



**CFR 47 FCC PART 15 SUBPART C**

**TEST REPORT**

*For*

**Capsule**

**MODEL NUMBER: AKES-11SI**

**FCC ID: 2A6BYAKES-11SI**

**REPORT NUMBER: 4790307922-3**

**ISSUE DATE: Apr. 19, 2022**

*Prepared for*

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*Prepared by*

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Revision History

Rev.	Issue Date	Revisions	Revised By
V0	04/19/2022	Initial Issue	



Summary of Test Results			
Clause	Test Items	FCC Rules	Test Results
1	6dB Bandwidth	FCC Part 15.247 (a) (2)	Pass
2	Conducted Output Power	FCC Part 15.247 (b) (3)	Pass
3	Power Spectral Density	FCC Part 15.247 (e)	Pass
4	Conducted Bandedge and Spurious Emission	FCC Part 15.247 (d)	Pass
5	Radiated Bandedge and Spurious Emission	FCC Part 15.247 (d) FCC Part 15.209 FCC Part 15.205	Pass
6	Conducted Emission Test for AC Power Port	FCC Part 15.207	N/A (See Note 1)
7	Antenna Requirement	FCC Part 15.203	Pass
<b>Note:</b> 1) The EUT is powered by battery. 2) The measurement result for the sample received is <Pass> according to < ANSI C63.10-2013, FCC CFR 47 Part 2, FCC CFR 47 Part 15C> when <Accuracy Method> decision rule is applied.			



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## 1. ATTESTATION OF TEST RESULTS

### Applicant Information

Company Name: ANKON Technologies Co., Ltd.  
Address: B3-2, B3-3, D3-4 Biolake, No.666, Hi-Tech Road, East Lake New Technology Development Zone, Wuhan, 430075 Hubei, China

### Manufacturer Information

Company Name: ANKON Technologies Co., Ltd.  
Address: B3-2, B3-3, D3-4 Biolake, No.666, Hi-Tech Road, East Lake New Technology Development Zone, Wuhan, 430075 Hubei, China

### Factory Information

Company Name: ANKON Technologies Co., Ltd.  
Address: B3-2, B3-3, D3-4 Biolake, No.666, Hi-Tech Road, East Lake New Technology Development Zone, Wuhan, 430075 Hubei, China

### EUT Description

EUT Name: Capsule  
Model: AKES-11SI  
Sample Number: 4755808-S001, 4755808-S006  
Sample Received Date: Mar. 12, 2022  
Date of Tested: Mar. 16, 2022 ~ Apr. 19, 2022

APPLICABLE STANDARDS	
STANDARD	TEST RESULTS
CFR 47 FCC PART 15 SUBPART C	PASS

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## 2. TEST METHODOLOGY

The tests documented in this report were performed in accordance with FCC KDB 558074 D01 15.247 Meas Guidance v05r02, KDB 414788 D01 Radiated Test Site v01r01, CFR 47 FCC Part 2, CFR 47 FCC Part 15, ANSI C63.10-2013.

## 3. FACILITIES AND ACCREDITATION

Accreditation Certificate	<b>A2LA (Certificate No.: 4829.01)</b> <b>UL-CCIC COMPANY LIMITED has been assessed and proved to be in compliance with A2LA.</b> <b>FCC (FCC Designation No.: CN1247)</b> <b>UL-CCIC COMPANY LIMITED has been recognized to perform compliance testing on equipment subject to the Commission's Declaration of Conformity (DoC) and Certification rules.</b> <b>IC (IC Designation No.: 25056; CAB No.: CN0073)</b> <b>UL-CCIC COMPANY LIMITED has been recognized to perform compliance testing on equipment subject to the Commission's Declaration of Conformity (DoC) and Certification rules.</b>
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Note 1: All tests measurement facilities use to collect the measurement data are located at No. 2, Chengwan Road, Suzhou Industrial Park, Suzhou 215122, People's Republic of China

Note 2: For below 30MHz, lab had performed measurements at test anechoic chamber and comparing to measurements obtained on an open field site. These measurements below 30MHz had been correlated to measurements performed on an OFS.

Note 3: The test anechoic chamber in UL-CCIC COMPANY LIMITED had been calibrated and compared to the open field sites and the test anechoic chamber is shown to be equivalent to or worst case from the open field site.



## 4. CALIBRATION AND UNCERTAINTY

### 4.1. MEASURING INSTRUMENT CALIBRATION

The measuring equipment utilized to perform the tests documented in this report has been calibrated in accordance with the manufacturer's recommendations and is traceable to recognize national standards.

### 4.2. MEASUREMENT UNCERTAINTY

Where relevant, the following measurement uncertainty levels have been estimated for tests performed on the apparatus:

Test Item	Uncertainty
Conduction emission	3.1dB
Radiation Emission test (include Fundamental emission) (9kHz-30MHz)	3.4dB
Radiation Emission test (include Fundamental emission) (30MHz-1GHz)	3.4dB
Radiation Emission test (1GHz to 26GHz) (include Fundamental emission)	3.9dB (1GHz-18Gz)
	4.2dB (18GHz-26Gz)
Note: This uncertainty represents an expanded uncertainty expressed at approximately the 95% confidence level using a coverage factor of k=2.	



## 5. EQUIPMENT UNDER TEST

### 5.1. DESCRIPTION OF EUT

EUT Name	Capsule
Model	AKES-11SI
Radio Technology	915MHz RF
Operation frequency	905MHz ~ 925MHz
Modulation	8-FSK
Data Rate	4Mbps
Power Supply	DC 3V

### 5.2. MAXIMUM OUTPUT POWER

Number of Transmit Chains (NTX)	Frequency (MHz)	Channel Number	Max Conducted Power (dBm)
1	905-925	1-21[11]	10.84

### 5.3. CHANNEL LIST

Channel	Frequency (MHz)	Channel	Frequency (MHz)	Channel	Frequency (MHz)	Channel	Frequency (MHz)
1	905	7	911	13	917	19	923
2	906	8	912	14	918	20	924
3	907	9	913	15	919	21	925
4	908	10	914	16	920		
5	909	11	915	17	921		
6	910	12	916	18	922		

### 5.4. TEST CHANNEL CONFIGURATION

Test Mode	Test Channel	Frequency
TX	CH 1, CH 11, CH 21	905MHz, 915MHz, 925MHz





### 5.5. THE WORSE CASE CONFIGURATIONS

The Worse Case Power Setting Parameter under 902 ~ 928MHz Band			
Test Software	DAQ-Mobile		
Transmit Antenna Number	Test Channel		
	NCB: 4MHz		
	CH 1	CH 11	CH 21
1	905	915	925

### 5.6. DESCRIPTION OF AVAILABLE ANTENNAS

Antenna	Frequency (MHz)	Antenna Type	MAX Antenna Gain (dBi)
1	905-925	Embedded FPC Antenna	-32.0

Transmit and Receive Mode	Description
<input checked="" type="checkbox"/> 1TX, 1RX	ANT 1 can be used as transmitting/receiving antenna.

### 5.7. THE WORSE CASE CONFIGURATIONS

The EUT only support 8-FSK modulation whose data rate is 4 Mbps, so the data rate of 4 Mbps was test and recorded in this report.



## 5.8. DESCRIPTION OF TEST SETUP

### SUPPORT EQUIPMENT

Item	Equipment	Brand Name	Model Name	P/N
1	Laptop	ThinkPad	ThinkPad X1 Carbon 5th	/

### I/O CABLES

Cable No	Port	Connector Type	Cable Type	Cable Length(m)	Remarks
1	USB	USB	USB Cable	1	/

### ACCESSORIES

Item	Accessory	Brand Name	Model Name	Description
1	/	/	/	/

### TEST SETUP

The EUT can work in engineering mode with a software through a laptop.

### SETUP DIAGRAM FOR TESTS





## 6. MEASURING INSTRUMENT AND SOFTWARE USED

Conducted Emissions (Instrument)							
Used	Equipment	Manufacturer	Model No.	Serial No.	Upper Last Cal.	Last Cal.	Next Cal.
<input checked="" type="checkbox"/>	EMI Test Receiver	R&S	ESR3	126700	2020-12-05	2021-12-04	2022-12-03
<input checked="" type="checkbox"/>	Two-Line V-Network	R&S	ENV216	126701	2020-12-05	2021-12-04	2022-12-03
<input checked="" type="checkbox"/>	Artificial Mains Networks	R&S	ENY81	126711	2020-10-13	2021-10-12	2022-10-11
Software							
Used	Description		Manufacturer	Name	Version		
<input checked="" type="checkbox"/>	Test Software for Conducted disturbance		R&S	EMC32	Ver. 9.25		
Radiated Emissions (Instrument)							
Used	Equipment	Manufacturer	Model No.	Serial No.	Upper Last Cal.	Last Cal.	Next Cal.
<input checked="" type="checkbox"/>	Spectrum Analyzer	Keysight	N9010B	155727	2020-05-10	2021-05-09	2022-05-08
<input checked="" type="checkbox"/>	EMI test receiver	R&S	ESR26	126703	2020-12-05	2021-12-04	2022-12-03
<input checked="" type="checkbox"/>	Receiver Antenna (9kHz-30MHz)	Schwarzbeck	FMZB 1513	155456	2018-06-15	2021-06-03	2024-06-02
<input checked="" type="checkbox"/>	Receiver Antenna (30MHz-1GHz)	SunAR RF Motion	JB1	177821	2019-01-19	2022-01-18	2025-01-17
<input checked="" type="checkbox"/>	Receiver Antenna (1GHz-18GHz)	R&S	HF907	126705	2019-01-27	2022-02-28	2025-02-27
<input checked="" type="checkbox"/>	Receiver Antenna (18GHz-26.5GHz)	ETS	3160-10	155565	2019-01-05	2021-07-15	2024-07-14
<input checked="" type="checkbox"/>	Pre-amplification (To 18GHz)	Compliance Direction System Inc.	PAP-1G18-50	178825	2021-03-26	2022-03-01	2023-02-28
<input checked="" type="checkbox"/>	Pre-amplification (To 26.5GHz)	R&S	SCU-26D	135391	2020-12-05	2021-12-04	2022-12-03
<input checked="" type="checkbox"/>	Band Reject Filter	Wainwright	WRCJV8-2350-2400-2483.5-2533.5-40SS	1	2020-05-10	2021-05-09	2022-05-08
<input checked="" type="checkbox"/>	Highpass Filter	Wainwright	WHKX10-2700-3000-18000-40SS	2	2020-05-10	2021-05-09	2022-05-08
Software							
Used	Description		Manufacturer	Name	Version		
<input checked="" type="checkbox"/>	Test Software for Radiated disturbance		Tonscend	TS+	Ver. 2.5		
Other instruments							
Used	Equipment	Manufacturer	Model No.	Serial No.	Upper Last Cal.	Last Cal.	Next Cal.
<input checked="" type="checkbox"/>	Spectrum Analyzer	Keysight	N9010B	155368	2020-05-10	2021-05-09	2022-05-08
<input checked="" type="checkbox"/>	Power Meter	Keysight	U2021XA	155370	2020-05-10	2021-05-09	2022-05-08



## 7. MEASUREMENT METHODS

No.	Test Item	KDB Name	Section
1	6dB Bandwidth and 99% Occupied Bandwidth	KDB 558074 D01 15.247 Meas Guidance v05r02	8.2
2	Peak Output Power	KDB 558074 D01 15.247 Meas Guidance v05r02	8.3.1.3/8.3.2.3
3	Power Spectral Density	KDB 558074 D01 15.247 Meas Guidance v05r02	8.4
4	Out-of-band emissions in non- restricted bands	KDB 558074 D01 15.247 Meas Guidance v05r02	8.5
5	Out-of-band emissions in restricted bands	KDB 558074 D01 15.247 Meas Guidance v05r02	8.6
6	Band-edge	KDB 558074 D01 15.247 Meas Guidance v05r02	8.7
7	Conducted Emission Test for AC Power Port	ANSI C63.10-2013	6.2

## 8. ANTENNA PORT TEST RESULTS

### 8.1. ON TIME AND DUTY CYCLE

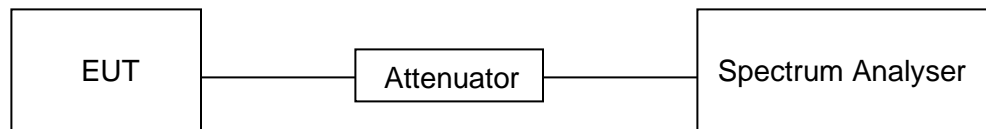
#### LIMITS

None; for reporting purposes only

#### PROCEDURE

KDB 558074 Zero-Span Spectrum Analyzer Method

#### TEST SETUP





## TEST ENVIRONMENT

Temperature	20°C	Relative Humidity	56%
Atmosphere Pressure	101kPa	Test Voltage	DC 3V

## RESULTS

On Time (msec)	Period (msec)	Duty Cycle x (Linear)	Duty Cycle (%)	Duty Cycle Correction Factor (db)	1/T Minimum VBW (kHz)	Final setting For VBW (kHz)
2.200	4.890	0.4499	44.99%	3.47	0.45	0.5

Note:

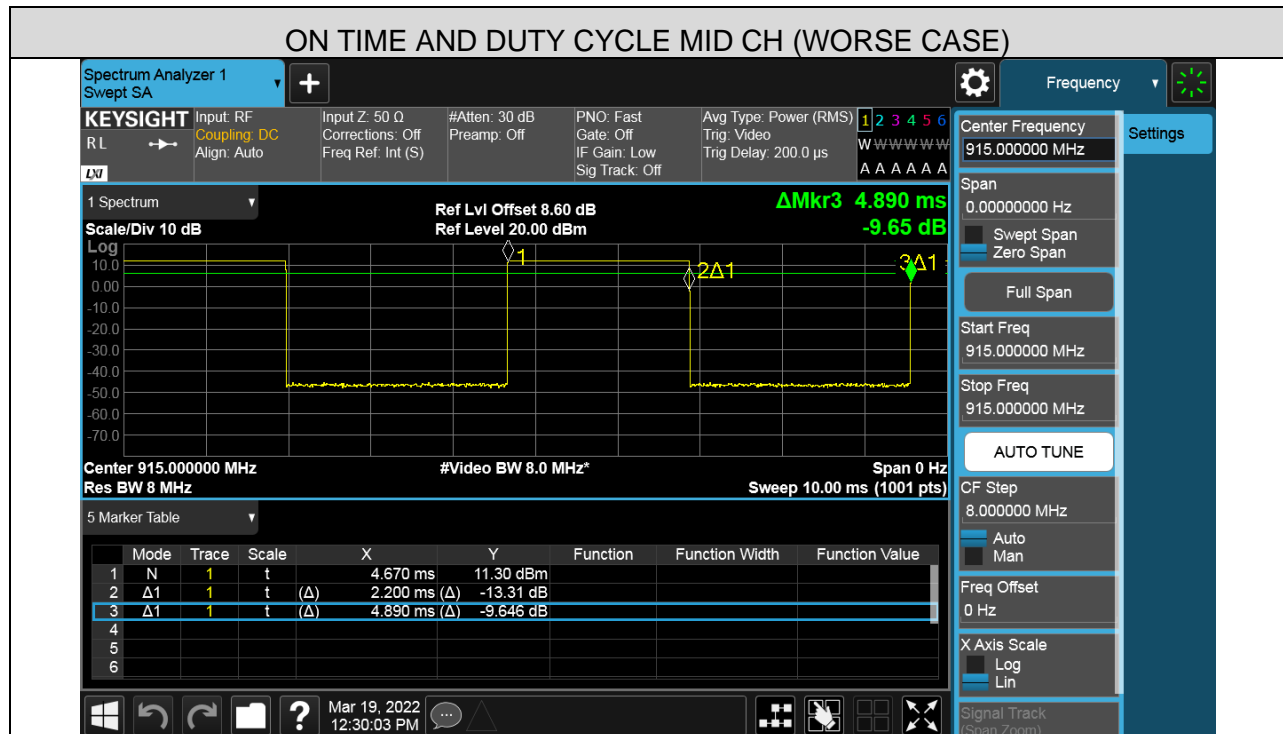
Duty Cycle Correction Factor=10log (1/x).

Where: x is Duty Cycle (Linear)

Where: T is On Time

If that calculated VBW is not available on the analyzer then the next higher value should be used.

## TEST GRAPHS





## 8.2. 6 dB BANDWIDTH

### LIMITS

CFR 47 FCC Part15 (15.247) Subpart C			
Section	Test Item	Limit	Frequency Range (MHz)
CFR 47 FCC 15.247(a)(2)	6 dB Bandwidth	$\geq 500\text{kHz}$	902-928

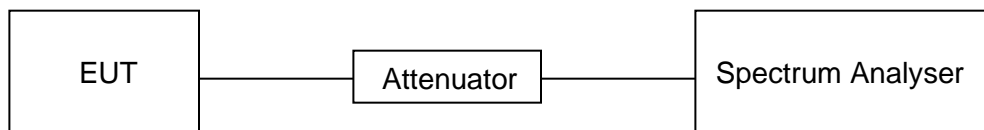
### TEST PROCEDURE

Connect the UUT to the spectrum analyser and use the following settings:

Center Frequency	The centre frequency of the channel under test
Detector	Peak
RBW	100 kHz
VBW	$\geq 3 \times \text{RBW}$
Trace	Max hold
Sweep	Auto couple

Allow the trace to stabilize and measure the maximum width of the emission that is constrained by the frequencies associated with the two outermost amplitude points (upper and lower frequencies) that are attenuated by 6 dB to the maximum level measured in the fundamental emission.

### TEST SETUP





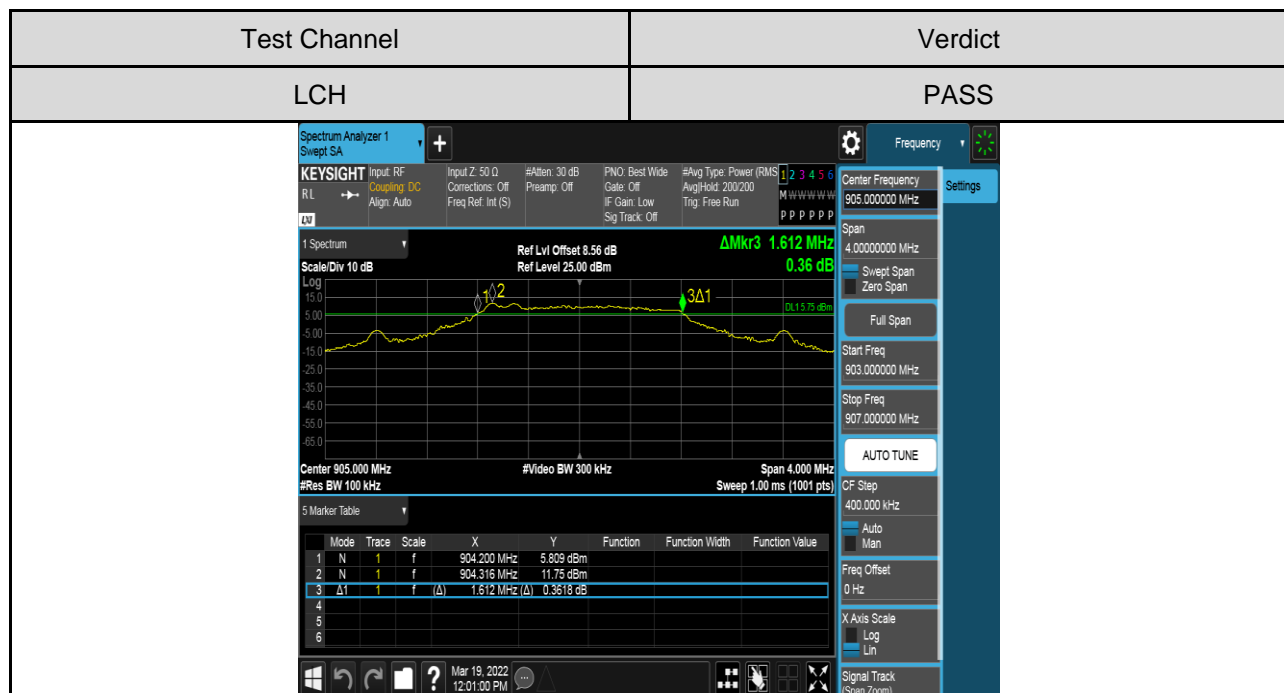
## TEST ENVIRONMENT

Temperature	20°C	Relative Humidity	56%
Atmosphere Pressure	101kPa	Test Voltage	DC 3V

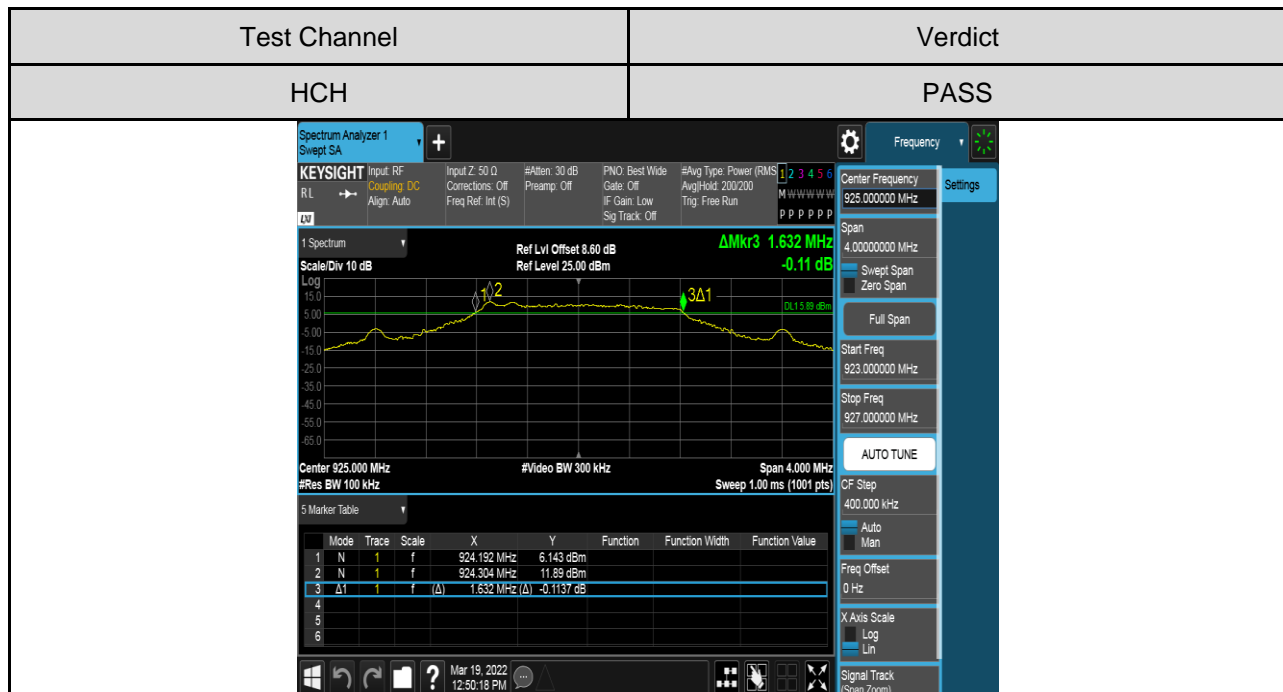
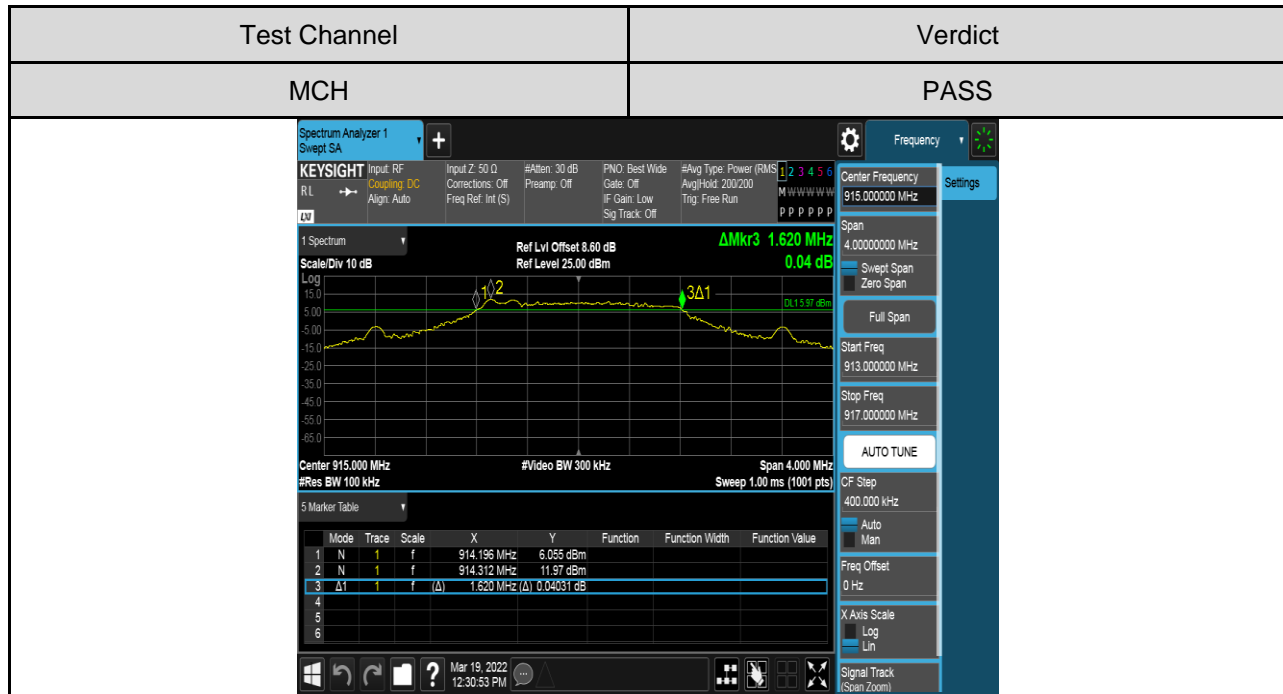
## RESULTS

Channel	Frequency	6dB bandwidth (MHz)
Low	905	1.612
Middle	915	1.620
High	925	1.632

## TEST GRAPHS









### 8.3. CONDUCTED OUTPUT POWER

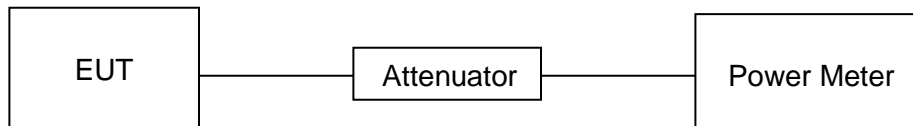
#### LIMITS

CFR 47 FCC Part15 (15.247) Subpart C			
Section	Test Item	Limit	Frequency Range (MHz)
CFR 47 FCC 15.247(b)(3)	Output Power	1 watt or 30dBm (See note1)	902-928
<b>Note:</b> 1. If transmitting antennas of directional gain greater than 6 dBi are used, both the maximum conducted output power and the maximum power spectral density shall be reduced by the amount in dB that the directional gain of the antenna exceeds 6dBi.			

#### TEST PROCEDURE

Place the EUT on the table and set it in the transmitting mode.  
Remove the antenna from the EUT and then connect a low loss RF cable from the antenna port to the Power sensor.  
Measure the power of each channel.  
Average Detector used for Average result.

#### TEST SETUP



#### TEST ENVIRONMENT

Temperature	20°C	Relative Humidity	56%
Atmosphere Pressure	101kPa	Test Voltage	DC 3V

#### RESULT

Test Channel	Measurement Output Power (AV)	10log(1/x) Factor	Maximum Conducted Output Power (AV)	LIMIT (dBm)
	dBm	dB	dBm	
Low	7.35	3.47	10.82	30
Middle	7.37	3.47	10.84	30
High	7.26	3.47	10.73	30



## 8.4. POWER SPECTRAL DENSITY

### LIMITS

CFR 47 FCC Part15 (15.247) Subpart C			
Section	Test Item	Limit	Frequency Range (MHz)
CFR 47 FCC §15.247 (e)	Power Spectral Density	8 dBm/3 kHz (See note1)	902-928
<b>Note:</b> 1. If transmitting antennas of directional gain greater than 6 dBi are used, both the maximum conducted output power and the maximum power spectral density shall be reduced by the amount in dB that the directional gain of the antenna exceeds 6dBi.			

### TEST PROCEDURE

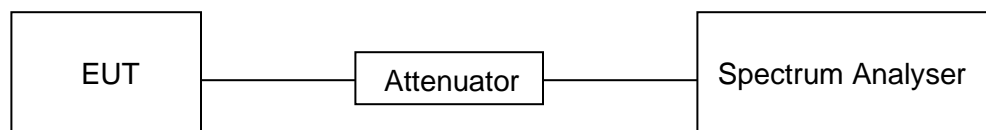
Connect the UUT to the spectrum analyser and use the following settings:

Center Frequency	The centre frequency of the channel under test
Detector	Peak
RBW	$3 \text{ kHz} \leq \text{RBW} \leq 100 \text{ kHz}$
VBW	$\geq 3 \times \text{RBW}$
Span	1.5 x DTS bandwidth
Trace	Max hold
Sweep time	Auto couple.

Allow trace to fully stabilize and use the peak marker function to determine the maximum amplitude level within the RBW.

If measured value exceeds limit, reduce RBW (no less than 3 kHz) and repeat.

### TEST SETUP



### TEST ENVIRONMENT

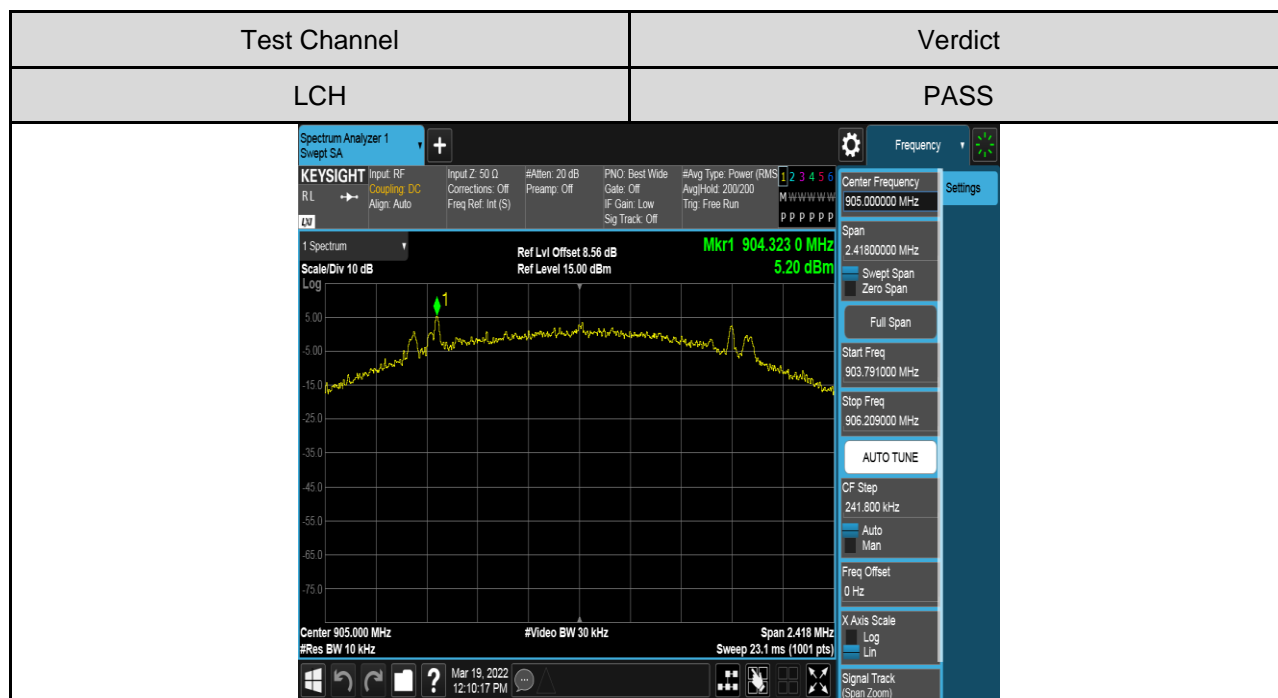
Temperature	20°C	Relative Humidity	56%
Atmosphere Pressure	101kPa	Test Voltage	DC 3V

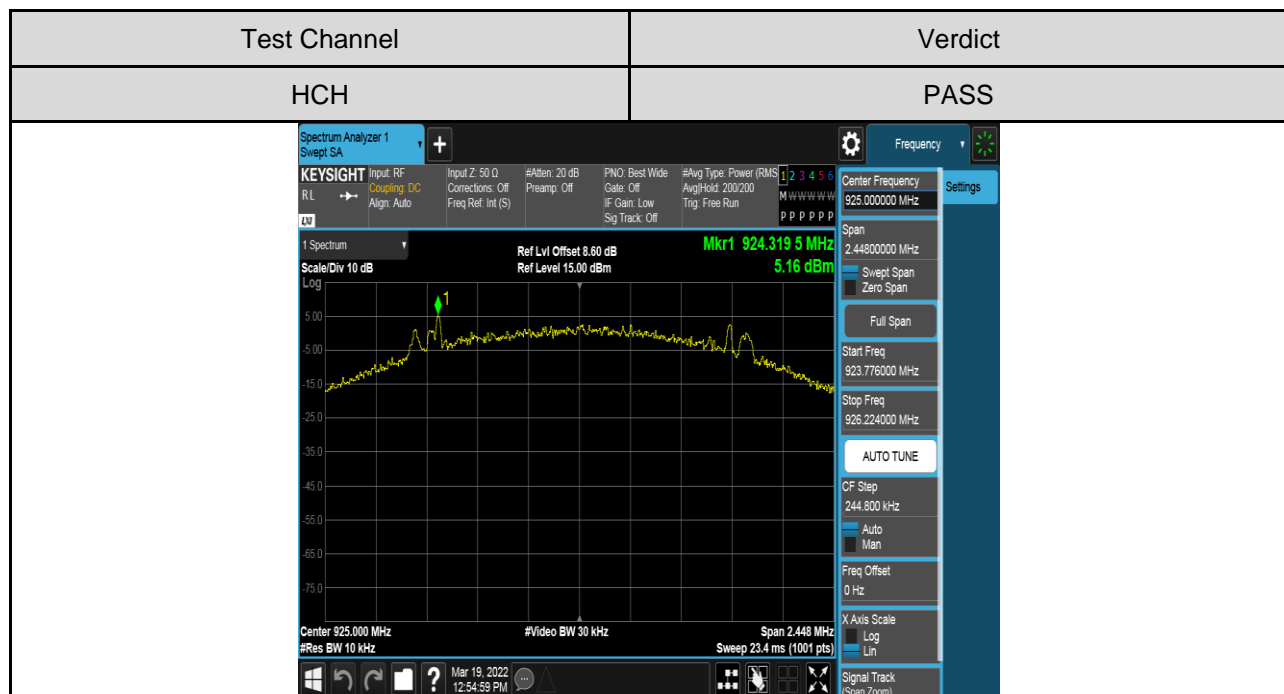
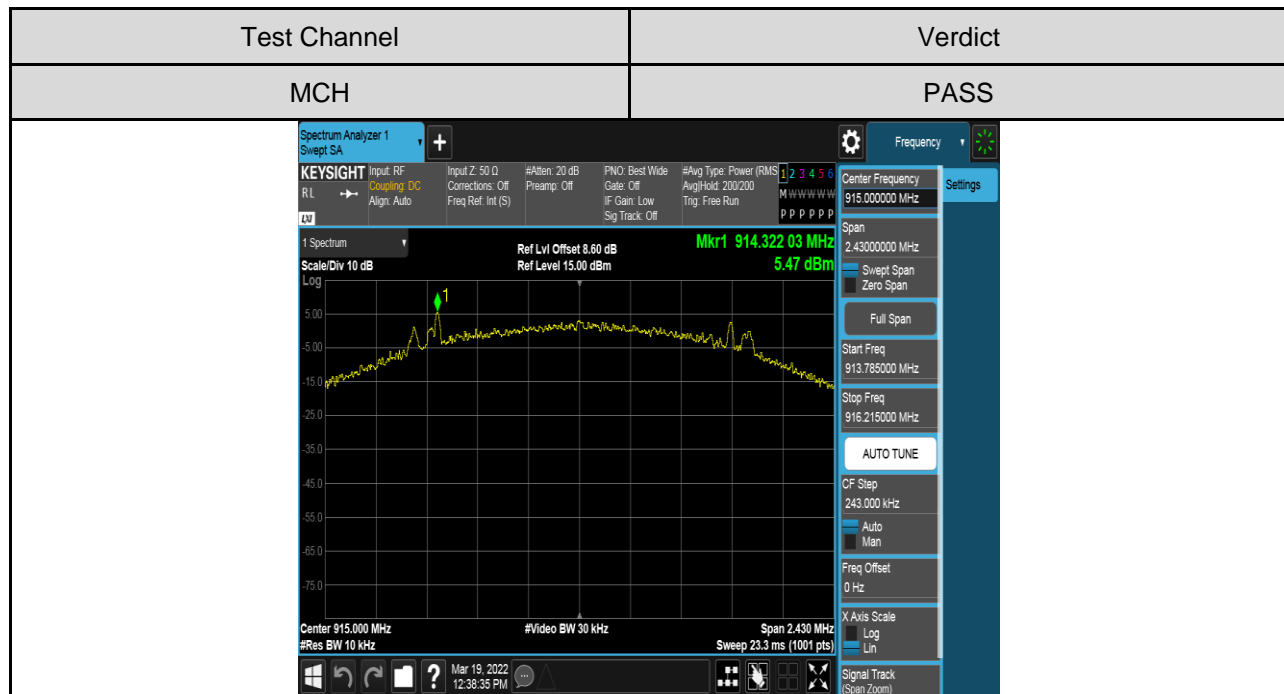
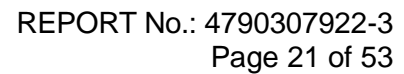


## RESULTS

Test Channel	Power Spectral Density (dBm/10kHz)	Limit (dBm/3kHz)	Result
Low	5.20	8	PASS
Middle	5.47	8	PASS
High	5.16	8	PASS

## TEST GRAPHS







## 8.5. CONDUCTED BANDEGE AND SPURIOUS EMISSIONS

### LIMITS

CFR 47 FCC Part15 (15.247) Subpart C		
Section	Test Item	Limit
CFR 47 FCC §15.247 (d)	Conducted Bandedge and Spurious Emissions	at least 30 dB below that in the 100 kHz bandwidth within the band that contains the highest level of the desired power

### TEST PROCEDURE

Connect the UUT to the spectrum analyser and use the following settings:

Center Frequency	The centre frequency of the channel under test
Detector	Peak
RBW	100 kHz
VBW	$\geq 3 \times \text{RBW}$
Span	1.5 x DTS bandwidth
Trace	Max hold
Sweep time	Auto couple.

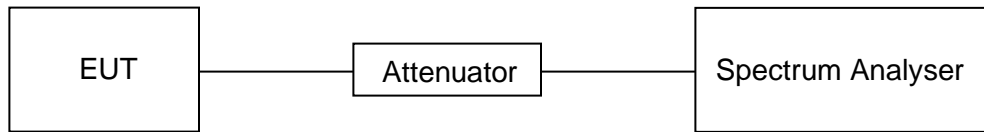
Use the peak marker function to determine the maximum PSD level.

Span	Set the center frequency and span to encompass frequency range to be measured
Detector	Peak
RBW	100 kHz
VBW	$\geq 3 \times \text{RBW}$
measurement points	$\geq \text{span}/\text{RBW}$
Trace	Max hold
Sweep time	Auto couple.

Use the peak marker function to determine the maximum amplitude level.



## TEST SETUP



## TEST ENVIRONMENT

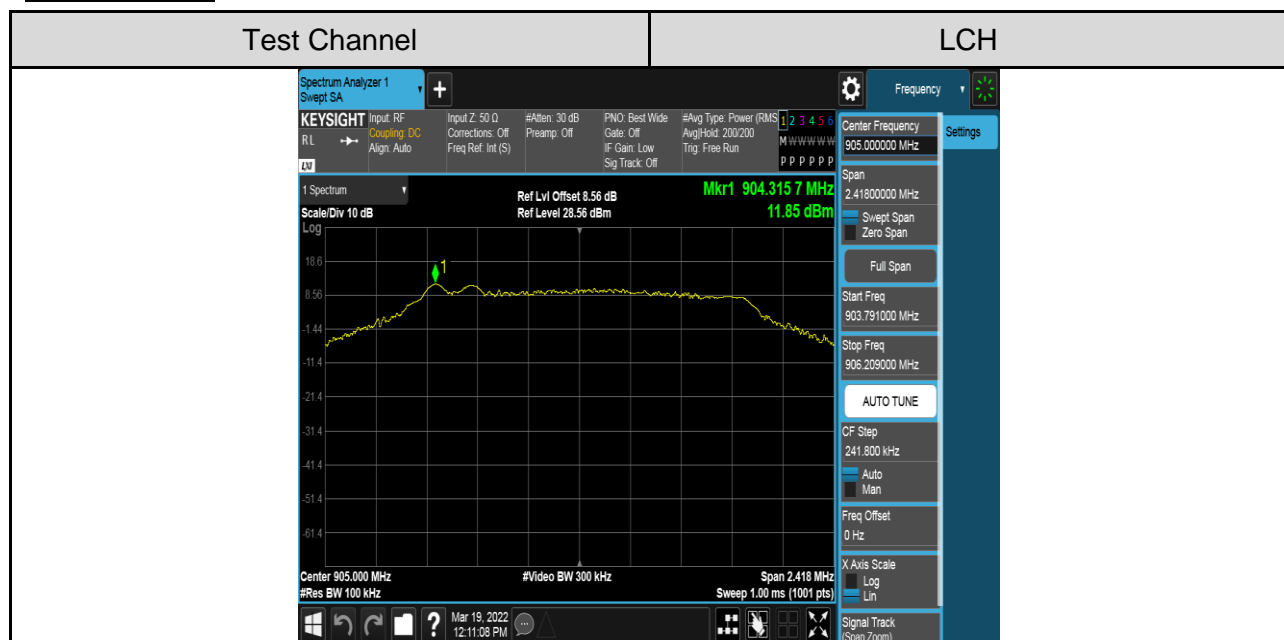
Temperature	20°C	Relative Humidity	56%
Atmosphere Pressure	101kPa	Test Voltage	DC 3V

## PART 1: REFERENCE LEVEL MEASUREMENT

### TEST RESULTS TABLE

Test Channel	Result[dBm]
LCH	11.85
MCH	11.99
HCH	11.90

## TEST GRAPHS







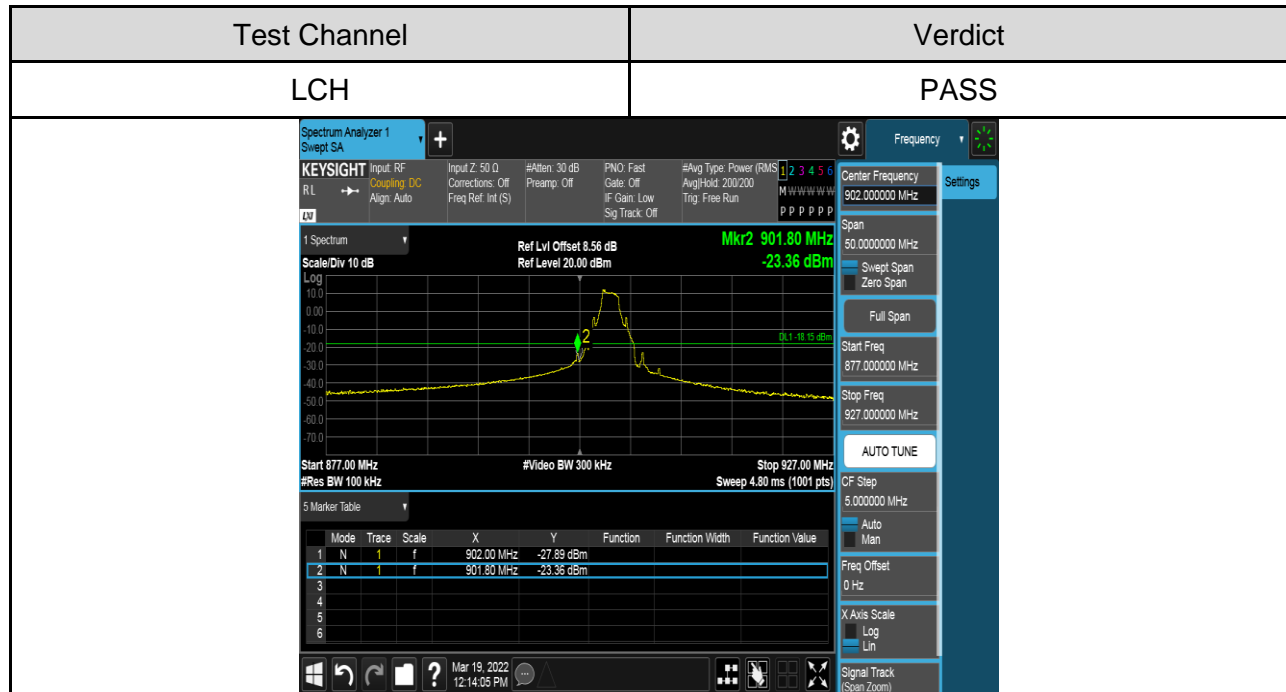


## PART 2: CONDUCTED BANDEDGE

### TEST RESULTS TABLE

Test Channel	Result	Verdict
LCH	Refer to the Test Graph	PASS
HCH	Refer to the Test Graph	PASS

### TEST GRAPHS





### PART 3: CONDUCTED SPURIOUS EMISSION

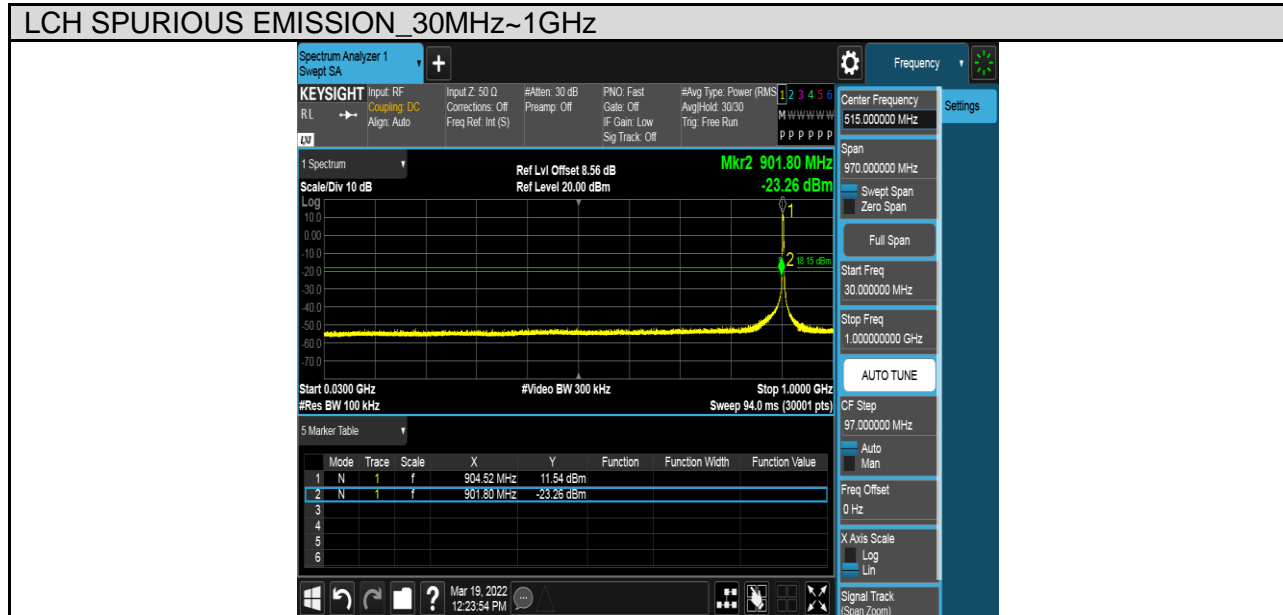
#### TEST RESULTS TABLE

Test Channel	Result	Verdict
LCH	Refer to the Test Graph	PASS
MCH	Refer to the Test Graph	PASS
HCH	Refer to the Test Graph	PASS



## TEST GRAPHS

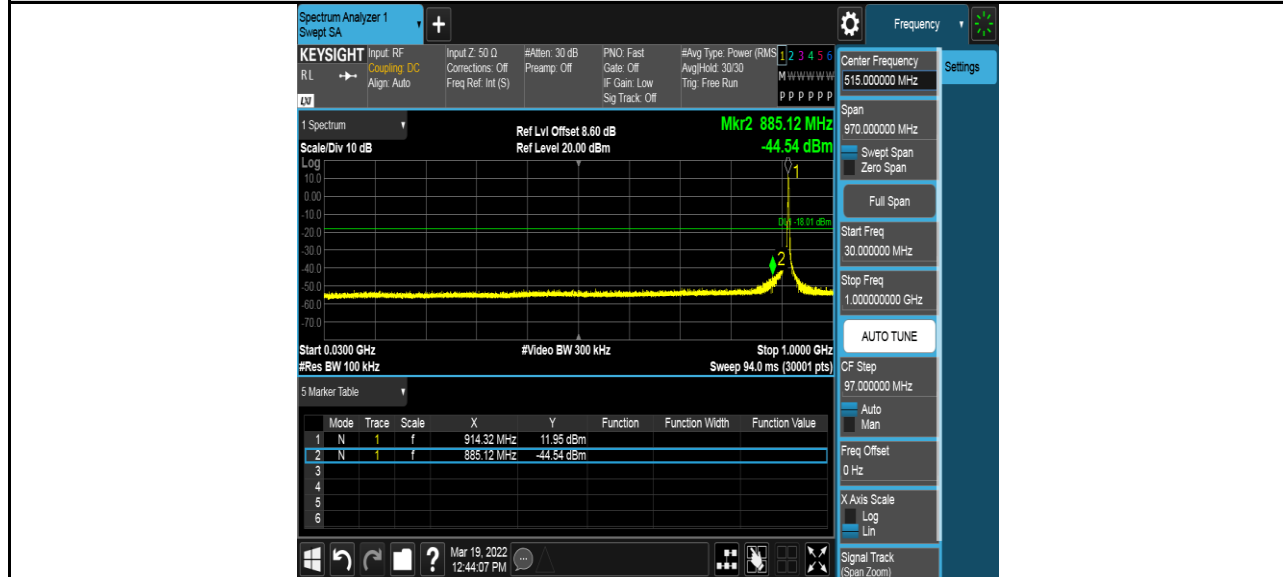
Channel	Verdict
LCH	PASS





Channel	Verdict
MCH	PASS

#### LCH SPURIOUS EMISSION\_30MHz~1GHz



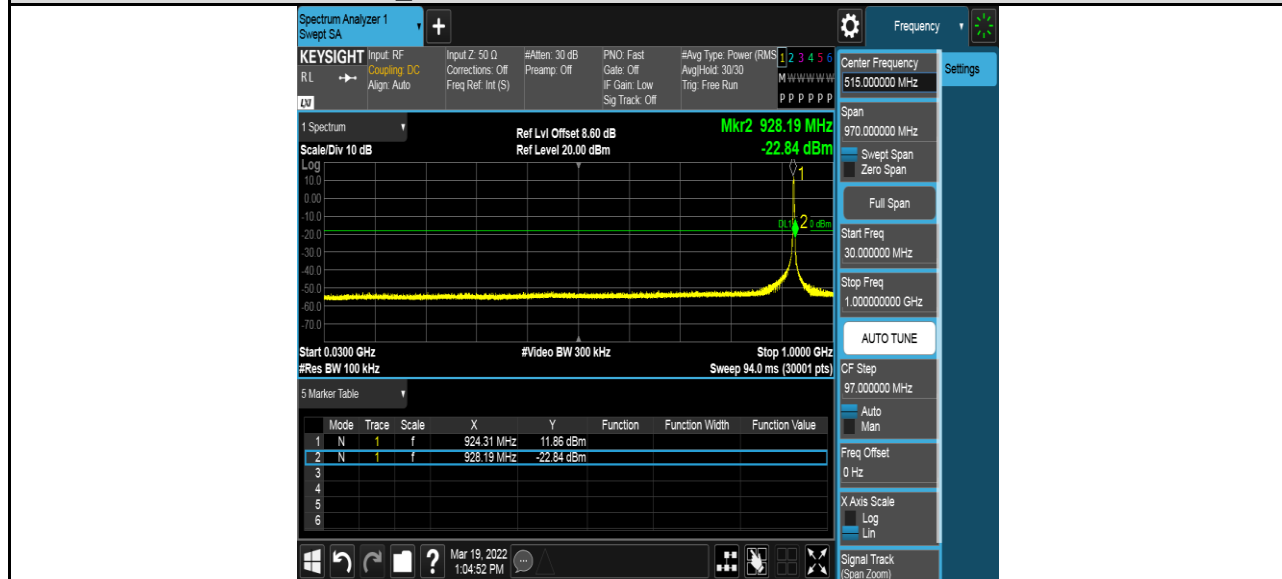
#### LCH SPURIOUS EMISSION\_1GHz~26.5GHz





Channel	Verdict
HCH	PASS

#### LCH SPURIOUS EMISSION\_30MHz~1GHz



#### LCH SPURIOUS EMISSION\_1GHz~26.5GHz





## 9. RADIATED TEST RESULTS

### LIMITS

Please refer to CFR 47 FCC §15.205 and §15.209

Radiation Disturbance Test Limit for FCC (Class B) (9kHz-1GHz)

Frequency (MHz)	Field Strength (microvolts/meter)	Measurement Distance (meters)
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
960~1000	500	3

Note: 1) At frequencies at or above 30 MHz, measurements may be performed at a distance other than what is specified provided: measurements are not made in the near field except where it can be shown that near field measurements are appropriate due to the characteristics of the device; and it can be demonstrated that the signal levels needed to be measured at the distance employed can be detected by the measurement equipment. Measurements shall not be performed at a distance greater than 30 meters unless it can be further demonstrated that measurements at a distance of 30 meters or less are impractical. When performing measurements at a distance other than that specified, the results shall be extrapolated to the specified distance using an extrapolation factor of 20 dB/decade (inverse linear-distance for field strength measurements; inverse-linear-distance-squared for power density measurements).

(2) At frequencies below 30 MHz, measurements may be performed at a distance closer than that specified in the regulations; however, an attempt should be made to avoid making measurements in the near field. Pending the development of an appropriate measurement procedure for measurements performed below 30 MHz, when performing measurements at a closer distance than specified, the results shall be extrapolated to the specified distance by either making measurements at a minimum of two distances on at least one radial to determine the proper extrapolation factor or by using the square of an inverse linear distance extrapolation factor (40 dB/decade). This paragraph (f) shall not apply to Access BPL devices operating below 30 MHz.



Radiation Disturbance Test Limit for FCC (Above 1G)

Frequency (MHz)	dB(uV/m) (at 3 meters)	
	Peak	Average
Above 1000	74	54

FCC Restricted bands of operation:

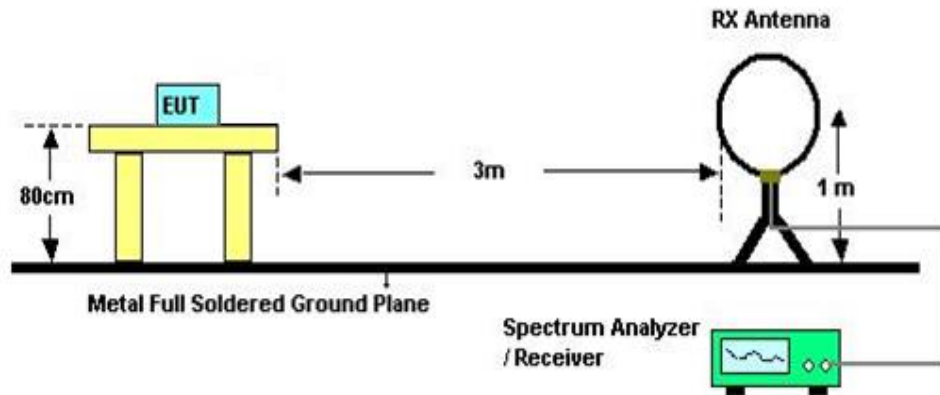
MHz	MHz	MHz	GHz
0.090-0.110	16.42-16.423	399.9-410	4.5-5.15
<sup>1</sup> 0.495-0.505	16.69475-16.69525	608-614	5.35-5.46
2.1735-2.1905	16.80425-16.80475	960-1240	7.25-7.75
4.125-4.128	25.5-25.67	1300-1427	8.025-8.5
4.17725-4.17775	37.5-38.25	1435-1626.5	9.0-9.2
4.20725-4.20775	73-74.6	1645.5-1646.5	9.3-9.5
6.215-6.218	74.8-75.2	1660-1710	10.6-12.7
6.26775-6.26825	108-121.94	1718.8-1722.2	13.25-13.4
6.31175-6.31225	123-138	2200-2300	14.47-14.5
8.291-8.294	149.9-150.05	2310-2390	15.35-16.2
8.362-8.366	156.52475-156.52525	2483.5-2500	17.7-21.4
8.37625-8.38675	156.7-156.9	2690-2900	22.01-23.12
8.41425-8.41475	162.0125-167.17	3260-3267	23.6-24.0
12.29-12.293	167.72-173.2	3332-3339	31.2-31.8
12.51975-12.52025	240-285	3345.8-3358	36.43-36.5
12.57675-12.57725	322-335.4	3600-4400	( <sup>2</sup> )
13.36-13.41			

Note: <sup>1</sup>Until February 1, 1999, this restricted band shall be 0.490-0.510 MHz.

<sup>2</sup>Above 38.6

## TEST SETUP AND PROCEDURE

Below 30MHz



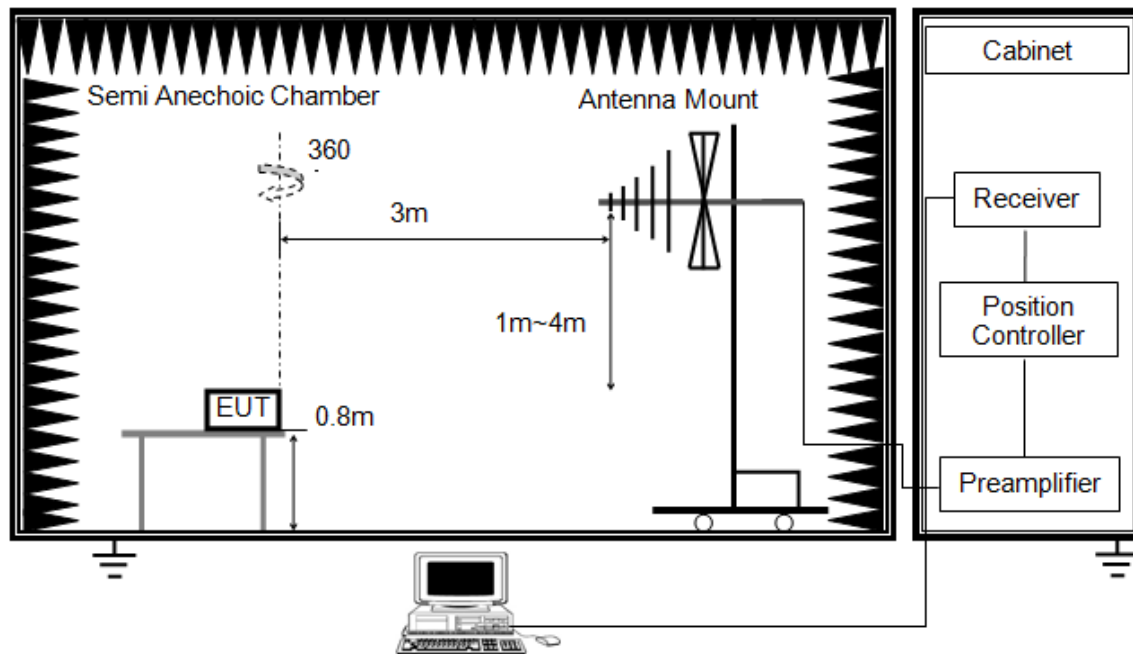
The setting of the spectrum analyser

RBW	200 Hz (From 9kHz to 0.15MHz)/ 9 kHz (From 0.15MHz to 30MHz)
VBW	200 Hz (From 9kHz to 0.15MHz)/ 9 kHz (From 0.15MHz to 30MHz)
Sweep	Auto
Detector	Peak/QP
Trace	Max hold

1. The testing follows the guidelines in ANSI C63.10-2013
2. The EUT was arranged to its worst case and then turntable (from 0 degree to 360 degrees) to find the maximum reading. A pre-amp and a high pass filter are used for the test in order to get better signal level. Both Horizontal, Face-on and Face-off polarizations of the antenna are set to make the measurement.
3. The EUT was placed on a turntable with 0.8 meter above ground.
4. The EUT was set 3 meters from the interference receiving antenna, which was mounted on the top of a 1m height antenna tower.
5. For measurement below 1GHz, the initial step in collecting conducted emission data is a spectrum analyzer peak detector mode pre-scanning the measurement frequency range. Significant peaks are then marked and then Quasi Peak detector mode re-measured. If the emission level of the EUT measured by the peak detector is 3 dB lower than the applicable limit, the peak emission level will be reported. Otherwise, the emission measurement will be repeated using the quasi-peak detector and reported.
6. Although these tests were performed other than open field site, adequate comparison measurements were confirmed against 30m open field site. Therefore sufficient tests were made to demonstrate that the alternative site produces results that correlate with the ones of tests made in an open field site based on KDB 414788.



Below 1G



The setting of the spectrum analyser

RBW	120 kHz
VBW	300 kHz
Sweep	Auto
Detector	Peak/QP
Trace	Max hold

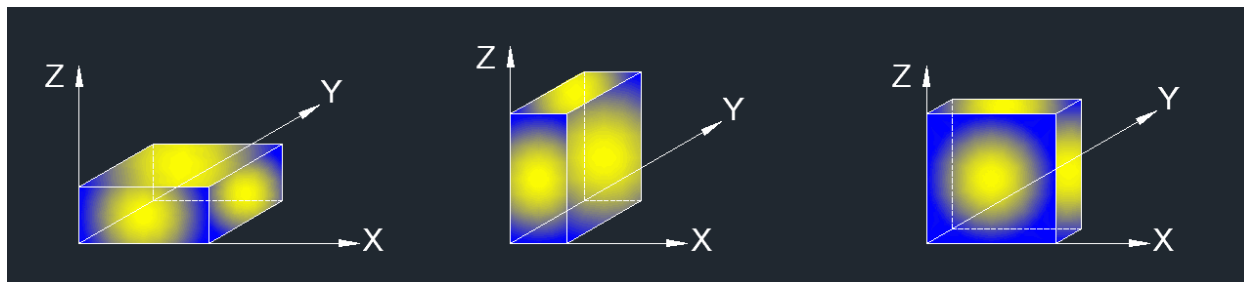
1. The testing follows the guidelines in ANSI C63.10-2013.
2. The EUT was arranged to its worst case and then tune the antenna tower (from 1 m to 4 m) and turntable (from 0 degree to 360 degrees) to find the maximum reading. A pre-amp and a high pass filter are used for the test in order to get better signal level. Both horizontal and vertical polarizations of the antenna are set to make the measurement.
3. The EUT was placed on a turntable with 0.8 meter above ground.
4. The EUT was set 3 meters from the interference receiving antenna, which was mounted on the top of a variable height antenna tower.
5. For measurement below 1GHz, the initial step in collecting conducted emission data is a spectrum analyzer peak detector mode pre-scanning the measurement frequency range. Significant peaks are then marked and then Quasi Peak detector mode re-measured. If the emission level of the EUT measured by the peak detector is 3 dB lower than the applicable limit, the peak emission level will be reported. Otherwise, the emission measurement will be repeated using the quasi-peak detector and reported.
6. For the actual test configuration, please refer to the related item in this test report (Photographs of the Test Configuration)

The diagram illustrates a measurement setup within a Semi Anechoic Chamber. The chamber's interior walls are lined with pyramidal absorbers. An Equipment Under Test (EUT) is placed on a stand that is 1.5m high and can rotate 360 degrees. A distance of 3m is marked between the EUT and the Antenna Mount. The Antenna Mount is positioned at a height of 1m to 4m. A horn antenna is also shown at a height of 1m. The chamber is connected to a computer system (Receiver, Position Controller, Preamplifier) housed in a Cabinet.

RBW	1 MHz
VBW	PEAK: 3 MHz AVG: See note6
Sweep	Auto
Detector	Peak
Trace	Max hold

1. The testing follows the guidelines in ANSI C63.10-2013.
2. The EUT was arranged to its worst case and then tune the antenna tower (from 1 m to 4 m) and turntable (from 0 degree to 360 degrees) to find the maximum reading. A pre-amp and a high pass filter are used for the test in order to get better signal level. Both horizontal and vertical polarizations of the antenna are set to make the measurement.
3. The EUT was placed on a turntable with 1.5m above ground.
4. The EUT was set 3 meters from the interference receiving antenna, which was mounted on the top of a variable height antenna tower.
5. For measurement above 1GHz, the emission measurement will be measured by the peak detector. This peak level, once corrected, must comply with the limit specified in Section 15.209.
6. For measurements above 1 GHz the resolution bandwidth is set to 1 MHz, then the video bandwidth is set to 3 MHz for peak measurements and 1 MHz resolution bandwidth with set VBW  $\leq$  RBW/100, but not less than list in section 7.1 with average detector, max hold to run for at least 50 traces for average measurements.
7. For the actual test configuration, please refer to the related item in this test report (Photographs of the Test Configuration)

X axis, Y axis, Z axis positions:



Note: For all radiated test, EUT in each of three orthogonal axis emissions had been tested, but only the worst case (X axis) data recorded in the report.

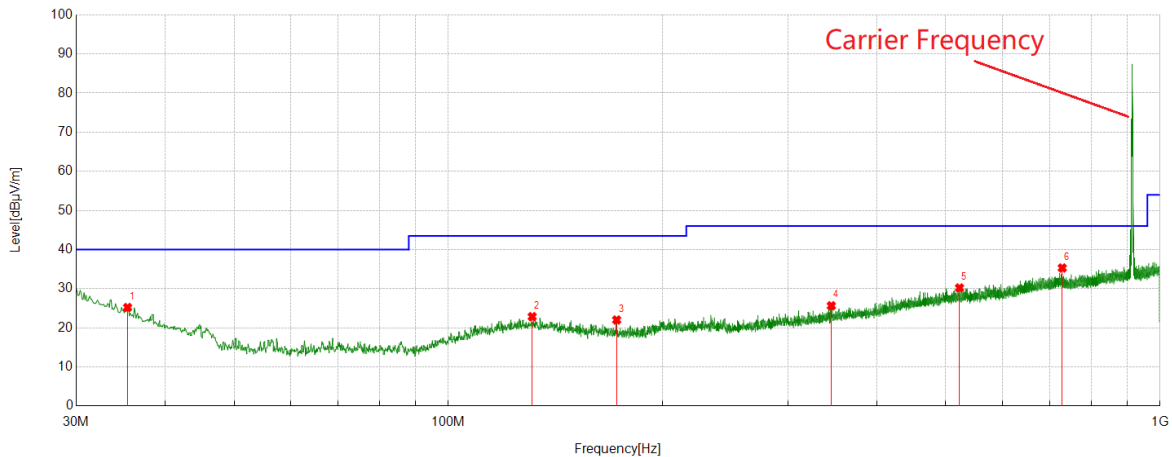
### **TEST ENVIRONMENT**

Temperature	20°C	Relative Humidity	56%
Atmosphere Pressure	101kPa	Test Voltage	DC 3V

## 9.1. SPURIOUS EMISSIONS BELOW 1 GHz

### SPURIOUS EMISSIONS 30MHz TO 1GHz (WORST-CASE CONFIGURATION)

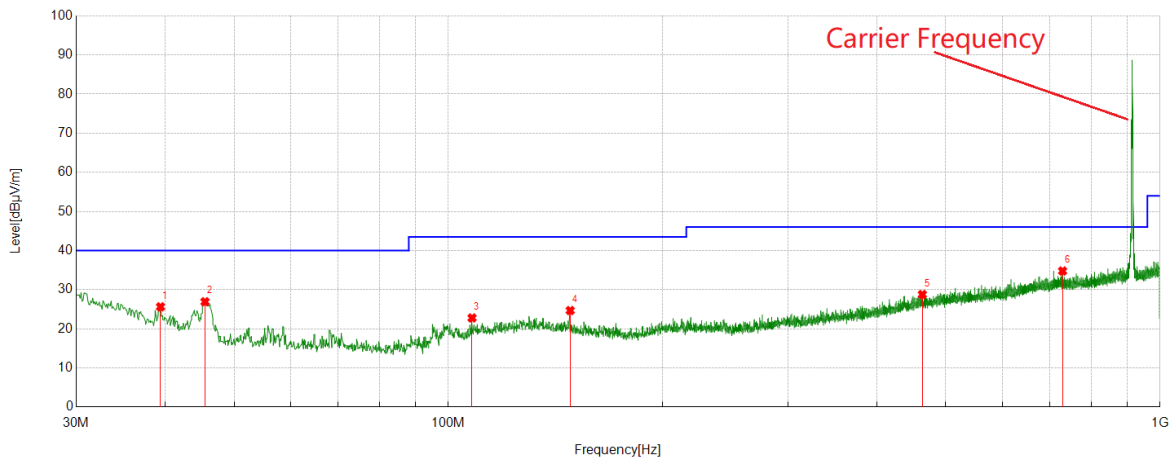
Channel	Polarization	Verdict
HCH	Horizontal	PASS



No.	Frequency (MHz)	Reading Level (dBuV/m)	Correct Factor (dB)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Remark
1	35.4325	1.22	23.98	25.20	40.00	-14.80	Peak
2	131.1811	1.79	21.07	22.86	43.50	-20.64	Peak
3	172.4102	3.28	18.73	22.01	43.50	-21.49	Peak
4	345.2815	3.38	22.26	25.64	46.00	-20.36	Peak
5	522.7123	3.51	26.69	30.20	46.00	-15.80	Peak
6	728.8579	5.49	29.81	35.30	46.00	-10.70	Peak

Note: 1. Result Level = Read Level + Correct Factor.  
 2. If Peak Result complies with QP limit, QP Result is deemed to comply with QP limit.  
 3. Test setup: RBW: 120 kHz, VBW: 300 kHz, Sweep time: auto.

Channel	Polarization	Verdict
HCH	Vertical	PASS



No.	Frequency (MHz)	Reading Level (dBuV/m)	Correct Factor (dB)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Remark
1	39.4099	4.36	21.27	25.63	40.00	-14.37	Peak
2	45.5216	9.53	17.39	26.92	40.00	-13.08	Peak
3	107.9958	3.90	18.88	22.78	43.50	-20.72	Peak
4	148.3518	4.91	19.77	24.68	43.50	-18.82	Peak
5	463.4393	3.13	25.64	28.77	46.00	-17.23	Peak
6	729.634	4.96	29.83	34.79	46.00	-11.21	Peak

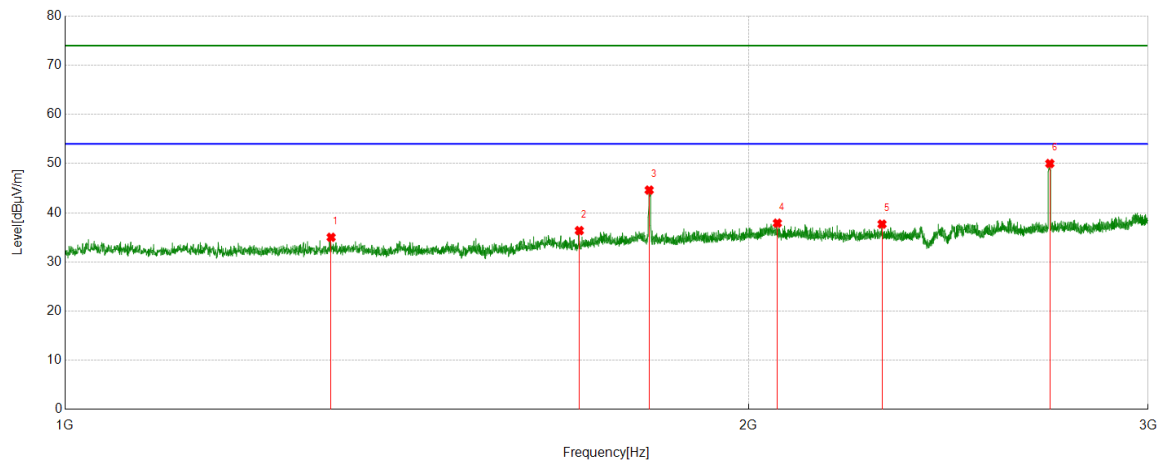
Note: 1. Result Level = Read Level + Correct Factor.  
2. If Peak Result complies with QP limit, QP Result is deemed to comply with QP limit.  
3. Test setup: RBW: 120 kHz, VBW: 300 kHz, Sweep time: auto.

Note: All constructions and test modes have been tested, only the worst data record in the report.

## 9.2. SPURIOUS EMISSIONS (1GHz~3GHz)

### HARMONICS AND SPURIOUS EMISSIONS

Channel	Polarization	Verdict
LCH	Horizontal	PASS



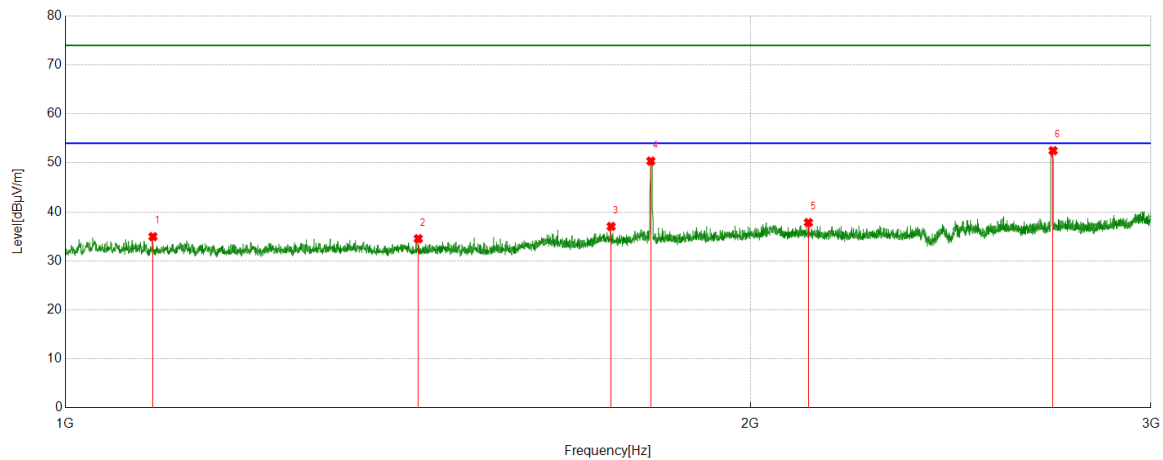
PK Result:

No.	Frequency [MHz]	Reading Level [dBuV/m]	Correct Factor [dB]	Result [dBuV/m]	Limit [dBuV/m]	Margin [dB]	Remark
1	1309.7887	41.10	-6.09	35.01	74.00	-38.99	Peak
2	1684.8356	41.44	-5.07	36.37	74.00	-37.63	Peak
3	1808.6011	49.06	-4.45	44.61	74.00	-29.39	Peak
4	2059.6325	40.73	-2.84	37.89	74.00	-36.11	Peak
5	2290.4113	40.91	-3.22	37.69	74.00	-36.31	Peak
6	2715.4644	51.41	-1.40	50.01	74.00	-23.99	Peak

- Note: 1. Measurement = Reading Level + Correct Factor.  
 2. If Peak Result complies with AV limit, AV Result is deemed to comply with AV limit.  
 3. Test setup: RBW: 1 MHz, VBW: 3 MHz, Sweep time: auto.  
 4. Peak: Peak detector.  
 5. Only the worst case emission was recorded, if it complies with the limit, the other emissions deemed to comply with the limit.



Channel	Polarization	Verdict
LCH	Vertical	PASS



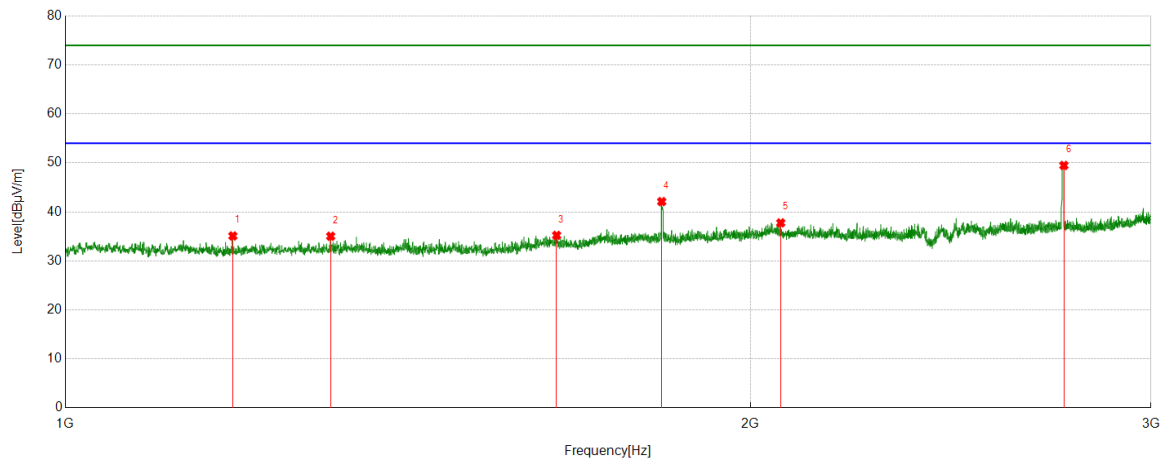
PK Result:

No.	Frequency	Reading Level	Correct Factor	Result	Limit	Margin	Remark
	[MHz]	[dBuV/m]	[dB]	[dBuV/m]	[dBuV/m]	[dB]	
1	1092.7616	41.19	-6.24	34.95	74.00	-39.05	Peak
2	1429.3037	41.07	-6.54	34.53	74.00	-39.47	Peak
3	1737.3422	41.97	-4.94	37.03	74.00	-36.97	Peak
4	1808.6011	54.82	-4.45	50.37	74.00	-23.63	Peak
5	2121.1401	40.77	-2.95	37.82	74.00	-36.18	Peak
6	2717.2147	53.92	-1.42	52.50	74.00	-21.50	Peak

- Note: 1. Measurement = Reading Level + Correct Factor.  
2. If Peak Result complies with AV limit, AV Result is deemed to comply with AV limit.  
3. Test setup: RBW: 1 MHz, VBW: 3 MHz, Sweep time: auto.  
4. Peak: Peak detector.  
5. Only the worst case emission was recorded, if it complies with the limit, the other emissions deemed to comply with the limit.



Channel	Polarization	Verdict
MCH	Horizontal	PASS



PK Result:

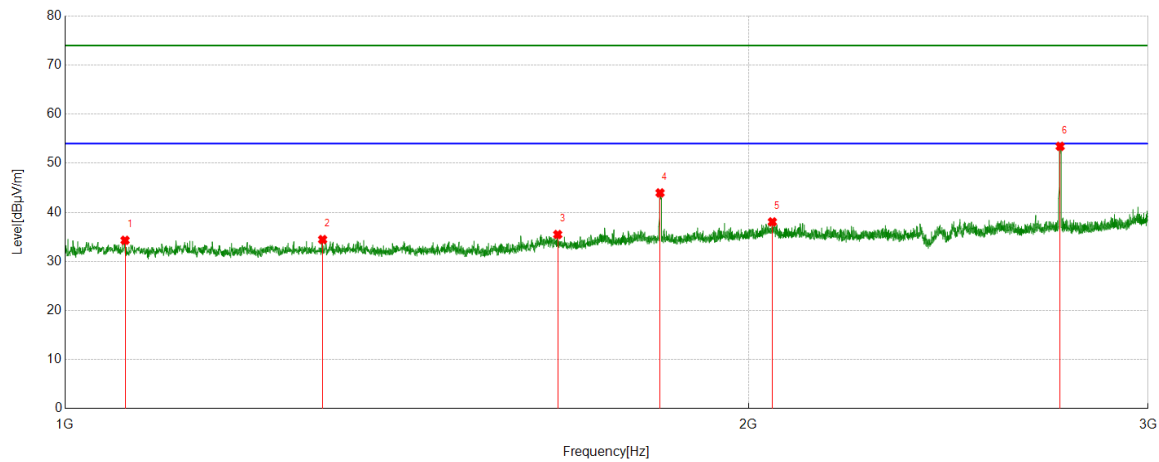
No.	Frequency	Reading Level	Correct Factor	Result	Limit	Margin	Remark
	[MHz]	[dBuV/m]	[dB]	[dBuV/m]	[dBuV/m]	[dB]	
1	1184.7731	41.64	-6.55	35.09	74.00	-38.91	Peak
2	1308.0385	41.20	-6.17	35.03	74.00	-38.97	Peak
3	1644.0805	40.41	-5.20	35.21	74.00	-38.79	Peak
4	1828.6036	46.24	-4.14	42.10	74.00	-31.90	Peak
5	2062.6328	40.68	-2.92	37.76	74.00	-36.24	Peak
6	2746.9684	51.02	-1.54	49.48	74.00	-24.52	Peak

- Note: 1. Measurement = Reading Level + Correct Factor.  
2. If Peak Result complies with AV limit, AV Result is deemed to comply with AV limit.  
3. Test setup: RBW: 1 MHz, VBW: 3 MHz, Sweep time: auto.  
4. Peak: Peak detector.  
5. Only the worst case emission was recorded, if it complies with the limit, the other emissions deemed to comply with the limit.





Channel	Polarization	Verdict
MCH	Vertical	PASS



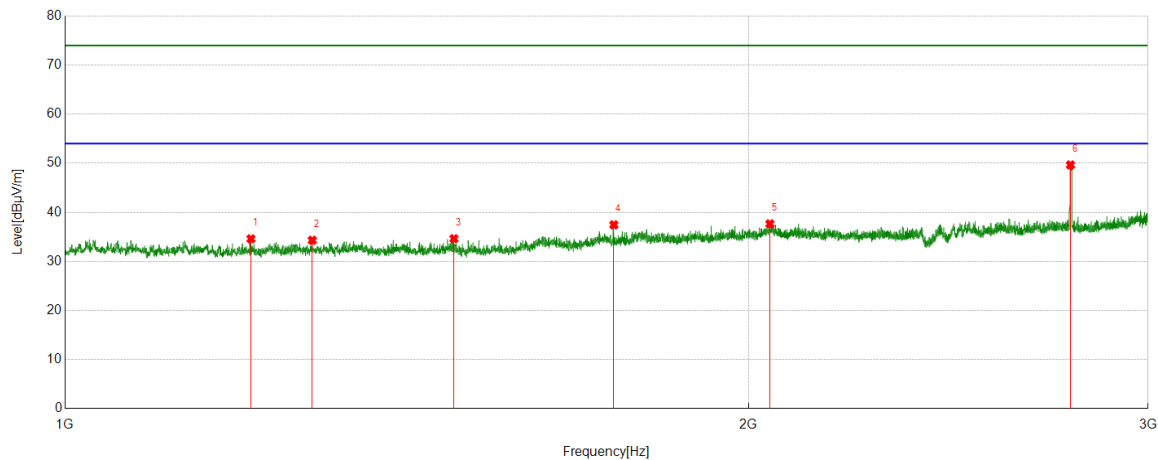
PK Result:

No.	Frequency	Reading Level	Correct Factor	Result	Limit	Margin	Remark
	[MHz]	[dBuV/m]	[dB]	[dBuV/m]	[dBuV/m]	[dB]	
1	1062.7578	40.20	-5.90	34.30	74.00	-39.70	Peak
2	1298.5373	40.97	-6.52	34.45	74.00	-39.55	Peak
3	1648.331	40.62	-5.14	35.48	74.00	-38.52	Peak
4	1828.6036	48.10	-4.14	43.96	74.00	-30.04	Peak
5	2049.3812	40.60	-2.55	38.05	74.00	-35.95	Peak
6	2743.968	54.99	-1.55	53.44	74.00	-20.56	Peak

- Note: 1. Measurement = Reading Level + Correct Factor.  
2. If Peak Result complies with AV limit, AV Result is deemed to comply with AV limit.  
3. Test setup: RBW: 1 MHz, VBW: 3 MHz, Sweep time: auto.  
4. Peak: Peak detector.  
5. Only the worst case emission was recorded, if it complies with the limit, the other emissions deemed to comply with the limit.



Channel	Polarization	Verdict
HCH	Horizontal	PASS



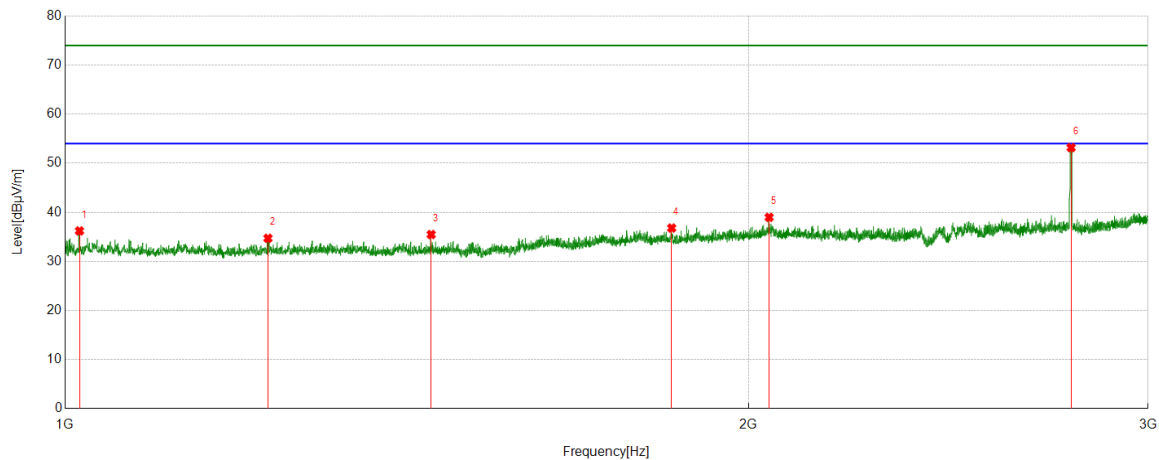
PK Result:

No.	Frequency	Reading Level	Correct Factor	Result	Limit	Margin	Remark
	[MHz]	[dBuV/m]	[dB]	[dBuV/m]	[dBuV/m]	[dB]	
1	1207.5259	40.99	-6.39	34.60	74.00	-39.40	Peak
2	1285.0356	40.66	-6.35	34.31	74.00	-39.69	Peak
3	1483.5604	41.16	-6.53	34.63	74.00	-39.37	Peak
4	1744.8431	42.42	-4.97	37.45	74.00	-36.55	Peak
5	2044.1305	40.20	-2.55	37.65	74.00	-36.35	Peak
6	2772.9716	51.14	-1.48	49.66	74.00	-24.34	Peak

- Note: 1. Measurement = Reading Level + Correct Factor.  
2. If Peak Result complies with AV limit, AV Result is deemed to comply with AV limit.  
3. Test setup: RBW: 1 MHz, VBW: 3 MHz, Sweep time: auto.  
4. Peak: Peak detector.  
5. Only the worst case emission was recorded, if it complies with the limit, the other emissions deemed to comply with the limit.



Channel	Polarization	Verdict
HCH	Vertical	PASS



PK Result:

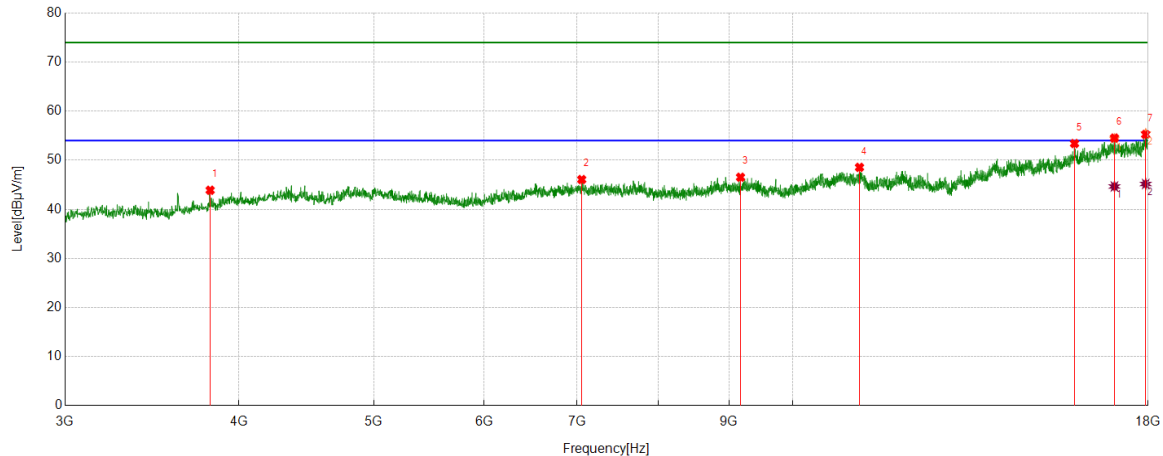
No.	Frequency	Reading Level	Correct Factor	Result	Limit	Margin	Remark
	[MHz]	[dBuV/m]	[dB]	[dBuV/m]	[dBuV/m]	[dB]	
1	1014.7518	41.84	-5.62	36.22	74.00	-37.78	Peak
2	1228.5286	41.20	-6.48	34.72	74.00	-39.28	Peak
3	1449.8062	41.81	-6.33	35.48	74.00	-38.52	Peak
4	1850.3563	40.96	-4.16	36.80	74.00	-37.20	Peak
5	2042.6303	41.53	-2.55	38.98	74.00	-35.02	Peak
6	2774.7218	54.68	-1.50	53.18	74.00	-20.82	Peak

- Note: 1. Measurement = Reading Level + Correct Factor.  
2. If Peak Result complies with AV limit, AV Result is deemed to comply with AV limit.  
3. Test setup: RBW: 1 MHz, VBW: 3 MHz, Sweep time: auto.  
4. Peak: Peak detector.  
5. Only the worst case emission was recorded, if it complies with the limit, the other emissions deemed to comply with the limit.

### 9.3. SPURIOUS EMISSIONS (3GHz~18GHz)

#### HARMONICS AND SPURIOUS EMISSIONS

Channel	Polarization	Verdict
LCH	Horizontal	PASS



#### PK Result:

No.	Frequency [MHz]	Reading Level [dBuV/m]	Correct Factor [dB]	Result [dBuV/m]	Limit [dBuV/m]	Margin [dB]	Remark
1	3813.8517	40.72	3.17	43.89	74.00	-30.11	Peak
2	7052.3815	37.42	8.65	46.07	74.00	-27.93	Peak
3	9171.3964	37.84	8.70	46.54	74.00	-27.46	Peak
4	11166.6458	37.10	11.45	48.55	74.00	-25.45	Peak
5	15937.2422	36.99	16.41	53.40	74.00	-20.60	Peak
6	17024.8781	36.22	18.17	54.39	74.00	-19.61	Peak
7	17928.7411	36.53	18.92	55.45	74.00	-18.55	Peak

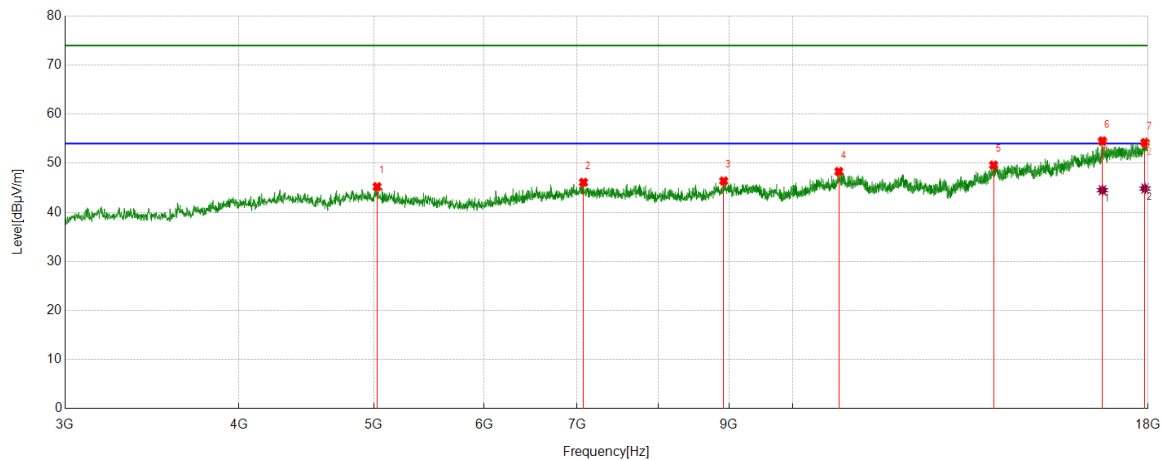
#### AV Result:

No.	Frequency [MHz]	Reading Level [dBuV/m]	Correct Factor [dB]	Result [dBuV/m]	Limit [dBuV/m]	Margin [dB]	Remark
1	17024.8781	26.48	18.17	44.65	54.00	-9.35	AV
2	17928.7411	26.24	18.92	45.16	54.00	-8.84	AV

- Note: 1. Measurement = Reading Level + Correct Factor.  
 2. If Peak Result complies with AV limit, AV Result is deemed to comply with AV limit.  
 3. Test setup: RBW: 1 MHz, VBW: 3 MHz, Sweep time: auto.  
 4. Peak: Peak detector.  
 5. Only the worst case emission was recorded, if it complies with the limit, the other emissions deemed to comply with the limit.



Channel	Polarization	Verdict
LCH	Vertical	PASS



## PK Result:

No.	Frequency	Reading Level	Correct Factor	Result	Limit	Margin	Remark
	[MHz]	[dBuV/m]	[dB]	[dBuV/m]	[dBuV/m]	[dB]	
1	5027.1284	39.44	5.78	45.22	74.00	-28.78	Peak
2	7073.0091	37.33	8.77	46.10	74.00	-27.90	Peak
3	8920.115	37.67	8.72	46.39	74.00	-27.61	Peak
4	10791.599	36.92	11.40	48.32	74.00	-25.68	Peak
5	13940.1175	35.50	14.12	49.62	74.00	-24.38	Peak
6	16691.0864	36.11	18.27	54.38	74.00	-19.62	Peak
7	17909.9887	34.98	19.05	54.03	74.00	-19.97	Peak

## AV Result:

No.	Frequency	Reading Level	Correct Factor	Result	Limit	Margin	Remark
	[MHz]	[dBuV/m]	[dB]	[dBuV/m]	[dBuV/m]	[dB]	
1	16691.0864	26.24	18.27	44.51	54.00	-9.49	AV
2	17909.9887	25.80	19.05	44.85	54.00	-9.15	AV

Note: 1. Measurement = Reading Level + Correct Factor.

2. If Peak Result complies with AV limit, AV Result is deemed to comply with AV limit.

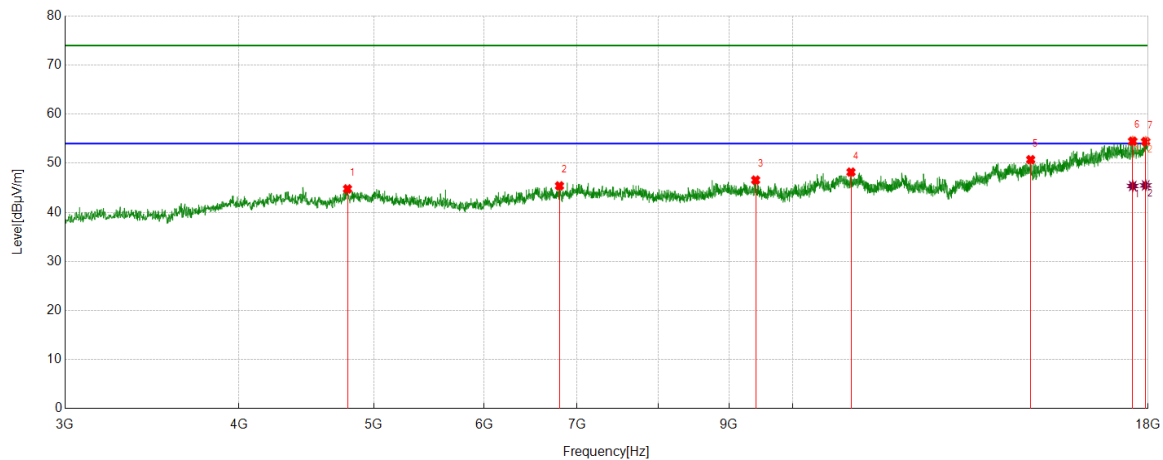
3. Test setup: RBW: 1 MHz, VBW: 3 MHz, Sweep time: auto.

4. Peak: Peak detector.

5. Only the worst case emission was recorded, if it complies with the limit, the other emissions deemed to comply with the limit.



Channel	Polarization	Verdict
MCH	Horizontal	PASS



PK Result:

No.	Frequency	Reading Level	Correct Factor	Result	Limit	Margin	Remark
	[MHz]	[dBuV/m]	[dB]	[dBuV/m]	[dBuV/m]	[dB]	
1	4787.0984	38.87	5.90	44.77	74.00	-29.23	Peak
2	6797.3497	37.32	8.07	45.39	74.00	-28.61	Peak
3	9403.9255	37.58	8.99	46.57	74.00	-27.43	Peak
4	11011.0014	36.40	11.79	48.19	74.00	-25.81	Peak
5	14823.3529	35.87	14.86	50.73	74.00	-23.27	Peak
6	17548.0685	36.47	18.07	54.54	74.00	-19.46	Peak
7	17928.7411	35.53	18.92	54.45	74.00	-19.55	Peak

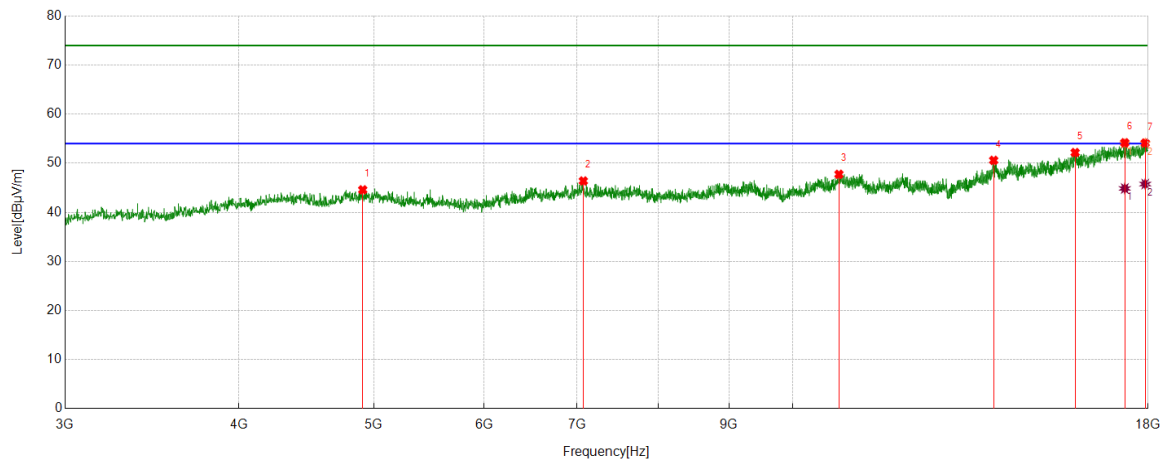
AV Result:

No.	Frequency	Reading Level	Correct Factor	Result	Limit	Margin	Remark
	[MHz]	[dBuV/m]	[dB]	[dBuV/m]	[dBuV/m]	[dB]	
1	17548.0685	27.29	18.07	45.36	54.00	-8.64	AV
2	17928.7411	26.57	18.92	45.49	54.00	-8.51	AV

- Note: 1. Measurement = Reading Level + Correct Factor.  
2. If Peak Result complies with AV limit, AV Result is deemed to comply with AV limit.  
3. Test setup: RBW: 1 MHz, VBW: 3 MHz, Sweep time: auto.  
4. Peak: Peak detector.  
5. Only the worst case emission was recorded, if it complies with the limit, the other emissions deemed to comply with the limit.



Channel	Polarization	Verdict
MCH	Vertical	PASS



PK Result:

No.	Frequency	Reading Level	Correct Factor	Result	Limit	Margin	Remark
	[MHz]	[dBuV/m]	[dB]	[dBuV/m]	[dBuV/m]	[dB]	
1	4908.9886	39.07	5.51	44.58	74.00	-29.42	Peak
2	7071.1339	37.62	8.77	46.39	74.00	-27.61	Peak
3	10793.4742	36.36	11.39	47.75	74.00	-26.25	Peak
4	13941.9927	36.50	14.09	50.59	74.00	-23.41	Peak
5	15954.1193	35.64	16.53	52.17	74.00	-21.83	Peak
6	17319.2899	36.34	17.65	53.99	74.00	-20.01	Peak
7	17915.6145	35.28	18.78	54.06	74.00	-19.94	Peak

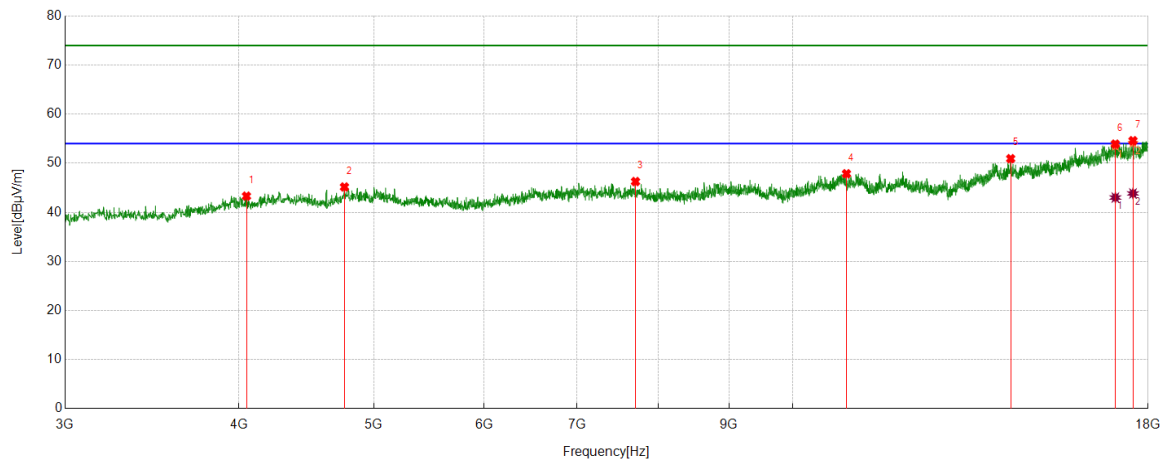
AV Result:

No.	Frequency	Reading Level	Correct Factor	Result	Limit	Margin	Remark
	[MHz]	[dBuV/m]	[dB]	[dBuV/m]	[dBuV/m]	[dB]	
1	17319.2899	27.21	17.65	44.86	54.00	-9.14	AV
2	17915.6145	26.98	18.78	45.76	54.00	-8.24	AV

- Note: 1. Measurement = Reading Level + Correct Factor.  
2. If Peak Result complies with AV limit, AV Result is deemed to comply with AV limit.  
3. Test setup: RBW: 1 MHz, VBW: 3 MHz, Sweep time: auto.  
4. Peak: Peak detector.  
5. Only the worst case emission was recorded, if it complies with the limit, the other emissions deemed to comply with the limit.



Channel	Polarization	Verdict
HCH	Horizontal	PASS



PK Result:

No.	Frequency	Reading Level	Correct Factor	Result	Limit	Margin	Remark
	[MHz]	[dBuV/m]	[dB]	[dBuV/m]	[dBuV/m]	[dB]	
1	4050.1313	39.70	3.60	43.30	74.00	-30.70	Peak
2	4762.7203	39.89	5.27	45.16	74.00	-28.84	Peak
3	7708.7136	38.26	8.01	46.27	74.00	-27.73	Peak
4	10928.4911	36.11	11.75	47.86	74.00	-26.14	Peak
5	14339.5424	36.45	14.48	50.93	74.00	-23.07	Peak
6	17051.1314	35.48	18.04	53.52	74.00	-20.48	Peak
7	17555.5694	36.03	18.12	54.15	74.00	-19.85	Peak

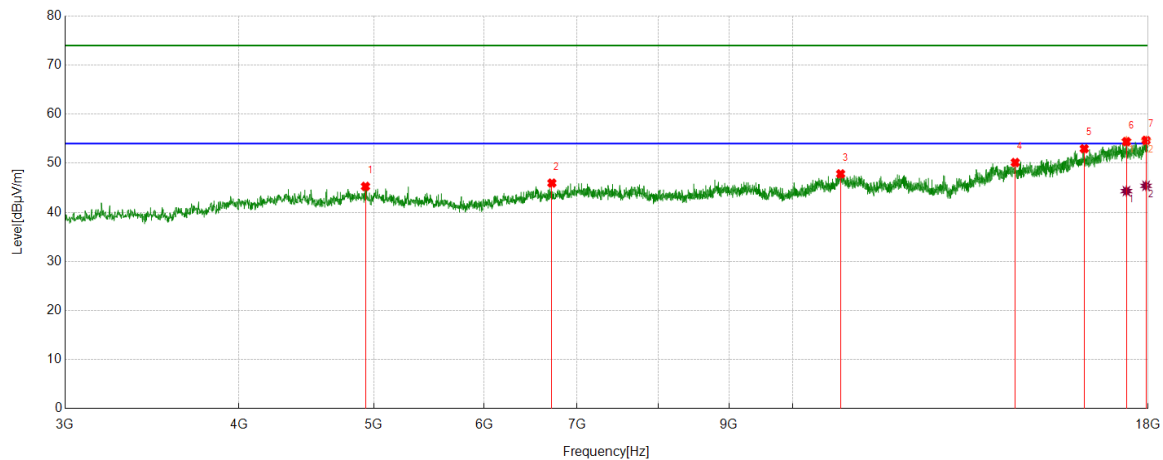
AV Result:

No.	Frequency	Reading Level	Correct Factor	Result	Limit	Margin	Remark
	[MHz]	[dBuV/m]	[dB]	[dBuV/m]	[dBuV/m]	[dB]	
1	17051.1314	24.97	18.04	43.01	54.00	-10.99	AV
2	17555.5694	25.72	18.12	43.84	54.00	-10.16	AV

- Note: 1. Measurement = Reading Level + Correct Factor.  
2. If Peak Result complies with AV limit, AV Result is deemed to comply with AV limit.  
3. Test setup: RBW: 1 MHz, VBW: 3 MHz, Sweep time: auto.  
4. Peak: Peak detector.  
5. Only the worst case emission was recorded, if it complies with the limit, the other emissions deemed to comply with the limit.



Channel	Polarization	Verdict
HCH	Vertical	PASS



#### PK Result:

No.	Frequency	Reading Level	Correct Factor	Result	Limit	Margin	Remark
	[MHz]	[dBuV/m]	[dB]	[dBuV/m]	[dBuV/m]	[dB]	
1	4931.4914	39.94	5.34	45.28	74.00	-28.72	Peak
2	6712.9641	37.66	8.30	45.96	74.00	-28.04	Peak
3	10823.4779	36.34	11.49	47.83	74.00	-26.17	Peak
4	14448.306	36.14	14.01	50.15	74.00	-23.85	Peak
5	16196.0245	36.07	16.89	52.96	74.00	-21.04	Peak
6	17366.1708	36.24	18.22	54.46	74.00	-19.54	Peak
7	17939.9925	35.41	19.11	54.52	74.00	-19.48	Peak

#### AV Result:

No.	Frequency	Reading Level	Correct Factor	Result	Limit	Margin	Remark
	[MHz]	[dBuV/m]	[dB]	[dBuV/m]	[dBuV/m]	[dB]	
1	17366.1708	26.11	18.22	44.33	54.00	-9.67	AV
2	17939.9925	26.29	19.11	45.40	54.00	-8.60	AV

Note: 1. Measurement = Reading Level + Correct Factor.

2. If Peak Result complies with AV limit, AV Result is deemed to comply with AV limit.

3. Test setup: RBW: 1 MHz, VBW: 3 MHz, Sweep time: auto.

4. Peak: Peak detector.

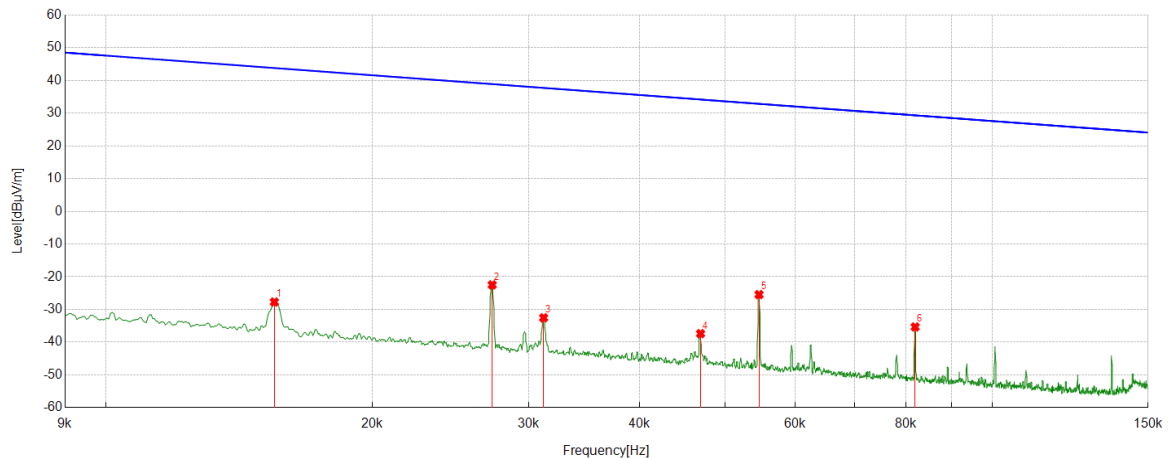
5. Only the worst case emission was recorded, if it complies with the limit, the other emissions deemed to comply with the limit.



## 9.4. SPURIOUS EMISSIONS BELOW 30MHz

### SPURIOUS EMISSIONS Below 30MHz (WORST CASE CONFIGURATION-FACE ON)

Channel	Frequency Range	Verdict
HCH	9kHz~150kHz	PASS

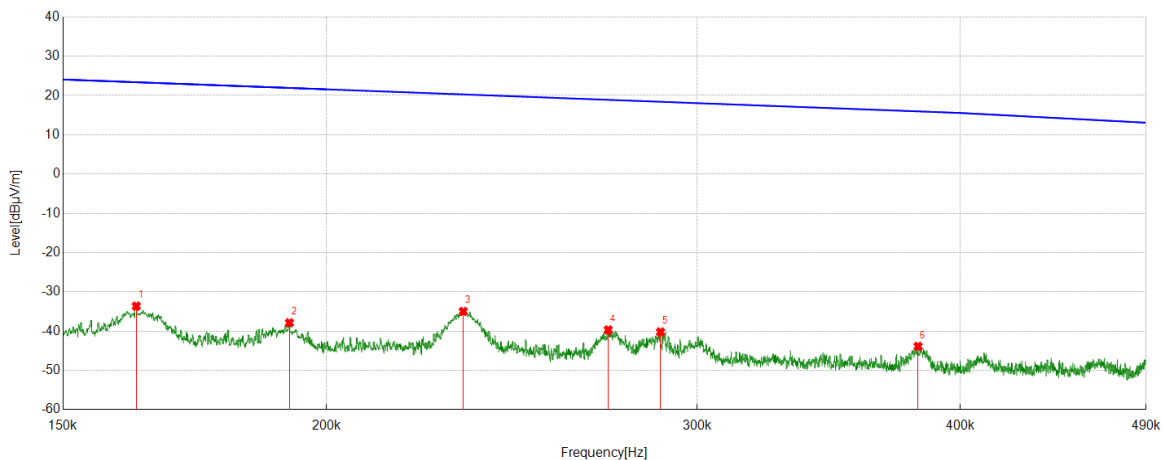


No.	Frequency	Reading Level	Correct Factor	Result	Limit	Margin	Remark
	(MHz)	(dBuV/m)	(dB)	(dBuV/m)	(dBuV/m)	(dB)	
1	0.0155	34.18	-61.89	-27.71	43.77	-71.48	Peak
2	0.0273	39.30	-61.77	-22.47	38.88	-61.35	Peak
3	0.0312	29.21	-61.74	-32.53	37.72	-70.25	Peak
4	0.0469	24.37	-61.74	-37.37	34.18	-71.55	Peak
5	0.0546	36.31	-61.75	-25.44	32.86	-58.30	Peak
6	0.0819	26.50	-61.83	-35.33	29.33	-64.66	Peak

- Note: 1. Measurement = Reading Level + Correct Factor.  
2. Result 300m= Result 3m-80 dBuV/m  
3. If Peak Result complies with AV and QP limit, AV and QP Result are deemed to comply with AV limit.



Channel	Frequency Range	Verdict
HCH	150kHz~490kHz	PASS

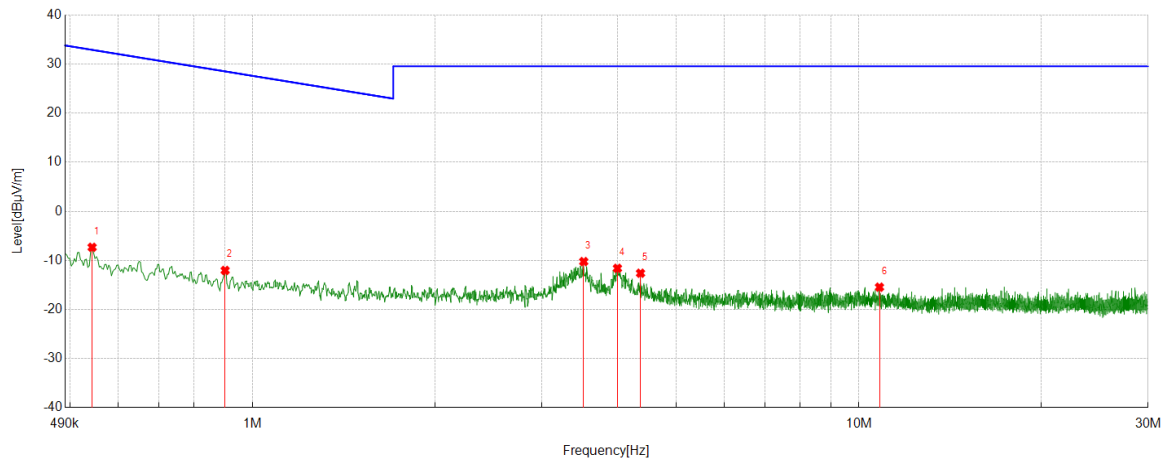


No.	Frequency (MHz)	Reading Level (dBuV/m)	Correct Factor (dB)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Remark
1	0.1625	28.22	-61.85	-33.63	23.39	-57.02	Peak
2	0.1921	23.98	-61.86	-37.88	21.93	-59.81	Peak
3	0.2323	26.89	-61.87	-34.98	20.28	-55.26	Peak
4	0.2722	22.21	-61.89	-39.68	18.91	-58.59	Peak
5	0.2882	21.69	-61.90	-40.21	18.41	-58.62	Peak
6	0.3819	18.03	-61.90	-43.87	15.96	-59.83	Peak

Note: 1. Measurement = Reading Level + Correct Factor.  
2. Result 300m= Result 3m-80 dBuV/m  
3. If Peak Result complies with AV and QP limit, AV and QP Result are deemed to comply with AV limit.



Channel	Frequency Range	Verdict
HCH	150kHz~490kHz	PASS



No.	Frequency (MHz)	Reading Level (dBuV/m)	Correct Factor (dB)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Remark
1	0.5431	14.56	-21.89	-7.33	32.91	-40.24	Peak
2	0.9002	9.83	-21.87	-12.04	28.52	-40.56	Peak
3	3.5151	11.51	-21.75	-10.24	29.54	-39.78	Peak
4	3.9961	10.13	-21.74	-11.61	29.54	-41.15	Peak
5	4.3621	9.13	-21.74	-12.61	29.54	-42.15	Peak
6	10.8136	6.16	-21.61	-15.45	29.54	-44.99	Peak

Note: 1. Measurement = Reading Level + Correct Factor.  
2. Result 30m= Result 3m-40 dBuV/m  
3. If Peak Result complies with AV and QP limit, AV and QP Result are deemed to comply with AV limit.

Note: All constructions and test modes have been tested, only the worst data record in the report.



## 10. ANTENNA REQUIREMENTS

### APPLICABLE REQUIREMENTS

Please refer to FCC §15.203

An intentional radiator shall be designed to ensure that no antenna other than that furnished by the responsible party shall be used with the device. The use of a permanently attached antenna or of an antenna that uses a unique coupling to the intentional radiator shall be considered sufficient to comply with the provisions of this section. The manufacturer may design the unit so that a broken antenna can be replaced by the user, but the use of a standard antenna jack or electrical connector is prohibited.

Please refer to FCC §15.247(b)(4)

The conducted output power limit specified in paragraph (b) of this section is based on the use of antennas with directional gains that do not exceed 6 dBi. Except as shown in paragraph (c) of this section, if transmitting antennas of directional gain greater than 6 dBi are used, the conducted output power from the intentional radiator shall be reduced below the stated values in paragraphs (b)(1), (b)(2), and (b)(3) of this section, as appropriate, by the amount in dB that the directional gain of the antenna exceeds 6 dBi.

### RESULTS

Complies

**END OF REPORT**