KTR

Test Report issued under the responsibility of:
Korea Testing & Research Institute

TEST REPORT

FCC Part 15 Subpart C § 15.247

FCC ID : 2A35YFAVEALLFIT

Report Number :	EFC-2021-000003
Date of issue :	Jan.12.2022
Total number of pages :	48
Tested by (name + signature)	Seong Seungseop 성승섭
Approved by (name + signature) :	Lee Jaejun 이재준
Testing Laboratory :	Korea Testing & Research institute (KTR)
Address :	98, Gyoyukwon-ro, Gwacheon-si, Gyeonggi-do, 13810, Korea
Applicant` s name :	STRONG FRIENDS COMPANY
Address :	10F, 1013, 39, Centum seo-ro, Haeundae-gu, Busan, Republic of Korea
Manufacturer` s name :	STRONG FRIENDS COMPANY
Address :	10F, 1013, 39, Centum seo-ro, Haeundae-gu, Busan, Republic of Korea
Test specification :	
Standard :	FCC Part 15 Subpart C § 15.247
Test procedure :	ANSI C63.10-2013, KDB 558074 D01 15.247 Meas Guidance v05r02
Non-standard test method:	N/A
Test Report Form No :	KTR-QI-Y10053-F19(00)
Test Reoprt Form(s) Originator :	Korea Testing & Research institute
Master TRF:	Dated 2012-06

General remarks :

1. The test results of this test report are only limited in to the samples and sample names provided by the client and do not guarantee the quality of all products of the client. You can check website (www.ktr.or.kr) or QR code to verify the authenticity of the certificate.
2. This test report shall be used only within the purpose of its defined usage and shall not be used for public relation, advertisement and lawsuit.
3. This test report is only valid when printed on KTR original report paper with hologram and when re-issued by KTR. The copy and the electronic file of the test report are only for reference.
4. ANSI C63.10-2013, KDB 558074 D01 15.247 Meas Guidance v05r02

Test item description	
Manufacturer :	STRONG FRIENDS COMPANY
Model/Type reference :	FAVE ALLFIT
Ratings :	DC 3.7 V(Battery)

QR Code for forgery

Revision History

The Revision history of this test report is shown below.

Revision	Report No.	Date of Issue	Description
0	EFC-2021-000003	2022.01.12	Initial

CONTENTS

1. General Information

1.1. Testing Laboratory

Laboratory	KOREA TESTING & RESEARCH INSTITUTE
Address	98, Gyoyukwon-ro, Gwacheon-si, Gyeonggi-do, 13810, Korea
Phone No	+ 82-2-2164-0011
Fax No.	+ 82-2-2634-1008
Accrediations	KOLAS : KT011, KC : J, VCCI Reg. : C-2363, R-2183 KCC & FCC : KR0030(Designation), FCC : 503434(Registration)

1.2. Applicant Information

Applicant(Company)	STRONG FRIENDS COMPANY
Address	10F, 1013, 39, Centum seo-ro, Haeundae-gu, Busan, Korea
Contact Person	Name : Jo, Kwang Lae // E-mail : kwanglae.jo@faves.co.kr Phone No. : +82-51-746-9888

1.3. Manufacturer Information

Same as the application information

1.4. Product Information

Equipment under test	FAVE ALLFIT
Model name	FAVE ALLFIT
Frequency Range	2 402 MHz ~ 2 480 MHz
Modulation technique	FHSS(GFSK)
Number of channels	40
Antenna type // Antenna gain	Chip Antenna // 3.5 dBi(Peak Gain)
Power source	DC 3.7 V(Battery)
Software Version	Fave Fitness Ver 2.3
Hardware Version	FAVE ALLFIT Ver 1.0
Serial Number	N/A
Variant Model	N/A
Date of Test(s)	2021.05.21 ~ 2022.01.04

1.5. Peripheral Devices

Device	Manufacturer	Model	Serial No.
Laptop	SAMSUNG ELECTRONICS	NT301E4C	N/A
AC/DC Adapter	Flextronics Power Systems (Dongguan)	A1487	N/A

1.6. Summary of Test Results

FCC Part 15 Subpart C § 15.247		
Section	Test Item	Result
§ 15.247(b)(3)	Maximum Peak Output Power	N/A[Note 2]
§ 15.247(e)	Peak Power Spectral Density	N/A[Note 2]
§ 15.247(a)(2)	6 dB Bandwidth	N/A[Note 2]
§ 15.205(a) § 15.209 § 15.247(d)	Spurious Emission Band Edge and Restricted Bands	C
§ 15.207(a)	AC Power Line Conducted Emissions	C

Notes :

1. C = Comply N/C = Not Comply N/T = Not Tested N/A = Not Applicable
2. These test items were not performed because the EUT uses the granted module.
   (FCC ID : 2APB6-BOT-NLE521)
   Please refer to the test report of the granted module.
3. The measurement procedures described in the American National Standard of Procedure for Compliance Testing of Unlicensed Wireless Devices(ANSI C63.10-2013) and the guidance provided in KDB 558074 D01 15.247 Meas Guidance v05r02 were used in the measurement of the EUT
4. All modes of operation and data rates were investigated. The test result shown in the following sections Represents the worst case emissions.
5. The fundamental of the EUT was investigated in three orthogonal position X, Y and Z. It was determined that X position was the worst in three orthogonal position. As a result, all final radiated testing was conducted with the EUT in X position.

1.7. Measurement Uncertainty

The measurement uncertainties shown below were calculated in accordance with the requirements of ANSI C63.10-2013.
All measurement uncertainty values are shown with a coverage factor of k = 2 to indicated a 95 % level of confidence. The measurement data shown herein meets of exceeds the U_{CISPR} measurement uncertainty values specified in CISPR 16-4-2 and thus, can be compared directly to specified limits to determined compliance.

Parameter	Expanded Uncertainty
Conducted Emissions(150 kHz ~ 30 MHz)	± 2.20 dB
Radiated Spurious Emissions(9 kHz ~ 30 MHz)	± 1.64 dB
Radiated Spurious Emissions(Below 1 GHz)	± 5.80 dB
Radiated Spurious Emissions(Above 1 GHz)	± 4.74 dB

1.8. Conducted Test for Offset Level

The offset level is set in the spectrum analyzer to compensate the RF Cable loss factor between EUT conducted output port and spectrum analyzer.
With the offset compensation, the spectrum analyser reading level is exactly the EUT RF output level.

Frequency(MHz)	Factor(dB)
30	20.10
100	20.29
200	20.34
300	20.40
400	20.44
500	20.48
600	20.51
700	20.52
800	20.59
900	20.63
1 000	20.63
2 000	20.78
3 000	20.94
4 000	20.88
5 000	22.12
6 000	21.41
7 000	21.35
8 000	21.56
9 000	21.71
10 000	21.86
11 000	22.04
12 000	22.19
13 000	22.32
14 000	22.45
15 000	22.21
16 000	22.33
17 000	22.56
18 000	22.55
19 000	22.54
20 000	22.74
21 000	22.57
22 000	22.58
23 000	22.54
24 000	22.84
25 000	22.96
26 000	23.03
26 500	23.22

1.9. Duty Cycle

Regarding to KDB 558074 D01 15.247 Meas Guidance v05r02, 6, the maximum duty cycle was investigated and set the spectrum analyser as below;

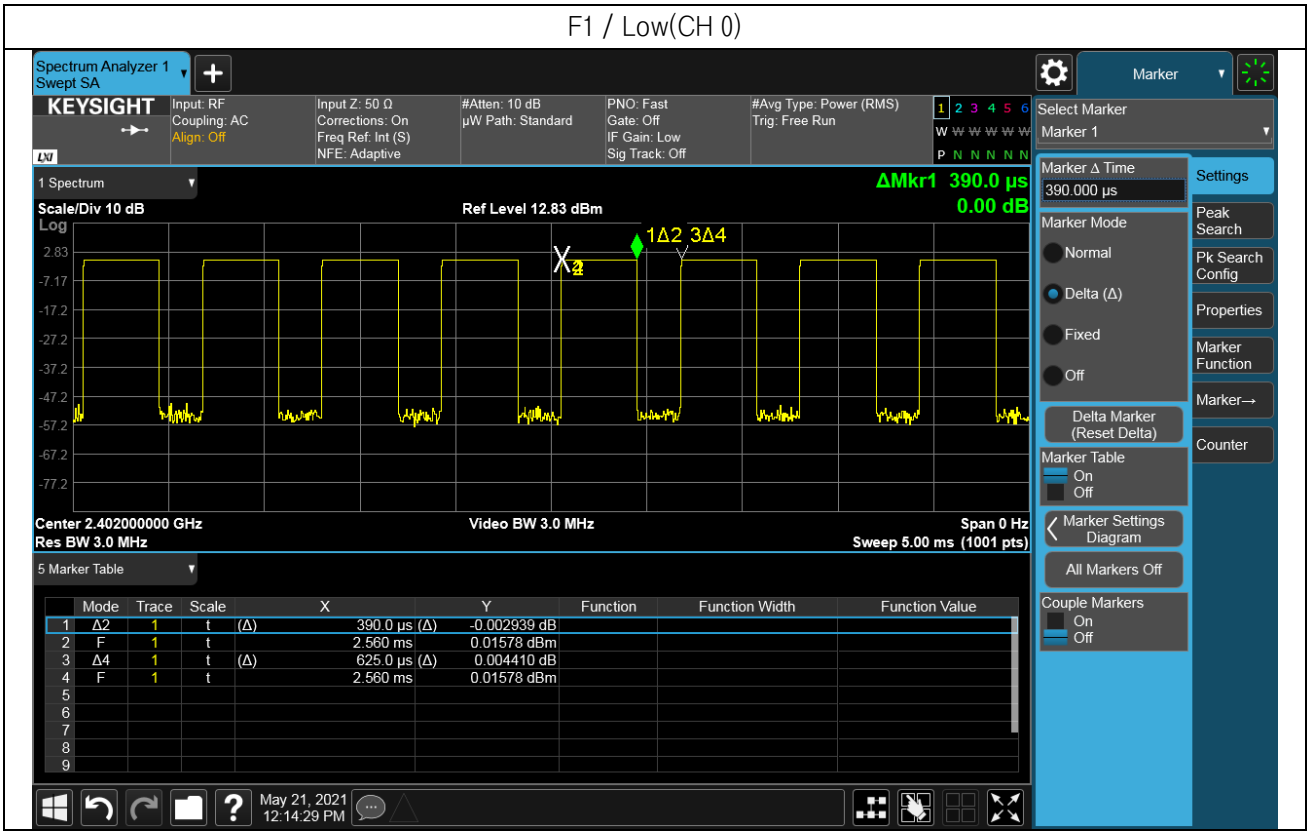
Set RBW ≥ OBW if possible; set RBW to the largest available value. Set detector = peak or average. The zero-span measurement method shall not be used unless both RBW and VBW are > 50/T and the number of sweep points across duration T exceeds 100.

Frequency(MHz)	Duty Cycle(%)	Correction Factor(dB)
F1 / Low(CH 0) / 2 402	62	2.08
F2 / Middle(CH 19) / 2 440	62	2.08
F3 / High(CH 39) / 2 480	62	2.08

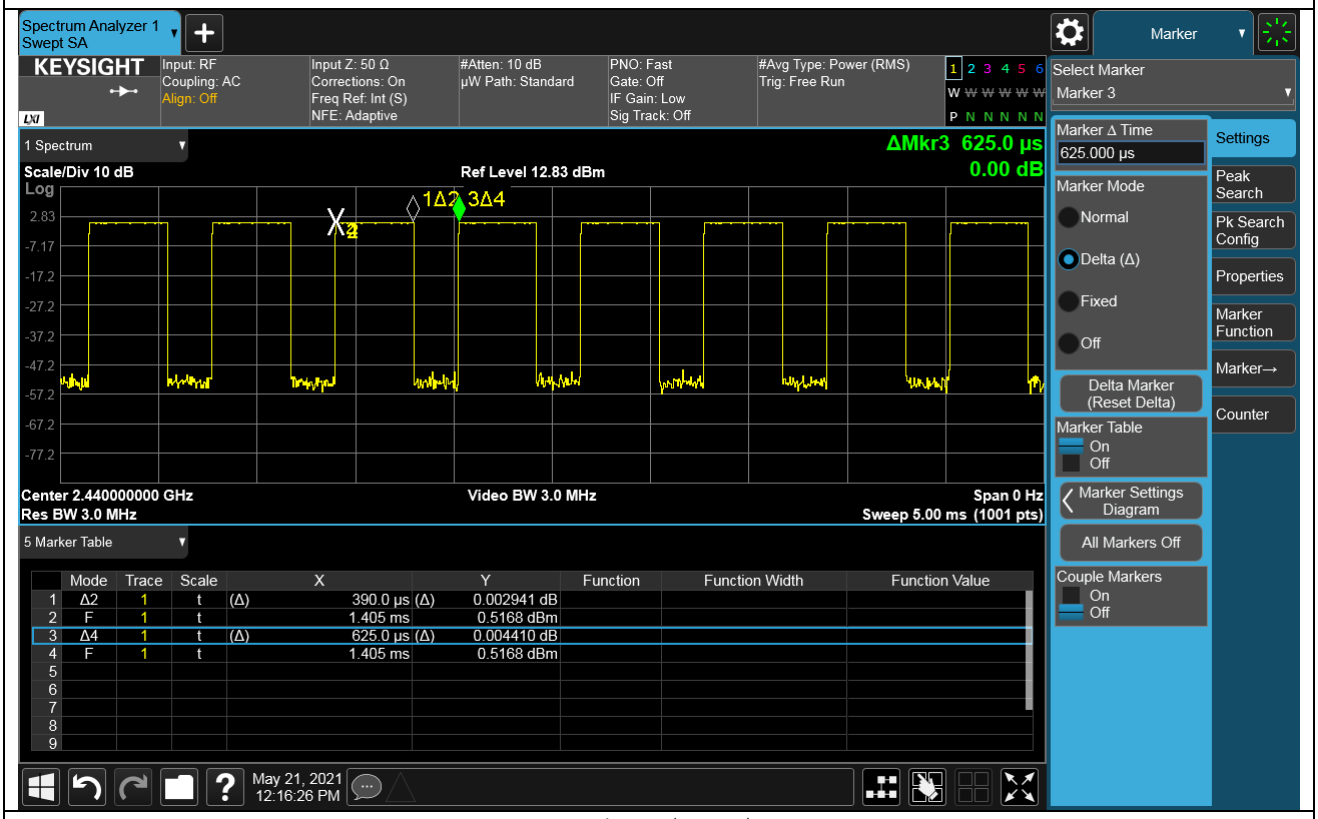
Notes :

1. Duty Cycle (%) = (Tx On Time / Tx On Time + Off Time) x 100 = (390 / 625) x 100 = 62 %
2. Correction Factor (dB) = 10 log (1 / Duty Cycle) = 10 log (1 / 0.62) = 2.08

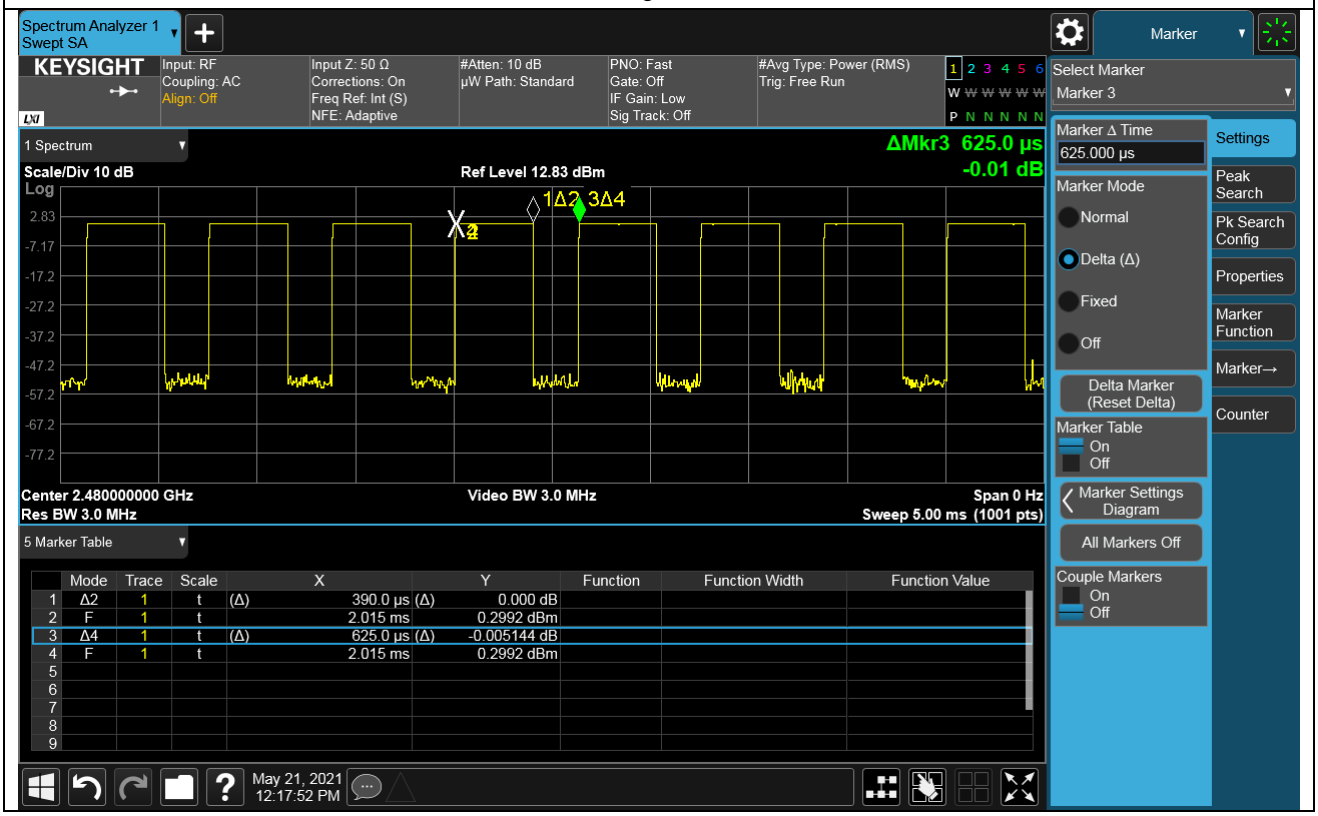
F1 / Low(CH 0)



F2 / Middle(CH 19)



F3 / High(CH 39)



2. Test Methodology

FCC KDB 558074 D01 15.247 Meas Guidance v05r02
GUIDANCE FOR COMPLIANCE MEASUREMENTS ON DIGITAL TRANSMISSION SYSTEM, FREQUENCY HOPPING SPREAD SPECTRUM SYSTEM, AND HYBRID SYSTEM DEVICES OPERATING UNDER SECTION 15.247 OF THE FCC RULES

ANSI C63.10-2013
American National Standard of Procedures for Compliance Testing of Unlicensed Wireless Devices

2.1. EUT Configuration

The EUT configuration for testing is installed on RF field strength measurement to meet the Commissions requirement and operating in a manner that intends to maximize its emission characteristics in a continuous normal application.

2.2. EUT Exercise

The EUT was operated in the test mode to fix the TX frequency that was for the purpose of the measurements. According to its specifications, the EUT must comply with the requirements of the Section 15.207, 15.209 and 15.247 under the FCC Rules Part 15 Subpart C.

2.3. General Test Procedures

- Conducted Emissions -

The EUT is placed on the wooden table, which is 0.8 m above ground plane and the conducted emissions from the EUT measured in the frequency range between 0.15 MHz and 30 MHz using CISPR Quasi-peak and Average detector.

- Radiated Emissions -

The EUT is placed on a non-conductive table. For emission measurements at or below 1 GHz, the table height is 80 cm. For emission measurements above 1 GHz, the table height is 1.5 m. The turntable shall rotate 360 degrees to determine the position of maximum emission level. The EUT is set 3 m away from the receiving antenna, which varied from 1 m to 4 m to find out the highest emission. Also, each emission was to be maximized by changing the polarization of receiving antenna both horizontal and vertical.

2.4. Description of Test Mode

The EUT has been tested with the operating condition for maximizing the emission characteristics. A test program is used to control the EUT for staying in continuous transmitting. The Bluetooth low energy mode with below low, middle and high channels were tested and reported.

Test Mode	Description	Frequency(MHz)		
Continuous transmitting	LE(1 Mbps)	F1 / Low(CH 0)	F2 / Middle(CH 19)	F3 / High(CH 39)
		2 402	2 440	2 480
※ Test Software : nRFgo Studio(V1.21.2.10)				

3. Antenna Requirement

According to FCC 47 CFR § 15.203:

An intentional radiator antenna shall be designed to ensure that no antenna other than that furnished by responsible party can be used with the device.

The use of a permanently attached antenna or of an antenna that uses a unique coupling to intentional radiator shall be considered sufficient to comply the provision of this section.

And according to FCC 47 CFR Section § 15.247(b) if transmitting antennas of directional gain greater than 6 dBi are used, the power shall be reduced by the amount in dB that the gain of the antenna exceeds 6 dBi.

(1) The Transmitter has permanently attached Chip Antenna(Internal antenna) on board.

(2) Antenna Peak Gain : 3.5 dBi

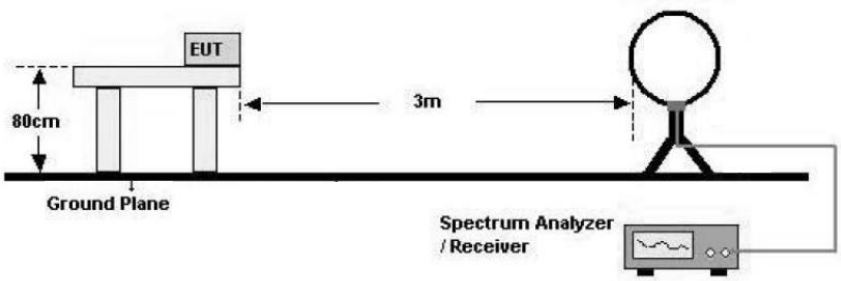
(3) The E.U.T complies with the requirement of § 15.203, § 15.247.

4. Test Result

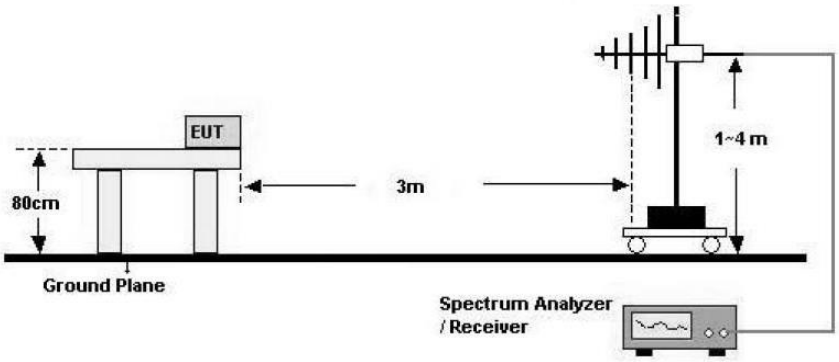
4.1. Radiated Spurious Emission, Band Edge and Restricted Bands

▣ Test Setup

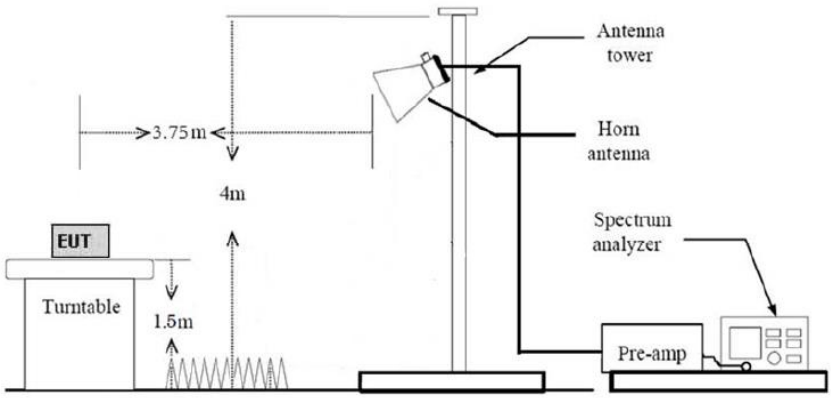
The diagram below shows the test setup that is utilized to make the measurement for emission from 9 kHz to 30 MHz Emissions.



The diagram below shows the test setup that is utilized to make the measurement for emission from 30 MHz to 1 GHz Emissions.



The diagram below shows the test setup that is utilized to make the measurement for emission from 1 GHz to the tenth harmonic of the highest fundamental frequency or to 40 GHz Emissions, whichever is lower



▣ Limit

According to § 15.209(a), Except as provided elsewhere in this subpart, the emissions from an intentional radiator shall not exceed the field strength levels specified in the following table:

Frequency (MHz)	Radiated (μ V/m)	Distance (m)
0.009 – 0.490	2400 / F(kHz)	300
0.490 – 1.705	24000 / F(kHz)	30
1.705 – 30.0	30	30
30 – 88	100**	3
88 – 216	150**	3
216 – 960	200**	3
Above 960	500	3

**Except as provided in paragraph (g), fundamental emissions from intentional radiators operating under this Section shall not be located in the frequency bands 54 MHz – 72 MHz, 76 MHz – 88 MHz, 174 MHz – 216 MHz or 470 MHz – 806 MHz. However, operation within these frequency bands is permitted under other sections of this Part, e.g., Sections § 15.231 and § 15.241.

According to § 15.205(a), Except as shown in paragraph (d) of this section, only spurious emissions are permitted in any of the frequency bands listed below:

MHz	MHz	MHz	GHz
0.090 – 0.110	16.42 –16.423	399.9 – 410	4.5 – 5.15
0.495 – 0.505	16.694 75 – 16.695 25	608 – 614	5.35 – 5.46
2.1735 – 2.190 5	16.804 25 – 16.804 75	960 – 1 240	7.25 – 7.75
4.125 – 4.128	25.5 – 25.67	1300 – 1 427	8.025 – 8.5
4.177 25 – 4.177 75	37.5 – 38.25	1 435 – 1 626.5	9.0 – 9.2
4.207 25 – 4.207 75	73 – 74.6	1 645.5 – 1 646.5	9.3 – 9.5
6.215 – 6.218	74.8 – 75.2	1 660 – 1 710	10.6 – 12.7
6.267 75 – 6.268 25	108 – 121.94	1 718.8 – 1 722.2	13.25 – 13.4
6.311 75 – 6.312 25	123 – 138	2 200 – 2 300	14.47 – 14.5
8.291 – 8.294	149.9 – 150.05	2 310 – 2 390	15.35 – 16.2
8.362 – 8.366	156.524 75 – 156.525 25	2 483.5 – 2 500	17.7 – 21.4
8.376 25 – 8.386 75	156.7 – 156.9	2 690 – 2 900	22.01 – 23.12
8.414 25 – 8.414 75	162.012 5 – 167.17	3 260 – 3 267	23.6 – 24.0
12.29 – 12.293	167.72 – 173.2	3 332 – 3 339	31.2 – 31.8
12.519 75 – 12.520 25	240 – 285	3 345.8 – 3 358	36.43 – 36.5
12.576 75 – 12.577 25	322 –335.4	3 600 – 4 400	Above 38.6
13.36 – 13.41			

The field strength of emissions appearing within these frequency bands shall not exceed the limits shown in § 15.209. At frequencies equal to or less than 1000 MHz, compliance with the limits in § 15.209 shall be demonstrated using measurement instrumentation employing a CISPR quasi-peak detector. Above 1000 MHz, compliance with the emission limits in § 15.209 shall be demonstrated based on the average value of the measured emissions. The provisions in § 15.35 apply to these measurements.

▣ Test procedure

ANSI C63.10 2013

■ Test procedure for radiated emission below 30 MHz

1. The EUT is placed on a non-conductive table 0.8 m above the ground at a 3 m semi-anechoic chamber. The table rotated 360 degrees to determine the position of the highest emission level.
2. The loop Antenna was placed at a location 3 m from the EUT and fixed at 1 m above the ground to determine the maximum value of the field strength.
3. The measurement performed X, Y, Z planes in EUT and horizontal, vertical polarization in the antenna.
4. The spectrum analyser or receiver was set to Peak or Quasi-peak function and specified bandwidth maximum hold mode.

■ Test procedure for radiated emission Above 30 MHz

1. The EUT is placed on a non-conductive table 0.8 m above the ground at a 3 m semi-anechoic chamber for below 1 GHz and table 1.5 m above the ground at a 3 m semi-anechoic chamber for 1 GHz. The table rotated 360 degrees to determine the position of the highest emission level.
2. During performing radiated emission below 1 GHz, the EUT was set 3 m distance from the interference receiving antenna, which was mounted on the top of variable-height antenna tower. For radiated emission above 1 GHz, the EUT was set 3.75 m distance from the interference receiving Antenna
3. The tower height is varied from 1 m to 4 m above the ground to determine the maximum value of the field strength.
4. The Bi-log antenna is used for measuring emission below 1 GHz. The Horn antenna is used for measuring emission above 1 GHz
5. The measurement performed X, Y, Z axes in EUT and horizontal, vertical polarization in the antenna.
6. The spectrum analyser or receiver was set to Peak or Quasi-peak function and specified bandwidth maximum hold mode for below 1 GHz.
7. The spectrum analyser or receiver was set to Peak and Average function and specified bandwidth maximum hold mode for above 1 GHz.

■ Emissions in Non-Restricted Frequency Bands

ANSI C63.10 2013 Section 11.11.2 & Section 11.11.2

- Reference Level Measurement

a) Set instrument center frequency to DTS channel center frequency.
b) Set the span to ≥ 1.5 times the DTS bandwidth.
c) Set the 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 PSD level.

Note that the channel found to contain the maximum PSD level can be used to establish the reference level.

- Level Measurement
a) Set the center frequency and span to encompass frequency range to be measured.
b) Set the RBW = 100 kHz
c) Set the VBW ≥ [3 × RBW].
d) Detector = peak.
e) Sweep time = auto couple.
f) Trace mode = max hold.
g) Allow trace to fully stabilize.
h) Use the peak marker function to determine the maximum amplitude level.

■ Emissions in Restricted Frequency Bands
ANSI C63.10 2013 Section 11.12.2.4 & Section 11.12.2.5

- Peak Emission Measurement
a) RBW = as specified in below table
b) VBW ≥ [3 × RBW].
c) Detector = peak.
d) Sweep time = auto.
e) Trace mode = max hold.

Frequency	RBW
9 kHz to 150 kHz	200 Hz to 300 Hz
0.15 kHz to 30 MHz	9 kHz to 10 kHz
30 MHz to 1 000 MHz	100 kHz to 120 kHz
> 1 000 MHz	1 MHz

Table. RBW as a function of frequency

If the peak-detected amplitude can be shown to comply with the average limit, then it is not necessary to perform a separate average measurement.

- Average Emission Measurement

1. Trace averaging with continuous EUT transmission at full power

If the EUT can be configured or modified to transmit continuously (D ≥ 98%), then the average emission levels shall be measured using the following method (with EUT transmitting continuously):
a) RBW = 1 MHz (unless otherwise specified).
b) VBW ≥ [3 × RBW].
c) Detector = RMS (power averaging), if [span / (# of points in sweep)] ≤ (RBW / 2). Satisfying this condition may require increasing the number of points in the sweep or reducing the span. If this condition cannot be satisfied, then the detector mode shall be set to peak.
d) Averaging type = power (i.e., rms):
   1) As an alternative, the detector and averaging type may be set for linear voltage averaging.
   2) Some instruments require linear display mode to use linear voltage averaging. Log or dB averaging shall not be used.
e) Sweep time = auto.
f) Perform a trace average of at least 100 traces.

2. Trace averaging across ON and OFF times of the EUT transmissions followed by duty cycle correction

If continuous transmission of the EUT (D ≥ 98%) cannot be achieved and the duty cycle is constant (duty cycle variations are less than ±2%), then the following procedure shall be used:
a) The EUT shall be configured to operate at the maximum achievable duty cycle.
b) Measure the duty cycle D of the transmitter output signal as described in 11.6.
c) RBW = 1 MHz (unless otherwise specified).
d) VBW ≥ [3 × RBW].
e) Detector = RMS (power averaging), if span / (# of points in sweep) ≤ (RBW / 2). Satisfying this condition may require increasing the number of points in the sweep or reducing the span. If this condition cannot be satisfied, then the detector mode shall be set to peak.
f) Averaging type = power (i.e., rms):
  1) As an alternative, the detector and averaging type may be set for linear voltage averaging.
  2) Some instruments require linear display mode to use linear voltage averaging. Log or dB averaging shall not be used.
g) Sweep time = auto.
h) Perform a trace average of at least 100 traces.
i) A correction factor shall be added to the measurement results prior to comparing with the emission limit to compute the emission level that would have been measured had the test been performed at 100% duty cycle. The correction factor is computed as follows:
  1) If power averaging (rms) mode was used in step f), then the applicable correction factor is [10 log (1 / D)], where D is the duty cycle.
  2) If linear voltage averaging mode was used in step f), then the applicable correction factor is [20 log (1 / D)], where D is the duty cycle.
  3) If a specific emission is demonstrated to be continuous (D ≥ 98%) rather than turning ON and OFF

Note :
1. Frequency 〈 30 MHz, extrapolation factor of 40 dB/decade of distance $F_d = 40\log(D_m/D_s)$
  * 0.009 MHz – 0.490 MHz : 40log(3 m/300 m) = −80 dB, 0.490 MHz – 30 MHz : 40log(3 m/30 m) = −40 dB
2. Frequency > 30 MHz, extrapolation factor of 20 dB/decade of distance $F_d = 20\log(D_m/D_s)$
  * Above 1 GHz : 20log(3.75 m/3 m) = 1.94 dB
  * F_d = Distance Factor, D_m = Measurement Distance(m), D_s = Specification Distance(m)
3. The worst case axis : X-Axis

▣ Test Result (Below 30 MHz)

Radiated emissions			Ant.	Correction factors					Total	Limit	
Frequency	Reading	Detect	Pol.	AF	CL	Amp	F_d	DF	Final Result	Limit	Margin
MHz	dBμV	Quasi Peak	H/V	dB/m	dB	dB	dB	dB	dBμV/m	dBμV/m	dB
9 kHz ~ 30 MHz : No spurious emissions were detected within 20 dB of the limit.											

Note :
1. According to § 15.31(o), emissions level are not reported much lower than the limit by over 20 dB

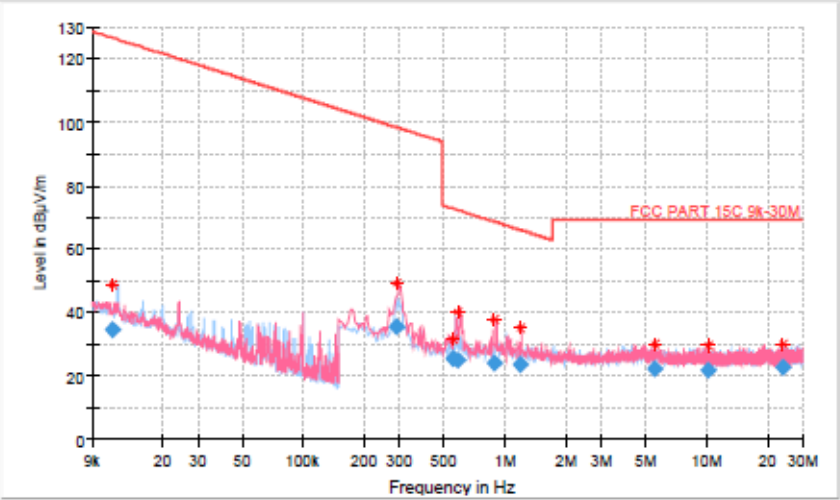
F1 / Low(CH 0)

EMI Auto Test(4) 1 / 1

EMI RE Auto Test Report

Common Information

EUT:	FAVE ALLFIT
Order No:	EFC-2021-000003
Test Description:	FCC PART 15C
Operating Conditions:	BLE(F1)
Operator Name:	KTR



Final Result

Frequency (MHz)	QuasiPeak (dBµV/m)	Limit (dBµV/m)	Margin (dB)	Meas. Time (ms)	Bandwidth (kHz)	Height (cm)	Pol	Azimuth (deg)	Corr. (dB/m)
0.011389	34.48	126.47	91.99	1000.0	0.200	100.0	H	40.0	19.6
0.289235	35.37	98.38	63.01	1000.0	9.000	100.0	V	206.0	19.4
0.548155	25.53	72.83	47.30	1000.0	9.000	100.0	V	268.0	19.3
0.581705	24.90	72.31	47.41	1000.0	9.000	100.0	V	200.0	19.3
0.879190	24.10	68.72	44.62	1000.0	9.000	100.0	V	206.0	19.4
1.196675	23.54	66.04	42.50	1000.0	9.000	100.0	V	206.0	19.4
5.562655	22.56	69.54	46.98	1000.0	9.000	100.0	V	46.0	19.7
10.117140	22.05	69.54	47.49	1000.0	9.000	100.0	V	40.0	19.6
23.935450	22.67	69.54	46.87	1000.0	9.000	100.0	H	28.0	20.9

5/28/2021

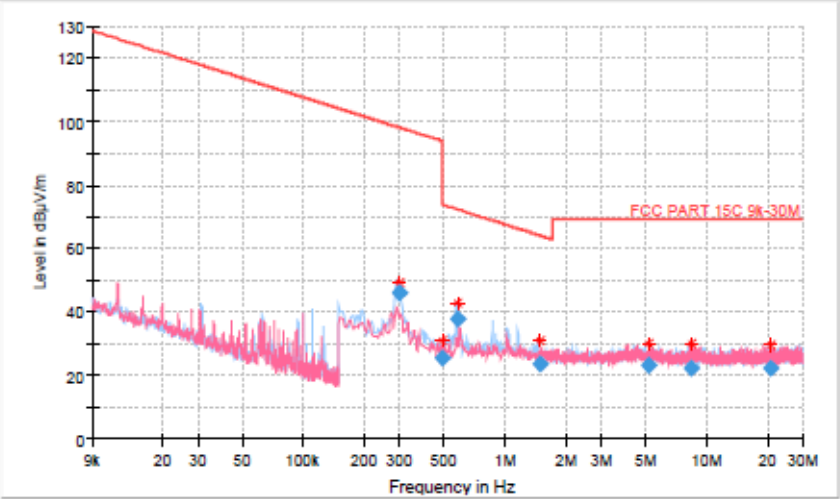
F2 / Middle(CH 19)

EMI Auto Test(4) 1 / 1

EMI RE Auto Test Report

Common Information

EUT:	FAVE ALL FIT
Order No:	EFC-2021-000003
Test Description:	FCC PART 15C
Operating Conditions:	BLE(F2)
Operator Name:	KTR



Final Result

Frequency (MHz)	QuasiPeak (dBµV/m)	Limit (dBµV/m)	Margin (dB)	Meas. Time (ms)	Bandwidth (kHz)	Height (cm)	Pol	Azimuth (deg)	Corr. (dB/m)
0.301295	45.91	98.02	52.11	1000.0	9.000	100.0	H	199.0	19.4
0.490185	25.52	73.80	48.27	1000.0	9.000	100.0	H	5.0	19.3
0.579855	37.79	72.34	34.55	1000.0	9.000	100.0	H	199.0	19.3
1.496460	23.85	64.09	40.24	1000.0	9.000	100.0	H	159.0	19.4
5.194485	23.04	69.54	46.50	1000.0	9.000	100.0	V	230.0	19.7
8.327125	22.12	69.54	47.42	1000.0	9.000	100.0	H	4.0	19.7
20.635115	22.20	69.54	47.34	1000.0	9.000	100.0	H	28.0	20.4

5/28/2021

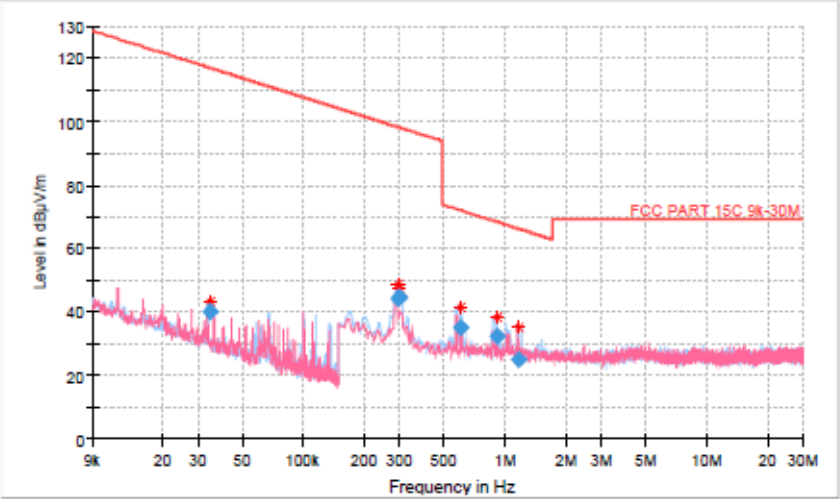
F3 / High(CH 39)

EMI Auto Test(4) 1 / 1

EMI RE Auto Test Report

Common Information

EUT:	FAVE ALLFIT
Order No:	EFC-2021-000003
Test Description:	FCC PART 15C
Operating Conditions:	BLE(F3)
Operator Name:	KTR



Final Result

Frequency (MHz)	QuasiPeak (dBµV/m)	Limit (dBµV/m)	Margin (dB)	Meas. Time (ms)	Bandwidth (kHz)	Height (cm)	Pol	Azimuth (deg)	Corr. (dB/m)
0.034520	40.03	116.84	76.81	1000.0	0.200	100.0	H	308.0	19.5
0.297295	44.44	98.14	53.70	1000.0	9.000	100.0	H	196.0	19.4
0.298250	44.77	98.11	53.34	1000.0	9.000	100.0	H	209.0	19.4
0.603855	35.26	71.98	36.73	1000.0	9.000	100.0	H	196.0	19.4
0.911190	32.49	68.41	35.91	1000.0	9.000	100.0	H	209.0	19.4
1.175660	25.14	66.19	41.06	1000.0	9.000	100.0	H	209.0	19.4

5/28/2021

▣ Test Result (Below 1 GHz)

[F1 / Low(CH 0)]

Radiated emissions			Ant.	Correction factors		Total	Limit	
Frequency	Reading	Detect	Pol.	AF + CL	Amp	Final Result	Limit	Margin
MHz	dBµV	Quasi Peak	H/V	dB	dB	dBµV/m	dBµV/m	dB
173.723 5	20.11	Quasi Peak	H	15.90	-	36.01	43.52	7.51
175.206 5	20.95		H	15.90		36.85	43.52	6.67
306.860 0	17.30		H	18.20		35.50	46.02	10.52
352.128 5	11.02		V	20.80		31.82	46.02	14.20
672.830 0	10.94		H	26.10		37.04	46.02	8.98
719.921 0	1.73		H	27.10		28.83	46.02	17.19

[F2 / Middle(CH 19)]

Radiated emissions			Ant.	Correction factors		Total	Limit	
Frequency	Reading	Detect	Pol.	AF + CL	Amp	Final Result	Limit	Margin
MHz	dBµV	Quasi Peak	H/V	dB	dB	dBµV/m	dBµV/m	dB
171.058 5	18.59	Quasi Peak	H	15.70	-	34.29	43.52	9.23
174.935 0	22.27		H	15.90		38.17	43.52	5.35
305.870 5	17.50		H	18.10		35.60	46.02	10.42
352.091 0	10.07		H	20.80		30.87	46.02	15.15
673.061 5	10.86		H	26.10		36.96	46.02	9.06

[F3 / High(CH 39)]

Radiated emissions			Ant.	Correction factors		Total	Limit	
Frequency	Reading	Detect	Pol.	AF + CL	Amp	Final Result	Limit	Margin
MHz	dBµV	Quasi Peak	H/V	dB	dB	dBµV/m	dBµV/m	dB
173.338 0	19.17	Quasi Peak	H	15.80	-	34.97	43.52	8.55
177.927 5	21.40		H	15.90		37.30	43.52	6.22
301.220 5	16.07		H	17.70		33.77	46.02	12.25
352.088 5	11.31		V	20.80		32.11	46.02	13.91
672.654 0	11.13		H	26.10		37.23	46.02	8.79
720.779 5	1.99		H	27.10		29.09	46.02	16.93

Note :

1. Detect : Detector, Pol : Polarization, AF : Antenna Factor, CL : Cable Loss, Amp : Preamp Gain
2. Final Result(dBµV/m) = Reading(dBµV) + AF(dB/m) + CL(dB) - Amp(dB)

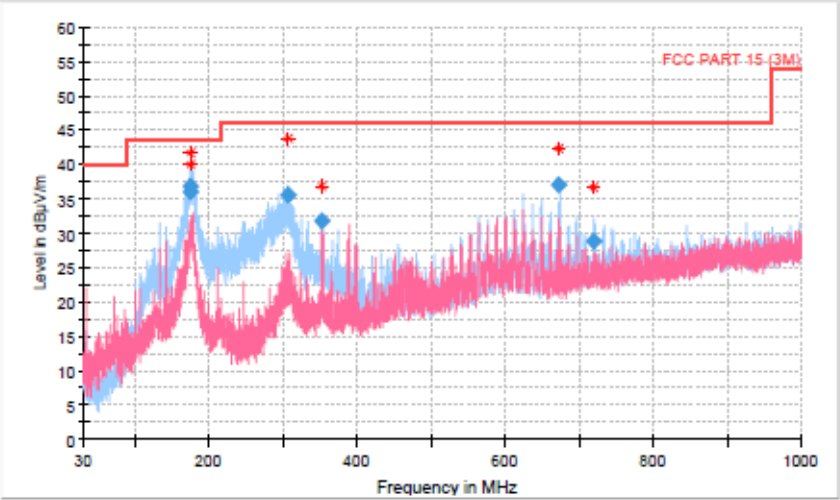
F1 / Low(CH 0)

EMI Auto Test 1 / 1

EMI RE Auto Test Report

Common Information

EUT:	FAVE ALLFIT
Order No:	EFC-2021-000003
Test Description:	FCC PART 15C
Operating Conditions:	BLE(F1)
Operator Name:	KTR



Final Result

Frequency (MHz)	QuasiPeak (dBµV/m)	Limit (dBµV/m)	Margin (dB)	Meas. Time (ms)	Bandwidth (kHz)	Height (cm)	Pol	Azimuth (deg)	Corr. (dB/m)
173.723500	36.01	43.52	7.51	1000.0	120.000	125.0	H	336.0	15.9
175.206500	36.85	43.52	6.67	1000.0	120.000	125.0	H	306.0	15.9
306.860000	35.50	46.02	10.52	1000.0	120.000	105.0	H	344.0	18.2
352.128500	31.82	46.02	14.20	1000.0	120.000	125.0	V	231.0	20.8
672.830000	37.04	46.02	8.98	1000.0	120.000	111.0	H	224.0	26.1
719.921000	28.83	46.02	17.19	1000.0	120.000	112.0	H	230.0	27.1

5/28/2021

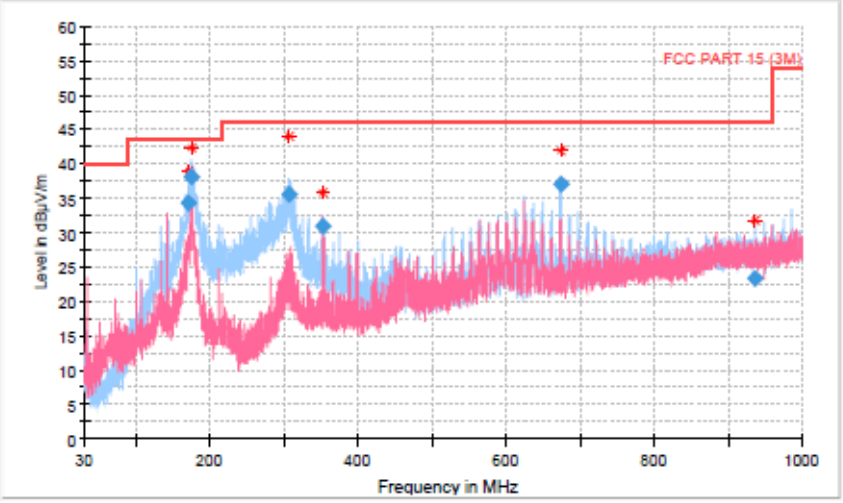
F2 / Middle(CH 19)

EMI Auto Test 1 / 1

EMI RE Auto Test Report

Common Information

EUT:	FAVE ALLFIT
Order No:	EFC-2021-000003
Test Description:	FCC PART 15C
Operating Conditions:	BLE(F2)
Operator Name:	KTR



Final Result

Frequency (MHz)	QuasiPeak (dBµV/m)	Limit (dBµV/m)	Margin (dB)	Meas. Time (ms)	Bandwidth (kHz)	Height (cm)	Pol	Azimuth (deg)	Corr. (dB/m)
171.058500	34.29	43.52	9.23	1000.0	120.000	125.0	H	324.0	15.7
174.935000	38.17	43.52	5.35	1000.0	120.000	125.0	H	304.0	15.9
305.870500	35.60	46.02	10.42	1000.0	120.000	100.0	H	345.0	18.1
352.091000	30.87	46.02	15.15	1000.0	120.000	100.0	H	268.0	20.8
673.061500	36.96	46.02	9.06	1000.0	120.000	125.0	H	229.0	26.1
936.645500	23.41	46.02	22.61	1000.0	120.000	100.0	H	9.0	30.0

5/28/2021

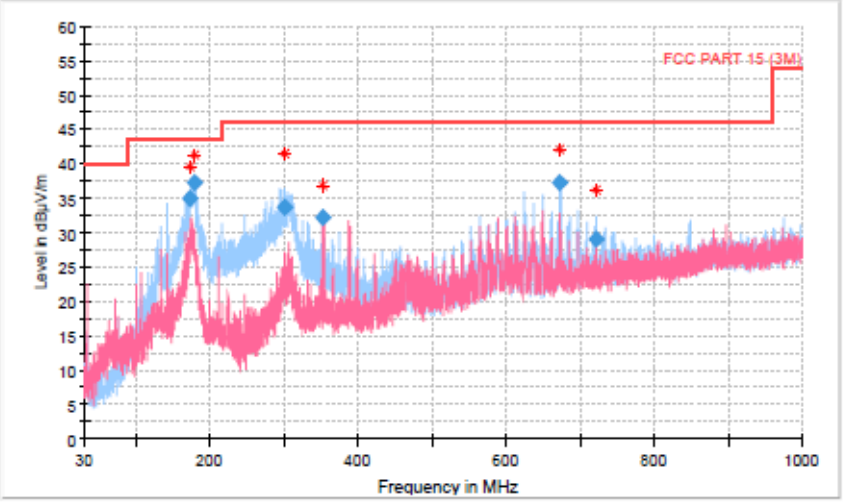
F3 / High(CH 39)

EMI Auto Test 1 / 1

EMI RE Auto Test Report

Common Information

EUT:	FAVE ALLFIT
Order No:	EFC-2021-000003
Test Description:	FCC PART 15C
Operating Conditions:	BLE(F3)
Operator Name:	KTR



Final Result

Frequency (MHz)	QuasiPeak (dBµV/m)	Limit (dBµV/m)	Margin (dB)	Meas. Time (ms)	Bandwidth (kHz)	Height (cm)	Pol	Azimuth (deg)	Corr. (dB/m)
173.338000	34.97	43.52	8.55	1000.0	120.000	112.0	H	339.0	15.8
177.927500	37.30	43.52	6.22	1000.0	120.000	105.0	H	312.0	15.9
301.220500	33.77	46.02	12.25	1000.0	120.000	100.0	H	1.0	17.7
352.088500	32.11	46.02	13.91	1000.0	120.000	125.0	V	234.0	20.8
672.654000	37.23	46.02	8.79	1000.0	120.000	125.0	H	229.0	26.1
720.779500	29.09	46.02	16.93	1000.0	120.000	125.0	H	5.0	27.1

5/28/2021

▣ Test Result (Above 1 GHz)

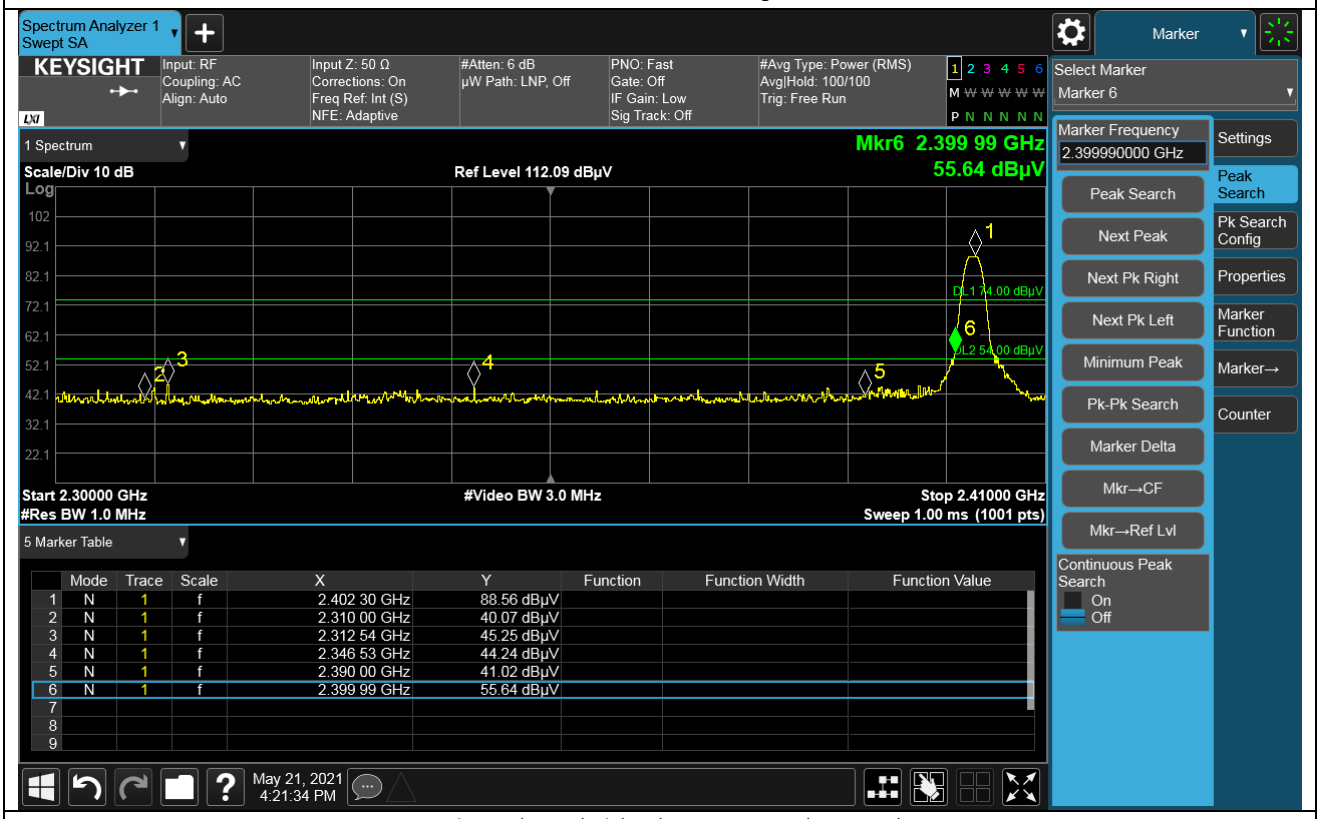
[F1 / Low(CH 0)]

Radiated emissions			Ant.	Correction factors					Total	Limit	
Frequency	Reading	Detect	Pol.	AF	CL	Amp	F_d	DF	Final Result	Limit	Margin
MHz	dBμV	PK/AV	H/V	dB/m	dB	dB	dB	dB	dBμV/m	dBμV/m	dB
*2 310.00	47.25	PK	H	31.40	3.20	43.72		–	40.07	74.00	33.93
*2 310.00	47.50	PK	V	31.40	3.20	43.72		–	40.32	74.00	33.68
*2 312.54	52.43	PK	H	31.40	3.20	43.72		–	45.25	74.00	28.75
*2 356.87	54.89	PK	V	31.90	3.29	43.68		–	48.34	74.00	25.66
*2 389.87	56.05	PK	V	31.90	3.32	43.70		–	49.51	74.00	24.49
*2 390.00	47.56	PK	H	31.90	3.32	43.70		–	41.02	74.00	32.98
2 399.99	63.16	PK	H	31.90	3.34	43.70		–	56.64	74.00	17.36
2 399.99	46.74	AV	H	31.90	3.34	43.70		2.08	42.30	54.00	11.70
2 399.99	61.27	PK	V	31.90	3.34	43.70	1.94	–	54.75	74.00	19.25
2 399.99	44.95	AV	V	31.90	3.34	43.70		2.08	40.51	54.00	13.49
3 185.00	54.82	PK	V	33.10	3.64	42.95		–	48.61	74.00	25.39
*4 805.00	51.72	PK	H	34.20	5.70	41.33		–	50.29	74.00	23.71
*4 805.00	51.32	PK	V	34.20	5.70	41.33		–	49.89	74.00	24.11
*20 652.00	34.69	PK	H	45.60	12.12	36.10		–	56.31	74.00	17.69
*20 652.00	21.88	AV	H	45.60	12.12	36.10		2.08	45.58	54.00	8.42
24 137.00	30.90	PK	V	45.90	14.42	34.10		–	57.12	74.00	16.88
24 137.00	17.29	AV	V	45.90	14.42	34.10		2.08	45.59	54.00	8.41

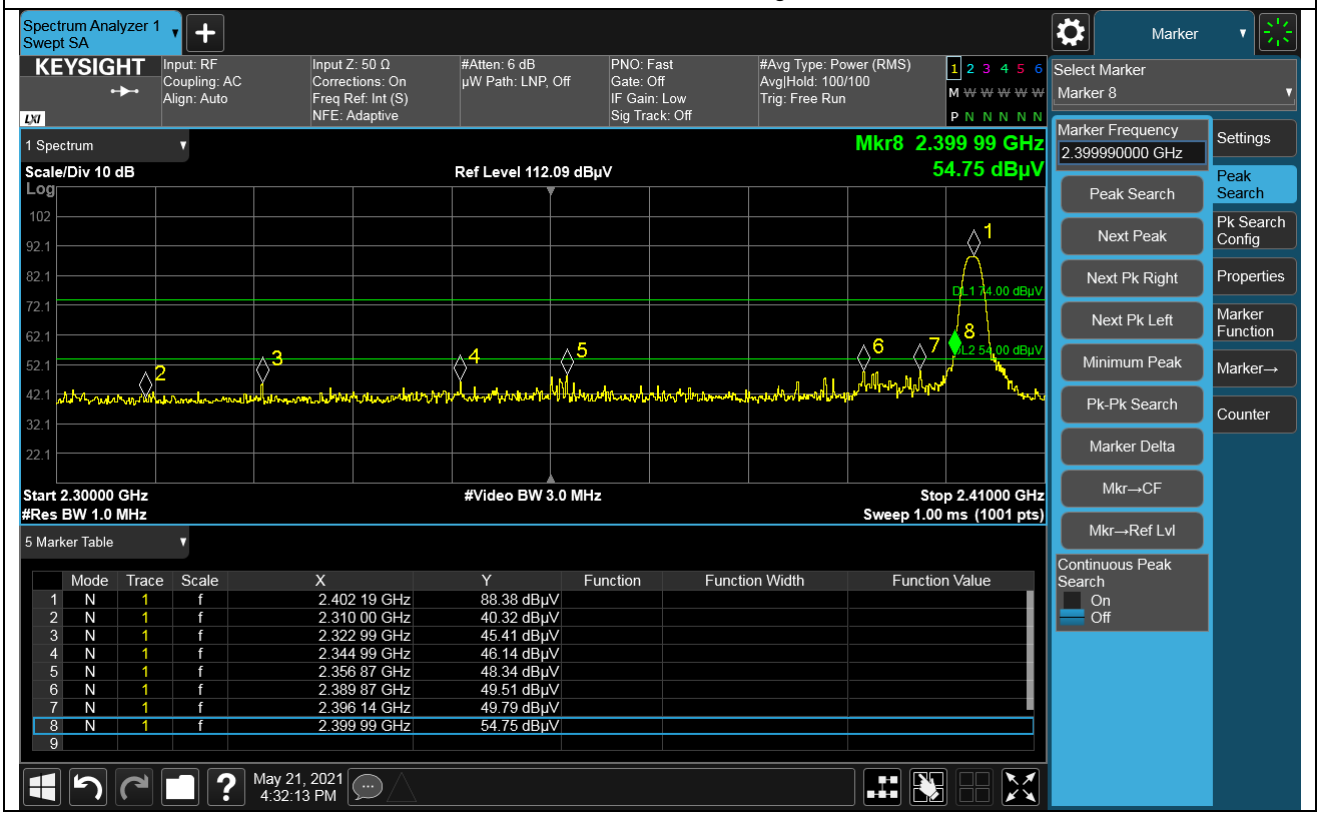
Note :

1. "*" means the restricted band.
2. According to § 15.31(o), emissions level are not reported much lower than the limit by over 20 dB
3. If the peak-detected amplitude can be shown to comply with the average limit, then it is not necessary to perform a separate average measurement.
4. Frequency 〈 30 MHz, extrapolation factor of 40 dB/decade of distance $F_d = 40\log(D_m/D_s)$
   * 0.009 MHz – 0.490 MHz : 40log(3 m/300 m) = −80 dB, 0.490 MHz – 30 MHz : 40log(3 m/30 m) = −40 dB
5. Frequency > 30 MHz, extrapolation factor of 20 dB/decade of distance $F_d = 20\log(D_m/D_s)$
   * Above 1 GHz : 20log(3.75 m/3 m) = 1.94 dB
   * F_d = Distance Factor, D_m = Measurement Distance(m), D_s = Specification Distance(m)
6. Detect : Detector, Pol : Polarization, AF : Antenna Factor, CL : Cable Loss, Amp : Preamp Gain
   DF : Duty Cycle Factor
7. Final Result(dBμV/m) = Reading(dBμV) + AF(dB/m) + CL(dB) − Amp(dB) + F_d(dB) + DF(dB)
8. Test plot data does not contain DF for average detector.
   Test plot data = Reading(dBμV) + AF(dB/m) + CL(dB) − Amp(dB) + F_d(dB)

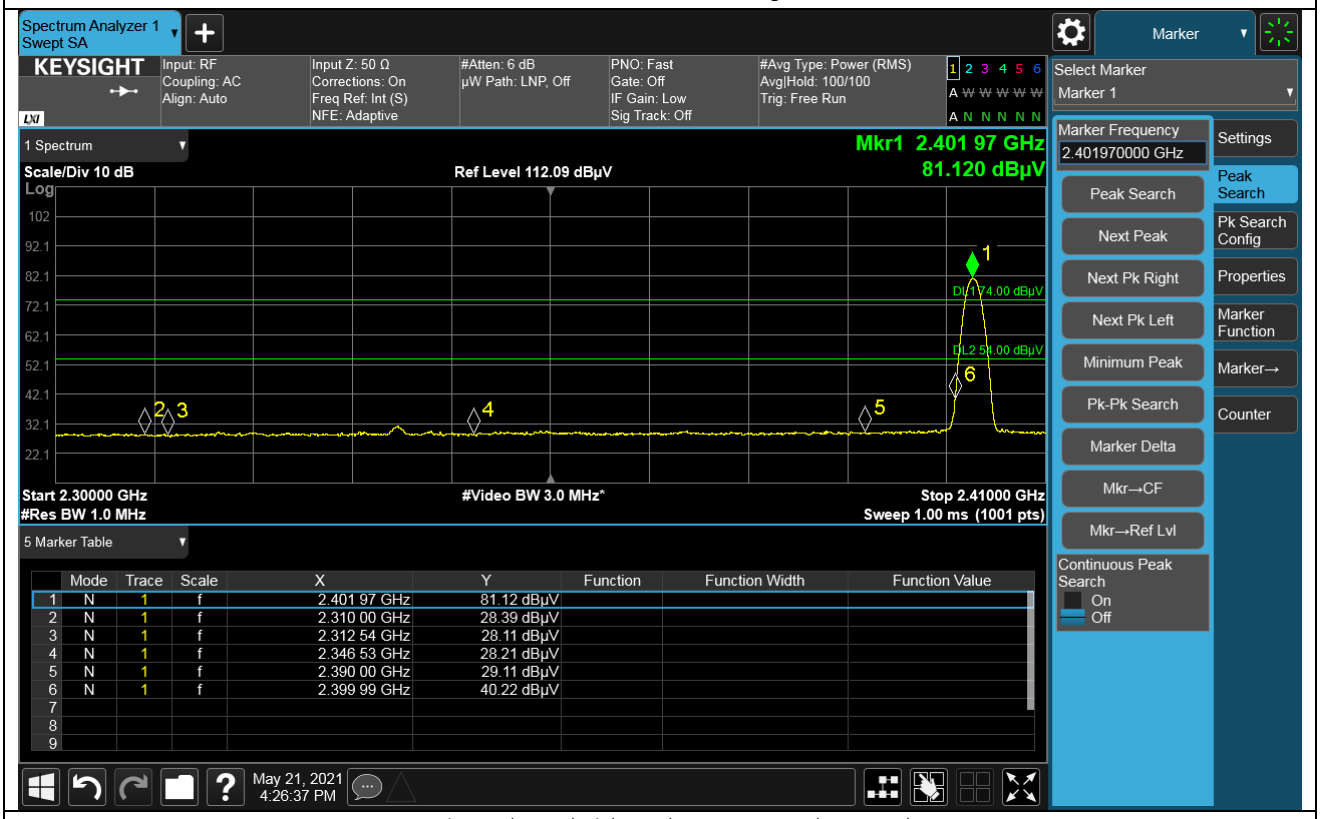
F1 / Low(CH 0) / (PK) Band Edge(Horizontal)



F1 / Low(CH 0) / (PK) Band Edge(Vertical)

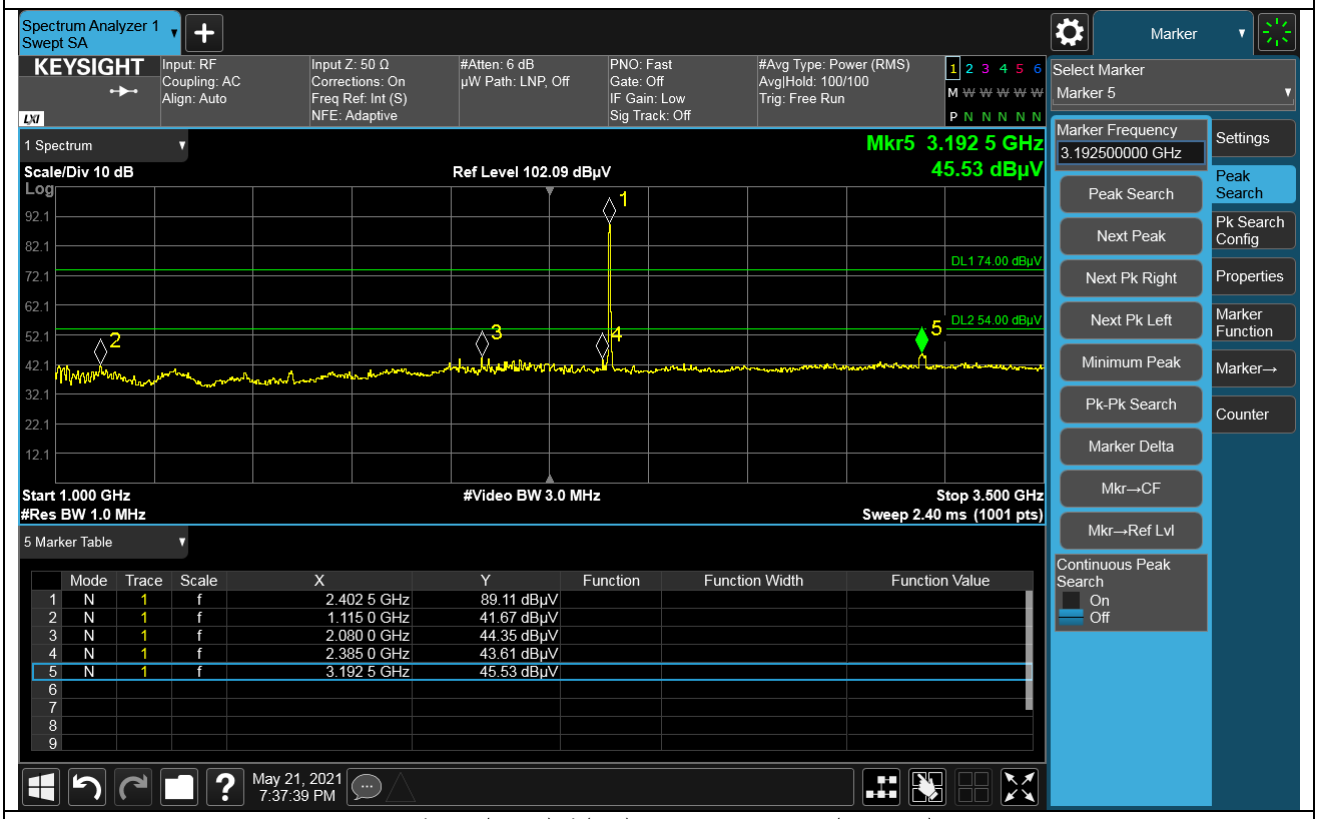


F1 / Low(CH 0) / (AVG) Band Edge(Horizontal)

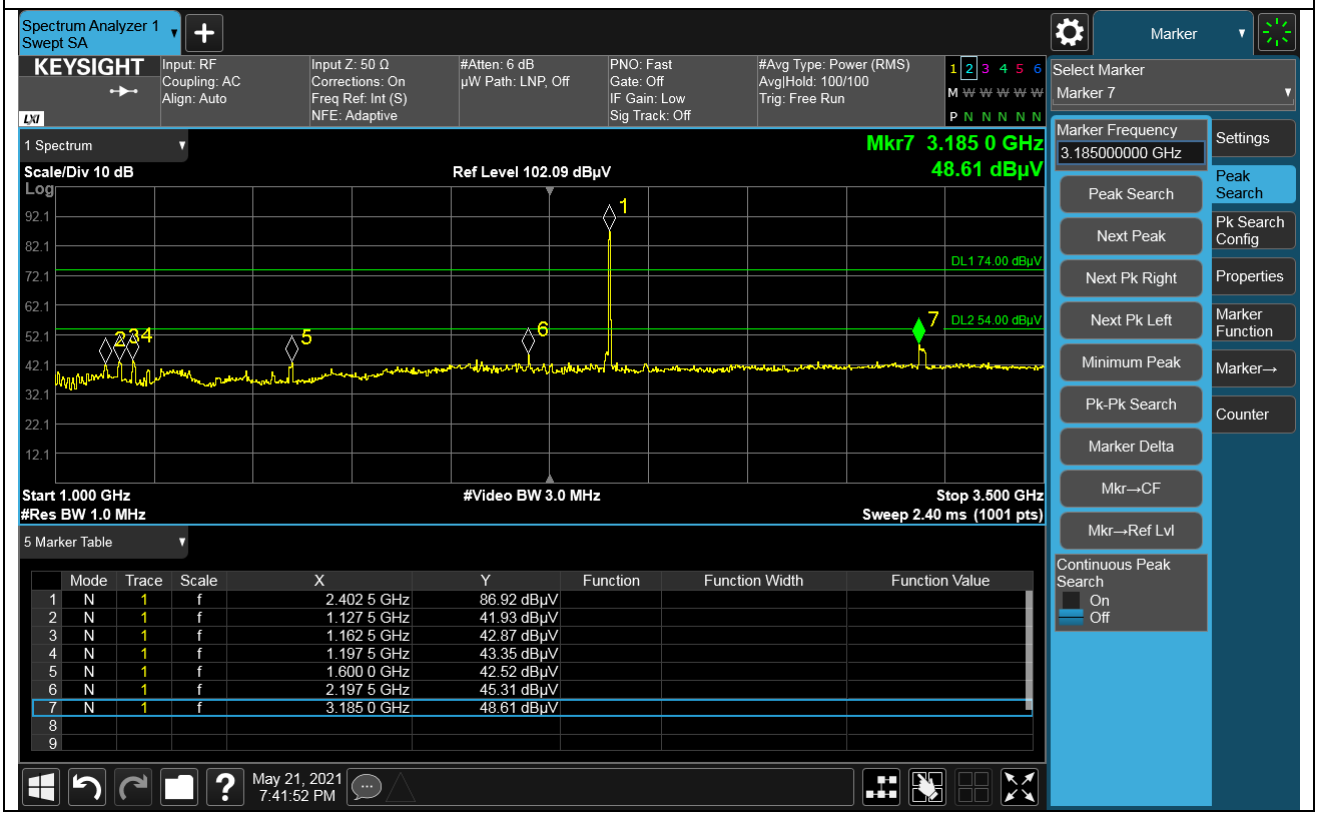


F1 / Low(CH 0) / (AVG) Band Edge(Vertical)

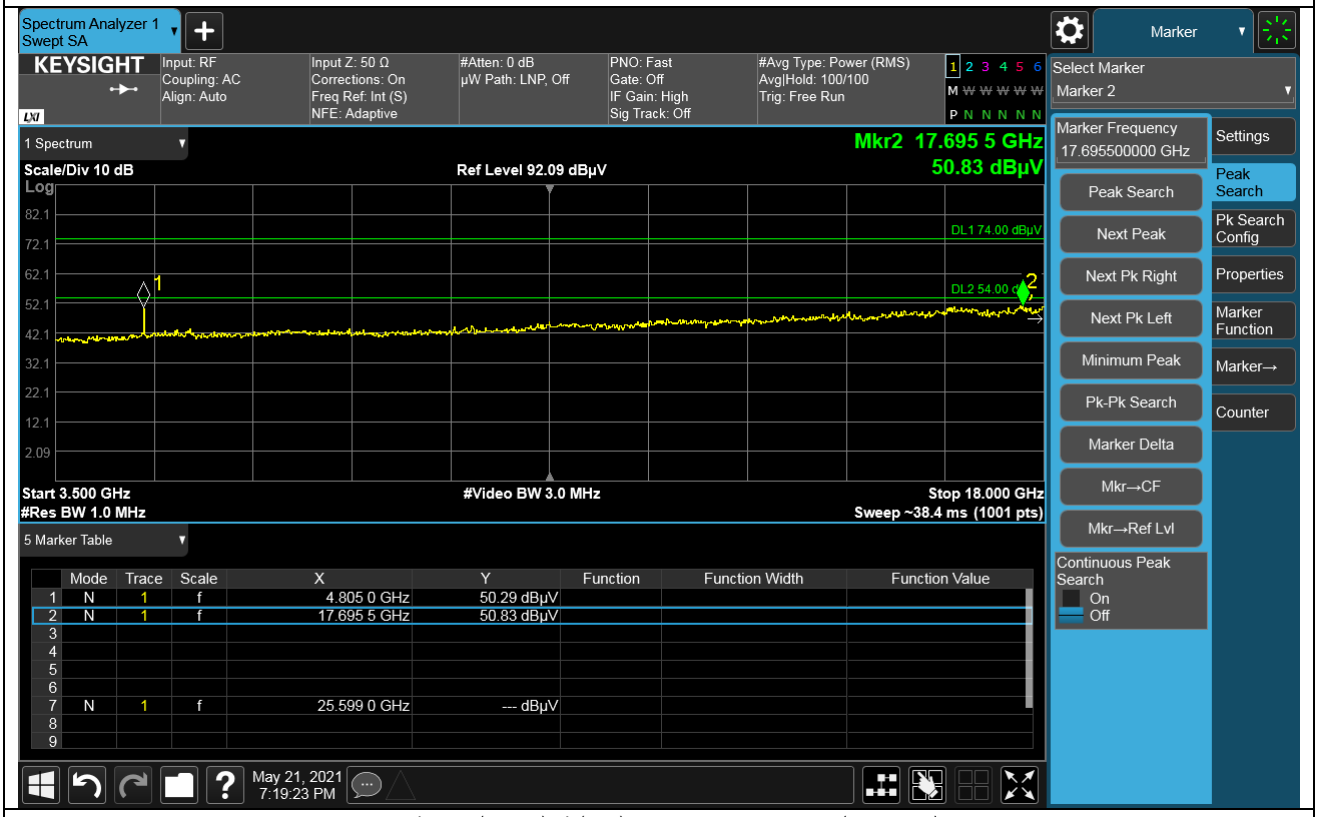
F1 / Low(CH 0) / (PK) 1 GHz ~ 3.5 GHz(Horizontal)



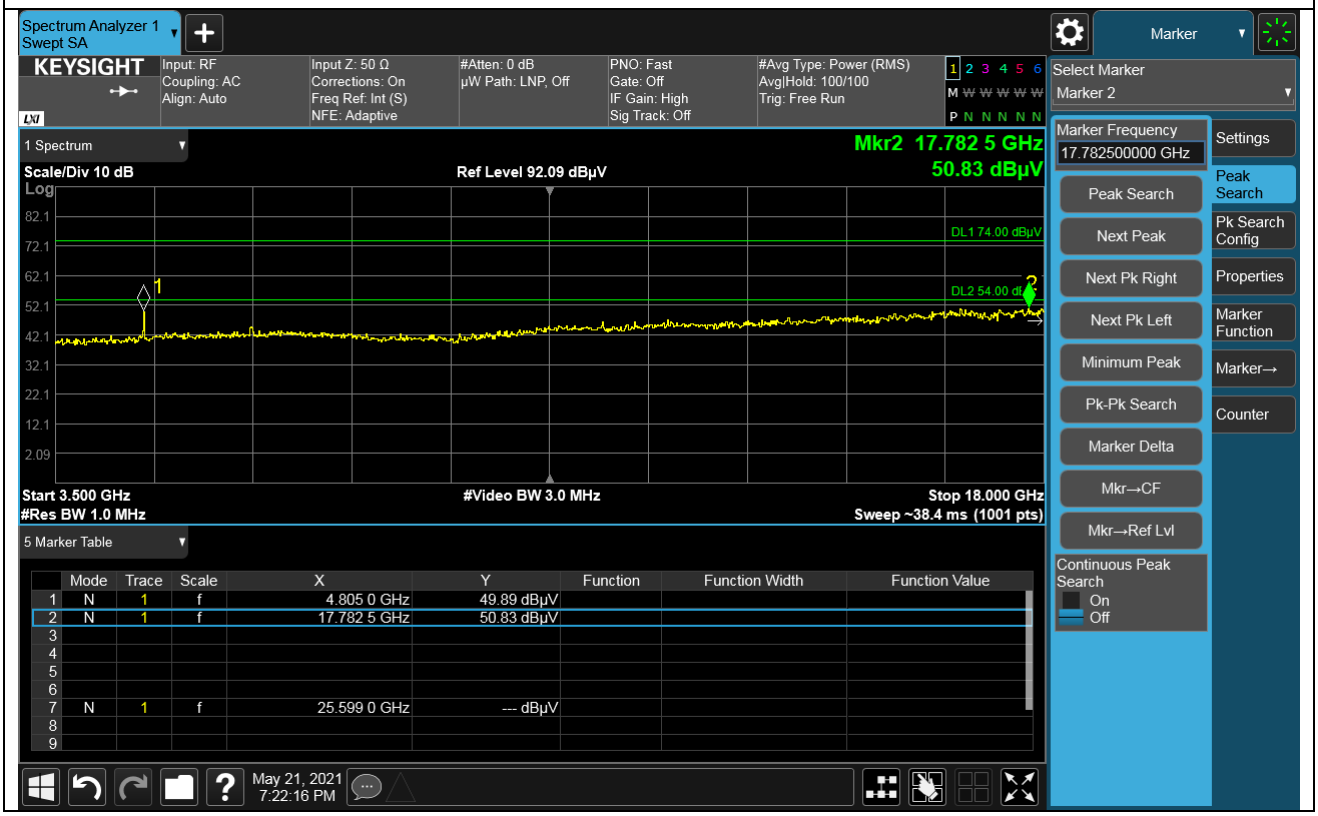
F1 / Low(CH 0) / (PK) 1 GHz ~ 3.5 GHz(Vertical)



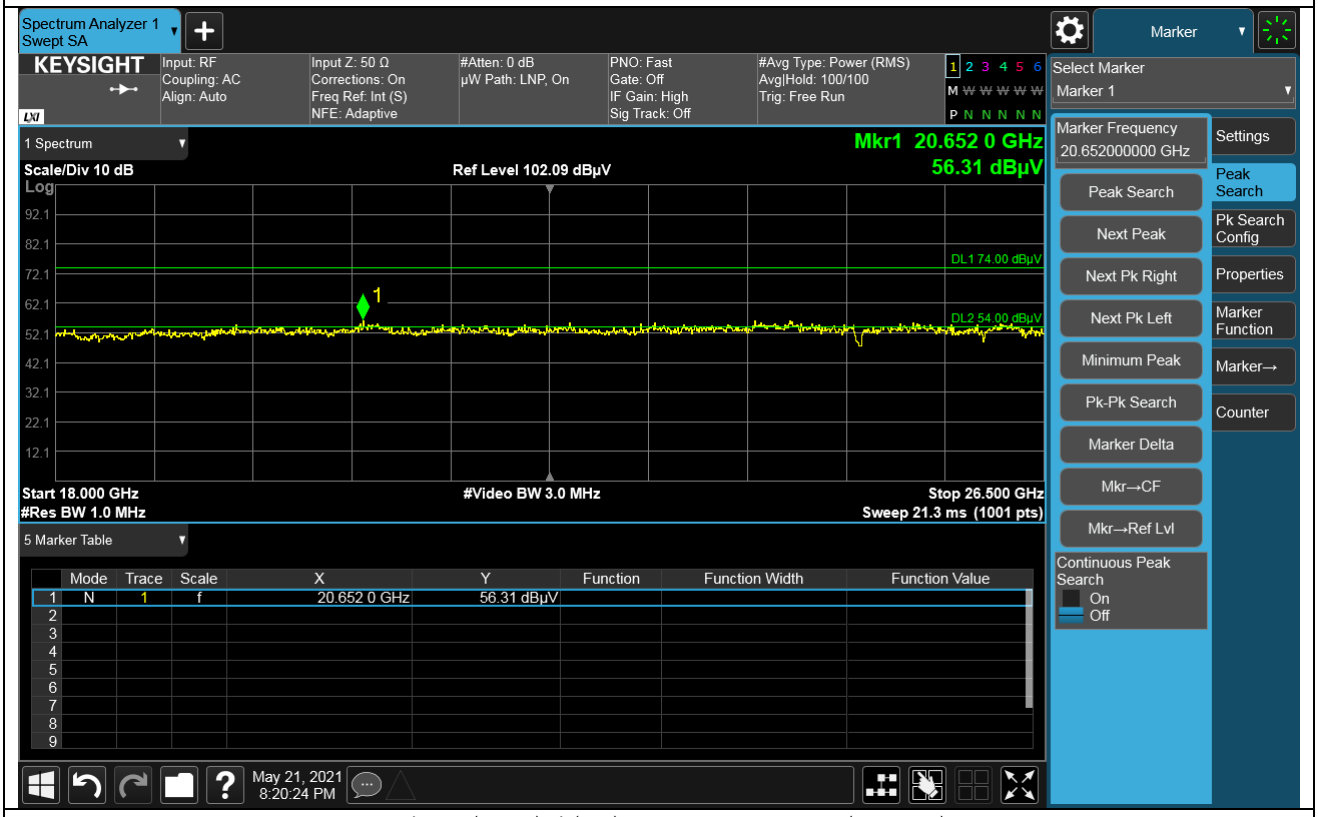
F1 / Low(CH 0) / (PK) 3.5 GHz ~ 18 GHz(Horizontal)



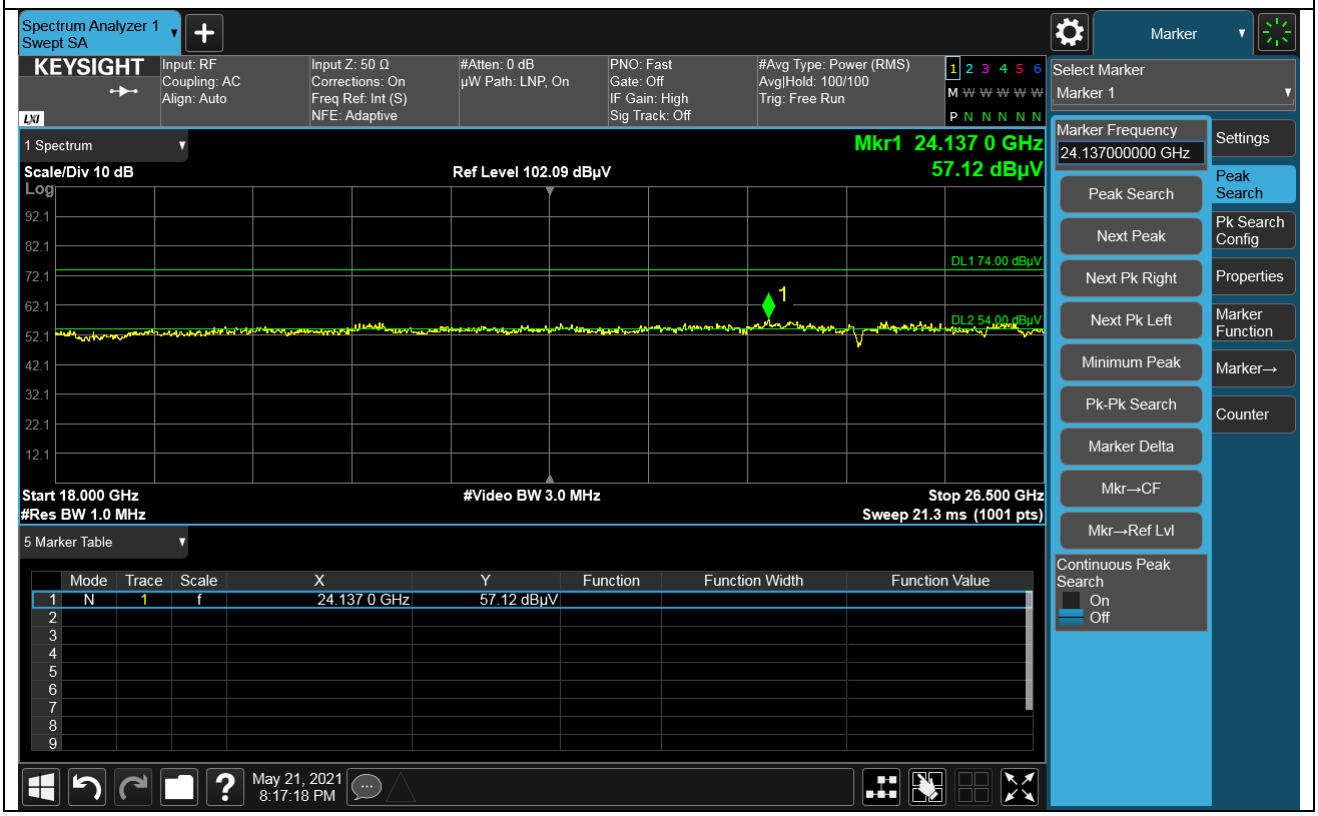
F1 / Low(CH 0) / (PK) 3.5 GHz ~ 18 GHz(Vertical)



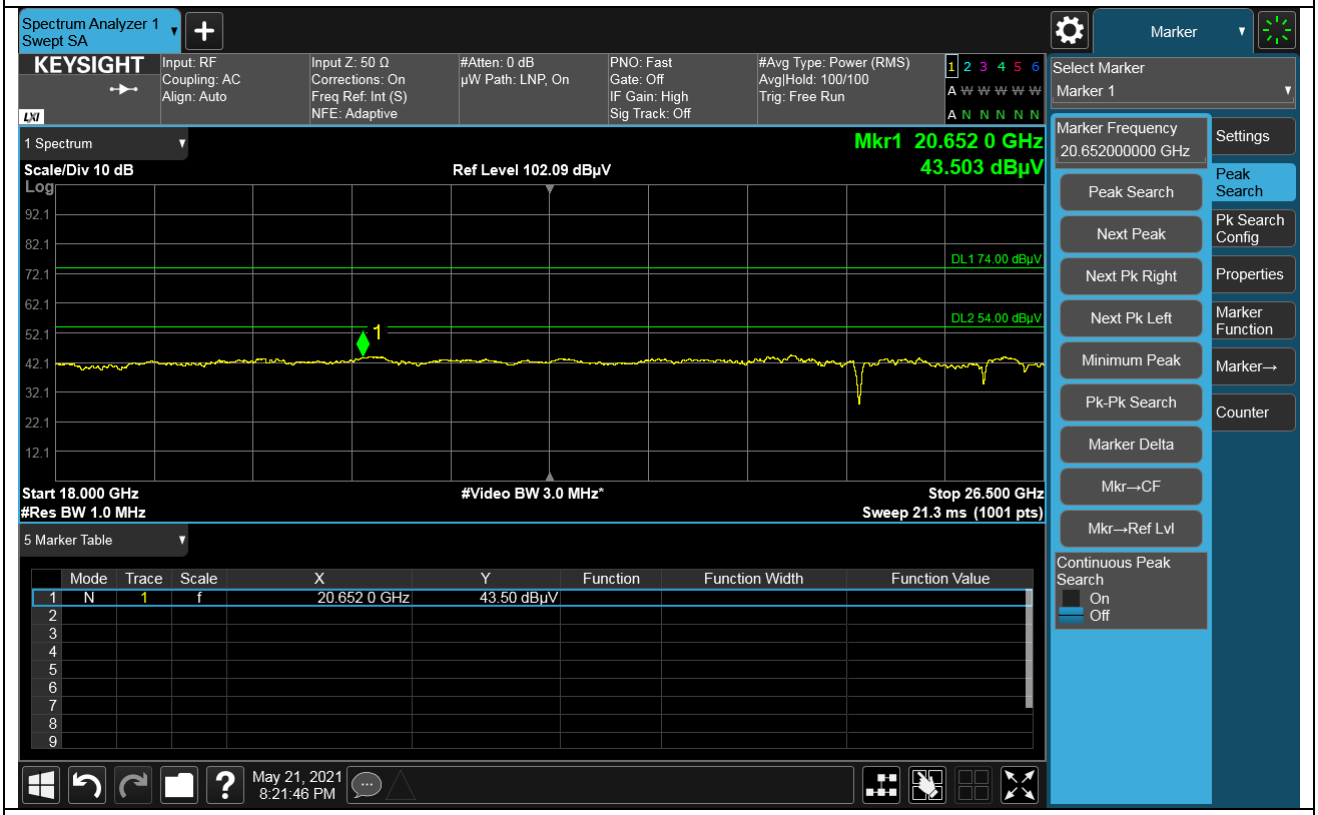
F1 / Low(CH 0) / (PK) 18 GHz ~ 26.5 GHz(Horizontal)



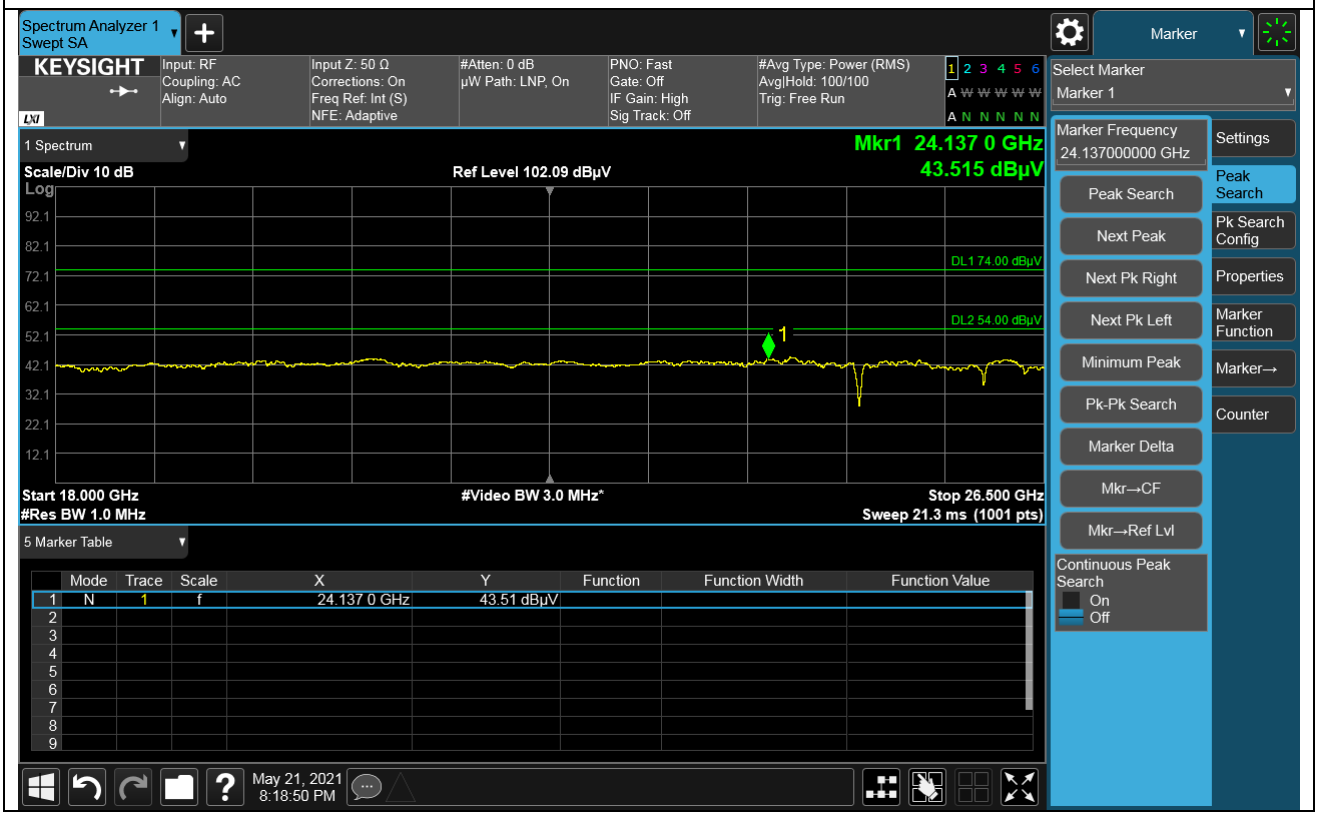
F1 / Low(CH 0) / (PK) 18 GHz ~ 26.5 GHz(Vertical)



F1 / Low(CH 0) / (AVG) 18 GHz ~ 26.5 GHz(Horizontal)



F1 / Low(CH 0) / (AVG) 18 GHz ~ 26.5 GHz(Vertical)



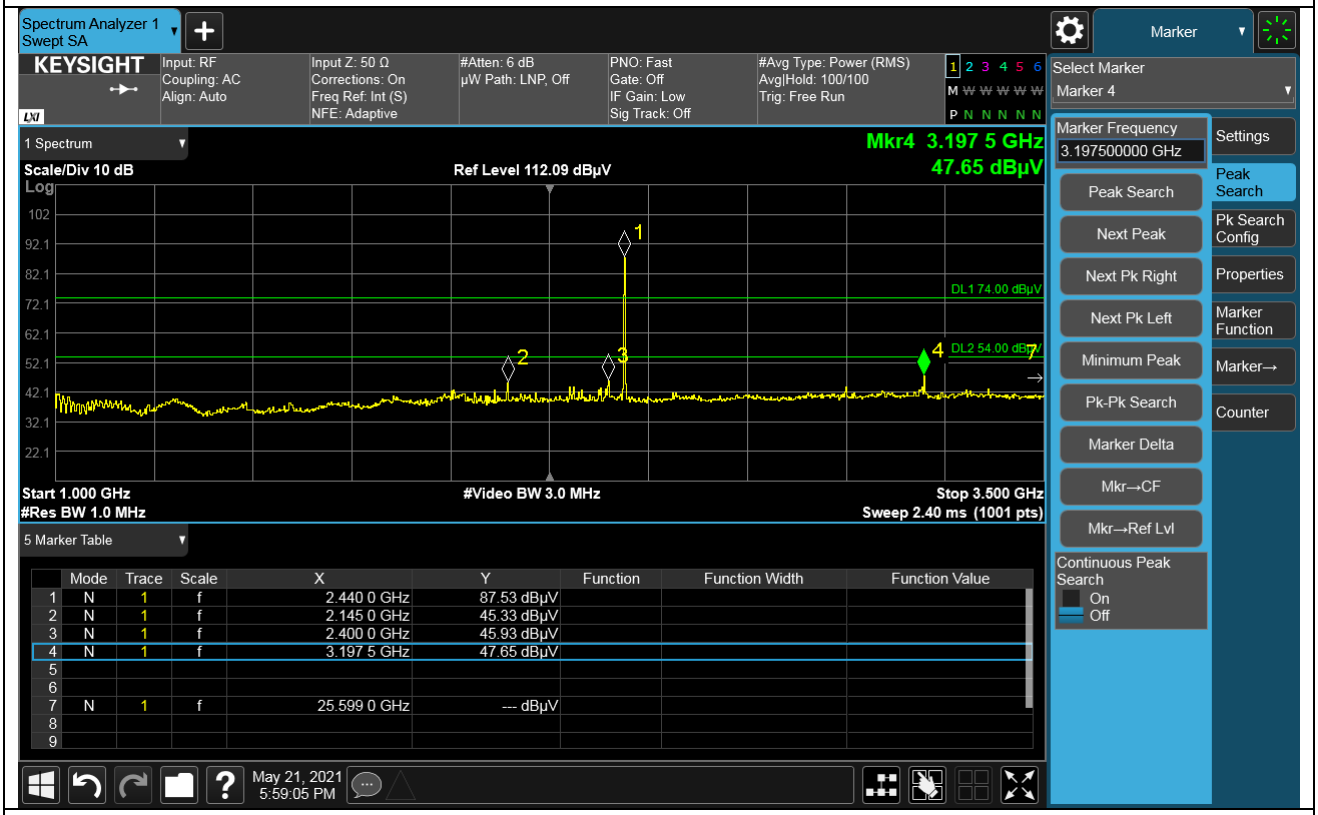
[F2 / Middle(CH 19)]

Radiated emissions			Ant.	Correction factors					Total	Limit	
Frequency	Reading	Detect	Pol.	AF	CL	Amp	F_d	DF	Final Result	Limit	Margin
MHz	dBµV	PK/AV	H/V	dB/m	dB	dB	dB	dB	dBµV/m	dBµV/m	dB
3 187.50	53.11	PK	V	33.10	3.64	42.95	1.94	–	46.90	74.00	27.10
3 197.50	53.86	PK	H	33.10	3.64	42.95		–	47.65	74.00	26.35
*4 877.50	50.75	PK	H	34.20	5.73	41.54		–	49.14	74.00	24.86
*4 877.50	49.19	PK	V	34.20	5.73	41.54		–	47.58	74.00	26.42
24 324.00	31.42	PK	V	45.90	14.76	35.30		–	56.78	74.00	17.22
24 324.00	18.86	AV	V	45.90	14.76	35.30		2.08	46.30	54.00	7.70
25 361.00	31.68	PK	H	46.00	14.33	35.30		–	56.71	74.00	17.29
25 361.00	17.49	AV	H	46.00	14.33	35.30		2.08	44.60	54.00	9.40

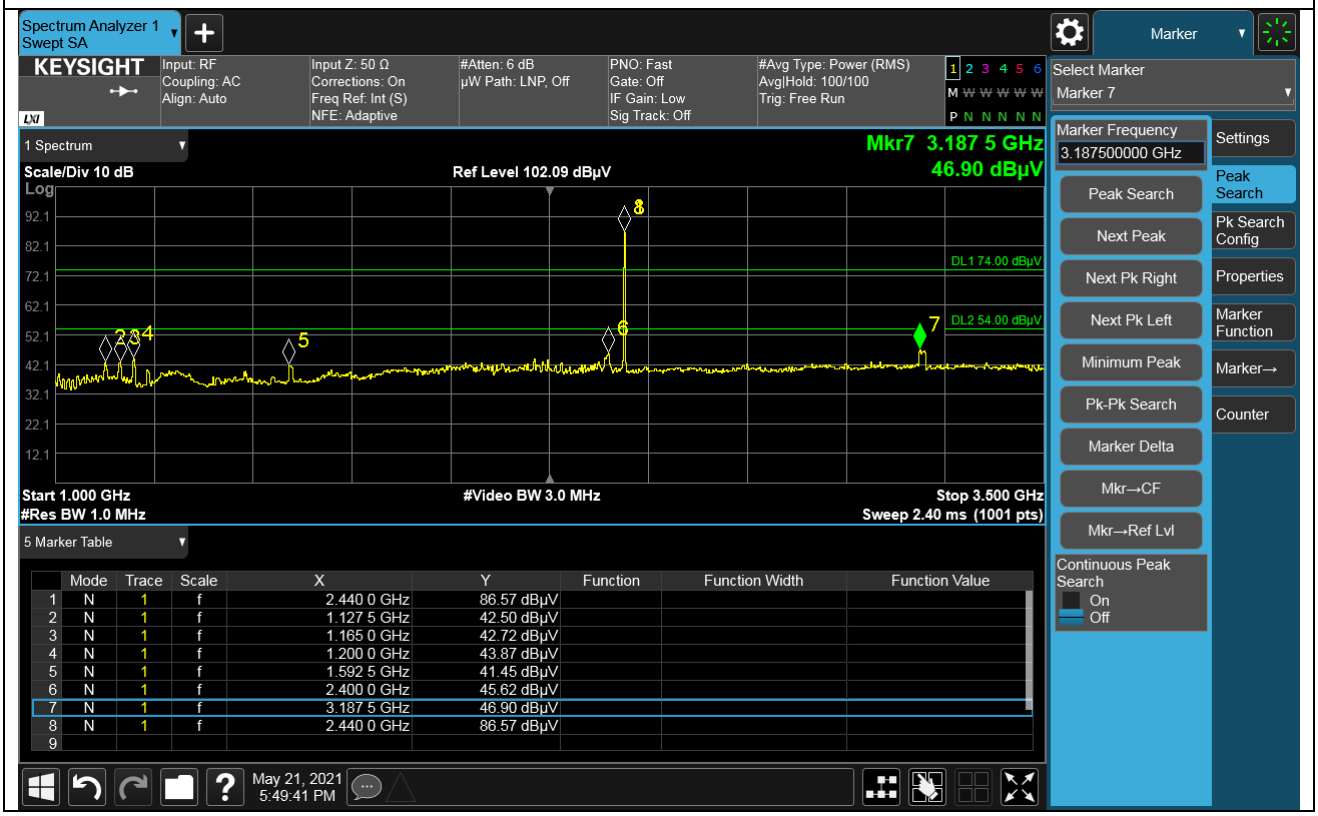
Note :

1. "*" means the restricted band.
2. According to § 15.31(o), emissions level are not reported much lower than the limit by over 20 dB
3. If the peak-detected amplitude can be shown to comply with the average limit, then it is not necessary to perform a separate average measurement.
4. Frequency 〈 30 MHz, extrapolation factor of 40 dB/decade of distance $F_d = 40\log(D_m/D_s)$
   * 0.009 MHz – 0.490 MHz : 40log(3 m/300 m) = −80 dB, 0.490 MHz – 30 MHz : 40log(3 m/30 m) = −40 dB
5. Frequency > 30 MHz, extrapolation factor of 20 dB/decade of distance $F_d = 20\log(D_m/D_s)$
   * Above 1 GHz : 20log(3.75 m/3 m) = 1.94 dB
   * F_d = Distance Factor, D_m = Measurement Distance(m), D_s = Specification Distance(m)
6. Detect : Detector, Pol : Polarization, AF : Antenna Factor, CL : Cable Loss, Amp : Preamp Gain
   DF : Duty Cycle Factor
7. Final Result(dBµV/m) = Reading(dBµV) + AF(dB/m) + CL(dB) − Amp(dB) + F_d(dB) + DF(dB)
8. Test plot data does not contain DF for average detector.
   Test plot data = Reading(dBµV) + AF(dB/m) + CL(dB) − Amp(dB) + F_d(dB)

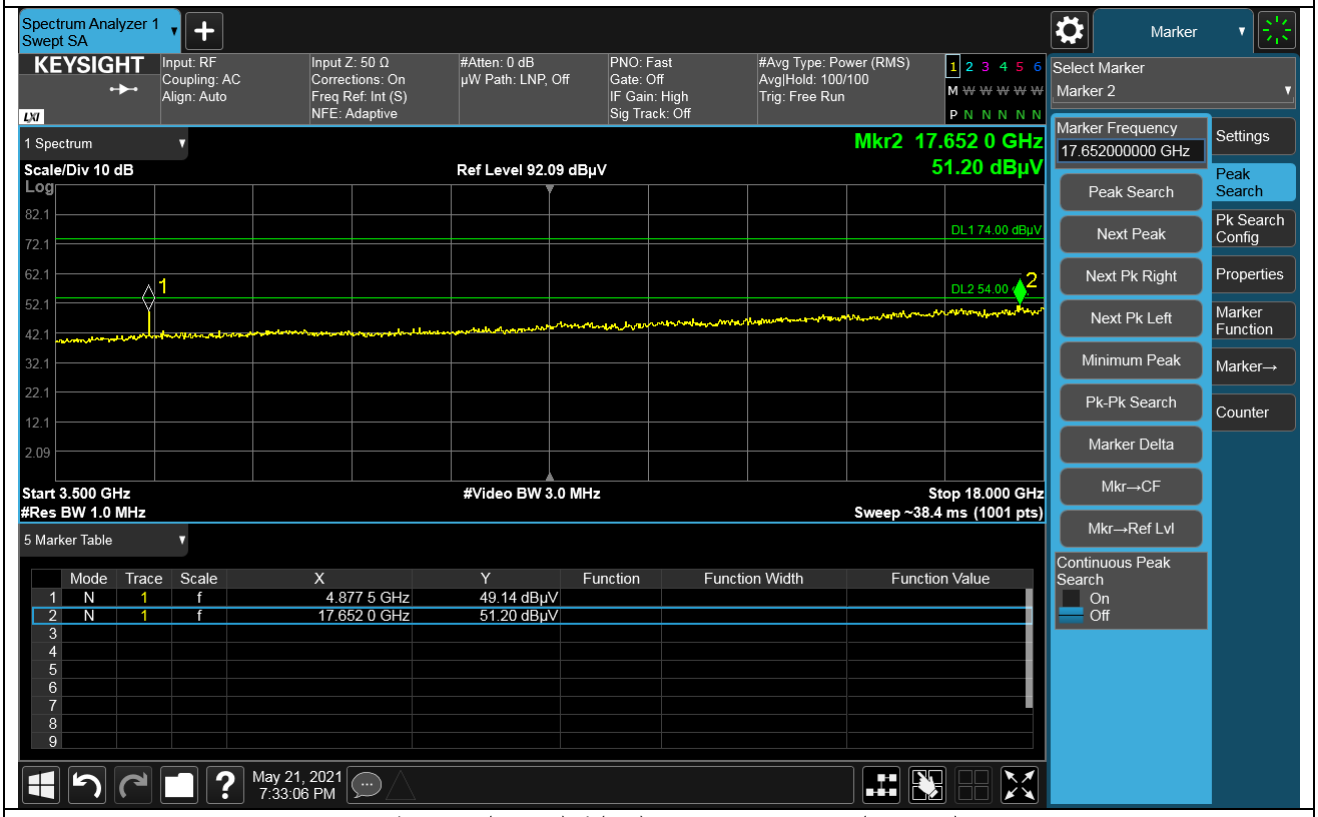
F2 / Middle(CH 19) / (PK) 1 GHz ~ 3.5 GHz(Horizontal)



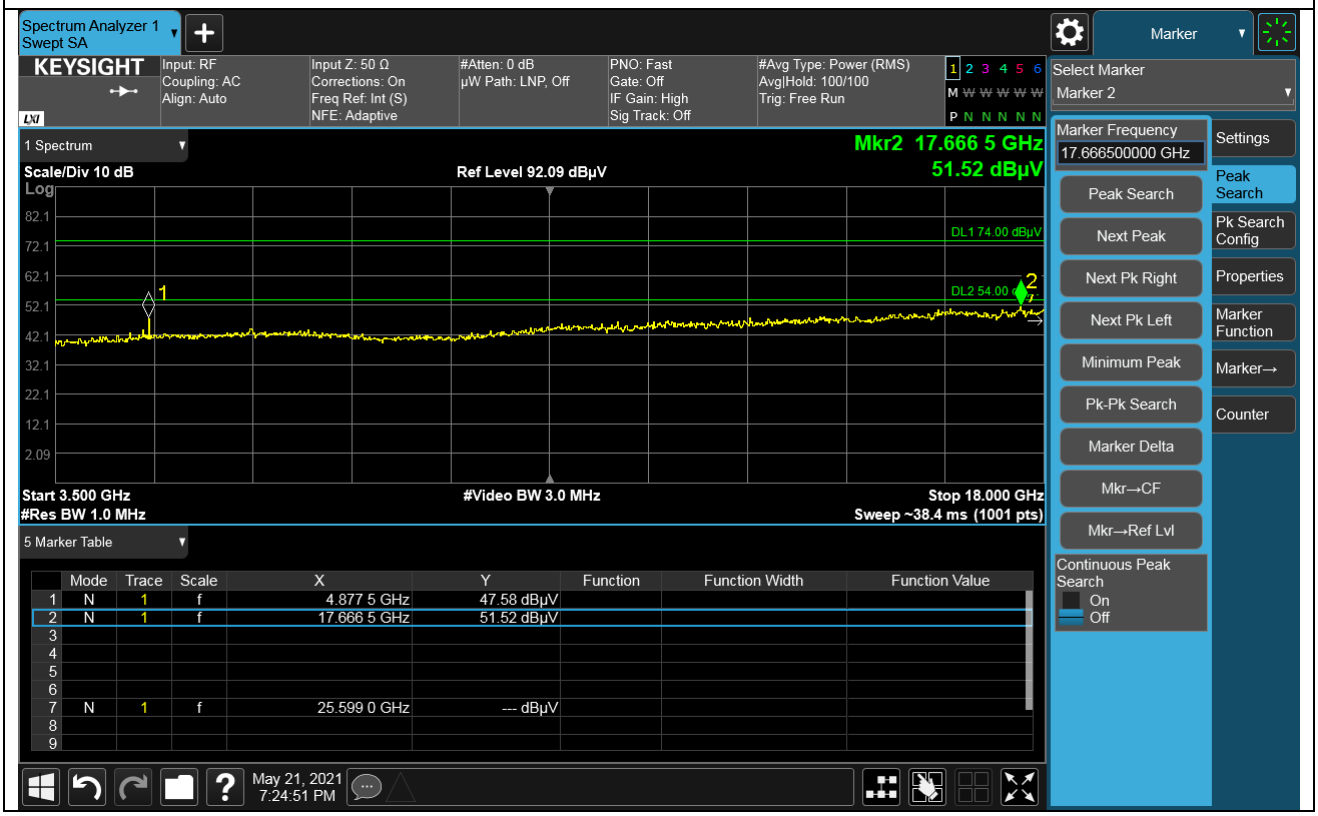
F2 / Middle(CH 19) / (PK) 1 GHz ~ 3.5 GHz(Vertical)



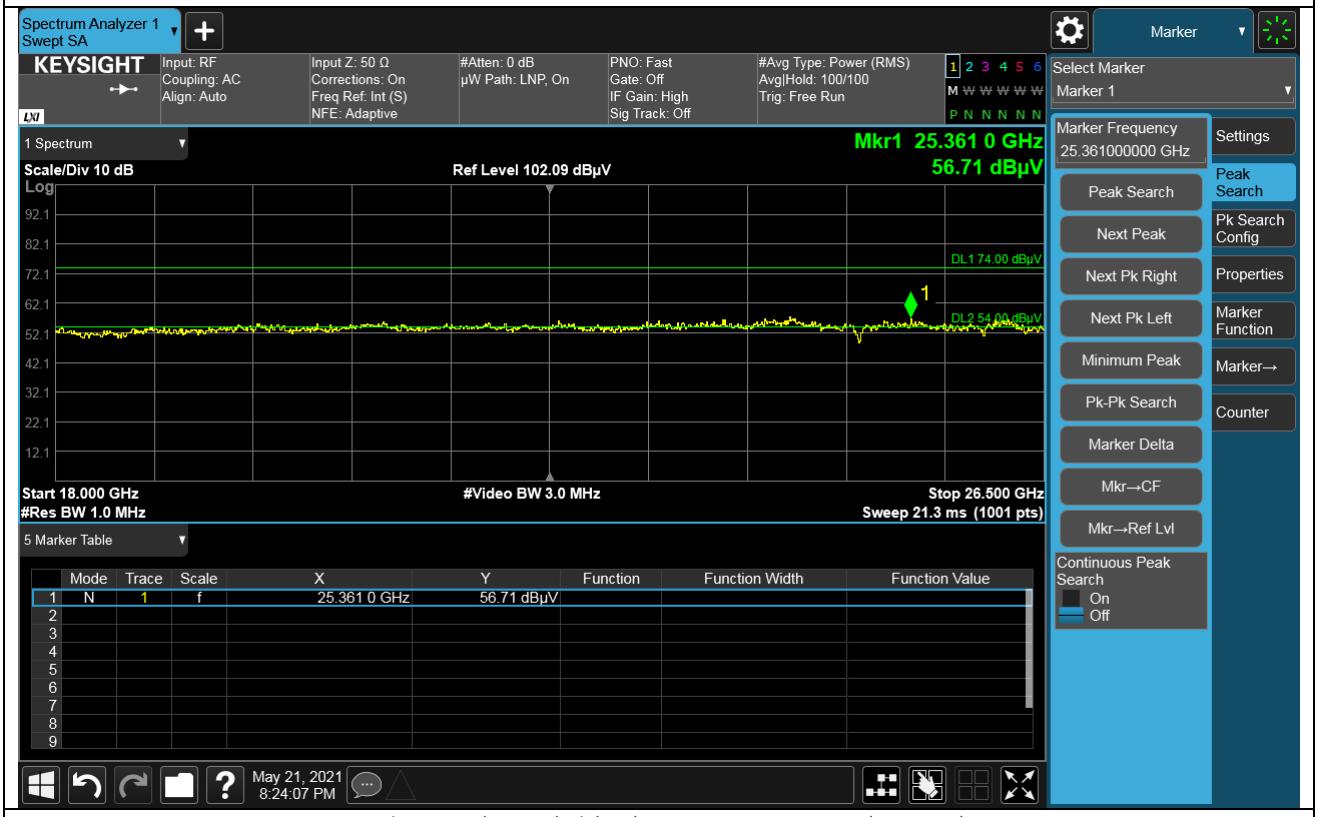
F2 / Middle(CH 19) / (PK) 3.5 GHz ~ 18 GHz(Horizontal)



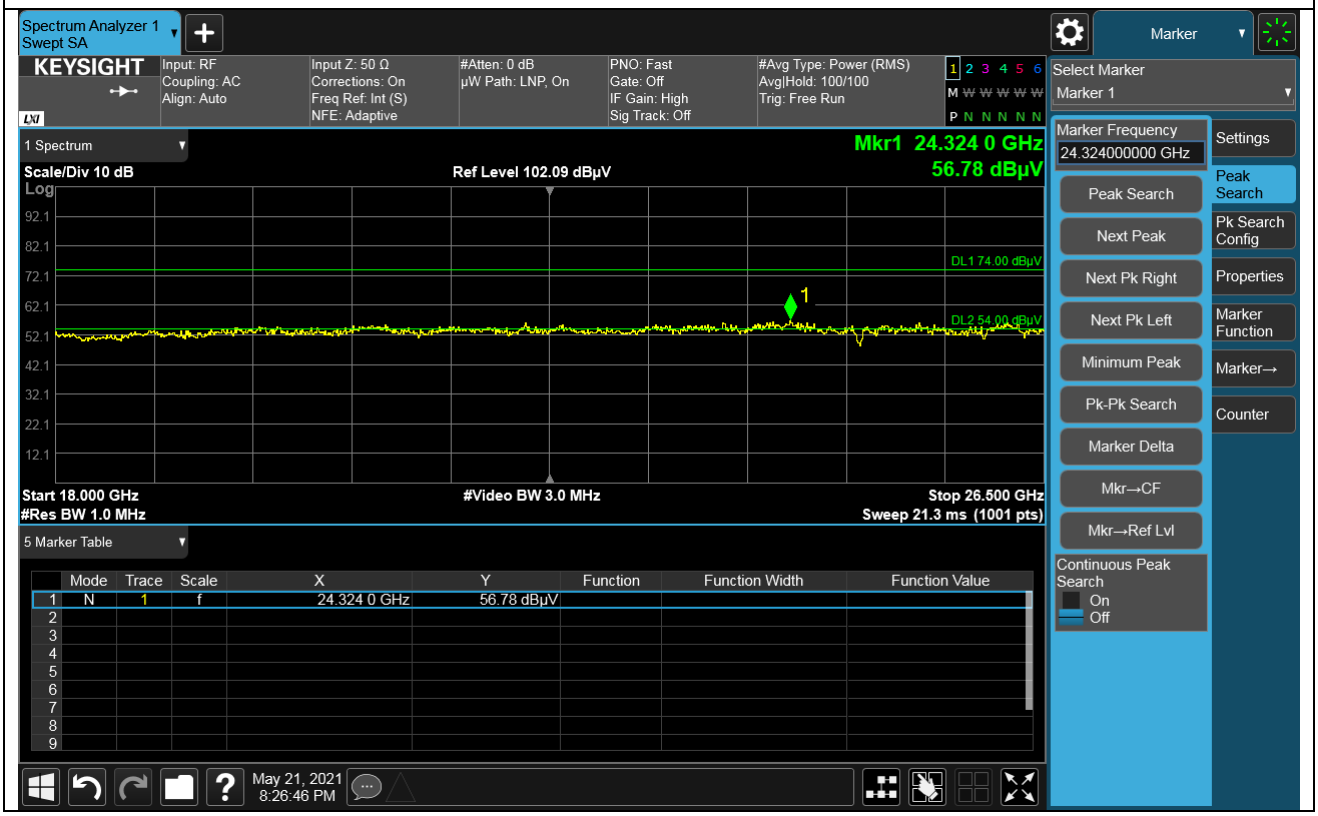
F2 / Middle(CH 19) / (PK) 3.5 GHz ~ 18 GHz(Vertical)



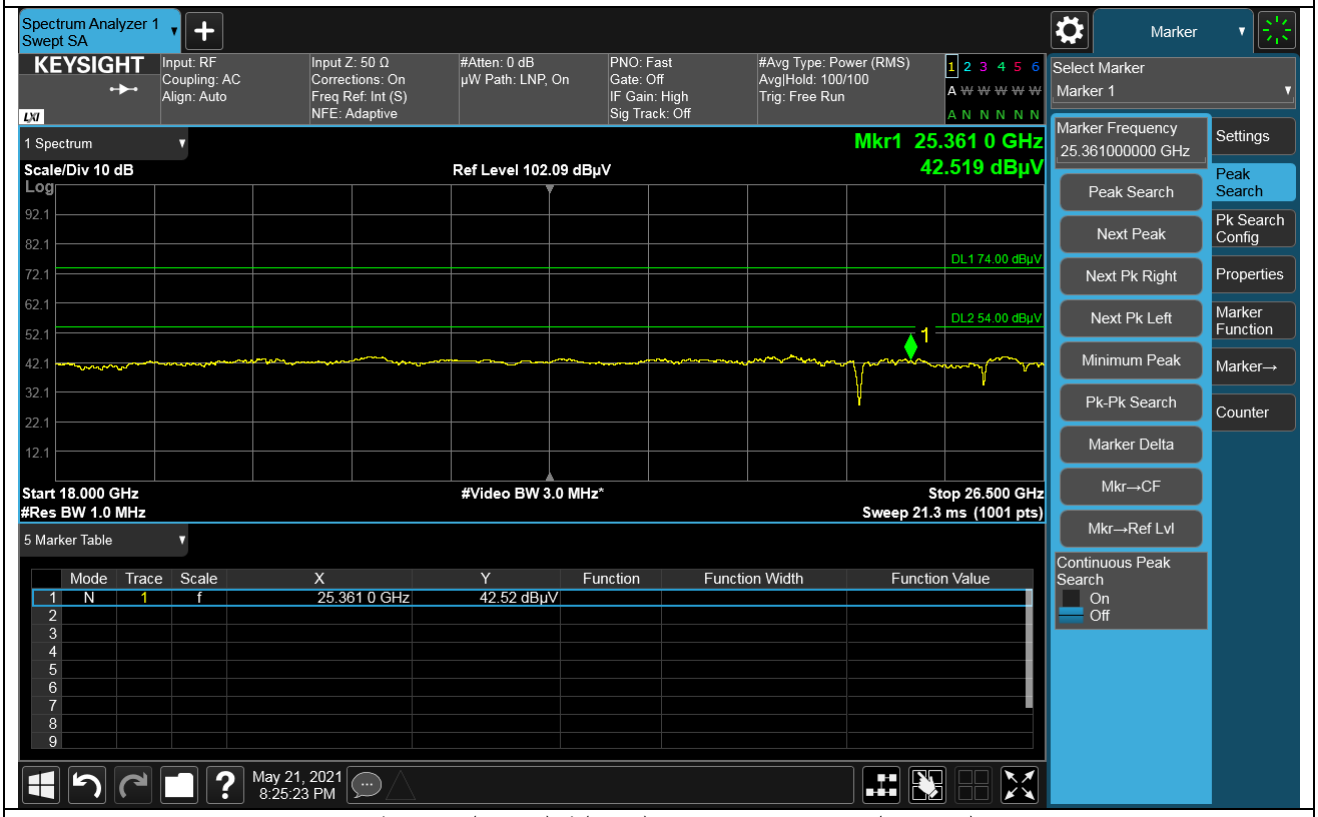
F2 / Middle(CH 19) / (PK) 18 GHz ~ 26.5 GHz(Horizontal)



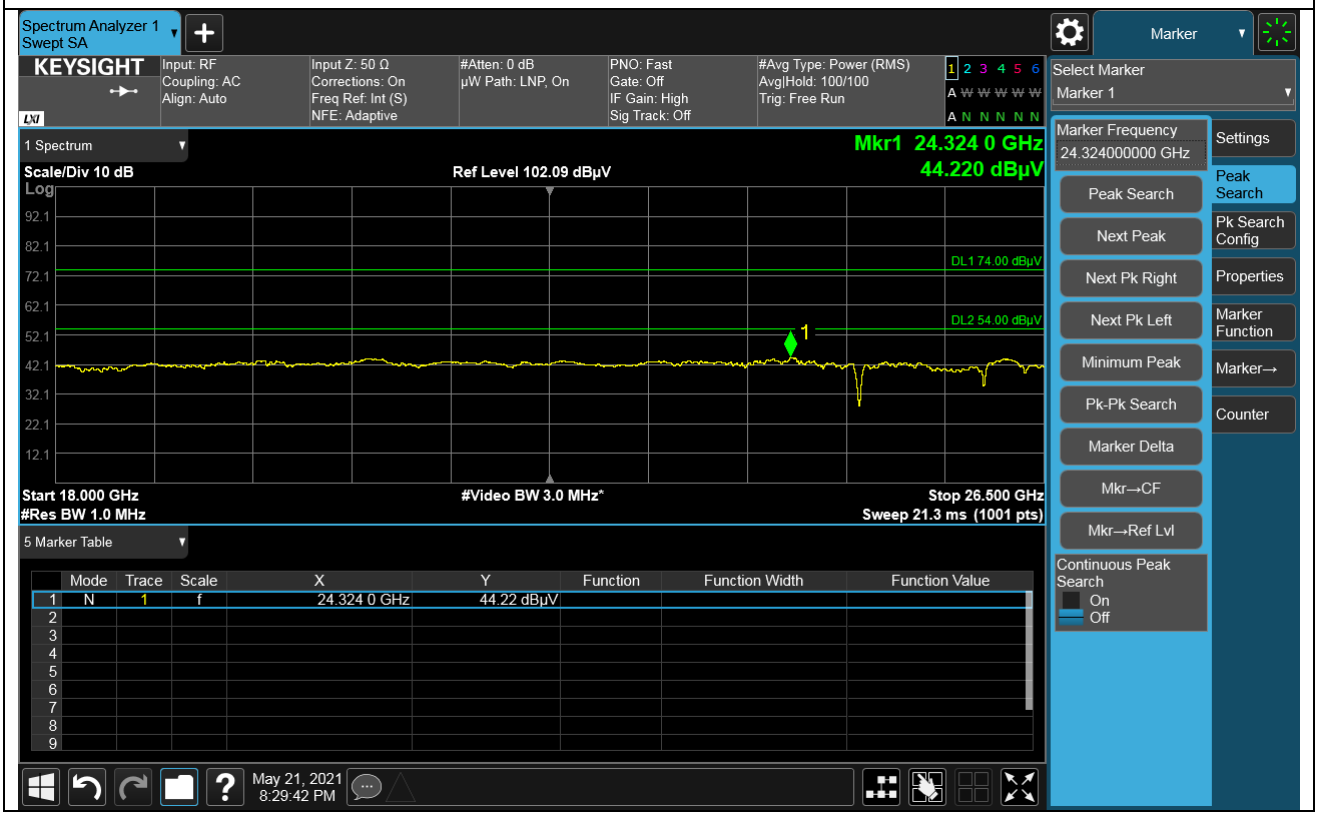
F2 / Middle(CH 19) / (PK) 18 GHz ~ 26.5 GHz(Vertical)



F2 / Middle(CH 19) / (AVG) 18 GHz ~ 26.5 GHz(Horizontal)



F2 / Middle(CH 19) / (AVG) 18 GHz ~ 26.5 GHz(Vertical)



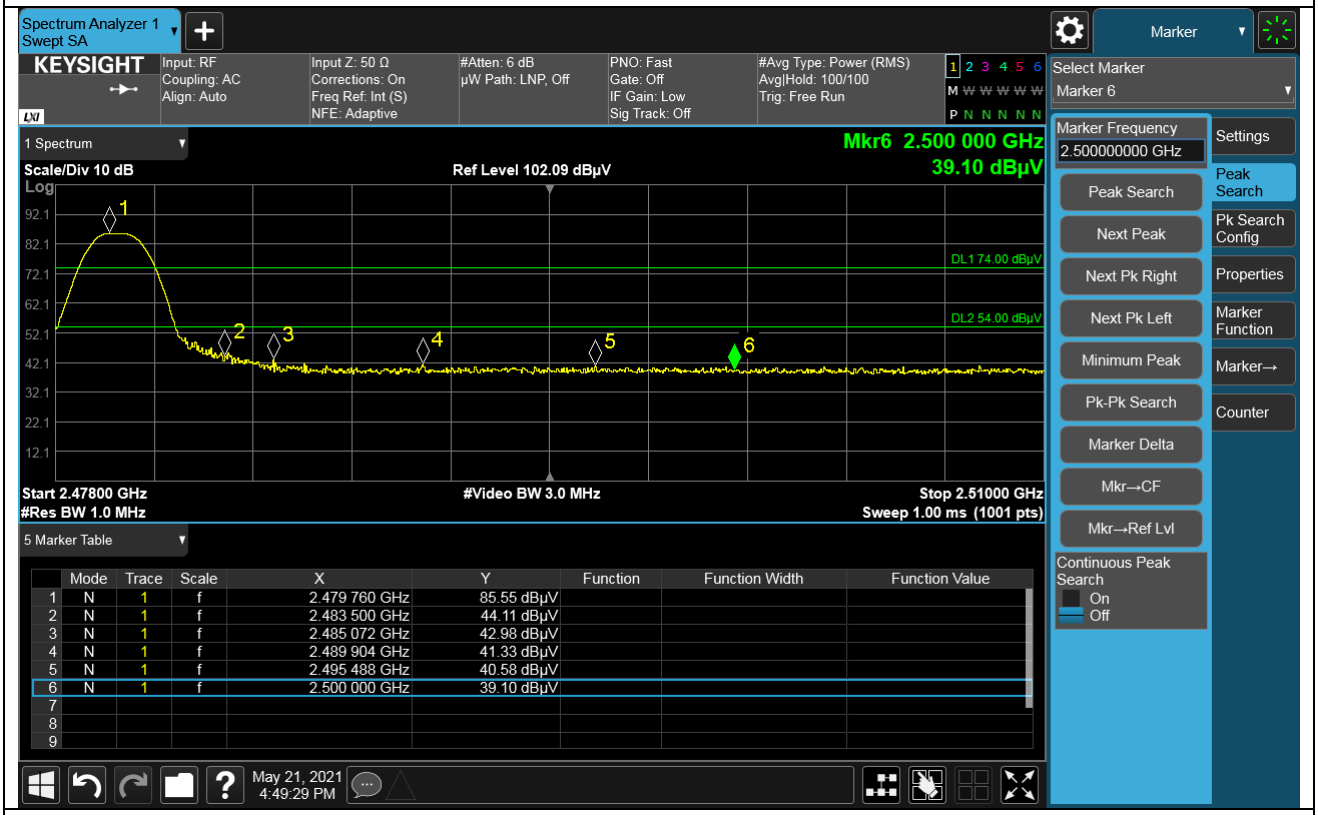
[F3 / High(CH 39)]

Radiated emissions			Ant.	Correction factors					Total	Limit	
Frequency	Reading	Detect	Pol.	AF	CL	Amp	F_d	DF	Final Result	Limit	Margin
MHz	dBμV	PK/AV	H/V	dB/m	dB	dB	dB	dB	dBμV/m	dBμV/m	dB
1 287.50	56.15	PK	V	29.40	2.16	43.95		–	43.76	74.00	30.24
*1 592.50	56.13	PK	V	28.00	2.16	43.88		–	42.41	74.00	31.59
2 167.50	52.83	PK	V	31.30	3.17	43.65		–	43.65	74.00	30.35
*2 483.50	52.23	PK	H	32.20	3.30	43.62		–	44.11	74.00	29.89
*2 483.50	50.87	PK	V	32.20	3.30	43.62		–	42.75	74.00	31.25
3 190.00	55.14	PK	H	33.10	3.64	42.95		–	48.93	74.00	25.07
3 200.00	53.20	PK	V	33.10	3.64	42.95		–	46.99	74.00	27.01
*3 674.00	48.95	PK	V	33.00	4.14	42.60		–	43.49	74.00	30.51
*4 964.50	50.02	PK	H	34.30	5.75	41.54	1.94	–	48.53	74.00	25.47
*4 964.50	49.88	PK	H	34.30	5.75	41.54		–	48.39	74.00	25.61
*15 825.00	38.80	PK	H	40.50	10.08	38.98		–	50.40	74.00	23.60
16 782.00	38.42	PK	V	41.90	10.45	39.81		–	50.96	74.00	23.04
17 391.00	39.48	PK	H	41.00	11.01	40.32		–	51.17	74.00	22.83
24 332.50	42.70	PK	H	45.90	14.93	45.90		–	57.63	74.00	16.37
24 332.50	29.78	AV	H	45.90	14.93	45.90		2.08	46.79	54.00	7.21
26 177.00	42.77	PK	V	46.20	14.03	46.30		–	56.70	74.00	17.30
26 177.00	30.13	AV	V	46.20	14.03	46.30		2.08	46.14	54.00	7.86

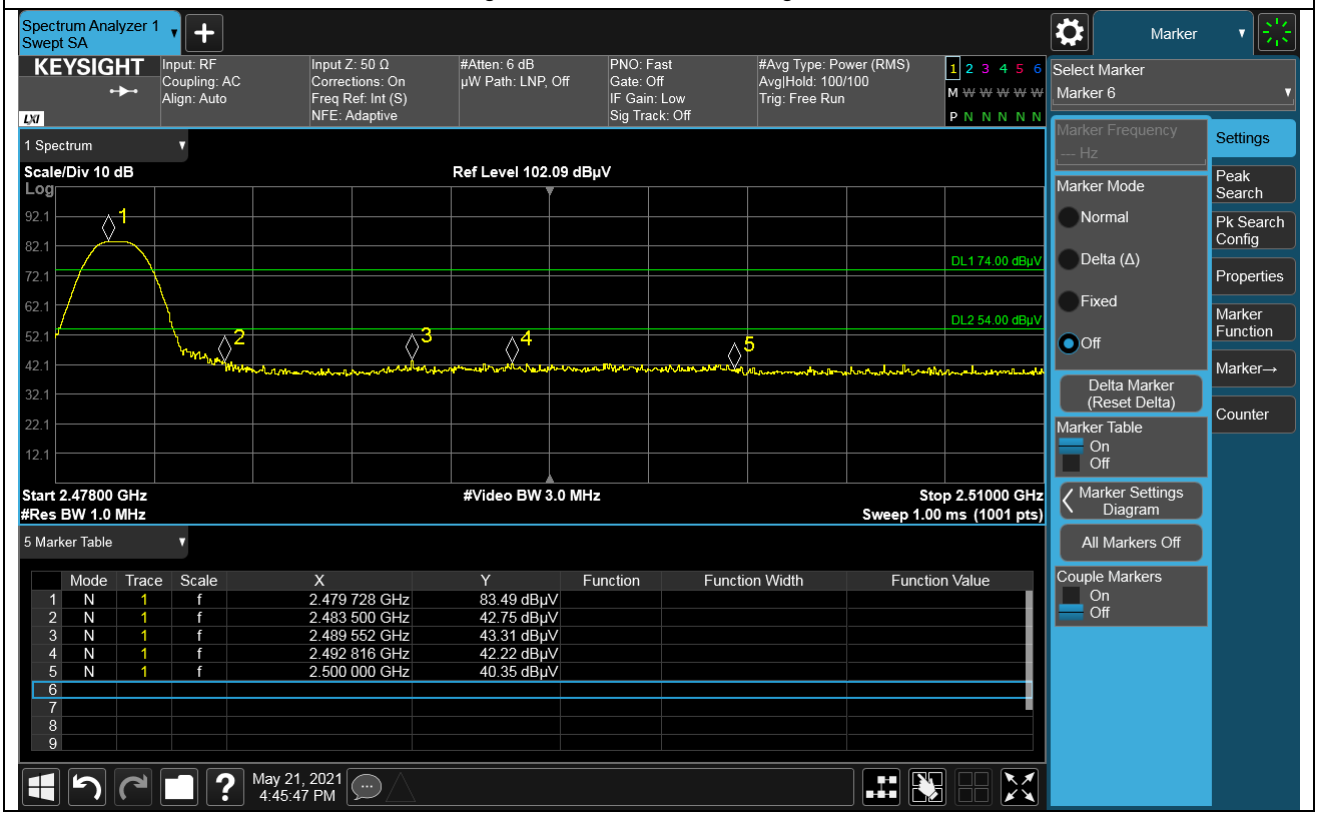
Note :

1. "*" means the restricted band.
2. According to § 15.31(o), emissions level are not reported much lower than the limit by over 20 dB
3. If the peak-detected amplitude can be shown to comply with the average limit, then it is not necessary to perform a separate average measurement.
4. Frequency 〈 30 MHz, extrapolation factor of 40 dB/decade of distance $F_d = 40\log(D_m/D_s)$
   * 0.009 MHz – 0.490 MHz : 40log(3 m/300 m) = −80 dB, 0.490 MHz – 30 MHz : 40log(3 m/30 m) = −40 dB
5. Frequency > 30 MHz, extrapolation factor of 20 dB/decade of distance $F_d = 20\log(D_m/D_s)$
   * Above 1 GHz : 20log(3.75 m/3 m) = 1.94 dB
   * F_d = Distance Factor, D_m = Measurement Distance(m), D_s = Specification Distance(m)
6. Detect : Detector, Pol : Polarization, AF : Antenna Factor, CL : Cable Loss, Amp : Preamp Gain
   DF : Duty Cycle Factor
7. Final Result(dBμV/m) = Reading(dBμV) + AF(dB/m) + CL(dB) − Amp(dB) + F_d(dB) + DF(dB)
8. Test plot data does not contain DF for average detector.
   Test plot data = Reading(dBμV) + AF(dB/m) + CL(dB) − Amp(dB) + F_d(dB)

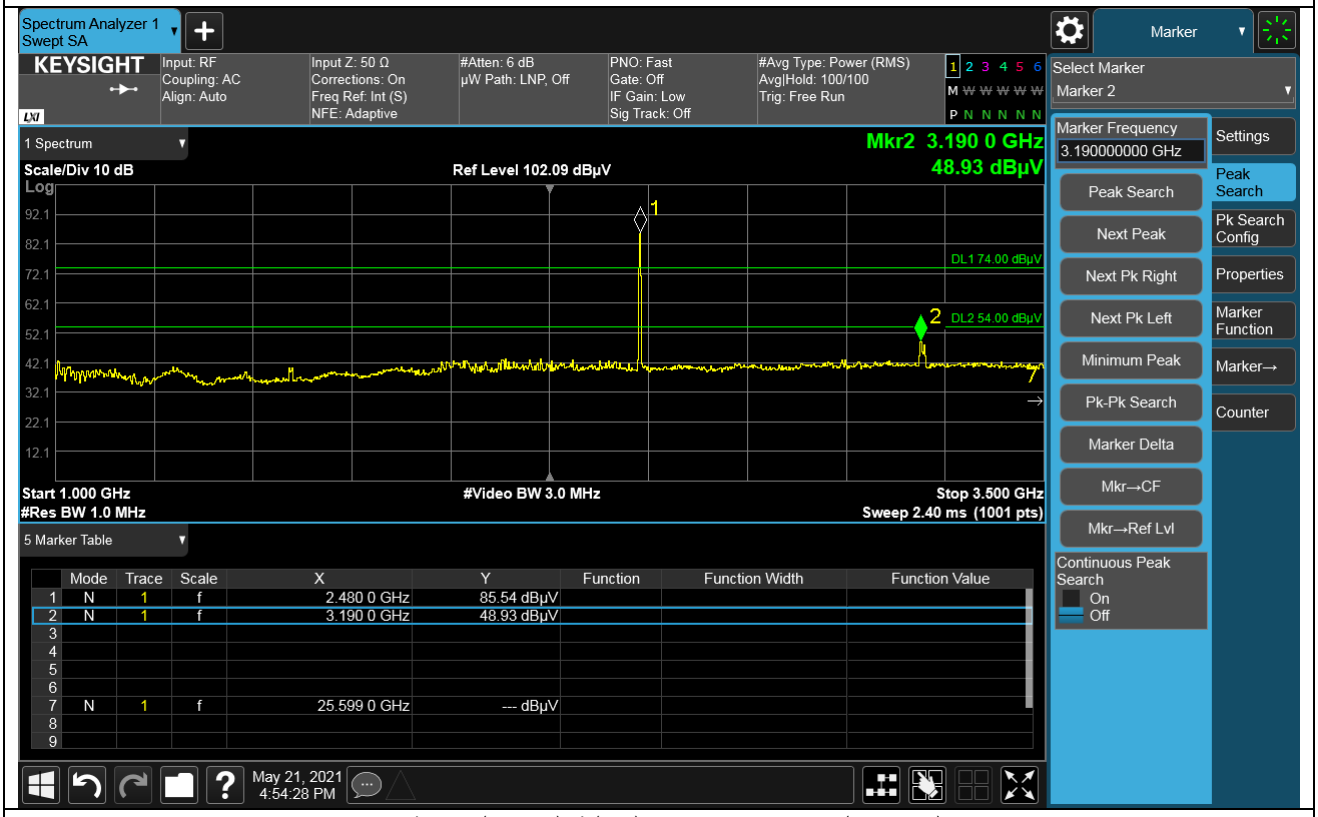
F3 / High(CH 39) / (PK) Band Edge(Horizontal)



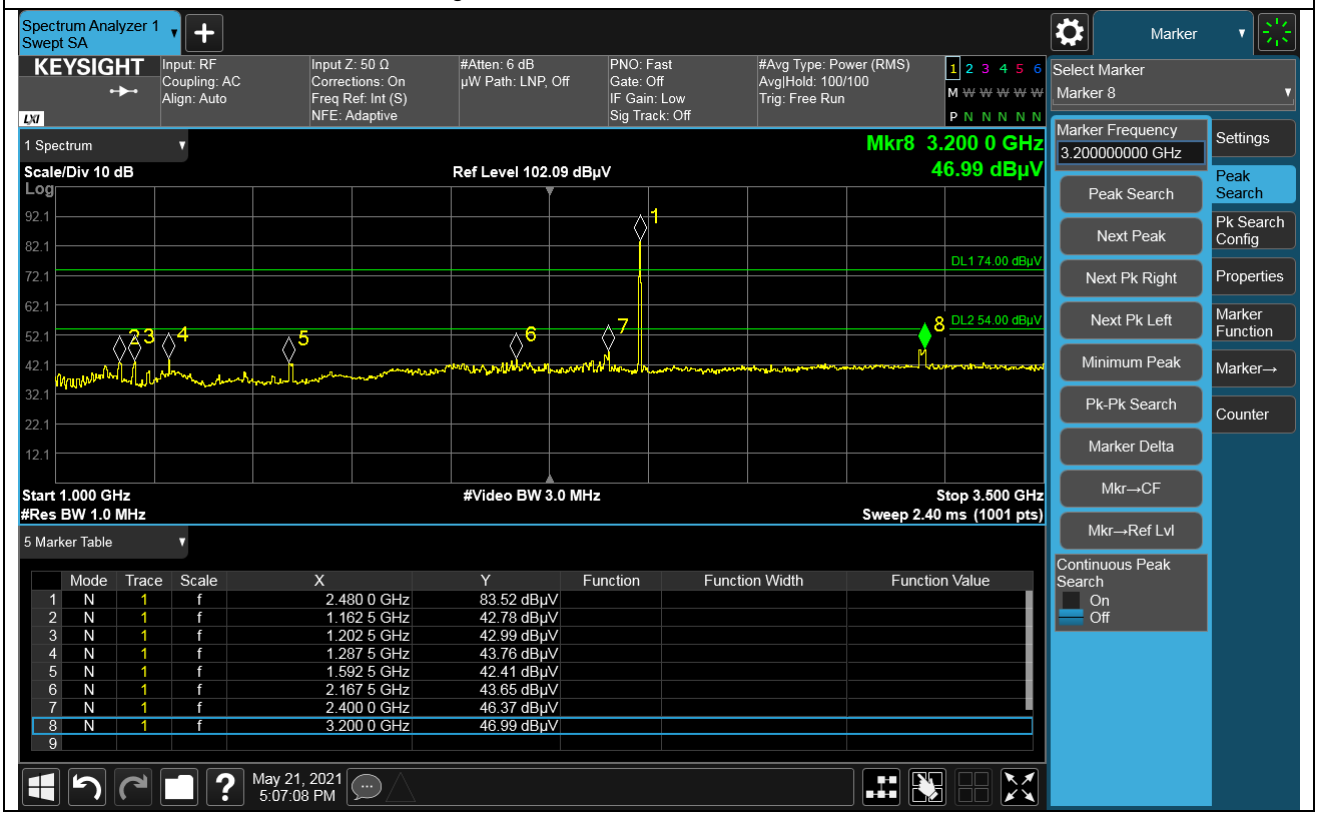
F3 / High(CH 39) / (PK) Band Edge(Vertical)



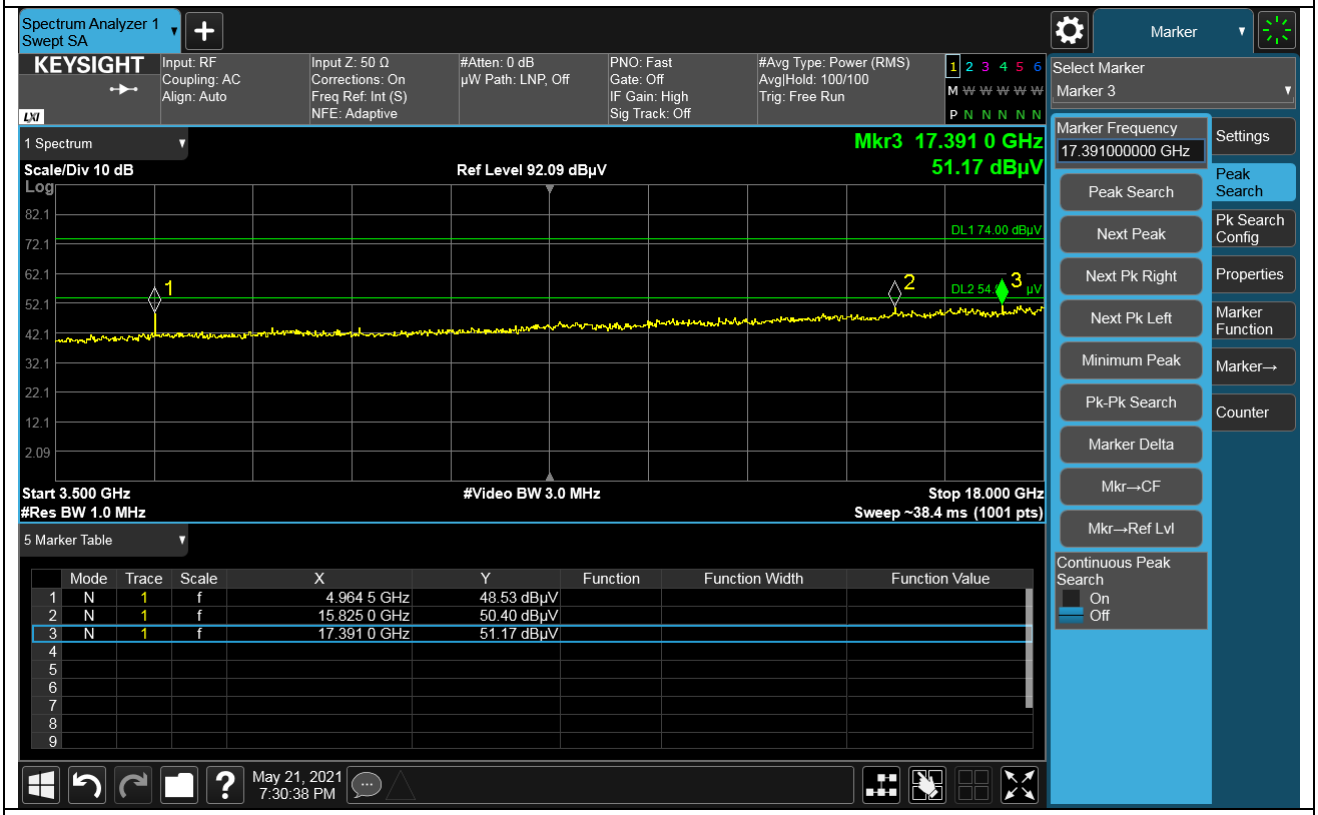
F3 / High(CH 39) / (PK) 1 GHz ~ 3.5 GHz(Horizontal)



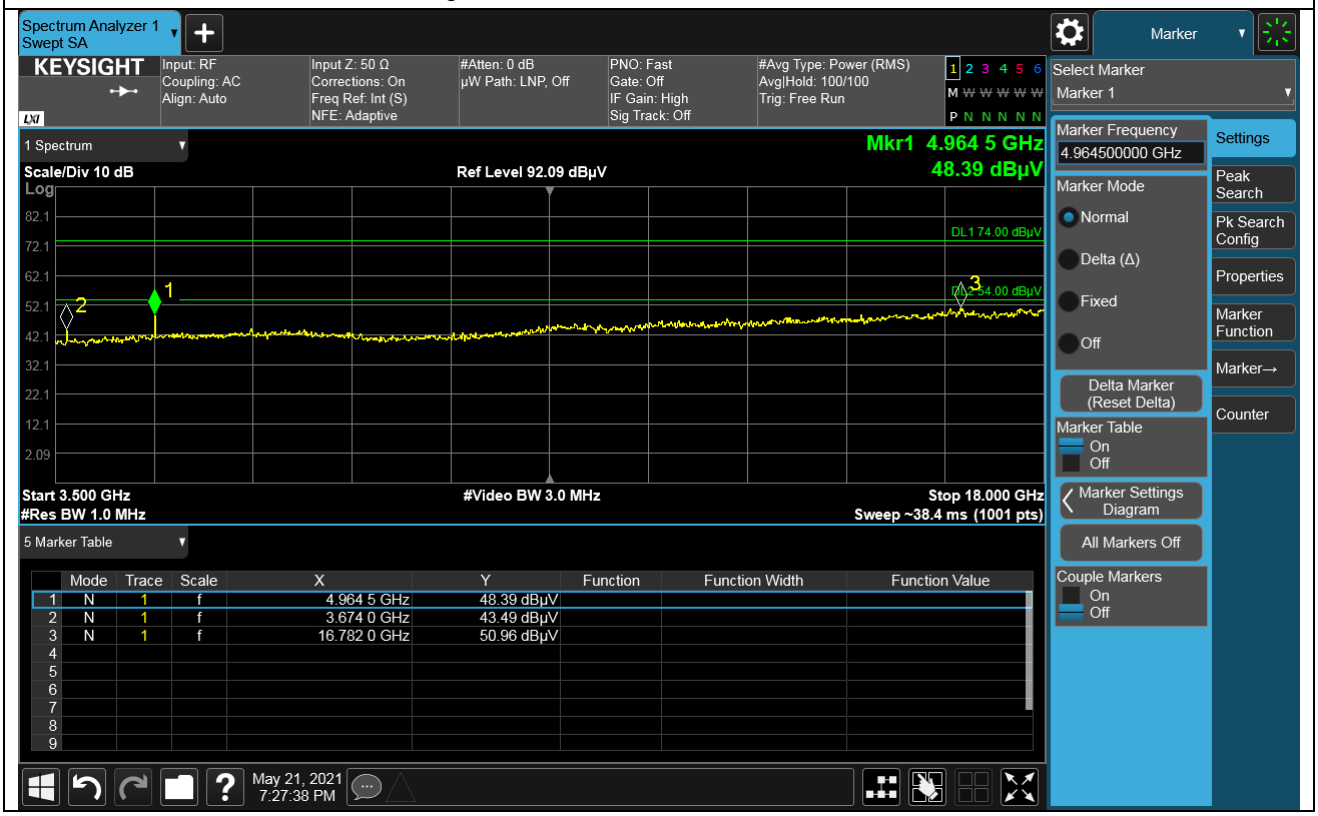
F3 / High(CH 39) / (PK) 1 GHz ~ 3.5 GHz(Vertical)



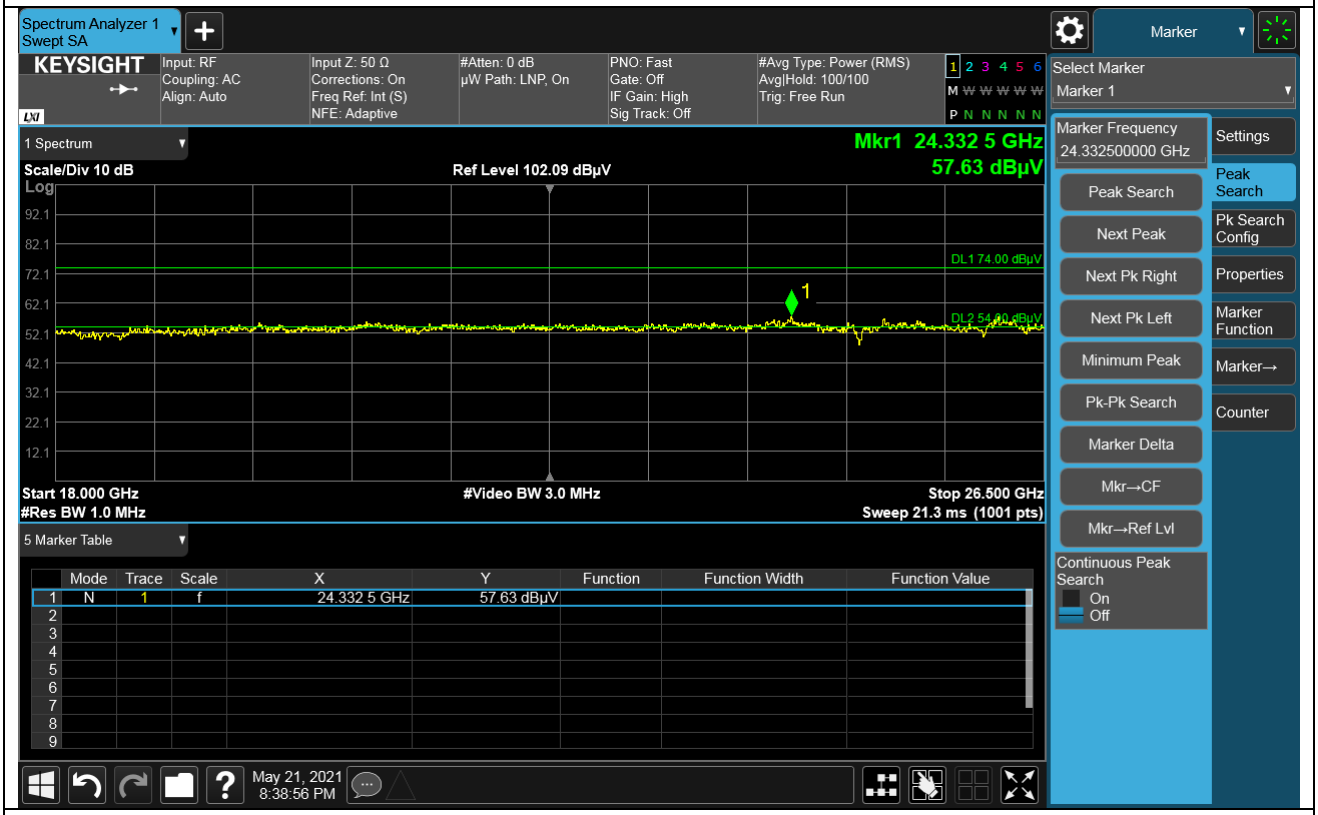
F3 / High(CH 39) / (PK) 3.5 GHz ~ 18 GHz(Horizontal)



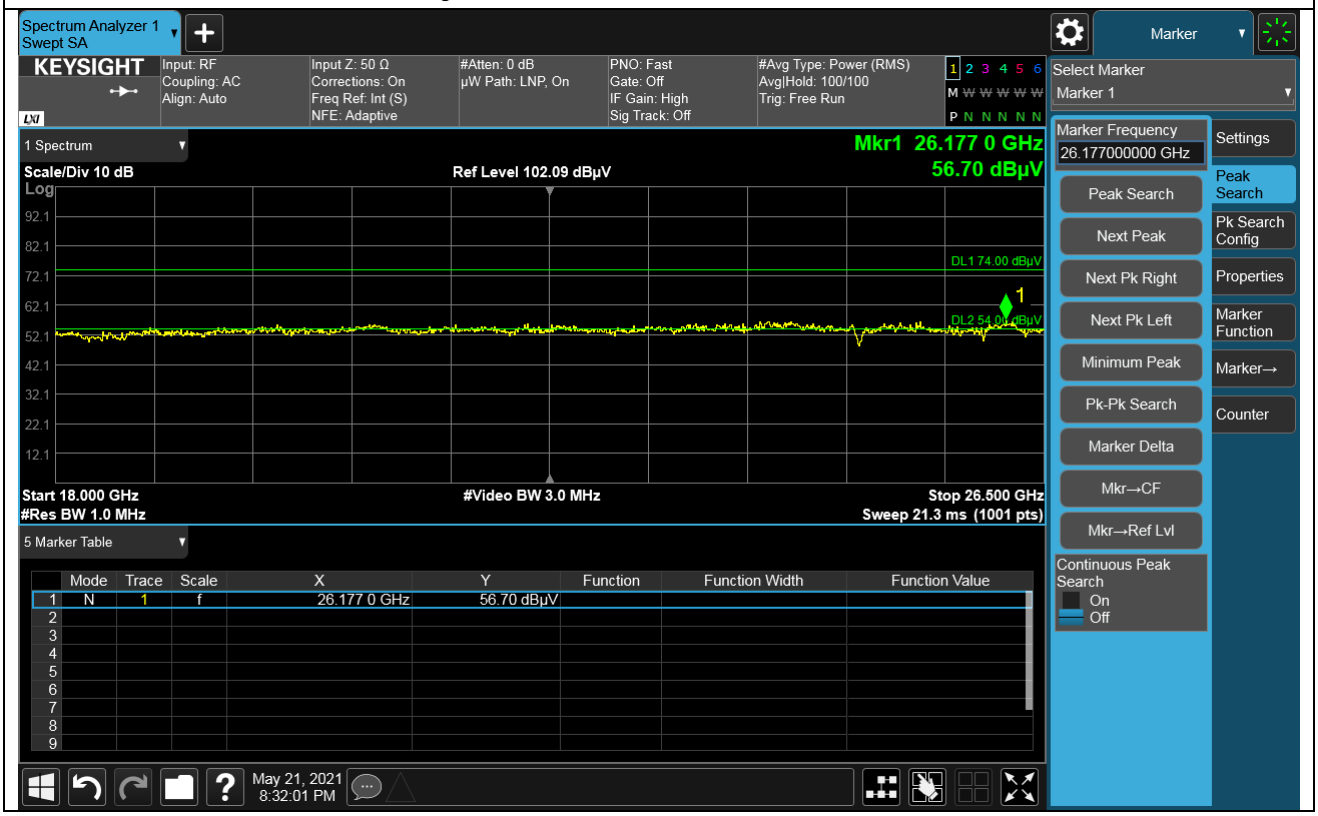
F3 / High(CH 39) / (PK) 3.5 GHz ~ 18 GHz(Vertical)



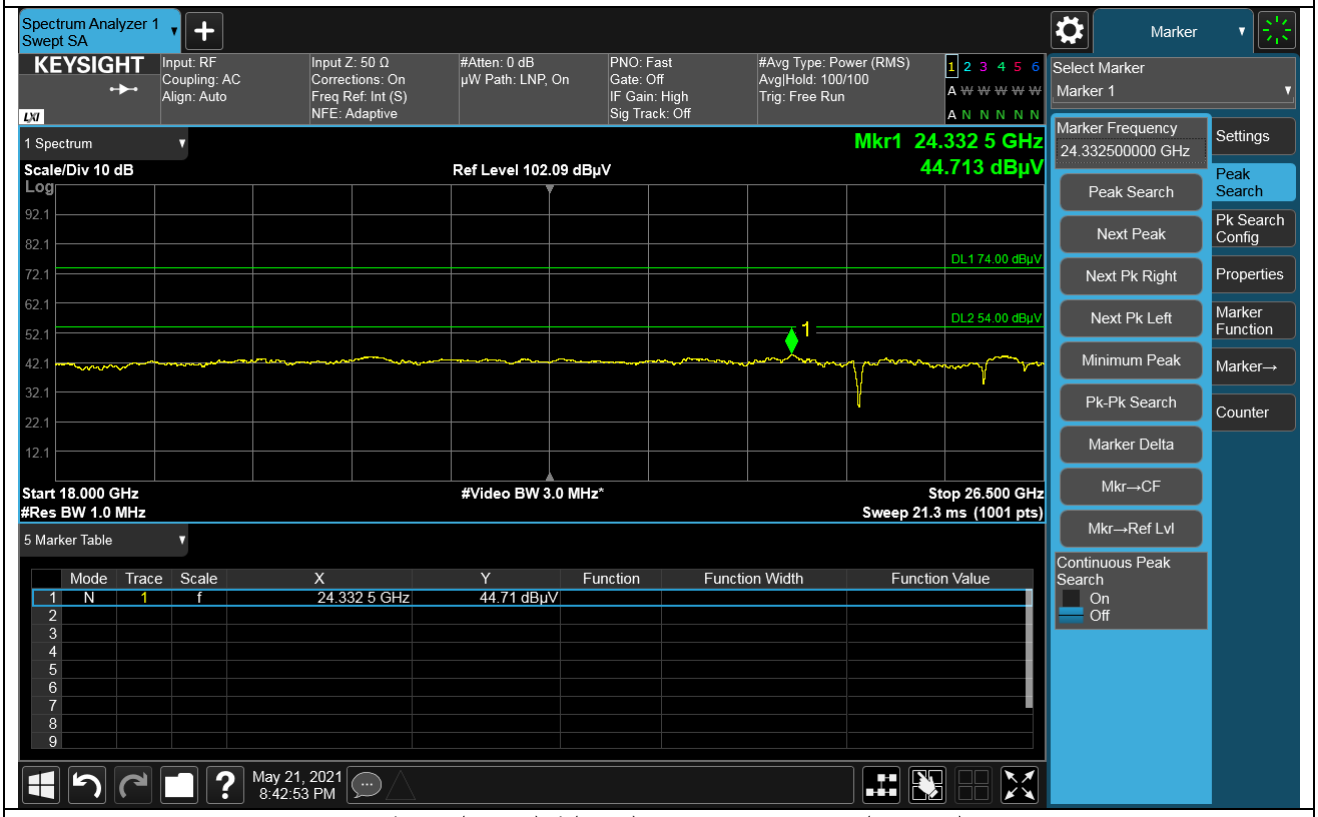
F3 / High(CH 39) / (PK) 18 GHz ~ 26.5 GHz(Horizontal)



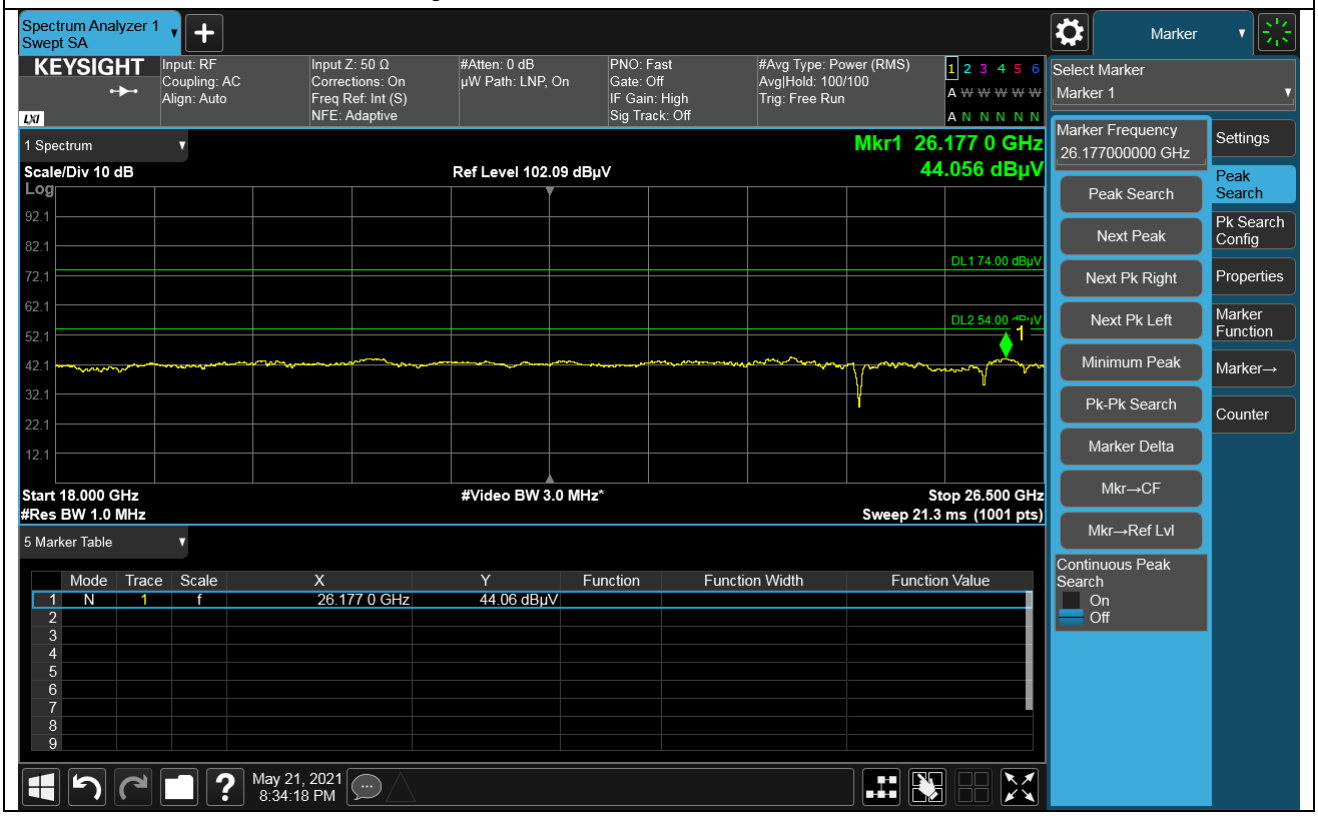
F3 / High(CH 39) / (PK) 18 GHz ~ 26.5 GHz(Vertical)



F3 / High(CH 39) / (AVG) 18 GHz ~ 26.5 GHz(Horizontal)

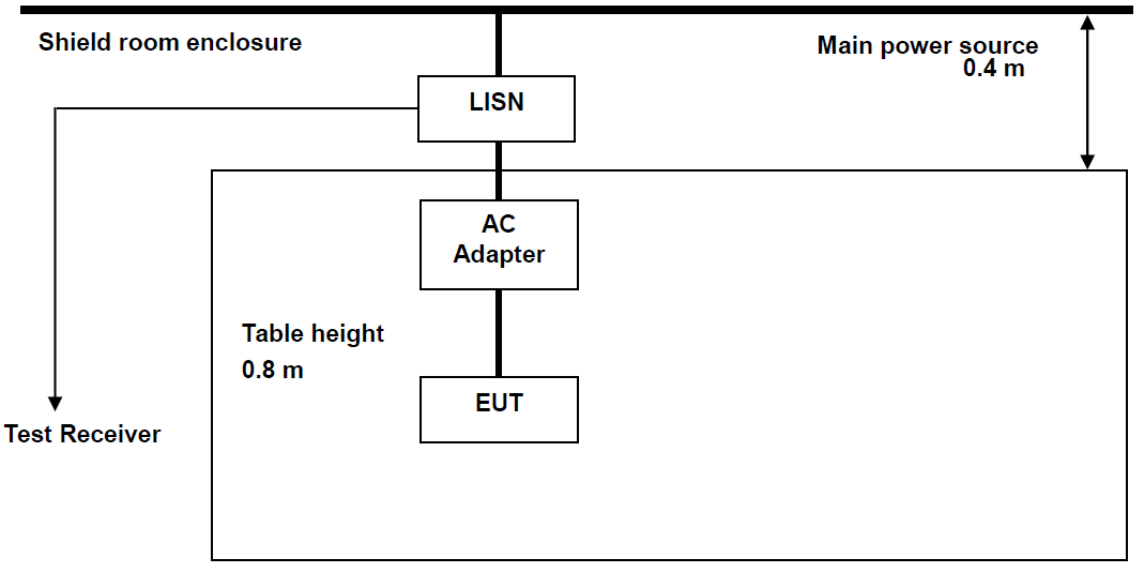


F3 / High(CH 39) / (AVG) 18 GHz ~ 26.5 GHz(Vertical)



4.2. AC Power Line Conducted Emissions

▣ Test Setup



▣ Limit

According to § 15.207(a), for an intentional radiator that is designed to be connected to the public utility (AC) power line, the radio frequency voltage that is conducted back onto the AC power line on any frequency or frequencies, within the band 150 kHz to 30 MHz, shall not exceed the limits in the following table, as measured using a 50 μH/50 ohms line impedance stabilization network (LISN). Compliance with the provisions of this paragraph shall be based on the measurement of the radio frequency voltage between each power line and ground at the power terminal. The lower limit applies at the boundary between the frequency ranges

Frequency of Emission (MHz)	Conducted limit (dBμV)	
	Quaisi-Peak	Average
0.15 – 0.5	66 to 56*	56 to 46*
0.5 – 5	56	46
5 – 30	60	50

*Decreases with the logarithm of the frequency.

▣ Test procedure

ANSI C63.10 2013 Section 6.2

1. The EUT is placed on a wooden table 80 cm above the reference ground plane and 40 cm from the conducting wall of the shielding room.
2. Connect EUT to the power mains through a line impedance stabilization network(LISN) which provides 50 ohm coupling impedance for measuring instrument.
3. All peripherals are connecting to the other LISN
4. The frequency range from 150 kHz to 30 MHz was performed.
5. Set the test receiver to Peak detector and a bandwidth of 9 kHz with maximum hold mode. And then measurement is also performed by Average and Quasi-Peak detector
6. The EUT is transmitting mode during the measurement.

▣ Test Result

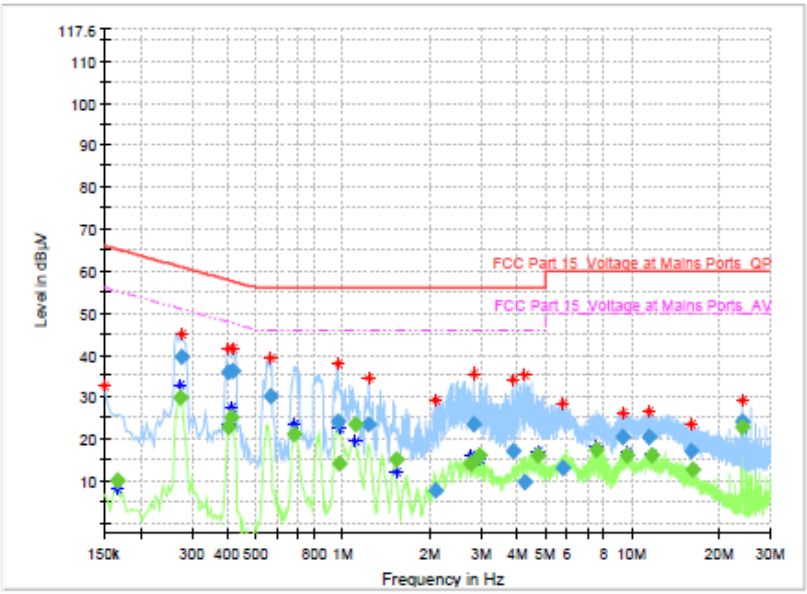
F1 / Low(CH 0)

Test

CONDUCTED DISTURBANCE VOLTAGE

Common Information

EUT:	FAVE ALLFIT
Order Number :	EFC-2021-000003
Factor :	ENV216(101365)
Polarization :	Live & Neutral
Test Voltage :	120 V~, 60 Hz
Test Spec :	FCC PART 15 SUBPART C // F1



Final_Result

Frequency (MHz)	QuasiPeak (dBµV)	CAverage (dBµV)	Limit (dBµV)	Margin (dB)	Meas. Time (ms)	Bandwidth (kHz)	Line	Corr. (dB)
0.166000	---	10.15	55.16	45.01	1000.0	9.000	L1	9.5
0.274000	---	29.89	51.00	21.10	1000.0	9.000	L1	9.6
0.278000	39.53	---	60.88	21.34	1000.0	9.000	L1	9.6
0.402000	35.95	---	57.81	21.86	1000.0	9.000	L1	9.6
0.402000	---	22.57	47.81	25.24	1000.0	9.000	L1	9.6
0.414000	---	25.12	47.57	22.45	1000.0	9.000	L1	9.6
0.418000	36.11	---	57.49	21.38	1000.0	9.000	L1	9.6
0.566000	30.01	---	56.00	25.99	1000.0	9.000	L1	9.6
0.682000	---	20.91	46.00	25.09	1000.0	9.000	N	9.6
0.958000	23.99	---	56.00	32.01	1000.0	9.000	N	9.6
0.970000	---	13.93	46.00	32.07	1000.0	9.000	N	9.6
1.110000	---	23.35	46.00	22.65	1000.0	9.000	N	9.6
1.234000	23.51	---	56.00	32.49	1000.0	9.000	N	9.6
1.526000	---	14.97	46.00	31.03	1000.0	9.000	N	9.6
2.094000	7.62	---	56.00	48.38	1000.0	9.000	N	9.6
2.782000	---	14.00	46.00	32.00	1000.0	9.000	N	9.6
2.830000	23.42	---	56.00	32.58	1000.0	9.000	N	9.6
2.970000	---	16.08	46.00	29.92	1000.0	9.000	N	9.6

1/4/2022

F1 / Low(CH 0)

Test

Frequency (MHz)	QuasiPeak (dBµV)	CAverage (dBµV)	Limit (dBµV)	Margin (dB)	Meas. Time (ms)	Bandwidth (kHz)	Line	Corr. (dB)
3.890000	17.17	---	56.00	38.83	1000.0	9.000	N	9.6
4.250000	9.80	---	56.00	46.20	1000.0	9.000	N	9.6
4.730000	---	16.02	46.00	29.98	1000.0	9.000	N	9.7
5.790000	13.15	---	60.00	46.85	1000.0	9.000	L1	9.7
7.510000	---	17.27	50.00	32.73	1000.0	9.000	N	9.7
9.286000	20.32	---	60.00	39.68	1000.0	9.000	N	9.7
9.566000	---	15.95	50.00	34.05	1000.0	9.000	N	9.8
11.466000	20.47	---	60.00	39.53	1000.0	9.000	N	9.8
11.750000	---	16.13	50.00	33.87	1000.0	9.000	N	9.8
15.954000	17.09	---	60.00	42.91	1000.0	9.000	N	9.8
16.254000	---	12.66	50.00	37.34	1000.0	9.000	N	9.8
23.998000	24.01	---	60.00	35.99	1000.0	9.000	N	9.8
24.002000	---	22.79	50.00	27.21	1000.0	9.000	N	9.8

1/4/2022

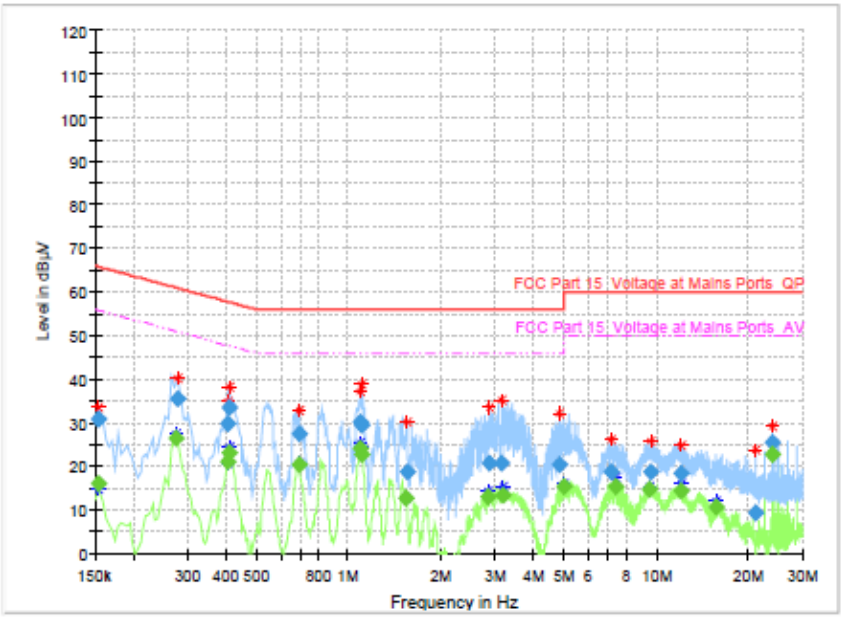
F2 / Middle(CH 19)

Test

CONDUCTED DISTURBANCE VOLTAGE

Common Information

EUT:	FAVE ALLFIT
Order Number :	EFC-2021-000003
Factor :	ENV216(101365)
Polarization :	Live & Neutral
Test Voltage :	120 V~, 60 Hz
Test Spec :	FCC PART 15 SUBPART C // F2



Final_Result

Frequency (MHz)	QuasiPeak (dBµV)	CAverage (dBµV)	Limit (dBµV)	Margin (dB)	Meas. Time (ms)	Bandwidth (kHz)	Line	Corr. (dB)
0.154000	---	16.09	55.78	39.69	1000.0	9.000	L1	9.5
0.154000	30.85	---	65.78	34.93	1000.0	9.000	L1	9.5
0.274000	---	26.53	51.00	24.46	1000.0	9.000	L1	9.6
0.278000	35.58	---	60.88	25.30	1000.0	9.000	L1	9.6
0.402000	29.99	---	57.81	27.82	1000.0	9.000	N	9.6
0.402000	---	21.28	47.81	26.53	1000.0	9.000	L1	9.6
0.410000	33.45	---	57.65	24.20	1000.0	9.000	L1	9.6
0.410000	---	23.07	47.65	24.57	1000.0	9.000	L1	9.6
0.690000	27.33	---	56.00	28.68	1000.0	9.000	L1	9.6
0.690000	---	20.30	46.00	25.70	1000.0	9.000	N	9.6
1.086000	---	24.08	46.00	21.92	1000.0	9.000	N	9.6
1.090000	30.17	---	56.00	25.83	1000.0	9.000	N	9.6
1.098000	29.55	---	56.00	26.45	1000.0	9.000	N	9.6
1.102000	---	22.87	46.00	23.13	1000.0	9.000	N	9.6
1.526000	---	12.77	46.00	33.23	1000.0	9.000	N	9.6
1.542000	18.75	---	56.00	37.25	1000.0	9.000	N	9.6
2.838000	---	13.04	46.00	32.96	1000.0	9.000	N	9.6
2.866000	20.74	---	56.00	35.26	1000.0	9.000	L1	9.6

1/4/2022

F2 / Middle(CH 19)

Test

Frequency (MHz)	QuasiPeak (dBµV)	CAverage (dBµV)	Limit (dBµV)	Margin (dB)	Meas. Time (ms)	Bandwidth (kHz)	Line	Corr. (dB)
3.134000	20.64	---	56.00	35.36	1000.0	9.000	L1	9.6
3.162000	---	13.50	46.00	32.50	1000.0	9.000	N	9.6
4.866000	20.48	---	56.00	35.52	1000.0	9.000	N	9.7
4.994000	---	15.30	46.00	30.70	1000.0	9.000	N	9.7
7.102000	18.89	---	60.00	41.11	1000.0	9.000	N	9.7
7.370000	---	15.46	50.00	34.54	1000.0	9.000	N	9.7
9.450000	---	14.65	50.00	35.35	1000.0	9.000	N	9.8
9.558000	18.71	---	60.00	41.29	1000.0	9.000	N	9.8
12.022000	---	14.38	50.00	35.62	1000.0	9.000	N	9.8
12.098000	18.30	---	60.00	41.70	1000.0	9.000	N	9.8
15.686000	---	10.69	50.00	39.31	1000.0	9.000	N	9.8
21.054000	9.42	---	60.00	50.58	1000.0	9.000	L1	9.6
24.002000	---	22.77	50.00	27.23	1000.0	9.000	N	9.8
24.002000	25.50	---	60.00	34.50	1000.0	9.000	N	9.8

1/4/2022

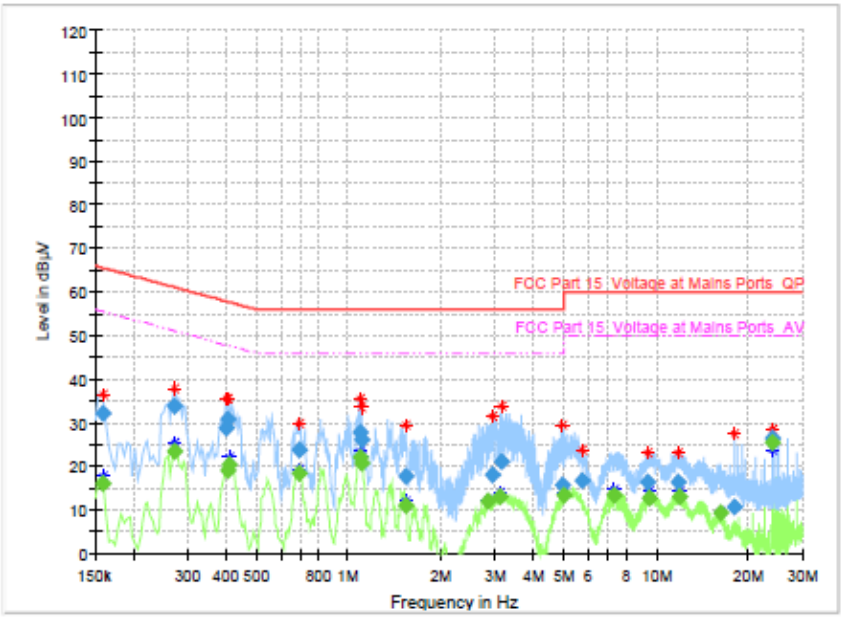
F3 / High(CH 39)

Test

CONDUCTED DISTURBANCE VOLTAGE

Common Information

EUT:	FAVE ALLFIT
Order Number :	EFC-2021-000003
Factor :	ENV216(101365)
Polarization :	Live & Neutral
Test Voltage :	120 V~, 60 Hz
Test Spec :	FCC PART 15 SUBPART C // F3



Final_Result

Frequency (MHz)	QuasiPeak (dBµV)	CAverage (dBµV)	Limit (dBµV)	Margin (dB)	Meas. Time (ms)	Bandwidth (kHz)	Line	Corr. (dB)
0.158000	---	15.96	55.57	39.60	1000.0	9.000	L1	9.5
0.158000	32.12	---	65.57	33.45	1000.0	9.000	L1	9.5
0.270000	---	23.50	51.12	27.62	1000.0	9.000	L1	9.6
0.270000	33.71	---	61.12	27.41	1000.0	9.000	L1	9.6
0.398000	28.99	---	57.90	28.90	1000.0	9.000	L1	9.6
0.402000	---	19.09	47.81	28.72	1000.0	9.000	L1	9.6
0.406000	30.73	---	57.73	27.00	1000.0	9.000	L1	9.6
0.410000	---	20.34	47.65	27.30	1000.0	9.000	L1	9.6
0.690000	---	18.51	46.00	27.49	1000.0	9.000	N	9.6
0.690000	23.93	---	56.00	32.07	1000.0	9.000	L1	9.6
1.086000	---	21.99	46.00	24.01	1000.0	9.000	N	9.6
1.086000	27.89	---	56.00	28.11	1000.0	9.000	N	9.6
1.102000	26.01	---	56.00	29.99	1000.0	9.000	N	9.6
1.102000	---	20.75	46.00	25.25	1000.0	9.000	N	9.6
1.530000	17.87	---	56.00	38.13	1000.0	9.000	N	9.6
1.534000	---	10.97	46.00	35.03	1000.0	9.000	N	9.6
2.846000	---	12.14	46.00	33.86	1000.0	9.000	N	9.6
2.950000	18.10	---	56.00	37.90	1000.0	9.000	L1	9.6

1/4/2022

F3 / High(CH 39)

Test

Frequency (MHz)	QuasiPeak (dBµV)	CAverage (dBµV)	Limit (dBµV)	Margin (dB)	Meas. Time (ms)	Bandwidth (kHz)	Line	Corr. (dB)
3.122000	---	13.18	46.00	32.82	1000.0	9.000	N	9.6
3.138000	21.20	---	56.00	34.80	1000.0	9.000	N	9.6
4.970000	15.85	---	56.00	40.15	1000.0	9.000	L1	9.7
4.986000	---	13.24	46.00	32.76	1000.0	9.000	N	9.7
5.730000	16.76	---	60.00	43.24	1000.0	9.000	N	9.7
7.286000	---	13.43	50.00	36.57	1000.0	9.000	N	9.7
9.390000	16.57	---	60.00	43.43	1000.0	9.000	N	9.8
9.446000	---	12.84	50.00	37.16	1000.0	9.000	N	9.8
11.822000	16.56	---	60.00	43.44	1000.0	9.000	N	9.8
11.870000	---	13.17	50.00	36.83	1000.0	9.000	N	9.8
16.186000	---	9.54	50.00	40.46	1000.0	9.000	N	9.8
17.898000	10.70	---	60.00	49.30	1000.0	9.000	N	9.8
24.002000	---	25.44	50.00	24.56	1000.0	9.000	N	9.8
24.002000	26.45	---	60.00	33.55	1000.0	9.000	N	9.8

1/4/2022

5. Test Equipment List

Equipment	Manufacturer	Model	Serial Number	Calibration Date	Calibration Interval	Calibration Due Date
Signal Analyzer	Keysight	N9040B	US55230181	11/20/2021	Annual	11/20/2022
EMI Receiver	R&S	ESR3	102635	09/07/2021	Annual	09/07/2022
EMI Receiver	R&S	ESR3	102623	09/06/2021	Annual	09/06/2022
Signal Generator	Keysight	N5173B	MY53270648	04/26/2021	Annual	04/26/2022
Attenuator	Agilent	8493C	18173	08/19/2021	Annual	08/19/2022
Function Power Supply	Agilent	6673A	MY41000334	09/06/2021	Annual	09/06/2022
DC Power Supply	Agilent	E3643A	KR03400220	09/06/2021	Annual	09/06/2022
LISN	R&S	ENV216	101365	02/25/2021	Annual	02/25/2022
Loop Antenna	R&S	HFH2-Z2	825841/008	09/02/2021	Annual	09/02/2022
Bi-Log Antenna	TDK	HLP-3003C	130961	08/11/2021	Annual	08/11/2022
Horn Antenna	ETS-LINDGREN	3117	00227635	07/15/2021	Annual	07/15/2022
Horn Antenna	ETS-LINDGREN	3116C	00201452	11/26/2021	Annual	11/26/2022
Pre-Amplifier	TESTEK	TK-PA18	120006	09/02/2021	Annual	09/02/2022
Pre-Amplifier	ETS-LINDGREN	3116C-PA	00201452	11/26/2021	Annual	11/26/2022
Low Pass Filter	WAINWRIGHT	WLK12-2000-2120-11000-40SS	1	11/11/2021	Annual	11/11/2022
High Pass Filter	WAINWRIGHT	WHKX12-935-1000-15000-40SS	16	11/11/2021	Annual	11/11/2022
High Pass Filter	WAINWRIGHT	WHNX3.5/26.5G-6SS	13	04/20/2021	Annual	04/20/2022
Antenna Position Tower	Innco Systems GmbH	MA4640/800-XP-ET	N/A	N/A	N/A	N/A
Antenna Mast	Innco Systems GmbH	MHE-0200-MA	N/A	N/A	N/A	N/A
Controller	Innco Systems GmbH	CO3000	CO3000/1036/41320817/P	N/A	N/A	N/A
Coaxial Cable	HUBER+SUHNER	SCOFLEX102	38169/2	N/A	N/A	N/A
Coaxial Cable	HUBER+SUHNER	SCOFLEX102	38172/2	N/A	N/A	N/A
Coaxial Cable	HUBER+SUHNER	SCOFLEX102	38173/2	N/A	N/A	N/A
Coaxial Cable	HUBER+SUHNER	SCOFLEX104	MY32577/4	N/A	N/A	N/A
Coaxial Cable	HUBER+SUHNER	SCOFLEX104	MY31218/4	N/A	N/A	N/A
Coaxial Cable	HUBER+SUHNER	SCOFLEX104	MY31117/4	N/A	N/A	N/A
Coaxial Cable	HUBER+SUHNER	SCOFLEX104	MY31217/4	N/A	N/A	N/A
Test Software(RE)	R&S	EMC32	Ver 8.54.0	N/A	N/A	N/A
Test Software(CE)	R&S	EMC32	Ver 10.28.00	N/A	N/A	N/A

- End of Test Report -