Prüfbericht-Nr.: *Test report No.:*	**60394654 001**	**Auftrags-Nr.:** *Order No.:*	168271611	Seite 1 von 17 *Page 1 of 17*
Kunden-Referenz-Nr.: *Client reference No.:*	N/A	**Auftragsdatum:** *Order date:*	01.07.2020	
Auftraggeber: *Client:*	**Ningbo Agsun Products Inc** #135,East Road, Third North City Line, Cixi city, Ningbo, CN			
Prüfgegenstand: *Test item:*	Pellet Grill (EXPERT GRILL)			
Bezeichnung / Typ-Nr.: *Identification / Type No.:*	XG1136224169002, XG1136224169003, XG1136224169004			
Auftrags-Inhalt: *Order content:*	FCC testing			
Prüfgrundlage: *Test specification:*	CFR47 FCC Part 15: Subpart C Section 15.247 CFR47 FCC Part 15: Subpart C Section 15.209			

Wareneingangsdatum: *Date of receipt:*	01.07.2020	Refer to Photos
Prüfmuster-Nr.: *Test sample No.:*	A002837617-001	
Prüfzeitraum: *Testing period:*	01.07.2020 - 14.07.2020	
Ort der Prüfung: *Place of testing:*	TÜV Rheinland (Shenzhen) Co., Ltd.	
Prüflaboratorium: *Testing laboratory:*	TÜV Rheinland (Shenzhen) Co., Ltd.	
Prüfergebnis*: *Test result*:*	Pass	

geprüft von / *tested by:*

Jackson Yang

Datum *Date*	Name/Stellung *Name/Position*	Unterschrift *Signature*
14.07.2020	Jackson Yang / Project Engineer	

kontrolliert von / *reviewed by:*

Winnie Hou

Datum *Date*	Name/Stellung *Name/Position*	Unterschrift *Signature*
14.07.2020	Winnie Hou / Technical Certifier	

Sonstiges / *Other:*

FCC ID: 2AWT4S2281801M
Note: The Radiated Spurious Emission above 18GHz and Radiated band edge of this product are evaluated in this report. All other tests refer to test report 60393691 001.

Zustand des Prüfgegenstandes bei Anlieferung: Prüfmuster vollständig und unbeschädigt
Condition of the test item at delivery: *Test item complete and undamaged:*

* Legende:	1 = sehr gut	2 = gut	3 = befriedigend	4 = ausreichend	5 = mangelhalt
	P(ass) = entspricht o.g. Prüfgrundlage(n)		F(ail) = entspricht nicht o.g. Prüfgrundlage(n)	N/A = nicht anwendbar	N/T = nicht getestet
Legend:	1 = very good	2 = good	3 = satisfactory	4 = sufficient	5 = poor
	P(ass) = passed a.m. test specifications(s)		F(ail) = failed a.m. test specifications(s)	N/A = not applicable	N/T = not tested

Test Summary

5.1.1 RADIATED SPURIOUS EMISSIONS

RESULT: *Pass*

Table of Contents

1 General Remarks

1.1 Complementary Materials

N/A

2 Test Sites

2.1 Test Facilities

TÜV Rheinland (Shenzhen) Co., Ltd.
1F East & 2-4F, Cybio Technology Building No.1, No.16 Kejibei 2nd Road, Nanshan District, Shenzhen, 518057, China

FCC Registration No.: 694916

IC Registration No.: 25069

2.2 List of Test and Measurement Instruments

Table 1: List of Test and Measurement Equipment

Radiated Spurious Emission				
Equipment	**Manufacturer**	**Model No.**	**Serial No.**	**Cal. Until**
EMI Test Receiver	Rohde & Schwarz	ESR 7	102021	19.08.2020
Signal Analyzer	Rohde & Schwarz	FSV 40	101439	21.08.2020
System Controller Interface	Rohde & Schwarz	SCI-100	S10010038	N/A
Filterbank	Rohde & Schwarz	Wlan	100759	21.08.2020
OSP	Rohde & Schwarz	OSP 120	102040	N/A
Pre-amplifier	Rohde & Schwarz	SCU08F1	08320031	20.08.2020
Amplifier	Rohde & Schwarz	SCU-18F	180070	20.08.2020
Amplifier	Rohde & Schwarz	SCU40A	100475	20.09.2020
Trilog Broadband Antenna (30 MHz - 1 GHz)	Schwarzbeck	VULB9162	193	02.09.2020
Double-Ridged Antenna (1 -18 GHz)	ETS-LINDGREN	3117	00218717	02.09.2020
Wideband Ridged Horn Antenna (18-40 GHz)	Steatite	QMS-00880	19067	02.09.2020
Active Loop Antenna	Schwarzbeck	FMZB 1513	302	01.09.2020
Wideband Ridged Horn Antenna (12-18 GHz)	Steatite	QMS-00208	18313	02.09.2020

2.3 Traceability

All measurement equipment calibrations are traceable to NIM (National Institute of Metrology) or where calibration is performed in other countries, to equivalent nationally recognized standards organizations.

2.4 Calibration

Equipment requiring calibration is calibrated periodically by the manufacturer or according to manufacturer's specifications. Additionally all equipment is verified for proper performance on a regular basics using in house standards or comparisons.

2.5 Measurement Uncertainty

The estimated combined standard uncertainty for radiated emissions and conducted emissions measurements as below table:

Table 2: Measurement Uncertainty

Items	Extended Uncertainty
Radiated Spurious Emissions (up to 1GHz)	± 4.84 dB
Radiated Spurious Emissions (1GHz to 26.5GHz)	± 4.76 dB

2.6 Location of Original Data

The original copies of all test data taken during actual testing were attached in this report and delivered to the applicant. A copy has been retained in the TÜV Rheinland (Shenzhen) Co., Ltd. file for certification follow-up purposes.

2.7 Status of Facility Used for Testing

The TÜV Rheinland (Shenzhen) Co., Ltd. Test facility located at 1F East & 2-4F, Cybio Technology Building No.1, No.16 Kejibei 2nd Road, Nanshan District, Shenzhen, 518057, China is listed on the US Federal Communications Commission list of facilities approved to perform measurements.

3 General Product Information

3.1 Product Function and Intended Use

The EUT are Pellet Grill (EXPERT GRILL) which supports BLE function.

All above models have the same electric circuit. The differences among them are in the appearances and mechanical aspects.

For details refer to the User Manual, Technical Description and Circuit Diagram.

3.2 Ratings and System Details

Table 3: Technical Specification of EUT

General Information of EUT	Value
Kind of Equipment	Pellet Grill (EXPERT GRILL)
Type Designation	XG1136224169002, XG1136224169003, XG1136224169004
Operating Voltage	AC 120V/60Hz
Testing Voltage	AC 120V/60Hz
Rated power	0.246kW
Protection Class	Class I
Operating Frequency band	2402 – 2480MHz
Bluetooth Core Version	Bluetooth Low Energy 4.2
Channel separation	2MHz
Modulation	GFSK
Antenna Type	Internal antenna
Peak Antenna Gain	2.0dBi
Channel	0~39

3.3 Independent Operation Modes

The basic operation modes are:

A. On, BLE transmitting mode
    1. Low channel
    2. Middle channel
    3. High channel
B. Off

3.4 Noise Generating and Noise Suppressing Parts

Refer to Circuit Diagram for further details.

3.5 Submitted Documents

N/A

4 Test Set-up and Operation Modes

4.1 Principle of Configuration Selection

Emissions: The equipment under test (EUT) was configured to measure its highest possible radiation level. The test modes were adapted accordingly in reference to the instructions for use.

According to the model differences description at section 3.1, all tests were performed on the model XG1136224169002.

4.2 Test Operation and Test Software

Test operation refers to test setup in chapter 5. All testing were performed according to the procedures in ANSI C63.10: 2013.

4.3 Special Accessories and Auxiliary Equipment

Table 4: List of Accessories and Auxiliary Equipment

Description	Manufacturer	Model	S/N	Rating
Laptop	Lenovo	T480	PF-16A6N8	N/A

4.4 Countermeasures to Achieve EMC Compliance

The test sample which has been tested contained the noise suppression parts as described in the Technical Construction File (TCF).

No additional measures were employed to achieve compliance.

4.5 Test Setup Diagram

Diagram of Measurement Configuration for Radiation Test (Below 1GHz)

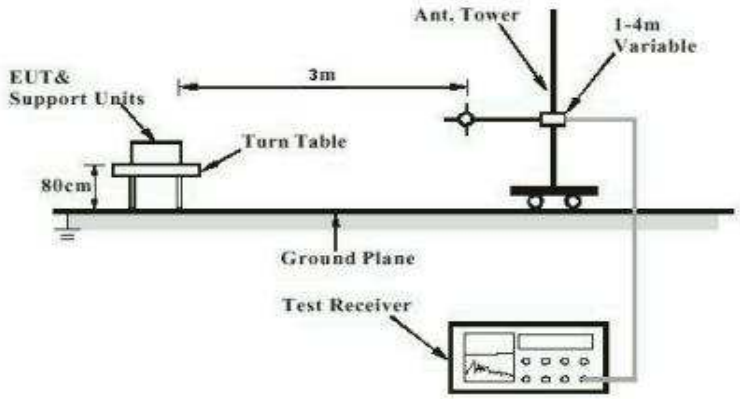
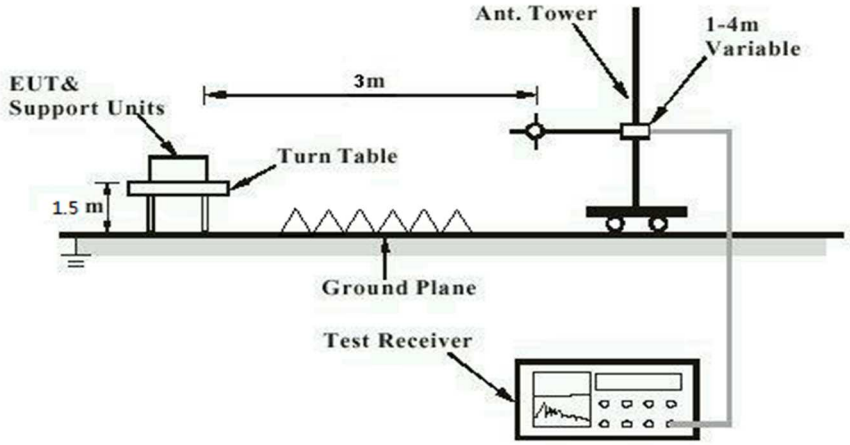


Diagram of Measurement Configuration for Radiation Test (Above 1GHz)



5 Test Results

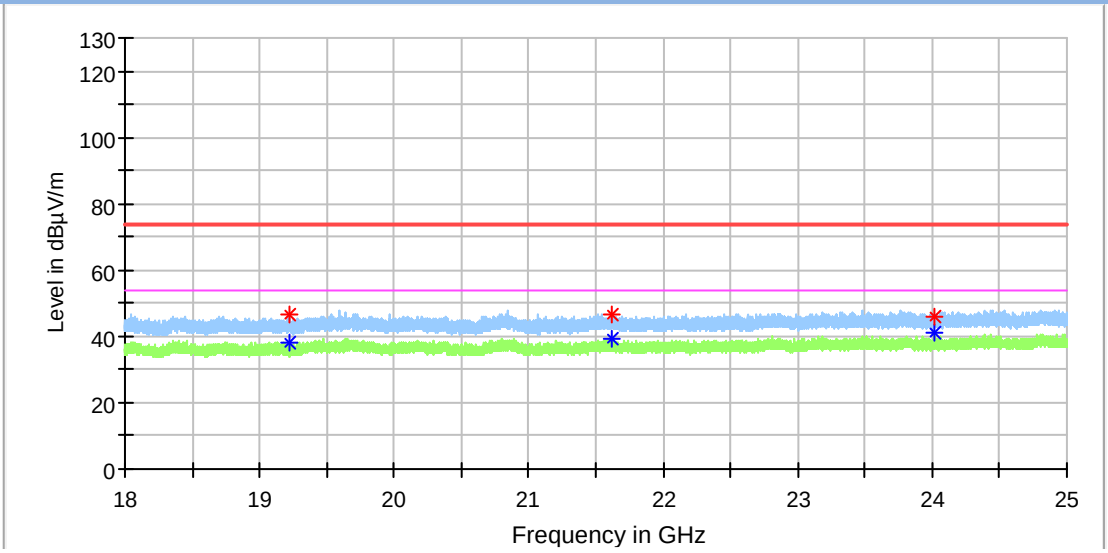
5.1 Transmitter Requirement & Test Suites

5.1.1 Radiated Spurious Emissions

RESULT: **Pass**

Test Specification		
Test standard	:	FCC Part 15.247 (d) & FCC Part 15.205
Basic standard	:	ANSI C63.10: 2013
Limits	:	Refer to 15.209(a) of FCC part 15.247(d)
Kind of test site	:	3m Semi-anechoic Chamber
Test Setup		
Date of testing	:	07.07.2020
Input voltage	:	AC 120V/60Hz
Operation mode	:	A.1, A.2, A.3
Earthing	:	Connected
Ambient temperature	:	23 ℃
Relative humidity	:	42 %
Atmospheric pressure	:	101 kPa

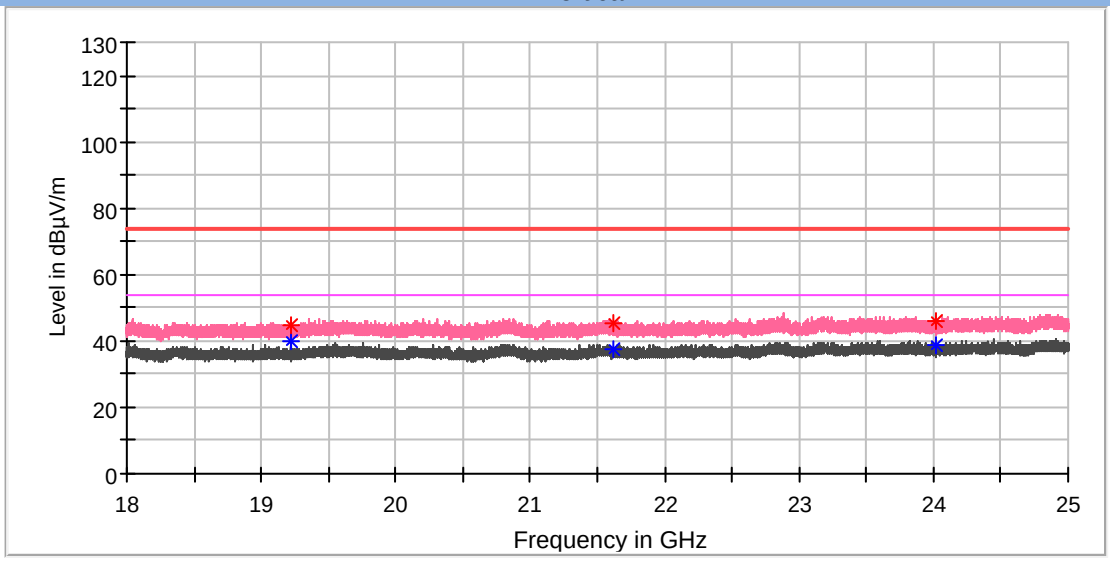
Mode A.1
Horizontal



Critical_Freqs

Frequency (MHz)	MaxPeak (dBµV/m)	Average (dBµV/m)	Limit (dBµV/m)	Margin (dB)	Height (cm)	Pol	Azimuth (deg)	Corr. (dB/m)
19217.781250	---	38.33	54.00	15.67	100.0	H	188.0	-13.2
19218.656250	46.74	---	74.00	27.26	100.0	H	0.0	-13.2
21620.093750	---	39.07	54.00	14.93	100.0	H	152.0	-11.7
21620.750000	46.37	---	74.00	27.63	100.0	H	188.0	-11.7
24022.406250	46.22	---	74.00	27.78	100.0	H	164.0	-10.1
24022.843750	---	40.91	54.00	13.09	100.0	H	176.0	-10.1

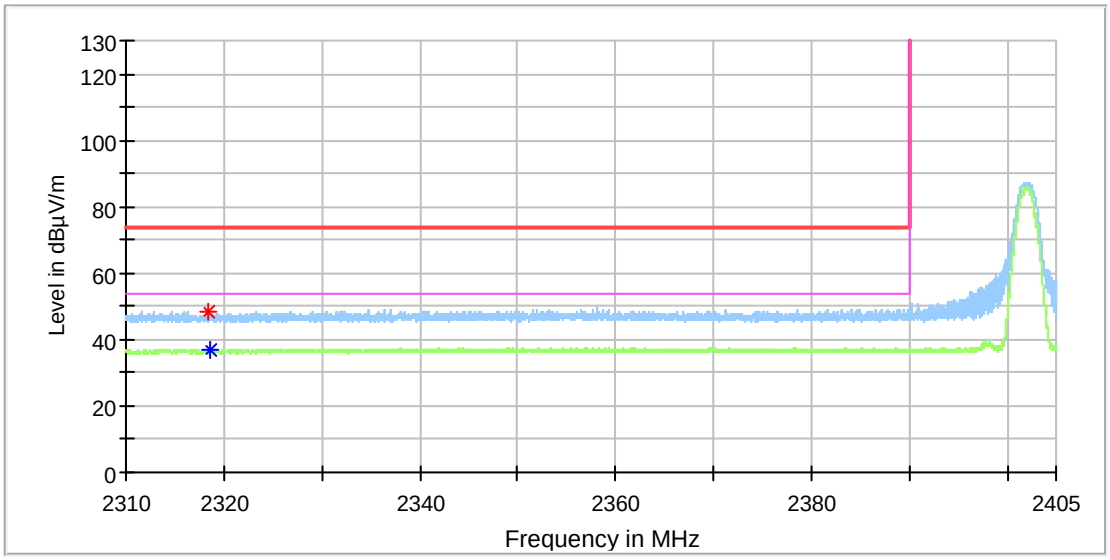
Vertical



Critical_Freqs

Frequency (MHz)	MaxPeak (dBµV/m)	Average (dBµV/m)	Limit (dBµV/m)	Margin (dB)	Height (cm)	Pol	Azimuth (deg)	Corr. (dB/m)
19215.375000	---	39.63	54.00	14.37	100.0	V	153.0	-13.2
19219.093750	44.90	---	74.00	29.10	100.0	V	290.0	-13.2
21616.375000	45.26	---	74.00	28.74	100.0	V	164.0	-11.7
21616.593750	---	37.36	54.00	16.64	100.0	V	349.0	-11.7
24017.593750	46.06	---	74.00	27.94	100.0	V	325.0	-10.1
24020.656250	---	38.55	54.00	15.45	100.0	V	105.0	-10.1

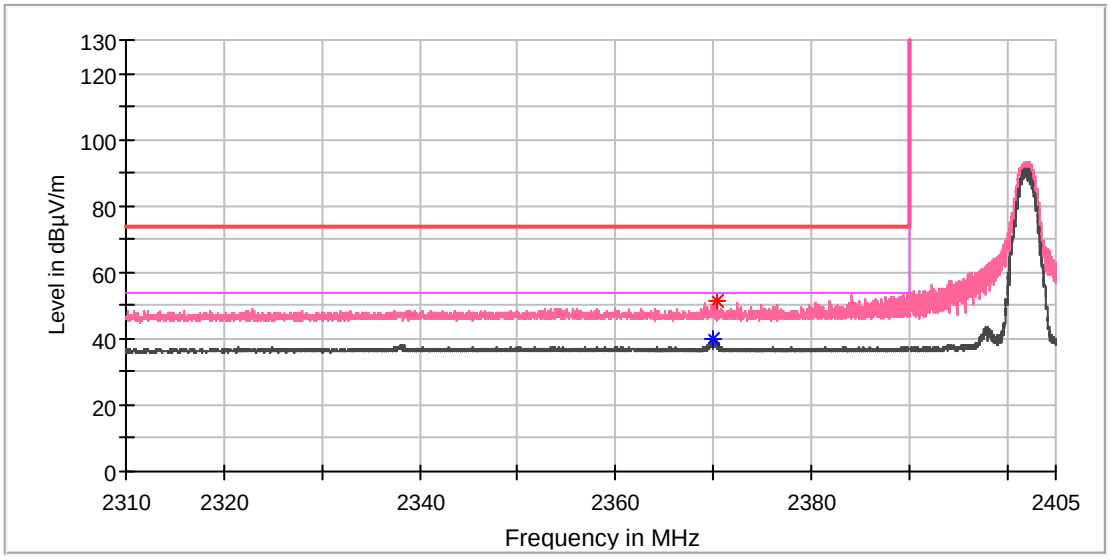
Horizontal



Critical_Freqs

Frequency (MHz)	MaxPeak (dBµV/m)	Average (dBµV/m)	Limit (dBµV/m)	Margin (dB)	Height (cm)	Pol	Azimuth (deg)	Corr. (dB/m)
2318.340441	48.49	---	74.00	25.51	100.0	H	259.0	6.6
2318.619853	---	36.76	54.00	17.24	100.0	H	105.0	6.6

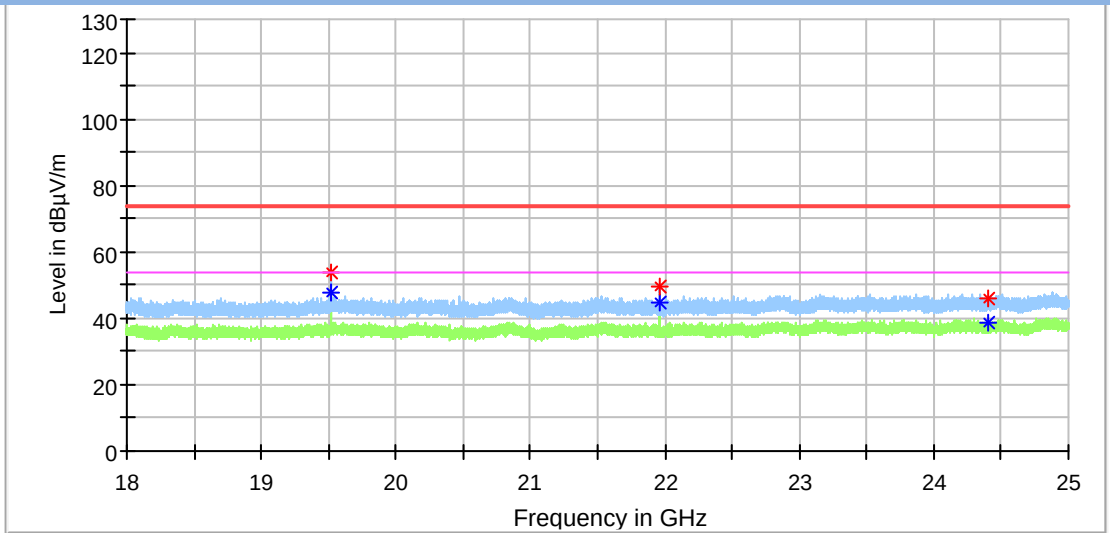
Vertical



Critical_Freqs

Frequency (MHz)	MaxPeak (dBµV/m)	Average (dBµV/m)	Limit (dBµV/m)	Margin (dB)	Height (cm)	Pol	Azimuth (deg)	Corr. (dB/m)
2369.933824	---	39.92	54.00	14.08	100.0	V	250.0	6.9
2370.311029	51.14	---	74.00	22.86	100.0	V	228.0	6.9

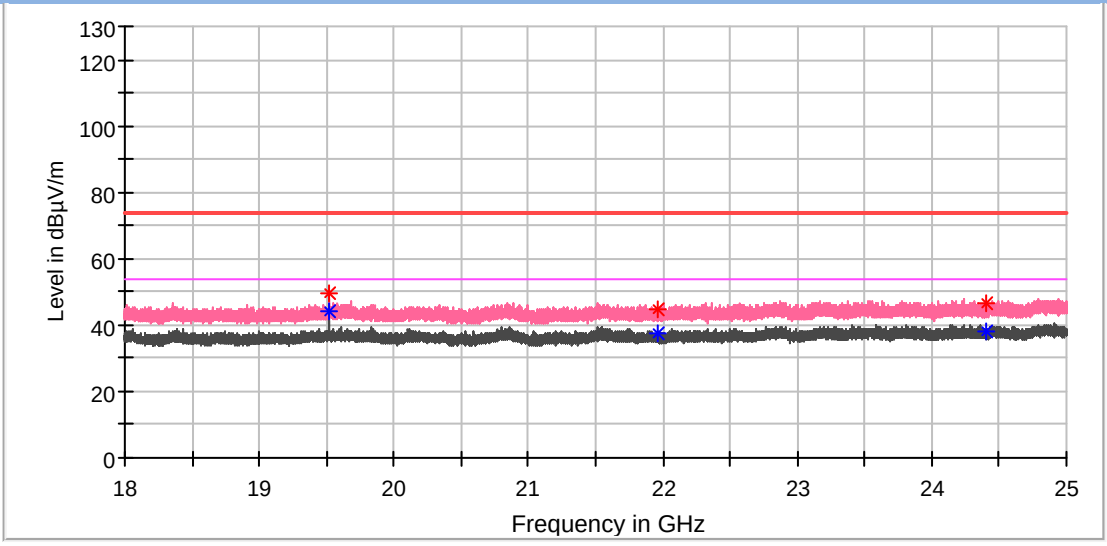
Mode A.2
Horizontal



Critical_Freqs

Frequency (MHz)	MaxPeak (dBµV/m)	Average (dBµV/m)	Limit (dBµV/m)	Margin (dB)	Height (cm)	Pol	Azimuth (deg)	Corr. (dB/m)
19521.406250	54.11	---	74.00	19.89	100.0	H	164.0	-13.1
19522.281250	---	48.01	54.00	5.99	100.0	H	164.0	-13.1
21957.406250	---	44.85	54.00	9.15	100.0	H	176.0	-11.4
21957.843750	49.80	---	74.00	24.20	100.0	H	176.0	-11.4
24399.093750	---	38.73	54.00	15.27	100.0	H	319.0	-10.1
24408.062500	46.23	---	74.00	27.77	100.0	H	331.0	-10.1

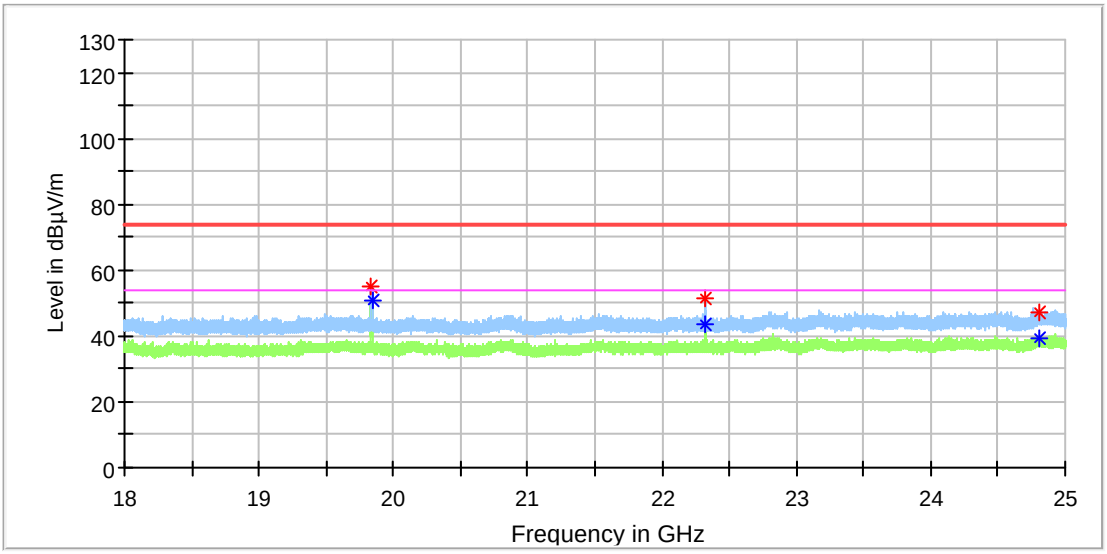
Vertical



Critical_Freqs

Frequency (MHz)	MaxPeak (dBµV/m)	Average (dBµV/m)	Limit (dBµV/m)	Margin (dB)	Height (cm)	Pol	Azimuth (deg)	Corr. (dB/m)
19521.843750	49.64	---	74.00	24.36	100.0	V	178.0	-13.1
19521.843750	---	43.94	54.00	10.06	100.0	V	178.0	-13.1
21958.718750	---	37.66	54.00	16.34	100.0	V	189.0	-11.4
21958.937500	44.92	---	74.00	29.08	100.0	V	189.0	-11.4
24404.781250	---	38.19	54.00	15.81	100.0	V	94.0	-10.1
24406.312500	46.80	---	74.00	27.20	100.0	V	47.0	-10.1

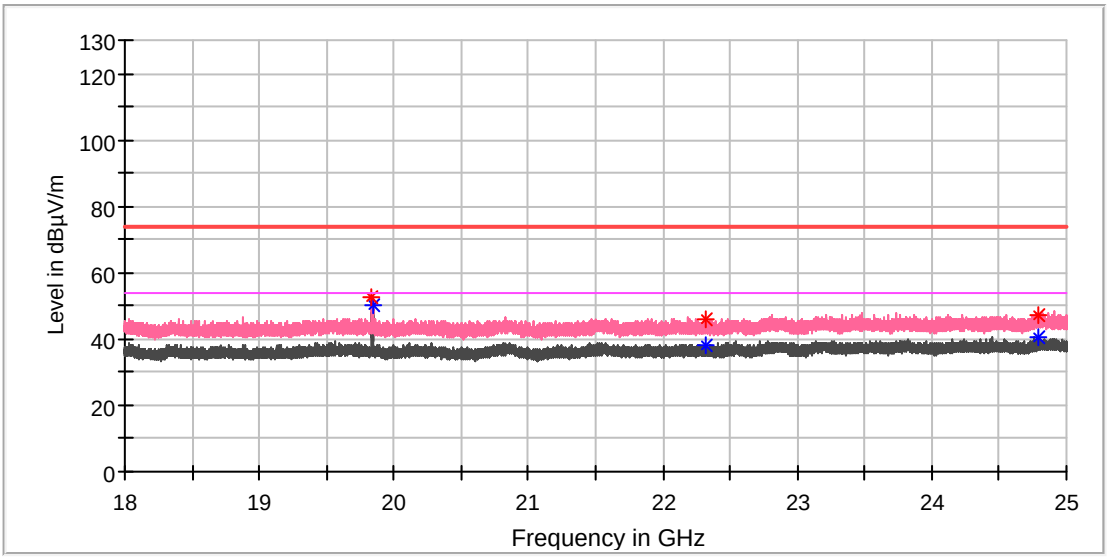
Mode A.3
Horizontal



Critical_Freqs

Frequency (MHz)	MaxPeak (dBµV/m)	Average (dBµV/m)	Limit (dBµV/m)	Margin (dB)	Height (cm)	Pol	Azimuth (deg)	Corr. (dB/m)
19837.937500	55.24	---	74.00	18.76	100.0	H	182.0	-13.0
19841.875000	---	50.98	54.00	3.02	100.0	H	182.0	-13.0
22317.906250	51.39	---	74.00	22.61	100.0	H	182.0	-11.2
22318.343750	---	43.58	54.00	10.42	100.0	H	182.0	-11.2
24800.281250	---	39.40	54.00	14.60	100.0	H	11.0	-10.2
24801.812500	47.32	---	74.00	26.68	100.0	H	171.0	-10.2

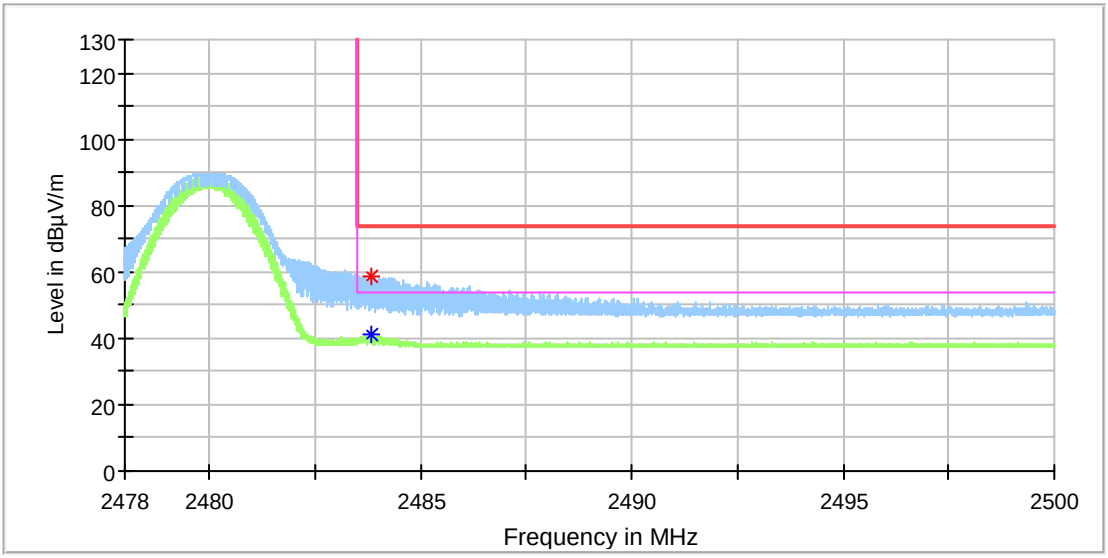
Vertical



Critical_Freqs

Frequency (MHz)	MaxPeak (dBµV/m)	Average (dBµV/m)	Limit (dBµV/m)	Margin (dB)	Height (cm)	Pol	Azimuth (deg)	Corr. (dB/m)
19837.937500	52.85	---	74.00	21.15	100.0	V	166.0	-13.0
19841.656250	---	50.03	54.00	3.97	100.0	V	178.0	-13.0
22316.375000	45.68	---	74.00	28.32	100.0	V	279.0	-11.2
22320.093750	---	37.82	54.00	16.18	100.0	V	43.0	-11.2
24797.437500	---	40.24	54.00	13.76	100.0	V	166.0	-10.2
24797.656250	47.14	---	74.00	26.86	100.0	V	267.0	-10.2

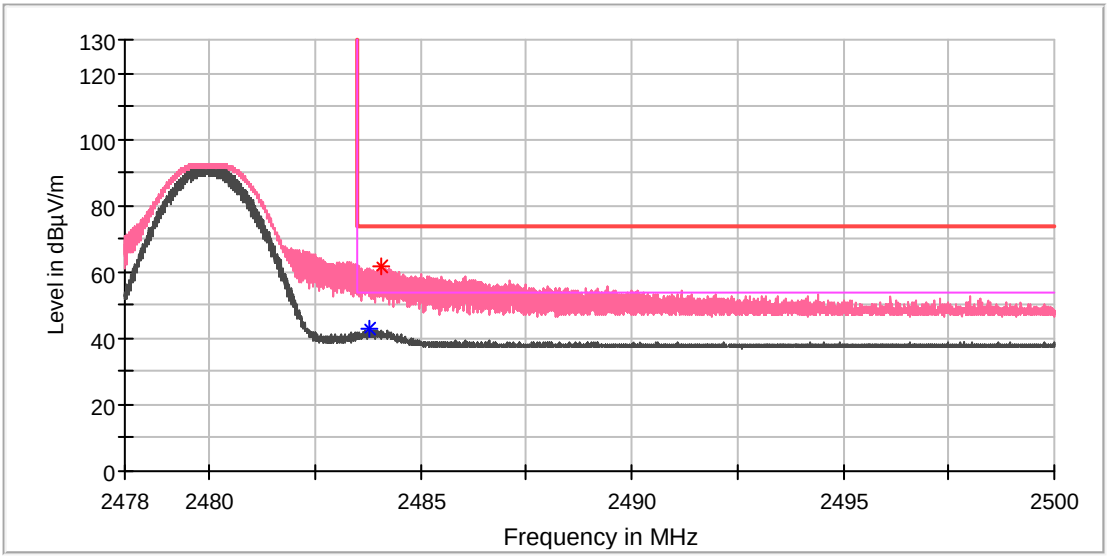
Horizontal



Critical_Freqs

Frequency (MHz)	MaxPeak (dBµV/m)	Average (dBµV/m)	Limit (dBµV/m)	Margin (dB)	Height (cm)	Pol	Azimuth (deg)	Corr. (dB/m)
2483.810588	58.62	---	74.00	15.38	100.0	H	197.0	7.4
2483.849412	---	41.21	54.00	12.79	100.0	H	197.0	7.4

Vertical



Critical_Freqs

Frequency (MHz)	MaxPeak (dBµV/m)	Average (dBµV/m)	Limit (dBµV/m)	Margin (dB)	Height (cm)	Pol	Azimuth (deg)	Corr. (dB/m)
2483.765294	---	42.72	54.00	11.28	100.0	V	163.0	7.4
2484.059706	61.70	---	74.00	12.30	100.0	V	163.0	7.4