

# **RF Exposure Evaluation Declaration**

Product Name	:	Door Panel
Model No.	:	SCEDP02
FCC ID	:	2AC5T-SCEDP02

Applicant:Scout Security, Inc.Address:210 N Racine Ave, Chicago IL 60607

Date of Receipt	:	Nov. 17, 2016
Test Date	:	Nov. 15, 2016~ Dec. 06, 2016
Issued Date	:	Jan. 11, 2017
Report No.	:	16B2130R-RF-US-P20V01
Report Version	:	V1.0

The test results relate only to the samples tested.

The test results shown in the test report are traceable to the national/international standard through the calibration of the equipment and evaluated measurement uncertainty herein.

This report must not be used to claim product endorsement by CNAS, TAF or any agency of the government. The test report shall not be reproduced without the written approval of QuieTek Corporation.



# Test Report Certification Issued Date : Jan. 11, 2017

Issued Date : Jan. 11, 2017 Report No. : 16B2130R-RF-US-P20V01

# QuieTek

a DEKRA company

Product Name	:	Door Panel
Applicant	:	Scout Security, Inc.
Address	:	210 N Racine Ave, Chicago IL 60607
Manufacturer	:	GoerTek Inc
Address	:	No.8877 Yingqian Street,High-Tech Industrial Development District,Weifang,Shandong,261031, P.R.China
Model No.		SCEDP02
FCC ID		2AC5T-SCEDP02
		DC3V
EUT Voltage	÷	KDB 447498D01V06
Applicable Standard	•	FCC Part1.1310(b)
Test Result		Complied
Performed Location	÷	Quietek Corporation - Suzhou EMC Laboratory
	•	No.99 Hongye Rd., Suzhou Industrial Park, Suzhou, 215006,
		Jiangsu, China
		TEL: +86-512-6251-5088 / FAX: +86-512-6251-5098
		FCC Registration Number: 800392
		IC Lab code: 4075B
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		(Engineering Manager: Harry Zhao)



## Laboratory Information

We, **QuieTek Corporation**, are an independent EMC and safety consultancy that was established the whole facility in our laboratories. The test facility has been accredited/accepted(audited or listed) by the following related bodies in compliance with ISO 17025, EN 45001 and specified testing scope:

Taiwan R.O.C.	:	BSMI, NCC, TAF
USA	:	FCC
Japan	:	VCCI
China	:	CNAS

The related certificate for our laboratories about the test site and management system can be downloaded from QuieTek Corporation's Web Site : <u>http://www.quietek.com/english/about/certificates.aspx?bval=5</u> The address and introduction of QuieTek Corporation's laboratories can be founded in our Web site : <u>http://www.quietek.com/index\_en.aspx</u>

If you have any comments, Please don't hesitate to contact us. Our contact information is as below:

#### HsinChu Testing Laboratory :

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# 1. RF Exposure Evaluation

## 1.1. Limits

According to FCC 1.1310: The criteria listed in the following table shall be used to evaluate the environment impact of human exposure to radio frequency (RF) radiation as specified in 1.1307(b)

LIMITS FOR MAXIMUM PERMISSIBLE EXPOSURE (MPE)

Frequency range (MHz)	Electric field strength (V/m)	Magnetic field strength (A/m)	Power density (mW/cm <sup>2</sup> )	Averaging time (minutes)
	(A) Limits for Oc	ccupational/Controlled Exp	osure	
0.3-3.0	614	1.63	*100	6
3.0-30	1842/1	4.89/1	*900/f <sup>2</sup>	6
30-300	61.4	0.163	1.0	6
300-1,500			f/300	6
1,500-100,000			5	6
	(B) Limits for Gener	al Population/Uncontrolled	Exposure	
0.3-1.34	614	1.63	*100	30
1.34-30	824/1	2.19/1	*180/f <sup>2</sup>	30
30-300	27.5	0.073	0.2	30
300-1,500			f/1500	30
1,500-100,000			1.0	30

F= Frequency in MHz

Friis Formula

Friis transmission formula:  $Pd = (Pout^{*}G)/(4^{*}pi^{*}r^{2})$ 

#### Where

Pd = power density in mW/cm2

Pout = output power to antenna in mW

G = gain of antenna in linear scale

Pi = 3.1416

R = distance between observation point and center of the radiator in cm

Pd id the limit of MPE. If we know the maximum gain of the antenna and the total power input to the antenna, through the calculation, we will know the distance r where the MPE limit is reached.



### 1.2. Test Procedure

Software provided by client enabled the EUT to transmit and receive data at lowest, middle and highest channel individually.

The temperature and related humidity: 18°C and 78% RH.

# 1.3. Test Result of RF Exposure Evaluation

Product	:	Door Panel
Test Item	:	RF Exposure Evaluation
Test Site	:	AC-6

• Output Power into Antenna & RF Exposure Evaluation Distance:

Test Mode Fr	Frequency Band (MHz)		Power Density at	Limit of Power
		EIRP (dBm)	R = 20 cm	Density
			(mW/cm2)	S(mW/cm2)
Zigbee	2405~2480	2.12	0.000324	1
RFID	0.127	-60.935	0	100

• Simultaneous transmission:

	Simultaneous transmission power	Limit of Power Density
Test Mode	density at R = 20 cm	S(mW/cm2)
	(mW/cm2)	
Zigbee + RFID	0.000324	1

Note: The power density is 0.000324mW/cm2 for Door Panel without any other radio equipment.

The End