

Report on the Radio Testing
For
Dyson Technology Ltd
on
RB03 Dyson 360 VISNAV
Report no. TRA-047957-45-13B
25th May 2021

RF930



Report Number: TRA-047957-45-13B
Issue: B

REPORT ON THE RADIO TESTING OF A
Dyson Technology Ltd
RB03 Dyson 360 VISNAV
WITH RESPECT TO SPECIFICATION
FCC 47CFR Subpart E

TEST DATE: 2020-06-10 to 2021-01-18

Tested by: A Longley, A Tosif & D Garvey

Written by: 

A Tosif
Radio Test Engineer

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Adobe Acrobat version: 2021.001.20155

D Winstanley
Radio Senior Test Engineer

Date:

25th May 2021

Disclaimers:

- [1] THIS DOCUMENT MAY BE REPRODUCED ONLY IN ITS ENTIRETY AND WITHOUT CHANGE
[2] THE RESULTS CONTAINED IN THIS DOCUMENT RELATE ONLY TO THE ITEM(S) TESTED

RF930

1 Revision Record

<i>Issue Number</i>	<i>Issue Date</i>	<i>Revision History</i>
A	13 th April 2021	Original
B	25th May 2021	Update after certification check

2 Summary

TEST REPORT NUMBER:	TRA-047957-45-13B
WORKS ORDER NUMBER:	TRA-047957-03
PURPOSE OF TEST:	Testing of radio frequency equipment per the relevant authorization procedure of chapter 47 of CFR (code of federal regulations) Part 2, subpart J.
TEST SPECIFICATION:	47CFR15 Subpart E
EQUIPMENT UNDER TEST (EUT):	RB03 Dyson 360 VISNAV
FCC IDENTIFIER:	QVHRB03001
MANUFACTURER/AGENT:	Dyson Technology Ltd
ADDRESS:	Tetbury Hill Malmesbury Wiltshire SN16 0RP United Kingdom
CLIENT CONTACT:	Neil Taylor ☎ 01666834364 ✉ neil.taylor@dyson.com
ORDER NUMBER:	6000061185
TEST DATE:	2020-06-10 to 2021-01-18
TESTED BY:	A Longley, A Tosif & D Garvey Element

2.1 Test Summary

<i>Test Method and Description</i>	<i>Requirement Clause 47CFR15</i>	<i>Applicable to this equipment</i>	<i>Result / Note</i>
Radiated spurious emissions (restricted bands of operation and cabinet radiation)	15.205	☒	PASS
AC power line conducted emissions	15.207	☒	PASS
Occupied bandwidth	15.407(e)	☒	PASS
Output power	15.407(a)	☒	PASS
Power spectral density	15.407(a)	☒	PASS
Conducted / radiated RF power out-of-band	15.407(b)	☒	PASS

The results contained in this report relate only to the items tested, in the condition at time of test, and were obtained in the period between the date of initial receipt of samples and the date of issue of the report.

The apparatus was set-up and exercised using the configurations, modes of operation and arrangements defined in this report only. Any modifications made are identified in Section 8 of this report.

Particular operating modes, apparatus monitoring methods and performance criteria required by the standards tested to have been performed except where identified in Section 5.2 of this test report (Deviations from Test Standards).

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4 Introduction

This report TRA-047957-45-13B presents the results of the Radio testing on a Dyson Technology Ltd, RB03 Dyson 360 VISNAV to specification 47CFR15 Radio Frequency Devices.

The testing was carried out for Dyson Technology Ltd by Element, at the address detailed below.

☒	Element Hull Unit E South Orbital Trading Park Hedon Road Hull HU9 1NJ UK	☐	Element Skelmersdale Unit 1 Pendle Place Skelmersdale West Lancashire WN8 9PN UK
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This report details the configuration of the equipment, the test methods used and any relevant modifications where appropriate.

FCC Site Listing:

Element is accredited for the above sites under the US-UK MRA, designation numbers:

UK2007 Hull

UK2020 Skelmersdale

The test site requirements of ANSI C63.4-2014 are met up to 1GHz.

The test site SVSWR requirements of CISPR 16-1-4:2010 are met over the frequency range 1 GHz to 18 GHz.

5 Test Specifications

5.1 Normative References

- FCC 47 CFR Ch. I – Part 15 – Radio Frequency Devices.
- FCC KDB Publication 905462 D02 v01r02 – Compliance measurement procedures for unlicensed-national information infrastructure devices operating in the 5250-5350 MHz and 5470-5725 MHz bands incorporating dynamic frequency selection.
- ANSI C63.10-2013 – American National Standard of Procedures for Compliance Testing of Unlicensed Wireless Devices.
- ANSI C63.4-2014 – American National Standard for Methods of Measurement of Radio-Noise Emissions from Low-Voltage Electrical and Electronic Equipment in the Range of 9 kHz to 40 GHz.
- KDB 789033 D02 General UNII Test Procedures New Rules v02r01
- KDB 662911 D01 Multiple Transmitter Output v02r01
- KDB 662911 D02 MIMO with Cross Polarized Antenna v01

5.2 Deviations from Test Standards

There were no deviations from the test standard.

6 Glossary of Terms

§	denotes a section reference from the standard, not this document
AC	Alternating Current
ANSI	American National Standards Institute
BW	bandwidth
C	Celsius
CAC	Channel Availability Check
CFR	Code of Federal Regulations
CW	Continuous Wave
dB	decibel
dBm	dB relative to 1 milliwatt
DC	Direct Current
DFS	Dynamic Frequency Selection
DSSS	Direct Sequence Spread Spectrum
EIRP	Equivalent Isotropically Radiated Power
ERP	Effective Radiated Power
EUT	Equipment Under Test
FCC	Federal Communications Commission
FHSS	Frequency Hopping Spread Spectrum
Hz	hertz
IC	Industry Canada (now ISED)
ISED	Innovation, Science and Economic Development Canada
ITU	International Telecommunication Union
LBT	Listen Before Talk
LE-LAN	Licence-Exempt Local Area Network
m	metre
max	maximum
MIMO	Multiple Input and Multiple Output
min	minimum
MRA	Mutual Recognition Agreement
N/A	Not Applicable
PCB	Printed Circuit Board
PDF	Portable Document Format
Pt-mpt	Point-to-multipoint
Pt-pt	Point-to-point
PSD	Power Spectral Density
RF	Radio Frequency
RH	Relative Humidity
RMS	Root Mean Square
Rx	receiver
s	second
SVSWR	Site Voltage Standing Wave Ratio
TPC	Transmitter Power Control
Tx	transmitter
UKAS	United Kingdom Accreditation Service
U-NII	Unlicensed-National Information Infrastructure
V	volt
W	watt
Ω	ohm

7 Equipment Under Test

7.1 EUT Identification

- Name: RB03 Dyson 360 VISNAV
- Model Number: RB03
- Software Revision: RB03ED.11.99.101.0266
- Build Level / Revision Number: OR1

7.2 System Equipment

Equipment listed below forms part of the overall test setup and is required for equipment functionality and/or monitoring during testing. The compliance levels achieved in this report relate only to the EUT and not items given in the following list.

Lenovo ThinkPad X230 Laptop PC

7.3 EUT Mode of Operation

The mode of operation for transmitter test was as follows.

Using the supplied computer to set the EUT transmitting permanent modulated carrier on bottom, middle and top channels.

5 GHz Wi-Fi SISO		
Modulation	Data Rate	Power Setting (Port A/B)
802.11a	6 Mbps	15
802.11a	54 Mbps	15
802.11n20	MCS0	15
802.11n20	MCS7	13
802.11n40	MCS0	14
802.11n40	MCS7	12
802.11ac20	MCS0	13
802.11ac20	MCS8	13
802.11ac40	MCS0	12
802.11ac40	MCS9	12
802.11ac80	MCS0	8
802.11ac80	MCS9	8

5 GHz Wi-Fi MIMO		
Modulation	Data Rate	Power Setting (Port A/B)
802.11n20 MIMO	MCS8	13
802.11n20 MIMO	MCS15	13
802.11n40 MIMO	MCS8	12
802.11n40 MIMO	MCS15	12
802.11ac20 MIMO	MCS0	13
802.11ac20 MIMO	MCS8	13
802.11ac40 MIMO	MCS0	12
802.11ac40 MIMO	MCS9	12
802.11ac80 MIMO	MCS0	8
802.11ac80 MIMO	MCS9	8

7.4 EUT Radio Frequency Parameters

Frequency of operation:	5.15 GHz – 5.35 GHz; 5.47 GHz – 5.725 GHz; 5.725 GHz – 5.85 GHz
Modulation types:	OFDM
Channel bandwidths:	20 MHz, 40 MHz & 80 MHz
Antenna type:	Two Integral Antennas
Maximum antenna gain:	Main Antenna: 5.1 dBi; AUX Antenna: 6.9 dBi
Duty Cycle:	100 %
Nominal Supply Voltage:	5 Vdc from internal power supply

7.5 EUT Description

The EUT is an autonomous Vacuum Cleaning Robot and Dock that has Bluetooth Low Energy, 2.4 GHz Wi-Fi and 5 GHz Wi-Fi Radios.

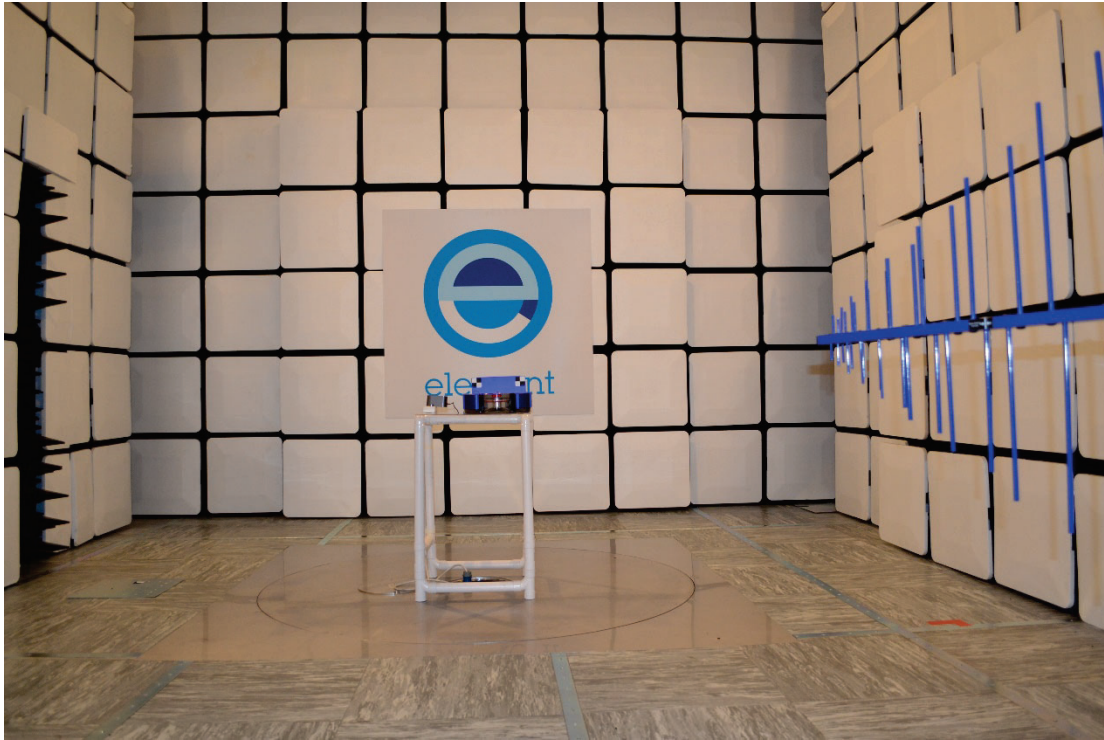
This report only covers the U-NII-3 band of 5 GHz WLAN radio.

8 Modifications

No modifications were performed during this assessment.

9 EUT Test Setup Photographs

The following photographs shows basic EUT radiated set-up:





9.1 Measurement software

Where applicable, the following software was used to perform measurements contained within this report.

Element Emissions R5 (See Note)

Note: The version of the Element software used is recorded in the results sheets contained within this report.

10 General Technical Parameters

10.1 Normal Conditions

The EUT was tested under the normal environmental conditions of the test laboratory, except where otherwise stated. The normal power source applied was 5 Vdc from an internal power supply which was powered from a 14.8 Vdc fully charged battery, with charging station connected to 110 Vac, 60 Hz, from the mains. For conducted testing, 5 Vdc was supplied from desktop power supply.

10.2 Varying Test Conditions

Variation of supply voltage is required to ensure stability of the declared output power and frequency. During carrier power testing the following variations were made:

	Category	Nominal	Variation
☐	Mains	110V ac +/-2%	85% and 115%
☒	Internal Power Supply	5 Vdc	N/A

11 Radiated emissions

11.1 Definitions

Spurious emissions

Emissions on a frequency or frequencies, which are outside the necessary bandwidth and the level of which may be reduced without affecting the corresponding transmission of information. Spurious emissions include harmonic emissions, parasitic emissions, intermodulation products and frequency conversion products, but exclude out-of-band emissions.

Restricted bands

A frequency band in which intentional radiators are permitted to radiate only spurious emissions but not fundamental signals.

11.2 Test Parameters

Test Location:	Element Hull
Test Chamber:	Wireless Lab 3
Test Standard and Clause:	ANSI C63.10-2013, Clause 6.5 and 6.6
EUT Channel Bandwidths:	20 MHz / 40 MHz / 80 MHz
Deviations From Standard:	None
Measurement BW:	30 MHz to 1 GHz: 120 kHz; Above 1 GHz: 1 MHz
Measurement Detector:	Up to 1 GHz: quasi-peak Above 1 GHz: RMS average and Peak

Environmental Conditions (Normal Environment)

Temperature: 21 °C	+15 °C to +35 °C (as declared)
Humidity: 42 %RH	20%RH to 75%RH (as declared)

Test Limits

Unwanted emissions that fall within the restricted frequency bands shall comply with the limits specified:

General Field Strength Limits for License-Exempt Transmitters at Frequencies above 30 MHz

Frequency (MHz)	Field Strength ($\mu\text{V/m}$ at 3m)
30-88	100
88-216	150
216-960	200
Above 960	500

All emissions shall be limited to a level of -27 dBm/MHz at 75 MHz or more above or below the band edge increasing linearly to 10 dBm/MHz at 25 MHz above or below the band edge, and from 25 MHz above or below the band edge increasing linearly to a level of 15.6 dBm/MHz at 5 MHz above or below the band edge, and from 5 MHz above or below the band edge increasing linearly to a level of 27 dBm/MHz at the band edge. Unwanted emissions below 1 GHz must comply with the above general field strength limits.

11.3 Test Method

With the EUT setup as per section 9 of this report and connected as per Figure i, the emissions from the EUT were measured on a spectrum analyzer / EMI receiver.

Radiated electromagnetic emissions from the EUT are checked first by preview scans. Preview scans for all spectrum and modulation characteristics are checked, using a peak detector and where applicable worst-case determined for function, operation, orientation, etc. for both vertical and horizontal polarisations. Pre-scan plots are shown with a peak detector and 100 kHz RBW.

If the EUT connects to auxiliary equipment and is table or floor standing, the configurations prescribed in ANSI C63.10 are followed. Alternatively, a layout closest to normal use (as declared by the provider) is employed, (see EUT setup photographs for more detail).

Emissions between 30 MHz and 1 GHz are measured using calibrated broadband antennas. Emissions above 1 GHz are characterized using standard gain horn antennas. Pre-amplifiers and filters are used where required. Care is taken to ensure that test receiver resolution bandwidth, video bandwidth and detector type(s) meet the regulatory requirements.

For both horizontal and vertical polarizations, the EUT is then rotated through 360 degrees in azimuth until the highest emission is detected. At the previously determined azimuth the test antenna is raised and lowered from 1 to 4 m in height until a maximum emission level is detected, this maximum value is recorded.

Power values measured on the test receiver / analyzer are converted to field strength, FS, in dBµV/m at the regulatory distance, using:

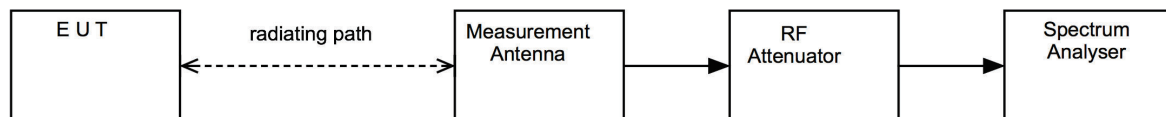
$$FS = PR + CL + AF - PA + DC - CF$$

Where,

- PR is the power recorded on the receiver / spectrum analyzer in dBµV;
- CL is the cable loss in dB;
- AF is the test antenna factor in dB/m;
- PA is the pre-amplifier gain in dB (where used);
- DC is the duty correction factor in dB (where used, e.g. where average detector on pulsed harmonic understates the power);
- CF is the distance factor in dB (where measurement distance different to limit distance);

This field strength value is then compared with the regulatory limit.

Figure i Test Setup



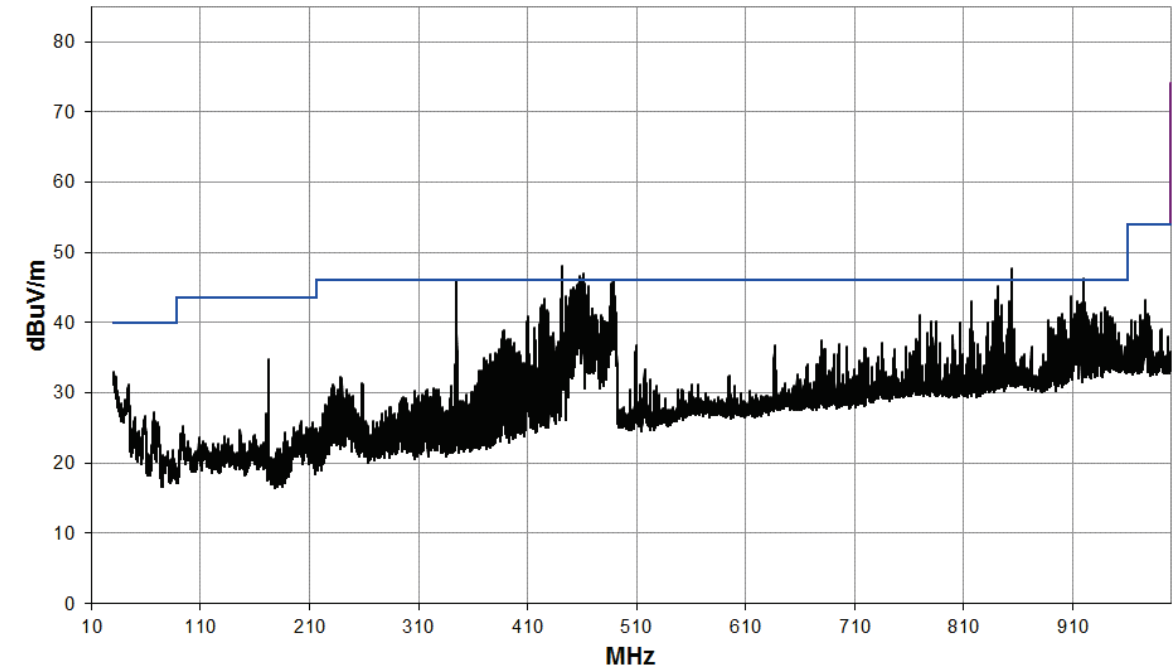
11.4 Test Equipment

Equipment Type	Manufacturer	Equipment Description	Element No	Due For Calibration
-	Rainford	Chamber	REF2259	2022-08-03
ESW26	R&S	EMI Test Receiver	REF2235	2021-08-31
CBL6111B	Chase	Bilog Antenna	REF2218	2021-10-23
LB-10180-NF	A Info Inc	Horn Antenna	REF2241	2022-07-13
LB-90-25-C2-SF	A Info Inc	Horn Antenna	REF2243	2022-07-17
LB-62-25-C-SF	A Info Inc	Horn Antenna	REF2244	2022-07-17
LB-180400-25-C-KF	A Info Inc	Horn Antenna	REF2246	2022-07-28
ESU40	R&S	Receiver	RFG701	2021-12-06
Emissions R5	Element	Radiated Test Software	REF9000	Cal not required

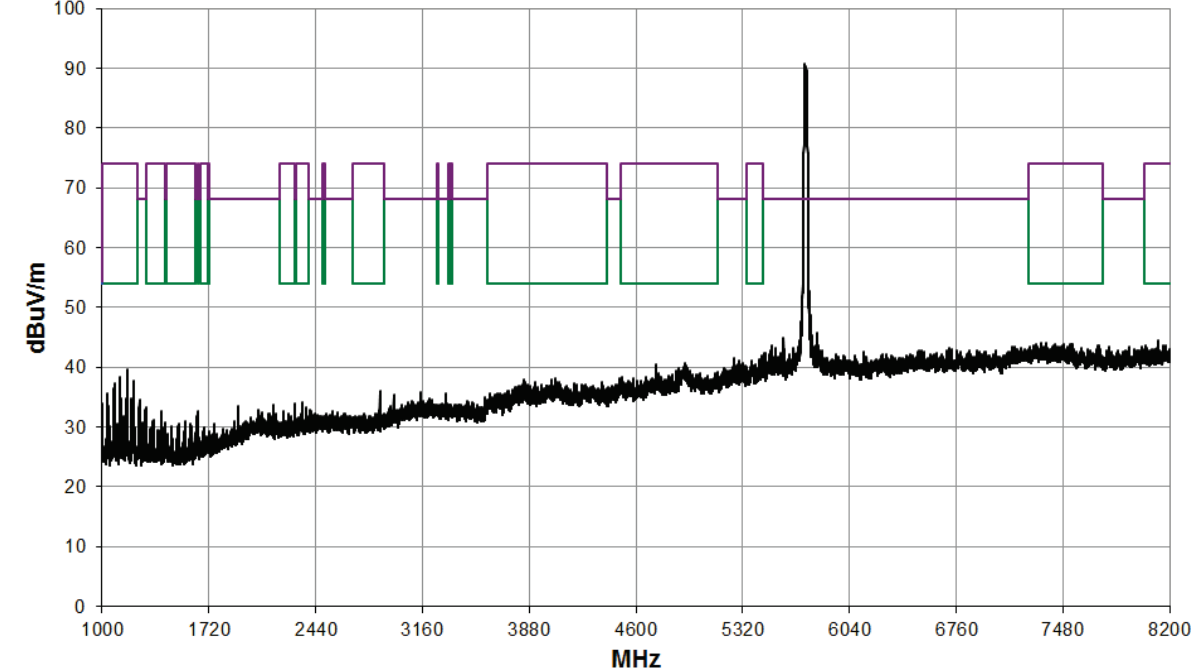
11.5 Test Results

SISO; Mode: 802.11a; Channel: CH149; Frequency: 5745 MHz; Bandwidth: 20 MHz; Rate: 6 Mbps										
Detector	Freq. (MHz)	Meas'd Emission (dBμV)	Cable Loss (dB)	Antenna Factor (dB/m)	Pre-amp Gain (dB)	Duty Cycle Corr'n (dB)	Field Strength (dBμV/m)	Distance Extrap'n Factor (dB)	Field Strength (μV/m)	Limit (μV/m)
No emissions within 20 dB of the limit.										

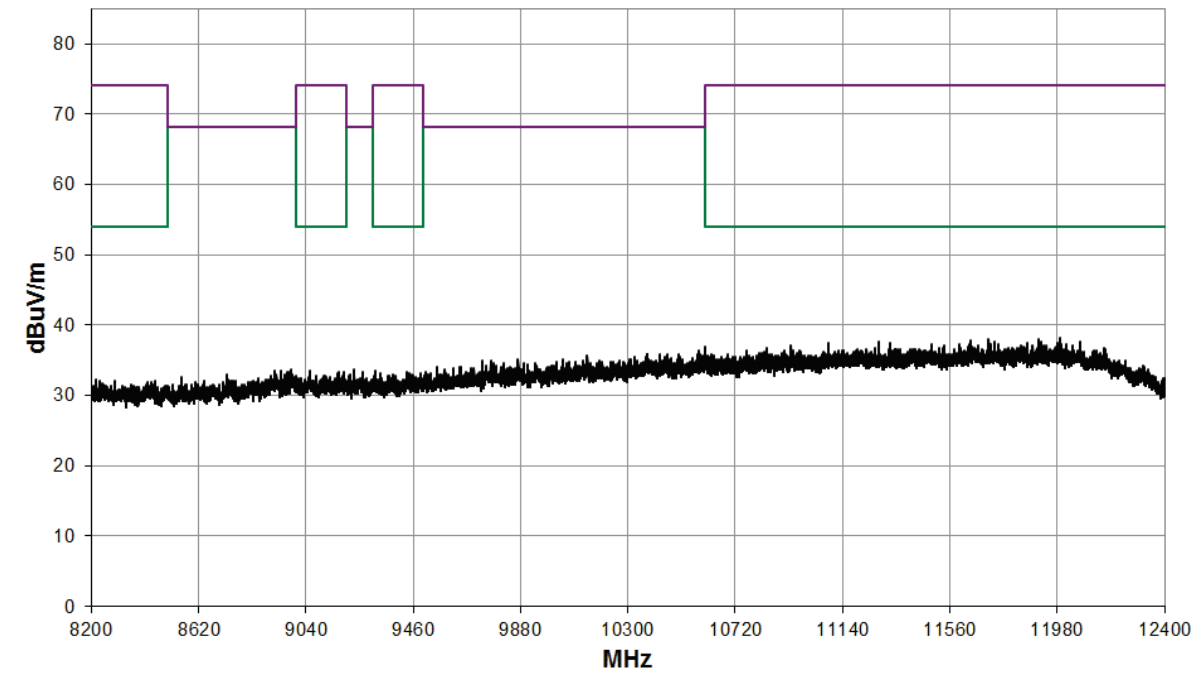
30 MHz to 1 GHz



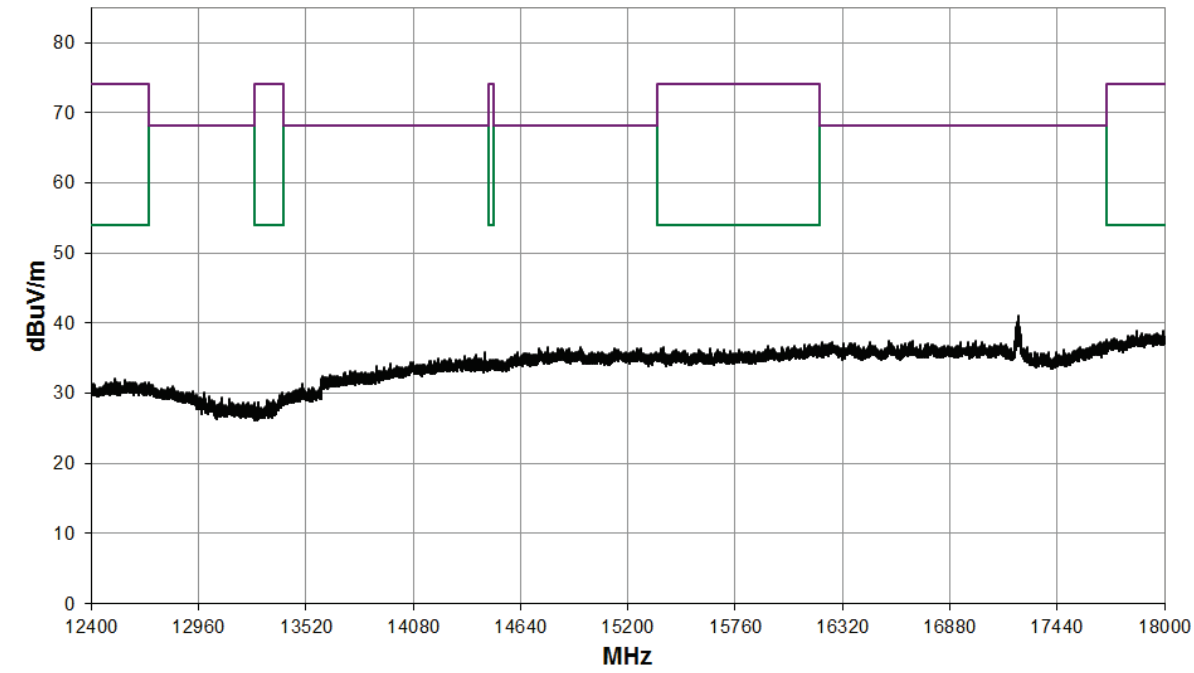
1 GHz to 8.2 GHz



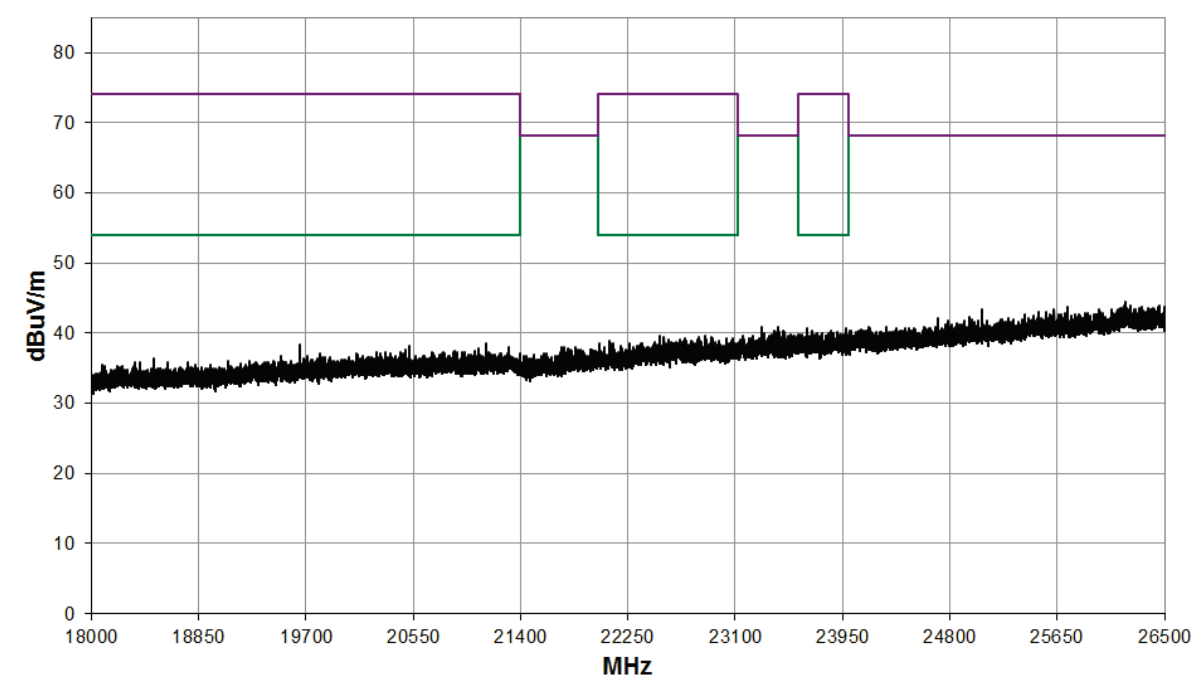
8.2 GHz to 12.4 GHz



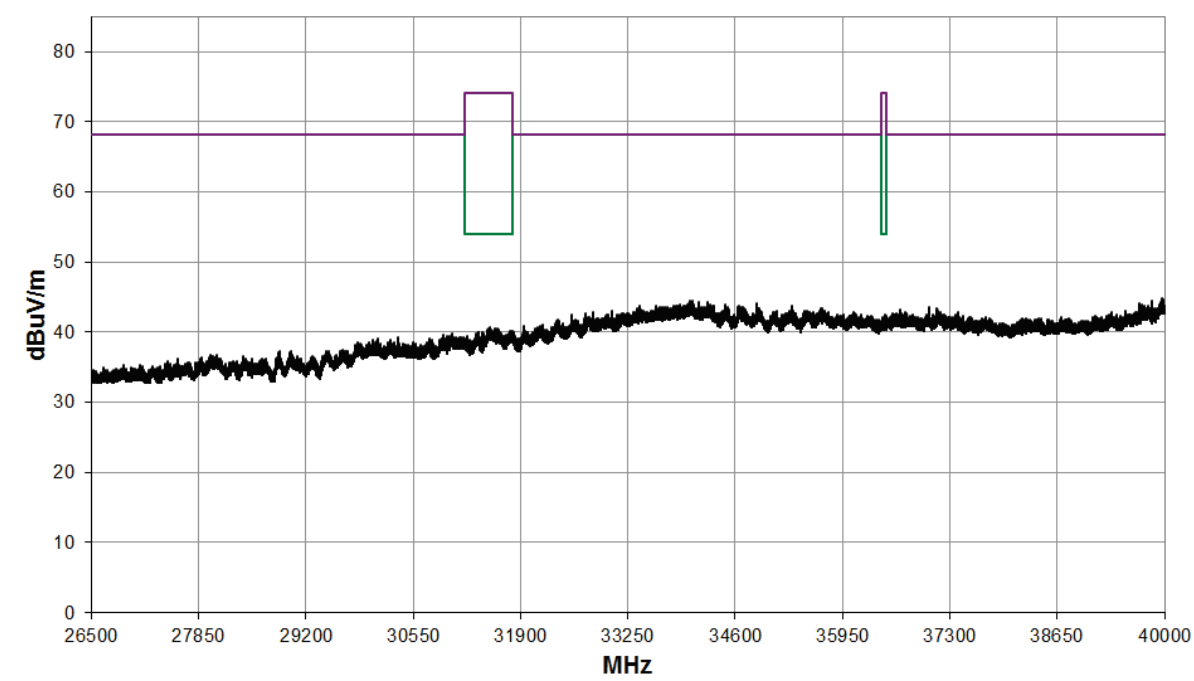
12.4 GHz to 18 GHz

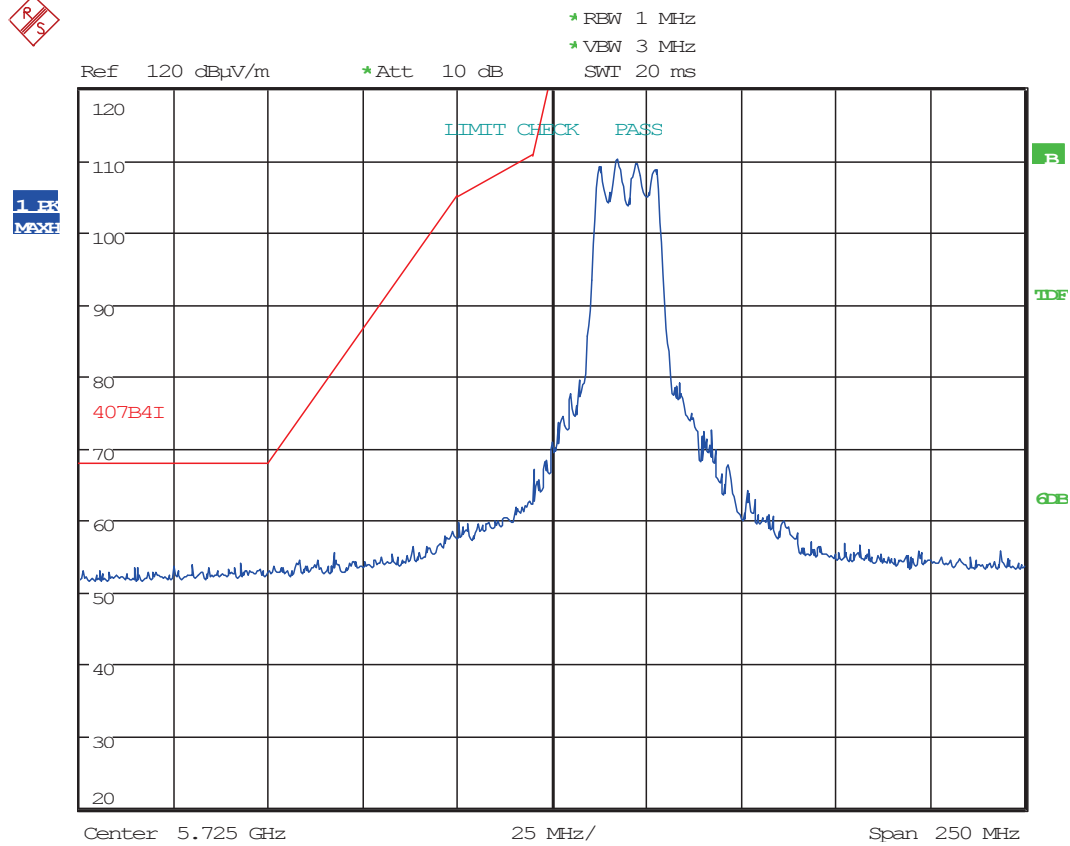


18 GHz to 26.5 GHz



26.5 GHz to 40 GHz

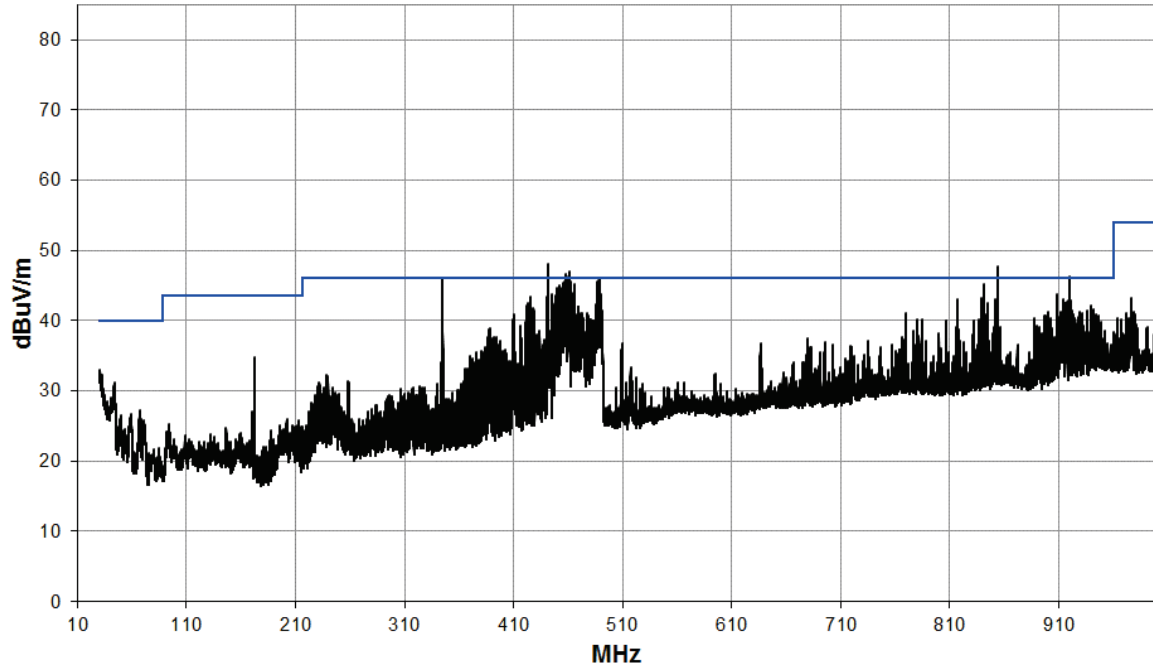




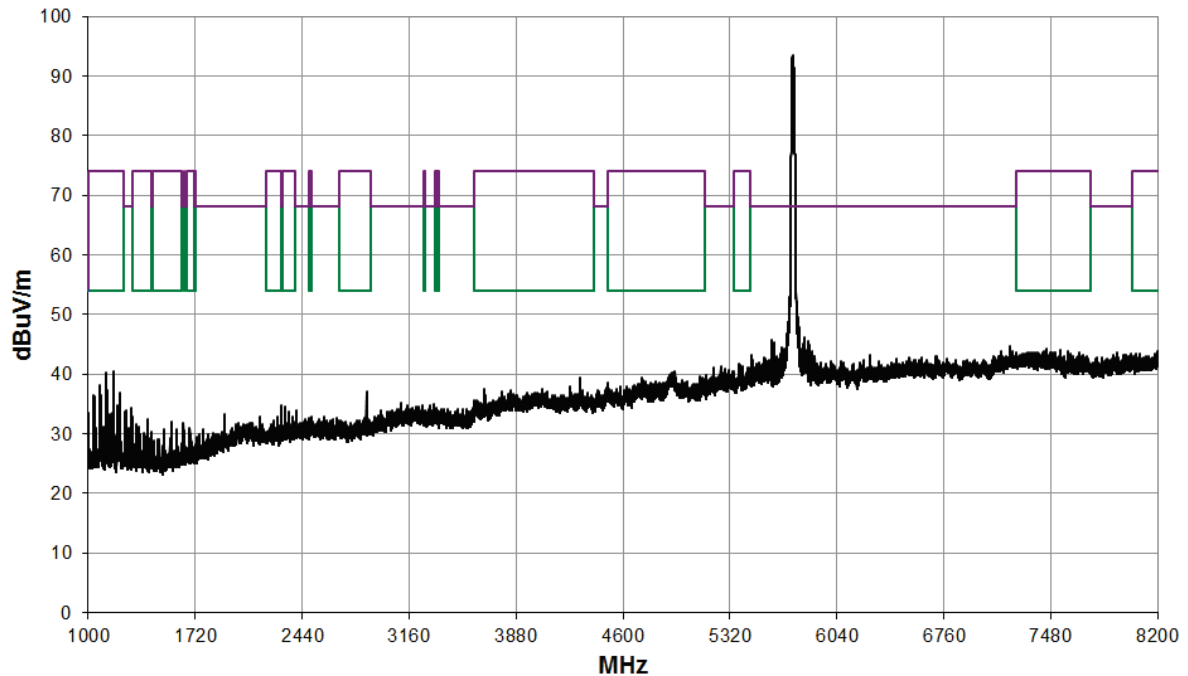
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SISO; Mode: 802.11a; Channel: CH149; Frequency: 5745 MHz; Bandwidth: 20 MHz; Rate: 54 Mbps										
Detector	Freq. (MHz)	Meas'd Emission (dBμV)	Cable Loss (dB)	Antenna Factor (dB/m)	Pre-amp Gain (dB)	Duty Cycle Corr'n (dB)	Field Strength (dBμV/m)	Distance Extrap'n Factor (dB)	Field Strength (μV/m)	Limit (μV/m)
No emissions within 20 dB of the limit.										

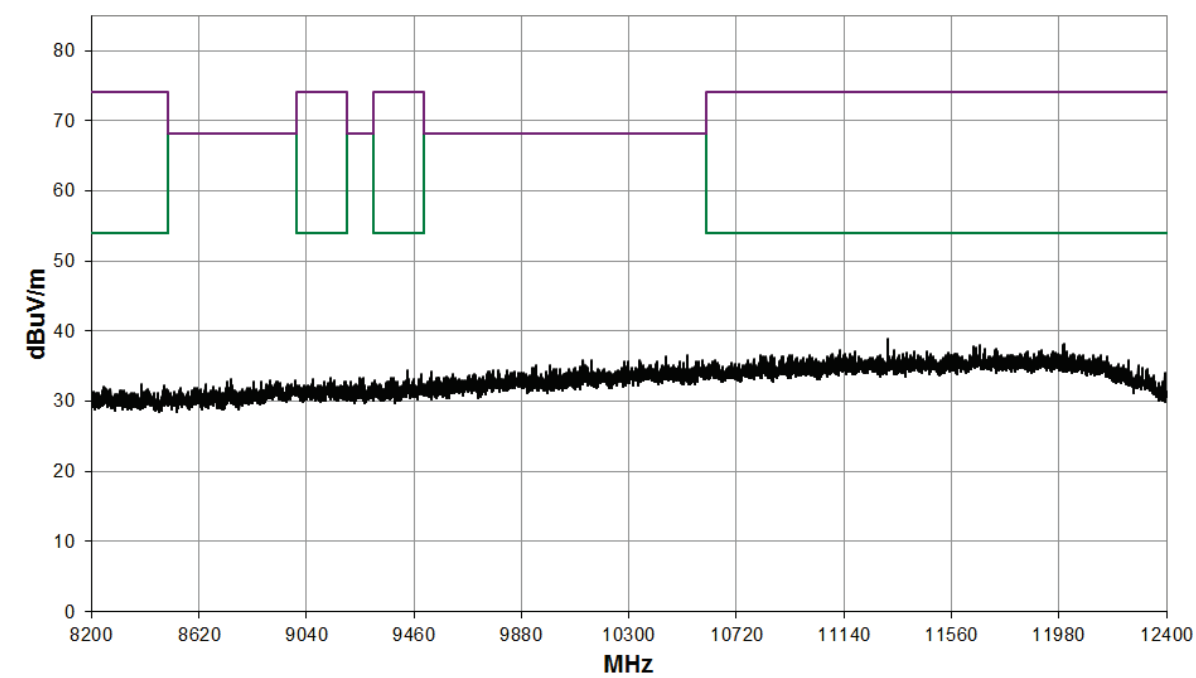
30 MHz to 1 GHz



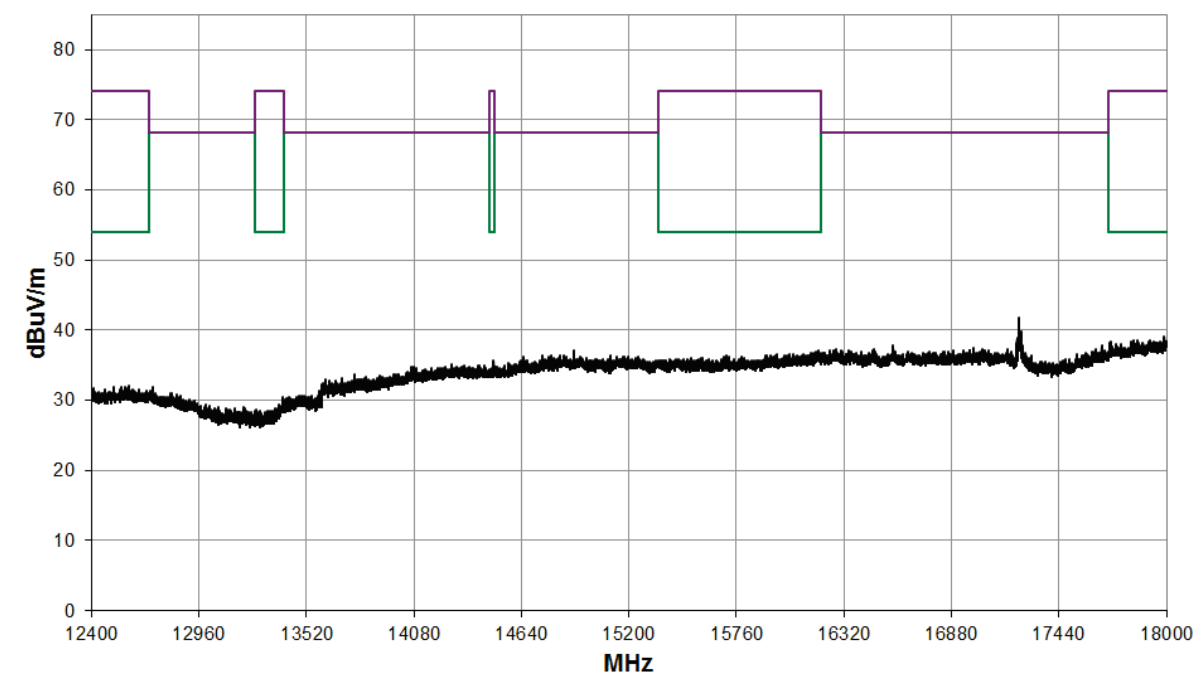
1 GHz to 8.2 GHz



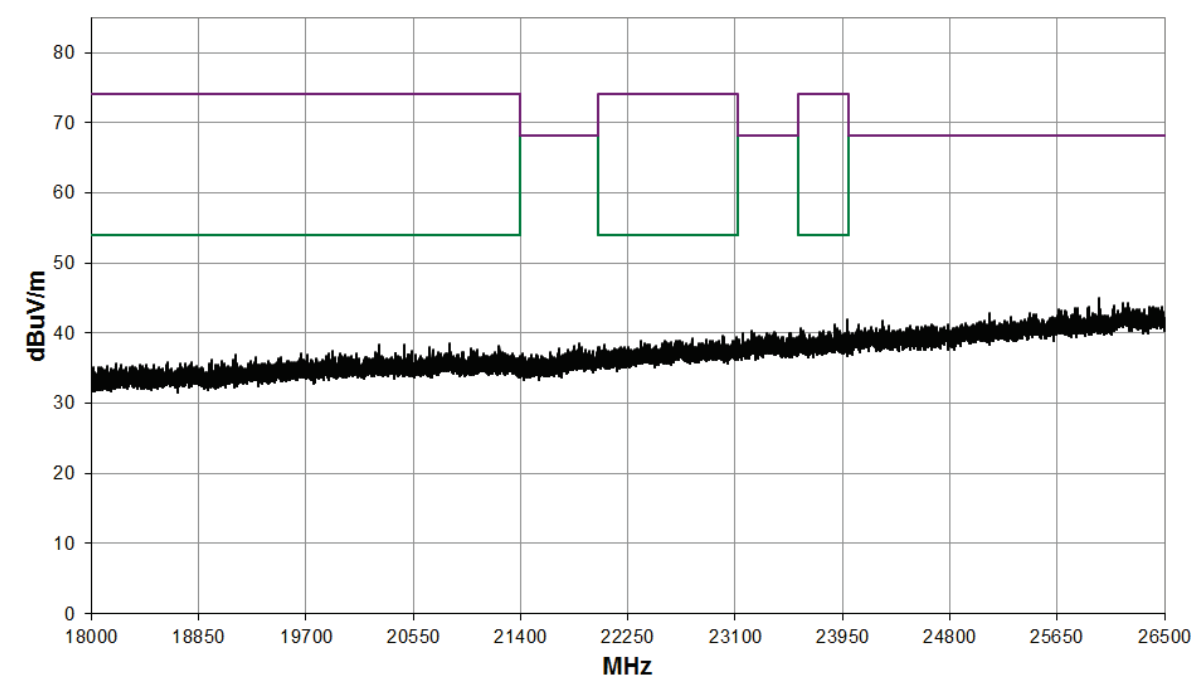
8.2 GHz to 12.4 GHz



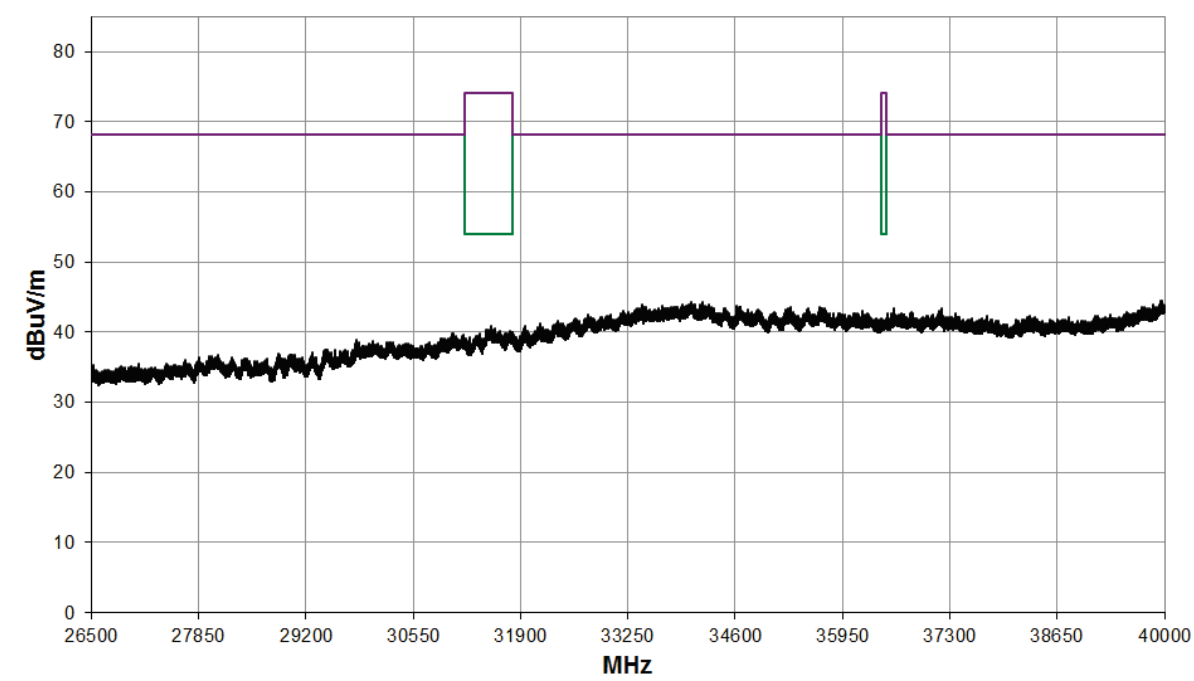
12.4 GHz to 18 GHz



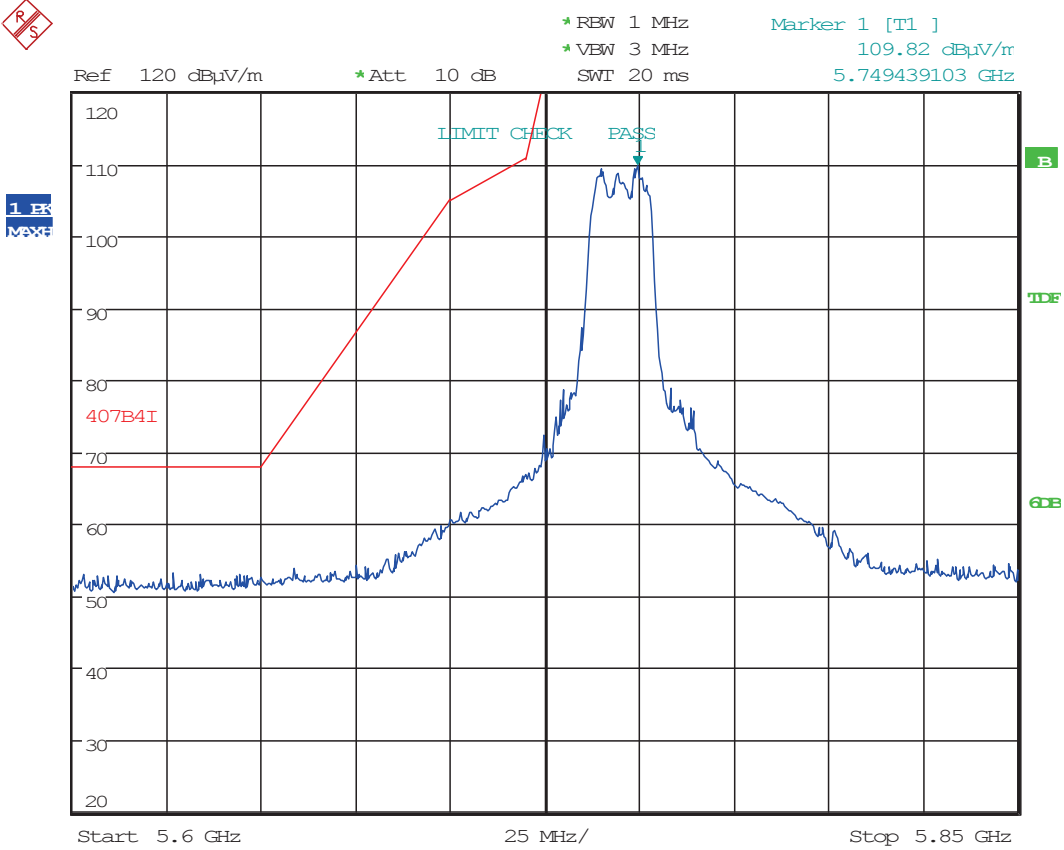
18 GHz to 26.5 GHz



26.5 GHz to 40 GHz



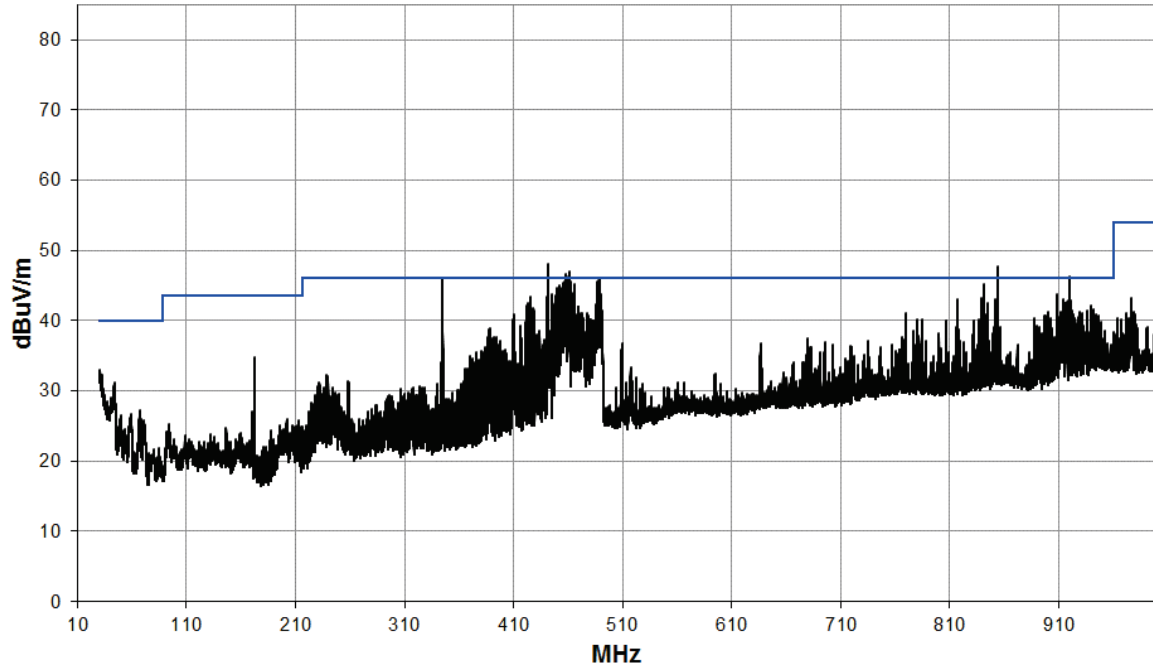
Band Edge



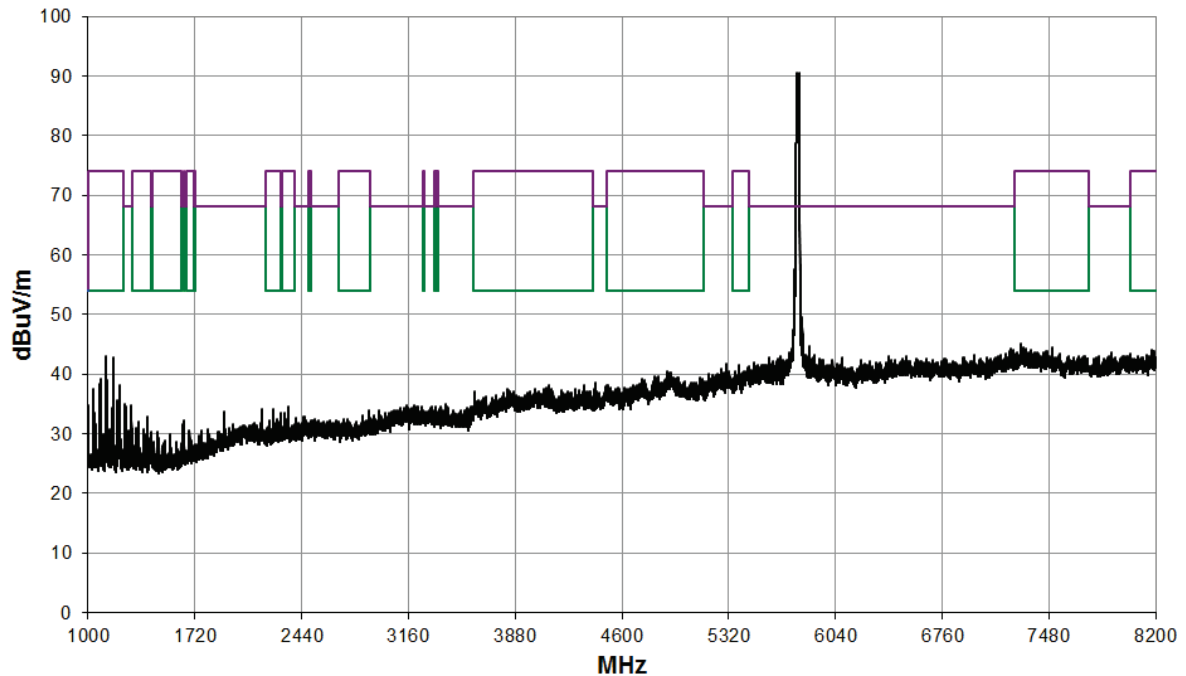
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SISO; Mode: 802.11a; Channel: CH157; Frequency: 5785 MHz; Bandwidth: 20 MHz; Rate: 6 Mbps										
Detector	Freq. (MHz)	Meas'd Emission (dBμV)	Cable Loss (dB)	Antenna Factor (dB/m)	Pre-amp Gain (dB)	Duty Cycle Corr'n (dB)	Field Strength (dBμV/m)	Distance Extrap'n Factor (dB)	Field Strength (μV/m)	Limit (μV/m)
No emissions within 20 dB of the limit.										

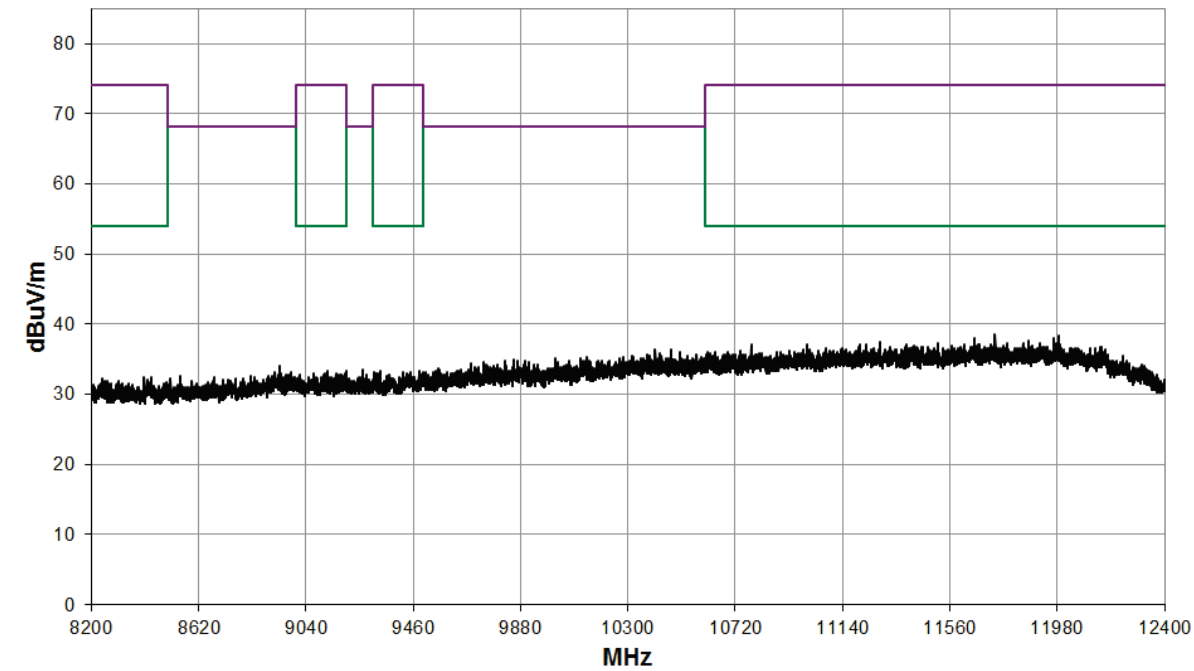
30 MHz to 1 GHz



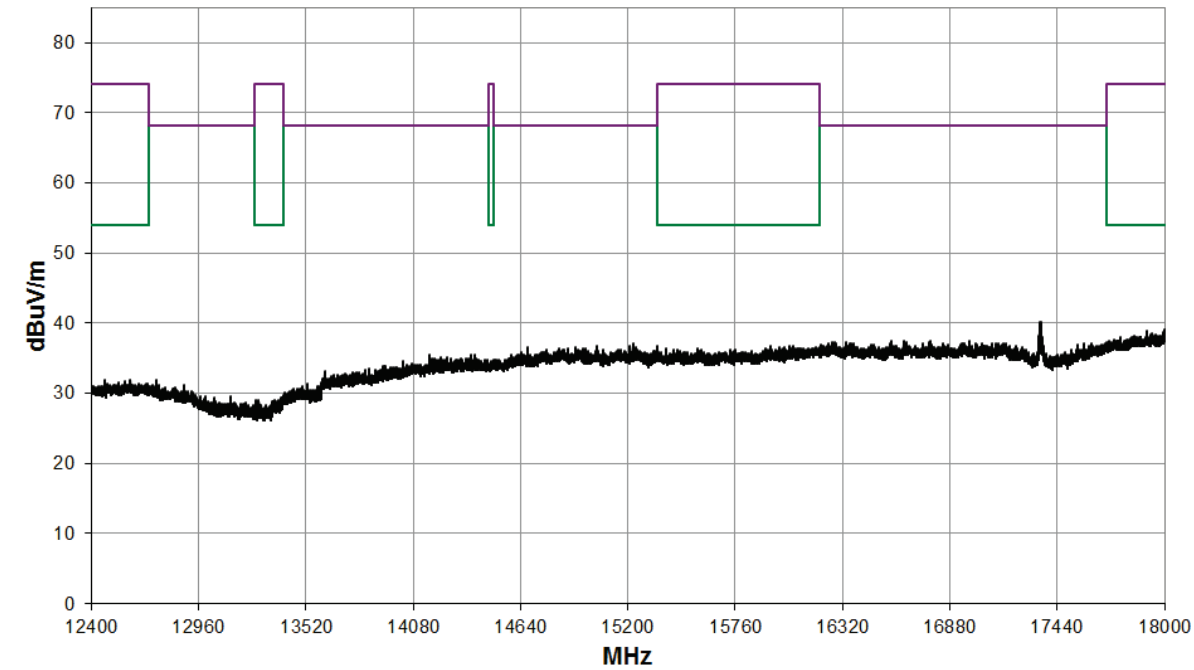
1 GHz to 8.2 GHz



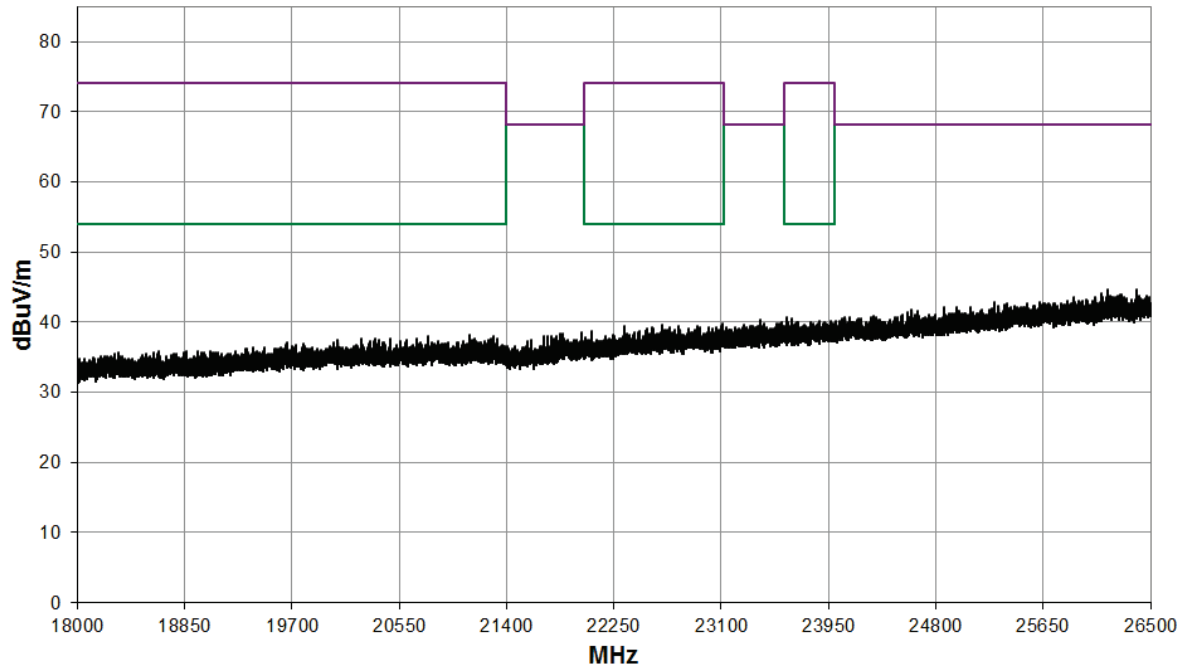
8.2 GHz to 12.4 GHz



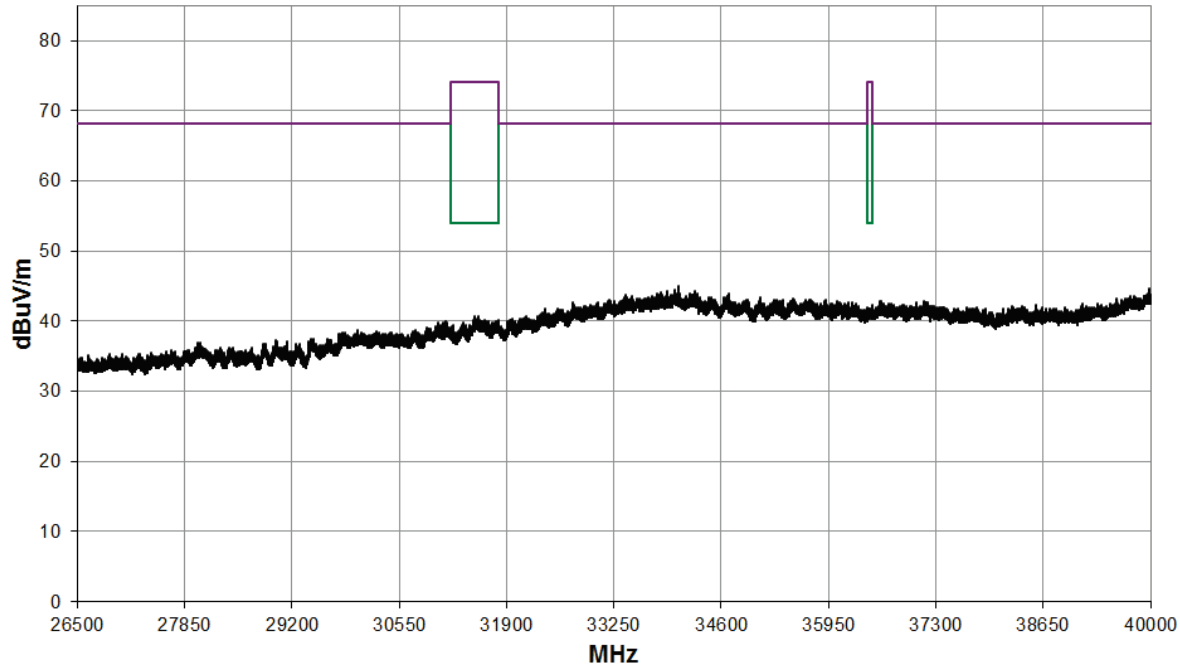
12.4 GHz to 18 GHz



18 GHz to 26.5 GHz

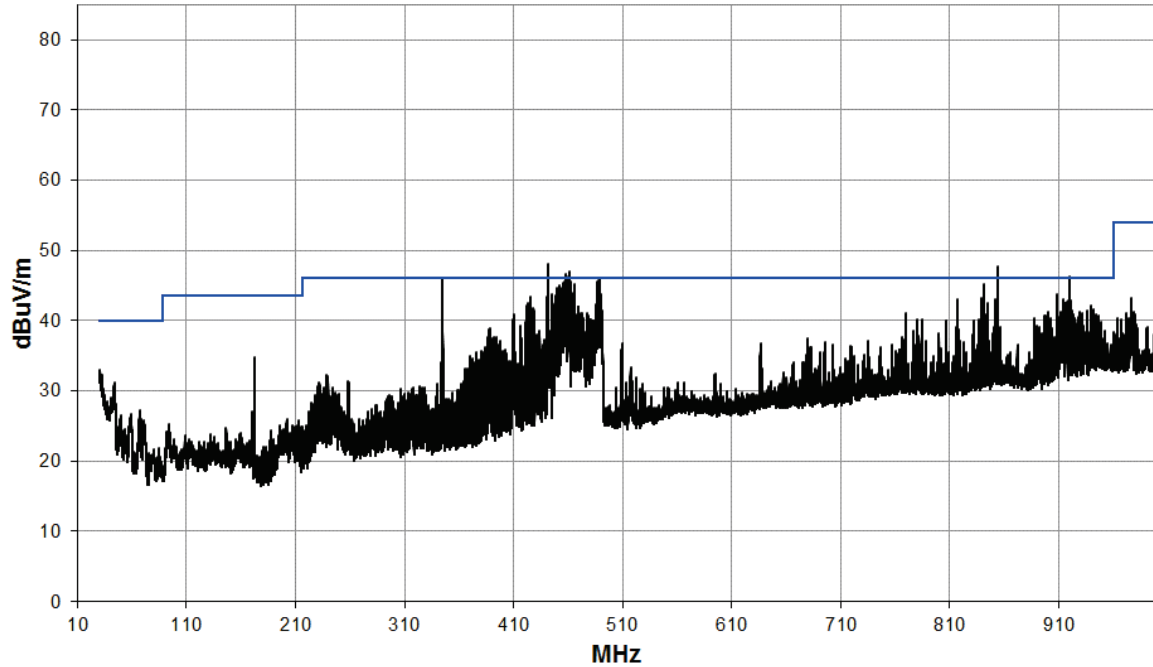


26.5 GHz to 40 GHz

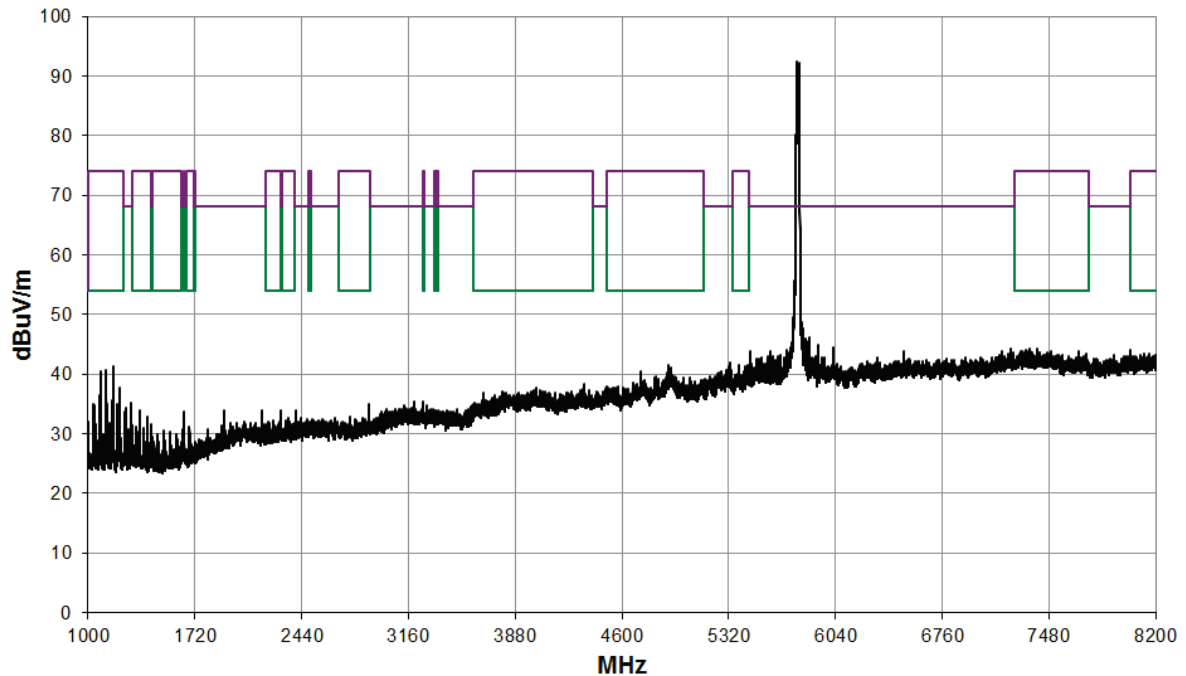


SISO; Mode: 802.11a; Channel: CH157; Frequency: 5785 MHz; Bandwidth: 20 MHz; Rate: 54 Mbps										
Detector	Freq. (MHz)	Meas'd Emission (dBμV)	Cable Loss (dB)	Antenna Factor (dB/m)	Pre-amp Gain (dB)	Duty Cycle Corr'n (dB)	Field Strength (dBμV/m)	Distance Extrap'n Factor (dB)	Field Strength (μV/m)	Limit (μV/m)
No emissions within 20 dB of the limit.										

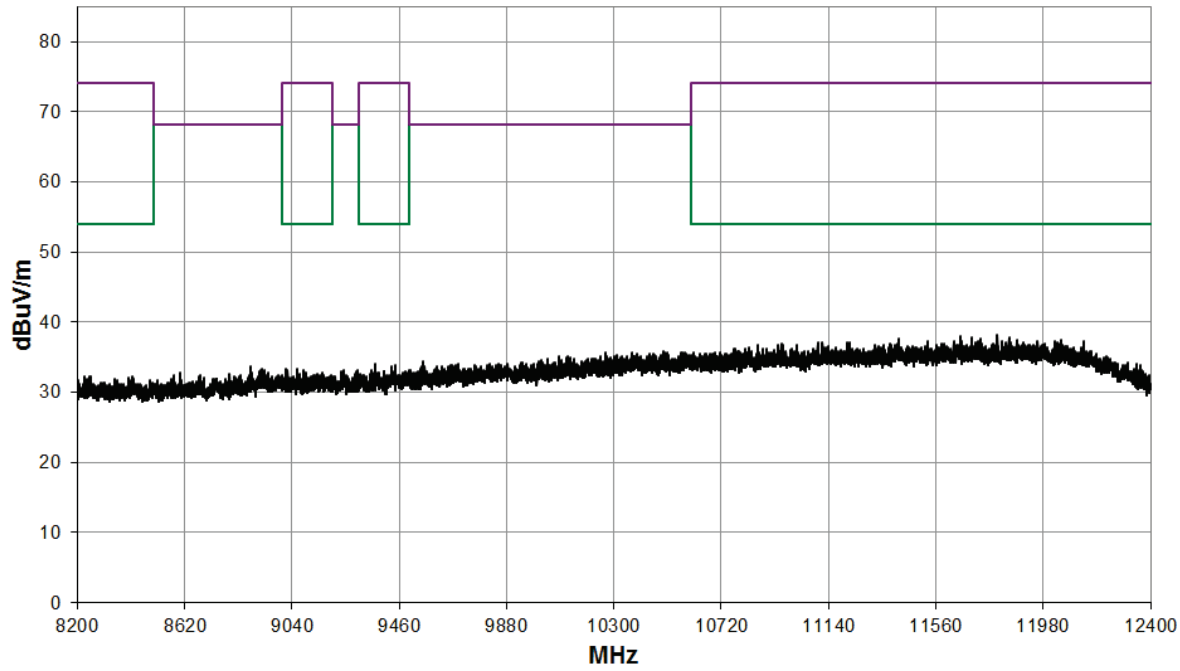
30 MHz to 1 GHz



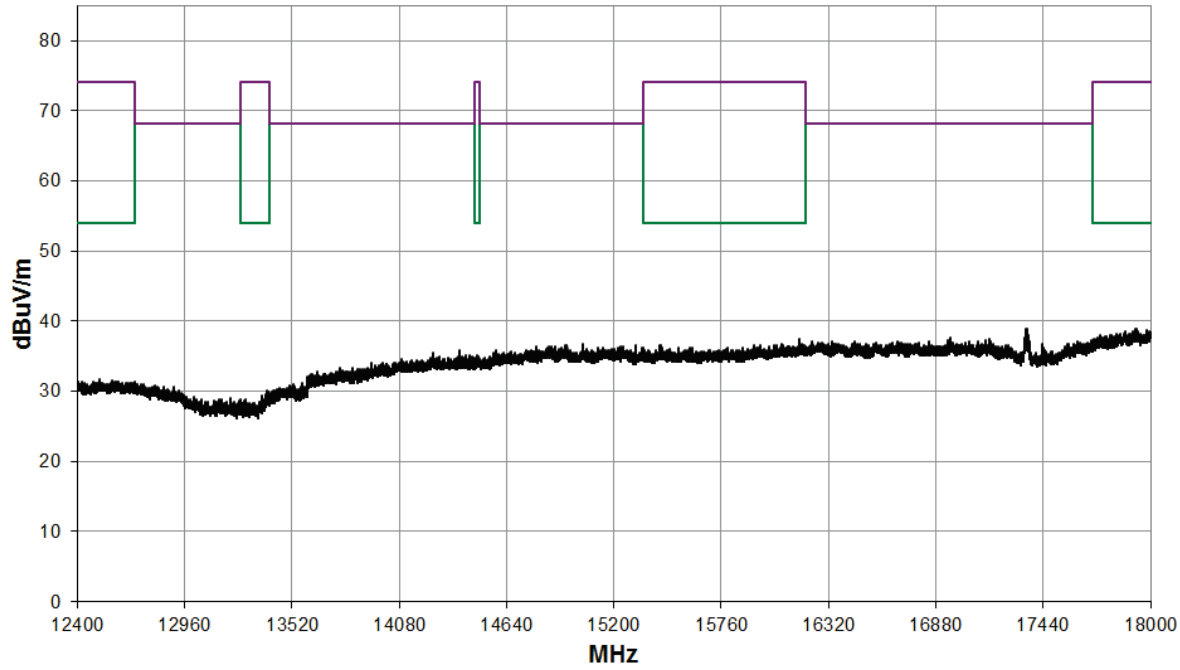
1 GHz to 8.2 GHz



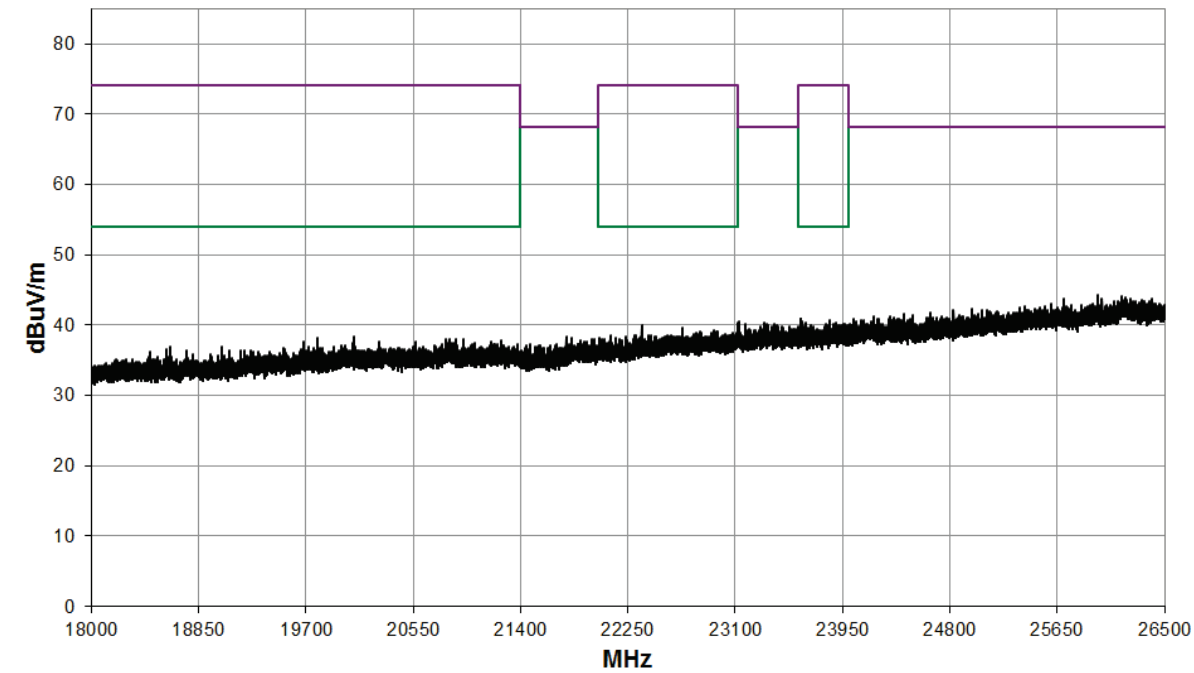
8.2 GHz to 12.4 GHz



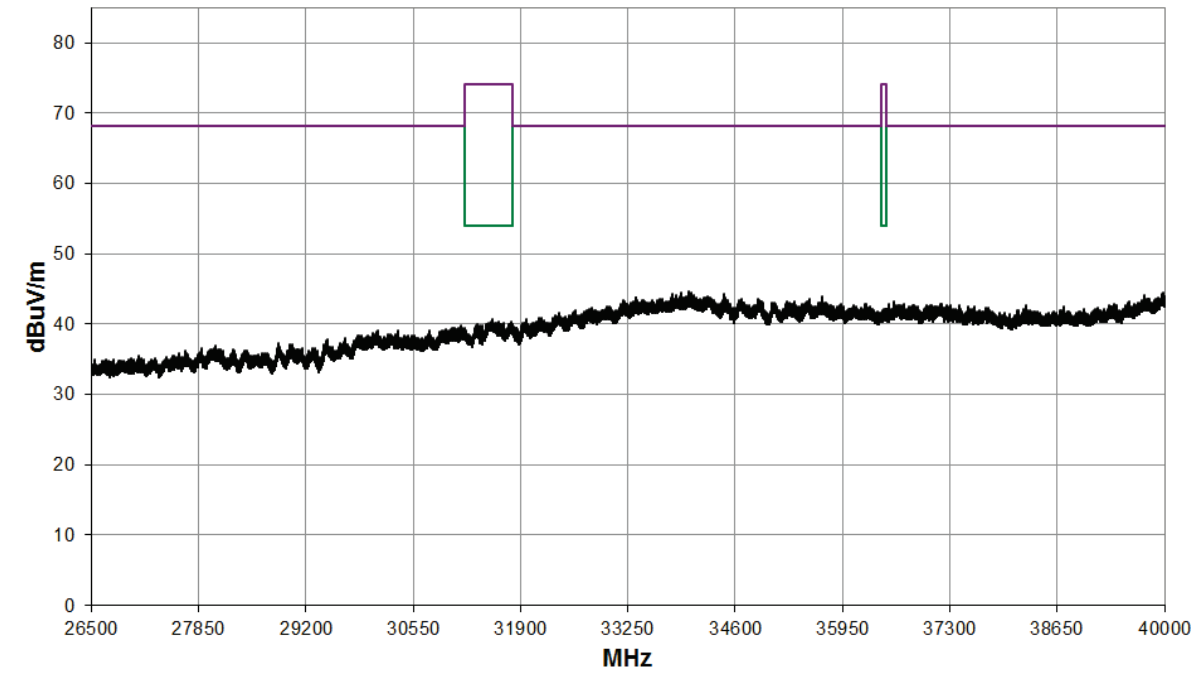
12.4 GHz to 18 GHz



18 GHz to 26.5 GHz

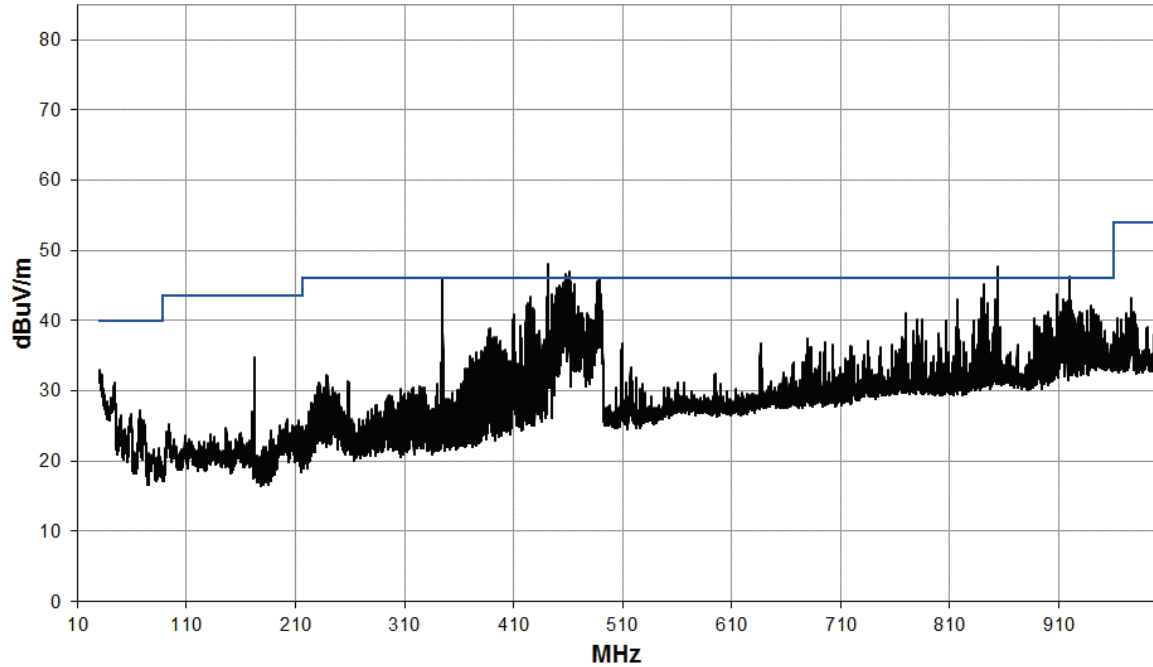


26.5 GHz to 40 GHz

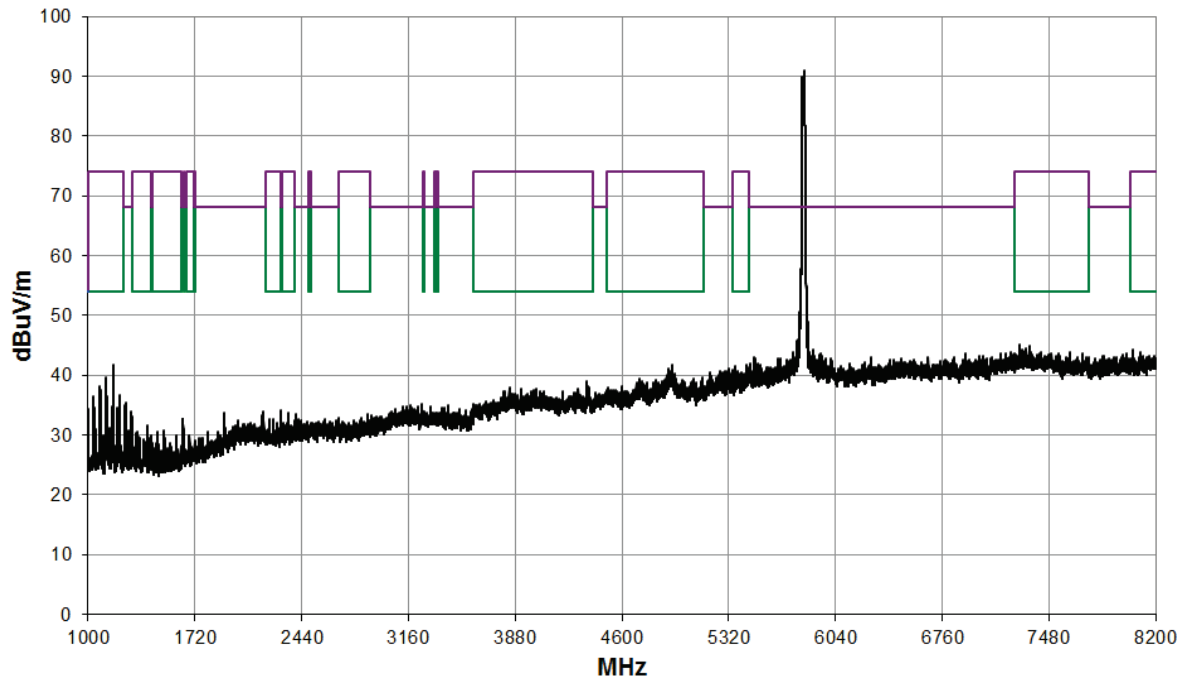


SISO; Mode: 802.11a; Channel: CH165; Frequency: 5825 MHz; Bandwidth: 20 MHz; Rate: 6 Mbps										
Detector	Freq. (MHz)	Meas'd Emission (dBμV)	Cable Loss (dB)	Antenna Factor (dB/m)	Pre-amp Gain (dB)	Duty Cycle Corr'n (dB)	Field Strength (dBμV/m)	Distance Extrap'n Factor (dB)	Field Strength (μV/m)	Limit (μV/m)
No emissions within 20 dB of the limit.										

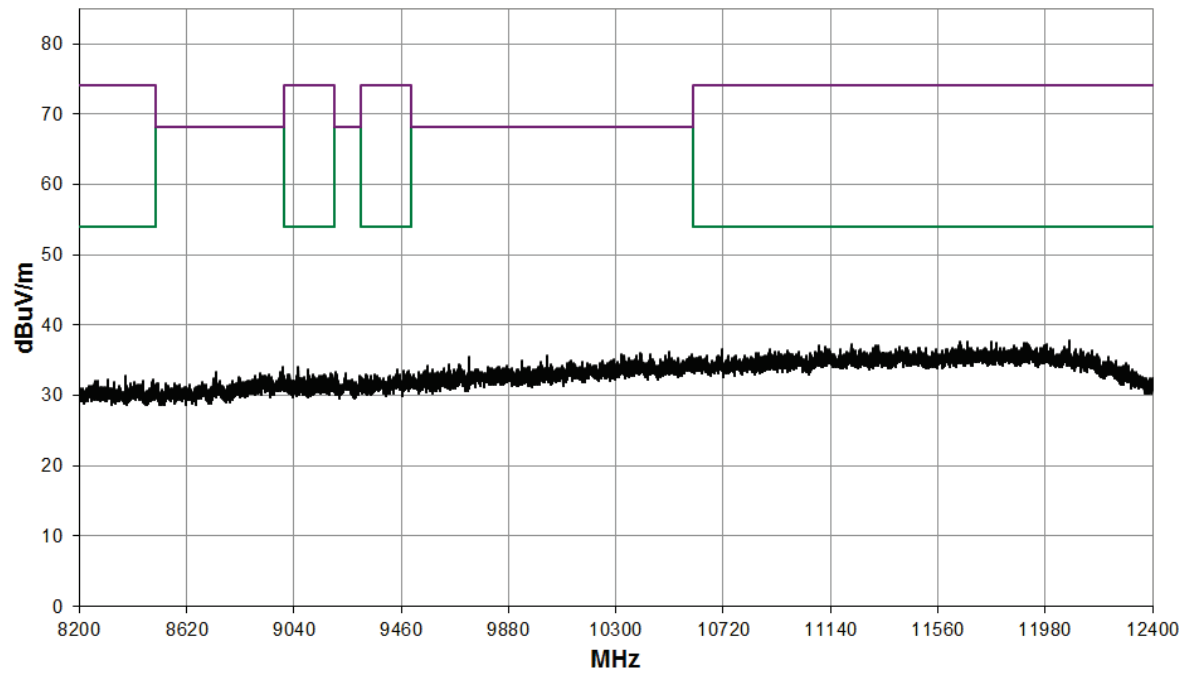
30 MHz to 1 GHz



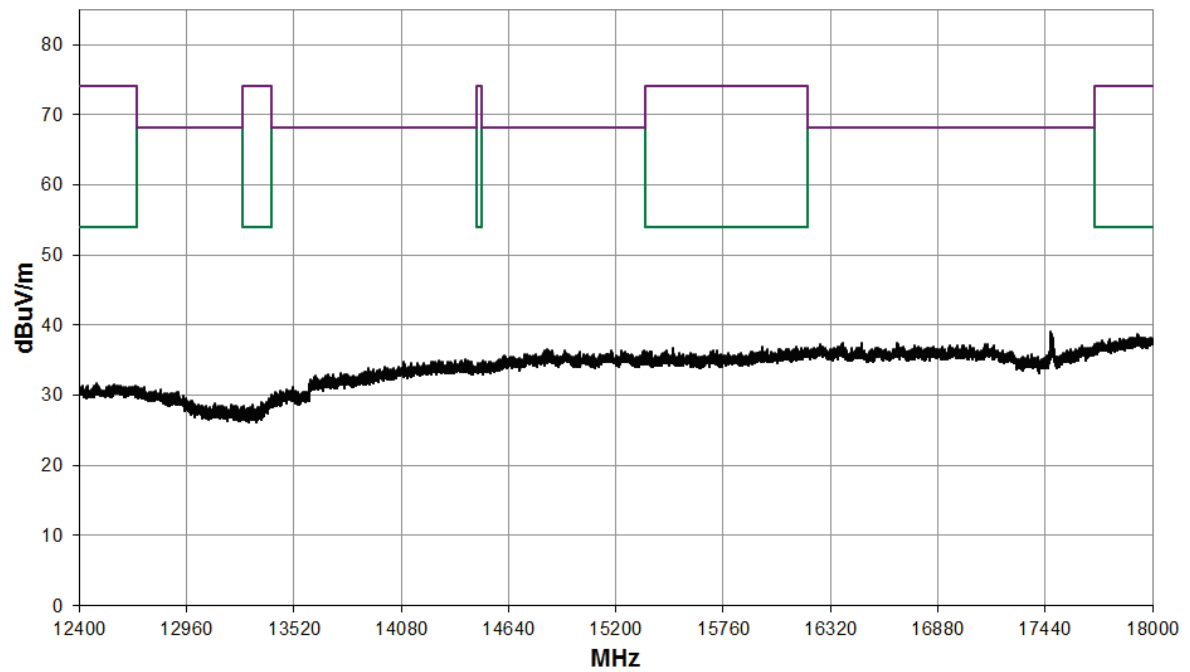
1 GHz to 8.2 GHz



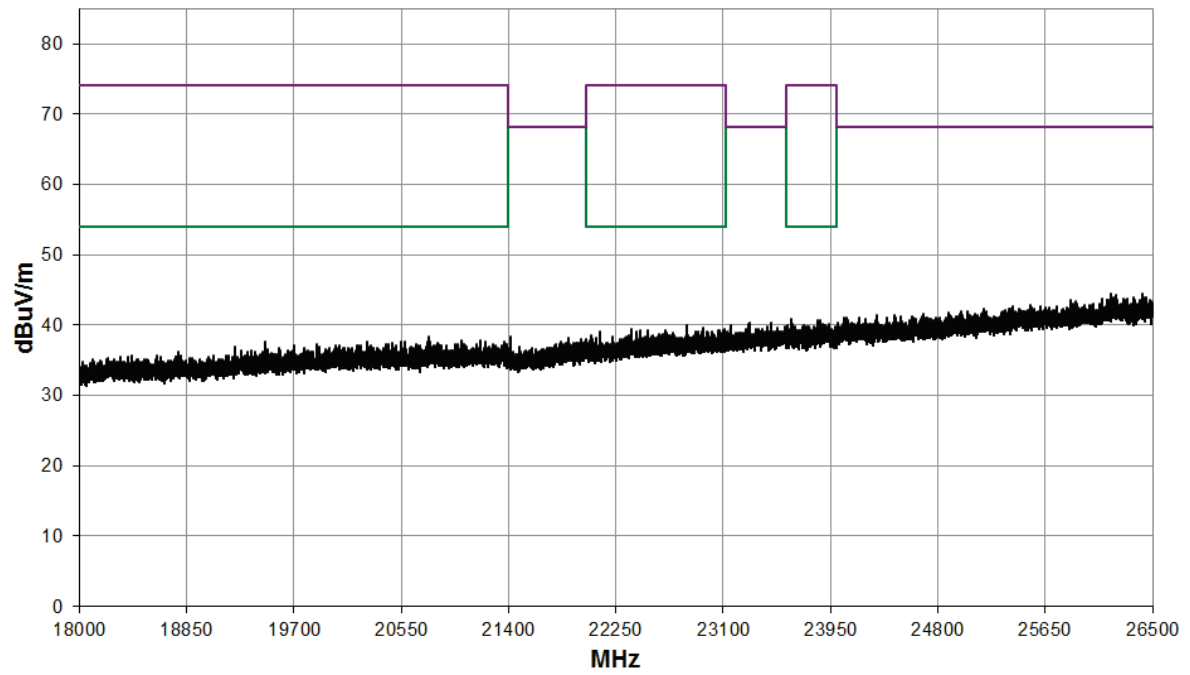
8.2 GHz to 12.4 GHz



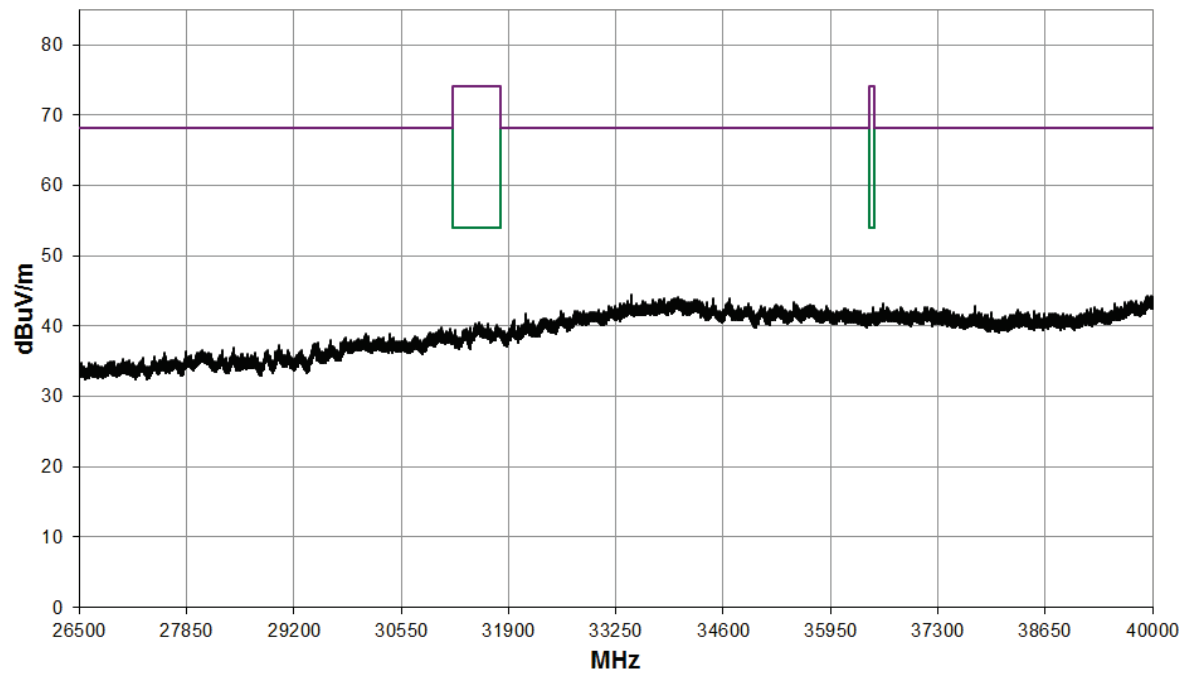
12.4 GHz to 18 GHz



18 GHz to 26.5 GHz



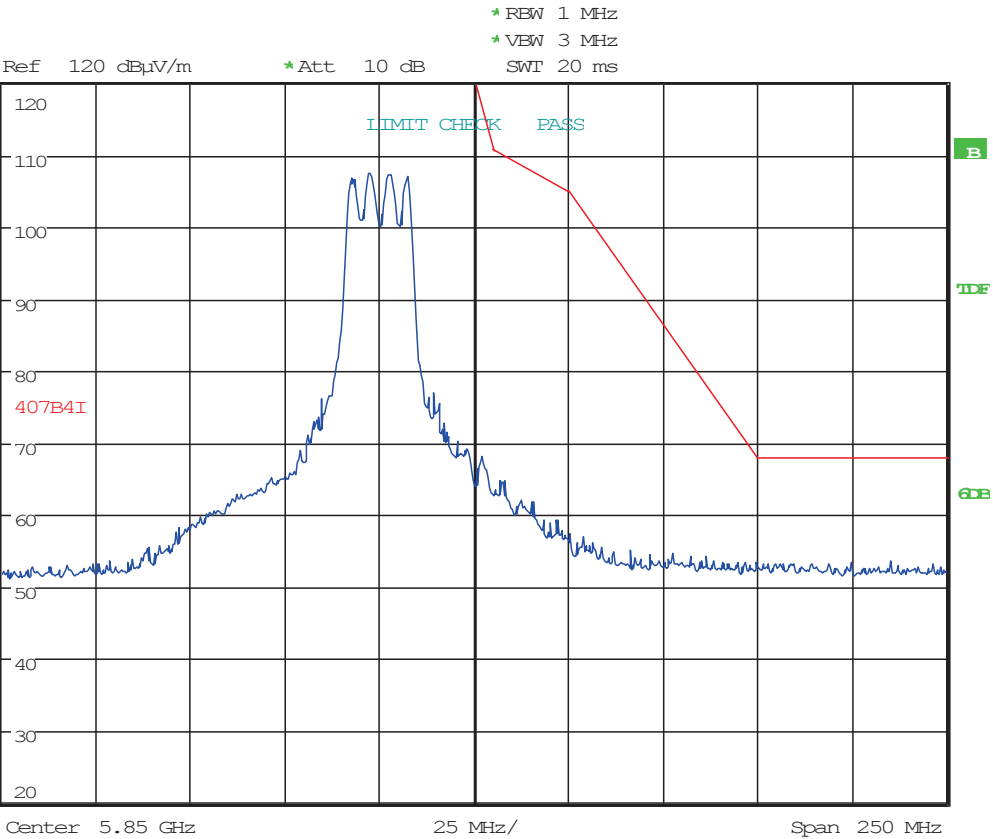
26.5 GHz to 40 GHz



Band Edge



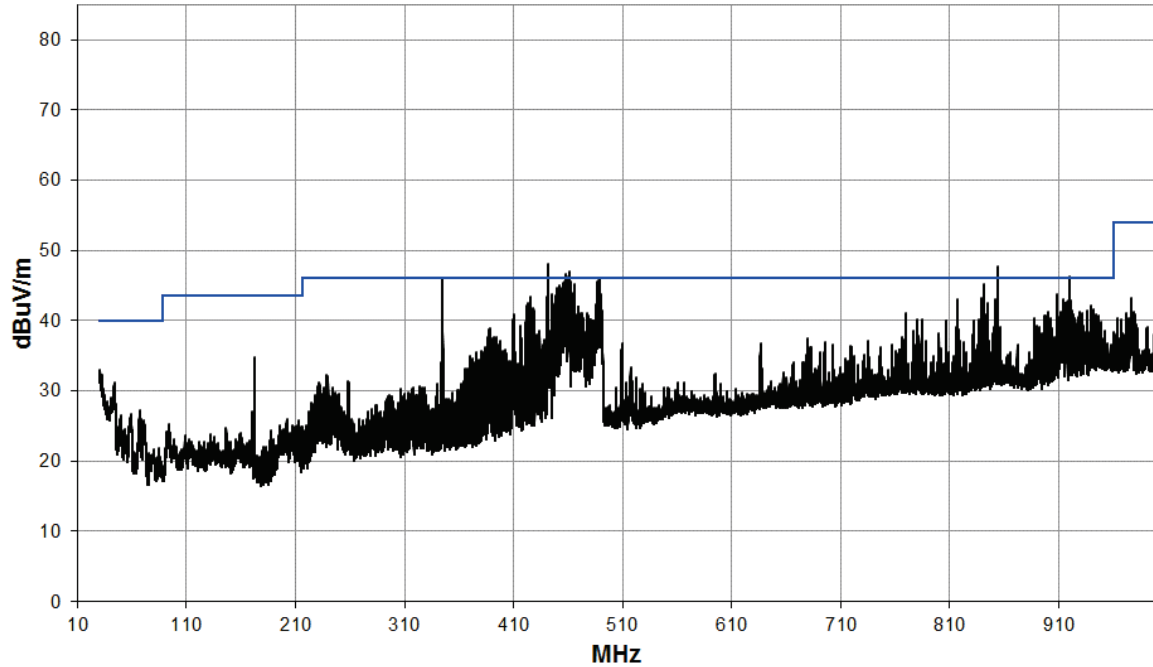
1 PK
MAX



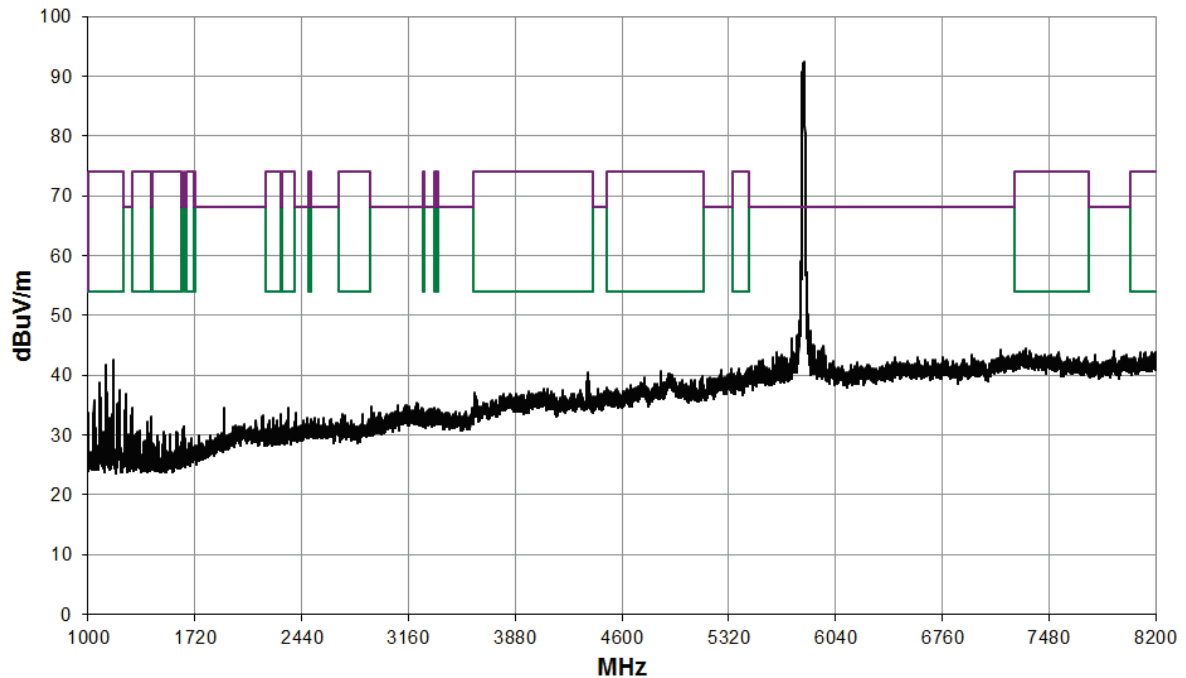
Date: 21.JUL.2020 12:40:46

SISO; Mode: 802.11a; Channel: CH165; Frequency: 5825 MHz; Bandwidth: 20 MHz; Rate: 54 Mbps										
Detector	Freq. (MHz)	Meas'd Emission (dBμV)	Cable Loss (dB)	Antenna Factor (dB/m)	Pre-amp Gain (dB)	Duty Cycle Corr'n (dB)	Field Strength (dBμV/m)	Distance Extrap'n Factor (dB)	Field Strength (μV/m)	Limit (μV/m)
No emissions within 20 dB of the limit.										

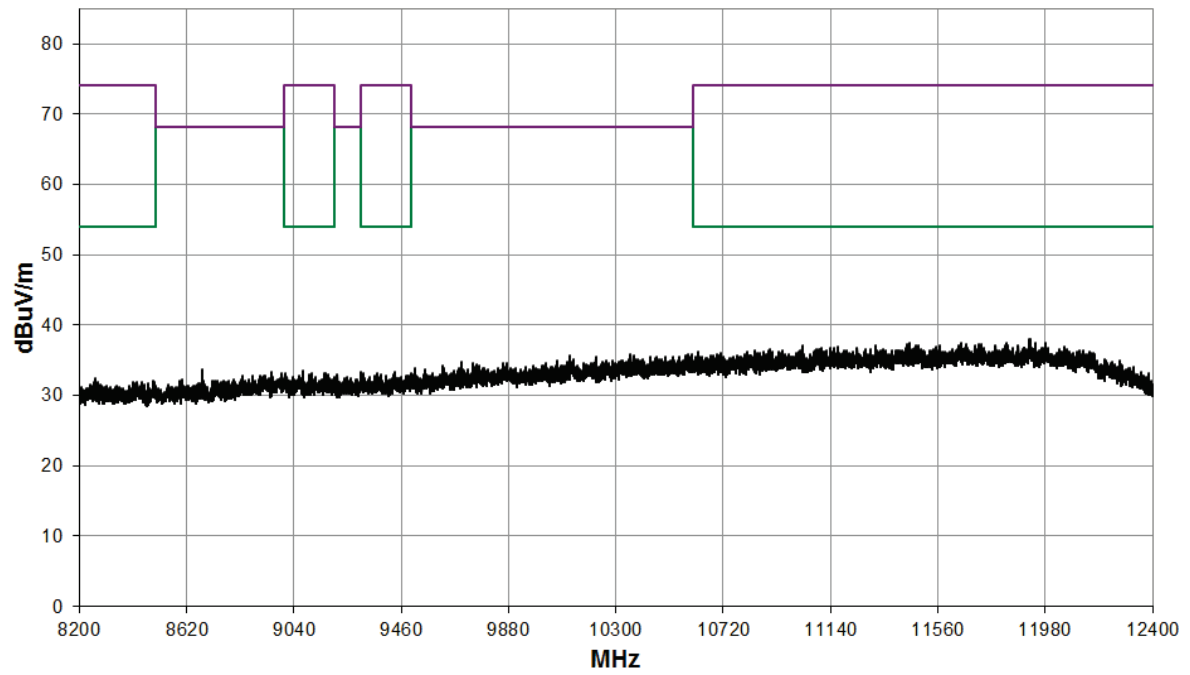
30 MHz to 1 GHz



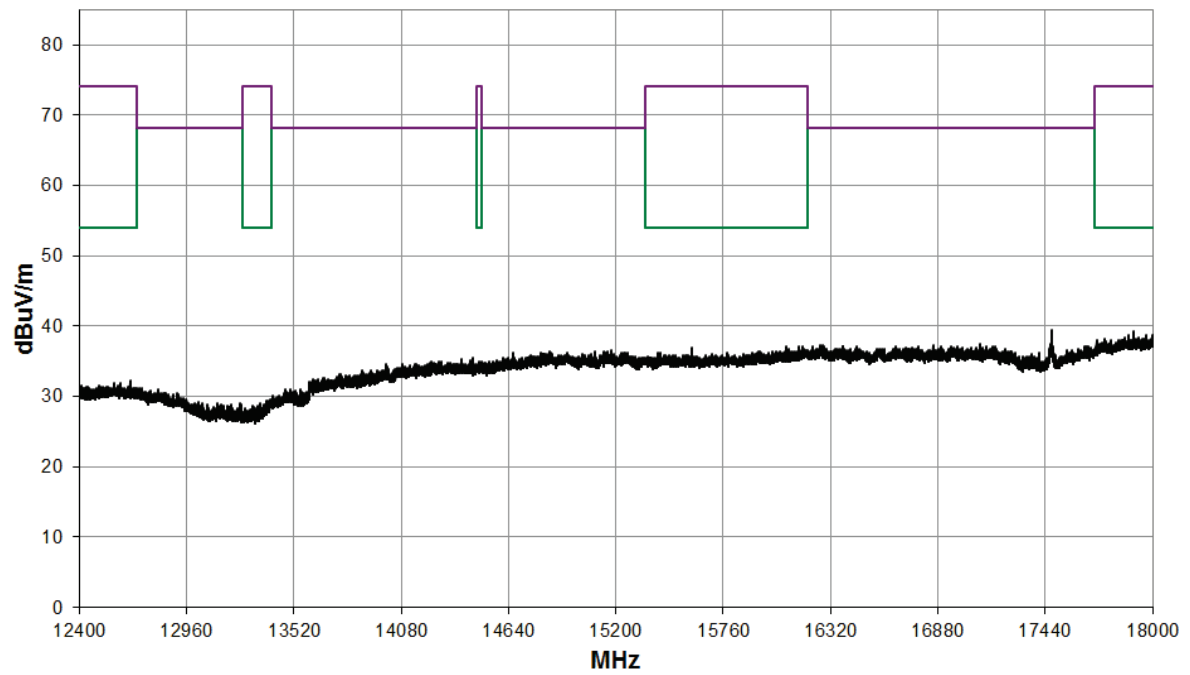
1 GHz to 8.2 GHz



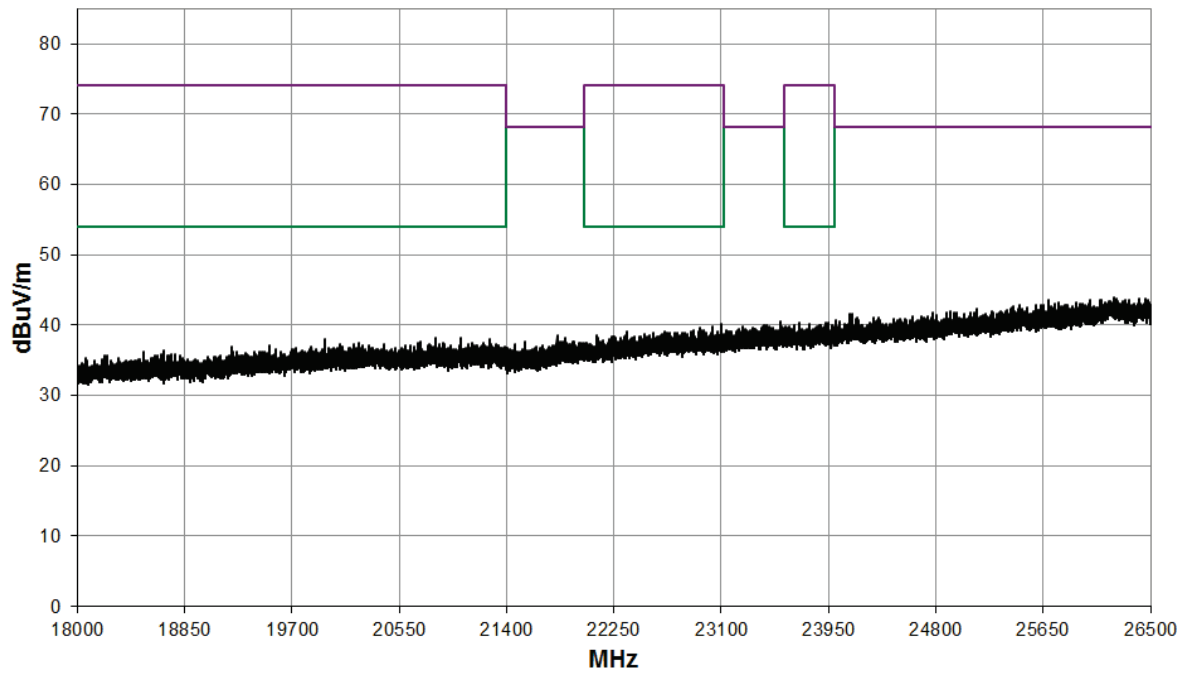
8.2 GHz to 12.4 GHz



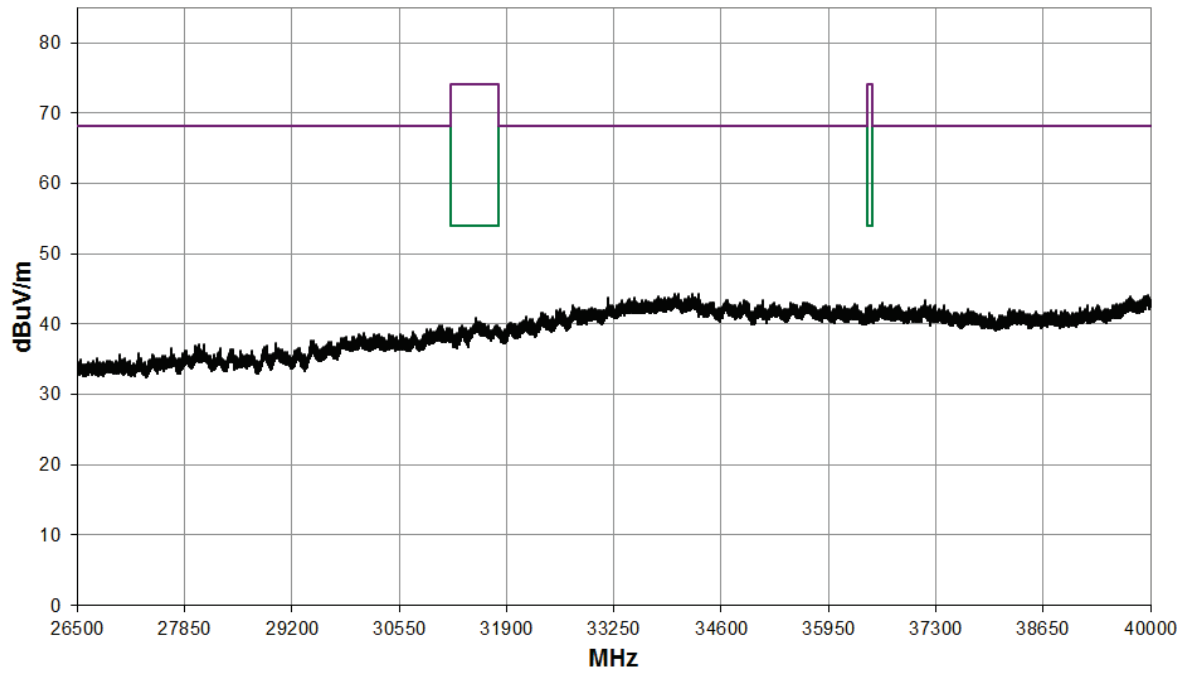
12.4 GHz to 18 GHz



18 GHz to 26.5 GHz



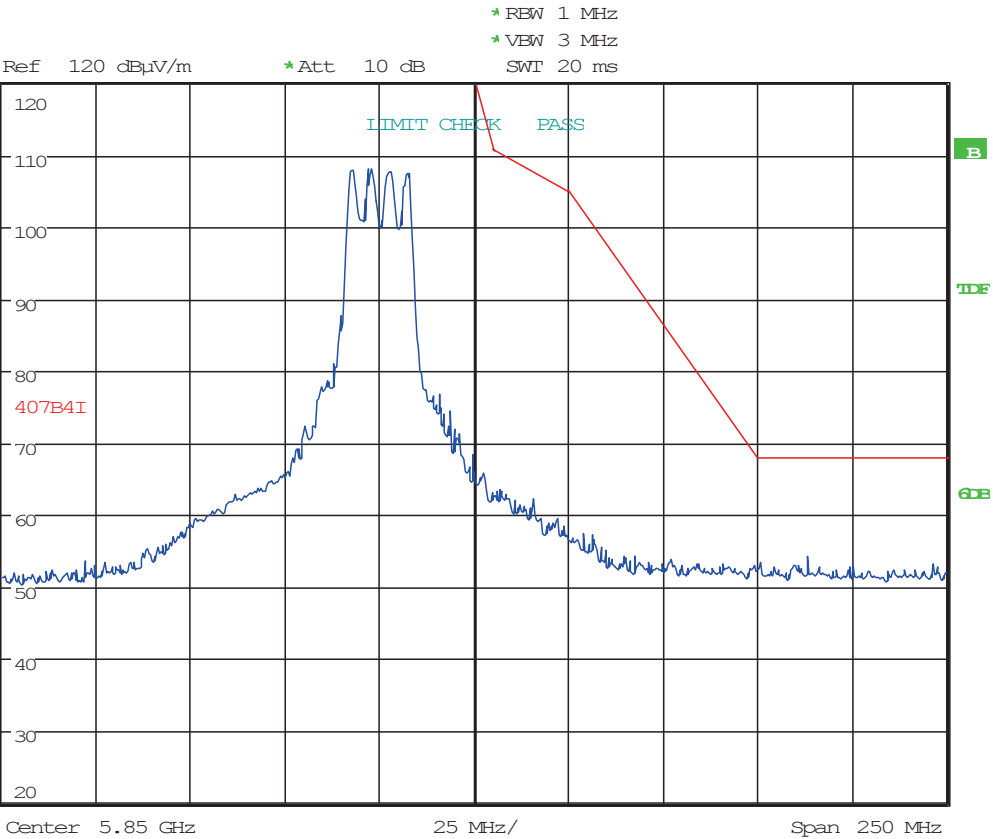
26.5 GHz to 40 GHz



Band Edge



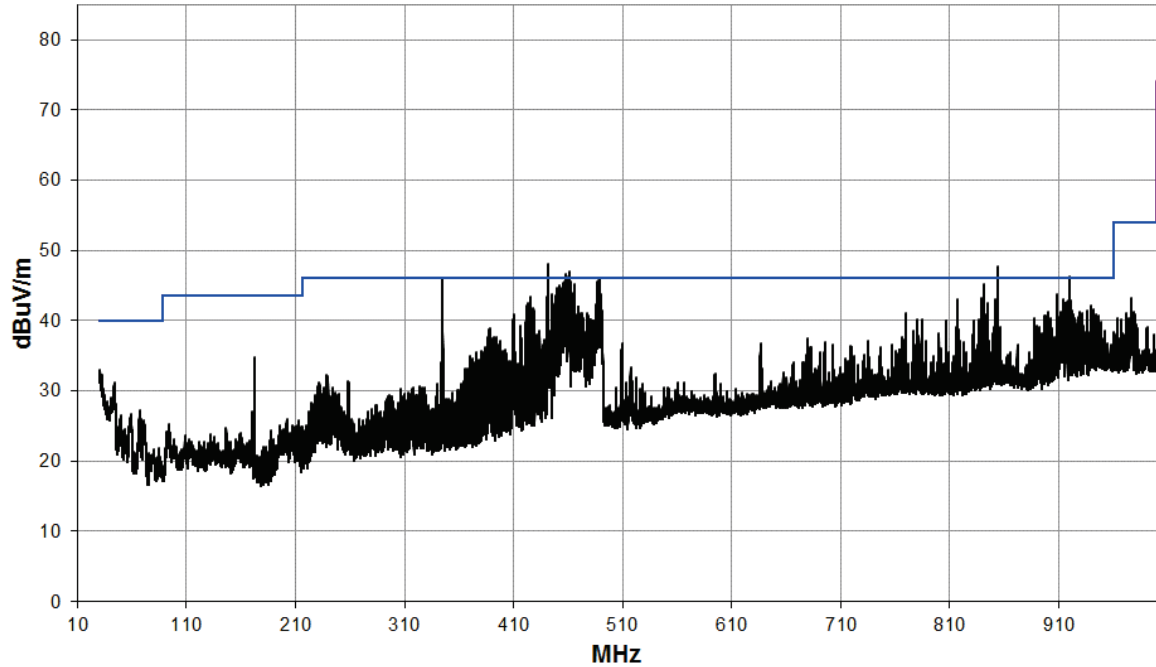
1 PK
MAX



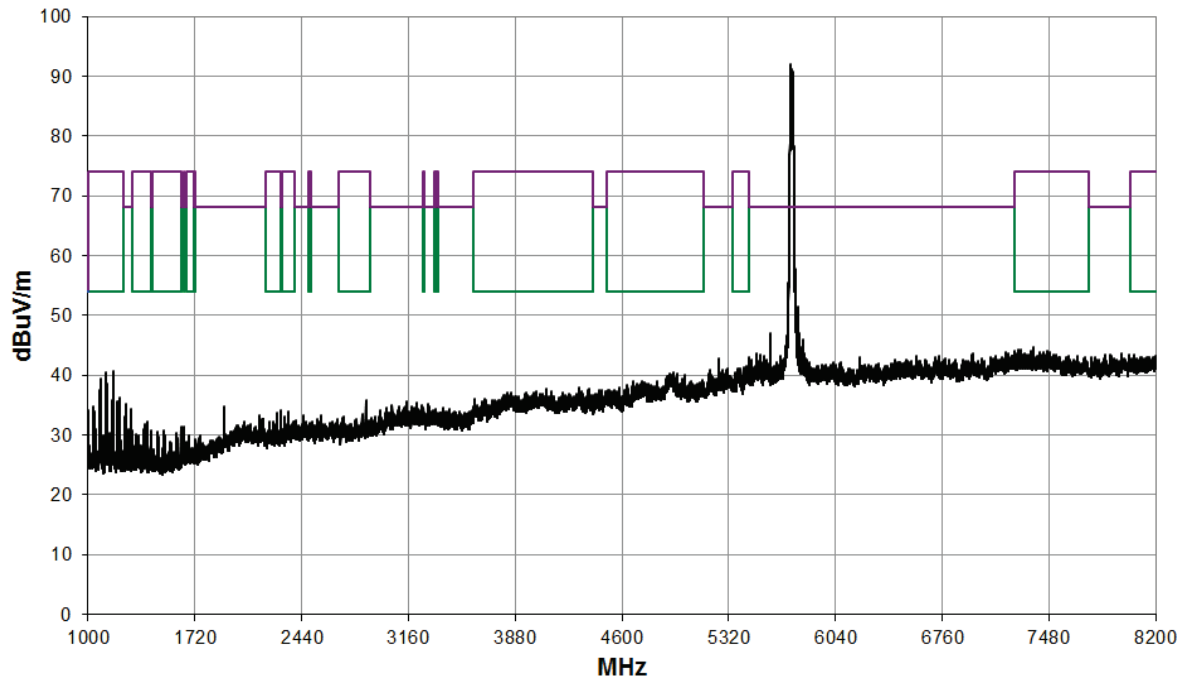
Date: 21.JUL.2020 12:42:19

SISO; Mode: 802.11n20; Channel: CH149; Frequency: 5745 MHz; Bandwidth: 20 MHz; MCS Index: 0										
Detector	Freq. (MHz)	Meas'd Emission (dBμV)	Cable Loss (dB)	Antenna Factor (dB/m)	Pre-amp Gain (dB)	Duty Cycle Corr'n (dB)	Field Strength (dBμV/m)	Distance Extrap'n Factor (dB)	Field Strength (μV/m)	Limit (μV/m)
No emissions within 20 dB of the limit.										

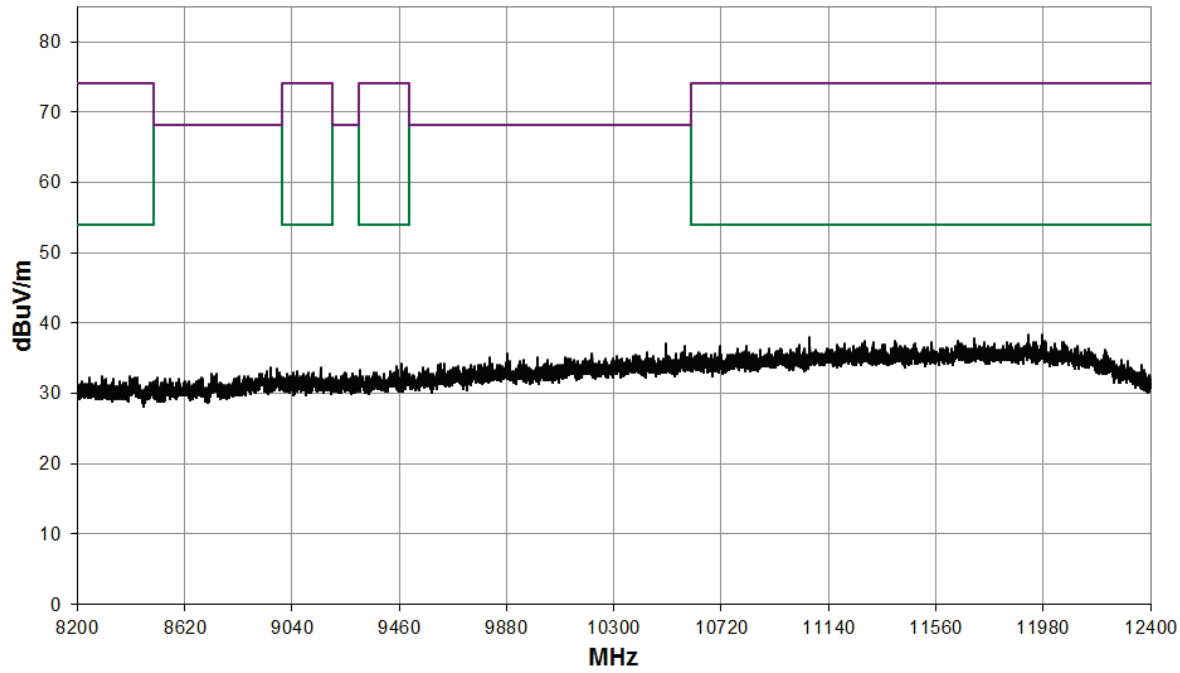
30 MHz to 1 GHz



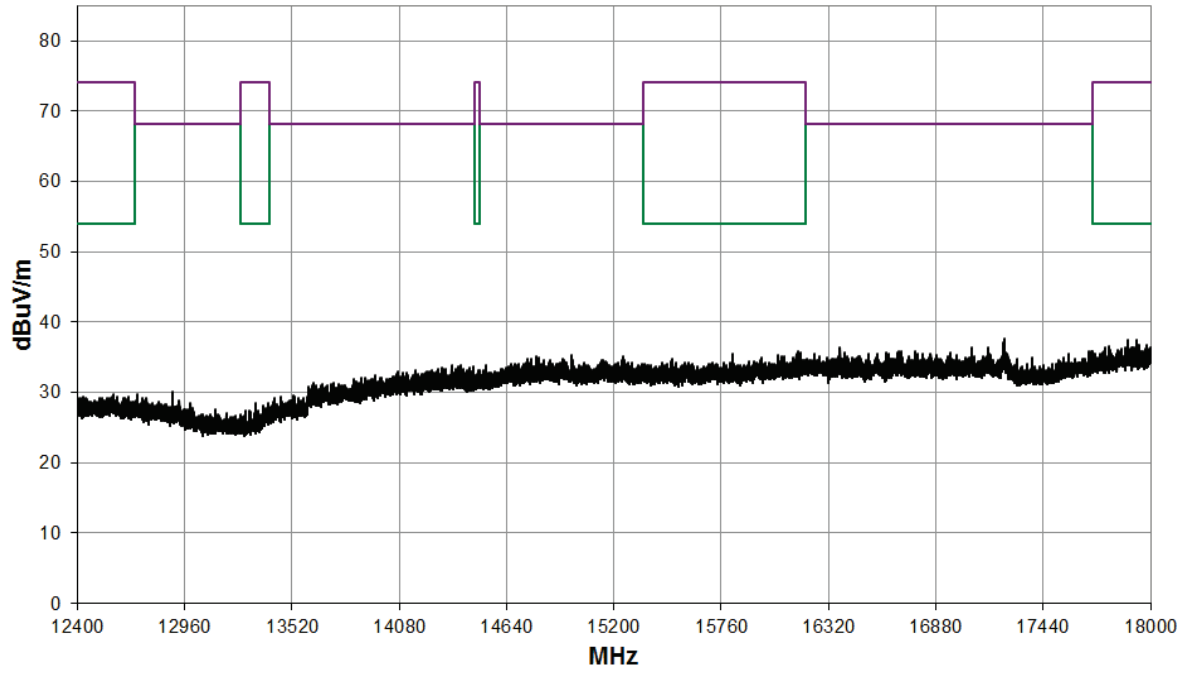
1 GHz to 8.2 GHz



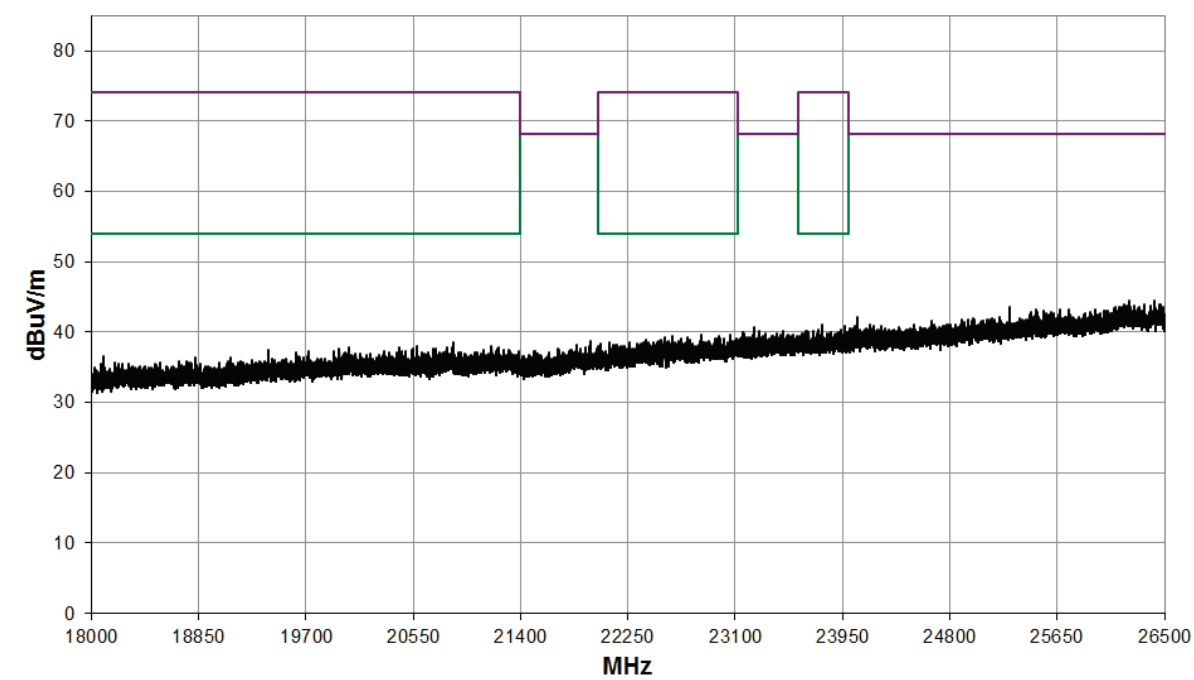
8.2 GHz to 12.4 GHz



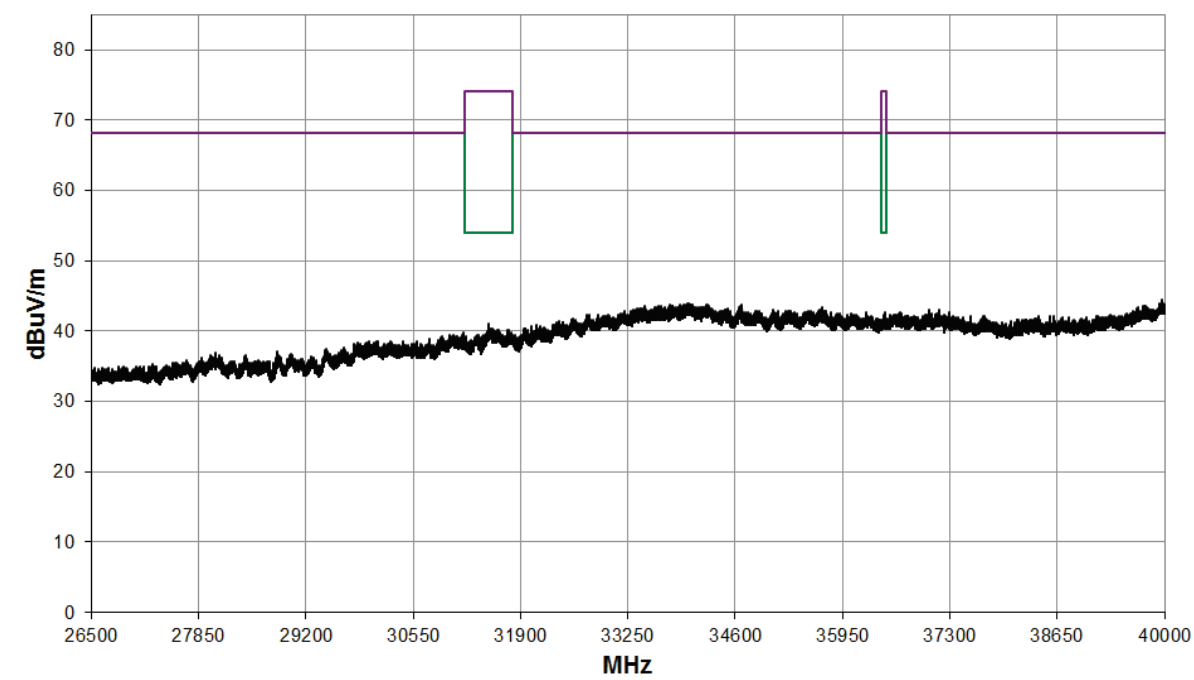
12.4 GHz to 18 GHz



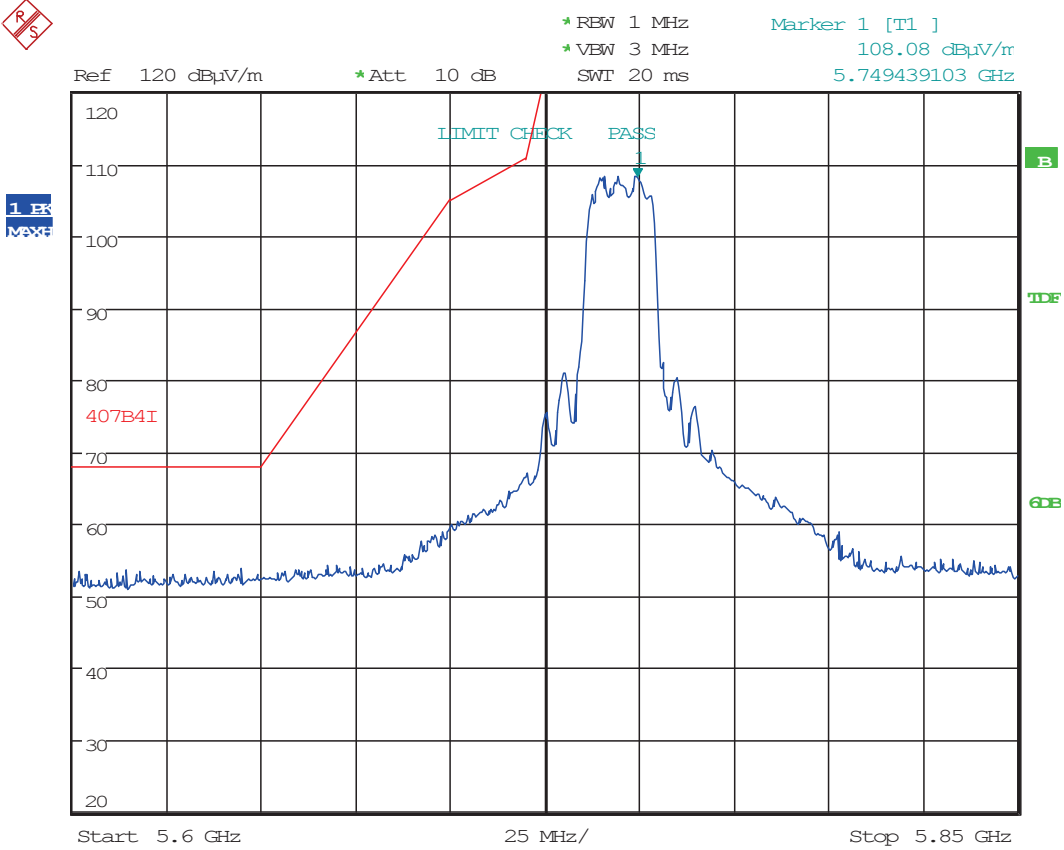
18 GHz to 26.5 GHz



26.5 GHz to 40 GHz



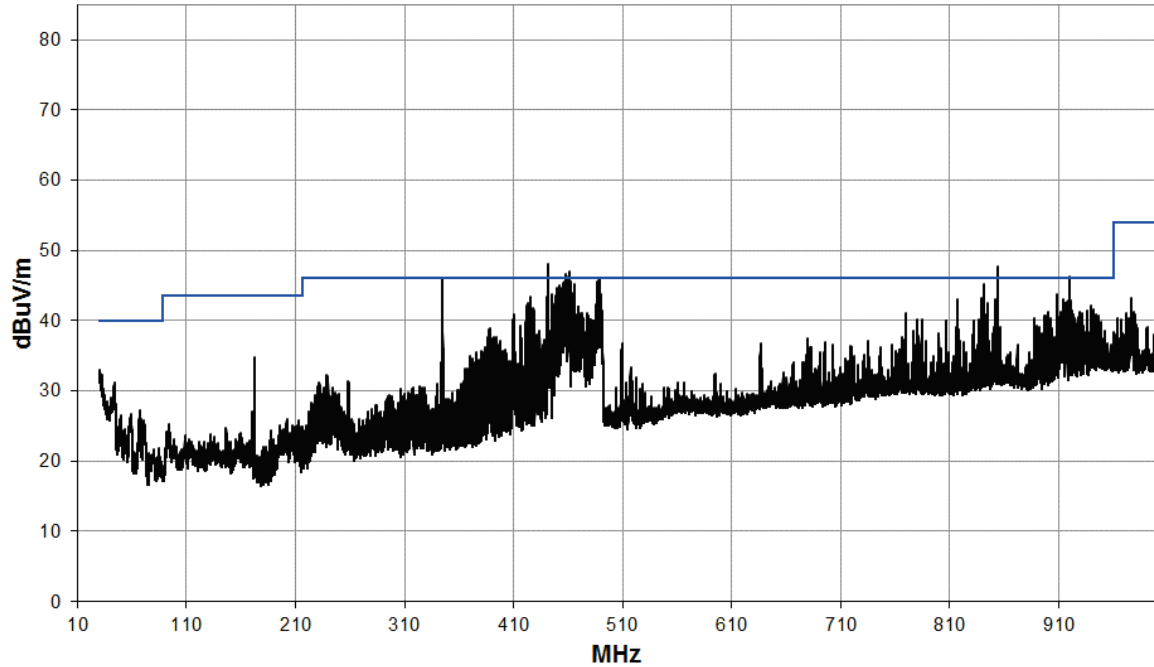
Band Edge



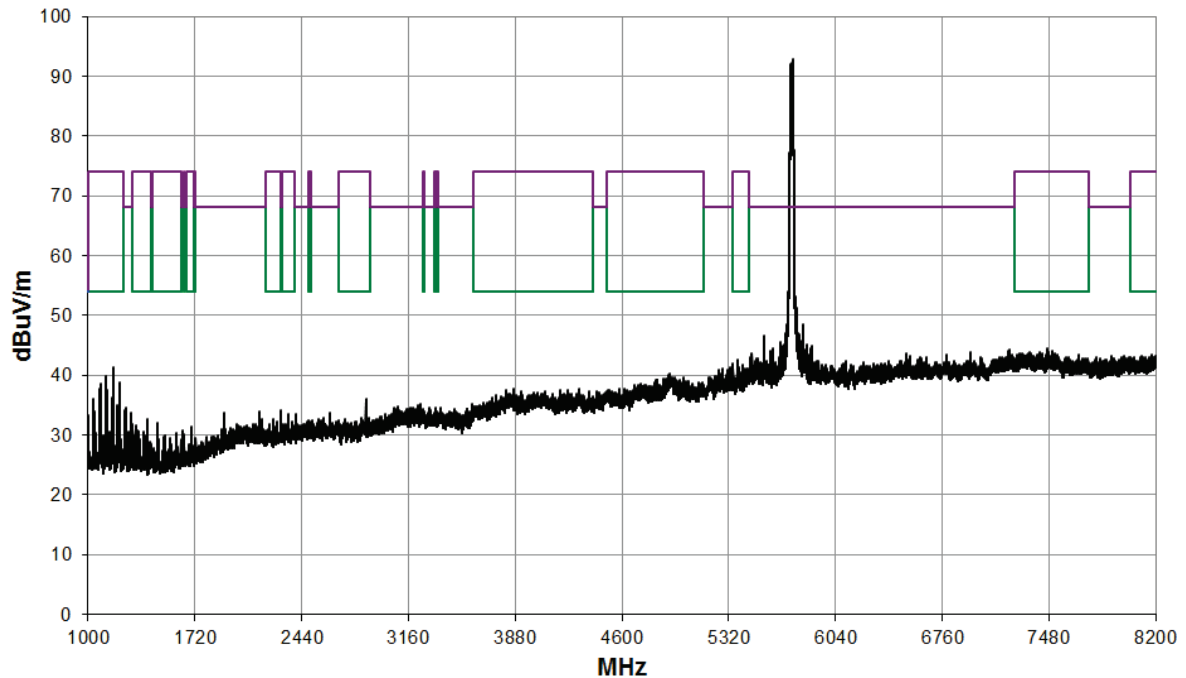
Date: 21.JUL.2020 14:27:57

SISO; Mode: 802.11n20; Channel: CH149; Frequency: 5745 MHz; Bandwidth: 20 MHz; MCS Index: 7										
Detector	Freq. (MHz)	Meas'd Emission (dBμV)	Cable Loss (dB)	Antenna Factor (dB/m)	Pre-amp Gain (dB)	Duty Cycle Corr'n (dB)	Field Strength (dBμV/m)	Distance Extrap'n Factor (dB)	Field Strength (μV/m)	Limit (μV/m)
No emissions within 20 dB of the limit.										

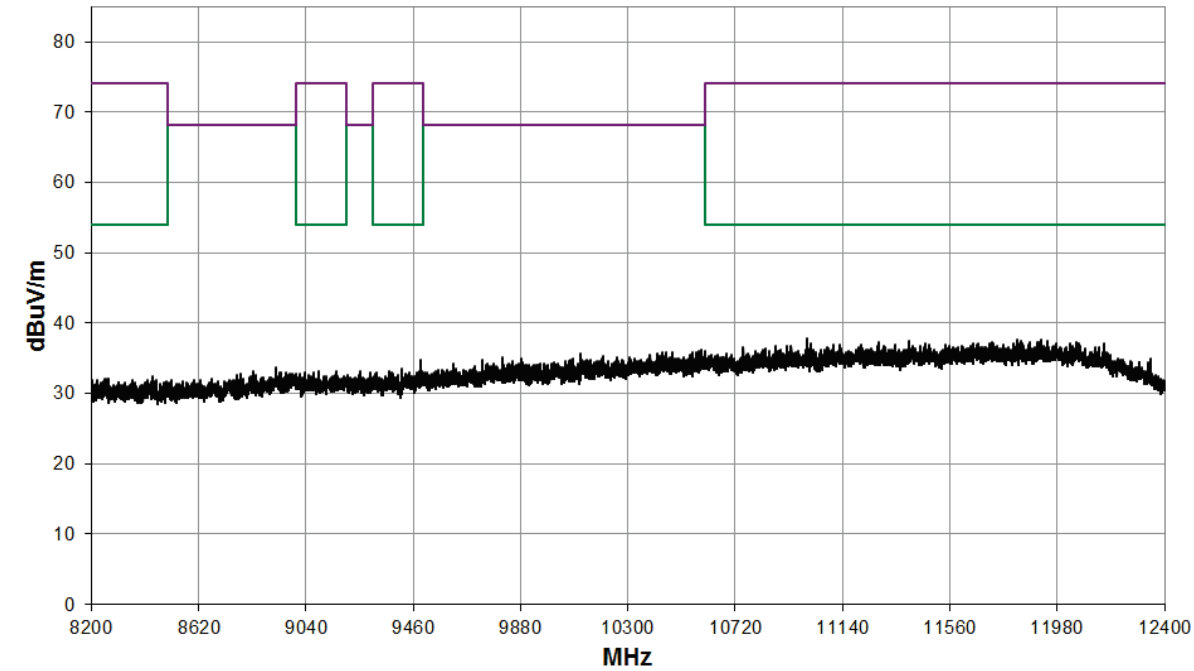
30 MHz to 1 GHz



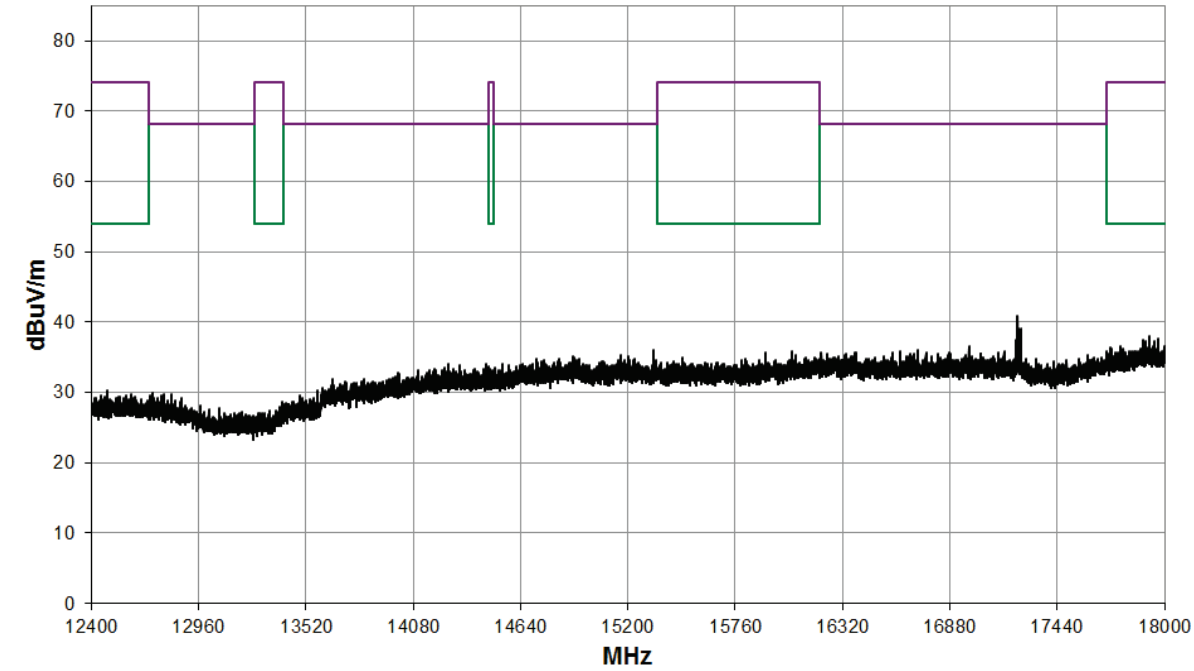
1 GHz to 8.2 GHz



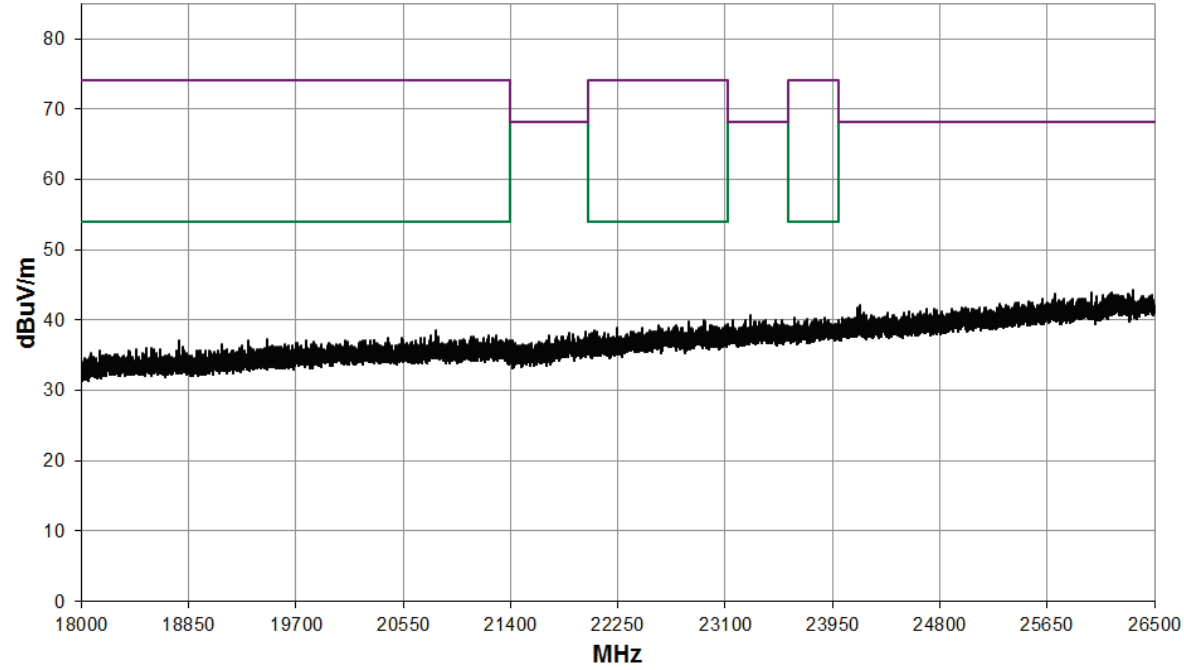
8.2 GHz to 12.4 GHz



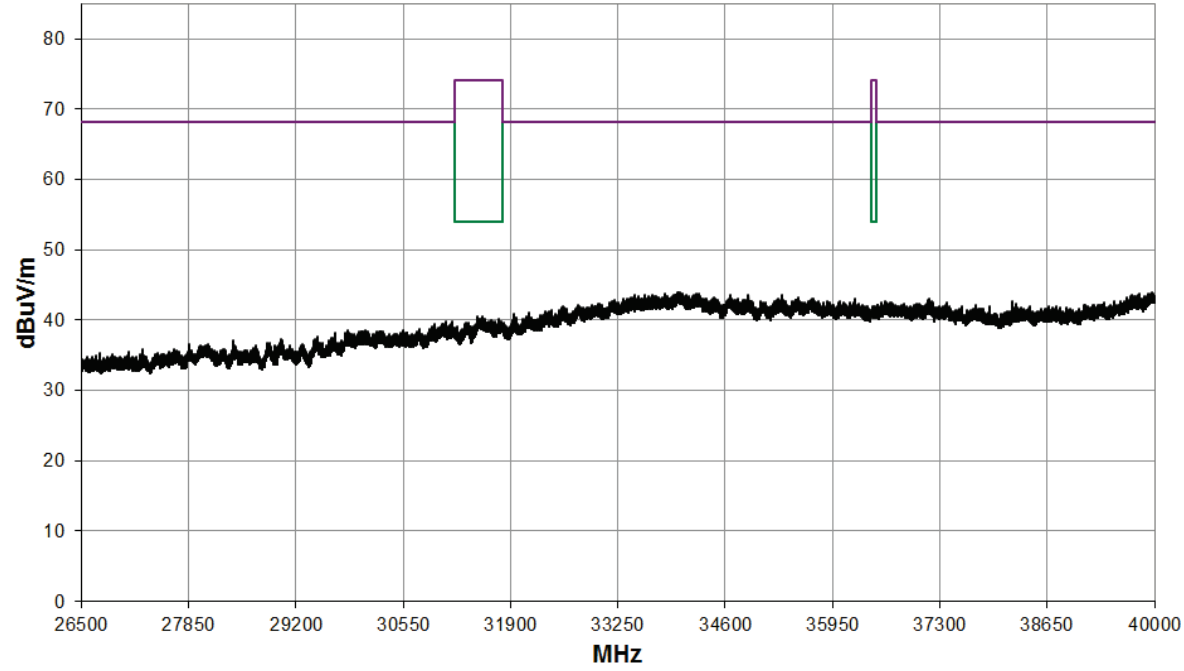
12.4 GHz to 18 GHz



18 GHz to 26.5 GHz



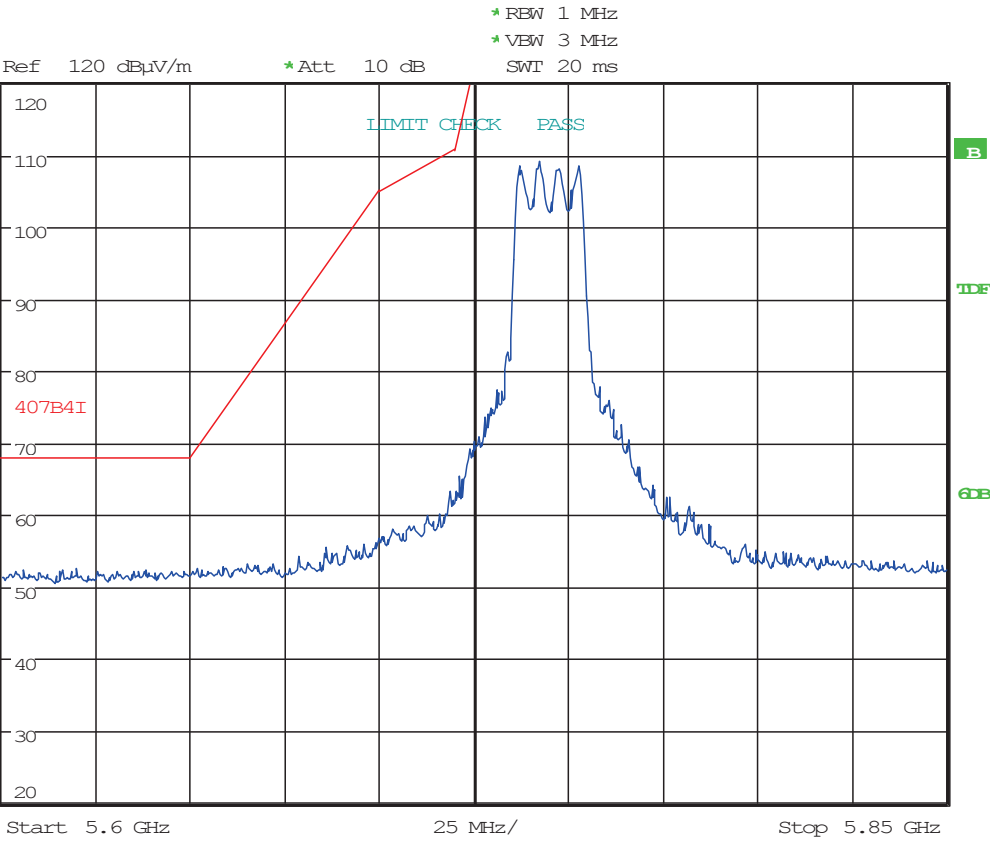
26.5 GHz to 40 GHz



Band Edge



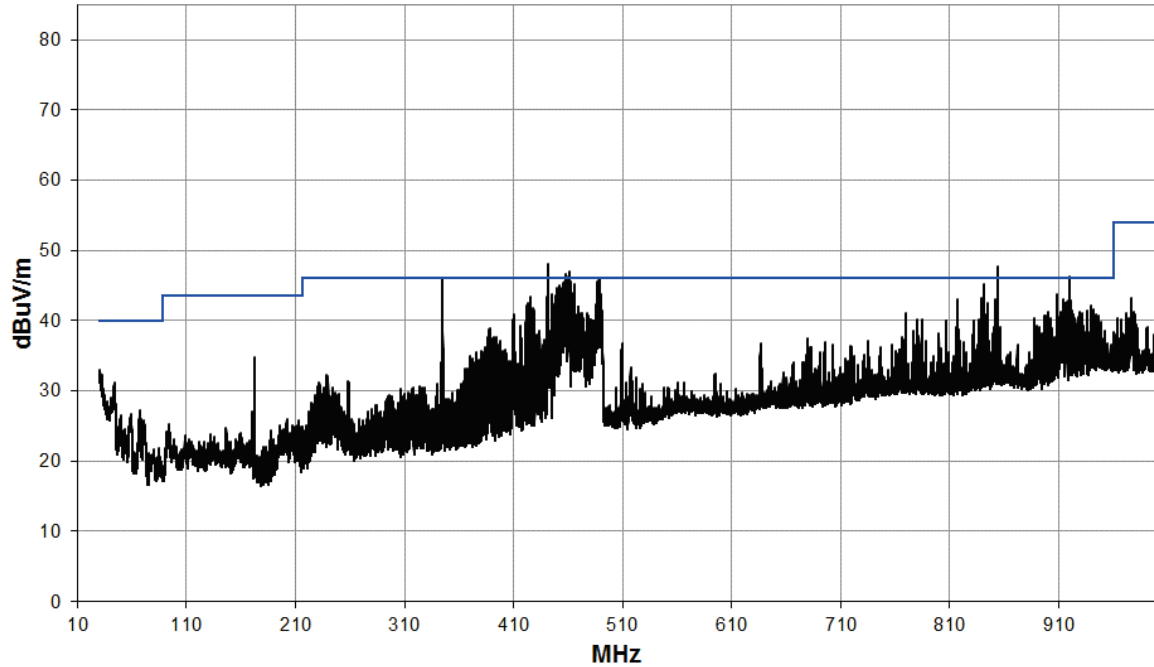
1 PK
MAX



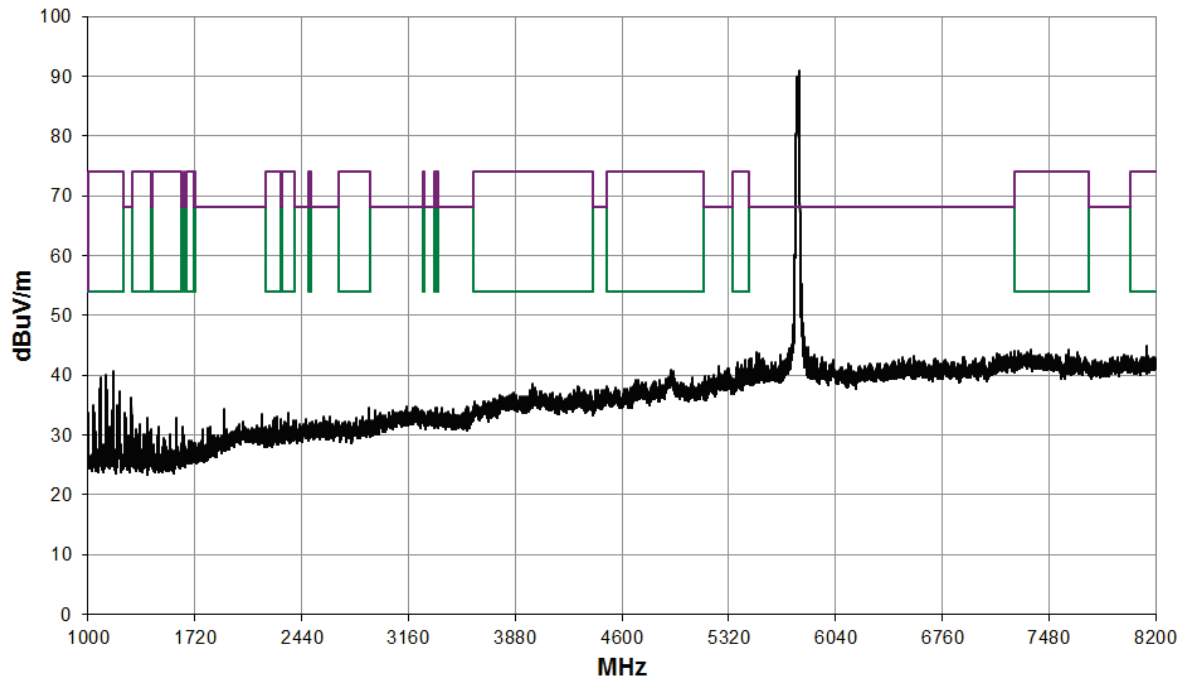
Date: 21.JUL.2020 14:28:42

SISO; Mode: 802.11n20; Channel: CH157; Frequency: 5785 MHz; Bandwidth: 20 MHz; MCS Index: 0										
Detector	Freq. (MHz)	Meas'd Emission (dBμV)	Cable Loss (dB)	Antenna Factor (dB/m)	Pre-amp Gain (dB)	Duty Cycle Corr'n (dB)	Field Strength (dBμV/m)	Distance Extrap'n Factor (dB)	Field Strength (μV/m)	Limit (μV/m)
No emissions within 20 dB of the limit.										

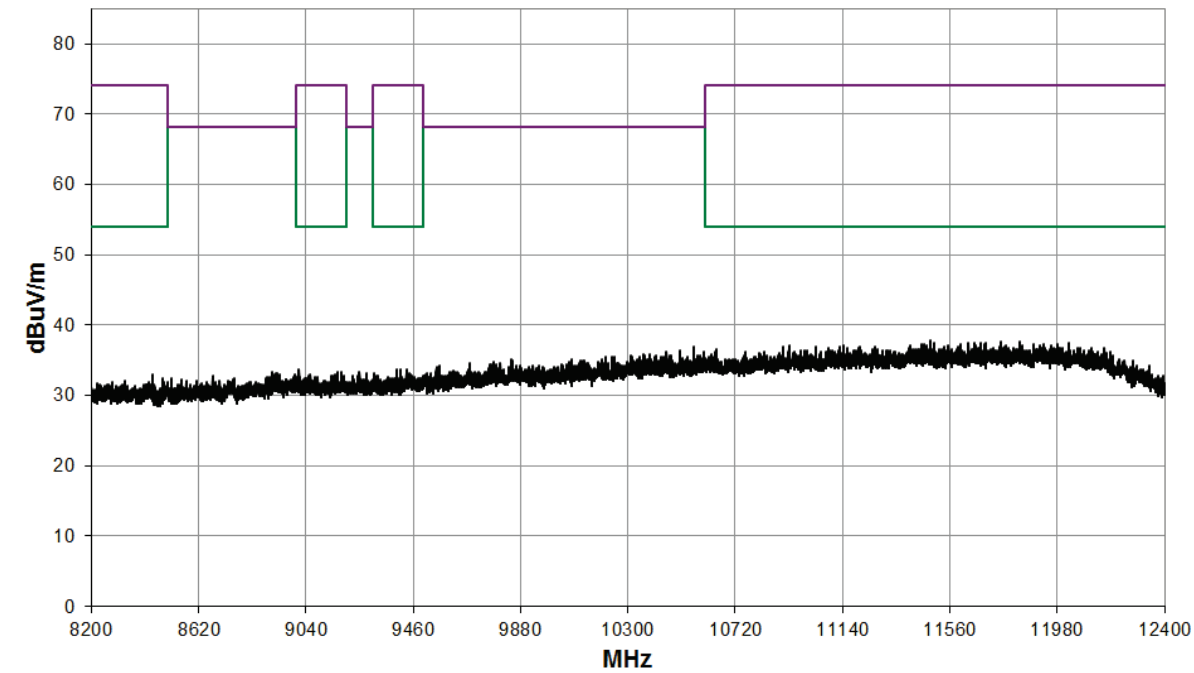
30 MHz to 1 GHz



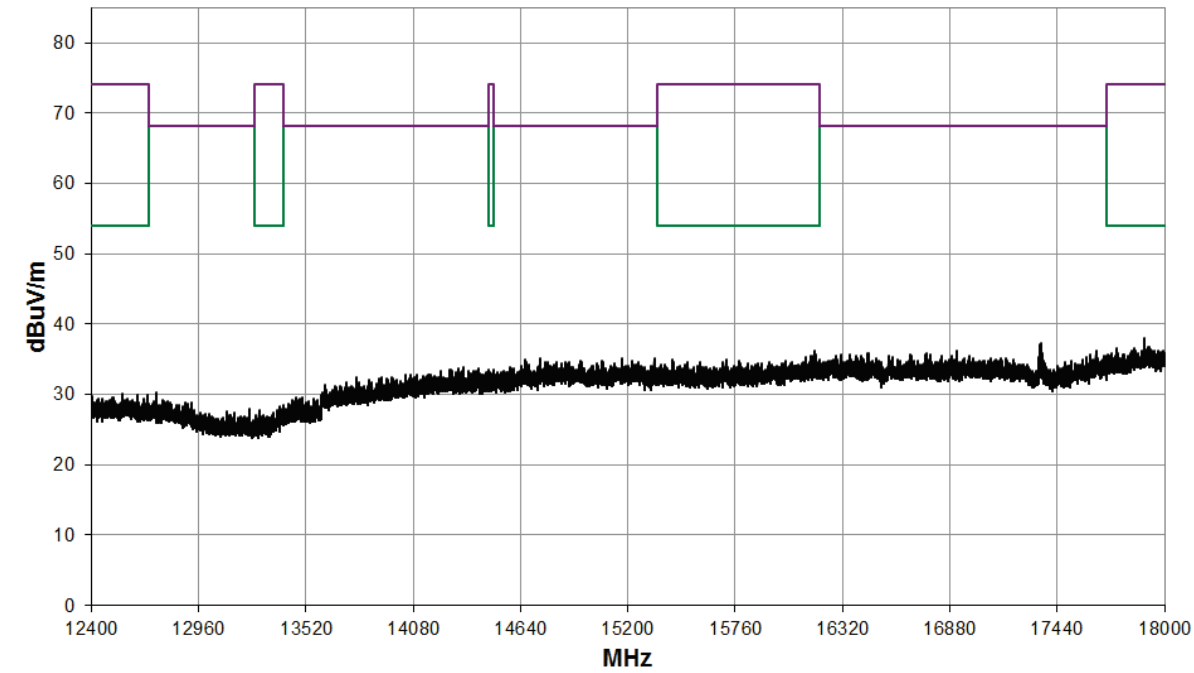
1 GHz to 8.2 GHz



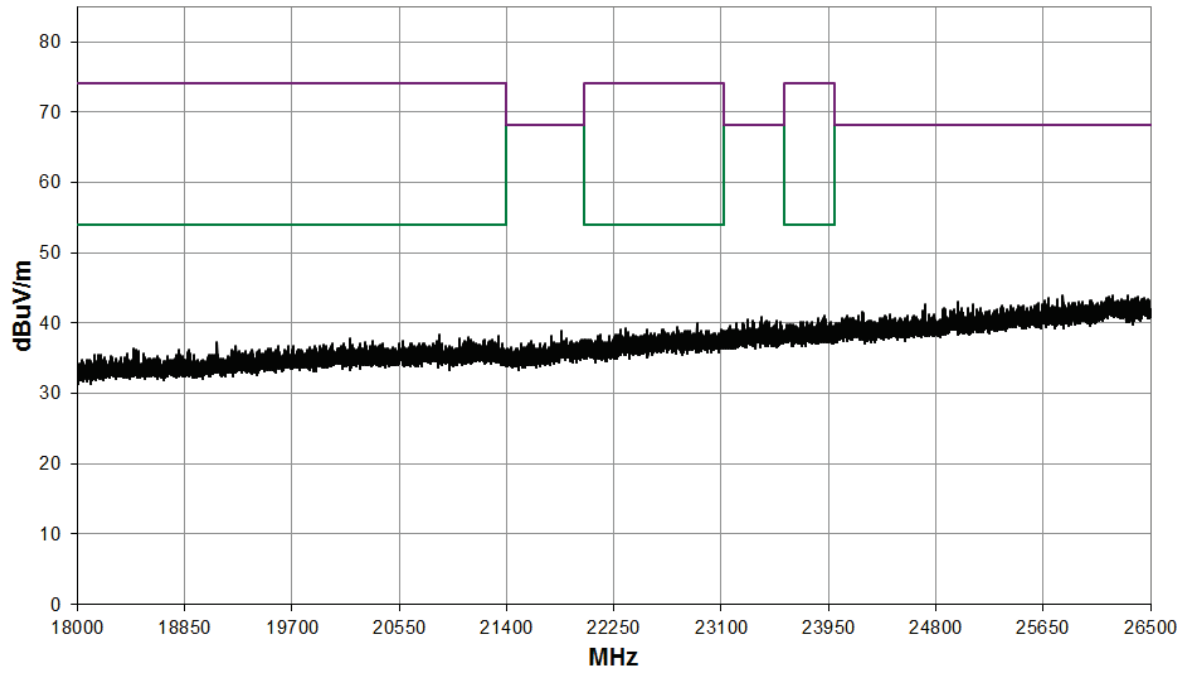
8.2 GHz to 12.4 GHz



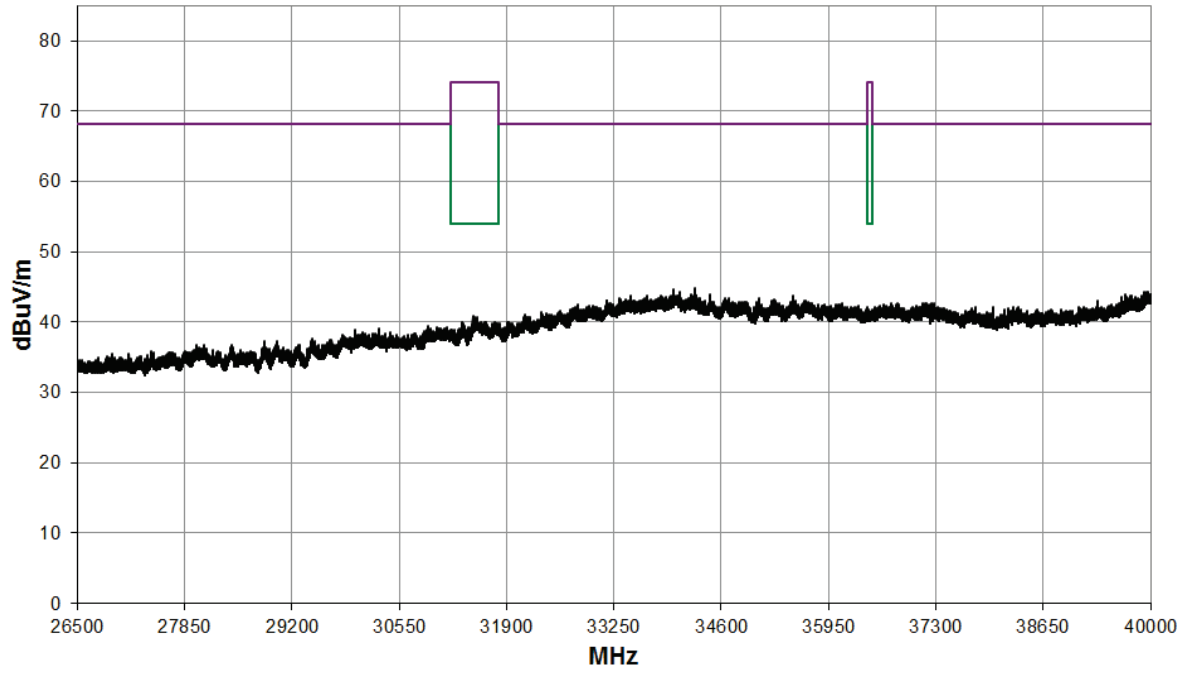
12.4 GHz to 18 GHz



18 GHz to 26.5 GHz

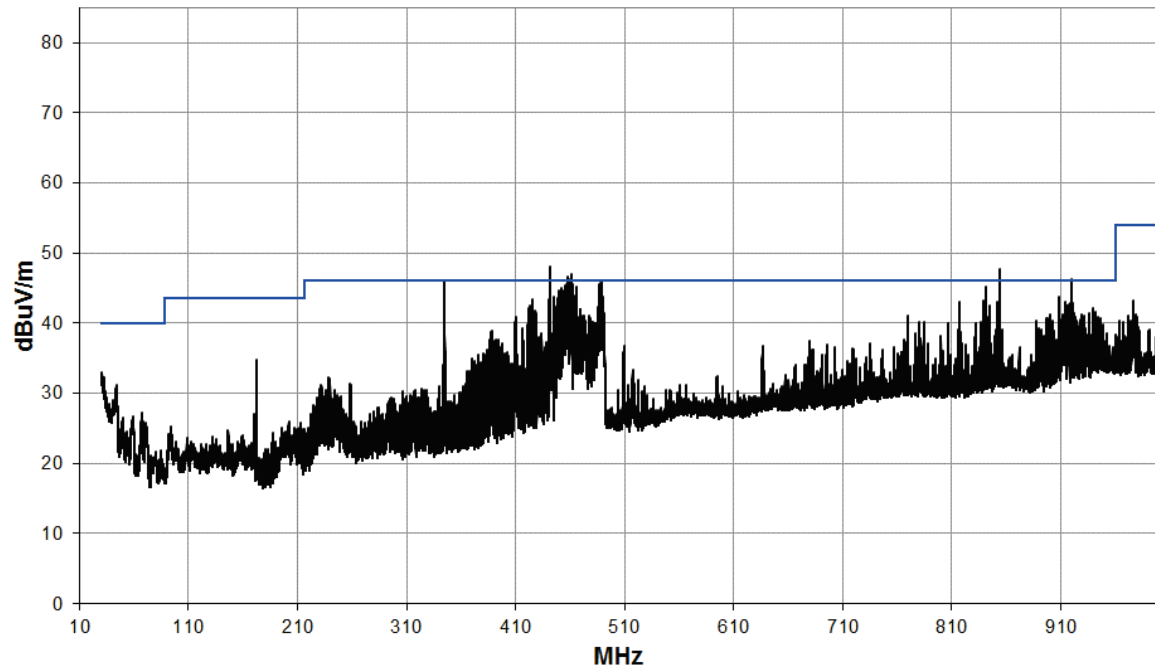


26.5 GHz to 40 GHz

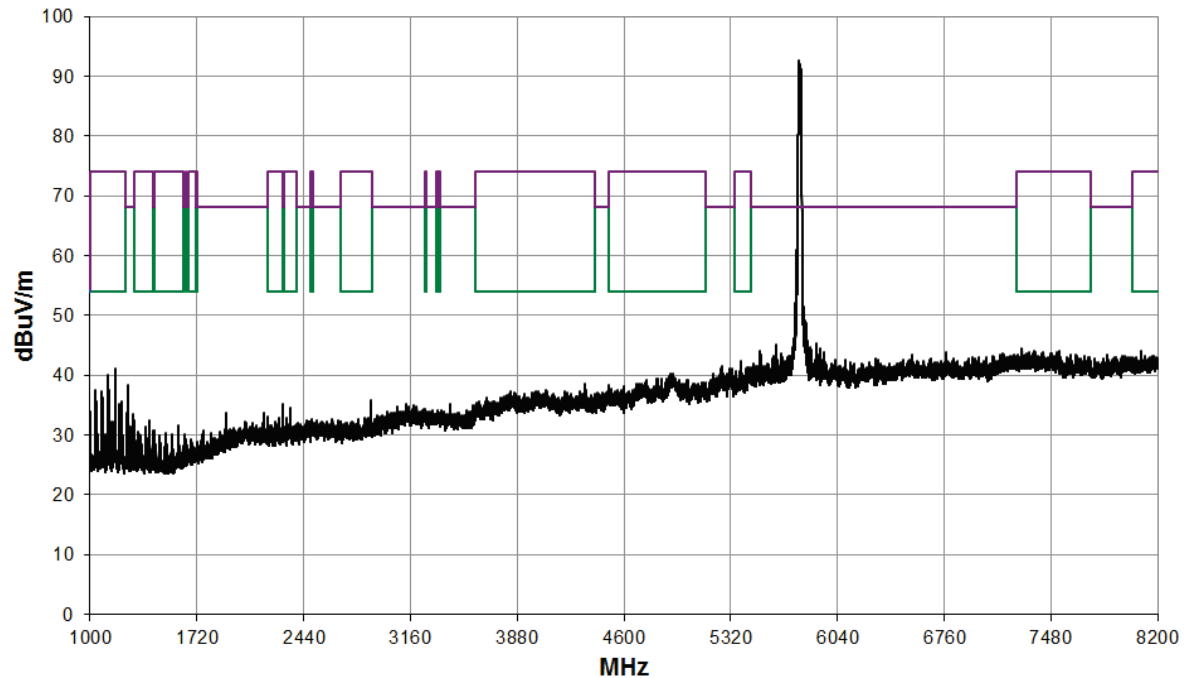


SISO; Mode: 802.11n20; Channel: CH157; Frequency: 5785 MHz; Bandwidth: 20 MHz; MCS Index: 7										
Detector	Freq. (MHz)	Meas'd Emission (dBμV)	Cable Loss (dB)	Antenna Factor (dB/m)	Pre-amp Gain (dB)	Duty Cycle Corr'n (dB)	Field Strength (dBμV/m)	Distance Extrap'n Factor (dB)	Field Strength (μV/m)	Limit (μV/m)

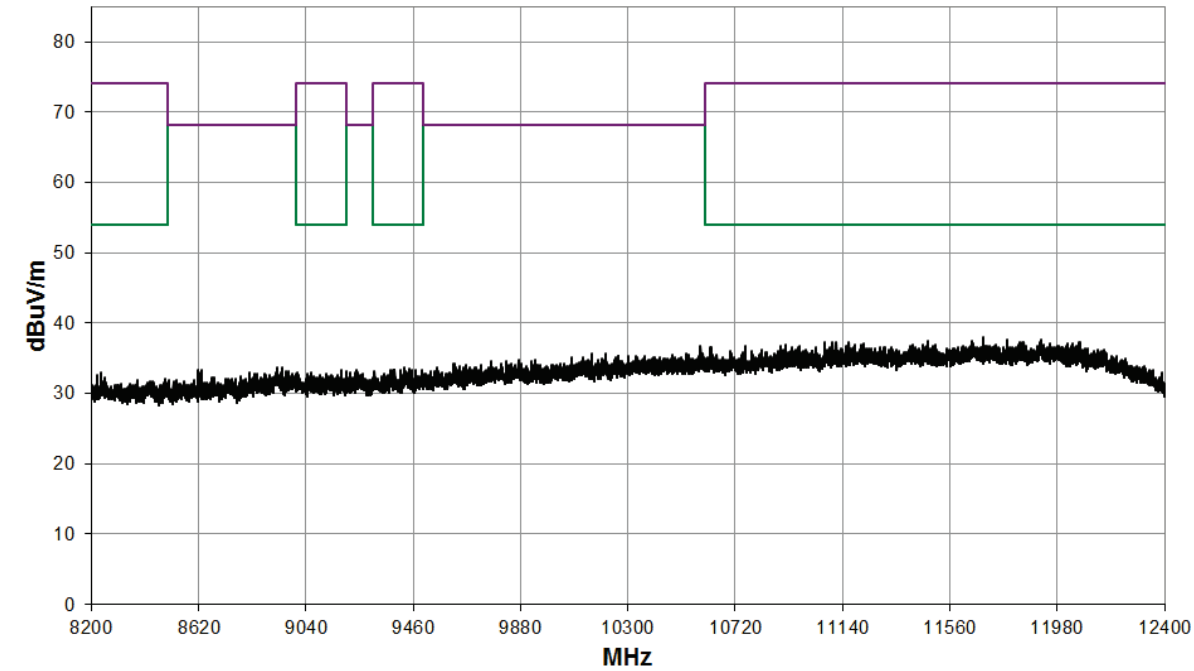
30 MHz to 1 GHz



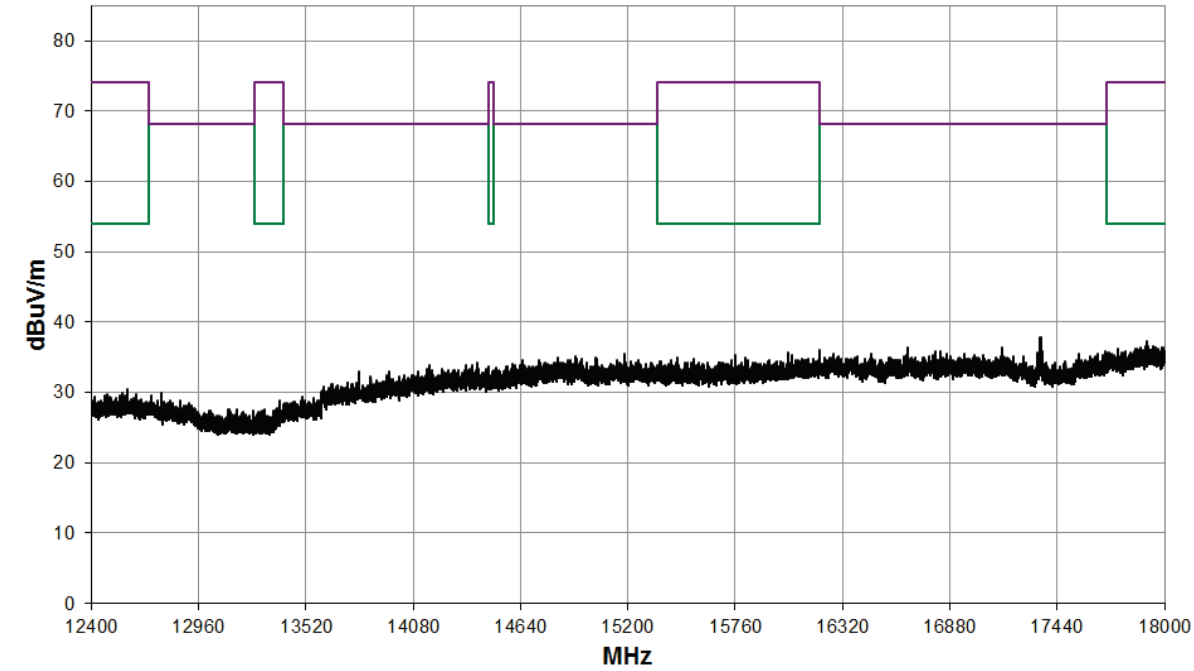
1 GHz to 8.2 GHz



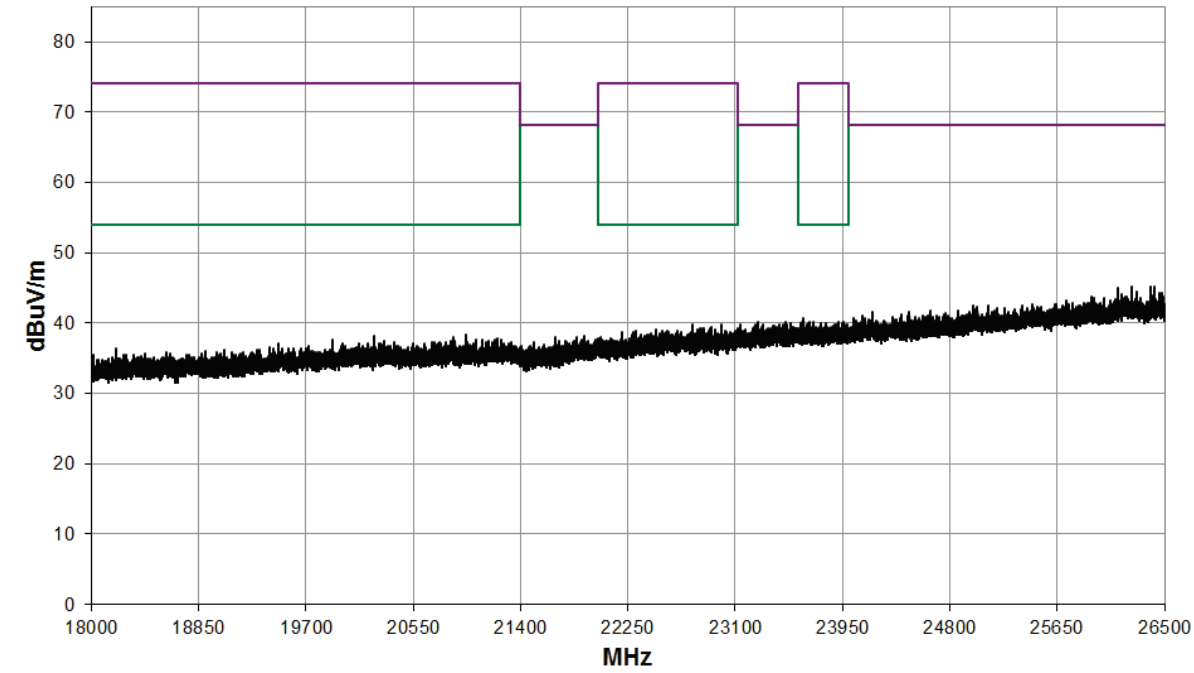
8.2 GHz to 12.4 GHz



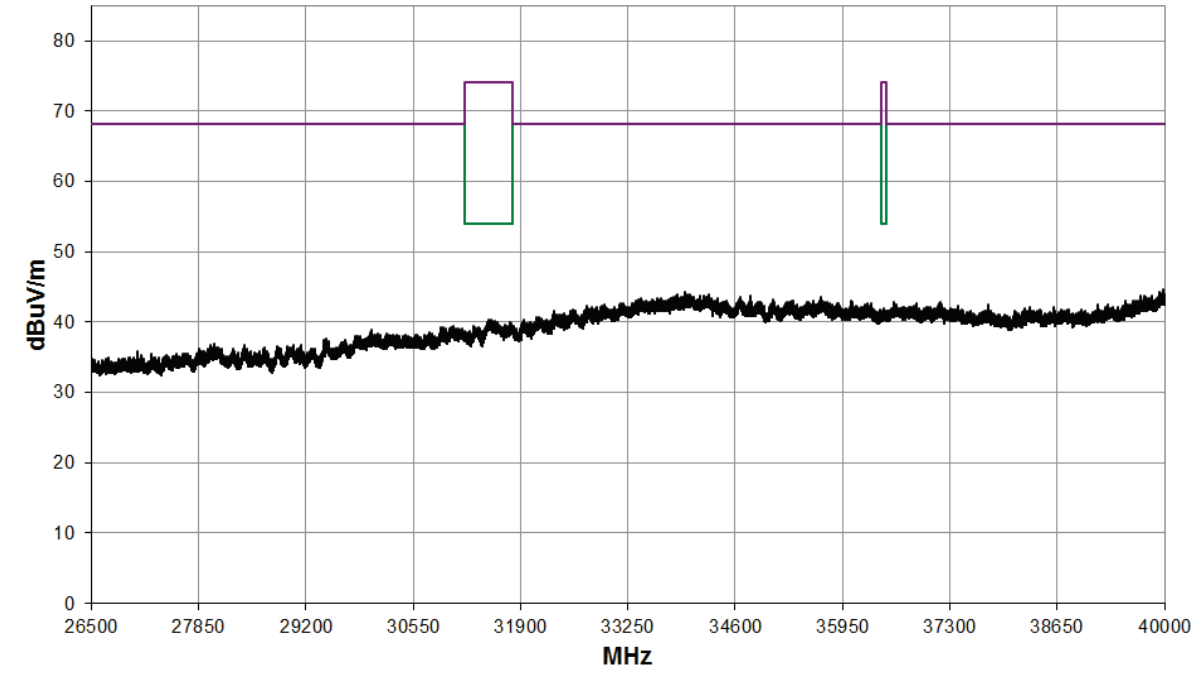
12.4 GHz to 18 GHz



18 GHz to 26.5 GHz

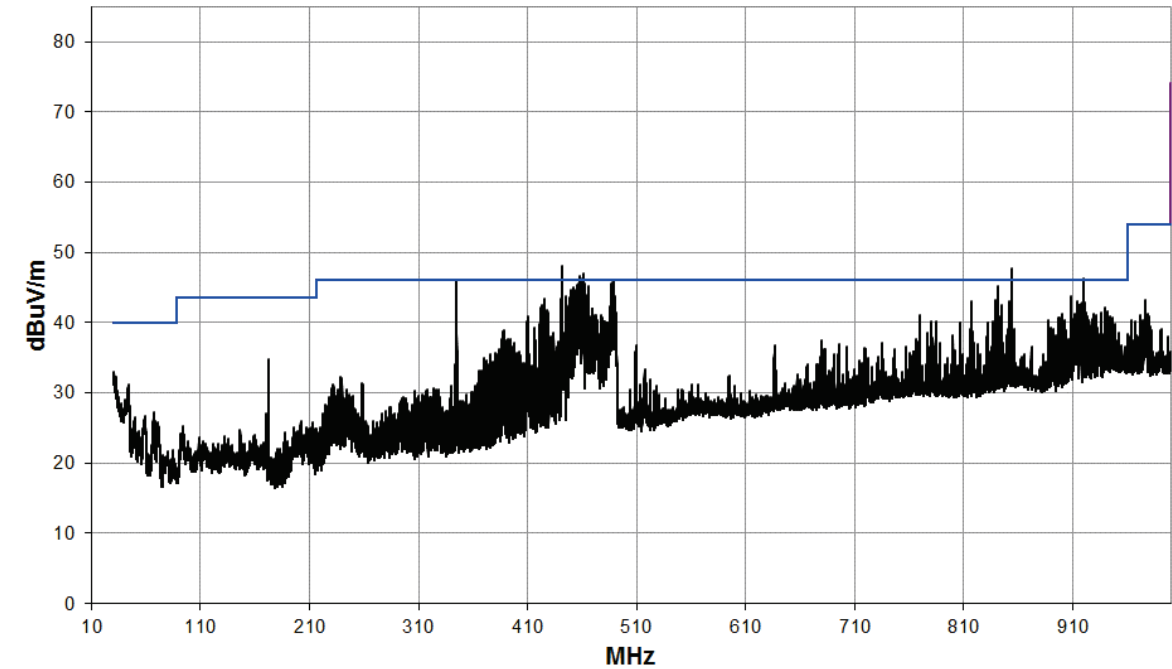


26.5 GHz to 40 GHz

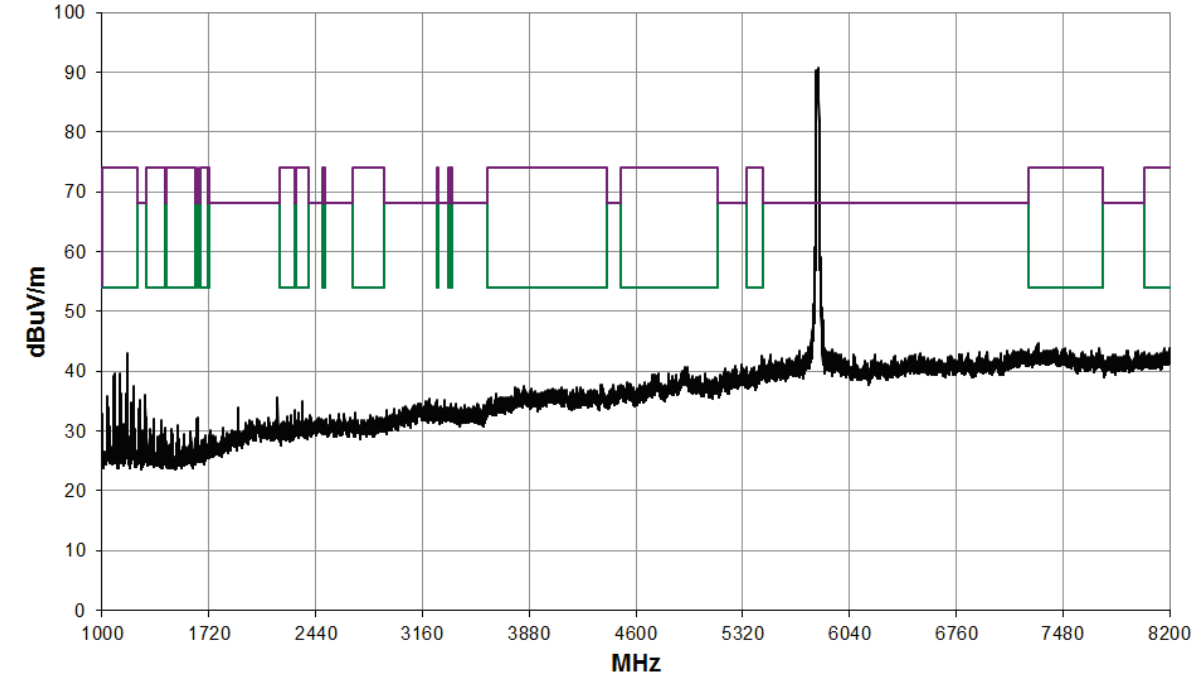


SISO; Mode: 802.11n20; Channel: CH165; Frequency: 5825 MHz; Bandwidth: 20 MHz; MCS Index: 0										
Detector	Freq. (MHz)	Meas'd Emission (dBμV)	Cable Loss (dB)	Antenna Factor (dB/m)	Pre-amp Gain (dB)	Duty Cycle Corr'n (dB)	Field Strength (dBμV/m)	Distance Extrap'n Factor (dB)	Field Strength (μV/m)	Limit (μV/m)
No emissions within 20 dB of the limit.										

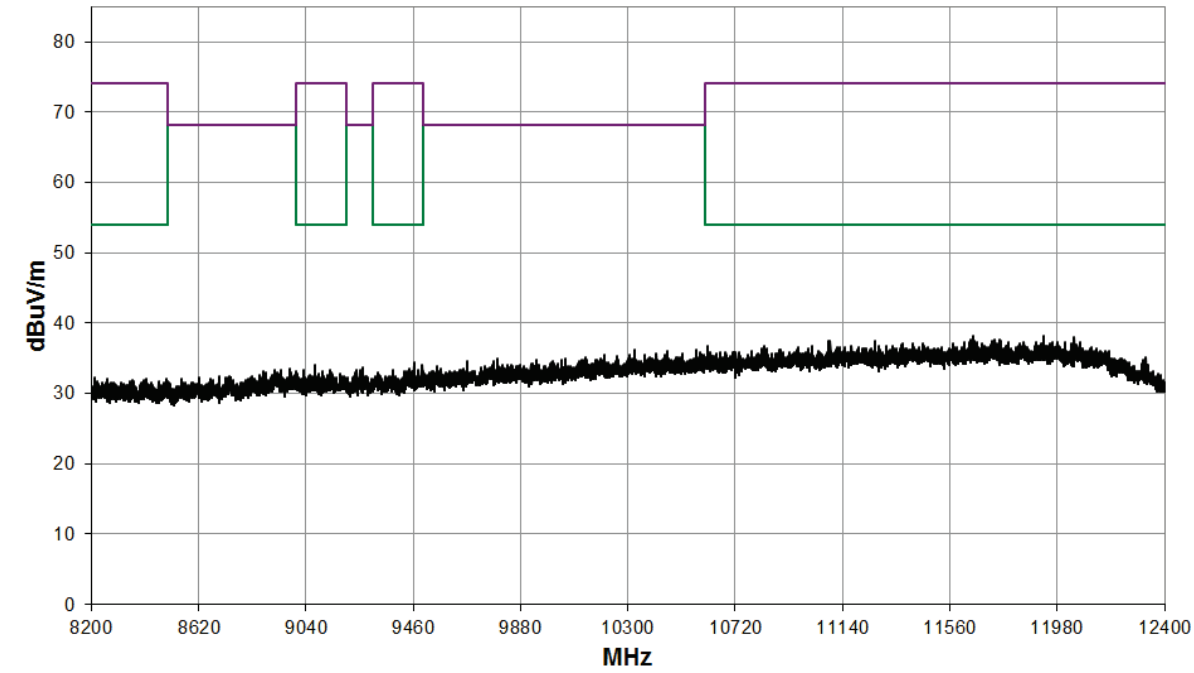
30 MHz to 1 GHz



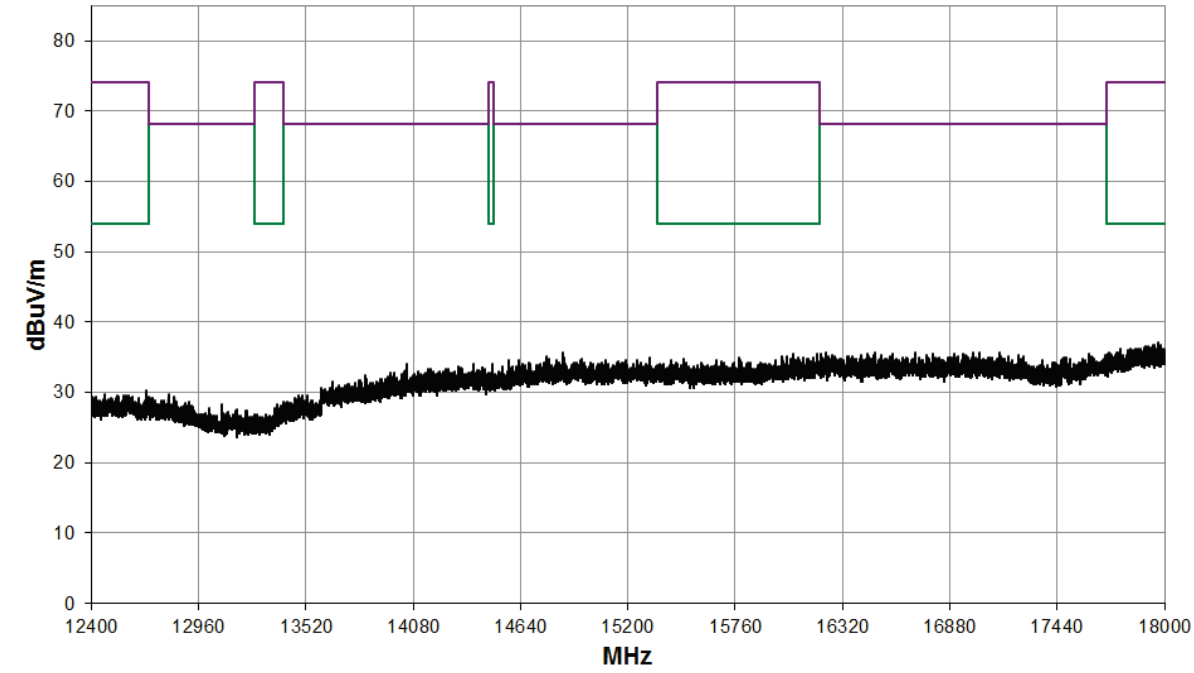
1 GHz to 8.2 GHz



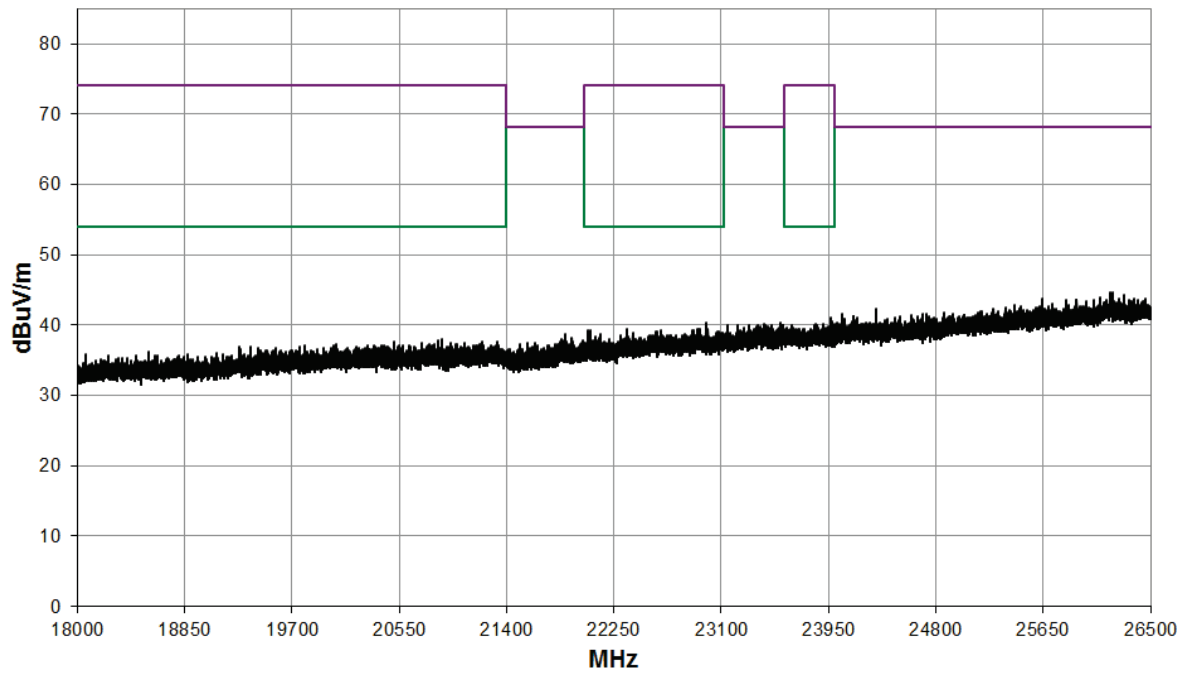
8.2 GHz to 12.4 GHz



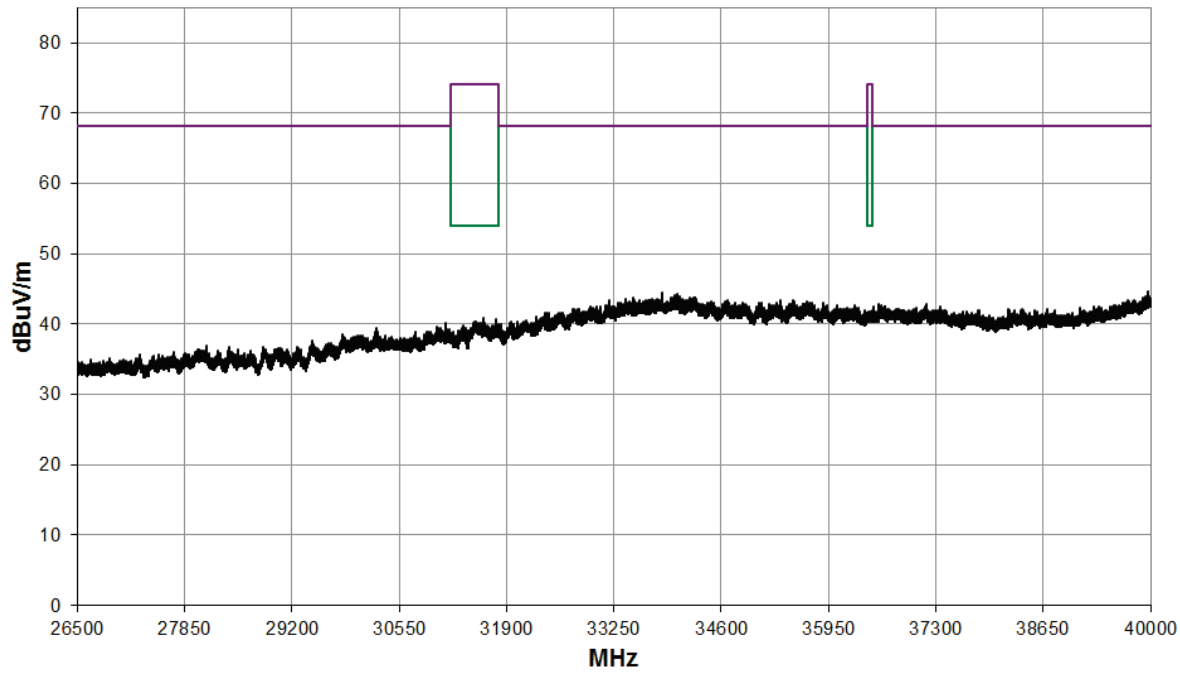
12.4 GHz to 18 GHz



18 GHz to 26.5 GHz



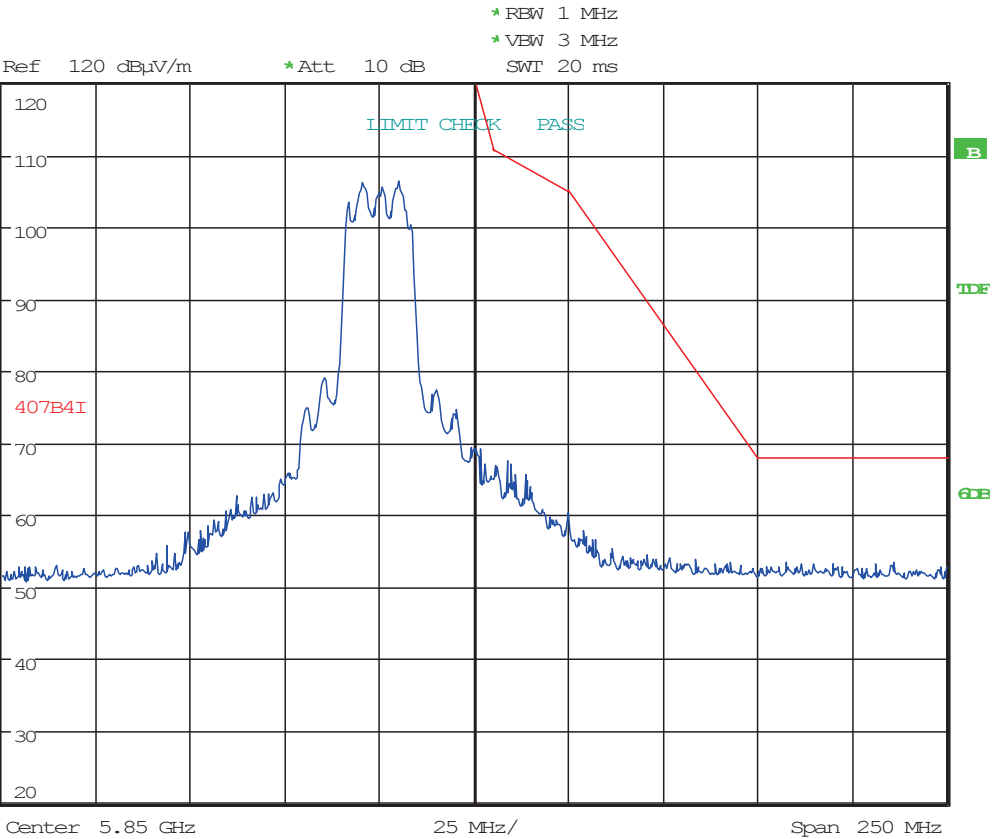
26.5 GHz to 40 GHz



Band Edge



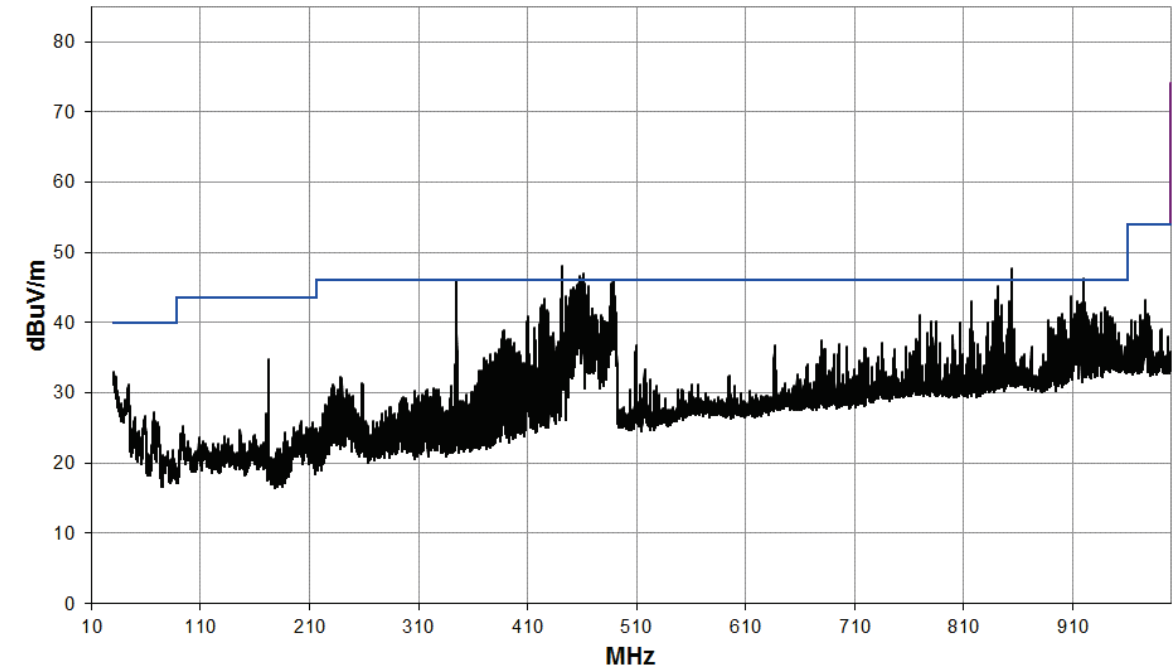
1 PK
MAX



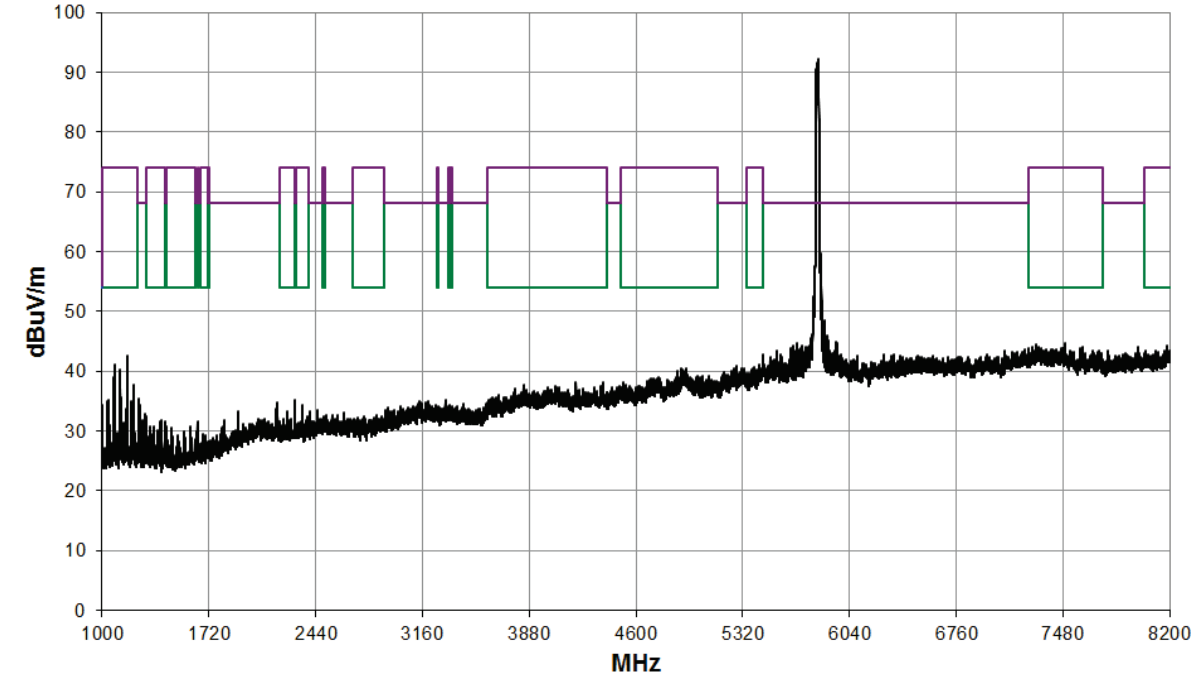
Date: 21.JUL.2020 12:45:30

SISO; Mode: 802.11n20; Channel: CH165; Frequency: 5825 MHz; Bandwidth: 20 MHz; MCS Index: 7										
Detector	Freq. (MHz)	Meas'd Emission (dBμV)	Cable Loss (dB)	Antenna Factor (dB/m)	Pre-amp Gain (dB)	Duty Cycle Corr'n (dB)	Field Strength (dBμV/m)	Distance Extrap'n Factor (dB)	Field Strength (μV/m)	Limit (μV/m)
No emissions within 20 dB of the limit.										

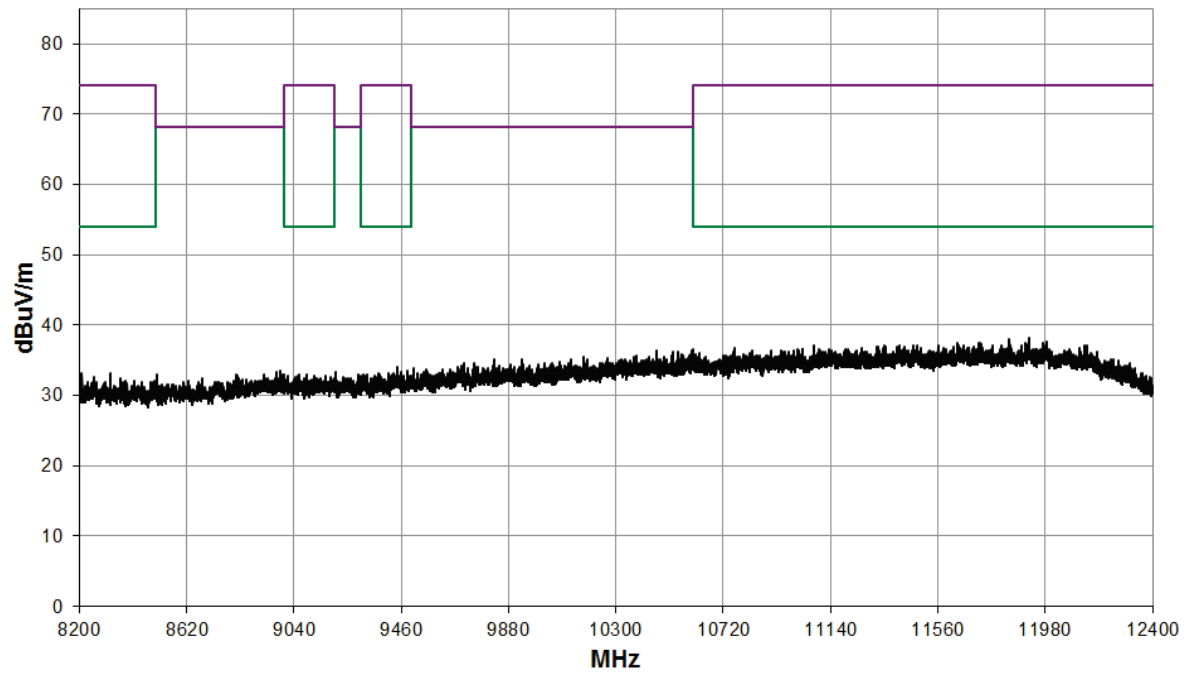
30 MHz to 1 GHz



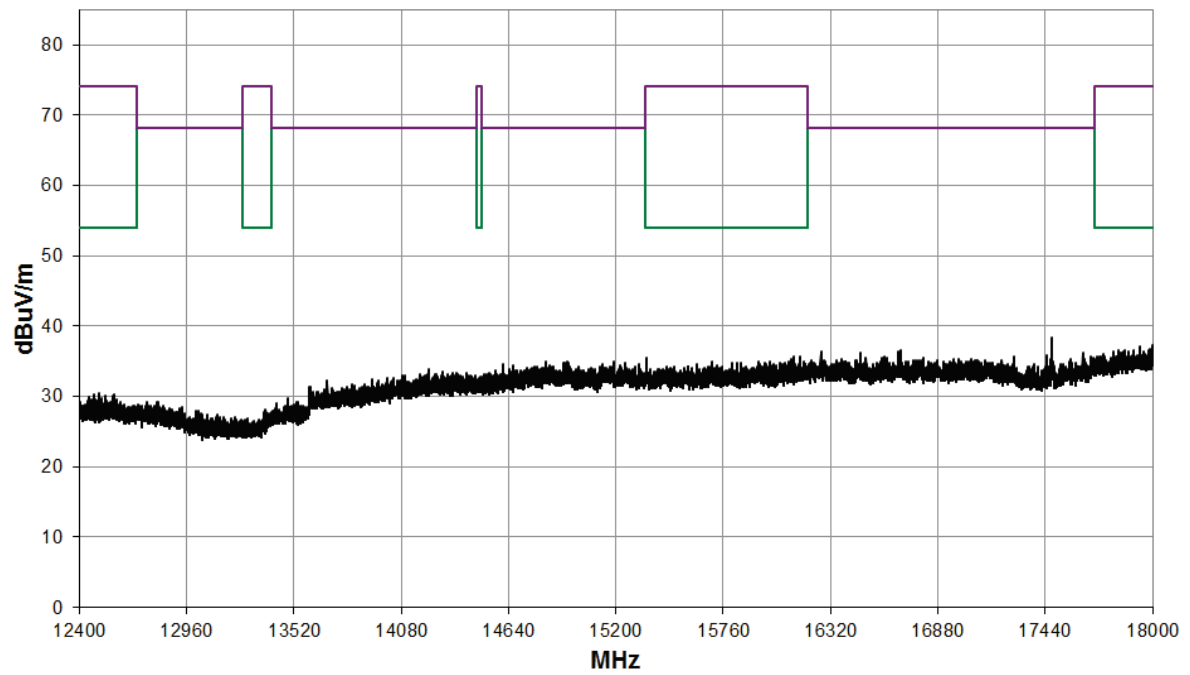
1 GHz to 8.2 GHz



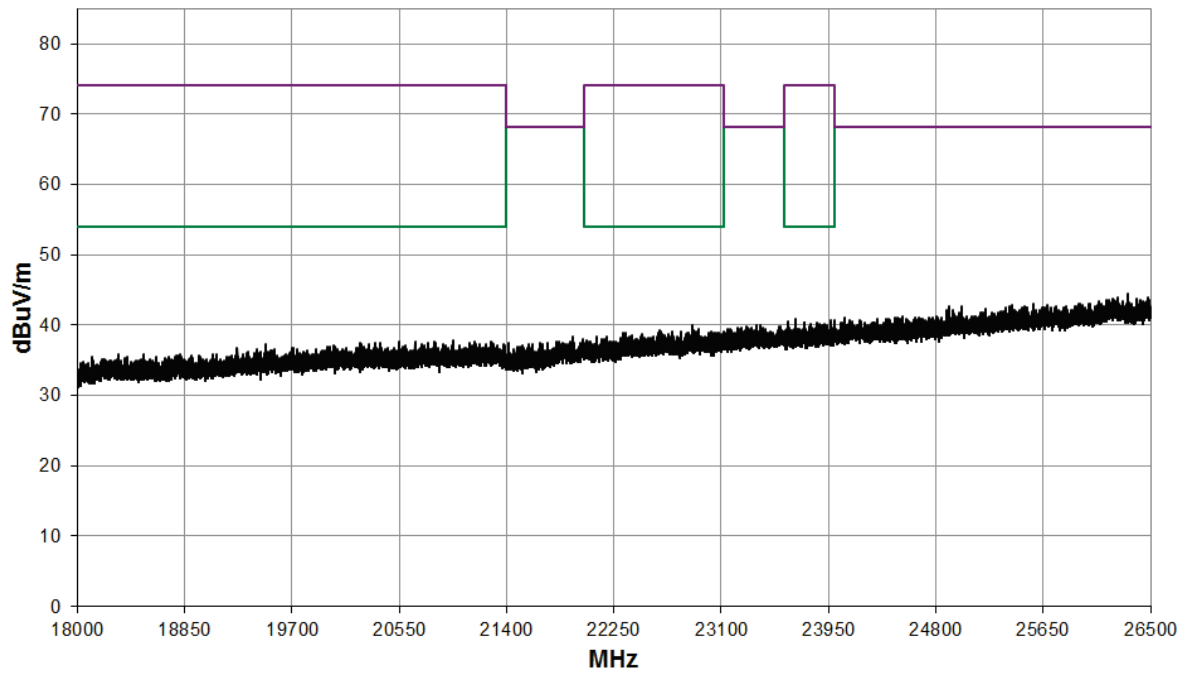
8.2 GHz to 12.4 GHz



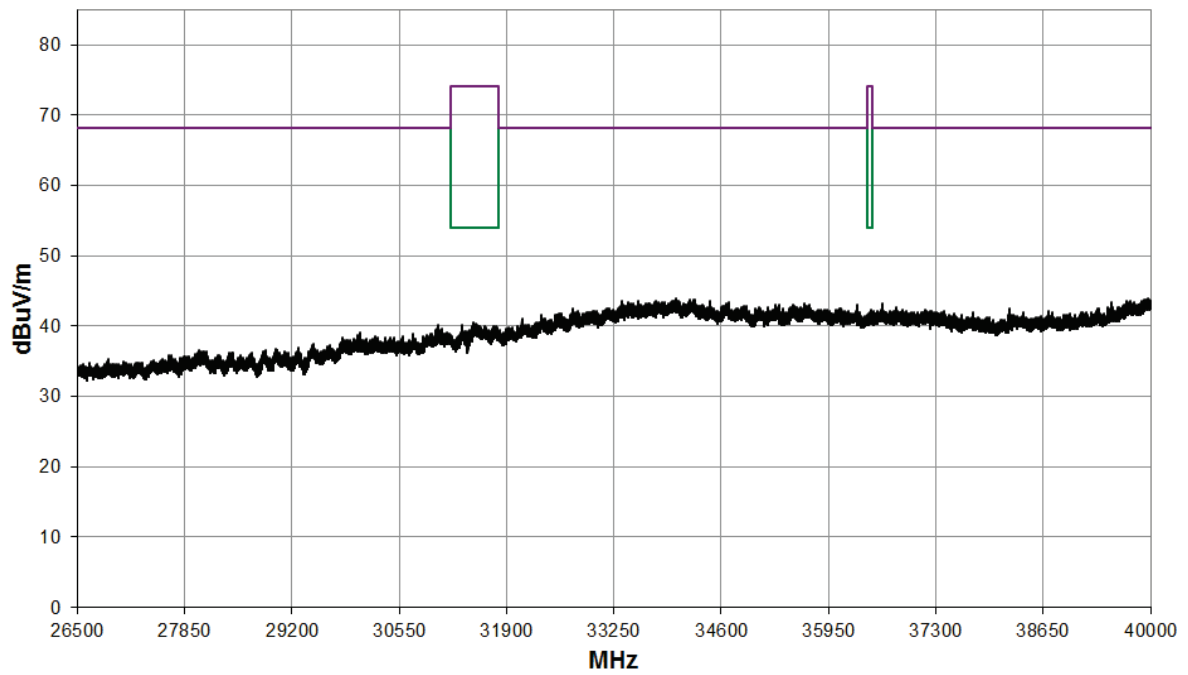
12.4 GHz to 18 GHz



18 GHz to 26.5 GHz



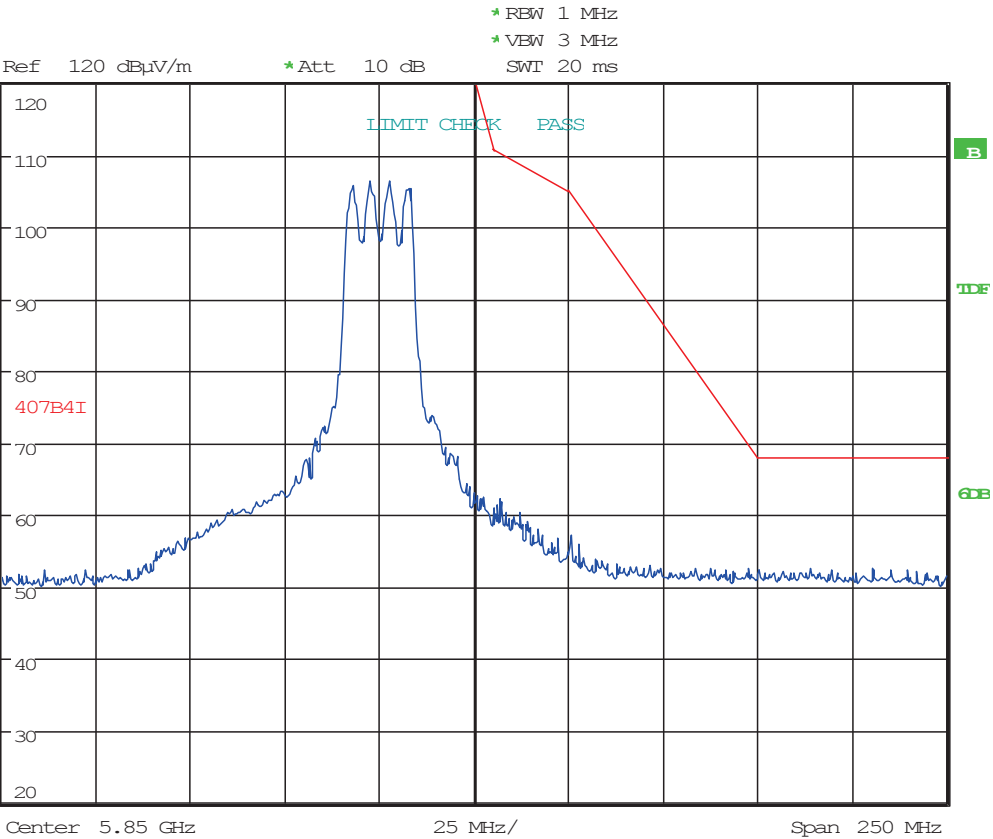
26.5 GHz to 40 GHz



Band Edge



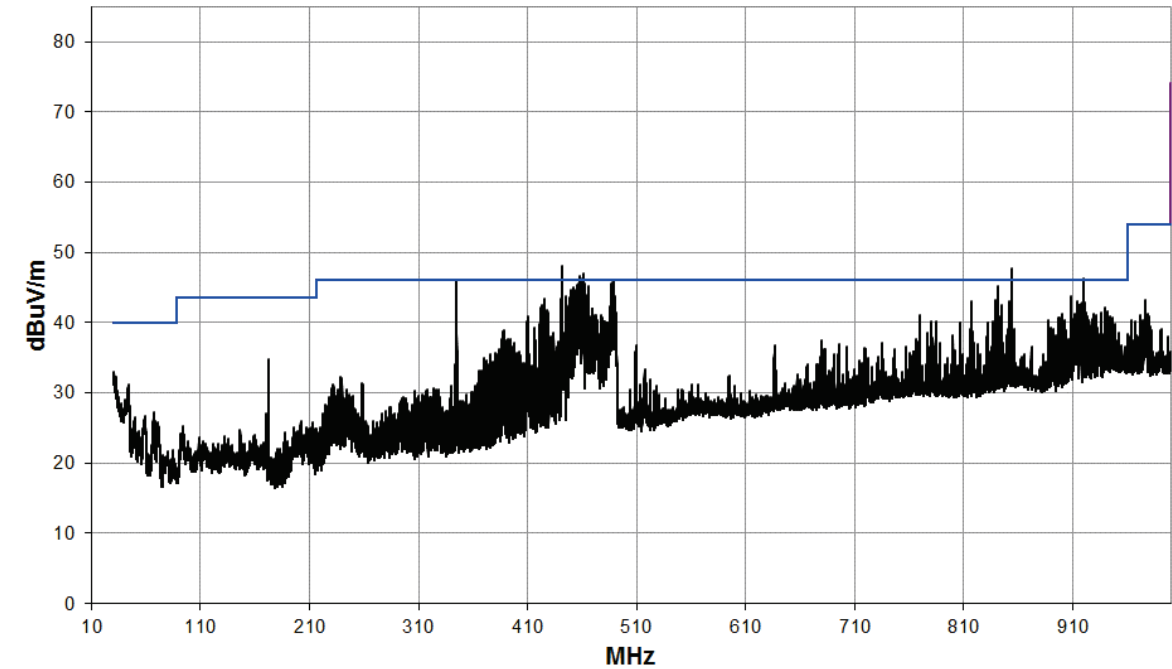
1 PK
MAX



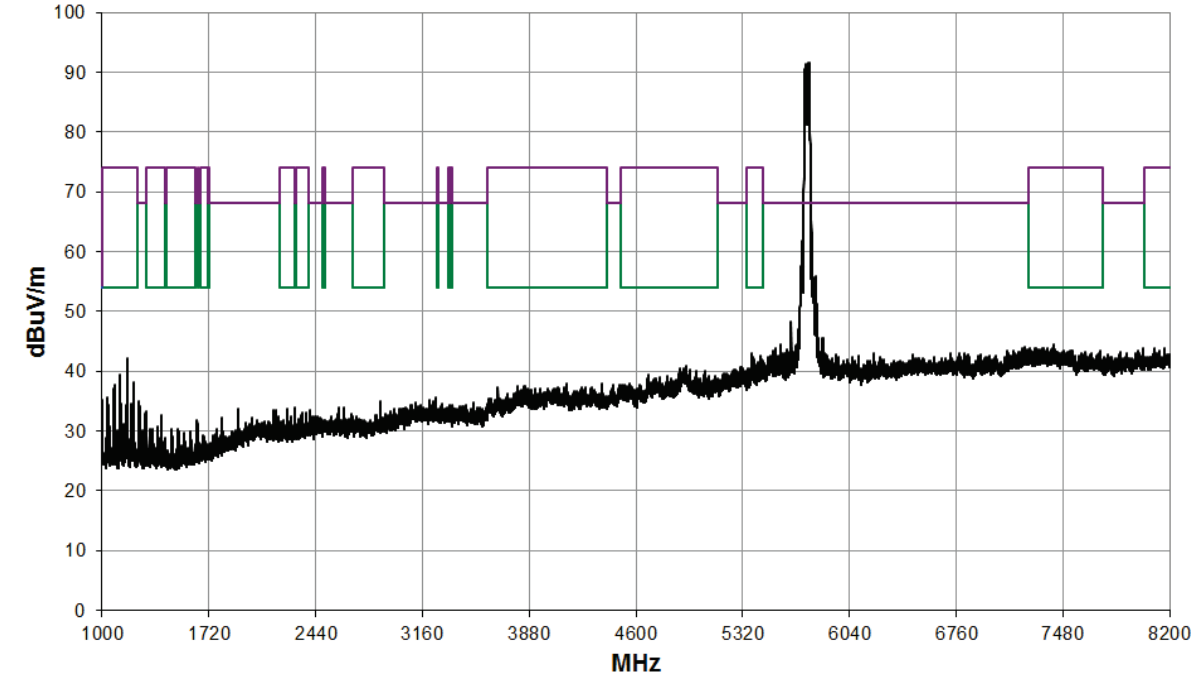
Date: 21.JUL.2020 12:46:11

SISO; Mode: 802.11n40; Channel: CH151; Frequency: 5755 MHz; Bandwidth: 40 MHz; MCS Index: 0										
Detector	Freq. (MHz)	Meas'd Emission (dBμV)	Cable Loss (dB)	Antenna Factor (dB/m)	Pre-amp Gain (dB)	Duty Cycle Corr'n (dB)	Field Strength (dBμV/m)	Distance Extrap'n Factor (dB)	Field Strength (μV/m)	Limit (μV/m)
No emissions within 20 dB of the limit.										

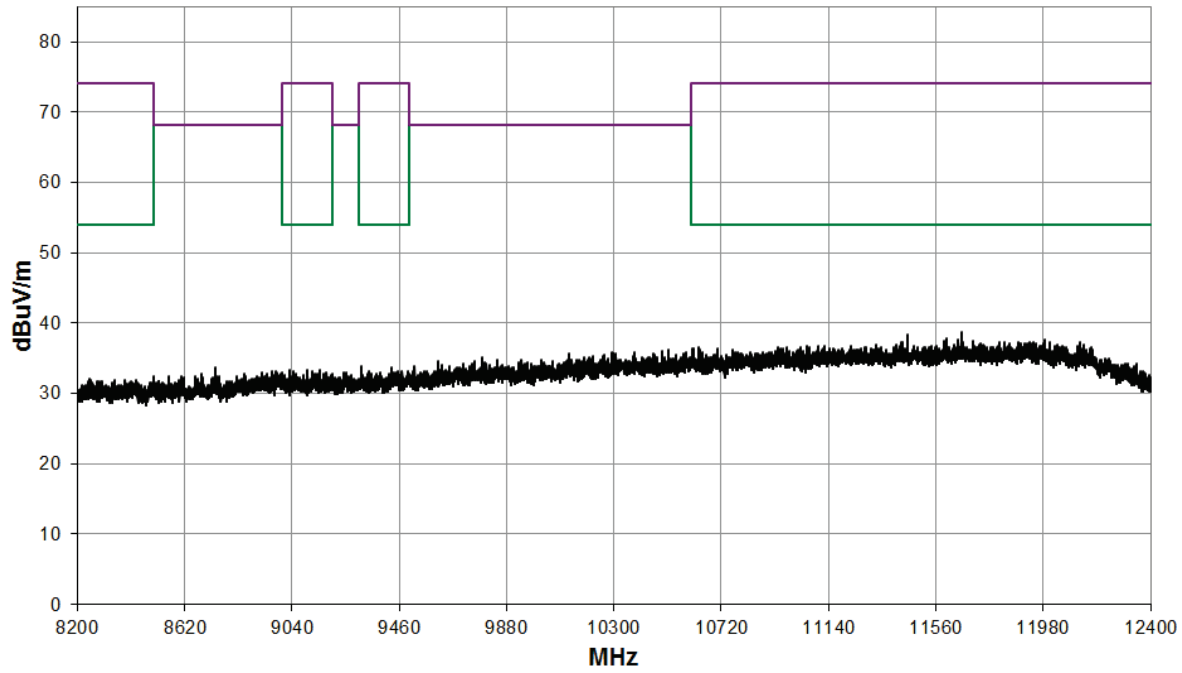
30 MHz to 1 GHz



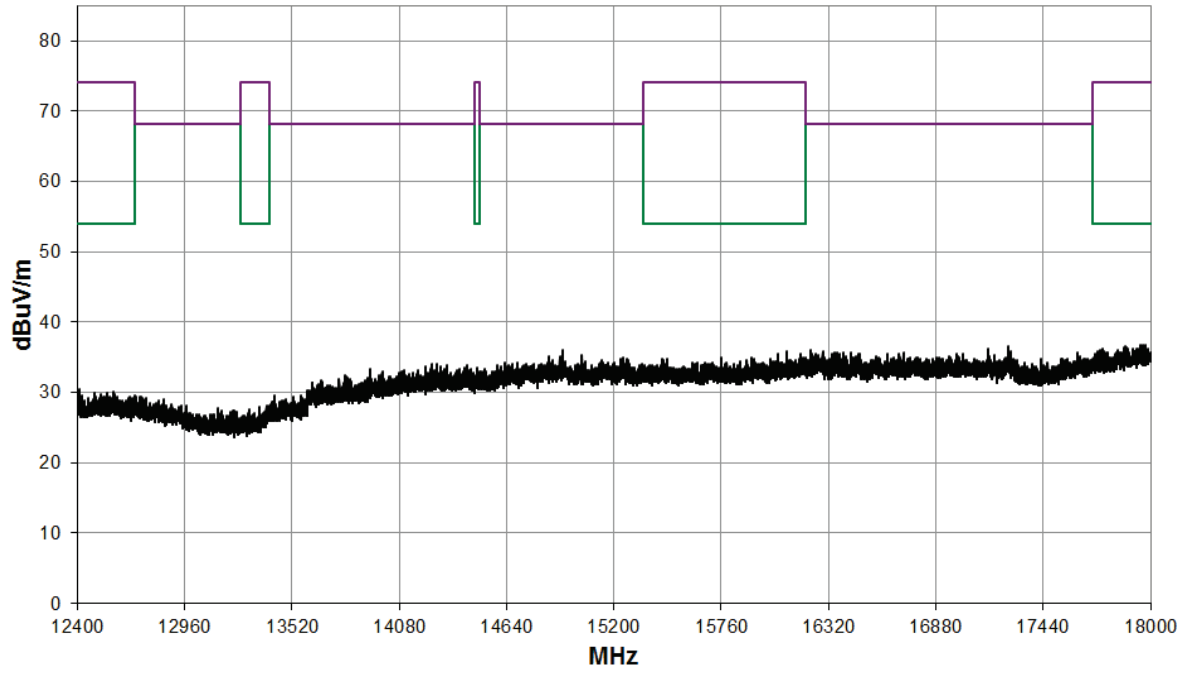
1 GHz to 8.2 GHz



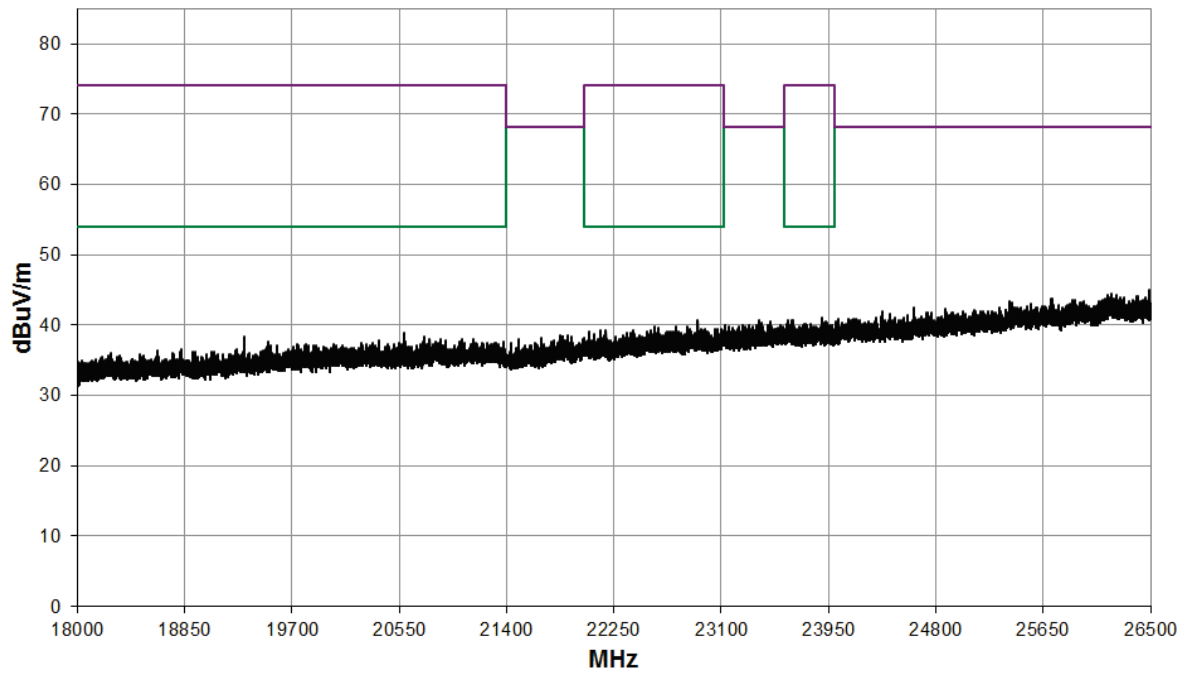
8.2 GHz to 12.4 GHz



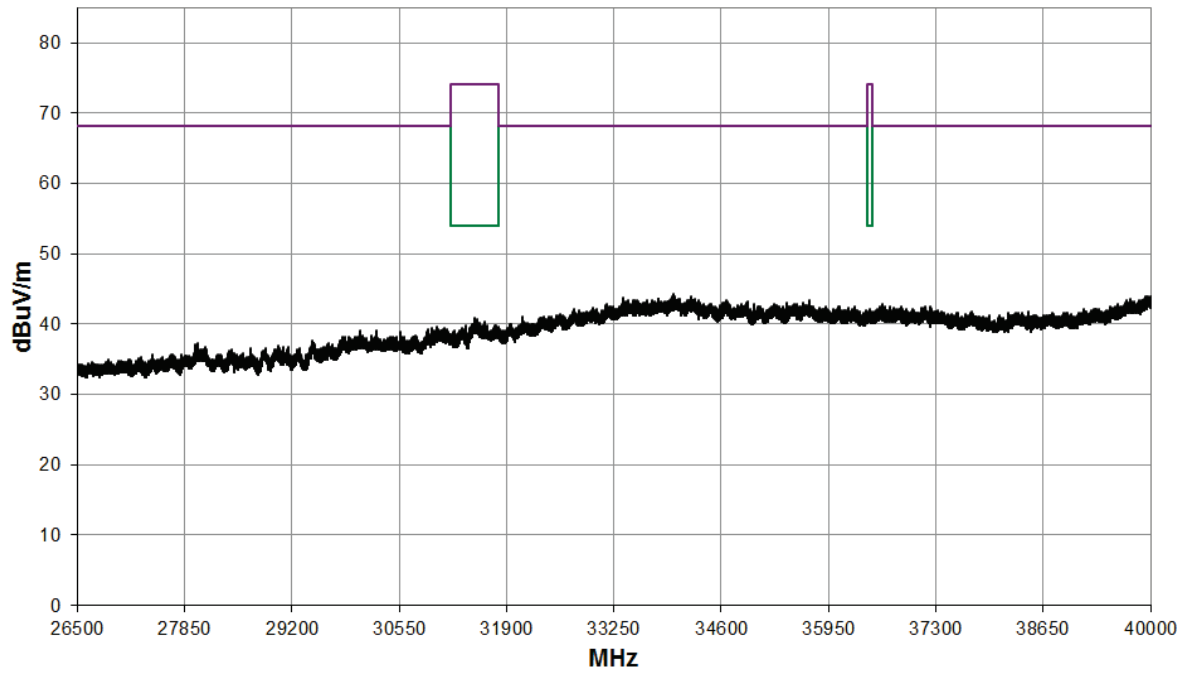
12.4 GHz to 18 GHz



18 GHz to 26.5 GHz



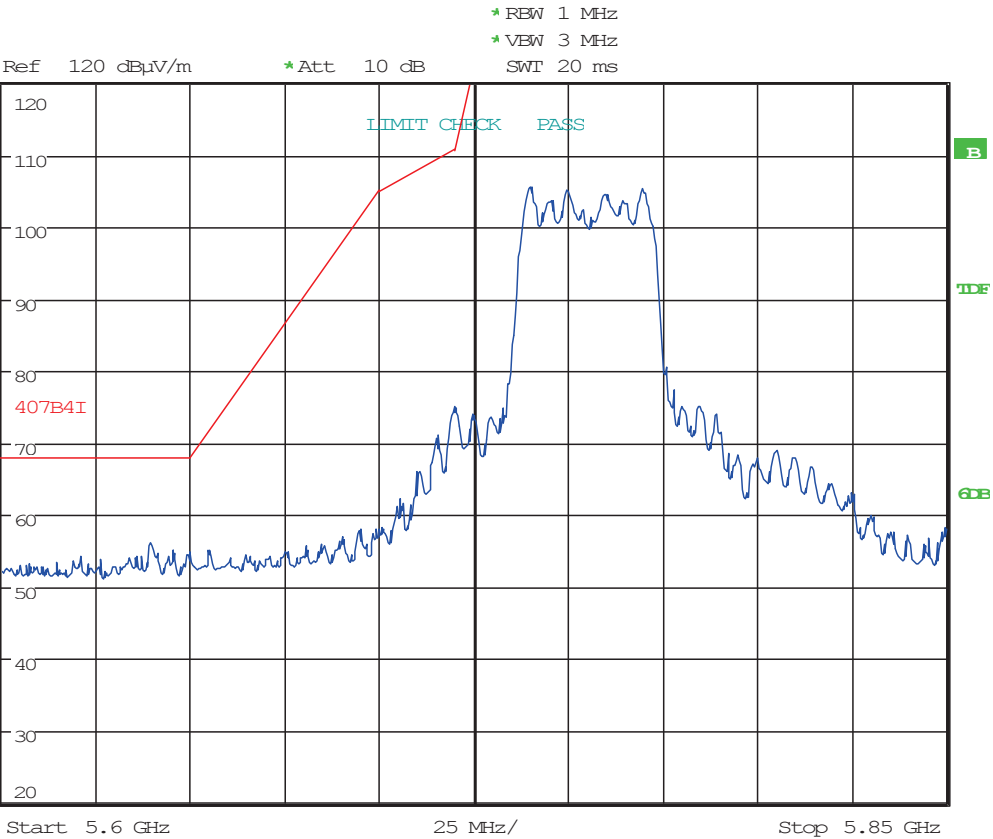
26.5 GHz to 40 GHz



Band Edge



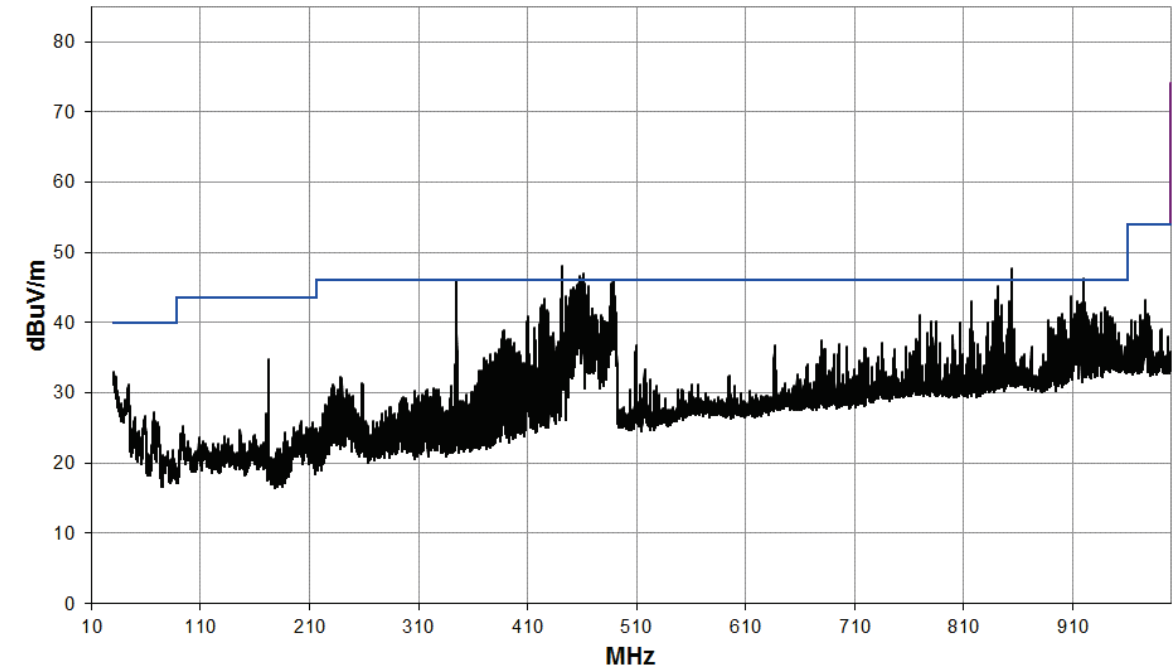
1 PK
MAX



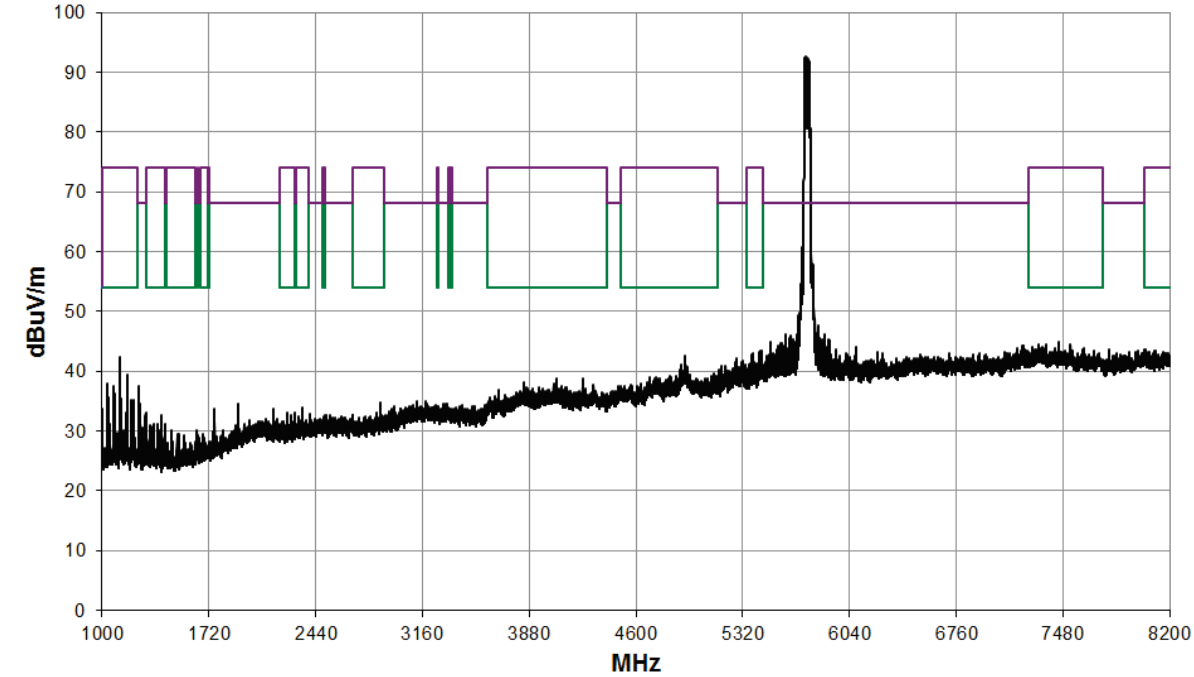
Date: 21.JUL.2020 14:35:37

SISO; Mode: 802.11n40; Channel: CH151; Frequency: 5755 MHz; Bandwidth: 40 MHz; MCS Index: 7										
Detector	Freq. (MHz)	Meas'd Emission (dBμV)	Cable Loss (dB)	Antenna Factor (dB/m)	Pre-amp Gain (dB)	Duty Cycle Corr'n (dB)	Field Strength (dBμV/m)	Distance Extrap'n Factor (dB)	Field Strength (μV/m)	Limit (μV/m)
No emissions within 20 dB of the limit.										

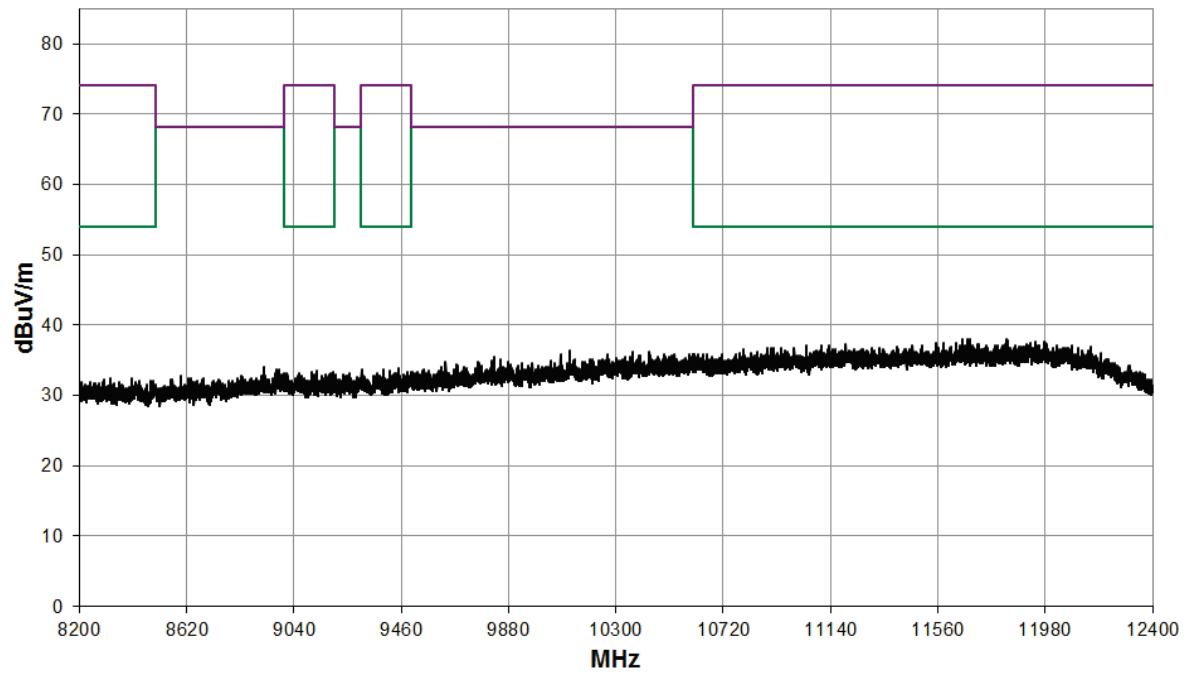
30 MHz to 1 GHz



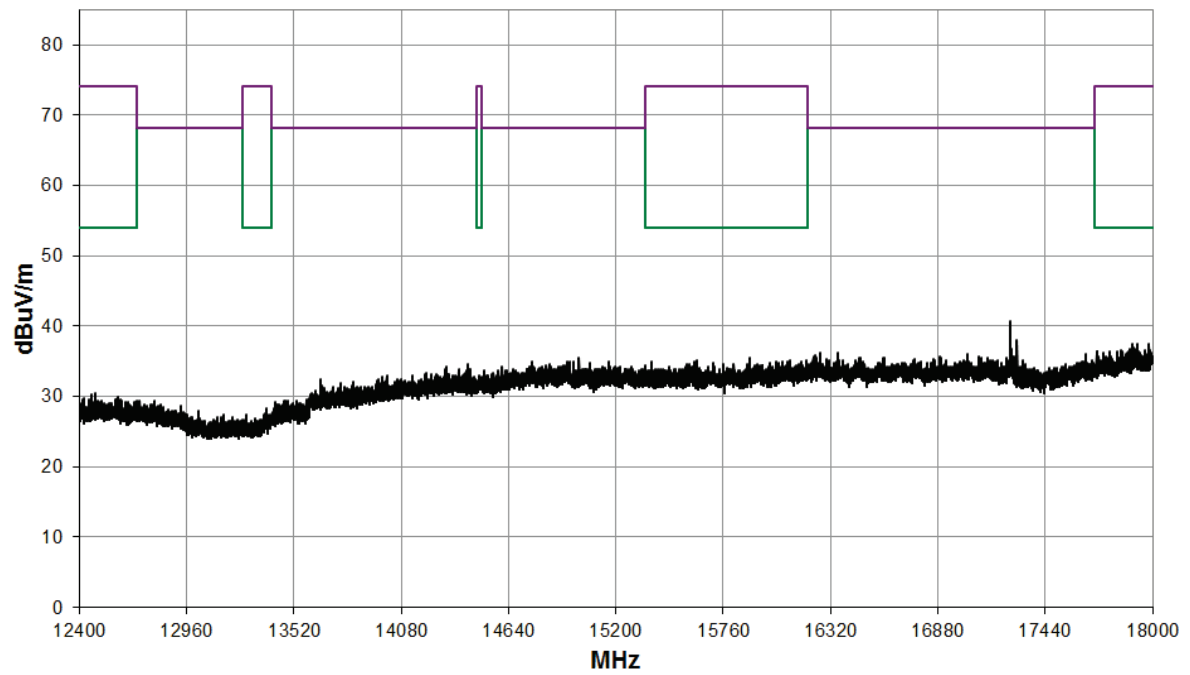
1 GHz to 8.2 GHz



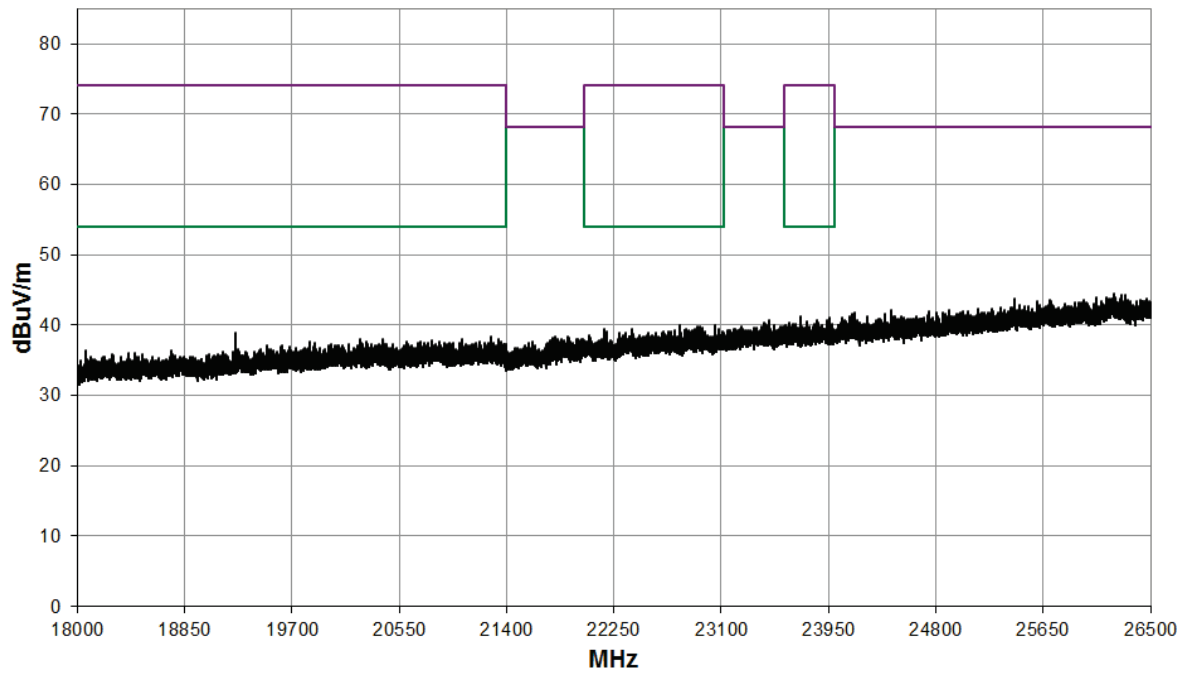
8.2 GHz to 12.4 GHz



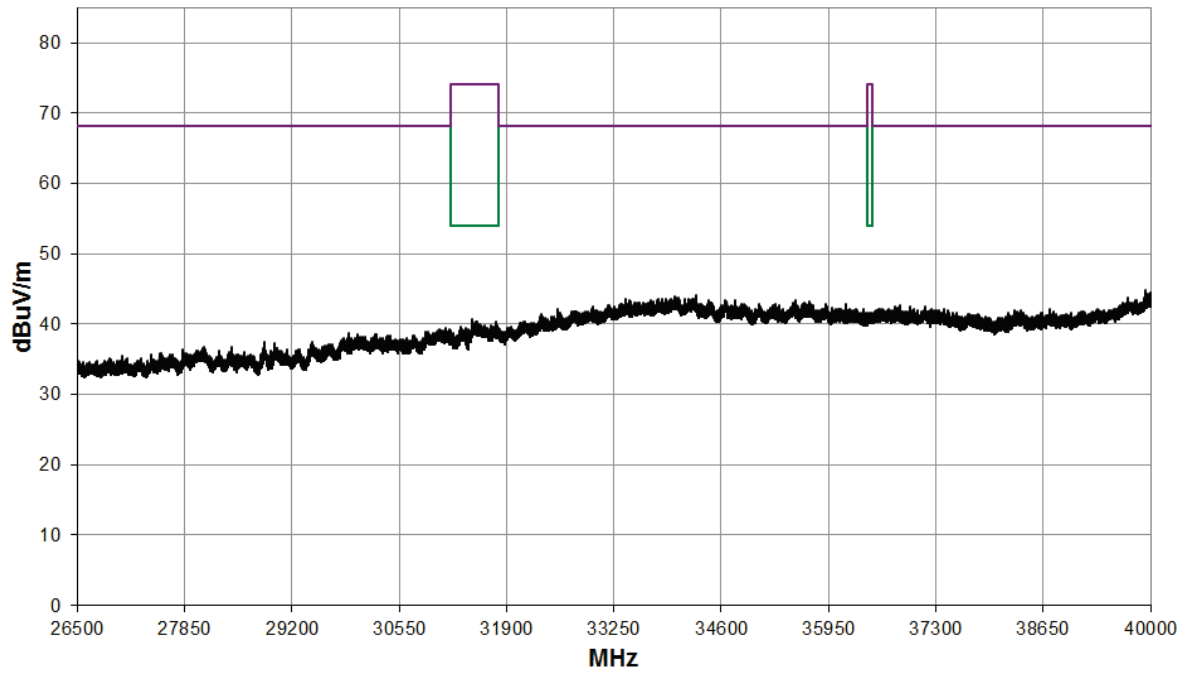
12.4 GHz to 18 GHz



18 GHz to 26.5 GHz



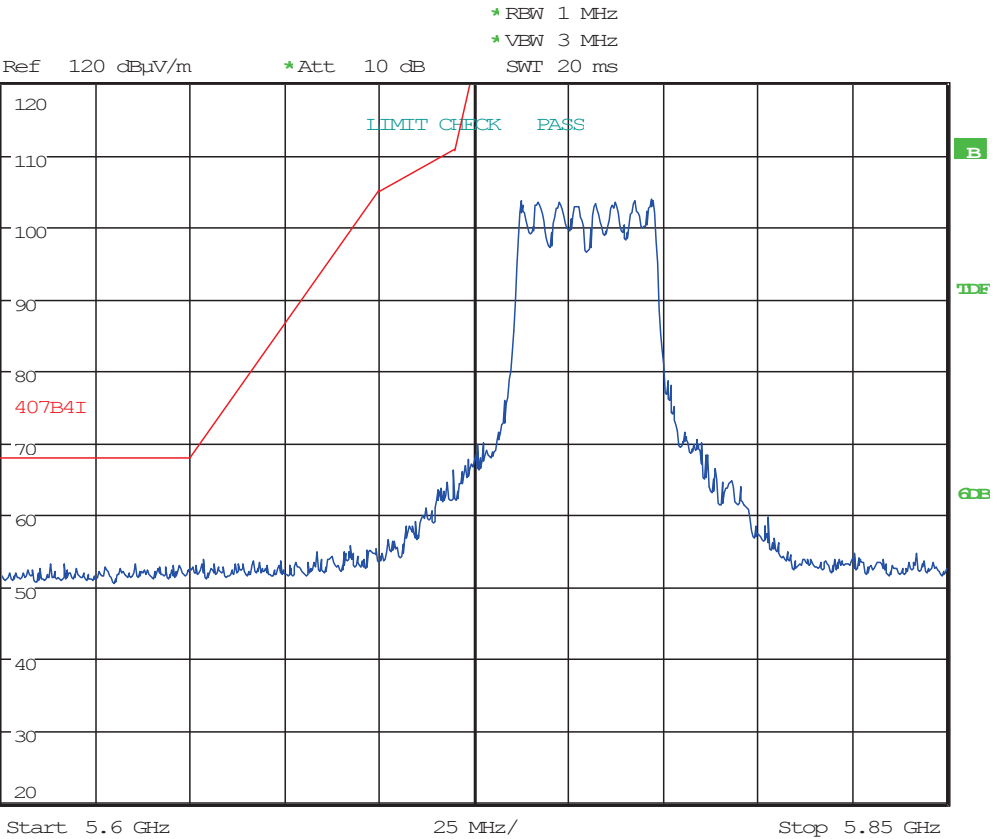
26.5 GHz to 40 GHz



Band Edge



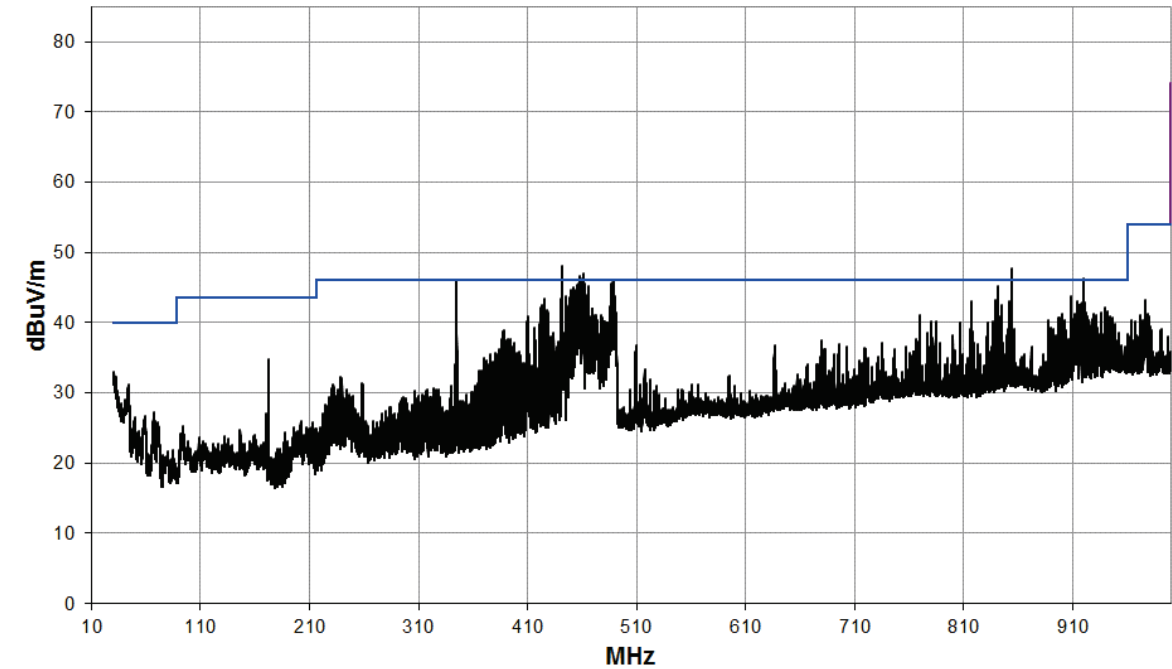
1 PK
Max



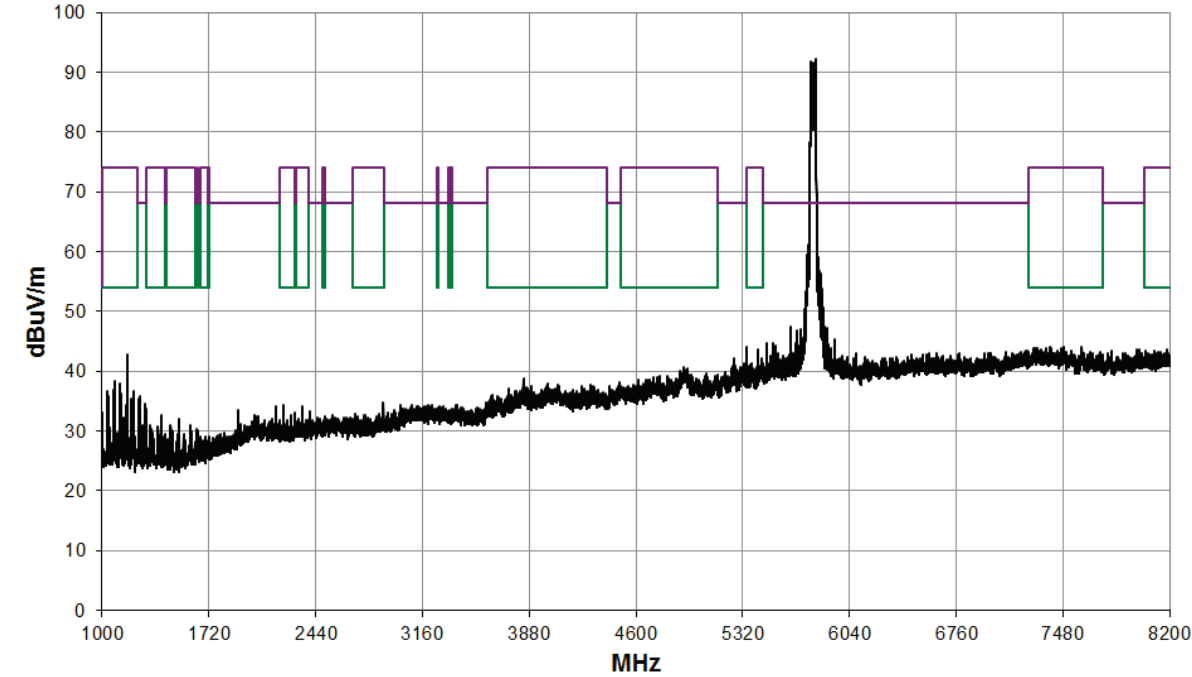
Date: 21.JUL.2020 14:36:28

SISO; Mode: 802.11n40; Channel: CH159; Frequency: 5795 MHz; Bandwidth: 40 MHz; MCS Index: 0										
Detector	Freq. (MHz)	Meas'd Emission (dBμV)	Cable Loss (dB)	Antenna Factor (dB/m)	Pre-amp Gain (dB)	Duty Cycle Corr'n (dB)	Field Strength (dBμV/m)	Distance Extrap'n Factor (dB)	Field Strength (μV/m)	Limit (μV/m)
No emissions within 20 dB of the limit.										

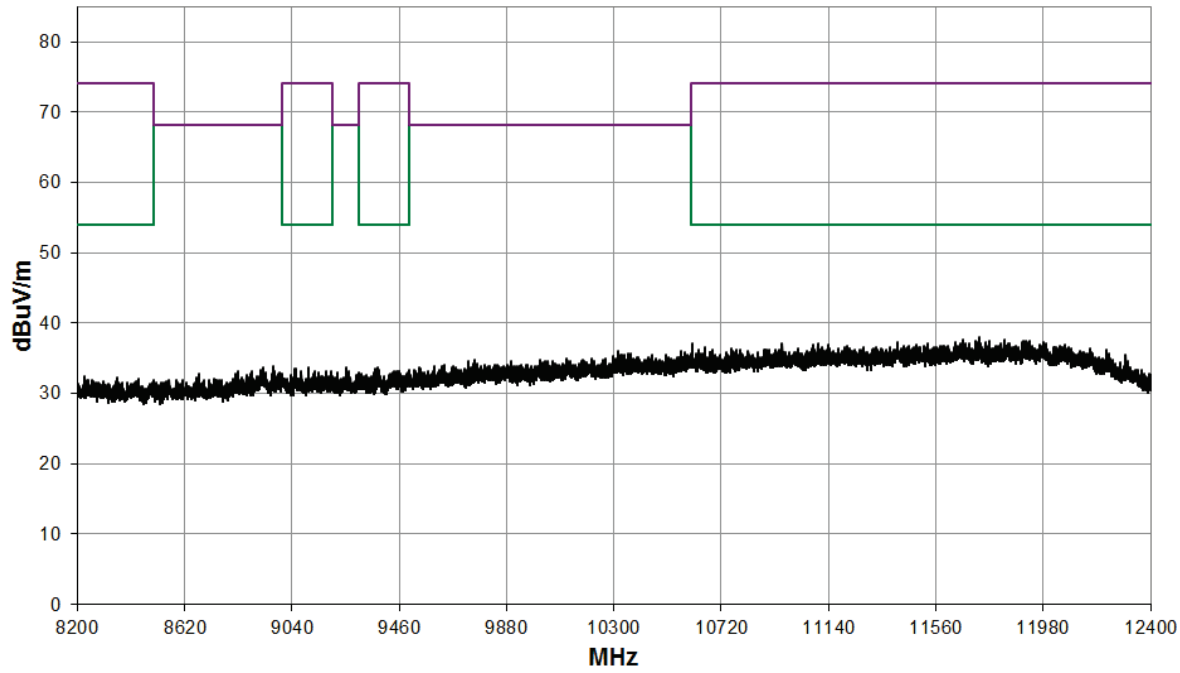
30 MHz to 1 GHz



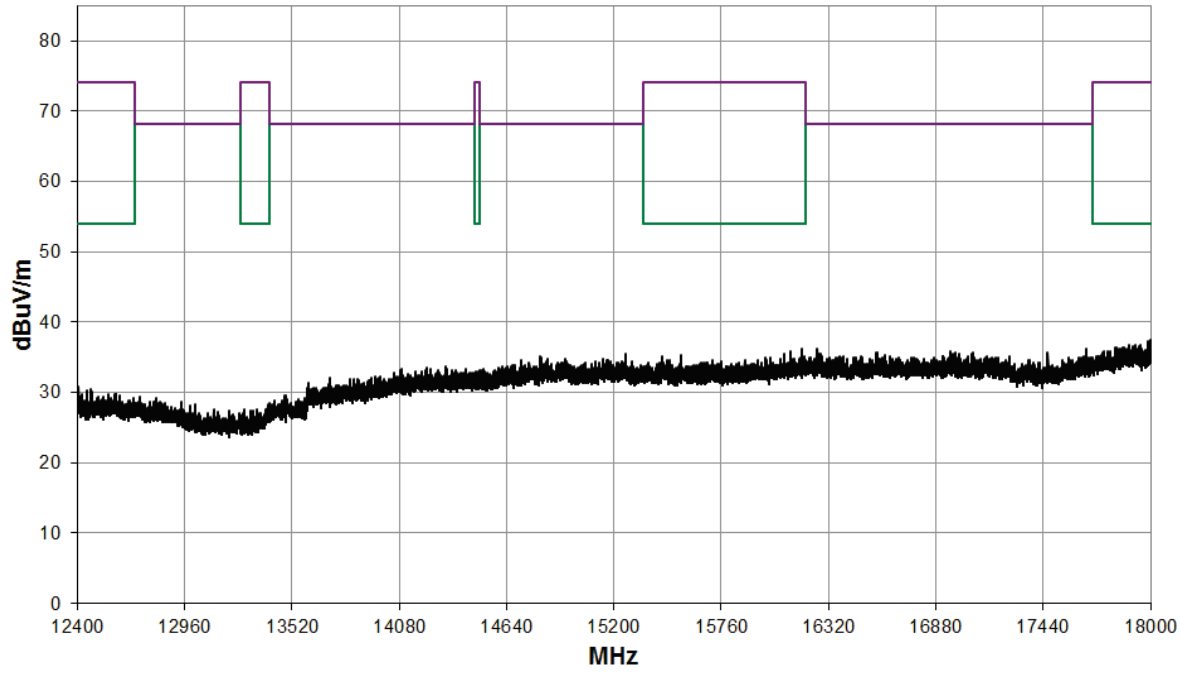
1 GHz to 8.2 GHz



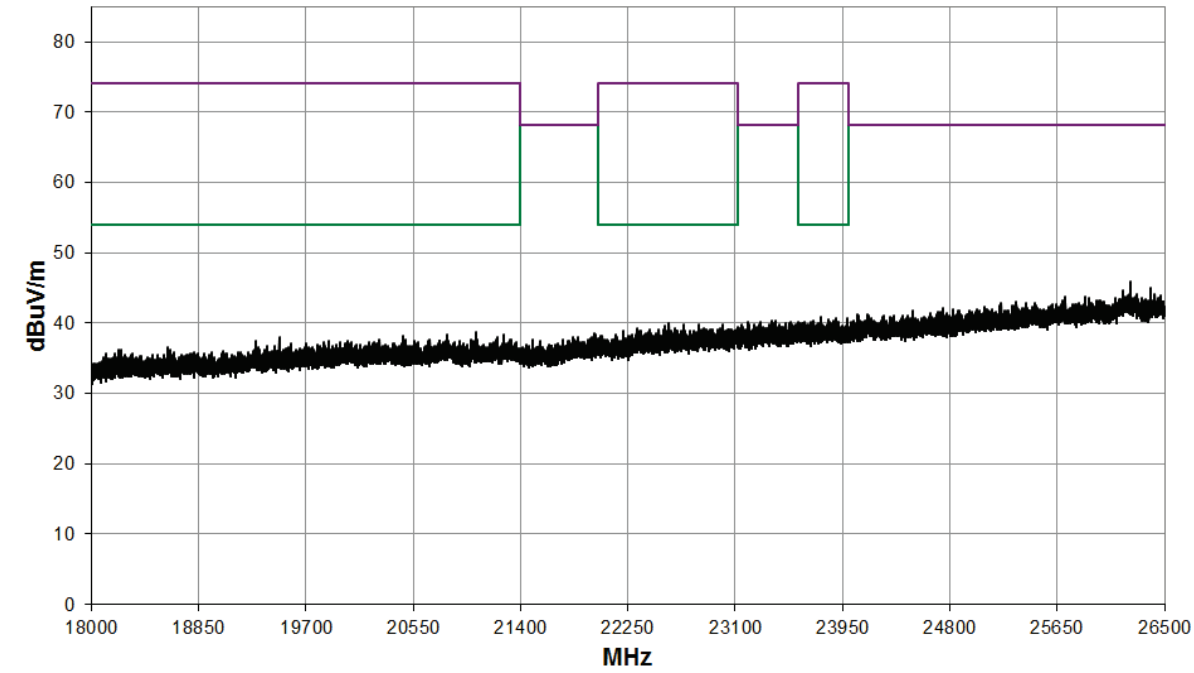
8.2 GHz to 12.4 GHz



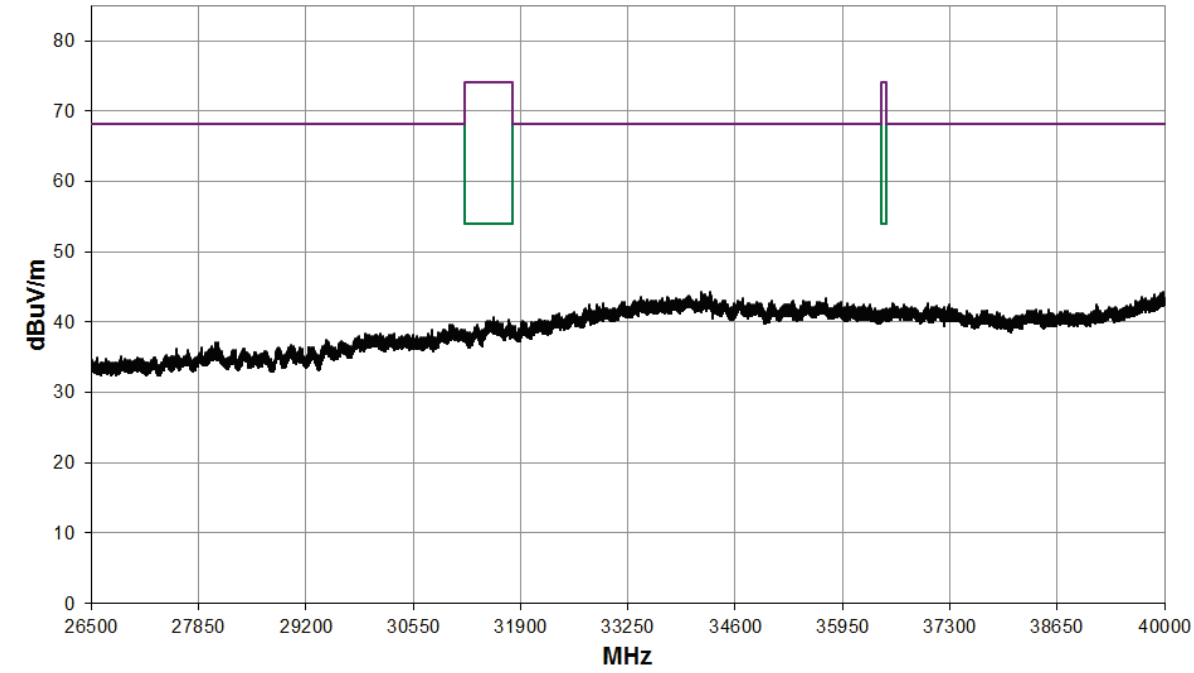
12.4 GHz to 18 GHz



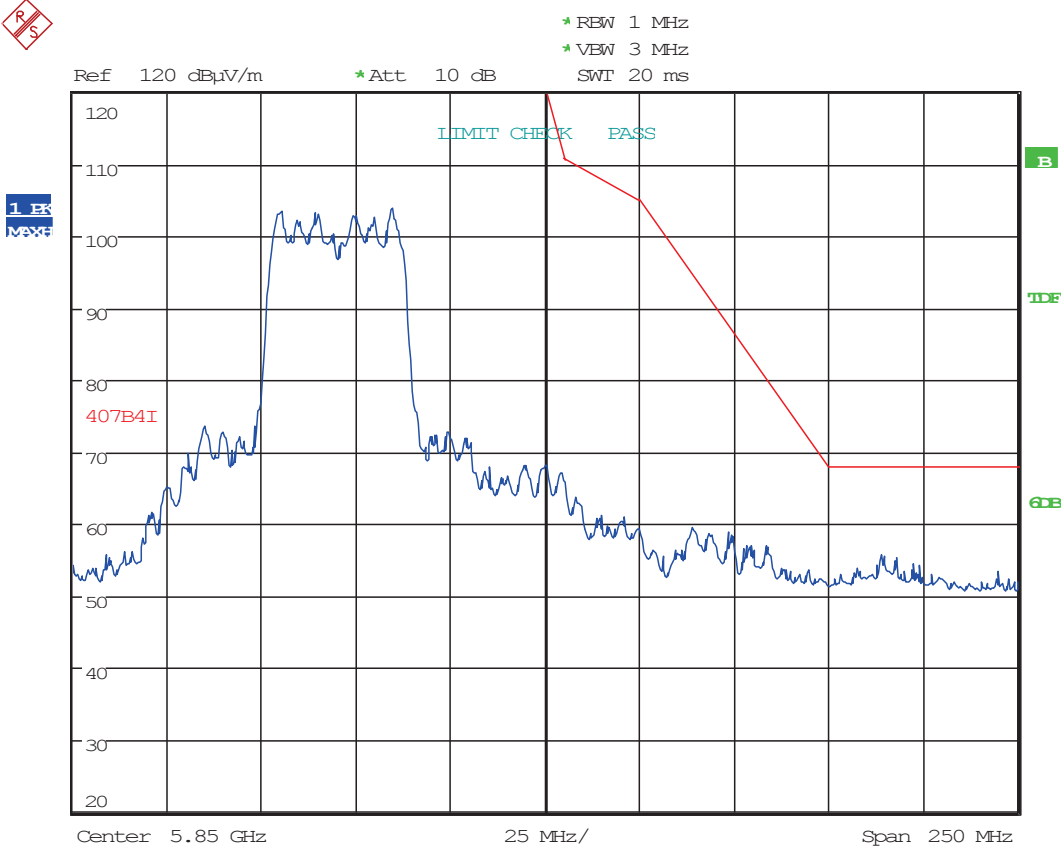
18 GHz to 26.5 GHz



26.5 GHz to 40 GHz



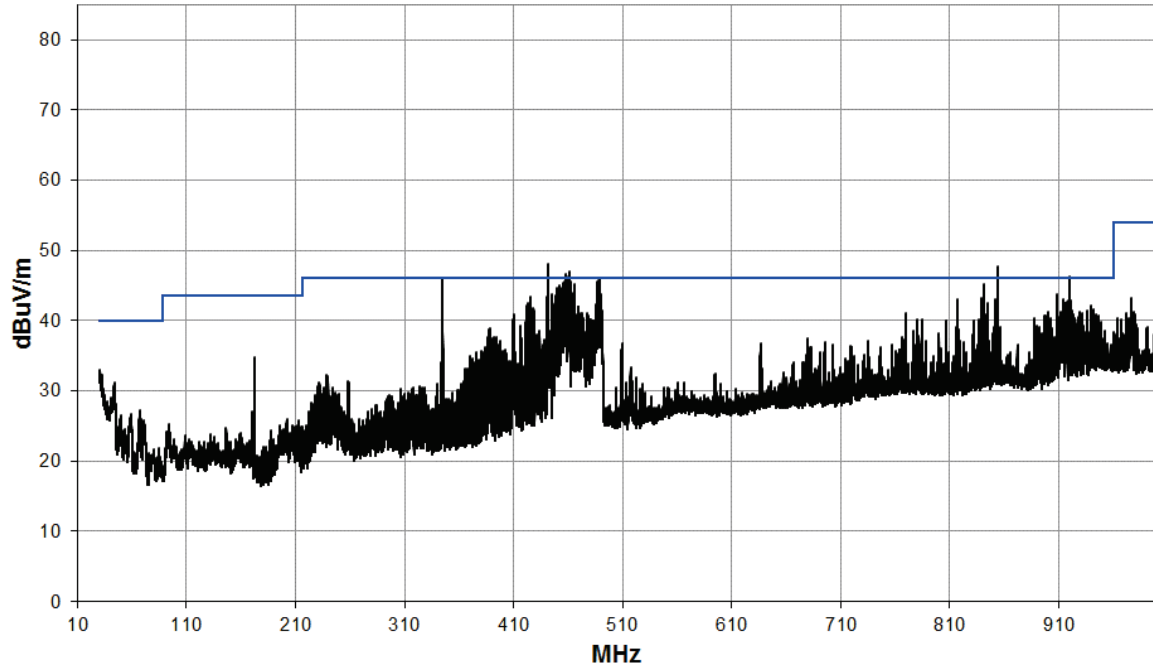
Band Edge



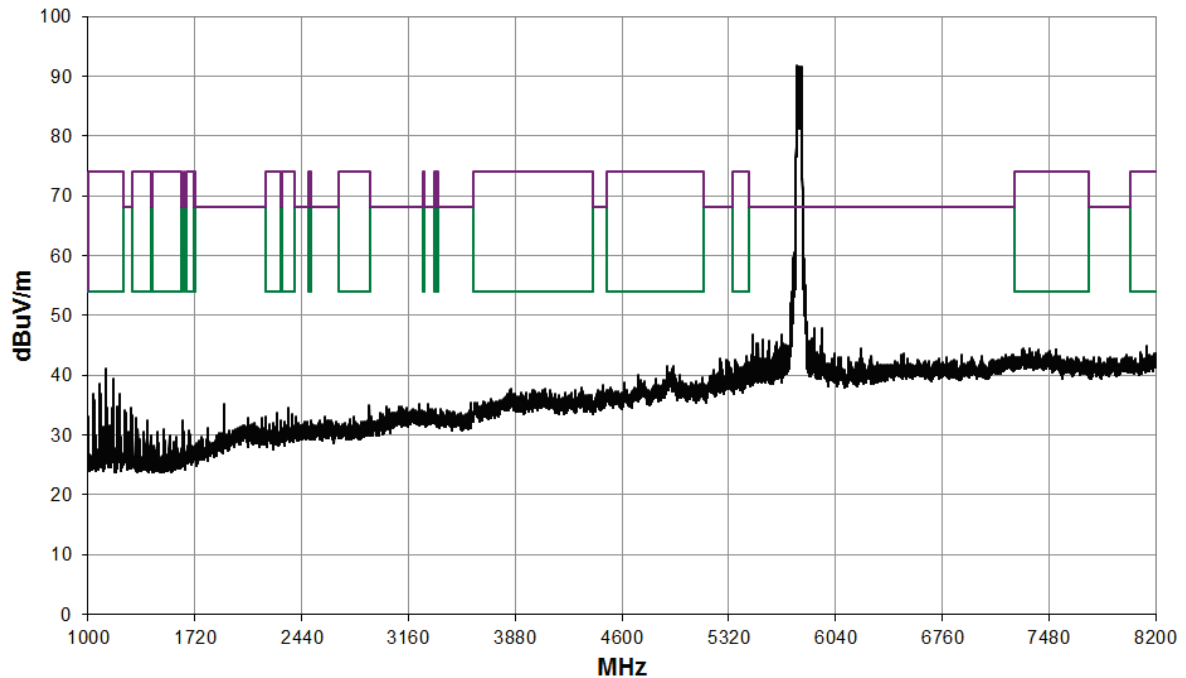
Date: 21.JUL.2020 12:54:41

SISO; Mode: 802.11n40; Channel: CH159; Frequency: 5795 MHz; Bandwidth: 40 MHz; MCS Index: 7										
Detector	Freq. (MHz)	Meas'd Emission (dBμV)	Cable Loss (dB)	Antenna Factor (dB/m)	Pre-amp Gain (dB)	Duty Cycle Corr'n (dB)	Field Strength (dBμV/m)	Distance Extrap'n Factor (dB)	Field Strength (μV/m)	Limit (μV/m)
No emissions within 20 dB of the limit.										

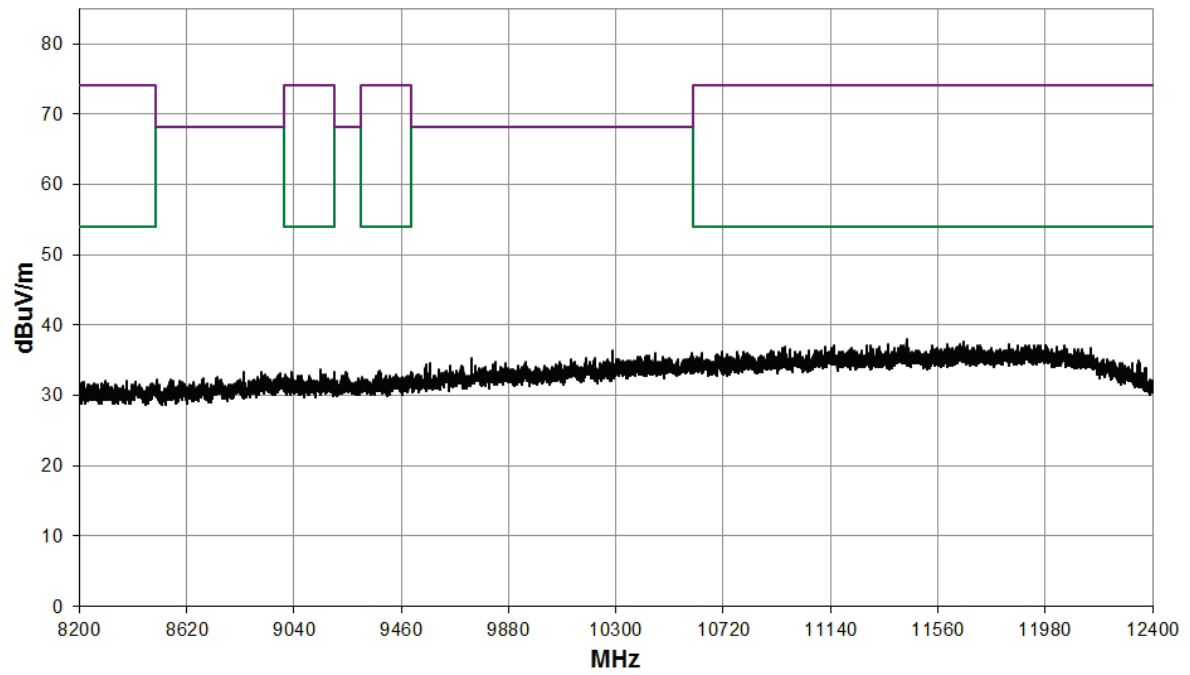
30 MHz to 1 GHz



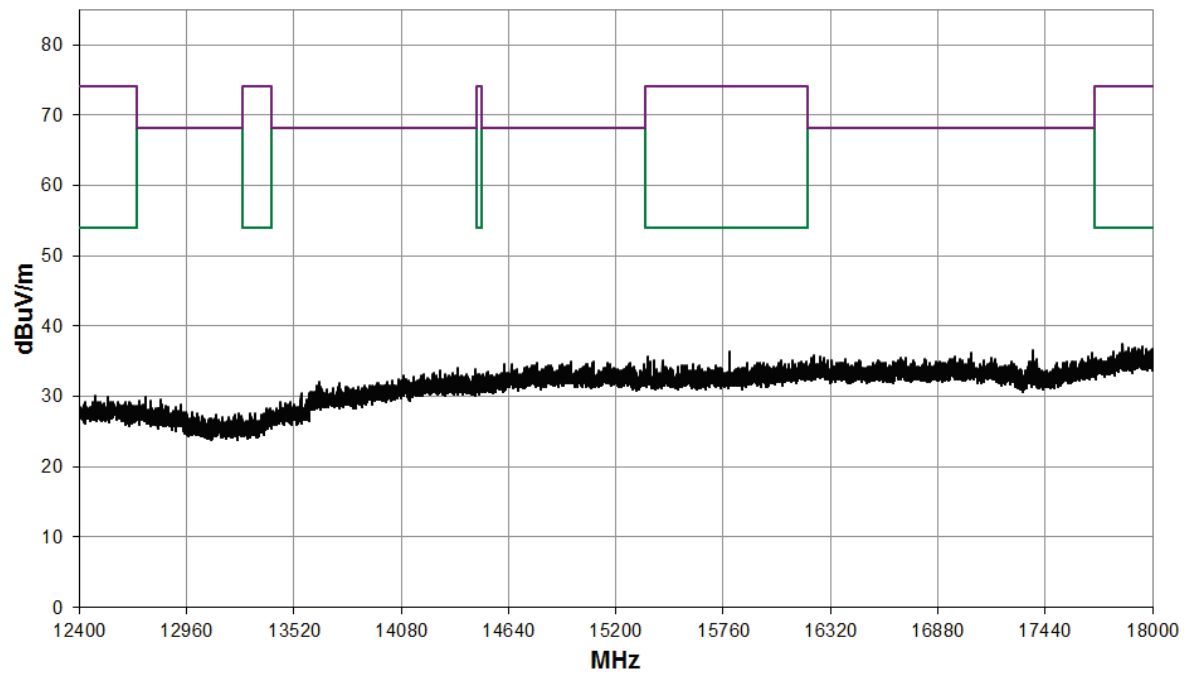
1 GHz to 8.2 GHz



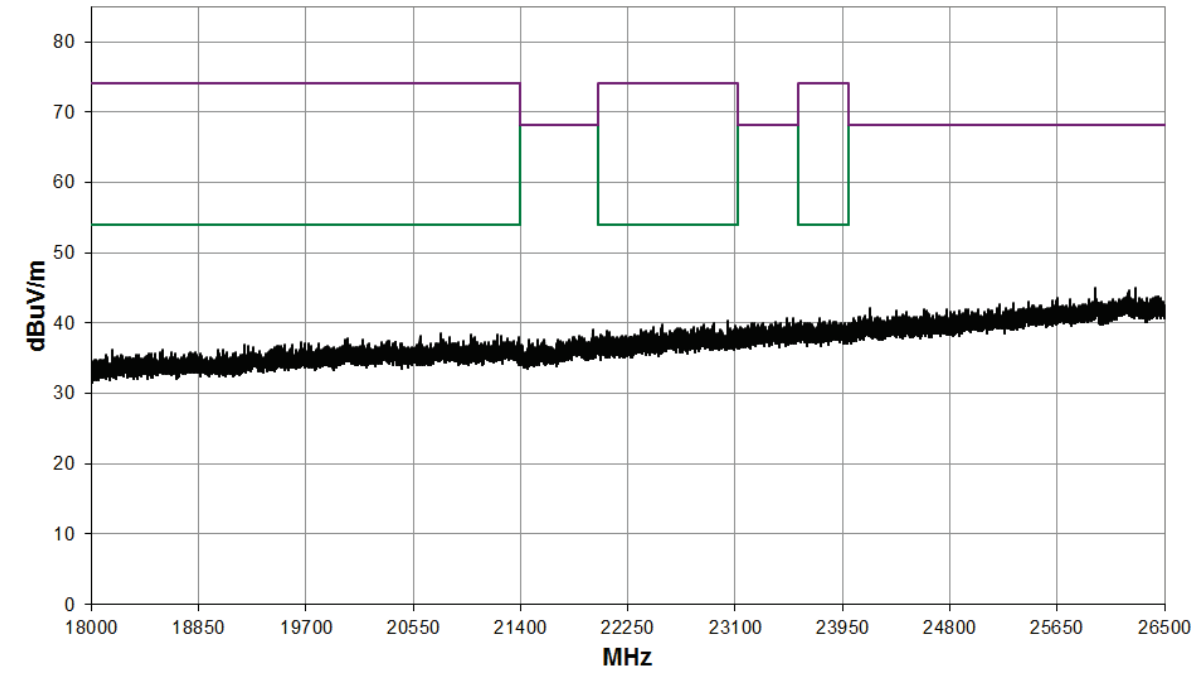
8.2 GHz to 12.4 GHz



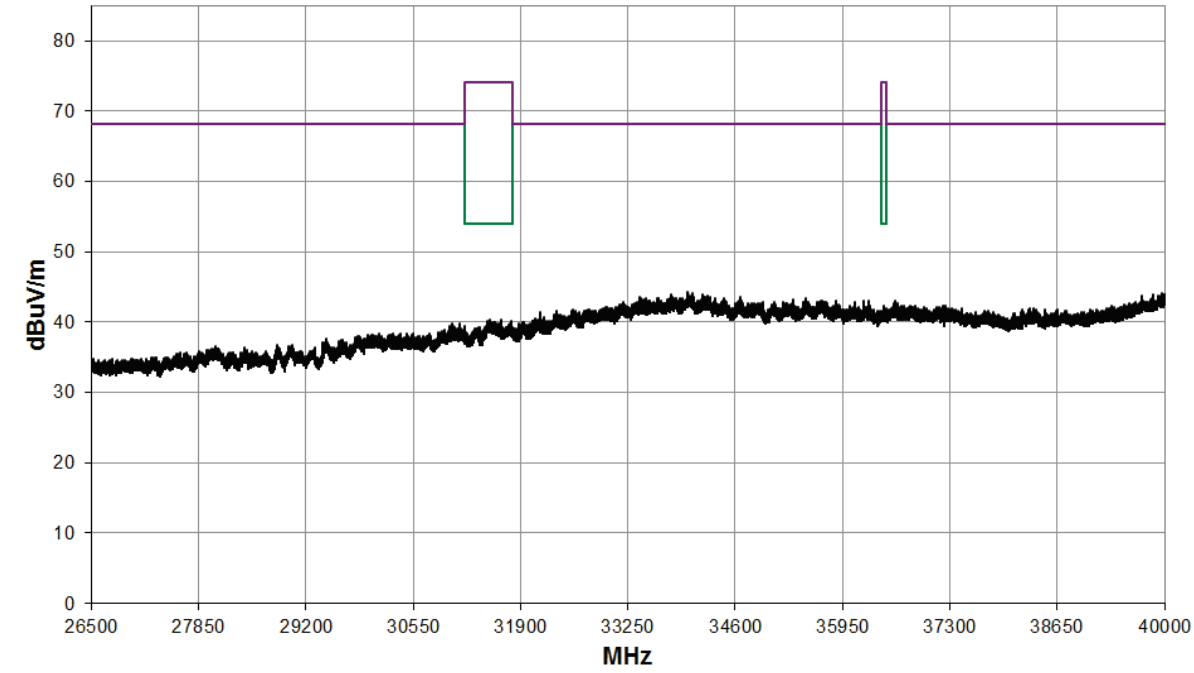
12.4 GHz to 18 GHz



18 GHz to 26.5 GHz



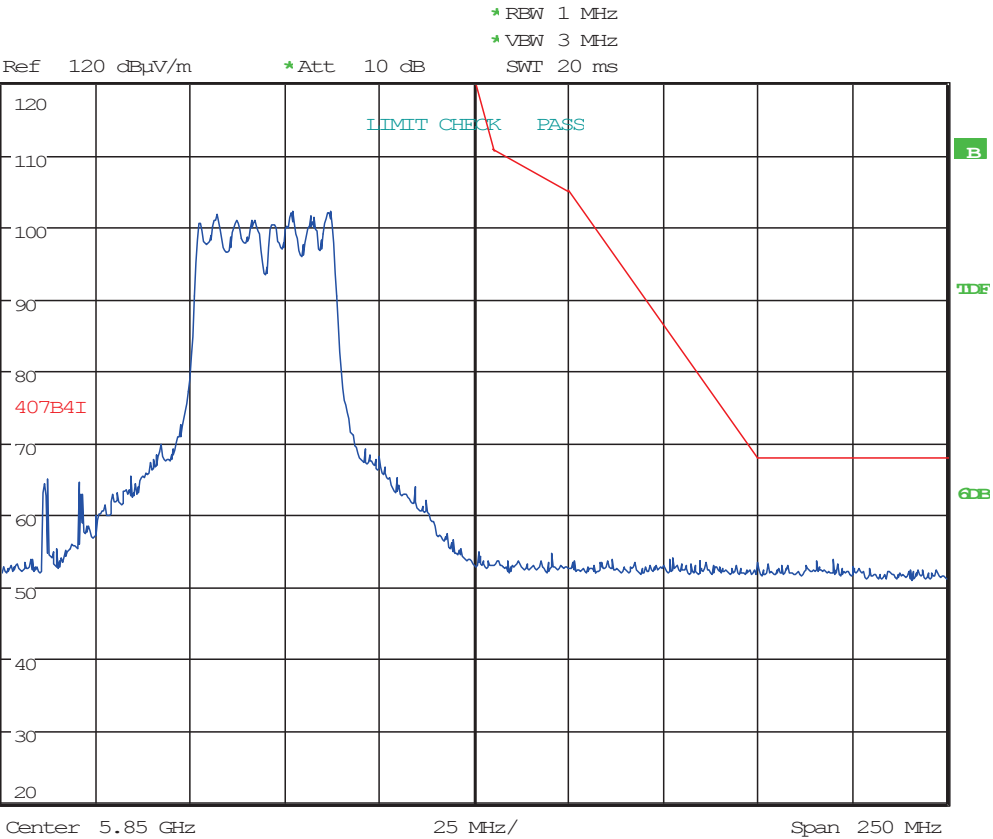
26.5 GHz to 40 GHz



Band Edge



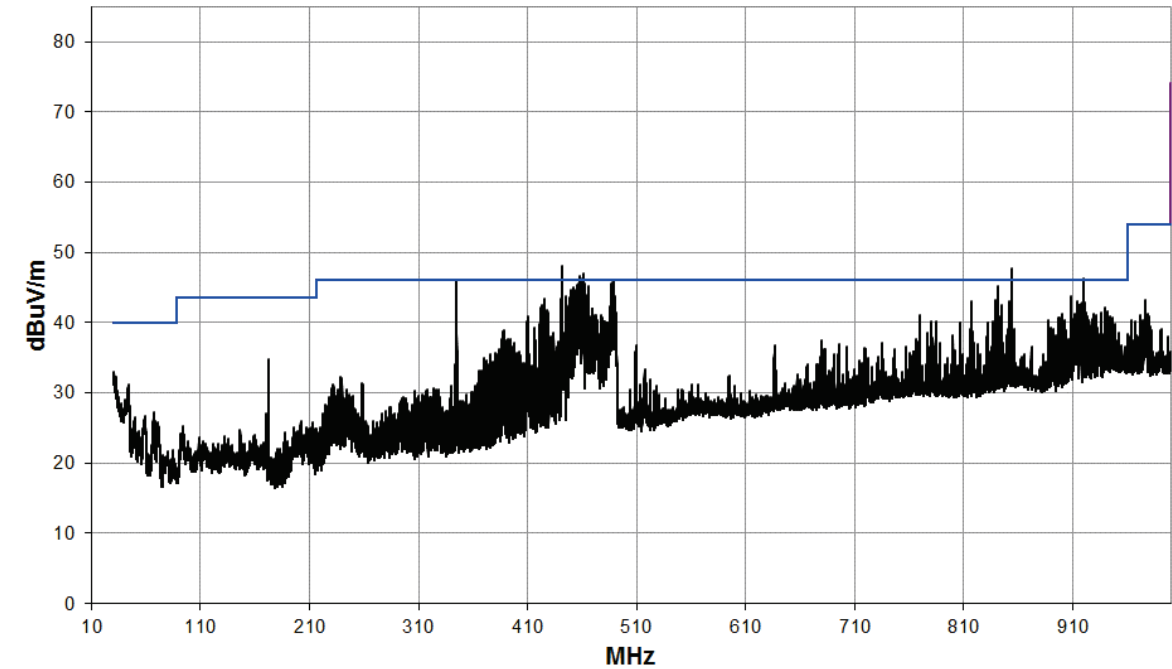
1 PK
Noise



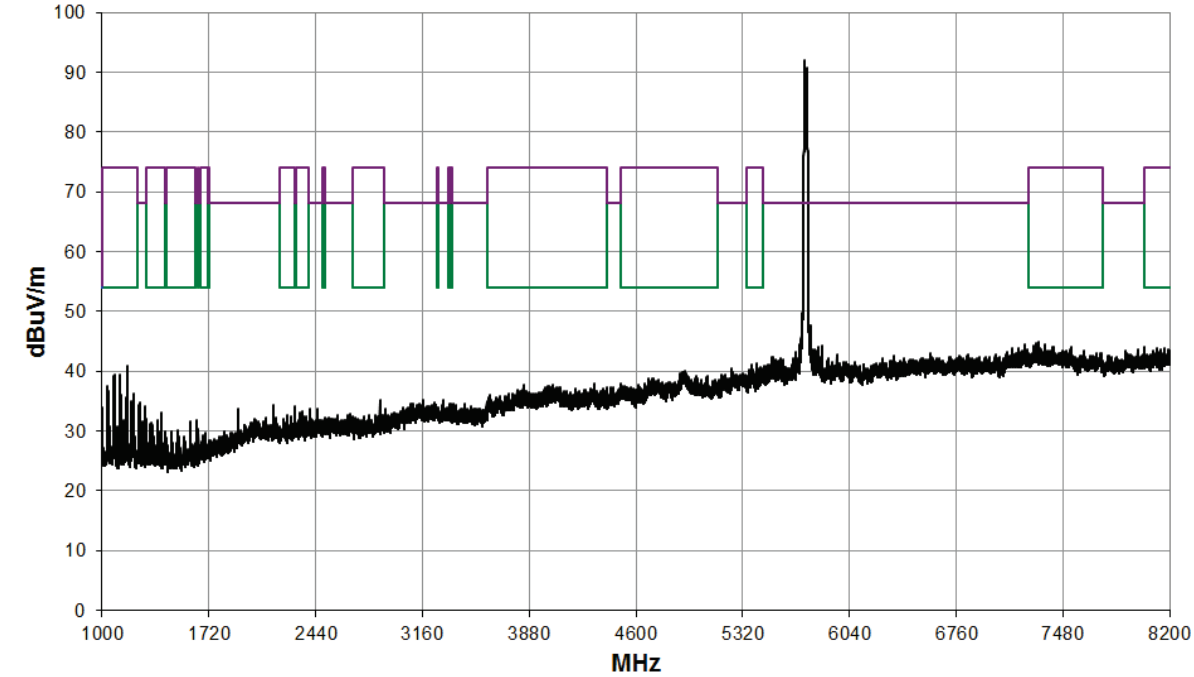
Date: 21.JUL.2020 12:57:59

SISO; Mode: 802.11ac20; Channel: CH149; Frequency: 5745 MHz; Bandwidth: 20 MHz; MCS Index: 0										
Detector	Freq. (MHz)	Meas'd Emission (dBμV)	Cable Loss (dB)	Antenna Factor (dB/m)	Pre-amp Gain (dB)	Duty Cycle Corr'n (dB)	Field Strength (dBμV/m)	Distance Extrap'n Factor (dB)	Field Strength (μV/m)	Limit (μV/m)
No emissions within 20 dB of the limit.										

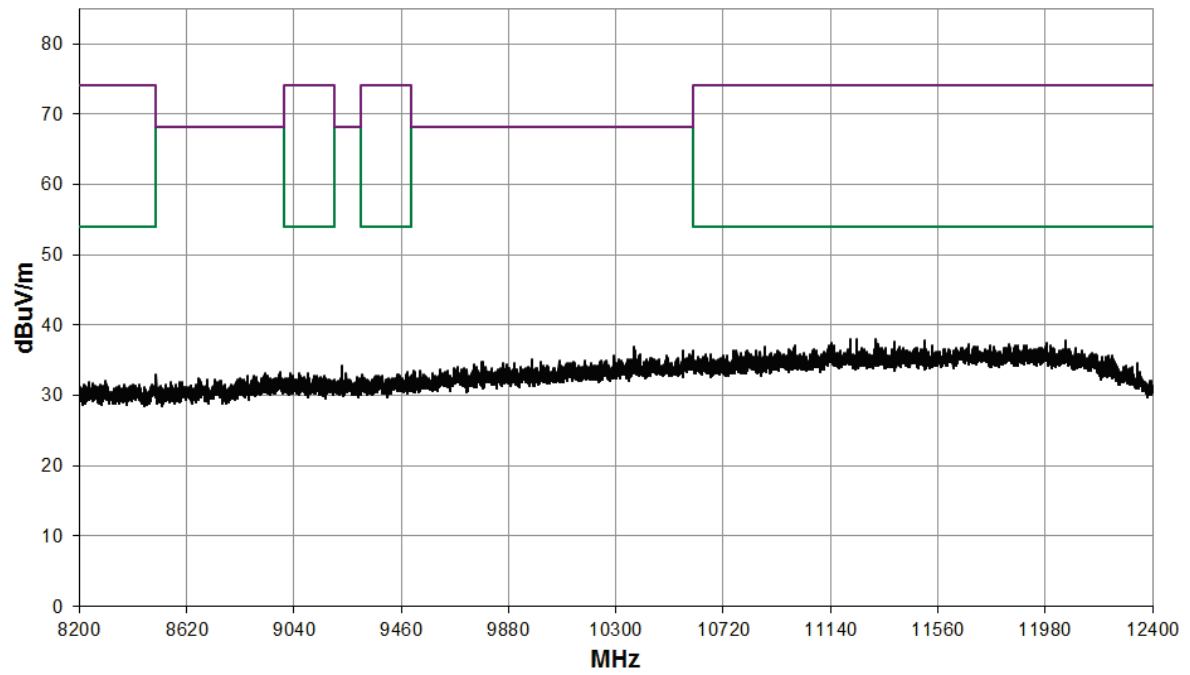
30 MHz to 1 GHz



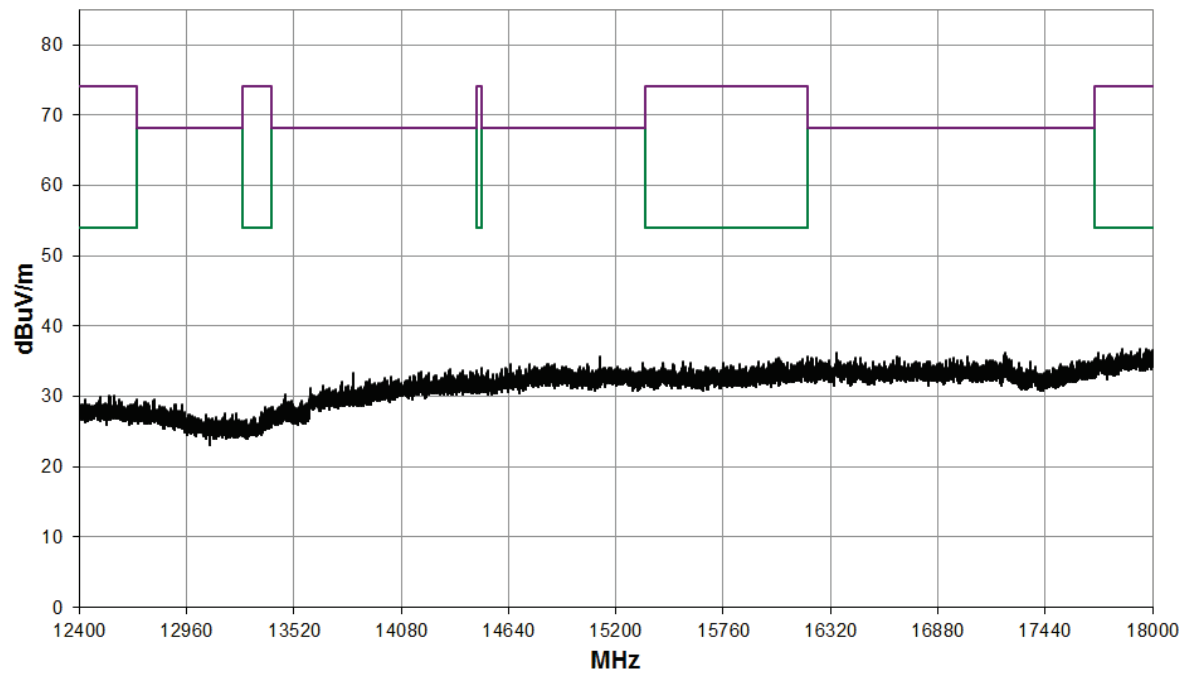
1 GHz to 8.2 GHz



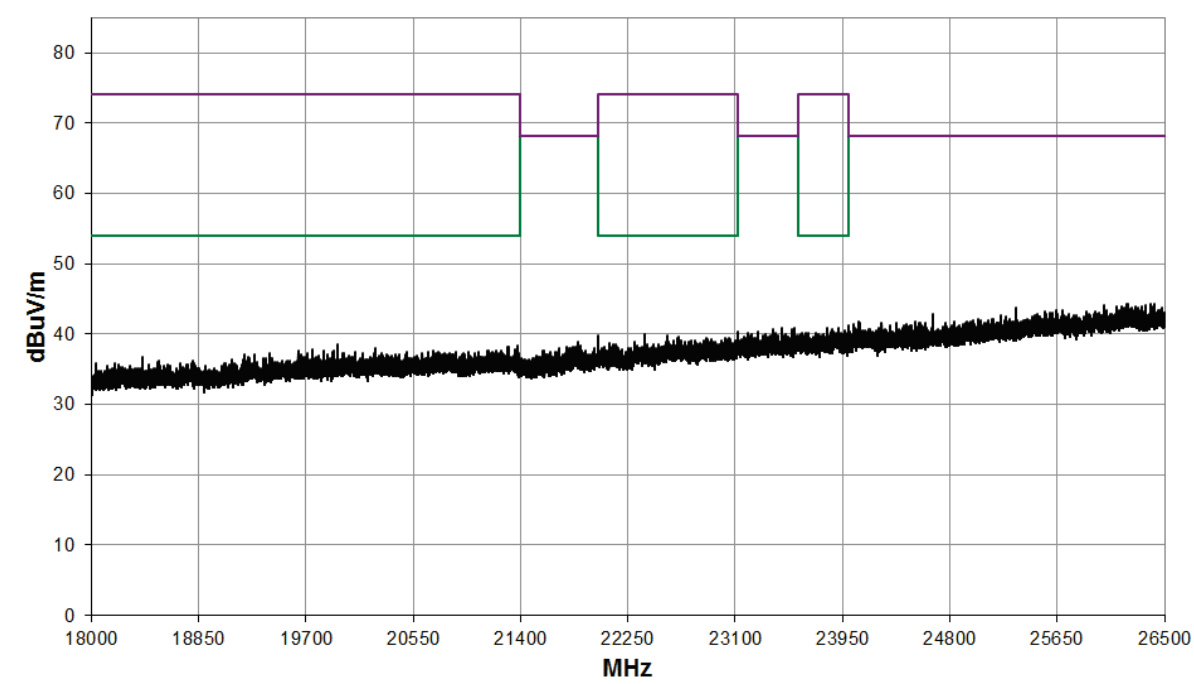
8.2 GHz to 12.4 GHz



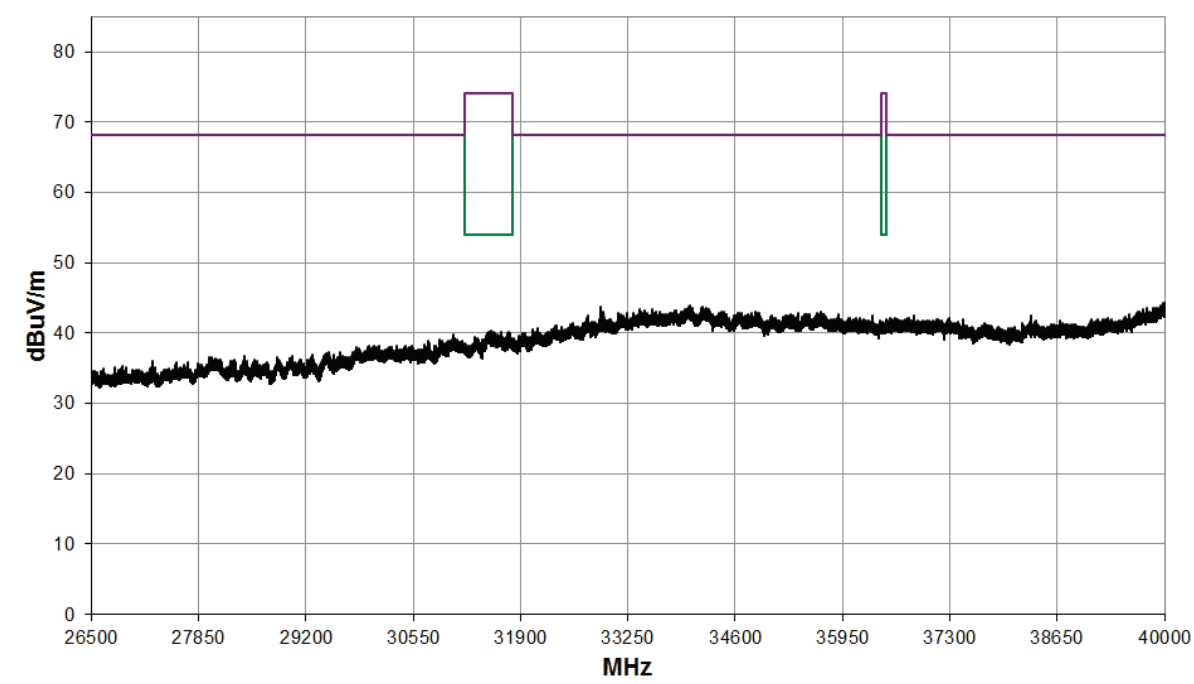
12.4 GHz to 18 GHz



18 GHz to 26.5 GHz



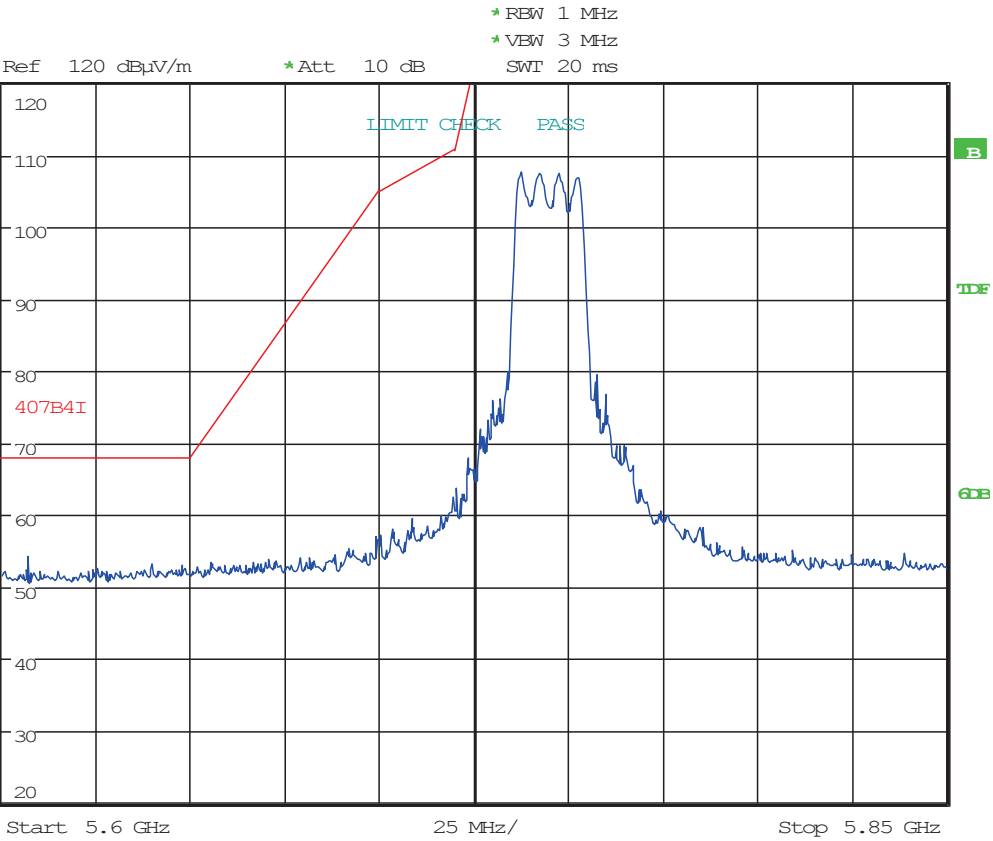
26.5 GHz to 40 GHz



Band Edge



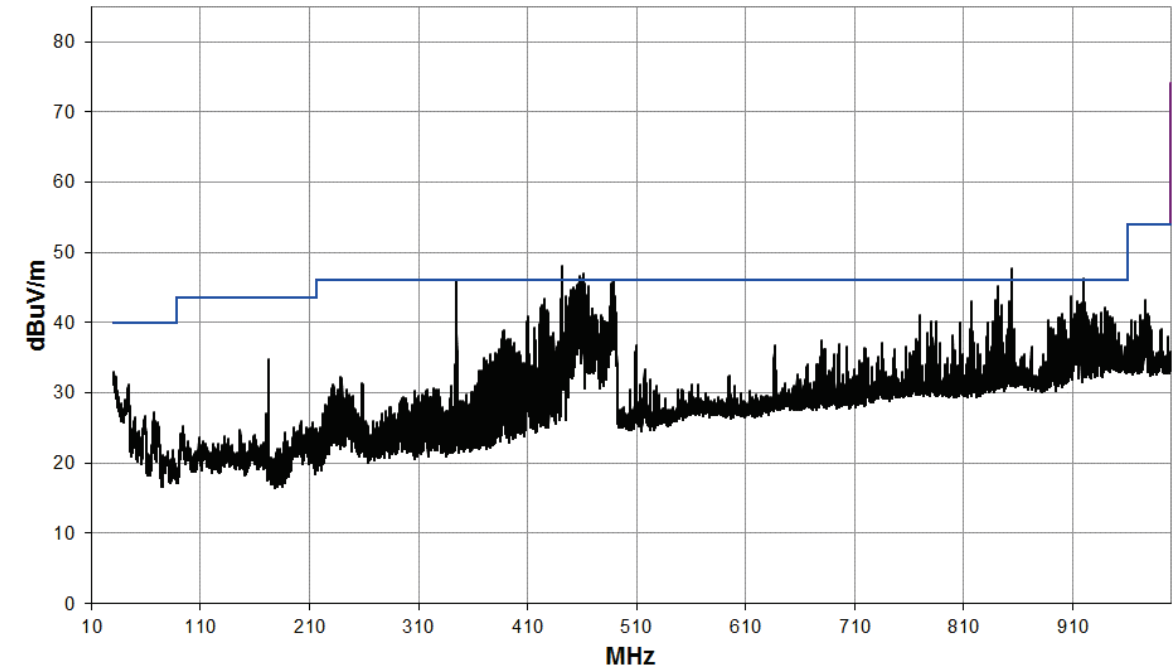
1 PK
MAX



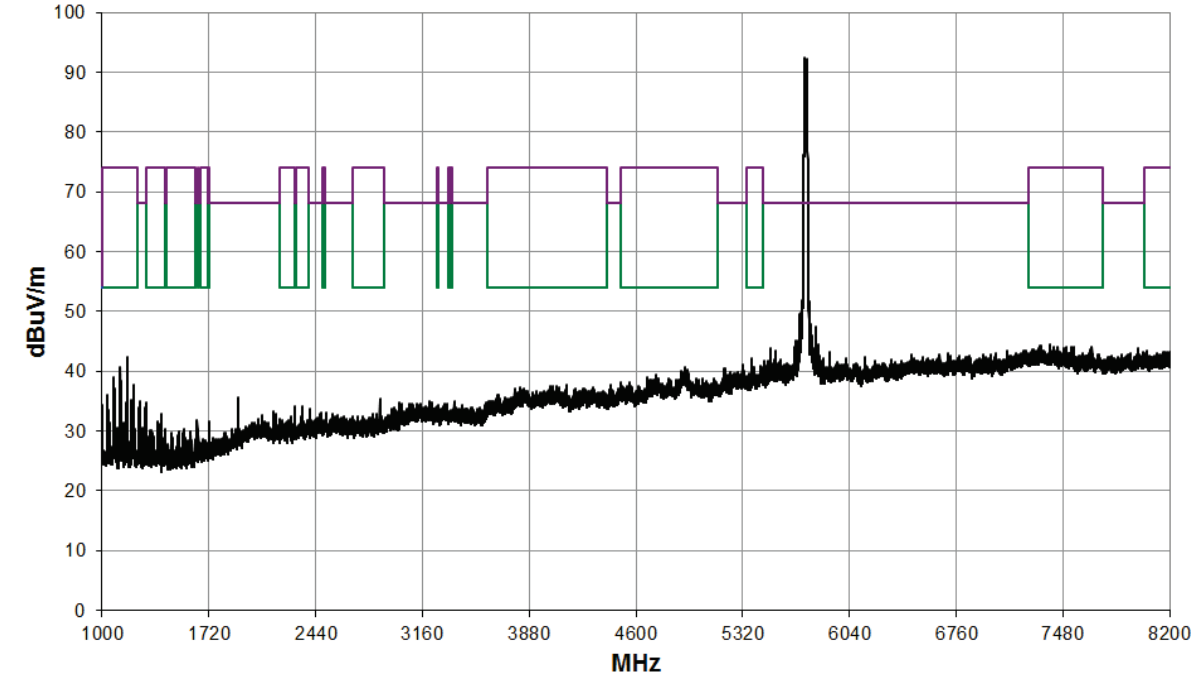
Date: 21.JUL.2020 14:29:53

SISO; Mode: 802.11ac20; Channel: CH149; Frequency: 5745 MHz; Bandwidth: 20 MHz; MCS Index: 8										
Detector	Freq. (MHz)	Meas'd Emission (dBµV)	Cable Loss (dB)	Antenna Factor (dB/m)	Pre-amp Gain (dB)	Duty Cycle Corr'n (dB)	Field Strength (dBµV/m)	Distance Extrap'n Factor (dB)	Field Strength (µV/m)	Limit (µV/m)
No emissions within 20 dB of the limit.										

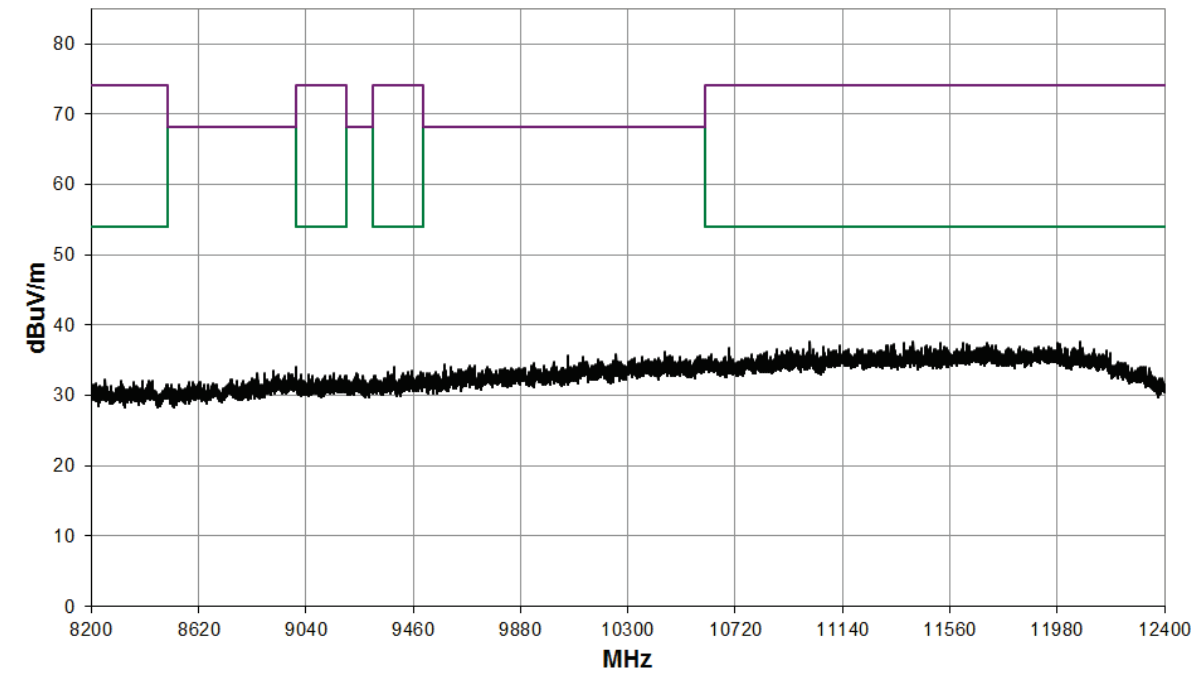
30 MHz to 1 GHz



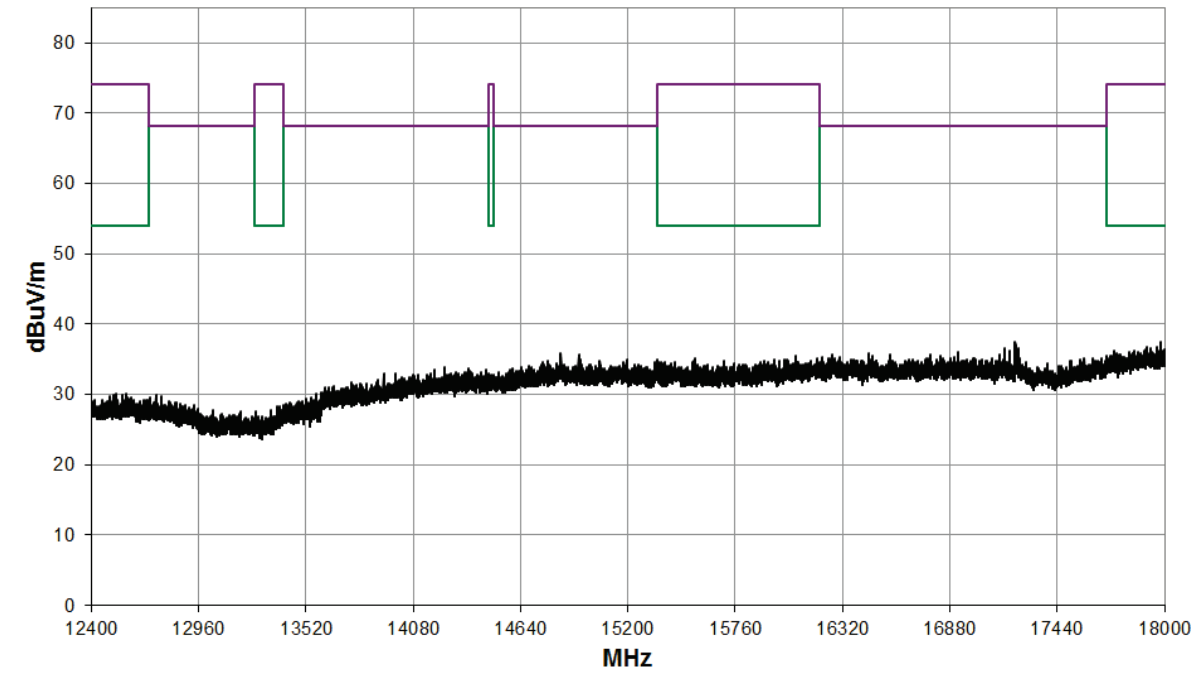
1 GHz to 8.2 GHz



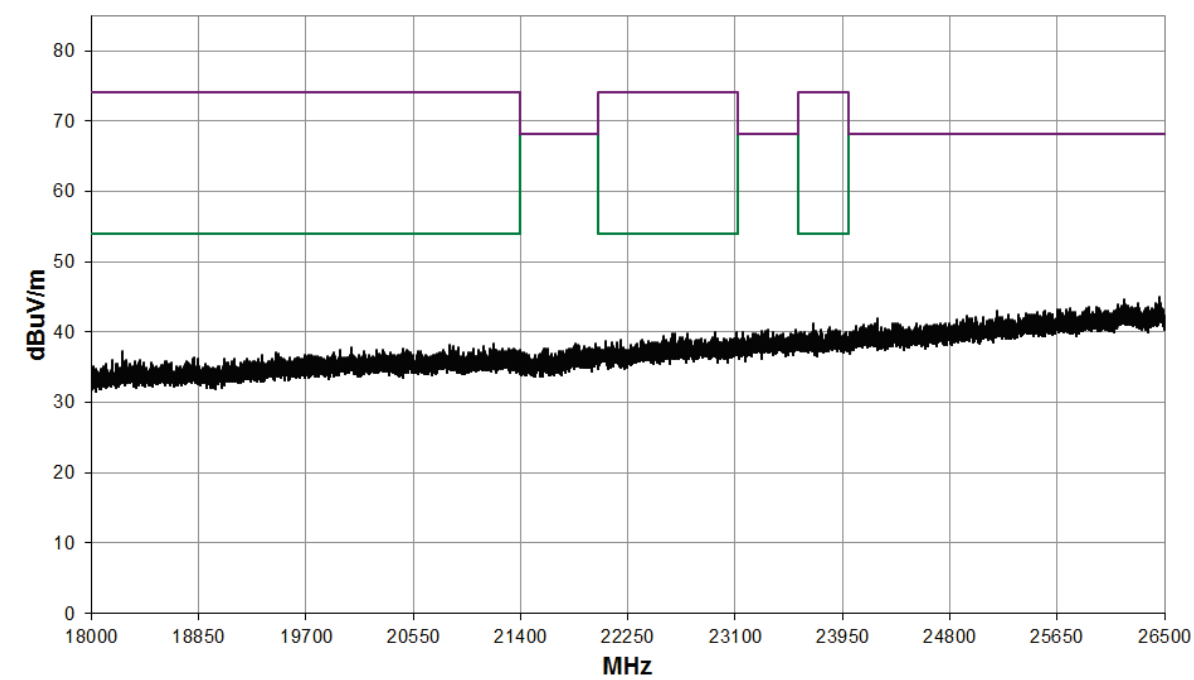
8.2 GHz to 12.4 GHz



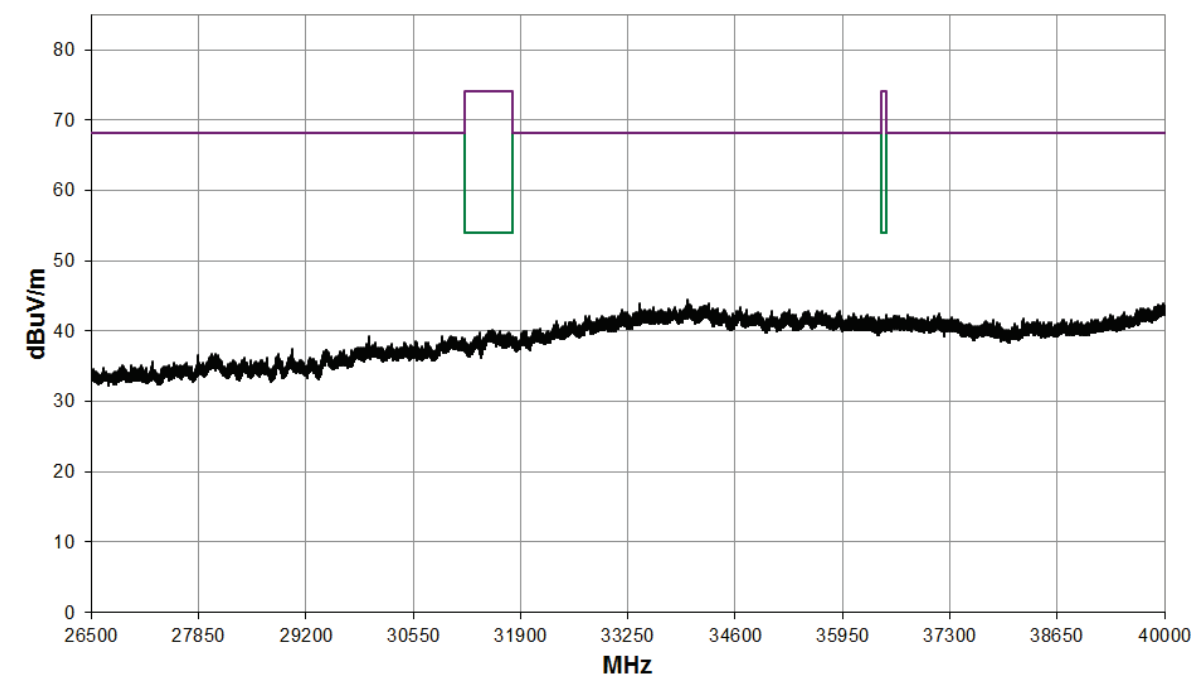
12.4 GHz to 18 GHz



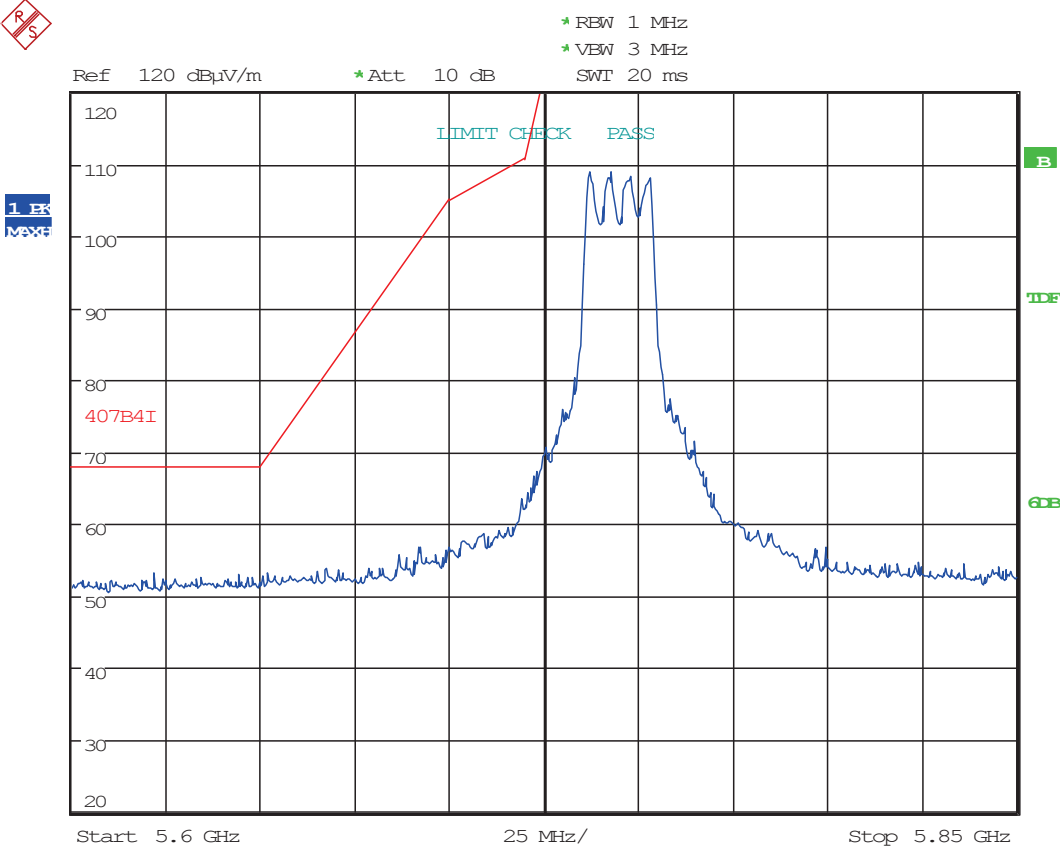
18 GHz to 26.5 GHz



26.5 GHz to 40 GHz



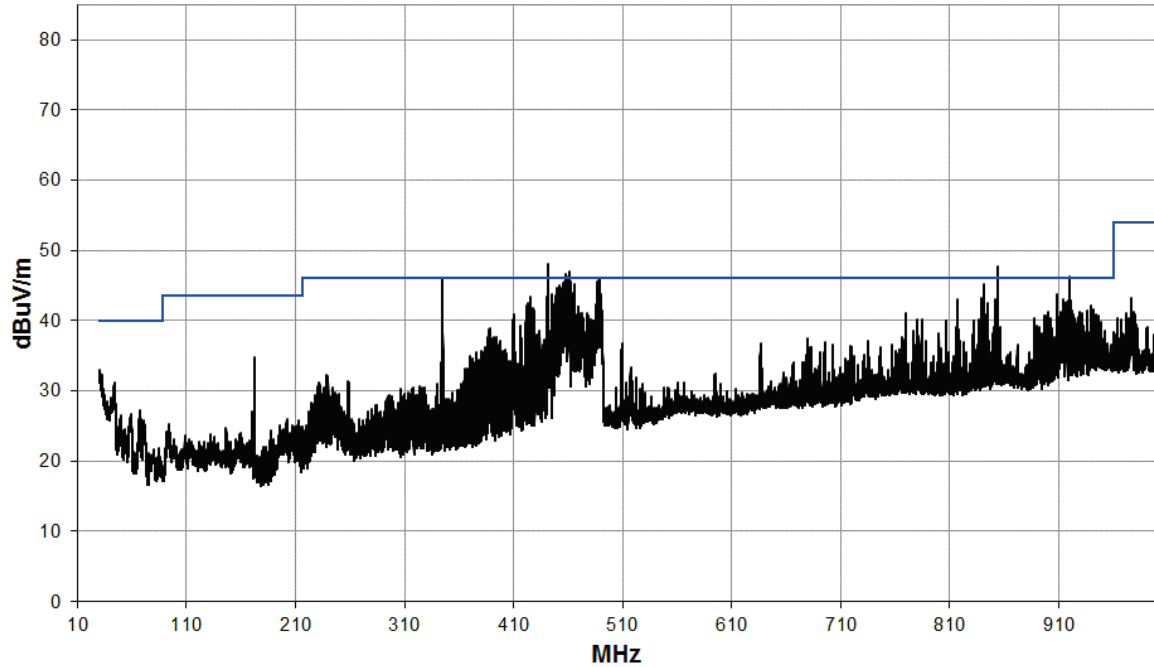
Band Edge



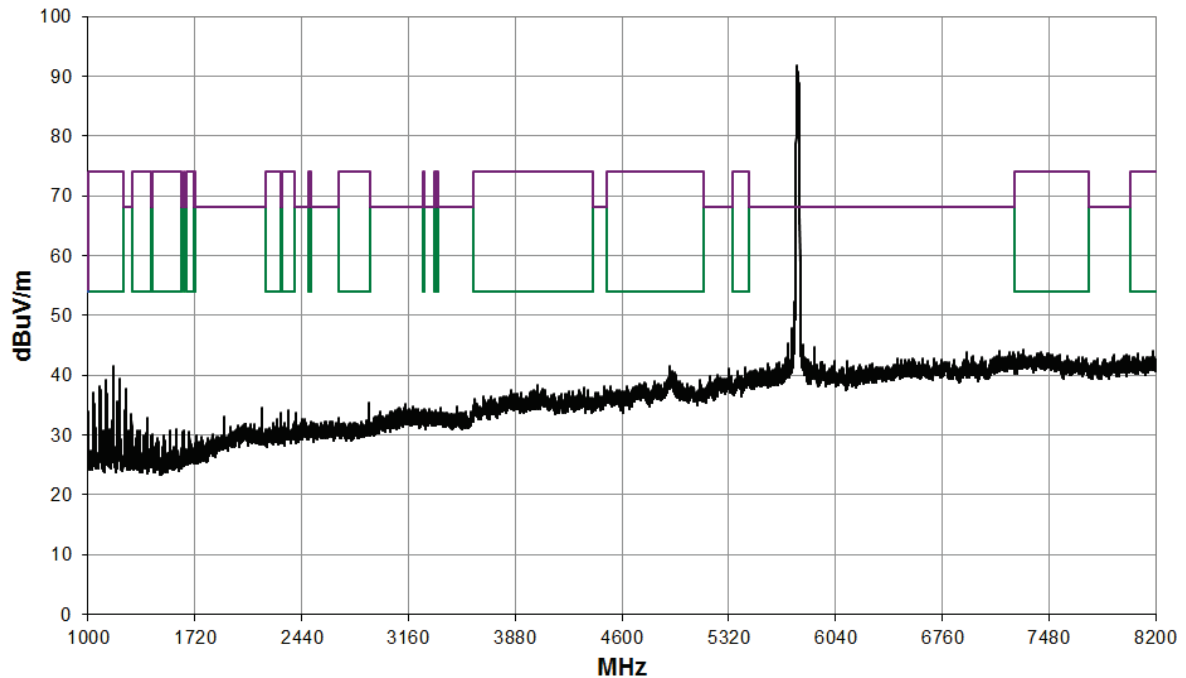
Date: 21.JUL.2020 14:30:46

SISO; Mode: 802.11ac20; Channel: CH157; Frequency: 5785 MHz; Bandwidth: 20 MHz; MCS Index: 0										
Detector	Freq. (MHz)	Meas'd Emission (dBμV)	Cable Loss (dB)	Antenna Factor (dB/m)	Pre-amp Gain (dB)	Duty Cycle Corr'n (dB)	Field Strength (dBμV/m)	Distance Extrap'n Factor (dB)	Field Strength (μV/m)	Limit (μV/m)
No emissions within 20 dB of the limit.										

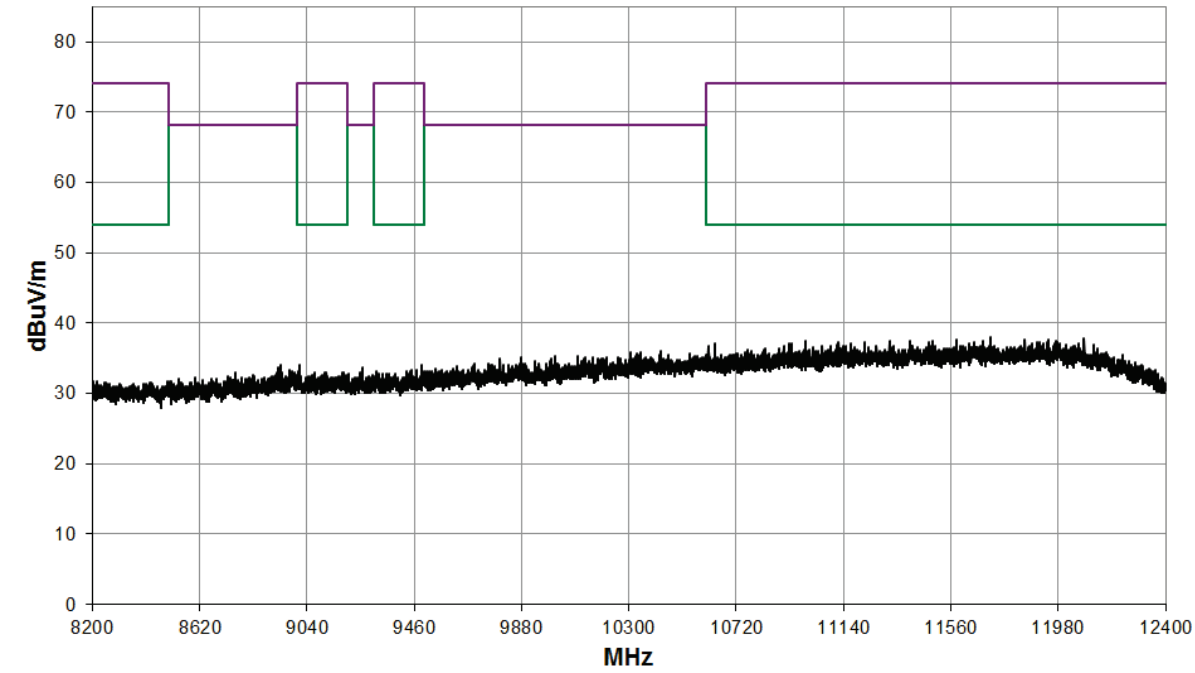
30 MHz to 1 GHz



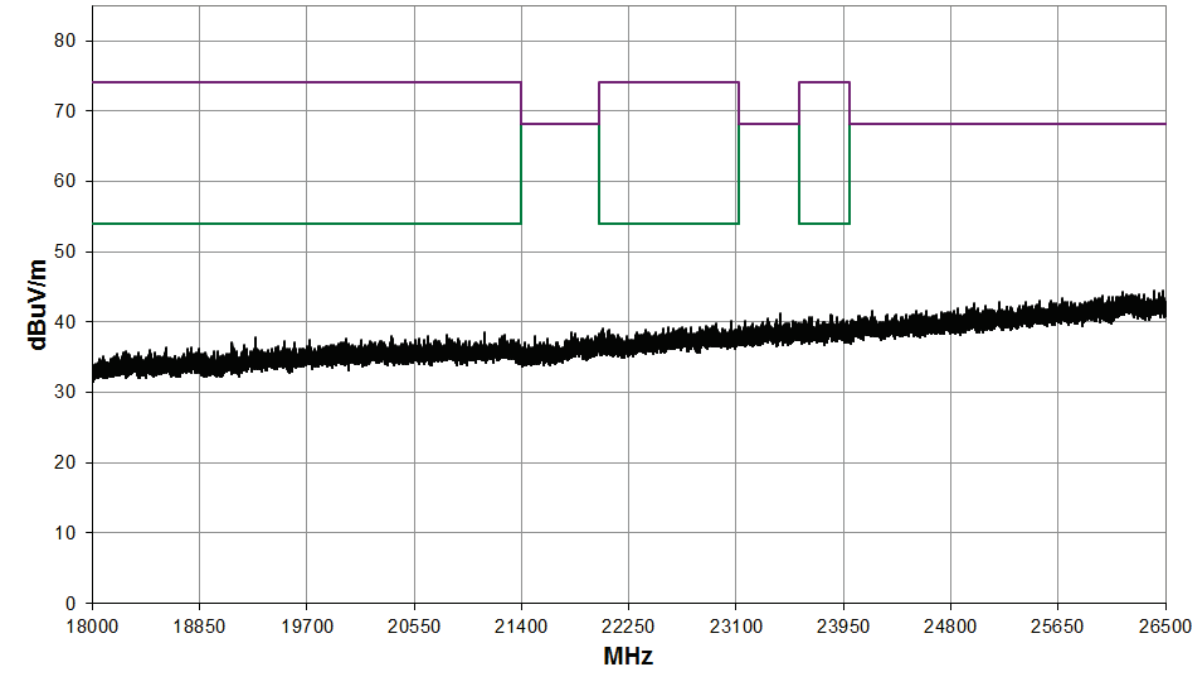
1 GHz to 8.2 GHz



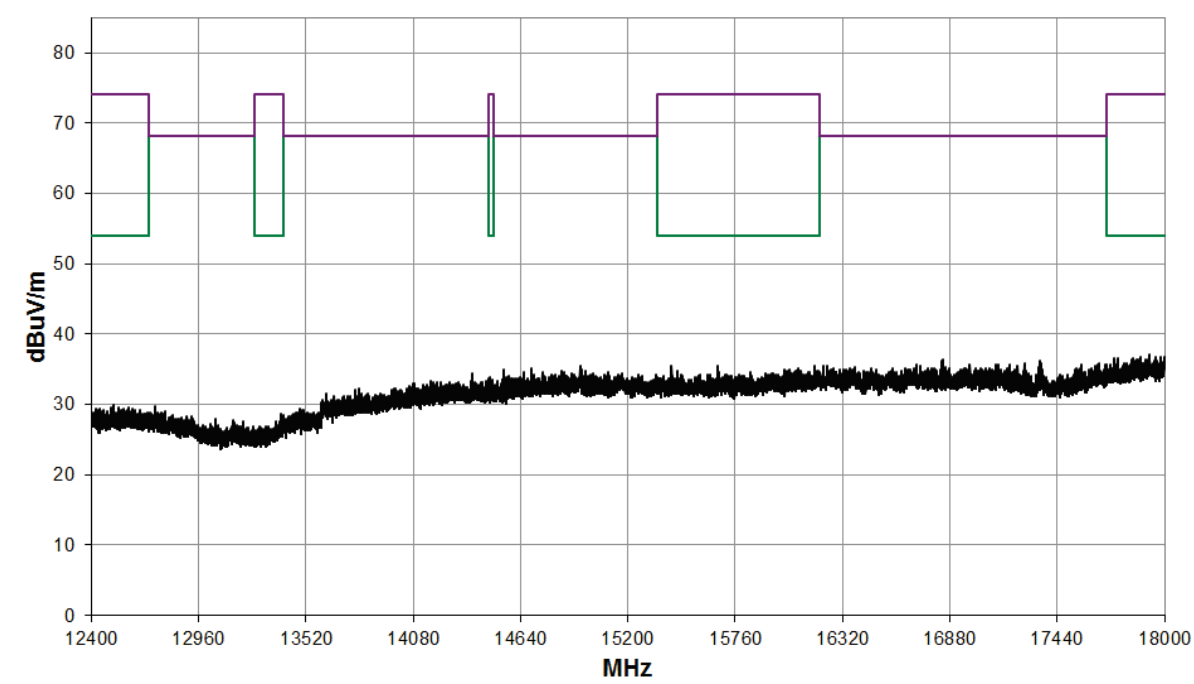
8.2 GHz to 12.4 GHz



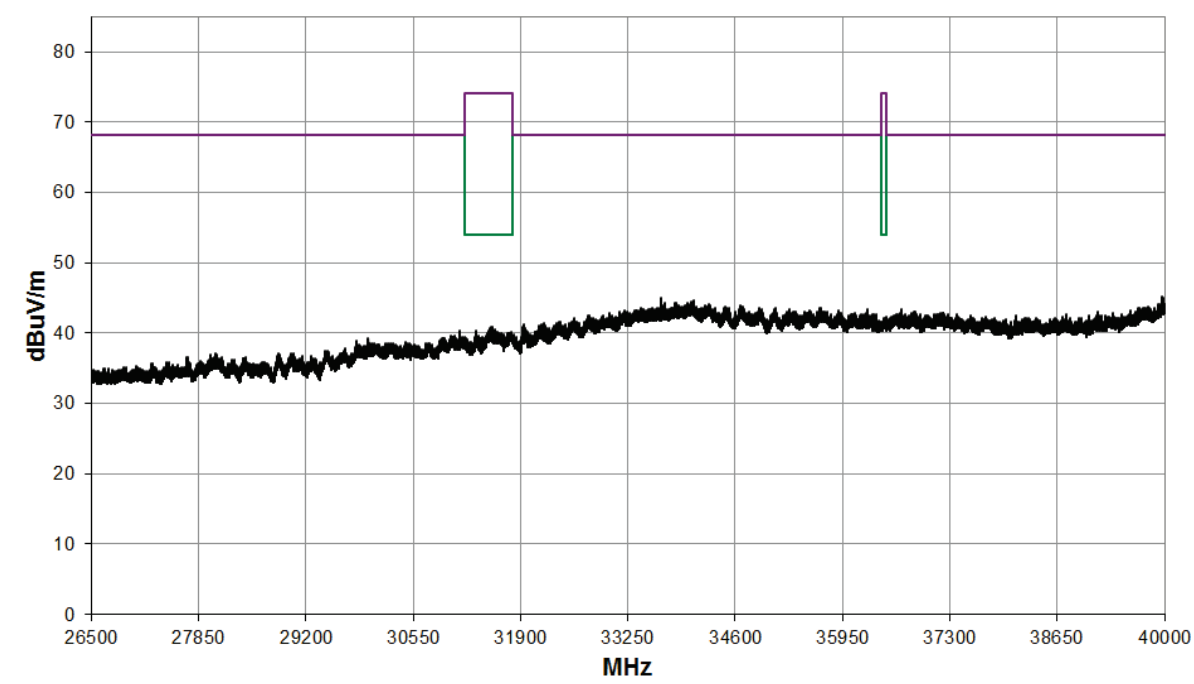
12.4 GHz to 18 GHz



18 GHz to 26.5 GHz

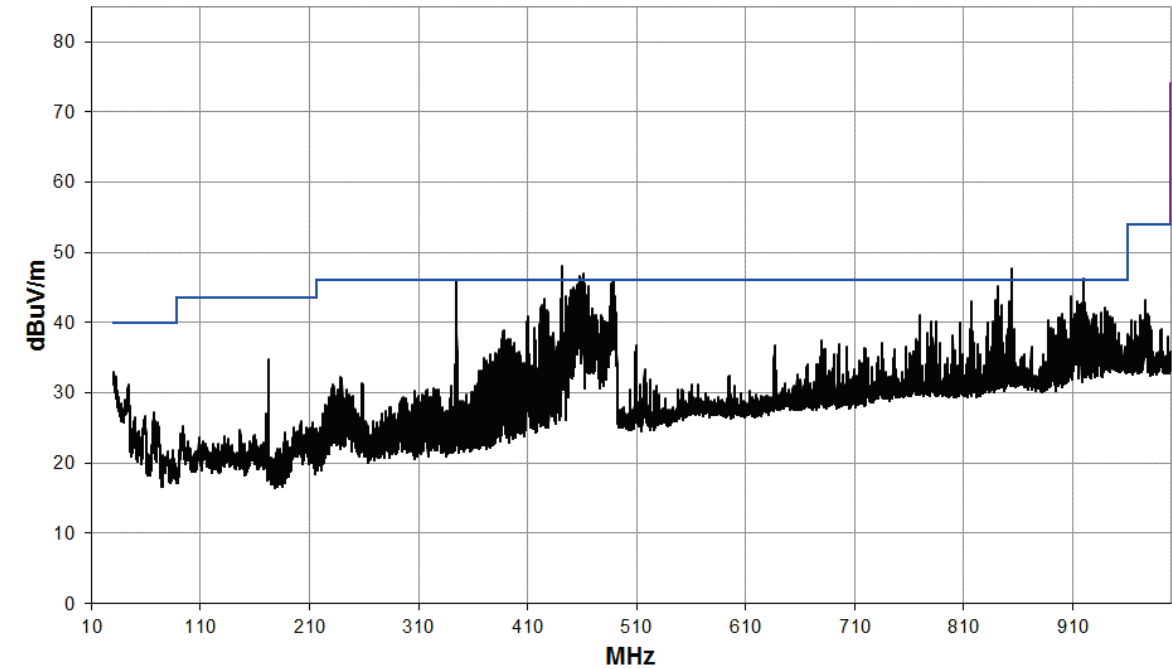


26.5 GHz to 40 GHz

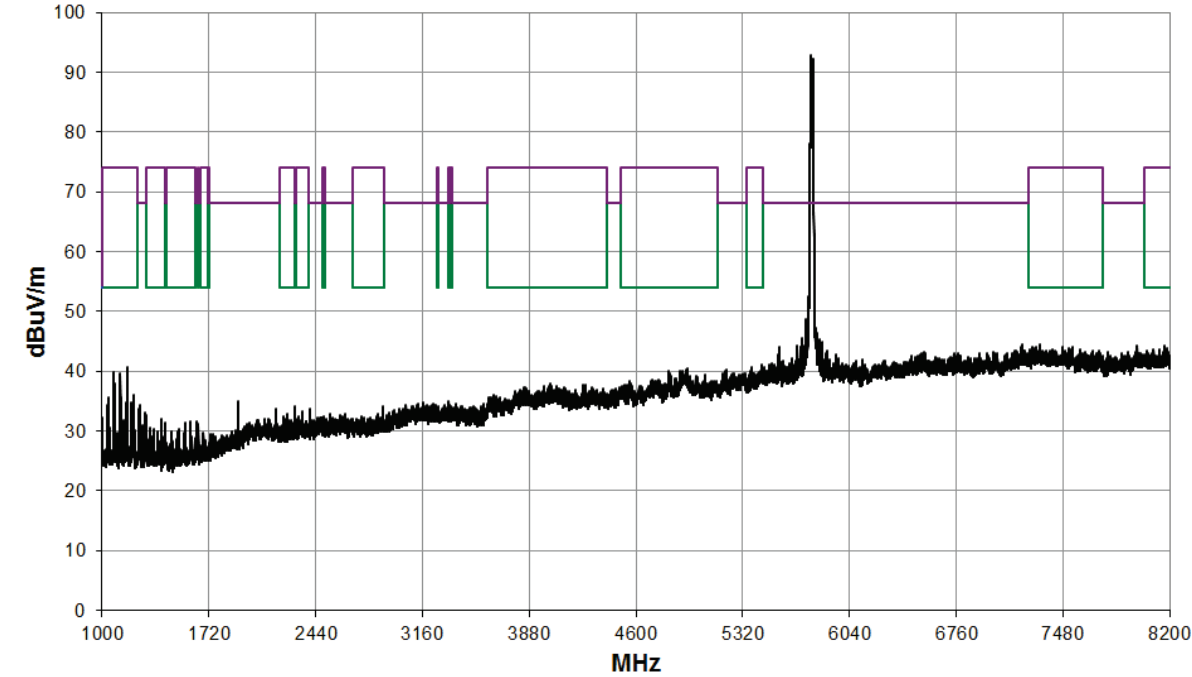


SISO; Mode: 802.11ac20; Channel: CH157; Frequency: 5785 MHz; Bandwidth: 20 MHz; MCS Index: 8										
Detector	Freq. (MHz)	Meas'd Emission (dBμV)	Cable Loss (dB)	Antenna Factor (dB/m)	Pre-amp Gain (dB)	Duty Cycle Corr'n (dB)	Field Strength (dBμV/m)	Distance Extrap'n Factor (dB)	Field Strength (μV/m)	Limit (μV/m)
No emissions within 20 dB of the limit.										

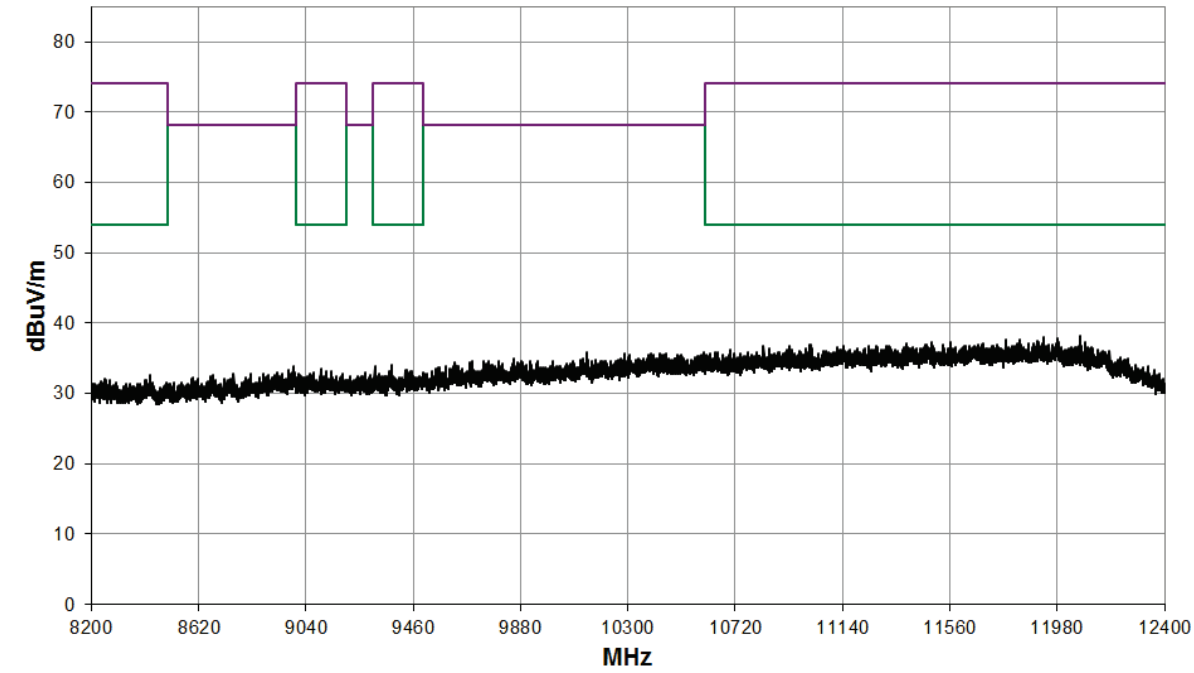
30 MHz to 1 GHz



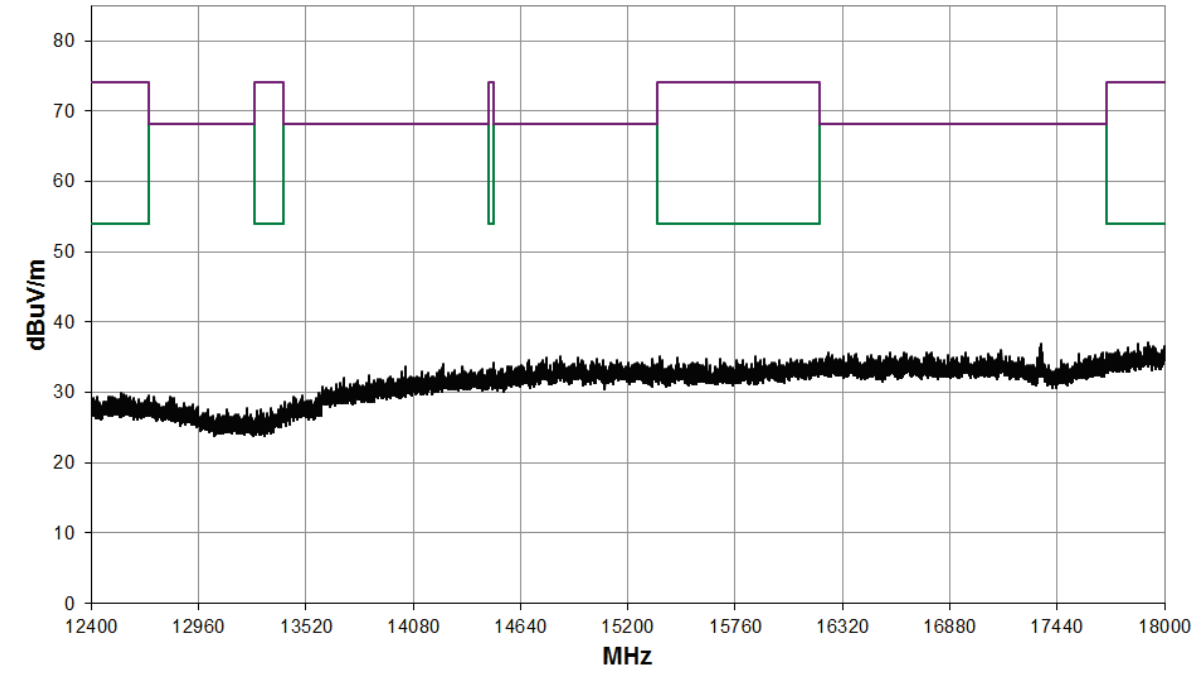
1 GHz to 8.2 GHz



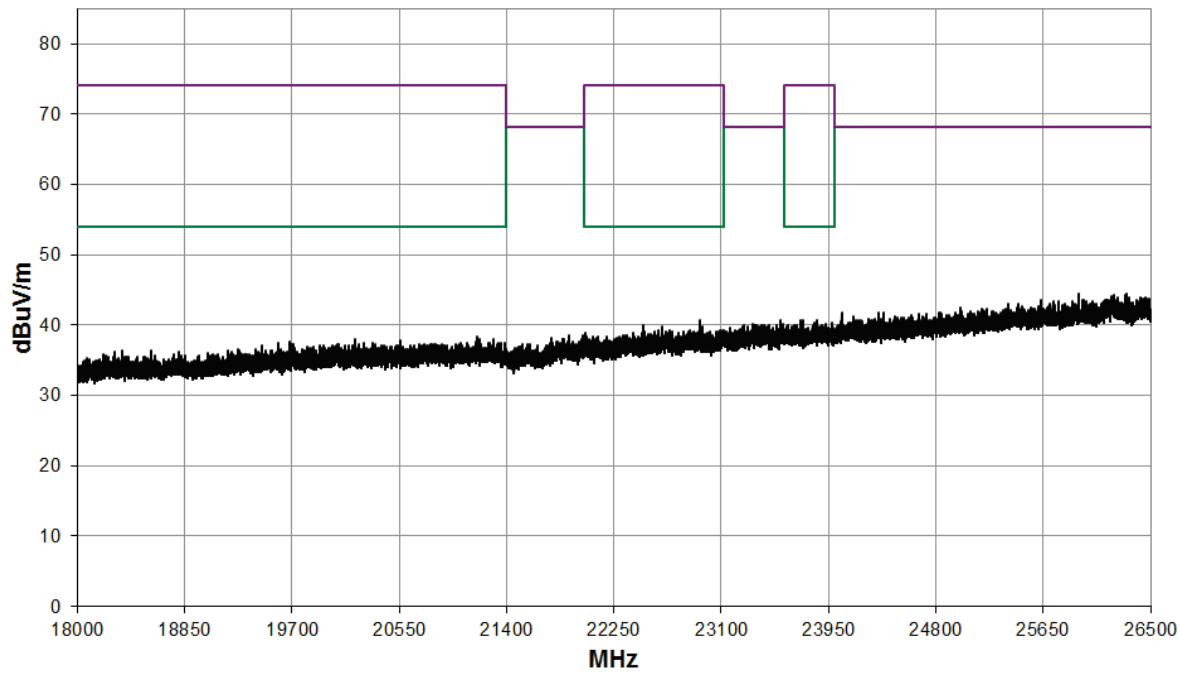
8.2 GHz to 12.4 GHz



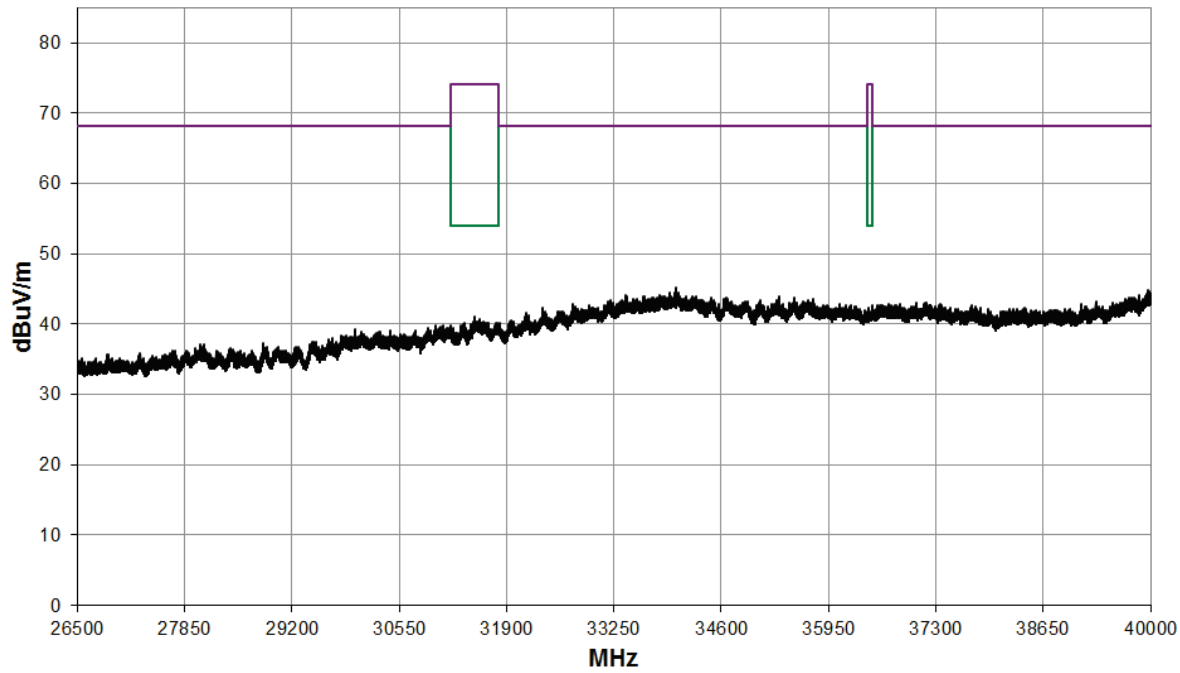
12.4 GHz to 18 GHz



18 GHz to 26.5 GHz

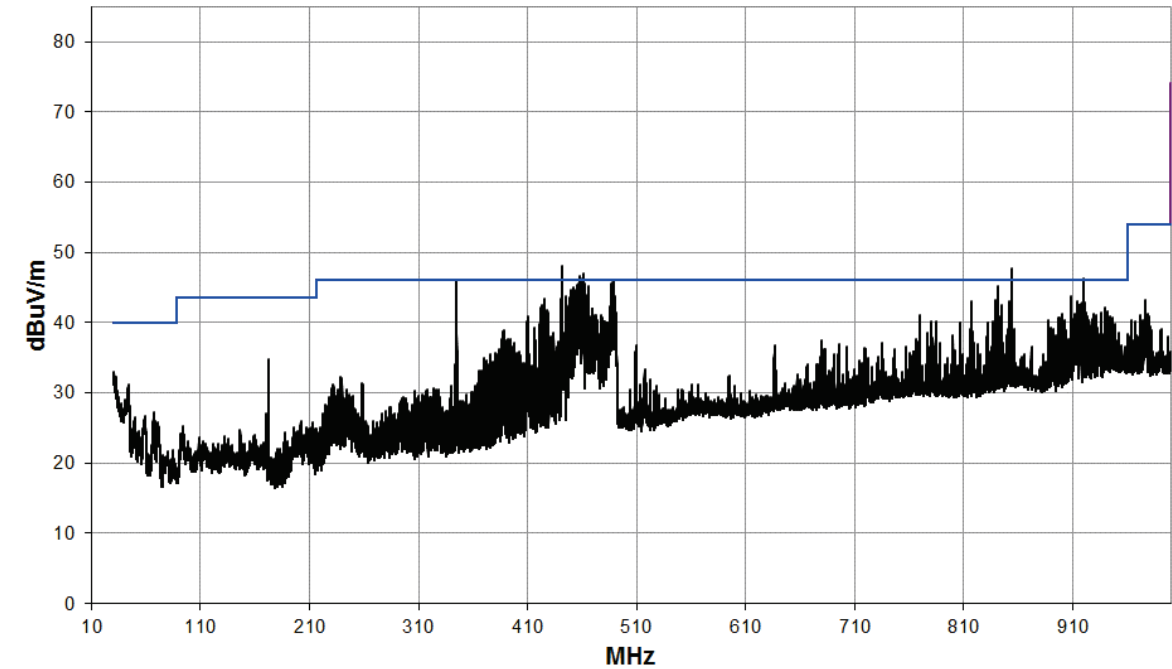


26.5 GHz to 40 GHz

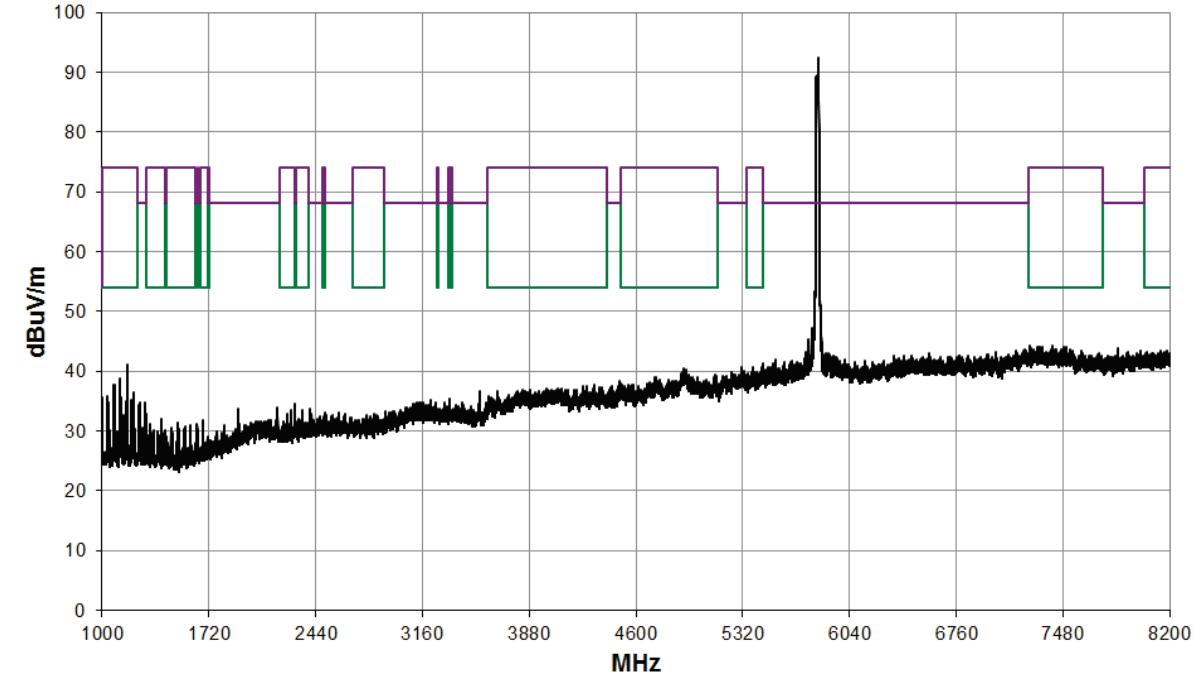


SISO; Mode: 802.11ac20; Channel: CH165; Frequency: 5825 MHz; Bandwidth: 20 MHz; MCS Index: 0										
Detector	Freq. (MHz)	Meas'd Emission (dBµV)	Cable Loss (dB)	Antenna Factor (dB/m)	Pre-amp Gain (dB)	Duty Cycle Corr'n (dB)	Field Strength (dBµV/m)	Distance Extrap'n Factor (dB)	Field Strength (µV/m)	Limit (µV/m)
No emissions within 20 dB of the limit.										

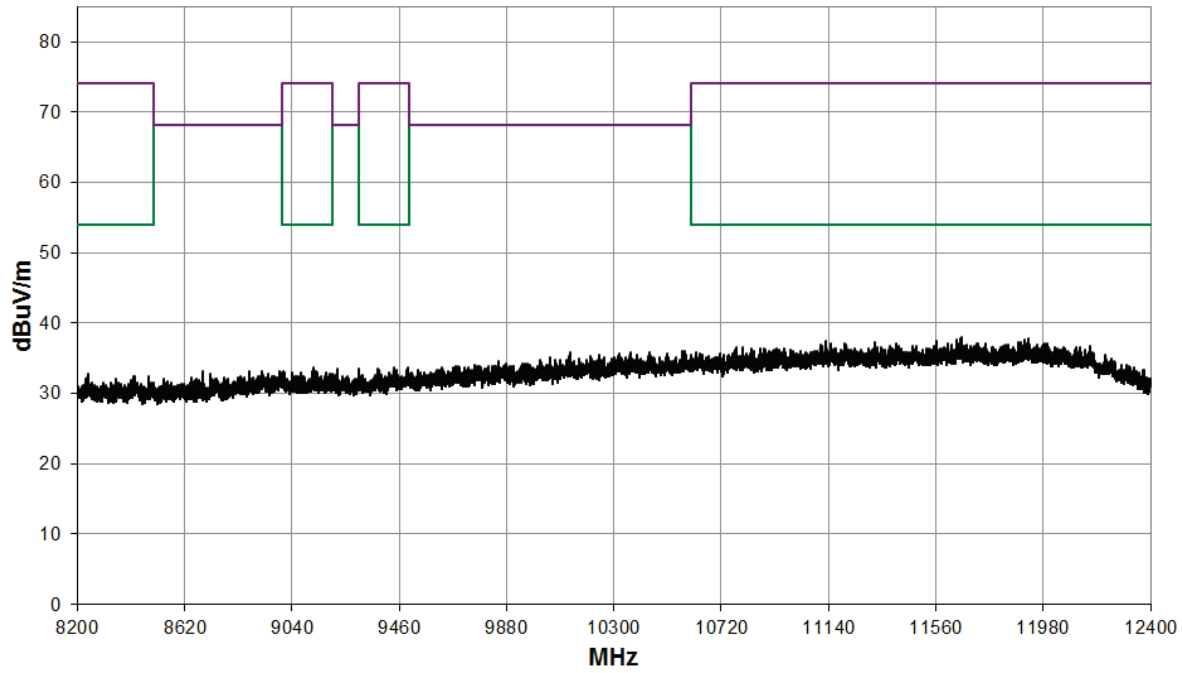
30 MHz to 1 GHz



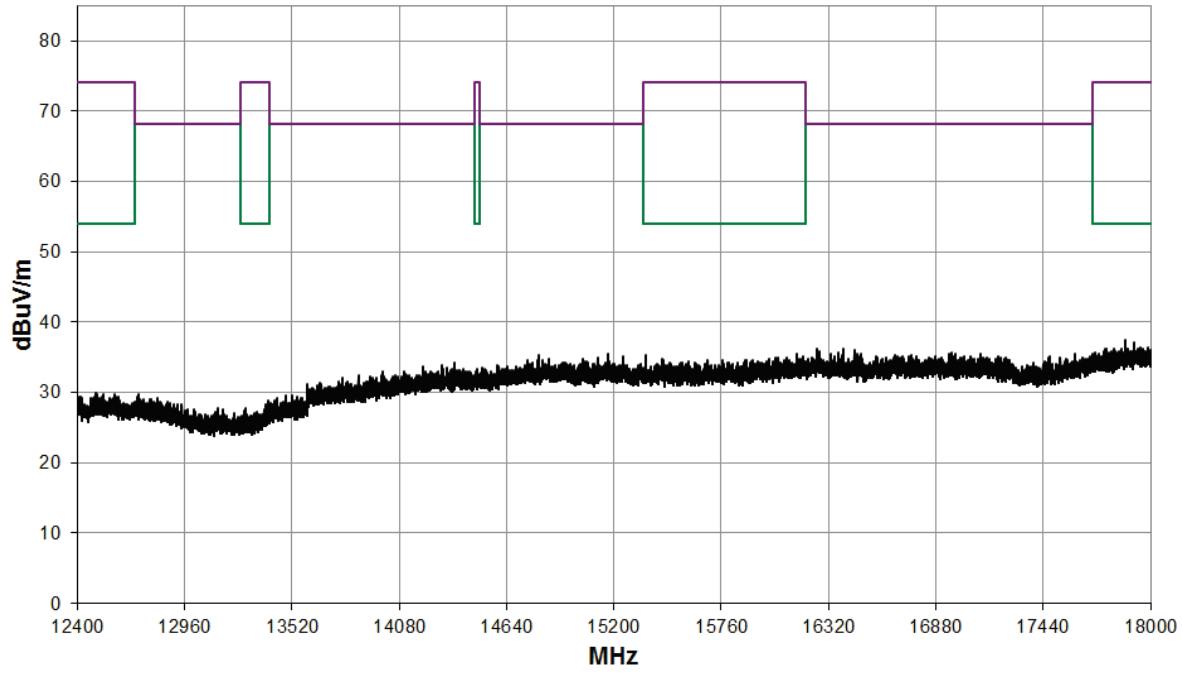
1 GHz to 8.2 GHz



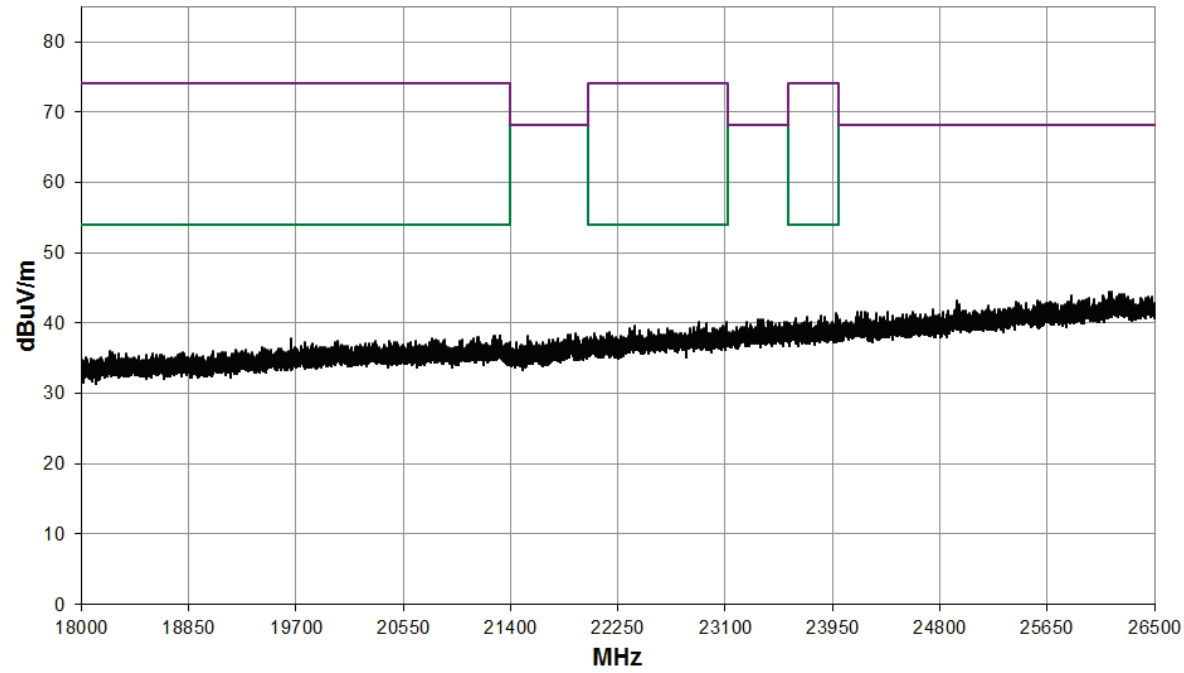
8.2 GHz to 12.4 GHz



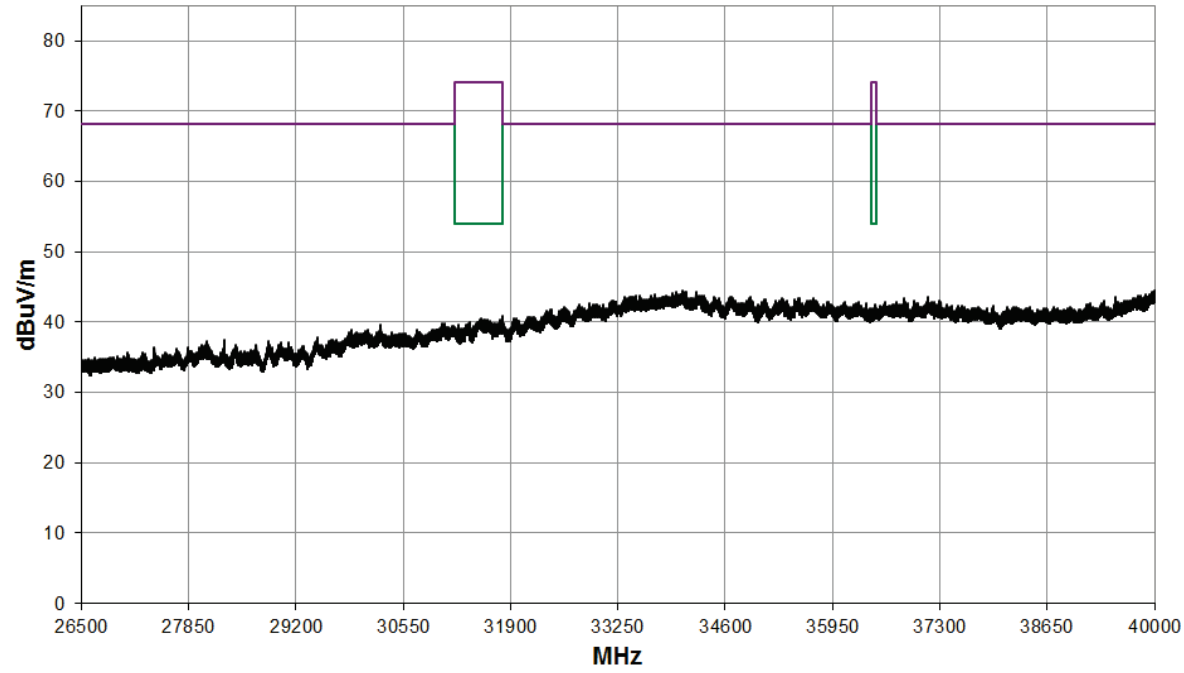
12.4 GHz to 18 GHz



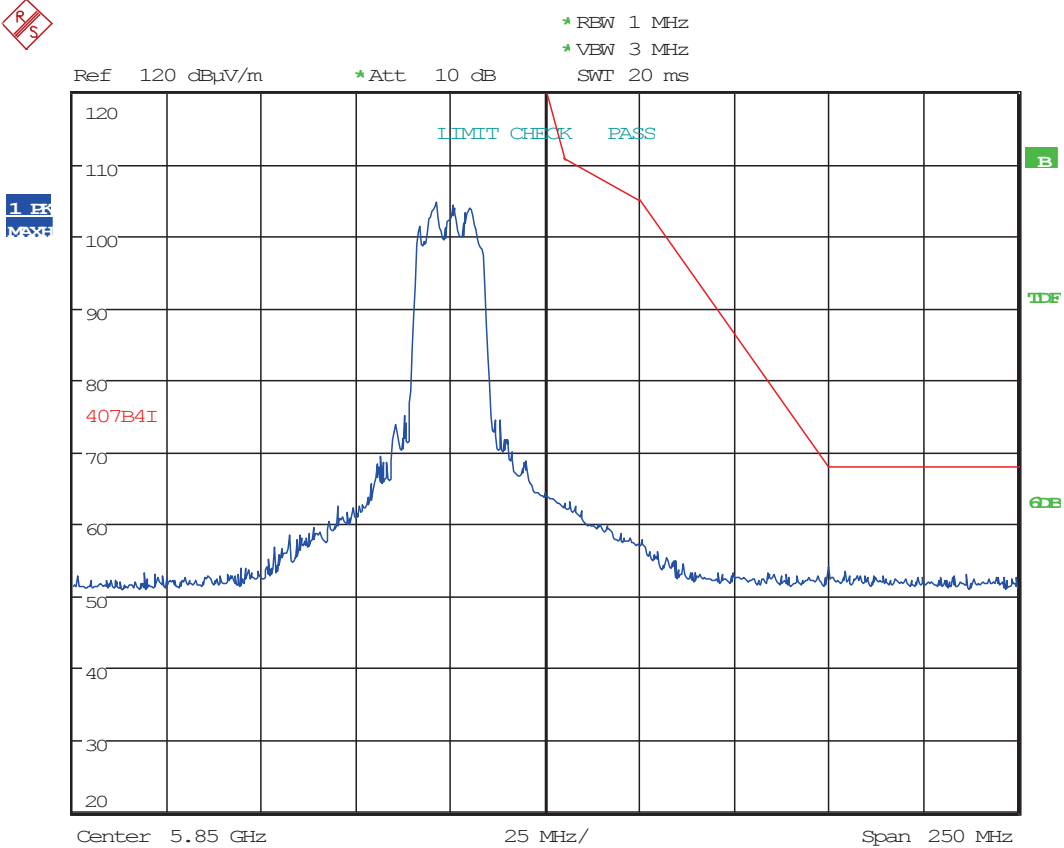
18 GHz to 26.5 GHz



26.5 GHz to 40 GHz



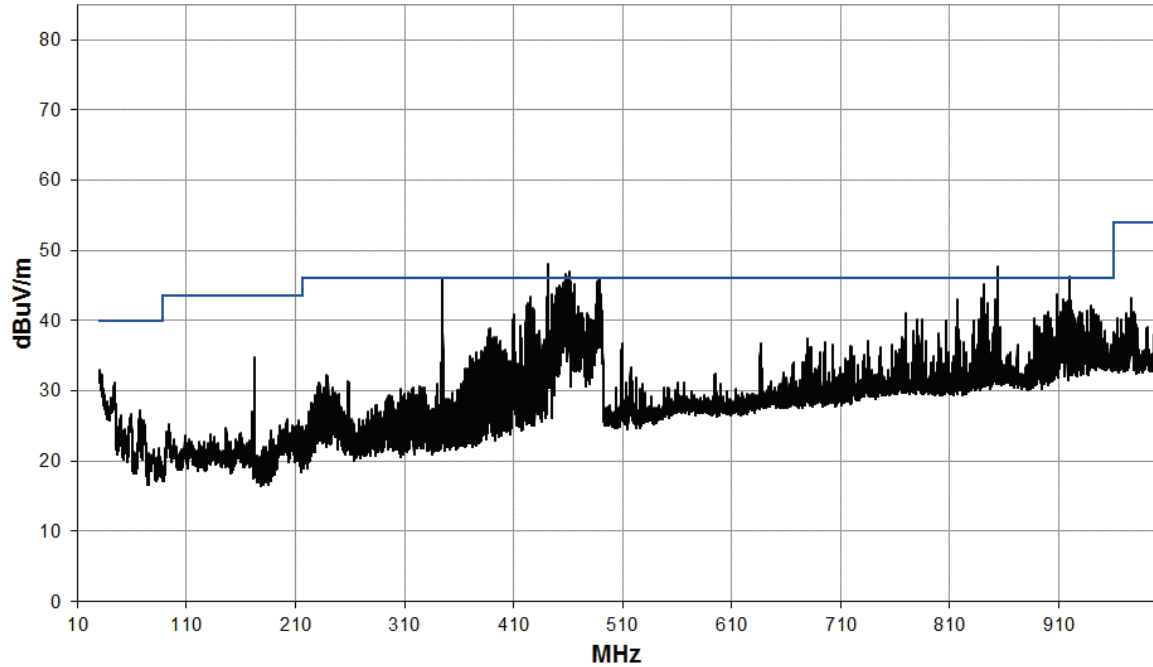
Band Edge



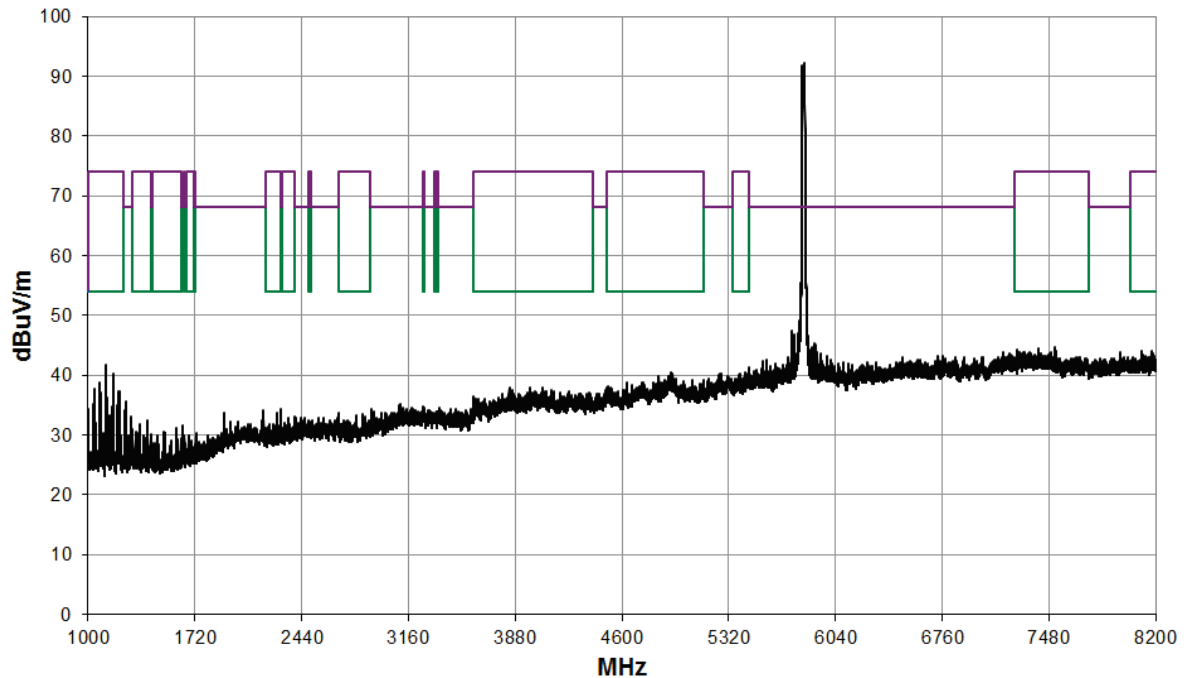
Date: 21.JUL.2020 12:48:29

SISO; Mode: 802.11ac20; Channel: CH165; Frequency: 5825 MHz; Bandwidth: 20 MHz; MCS Index: 8										
Detector	Freq. (MHz)	Meas'd Emission (dBμV)	Cable Loss (dB)	Antenna Factor (dB/m)	Pre-amp Gain (dB)	Duty Cycle Corr'n (dB)	Field Strength (dBμV/m)	Distance Extrap'n Factor (dB)	Field Strength (μV/m)	Limit (μV/m)
No emissions within 20 dB of the limit.										

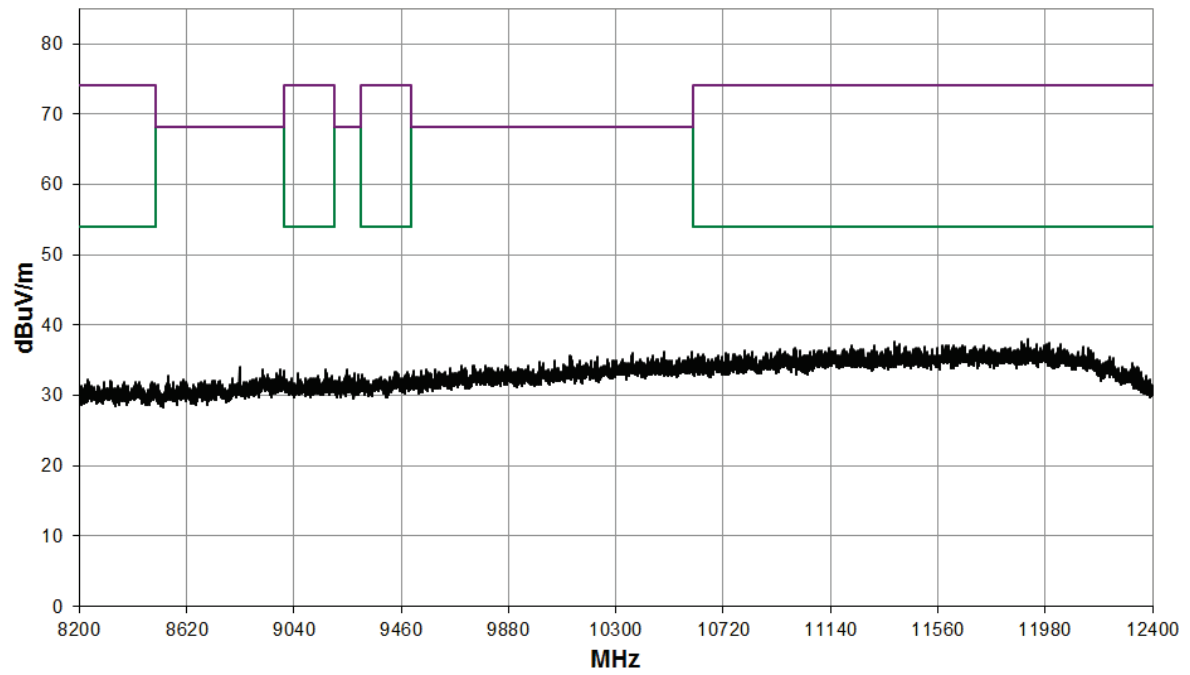
30 MHz to 1 GHz



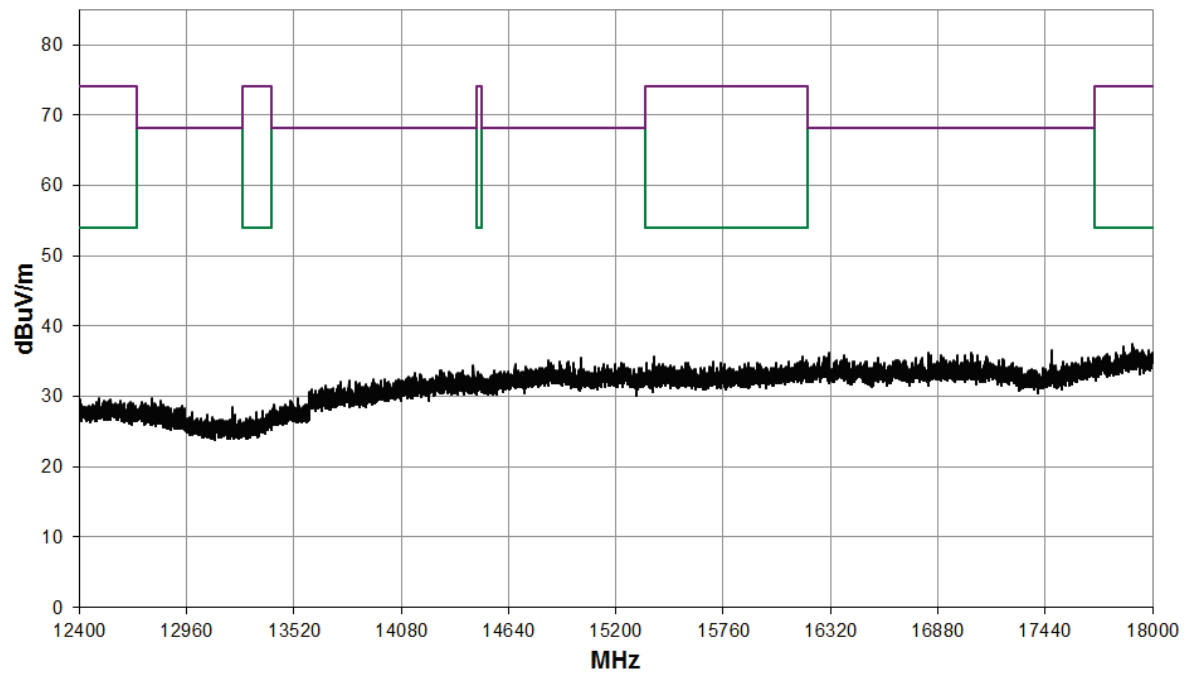
1 GHz to 8.2 GHz



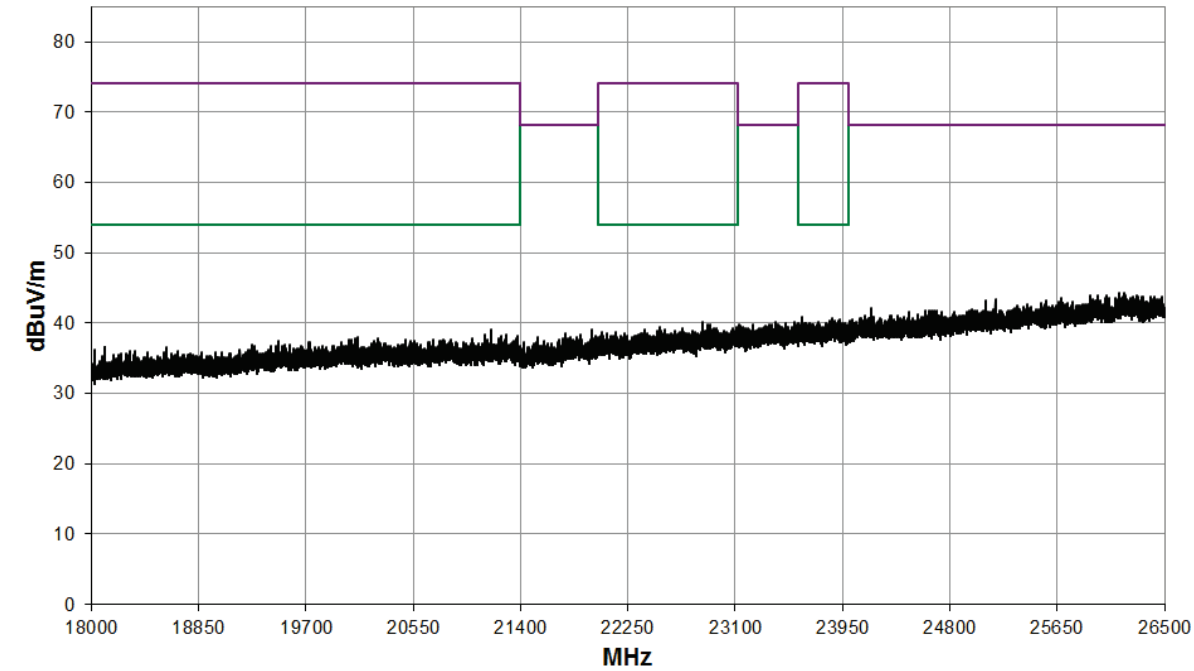
8.2 GHz to 12.4 GHz



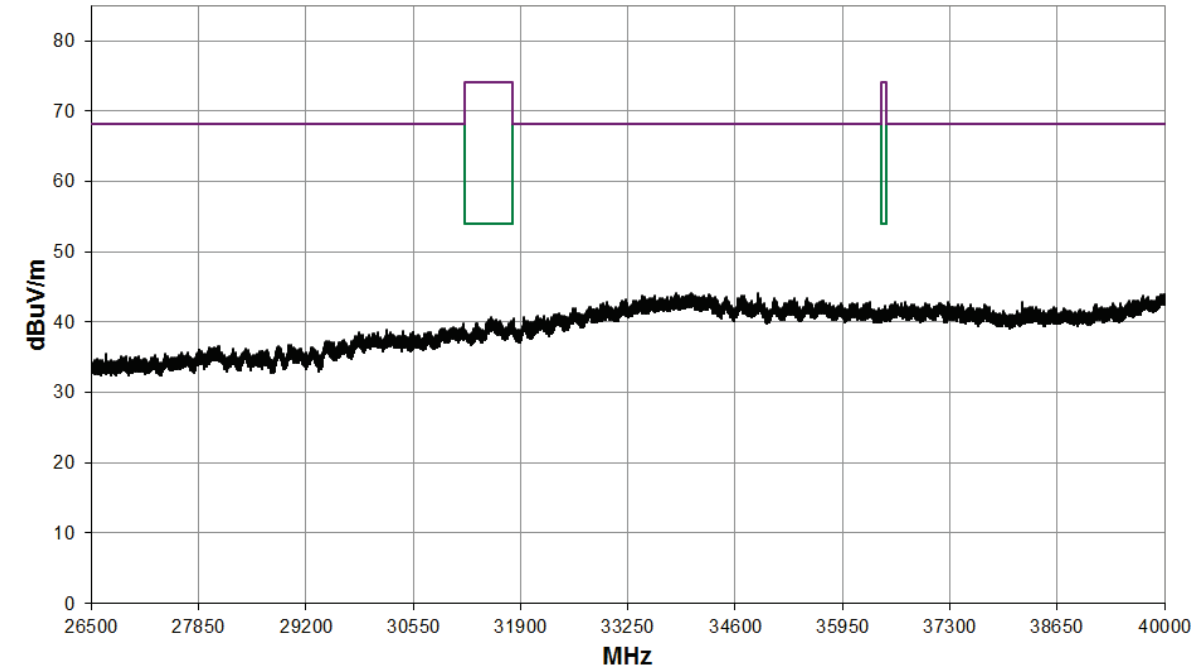
12.4 GHz to 18 GHz



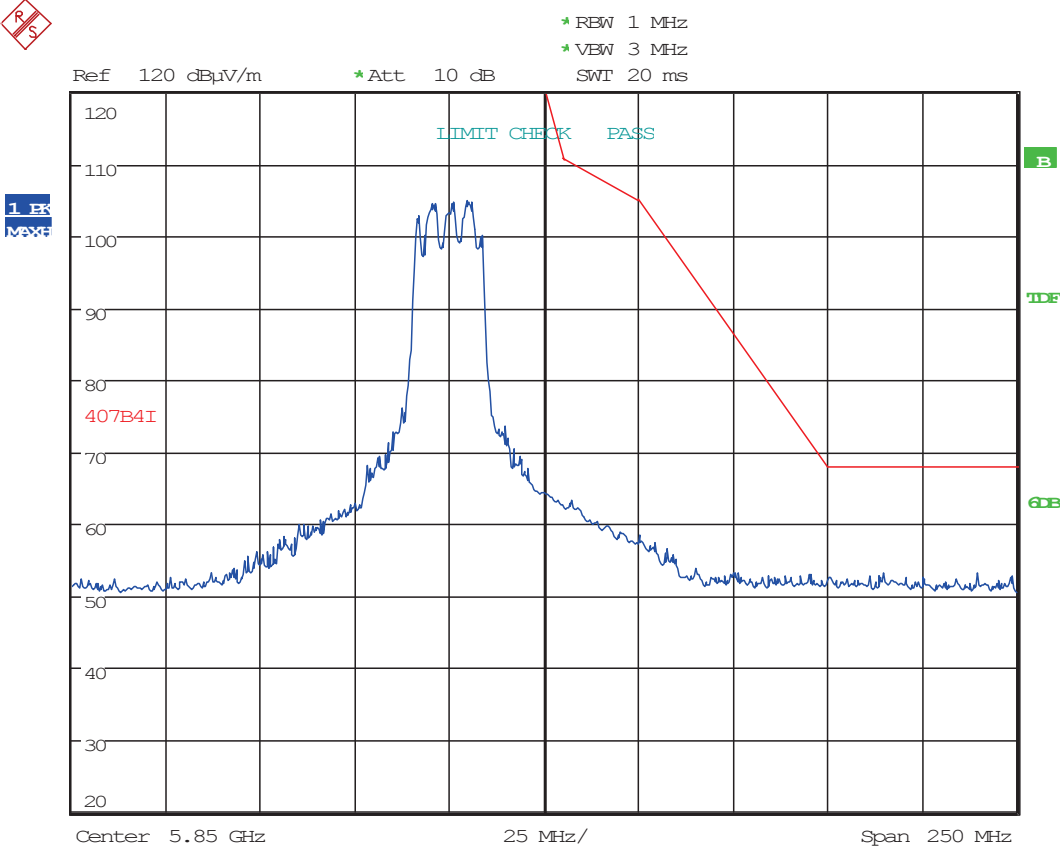
18 GHz to 26.5 GHz



26.5 GHz to 40 GHz



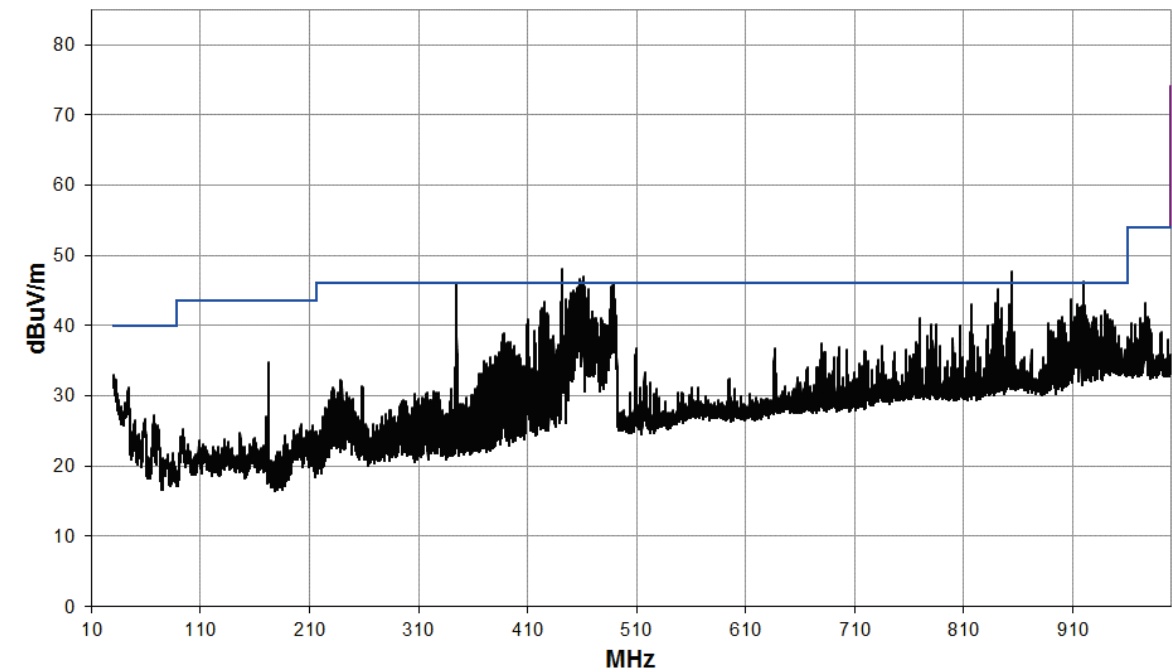
Band Edge



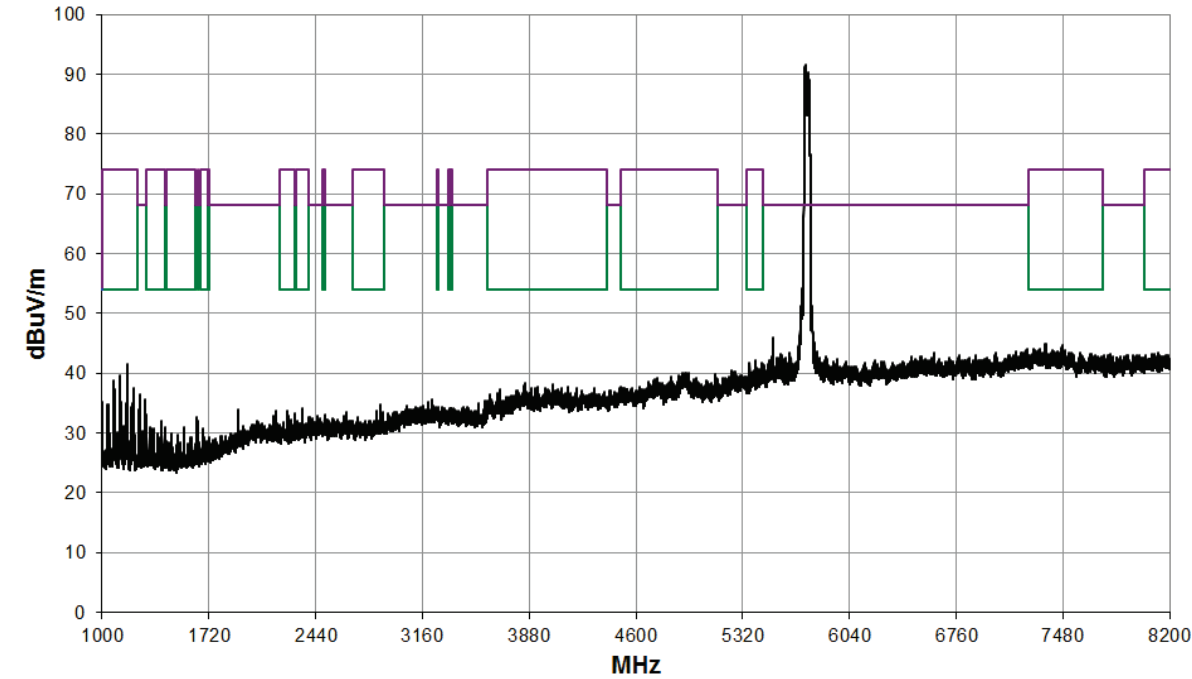
Date: 21.JUL.2020 12:49:41

SISO; Mode: 802.11ac40; Channel: CH151; Frequency: 5755 MHz; Bandwidth: 40 MHz; MCS Index: 0										
Detector	Freq. (MHz)	Meas'd Emission (dBμV)	Cable Loss (dB)	Antenna Factor (dB/m)	Pre-amp Gain (dB)	Duty Cycle Corr'n (dB)	Field Strength (dBμV/m)	Distance Extrap'n Factor (dB)	Field Strength (μV/m)	Limit (μV/m)
No emissions within 20 dB of the limit.										

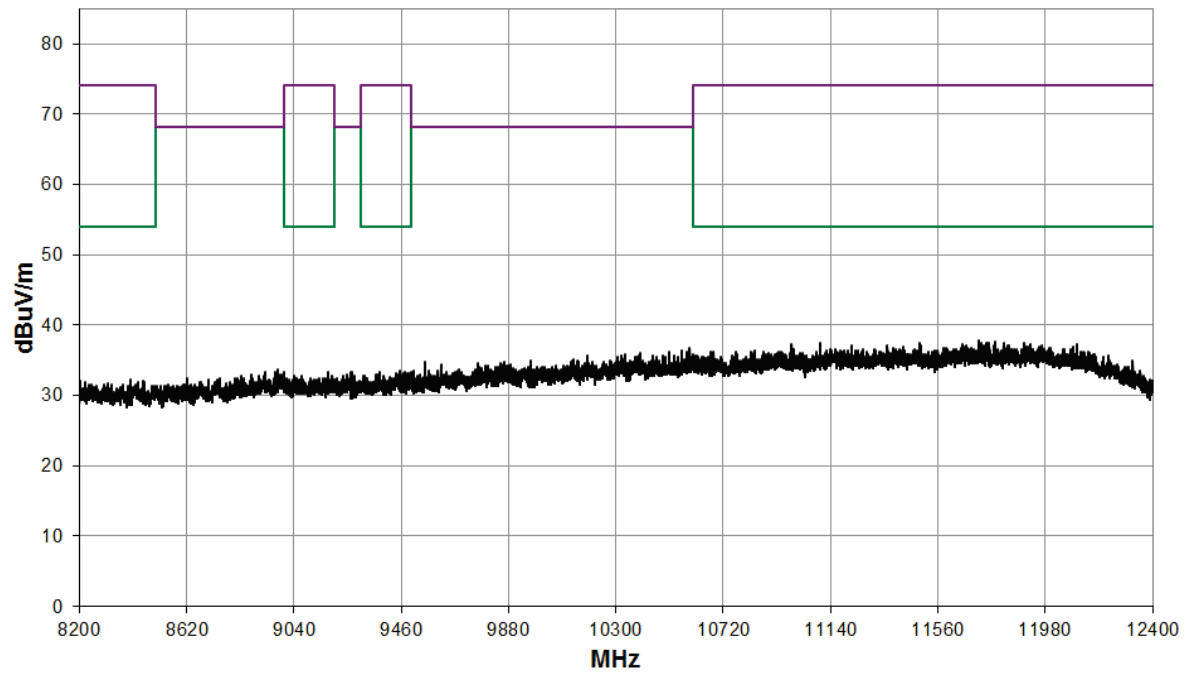
30 MHz to 1 GHz



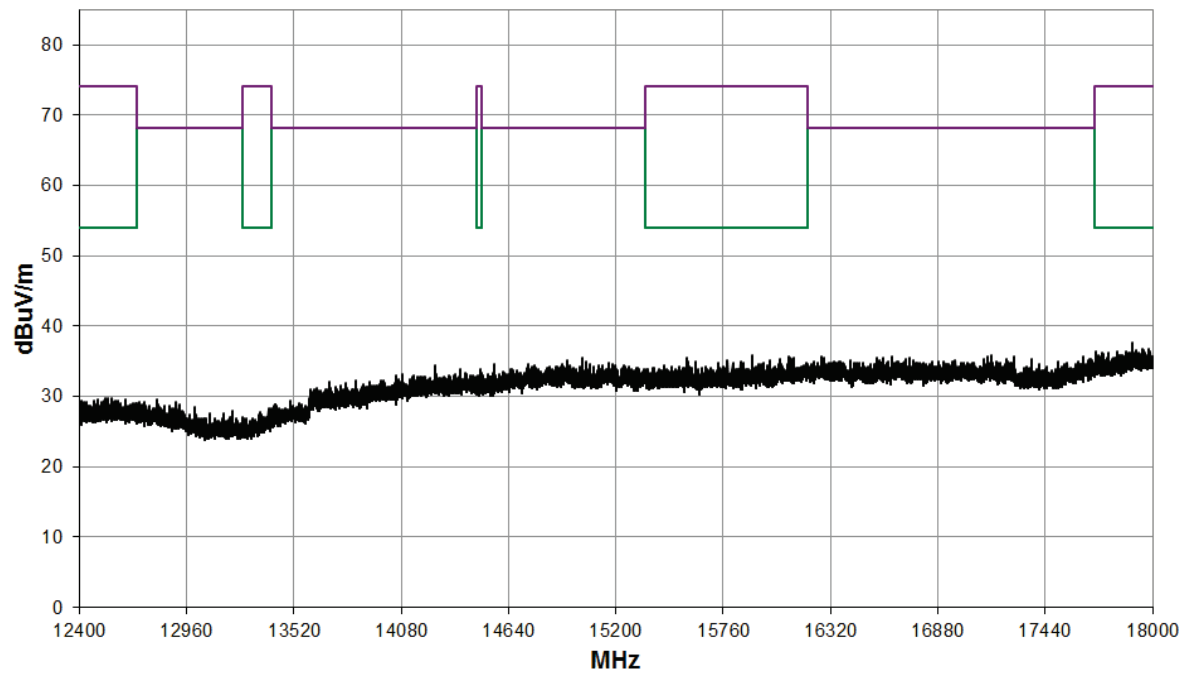
1 GHz to 8.2 GHz



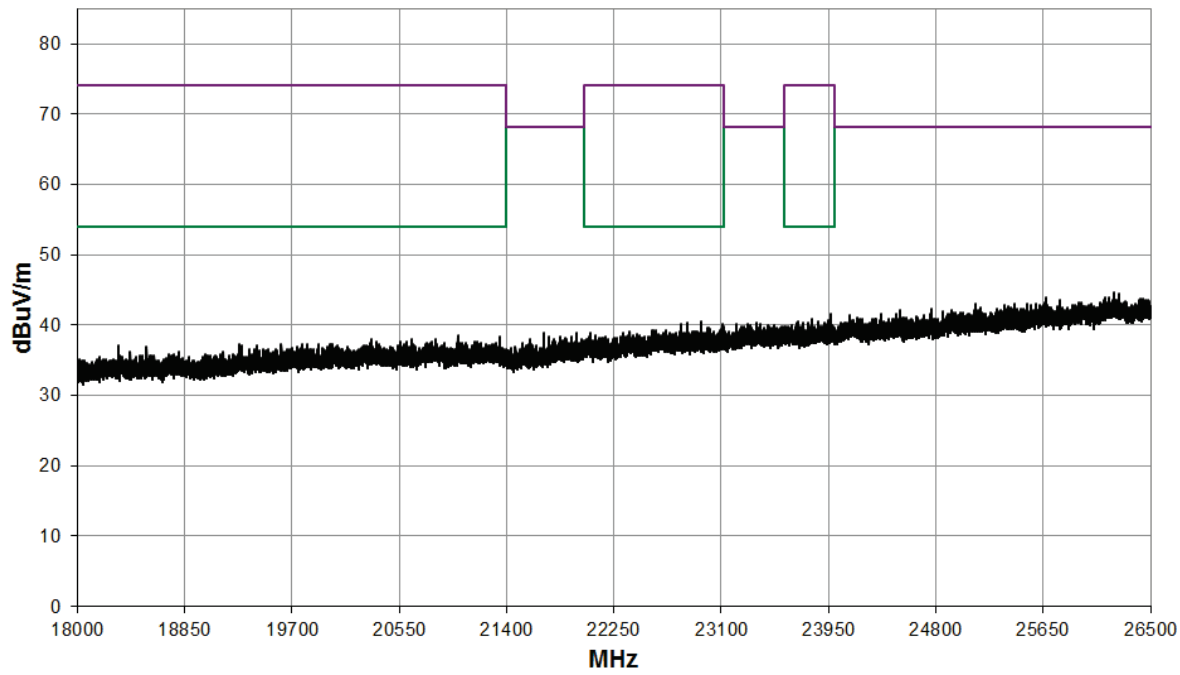
8.2 GHz to 12.4 GHz



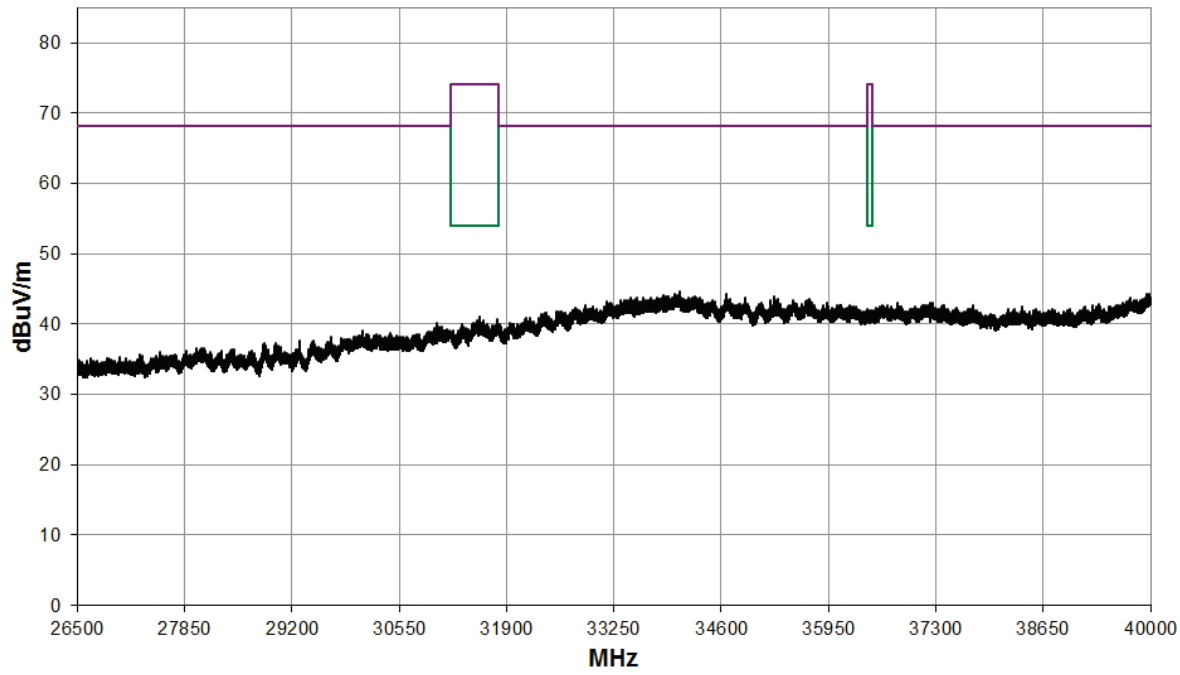
12.4 GHz to 18 GHz



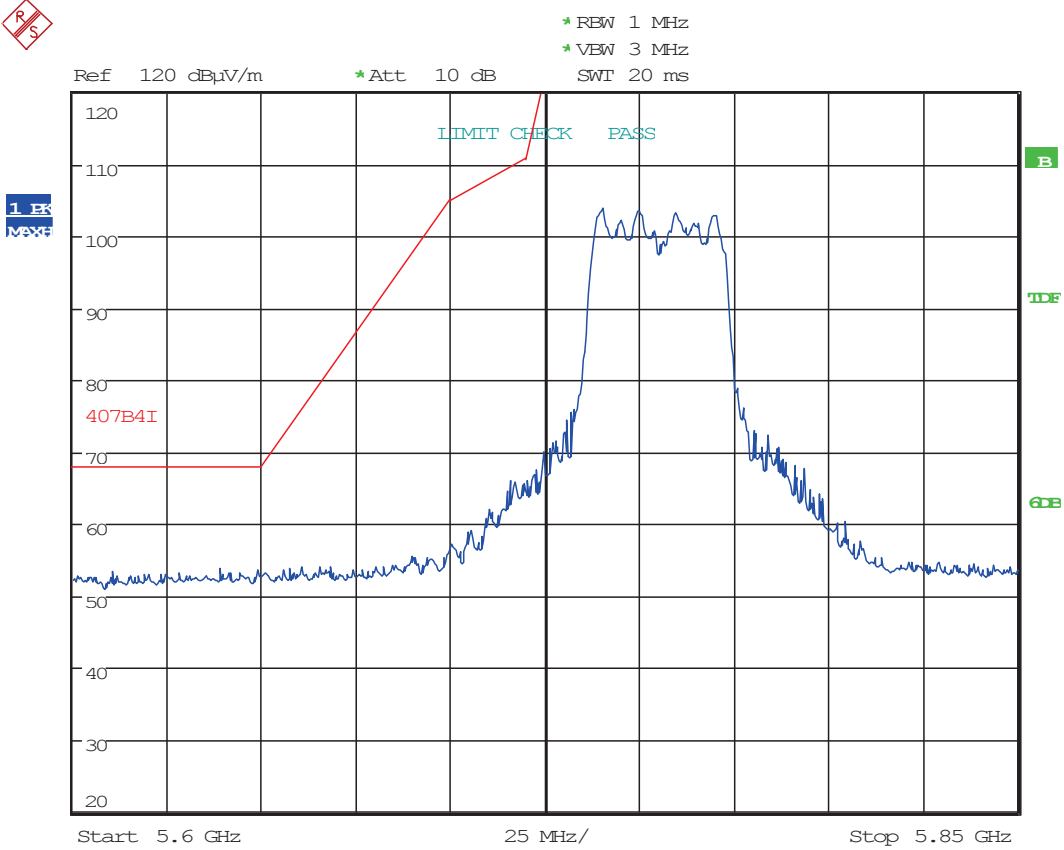
18 GHz to 26.5 GHz



26.5 GHz to 40 GHz



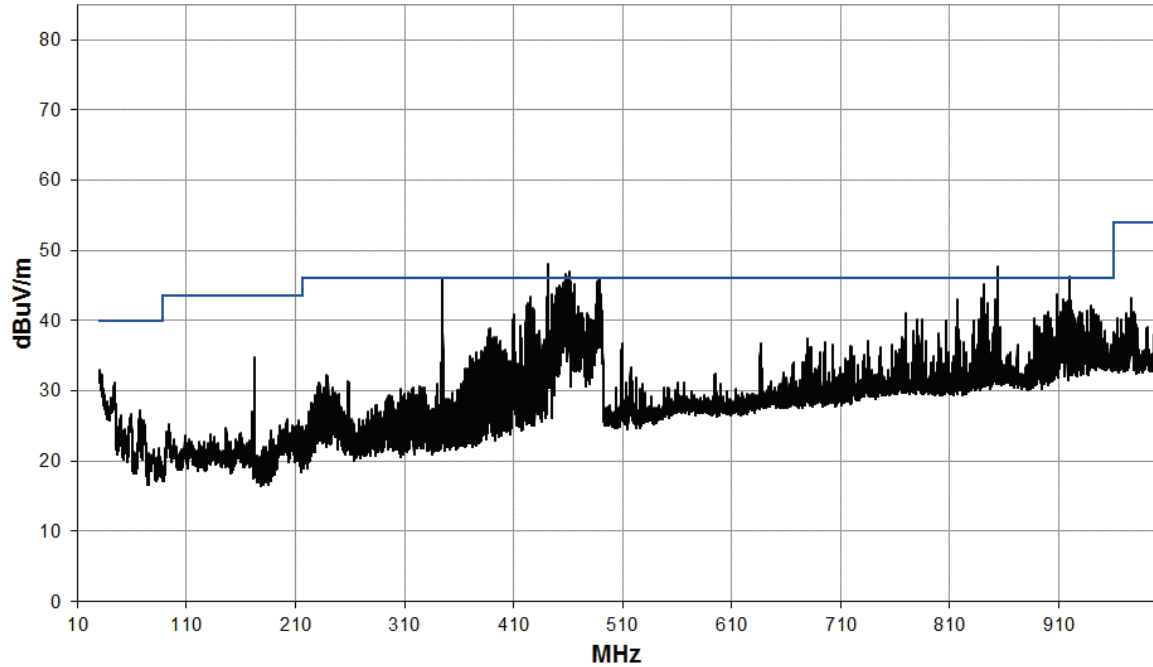
Band Edge



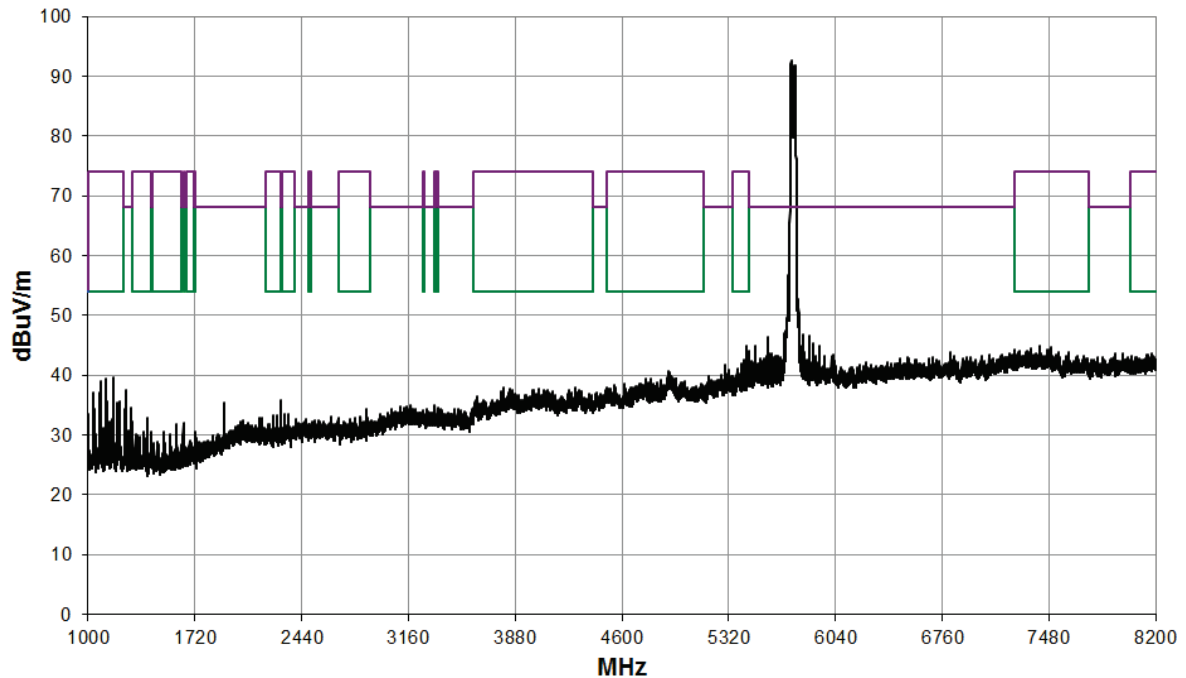
Date: 21.JUL.2020 14:33:15

SISO; Mode: 802.11ac40; Channel: CH151; Frequency: 5755 MHz; Bandwidth: 40 MHz; MCS Index: 9										
Detector	Freq. (MHz)	Meas'd Emission (dBμV)	Cable Loss (dB)	Antenna Factor (dB/m)	Pre-amp Gain (dB)	Duty Cycle Corr'n (dB)	Field Strength (dBμV/m)	Distance Extrap'n Factor (dB)	Field Strength (μV/m)	Limit (μV/m)
No emissions within 20 dB of the limit.										

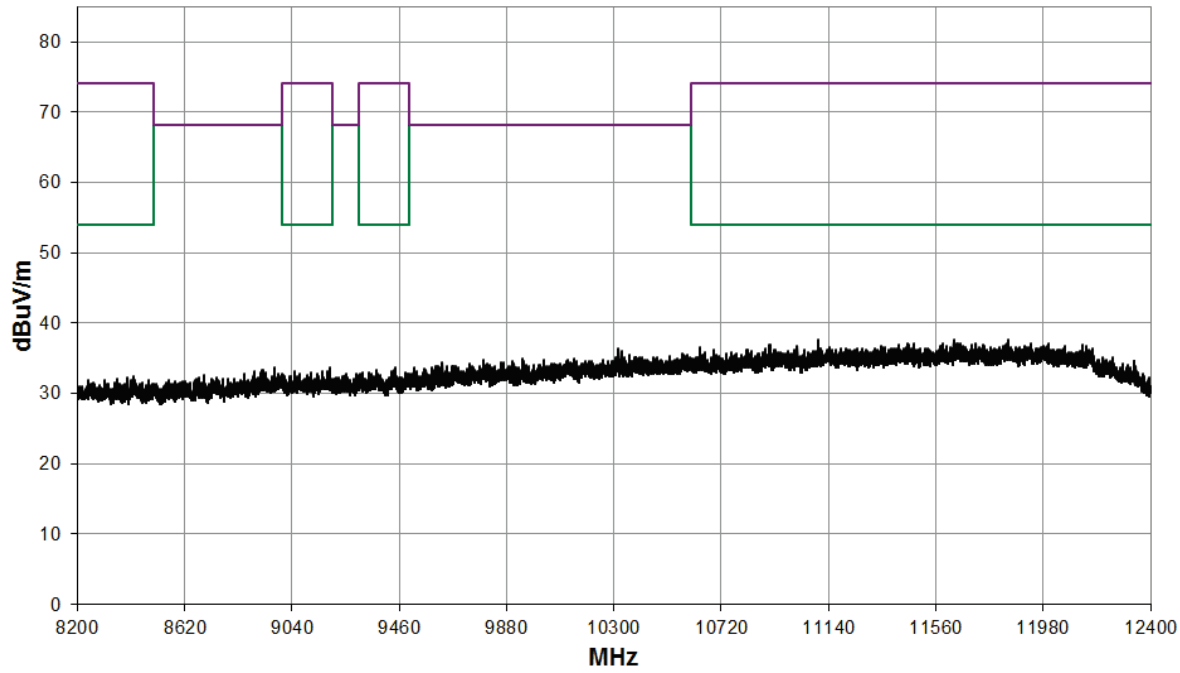
30 MHz to 1 GHz



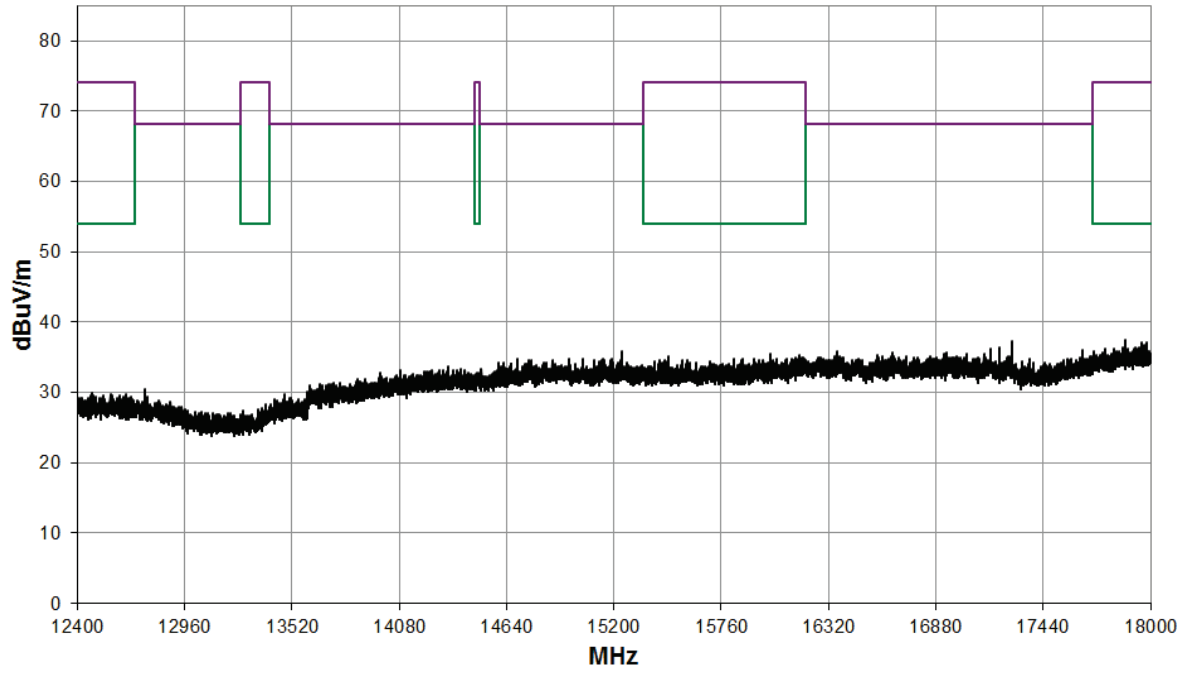
1 GHz to 8.2 GHz



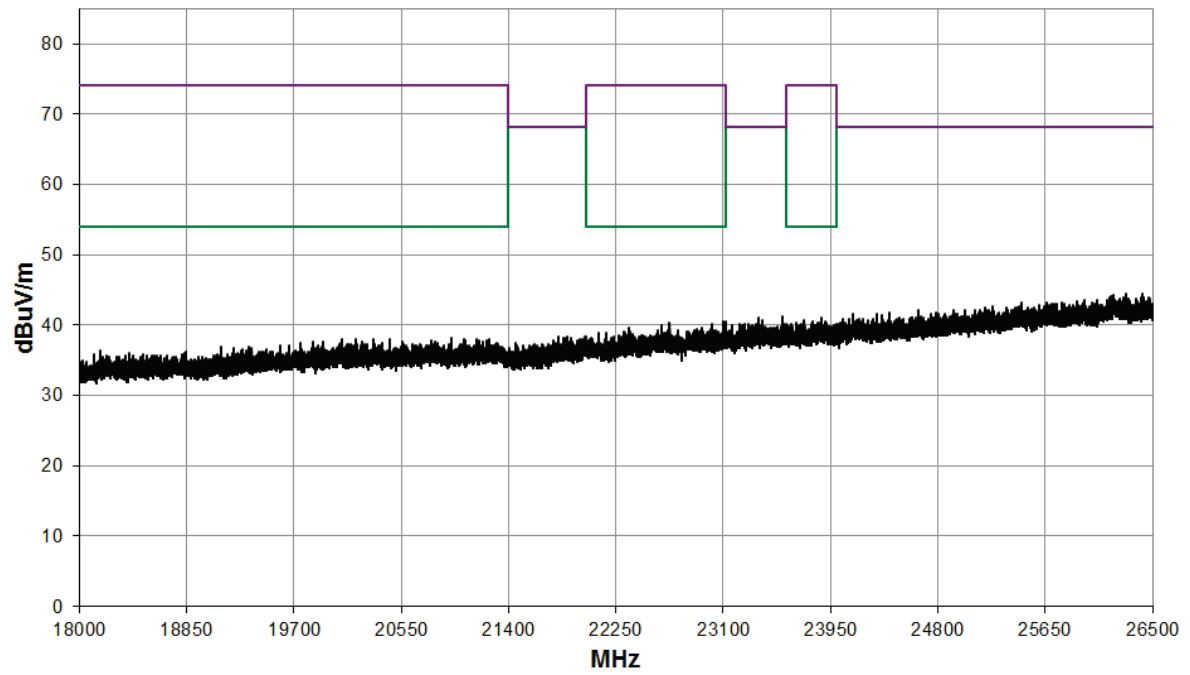
8.2 GHz to 12.4 GHz



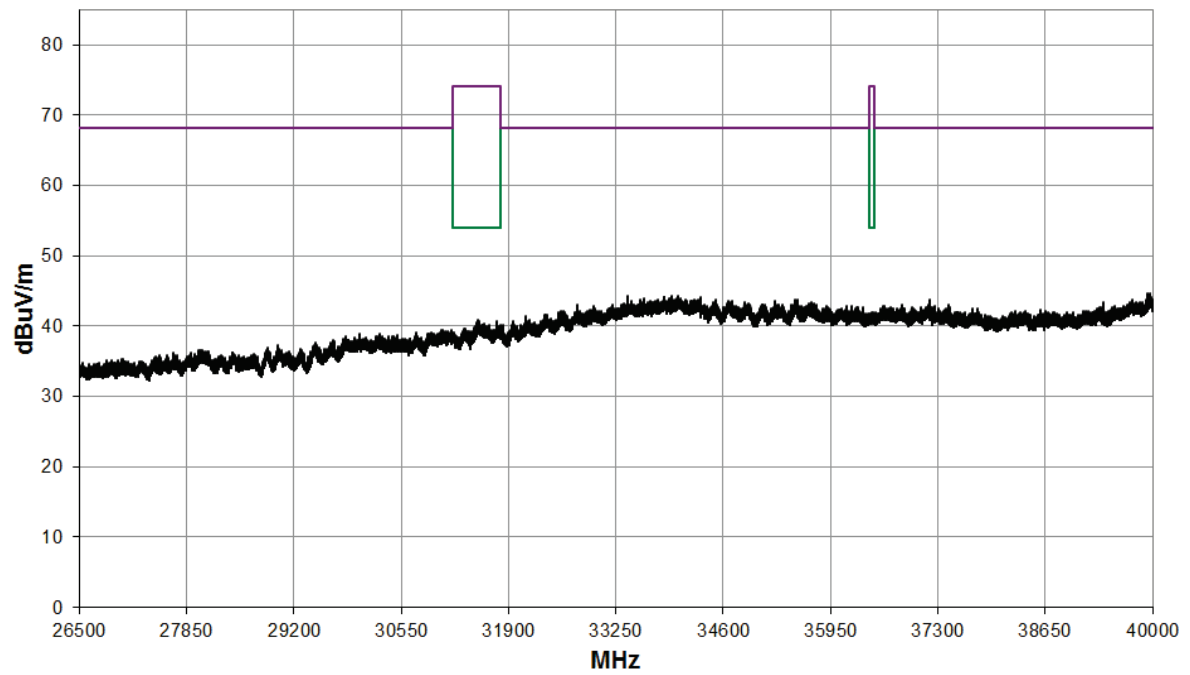
12.4 GHz to 18 GHz



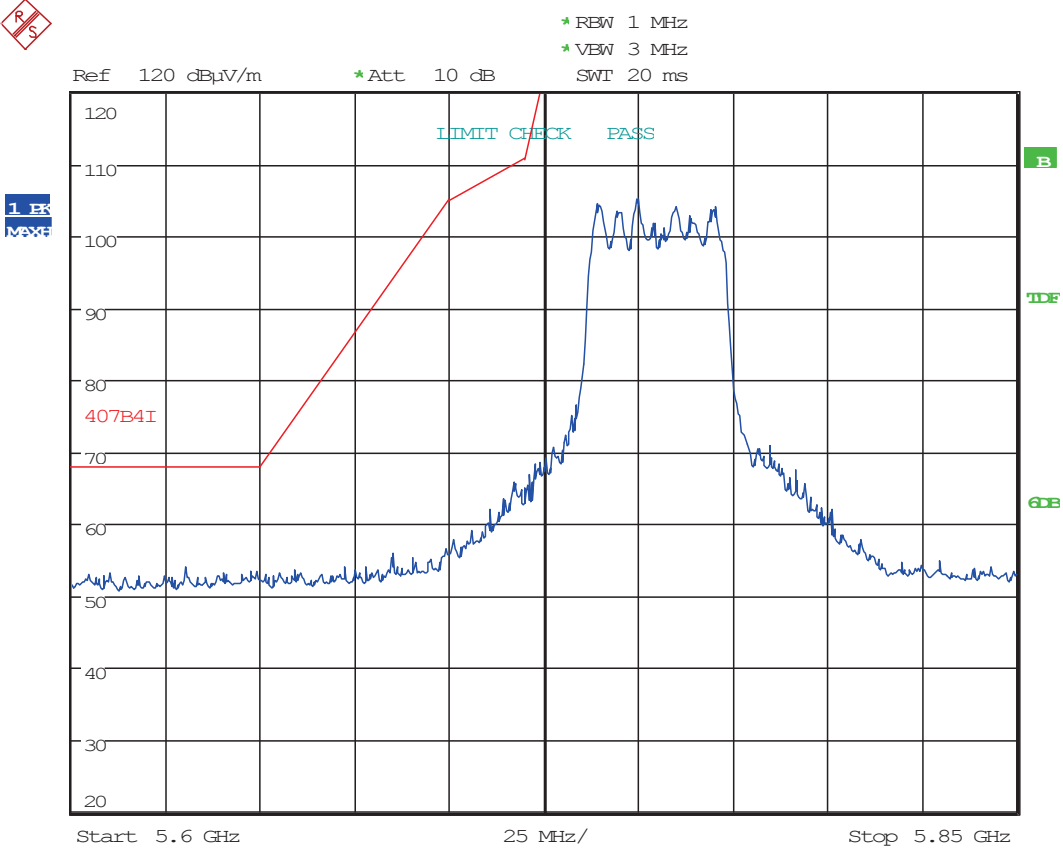
18 GHz to 26.5 GHz



26.5 GHz to 40 GHz



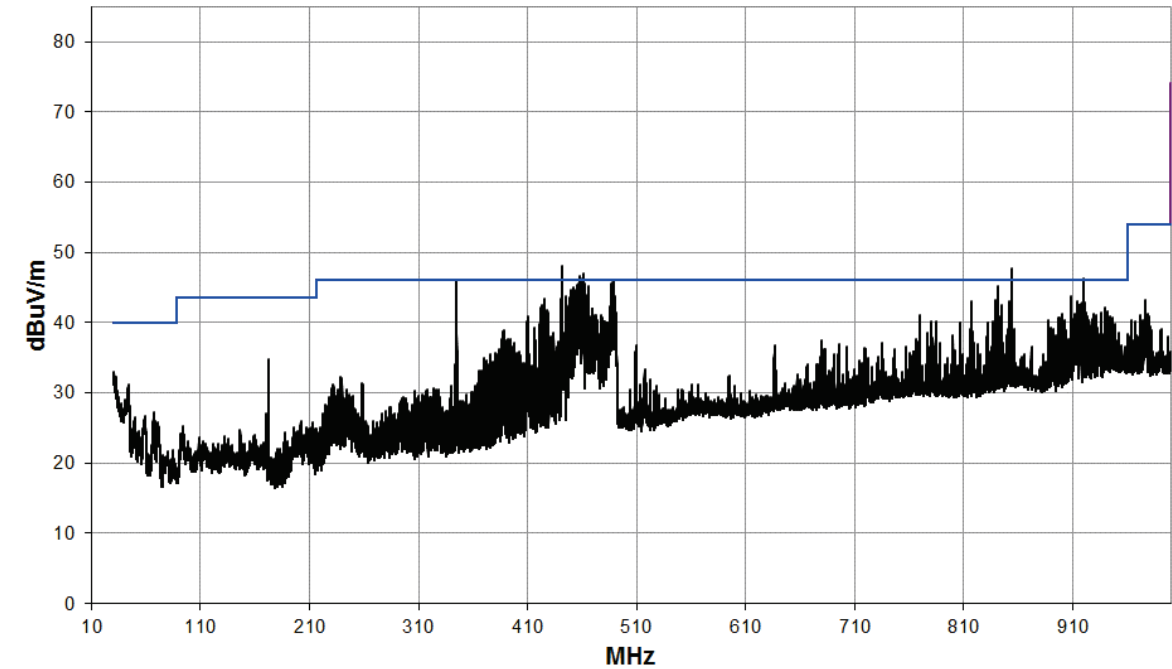
Band Edge



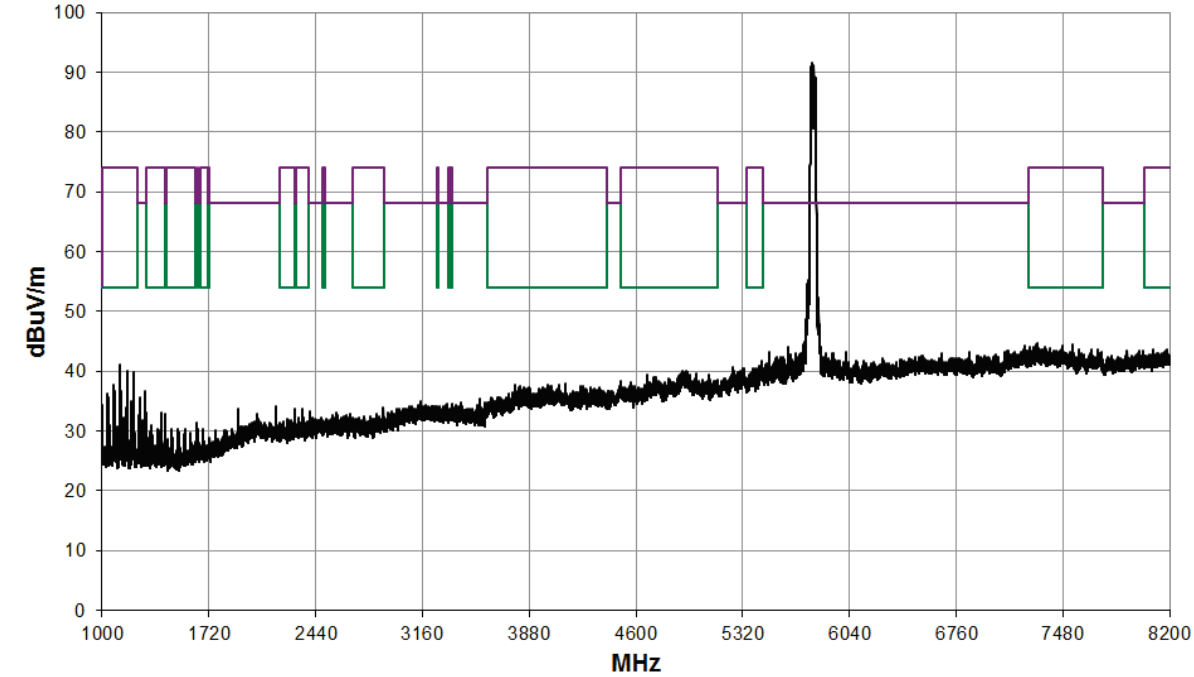
Date: 21.JUL.2020 14:34:14

SISO; Mode: 802.11ac40; Channel: CH159; Frequency: 5795 MHz; Bandwidth: 40 MHz; MCS Index: 0										
Detector	Freq. (MHz)	Meas'd Emission (dBμV)	Cable Loss (dB)	Antenna Factor (dB/m)	Pre-amp Gain (dB)	Duty Cycle Corr'n (dB)	Field Strength (dBμV/m)	Distance Extrap'n Factor (dB)	Field Strength (μV/m)	Limit (μV/m)
No emissions within 20 dB of the limit.										

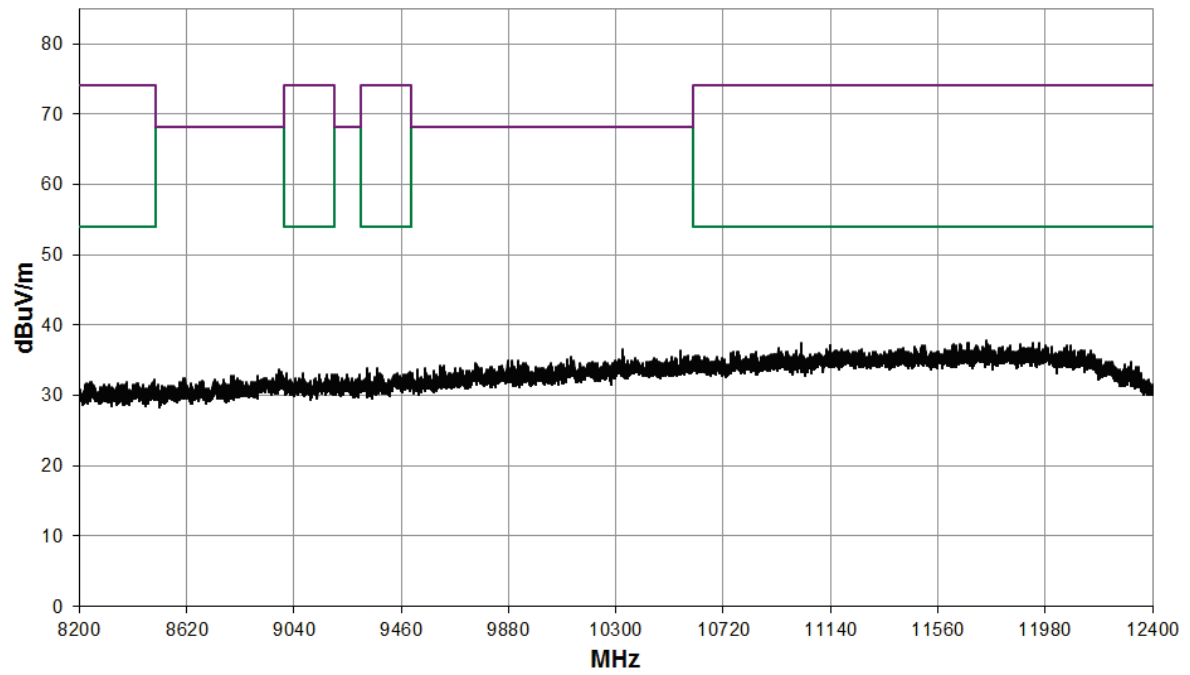
30 MHz to 1 GHz



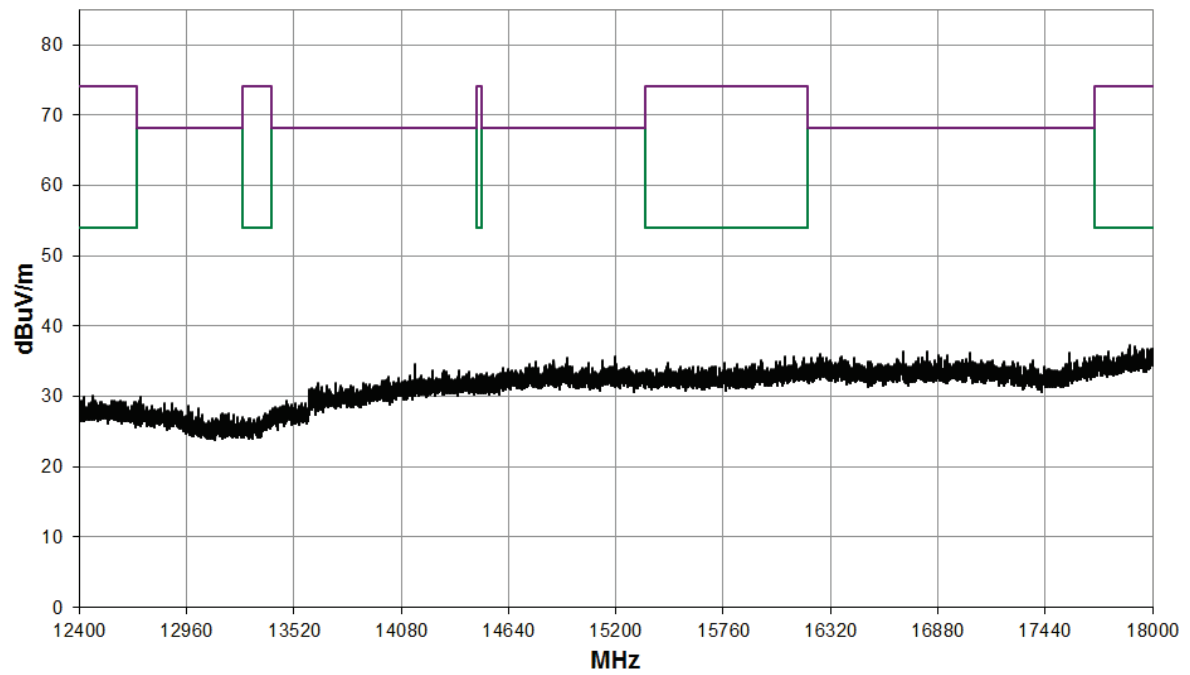
1 GHz to 8.2 GHz



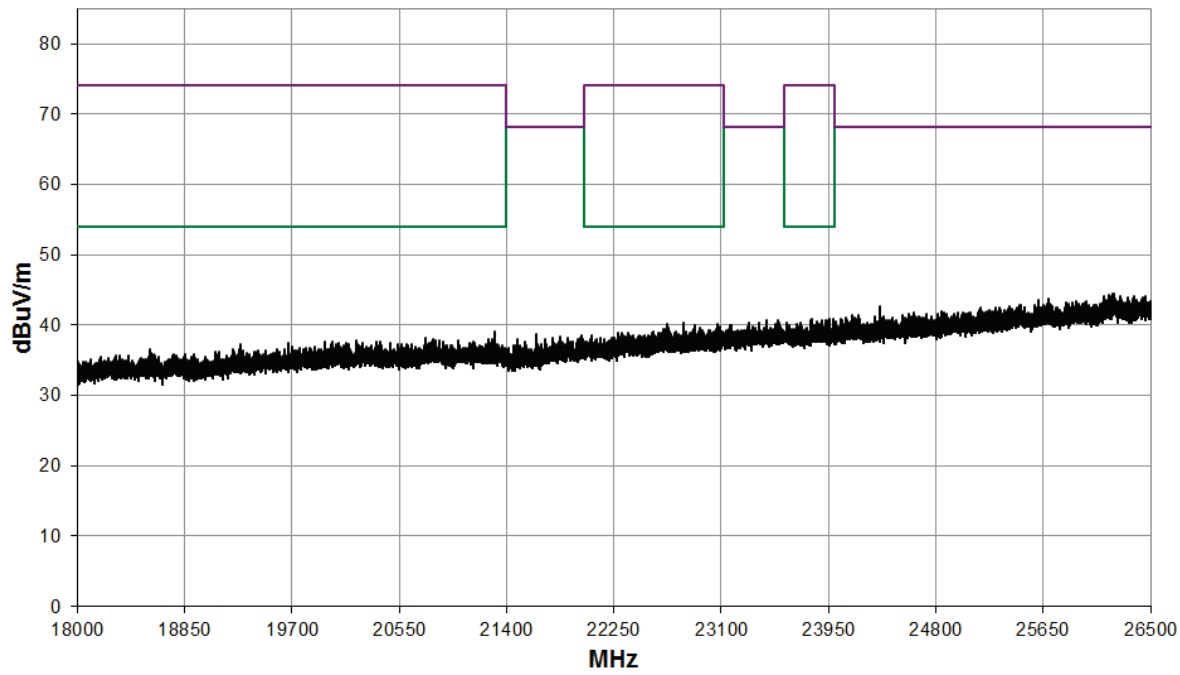
8.2 GHz to 12.4 GHz



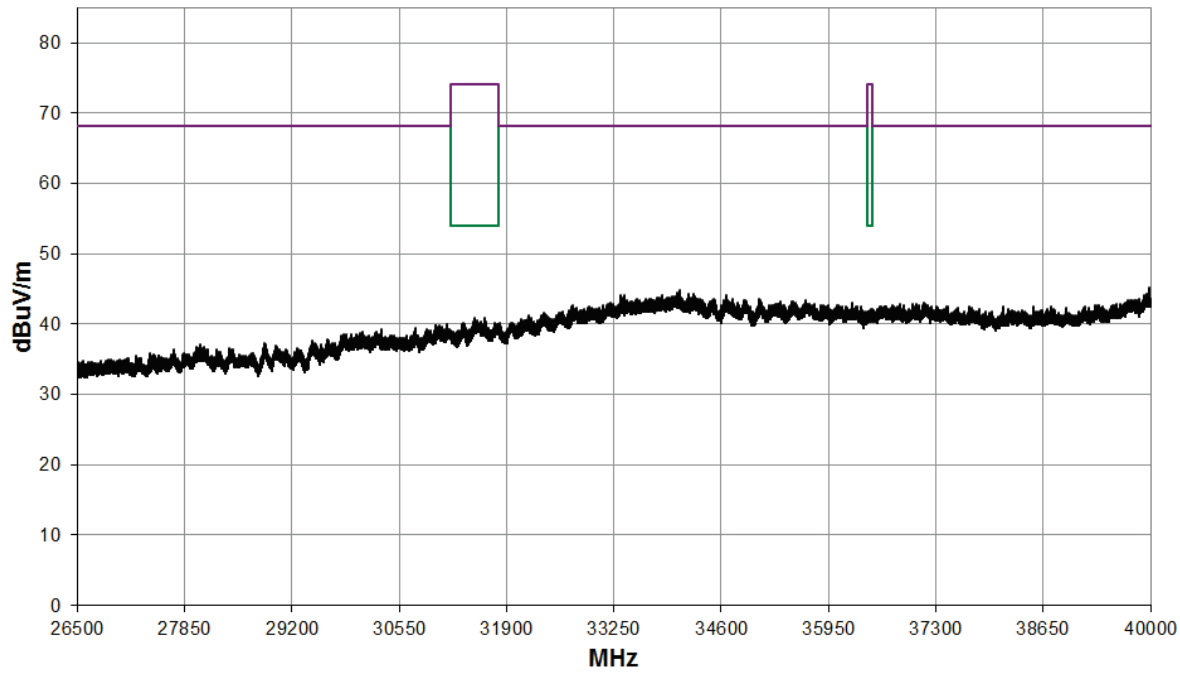
12.4 GHz to 18 GHz



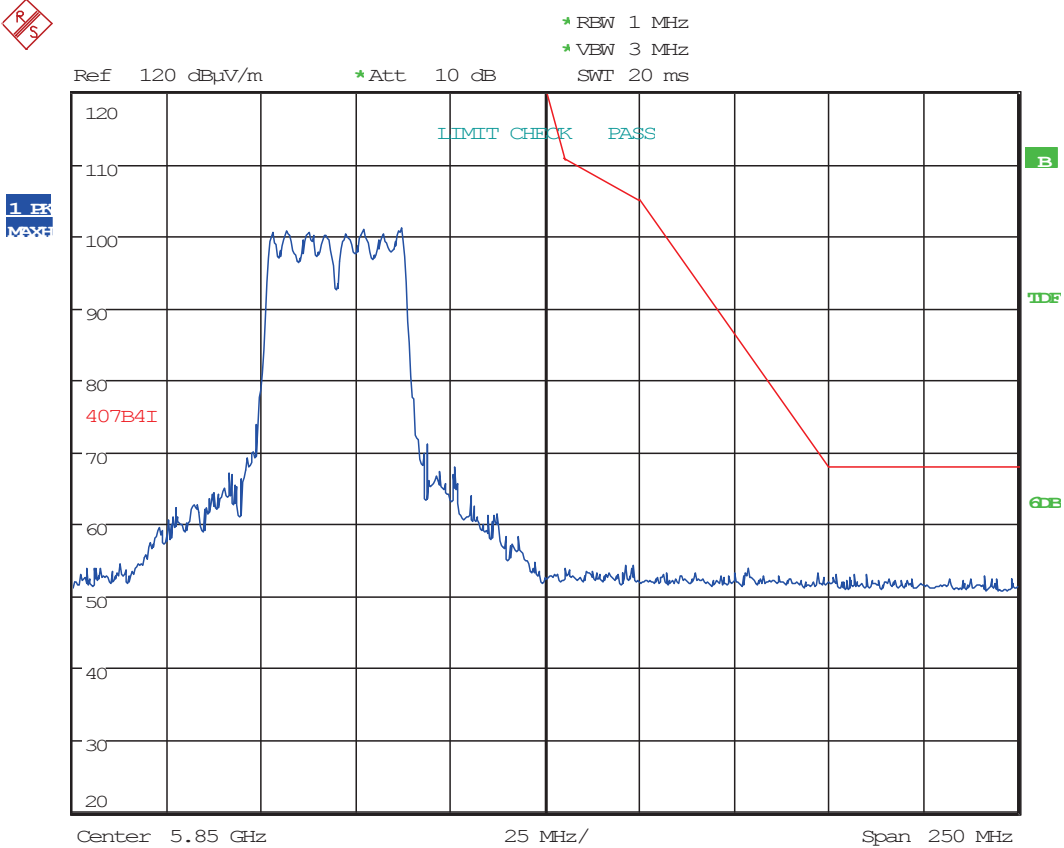
18 GHz to 26.5 GHz



26.5 GHz to 40 GHz



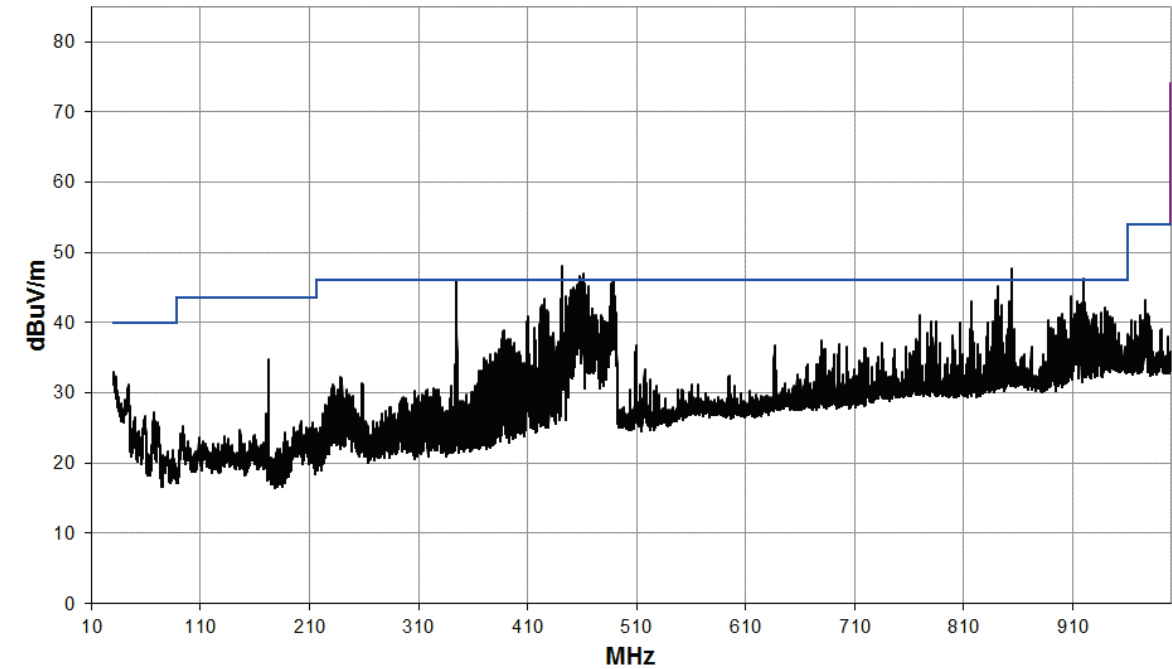
Band Edge



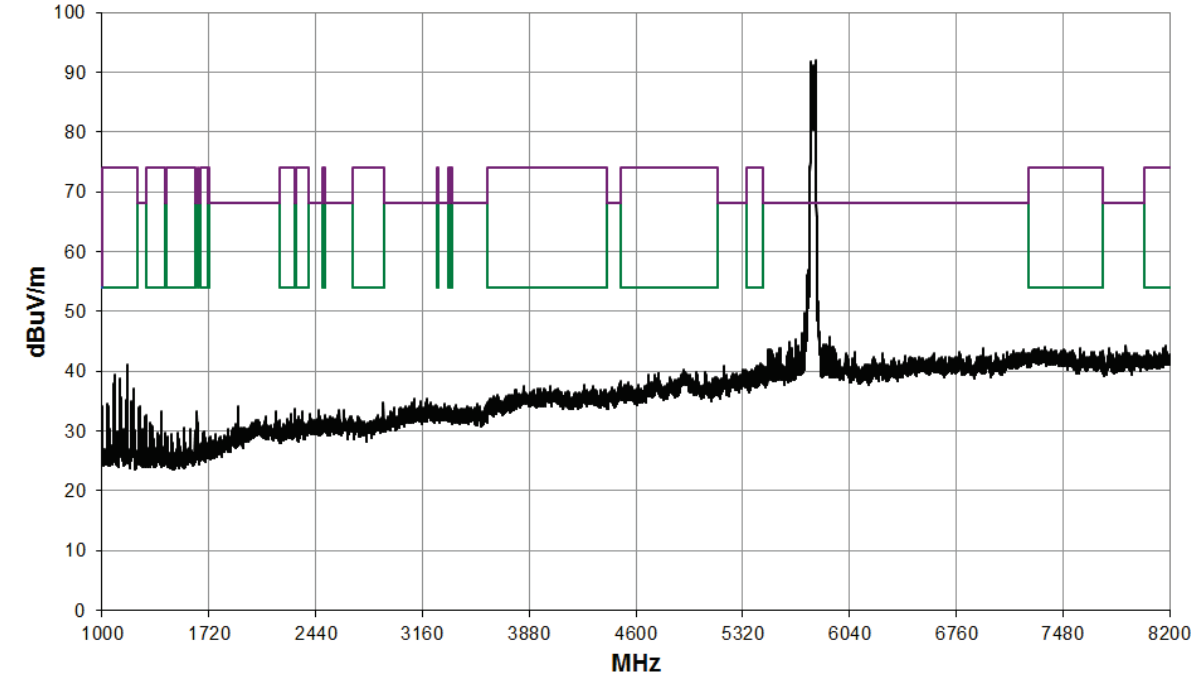
Date: 21.JUL.2020 12:59:22

SISO; Mode: 802.11ac40; Channel: CH159; Frequency: 5795 MHz; Bandwidth: 40 MHz; MCS Index: 9										
Detector	Freq. (MHz)	Meas'd Emission (dBμV)	Cable Loss (dB)	Antenna Factor (dB/m)	Pre-amp Gain (dB)	Duty Cycle Corr'n (dB)	Field Strength (dBμV/m)	Distance Extrap'n Factor (dB)	Field Strength (μV/m)	Limit (μV/m)
No emissions within 20 dB of the limit.										

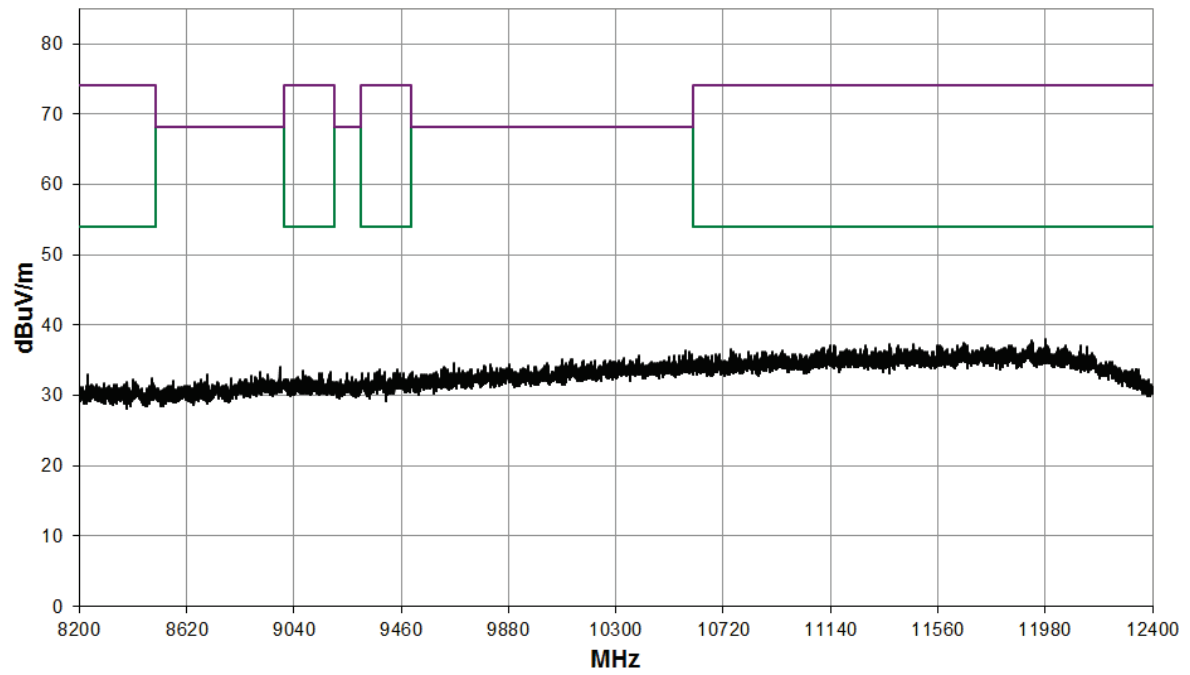
30 MHz to 1 GHz



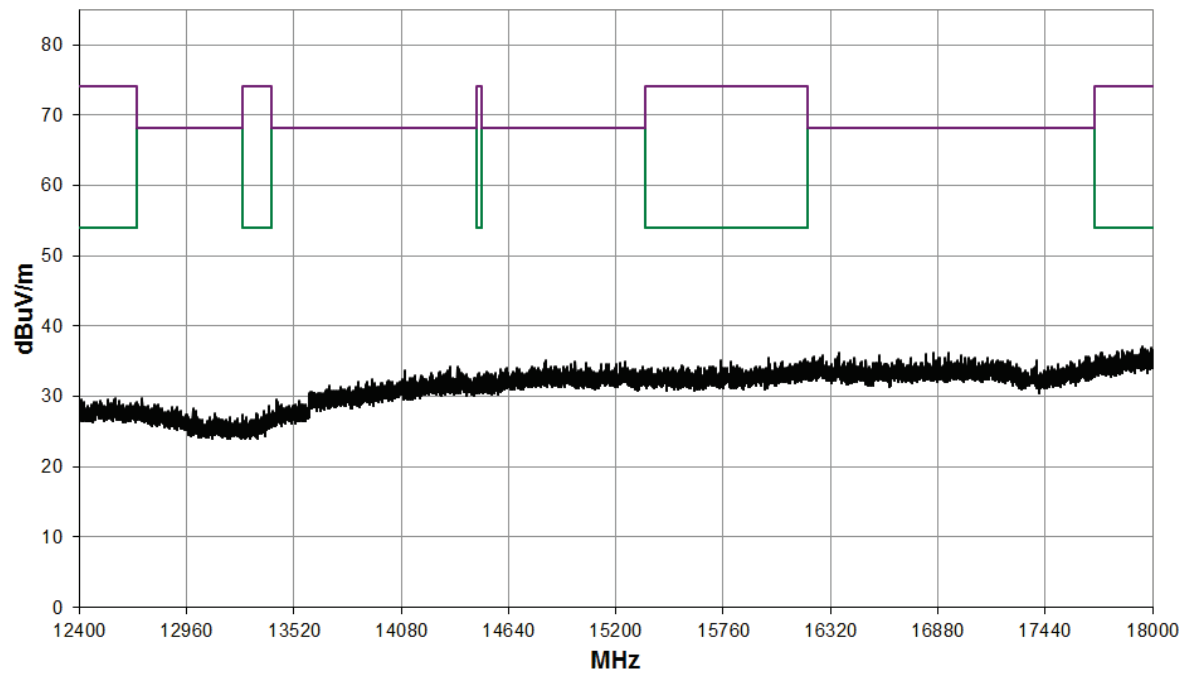
1 GHz to 8.2 GHz



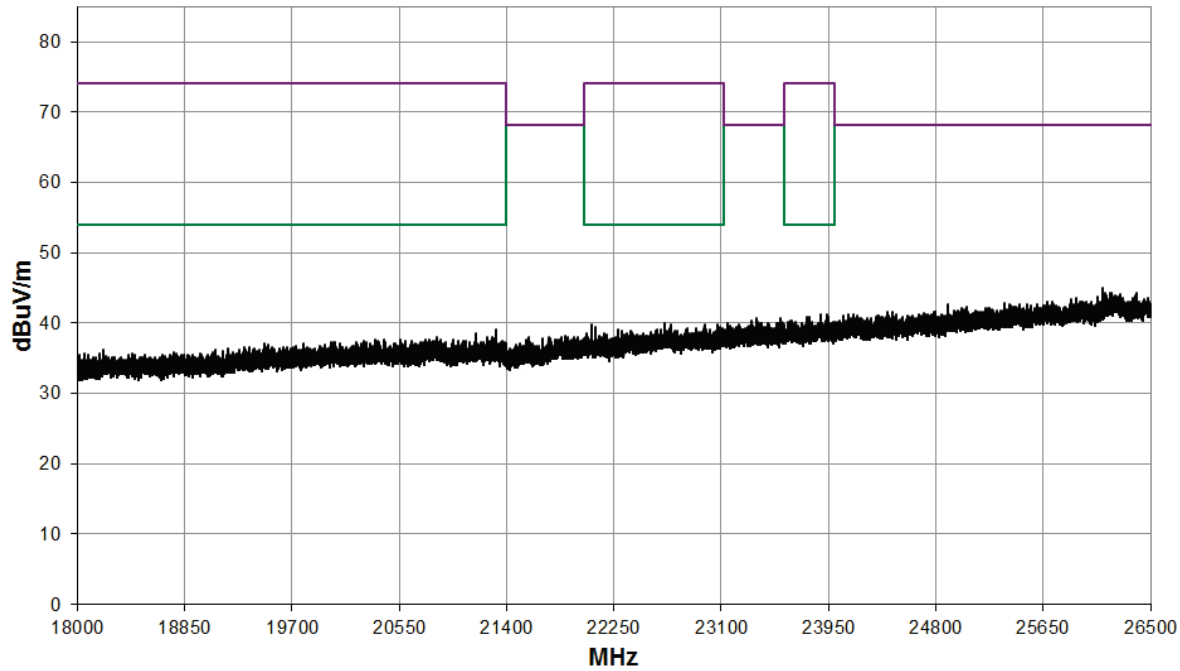
8.2 GHz to 12.4 GHz



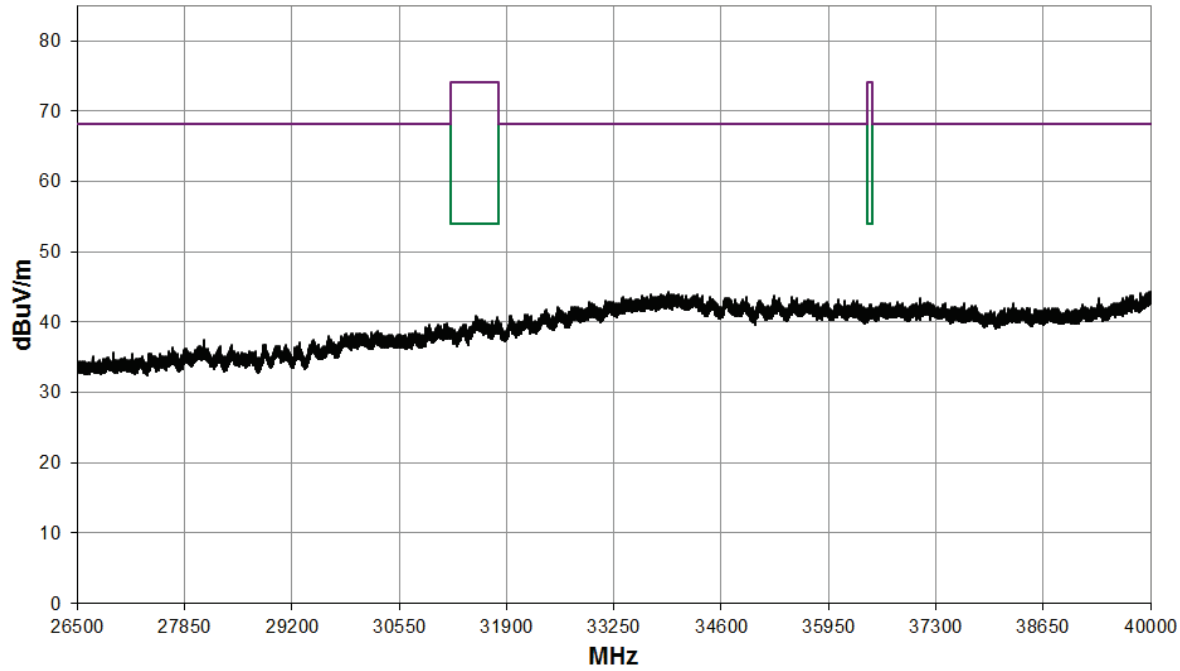
12.4 GHz to 18 GHz



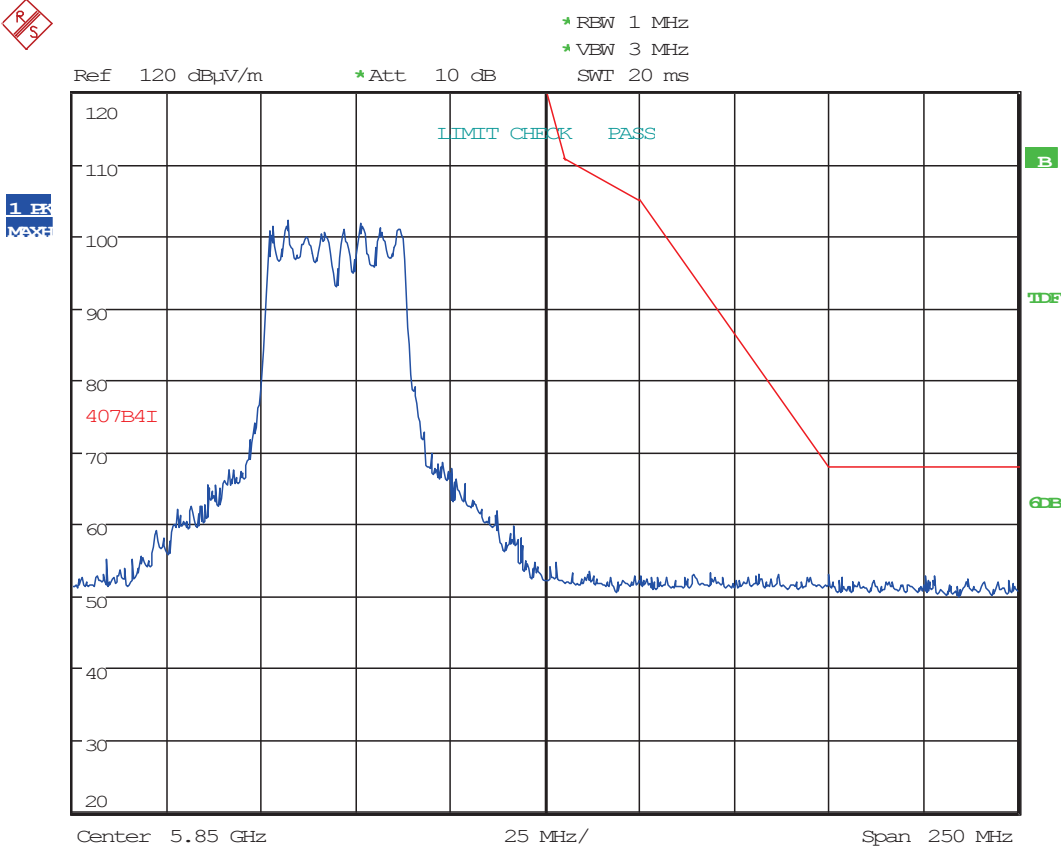
18 GHz to 26.5 GHz



26.5 GHz to 40 GHz



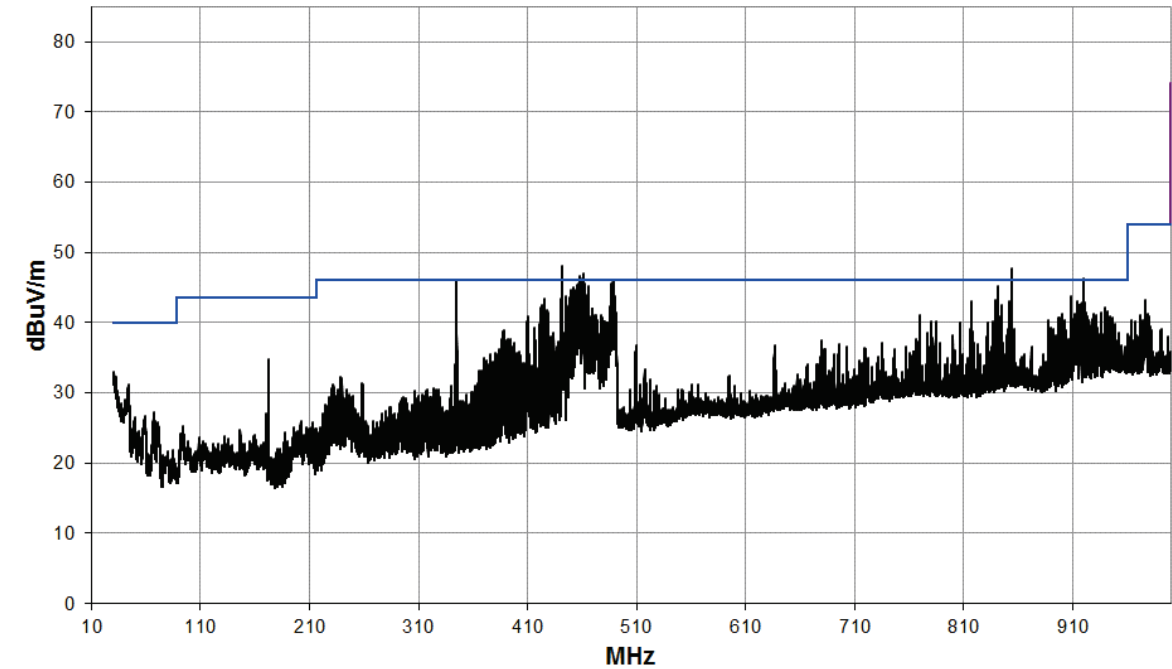
Band Edge



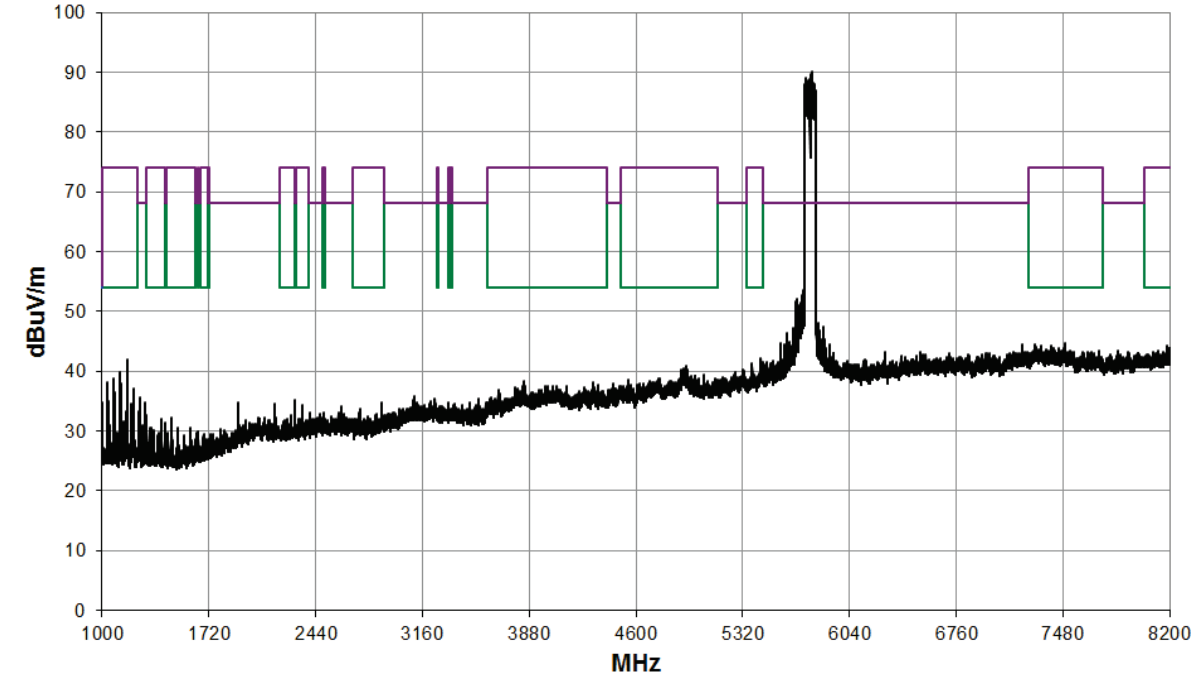
Date: 21.JUL.2020 12:59:56

SISO; Mode: 802.11ac80; Channel: CH155; Frequency: 5775 MHz; Bandwidth: 80 MHz; MCS Index: 0										
Detector	Freq. (MHz)	Meas'd Emission (dBμV)	Cable Loss (dB)	Antenna Factor (dB/m)	Pre-amp Gain (dB)	Duty Cycle Corr'n (dB)	Field Strength (dBμV/m)	Distance Extrap'n Factor (dB)	Field Strength (μV/m)	Limit (μV/m)
No emissions within 20 dB of the limit.										

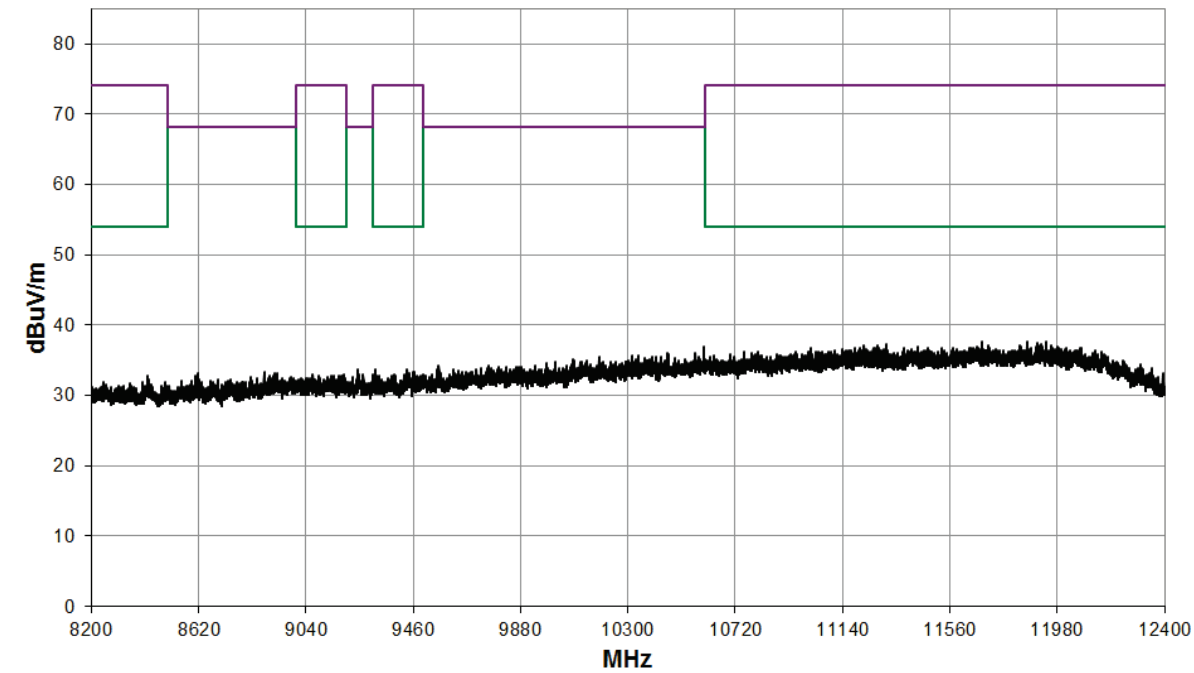
30 MHz to 1 GHz



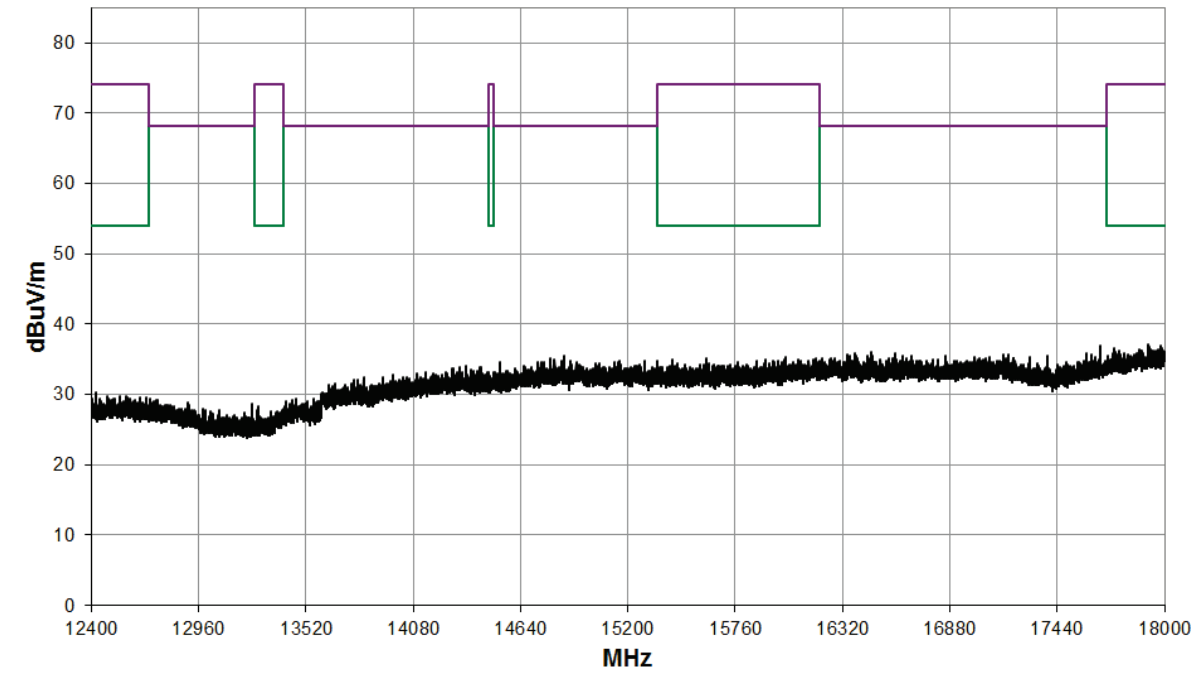
1 GHz to 8.2 GHz



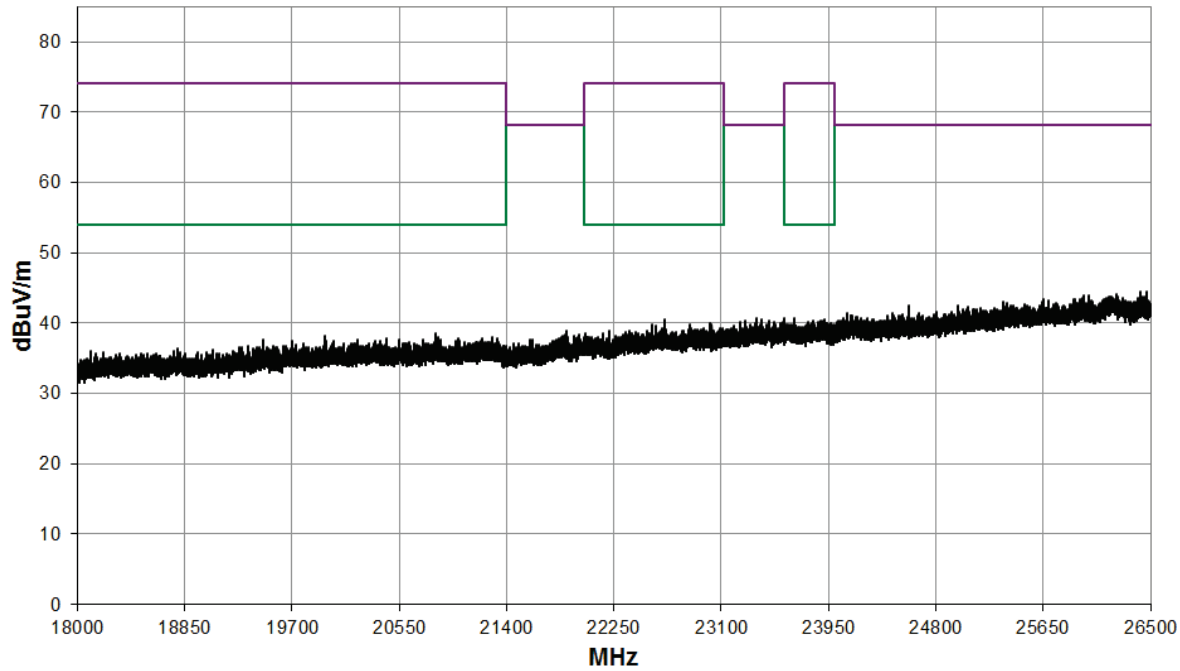
8.2 GHz to 12.4 GHz



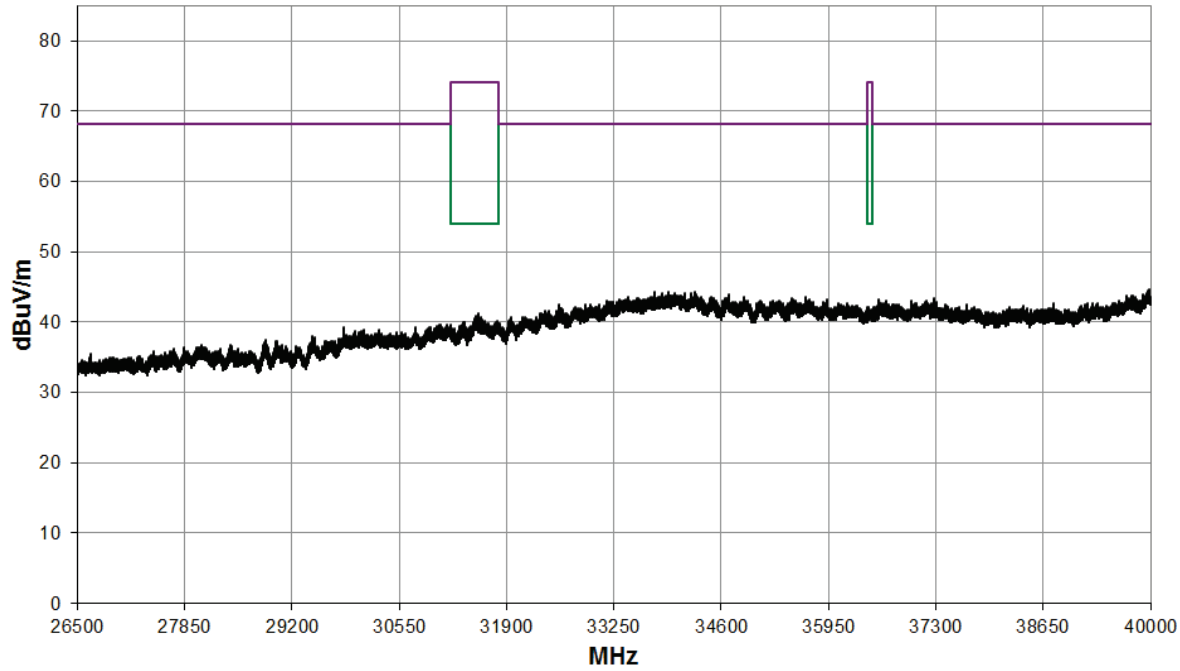
12.4 GHz to 18 GHz



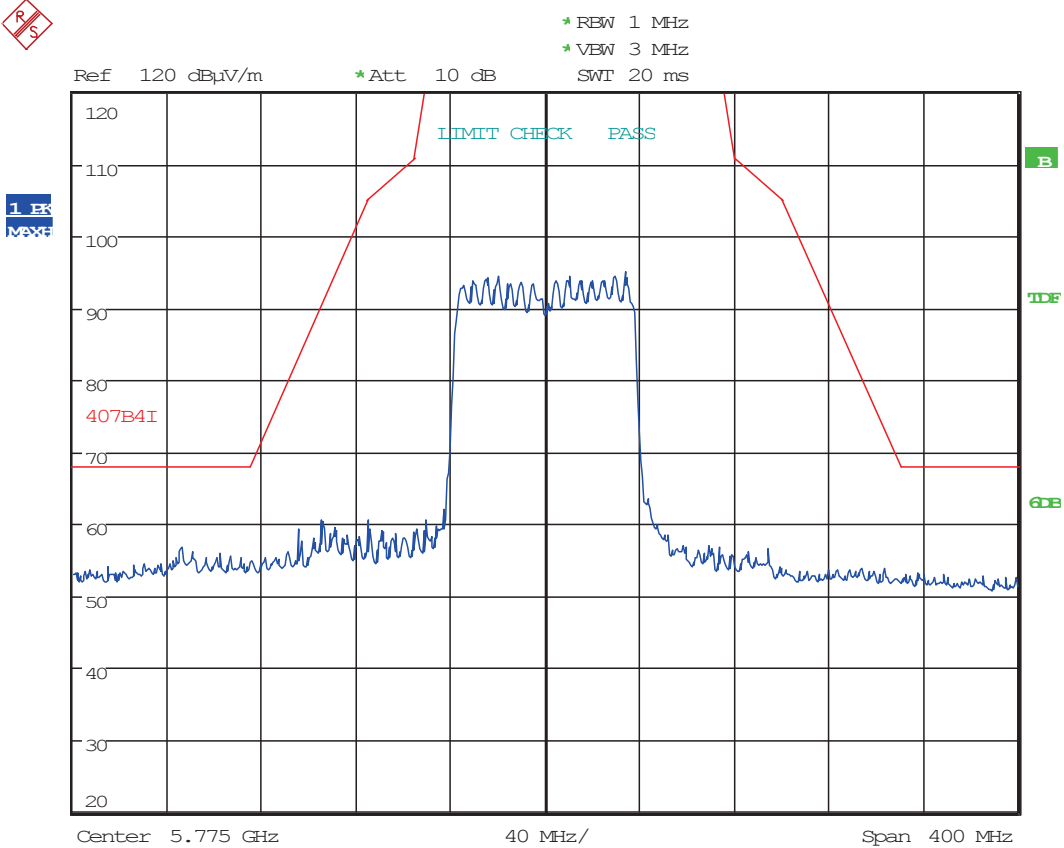
18 GHz to 26.5 GHz



26.5 GHz to 40 GHz



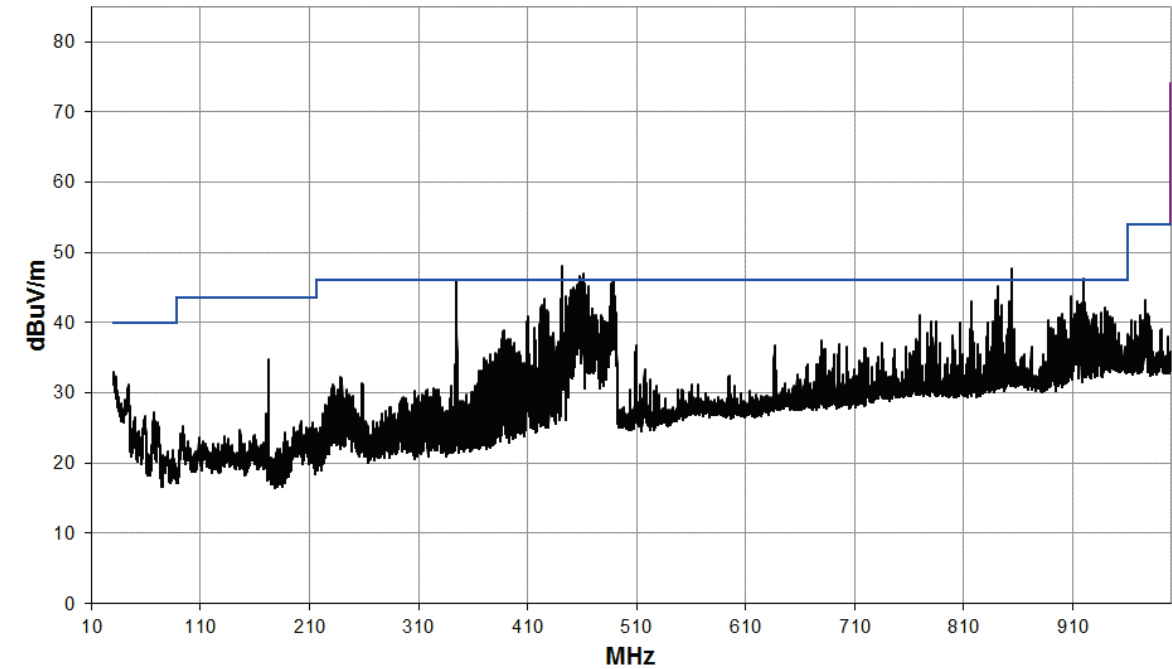
Band Edge



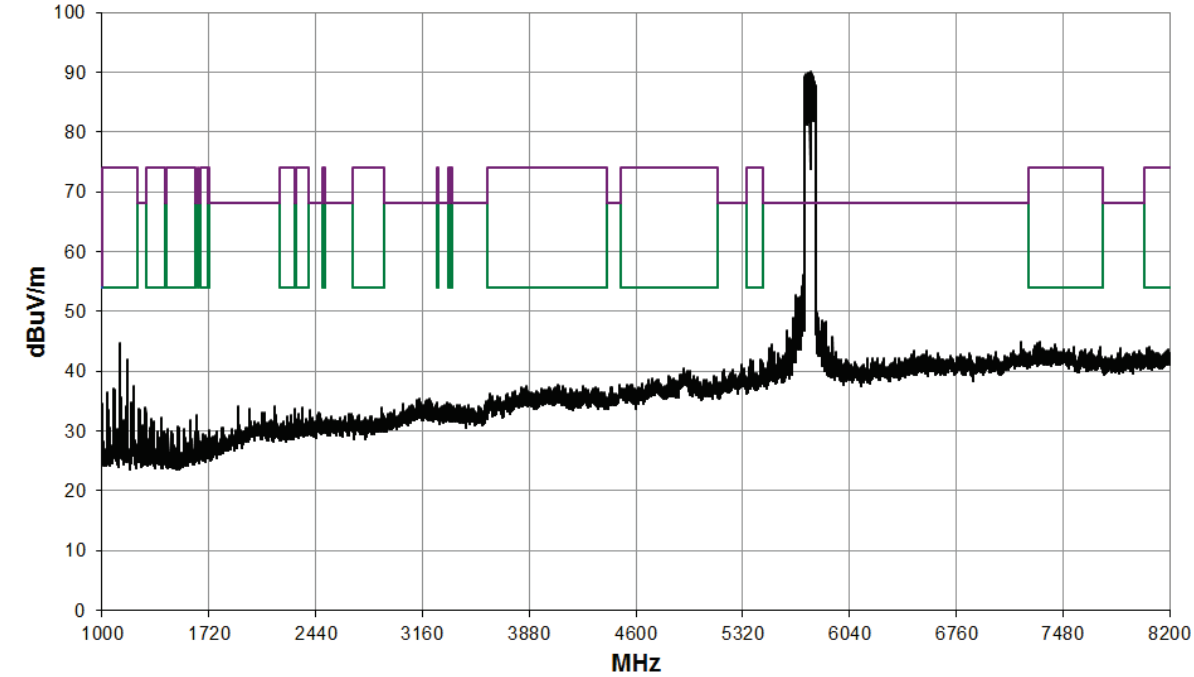
Date: 21.JUL.2020 13:04:45

SISO; Mode: 802.11ac80; Channel: CH155; Frequency: 5775 MHz; Bandwidth: 80 MHz; MCS Index: 9										
Detector	Freq. (MHz)	Meas'd Emission (dBμV)	Cable Loss (dB)	Antenna Factor (dB/m)	Pre-amp Gain (dB)	Duty Cycle Corr'n (dB)	Field Strength (dBμV/m)	Distance Extrap'n Factor (dB)	Field Strength (μV/m)	Limit (μV/m)
No emissions within 20 dB of the limit.										

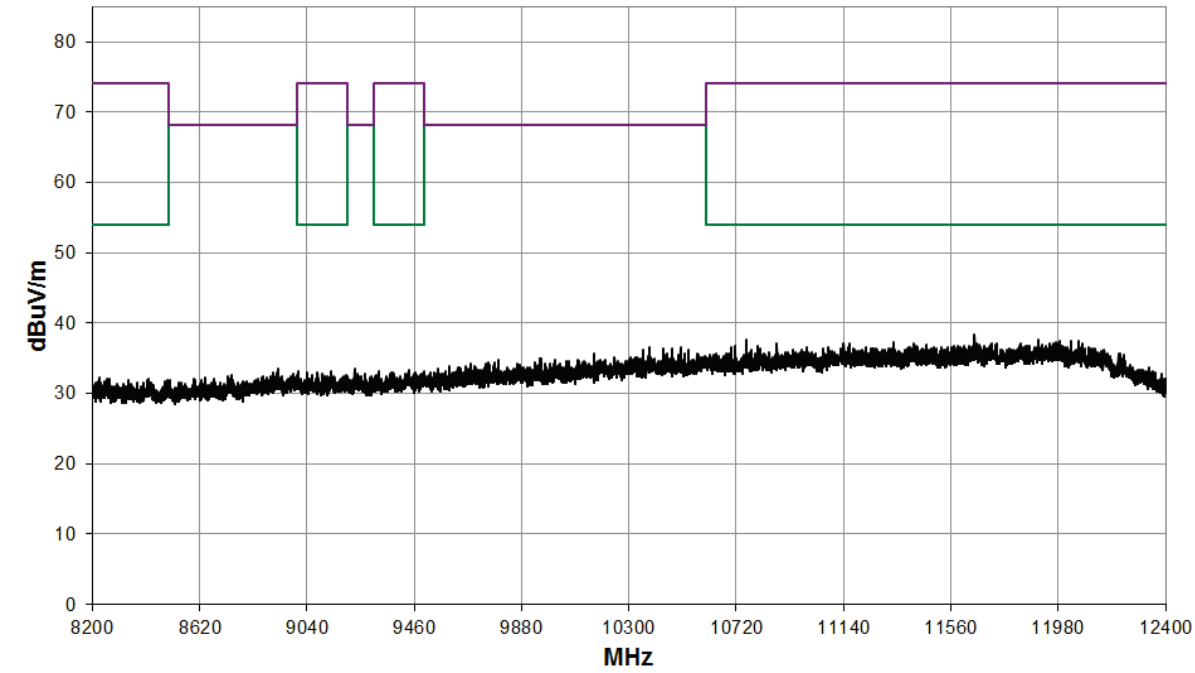
30 MHz to 1 GHz



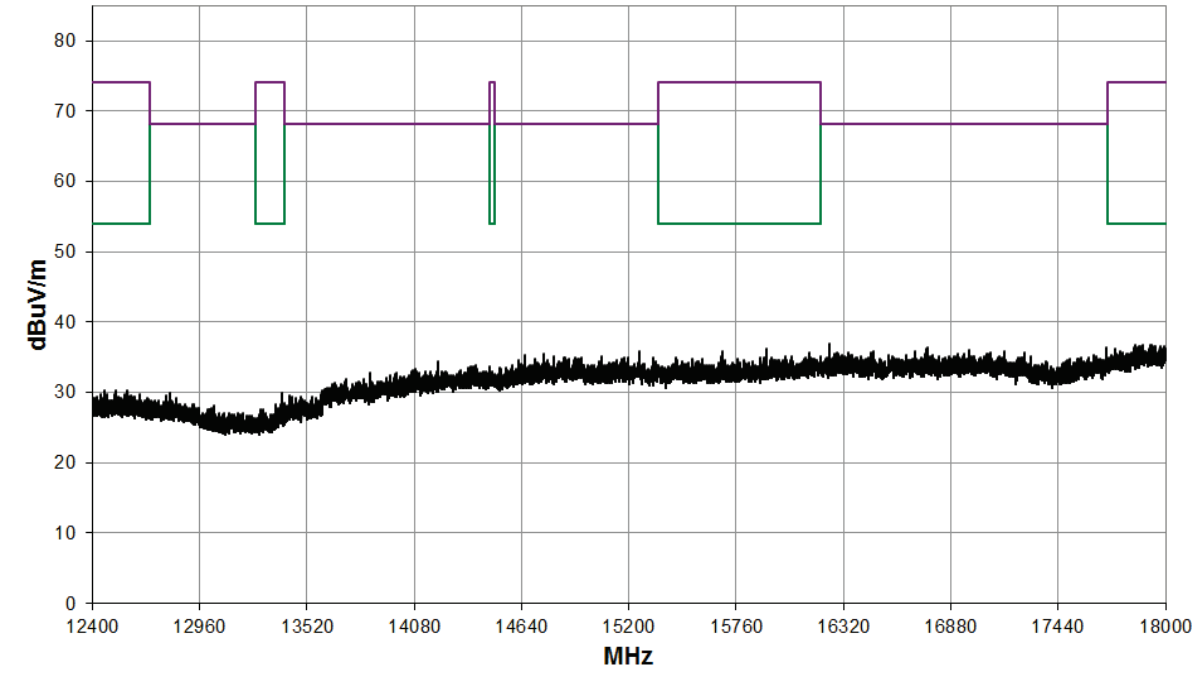
1 GHz to 8.2 GHz



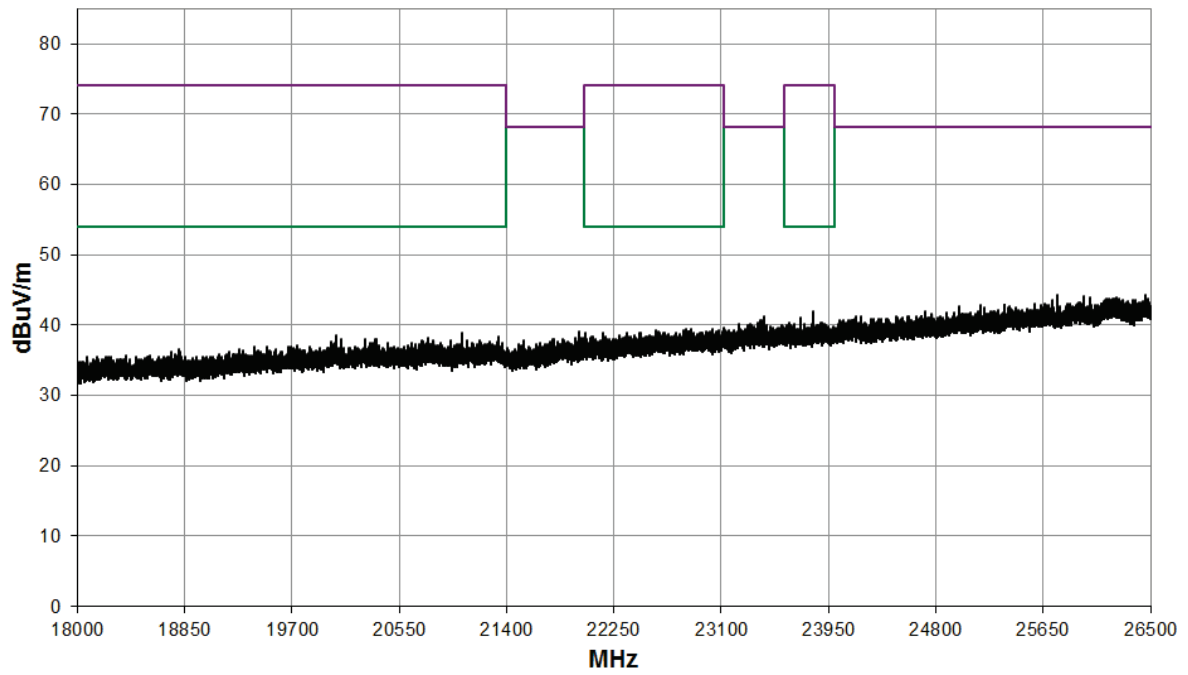
8.2 GHz to 12.4 GHz



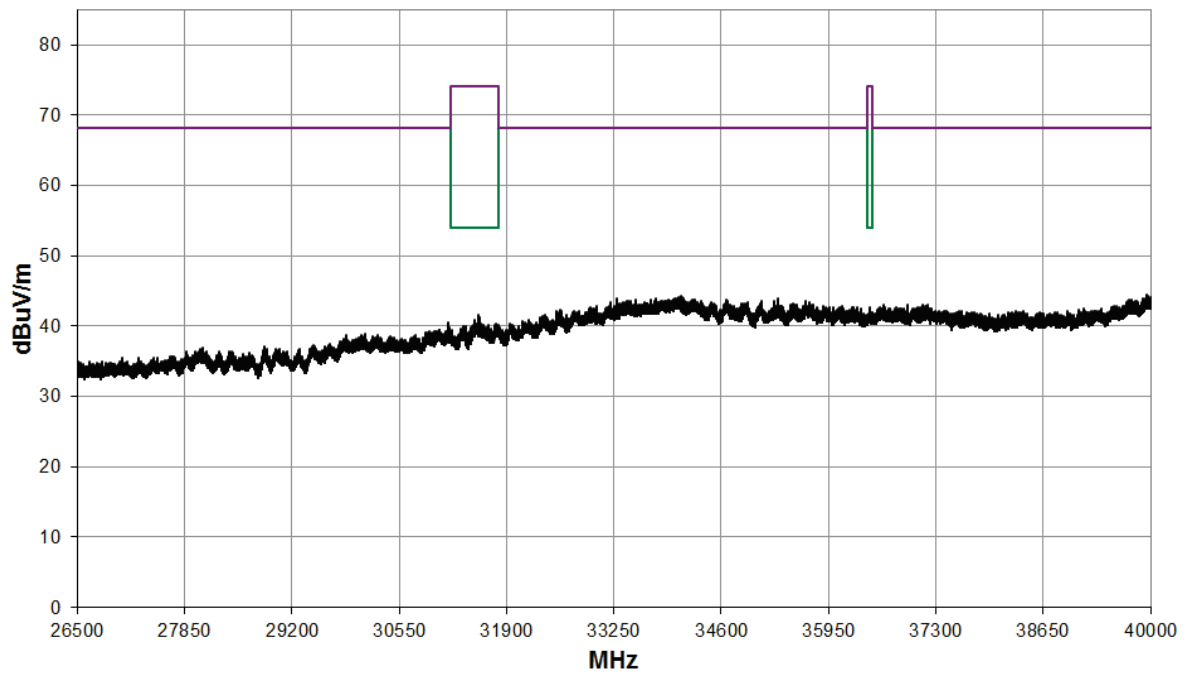
12.4 GHz to 18 GHz



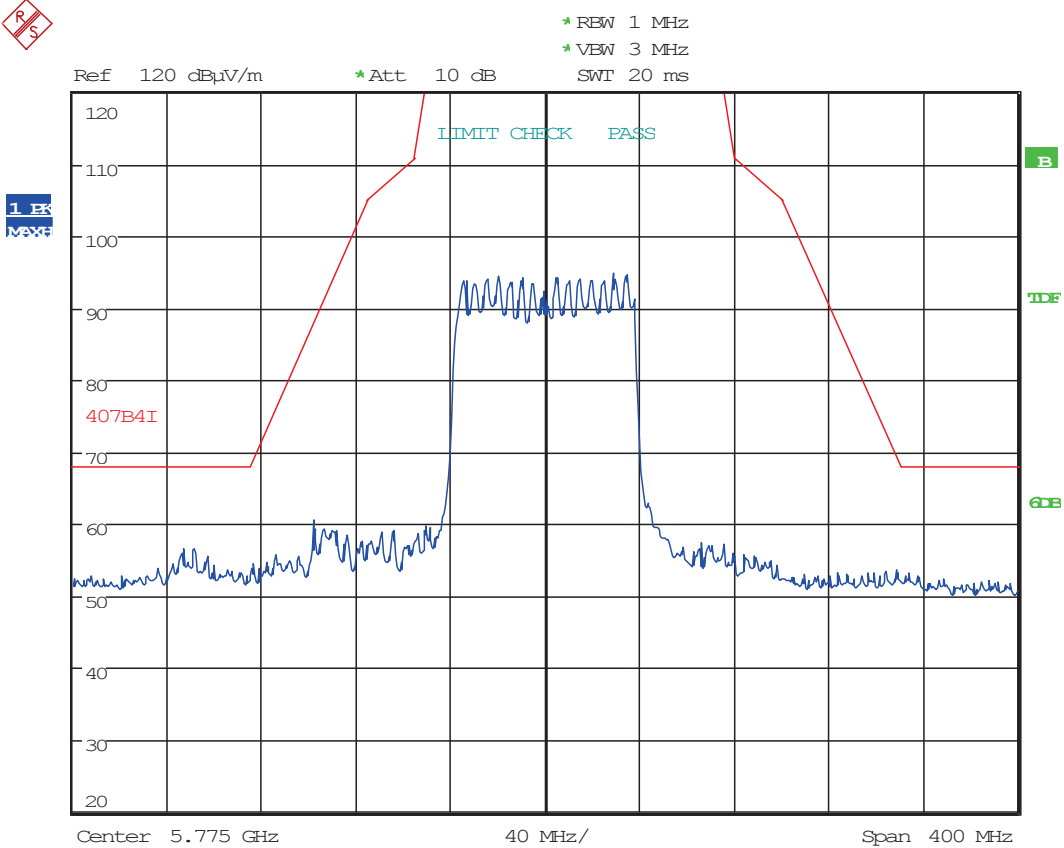
18 GHz to 26.5 GHz



26.5 GHz to 40 GHz



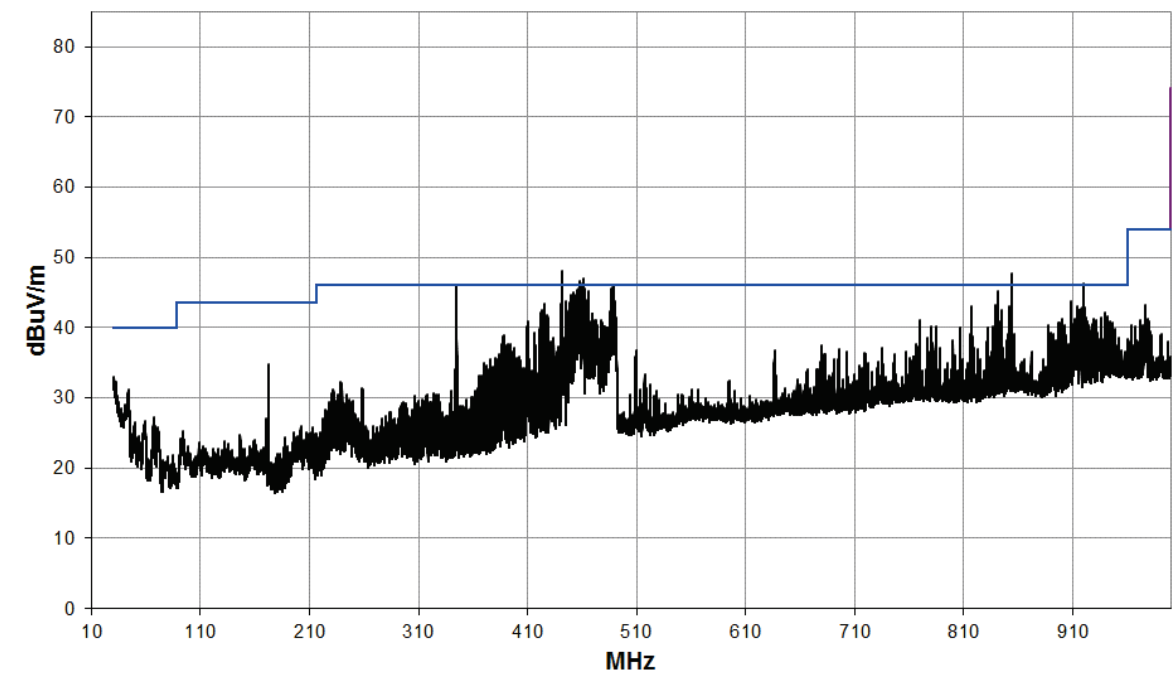
Band Edge



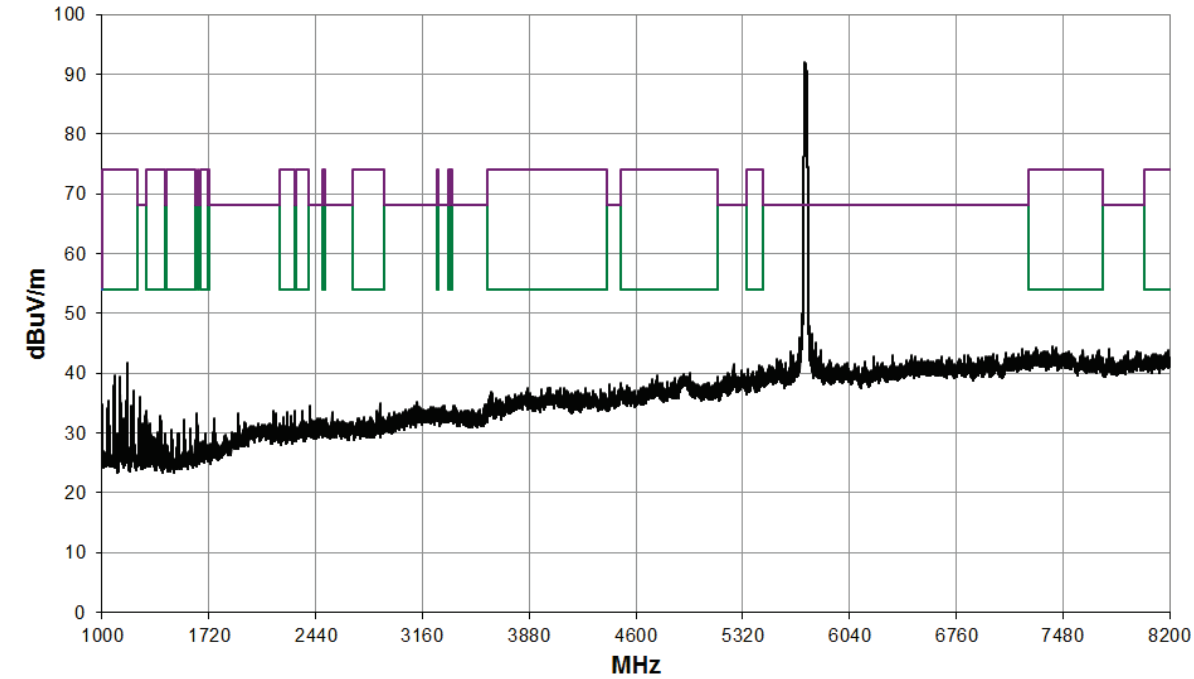
Date: 21.JUL.2020 13:08:44

MIMO; Mode: 802.11n20; Channel: CH149; Frequency: 5745 MHz; Bandwidth: 20 MHz; MCS Index: 8										
Detector	Freq. (MHz)	Meas'd Emission (dBµV)	Cable Loss (dB)	Antenna Factor (dB/m)	Pre-amp Gain (dB)	Duty Cycle Corr'n (dB)	Field Strength (dBµV/m)	Distance Extrap'n Factor (dB)	Field Strength (µV/m)	Limit (µV/m)
No emissions within 20 dB of the limit.										

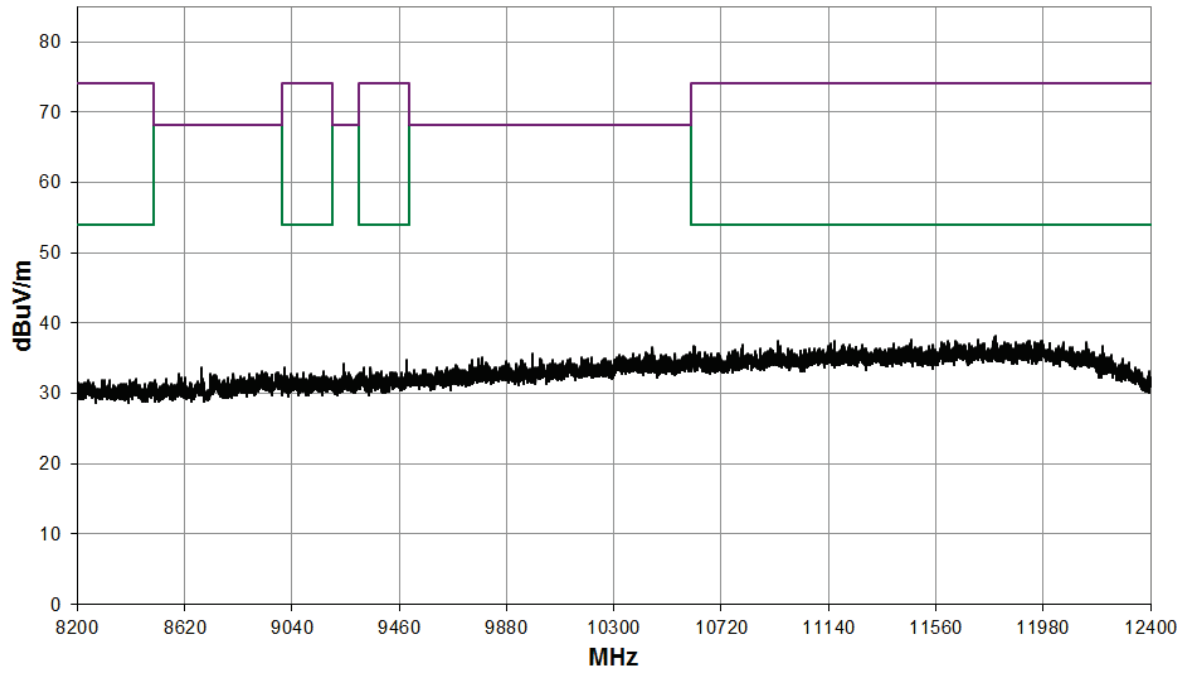
30 MHz to 1 GHz



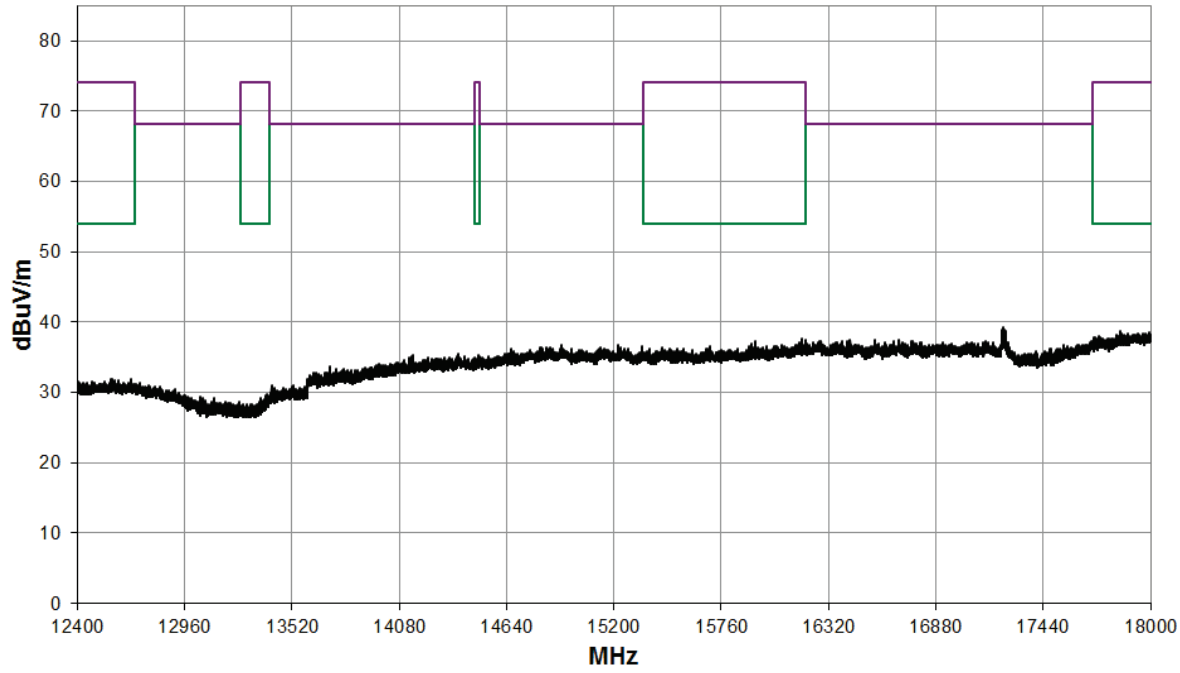
1 GHz to 8.2 GHz



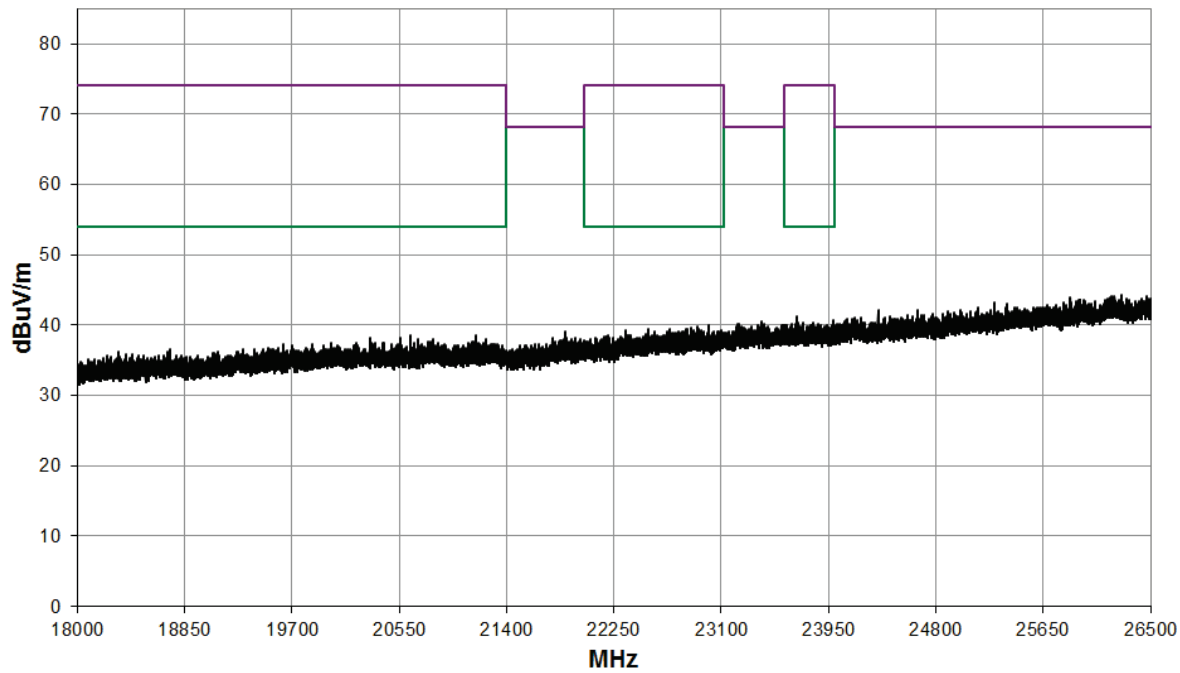
8.2 GHz to 12.4 GHz



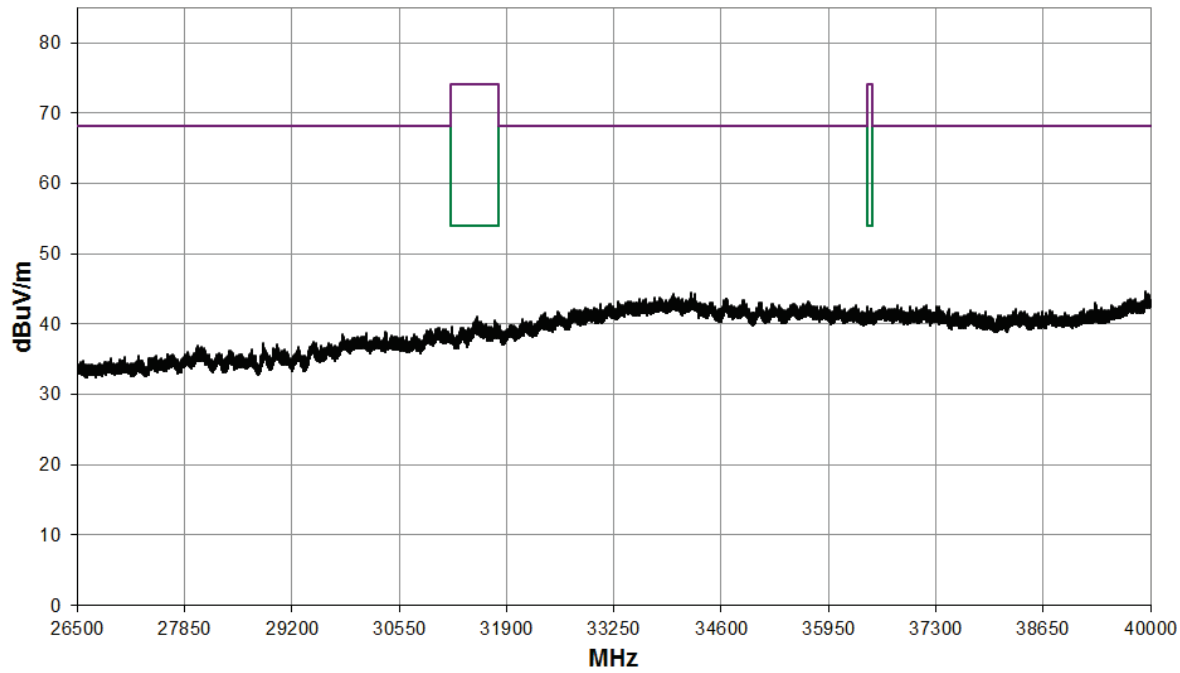
12.4 GHz to 18 GHz



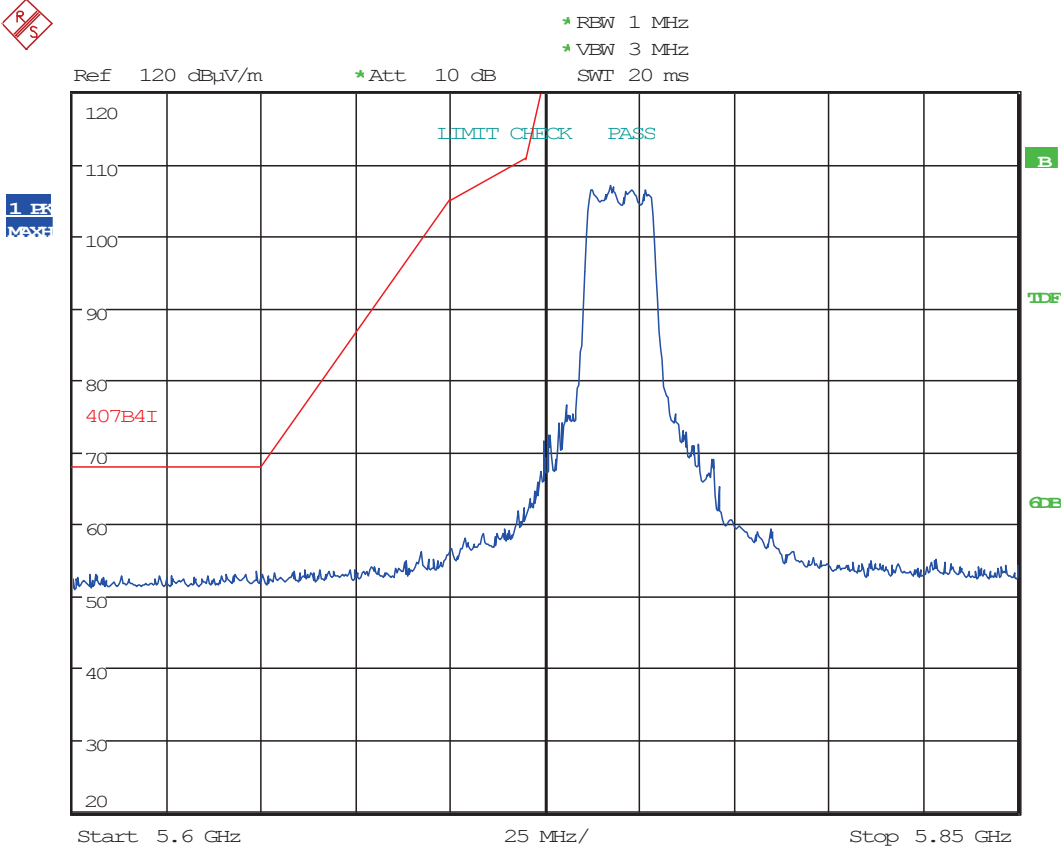
18 GHz to 26.5 GHz



26.5 GHz to 40 GHz



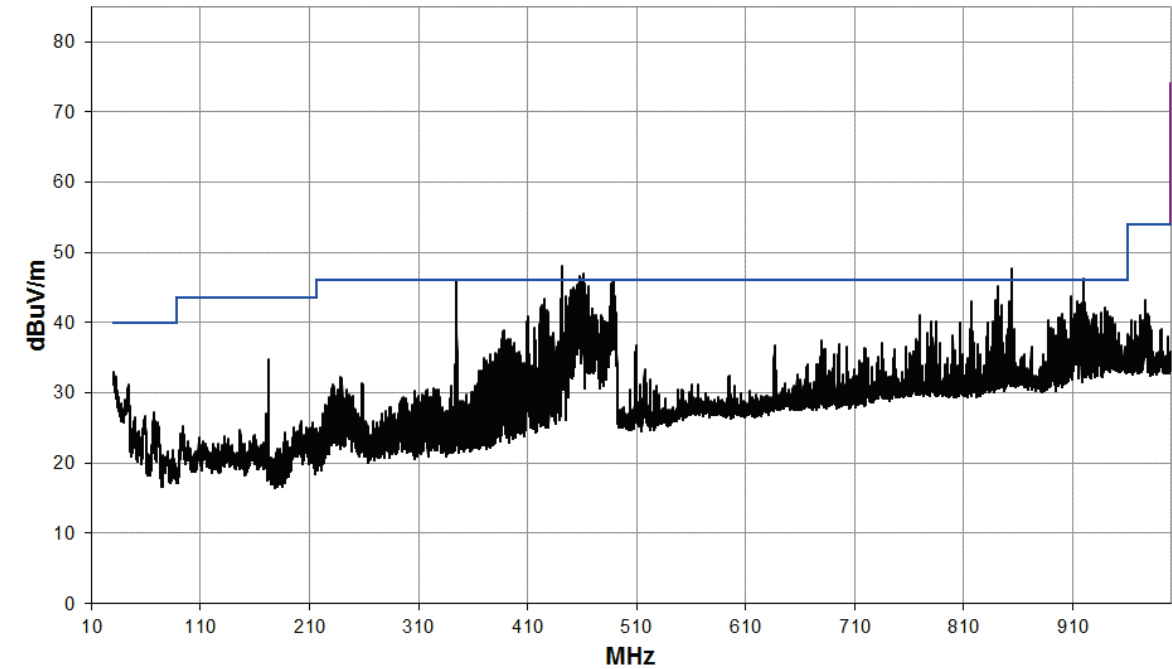
Band Edge



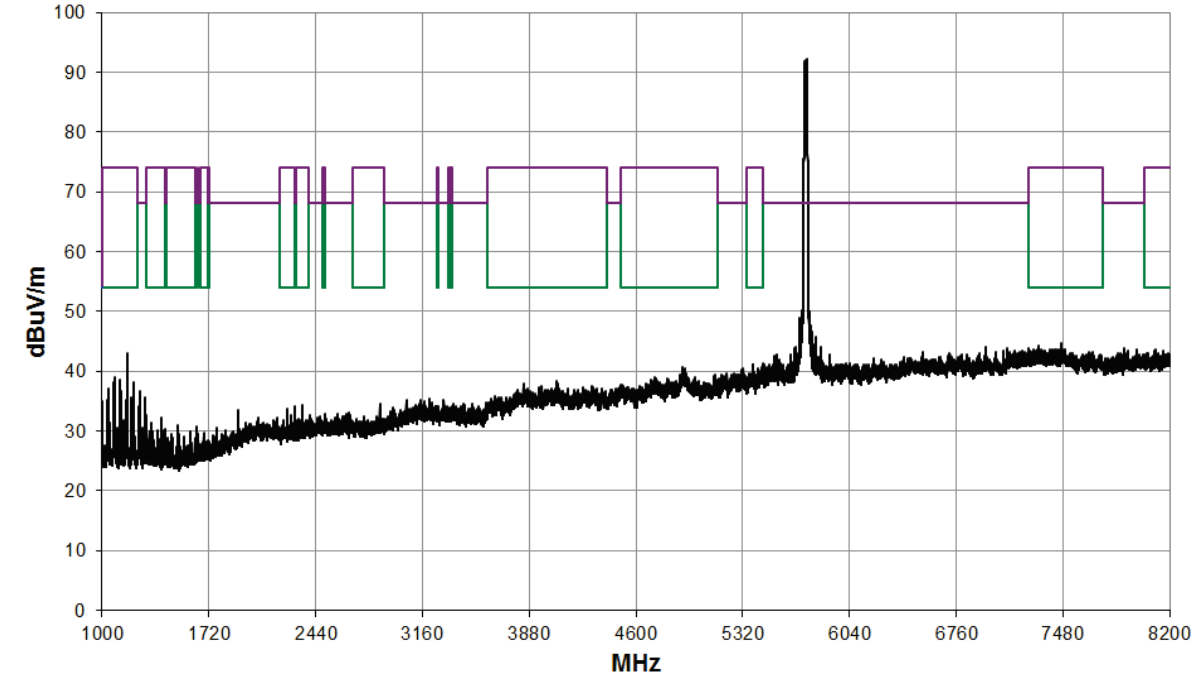
Date: 21.JUL.2020 14:38:24

MIMO; Mode: 802.11n20; Channel: CH149; Frequency: 5745 MHz; Bandwidth: 20 MHz; MCS Index: 15										
Detector	Freq. (MHz)	Meas'd Emission (dBμV)	Cable Loss (dB)	Antenna Factor (dB/m)	Pre-amp Gain (dB)	Duty Cycle Corr'n (dB)	Field Strength (dBμV/m)	Distance Extrap'n Factor (dB)	Field Strength (μV/m)	Limit (μV/m)
No emissions within 20 dB of the limit.										

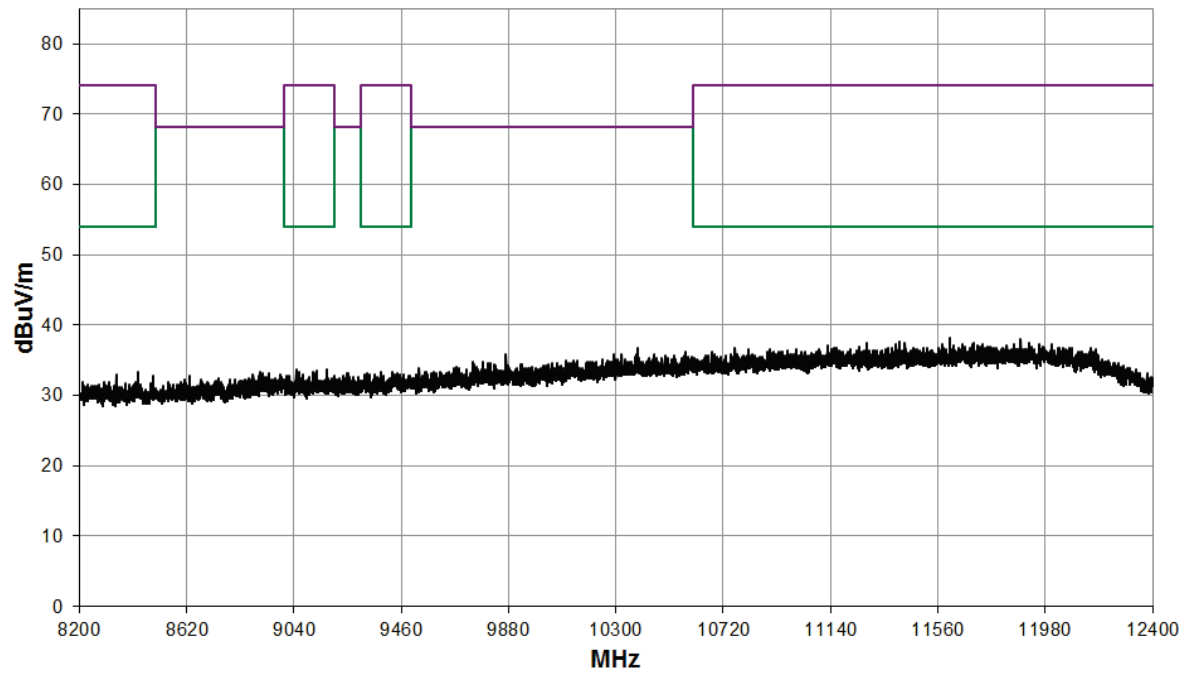
30 MHz to 1 GHz



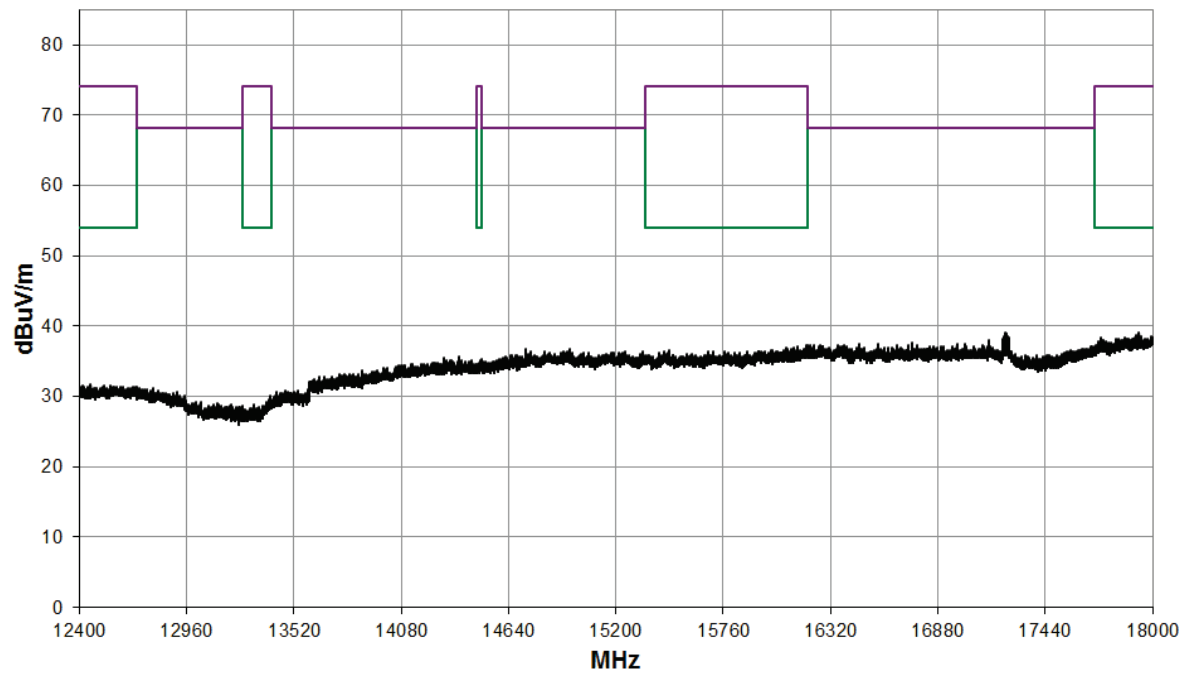
1 GHz to 8.2 GHz



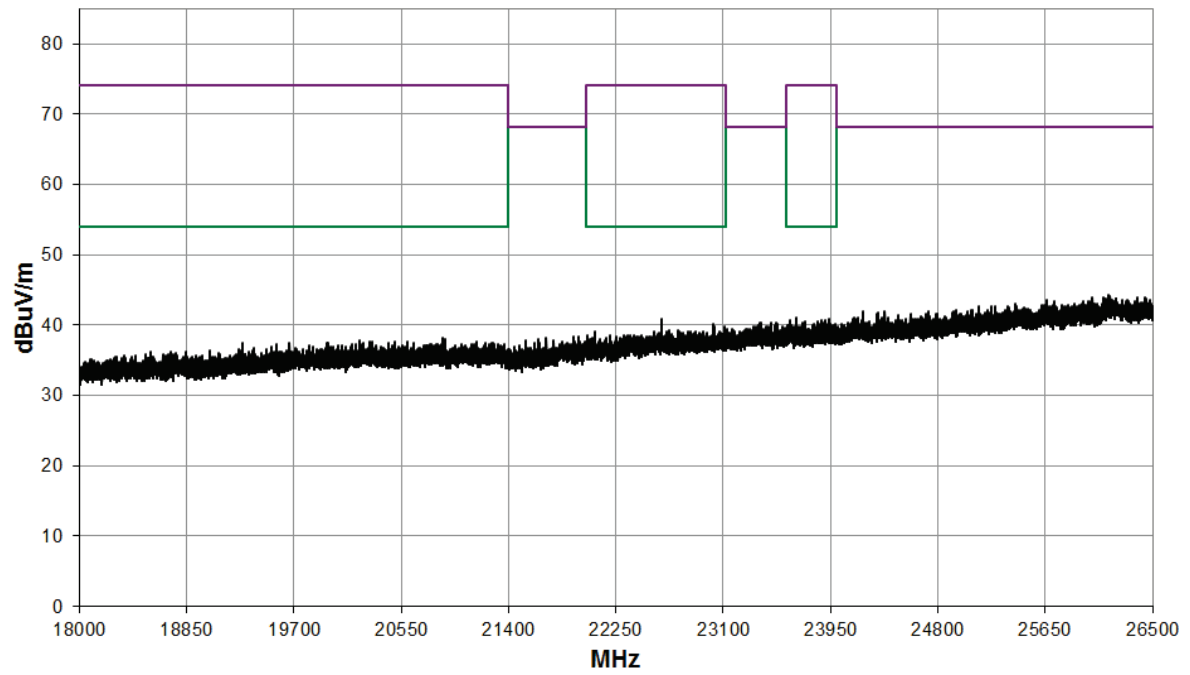
8.2 GHz to 12.4 GHz



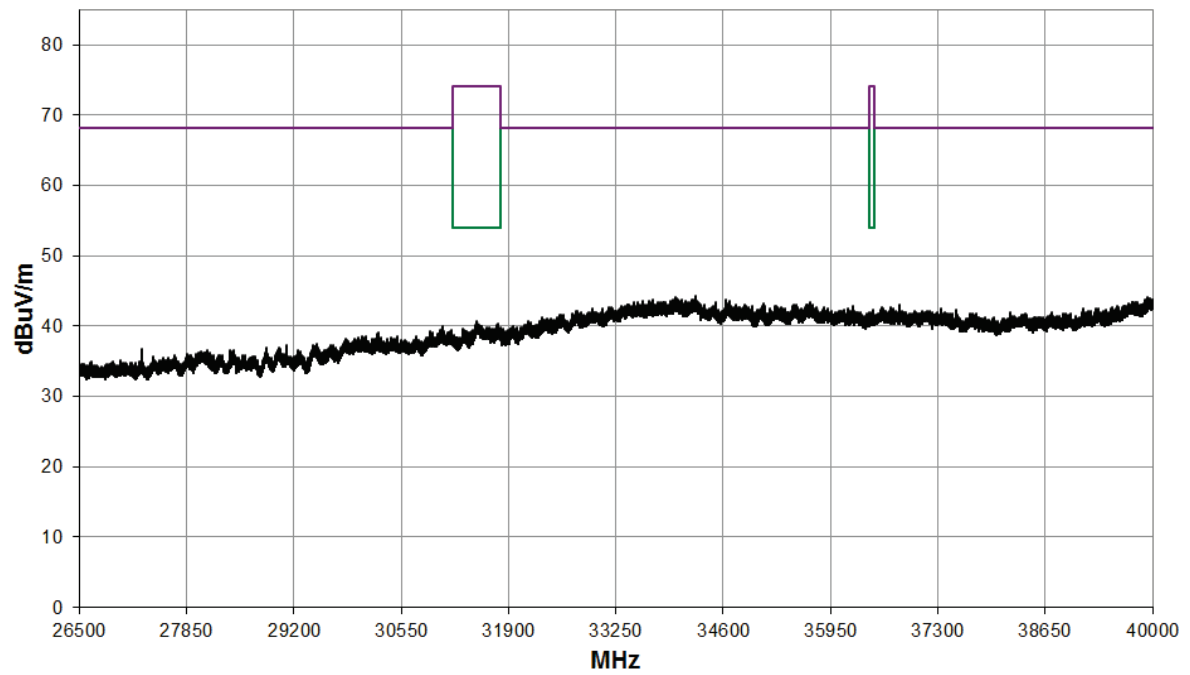
12.4 GHz to 18 GHz



18 GHz to 26.5 GHz



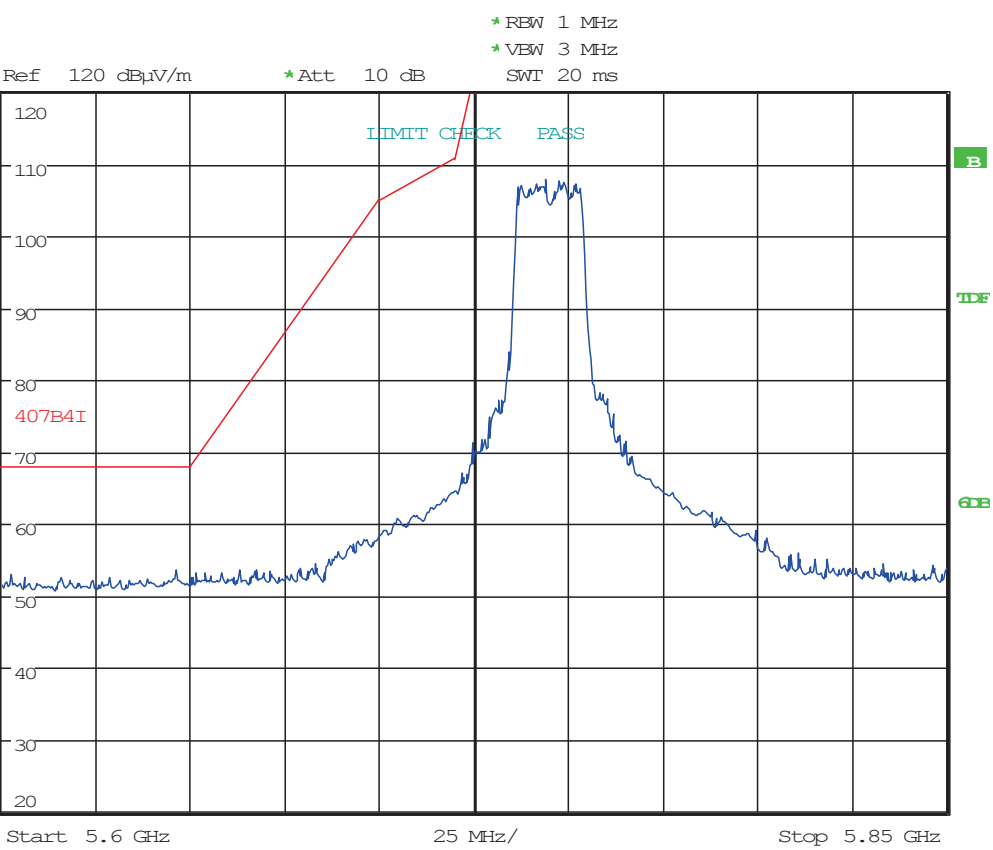
26.5 GHz to 40 GHz



Band Edge



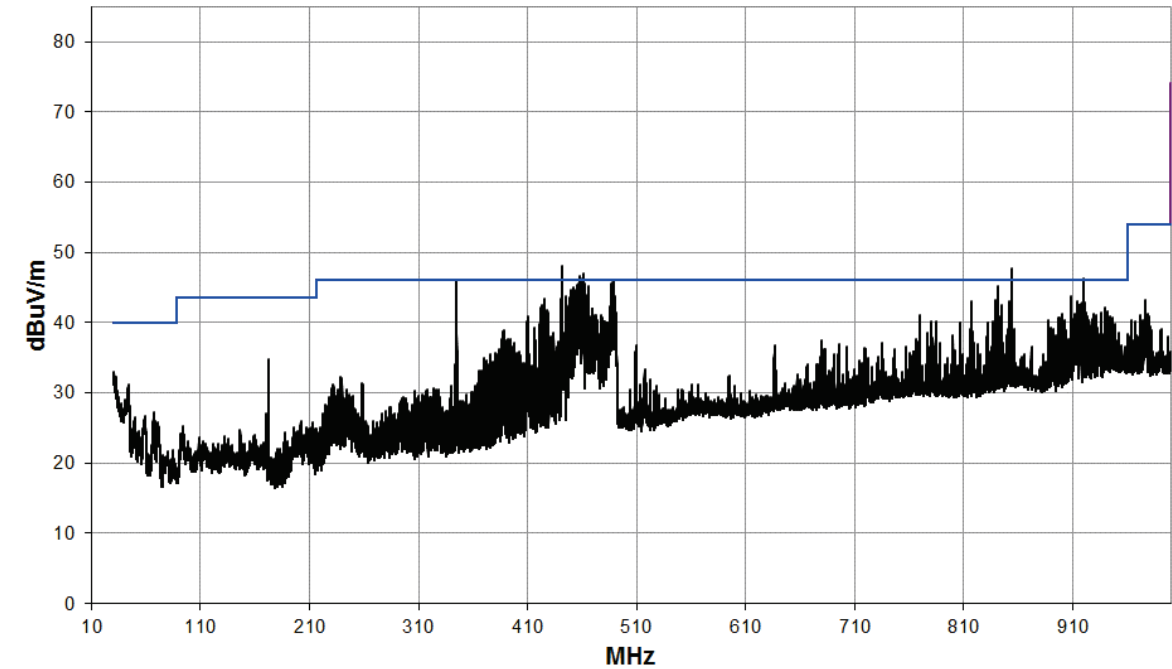
1 PK
MAX



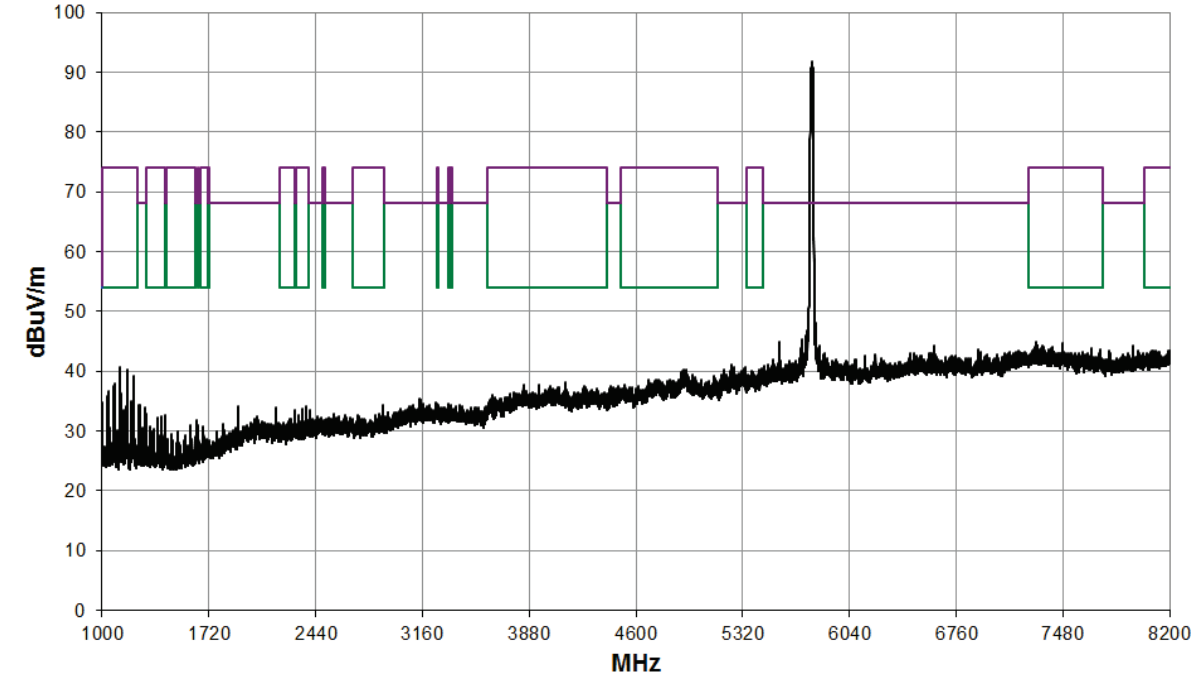
Date: 21.JUL.2020 14:40:08

MIMO; Mode: 802.11n20; Channel: CH157; Frequency: 5785 MHz; Bandwidth: 20 MHz; MCS Index: 8										
Detector	Freq. (MHz)	Meas'd Emission (dBμV)	Cable Loss (dB)	Antenna Factor (dB/m)	Pre-amp Gain (dB)	Duty Cycle Corr'n (dB)	Field Strength (dBμV/m)	Distance Extrap'n Factor (dB)	Field Strength (μV/m)	Limit (μV/m)
No emissions within 20 dB of the limit.										

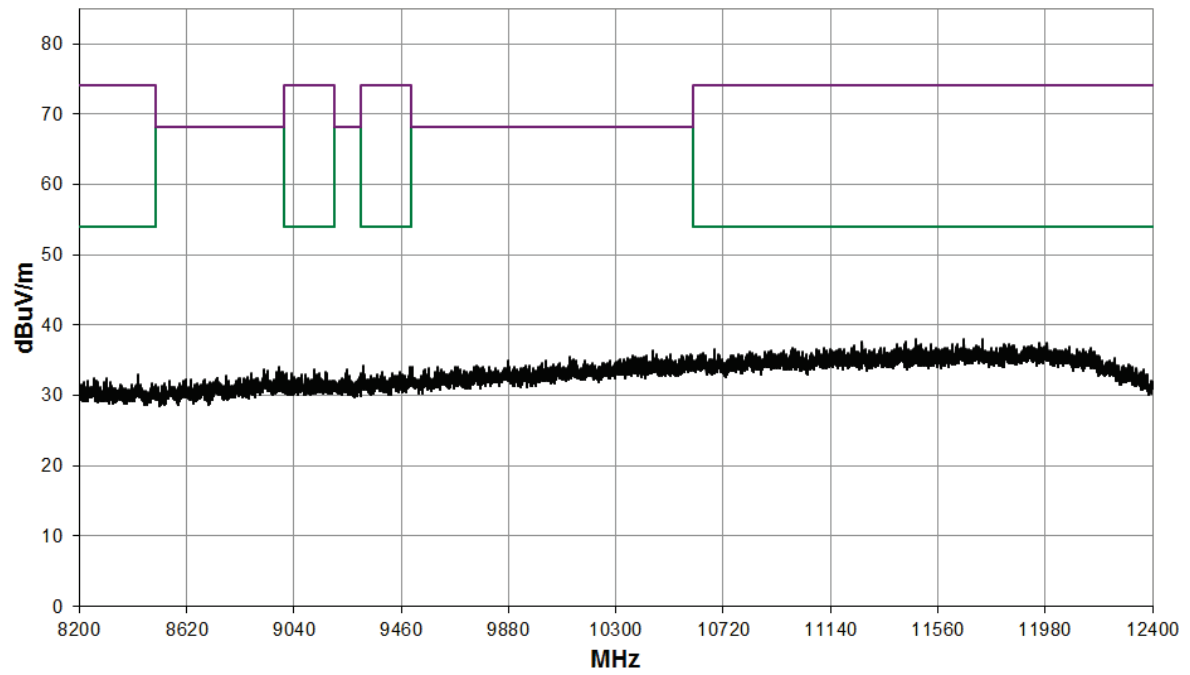
30 MHz to 1 GHz



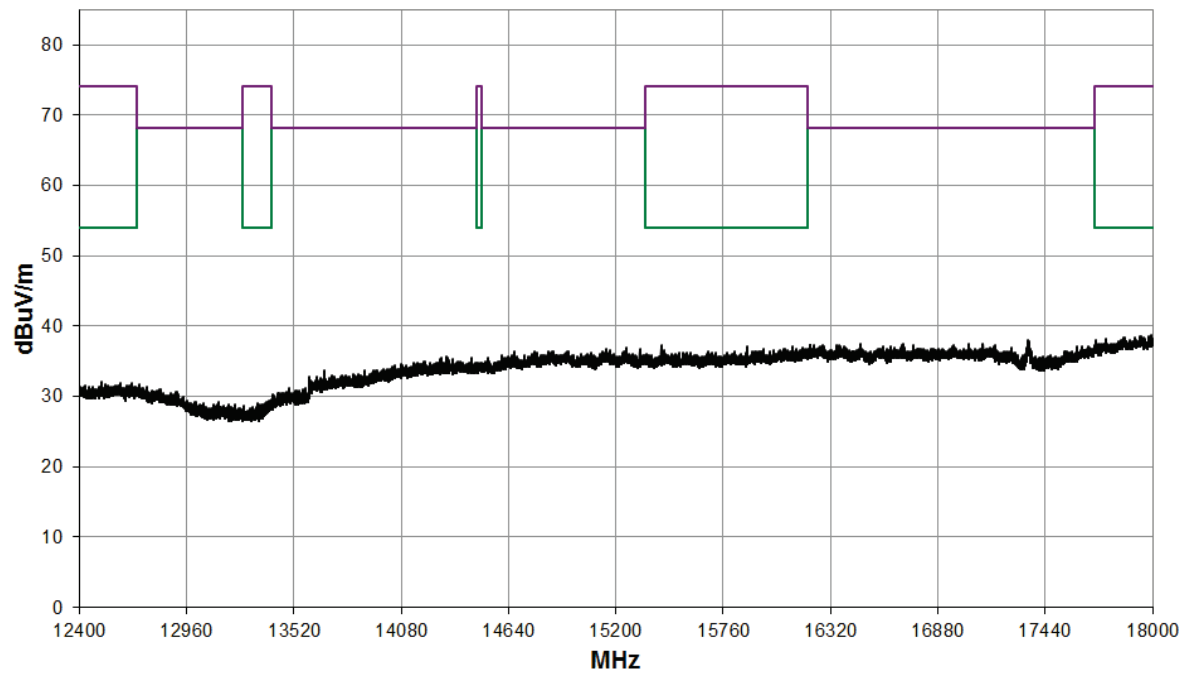
1 GHz to 8.2 GHz



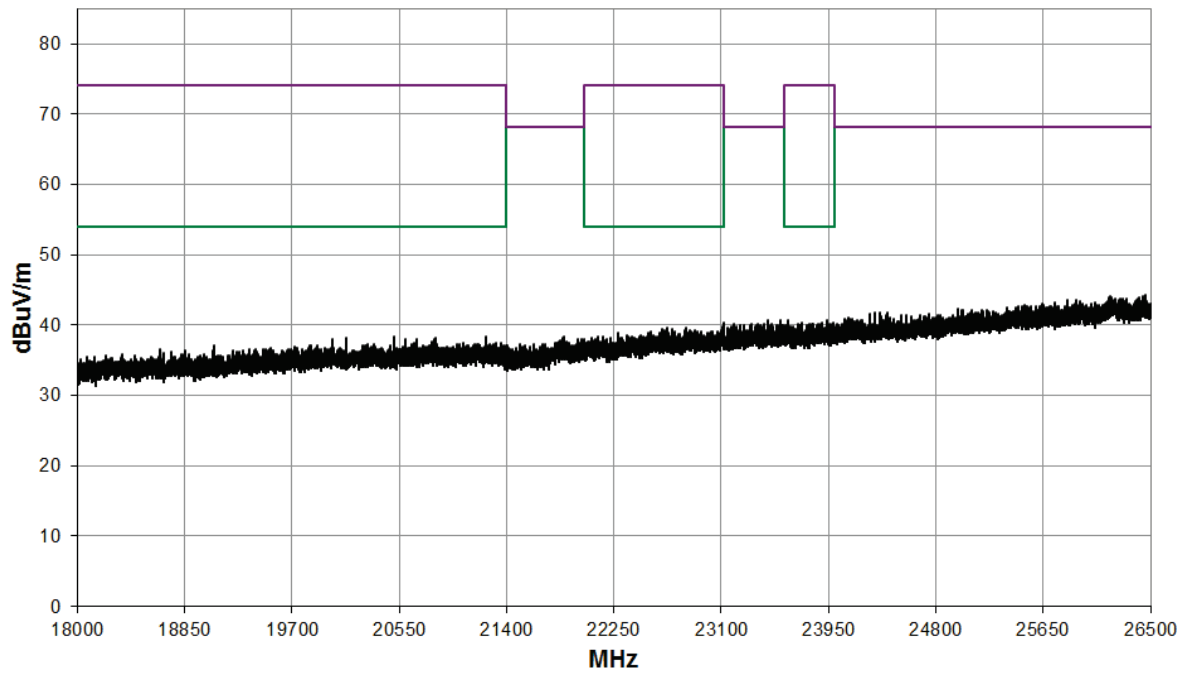
8.2 GHz to 12.4 GHz



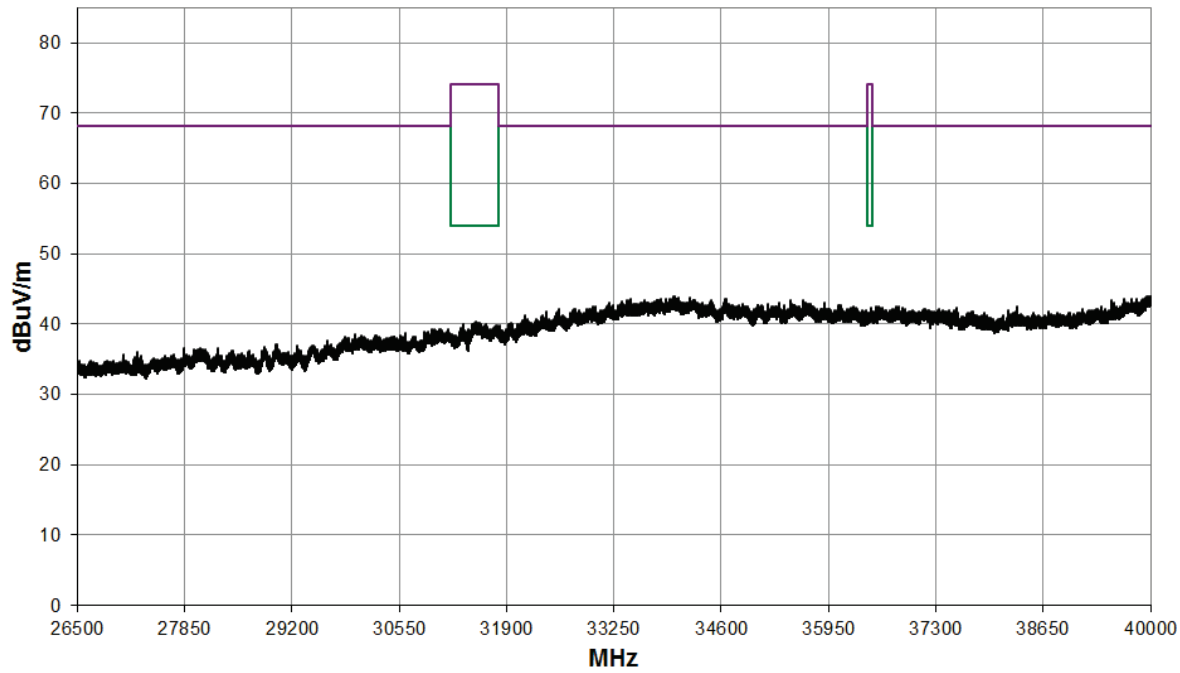
12.4 GHz to 18 GHz



18 GHz to 26.5 GHz

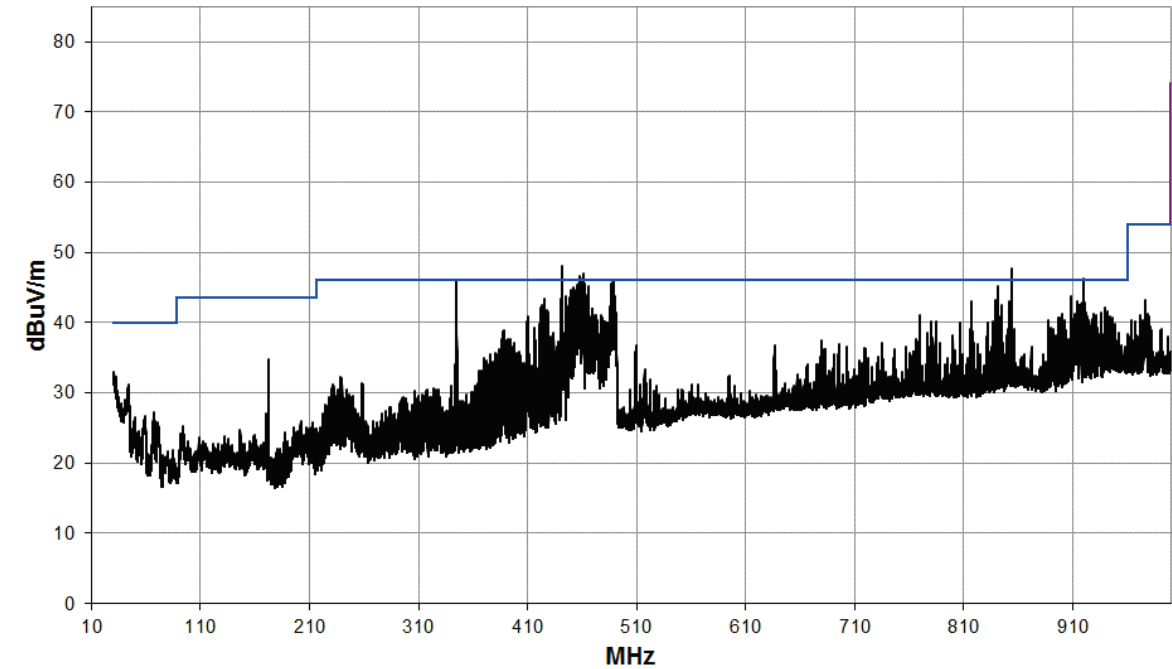


26.5 GHz to 40 GHz

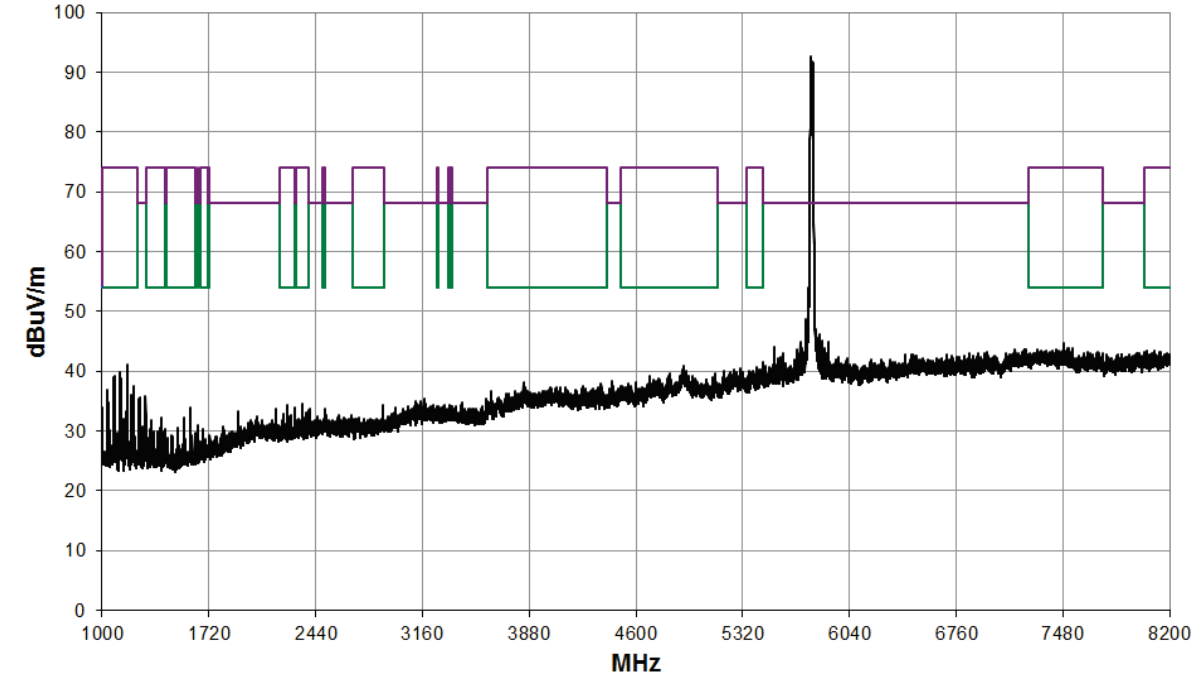


MIMO; Mode: 802.11n20; Channel: CH157; Frequency: 5785 MHz; Bandwidth: 20 MHz; MCS Index: 15										
Detector	Freq. (MHz)	Meas'd Emission (dBμV)	Cable Loss (dB)	Antenna Factor (dB/m)	Pre-amp Gain (dB)	Duty Cycle Corr'n (dB)	Field Strength (dBμV/m)	Distance Extrap'n Factor (dB)	Field Strength (μV/m)	Limit (μV/m)
No emissions within 20 dB of the limit.										

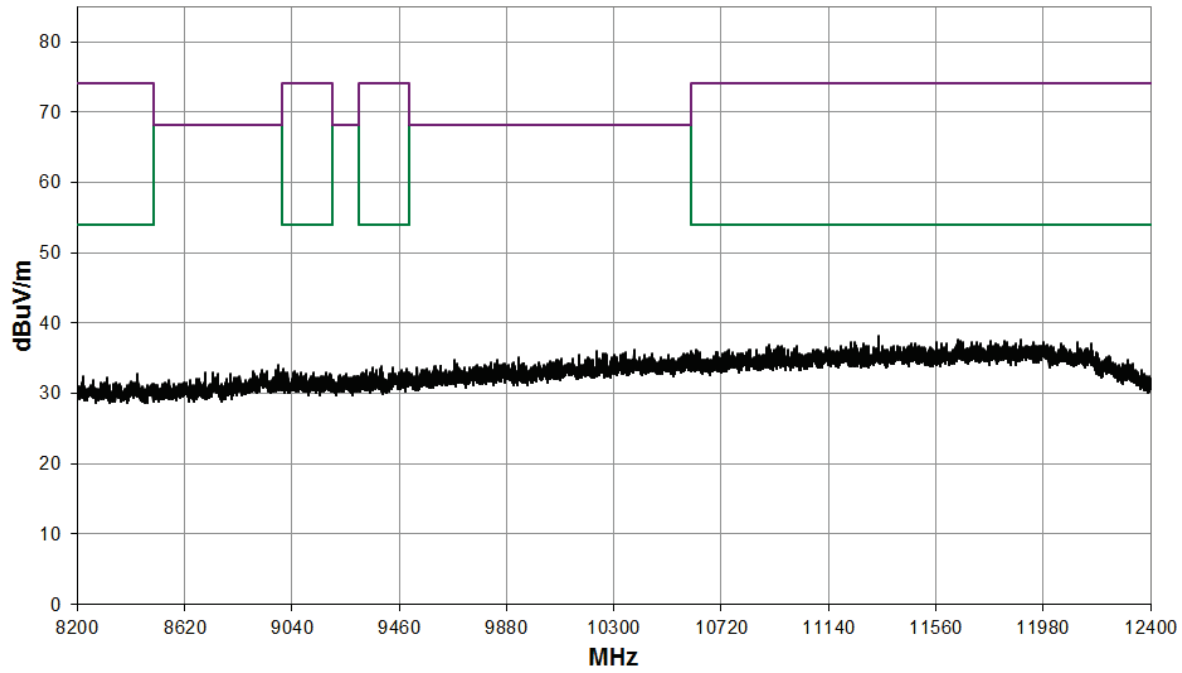
30 MHz to 1 GHz



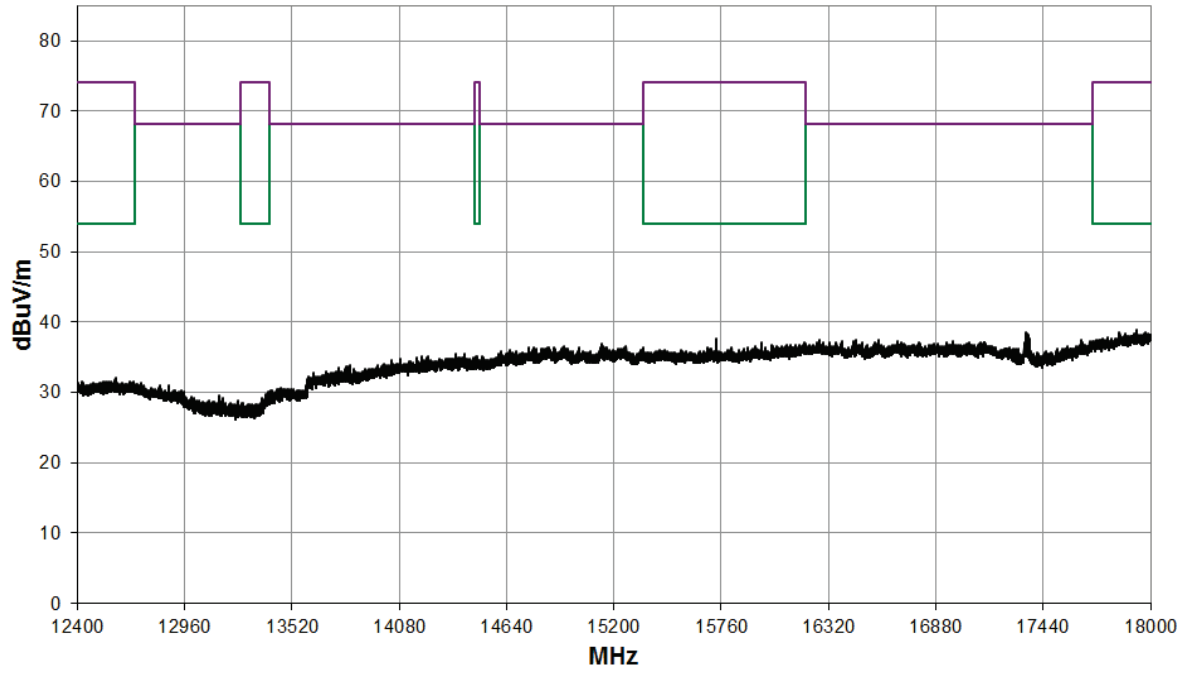
1 GHz to 8.2 GHz



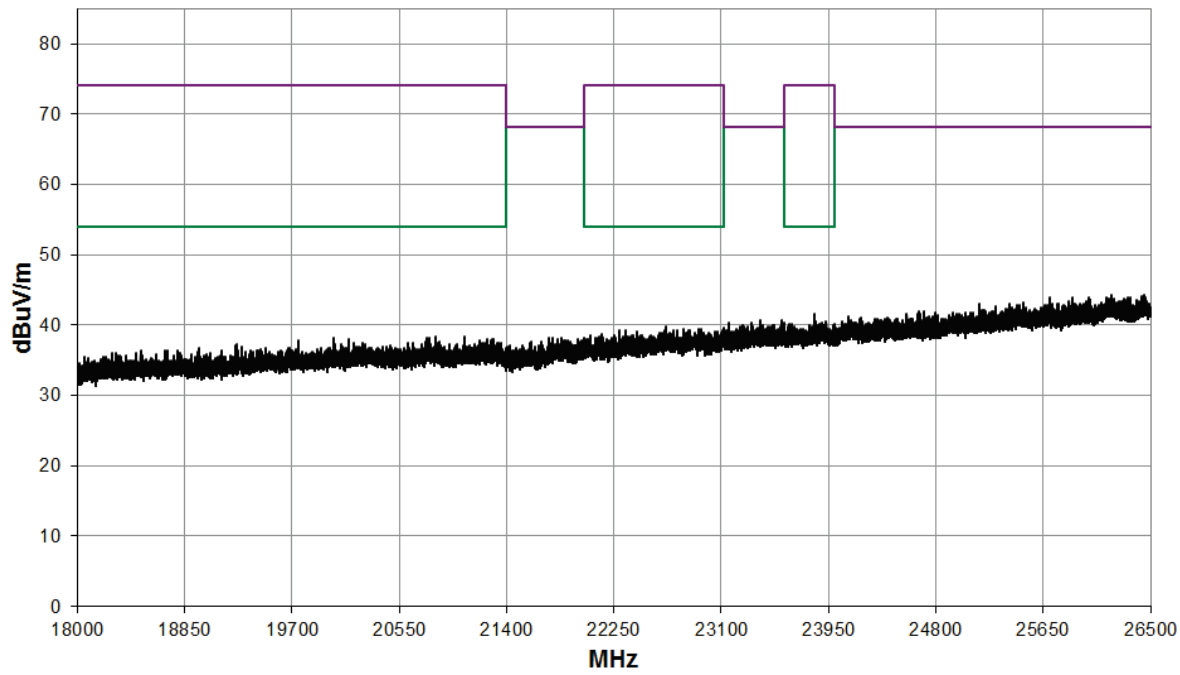
8.2 GHz to 12.4 GHz



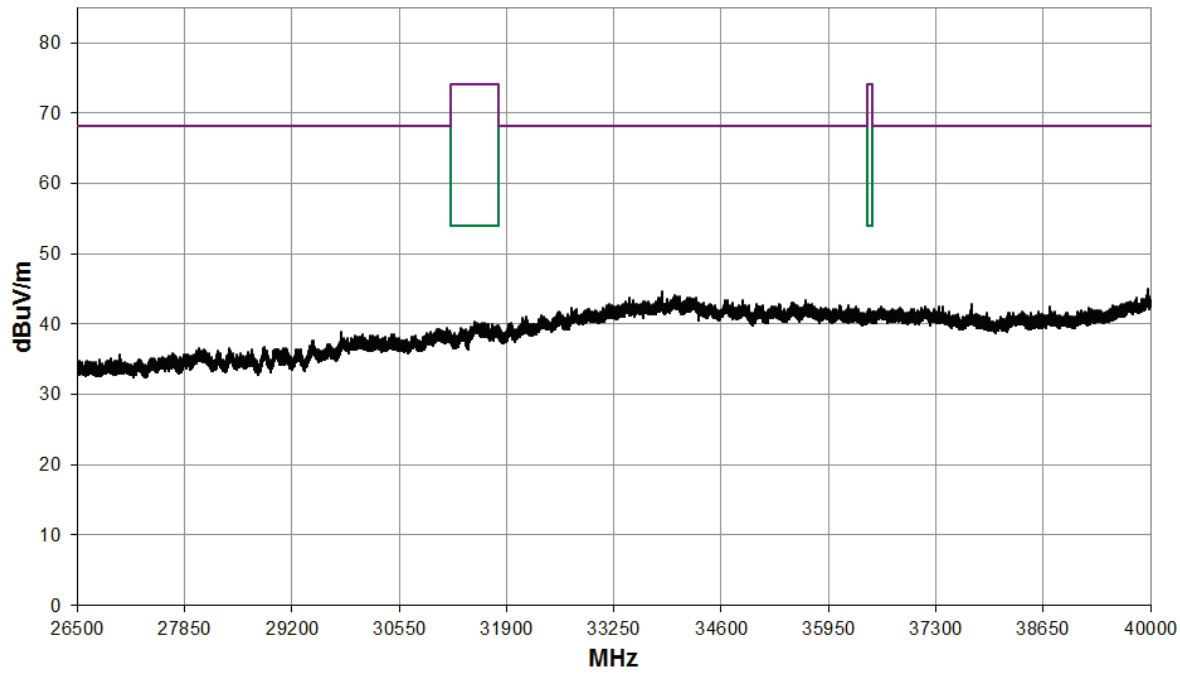
12.4 GHz to 18 GHz



18 GHz to 26.5 GHz

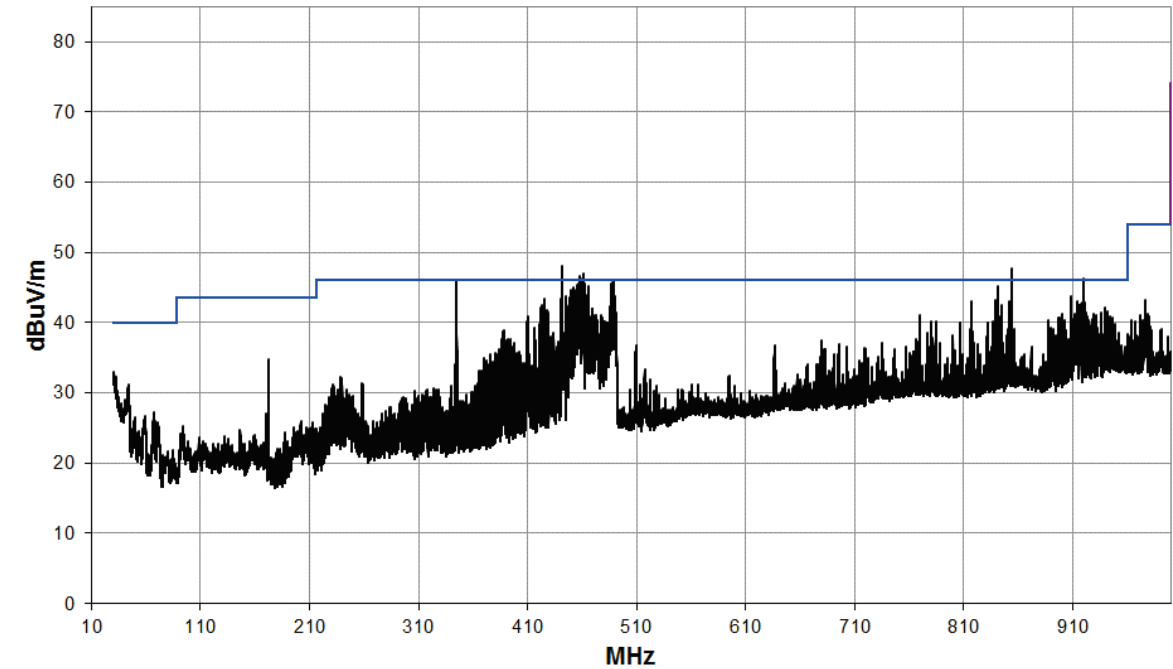


26.5 GHz to 40 GHz

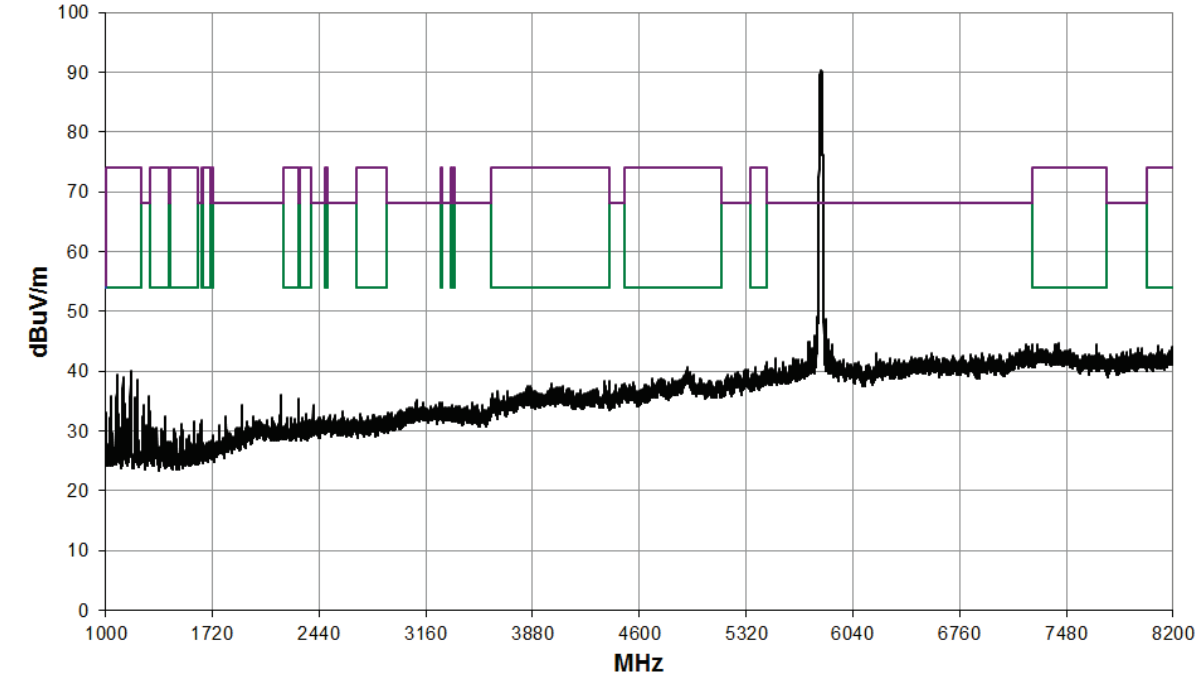


MIMO; Mode: 802.11n20; Channel: CH165; Frequency: 5825 MHz; Bandwidth: 20 MHz; MCS Index: 8										
Detector	Freq. (MHz)	Meas'd Emission (dBμV)	Cable Loss (dB)	Antenna Factor (dB/m)	Pre-amp Gain (dB)	Duty Cycle Corr'n (dB)	Field Strength (dBμV/m)	Distance Extrap'n Factor (dB)	Field Strength (μV/m)	Limit (μV/m)
No emissions within 20 dB of the limit.										

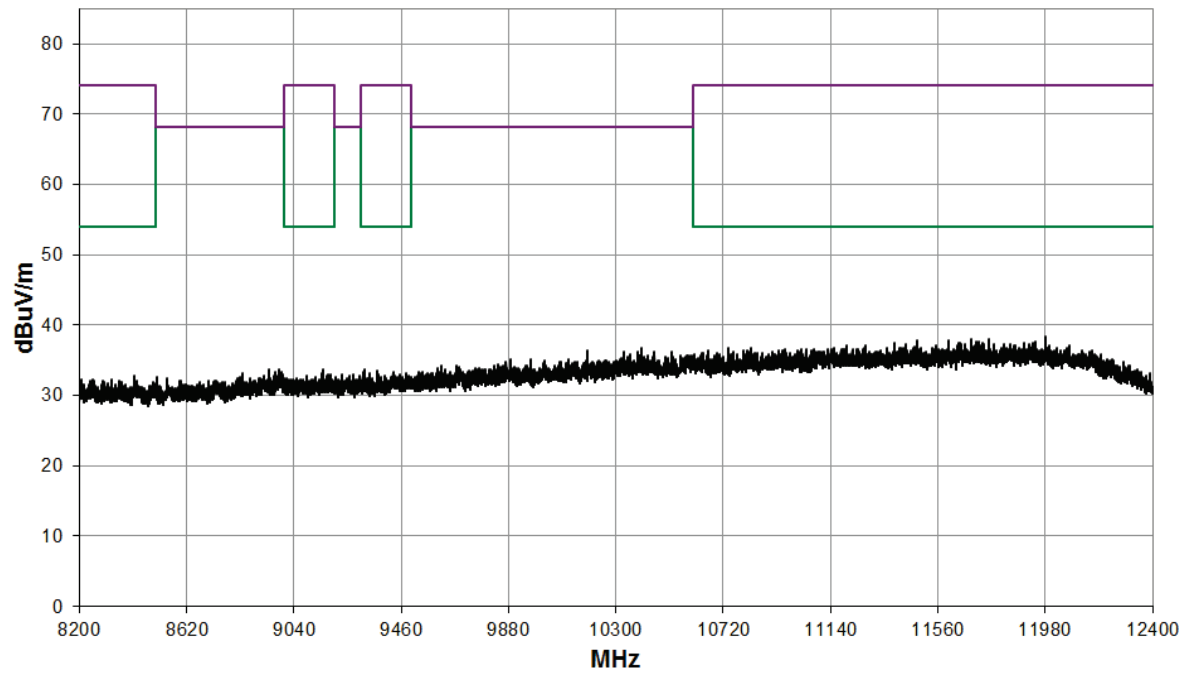
30 MHz to 1 GHz



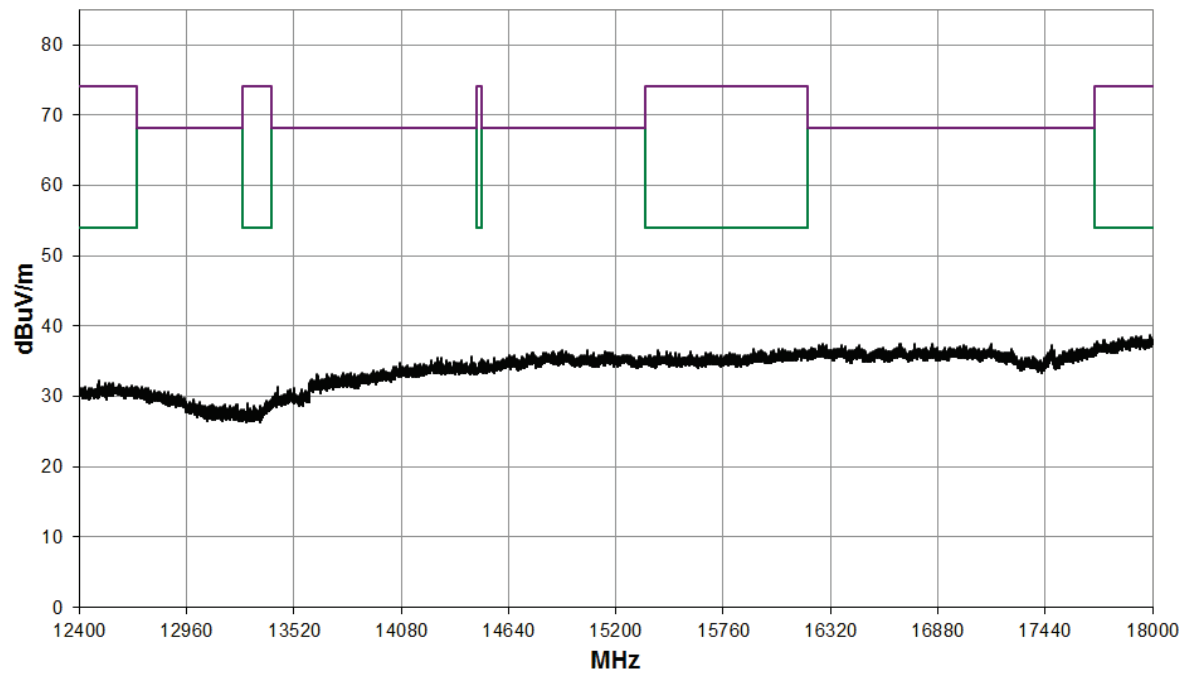
1 GHz to 8.2 GHz



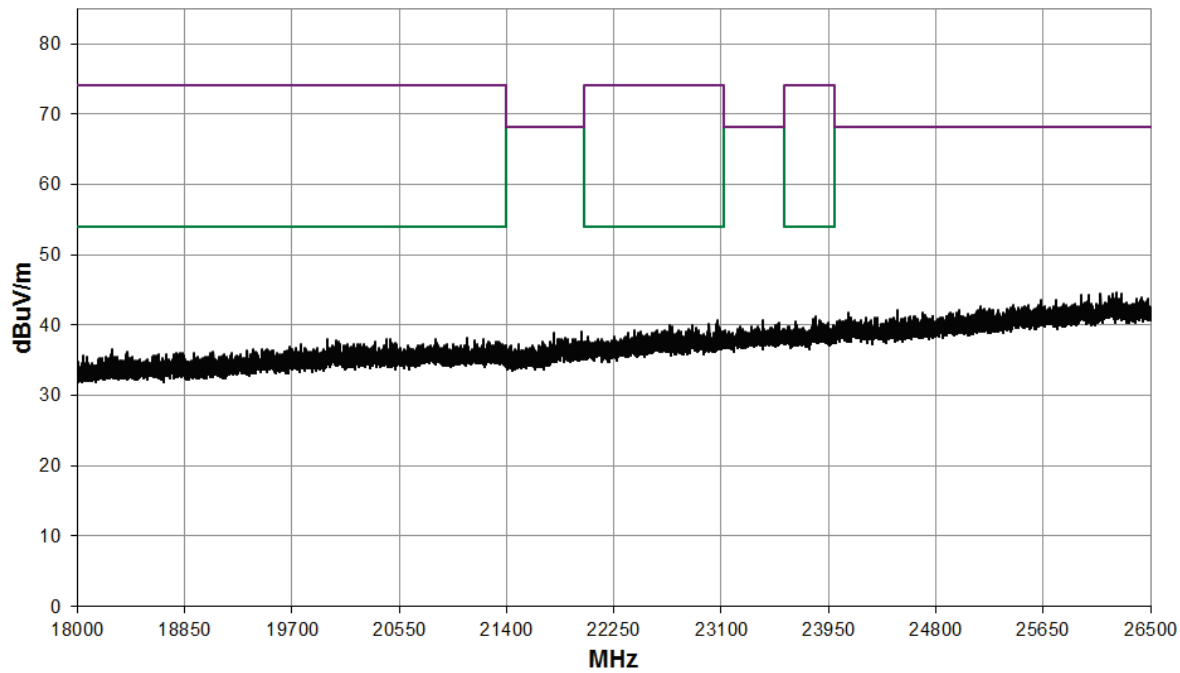
8.2 GHz to 12.4 GHz



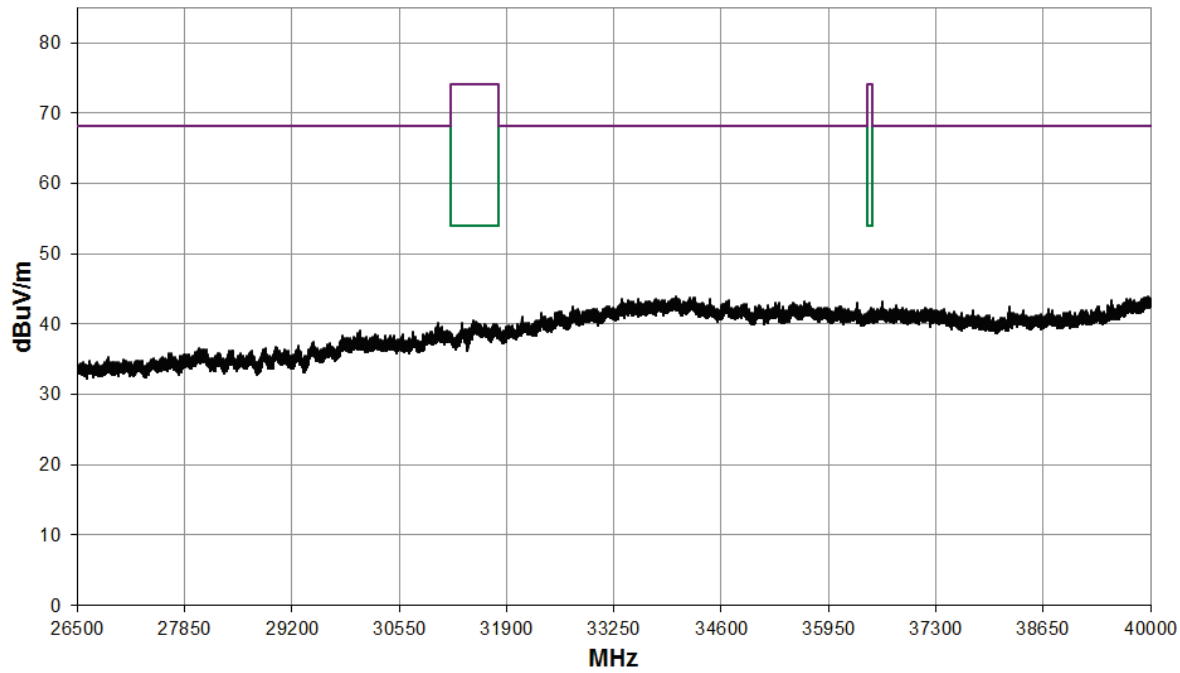
12.4 GHz to 18 GHz



18 GHz to 26.5 GHz



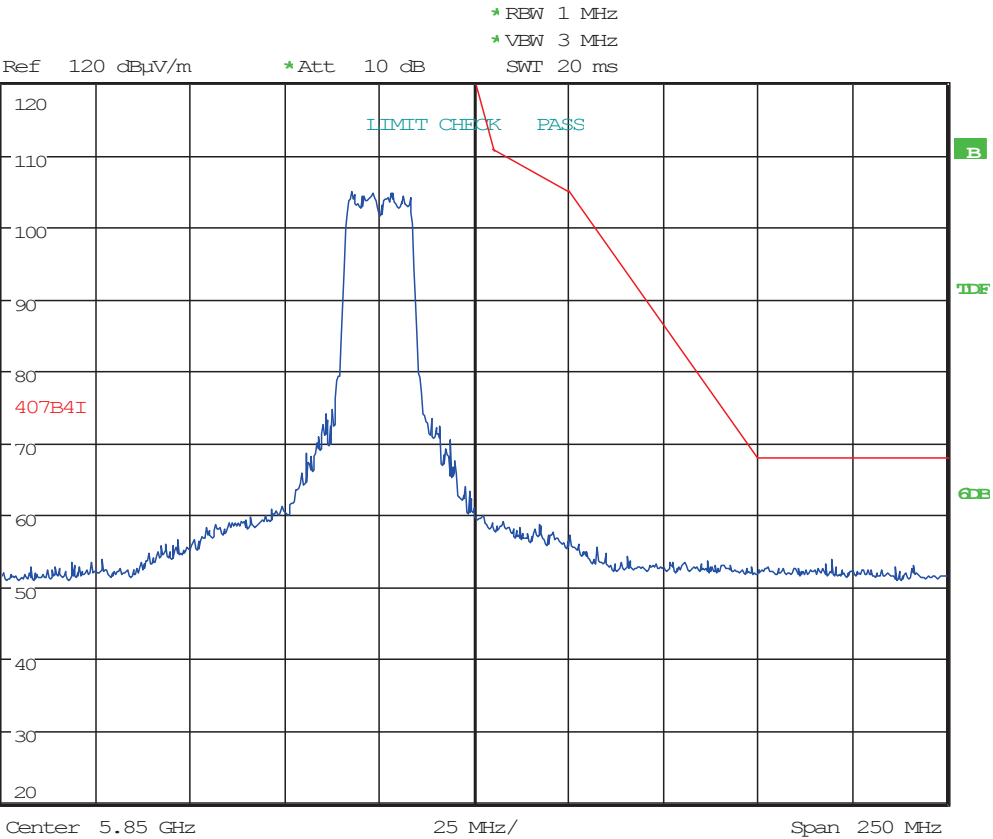
26.5 GHz to 40 GHz



Band Edge



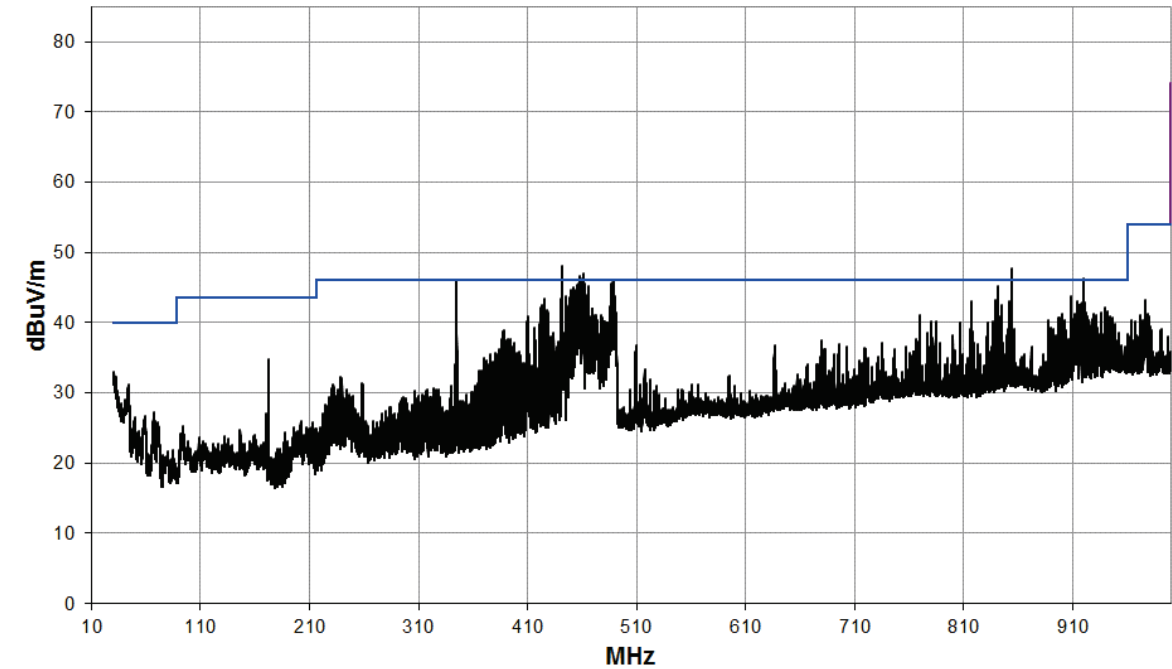
1 PK
MAX



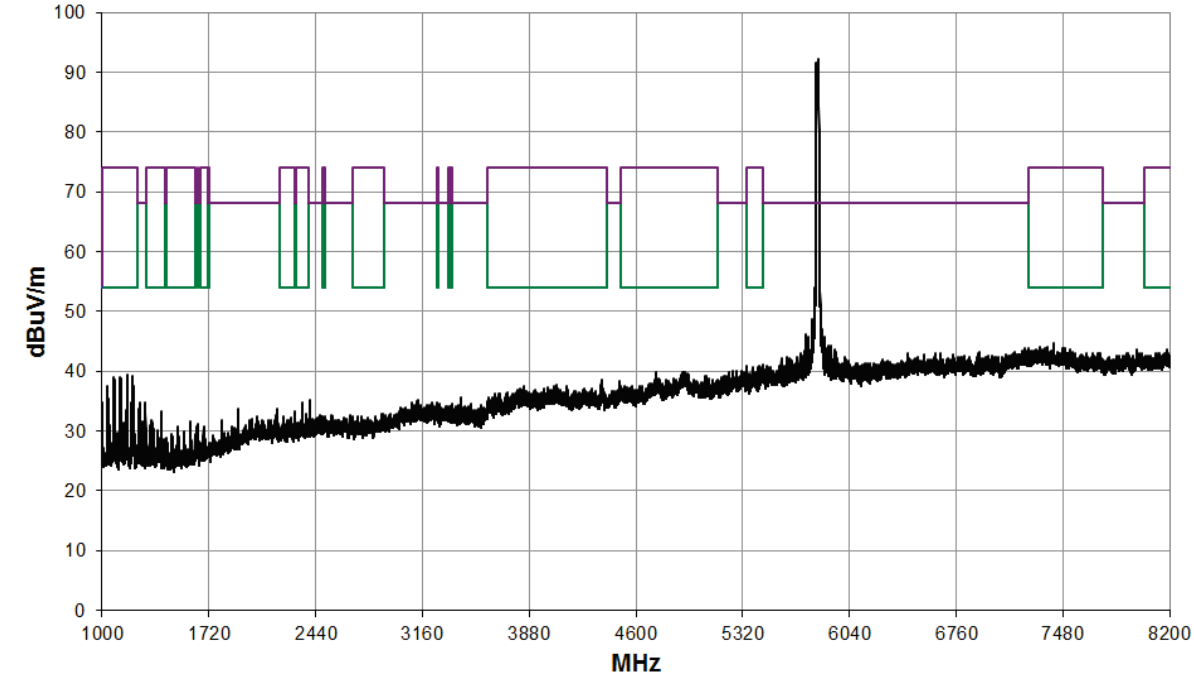
Date: 21.JUL.2020 14:03:18

MIMO; Mode: 802.11n20; Channel: CH165; Frequency: 5825 MHz; Bandwidth: 20 MHz; MCS Index: 15										
Detector	Freq. (MHz)	Meas'd Emission (dBμV)	Cable Loss (dB)	Antenna Factor (dB/m)	Pre-amp Gain (dB)	Duty Cycle Corr'n (dB)	Field Strength (dBμV/m)	Distance Extrap'n Factor (dB)	Field Strength (μV/m)	Limit (μV/m)
No emissions within 20 dB of the limit.										

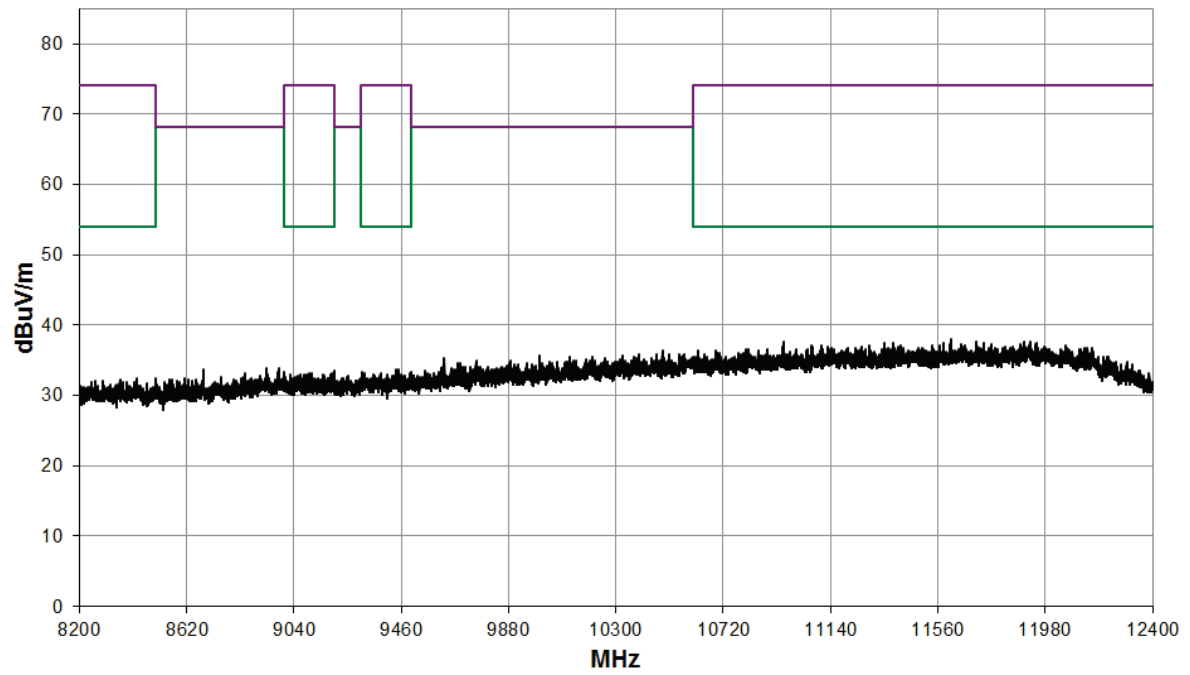
30 MHz to 1 GHz



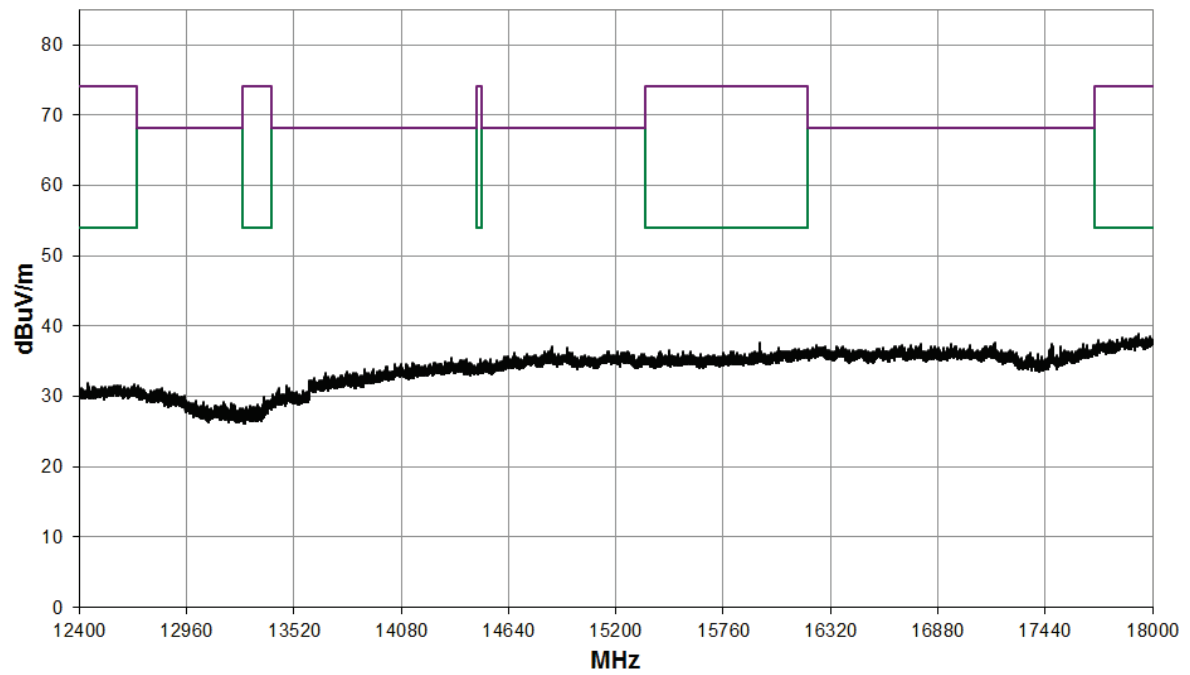
1 GHz to 8.2 GHz



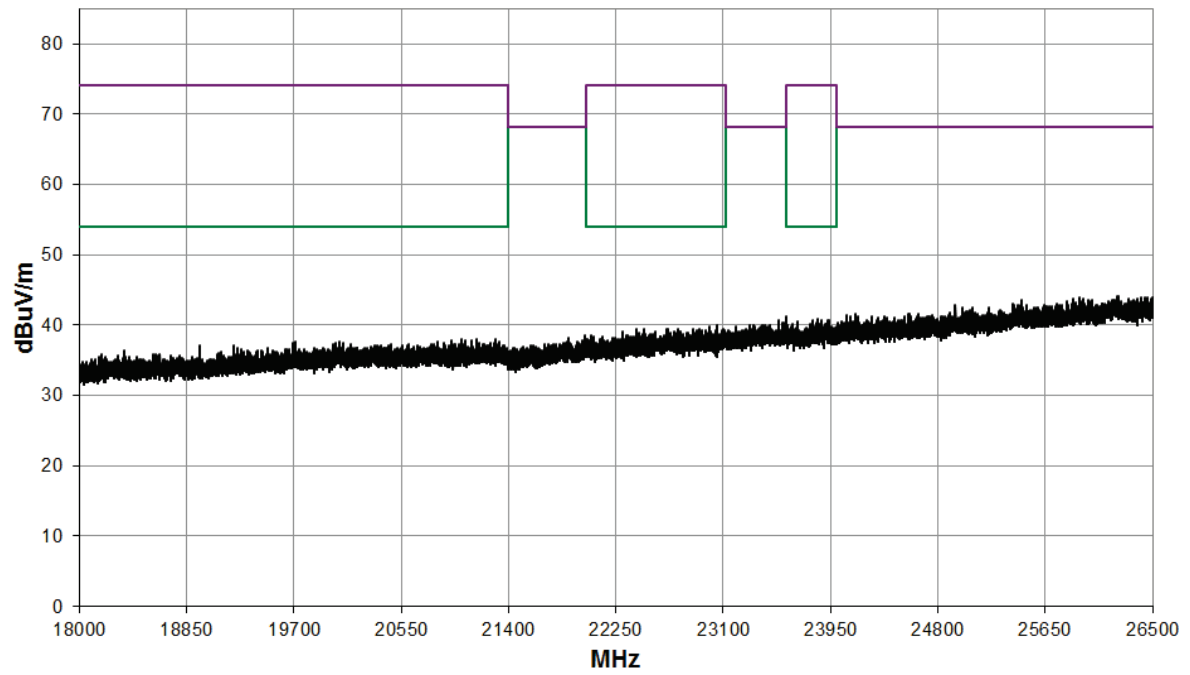
8.2 GHz to 12.4 GHz



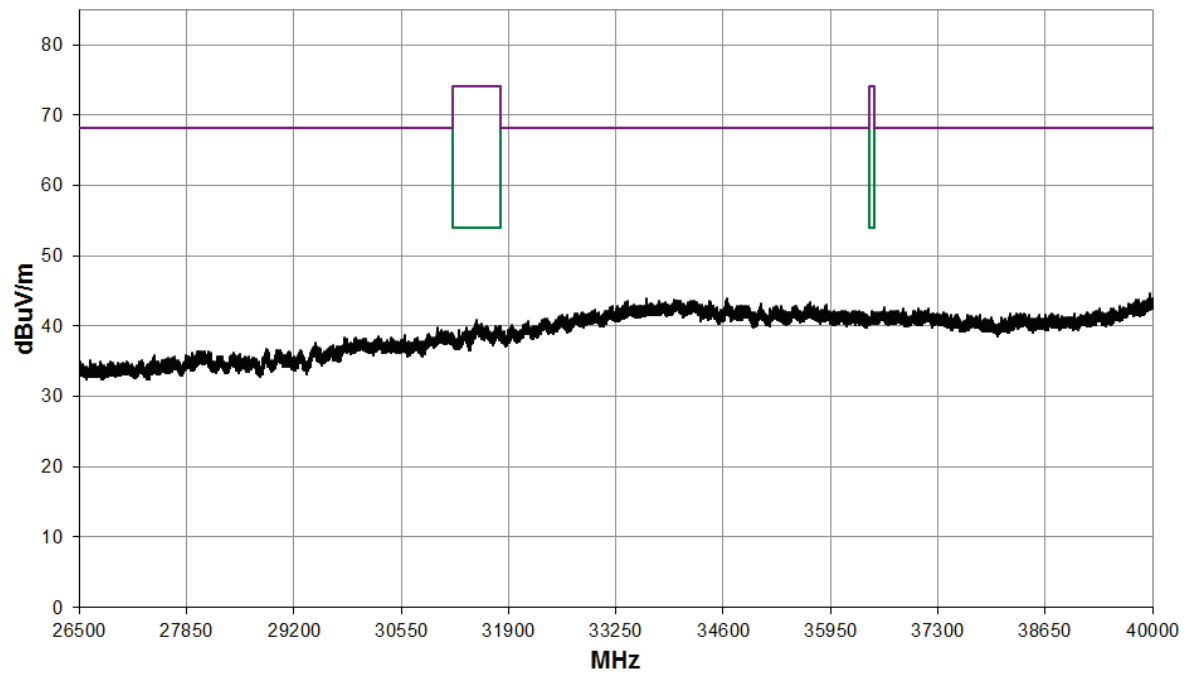
12.4 GHz to 18 GHz



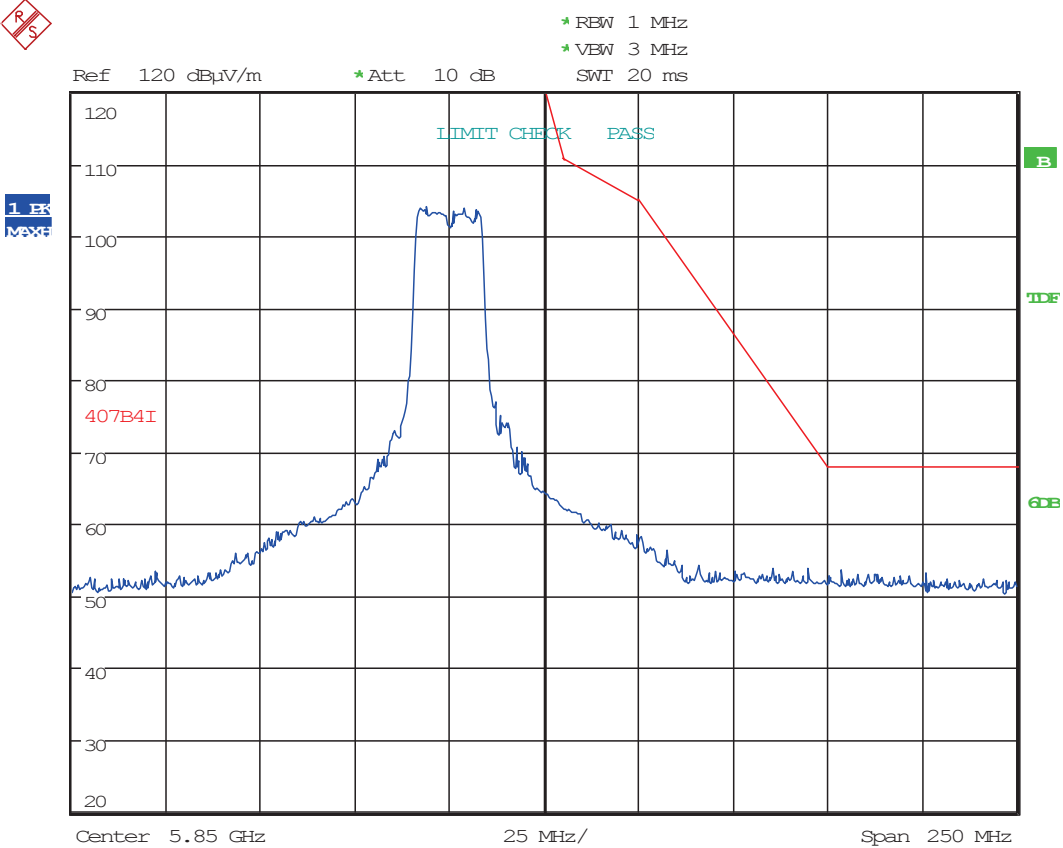
18 GHz to 26.5 GHz



26.5 GHz to 40 GHz



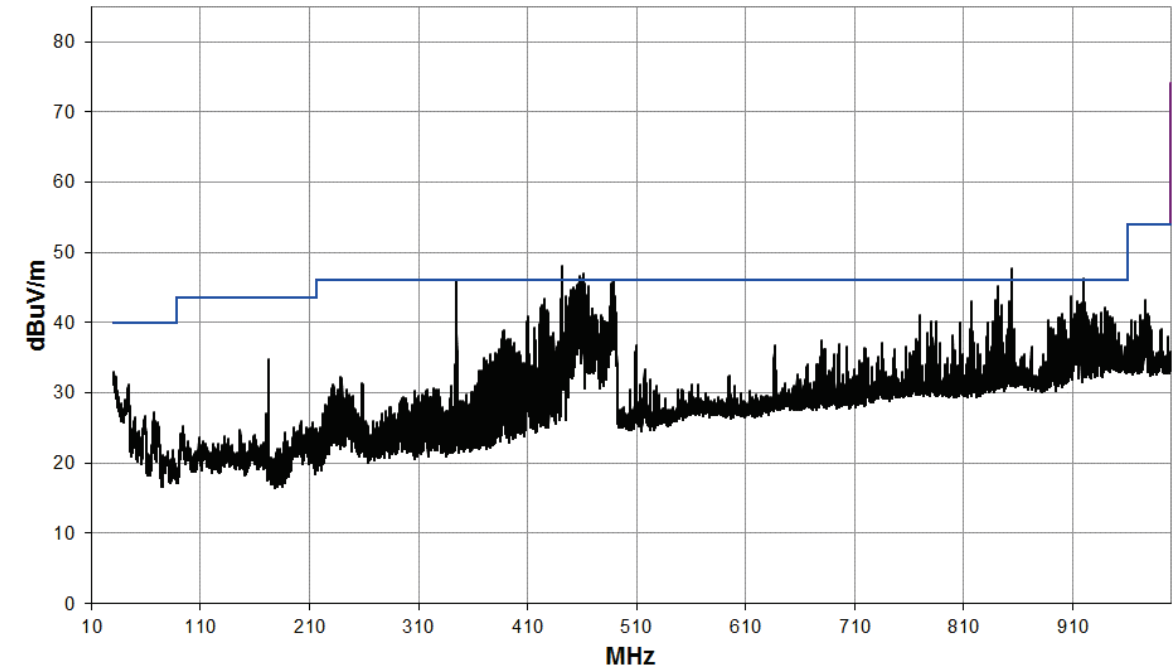
Band Edge



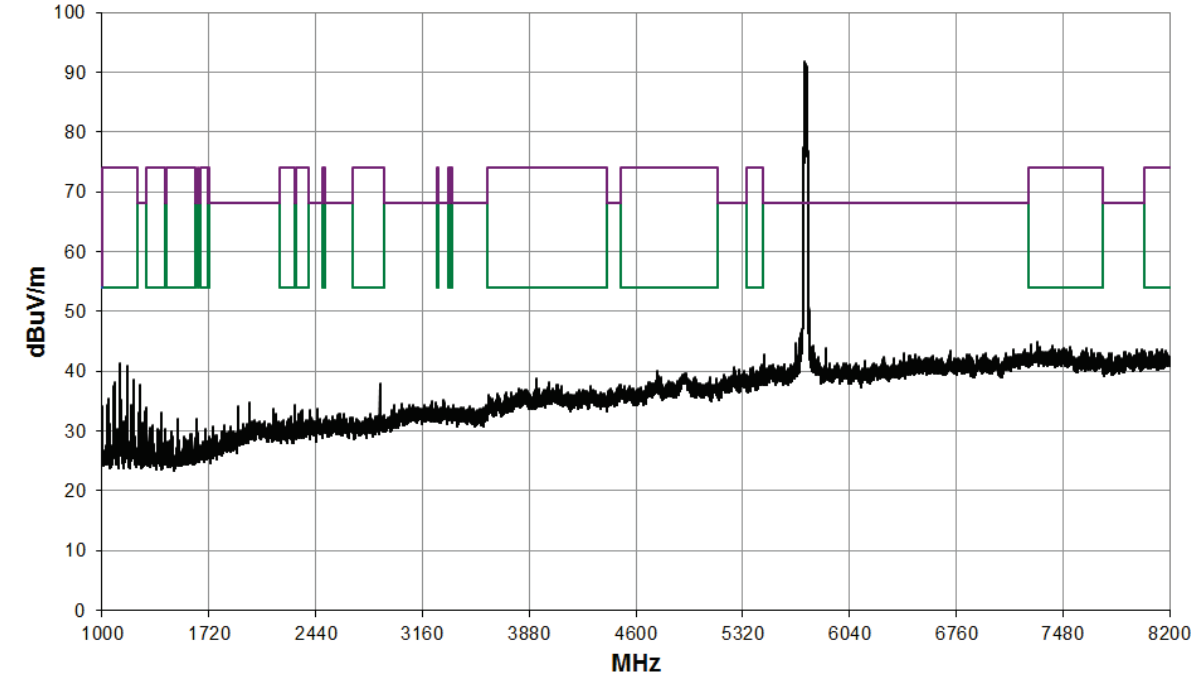
Date: 21.JUL.2020 14:04:31

MIMO; Mode: 802.11n40; Channel: CH151; Frequency: 5755 MHz; Bandwidth: 40 MHz; MCS Index: 8										
Detector	Freq. (MHz)	Meas'd Emission (dBμV)	Cable Loss (dB)	Antenna Factor (dB/m)	Pre-amp Gain (dB)	Duty Cycle Corr'n (dB)	Field Strength (dBμV/m)	Distance Extrap'n Factor (dB)	Field Strength (μV/m)	Limit (μV/m)
No emissions within 20 dB of the limit.										

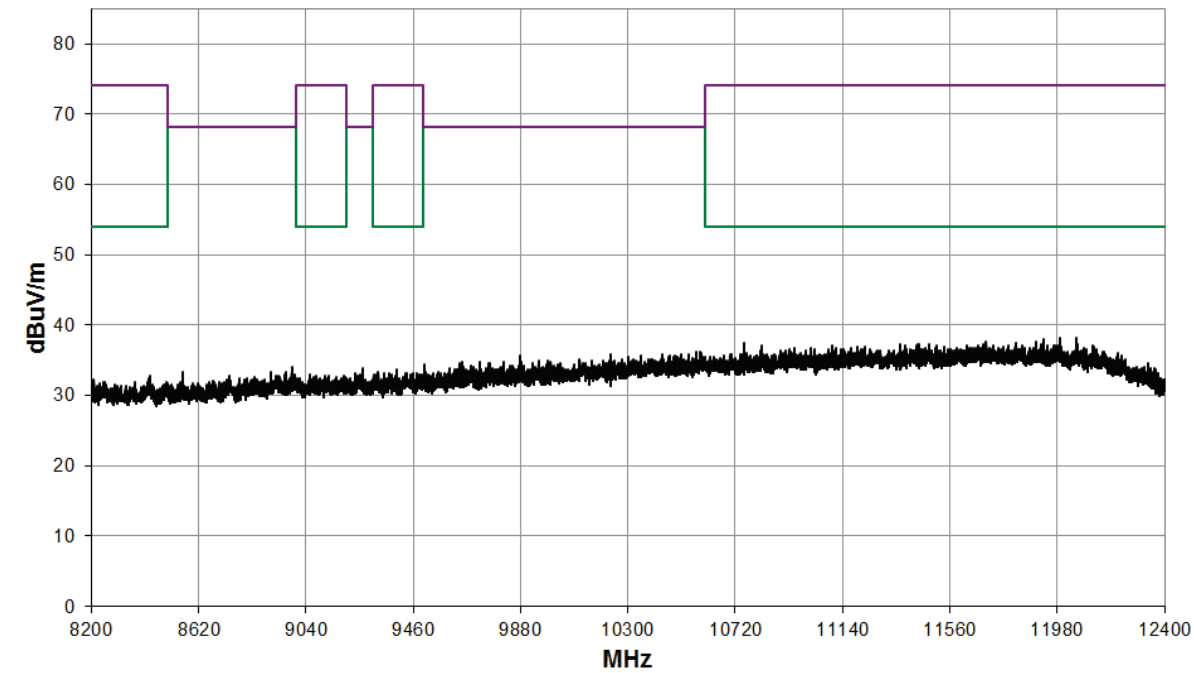
30 MHz to 1 GHz



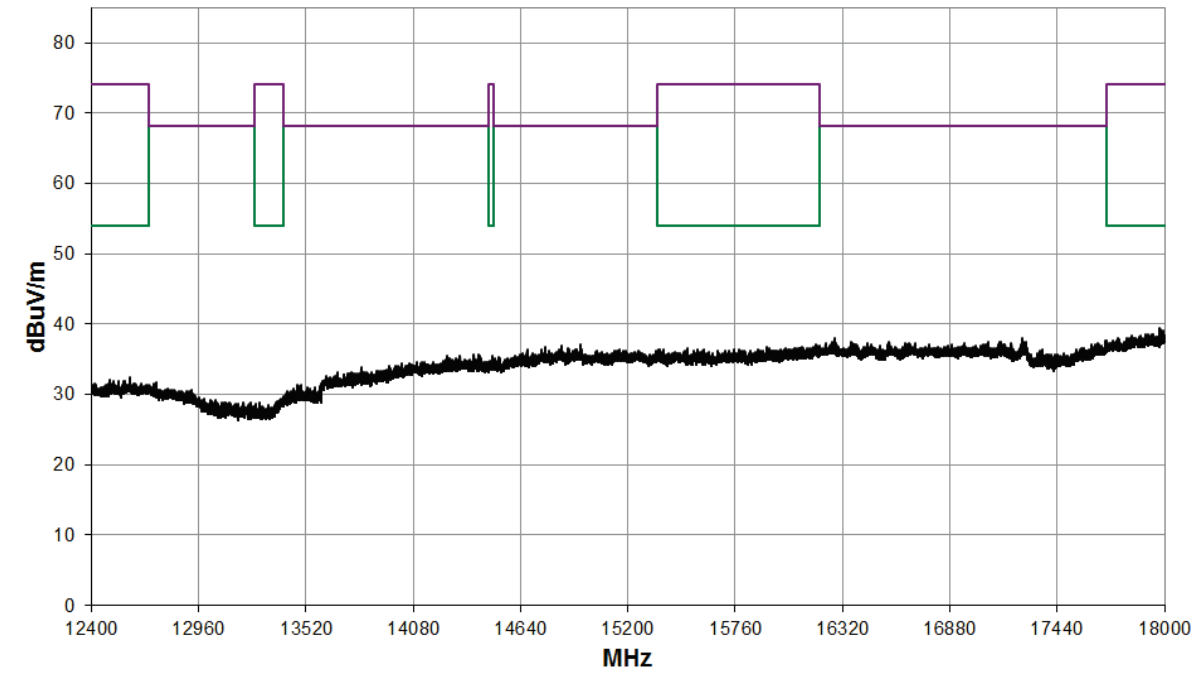
1 GHz to 8.2 GHz



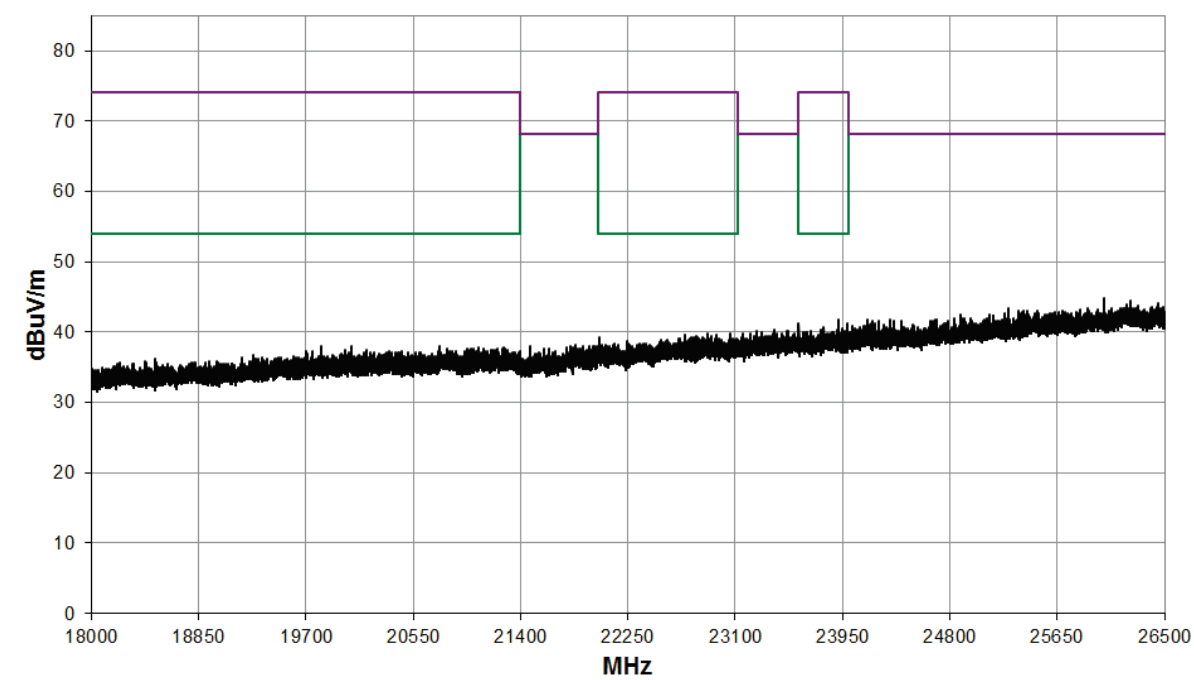
8.2 GHz to 12.4 GHz



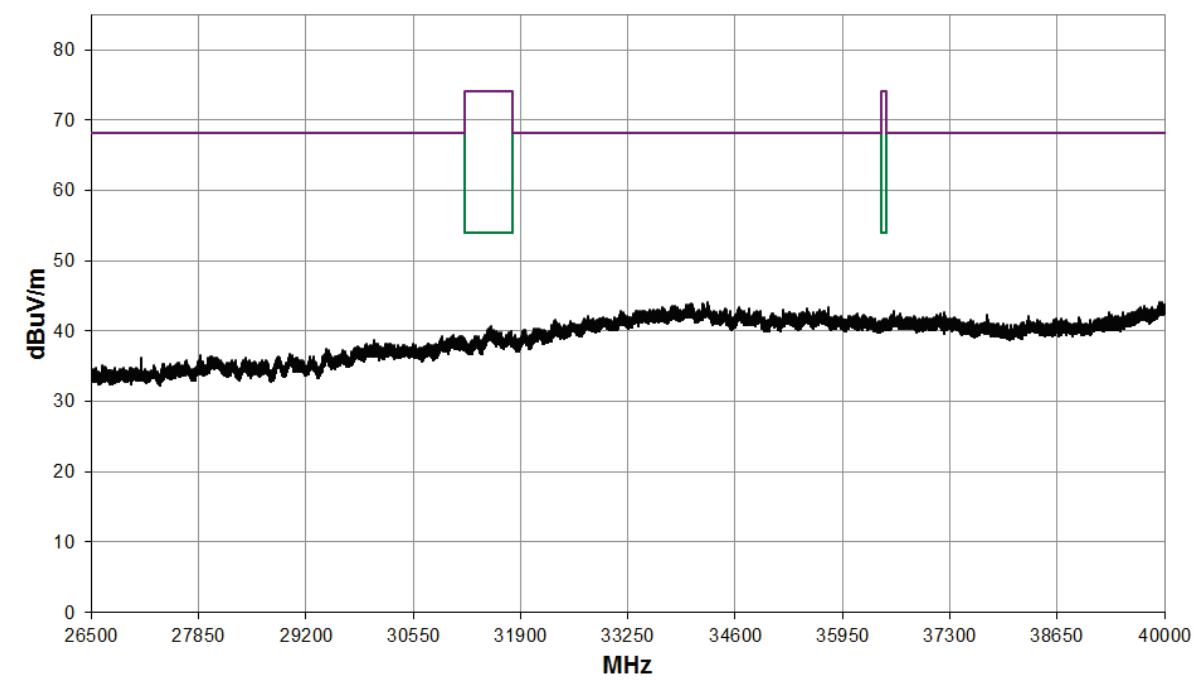
12.4 GHz to 18 GHz



18 GHz to 26.5 GHz



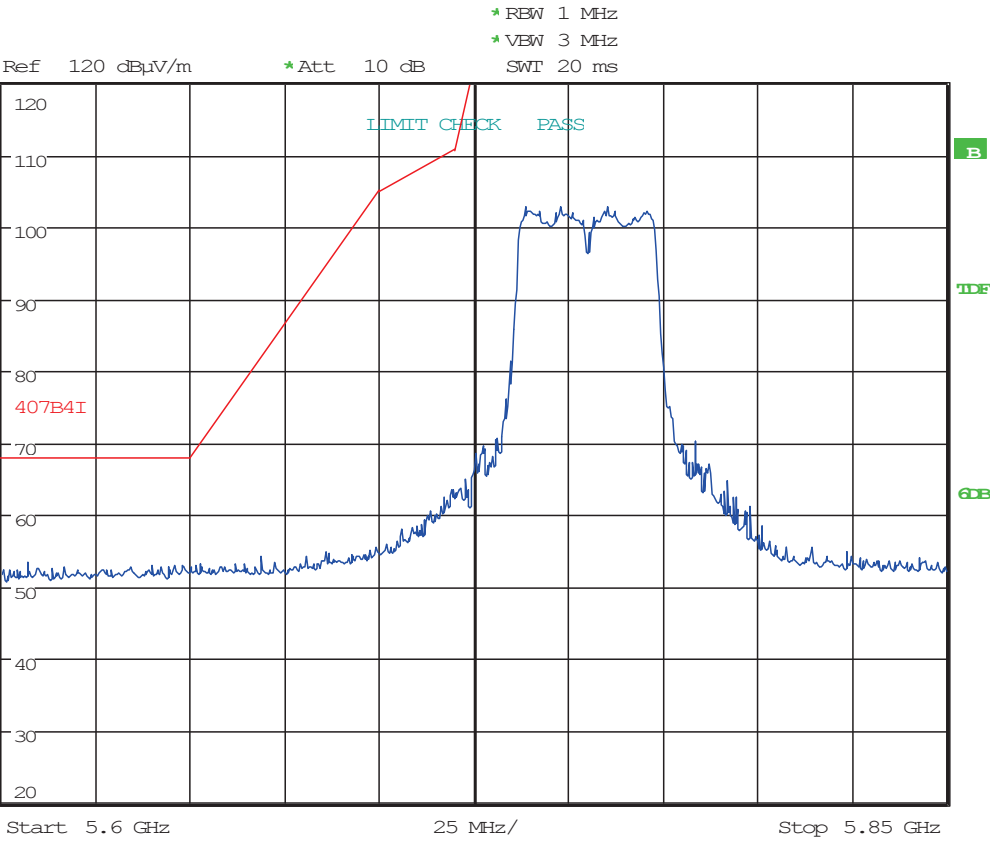
26.5 GHz to 40 GHz



Band Edge



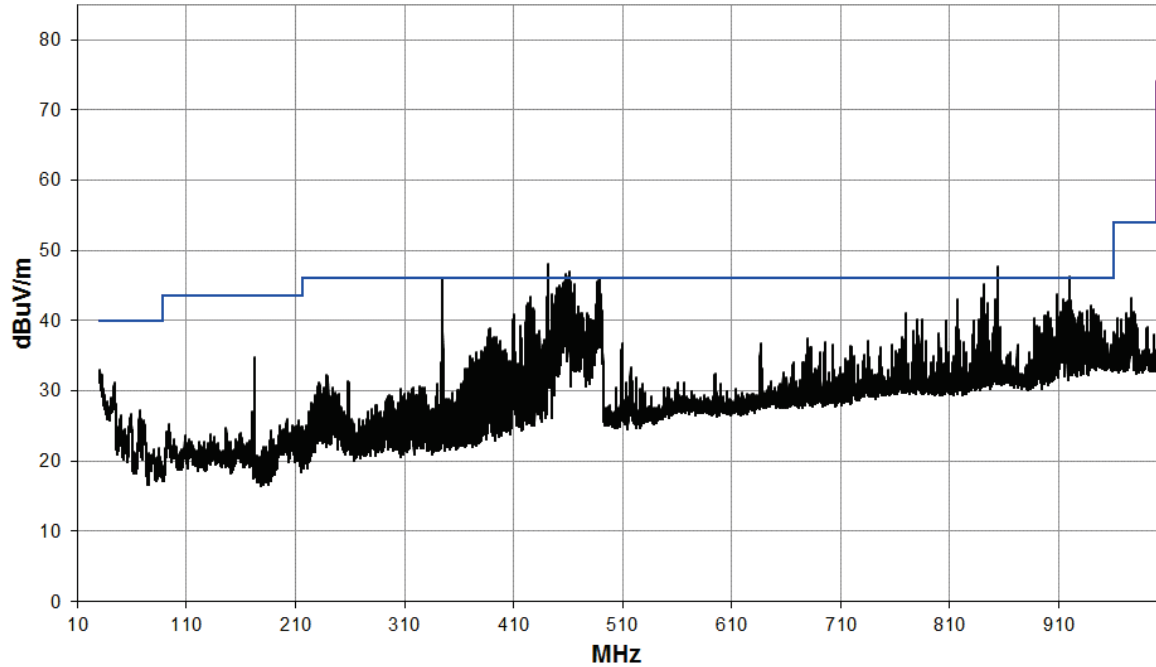
1 PK
MAX



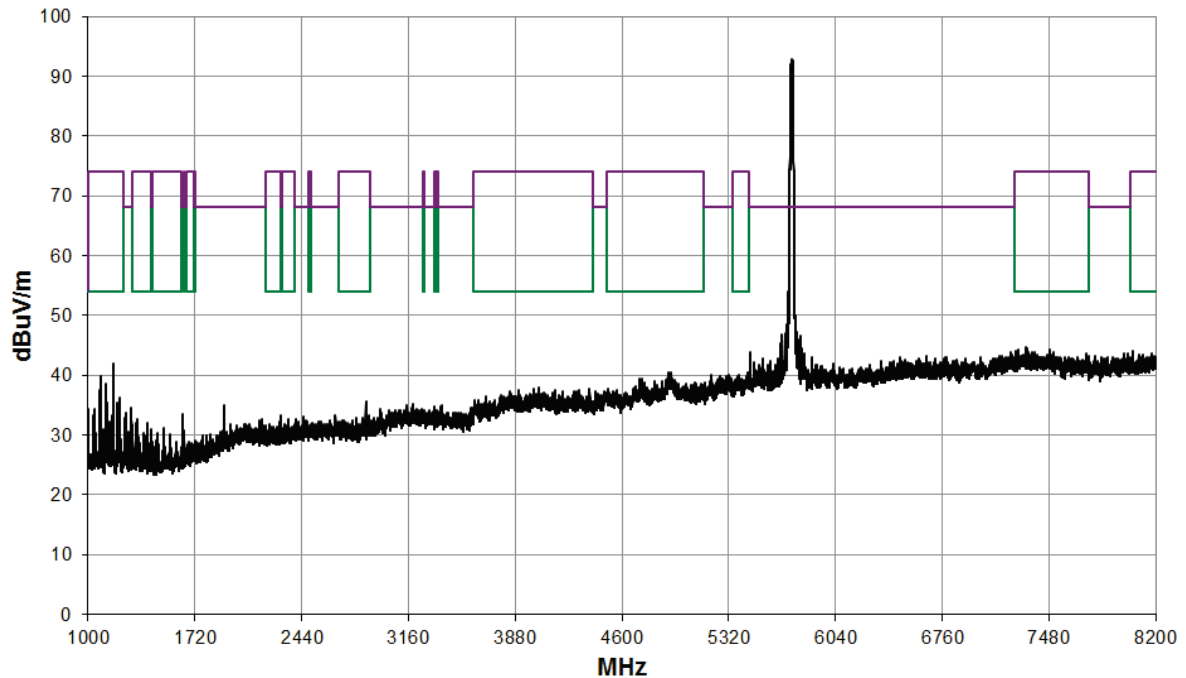
Date: 21.JUL.2020 16:29:21

MIMO; Mode: 802.11n40; Channel: CH151; Frequency: 5755 MHz; Bandwidth: 40 MHz; MCS Index: 15										
Detector	Freq. (MHz)	Meas'd Emission (dBμV)	Cable Loss (dB)	Antenna Factor (dB/m)	Pre-amp Gain (dB)	Duty Cycle Corr'n (dB)	Field Strength (dBμV/m)	Distance Extrap'n Factor (dB)	Field Strength (μV/m)	Limit (μV/m)
No emissions within 20 dB of the limit.										

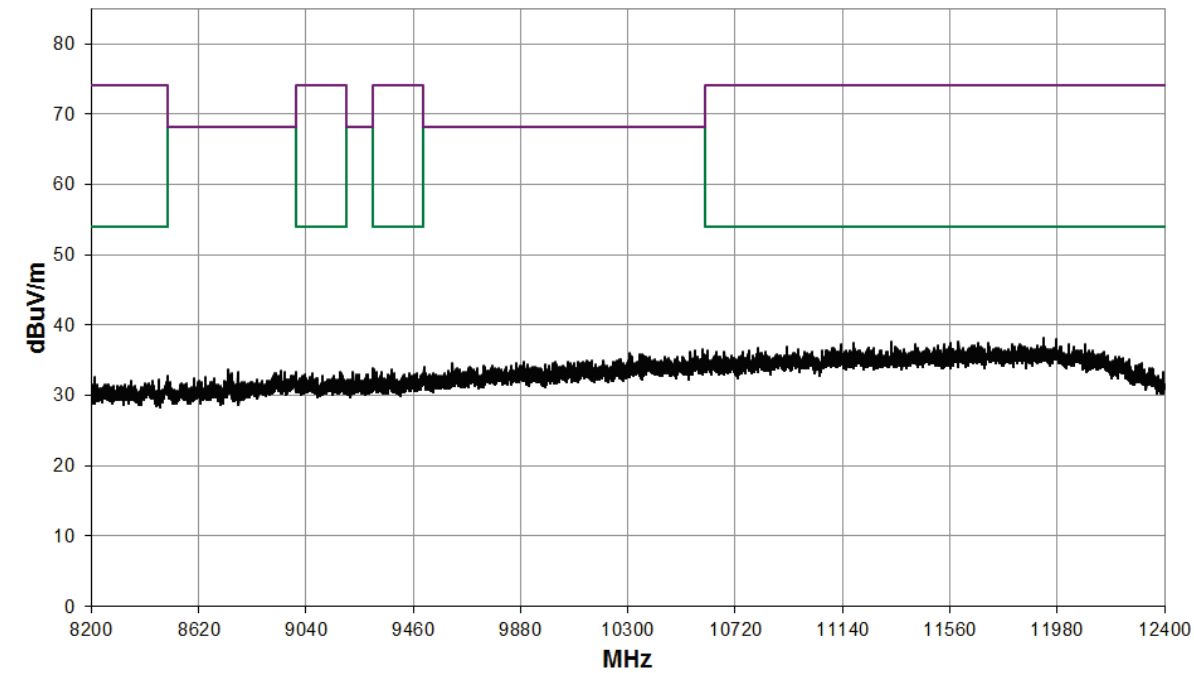
30 MHz to 1 GHz



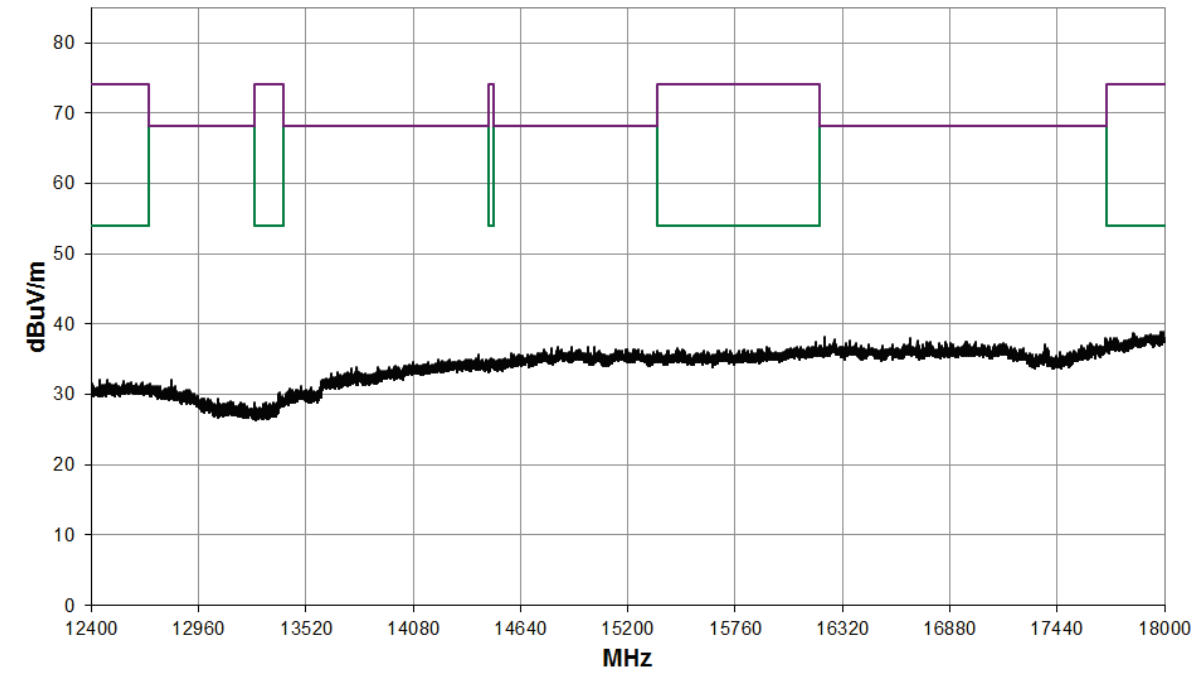
1 GHz to 8.2 GHz



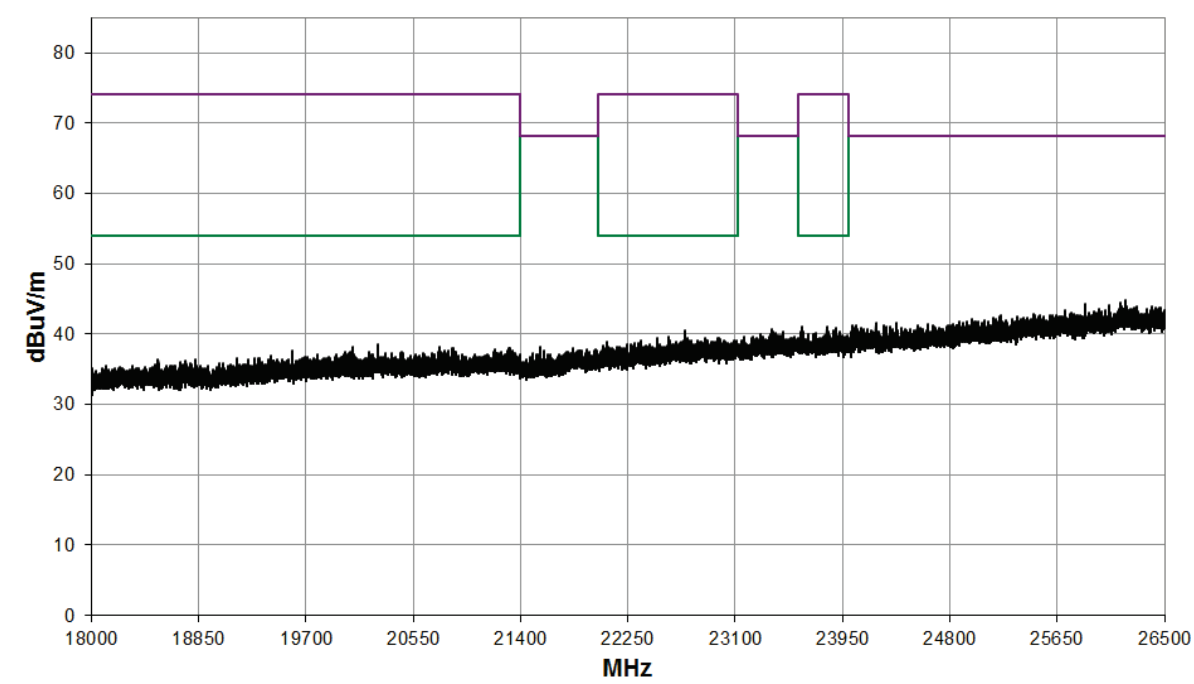
8.2 GHz to 12.4 GHz



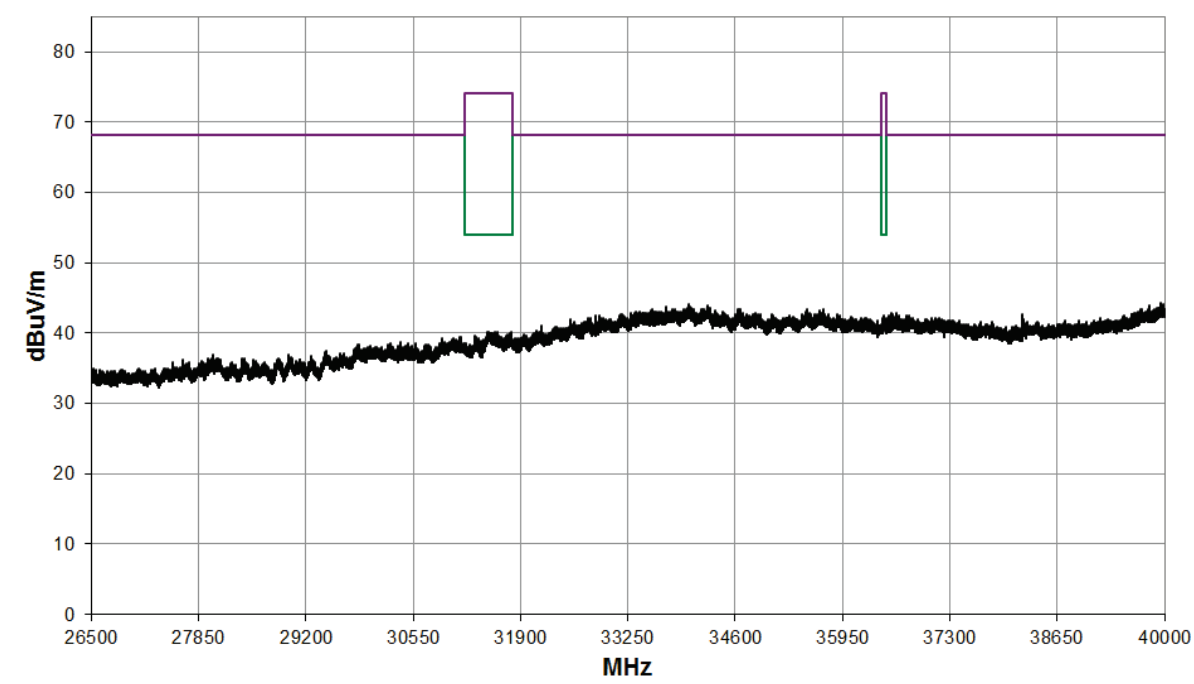
12.4 GHz to 18 GHz



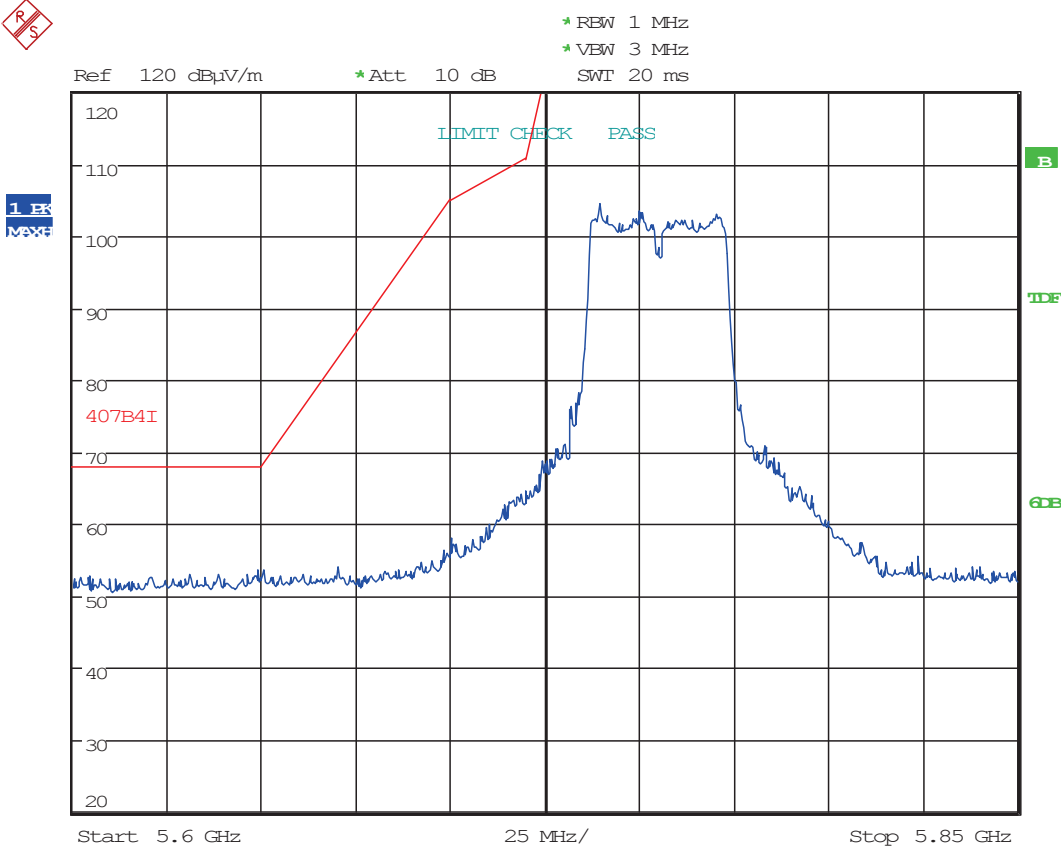
18 GHz to 26.5 GHz



26.5 GHz to 40 GHz



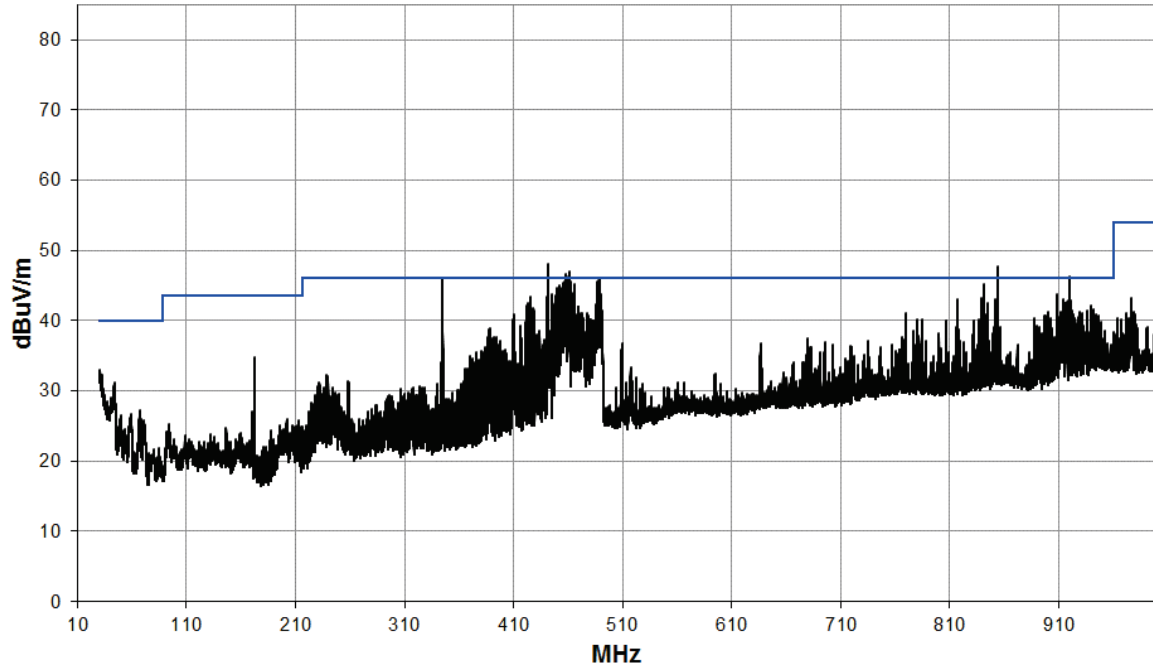
Band Edge



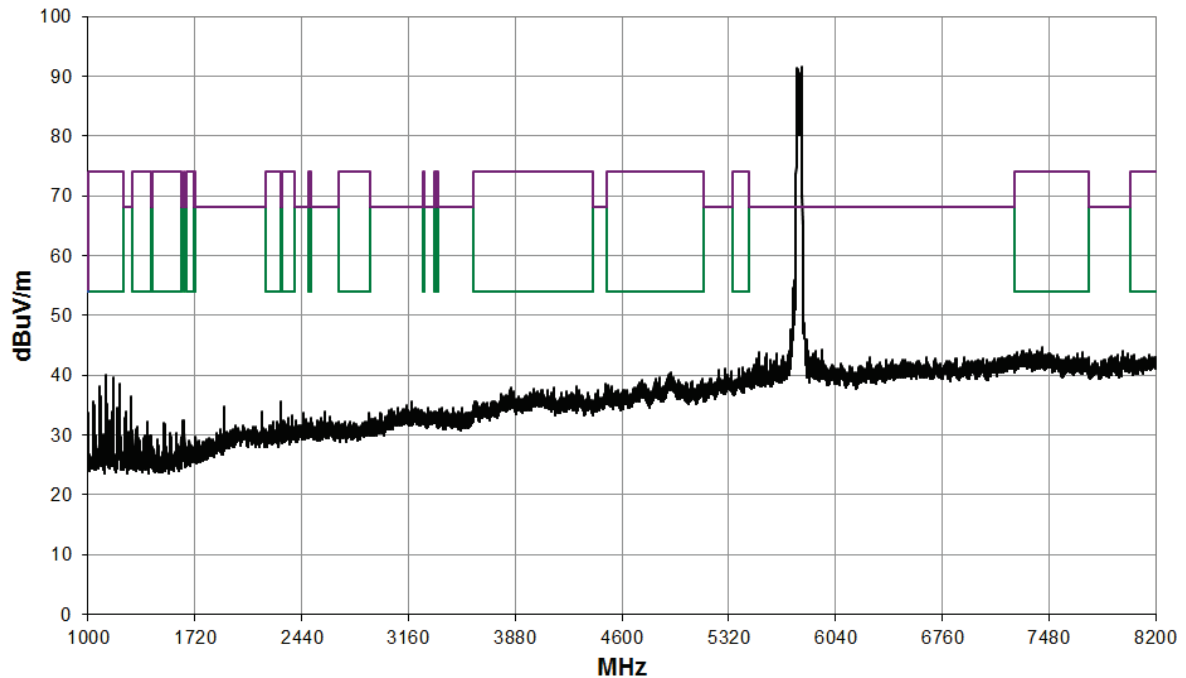
Date: 21.JUL.2020 16:30:11

MIMO; Mode: 802.11n40; Channel: CH159; Frequency: 5795 MHz; Bandwidth: 40 MHz; MCS Index: 8										
Detector	Freq. (MHz)	Meas'd Emission (dBμV)	Cable Loss (dB)	Antenna Factor (dB/m)	Pre-amp Gain (dB)	Duty Cycle Corr'n (dB)	Field Strength (dBμV/m)	Distance Extrap'n Factor (dB)	Field Strength (μV/m)	Limit (μV/m)
No emissions within 20 dB of the limit.										

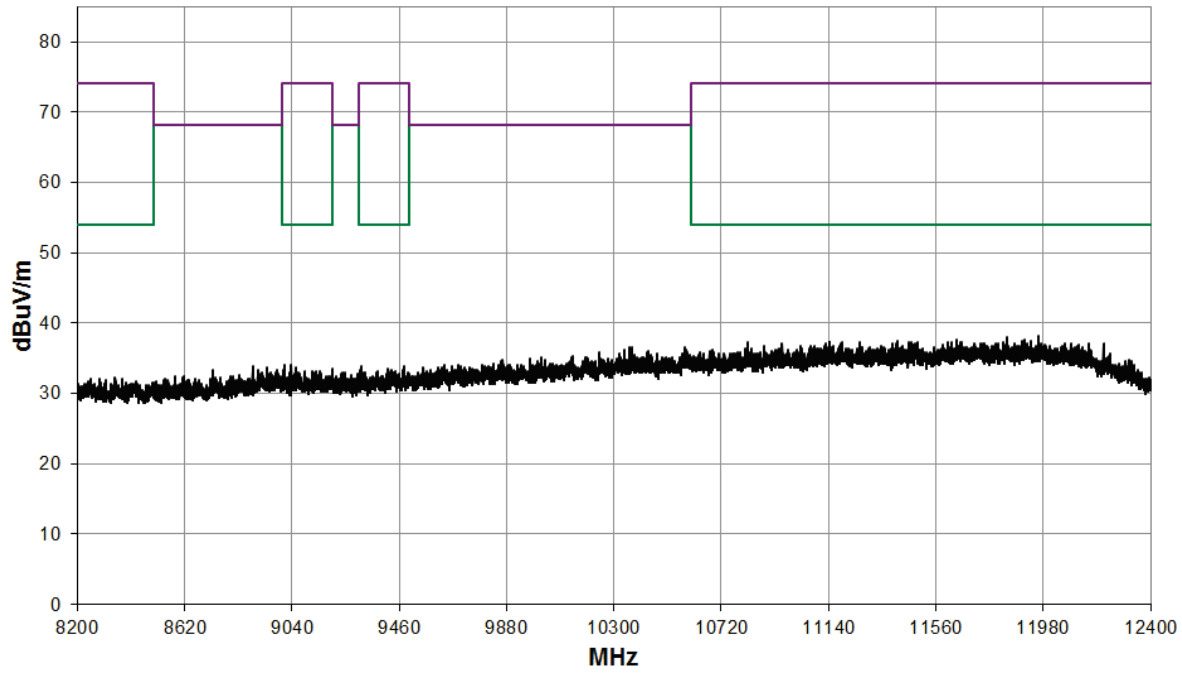
30 MHz to 1 GHz



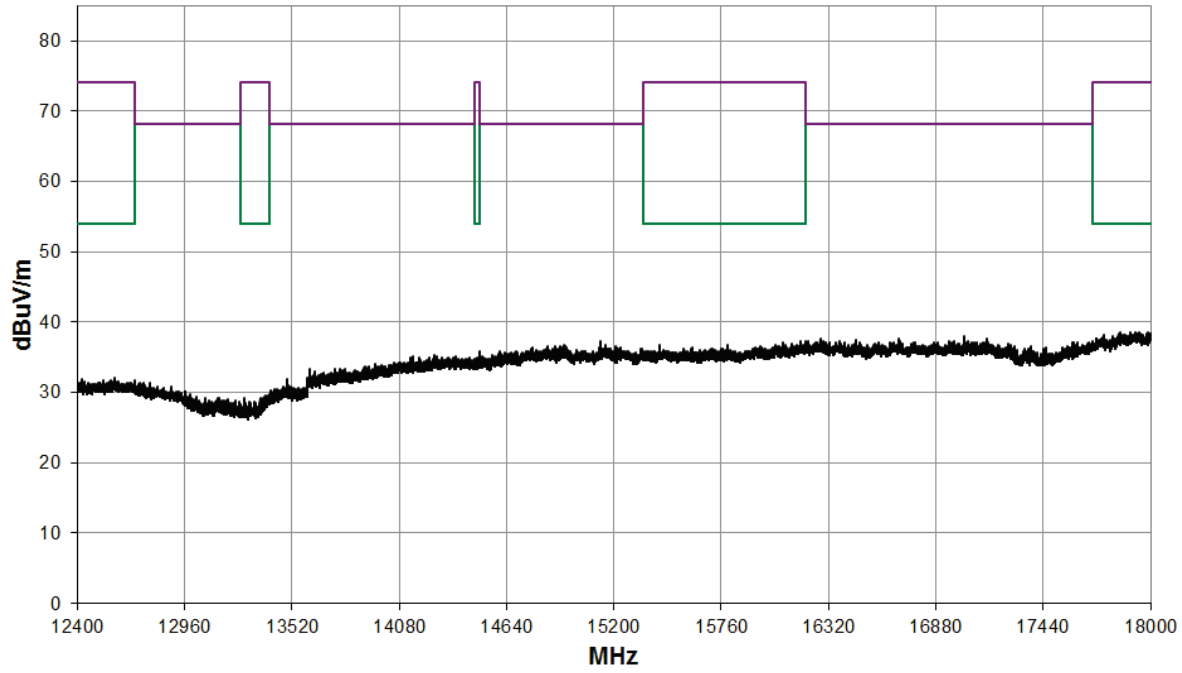
1 GHz to 8.2 GHz



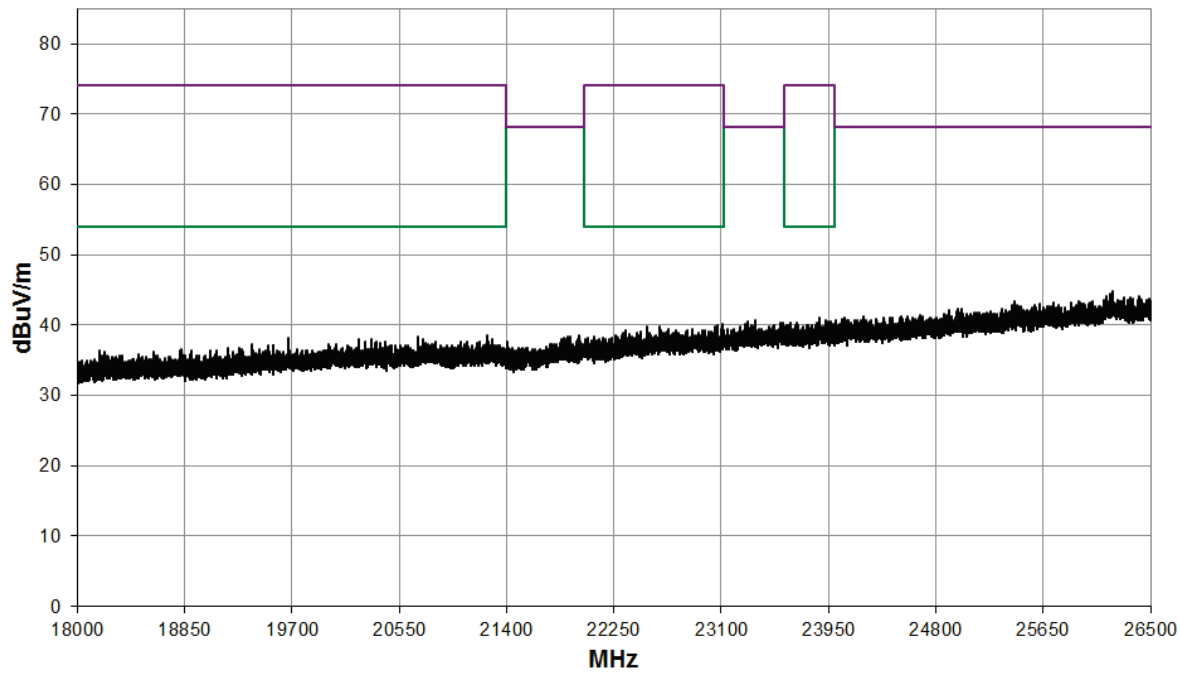
8.2 GHz to 12.4 GHz



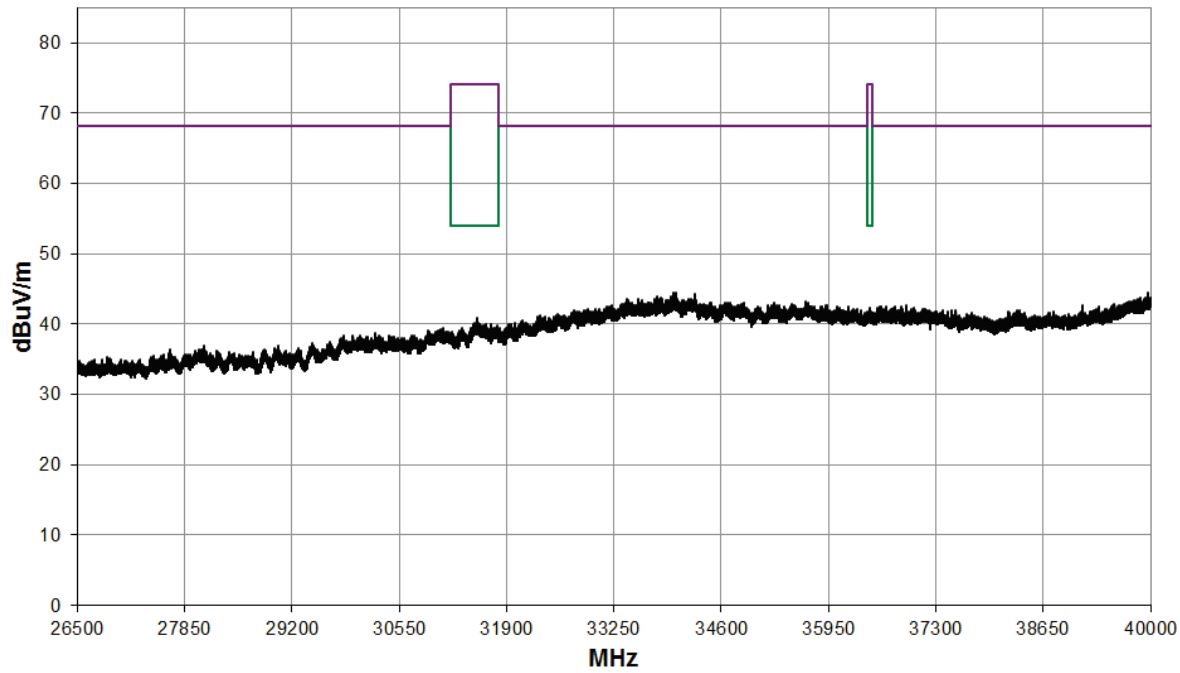
12.4 GHz to 18 GHz



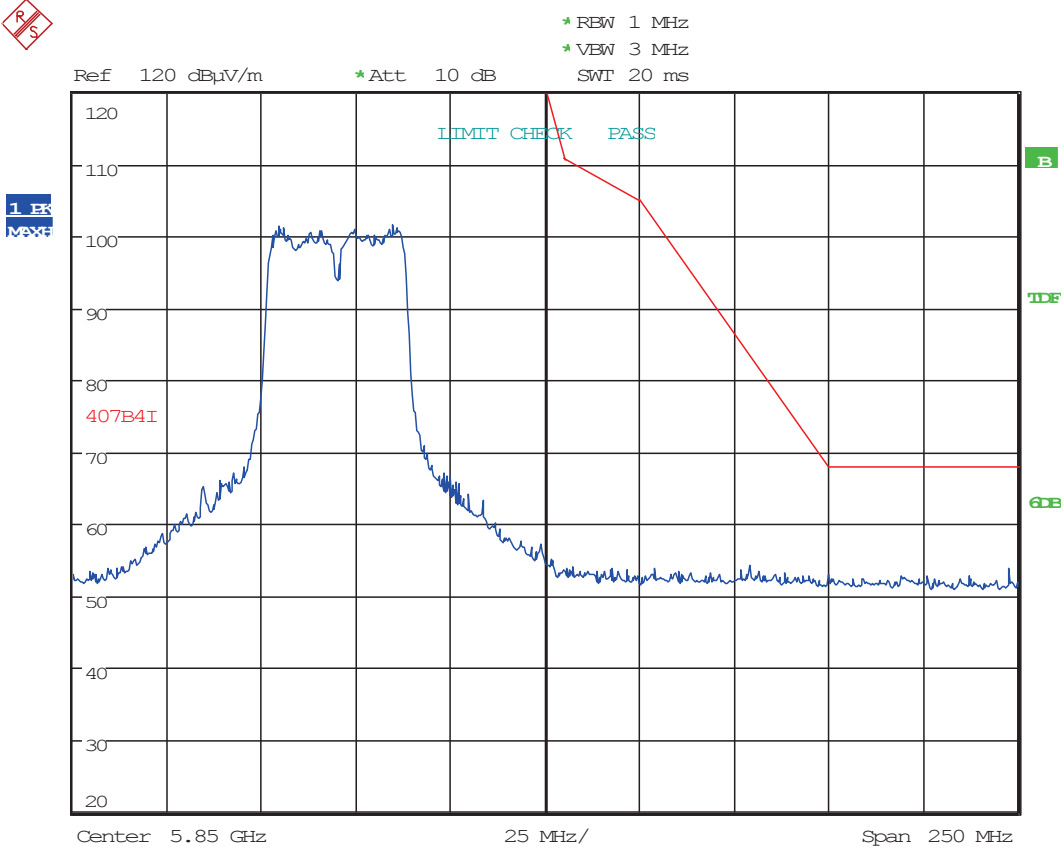
18 GHz to 26.5 GHz



26.5 GHz to 40 GHz



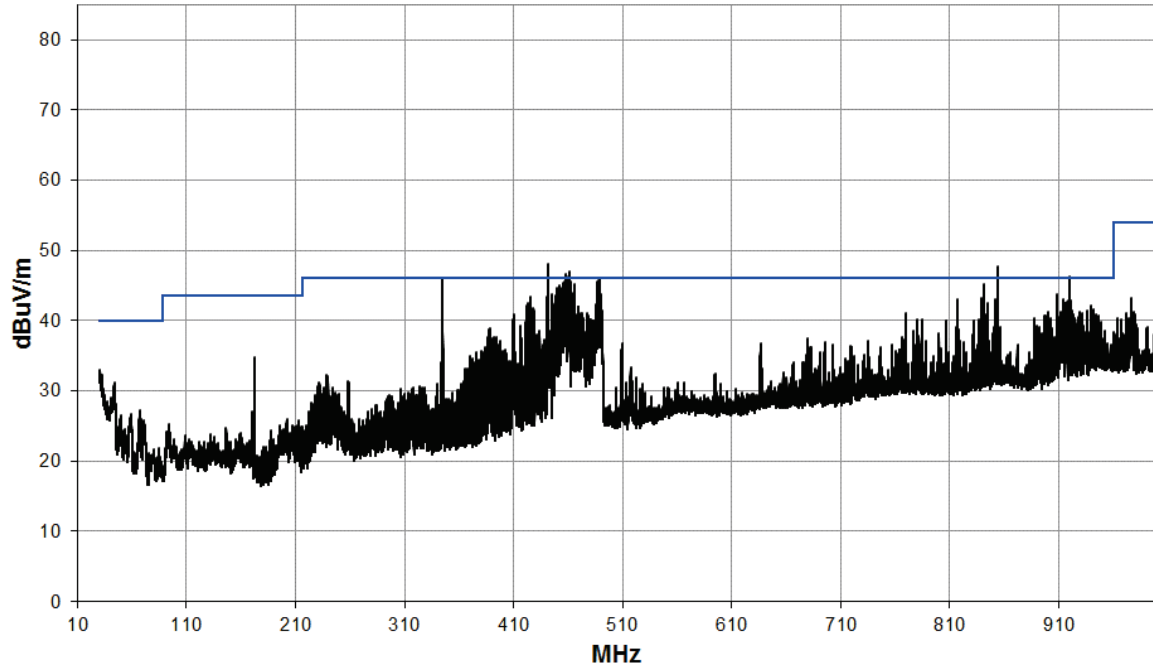
Band Edge



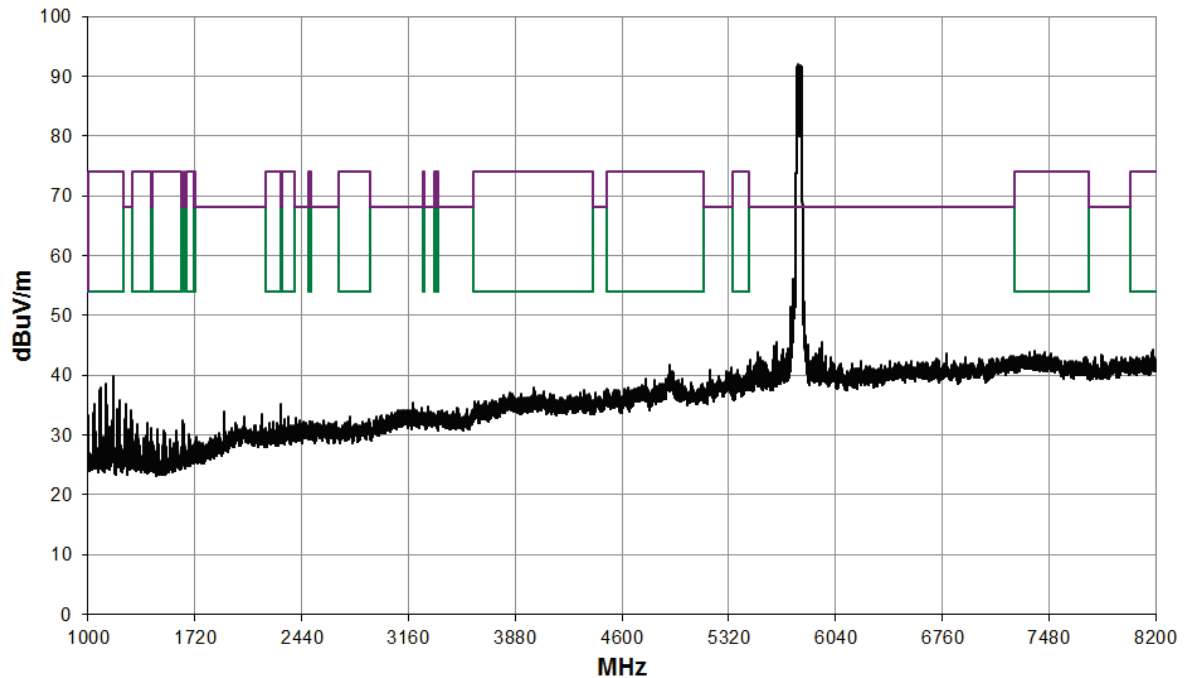
Date: 21.JUL.2020 14:06:45

MIMO; Mode: 802.11n40; Channel: CH159; Frequency: 5795 MHz; Bandwidth: 40 MHz; MCS Index: 15										
Detector	Freq. (MHz)	Meas'd Emission (dBμV)	Cable Loss (dB)	Antenna Factor (dB/m)	Pre-amp Gain (dB)	Duty Cycle Corr'n (dB)	Field Strength (dBμV/m)	Distance Extrap'n Factor (dB)	Field Strength (μV/m)	Limit (μV/m)
No emissions within 20 dB of the limit.										

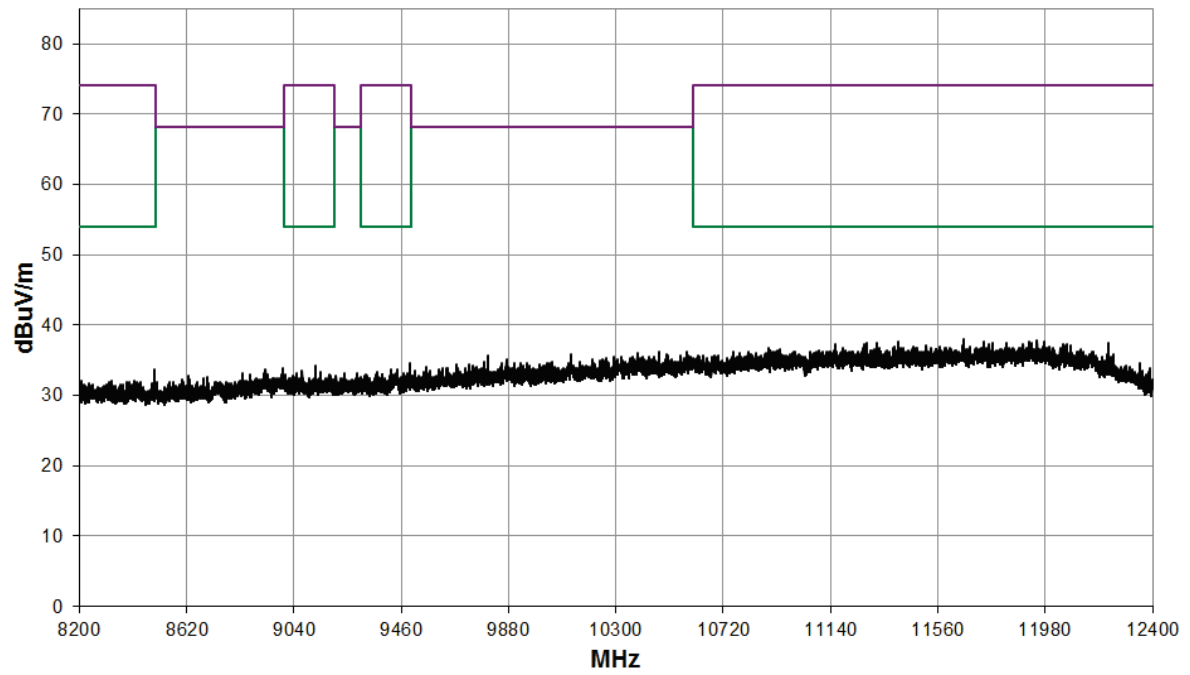
30 MHz to 1 GHz



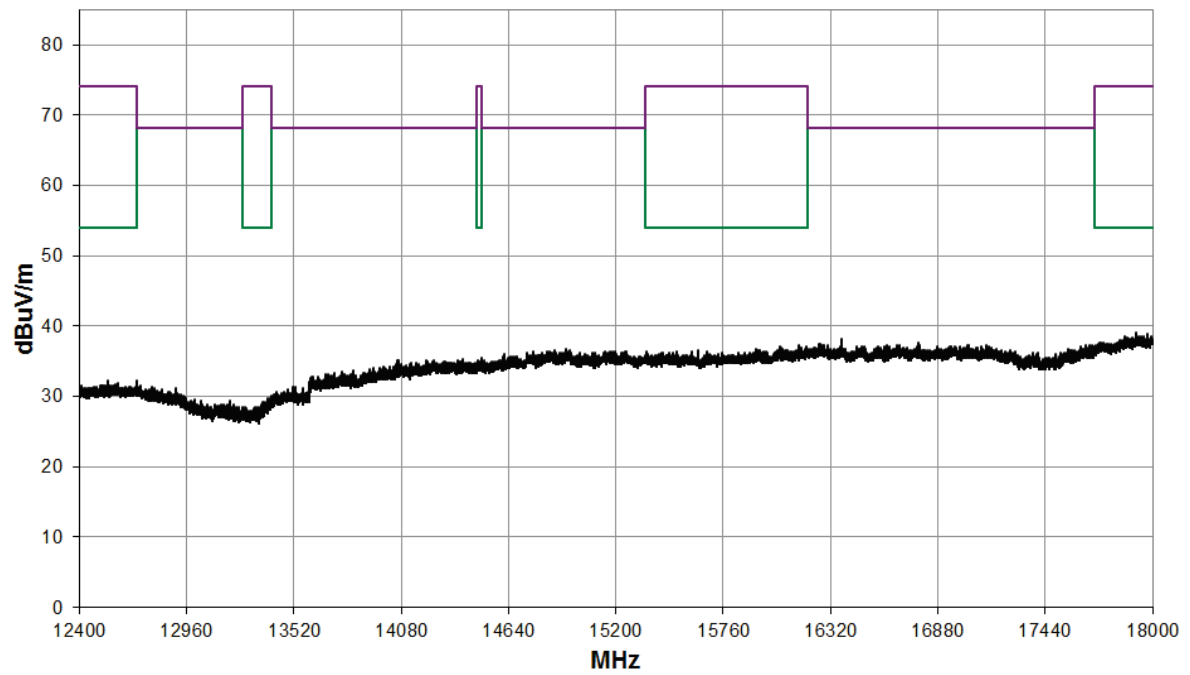
1 GHz to 8.2 GHz



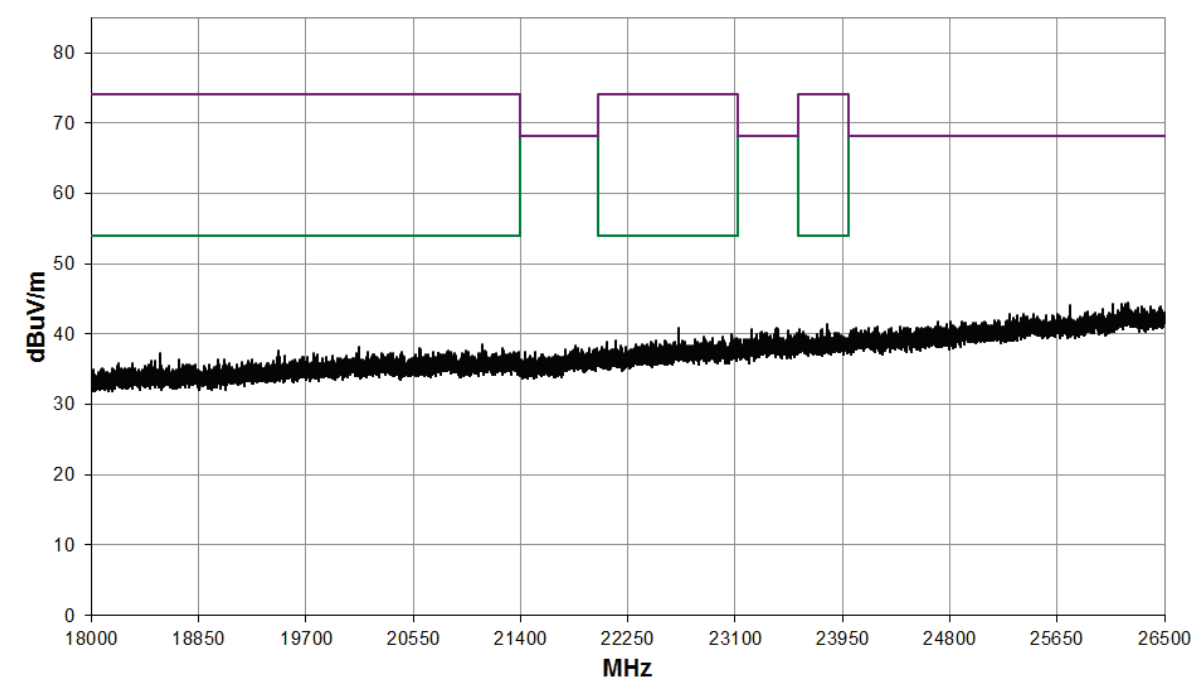
8.2 GHz to 12.4 GHz



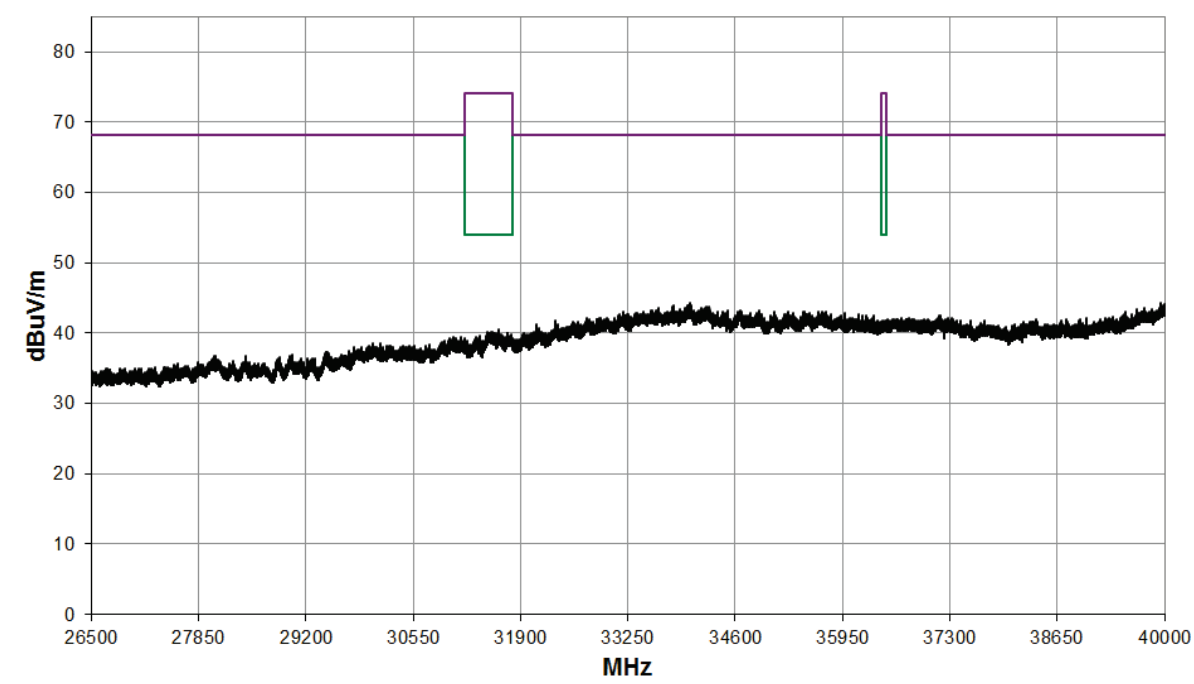
12.4 GHz to 18 GHz



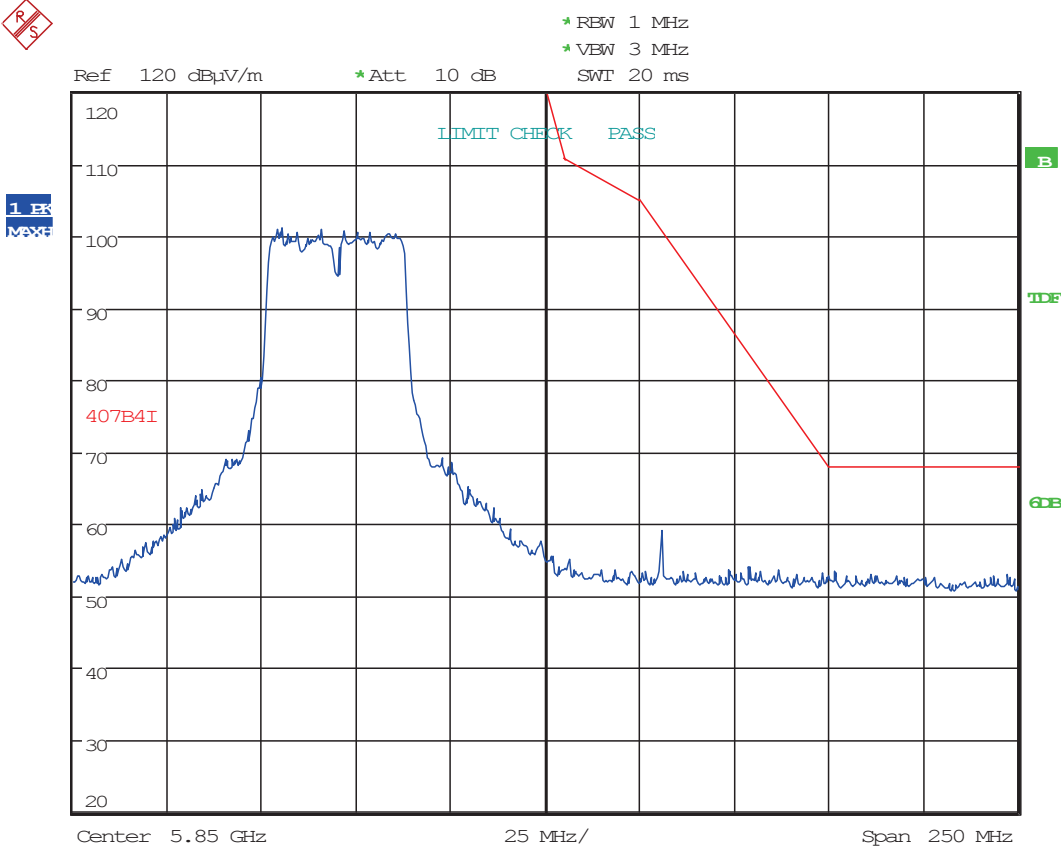
18 GHz to 26.5 GHz



26.5 GHz to 40 GHz



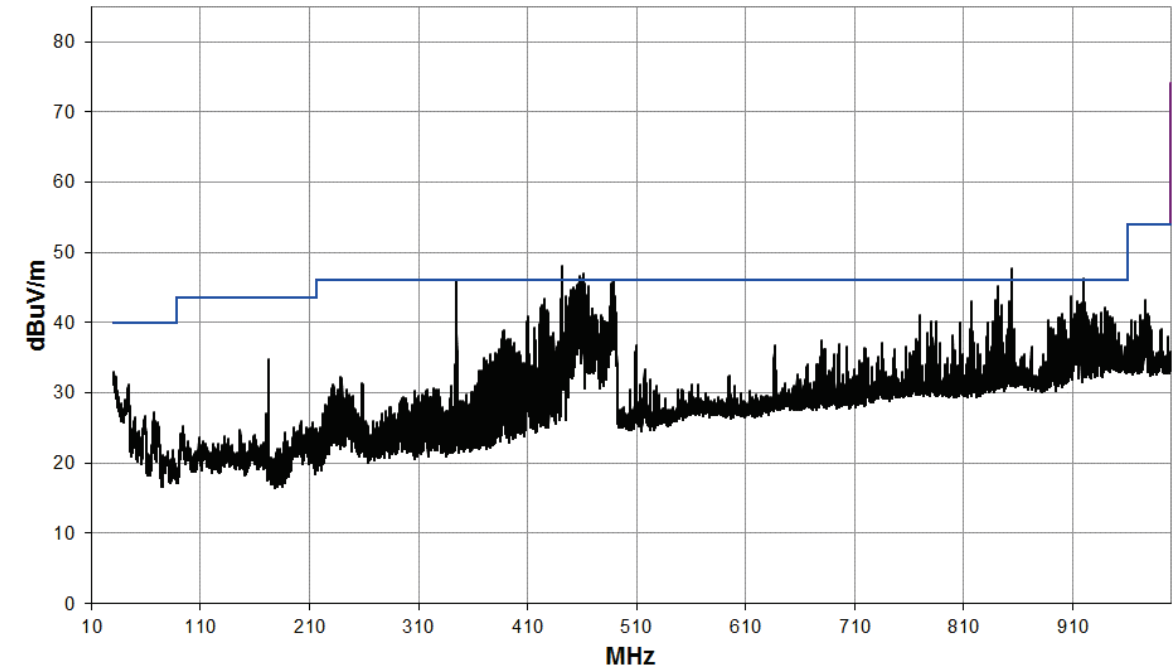
Band Edge



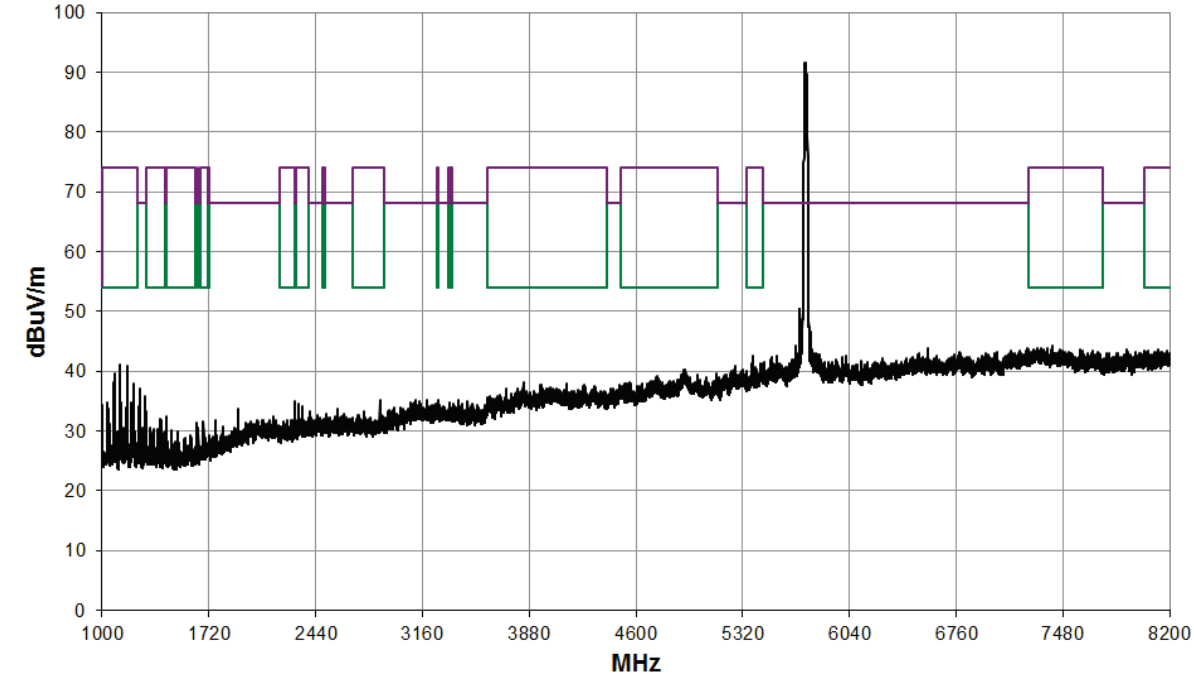
Date: 21.JUL.2020 14:08:44

MIMO; Mode: 802.11ac20; Channel: CH149; Frequency: 5745 MHz; Bandwidth: 20 MHz; MCS Index: 0										
Detector	Freq. (MHz)	Meas'd Emission (dBμV)	Cable Loss (dB)	Antenna Factor (dB/m)	Pre-amp Gain (dB)	Duty Cycle Corr'n (dB)	Field Strength (dBμV/m)	Distance Extrap'n Factor (dB)	Field Strength (μV/m)	Limit (μV/m)
No emissions within 20 dB of the limit.										

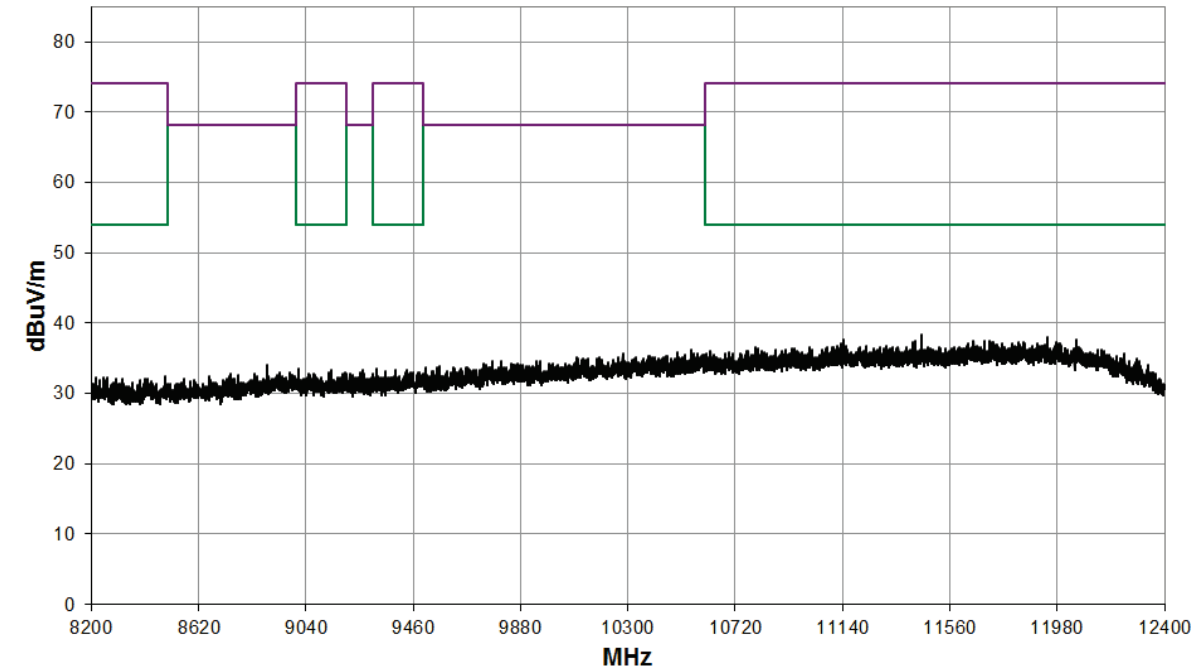
30 MHz to 1 GHz



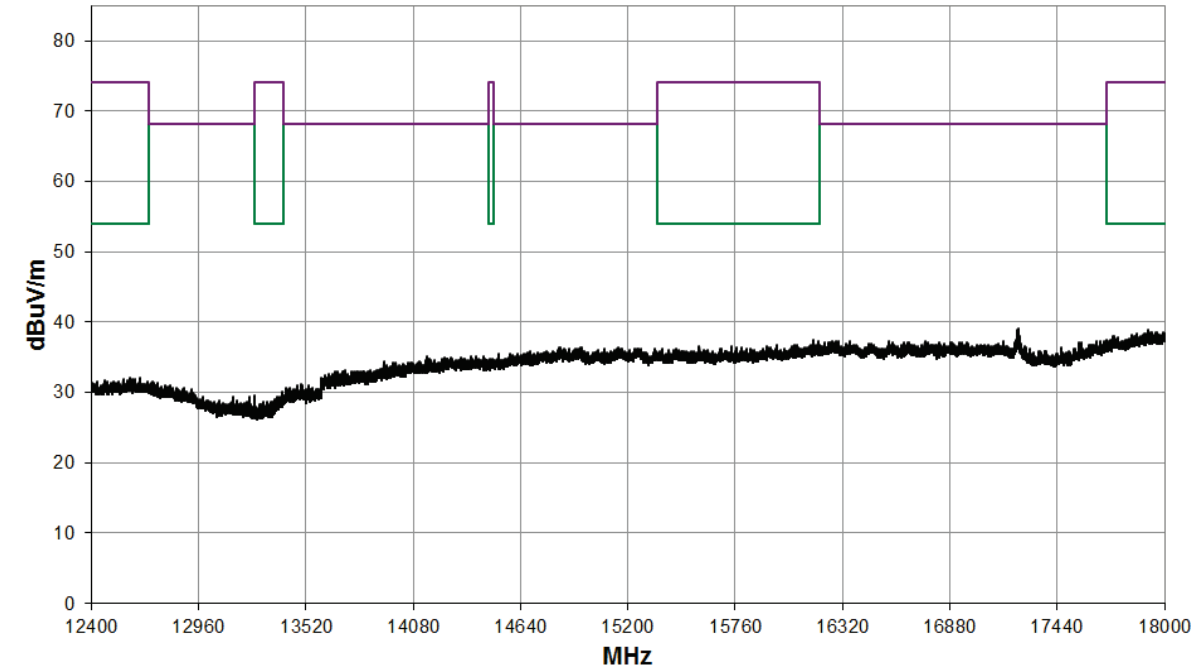
1 GHz to 8.2 GHz



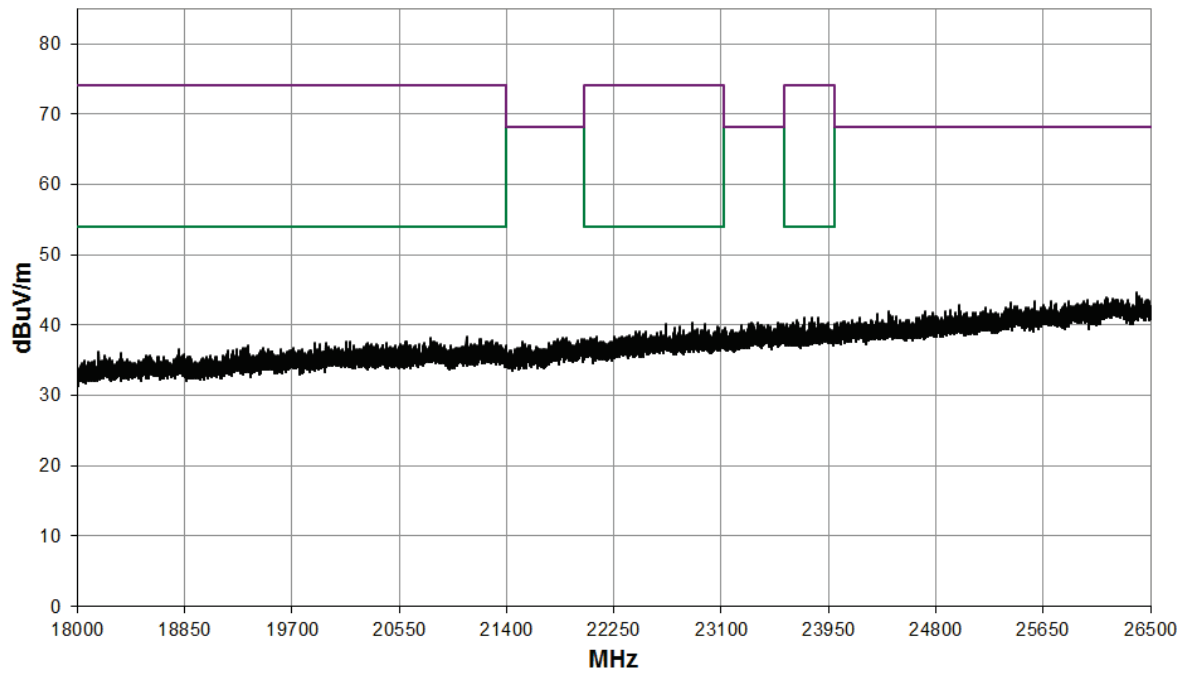
8.2 GHz to 12.4 GHz



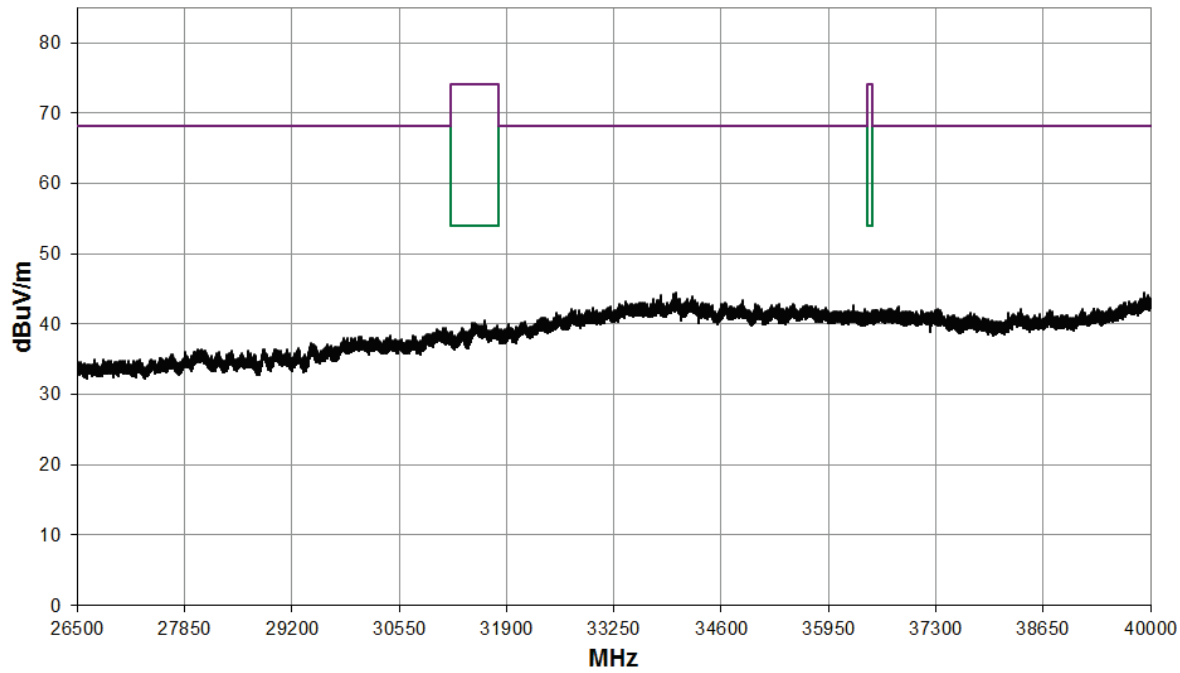
12.4 GHz to 18 GHz



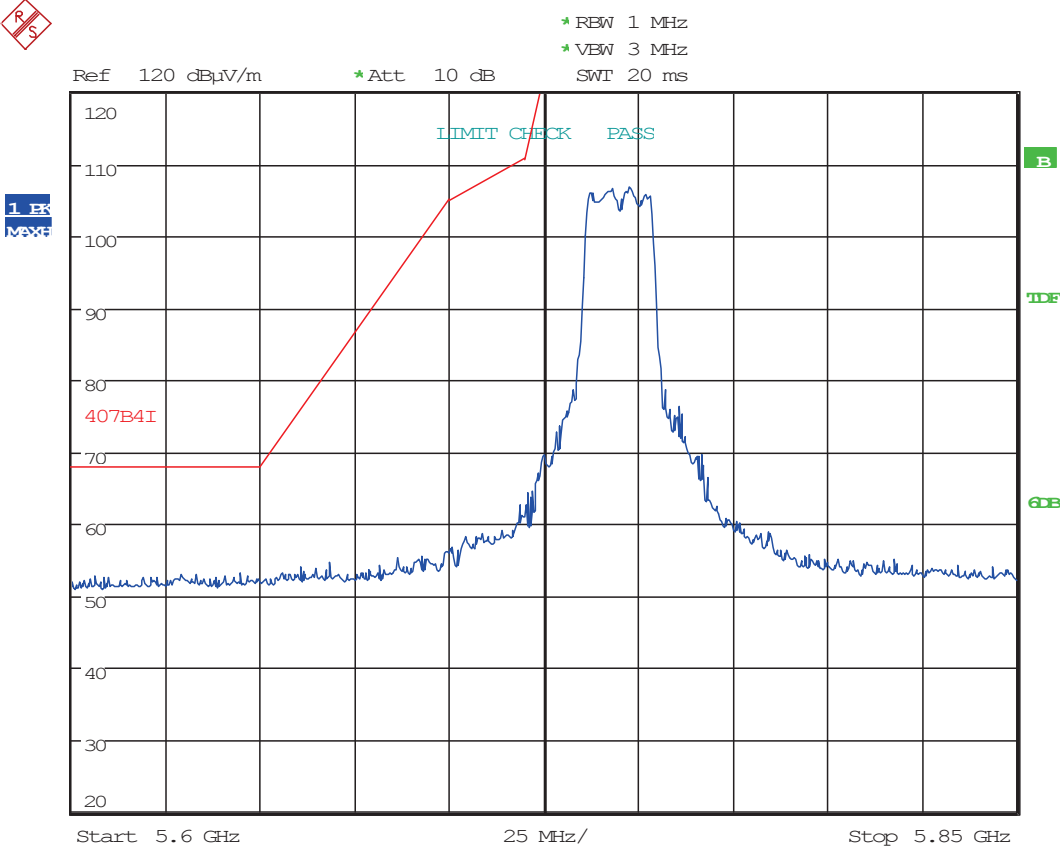
18 GHz to 26.5 GHz



26.5 GHz to 40 GHz



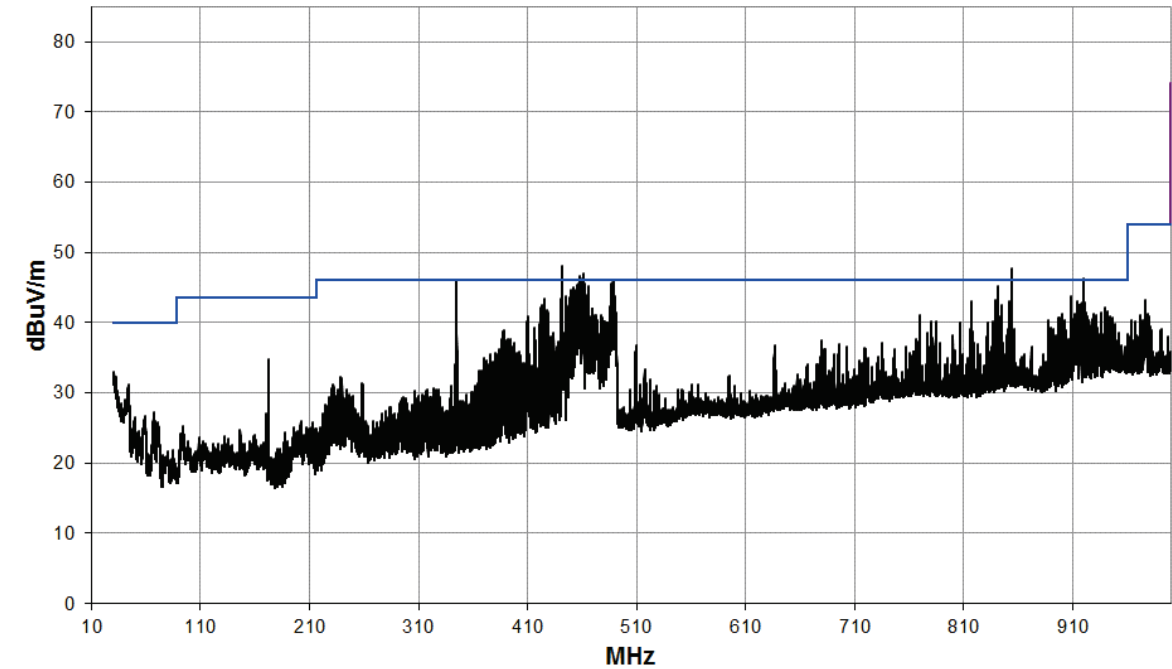
Band Edge



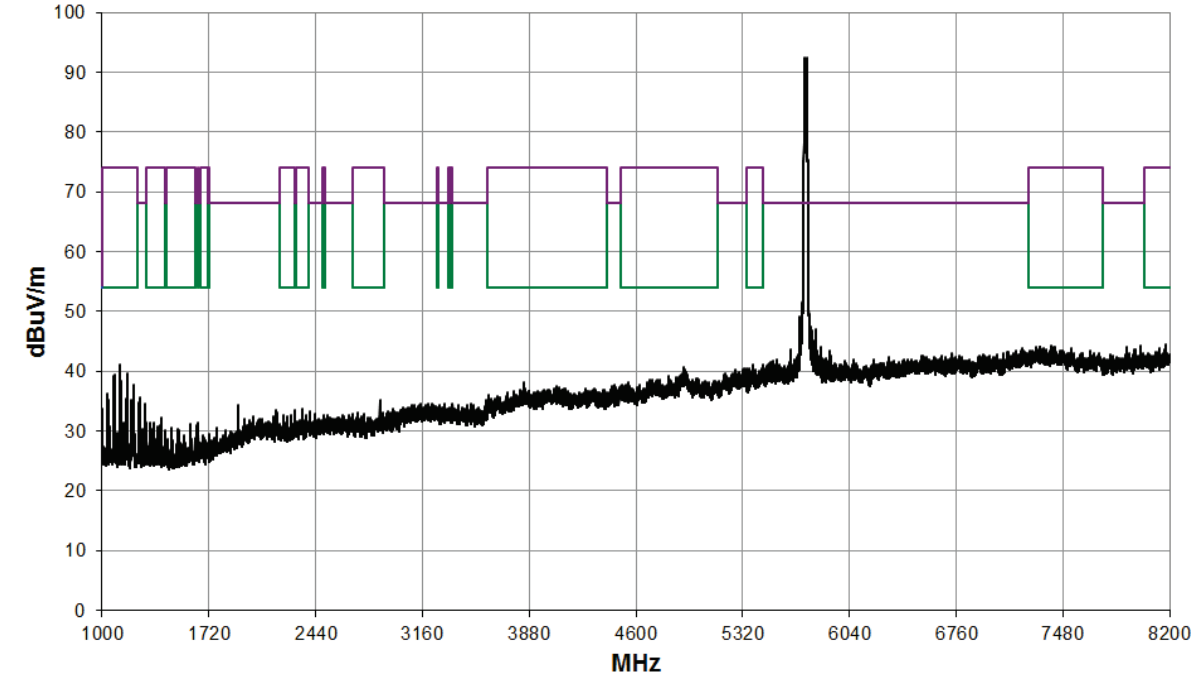
Date: 21.JUL.2020 14:42:42

MIMO; Mode: 802.11ac20; Channel: CH149; Frequency: 5745 MHz; Bandwidth: 20 MHz; MCS Index: 8										
Detector	Freq. (MHz)	Meas'd Emission (dBμV)	Cable Loss (dB)	Antenna Factor (dB/m)	Pre-amp Gain (dB)	Duty Cycle Corr'n (dB)	Field Strength (dBμV/m)	Distance Extrap'n Factor (dB)	Field Strength (μV/m)	Limit (μV/m)
No emissions within 20 dB of the limit.										

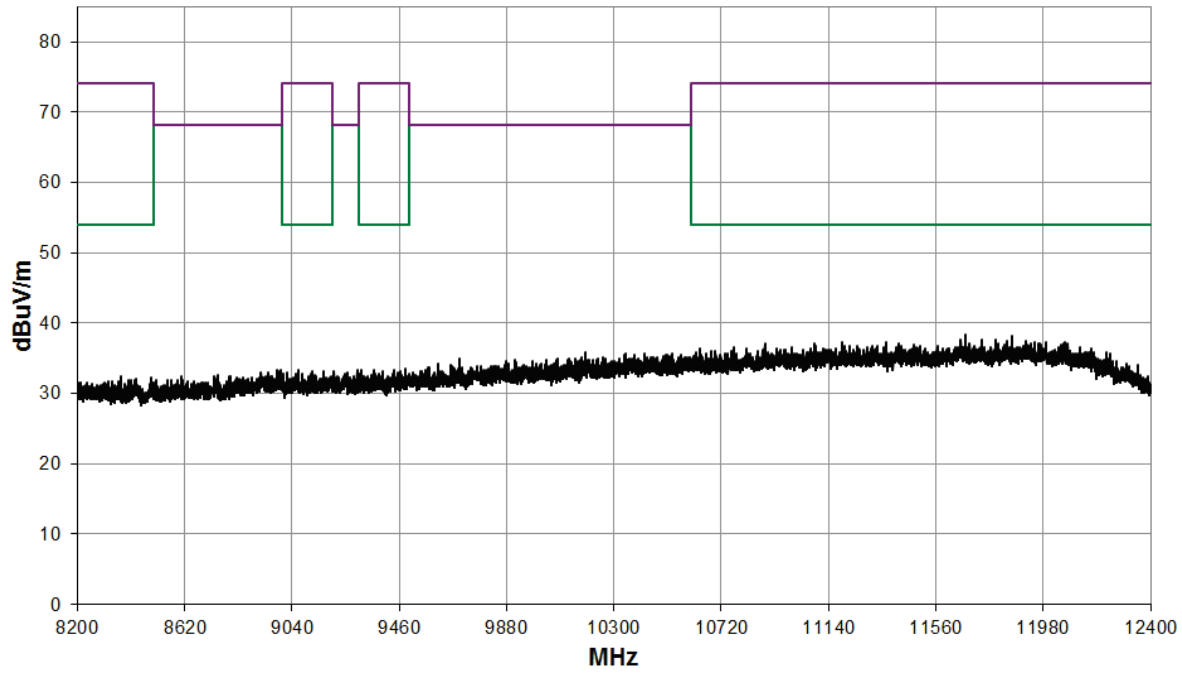
30 MHz to 1 GHz



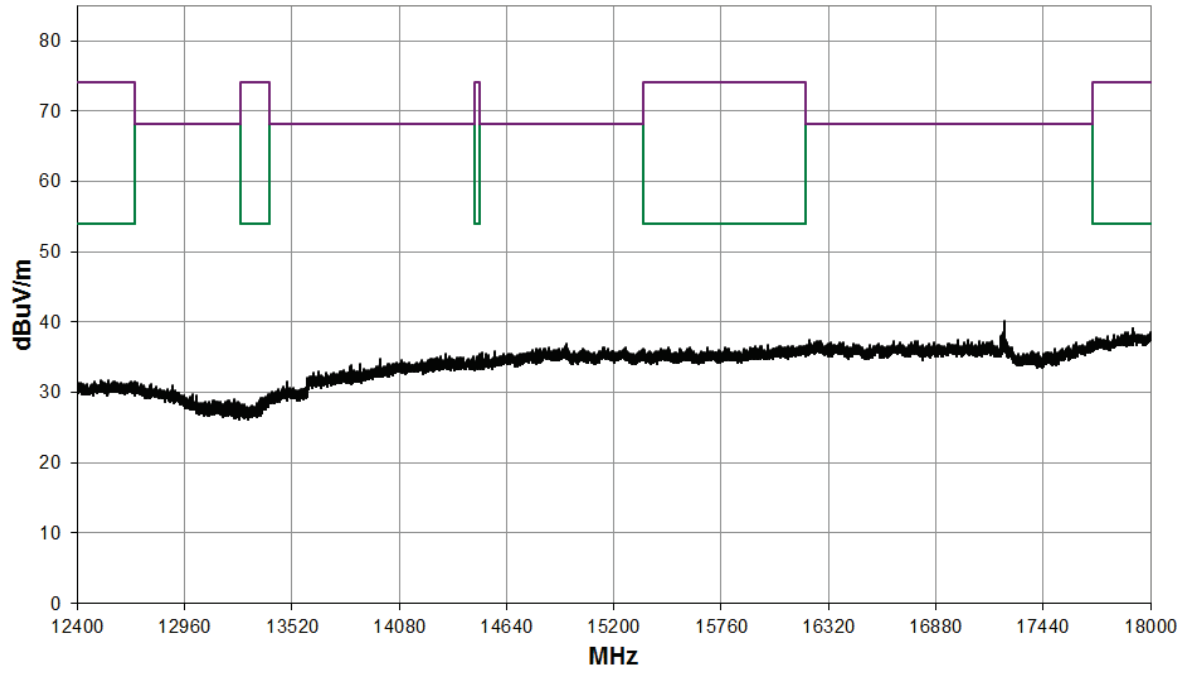
1 GHz to 8.2 GHz



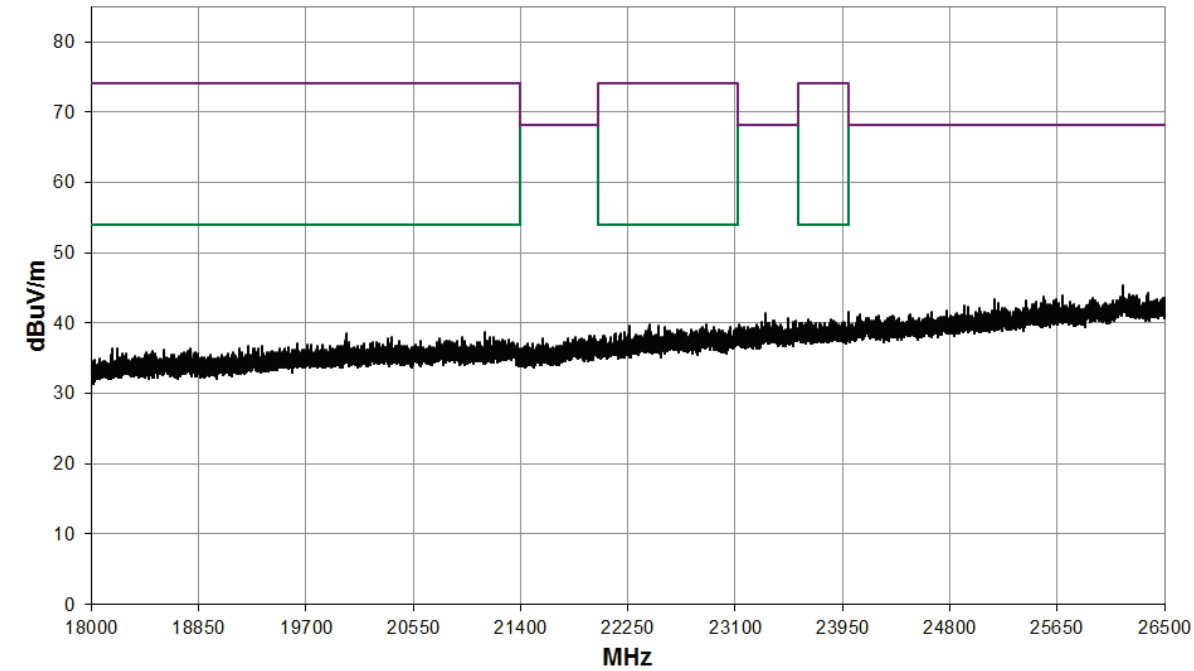
8.2 GHz to 12.4 GHz



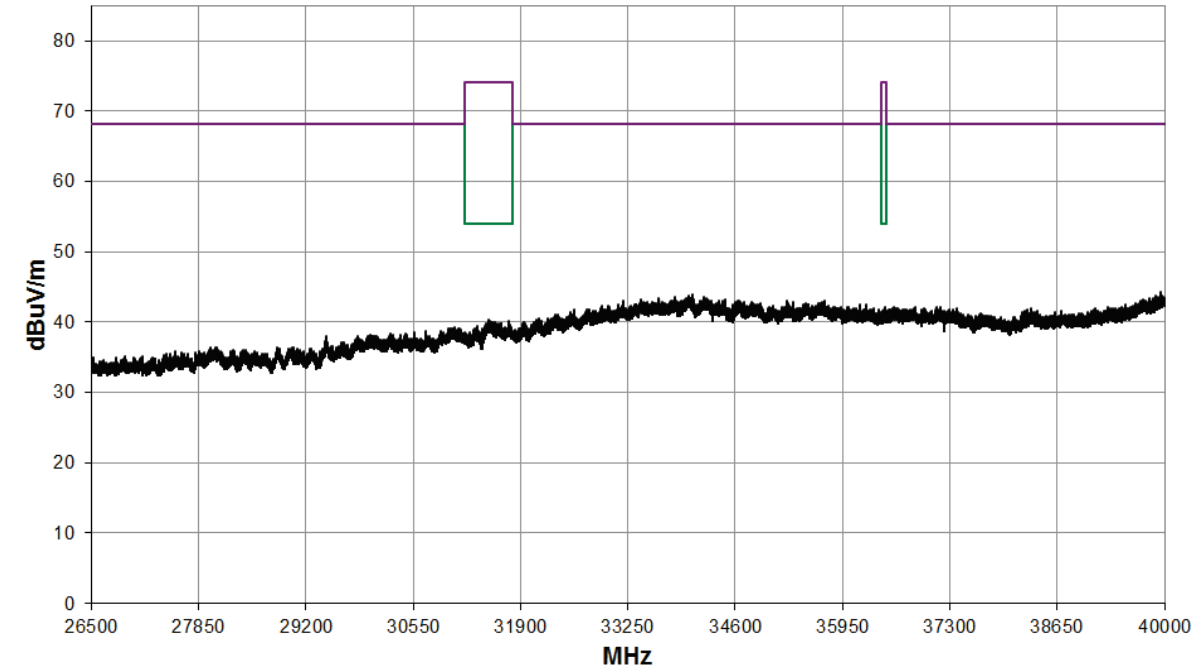
12.4 GHz to 18 GHz



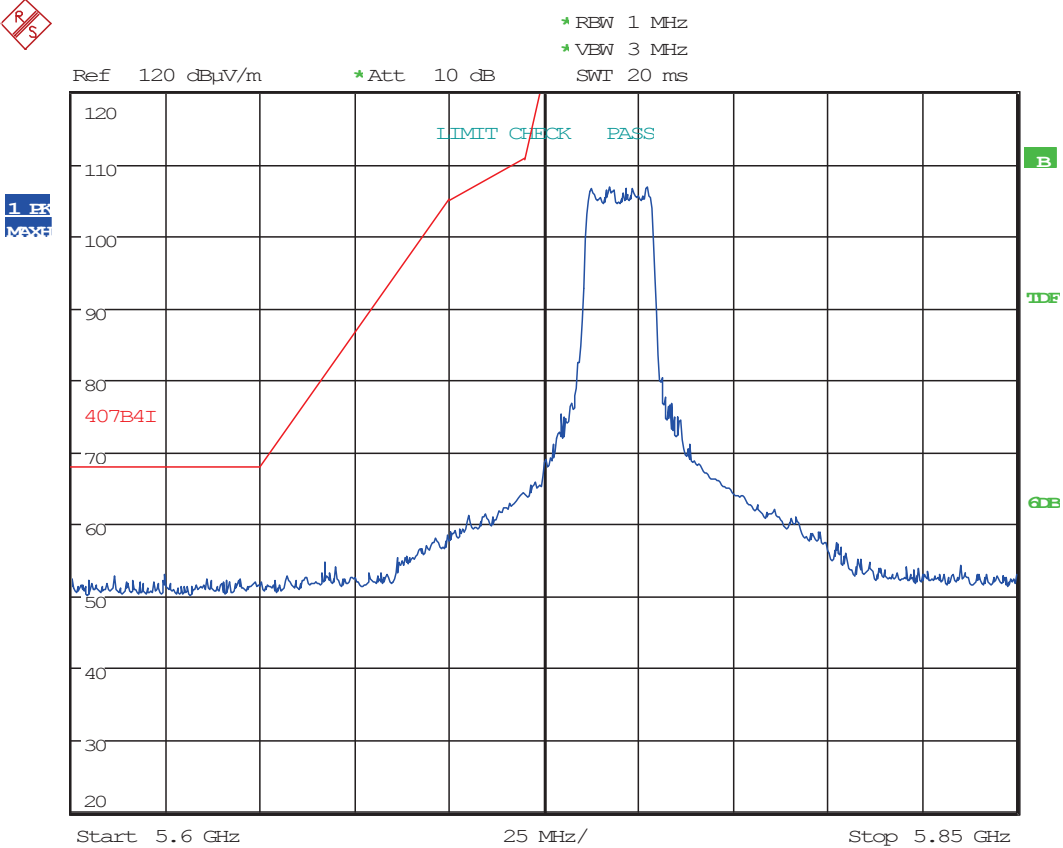
18 GHz to 26.5 GHz



26.5 GHz to 40 GHz



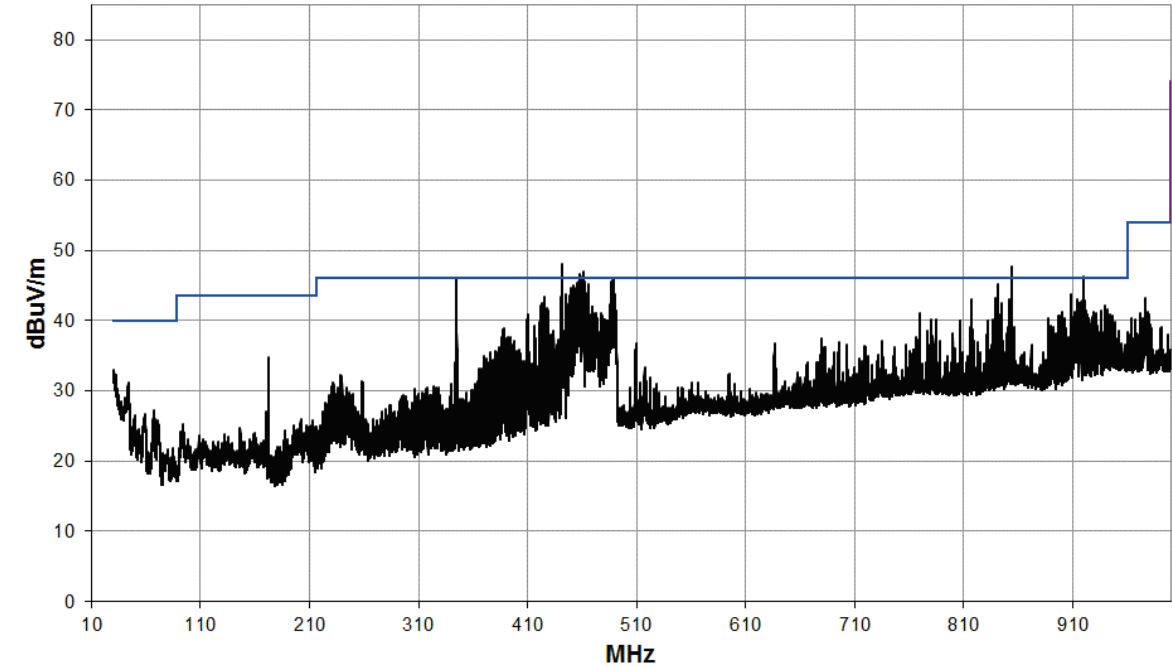
Band Edge



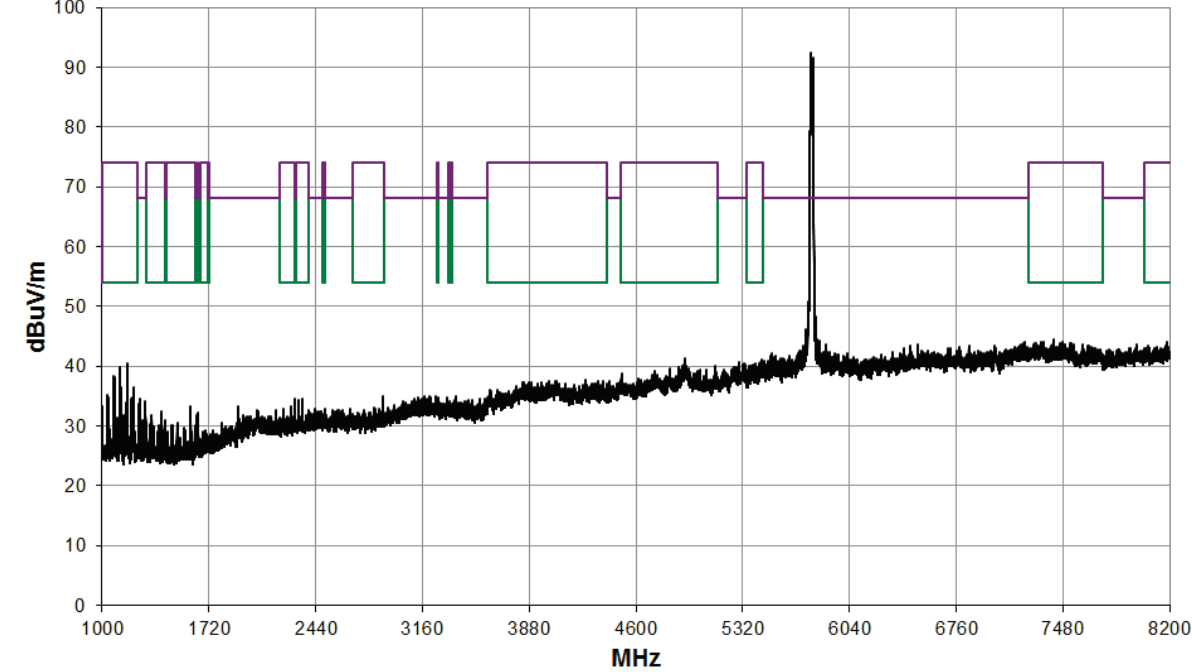
Date: 21.JUL.2020 14:48:18

MIMO; Mode: 802.11ac20; Channel: CH157; Frequency: 5785 MHz; Bandwidth: 20 MHz; MCS Index: 0										
Detector	Freq. (MHz)	Meas'd Emission (dBμV)	Cable Loss (dB)	Antenna Factor (dB/m)	Pre-amp Gain (dB)	Duty Cycle Corr'n (dB)	Field Strength (dBμV/m)	Distance Extrap'n Factor (dB)	Field Strength (μV/m)	Limit (μV/m)
No emissions within 20 dB of the limit.										

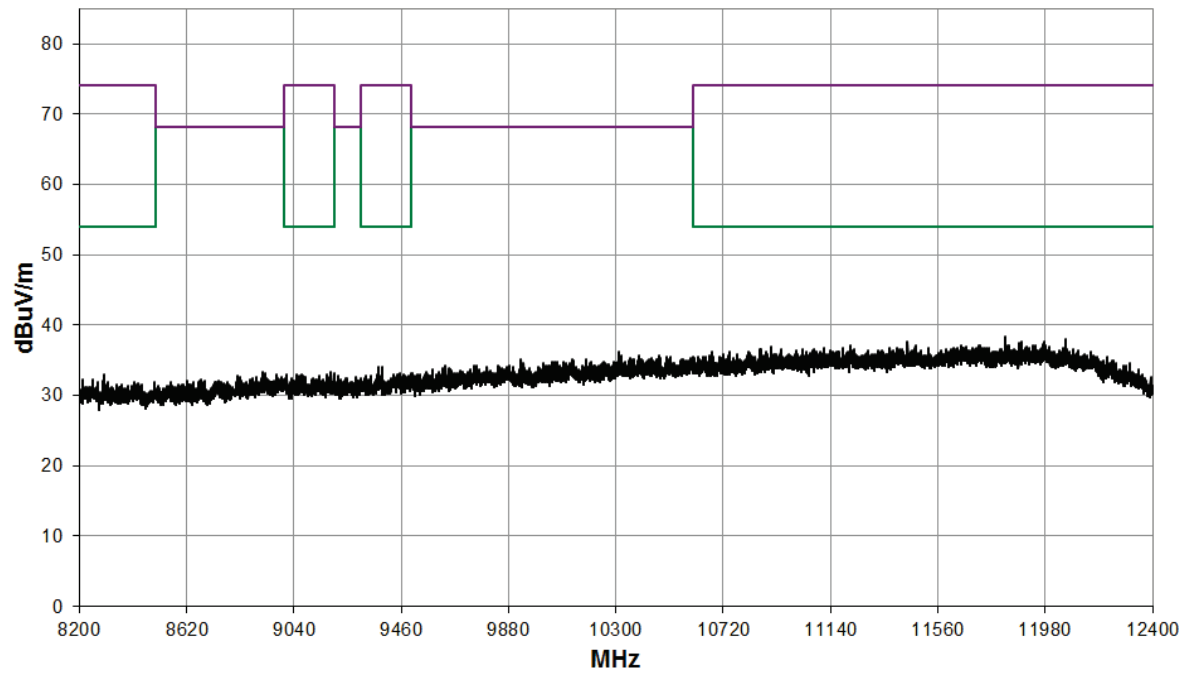
30 MHz to 1 GHz



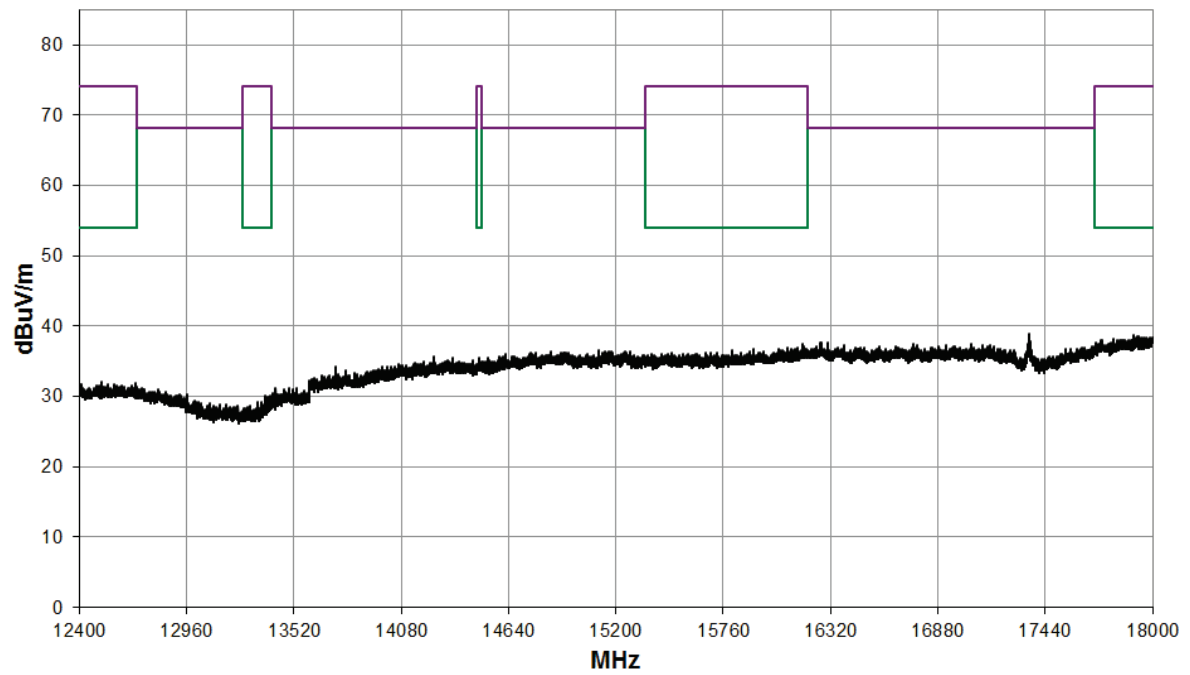
1 GHz to 8.2 GHz



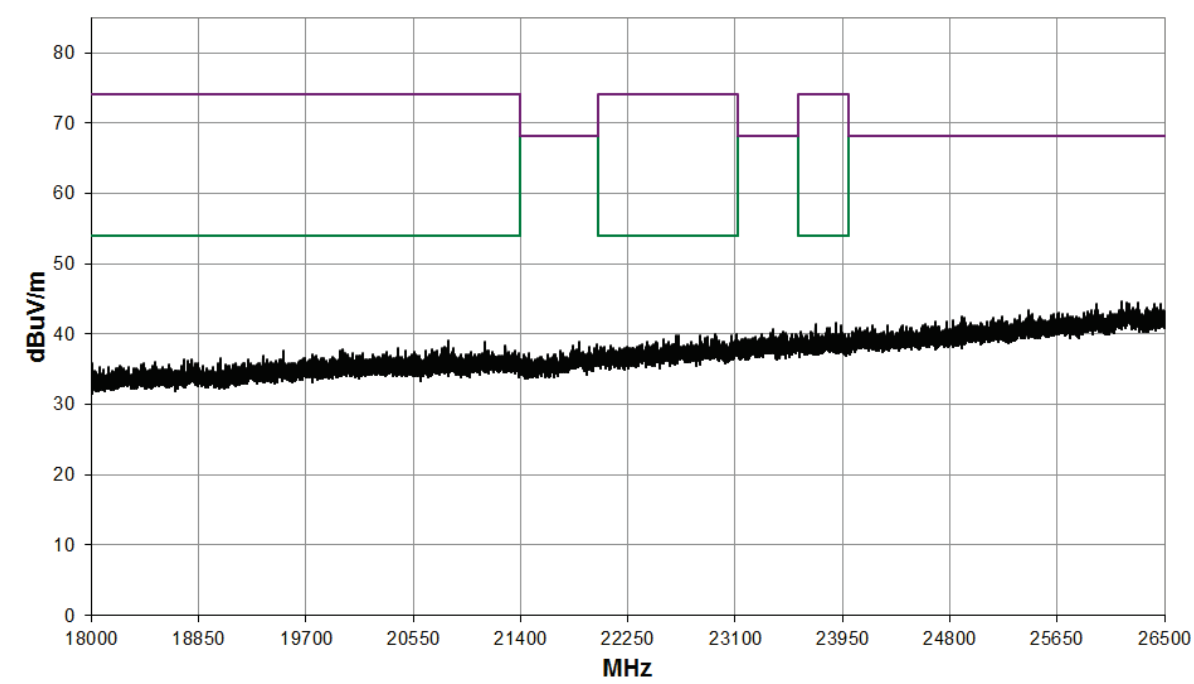
8.2 GHz to 12.4 GHz



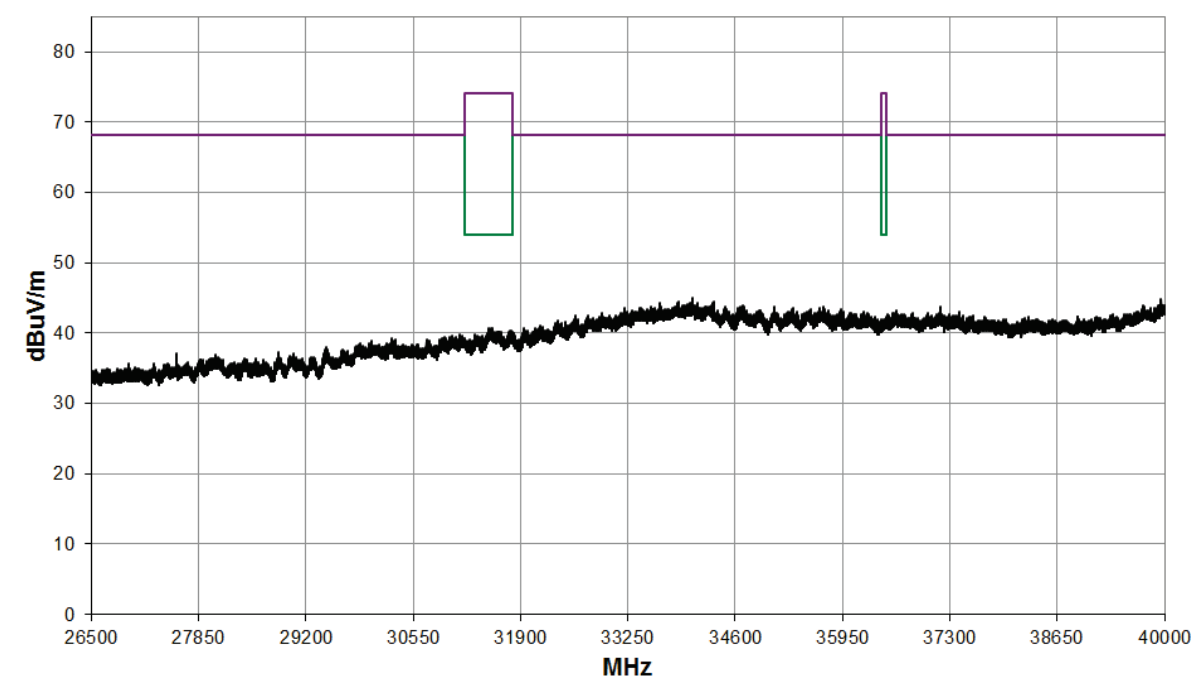
12.4 GHz to 18 GHz



18 GHz to 26.5 GHz

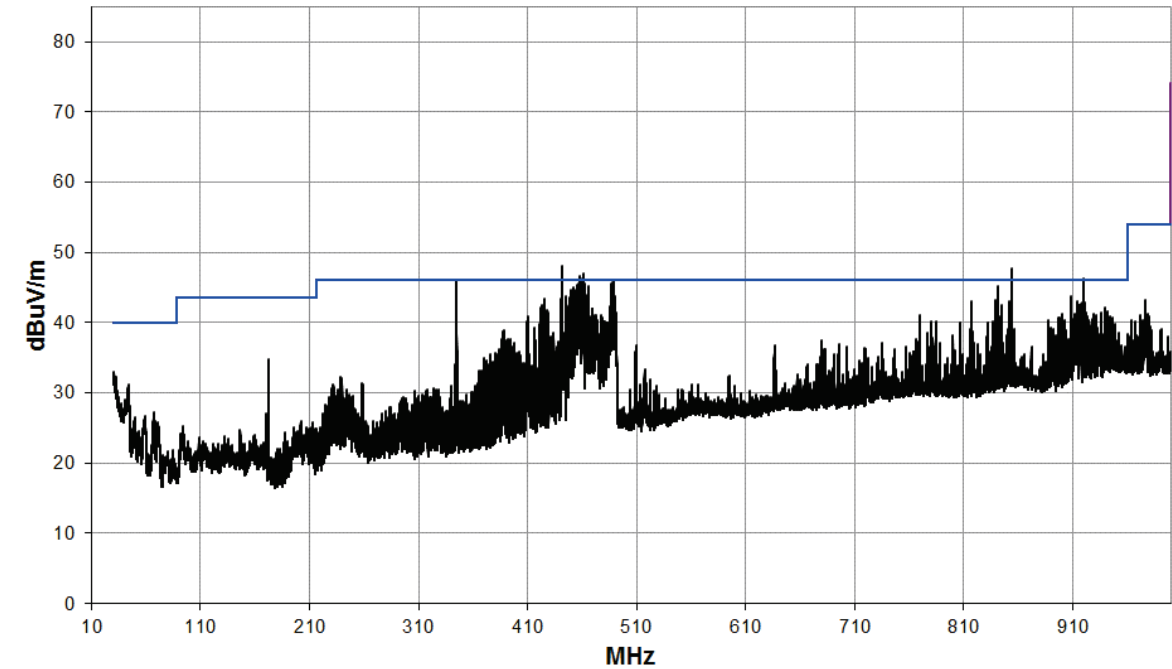


26.5 GHz to 40 GHz

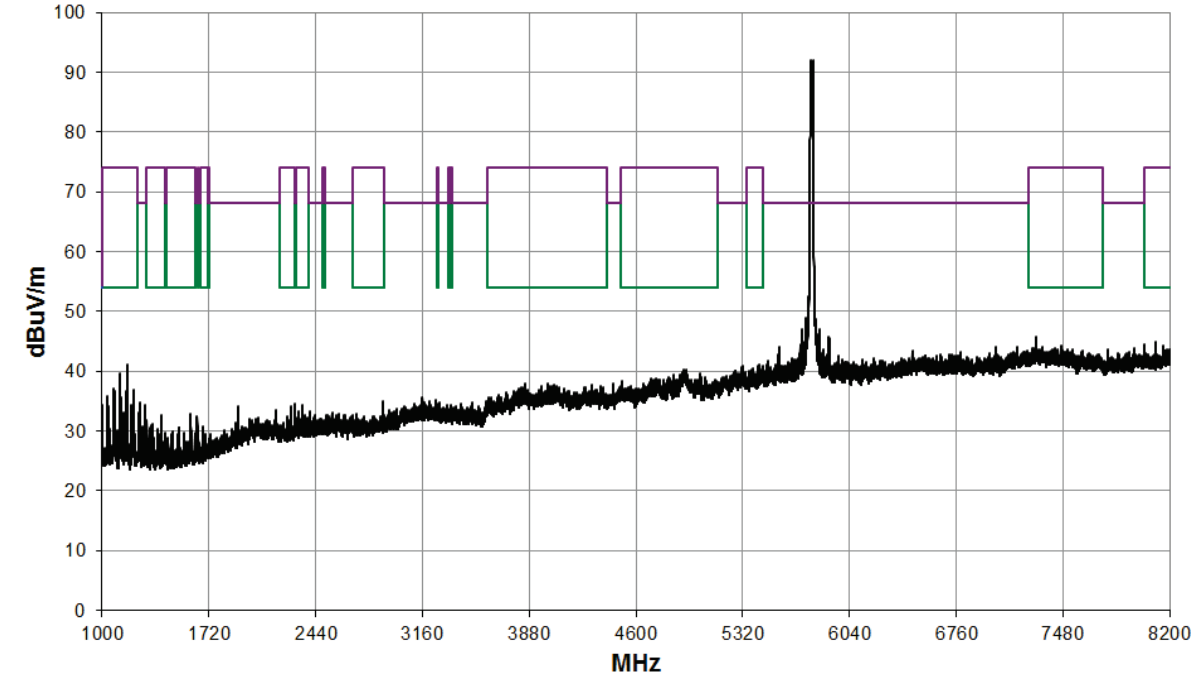


MIMO; Mode: 802.11ac20; Channel: CH157; Frequency: 5785 MHz; Bandwidth: 20 MHz; MCS Index: 8										
Detector	Freq. (MHz)	Meas'd Emission (dBμV)	Cable Loss (dB)	Antenna Factor (dB/m)	Pre-amp Gain (dB)	Duty Cycle Corr'n (dB)	Field Strength (dBμV/m)	Distance Extrap'n Factor (dB)	Field Strength (μV/m)	Limit (μV/m)
No emissions within 20 dB of the limit.										

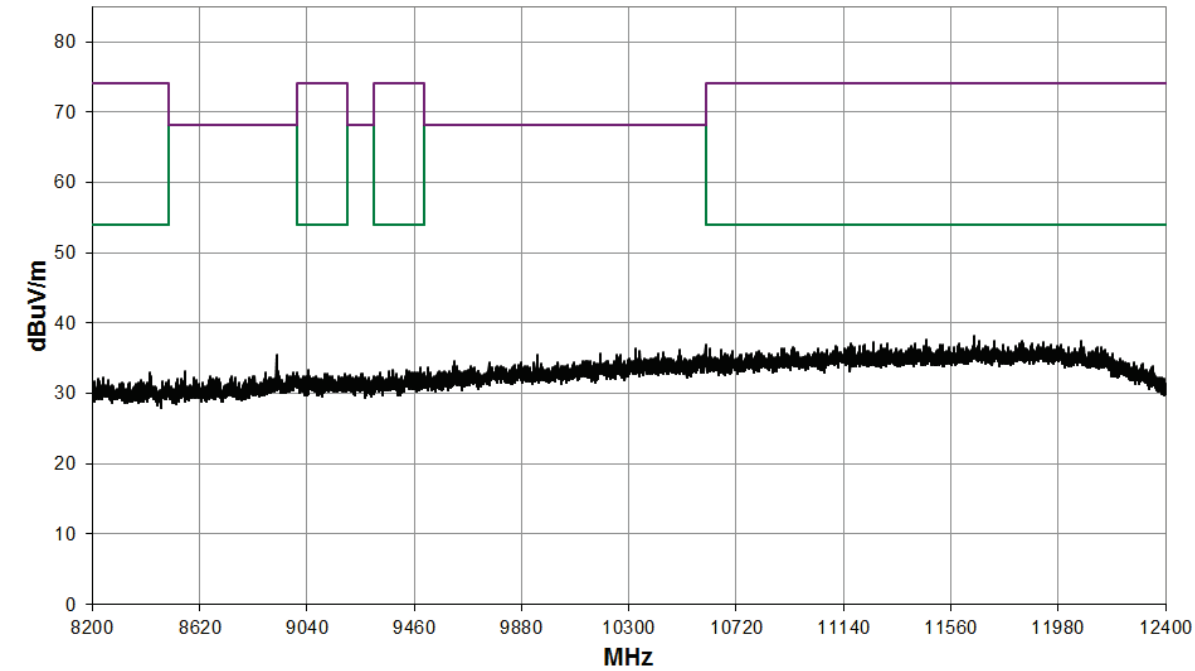
30 MHz to 1 GHz



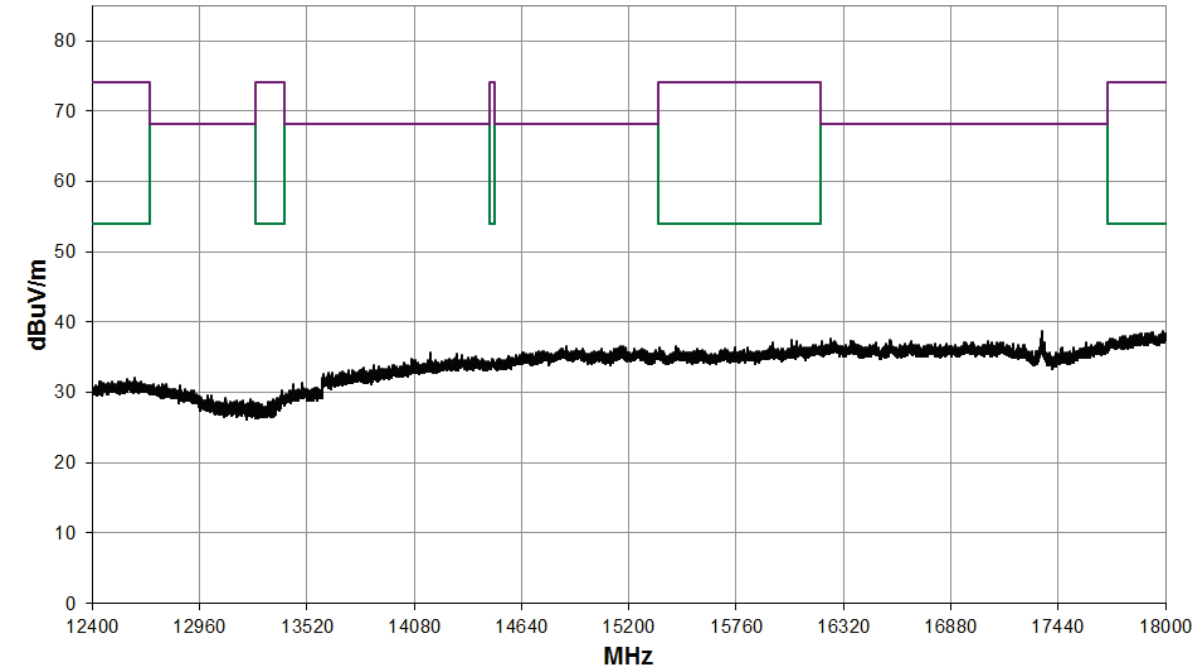
1 GHz to 8.2 GHz



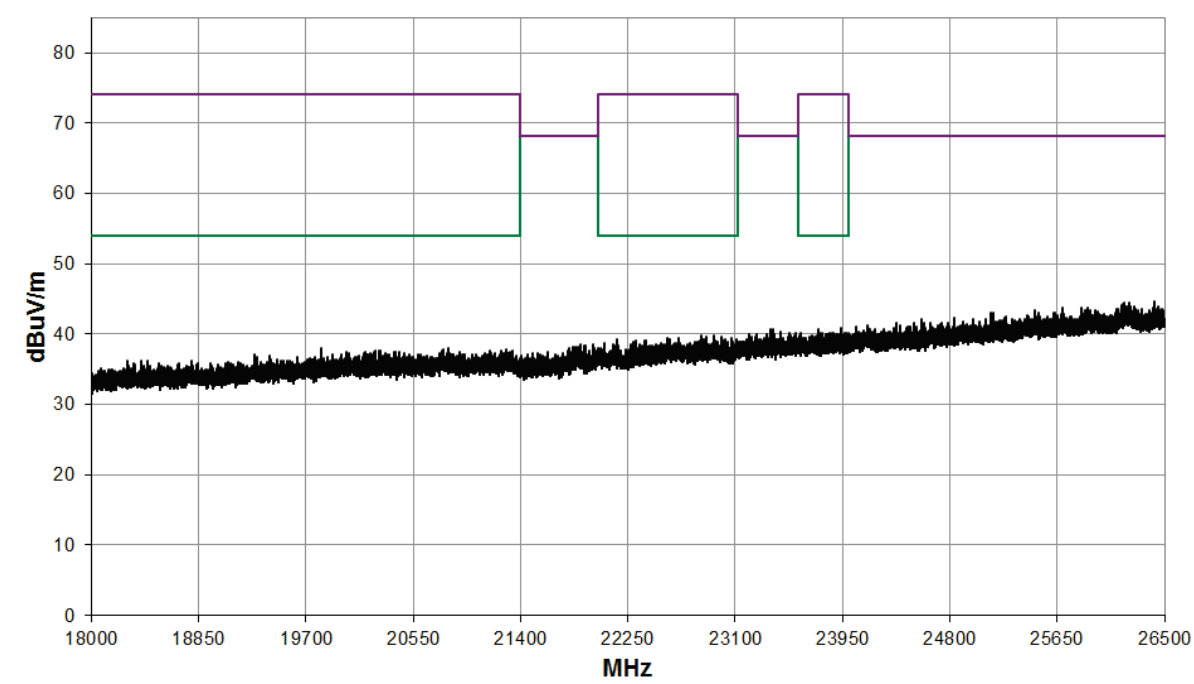
8.2 GHz to 12.4 GHz



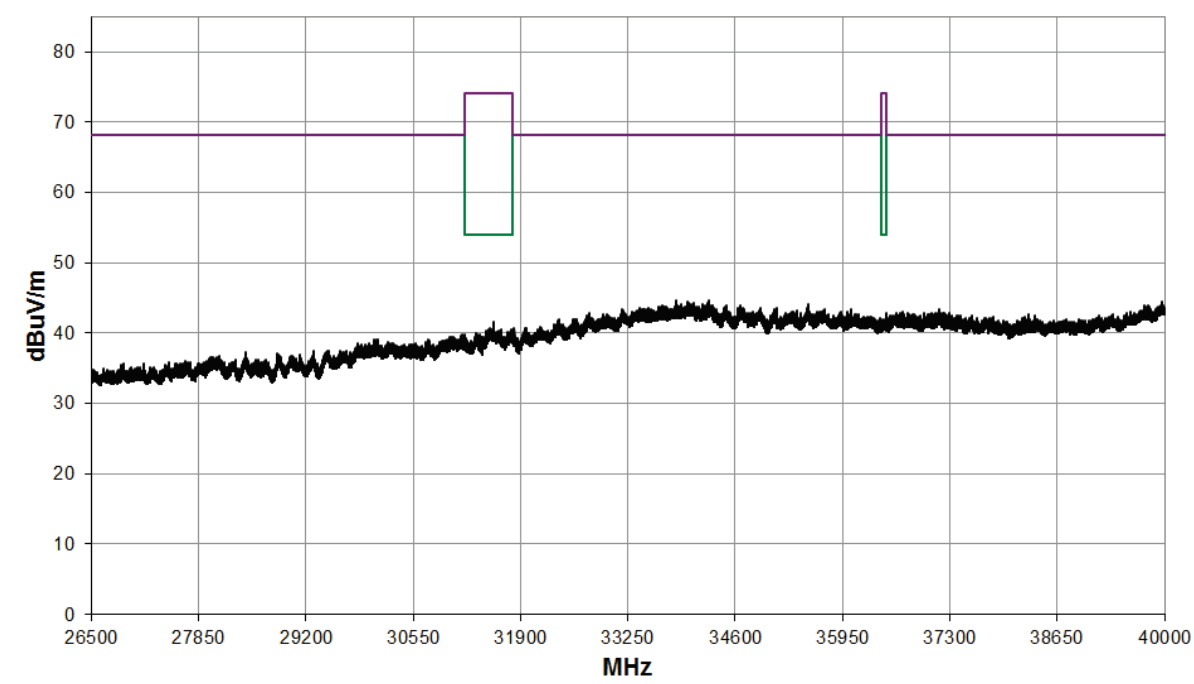
12.4 GHz to 18 GHz



18 GHz to 26.5 GHz

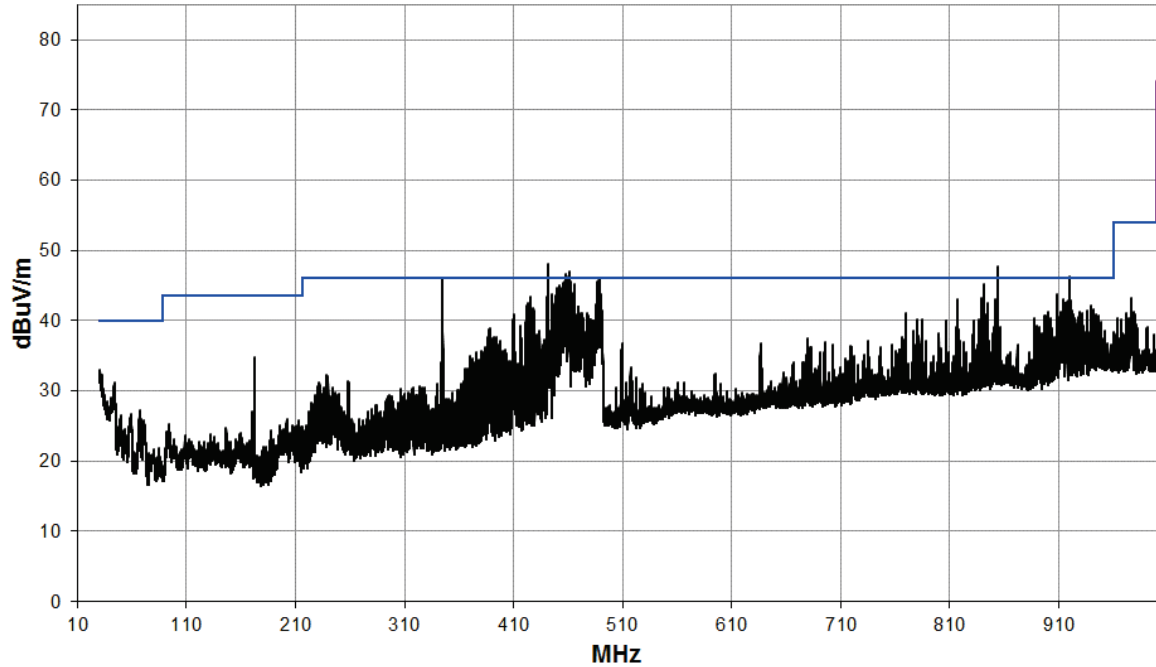


26.5 GHz to 40 GHz

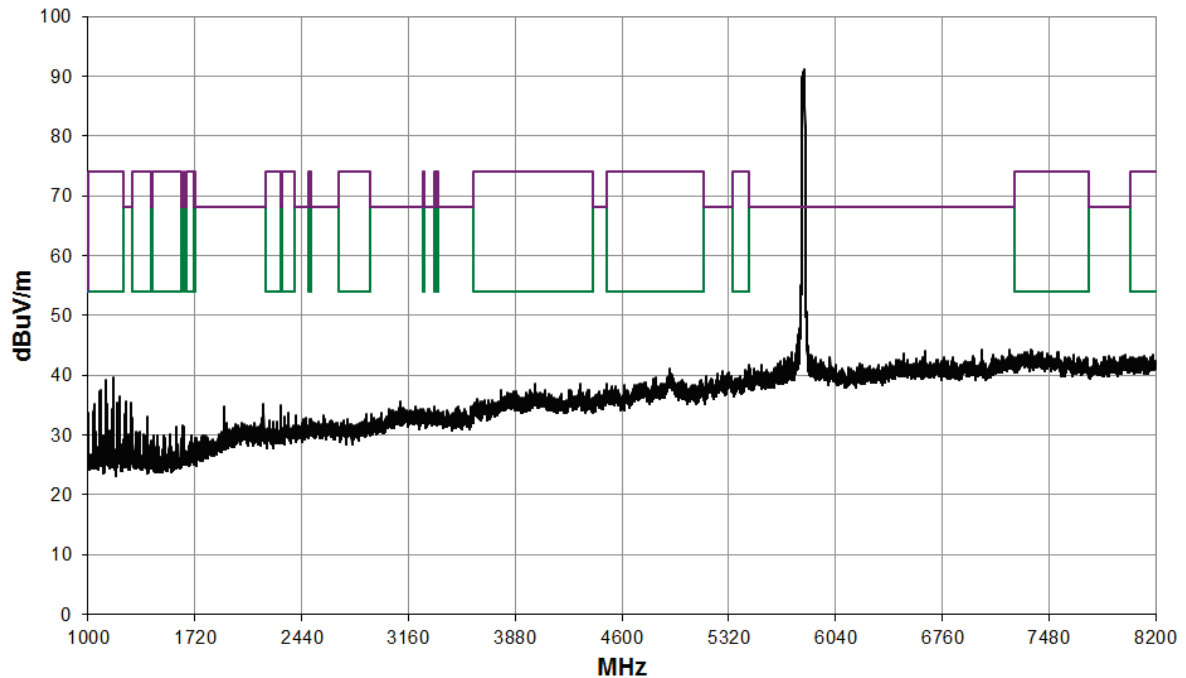


MIMO; Mode: 802.11ac20; Channel: CH165; Frequency: 5825 MHz; Bandwidth: 20 MHz; MCS Index: 0										
Detector	Freq. (MHz)	Meas'd Emission (dBμV)	Cable Loss (dB)	Antenna Factor (dB/m)	Pre-amp Gain (dB)	Duty Cycle Corr'n (dB)	Field Strength (dBμV/m)	Distance Extrap'n Factor (dB)	Field Strength (μV/m)	Limit (μV/m)
No emissions within 20 dB of the limit.										

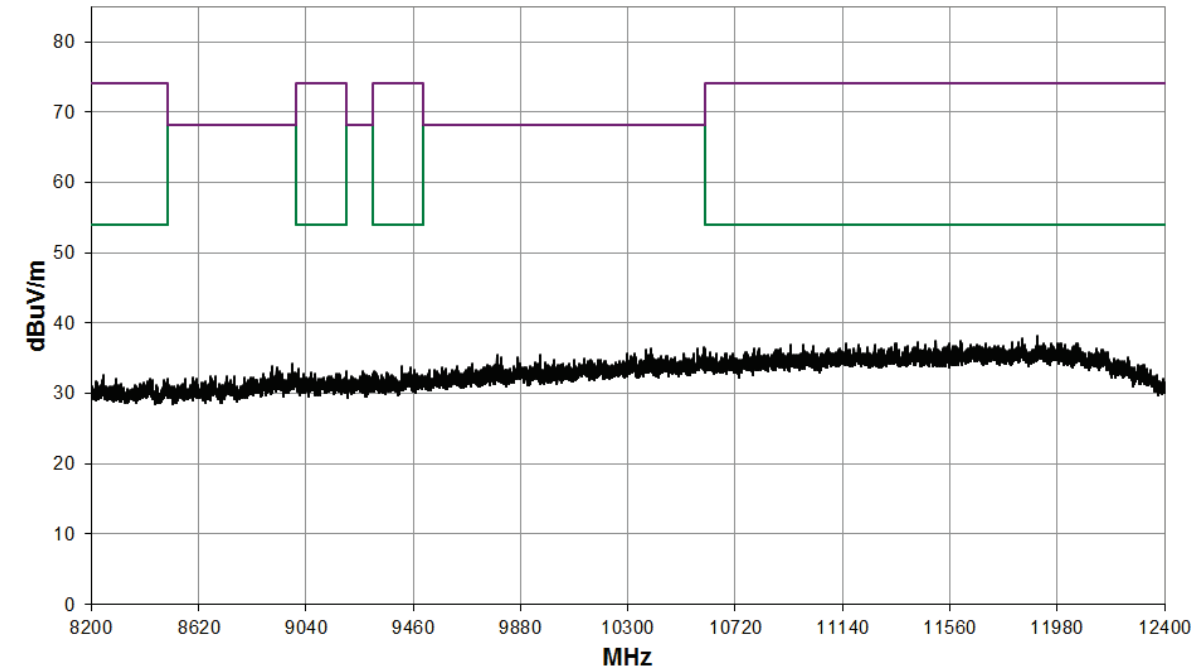
30 MHz to 1 GHz



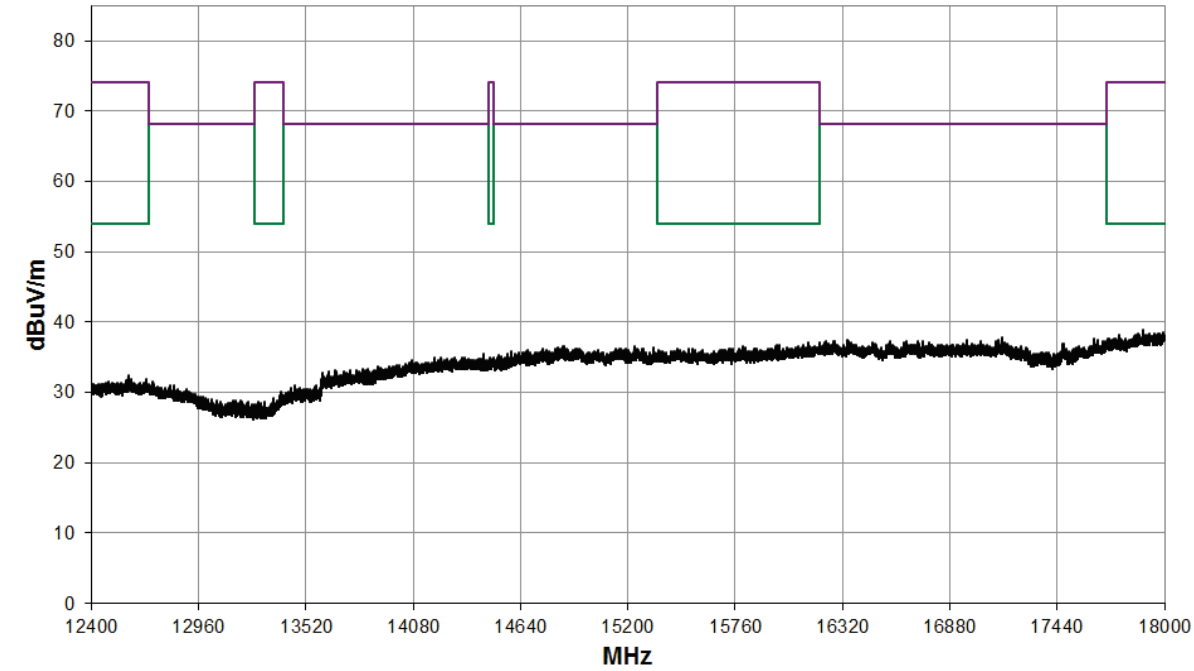
1 GHz to 8.2 GHz



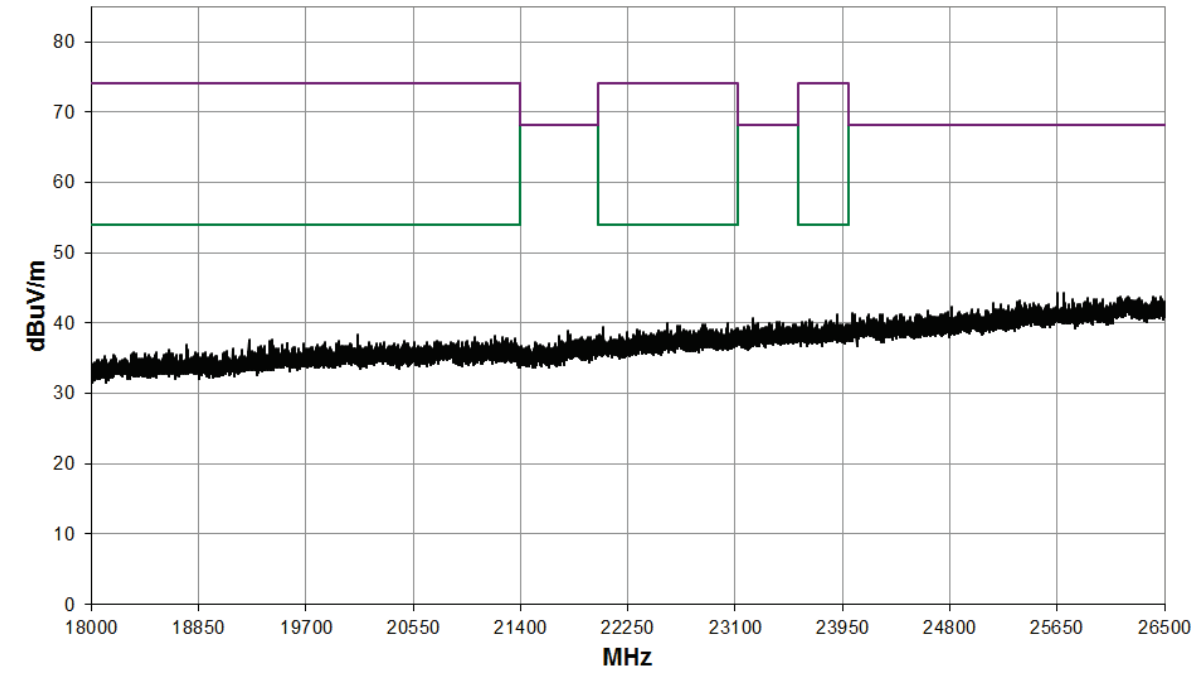
8.2 GHz to 12.4 GHz



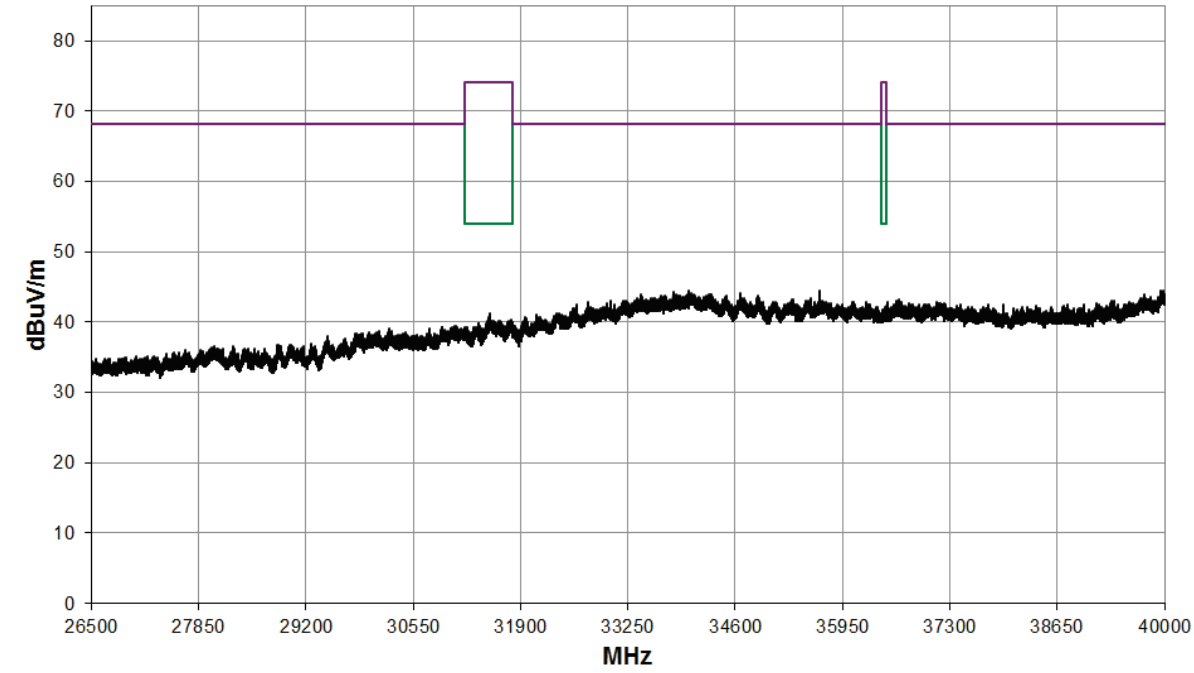
12.4 GHz to 18 GHz



18 GHz to 26.5 GHz



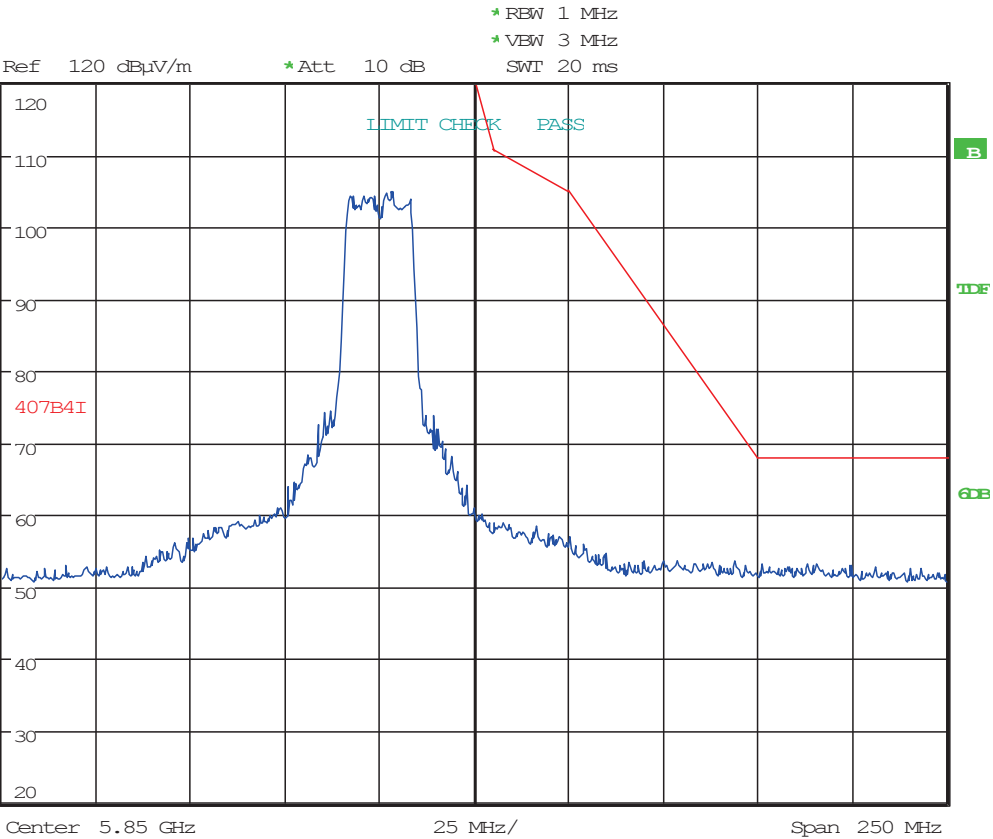
26.5 GHz to 40 GHz



Band Edge



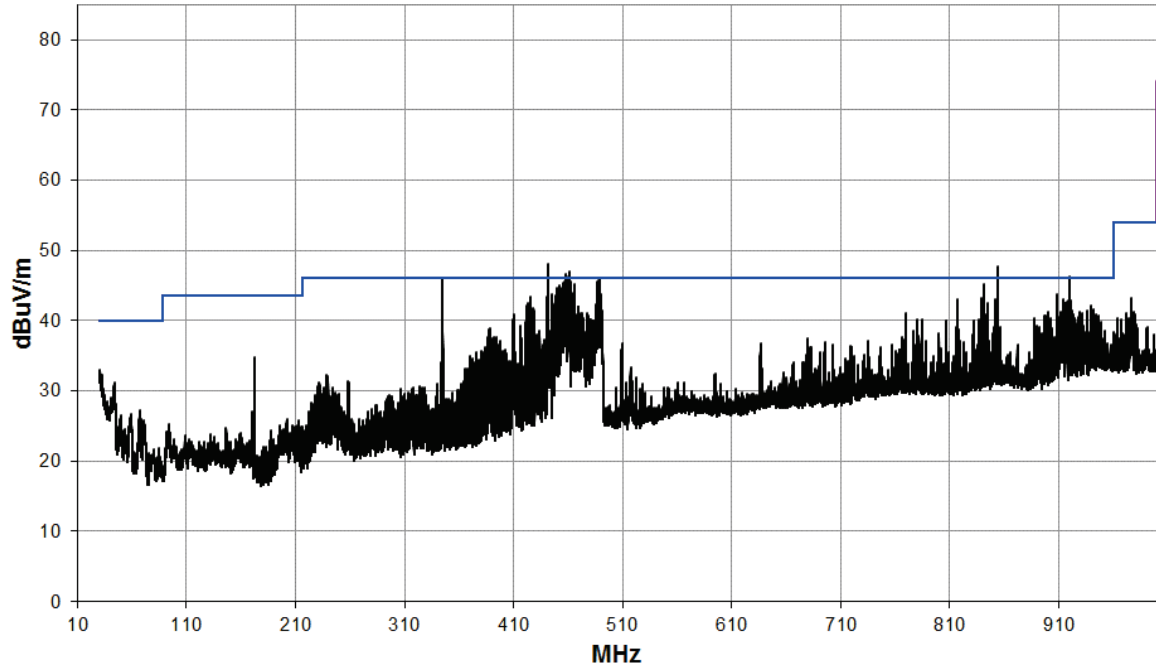
1 PK
Noise



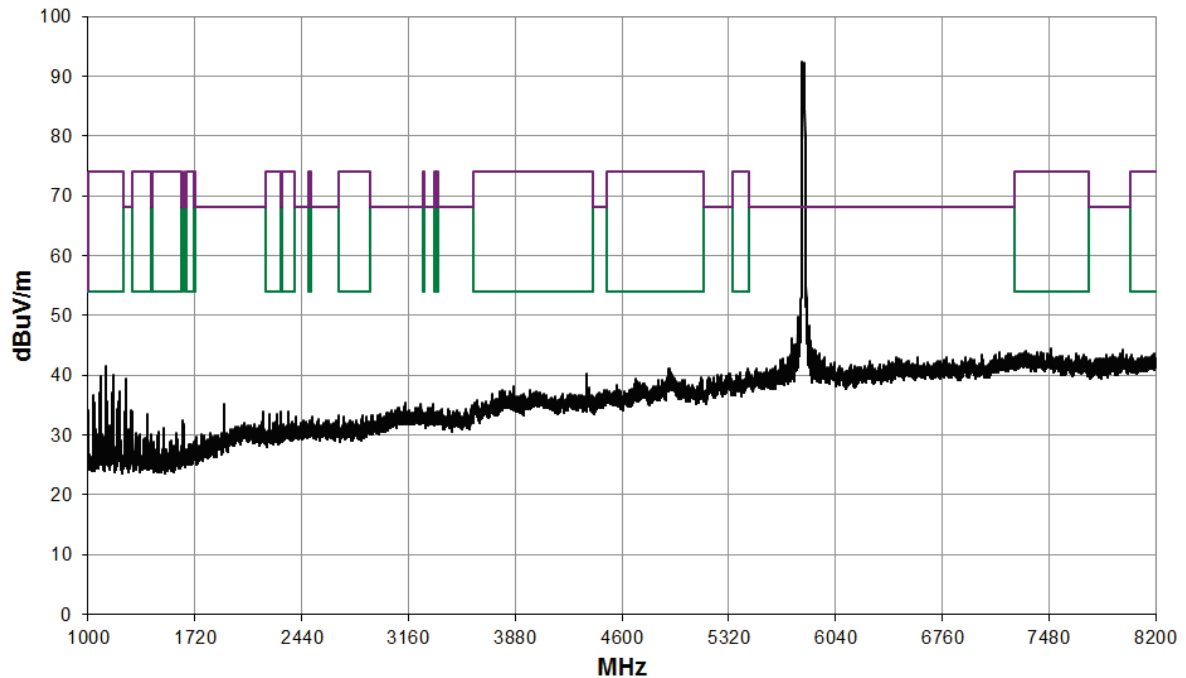
Date: 21.JUL.2020 13:24:03

MIMO; Mode: 802.11ac20; Channel: CH165; Frequency: 5825 MHz; Bandwidth: 20 MHz; MCS Index: 8										
Detector	Freq. (MHz)	Meas'd Emission (dBμV)	Cable Loss (dB)	Antenna Factor (dB/m)	Pre-amp Gain (dB)	Duty Cycle Corr'n (dB)	Field Strength (dBμV/m)	Distance Extrap'n Factor (dB)	Field Strength (μV/m)	Limit (μV/m)
No emissions within 20 dB of the limit.										

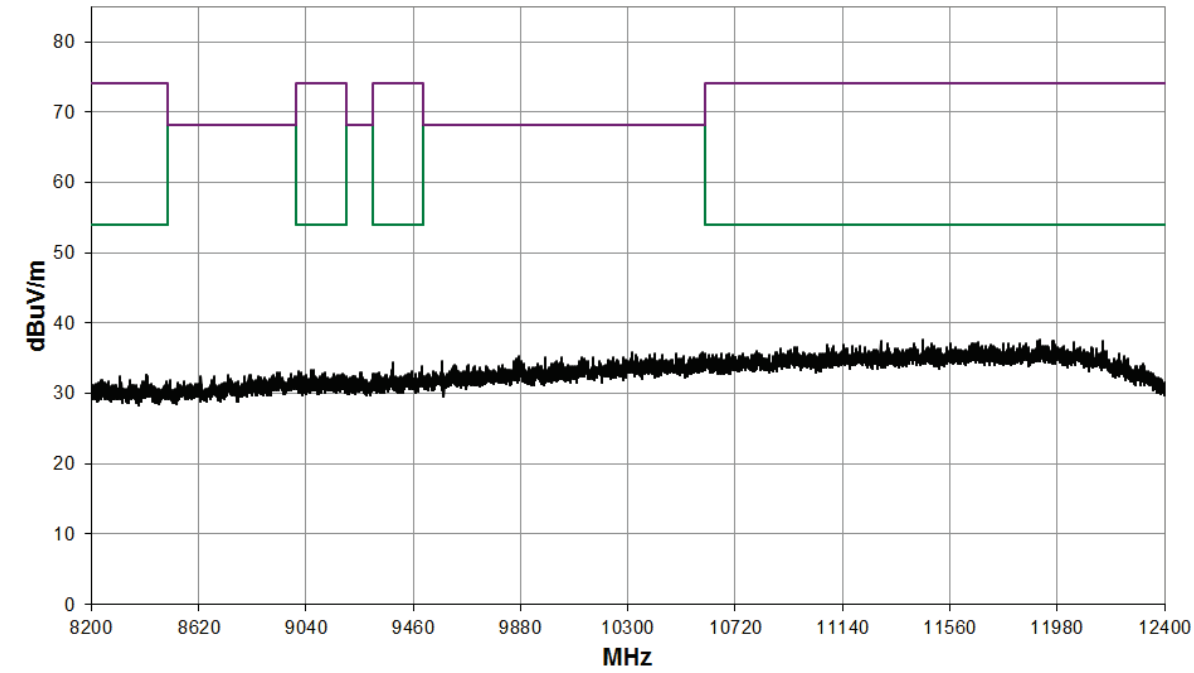
30 MHz to 1 GHz



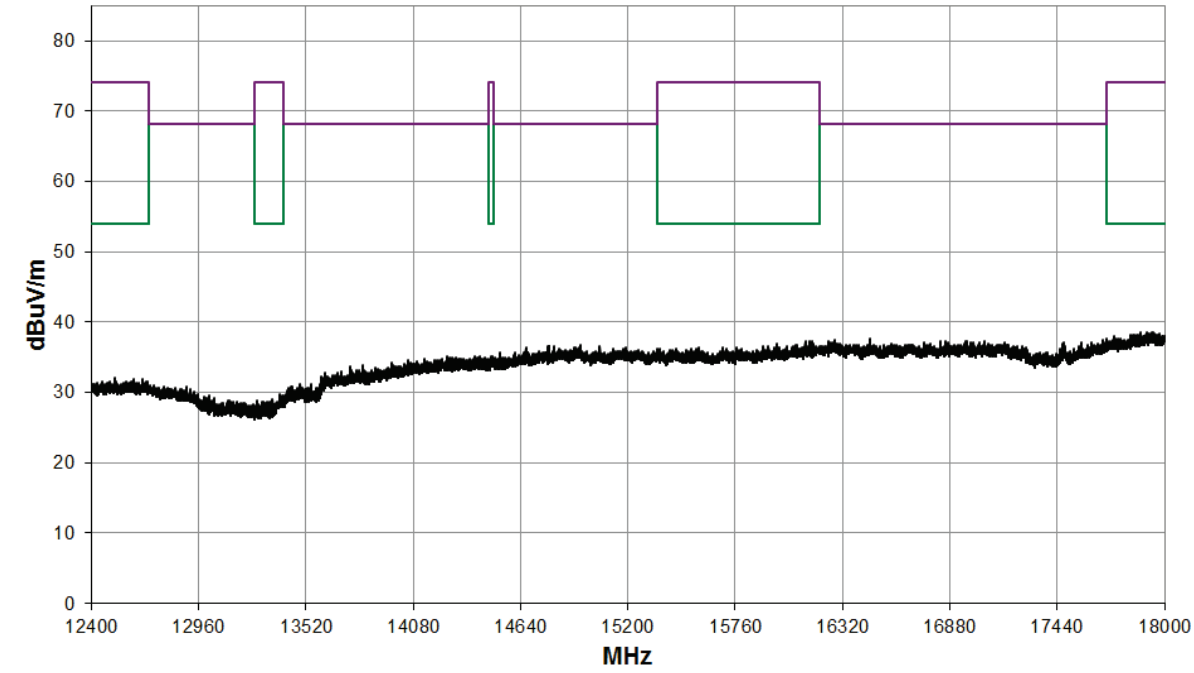
1 GHz to 8.2 GHz



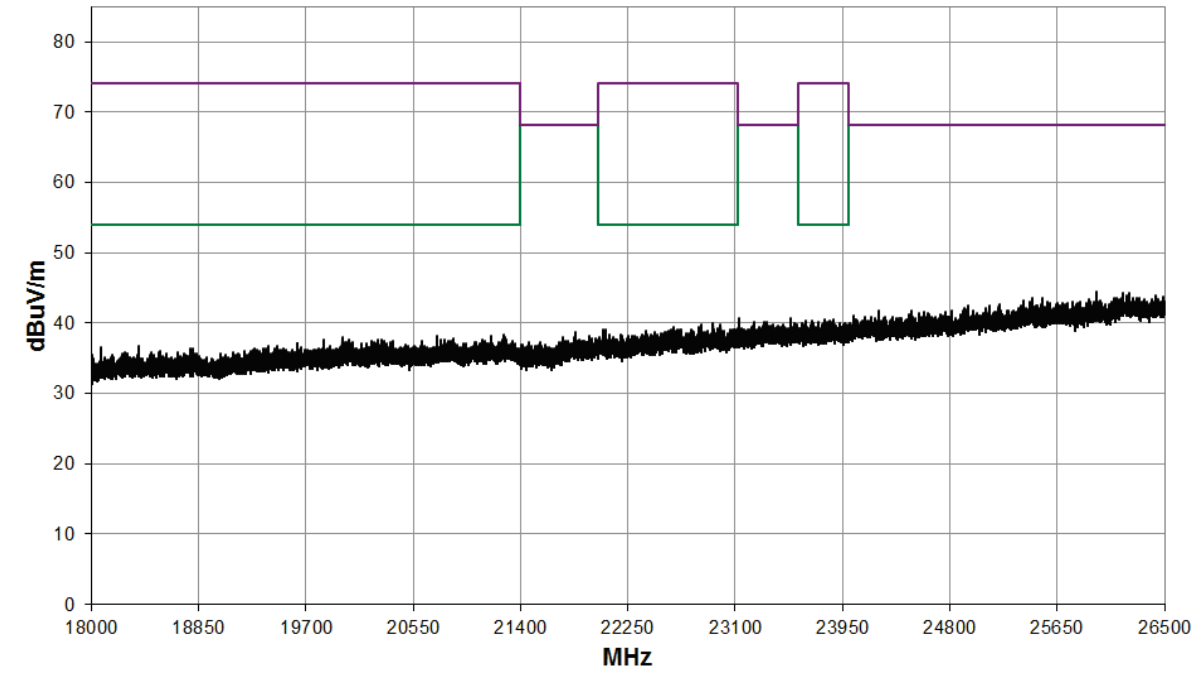
8.2 GHz to 12.4 GHz



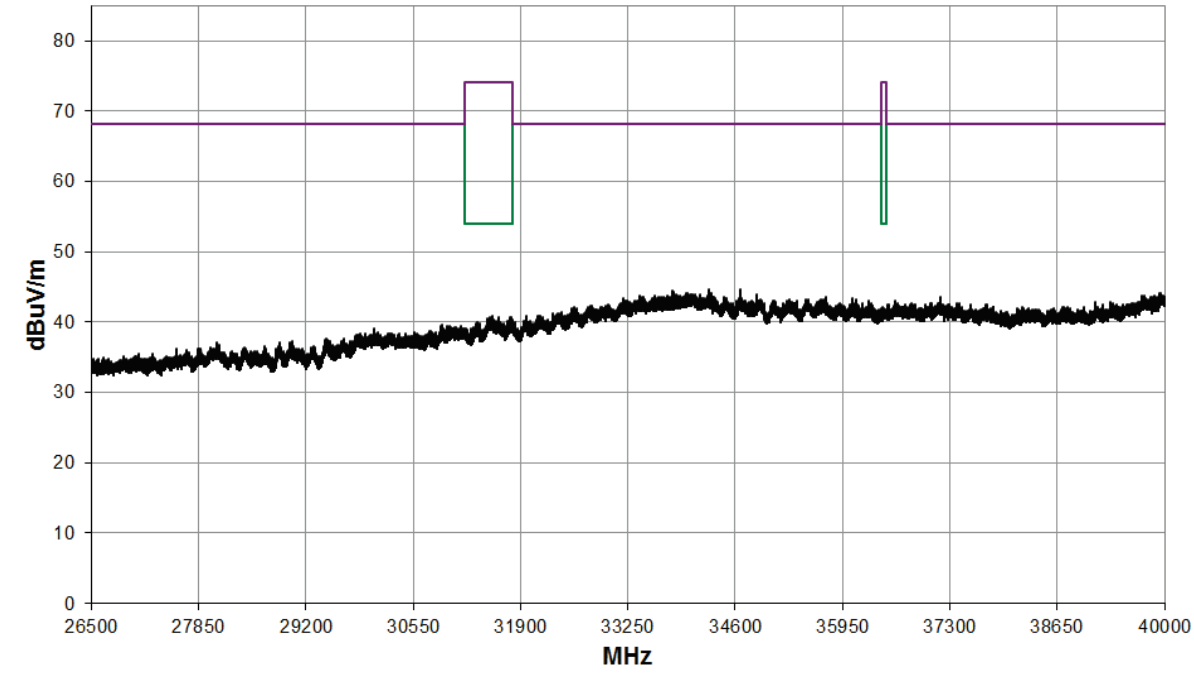
12.4 GHz to 18 GHz



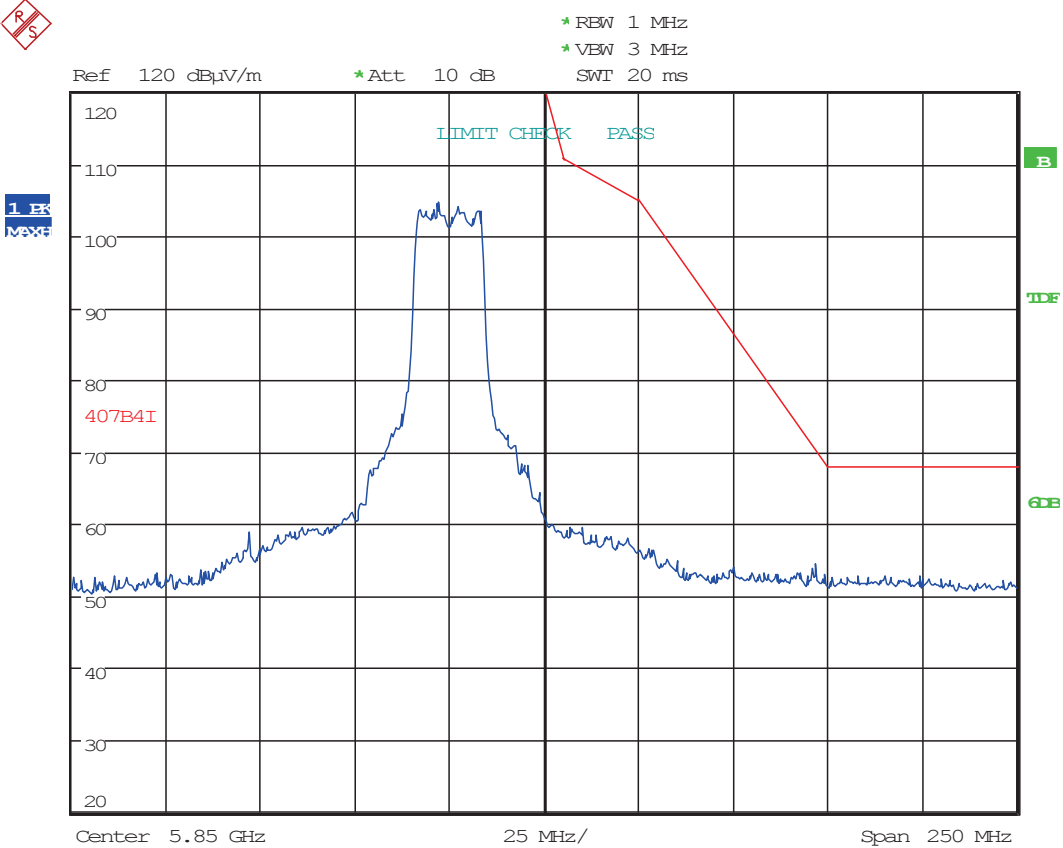
18 GHz to 26.5 GHz



26.5 GHz to 40 GHz



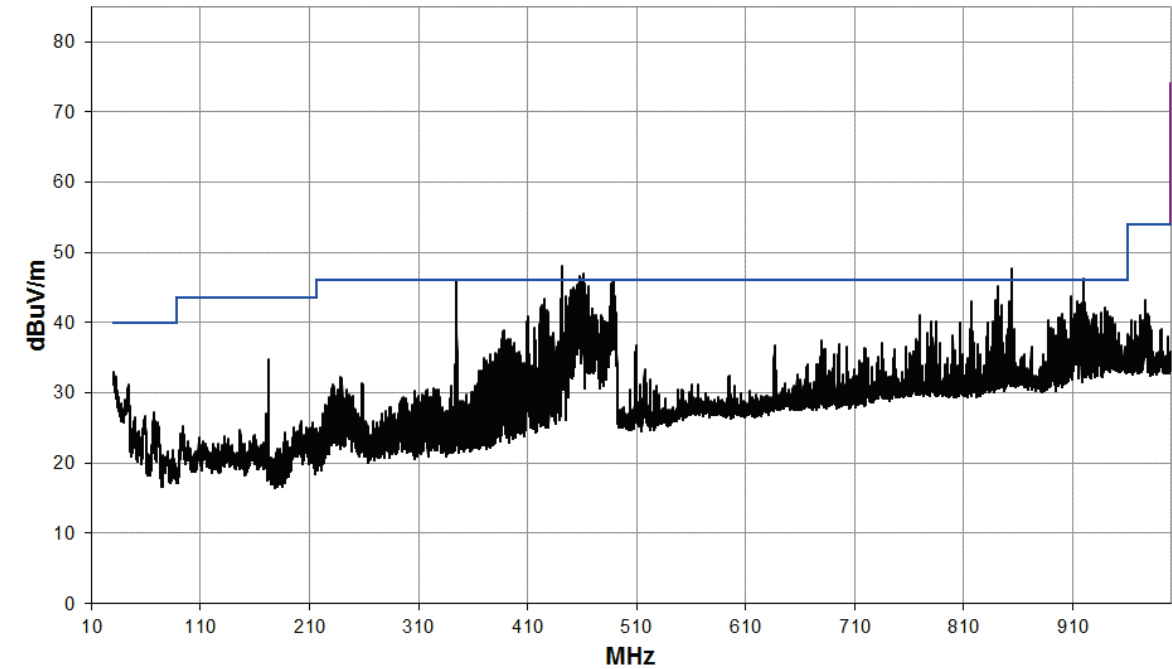
Band Edge



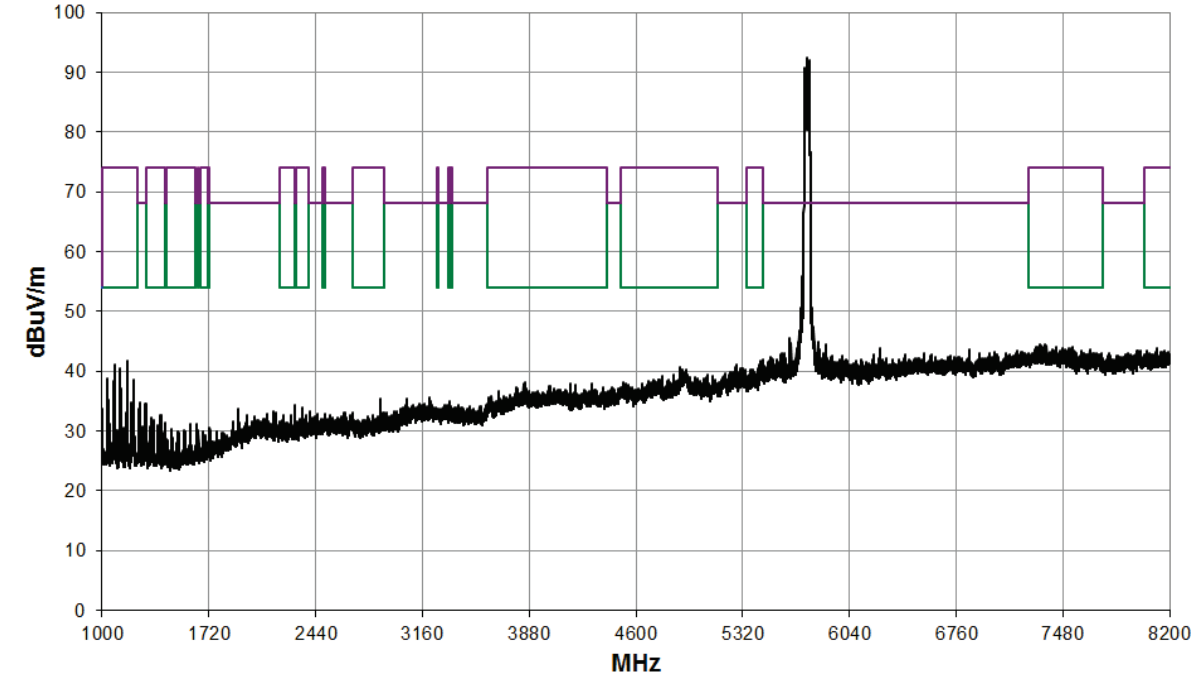
Date: 21.JUL.2020 13:25:14

MIMO; Mode: 802.11ac40; Channel: CH151; Frequency: 5755 MHz; Bandwidth: 40 MHz; MCS Index: 0										
Detector	Freq. (MHz)	Meas'd Emission (dBμV)	Cable Loss (dB)	Antenna Factor (dB/m)	Pre-amp Gain (dB)	Duty Cycle Corr'n (dB)	Field Strength (dBμV/m)	Distance Extrap'n Factor (dB)	Field Strength (μV/m)	Limit (μV/m)
No emissions within 20 dB of the limit.										

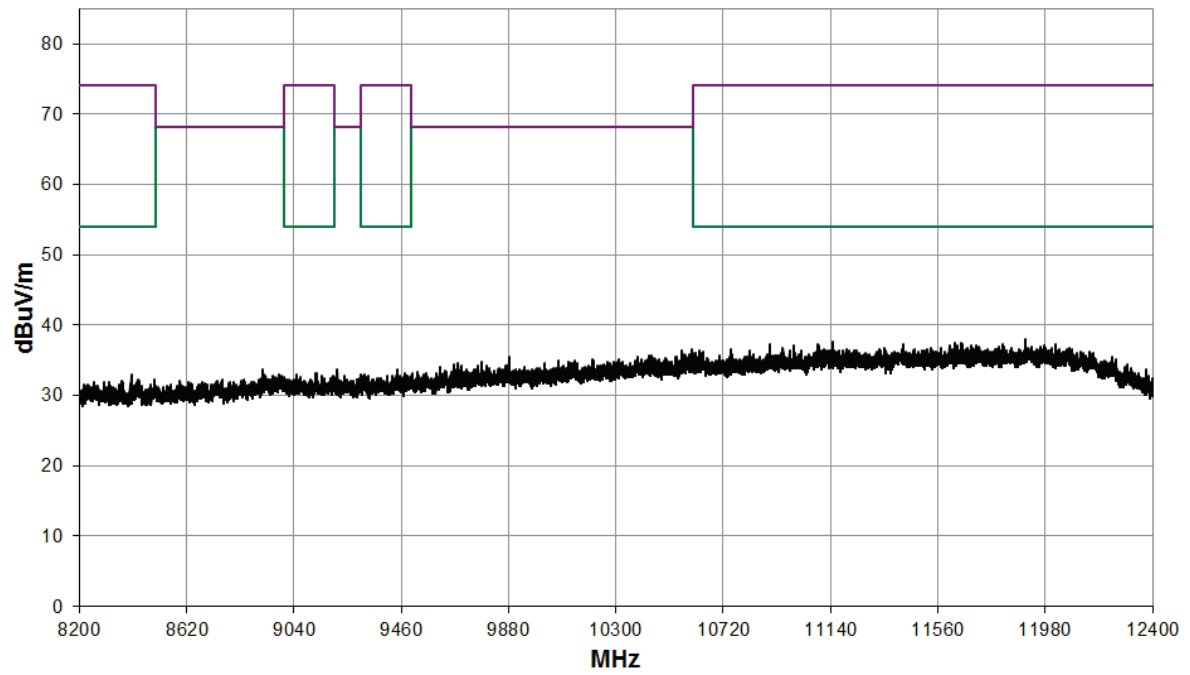
30 MHz to 1 GHz



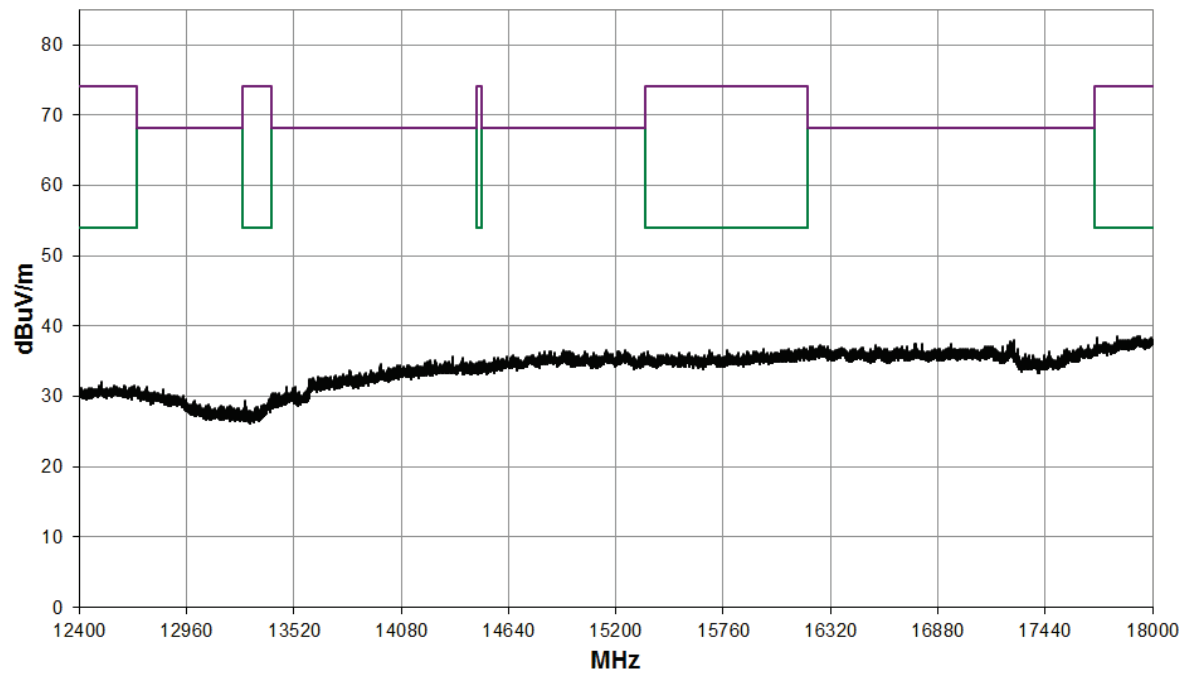
1 GHz to 8.2 GHz



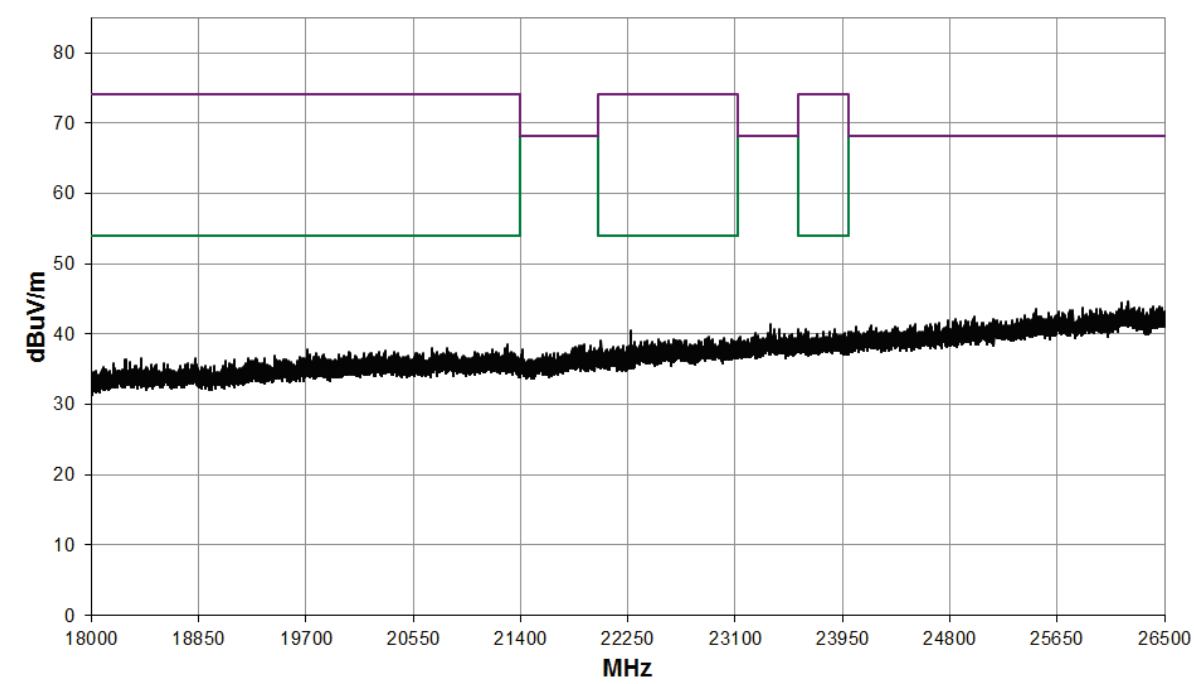
8.2 GHz to 12.4 GHz



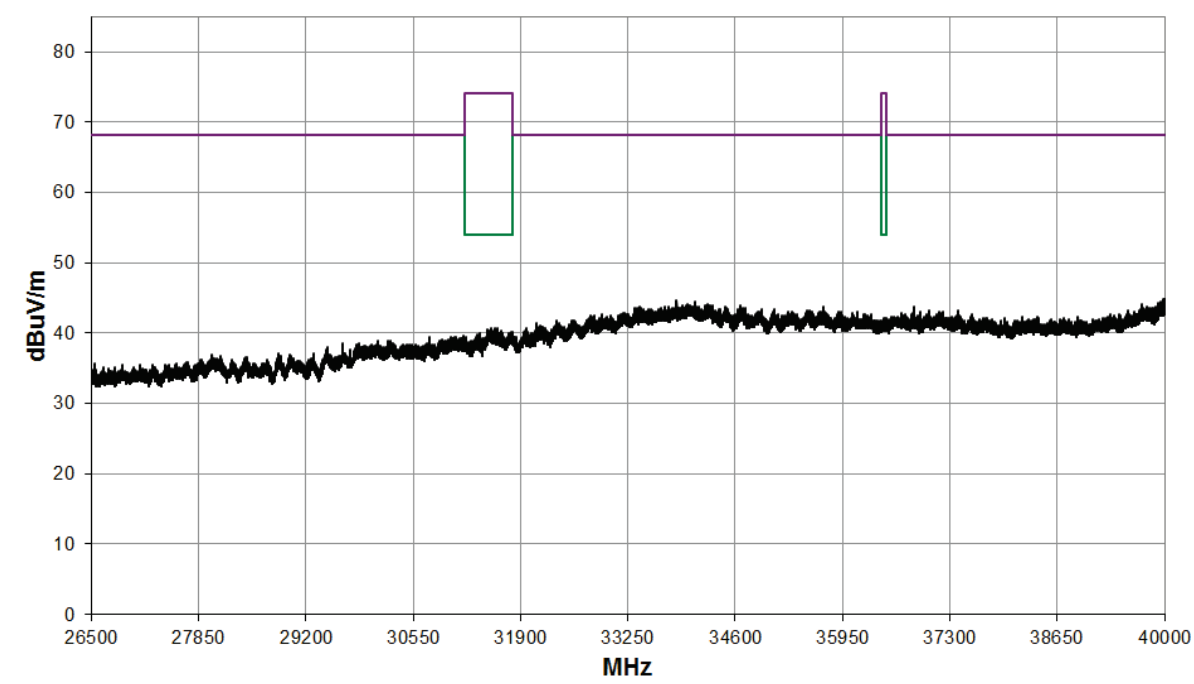
12.4 GHz to 18 GHz



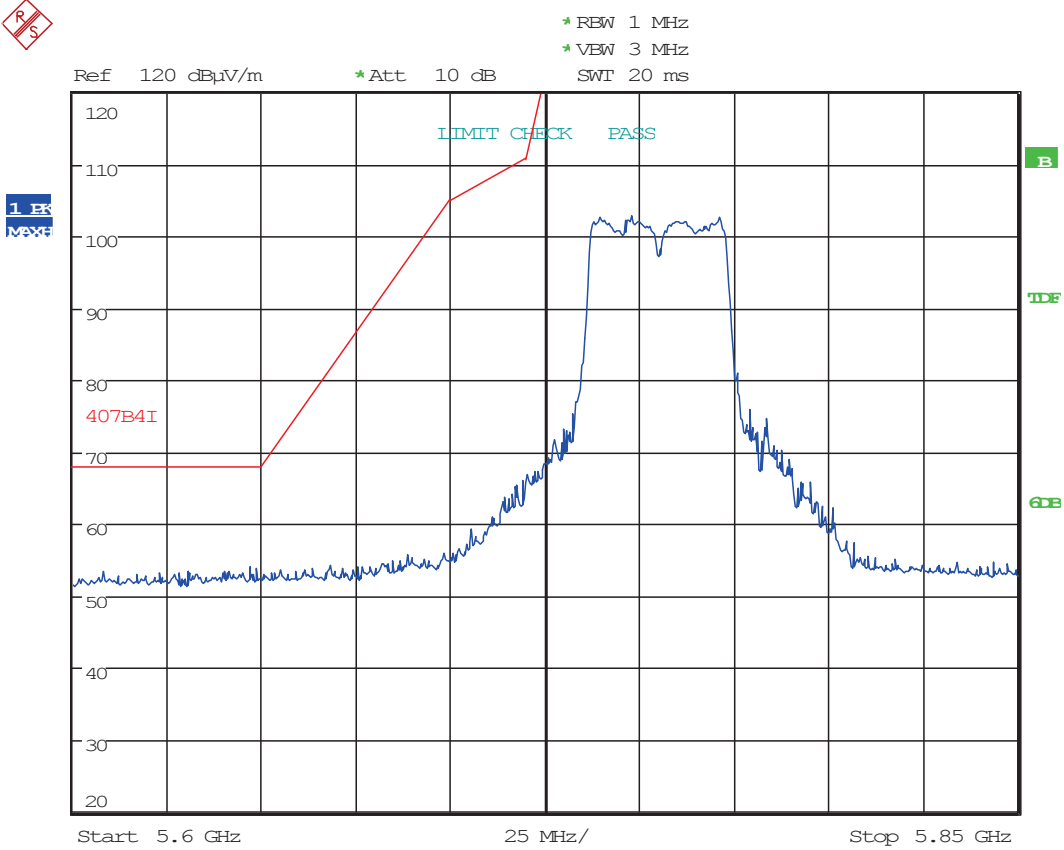
18 GHz to 26.5 GHz



26.5 GHz to 40 GHz



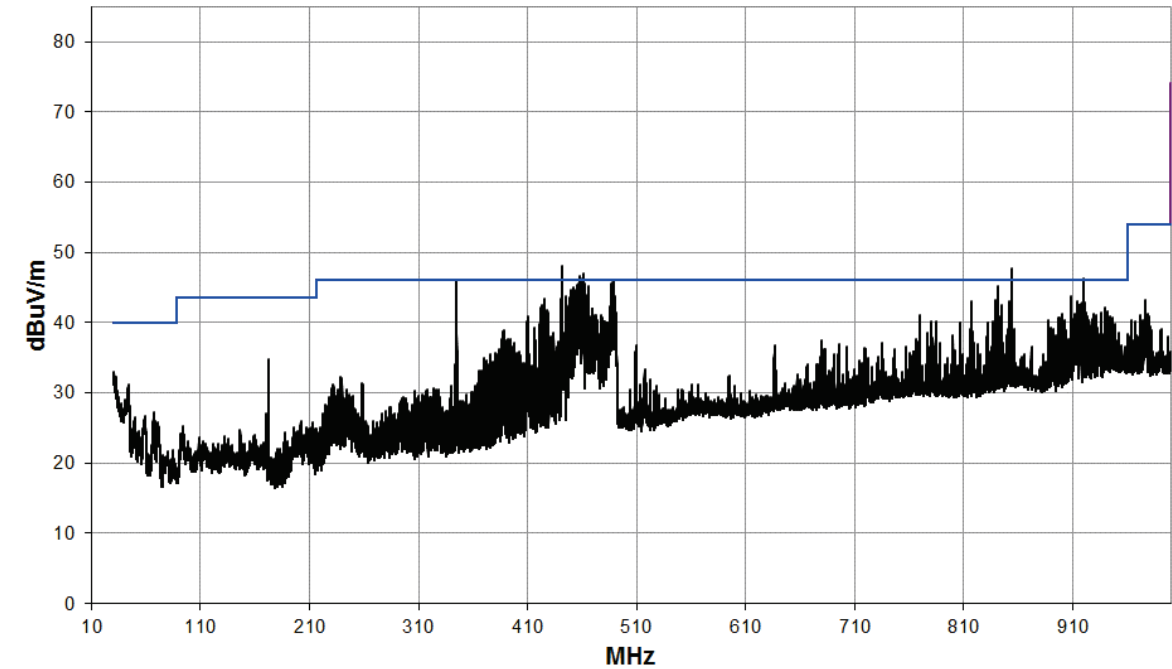
Band Edge



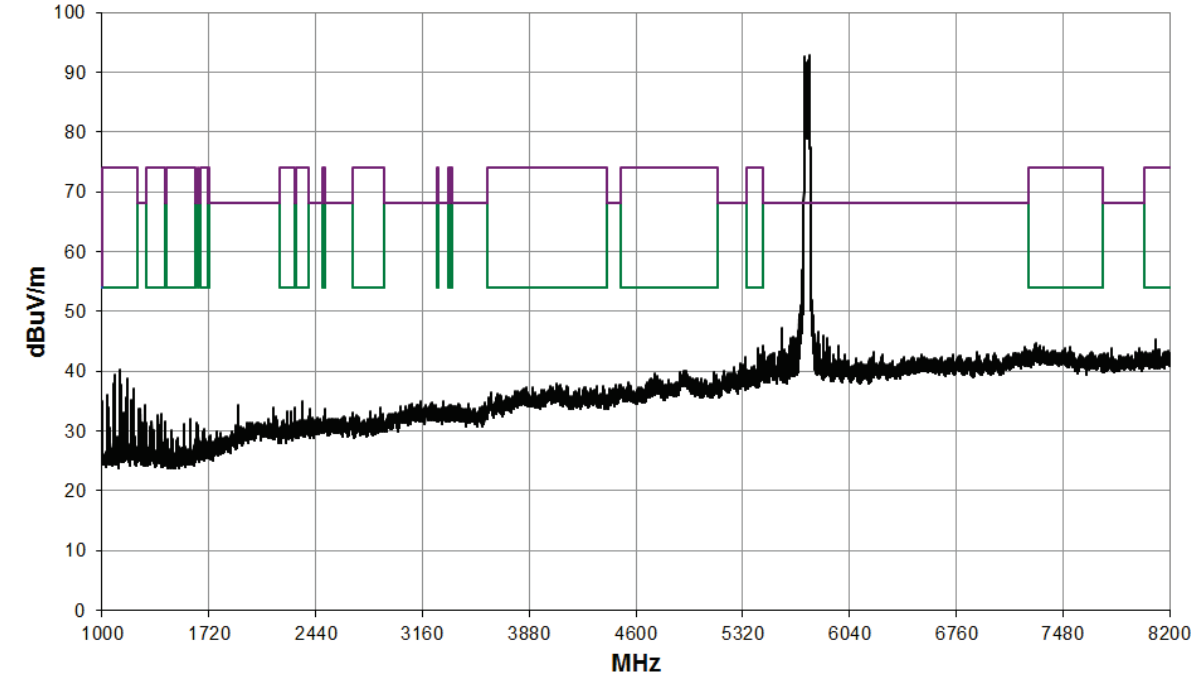
Date: 21.JUL.2020 14:50:21

MIMO; Mode: 802.11ac40; Channel: CH151; Frequency: 5755 MHz; Bandwidth: 40 MHz; MCS Index: 9										
Detector	Freq. (MHz)	Meas'd Emission (dBμV)	Cable Loss (dB)	Antenna Factor (dB/m)	Pre-amp Gain (dB)	Duty Cycle Corr'n (dB)	Field Strength (dBμV/m)	Distance Extrap'n Factor (dB)	Field Strength (μV/m)	Limit (μV/m)
No emissions within 20 dB of the limit.										

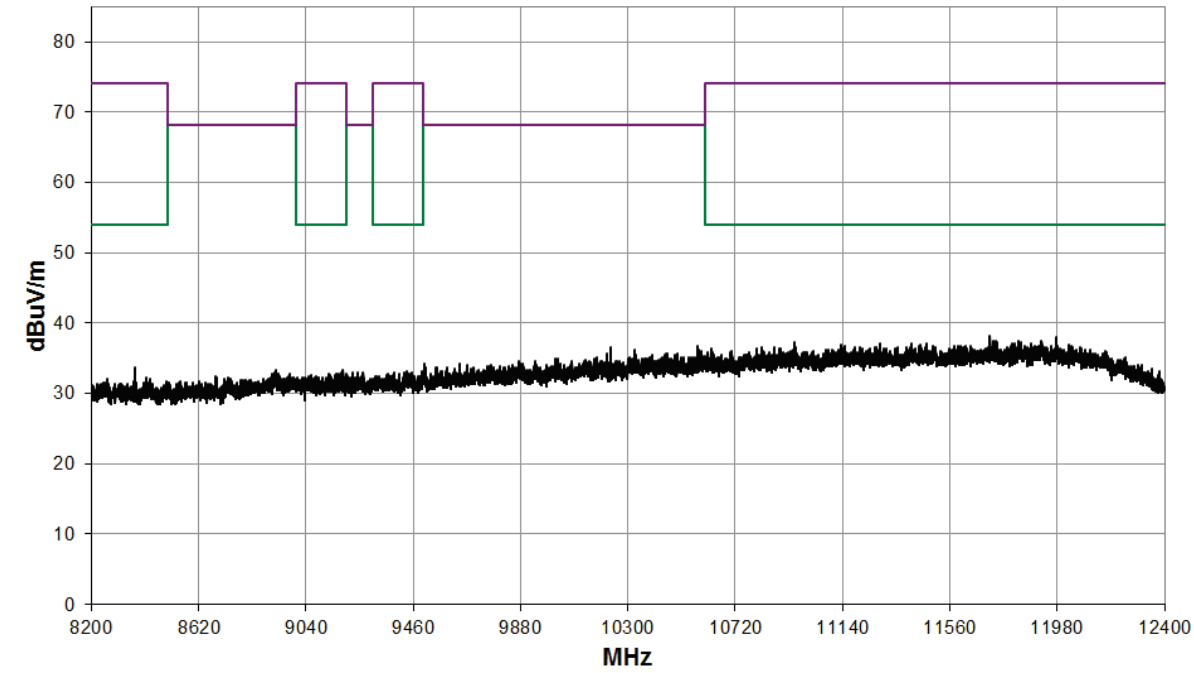
30 MHz to 1 GHz



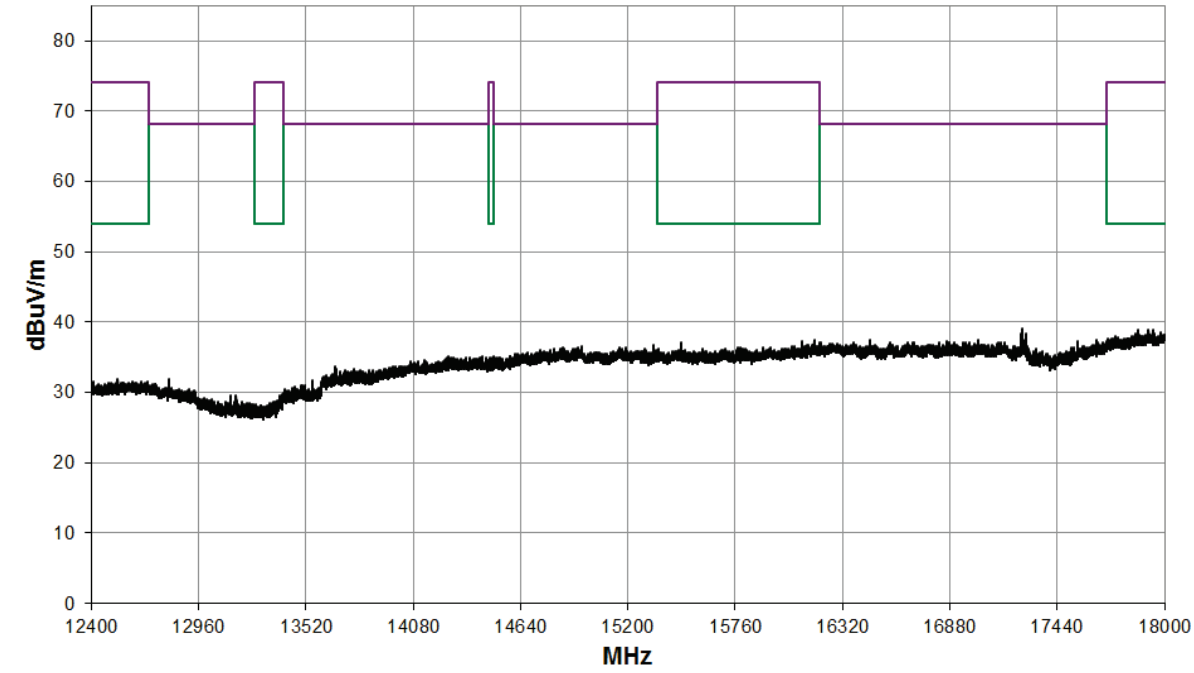
1 GHz to 8.2 GHz



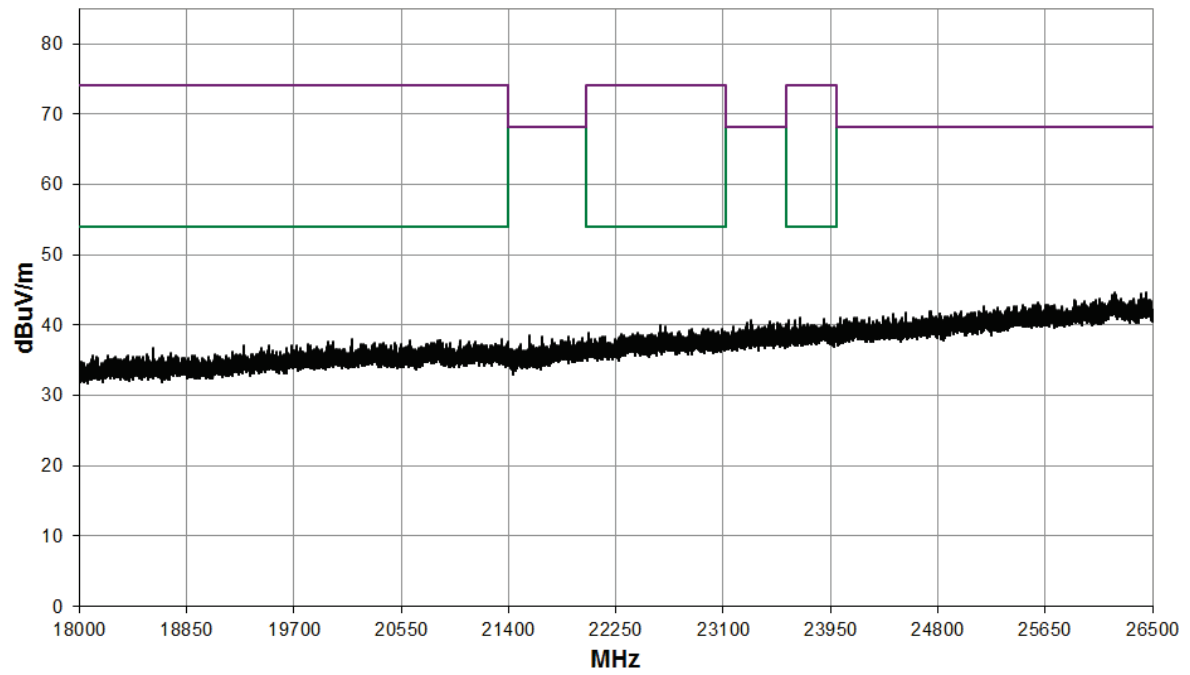
8.2 GHz to 12.4 GHz



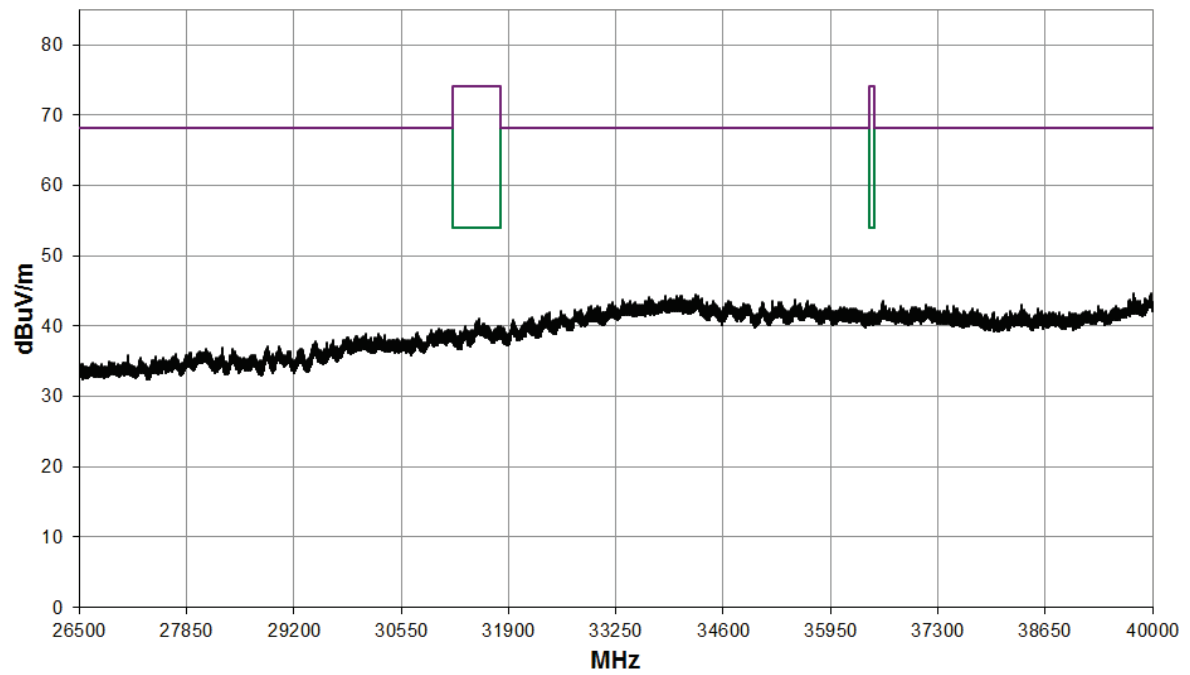
12.4 GHz to 18 GHz



18 GHz to 26.5 GHz



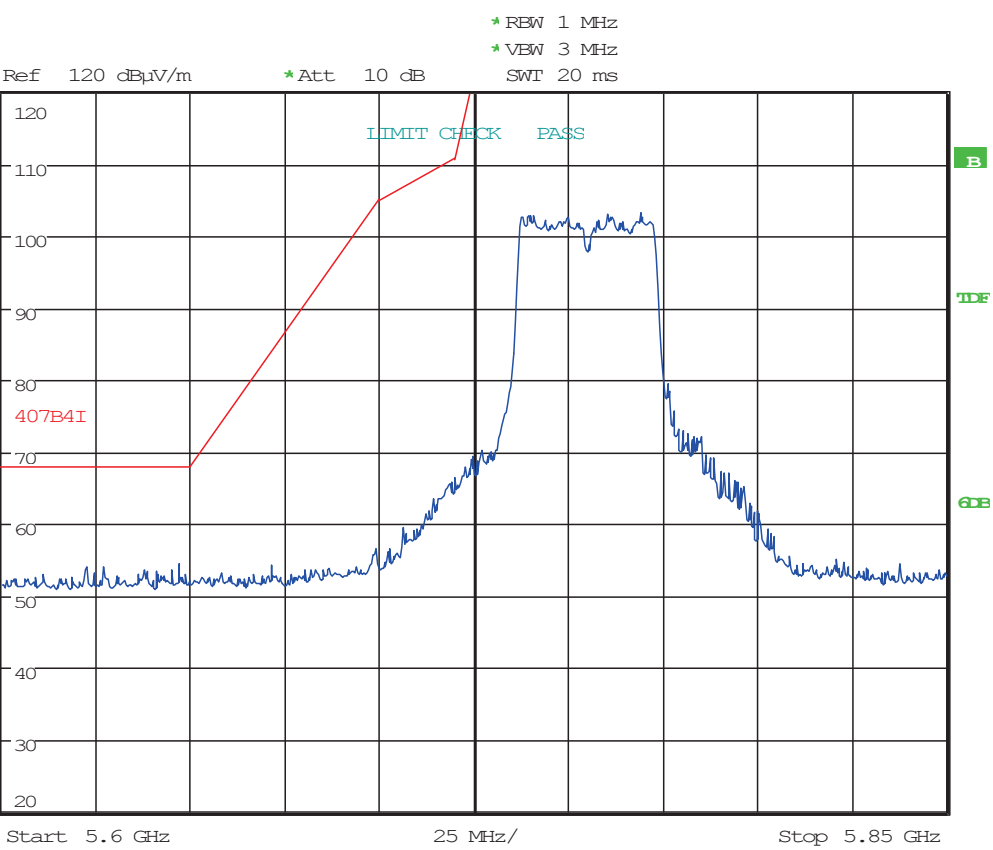
26.5 GHz to 40 GHz



Band Edge



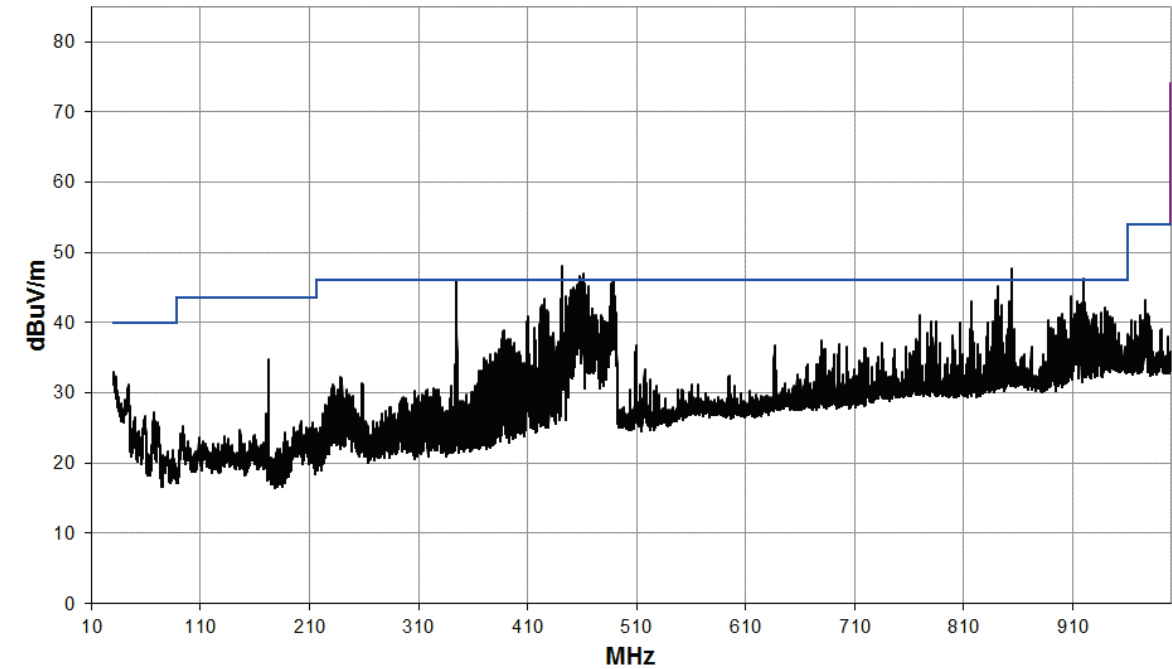
1 PK
MAX



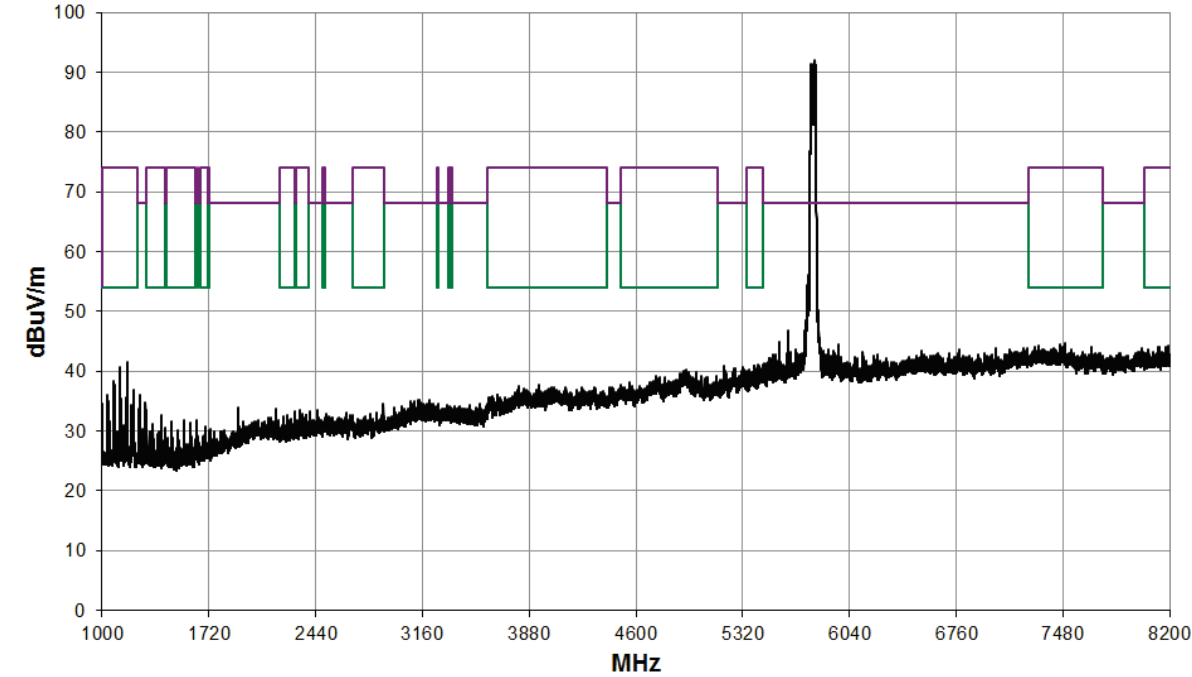
Date: 21.JUL.2020 14:54:32

MIMO; Mode: 802.11ac40; Channel: CH159; Frequency: 5795 MHz; Bandwidth: 40 MHz; MCS Index: 0										
Detector	Freq. (MHz)	Meas'd Emission (dBμV)	Cable Loss (dB)	Antenna Factor (dB/m)	Pre-amp Gain (dB)	Duty Cycle Corr'n (dB)	Field Strength (dBμV/m)	Distance Extrap'n Factor (dB)	Field Strength (μV/m)	Limit (μV/m)
No emissions within 20 dB of the limit.										

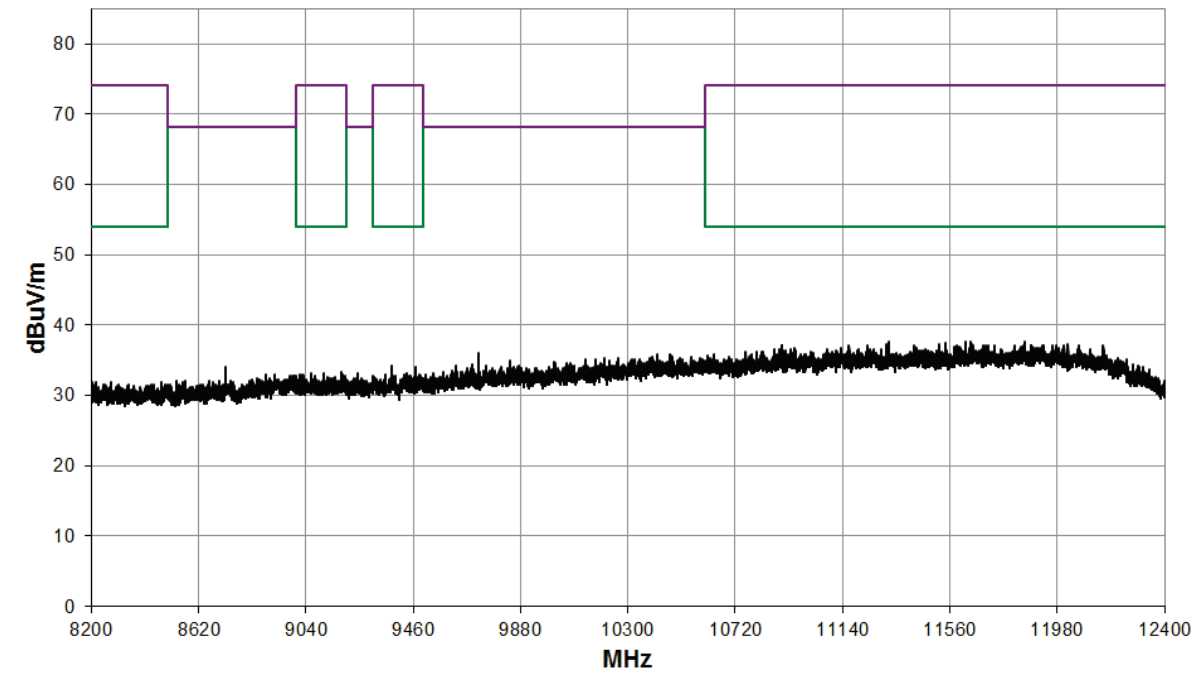
30 MHz to 1 GHz



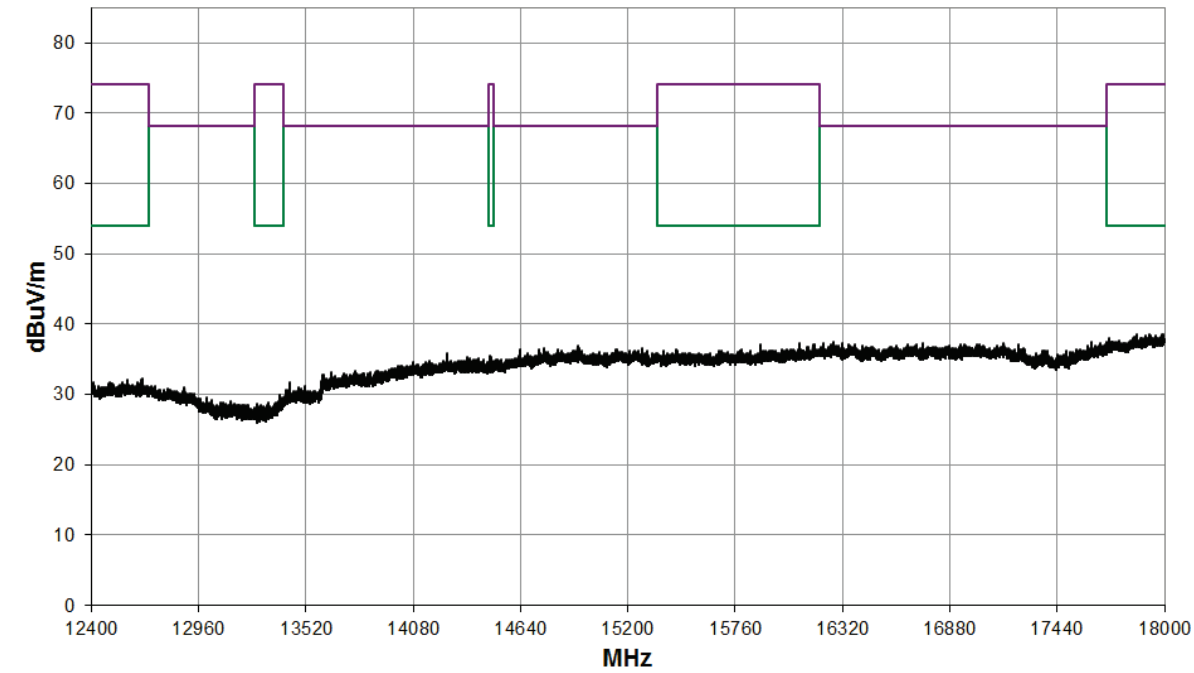
1 GHz to 8.2 GHz



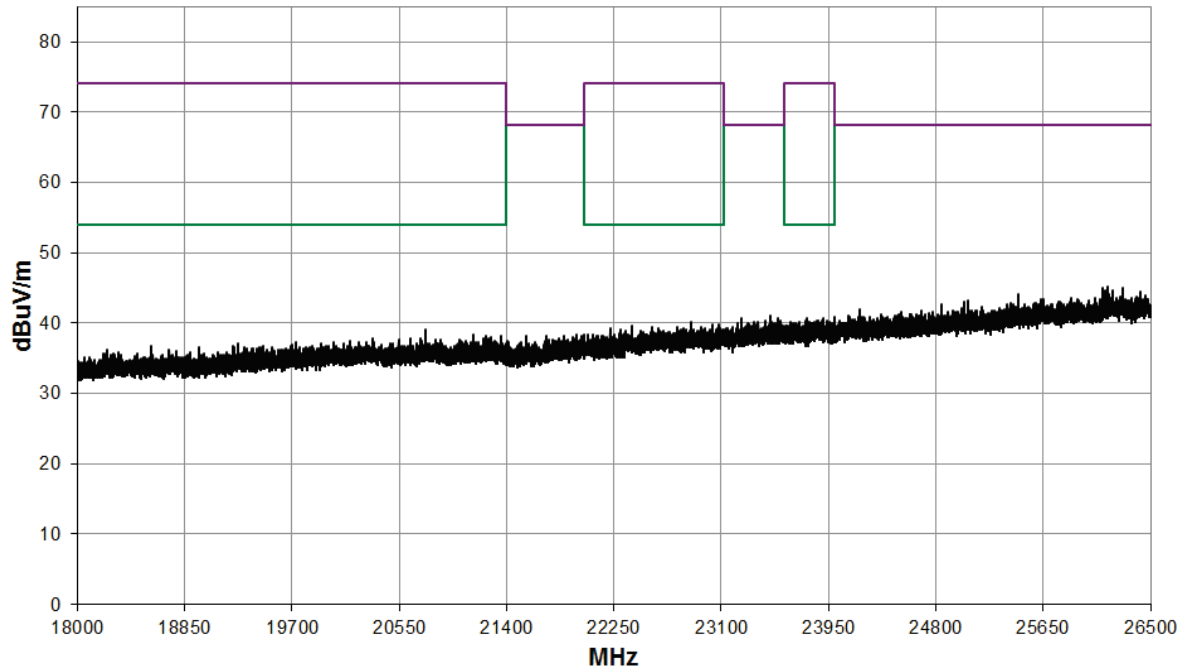
8.2 GHz to 12.4 GHz



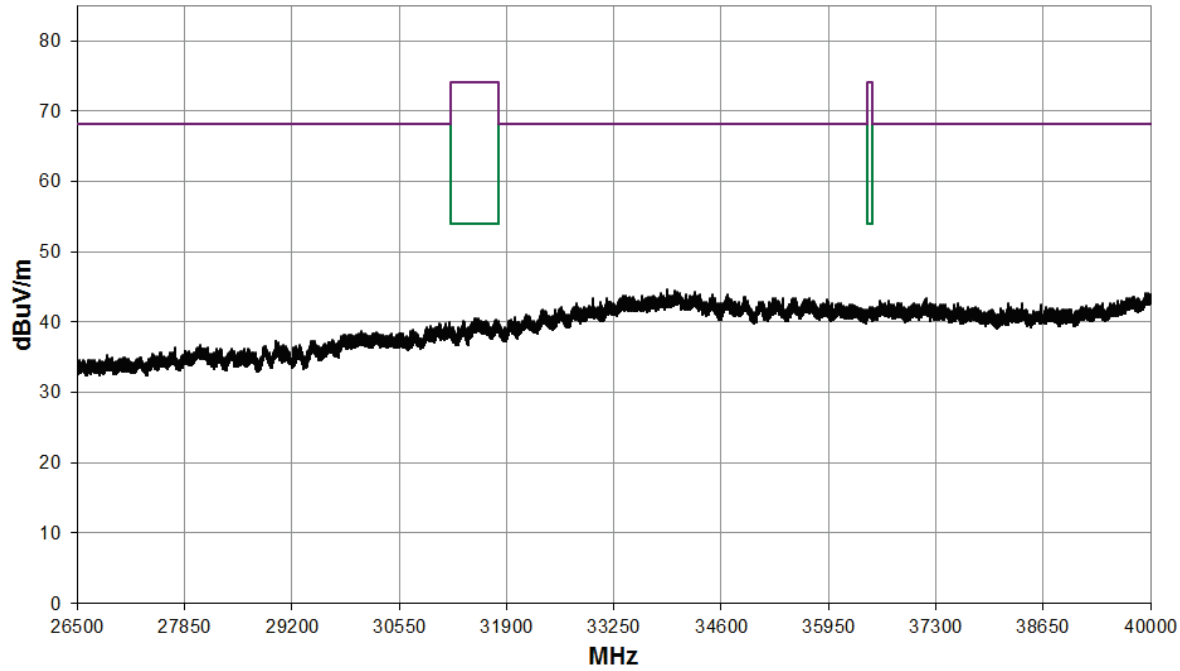
12.4 GHz to 18 GHz



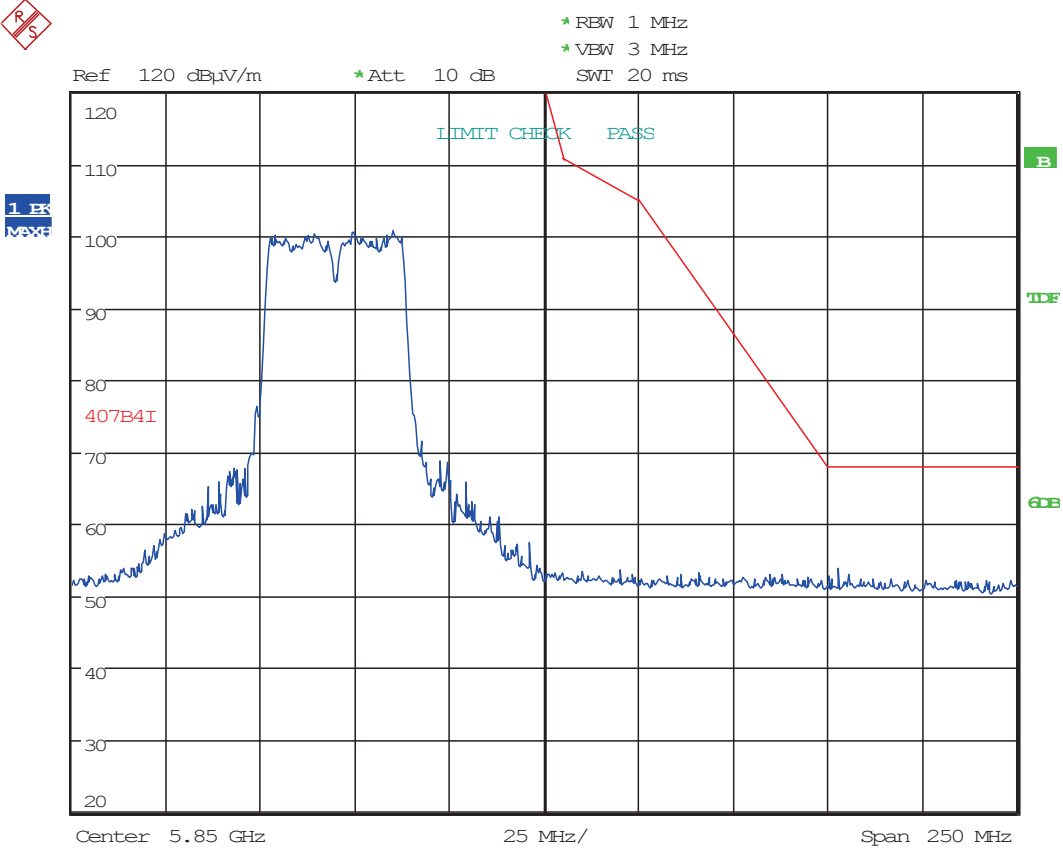
18 GHz to 26.5 GHz



26.5 GHz to 40 GHz



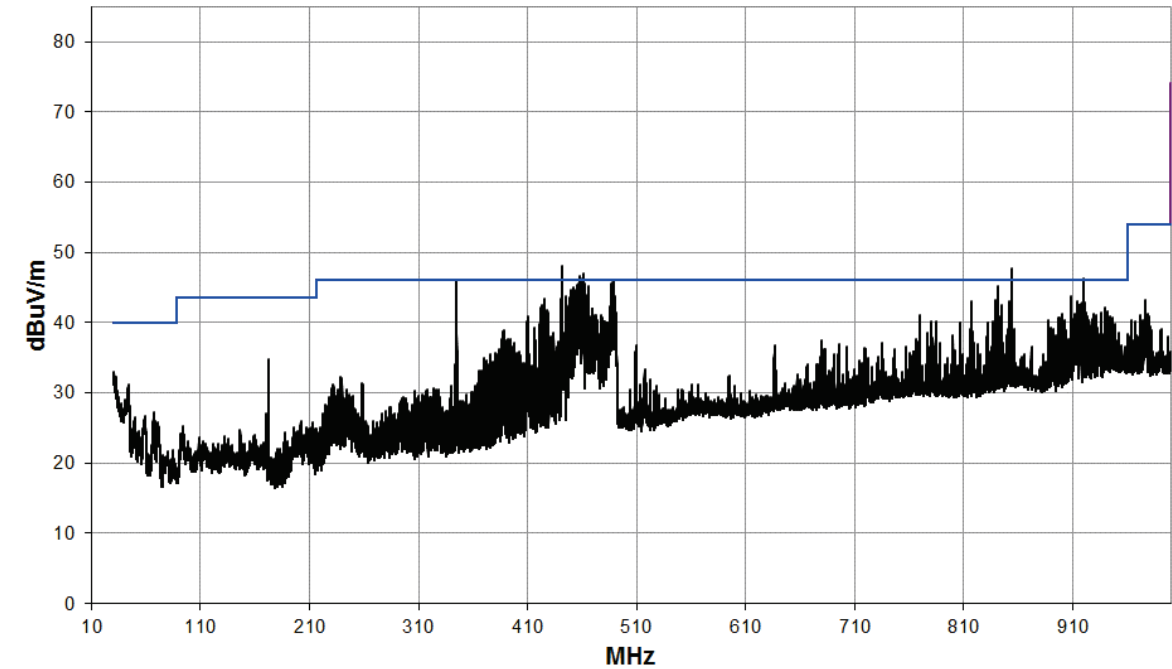
Band Edge



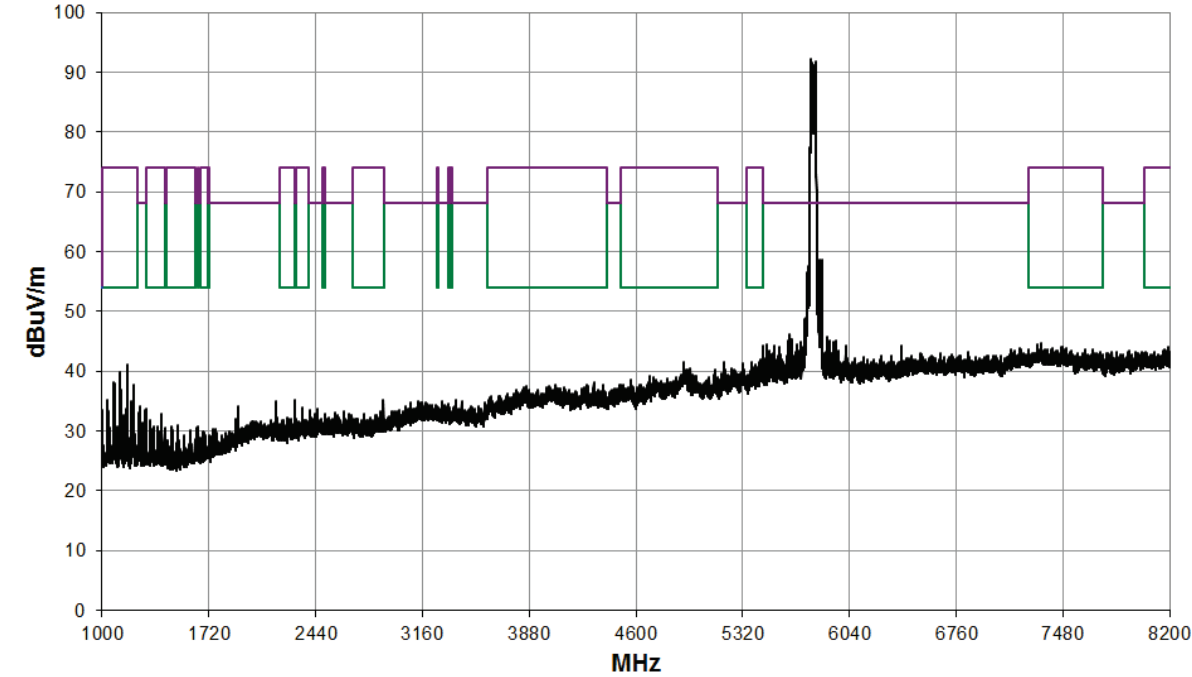
Date: 21.JUL.2020 13:21:53

MIMO; Mode: 802.11ac40; Channel: CH159; Frequency: 5795 MHz; Bandwidth: 40 MHz; MCS Index: 9										
Detector	Freq. (MHz)	Meas'd Emission (dBμV)	Cable Loss (dB)	Antenna Factor (dB/m)	Pre-amp Gain (dB)	Duty Cycle Corr'n (dB)	Field Strength (dBμV/m)	Distance Extrap'n Factor (dB)	Field Strength (μV/m)	Limit (μV/m)
No emissions within 20 dB of the limit.										

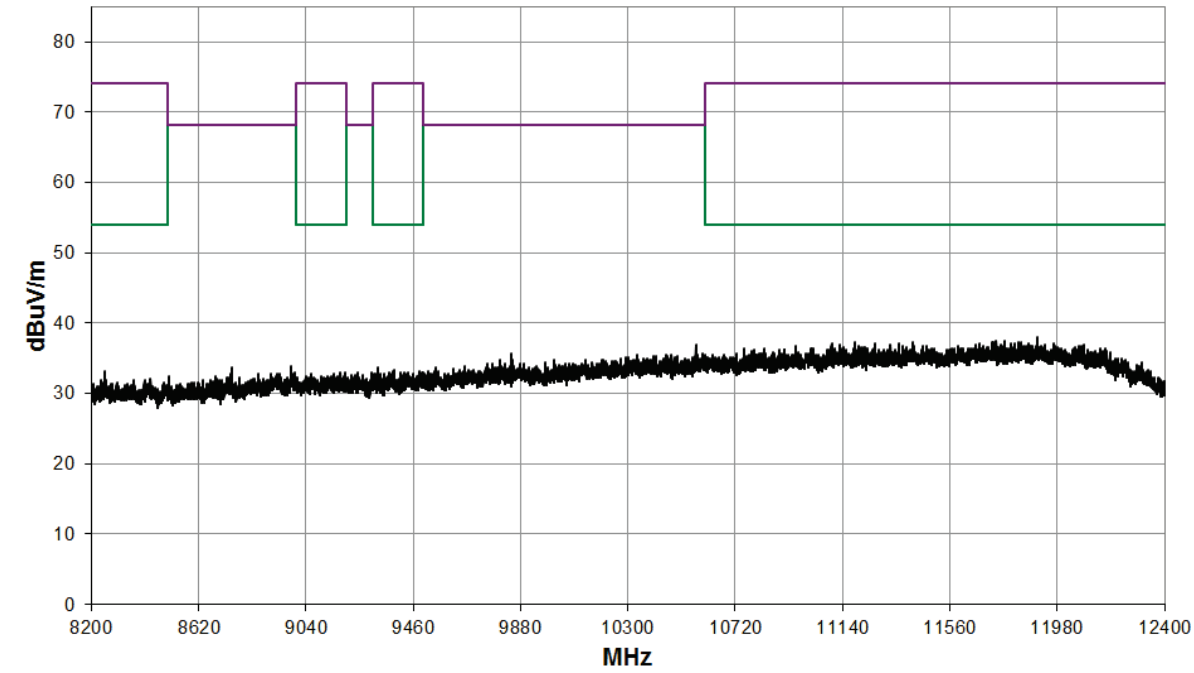
30 MHz to 1 GHz



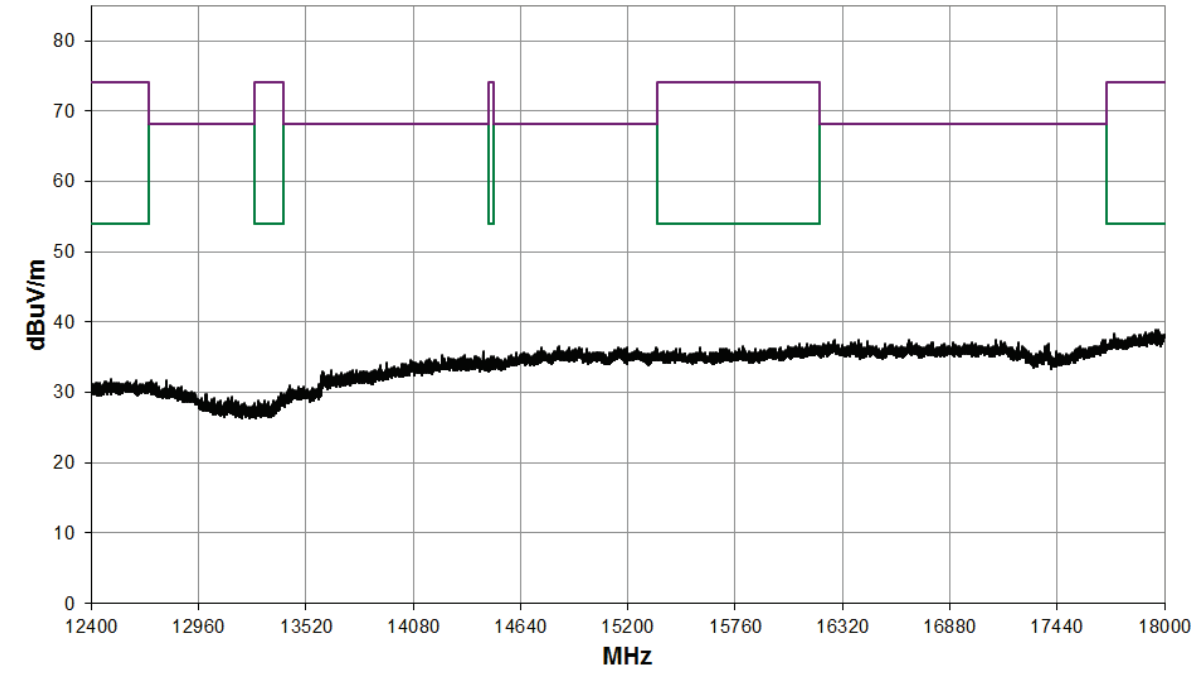
1 GHz to 8.2 GHz



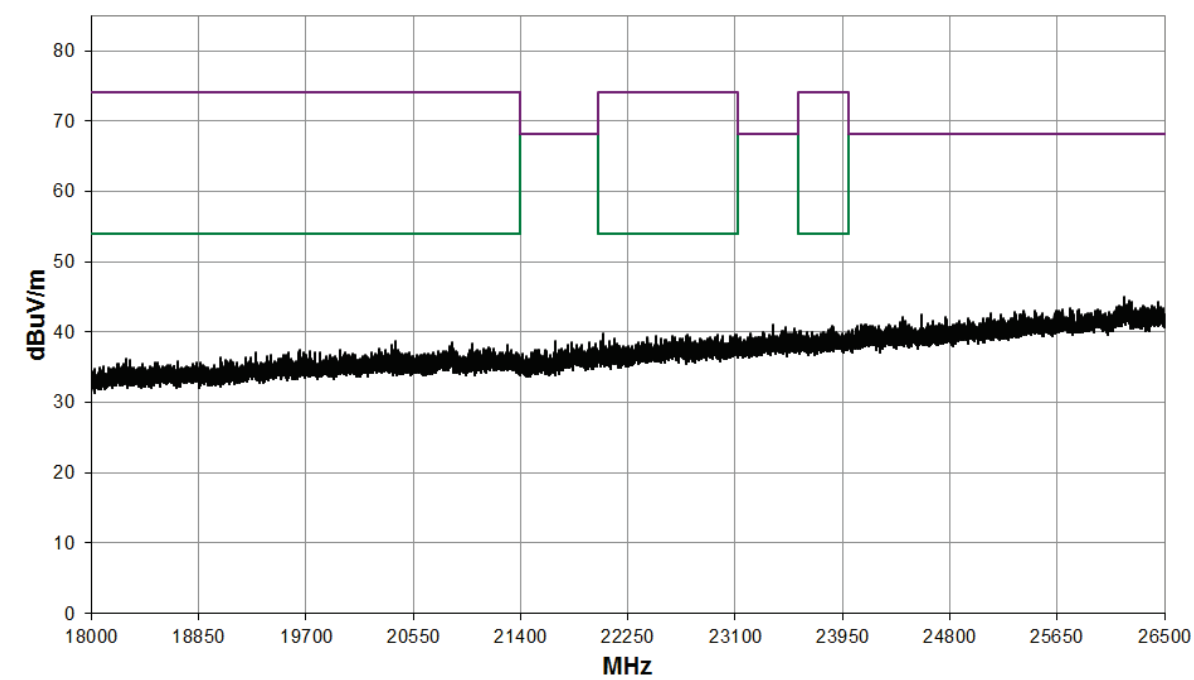
8.2 GHz to 12.4 GHz



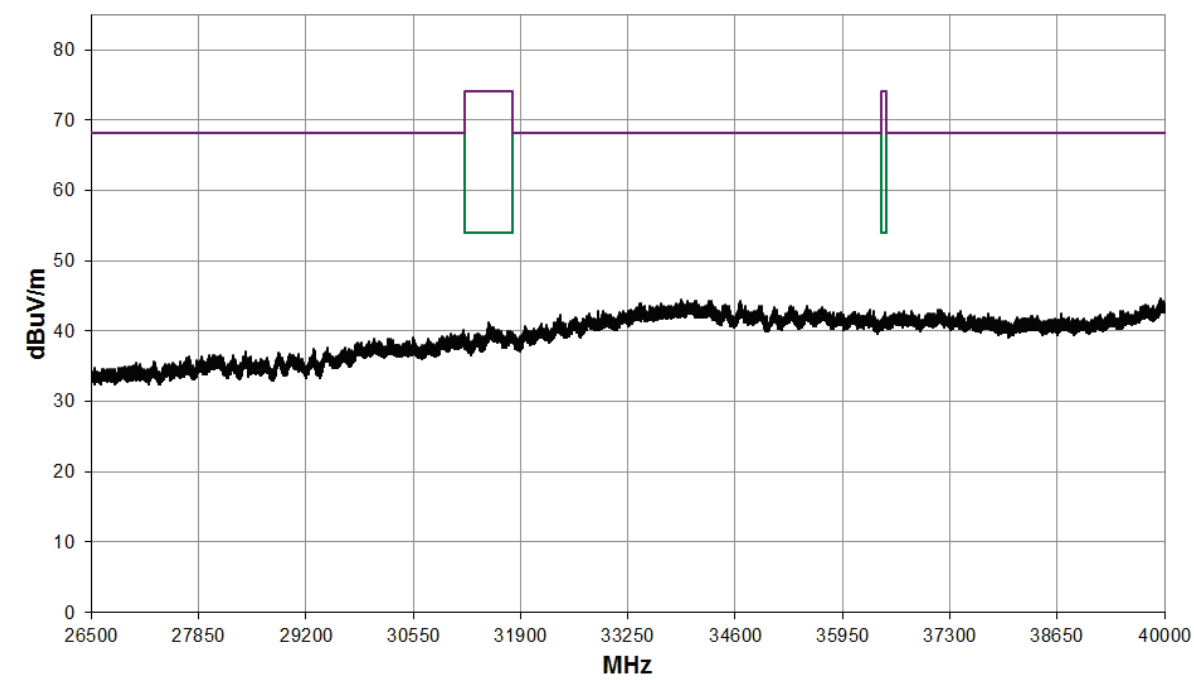
12.4 GHz to 18 GHz



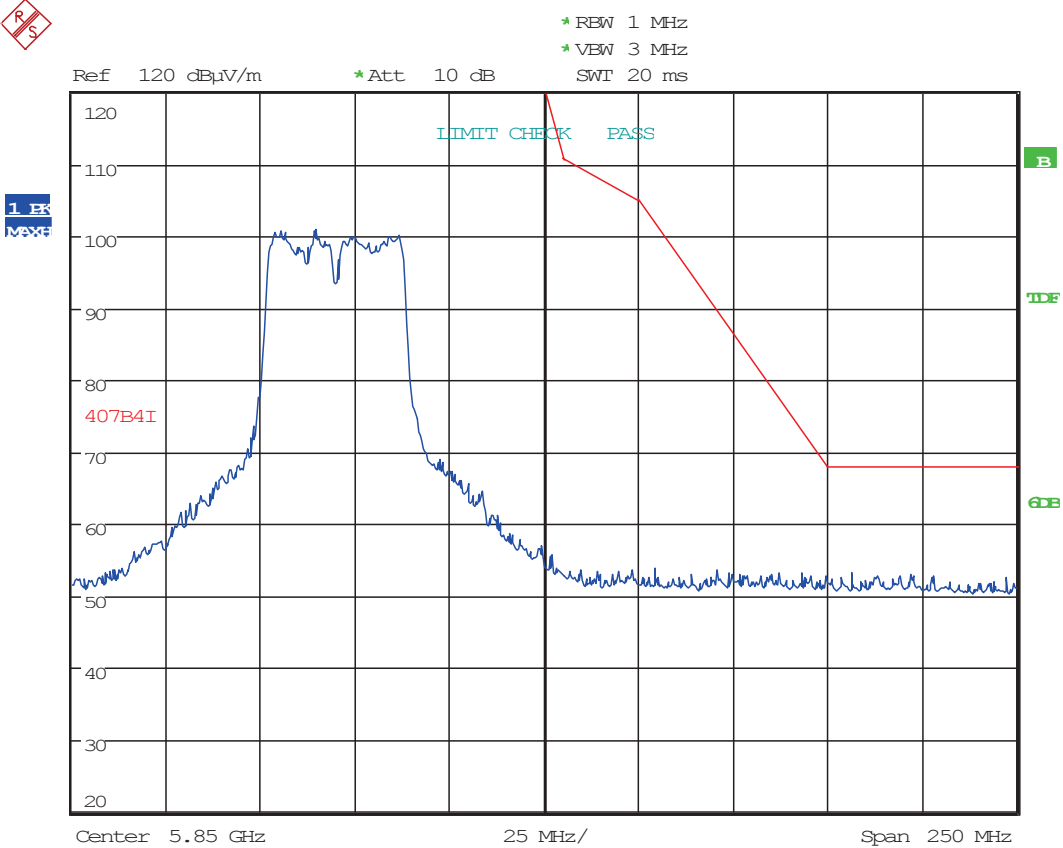
18 GHz to 26.5 GHz



26.5 GHz to 40 GHz



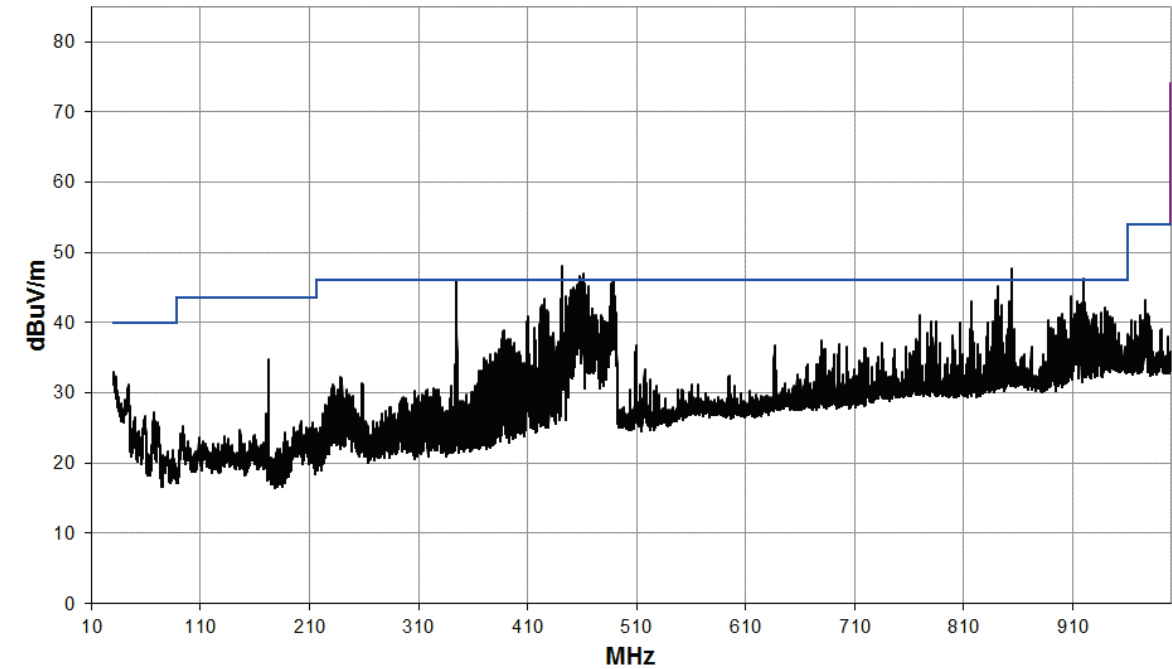
Band Edge



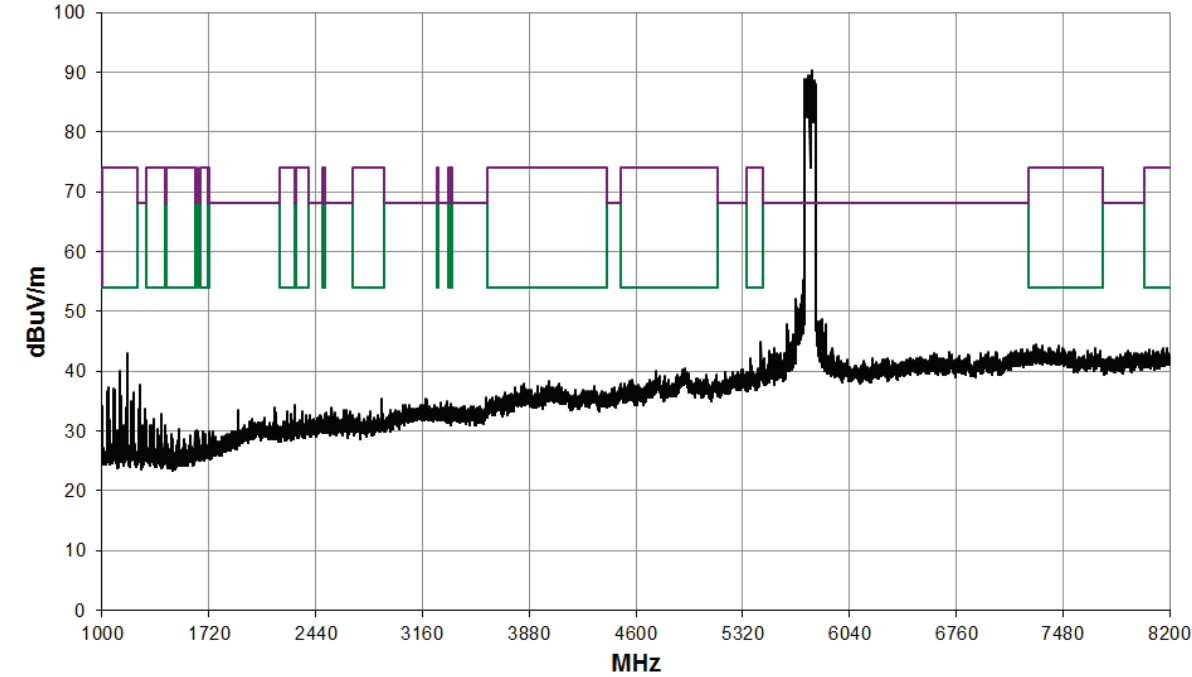
Date: 21.JUL.2020 13:22:40

MIMO; Mode: 802.11ac80; Channel: CH155; Frequency: 5775 MHz; Bandwidth: 80 MHz; MCS Index: 0										
Detector	Freq. (MHz)	Meas'd Emission (dBμV)	Cable Loss (dB)	Antenna Factor (dB/m)	Pre-amp Gain (dB)	Duty Cycle Corr'n (dB)	Field Strength (dBμV/m)	Distance Extrap'n Factor (dB)	Field Strength (μV/m)	Limit (μV/m)
No emissions within 20 dB of the limit.										

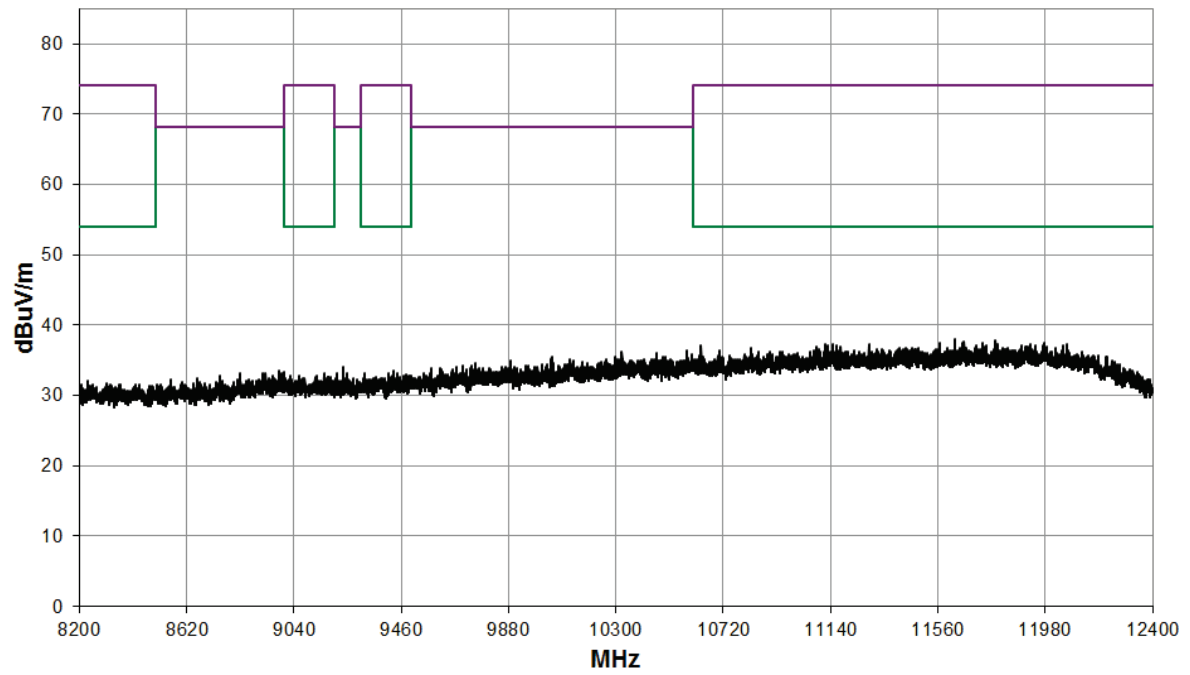
30 MHz to 1 GHz



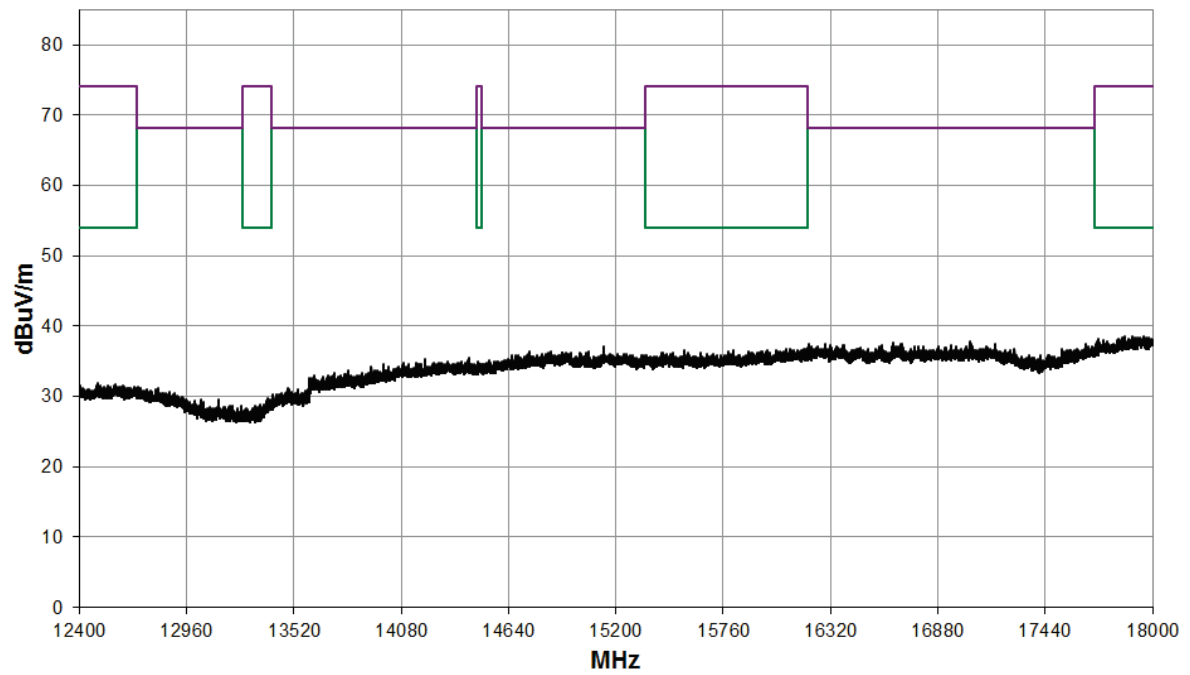
1 GHz to 8.2 GHz



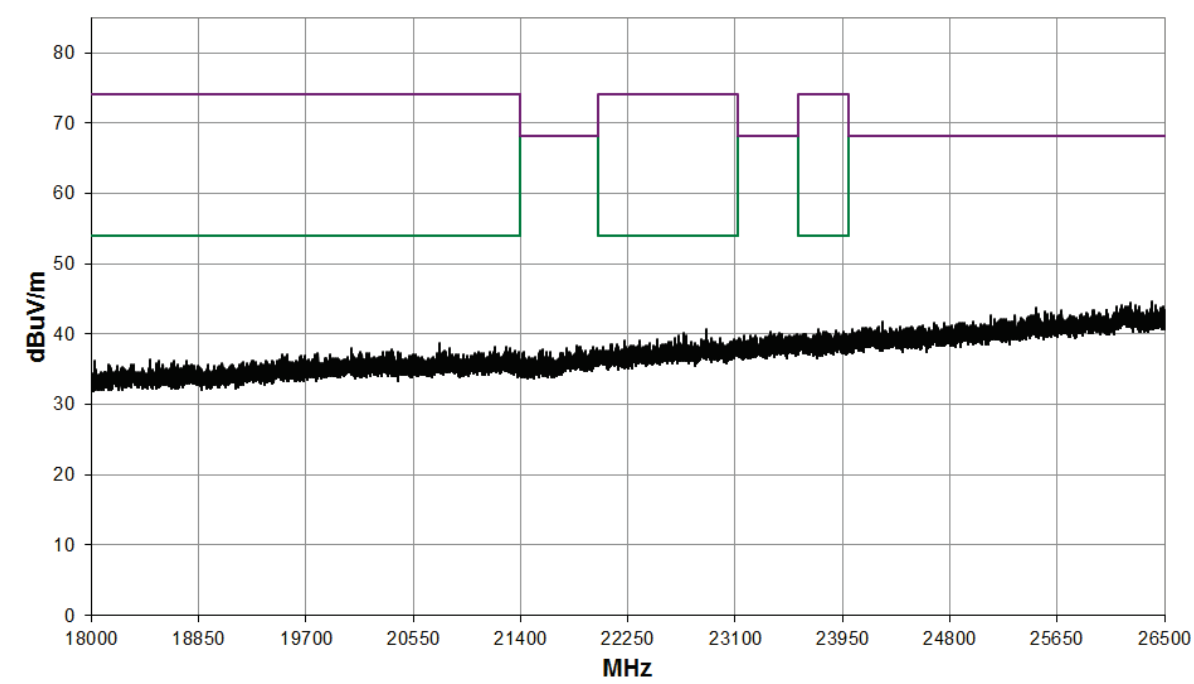
8.2 GHz to 12.4 GHz



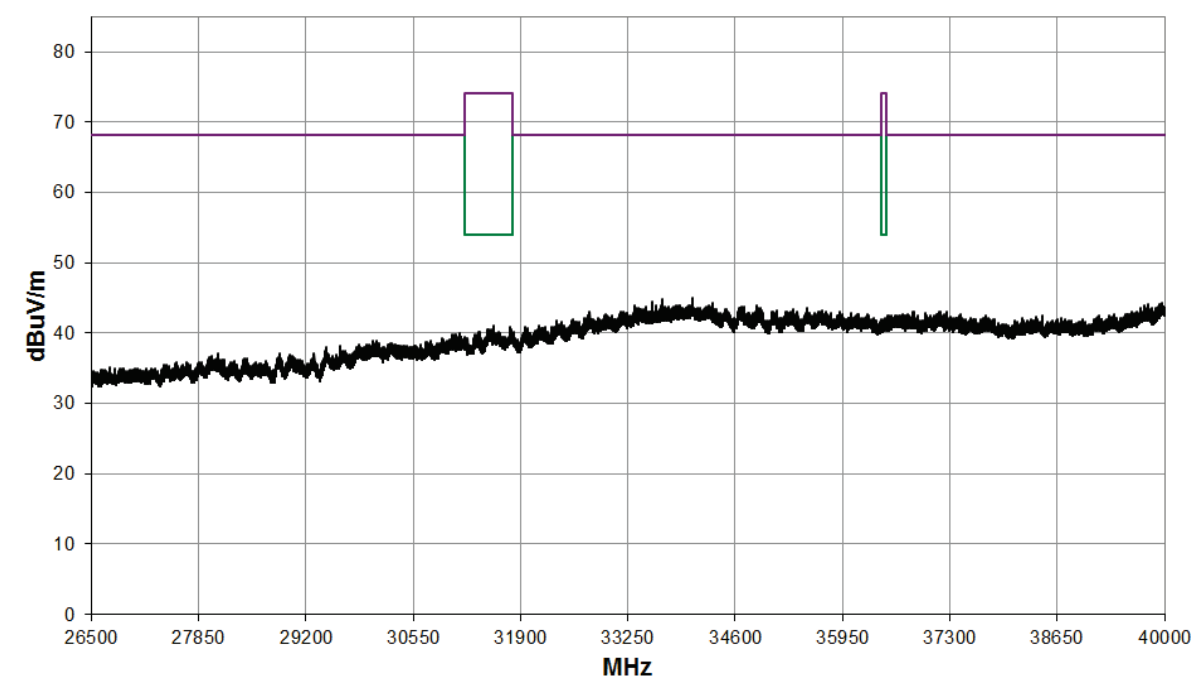
12.4 GHz to 18 GHz



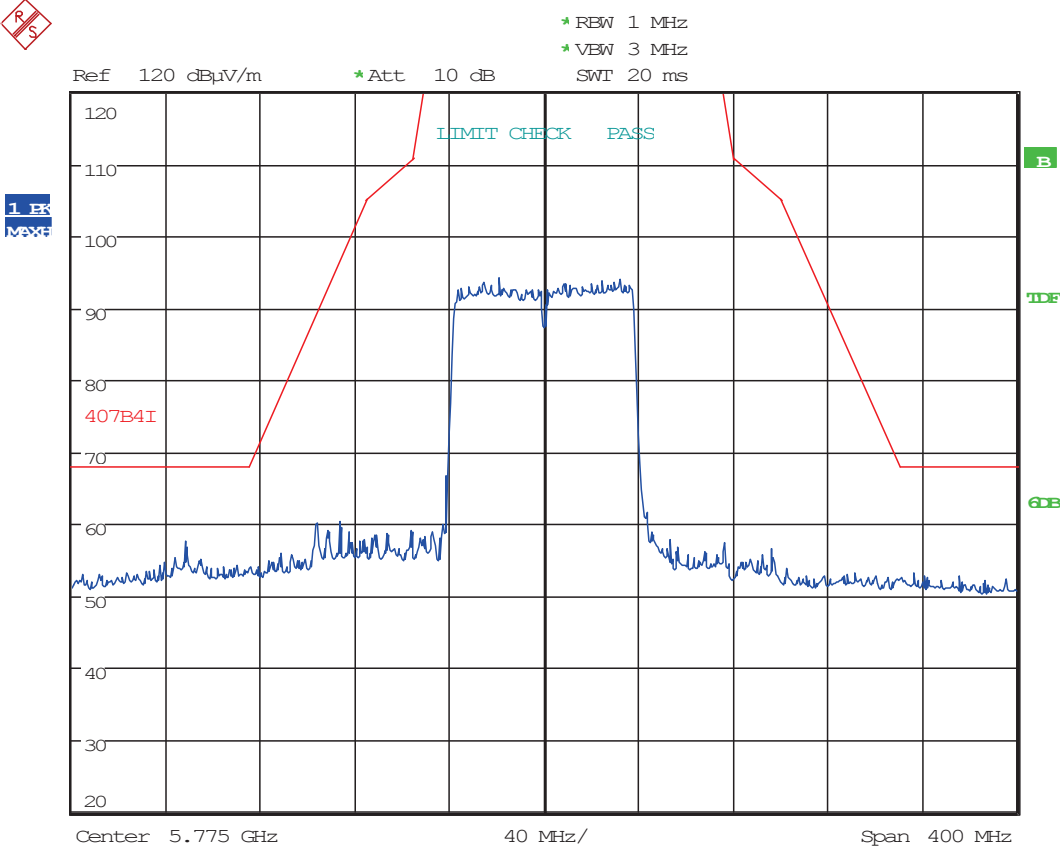
18 GHz to 26.5 GHz



26.5 GHz to 40 GHz



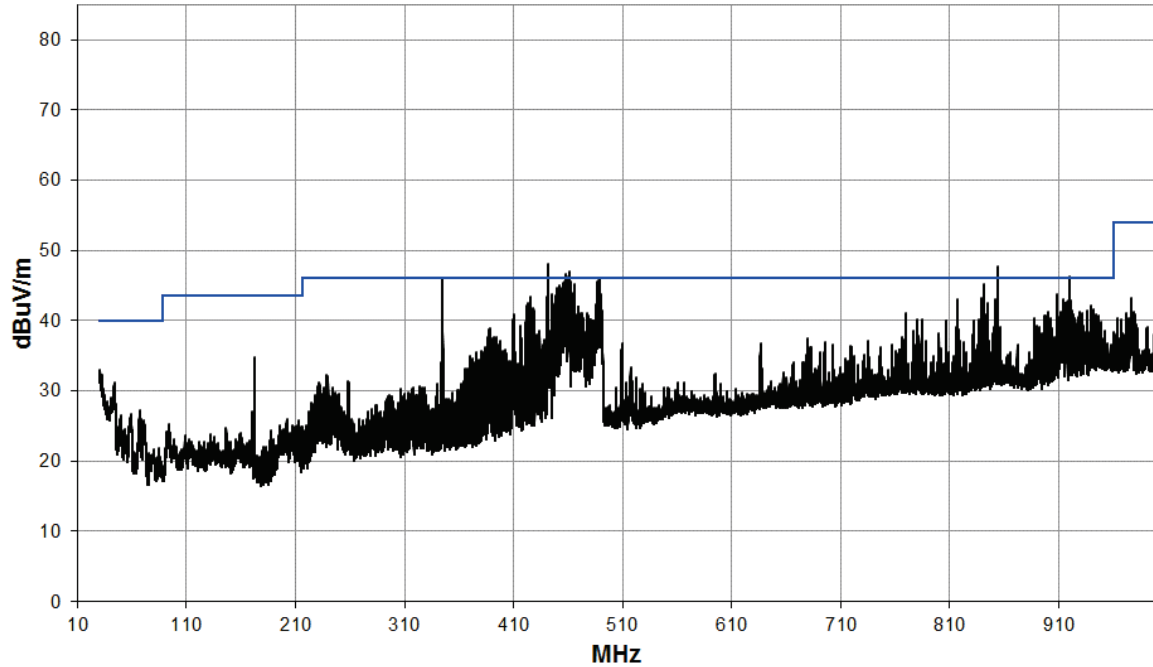
Band Edge



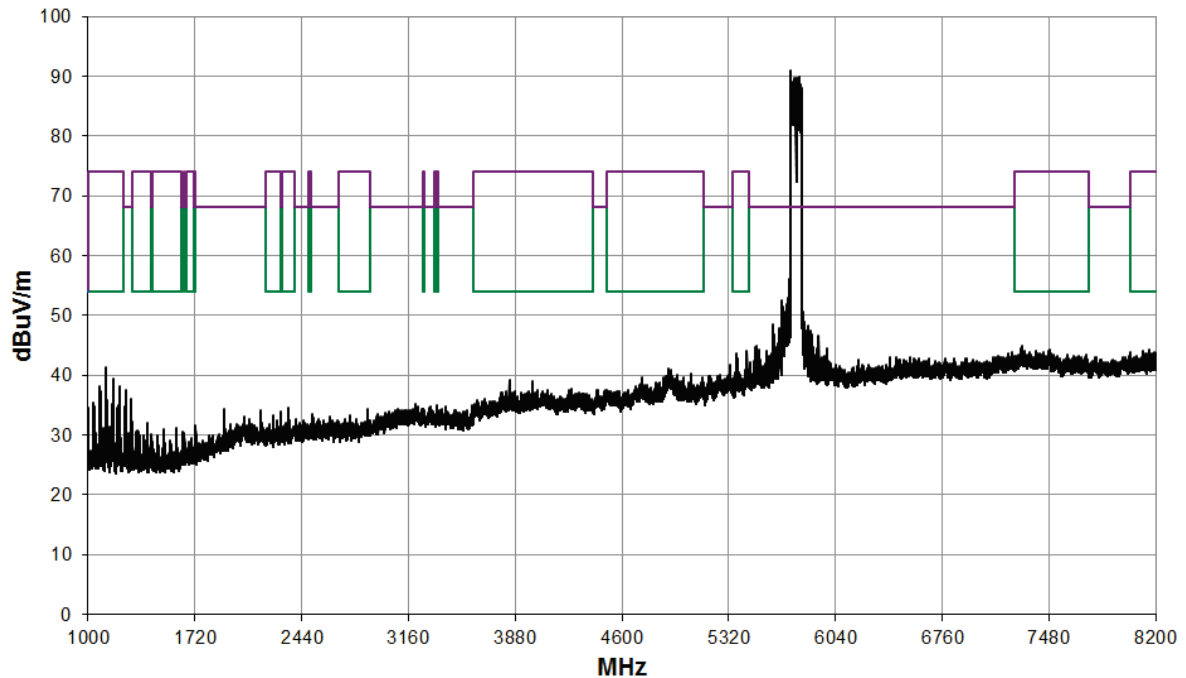
Date: 21.JUL.2020 13:15:45

MIMO; Mode: 802.11ac80; Channel: CH155; Frequency: 5775 MHz; Bandwidth: 80 MHz; MCS Index: 9										
Detector	Freq. (MHz)	Meas'd Emission (dBμV)	Cable Loss (dB)	Antenna Factor (dB/m)	Pre-amp Gain (dB)	Duty Cycle Corr'n (dB)	Field Strength (dBμV/m)	Distance Extrap'n Factor (dB)	Field Strength (μV/m)	Limit (μV/m)
No emissions within 20 dB of the limit.										

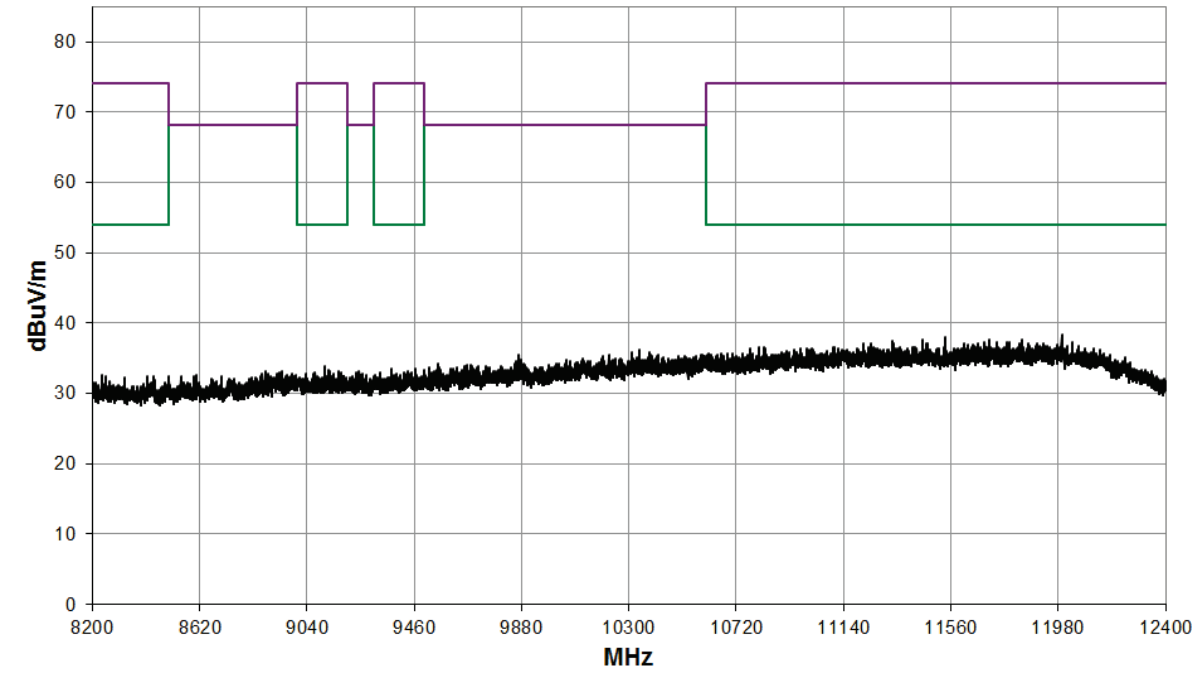
30 MHz to 1 GHz



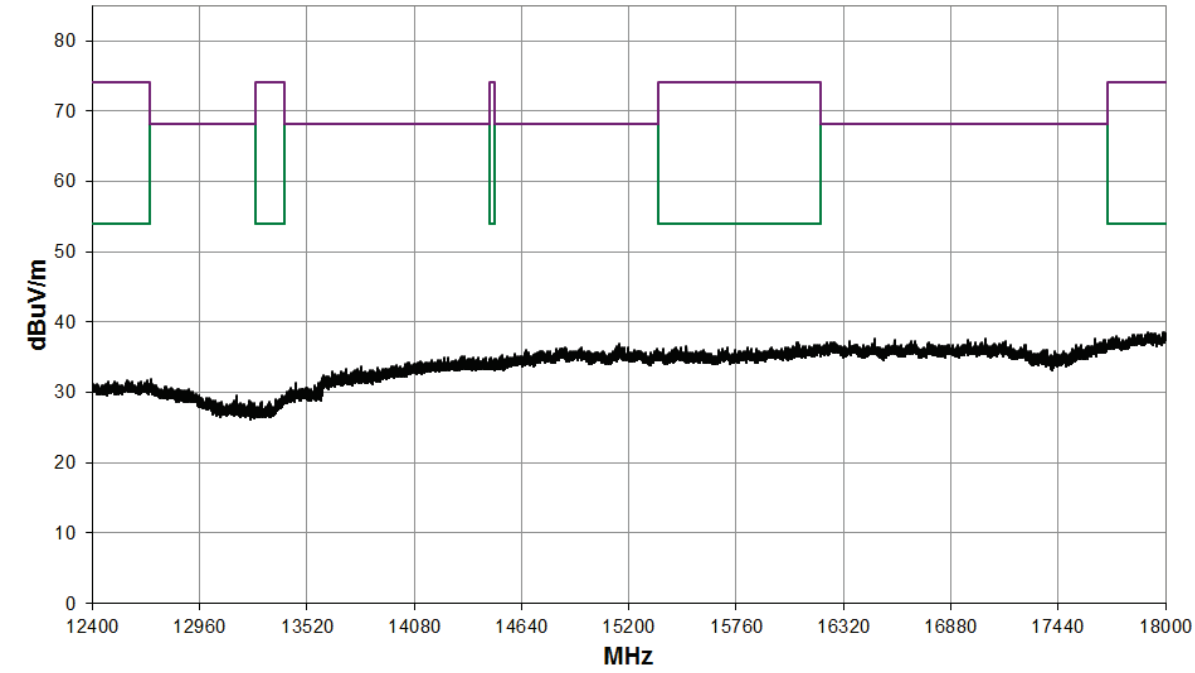
1 GHz to 8.2 GHz



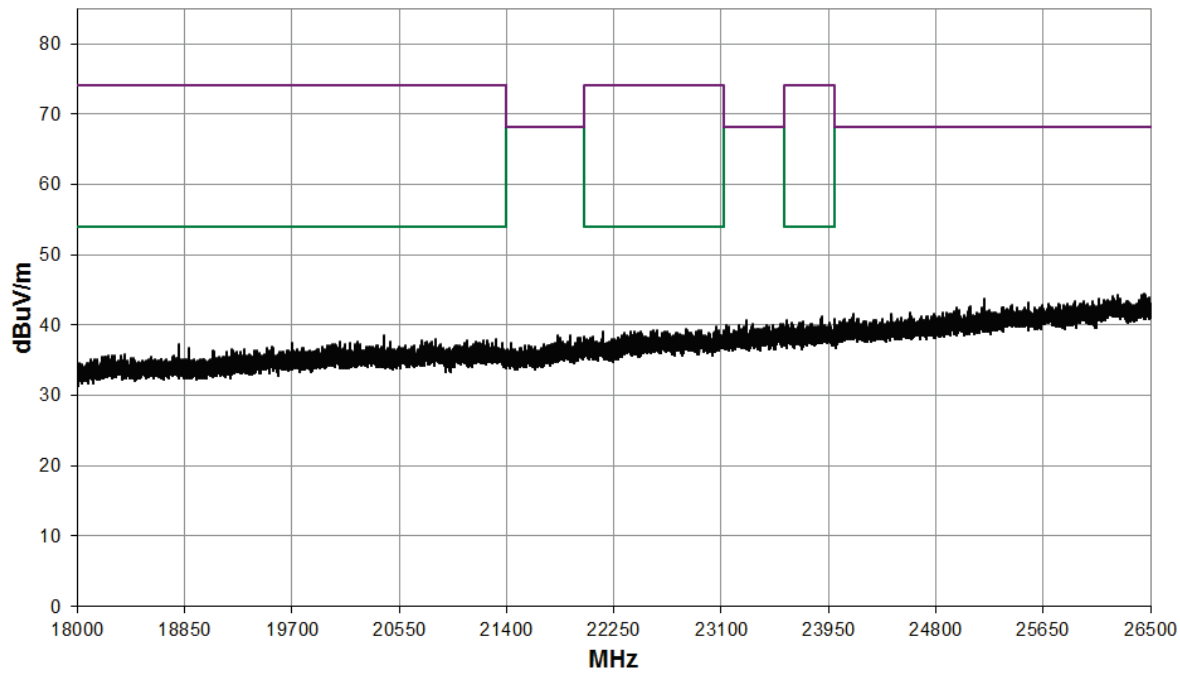
8.2 GHz to 12.4 GHz



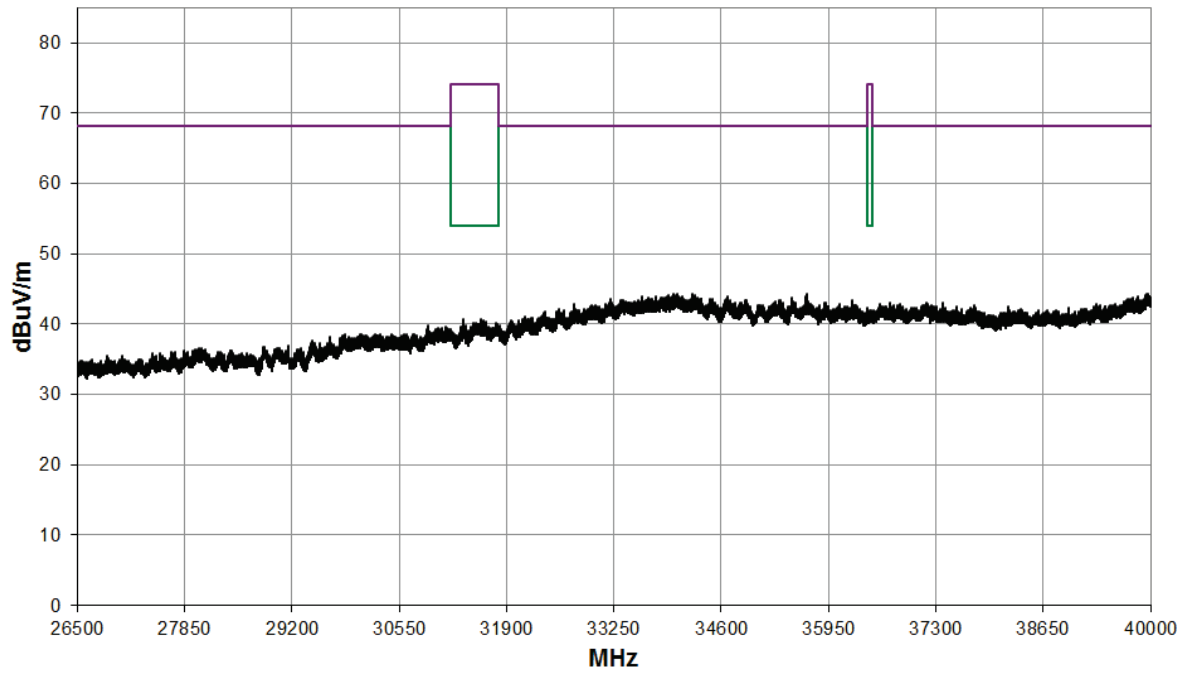
12.4 GHz to 18 GHz



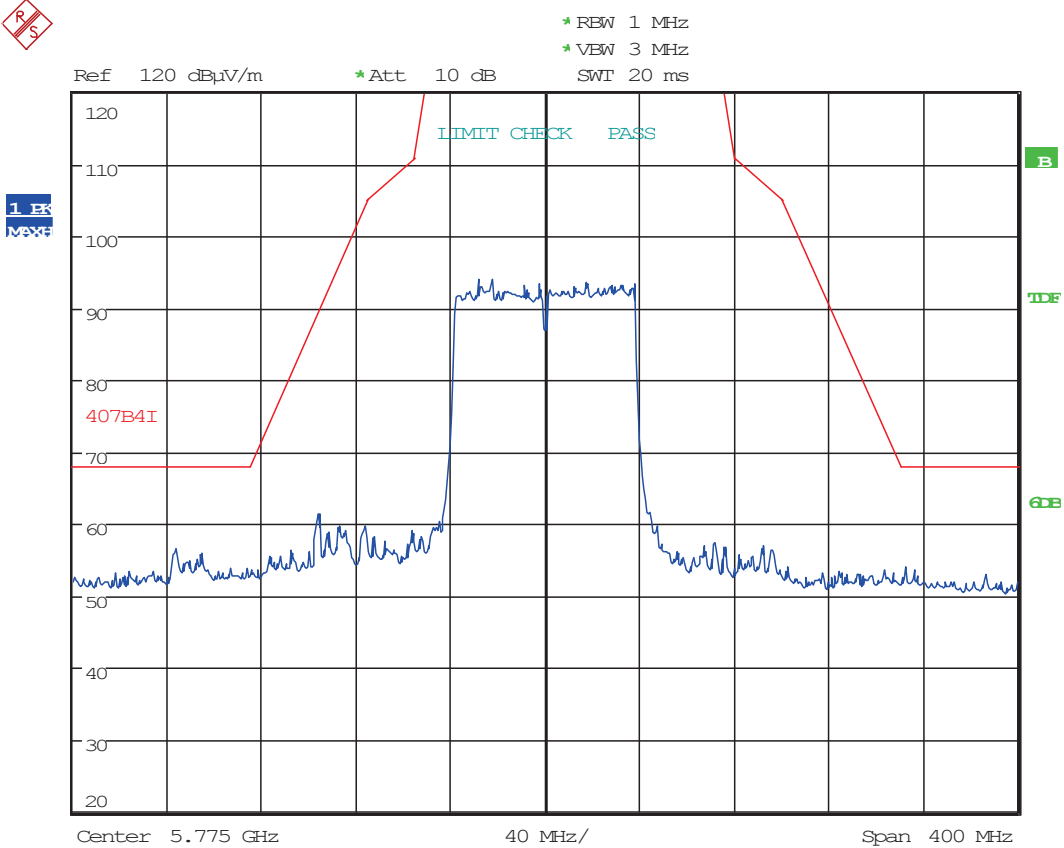
18 GHz to 26.5 GHz



26.5 GHz to 40 GHz



Band Edge



Date: 21.JUL.2020 13:19:02

Emissions common in all modes

Detector	Freq. (MHz)	Meas'd Emission (dBμV)	Cable Loss (dB)	Antenna Factor (dB/m)	Pre-amp Gain (dB)	Duty Cycle Corr'n (dB)	Field Strength (dBμV/m)	Distance Extrap'n Factor (dB)	Field Strength (μV/m)	Limit (μV/m)
QP	30.0	0.1	0.7	24.2	0.0	0.0	25.0	0.0	17.8	100.0
QP	43.7	8.9	0.9	17.9	0.0	0.0	27.7	0.0	24.3	100.0
QP	172.3	13.9	1.7	15.4	0.0	0.0	31.0	0.0	35.5	150.0
QP	240.0	10.5	2.1	17.0	0.0	0.0	29.6	0.0	30.2	200.0
QP	344.6	17.7	2.6	20.0	0.0	0.0	40.3	0.0	103.5	200.0
QP	388.0	9.0	2.8	21.2	0.0	0.0	33.0	0.0	44.7	200.0
QP	424.0	4.4	2.9	22.4	0.0	0.0	29.7	0.0	30.5	200.0
QP	453.2	14.9	3.0	23.0	0.0	0.0	40.9	0.0	110.9	200.0
QP	501.1	3.8	3.2	23.7	0.0	0.0	30.7	0.0	34.3	200.0
QP	636.4	1.5	3.6	26.4	0.0	0.0	31.5	0.0	37.6	200.0
QP	899.8	1.1	4.2	28.8	0.0	0.0	34.1	0.0	50.7	200.0
QP	950.2	-8.0	4.3	30.6	0.0	0.0	26.9	0.0	22.1	200.0