



FCC TEST REPORT FCC ID:2AH4J-LOCK420

Report No.....: ZHT-250604106W01

Product.....: Rently Smart Bolt Elite

Trademark.....:: /

Model(s).....: LOCK420-8Z, LOCK420-4Z

Model Difference.....: LOCK420-8Z and LOCK420-4Z is tested model, The models are

identical in circuit, only different on the model names and battery

capacity and size.

Applicant.....: : Consumer 2.0

Address.....:: 6300 Wilshire Blvd Suite 620, Los Angeles, CA 90048, United States

Manufacturer.....: Consumer 2.0

Address.....:: 6300 Wilshire Blvd Suite 620, Los Angeles, CA 90048, United States

Prepared by.....: : Guangdong Zhonghan Testing Technology Co., Ltd.

Address.....: Room 104/201, Building 1, Yibaolai Industrial Park, Qiaotou, Fuhai

Subdistrict, Bao'an District, Shenzhen, Guangdong, China

Date of Receipt.....: June 4, 2025

 June 4, 2025 to June 11, 2025 Date of Test(s).....

Date of Issue..... : June 11, 2025

Standard......: FCC CFR Title 47 Part 15 Subpart C Section 15.247

Test procedure.....: KDB558074 D01 15.247 Meas Guidance v05r02

ANSI C63.10:2013

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

Prepared by Reviewed by: Approved by:

Leon Li/ Engineer

Baret Wu/ Director

Levi Lee/ Manager

Note: This device described above has been tested by ZHT, 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. This report shall not be reproduced except in full, without the written approval of ZHT, this document may be altered or revised by ZHT, personal only, and shall be noted in the revision of the document.





	Table of Contents			Page
1. VERSION				3
2. SUMMARY OF TEST RES	ULTS			4
3. GENERAL INFORMATION	(D)			5
3.1 GENERAL DESCRIP	ΓΙΟΝ OF EUT			5
3.2 DESCRIPTION OF TE	ST MODES			6
3.3 TEST SETUP CONFI	GURATION			6
3.4 DESCRIPTION OF SI	JPPORT UNITS(CONDUCT	ED MODE)	(12)	7
4. TEST FACILITY AND TES	T INSTRUMENT USED			8
4.1 TEST FACILITY				8
4.2 INSTRUMENT LIST F	OR ALL TEST ITEMS			8
4.3 TESTING SOFTWAR	E	(.1)		10
5. CHANNEL BANDWIDTH				11
5.1 CONDUCTED EMISS	ION MEASUREMENT			11
5.2 RADIATED EMISSION	N MEASUREMENT			17
6.ANTENNA REQUIREMENT	(12)		(12)	24
7. TEST SETUP PHOTO				25
8. EUT CONSTRUCTIONAL				-
6. LOT CONSTRUCTIONAL	DE TAILS	44		







Project No.: ZHT-250604106W01 Page 3 of 25

1. VERSION

Report No.	Version	Description	Approved
ZHT-250604106W01 Rev.01		Initial issue of report	June 11, 2025

rteport	IVO.	VELSION	Description		Approved	- 6
ZHT-25060	4106W01	Rev.01	Initial issue of re	eport	June 11, 2025	
B		15)	B		15	J























Project No.: ZHT-250604106W01 Page 4 of 25

2. SUMMARY OF TEST RESULTS

Test procedures according to the technical standards:

FCC Part15 (15.247) , Subpart C						
Standard Section	Test Item	Judgment	Remark			
FCC part 15.203/15.247 (b)(4)	Antenna requirement	PASS				
FCC part 15.207	AC Power Line Conducted Emission	PASS				
FCC part 15.205/15.209	Radiated Spurious Emission	PASS				

NOTE:

Class II Permissive Change: The original Rently Smart Bolt Elite and the new Rently Smart Bolt Elite only added diodes and triode on both sides and changed the color of the magnets.

Note: Report is for Class II Permissive Change only. Updated test data include Antenna Requirement, Conducted Emission and Radiated Emission. Other test data refer to the original report psi2503155-C01-R02, The original FCC ID issue date: 04/15/2025







Project No.: ZHT-250604106W01 Page 5 of 25



3.1 GENERAL DESCRIPTION OF EUT

Product Name:	Rently Smart Bolt Elite				
Test Model No.:	LOCK420-8Z, LOCK420-4Z	110			
Hardware Version:	V1.0				
Software Version:	V1.0				
Sample(s) Status:	Engineer sample				
Operation Frequency:	2402MHz~2480MHz				
Channel Numbers:	40				
Channel Separation:	2MHz				
Modulation Type:	GFSK				
Antenna Type:	PCB antenna				
Antenna gain:	1dBi				
Power supply:	Input: DC 5V via adapter, DC 6V powered by battery				
Sample Number:	250604106YP001				

Remark: The antenna gain is provided by the customer, if the data provided by the customer is not accurate, Guangdong Zhonghan Testing Technology Co., Ltd. does not assume any responsibility.























□ admin@zht-lab.cn







	415		11	N		41		
Operation Frequency each of channel								
Channel	Frequency	Channel	Frequency	Channel	Frequency	Channel	Frequency	
1	2402 MHz	11	2422 MHz	21	2442 MHz	31	2462 MHz	
2	2404 MHz	12	2424 MHz	22	2444 MHz	32	2464 MHz	
3	2406 MHz	13	2426 MHz	23	2446 MHz	33	2466 MHz	
4	2408 MHz	14	2428 MHz	24	2448 MHz	34	2468 MHz	
5	2410 MHz	15	2430 MHz	25	2450 MHz	35	2470 MHz	
6	2412 MHz	16	2432 MHz	26	2452 MHz	36	2472 MHz	
7	2414 MHz	17	2434 MHz	27	2454 MHz	37	2474 MHz	
8	2416 MHz	18	2436 MHz	28	2456 MHz	38	2476 MHz	
9	2418 MHz	19	2438 MHz	29	2458 MHz	39	2478 MHz	
10	2420 MHz	20	2440 MHz	30	2460 MHz	40	2480 MHz	

In section 15.31(m), regards to the operating frequency range over 10 MHz, the Lowest frequency, the middle frequency, and the highest frequency of channel were selected to perform the test, and the selected channel see below:

Channel	Frequency
The lowest channel	2402MHz
The middle channel	2440MHz
The Highest channel	2480MHz

3.2 DESCRIPTION OF TEST MODES

Transmitting mode	Keep the EUT in continuously transmitting mode	

Remark: EUT use new battery during the test, the test voltage was tuned from 85% to 115% of the nominal rated supply voltage, and found that the worst case was under the nominal rated supply condition. So the report just shows that condition's data.

3.3 TEST SETUP CONFIGURATION

Conducted Emission

EUT ΑE

Radiated Emission

EUT





Project No.: ZHT-250604106W01 Page 7 of 25

3.4 DESCRIPTION OF SUPPORT UNITS(CONDUCTED MODE)

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.	Series No.	Note
E1	Adapter Honor Device Co., Ltd.		HW-110600C02	1	AE
				P -	(L)

Item	Shielded Type	Ferrite Core	Length	Note
		/		
	71)	<i>7</i> H)	710)

Note:

- (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 <code>"Length_"</code> column.







4. TEST FACILITY AND TEST INSTRUMENT USED

4.1 TEST FACILITY

Guangdong Zhonghan Testing Technology Co., Ltd.

Add.: Room 104/201, Building 1, Yibaolai Industrial Park, Qiaotou, Fuhai Subdistrict, Bao'an District,

Shenzhen, Guangdong, China

FCC Registration Number: 255941 Designation Number: CN0325 IC Registered No.: 29832 CAB identifier: CN0143

4.2 INSTRUMENT LIST FOR ALL TEST ITEMS

Radiation Test equipment

Item	Equipment	Manufacturer	Model	Serial No.	Last Cal.	Next Cal.
1	Receiver	R&S	ESCI	100874	May 6, 2025	May 5, 2026
2	Loop Antenna	TESEQ	HLA6121	58357	Oct. 11, 2024	Oct. 10, 2025
3	Amplifier	Schwarzbeck	BBV 9743 B	00378	May 6, 2025	May 5, 2026
4	Amplifier	Schwarzbeck	BBV 9718 B	00040	May 7, 2025	May 6, 2026
5	Bilog Antenna	Schwarzbeck	VULB9162	00498	May 15, 2025	May 14, 2026
6	Horn Antenna	Schwarzbeck	BBHA9120D	02623	May 15, 2025	May 14, 2026
7	Horn Antenna	A.H.SYSTEMS	SAS574	588	Oct. 21, 2024	Oct. 20, 2025
8	Amplifier	AEROFLEX	100KHz-40GHz	097	Oct. 21, 2024	Oct. 20, 2025
9	Spectrum Analyzer	R&S	FSV40	101413	Oct. 21, 2024	Oct. 20, 2025
10	Spectrum Analyzer	KEYSIGHT	N9020A	MY53420208	May 7, 2025	May 6, 2026
11	WIDBAND RADIO COMMUNICATION TESTER	R&S	CMW500	109863	May 7, 2025	May 6, 2026
12	Single Generator	Agilent	N5182A	MY48180575	May 7, 2025	May 6, 2026
13	Power Sensor	MWRFtest	MW100-RFCB	25	May 7, 2025	May 6, 2026
14	Power Amplifier Shielding Room	EMToni	2m3m3m		Nov. 25, 2021	Nov. 24, 2026
15	CABLE	EMToni	DA800-NM- NM-11000MM	1	May 6, 2025	May 5, 2026





Project No.: ZHT-250604106W01 Page 9 of 25

Conduction Test equipment

Equipment	Manufacturer	Model	Serial No.	Last Cal.	Next Cal.
Receiver	R&S	ESCI	100874	May 6, 2025	May 5, 2026
LISN	R&S	ENV216	102794	May 6, 2025	May 5, 2026
ISN CAT 6	Schwarzbeck	NTFM 8158	00318	May 7, 2025	May 6, 2026
ISN CAT 5	Schwarzbeck	CAT5 8158	00343	May 7, 2025	May 6, 2026
Capacitive Voltage Probe	Schwarzbeck	CVP 9222 C	00101	May 8, 2025	May 7, 2026
Current Transformer Clamp	Schwarzbeck	SW 9605	SW9605 #209	May 8, 2025	May 7, 2026
CABLE	EMToni	G223-NM-BNCM -2000MM	1	May 7, 2025	May 6, 2026

Conducted Test Instrument

Item	Equipment	Manufacturer	Model	Serial No.	Last Cal.	Next Cal.
1	Spectrum Analyzer	R&S	FSV40	101413	Oct. 21, 2024	Oct. 20, 2025
2	Spectrum Analyzer	KEYSIGHT	N9020A	MY53420208	May 7, 2025	May 6, 2026
3	Power Sensor	MWRFtest	MW100-RFCB	1	May 7, 2025	May 6, 2026







Project No.: ZHT-250604106W01 Page 10 of 25

4.3 TESTING SOFTWARE

Project	Software name	Edition
RF Conducted	MTS 8310	2.0.0.0
Conducted Emission	EZ-EMC	EMC-CON 3A1.1+
Radiated Emission	EZ-EMC	FA-03A2 RE+

4.3 MEASUREMENT UNCERTAINTY

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

No.	Item	Uncertainty
1	Conducted Emission Test	±1.38dB
2	RF conducted power	±0.16dB
3	Spurious emissions conducted	±0.21dB
4	All radiated emissions (9k-30MHz)	±4.68dB
5	All radiated emissions (<1G)	±4.68dB
6	All radiated emissions (>1G)	±4.89dB
7	Temperature	±0.5°C
8	Humidity	±2%
9	Occupied Bandwidth	±4.96%
10	Power Spectral Density	±0.71dB

Decision Rule

□ Uncertainty is not included

☐ Uncertainty is included























Project No.: ZHT-250604106W01 Page 11 of 25

5. CHANNEL BANDWIDTH

5.1 CONDUCTED EMISSION MEASUREMENT

Test Requirement:	FCC Part15 C Section 15.207
Test Method:	ANSI C63.10:2013
Test Frequency Range:	150KHz to 30MHz
Receiver setup:	RBW=9KHz, VBW=30KHz, Sweep time=auto

5.1.1 POWER LINE CONDUCTED EMISSION Limits

FREQUENCY (MHz)	Limit (d	Standard	
PREQUENCY (MINZ)	QP	AVG	Standard
0.15 -0.5	66 - 56 *	56 - 46 *	FCC
0.50 -5.0	56.00	46.00	FCC
5.0 -30.0	60.00	50.00	FCC

Note:

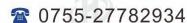
(1) *Decreases with the logarithm of the frequency.

5.1.2 TEST PROCEDURE

- a. The EUT was placed 0.8 meters from the horizontal ground plane with EUT being connected 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.
- b. 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 40 cm long.
- c. 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.
- d. LISN at least 80 cm from nearest part of EUT chassis.
- e. For the actual test configuration, please refer to the related Item -EUT Test Photos.

5.1.3 DEVIATION FROM TEST STANDARD

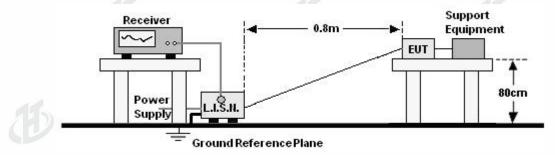
No deviation





Project No.: ZHT-250604106W01 Page 12 of 25

5.1.4 TEST SETUP



5.1.5 EUT OPERATING CONDITIONS

The EUT was configured for testing in a typical fashion (as a customer would normally use it). The EUT has been programmed to continuously transmit during test. This operating condition was tested and used to collect the included data.



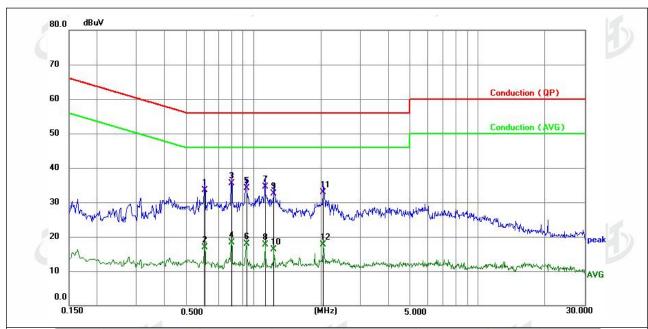




Project No.: ZHT-250604106W01 Page 13 of 25

5.1.6 TEST RESULTS

Model: LOCK420-8Z						
Temperature:	24.3 ℃	Relative Humidity:	50%			
Pressure:	101kPa	Phase :	L			
Test Voltage:	AC 120V/60Hz					



	No.	Frequency (MHz)	Reading (dBuV)	Factor (dB)	Level (dBuV)	Limit (dBuV)	Margin (dB)	Detector
İ	1	0.6045	23.50	10.03	33.53	56.00	-22.47	QP
ĺ	2	0.6045	6.91	10.03	16.94	46.00	-29.06	AVG
	3 *	0.7980	25.44	10.04	35.48	56.00	-20.52	QP
	4	0.7980	8.28	10.04	18.32	46.00	-27.68	AVG
	5	0.9284	24.11	10.05	34.16	56.00	-21.84	QP
	6	0.9284	7.80	10.05	17.85	46.00	-28.15	AVG
İ	7	1.1265	24.39	10.06	34.45	56.00	-21.55	QP
	8	1.1265	7.56	10.06	17.62	46.00	-28.38	AVG
Ī	9	1.2340	22.35	10.06	32.41	56.00	-23.59	QP
	10	1.2340	6.23	10.06	16.29	46.00	-29.71	AVG
	11	2.0490	22.90	10.07	32.97	56.00	-23.03	QP
	12	2.0490	7.56	10.07	17.63	46.00	-28.37	AVG

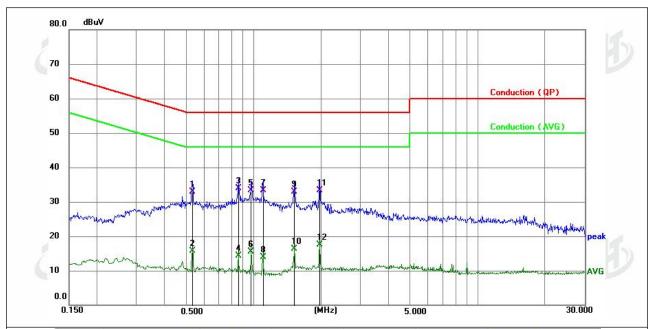
- 1.An initial pre-scan was performed on the line and neutral lines with peak detector.
- 2. Quasi-Peak and Average measurement were performed at the frequencies with maximized peak emission.
- 3.Mesurement Level = Reading level + Correct Factor
- 4. The test data shows only the worst case GFSK mode(Low Channel:2402MHz)





Project No.: ZHT-250604106W01 Page 14 of 25

Model: LOCK420-8Z						
Temperature:	24.3℃	Relative Humidity:	50%			
Pressure:	101kPa	Phase :	N			
Test Voltage:	AC 120V/60Hz					



	No.	Frequency (MHz)	Reading (dBuV)	Factor (dB)	Level (dBuV)	Limit (dBuV)	Margin (dB)	Detector
Ì	1	0.5322	22.94	10.02	32.96	56.00	-23.04	QP
İ	2	0.5322	5.62	10.02	15.64	46.00	-30.36	AVG
	3 *	0.8565	23.78	10.05	33.83	56.00	-22.17	QP
Ì	4	0.8565	4.26	10.05	14.31	46.00	-31.69	AVG
Ì	5	0.9780	23.31	10.06	33.37	56.00	-22.63	QP
Ì	6	0.9780	5.41	10.06	15.47	46.00	-30.53	AVG
Ì	7	1.1040	23.32	10.06	33.38	56.00	-22.62	QP
Ì	8	1.1040	3.76	10.06	13.82	46.00	-32.18	AVG
Ì	9	1.5270	22.76	10.06	32.82	56.00	-23.18	QP
İ	10	1.5270	6.19	10.06	16.25	46.00	-29.75	AVG
Ì	11	1.9770	23.30	10.06	33.36	56.00	-22.64	QP
	12	1.9770	7.46	10.06	17.52	46.00	-28.48	AVG

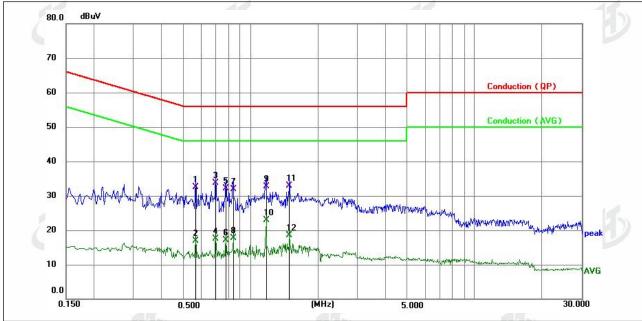
Notes:

- 1.An initial pre-scan was performed on the line and neutral lines with peak detector.
- 2. Quasi-Peak and Average measurement were performed at the frequencies with maximized peak emission.
- 3.Mesurement Level = Reading level + Correct Factor
- 4. The test data shows only the worst case GFSK mode(Low Channel:2402MHz).



Project No.: ZHT-250604106W01 Page 15 of 25

	Madal-LOCK420-47							
	Model: LOCK420-4Z							
Temperature:	24.3 ℃	Relative Humidity:	50%					
Pressure:	101kPa	Phase :	L					
Test Voltage:	AC 120V/60Hz							



	THE PARTY NAMED IN COLUMN TWO IS NOT THE PARTY N		10011 71	The same of the sa			
No.	Frequency (MHz)	Reading (dBuV)	Factor (dB)	Level (dBuV)	Limit (dBuV)	Margin (dB)	Detector
1	0.5685	22.43	10.03	32.46	56.00	-23.54	QP
2	0.5685	6.91	10.03	16.94	46.00	-29.06	AVG
3 *	0.6990	23.73	10.04	33.77	56.00	-22.23	QP
4	0.6990	7.50	10.04	17.54	46.00	-28.46	AVG
5	0.7752	22.16	10.04	32.20	56.00	-23.80	QP
6	0.7752	7.08	10.04	17.12	46.00	-28.88	AVG
7	0.8385	21.92	10.05	31.97	56.00	-24.03	QP
8	0.8385	7.70	10.05	17.75	46.00	-28.25	AVG
9	1.1760	22.64	10.06	32.70	56.00	-23.30	QP
10	1.1760	12.85	10.06	22.91	46.00	-23.09	AVG
11	1.4910	22.88	10.07	32.95	56.00	-23.05	QP
12	1.4910	8.37	10.07	18.44	46.00	-27.56	AVG

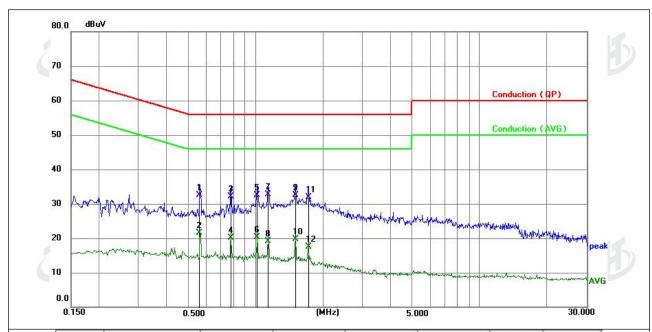
- 1.An initial pre-scan was performed on the line and neutral lines with peak detector.
- 2.Quasi-Peak and Average measurement were performed at the frequencies with maximized peak emission.
- 3.Mesurement Level = Reading level + Correct Factor
- 4. The test data shows only the worst case GFSK mode(Low Channel:2402MHz)





Project No.: ZHT-250604106W01 Page 16 of 25

Model: LOCK420-4Z						
Temperature:	24.3℃	R	Relative Humidity :	50%		
Pressure:	101kPa	P	Phase :	N		
Test Voltage:	AC 120V/60Hz					



	No.	Frequency (MHz)	Reading (dBuV)	Factor (dB)	Level (dBuV)	Limit (dBuV)	Margin (dB)	Detector
	1	0.5639	22.39	10.03	32.42	56.00	-23.58	QP
	2	0.5639	11.40	10.03	21.43	46.00	-24.57	AVG
	3	0.7752	22.16	10.04	32.20	56.00	-23.80	QP
1	4	0.7752	10.08	10.04	20.12	46.00	-25.88	AVG
	5	1.0181	22.52	10.06	32.58	56.00	-23.42	QP
	6	1.0181	10.23	10.06	20.29	46.00	-25.71	AVG
	7 *	1.1400	22.69	10.06	32.75	56.00	-23.25	QP
	8	1.1400	9.13	10.06	19.19	46.00	-26.81	AVG
	9	1.5040	22.38	10.06	32.44	56.00	-23.56	QP
	10	1.5040	9.69	10.06	19.75	46.00	-26.25	AVG
	11	1.7250	21.75	10.06	31.81	56.00	-24.19	QP
	12	1.7250	7.46	10.06	17.52	46.00	-28.48	AVG

Notes:

- 1.An initial pre-scan was performed on the line and neutral lines with peak detector.
- 2. Quasi-Peak and Average measurement were performed at the frequencies with maximized peak emission.
- 3.Mesurement Level = Reading level + Correct Factor
- 4. The test data shows only the worst case GFSK mode(Low Channel:2402MHz).







5.2 RADIATED EMISSION MEASUREMENT

Test Requirement:	rement: FCC Part15 C Section 15.209					
Test Method:	ANSI C63.10:2013	NSI C63.10:2013				
Test Frequency Range:	9kHz to 25GHz					
Test site:	Measurement Distance: 3m					
Receiver setup:	Frequency	Detector	RBW	VBW	Value	
	9KHz-150KHz	Quasi-peak	200Hz	600Hz	Quasi-peak	
	150KHz-30MHz	Quasi-peak	9KHz	30KHz	Quasi-peak	
	30MHz-1GHz	Quasi-peak	100KHz	300KHz	Quasi-peak	
	A1 4011-	Peak	1MHz	3MHz	Peak	
	Above 1GHz	Peak	1MHz	10Hz	Average	

5.2.1 RADIATED EMISSION LIMITS

Frequencies	Field Strength	Measurement Distance	
(MHz)	(micorvolts/meter)	(meters)	
0.009~0.490	2400/F(KHz)	300	
0.490~1.705	24000/F(KHz)	30	
1.705~30.0	30	30	
30~88	100	3	
88~216	150	3	
216~960	200	3	
Above 960	500	3	

LIMITS OF RADIATED EMISSION MEASUREMENT

	EDEOLIENCY (MH-)	Limit (dBuV/m) (at 3M)		
	FREQUENCY (MHz)	PEAK	AVERAGE	
	Above 1000	74	54	

Notes:

- (1) The limit for radiated test was performed according to FCC PART 15C.
- (2) The tighter limit applies at the band edges.
- (3) Emission level (dBuV/m)=20log Emission level (uV/m).











Project No.: ZHT-250604106W01 Page 18 of 25

5.2.2 TEST PROCEDURE

- a. The measuring distance of at 3 m shall be used for measurements at frequency up to 25GHz. 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 meters above the ground at a 3 meter semi-chamber test. The table was rotated 360 degrees to determine the position of the highest
- c. The height of the equipment or of the substitution antenna shall be 0.8m; above 1GHz, the height was 1.5m, 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. 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.
- e. 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.
- f. For the actual test configuration, please refer to the related Item -EUT Test Photos.
- g. 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. Note:

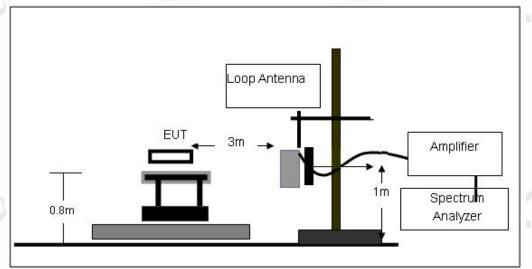
Both horizontal and vertical antenna polarities were tested and performed pretest to three orthogonal axis. The worst case emissions were reported

5.2.3 DEVIATION FROM TEST STANDARD

No deviation

5.2.4 TEST SETUP

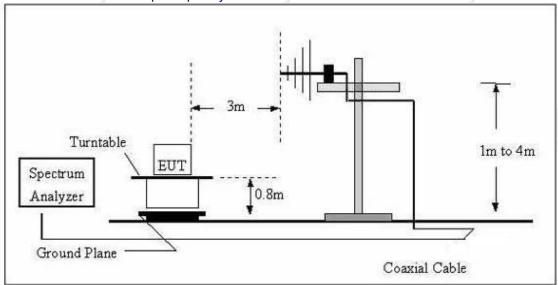
(A) Radiated Emission Test-Up Frequency Below 30MHz



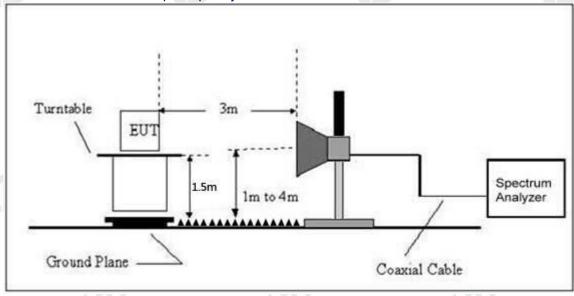


Project No.: ZHT-250604106W01 Page 19 of 25

(B) Radiated Emission Test-Up Frequency 30MHz~1GHz



(C) Radiated Emission Test-Up Frequency Above 1GHz



5.2.5 EUT OPERATING CONDITIONS

The EUT was configured for testing in a typical fashion (as a customer would normally use it). The EUT has been programmed to continuously transmit during test. This operating condition was tested and used to collect the included data.

5.2.6 TEST RESULTS (Between 9KHz – 30 MHz)

The emission from 9 kHz to 30MHz was pre-tested and found the result was 20dB lower than the limit, and according to 15.31(o) & RSS-Gen 6.13, the test result no need to reported.

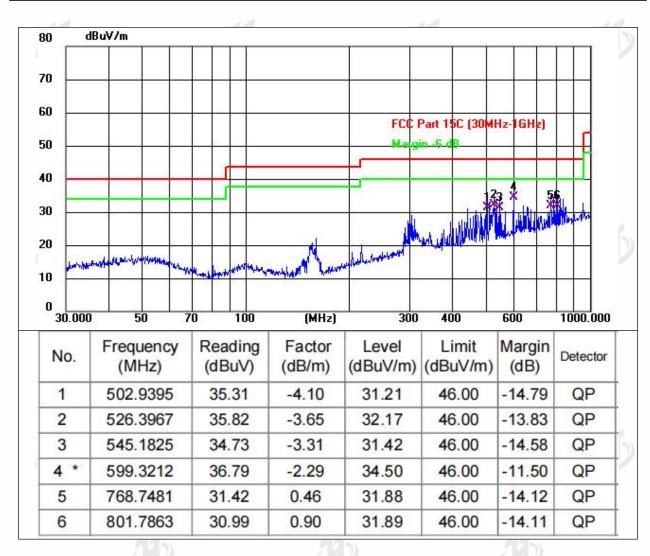


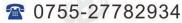


Project No.: ZHT-250604106W01 Page 20 of 25

Between 30MHz - 1GHz

Model: LOCK420-8Z				
Temperature:	25.2℃	Relative Humidity:	50%	
Pressure:	1010kPa	Polarization:	Horizontal	
Test Voltage:	DC 6 V			



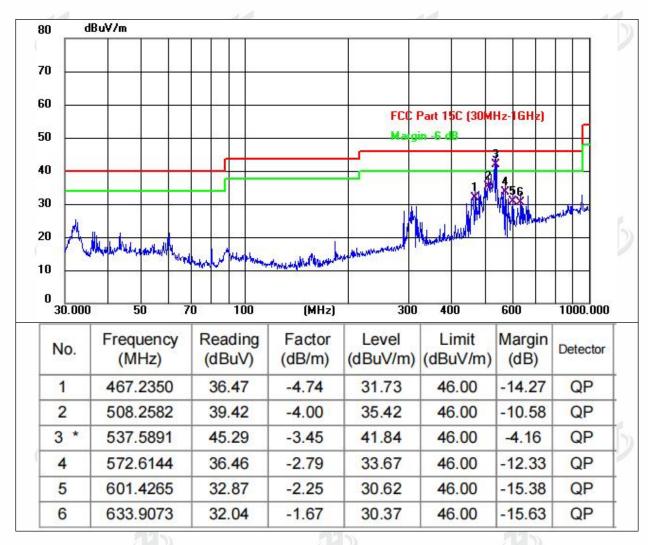






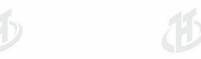
Project No.: ZHT-250604106W01 Page 21 of 25

Model: LOCK420-8Z				
Temperature:	25.2℃	Relative Humidity:	50%	
Pressure:	1010kPa	Polarization:	Vertical	
Test Voltage:	DC 6 V			



Remarks:

- 1.Final Level =Receiver Read level + Antenna Factor + Cable Loss
- 2. The emission levels of other frequencies are very lower than the limit and not show in test report.
- 3. The test data shows only the worst case GFSK mode(Middle Channel:2402MHz).













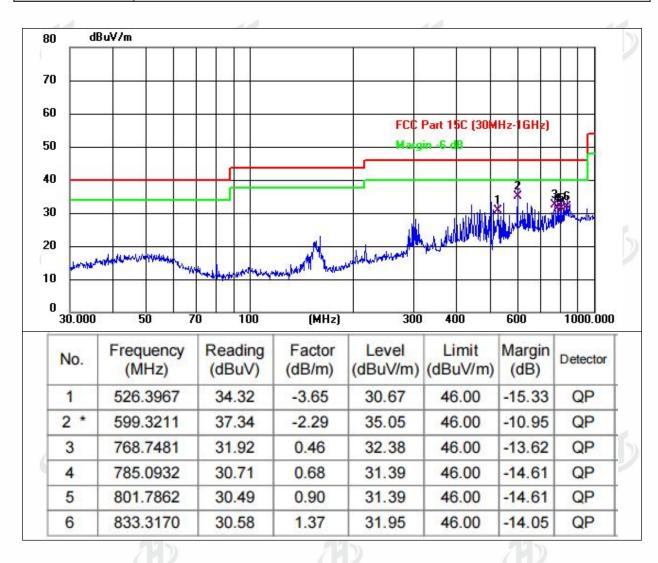






Project No.: ZHT-250604106W01 Page 22 of 25

Model: LOCK420-4Z				
Temperature:	25.2℃	Relative Humidity:	50%	
Pressure:	1010kPa	Polarization:	Horizontal	
Test Voltage: DC 6 V				

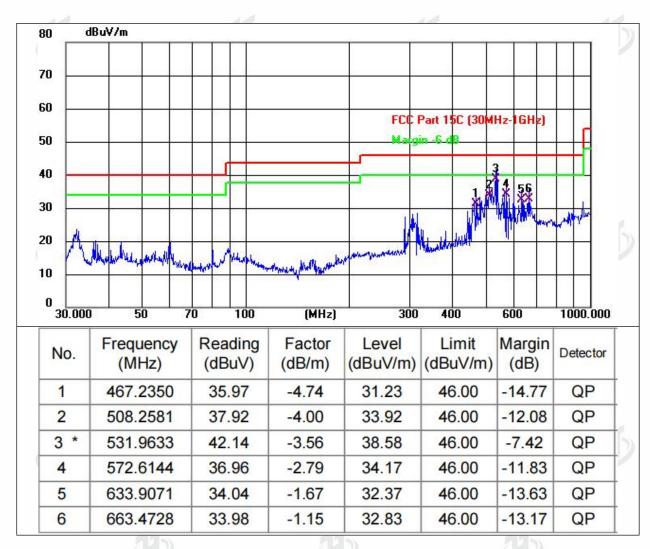






Project No.: ZHT-250604106W01 Page 23 of 25

Model: LOCK420-4Z				
Temperature:	25.2℃	Relative Humidity:	50%	
Pressure:	1010kPa	Polarization:	Vertical	
Test Voltage:	DC 6 V			



Remarks:

- 1.Final Level =Receiver Read level + Antenna Factor + Cable Loss
- 2. The emission levels of other frequencies are very lower than the limit and not show in test report.
- 3. The test data shows only the worst case GFSK mode(Middle Channel:2402MHz).



















Project No.: ZHT-250604106W01 Page 24 of 25

6.ANTENNA REQUIREMENT

Standard requirement:	FCC Part15 C Section 15.203 /247(b)(4)
•	

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.

15.247(b) (4) requirement:

(4) The conducted output power limit specified in paragraph (b) of this section is based on the use of antennas with directional gains that do not exceed 6 dBi. Except as shown in paragraph (c) of this section, if transmitting antennas of directional gain greater than 6 dBi are used, the conducted output power from the intentional radiator shall be reduced below the stated values in paragraphs (b)(1), (b)(2), and (b)(3) of this section, as appropriate, by the amount in dB that the directional gain of the antenna exceeds 6 dBi.

EUT Antenna:

The antenna is PCB antenna, the best case gain of the antennas is 1dBi, reference to the appendix II for details







Project No.: ZHT-250604106W01 Page 25 of 25



Reference to the appendix I for details.

8. EUT CONSTRUCTIONAL DETAILS

Reference to the appendix II for details.









































