

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

ANKON Technologies Co., Ltd.

Prepared by

UL-CCIC COMPANY LIMITED No. 2, Chengwan Road, Suzhou Industrial Park, Suzhou 215122, China Tel: +86 769 22038881 Fax: +86 769 33244054 Website: www.ul.com

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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		
,	Γ is powered by battery. asurement result for the sample receive	ed is <pass> according to < ANSI C</pass>	63.10-2013,		

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			

Prepared By:

Tom Tang

Reviewed By:

Leon Wu

Leon Wu

Senior Engineer Project

Tom Tang Project Engineer

Authorized By:

Chris Zhong

Chris Zhong Laboratory Leader



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	A2LA (Certificate No.: 4829.01) UL-CCIC COMPANY LIMITED has been assessed and proved to be in compliance with A2LA. FCC (FCC Designation No.: CN1247) 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. IC (IC Designation No.: 25056; CAB No.: CN0073) 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.
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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	Frequency	Channel Number	Max Conducted Power
(NTX)	(MHz)		(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				
	Test Channel				
Transmit Antenna Number		NCB: 4MHz			
Number	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
⊠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	Mod	lel No.	Seri	al No.	Upper Last Cal.	Last Cal.	Next Cal.
\checkmark	EMI Test Receiver	R&S	E	SR3	12	6700	2020-12-05	2021-12-04	2022-12-03
\checkmark	Two-Line V-Network	R&S	EN	V216	12	6701	2020-12-05	2021-12-04	2022-12-03
V	Artificial Mains Networks	R&S	EN	NY81	12	6711	2020-10-13	2021-10-12	2022-10-11
Software									
Used	Des	scription		Ma	inufac	turer	Name	Version	
	Test Software for (Conducted distur	bance		R&S	;	EMC32	Ver. 9.25	
		Ra	diated	d Emissi	ions (Instrum	nent)		
Used	Equipment	Manufacturer	Mod	lel No.	Seri	al No.	Upper Last Cal.	Last Cal.	Next Cal.
\checkmark	Spectrum Analyzer	Keysight	N9	010B	15	5727	2020-05-10	2021-05-09	2022-05-08
\checkmark	EMI test receiver	R&S	ES	SR26	12	6703	2020-12-05	2021-12-04	2022-12-03
\checkmark	Receiver Antenna (9kHz-30MHz)	Schwarzbeck	FMZ	B 1513	15	5456	2018-06-15	2021-06-03	2024-06-02
\checkmark	Receiver Antenna (30MHz-1GHz)	SunAR RF Motion	JB1		17	7821	2019-01-19	2022-01-18	2025-01-17
V	Receiver Antenna (1GHz-18GHz)	R&S	HF907		12	6705	2019-01-27	2022-02-28	2025-02-27
V	Receiver Antenna (18GHz-26.5GHz)	ETS	3160-10		15	5565	2019-01-05	2021-07-15	2024-07-14
V	Pre-amplification (To 18GHz)	Compliance Direction System Inc.	PAP-1G18-50		17	8825	2021-03-26	2022-03-01	2023-02-28
V	Pre-amplification (To 26.5GHz)	R&S	SCI	U-26D	13	5391	2020-12-05	2021-12-04	2022-12-03
V	Band Reject Filter	Wainwright	2350 2483.5	CJV8-)-2400- 5-2533.5- 0SS		1	2020-05-10	2021-05-09	2022-05-08
V	Highpass Filter	Wainwright	WHKX10- 2700-3000- 18000-40SS			2	2020-05-10	2021-05-09	2022-05-08
	Software								
Used	Used Description I		Manufac	cturer Nar		Name	Version		
\checkmark	☑ Test Software for Radiated disturbance			Tonsce			TS+	Ver. 2.5	
			0	ther ins	trum	ents			
Used	Equipment	Manufacturer	Mod	lel No.	Seri	al No.	Upper Last Cal.	Last Cal.	Next Cal.
	Spectrum Analyzer	Keysight	N9	010B	15	5368	2020-05-10	2021-05-09	2022-05-08
\checkmark	Power Meter	Keysight	U20)21XA	15	5370	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

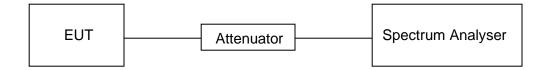
<u>LIMITS</u>

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:

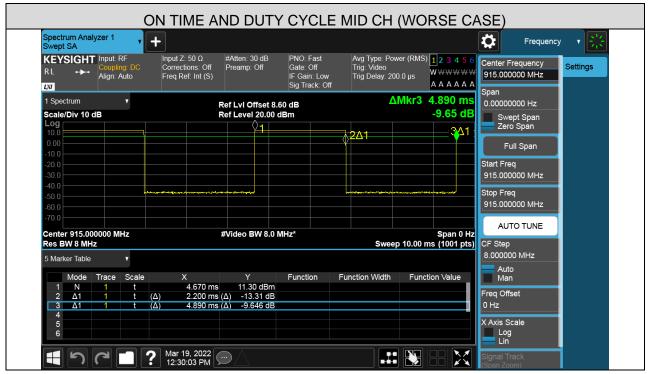
Duty Cycle Correction Factor=10log (1/x).

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

<u>LIMITS</u>

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	≥ 500kHz	902-928			

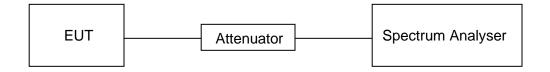
TEST PROCEDURE

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	≥3 × 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

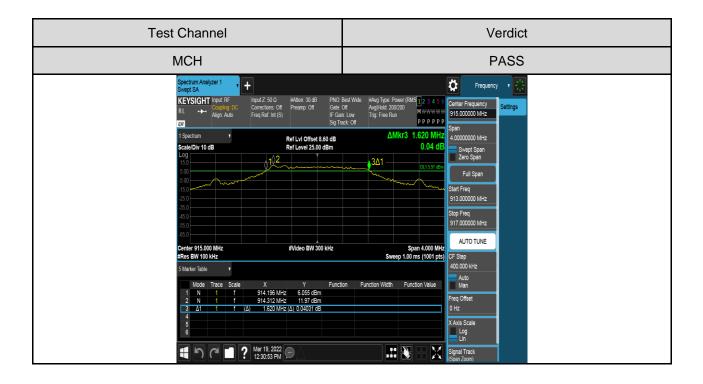
Temperature	20°C	Relative Humidity	56%
Atmosphere Pressure	101kPa	Test Voltage	DC 3V

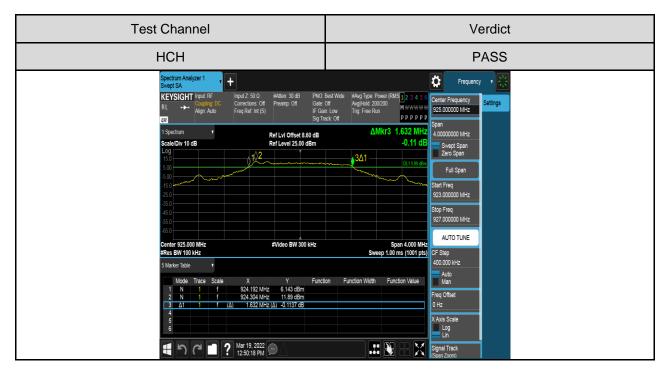
RESULTS

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

TEST GRAPHS

Test Channel	Verdict
LCH	PASS
Spectrum Analyzer 1 Swept SA Imput 75 0.0 (Control Align Auto Im	Low Trig: Free Run MWWWW 905.000000 MHz
66 0 Center 905.000 MHz #Video BW 300 kHz #Res BW 100 kHz #Video BW 300 kHz #Res BW 100 kHz Formation and the second seco	Span 4.000 Mt/s Sweep 1.00 ms (1001 pts) n Function Width Function Value Auto Man Freq Offset Og Lin Signal Track Signal Track







8.3. CONDUCTED OUTPUT POWER

<u>LIMITS</u>

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				

Note:

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

<u>RESULT</u>

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 Density8 dBm/3 kHz (See note1)902-928			
Note: 1. If transmitting antennas of directional gain greater than 6 dBi are used, both the maximum			

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

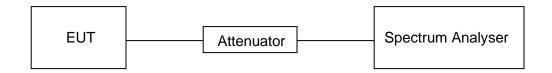
Center Frequency	The centre frequency of the channel under test	
Detector	Peak	
RBW	3 kHz ≤ RBW ≤100 kHz	
VBW	≥3 × RBW	
Span	1.5 x DTS bandwidth	
Trace	Max hold	
Sweep time	Auto couple.	

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

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

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RESULTS

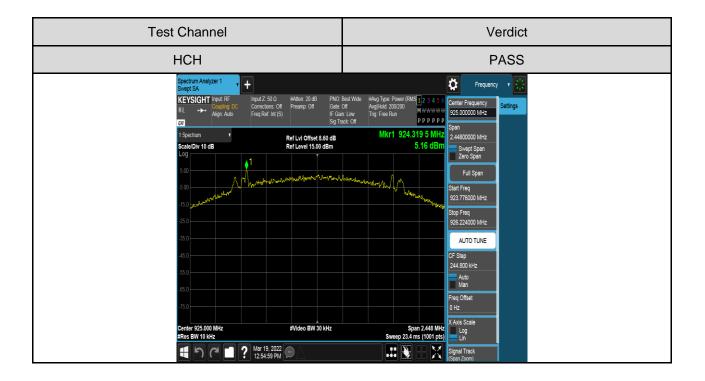
Test Channel	Power Spectral Density (dBm/10kHz)	Limit (dBm/3kHz)	Result
Low	5.20	8	PASS
Middle	5.47	8	PASS
High	5.16	8	PASS

TEST GRAPHS





Test Channel			Verdict	
МСН			PASS	
RL →→ Correct RL →→ Align Audo Freq F 1 Spectrum ■ Scale/Div 10 dB ■ Log 0 0 0 0 0 5:00 0 0 0 0 0 0 5:00 0 0 0 0 0 0 0 5:00 0	Etions Off Ref. Int (S) Preamp Off Fig Gram Sig Tra Ref Level 15.00 dBm Press Ref Level 15.00 dB	Low Migree Run Microwy Microwy P P P P P Mkr1 914.322 03 MHz 5.47 dBm Microwy 0 0 0 Microwy 0 0	Span 2.4300000 MHz 3.vept Span Zero Span Full Span Start Freq 913.785000 MHz Stop Freq 915.215000 MHz CF Step 2.43.0000 KHz Auto TUNE CF Step 2.43.0000 KHz Auto Start Man Freq Offset 0 Hz X.Aris Scale Log Lin	
	19, 2022 38:35 PM	🛄 🔛 🔜 🔛	Signal Track (Span Zoom)	





8.5. CONDUCTED BANDEDGE AND SPURIOUS EMISSIONS

LIMITS

CFR 47 FCC Part15 (15.247) Subpart C			
Section Test Item Limit			
CFR 47 FCC §15.247 (d)	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	≥3 × RBW
Span	1.5 x DTS bandwidth
Trace	Max hold
Sweep time	Auto couple.

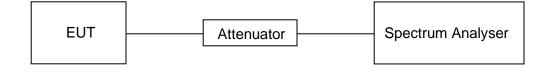
Use the peak marker function to determine the maximum PSD level.

Span	Set the center frequency and span to encompass frequency range to be measured	
Detector	Peak	
RBW	100 kHz	
VBW	≥3 × RBW	
measurement points	≥span/RBW	
Trace	Max hold	
Sweep time	Auto couple.	
the state we also an end on the state to the terms in a the second income second builds have be		

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
НСН	11.90

TEST GRAPHS





Test Channe	I	MCH
Spectrum Analyzer 1 Swept SA KEYSIGHT RL ↔ Auto Algor Auto	C Corrections: Off Preamp: Off Gate: Off Freq Ref: Int (S) IF Gain: Low	
tor 1 Spectrum ▼ Scale/Dv 10 dB Log	Sig Track C Ref LvI Offset 8.60 dB Ref Level 28.60 dBm	лят рррррр Мкг1 914.309 88 МН2 11.99 dBm Span змер Span змер Span Zero Span Zero Span
18.6 8.60	1	Full Span Start Freq 913.785000 MHz
-1.40		Stop Freq 916.215000 MHz
-31.4		CF Step 243.000 MHz Auto
-51.4 		Freq Offset 0 Hz X Avis Scale
Certer 915.000 MHz #Res BW 100 kHz 북 이 전 대	#Video BW 300 kHz Mar 19, 2022 12:39:55 PM	Span 2.430 MHz Sweep 1.00 ms (1001 pts) Signal Track Span 1 Track Span 2.430 MHz Signal Track



PART 2: CONDUCTED BANDEDGE

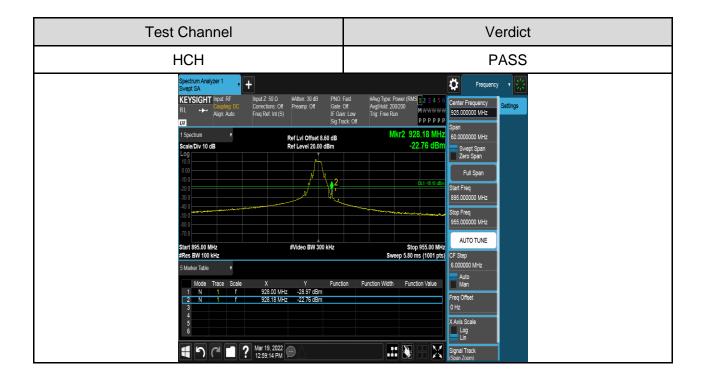
TEST RESULTS TABLE

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

TEST GRAPHS

Test Channel	Verdict
LCH	PASS
Spectrum Analyzer 1 + Swept SA Input RF RL → Aggn Auto Corrections Off TS Spectrum 1 Spectrum 1 Spectrum 1 Spectrum 1 Spectrum 10 Ref Level 10 00 00 00 00 00 00 00 00 00 00 00	Diff Gate Off Merry Hergener Preparety Sattings iF Gan Low Tig/ Free Run Merry Hergener Preparety Sattings sg Track. Off Mir/2 90.20000 MHz Span -23.36 dBm 2 01.1115 dB 2 01.1115 dB
Start 877.00 MHz #Video B #Res BW 100 kHz 5 Marker Table Mode Trace Scale X Y 1 N 1 f 902 00 MHz -27.88 2 N 1 7 901 80 MHz -23.36 3 4 - - - 6 - - - -	
4 5 7 1 2222	





PART 3: CONDUCTED SPURIOUS EMISSION

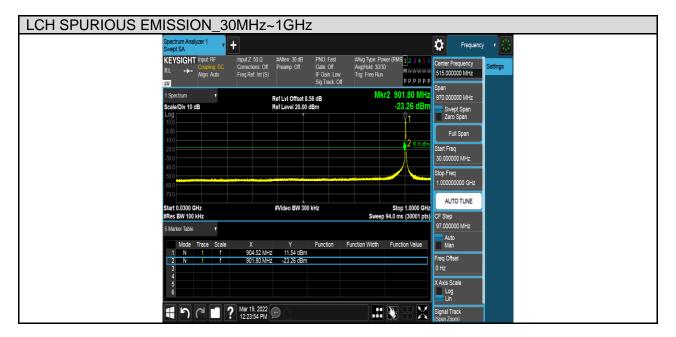
TEST RESULTS TABLE

Test Channel	Result	Verdict
LCH	Refer to the Test Graph	PASS
МСН	Refer to the Test Graph	PASS
НСН	Refer to the Test Graph	PASS



TEST GRAPHS

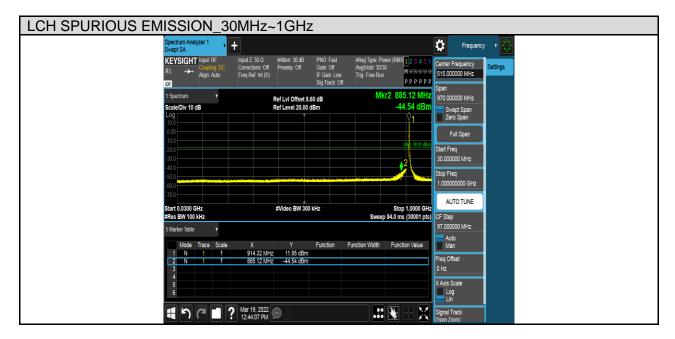
Channel	Verdict
LCH	PASS



LCH SPURIOUS EMISSION_1GHz~26.5GHz Ö ectrum / ent SA + Frequency v Input Z: 50 Ω Corrections: Off Freq Ref: Int (S) PNO: Fas Gate: Off IF Gain: L #Avg Type: P Avg|Hold: 30/ Trig: Free Ru KEYSIGHT Input RI Center Frequency Settings Align: Aut 13.750000000 GHz рррррр LUI Mkr1 2.712 75 GH Ref LvI Offset 8.56 dB Ref Level 15.00 dBm 25.5000000 GHz -36.42 dB Div 10 dB Swept Span Zero Span Start Freq 1.000000000 GHz Stop Freq 26.5000 00 GHz AUTO TUNE Start 1.00 GHz #Res BW 100 kHz #Video BW 300 kHz Stop 26.50 GHz Sweep 2.44 s (30001 pts) CF Step . 2.550000000 GHz Marker Tabl Auto Man Function Val Mode Trace Scale Functio ion Width 2.712 75 GHz -36.42 dBm req Offset X Axis Scale Log Lin (Mar 19, 2022) 12:26:52 PM X Signal Track



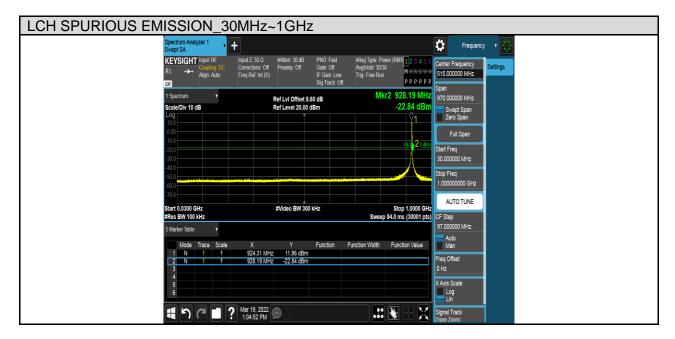
Channel	Verdict
MCH	PASS







Channel	Verdict
НСН	PASS







9. RADIATED TEST RESULTS

<u>LIMITS</u>

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:

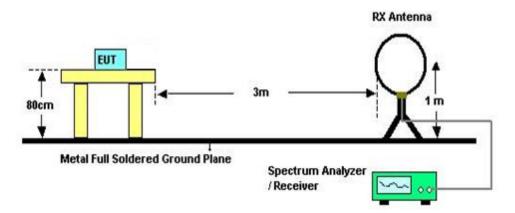
MHz	MHz	MHz	GHz	
0.090-0.110	16.42-16.423	399.9-410	4.5-5.15	
¹ 0.495-0.505	16.69475-16.69525	608-614	5.35-5.46	
2.1735-2.1905	16.80425-16.80475	960-1240	7.25-7.75	
4.125-4.128	25.5-25.67	1300-1427	8.025-8.5	
4.17725-4.17775	37.5-38.25	1435-1626.5	9.0-9.2	
4.20725-4.20775	73-74.6	1645.5-1646.5	9.3-9.5	
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	(2)	
13.36-13.41				

Note: ¹Until February 1, 1999, this restricted band shall be 0.490-0.510 MHz. ²Above 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.

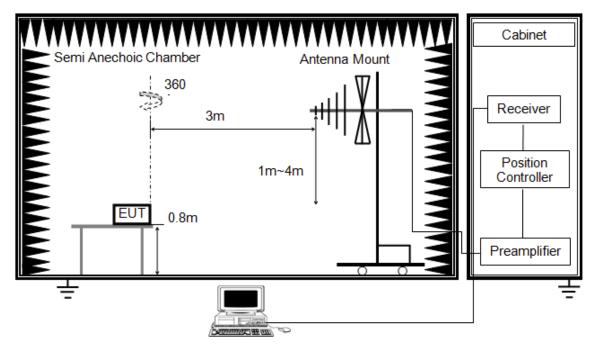
4. The EUT was set 3 meters from the interference receiving antenna, which was mounted on the top of a 1m height antenna tower.

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.

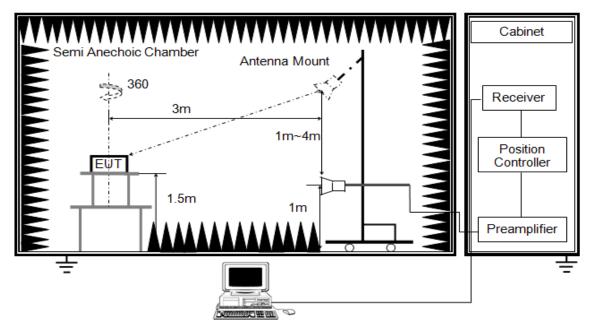
4. The EUT was set 3 meters from the interference receiving antenna, which was mounted on the top of a variable height antenna tower.

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)



Above 1G



The setting of the spectrum analyser

RBW	1 MHz
IVBW/	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.

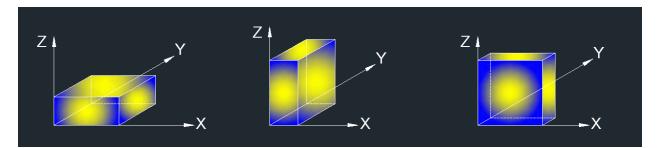
5. For measurement above 1GHz, the emission measurement will be measured by the peak detector. This peak level, once corrected, must comply with the limit specified in Section 15.209.

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 ≤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:



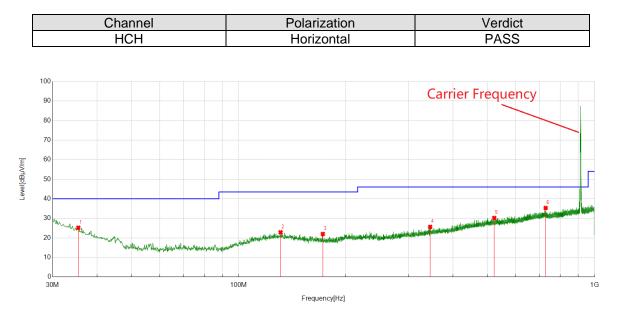
Note: For all radiated test, EUT in each of three orthogonal axis emissions had been tested, but only the worst case (X axis) data recorded in the report.

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)

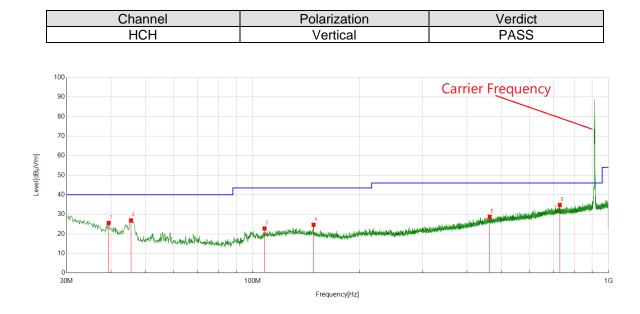
No.	Frequency	Reading Level	Correct Factor	Result	Limit	Margin	Remark
	(MHz)	(dBuV/m)	(dB)	(dBuV/m)	(dBuV/m)	(dB)	
1	35.4325	1.22	23.98	25.20	40.00	-14.80	Peak
2	131.1811	1.79	21.07	22.86	43.50	-20.64	Peak
3	172.4102	3.28	18.73	22.01	43.50	-21.49	Peak
4	345.2815	3.38	22.26	25.64	46.00	-20.36	Peak
5	522.7123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





No.	Frequency	Reading Level	Correct Factor	Result	Limit	Margin	Remark
	(MHz)	(dBuV/m)	(dB)	(dBuV/m)	(dBuV/m)	(dB)	
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

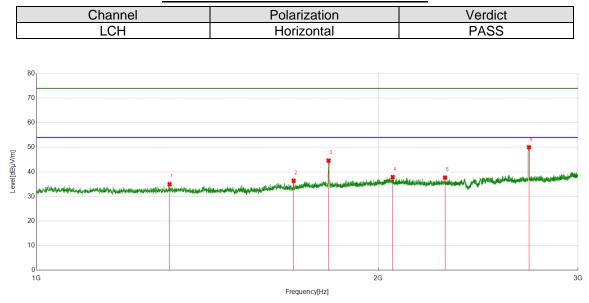
Note: 1. Result Level = Read Level + Correct Factor.

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

PK Res	PK Result:										
No.	Frequency	Reading Level	Correct Factor	Result	Limit	Margin	Remark				
	[MHz]	[dBuV/m]	[dB]	[dBuV/m]	[dBuV/m]	[dB]					
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				

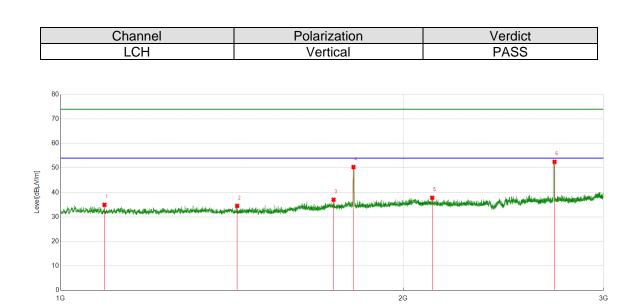
Note: 1. Measurement = Reading Level + Correct Factor.

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.

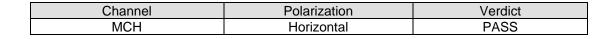


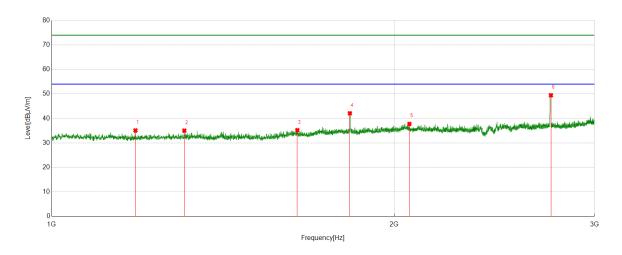
No.	Frequency	Reading Level	Correct Factor	Result	Limit	Margin	Remark
	[MHz]	[dBuV/m]	[dB]	[dBuV/m]	[dBuV/m]	[dB]	
1	1092.7616	41.19	-6.24	34.95	74.00	-39.05	Peak
2	1429.3037	41.07	-6.54	34.53	74.00	-39.47	Peak
3	1737.3422	41.97	-4.94	37.03	74.00	-36.97	Peak
4	1808.6011	54.82	-4.45	50.37	74.00	-23.63	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

Frequency[Hz]

- 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.

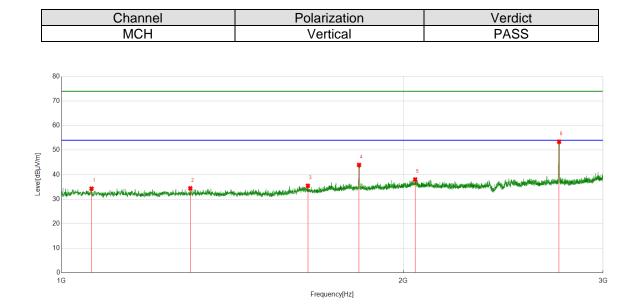






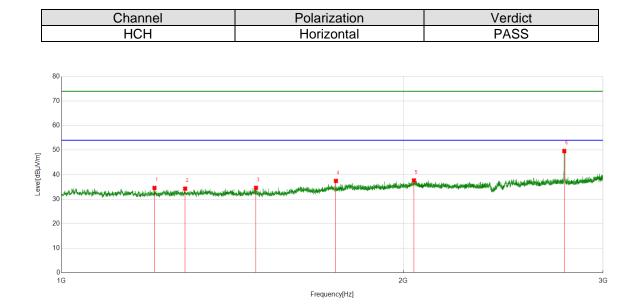
No.	Frequency	Reading Level	Correct Factor	Result	Limit	Margin	Remark
	[MHz]	[dBuV/m]	[dB]	[dBuV/m]	[dBuV/m]	[dB]	
1	1184.7731	41.64	-6.55	35.09	74.00	-38.91	Peak
2	1308.0385	41.20	-6.17	35.03	74.00	-38.97	Peak
3	1644.0805	40.41	-5.20	35.21	74.00	-38.79	Peak
4	1828.6036	46.24	-4.14	42.10	74.00	-31.90	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

- 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.



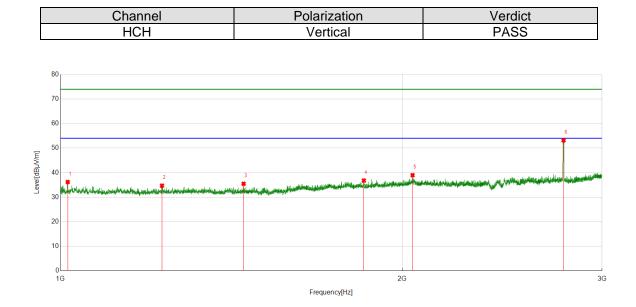
No.	Frequency	Reading Level	Correct Factor	Result	Limit	Margin	Remark
	[MHz]	[dBuV/m]	[dB]	[dBuV/m]	[dBuV/m]	[dB]	
1	1062.7578	40.20	-5.90	34.30	74.00	-39.70	Peak
2	1298.5373	40.97	-6.52	34.45	74.00	-39.55	Peak
3	1648.331	40.62	-5.14	35.48	74.00	-38.52	Peak
4	1828.6036	48.10	-4.14	43.96	74.00	-30.04	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

- 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.



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

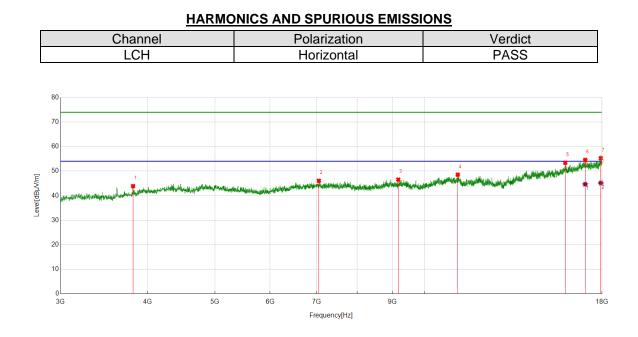
- 2. If Peak Result complies with AV limit, AV Result is deemed to comply with AV limit.
- 3. Test setup: RBW: 1 MHz, VBW: 3 MHz, Sweep time: auto.
- 4. Peak: Peak detector.
- 5. Only the worst case emission was recorded, if it complies with the limit, the other emissions deemed to comply with the limit.



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

- 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)



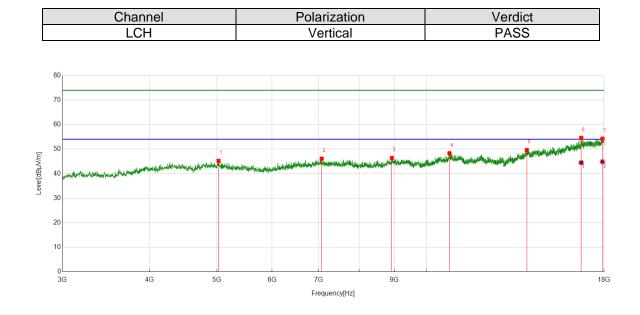
PK Result:

No.	Frequency	Reading Level	Correct Factor	Result	Limit	Margin	Remark
	[MHz]	[dBuV/m]	[dB]	[dBuV/m]	[dBuV/m]	[dB]	
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	Reading Level	Correct Factor	Result	Limit	Margin	Remark
	[MHz]	[dBuV/m]	[dB]	[dBuV/m]	[dBuV/m]	[dB]	
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

- 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.

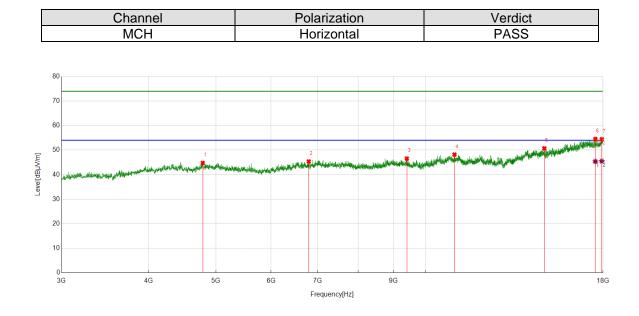


No.	Frequency	Reading Level	Correct Factor	Result	Limit	Margin	Remark
	[MHz]	[dBuV/m]	[dB]	[dBuV/m]	[dBuV/m]	[dB]	
1	5027.1284	39.44	5.78	45.22	74.00	-28.78	Peak
2	7073.0091	37.33	8.77	46.10	74.00	-27.90	Peak
3	8920.115	37.67	8.72	46.39	74.00	-27.61	Peak
4	10791.599	36.92	11.40	48.32	74.00	-25.68	Peak
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

- 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.

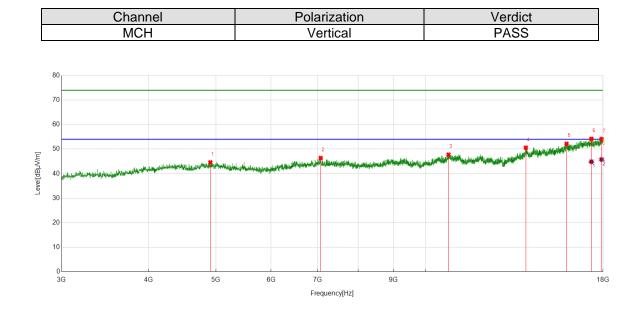


No.	Frequency	Reading Level	Correct Factor	Result	Limit	Margin	Remark
	[MHz]	[dBuV/m]	[dB]	[dBuV/m]	[dBuV/m]	[dB]	
1	4787.0984	38.87	5.90	44.77	74.00	-29.23	Peak
2	6797.3497	37.32	8.07	45.39	74.00	-28.61	Peak
3	9403.9255	37.58	8.99	46.57	74.00	-27.43	Peak
4	11011.0014	36.40	11.79	48.19	74.00	-25.81	Peak
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

- 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.

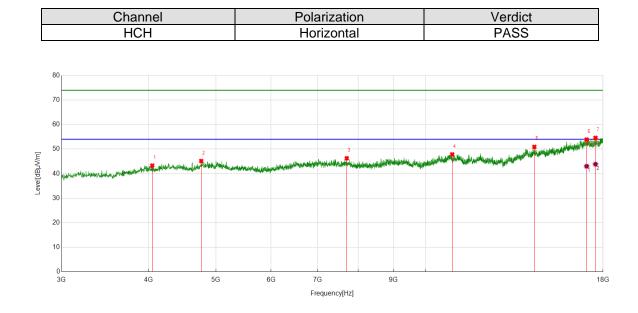


No.	Frequency	Reading Level	Correct Factor	Result	Limit	Margin	Remark
	[MHz]	[dBuV/m]	[dB]	[dBuV/m]	[dBuV/m]	[dB]	
1	4908.9886	39.07	5.51	44.58	74.00	-29.42	Peak
2	7071.1339	37.62	8.77	46.39	74.00	-27.61	Peak
3	10793.4742	36.36	11.39	47.75	74.00	-26.25	Peak
4	13941.9927	36.50	14.09	50.59	74.00	-23.41	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

- 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.

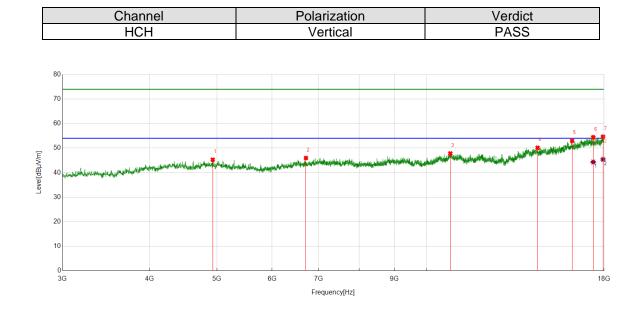


No.	Frequency	Reading Level	Correct Factor	Result	Limit	Margin	Remark
	[MHz]	[dBuV/m]	[dB]	[dBuV/m]	[dBuV/m]	[dB]	
1	4050.1313	39.70	3.60	43.30	74.00	-30.70	Peak
2	4762.7203	39.89	5.27	45.16	74.00	-28.84	Peak
3	7708.7136	38.26	8.01	46.27	74.00	-27.73	Peak
4	10928.4911	36.11	11.75	47.86	74.00	-26.14	Peak
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

- 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.

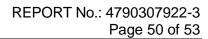


No.	Frequency	Reading Level	Correct Factor	Result	Limit	Margin	Remark
	[MHz]	[dBuV/m]	[dB]	[dBuV/m]	[dBuV/m]	[dB]	
1	4931.4914	39.94	5.34	45.28	74.00	-28.72	Peak
2	6712.9641	37.66	8.30	45.96	74.00	-28.04	Peak
3	10823.4779	36.34	11.49	47.83	74.00	-26.17	Peak
4	14448.306	36.14	14.01	50.15	74.00	-23.85	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

- 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

Channel Frequency Range Verdict HCH 9kHz~150kHz PASS 60 50 40 30 20 10 Level[dBµV/m] 0 -10 -20 -30 -40 -50 -60 L 9k 30k 20k 40k 60k 80k 150k Frequency[Hz]

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

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

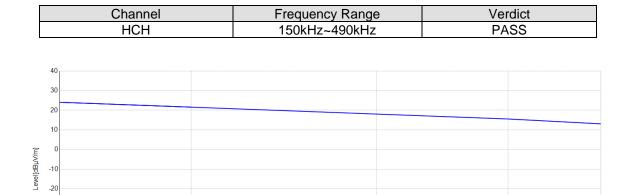
3. If Peak Result complies with AV and QP limit, AV and QP Result are deemed to comply with AV limit.

400k

490k



-30 -40 mm -50 -60 150k



No.	Frequency	Reading Level	Correct Factor	Result	Limit	Margin	Remark
	(MHz)	(dBuV/m)	(dB)	(dBuV/m)	(dBuV/m)	(dB)	
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

Frequency[Hz]

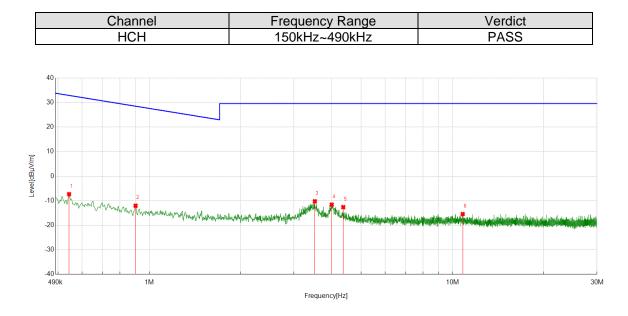
300k

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

200k

- 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.





No.	Frequency	Reading Level	Correct Factor	Result	Limit	Margin	Remark
	(MHz)	(dBuV/m)	(dB)	(dBuV/m)	(dBuV/m)	(dB)	
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