

Report No.: AGC01284210601FE10A Page 1 of 22

FCC Test Report

Report No.: AGC01284210601FE10A

FCC ID		DDO10MINI
FCC ID	•	BB019MINI
PRODUCT DESIGNATION		CB Radio
BRAND NAME	:	COBRA
MODEL NAME	:	19MINICB
APPLICANT	-	Cobra Electronics Corporation
DATE OF ISSUE	C: C	Jan. 07, 2022
STANDARD(S)	:	FCC Part 95 Rules
REPORT VERSION	2	V 1.0

Attestation of Global Compliance (Shenzhen) Co., Ltd



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REPORT REVISE RECORD

Report Version	Revise Time	Issued Date	Valid Version	Notes
V1.0		Jan. 07, 2022	Valid	Class II Permissive Change

Note: The original test report Ref. No. (AGC01284210601FE10) (dated 2021-07-09), was modified on 2022-01-07 to include the following changes and additions for:

- Change the hardware version from V1.0 to V1.2

-Q9 Change from FQP13N10 to IRFZ24N, and U4 change from ICS-0639 to MM32SPIN06PF -Minor changes to components made in the R183 ,C161 and C162 to support this changes For the above described change(s),updated FCC Radiated emission, and MAXIMUMN TRANSMITTER POWER.

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1. GENERAL INFORMATION

Applicant	Cobra Electronics Corporation		
Address	6500 West Cortland Street Chicago, IL 60707-4013 United States		
Manufacturer	Cobra Electronics Corporation		
Address	6500 West Cortland Street Chicago, IL 60707-4013 United States		
Factory	Cobra Electronics Corporation		
Address	6500 West Cortland Street Chicago, IL 60707-4013 United States		
Product Designation	CB Radio		
Brand Name	COBRA		
Test Model	19MINICB		
Deviation from Standard	None		
Date of Receipt	Dec. 17, 2021		
Date of Test	Dec. 17, 2021~Jan. 07, 2022		
Test Result	Pass		

WE HEREBY CERTIFY THAT:

The above equipment was tested by Attestation of Global Compliance (Shenzhen) Co., Ltd. The data evaluation, test procedures, and equipment configurations shown in this report were made in accordance with the procedures given in ANSI/TIA-382-A-1998. The sample tested as described in this report is in compliance with the FCC Rules Part 95. The test results of this report relate only to the tested sample identified in this report.

Prepared By

Bibo zhang

Bibo Zhang (Project Engineer)

Jan. 07, 2022

Reviewed By

Calin Lin

Calvin Liu (Reviewer)

Jan. 07, 2022

Approved By

Max Zhang

Max Zhang Authorized Officer

Jan. 07, 2022

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2. PRODUCT INFORMATION

2.1 PRODUCT TECHNICAL DESCRIPTION

Hardware Version	V1.2
Software Version	V1.02
Power Supply	DC 13.8V
Communication Type	Voice / Tone only
Operation Frequency Range	26.965MHz-27.405MHz
Modulation Type	AM
Number of Channels:	40 Channels
Rated Output Power	4W (It was fixed by the manufacturer, any individual can't arbitrarily change it.)
Maximum Transmitter Power	35.914dBm
Antenna Designation	Detachable
Antenna Type	External antenna
Antenna Gain	0dBi (Typical), 5dBi (Max)

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2.2 TEST FREQUENCY LIST

According to ANSI C63.26 section 5.1.2.1:

Measurements of transmitters shall be performed and, if required, reported for each frequency band in which the EUT can be operated with the device transmitting at the number of frequencies in each band specified in Table 2.

Frequency range Over which EUT operates	Number of Frequencies	Location in frequency range of operation
1 MHz or less		Middle
1 MHz to 10 MHz	2	1 near top and 1 near bottom
More than 10 MHz	3 .	1 near top, 1 near middle, and 1 near bottom

	Operation Frequen	cy Each of Channel	
	CBRS	С	BRS
Channel	Frequency	Channel	Frequency
1 💿	26.965 MHz	21	27.215 MHz
2	26.975 MHz	22	27.225 MHz
3	26.985 MHz	23	27.255 MHz
4	27.005 MHz	24	27.235 MHz
5	27.015 MHz	25	27.245 MHz
6	27.025 MHz	26	27.265 MHz
7	27.035 MHz	27	27.275 MHz
8	27.055 MHz	28	27.285 MHz
9	27.065 MHz	29	27.295 MHz
10	27.075 MHz	30	27.305 MHz
11	27.085 MHz	31	27.315 MHz
12	27.105 MHz	32	27.325 MHz
13	27.115 MHz	33	27.335 MHz
14	27.125 MHz	34	27.345 MHz
15	27.135 MHz	35	27.355 MHz
16	27.155 MHz	36	27.365 MHz
17	27.165 MHz	37	27.375 MHz
18	27.175 MHz	38	27.385 MHz
19	27.205 MHz	39	27.395 MHz
20	27.205 MHz	40	27.405 MHz

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2.3 RELATED SUBMITTAL(S) / GRANT (S)

This submittal(s) (test report) is intended for FCC ID: **BBO19MINI**, filing to comply with Part 2, Part 95 of the Federal Communication Commission rules.

2.4 TEST METHODOLOGY

The tests were performed according to following standards:

No.	Identity	Document Title
1	FCC 47 CFR Part 95	PERSONAL RADIO SERVICES
2	FCC 47 CFR Part 2	Frequency allocations and radio treaty matters; general rules and regulations
3	ANSI C63.26-2015	American National Standard for Compliance Testing of Transmitters Used in Licensed Radio Services
4	ANSI EIA/TIA 382-A-1989	Minimum standards – Citizens band radio service amplitude modulated (AM) transceivers operating in the 27MHz band.

2.5 CALCULATION OF EMISSION INDICATORS

FCC Rules and Regulations Part 2.202: Necessary Bandwidth and Emission Bandwidth

For AM Mode (ChannelSpacing: 10kHz)

Emission Designator 8K00A3E

Bn = 2M, M may vary between 4000 and 10000 depending on the quality desired.

Speech and music, M = 4000, Bandwidth: 8000 Hz= 8 kHz

A3E portion of the designator represents an AM voice transmission.

Therefore, the entire designator for 10 kHz channel spacing AM mode is 8K00A3E.

2.6 STATEMENT - COMPLIANCE TO §95.977

§95.977 CBRS tone transmissions.

In addition to the tones permitted under §95.377, CBRS transmitter types may be designed to transmit brief tones to indicate the beginning or end of a transmission.

This device is capable of transmitting a brief (less than one second) audio tone, "Roger Beep", when the PTT button is released on the microphone indicating end of transmission. This function is user selectable and complies with the requirements of §95.377. See User's Manual .

2.7 SPECIAL ACCESSORIES

Not available for this EUT intended for grant.

2.8 EQUIPMENT MODIFICATIONS

Not available for this EUT intended for grant.

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3. TEST ENVIRONMENT

3.1 ADDRESS OF THE TEST LABORATORY

Laboratory: Attestation of Global Compliance (Shenzhen) Co., Ltd.

Address: 1-2/F, Building 19, Junfeng Industrial Park, Chongqing Road, Heping Community, Fuhai Street, Bao'an District, Shenzhen, Guangdong, China

3.2 TEST FACILITY

The test facility is recognized, certified, or accredited by the following organizations:

CNAS-Lab Code: L5488

Attestation of Global Compliance (Shenzhen) Co., Ltd. has been assessed and proved to be in compliance with CNAS-CL01 Accreditation Criteria for Testing and Calibration Laboratories (identical to ISO/IEC17025: 2017 General Requirements) for the Competence of Testing and Calibration Laboratories.

A2LA-Lab Cert. No.: 5054.02

Attestation of Global Compliance (Shenzhen) Co., Ltd. EMC Laboratory has been accredited by A2LA for technical competence in the field of electrical testing, and proved to be in compliance with ISO/IEC 17025: 2017 General Requirements for the Competence of Testing and Calibration Laboratories and any additional program requirements in the identified field of testing.

FCC-Registration No.: 975832

Attestation of Global Compliance (Shenzhen) Co., Ltd. EMC Laboratory has been registered and fully described in a report filed with the FCC (Federal Communications Commission). The acceptance letter from the FCC is maintained in our files with Registration 975832.

IC-Registration No.: 24842

Attestation of Global Compliance (Shenzhen) Co., Ltd. EMC Laboratory has been registered and fully described in a report filed with the Certification and Engineering Bureau of Industry Canada. The acceptance letter from the IC is maintained in our files with Registration 24842.

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3.3 ENVIRONMENTAL CONDITIONS

	NORMAL CONDITIONS	EXTREME CONDITIONS
Temperature range ($^{\circ}$ C)	15 - 35	-20 - 50
Relative humidty range	20 % - 75 %	20 % - 75 %
Pressure range (kPa)	86 - 106	86 - 106
Power supply	DC13.8V	LV: DC 11.73V/HV:DC 15.87V
		R

Note: The Extreme Temperature and Extreme Voltages declared by the manufacturer.

3.4 MEASUREMENT UNCERTAINTY

The reported uncertainty of measurement y \pm U, where expended uncertainty U is based on a standard uncertainty multiplied by a coverage factor of k=2, providing a level of confidence of approximately 95%.

Test Items	Measurement Uncertainty
Frequency stability	±0.5%
Transmitter power conducted	±0.8dB
Transmitter power Radiated	±1.3dB
Conducted spurious emission 9kHz-40 GHz	±2.7dB
Conducted Emission	±3.2 dB
Radiated Emission below 1GHz	±3.9 dB
Radiated Emission above 1GHz	±4.8 dB
Occupied Channel Bandwidth	±2 %
FM deviation	±2 %
Audio level	±0.98dB
Low Pass Filter Response	±0.65dB
Modulation Limiting	0.42 %
Transient Frequency Behavior	6.8 %

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3.5 LIST OF EQUIPMENTS USED

Equipment	Manufacturer	Model	S/N	Cal. Date	Cal. Due
TEST RECEIVER	R&S	ESCI	10096	Apr. 14, 2021	Apr. 13, 2022
EXA Signal Analyzer	Aglient	N9020A	W1312-60196	Aug. 18, 2021	Aug. 17, 2022
EXA Signal Analyzer	Aglient	N9020A	MY52090123	Sep. 06, 2021	Sep. 05, 2022
Horn antenna	SCHWARZBECK	BBHA 9170	#768	Oct. 31, 2021	Oct. 30, 2023
preamplifier	ChengYi	EMC184045SE	980508	Sep. 29, 2021	Sep. 28, 2023
Double-Ridged Waveguide Horn	ETS LINDGREN	3117	00034609	Apr. 23, 2021	Apr. 22, 2023
Broadband Preamplifier	SCHWARZBECK	BBV 9718	9718-205	Jun. 07, 2021	Jun. 06, 2022
HORN ANTENNA	EM	EM-AH-10180		Feb. 26, 2021	Feb. 25, 2022
SIGNAL GENERATOR	AGILENT	E4421B	MY43351603	May 11, 2021	May 10, 2022
SIGNAL GENERATOR	R&S	SMT03	A0304261	Jun. 07, 2021	Jun. 06, 2022
ANTENNA	SCHWARZBECK	VULB9168	VULB9168-494	Jan. 08, 2021	Jan. 07, 2023
ANTENNA	SCHWARZBECK	VULB9168	D69250	Apr. 28, 2021	Apr. 27, 2023
Active loop antenna (9K-30MHz)	ZHINAN	ZN30900C	18051	May 22, 2021	May 20, 2022
Modulation Domain Analyzer	HP	53310A	3121A02467	Jul. 03, 2020	Jul. 02, 2022
Small environmental tester	ESPEC	SH-242	-	Sep. 03, 2020	Sep. 02, 2022
RF Communication Test Set	HP	8920B	US35010161	Sep. 06, 2021	Sep. 05, 2022
Attenuator	Weinachel Corp	58-30-33	ML030	Oct. 24, 2021	Oct. 23, 2022
RF Cable	R&S	1#		Each time	N/A
RF Cable	R&S	2#	©	Each time	N/A
Fliter-UHF	Microwave	N25155M2	498705	May 09, 2021	May 08, 2022

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4.SYSTEM TEST CONFIGURATION

4.1 EUT CONFIGURATION

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

4.2 EUT EXERCISE

The Transmitter was operated in the normal operating mode. The TX frequency was fixed which was for the purpose of the measurements.

4.3 CONFIGURATION OF TESTED SYSTEM

Fig. 2-1 Configuration of Tested System

EUT

Table 2-1 Equipment Used in Tested System

4.4 EQUIPMENT USED IN TESTED SYSTEM

The Following Peripheral Devices And Interface Cables Were Connected During The Measurement: Test Accessories Come From The Laboratory Test Accessories Come From The Manufacturer

Item	Equipment	Model No.	Identifier	Note
1	CB Radio	19MINICB	FCC ID: BBO19MINI	EUT
2	Hand microphone	BAT-R1		Accessories

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4.5 SUMMARY OF TEST RESULTS

Item	FCC Rules	FCC Rules Description of Test			
1	§ 95.967& 2.1046(a)	Maximum Transmitter Power	Pass		
2	§95.979& 2.1053	Ratiated Spurious Emission	Pass		

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 Attestation of Global Compliance(Shenzhen)Co., Ltd

 Attestation of Global Compliance(Shenzhen)Std & Tech Co., Ltd

 Tel: +86-755 2523 4088
 E-mail: agc@agc-cert.com



5. DESCRIPTION OF TEST MODES

The EUT (**CB Radio**) has been tested under normal operating condition. (CBRS TX) are chosen for testing at each channel separation.

NO.	TEST MODE DESCRIPTION	CHANNEL SEPARATION
1	CBRS TX CHANNEL 1	10.0 kHz
2	CBRS TX CHANNEL 19	10.0 kHz
3	CBRS TX CHANNEL 40	10.0 kHz

Note:

- 1. Only the result of the worst case was recorded in the report, if no other cases.
- 2. For Radiated Emission, 3axis were chosen for testing for each applicable mode.
- 3. Manufacturers use computer PC programming software to switch and operate frequency points, refer to the instructions for details

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6. RATIATED SPURIOUS EMISSION

6.1 PROVISIONS APPLICABLE

FCC Part 95.979(a), FCC Part 2.1049

Each CBRS transmitter type must be designed to comply with the applicable unwanted emissions limits in this section. The power of unwanted emissions must be attenuated below the transmitter output power in Watts (P) as specified in the applicable paragraphs listed in the following table:

Emission type	Paragraph			
A3E	(1), (3), (5), (6)			
H3E, J3E, R3E	(2), (4), (5), (6)			

(1) 25 dB (decibels) in the frequency band 4 kHz to 8 kHz removed from the channel center frequency;

(2) 25 dB in the frequency band 2 kHz to 6 kHz removed from the channel center frequency;

(3) 35 dB in the frequency band 8 kHz to 20 kHz removed from the channel center frequency;

(4) 35 dB in the frequency band 6 kHz to 10 kHz removed from the channel center frequency;

(5) 53 + 10 log (P) dB in any frequency band removed from the channel center frequency by more than 250% of the authorized bandwidth.

(6) 60 dB in any frequency band centered on a harmonic (i.e., an integer multiple of two or more times) of the carrier frequency.

6.2 MEASUREMENT PROCEDURE

- 1. EUT was placed on a 0.8 or 1.5meter high non-conductive stand at a 3 meter test distance from the receive antenna. A receiving antenna was placed on the antenna mast 3 meters from the EUT for emission measurements. The disturbance of the transmitter was maximized on the test receiver display by raising and lowering from 1m to 4m the receive antenna and by rotating through 360° the turntable. After the fundamental emission was maximized, a field strength measurement was made. The radiated emission measurements of all transmit frequencies in all channels were measured with peak detector.
- 2. A log-periodic antenna or double-ridged waveguide horn antenna shall be substituted in place of the EUT. The log-periodic antenna will be driven by a signal generator and the level will be adjusted till the same power value on the spectrum analyzer or receiver. The level of the spurious emissions can be calculated through the level of the signal generator, cable loss, the gain of the substitution antenna and the reading of the spectrum analyzer or receiver.
- 3. The EUT is then put into continuously transmitting mode at its maximum power level during the test. Set Test Receiver or Spectrum RBW=1MHz, VBW=3MHz for above 1GHz and RBW=100kHz, VBW=300kHz for 30MHz to 1GHz, And the maximum value of the receiver should be recorded as (Pr).
- 4. The EUT shall be replaced by a substitution antenna. In the chamber, an substitution antenna for the frequency band of interest is placed at the reference point of the chamber. An RF Signal source for the frequency band of interest is connected to the substitution antenna with a cable that has been constructed to not interfere with the radiation pattern of the antenna. A power (PMea) is applied to the input of the

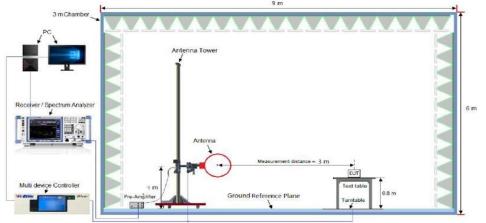
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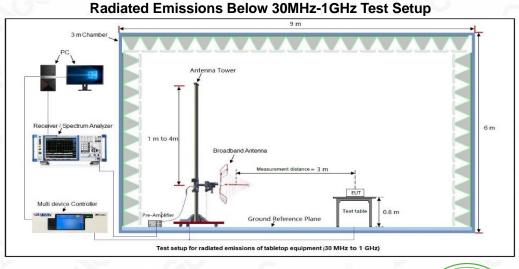
substitution antenna, and adjust the level of the signal generator output until the value of the receiver reach the previously recorded (Pr). The power of signal source (PMea) is recorded. The test should be performed by rotating the test item and adjusting the receiving antenna polarization.

- A amplifier should be connected to the Signal Source output port. And the cable should be connect between the Amplifier and the Substitution Antenna. The cable loss (PcI) ,the Substitution Antenna Gain (Ga) and the Amplifier Gain (PAg) should be recorded after test
- 6. The measurement results are obtained as described below: Power(EIRP)=PMea- PAg Pcl Ga The measurement results are amend as described below:Power(EIRP)=PMea- Pcl Ga
- 7. This value is EIRP since the measurement is calibrated using an antenna of known gain (2.15 dBi) and known input power.
- 8. ERP can be calculated from EIRP by subtracting the gain of the dipole, ERP = EIRP-2.15dBi.
- 9. Test the EUT in the lowest channel, the middle channel the Highest channel

6.3 MEASUREMENT SETUP

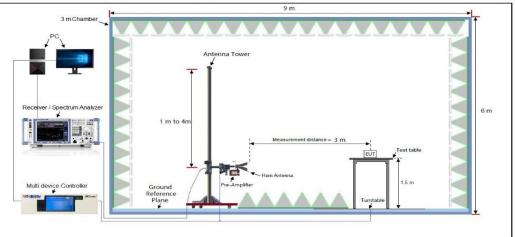


Radiated Emissions Below 30MHz Test Setup



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Radiated Emissions Above 1GHz Test Setup

6.4 MEASUREMENT RESULTS

Preliminary calculation	Final Result			
P(dBm)=30+10log 【P(W)】=36.02dBm	Limit= Preliminary calculation-60dB=-24dBm			

- 1. Factor=Antenna Factor + Cable loss. (Below 1GHz)
- 2. Factor=Antenna Factor+ Cable loss -Pre-amplifier. (Above 1 GHz)
- 3. Margin=Limit- Level
- 4. the unwanted emission should be attenuated below TP by at least 60 dB.
- 5. In the frequency range of 9KHz-30MHz, in addition to displaying the Fundamental level, the radiated spurious emission level is much less than 60dB of the carrier power, so it is ignored.

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Fest	Mode:	TX-0	CH1		P	plarity:		Horizonta	l
		80 [FCC Part 95D O	PERTX			©
		70 60 50							
		40							
		20							
		E 0							
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		-70 -80 -90		In the termination of the second					
		-100 25M	10	<u></u> ом		1G		12.	75G
					Frequency[Hz]			
		0	— Limit 🗰 Final Test	Horizontal					
					1				
	NO.	Freq.	Reading	Level	Limit	Margin	Factor	Angle	Polarity
	NO.	[MHz]	[dBm]	[dBm]	[dBm]	[dB]	[dB]	[°]	Folanty
	1	26.95	-66.90	-30.34	-24.00	6.34	36.56	170	Horizontal
	2	107.875	-82.52	-57.55	-24.00	33.55	24.97	153	Horizontal
	3	134.2	-89.19	-60.93	-24.00	36.93	28.26	136	Horizontal
	4	458.875	-89.54	-54.00	-24.00	30.00	35.54	128	Horizontal
	5	539.8	-89.47	-51.74	-24.00	27.74	37.73	272	Horizontal
	6	566.125	-81.08	-42.42	-24.00	18.42	38.66	222	Horizontal
			G	8					
「est	Mode:	TX-0	CH1		P	plarity:		Vertical	
		80			FCC Part 95D O	PER TX			
		60 50							
		40 30							
		20 10 E 0							
		B -10 -20							
		-30 -40 -50	2				2		(4)
		-50 -60 -70	- the	to and the state of the	Miller Jack Hilling				
		-80							
		-100 25M	10	ом		1G		12.	75G
					Frequency[HZJ			
		-	— Limit 🗰 Final Test	Vertical					- 6
		Freq.	Reading	Level	Limit	Margin	Factor	Angle	Deleritu
			[dBm]	[dBm]	[dBm]	[dB]	[dB]	[°]	Polarity
	NO.	[MHz]							
					-24.00	4.82	26.67	145	Vertical
	1	26.95	-55.49	-28.82	-24.00	4.82 29.43	26.67 30.32	145 214	Vertical Vertical
	1	26.95 53.275	-55.49 -83.75	-28.82 -53.43	-24.00	29.43	30.32	214	Vertical
	1 2 3	26.95 53.275 80.575	-55.49 -83.75 -84.01	-28.82 -53.43 -55.40	-24.00 -24.00	29.43 31.40	30.32 28.61	214 85	Vertical Vertical
	1 2 3 4	26.95 53.275 80.575 107.875	-55.49 -83.75 -84.01 -81.35	-28.82 -53.43 -55.40 -50.60	-24.00 -24.00 -24.00	29.43 31.40 26.60	30.32 28.61 30.75	214 85 52	Vertical Vertical Vertical
	1 2 3	26.95 53.275 80.575	-55.49 -83.75 -84.01	-28.82 -53.43 -55.40	-24.00 -24.00	29.43 31.40	30.32 28.61	214 85	Vertical Vertical

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st Mode: TX-CH1		CH19		Po	plarity:		Horizonta	l
	80			FCC Part 95D OI	PERTX			8
	70 60 50							
	40							
	20							
	[편 0 -10 							3)
	₹ -20 -30 -40							
	-40 -50 -60	2	3 4		مر و المار الم			
	-70 -80		handbertratheren	- Jun				
	-90 -100 25M	100	M		1G			75G
	2500	100	IVI	Frequency[I			12.	136
	9	– Limit 🗰 Final Test	Horizontal					
	Freq.	Reading	Level	Limit	Margin	Factor	Angle	
NO.	[MHz]	[dBm]	[dBm]	[dBm]	[dB]	[dB]	[°]	Polarity
		07.40	-					11. 1
1	26.95	-67.12	-30.56	-24.00	6.56	36.56	179	Horizontal
2	81.55	-86.01	-59.56	-24.00	35.56	26.45	298	Horizontal
3	108.85	-82.39	-57.37	-24.00	33.37	25.02	145	Horizontal
4	162.475	-91.75	-62.41	-24.00	38.41	29.34	136	Horizontal
5	462.775	-92.17	-56.55	-24.00	32.55	35.62	128	Horizontal
6	543.7	-88.21	-50.34	-24.00	26.34	37.87	264	Horizontal
7	571	-81.12	-42.29	-24.00	18.29	38.83	222	Horizontal
: Mode:	TX-C	CH19		Po	plarity:		Vertical	
	80			FCC Part 95D OI	PERTX			
	60 50							
	40							3
	20							
	(Here) -10 -20							
	a -20 -30 ≠ -40							
	-50 -60	2 3	4		and the second			
	-70		han marker had	- John to the state of the stat				
	-90 -100 25M	100	M		1G		12	75G
				Frequency[I				
	_	– Limit 🗰 Final Test						
	Freq	Reading	Level	Limit	Margin	Factor	Angle	
NO.	Freq. [MHz]	Reading [dBm]	Level [dBm]	Limit [dBm]	Margin [dB]	Factor [dB]	Angle [°]	Polarity
	[MHz]	[dBm]	[dBm]	[dBm]	[dB]	[dB]	[°]	
1	[MHz] 26.95	[dBm] -55.19	[dBm] -28.52	[dBm] -24.00	[dB] 4.52	[dB] 26.67	[°] 144	Vertical
1 2	[MHz] 26.95 54.25	[dBm] -55.19 -81.94	[dBm] -28.52 -51.46	[dBm] -24.00 -24.00	[dB] 4.52 27.46	[dB] 26.67 30.48	[°] 144 220	Vertical Vertical
1 2 3	[MHz] 26.95 54.25 81.55	[dBm] -55.19 -81.94 -83.77	[dBm] -28.52 -51.46 -55.20	[dBm] -24.00 -24.00 -24.00	[dB] 4.52 27.46 31.20	[dB] 26.67 30.48 28.57	[°] 144 220 77	Vertical Vertical Vertical
1 2 3 4	[MHz] 26.95 54.25 81.55 108.85	[dBm] -55.19 -81.94 -83.77 -81.21	[dBm] -28.52 -51.46 -55.20 -50.27	[dBm] -24.00 -24.00 -24.00 -24.00	[dB] 4.52 27.46 31.20 26.27	[dB] 26.67 30.48 28.57 30.94	[°] 144 220 77 43	Vertical Vertical Vertical Vertical
1 2 3 4 5	[MHz] 26.95 54.25 81.55 108.85 189.775	[dBm] -55.19 -81.94 -83.77 -81.21 -91.85	[dBm] -28.52 -51.46 -55.20 -50.27 -63.06	[dBm] -24.00 -24.00 -24.00 -24.00 -24.00	[dB] 4.52 27.46 31.20 26.27 39.06	[dB] 26.67 30.48 28.57 30.94 28.79	[°] 144 220 77 43 220	Vertical Vertical Vertical Vertical Vertical
1 2 3 4	[MHz] 26.95 54.25 81.55 108.85	[dBm] -55.19 -81.94 -83.77 -81.21	[dBm] -28.52 -51.46 -55.20 -50.27	[dBm] -24.00 -24.00 -24.00 -24.00	[dB] 4.52 27.46 31.20 26.27	[dB] 26.67 30.48 28.57 30.94	[°] 144 220 77 43	Vertical Vertical Vertical Vertical

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est Mode:	TX-C	TX-CH40 Polarity:				Horizontal		
	80			FCC Part 95D OF				8
	80 70 60 50 40 20 20 10 10 - 10 - - - - - - - - - - - - - -		S S S S S S S S S S S S S S S S S S S		16		12:	75G
				Frequency[H	Hz]			
) •	- Limit 🗰 Final Test -	Horizontal					
NO.	Freq. [MHz]	Reading [dBm]	Level [dBm]	Limit [dBm]	Margin [dB]	Factor [dB]	Angle [°]	Polarity
1	26.95	-67.15	-30.59	-24.00	6.59	36.56	179	Horizontal
2	54.25	-89.55	-57.11	-24.00	33.11	32.44	257	Horizontal
3	81.55	-86.02	-59.57	-24.00	35.57	26.45	300	Horizontal
4	108.85	-82.28	-57.26	-24.00	33.26	25.02	154	Horizontal
5	164.425	-89.66	-60.30	-24.00	36.30	29.36	128	Horizontal
6	548.575	-87.67	-49.63	-24.00	25.63	38.04	265	Horizontal
	<u> </u>	G .	0					
est Mode:	TX-C	CH40		Po	plarity:		Vertical	
	80 70 60 50 40 10 10 -10 -20 -30 -40 -40 -50 -60 -70 -80 -90 -100 25M		M	FCC Part 95D OF	16		12	756
		- Limit • Final Test	Vertical	I		_	Angle	
NO.	Freq. [MHz]	[dBm]	Level [dBm]	Limit [dBm]	Margin [dB]	Factor [dB]	[°]	Polarity
1	26.95	-54.84	-28.17	-24.00	4.17	26.67	147	Vertical
2	54.25	-79.75	-49.27	-24.00	25.27	30.48	198	Vertical
3	81.55	-83.25	-54.68	-24.00	30.68	28.57	54	Vertical
4	108.85	-81.77	-50.83	-24.00	26.83	30.94	54	Vertical
5	575.875	-82.50	-44.35	-24.00	20.35	38.15	189	Vertical
	4754 4054	40.44	47.07	0100	00.07	4.07	100	

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Vertical

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7. MAXIMUMN TRANSMITTER POWER

7.1 PROVISIONS APPLICABLE

FCC Part 95.967, FCC Part2.1046(a)

Each CBRS transmitter type must be designed such that the transmitter power can not exceed the following limits:

(a) When transmitting amplitude modulated (AM) voice signals, the mean carrier power must not exceed 4 Watts.

(b) When transmitting single sideband (SSB) voice signals, the peak envelope power must not exceed 12 Watts.

7.2 MEASUREMENT METHOD

Conducted RF Output Power:

- 1. The RF output of the transmitter was connected to the input of the spectrum analyzer through sufficient attenuation.
- 2. The DUT was connected to a Spectrum Analyzer (SA) via a 30dB attenuator connected to the DUT's antenna port. The SA was configured as above using the Automatic 6dB Cursor Bandwidth measurement. The output power of the DUT was set to the manufacturer's highest output power setting at the Low, Mid and High frequency channels as permitted by the device. The DUT was set to transmit at its maximum Duty Cycle.
- 3. Spectrum set as follow:

Centre frequency = fundamental frequency, Span=50kHz , RBW=300Hz, VBW=3KHz ;

Sweep = auto, Detector function = peak, Trace = max hold

7.3 MEASUREMENT SETUP



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7.4 MEASUREMENT RESULTS

Conducted Power Measurement Results								
Mode	Channel Separation	Test Channel	Measurement Result (dBm)					
		26.965 MHz	35.668					
CBRS TX	10 kHz	27.205 MHz	35.914					
GU LG	8	27.405 MHz	35.906					

Test plot as follows:



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APPENDIX I: PHOTOGRAPHS OF TEST SETUP

Refer to the Report No.: AGC01284210601AP01A

APPENDIX II: PHOTOGRAPHS OF TEST EUT

Refer to the Report No.: AGC01284210601AP02A
----END OF REPORT----

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 Attestation of Global Compliance(Shenzhen)Co., Ltd

 Attestation of Global Compliance(Shenzhen)Std & Tech Co., Ltd

 Tel: +86-755 2523 4088
 E-mail: agc@agc-cert.com

Conditions of Issuance of Test Reports

1. All samples and goods are accepted by the Attestation of Global Compliance (Shenzhen) Co., Ltd (the "Company") solely for testing and reporting in accordance with the following terms and conditions. The company provides its services on the basis that such terms and conditions constitute express agreement between the company and any person, firm or company requesting its services (the "Clients").

2. Any report issued by Company as a result of this application for testing services (the "Report") shall be issued in confidence to the Clients and the Report will be strictly treated as such by the Company. It may not be reproduced either in its entirety or in part and it may not be used for advertising or other unauthorized purposes without the written consent of the Company. The Clients to whom the Report is issued may, however, show or send it, or a certified copy thereof prepared by the Company to its customer, supplier or other persons directly concerned. The Company will not, without the consent of the Clients, enter into any discussion or correspondence with any third party concerning the contents of the Report, unless required by the relevant governmental authorities, laws or court orders.

3. The Company shall not be called or be liable to be called to give evidence or testimony on the Report in a court of law without its prior written consent, unless required by the relevant governmental authorities, laws or court orders.

4. In the event of the improper use of the report as determined by the Company, the Company reserves the right to withdraw it, and to adopt any other additional remedies which may be appropriate.

5. Samples submitted for testing are accepted on the understanding that the Report issued cannot form the basis of, or be the instrument for, any legal action against the Company.

6. The Company will not be liable for or accept responsibility for any loss or damage however arising from the use of information contained in any of its Reports or in any communication whatsoever about its said tests or investigations.

7.Clients wishing to use the Report in court proceedings or arbitration shall inform the Company to that effect prior to submitting the sample for testing.

8. The Company is not responsible for recalling the electronic version of the original report when any revision is made to them. The Client assumes the responsibility to providing the revised version to any interested party who uses them.

9. Subject to the variable length of retention time for test data and report stored hereinto as otherwise specifically required by individual accreditation authorities, the Company will only keep the supporting test data and information of the test report for a period of six years. The data and information will be disposed of after the aforementioned retention period has elapsed. Under no circumstances shall we provide any data and information which has been disposed of after retention period. Under no circumstances shall we be liable for damage of any kind, including (but not limited to) compensatory damages, lost profits, lost data, or any form of special, incidental, indirect, consequential or punitive damages of any kind, whether based on breach of contract of warranty, tort (including negligence), product liability or otherwise, even if we are informed in advance of the possibility of such damages.

Any report having not been signed by authorized approver, or having been altered without authorization, or having not been stamped by the solution of a stamp of the test results for the test results and the test of the test of the test results of the test results of the test report is not permitted without the writter apply only to the tested sample. Any objections to report issued by AGC should be submitted to AGC within 15days after the issues of the test report. Further enquiry of validity or verification of the test report should be addressed to AGC by agc@agc-cert.com.