



TEST REPORT

Report Number: C21T00056-SRD01-V02

Applicant	Toast, Incorporated
Product Name	Data Processing machine
Model Name	TT204W, TT204, TT202W, TT203, TK200, TT203W
Brand Name	Toast
FCC ID	2AMNG-TT200B
IC ID	23177-TT200B

Industrial Internet Innovation Center (Shanghai) Co., Ltd. tested the above equipment in accordance with the requirements in FCC Part15, ANSI C63.10-2013, KDB 558074, RSS-Gen Issue 5, RSS-247 Issue 2.

Prepared by

Reviewed by

Approved by

Issue Date

2021-08-16

Industrial Internet Innovation Center (Shanghai) Co., Ltd.

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Test Laboratory:

Industrial Internet Innovation Center (Shanghai) Co., Ltd.

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Revision Version

Report Number	Revision	Date	Memo
C21T00056-SRD01-V00	00	2021-07-27	Initial creation of test report
C21T00056-SRD01-V01	01	2021-08-10	Amendment formula of 6.5
C21T00056-SRD01-V02	02	2021-08-16	Amendment test setup pictures

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1. Test Laboratory

1.1. Testing Location

Primary Lab:

Company Name	Industrial Internet Innovation Center (Shanghai) Co., Ltd.
Address	Building 4, No. 766 Jingang Rd, Pudong, Shanghai, China
FCC Registration No.	958356
FCC Designation No.	CN1177
IC designation No.	CN0067

Subcontracting Lab #1:

Company Name	N/A
Address	N/A

1.2. Testing Environment

Normal Temperature	15°C~35°C
Relative Humidity	30%RH~60%RH
Supply Voltage	120V/60Hz

1.3. Project Information

Project Leader	Lu Fang
Testing Start Date	2021-05-31
Testing End Date	2021-07-27

2. Client Information

2.1. Applicant Information

Company Name	Toast, Incorporated
Address	401 Park Drive, Suite 801, Boston, MA 02215, USA
Telephone	5625462272

2.2. Manufacturer Information

Company Name	Toast, Incorporated
Address	401 Park Drive, Suite 801, Boston, MA 02215, USA
Telephone	5625462272

3. Equipment under Test (EUT) and Ancillary Equipment (AE)

3.1. About EUT

Product Name	Data Processing machine
Model name	TT204W, TT204, TT202W, TT203, TK200, TT203W
Supported Radio Technology and Bands	BT4.2 WLAN 802.11b,g,n WLAN 802.11a, n, ac
Hardware Version	CT541MB80C 20210226
Software Version	Sunmi-ct541-v2.1.59p69
FCC ID	2AMNG-TT200B
IC ID	23177-TT200B

Note: Photographs of EUT are shown in ANNEX B of this test report.

3.2. Internal Identification of EUT used during the test

EUT ID*	SN or IMEI	HW Version	SW Version	Date of Receipt
N05 (Mainly Supply)	N/A	CT541MB80C 20210226	Sunmi-ct541-v2.1.59p69	2021/5/31
N02 (Mainly Supply)	N/A	CT541MB80C 20210226	Sunmi-ct541-v2.1.59p69	2021/5/31
N01 (Secondary Supply)	N/A	CT541MB80C 20210226	Sunmi-ct541-v2.1.59p69	2021/5/31
N03 (Thirdly Supply)	N/A	CT541MB80C 20210226	Sunmi-ct541-v2.1.59p69	2021/5/31

*EUT ID: is internally used to identify the test sample in the lab.

3.3. Internal Identification of AE used during the test

AE ID*	Description	Model	SN/Remark
CA01	Adapter	SOY-2400400	N/A
CB02	Adapter	WTA96-2400400-T	N/A
CA05	Adapter	SOY-2400400	N/A
UA01	Adapter Cable	N/A	N/A
UB02	Adapter Cable	N/A	N/A
UA05	Adapter Cable	N/A	N/A
AE1	RF Cable	N/A	N/A

*AE ID: is internally used to identify the test sample in the lab.

*The AE is provided by the client.

4. Reference Documents

4.1. Reference Documents for testing

The following documents listed in this section are referred for testing.

Reference	Title	Version
FCC Part15	FCC CFR 47, Part 15, Subpart C: 15.205 Restricted bands of operation; 15.209 Radiated emission limits, general requirements; 15.247 Operation within the bands 902-928MHz, 2400-2483.5MHz, and 5725-5850MHz.	2018-10-01
ANSI C63.10	American National Standard of Procedures for Compliance Testing of Unlicensed Wireless Devices	2013
KDB 558074	Guidance for Performing Compliance Measurements on Frequency Hopping Spread Spectrum systems (DSS) Operating Under §15.247	v05r02
RSS-247 Issue 2	Digital Transmission Systems (DTSS), Frequency Hopping Systems (FHSS) and Licence-Exempt Local Area Network (LE-LAN) Devices	2017
RSS-Gen Issue 5	General Requirements for Compliance of Radio Apparatus	2019

4.2. Reference Information from client

Information of the test sample provided by the client.

Antenna gain of EUT 1.92 dBi

5. Test Summary

5.1. Summary of Test Results

Measurement Items	Sub-clause of Part15C	Sub-clause of IC	Verdict
Maximum Peak Output Power	15.247(b)	RSS-247 5.4	Pass
20dB Occupied Bandwidth	15.247(a)	RSS-247 5.1	Pass
99% Occupied Bandwidth	N/A	RSS-Gen 6.7	Pass
Band Edges Compliance	15.247 (d)	RSS-247 5.5	Pass
Time Of Occupancy (Dwell Time)	15.247(a)	RSS-247 5.1	Pass
Carrier Frequency Separation	15.247(a)	RSS-247 5.1	Pass
Number Of Hopping Channels	15.247(a)	RSS-247 5.1	Pass
Transmitter Spurious Emission-Conducted	15.247(d)	RSS-247 5.5	Pass
Transmitter Spurious Emission-Radiated	15.247,15.209,15.205	RSS-Gen 8.9,8.10	Pass
AC Powerline Conducted Emission	15.207	RSS-Gen 8.8	Pass

Test Conditions

Tnom	Normal Temperature
Tmin	Low Temperature
Tmax	High Temperature
Vnom	Normal Voltage
Vmin	Low Voltage
Vmax	High Voltage
Hnom	Norm Humidity
Anom	Norm Air Pressure

For this report, all the test case listed above are tested under Normal Temperature and Normal Voltage, and also under norm humidity, the specific conditions as following:

Temperature	Tnom	24℃
Voltage	Vnom	24V
Humidity	Hnom	48%
Air Pressure	Anom	1010hPa

Note:

- All the test data for each data were verified, but only the worst case was reported.
- The GFSK, $\pi/4$ DQPSK and 8DPSK were set in DH1 for GFSK, 2-DH1 for $\pi/4$ DQPSK, 3-DH1 for 8DPSK.
- The DC and low frequency voltages' measurement uncertainty is $\pm 2\%$.

5.2. Statements

The TT204W, TT204, TT202W, TT203, TK200, TT203W supporting BT/WLAN, manufactured by Toast, Incorporated are new products for testing.

This project have three sets of configured sample N05(N02)/N01/N03, and we mainly tested sample N05(N02) tested the worst mode N01/N03, the main difference is as below:

Mainly Supply	TT204	Main LCD panel Terminal + Sub LCD panel Terminal + Attached base support
	TT204W	The same with TT204, just the color is White
Secondary Supply	TT203	Main LCD panel Terminal + Attached base support
	TT202W, TT203W	The same with TT203, just the color is White
Thirdly Supply	TK200	Main LCD panel Terminal + Add POE module + Add one speaker

Industrial Internet Innovation Center (Shanghai) Co., Ltd. only performed test cases which identified with Pass/Fail/Inc result in section 5.1.

Industrial Internet Innovation Center (Shanghai) Co., Ltd. has verified that the compliance of the tested device specified in section 3 of this test report is successfully evaluated according to the procedure and test methods as defined in type certification requirement listed in section 4 of this test report.

6. Measurement Results

Shielding Room1 (6.0 meters×3.0 meters×2.7 meters) did not exceed following limits along the conducted RF performance testing:

Temperature	Min. = 15 °C, Max. = 35 °C
Relative humidity	Min. = 20 %, Max. = 75 %
Shielding effectiveness	> 100 dB
Ground system resistance	< 0.5 Ω
Temperature	Min. = 15 °C, Max. = 35 °C

Control room did not exceed following limits along the EMC testing:

Temperature	Min. = 15 °C, Max. = 35 °C
Relative humidity	Min. = 30 %, Max. = 60 %
Shielding effectiveness	> 100 dB
Electrical insulation	> 10 kΩ
Ground system resistance	< 0.5 Ω

Fully-anechoic chamber1 (6.9 meters×10.9 meters×5.4 meters) did not exceed following limits along the EMC testing:

Temperature	Min. = 15 °C, Max. = 35 °C
Relative humidity	Min. = 25 %, Max. = 75 %
Shielding effectiveness	> 100 dB
Electrical insulation	> 10 kΩ
Ground system resistance	< 0.5 Ω
VSWR	Between 0 and 6 dB, from 1GHz to 18GHz
Site Attenuation Deviation	Between -4 and 4 dB, 30MHz to 1GHz
Uniformity of field strength	Between 0 and 6 dB, from 80MHz to 3000 MHz

6.1. Peak Output Power-Conducted

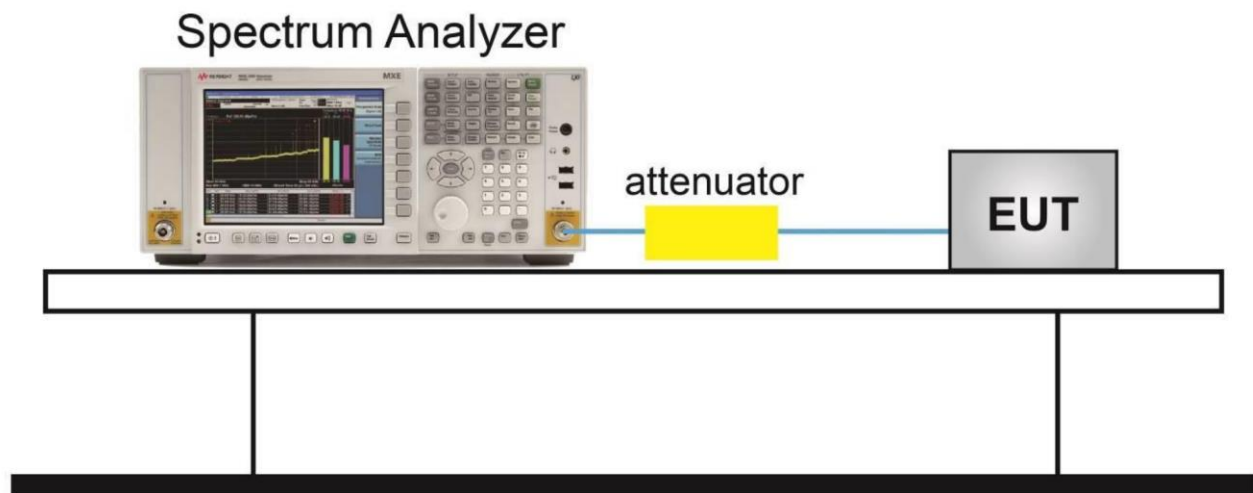
6.1.1. Measurement Limit

Standard	Limit (dBm)
FCC 47 Part 15.247(b)(1)	<30
RSS-247 5.4(b)	<30

6.1.2. Test Condition

Hopping Mode	RBW	VBW	Span	Sweep time
Hopping OFF	3MHz	10MHz	9MHz	Auto

6.1.3. Test Setup



6.1.4. Test procedure

The measurement is according to ANSI C63.10 clause 7.8.5.

1. The output power of EUT was connected to the spectrum analyzer and CBT32 by cable and divide. The path loss was compensated to the results for each measurement.
2. Enable EUT transmitter maximum power continuously.
3. Measure the conducted output power and record the results it.

Measurement Results

Note: Bold font is the maximum Value

Peak Conducted Output Power GFSK, CH0 (dBm)	6.77	Peak Conducted Output Power GFSK, CH39 (dBm)	7.10
Peak Conducted Output Power GFSK, CH78 (dBm)	6.75	Peak Conducted Output Power $\pi/4$ DQPSK, CH0 (dBm)	6.81

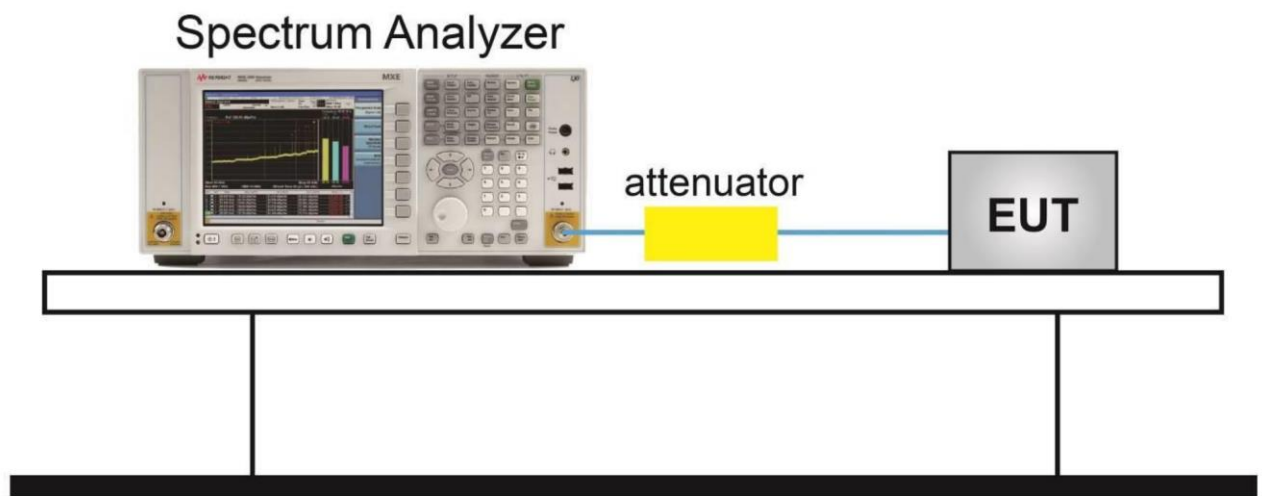
Peak Conducted Output Power $\pi/4$ DQPSK, CH39 (dBm)	7.24	Peak Conducted Output Power $\pi/4$ DQPSK, CH78 (dBm)	6.93
Ref: 30 dBm, Att: 30 dB, BW: 3 MHz, VSW: 10 MHz, SWP: 2.5 ms, Marker 1 [T1]: 7.24 dBm, 2.44081346 GHz Center: 2.441 GHz, 900 kHz, Span: 9 MHz Date: 28 JUN 2021 16:28:23		Ref: 30 dBm, Att: 30 dB, BW: 3 MHz, VSW: 10 MHz, SWP: 2.5 ms, Marker 1 [T1]: 6.93 dBm, 2.40171538 GHz Center: 2.402 GHz, 900 kHz, Span: 9 MHz Date: 28 JUN 2021 16:35:13	
Peak Conducted Output Power 8DPSK, CH0 (dBm)	7.06	Peak Conducted Output Power 8DPSK, CH39 (dBm)	7.49
Ref: 30 dBm, Att: 30 dB, BW: 3 MHz, VSW: 10 MHz, SWP: 2.5 ms, Marker 1 [T1]: 7.06 dBm, 2.40192785 GHz Center: 2.402 GHz, 900 kHz, Span: 9 MHz Date: 28 JUN 2021 16:37:20		Ref: 30 dBm, Att: 30 dB, BW: 3 MHz, VSW: 10 MHz, SWP: 2.5 ms, Marker 1 [T1]: 7.49 dBm, 2.440812500 GHz Center: 2.441 GHz, 900 kHz, Span: 9 MHz Date: 28 JUN 2021 16:30:00	
Peak Conducted Output Power 8DPSK, CH78 (dBm)	7.13	/	/
Ref: 30 dBm, Att: 30 dB, BW: 3 MHz, VSW: 10 MHz, SWP: 2.5 ms, Marker 1 [T1]: 7.13 dBm, 2.479556731 GHz Center: 2.448 GHz, 900 kHz, Span: 9 MHz Date: 28 JUN 2021 16:38:19		/	

6.2. Frequency Band Edges-Conducted

6.2.1. Measurement Limit

Standard	Limited(dBc)
FCC 47 CFR Part 15.247(d)	>20
RSS-247 5.5	>20

6.2.2. Test Setup



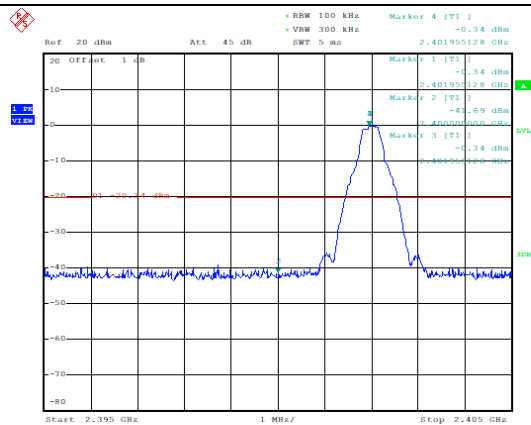
6.2.3. Test procedure

The measurement is according to ANSI C63.10 clause 7.8.6.

1. Connect the EUT to spectrum analyzer.
2. Set RBW=100KHz, VBW=300KHz, span more than 1.5 times channel bandwidth (2MHz).
3. Detector =peak, sweep time=auto couple, trace mode=max hold.
4. Allow sweep to continue until the trace stabilizes.

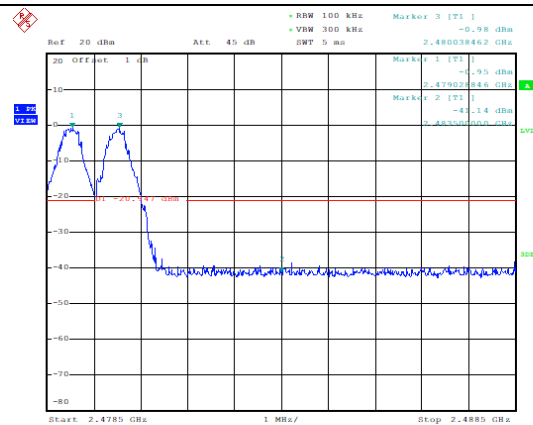
Measurement results

Frequency Band Edge: GFSK, Ch0, Hopping OFF



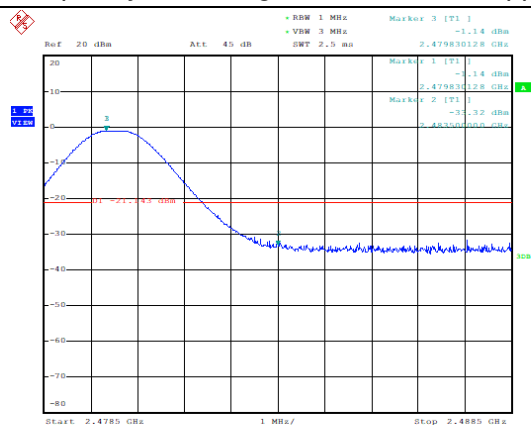
Date: 16.JUL.2021 11:42:18

Frequency Band Edge: GFSK, Ch0, Hopping ON



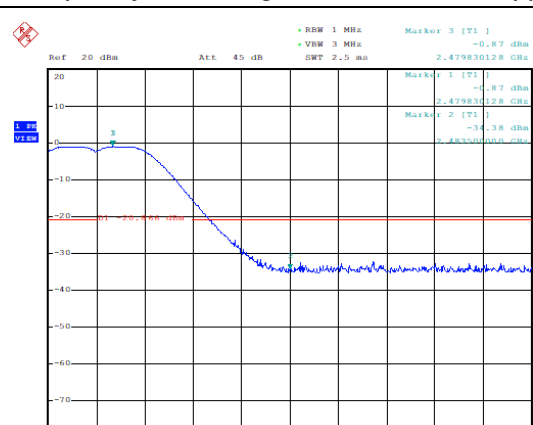
Date: 16.JUL.2021 11:12:22

Frequency Band Edge: GFSK, Ch78, Hopping OFF



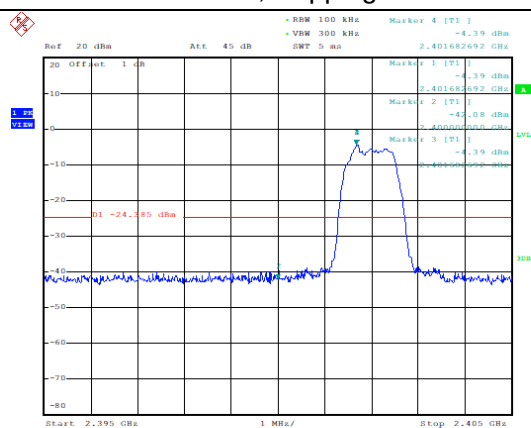
Date: 16.JUL.2021 11:46:46

Frequency Band Edge: GFSK, Ch78, Hopping ON



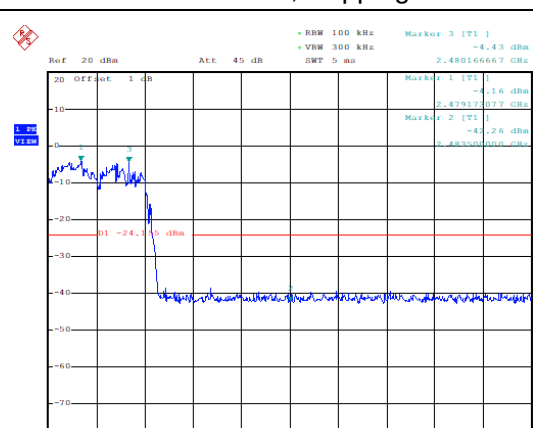
Date: 16.JUL.2021 11:15:27

Frequency Band Edge: $\pi/4$ DQPSK, Ch0, Hopping OFF



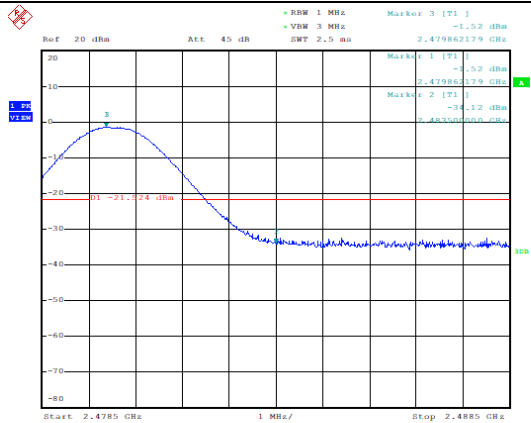
Date: 16.JUL.2021 11:48:30

Frequency Band Edge: $\pi/4$ DQPSK, Ch0, Hopping ON



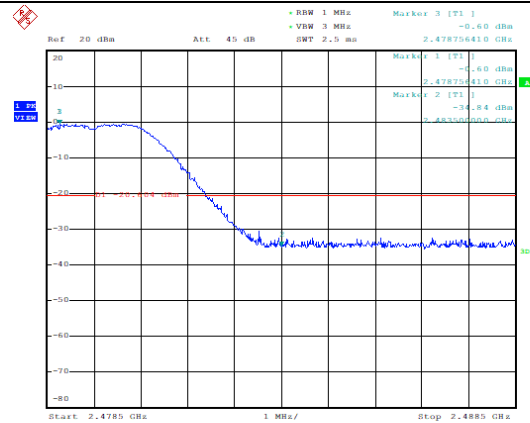
Date: 16.JUL.2021 11:37:26

Frequency Band Edge: $\pi/4$ DQPSK,
Ch78, Hopping OFF



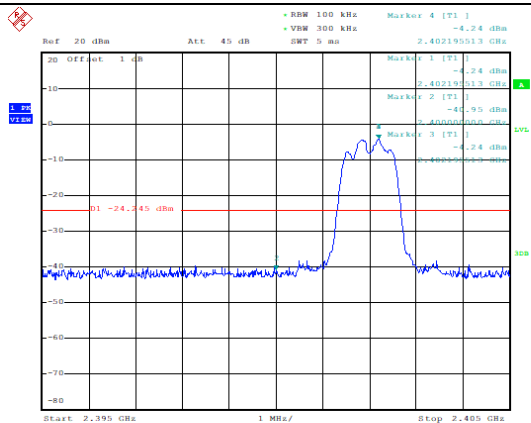
Date: 16.JUL.2021 11:52:04

Frequency Band Edge: $\pi/4$ DQPSK,
Ch78, Hopping ON



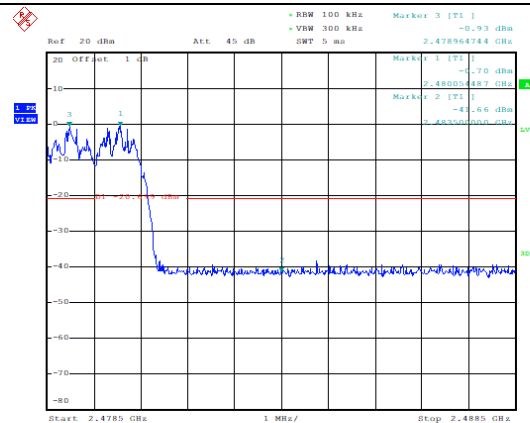
Date: 16.JUL.2021 11:57:20

Frequency Band Edge: 8DPSK, Ch0, Hopping OFF



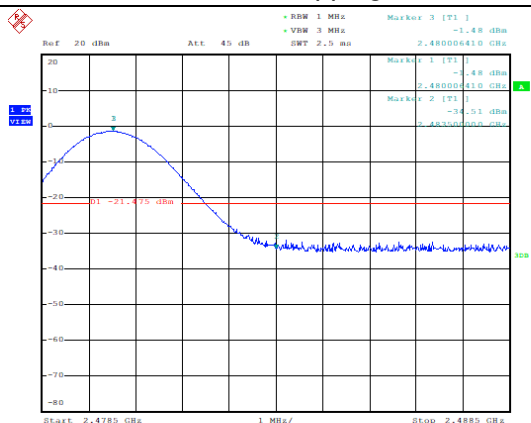
Date: 16.JUL.2021 11:53:41

Frequency Band Edge: 8DPSK, Ch0, Hopping ON



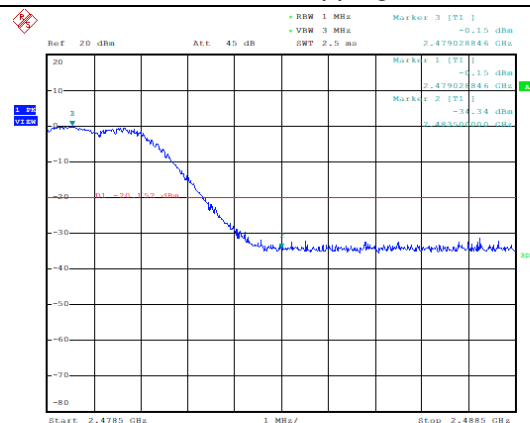
Date: 16.JUL.2021 11:50:52

Frequency Band Edge: 8DPSK,
Ch78, Hopping OFF



Date: 16.JUL.2021 11:56:51

Frequency Band Edge: 8DPSK,
Ch78, Hopping ON



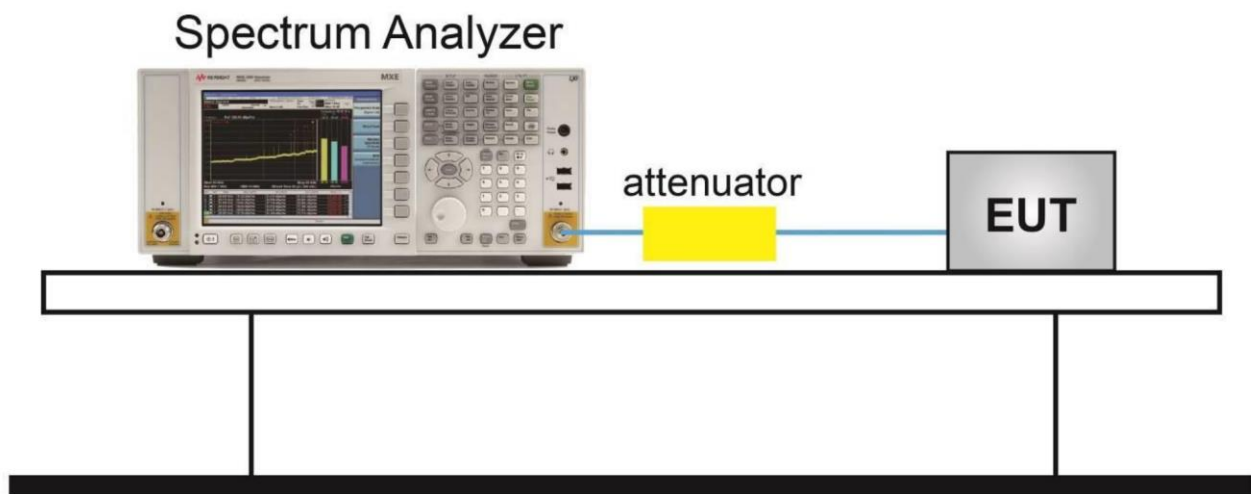
Date: 16.JUL.2021 11:54:06

6.3. Conducted Emission

6.3.1 Measurement Limit

Standard	Limit
FCC 47 CFR Part15.247 (d)	20dB below peak output power in 100KHz bandwidth
RSS-247 5.5	20dB below peak output power in 100KHz bandwidth

6.3.2. Test Setup



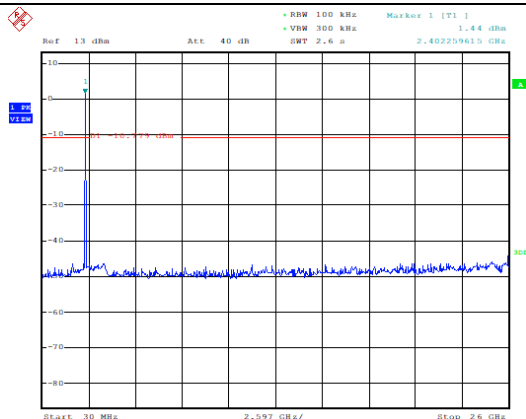
6.3.3 Test procedures

The measurement is according to ANSI C63.10 clause 7.8.8.

1. Connect the EUT to spectrum analyzer.
2. Set RBW=100KHz, VBW=300KHz.
3. Detector =peak, sweep time=auto couple, trace mode=max hold.

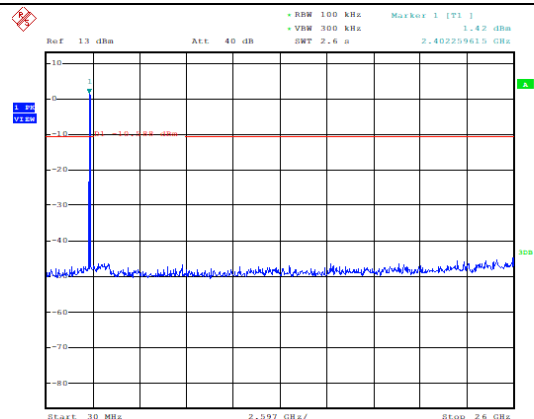
Measurement Results

Conducted spurious emission: GFSK, Ch0, 30MHz~26GHz



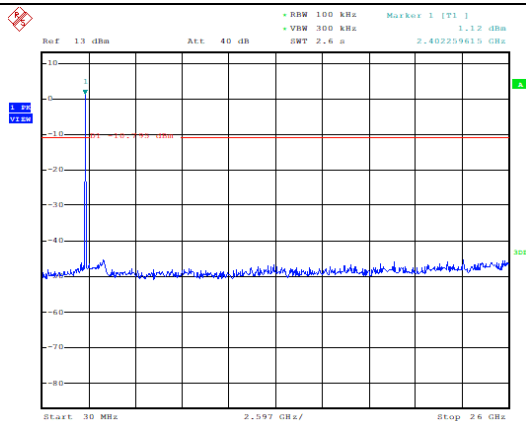
Date: 16 JUL 2021 19:46:04

Conducted spurious emission: GFSK, Ch39, 30MHz~26GHz



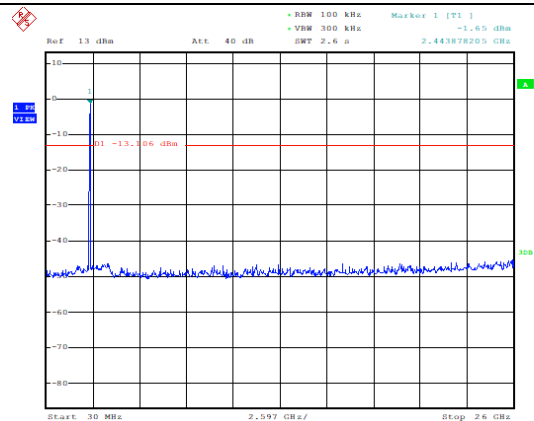
Date: 16 JUL 2021 19:47:18

Conducted spurious emission: GFSK, Ch78, 30MHz~26GHz



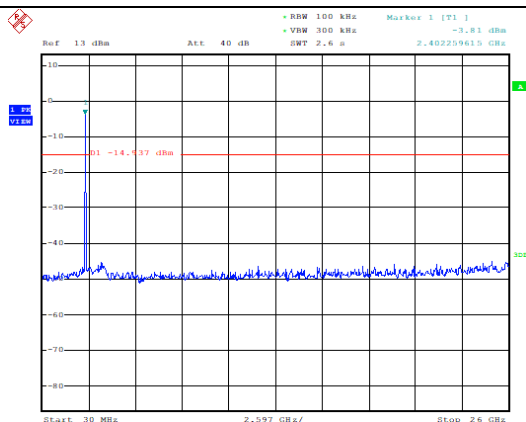
Date: 16 JUL 2021 19:49:21

Conducted spurious emission: $\pi/4$ DQPSK, Ch0, 30MHz~26GHz



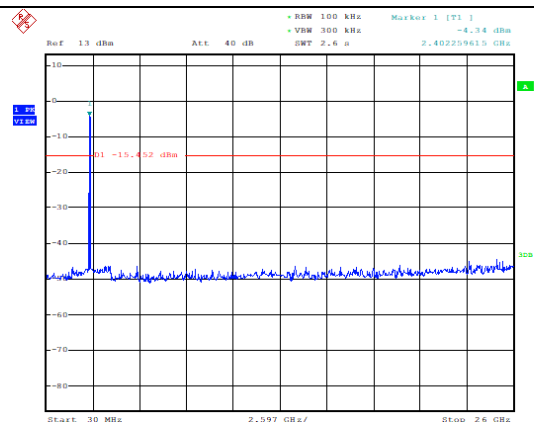
Date: 16 JUL 2021 19:51:19

Conducted spurious emission: $\pi/4$ DQPSK, Ch39, 30MHz~26GHz



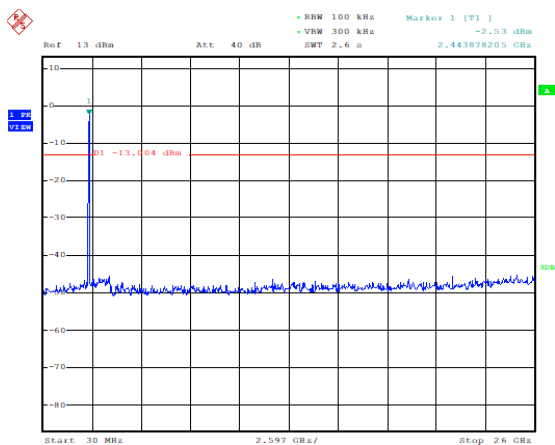
Date: 16 JUL 2021 19:52:48

Conducted spurious emission: $\pi/4$ DQPSK, Ch78, 30MHz~26GHz



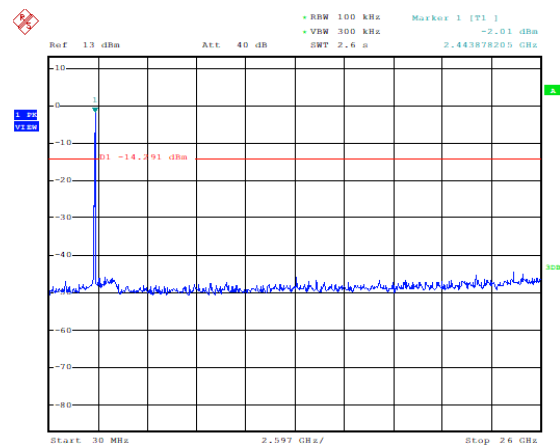
Date: 16 JUL 2021 19:54:02

Conducted spurious emission:
8DQPSK, Ch0, 30MHz~26GHz



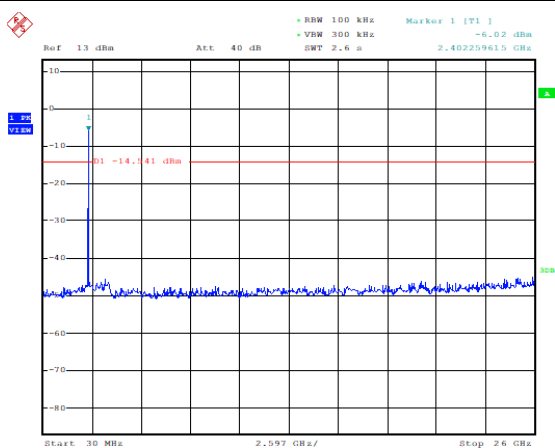
Date: 16.JUL.2021 19:55:48

Conducted spurious emission:
8DQPSK, Ch39, 30MHz~26GHz



Date: 16.JUL.2021 19:57:44

Conducted spurious emission:
8DQPSK, Ch78, 30MHz~26GHz



Date: 16.JUL.2021 19:59:19

/

/

6.4. Radiated Emission

6.4.1. Measurement Limit

Standard	Limit
FCC 47 CFR Part 15.247, 15.205, 15.209	20dB below peak output power
RSS-Gen 8.9,8.10	20dB below peak output power

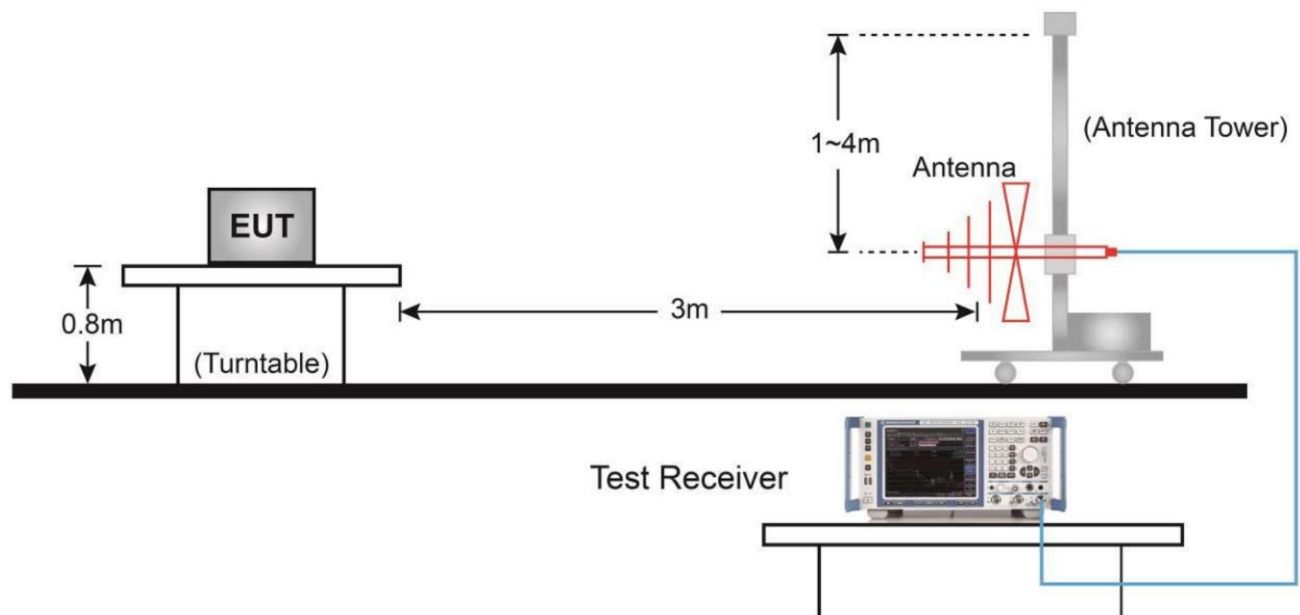
In addition, radiated emissions which fall in the restricted bands, as defined in 15.205(a), must also comply with the radiated emission limits specified in 15.209(a) (see 15.205(c)).

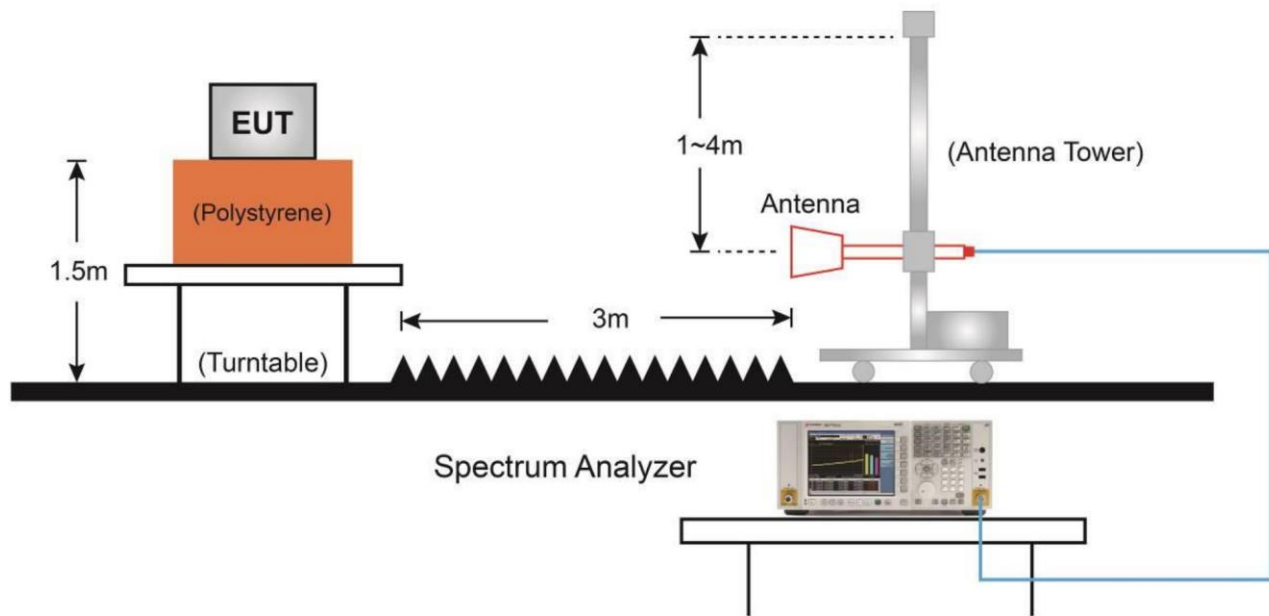
Limit in restricted band

Frequency of emission	Field strength (uV/m)	Field strength (dBuV/m)
30~88	100	40
88~216	150	43.5
216~960	200	46
Above 960	500	54

6.4.2. Test Setup

Below 1GHz Test Setup





6.4.3. Test Method

Portable, small, lightweight, or modular devices that may be handheld, worn on the body, or placed on a table during operation shall be positioned on a non-conducting platform, the top of which is 80 cm above the reference ground plane. The preferred area occupied by the EUT arrangement is 1 m by 1.5 m. For emissions testing at or below 1 GHz, the table height shall be 80 cm above the reference ground plane. For emission measurements above 1 GHz, the table height shall be 1.5 m. but it may be larger or smaller to accommodate various sized EUTs. For testing purposes, ceiling- and wall-mounted devices also shall be positioned on a tabletop (see also ANSI C63.10-2013 section 6.3.4 and 6.3.5). In making any tests involving handheld, body-worn, or ceiling-mounted equipment, it is essential to recognize that the measured levels may be dependent on the orientation (attitude) of the three orthogonal axes of the EUT. Thus, exploratory tests as specified in 8.3.1 shall be carried out for various axes orientations to determine the attitude having maximum or near-maximum emission level.

The EUT was placed on a non-conductive table. The measurement antenna was placed at a distance of 3 meters from the EUT. During the tests, the antenna height and the EUT azimuth were varied in order to identify the maximum level of emissions from the EUT. This maximization process was repeated with the EUT positioned in each of its three orthogonal orientations.

Frequency of emission	RBW/VBW	Sweep Time (s)
30~1000	100KHz/300KHz	5
1000~4000	1MHz/3MHz	15
4000~18000	1MHz/3MHz	40
18000~26500	1MHz/3MHz	20

Measurement Results

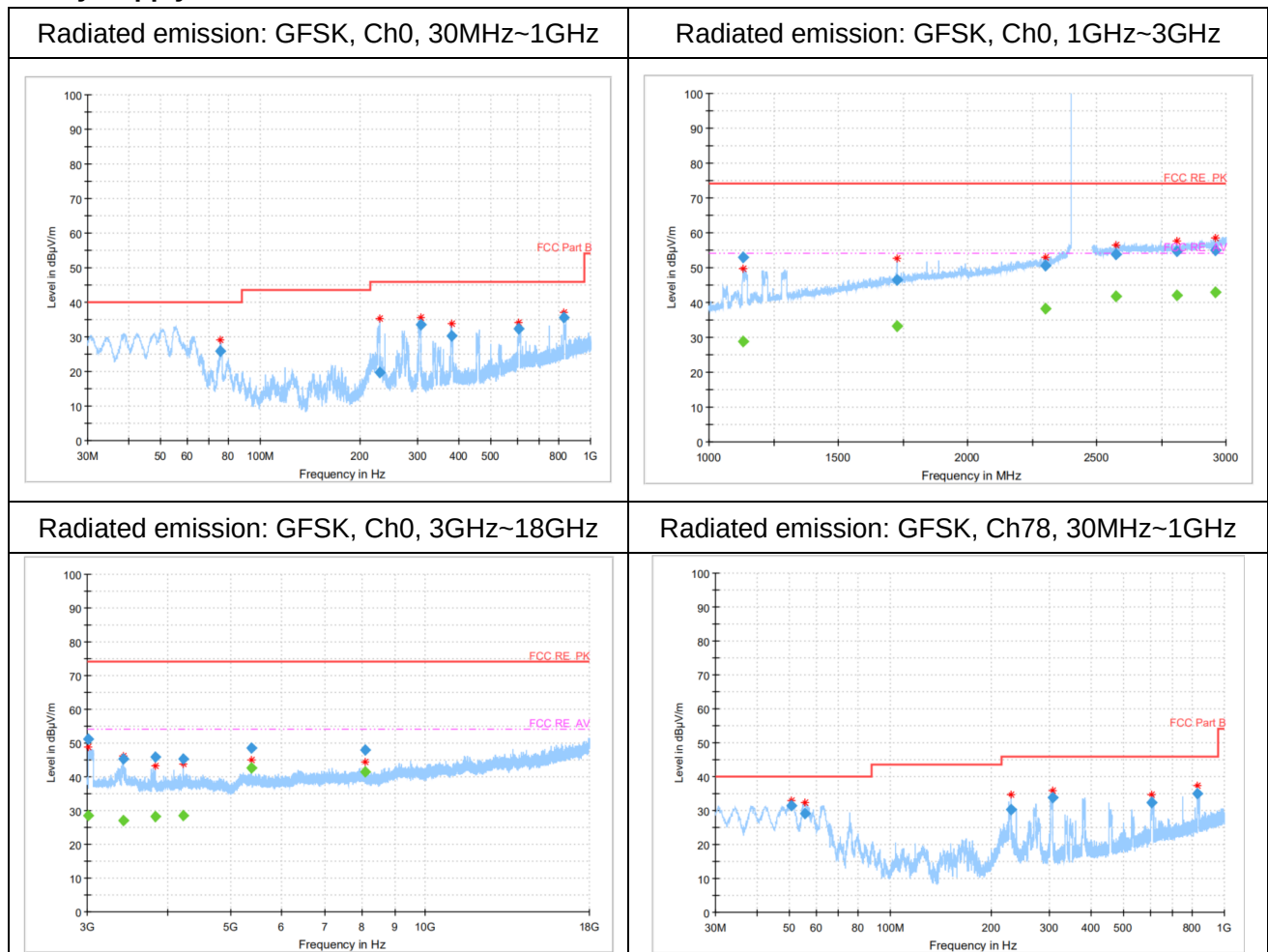
A “reference path loss” is established and A_{Rpi} is the attenuation of “reference path loss”, and including the gain of receive antenna, the gain of the preamplifier, the cable loss.

The measurement results are obtained as described below:

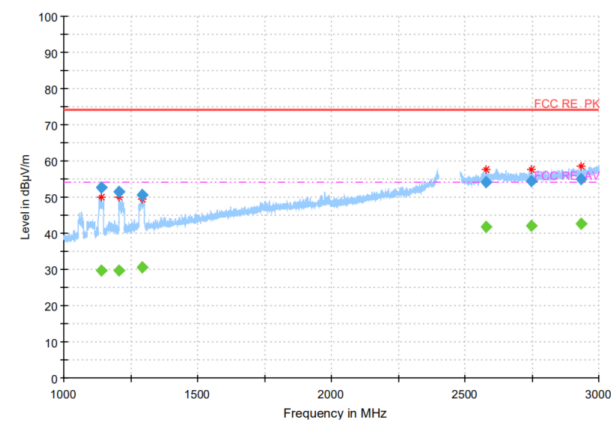
A_{Rpi} = Cable loss + Antenna Gain - Preamplifier gain

Result = $P_{Mea} + A_{Rpi}$

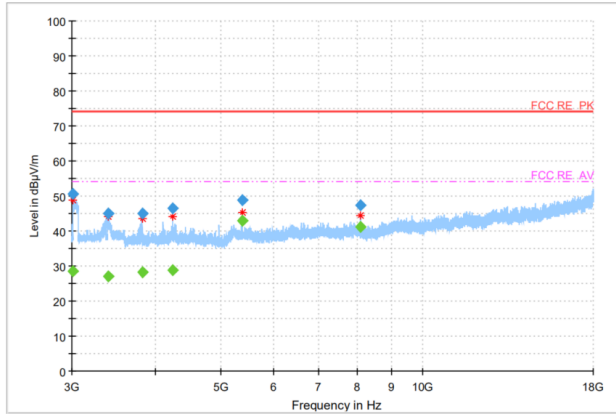
Mainly Supply



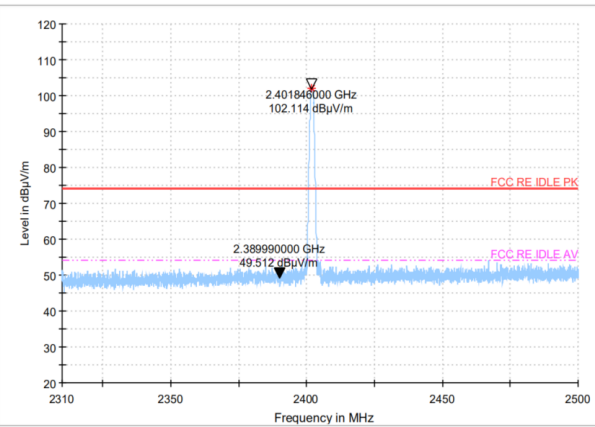
Radiated emission: GFSK, Ch78, 1GHz~3GHz



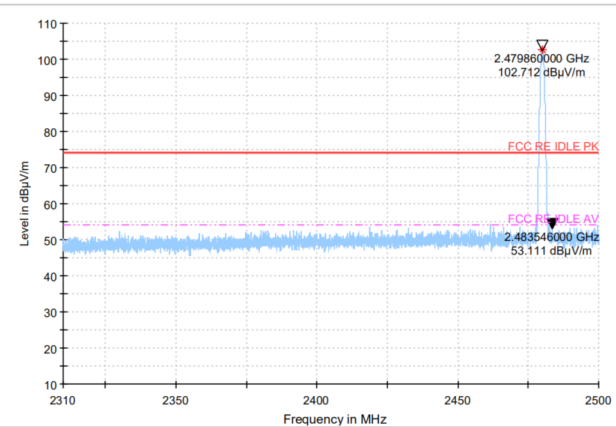
Radiated emission: GFSK, Ch78, 3GHz~18GHz



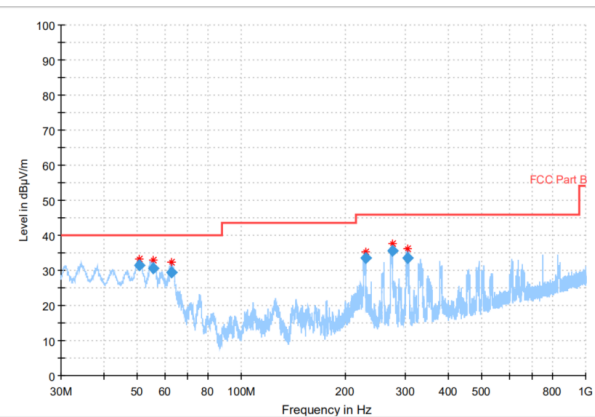
Bandedge (Low): GFSK, low channel



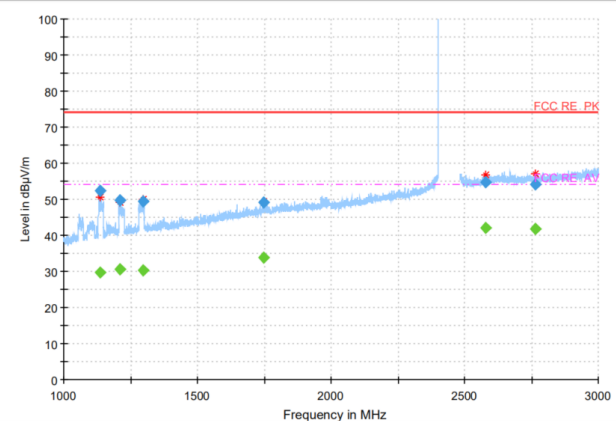
Bandedge (High): GFSK, high channel



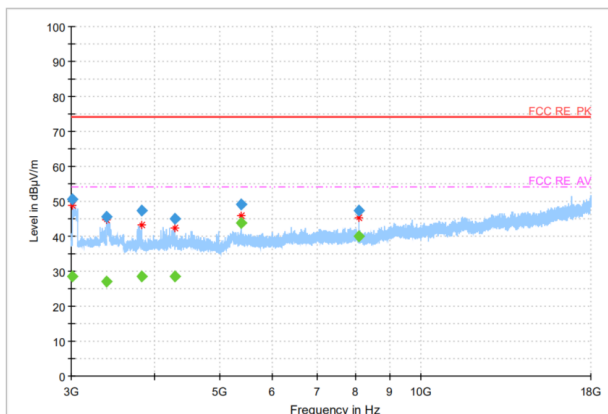
Radiated emission: $\pi/4$ DQPSK, Ch0,
30MHz~1GHz



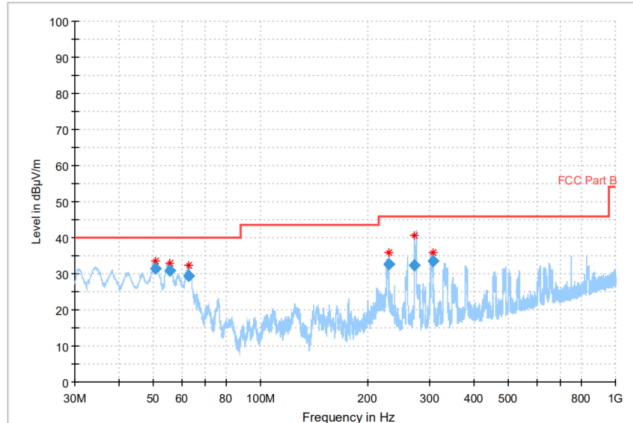
Radiated emission: $\pi/4$ DQPSK, Ch0,
1GHz~3GHz



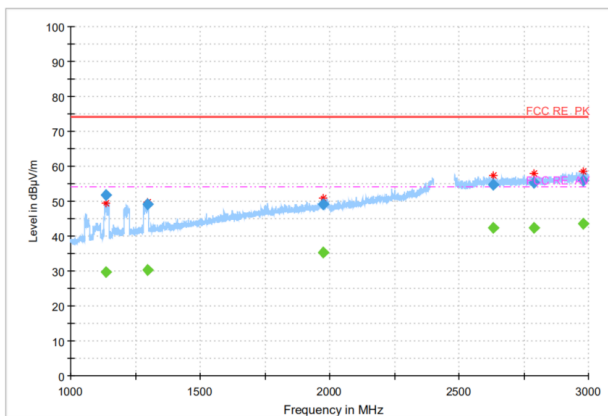
Radiated emission: $\pi/4$ DQPSK, Ch0,
3GHz~18GHz



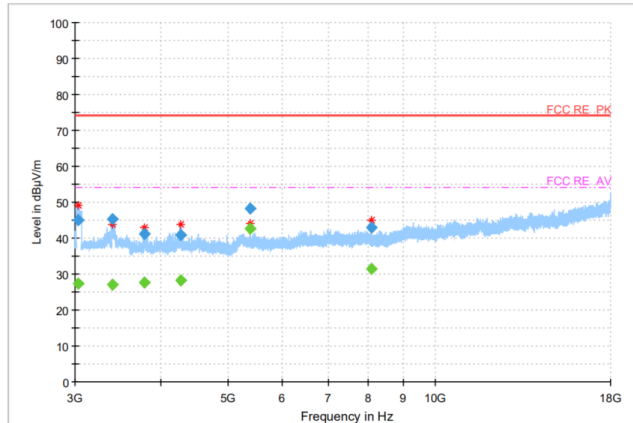
Radiated emission: $\pi/4$ DQPSK, Ch78,
30MHz~1GHz



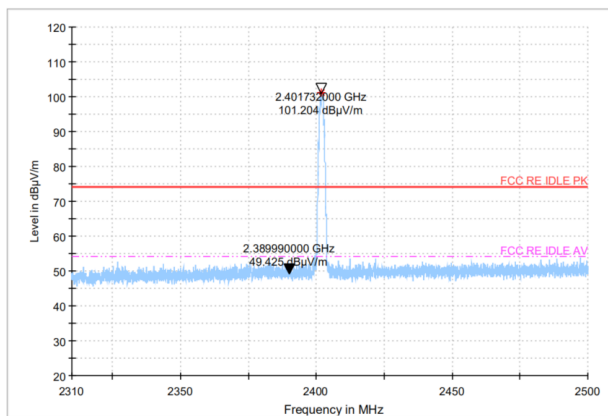
Radiated emission: $\pi/4$ DQPSK, Ch78,
1GHz~3GHz



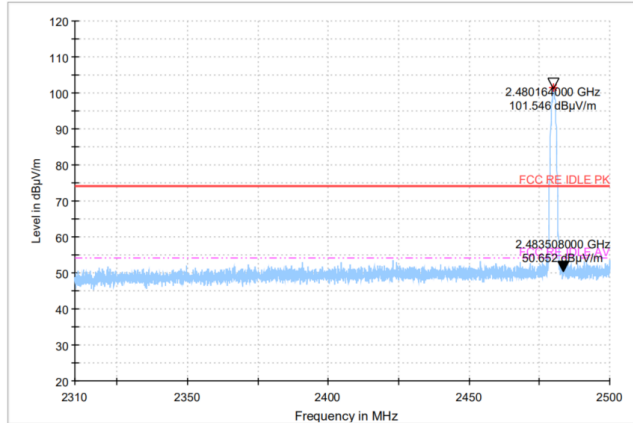
Radiated emission: $\pi/4$ DQPSK, Ch78,
3GHz~18GHz



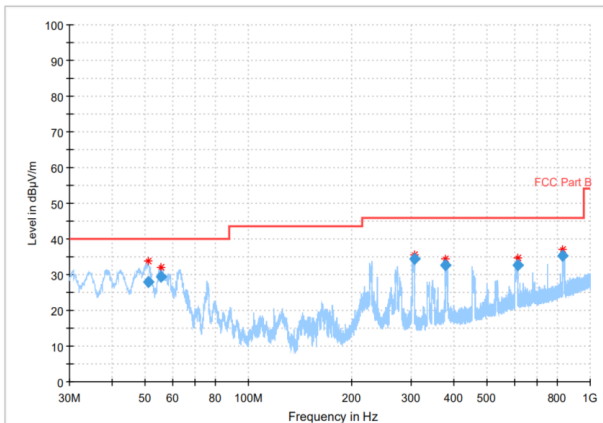
Bandedge (Low): $\pi/4$ DQPSK, low channel



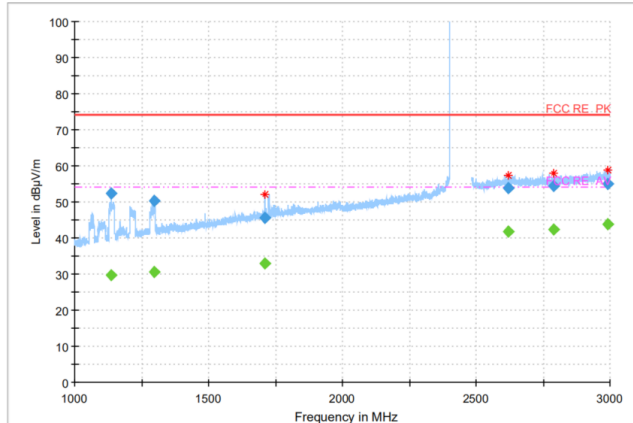
Bandedge (Low): $\pi/4$ DQPSK, high channel



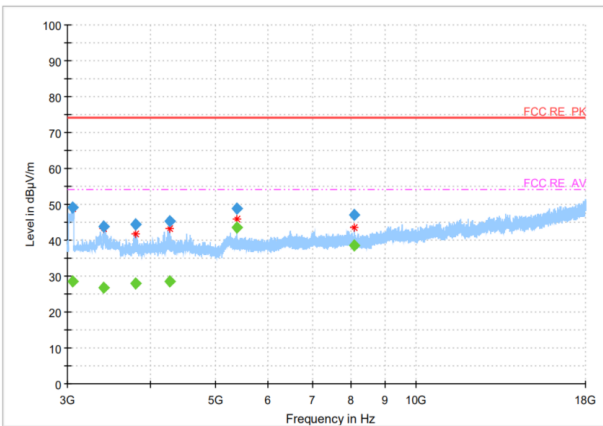
Radiated emission: 8DPSK, Ch0,
30MHz~1GHz



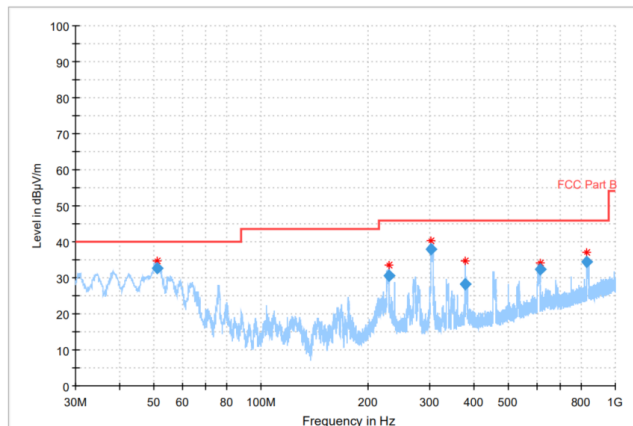
Radiated emission: 8DPSK, Ch0,
1GHz~3GHz



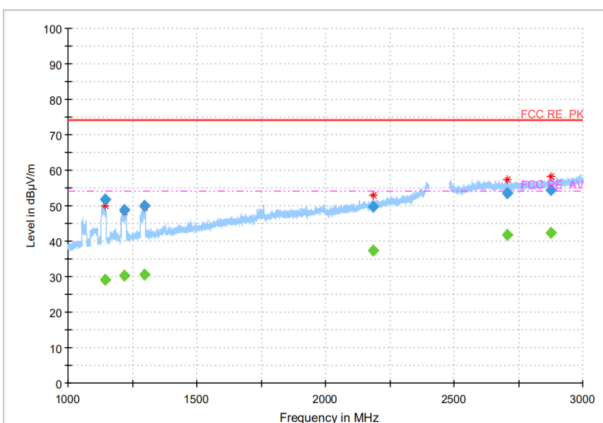
Radiated emission: 8DPSK, Ch0, 3GHz~18GHz



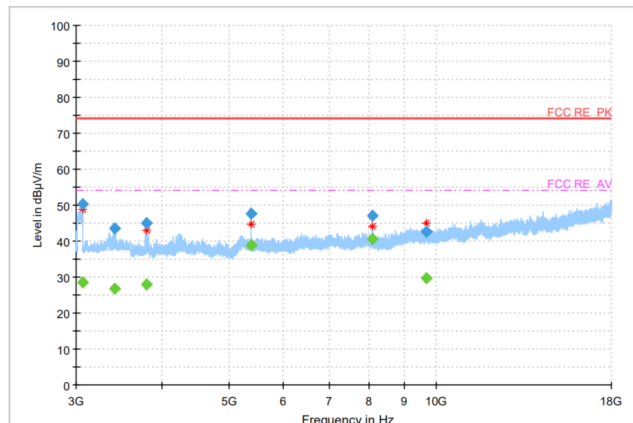
Radiated emission: 8DPSK, Ch78, 30MHz~1GHz



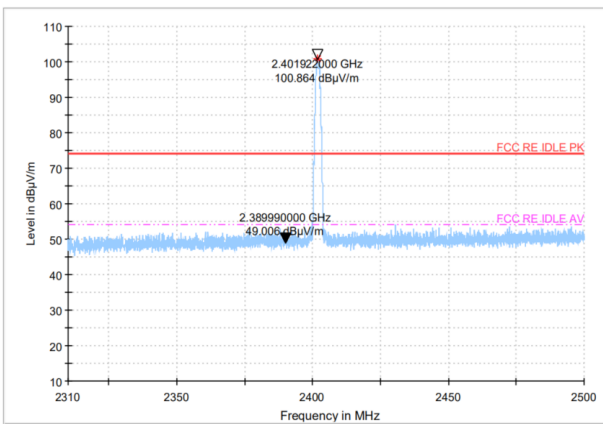
Radiated emission: 8DPSK, Ch78, 1GHz~3GHz



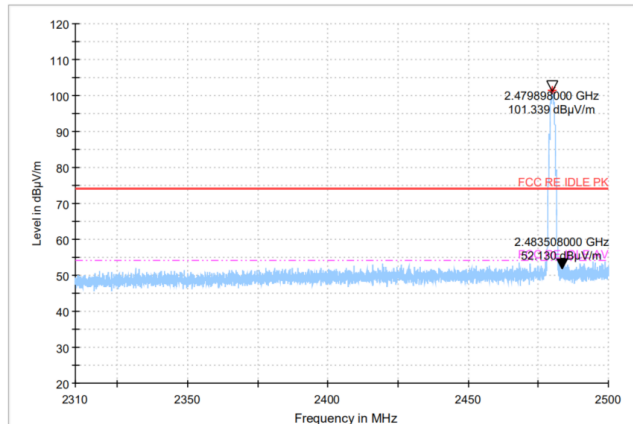
Radiated emission: 8DPSK, Ch78, 3GHz~18GHz



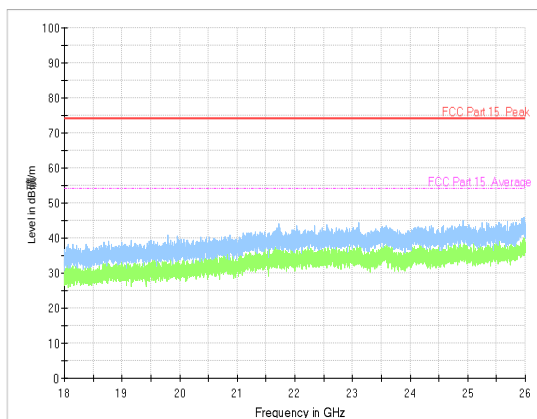
Bandedge (Low): 8DPSK, low channel



Bandedge (High): 8DPSK, high channel



ALL Channel 18GHz~26GHz

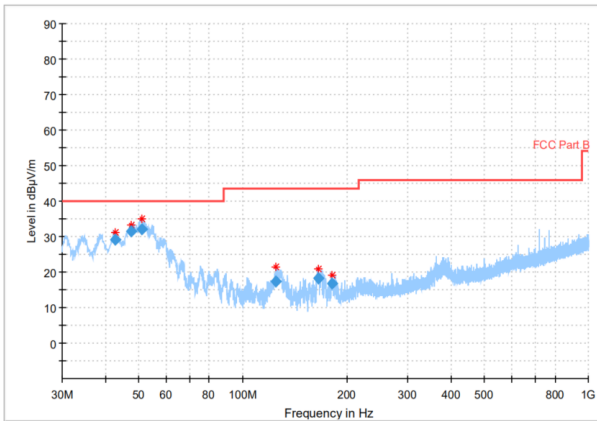


/

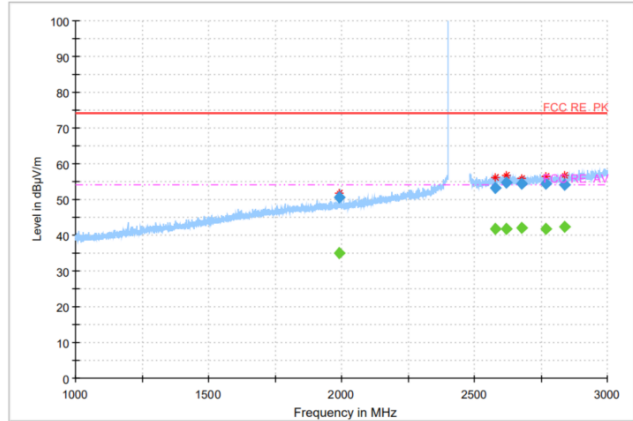
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Secondary Supply

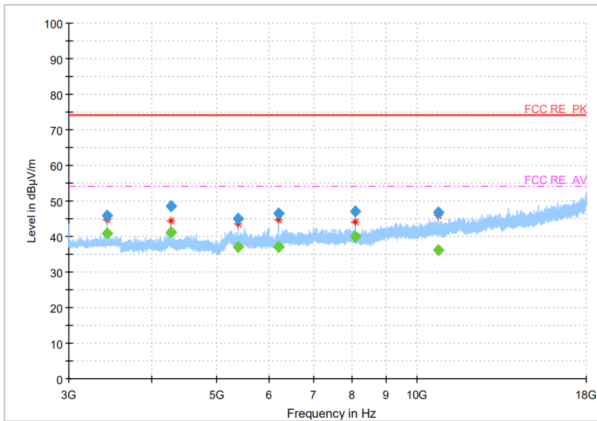
Radiated emission: GFSK, Ch0, 30MHz~1GHz



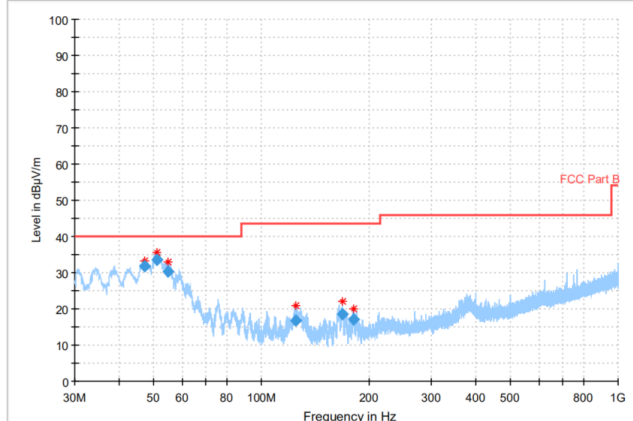
Radiated emission: GFSK, Ch0, 1GHz~3GHz



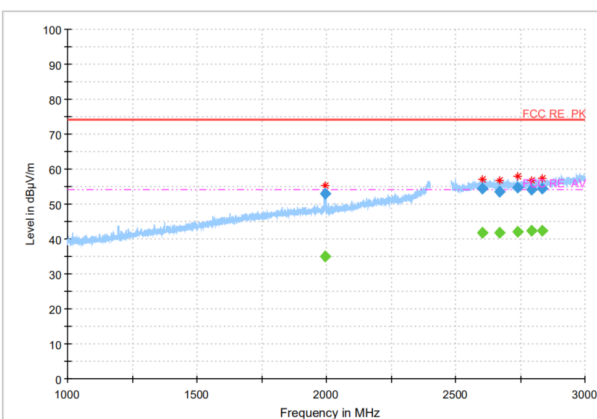
Radiated emission: GFSK, Ch0, 3GHz~18GHz



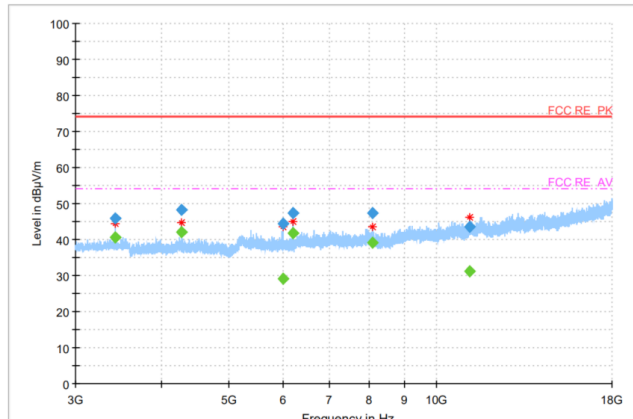
Radiated emission: GFSK, Ch78, 30MHz~1GHz



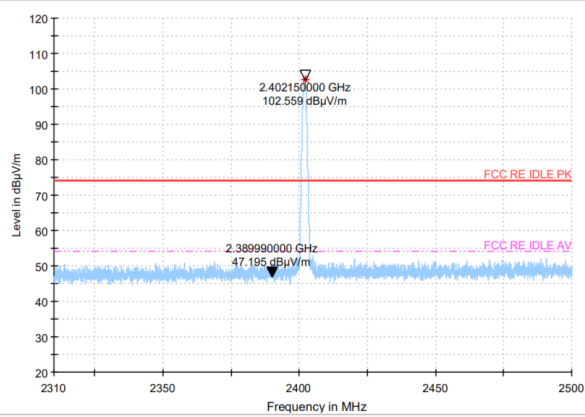
Radiated emission: GFSK, Ch78, 1GHz~3GHz



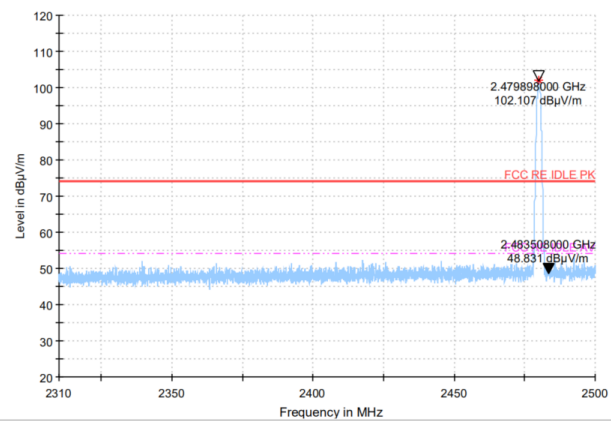
Radiated emission: GFSK, Ch78, 3GHz~18GHz



Bandedge (Low): GFSK, low channel

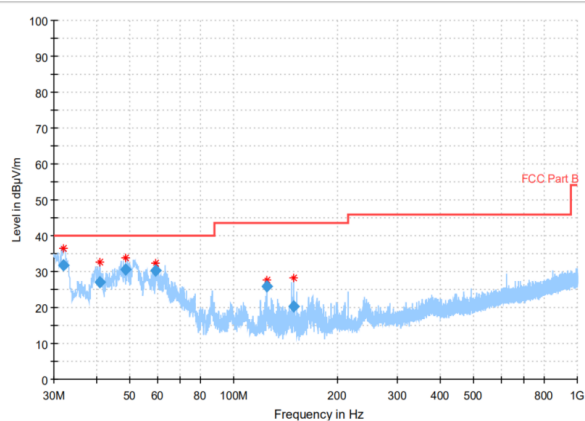


Bandedge (High): GFSK, high channel

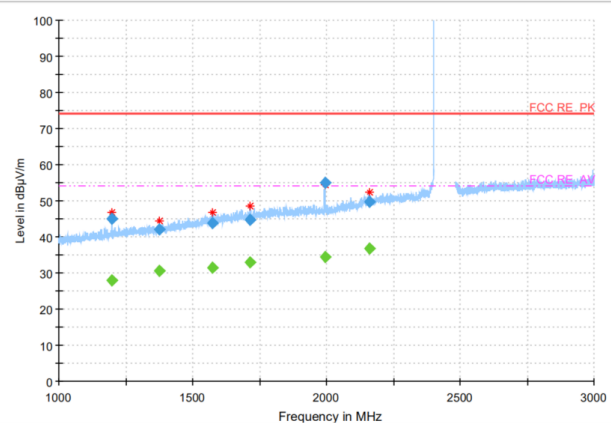


Thirdly Supply

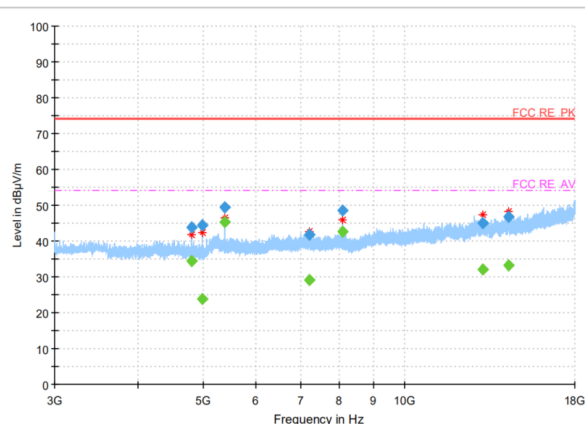
Radiated emission: GFSK, Ch0, 30MHz~1GHz



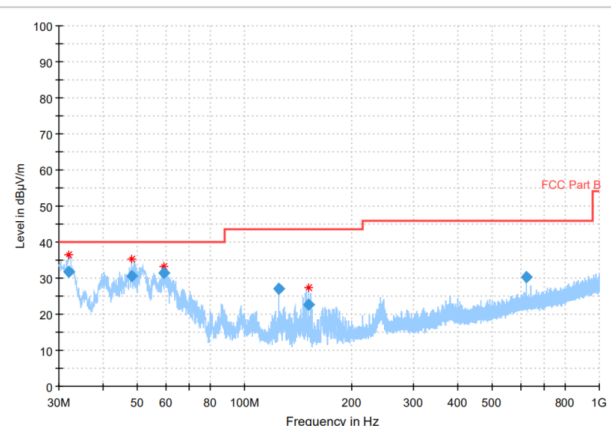
Radiated emission: GFSK, Ch0, 1GHz~3GHz



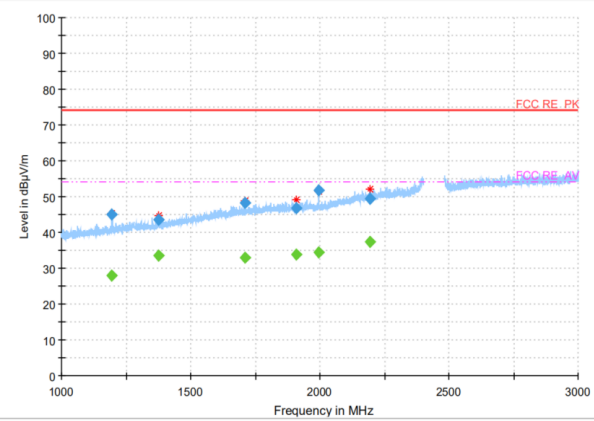
Radiated emission: GFSK, Ch0, 3GHz~18GHz



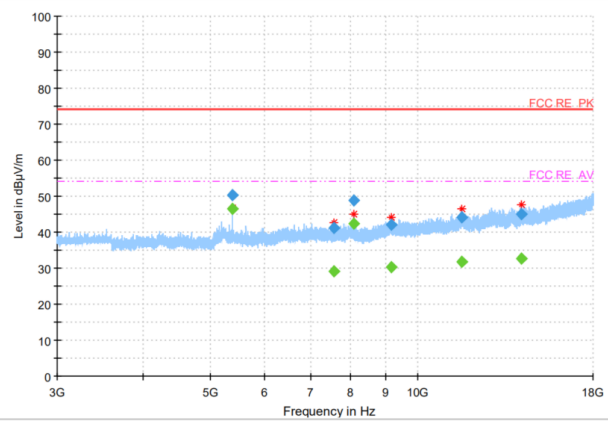
Radiated emission: GFSK, Ch78, 30MHz~1GHz



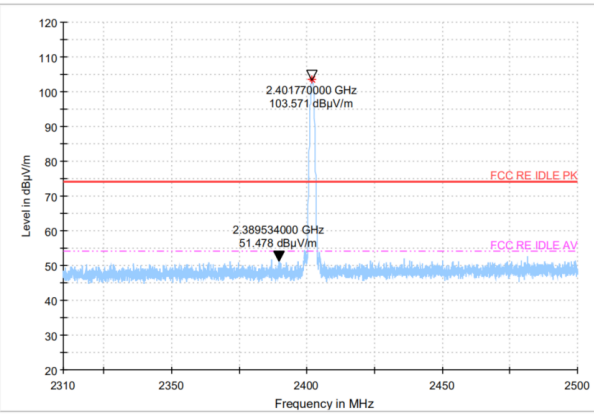
Radiated emission: GFSK, Ch78, 1GHz~3GHz



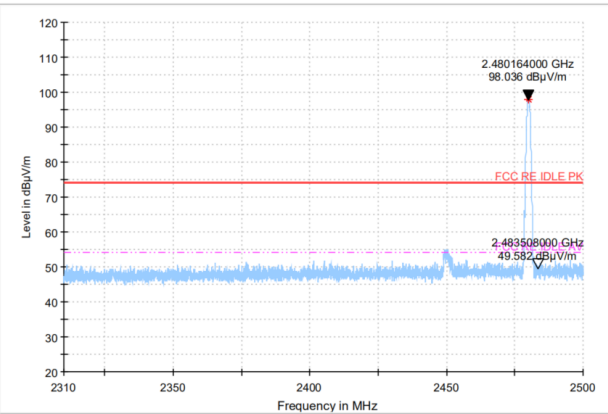
Radiated emission: GFSK, Ch78, 3GHz~18GHz



Bandedge (Low): GFSK, low channel



Bandedge (High): GFSK, high channel





Mainly Supply

GFSK Ch0 30MHz-1GHz

Frequency (MHz)	Result(dBuV/m)	ARpl(dB)	PMea(dBuV/m)	Polarity
75.53	25.97	-19.7	45.67	V
229.56	19.79	-14.2	33.99	H
306.16	33.45	-12.4	45.85	V
380.07	30.21	-10	40.21	H
603.55	32.27	-4.5	36.77	H
829.73	35.52	-1.7	37.22	V

GFSK Ch0 1GHz-3GHz (Peak)

Frequency (MHz)	Result(dBuV/m)	ARpl(dB)	PMea(dBuV/m)	Polarity
1131.07	52.87	1.7	51.17	H
1727.68	46.58	8.1	38.48	V
2299.97	50.69	13.5	37.19	V
2576.27	53.73	16.9	36.83	H
2809.29	54.64	17.7	36.94	V
2959.48	55.06	18.7	36.36	H

GFSK Ch0 1GHz-3GHz (Average)

Frequency (MHz)	Result(dBuV/m)	ARpl(dB)	PMea(dBuV/m)	Polarity
1131.07	28.69	1.7	26.99	H
1727.68	33.19	8.1	25.09	V
2299.97	38.34	13.5	24.84	V
2576.27	41.82	16.9	24.92	H
2809.29	42.09	17.7	24.39	V
2959.48	43.07	18.7	24.37	H

GFSK Ch0 3GHz-18GHz(Peak)

Frequency (MHz)	Result(dBuV/m)	ARpl(dB)	PMea(dBuV/m)	Polarity
3016.5	51.05	-7.4	58.45	V
3418.2	45.3	-6.7	52	H
3828.9	45.9	-6.2	52.1	V
4233.4	45.32	-5.5	50.82	V
5400.1	48.48	-3.3	51.78	V
8099.8	47.81	-1.5	49.31	H

GFSK Ch0 3GHz-18GHz (Average)

Frequency (MHz)	Result(dBuV/m)	ARpl(dB)	PMea(dBuV/m)	Polarity
3016.5	28.54	-7.4	35.94	V
3418.2	26.96	-6.7	33.66	H
3828.9	28.24	-6.2	34.44	V
4233.4	28.51	-5.5	34.01	V
5400.1	42.66	-3.3	45.96	V
8099.8	41.52	-1.5	43.02	H

GFSK CH78 30MHz-1GHz

Frequency (MHz)	Result(dBuV/m)	ARpl(dB)	PMea(dBuV/m)	Polarity
50.53	31.58	-15.3	46.88	V
55.78	29.14	-16	45.14	V
229.58	30.39	-14.2	44.59	H
306.22	33.9	-12.4	46.3	V
603.57	32.26	-4.5	36.76	H
829.72	35.04	-1.7	36.74	H

GFSK Ch78 1GHz-3GHz (Peak)

Frequency (MHz)	Result(dBuV/m)	ARpl(dB)	PMea(dBuV/m)	Polarity
1138.76	52.52	1.70	50.82	H
1206.45	51.39	2.50	48.89	H
1292.34	50.51	3.50	47.01	V
2579.25	54.04	17.00	37.04	V
2745.92	54.39	17.40	36.99	H
2934.44	55.09	18.50	36.59	H

GFSK Ch78 1GHz-3GHz (Average)

Frequency (MHz)	Result(dBuV/m)	ARpl(dB)	PMea(dBuV/m)	Polarity
1138.76	29.71	1.70	28.01	H
1206.45	29.77	2.50	27.27	H
1292.34	30.73	3.50	27.23	V
2579.25	41.88	17.00	24.88	V
2745.92	42.20	17.40	24.80	H
2934.44	42.76	18.50	24.26	H

GFSK Ch78 3GHz-18GHz(Peak)

Frequency (MHz)	Result(dBuV/m)	ARpl(dB)	PMea(dBuV/m)	Polarity
3397.5	45.13	-6.70	51.83	V
5399.6	48.95	-3.30	52.25	H
3016.4	50.52	-7.40	57.92	V
3819.6	45.14	-6.20	51.34	V
4247.8	46.38	-5.40	51.78	V
8099.9	47.40	-1.50	48.90	V

GFSK Ch78 3GHz-18GHz (Average)

Frequency (MHz)	Result(dBuV/m)	ARpl(dB)	PMea(dBuV/m)	Polarity
3397.5	27.11	-6.7	33.81	V
5399.6	43.05	-3.3	46.35	H
3016.4	28.58	-7.4	35.98	V
3819.6	28.22	-6.2	34.42	V
4247.8	28.81	-5.4	34.21	V
8099.9	41.32	-1.5	42.82	V

 $\pi/4$ DQPSK Ch0 30MHz-1GHz

Frequency (MHz)	Result(dBuV/m)	ARpl(dB)	PMea(dBuV/m)	Polarity
50.61	31.53	-15.3	46.83	V
55.50	30.53	-15.9	46.43	V
62.92	29.44	-17.1	46.54	V
229.57	33.60	-14.2	47.80	H
275.59	35.46	-12.9	48.36	V
305.11	33.41	-12.4	45.81	V

 $\pi/4$ DQPSK Ch0 1GHz-3GHz (Peak)

Frequency (MHz)	Result(dBuV/m)	ARpl(dB)	PMea(dBuV/m)	Polarity
1134.47	52.30	1.7	50.60	H
1210.10	49.57	2.6	46.97	H
1298.63	49.50	3.6	45.90	V
1747.79	48.99	8.3	40.69	V
2576.87	54.62	16.9	37.72	H
2762.80	54.19	17.5	36.69	H