# SGS

# SGS-CSTC Standards Technical Services Co., Ltd. Guangzhou Branch

198 Kezhu Road, Scientech Park, Guangzhou Economic & Technological Development District, Guangzhou, China 510663

Telephone: +86 (0) 20 82155555 Fax: +86 (0) 20 82075059 Email: ee.guangzhou@sgs.com Report No.: GZEM180800469601 Page: 1 of 19 FCC ID: 2AEZA-DS0001

## **TEST REPORT**

Application No.: Applicant: Address of Applicant:	GZEM1808004696CR GUANZHOU BOSMA TECHNOLOGY CO.,LTD FL.2&3, Building A5, NO.11 Kai-Yuan AVE., Guangzhou, China
Manufacturer:	The same as Applicant
Address of Manufacturer:	The same as Applicant
Factory:	The same as Applicant
Address of Factory:	The same as Applicant
Equipment Under Test (EUT	):
FCC ID: 2AEZA-DS0001	
EUT Name:	DOOR & WINDOW DETECTOR
Model No.:	DS0001
Trade Mark:	BOSMA
Standard(s) :	47 CFR Part 15, Subpart C 15.249
Date of Receipt:	2018-08-13
Date of Test:	2018-08-16 to 2018-08-24
Date of Issue:	2018-08-28
Test Result:	Pass*

\* In the configuration tested, the EUT complied with the standards specified above.



#### Kobe Jian Lab Manager

The manufacturer should ensure that all products in series production are in conformity with the product sample detailed in this report. If the product in this report is used in any configuration other than that detailed in the report, the manufacturer must ensure the new system complies with all relevant standards. Any mention of SGS International Electrical Approvals or testing done by SGS International Electrical Approvals in connection with, distribution or use of the product described in this report must be approved by SGS International Electrical Approvals in writing.

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	Revision Record								
Version Chapter Date Modifier Remark									
01		2018-08-28		Original					

Authorized for issue by:		
Tested By	Curry_Wu /Project Engineer	2018-08-16 to 2018-08-24
Checked By	Ricky_Liu /Reviewer	2018-08-28 Date

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### 2 Test Summary

Radio Spectrum Technical Requirement							
Item	Standard	Method	Requirement	Result			
Antenna Requirement	47 CFR Part 15, Subpart C 15.249	N/A	47 CFR Part 15, Subpart C 15.203	Pass			

Radio Spectrum Matter Part							
Item	Standard	Method	Requirement	Result			
20dB Bandwidth	47 CFR Part 15, Subpart C 15.249	ANSI C63.10 (2013) Section 6.9	47 CFR Part 15, Subpart C 15.215	Pass			
Field Strength of the Fundamental Signal (15.249(a))	47 CFR Part 15, Subpart C 15.249	ANSI C63.10 (2013) Section 6.5&6.6	47 CFR Part 15, Subpart C 15.249(a)	Pass			
Restricted Band Around Fundamental Frequency	47 CFR Part 15, Subpart C 15.249	ANSI C63.10 (2013) Section 6.4&6.5&6.6	47 CFR Part 15, Subpart C 15.205 & 15.249(d) & 15.209	Pass			
Radiated Emissions	47 CFR Part 15, Subpart C 15.249	ANSI C63.10 (2013) Section 6.4&6.5&6.6	47 CFR Part 15, Subpart C 15.209 & 15.249 (a),(d)	Pass			

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### 4 General Information

#### 4.1 Details of E.U.T.

Power Supply:	DC 3V 'CR2032' battery
Test Voltage:	DC 3V
Antenna Type	Integral
Channel Spacing	N/A
Modulation Type	GFSK
Number of Channels	1
Operation Frequency	915MHz

#### 4.2 Description of Support Units

The EUT has been tested as an independent unit.

#### 4.3 Measurement Uncertainty

#### RF

{⊢		
No.	Item	Measurement Uncertainty
1	Radio Frequency	±5.5 x 10-8
2	Duty cycle	±0.57%
3	Occupied Bandwidth	±3%
4	RF Conducted power	±0.68dB
5	RF Power Density	±1.50dB
6	Conducted Spurious Emissions	±1.04dB
7	PE Padiated Power	±4.5dB (below 1GHz)
/	RF Radiated Power	±4.8dB (above 1GHz)
8	Redicted Sourious Emission Test	±4.5dB (30MHz-1GHz)
0	Radiated Spurious Emission Test	±4.8dB (1GHz-18GHz)
9	Temperature	±0.4°C
10	Humidity	±1.3%
11	Supply Voltages	±1.5%
12	Time	±3%

#### 4.4 Test Location

All tests were performed at:

SGS-CSTC Standards Technical Services Co., Ltd., Guangzhou Branch EMC Laboratory, 198 Kezhu Road, Scientech Park, Guangzhou Economic & Technology Development District, Guangzhou, China 510663

Tel: +86 20 82155555

Fax: +86 20 82075059

No tests were sub-contracted.

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#### 4.5 Test Facility

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

#### • NVLAP (Lab Code: 200611-0)

SGS-CSTC Standards Technical Services Co., Ltd., Guangzhou EMC Laboratory is accredited by the National Voluntary Laboratory Accreditation Program (NVLAP/NIST). NVLAP Code: 200611-0.

The report must not be used by the client to claim product certification, approval, or endorsement by NVLAP, NIST, or any agency of the Federal Government.

#### • ACMA

SGS-CSTC Standards Technical Services Co., Ltd., EMC Laboratory can also perform testing for the Australian C-Tick mark as a result of our NVLAP accreditation.

#### • SGS UK(Certificate No.: 32), SGS-TUV SAARLAND and SGS-FIMKO

Have approved SGS-CSTC Standards Technical Services Co., Ltd., EMC Laboratory as a supplier of EMC TESTING SERVICES and SAFETY TESTING SERVICES.

#### • CNAS (Lab Code: L0167)

SGS-CSTC Standards Technical Services Co., Ltd., EMC Laboratory has been assessed and in compliance with CNAS-CL01:2006 accreditation criteria for testing laboratories (identical to

ISO/IEC 17025:2005 General Requirements) for the Competence of Testing Laboratories.

#### • FCC Recognized 2.948 Listed Test Firm(Registration No.: 282399)

SGS-CSTC Standards Technical Services 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. Registration 282399, May 31, 2002.

#### FCC Recognized Accredited Test Firm(Registration No.: 486818)

SGS-CSTC Standards Technical Services Co., Ltd., EMC Laboratory has been accredited and fully described in a report filed with the (FCC) Federal Communications Commission. The acceptance letter from the FCC is maintained in our files. Designation Number: CN5016, Test Firm Registration Number: 486818, Jul 13, 2017.

#### Industry Canada (Registration No.: 4620B-1)

The 3m/10m Alternate Semi-anechoic chamber of SGS-CSTC Standards Technical Services Co., Ltd., has been registered by Certification and Engineering of Industry Canada for radio equipment testing with Registration No. 4620B-1.

#### • VCCI (Registration No.: R-2460, C-2584, G-449 and T-1179)

The 10m Semi-anechoic chamber and Shielded Room of SGS-CSTC Standards Technical Services Co., Ltd. have been registered in accordance with the Regulations for Voluntary Control Measures with Registration No.: R-2460, C-2584, G-449 and T-1179 respectively.

#### • CBTL (Lab Code: TL129)

SGS-CSTC Standards Technical Services Co., Ltd., E&E Laboratory has been assessed and fully comply with the requirements of ISO/IEC 17025:2005, the Basic Rules, IECEE 01 and Rules of procedure IECEE 02, and the relevant IECEE CB-Scheme Operational documents.

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4.6 Deviation from Standards

None

4.7 Abnormalities from Standard Conditions None

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### 5 Equipment List

20dB Bandwidth							
Equipment	Manufacturer	Model No	Inventory No	Cal Date	Cal Due Date		
EXA Signal Analzer	Agilent Technologies	N9010A	EMC2138	2017-11-15	2018-11-14		
6dB Attenuator	HP	8491A	EMC2062	2018-04-04	2020-04-03		
Test Software JS1120-3	HangTianXing	V2.6	GZE100-69	N/A	N/A		

Radiated Spurious Emissions						
Equipment	Manufacturer	Model No	Inventory No	Cal Date	Cal Due Date	
EMI Test Receiver	Rohde & Schwarz	ESIB26	EMC0522	2018-01-19	2019-01-18	
EMI Test Receiver	Rohde & Schwarz	ESCI	EMC0056	2018-01-19	2019-01-18	
Chamber cable	HangTianXing	N/A	EMC0542	2017-06-30	2019-06-30	
Trilog Broadband Antenna 30MHz-1GHz	SCHWARZBECK MESS-ELEKTRONIK	VULB 9160	EMC2025	2016-09-08	2019-09-07	
Bi-log Type Antenna	Schaffner -Chase	CBL6112B	EMC0524	2016-09-08	2019-09-07	
Bi-log Type Antenna	Schaffner -Chase	CBL6143	EMC0519	2017-05-04	2020-05-03	
Horn Antenna 1GHz-18GHz	SCHWARZBECK MESS-ELEKTRONIK	BBHA 9120D	EMC2026	2016-09-09	2019-09-08	
1GHz-26.5 GHz Pre-Amplifier	Agilent	8449B	EMC0521	2018-01-08	2019-01-07	
Amplifier	HP	8447F	EMC2065	2018-06-01	2019-05-31	
Pre-Amplifier MH648A	ANRITSU CORP	MH648A	EMC2086	2017-11-20	2018-11-19	
Active Loop Antenna	EMCO	6502	EMC0523	2018-02-24	2019-02-23	
High Pass Filter (915MHz)	FSY MICROWAVE	HM1465-9SS	EMC2079	2018-01-19	2019-01-18	
2.4GHz Filter	Micro-Tronics	BRM 50702	EMC2069	2018-01-08	2019-01-07	
10m Semi-Anechoic Chamber	ETS	N/A	EMC0530	2017-06-18	2019-06-18	
966 Anechoic Chamber	C.R.T	9m x 6m x 6m	EMC2142	2017-11-29	2018-11-28	
MXE EMI Receiver	Keysight	N9038A	EMC2139	2017-11-15	2018-11-14	
EXA Signal Analyzer	Keysight	N9010A	EMC2138	2017-11-15	2018-11-14	
Test Software E3	Audix	Ver.6.120110a	GZE100-61	N/A	N/A	

General used equipment					
Equipment	Manufacturer	Model No	Inventory No	Cal Date	Cal Due Date

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DMM	Fluke	73	EMC0006	2018-07-20	2019-07-19
DMM	Fluke	73	EMC0007	2018-07-19	2019-07-18

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### 6 Radio Spectrum Technical Requirement

#### 6.1 Antenna Requirement

#### 6.1.1 Test Requirement:

47 CFR Part 15, Subpart C 15.203 Limit:

15.203 requirement:

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, 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.

#### 6.1.2 Conclusion

Standard Requirement:

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, 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.



#### EUT Antenna:

The antenna is integrated on the main PCB and no consideration of replacement. The best case gain of the antenna is 1.5dBi.

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### 7 Radio Spectrum Matter Test Results

#### 7.1 20dB Bandwidth

Test Requirement	47 CFR Part 15, Subpart C 15.215
Test Method:	ANSI C63.10 (2013) Section 6.9
Limit:	N/A

#### 7.1.1 E.U.T. Operation

Operating Environment:

Temperature:23.3 °CHumidity:60.3 % RHAtmospheric Pressure:1020mbarTest modea:TX mode\_Keep the EUT in transmitting with modulation mode.

#### 7.1.2 Measurement Procedure and Data

#### Mode:a; 🚺 Keysight Spectrum Analyzer - Occupied BW - 12 SENSE:IN ALIGN OFF 06:11:44 PM Aug 21, 2018 Trace/Detector Span 500.00 kHz Center Freq: 915.000000 MHz Radio Std: None Trig: Free Run Avg|Hold:>10/10 G #Atten: 20 dB Radio Device: BTS #IFGain:Low Ref 30.00 dBm 10 dB/div Log **Clear Write** Average Max Hold Center 915 MHz #Res BW 5.1 kHz Span 500 kHz #VBW 15 kHz Sweep 6.067 ms Min Hold **Total Power** 16.4 dBm **Occupied Bandwidth** 138.09 kHz Detector Average Transmit Freg Error -4.155 kHz **OBW Power** 99.00 % Auto Man x dB Bandwidth 133.7 kHz x dB -20.00 dB MSG STATUS

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#### 7.2 Field Strength of the Fundamental Signal (15.249(a))

Test Requirement Test Method: Measurement Distance: Limit:

47 CFR Part 15, Subpart C 15.249(a) ANSI C63.10 (2013) Section 6.5&6.6 3m

Frequency	Limit (dBuV/m @3m)	Remark		
	94.0	Average Value		
902MHz-928MHz	114.0	Peak Value		

#### 7.2.1 E.U.T. Operation

Operating Environment:

Temperature:23 °CHumidity:55 % RHAtmospheric Pressure:1020mbarTest modea:TX modeKeep the EUT in transmitting with modulation mode.

#### 7.2.2 Measurement Procedure and Data

a. For below 1GHz, the EUT was placed on the top of a rotating table 0.8 meters above the ground at a 3 or 10 meter semi-anechoic chamber. The table was rotated 360 degrees to determine the position of the highest radiation.

b. For above 1GHz, the EUT was placed on the top of a rotating table 1.5 meters above the ground at a 3 meter fully-anechoic chamber. The table was rotated 360 degrees to determine the position of the highest radiation.

c. The EUT was set 3 or 10 meters away from the interference-receiving antenna, which was mounted on the top of a variable-height antenna tower.

d. The antenna height is varied from one meter to four meters above the ground to determine the maximum value of the field strength. Both horizontal and vertical polarizations of the antenna are set to make the measurement.

e. For each suspected emission, the EUT was arranged to its worst case and then the antenna was tuned to heights from 1 meter to 4 meters (for the test frequency of below 30MHz, the antenna was tuned to heights 1 meter) and the rotatable table was turned from 0 degrees to 360 degrees to find the maximum reading.

f. The test-receiver system was set to Peak Detect Function and Specified Bandwidth with Maximum Hold Mode.

g. If the emission level of the EUT in peak mode was 10dB lower than the limit specified, then testing could be stopped and the peak values of the EUT would be reported. Otherwise the emissions that did not have 10dB margin would be re-tested one by one using peak, quasi-peak or average method as specified and then reported in a data sheet.

h. Test the EUT in the lowest channel, the middle channel, the Highest channel.

i. The radiation measurements are performed in X, Y, Z axis positioning for Transmitting mode, and found the X axis positioning which it is the worst case.

j. Repeat above procedures until all frequencies measured was complete.

Remark: Level= Read Level+ Cable Loss+ Antenna Factor- Preamp Factor

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#### Mode:a; Polarization:Horizontal; Modulation:GFSK;

	Freq	ReadAntenna Level Factor								Remark	
	MHz	dBuV	dB/m	dB	dB	dBuV/m	dBuV/m	dB		187 <u>1</u>	-
1	915.020	86.42	23.55	3.13	27.62	85.48	94.00	-8.52	HORIZONTAL	Average	
2	915.020	88.16	23.55	3.13	27.62	87.22	114.00	-26.78	HORIZONTAL	Peak	

#### Mode:a; Polarization:Vertical; Modulation:GFSK;

	Freq	ReadAntenna Level Factor		Cable Preamp Loss Factor						Remark	
	MHz	dBuV	dB/m	dB	dB	dBuV/m	dBuV/m	dB			•
1	915.039	74.52	23.55	3.13	27.62	73.58	94.00	-20.42	VERTICAL	Average	
2	915.039	76.70	23.55	3.13	27.62	75.76	114.00	-38.24	VERTICAL	Peak	

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#### 7.3 Restricted Band Around Fundamental Frequency

Test Requirement	47 CFR Part 15, Subpart C 15.205 & 15.249(d) & 15.209
Test Method:	ANSI C63.10 (2013) Section 6.4&6.5&6.6
Measurement Distance:	3m
Limit:	

Frequency	Limit (dBuV/m @3m)	Remark						
30MHz-88MHz	40.0	Quasi-peak Value						
88MHz-216MHz	43.5	Quasi-peak Value						
216MHz-960MHz	46.0	Quasi-peak Value						
960MHz-1GHz	54.0	Quasi-peak Value						
Above 1GHz	54.0	Average Value						
Above 1GHz	74.0	Peak Value						
Emission radiated outside of the specified frequency bands, except for harmonics, shall be attenuated by at least 50 dB below the level of the fundamental or to the general								

radiated emission limits in Section 15.209, whichever is the lesser attenuation.

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#### 7.3.1 E.U.T. Operation

**Operating Environment:** 

Temperature:23 °CHumidity:55 % RHAtmospheric Pressure:1020mbarTest modea:TX mode\_Keep the EUT in transmitting with modulation mode.

#### 7.3.2 Measurement Procedure and Data

a. For below 1GHz, the EUT was placed on the top of a rotating table 0.8 meters above the ground at a 3 or 10 meter semi-anechoic chamber. The table was rotated 360 degrees to determine the position of the highest radiation.

b. For above 1GHz, the EUT was placed on the top of a rotating table 1.5 meters above the ground at a 3 meter fully-anechoic chamber. The table was rotated 360 degrees to determine the position of the highest radiation.

c. The EUT was set 3 or 10 meters away from the interference-receiving antenna, which was mounted on the top of a variable-height antenna tower.

d. The antenna height is varied from one meter to four meters above the ground to determine the maximum value of the field strength. Both horizontal and vertical polarizations of the antenna are set to make the measurement.

e. For each suspected emission, the EUT was arranged to its worst case and then the antenna was tuned to heights from 1 meter to 4 meters (for the test frequency of below 30MHz, the antenna was tuned to heights 1 meter) and the rotatable table was turned from 0 degrees to 360 degrees to find the maximum reading.

f. The test-receiver system was set to Peak Detect Function and Specified Bandwidth with Maximum Hold Mode.

g. If the emission level of the EUT in peak mode was 10dB lower than the limit specified, then testing could be stopped and the peak values of the EUT would be reported. Otherwise the emissions that did not have 10dB margin would be re-tested one by one using peak, quasi-peak or average method as specified and then reported in a data sheet.

h. Test the EUT in the lowest channel, the middle channel, the Highest channel.

i. The radiation measurements are performed in X, Y, Z axis positioning for Transmitting mode, and found the X axis positioning which it is the worst case.

j. Repeat above procedures until all frequencies measured was complete.

Remark: Level= Read Level+ Cable Loss+ Antenna Factor- Preamp Factor



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#### Mode:a; Polarization:Horizontal; Modulation:GFSK;

	Freq	ReadAntenna Level Factor								Remark	
-	MHz	dBuV	dB/m	dB	dB	dBuV/m	dBuV/m	dB		8	-
1									HORIZONTAL HORIZONTAL	-	

Mode:a; Polarization:Vertical; Modulation:GFSK;

	Freq	ReadAntenna q Level Factor				Limit Level Line				Remark	
	MHz	dBuV	dB/m	dB	dB	dBuV/m	dBuV/m	dB			_
1	614.000	29.35	20.41	2.65	28.03	24.38	46.00	-21.62	VERTICAL	QP	
2	960.000	30.36	24.17	3.20	27.60	30.13	46.00	-15.87	VERTICAL	QP	



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#### 7.4 Radiated Emissions

Test Requirement	47 CFR Part 15, Subpart C 15.209 & 15.249 (a),(d)
Test Method:	ANSI C63.10 (2013) Section 6.4&6.5&6.6
Measurement Distance:	3m
Limit:	

Frequency(MHz)	Field strength (microvolts/meter)	Limit (dBuV/m)	Detector	Measurement Distance (meters)
0.009-0.490	2400/F(kHz)	-	-	300
0.490-1.705	24000/F(kHz)	-	-	30
1.705-30	30	-	-	30
30-88	100	40.0	QP	3
88-216	150	43.5	QP	3
216-960	200	46.0	QP	3
960-1000	500	54.0	QP	3
Above 1000	500	54.0	AV	3

#### 7.4.1 E.U.T. Operation

Operating Environment:

Temperature:23 °CHumidity:55 % RHAtmospheric Pressure:1020mbarTest modea:TX mode\_Keep the EUT in transmitting with modulation mode.

#### 7.4.2 Measurement Procedure and Data

For testing performed with the loop antenna, the center of the loop was positioned 1 m above the ground and positioned with its plane vertical at the specified distance from the EUT. During testing the loop was rotated about its vertical axis for maximum response at each azimuth and also investigated with the loop positioned in the horizontal plane. Only the worst position of vertical was shown in the report.

Measured Level I=Read Level + Antenna Factor + Cable Loss - Preamp Factor



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#### Mode:a; Polarization:Horizontal; Modulation:GFSK;

					ReadAntenna Cable Preamp Limit Freq Level Factor Loss Factor Level Line						Pol/Phase	Remark
1	MHz	dBuV	dB/m	dB	dB	dBuV/m	dBuV/m	dB				
1	30.638	24.52	14.08	0.60	27.00	12.20	40.00	-27.80	HORIZONTAL	QP		
2	51.121	24.66	14.47	0.72	27.00	12.85	40.00	-27.15	HORIZONTAL	QP		
3	61.778	24.33	13.93	0.80	27.00	12.06	40.00	-27.94	HORIZONTAL	QP		
4	153.200	25.05	13.52	1.31	26.76	13.12	43.50	-30.38	HORIZONTAL	QP		
5	172.599	25.38	13.00	1.40	26.71	13.07	43.50	-30.43	HORIZONTAL	QP		
6	851.035	25.26	22.95	3.10	27.70	23.61	46.00	-22.39	HORIZONTAL	QP		

#### Mode:a; Polarization:Horizontal; Modulation:GFSK;

	Freq		Antenna Factor			Level	Limit Line	Over Limit	Pol/Phase	Remark
	MHz	dBuV	dB/m	dB	dB	dBuV/m	dBuV/m	dB		
1	1830.080	35.37	25.16	5.75	37.54	28.74	54.00	-25.26	HORIZONTAL	Average
2	1830.080	44.96	25.16	5.75	37.54	38.33	74.00	-35.67	HORIZONTAL	Peak
3	2745.213	37.38	27.29	4.78	37.28	32.17	54.00	-21.83	HORIZONTAL	Average
4	2745.213	47.29	27.29	4.78	37.28	42.08	74.00	-31.92	HORIZONTAL	Peak
5	3660.691	33.55	28.34	6.83	36.93	31.79	54.00	-22.21	HORIZONTAL	Average
6	3660.691	43.88	28.34	6.83	36.93	42.12	74.00	-31.88	HORIZONTAL	Peak
7	4575.316	33.54	30.22	6.92	36.92	33.76	54.00	-20.24	HORIZONTAL	Average
8	4575.316	43.77	30.22	6.92	36.92	43.99	74.00	-30.01	HORIZONTAL	Peak
9	5490.956	33.44	31.88	7.84	36.99	36.17	54.00	-17.83	HORIZONTAL	Average
10	5490.956	43.67	31.88	7.84	36.99	46.40	74.00	-27.60	HORIZONTAL	Peak
11	8235.801	30.84	36.33	8.23	36.92	38.48	54.00	-15.52	HORIZONTAL	Average
12	8235.801	39.05	36.33	8.23	36.92	46.69	74.00	-27.31	HORIZONTAL	Peak

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#### Mode:a; Polarization:Vertical; Modulation:GFSK;

	Freq	ReadAntenna Level Factor		Cable Preamp Loss Factor						Remark
-	MHz	dBuV	dB/m	dB	dB	dBuV/m	dBuV/m	dB	3	
1	30.853	30.97	14.08	0.60	27.00	18.65	40.00	-21.35	VERTICAL	QP
2	33.095	42.67	14.00	0.60	27.00	30.27	40.00	-9.73	VERTICAL	QP
3	47.994	27.36	14.41	0.70	27.00	15.47	40.00	-24.53	VERTICAL	QP
4	75.446	30.64	10.88	0.92	27.00	15.44	40.00	-24.56	VERTICAL	QP
5	131.297	29.45	12.29	1.23	26.87	16.10	43.50	-27.40	VERTICAL	QP
6	810.265	26.42	22.48	3.03	27.70	24.23	46.00	-21.77	VERTICAL	QP

#### Mode:a; Polarization:Vertical; Modulation:GFSK;

	Freq	ReadAntenna Level Factor		Cable Preamp Loss Factor			Limit Line		Pol/Phase	Remark
	MHz	dBuV	dB/m	dB	dB	dBuV/m	dBuV/m	dB		
1	1830.638	37.39	25.16	5.75	37.54	30.76	54.00	-23.24	VERTICAL	Average
2	1830.638	47.06	25.16	5.75	37.54	40.43	74.00	-33.57	VERTICAL	Peak
3	2745.185	39.25	27.29	4.78	37.28	34.04	54.00	-19.96	VERTICAL	Average
4	2745.185	48.87	27.29	4.78	37.28	43.66	74.00	-30.34	VERTICAL	Peak
5	3660.785	34.13	28.34	6.83	36.93	32.37	54.00	-21.63	VERTICAL	Average
6	3660.785	44.39	28.34	6.83	36.93	42.63	74.00	-31.37	VERTICAL	Peak
7	4575.207	34.04	30.22	6.92	36.92	34.26	54.00	-19.74	VERTICAL	Average
8	4575.207	43.13	30.22	6.92	36.92	43.35	74.00	-30.65	VERTICAL	Peak
9	6405.061	32.75	34.03	7.01	36.99	36.80	54.00	-17.20	VERTICAL	Average
10	6405.061	42.55	34.03	7.01	36.99	46.60	74.00	-27.40	VERTICAL	Peak
11	8235.602	29.41	36.33	8.23	36.92	37.05	54.00	-16.95	VERTICAL	Average
12	8235.602	38.94	36.33	8.23	36.92	46.58	74.00	-27.42	VERTICAL	Peak

--End of Report-

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