

# FCC PART 15.247

## TEST REPORT

For

**Beijing InHand Networks Technology Co., Ltd.**

Room 501, floor 5, building 3, yard 18, ziyue road, chaoyang district, Beijing

**Tested Model: IG902**  
**FCC ID: 2AANYIG9**

<b>Report Type:</b> Class II Permissive Change		<b>Product Name:</b> Edge computing gateway	
<b>Report Number:</b>		RSC201123001-0B	
<b>Date of Report Issue:</b>		2020-12-10	
<b>Reviewed By:</b>		Sula Huang	
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## DOCUMENT REVISION HISTORY

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Revision Number	Report Number	Description of Revision	Date of Revision
0	EC1902004RF01	Original Report	2020-01-08
1	RSC201123001-0B	CIIPC Report	2020-12-10

Note: This report was the CIIPC report, which was identical to the previously certified except for the changes as below for details.

- 1) Removing the LTE Module and Disable GPS function
- 2) Removing the SIM card slot

Base on above changes, AC Power Line conducted Emissions and Radiated Emissions were done and MPE was updated, other data was referred to the report number: EC1902004RF01.

## GENERAL INFORMATION

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

Applicant	Beijing InHand Networks Technology Co., Ltd.
Product	Edge computing gateway
Tested Model	IG902
Multiple Models	IG912, IG952, IG962, IG992, IG903, IG913, IG953, IG963, IG993, IG904, IG914, IG954, IG964, IG994, IG905, IG915, IG955, IG965, IG995, IG906, IG916, IG956, IG966, IG996
FCC ID	2AANYIG9
Radio Mode*	Wi-Fi
Frequency*	2412-2462MHz (802.11b/g/n20) 2422-2452MHz (802.11n40)
Modulation Type*	802.11b: DSSS 802.11g/n20/n40: OFDM
Voltage Range	DC 12-48V(Typical:12V) from adapter
Measure approximately	135 mm (L) x 120 mm (W) x 45 mm (H)
Sample serial number	201123001 /01 (assigned by the BACL, Chengdu)
Sample/EUT Status	The test sample was in good condition and received: 2020-11-23

Note: Unless otherwise stated the results shown in this test report refer only to the sample(s) tested.

### Objective

This report is prepared on behalf of **Beijing InHand Networks Technology Co., Ltd.** in accordance with Part 2, Subpart J, Part 15, Subparts A and C of the Federal Communications Commission's rules.

The tests were performed in order to determine the compliance of the EUT with FCC Part 15-Subpart C, section 15.203, 15.205, 15.207, 15.209 and 15.247 rules.

### Related Submittal(s)/Grant(s)

FCC Part 15E NII submissions with FCC ID: 2AANYIG9

## Measurement Uncertainty

Item			Uncertainty
AC power line conducted emission			2.48 dB
Radiated Emission(Field Strength)	30MHz-200MHz	H	4.31 dB
		V	4.57 dB
	200MHz-1GHz	H	4.68 dB
		V	5.78 dB
	1GHz-6GHz		4.56 dB
	6GHz-18GHz		4.57 dB
	18GHz-40GHz		5.44 dB

Note: The extended uncertainty given in this report is obtained by combining the standard uncertainty times the corresponding inclusion factor K when the inclusion probability is about 95%.

## Test Methodology

All measurements contained in this report were conducted with:

1. ANSI C63.10-2013 American National Standard of Procedures for Compliance Testing of Unlicensed Wireless Devices.
2. KDB558074 D01 DTS Meas Guidance v05r02.

## Test Facility

The test site used by Bay Area Compliance Laboratories Corp. (Chengdu) to collect test data is located No.5040, Huilongwan Plaza, No. 1, Shawan Road, Jinniu District, Chengdu, Sichuan, China.

Bay Area Compliance Laboratories Corp. (Chengdu) lab is accredited to ISO/IEC 17025 by A2LA (Lab code: 4324.01) and the FCC designation No. CN1186 under the FCC KDB 974614 D01. The facility also complies with the radiated and AC line conducted test site criteria set forth in ANSI C63.4-2014.

## SYSTEM TEST CONFIGURATION

### Description of Test Configuration\*

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

For 2.4G Wi-Fi mode, 11 channels are provided to testing:

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

802.11b/g/n20 were tested with channel 1, 6 and 11.

802.11n40 was tested with channel 3, 6 and 9.

### EUT Exercise Software\*

The worst condition (maximum power with maximum duty cycle) was setting by the software as following table:

Test Mode	Test Software Version	RF test tool		
802.11b	Test Frequency	2412MHz	2437MHz	2462MHz
	Data Rate	1Mbps	1Mbps	1Mbps
	Power Level	14	14	14
802.11g	Test Frequency	2412MHz	2437MHz	2462MHz
	Data Rate	6Mbps	6Mbps	6Mbps
	Power Level	14	14	14
802.11n-HT20	Test Frequency	2412MHz	2437MHz	2462MHz
	Data Rate	MCS0	MCS0	MCS0
	Power Level	14	14	14
802.11n-HT40	Test Frequency	2422MHz	2437MHz	2452MHz
	Data Rate	MCS0	MCS0	MCS0
	Power Level	14	14	14

## Special Accessories

No special accessories were supplied by BACL.

## Equipment Modifications

No modification was made to the EUT.

## Support Equipment List and Details

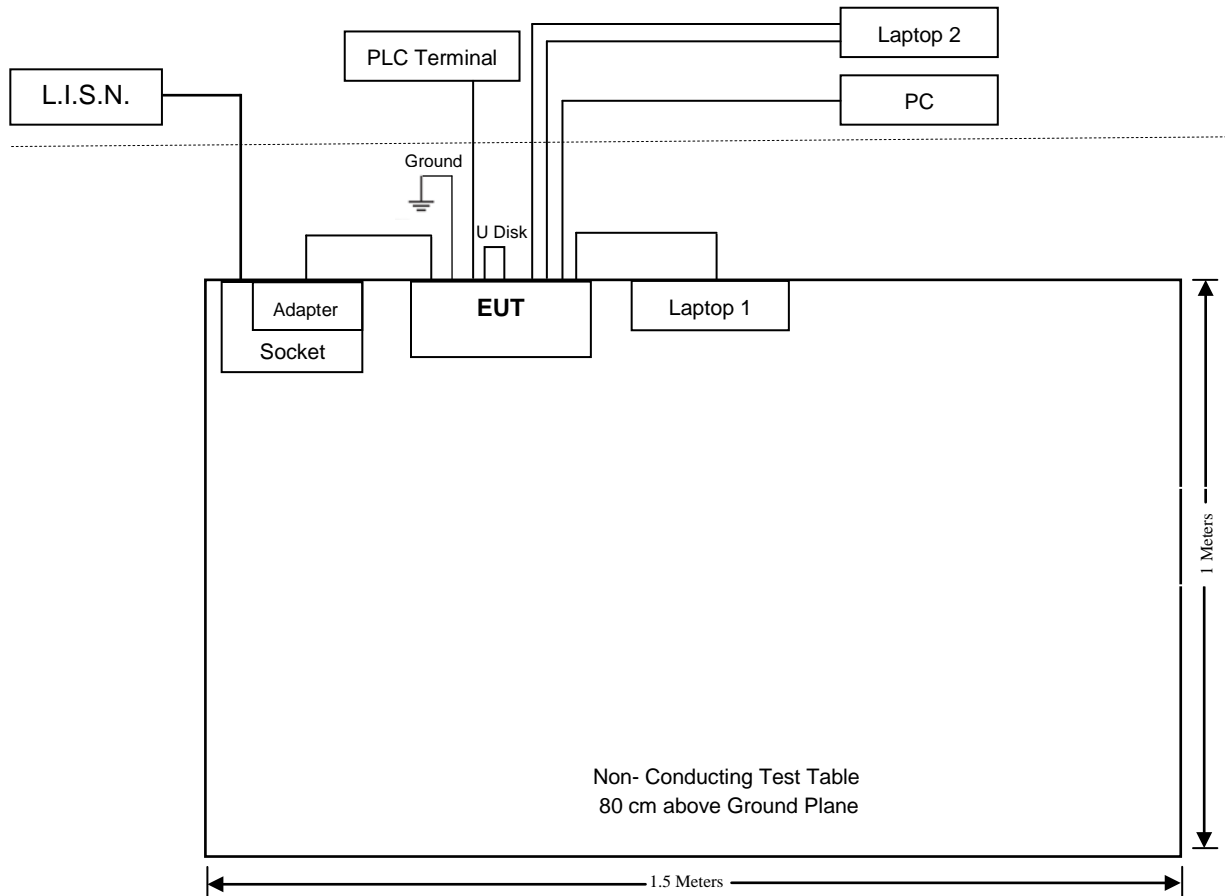
Manufacturer	Description	Model	Serial Number
DELL	Laptop 1	Latitude E5430	BTXWLX1
DELL	Laptop 2	E6410	353854366585
IBM	PC	8176	99Y7315
SHENZHEN FRECOM ELECTRONICS CO.,LTD.	Adapter	F24W5-120200SPAU	01460146600R
Kingston	U Disk	16G	Unknown
Kingston	Micro SD card	16G	Unknown
Unknown	PLC Terminal	Unknown	Unknown

## External I/O Cable

Cable Description	Length (m)	From	To
Unshielded DC Power Cable	1.50	Adapter	EUT
Unshielded Ethernet Cable	10.0	EUT	Laptop 1
Unshielded Ethernet Cable	10.0	EUT	Laptop 2
Unshielded RS232 Cable	10.0	EUT	Laptop 2
Unshielded RS285 Cable	10.0	EUT	PC
Unshielded Serial Cable	10.0	EUT	PLC Terminal

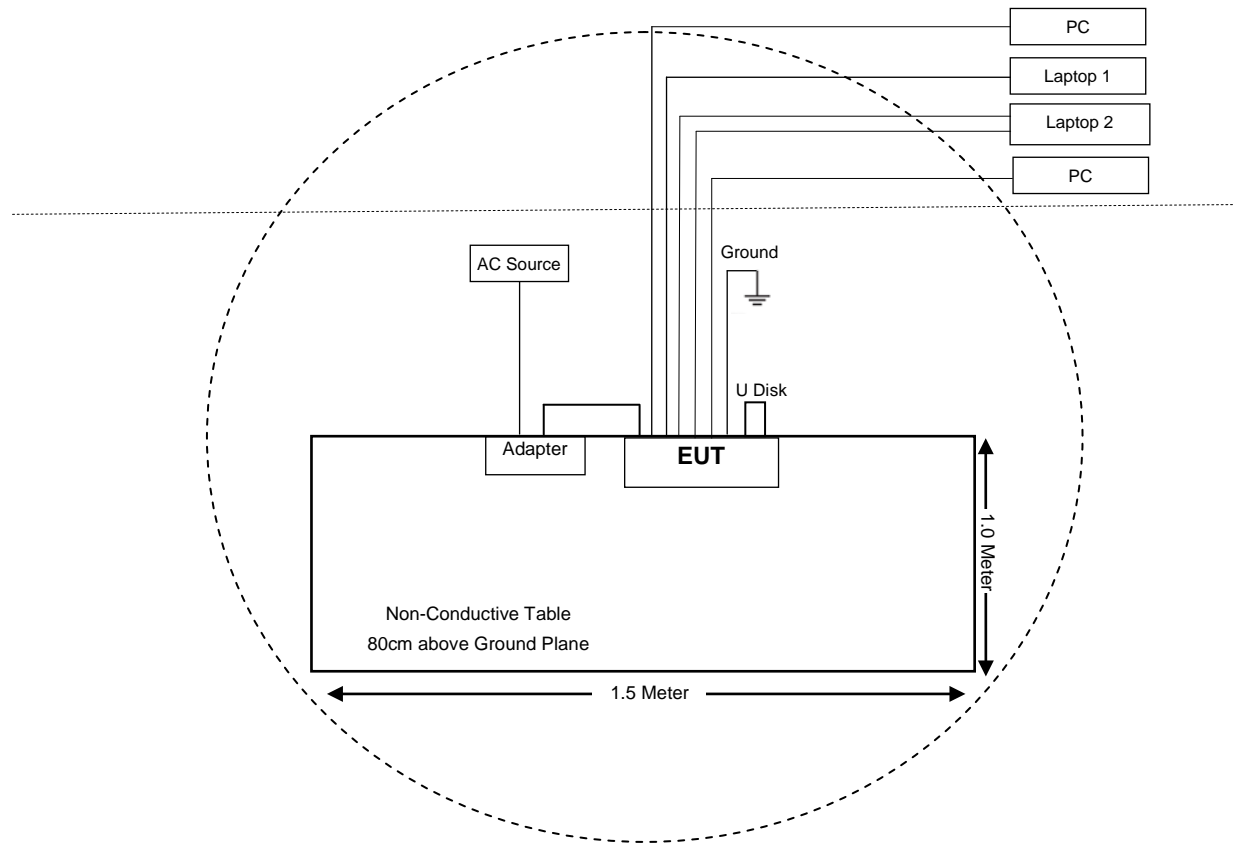
## Block Diagram of Test Setup

For Conducted Emissions:

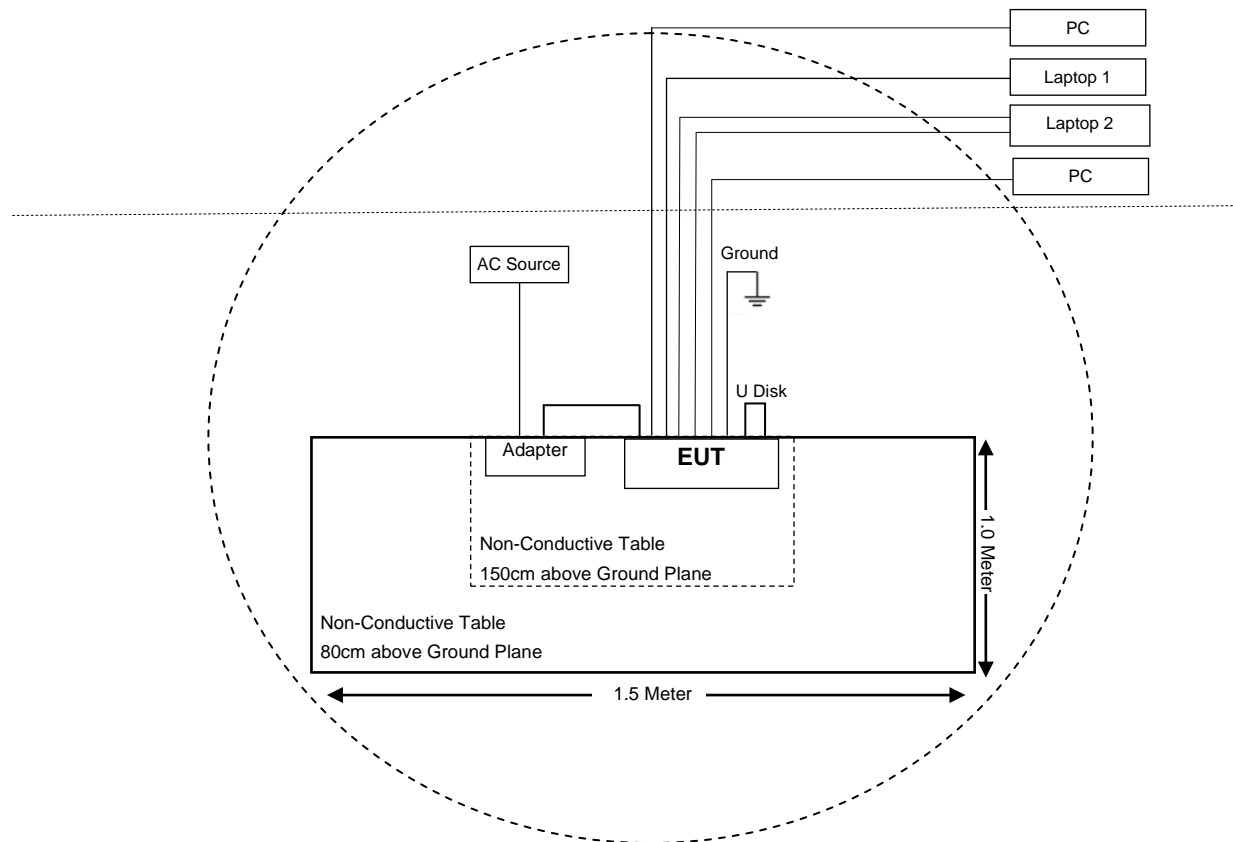




For Radiated Emissions(30MHz-1GHz):



For Radiated Emissions (Above 1GHz):



## SUMMARY OF TEST RESULTS

FCC Rules	Description of Test	Result
FCC §15.247 & §1.1310 & §2.1091	Maximum Permissible exposure (MPE)	Compliance
§15.203	Antenna Requirement	Compliance
§15.207 (a)	AC Line Conducted Emissions	Compliance
§15.205, §15.209, §15.247(d)	Spurious Emissions	Compliance
§15.247 (a)(2)	6 dB Emission Bandwidth	Compliance <sup>※</sup>
§15.247(b)(3)	Maximum conducted output power	Compliance <sup>※</sup>
§15.247(d)	100 kHz Bandwidth of Frequency Band Edge	Compliance <sup>※</sup>
§15.247(e)	Power Spectral Density	Compliance <sup>※</sup>

Note: Otherwise required by the applicant or Product Regulations, Decision Rule in this report did not consider the uncertainty.

Compliance<sup>※</sup>: This product (Model Number: IG902) has been certified, refer to the certified product, FCC ID: 2AANYIG9, Report No.: EC1902004RF01 (Issued on 2020-01-08 and released by Hunan Ecloud Testing Technology Co., Ltd.)

## TEST EQUIPMENTS LIST

Manufacturer	Description	Model	Serial Number	Calibration Date	Calibration Due Date
Conducted Emission					
Rohde & Schwarz	EMI Test Receiver	ESCI	100028	2020-04-13	2021-04-12
ROHDE&SCHWARZ	L.I.S.N.	ENV216	3560.6550.16	2020-01-13	2021-01-12
HP	RF Limiter	11947A	3107A01270	2020-08-13	2021-08-12
Unknown	Conducted Cable	L-E-003	000003	2020-08-04	2021-08-03
Rohde & Schwarz	EMC32	EMC32	V 8.52.0	NCR	NCR
Radiated Emission					
EMCT	Semi-Anechoic Chamber	966	001	2017-05-18	2022-05-17
SONOMA INSTRUMENT	Amplifier	310 N	186684	2020-08-10	2021-08-09
SUNOL SCIENCES	Broadband Antenna	JB3	A121808	2019-12-10	2022-12-09
INMET	Attenuator	18N-6dB	000186	2019-12-10	2022-12-09
Rohde & Schwarz	EMI Test Receiver	ESR3	102456	2020-04-13	2021-04-12
Unknown	RF Cable (Below 1GHz)	L-E-005	000005	2020-09-04	2021-09-03
Unknown	RF Cable (Below 1GHz)	T-E128	000128	2020-10-16	2021-10-15
MICRO-COAX	RF Cable (Below 1GHz)	T-E237	233522-001	2020-07-17	2021-07-16
Rohde & Schwarz	Spectrum Analyzer	FSU26	200835	2020-04-13	2021-04-12
EMCO	Horn Antenna	3115	2192	2019-09-25	2021-09-24
Mini-circuits	Pre-Amplifier	ZVA-183-S+	771001215	2020-09-20	2021-09-19
EM Electronics	Pre-Amplifier	EM18G40	060725	2020-07-23	2021-07-22
A.H. Systems, Inc	Horn Antenna	SAS-574	510	2019-09-02	2021-09-01
MICRO-TRONICS	2.4GHz Notch Filter	BRM50702	G396	2020-02-22	2021-02-21
SUHNER+HUBER	RF Cable (Above 1GHz)	SUCOFLEX 104PE	93533/4PE	2020-05-18	2021-05-17
IW-MICROWAVE	RF Cable (Above 1GHz)	SPS-2301	111503	2020-08-31	2021-08-30
SUHNER+HUBER	RF Cable (Above 18GHz)	T-E222	2551/2	2020-07-18	2021-07-17
FLORIDA RF LABS	RF Cable (Above 18GHz)	T-E210	1042	2020-07-18	2021-07-17
Rohde & Schwarz	EMC32	EMC32	V9.10.00	NCR	NCR

## FCC §15.247 & §1.1310 & §2.1091- MAXIMUM PERMISSIBLE EXPOSURE

### Applicable Standard

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

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

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

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

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

Per 447498 D01 General RF Exposure Guidance v06, simultaneous transmission MPE test exclusion applies when the sum of the MPE for all simultaneous transmitting antennas incorporated in a host device, based on the calculated/estimated, numerically modeled or measured field strengths or power density, is ≤ 1.0.

### Calculated Formulary:

Predication of MPE limit at a given distance

$$S = PG/4\pi R^2$$

Where:

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

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

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

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

### Calculated Data:

Radio Mode	Frequency Range (MHz)	Antenna Gain		Tune-up Conducted Power		Evaluation Distance (cm)	Power Density (mW/cm <sup>2</sup> )	MPE Limit (mW/cm <sup>2</sup> )
		(dBi)	(numeric)	(dBm)	(mW)			
WLAN	2412-2462	2.0	1.58	15.0	31.62	20	0.01	1.0
WLAN	5150-5250	2.0	1.58	15.0	31.62	20	0.01	1.0
WLAN	5725-5850	2.0	1.58	15.0	31.62	20	0.01	1.0

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

**Result:** The device meets FCC MPE at 20cm distance.

## FCC §15.203 - ANTENNA REQUIREMENT

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### Applicable Standard

According to § 15.203, an intentional radiator shall be designed to ensure that no antenna other than that furnished by the responsible party shall be used with the device. The use of a permanently attached antenna or of an antenna that uses a unique coupling to the intentional radiator shall be considered sufficient to comply with the provisions of this section. The manufacturer may design the unit so that a broken antenna can be replaced by the user, but the user of a standard antenna jack or electrical connector is prohibited. The structure and application of the EUT were analyzed to determine compliance with section §15.203 of the rules. §15.203 state that the subject device must meet the following criteria:

- a. Antenna must be permanently attached to the unit.
  - b. Antenna must use a unique type of connector to attach to the EUT.
- Unit must be professionally installed, and installer shall be responsible for verifying that the correct antenna is employed with the unit.

### Antenna Information\*

The EUT has one external Wi-Fi antenna which connected by reverse SMA connector, fulfill the requirement of this section. Please refer to the table below and EUT photos.

Frequency (MHz)	Impedance	Max. Antenna Gain	Antenna Type
2400-5850	50 ohm	2.0	Reverse SMA

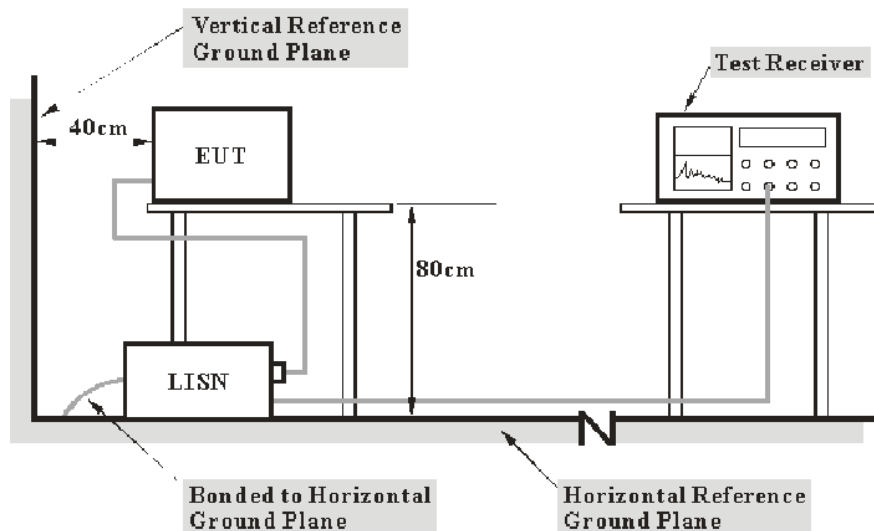
**Result:** Compliance.

## FCC §15.207 (a) – AC LINE CONDUCTED EMISSIONS

### Applicable Standard

FCC§15.207

### EUT Setup



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

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

The spacing between the peripherals was 10 cm.

### EMI Test Receiver Setup

The EMI test receiver was set to investigate the spectrum from 150 kHz to 30 MHz.

During the conducted emission test, the EMI test receiver was set with the following configurations:

Frequency Range	IF B/W
150 kHz – 30 MHz	9 kHz

## Test Procedure

During the conducted emission test, the adapter was connected to the first L.I.S.N.

Maximizing procedure was performed on the six (6) highest emissions of the EUT.

All data was recorded in the Quasi-peak and average detection mode.

## Corrected Amplitude & Margin Calculation

The basic equation is as follows:

$$V_C = V_R + A_C + VDF$$

$$C_f = A_C + VDF$$

Herein,

$V_C$  (cord. Reading): corrected voltage amplitude

$V_R$ : reading voltage amplitude

$A_C$ : attenuation caused by cable loss

VDF: voltage division factor of AMN

$C_f$ : Correction Factor

The “**Margin**” column of the following data tables indicates the degree of compliance within the applicable limit. For example, a margin of 7dB means the emission is 7dB below the limit. The equation for margin calculation is as follows:

$$\text{Margin} = \text{Limit} - \text{Corrected Amplitude}$$

## Test Data

### Test Environment Conditions

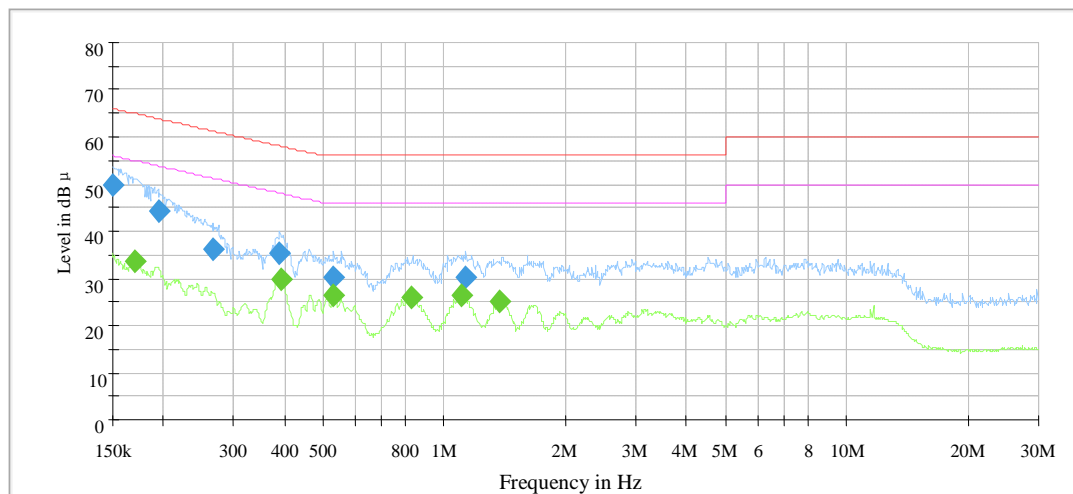
Temperature:	20 °C
Relative Humidity:	60 %
ATM Pressure:	95.7kPa

The testing was performed by Winfred Wang on 2020-11-23.

Test Mode: Transmitting-Worst case (802.11b\_low channel)



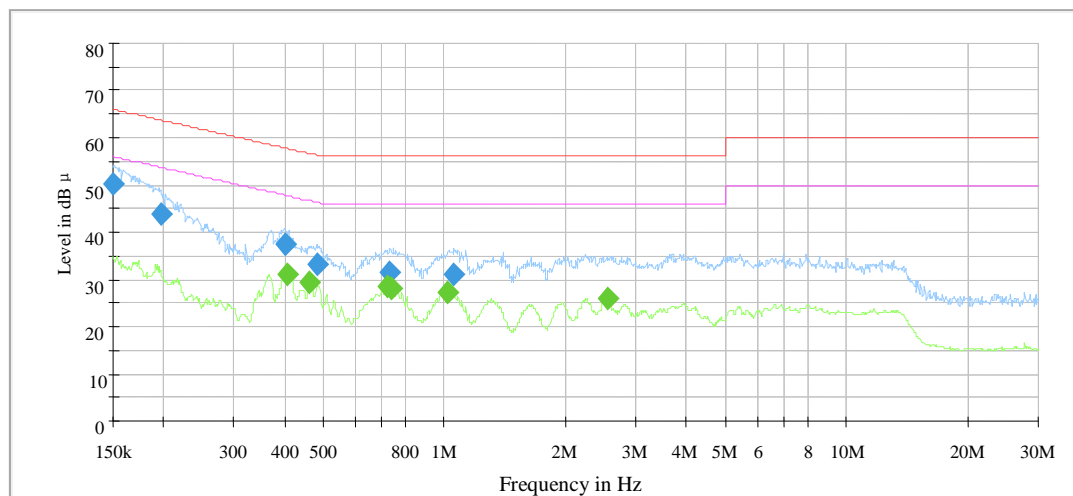
**AC 120V/60Hz, Line:**



Frequency (MHz)	QuasiPeak (dB $\mu$ V)	Meas. Time (ms)	Bandwidth (kHz)	Line	Corr. (dB)	Margin (dB)	Limit (dB $\mu$ V)
0.150750	50.0	200.0	9.000	L1	19.6	16.0	66.0
0.196363	44.3	200.0	9.000	L1	19.7	19.5	63.8
0.266188	36.3	200.0	9.000	L1	19.7	24.9	61.2
0.388874	35.5	200.0	9.000	L1	19.7	22.6	58.1
0.532441	30.2	200.0	9.000	L1	19.7	25.8	56.0
1.130698	30.4	200.0	9.000	L1	19.6	25.6	56.0

Frequency (MHz)	Average (dB $\mu$ V)	Meas. Time (ms)	Bandwidth (kHz)	Line	Corr. (dB)	Margin (dB)	Limit (dB $\mu$ V)
0.170769	33.7	200.0	9.000	L1	19.6	21.2	54.9
0.392773	29.9	200.0	9.000	L1	19.7	18.1	48.0
0.532441	26.6	200.0	9.000	L1	19.7	19.4	46.0
0.829948	25.9	200.0	9.000	L1	19.7	20.1	46.0
1.102850	26.3	200.0	9.000	L1	19.6	19.7	46.0
1.373482	25.0	200.0	9.000	L1	19.6	21.0	46.0

**AC 120V/60Hz, Neutral:**



Frequency (MHz)	QuasiPeak (dB $\mu$ V)	Meas. Time (ms)	Bandwidth (kHz)	Line	Corr. (dB)	Margin (dB)	Limit (dB $\mu$ V)
0.150750	50.5	200.0	9.000	N	19.6	15.5	66.0
0.197344	43.9	200.0	9.000	N	19.6	19.8	63.7
0.400687	37.4	200.0	9.000	N	19.7	20.4	57.8
0.481892	33.2	200.0	9.000	N	19.7	23.1	56.3
0.732654	31.6	200.0	9.000	N	19.6	24.4	56.0
1.059712	30.9	200.0	9.000	N	19.6	25.1	56.0

Frequency (MHz)	Average (dB $\mu$ V)	Meas. Time (ms)	Bandwidth (kHz)	Line	Corr. (dB)	Margin (dB)	Limit (dB $\mu$ V)
0.404704	31.0	200.0	9.000	N	19.7	16.8	47.8
0.463043	29.2	200.0	9.000	N	19.7	17.4	46.6
0.718183	28.3	200.0	9.000	N	19.6	17.7	46.0
0.739999	28.3	200.0	9.000	N	19.6	17.7	46.0
1.018261	27.1	200.0	9.000	N	19.6	18.9	46.0
2.536580	25.9	200.0	9.000	N	19.6	20.1	46.0

**Note:**

- 1) Correction Factor = LISN VDF (Voltage Division Factor) + Cable Loss + Transient Limiter Attenuation  
The corrected factor has been input into the transducer of the test software.
- 2) Corrected Amplitude = Reading + Correction Factor
- 3) Margin = Limit – Corrected Amplitude

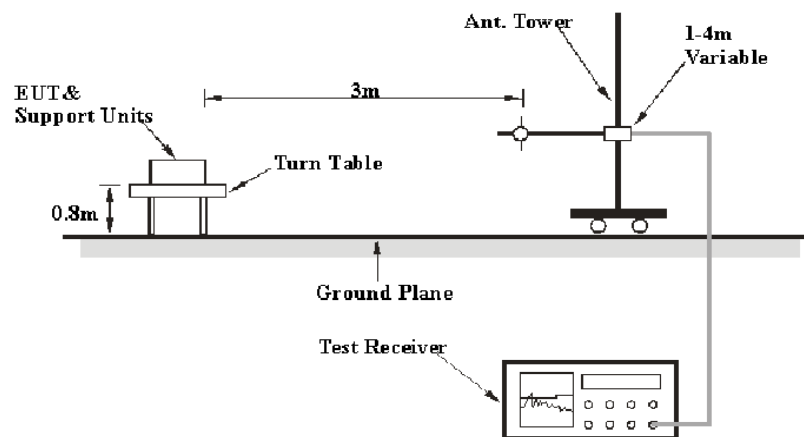
## FCC §15.209, §15.205 & §15.247(d) - SPURIOUS EMISSIONS

### Applicable Standard

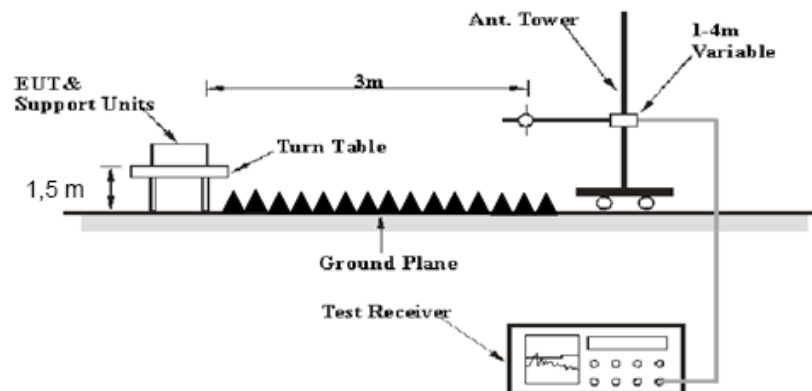
FCC §15.247 (d); §15.209; §15.205;

### EUT Setup

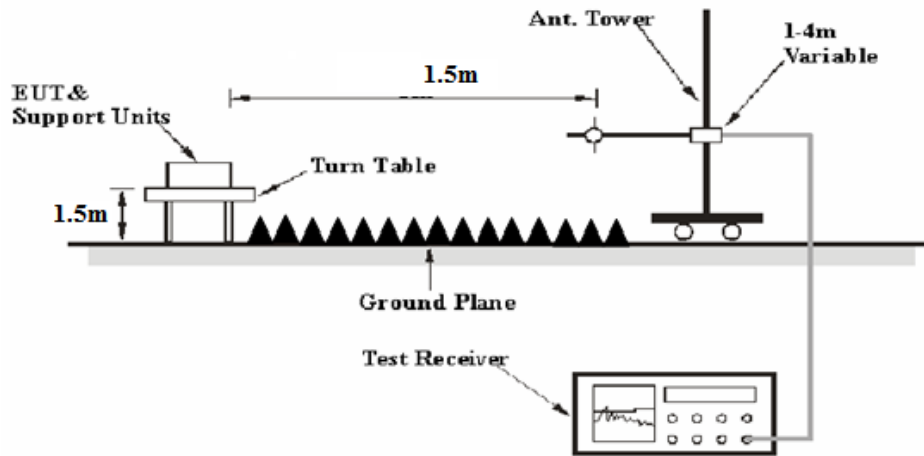
Below 1GHz:



1-18 GHz:



### Above 18 GHz:



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

The external I/O cables were draped along the test table and formed a bundle 30 to 40 cm long in the middle.

The spacing between the peripherals was 10 cm.

### EMI Test Receiver & Spectrum Analyzer Setup

The system was investigated from 30 MHz to 26 GHz.

During the radiated emission test, the EMI test receiver Setup was set with the following configurations:

Frequency Range	RBW	Video B/W	Detector
30 MHz – 1000 MHz	120 kHz	300 kHz	QP
Above 1 GHz	1MHz	3 MHz	PK
	1MHz	3 MHz	AV

If the maximized peak measured value complies with under the QP/Average limit more than 6dB, then it is unnecessary to perform an QP/Average measurement.

## Test Procedure

Maximizing procedure was performed on the highest emissions to ensure that the EUT complied with all installation combinations.

Data was recorded in Quasi-peak detection mode for frequency range of 30 MHz-1GHz, peak and Average detection modes for frequencies above 1 GHz.

According to C63.10, the above 1G test result shall be extrapolated to the specified distance using an extrapolation factor of 20dB/decade from 3m to 1.5m

Distance extrapolation factor =  $20 \log (\text{specific distance [3m]}/\text{test distance [1.5m]})$  dB

Extrapolation result = Corrected Amplitude (dB $\mu$ V/m) - distance extrapolation factor (6dB)

## Corrected Amplitude & Margin Calculation

The Corrected Amplitude is calculated by adding the Antenna Loss and Cable Loss, and subtracting the Amplifier Gain from the Meter Reading. The basic equation is as follows:

Corrected Amplitude = Meter Reading + Antenna Loss + Cable Loss - Amplifier Gain  
or

Corrected Amplitude = Meter Reading + Antenna Loss + Cable Loss

The “**Margin**” column of the following data tables indicates the degree of compliance with the applicable limit. For example, a margin of 7dB means the emission is 7dB below the limit. The equation for margin calculation is as follows:

Margin = Limit –Corrected Amplitude

## Test Data

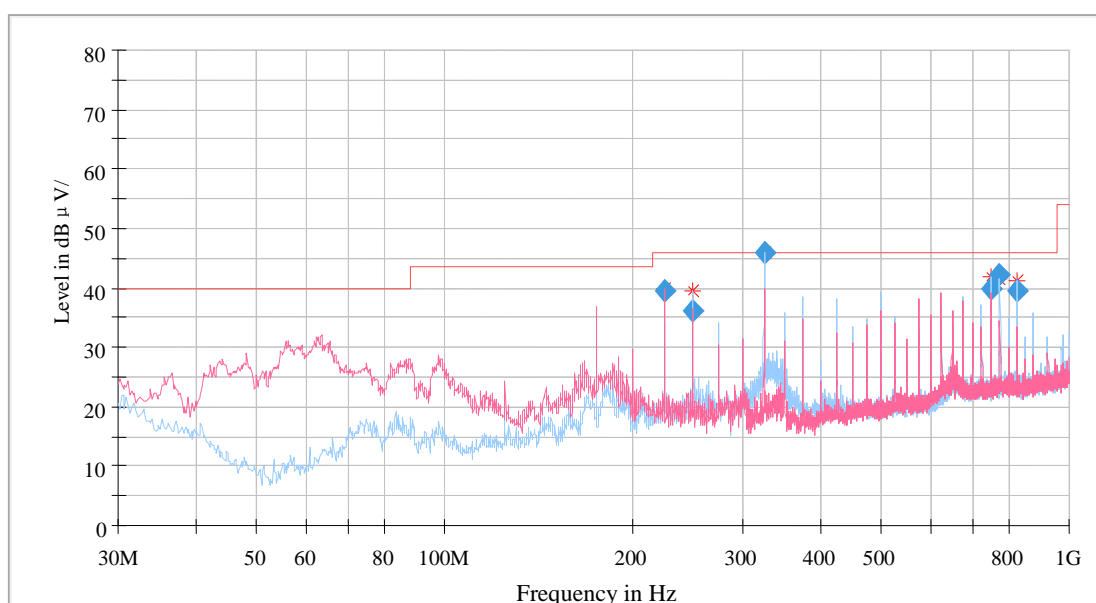
### Test Environment Conditions

Temperature:	21 °C	20 °C
Relative Humidity:	53 %	55 %
ATM Pressure:	95.6 kPa	95.6 kPa
Test Case:	Below 1GHz	Above 1GHz
Test Date:	2020-11-28	2020-12-08

The testing was performed by Winfred Wang.

Test Mode: Transmitting (802.11b)-Worst case

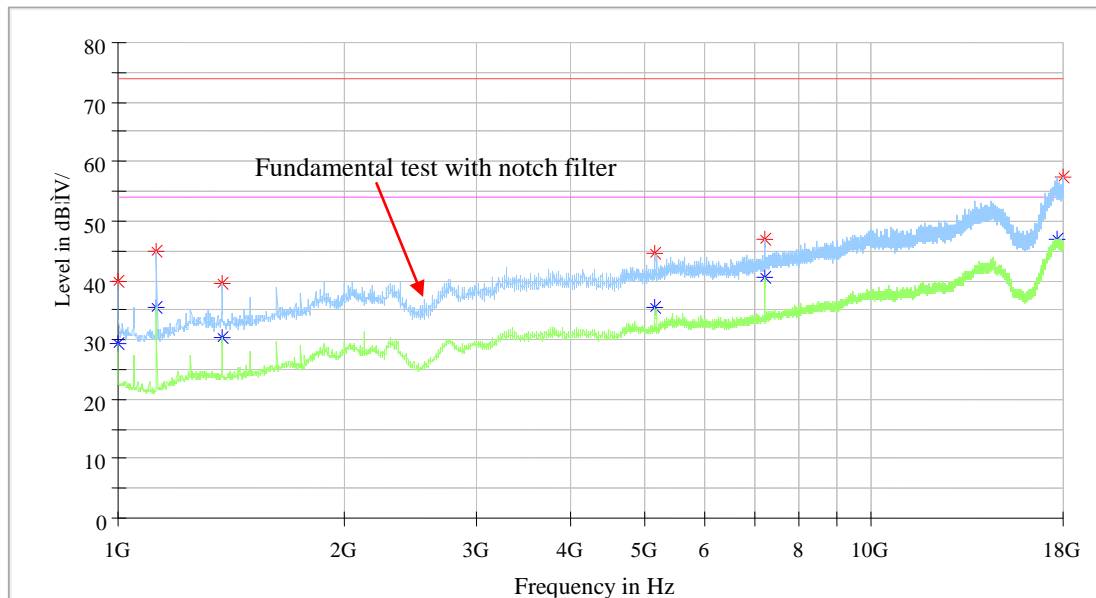
### 30 MHz to 1 GHz:



Frequency (MHz)	QuasiPeak (dBμV/m)	Limit (dBμV/m)	Margin (dB)	Meas. Time (ms)	Bandwidth (kHz)	Height (cm)	Pol	Azimuth (deg)	Corr. (dB)
224.995125	39.42	46.00	6.58	200.0	120.000	103.0	V	319.0	-13.8
249.999000	36.00	46.00	10.00	200.0	120.000	124.0	H	0.0	-13.0
325.032250	45.91	46.00	0.09	200.0	120.000	112.0	H	221.0	-10.8
750.020375	39.84	46.00	6.16	200.0	120.000	123.0	H	322.0	-3.0
774.965250	42.07	46.00	3.93	200.0	120.000	104.0	H	0.0	-2.6
825.008250	39.44	46.00	6.56	200.0	120.000	101.0	H	28.0	-2.5

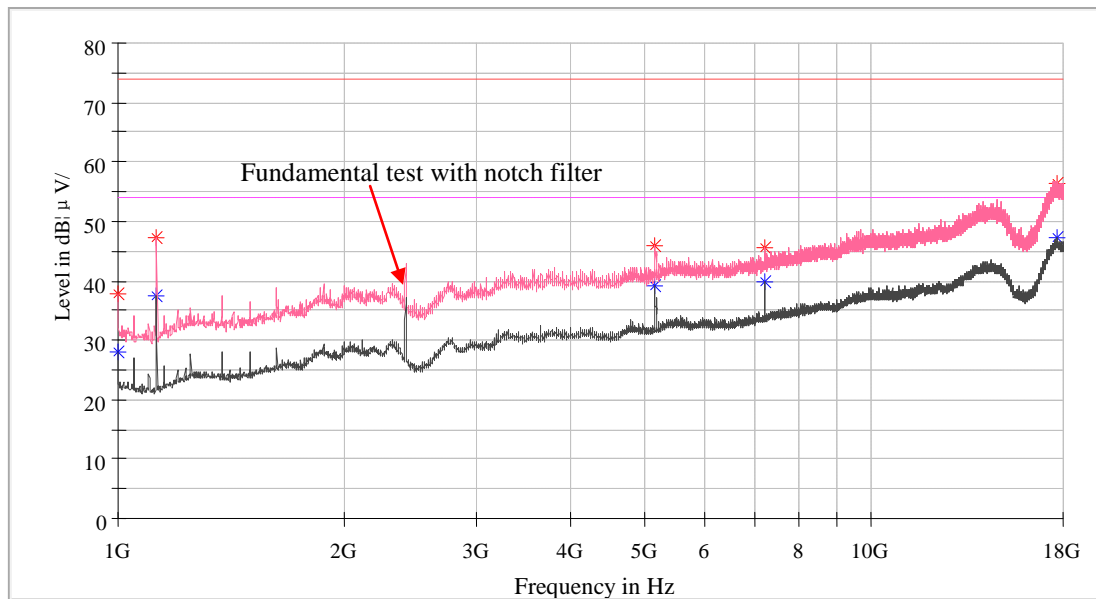
# 1 GHz to 18 GHz:

Horizontal



Frequency (MHz)	MaxPeak (dB µ V/m)	Average (dB µ V/m)	Limit (dB µ V/m)	Margin (dB)	Height (cm)	Pol	Azimuth (deg)	Corr. (dB)
1000.000000	39.76	---	74.00	34.24	100.0	H	260.0	-0.4
1000.000000	---	29.40	54.00	24.60	100.0	H	260.0	-0.4
1124.100000	---	35.59	54.00	18.41	100.0	H	142.0	0.1
1124.100000	44.87	---	74.00	29.13	150.0	H	132.0	0.1
1374.000000	39.58	---	74.00	34.42	100.0	H	212.0	1.0
1374.000000	---	30.28	54.00	23.72	100.0	H	212.0	1.0
5171.800000	44.65	---	74.00	29.35	100.0	H	142.0	12.8
5173.500000	---	35.50	54.00	18.50	100.0	H	142.0	12.8
7235.600000	46.80	---	74.00	27.20	100.0	H	247.0	15.3
7237.300000	---	40.67	54.00	13.33	100.0	H	247.0	15.3
17714.400000	---	47.00	54.00	7.00	100.0	H	0.0	29.2
17974.500000	57.34	---	74.00	16.66	150.0	H	199.0	29.2

Vertical

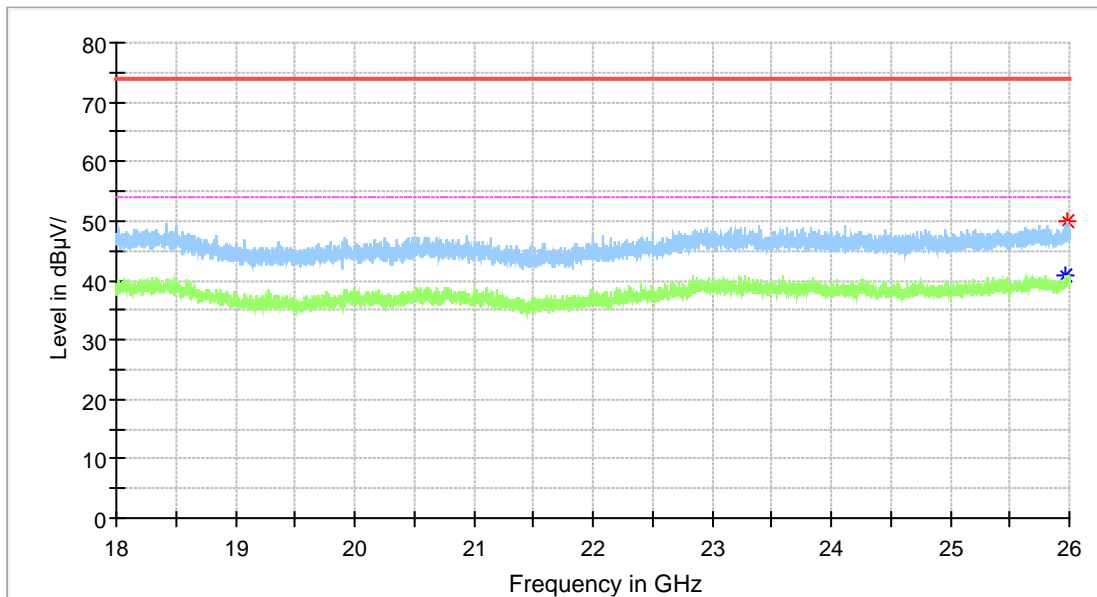


Frequency (MHz)	MaxPeak (dB $\mu$ V/m)	Average (dB $\mu$ V/m)	Limit (dB $\mu$ V/m)	Margin (dB)	Height (cm)	Pol	Azimuth (deg)	Corr. (dB)
1000.000000	39.76	---	74.00	34.24	100.0	H	260.0	-0.4
1000.000000	---	29.40	54.00	24.60	100.0	H	260.0	-0.4
1124.100000	---	35.59	54.00	18.41	100.0	H	142.0	0.1
1124.100000	44.87	---	74.00	29.13	150.0	H	132.0	0.1
1374.000000	39.58	---	74.00	34.42	100.0	H	212.0	1.0
1374.000000	---	30.28	54.00	23.72	100.0	H	212.0	1.0
5171.800000	44.65	---	74.00	29.35	100.0	H	142.0	12.8
5173.500000	---	35.50	54.00	18.50	100.0	H	142.0	12.8
7235.600000	46.80	---	74.00	27.20	100.0	H	247.0	15.3
7237.300000	---	40.67	54.00	13.33	100.0	H	247.0	15.3
17714.400000	---	47.00	54.00	7.00	100.0	H	0.0	29.2
17974.500000	57.34	---	74.00	16.66	150.0	H	199.0	29.2



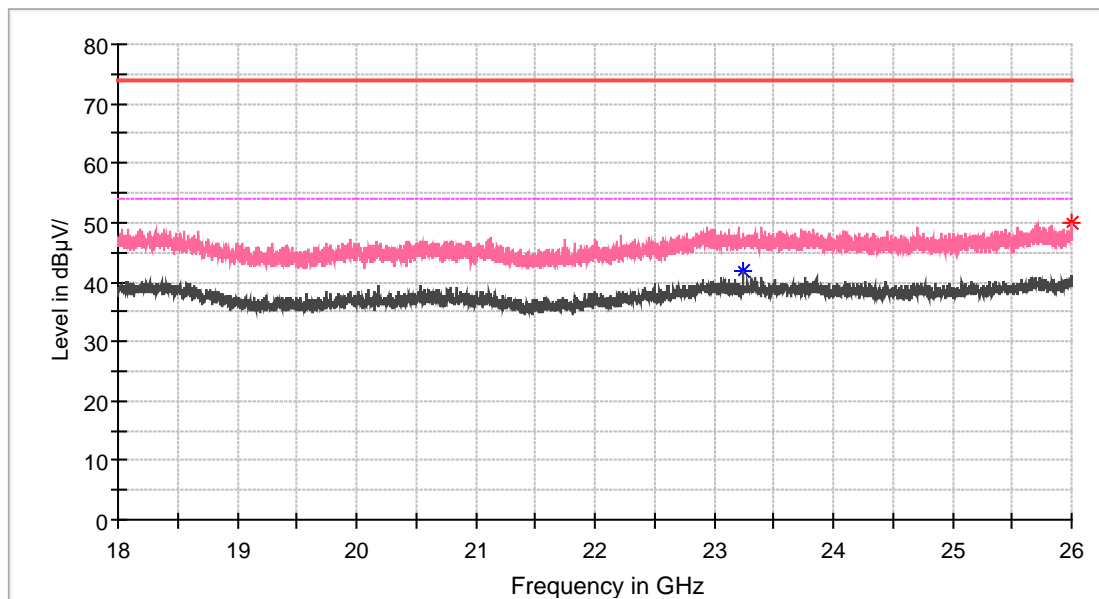
# 18 GHz to 26 GHz:

Horizontal



Frequency (MHz)	MaxPeak (dB $\mu$ V/m)	Average (dB $\mu$ V/m)	Limit (dB $\mu$ V/m)	Margin (dB)	Height (cm)	Pol	Azimuth (deg)	Corr. (dB/m)
25963.200000	---	41.01	54.00	12.99	100.0	H	344.0	7.2
25976.000000	49.79	---	74.00	24.21	100.0	H	320.0	7.2

Vertical



Frequency (MHz)	MaxPeak (dB $\mu$ V/m)	Average (dB $\mu$ V/m)	Limit (dB $\mu$ V/m)	Margin (dB)	Height (cm)	Pol	Azimuth (deg)	Corr. (dB/m)
23241.600000	---	41.91	54.00	12.09	100.0	V	1.0	5.8
25997.600000	50.01	---	74.00	23.99	100.0	V	161.0	7.3

Note:

Corrected Amplitude = Corrected Factor + Reading

Corrected Factor=Antenna factor (RX) + Cable Loss – Amplifier Factor

Margin = Limit- Corr. Amplitude

**END OF REPORT**