FCC PART 15.247

TEST REPORT

For

Chongqing Jinou Science & Technology Development Co., Ltd.

D1-802, Overseas Students Pioneer Park No.71 Kecheng Rd, Jiulongpo District, Chongqing, China

FCC ID: SI8BLES-06

Report Type:	Product Name:
Original Report	BLE5.0 Serial Adapter

Report Number:	RSC210531001-0B
Date of Report Issue:	2021-07-21
Reviewed By:	Sula Huang
Test Laboratory:	Bay Area Compliance Laboratories Corp. (Chengdu) No.5040, Huilongwan Plaza, No. 1, Shawan Road, Jinniu District, Chengdu, Sichuan, China Tel: +86-28-65525123 Fax: +86-28-65525125 www.baclcorp.com

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GENERAL INFORMATION

Product Description for Equipment under Test (EUT)

Applicant	Chongqing Jinou Science & Technology Development Co., Ltd.
Product	BLE5.0 Serial Adapter
Tested Model	BLES-06
FCC ID	SI8BLES-06
Radio Mode*	Bluetooth LE
Frequency*	2402-2480MHz
RF Output Power*	3.08dBm
Modulation Type*	GFSK
Voltage	DC 6V
Measure approximately	99 mm (L) x 34 mm (W) x 17 mm (H)
Sample serial number	210531001/02 (assigned by the BACL, Chengdu)
Sample/EUT Status	The test sample was in good condition and received: 2021-05-31

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 **Chongqing Jinou Science & Technology Development 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)

None

Measurement Uncertainty

Item			Uncertainty
Conducted emission			2.48 dB
Radiated Emission	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
RF output power, conducted			±0.61dB
Occupied Bandwidth			±5%
Power Spectrum Density, conducted			±2.5dB
Spurious emissions, conducted			±2.5dB
Humidity			±5%
Temperature			±1℃
Voltage(AC,<10kHz)			±1%

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 Bluetooth LE mode, 40 channels are provided for testing:

Channel	Frequency (MHz)	Channel	Frequency (MHz)
0	2402	20	2442
1	2404	…	…
…	…	…	…
…	…	…	…
..	…	38	2478
19	2440	39	2480

EUT was tested with channel 0, 19 and 39.

Equipment Modifications

No modification was made to the EUT tested.

EUT Exercise Software*

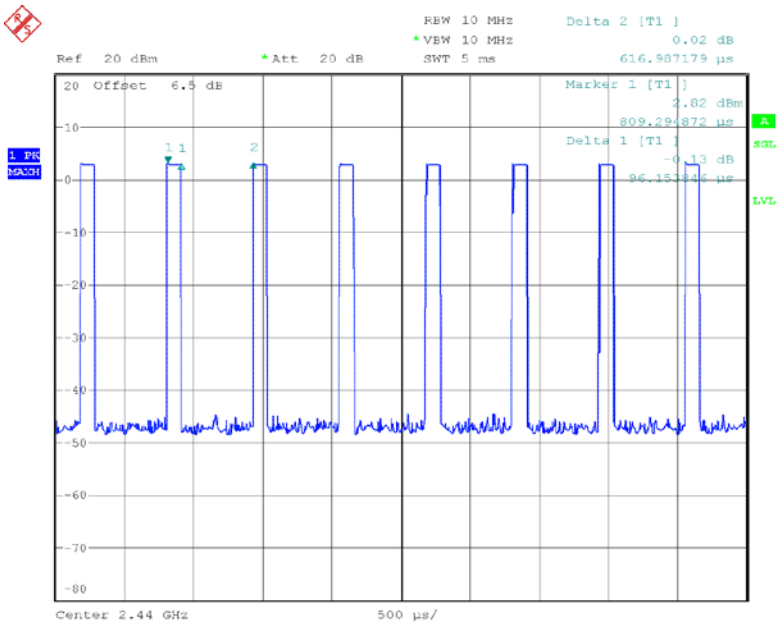
The software "**nrfgo Studio**" was used for testing, which was provided by applicant. The setting by the software as following table:

Test Mode	Test Software	Nrfgo Studio		
LE 1M	Test Frequency	2402MHz	2440MHz	2480MHz
	Data Rate	Default	Default	Default
	Power Level	B0 0B	B0 0B	B0 0B
LE 2M	Test Frequency	2402MHz	2440MHz	2480MHz
	Data Rate	Default	Default	Default
	Power Level	B0 0B	B0 0B	B0 0B

Duty Cycle information is below:

Mode	T_{on}	T_p	Duty Cycle
	(ms)	(ms)	(%)
LE 1M	0.096	0.617	15.56
LE 2M	0.064	0.625	10.24

LE 1M



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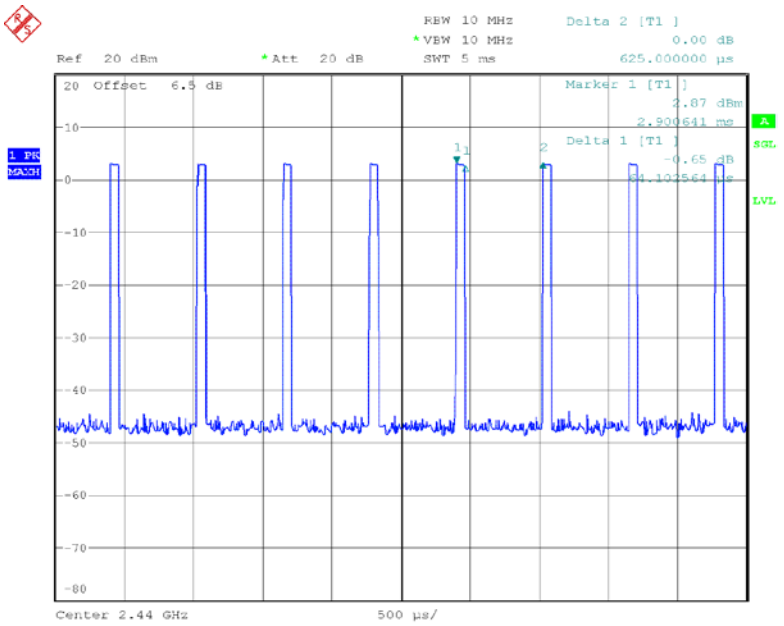
LE 2M



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Support Test Devices Description

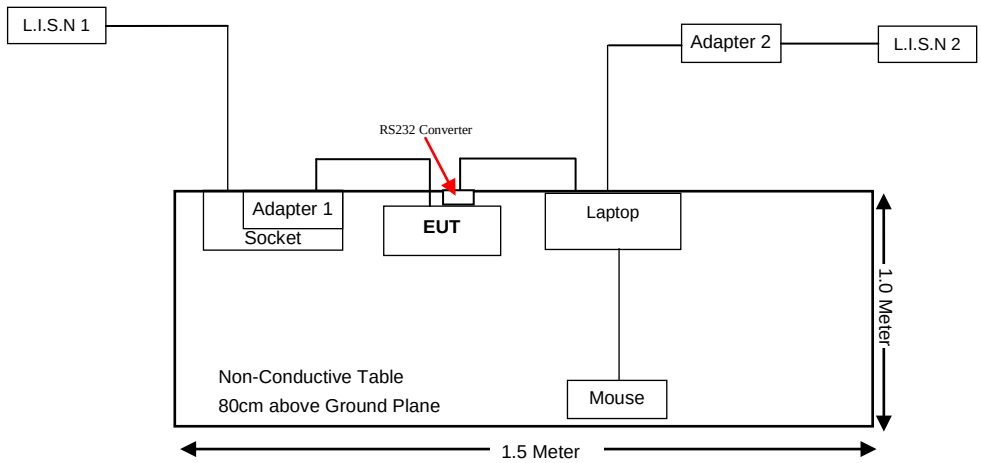
Manufacturer	Device Name	Model	Serial Number
DELL	Mouse	MOJUUO	002B6M6
DELL	Laptop	PP01L	3F438A01
DELL	Adapter 2	ADP-90FB REV.B	Unknown
Yue Wei	Adapter 1	YW-506	Unknown
JINOU	RS232 Converter (female to female)	Unknown	Unknown

Support Test Cable Description

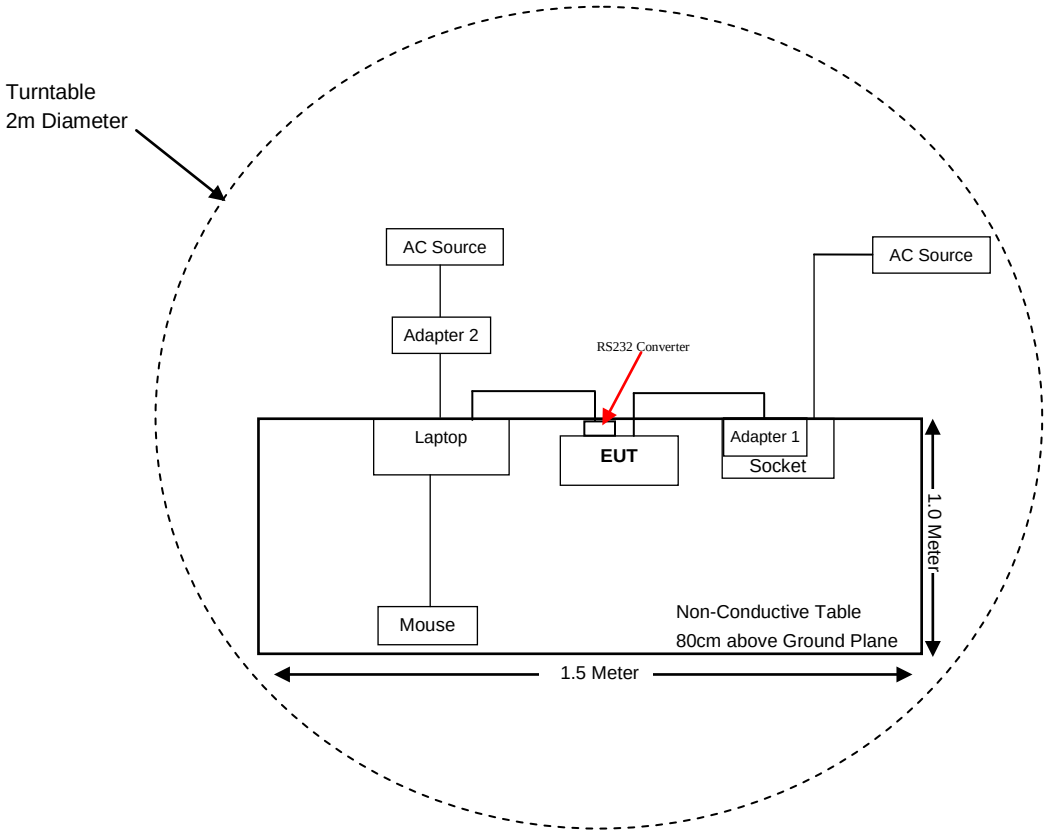
Cable Description	Length (m)	From / Port	To
Shielding USB to Serial Cable	1.8	Laptop	EUT
Adapter DC power cable	2.0	EUT	Adapter1
Unshielded Mouse Cable	1.4	Laptop	Mouse
Unshielded DC Power Cable	1.75	Adapter 2	Laptop

Block Diagram of Test Setup

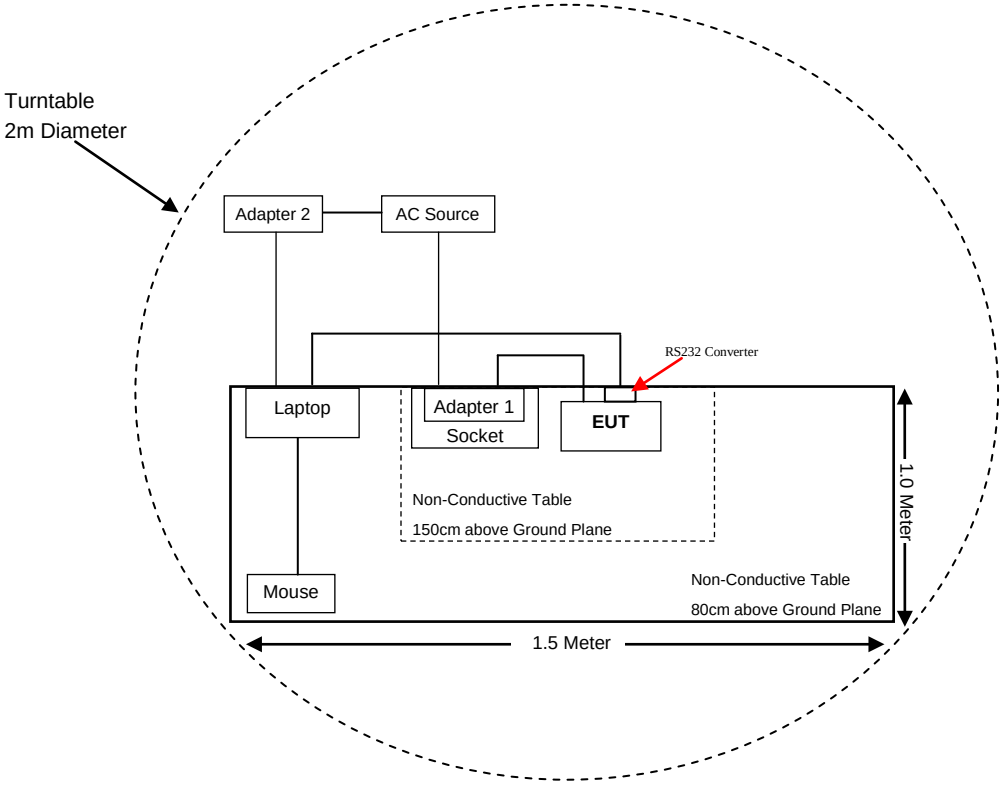
For Conducted Emissions:



For Radiated Emissions(Below 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)	Compliant
§15.203	Antenna Requirement	Compliant
§15.207 (a)	AC Line Conducted Emissions	Compliant
§15.205, §15.209, §15.247(d)	Spurious Emissions	Compliant
§15.247 (a)(2)	6 dB Emission Bandwidth	Compliant
§15.247(b)(3)	Maximum conducted output power	Compliant
§15.247(d)	100 kHz Bandwidth of Frequency Band Edge	Compliant
§15.247(e)	Power Spectral Density	Compliant

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

TEST EQUIPMENTS LIST

Manufacturer	Description	Model	Serial Number	Calibration Date	Calibration Due Date
Conducted Emission					
Rohde & Schwarz	EMI Test Receiver	ESCI	100028	2021-04-12	2022-04-11
ROHDE&SCHWARZ	L.I.S.N.	ENV216	3560.6550.16	2021-01-13	2022-01-12
EMCO	L.I.S.N.	3810/2BR	9509-1102	2021-01-13	2022-01-12
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	2020-07-24	2025-07-23
SONOMA INSTRUMENT	Pre-Amplifier	310 N	186684	2020-08-10	2021-08-09
SUNOL SCIENCES	Broadband Antenna	JB3	A121808	2019-12-10	2022-12-09
Rohde & Schwarz	EMI Test Receiver	ESR3	102456	2021-04-12	2022-04-11
INMET	Attenuator	18N-6dB	000186	2019-12-10	2022-12-09
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
UTIFLEX	RF Cable (Below 1GHz)	T-E237	233522-001	2020-07-17	2021-07-16
Rohde & Schwarz	Spectrum Analyzer	FSU26	200835	2021-04-12	2022-04-11
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
MICRO-TRONICS	2.4GHz Notch Filter	BRM50702	G396	2021-05-19	2022-05-18
SUHNER+HUBER	RF Cable (Above 1GHz)	SUCOFLEX 104PE	93533/4PE	2021-05-16	2022-05-15
IW-MICROWAVE	RF Cable (Above 1GHz)	SPS-2301	111503	2020-08-31	2021-08-30
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
HUBER+SUHNER	RF Cable (Above 18GHz)	T-E222	2551/2	2020-07-18	2021-07-17
FORIDA RF Labs	RF Cable (Above 18GHz)	T-E210	1042	2020-07-18	2021-07-17
Rohde & Schwarz	EMC32	EMC32	V9.10.00	NCR	NCR

Manufacturer	Description	Model	Serial Number	Calibration Date	Calibration Due Date
RF Conducted Test					
Rohde & Schwarz	Spectrum Analyzer	FSU26	100113	2021-04-12	2022-04-11
Mini-circuits	6dB Attenuator	BW-S6W5+	00433	2020-09-10	2021-09-09
Unknown	RF Coaxial Cable	SMA-IPEX	Unknown	Each Time	

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^2)**	**Averaging Time (minutes)**
0.3–1.34	614	1.63	※(100)	30
1.34–30	824/f	2.19/f	※($180/f^2$)	30
30–300	27.5	0.073	0.2	30
300–1500	/	/	f/1500	30
1500–100,000	/	/	1.0	30

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^2);
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);

Mode	Frequency Range (MHz)	Antenna Gain		Tune-up Conducted Power		Evaluation Distance (cm)	Power Density (mW/cm^2)	MPE Limit (mW/cm^2)
		(dBi)	(numeric)	(dBm)	(mW)			
BLE	2402-2480	2.0	1.58	3.5	2.24	20	0.0007	1.0

Result: The device meets RF exposure evaluation at ⩾20cm distance.

FCC §15.203 - ANTENNA REQUIREMENT

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 antenna and the maximum antenna gain is 2.0dBi, which fulfill the requirement of this section. Please refer to the EUT photos.

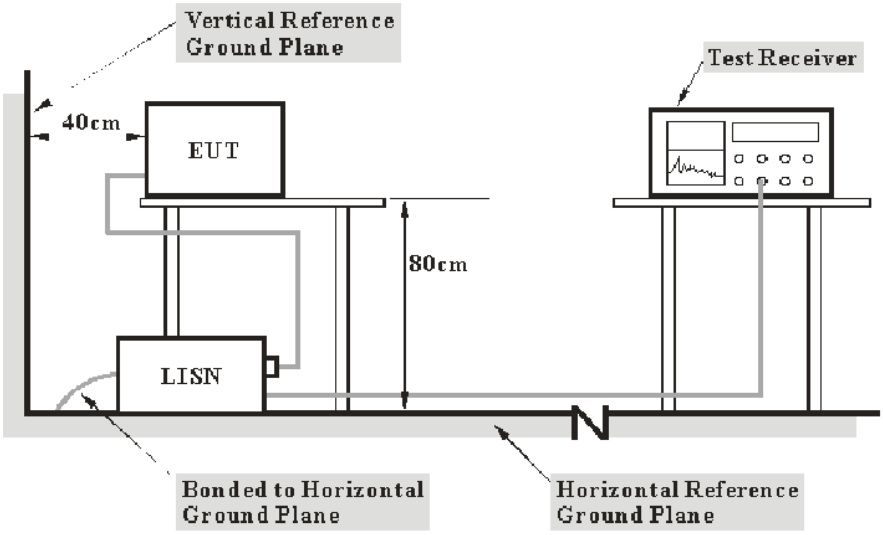
Result: Compliance

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:

Margin = Limit – Corrected Amplitude

Test Data

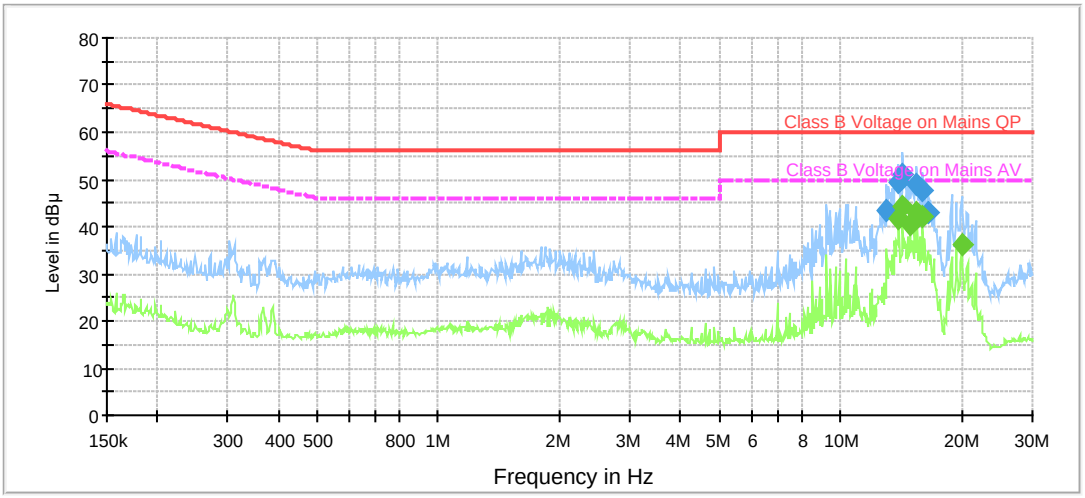
Test Environment Conditions

Temperature:	19 °C
Relative Humidity:	52 %
ATM Pressure:	95.9 kPa

The testing was performed by Even Wu on 2021-07-05.

Test Mode: Transmitting (LE 2M_Middle Channel)-Worst C**ase**

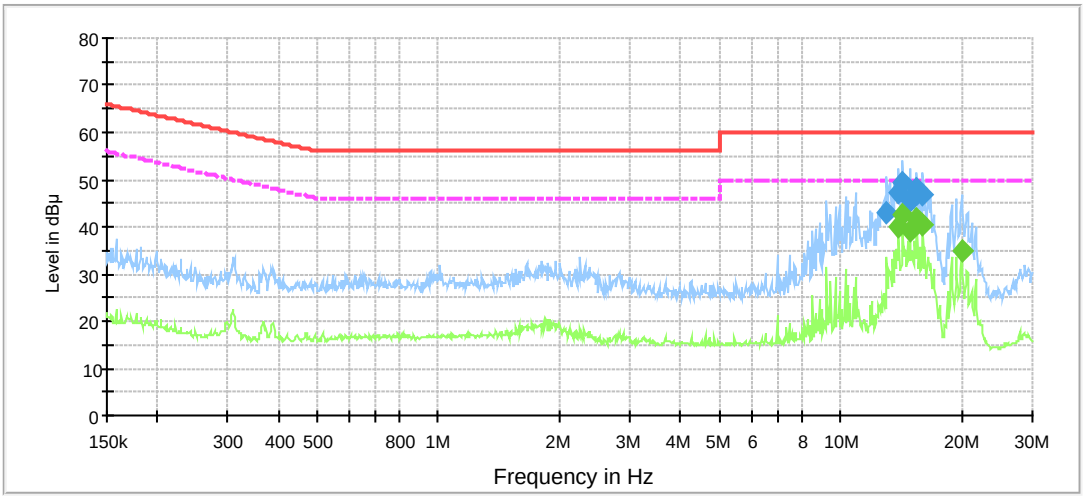
AC120V/60Hz, Line:



Frequency (MHz)	QuasiPeak (dB µ V)	Meas. Time (ms)	Bandwidth (kHz)	Line	Corr. (dB)	Margin (dB)	Limit (dB µ V)
13.023173	43.2	2000.0	9.000	L1	19.6	16.8	60.0
13.965024	49.3	2000.0	9.000	L1	19.6	10.7	60.0
14.317658	50.9	2000.0	9.000	L1	19.6	9.1	60.0
15.507043	48.9	2000.0	9.000	L1	19.6	11.1	60.0
15.978108	47.8	2000.0	9.000	L1	19.6	12.2	60.0
16.463483	42.8	2000.0	9.000	L1	19.6	17.2	60.0

Frequency (MHz)	Average (dB µ V)	Meas. Time (ms)	Bandwidth (kHz)	Line	Corr. (dB)	Margin (dB)	Limit (dB µ V)
13.965024	41.8	2000.0	9.000	L1	19.6	8.2	50.0
14.317658	44.4	2000.0	9.000	L1	19.6	5.6	50.0
14.900488	40.5	2000.0	9.000	L1	19.6	9.5	50.0
15.507043	42.9	2000.0	9.000	L1	19.6	7.1	50.0
15.978108	42.0	2000.0	9.000	L1	19.6	8.0	50.0
19.998533	36.0	2000.0	9.000	L1	19.6	14.0	50.0

AC120V/60Hz, Neutral:



Frequency (MHz)	QuasiPeak (dB µ V)	Meas. Time (ms)	Bandwidth (kHz)	Line	Corr. (dB)	Margin (dB)	Limit (dB µ V)
13.023173	43.2	2000.0	9.000	N	19.6	16.8	60.0
13.965024	47.4	2000.0	9.000	N	19.6	12.6	60.0
14.317658	49.4	2000.0	9.000	N	19.6	10.6	60.0
14.900488	45.7	2000.0	9.000	N	19.6	14.3	60.0
15.507043	47.9	2000.0	9.000	N	19.6	12.1	60.0
15.978108	46.7	2000.0	9.000	N	19.6	13.3	60.0

Frequency (MHz)	Average (dB µ V)	Meas. Time (ms)	Bandwidth (kHz)	Line	Corr. (dB)	Margin (dB)	Limit (dB µ V)
13.965024	40.2	2000.0	9.000	N	19.6	9.8	50.0
14.317658	42.6	2000.0	9.000	N	19.6	7.4	50.0
14.900488	39.2	2000.0	9.000	N	19.6	10.8	50.0
15.507043	41.6	2000.0	9.000	N	19.6	8.4	50.0
15.978108	40.6	2000.0	9.000	N	19.6	9.4	50.0
19.998533	34.7	2000.0	9.000	N	19.6	15.3	50.0

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

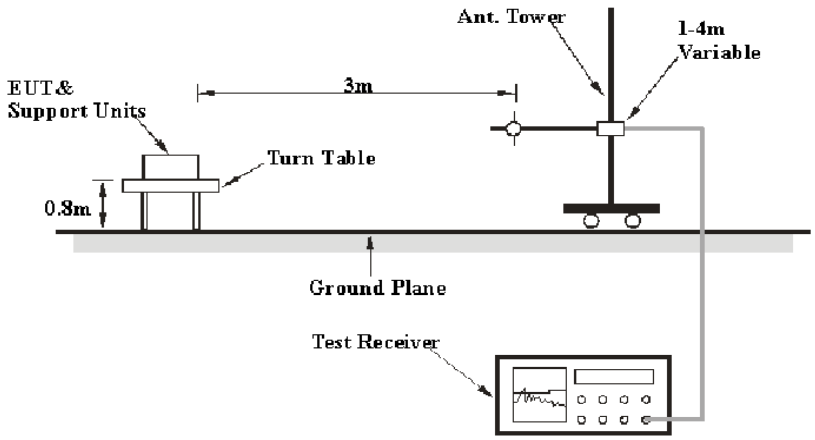
FCC §15.209, §15.205 & §15.247(d) - SPURIOUS EMISSIONS

Applicable Standard

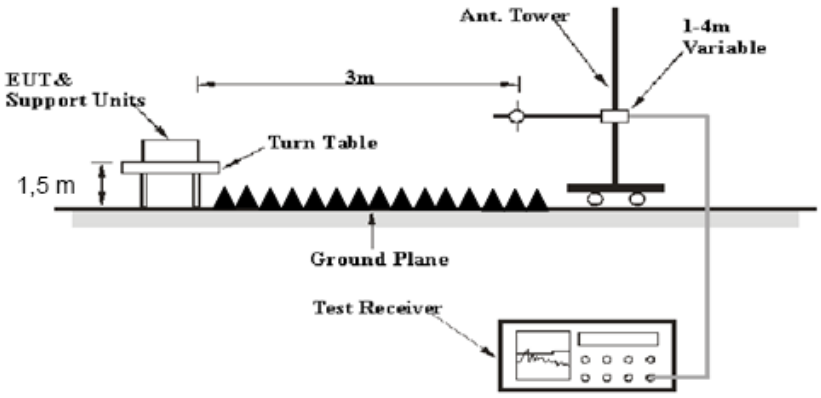
FCC §15.247 (d); §15.209; §15.205;

EUT Setup

Below 1GHz:



Above 1GHz:



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 25 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-1 GHz, peak and Average detection modes for frequencies above 1 GHz.

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

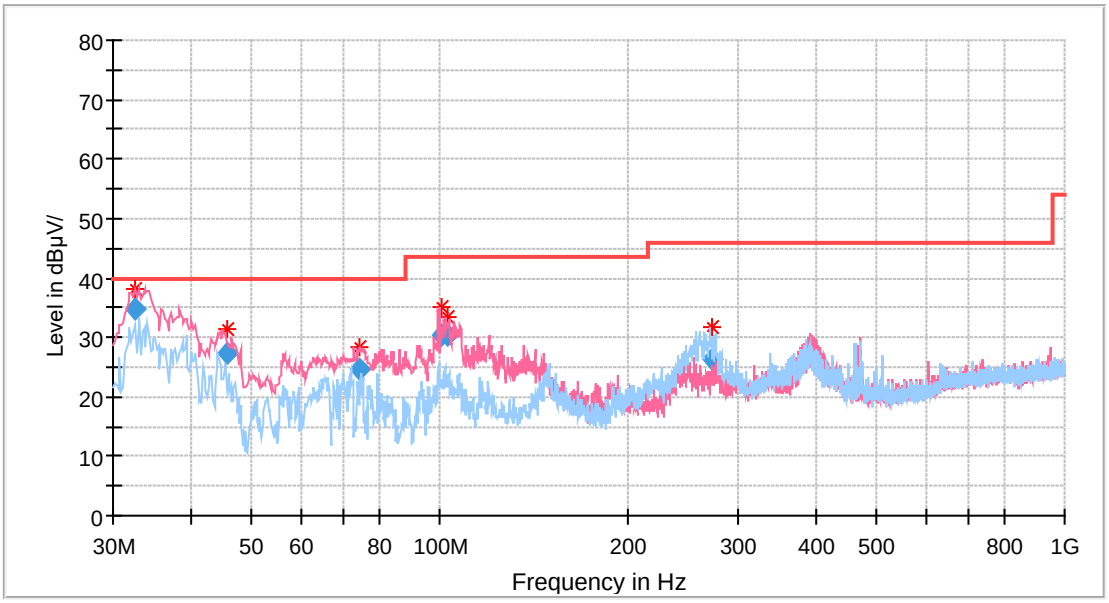
Test Environment Conditions

Temperature:	28 °C
Relative Humidity:	53 %
ATM Pressure:	95.2 kPa

The testing was performed by Even Wu on 2021-07-07.

Test Mode: Transmitting

30 MHz to 1 GHz: LE 2M_Middle Channel-Worst Case

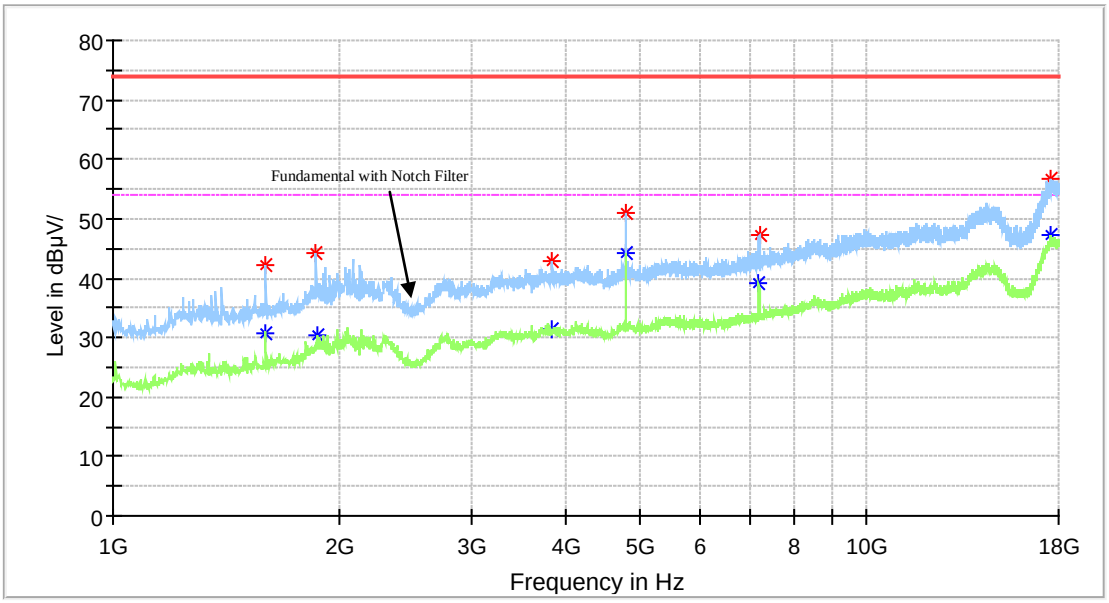


Frequency (MHz)	QuasiPeak (dB µ V/m)	Limit (dB µ V/m)	Margin (dB)	Meas. Time (ms)	Bandwidth (kHz)	Height (cm)	Pol	Azimuth (deg)	Corr. (dB/m)
32.453000	34.93	40.00	5.07	1000.0	120.000	103.0	V	123.0	-6.2
45.573250	27.41	40.00	12.59	1000.0	120.000	106.0	V	130.0	-14.9
74.247625	24.56	40.00	15.44	1000.0	120.000	102.0	V	37.0	-17.0
100.939125	30.48	43.50	13.02	1000.0	120.000	106.0	V	266.0	-14.9
102.748125	30.45	43.50	13.05	1000.0	120.000	174.0	V	252.0	-14.4
272.411875	26.46	46.00	19.54	1000.0	120.000	124.0	H	17.0	-11.3

1 GHz to 18 GHz:

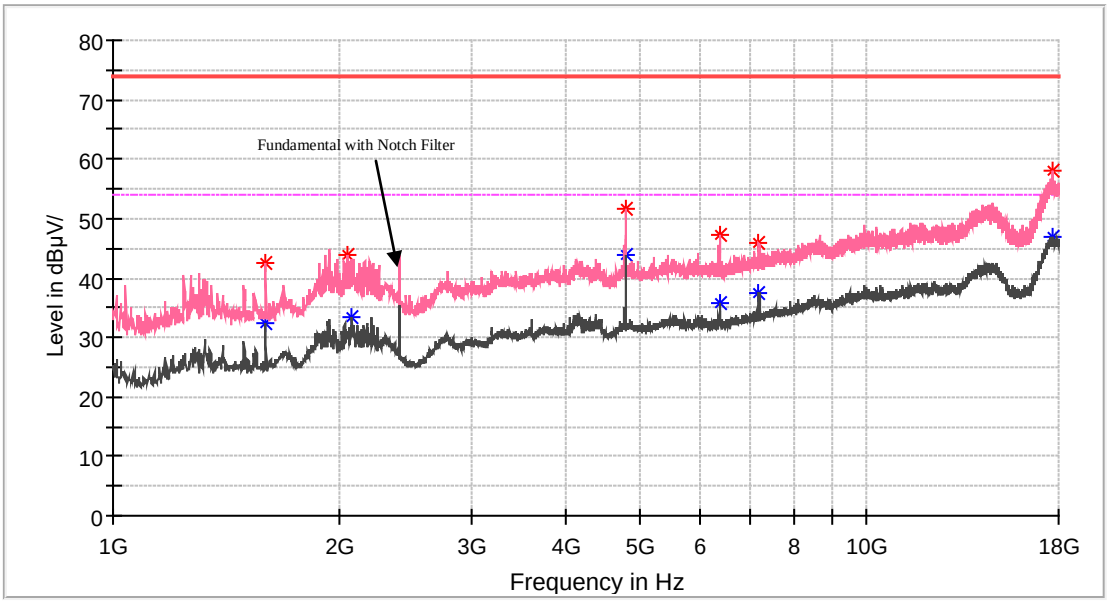
LE 1M Mode:

2402 MHz (Horizontal)



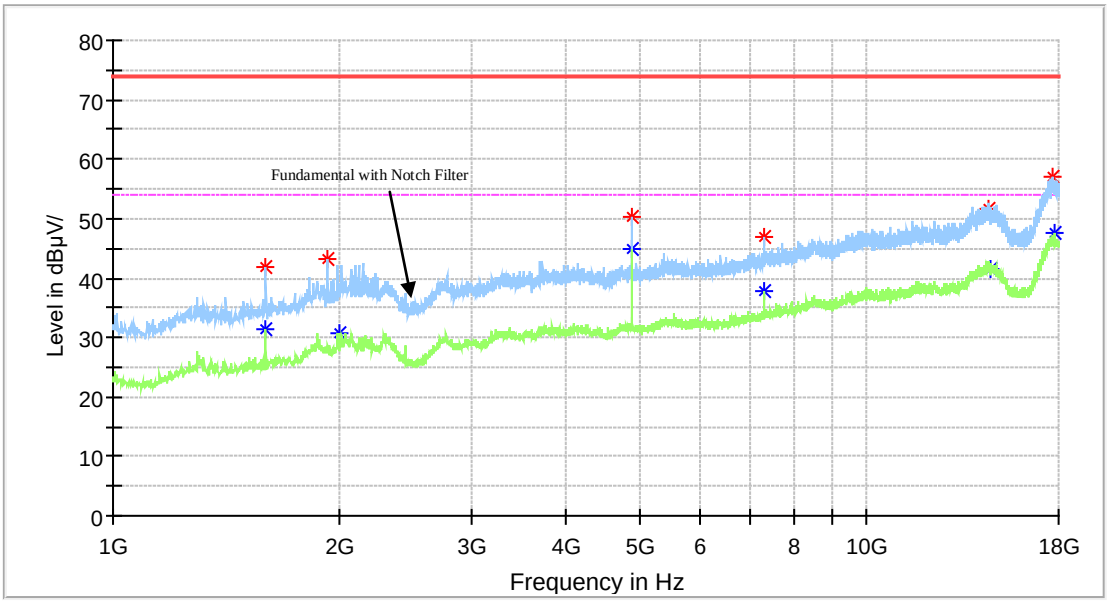
Frequency (MHz)	MaxPeak (dB µ V/m)	Average (dB µ V/m)	Limit (dB µ V/m)	Margin (dB)	Height (cm)	Pol	Azimuth (deg)	Corr. (dB/m)
1593.300000	---	30.84	54.00	23.16	150.0	H	70.0	2.4
1593.300000	42.33	---	74.00	31.67	200.0	H	76.0	2.4
1860.200000	44.16	---	74.00	29.84	150.0	H	0.0	4.8
1865.300000	---	30.35	54.00	23.65	150.0	H	152.0	4.8
3825.400000	42.76	---	74.00	31.24	150.0	H	327.0	10.4
3827.100000	---	31.52	54.00	22.48	150.0	H	192.0	10.4
4802.900000	---	44.36	54.00	9.64	150.0	H	358.0	11.8
4804.600000	51.11	---	74.00	22.89	150.0	H	353.0	11.8
7205.000000	---	39.28	54.00	14.72	200.0	H	329.0	15.1
7206.700000	47.25	---	74.00	26.75	200.0	H	329.0	15.1
17575.000000	---	47.27	54.00	6.73	150.0	H	353.0	29.4
17585.200000	56.61	---	74.00	17.39	200.0	H	113.0	29.4

2402 MHz (Vertical)



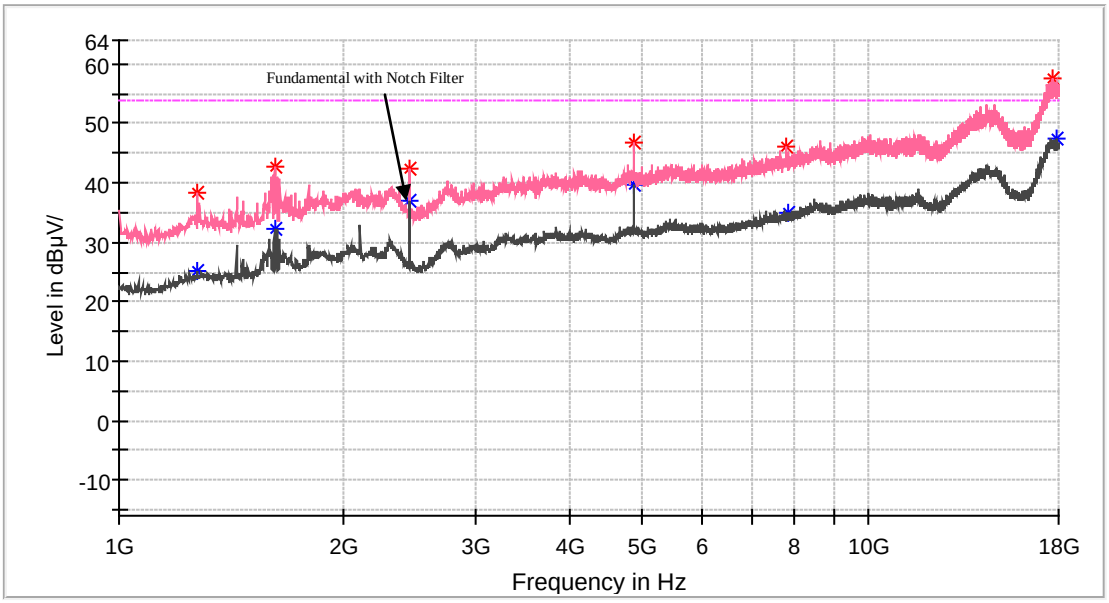
Frequency (MHz)	MaxPeak (dB µ V/m)	Average (dB µ V/m)	Limit (dB µ V/m)	Margin (dB)	Height (cm)	Pol	Azimuth (deg)	Corr. (dB/m)
1593.300000	---	32.42	54.00	21.58	150.0	V	135.0	2.4
1595.000000	42.65	---	74.00	31.35	150.0	V	135.0	2.4
2050.600000	43.81	---	74.00	30.19	200.0	V	93.0	5.9
2077.800000	---	33.29	54.00	20.71	150.0	V	126.0	5.9
4802.900000	---	43.81	54.00	10.19	150.0	V	314.0	11.8
4802.900000	51.69	---	74.00	22.31	150.0	V	314.0	11.8
6382.200000	47.14	---	74.00	26.86	150.0	V	154.0	13.6
6385.600000	---	35.93	54.00	18.07	150.0	V	154.0	13.6
7205.000000	---	37.50	54.00	16.50	150.0	V	323.0	15.1
7205.000000	45.88	---	74.00	28.12	150.0	V	323.0	15.1
17626.000000	---	46.90	54.00	7.10	150.0	V	0.0	29.4
17687.200000	58.11	---	74.00	15.89	150.0	V	135.0	29.4

2440 MHz (Horizontal)



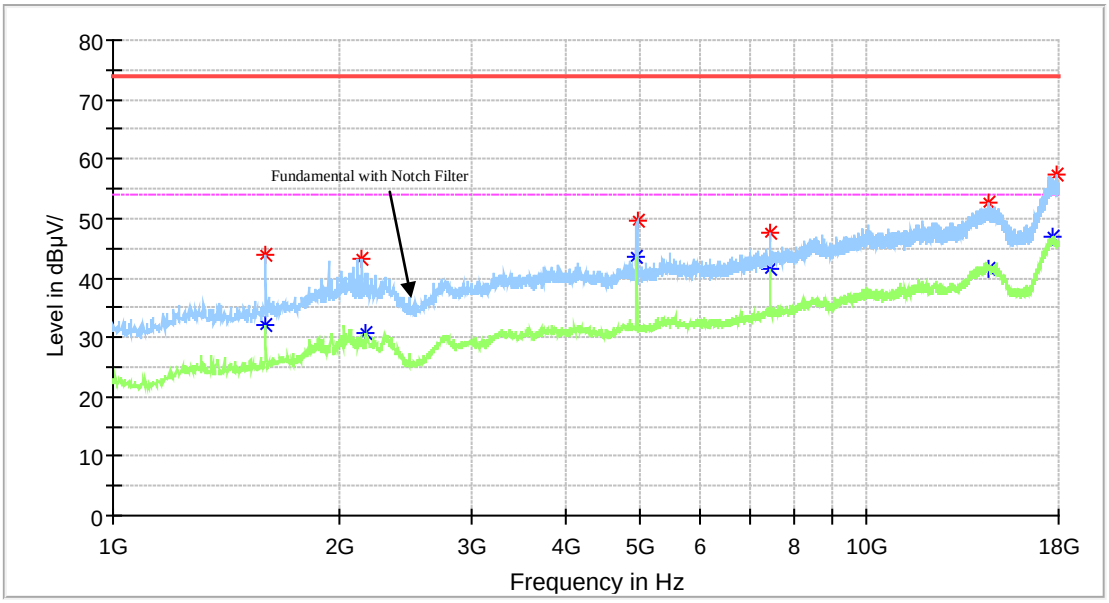
Frequency (MHz)	MaxPeak (dB µ V/m)	Average (dB µ V/m)	Limit (dB µ V/m)	Margin (dB)	Height (cm)	Pol	Azimuth (deg)	Corr. (dB/m)
1595.000000	---	31.41	54.00	22.59	200.0	H	72.0	2.4
1595.000000	41.89	---	74.00	32.11	150.0	H	80.0	2.4
1926.500000	43.30	---	74.00	30.70	150.0	H	162.0	5.3
1999.600000	---	30.88	54.00	23.12	150.0	H	51.0	5.9
4879.400000	---	44.93	54.00	9.07	200.0	H	310.0	12.0
4879.400000	50.13	---	74.00	23.87	200.0	H	310.0	12.0
7318.900000	---	37.76	54.00	16.24	150.0	H	60.0	15.4
7318.900000	46.99	---	74.00	27.01	150.0	H	60.0	15.4
14567.700000	51.59	---	74.00	22.41	150.0	H	0.0	25.0
14594.900000	---	41.40	54.00	12.60	150.0	H	315.0	24.9
17671.900000	57.01	---	74.00	16.99	150.0	H	126.0	29.4
17775.600000	---	47.49	54.00	6.51	200.0	H	7.0	29.4

2440 MHz (Vertical)



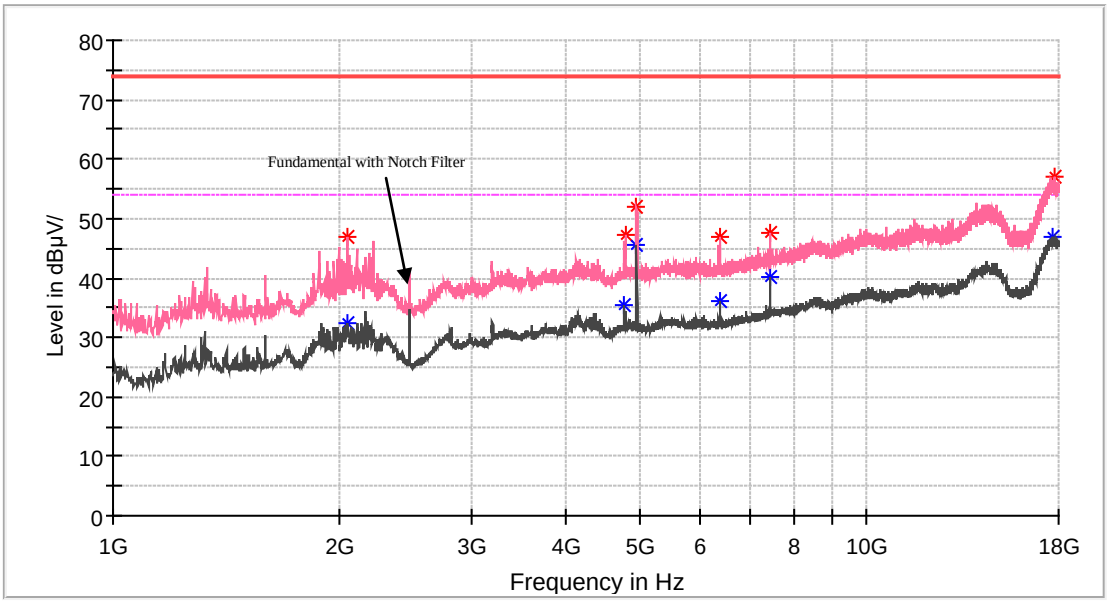
Frequency (MHz)	MaxPeak (dB µ V/m)	Average (dB µ V/m)	Limit (dB µ V/m)	Margin (dB)	Height (cm)	Pol	Azimuth (deg)	Corr. (dB)
1272.000000	38.20	---	74.00	35.80	150.0	V	254.0	0.8
1272.000000	---	25.31	54.00	28.69	150.0	V	254.0	0.8
1613.700000	---	32.18	54.00	21.82	150.0	V	232.0	2.6
1613.700000	42.70	---	74.00	31.30	150.0	V	232.0	2.6
2439.900000	42.35	---	74.00	31.65	200.0	V	3.0	5.8
2439.900000	---	37.10	54.00	16.90	200.0	V	3.0	5.8
4879.400000	46.70	---	74.00	27.30	150.0	V	152.0	12.0
4879.400000	---	39.72	54.00	14.28	150.0	V	152.0	12.0
7786.400000	46.10	---	74.00	27.90	200.0	V	124.0	16.2
7811.900000	---	35.11	54.00	18.89	200.0	V	80.0	16.2
17653.200000	57.74	---	74.00	16.26	150.0	V	342.0	29.4
17930.300000	---	47.42	54.00	6.58	150.0	V	116.0	29.4

2480 MHz (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)
1591.600000	43.78	---	74.00	30.22	150.0	H	200.0	2.4
1593.300000	---	32.09	54.00	21.91	150.0	H	200.0	2.4
2142.400000	43.36	---	74.00	30.64	200.0	H	45.0	5.9
2166.200000	---	30.74	54.00	23.26	150.0	H	272.0	5.9
4959.300000	---	43.68	54.00	10.32	200.0	H	0.0	12.2
4961.000000	49.51	---	74.00	24.49	200.0	H	0.0	12.2
7439.600000	---	41.49	54.00	12.51	200.0	H	319.0	15.7
7439.600000	47.58	---	74.00	26.42	200.0	H	319.0	15.7
14484.400000	---	41.52	54.00	12.48	150.0	H	172.0	25.0
14498.000000	52.76	---	74.00	21.24	150.0	H	235.0	25.0
17716.100000	---	46.97	54.00	7.03	150.0	H	293.0	29.4
17921.800000	57.39	---	74.00	16.61	200.0	H	99.0	29.4

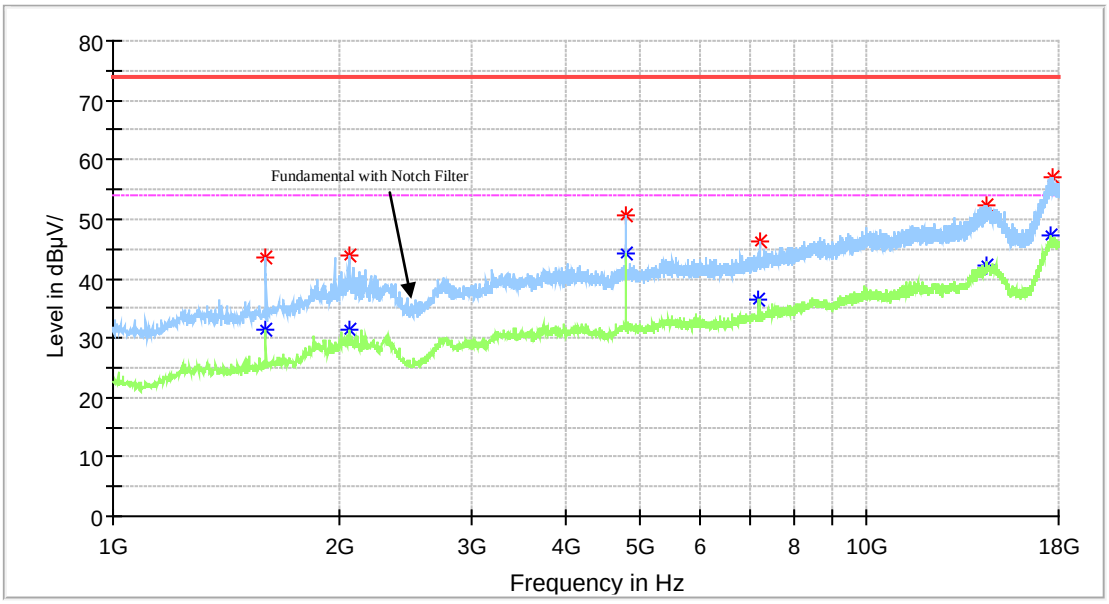
2480 MHz (Vertical)



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)
2045.500000	---	32.32	54.00	21.68	150.0	V	164.0	5.9
2048.900000	46.78	---	74.00	27.22	150.0	V	126.0	5.9
4779.100000	---	35.42	54.00	18.58	150.0	V	135.0	11.7
4782.500000	47.38	---	74.00	26.62	150.0	V	145.0	11.7
4959.300000	---	45.66	54.00	8.34	150.0	V	343.0	12.2
4959.300000	51.87	---	74.00	22.13	150.0	V	343.0	12.2
6377.100000	46.97	---	74.00	27.03	150.0	V	155.0	13.5
6385.600000	---	35.97	54.00	18.03	150.0	V	155.0	13.6
7439.600000	---	40.24	54.00	13.76	200.0	V	215.0	15.7
7439.600000	47.76	---	74.00	26.24	200.0	V	215.0	15.7
17716.100000	---	47.08	54.00	6.92	200.0	V	2.0	29.4
17775.600000	57.10	---	74.00	16.90	150.0	V	343.0	29.4

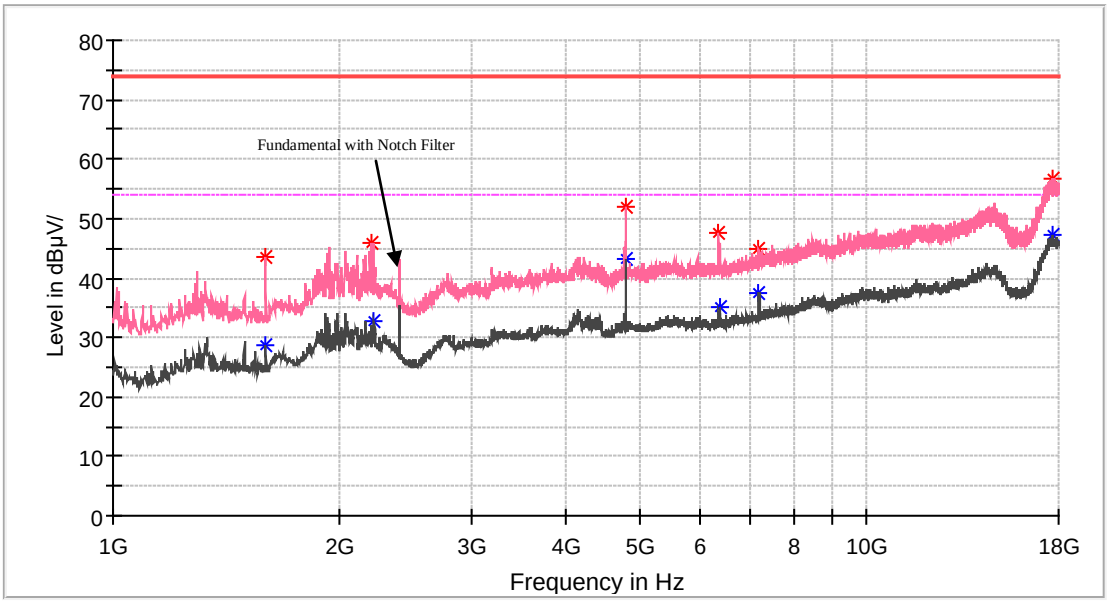
LE 2M Mode:

2402 MHz (Horizontal)



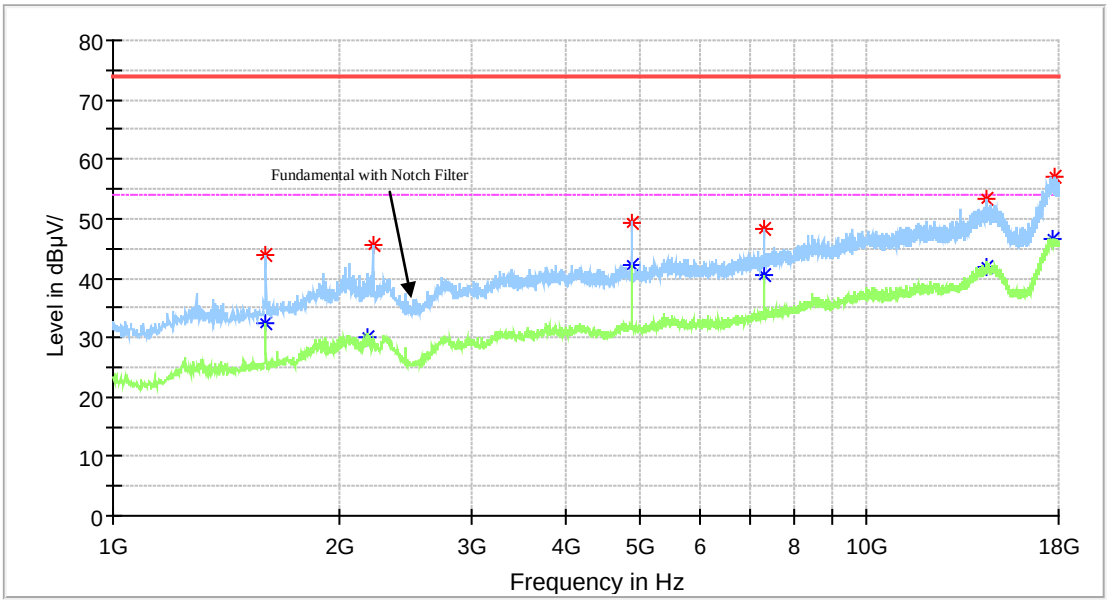
Frequency (MHz)	MaxPeak (dB µ V/m)	Average (dB µ V/m)	Limit (dB µ V/m)	Margin (dB)	Height (cm)	Pol	Azimuth (deg)	Corr. (dB/m)
1593.300000	---	31.41	54.00	22.59	150.0	H	69.0	2.4
1593.300000	43.55	---	74.00	30.45	200.0	H	74.0	2.4
2055.700000	---	31.44	54.00	22.56	150.0	H	98.0	5.9
2057.400000	43.95	---	74.00	30.05	150.0	H	107.0	5.9
4802.900000	---	44.13	54.00	9.87	150.0	H	297.0	11.8
4802.900000	50.57	---	74.00	23.43	150.0	H	297.0	11.8
7205.000000	---	36.62	54.00	17.38	150.0	H	0.0	15.1
7208.400000	46.28	---	74.00	27.72	150.0	H	323.0	15.1
14474.200000	52.30	---	74.00	21.70	200.0	H	263.0	25.0
14477.600000	---	42.35	54.00	11.65	200.0	H	27.0	25.0
17558.000000	---	47.20	54.00	6.80	150.0	H	234.0	29.4
17644.700000	57.20	---	74.00	16.80	200.0	H	0.0	29.4

2402 MHz (Vertical)



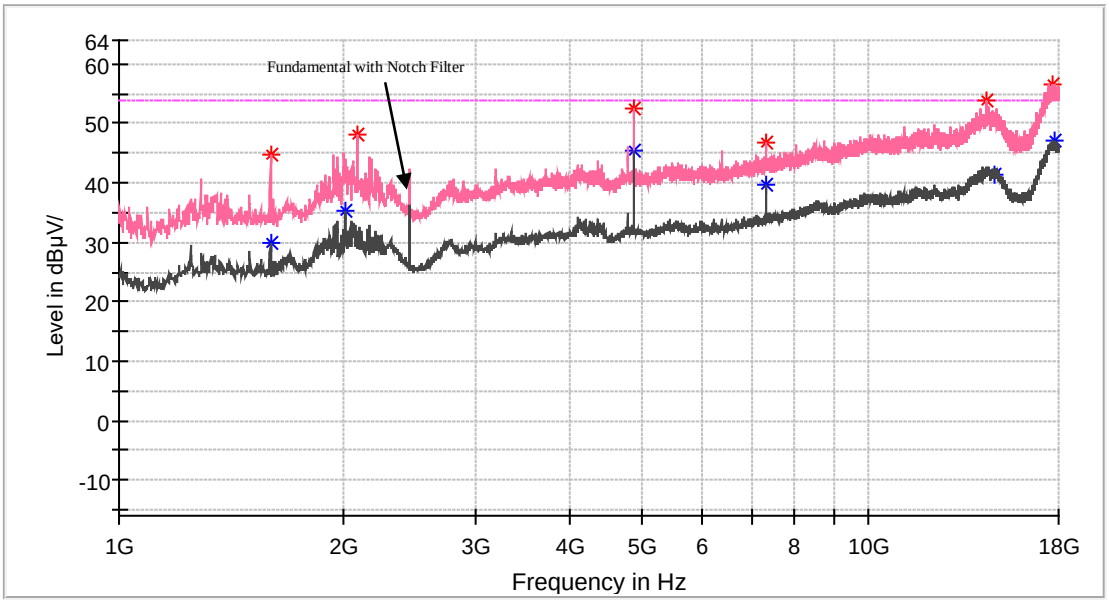
Frequency (MHz)	MaxPeak (dB µ V/m)	Average (dB µ V/m)	Limit (dB µ V/m)	Margin (dB)	Height (cm)	Pol	Azimuth (deg)	Corr. (dB/m)
1593.300000	---	28.83	54.00	25.17	150.0	V	145.0	2.4
1593.300000	43.47	---	74.00	30.53	150.0	V	145.0	2.4
2205.300000	46.05	---	74.00	27.95	150.0	V	118.0	5.8
2222.300000	---	32.84	54.00	21.16	150.0	V	136.0	5.8
4802.900000	---	43.06	54.00	10.94	200.0	V	23.0	11.8
4804.600000	51.97	---	74.00	22.03	150.0	V	2.0	11.8
6373.700000	47.71	---	74.00	26.29	150.0	V	145.0	13.5
6385.600000	---	35.12	54.00	18.88	150.0	V	154.0	13.6
7205.000000	---	37.63	54.00	16.37	200.0	V	0.0	15.1
7205.000000	44.87	---	74.00	29.13	200.0	V	0.0	15.1
17668.500000	56.72	---	74.00	17.28	150.0	V	344.0	29.4
17671.900000	---	47.28	54.00	6.72	150.0	V	313.0	29.4

2440 MHz (Horizontal)



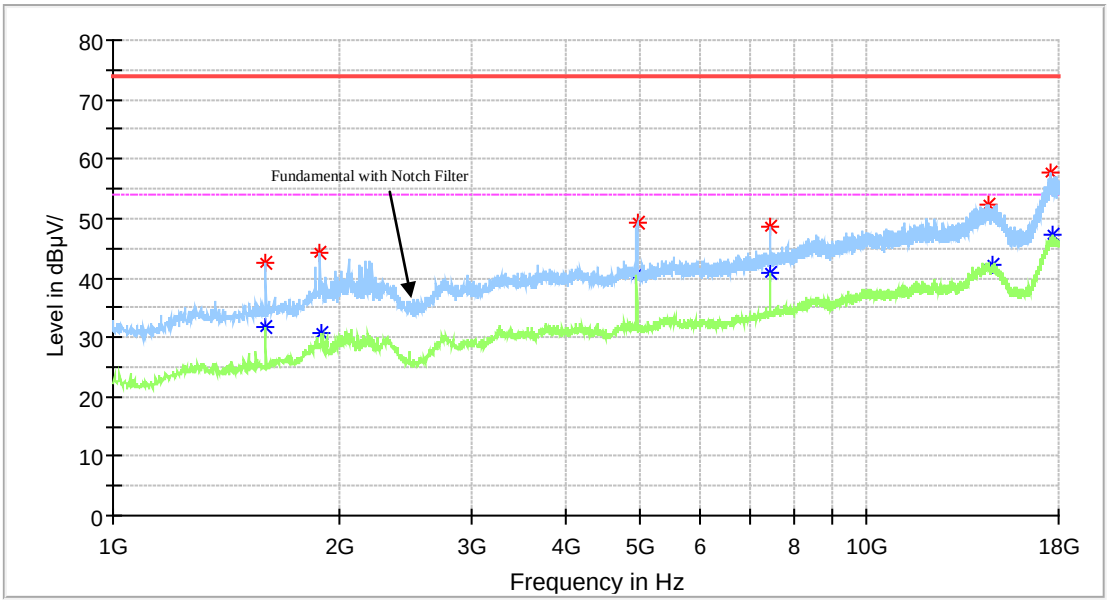
Frequency (MHz)	MaxPeak (dB µ V/m)	Average (dB µ V/m)	Limit (dB µ V/m)	Margin (dB)	Height (cm)	Pol	Azimuth (deg)	Corr. (dB/m)
1591.600000	43.95	---	74.00	30.05	150.0	H	221.0	2.4
1595.000000	---	32.51	54.00	21.49	200.0	H	81.0	2.4
2171.300000	---	30.20	54.00	23.80	200.0	H	0.0	5.9
2210.400000	45.50	---	74.00	28.50	200.0	H	98.0	5.8
4879.400000	---	42.30	54.00	11.70	150.0	H	358.0	12.0
4881.100000	49.42	---	74.00	24.58	150.0	H	2.0	12.0
7318.900000	---	40.62	54.00	13.38	200.0	H	339.0	15.4
7318.900000	48.19	---	74.00	25.81	200.0	H	339.0	15.4
14475.900000	---	41.96	54.00	12.04	200.0	H	90.0	25.0
14481.000000	53.34	---	74.00	20.66	200.0	H	0.0	25.0
17648.100000	---	46.74	54.00	7.26	150.0	H	247.0	29.4
17738.200000	57.09	---	74.00	16.91	150.0	H	337.0	29.4

2440 MHz (Vertical)



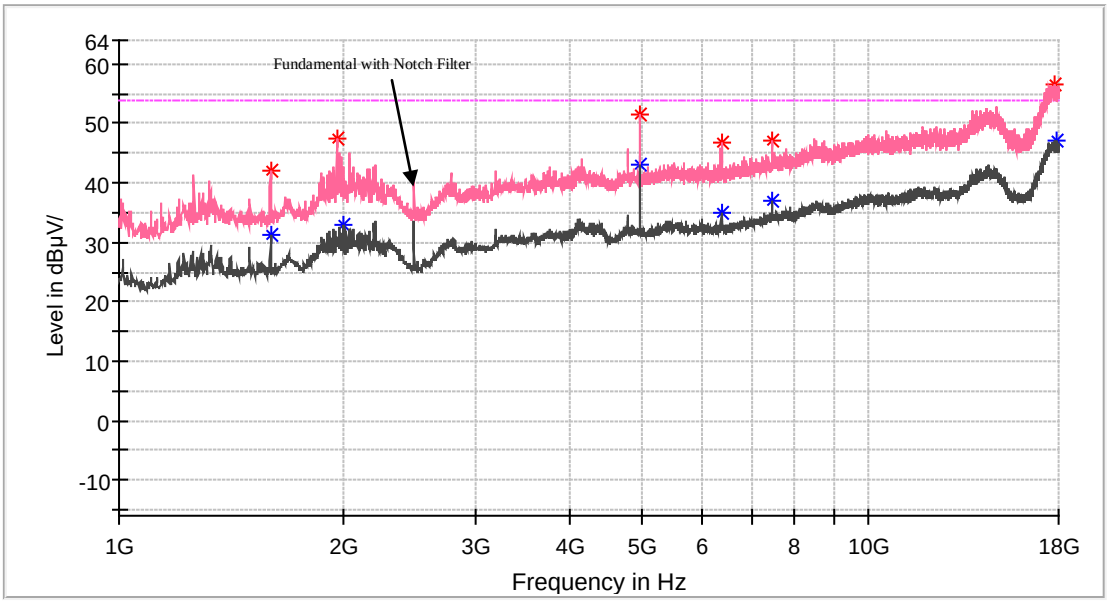
Frequency (MHz)	MaxPeak (dB µ V/m)	Average (dB µ V/m)	Limit (dB µ V/m)	Margin (dB)	Height (cm)	Pol	Azimuth (deg)	Corr. (dB/m)
1593.300000	44.93	---	74.00	29.07	200.0	V	45.0	2.4
1595.000000	---	30.05	54.00	23.95	200.0	V	144.0	2.4
2009.800000	---	35.16	54.00	18.84	150.0	V	157.0	5.9
2082.900000	48.01	---	74.00	25.99	150.0	V	129.0	5.9
4879.400000	---	45.45	54.00	8.55	150.0	V	358.0	12.0
4879.400000	52.58	---	74.00	21.42	150.0	V	358.0	12.0
7318.900000	46.68	---	74.00	27.32	150.0	V	326.0	15.4
7320.600000	---	39.54	54.00	14.46	150.0	V	0.0	15.4
14447.000000	53.99	---	74.00	20.01	200.0	V	54.0	25.0
14810.800000	---	41.43	54.00	12.57	150.0	V	0.0	24.8
17719.500000	56.70	---	74.00	17.30	150.0	V	345.0	29.4
17813.000000	---	47.07	54.00	6.93	150.0	V	202.0	29.4

2480 MHz (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/m)
1593.300000	42.64	---	74.00	31.36	150.0	H	98.0	2.4
1595.000000	---	31.72	54.00	22.28	150.0	H	60.0	2.4
1884.000000	44.24	---	74.00	29.76	150.0	H	154.0	5.0
1887.400000	---	30.80	54.00	23.20	150.0	H	346.0	5.0
4959.300000	---	40.53	54.00	13.47	200.0	H	350.0	12.2
4961.000000	49.22	---	74.00	24.78	200.0	H	350.0	12.2
7439.600000	---	40.82	54.00	13.18	150.0	H	328.0	15.7
7439.600000	48.64	---	74.00	25.36	150.0	H	328.0	15.7
14499.700000	52.19	---	74.00	21.81	150.0	H	358.0	25.0
14664.600000	---	42.30	54.00	11.70	150.0	H	293.0	24.9
17512.100000	57.80	---	74.00	16.20	200.0	H	0.0	29.4
17711.000000	---	47.18	54.00	6.82	200.0	H	216.0	29.4

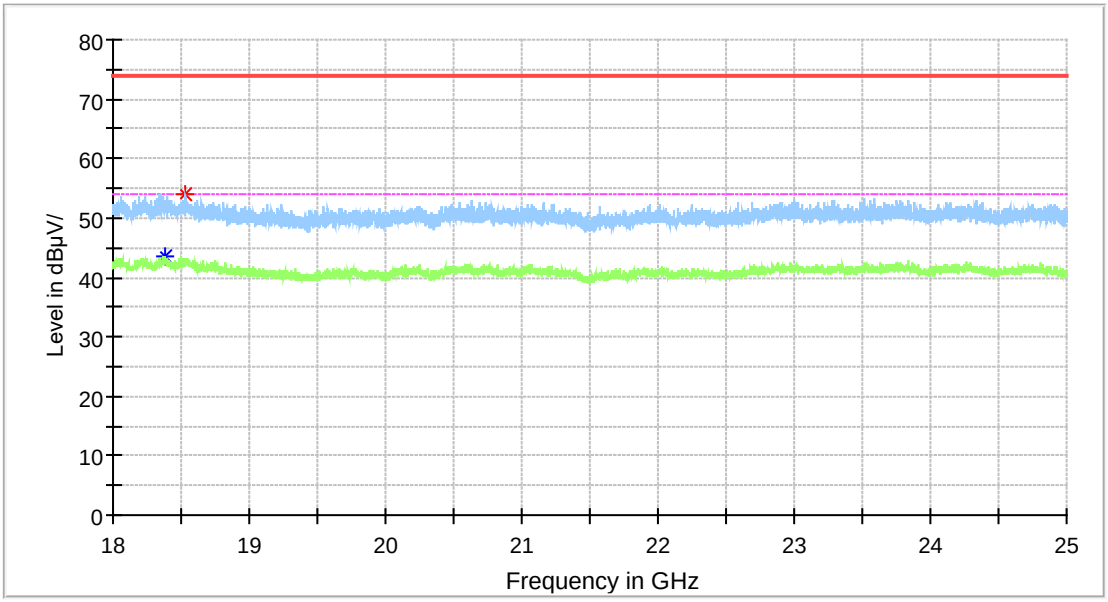
2480 MHz (Vertical)



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/m)
1593.300000	42.16	---	74.00	31.84	200.0	V	188.0	2.4
1595.000000	---	31.12	54.00	22.88	150.0	V	144.0	2.4
1952.000000	47.55	---	74.00	26.45	150.0	V	153.0	5.5
1991.100000	---	33.00	54.00	21.00	150.0	V	161.0	5.8
4959.300000	---	42.98	54.00	11.02	200.0	V	6.0	12.2
4959.300000	51.38	---	74.00	22.62	150.0	V	31.0	12.2
6373.700000	---	35.11	54.00	18.89	150.0	V	153.0	13.5
6382.200000	46.63	---	74.00	27.37	150.0	V	153.0	13.6
7439.600000	---	36.85	54.00	17.15	200.0	V	14.0	15.7
7441.300000	47.08	---	74.00	26.92	150.0	V	357.0	15.7
17787.500000	56.61	---	74.00	17.39	200.0	V	14.0	29.4
17913.300000	---	46.99	54.00	7.01	200.0	V	50.0	29.4

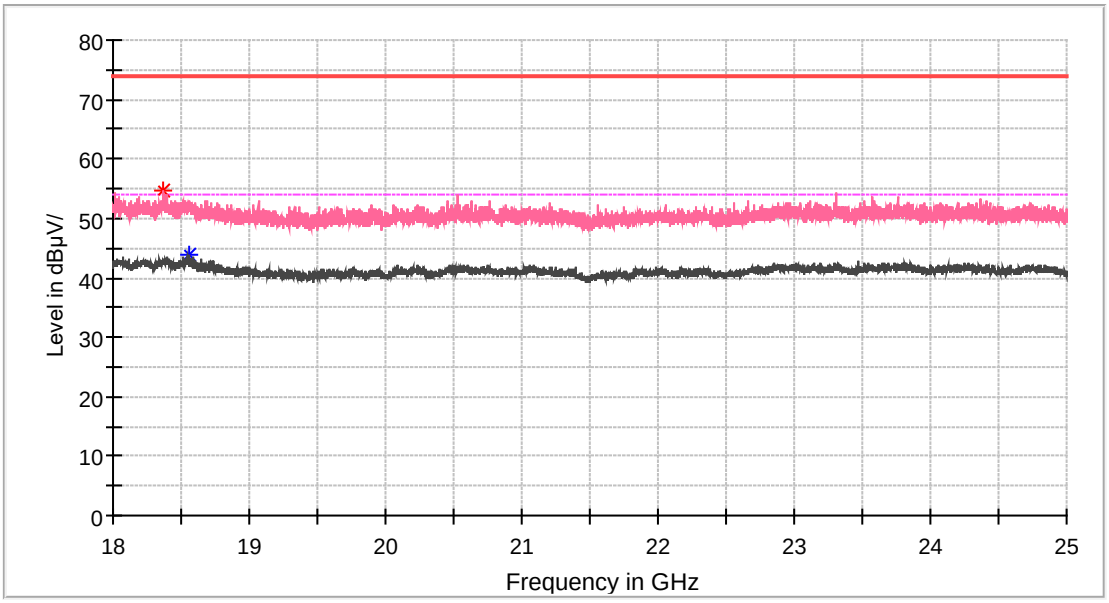
18 GHz to 25 GHz: LE 2M_Middle Channel-Worst Case

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/m)
18382.200000	---	43.56	54.00	10.44	100.0	H	0.0	8.2
18529.900000	54.01	---	74.00	19.99	100.0	H	348.0	8.3

Vertical

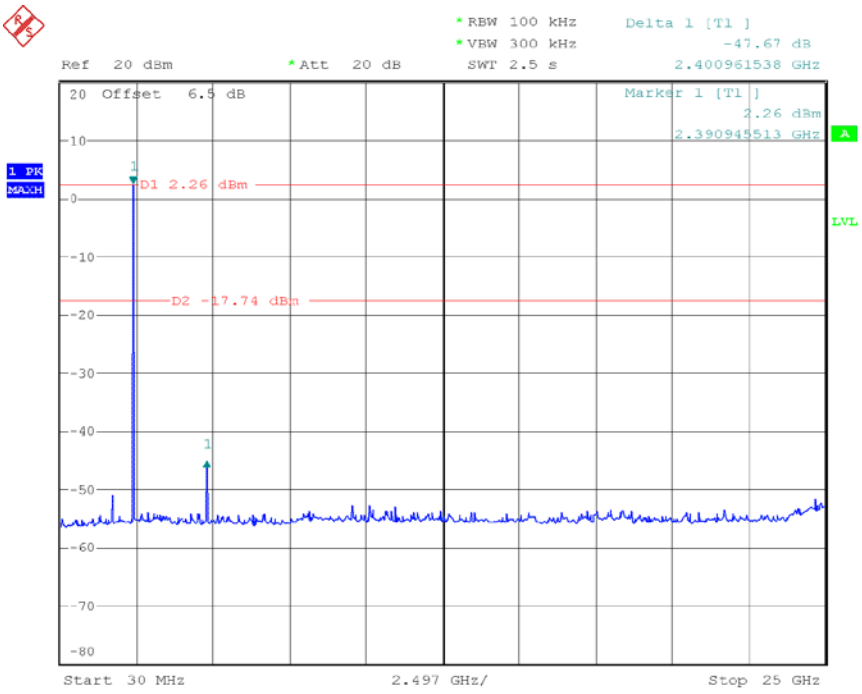


Frequency (MHz)	MaxPeak (dB µ V/m)	Average (dB µ V/m)	Limit (dB µ V/m)	Margin (dB)	Height (cm)	Pol	Azimuth (deg)	Corr. (dB/m)
18373.800000	54.60	---	74.00	19.40	100.0	V	272.0	8.2
18562.100000	---	43.75	54.00	10.25	100.0	V	5.0	8.2

Note:
Corrected Amplitude = Corrected Factor + Reading
Corrected Factor=Antenna factor (RX) + Cable Loss – Amplifier Factor or Antenna factor (RX) + Cable Loss
Margin = Limit- Corr. Amplitude

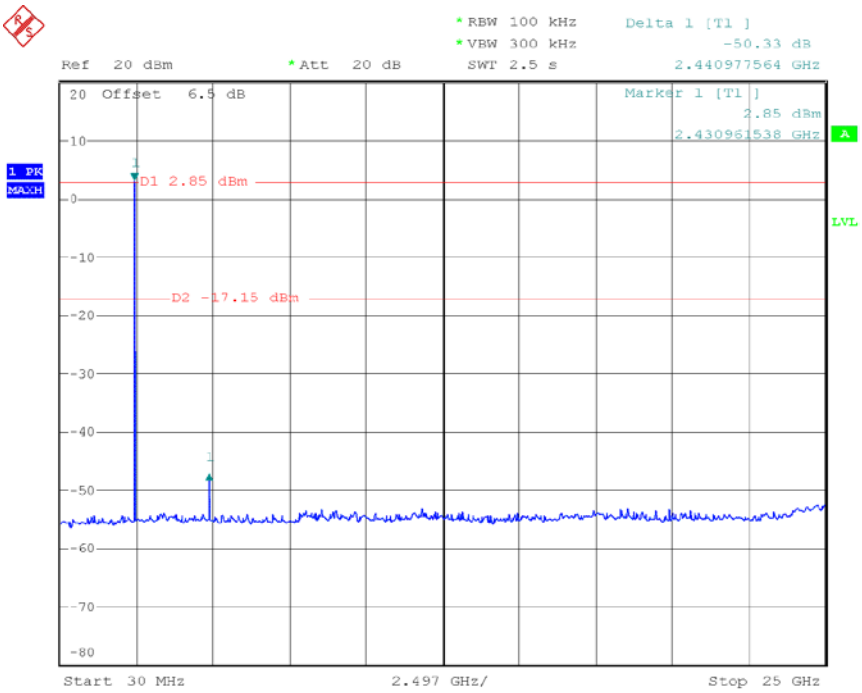
Conducted Spurious Emission At Antenna Port:

LE 1M: Low Channel



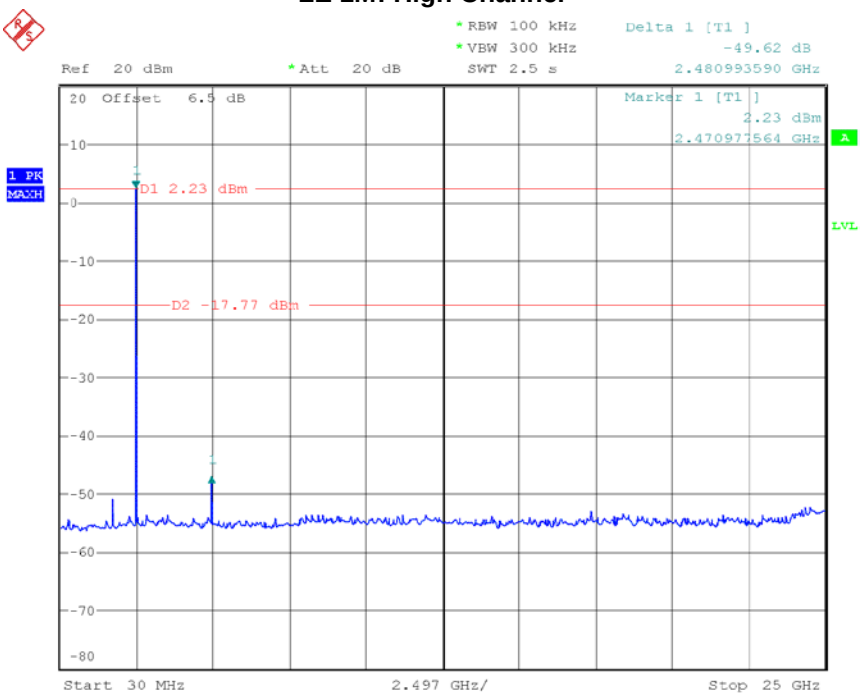
Date: 7.JUL.2021 17:12:42

LE 1M: Middle Channel



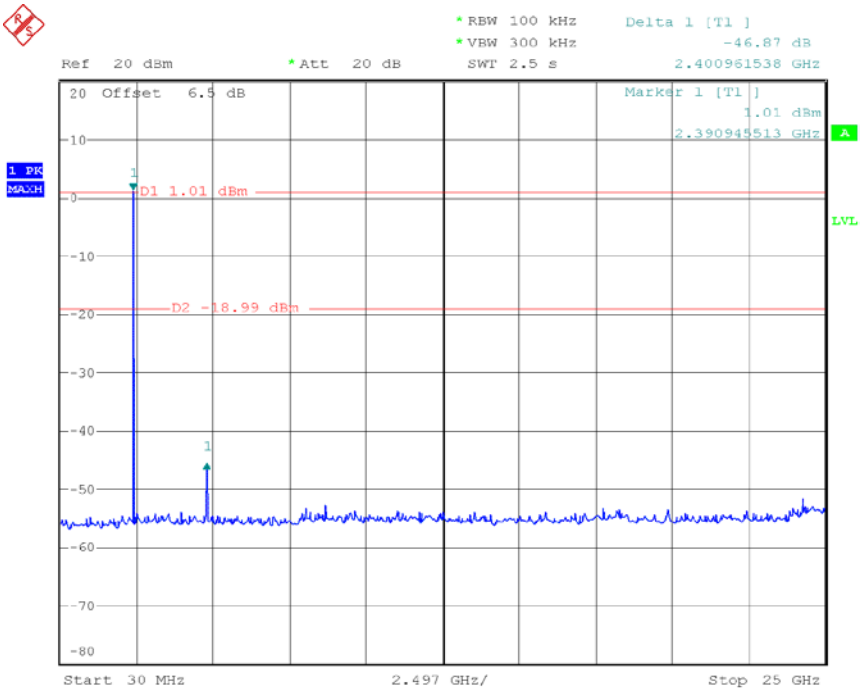
Date: 7.JUL.2021 16:56:36

LE 1M: High Channel



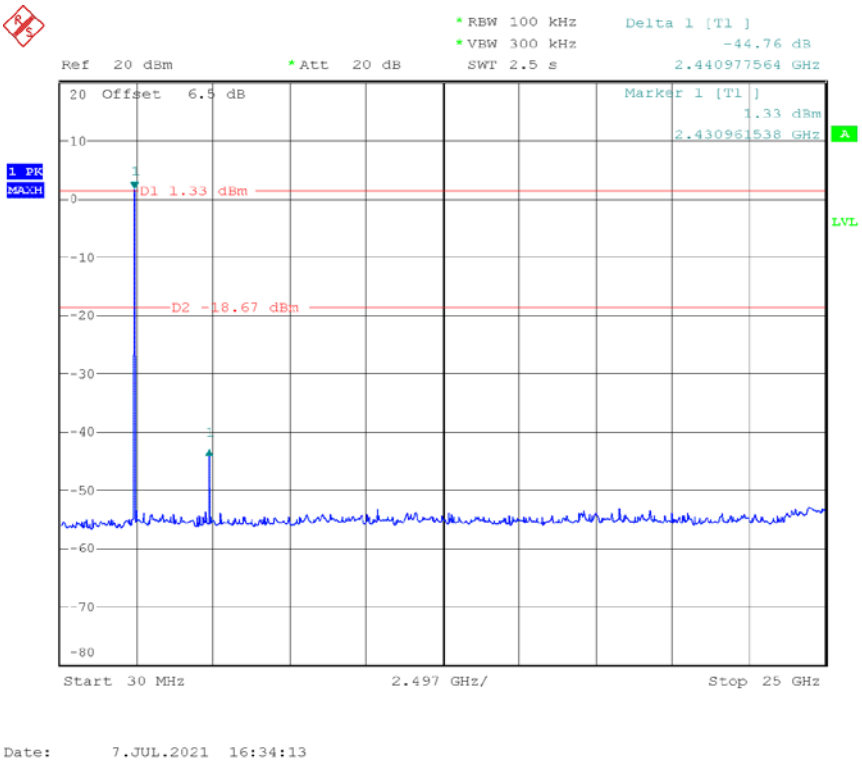
Date: 7.JUL.2021 17:08:02

LE 2M: Low Channel



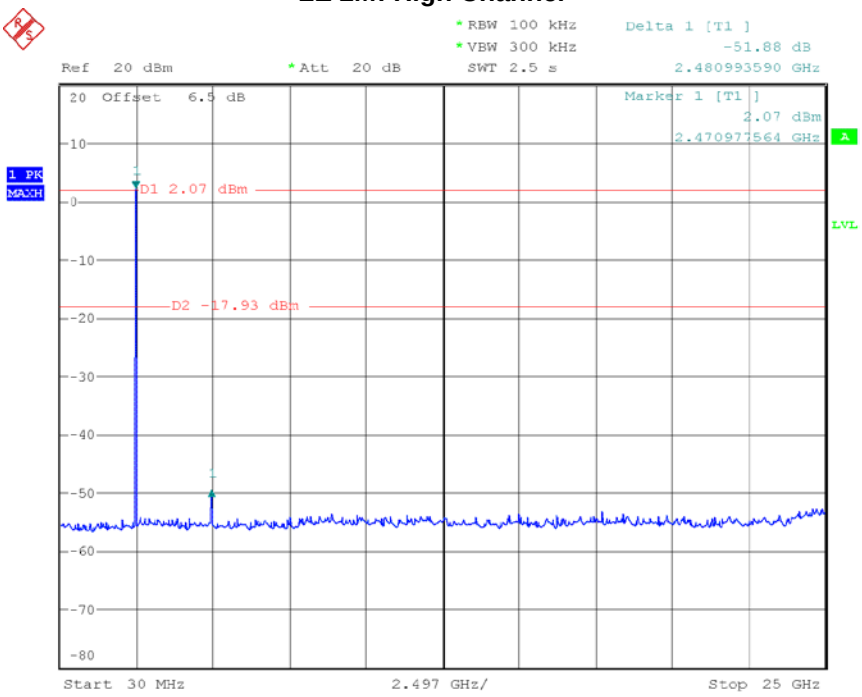
Date: 7.JUL.2021 16:29:45

LE 2M: Middle Channel



Date: 7.JUL.2021 16:34:13

LE 2M: High Channel



Date: 7.JUL.2021 17:20:30

Band Edge Emission:

LE 1M Mode

Frequency	Receiver		Rx Antenna		Cable loss	Amplifier Gain	Corrected Amplitude	Limit	Margin
	Reading	Measurement	Polar	Factor					
MHz	dBµV	PK/AV	H/V	dB(1/m)	dB	dB	dBµV/m	dBµV/m	dB
Frequency: 2402 MHz									
2402	67.81	PK	V	29.14	3.02	0.00	99.97	N/A	N/A
2402	66.76	AV	V	29.14	3.02	0.00	98.92	N/A	N/A
2390	28.66	PK	V	29.15	3.01	0.00	60.82	74.00	13.18
2390	17.08	AV	V	29.15	3.01	0.00	49.24	54.00	4.76
Frequency: 2480 MHz									
2480	68.11	PK	V	29.03	3.07	0.00	100.21	N/A	N/A
2480	67.12	AV	V	29.03	3.07	0.00	99.22	N/A	N/A
2483.5	36.62	PK	V	29.02	3.07	0.00	68.71	74.00	5.29
2483.5	21.38	AV	V	29.02	3.07	0.00	53.47	54.00	0.53

LE 2M Mode

Frequency	Receiver		Rx Antenna		Cable loss	Amplifier Gain	Corrected Amplitude	Limit	Margin
	Reading	Measurement	Polar	Factor					
MHz	dBµV	PK/AV	H/V	dB(1/m)	dB	dB	dBµV/m	dBµV/m	dB
Frequency: 2402 MHz									
2402	67.87	PK	V	29.14	3.02	0.00	100.03	N/A	N/A
2402	66.04	AV	V	29.14	3.02	0.00	98.20	N/A	N/A
2390	28.52	PK	V	29.15	3.01	0.00	60.68	74.00	13.32
2390	17.86	AV	V	29.15	3.01	0.00	50.02	54.00	3.98
Frequency: 2480 MHz									
2480	68.11	PK	V	29.03	3.07	0.00	100.21	N/A	N/A
2480	66.23	AV	V	29.03	3.07	0.00	98.33	N/A	N/A
2483.5	36.58	PK	V	29.02	3.07	0.00	68.67	74.00	5.33
2483.5	21.62	AV	V	29.02	3.07	0.00	53.71	54.00	0.29

Note:
Corrected Amplitude = Corrected Factor + Reading
Corrected Factor=Antenna factor (RX) + Cable Loss – Amplifier Factor or Antenna factor (RX) + Cable Loss
Margin = Limit- Corr. Amplitude

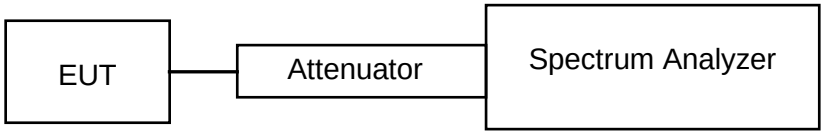
FCC §15.247(a) (2) – 6 dB EMISSION BANDWIDTH

Applicable Standard

Systems using digital modulation techniques may operate in the 902–928 MHz, 2400–2483.5 MHz, and 5725–5850 MHz bands. The minimum 6 dB bandwidth shall be at least 500 kHz.

Test Procedure

a) Set RBW = 100 kHz.
b) Set the video bandwidth (VBW) ≥ 3×RBW
c) Detector = Peak.
d) Trace mode = max hold.
e) Sweep = auto couple.
f) Allow the trace to stabilize.
g) Measure the maximum width of the emission that is constrained by the frequencies associated with the two outermost amplitude points (upper and lower frequencies) that are attenuated by 6 dB relative to the maximum level measured in the fundamental emission.



Test Data

Environmental Conditions

Temperature:	27 °C
Relative Humidity:	58 %
ATM Pressure:	95.5 kPa

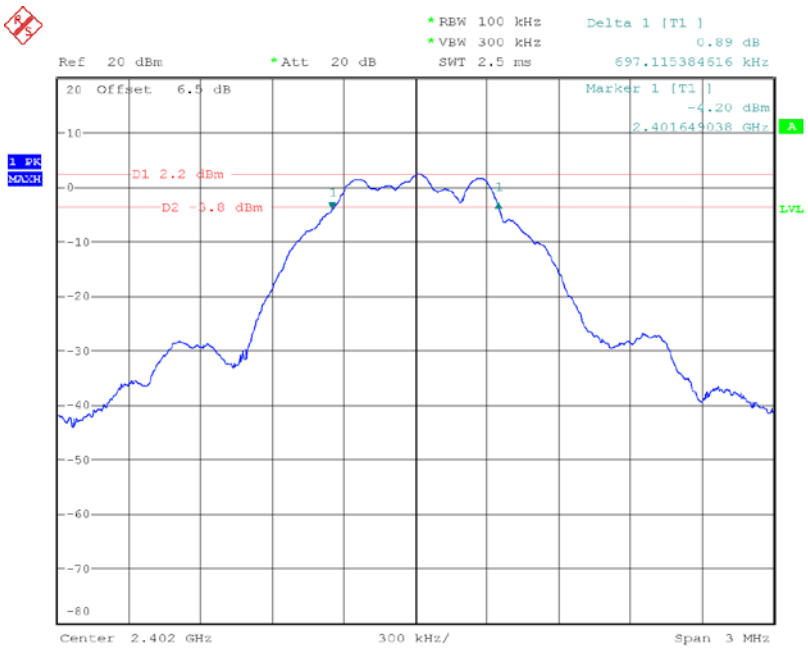
The testing was performed by Even Wu on 2021-07-07.

Test Mode: Transmitting

Test Result: Compliance. Please refer to the following table and plots.

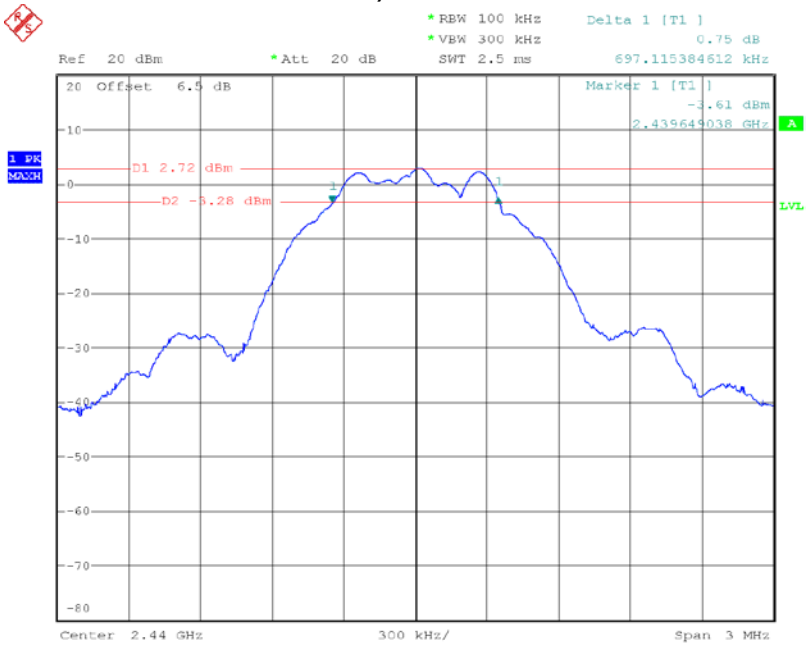
Mode	Channel	Frequency (MHz)	6 dB Emission Bandwidth (MHz)	Limit (MHz)
LE 1M	Low	2402	0.697	≥0.50
	Middle	2440	0.697	
	High	2480	0.697	
LE 2M	Low	2402	1.199	
	Middle	2440	1.199	
	High	2480	1.199	

LE 1M mode, Low Channel



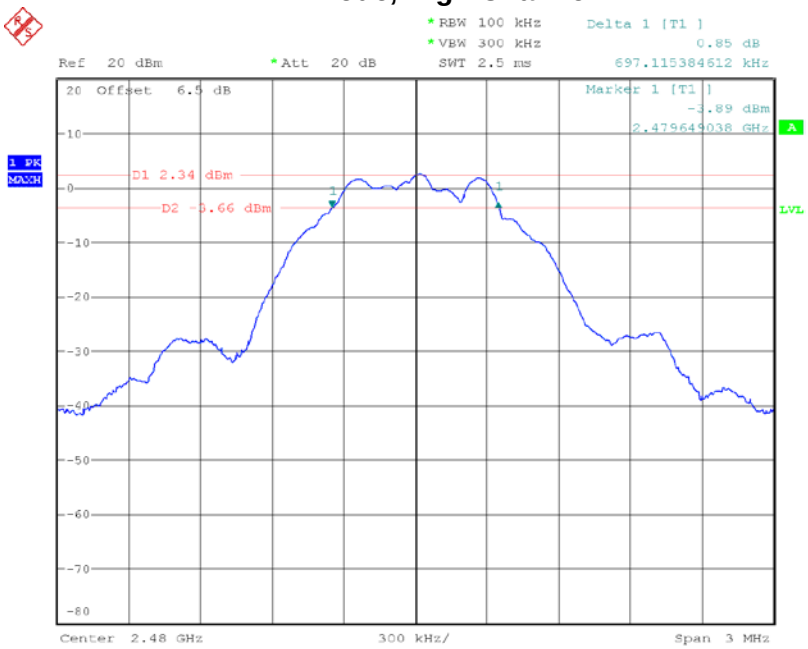
Date: 7.JUL.2021 15:50:26

LE 1M mode, Middle Channel



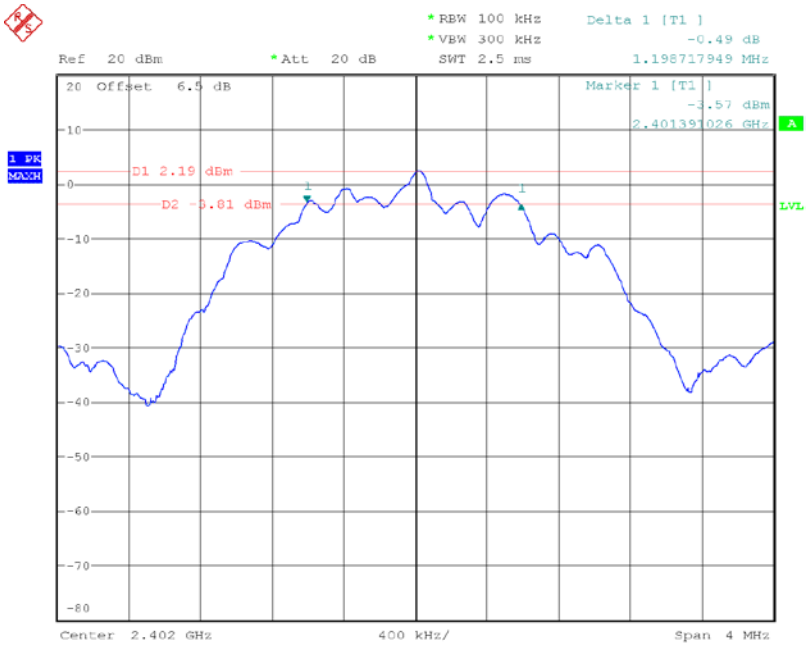
Date: 7.JUL.2021 15:55:14

LE 1M mode, High Channel



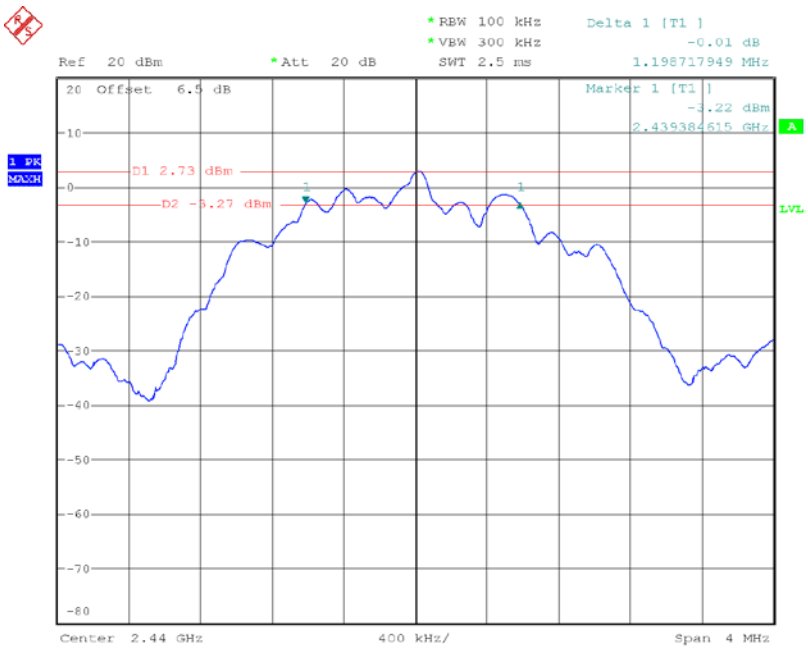
Date: 7.JUL.2021 15:46:36

LE 2M mode, Low Channel



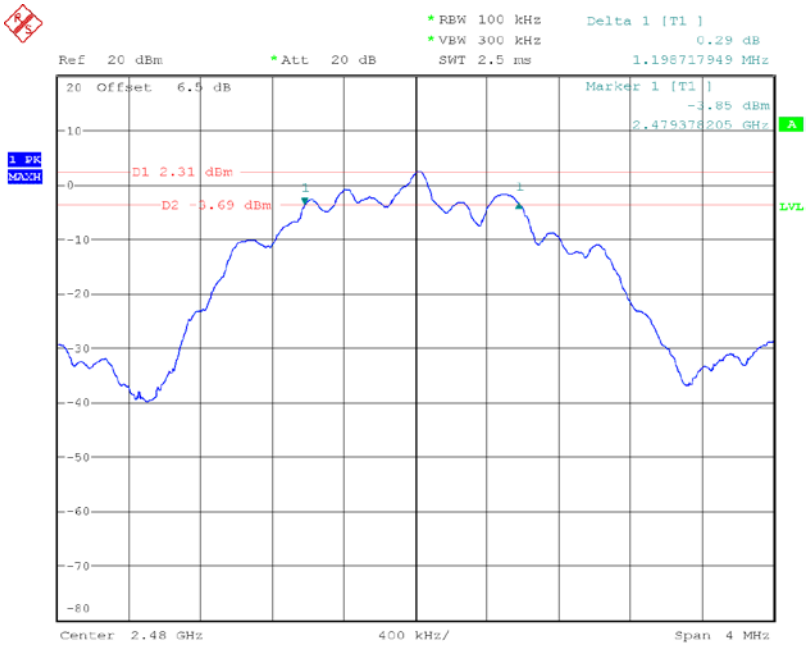
Date: 7.JUL.2021 16:25:49

LE 2M mode, Middle Channel



Date: 7.JUL.2021 16:22:30

LE 2M mode, High Channel



Date: 7.JUL.2021 16:18:46

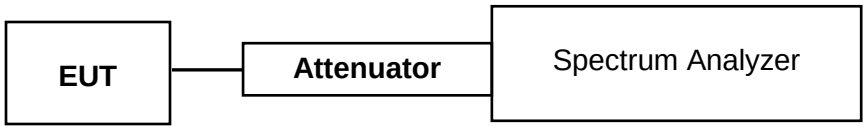
FCC §15.247(b) (3) - MAXIMUM CONDUCTED OUTPUT POWER

Applicable Standard

According to FCC §15.247(b) (3), for systems using digital modulation in the 902-928 MHz, 2400-2483.5 MHz, and 5725-5850 MHz bands: 1 Watt. As an alternative to a peak power measurement, compliance with the one Watt limit can be based on a measurement of the maximum conducted output power. Maximum Conducted Output Power is defined as the total transmit power delivered to all antennas and antenna elements averaged across all symbols in the signaling alphabet when the transmitter is operating at its maximum power control level. Power must be summed across all antennas and antenna elements. The average must not include any time intervals during which the transmitter is off or is transmitting at a reduced power level. If multiple modes of operation are possible (e.g., alternative modulation methods), the maximum conducted output power is the highest total transmit power occurring in any mode.

Test Procedure

1. Place the EUT on a bench and set it in transmitting mode.
2. Remove the antenna from the EUT and then connect a low loss RF cable from the antenna port to test equipment.
3. Add a correction factor to the display.



4.RBW $\geqslant$ DTS bandwidth
The following procedure shall be used when an instrument with a resolution bandwidth that is greater than the DTS bandwidth is available to perform the measurement:
a) Set the RBW $\geqslant$ DTS bandwidth.
b) Set VBW $\geqslant$ [3 $\times$ RBW].
c) Set span $\geqslant$ [3 $\times$ RBW].
d) Sweep time = auto couple.
e) Detector = peak.
f) Trace mode = max hold.
g) Allow trace to fully stabilize.
h) Use peak marker function to determine the peak amplitude level.

Test Data

Environmental Conditions

Temperature:	27 °C
Relative Humidity:	58 %
ATM Pressure:	95.5 kPa

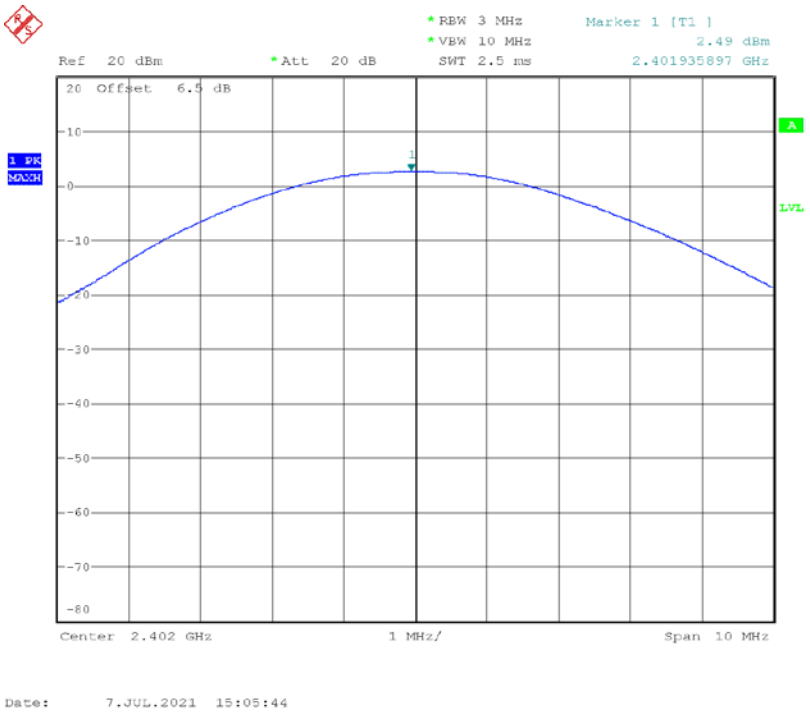
The testing was performed by Even Wu on 2021-07-07.

Test Mode: Transmitting

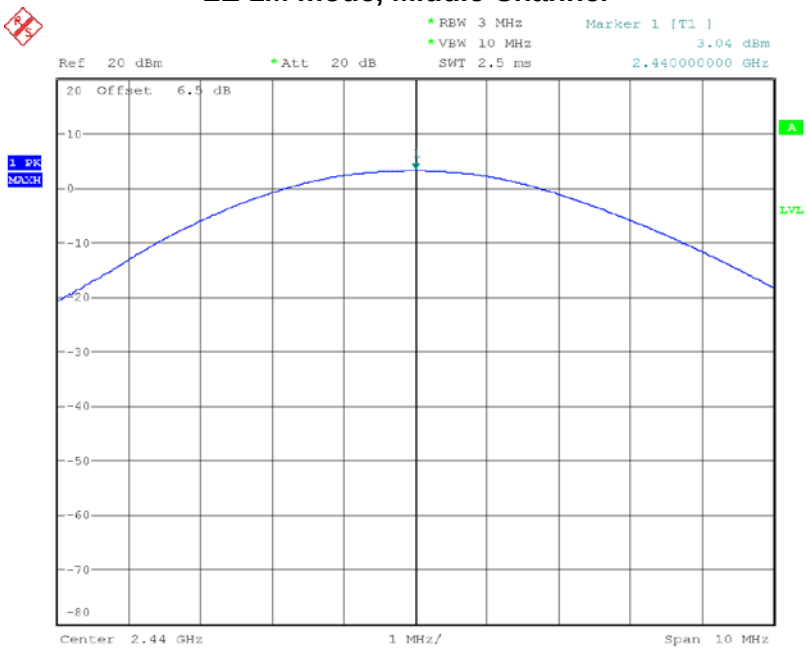
Test Result: Compliance. Please refer to the following table and plots.

Mode	Channel	Frequency (MHz)	Max Peak Conducted Output Power (dBm)	Limit (dBm)
LE 1M	Low	2402	2.49	30
	Middle	2440	3.04	
	High	2480	2.62	
LE 2M	Low	2402	2.57	
	Middle	2440	3.08	
	High	2480	2.70	

LE 1M mode, Low Channel

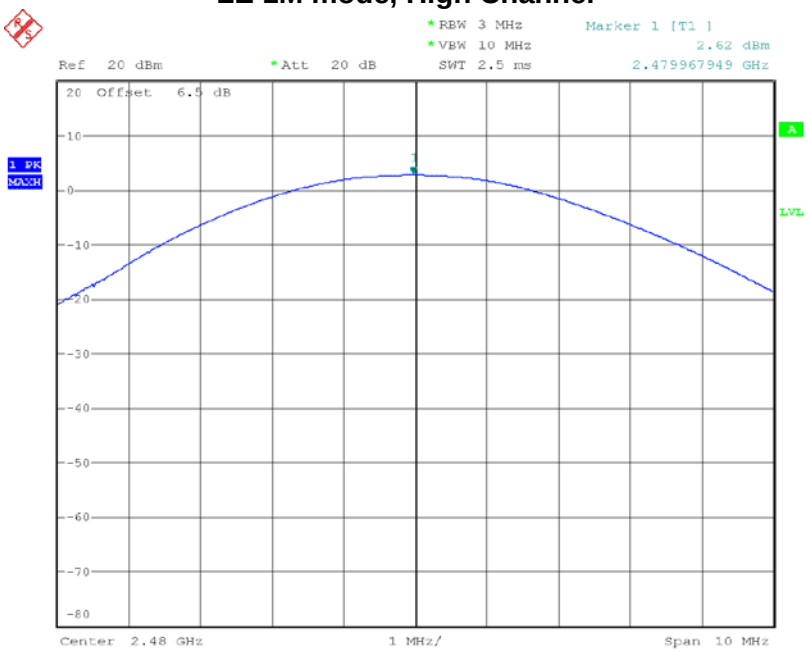


LE 1M mode, Middle Channel



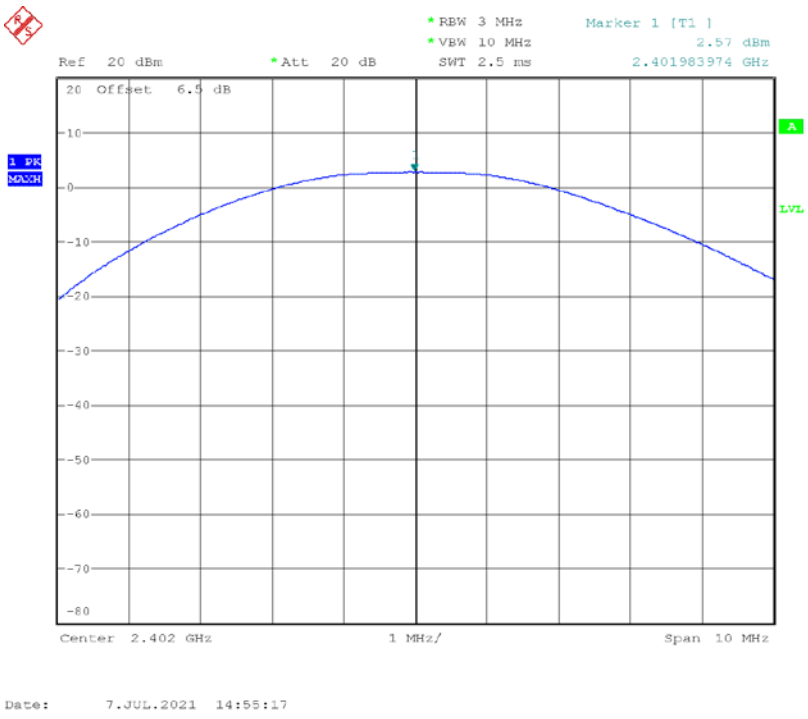
Date: 7.JUL.2021 15:08:01

LE 1M mode, High Channel



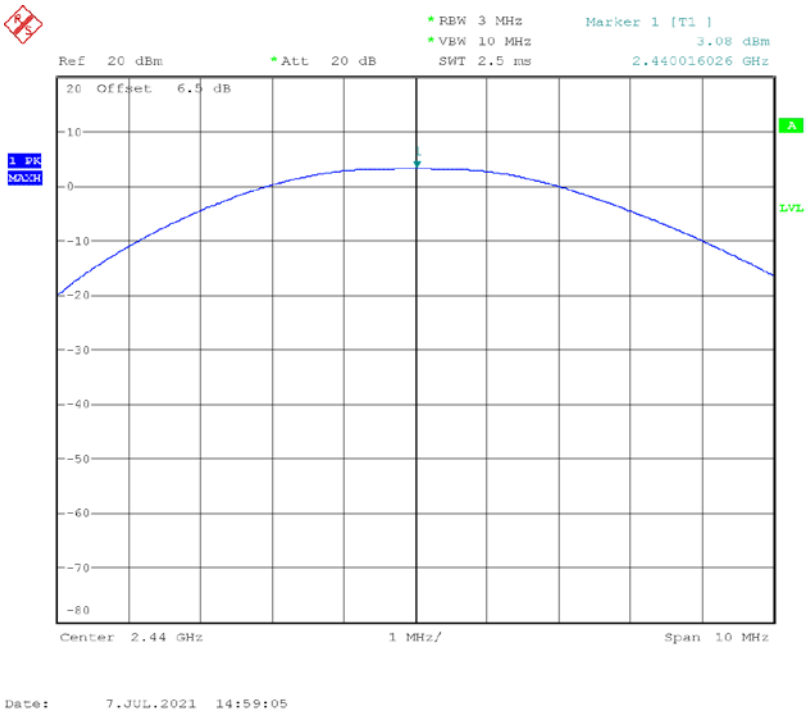
Date: 7.JUL.2021 15:10:08

LE 2M mode, Low Channel



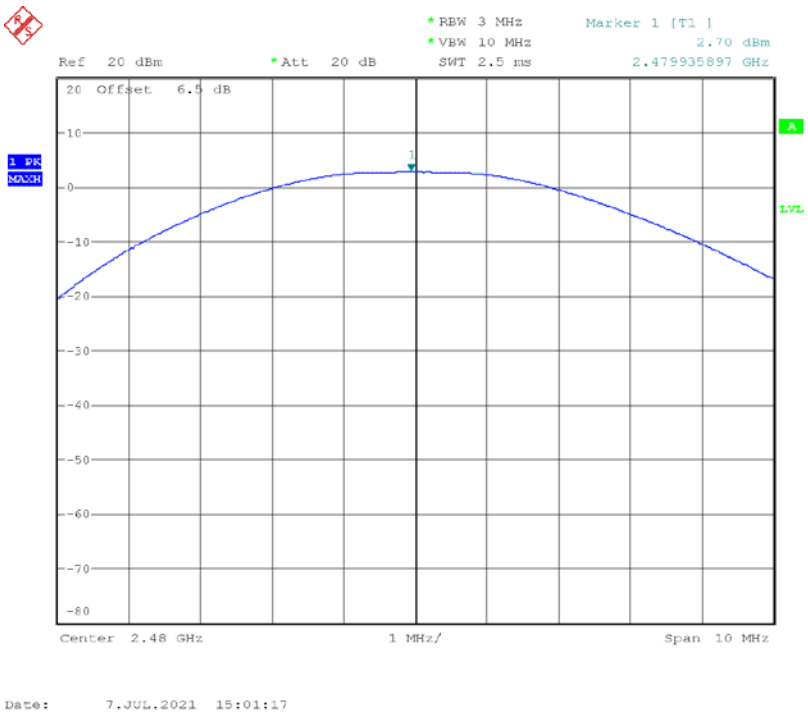
Date: 7.JUL.2021 14:55:17

LE 2M mode, Middle Channel



Date: 7.JUL.2021 14:59:05

LE 2M mode, High Channel



FCC §15.247(d) – 100 kHz BANDWIDTH OF FREQUENCY BAND EDGE

Applicable Standard

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

Test Procedure

1. Check the calibration of the measuring instrument using either an internal calibrator or a known signal from an external generator.
2. Position the EUT without connection to measurement instrument. Turn on the EUT and connect its antenna terminal to measurement instrument via a low loss cable. Then set it to any one measured frequency within its operating range, and make sure the instrument is operated in its linear range.
3. Set RBW to 100 kHz and VBW of spectrum analyzer to 300 kHz with a convenient frequency span including 100 kHz bandwidth from band edge.
4. Measure the highest amplitude appearing on spectral display and set it as a reference level. Plot the graph with marking the highest point and edge frequency.
5. Repeat above procedures until all measured frequencies were complete.

Test Data

Environmental Conditions

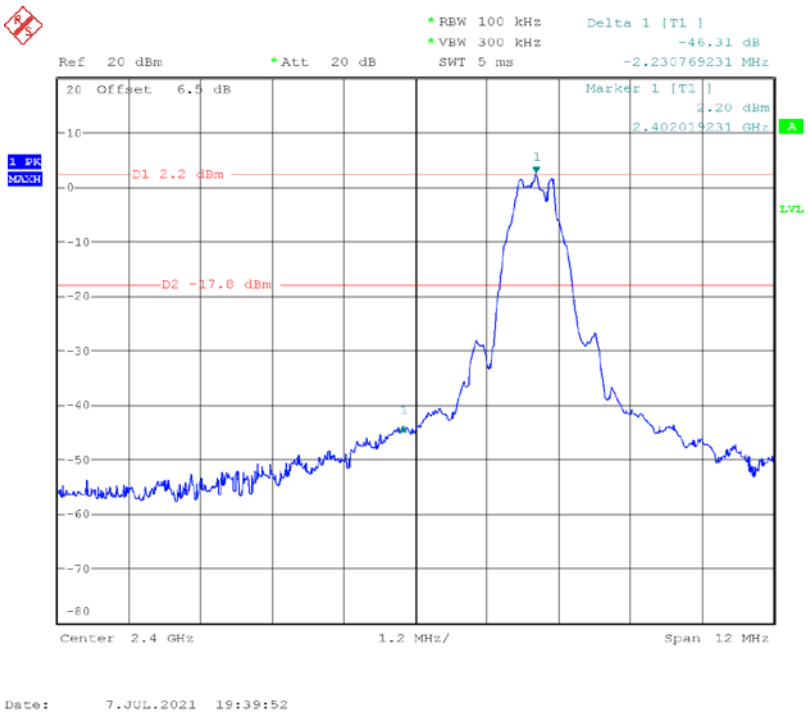
Temperature:	27 °C
Relative Humidity:	58 %
ATM Pressure:	95.5 kPa

The testing was performed by Even Wu on 2021-07-07.

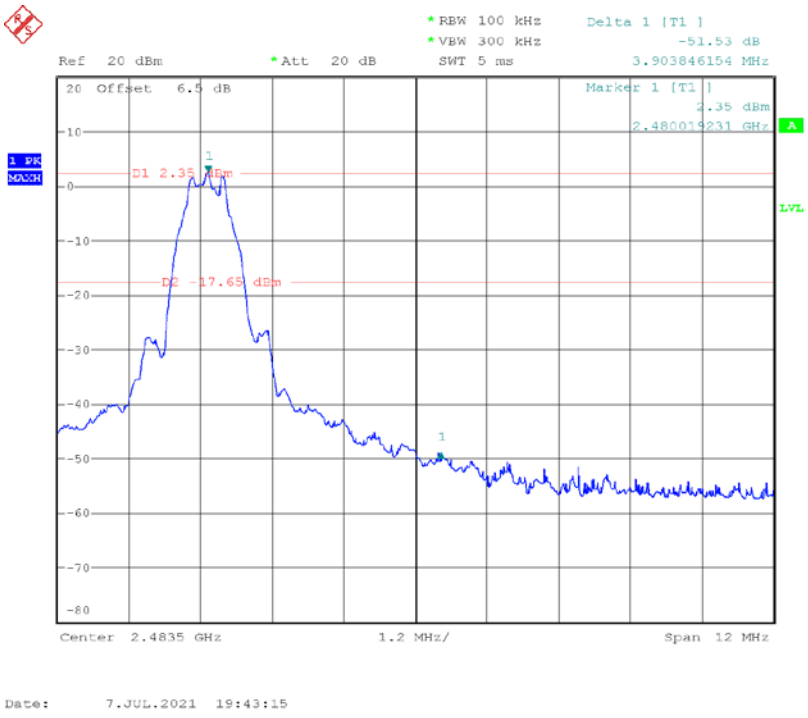
Test mode: Transmitting

Test Result: Compliance. Please refer to following plots.

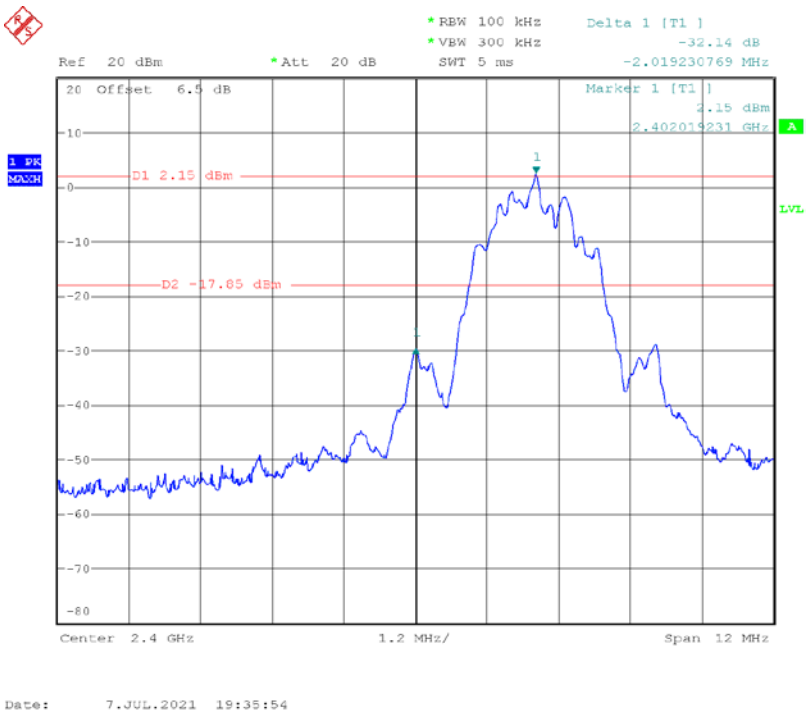
LE 1M: Band Edge, Left Side



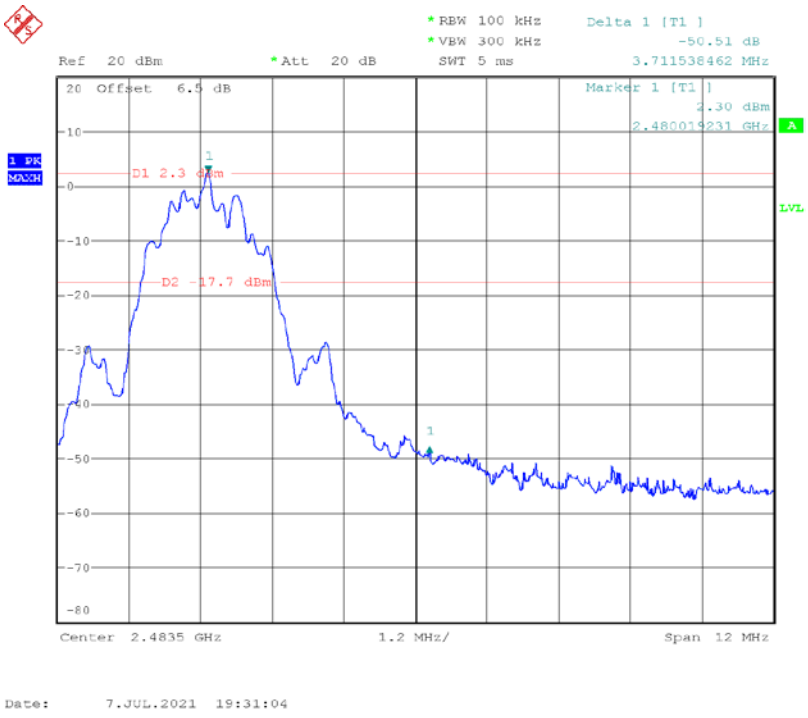
LE 1M: Band Edge, Right Side



LE 2M: Band Edge, Left Side



LE 2M: Band Edge, Right Side



FCC §15.247(e) - POWER SPECTRAL DENSITY

Applicable Standard

For digitally modulated systems, the power spectral density conducted from the intentional radiator to the antenna shall not be greater than 8 dBm in any 3 kHz band during any time interval of continuous transmission. This power spectral density shall be determined in accordance with the provisions of paragraph (b) of this section. The same method of determining the conducted output power shall be used to determine the power spectral density.

Test Procedure

a) Set analyzer center frequency to DTS channel center frequency.
b) Set the span to 1.5 times the DTS bandwidth.
c) Set the RBW to: 3 kHz ≤ RBW ≤ 100 kHz.
d) Set the VBW ≥ 3×RBW.
e) Detector = peak.
f) Sweep time = auto couple.
g) Trace mode = max hold.
h) Allow trace to fully stabilize.
i) Use the peak marker function to determine the maximum amplitude level within the RBW.
j) If measured value exceeds limit, reduce RBW (no less than 3 kHz) and repeat.

Test Data

Environmental Conditions

Temperature:	27 °C
Relative Humidity:	58 %
ATM Pressure:	95.5 kPa

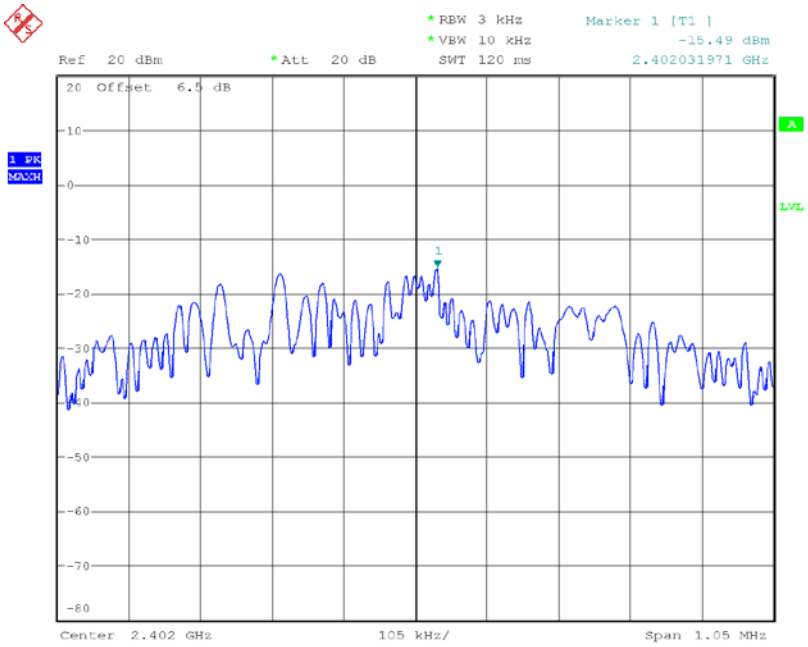
The testing was performed by Even Wu on 2021-07-07.

Test Mode: Transmitting

Test Result: Compliance. Please refer to the following table and plots

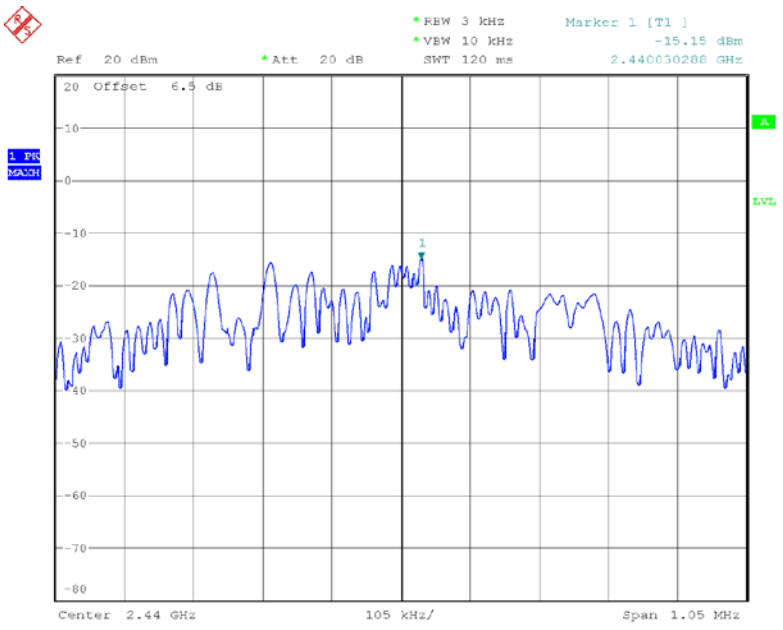
Mode	Channel	Frequency (MHz)	Power Spectral Density (dBm/3kHz)	Limit (dBm/3kHz)
LE 1M	Low	2402	-15.49	≤8
	Middle	2440	-15.15	
	High	2480	-15.38	
LE 2M	Low	2402	-17.72	
	Middle	2440	-17.20	
	High	2480	-17.64	

LE 1M: Low Channel



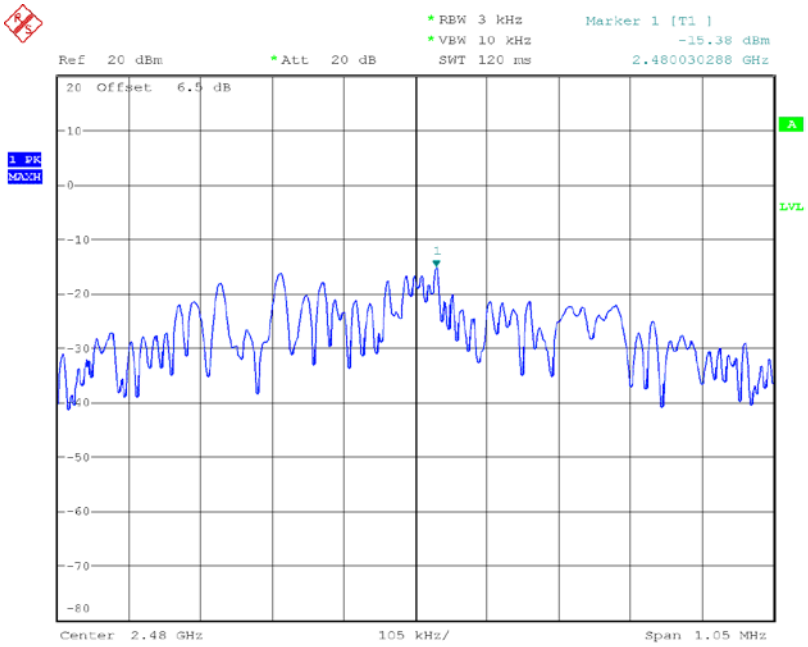
Date: 7.JUL.2021 19:19:31

LE 1M: Middle Channel



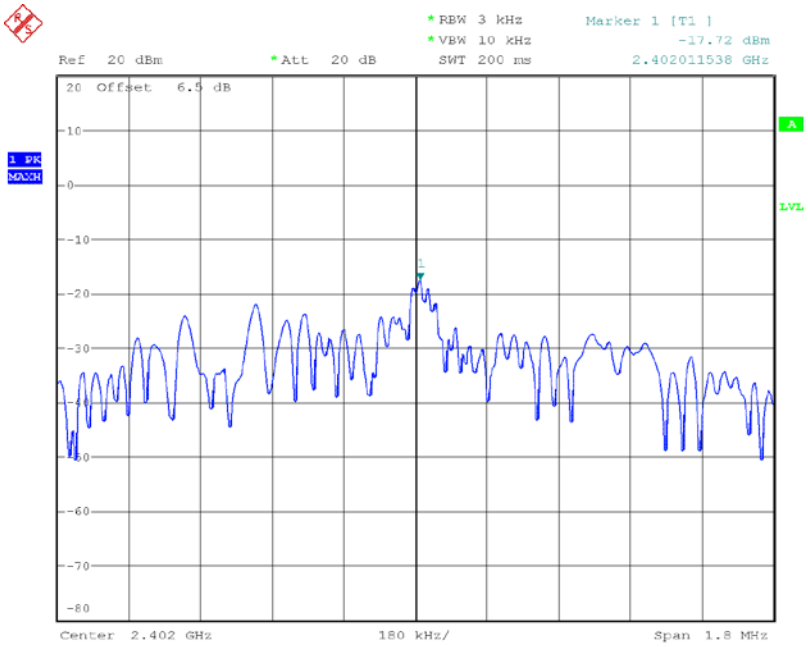
Date: 7.JUL.2021 19:17:22

LE 1M: High Channel



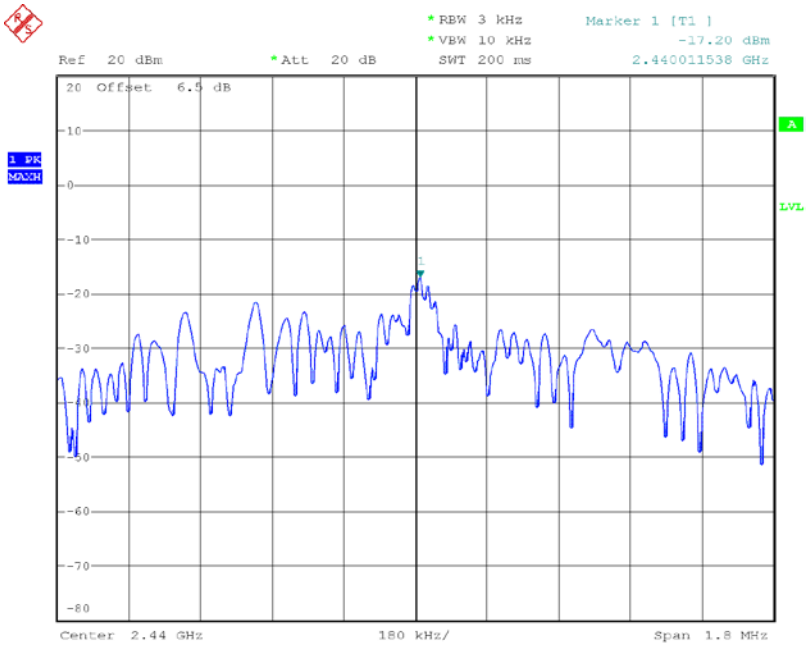
Date: 7.JUL.2021 19:21:36

LE 2M: Low Channel



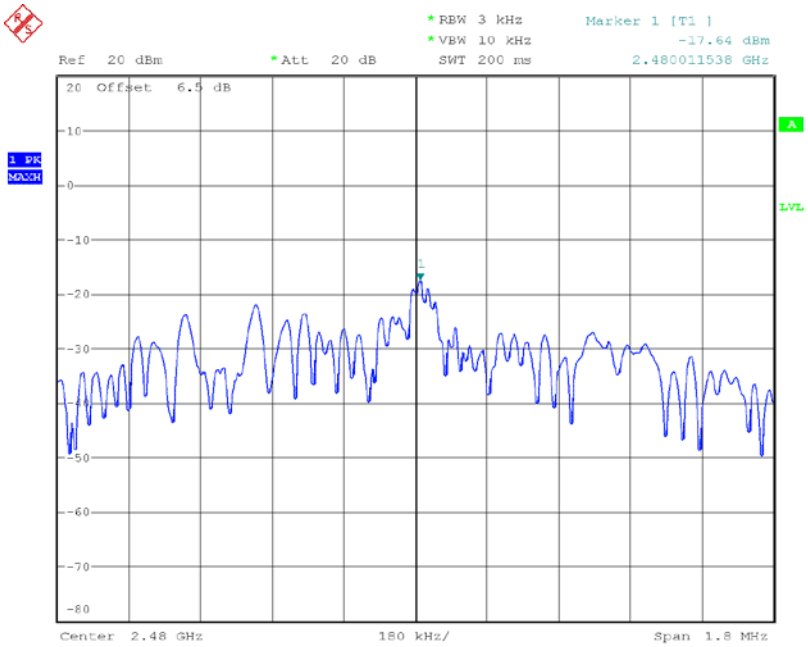
Date: 7.JUL.2021 19:23:34

LE 2M: Middle Channel



Date: 7.JUL.2021 19:24:26

LE 2M: High Channel



Date: 7.JUL.2021 19:25:44

END OF REPORT