle (IEEE 802.11an Mode HT20 / Band 2C / Chain 0)



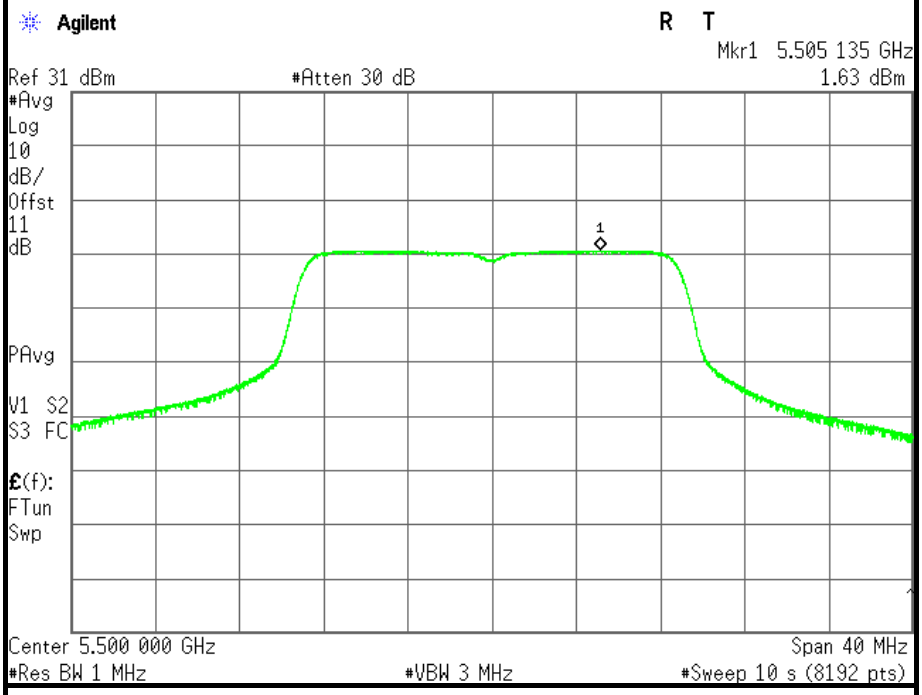
This report shall not be reproduced, except in full, without the written approval of Compliance Certification Services Inc.

CH High (IEEE 802.11an Mode HT20 / Band 2C / Chain 0)

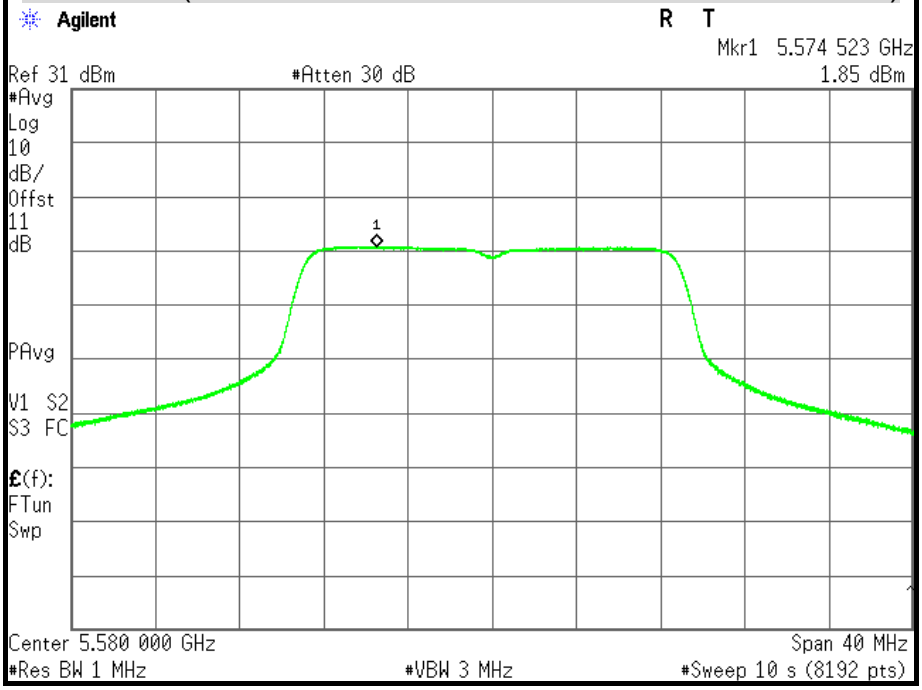


This report shall not be reproduced, except in full, without the written approval of Compliance Certification Services Inc.

CH Low (IEEE 802.11an Mode HT20 / Band 2C / Chain 1)

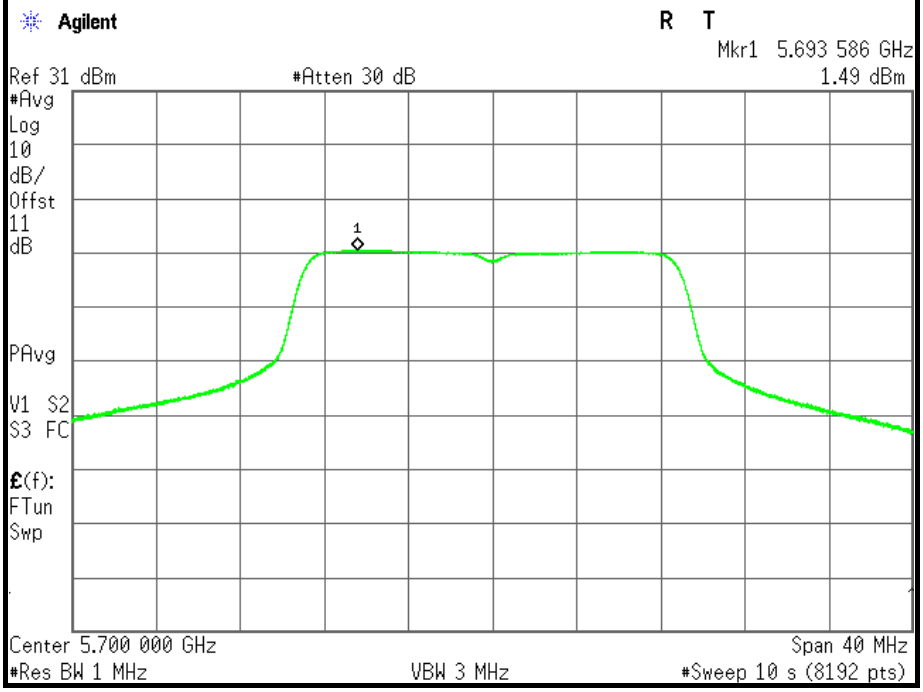


CH Middle (IEEE 802.11an Mode HT20 / Band 2C / Chain 1)



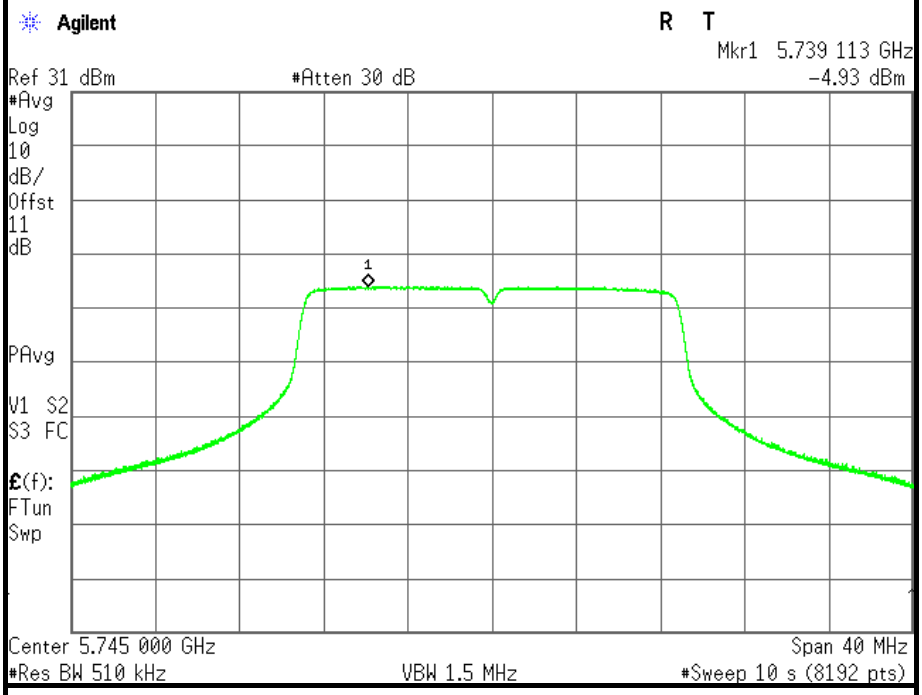
This report shall not be reproduced, except in full, without the written approval of Compliance Certification Services Inc.

CH High (IEEE 802.11an Mode HT20 / Band 2C / Chain 1)

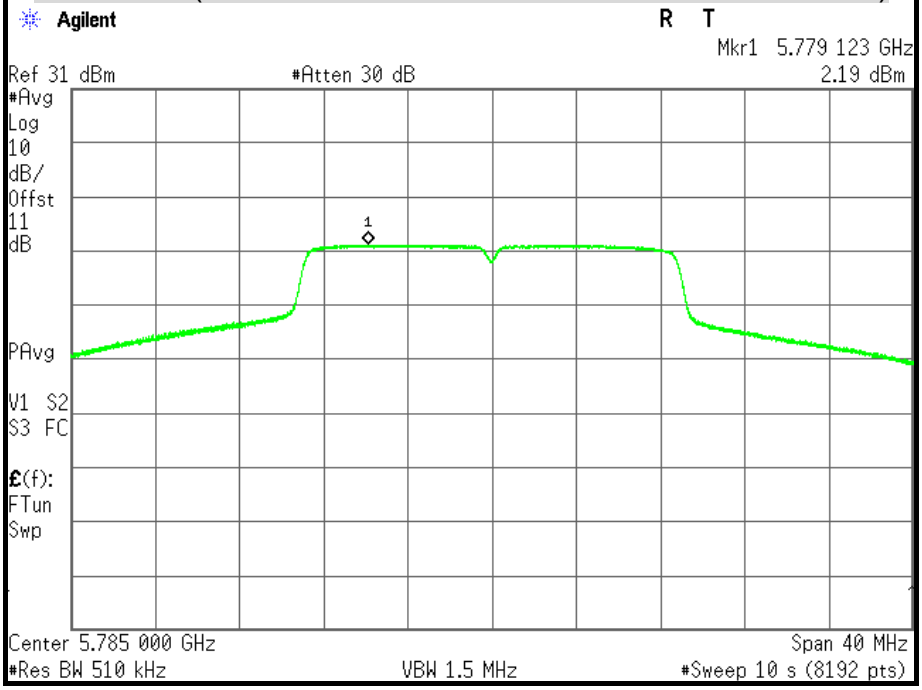


This report shall not be reproduced, except in full, without the written approval of Compliance Certification Services Inc.

CH Low (IEEE 802.11an Mode HT20 / Band 3 / Chain 0)

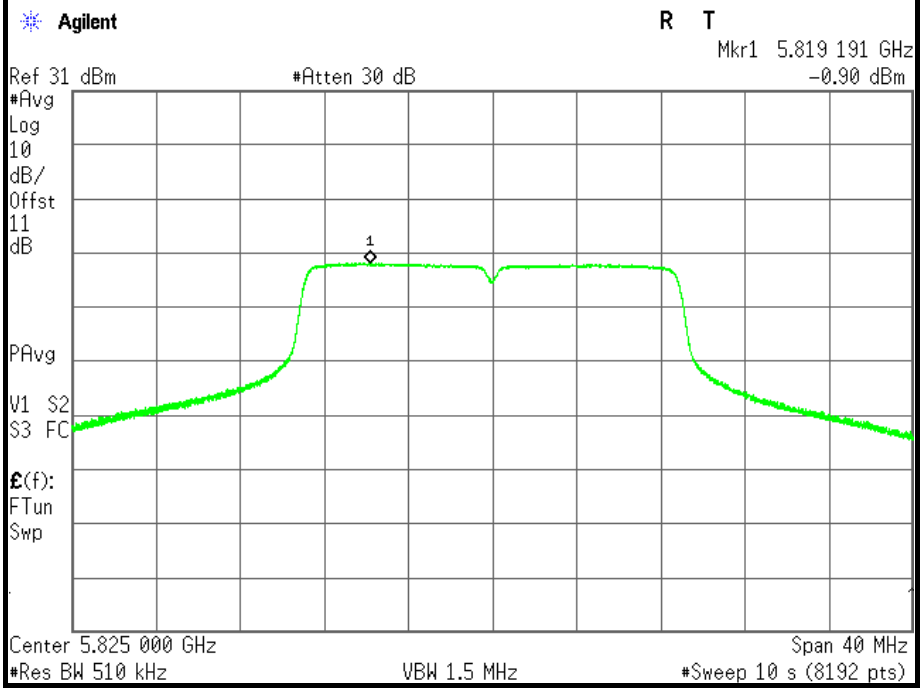


CH Middle (IEEE 802.11an Mode HT20 / Band 3 / Chain 0)



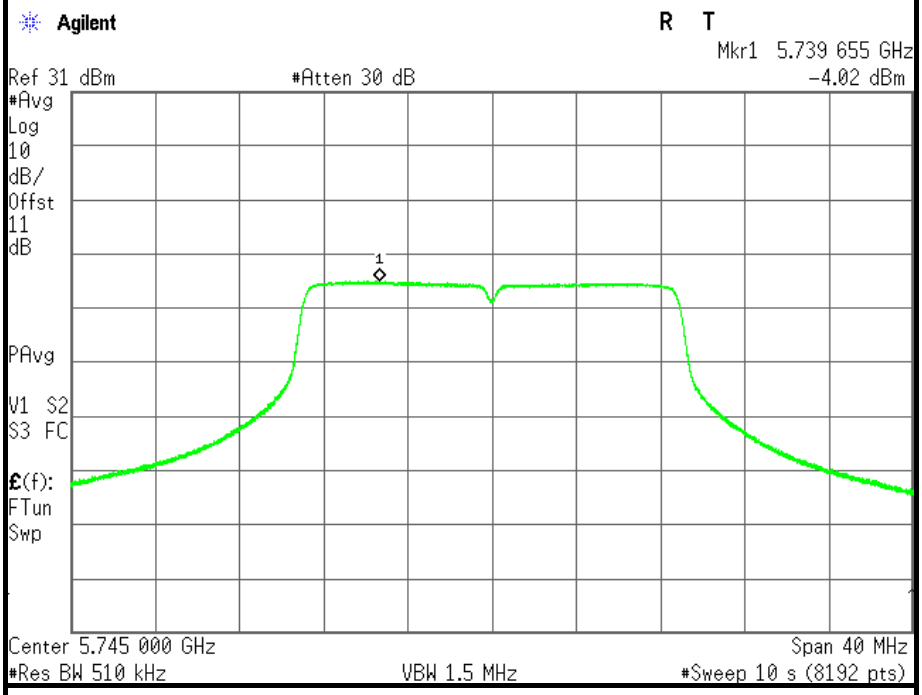
This report shall not be reproduced, except in full, without the written approval of Compliance Certification Services Inc.

CH High (IEEE 802.11an Mode HT20 / Band 3 / Chain 0)

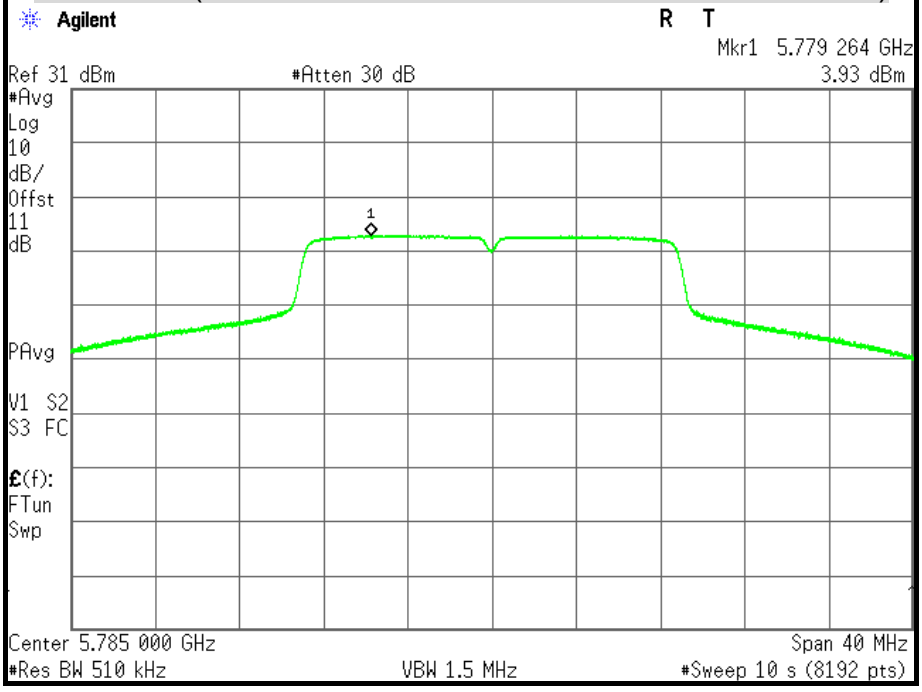


This report shall not be reproduced, except in full, without the written approval of Compliance Certification Services Inc.

CH Low (IEEE 802.11an Mode HT20 / Band 3 / Chain 1)

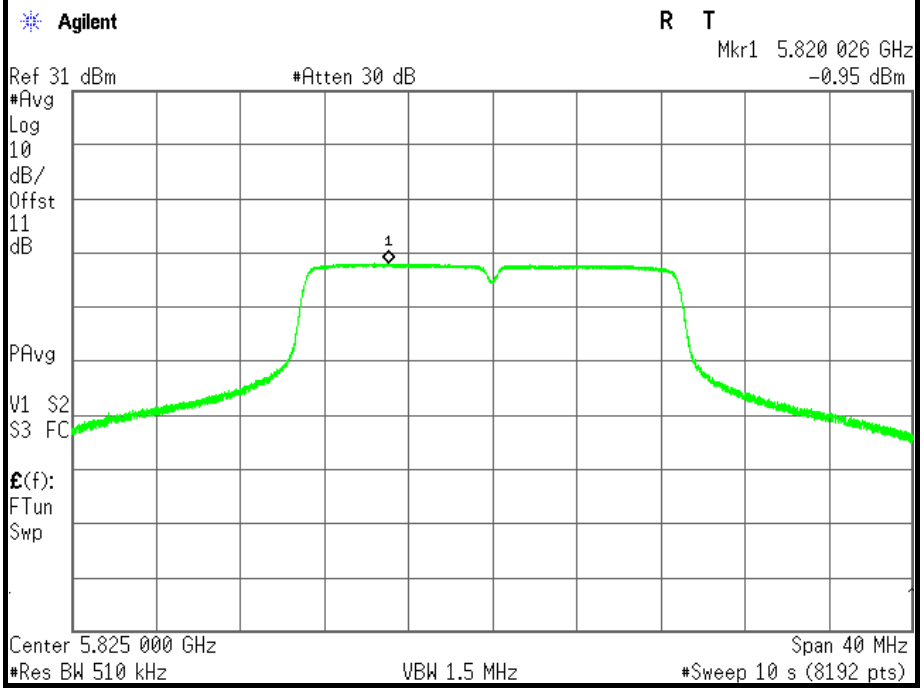


CH Middle (IEEE 802.11an Mode HT20 / Band 3 / Chain 1)



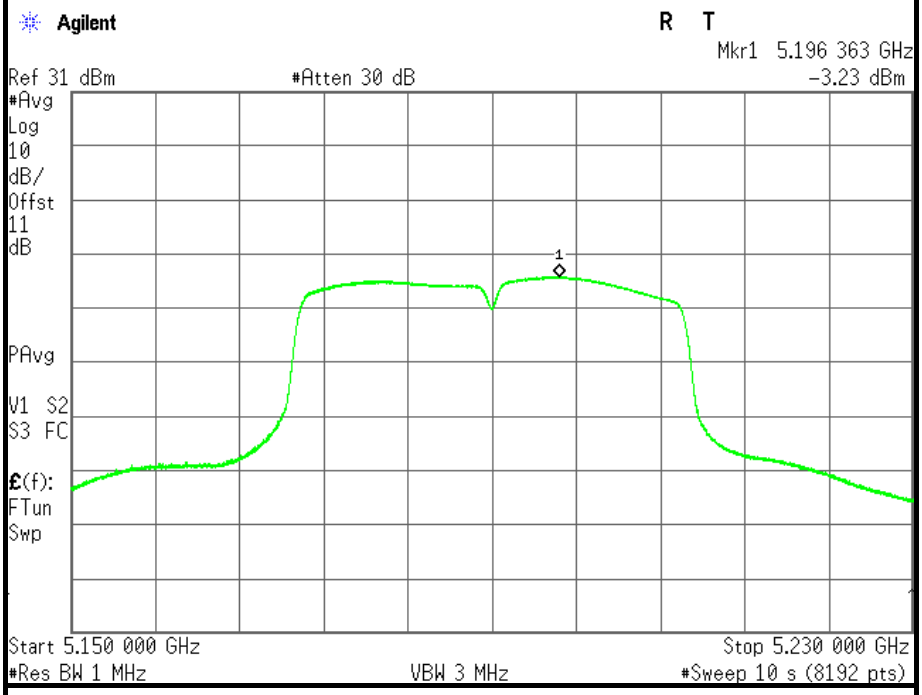
This report shall not be reproduced, except in full, without the written approval of Compliance Certification Services Inc.

CH High (IEEE 802.11an Mode HT20 / Band 3 / Chain 1)

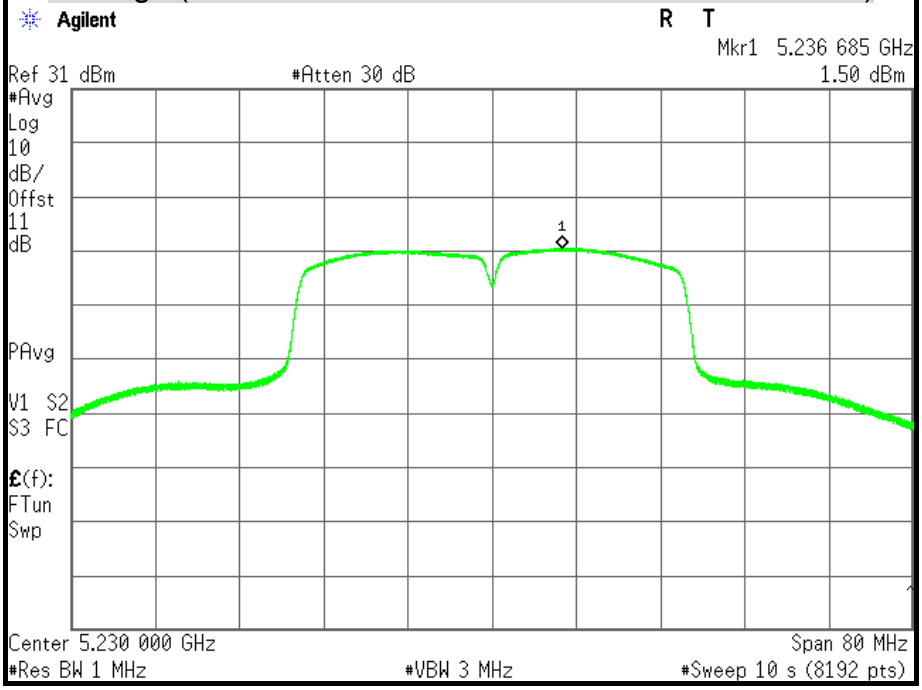


This report shall not be reproduced, except in full, without the written approval of Compliance Certification Services Inc.

CH Low (IEEE 802.11an Mode HT40 / Band 1 / Chain 0)

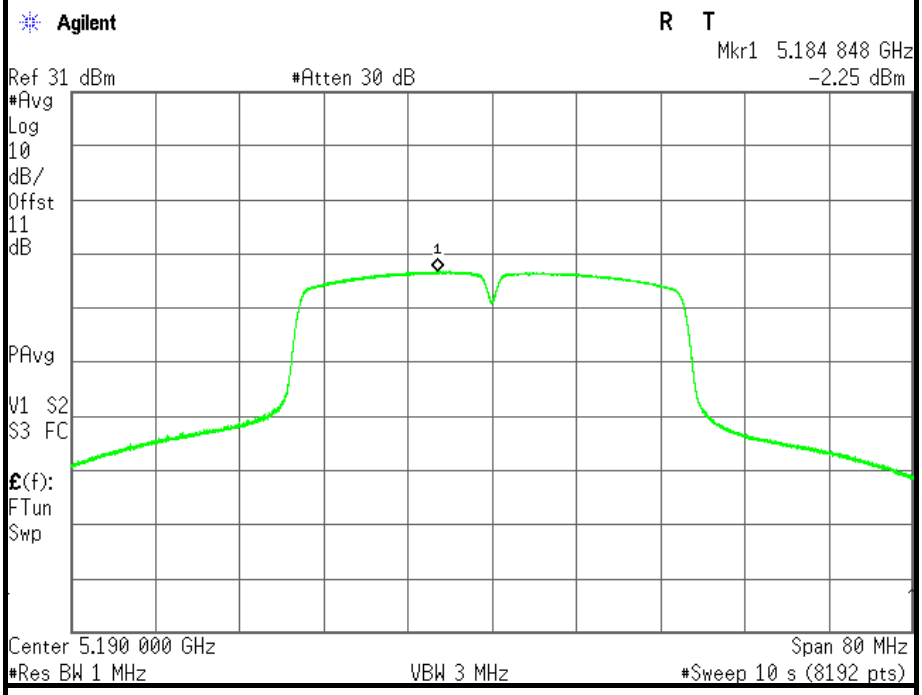


CH High (IEEE 802.11an Mode HT40 / Band 1 / Chain 0)

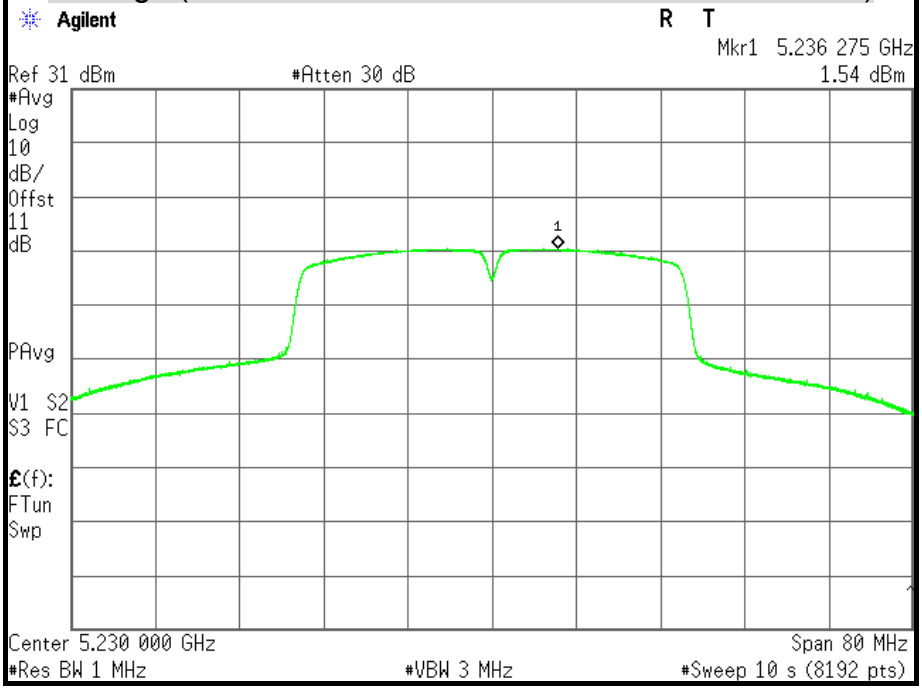


This report shall not be reproduced, except in full, without the written approval of Compliance Certification Services Inc.

CH Low (IEEE 802.11an Mode HT40 / Band 1 / Chain 1)

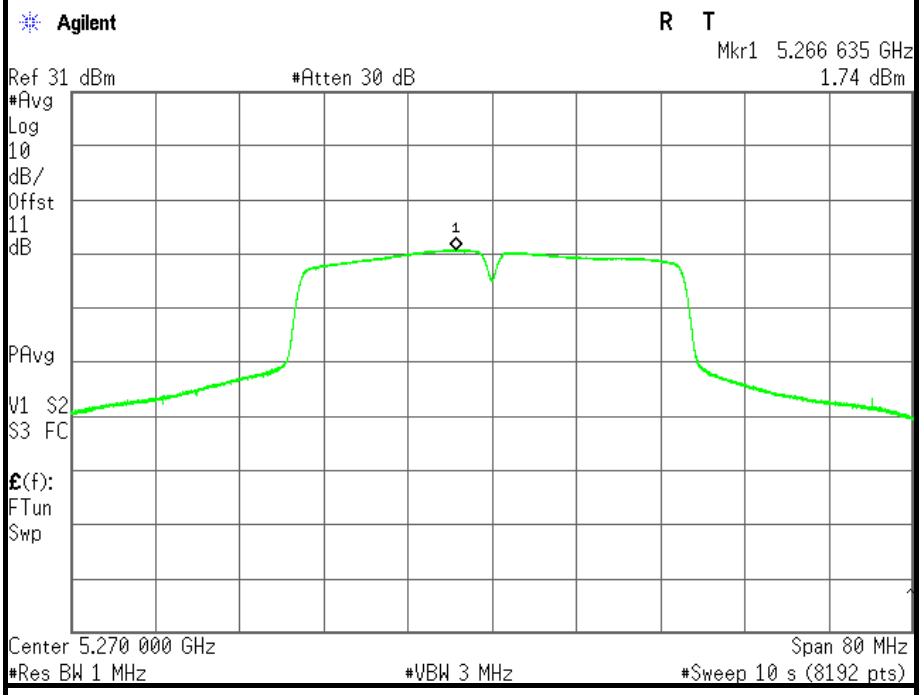


CH High (IEEE 802.11an Mode HT40 / Band 1 / Chain 1)

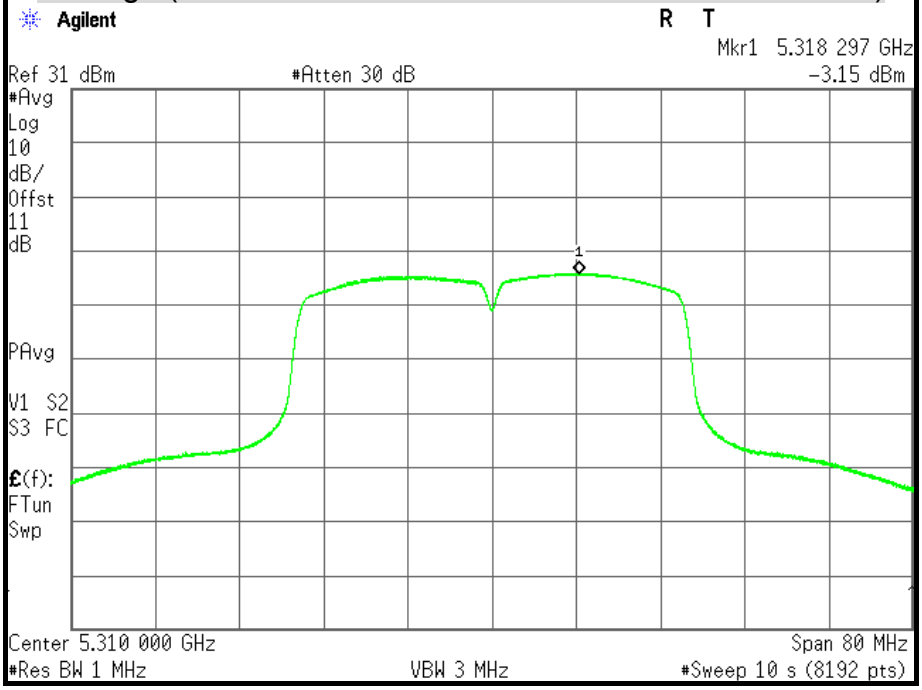


This report shall not be reproduced, except in full, without the written approval of Compliance Certification Services Inc.

CH Low (IEEE 802.11an Mode HT40 / Band 2A / Chain 0)

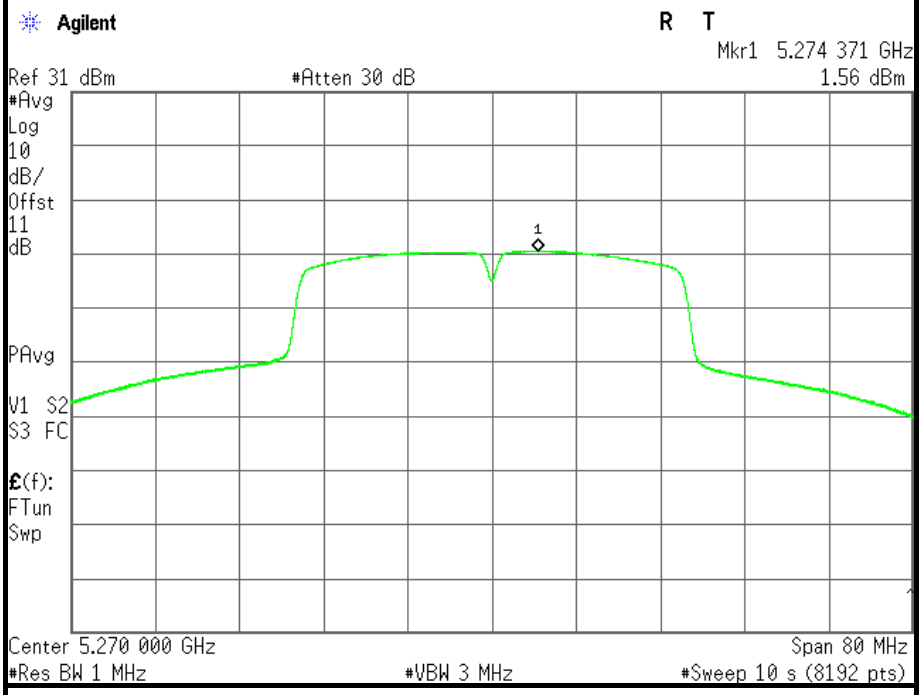


CH High (IEEE 802.11an Mode HT40 / Band 2A / Chain 0)

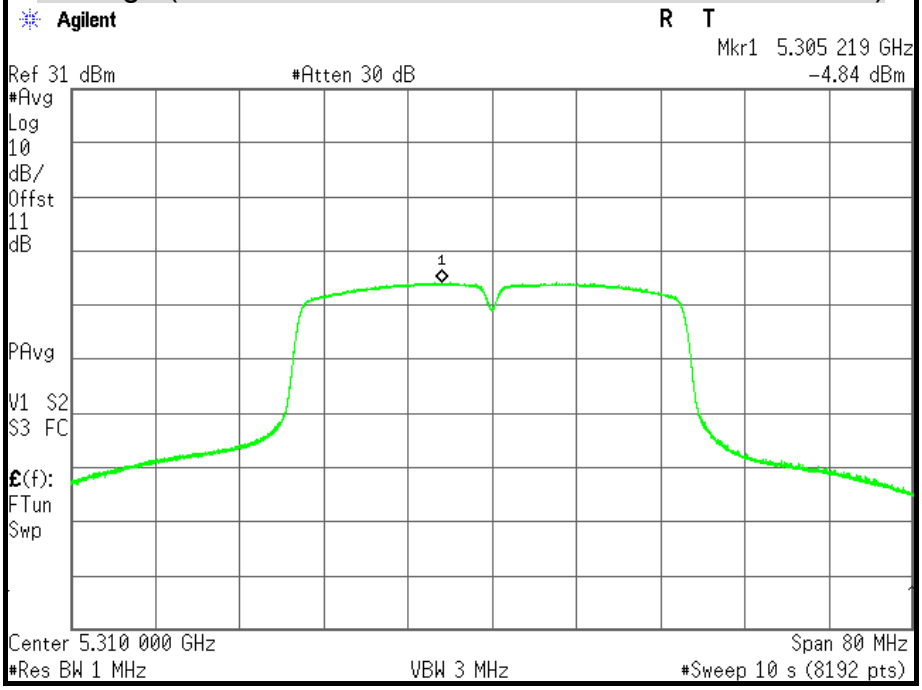


This report shall not be reproduced, except in full, without the written approval of Compliance Certification Services Inc.

CH Low (IEEE 802.11an Mode HT40 / Band 2A / Chain 1)

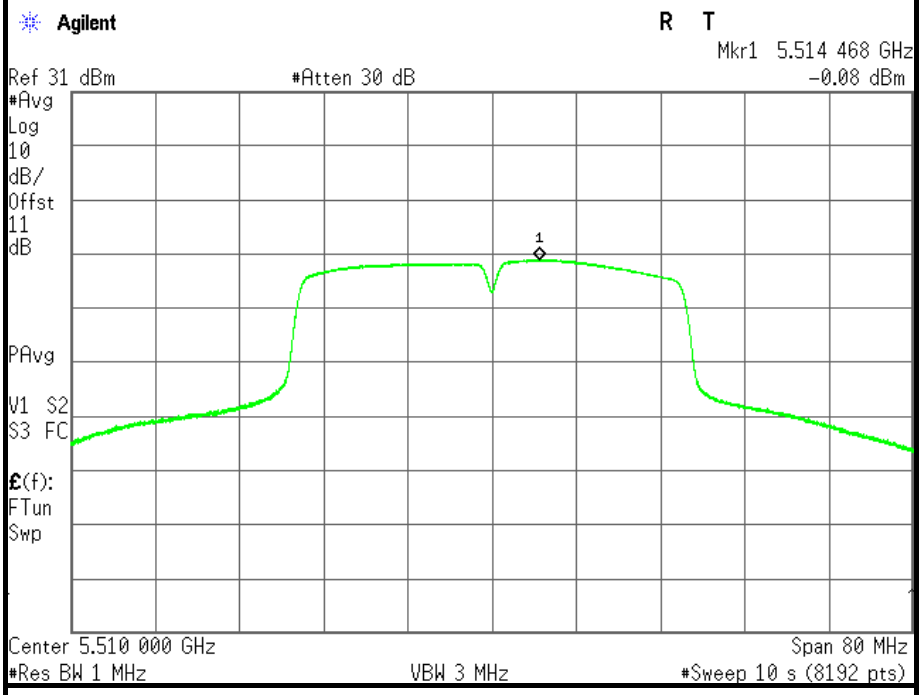


CH High (IEEE 802.11an Mode HT40 / Band 2A / Chain 1)

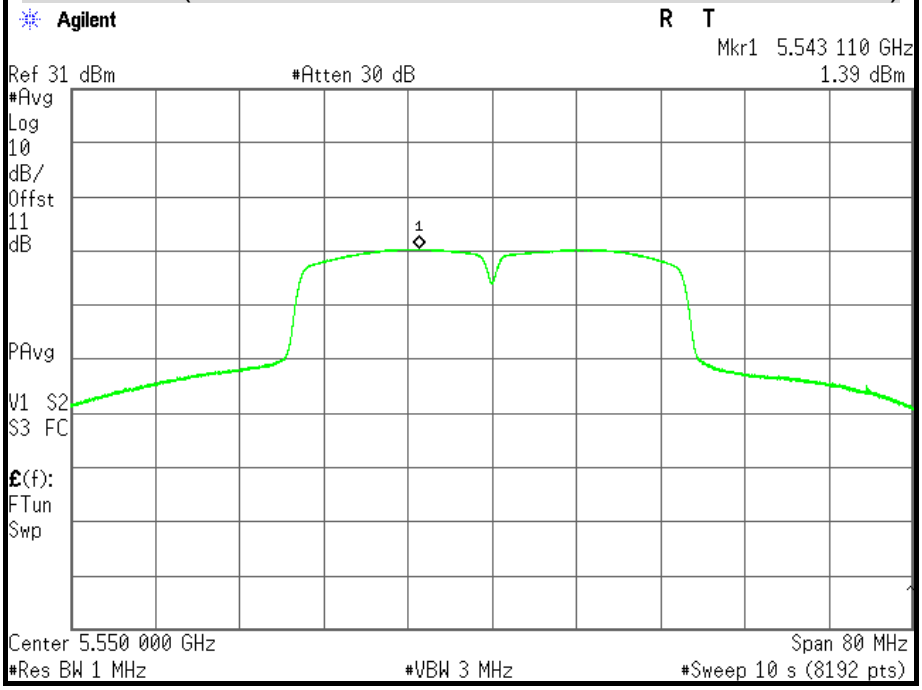


This report shall not be reproduced, except in full, without the written approval of Compliance Certification Services Inc.

CH Low (IEEE 802.11an Mode HT40 / Band 2C / Chain 0)

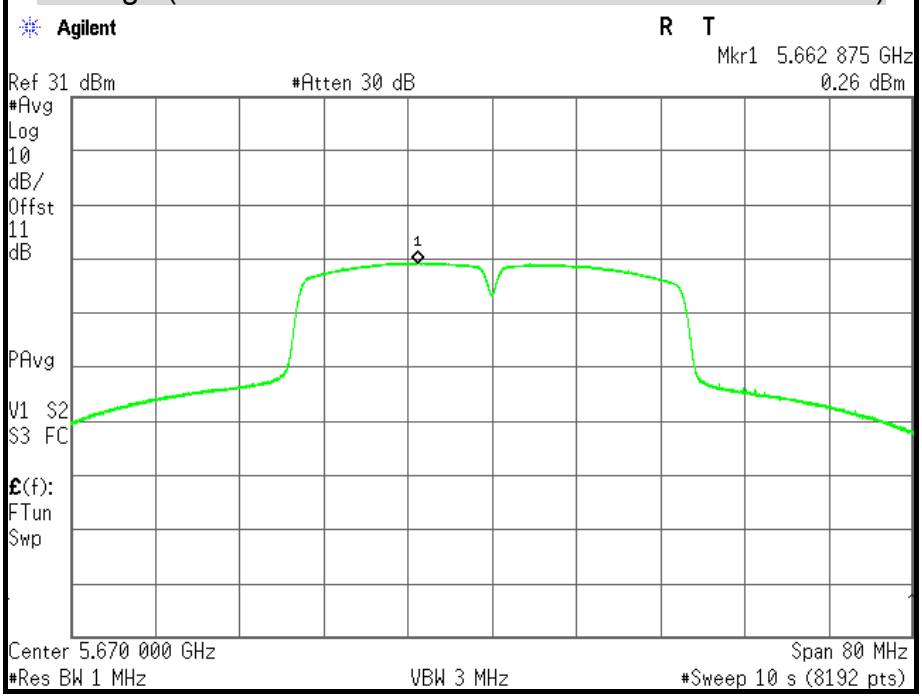


CH Middle (IEEE 802.11an Mode HT40 / Band 2C / Chain 0)



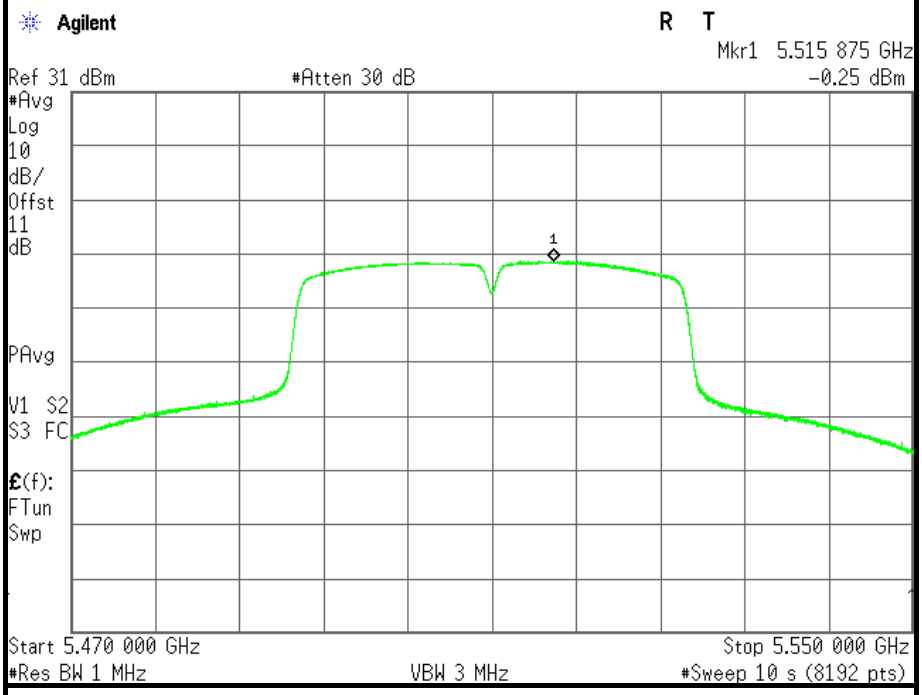
This report shall not be reproduced, except in full, without the written approval of Compliance Certification Services Inc.

CH High (IEEE 802.11an Mode HT40 / Band 2C / Chain 0)

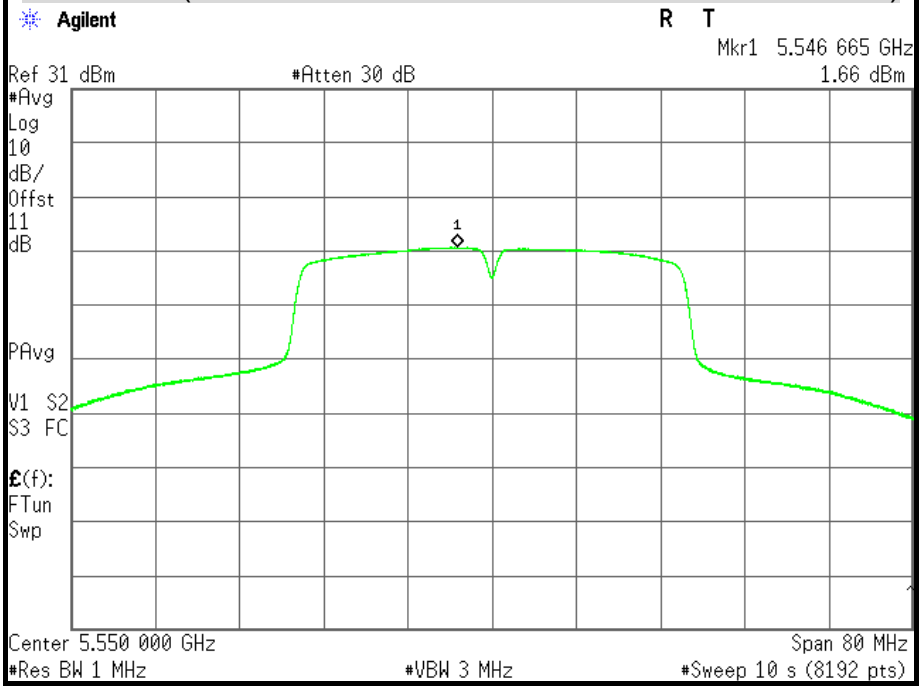


This report shall not be reproduced, except in full, without the written approval of Compliance Certification Services Inc.

CH Low (IEEE 802.11an Mode HT40 / Band 2C / Chain 1)

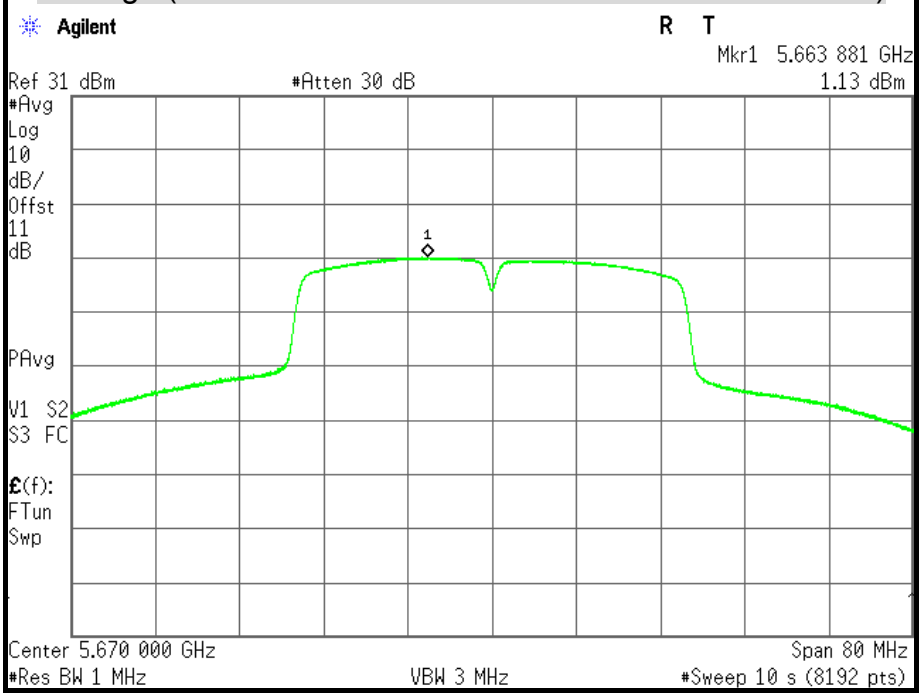


CH Middle (IEEE 802.11an Mode HT40 / Band 2C / Chain 1)



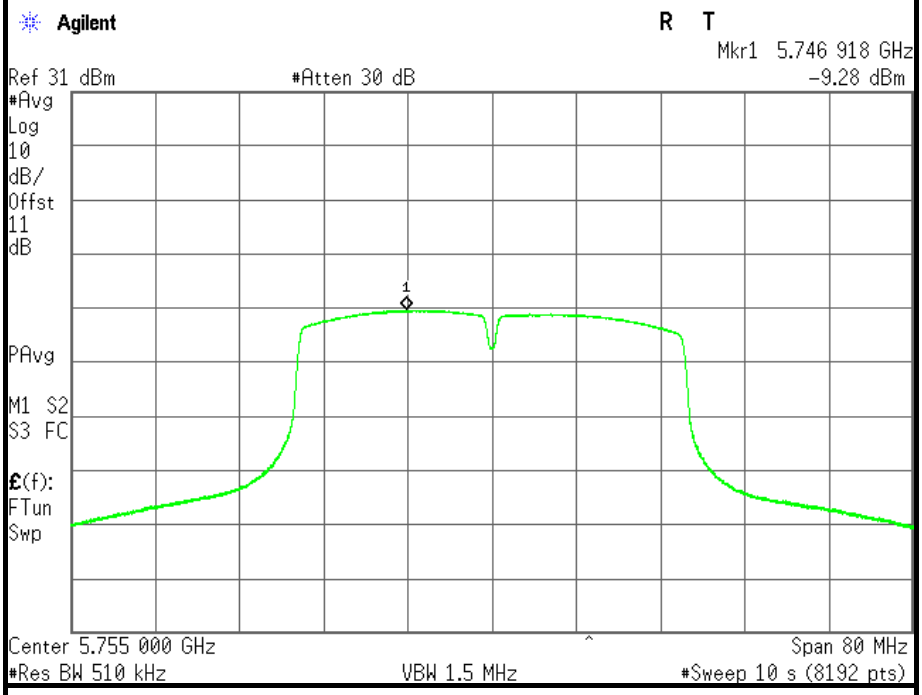
This report shall not be reproduced, except in full, without the written approval of Compliance Certification Services Inc.

CH High (IEEE 802.11an Mode HT40 / Band 2C / Chain 1)

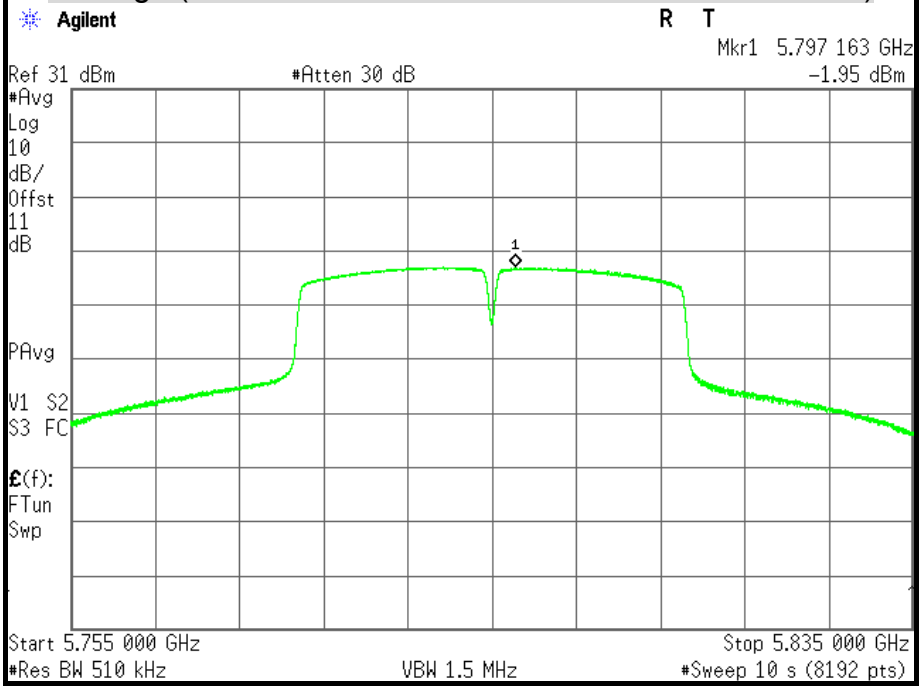


This report shall not be reproduced, except in full, without the written approval of Compliance Certification Services Inc.

CH Low (IEEE 802.11an Mode HT40 / Band 3 / Chain 0)

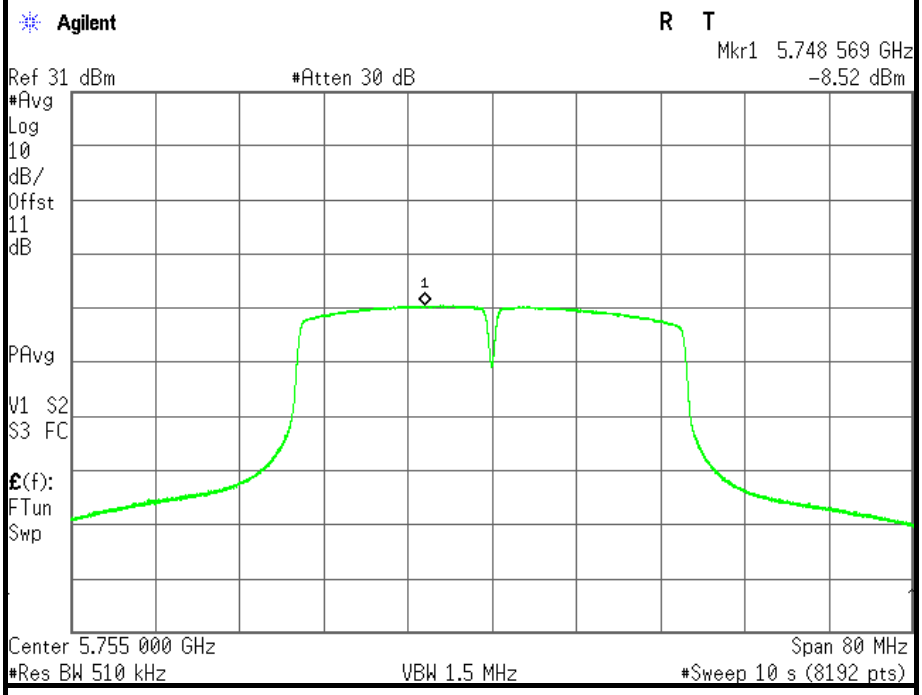


CH High (IEEE 802.11an Mode HT40 / Band 3 / Chain 0)

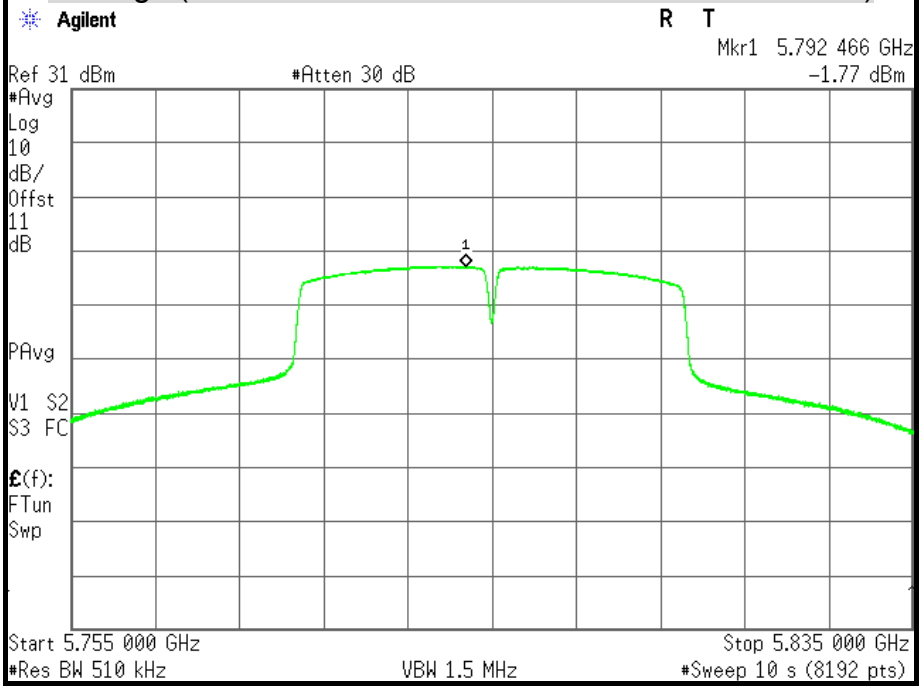


This report shall not be reproduced, except in full, without the written approval of Compliance Certification Services Inc.

CH Low (IEEE 802.11an Mode HT40 / Band 3 / Chain 1)



CH High (IEEE 802.11an Mode HT40 / Band 3 / Chain 1)



This report shall not be reproduced, except in full, without the written approval of Compliance Certification Services Inc.

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:

1. *[1] Until February 1, 1999, this restricted band shall be 0.490-0.510 MHz.*
2. *[2] Above 38.6*

(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.

This report shall not be reproduced, except in full, without the written approval of Compliance Certification Services Inc.

(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.

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	12/02/2015
Horn Antenna	COM-POWER	AH-840	03077	12/17/2015
Pre-Amplifier	Agilent	8447D	2944A10052	07/15/2015
Pre-Amplifier	Agilent	8449B	3008A01916	07/15/2015
LOOP Antenna	EMCO	6502	8905-2356	09/23/2015
Notch Filters Band Reject	Micro-Tronics	BRM05702-01	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.

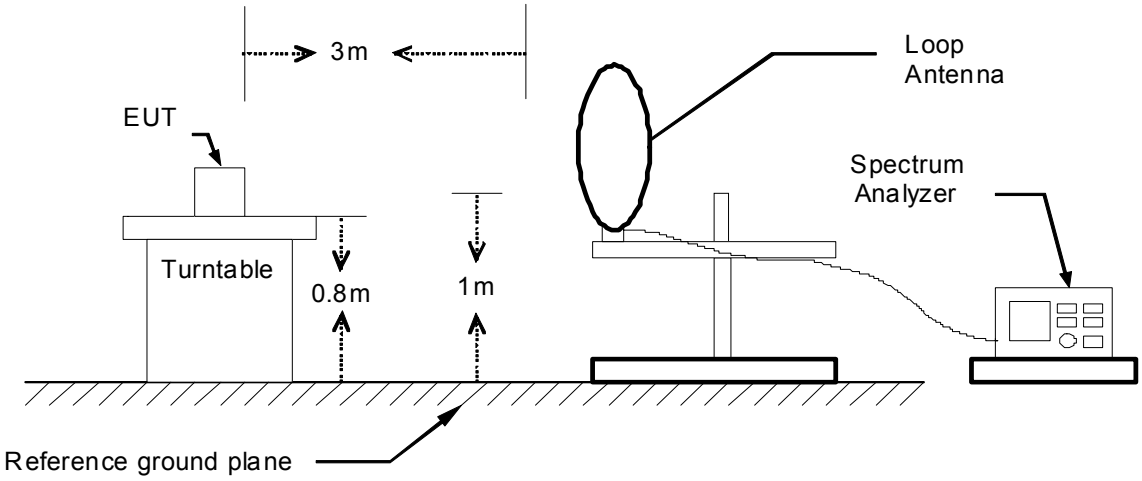
Remark: *1. Each piece of equipment is scheduled for calibration once a year.*
2. N.C.R = No Calibration Request.

This report shall not be reproduced, except in full, without the written approval of Compliance Certification Services Inc.

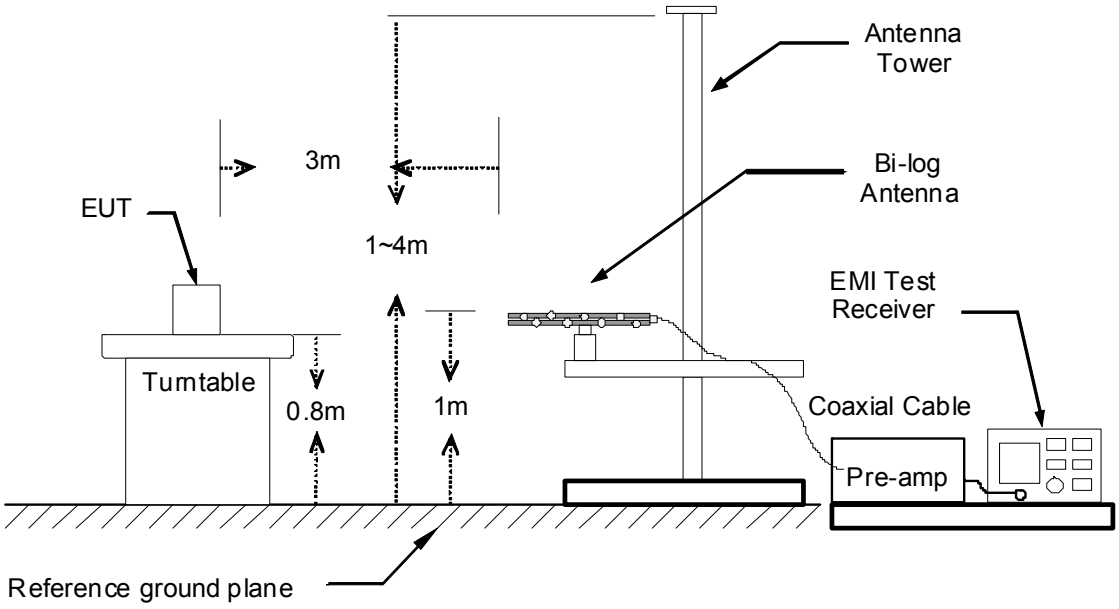
TEST SETUP

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

9kHz ~ 30MHz

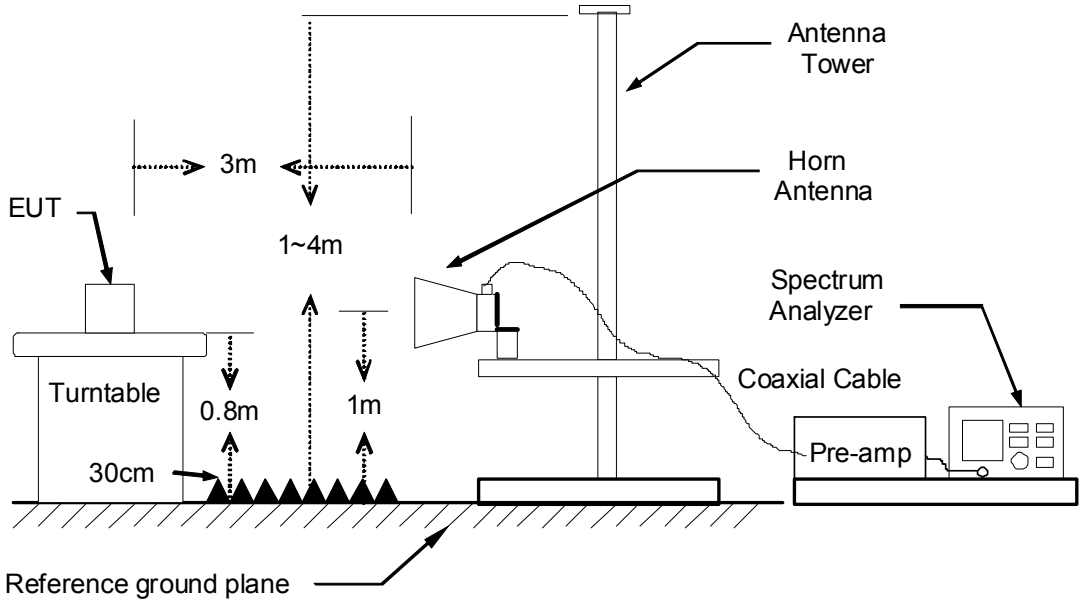


30MHz ~ 1GHz



This report shall not be reproduced, except in full, without the written approval of Compliance Certification Services Inc.

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



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.*

This report shall not be reproduced, except in full, without the written approval of Compliance Certification Services Inc.

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-572	Test Date	2015/03/05
Test Mode	TX Mode	Temp. & Humidity	18°C, 56%

966 Chamber_B at 3Meter / Horizontal						
Frequency (MHz)	Reading (dBμV)	Correction Factor (dB/m)	Result (dBμV/m)	Limit (dBμV/m)	Margin (dB)	Remark
47.46	45.54	-13.80	31.74	40.00	-8.26	Peak
65.89	45.05	-15.50	29.56	40.00	-10.44	Peak
101.78	48.74	-18.35	30.39	43.50	-13.11	Peak
739.07	35.70	-4.03	31.66	46.00	-14.34	Peak
800.18	41.05	-3.34	37.71	46.00	-8.29	Peak
1000.00	37.31	-0.03	37.28	74.00	-36.72	Peak

966 Chamber_B at 3Meter / Vertical						
Frequency (MHz)	Reading (dBμV)	Correction Factor (dB/m)	Result (dBμV/m)	Limit (dBμV/m)	Margin (dB)	Remark
30.97	46.65	-15.39	31.26	40.00	-8.74	Peak
46.49	47.91	-13.87	34.05	40.00	-5.95	Peak
64.92	47.23	-15.32	31.91	40.00	-8.09	Peak
800.18	44.80	-3.34	41.46	46.00	-4.54	Peak
833.16	42.36	-2.71	39.65	46.00	-6.35	Peak
844.80	40.66	-2.49	38.17	46.00	-7.83	Peak

Remark:

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.*
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).*

This report shall not be reproduced, except in full, without the written approval of Compliance Certification Services Inc.

Above 1 GHz

Product Name	Computer	Test By	Rex Chiu
Test Model	TREK-572	Test Date	2015/03/04
Test Mode	UNII Band 1/ IEEE 802.11a TX / CH Low	Temp. & Humidity	17°C, 56%

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
1600.00	46.81	---	-1.93	44.88	---	74.00	54.00	-9.12	Peak
4015.00	42.22	---	6.02	48.25	---	74.00	54.00	-5.75	Peak
5475.00	39.71	---	9.99	49.70	---	74.00	54.00	-4.30	Peak
6072.00	40.51	---	11.56	52.07	---	74.00	54.00	-1.93	Peak
7176.00	40.21	---	11.91	52.11	---	74.00	54.00	-1.89	Peak
8820.00	38.71	---	12.48	51.19	---	74.00	54.00	-2.81	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
1735.00	47.81	---	-0.68	47.13	---	74.00	54.00	-6.87	Peak
4045.00	41.35	---	6.13	47.48	---	74.00	54.00	-6.52	Peak
5555.00	40.57	---	10.25	50.82	---	74.00	54.00	-3.18	Peak
6396.00	39.81	---	11.63	51.44	---	74.00	54.00	-2.56	Peak
7776.00	39.23	---	11.87	51.10	---	74.00	54.00	-2.90	Peak
9288.00	39.06	---	13.26	52.32	---	74.00	54.00	-1.68	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)
   Remark AVG = Result(AV) – Limit(AV)

This report shall not be reproduced, except in full, without the written approval of Compliance Certification Services Inc.

Product Name	Computer	Test By	Rex Chiu
Test Model	TREK-572	Test Date	2015/03/04
Test Mode	UNII Band 1/ IEEE 802.11a TX / CH Middle	Temp. & Humidity	17°C, 56%

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
3480.00	42.96	---	4.99	47.95	---	74.00	54.00	-6.05	Peak
5150.00	48.37	39.63	8.73	57.10	48.36	74.00	54.00	-5.64	AVG
5415.00	40.57	---	9.76	50.33	---	74.00	54.00	-3.67	Peak
6384.00	38.73	---	11.63	50.36	---	74.00	54.00	-3.64	Peak
8604.00	39.31	---	12.67	51.98	---	74.00	54.00	-2.02	Peak
10440.00	40.81	28.50	15.41	56.22	43.91	74.00	54.00	-10.09	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
4055.00	42.33	---	6.16	48.50	---	74.00	54.00	-5.50	Peak
5150.00	44.26	34.49	8.73	52.98	43.22	74.00	54.00	-10.78	AVG
5505.00	39.66	---	10.10	49.76	---	74.00	54.00	-4.24	Peak
6204.00	39.06	---	11.59	50.65	---	74.00	54.00	-3.35	Peak
8064.00	38.65	---	12.48	51.13	---	74.00	54.00	-2.87	Peak
10440.00	40.50	29.76	15.41	55.90	45.17	74.00	54.00	-8.83	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)
   Remark AVG = Result(AV) – Limit(AV)

This report shall not be reproduced, except in full, without the written approval of Compliance Certification Services Inc.

Product Name	Computer	Test By	Rex Chiu
Test Model	TREK-572	Test Date	2015/03/04
Test Mode	UNII Band 1/ IEEE 802.11a TX / CH High	Temp. & Humidity	17°C, 56%

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
3495.00	43.48	---	5.02	48.50	---	74.00	54.00	-5.50	Peak
4625.00	41.26	---	7.84	49.10	---	74.00	54.00	-4.90	Peak
5500.00	41.06	---	10.09	51.15	---	74.00	54.00	-2.85	Peak
6132.00	39.27	---	11.58	50.85	---	74.00	54.00	-3.15	Peak
7332.00	39.30	---	11.55	50.85	---	74.00	54.00	-3.15	Peak
8868.00	38.79	---	12.44	51.24	---	74.00	54.00	-2.76	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
1725.00	48.31	---	-0.77	47.54	---	74.00	54.00	-6.46	Peak
4755.00	41.41	---	7.94	49.35	---	74.00	54.00	-4.65	Peak
5535.00	39.33	---	10.19	49.53	---	74.00	54.00	-4.47	Peak
6000.00	39.87	---	11.55	51.42	---	74.00	54.00	-2.58	Peak
7968.00	39.17	---	12.36	51.52	---	74.00	54.00	-2.48	Peak
9480.00	38.56	---	13.88	52.44	---	74.00	54.00	-1.56	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)
   Remark AVG = Result(AV) – Limit(AV)

This report shall not be reproduced, except in full, without the written approval of Compliance Certification Services Inc.

Product Name	Computer	Test By	Rex Chiu
Test Model	TREK-572	Test Date	2015/03/04
Test Mode	UNII Band 1/ IEEE 802.11an HT20 TX / CH Low	Temp. & Humidity	17°C, 56%

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
1740.00	45.40	---	-0.63	44.77	---	74.00	54.00	-9.23	Peak
3455.00	43.22	---	4.94	48.16	---	74.00	54.00	-5.84	Peak
5360.00	40.49	---	9.54	50.03	---	74.00	54.00	-3.97	Peak
6060.00	39.25	---	11.56	50.81	---	74.00	54.00	-3.19	Peak
7236.00	39.56	---	11.77	51.33	---	74.00	54.00	-2.67	Peak
8736.00	39.26	---	12.56	51.82	---	74.00	54.00	-2.18	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
1600.00	48.80	---	-1.93	46.87	---	74.00	54.00	-7.13	Peak
4480.00	41.32	---	7.67	48.99	---	74.00	54.00	-5.01	Peak
5540.00	40.14	---	10.21	50.35	---	74.00	54.00	-3.65	Peak
6084.00	39.42	---	11.57	50.99	---	74.00	54.00	-3.01	Peak
7980.00	39.02	---	12.39	51.41	---	74.00	54.00	-2.59	Peak
9252.00	38.68	---	13.14	51.82	---	74.00	54.00	-2.18	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)
   Remark AVG = Result(AV) – Limit(AV)

This report shall not be reproduced, except in full, without the written approval of Compliance Certification Services Inc.

Product Name	Computer	Test By	Rex Chiu
Test Model	TREK-572	Test Date	2015/03/04
Test Mode	UNII Band 1/ IEEE 802.11an HT20 TX / CH Middle	Temp. & Humidity	17°C, 56%

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
3875.00	43.75	---	5.73	49.48	---	74.00	54.00	-4.52	Peak
5150.00	49.90	37.68	8.73	58.62	46.41	74.00	54.00	-7.59	AVG
5485.00	39.72	---	10.03	49.75	---	74.00	54.00	-4.25	Peak
6216.00	39.11	---	11.59	50.70	---	74.00	54.00	-3.30	Peak
8028.00	38.73	---	12.46	51.18	---	74.00	54.00	-2.82	Peak
9264.00	39.14	---	13.18	52.32	---	74.00	54.00	-1.68	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
4100.00	42.26	---	6.32	48.58	---	74.00	54.00	-5.42	Peak
5150.00	42.49	---	8.73	51.22	---	74.00	54.00	-2.78	Peak
5470.00	39.74	---	9.97	49.71	---	74.00	54.00	-4.29	Peak
6048.00	39.60	---	11.56	51.16	---	74.00	54.00	-2.84	Peak
7752.00	38.91	---	11.81	50.72	---	74.00	54.00	-3.28	Peak
9348.00	38.53	---	13.45	51.98	---	74.00	54.00	-2.02	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)
   Remark AVG = Result(AV) – Limit(AV)

This report shall not be reproduced, except in full, without the written approval of Compliance Certification Services Inc.

Product Name	Computer	Test By	Rex Chiu
Test Model	TREK-572	Test Date	2015/03/04
Test Mode	UNII Band 1/ IEEE 802.11an HT20 TX / CH High	Temp. & Humidity	17°C, 56%

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
1740.00	48.26	---	-0.63	47.63	---	74.00	54.00	-6.37	Peak
5150.00	40.60	---	8.73	49.32	---	74.00	54.00	-4.68	Peak
5410.00	40.93	---	9.74	50.67	---	74.00	54.00	-3.33	Peak
6168.00	39.73	---	11.58	51.31	---	74.00	54.00	-2.69	Peak
7920.00	38.50	---	12.24	50.73	---	74.00	54.00	-3.27	Peak
9168.00	38.00	---	12.87	50.87	---	74.00	54.00	-3.13	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
3300.00	42.46	---	4.63	47.09	---	74.00	54.00	-6.91	Peak
4635.00	42.25	---	7.85	50.09	---	74.00	54.00	-3.91	Peak
5495.00	39.90	---	10.07	49.97	---	74.00	54.00	-4.03	Peak
6132.00	38.78	---	11.58	50.36	---	74.00	54.00	-3.64	Peak
7860.00	39.02	---	12.08	51.10	---	74.00	54.00	-2.90	Peak
9324.00	38.63	---	13.37	52.00	---	74.00	54.00	-2.00	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)
   Remark AVG = Result(AV) – Limit(AV)

This report shall not be reproduced, except in full, without the written approval of Compliance Certification Services Inc.

Product Name	Computer	Test By	Rex Chiu
Test Model	TREK-572	Test Date	2015/03/04
Test Mode	UNII Band 1/ IEEE 802.11an HT40 TX / CH Low	Temp. & Humidity	17°C, 56%

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
2055.00	43.19	---	1.92	45.11	---	74.00	54.00	-8.89	Peak
3460.00	42.54	---	4.95	47.49	---	74.00	54.00	-6.51	Peak
5415.00	40.01	---	9.76	49.77	---	74.00	54.00	-4.23	Peak
6096.00	39.25	---	11.57	50.82	---	74.00	54.00	-3.18	Peak
7680.00	39.13	---	11.62	50.75	---	74.00	54.00	-3.25	Peak
9312.00	38.20	---	13.33	51.54	---	74.00	54.00	-2.46	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
3135.00	43.19	---	4.30	47.49	---	74.00	54.00	-6.51	Peak
3865.00	42.72	---	5.72	48.44	---	74.00	54.00	-5.56	Peak
5480.00	39.51	---	10.01	49.52	---	74.00	54.00	-4.48	Peak
6108.00	39.74	---	11.57	51.31	---	74.00	54.00	-2.69	Peak
7440.00	39.18	---	11.30	50.48	---	74.00	54.00	-3.52	Peak
9252.00	38.99	---	13.14	52.13	---	74.00	54.00	-1.87	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)
   Remark AVG = Result(AV) – Limit(AV)

This report shall not be reproduced, except in full, without the written approval of Compliance Certification Services Inc.

Product Name	Computer	Test By	Rex Chiu
Test Model	TREK-572	Test Date	2015/03/04
Test Mode	UNII Band 1/ IEEE 802.11an HT40 TX / CH High	Temp. & Humidity	17°C, 56%

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
5150.00	51.78	42.81	8.73	60.50	51.54	74.00	54.00	-2.46	AVG
5350.00	40.01	---	9.51	49.52	---	74.00	54.00	-4.48	Peak
5565.00	40.32	---	10.28	50.60	---	74.00	54.00	-3.40	Peak
6168.00	39.40	---	11.58	50.98	---	74.00	54.00	-3.02	Peak
7740.00	39.19	---	11.77	50.97	---	74.00	54.00	-3.03	Peak
9360.00	38.44	---	13.49	51.93	---	74.00	54.00	-2.07	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
3240.00	43.36	---	4.51	47.87	---	74.00	54.00	-6.13	Peak
5150.00	45.27	36.42	8.73	54.00	45.15	74.00	54.00	-8.85	AVG
5570.00	40.08	---	10.29	50.37	---	74.00	54.00	-3.63	Peak
6132.00	38.89	---	11.58	50.47	---	74.00	54.00	-3.53	Peak
7980.00	38.99	---	12.39	51.38	---	74.00	54.00	-2.62	Peak
9180.00	37.82	---	12.91	50.73	---	74.00	54.00	-3.27	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)
   Remark AVG = Result(AV) – Limit(AV)

This report shall not be reproduced, except in full, without the written approval of Compliance Certification Services Inc.

Product Name	Computer	Test By	Rex Chiu
Test Model	TREK-572	Test Date	2015/03/04
Test Mode	UNII Band 2A / IEEE 802.11a TX / CH Low	Temp. & Humidity	17°C, 56%

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
1600.00	47.64	---	-1.93	45.70	---	74.00	54.00	-8.30	Peak
4590.00	42.08	---	7.81	49.89	---	74.00	54.00	-4.11	Peak
5350.00	39.62	---	9.51	49.12	---	74.00	54.00	-4.88	Peak
6036.00	39.32	---	11.56	50.88	---	74.00	54.00	-3.12	Peak
7812.00	38.99	---	11.96	50.95	---	74.00	54.00	-3.05	Peak
9288.00	38.26	---	13.26	51.52	---	74.00	54.00	-2.48	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
3190.00	43.85	---	4.41	48.26	---	74.00	54.00	-5.74	Peak
4770.00	41.81	---	7.96	49.76	---	74.00	54.00	-4.24	Peak
5375.00	41.37	---	9.60	50.97	---	74.00	54.00	-3.03	Peak
6192.00	39.53	---	11.59	51.12	---	74.00	54.00	-2.88	Peak
8028.00	38.75	---	12.46	51.20	---	74.00	54.00	-2.80	Peak
9468.00	38.63	---	13.84	52.46	---	74.00	54.00	-1.54	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)
   Remark AVG = Result(AV) – Limit(AV)

This report shall not be reproduced, except in full, without the written approval of Compliance Certification Services Inc.

Product Name	Computer	Test By	Rex Chiu
Test Model	TREK-572	Test Date	2015/03/04
Test Mode	UNII Band 2A / IEEE 802.11a TX / CH Middle	Temp. & Humidity	17°C, 56%

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
1730.00	50.89	---	-0.73	50.17	---	74.00	54.00	-3.83	Peak
4730.00	42.35	---	7.92	50.27	---	74.00	54.00	-3.73	Peak
5360.00	42.44	---	9.54	51.99	---	74.00	54.00	-2.01	Peak
6132.00	39.52	---	11.58	51.10	---	74.00	54.00	-2.90	Peak
7284.00	39.22	---	11.66	50.88	---	74.00	54.00	-3.12	Peak
9348.00	38.75	---	13.45	52.20	---	74.00	54.00	-1.80	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
1745.00	47.76	---	-0.59	47.17	---	74.00	54.00	-6.83	Peak
4725.00	41.12	---	7.92	49.04	---	74.00	54.00	-4.96	Peak
5555.00	39.65	---	10.25	49.90	---	74.00	54.00	-4.10	Peak
6552.00	39.97	---	11.72	51.69	---	74.00	54.00	-2.31	Peak
7968.00	38.14	---	12.36	50.50	---	74.00	54.00	-3.50	Peak
9108.00	38.65	---	12.68	51.33	---	74.00	54.00	-2.67	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)
   Remark AVG = Result(AV) – Limit(AV)

This report shall not be reproduced, except in full, without the written approval of Compliance Certification Services Inc.

Product Name	Computer	Test By	Rex Chiu
Test Model	TREK-572	Test Date	2015/03/04
Test Mode	UNII Band 2A / IEEE 802.11a TX / CH High	Temp. & Humidity	17°C, 56%

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
3140.00	43.61	---	4.31	47.92	---	74.00	54.00	-6.08	Peak
4700.00	40.97	---	7.90	48.87	---	74.00	54.00	-5.13	Peak
5550.00	40.13	---	10.24	50.37	---	74.00	54.00	-3.63	Peak
6600.00	39.56	---	11.78	51.34	---	74.00	54.00	-2.66	Peak
8016.00	38.35	---	12.45	50.80	---	74.00	54.00	-3.20	Peak
9264.00	37.94	---	13.18	51.12	---	74.00	54.00	-2.88	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
3990.00	42.51	---	5.95	48.46	---	74.00	54.00	-5.54	Peak
4750.00	40.76	---	7.94	48.70	---	74.00	54.00	-5.30	Peak
5985.00	38.05	---	11.51	49.55	---	74.00	54.00	-4.45	Peak
6120.00	39.46	---	11.57	51.03	---	74.00	54.00	-2.97	Peak
7968.00	38.77	---	12.36	51.13	---	74.00	54.00	-2.87	Peak
8760.00	38.97	---	12.54	51.51	---	74.00	54.00	-2.49	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)
   Remark AVG = Result(AV) – Limit(AV)

This report shall not be reproduced, except in full, without the written approval of Compliance Certification Services Inc.

Product Name	Computer	Test By	Rex Chiu
Test Model	TREK-572	Test Date	2015/03/04
Test Mode	UNII Band 2A / IEEE 802.11an HT20 TX / CH Low	Temp. & Humidity	17°C, 56%

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
3820.00	42.03	---	5.63	47.66	---	74.00	54.00	-6.34	Peak
4655.00	40.95	---	7.86	48.82	---	74.00	54.00	-5.18	Peak
5435.00	40.04	---	9.84	49.88	---	74.00	54.00	-4.12	Peak
6084.00	39.13	---	11.57	50.70	---	74.00	54.00	-3.30	Peak
7704.00	39.84	---	11.68	51.52	---	74.00	54.00	-2.48	Peak
9336.00	39.12	---	13.41	52.54	---	74.00	54.00	-1.46	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
3650.00	42.28	---	5.31	47.59	---	74.00	54.00	-6.41	Peak
4680.00	42.02	---	7.88	49.91	---	74.00	54.00	-4.09	Peak
5460.00	40.17	---	9.93	50.11	---	74.00	54.00	-3.89	Peak
6636.00	40.05	---	11.83	51.88	---	74.00	54.00	-2.12	Peak
8160.00	38.45	---	12.54	50.99	---	74.00	54.00	-3.01	Peak
9348.00	39.07	---	13.45	52.53	---	74.00	54.00	-1.47	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)
   Remark AVG = Result(AV) – Limit(AV)

This report shall not be reproduced, except in full, without the written approval of Compliance Certification Services Inc.

Product Name	Computer	Test By	Rex Chiu
Test Model	TREK-572	Test Date	2015/03/04
Test Mode	UNII Band 2A / IEEE 802.11an HT20 TX / CH Middle	Temp. & Humidity	17°C, 56%

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
4760.00	41.35	---	7.95	49.29	---	74.00	54.00	-4.71	Peak
5350.00	45.24	31.36	9.51	54.75	40.87	74.00	54.00	-13.13	AVG
5990.00	38.74	---	11.52	50.26	---	74.00	54.00	-3.74	Peak
6144.00	39.19	---	11.58	50.77	---	74.00	54.00	-3.23	Peak
7908.00	39.20	---	12.20	51.40	---	74.00	54.00	-2.60	Peak
9240.00	39.25	---	13.10	52.36	---	74.00	54.00	-1.64	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
3815.00	41.86	---	5.62	47.48	---	74.00	54.00	-6.52	Peak
4800.00	42.36	---	7.98	50.34	---	74.00	54.00	-3.66	Peak
5350.00	39.67	---	9.51	49.18	---	74.00	54.00	-4.82	Peak
6144.00	38.73	---	11.58	50.31	---	74.00	54.00	-3.69	Peak
7956.00	38.80	---	12.33	51.12	---	74.00	54.00	-2.88	Peak
8760.00	38.71	---	12.54	51.25	---	74.00	54.00	-2.75	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)
   Remark AVG = Result(AV) – Limit(AV)

This report shall not be reproduced, except in full, without the written approval of Compliance Certification Services Inc.

Product Name	Computer	Test By	Rex Chiu
Test Model	TREK-572	Test Date	2015/03/04
Test Mode	UNII Band 2A / IEEE 802.11an HT20 TX / CH High	Temp. & Humidity	17°C, 56%

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
4035.00	41.85	---	6.09	47.95	---	74.00	54.00	-6.05	Peak
4705.00	41.06	---	7.90	48.96	---	74.00	54.00	-5.04	Peak
5500.00	41.37	---	10.09	51.46	---	74.00	54.00	-2.54	Peak
6192.00	39.20	---	11.59	50.78	---	74.00	54.00	-3.22	Peak
7728.00	39.13	---	11.74	50.87	---	74.00	54.00	-3.13	Peak
9396.00	38.58	---	13.61	52.19	---	74.00	54.00	-1.81	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
3280.00	42.62	---	4.59	47.21	---	74.00	54.00	-6.79	Peak
4650.00	41.92	---	7.86	49.78	---	74.00	54.00	-4.22	Peak
5565.00	39.37	---	10.28	49.65	---	74.00	54.00	-4.35	Peak
6192.00	38.97	---	11.59	50.56	---	74.00	54.00	-3.44	Peak
7668.00	39.57	---	11.59	51.16	---	74.00	54.00	-2.84	Peak
9348.00	38.65	---	13.45	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)
   Remark AVG = Result(AV) – Limit(AV)

This report shall not be reproduced, except in full, without the written approval of Compliance Certification Services Inc.

Product Name	Computer	Test By	Rex Chiu
Test Model	TREK-572	Test Date	2015/03/04
Test Mode	UNII Band 2A / IEEE 802.11an HT40 TX / CH Low	Temp. & Humidity	17°C, 56%

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
1725.00	47.95	---	-0.77	47.17	---	74.00	54.00	-6.83	Peak
5150.00	42.92	---	8.73	51.64	---	74.00	54.00	-2.36	Peak
5350.00	52.16	43.25	9.51	61.66	52.76	74.00	54.00	-1.24	AVG
6156.00	38.78	---	11.58	50.36	---	74.00	54.00	-3.64	Peak
7728.00	38.99	---	11.74	50.73	---	74.00	54.00	-3.27	Peak
9408.00	38.54	---	13.64	52.18	---	74.00	54.00	-1.82	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
3915.00	42.49	---	5.81	48.30	---	74.00	54.00	-5.70	Peak
4535.00	42.14	---	7.77	49.91	---	74.00	54.00	-4.09	Peak
5350.00	48.15	39.65	9.51	57.65	49.16	74.00	54.00	-4.84	AVG
6312.00	39.48	---	11.61	51.10	---	74.00	54.00	-2.90	Peak
7764.00	39.57	---	11.84	51.40	---	74.00	54.00	-2.60	Peak
9300.00	38.85	---	13.30	52.15	---	74.00	54.00	-1.85	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)
   Remark AVG = Result(AV) – Limit(AV)

This report shall not be reproduced, except in full, without the written approval of Compliance Certification Services Inc.

Product Name	Computer	Test By	Rex Chiu
Test Model	TREK-572	Test Date	2015/03/04
Test Mode	UNII Band 2A / IEEE 802.11an HT40 TX / CH High	Temp. & Humidity	17°C, 56%

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
3225.00	43.02	---	4.48	47.50	---	74.00	54.00	-6.50	Peak
4640.00	41.67	---	7.85	49.52	---	74.00	54.00	-4.48	Peak
5555.00	40.04	---	10.25	50.30	---	74.00	54.00	-3.70	Peak
6144.00	39.72	---	11.58	51.30	---	74.00	54.00	-2.70	Peak
7224.00	39.83	---	11.79	51.62	---	74.00	54.00	-2.38	Peak
8940.00	38.35	---	12.38	50.73	---	74.00	54.00	-3.27	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
3230.00	42.80	---	4.49	47.29	---	74.00	54.00	-6.71	Peak
4605.00	42.26	---	7.82	50.09	---	74.00	54.00	-3.91	Peak
5550.00	40.17	---	10.24	50.40	---	74.00	54.00	-3.60	Peak
6180.00	39.89	---	11.59	51.47	---	74.00	54.00	-2.53	Peak
7728.00	38.97	---	11.74	50.71	---	74.00	54.00	-3.29	Peak
9300.00	38.35	---	13.30	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)
   Remark AVG = Result(AV) – Limit(AV)

This report shall not be reproduced, except in full, without the written approval of Compliance Certification Services Inc.

Product Name	Computer	Test By	Rex Chiu
Test Model	TREK-572	Test Date	2015/03/04
Test Mode	UNII Band 2C / IEEE 802.11a TX / CH Low	Temp. & Humidity	17°C, 56%

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
3365.00	42.39	---	4.76	47.15	---	74.00	54.00	-6.85	Peak
4655.00	40.82	---	7.86	48.68	---	74.00	54.00	-5.32	Peak
5825.00	38.53	---	11.04	49.57	---	74.00	54.00	-4.43	Peak
6036.00	39.30	---	11.56	50.86	---	74.00	54.00	-3.14	Peak
7080.00	39.28	---	12.13	51.41	---	74.00	54.00	-2.59	Peak
9648.00	37.93	---	14.15	52.08	---	74.00	54.00	-1.92	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
3985.00	41.58	---	5.94	47.53	---	74.00	54.00	-6.47	Peak
4685.00	40.97	---	7.89	48.86	---	74.00	54.00	-5.14	Peak
5960.00	39.05	---	11.43	50.49	---	74.00	54.00	-3.51	Peak
6228.00	38.81	---	11.60	50.40	---	74.00	54.00	-3.60	Peak
7848.00	38.67	---	12.05	50.72	---	74.00	54.00	-3.28	Peak
9336.00	38.93	---	13.41	52.34	---	74.00	54.00	-1.66	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)
   Remark AVG = Result(AV) – Limit(AV)

This report shall not be reproduced, except in full, without the written approval of Compliance Certification Services Inc.

Product Name	Computer	Test By	Rex Chiu
Test Model	TREK-572	Test Date	2015/03/04
Test Mode	UNII Band 2C / IEEE 802.11a TX / CH Middle	Temp. & Humidity	17°C, 56%

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
4670.00	40.84	---	7.88	48.72	---	74.00	54.00	-5.28	Peak
5375.00	40.89	---	9.60	50.49	---	74.00	54.00	-3.51	Peak
5995.00	39.16	---	11.54	50.70	---	74.00	54.00	-3.30	Peak
6144.00	39.15	---	11.58	50.73	---	74.00	54.00	-3.27	Peak
8592.00	38.44	---	12.68	51.13	---	74.00	54.00	-2.87	Peak
11148.00	42.28	29.42	17.91	60.20	47.33	74.00	54.00	-6.67	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
4730.00	41.78	---	7.92	49.70	---	74.00	54.00	-4.30	Peak
5405.00	40.28	---	9.72	50.00	---	74.00	54.00	-4.00	Peak
5730.00	39.45	---	10.76	50.21	---	74.00	54.00	-3.79	Peak
6120.00	38.80	---	11.57	50.38	---	74.00	54.00	-3.62	Peak
6984.00	39.49	---	12.29	51.78	---	74.00	54.00	-2.22	Peak
8724.00	39.12	---	12.57	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)
   Remark AVG = Result(AV) – Limit(AV)

This report shall not be reproduced, except in full, without the written approval of Compliance Certification Services Inc.

Product Name	Computer	Test By	Rex Chiu
Test Model	TREK-572	Test Date	2015/03/04
Test Mode	UNII Band 2C / IEEE 802.11a TX / CH High	Temp. & Humidity	17°C, 56%

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
4665.00	40.93	---	7.87	48.80	---	74.00	54.00	-5.20	Peak
5445.00	39.25	---	9.88	49.13	---	74.00	54.00	-4.87	Peak
5725.00	55.80	42.64	10.75	66.54	53.39	74.00	54.00	-0.61	AVG
6132.00	38.87	---	11.58	50.45	---	74.00	54.00	-3.55	Peak
8688.00	38.26	---	12.60	50.86	---	74.00	54.00	-3.14	Peak
11400.00	41.21	28.39	17.34	58.54	45.73	74.00	54.00	-8.27	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
4665.00	40.55	---	7.87	48.42	---	74.00	54.00	-5.58	Peak
5435.00	40.06	---	9.84	49.90	---	74.00	54.00	-4.10	Peak
5725.00	52.63	39.75	10.75	63.37	50.50	74.00	54.00	-3.50	AVG
6012.00	39.22	---	11.55	50.77	---	74.00	54.00	-3.23	Peak
8688.00	38.61	---	12.60	51.20	---	74.00	54.00	-2.80	Peak
11400.00	45.28	34.76	17.34	62.62	52.10	74.00	54.00	-1.90	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)
   Remark AVG = Result(AV) – Limit(AV)

This report shall not be reproduced, except in full, without the written approval of Compliance Certification Services Inc.

Product Name	Computer	Test By	Rex Chiu
Test Model	TREK-572	Test Date	2015/03/04
Test Mode	UNII Band 2C / IEEE 802.11an HT20 TX / CH Low	Temp. & Humidity	17°C, 56%

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
3230.00	43.28	---	4.49	47.77	---	74.00	54.00	-6.23	Peak
4665.00	41.71	---	7.87	49.58	---	74.00	54.00	-4.42	Peak
6000.00	39.04	---	11.55	50.59	---	74.00	54.00	-3.41	Peak
6144.00	39.39	---	11.58	50.97	---	74.00	54.00	-3.03	Peak
7896.00	38.24	---	12.17	50.42	---	74.00	54.00	-3.58	Peak
9276.00	39.35	---	13.22	52.56	---	74.00	54.00	-1.44	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
3280.00	42.68	---	4.59	47.27	---	74.00	54.00	-6.73	Peak
4680.00	41.50	---	7.88	49.38	---	74.00	54.00	-4.62	Peak
5970.00	39.19	---	11.46	50.65	---	74.00	54.00	-3.35	Peak
6384.00	39.19	---	11.63	50.82	---	74.00	54.00	-3.18	Peak
7920.00	38.64	---	12.24	50.88	---	74.00	54.00	-3.12	Peak
9444.00	38.68	---	13.76	52.44	---	74.00	54.00	-1.56	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)
   Remark AVG = Result(AV) – Limit(AV)

This report shall not be reproduced, except in full, without the written approval of Compliance Certification Services Inc.

Product Name	Computer	Test By	Rex Chiu
Test Model	TREK-572	Test Date	2015/03/04
Test Mode	UNII Band 2C / IEEE 802.11an HT20 TX / CH Middle	Temp. & Humidity	17°C, 56%

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
4615.00	41.33	---	7.83	49.16	---	74.00	54.00	-4.84	Peak
5450.00	41.25	---	9.90	51.14	---	74.00	54.00	-2.86	Peak
5830.00	38.78	---	11.05	49.83	---	74.00	54.00	-4.17	Peak
6156.00	39.54	---	11.58	51.12	---	74.00	54.00	-2.88	Peak
7572.00	39.14	---	11.34	50.49	---	74.00	54.00	-3.51	Peak
9636.00	38.50	---	14.13	52.63	---	74.00	54.00	-1.37	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
4665.00	41.26	---	7.87	49.13	---	74.00	54.00	-4.87	Peak
5425.00	39.77	---	9.80	49.56	---	74.00	54.00	-4.44	Peak
6000.00	38.60	---	11.55	50.15	---	74.00	54.00	-3.85	Peak
6264.00	38.31	---	11.60	49.92	---	74.00	54.00	-4.08	Peak
8580.00	39.07	---	12.69	51.76	---	74.00	54.00	-2.24	Peak
11160.00	39.83	30.26	17.89	57.71	48.15	74.00	54.00	-5.85	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)
   Remark AVG = Result(AV) – Limit(AV)

This report shall not be reproduced, except in full, without the written approval of Compliance Certification Services Inc.

Product Name	Computer	Test By	Rex Chiu
Test Model	TREK-572	Test Date	2015/03/04
Test Mode	UNII Band 2C / IEEE 802.11an HT20 TX / CH High	Temp. & Humidity	17°C, 56%

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
4655.00	40.93	---	7.86	48.80	---	74.00	54.00	-5.20	Peak
5425.00	40.26	---	9.80	50.05	---	74.00	54.00	-3.95	Peak
5725.00	59.90	42.37	10.75	70.65	53.12	74.00	54.00	-0.88	AVG
6108.00	39.19	---	11.57	50.77	---	74.00	54.00	-3.23	Peak
8520.00	39.86	---	12.74	52.60	---	74.00	54.00	-1.40	Peak
11400.00	40.56	28.31	17.34	57.90	45.65	74.00	54.00	-8.35	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
4725.00	41.38	---	7.92	49.30	---	74.00	54.00	-4.70	Peak
5435.00	39.86	---	9.84	49.70	---	74.00	54.00	-4.30	Peak
5725.00	49.50	32.69	10.75	60.25	43.44	74.00	54.00	-10.56	AVG
6192.00	38.88	---	11.59	50.47	---	74.00	54.00	-3.53	Peak
8628.00	38.20	---	12.65	50.85	---	74.00	54.00	-3.15	Peak
11400.00	44.34	33.53	17.34	61.68	50.87	74.00	54.00	-3.13	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)
   Remark AVG = Result(AV) – Limit(AV)

This report shall not be reproduced, except in full, without the written approval of Compliance Certification Services Inc.

Product Name	Computer	Test By	Rex Chiu
Test Model	TREK-572	Test Date	2015/03/04
Test Mode	UNII Band 2C / IEEE 802.11an HT40 TX / CH Low	Temp. & Humidity	17°C, 56%

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
3915.00	42.55	---	5.81	48.36	---	74.00	54.00	-5.64	Peak
4615.00	41.81	---	7.83	49.64	---	74.00	54.00	-4.36	Peak
5960.00	38.96	---	11.43	50.39	---	74.00	54.00	-3.61	Peak
6204.00	38.72	---	11.59	50.31	---	74.00	54.00	-3.69	Peak
7236.00	39.04	---	11.77	50.81	---	74.00	54.00	-3.19	Peak
8568.00	38.88	---	12.70	51.59	---	74.00	54.00	-2.41	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
3860.00	43.02	---	5.71	48.73	---	74.00	54.00	-5.27	Peak
4690.00	41.10	---	7.89	48.99	---	74.00	54.00	-5.01	Peak
5680.00	38.94	---	10.62	49.56	---	74.00	54.00	-4.44	Peak
6120.00	38.79	---	11.57	50.36	---	74.00	54.00	-3.64	Peak
7248.00	39.14	---	11.74	50.88	---	74.00	54.00	-3.12	Peak
8628.00	39.24	---	12.65	51.89	---	74.00	54.00	-2.11	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)
   Remark AVG = Result(AV) – Limit(AV)

This report shall not be reproduced, except in full, without the written approval of Compliance Certification Services Inc.

Product Name	Computer	Test By	Rex Chiu
Test Model	TREK-572	Test Date	2015/03/04
Test Mode	UNII Band 2C / IEEE 802.11an HT40 TX / CH Middle	Temp. & Humidity	17°C, 56%

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
4600.00	41.40	---	7.82	49.22	---	74.00	54.00	-4.78	Peak
5460.00	53.06	43.22	9.93	62.99	53.15	74.00	54.00	-0.85	AVG
5980.00	39.31	---	11.49	50.80	---	74.00	54.00	-3.20	Peak
6960.00	40.43	---	12.26	52.69	---	74.00	54.00	-1.31	Peak
9348.00	38.56	---	13.45	52.01	---	74.00	54.00	-1.99	Peak
11100.00	40.45	30.59	18.02	58.47	48.61	74.00	54.00	-5.39	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
4600.00	41.71	---	7.82	49.53	---	74.00	54.00	-4.47	Peak
5460.00	45.91	36.13	9.93	55.84	46.06	74.00	54.00	-7.94	AVG
5990.00	38.79	---	11.52	50.32	---	74.00	54.00	-3.68	Peak
6228.00	38.73	---	11.60	50.32	---	74.00	54.00	-3.68	Peak
8064.00	39.28	---	12.48	51.76	---	74.00	54.00	-2.24	Peak
9336.00	38.14	---	13.41	51.56	---	74.00	54.00	-2.44	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)
   Remark AVG = Result(AV) – Limit(AV)

This report shall not be reproduced, except in full, without the written approval of Compliance Certification Services Inc.

Product Name	Computer	Test By	Rex Chiu
Test Model	TREK-572	Test Date	2015/03/04
Test Mode	UNII Band 2C / IEEE 802.11an HT40 TX / CH High	Temp. & Humidity	17°C, 56%

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
4650.00	41.95	---	7.86	49.81	---	74.00	54.00	-4.19	Peak
5395.00	39.94	---	9.68	49.62	---	74.00	54.00	-4.38	Peak
5725.00	49.76	41.74	10.75	60.51	52.49	74.00	54.00	-1.51	AVG
6192.00	39.01	---	11.59	50.60	---	74.00	54.00	-3.40	Peak
7908.00	38.59	---	12.20	50.79	---	74.00	54.00	-3.21	Peak
9444.00	38.84	---	13.76	52.60	---	74.00	54.00	-1.40	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
4700.00	41.66	---	7.90	49.56	---	74.00	54.00	-4.44	Peak
5440.00	40.05	---	9.86	49.90	---	74.00	54.00	-4.10	Peak
5725.00	42.74	34.85	10.75	53.49	45.60	74.00	54.00	-8.40	AVG
6048.00	39.58	---	11.56	51.14	---	74.00	54.00	-2.86	Peak
8640.00	38.79	---	12.64	51.43	---	74.00	54.00	-2.57	Peak
11340.00	42.56	31.37	17.47	60.03	48.84	74.00	54.00	-5.16	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)
   Remark AVG = Result(AV) – Limit(AV)

This report shall not be reproduced, except in full, without the written approval of Compliance Certification Services Inc.

Product Name	Computer	Test By	Rex Chiu
Test Model	TREK-572	Test Date	2015/03/04
Test Mode	UNII Band 3 / IEEE 802.11a TX / CH Low	Temp. & Humidity	17°C, 56%

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
4770.00	42.04	---	7.96	50.00	---	74.00	54.00	-4.00	Peak
5480.00	39.67	---	10.01	49.68	---	74.00	54.00	-4.32	Peak
5725.00	51.53	41.88	10.75	62.28	52.63	74.00	54.00	-1.37	AVG
6144.00	39.07	---	11.58	50.65	---	74.00	54.00	-3.35	Peak
8496.00	39.79	---	12.76	52.55	---	74.00	54.00	-1.45	Peak
11496.00	41.70	28.63	17.12	58.82	45.75	74.00	54.00	-8.25	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
4700.00	41.88	---	7.90	49.78	---	74.00	54.00	-4.22	Peak
5445.00	39.23	---	9.88	49.11	---	74.00	54.00	-4.89	Peak
5725.00	46.70	37.11	10.75	57.44	47.86	74.00	54.00	-6.14	AVG
6108.00	39.96	---	11.57	51.53	---	74.00	54.00	-2.47	Peak
8700.00	39.66	---	12.59	52.24	---	74.00	54.00	-1.76	Peak
11496.00	45.77	34.49	17.12	62.89	51.61	74.00	54.00	-2.39	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)
   Remark AVG = Result(AV) – Limit(AV)

This report shall not be reproduced, except in full, without the written approval of Compliance Certification Services Inc.

Product Name	Computer	Test By	Rex Chiu
Test Model	TREK-572	Test Date	2015/03/04
Test Mode	UNII Band 3 / IEEE 802.11a TX / CH Middle	Temp. & Humidity	17°C, 56%

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
3855.00	43.46	---	5.70	49.16	---	74.00	54.00	-4.84	Peak
5725.00	49.06	40.26	10.75	59.81	51.01	74.00	54.00	-2.99	AVG
5850.00	46.79	36.94	11.11	57.90	48.05	74.00	54.00	-5.95	AVG
6960.00	38.90	---	12.26	51.16	---	74.00	54.00	-2.84	Peak
8592.00	38.83	---	12.68	51.51	---	74.00	54.00	-2.49	Peak
11568.00	41.06	28.54	17.50	58.56	46.04	74.00	54.00	-7.96	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
4750.00	41.38	---	7.94	49.32	---	74.00	54.00	-4.68	Peak
5725.00	42.14	33.24	10.75	52.89	43.99	74.00	54.00	-10.01	AVG
5960.00	38.24	---	11.43	49.67	---	74.00	54.00	-4.33	Peak
6108.00	39.82	---	11.57	51.39	---	74.00	54.00	-2.61	Peak
8544.00	39.76	---	12.72	52.49	---	74.00	54.00	-1.51	Peak
11568.00	42.25	31.38	17.50	59.75	48.88	74.00	54.00	-5.12	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)
   Remark AVG = Result(AV) – Limit(AV)

This report shall not be reproduced, except in full, without the written approval of Compliance Certification Services Inc.

Product Name	Computer	Test By	Rex Chiu
Test Model	TREK-572	Test Date	2015/03/04
Test Mode	UNII Band 3 / IEEE 802.11a TX / CH High	Temp. & Humidity	17°C, 56%

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
4695.00	41.20	---	7.90	49.10	---	74.00	54.00	-4.90	Peak
5425.00	40.34	---	9.80	50.14	---	74.00	54.00	-3.86	Peak
5850.00	54.91	41.75	11.11	66.03	52.86	74.00	54.00	-1.14	AVG
6312.00	38.72	---	11.61	50.34	---	74.00	54.00	-3.66	Peak
8160.00	38.19	---	12.54	50.74	---	74.00	54.00	-3.26	Peak
11652.00	40.89	28.46	17.98	58.87	46.44	74.00	54.00	-7.56	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
4655.00	41.48	---	7.86	49.34	---	74.00	54.00	-4.66	Peak
5430.00	39.78	---	9.82	49.59	---	74.00	54.00	-4.41	Peak
5850.00	46.34	33.52	11.11	57.45	44.63	74.00	54.00	-9.37	AVG
6156.00	40.56	---	11.58	52.14	---	74.00	54.00	-1.86	Peak
7704.00	39.90	---	11.68	51.59	---	74.00	54.00	-2.41	Peak
11652.00	42.78	31.95	17.98	60.76	49.93	74.00	54.00	-4.07	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)
   Remark AVG = Result(AV) – Limit(AV)

This report shall not be reproduced, except in full, without the written approval of Compliance Certification Services Inc.

Product Name	Computer	Test By	Rex Chiu
Test Model	TREK-572	Test Date	2015/03/04
Test Mode	UNII Band 3 / IEEE 802.11an HT20 TX / CH Low	Temp. & Humidity	17°C, 56%

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
5405.00	40.96	---	9.72	50.68	---	74.00	54.00	-3.32	Peak
5725.00	54.02	42.04	10.75	64.76	52.79	74.00	54.00	-1.21	AVG
5965.00	38.30	---	11.45	49.75	---	74.00	54.00	-4.25	Peak
6132.00	39.12	---	11.58	50.69	---	74.00	54.00	-3.31	Peak
8232.00	39.04	---	12.59	51.63	---	74.00	54.00	-2.37	Peak
11484.00	40.79	27.96	17.15	57.94	45.11	74.00	54.00	-8.89	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
4700.00	41.89	---	7.90	49.79	---	74.00	54.00	-4.21	Peak
5350.00	40.26	---	9.51	49.76	---	74.00	54.00	-4.24	Peak
5725.00	50.24	38.51	10.75	60.98	49.26	74.00	54.00	-4.74	AVG
6276.00	39.45	---	11.61	51.05	---	74.00	54.00	-2.95	Peak
8712.00	38.18	---	12.58	50.76	---	74.00	54.00	-3.24	Peak
11496.00	41.49	30.24	17.12	58.60	47.36	74.00	54.00	-6.64	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)
   Remark AVG = Result(AV) – Limit(AV)

This report shall not be reproduced, except in full, without the written approval of Compliance Certification Services Inc.

Product Name	Computer	Test By	Rex Chiu
Test Model	TREK-572	Test Date	2015/03/04
Test Mode	UNII Band 3 / IEEE 802.11an HT20 TX / CH Middle	Temp. & Humidity	17°C, 56%

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
5365.00	40.53	---	9.56	50.09	---	74.00	54.00	-3.91	Peak
5725.00	51.47	36.53	10.75	62.22	47.28	74.00	54.00	-6.72	AVG
5850.00	47.81	32.96	11.11	58.92	44.07	74.00	54.00	-9.93	AVG
6144.00	39.53	---	11.58	51.11	---	74.00	54.00	-2.89	Peak
8412.00	39.52	---	12.70	52.22	---	74.00	54.00	-1.78	Peak
11568.00	39.93	27.58	17.50	57.43	45.08	74.00	54.00	-8.92	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
5410.00	39.84	---	9.74	49.58	---	74.00	54.00	-4.42	Peak
5725.00	46.50	31.61	10.75	57.25	42.36	74.00	54.00	-11.64	AVG
5850.00	43.19	28.04	11.11	54.30	39.15	74.00	54.00	-14.85	AVG
6144.00	39.35	---	11.58	50.93	---	74.00	54.00	-3.07	Peak
7800.00	40.24	---	11.93	52.17	---	74.00	54.00	-1.83	Peak
11568.00	43.21	32.31	17.50	60.71	49.81	74.00	54.00	-4.19	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)
   Remark AVG = Result(AV) – Limit(AV)

This report shall not be reproduced, except in full, without the written approval of Compliance Certification Services Inc.

Product Name	Computer	Test By	Rex Chiu
Test Model	TREK-572	Test Date	2015/03/04
Test Mode	UNII Band 3 / IEEE 802.11an HT20 TX / CH High	Temp. & Humidity	17°C, 56%

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
5390.00	41.47	---	9.66	51.13	---	74.00	54.00	-2.87	Peak
5670.00	40.03	---	10.59	50.61	---	74.00	54.00	-3.39	Peak
5850.00	57.60	42.31	11.11	68.72	53.42	74.00	54.00	-0.58	AVG
6204.00	40.03	---	11.59	51.62	---	74.00	54.00	-2.38	Peak
8568.00	38.90	---	12.70	51.60	---	74.00	54.00	-2.40	Peak
11652.00	41.55	28.32	17.98	59.53	46.30	74.00	54.00	-7.70	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
4625.00	41.83	---	7.84	49.67	---	74.00	54.00	-4.33	Peak
5455.00	40.02	---	9.91	49.93	---	74.00	54.00	-4.07	Peak
5850.00	48.00	33.56	11.11	59.11	44.67	74.00	54.00	-9.33	AVG
6948.00	39.59	---	12.24	51.83	---	74.00	54.00	-2.17	Peak
8736.00	38.33	---	12.56	50.89	---	74.00	54.00	-3.11	Peak
11640.00	41.86	31.06	17.91	59.78	48.97	74.00	54.00	-5.03	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)
   Remark AVG = Result(AV) – Limit(AV)

This report shall not be reproduced, except in full, without the written approval of Compliance Certification Services Inc.

Product Name	Computer	Test By	Rex Chiu
Test Model	TREK-572	Test Date	2015/03/04
Test Mode	UNII Band 3 / IEEE 802.11an HT40 TX / CH Low	Temp. & Humidity	17°C, 56%

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
5385.00	40.61	---	9.64	50.26	---	74.00	54.00	-3.74	Peak
5725.00	50.16	41.67	10.75	60.91	52.42	74.00	54.00	-1.58	AVG
5990.00	38.47	---	11.52	49.99	---	74.00	54.00	-4.01	Peak
6348.00	38.79	---	11.62	50.41	---	74.00	54.00	-3.59	Peak
8100.00	39.40	---	12.50	51.91	---	74.00	54.00	-2.09	Peak
9348.00	38.64	---	13.45	52.10	---	74.00	54.00	-1.90	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
5415.00	40.28	---	9.76	50.04	---	74.00	54.00	-3.96	Peak
5725.00	42.80	33.86	10.75	53.55	44.61	74.00	54.00	-9.39	AVG
5990.00	39.11	---	11.52	50.63	---	74.00	54.00	-3.37	Peak
6084.00	38.96	---	11.57	50.53	---	74.00	54.00	-3.47	Peak
8772.00	38.60	---	12.53	51.13	---	74.00	54.00	-2.87	Peak
11508.00	42.25	31.57	17.16	59.41	48.73	74.00	54.00	-5.27	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)
   Remark AVG = Result(AV) – Limit(AV)

This report shall not be reproduced, except in full, without the written approval of Compliance Certification Services Inc.

Product Name	Computer	Test By	Rex Chiu
Test Model	TREK-572	Test Date	2015/03/04
Test Mode	UNII Band 3 / IEEE 802.11an HT40 TX / CH High	Temp. & Humidity	17°C, 56%

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
5405.00	40.74	---	9.72	50.46	---	74.00	54.00	-3.54	Peak
5725.00	46.65	39.37	10.75	57.40	50.12	74.00	54.00	-3.88	AVG
5850.00	48.53	41.54	11.11	59.64	52.65	74.00	54.00	-1.35	AVG
6192.00	39.01	---	11.59	50.60	---	74.00	54.00	-3.40	Peak
7212.00	39.34	---	11.82	51.16	---	74.00	54.00	-2.84	Peak
8856.00	38.49	---	12.45	50.94	---	74.00	54.00	-3.06	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
5460.00	39.90	---	9.93	49.83	---	74.00	54.00	-4.17	Peak
5725.00	40.88	---	10.75	51.63	---	74.00	54.00	-2.37	Peak
5850.00	43.61	36.72	11.11	54.72	47.83	74.00	54.00	-6.17	AVG
6144.00	39.84	---	11.58	51.41	---	74.00	54.00	-2.59	Peak
8544.00	38.53	---	12.72	51.26	---	74.00	54.00	-2.74	Peak
11592.00	40.96	30.76	17.64	58.59	48.40	74.00	54.00	-5.60	AVG

Remark:

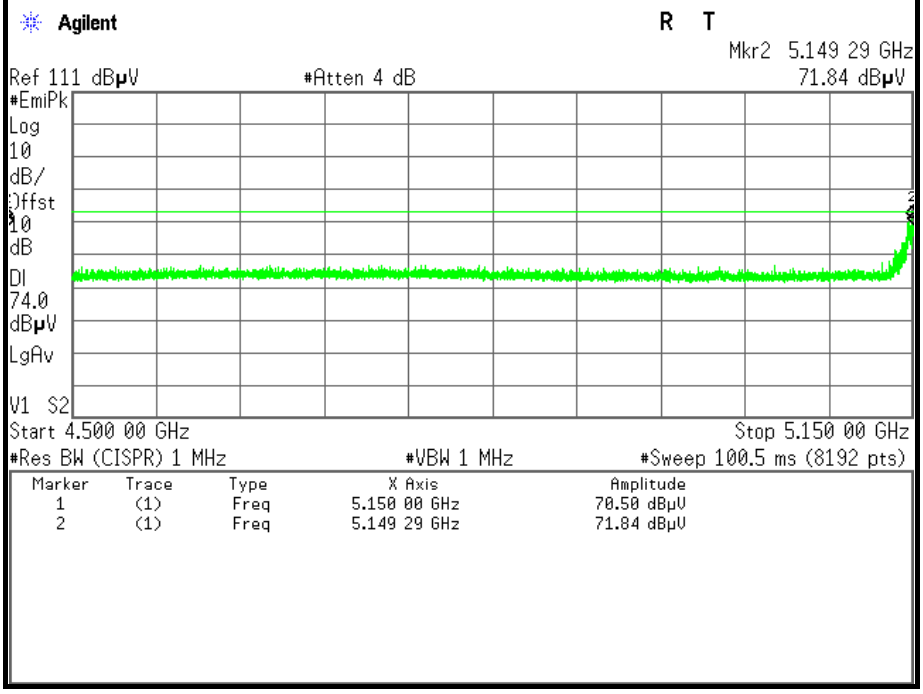
1. *Measuring frequencies from 1 GHz to the 10th harmonic of highest fundamental frequency.*
2. *Average test would be performed if the peak result were greater than the average limit.*
3. *Data of measurement within this frequency range shown " --- " in the table above means the reading of emissions 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)
   Remark AVG = Result(AV) – Limit(AV)

This report shall not be reproduced, except in full, without the written approval of Compliance Certification Services Inc.

Restricted Band Edges

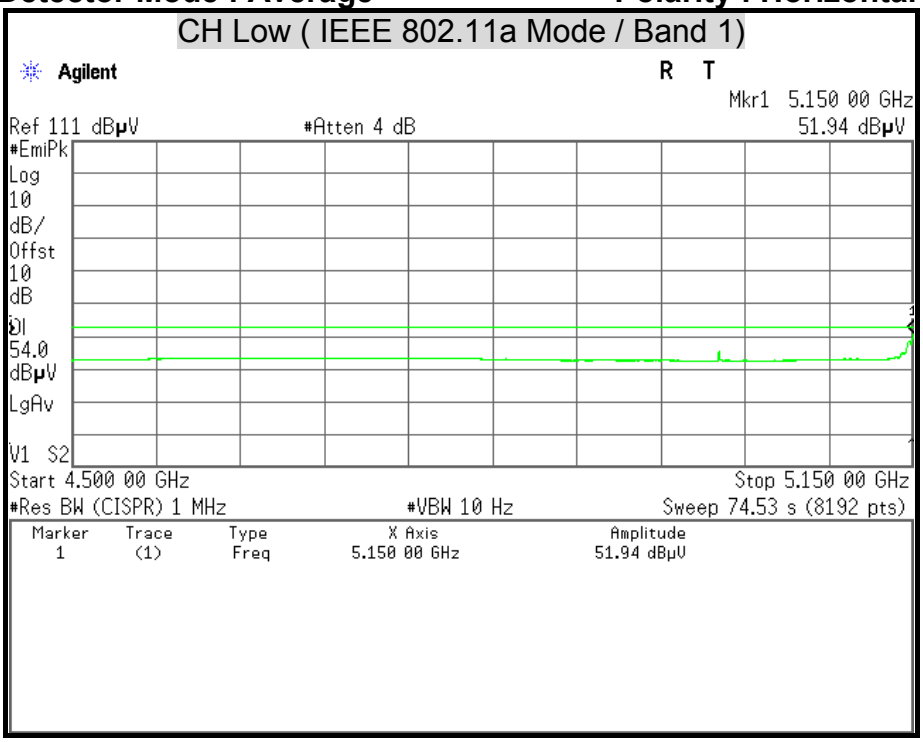
Detector Mode : Peak **Polarity : Horizontal**

CH Low (IEEE 802.11a Mode / Band 1)



Detector Mode : Average **Polarity : Horizontal**

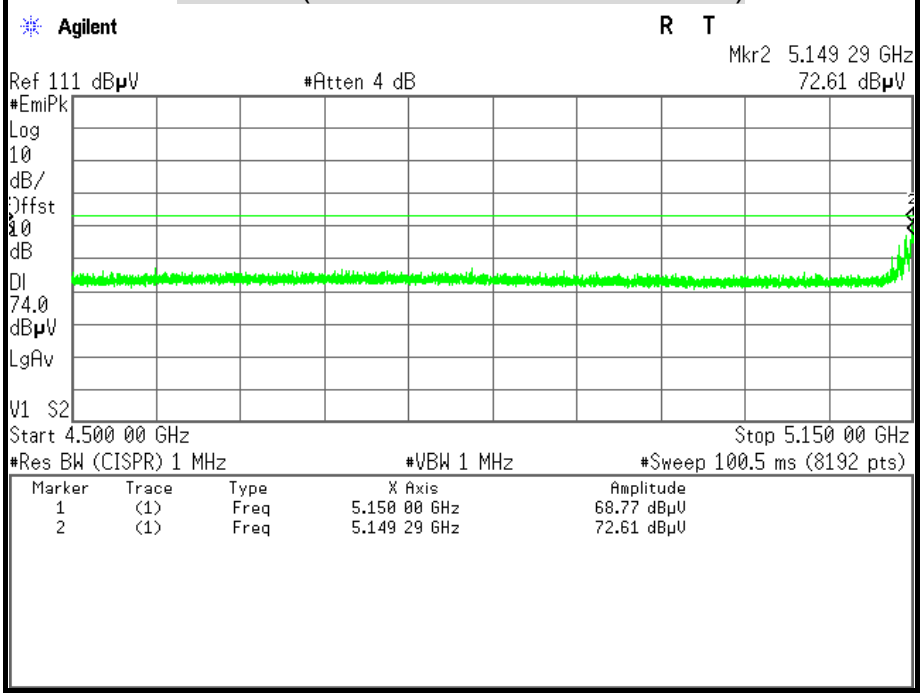
CH Low (IEEE 802.11a Mode / Band 1)



This report shall not be reproduced, except in full, without the written approval of Compliance Certification Services Inc.

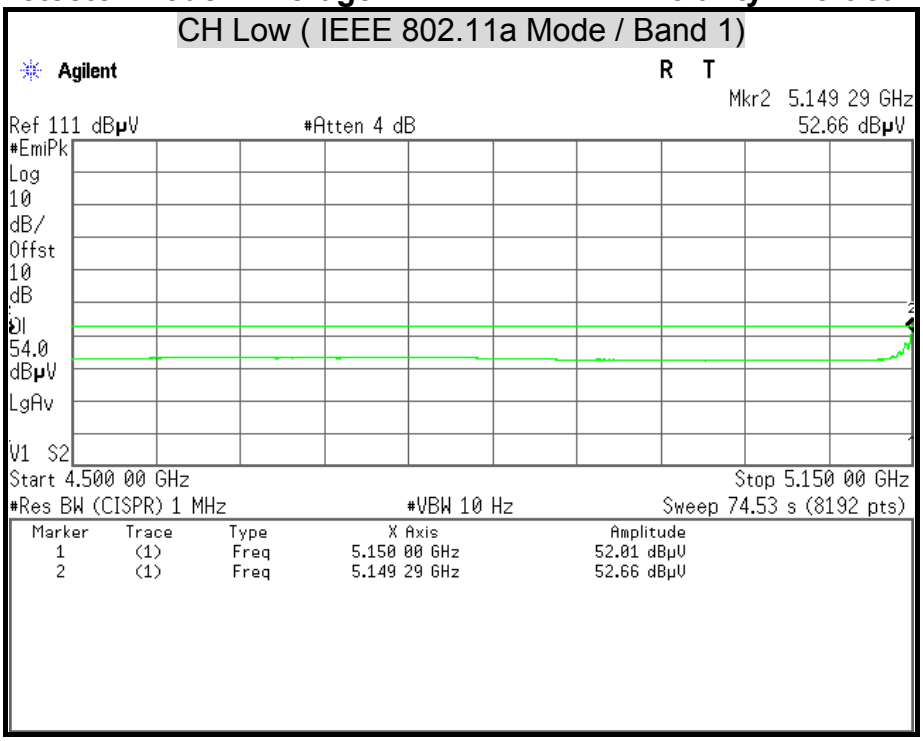
Detector Mode : Peak **Polarity : Vertical**

CH Low (IEEE 802.11a Mode / Band 1)



Detector Mode : Average **Polarity : Vertical**

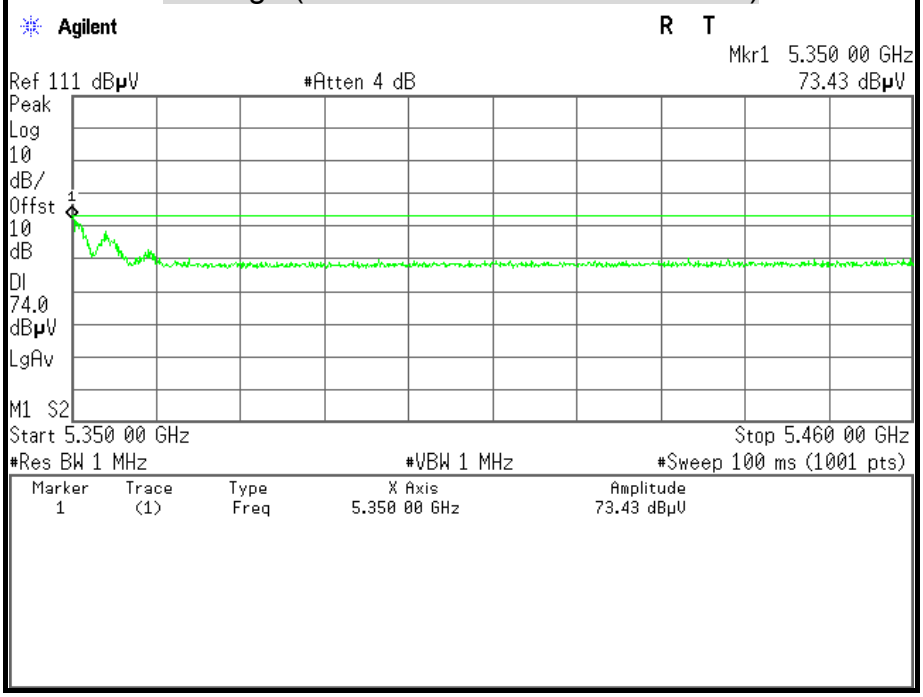
CH Low (IEEE 802.11a Mode / Band 1)



This report shall not be reproduced, except in full, without the written approval of Compliance Certification Services Inc.

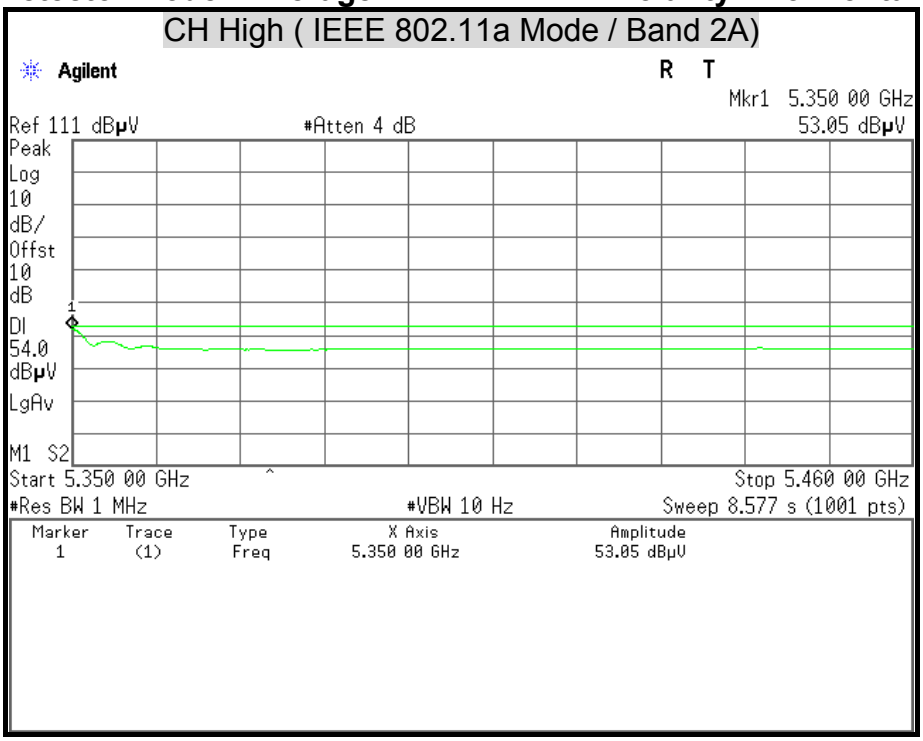
Detector Mode : Peak **Polarity : Horizontal**

CH High (IEEE 802.11a Mode / Band 2A)



Detector Mode : Average **Polarity : Horizontal**

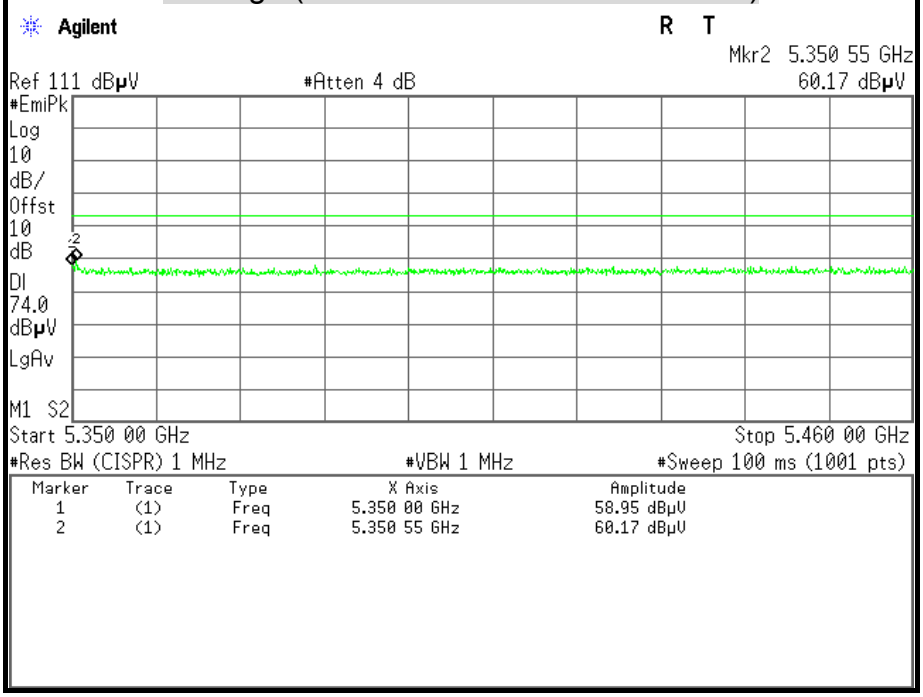
CH High (IEEE 802.11a Mode / Band 2A)



This report shall not be reproduced, except in full, without the written approval of Compliance Certification Services Inc.

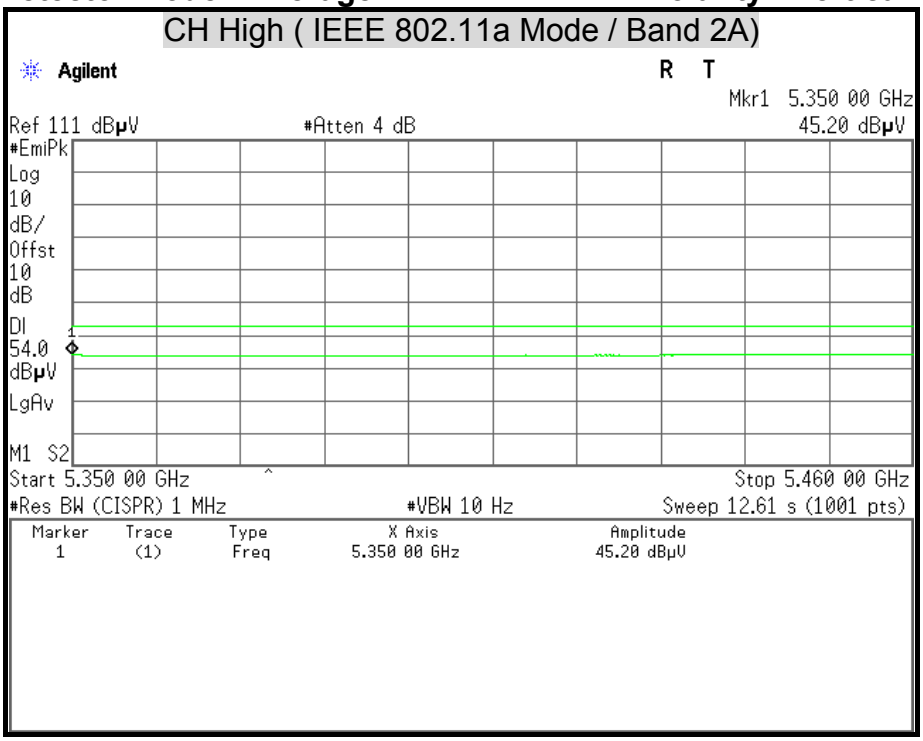
Detector Mode : Peak **Polarity : Vertical**

CH High (IEEE 802.11a Mode / Band 2A)



Detector Mode : Average **Polarity : Vertical**

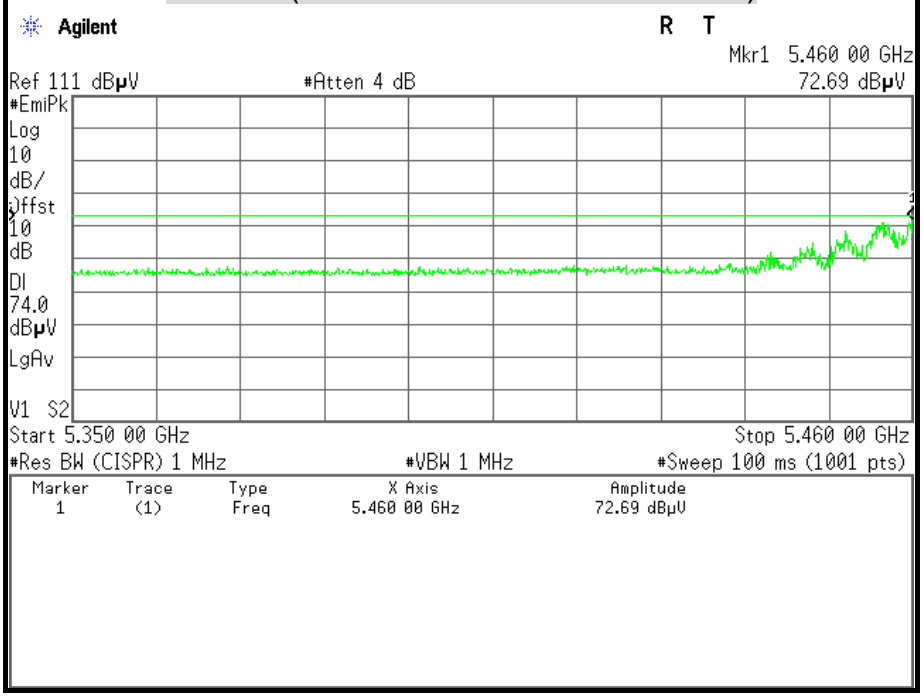
CH High (IEEE 802.11a Mode / Band 2A)



This report shall not be reproduced, except in full, without the written approval of Compliance Certification Services Inc.

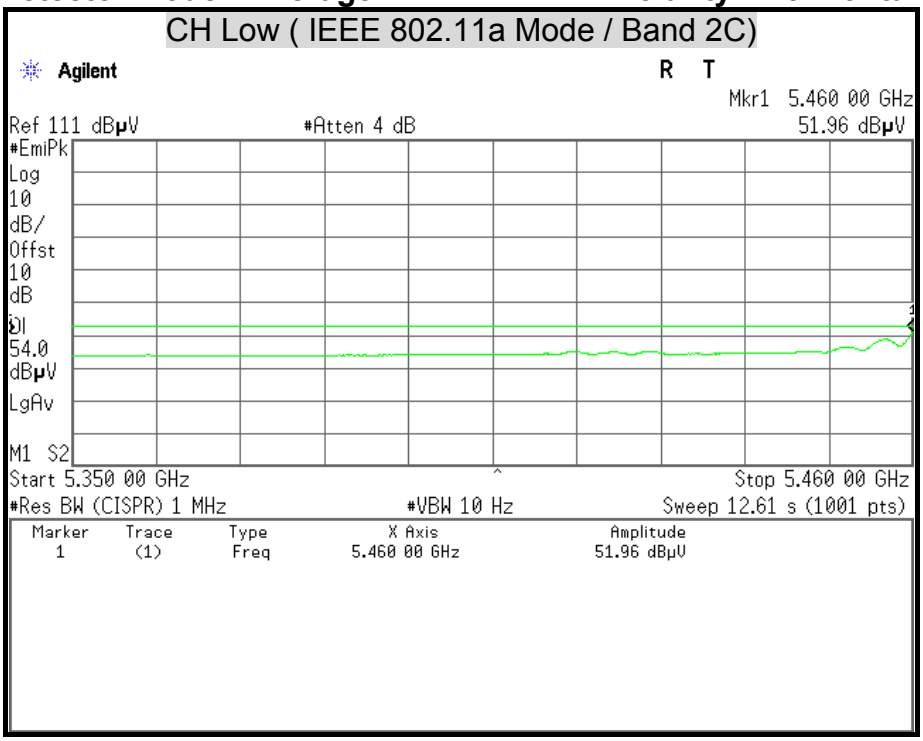
Detector Mode : Peak **Polarity : Horizontal**

CH Low (IEEE 802.11a Mode / Band 2C)



Detector Mode : Average **Polarity : Horizontal**

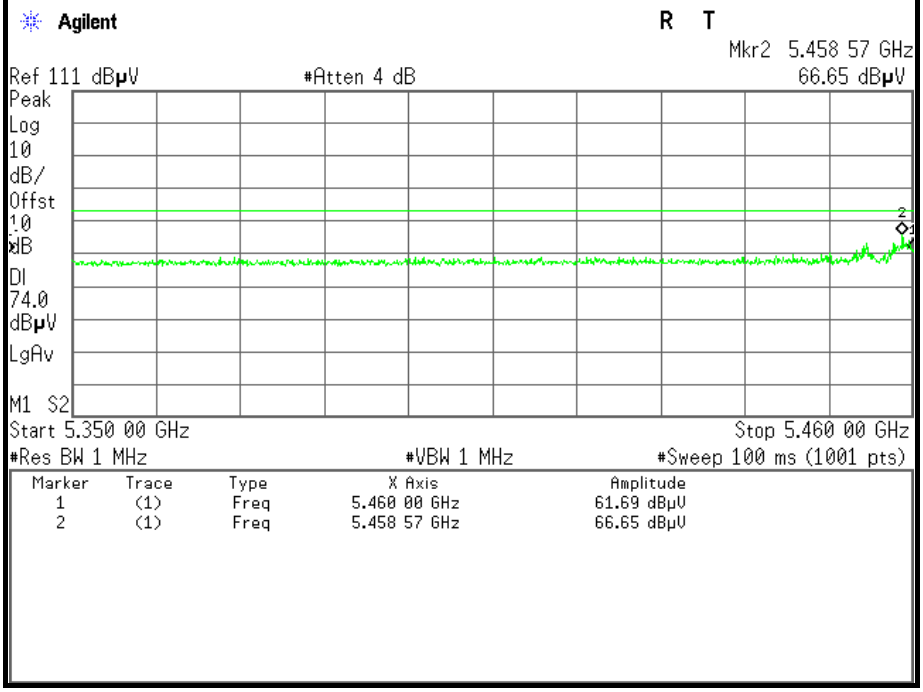
CH Low (IEEE 802.11a Mode / Band 2C)



This report shall not be reproduced, except in full, without the written approval of Compliance Certification Services Inc.

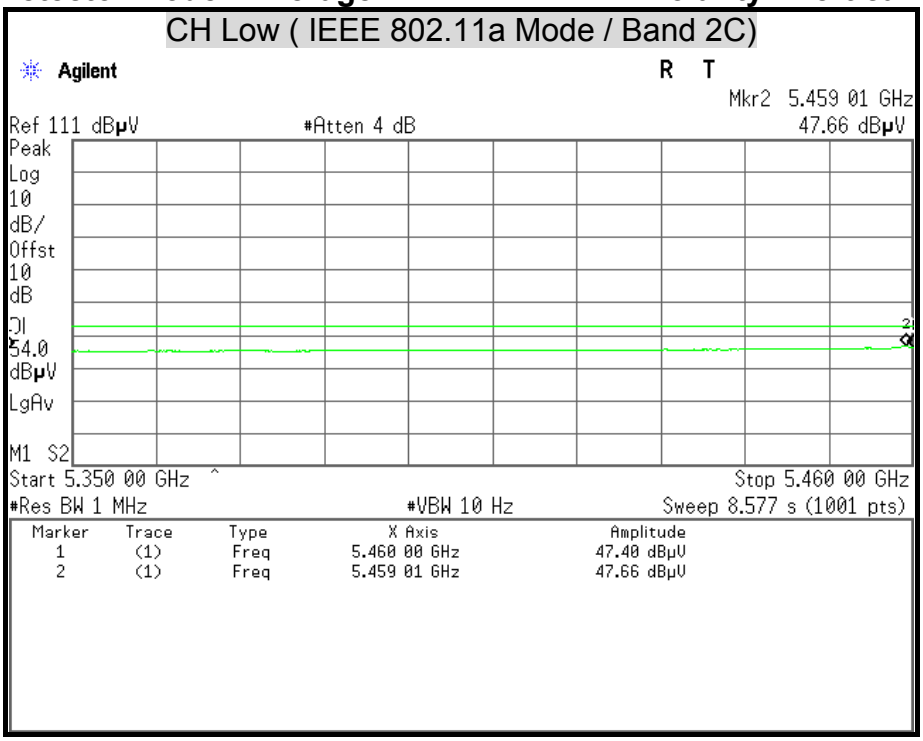
Detector Mode : Peak **Polarity : Vertical**

CH Low (IEEE 802.11a Mode / Band 2C)



Detector Mode : Average **Polarity : Vertical**

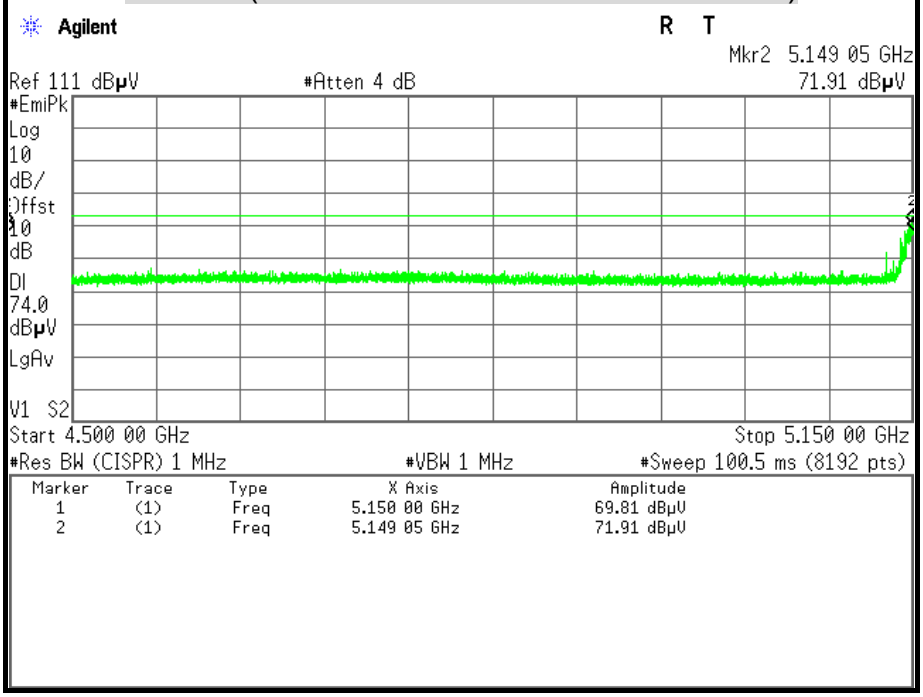
CH Low (IEEE 802.11a Mode / Band 2C)



This report shall not be reproduced, except in full, without the written approval of Compliance Certification Services Inc.

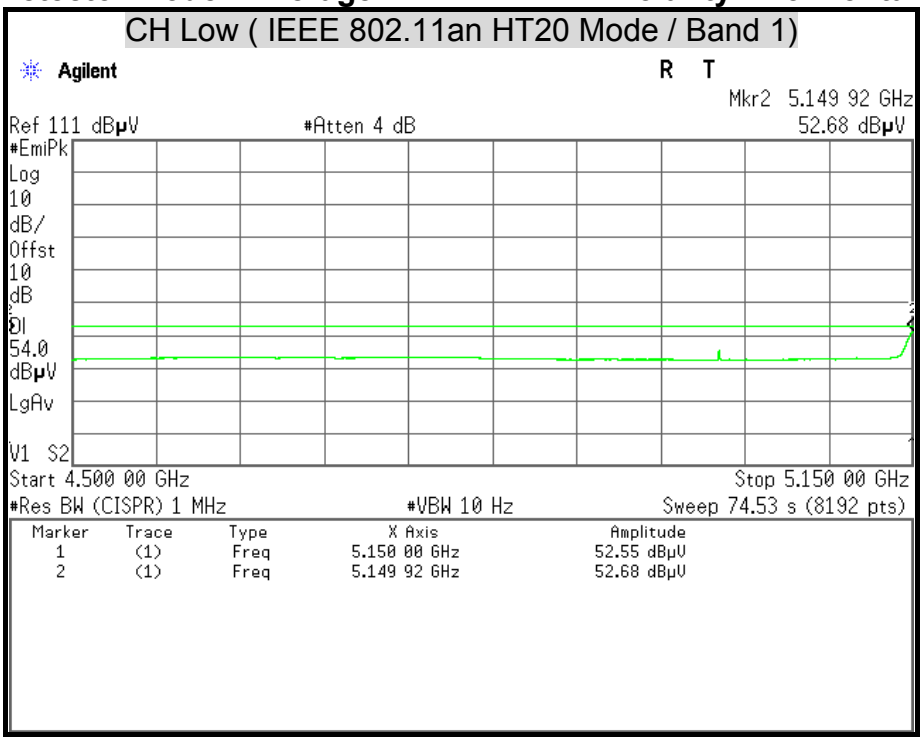
Detector Mode : Peak **Polarity : Horizontal**

CH Low (IEEE 802.11an HT20 Mode / Band 1)



Detector Mode : Average **Polarity : Horizontal**

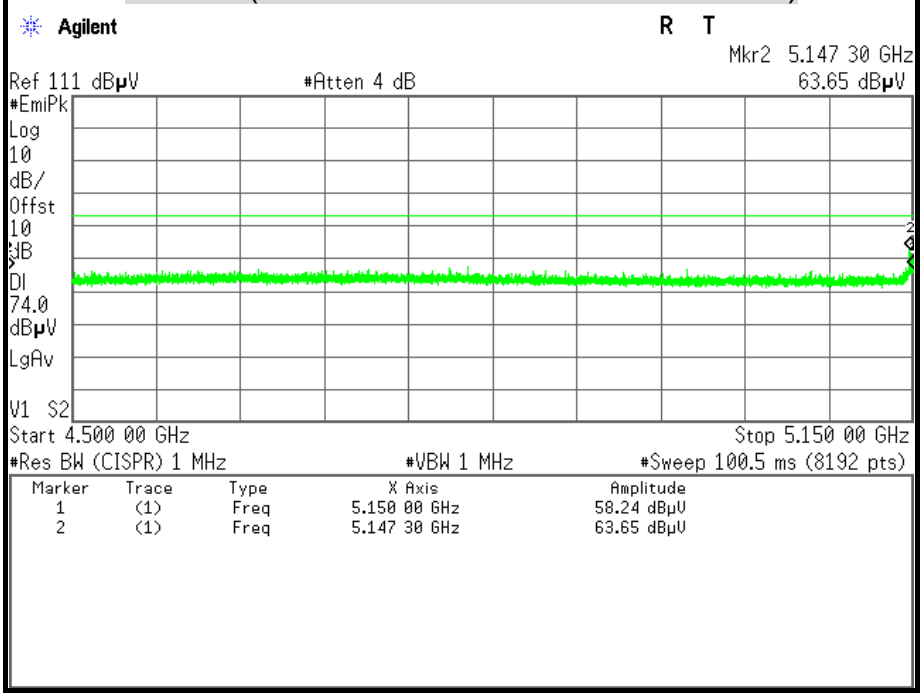
CH Low (IEEE 802.11an HT20 Mode / Band 1)



This report shall not be reproduced, except in full, without the written approval of Compliance Certification Services Inc.

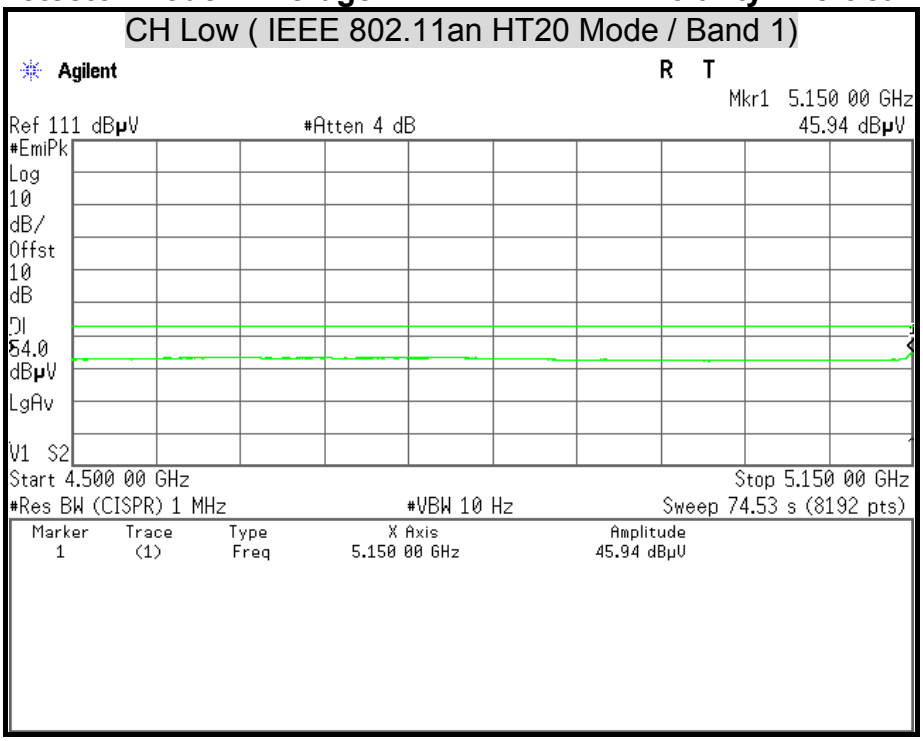
Detector Mode : Peak **Polarity : Vertical**

CH Low (IEEE 802.11an HT20 Mode / Band 1)



Detector Mode : Average **Polarity : Vertical**

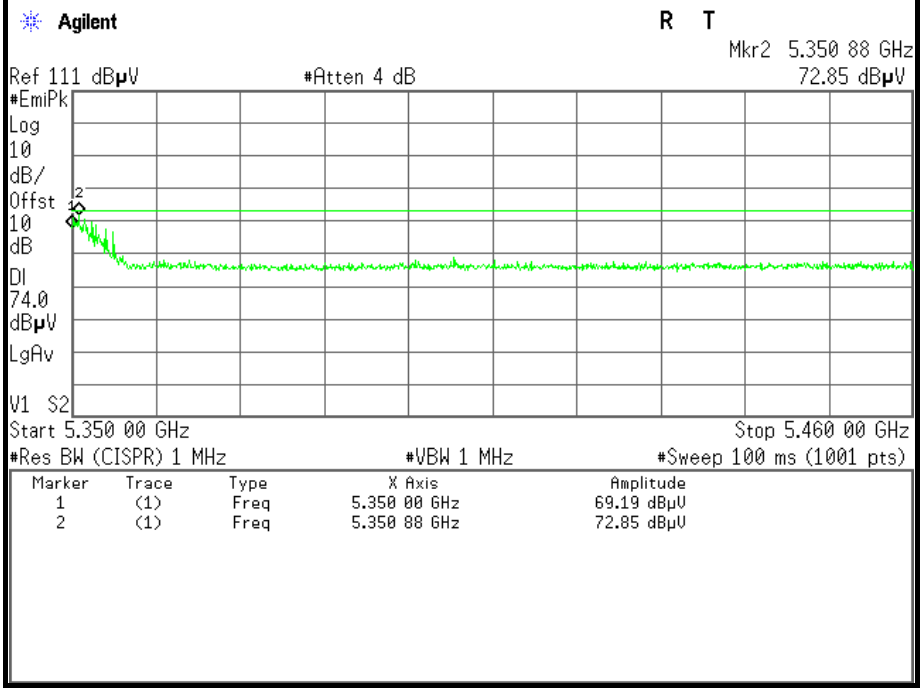
CH Low (IEEE 802.11an HT20 Mode / Band 1)



This report shall not be reproduced, except in full, without the written approval of Compliance Certification Services Inc.

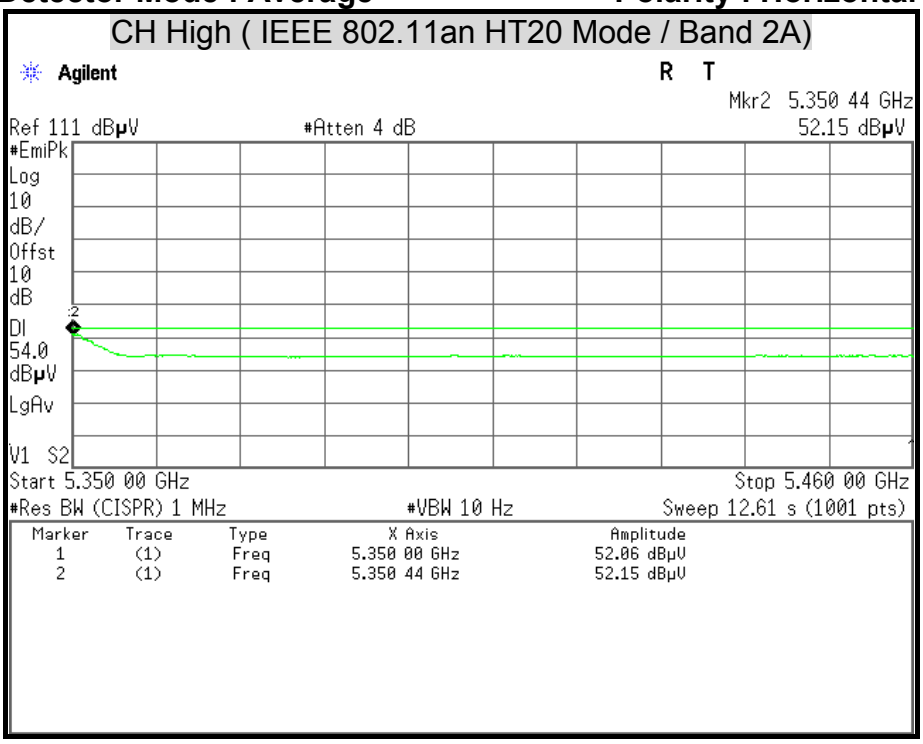
Detector Mode : Peak **Polarity : Horizontal**

CH High (IEEE 802.11an HT20 Mode / Band 2A)



Detector Mode : Average **Polarity : Horizontal**

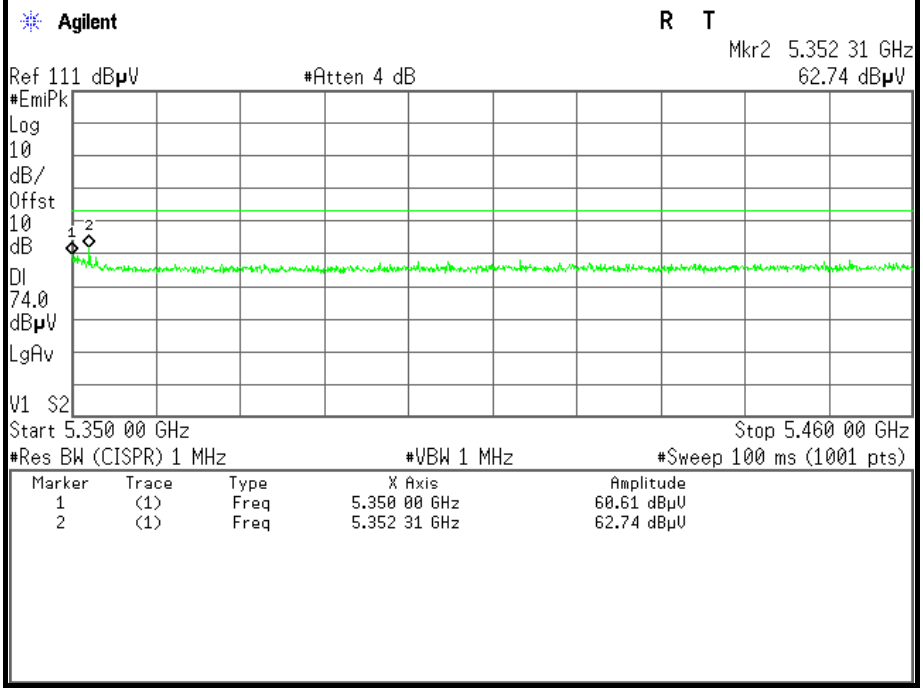
CH High (IEEE 802.11an HT20 Mode / Band 2A)



This report shall not be reproduced, except in full, without the written approval of Compliance Certification Services Inc.

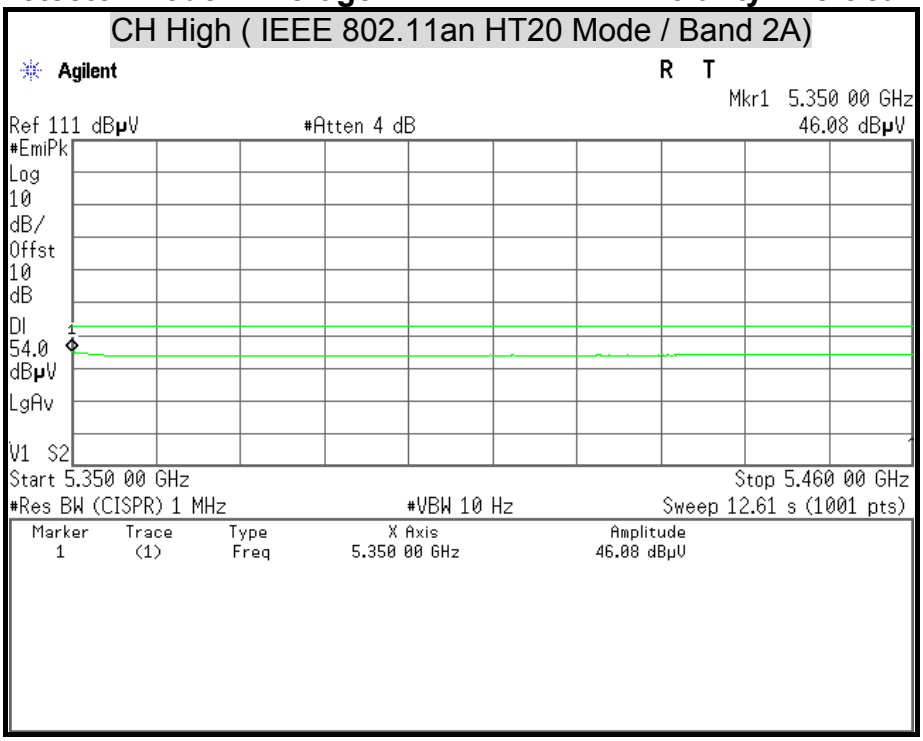
Detector Mode : Peak **Polarity : Vertical**

CH High (IEEE 802.11an HT20 Mode / Band 2A)



Detector Mode : Average **Polarity : Vertical**

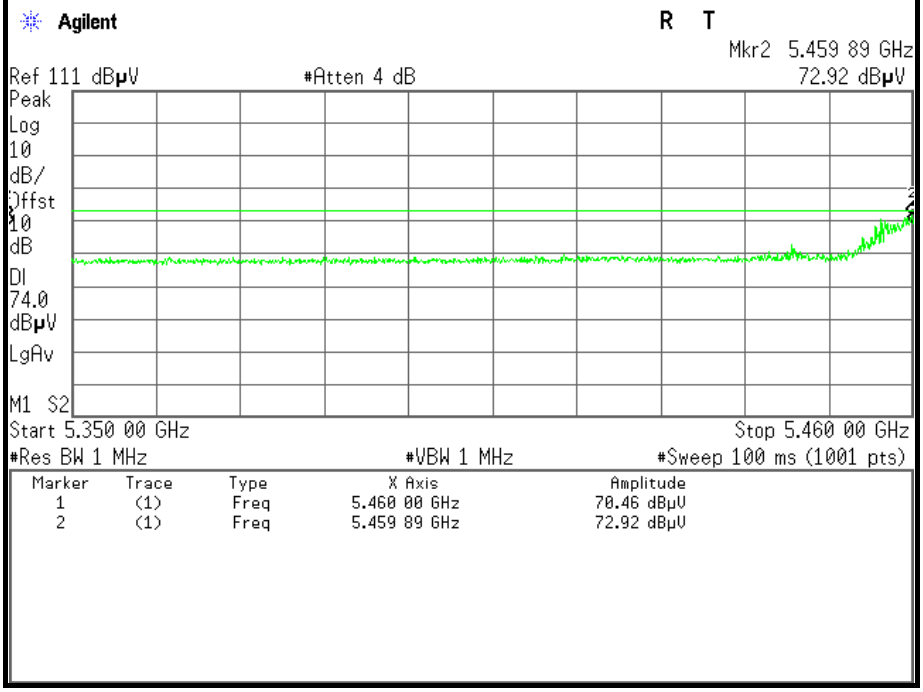
CH High (IEEE 802.11an HT20 Mode / Band 2A)



This report shall not be reproduced, except in full, without the written approval of Compliance Certification Services Inc.

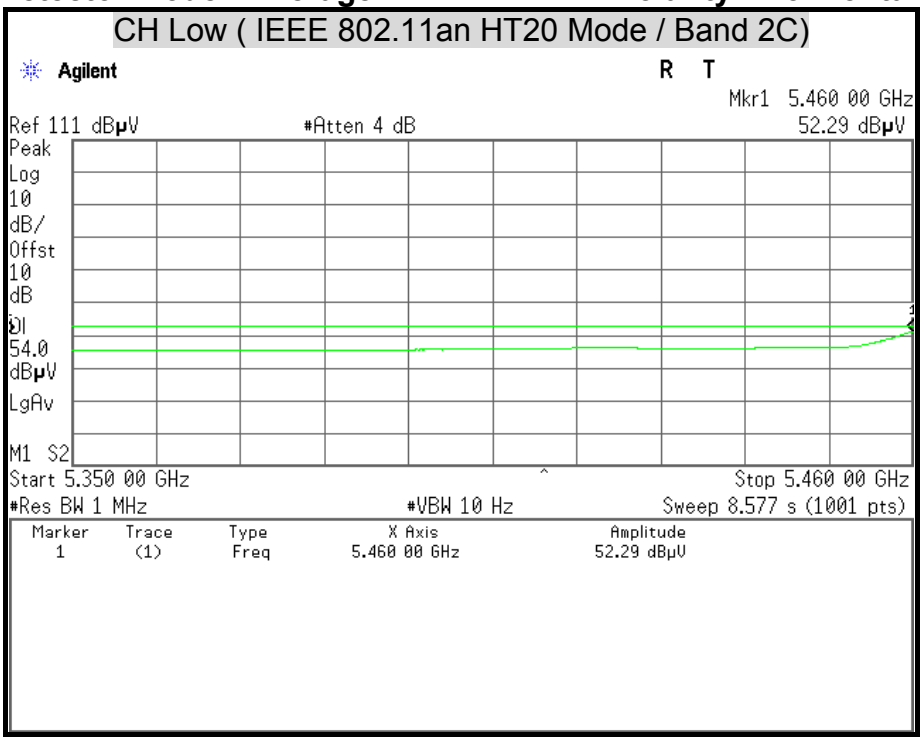
Detector Mode : Peak **Polarity : Horizontal**

CH Low (IEEE 802.11an HT20 Mode / Band 2C)



Detector Mode : Average **Polarity : Horizontal**

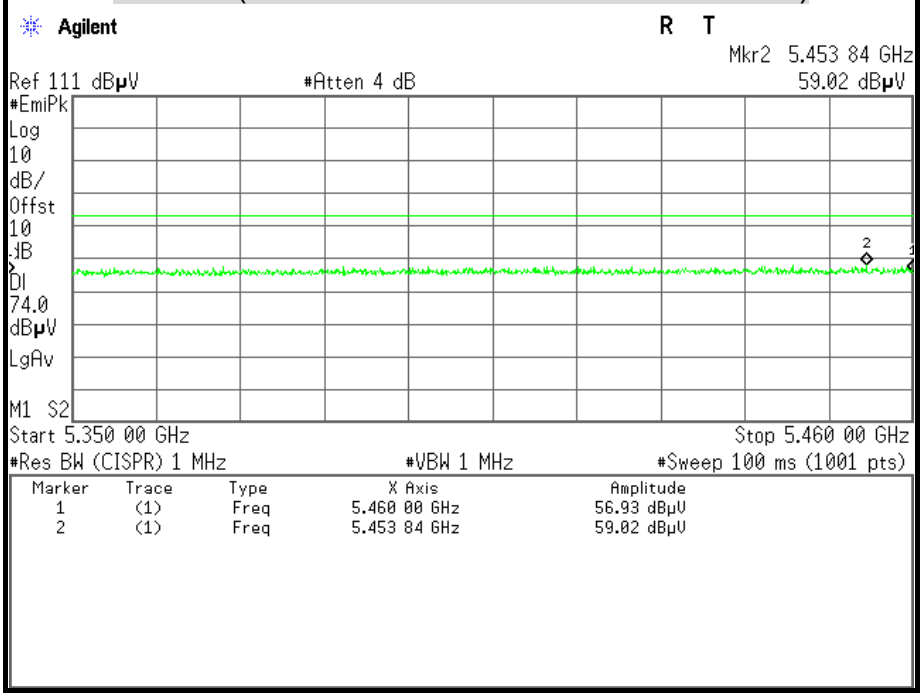
CH Low (IEEE 802.11an HT20 Mode / Band 2C)



This report shall not be reproduced, except in full, without the written approval of Compliance Certification Services Inc.

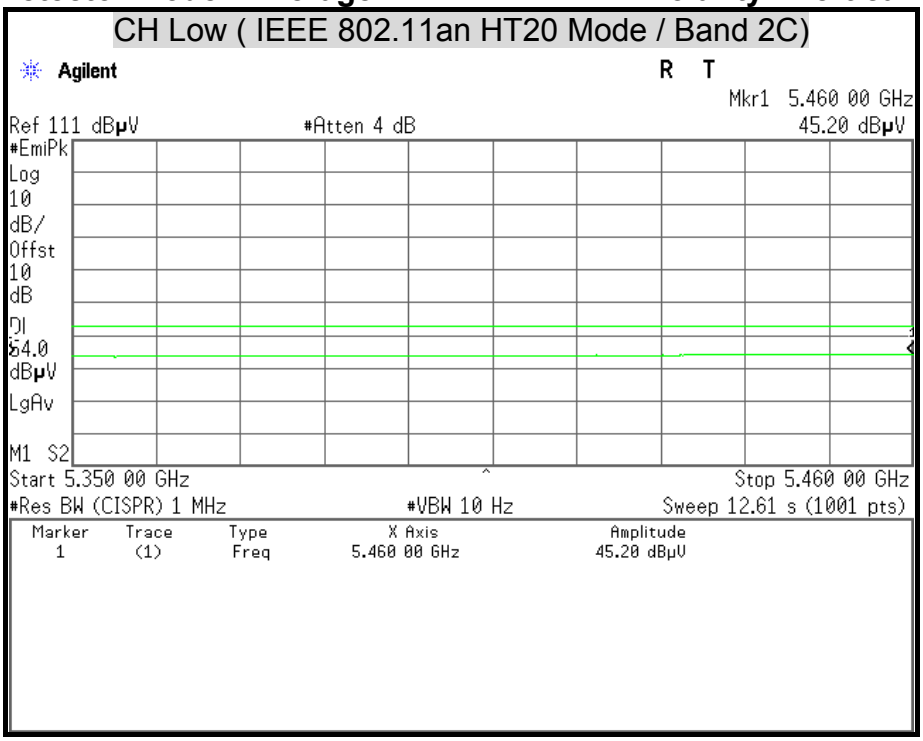
Detector Mode : Peak **Polarity : Vertical**

CH Low (IEEE 802.11an HT20 Mode / Band 2C)



Detector Mode : Average **Polarity : Vertical**

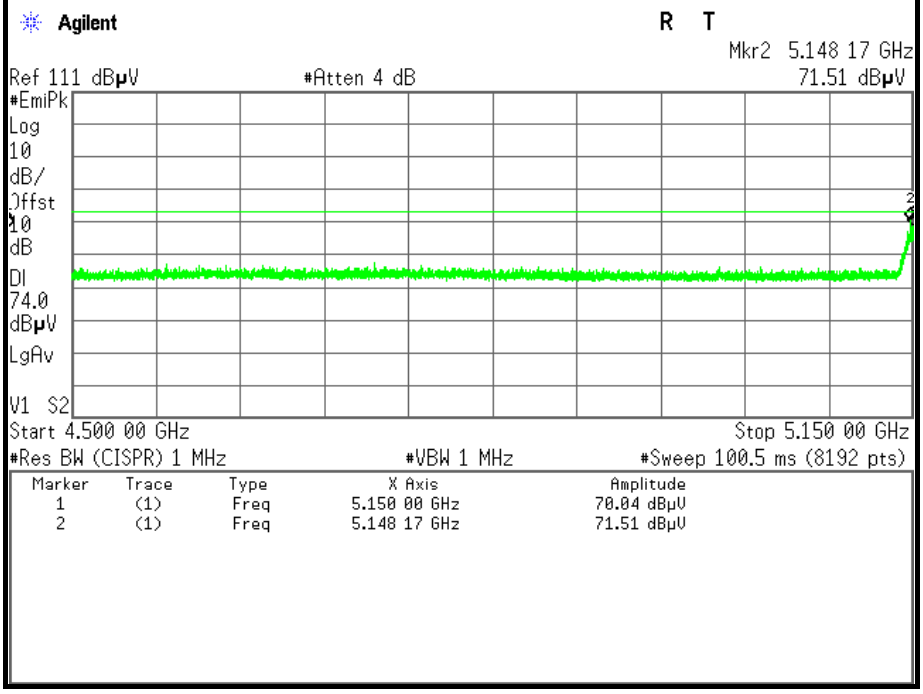
CH Low (IEEE 802.11an HT20 Mode / Band 2C)



This report shall not be reproduced, except in full, without the written approval of Compliance Certification Services Inc.

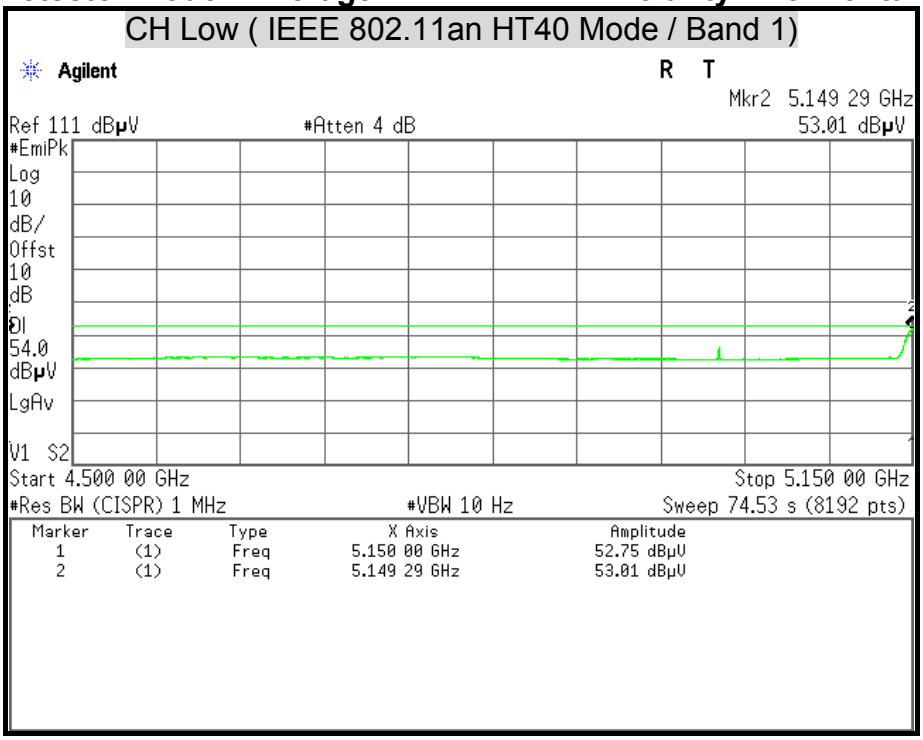
Detector Mode : Peak **Polarity : Horizontal**

CH Low (IEEE 802.11an HT40 Mode / Band 1)



Detector Mode : Average **Polarity : Horizontal**

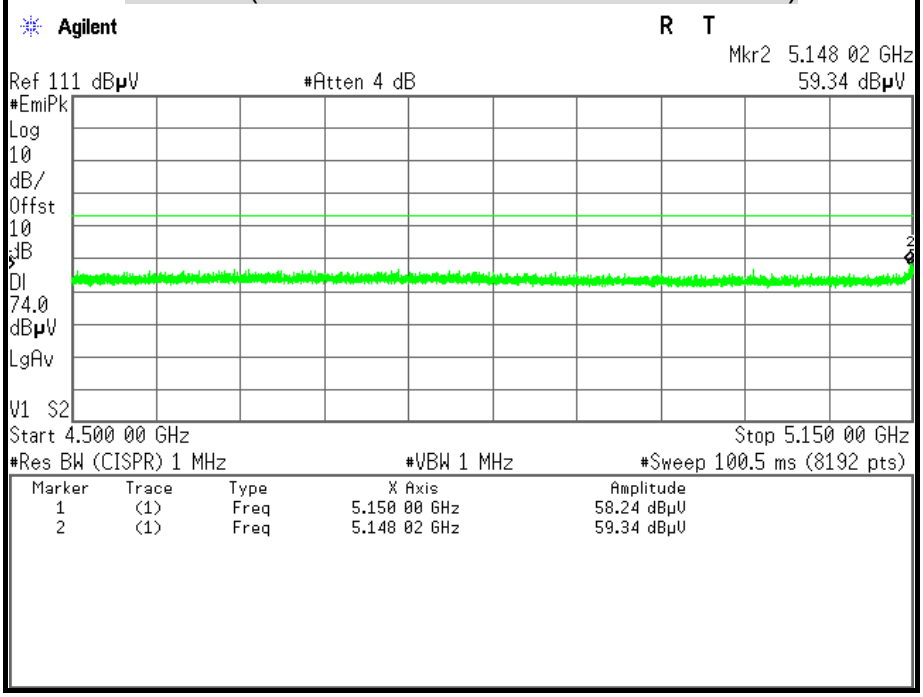
CH Low (IEEE 802.11an HT40 Mode / Band 1)



This report shall not be reproduced, except in full, without the written approval of Compliance Certification Services Inc.

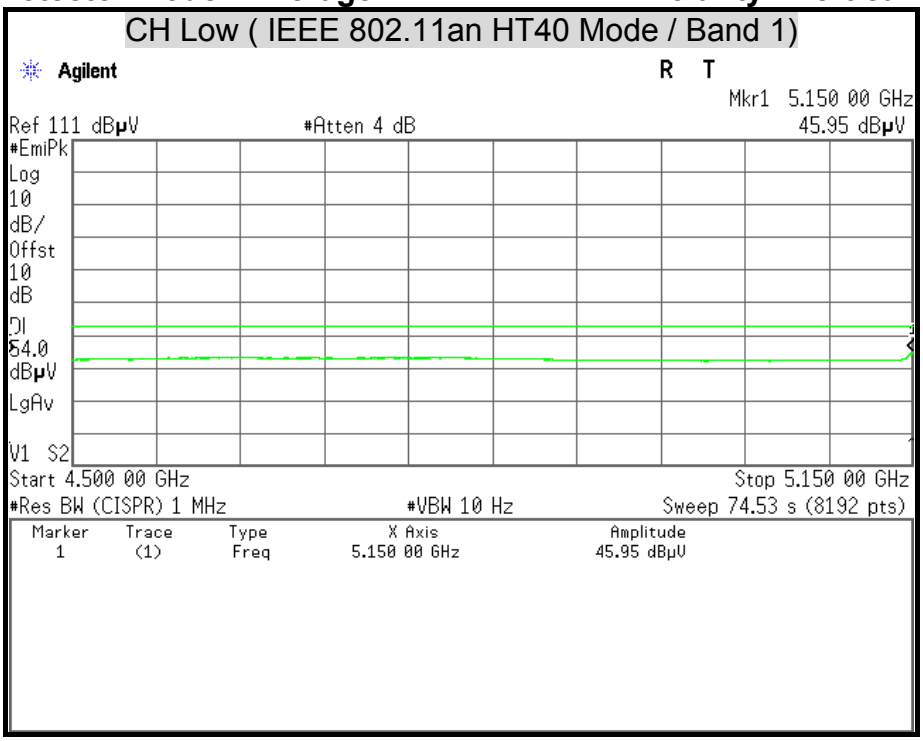
Detector Mode : Peak **Polarity : Vertical**

CH Low (IEEE 802.11an HT40 Mode / Band 1)



Detector Mode : Average **Polarity : Vertical**

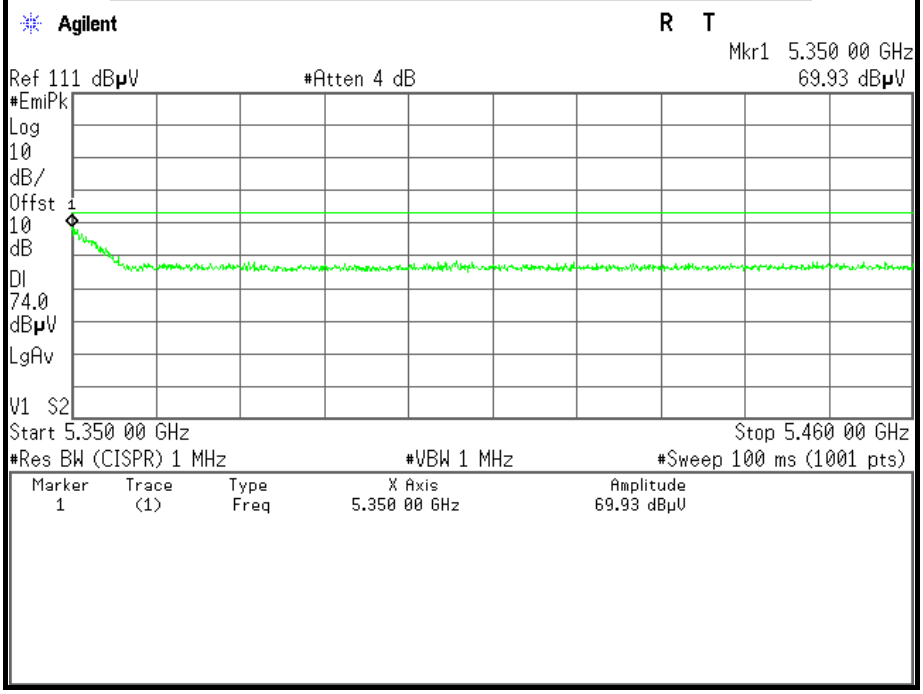
CH Low (IEEE 802.11an HT40 Mode / Band 1)



This report shall not be reproduced, except in full, without the written approval of Compliance Certification Services Inc.

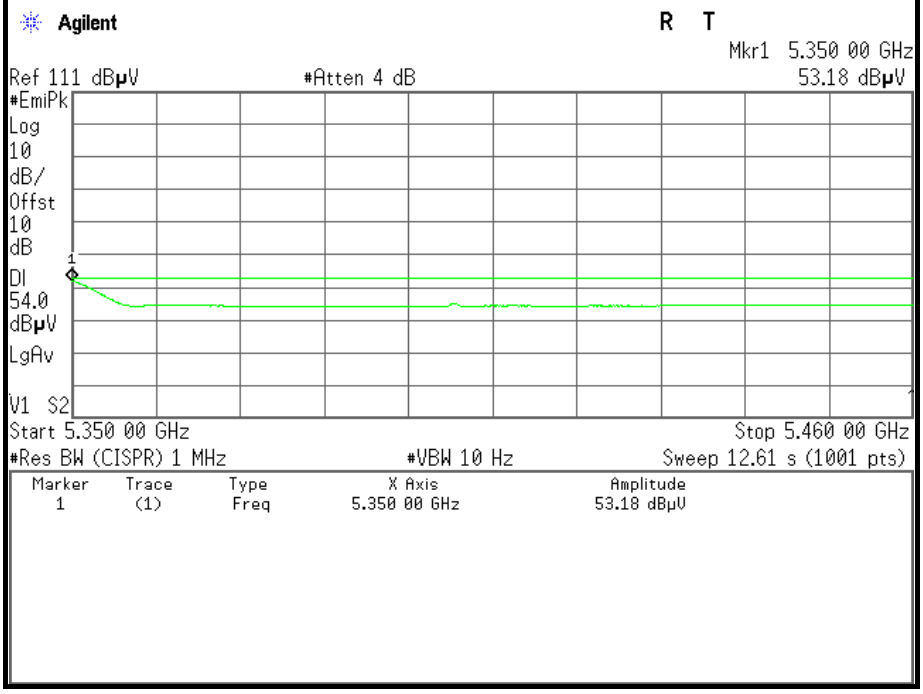
Detector Mode : Peak **Polarity : Horizontal**

CH High (IEEE 802.11an HT40 Mode / Band 2A)



Detector Mode : Average **Polarity : Horizontal**

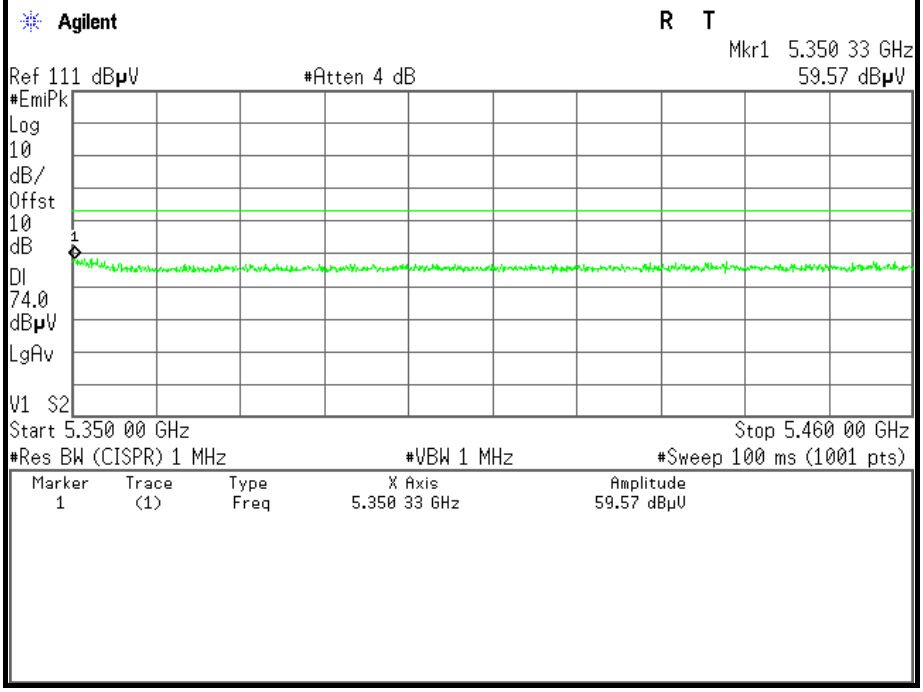
CH High (IEEE 802.11an HT40 Mode / Band 2A)



This report shall not be reproduced, except in full, without the written approval of Compliance Certification Services Inc.

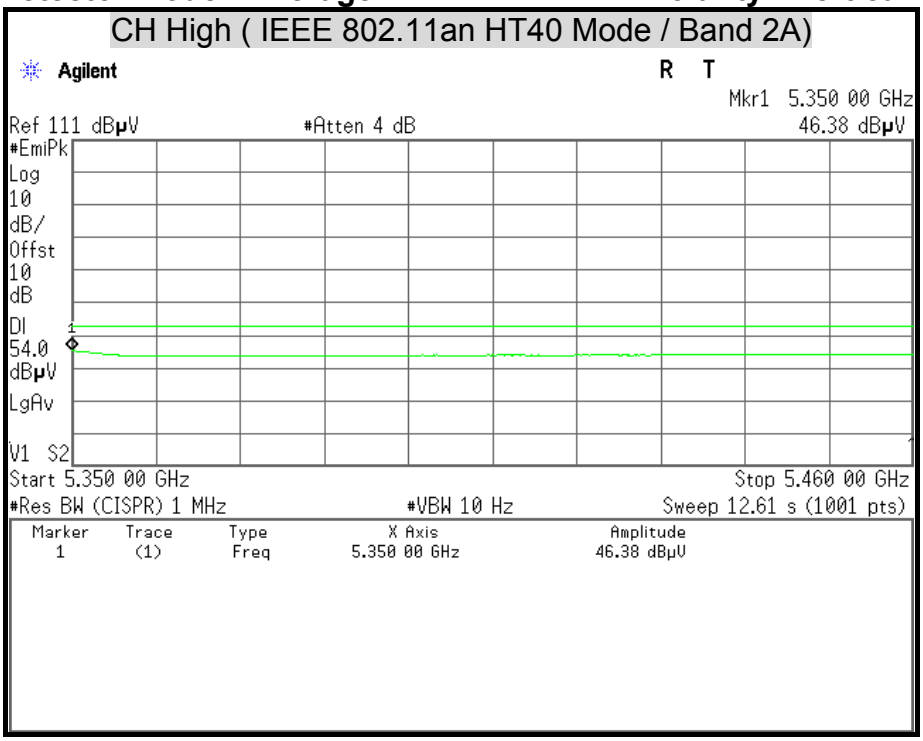
Detector Mode : Peak **Polarity : Vertical**

CH High (IEEE 802.11an HT40 Mode / Band 2A)



Detector Mode : Average **Polarity : Vertical**

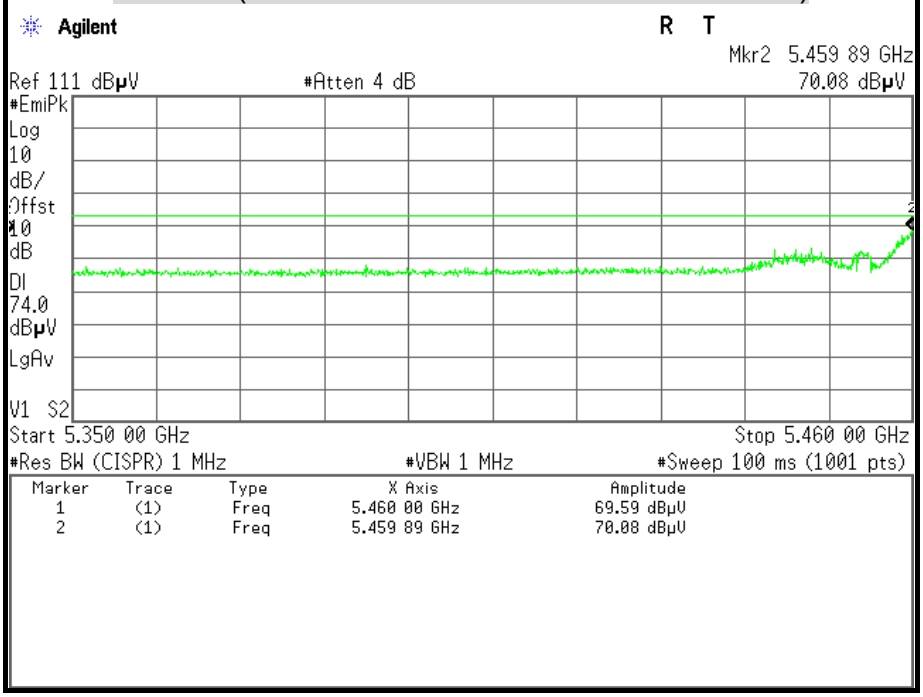
CH High (IEEE 802.11an HT40 Mode / Band 2A)



This report shall not be reproduced, except in full, without the written approval of Compliance Certification Services Inc.

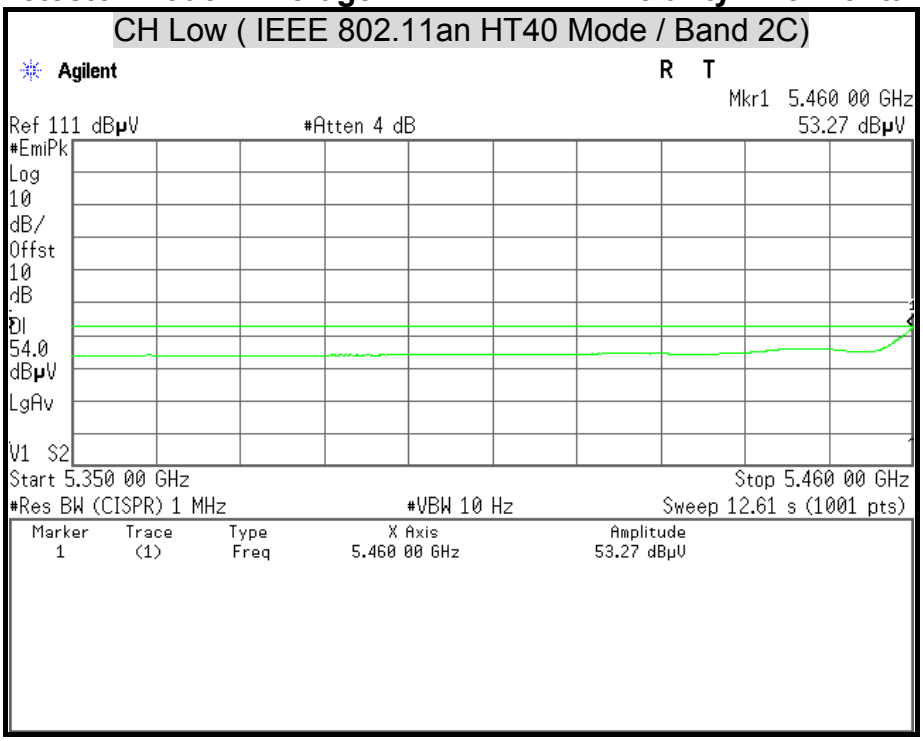
Detector Mode : Peak **Polarity : Horizontal**

CH Low (IEEE 802.11an HT40 Mode / Band 2C)



Detector Mode : Average **Polarity : Horizontal**

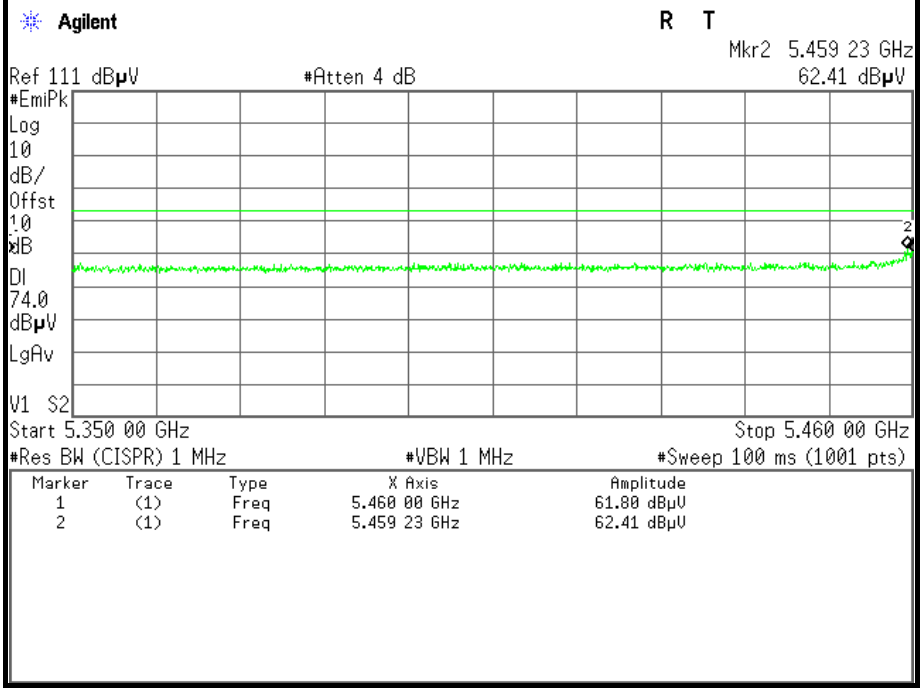
CH Low (IEEE 802.11an HT40 Mode / Band 2C)



This report shall not be reproduced, except in full, without the written approval of Compliance Certification Services Inc.

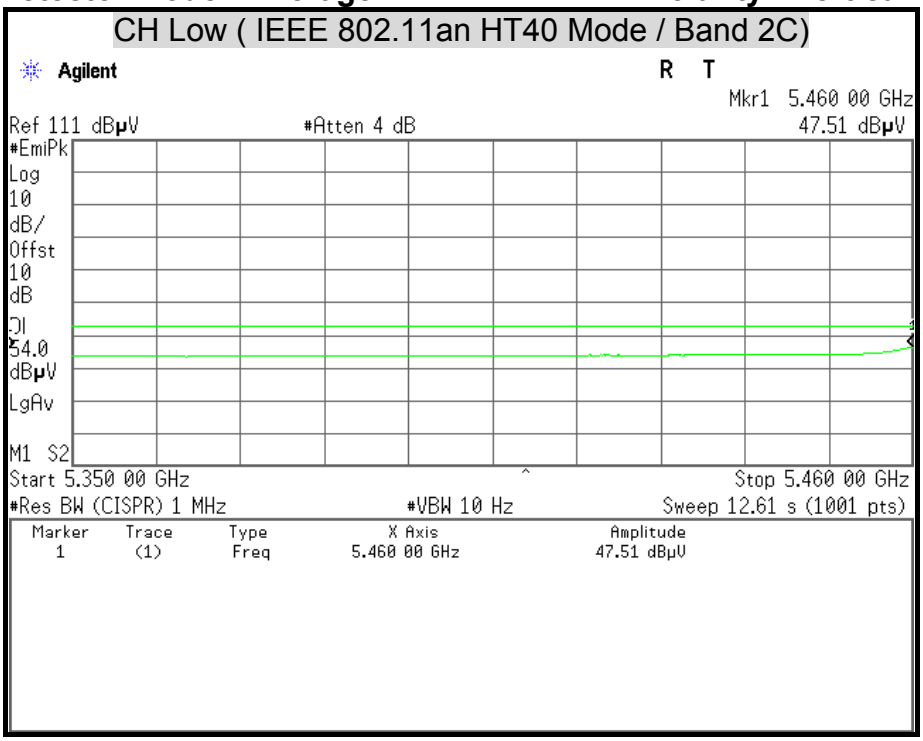
Detector Mode : Peak **Polarity : Vertical**

CH Low (IEEE 802.11an HT40 Mode / Band 2C)



Detector Mode : Average **Polarity : Vertical**

CH Low (IEEE 802.11an HT40 Mode / Band 2C)



This report shall not be reproduced, except in full, without the written approval of Compliance Certification Services Inc.

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 μH/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 (MHz)	Conducted Limit (dBμv)	
	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

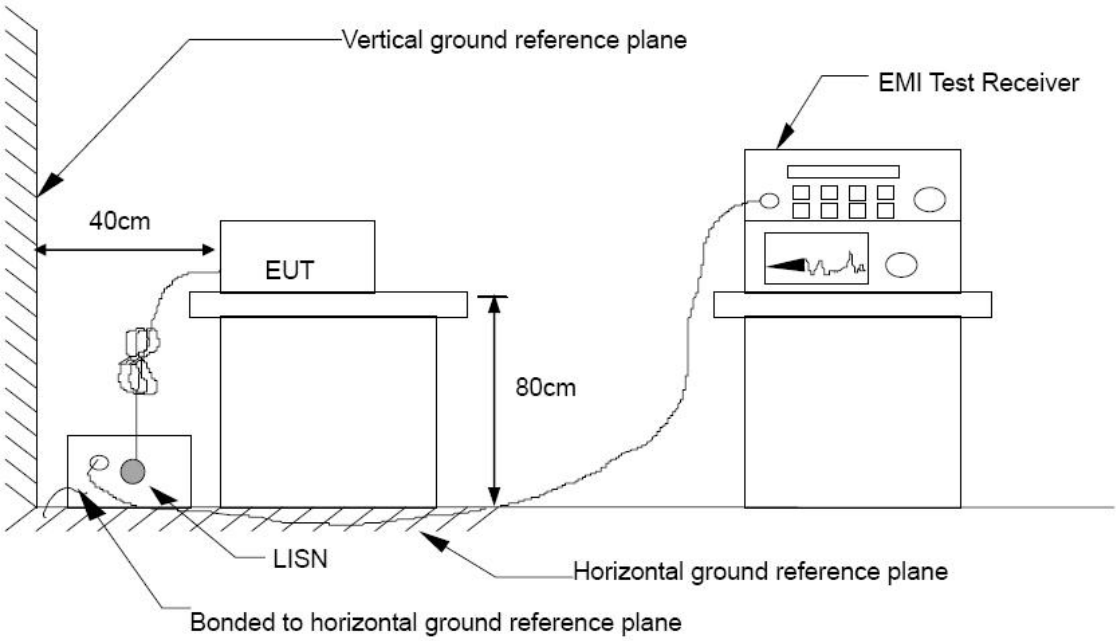
TEST EQUIPMENT

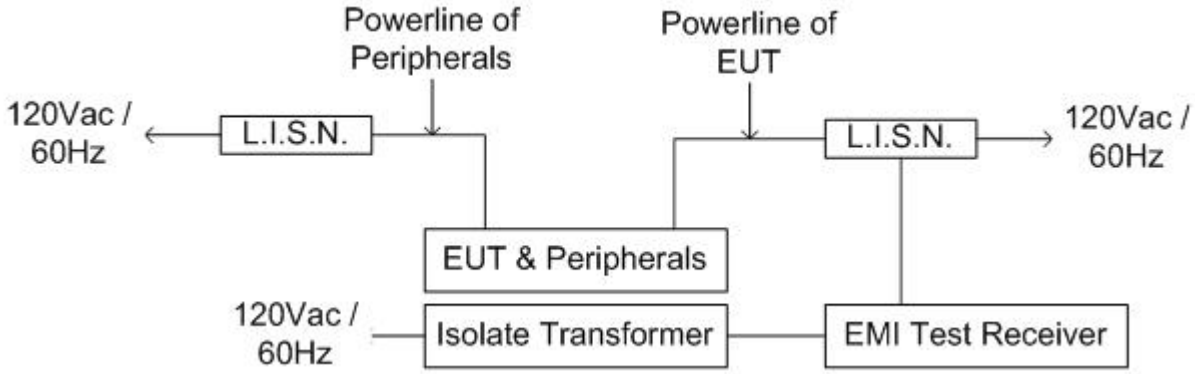
Name of Equipment	Manufacturer	Model	Serial Number	Calibration Due
L.I.S.N	SCHWARZBECK	NSLK 8127	8127-465	08/06/2015
L.I.S.N	SCHWARZBECK	NSLK 8127	8127-473	03/09/2016
EMI Receiver	ROHDE & SCHWARZ	ESCS 30	835418/008	11/02/2015
Pulse Limiter	ROHDE & SCHWARZ	ESH3-Z2	100111	06/30/2015

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

This report shall not be reproduced, except in full, without the written approval of Compliance Certification Services Inc.

TEST SETUP





This report shall not be reproduced, except in full, without the written approval of Compliance Certification Services Inc.

TEST PROCEDURE

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

The test procedure is performed in a 4m × 3m × 2.4m (L×W×H) shielded room.

The EUT along with its peripherals were placed on a 1.0m (W) × 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 DC Source, this test item is not applicable.

This report shall not be reproduced, except in full, without the written approval of Compliance Certification Services Inc.

7.7 FREQUENCY STABILITY

LIMITS

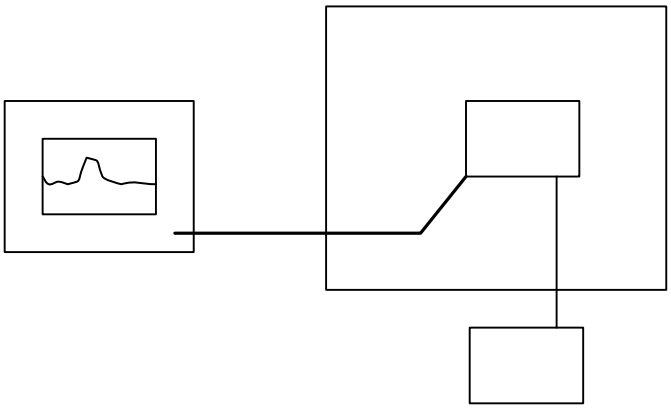
§ 15.407 (g) manufacturers of U-NII devices are responsible for ensuring frequency stability such that an emission is maintained within the band of operation under all conditions of normal operation as specified in the user's manual.

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



This report shall not be reproduced, except in full, without the written approval of Compliance Certification Services Inc.

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.

This report shall not be reproduced, except in full, without the written approval of Compliance Certification Services Inc.

TEST RESULTS

IEEE 802.11a mode

U-NII	Channel	Channel Frequency (MHz)	Measured Frequency (MHz)	Delta Frequency (kHz)	20 ppm Limit (kHz)	Margin (kHz)
Band 1	Low	5180	5179.974130	-25.87	103.60	-77.73
	Middle	5220	5219.973170	-26.83	104.40	-77.57
	High	5240	5239.975780	-24.22	104.80	-80.58
Band 2A	Low	5260	5259.974460	-25.54	105.20	-79.66
	Middle	5280	5279.975710	-24.29	105.60	-81.31
	High	5320	5319.975850	-24.15	106.40	-82.25
Band 2C	Low	5500	5499.976850	-23.15	110.00	-86.85
	Middle	5580	5579.977250	-22.75	111.60	-88.85
	High	5700	5699.970890	-29.11	114.00	-84.89
Band 3	Low	5745	5744.975580	-24.42	114.90	-90.48
	Middle	5785	5784.972260	-27.74	115.70	-87.96
	High	5825	5824.974070	-25.93	116.50	-90.57

This report shall not be reproduced, except in full, without the written approval of Compliance Certification Services Inc.

IEEE 802.11an HT20 Mode

U-NII	Channel	Channel Frequency (MHz)	Measured Frequency (MHz)	Delta Frequency (kHz)	20 ppm Limit (kHz)	Margin (kHz)
Band 1	Low	5180	5179.973940	-26.06	103.60	-77.54
	Middle	5220	5219.974820	-25.18	104.40	-79.22
	High	5240	5239.975820	-24.18	104.80	-80.62
Band 2A	Low	5260	5259.975560	-24.44	105.20	-80.76
	Middle	5280	5279.974090	-25.91	105.60	-79.69
	High	5320	5319.973420	-26.58	106.40	-79.82
Band 2C	Low	5500	5499.972620	-27.38	110.00	-82.62
	Middle	5580	5579.971910	-28.09	111.60	-83.51
	High	5700	5699.970920	-29.08	114.00	-84.92
Band 3	Low	5745	5744.977060	-22.94	114.90	-91.96
	Middle	5785	5784.976240	-23.76	115.70	-91.94
	High	5825	5824.976650	-23.35	116.50	-93.15

This report shall not be reproduced, except in full, without the written approval of Compliance Certification Services Inc.

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	5189.976580	-23.42	103.80	-80.38
	High	5230	5229.977430	-22.57	104.60	-82.03
Band 2A	Low	5270	5269.977240	-22.76	105.40	-82.64
	High	5310	5309.978650	-21.35	106.20	-84.85
Band 2C	Low	5510	5509.977620	-22.38	110.20	-87.82
	Middle	5550	5549.976970	-23.03	111.00	-87.97
	High	5670	5669.977820	-22.18	113.40	-91.22
Band 3	Low	5755	5754.977490	-22.51	115.10	-92.59
	High	5795	5794.976150	-23.85	115.90	-92.05

This report shall not be reproduced, except in full, without the written approval of Compliance Certification Services Inc.