

■Report No.: DDT-R20040220-1E3

■Issued Date: Apr. 29, 2020

FCC CERTIFICATION TEST REPORT

FOR

Applicant	:	SHENZHEN ECARE ELECTRONICS CO., LTD.		
Address	•	5-6/F., Block B, Huali Industrial Building, District 28, Bao An, Shenzhen, Guang Dong, China.		
Equipment under Test	:	Temperature Monitor		
Model No.	į	TP27B		
Trade Mark	FIN TESTING			
FCC ID	:	2AATP-TP27B		
Manufacturer	•	SHENZHEN ECARE ELECTRONICS CO., LTD.		
Address	<u>/</u>	5-6/F., Block B, Huali Industrial Building, District 28, Bao An, Shenzhen, Guang Dong, China.		

Issued By: Dongguan Dongdian Testing Service Co., Ltd.

Add: No. 17, Zongbu Road 2, SongshanLake Sci&Tech, IndustryPark, Dongguan City, Guangdong Province, China, 523808

Tel: +86-0769-38826678, E-mail: ddt@dgddt.com, http://www.dgddt.com



TABLE OF CONTENTS

	Test report declares	4
1.	Summary of test results	6
2.	General test information	7
2.1.	Description of EUT	7
2.2.	Accessories of EUT	7
2.3.	Assistant equipment used for test	7
2.4.	Block diagram of EUT configuration for test	7
2.5.	Test environment conditions	7
2.6.	Deviations of test standard	
2.7.	Test laboratory	00MG 0MM 8
2.8.	Measurement uncertainty	8
3.	Equipment used during test	9
4.	20dB Bandwidth	10
4.1.	Block diagram of test setup	10
4.2.	Limits	10
4.3.	Test Procedure	10
4.4.	Test Result	10
4.5.	Original test data	
5.	Radiated emission	
5.1.	Block diagram of test setup	12
5.2.	Limit	13
5.3.	Test Procedure	14
5.4.	Test result	
6.	Band Edge Compliance	
6.1.	Block diagram of test setup	20
6.2.	Limit	20
6.3.	Test Procedure	20
6.4.	Test result	
7.	Power Line Conducted Emission	
7.1.	Block diagram of test setup	23
7.2.	Power Line Conducted Emission Limits	23
7.3.	Test Procedure	23
7.4.	Test Result	24
8. рома оням	Antenna Requirements	
8.1.	Limit DOMODOMA D	25
8.2.	Result	25
9.	Test setup photograph	26

10. Photos of the EUT.....

	_	
Applicant	:	SHENZHEN ECARE ELECTRONICS CO., LTD.
Address	:	5-6/F., Block B, Huali Industrial Building, District 28, Bao An, Shenzhen, Guang Dong, China.
Equipment under Test		Temperature Monitor
Model No.	:	TP27B onto annu 1
Trade mark	:	1
Manufacturer	:	SHENZHEN ECARE ELECTRONICS CO., LTD.
Address	STING	5-6/F., Block B, Huali Industrial Building, District 28, Bao An, Shenzhen, Guang Dong, China.

Test Standard Used:

FCC Rules and Regulations Part 15 Subpart C.

Test procedure used:

ANSI C63.10:2013.

We Declare:

The equipment described above is tested by Dongguan Dongdian Testing Service Co., Ltd. and in the configuration tested the equipment complied with the standards specified above. The test results are contained in this test report and Dongguan Dongdian Testing Service Co., Ltd. is assumed of full responsibility for the accuracy and completeness of these tests.

After test and evaluation, our opinion is that the equipment provided for test compliance with the requirement of the above FCC standards.

Report No:	DDT-R20040220-1E3		
Date of Receipt:	Apr. 09, 2020	Date of Test:	Apr. 09, 2020 ~ Apr. 29, 2020

Prepared By:

Sam Li

Sam Li/Engineer

Approved By

Damon Hu/EMC Manager

Report No.: DDT-R20040220-1E3

Note: This report applies to above tested sample only. This report shall not be reproduced in parts without written approval of Dongguan Dongdian Testing Service Co., Ltd.

Revision history

Rev.	Revisions		Issue Date	Revised By
	Initial issue		Apr. 29, 2020	
	DONG DIAN TEGTING	MANTESTING	DONG DIRN TESTING	1

1. Summary of test results

Description of Test Item	Standard	Results	
20dB Bandwidth	FCC Part 15: 15.215 ANSI C63.10:2013	PASS	
Radiated Emission	FCC Part 15: 15.209 FCC Part 15: 15.249 ANSI C63.10:2013	PASS	
Band Edge Compliance	FCC Part 15: 15.205 FCC Part 15: 15.249 ANSI C63.10:2013	PASS	
Power Line Conducted Emission	FCC Part 15: 15.207 ANSI C63.10:2013	N/A	
Antenna requirement	FCC Part 15: 15.203	PASS	

2. General test information

2.1. Description of EUT

EUT* Name	:	Temperature Monitor
Model Number : TP27B		TP27B
EUT function description	ription: Please reference user manual of this device	
Power supply	supply : DC 3V (2*1.5 "AAA" batteries)	
Operation frequency : 915		915MHz
Modulation	:	FSK
Antenna Type	:	Integral Antenna, maximum PK gain: 0dBi
Sample Type		Series production

Note: EUT is the ab. of equipment under test.

2.2. Accessories of EUT

Description of Accessories	Manufacturer	Model number	Serial No.	Other	
DONG DIAM TO N/A	N/A	N/A	EONG THAN TESTING N/A	N/A	

2.3. Assistant equipment used for test

Assistant equipment	Manufacturer	acturer Model number Ser		Other
N/A	N/A	N/A	N/A	N/A

2.4. Block diagram of EUT configuration for test

Tx Mode:

EUT

2.5. Test environment conditions

During the measurement the environmental conditions were within the listed ranges:

Temperature range:	21-25℃	00110
Humidity range:	40-75%	
Pressure range:	86-106kPa	

2.6. Deviations of test standard

No Deviation.

2.7. Test laboratory

Dongguan Dongdian Testing Service Co., Ltd.

Add: No. 17, Zongbu Road 2, Songshan Lake Sci&Tech, Industry Park, Dongguan City,

Guangdong Province, China, 523808

Tel: +86-0769-38826678, http://www.dgddt.com, Email: ddt@dgddt.com

CNAS Accreditation No. L6451; A2LA Accreditation No. 3870.01

FCC Designation Number: CN1182; FCC Test Firm Registration Number: 540522

Industry Canada site registration number: 10288A-1

2.8. Measurement uncertainty

Test Item	Uncertainty		
Bandwidth	1.1%		
Dools Outrout Dougra (Conducted) (Conducted)	0.86dB (10MHz ≤ f < 3.6GHz);		
Peak Output Power (Conducted) (Spectrum analyzer)	1.38dB (3.6GHz ≤ f < 8GHz)		
Peak Output Power (Conducted) (Power Sensor)	0.74dB		
Dower Spectral Density	0.74dB (10MHz ≤ f < 3.6GHz);		
Power Spectral Density	1.38dB (3.6GHz ≤ f < 8GHz)		
	0.86dB (10MHz ≤ f < 3.6GHz);		
Conducted spurious emissions	1.40dB (3.6GHz ≤ f < 8GHz)		
	1.66dB (8GHz ≤ f < 22GHz)		
Uncertainty for radio frequency (RBW<20kHz)	3×10 ⁻⁸		
Temperature none man results	0.4°C		
Humidity	2%		
Uncertainty for Radiation Emission test	4.70dB (Antenna Polarize: V)		
(30MHz-1GHz)	4.84dB (Antenna Polarize: H)		
Uncertainty for Radiation Emission test	4.10dB (1-6GHz)		
(1GHz-18GHz)	4.40dB (6GHz-18GHz)		
Uncertainty for Power line conduction emission test	3.32dB (150kHz-30MHz)		
Note: This uncertainty represents an expanded uncertain	nty expressed at approximately the 95%		

Note: This uncertainty represents an expanded uncertainty expressed at approximately the 95% confidence level using a coverage factor of k=2.

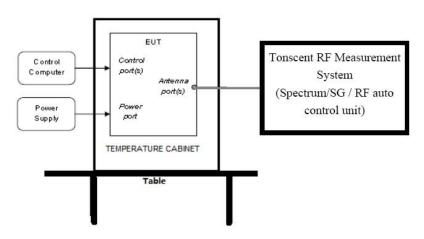
3. Equipment used during test

Equipment	Manufacturer	Model No.	Serial No.	Last Cal.	Cal. Interval
RF Connected Test (Tonscend RF N	leasurement	System)		
Spectrum analyzer	R&S	FSU26	200071	Sep. 29, 2019	1 Year
Wideband Radio Communication tester	R&S	CMW500	117491	Jun. 25, 2019	1 Year
Vector Signal Generator	Agilent	E8267D	US49060192	Sep. 29, 2019	1 Year
Vector Signal Generator	Agilent	N5182A	MY48180737	Jun. 25, 2019	1 Year
Power Sensor	Agilent	U2021XA	MY55150010	Jun. 28, 2019	1 Year
Power Sensor	Agilent	U2021XA	MY55150011	Jun. 28, 2019	1 Year
DC Power Source	MATRIS	MPS-3005L-	D813058W	Jun. 25, 2019	1 Year
RF Cable	Micable	C10-01-01-1	100309	Sep. 29, 2019	1 Year
Temp&Humi Programmable	ZHIXIANG	ZXGDJS-15 0L	ZX170110-A	Oct. 21, 2019	1 Year
Test Software	JS Tonscend	JS1120-3	Ver.2.7	N/A	N/A
Radiation 2#chambe	DONG DIAN TEST		IN TESTIN		BONG DIAN TESTING
EMI Test Receiver	R&S	ESCI	101364	Sep. 29, 2019	1 Year
Spectrum analyzer	Agilent	E4447A	MY50180031	Jun. 25, 2019	1 Year
Trilog Broadband Antenna	Schwarzbeck	VULB 9163	9163-994	Nov. 15, 2019	1 Year
Active Loop antenna	Schwarzbeck	FMZB-1519	1519-038	Sep. 29, 2019	1 Year
Double Ridged Horn Antenna	Schwarzbeck	BBHA9120	02108	Jul. 21, 2019	1 Year
Broad Band Horn Antenna	Schwarzbeck	BBHA 9170	790	Sep. 29, 2019	1 Year
Pre-amplifier	TERA-MW	TRLA-0040 G35	101303	Sep. 29, 2019	1 Year
RF Cable	N/A	14+1.5m	06270619	Sep. 29, 2019	1 Year
Test software	Audix	ЕЗ дома вият	V 6.11111b	N/A	N/A

Report No.: DDT-R20040220-1E3

20dB Bandwidth

4.1. Block diagram of test setup



4.2. Limits

Intentional radiators operating under the alternative provisions to the general emission limits, as contained in § 15.217 through 15.257 and in Subpart E of this part, must be designed to ensure that the 20dB bandwidth of the emission, or whatever bandwidth may otherwise be specified in the specific rule section under which the equipment operates, is contained within the frequency band designated in the rule section under which the equipment is operated.

4.3. Test Procedure

- (1) Connect EUT's antenna output to spectrum analyzer by RF cable.
- (2) Set the spectrum analyzer as follows:

RBW: 3 kHz VBW: 10 kHz Detector Mode: Peak Sweep time: auto

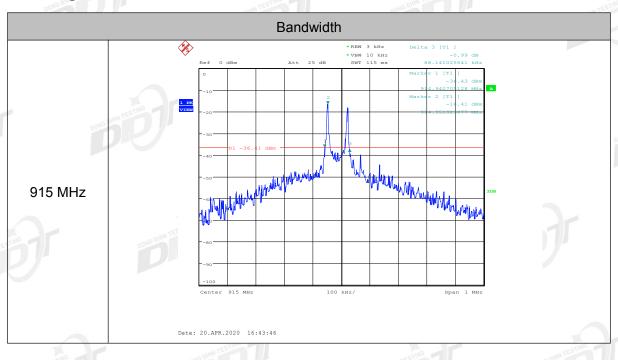
Trace mode Max hold

(3) Allow the trace to stabilize, measure the 20dB bandwidth of signal.

4.4. Test Result

Mode	Freq (MHz)	20dB bandwidth Result (kHz)	Limit (kHz)	Conclusion
FSK	915	88.141		PASS

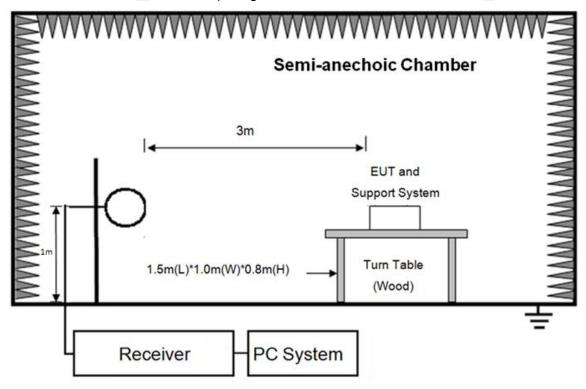
4.5. Original test data



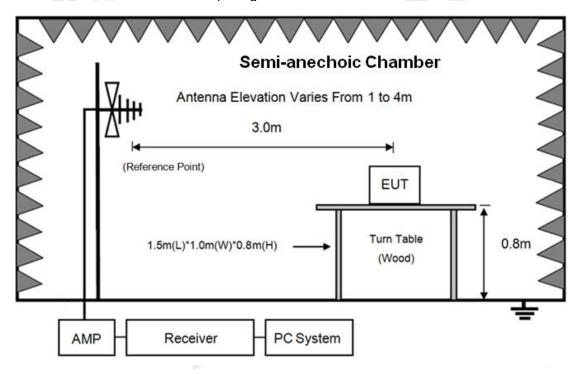
5. Radiated emission

5.1. Block diagram of test setup

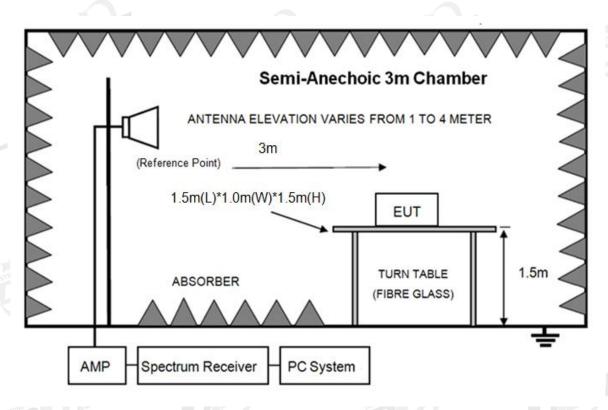
In 3m Anechoic Chamber Test Setup Diagram for 9kHz-30MHz



In 3m Anechoic Chamber Test Setup Diagram for 30MHz-1GHz



In 3m Anechoic Chamber Test Setup Diagram for frequency above 1GHz



Note: For harmonic emissions test an appropriate high pass filter was inserted in the input port of AMP.

5.2. Limit

FR	FREQUENCY		DISTANCE	FIELD STRE	NGTHS LIMIT
T How	MHz		Meters	μV/m	dB(μV)/m
30	~	88	3	100	40.0
88	~	216	3	150	43.5
216	~	960	3	200	46.0
960	~	1000	3	500	54.0
Abov	ve 100	00MHz	3		/)/m (Peak) /m (Average)
Fundame	ental e	ngth of emission for 28 MHz	3	94.0 dB(μV)/m (Average 114.0 dB(μV)/m(Peak)	
	d Strer larmor	ngth of nics	3	• • • • • • • • • • • • • • • • • • • •	/)/m (Peak) /m (Average)

Remark:

- (1) Emission level $dB\mu V = 20 \log Emission level \mu V/m$
- (2) The smaller limit shall apply at the cross point between two frequency bands.
- (3) Distance is the distance in meters between the measuring instrument, antenna and the closest point of any part of the device or system.
- (4) The emission limits shown in the above table are based on measurements employing a CISPR quasi-peak detector except for the frequency bands 9-90 kHz, 110-490 kHz and above 1000MHz, radiated emission limits in these three bands are based on measurements employing an average detector.

5.3. Test Procedure

- (1) EUT was placed on a non-metallic table, 80 cm above the ground plane inside a semi-anechoic chamber.
- (2) Setup EUT and assistant system according clause 2.4
- (3) Test antenna was located 3m from the EUT on an adjustable mast. Below pre-scan procedure was first performed in order to find prominent radiated emissions.
 - (a) Change work frequency or channel of device if practicable.
 - (b) Change modulation type of device if practicable.
 - (c) Change power supply range from 85% to 115% of the rated supply voltage
- (d) Rotated EUT though three orthogonal axes to determine the attitude of EUT arrangement produces highest emissions
- (4) Spectrum frequency from 9kHz to 10GHz (tenth harmonic of fundamental frequency) was investigated, and no any obvious emission were detected from 9kHz to 30MHz, so below final test was performed with frequency range from 30MHz to 10GHz.
- (5) For final emissions measurements at each frequency of interest, the EUT were rotated and the antenna height was varied between 1m and 4m in order to maximize the emission. Measurements in both horizontal and vertical polarities were made and the data was recorded. In order to find the maximum emission, the relative positions of equipment and all of the interface cables were changed according to ANSI C63.10:2013 on Radiated Emission test.
- (6) For emissions from 30MHz to 1GHz, Quasi-Peak values were measured with EMI Receiver and the bandwidth of Receiver is 120 kHz.
- (7) For emissions above 1GHz, both Peak and Average level were measured with Spectrum Analyzer, and the RBW is set at 1MHz, VBW is set at 3MHz for Peak measure; RBW is set at 1MHz, VBW is set at 10Hz for Average measure. Peak detector is used for both PK and AV test.
- (8) For fundamental frequency test, set spectrum analyzer's RBW=100 kHz, VBW=300 kHz. Peak detector for PK, RMS detector for AV, Read the Level in spectrum analyzer and record.
- (9) X axis, Y axis, Z axis are tested, and worse setup X axis is reported.

5.4. Test result

PASS. (See below detailed test result)
All the emissions except fundamental emission from 9kHz to 10GHz were comply with 15.209

Note1: According exploratory test, the emission levels are 20 dB below the limit detected from 9kHz to 30MHz.

Note2: For emissions above 1GHz. If peak results comply with AV limit, AV Result is deemed to comply with AV limit.

Field Strength of the Fundamental Signal

<u> </u>	iora ottorigin of the Faritamiental orginal								
Freq.	Read level	Antenna	Cable	PK Result	AV Limit	Margin	Polarization		
(MHz)	(dBµV)	Factor (dB/m)	Loss (dB)	Level	(dBµV/m)	(dB)			
				(dBµV/m)					
915	63.47	22.22	7.98	93.67	94.00	0.33	HORIZONTAL		
915	58.62	22.22	7.98	88.82	94.00	5.18	VERTICAL		
Result: P	ass	NG .				1			

Note: 1. Result Level = Read Level + Antenna Factor + Cable loss

^{2.} If Peak Result complies with AV limit, AV Result is deemed to comply with AV limit.

Radiated Emission test (below 1GHz)

TR-4-E-009 Radiated Emission Test Result

Test Site : DDT 3m Chamber 2# E:\2020 RE2# Report Data\Q20040220-1E TB27B\FCC BELOW

1G.EM6

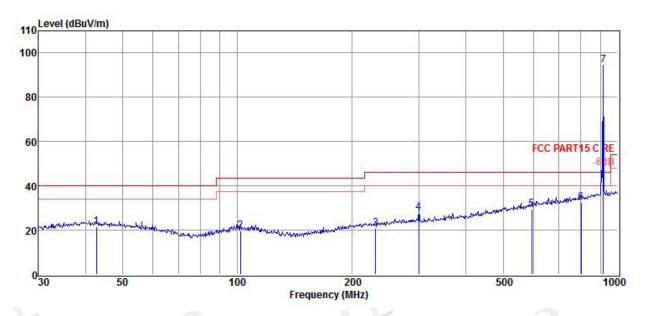
Test Date : 2020-04-13 Tested By : Jacky

EUT : Temperature Monitor Model Number : TP27B

Power Supply : DC 3V Test Mode : Tx mode

Memo :

Data: 5



Item	Freq.	Read	Antenna	Cable 😡	Result	Limit	Over	Detector	Polarization
		Level	Factor	Loss	Level	Line	Limit	NU/	
(Mark)	(MHz)	(dBµV)	(dB/m)	dB	(dBµV/m)	(dBµV/m)	(dB)		
1	42.60	3.61	14.16	3.73	21.50	40.00	-18.50	QP	HORIZONTAL
2	102.00	3.94	11.68	4.22	19.84	43.50	-23.66	QP	HORIZONTAL
3	230.91	3.33	12.32	5.03	20.68	46.00	-25.32	QP	HORIZONTAL
4	300.37	8.43	14.01	5.37	27.81	46.00	-18.19	QP	HORIZONTAL
5	595.13	3.38	19.23	6.74	29.35	46.00	-16.65	QP	HORIZONTAL
6	801.79	3.85	21.22	7.55	32.62	46.00	-13.38	QP	HORIZONTAL
7	915.00	63.47	22.22	7.98	93.67	1	1	Peak	HORIZONTAL

Note: 1. Result Level = Read Level + Antenna Factor + Cable loss.

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.

TR-4-E-009 Radiated Emission Test Result

Test Site : DDT 3m Chamber 2# E:\2020 RE2# Report Data\Q20040220-1E TB27B\FCC BELOW

1G.EM6

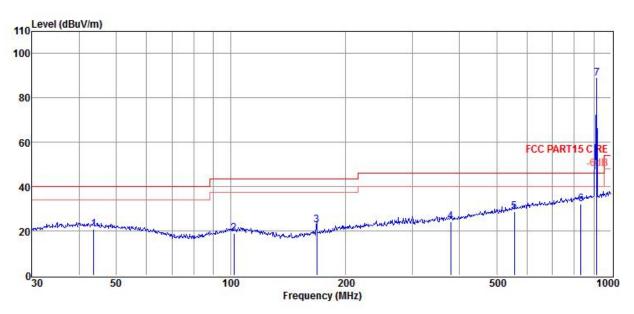
Test Date : 2020-04-13 Tested By : Jacky

EUT : Temperature Monitor Model Number : TP27B

Power Supply : DC 3V Test Mode : Tx mode

Memo :

Data: 6



Item (Mark)	Freq.	Read Level (dBµV)	Antenna Factor (dB/m)	Cable Loss	Result Level (dBµV/m)	Limit Line (dBµV/m)	Over Limit	Detector MTESTING	Polarization
1	43.66	3.07	14.03	3.73	20.83	40.00	-19.17	QP	VERTICAL
2	102.00	3.00	11.68	4.22	18.90	43.50	-24.60	QP	VERTICAL
3	168.41	8.62	9.32	4.66	22.60	43.50	-20.90	QP	VERTICAL
4	378.58	3.09	15.21	5.74	24.04	46.00	-21.96	QP	VERTICAL
5, IRM TE	556.77	3.51	18.64	6.56	28.71	46.00	-17.29	QP	VERTICAL
6	833.32	2.92	21.51	7.67	32.10	46.00	-13.90	QP	VERTICAL
7	915.00	58.62	22.22	7.98	88.82	1	1	Peak	VERTICAL

Note: 1. Result Level = Read Level + Antenna Factor + Cable loss.

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.

Radiated Emission test (above 1GHz)

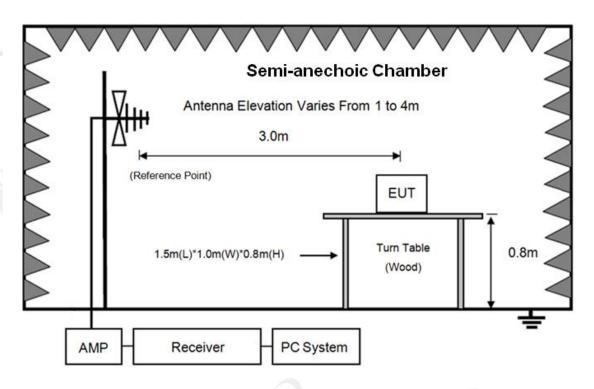
Freq.	Read	Antenn	PRM	Cable	ResultL	Limit	Margin	Detector	Polarization
(MHz)	level	а	Facto	Loss	evel(dB	(dBµV/	(dB)	type	DONU
	(dBµV)	Factor	r(dB)	(dB)	μV/m)	m)	, ,	•	
		(dB/m)							
Tx mode: 9	15MHz								
1830.00	64.11	26.29	43.98	3.44	49.86	74.00	-24.14	Peak	HORIZONTAL
4123.00	50.49	30.90	44.42	5.76	42.73	74.00	-31.27	Peak	HORIZONTAL
5410.00	51.08	32.66	44.23	6.56	46.07	74.00	-27.93	Peak	HORIZONTAL
6643.00	47.75	35.79	43.53	7.35	47.36	74.00	-26.64	Peak	HORIZONTAL
7822.00	46.99	37.75	42.98	8.49	50.25	74.00	-23.75	Peak	HORIZONTAL
9775.00	45.91	39.32	43.62	9.20	50.81	74.00	-23.19	Peak	HORIZONTAL
1830.00	54.53	26.29	43.98	3.44	40.28	74.00	-33.72	Peak	VERTICAL
3628.00	49.42	29.63	44.36	5.29	39.98	74.00	-34.02	Peak	VERTICAL
4942.00	51.50	32.42	44.49	6.24	45.67	74.00	-28.33	Peak	VERTICAL
6940.00	47.57	36.80	43.38	7.52	48.51	74.00	-25.49	Peak	VERTICAL
8065.00	47.39	37.96	42.93	8.68	51.10	74.00	-22.90	Peak	VERTICAL
9640.00	46.70	39.21	43.57	9.10	51.44	74.00	-22.56	Peak	VERTICAL
Result: Pa	ass		y						

Note 1: Result Level = Read Level + Antenna Factor + Cable loss - PRM Factor.

^{2:} For emissions above 1GHz. If peak results comply with AV limit, AV Result is deemed to comply with AV limit.

6. Band Edge Compliance

6.1. Block diagram of test setup



6.2. Limit

Emissions 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 §15.209, whichever is the lesser attenuation.

6.3. Test Procedure

Same with clause 5.3 except change investigated frequency range from 890MHz to 930MHz. Remark: All restriction bands have been tested, and only the worst case is shown in report.

6.4. Test result

PASS. (See below detailed test result)

TR-4-E-009 Radiated Emission Test Result

Test Site : DDT 3m Chamber 2# E:\2020 RE2# Report Data\Q20040220-1E TB27B\FCC BELOW

1G.EM6

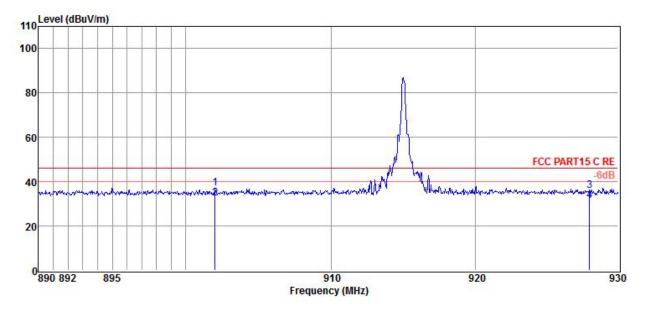
Test Date : 2020-04-29 Tested By : Bill

Power Supply : DC 3V Test Mode : Tx mode

Condition : Temp:24.5'C, Humi:55%, Press:100.1kPa Antenna/Distance : 2019 VULB 9163 2#/3m/VERTICAL

Memo :

Data: 10



Item	Freq.	Read Level	Antenna Factor	Cable Loss	Result Level	Limit Line	Over Limit	Detector	Polarization
(Mark)	(MHz)	(dBµV)	(dB/m)	dB	(dBµV/m)	(dBµV/m)	(dB)		e e
1	902.00	7.04	22.11	7.93	37.08	46.00	-8.92	Peak	VERTICAL
2	902.00	2.54	22.11	7.93	32.58	46.00	-13.42	Average	VERTICAL
3	928.00	5.43	22.30	8.02	35.75	46.00	-10.25	Peak	VERTICAL
4	928.00	1.16	22.30	8.02	31.48	46.00	-14.52	Average	VERTICAL

Note: 1. Result Level = Read Level + Antenna Factor + Cable loss.

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.

TR-4-E-009 Radiated Emission Test Result

Test Site : DDT 3m Chamber 2# E:\2020 RE2# Report Data\Q20040220-1E TB27B\FCC BELOW

1G.EM6

Test Date : 2020-04-29 Tested By : Bill

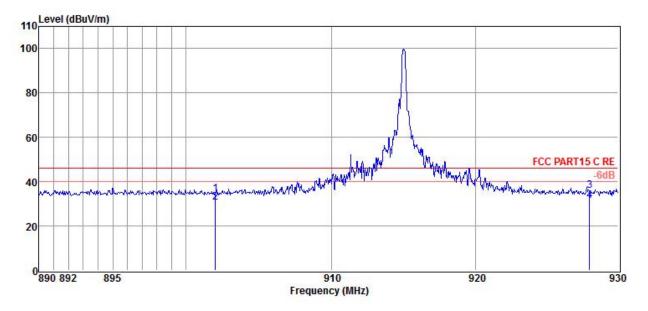
EUT : Temperature Monitor **Model Number** : TP27B

Power Supply : DC 3V Test Mode : Tx mode

Condition : Temp:24.5'C,Humi:55%,Press:100.1kPa Antenna/Distance : 2019 VULB 9163 2#/3m/HORIZONTAL

Memo :

Data: 11



Item	Freq.	Read Level	Antenna Factor	Cable Loss	Result Level	Limit Line	Over Limit	Detector	Polarization
(Mark)	(MHz)	(dBµV)	(dB/m)	dB	(dBµV/m)	(dBµV/m)	(dB)		
1	902.00	4.54	22.11	7.93	34.58	46.00	-11.42	Peak	HORIZONTAL
2	902.00	0.68	22.11	7.93	30.72	46.00	-15.28	Average	HORIZONTAL
3	928.00	5.47	22.30	8.02	35.79	46.00	-10.21	Peak	HORIZONTAL
4	928.00	1.12	22.30	8.02	31.44	46.00	-14.56	Average	HORIZONTAL

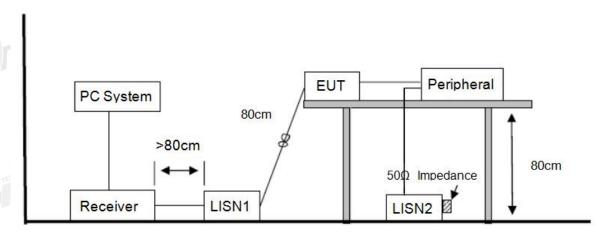
Note: 1. Result Level = Read Level + Antenna Factor + Cable loss.

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.

7. Power Line Conducted Emission

7.1. Block diagram of test setup



7.2. Power Line Conducted Emission Limits

Frequency	Quasi-Peak Level dB(μV)	Average Level dB(μV)
150kHz ~ 500kH	z 66 ~ 56*	56 ~ 46*
500kHz ~ 5MHz	56	46
5MHz ~ 30MH:	60	50

Note 1: * Decreasing linearly with logarithm of frequency.

Note 2: The lower limit shall apply at the transition frequencies.

7.3. Test Procedure

The EUT and Support equipment, if needed, were put placed on a non-metallic table, 80cm above the ground plane.

Configuration EUT to simulate typical usage as described in clause 2.4 and test equipment as described in clause 10.2 of this report.

All I/O cables were positioned to simulate typical actual usage as per ANSI C63.10.

All support equipment power received from a second LISN.

Emissions were measured on each current carrying line of the EUT using an EMI Test Receiver connected to the LISN powering the EUT.

The Receiver scanned from 150 kHz to 30MHz for emissions in each of the test modes.

During the above scans, the emissions were maximized by cable manipulation.

The test mode(s) described in clause 2.4 were scanned during the preliminary test.

After the preliminary scan, we found the test mode producing the highest emission level. The EUT configuration and worse cable configuration of the above highest emission levels were

recorded for reference of the final test.

EUT and support equipment were set up on the test bench as per the configuration with highest emission level in the preliminary test.

A scan was taken on both power lines, Neutral and Line, recording at least the six highest emissions.

Emission frequency and amplitude were recorded into a computer in which correction factors were used to calculate the emission level and compare reading to the applicable limit.

The test data of the worst-case condition(s) was recorded.

The bandwidth of test receiver is set at 9 kHz.

7.4. Test Result

PASS. (See below detailed test result)

Not applicable, since EUT is battery-powered.

8. Antenna Requirements

8.1. Limit

For intentional device, according to FCC 47 CFR Section 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.

8.2. Result

The antenna used for this product is Integral Antenna and that no antenna other than that furnished by the responsible party shall be used with the device, the maximum peak gain of the transmit antenna is 0 dBi.