Prüfbericht-Nr.: *Test Report No.*:	**60406401 001**	**Auftrags-Nr.:** *Order No.*:	**244238072**	**Seite 1 von 58** *Page 1 of 58*
Kunden-Referenz-Nr.: *Client Reference No.*:	**2045411**	**Auftragsdatum:** *Order date*:	**08.06.2020**	
Auftraggeber: *Client*:	**DECATHLON USA LLC** 2415 3rd Street, Suite 231, San Francisco California United States			
Prüfgegenstand: *Test item*:	**DOMYOS Fitness CONSOLE**			
Bezeichnung / Typ-Nr.: *Identification / Type No.*:	**CONSOLE 3** **FCC ID: 2AH2PCONSOLE3** **IC: 24468-CONSOLE3** **HVIN: CONSOLE 3**			
Auftrags-Inhalt: *Order content*:	**Complete test**			
Prüfgrundlage: *Test specification*:	**FCC CFR47 Part 15, Subpart C Section 15.247** **KDB 558074 D01 15.247 Meas Guidance v05r02** **RSS-Gen Issue 5, Amendment 1, March 2019** **RSS-247 Issue 2, February 2017** **ANSI C63.10: 2013**			

Wareneingangsdatum: *Date of receipt*:	**30.04.2020**
Prüfmuster-Nr.: *Test sample No.*:	**A002841869-001~003**
Prüfzeitraum: *Testing period*:	**23.07.2020 to 28.07.2020**
Ort der Prüfung: *Place of testing*:	**TÜV Rheinland (Shanghai) Co., Ltd.**
Prüflaboratorium: *Testing laboratory*:	**TÜV Rheinland (Shanghai) Co., Ltd.**
Prüfergebnis*: *Test result**:	**Pass**

geprüft von / *tested by*:

Tony C.L.chen

Datum *Date*	Name / Stellung *Name / Position*	Unterschrift *Signature*
27.08.2020	TonyC.L.Chen / PE	

kontrolliert von / *reviewed by*:

Hongfei Wu

Datum *Date*	Name / Stellung *Name / Position*	Unterschrift *Signature*
	Hongfei Wu / Reviewer	

Sonstiges / *Other*

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

* Legende:	1 = sehr gut	2 = gut	3 = befriedigend	4 = ausreichend	5 = mangelhaft
	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 specification(s)		*F(ail) = failed a.m. test specification(s)*	*N/A = not applicable*	*N/T = not tested*

V04

TEST SUMMARY

5.1.1 ANTENNA REQUIREMENT
RESULT: Pass

5.1.2 6DB & 99% BANDWIDTH
RESULT: Pass

5.1.3 PEAK OUTPUT POWER
RESULT: Pass

5.1.4 POWER SPECTRAL DENSITY
RESULT: Pass

5.1.5 CONDUCTED BAND EDGE AND OUT-OF BAND EMISSIONS
RESULT: Pass

5.2.1 CONDUCTED EMISSION
RESULT: Pass

5.3.1 RADIATED BAND-EDGE
RESULT: Pass

5.3.2 RADIATED SPURIOUS EMISSION
RESULT: Pass

Contents

1. General Remarks

1.1 Complementary Materials

Null.

2. Test Sites

2.1 Test Facilities

TÜV Rheinland (Shanghai) Co., Ltd.

Shanghai TUV Rheinland Building No. 177, 178 Lane 777, West Guangzhong Rd, Jing'an District, Shanghai, China

The used test equipment is in accordance with CISPR 16 for measurement of radio interference.

The Federal Communications Commission has reviewed the technical characteristics of the radiated and conducted emission facility, and has found these test facilities to be in compliance with the requirements of section 2.948 of the FCC rules. The description of the test facility is listed under FCC registration number 958801.

The Innovation, Science and Economic Development Canada has reviewed the technical characteristics of the radiated and conducted emission facility, and has found these test facilities to be in compliance. The description of the test facility is listed under chambers filing number 2932F.

2.2 List of Test and Measurement Instruments

Table 1: List of Test and Measurement Equipment

Instrument	Manufacturer	Type No.	Asset No.	Cali. Due Date
3m Anechoic Chamber	Frankonia	SAC3	FJ129002	13.05.2022
EMI Test Receiver	R&S	ESCI	100280	31.10.2020
Spectrum Analyzer	R&S	FSV40	101258	31.10.2021
BiLog Antenna	Teseq	CBL 6112D	40530	13.02.2021
Log-periodic Antenna	R&S	HL050	100692	16.02.2021
Preamplifier	Taiwan EMC Instruments Corporation	EMC051845SE	980612	05.03.2021
Broadband Horn Antenna	Schwarzbeck	BBHA 9170	9170-305	09.07.2021
Preamplifier	Taiwan EMC Instruments Corporation	EMC184045SE	980596	05.03.2021
Spectrum Analyzer	Keysight	N9020A	MY54500180	09.05.2021
DC Power Supply	ALLPOWER	ADC50-20	99223	12.10.2020
Thermohygrometer	Testo	608-H1	1241320614	13.10.2020
EMI test receiver	R&S	ESIB26	G1811380	06.03.2021
Artificial main network	R&S	ENV432	G1830003	01.11.2020
EMC measurement software	R&S	EMC32	G1824845	N/A

2.3 Traceability

All measurement equipment calibrations are traceable to NIST or where calibration is performed outside the United States, 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

Table 2: Measurement Uncertainty

Measurement Type	Frequency	Uncertainty
Antenna Port Conducted Emission	< 1GHz	±0.39dB
	> 1GHz	±0.68dB
Radiated Emission	9kHz – 30MHz	±2.93dB
	30MHz - 1GHz	±5.34dB
	> 1GHz	±5.40dB

3. General Product Information

3.1 Product Function and Intended Use

The EUT (Equipment Under Test) is a panel used for fitness equipment which support Bluetooth Low Energy.

The aim of this report is to evalute the RF characteristic of the Bluetooth Low Energy Part of this module.

For details refer to the User Manual and Circuit Diagram.

3.2 Ratings and System Details

Table 3: Technical Specification of EUT

General Description of EUT	
Product Name:	DOMYOS Fitness CONSOLE
Model No.:	CONSOLE 3
Rated Voltage:	DC 9V AC 120V, 60Hz
Bluetooth Low Energy	
Frequency Range:	2402 to 2480MHz
Modulation Type:	GFSK
Antenna Type:	PCB Antenna
Antenna Gain:	3dBi

3.3 Independent Operation Modes

Table 4: Independent Operation Modes

Test Mode	Channel	Frequency
TM1	00	2402
TM2	19	2440
TM3	39	2480
TM4	Normal Operating Mode	

3.4 Noise Generating and Noise Suppressing Parts

Refer to the Circuit Diagram.

3.5 Submitted Documents

- Bill of Material
- PCB Layout
- Photo Document
- Circuit Diagram
- Instruction Manual
- Rating Label

4. Test Set-up and Operation Modes

4.1 Principle of Configuration Selection

The equipment under test (EUT) was configured to measure its maximum power level. The test modes were adapted accordingly in reference to the instructions for use.

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.
Test Software used: EMI_TEST_v1.1

4.3 Special Accessories and Auxiliary Equipment

Table 5: Auxiliary Equipment

Product Name	Model Name	Manufactory
Exercise Bike	Domyos Bike 500 CN	DECATHLON SA

Note: Above auxiliary equipment was used for Conducted Emission test.

4.4 Countermeasures to achieve EMC Compliance

Null.

5. Test Results

5.1 Conducted Testing at Antenna Port

5.1.1 Antenna Requirement

RESULT: **Pass**

According to the manufacturer declared, the EUT has one PCB antenna, the directional gain of antenna is 3dBi and the antenna is designed with permanent attachment and no consideration of replacement. Therefore the EUT is considered sufficient to comply with the provision.

Table 6: Antenna Requirement

FCC 15.203 – Antenna Requirement 1		
Requirement:	No antenna other than that furnished by the responsible party shall be used with the device	
Results:	Antenna type:	PCB antenna
Verdict:	Pass	

FCC 15.204 – Antenna Requirement 2	
Requirement:	An intentional radiator may be operated only with the antenna with which it is authorized. If an antenna is marketed with the intentional radiator, it shall be of a type which is authorized with the intentional radiator.
Results:	Only one integral antenna can be used
Verdict:	Pass

RSS-Gen 6.4 – External Controls	
Requirement:	The device shall not have any external controls accessible to the user that enable it to be adjusted, selected or programmed to operate in violation of the regulatory requirements, including RSS-Gen and the applicable RSSs.
Results:	The device does not have any external controls accessible to the user that enable it to be adjusted, selected or programmed to operate in violation of the regulatory requirements, including RSS-Gen and the applicable RSSs.
Verdict:	Pass

RSS-Gen 6.8 – Antenna Requirement		
Requirement:	When measurements at the antenna port are used to determine RF output power, the effective gain of the device's antenna shall be stated, based on a measurement or on data from the antenna's manufacturer.	
Results:	a) Aennta type:	PCB
	b) Manufacture:	N/A
	c) Model No.:	N/A
	d) Gain with reference to an isotropic radiator:	3dBi
Verdict:	Pass	

5.1.2 6dB & 99% Bandwidth

RESULT: **Pass**

Date of testing	:	23.07.2020
Ambient temperature	:	20.6°C
Relative humidity	:	58.6%
Atmospheric pressure	:	101kPa
Test requirement	:	FCC Part 15.247(a)(2) RSS-247 Issue 2, February 2017, Clause 5.2(a)
Test procedure	:	KDB 558074 D01v05r02 ANSI C63.10: 2013
Test voltage	:	DC 9V
Test modes applied	:	TM1 to TM3

Table 7: 6dB & 99% Bandwidth

Test Mode	CH.	Freq. [MHz]	6dB Bandwidth [kHz]	99% Bandwidth [kHz]
TM1	00	2402	659.3	1060.9
TM2	19	2440	655.4	1049.6
TM3	39	2480	662.9	1043.7

Note:
For frequency hopping systems operating in the 2400 – 2483.5MHz band, no bandwidth limit is specified. The test data is provide for reference.
And according to FCC, when the occupied bandwidth limit is not stated in the applicable FCC or reference measurement method, the transmitted signal band width shall be reported as the 99% emission bandwidth.

Figure 1: 6dB Bandwidth, 2402MHz

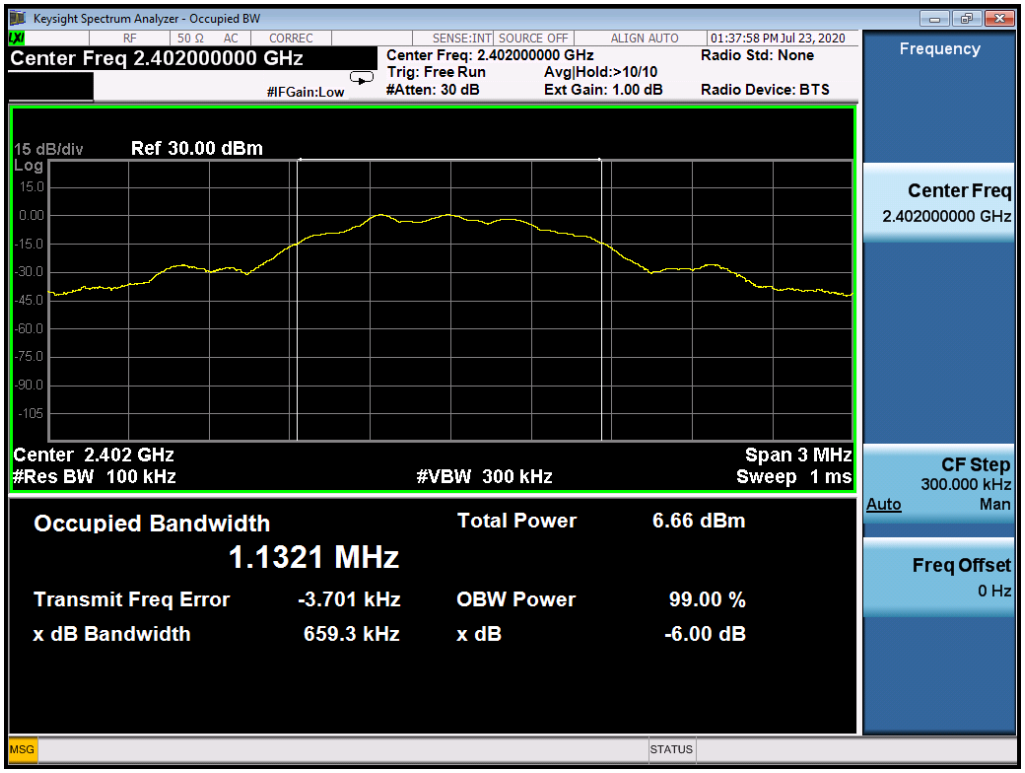


Figure 2: 6dB Bandwidth, 2440MHz

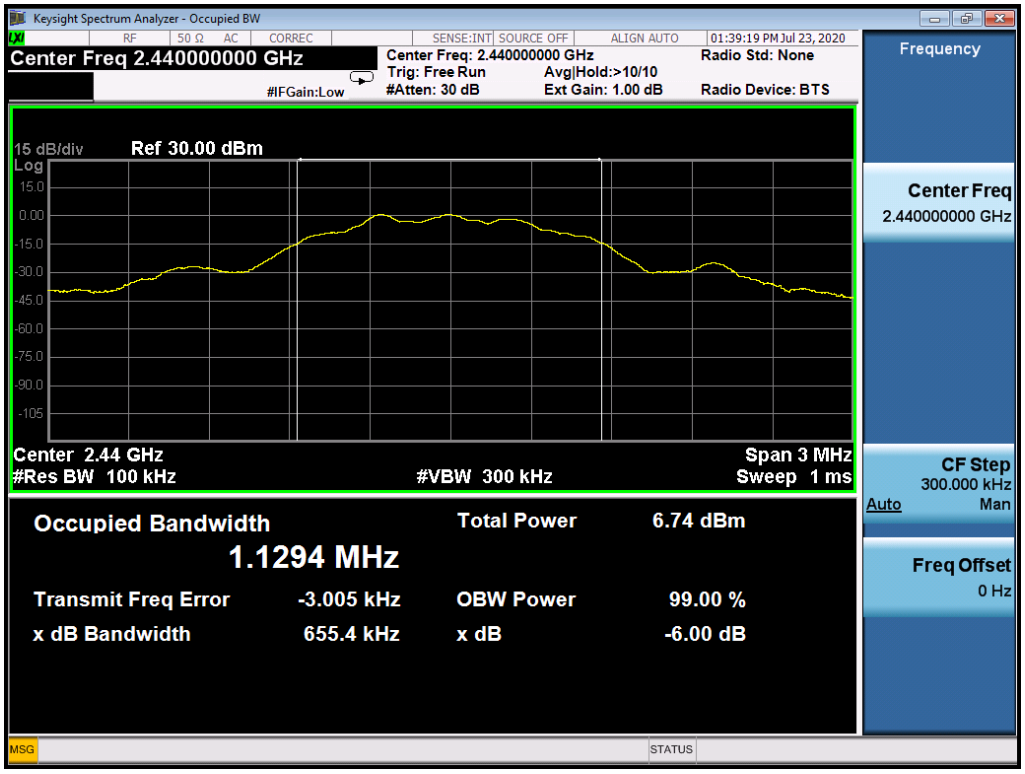


Figure 3: 6dB Bandwidth, 2480MHz

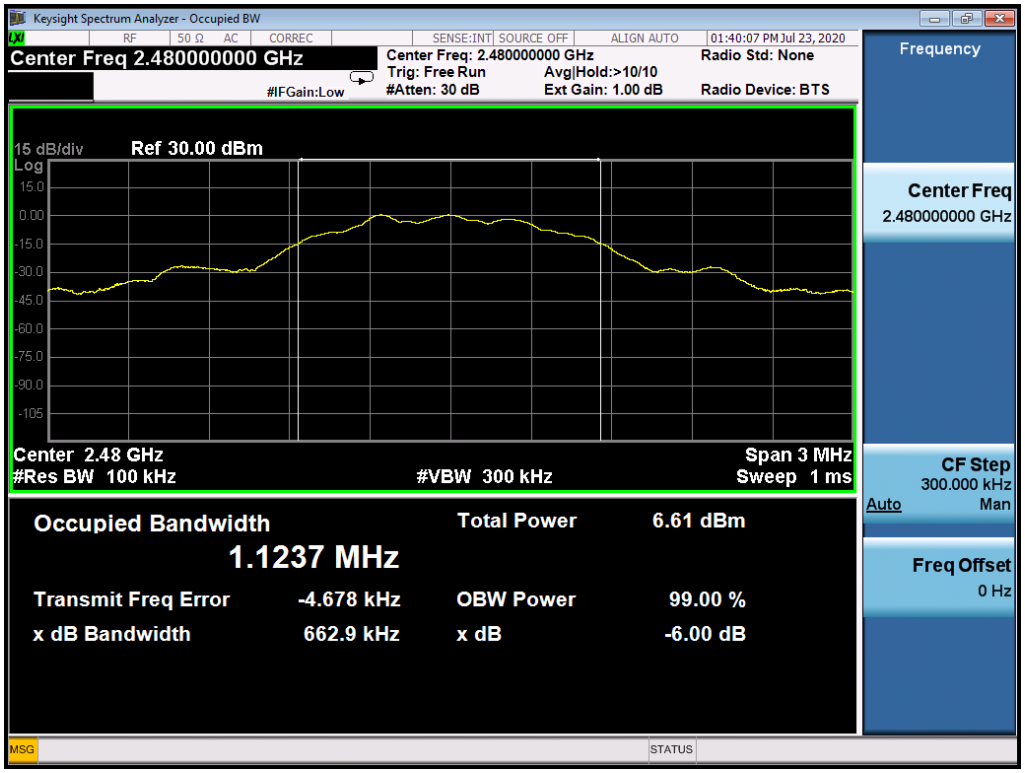


Figure 4: 99% Bandwidth, 2402MHz

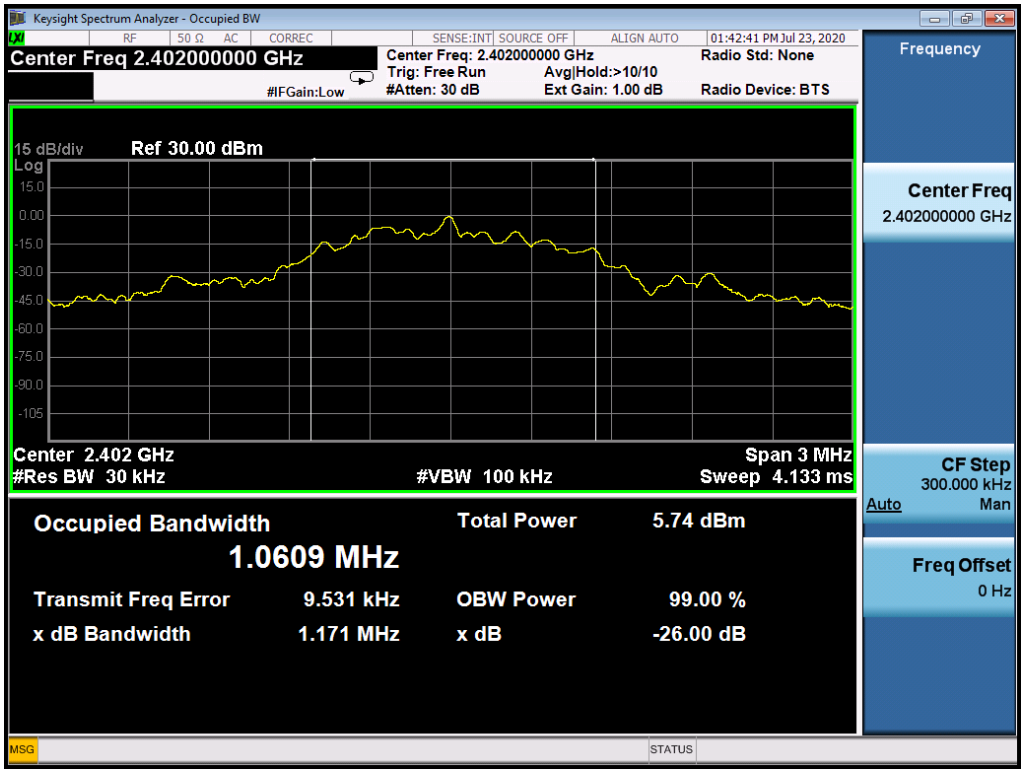


Figure 5: 99% Bandwidth, 2440MHz

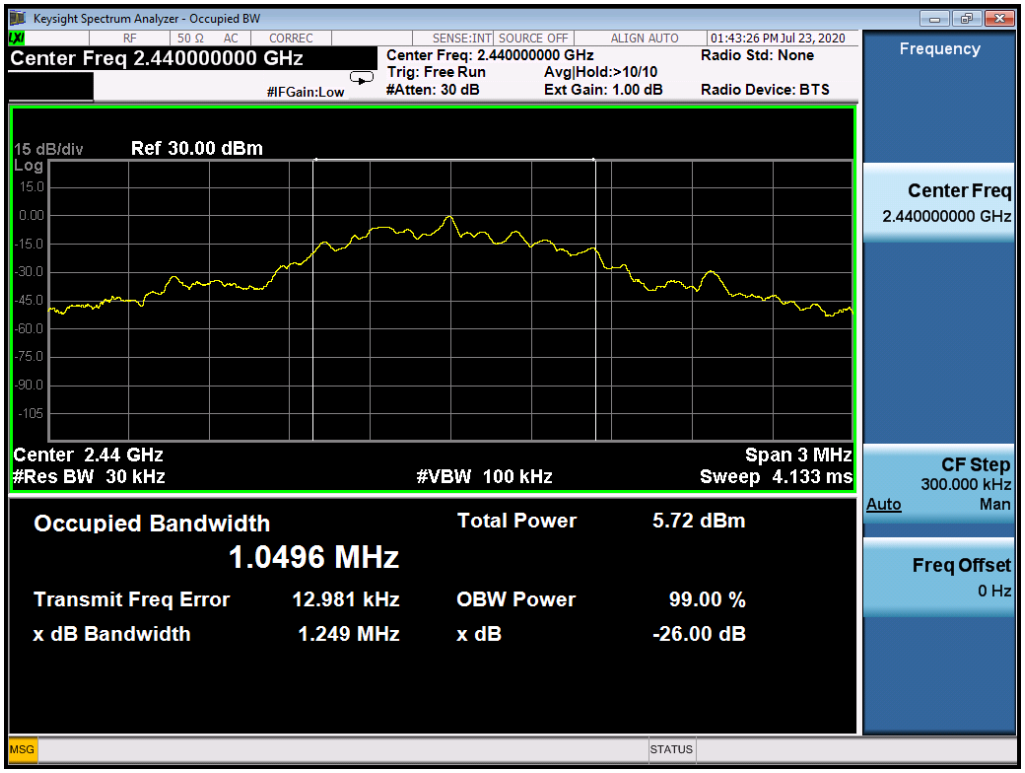
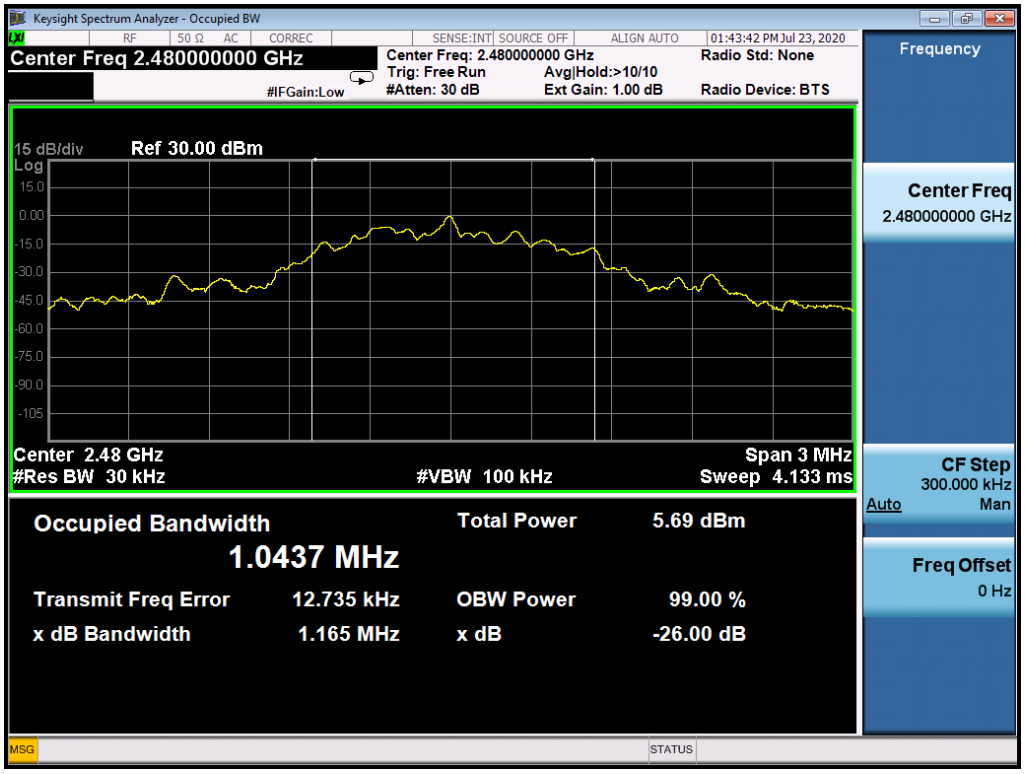


Figure 6: 99% Bandwidth, 2480MHz



5.1.3 Peak Output Power

RESULT: **Pass**

Date of testing	:	23.07.2020
Ambient temperature	:	23.1°C
Relative humidity	:	48.5%
Atmospheric pressure	:	101kPa
Test requirement	:	FCC Part 15.247(b)(3) RSS-247 Issue 2, February 2017, Clause 5.4(d)
Test procedure	:	KDB 558074 D01v05r02 ANSI C63.10: 2013
Test voltage	:	DC 9V
Test modes applied	:	TM1 to TM3

Table 8: Peak Output Power

Mode	Antenna Gain [dBi]	CH.	Freq. [MHz]	Maximum Peak Conducted Output Power [dBm]	Peak Conducted Output Power Limit [dBm]	Maximum EIRP [dBm]	EIRP Limit [dBm]
TM1	**3**	00	2402	0.548	30	3.548	36
TM2		**19**	**2440**	**0.607**	**30**	**3.607**	**36**
TM3		39	2480	0.604	30	3.604	36

Note:
EIRP=Peak Conducted Output Power + Antenna Gain

5.1.4 Power Spectral Density

RESULT: **Pass**

Date of testing	:	23.07.2020
Ambient temperature	:	21.4°C
Relative humidity	:	56.1%
Atmospheric pressure	:	101kPa
Test requirement	:	FCC Part 15.247(e) RSS-247 Issue 2, February 2017, Clause 5.2(b)
Test procedure	:	KDB 558074 D01v05r02 ANSI C63.10: 2013
Test voltage	:	DC 9V
Test modes applied	:	TM1 to TM3

Table 9: Power Spectral Density

Mode	CH.	Frequency [MHz]	Result [dBm/3kHz]	Limit [dBm/3kHz]
TM1	00	2402	-0.167	8
TM2	19	2440	-0.122	8
TM3	39	2480	-0.060	8

Figure 7: Power Spectral Density, 2402MHz

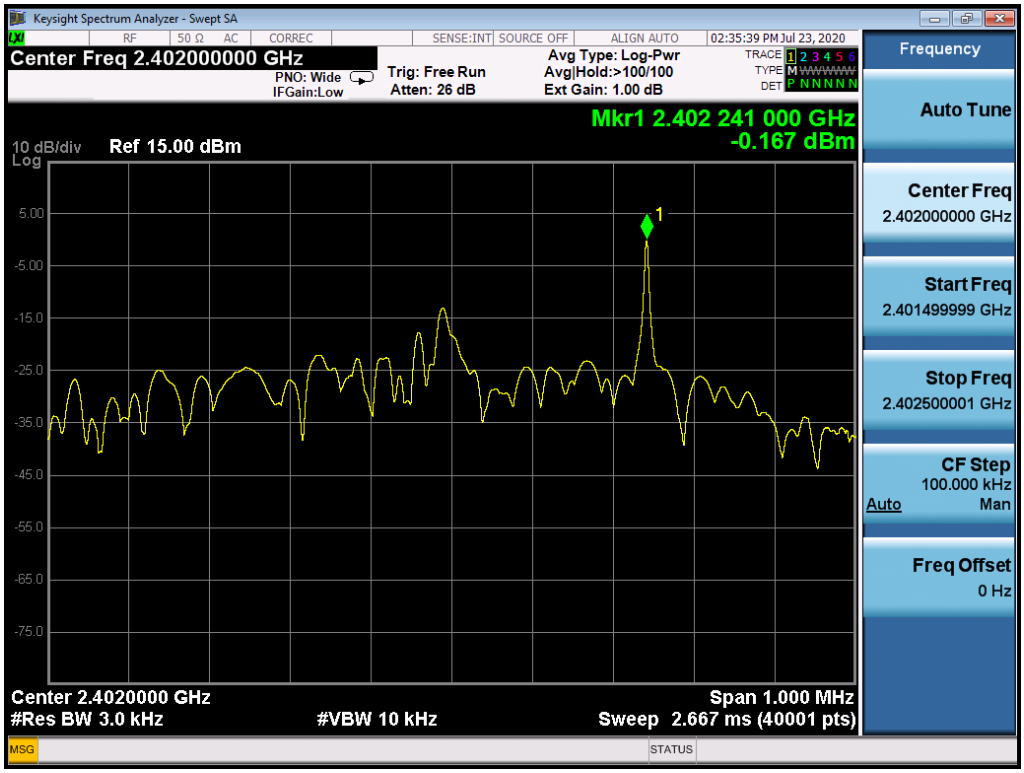


Figure 8: Power Spectral Density, 2440MHz

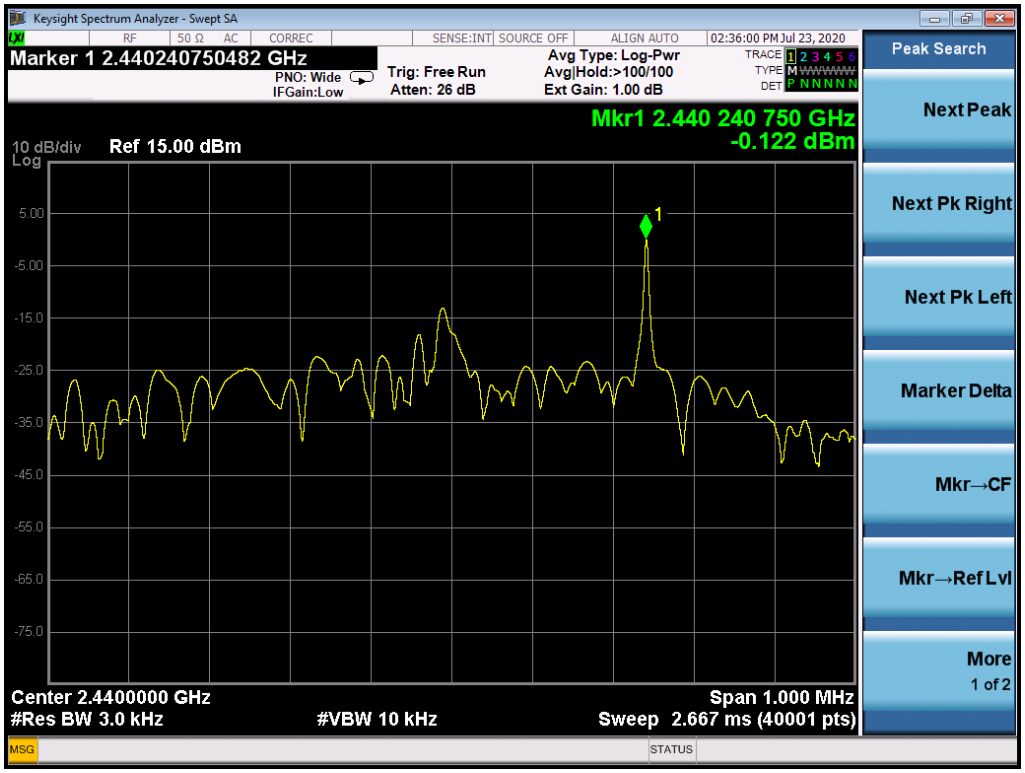


Figure 9: Power Spectral Density, 2480MHz

5.1.5 Conducted Band Edge and out-of Band Emissions

RESULT: **Pass**

Date of testing	:	23.07.2020
Ambient temperature	:	21.4°C
Relative humidity	:	56.1%
Atmospheric pressure	:	101kPa
Test requirement	:	FCC Part 15.247(d) RSS-247 Issue 2, February 2017, Clause 5.5
Test procedure	:	KDB 558074 D01v05r02 ANSI C63.10: 2013
Test voltage	:	DC 9V
Test modes applied	:	TM1 to TM3

Figure 10: Reference level, 2402MHz

Figure 11: Reference level, 2440MHz

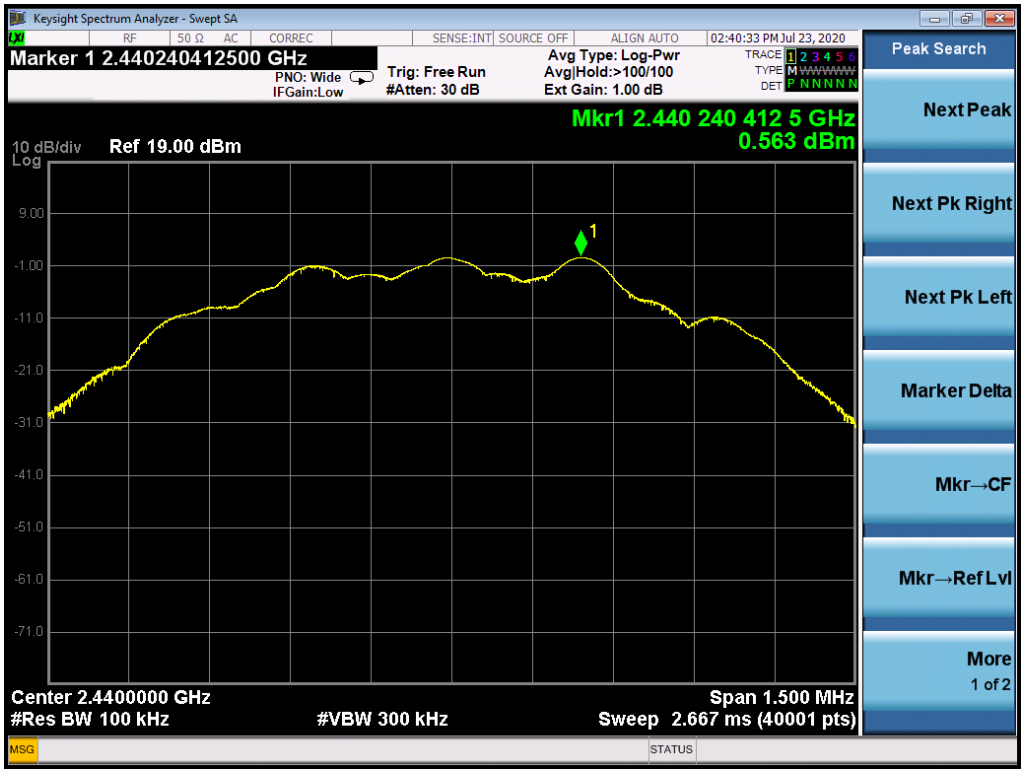


Figure 12: Reference level, 2480MHz

Figure 13: Conducted Spurious Emission, 2402MHz

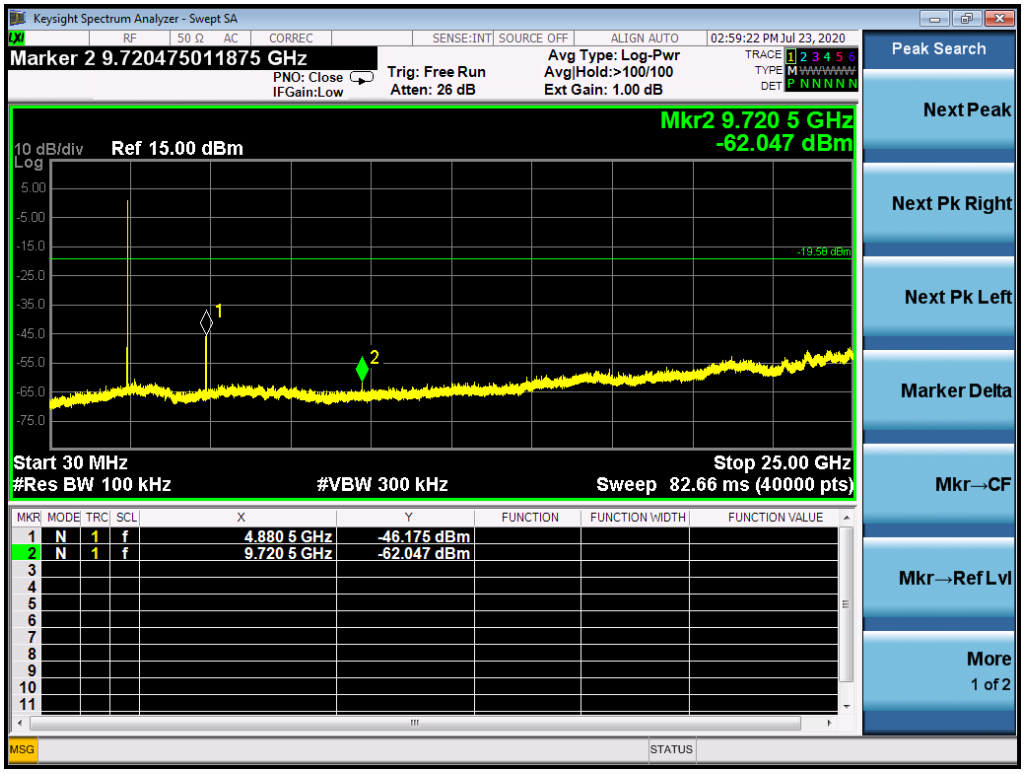


Figure 14: Conducted Spurious Emission, 2440MHz

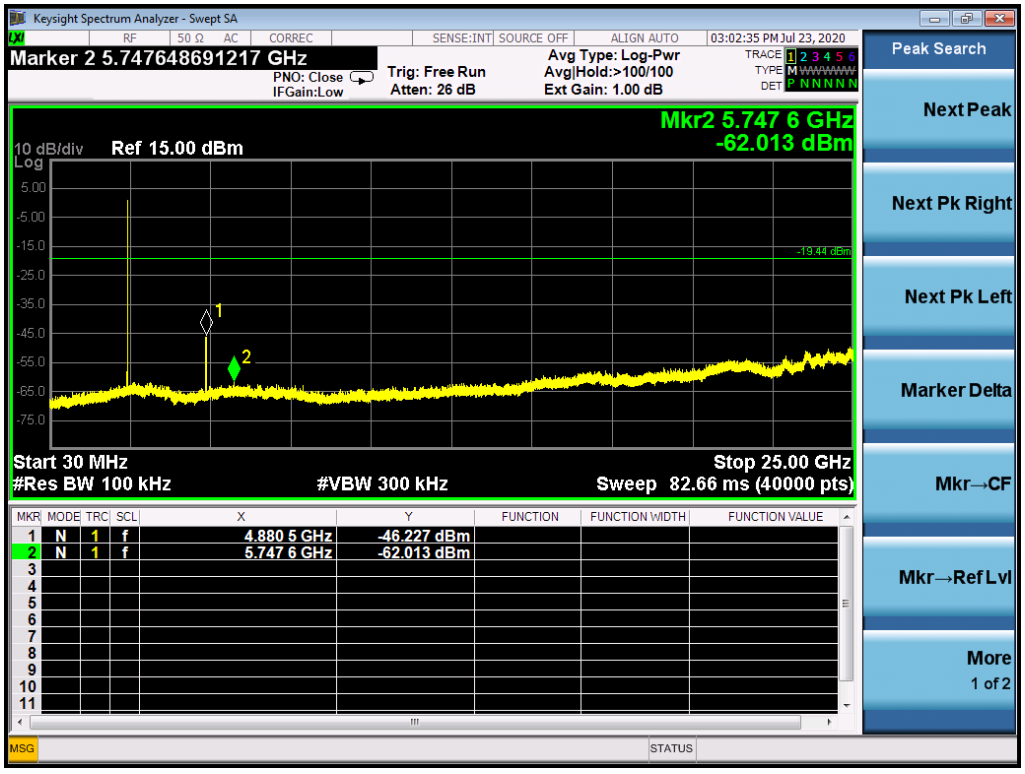


Figure 15: Conducted Spurious Emission, 2480MHz

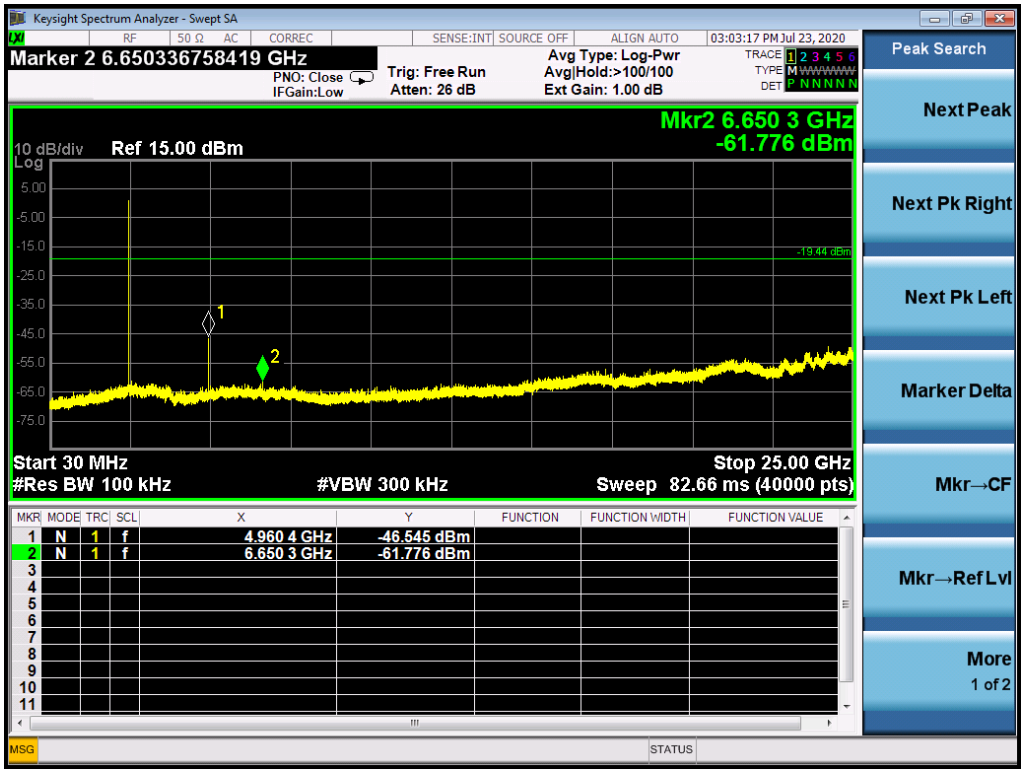


Figure 16: Conducted Band Edge, Lower Band

Figure 17: Conducted Band Edge, Higher Band

5.2 Emission in the Frequency Range up to 30MHz

5.2.1 Conducted Emission

RESULT: **Pass**

Date of testing	:	23.07.2020
Ambient temperature	:	26.1°C
Relative humidity	:	32.7%
Atmospheric pressure	:	101kPa
Test requirement	:	FCC Part 15.207 (a) RSS-Gen Issue 5, Amendment 1, March 2019, Clause 8.8
Test procedure	:	KDB 558074 D01v05r02 ANSI C63.10: 2013
Test voltage	:	AC 120V, 60Hz
Test modes applied	:	TM4

Figure 18: Conducted Emission, L

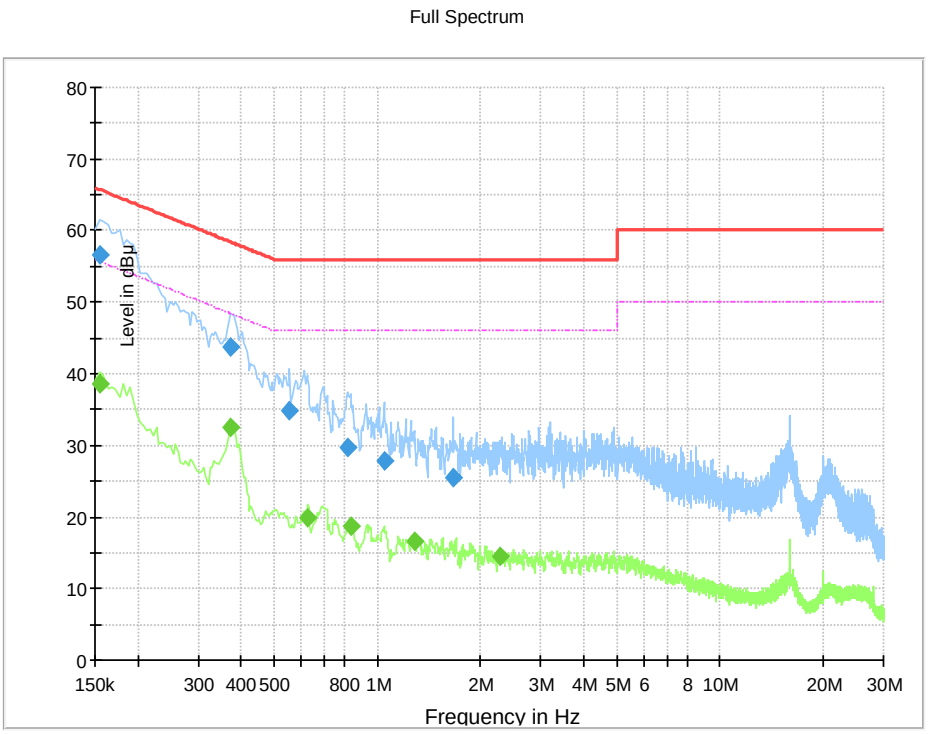


Table 10: Conducted Emission, L, Final Result_QPK

Frequency [MHz]	QuasiPeak [dBµV]	Limit [dBµV]	Margin [dB]	Meas. Time [ms]	Bandwidth [kHz]	Line	Corr. (dB)
0.154500	56.70	65.75	9.06	1000.0	9.000	L1	9.5
0.375000	43.71	58.39	14.68	1000.0	9.000	L1	9.6
0.555000	34.81	56.00	21.19	1000.0	9.000	L1	9.6
0.816000	29.80	56.00	26.20	1000.0	9.000	L1	9.6
1.045500	27.93	56.00	28.07	1000.0	9.000	L1	9.6
1.666500	25.40	56.00	30.60	1000.0	9.000	L1	9.6

Table 11: Conducted Emission, L, Final Result_CAV

Frequency [MHz]	CAverage [dBµV]	Limit [dBµV]	Margin [dB]	Meas. Time [ms]	Bandwidth [kHz]	Line	Corr. (dB)
0.154500	38.65	55.75	17.11	1000.0	9.000	L1	9.5
0.375000	32.45	48.39	15.94	1000.0	9.000	L1	9.6
0.627000	19.94	46.00	26.06	1000.0	9.000	L1	9.6
0.834000	18.63	46.00	27.37	1000.0	9.000	L1	9.6
1.279500	16.67	46.00	29.33	1000.0	9.000	L1	9.6
2.278500	14.51	46.00	31.49	1000.0	9.000	L1	9.7

Figure 19: Conducted Emission, N

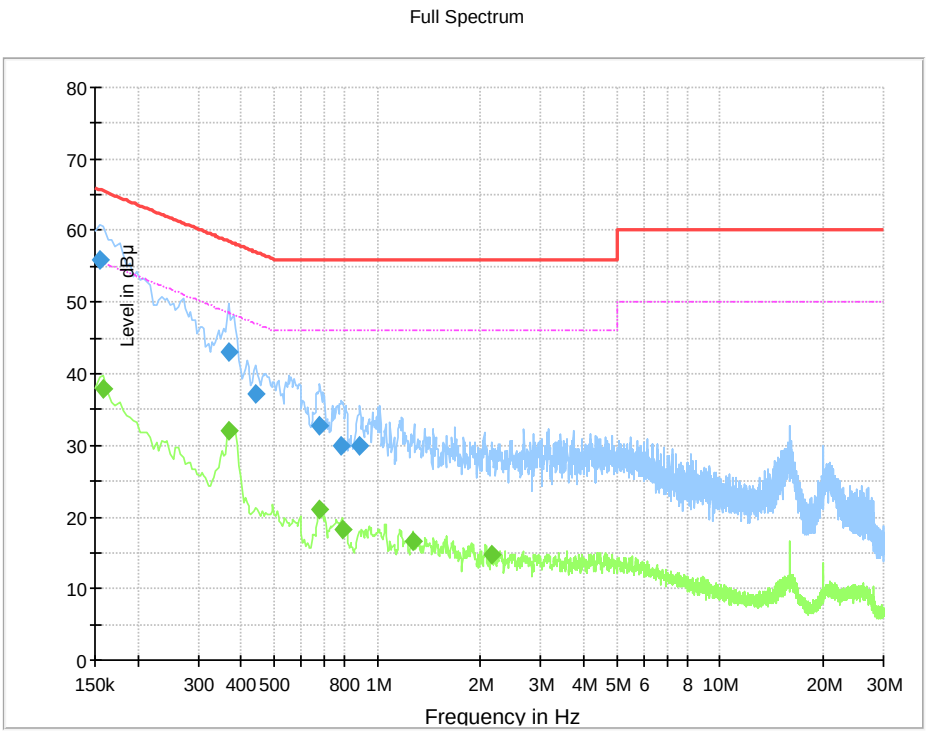


Table 12: Conducted Emission, N, Final Result_QPK

Frequency [MHz]	QuasiPeak [dBµV]	Limit [dBµV]	Margin [dB]	Meas. Time [ms]	Bandwidth [kHz]	Line	Corr. (dB)
0.154500	55.97	65.75	9.78	1000.0	9.000	N	9.5
0.370500	43.14	58.49	15.35	1000.0	9.000	N	9.6
0.442500	37.21	57.02	19.80	1000.0	9.000	N	9.6
0.681000	32.66	56.00	23.34	1000.0	9.000	N	9.6
0.784500	30.05	56.00	25.95	1000.0	9.000	N	9.6
0.888000	29.98	56.00	26.02	1000.0	9.000	N	9.6

Table 13: Conducted Emission, N, Final Result_CAV

Frequency [MHz]	CAverage [dBµV]	Limit [dBµV]	Margin [dB]	Meas. Time [ms]	Bandwidth [kHz]	Line	Corr. (dB)
0.159000	37.81	55.52	17.71	1000.0	9.000	N	9.5
0.370500	32.02	48.49	16.47	1000.0	9.000	N	9.6
0.681000	20.99	46.00	25.01	1000.0	9.000	N	9.6
0.789000	18.20	46.00	27.80	1000.0	9.000	N	9.6
1.266000	16.71	46.00	29.29	1000.0	9.000	N	9.6
2.148000	14.72	46.00	31.28	1000.0	9.000	N	9.6

5.3 Emission in the Frequency Range above 30MHz

5.3.1 Radiated Band-Edge

RESULT: **Pass**

Date of testing	:	23.07.2020
Ambient temperature	:	26.1°C
Relative humidity	:	32.7%
Atmospheric pressure	:	101kPa
Test requirement	:	FCC 15.247(d) FCC 15.205(a) FCC 15.209(a) Clause 5.5 of RSS-247 Issue 2 February 2017 Clause 8.90 of RSS-Gen Issue 5, March 2019 Clause 8.10 of RSS-Gen Issue 5, March 2019
Test procedure	:	KDB 558074 D01v05r02 ANSI C63.10: 2013
Test voltage	:	DC 9V
Test modes applied	:	TM1, TM3

Note:
All the test modes were applied, ony the worst case were shown in this report.

Figure 20: Radiated Band-Edge, TM1, H

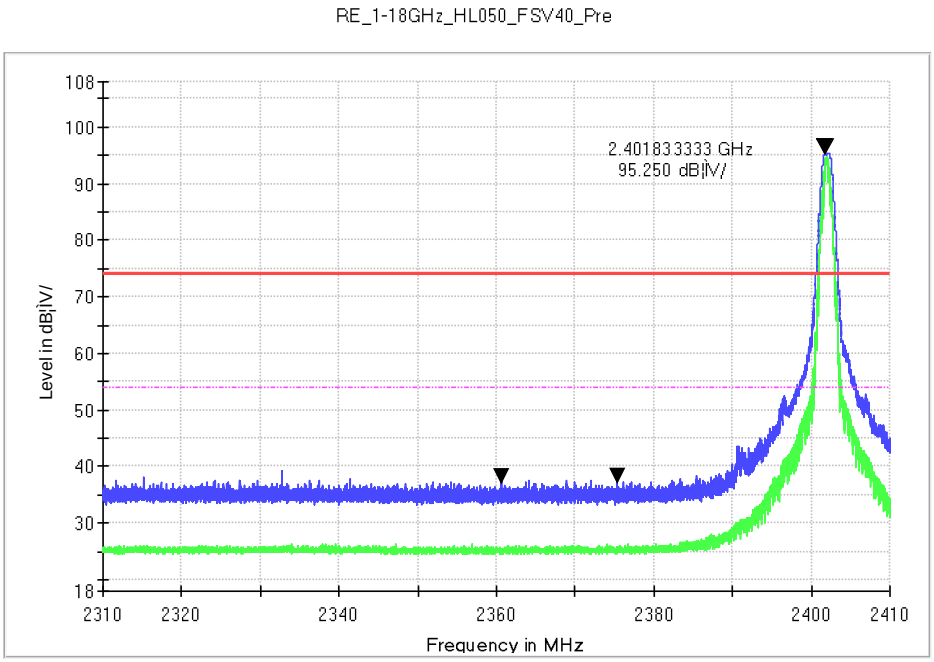


Table 14: Radiated Band-Edge, TM1, H

Frequency [MHz]	Measure Level [dBuV/m]	Reading Level [dBµV]	Over Limit [dB]	Limit [dBuV/m]	Factor	Type
2361.960	36.764	14.577	-37.236	74.000	22.187	PK
2375.240	36.212	14.667	-37.788	74.000	21.545	PK
2401.833	95.250	72.670	21.250	74.000	22.580	PK

Note: Measure Level (dBµV/m) = Reading Level (dBµV) + Factor (dB)
Factor (dB) = Cable Loss (dB) + Antenna Factor (dB/m)

Figure 21: Radiated Band-Edge, TM1, V

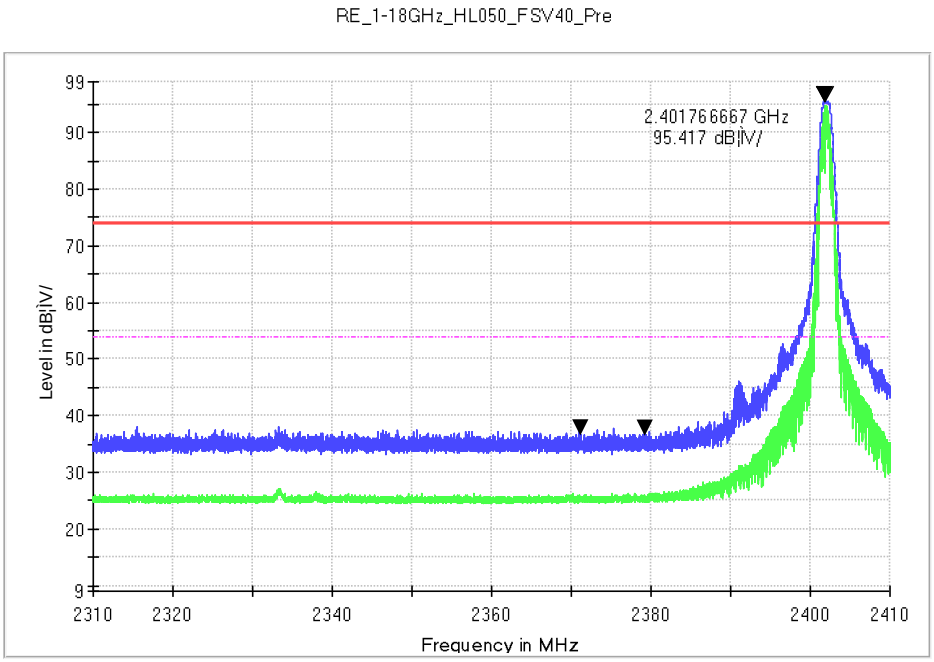


Table 15: Radiated Band-Edge, TM1, V

Frequency [MHz]	Measure Level [dBuV/m]	Reading Level [dBµV]	Over Limit [dB]	Limit [dBuV/m]	Factor	Type
2372.221	37.782	14.901	-36.218	74.000	22.881	PK
2378.246	38.542	17.304	-35.458	74.000	21.238	PK
2401.767	95.417	74.248	21.417	74.000	21.169	PK

Note: Measure Level (dBµV/m) = Reading Level (dBµV) + Factor (dB)
Factor (dB) = Cable Loss (dB) + Antenna Factor (dB/m)

Figure 22: Radiated Band-Edge, TM3, H

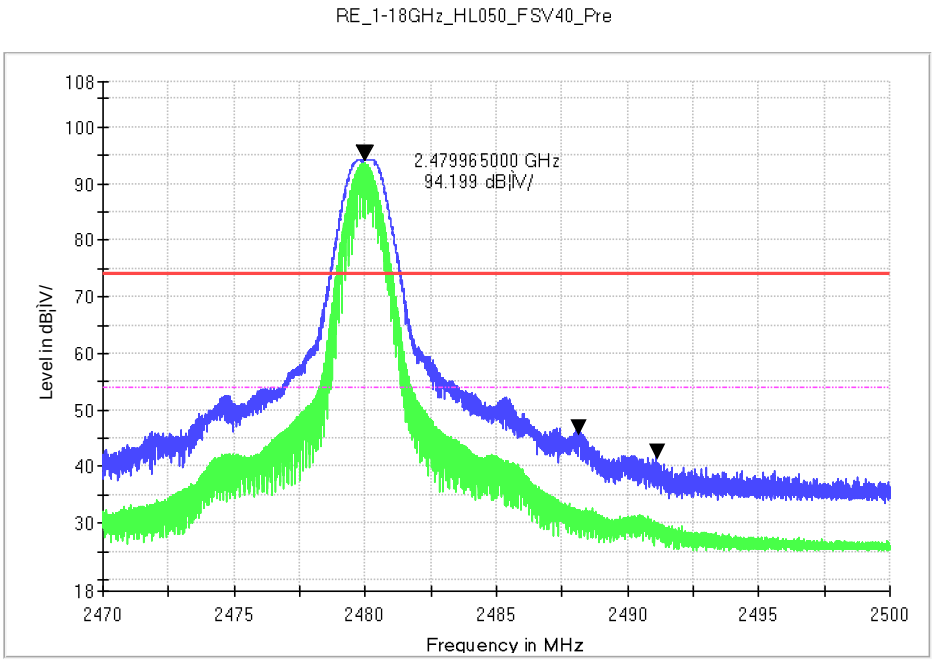


Table 16: Radiated Band-Edge, TM3, H

Frequency [MHz]	Measure Level [dBuV/m]	Reading Level [dBµV]	Over Limit [dB]	Limit [dBuV/m]	Factor	Type
2488.125	45.572	24.194	-28.428	74.000	21.378	PK
2492.336	40.368	19.256	-33.632	74.000	21.112	PK
2479.965	94.199	71.379	20.199	74.000	22.820	PK

Note: Measure Level (dBµV/m) = Reading Level (dBµV) + Factor (dB)
Factor (dB) = Cable Loss (dB) + Antenna Factor (dB/m)

Figure 23: Radiated Band-Edge, TM3, V

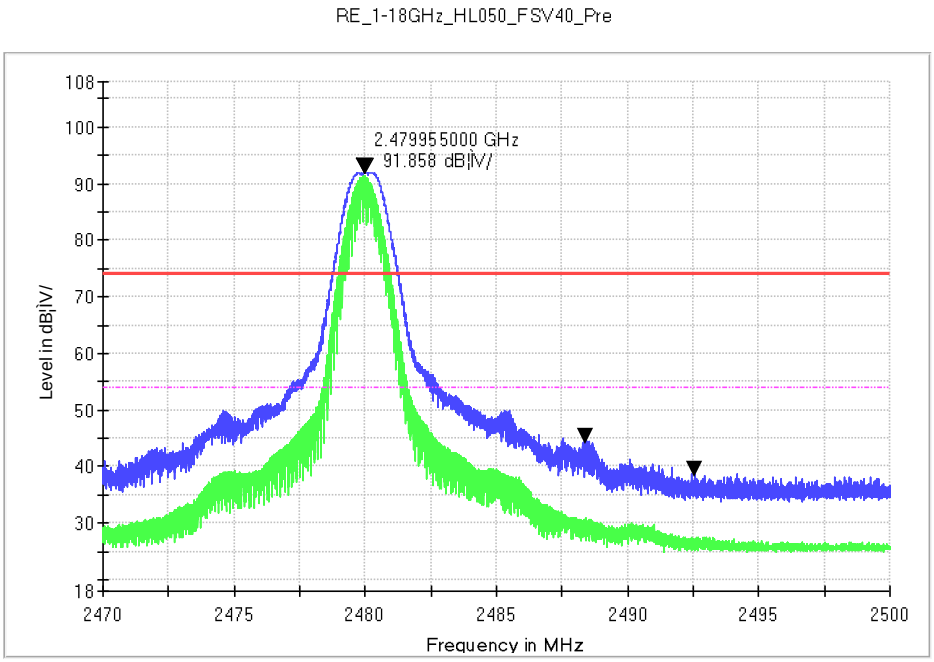


Table 17: Radiated Band-Edge, TM3, V

Frequency [MHz]	Measure Level [dBuV/m]	Reading Level [dBµV]	Over Limit [dB]	Limit [dBuV/m]	Factor	Type
2487.125	44.658	22.849	-29.342	74.000	21.809	PK
2492.000	38.165	16.821	-35.835	74.000	21.344	PK
2479.955	91.858	70.430	17.858	74.000	21.428	PK

Note: Measure Level (dBµV/m) = Reading Level (dBµV) + Factor (dB)
Factor (dB) = Cable Loss (dB) + Antenna Factor (dB/m)

5.3.2 Radiated Spurious Emission

RESULT: **Pass**

Date of testing	:	23.07.2020
Ambient temperature	:	23.2°C
Relative humidity	:	38.5%
Atmospheric pressure	:	101kPa
Test requirement	:	FCC Part 15.209(a) FCC Part 15.247(d) RSS-247 Issue 2, February 2017, Clause 5.5 RSS-Gen Issue 5, Amendment 1, March 2019, Clause 8.9
Test procedure	:	KDB 558074 D01v05r02 ANSI C63.10: 2013
Test voltage	:	DC 9V
Test modes applied	:	TM1 to TM3
Kind of test site		3m Anechoic Chamber

Figure 24: Radiated Spurious Emission, TM1, 30MHz to 1GHz, H

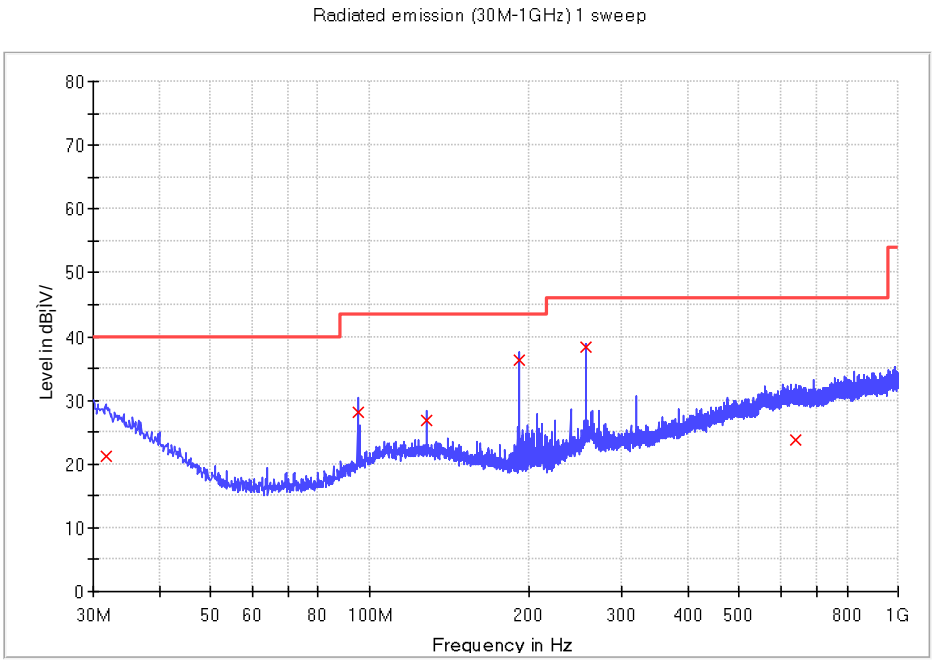


Table 18: Radiated Spurious Emission, TM1, 30MHz to 1GHz, H

Frequency (MHz)	QuasiPeak (dBµV/m)	Meas. Time (ms)	Bandwidth (kHz)	Height (cm)	Pol	Azimuth (deg)	Corr. (dB)	Margin - QPK (dB)	Limit - QPK (dBµV/m)
31.697500	21.3	1000.0	120.000	100.0	H	180.0	24.6	18.7	40.0
94.990000	28.2	1000.0	120.000	100.0	H	180.0	16.6	15.3	43.5
127.970000	26.9	1000.0	120.000	100.0	H	180.0	18.7	16.6	43.5
191.990000	36.3	1000.0	120.000	100.0	H	180.0	15.9	7.2	43.5
256.010000	38.2	1000.0	120.000	100.0	H	180.0	20.1	7.8	46.0
640.493750	23.9	1000.0	120.000	100.0	H	180.0	26.4	22.1	46.0

Figure 25: Radiated Spurious Emission, TM1, 30MHz to 1GHz, V

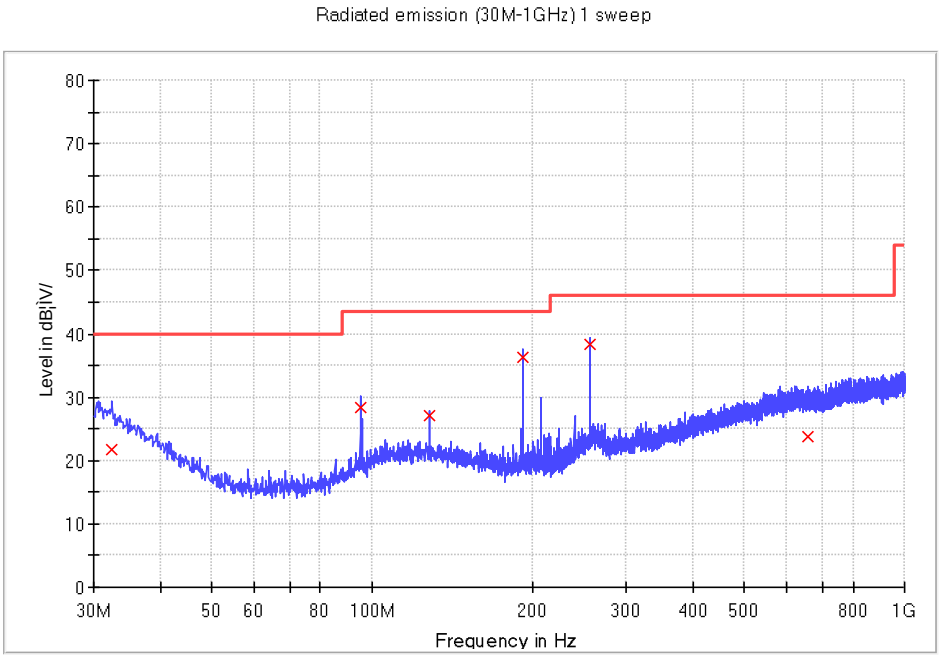


Table 19: Radiated Spurious Emission, TM1, 30MHz to 1GHz, V

Frequency (MHz)	QuasiPeak (dBµV/m)	Meas. Time (ms)	Bandwidth (kHz)	Height (cm)	Pol	Azimuth (deg)	Corr. (dB)	Margin - QPK (dB)	Limit - QPK (dBµV/m)
32.546250	21.8	1000.0	120.000	100.0	H	180.0	24.1	18.2	40.0
94.990000	28.3	1000.0	120.000	100.0	H	180.0	16.6	15.2	43.5
127.970000	27.2	1000.0	120.000	100.0	H	180.0	18.7	16.3	43.5
191.990000	36.3	1000.0	120.000	100.0	H	180.0	15.9	7.2	43.5
256.010000	38.2	1000.0	120.000	100.0	H	180.0	20.1	7.8	46.0
660.257500	23.8	1000.0	120.000	100.0	H	180.0	26.3	22.2	46.0

Figure 26: Radiated Spurious Emission, TM1, 1GHz to 7GHz, H

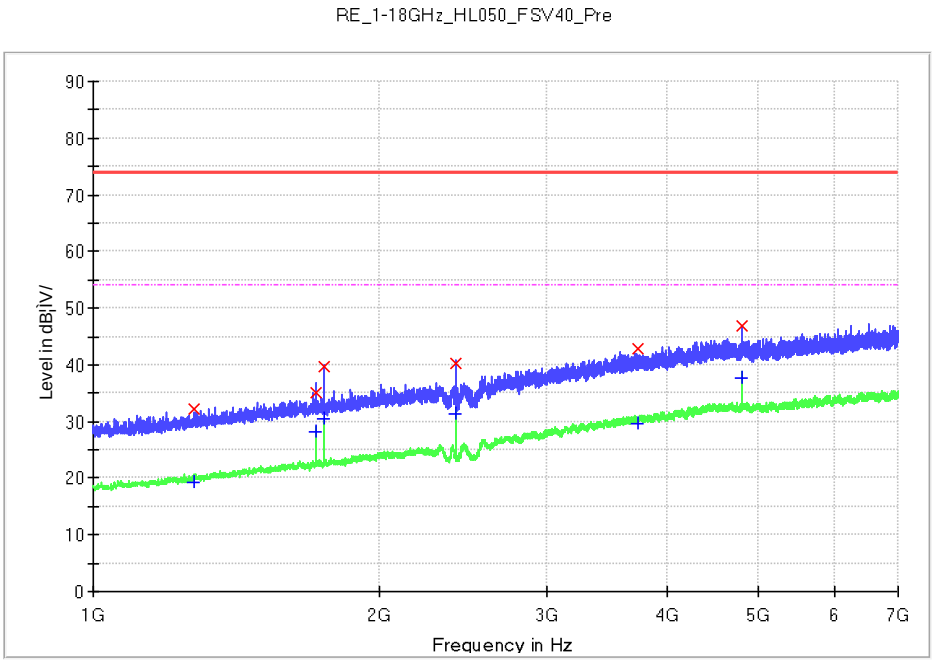


Table 20: Radiated Spurious Emission, TM1, 1GHz to 7GHz, H

Frequency (MHz)	QuasiPeak (dBµV/m)	Meas. Time (ms)	Bandwidth (kHz)	Height (cm)	Pol	Azimuth (deg)	Corr. (dB)	Margin - QPK (dB)	Limit - QPK (dBµV/m)
1275.500000	32.1	1000.0	1000.000	150.0	H	-13.0	-20.6	41.9	74.0
1713.000000	35.2	1000.0	1000.000	150.0	H	-13.0	-17.7	38.8	74.0
1746.000000	39.7	1000.0	1000.000	150.0	H	-13.0	-17.6	34.3	74.0
2402.000000	40.3	1000.0	1000.000	150.0	H	-13.0	-14.5	33.7	74.0
3739.000000	42.7	1000.0	1000.000	150.0	H	-13.0	-8.8	31.3	74.0
4804.000000	46.8	1000.0	1000.000	150.0	H	-13.0	-6.5	27.2	74.0

Figure 27: Radiated Spurious Emission, TM1, 1GHz to 7GHz, V

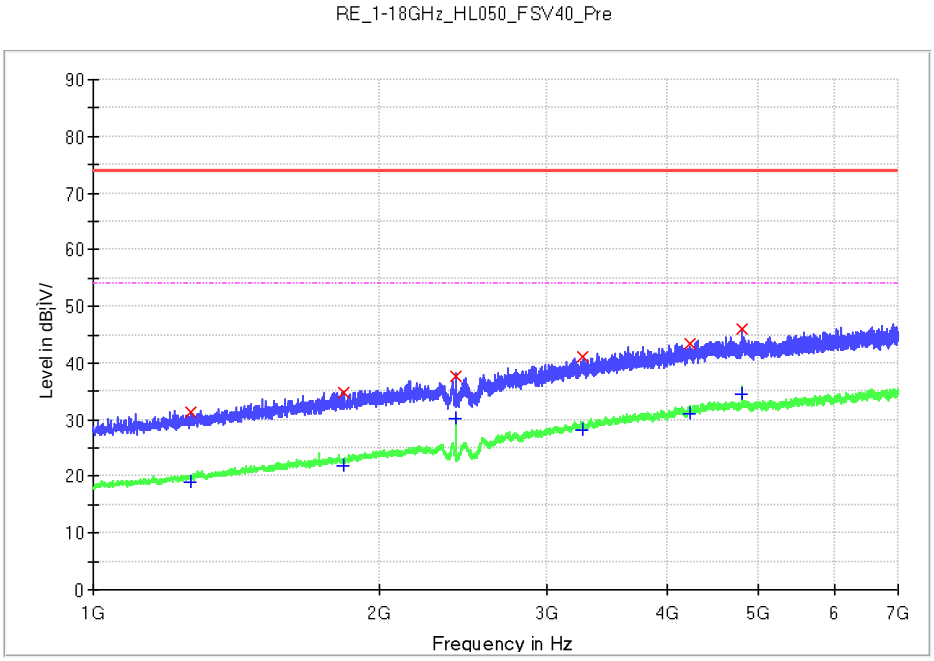


Table 21: Radiated Spurious Emission, TM1, 1GHz to 7GHz, V

Frequency (MHz)	QuasiPeak (dBµV/m)	Meas. Time (ms)	Bandwidth (kHz)	Height (cm)	Pol	Azimuth (deg)	Corr. (dB)	Margin - QPK (dB)	Limit - QPK (dBµV/m)
1267.500000	31.4	1000.0	1000.000	150.0	V	180.0	-20.7	42.6	74.0
1835.500000	34.8	1000.0	1000.000	150.0	V	180.0	-17.2	39.2	74.0
2402.000000	37.7	1000.0	1000.000	150.0	V	180.0	-14.5	36.3	74.0
3269.000000	41.1	1000.0	1000.000	150.0	V	180.0	-10.5	32.9	74.0
4238.000000	43.4	1000.0	1000.000	150.0	V	180.0	-7.4	30.6	74.0
4803.500000	46.1	1000.0	1000.000	150.0	V	180.0	-6.5	27.9	74.0

Figure 28: Radiated Spurious Emission, TM1, 7GHz to 18GHz, H

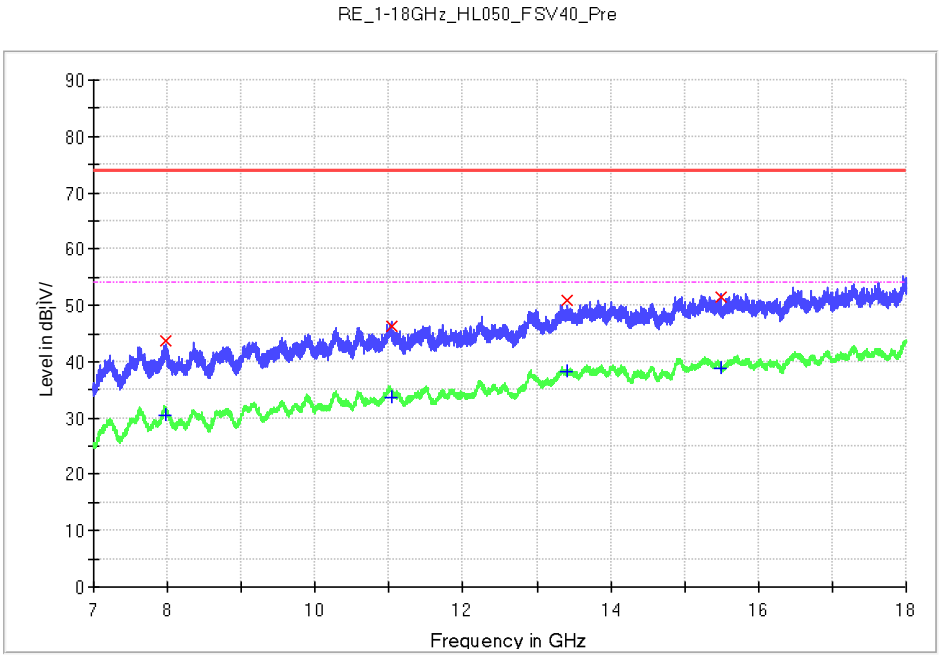


Table 22: Radiated Spurious Emission, TM1, 7GHz to 18GHz, H

Frequency (MHz)	QuasiPeak (dBµV/m)	Meas. Time (ms)	Bandwidth (kHz)	Height (cm)	Pol	Azimuth (deg)	Corr. (dB)	Margin - QPK (dB)	Limit - QPK (dBµV/m)
7986.333333	43.6	1000.0	1000.000	150.0	H	-90.0	-3.1	30.4	74.0
11026.000000	46.3	1000.0	1000.000	150.0	H	-90.0	0.9	27.7	74.0
13420.333333	50.9	1000.0	1000.000	150.0	H	-90.0	2.6	23.1	74.0
15492.916667	51.4	1000.0	1000.000	150.0	H	-90.0	6.1	22.6	74.0

Figure 29: Radiated Spurious Emission, TM1, 7GHz to 18GHz, V

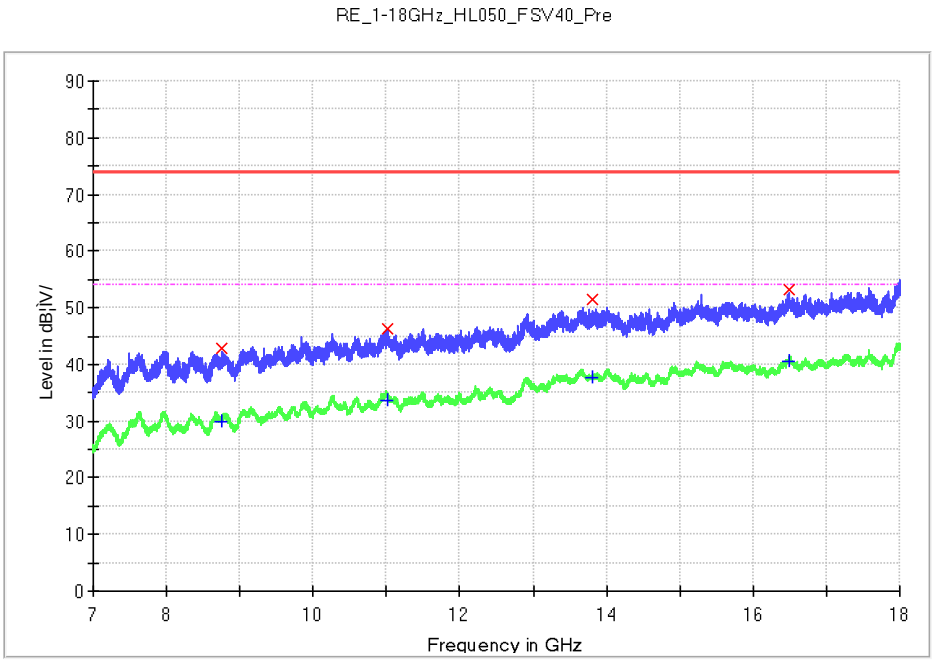


Table 23: Radiated Spurious Emission, TM1, 7GHz to 18GHz, V

Frequency (MHz)	QuasiPeak (dBµV/m)	Meas. Time (ms)	Bandwidth (kHz)	Height (cm)	Pol	Azimuth (deg)	Corr. (dB)	Margin - QPK (dB)	Limit - QPK (dBµV/m)
8748.083333	42.9	1000.0	1000.000	150.0	V	90.0	-1.6	31.1	74.0
11019.583333	46.2	1000.0	1000.000	150.0	V	90.0	1.0	27.8	74.0
13815.416667	51.3	1000.0	1000.000	150.0	V	90.0	3.7	22.7	74.0
16493.916667	53.3	1000.0	1000.000	150.0	V	90.0	7.4	20.7	74.0

Figure 30: Radiated Spurious Emission, TM1, 18GHz to 25GHz, H

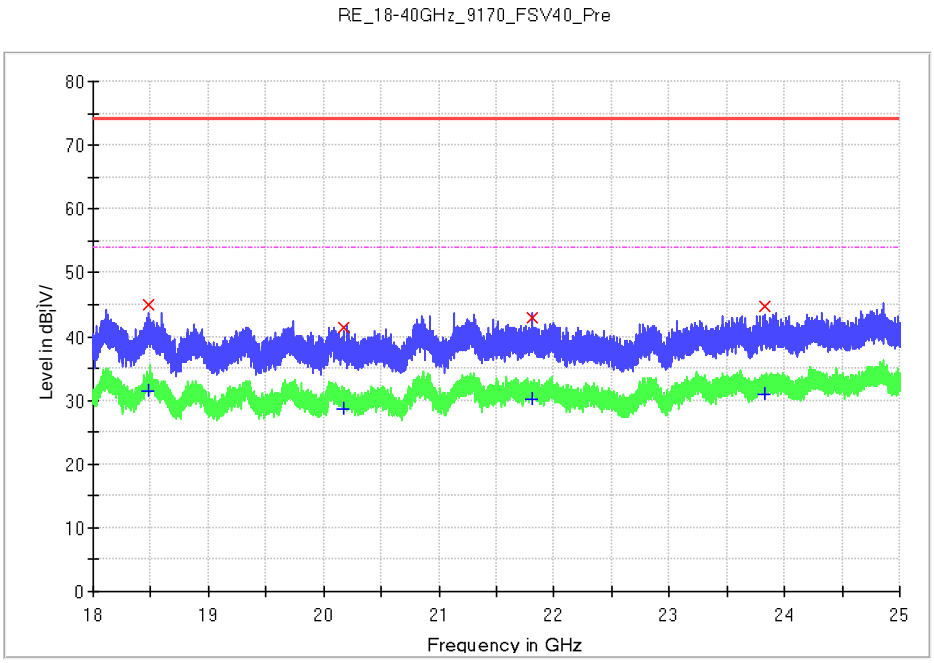


Table 24: Radiated Spurious Emission, TM1, 18GHz to 25GHz, H

Frequency (MHz)	QuasiPeak (dBµV/m)	Meas. Time (ms)	Bandwidth (kHz)	Height (cm)	Pol	Azimuth (deg)	Corr. (dB)	Margin - QPK (dB)	Limit - QPK (dBµV/m)
18483.875000	45.0	1000.0	1000.000	150.0	H	-13.0	-9.2	29.0	74.0
20167.812500	41.5	1000.0	1000.000	150.0	H	-13.0	-7.8	32.5	74.0
21806.031250	42.8	1000.0	1000.000	150.0	H	-13.0	-5.9	31.2	74.0
23831.000000	44.8	1000.0	1000.000	150.0	H	-13.0	-4.2	29.2	74.0

Figure 31: Radiated Spurious Emission, TM1, 18GHz to 25GHz, V

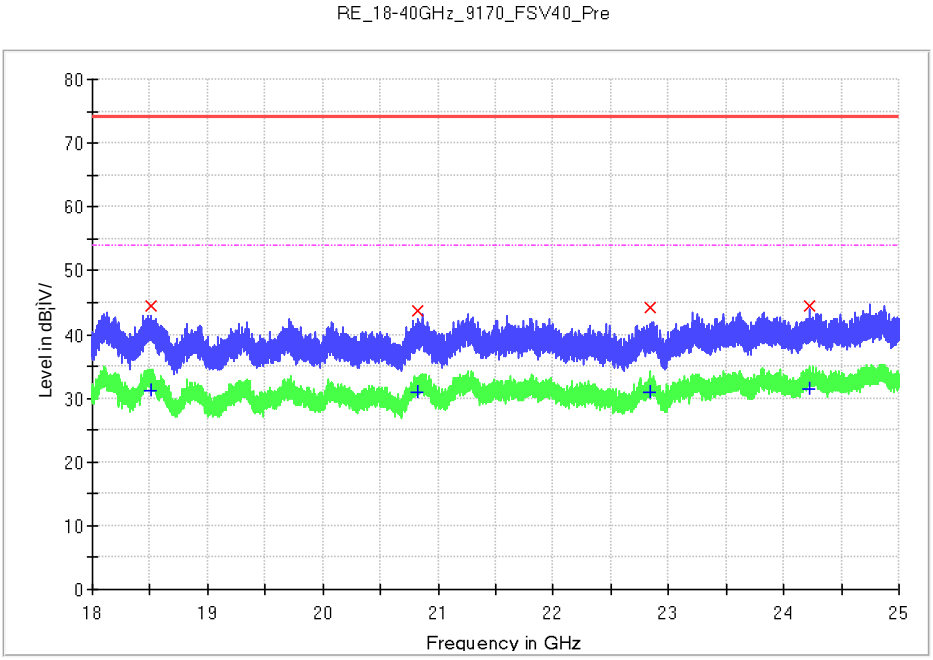


Table 25: Radiated Spurious Emission, TM1, 18GHz to 25GHz, H

Frequency (MHz)	QuasiPeak (dBµV/m)	Meas. Time (ms)	Bandwidth (kHz)	Height (cm)	Pol	Azimuth (deg)	Corr. (dB)	Margin - QPK (dB)	Limit - QPK (dBµV/m)
18509.906250	44.5	1000.0	1000.000	150.0	V	-13.0	-9.3	29.5	74.0
20816.187500	43.7	1000.0	1000.000	150.0	V	-13.0	-7.3	30.3	74.0
22845.750000	44.3	1000.0	1000.000	150.0	V	-13.0	-5.9	29.7	74.0
24226.062500	44.4	1000.0	1000.000	150.0	V	-13.0	-4.1	29.6	74.0

Figure 32: Radiated Spurious Emission, TM2, 30MHz to 1GHz, H

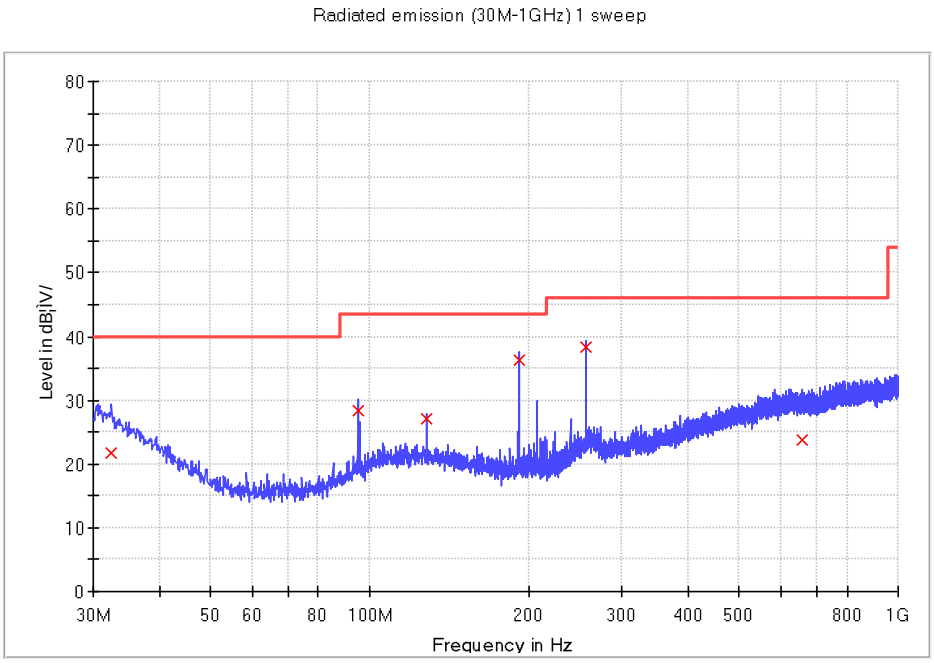


Table 26: Radiated Spurious Emission, TM2, 30MHz to 1GHz, H

Frequency (MHz)	QuasiPeak (dBµV/m)	Meas. Time (ms)	Bandwidth (kHz)	Height (cm)	Pol	Azimuth (deg)	Corr. (dB)	Margin - QPK (dB)	Limit - QPK (dBµV/m)
32.546250	21.8	1000.0	120.000	100.0	H	180.0	24.1	18.2	40.0
94.990000	28.3	1000.0	120.000	100.0	H	180.0	16.6	15.2	43.5
127.970000	27.2	1000.0	120.000	100.0	H	180.0	18.7	16.3	43.5
191.990000	36.3	1000.0	120.000	100.0	H	180.0	15.9	7.2	43.5
256.010000	38.2	1000.0	120.000	100.0	H	180.0	20.1	7.8	46.0
660.257500	23.8	1000.0	120.000	100.0	H	180.0	26.3	22.2	46.0

Figure 33: Radiated Spurious Emission, TM2, 30MHz to 1GHz, V

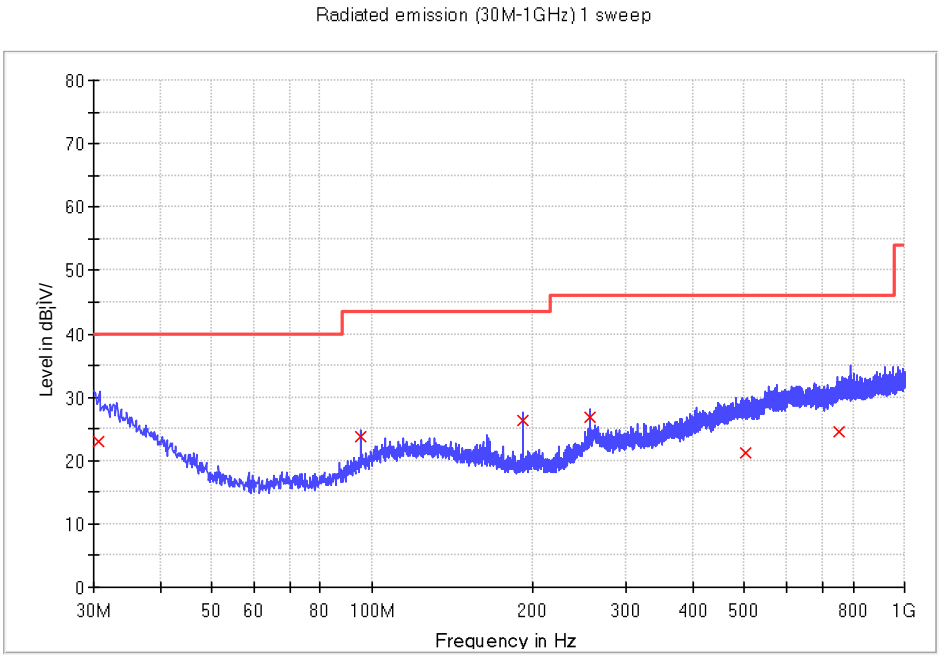


Table 27: Radiated Spurious Emission, TM2, 30MHz to 1GHz, V

Frequency (MHz)	QuasiPeak (dBµV/m)	Meas. Time (ms)	Bandwidth (kHz)	Height (cm)	Pol	Azimuth (deg)	Corr. (dB)	Margin - QPK (dB)	Limit - QPK (dBµV/m)
30.727500	22.9	1000.0	120.000	100.0	V	180.0	25.0	17.1	40.0
94.990000	23.7	1000.0	120.000	100.0	V	180.0	16.6	19.8	43.5
191.990000	26.3	1000.0	120.000	100.0	V	180.0	15.9	17.2	43.5
256.010000	26.8	1000.0	120.000	100.0	V	180.0	20.1	19.2	46.0
503.602500	21.1	1000.0	120.000	100.0	V	180.0	24.9	24.9	46.0
753.741250	24.6	1000.0	120.000	100.0	V	180.0	27.2	21.4	46.0

Figure 34: Radiated Spurious Emission, TM2, 1GHz to 7GHz, H

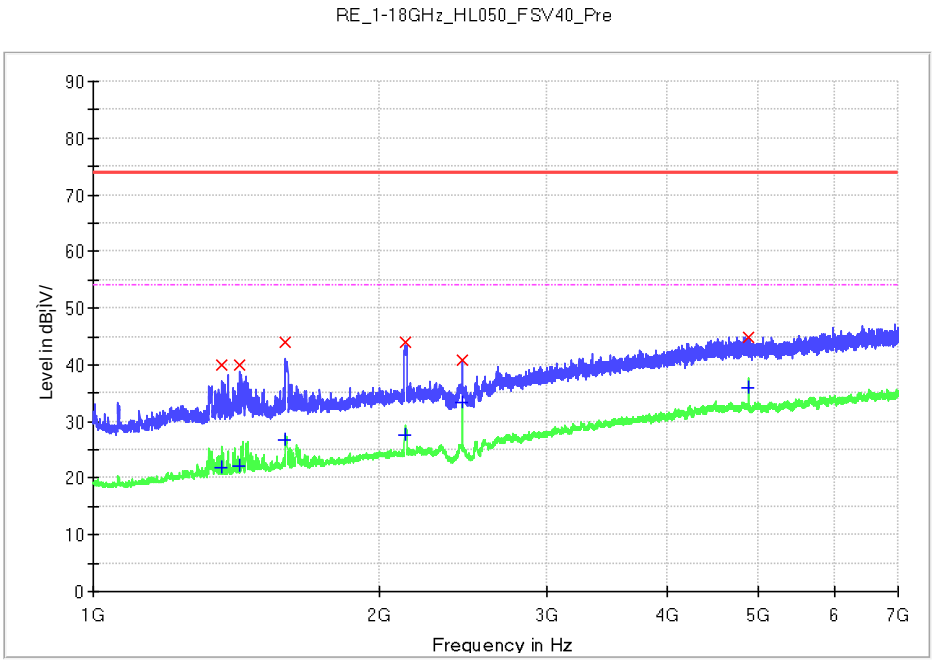


Table 28: Radiated Spurious Emission, TM2, 1GHz to 7GHz, H

Frequency (MHz)	QuasiPeak (dBµV/m)	Meas. Time (ms)	Bandwidth (kHz)	Height (cm)	Pol	Azimuth (deg)	Corr. (dB)	Margin - QPK (dB)	Limit - QPK (dBµV/m)
1365.500000	40.1	1000.0	1000.000	150.0	H	-180.0	-20.0	33.9	74.0
1422.500000	40.1	1000.0	1000.000	150.0	H	-180.0	-19.5	33.9	74.0
1593.000000	44.1	1000.0	1000.000	150.0	H	-180.0	-18.4	29.9	74.0
2126.000000	43.9	1000.0	1000.000	150.0	H	-180.0	-15.8	30.1	74.0
2439.500000	41.0	1000.0	1000.000	150.0	H	-180.0	-14.3	33.0	74.0
4879.500000	44.9	1000.0	1000.000	150.0	H	-180.0	-6.5	29.1	74.0

Figure 35: Radiated Spurious Emission, TM2, 1GHz to 7GHz, V

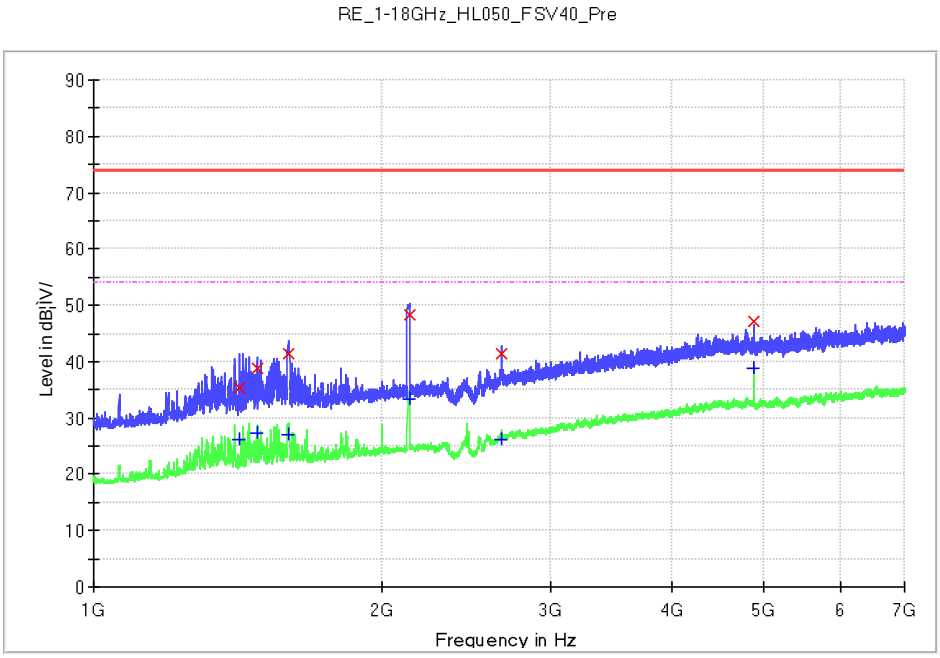


Table 29: Radiated Spurious Emission, TM2, 1GHz to 7GHz, V

Frequency (MHz)	QuasiPeak (dBµV/m)	Meas. Time (ms)	Bandwidth (kHz)	Height (cm)	Pol	Azimuth (deg)	Corr. (dB)	Margin - QPK (dB)	Limit - QPK (dBµV/m)
1419.000000	35.3	1000.0	1000.000	150.0	V	-180.0	-19.6	38.7	74.0
1479.000000	38.8	1000.0	1000.000	150.0	V	-180.0	-19.0	35.2	74.0
1596.000000	41.5	1000.0	1000.000	150.0	V	-180.0	-18.3	32.5	74.0
2132.500000	48.2	1000.0	1000.000	150.0	V	-180.0	-15.7	25.8	74.0
2666.000000	41.3	1000.0	1000.000	150.0	V	-180.0	-13.3	32.7	74.0
4880.500000	47.1	1000.0	1000.000	150.0	V	-180.0	-6.5	26.9	74.0

Figure 36: Radiated Spurious Emission, TM2, 7GHz to 18GHz, H

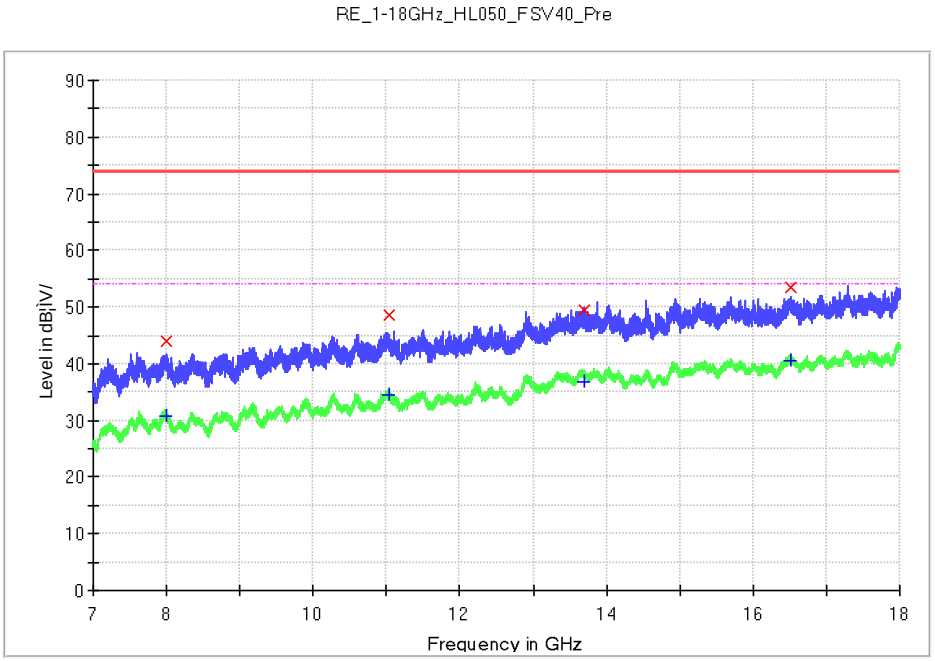


Figure 37: Radiated Spurious Emission, TM2, 7GHz to 18GHz, H

Frequency (MHz)	QuasiPeak (dBµV/m)	Meas. Time (ms)	Bandwidth (kHz)	Height (cm)	Pol	Azimuth (deg)	Corr. (dB)	Margin - QPK (dB)	Limit - QPK (dBµV/m)
7988.166667	44.1	1000.0	1000.000	150.0	H	-90.0	-3.1	29.9	74.0
11046.166667	48.5	1000.0	1000.000	150.0	H	-90.0	0.8	25.5	74.0
13708.166667	49.5	1000.0	1000.000	150.0	H	-90.0	3.3	24.5	74.0
16520.500000	53.4	1000.0	1000.000	150.0	H	-90.0	7.3	20.6	74.0

Figure 38: Radiated Spurious Emission, TM2, 7GHz to 18GHz, V

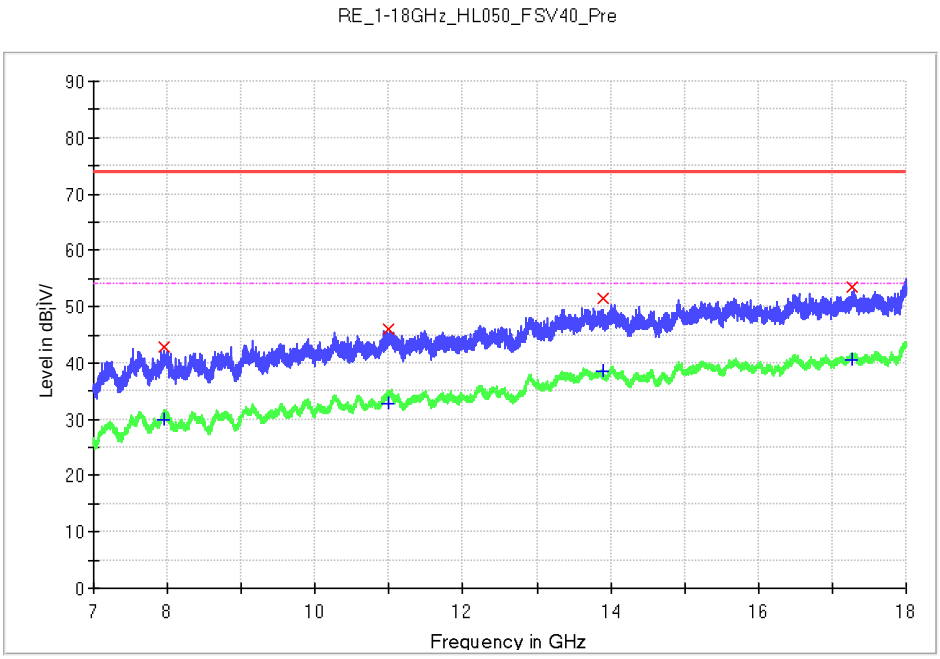


Table 30: Radiated Spurious Emission, TM2, 7GHz to 18GHz, V

Frequency (MHz)	QuasiPeak (dBµV/m)	Meas. Time (ms)	Bandwidth (kHz)	Height (cm)	Pol	Azimuth (deg)	Corr. (dB)	Margin - QPK (dB)	Limit - QPK (dBµV/m)
7943.250000	42.8	1000.0	1000.000	150.0	V	90.0	-2.9	31.2	74.0
10999.416667	46.1	1000.0	1000.000	150.0	V	90.0	1.0	27.9	74.0
13893.333333	51.5	1000.0	1000.000	150.0	V	90.0	4.5	22.5	74.0
17261.166667	53.5	1000.0	1000.000	150.0	V	90.0	8.6	20.5	74.0

Figure 39: Radiated Spurious Emission, TM2, 18GHz to 25GHz, H

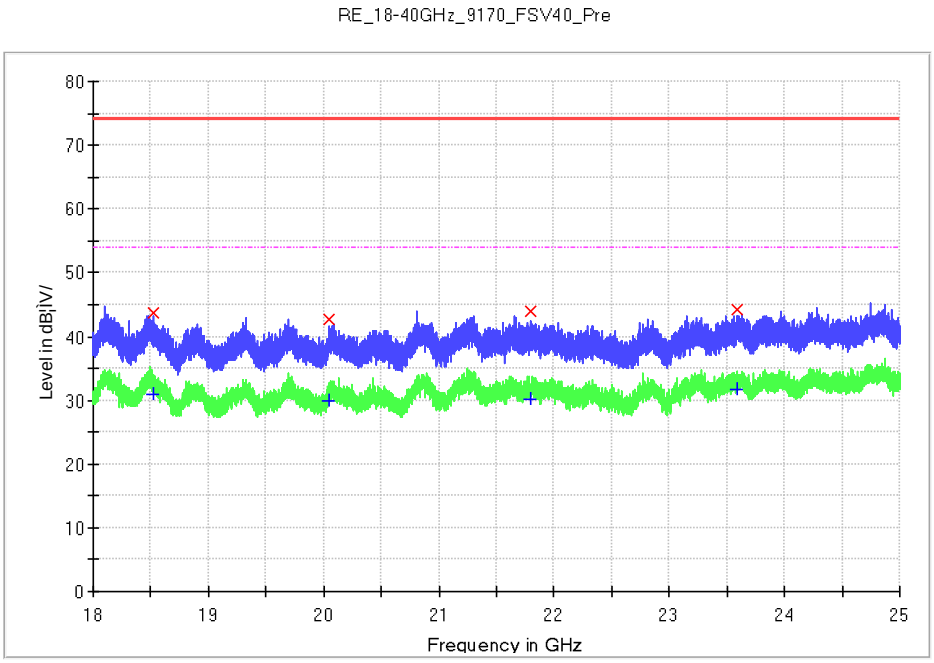


Table 31: Radiated Spurious Emission, TM2, 18GHz to 25GHz, H

Frequency (MHz)	QuasiPeak (dBµV/m)	Meas. Time (ms)	Bandwidth (kHz)	Height (cm)	Pol	Azimuth (deg)	Corr. (dB)	Margin - QPK (dB)	Limit - QPK (dBµV/m)
18527.187500	43.8	1000.0	1000.000	150.0	H	-13.0	-9.3	30.2	74.0
20053.406250	42.7	1000.0	1000.000	150.0	H	-13.0	-7.7	31.3	74.0
21801.000000	43.9	1000.0	1000.000	150.0	H	-13.0	-5.9	30.1	74.0
23593.656250	44.3	1000.0	1000.000	150.0	H	-13.0	-4.2	29.7	74.0

Figure 40: Radiated Spurious Emission, TM2, 18GHz to 25GHz, V

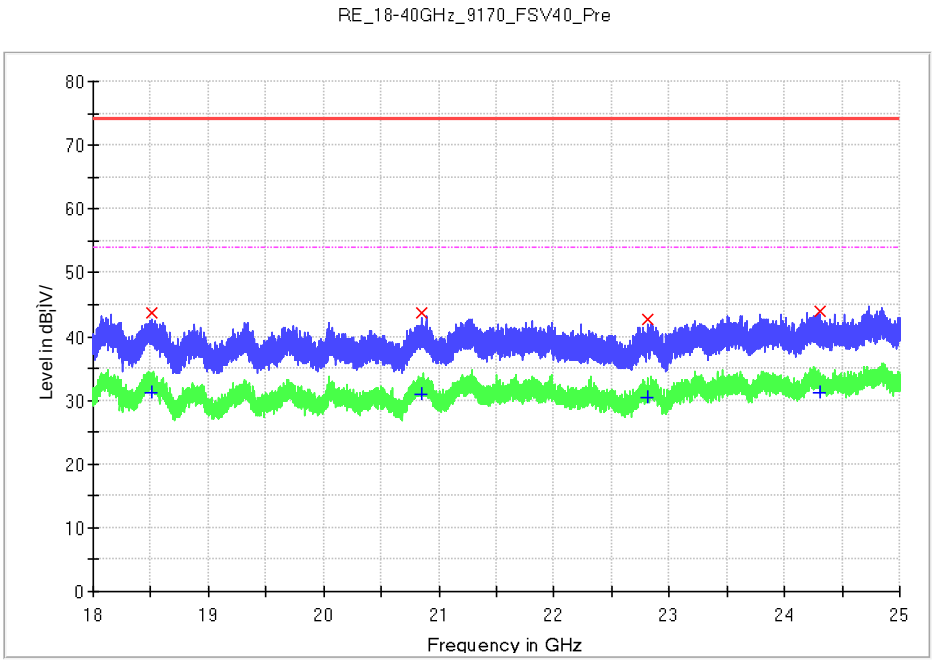


Table 32: Radiated Spurious Emission, TM2, 18GHz to 25GHz, V

Frequency (MHz)	QuasiPeak (dBµV/m)	Meas. Time (ms)	Bandwidth (kHz)	Height (cm)	Pol	Azimuth (deg)	Corr. (dB)	Margin - QPK (dB)	Limit - QPK (dBµV/m)
18527.187500	43.8	1000.0	1000.000	150.0	H	-13.0	-9.3	30.2	74.0
20053.406250	42.7	1000.0	1000.000	150.0	H	-13.0	-7.7	31.3	74.0
21801.000000	43.9	1000.0	1000.000	150.0	H	-13.0	-5.9	30.1	74.0
23593.656250	44.3	1000.0	1000.000	150.0	H	-13.0	-4.2	29.7	74.0

Figure 41: Radiated Spurious Emission, TM3, 30MHz to 1GHz, H

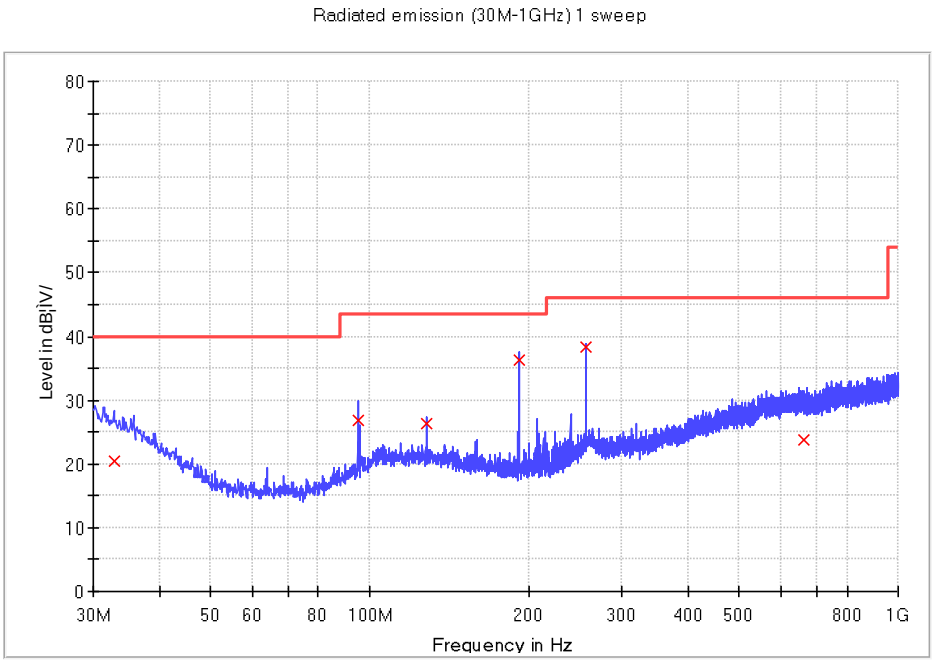


Table 33: Radiated Spurious Emission, TM3, 30MHz to 1GHz, H

Frequency (MHz)	QuasiPeak (dBµV/m)	Meas. Time (ms)	Bandwidth (kHz)	Height (cm)	Pol	Azimuth (deg)	Corr. (dB)	Margin - QPK (dB)	Limit - QPK (dBµV/m)
32.788750	20.6	1000.0	120.000	100.0	H	180.0	23.9	19.4	40.0
94.990000	26.9	1000.0	120.000	100.0	H	180.0	16.6	16.6	43.5
127.970000	26.2	1000.0	120.000	100.0	H	180.0	18.7	17.3	43.5
191.990000	36.3	1000.0	120.000	100.0	H	180.0	15.9	7.2	43.5
256.010000	38.2	1000.0	120.000	100.0	H	180.0	20.1	7.8	46.0
661.591250	23.7	1000.0	120.000	100.0	H	180.0	26.3	22.3	46.0

Figure 42: Radiated Spurious Emission, TM3, 30MHz to 1GHz, V

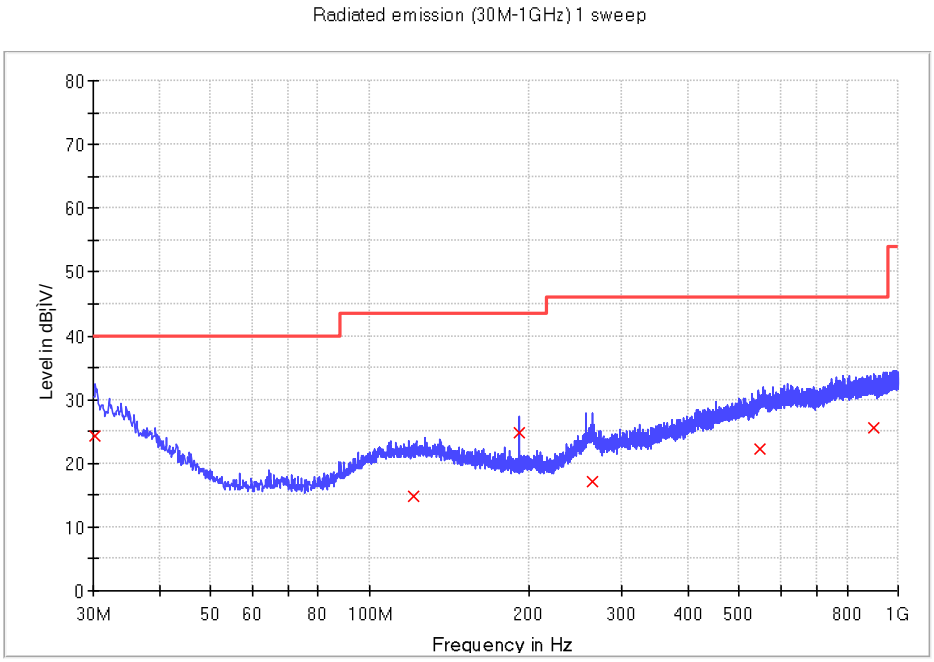


Table 34: Radiated Spurious Emission, TM3, 30MHz to 1GHz, V

Frequency (MHz)	QuasiPeak (dBµV/m)	Meas. Time (ms)	Bandwidth (kHz)	Height (cm)	Pol	Azimuth (deg)	Corr. (dB)	Margin - QPK (dB)	Limit - QPK (dBµV/m)
30.242500	24.2	1000.0	120.000	100.0	V	180.0	25.3	15.8	40.0
121.301250	14.8	1000.0	120.000	100.0	V	180.0	18.6	28.7	43.5
191.990000	24.8	1000.0	120.000	100.0	V	180.0	15.9	18.7	43.5
263.648750	17.1	1000.0	120.000	100.0	V	180.0	20.7	28.9	46.0
546.282500	22.3	1000.0	120.000	100.0	V	180.0	26.0	23.7	46.0
900.090000	25.5	1000.0	120.000	100.0	V	180.0	28.2	20.5	46.0

Figure 43: Radiated Spurious Emission, TM3, 1GHz to 7GHz, H

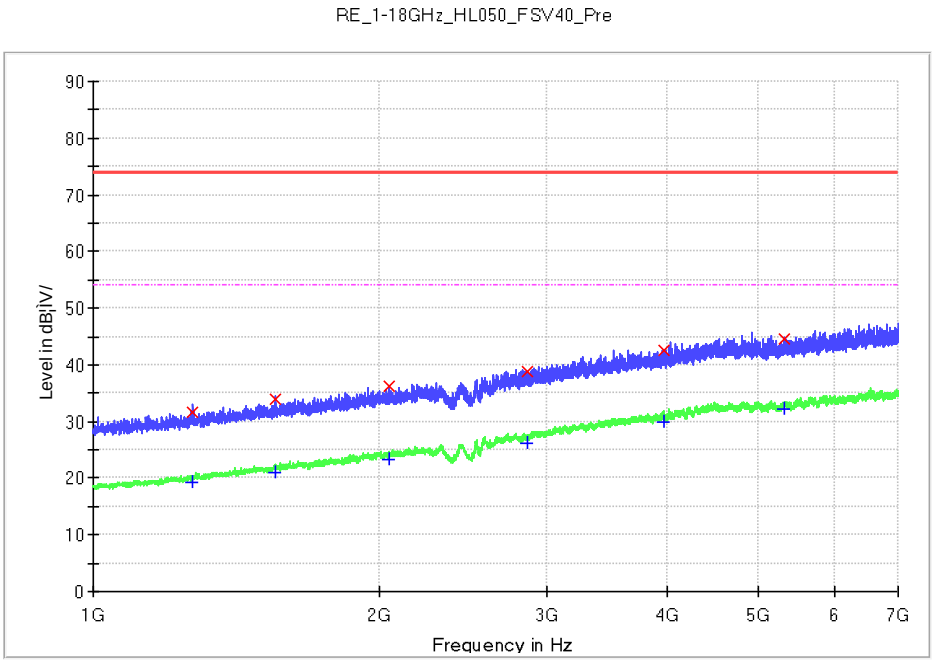


Table 35: Radiated Spurious Emission, TM3, 1GHz to 7GHz, H

Frequency (MHz)	QuasiPeak (dBµV/m)	Meas. Time (ms)	Bandwidth (kHz)	Height (cm)	Pol	Azimuth (deg)	Corr. (dB)	Margin - QPK (dB)	Limit - QPK (dBµV/m)
1273.000000	31.8	1000.0	1000.000	150.0	H	-180.0	-20.7	42.2	74.0
1553.000000	33.9	1000.0	1000.000	150.0	H	-180.0	-18.6	40.1	74.0
2048.500000	36.1	1000.0	1000.000	150.0	H	-180.0	-16.1	37.9	74.0
2862.000000	38.7	1000.0	1000.000	150.0	H	-180.0	-12.4	35.3	74.0
3971.500000	42.5	1000.0	1000.000	150.0	H	-180.0	-8.5	31.5	74.0
5325.500000	44.7	1000.0	1000.000	150.0	H	-180.0	-6.1	29.3	74.0

Figure 44: Radiated Spurious Emission, TM3, 1GHz to 7GHz, V

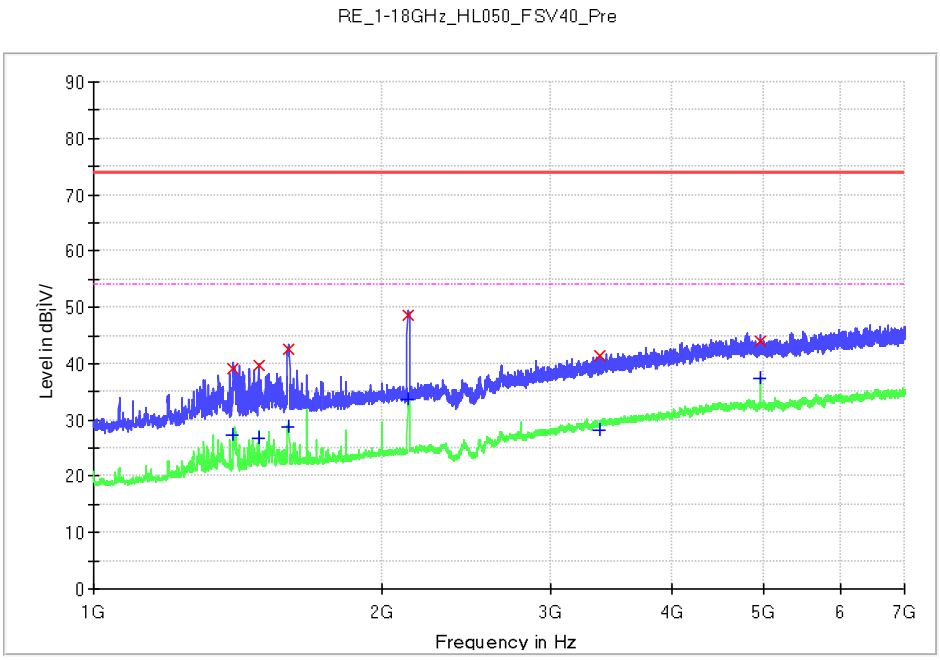


Table 36: Radiated Spurious Emission, TM3, 1GHz to 7GHz, V

Frequency (MHz)	QuasiPeak (dBµV/m)	Meas. Time (ms)	Bandwidth (kHz)	Height (cm)	Pol	Azimuth (deg)	Corr. (dB)	Margin - QPK (dB)	Limit - QPK (dBµV/m)
1399.000000	39.2	1000.0	1000.000	150.0	V	180.0	-19.7	34.8	74.0
1489.000000	39.8	1000.0	1000.000	150.0	V	180.0	-19.0	34.2	74.0
1597.500000	42.5	1000.0	1000.000	150.0	V	180.0	-18.3	31.5	74.0
2125.000000	48.7	1000.0	1000.000	150.0	V	180.0	-15.8	25.3	74.0
3372.000000	41.3	1000.0	1000.000	150.0	V	180.0	-10.1	32.7	74.0
4960.000000	44.0	1000.0	1000.000	150.0	V	180.0	-6.6	30.0	74.0

Figure 45: Radiated Spurious Emission, TM3, 7GHz to 18GHz, H

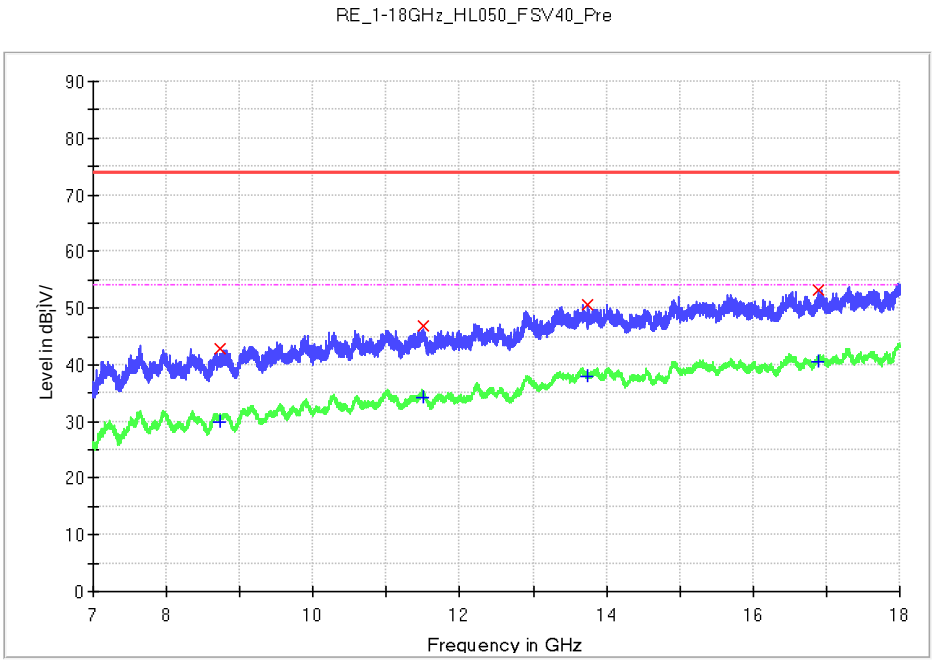


Table 37: Radiated Spurious Emission, TM3, 7GHz to 18GHz, H

Frequency (MHz)	QuasiPeak (dBµV/m)	Meas. Time (ms)	Bandwidth (kHz)	Height (cm)	Pol	Azimuth (deg)	Corr. (dB)	Margin - QPK (dB)	Limit - QPK (dBµV/m)
8730.666667	42.8	1000.0	1000.000	150.0	H	-90.0	-1.7	31.2	74.0
11492.583333	46.8	1000.0	1000.000	150.0	H	-90.0	1.5	27.2	74.0
13744.833333	50.7	1000.0	1000.000	150.0	H	-90.0	3.4	23.3	74.0
16900.000000	53.2	1000.0	1000.000	150.0	H	-90.0	7.7	20.8	74.0

Figure 46: Radiated Spurious Emission, TM3, 7GHz to 18GHz, V

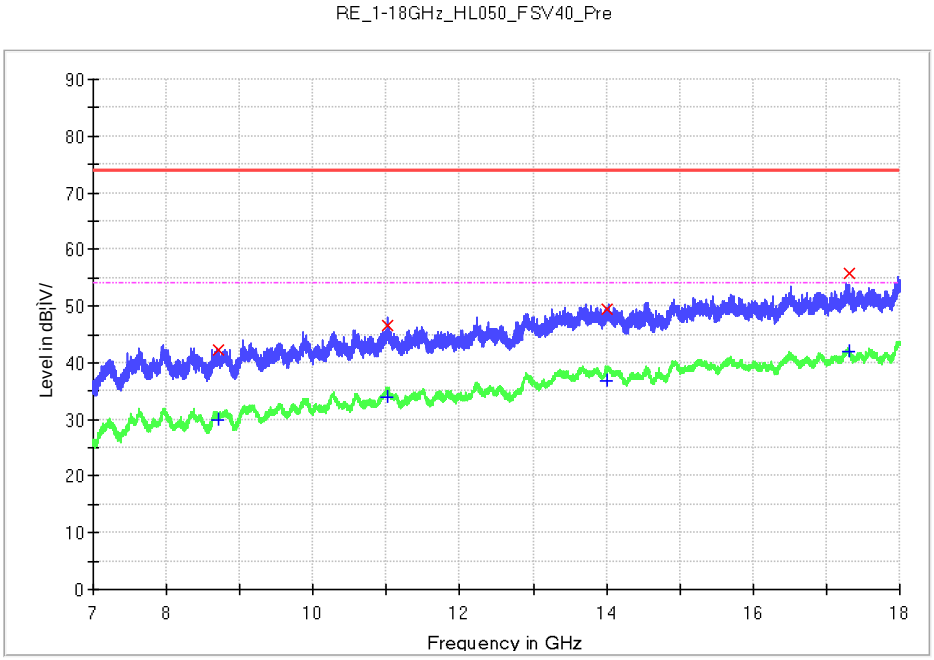


Table 38: Radiated Spurious Emission, TM3, 7GHz to 18GHz, V

Frequency (MHz)	QuasiPeak (dBµV/m)	Meas. Time (ms)	Bandwidth (kHz)	Height (cm)	Pol	Azimuth (deg)	Corr. (dB)	Margin - QPK (dB)	Limit - QPK (dBµV/m)
8705.000000	42.2	1000.0	1000.000	150.0	V	-90.0	-1.7	31.8	74.0
11024.166667	46.7	1000.0	1000.000	150.0	V	-90.0	0.9	27.3	74.0
14004.250000	49.4	1000.0	1000.000	150.0	V	-90.0	4.6	24.6	74.0
17310.666667	55.7	1000.0	1000.000	150.0	V	-90.0	9.1	18.3	74.0

Figure 47: Radiated Spurious Emission, TM3, 18GHz to 25GHz, H

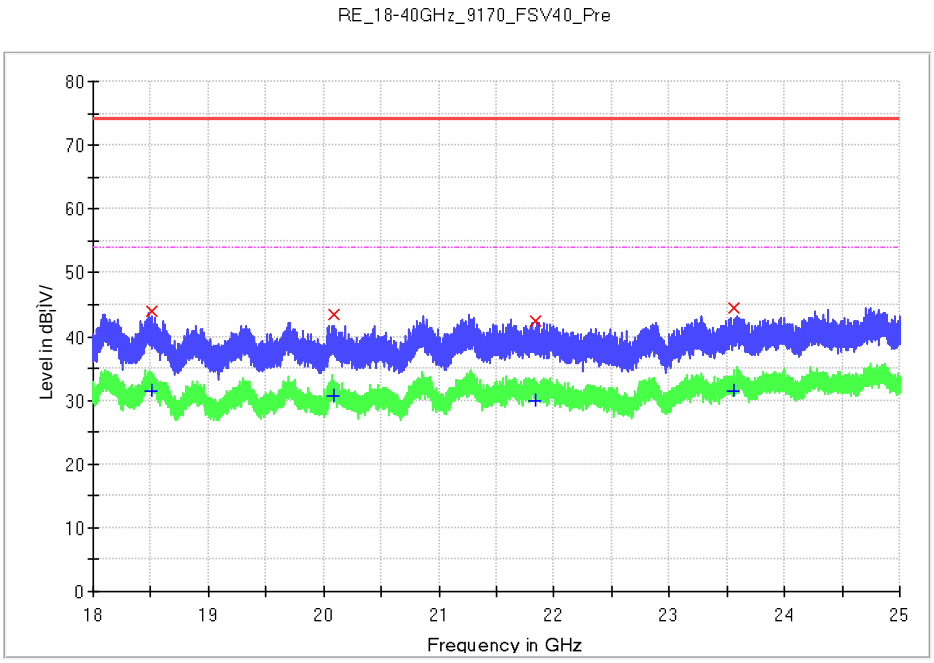


Table 39: Radiated Spurious Emission, TM3, 18GHz to 25GHz, H

Frequency (MHz)	QuasiPeak (dBµV/m)	Meas. Time (ms)	Bandwidth (kHz)	Height (cm)	Pol	Azimuth (deg)	Corr. (dB)	Margin - QPK (dB)	Limit - QPK (dBµV/m)
18507.718750	44.0	1000.0	1000.000	150.0	H	-13.0	-9.3	30.0	74.0
20085.343750	43.5	1000.0	1000.000	150.0	H	-13.0	-7.7	30.5	74.0
21842.562500	42.6	1000.0	1000.000	150.0	H	-13.0	-5.9	31.4	74.0
23557.125000	44.5	1000.0	1000.000	150.0	H	-13.0	-4.2	29.5	74.0

Figure 48: Radiated Spurious Emission, TM3, 18GHz to 25GHz, V

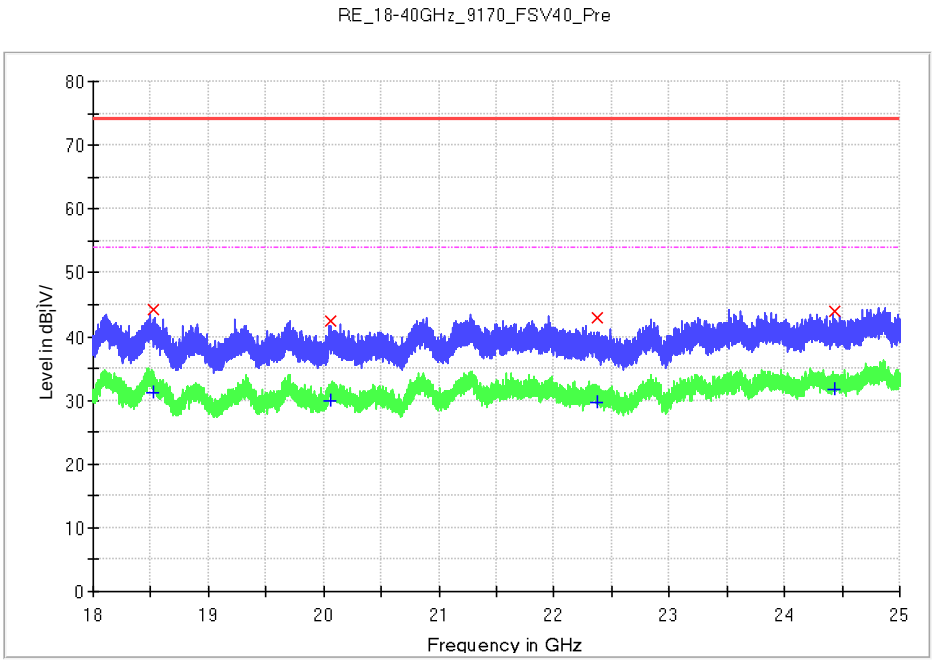


Table 40: Radiated Spurious Emission, TM3, 18GHz to 25GHz, V

Frequency (MHz)	QuasiPeak (dBµV/m)	Meas. Time (ms)	Bandwidth (kHz)	Height (cm)	Pol	Azimuth (deg)	Corr. (dB)	Margin - QPK (dB)	Limit - QPK (dBµV/m)
18520.187500	44.2	1000.0	1000.000	150.0	V	-13.0	-9.3	29.8	74.0
20056.687500	42.5	1000.0	1000.000	150.0	V	-13.0	-7.7	31.5	74.0
22372.593750	42.9	1000.0	1000.000	150.0	V	-13.0	-6.6	31.1	74.0
24431.906250	44.0	1000.0	1000.000	150.0	V	-13.0	-4.0	30.0	74.0

6. List of Tables

7. List of Figures