FCC RADIO TEST REPORT
FCC ID: 2AIT9-PN602

Product：	BURGLAR ALARM CONTROL PANEL
Trade Mark：	PGST
Model Name：	PN-602
Serial Model：	N/A
Report No.：	NTEK-2016NT11159876F2

Prepared for

SZ PGST CO., LTD
Add: No.3,Xinggong 1 Rd,Hongxing Community,Gongming Agency, Guangming New District, Shenzhen City,China

Prepared by

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TEST RESULT CERTIFICATION

Applicant's name	:	SZ PGST CO., LTD
Address	:	No.3,Xinggong 1 Rd,Hongxing Community,Gongming Agency,Guangming New District, Shenzhen City,China
Manufacturer's Name	:	SZ PGST CO., LTD
Address	:	No.3,Xinggong 1 Rd,Hongxing Community,Gongming Agency,Guangming New District, Shenzhen City,China
Product description		
Product name	:	BURGLAR ALARM CONTROL PANEL
Model and/or type reference	:	PN-602
Serial Model：		N/A
Standards	:	FCC Part15.231a 02 Dec. 2016
Test procedure		ANSI C63.4-2003

This device described above has been tested by NTEK, 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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Date of Test	:	
Date (s) of performance of tests	:	11 Nov. 2016 ~ 02 Dec. 2016
Date of Issue	:	02 Dec. 2016
Test Result	:	**Pass**

Testing Engineer : Lake.Xie

(Lake Xie)

Technical Manager : Jason chen

(Jason Chen)

Authorized Signatory : Sam . Chen

(Sam Chen)

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1. SUMMARY OF TEST RESULTS

Test procedures according to the technical standards:

FCC Part15, Subpart C (15.231a)			
Standard Section	Test Item	Judgment	Remark
15.207	Conducted Emission	Pass	
15.203	Antenna Requirement	Pass	
15.231	Radiated Spurious Emission	Pass	
15.231	Occupied Bandwidth	Pass	
15.231	Transmitter Timeout	Pass	

NOTE:
(1) ” N/A” denotes test is not applicable in this Test Report.

1.1 TEST FACILITY

NTEK Testing Technology Co., Ltd
Add. : 1/F, Building E, Fenda Science Park, Sanwei Community, Xixiang Street, Bao'an District, Shenzhen P.R. China.
FCC Registration No.:238937; IC Registration No.:9270A-1
CNAS Registration No.:L5516

1.2 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%

2. GENERAL INFORMATION

2.1 GENERAL DESCRIPTION OF EUT

Equipment	Burglar alarm control panel
Trade Mark	PGST
Model Name	PN-602
Serial Model	N/A
Model Difference	N/A
Product Description	The EUT is a Burglar alarm control panel Operation Frequency: 433.92MHz Modulation Type: ASK Number Of Channel 1CH. Antenna Designation: Internal Antenna Antenna Gain: 1dBi Field Strength: 79.20dBuV/m@3m 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.
Channel List	Refer to below
Adapter	Model:RO62-0501000US Input: 100~240V 50/60Hz 0.3A Output:DC 5V,1000mA
Battery	DC 3.7V/280mAh from Battery or DC 5V from Adapter.

Note:

1. For a more detailed features description, please refer to the manufacturer's specifications or the User's Manual.

2.

Channel	Frequency (MHz)
01	433.92MHz
--	--

2.2 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.

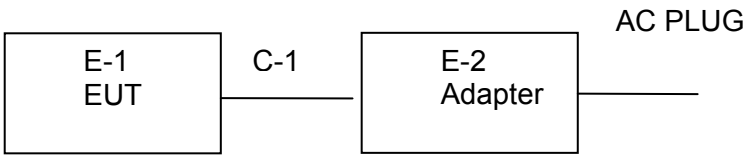
Pretest Mode	Description
Mode 1	TX

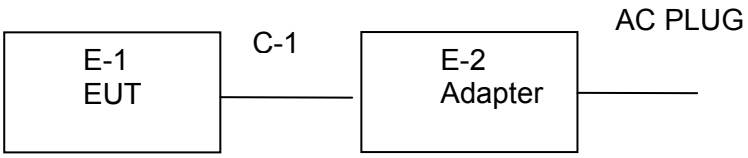
For Conducted Emission	
Final Test Mode	Description
Mode 1	TX

For Radiated Emission	
Final Test Mode	Description
Mode 1	TX

2.3 BLOCK DIGRAM SHOWING THE CONFIGURATION OF SYSTEM TESTED

Radiated Spurious Emission Test





2.4 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	Brand	Model/Type No.	Series No.	Note
E-1	Burglar alarm control panel	PGST	PN-602	N/A	EUT

Item	Shielded Type	Ferrite Core	Length	Note
C-1	USB Cable	NO	NO	1.2m

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『Length』column.

2.5 EQUIPMENTS LIST FOR ALL TEST ITEMS

Radiation Test equipment

Item	Kind of Equipment	Manufacturer	Type No.	Serial No.	Last calibration	Calibrated until	Calibration period
1	Spectrum Analyzer	Agilent	E4407B	MY45108040	2016.07.06	2017.07.05	1 year
2	Test Receiver	R&S	ESPI	101433.92	2016.06.07	2017.06.06	1 year
3	Bilog Antenna	TESEQ	CBL6111D	3916	2016.07.06	2017.07.05	1 year
4	50Ω Coaxial Switch	Anritsu	MP59B	6200264416	2016.06.07	2017.06.06	1 year
5	Spectrum Analyzer	ADVANTEST	R3132	150900201	2016.06.07	2017.06.06	1 year
6	Horn Antenna	EM	EM-AH-10180	2011071402	2016.07.06	2017.07.05	1 year
7	Horn Ant	Schwarzbeck	BBHA 9170	9170-181	2016.07.06	2017.07.05	1 year
8	Amplifier	EM	EM-30180	060538	2016.9.22	2017.9.21	1 year
9	Loop Antenna	ARA	PLA-1030/B	1029	2016.06.08	2017.06.07	1 year
10	Power Meter	R&S	NRVS	100696	2016.07.06	2017.07.05	1 year
11	Power Sensor	R&S	URV5-Z4	0395.1619.05	2016.07.06	2017.07.05	1 year

Conduction Test equipment

Item	Kind of Equipment	Manufacturer	Type No.	Serial No.	Last calibration	Calibrated until	Calibration period
1	Test Receiver	R&S	ESCI	101160	2016.06.07	2017.06.06	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	2016.07.06	2017.07.05	1 year
5	Passive Voltage Probe	R&S	ESH2-Z3	100196	2016.07.06	2017.07.05	1 year
6	Absorbing clamp	R&S	MOS-21	100423	2016.06.08	2017.06.07	1 year

3. ANTENNA REQUIREMENT

3.1 STANDARD 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.

3.2 EUT ANTENNA

The EUT antenna is Internal Antenna. It comply with the standard requirement.

3.3 CONDUCTED EMISSION MEASUREMENT

3.3.1 POWER LINE CONDUCTED EMISSION Limits (Frequency Range 150KHz-30MHz)

FREQUENCY (MHz)	Class B (dBuV)		Standard
	Quasi-peak	Average	
0.15 -0.5	66 - 56 *	56 - 46 *	CISPR
0.50 -5.0	56.00	46.00	CISPR
5.0 -30.0	60.00	50.00	CISPR

0.15 -0.5	66 - 56 *	56 - 46 *	LP002.
0.50 -5.0	56.00	46.00	LP002.
5.0 -30.0	60.00	50.00	LP002.

Note:

(1) The tighter limit applies at the band edges.

(2) The limit of " * " marked band means the limitation decreases linearly with the logarithm of the frequency in the range.

The following table is the setting of the receiver

Receiver Parameters	Setting
Attenuation	10 dB
Start Frequency	0.15 MHz
Stop Frequency	30 MHz
IF Bandwidth	9 kHz

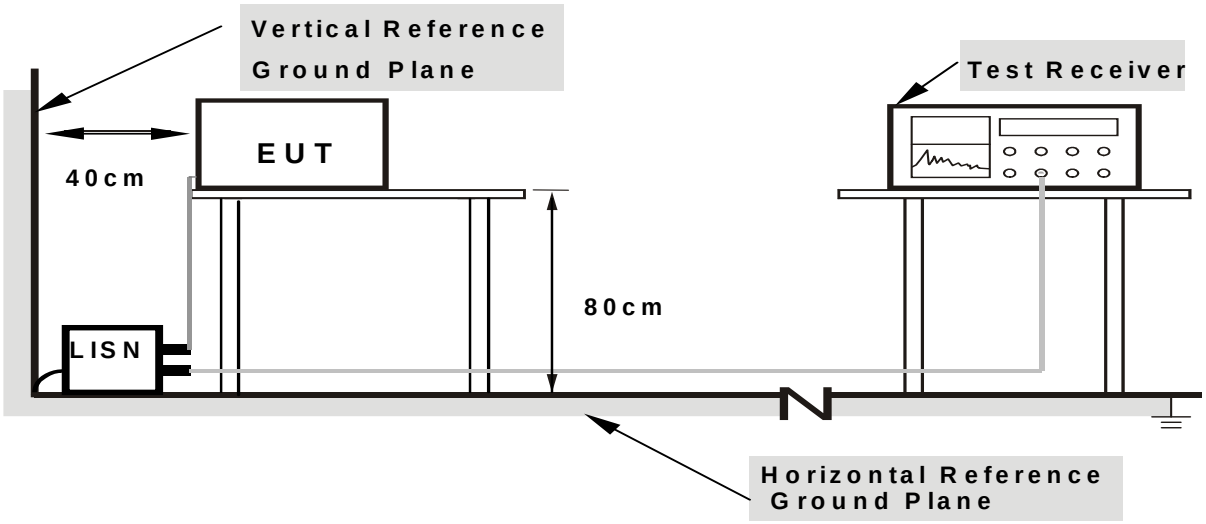
3.3.2 TEST PROCEDURE

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.

3.3.3 DEVIATION FROM TEST STANDARD

No deviation

3.3.4 TEST SETUP



Note: 1.Support units were connected to second LISN.
2.Both of LISNs (AMN) are 80 cm from EUT and at least 80 from other units and other metal planes

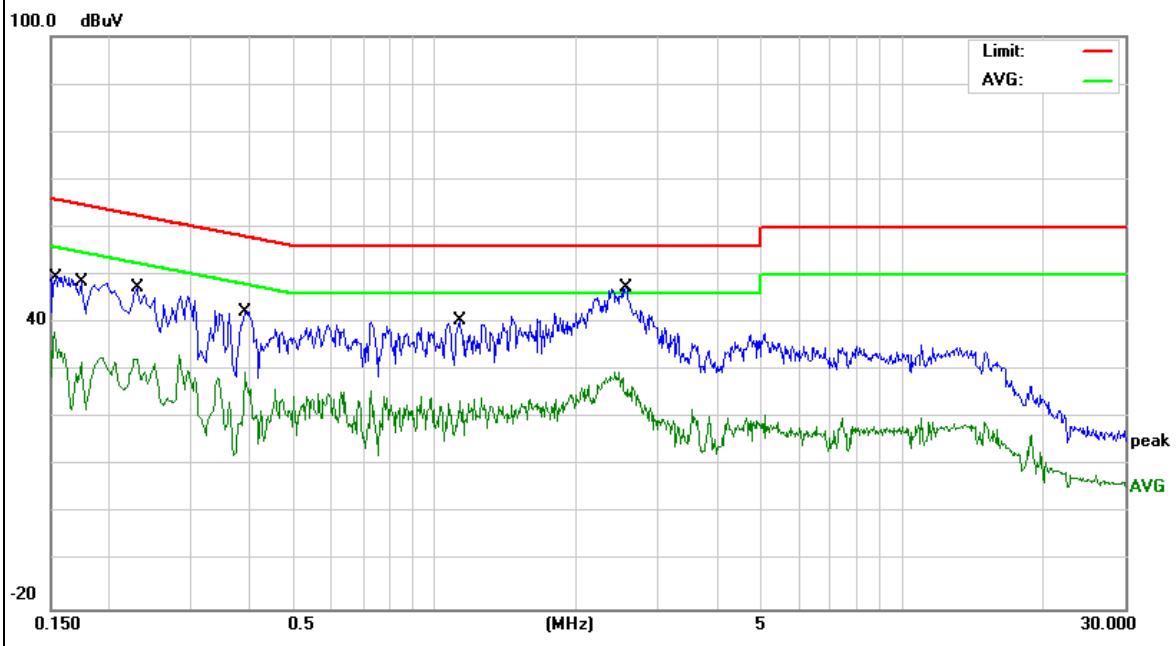
3.2.5 TEST RESULT

EUT：	Burglar alarm control panel	Model Name. ：	PN-602
Temperature：	26 ℃	Relative Humidity：	54%
Pressure：	1010hPa	Phase：	L
Test Voltage ：	DC 5V form Adapter AC 120V/60Hz	Test Mode：	TX

Frequency	Reading Level	Correct Factor	Measure-ment	Limits	Margin	Remark
(MHz)	(dBμV)	(dB)	(dBμV)	(dBμV)	(dB)	
0.1500	39.21	10.13	49.34	66.00	-16.66	QP
0.1500	24.01	10.13	34.14	56.00	-21.86	AVG
0.1740	38.34	10.15	48.49	64.76	-16.27	QP
0.1740	21.71	10.15	31.86	54.76	-22.90	AVG
0.2300	37.31	10.15	47.46	62.45	-14.99	QP
0.2300	22.22	10.15	32.37	52.45	-20.08	AVG
0.3899	32.27	9.95	42.22	58.06	-15.84	QP
0.3899	19.68	9.95	29.63	48.06	-18.43	AVG
1.1260	30.65	9.76	40.41	56.00	-15.59	QP
1.1260	13.97	9.76	23.73	46.00	-22.27	AVG
2.5620	37.45	9.76	47.21	56.00	-8.79	QP
2.5620	18.59	9.76	28.35	46.00	-17.65	AVG

Remark:

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

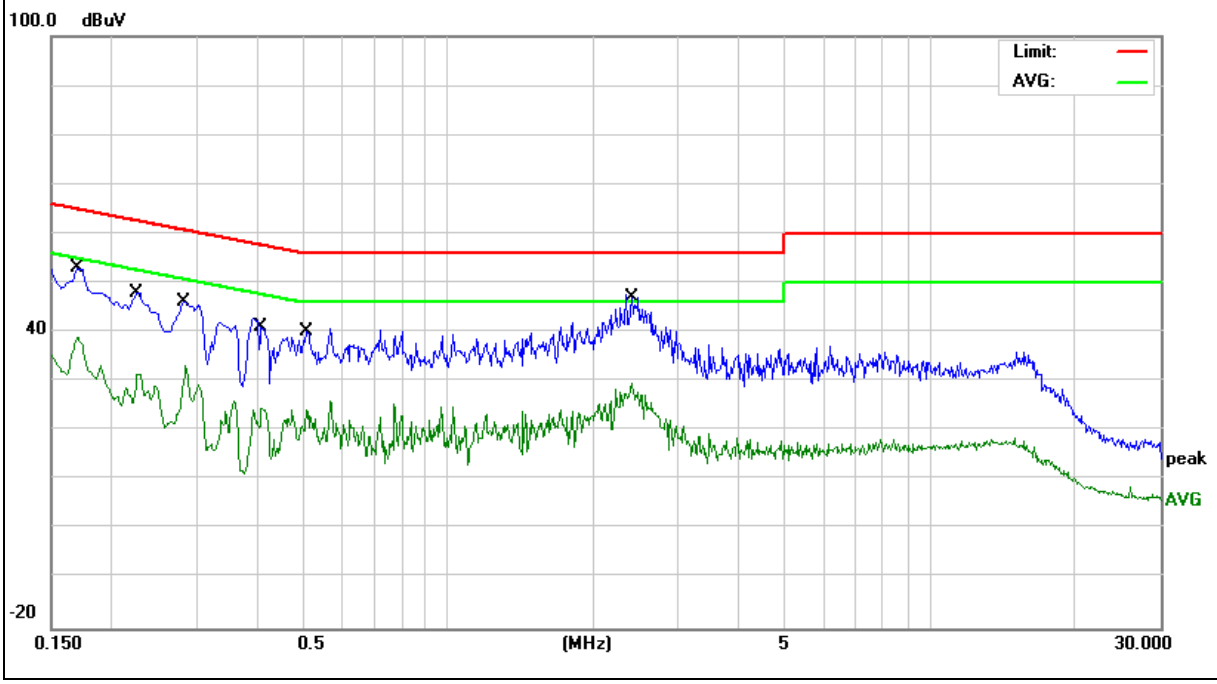


EUT：	Burglar alarm control panel	Model Name. ：	PN-602
Temperature：	26 ℃	Relative Humidity：	56%
Pressure：	1010hPa	Phase：	N
Test Voltage ：	DC 5V from adapter AC120V/60Hz	Test Mode：	TX

Frequency (MHz)	Reading Level (dBμV)	Correct Factor (dB)	Measure-ment (dBμV)	Limits (dBμV)	Margin (dB)	Remark
0.1700	42.76	10.15	52.91	64.96	-12.05	QP
0.1700	28.88	10.15	39.03	54.96	-15.93	AVG
0.2260	37.87	10.16	48.03	62.59	-14.56	QP
0.2260	21.35	10.16	31.51	52.59	-21.08	AVG
0.2860	36.10	10.13	46.23	60.64	-14.41	QP
0.2860	22.98	10.13	33.11	50.64	-17.53	AVG
0.4100	32.83	9.93	42.76	57.65	-14.89	QP
0.4100	14.57	9.93	24.50	47.65	-23.15	AVG
0.5100	30.20	9.84	40.04	56.00	-15.96	QP
0.5100	14.32	9.84	24.16	46.00	-21.84	AVG
2.3980	37.83	9.76	47.59	56.00	-8.41	QP
2.3980	19.81	9.76	29.57	46.00	-16.43	AVG

Remark:

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

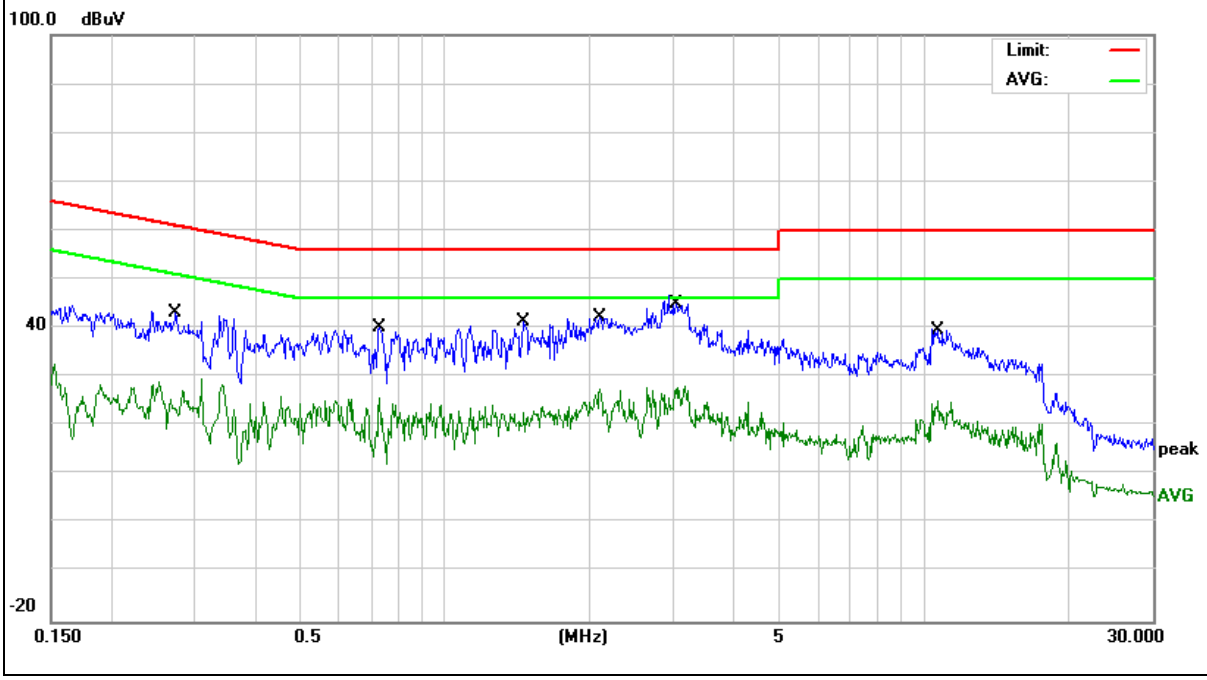


EUT：	Burglar alarm control panel	Model Name. ：	PN-602
Temperature：	26 ℃	Relative Humidity：	56%
Pressure：	1010hPa	Phase：	L
Test Voltage ：	DC 5V from adapter AC240V/60Hz	Test Mode：	TX

Frequency	Reading Level	Correct Factor	Measure-ment	Limits	Margin	Remark
(MHz)	(dBμV)	(dB)	(dBμV)	(dBμV)	(dB)	
0.2740	33.09	10.13	43.22	60.99	-17.77	QP
0.2740	15.46	10.13	25.59	50.99	-25.40	AVG
0.7298	30.41	9.77	40.18	56.00	-15.82	QP
0.7298	16.08	9.77	25.85	46.00	-20.15	AVG
1.4577	31.51	9.75	41.26	56.00	-14.74	QP
1.4577	12.90	9.75	22.65	46.00	-23.35	AVG
2.1099	32.45	9.75	42.20	56.00	-13.80	QP
2.1099	17.88	9.75	27.63	46.00	-18.37	AVG
3.0619	37.03	9.77	46.80	56.00	-9.20	QP
3.0619	18.21	9.77	27.98	46.00	-18.02	AVG
10.6936	30.02	9.88	39.90	60.00	-20.10	QP
10.6936	15.16	9.88	25.04	50.00	-24.96	AVG

Remark:

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

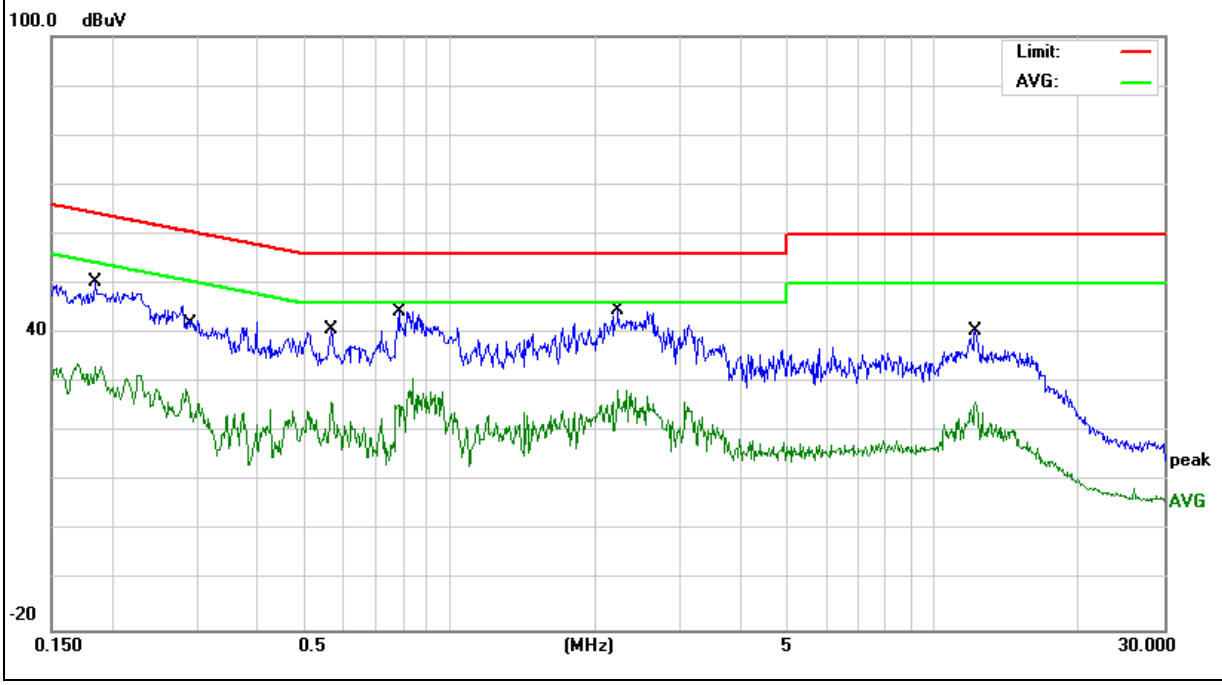


EUT：	Burglar alarm control panel	Model Name. ：	PN-602
Temperature：	26 ℃	Relative Humidity：	56%
Pressure：	1010hPa	Phase：	N
Test Voltage ：	DC 5V from adapter AC240V/60Hz	Test Mode：	TX

Frequency	Reading Level	Correct Factor	Measure-ment	Limits	Margin	Remark
(MHz)	(dBμV)	(dB)	(dBμV)	(dBμV)	(dB)	
0.1844	40.24	10.16	50.40	64.28	-13.88	QP
0.1844	23.06	10.16	33.22	54.28	-21.06	AVG
0.2859	35.44	10.13	45.57	60.64	-15.07	QP
0.2859	18.47	10.13	28.60	50.64	-22.04	AVG
0.5699	30.86	9.82	40.68	56.00	-15.32	QP
0.5699	16.12	9.82	25.94	46.00	-20.06	AVG
0.7860	34.64	9.76	44.40	56.00	-11.60	QP
0.7860	15.83	9.76	25.59	46.00	-20.41	AVG
2.2259	34.84	9.75	44.59	56.00	-11.41	QP
2.2259	18.74	9.75	28.49	46.00	-17.51	AVG
12.2258	30.70	9.90	40.60	60.00	-19.40	QP
12.2258	16.03	9.90	25.93	50.00	-24.07	AVG

Remark:

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



3.4 RADIATED EMISSION MEASUREMENT

3.4.1 Radiated Emission Limits (FCC 15.209)

Frequencies (MHz)	Field Strength (micorvolts/meter)	Measurement Distance (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

Note:

(1) The tighter limit applies at the band edges.

(2) Emission level (dBuV/m)=20log Emission level (uV/m).

LIMITS OF RADIATED EMISSION MEASUREMENT (FCC 15.231)

Fundamental Frequency (MHz)	Field Strength of fundamental (microvolts/meter)	Field Strength of Unwanted Emissions (microvolts/meter)
40.66 - 40.70	2250.00	225.00
70 - 130	950.00	95.00
130 - 174	1,250 to 3,750 **	95 to 375 **
174 - 260	3750.00	375.00
260 - 470	3,750 to 9,500 **	375 to 1,250 **
Above 470	9500.00	950.00

Notes:

(1) ** linear interpolations

[Where F is the frequency in MHz, the formulas for calculating the maximum permitted fundamental field strengths are as follows: for the band 130-174 MHz, uV/m at 3 meters = 56.81818(F) - 6136.3636; for the band 260-470 MHz, uV/m at 3 meters = 41.6667(F) - 7083.3333. The maximum permitted unwanted emission level is 20 dB below the maximum permitted fundamental level.]

The limits on the field strength of the spurious emissions in the above table are based on the fundamental frequency of the intentional radiator. Spurious emissions shall be attenuated to the average (or, alternatively, CISPR quasi-peak) limits shown in this table or to the general limits shown in 93 Section 15.209, whichever limit permits a higher field strength.

Spectrum Parameter	Setting
Attenuation	Auto
Start Frequency	1000 MHz
Stop Frequency	10th carrier harmonic
RB / VB (emission in restricted band)	1MHz / 1MHz for Peak

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 90kHz for QP

3.4.2 TEST PROCEDURE

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 meters above the ground at a 3m meter open area test site. 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; the height of the test antenna shall vary between 1 m to 4 m.
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.

Note:

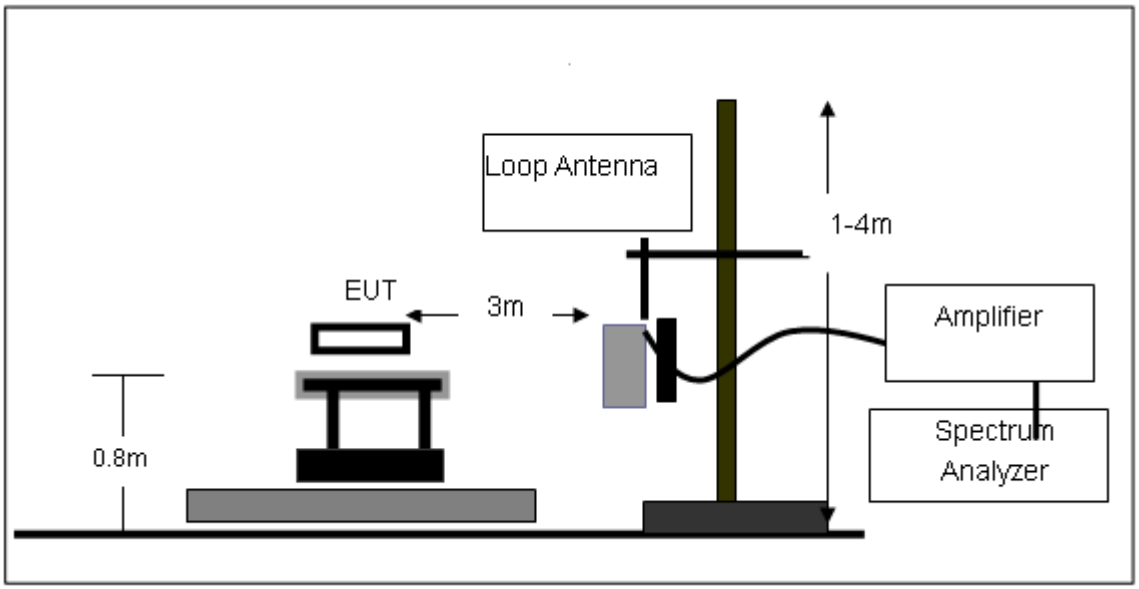
Both horizontal and vertical antenna polarities were tested
and performed pretest to three orthogonal axis. The worst case emissions were reported

3.4.3 DEVIATION FROM TEST STANDARD

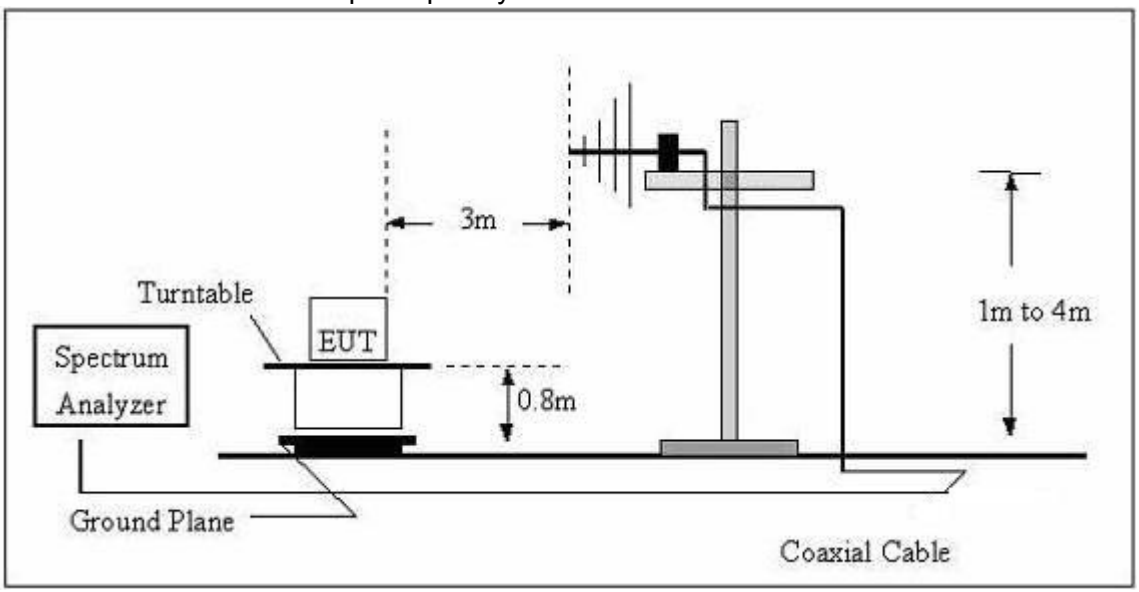
No deviation

3.4.4 TEST SETUP

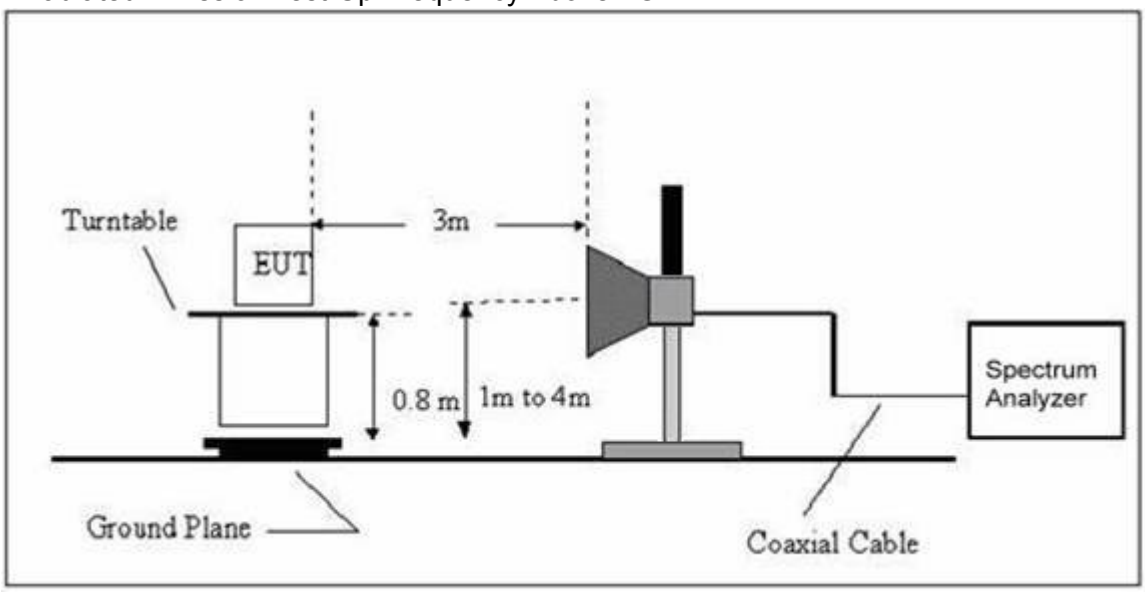
（A）Radiated Emission Test-Up Frequency Below 30MHz



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



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



3.4.5 TEST RESULTS (BELOW 30MHz)

EUT：	Burglar alarm control panel	Model Name. ：	PN-602
Temperature：	20 ℃	Relative Humidtity：	48%
Pressure：	1010 hPa	Test Voltage ：	DC 5V from adapter AC120V/60Hz
Test Mode ：	TX	Polarization :	--

Freq.	Reading	Limit	Margin	State
(MHz)	(dBuV/m)	(dBuV/m)	(dB)	P/F
--	--	--	--	PASS
--	--	--	--	PASS

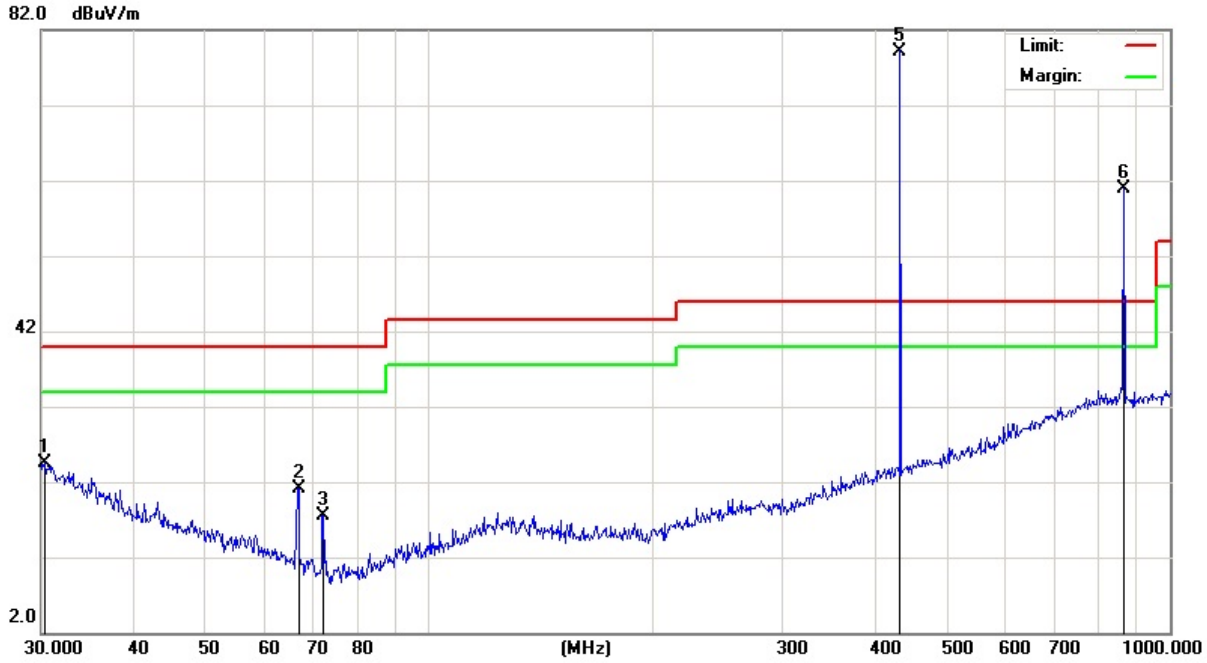
NOTE:

The amplitude of spurious emissions which are attenuated by more than 20dB below the permissible value has no need to be reported.
Distance extrapolation factor =40 log (specific distance/test distance)(dB);
Limit line = specific limits(dBuv) + distance extrapolation factor.

`

3.4.6 TEST RESULTS (BETWEEN 30 – 1000 MHZ)

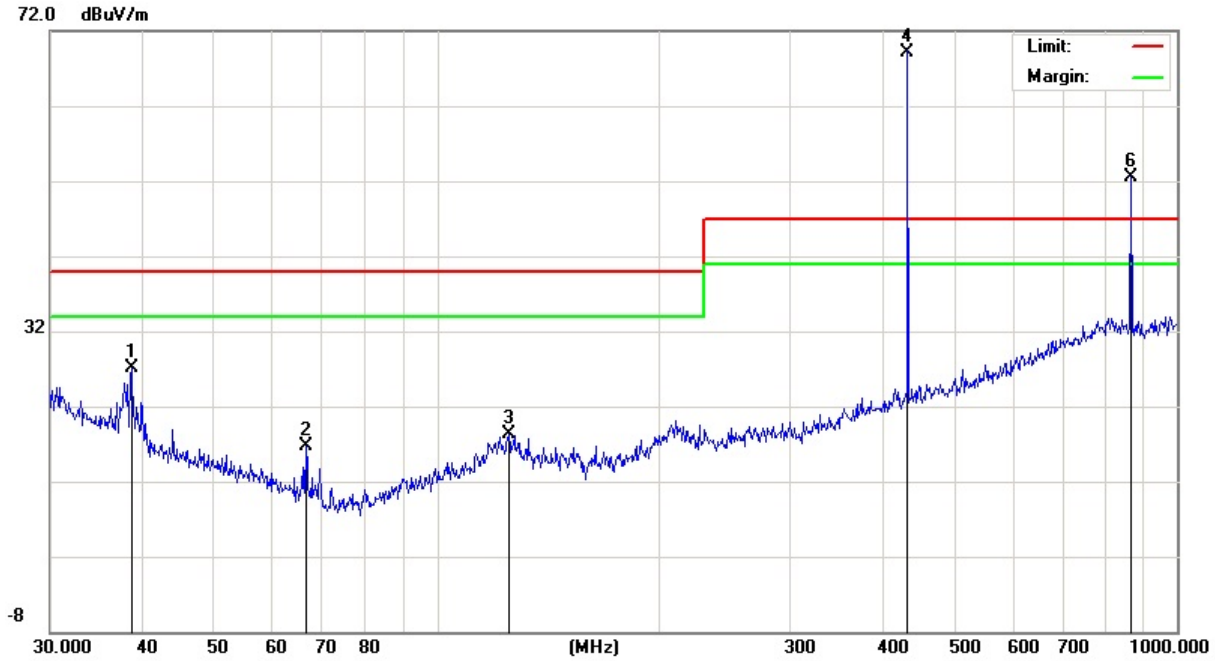
EUT：	Burglar alarm control panel	Model Name ：	PN-602
Temperature：	20 ℃	Relative Humidity：	48%
Pressure：	1010 hPa	Test Voltage ：	DC 5V from adapter AC120V/60Hz
Test Mode ：	TX	Polarization：	Horizontal



No.	Frequency (MHz)	Reading (dBuV/m)	Correct dB/m	Result (dBuV/m)	Limit (dBuV/m)	Over Limit (dB)	Remark
1	30.3171	5.32	19.25	24.57	40.00	-15.43	QP
2	66.7325	14.81	6.31	21.12	40.00	-18.88	QP
3	72.0841	11.88	5.63	17.51	40.00	-22.49	QP
4	433.9200	-	-	74.16	80.83	-6.67	AVG
5	433.9200	60.22	18.98	79.20	100.83	-21.63	QP
6	867.8400	33.74	27.16	60.90	80.83	-19.93	QP
7	867.8400	-	-	55.86	60.83	-4.97	AVG

Note: The average value of fundamental frequency is:
Average= Peak Value+ 20log(Duty cycle), Final Average=QP-5.04

EUT：	Burglar alarm control panel	Model Name ：	PN-602
Temperature：	20 ℃	Relative Humidity：	48%
Pressure：	1010 hPa	Test Voltage ：	DC 5V from adapter AC120V/60Hz
Test Mode ：	TX	Polarization：	Vertical



No.	Frequency (MHz)	Reading (dBuV/m)	Correct dB/m	Result (dBuV/m)	Limit (dBuV/m)	Over Limit (dB)	Remark
1	38.6161	12.64	14.41	27.05	40.00	-12.95	QP
2	66.4989	10.28	6.37	16.65	40.00	-23.35	QP
3	125.0066	6.36	11.99	18.35	40.00	-21.65	QP
4	433.9200	50.24	18.96	69.20	100.83	-31.63	QP
5	433.9200	-	-	64.16	80.83	-16.67	AVG
6	867.8400	25.34	27.16	52.50	80.83	-28.33	QP
7	867.8400	-	-	47.46	60.83	-13.37	AVG

Note: The average value of fundamental frequency is:
Average= Peak Value+ 20log(Duty cycle), Final Average=QP-5.04

3.4.7 TEST RESULTS (ABOVE 1000 MHZ)

EUT：	Burglar alarm control panel	Model Name ：	PN-602
Temperature：	20 ℃	Relative Humidity：	48%
Pressure：	1010 hPa	Test Voltage ：	DC 5V
Test Mode ：	TX	Polarization：	Horizontal

No.	Frequency	Reading	Correct Factor	Dutycycle Factor	Result	Limit	Over Limit	Remark
	(MHz)	(dBuV/m)	(dB)	(dB)	(dBuV/m)	(dBuV/m)	(dB)	
1	1301.76	23.74	12.41	-	36.15	80.83	-44.68	Peak
2	1735.68	33.76	13.49	-	47.25	80.83	-33.58	Peak
3	2169.6	20.67	16.57	-	37.24	80.83	-43.59	Peak
4	3404.6	22.03	16.85	-	38.88	74.00	-35.12	Peak
5	1301.76	-	-	-5.04	31.11	60.83	-29.72	AVG
6	1735.68	-	-	-5.04	42.21	60.83	-18.62	AVG
7	2169.6	-	-	-5.04	32.20	60.83	-28.63	AVG
8	3404.6	-	-	-5.04	33.84	54.00	-20.16	AVG

EUT：	Burglar alarm control panel	Model Name ：	PN-602
Temperature：	20 ℃	Relative Humidity：	48%
Pressure：	1010 hPa	Test Voltage ：	DC 5V from adapter AC120V/60Hz
Test Mode ：	TX	Polarization：	Vertical

No.	Frequency	Reading	Correct Factor	Dutycycle Factor	Result	Limit	Over Limit	Remark
	(MHz)	(dBuV/m)	(dB)	(dB)	(dBuV/m)	(dBuV/m)	(dB)	
1	1301.76	22.25	13.43	-	35.68	80.83	-45.15	Peak
2	1735.68	26.76	13.49	-	40.25	80.83	-40.58	Peak
3	2169.6	17.47	17.91	-	35.38	80.83	-45.45	Peak
4	3325.4	15.66	18.62	-	34.28	74.00	-39.72	Peak
5	1301.76	-	-	-5.04	30.64	60.83	-30.19	AVG
6	1735.68	-	-	-5.04	35.21	60.83	-25.62	AVG
7	2169.6	-	-	-5.04	30.34	60.83	-30.49	AVG
8	3325.4	-	-	-5.04	29.24	54.00	-24.76	AVG

Note: 1. EUT Pre-scan X/Y/Z orientation, only worst case is presented in the report(Y orientation).

2. *Calculate Average value based on Duty Cycle correction factor:

Duty Cycle=Ton/(Ton+Toff)= 30.1ms/54.17ms = 0.56=56%

Duty Cycle factor= 20lg (Duty Cycle) =20lg (0.56) = -5.04dB

Average=Peak+ Duty Cycle factor

2. FCC Limit for Average Measurement = 41.6667(433.92)-7083.3333 = 10996.681164uV/m =80.83dBuV/m

3. Pulse Desensitization Correction Factor

Pulse Width(PW)= 54.17ms 2/PW=2/54.17ms=0.0369kHz

RBW(100kHz)＞2/PW (0.02kHz),

Therefore PDCF is not needed.

3.4.8 DUTY CYCLE

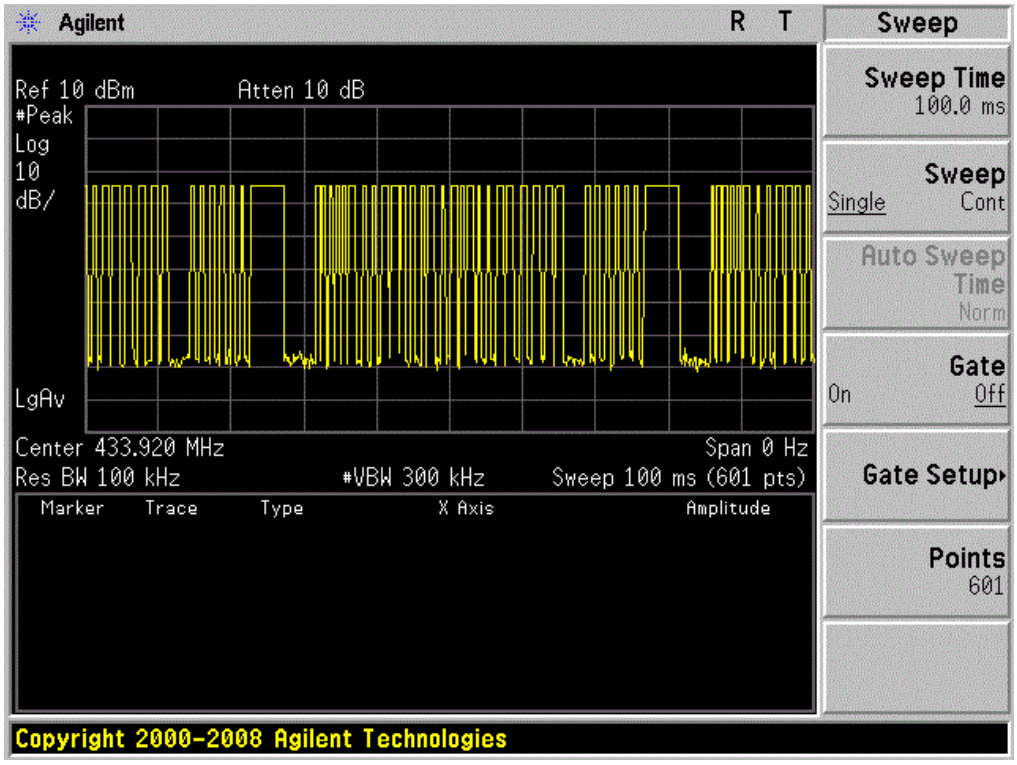
The duty cycle is simply the on time divided by the period:

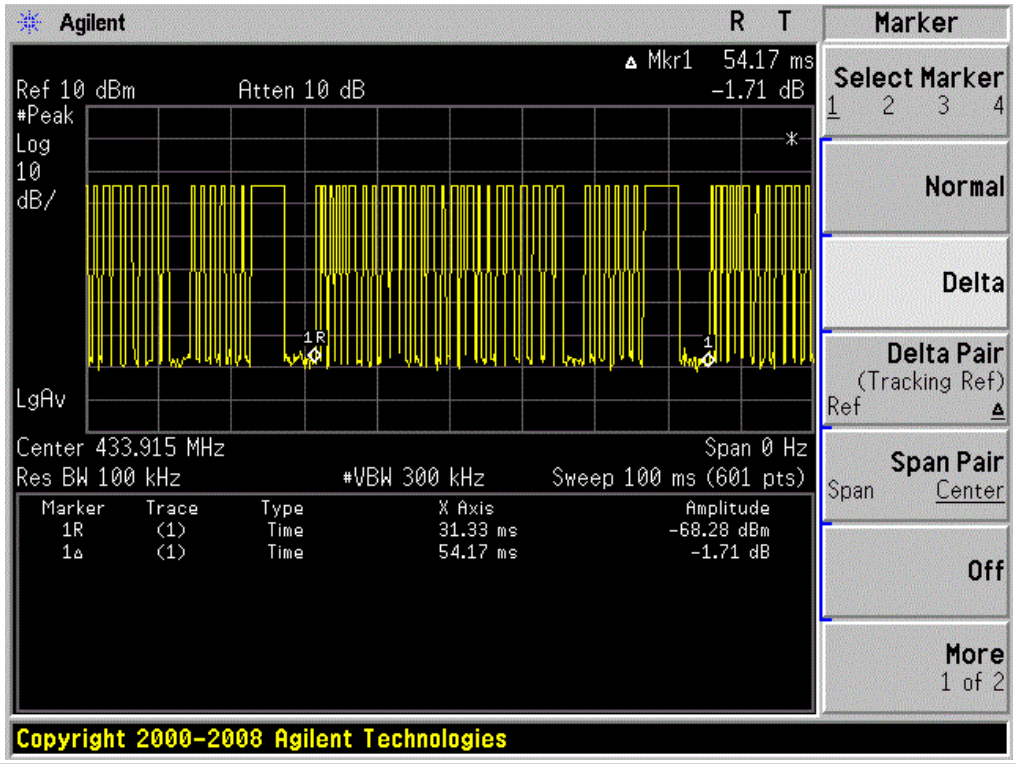
The duration of one cycle = 54.17ms

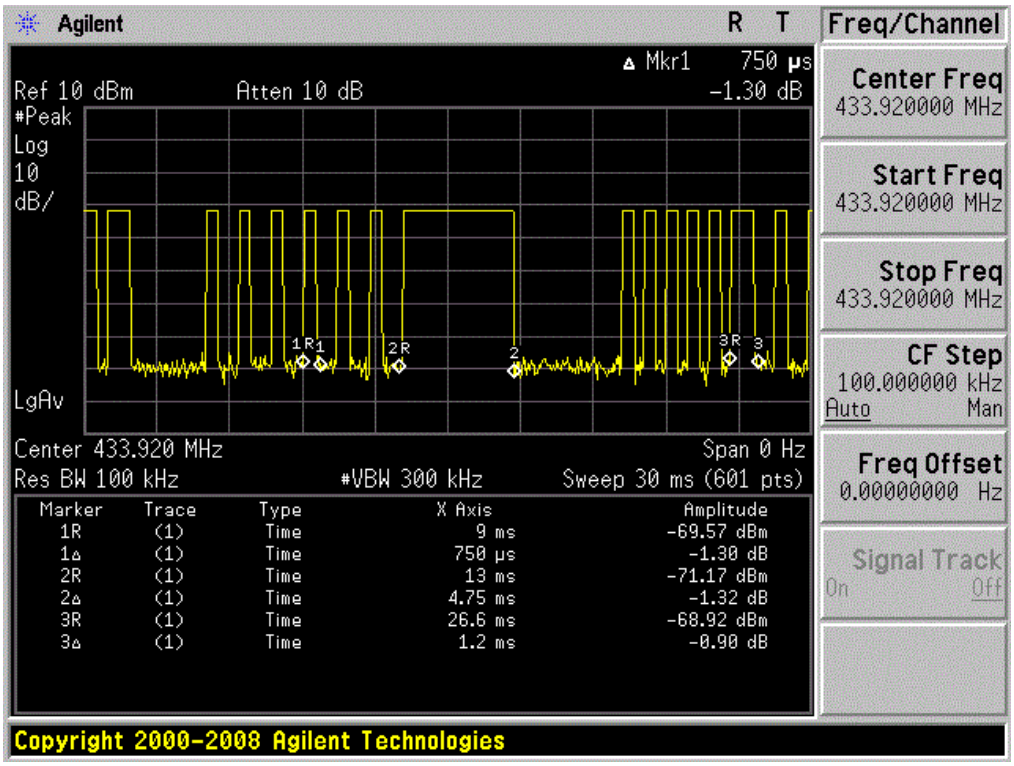
Effective period of the cycle = 0.75*13+4.75*1+1.2*13=30.1ms

Duty Cycle = 30.1ms/54.17ms = 0.56

The duration of one cycle






Agilent
R T
Freq/Channel
Mkr1 750 µs
Ref 10 dBm
Atten 10 dB
-1.30 dB
#Peak
Log
10
dB/
LgAv
Center Freq
433.920000 MHz
Start Freq
433.920000 MHz
Stop Freq
433.920000 MHz
CF Step
100.000000 kHz
Auto
Man
Center 433.920 MHz
Span 0 Hz
Res BW 100 kHz
#VBW 300 kHz
Sweep 30 ms (601 pts)
Freq Offset
0.00000000 Hz
Signal Track
On
Off
Marker Trace Type X Axis Amplitude
1R (1) Time 9 ms -69.57 dBm
1Δ (1) Time 750 µs -1.30 dB
2R (1) Time 13 ms -71.17 dBm
2Δ (1) Time 4.75 ms -1.32 dB
3R (1) Time 26.6 ms -68.92 dBm
3Δ (1) Time 1.2 ms -0.90 dB
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4. BANDWIDTH TEST

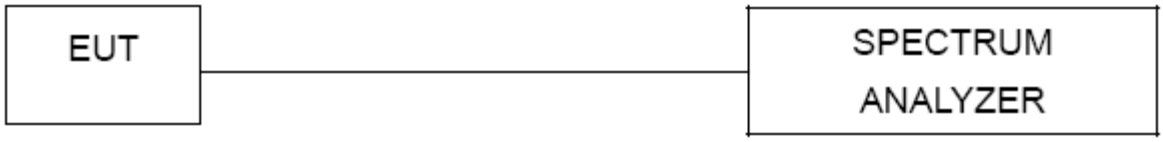
4.1 TEST PROCEDURE

The bandwidth of the emission shall be no wider than 0.25% of the center frequency for devices operating above 70 MHz and below 900 MHz. For devices operating above 900 MHz, the emission shall be no wider than 0.5% of the center frequency. Bandwidth is determined at the points 20 dB down from the modulated carrier.
Limit: 433.92MHz*0.25%=1084.8KHz

4.2 DEVIATION FROM STANDARD

No deviation.

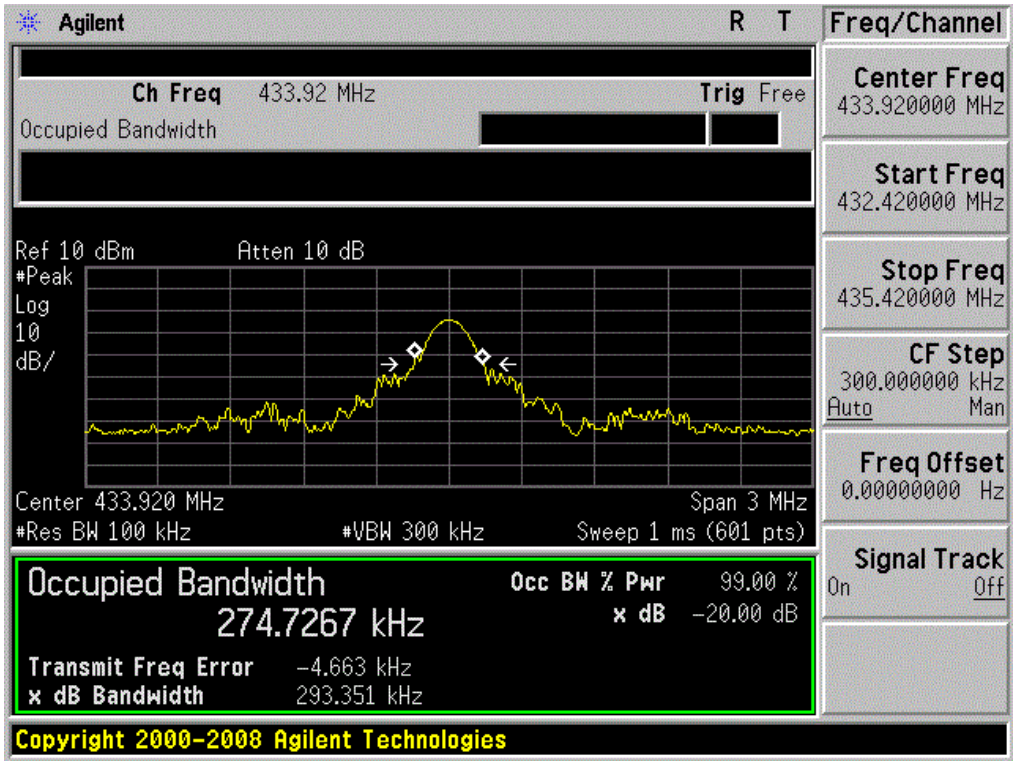
4.3 TEST SETUP



4.4 TEST RESULTS

EUT：	Burglar alarm control panel	Model Name ：	PN-602
Temperature：	26 ℃	Relative Humidity：	53%
Pressure：	1020 hPa	Test Power ：	DC 5V from adapter AC120V/60Hz
Test Mode ：	TX CH 1		

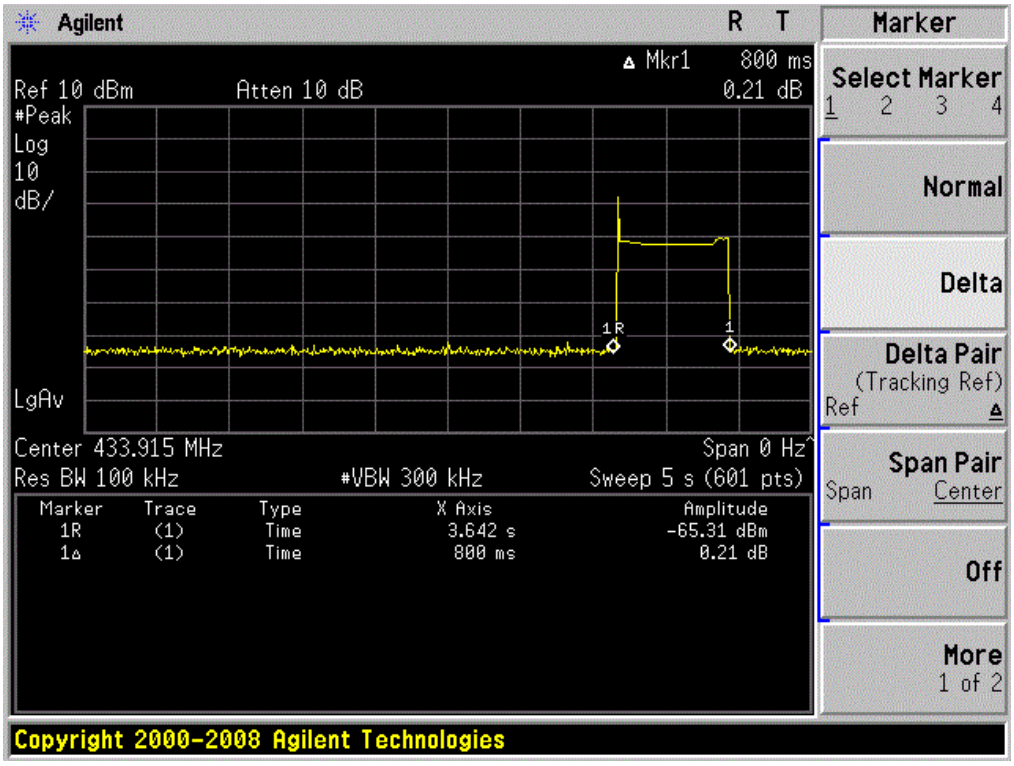
Test Channel	Frequency (MHz)	20 dBc Bandwidth (kHz)	Limit (kHz)
CH01	433.92	293.351	1084.8



5. TRANSMITTER TIMEOUT

5.1 REQUIREMENTS	
1	A manually operated transmitter shall employ a switch that will automatically deactivate the transmitter within not more than 5 seconds of being released. **Result:** The EUT is a manually activated transmitter, press 5 seconds will automatically stop working
2	A transmitter activated automatically shall cease transmission within 5 seconds after activation. **Result:** The EUT is a manually activated transmitter, press 5 seconds will automatically stop working
3	Periodic transmissions at regular predetermined intervals are not permitted. However, polling or supervision transmissions, including data, to determine system integrity of transmitters used in security or safety applications are allowed if the total duration of transmissions does not exceed more than two seconds per hour for each transmitter. There is no limit on the number of individual transmissions, provided the total transmission time does not exceed two seconds per hour **Result:**The EUT does not employ periodic transmission.
4	Intentional radiators which are employed for radio control purposes during emergencies involving fire, security, and safety of life, when activated to signal an alarm, may operate during the pendency of the alarm condition. **Result:**The section is not applicable to EUT.

Test data



THE DURATION OF EACH TRANSMISSION	LIMIT	RESULT
0.800s	<5s	PASS