



# FCC Part 15.247

## TEST REPORT

For

### Actiontec Electronics Inc.

3301 Olcott St. Santa Clara, CA 95054

Report Type	Original Report
FCC ID:	FCC ID: LNQT3280
Product Name:	WiFi 6 Gateway Router with Bonded VDSL
Model Name:	T3280
Report Number :	RLK200729001-00B
Report Date :	2020/11/06
Reviewed By :	Zeus Chen <i>Zeus Chen</i>
<b>Prepared By:</b> Bay Area Compliance Laboratories Corp.(Linkou Laboratory) No. 6, Wende 2Rd., Guishan Dist., Taoyuan City 33382, Taiwan (R.O.C.) Tel: +886 (3)3961072; Fax: +886 (3) 3961027 www.bacl.com.tw	

*Note: This test report is prepared for the customer shown above and for the device described herein. It may not be duplicated or used in part without prior written consent from Bay Area Compliance Laboratories Corp. (Linkou Laboratory)*

### Revision History

Revision	Report Number	Issue Date	Description
1.0	RLK200729001-00B	2020/11/06	Original Report

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# 1 General Information

## 1.1 Product Description for Equipment under Test (EUT)

<b>Applicant</b>	<b>Actiontec Electronics Inc.</b> 3301 Olcott St. Santa Clara, CA 95054
<b>Manufacturer</b>	<b>Actiontec Electronics Inc.</b> 3301 Olcott St. Santa Clara, CA 95054
<b>Product (Equipment)</b>	WiFi 6 Gateway Router with Bonded VDSL
<b>Model Name</b>	T3280
<b>Frequency Range</b>	IEEE 802.11b/g/n HT20/ax HE20/HE40: 2412 - 2462 MHz IEEE 802.11n HT40/ax HE40: 2422 - 2452 MHz
<b>Number of Channels</b>	IEEE 802.11b/g/n HT20/ax HE20: 11 Channels IEEE 802.11n HT40/ax HE40: 9 Channels
<b>Output Power</b>	IEEE 802.11b: 27.15 dBm (0.5188 W) IEEE 802.11g: 27.98 dBm (0.6281 W) IEEE 802.11n HT20: 27.28 dBm (0.5346 W) IEEE 802.11n HT40: 22.85 dBm (0.1928 W) IEEE 802.11ax HE20: 27.48 dBm (0.5598 W) IEEE 802.11ax HE40: 23.04 dBm (0.2014 W)
<b>Modulation Type</b>	IEEE 802.11b: DSSS IEEE 802.11g/n HT 20/HT40/ax HE20/HE40: OFDM
<b>Related Submittal(s)/Grant(s)</b>	<b>FCC Part 15.407 NII with FCC ID: LNQT3280</b>
<b>Received Date</b>	2020/08/19
<b>Date of Test</b>	2020/10/13 - 2020/10/28

*\*All measurement and test data in this report was gathered from production sample serial number: 200729001 Assigned by BACL, Linkou Laboratory).*

## 1.2 Operation Condition of EUT

<b>Power Operation (Voltage Range)</b>	<input checked="" type="checkbox"/> AC 120 V/60 Hz <input checked="" type="checkbox"/> Adapter <i>Brand Name: Actiontec</i> <i>Model: CSD024T-W120U</i> <i>I/P: 120Vac, 50/60Hz, 0.58A</i> <i>O/P: 12Vdc, 2A</i> <input type="checkbox"/> By Power Cord.
	<input type="checkbox"/> DC Type <input type="checkbox"/> DC Power <input type="checkbox"/> Battery <input type="checkbox"/> External from USB Cable <input type="checkbox"/> External DC Adapter

### 1.3 Objective and Test Methodology

The Objective of this Test Report was to document the compliance of the Actiontec Electronics Inc.. Appliance (Model: T3280) to the requirements of the following Standards:

- Part 2, Subpart J, Part 15, Subparts A and C, section 15.247 of the Federal Communication Commission's rules.
- ANSI C63.10-2013 of the American National Standard of Procedures for Compliance Testing of Unlicensed Wireless Devices.

### 1.4 Measurement Uncertainty

Parameter	Expanded Measurement uncertainty
RF output power	± 1.488 dB
Occupied Channel Bandwidth	± 453.927 Hz
RF Conducted Emission test	± 2.77 dB
AC Power Line Conducted Emission	± 2.66 dB
Radiated Below 1G	± 3.57 dB
Radiated Above 1G	± 5.32 dB

The test results with statement of conformity, the decision rules are based on the specifications and standards. The test results will not take the measurement uncertainty into account.

### 1.5 Test Facility

The Test site used by Bay Area Compliance Laboratories Corp. (Linkou Laboratory) to collect test data is located on

No.6, Wende 2Rd., Guishan Dist., Taoyuan City 33382, Taiwan (R.O.C.).

Bay Area Compliance Laboratories Corp. (Linkou Laboratory) Lab is accredited to ISO 17025 by Taiwan Accreditation Foundation (TAF code: 3546) by Mutual Recognition Agreement (MRA). The test site has been approved by the FCC under the KDB 974614 D01 and is listed in the FCC Public Access Link (PAL) database. The FCC Registration No.: 0027578244. Designation No.: TW1119. The Test Firm Registration No.: 311381. ISED#: 25102 and CAB identifier is TW3546.

## 2 System Test Configuration

### 2.1 Test Channels and Description of Worst Test Configuration

The system was configured for testing in testing mode which was provided by manufacturer.

No special accessory, No modification was made to the EUT and No special equipment used during test.

**For Wi-Fi 2.4G mode, there are totally 11 channels.**

Channel	Frequency (MHz)	Channel	Frequency (MHz)
1	2412	7	2442
2	2417	8	2447
3	2422	9	2452
4	2427	10	2457
5	2432	11	2462
6	2437	-	-

For 802.11b/g/n HT20/ax HE20: Channel **1, 6** and **11** were tested.

For 802.11n HT40/ax HE40: Channel **3, 6** and **9** were tested.

The worst-case data rates are determined to be as follows for each mode based upon investigation by measuring the Peak power and PSD across all data rates bandwidths, and modulations. Radiated below 1G were tested worst output power.

Modulation Used for Conformance Test			
Configuration	N <sub>TX</sub>	Data Rate	Worst Data Rate
802.11b	3	1-11 Mbps	1 Mbps
802.11g	3	6-54 Mbps	6 Mbps
802.11n HT 20	3	MCS 0-22	MCS 0
802.11n HT 40	3	MCS 0-22	MCS 0
802.11ax HE 20	3	MCS 0-22	MCS 0
802.11ax HE 40	3	MCS 0-22	MCS 0

Worst Case of Power Setting				
EUT Exercise Software		EngineerModeaccessMTool_REL_3_1_0_1		
Configuration	N <sub>TX</sub>	Low CH	Mid CH	High CH
802.11b	3	92	93	92
802.11g	3	78	95	73
802.11n HT 20	3	73	92	64
802.11n HT 40	3	72	76	63
802.11ax HE 20	3	73	92	64
802.11ax HE 40	3	72	76	63

## 2.2 Support Equipment List and External Cable List

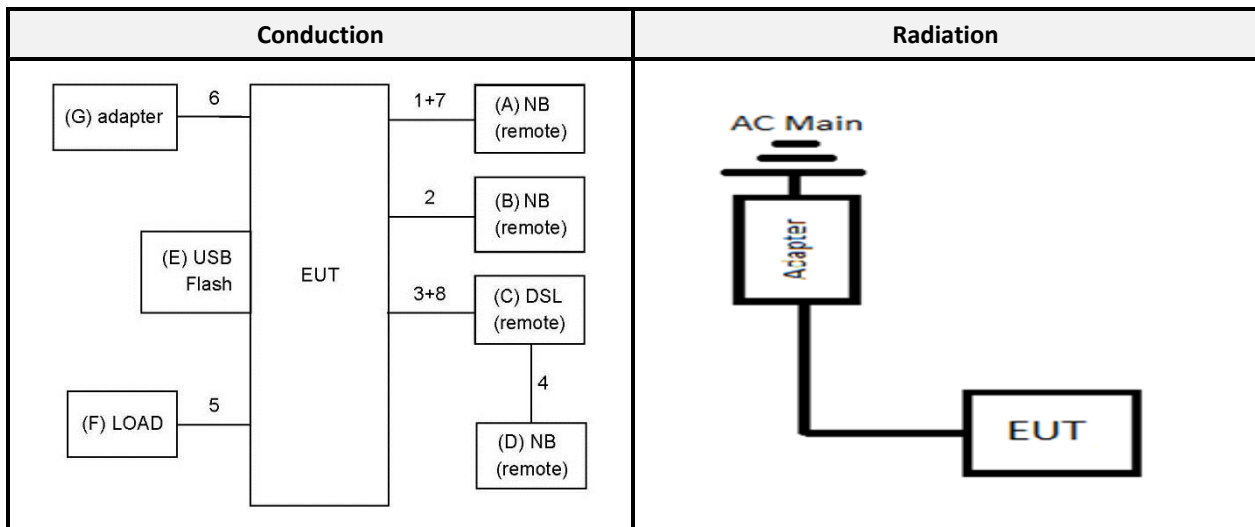
### Equipment List:

No.	Description	Manufacturer	Model Number
A	Notebook	DELL	Latitude E6410
B	NB	DELL	Latitude E5470
C	DSL	Broadcom	BCM96358MG-CO
D	NB	DELL	Latitude E5470
E	USB Flash	Kingston	16GB
F	LAN LOAD	NA	NA
G	ADAPTER	Actiontec	CDS024T-W120U

### Cable List:

No.	Description	Shielded Type	Ferrite Core	Length (M)	Remark
1	LAN Cable	Non-Shielded	NA	1.8	EUT
2	LAN Cable	Non-Shielded	NA	10	
3	RJ-11 Cable	Non-Shielded	NA	3.6	EUT
4	LAN Cable	Non-Shielded	NA	1.8	
5	LAN Cable*3	Non-Shielded	NA	1.5	
6	DC Cable	Non-Shielded	NA	1.8	
7	LAN Cable	Non-Shielded	NA	10	
8	RJ-11 Cable	Non-Shielded	NA	10	

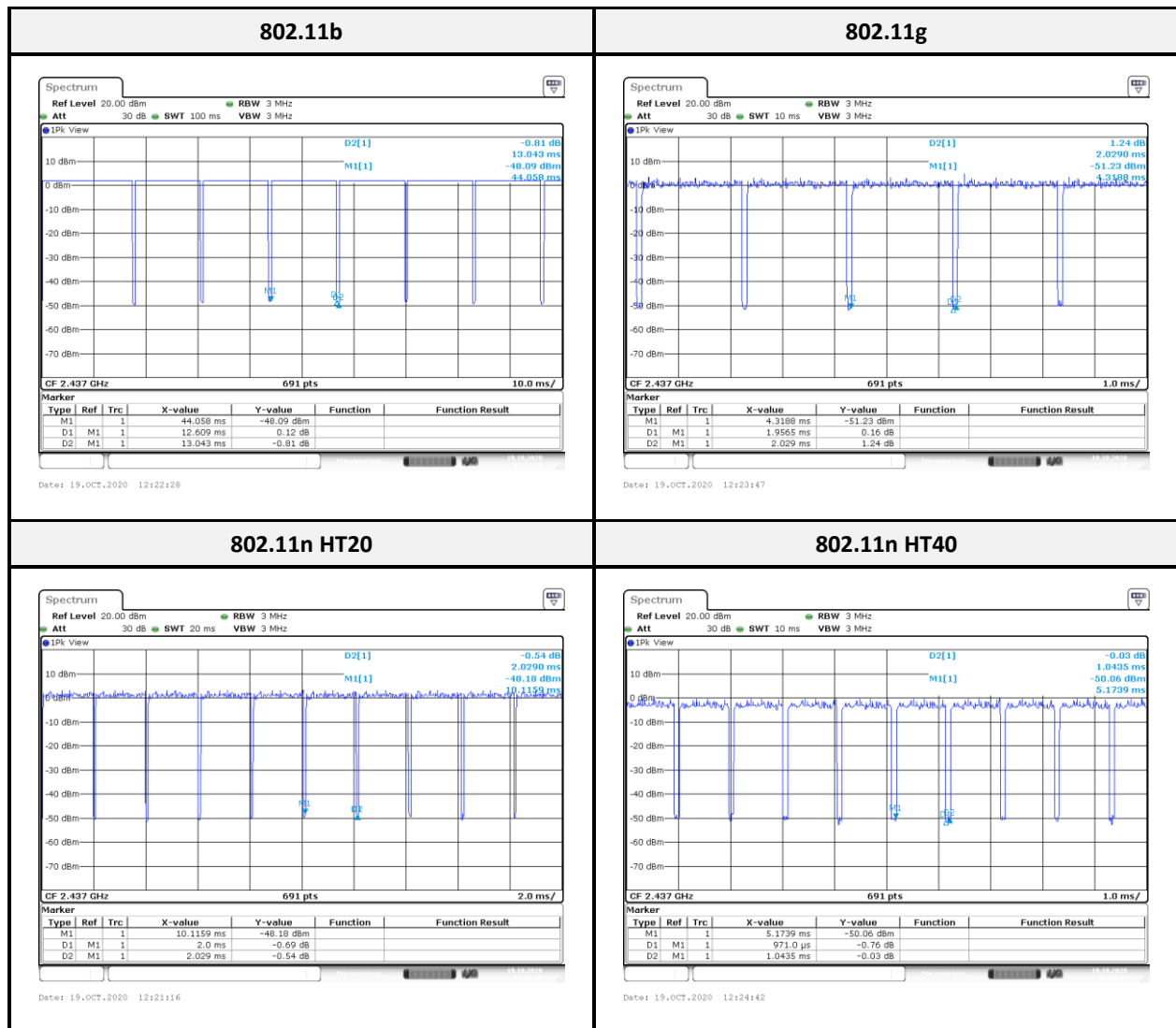
## 2.3 Block Diagram of Test Setup



## 2.4 Duty Cycle

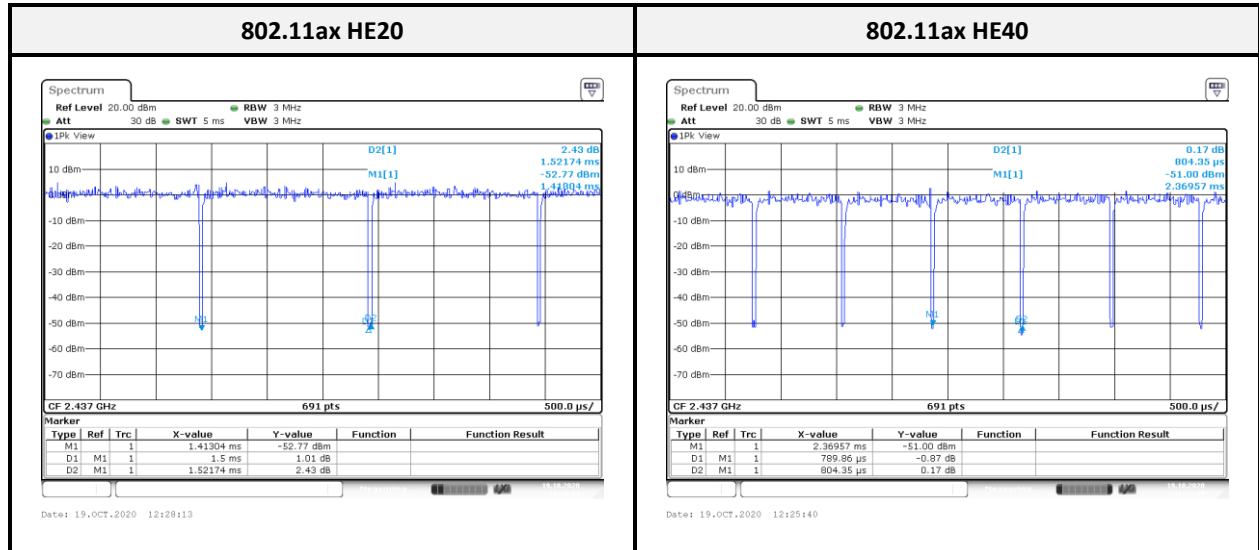
All measurements are to be performed with the EUT transmitting at 100% duty cycle at its maximum power control level; however, if 100% duty cycle cannot be achieved, measurements of duty cycle, x, and maximum power transmission duration, T, are required for each tested mode of operation.

Configuration	On Time (ms)	Period (ms)	Duty Cycle (%)	Duty Factor (dB)
802.11b	12.61	13.04	96.67	0.15
802.11g	1.96	2.03	96.43	0.16
802.11n HT 20	2.00	2.03	98.57	0.06
802.11n HT 40	0.97	1.04	93.05	0.31
802.11ax HE 20	1.50	1.52	98.57	0.06
802.11ax HE 40	0.79	0.80	98.20	0.08



\*Note: Duty Factor = 10\*log (1/Duty cycle)





\*Note: Duty Factor = 10\*log (1/Duty cycle)

## 2.5 Environmental Conditions and Test Date

Test Site	Test Date	Temperature (°C)	Relative Humidity (%)	Test Engineer
Conduction (Con-01)	2020/10/20	24.4	52	Brian Chang
Radiated (966A)	2020/10/13 - 2020/10/16	21.1 - 22.1	54 - 57	Leo Cheng
Conducted (TH-02)	2020/10/28	22.9	57	Blake Wang

### 3 Summary of Test Results

FCC Rules	Description of Test	Result
§15.247(i), §1.1310, §2.1091	Maximum Permissible Exposure (MPE)	Compliance
§15.203	Antenna Requirement	Compliance
§15.207(a)	AC Line Conducted Emissions	Compliance
§15.205, §15.209, §15.247(d)	Spurious Emissions	Compliance
§15.247(a)(2)	6 dB Emission Bandwidth	Compliance
§15.247(b)(3)	Maximum Peak Output Power	Compliance
§15.247(d)	100 kHz Bandwidth of Frequency Band Edge	Compliance
§15.247(e)	Power Spectral Density	Compliance

**4 FCC§15.247(i), §1.1307, § 2.1091 – Maximum Permissible Exposure (MPE)**

**4.1 Applicable Standard**

According to subpart 15.247(i)and subpart §1.1310, systems operating under the provisions of this section shall be operated in a manner that ensures that the public is not exposed to radio frequency energy level in excess of the Commission’s guidelines.

**Limits for Maximum Permissible Exposure (MPE) (§1.1310, §2.1091)**

<b>(B) Limits for General Population/Uncontrolled Exposure</b>				
<b>Frequency Range (MHz)</b>	<b>Electric Field Strength (V/m)</b>	<b>Magnetic Field Strength (A/m)</b>	<b>Power Density (mW/cm<sup>2</sup>)</b>	<b>Averaging Time (minutes)</b>
0.3–1.34	614	1.63	*(100)	30
1.34–30	824/f	2.19/f	*(180/f <sup>2</sup> )	30
30–300	27.5	0.073	0.2	30
300–1500	/	/	f/1500	30
1500–100,000	/	/	1.0	30

*f = frequency in MHz; \* = Plane-wave equivalent power density;*

According to §1.1310 and §2.1091 RF exposure is calculated.

**Calculated Formulary:** Predication of MPE limit at a given distance

S = PG/4πR<sup>2</sup> = power density (in appropriate units, e.g. mW/cm<sup>2</sup>);

P = power input to the antenna (in appropriate units, e.g., mW);

G = power gain of the antenna in the direction of interest relative to an isotropic radiator, the power gain factor, is normally numeric gain;

R = distance to the center of radiation of the antenna (appropriate units, e.g., cm);

For simultaneously transmit system, the calculated power density should comply with:

$$\sum_i \frac{S_i}{S_{Limit,i}} \leq 1$$

## 4.2 RF Exposure Evaluation Result

### MPE Evaluation:

Mode	Frequency Range (MHz)	Antenna Gain		Target Power		Evaluation Distance (cm)	Power Density (mW/cm <sup>2</sup> )	MPE Limit (mW/cm <sup>2</sup> )
		(dBi)	(numeric)	(dBm)	(mW)			
Wi-Fi 2.4G	2412-2462	3.93	2.4717	28.50	707.9458	20	0.3483	1.0
UNII-1	5150-5250	4.12	2.5823	28.00	630.9573	20	0.3243	1.0
UNII-2a	5250-5350	4.49	2.8119	23.00	199.5262	20	0.1117	1.0
UNII-2c	5470-5725	4.95	3.1261	23.00	199.5262	20	0.1242	1.0
UNII-3	5745-5850	4.95	3.1261	29.50	891.2509	20	0.5546	1.0

Note: Wi-Fi 2.4G and Wi-Fi 5G can't simultaneously.

**Result:** MPE evaluation of single and simultaneous transmission meet the requirement of standard.

## 5 FCC §15.203 - Antenna Requirements

### 5.1 Applicable Standard

According to § 15.203, an intentional radiator shall be designed to ensure that no antenna other than that furnished by the responsible party shall be used with the device. The use of a permanently attached antenna or of an antenna that uses a unique coupling to the intentional radiator shall be considered sufficient to comply with the provisions of this section. The manufacturer may design the unit so that a broken antenna can be replaced by the user, but the user of a standard antenna jack or electrical connector is prohibited.

And according to FCC 47 CFR section 15.247 (b), if the transmitting antennas of directional gain greater than 6dBi are used, the power shall be reduced by the amount in dB that the directional gain of the antenna does not exceed 6dBi

### 5.2 Antenna List and Details

Antenna Type	Brand	Model	Antenna Gain	Result
Internal Antenna	CALTRONICS	LB1	-9.17 dB	Compliance
Internal Antenna	CALTRONICS	LB2	3.90 dBi	Compliance
Internal Antenna	CALTRONICS	LB3	3.93 dBi	Compliance

*The EUT has an internal dedicated antennas arrangement, fulfill the requirement of this section.*

## 6 FCC §15.207 - AC Line Conducted Emissions

### 6.1 Applicable Standard

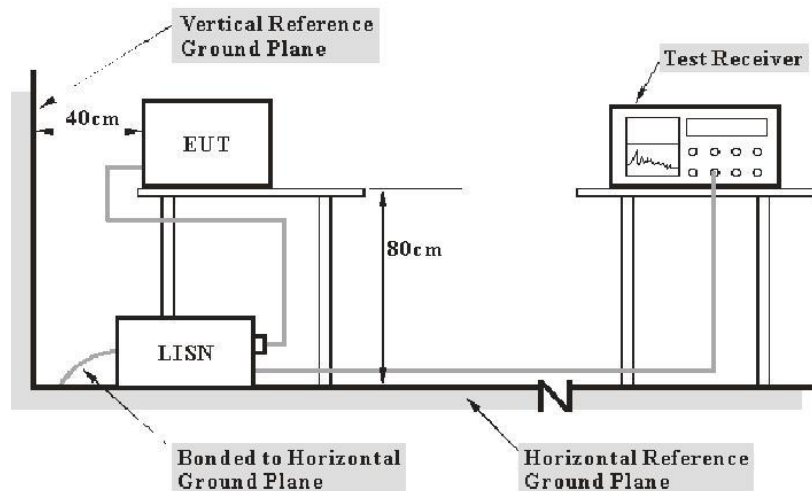
According to FCC §15.207,

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  $\mu$ H/50 ohms line impedance stabilization network (LISN). Compliance with the provisions of this paragraph shall be based on the measurement of the radio frequency voltage between each power line and ground at the power terminal. The lower limit applies at the boundary between the frequencies ranges.

Frequency (MHz)	Conducted Limit (dBuV)	
	Quasi-Peak	Average
0.15-0.5	66 to 56 <sup>Note 1</sup>	56 to 46 <sup>Note 2</sup>
0.5-5	56	46
5-30	60	50

Note 1: Decreases with the logarithm of the frequency. Note 2: A linear average detector is required

### 6.2 EUT Setup and Test Procedure



- Note: 1. Support units were connected to second LISN.  
 2. Both of LISNs (AMN) 80 cm from EUT and at the least 80 cm from other units and other metal planes support units.

The setup of EUT is according with per ANSI C63.10-2013 measurement procedure. The specification used was with the FCC Part 15.207 limits

The EMI test receiver was set to investigate the spectrum from 150 kHz to 30 MHz. During the conducted emission test, the EMI test receiver was set with the following configurations

Frequency Range	Receiver RBW
150 kHz - 30 MHz	9 kHz

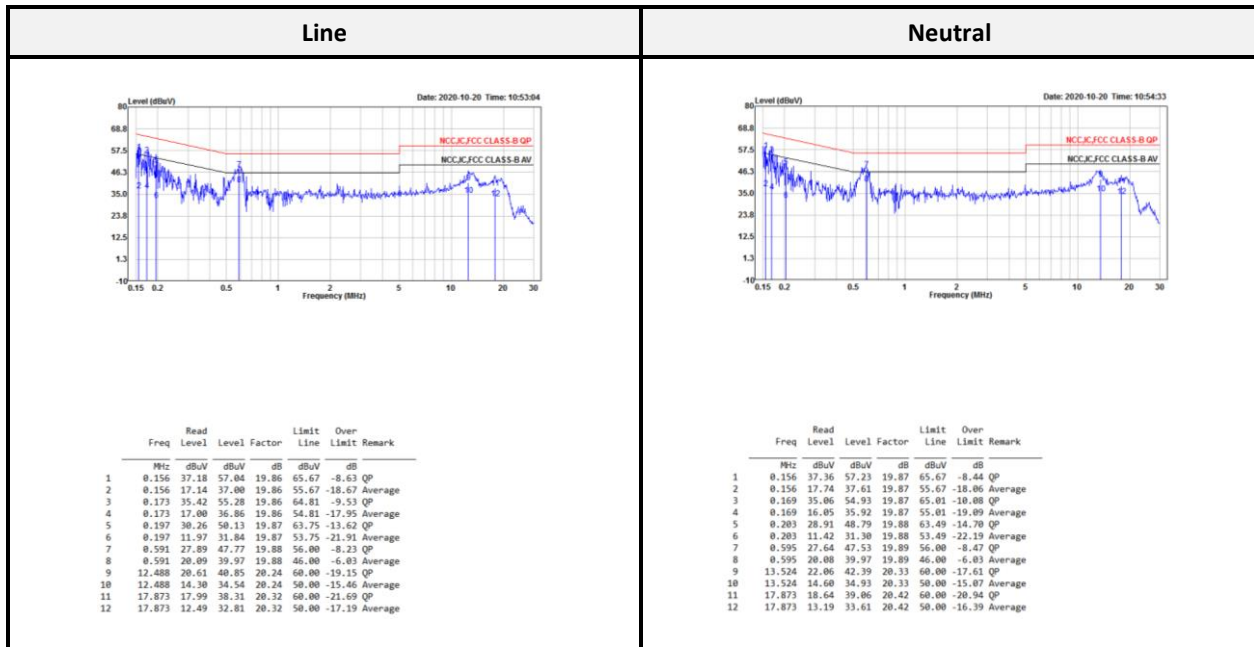
During the conducted emission test, the adapter was connected to the outlet of the LISN. Maximizing procedure was performed on the six (6) highest emissions of the EUT. All data was recorded in the Quasi-peak and average detection mode.

### 6.3 Test Equipment List and Details

Description	Manufacture	Model	Serial No.	Cal. Date.	Cal. Due.
<b>AC Line Conduction Room (CON-01)</b>					
Two-Line V-Network	Rohde & Schwarz	ENV216	100010	2020/09/14	2021/09/13
Pulse Limiter	SCHWARZBECK	VSTD 9561-F	00432	2020/09/11	2021/09/10
ESR EMI Test Receiver	Rohde & Schwarz	ESR3	102430	2020/05/07	2021/05/06
RF Cable	EMCI	EMCCFD300-BM-BM-8000	180526	2020/08/18	2021/08/17
Software	Audix	e3 v9	E3LK-03	N.C.R	N.C.R

**\*Statement of Traceability:** The testing equipment's listed above have finished the calibration by Electronics Testing Center, Taiwan (ETC) or other laboratories which were accredited by TAF or equivalent organizations. The calibration result could be traceable to the International System of Units (SI).

### 6.4 Test Result



Note1: Transmit mode

Note2:

Level = Read Level + Factor

Over Limit (Margin) = Level – Limit Line

Factor = (LISN, ISN, PLC or current probe) Factor + Cable Loss + Attenuator



**7 FCC §15.209, §15.205, §15.247(d) – Spurious Emissions**

**7.1 Applicable Standard**

As per FCC §15.35(d): Unless otherwise specified, on any frequency or frequencies above 1000 MHz, the radiated emission limits are based on the use of measurement instrumentation employing an average detector function.

Unless otherwise specified, measurements above 1000 MHz shall be performed using a minimum resolution bandwidth of 1MHz.

As Per FCC §15.205(a) except as show 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	13.36-13.41	399.9-410	4.5-5.15
0.495-0.505	16.42-16.423	608-614	5.35-5.46
2.1735-2.1905	16.69475-16.69525	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	2690-2900	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	3345.8-3358	36.43-36.5
12.57675-12.57725	322-335.4	3600-4400	Above 38.6

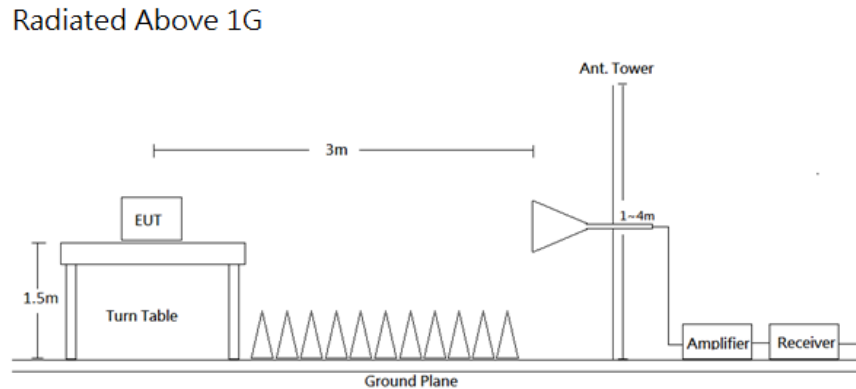
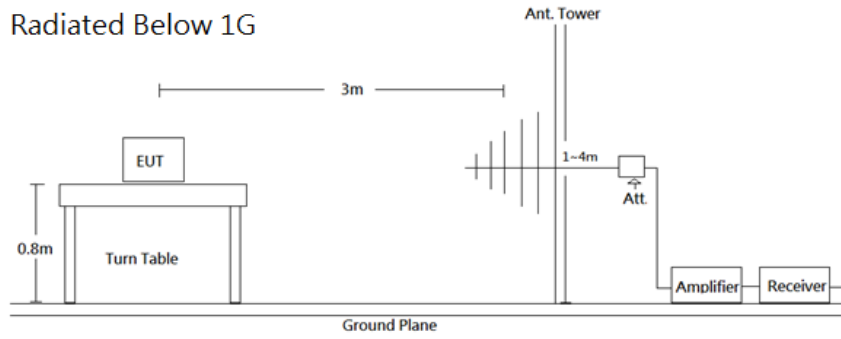
As per FCC §15.209(a): Except as provided elsewhere in this Subpart, the emissions from an intentional radiator shall not exceed the field strength levels specified in the following table:

Frequency (MHz)	Field Strength (micro volts/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

\*\* 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 470-806MHz. However, operation within these frequency bands is permitted under other sections of this Part, e.g., Sections 15.231 and 15.241.

As per FCC §15.247 (d) In any 100 kHz bandwidth outside the frequency band in which the spread spectrum or digitally modulated intentional radiator is operating, the radio frequency power that is produced by the intentional radiator shall be at least 20 dB below that in the 100 kHz bandwidth within the band that contains the highest level of the desired power, based on either an RF conducted or a radiated measurement, provided the transmitter demonstrates compliance with the peak conducted power limits. If the transmitter complies with the conducted power limits based on the use of RMS averaging over a time interval, as permitted under paragraph (b)(3) of this section, the attenuation required under this paragraph shall be 30 dB instead of 20dB. Attenuation below the general limits specified in §15.209(a) is not required. In addition, radiated emissions which fall in the restricted bands, as defined in §15.205(a), must also comply with the radiated emission limits specified in §15.209(a) (see §15.205(c)).

### 7.2 EUT Setup and Test Procedure



Radiated emission tests were performed in the 3 meters chamber test site, using the setup accordance with the ANSI C63.10-2013. The specification used was the FCC Part 15.209 and FCC 15.247 Limits.

The system was investigated from 30 MHz to 26.5 GHz. During the radiated emission test, the EMI test receiver was set with the following configurations measurement method 6.3 in ANSI C63.10.

Frequency Range	RBW	VBW	Duty cycle	Measurement method
30-1000 MHz	120 kHz	/	-	QP
Above 1 GHz	1 MHz	3 MHz	-	PK
	1 MHz	10 Hz	>98%	Ave
	1 MHz	1/T	<98%	Ave

Maximizing procedure was performed on the highest emissions to ensure that the EUT complied with all installation combinations. All data was recorded in the Quasi-peak detector mode from 30 MHz to 1 GHz and PK and average detector modes for frequencies above 1 GHz.

### 7.3 Test Equipment List and Details

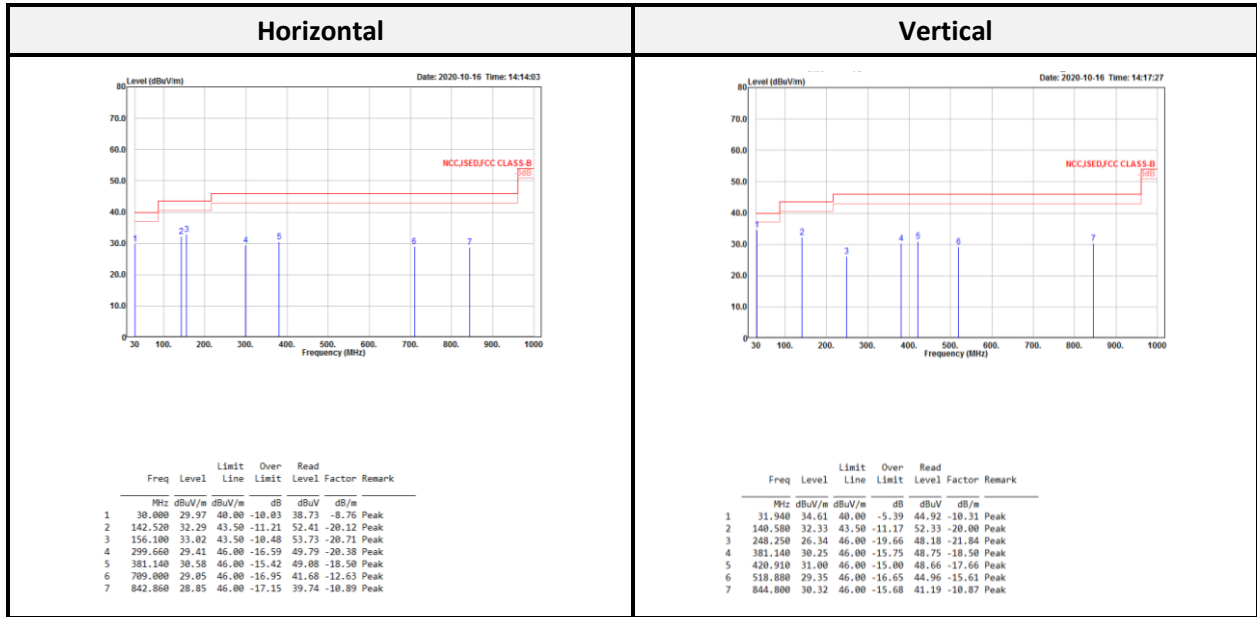
Description	Manufacture	Model	Serial No.	Cal. Date.	Cal. Due.
<b>Radiation 3M Room (966A)</b>					
Active Loop	EMCO	6502	0001-3322	2020/03/16	2021/03/15
Bilog Antenna/6 dB Attenuator	SUNOL SCIENCES & EMEC /EMCI	JB3/N-6-06	A111513/AT-N0668	2020/03/19	2021/03/18
Signal and Spectrum Analyzer	Rohde & Schwarz	FSV40	101434	2020/05/07	2021/05/06
Horn Antenna	ETS-Lindgren	3115	00109141	2020/07/15	2021/07/14
Horn Antenna	ETS-Lindgren	3160-09	00123852	2020/07/07	2021/07/06
Preamplifier	A.H. Systems	PAM-1840VH	174	2020/03/25	2021/03/24
Preamplifier	A.H. Systems	PAM-0118	478	2020/05/05	2021/05/04
Microflex Cable (1m)	EMCI	EMC106-SM-SM-2000	180515	2020/08/06	2021/08/05
Microflex Cable (2m)	MTJ	H0919	00000-MT28A-100	2020/08/06	2021/08/05
Microflex Cable (8m)	UTIFLEX	UFA210A-1-3149-300300	MFR 64639 232490-001	2020/08/06	2021/08/05
Turn Table	Chaintek	T-200-S-1	003501	N.C.R	N.C.R
Antenna Tower	Chaintek	MBD-400-1	003504	N.C.R	N.C.R
Controller	Chaintek	3000-1	003507	N.C.R	N.C.R
Software	Audix	e3 v9	E3LK-01	N.C.R	N.C.R
<b>Conducted Room (TH-02)</b>					
Spectrum Analyzer	Rohde & Schwarz	FSU26	100406	2020/03/11	2021/03/10
Cable	MTJ	MT40S	620620-MT40S-100	Each use	-

**\*Statement of Traceability:** The testing equipment's listed above have finished the calibration by Electronics Testing Center, Taiwan (ETC) or other laboratories which were accredited by TAF or equivalent organizations. The calibration result could be traceable to the International System of Units (SI).

### 7.4 Test Result

Transmitting mode (Pre-scan with three orthogonal axis, and worse case as X axis)

Below 1G (30 MHz-1 GHz) test the output power worst mode



Note1: Transmit with MIMO mode

Note2:

Level = Read Level + Factor

Over Limit = Level – Limit

Correct Factor = Antenna Factor + Cable Loss – Amplifier Gain

Spurious emissions more than 20 dB below the limit were not reported

**Above 1G (1 GHz-26.5 GHz)**

**802.11b mode:**

Low CH													
Horizontal							Vertical						
Freq	Level	Limit Line	Over Limit	Read Level	Factor	Remark	Freq	Level	Limit Line	Over Limit	Read Level	Factor	Remark
MHz	dBuV/m	dBuV/m	dB	dBuV	dB/m		MHz	dBuV/m	dBuV/m	dB	dBuV	dB/m	
1 !	2389.744	44.78	54.00	-9.22	54.46	-9.68 Average	1 !	2389.856	44.56	54.00	-9.44	54.24	-9.68 Average
2 !	2389.744	58.34	74.00	-15.66	68.02	-9.68 Peak	2 !	2389.856	58.00	74.00	-16.00	67.68	-9.68 Peak
3 *	2413.040	108.23			117.87	-9.64 Average	3 *	2413.040	111.55			121.19	-9.64 Average
4 *	2413.040	110.70			120.34	-9.64 Peak	4 *	2413.040	114.12			123.76	-9.64 Peak
1 !	3850.000	41.26	54.00	-12.74	46.40	-5.14 Average	1 !	3850.000	46.28	54.00	-7.72	51.42	-5.14 Average
2	3850.000	45.11	74.00	-28.89	50.25	-5.14 Peak	2	3850.000	49.84	74.00	-24.16	54.98	-5.14 Peak
3 !	4824.000	44.10	54.00	-9.90	46.96	-2.86 Average	3 !	4824.000	37.79	54.00	-16.21	40.65	-2.86 Average
4	4824.000	47.84	74.00	-26.16	50.70	-2.86 Peak	4	4824.000	44.24	74.00	-29.76	47.10	-2.86 Peak
5 !	7236.000	53.00	54.00	-1.00	49.18	3.82 Average	5 !	7236.000	48.77	54.00	-5.23	44.95	3.82 Average
6 !	7236.000	55.55	74.00	-18.45	51.73	3.82 Peak	6	7236.000	53.68	74.00	-20.32	49.86	3.82 Peak
7	9648.000	49.60	74.00	-24.40	43.09	6.51 Peak	7	9648.000	49.16	74.00	-24.84	42.65	6.51 Peak
8	10000.000	53.77	74.00	-20.23	47.20	6.57 Peak	8	10000.000	50.97	74.00	-23.03	44.40	6.57 Peak

Middle CH													
Horizontal							Vertical						
Freq	Level	Limit Line	Over Limit	Read Level	Factor	Remark	Freq	Level	Limit Line	Over Limit	Read Level	Factor	Remark
MHz	dBuV/m	dBuV/m	dB	dBuV	dB/m		MHz	dBuV/m	dBuV/m	dB	dBuV	dB/m	
1 !	2389.134	45.05	54.00	-8.95	54.73	-9.68 Average	1 !	2389.860	44.94	54.00	-9.06	54.62	-9.68 Average
2 !	2389.134	57.23	74.00	-16.77	66.91	-9.68 Peak	2 !	2389.860	57.45	74.00	-16.55	67.13	-9.68 Peak
3 *	2436.324	111.51			121.10	-9.59 Average	3 *	2436.324	112.32			121.91	-9.59 Average
4 *	2436.324	113.95			123.54	-9.59 Peak	4 *	2436.324	114.94			124.53	-9.59 Peak
5 !	2485.692	48.05	54.00	-5.95	57.55	-9.50 Average	5 !	2483.514	49.80	54.00	-4.20	59.30	-9.50 Average
6 !	2485.692	59.04	74.00	-14.96	68.54	-9.50 Peak	6 !	2483.514	61.51	74.00	-12.49	71.01	-9.50 Peak
1 !	3850.000	42.37	54.00	-11.63	47.51	-5.14 Average	1 !	3850.000	48.57	54.00	-5.43	53.71	-5.14 Average
2	3850.000	45.46	74.00	-28.54	50.60	-5.14 Peak	2	3850.000	50.31	74.00	-23.69	55.45	-5.14 Peak
3 !	4874.000	42.50	54.00	-11.50	45.28	-2.78 Average	3 !	4874.000	37.75	54.00	-16.25	40.53	-2.78 Average
4	4874.000	46.97	74.00	-27.03	49.75	-2.78 Peak	4	4874.000	44.80	74.00	-29.20	47.58	-2.78 Peak
5 !	7311.000	50.75	54.00	-3.25	46.82	3.93 Average	5 !	7311.000	52.49	54.00	-1.51	48.56	3.93 Average
6 !	7311.000	54.66	74.00	-19.34	50.73	3.93 Peak	6 !	7311.000	55.53	74.00	-18.47	51.60	3.93 Peak
7	9748.000	51.34	74.00	-22.66	44.94	6.40 Peak	7	9748.000	49.76	74.00	-24.24	43.36	6.40 Peak
8 !	10000.000	54.45	74.00	-19.55	47.88	6.57 Peak	8	10000.000	51.11	74.00	-22.89	44.54	6.57 Peak

High CH													
Horizontal							Vertical						
Freq	Level	Limit Line	Over Limit	Read Level	Factor	Remark	Freq	Level	Limit Line	Over Limit	Read Level	Factor	Remark
MHz	dBuV/m	dBuV/m	dB	dBuV	dB/m		MHz	dBuV/m	dBuV/m	dB	dBuV	dB/m	
1 *	2462.900	111.16			120.71	-9.55 Average	1 *	2461.100	115.41			124.96	-9.55 Average
2 *	2462.900	113.69			123.24	-9.55 Peak	2 *	2461.100	117.87			127.42	-9.55 Peak
3 !	2486.400	47.63	54.00	-6.37	57.12	-9.49 Average	3 !	2485.500	51.69	54.00	-2.31	61.19	-9.50 Average
4 !	2486.400	59.90	74.00	-14.10	69.39	-9.49 Peak	4 !	2485.500	64.24	74.00	-9.76	73.74	-9.50 Peak
1 !	3850.000	41.84	54.00	-12.16	46.98	-5.14 Average	1 !	3850.000	48.47	54.00	-5.53	53.61	-5.14 Average
2	3850.000	45.51	74.00	-28.49	50.65	-5.14 Peak	2	3850.000	50.07	74.00	-23.93	55.21	-5.14 Peak
3 !	4924.000	38.01	54.00	-15.99	40.65	-2.64 Average	3 !	4924.000	36.32	54.00	-17.68	38.96	-2.64 Average
4	4924.000	45.96	74.00	-28.04	48.60	-2.64 Peak	4	4924.000	44.25	74.00	-29.75	46.89	-2.64 Peak
5 !	7386.000	51.52	54.00	-2.48	47.51	4.01 Average	5 !	7386.000	52.54	54.00	-1.46	48.53	4.01 Average
6 !	7386.000	55.76	74.00	-18.24	51.75	4.01 Peak	6 !	7386.000	56.40	74.00	-17.60	52.39	4.01 Peak
7	9848.000	50.84	74.00	-23.16	44.39	6.45 Peak	7	9848.000	49.98	74.00	-24.02	43.53	6.45 Peak
8 !	10001.000	54.02	74.00	-19.98	47.45	6.57 Peak	8	10000.000	51.02	74.00	-22.98	44.45	6.57 Peak

802.11g mode:

Low CH															
Horizontal							Vertical								
Limit	Over	Read					Limit	Over	Read						
Line	Limit	Level	Factor	Remark	Line	Limit	Level	Factor	Remark	Line	Limit	Level	Factor	Remark	
Freq	Level	Line	Limit	Read	Freq	Level	Line	Limit	Read	Freq	Level	Line	Limit	Read	
MHz	dBuV/m	dBuV/m	dB	dBuV	MHz	dBuV/m	dBuV/m	dB	dBuV	MHz	dBuV/m	dBuV/m	dB	dBuV	
1 !	2389.968	48.97	54.00	-5.03	58.65	-9.68	Average	1 !	2389.744	52.55	54.00	-1.45	62.23	-9.68	Average
2 !	2389.968	72.39	74.00	-1.61	82.07	-9.68	Peak	2 !	2389.744	73.09	74.00	-0.91	82.77	-9.68	Peak
3 *	2419.536	103.07			112.69	-9.62	Average	3 *	2415.840	104.74			114.38	-9.64	Average
4 *	2419.536	113.92			123.54	-9.62	Peak	4 *	2415.840	114.71			124.35	-9.64	Peak
1 !	3850.000	42.50	54.00	-11.50	47.64	-5.14	Average	1 !	3850.000	47.68	54.00	-6.32	52.82	-5.14	Average
2	3850.000	45.50	74.00	-28.50	50.64	-5.14	Peak	2	3850.000	50.01	74.00	-23.99	55.15	-5.14	Peak
3	4824.000	28.25	54.00	-25.75	31.11	-2.86	Average	3	4824.000	27.99	54.00	-26.01	30.85	-2.86	Average
4	4824.000	42.06	74.00	-31.94	44.92	-2.86	Peak	4	4824.000	41.65	74.00	-32.35	44.51	-2.86	Peak
5 !	7236.000	40.03	54.00	-13.97	36.21	3.82	Average	5 !	7236.000	36.98	54.00	-17.02	33.16	3.82	Average
6 !	7236.000	58.61	74.00	-15.39	54.79	3.82	Peak	6	7236.000	52.22	74.00	-21.78	48.40	3.82	Peak
7	10001.500	50.93	74.00	-23.07	44.36	6.57	Peak	7	10000.000	51.04	74.00	-22.96	44.47	6.57	Peak

Middle CH															
Horizontal							Vertical								
Limit	Over	Read					Limit	Over	Read						
Line	Limit	Level	Factor	Remark	Line	Limit	Level	Factor	Remark	Line	Limit	Level	Factor	Remark	
Freq	Level	Line	Limit	Read	Freq	Level	Line	Limit	Read	Freq	Level	Line	Limit	Read	
MHz	dBuV/m	dBuV/m	dB	dBuV	MHz	dBuV/m	dBuV/m	dB	dBuV	MHz	dBuV/m	dBuV/m	dB	dBuV	
1 !	2389.618	48.19	54.00	-5.81	57.87	-9.68	Average	1 !	2389.860	47.22	54.00	-6.78	56.90	-9.68	Average
2 !	2389.618	65.68	74.00	-8.32	75.36	-9.68	Peak	2 !	2389.860	66.61	74.00	-7.39	76.29	-9.68	Peak
3 *	2432.694	106.28			115.88	-9.60	Average	3 *	2432.210	108.92			118.52	-9.60	Average
4 *	2432.694	117.11			126.71	-9.60	Peak	4 *	2432.210	119.21			128.81	-9.60	Peak
5 !	2484.482	49.80	54.00	-4.20	59.30	-9.50	Average	5 !	2483.756	53.28	54.00	-0.72	62.78	-9.50	Average
6 !	2484.482	66.74	74.00	-7.26	76.24	-9.50	Peak	6 !	2483.756	69.14	74.00	-4.86	78.64	-9.50	Peak
1 !	3850.000	41.18	54.00	-12.82	46.32	-5.14	Average	1 !	3850.000	48.51	54.00	-5.49	53.65	-5.14	Average
2	3850.000	45.49	74.00	-28.51	50.63	-5.14	Peak	2	3850.000	49.98	74.00	-24.02	55.12	-5.14	Peak
3	4874.000	32.17	54.00	-21.83	34.95	-2.78	Average	3	4874.000	28.57	54.00	-25.43	31.35	-2.78	Average
4	4874.000	45.14	74.00	-28.86	47.92	-2.78	Peak	4	4874.000	41.29	74.00	-32.71	44.07	-2.78	Peak
5 !	7311.000	49.51	54.00	-4.49	45.58	3.93	Average	5 !	7311.000	45.88	54.00	-8.12	41.95	3.93	Average
6 !	7311.000	64.32	74.00	-9.68	60.39	3.93	Peak	6 !	7311.000	59.45	74.00	-14.55	55.52	3.93	Peak
7	9748.000	51.67	74.00	-22.33	45.27	6.40	Peak	7	9748.000	51.69	74.00	-22.31	45.29	6.40	Peak
8 !	10000.000	55.45	74.00	-18.55	48.88	6.57	Peak	8	10000.000	51.50	74.00	-22.50	44.93	6.57	Peak

High CH															
Horizontal							Vertical								
Limit	Over	Read					Limit	Over	Read						
Line	Limit	Level	Factor	Remark	Line	Limit	Level	Factor	Remark	Line	Limit	Level	Factor	Remark	
Freq	Level	Line	Limit	Read	Freq	Level	Line	Limit	Read	Freq	Level	Line	Limit	Read	
MHz	dBuV/m	dBuV/m	dB	dBuV	MHz	dBuV/m	dBuV/m	dB	dBuV	MHz	dBuV/m	dBuV/m	dB	dBuV	
1 *	2468.500	102.42			111.96	-9.54	Average	1 *	2464.400	105.21			114.76	-9.55	Average
2 *	2468.500	113.73			123.27	-9.54	Peak	2 *	2464.400	115.15			124.70	-9.55	Peak
3 !	2483.700	50.83	54.00	-3.17	60.33	-9.50	Average	3 !	2484.200	51.02	54.00	-2.98	60.52	-9.50	Average
4 !	2483.700	73.34	74.00	-0.66	82.84	-9.50	Peak	4 !	2484.200	68.25	74.00	-5.75	77.75	-9.50	Peak
1 !	3850.000	42.15	54.00	-11.85	47.29	-5.14	Average	1 !	3850.000	47.74	54.00	-6.26	52.88	-5.14	Average
2	3850.000	45.33	74.00	-28.67	50.47	-5.14	Peak	2	3850.000	50.09	74.00	-23.91	55.23	-5.14	Peak
3	4924.000	28.11	54.00	-25.89	30.75	-2.64	Average	3	4924.000	28.23	54.00	-25.77	30.87	-2.64	Average
4	4924.000	42.85	74.00	-31.15	45.49	-2.64	Peak	4	4924.000	41.68	74.00	-32.32	44.32	-2.64	Peak
5 !	7386.000	39.01	54.00	-14.99	35.00	4.01	Average	5 !	7386.000	36.46	54.00	-17.54	32.45	4.01	Average
6 !	7386.000	54.53	74.00	-19.47	50.52	4.01	Peak	6	7386.000	51.85	74.00	-22.15	47.84	4.01	Peak
7 !	10000.000	54.19	74.00	-19.81	47.62	6.57	Peak	7	10000.000	51.10	74.00	-22.90	44.53	6.57	Peak

802.11ax HE20 mode:

Low CH													
Horizontal							Vertical						
Freq	Level	Limit Line	Over Limit	Read Level	Factor	Remark	Freq	Level	Limit Line	Over Limit	Read Level	Factor	Remark
MHz	dBuV/m	dBuV/m	dB	dBuV	dB/m		MHz	dBuV/m	dBuV/m	dB	dBuV	dB/m	
1 !	2387.952	47.85	54.00	-6.15	57.53	-9.68 Average	1 !	2389.296	50.53	54.00	-3.47	60.21	-9.68 Average
2 !	2387.952	69.93	74.00	-4.07	79.61	-9.68 Peak	2 !	2389.296	72.33	74.00	-1.67	82.01	-9.68 Peak
3 *	2420.320	100.67			110.29	-9.62 Average	3 *	2417.184	103.03			112.66	-9.63 Average
4 *	2420.320	113.96			123.58	-9.62 Peak	4 *	2417.184	115.74			125.37	-9.63 Peak
1 !	3850.000	42.39	54.00	-11.61	47.53	-5.14 Average	1 !	3850.000	48.78	54.00	-5.22	53.92	-5.14 Average
2	3850.000	45.68	74.00	-28.32	50.82	-5.14 Peak	2	3850.000	50.41	74.00	-23.59	55.55	-5.14 Peak
3	4824.000	29.68	54.00	-24.32	32.54	-2.86 Average	3	4824.000	28.09	54.00	-25.91	30.95	-2.86 Average
4	4824.000	42.64	74.00	-31.36	45.50	-2.86 Peak	4	4824.000	41.44	74.00	-32.56	44.30	-2.86 Peak
5 !	7236.000	38.47	54.00	-15.53	34.65	3.82 Average	5 !	7236.000	36.34	54.00	-17.66	32.52	3.82 Average
6 !	7236.000	56.27	74.00	-17.73	52.45	3.82 Peak	6	7236.000	51.18	74.00	-22.82	47.36	3.82 Peak
7 !	10000.000	54.13	74.00	-19.87	47.56	6.57 Peak	7	10000.000	51.38	74.00	-22.62	44.81	6.57 Peak

Middle CH													
Horizontal							Vertical						
Freq	Level	Limit Line	Over Limit	Read Level	Factor	Remark	Freq	Level	Limit Line	Over Limit	Read Level	Factor	Remark
MHz	dBuV/m	dBuV/m	dB	dBuV	dB/m		MHz	dBuV/m	dBuV/m	dB	dBuV	dB/m	
1 !	2389.860	47.25	54.00	-6.75	56.93	-9.68 Average	1 !	2382.600	47.81	54.00	-6.19	57.50	-9.69 Average
2 !	2389.860	62.12	74.00	-11.88	71.80	-9.68 Peak	2 !	2382.600	65.81	74.00	-8.19	75.50	-9.69 Peak
3 *	2438.260	104.17			113.76	-9.59 Average	3 *	2433.904	108.95			118.55	-9.60 Average
4 *	2438.260	117.20			126.79	-9.59 Peak	4 *	2433.904	121.19			130.79	-9.60 Peak
5 !	2484.482	48.94	54.00	-5.06	58.44	-9.50 Average	5 !	2483.514	53.07	54.00	-0.93	62.57	-9.50 Average
6 !	2484.482	64.92	74.00	-9.08	74.42	-9.50 Peak	6 !	2483.514	70.83	74.00	-3.17	80.33	-9.50 Peak
1 !	3850.000	42.30	54.00	-11.70	47.44	-5.14 Average	1 !	3850.000	48.00	54.00	-6.00	53.14	-5.14 Average
2	3850.000	45.16	74.00	-28.84	50.30	-5.14 Peak	2	3850.000	49.97	74.00	-24.03	55.11	-5.14 Peak
3	4874.000	31.80	54.00	-22.20	34.58	-2.78 Average	3	4874.000	29.21	54.00	-24.79	31.99	-2.78 Average
4	4874.000	44.22	74.00	-29.78	47.00	-2.78 Peak	4	4874.000	42.42	74.00	-31.58	45.20	-2.78 Peak
5 !	7311.000	47.67	54.00	-6.33	43.74	3.93 Average	5 !	7311.000	44.25	54.00	-9.75	40.32	3.93 Average
6 !	7311.000	61.78	74.00	-12.22	57.85	3.93 Peak	6 !	7311.000	58.24	74.00	-15.76	54.31	3.93 Peak
7	9748.000	50.26	74.00	-23.74	43.86	6.40 Peak	7	9748.000	50.04	74.00	-23.96	43.64	6.40 Peak
8 !	10000.000	54.15	74.00	-19.85	47.58	6.57 Peak	8	10000.000	51.09	74.00	-22.91	44.52	6.57 Peak

High CH													
Horizontal							Vertical						
Freq	Level	Limit Line	Over Limit	Read Level	Factor	Remark	Freq	Level	Limit Line	Over Limit	Read Level	Factor	Remark
MHz	dBuV/m	dBuV/m	dB	dBuV	dB/m		MHz	dBuV/m	dBuV/m	dB	dBuV	dB/m	
1 *	2468.300	98.12			107.66	-9.54 Average	1 *	2458.900	101.97			111.52	-9.55 Average
2 *	2468.300	111.49			121.03	-9.54 Peak	2 *	2458.900	115.16			124.71	-9.55 Peak
3 !	2484.100	48.20	54.00	-5.80	57.70	-9.50 Average	3 !	2484.600	53.07	54.00	-0.93	62.57	-9.50 Average
4 !	2484.100	68.68	74.00	-5.32	78.18	-9.50 Peak	4 !	2484.600	69.00	74.00	-5.00	78.50	-9.50 Peak
1 !	3850.000	41.97	54.00	-12.03	47.11	-5.14 Average	1 !	3850.000	47.76	54.00	-6.24	52.90	-5.14 Average
2	3850.000	44.83	74.00	-29.17	49.97	-5.14 Peak	2	3850.000	49.73	74.00	-24.27	54.87	-5.14 Peak
3	4924.000	28.36	54.00	-25.64	31.00	-2.64 Average	3	4924.000	28.28	54.00	-25.72	30.92	-2.64 Average
4	4924.000	42.80	74.00	-31.20	45.44	-2.64 Peak	4	4924.000	41.21	74.00	-32.79	43.85	-2.64 Peak
5 !	7386.000	35.91	54.00	-18.09	31.90	4.01 Average	5 !	7386.000	34.55	54.00	-19.45	30.54	4.01 Average
6	7386.000	51.86	74.00	-22.14	47.85	4.01 Peak	6	7386.000	49.71	74.00	-24.29	45.70	4.01 Peak
7 !	10000.000	54.09	74.00	-19.91	47.52	6.57 Peak	7	10000.000	51.22	74.00	-22.78	44.65	6.57 Peak



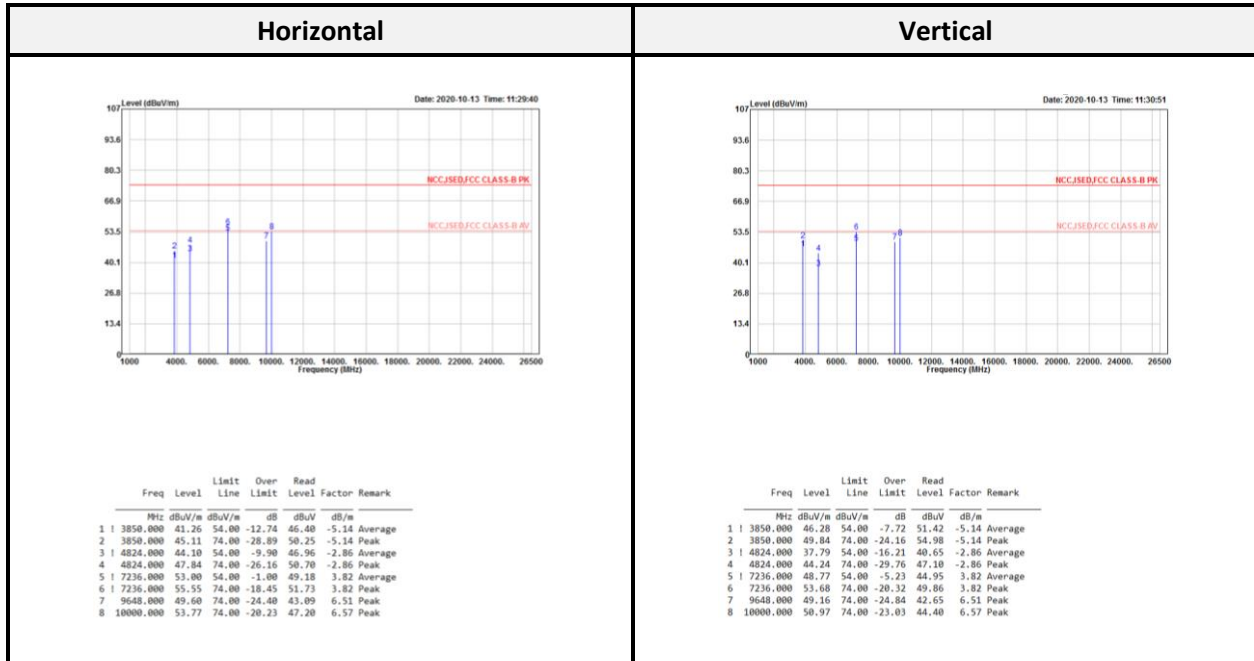
802.11ax HE40 mode:

Low CH													
Horizontal							Vertical						
Freq	Level	Limit Line	Over Limit	Read Level	Factor	Remark	Freq	Level	Limit Line	Over Limit	Read Level	Factor	Remark
MHz	dBuV/m	dBuV/m	dB	dBuV	dB/m		MHz	dBuV/m	dBuV/m	dB	dBuV	dB/m	
1 !	2388.672	49.22	54.00	-4.78	58.90	-9.68 Average	1 !	2389.068	53.28	54.00	-0.72	62.96	-9.68 Average
2 !	2388.672	67.61	74.00	-6.39	77.29	-9.68 Peak	2 !	2389.068	71.26	74.00	-2.74	80.94	-9.68 Peak
3 *	2424.180	98.10			107.71	-9.61 Average	3 *	2432.364	103.36			112.96	-9.60 Average
4 *	2424.180	110.10			119.71	-9.61 Peak	4 *	2432.364	115.02			124.62	-9.60 Peak
1 !	3850.000	42.03	54.00	-11.97	47.17	-5.14 Average	1 !	3850.000	48.45	54.00	-5.55	53.59	-5.14 Average
2	3850.000	45.57	74.00	-28.43	50.71	-5.14 Peak	2	3850.000	50.14	74.00	-23.86	55.28	-5.14 Peak
3	4844.000	28.10	54.00	-25.90	30.92	-2.82 Average	3	4844.000	28.11	54.00	-25.89	30.93	-2.82 Average
4	4844.000	41.03	74.00	-32.97	43.85	-2.82 Peak	4	4844.000	41.68	74.00	-32.32	44.50	-2.82 Peak
5 !	7266.000	35.31	54.00	-18.69	31.42	3.89 Average	5 !	7266.000	34.40	54.00	-19.60	30.51	3.89 Average
6	7266.000	49.75	74.00	-24.25	45.86	3.89 Peak	6	7266.000	47.44	74.00	-26.56	43.55	3.89 Peak
7 !	10000.000	54.25	74.00	-19.75	47.68	6.57 Peak	7	10000.000	51.86	74.00	-22.14	45.29	6.57 Peak

Middle CH													
Horizontal							Vertical						
Freq	Level	Limit Line	Over Limit	Read Level	Factor	Remark	Freq	Level	Limit Line	Over Limit	Read Level	Factor	Remark
MHz	dBuV/m	dBuV/m	dB	dBuV	dB/m		MHz	dBuV/m	dBuV/m	dB	dBuV	dB/m	
1 !	2389.860	47.84	54.00	-6.16	57.52	-9.68 Average	1 !	2389.618	49.13	54.00	-4.87	58.81	-9.68 Average
2 !	2389.860	64.54	74.00	-9.46	74.22	-9.68 Peak	2 !	2389.618	65.53	74.00	-8.47	75.21	-9.68 Peak
3 *	2429.306	97.89			107.50	-9.61 Average	3 *	2431.242	102.32			111.93	-9.61 Average
4 *	2429.306	111.55			121.16	-9.61 Peak	4 *	2431.242	114.04			123.65	-9.61 Peak
5 !	2486.176	48.25	54.00	-5.75	57.75	-9.50 Average	5 !	2483.756	53.77	54.00	-0.23	63.27	-9.50 Average
6 !	2486.176	65.46	74.00	-8.54	74.96	-9.50 Peak	6 !	2483.756	68.79	74.00	-5.21	78.29	-9.50 Peak
1 !	3850.000	42.16	54.00	-11.84	47.30	-5.14 Average	1 !	3850.000	48.50	54.00	-5.50	53.64	-5.14 Average
2	3850.000	45.51	74.00	-28.49	50.65	-5.14 Peak	2	3850.000	50.18	74.00	-23.82	55.32	-5.14 Peak
3	4874.000	28.87	54.00	-25.13	31.65	-2.78 Average	3	4874.000	29.02	54.00	-24.98	31.80	-2.78 Average
4	4874.000	41.77	74.00	-32.23	44.55	-2.78 Peak	4	4874.000	41.63	74.00	-32.37	44.41	-2.78 Peak
5 !	7311.000	36.33	54.00	-17.67	32.40	3.93 Average	5 !	7311.000	34.52	54.00	-19.48	30.59	3.93 Average
6	7311.000	50.03	74.00	-23.97	46.10	3.93 Peak	6	7311.000	47.03	74.00	-26.97	43.10	3.93 Peak
7 !	10000.000	54.41	74.00	-19.59	47.84	6.57 Peak	7	10000.000	50.84	74.00	-23.16	44.27	6.57 Peak

High CH													
Horizontal							Vertical						
Freq	Level	Limit Line	Over Limit	Read Level	Factor	Remark	Freq	Level	Limit Line	Over Limit	Read Level	Factor	Remark
MHz	dBuV/m	dBuV/m	dB	dBuV	dB/m		MHz	dBuV/m	dBuV/m	dB	dBuV	dB/m	
1 *	2469.320	96.33			105.86	-9.53 Average	1 *	2444.720	100.42			110.00	-9.58 Average
2 *	2469.320	109.62			119.15	-9.53 Peak	2 *	2444.720	112.26			121.84	-9.58 Peak
3 !	2486.240	49.79	54.00	-4.21	59.29	-9.50 Average	3 !	2485.520	53.71	54.00	-0.29	63.21	-9.50 Average
4 !	2486.240	63.75	74.00	-10.25	73.25	-9.50 Peak	4 !	2485.520	67.45	74.00	-6.55	76.95	-9.50 Peak
1 !	3850.000	41.95	54.00	-12.05	47.09	-5.14 Average	1 !	3850.000	48.73	54.00	-5.27	53.87	-5.14 Average
2	3850.000	50.27	74.00	-23.73	55.41	-5.14 Peak	2	3850.000	50.02	74.00	-23.98	55.16	-5.14 Peak
3	4904.000	28.60	54.00	-25.40	31.31	-2.71 Average	3	4904.000	28.23	54.00	-25.77	30.94	-2.71 Average
4	4904.000	39.87	74.00	-34.13	42.58	-2.71 Peak	4	4904.000	42.15	74.00	-31.85	44.86	-2.71 Peak
5	7356.000	33.12	54.00	-20.88	29.14	3.98 Average	5	7356.000	33.28	54.00	-20.72	29.30	3.98 Average
6	7356.000	45.78	74.00	-28.22	41.80	3.98 Peak	6	7356.000	45.08	74.00	-28.92	41.10	3.98 Peak
7 !	10000.000	54.11	74.00	-19.89	47.54	6.57 Peak	7	10000.000	51.39	74.00	-22.61	44.82	6.57 Peak

**Above 1G (1 GHz-26.5 GHz): The worst mode:**



Note1: Transmit with MIMO mode

Note2:

Level = Read Level + Factor

Over Limit = Level – Limit

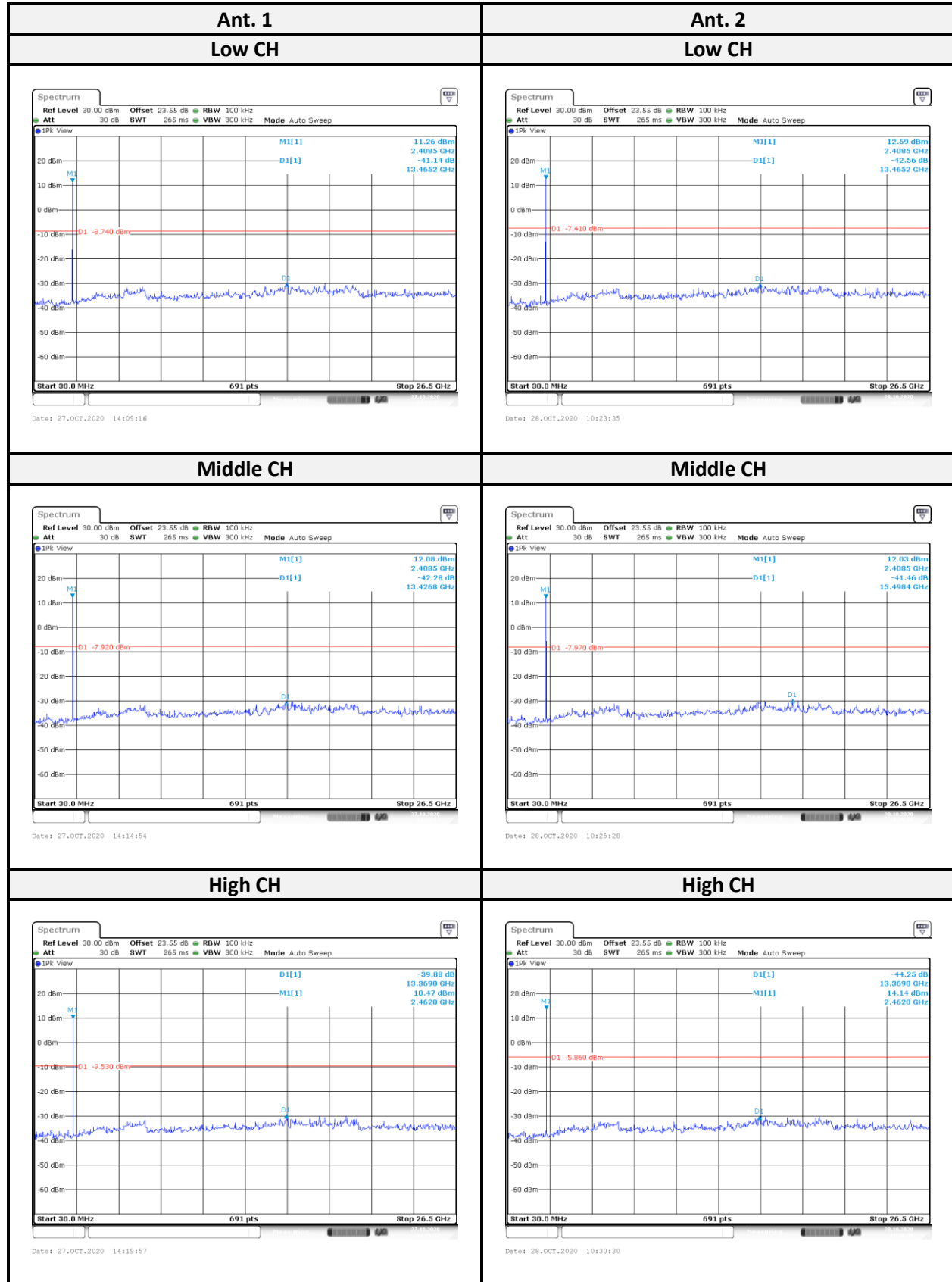
Correct Factor = Antenna Factor + Cable Loss – Amplifier Gain

Spurious emissions more than 20 dB below the limit were not reported

**Conducted Spurious Emissions:**

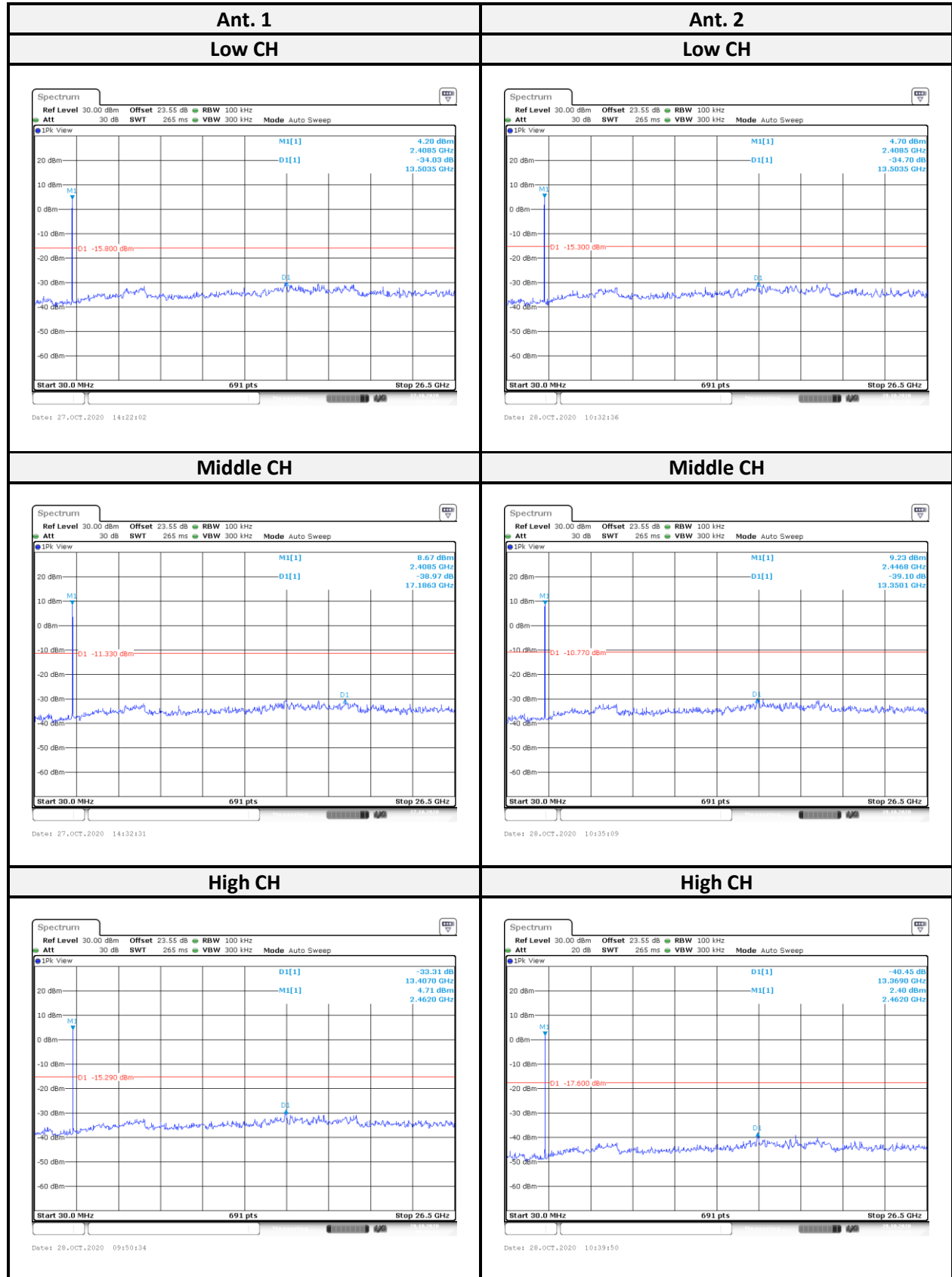
Channel	Frequency (MHz)	Delta Peak to Band Emission (dBc)			Limit (dBc)	Result
		Ant. 1	Ant. 2	Ant. 3		
<b>802.11b mode</b>						
Low	2412	41.14	42.56	42.24	≥ 20	Compliance
Mid	2437	42.28	41.46	41.64	≥ 20	Compliance
High	2462	39.88	44.25	41.41	≥ 20	Compliance
<b>802.11g mode</b>						
Low	2412	34.03	34.70	35.83	≥ 20	Compliance
Mid	2437	38.97	39.10	35.16	≥ 20	Compliance
High	2462	33.31	40.45	33.33	≥ 20	Compliance
<b>802.11ax HE20 mode</b>						
Low	2412	35.49	31.26	34.15	≥ 20	Compliance
Mid	2437	37.59	40.75	39.29	≥ 20	Compliance
High	2462	30.97	31.15	32.64	≥ 20	Compliance
<b>802.11ax HE40 mode</b>						
Low	2422	30.36	31.75	31.27	≥ 20	Compliance
Mid	2437	31.49	30.58	32.36	≥ 20	Compliance
High	2452	30.35	37.01	30.6	≥ 20	Compliance

802.11b mode



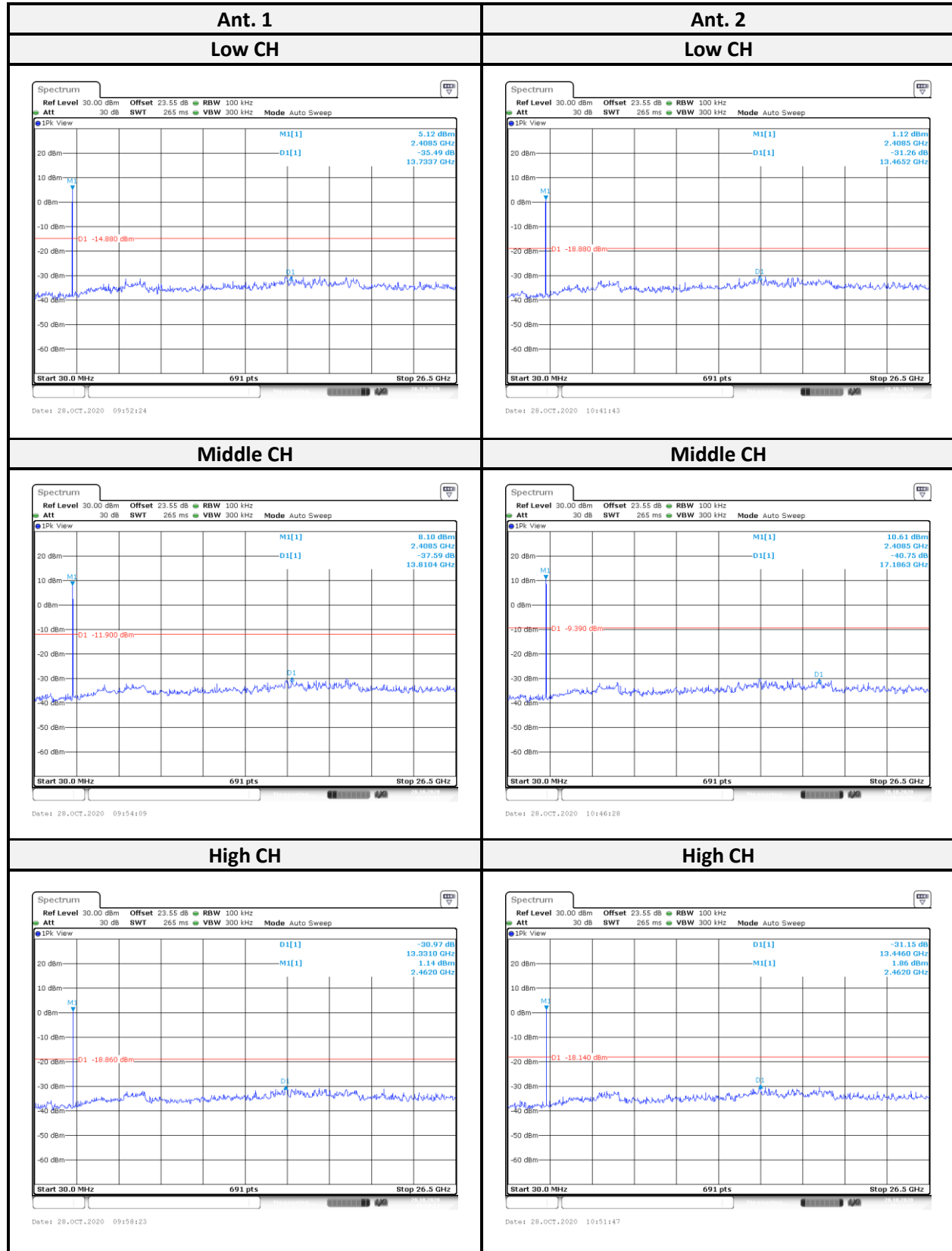
<b>Ant. 3</b>	-
<b>Low CH</b>	-
<p>Spectrum          Ref Level 30.00 dBm Offset 23.55 dB RBW 100 kHz          Att 30 dB SWT 265 ms VBW 300 kHz Mode Auto Sweep          1Pk View          M1[1] 11.86 dBm          2.4085 GHz          -42.24 dB          13.3884 GHz          D1 -8.140 dBm          Start 30.0 MHz 691 pts Stop 26.5 GHz          Date: 28.OCT.2020 11:24:18</p>	-
<b>Middle CH</b>	-
<p>Spectrum          Ref Level 30.00 dBm Offset 23.55 dB RBW 100 kHz          Att 30 dB SWT 265 ms VBW 300 kHz Mode Auto Sweep          1Pk View          M1[1] 11.40 dBm          2.4085 GHz          -41.64 dB          13.3884 GHz          D1 -8.500 dBm          Start 30.0 MHz 691 pts Stop 26.5 GHz          Date: 28.OCT.2020 11:26:21</p>	-
<b>High CH</b>	-
<p>Spectrum          Ref Level 30.00 dBm Offset 23.55 dB RBW 100 kHz          Att 30 dB SWT 265 ms VBW 300 kHz Mode Auto Sweep          1Pk View          D1[1] -41.41 dBm          13.3690 GHz          M1[1] 13.10 dBm          2.4620 GHz          D1 -6.900 dBm          Start 30.0 MHz 691 pts Stop 26.5 GHz          Date: 28.OCT.2020 11:31:09</p>	-

802.11g mode



<b>Ant. 3</b>	-
<b>Low CH</b>	-
<p>Spectrum          Ref Level 30.00 dBm Offset 23.55 dB RBW 100 kHz          Att 30 dB SWT 265 ms VBW 300 kHz Mode Auto Sweep          1Pk View          MI[1] 5.64 dBm 2.4083 GHz          DI[1] -35.83 dB 19.3884 GHz          D1 -14.360 dBm          Start 30.0 MHz 691 pts Stop 26.5 GHz          Date: 28.OCT.2020 11:34:13</p>	-
<b>Middle CH</b>	-
<p>Spectrum          Ref Level 20.00 dBm Offset 23.55 dB RBW 100 kHz          Att 30 dB SWT 265 ms VBW 300 kHz Mode Auto Sweep          1Pk View          DI[1] -35.16 dB 13.8290 GHz          MI[1] 5.76 dBm 2.4240 GHz          D1 -14.240 dBm          Start 30.0 MHz 691 pts Stop 26.5 GHz          Date: 28.OCT.2020 10:19:48</p>	-
<b>High CH</b>	-
<p>Spectrum          Ref Level 30.00 dBm Offset 23.55 dB RBW 100 kHz          Att 30 dB SWT 265 ms VBW 300 kHz Mode Auto Sweep          1Pk View          DI[1] -33.33 dB 15.4380 GHz          MI[1] 4.46 dBm 2.4620 GHz          D1 -15.540 dBm          Start 30.0 MHz 691 pts Stop 26.5 GHz          Date: 28.OCT.2020 11:41:00</p>	-

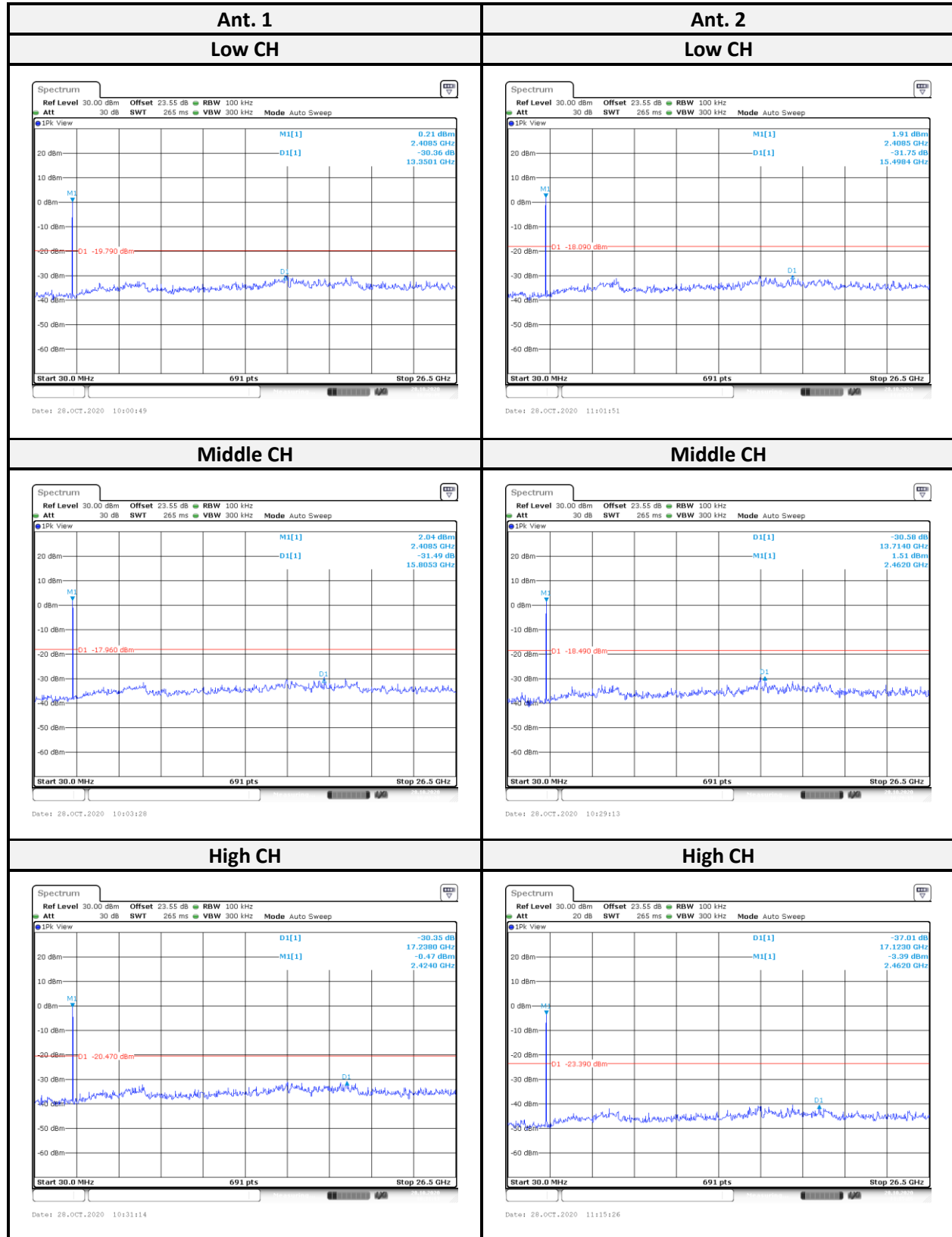
802.11ax HE20 mode:





<b>Ant. 3</b>	-
<b>Low CH</b>	-
<p>Spectrum          Ref Level 30.00 dBm Offset 23.55 dB RBW 100 kHz          Att 30 dB SWT 265 ms VBW 300 kHz Mode Auto Sweep          1Pk View          MI[1] 4.24 dBm 2.4085 GHz          DI[1] -34.15 dB 19.4268 GHz          DI -15.760 dBm          Start 30.0 MHz 691 pts Stop 26.5 GHz          Date: 28.OCT.2020 11:44:33</p>	-
<b>Middle CH</b>	-
<p>Spectrum          Ref Level 30.00 dBm Offset 23.55 dB RBW 100 kHz          Att 30 dB SWT 265 ms VBW 300 kHz Mode Auto Sweep          1Pk View          DI[1] -99.29 dB 15.4760 GHz          MI[1] 9.09 dBm 2.4240 GHz          DI -20.470 dBm          Start 30.0 MHz 691 pts Stop 26.5 GHz          Date: 28.OCT.2020 10:45:17</p>	-
<b>High CH</b>	-
<p>Spectrum          Ref Level 30.00 dBm Offset 23.55 dB RBW 100 kHz          Att 30 dB SWT 265 ms VBW 300 kHz Mode Auto Sweep          1Pk View          DI[1] -32.64 dB 13.7520 GHz          MI[1] 2.50 dBm 2.4620 GHz          DI -17.500 dBm          Start 30.0 MHz 691 pts Stop 26.5 GHz          Date: 28.OCT.2020 11:50:15</p>	-

802.11ax HE40 Mode



<b>Ant. 3</b>	-
<b>Low CH</b>	-
<p>Spectrum          Ref Level 30.00 dBm Offset 23.55 dB RBW 100 kHz          Att 30 dB SWT 265 ms VBW 300 kHz Mode Auto Sweep          1Pk View          M1[1] 1.36 dBm          2.4085 GHz          -31.27 dB          19.4652 GHz          -18.640 dBm          Start 30.0 MHz 691 pts Stop 26.5 GHz          Date: 28.OCT.2020 13:23:00</p>	-
<b>Middle CH</b>	-
<p>Spectrum          Ref Level 30.00 dBm Offset 23.55 dB RBW 100 kHz          Att 30 dB SWT 265 ms VBW 300 kHz Mode Auto Sweep          1Pk View          M1[1] 3.96 dBm          2.4085 GHz          -32.36 dB          19.30884 GHz          -16.040 dBm          Start 30.0 MHz 691 pts Stop 26.5 GHz          Date: 28.OCT.2020 13:30:25</p>	-
<b>High CH</b>	-
<p>Spectrum          Ref Level 30.00 dBm Offset 23.55 dB RBW 100 kHz          Att 30 dB SWT 265 ms VBW 300 kHz Mode Auto Sweep          1Pk View          M1[1] 0.40 dBm          2.4468 GHz          -30.60 dB          17.1480 GHz          -19.600 dBm          Start 30.0 MHz 691 pts Stop 26.5 GHz          Date: 28.OCT.2020 13:32:47</p>	-