

RADIO TEST REPORT FCC ID: 2AB7K-T9201

Product:	BodySense Blood Pressure Monitor		
Trade Name:	Eufy		
Model No.:	T9201(SKU No.T92010N1)		
Serial Model:	N/A		
Report No.:	NTEK-2016NT11159863F		
Issue Date:	22 Nov. 2016		

Prepared for

Anker technology Co., Limited Room 1318-19, Hollywood Plaza, 610 Nathan Road, Mongkok, Kowloon, Hongkong

Prepared by

NTEK TESTING TECHNOLOGY CO., LTD. 1/F, Building E, Fenda Science Park, Sanwei Community, Xixiang Street Bao'an District, Shenzhen 518126 P.R. China Tel.: +86-755-6115 6588 Fax.: +86-755-6115 6599 Website:http://www.ntek.org.cn



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TEST RESULT

Complied

1 TEST RESULT CERTIFICATION

Applicant's name:	Anker technology Co., Limited	
Address:	Room 1318-19, Hollywood Plaza, 610 Nathan Road, Mongkok,	
	Kowloon, Hongkong	
Manufacturer's Name:	Shenzhen Belter Health Measurement and Analysis Technology Co., Ltd	
Address:	702/704, Block C, Tsinghua Unis Science Park, No.13 Langshan	
	Rd.,Hi-Tech Industrial Park(north), Nanshan District, 518057 Shenzhen,	
	People's Republic of China	
Product description		
Product name:	BodySense Blood Pressure Monitor	
Model and/or type reference:	T9201(SKU No.T92010N1)	
Serial Model:	N/A	

Measurement Procedure Used:

APPLICABLE STANDARDS

APPLICABLE STANDARD/ TEST PROCEDURE

FCC 47 CFR Part 2, Subpart J:2016

FCC 47 CFR Part 15, Subpart C:2016

KDB 174176 D01 Line Conducted FAQ v01r01

ANSI C63.10-2013

FCC KDB 558074 D01 DTS Meas Guidance v03r05

This device described above has been tested by NTEK Testing Technology Co., Ltd., and the test results show that the equipment under test (EUT) is in compliance with the FCC requirements. And it is applicable only to the tested sample identified in the report.

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The test results of this report relate only to the tested sample identified in this report.

Date of Test	: 10 Oct. 2016 ~ 22 Nov. 2016	
Testing Engineer	: Ahu lin	
	(Allen Liu)	
Technical Manager	Jason chen	
	(Jason Chen)	
	Sem. Chen	
Authorized Signatory		
	(Sam Chen)	



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	FCC Part15 (15.247), Subpart	C		
Standard Section	Test Item	Verdict	Remark	
15.207	Conducted Emission	PASS		
15.247 (a)(2)	6dB Bandwidth PASS			
15.247 (b)	Peak Output Power	PASS		
15.247 (c)	Radiated Spurious Emission	PASS		
15.247 (d)	Power Spectral Density	PASS		
15.205	Band Edge Emission	PASS		
15.203	Antenna Requirement PASS			

Remark:

 "N/A" denotes test is not applicable in this Test Report.
 All test items were verified and recorded according to the standards and without any deviation during the test.



3 FACILITIES AND ACCREDITATIONS

3.1 FACILITIES

All measurement facilities used to collect the measurement data are located at

1/F, Building E, Fenda Science Park, Sanwei Community, Xixiang Street, Bao'an District, Shenzhen P.R. China.

The sites are constructed in conformance with the requirements of ANSI C63.7, ANSI C63.10 and CISPR Publication 22.

3.2 LABORATORY ACCREDITATIONS AND LISTINGS

•
Site Description
EMC Lab.

EMC Lab.	 Accredited by CNAS, 2014.09.04 The certificate is valid until 2017.09.03 The Laboratory has been assessed and proved to be in compliance with
	CNAS-CL01:2006 (identical to ISO/IEC 17025:2005) The Certificate Registration Number is L5516.
	Accredited by Industry Canada, August 29, 2012 The Certificate Registration Number is 9270A-1.
	Accredited by FCC, September 6, 2013 The Certificate Registration Number is 238937.
Name of Firm Site Location	 NTEK Testing Technology Co., Ltd 1/F, Building E, Fenda Science Park, Sanwei Community, Xixiang Street, Bao'an District, Shenzhen P.R. China.

3.3 MEASUREMENT UNCERTAINTY

The reported uncertainty of measurement y±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 %.

No.	Item	Uncertainty	
1	Conducted Emission Test	±1.38dB	
2	RF power, conducted ±0.16dB		
3	Spurious emissions, conducted	±0.21dB	
4	All emissions, radiated(<1G)	±4.68dB	
5	All emissions, radiated(>1G)	±4.89dB	
6	Temperature	±0.5°C	
7	Humidity	±2%	



4 GENERAL DESCRIPTION OF EUT

Product Feature and Specification			
Equipment	Equipment BodySense Blood Pressure Monitor		
Trade Name	Eufy		
FCC ID	2AB7K-T9201		
Model No.	T9201(SKU No.T92010N1)		
Serial Model	N/A		
Model Difference	Model Difference N/A		
Operating Frequency 2402MHz~2480MHz			
Modulation	ation GFSK		
Number of Channels	mber of Channels 40 Channels		
Bluetooth Version BT V4.0(BLE)			
Antenna Type	PCB Antenna		
Antenna Gain	1 dBi		
Power supply	DC supply: DC 3.7V/400mAh from Battery or DC 5V from USB Port.		
	Adapter supply:		
HW Version	EPA-13B4 V1.4 2016-3-15		
SW Version	5EBB		

Note: Based on the application, features, or specification exhibited in User's Manual, the EUT is considered as an ITE/Computing Device. More details of EUT technical specification, please refer to the User's Manual.



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Revision History				
Report No.	Version	Description	Issued Date	
NTEK-2016NT11159863F	Rev.01	Initial issue of report	Nov 22, 2016	



5 DESCRIPTION OF TEST MODES

To investigate the maximum EMI emission characteristics generates from EUT, the test system was pre-scanning tested base on the consideration of following EUT operation mode or test configuration mode which possible have effect on EMI emission level. Each of these EUT operation mode(s) or test configuration mode(s) mentioned above was evaluated respectively.

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

Test of channel included the lowest and middle and highest frequency to perform the test, then record on this report.

Those data rates (1Mbps for GFSK modulation) were used for all test.

The EUT was pretested with 3 orientations placed on the table for the radiated emission measurement -X, Y, and Z-plane. The X-plane results were found as the worst case and were shown in this report.

Carrier Frequency and Channel list:

Channel	Frequency(MHz)
0	2402
1	2404
19	2440
20	2442
38	2478
39	2480

Note: fc=2402MHz+k×2MHz k=0 to 39

The following summary table is showing all test modes to demonstrate in compliance with the standard.

	Test Cases					
Toot Itom	Data Rate/ Modulation					
Test Item	Bluetooth 4.0_LE / GFSK					
AC Conducted Emission	Mode 1: normal link mode					
	Mode 1: normal link mode					
Radiated Test	Mode 2: Bluetooth Tx Ch00_2402MHz_1Mbps					
Cases	Mode 3: Bluetooth Tx Ch19_2440MHz_1Mbps					
	Mode 4: Bluetooth Tx Ch39_2480MHz_1Mbps					
Conducted Test	Mode 2: Bluetooth Tx Ch00_2402MHz_1Mbps					
Conducted Test Cases	Mode 3: Bluetooth Tx Ch19_2440MHz_1Mbps					
Cases	Mode 4: Bluetooth Tx Ch39_2480MHz_1Mbps					

Note:

1. The engineering test program was provided and the EUT was programmed to be in continuously transmitting mode.

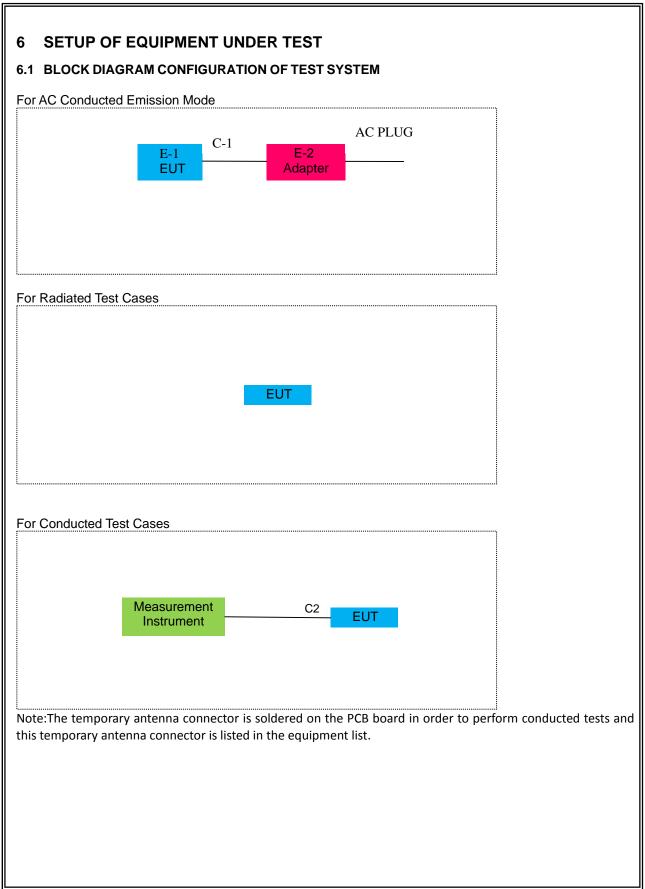
2. AC power line Conducted Emission was tested under maximum output power.

 For radiated test cases, the worst mode data rate 1Mbps was reported only, because this data rate has the highest RF output power at preliminary tests, and no other significantly frequencies found in conducted spurious emission.

4. EUT built-in battery-powered, fully-charged battery use of the test battery

5. EUT is set to continuous transmission mode. duty cycle greater than 98%.







6.2 SUPPORT EQUIPMENT

The EUT has been tested as an independent unit together with other necessary accessories or support units. The following support units or accessories were used to form a representative test configuration during the tests.

Item	Equipment	Mfr/Brand	Model/Type No.	FCC ID	Note
E-1	BodySense Blood Pressure Monitor	N/A	T9201(SKU No.T92010N1)	2AB7K-T9201	EUT
E-2	Adapter	TP-LINK	T050100-2A3	N/A	

Item	Cable Type	Shielded Type	Ferrite Core	Length
C-1	USB Cable	NO	NO	0.8m
C-2	RF Cable	NO	NO	0.3m

Notes:

- (1) The support equipment was authorized by Declaration of Confirmation.
- (2) For detachable type I/O cable should be specified the length in cm in [Length] column.
- (3) "YES" is means "shielded" "with core"; "NO" is means "unshielded" "without core".



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6.3 EQUIPMENTS LIST FOR ALL TEST ITEMS

RF Test equipment

	51, 5 qp 6	1					
Iter	Nind of Equipment	Manufacturer	Type No.	Serial No.	Last calibration	Calibrated until	Calibrati on period
1	Spectrum Analyzer	Agilent	E4407B	MY45108040	2016.07.06	2017.07.05	1 year
2	Spectrum Analyzer	Agilent	N9020A	MY49100060	2016.07.06	2017.07.05	1 year
3	EMI Test Receiver	Agilent	N9038A	MY53227146	2016.06.06	2017.06.05	1 year
4	Test Receiver	R&S	ESPI	101318	2016.06.06	2017.06.05	1 year
5	Bilog Antenna	TESEQ	CBL6111D	31216	2016.07.06	2017.07.05	1 year
6	50Ω Coaxial Switch	Anritsu	MP59B	6200264416	2016.06.06	2017.06.05	1 year
7	Horn Antenna	EM	EM-AH-1018 0	2011071402	2016.07.06	2017.07.05	1 year
8	Horn Ant	Schwarzbeck	BBHA 9170	9170-181	2016.07.06	2017.07.05	1 year
9	Amplifier	EM	EM-30180	060538	2015.12.22	2016.12.21	1 year
10	Amplifier	MITEQ	TTA1840-35- HG	177156	2016.06.06	2017.06.05	1 year
11	Loop Antenna	ARA	PLA-1030/B	1029	2016.06.06	2017.06.05	1 year
12	Power Meter	DARE	RPR3006W	100696	2016.07.06	2017.07.05	1 year
13	Test Cable (9KHz-30MHz)	N/A	R-01	N/A	2016.07.06	2017.07.05	1 year
14	Test Cable (30MHz-1GHz)	N/A	R-02	N/A	2016.07.06	2017.07.05	1 year
15	High Test Cable(1G-40G Hz)	N/A	R-03	N/A	2016.06.06	2017.06.05	1 year
16	High Test Cable(1G-40G Hz)	N/A	R-04	N/A	2016.06.06	2017.06.05	1 year
17	temporary antenna connector (Note)	NTS	R001	N/A	N/A	N/A	N/A

Note:

We will use the temporary antenna connector (soldered on the PCB board) When conducted test And this temporary antenna connector is listed within the instrument list



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ltem	Kind of Equipment	Manufacturer	Type No.	Serial No.	Last calibration	Calibrated until	Calibration period
1	Test Receiver	R&S	ESCI	101160	2016.06.06	2017.06.05	1 year
2	LISN	R&S	ENV216	101313	2016.08.24	2017.08.23	1 year
3	LISN	EMCO	3816/2	00042990	2016.08.24	2017.08.23	1 year
4	50Ω Coaxial Switch	Anritsu	MP59B	6200264417	2016.06.07	2017.06.06	1 year
5	Passive Voltage Probe	R&S	ESH2-Z3	100196	2016.06.07	2017.06.06	1 year
6	Absorbing clamp	R&S	MOS-21	100423	2016.06.08	2017.06.07	1 year
7	Test Cable (9KHz-30MH z)	N/A	C01	N/A	2016.06.08	2017.06.07	1 year
8	Test Cable (9KHz-30MH z)	N/A	C02	N/A	2016.06.08	2017.06.07	1 year
9	Test Cable (9KHz-30MH z)	N/A	C03	N/A	2016.06.08	2017.06.07	1 year
1	Attenuation	MCE	24-10-34	BN9258	2016.06.08	2017.06.07	1 year

Note: Each piece of equipment is scheduled for calibration once a year.



7 TEST REQUIREMENTS

7.1 CONDUCTED EMISSIONS TEST

7.1.1 Applicable Standard

According to FCC Part 15.207(a) and KDB 174176 D01 Line Conducted FAQ v01r01

7.1.2 Conformance Limit

Fraguanay (MHz)	Conducted Emission Limit				
Frequency(MHz)	Quasi-peak	Average			
0.15-0.5	66-56*	56-46*			
0.5-5.0	56	46			
5.0-30.0	60	50			

Note: 1. *Decreases with the logarithm of the frequency

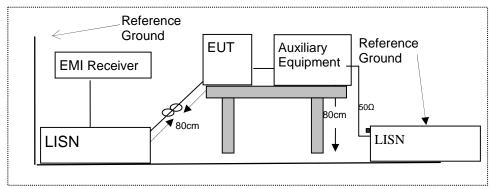
2. The lower limit shall apply at the transition frequencies

3. The limit decreases in line with the logarithm of the frequency in the range of 0.15 to 0.50MHz.

7.1.3 Measuring Instruments

The Measuring equipment is listed in the section 6.3 of this test report.

7.1.4 Test Configuration



7.1.5 Test Procedure

According to the requirements in Section 13.1.4.1 of ANSI C63.10-2013 Conducted emissions the EUT measured in the frequency range between 0.15 MHz and 30 MHz using CISPR Quasi-Peak and average detector mode.

- 1. The EUT was placed 0.4 meter from the conducting wall of the shielding room.
- 2. The EUT was placed on a table which is 0.8m above ground plane.
- Connect EUT to the power mains through a line impedance stabilization network (LISN). All other support equipments powered from additional LISN(s). The LISN provide 50 Ohm/ 50uH of coupling impedance for the measuring instrument.
- 4. Interconnecting cables that hang closer than 40 cm to the ground plane shall be folded back and forth in the center forming a bundle 30 to 40cm long.
- 5. I/O cables that are not connected to a peripheral shall be bundled in the center. The end of the cable may be terminated, if required, using the correct terminating impedance. The overall length shall not exceed 1 m.
- 6. LISN at least 80 cm from nearest part of EUT chassis.
- 7. The frequency range from 150KHz to 30MHz was searched.
- 8. Set the test-receiver system to Peak Detect Function and specified bandwidth(IF bandwidth=9KHz) with Maximum Hold Mode
- 9. For the actual test configuration, please refer to the related Item -EUT Test Photos.



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7.1.6 Test Results

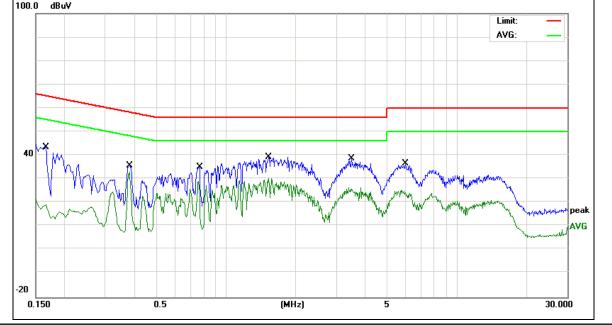
EUT:	BodySense Blood Pressure Monitor	Model Name :	T9201(SKU No.T92010N1)
Temperature:	26 °C	Relative Humidity:	54%
Pressure:	1010hPa	Phase :	L
Test Voltage :	DC 5.0V form Adapter AC 120V/60Hz	Test Mode:	Mode 1

Frequency	Reading Level	Correct Factor	Measure-ment	Limits	Margin	Densente
(MHz)	(dBµV)	(dB)	(dBµV)	(dBµV)	(dB)	- Remark
0.166	33.43	10.06	43.49	65.15	-21.66	QP
0.166	14.96	10.06	25.02	55.15	-30.13	AVG
0.382	25.59	10.06	35.65	58.23	-22.58	QP
0.382	11.3	10.06	21.36	48.23	-26.87	AVG
0.77	25.29	9.82	35.11	56	-20.89	QP
0.77	12.76	9.82	22.58	46	-23.42	AVG
1.5339	29.57	9.81	39.38	56	-16.62	QP
1.5339	13.66	9.81	23.47	46	-22.53	AVG
3.5019	28.9	9.73	38.63	56	-17.37	QP
3.5019	12.23	9.73	21.96	46	-24.04	AVG
5.9618	26.92	9.73	36.65	60	-23.35	QP
5.9618	13.74	9.73	23.47	50	-26.53	AVG

Remark:

All readings are Quasi-Peak and Average values.
 Factor = Insertion Loss + Cable Loss.

100.0 dBuV





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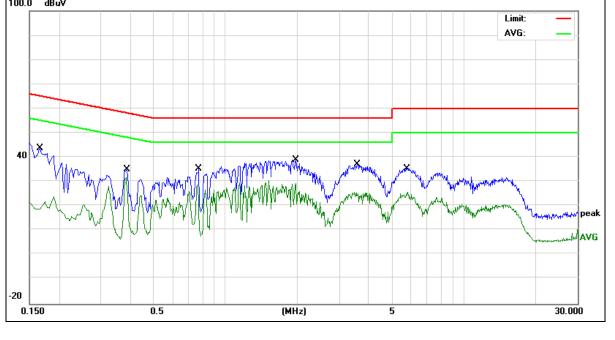
·			
EUT:	BodySense Blood Pressure Monitor	Model Name :	T9201(SKU No.T92010N1)
Temperature:	26 °C	Relative Humidity:	54%
Pressure:	1010hPa	Phase :	Ν
Test Voltage :	DC 5.0V form Adapter AC 120V/60Hz	Test Mode:	Mode 1

Frequency	Reading Level	Correct Factor	Measure-ment	Limits	Margin	Demode
(MHz)	(dBµV)	(dB)	(dBµV)	(dBµV)	(dB)	Remark
0.166	33.84	10.06	43.9	65.15	-21.25	QP
0.166	13.59	10.06	23.65	55.15	-31.5	AVG
0.386	24.99	10.06	35.05	58.15	-23.1	QP
0.386	14.09	10.06	24.15	48.15	-24	AVG
0.774	25.57	9.82	35.39	56	-20.61	QP
0.774	14.54	9.82	24.36	46	-21.64	AVG
1.9698	29.35	9.75	39.1	56	-16.9	QP
1.9698	15.94	9.75	25.69	46	-20.31	AVG
3.5779	27.44	9.73	37.17	56	-18.83	QP
3.5779	14.85	9.73	24.58	46	-21.42	AVG
5.7579	25.76	9.73	35.49	60	-24.51	QP
5.7579	14.93	9.73	24.66	50	-25.34	AVG

Remark:

All readings are Quasi-Peak and Average values.
 Factor = Insertion Loss + Cable Loss.

100.0 dBuV

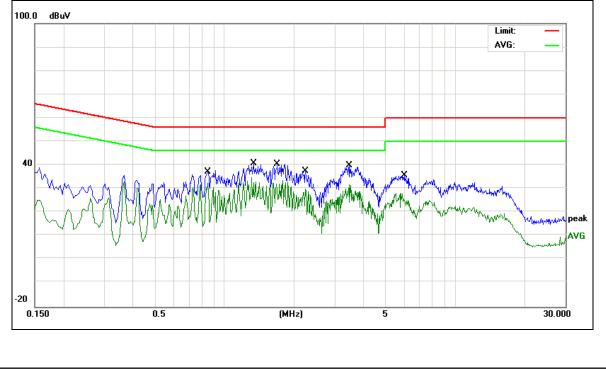


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EUT:		BodySense Blood Pressure Monitor			ne :	T9201(SKU No.T92010N1)		
Temperature:	26 ℃			Relative Humidity: 54		54%		
Pressure:	1010hPa		-	Phase :		L		
Test Voltage :	DC 5.0V form AC 240V/60H		,	Test Mode	:	Mode 1		
		1						
Frequency	Reading Level	Correct Factor	Measu	ire-ment	Limits	5	Margin	Remark
(MHz)	(dBµV)	(dB)	(dBµV)	(dBµV)	(dB)	Itelliurk
0.8457	27.32	9.84		37.16	56		-18.84	QP
0.8457	12.74	9.84		22.58	46		-23.42	AVG
1.334	30.79	9.83		40.62	56		-15.38	QP
1.334	16.86	9.83		26.69	46		-19.31	AVG
1.6937	30.52	9.79		40.31	56		-15.69	QP
1.6937	11.96	9.79		21.75	46		-24.25	AVG
2.2458	27.78	9.75		37.53	56		-18.47	QP
2.2458	13.9	9.75		23.65	46		-22.35	AVG
3.458	30.04	9.73		39.77	56		-16.23	QP
3.458	17.29	9.73		27.02	46		-18.98	AVG
6.0217	25.83	9.73		35.56	60		-24.44	QP
6.0217	13.12	9.73		22.85	50		-27.15	AVG
Remark: 1. All readings are 2. Factor = Insertio								



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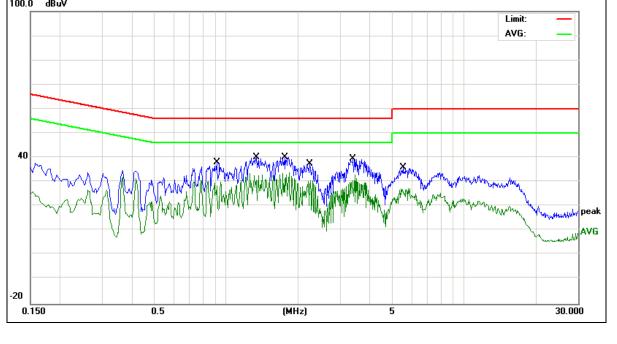
EUT:	BodySense Blood Pressure Monitor	Model Name :	T9201(SKU No.T92010N1)
Temperature:	26 °C	Relative Humidity:	54%
Pressure:	1010hPa	Phase :	N
Lect Voltage .	DC 5.0V form Adapter AC 240V/60Hz	Test Mode:	Mode 1

Frequency	Reading Level	Correct Factor	Measure-ment	Limits	Margin	Damark
(MHz)	(dBµV)	(dB)	(dBµV)	(dBµV)	(dB)	Remark
0.91	28.11	9.85	37.96	56	-18.04	QP
0.91	13.8	9.85	23.65	46	-22.35	AVG
1.334	30.37	9.83	40.2	56	-15.8	QP
1.334	15.82	9.83	25.65	46	-20.35	AVG
1.758	30.41	9.78	40.19	56	-15.81	QP
1.758	14.34	9.78	24.12	46	-21.88	AVG
2.2458	27.61	9.75	37.36	56	-18.64	QP
2.2458	13.61	9.75	23.36	46	-22.64	AVG
3.402	29.81	9.73	39.54	56	-16.46	QP
3.402	15.29	9.73	25.02	46	-20.98	AVG
5.5057	26.08	9.73	35.81	60	-24.19	QP
5.5057	15.38	9.73	25.11	50	-24.89	AVG

Remark:

All readings are Quasi-Peak and Average values.
 Factor = Insertion Loss + Cable Loss.

100.0 dBuV





7.2 RADIATED SPURIOUS EMISSION

7.2.1 Applicable Standard

According to FCC Part 15.247(d) and 15.209 and ANSI C63.10-2013

7.2.2 Conformance Limit

According to FCC Part 15.247(d): radiated emissions which fall in the restricted bands, as defined in §15.205(a), must also comply with the radiated emission limits specified in §15.209(a) (see §15.205(c)). According to FCC Part15.205, Restricted bands

MHz	MHz	MHz	GHz
0.090-0.110	16.42-16.423	399.9-410	4.5-5.15
10.495-0.505	16.69475-16.69525	608-614	5.35-5.46
2.1735-2.1905	16.80425-16.80475	960-1240	7.25-7.75
4.125-4.128	25.5-25.67	1300-1427	8.025-8.5
4.17725-4.17775	37.5-38.25	1435-1626.5	9.0-9.2
4.20725-4.20775	73-74.6	1645.5-1646.5	9.3-9.5
6.215-6.218	74.8-75.2	1660-1710	10.6-12.7
6.26775-6.26825	123-138	2200-2300	14.47-14.5
8.291-8.294	149.9-150.05	2310-2390	15.35-16.2
8.362-8.366	156.52475-156.52525	2483.5-2500	17.7-21.4
8.37625-8.38675	156.7-156.9	2690-2900	22.01-23.12
8.41425-8.41475	162.0125-167.17	3260-3267	23.6-24.0
12.29-12.293	167.72-173.2	3332-3339	31.2-31.8
12.51975-12.52025	240-285	3345.8-3358	36.43-36.5
12.57675-12.57725	322-335.4	3600-4400	(2)
13.36-13.41			

20dBc in any 100 kHz bandwidth outside the operating frequency band. In case the emission fall within the restricted band specified on 15.205(a), then the 15.209(a) limit in the table below has to be followed.

Restricted Frequency(MHz)	Field Strength (µV/m)	Field Strength (dBµV/m)	Measurement Distance
0.009~0.490	2400/F(KHz)	20 log (uV/m)	300
0.490~1.705	2400/F(KHz)	20 log (uV/m)	30
1.705~30.0	30	29.5	30
30-88	100	40	3
88-216	150	43.5	3
216-960	200	46	3
Above 960	500	54	3

Limits of Radiated Emission Measurement(Above 1000MHz)

Frequency(MHz)	Class B (dBuV/m) (at 3M)			
	PEAK	AVERAGE		
Above 1000	74	54		

Remark :1. Emission level in dBuV/m=20 log (uV/m)

Measurement was performed at an antenna to the closed point of EUT distance of meters.
 Distance extrapolation factor =40log(Specific distance/ test distance)(dB);

Limit line=Specific limits(dBuV) + distance extrapolation factor.

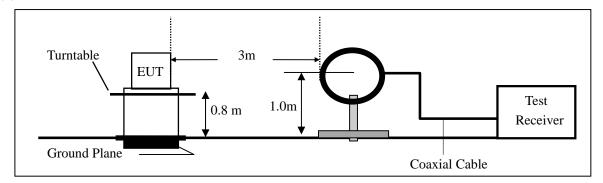


7.2.3 **Measuring Instruments**

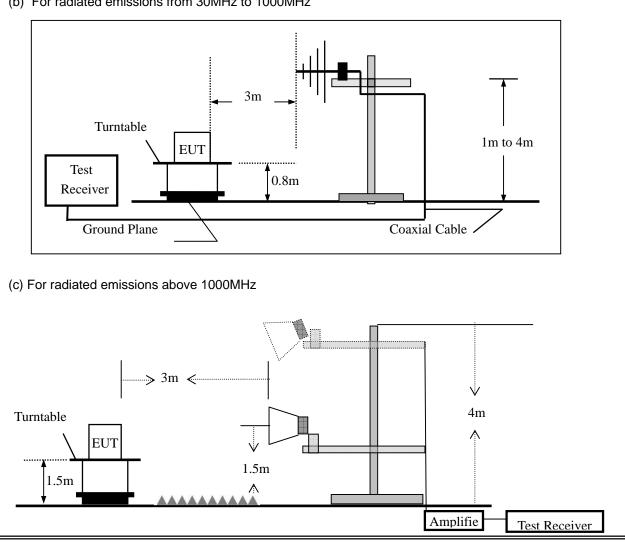
The Measuring equipment is listed in the section 6.3 of this test report.

7.2.4 Test Configuration

(a) For radiated emissions below 30MHz



(b) For radiated emissions from 30MHz to 1000MHz





7.2.5 Test Procedure

The test site semi-anechoic chamber has met the requirement of NSA tolerance 4 dB according to the standards: ANSI C63.10-2013. The test distance is 3m. The setup is according to the requirements in Section 13.1.4.1 of ANSI C63.10-2013 and CAN/CSA-CEI/IEC CISPR 22.

This test is required for any spurious emission that falls in a Restricted Band, as defined in Section 15.205. It must be performed with the highest gain of each type of antenna proposed for use with the EUT. Use the following spectrum analyzer settings:

ose the following speetrum analyzer settinge						
Spectrum Parameter	Setting					
Attenuation	Auto					
Start Frequency	1000 MHz					
Stop Frequency	10th carrier harmonic					
RB / VB (emission in restricted band)	1 MHz / 1 MHz for Peak, 1 MHz / 10Hz for Average					

Receiver Parameter	Setting
Attenuation	Auto
Start ~ Stop Frequency	9kHz~150kHz / RB 200Hz for QP
Start ~ Stop Frequency	150kHz~30MHz / RB 9kHz for QP
Start ~ Stop Frequency	30MHz~1000MHz / RB 120kHz for QP

a. The measuring distance of at 3 m shall be used for measurements at frequency up to 1GHz. For frequencies above 1GHz, any suitable measuring distance may be used.

- b. The EUT was placed on the top of a rotating table 0.8 m for below 1GHz and 1.5m for above 1GHz the ground at a 3 meter. The table was rotated 360 degrees to determine the position of the highest radiation.
- c. The height of the equipment or of the substitution antenna shall be 0.8 m for below 1GHz and 1.5m for above 1GHz; the height of the test antenna shall vary between 1 m to 4 m. Both horizontal and vertical polarizations of the antenna are set to make the measurement.
- d. For the radiated emission test above 1GHz: Place the measurement antenna away from each area of the EUT determined to be a source of emissions at the specified measurement distance, while keeping the measurement antenna aimed at the source of emissions at each frequency of significant emissions, with polarization oriented for maximum response. The measurement antenna may have to be higher or lower than the EUT, depending on the radiation pattern of the emission and staying aimed at the emission source for receiving the maximum signal. The final measurement antenna elevation shall be that which maximizes the emissions. The measurement antenna elevation for maximum emissions shall be restricted to a range of heights of from 1 m to 4 m above the ground or reference ground plane.
- e. The initial step in collecting conducted emission data is a spectrum analyzer peak detector mode pre-scanning the measurement frequency range. Significant peaks are then marked and then Quasi Peak detector mode re-measured.
- f. If the Peak Mode measured value compliance with and lower than Quasi Peak Mode Limit, the EUT shall be deemed to meet QP Limits and then no additional QP Mode measurement performed.
- g. For the actual test configuration, please refer to the related Item –EUT Test Photos.
 - Note:

Both horizontal and vertical antenna polarities were tested

and performed pretest to three orthogonal axis. The worst case emissions were reported



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During the radiated emission test, the Spectrum Analyzer was set with the following configurations:							
Frequency Band (MHz)	Function	Resolution bandwidth	Video Bandwidth				
30 to 1000	QP	120 kHz	300 kHz				
11 1000	Peak	1 MHz	1 MHz				
Above 1000	Average	1 MHz	10 Hz				

Note: for the frequency ranges below 30 MHz, a narrower RBW is used for these ranges but the measured value should add a RBW correction factor (RBWCF) where RBWCF [dB] = 10^{10} [df] (100 [kHz]/narrower RBW [kHz])., the narrower RBW is 1 kHz and RBWCF is 20 dB for the frequency 9 kHz to 150 kHz, and the narrower RBW is 10 kHz and RBWCF is 10 dB for the frequency 150 kHz to 30 MHz.

7.2.6 Test Results

Spurious	Emission	below 30MHz	(9KHz to 30MHz
Spunous	EIIIISSIUII		

EUT:	BodySense Blood Pressure Monitor	Model No.:	T9201(SKU No.T92010N1)
Temperature:	20 ℃	Relative Humidity:	48%
Test Mode:	Mode2/Mode3/Mode4	Test By:	Allen Liu

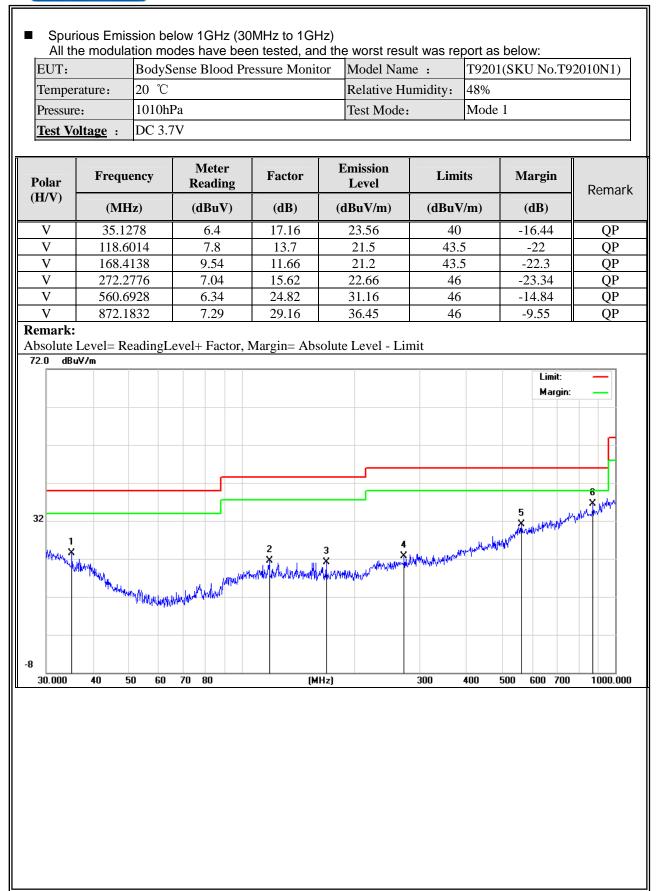
Freq.	Ant.Pol.	Emission Level(dBuV/m)		Limit 3m(dBuV/m)		Over(dB)	
(MHz)	H/V	PK	AV	PK	AV	PK	AV

Note: the amplitude of spurious emission that is attenuated by more than 20dB below the permissible limit has no need to be reported.

Distance extrapolation factor =20log(Specific distance/ test distance)(dB);

Limit line=Specific limits(dBuV) + distance extrapolation factor







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(H/V) H H H H H H H	(MHz) 31.8427		Factor	Emission Level	Limits	Margin	Remark
H H H H	31.8427	(dBuV)	(dB) (dBuV/m)		(dBuV/m)	(dB)	Remark
H H H H		5.74	18.89	24.63	40	-15.37	QP
H H H	127.2176	6.49	13.51	20	43.5	-23.5	QP
H H	414.7223	6.91	20.43	27.34	46	-18.66	QP
Н	554.8253	7.5	24.86	32.36	46	-13.64	QP
	726.8052	5.82	26.68	32.5	46	-13.5	QP
Н	938.8325	7.55	30.97	38.52	46	-7.48	QP
emark:	vel= ReadingL	evel+ Factor, N	Margin= Abs	solute Level - Lin	mit		
						Limit: Margin:	
						Margin:	
32	Muham water have been	Lines and the second se	2 X Ayya ^{ha} ti Majikashan	Array site have group a the other of galled	alayhandhattiry. Aadhaa a	4 5 X Munumum M	6 X nun Verenne
30.000 4	10 50 60	70 80	(M	Hz)	300 400	500 600 700	1000.000



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EUT:		Body	/Sense B	lood Press	sure Monito	Model No	o.:	T9201(SK	U No.T9201	0N1)
Femperatu	rature: 20 °C			Relative	Humidity:	48%				
Fest Mode:		Mode	e2/Mode	3/Mode4		Test By:		Allen Liu		
_	_				_					
Frequenc	Re Le		Cable loss	Antenna Factor	Preamp Factor	Emission Level	Limits	Margin	Remark	Comment
y (MHz)	(dB	-	(dB)	dB/m	(dB)	(dBµV/m)	(dBµV/m)	(dB)	Remark	Comment
(101112)	(uD	μν)	(UD)		Channel (2	,	,	(uD)		
4804.225	62.	05	5.21	35.59	44.30	58.55	74.00	-15.45	Pk	Vertical
4804.225	42		5.21	35.59	44.30	38.83	54.00	-15.17	AV	Vertical
7206.136	59.		6.48	36.27	44.60	57.17	74.00	-16.83	Pk	Vertical
7206.136	43.		6.48	36.27	44.60	41.26	54.00	-12.74	AV	Vertical
4804.201	60.		5.21	35.55	44.30	57.05	74.00	-16.95	Pk	Horizonta
4804.201	42.	15	5.21	35.55	44.30	38.61	54.00	-15.39	AV	Horizonta
7206.553	61.	33	6.48	36.27	44.52	59.56	74.00	-14.44	Pk	Horizonta
7206.553	45.	02	6.48	36.27	44.52	43.25	54.00	-10.75	AV	Horizonta
				Mid	Channel (24	440 MHz)-/	Above 1G			-
4880.147	62.	25	5.21	35.66	44.20	58.92	74.00	-15.08	Pk	Vertical
4880.147	42.	14	5.21	35.66	44.20	38.81	54.00	-15.19	AV	Vertical
7320.412	59.	36	7.10	36.50	44.43	58.53	74.00	-15.47	Pk	Vertical
7320.412	43.	25	7.10	36.50	44.43	42.42	54.00	-11.58	AV	Vertical
4880.214	60.	25	5.21	35.66	44.20	56.92	74.00	-17.08	Pk	Horizonta
4880.214	44.	11	5.21	35.66	44.20	40.78	54.00	-13.22	AV	Horizonta
7320.301	59.	58	7.10	36.50	44.43	58.75	74.00	-15.25	Pk	Horizonta
7320.301	43.	03	7.10	36.50	44.43	42.20	54.00	-11.80	AV	Horizonta
					Channel (24	,		1		
4960.169	63.	-	5.21	35.52	44.21	59.54	74.00	-14.46	Pk	Vertical
4960.169	41.		5.21	35.52	44.21	37.63	54.00	-16.37	AV	Vertical
7440.322	60.		7.10	36.53	44.60	59.61	74.00	-14.39	Pk	Vertical
7440.322	44.		7.10	36.53	44.60	43.28	54.00	-10.72	AV	Vertical
4960.514	65.		5.21	35.52	44.21	61.88	74.00	-12.12	Pk	Horizonta
4960.514	46.		5.21	35.52	44.21	42.64	54.00	-11.36	AV	Horizonta
7440.402	62.		7.10	36.53	44.60	61.41	74.00	-12.59	Pk	Horizonta
7440.402	43.	15	7.10	36.53	44.60	42.18	54.00	-11.82	AV	Horizonta

Note: (1) All Readings are Peak Value (VBW=3MHz) and AV Value (VBW=10Hz).
(2) Emission Level= Antenna Factor + Cable Loss + Read Level - Preamp Factor (3)All other emissions more than 20dB below the limit.



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Spurious Emission in Restricted Band 2310-2390MHz and 2483.5-2500MHz							
EUT:	BodySense Blood Pressure Monitor	Model No.:	T9201(SKU No.T92010N1)				
Temperature: 20 °C		Relative Humidity:	48%				
Test Mode: Mode2/ Mode4		Test By:	Allen Liu				

Frequenc		Cable	Antenna	Preamp	Emission	Limits	Margin	Detector	
у	Reading	Loss	Factor	Factor	Level		-		Comment
(MHz)	(dBµV)	(dB)	dB/m	(dB)	(dBµV/m)	(dBµV/m)	(dB)	Туре	
	GFSK								
2310.00	59.02	2.97	27.80	43.80	45.99	74	-28.01	Pk	Horizontal
2310.00	43.36	2.97	27.80	43.80	30.33	54	-23.67	AV	Horizontal
2310.00	59.45	2.97	27.80	43.80	46.42	74	-27.58	Pk	Vertical
2310.00	43.25	2.97	27.80	43.80	30.22	54	-23.78	AV	Vertical
2390.00	59.44	3.14	27.21	43.80	45.99	74	-28.01	Pk	Vertical
2390.00	41.69	3.14	27.21	43.80	28.24	54	-25.76	AV	Vertical
2390.00	58.25	3.14	27.21	43.80	44.80	74	-29.20	Pk	Horizontal
2390.00	43.26	3.14	27.21	43.80	29.81	54	-24.19	AV	Horizontal
2483.50	60.25	3.58	27.70	44.00	47.53	74	-26.47	Pk	Vertical
2483.50	44.25	3.58	27.70	44.00	31.53	54	-22.47	AV	Vertical
2483.50	61.36	3.58	27.70	44.00	48.64	74	-25.36	Pk	Horizontal
2483.50	43.58	3.58	27.70	44.00	30.86	54	-23.14	AV	Horizontal

Note: (1) All other emissions more than 20dB below the limit.



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Spurious Emission in Restricted Band 3260MMHz-18000MHz							
	BodySense Blood Pressure Monitor	Model No.:	T9201(SKU No.T92010N1)				
Temperature:	20 ℃	Relative Humidity:	48%				
Test Mode:	Mode2/ Mode4	Test By:	Allen Liu				

Frequenc	Readin	Cable	Antenn	Preamp	Emission	Limits	Margin	Detect	
У	g Level	Loss	а	Factor	Level	Linito	Margin	or	Comment
(MHz)	(dBµV)	(dB)	dB/m	(dB)	(dBµ V/m)	(dBµ V/m)	(dB)	Туре	Comment
3260	62.15	4.04	29.57	44.70	51.06	74	-22.94	Pk	Vertical
3260	50.33	4.04	29.57	44.70	39.24	54	-14.76	AV	Vertical
3260	61.05	4.04	29.57	44.70	49.96	74	-24.04	Pk	Horizontal
3260	52.25	4.04	29.57	44.70	41.16	54	-12.84	AV	Horizontal
3332	63.65	4.26	29.87	44.40	53.38	74	-20.62	Pk	Vertical
3332	53.34	4.26	29.87	44.40	43.07	54	-10.93	AV	Vertical
3332	62.58	4.26	29.87	44.40	52.31	74	-21.69	Pk	Horizontal
3332	52.15	4.26	29.87	44.40	41.88	54	-12.12	AV	Horizontal
17797	43.39	10.99	43.95	43.50	54.83	74	-19.17	Pk	Vertical
17797	36.58	10.99	43.95	43.50	48.02	54	-5.98	AV	Vertical
17788	41.25	11.81	43.69	44.60	52.15	74	-21.85	Pk	Horizontal
17788	33.48	11.81	43.69	44.60	44.38	54	-9.62	AV	Horizontal

Note: (1) All other emissions more than 20dB below the limit.



7.3 6DB BANDWIDTH

7.3.1 Applicable Standard

According to FCC Part 15.247(a)(2) and KDB 558074 DTS 01 Meas. Guidance v03r05

7.3.2 Conformance Limit

The minimum permissible 6dB bandwidth is 500 kHz.

7.3.3 Measuring Instruments

The Measuring equipment is listed in the section 6.3 of this test report.

7.3.4 Test Setup

Please refer to Section 6.1 of this test report.

7.3.5 Test Procedure

The testing follows KDB 558074 DTS 01 Meas. Guidance v03r05 The RF output of EUT was connected to the spectrum analyzer by RF cable and attenuator. The path loss was compensated to the results for each measurement. Set to the maximum power setting and enable the EUT transmit continuously. The EUT was operating in controlled its channel. Use the following spectrum analyzer settings: Span = the frequency band of operation RBW = 100KHz VBW \geq 3*RBW Sweep = auto Detector function = peak Trace = max hold

7.3.6 Test Results

EUT:	BodySense Blood Pressure Monitor	Model No.:	T9201(SKU No.T92010N1)		
Temperature:	20 ℃	Relative Humidity:	48%		
Test Mode:	Mode2/Mode3/Mode4	Test By:	Allen Liu		
Channel	Frequency (MHz)	6dB bandwidth (kHz)	Limit (kHz)	Result	
Low	2402	671.0	500	Pass	
Middle	2440	685.5	500	Pass	
High	2480	681.5	500	Pass	



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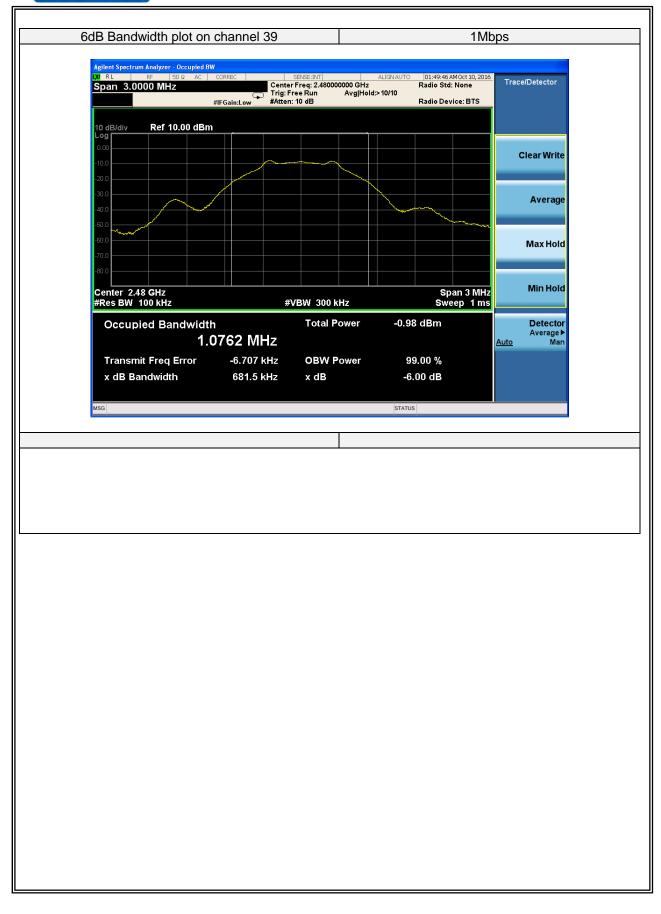
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7.4 PEAK OUTPUT POWER

7.4.1 Applicable Standard

According to FCC Part 15.247(b)(3) and KDB 558074 DTS 01 Meas. Guidance v03r05

7.4.2 Conformance Limit

The maximum peak conducted output power of the intentional radiator for systems using digital modulation in the 2400 - 2483.5 MHz bands shall not exceed: 1 Watt (30dBm). If transmitting antenna of directional gain greater than 6dBi is used, the peak output power from the intentional radiator shall be reduced below the above stated value by the amount in dB that the directional gain of the antenna exceeds 6 dBi. In case of point-to-point operation, the limit has to be reduced by 1dB for every 3dB that the directional gain of the antenna exceeds 6 dBi.

7.4.3 Measuring Instruments

The Measuring equipment is listed in the section 6.3 of this test report.

7.4.4 Test Setup

Please refer to Section 6.1 of this test report.

7.4.5 Test Procedure

The testing follows KDB 558074 DTS 01 Meas. Guidance v03r05 The RF output of EUT was connected to the spectrum analyzer by RF cable and attenuator. The path loss was compensated to the results for each measurement. Set to the maximum power setting and enable the EUT transmit continuously. The EUT was operating in controlled its channel. Use the following spectrum analyzer settings: Set the RBW \geq DTS bandwidth(about 1MHz). Set VBW =3*RBW(about 3MHz) Set the span \geq 3*RBW Set Sweep time = auto couple. Set Detector = peak. Set Trace mode = max hold. Allow trace to fully stabilize. Use peak marker function to determine the peak amplitude level.



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7.4.6 Test Results

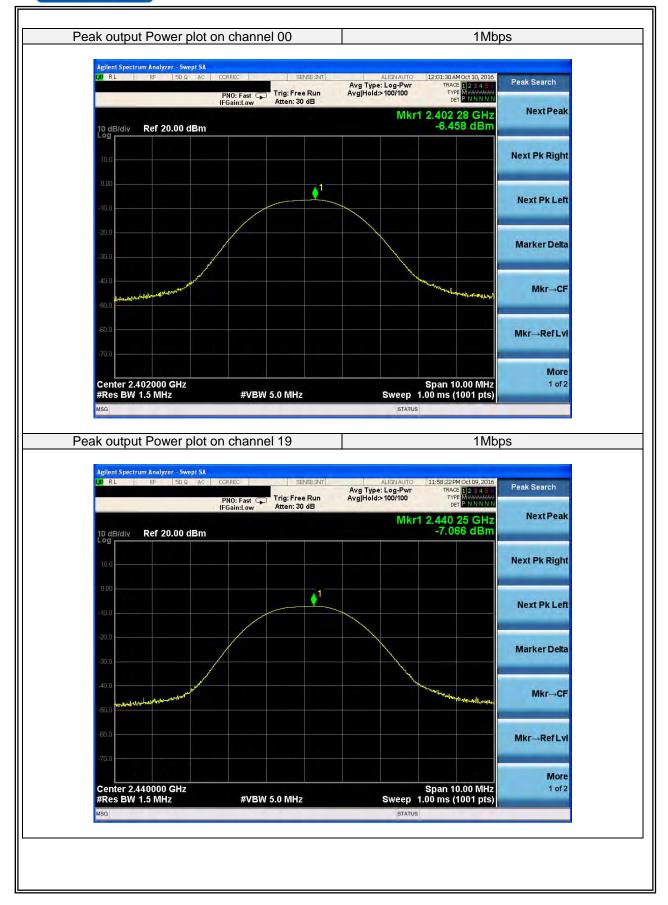
EUT:	BodySense Blood Pressure Monitor	Model No.:	T9201(SKU No.T92010N1)
Temperature:	20 ℃	Relative Humidity:	48%
Test Mode:	Mode2/Mode3/Mode4	Test By:	Allen Liu

Test Channel	Frequency (MHz) Power Setting Peak Output Power (dBm)		Peak Output Power (dBm)	LIMIT (dBm)	Verdict	
1Mbps						
00	2402	Default	-6.458	30	PASS	
19	2440	Default	-7.066	30	PASS	
39	2480	Default	-7.547	30	PASS	



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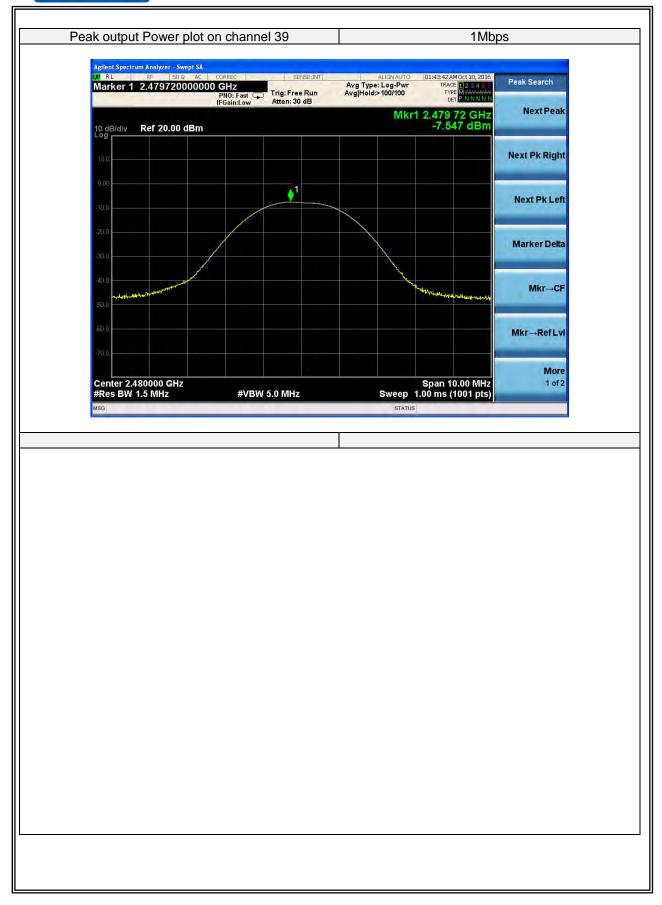
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7.5 POWER SPECTRAL DENSITY

7.5.1 Applicable Standard

According to FCC Part 15.247(e) and KDB 558074 DTS 01 Meas. Guidance v03r05

7.5.2 Conformance Limit

The transmitter power spectral density conducted from the transmitter to the antenna shall not be greater than 8 dBm in any 3 kHz band during any time interval of continuous transmission.

7.5.3 Measuring Instruments

The Measuring equipment is listed in the section 6.3 of this test report.

7.5.4 Test Setup

Please refer to Section 6.1 of this test report.

7.5.5 Test Procedure

The testing follows Measurement Procedure 10.3 Method AVGPSD of FCC KDB Publication No. 558074 D01 DTS Meas. Guidance v03r05

This procedure may be used when the maximum (average) conducted output power was used to demonstrate compliance to the output power limit. This is the baseline method for determining the maximum (average) conducted PSD level. If the instrument has an RMS power averaging detector, it must be used; otherwise, use the sample detector. The EUT must be configured to transmit continuously (duty cycle \geq 98%); otherwise sweep triggering/signal gating must be implemented to ensure that measurements are made only when the EUT is transmitting at its maximum power control level (no transmitter off time is to be considered).

The RF output of EUT was connected to the spectrum analyzer by RF cable and attenuator.

The path loss was compensated to the results for each measurement.

Set to the maximum power setting and enable the EUT transmit continuously.

The EUT was operating in controlled its channel.

- a) Set instrument center frequency to DTS channel center frequency.
- b) Set span to at least 1.5 times the OBW.
- c) Set RBW to: 3 kHz \leq RBW \leq 100 kHz. .

d) Set VBW ≥3 x RBW.

- e) Detector = power averaging (RMS) or sample detector (when RMS not available).
- f) Ensure that the number of measurement points in the sweep $\ge 2 \times \text{span/RBW}$.

g) Sweep time = auto couple.

h) Employ trace averaging (RMS) mode over a minimum of 100 traces.

i) Use the peak marker function to determine the maximum amplitude level.

j) If measured value exceeds limit, reduce RBW (no less than 3 kHz) and repeat (note that this may require zooming in on the emission of interest and reducing



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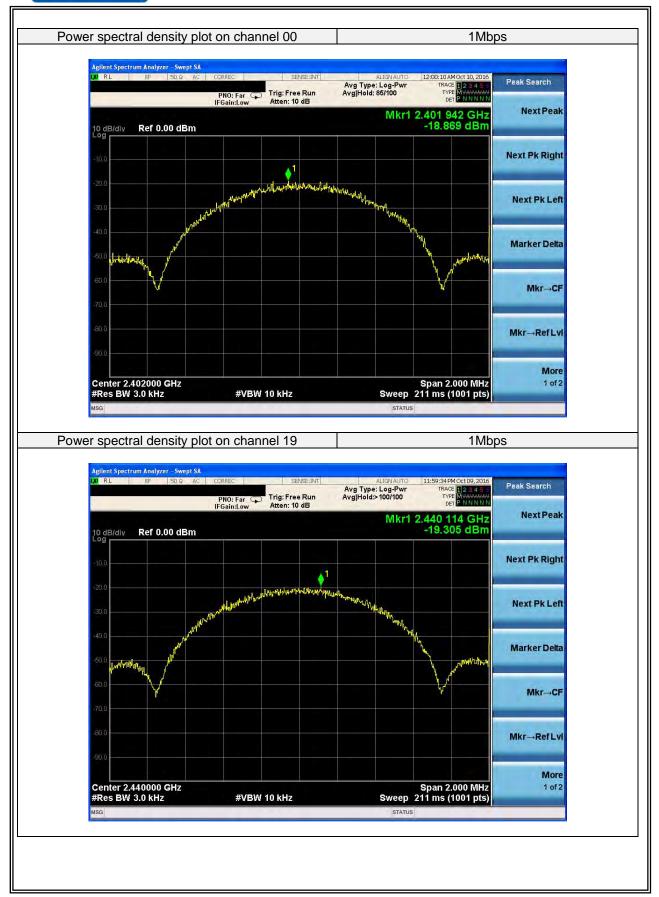
7.5.6 Test Results

t								
EUT:	BodySense Blood	d Pressure Monitor	Model No.: T920			9201(SKU No.T92010N1)		
Temperature:	20 ℃			tive Humidity:				
Test Mode: Mode2/Mode3/Mode4 7		Test By: Allen Liu						
Test Channel	Frequency	Power Density	'	Limit		Verdict		
rest ontariner	(MHz)	(dBm/3KHz)		(dBm/3KHz)		Verdict		
		1 M b	ps					
00	2402	402 -18.869		8		PASS		
19	2440	-19.305		8		PASS		
39	2480	-20.312		8		PASS		



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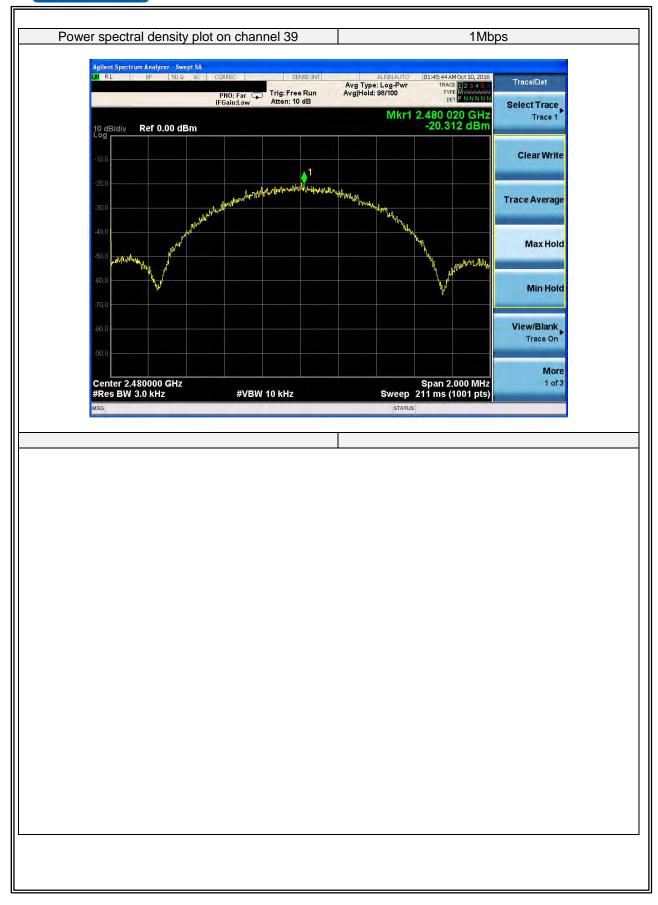
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7.6 CONDUCTED BAND EDGE MEASUREMENT

7.6.1 Applicable Standard

According to FCC Part 15.247(d) and KDB 558074 DTS 01 Meas. Guidance v03r05

7.6.2 Conformance Limit

In any 100 kHz bandwidth outside the frequency band in which the spread spectrum or digitally modulated intentional radiator is operating, the radio frequency power that is produced by the intentional radiator shall be at least 20 dB below that in the 100 kHz bandwidth within the band that contains the highest level of the desired power, based on either an RF conducted or a radiated measurement, provided the transmitter demonstrates compliance with the peak conducted power limits. If the transmitter complies with the conducted power limits based on the use of RMS averaging over a time interval, as permitted under paragraph (b)(3) of this section, the attenuation required under this paragraph shall be 30 dB instead of 20 dB.

7.6.3 Measuring Instruments

The Measuring equipment is listed in the section 6.3 of this test report.

7.6.4 Test Setup

Please refer to Section 6.1 of this test report.

7.6.5 Test Procedure

The testing follows FCC KDB Publication No. 558074 D01 DTS Meas. Guidance v03r05.

The RF output of EUT was connected to the spectrum analyzer by RF cable and attenuator.

The path loss was compensated to the results for each measurement.

Set to the maximum power setting and enable the EUT transmit continuously.

The EUT was operating in controlled its channel.

Set RBW to 100 kHz and VBW of spectrum analyzer to 100 kHz with a convenient frequency span including 100 kHz bandwidth from band edge.

Measure the highest amplitude appearing on spectral display and set it as a reference level. Plot the graph with marking the highest point and edge frequency.

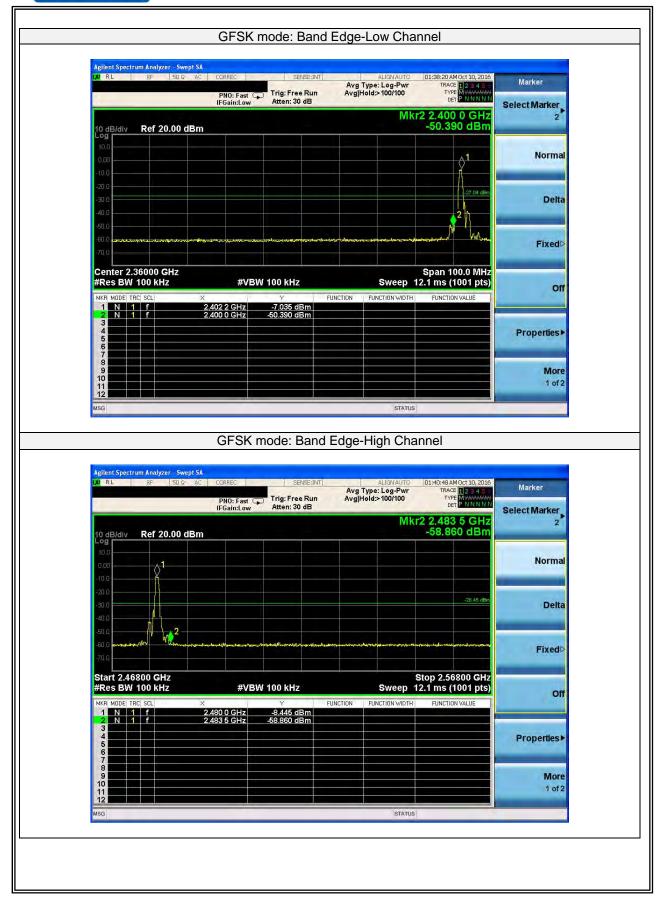
Repeat above procedures until all measured frequencies were complete.

7.6.6 Test Results

EUT:	BodySense Blood Pressure Monitor	Model No.:	T9201(SKU No.T92010N1)
Temperature:	20 °C	Relative Humidity:	48%
Test Mode:	Mode2/Mode4	Test By:	Allen Liu



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7.7 SPURIOUS RF CONDUCTED EMISSIONS

7.7.1 Conformance Limit

1. Below -20dB of the highest emission level in operating band.

2. Fall in the restricted bands listed in section 15.205. The maximum permitted average field strength is listed in section 15.209.

7.7.2 Measuring Instruments

The Measuring equipment is listed in the section 6.3 of this test report.

7.7.3 Test Setup

Please refer to Section 6.1 of this test report.

7.7.4 Test Procedure

The Spurious RF conducted emissions compliance of RF radiated emission should be measured by following the guidance in ANSI C63.10-2013 with respect to maximizing the emission by rotating the EUT, measuring the emission while the EUT is situated in three orthogonal planes (if appropriate), adjusting the measurement antenna height and polarization etc. Set RBW=100kHz and VBW= 300KHz to measure the peak field strength , and mwasure frequeny range from 9KHz to 26.5GHz.

7.7.5 Test Results

Remark: The measurement frequency range is from 9KHz to the 10th harmonic of the fundamental frequency. The lowest, middle and highest channels are tested to verify the spurious emissions and bandege measurement data.



C(f)

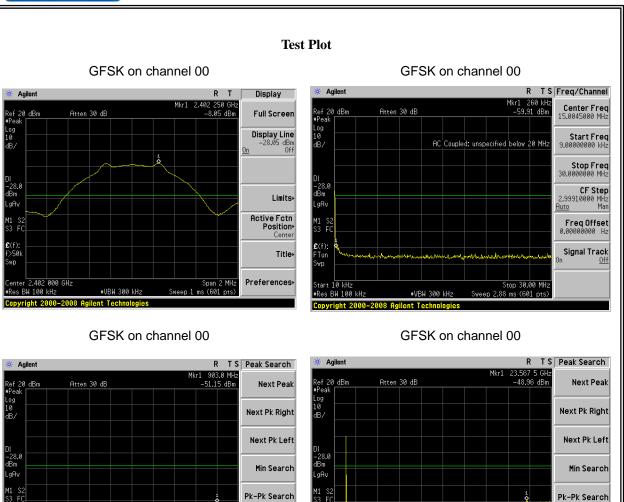
Tur

٨n

Start 30.0 MHz #Res BW 100 kHz

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More 1 of 2

Stop 1.000 0 GHz 92.72 ms (601 pts)

#VBW 300 kHz

nine

 Start 1.000 0 GHz
 \$top 26.500 0 GHz

 •Res BW 100 kHz
 •VBW 300 kHz
 Sweep 2.437 s (601 pts)

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Mkr→CF

More 1 of 2



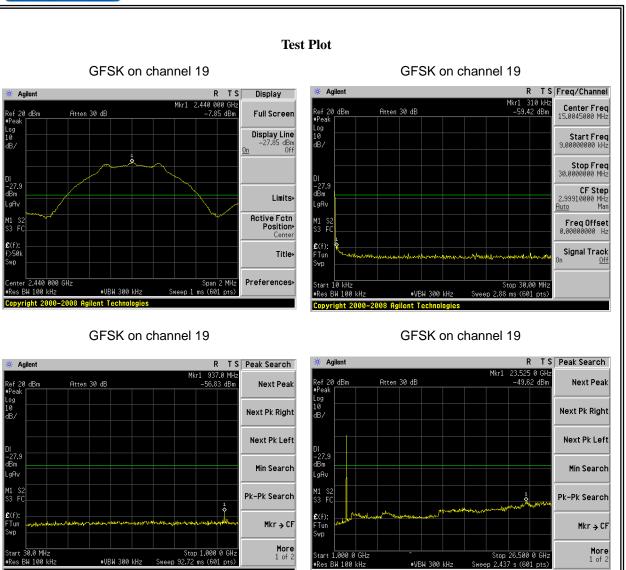
Log 10

M1 \$3

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nine

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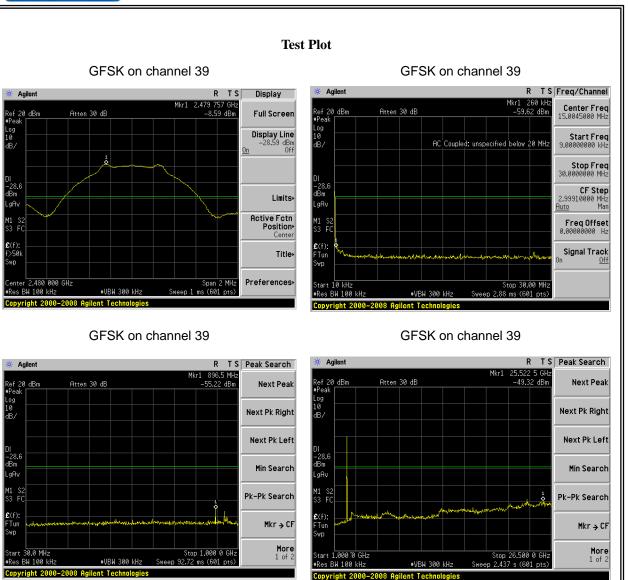


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7.8 ANTENNA APPLICATION

7.8.1 Antenna Requirement

15.203 requirement: For intentional device, according to 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.

7.8.2 Result

The EUT antenna is permanent attached PCB antenna(Gain:1dBi). It comply with the standard requirement.

END OF REPORT