



FCC - TEST REPORT

Report Number : **68.730.17.107.01** Date of Issue: May 23, 2018

Model : **SD1**

Product Type : **Ultrasonic Pocket Doppler**

Applicant : **EDAN INSTRUMENTS, INC.**

Address : **#15 Jinhui Road, Jinsha Community, Kengzi Sub-District,
Pingshan District. Shenzhen, 518122, China**

Production Facility : **EDAN INSTRUMENTS, INC.**

Address : **#15 Jinhui Road, Jinsha Community, Kengzi Sub-District,
Pingshan District. Shenzhen, 518122, China**

Test Result : **Positive** **Negative**

Total pages including Appendices : **12**

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2 Details about the Test Laboratory

Details about the Test Laboratory

Company name: TÜV SÜD Certification and Testing (China) Co., Ltd. Shenzhen Branch
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FCC Registration 514049

Number:

IC Registration 10320A-1

Number:

3 Description of the Equipment Under Test

Description of the Equipment Under Test

Product: Ultrasonic Pocket Doppler

Model no.: SD1

Serial number: NIL

Options and accessories: NIL

Rated Input: 3.0VDC (supplied by 2*1.5VDC size AA/LR6 Batteries)

Remark: NIL



4 Summary of Test Standards

Test Standards	
FCC Part 15 Subpart B, 10-1-2017 Edition	PART 15 - RADIO FREQUENCY DEVICES Subpart B - Unintentional Radiators

5 Summary of Test Results

Emission Tests				
FCC Part 15 Subpart B,10-1-2017 Edition				
Test Condition Class B	Pages	Test Result		
		Pass	Fail	N/A
Radiated Emission 30MHz to 1000MHz	8	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Radiated Emission 1GHz to 18GHz	10	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Conducted Emission on AC 150kHz to 30MHz	--	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>

System Measurement Uncertainty	
Test Items	Extended Uncertainty
Uncertainty for Radiated Emission in 3m chamber 30MHz-1000MHz	Horizontal: 4.99dB; Vertical: 4.97dB;
Uncertainty for Radiated Emission in 3m chamber 1000MHz-18000MHz	Horizontal: 4.96dB; Vertical: 4.95dB;

6 General Remarks

Remarks

This submittal(s) (test report) is intended for FCC ID: SMQSD1MEDAN, complies with Section 15.107, 15.109 of the FCC Part 15 Subpart C 10-1-2017 Edition.

Model: SD1 is an Ultrasonic Pocket Doppler supports Ultrasonic testing and Bluetooth BR+EDR/Low Energy functions, the frequency range is 2402 – 2480MHz for Bluetooth.

SUMMARY:

All tests according to the regulations cited on page 5 were

■ - Performed

□ - **Not** Performed

The Equipment Under Test

■ - **Fulfills** the general approval requirements.

□ - **Does not** fulfill the general approval requirements.

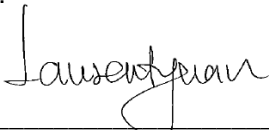
Sample Received Date: December 11, 2017

Testing Start Date: December 11, 2017

Testing End Date: December 13, 2017

- TÜV SÜD Certification and Testing (China) Co., Ltd. Shenzhen Branch-

Reviewed by:



Laurent Yuan
EMC Project Manager



Prepared by:

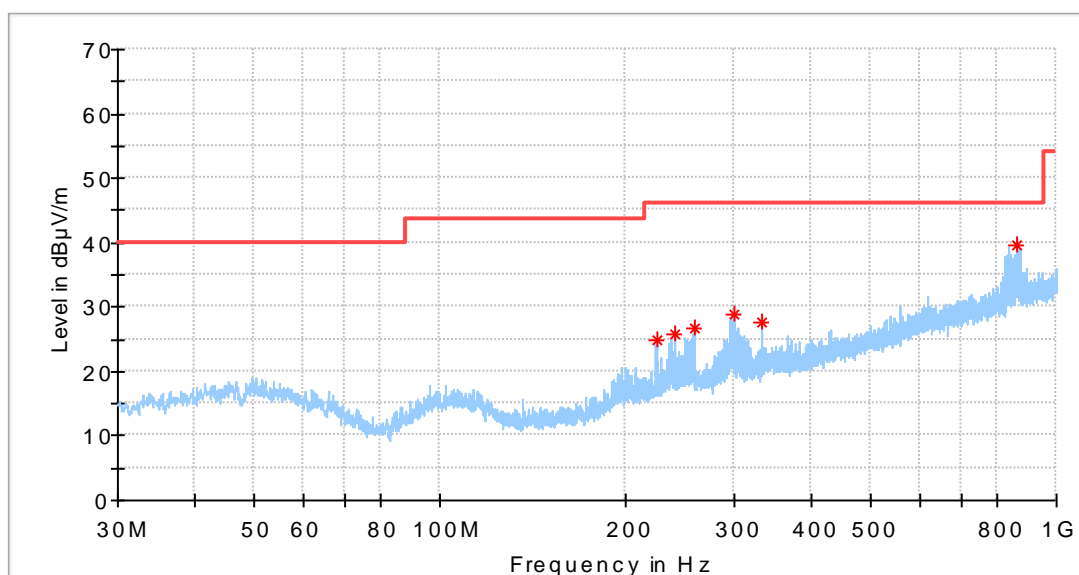


Aaron Lai
EMC Project Engineer

7 Emission Test Results

7.1 Radiated Emission Test 30MHz – 1000MHz

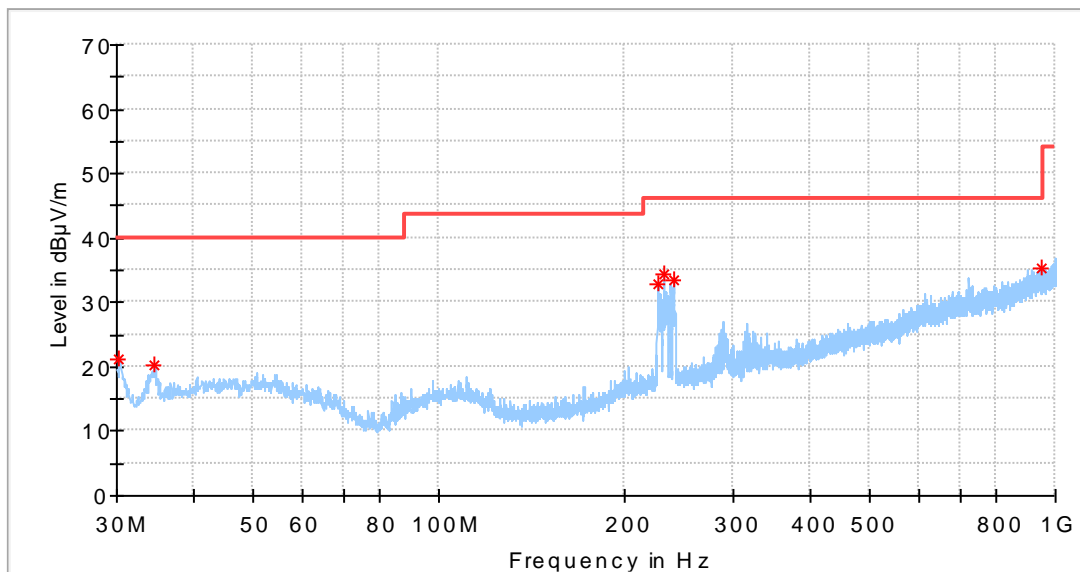
Product Type : Ultrasonic Pocket Doppler
 M/N : SD1
 Operating Condition : Detecting
 Test Specification : Horizontal
 Comment : 3VDC
 Temperature (°C): 23.9 Relative Humidity (%): 48.4 Atmospheric Pressure(mbar) : 1017



Frequency (MHz)	MaxPeak (dBµV/m)	Limit (dBµV/m)	Margin (dB)	Height (cm)	Pol	Azimuth (deg)	Corr. (dB)
224.424375	24.82	46.00	21.18	200.0	H	210.0	16.7
240.368750	25.80	46.00	20.20	200.0	H	210.0	17.8
258.071250	26.79	46.00	19.21	200.0	H	210.0	17.8
301.236250	28.87	46.00	17.13	200.0	H	210.0	19.0
332.579375	27.62	46.00	18.38	200.0	H	210.0	19.9
863.896875	39.72	46.00	6.28	200.0	H	210.0	29.6

Radiated Emission Test 30MHz – 1000MHz

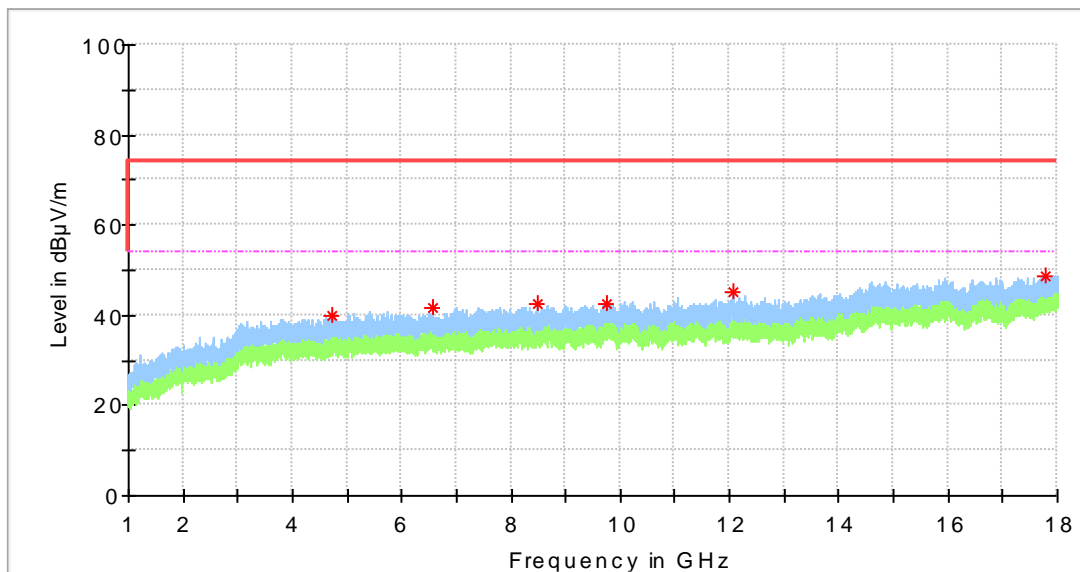
Product Type : Ultrasonic Pocket Doppler
 M/N : SD1
 Operating Condition : Detecting
 Test Specification : Vertical
 Comment : 3VDC
 Temperature (°C): 23.9 Relative Humidity (%): 48.4 Atmospheric Pressure(mbar) : 1017



Frequency (MHz)	MaxPeak (dBµV/m)	Limit (dBµV/m)	Margin (dB)	Height (cm)	Pol	Azimuth (deg)	Corr. (dB)
30.303125	21.11	40.00	18.89	100.0	V	235.0	15.1
34.607500	20.25	40.00	19.75	100.0	V	318.0	15.9
226.364375	32.79	46.00	13.21	200.0	V	179.0	17.1
231.456875	34.44	46.00	11.56	200.0	V	179.0	17.4
240.732500	33.35	46.00	12.65	200.0	V	179.0	18.1
948.286875	35.41	46.00	10.59	200.0	V	0.0	31.4

7.2 Radiated Emission Test 1000MHz – 18000MHz

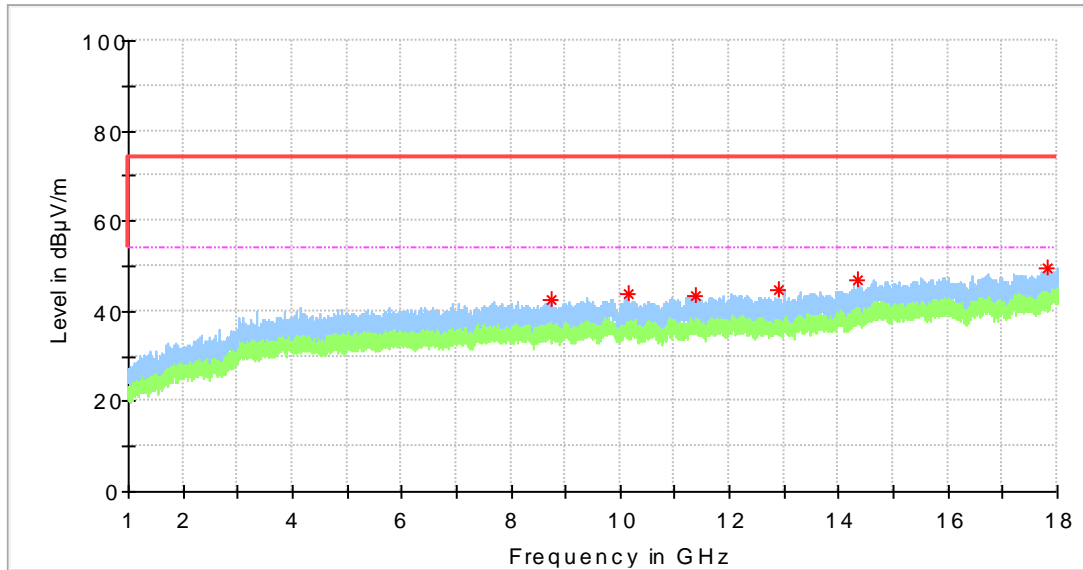
Product Type : Ultrasonic Pocket Doppler
 M/N : SD1
 Operating Condition : Detecting
 Test Specification : Horizontal
 Comment : 3VDC
 Temperature (°C): 23.9 Relative Humidity (%): 48.4 Atmospheric Pressure(mbar) : 1017



Frequency (MHz)	MaxPeak (dBµV/m)	Average (dBµV/m)	Limit (dBµV/m)	Margin (dB)	Height (cm)	Pol	Azimuth (deg)	Corr. (dB)
4732.208333	39.97	---	74.00	34.03	100.0	H	113.0	0.4
6563.958333	41.63	---	74.00	32.37	100.0	H	4.0	2.4
8478.583333	42.37	---	74.00	31.63	100.0	H	0.0	4.2
9752.166667	42.41	---	74.00	31.59	100.0	H	0.0	6.1
12062.750000	45.25	---	74.00	28.75	100.0	H	0.0	8.9
17767.666667	48.79	---	74.00	25.21	100.0	H	320.0	17.9

Radiated Emission Test 1000MHz – 18000MHz

Product Type : Ultrasonic Pocket Doppler
 M/N : SD1
 Operating Condition : Detecting
 Test Specification : Vertical
 Comment : 3VDC
 Temperature (°C): 23.9 Relative Humidity (%): 48.4 Atmospheric Pressure(mbar) : 1017



Frequency (MHz)	MaxPeak (dBµV/m)	Average (dBµV/m)	Limit (dBµV/m)	Margin (dB)	Height (cm)	Pol	Azimuth (deg)	Corr. (dB)
8754.833333	42.60	---	74.00	31.40	100.0	V	91.0	5.2
10136.083333	43.70	---	74.00	30.30	100.0	V	312.0	6.0
11388.416667	43.37	---	74.00	30.63	100.0	V	0.0	7.8
12889.375000	44.61	---	74.00	29.39	100.0	V	0.0	8.9
14342.875000	47.00	---	74.00	27.00	100.0	V	41.0	13.1
17816.541667	49.52	---	74.00	24.48	100.0	V	0.0	18.2

Test Equipment List

Radiated Emission Test

DESCRIPTION	MANUFACTURER	MODEL NO.	SERIAL NO.	CAL. DUE DATE
EMI Test Receiver	Rohde & Schwarz	ESR 26	101269	2018-7-14
Trilog Super Broadband Test Antenna	Schwarzbeck	VULB 9163	707	2018-7-14
Horn Antenna	Rohde & Schwarz	HF907	102294	2018-7-14
Pre-amplifier	Rohde & Schwarz	SCU 18	102230	2018-7-14
Signal Generator	Rohde & Schwarz	SMY01	839369/005	2018-7-7
Attenuator	Agilent	8491A	MY39264334	2018-7-7
3m Semi-anechoic chamber	TDK	9X6X6	----	2020-7-7
Test software	Rohde & Schwarz	EMC32	Version 9.15.00	N/A