



FCC Part 15.247

RSS-247 Issue 2, Feb 2017; RSS-Gen Issue 5, Mar 2019

TEST REPORT

For

Silicon Labs

9th Floor, Maximus Towers 2B, Raheja Mindspace IT Park, APIIC Software Layout, Madhapur, Hyderabad,
Telangana, India - 500 081

Report Type:	Original Report
Brand Name:	Silicon Labs
FCC Identity:	FCC ID: XF6-B001P4V2P1
IC Identity:	IC: 8407A-B001P4V2P1
Product Name:	WiFi bgn, BT5.0 SIP Module
Model Name:	RS9116-B0014
Report Number:	RLK201108002-00C
Report Date:	2021/01/16
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Note: This test report is prepared for the customer shown above and for the device described herein.
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Revision History

Revision	Report Number	Issue Date	Description
1.0	RLK201108002-00C	2021/01/16	Original Report

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1 General Information

1.1 Product Description for Equipment under Test (EUT)

Applicant	Silicon Labs 9th Floor, Maximus Towers 2B, Raheja Mindspace IT Park, APIIC Software Layout, Madhapur, Hyderabad, Telangana, India - 500 081
Manufacturer	Silicon Labs 9th Floor, Maximus Towers 2B, Raheja Mindspace IT Park, APIIC Software Layout, Madhapur, Hyderabad, Telangana, India - 500 081
Brand Name	Silicon Labs
Product (Equipment)	WiFi bgn, BT5.0 SIP Module
Model Name	RS9116-B0014
Frequency Range	IEEE 802.11b/g/n HT20: 2412 - 2462 MHz IEEE 802.11n HT40: 2422 - 2452 MHz
Number of Channels	IEEE 802.11b/g/n HT20: 11 Channels IEEE 802.11n HT40: 9 Channels
Output Power	Chip Antenna (FR05-S1-N-0-102) with 1.8Vdc IEEE 802.11b: 16.59 dBm (0.0456W) IEEE 802.11g: 17.40 dBm (0.0550 W) IEEE 802.11n HT20: 17.14 dBm (0.0518 W) IEEE 802.11n HT40: 13.87 dBm (0.0244 W) Chip Antenna (FR05-S1-N-0-102) with 3.3Vdc IEEE 802.11b: 19.70 dBm (0.0933 W) IEEE 802.11g: 22.35 dBm (0.1718 W) IEEE 802.11n HT20: 22.00 dBm (0.1585 W) IEEE 802.11n HT40: 17.49 dBm (0.0561 W) Dipole Antenna (GW.34.5153) with 1.8Vdc IEEE 802.11b: 16.43 dBm (0.0440 W) IEEE 802.11g: 17.24 dBm (0.0530 W) IEEE 802.11n HT20: 17.31 dBm (0.0538 W) IEEE 802.11n HT40: 13.91 dBm (0.0246 W) Dipole Antenna (GW.34.5153) with 3.3Vdc IEEE 802.11b: 19.75 dBm (0.0944 W) IEEE 802.11g: 22.22 dBm (0.1667 W) IEEE 802.11n HT20: 21.91 dBm (0.1552 W) IEEE 802.11n HT40: 17.22 dBm (0.0527 W)
Modulation Type	IEEE 802.11b: DSSS; IEEE 802.11g/n HT 20/HT40: OFDM
Power Operation (Voltage Range)	☒ DC Type ☒ From Host System: 1.8Vdc/3.3Vdc
Related Submittal(s)/Grant(s)	FCC Part 15.247 DSS with FCC ID: XF6-B001P4V2P1 FCC Part 15.247 DTS with FCC ID: XF6-B001P4V2P1
Received Date	2020/11/13
Date of Test	2020/11/27 - 2020/12/10

Note: All measurement and test data in this report was gathered from production sample serial number: 201108002. Assigned by Bay Area Compliance Laboratories Corp. (Linkou Laboratory)

1.2 Objective and Test Methodology

The Objective of this Test Report was to document the compliance of the Silicon Labs. Appliance (Model: RS9116-B0014) 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.
- RSS-Gen Issue 5, Mar 2019— General Requirements for Compliance of Radio Apparatus
- RSS-247 Issue 2, Feb 2017— Digital Transmission Systems (DTSs), Frequency Hopping Systems (FHSs) and Licence-Exempt Local Area Network (LE-LAN) Devices

1.3 Measurement Uncertainty

Parameter	Expanded Measurement uncertainty
RF output power with Power Meter	± 1.488 dB
Occupied Channel Bandwidth	± 453.927 Hz
RF Conducted test with Spectrum	± 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.

1.4 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.: TW3546. The Test Firm Registration No.: 181430.

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: Channel 1, 6 and 11 were tested. For 802.11n HT40: Channel 3, 6 and 9 were tested.

-For Radiated Emission, Conducted Power, Conducted Band Edge and PSD had test for two antenna and two voltage that because the power setting is different, the result will be different. For Bandwidth, Conducted Emission only test one result that because the power not affect the result.

Modulation Used for Conformance Test			
Configuration	N _{TX}	Data Rate	Worst Data Rate
802.11b	1	1-11 Mbps	1 Mbps
802.11g	1	6-54 Mbps	6 Mbps
802.11n HT 20	1	MCS 0-7	MCS 0
802.11n HT 40	1	MCS 0-7	MCS 0

Worst Case of Power Setting				
EUT Exercise Software		PER Test App		
Configuration	N _{TX}	Low CH	Mid CH	High CH
<Chip Antenna (FR05-S1-N-0-102) with 1.8V _{dc} >				
802.11b	1	13	22	12
802.11g	1	9	15	8
802.11n HT 20	1	7	14	7
802.11n HT 40	1	5	9	6
<Chip Antenna (FR05-S1-N-0-102) with 3.3V _{dc} >				
802.11b	1	17	22	15
802.11g	1	11	19	12
802.11n HT 20	1	10	18	12
802.11n HT 40	1	7	12	10

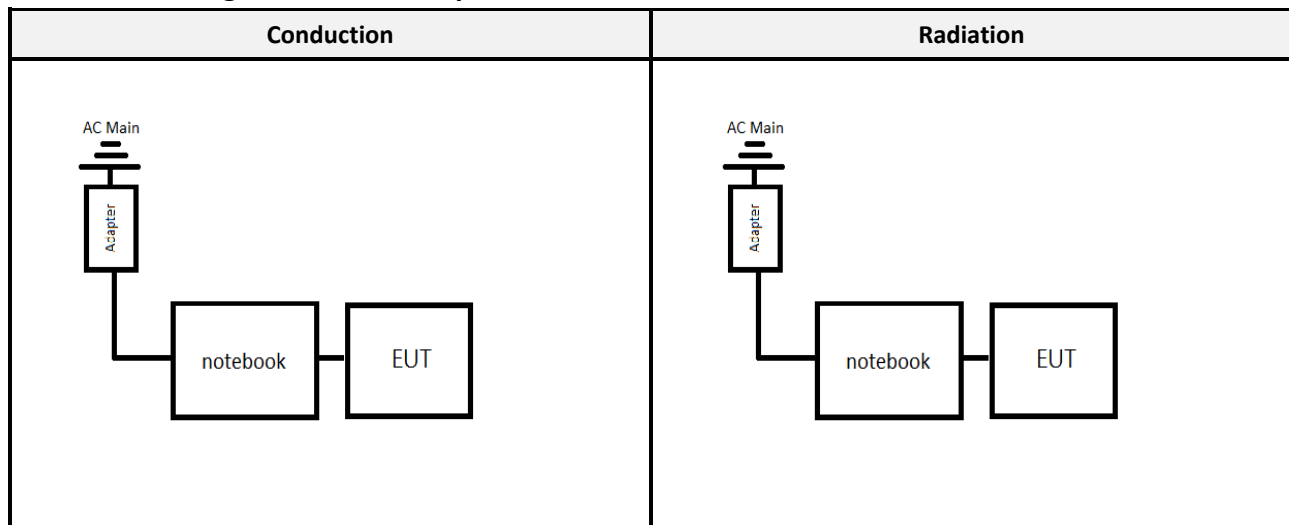
Worst Case of Power Setting				
EUT Exercise Software		PER Test App		
Configuration	N _{TX}	Low CH	Mid CH	High CH
< Dipole Antenna (GW.34.5153) with 1.8Vdc>				
802.11b	1	14	22	12
802.11g	1	10	15	8
802.11n HT 20	1	9	15	8
802.11n HT 40	1	6	9	6
< Dipole Antenna (GW.34.5153) with 3.3Vdc>				
802.11b	1	22	22	15
802.11g	1	12	19	12
802.11n HT 20	1	11	18	11
802.11n HT 40	1	9	12	9

2.2 Support Equipment List and External Cable List

No.	Description	Manufacturer	Model Number	Serial Number
A	NoteBook	DELL	Latitude E6410	PP27LA001

No.	Description	Manufacturer	Model Number
1	USB Cable	Tensility International Corp	10-02331

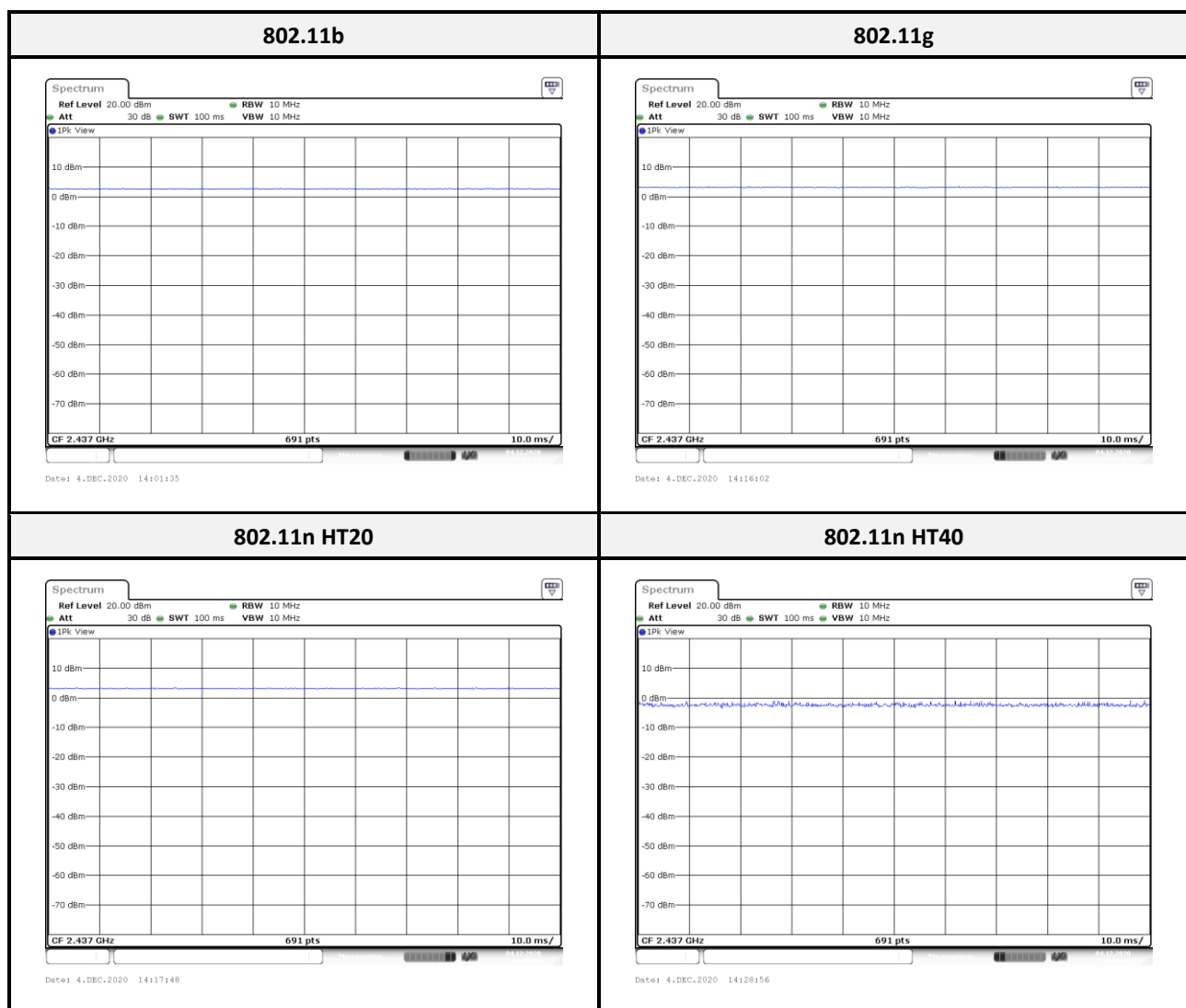
2.3 Block Diagram of Test Setup



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	100.00	100.00	100.00	0.00
802.11g	100.00	100.00	100.00	0.00
802.11n HT20	100.00	100.00	100.00	0.00
802.11n HT40	100.00	100.00	100.00	0.00



Note1: Duty Factor = $10 \cdot \log(1/\text{Duty cycle})$

2.5 Environmental Conditions and Test Date

Test Site	Test Date	Temperature (°C)	Relative Humidity (% RH)	Test Engineer
Conduction (Con-01)	2020/12/09	24.6	58	Rui Zhan
Radiated (966A)	2020/11/27 - 2020/12/10	19.5 - 21.5	55 - 61	Leo Cheng
Conducted (TH-02)	2020/12/04 - 2020/12/10	22.5 - 23.2	57 - 60	Rui Zhan

3 Summary of Test Results

FCC Rules	Description of Test	Result
§15.247(i), §1.1310, §2.1091	Maximum Permissible Exposure (MPE)	Compliance
ISED RSS-102 Sec 2.5.2	Exemption Limits for Routine Evaluation – RF Exposure Evaluation	Compliance
§15.203 ISED RSS-Gen Sec 6.8	Antenna Requirement	Compliance
§15.207(a) ISED RSS-Gen Sec 6.8	AC Line Conducted Emissions	Compliance
§15.205, §15.209, §15.247(d) ISED RSS-Gen Sec 8.9 and 8.10 ISED RSS-247 Sec 5.5	Spurious Emissions	Compliance
§15.247(a)(2) ISED RSS-247 Sec 5.2 ISED RSS-Gen Sec 6.7	6 dB Emission Bandwidth and Occupied Bandwidth	Compliance
§15.247(b)(3) ISED RSS-247 Sec 5.4(d)	Maximum Output Power	Compliance
§15.247(d) ISED RSS-247 Sec 5.5	100 kHz Bandwidth of Frequency Band Edge	Compliance
§15.247(e) ISED RSS-247 Sec 5.2(b)	Power Spectral Density	Compliance

4 FCC§15.247(i), §1.1310, § 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) Limits for General Population/Uncontrolled Exposure				
Frequency Range (MHz)	Electric Field Strength (V/m)	Magnetic Field Strength (A/m)	Power Density (mW/cm ²)	Averaging Time (minutes)
0.3–1.34	614	1.63	*(100)	30
1.34–30	824/f	2.19/f	*(180/f ²)	30
30–300	27.5	0.073	0.2	30
300–1500	/	/	f/1500	30
1500–100,000	/	/	1.0	30

Note: 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

$S = PG/4\pi R^2$ = power density (in appropriate units, e.g. mW/cm²);

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 ²)	MPE Limit (mW/cm ²)
		(dBi)	(numeric)	(dBm)	(mW)			
BLE	2402-2480	5.89	3.8815	22.00	158.4893	20	0.1224	1.0
BR/EDR	2402-2480	5.89	3.8815	21.00	125.8925	20	0.0973	1.0
Wi-Fi 2.4G	2412-2462	5.89	3.8815	23.00	199.5262	20	0.1542	1.0

Note: Wi-Fi and BT can't simultaneously.

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

5 RSS-102 Sec 2.5.2 - Exemption Limits for Routine Evaluation – RF Exposure Evaluation

5.1 Applicable Standard

According to subpart RSS-102 Sec 2.5.2,

RF exposure evaluation is required if the separation distance between the user and/or bystander and the device's radiating element is greater than 20 cm, except when the device operates as follows:

- below 20 MHz⁶ and the source-based, time-averaged maximum e.i.r.p. of the device is equal to or less than 1 W (adjusted for tune-up tolerance);
- at or above 20 MHz and below 48 MHz and the source-based, time-averaged maximum e.i.r.p. of the device is equal to or less than $4.49/f^{0.5}$ W (adjusted for tune-up tolerance), where f is in MHz;
- at or above 48 MHz and below 300 MHz and the source-based, time-averaged maximum e.i.r.p. of the device is equal to or less than 0.6 W (adjusted for tune-up tolerance);
- at or above 300 MHz and below 6 GHz and the source-based, time-averaged maximum e.i.r.p. of the device is equal to or less than $1.31 \times 10^{-2} f^{0.6834}$ W (adjusted for tune-up tolerance), where f is in MHz;
- at or above 6 GHz and the source-based, time-averaged maximum e.i.r.p. of the device is equal to or less than 5 W (adjusted for tune-up tolerance).

In these cases, the information contained in the RF exposure technical brief may be limited to information that demonstrates how the e.i.r.p. was derived.

5.2 RF Exposure Evaluation Result

BLE Max tune-up conducted output power is 22.00 dBm (158.4893 mW) at 2402 MHz, Antenna Gain = 5.89 dBi, EIRP = 27.89 dBm (0.6152 W), so the maximum conducted and E.I.R.P. source-based, time-averaged output is less than 2.68 W for general public use.

BR/EDR Max tune-up conducted output power is 21.00 dBm (125.8925 mW) at 2402 MHz, Antenna Gain = 5.89 dBi, EIRP = 26.89 dBm (0.4887 W), so the maximum conducted and E.I.R.P. source-based, time-averaged output is less than 2.68 W for general public use.

Wi-Fi 2.4G Max tune-up conducted output power is 23.00 dBm (199.5262 mW) at 2437 MHz, Antenna Gain = 5.89 dBi, EIRP = 28.89 dBm (0.7745 W), so the maximum conducted and E.I.R.P. source-based, time-averaged output is less than 2.70 W for general public use.

Note: Wi-Fi and BT can't simultaneously.

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

6 FCC §15.203 and RSS-Gen Sec 6.8- Antenna Requirements

6.1 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.

According to RSS-Gen 6.8: Transmitter Antenna for Licence-Exempt Radio Apparatus

The applicant for equipment certification, as per RSP-100, must provide a list of all antenna types that may be used with the licence-exempt transmitter, indicating the maximum permissible antenna gain (in dBi) and the required impedance for each antenna.

Licence-exempt transmitters that have received equipment certification may operate with different types of antennas. However, it is not permissible to exceed the maximum equivalent isotropically radiated power (e.i.r.p.) limits specified in the applicable standard (RSS) for the licence-exempt apparatus.

Testing shall be performed using the highest gain antenna of each combination of licence-exempt transmitter and antenna type, with the transmitter output power set at the maximum level. Footnote8 When a measurement at the antenna connector is used to determine RF output power, the effective gain of the device's antenna shall be stated, based on a measurement or on data from the antenna manufacturer.

User manuals for transmitters equipped with detachable antennas shall also contain the following notice in a conspicuous location:

This radio transmitter (identify the device by certification number) has been approved by Industry Canada to operate with the antenna types listed below with the maximum permissible gain indicated. Antenna types not included in this list, having a gain greater than the maximum gain indicated for that type, are strictly prohibited for use with this device.

Immediately following the above notice, the manufacturer shall provide a list of all antenna types approved for use with the transmitter, indicating the maximum permissible antenna gain (in dBi).

6.2 Antenna List and Details

Brand	Model	Antenna Type	Antenna Gain	Result
Fractus	FR05-S1-N-0-102	Chip	1.70 dBi	Compliance
TAOGLAS	GW.34.5153	Dipole	5.89dBi	Compliance

The EUT have an internal and external antennas arrangement and fulfill the requirement of this section.

7 FCC §15.207 and RSS-Gen Sec 8.8 - AC Line Conducted Emissions

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

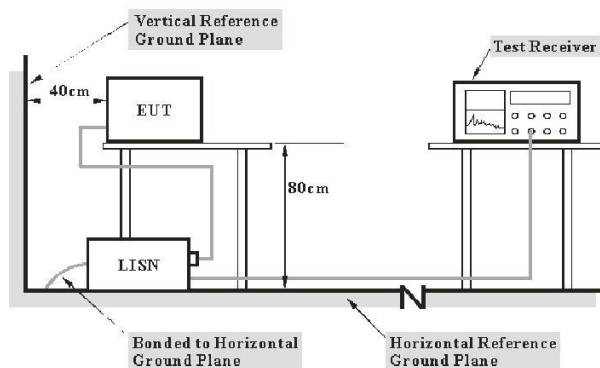
According to RSS-Gen 8.8 Conducted limits:

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

Frequency (MHz)	Conducted Limit (dBuV)	
	Quasi-Peak	Average
0.15-0.5	66 to 56 ^{Note 1}	56 to 46 ^{Note 2}
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

7.2 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 and RSS-Gen 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

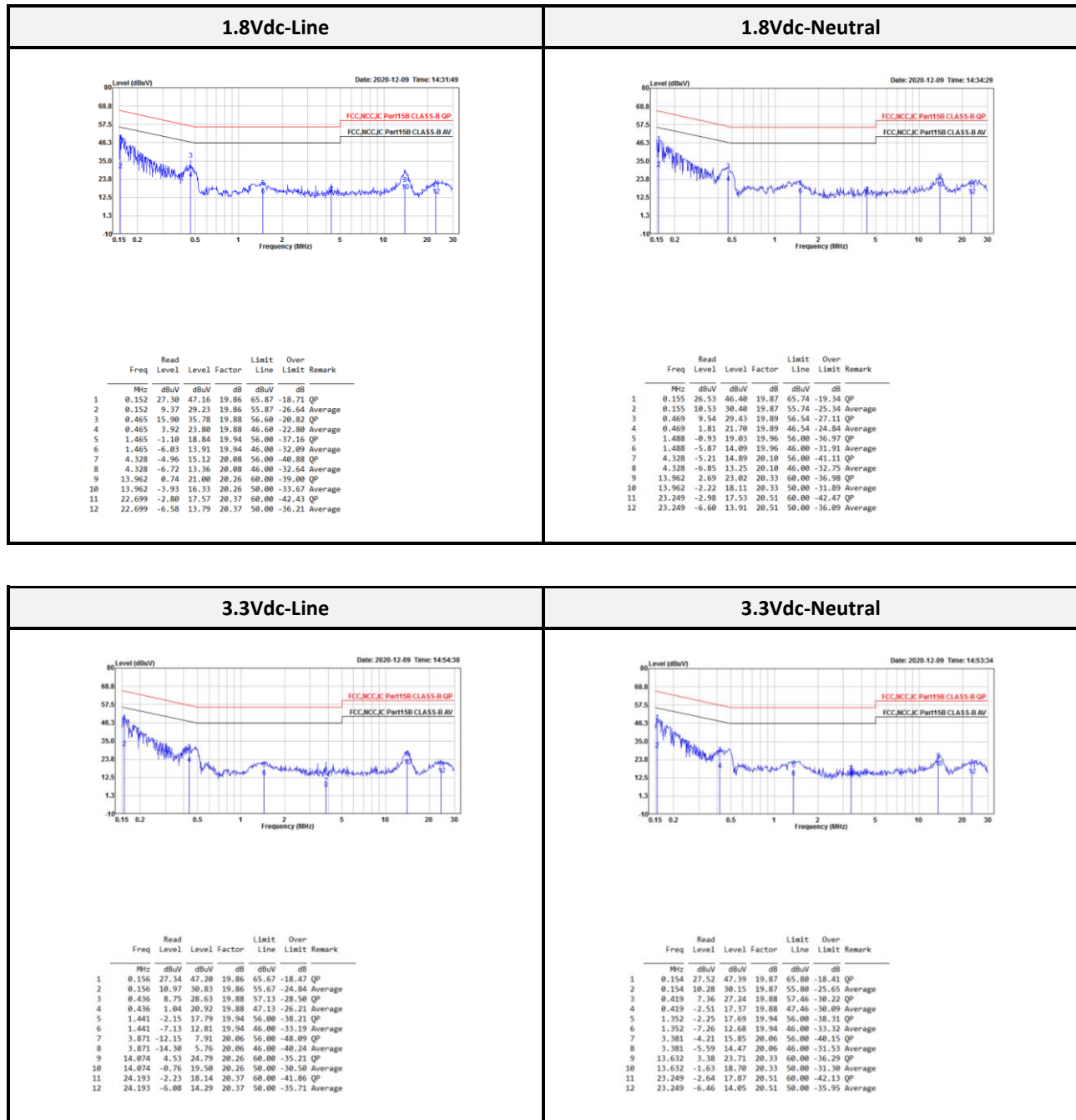
During the conducted emission test, the adapter was connected to the outlet of the LISN. Maximizing procedure was performed on the six (6) highest emissions of the EUT. All data was recorded in the Quasi-peak and average detection mode.

7.3 Test Equipment List and Details

Description	Manufacture	Model	Serial No.	Cal. Date.	Cal. Due.
AC Line Conduction Room (CON-01)					
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).

7.4 Test Result



Note:

Level = Read Level + Factor

Over Limit (Margin) = Level – Limit Line

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

8 FCC §15.209, §15.205, §15.247(d), RSS-Gen Sec 8.9, 8.10 and RSS-247 Sec 5.5 – Spurious Emissions

8.1 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)).

As per RSS-Gen 8.9,

Except when the requirements applicable to a given device state otherwise, emissions from licence-exempt transmitters shall comply with the field strength limits shown in Table 4 and Table 5 below. Additionally, the level of any transmitter emission shall not exceed the level of the transmitter's fundamental emission.

Table 4 – General Field Strength Limits for Licence-Exempt Transmitters at Frequencies Above 30 MHz

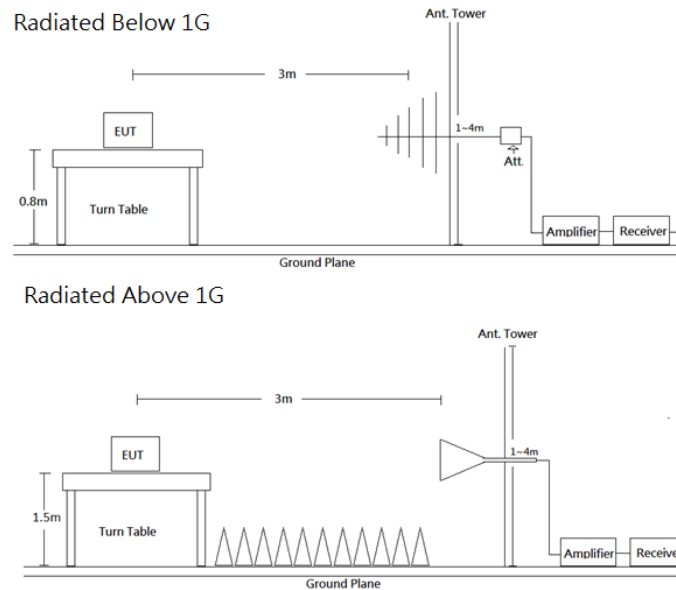
Frequency (MHz)	Field Strength (µV/m at 3 metres)
30-88	100
88-216	150
216-960	200
Above 960*	500

* Unless otherwise specified, for all frequencies greater than 1 GHz, the radiated emission limits for licence-exempt radio apparatus stated in applicable RSSs (including RSS-Gen) are based on measurements using a linear average detector function having a minimum resolution bandwidth of 1 MHz. If an average limit is specified for the EUT, then the peak emission shall also be measured with instrumentation properly adjusted for such factors as pulse desensitization to ensure the peak emission is less than 20 dB above the average limit.

Note: Transmitting devices are not permitted in restricted frequency bands unless stated otherwise in the specific RSS.

As per RSS-247 §5.5, in any 100 kHz bandwidth outside the frequency band in which the spread spectrum or digitally modulated device is operating, the RF power that is produced 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 that the transmitter demonstrates compliance with the peak conducted power limits. If the transmitter complies with the conducted power limits based on the use of root-mean-square averaging over a time interval, as permitted under Section 5.4(4), the attenuation required shall be 30 dB instead of 20 dB. Attenuation below the general field strength limits specified in RSS-Gen is not required.

8.2 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 RSS-Gen, 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%	PK
	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.

8.3 Test Equipment List and Details

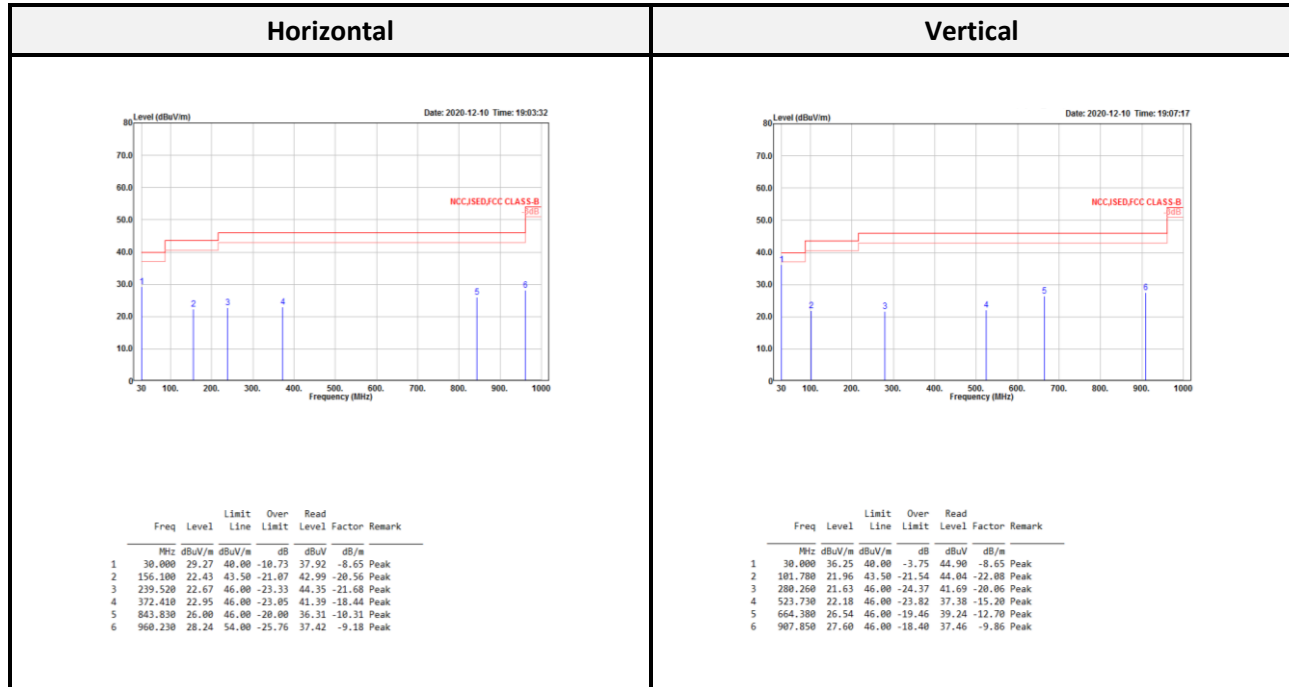
Description	Manufacture	Model	Serial No.	Cal. Date.	Cal. Due.
Radiation 3M Room (966B)					
Active Loop	EMCO	6502	0001-3322	2020/03/16	2021/03/15
Bilog Antenna/6 dB Attenuator	SUNOL SCIENCES & EMEC /EMCI	JB3/N-6-06	A111513/AT-N0668	2020/03/19	2021/03/18
Signal and Spectrum Analyzer	Rohde & Schwarz	FSV40	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	EMC102-KM-KM-1000	180524	2020/08/06	2021/08/05
Microflex Cable (2m)	EMCI	EMC106-SM-SM-2000	180516	2020/08/06	2021/08/05
Microflex Cable (8m)	UTIFLEX	UFA210A-1-3149-300300	MFR 64639 232490-002	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
Conducted Room (TH-02)					
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).

8.4 Test Results

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

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



Result = Reading + Correct Factor

Margin = Result – 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)**<Chip Antenna (FR05-S1-N-0-102) with 1.8V_{dc}>**

IEEE 802.11b Low CH Horizontal								IEEE 802.11b Low CH 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 ! 2385.824	52.45	54.00	-1.55	60.22	-7.77	Average		1 ! 2386.384	41.19	54.00	-12.81	48.96	-7.77	Average	
2 ! 2385.824	60.98	74.00	-13.02	68.75	-7.77	Peak		2 2386.384	53.54	74.00	-20.46	61.31	-7.77	Peak	
3 * 2411.248	103.51			111.22	-7.71	Average		3 * 2411.360	94.71			102.42	-7.71	Average	
4 * 2411.248	106.20			113.91	-7.71	Peak		4 * 2411.360	97.46			105.17	-7.71	Peak	
1 ! 3216.000	47.95	54.00	-6.05	53.41	-5.46	Average		1 ! 3216.000	43.28	54.00	-10.72	48.74	-5.46	Average	
2 3216.000	50.00	74.00	-24.00	55.46	-5.46	Peak		2 3216.000	45.75	74.00	-28.25	51.21	-5.46	Peak	
3 ! 4824.000	38.80	54.00	-15.20	40.45	-1.65	Average		3 ! 4824.000	41.05	54.00	-12.95	42.70	-1.65	Average	
4 4824.000	45.88	74.00	-28.12	47.53	-1.65	Peak		4 4824.000	46.05	74.00	-27.95	47.70	-1.65	Peak	
5 ! 7236.000	36.33	54.00	-17.67	30.76	5.57	Average		5 ! 7236.000	36.17	54.00	-17.83	30.60	5.57	Average	
6 7236.000	47.92	74.00	-26.08	42.35	5.57	Peak		6 7236.000	47.89	74.00	-26.11	42.32	5.57	Peak	

IEEE 802.11b Middle CH Horizontal								IEEE 802.11b Middle CH 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 ! 2386.230	43.61	54.00	-10.39	51.38	-7.77	Average		1 ! 2385.262	40.09	54.00	-13.91	47.86	-7.77	Average	
2 ! 2386.230	56.83	74.00	-17.17	64.60	-7.77	Peak		2 2385.262	52.96	74.00	-21.04	60.73	-7.77	Peak	
3 * 2436.324	104.19			111.84	-7.65	Average		3 * 2436.324	96.06			103.71	-7.65	Average	
4 * 2436.324	106.91			114.56	-7.65	Peak		4 * 2436.324	98.78			106.43	-7.65	Peak	
5 ! 2484.724	44.48	54.00	-9.52	52.07	-7.59	Average		5 ! 2488.596	39.50	54.00	-14.50	47.09	-7.59	Average	
6 ! 2484.724	55.60	74.00	-18.40	63.19	-7.59	Peak		6 2488.596	51.76	74.00	-22.24	59.35	-7.59	Peak	
1 ! 3249.300	47.95	54.00	-6.05	53.31	-5.36	Average		1 ! 3249.300	45.34	54.00	-8.66	50.70	-5.36	Average	
2 3249.300	49.83	74.00	-24.17	55.19	-5.36	Peak		2 3249.300	47.97	74.00	-26.03	53.33	-5.36	Peak	
3 ! 4874.000	43.43	54.00	-10.57	44.98	-1.55	Average		3 ! 4874.000	46.78	54.00	-7.22	48.33	-1.55	Average	
4 4874.000	47.99	74.00	-26.01	49.54	-1.55	Peak		4 4874.000	50.00	74.00	-24.00	51.55	-1.55	Peak	
5 ! 7311.000	38.77	54.00	-15.23	33.45	5.32	Average		5 ! 7311.000	39.18	54.00	-14.82	33.86	5.32	Average	
6 7311.000	49.06	74.00	-24.94	43.74	5.32	Peak		6 7311.000	50.12	74.00	-23.88	44.80	5.32	Peak	

IEEE 802.11b High CH Horizontal								IEEE 802.11b High CH 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 * 2461.200	102.21			109.83	-7.62	Average		1 * 2461.100	94.29			101.91	-7.62	Average	
2 * 2461.200	104.46			112.08	-7.62	Peak		2 * 2461.100	97.02			104.64	-7.62	Peak	
3 ! 2484.500	50.27	54.00	-3.73	57.86	-7.59	Average		3 ! 2484.600	42.18	54.00	-11.82	49.77	-7.59	Average	
4 ! 2484.500	58.26	74.00	-15.74	65.85	-7.59	Peak		4 2484.600	52.64	74.00	-21.36	60.23	-7.59	Peak	
1 ! 3282.700	46.08	54.00	-7.92	51.38	-5.30	Average		1 ! 3282.700	41.48	54.00	-12.52	46.78	-5.30	Average	
2 3282.700	48.38	74.00	-25.62	53.68	-5.30	Peak		2 3282.700	44.18	74.00	-29.82	49.48	-5.30	Peak	
3 ! 4924.000	42.33	54.00	-11.67	43.76	-1.43	Average		3 ! 4924.000	45.09	54.00	-8.91	46.52	-1.43	Average	
4 4924.000	46.76	74.00	-27.24	48.19	-1.43	Peak		4 4924.000	48.77	74.00	-25.23	50.20	-1.43	Peak	
5 ! 7386.000	35.96	54.00	-18.04	30.52	5.44	Average		5 ! 7386.000	36.44	54.00	-17.56	31.00	5.44	Average	
6 7386.000	49.14	74.00	-24.86	43.70	5.44	Peak		6 7386.000	47.86	74.00	-26.14	42.42	5.44	Peak	

IEEE 802.11g Low CH Horizontal							IEEE 802.11g Low CH 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 ! 2389.856	53.60	54.00	-0.40	61.36	-7.76	Average	1 ! 2389.520	45.86	54.00	-8.14	53.62	-7.76	Average
2 ! 2389.856	71.83	74.00	-2.17	79.59	-7.76	Peak	2 ! 2389.520	63.10	74.00	-10.90	70.86	-7.76	Peak
3 * 2410.800	94.44			102.15	-7.71	Average	3 * 2414.608	86.79			94.50	-7.71	Average
4 * 2410.800	105.33			113.04	-7.71	Peak	4 * 2414.608	97.05			104.76	-7.71	Peak
1 ! 3216.000	47.09	54.00	-6.91	52.55	-5.46	Average	1 ! 3216.000	43.13	54.00	-10.87	48.59	-5.46	Average
2 ! 3216.000	48.71	74.00	-25.29	54.17	-5.46	Peak	2 ! 3216.000	46.16	74.00	-27.84	51.62	-5.46	Peak
3 ! 4824.000	28.90	54.00	-25.10	30.55	-1.65	Average	3 ! 4824.000	29.45	54.00	-24.55	31.10	-1.65	Average
4 ! 4824.000	44.00	74.00	-30.00	45.65	-1.65	Peak	4 ! 4824.000	43.64	74.00	-30.36	45.29	-1.65	Peak
5 ! 7236.000	34.72	54.00	-19.28	29.15	5.57	Average	5 ! 7236.000	34.57	54.00	-19.43	29.00	5.57	Average
6 ! 7236.000	48.22	74.00	-25.78	42.65	5.57	Peak	6 ! 7236.000	47.77	74.00	-26.23	42.20	5.57	Peak

IEEE 802.11g Middle CH Horizontal							IEEE 802.11g Middle CH 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 ! 2389.618	53.03	54.00	-0.97	60.79	-7.76	Average	1 ! 2389.860	45.81	54.00	-8.19	53.57	-7.76	Average
2 ! 2389.618	70.18	74.00	-3.82	77.94	-7.76	Peak	2 ! 2389.860	62.47	74.00	-11.53	70.23	-7.76	Peak
3 * 2436.324	99.92			107.57	-7.65	Average	3 * 2435.356	92.48			100.13	-7.65	Average
4 * 2436.324	110.55			118.20	-7.65	Peak	4 * 2435.356	102.91			110.56	-7.65	Peak
5 ! 2483.514	49.08	54.00	-4.92	56.67	-7.59	Average	5 ! 2485.208	42.33	54.00	-11.67	49.92	-7.59	Average
6 ! 2483.514	67.15	74.00	-6.85	74.74	-7.59	Peak	6 ! 2485.208	59.29	74.00	-14.71	66.88	-7.59	Peak
1 ! 3249.300	48.90	54.00	-5.10	54.26	-5.36	Average	1 ! 3249.300	46.15	54.00	-7.85	51.51	-5.36	Average
2 ! 3249.300	52.26	74.00	-21.74	57.62	-5.36	Peak	2 ! 3249.300	48.51	74.00	-25.49	53.87	-5.36	Peak
3 ! 4874.000	31.46	54.00	-22.54	33.01	-1.55	Average	3 ! 4874.000	33.21	54.00	-20.79	34.76	-1.55	Average
4 ! 4874.000	44.80	74.00	-29.20	46.35	-1.55	Peak	4 ! 4874.000	50.66	74.00	-23.34	52.21	-1.55	Peak
5 ! 7311.000	36.70	54.00	-17.30	31.38	5.32	Average	5 ! 7311.000	36.73	54.00	-17.27	31.41	5.32	Average
6 ! 7311.000	50.28	74.00	-23.72	44.96	5.32	Peak	6 ! 7311.000	50.72	74.00	-23.28	45.40	5.32	Peak

IEEE 802.11g High CH Horizontal							IEEE 802.11g High CH 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 * 2463.700	92.50			100.12	-7.62	Average	1 * 2457.300	83.96			91.58	-7.62	Average
2 * 2463.700	102.78			110.40	-7.62	Peak	2 * 2457.300	94.45			102.07	-7.62	Peak
3 ! 2484.100	53.50	54.00	-0.50	61.09	-7.59	Average	3 ! 2483.900	45.86	54.00	-8.14	53.45	-7.59	Average
4 ! 2484.100	71.61	74.00	-2.39	79.20	-7.59	Peak	4 ! 2483.900	64.11	74.00	-9.89	71.70	-7.59	Peak
1 ! 3282.700	46.35	54.00	-7.65	51.65	-5.30	Average	1 ! 3282.700	44.18	54.00	-9.82	49.48	-5.30	Average
2 ! 3282.700	49.02	74.00	-24.98	54.32	-5.30	Peak	2 ! 3282.700	47.09	74.00	-26.91	52.39	-5.30	Peak
3 ! 4924.000	29.54	54.00	-24.46	30.97	-1.43	Average	3 ! 4924.000	29.97	54.00	-24.03	31.40	-1.43	Average
4 ! 4924.000	43.09	74.00	-30.91	44.52	-1.43	Peak	4 ! 4924.000	44.05	74.00	-29.95	45.48	-1.43	Peak
5 ! 7386.000	34.19	54.00	-19.81	28.75	5.44	Average	5 ! 7386.000	34.09	54.00	-19.91	28.65	5.44	Average
6 ! 7386.000	48.61	74.00	-25.39	43.17	5.44	Peak	6 ! 7386.000	49.15	74.00	-24.85	43.71	5.44	Peak

IEEE 802.11n HT20 Low CH Horizontal								IEEE 802.11n HT20 Low CH 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 !	2389.968	52.83	54.00	-1.17	60.59	-7.76	Average	1 !	2389.408	44.59	54.00	-9.41	52.35	-7.76	Average
2 !	2389.968	70.77	74.00	-3.23	78.53	-7.76	Peak	2 !	2389.408	60.66	74.00	-13.34	68.42	-7.76	Peak
3 *	2412.032	91.96			99.67	-7.71	Average	3 *	2411.248	85.28			92.99	-7.71	Average
4 *	2412.032	102.66			110.37	-7.71	Peak	4 *	2411.248	95.95			103.66	-7.71	Peak
1 !	3216.000	45.43	54.00	-8.57	50.89	-5.46	Average	1 !	3216.000	40.36	54.00	-13.64	45.82	-5.46	Average
2	3216.000	47.79	74.00	-26.21	53.25	-5.46	Peak	2	3216.000	44.16	74.00	-29.84	49.62	-5.46	Peak
3	4824.000	28.62	54.00	-25.38	30.27	-1.65	Average	3	4824.000	30.56	54.00	-23.44	32.21	-1.65	Average
4	4824.000	41.72	74.00	-32.28	43.37	-1.65	Peak	4	4824.000	43.04	74.00	-30.96	44.69	-1.65	Peak
5	7236.000	33.96	54.00	-20.04	28.39	5.57	Average	5	7236.000	33.92	54.00	-20.08	28.35	5.57	Average
6	7236.000	47.17	74.00	-26.83	41.60	5.57	Peak	6	7236.000	48.25	74.00	-25.75	42.68	5.57	Peak

IEEE 802.11n HT20 Middle CH Horizontal								IEEE 802.11n HT20 Middle CH 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 !	2387.198	51.32	54.00	-2.68	59.09	-7.77	Average	1 !	2388.650	42.40	54.00	-11.60	50.16	-7.76	Average
2 !	2387.198	67.51	74.00	-6.49	75.28	-7.77	Peak	2 !	2388.650	56.50	74.00	-17.50	64.26	-7.76	Peak
3 *	2435.598	99.43			107.08	-7.65	Average	3 *	2438.744	91.57			99.22	-7.65	Average
4 *	2435.598	109.72			117.37	-7.65	Peak	4 *	2438.744	101.73			109.38	-7.65	Peak
5 !	2484.240	47.35	54.00	-6.65	54.94	-7.59	Average	5 !	2484.724	40.46	54.00	-13.54	48.05	-7.59	Average
6 !	2484.240	63.07	74.00	-10.93	70.66	-7.59	Peak	6 !	2484.724	55.19	74.00	-18.81	62.78	-7.59	Peak
1 !	3249.300	47.10	54.00	-6.90	52.46	-5.36	Average	1 !	3249.300	43.79	54.00	-10.21	49.15	-5.36	Average
2	3249.300	48.82	74.00	-25.18	54.18	-5.36	Peak	2	3249.300	46.59	74.00	-27.41	51.95	-5.36	Peak
3	4874.000	30.85	54.00	-23.15	32.40	-1.55	Average	3	4874.000	31.49	54.00	-22.51	33.04	-1.55	Average
4	4874.000	42.15	74.00	-31.85	43.70	-1.55	Peak	4	4874.000	43.39	74.00	-30.61	44.94	-1.55	Peak
5 !	7311.000	34.13	54.00	-19.87	28.81	5.32	Average	5 !	7311.000	34.11	54.00	-19.89	28.79	5.32	Average
6	7311.000	46.48	74.00	-27.52	41.16	5.32	Peak	6	7311.000	46.73	74.00	-27.27	41.41	5.32	Peak

IEEE 802.11n HT20 High CH Horizontal								IEEE 802.11n HT20 High CH 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 *	2463.800	90.47			98.09	-7.62	Average	1 *	2460.400	82.79			90.41	-7.62	Average
2 *	2463.800	100.87			108.49	-7.62	Peak	2 *	2460.400	93.25			100.87	-7.62	Peak
3 !	2484.000	48.77	54.00	-5.23	56.36	-7.59	Average	3 !	2483.600	41.91	54.00	-12.09	49.50	-7.59	Average
4 !	2484.000	66.19	74.00	-7.81	73.78	-7.59	Peak	4 !	2483.600	58.25	74.00	-15.75	65.84	-7.59	Peak
1 !	3282.700	37.30	54.00	-16.70	42.60	-5.30	Average	1 !	3282.700	42.44	54.00	-11.56	47.74	-5.30	Average
2	3282.700	47.75	74.00	-26.25	53.05	-5.30	Peak	2	3282.700	45.45	74.00	-28.55	50.75	-5.30	Peak
3	4924.000	28.90	54.00	-25.10	30.33	-1.43	Average	3	4924.000	29.19	54.00	-24.81	30.62	-1.43	Average
4	4924.000	42.10	74.00	-31.90	43.53	-1.43	Peak	4	4924.000	42.65	74.00	-31.35	44.08	-1.43	Peak
5	7386.000	33.63	54.00	-20.37	28.19	5.44	Average	5	7386.000	33.55	54.00	-20.45	28.11	5.44	Average
6	7386.000	46.64	74.00	-27.36	41.20	5.44	Peak	6	7386.000	47.09	74.00	-26.91	41.65	5.44	Peak

IEEE 802.11n HT40 Low CH Horizontal

	Freq	Level	Limit Line	Over Limit	Read Level	Factor	Remark
	MHz	dBuV/m	dBuV/m	dB	dBuV	dB/m	
1 !	2386.692	52.74	54.00	-1.26	60.51	-7.77	Average
2 !	2386.692	68.99	74.00	-5.01	76.76	-7.77	Peak
3 *	2427.876	86.45			94.12	-7.67	Average
4 *	2427.876	97.19			104.86	-7.67	Peak
1 !	3229.300	47.07	54.00	-6.93	52.49	-5.42	Average
2	3229.300	48.78	74.00	-25.22	54.20	-5.42	Peak
3	4844.000	28.70	54.00	-25.30	30.32	-1.62	Average
4	4844.000	42.53	74.00	-31.47	44.15	-1.62	Peak
5	7266.000	33.27	54.00	-20.73	27.85	5.42	Average
6	7266.000	46.51	74.00	-27.49	41.09	5.42	Peak

IEEE 802.11n HT40 Low CH Vertical

	Freq	Level	Limit Line	Over Limit	Read Level	Factor	Remark
	MHz	dBuV/m	dBuV/m	dB	dBuV	dB/m	
1 !	2388.276	45.32	54.00	-8.68	53.09	-7.77	Average
2 !	2388.276	58.99	74.00	-15.01	66.76	-7.77	Peak
3 *	2416.260	78.62			86.32	-7.70	Average
4 *	2416.260	89.74			97.44	-7.70	Peak
1 !	3229.300	41.42	54.00	-12.58	46.84	-5.42	Average
2	3229.300	45.07	74.00	-28.93	50.49	-5.42	Peak
3	4844.000	28.59	54.00	-25.41	30.21	-1.62	Average
4	4844.000	42.22	74.00	-31.78	43.84	-1.62	Peak
5	7266.000	33.45	54.00	-20.55	28.03	5.42	Average
6	7266.000	46.98	74.00	-27.02	41.56	5.42	Peak

IEEE 802.11n HT40 Middle CH Horizontal

	Freq	Level	Limit Line	Over Limit	Read Level	Factor	Remark
	MHz	dBuV/m	dBuV/m	dB	dBuV	dB/m	
1 !	2387.682	52.08	54.00	-1.92	59.85	-7.77	Average
2 !	2387.682	69.93	74.00	-4.07	77.70	-7.77	Peak
3 *	2439.712	89.46			97.11	-7.65	Average
4 *	2439.712	99.28			106.93	-7.65	Peak
5 !	2485.692	51.65	54.00	-2.35	59.24	-7.59	Average
6 !	2485.692	68.16	74.00	-5.84	75.75	-7.59	Peak
1 !	3249.300	46.72	54.00	-7.28	52.08	-5.36	Average
2	3249.300	48.89	74.00	-25.11	54.25	-5.36	Peak
3	4874.000	28.61	54.00	-25.39	30.16	-1.55	Average
4	4874.000	41.64	74.00	-32.36	43.19	-1.55	Peak
5	7311.000	33.56	54.00	-20.44	28.24	5.32	Average
6	7311.000	47.26	74.00	-26.74	41.94	5.32	Peak

IEEE 802.11n HT40 Middle CH Vertical

	Freq	Level	Limit Line	Over Limit	Read Level	Factor	Remark
	MHz	dBuV/m	dBuV/m	dB	dBuV	dB/m	
1 !	2386.230	44.68	54.00	-9.32	52.45	-7.77	Average
2 !	2386.230	59.16	74.00	-14.84	66.93	-7.77	Peak
3 *	2434.146	83.06	54.00	29.06	90.72	-7.66	Average
4 *	2434.146	93.96			101.62	-7.66	Peak
5 !	2483.998	43.86			51.45	-7.59	Average
6 !	2483.998	59.67	74.00	-14.33	67.26	-7.59	Peak
1 !	3249.300	43.41	54.00	-10.59	48.77	-5.36	Average
2	3249.300	46.56	74.00	-27.44	51.92	-5.36	Peak
3	4874.000	28.79	54.00	-25.21	30.34	-1.55	Average
4	4874.000	42.47	74.00	-31.53	44.02	-1.55	Peak
5	7311.000	33.60	54.00	-20.40	28.28	5.32	Average
6	7311.000	46.88	74.00	-27.12	41.56	5.32	Peak

IEEE 802.11n HT40 High CH Horizontal

	Freq	Level	Limit Line	Over Limit	Read Level	Factor	Remark
	MHz	dBuV/m	dBuV/m	dB	dBuV	dB/m	
1 *	2447.480	86.44			94.07	-7.63	Average
2 *	2447.480	97.82			105.45	-7.63	Peak
3 !	2486.720	49.99	54.00	-4.01	57.58	-7.59	Average
4 !	2486.720	64.57	74.00	-9.43	72.16	-7.59	Peak
1 !	3269.300	45.09	54.00	-8.91	50.42	-5.33	Average
2	3269.300	47.76	74.00	-26.24	53.09	-5.33	Peak
3	4904.000	28.76	54.00	-25.24	30.23	-1.47	Average
4	4904.000	42.07	74.00	-31.93	43.54	-1.47	Peak
5	7356.000	32.96	54.00	-21.04	27.69	5.27	Average
6	7356.000	46.81	74.00	-27.19	41.54	5.27	Peak

IEEE 802.11n HT40 High CH Vertical

	Freq	Level	Limit Line	Over Limit	Read Level	Factor	Remark
	MHz	dBuV/m	dBuV/m	dB	dBuV	dB/m	
1 *	2458.880	78.36			85.98	-7.62	Average
2 *	2458.880	88.56			96.18	-7.62	Peak
3 !	2483.840	42.87	54.00	-11.13	50.46	-7.59	Average
4 !	2483.840	56.59	74.00	-17.41	64.18	-7.59	Peak
1 !	3269.300	41.44	54.00	-12.56	46.77	-5.33	Average
2	3269.300	45.30	74.00	-28.70	50.63	-5.33	Peak
3	4904.000	27.72	54.00	-26.28	29.19	-1.47	Average
4	4904.000	42.38	74.00	-31.62	43.85	-1.47	Peak
5	7356.000	31.91	54.00	-22.09	26.64	5.27	Average
6	7356.000	46.75	74.00	-27.25	41.48	5.27	Peak

<Chip Antenna (FR05-S1-N-0-102) with 3.3V_{dc}>

IEEE 802.11b Low CH Horizontal								IEEE 802.11b Low CH 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	52.21	54.00	-1.79	59.97	-7.76	Average		1 ! 2388.960	40.24	54.00	-13.76	48.00	-7.76	Average	
2 ! 2389.744	61.19	74.00	-12.81	68.95	-7.76	Peak		2 2388.960	53.35	74.00	-20.65	61.11	-7.76	Peak	
3 * 2411.248	106.91			114.62	-7.71	Average		3 * 2413.040	97.83			105.54	-7.71	Average	
4 * 2411.248	109.65			117.36	-7.71	Peak		4 * 2413.040	100.53			108.24	-7.71	Peak	
1 ! 3216.000	45.48	54.00	-8.52	50.94	-5.46	Average		1 ! 3216.000	42.40	54.00	-11.60	47.86	-5.46	Average	
2 3216.000	48.00	74.00	-26.00	53.46	-5.46	Peak		2 3216.000	45.83	74.00	-28.17	51.29	-5.46	Peak	
3 ! 4824.000	42.20	54.00	-11.80	43.85	-1.65	Average		3 ! 4824.000	42.79	54.00	-11.21	44.44	-1.65	Average	
4 4824.000	47.09	74.00	-26.91	48.74	-1.65	Peak		4 4824.000	47.08	74.00	-26.92	48.73	-1.65	Peak	
5 ! 7236.000	40.88	54.00	-13.12	35.31	5.57	Average		5 ! 7236.000	40.89	54.00	-13.11	35.32	5.57	Average	
6 7236.000	49.00	74.00	-25.00	43.43	5.57	Peak		6 7236.000	50.20	74.00	-23.80	44.63	5.57	Peak	

IEEE 802.11b Middle CH Horizontal								IEEE 802.11b Middle CH 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 ! 2384.778	45.26	54.00	-8.74	53.03	-7.77	Average		1 ! 2369.290	38.68	54.00	-15.32	46.50	-7.82	Average	
2 ! 2384.778	59.39	74.00	-14.61	67.16	-7.77	Peak		2 2369.290	52.07	74.00	-21.93	59.89	-7.82	Peak	
3 * 2436.324	106.91			114.56	-7.65	Average		3 * 2436.324	98.31			105.96	-7.65	Average	
4 * 2436.324	109.71			117.36	-7.65	Peak		4 * 2436.324	101.13			108.78	-7.65	Peak	
5 ! 2491.984	44.16	54.00	-9.84	51.75	-7.59	Average		5 ! 2530.220	38.84	54.00	-15.16	46.30	-7.46	Average	
6 ! 2491.984	57.69	74.00	-16.31	65.28	-7.59	Peak		6 2530.220	52.36	74.00	-21.64	59.82	-7.46	Peak	
1 ! 3249.300	49.34	54.00	-4.66	54.70	-5.36	Average		1 ! 3249.300	46.49	54.00	-7.51	51.85	-5.36	Average	
2 3249.300	47.30	74.00	-26.70	52.66	-5.36	Peak		2 3249.300	48.26	74.00	-25.74	53.62	-5.36	Peak	
3 ! 4874.000	44.46	54.00	-9.54	46.01	-1.55	Average		3 ! 4874.000	46.88	54.00	-7.12	48.43	-1.55	Average	
4 4874.000	48.46	74.00	-25.54	50.01	-1.55	Peak		4 4874.000	50.11	74.00	-23.89	51.66	-1.55	Peak	
5 ! 7311.000	41.56	54.00	-12.44	36.24	5.32	Average		5 ! 7311.000	40.47	54.00	-13.53	35.15	5.32	Average	
6 7311.000	50.27	74.00	-23.73	44.95	5.32	Peak		6 7311.000	49.97	74.00	-24.03	44.65	5.32	Peak	

IEEE 802.11b High CH Horizontal								IEEE 802.11b High CH 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	104.54			112.16	-7.62	Average		1 * 2462.900	95.58			103.20	-7.62	Average	
2 * 2462.900	107.31			114.93	-7.62	Peak		2 * 2462.900	98.25			105.87	-7.62	Peak	
3 ! 2488.100	51.16	54.00	-2.84	58.75	-7.59	Average		3 ! 2487.200	41.65	54.00	-12.35	49.24	-7.59	Average	
4 ! 2488.100	60.59	74.00	-13.41	68.18	-7.59	Peak		4 2487.200	52.80	74.00	-21.20	60.39	-7.59	Peak	
1 ! 3282.700	45.96	54.00	-8.04	51.26	-5.30	Average		1 ! 3282.700	45.67	54.00	-8.33	50.97	-5.30	Average	
2 3282.700	48.26	74.00	-25.74	53.56	-5.30	Peak		2 3282.700	47.97	74.00	-26.03	53.27	-5.30	Peak	
3 ! 4924.000	43.32	54.00	-10.68	44.75	-1.43	Average		3 ! 4924.000	46.11	54.00	-7.89	47.54	-1.43	Average	
4 4924.000	48.97	74.00	-25.03	50.40	-1.43	Peak		4 4924.000	49.42	74.00	-24.58	50.85	-1.43	Peak	
5 ! 7386.000	37.31	54.00	-16.69	31.87	5.44	Average		5 ! 7386.000	39.98	54.00	-14.02	34.54	5.44	Average	
6 7386.000	48.99	74.00	-25.01	43.55	5.44	Peak		6 7386.000	49.09	74.00	-24.91	43.65	5.44	Peak	

IEEE 802.11g Low CH Horizontal								IEEE 802.11g Low CH 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 ! 2388.960	53.90	54.00	-0.10	61.66	-7.76	Average		1 ! 2389.856	42.65	54.00	-11.35	50.41	-7.76	Average	
2 ! 2388.960	70.20	74.00	-3.80	77.96	-7.76	Peak		2 ! 2389.856	57.80	74.00	-16.20	65.56	-7.76	Peak	
3 * 2411.136	97.15			104.86	-7.71	Average		3 * 2411.248	86.57			94.28	-7.71	Average	
4 * 2411.136	107.40			115.11	-7.71	Peak		4 * 2411.248	96.95			104.66	-7.71	Peak	
1 ! 3216.000	46.06	54.00	-7.94	51.52	-5.46	Average		1 ! 3216.000	42.16	54.00	-11.84	47.62	-5.46	Average	
2 ! 3216.000	47.87	74.00	-26.13	53.33	-5.46	Peak		2 ! 3216.000	45.37	74.00	-28.63	50.83	-5.46	Peak	
3 ! 4824.000	29.75	54.00	-24.25	31.40	-1.65	Average		3 ! 4824.000	30.27	54.00	-23.73	31.92	-1.65	Average	
4 ! 4824.000	42.74	74.00	-31.26	44.39	-1.65	Peak		4 ! 4824.000	42.87	74.00	-31.13	44.52	-1.65	Peak	
5 ! 7386.000	34.30	54.00	-19.70	28.86	5.44	Average		5 ! 7236.000	34.34	54.00	-19.66	28.77	5.57	Average	
6 ! 7386.000	49.25	74.00	-24.75	43.81	5.44	Peak		6 ! 7236.000	47.43	74.00	-26.57	41.86	5.57	Peak	

IEEE 802.11g Middle CH Horizontal								IEEE 802.11g Middle CH 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 ! 2386.472	52.15	54.00	-1.85	59.92	-7.77	Average		1 ! 2389.860	43.11	54.00	-10.89	50.87	-7.76	Average	
2 ! 2386.472	69.45	74.00	-4.55	77.22	-7.77	Peak		2 ! 2389.860	59.85	74.00	-14.15	67.61	-7.76	Peak	
3 * 2436.082	103.10			110.75	-7.65	Average		3 * 2436.082	94.27			101.92	-7.65	Average	
4 * 2436.082	113.47			121.12	-7.65	Peak		4 * 2436.082	104.63			112.28	-7.65	Peak	
5 ! 2483.756	53.50	54.00	-0.50	61.09	-7.59	Average		5 ! 2484.482	44.13	54.00	-9.87	51.72	-7.59	Average	
6 ! 2483.756	70.17	74.00	-3.83	77.76	-7.59	Peak		6 ! 2484.482	62.36	74.00	-11.64	69.95	-7.59	Peak	
1 ! 3249.300	49.61	54.00	-4.39	54.97	-5.36	Average		1 ! 3249.300	43.87	54.00	-10.13	49.23	-5.36	Average	
2 ! 3249.300	51.97	74.00	-22.03	57.33	-5.36	Peak		2 ! 3249.300	48.23	74.00	-25.77	53.59	-5.36	Peak	
3 ! 4874.000	34.96	54.00	-19.04	36.51	-1.55	Average		3 ! 4874.000	36.96	54.00	-17.04	38.51	-1.55	Average	
4 ! 4874.000	48.00	74.00	-26.00	49.55	-1.55	Peak		4 ! 4874.000	50.97	74.00	-23.03	52.52	-1.55	Peak	
5 ! 7311.000	39.97	54.00	-14.03	34.65	5.32	Average		5 ! 7311.000	41.92	54.00	-12.08	36.60	5.32	Average	
6 ! 7311.000	53.07	74.00	-20.93	47.75	5.32	Peak		6 ! 7311.000	49.72	74.00	-24.28	44.40	5.32	Peak	

IEEE 802.11g High CH Horizontal								IEEE 802.11g High CH 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 * 2460.800	95.91			103.53	-7.62	Average		1 * 2464.900	85.99			93.61	-7.62	Average	
2 * 2460.800	106.88			114.50	-7.62	Peak		2 * 2464.900	96.64			104.26	-7.62	Peak	
3 ! 2483.600	53.37	54.00	-0.63	60.96	-7.59	Average		3 ! 2483.700	41.64	54.00	-12.36	49.23	-7.59	Average	
4 ! 2483.600	71.85	74.00	-2.15	79.44	-7.59	Peak		4 ! 2483.700	58.94	74.00	-15.06	66.53	-7.59	Peak	
1 ! 3282.700	46.05	54.00	-7.95	51.35	-5.30	Average		1 ! 3282.700	44.25	54.00	-9.75	49.55	-5.30	Average	
2 ! 3282.700	48.35	74.00	-25.65	53.65	-5.30	Peak		2 ! 3282.700	47.55	74.00	-26.45	52.85	-5.30	Peak	
3 ! 4924.000	31.49	54.00	-22.51	32.92	-1.43	Average		3 ! 4924.000	32.85	54.00	-21.15	34.28	-1.43	Average	
4 ! 4924.000	44.77	74.00	-29.23	46.20	-1.43	Peak		4 ! 4924.000	46.22	74.00	-27.78	47.65	-1.43	Peak	
5 ! 7386.000	34.30	54.00	-19.70	28.86	5.44	Average		5 ! 7386.000	34.09	54.00	-19.91	28.65	5.44	Average	
6 ! 7386.000	46.66	74.00	-27.34	41.22	5.44	Peak		6 ! 7386.000	48.95	74.00	-25.05	43.51	5.44	Peak	

IEEE 802.11n HT20 Low CH Horizontal								IEEE 802.11n HT20 Low CH 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 ! 2389.968	53.44	54.00	-0.56	61.20	-7.76	Average		1 ! 2389.968	41.92	54.00	-12.08	49.68	-7.76	Average	
2 ! 2389.968	71.96	74.00	-2.04	79.72	-7.76	Peak		2 ! 2389.968	57.24	74.00	-16.76	65.00	-7.76	Peak	
3 * 2412.256	96.13			103.84	-7.71	Average		3 * 2411.024	85.77			93.48	-7.71	Average	
4 * 2412.256	106.79			114.50	-7.71	Peak		4 * 2411.024	96.45			104.16	-7.71	Peak	
1 ! 3216.000	45.70	54.00	-8.30	51.16	-5.46	Average		1 ! 3216.000	41.33	54.00	-12.67	46.79	-5.46	Average	
2 3216.000	47.92	74.00	-26.08	53.38	-5.46	Peak		2 3216.000	45.24	74.00	-28.76	50.70	-5.46	Peak	
3 4824.000	29.76	54.00	-24.24	31.41	-1.65	Average		3 4824.000	30.07	54.00	-23.93	31.72	-1.65	Average	
4 4824.000	42.77	74.00	-31.23	44.42	-1.65	Peak		4 4824.000	42.43	74.00	-31.57	44.08	-1.65	Peak	
5 ! 7236.000	34.15	54.00	-19.85	28.58	5.57	Average		5 ! 7236.000	34.24	54.00	-19.76	28.67	5.57	Average	
6 7236.000	48.04	74.00	-25.96	42.47	5.57	Peak		6 7236.000	47.64	74.00	-26.36	42.07	5.57	Peak	

IEEE 802.11n HT20 Middle CH Horizontal								IEEE 802.11n HT20 Middle CH 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 ! 2385.988	49.94	54.00	-4.06	57.71	-7.77	Average		1 ! 2389.376	42.27	54.00	-11.73	50.03	-7.76	Average	
2 ! 2385.988	63.67	74.00	-10.33	71.44	-7.77	Peak		2 ! 2389.376	54.91	74.00	-19.09	62.67	-7.76	Peak	
3 * 2435.356	101.87			109.52	-7.65	Average		3 * 2438.502	91.77			99.42	-7.65	Average	
4 * 2435.356	112.90			120.55	-7.65	Peak		4 * 2438.502	102.14			109.79	-7.65	Peak	
5 ! 2483.756	50.57	54.00	-3.43	58.16	-7.59	Average		5 ! 2484.240	41.73	54.00	-12.27	49.32	-7.59	Average	
6 ! 2483.756	68.62	74.00	-5.38	76.21	-7.59	Peak		6 ! 2484.240	55.52	74.00	-18.48	63.11	-7.59	Peak	
1 ! 3249.300	48.14	54.00	-5.86	53.50	-5.36	Average		1 ! 3249.300	46.67	54.00	-7.33	52.03	-5.36	Average	
2 3249.300	51.11	74.00	-22.89	56.47	-5.36	Peak		2 3249.300	46.27	74.00	-27.73	51.63	-5.36	Peak	
3 ! 4874.000	34.87	54.00	-19.13	36.42	-1.55	Average		3 4874.000	33.62	54.00	-20.38	35.17	-1.55	Average	
4 4874.000	48.57	74.00	-25.43	50.12	-1.55	Peak		4 4874.000	43.14	74.00	-30.86	44.69	-1.55	Peak	
5 ! 7311.000	47.25	54.00	-6.75	41.93	5.32	Average		5 ! 7311.000	37.08	54.00	-16.92	31.76	5.32	Average	
6 7311.000	53.43	74.00	-20.57	48.11	5.32	Peak		6 7311.000	47.33	74.00	-26.67	42.01	5.32	Peak	

IEEE 802.11n HT20 High CH Horizontal								IEEE 802.11n HT20 High CH 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 * 2462.200	95.78			103.40	-7.62	Average		1 * 2464.100	85.76			93.38	-7.62	Average	
2 * 2462.200	106.52			114.14	-7.62	Peak		2 * 2464.100	96.46			104.08	-7.62	Peak	
3 ! 2483.900	53.12	54.00	-0.88	60.71	-7.59	Average		3 ! 2484.500	42.68	54.00	-11.32	50.27	-7.59	Average	
4 ! 2483.900	72.33	74.00	-1.67	79.92	-7.59	Peak		4 ! 2484.500	59.42	74.00	-14.58	67.01	-7.59	Peak	
1 ! 3282.700	44.52	54.00	-9.48	49.82	-5.30	Average		1 ! 3282.700	44.05	54.00	-9.95	49.35	-5.30	Average	
2 3282.700	48.17	74.00	-25.83	53.47	-5.30	Peak		2 3282.700	47.25	74.00	-26.75	52.55	-5.30	Peak	
3 4924.000	28.93	54.00	-25.07	30.36	-1.43	Average		3 4924.000	32.24	54.00	-21.76	33.67	-1.43	Average	
4 4924.000	45.16	74.00	-28.84	46.59	-1.43	Peak		4 4924.000	45.04	74.00	-28.96	46.47	-1.43	Peak	
5 7386.000	33.74	54.00	-20.26	28.30	5.44	Average		5 7386.000	33.85	54.00	-20.15	28.41	5.44	Average	
6 7386.000	48.84	74.00	-25.16	43.40	5.44	Peak		6 7386.000	47.89	74.00	-26.11	42.45	5.44	Peak	

IEEE 802.11n HT40 Low CH Horizontal								IEEE 802.11n HT40 Low CH 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 ! 2386.428	52.07	54.00	-1.93	59.84	-7.77	Average		1 ! 2388.672	41.94	54.00	-12.06	49.70	-7.76	Average	
2 ! 2386.428	67.00	74.00	-7.00	74.77	-7.77	Peak		2 ! 2388.672	56.30	74.00	-17.70	64.06	-7.76	Peak	
3 * 2414.676	88.89			96.60	-7.71	Average		3 * 2426.820	79.24			86.91	-7.67	Average	
4 * 2414.676	99.84			107.55	-7.71	Peak		4 * 2426.820	89.83			97.50	-7.67	Peak	
1 ! 3229.300	46.57	54.00	-7.43	51.99	-5.42	Average		1 ! 3229.300	43.86	54.00	-10.14	49.28	-5.42	Average	
2 3229.300	50.59	74.00	-23.41	56.01	-5.42	Peak		2 3229.300	47.83	74.00	-26.17	53.25	-5.42	Peak	
3 4844.000	28.66	54.00	-25.34	30.28	-1.62	Average		3 4844.000	29.03	54.00	-24.97	30.65	-1.62	Average	
4 4844.000	43.89	74.00	-30.11	45.51	-1.62	Peak		4 4844.000	44.50	74.00	-29.50	46.12	-1.62	Peak	
5 7266.000	33.64	54.00	-20.36	28.22	5.42	Average		5 7266.000	33.80	54.00	-20.20	28.38	5.42	Average	
6 7266.000	48.78	74.00	-25.22	43.36	5.42	Peak		6 7266.000	48.94	74.00	-25.06	43.52	5.42	Peak	

IEEE 802.11n HT40 Middle CH Horizontal								IEEE 802.11n HT40 Middle CH 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 ! 2388.408	53.44	54.00	-0.56	61.21	-7.77	Average		1 ! 2389.618	42.15	54.00	-11.85	49.91	-7.76	Average	
2 ! 2388.408	68.99	74.00	-5.01	76.76	-7.77	Peak		2 ! 2389.618	57.06	74.00	-16.94	64.82	-7.76	Peak	
3 * 2431.484	93.55			101.21	-7.66	Average		3 * 2442.858	82.54			90.19	-7.65	Average	
4 * 2431.484	104.05			111.71	-7.66	Peak		4 * 2442.858	92.56			100.21	-7.65	Peak	
5 ! 2484.724	52.85	54.00	-1.15	60.44	-7.59	Average		5 ! 2483.514	41.28	54.00	-12.72	48.87	-7.59	Average	
6 ! 2484.724	68.44	74.00	-5.56	76.03	-7.59	Peak		6 ! 2483.514	57.33	74.00	-16.67	64.92	-7.59	Peak	
1 ! 3249.300	46.91	54.00	-7.09	52.27	-5.36	Average		1 ! 3249.300	46.12	54.00	-7.88	51.48	-5.36	Average	
2 3249.300	51.36	74.00	-22.64	56.72	-5.36	Peak		2 3249.300	50.01	74.00	-23.99	55.37	-5.36	Peak	
3 4874.000	29.76	54.00	-24.24	31.31	-1.55	Average		3 4874.000	29.95	54.00	-24.05	31.50	-1.55	Average	
4 4874.000	43.72	74.00	-30.28	45.27	-1.55	Peak		4 4874.000	43.66	74.00	-30.34	45.21	-1.55	Peak	
5 ! 7311.000	34.06	54.00	-19.94	28.74	5.32	Average		5 ! 7311.000	34.60	54.00	-19.40	29.28	5.32	Average	
6 7311.000	48.64	74.00	-25.36	43.32	5.32	Peak		6 7311.000	48.15	74.00	-25.85	42.83	5.32	Peak	

IEEE 802.11n HT40 High CH Horizontal								IEEE 802.11n HT40 High CH 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 * 2449.400	90.22			97.85	-7.63	Average		1 * 2443.520	79.98			87.63	-7.65	Average	
2 * 2449.400	101.47			109.10	-7.63	Peak		2 * 2443.520	91.12			98.77	-7.65	Peak	
3 ! 2483.720	52.57	54.00	-1.43	60.16	-7.59	Average		3 ! 2486.000	42.51	54.00	-11.49	50.10	-7.59	Average	
4 ! 2483.720	68.02	74.00	-5.98	75.61	-7.59	Peak		4 ! 2486.000	56.91	74.00	-17.09	64.50	-7.59	Peak	
1 ! 3269.300	44.76	54.00	-9.24	50.09	-5.33	Average		1 ! 3269.500	44.15	54.00	-9.85	49.48	-5.33	Average	
2 3269.300	48.73	74.00	-25.27	54.06	-5.33	Peak		2 3269.500	47.48	74.00	-26.52	52.81	-5.33	Peak	
3 4904.000	29.31	54.00	-24.69	30.78	-1.47	Average		3 4904.000	29.47	54.00	-24.53	30.94	-1.47	Average	
4 4904.000	43.74	74.00	-30.26	45.21	-1.47	Peak		4 4904.000	42.78	74.00	-31.22	44.25	-1.47	Peak	
5 7356.000	33.45	54.00	-20.55	28.18	5.27	Average		5 7356.000	33.45	54.00	-20.55	28.18	5.27	Average	
6 7356.000	48.08	74.00	-25.92	42.81	5.27	Peak		6 7356.000	49.65	74.00	-24.35	44.38	5.27	Peak	

< Dipole Antenna (GW.34.5153) with 1.8V_{dc}>

IEEE 802.11b Low CH Horizontal								IEEE 802.11b Low CH 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	39.71	54.00	-14.29	47.47	-7.76	Average	1 !	2386.160	53.48	54.00	-0.52	61.25	-7.77	Average
2	2389.744	51.43	74.00	-22.57	59.19	-7.76	Peak	2 !	2386.160	61.17	74.00	-12.83	68.94	-7.77	Peak
3 *	2413.040	92.00			99.71	-7.71	Average	3 *	2411.248	104.08			111.79	-7.71	Average
4 *	2413.040	94.51			102.22	-7.71	Peak	4 *	2411.248	106.79			114.50	-7.71	Peak
1 !	3216.000	42.84	54.00	-11.16	48.30	-5.46	Average	1 !	3216.000	43.87	54.00	-10.13	49.33	-5.46	Average
2	3216.000	45.89	74.00	-28.11	51.35	-5.46	Peak	2	3216.000	48.45	74.00	-25.55	53.91	-5.46	Peak
3 !	4824.000	42.86	54.00	-11.14	44.51	-1.65	Average	3 !	4824.000	42.74	54.00	-11.26	44.39	-1.65	Average
4	4824.000	46.22	74.00	-27.78	47.87	-1.65	Peak	4	4824.000	44.79	74.00	-29.21	46.44	-1.65	Peak
5 !	7236.000	36.03	54.00	-17.97	30.46	5.57	Average	5 !	7236.000	39.24	54.00	-14.76	33.67	5.57	Average
6	7236.000	45.70	74.00	-28.30	40.13	5.57	Peak	6	7236.000	45.62	74.00	-28.38	40.05	5.57	Peak

IEEE 802.11b Middle CH Horizontal								IEEE 802.11b Middle CH 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	38.08	54.00	-15.92	45.84	-7.76	Average	1 !	2389.860	44.10	54.00	-9.90	51.86	-7.76	Average
2	2389.134	50.84	74.00	-23.16	58.60	-7.76	Peak	2 !	2389.860	55.79	74.00	-18.21	63.55	-7.76	Peak
3 *	2436.324	92.72			100.37	-7.65	Average	3 *	2436.324	104.33			111.98	-7.65	Average
4 *	2436.324	95.40			103.05	-7.65	Peak	4 *	2436.324	107.05			114.70	-7.65	Peak
5 !	2549.822	38.31	54.00	-15.69	45.69	-7.38	Average	5 !	2485.934	43.72	54.00	-10.28	51.31	-7.59	Average
6	2549.822	50.86	74.00	-23.14	58.24	-7.38	Peak	6 !	2485.934	55.93	74.00	-18.07	63.52	-7.59	Peak
1 !	3249.300	44.71	54.00	-9.29	50.07	-5.36	Average	1 !	3249.300	45.19	54.00	-8.81	50.55	-5.36	Average
2	3249.300	48.28	74.00	-25.72	53.64	-5.36	Peak	2	3249.300	48.75	74.00	-25.25	54.11	-5.36	Peak
3 !	4874.000	45.87	54.00	-8.13	47.42	-1.55	Average	3 !	4874.000	45.94	54.00	-8.06	47.49	-1.55	Average
4	4874.000	49.02	74.00	-24.98	50.57	-1.55	Peak	4	4874.000	48.48	74.00	-25.52	50.03	-1.55	Peak
5 !	7311.000	36.78	54.00	-17.22	31.46	5.32	Average	5 !	7311.000	40.71	54.00	-13.29	35.39	5.32	Average
6	7311.000	47.02	74.00	-26.98	41.70	5.32	Peak	6	7311.000	46.54	74.00	-27.46	41.22	5.32	Peak

IEEE 802.11b High CH Horizontal								IEEE 802.11b High CH 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 *	2461.200	90.04			97.66	-7.62	Average	1 *	2461.100	102.13			109.75	-7.62	Average
2 *	2461.200	92.66			100.28	-7.62	Peak	2 *	2461.100	104.73			112.35	-7.62	Peak
3 !	2491.300	39.24	54.00	-14.76	46.83	-7.59	Average	3 !	2484.600	50.62	54.00	-3.38	58.21	-7.59	Average
4	2491.300	52.47	74.00	-21.53	60.06	-7.59	Peak	4 !	2484.600	57.76	74.00	-16.24	65.35	-7.59	Peak
1 !	3282.700	45.31	54.00	-8.69	50.61	-5.30	Average	1 !	3282.700	45.57	54.00	-8.43	50.87	-5.30	Average
2	3282.700	48.24	74.00	-25.76	53.54	-5.30	Peak	2	3282.700	49.49	74.00	-24.51	54.79	-5.30	Peak
3 !	4924.000	43.56	54.00	-10.44	44.99	-1.43	Average	3 !	4924.000	43.21	54.00	-10.79	44.64	-1.43	Average
4	4924.000	43.66	74.00	-30.34	45.09	-1.43	Peak	4	4924.000	47.21	74.00	-26.79	48.64	-1.43	Peak
5 !	7386.000	34.75	54.00	-19.25	29.31	5.44	Average	5 !	7386.000	36.06	54.00	-17.94	30.62	5.44	Average
6	7386.000	45.94	74.00	-28.06	40.50	5.44	Peak	6	7386.000	46.61	74.00	-27.39	41.17	5.44	Peak

IEEE 802.11g Low CH Horizontal								IEEE 802.11g Low CH 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 ! 2389.968	42.58	54.00	-11.42	50.34	-7.76	Average		1 ! 2389.968	53.74	54.00	-0.26	61.50	-7.76	Average	
2 ! 2389.968	56.76	74.00	-17.24	64.52	-7.76	Peak		2 ! 2389.968	70.61	74.00	-3.39	78.37	-7.76	Peak	
3 * 2413.824	82.97			90.68	-7.71	Average		3 * 2411.248	95.42			103.13	-7.71	Average	
4 * 2413.824	92.44			100.15	-7.71	Peak		4 * 2411.248	105.11			112.82	-7.71	Peak	
1 ! 3216.000	43.00	54.00	-11.00	48.46	-5.46	Average		1 ! 3216.000	44.83	54.00	-9.17	50.29	-5.46	Average	
2 3216.000	46.66	74.00	-27.34	52.12	-5.46	Peak		2 3216.000	49.30	74.00	-24.70	54.76	-5.46	Peak	
3 4824.000	30.44	54.00	-23.56	32.09	-1.65	Average		3 4824.000	29.72	54.00	-24.28	31.37	-1.65	Average	
4 4824.000	40.22	74.00	-33.78	41.87	-1.65	Peak		4 4824.000	40.91	74.00	-33.09	42.56	-1.65	Peak	
5 ! 7236.000	34.89	54.00	-19.11	29.32	5.57	Average		5 ! 7236.000	35.04	54.00	-18.96	29.47	5.57	Average	
6 7236.000	47.10	74.00	-26.90	41.53	5.57	Peak		6 7236.000	46.61	74.00	-27.39	41.04	5.57	Peak	

IEEE 802.11g Middle CH Horizontal								IEEE 802.11g Middle CH 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 ! 2389.376	40.68	54.00	-13.32	48.44	-7.76	Average		1 ! 2388.892	51.77	54.00	-2.23	59.53	-7.76	Average	
2 ! 2389.376	54.62	74.00	-19.38	62.38	-7.76	Peak		2 ! 2388.892	67.69	74.00	-6.31	75.45	-7.76	Peak	
3 * 2439.712	97.24			104.89	-7.65	Average		3 * 2438.986	101.09			108.74	-7.65	Average	
4 * 2439.712	98.95			106.60	-7.65	Peak		4 * 2438.986	110.83			118.48	-7.65	Peak	
5 ! 2485.450	40.69	54.00	-13.31	48.28	-7.59	Average		5 ! 2484.240	49.19	54.00	-4.81	56.78	-7.59	Average	
6 ! 2485.450	54.54	74.00	-19.46	62.13	-7.59	Peak		6 ! 2484.240	66.98	74.00	-7.02	74.57	-7.59	Peak	
1 ! 3249.300	44.86	54.00	-9.14	50.22	-5.36	Average		1 ! 3249.300	44.77	54.00	-9.23	50.13	-5.36	Average	
2 3249.300	49.29	74.00	-24.71	54.65	-5.36	Peak		2 3249.300	48.76	74.00	-25.24	54.12	-5.36	Peak	
3 4874.000	33.00	54.00	-21.00	34.55	-1.55	Average		3 4874.000	33.38	54.00	-20.62	34.93	-1.55	Average	
4 4874.000	41.51	74.00	-32.49	43.06	-1.55	Peak		4 4874.000	43.18	74.00	-30.82	44.73	-1.55	Peak	
5 ! 7311.000	35.48	54.00	-18.52	30.16	5.32	Average		5 ! 7311.000	37.43	54.00	-16.57	32.11	5.32	Average	
6 7311.000	46.99	74.00	-27.01	41.67	5.32	Peak		6 7311.000	46.56	74.00	-27.44	41.24	5.32	Peak	

IEEE 802.11g High CH Horizontal								IEEE 802.11g High CH 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 * 2464.400	83.24			90.86	-7.62	Average		1 * 2465.000	93.71			101.33	-7.62	Average	
2 * 2464.400	93.08			100.70	-7.62	Peak		2 * 2465.000	103.69			111.31	-7.62	Peak	
3 ! 2484.500	44.04	54.00	-9.96	51.63	-7.59	Average		3 ! 2484.000	52.61	54.00	-1.39	60.20	-7.59	Average	
4 ! 2484.500	61.33	74.00	-12.67	68.92	-7.59	Peak		4 ! 2484.000	70.21	74.00	-3.79	77.80	-7.59	Peak	
1 ! 3282.700	45.18	54.00	-8.82	50.48	-5.30	Average		1 ! 3282.700	45.04	54.00	-8.96	50.34	-5.30	Average	
2 3282.700	49.67	74.00	-24.33	54.97	-5.30	Peak		2 3282.700	49.50	74.00	-24.50	54.80	-5.30	Peak	
3 4924.000	30.69	54.00	-23.31	32.12	-1.43	Average		3 4924.000	29.72	54.00	-24.28	31.15	-1.43	Average	
4 4924.000	40.84	74.00	-33.16	42.27	-1.43	Peak		4 4924.000	40.49	74.00	-33.51	41.92	-1.43	Peak	
5 ! 7386.000	34.48	54.00	-19.52	29.04	5.44	Average		5 ! 7386.000	34.49	54.00	-19.51	29.05	5.44	Average	
6 7386.000	46.01	74.00	-27.99	40.57	5.44	Peak		6 7386.000	46.22	74.00	-27.78	40.78	5.44	Peak	

IEEE 802.11n HT20 Low CH Horizontal								IEEE 802.11n HT20 Low CH 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 !	2387.728	42.16	54.00	-11.84	49.93	-7.77	Average	1 !	2389.296	52.82	54.00	-1.18	60.58	-7.76	Average
2 !	2387.728	59.07	74.00	-14.93	66.84	-7.77	Peak	2 !	2389.296	71.38	74.00	-2.62	79.14	-7.76	Peak
3 *	2413.712	81.86			89.57	-7.71	Average	3 *	2410.128	94.28			101.99	-7.71	Average
4 *	2413.712	92.10			99.81	-7.71	Peak	4 *	2410.128	104.84			112.55	-7.71	Peak
1 !	3216.000	42.98	54.00	-11.02	48.44	-5.46	Average	1 !	3216.000	44.75	54.00	-9.25	50.21	-5.46	Average
2	3216.000	46.20	74.00	-27.80	51.66	-5.46	Peak	2	3216.000	49.05	74.00	-24.95	54.51	-5.46	Peak
3	4824.000	30.46	54.00	-23.54	32.11	-1.65	Average	3	4824.000	29.78	54.00	-24.22	31.43	-1.65	Average
4	4824.000	41.86	74.00	-32.14	43.51	-1.65	Peak	4	4824.000	40.79	74.00	-33.21	42.44	-1.65	Peak
5 !	7236.000	34.88	54.00	-19.12	29.31	5.57	Average	5 !	7236.000	34.90	54.00	-19.10	29.33	5.57	Average
6	7236.000	46.16	74.00	-27.84	40.59	5.57	Peak	6	7236.000	46.60	74.00	-27.40	41.03	5.57	Peak

IEEE 802.11n HT20 Middle CH Horizontal								IEEE 802.11n HT20 Middle CH 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 !	2385.746	40.11	54.00	-13.89	47.88	-7.77	Average	1 !	2385.504	52.94	54.00	-1.06	60.71	-7.77	Average
2	2385.746	53.57	74.00	-20.43	61.34	-7.77	Peak	2 !	2385.504	68.19	74.00	-5.81	75.96	-7.77	Peak
3 *	2438.502	89.43			97.08	-7.65	Average	3 *	2435.598	93.17			100.82	-7.65	Average
4 *	2438.502	99.93			107.58	-7.65	Peak	4 *	2435.598	110.57			118.22	-7.65	Peak
5 !	2483.514	41.66	54.00	-12.34	49.25	-7.59	Average	5 !	2483.514	50.80	54.00	-3.20	58.39	-7.59	Average
6 !	2483.514	55.44	74.00	-18.56	63.03	-7.59	Peak	6 !	2483.514	66.55	74.00	-7.45	74.14	-7.59	Peak
1 !	3249.300	44.80	54.00	-9.20	50.16	-5.36	Average	1 !	3249.300	44.75	54.00	-9.25	50.11	-5.36	Average
2	3249.300	48.95	74.00	-25.05	54.31	-5.36	Peak	2	3249.300	48.88	74.00	-25.12	54.24	-5.36	Peak
3	4874.000	33.05	54.00	-20.95	34.60	-1.55	Average	3	4874.000	33.20	54.00	-20.80	34.75	-1.55	Average
4	4874.000	41.93	74.00	-32.07	43.48	-1.55	Peak	4	4874.000	42.32	74.00	-31.68	43.87	-1.55	Peak
5 !	7311.000	35.35	54.00	-18.65	30.03	5.32	Average	5 !	7311.000	37.33	54.00	-16.67	32.01	5.32	Average
6	7311.000	46.21	74.00	-27.79	40.89	5.32	Peak	6	7311.000	46.59	74.00	-27.41	41.27	5.32	Peak

IEEE 802.11n HT20 High CH Horizontal								IEEE 802.11n HT20 High CH 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 *	2463.500	82.95			90.57	-7.62	Average	1 *	2460.900	93.61			101.23	-7.62	Average
2 *	2463.500	93.19			100.81	-7.62	Peak	2 *	2460.900	103.61			111.23	-7.62	Peak
3 !	2484.200	45.24	54.00	-8.76	52.83	-7.59	Average	3 !	2484.200	53.95	54.00	-0.05	61.54	-7.59	Average
4 !	2484.200	62.38	74.00	-11.62	69.97	-7.59	Peak	4 !	2484.200	71.78	74.00	-2.22	79.37	-7.59	Peak
1 !	3282.700	45.09	54.00	-8.91	50.39	-5.30	Average	1 !	3282.700	44.90	54.00	-9.10	50.20	-5.30	Average
2	3282.700	49.39	74.00	-24.61	54.69	-5.30	Peak	2	3282.700	49.54	74.00	-24.46	54.84	-5.30	Peak
3	4924.000	30.66	54.00	-23.34	32.09	-1.43	Average	3	4924.000	29.88	54.00	-24.12	31.31	-1.43	Average
4	4924.000	41.69	74.00	-32.31	43.12	-1.43	Peak	4	4924.000	40.49	74.00	-33.51	41.92	-1.43	Peak
5 !	7386.000	34.45	54.00	-19.55	29.01	5.44	Average	5 !	7386.000	34.50	54.00	-19.50	29.06	5.44	Average
6	7386.000	45.43	74.00	-28.57	39.99	5.44	Peak	6	7386.000	45.76	74.00	-28.24	40.32	5.44	Peak

IEEE 802.11n HT40 Low CH Horizontal

	Freq	Level	Limit Line	Over Limit	Read Level	Factor	Remark
	MHz	dBuV/m	dBuV/m	dB	dBuV	dB/m	
1 !	2386.560	40.60	54.00	-13.40	48.37	-7.77	Average
2 !	2386.560	55.24	74.00	-18.76	63.01	-7.77	Peak
3 *	2428.404	75.81			83.48	-7.67	Average
4 *	2428.404	86.66			94.33	-7.67	Peak
1 !	3229.300	44.05	54.00	-9.95	49.47	-5.42	Average
2	3229.300	48.34	74.00	-25.66	53.76	-5.42	Peak
3	4844.000	30.41	54.00	-23.59	32.03	-1.62	Average
4	4844.000	40.56	74.00	-33.44	42.18	-1.62	Peak
5 !	7266.000	34.43	54.00	-19.57	29.01	5.42	Average
6	7266.000	45.34	74.00	-28.66	39.92	5.42	Peak

IEEE 802.11n HT40 Low CH Vertical

	Freq	Level	Limit Line	Over Limit	Read Level	Factor	Remark
	MHz	dBuV/m	dBuV/m	dB	dBuV	dB/m	
1 !	2383.128	52.58	54.00	-1.42	60.36	-7.78	Average
2 !	2383.128	67.00	74.00	-7.00	74.78	-7.78	Peak
3 *	2424.180	87.52			95.20	-7.68	Average
4 *	2424.180	97.54			105.22	-7.68	Peak
1 !	3229.300	45.05	54		49.47	-5.42	Average
2	3229.300	48.76	74.00	-25.24	53.18	-5.42	Peak
3	4844.000	29.52	54.00	-24.48	31.14	-1.62	Average
4	4844.000	41.59	74.00	-32.41	43.21	-1.62	Peak
5 !	7266.000	34.39	54.00	-19.61	28.97	5.42	Average
6	7266.000	45.31	74.00	-28.69	39.89	5.42	Peak

IEEE 802.11n HT40 Middle CH Horizontal

	Freq	Level	Limit Line	Over Limit	Read Level	Factor	Remark
	MHz	dBuV/m	dBuV/m	dB	dBuV	dB/m	
1 !	2386.714	39.26	54.00	-14.74	47.03	-7.77	Average
2	2386.714	53.51	74.00	-20.49	61.28	-7.77	Peak
3 *	2441.648	79.71			87.36	-7.65	Average
4 *	2441.648	89.08			96.73	-7.65	Peak
5 !	2483.514	43.79	54.00	-10.21	51.38	-7.59	Average
6 !	2483.514	59.39	74.00	-14.61	66.98	-7.59	Peak
1 !	3249.300	45.01	54.00	-8.99	50.37	-5.36	Average
2	3249.300	49.18	74.00	-24.82	54.54	-5.36	Peak
3	4874.000	30.66	54.00	-23.34	32.21	-1.55	Average
4	4874.000	40.39	74.00	-33.61	41.94	-1.55	Peak
5 !	7311.000	34.46	54.00	-19.54	29.14	5.32	Average
6	7311.000	45.90	74.00	-28.10	40.58	5.32	Peak

IEEE 802.11n HT40 Middle CH Vertical

	Freq	Level	Limit Line	Over Limit	Read Level	Factor	Remark
	MHz	dBuV/m	dBuV/m	dB	dBuV	dB/m	
1 !	2389.860	51.68	54.00	-2.32	59.44	-7.76	Average
2 !	2389.860	67.60	74.00	-6.40	75.36	-7.76	Peak
3 *	2440.438	91.04			98.69	-7.65	Average
4 *	2440.438	101.32			108.97	-7.65	Peak
5 !	2483.756	52.88	54.00	-1.12	60.47	-7.59	Average
6 !	2483.756	70.49	74.00	-3.51	78.08	-7.59	Peak
1 !	3249.300	45.01	54.00	-8.99	50.37	-5.36	Average
2	3249.300	49.18	74.00	-24.82	54.54	-5.36	Peak
3	4874.000	30.66	54.00	-23.34	32.21	-1.55	Average
4	4874.000	40.39	74.00	-33.61	41.94	-1.55	Peak
5 !	7311.000	34.46	54.00	-19.54	29.14	5.32	Average
6	7311.000	45.90	74.00	-28.10	40.58	5.32	Peak

IEEE 802.11n HT40 High CH Horizontal

	Freq	Level	Limit Line	Over Limit	Read Level	Factor	Remark
	MHz	dBuV/m	dBuV/m	dB	dBuV	dB/m	
1 *	2449.400	76.25			83.88	-7.63	Average
2 *	2449.400	86.54			94.17	-7.63	Peak
3 !	2484.200	41.36	54.00	-12.64	48.95	-7.59	Average
4 !	2484.200	55.15	74.00	-18.85	62.74	-7.59	Peak
1 !	3269.300	44.78	54.00	-9.22	50.11	-5.33	Average
2	3269.300	49.66	74.00	-24.34	54.99	-5.33	Peak
3	4904.000	30.62	54.00	-23.38	32.09	-1.47	Average
4	4904.000	41.26	74.00	-32.74	42.73	-1.47	Peak
5	7356.000	33.77	54.00	-20.23	28.50	5.27	Average
6	7356.000	45.71	74.00	-28.29	40.44	5.27	Peak

IEEE 802.11n HT40 High CH Vertical

	Freq	Level	Limit Line	Over Limit	Read Level	Factor	Remark
	MHz	dBuV/m	dBuV/m	dB	dBuV	dB/m	
1 *	2455.280	87.92			95.55	-7.63	Average
2 *	2455.280	98.00			105.63	-7.63	Peak
3 !	2487.560	50.51	54.00	-3.49	58.10	-7.59	Average
4 !	2487.560	65.40	74.00	-8.60	72.99	-7.59	Peak
1 !	3269.300	44.72	54.00	-9.28	50.05	-5.33	Average
2	3269.300	49.44	74.00	-24.56	54.77	-5.33	Peak
3	4904.000	29.63	54.00	-24.37	31.10	-1.47	Average
4	4904.000	41.07	74.00	-32.93	42.54	-1.47	Peak
5	7356.000	33.84	54.00	-20.16	28.57	5.27	Average
6	7356.000	46.15	74.00	-27.85	40.88	5.27	Peak

< Dipole Antenna (GW.34.5153) with 3.3V_{dc}>

IEEE 802.11b Low CH Horizontal								IEEE 802.11b Low CH 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 !	2385.152	38.62	54.00	-15.38	46.39	-7.77	Average	1 !	2389.520	50.93	54.00	-3.07	58.69	-7.76	Average
2	2385.152	52.16	74.00	-21.84	59.93	-7.77	Peak	2 !	2389.520	61.09	74.00	-12.91	68.85	-7.76	Peak
3 *	2413.040	92.29			100.00	-7.71	Average	3 *	2411.248	106.79			114.50	-7.71	Average
4 *	2413.040	94.95			102.66	-7.71	Peak	4 *	2411.248	109.50			117.21	-7.71	Peak
1 !	3216.000	47.18	54.00	-6.82	52.64	-5.46	Average	1 !	3216.000	45.52	54.00	-8.48	50.98	-5.46	Average
2	3216.000	48.92	74.00	-25.08	54.38	-5.46	Peak	2	3216.000	48.13	74.00	-25.87	53.59	-5.46	Peak
3 !	4824.000	44.54	54.00	-9.46	46.19	-1.65	Average	3 !	4824.000	46.99	54.00	-7.01	48.64	-1.65	Average
4	4824.000	48.67	74.00	-25.33	50.32	-1.65	Peak	4	4824.000	50.13	74.00	-23.87	51.78	-1.65	Peak
5 !	7236.000	42.06	54.00	-11.94	36.49	5.57	Average	5 !	7236.000	46.48	54.00	-7.52	40.91	5.57	Average
6	7236.000	51.25	74.00	-22.75	45.68	5.57	Peak	6	7236.000	53.06	74.00	-20.94	47.49	5.57	Peak

IEEE 802.11b Middle CH Horizontal								IEEE 802.11b Middle CH 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 !	2355.980	37.58	54.00	-16.42	45.46	-7.88	Average	1 !	2385.746	43.60	54.00	-10.40	51.37	-7.77	Average
2	2355.980	51.51	74.00	-22.49	59.39	-7.88	Peak	2 !	2385.746	57.29	74.00	-16.71	65.06	-7.77	Peak
3 *	2436.324	92.11			99.76	-7.65	Average	3 *	2436.324	107.11			114.76	-7.65	Average
4 *	2436.324	94.99			102.64	-7.65	Peak	4 *	2436.324	109.82			117.47	-7.65	Peak
5 !	2538.932	37.97	54.00	-16.03	45.40	-7.43	Average	5 !	2496.098	45.28	54.00	-8.72	52.86	-7.58	Average
6	2538.932	52.28	74.00	-21.72	59.71	-7.43	Peak	6 !	2496.098	58.70	74.00	-15.30	66.28	-7.58	Peak
1 !	3249.300	47.64	54.00	-6.36	53.00	-5.36	Average	1 !	3249.300	46.14	54.00	-7.86	51.50	-5.36	Average
2	3249.300	49.79	74.00	-24.21	55.15	-5.36	Peak	2	3249.300	49.30	74.00	-24.70	54.66	-5.36	Peak
3 !	4874.000	46.67	54.00	-7.33	48.22	-1.55	Average	3 !	4874.000	49.34	54.00	-4.66	50.89	-1.55	Average
4	4874.000	50.43	74.00	-23.57	51.98	-1.55	Peak	4	4874.000	52.19	74.00	-21.81	53.74	-1.55	Peak
5 !	7311.000	41.80	54.00	-12.20	36.48	5.32	Average	5 !	7311.000	46.75	54.00	-7.25	41.43	5.32	Average
6	7311.000	50.17	74.00	-23.83	44.85	5.32	Peak	6	7311.000	52.92	74.00	-21.08	47.60	5.32	Peak

IEEE 802.11b High CH Horizontal								IEEE 802.11b High CH 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 *	2461.100	88.80			96.42	-7.62	Average	1 *	2461.100	104.68			112.30	-7.62	Average
2 *	2461.100	91.56			99.18	-7.62	Peak	2 *	2461.100	107.40			115.02	-7.62	Peak
3 !	2505.700	38.29	54.00	-15.71	45.84	-7.55	Average	3 !	2487.300	51.71	54.00	-2.29	59.30	-7.59	Average
4	2505.700	51.76	74.00	-22.24	59.31	-7.55	Peak	4 !	2487.300	60.92	74.00	-13.08	68.51	-7.59	Peak
1 !	3282.700	46.83	54.00	-7.17	52.13	-5.30	Average	1 !	3282.700	45.54	54.00	-8.46	50.84	-5.30	Average
2	3282.700	48.98	74.00	-25.02	54.28	-5.30	Peak	2	3282.700	47.91	74.00	-26.09	53.21	-5.30	Peak
3 !	4924.000	46.27	54.00	-7.73	47.70	-1.43	Average	3 !	4924.000	46.92	54.00	-7.08	48.35	-1.43	Average
4	4924.000	50.04	74.00	-23.96	51.47	-1.43	Peak	4	4924.000	50.14	74.00	-23.86	51.57	-1.43	Peak
5 !	7386.000	34.96	54.00	-19.04	29.52	5.44	Average	5 !	7386.000	39.88	54.00	-14.12	34.44	5.44	Average
6	7386.000	47.80	74.00	-26.20	42.36	5.44	Peak	6	7386.000	49.49	74.00	-24.51	44.05	5.44	Peak

IEEE 802.11g Low CH Horizontal								IEEE 802.11g Low CH 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 !	2389.717	40.09	54.00	-13.91	47.85	-7.76	Average	1 !	2389.870	52.66	54.00	-1.34	60.42	-7.76	Average
2 !	2389.717	55.24	74.00	-18.76	63.00	-7.76	Peak	2 !	2389.870	69.67	74.00	-4.33	77.43	-7.76	Peak
3 *	2414.197	81.44			89.15	-7.71	Average	3 *	2410.831	96.91			104.62	-7.71	Average
4 *	2414.197	91.91			99.62	-7.71	Peak	4 *	2410.831	107.56			115.27	-7.71	Peak
1 !	3216.000	46.59	54.00	-7.41	52.05	-5.46	Average	1 !	3216.000	42.96	54.00	-11.04	48.42	-5.46	Average
2	3216.000	48.95	74.00	-25.05	54.41	-5.46	Peak	2	3216.000	46.41	74.00	-27.59	51.87	-5.46	Peak
3	4824.000	31.12	54.00	-22.88	32.77	-1.65	Average	3	4824.000	32.22	54.00	-21.78	33.87	-1.65	Average
4	4824.000	44.52	74.00	-29.48	46.17	-1.65	Peak	4	4824.000	45.64	74.00	-28.36	47.29	-1.65	Peak
5 !	7236.000	34.60	54.00	-19.40	29.03	5.57	Average	5 !	7236.000	34.67	54.00	-19.33	29.10	5.57	Average
6	7236.000	47.64	74.00	-26.36	42.07	5.57	Peak	6	7236.000	48.05	74.00	-25.95	42.48	5.57	Peak

IEEE 802.11g Middle CH Horizontal								IEEE 802.11g Middle CH 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 !	2386.472	39.88	54.00	-14.12	47.65	-7.77	Average	1 !	2387.198	49.63	54.00	-4.37	57.40	-7.77	Average
2 !	2386.472	56.25	74.00	-17.75	64.02	-7.77	Peak	2 !	2387.198	68.49	74.00	-5.51	76.26	-7.77	Peak
3 *	2436.082	89.56			97.21	-7.65	Average	3 *	2436.082	103.24			110.89	-7.65	Average
4 *	2436.082	100.37			108.02	-7.65	Peak	4 *	2436.082	113.95			121.60	-7.65	Peak
5 !	2483.756	40.37	54.00	-13.63	47.96	-7.59	Average	5 !	2484.240	53.72	54.00	-0.28	61.31	-7.59	Average
6 !	2483.756	56.43	74.00	-17.57	64.02	-7.59	Peak	6 !	2484.240	73.29	74.00	-0.71	80.88	-7.59	Peak
1 !	3249.300	46.80	54.00	-7.20	52.16	-5.36	Average	1 !	3249.300	46.21	54.00	-7.79	51.57	-5.36	Average
2	3249.300	49.14	74.00	-24.86	54.50	-5.36	Peak	2	3249.300	48.93	74.00	-25.07	54.29	-5.36	Peak
3 !	4874.000	36.32	54.00	-17.68	37.87	-1.55	Average	3 !	4874.000	38.90	54.00	-15.10	40.45	-1.55	Average
4	4874.000	49.81	74.00	-24.19	51.36	-1.55	Peak	4	4874.000	51.67	74.00	-22.33	53.22	-1.55	Peak
5 !	7311.000	40.03	54.00	-13.97	34.71	5.32	Average	5 !	7311.000	42.32	54.00	-11.68	37.00	5.32	Average
6	7311.000	53.27	74.00	-20.73	47.95	5.32	Peak	6 !	7311.000	55.46	74.00	-18.54	50.14	5.32	Peak

IEEE 802.11g High CH Horizontal								IEEE 802.11g High CH 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 *	2464.900	80.14			87.76	-7.62	Average	1 *	2460.700	96.19			103.81	-7.62	Average
2 *	2464.900	90.83			98.45	-7.62	Peak	2 *	2460.700	106.90			114.52	-7.62	Peak
3 !	2483.500	39.15	54		47.74	-7.59	Average	3 !	2483.900	53.20	54.00	-0.80	60.79	-7.59	Average
4	2483.500	53.41	74.00	-20.59	61.00	-7.59	Peak	4 !	2483.900	71.44	74.00	-2.56	79.03	-7.59	Peak
1 !	3282.700	44.88	54.00	-9.12	50.18	-5.30	Average	1 !	3282.700	45.31	54.00	-8.69	50.61	-5.30	Average
2	3282.700	47.53	74.00	-26.47	52.83	-5.30	Peak	2	3282.700	47.82	74.00	-26.18	53.12	-5.30	Peak
3	4924.000	33.15	54.00	-20.85	34.58	-1.43	Average	3 !	4924.000	34.46	54.00	-19.54	35.89	-1.43	Average
4	4924.000	46.90	74.00	-27.10	48.33	-1.43	Peak	4	4924.000	47.99	74.00	-26.01	49.42	-1.43	Peak
5 !	7386.000	34.15	54.00	-19.85	28.71	5.44	Average	5 !	7386.000	34.59	54.00	-19.41	29.15	5.44	Average
6	7386.000	47.51	74.00	-26.49	42.07	5.44	Peak	6	7386.000	47.66	74.00	-26.34	42.22	5.44	Peak

IEEE 802.11n HT20 Low CH Horizontal								IEEE 802.11n HT20 Low CH 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 !	2386.496	39.43	54.00	-14.57	47.20	-7.77	Average	1 !	2389.632	52.89	54.00	-1.11	60.65	-7.76	Average
2	2386.496	53.30	74.00	-20.70	61.07	-7.77	Peak	2 !	2389.632	70.59	74.00	-3.41	78.35	-7.76	Peak
3 *	2412.256	81.90			89.61	-7.71	Average	3 *	2410.352	96.05			103.76	-7.71	Average
4 *	2412.256	92.24			99.95	-7.71	Peak	4 *	2410.352	107.00			114.71	-7.71	Peak
1 !	3216.000	46.59	54.00	-7.41	52.05	-5.46	Average	1 !	3216.000	43.04	54.00	-10.96	48.50	-5.46	Average
2	3216.000	48.89	74.00	-25.11	54.35	-5.46	Peak	2	3216.000	46.51	74.00	-27.49	51.97	-5.46	Peak
3	4824.000	30.46	54.00	-23.54	32.11	-1.65	Average	3	4824.000	32.06	54.00	-21.94	33.71	-1.65	Average
4	4824.000	43.88	74.00	-30.12	45.53	-1.65	Peak	4	4824.000	45.74	74.00	-28.26	47.39	-1.65	Peak
5 !	7236.000	34.44	54.00	-19.56	28.87	5.57	Average	5 !	7236.000	34.65	54.00	-19.35	29.08	5.57	Average
6	7236.000	47.78	74.00	-26.22	42.21	5.57	Peak	6	7236.000	48.60	74.00	-25.40	43.03	5.57	Peak

IEEE 802.11n HT20 Middle CH Horizontal								IEEE 802.11n HT20 Middle CH 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 !	2388.650	39.24	54.00	-14.76	47.00	-7.76	Average	1 !	2389.618	48.88	54.00	-5.12	56.64	-7.76	Average
2	2388.650	52.25	74.00	-21.75	60.01	-7.76	Peak	2 !	2389.618	63.31	74.00	-10.69	71.07	-7.76	Peak
3 *	2435.114	88.74			96.39	-7.65	Average	3 *	2438.260	102.97			110.62	-7.65	Average
4 *	2435.114	99.29			106.94	-7.65	Peak	4 *	2438.260	113.48			121.13	-7.65	Peak
5 !	2484.240	39.25	54.00	-14.75	46.84	-7.59	Average	5 !	2483.514	53.27	54.00	-0.73	60.86	-7.59	Average
6	2484.240	52.93	74.00	-21.07	60.52	-7.59	Peak	6 !	2483.514	69.71	74.00	-4.29	77.30	-7.59	Peak
1 !	3249.300	48.26	54.00	-5.74	53.62	-5.36	Average	1 !	3249.300	46.66	54.00	-7.34	52.02	-5.36	Average
2	3249.300	50.15	74.00	-23.85	55.51	-5.36	Peak	2	3249.300	49.14	74.00	-24.86	54.50	-5.36	Peak
3 !	4874.000	36.58	54.00	-17.42	38.13	-1.55	Average	3 !	4874.000	36.61	54.00	-17.39	38.16	-1.55	Average
4	4874.000	49.82	74.00	-24.18	51.37	-1.55	Peak	4	4874.000	50.10	74.00	-23.90	51.65	-1.55	Peak
5 !	7311.000	39.69	54.00	-14.31	34.37	5.32	Average	5 !	7311.000	42.13	54.00	-11.87	36.81	5.32	Average
6	7311.000	53.19	74.00	-20.81	47.87	5.32	Peak	6 !	7311.000	55.60	74.00	-18.40	50.28	5.32	Peak

IEEE 802.11n HT20 High CH Horizontal								IEEE 802.11n HT20 High CH 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 *	2464.000	79.21			86.83	-7.62	Average	1 *	2460.400	95.24			102.86	-7.62	Average
2 *	2464.000	90.18			97.80	-7.62	Peak	2 *	2460.400	105.44			113.06	-7.62	Peak
3 !	2484.200	38.70	54.00	-15.30	46.29	-7.59	Average	3 !	2484.300	52.85	54.00	-1.15	60.44	-7.59	Average
4	2484.200	53.04	74.00	-20.96	60.63	-7.59	Peak	4 !	2484.300	68.67	74.00	-5.33	76.26	-7.59	Peak
1 !	3282.700	44.43	54.00	-9.57	49.73	-5.30	Average	1 !	3282.700	45.21	54.00	-8.79	50.51	-5.30	Average
2	3282.700	47.08	74.00	-26.92	52.38	-5.30	Peak	2	3282.700	47.65	74.00	-26.35	52.95	-5.30	Peak
3	4924.000	32.31	54.00	-21.69	33.74	-1.43	Average	3	4924.000	33.45	54.00	-20.55	34.88	-1.43	Average
4	4924.000	45.81	74.00	-28.19	47.24	-1.43	Peak	4	4924.000	46.35	74.00	-27.65	47.78	-1.43	Peak
5 !	7386.000	34.02	54.00	-19.98	28.58	5.44	Average	5 !	7386.000	34.03	54.00	-19.97	28.59	5.44	Average
6	7386.000	47.06	74.00	-26.94	41.62	5.44	Peak	6	7386.000	47.73	74.00	-26.27	42.29	5.44	Peak

IEEE 802.11n HT40 Low CH Horizontal

	Freq	Level	Limit Line	Over Limit	Read Level	Factor	Remark
	MHz	dBuV/m	dBuV/m	dB	dBuV	dB/m	
1 !	2385.504	39.81	54.00	-14.19	47.58	-7.77	Average
2 !	2385.504	54.14	74.00	-19.86	61.91	-7.77	Peak
3 *	2424.444	75.89			83.57	-7.68	Average
4 *	2424.444	86.88			94.56	-7.68	Peak
1 !	3229.300	47.48	54.00	-6.52	52.90	-5.42	Average
2	3229.300	49.74	74.00	-24.26	55.16	-5.42	Peak
3	4844.000	29.35	54.00	-24.65	30.97	-1.62	Average
4	4844.000	42.38	74.00	-31.62	44.00	-1.62	Peak
5	7266.000	33.95	54.00	-20.05	28.53	5.42	Average
6	7266.000	47.15	74.00	-26.85	41.73	5.42	Peak

IEEE 802.11n HT40 Low CH Vertical

	Freq	Level	Limit Line	Over Limit	Read Level	Factor	Remark
	MHz	dBuV/m	dBuV/m	dB	dBuV	dB/m	
1 !	2387.616	53.43	54.00	-0.57	61.20	-7.77	Average
2 !	2387.616	68.14	74.00	-5.86	75.91	-7.77	Peak
3 *	2426.292	90.09			97.76	-7.67	Average
4 *	2426.292	100.76			108.43	-7.67	Peak
1 !	3229.300	45.34	54.00	-8.66	50.76	-5.42	Average
2	3229.300	47.95	74.00	-26.05	53.37	-5.42	Peak
3	4844.000	30.03	54.00	-23.97	31.65	-1.62	Average
4	4844.000	43.06	74.00	-30.94	44.68	-1.62	Peak
5 !	7266.000	34.01	54.00	-19.99	28.59	5.42	Average
6	7266.000	46.87	74.00	-27.13	41.45	5.42	Peak

IEEE 802.11n HT40 Middle CH Horizontal

	Freq	Level	Limit Line	Over Limit	Read Level	Factor	Remark
	MHz	dBuV/m	dBuV/m	dB	dBuV	dB/m	
1 !	2386.472	39.98	54.00	-14.02	47.75	-7.77	Average
2	2386.472	53.42	74.00	-20.58	61.19	-7.77	Peak
3 *	2433.904	79.27			86.93	-7.66	Average
4 *	2433.904	90.19			97.85	-7.66	Peak
5 !	2484.724	39.92	54.00	-14.08	47.51	-7.59	Average
6 !	2484.724	55.64	74.00	-18.36	63.23	-7.59	Peak
1 !	3249.300	48.08	54.00	-5.92	53.44	-5.36	Average
2	3249.300	49.67	74.00	-24.33	55.03	-5.36	Peak
3	4874.000	29.96	54.00	-24.04	31.51	-1.55	Average
4	4874.000	43.01	74.00	-30.99	44.56	-1.55	Peak
5	7311.000	33.99	54.00	-20.01	28.67	5.32	Average
6	7311.000	48.50	74.00	-25.50	43.18	5.32	Peak

IEEE 802.11n HT40 Middle CH Vertical

	Freq	Level	Limit Line	Over Limit	Read Level	Factor	Remark
	MHz	dBuV/m	dBuV/m	dB	dBuV	dB/m	
1 !	2388.892	52.84	54.00	-1.16	60.60	-7.76	Average
2 !	2388.892	69.29	74.00	-4.71	77.05	-7.76	Peak
3 *	2441.890	94.21			101.86	-7.65	Average
4 *	2441.890	105.42			113.07	-7.65	Peak
5 !	2483.998	53.01	54.00	-0.99	60.60	-7.59	Average
6 !	2483.998	71.26	74.00	-2.74	78.85	-7.59	Peak
1 !	3249.300	46.10	54.00	-7.90	51.46	-5.36	Average
2	3249.300	48.87	74.00	-25.13	54.23	-5.36	Peak
3	4874.000	30.92	54.00	-23.08	32.47	-1.55	Average
4	4874.000	45.12	74.00	-28.88	46.67	-1.55	Peak
5 !	7311.000	34.11	54.00	-19.89	28.79	5.32	Average
6	7311.000	47.21	74.00	-26.79	41.89	5.32	Peak

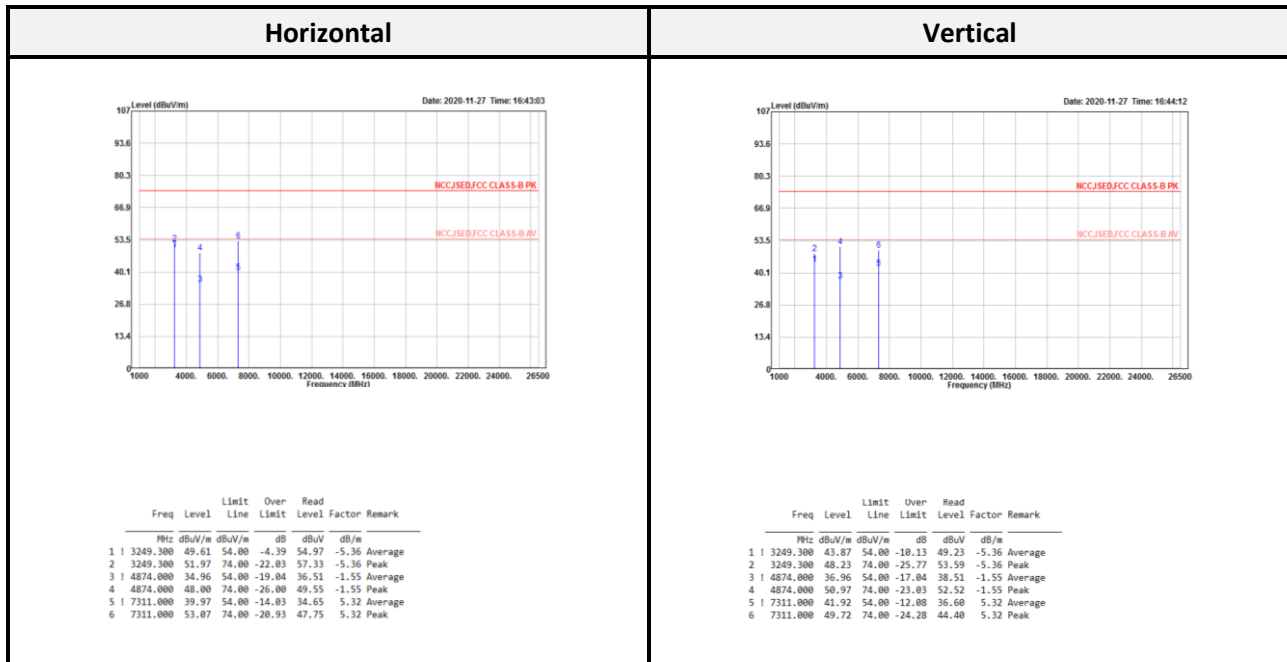
IEEE 802.11n HT40 High CH Horizontal

	Freq	Level	Limit Line	Over Limit	Read Level	Factor	Remark
	MHz	dBuV/m	dBuV/m	dB	dBuV	dB/m	
1 *	2444.360	74.36			82.00	-7.64	Average
2 *	2444.360	85.70			93.34	-7.64	Peak
3 !	2485.520	39.28	54.00	-14.72	46.87	-7.59	Average
4	2485.520	52.48	74.00	-21.52	60.07	-7.59	Peak
1 !	3269.300	46.69	54.00	-7.31	52.02	-5.33	Average
2	3269.300	48.95	74.00	-25.05	54.28	-5.33	Peak
3	4904.000	29.45	54.00	-24.55	30.92	-1.47	Average
4	4904.000	42.73	74.00	-31.27	44.20	-1.47	Peak
5	7356.000	33.32	54.00	-20.68	28.05	5.27	Average
6	7356.000	47.69	74.00	-26.31	42.42	5.27	Peak

IEEE 802.11n HT40 High CH Vertical

	Freq	Level	Limit Line	Over Limit	Read Level	Factor	Remark
	MHz	dBuV/m	dBuV/m	dB	dBuV	dB/m	
1 *	2448.680	90.66			98.29	-7.63	Average
2 *	2448.680	101.66			109.29	-7.63	Peak
3 !	2484.200	52.78	54.00	-1.22	60.37	-7.59	Average
4 !	2484.200	67.28	74.00	-6.72	74.87	-7.59	Peak
1 !	3269.300	45.58	54.00	-8.42	50.91	-5.33	Average
2	3269.300	48.21	74.00	-25.79	53.54	-5.33	Peak
3	4904.000	30.02	54.00	-23.98	31.49	-1.47	Average
4	4904.000	43.41	74.00	-30.59	44.88	-1.47	Peak
5	7356.000	33.37	54.00	-20.63	28.10	5.27	Average
6	7356.000	46.70	74.00	-27.30	41.43	5.27	Peak

Above 1G (1 GHz-26.5 GHz): The worst mode is Chip Antenna with 3.3V_{dc} for 802.11g middle CH.



Level = Read Level + Factor

Over Limit = Level – Limit

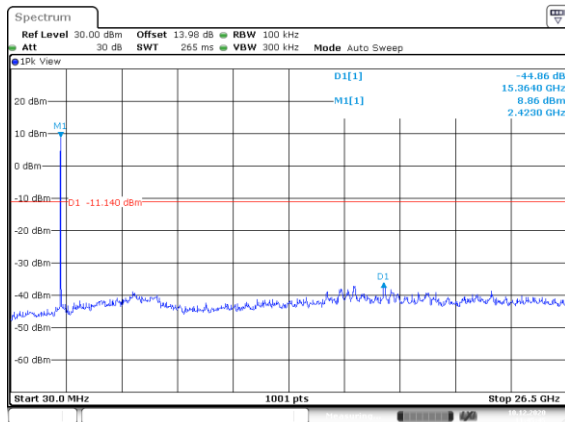
Correct Factor = Antenna Factor + Cable Loss – Amplifier Gain

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

Conducted Spurious Emissions:

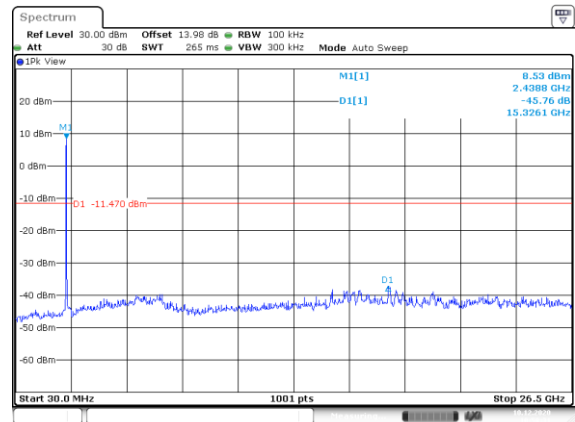
Configuration	Channel	Frequency (MHz)	Delta Peak to Band Emission (dBc)	Limit (dBc)	Result
IEEE 802.11b	Low	2412	44.86	≥ 20	Compliance
	Mid	2437	45.76	≥ 20	Compliance
	High	2462	42.74	≥ 20	Compliance
IEEE 802.11g	Low	2412	34.68	≥ 20	Compliance
	Mid	2437	41.33	≥ 20	Compliance
	High	2462	33.97	≥ 20	Compliance
IEEE 802.11n HT20	Low	2412	33.54	≥ 20	Compliance
	Mid	2437	40.22	≥ 20	Compliance
	High	2462	32.28	≥ 20	Compliance
IEEE 802.11n HT40	Low	2422	28.18	≥ 20	Compliance
	Mid	2437	30.19	≥ 20	Compliance
	High	2452	26.99	≥ 20	Compliance

IEEE 802.11b Low CH



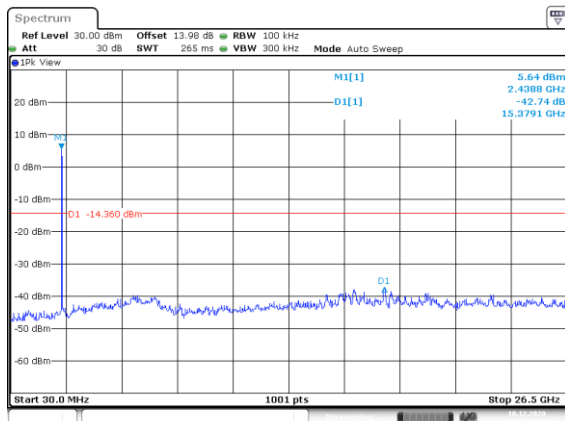
Date: 10.DEC.2020 11:45:45

IEEE 802.11b Middle CH



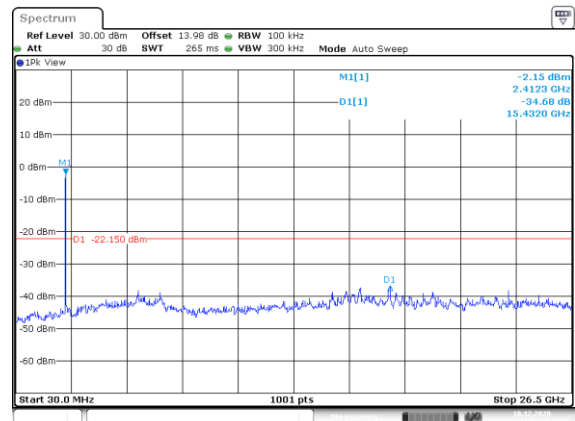
Date: 10.DEC.2020 10:58:31

IEEE 802.11b High CH



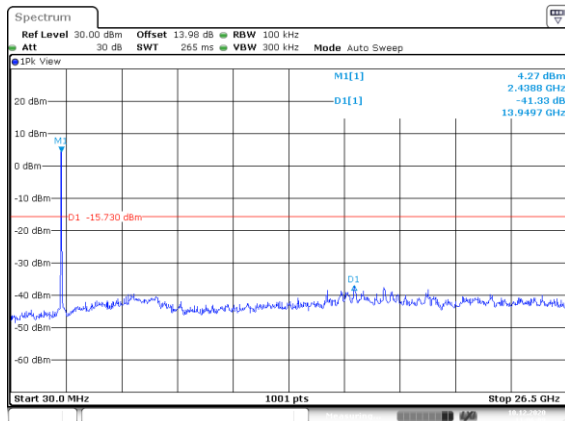
Date: 10.DEC.2020 11:01:52

IEEE 802.11g Low CH



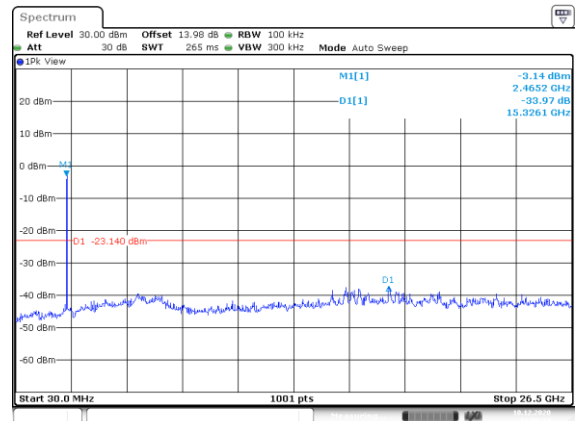
Date: 10.DEC.2020 11:03:56

IEEE 802.11g Middle CH



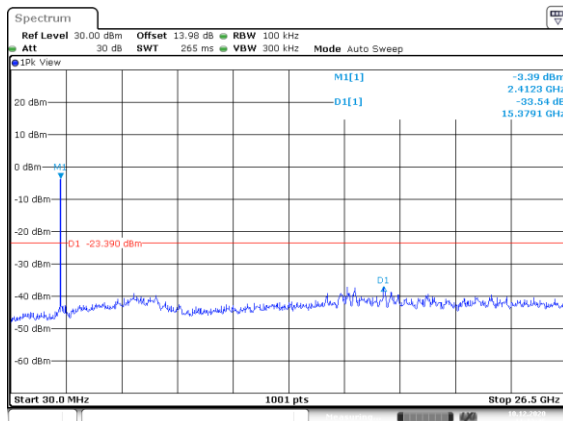
Date: 10.DEC.2020 11:06:09

IEEE 802.11g High CH



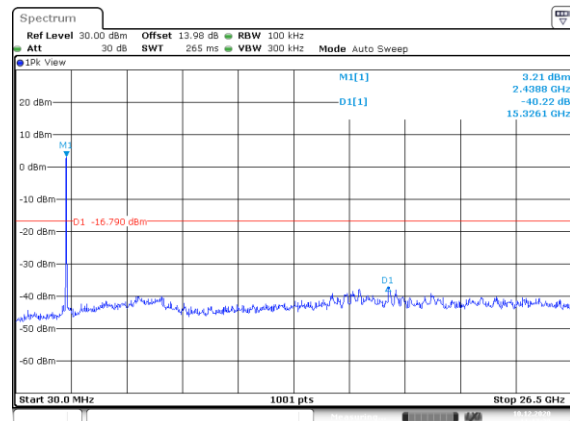
Date: 10.DEC.2020 11:08:34

IEEE 802.11n HT20 Low CH



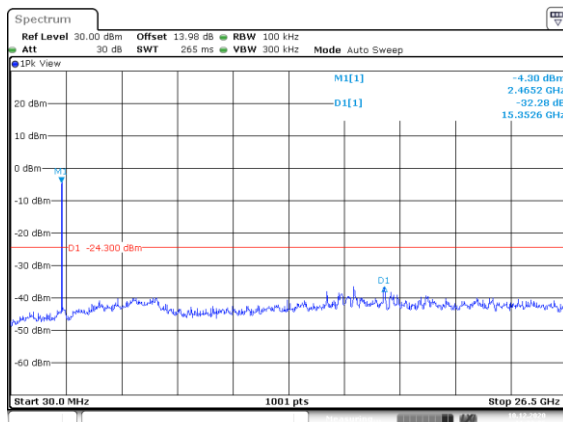
Date: 10 DEC 2020 11:12:45

IEEE 802.11n HT20 Middle CH



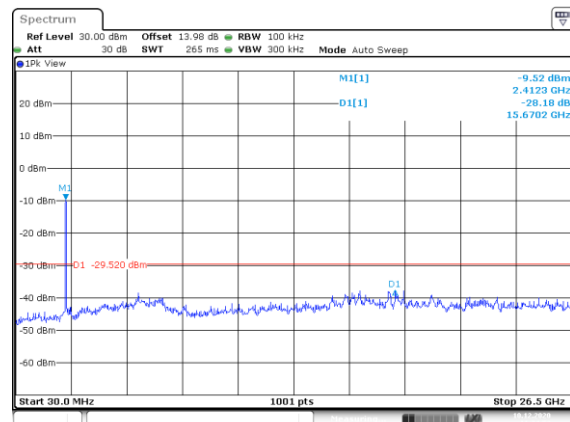
Date: 10 DEC 2020 11:17:28

IEEE 802.11n HT20 High CH



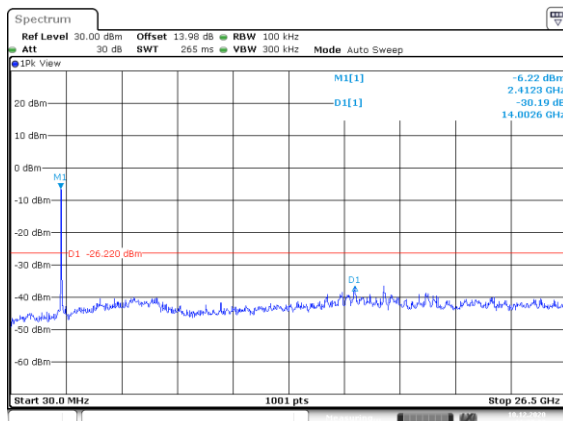
Date: 10 DEC 2020 11:22:06

IEEE 802.11n HT40 Low CH



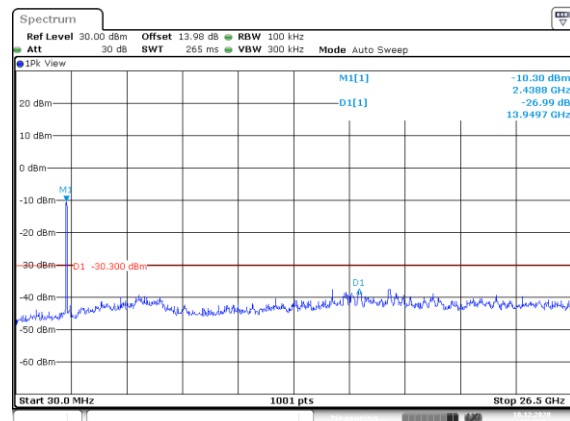
Date: 10 DEC 2020 11:24:53

IEEE 802.11n HT40 Middle CH



Date: 10 DEC 2020 11:27:22

IEEE 802.11n HT40 High CH



Date: 10 DEC 2020 11:30:14