FCC PART 95

MEASUREMENT AND TEST REPORT

For

Altis Technology (Hong Kong) Ltd.

Suite 711, Lu Plaza, 2 Wing Yip Street, Kwun Tong Hong Kong China

FCC ID: 2AHJMACXTEDE

Report Type:	**Product Type:**
Original Report	Walkie Talkie Two-way Radio

Report Number:	RDG190513008-00
Report Date:	2019-08-30
Reviewed By:	Jerry Zhang EMC Manager
Test Laboratory:	Bay Area Compliance Laboratories Corp. (Dongguan) No.69 Pulongcun, Puxinhu Industry Area, Tangxia, Dongguan, Guangdong, China Tel: +86-769-86858888 Fax: +86-769-86858891 www.baclcorp.com.cn

TABLE OF CONTENTS

GENERAL INFORMATION

Product Description for Equipment Under Test (EUT)

EUT Name:	Walkie Talkie Two-way Radio
EUT Model:	ACXT545
Multiple Models:	CXT545, CXT565, CXT531, CXT545C+, CXT595, CXT545C, ACXT645, ACXT645 HD, CX445, PR540, ACXT531, AD500, AD500 SNOW, AD500 CAMO, AD501, AD502, AD501 SNOW, AD501 CAMO, AD502 SNOW, AD502 CAMO, AD505, AD505 SNOW, AD505 CAMO, AD510, AD510 SNOW, AD510 CAMO, AD515
Operation Frequency:	462.5500-462.7250MHz 467.5625-467.7125MHz
Modulation Mode:	F3E
Channel Spacing:	12.5kHz
Emission Designator:	11K0F3E
Maximum Output Power: (ERP)	462.5500-462.7250MHz High Power: 25.81dBm 462.5500-462.7250MHz Low Power: 21.92dBm 467.5625-467.7125MHz: 22.34 dBm
Rated Input Voltage:	DC3.6V from battery and DC 5V from Charger Base or USB port
Serial Number:	190513008
EUT Received Date:	2019-08-16

Note: Model ACXT545 was selected for fully testing, the detailed information about the difference among CXT545, CXT565, CXT531, CXT545C+, CXT595, CXT545C, ACXT645, ACXT645 HD, CX445, PR540, ACXT531, AD500, AD500 SNOW, AD500 CAMO, AD501, AD502, AD501 SNOW, AD501 CAMO, AD502 SNOW, AD502 CAMO, AD505, AD505 SNOW, AD505 CAMO, AD510, AD510 SNOW, AD510 CAMO, AD515 and model ACXT545can be referred to the declaration letter which was stated and guaranteed by the manufacturer.

Objective

This report is prepared on behalf of *Altis Technology (Hong Kong) Ltd.* in accordance with Part 2 and Part 95, Subpart A and B of the Federal Communication Commissions rules.

Related Submittal(s)/Grant(s)

No related submittal(s).

Test Methodology

All tests and measurements indicated in this document were performed in accordance with Part 95 Subpart A and Subpart B of the Federal Communication Commissions rules with TIA-603-D, Land Mobile FM or PM-Communications Equipment-Measurement and Performance Standards.

All emissions measurement was performed and Bay Area Compliance Laboratories Corp. (Dongguan).

Measurement Uncertainty

Parameter	Measurement Uncertainty
Occupied Channel Bandwidth	±5 %
RF output power, conducted	±0.61dB
Unwanted Emissions, radiated	30MHz ~ 1GHz:5.85 dB 1G~26.5GHz: 5.23 dB
Unwanted Emissions, conducted	±1.5 dB
Temperature	±1℃
Humidity	±5%
DC and low frequency voltages	±0.4%
Duty Cycle	1%

Test Facility

The Test site used by Bay Area Compliance Laboratories Corp. (Dongguan) to collect test data is located on the No.69 Pulongcun, Puxinhu Industry Area, Tangxia, Dongguan, Guangdong, China.

The lab has been recognized as the FCC accredited lab under the KDB 974614 D01 and is listed in the FCC Public Access Link (PAL) database, FCC Registration No. : 897218, the FCC Designation No. : CN1220.

The lab has been recognized by Innovation, Science and Economic Development Canada to test to Canadian radio equipment requirements, the CAB identifier: CN0022.

SYSTEM TEST CONFIGURATION

Description of Test Configuration

The system was configured for testing in a typical fashion (as normally used by a typical user).

The device uses total 22 FRS channels as below:

Channel No.	Frequency (MHz)	Channel No.	Frequency (MHz)
1	462.5625	12	467.6625
2	462.5875	13	467.6875
3	462.6125	14	467.7125
4	462.6375	15	462.5500
5	462.6625	16	462.5750
6	462.6875	17	462.6000
7	462.7125	18	462.6250
8	467.5625	19	462.6500
9	467.5875	20	462.6750
10	467.6125	21	462.7000
11	467.6375	22	462.7250

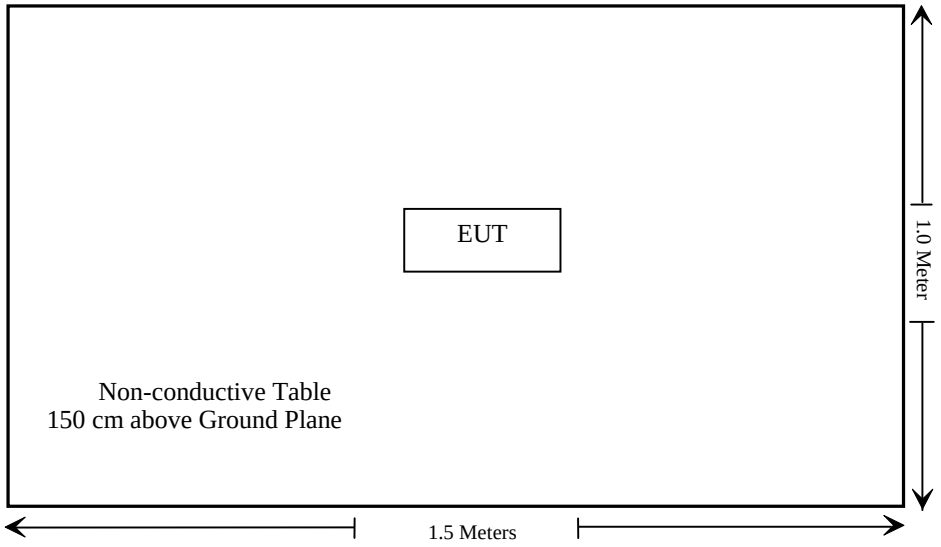
Equipment Modifications

No modification was made to the EUT tested.

EUT Exercise Software

No software was used during test.

Block Diagram of Test Setup



SUMMARY OF TEST RESULTS

FCC Rules	Description of Test	Results
§2.1093	RF Exposure	Compliance
§2.1046, §95.567	RF Output Power	Compliance
§2.1047, §95.575	Modulation Characteristic	Compliance
§2.1049, §95.573, §95.579	Authorized Bandwidth & Emission Mask	Compliance
§2.1053, §95.579	Spurious Radiated Emissions	Compliance
§2.1055(d), §95.565	Frequency Stability	Compliance

FCC §2.1093 - RF EXPOSURE INFORMATION

Applicable Standard

According to FCC §2.1093 and §1.1307(b) (1), systems operating under the provisions of this section shall be operated in a manner that ensure that the public is not exposed to radio frequency energy level in excess of the Commission's guideline.

Test Result

Please refer to SAR Report Number: RDG190513008-20.

FCC §2.1046, §95.567 - RF OUTPUT POWER

Applicable Standard

Acorrding to FCC §95.567

Each FRS transmitter type must be designed such that the effective radiated power (ERP) on channels 8 through 14 does not exceed 0.5 Watts and the ERP on channels 1 through 7 and 15 through 22 does not exceed 2.0 Watts.

Test Procedure

The transmitter was placed on a wooden turntable, and it was transmitting into a non-radiating load, which was also placed on the turntable.

The measurement antenna was placed at a distance of 3 meters from the EUT. During the tests, the antenna height and polarization as well as EUT azimuth were varied in order to identify the maximum level of emissions from the EUT .The test was performed by placing the EUT on 3-orthogonal axis.

Remove the EUT and replace it with substitution antenna. A signal generator was connected to the substitution antenna by a non-radiating cable. The absolute levels of the emissions were measured by the substitution.

Test Equipment List and Details

Manufacturer	Description	Model	Serial Number	Calibration Date	Calibration Due Date
R&S	EMI Test Receiver	ESR3	102453	2019-06-26	2020-06-26
Sunol Sciences	Antenna	JB3	A060611-1	2017-11-10	2020-11-10
EMCO	Adjustable Dipole Antenna	3121C	9109-753	N/A	N/A
Unknown	Coaxial Cable	C-NJNJ-50	C-0400-01	2018-09-05	2019-09-05
Unknown	Coaxial Cable	C-NJNJ-50	C-0075-01	2018-09-05	2019-09-05
Unknown	Coaxial Cable	C-NJNJ-50	C-1400-01	2019-05-06	2020-05-06
Unknown	Coaxial Cable	C-NJNJ-50	C-0200-02	2018-09-05	2019-09-05
Agilent	Signal Generator	E8247C	MY43321350	2018-12-10	2019-12-10

*** Statement of Traceability:** Bay Area Compliance Laboratories Corp. (Dongguan) attests that all calibrations have been performed, traceable to National Primary Standards and International System of Units (SI).

Test Data

Environmental Conditions

Temperature:	28°C
Relative Humidity:	54 %
ATM Pressure:	100. 7kPa
Test by:	Tyler Pan
Test Date:	2019-08-23

Test Mode: Transmitting

ERP:

High Power

Frequency (MHz)	Polar (H/V)	Receiver Reading (dBμV)	Substituted Method			Absolute Level (dBm)	Limit (dBm)	Margin (dB)
			Substituted Level (dBm)	Antenna Gain (dBd/dBi)	Cable Loss (dB)			
Frequency:462.6375MHz								
462.6375	H	93.87	12.54	0.00	0.67	11.87	33.00	21.13
462.6375	V	104.86	26.48	0.00	0.67	25.81	33.00	7.19

Low Power

Frequency (MHz)	Polar (H/V)	Receiver Reading (dBμV)	Substituted Method			Absolute Level (dBm)	Limit (dBm)	Margin (dB)
			Substituted Level (dBm)	Antenna Gain (dBd/dBi)	Cable Loss (dB)			
Frequency:462.6375MHz								
462.6375	H	90.31	8.98	0.00	0.67	8.31	33.00	24.69
462.6375	V	100.97	22.59	0.00	0.67	21.92	33.00	11.08

FM_12.5kHz

Frequency (MHz)	Polar (H/V)	Receiver Reading (dBμV)	Substituted Method			Absolute Level (dBm)	Limit (dBm)	Margin (dB)
			Substituted Level (dBm)	Antenna Gain (dBd/dBi)	Cable Loss (dB)			
Frequency:467.6375MHz								
467.6375	H	90.63	9.43	0.00	0.68	8.75	27.00	18.25
467.6375	V	101.25	23.02	0.00	0.68	22.34	27.00	4.66

Test Result: Compliance.

FCC §2.1047 & §95.575 - MODULATION CHARACTERISTIC

Applicable Standard

Per FCC §2.1047 and §95.575:

Each FRS transmitter type must be designed such that the peak frequency deviation does not exceed 2.5 kHz, and the highest audio frequency contributing substantially to modulation must not exceed 3.125 kHz.

Test Equipment List and Details

Manufacturer	Description	Model No.	Serial No.	Calibration Date	Calibration Due Date
HP	RF Communications Test Set	8920A	00 235	2019-07-11	2020-07-11
UNI-T	Multimeter	UT39A	M130199938	2019-07-24	2020-07-24
Unknown	Coaxial Cable	C-SJ00-0010	C0010/01	Each time	N/A
Weinschel	Coaxial Attenuators	53-20-34	LN749	Each time	N/A

*** Statement of Traceability:** Bay Area Compliance Laboratories Corp. (Dongguan) attests that all calibrations have been performed, traceable to National Primary Standards and International System of Units (SI).

Test Procedure

Test Method: TIA/EIA-603-D

Test Data

Environmental Conditions

Temperature:	27℃
Relative Humidity:	73%
ATM Pressure:	100.7 kPa
Test by:	Blake Yang
Test Date:	2019-08-21

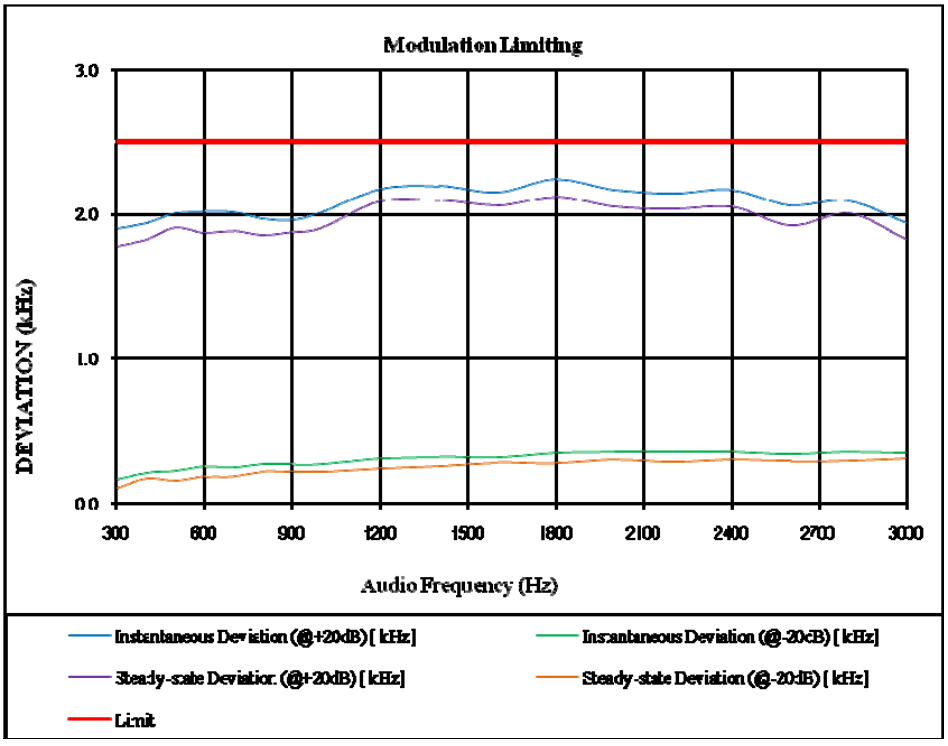
Please refer to the following tables and plots.

Test Mode: Transmitting

MODULATION LIMITING

Carrier Frequency: 462.6375 MHz

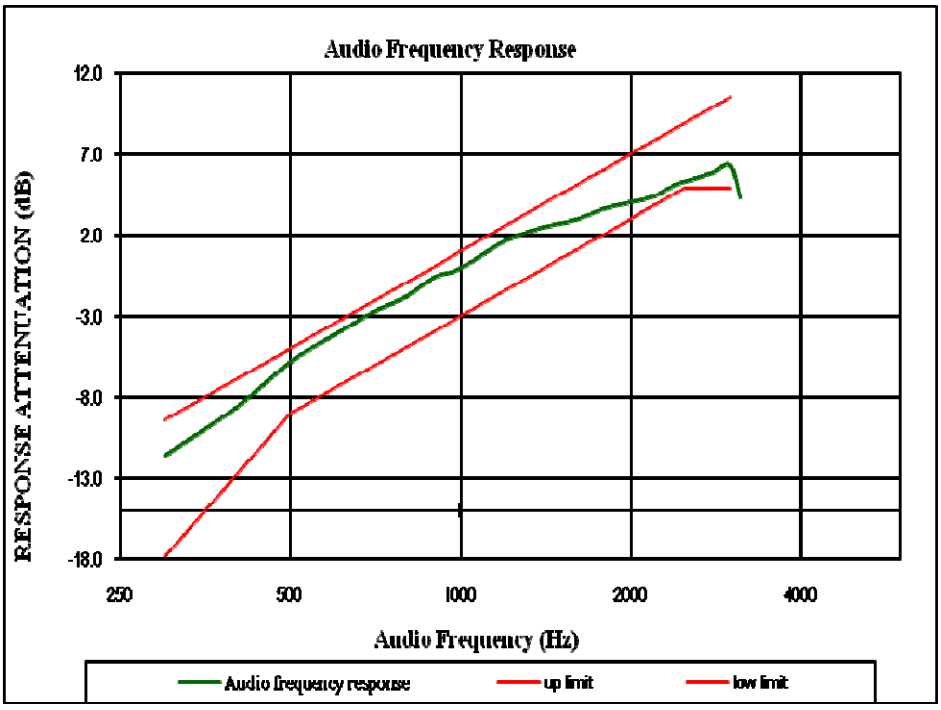
Audio Frequency (Hz)	Instantaneous		Steady-state		Limit [kHz]
	Deviation (@+20dB) [kHz]	Deviation (@-20dB) [kHz]	Deviation (@+20dB) [kHz]	Deviation (@-20dB) [kHz]	
300	1.898	0.159	1.777	0.097	2.5
400	1.939	0.210	1.826	0.169	2.5
500	2.003	0.220	1.903	0.153	2.5
600	2.015	0.251	1.870	0.182	2.5
700	2.011	0.249	1.884	0.186	2.5
800	1.969	0.268	1.852	0.216	2.5
900	1.960	0.266	1.873	0.212	2.5
1000	2.014	0.269	1.903	0.216	2.5
1200	2.176	0.307	2.091	0.235	2.5
1400	2.194	0.318	2.096	0.257	2.5
1600	2.154	0.315	2.063	0.279	2.5
1800	2.241	0.347	2.117	0.274	2.5
2000	2.168	0.352	2.050	0.300	2.5
2200	2.141	0.356	2.034	0.282	2.5
2400	2.169	0.351	2.051	0.300	2.5
2600	2.061	0.341	1.920	0.288	2.5
2800	2.093	0.349	2.003	0.292	2.5
3000	1.934	0.344	1.820	0.306	2.5



Audio Frequency Response

Carrier Frequency: 462.6375 MHz

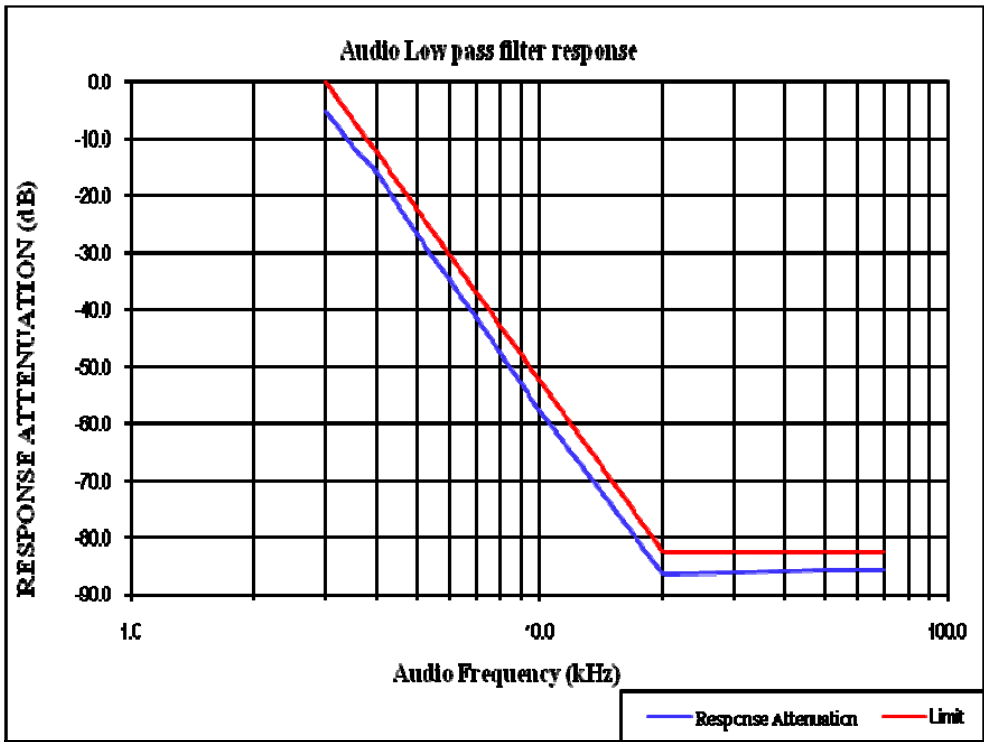
Audio Frequency (Hz)	Response Attenuation (dB)
300	-11.57
400	-8.67
500	-5.80
600	-4.14
700	-2.71
800	-1.81
900	-0.60
1000	0.00
1200	1.65
1400	2.47
1600	2.97
1800	3.67
2000	4.03
2200	4.42
2400	5.13
2600	5.47
2800	5.87
3000	6.35
3125	4.32



Audio Low Pass Filter Response

Carrier Frequency: 462.6375 MHz

Audio Frequency (kHz)	Response Attenuation (dB)	Limit (dB)
3.0	-5.3	0.0
3.5	-11.4	-6.7
4.0	-15.8	-12.5
5.0	-26.7	-22.2
7.0	-41.4	-36.8
10.0	-57.6	-52.3
15.0	-74.3	-69.9
20.0	-86.5	-82.5
30.0	-86.2	-82.5
50.0	-85.7	-82.5
70.0	-85.9	-82.5



FCC §2.1049,§95.573, §95.579 - AUTHOURIZED BANDWIDTH AND EMISSION MASK

Applicable Standard

According to §95.573

Each FRS transmitter type must be designed such that the occupied bandwidth does not exceed 12.5 kHz.

According to §95.579

Each FRS transmitter type must be designed to satisfy the applicable unwanted emissions limits in this paragraph.

(a) Attenuation requirements. The power of unwanted emissions must be attenuated below the carrier power output in Watts (P) by at least:

(1) 25 dB (decibels) in the frequency band 6.25 kHz to 12.5 kHz removed from the channel center frequency.

(2) 35 dB in the frequency band 12.5 kHz to 31.25 kHz removed from the channel center frequency.

(3) 43 + 10 log (P) dB in any frequency band removed from the channel center frequency by more than 31.25 kHz.

Test Procedure

TIA-603-D, section 2.2.11

Test Equipment List and Details

Manufacturer	Description	Model No.	Serial No.	Calibration Date	Calibration Due Date
Rohde & Schwarz	Signal Analyzer	FSIQ26	831929/005	2019-08-03	2020-08-03
Unknown	Coaxial Cable	C-SJ00-0010	C0010/01	Each time	N/A
Weinschel	Coaxial Attenuators	53-20-34	LN749	Each time	N/A

*** Statement of Traceability:** Bay Area Compliance Laboratories Corp. (Dongguan) attests that all calibrations have been performed, traceable to National Primary Standards and International System of Units (SI).

Test Data

Environmental Conditions

Temperature:	27℃
Relative Humidity:	73%
ATM Pressure:	100.7 kPa
Test by:	Blake Yang
Test Date:	2019-08-21

Test Mode: Transmitting

fc (MHz)	Power Level	99% Occupied Bandwidth (kHz)	Limit (kHz)
462.6375	H	9.619	12.50
462.6375	L	9.619	12.50
467.6375	/	9.619	12.50

Note: Emission bandwidth was based on calculation method instead of measurement.

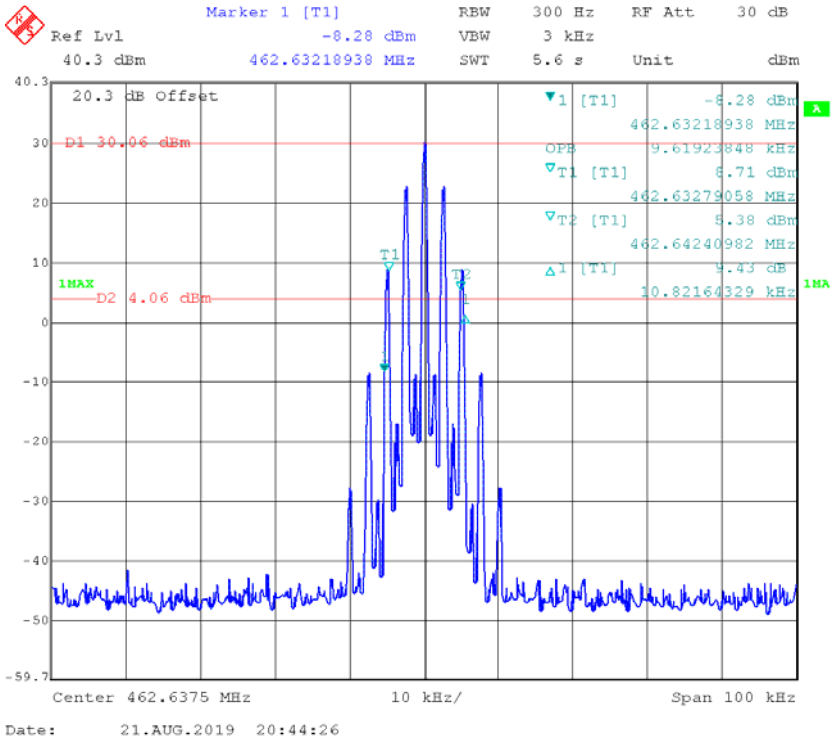
Emission Designator

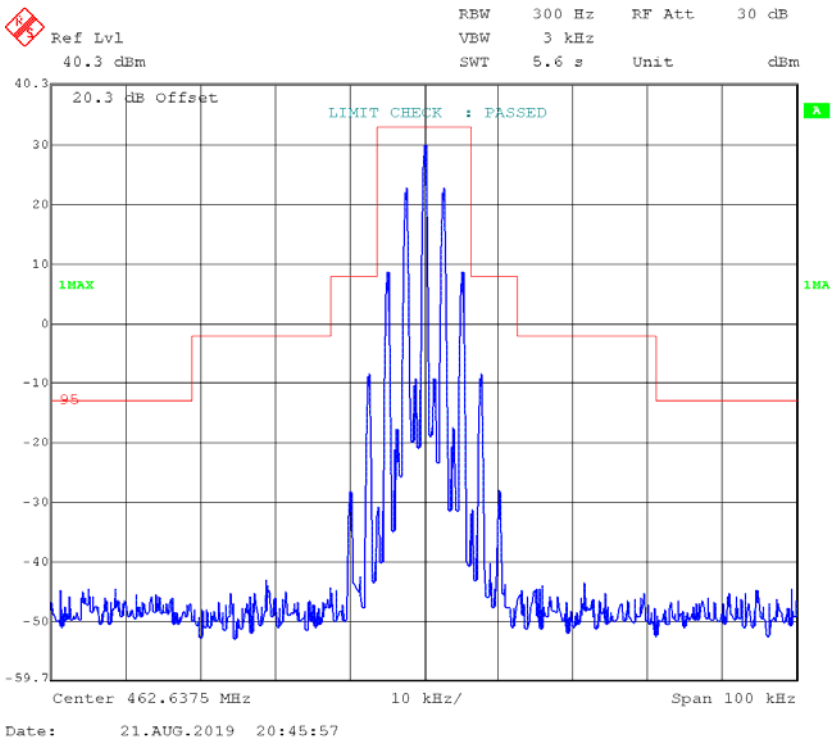
Per CFR 47 §2.201& §2.202, BW = 2M + 2D

For FM Mode (Channel Spacing: 12.5 kHz)
Emission Designator 11K0F3E
In this case, the maximum modulating frequency is 3.0 kHz with a 2.5 kHz deviation.
BW = 2(M+D) = 2*(3.0 kHz + 2.5 kHz) = 11 kHz = 11K0
F3E portion of the designator represents an FM voice transmission
Therefore, the entire designator for 12.5 kHz channel spacing FM mode is 11K0F3E.

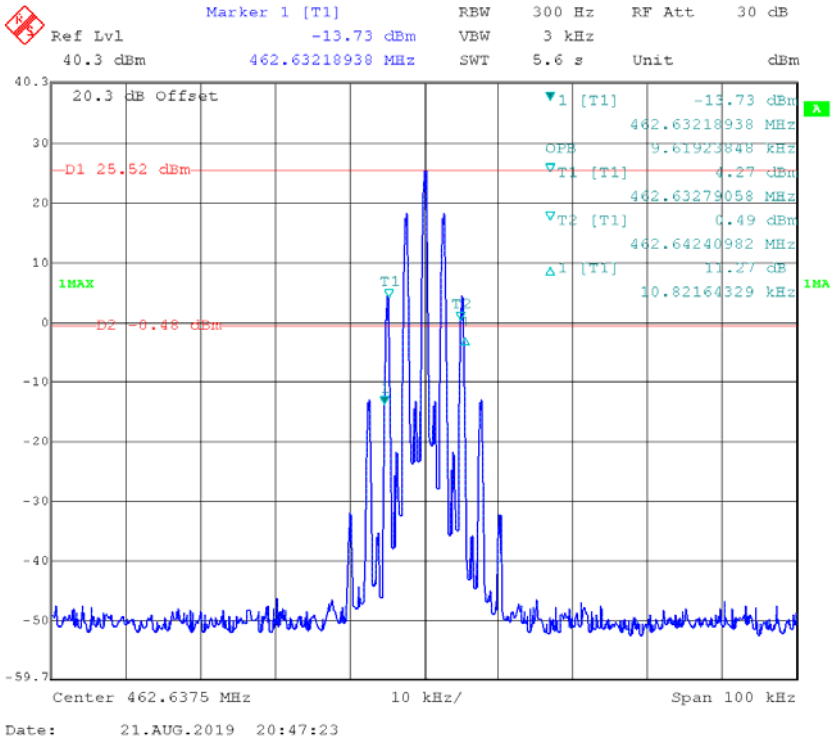
FM:

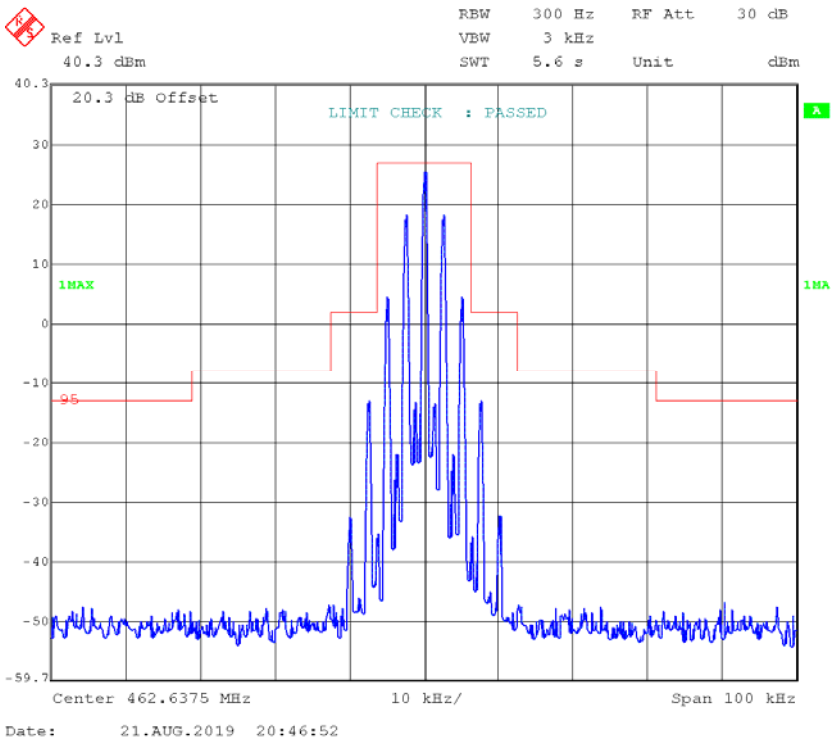
462.6375 MHz (High)



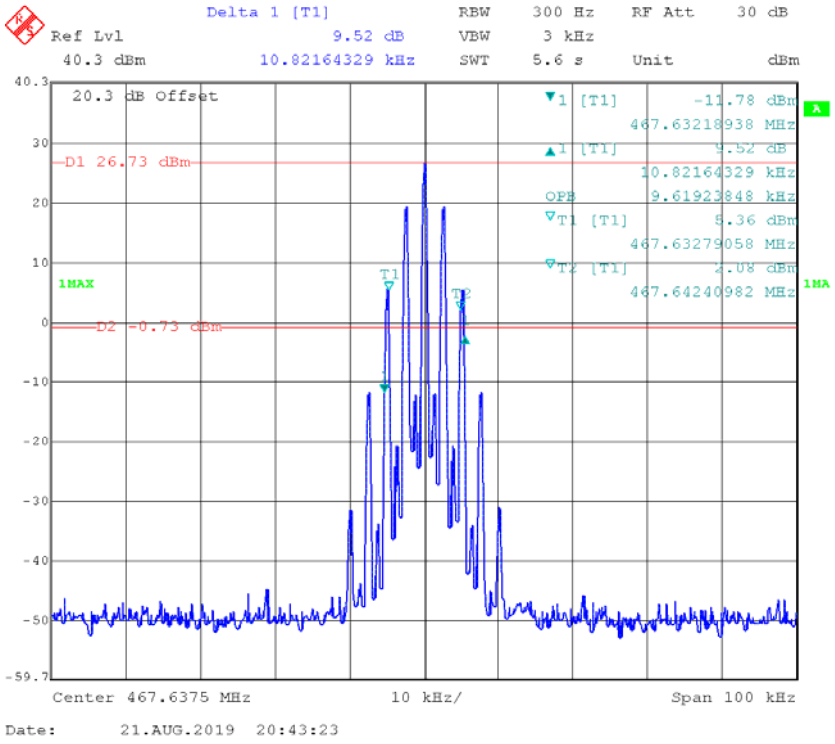


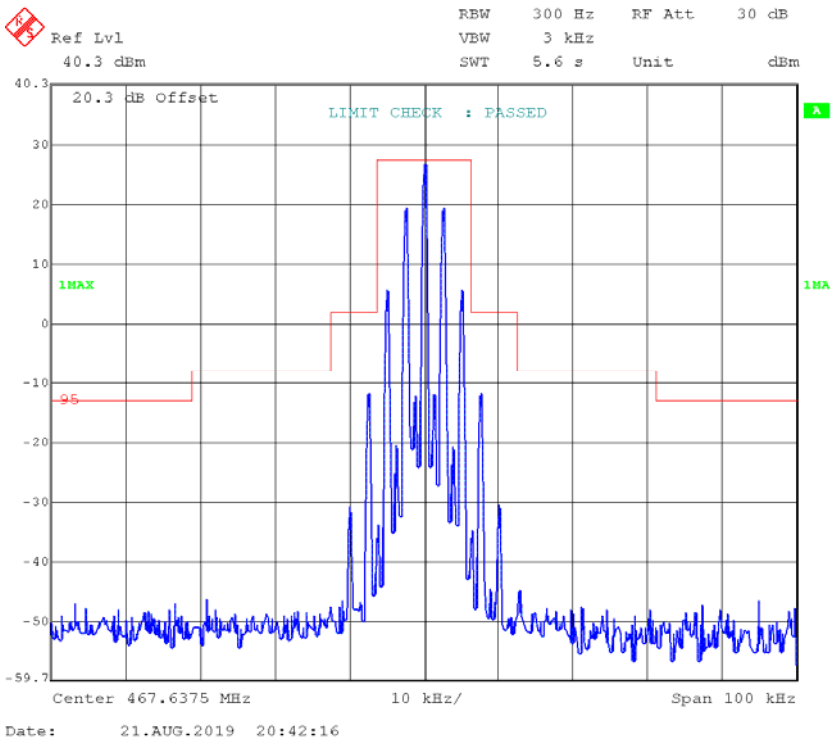
462.6375 MHz (low)





467.6375 MHz


Delta 1 [T1]
RBW 300 Hz
RF Att 30 dB
Ref Lvl
9.52 dB
VBW 3 kHz
40.3 dBm
10.82164329 kHz
SWT 5.6 s
Unit dBm
20.3 dB Offset
T1 [T1] -11.78 dBm
467.63218938 MHz
D1 26.73 dBm
T1 [T1] 9.52 dB
10.82164329 kHz
OBW 9.61923848 kHz
T1 [T1] 5.36 dBm
467.63279058 MHz
T2 [T1] 2.08 dBm
467.64240982 MHz
1MAX
1MA
D2 -0.73 dBm
40.3
30
20
10
0
-10
-20
-30
-40
-50
-59.7
Center 467.6375 MHz
10 kHz/
Span 100 kHz
Date: 21.AUG.2019 20:43:23


RBW 300 Hz
RF Att 30 dB
Ref Lvl
VBW 3 kHz
40.3 dBm
SWT 5.6 s
Unit dBm
20.3 dB Offset
LIMIT CHECK : PASSED
1MAX
1MA
95
40.3
30
20
10
0
-10
-20
-30
-40
-50
-59.7
Center 467.6375 MHz
10 kHz/
Span 100 kHz
Date: 21.AUG.2019 20:42:16

FCC §2.1053 & §95.579 - RADIATED SPURIOUS EMISSION

Applicable Standard

FCC §2.1053 and §95.579

Test Procedure

The transmitter was placed on a wooden turntable, and it was transmitting into a non-radiating load, which was also placed on the turntable.

The measurement antenna was placed at a distance of 3 meters from the EUT. During the tests, the antenna height and polarization as well as EUT azimuth were varied in order to identify the maximum level of emissions from the EUT .The test was performed by placing the EUT on 3-orthogonal axis.

The frequency range up to tenth harmonic of the fundamental frequency was investigated.

Remove the EUT and replace it with substitution antenna. A signal generator was connected to the substitution antenna by a non-radiating cable. The absolute levels of the spurious emissions were measured by the substitution.

Spurious emissions in dB =10 1g (TXpwr in Watts/0.001)-the absolute level
Spurious attenuation limit in dB = 43+10 Log_{10} (power out in Watts)

Test Equipment List and Details

Manufacturer	Description	Model	Serial Number	Calibration Date	Calibration Due Date
R&S	EMI Test Receiver	ESR3	102453	2019-06-26	2020-06-26
Sunol Sciences	Antenna	JB3	A060611-1	2017-11-10	2020-11-10
EMCO	Adjustable Dipole Antenna	3121C	9109-753	N/A	N/A
Unknown	Coaxial Cable	C-NJNJ-50	C-0400-01	2018-09-05	2019-09-05
Unknown	Coaxial Cable	C-NJNJ-50	C-0075-01	2018-09-05	2019-09-05
Unknown	Coaxial Cable	C-NJNJ-50	C-1400-01	2018-09-05	2019-09-05
HP	Amplifier	8447D	2727A05902	2018-09-05	2019-09-05
Agilent	Spectrum Analyzer	E4440A	SG43360054	2019-01-04	2020-01-04
TDK RF	Horn Antenna	HRN-0118	130 084	2018-10-12	2021-10-12
ETS-Lindgren	Horn Antenna	3115	000 527 35	2018-10-12	2021-10-12
Unknown	Coaxial Cable	C-SJSJ-50	C-0800-01	2018-09-05	2019-09-05
Unknown	Coaxial Cable	C-NJNJ-50	C-0200-02	2018-09-05	2019-09-05
MITEQ	Amplifier	AFS42-00101800-25-S-42	2001271	2018-09-05	2019-09-05
Agilent	Signal Generator	E8247C	MY43321350	2018-12-10	2019-12-10

*** Statement of Traceability:** Bay Area Compliance Laboratories Corp. (Dongguan) attests that all calibrations have been performed, traceable to National Primary Standards and International System of Units (SI).

Test Data

Environmental Conditions

Test Items	Radiation Below 1GHz	Radiation Above 1GHz
Temperature:	28°C	27.2°C
Relative Humidity:	54%	54 %
ATM Pressure:	100.7 kPa	100.7 kPa
Tester:	Tyler Pan	Lucy Lu
Test Date:	2019-08-23	2019-08-23

Test Mode: Transmitting

Frequency (MHz)	Polar (H/V)	Receiver Reading (dBμV)	Substituted Method			Absolute Level (dBm)	Limit (dBm)	Margin (dB)
			Substituted Level (dBm)	Antenna Gain (dBd/dBi)	Cable Loss (dB)			
FM, frequency:462.6375**MHz High Power**								
925.28	H	67.55	-28.54	0.00	0.97	-29.51	-13.00	16.51
925.28	V	71.75	-26.17	0.00	0.97	-27.14	-13.00	14.14
1387.91	H	69.03	-44.22	8.92	1.20	-36.50	-13.00	23.50
1387.91	V	79.67	-34.21	8.92	1.20	-26.49	-13.00	13.49
1850.55	H	79.73	-33.81	11.45	0.85	-23.21	-13.00	10.21
1850.55	V	87.51	-26.48	11.45	0.85	-15.88	-13.00	2.88
2313.19	H	75.89	-36.36	11.35	1.24	-26.25	-13.00	13.25
2313.19	V	79.74	-32.45	11.35	1.24	-22.34	-13.00	9.34
2775.83	H	80.86	-31.36	13.10	1.33	-19.59	-13.00	6.59
2775.83	V	78.54	-33.86	13.10	1.33	-22.09	-13.00	9.09
3238.46	H	80.80	-29.35	13.60	1.58	-17.33	-13.00	4.33
3238.46	V	81.43	-28.76	13.60	1.58	-16.74	-13.00	3.74
3701.10	H	65.04	-44.05	14.00	1.83	-31.88	-13.00	18.88
3701.10	V	60.71	-48.36	14.00	1.83	-36.19	-13.00	23.19
4163.74	H	64.03	-45.00	13.89	1.51	-32.62	-13.00	19.62
4163.74	V	59.66	-49.39	13.89	1.51	-37.01	-13.00	24.01
4626.38	H	62.08	-46.38	14.25	1.80	-33.93	-13.00	20.93
4626.38	V	54.96	-53.60	14.25	1.80	-41.15	-13.00	28.15

Frequency (MHz)	Polar (H/V)	Receiver Reading (dBμV)	Substituted Method			Absolute Level (dBm)	Limit (dBm)	Margin (dB)
			Substituted Level (dBm)	Antenna Gain (dBd/dBi)	Cable Loss (dB)			
FM, frequency:467.6375**MHz**								
935.28	H	57.25	-38.42	0.00	0.94	-39.36	-13.00	26.36
935.28	V	59.93	-37.50	0.00	0.94	-38.44	-13.00	25.44
1402.91	H	69.26	-44.00	9.01	1.20	-36.19	-13.00	23.19
1402.91	V	76.85	-36.99	9.01	1.20	-29.18	-13.00	16.18
1870.55	H	67.18	-46.02	11.59	0.92	-35.35	-13.00	22.35
1870.55	V	75.13	-38.46	11.59	0.92	-27.79	-13.00	14.79
2338.19	H	62.96	-49.39	11.62	1.25	-39.02	-13.00	26.02
2338.19	V	53.37	-59.00	11.62	1.25	-48.63	-13.00	35.63
2805.83	H	51.39	-60.79	13.15	1.36	-49.00	-13.00	36.00
2805.83	V	53.35	-59.03	13.15	1.36	-47.24	-13.00	34.24
3273.46	H	56.71	-53.81	13.60	1.58	-41.79	-13.00	28.79
3273.46	V	52.96	-57.58	13.60	1.58	-45.56	-13.00	32.56
3741.10	H	49.32	-59.57	13.84	1.69	-47.42	-13.00	34.42
3741.10	V	47.20	-61.59	13.84	1.69	-49.44	-13.00	36.44
4208.74	H	56.23	-52.75	13.99	1.53	-40.29	-13.00	27.29
4208.74	V	53.66	-55.29	13.99	1.53	-42.83	-13.00	29.83
4676.38	H	58.46	-50.10	14.35	1.71	-37.46	-13.00	24.46
4676.38	V	53.79	-54.86	14.35	1.71	-42.22	-13.00	29.22

Note 1:The unit of antenna gain is dBd for frequency below 1GHz and is dBi for frequency above 1GHz.
Note 2:
Absolute Level = Substituted Level - Cable loss + Antenna Gain
Margin = Limit- Absolute Level

FCC§2.1055 (d), §95.565- FREQUENCY STABILITY

Applicable Standard

According to FCC §2.1055(a) (1),

The frequency stability shall be measured with variation of ambient temperature from –30 ºC to +50 ºC, and according to FCC 2.1055(d) (2), the frequency stability shall be measured with reducing primary supply voltage to the battery operating end point which is specified by the manufacturer.

According to FCC §95.565

Each FRS transmitter type must be designed such that the carrier frequencies remain within ± 2.5 parts-per-million of the channel center frequencies specified in § 95.563 during normal operating conditions.

Test Procedure

Frequency Stability vs. Temperature: The equipment under test was connected to an external DC power supply and the RF output was connected to a Frequency Counter via feed-through attenuators. The EUT was placed inside the temperature chamber. The DC leads and RF output cable exited the chamber through an opening made for the purpose.

After the temperature stabilized for approximately 20 minutes, the frequency output was recorded from the Frequency Counter.

Frequency Stability vs. Voltage:

1) Vary primary supply voltage from 85 to 115 percent of the nominal value for other than hand carried battery equipment.

(2) For hand carried, battery powered equipment, reduce primary supply voltage to the battery operating end point which shall be specified by the manufacturer.

The output frequency was recorded for each voltage.

Test Equipment List and Details

Manufacturer	Description	Model No.	Serial No.	Calibration Date	Calibration Due Date
Unknown	Coaxial Cable	C-SJ00-0010	C0010/01	Each time	/
E-Microwave	Blocking Control	EMDCB-00036	0E01201047	Each time	/
Weinschel	Coaxial Attenuators	53-20-34	LN749	Each time	/
ESPEC	Constant temperature and humidity Tester	ESX-4CA	018 463	2019-03-26	2020-03-26
UNI-T	Multimeter	UT39A	M130199938	2019-07-24	2020-07-24
Pro instrument	DC Power Supply	pps3300	3300012	N/A	N/A
HP	RF Communications Test Set	8920A	00 235	2019-07-11	2020-07-11

*** Statement of Traceability:** Bay Area Compliance Laboratories Corp. (Dongguan) attests that all calibrations have been performed, traceable to National Primary Standards and International System of Units (SI).

Test Data

Environmental Conditions

Temperature:	27℃
Relative Humidity:	73%
ATM Pressure:	100.7 kPa
Test by:	Blake Yang
Test Date:	2019-08-21

Test Mode: Transmitting

Reference Frequency: 462.6375 MHz				
Temperature	**Voltage**	**Reading**	**Frequency Error**	**Limit**
℃	**Vdc**	**MHz**	**ppm**	**ppm**
-30	3.6	462.6379145	0.90	2.5
-20		462.6378173	0.69	
-10		462.6377843	0.61	
0		462.6378041	0.66	
10		462.6378414	0.74	
20		462.6378507	0.76	
30		462.6378365	0.73	
40		462.6378541	0.77	
50		462.6377978	0.64	
20	4.8	462.6378000	0.65	
20	3.0	462.6379453	0.96	

Reference Frequency: 467.6375 MHz				
Temperature	**Voltage**	**Reading**	**Frequency Error**	**Limit**
℃	**Vdc**	**MHz**	**ppm**	**ppm**
-30	3.6	467.6378635	0.78	2.5
-20		467.6378306	0.71	
-10		467.6378376	0.72	
0		467.6378149	0.67	
10		467.6378519	0.75	
20		467.6378507	0.75	
30		467.6379059	0.87	
40		467.6379465	0.95	
50		467.6378479	0.74	
20	4.8	467.6378312	0.71	
20	3.0	467.6378109	0.66	

Note: The extreme voltage was declared by applicant.

******* END OF REPORT *******