RF Exposure Evaluation Declaration

FCC ID:	P27SCH2R1
Applicant:	Sercomm Corporation
Application Type:	Certification
Product:	Indoor Camera
Model No.:	SCH2R0-29xxxxx (the 1st x should be “blank” or “-”; the rest x could be 0 to 9, A to Z, a to z, “blank” or “-”, for the marketing purpose)
Brand Name:	ADT
FCC Classification:	Digital Transmission System (DTS) Unlicensed PCS Base Station (PUB)
Test Procedure(s):	KDB 447498 D01v06
Test Date:	July 31, 2020

Reviewed By: oscar shi
(Oscar Shi)

Approved By: Robin Wu
(Robin Wu)

ACCREDITED
TESTING LABORATORY
CERTIFICATE #3628.01

The test results relate only to the samples tested.

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

Revision History

Report No.	Version	Description	Issue Date	Note
2007RSU069-U3	Rev. 01	Initial Report	08-11-2020	Valid

CONTENTS

General Information

Applicant:	Sercomm Corporation
Applicant Address:	8F, No. 3-1, YuanQu St., NanKang, Taipei 115, Taiwan, R.O.C.
Manufacturer:	Sercomm Corporation
Manufacturer Address:	8F, No. 3-1, YuanQu St., NanKang, Taipei 115, Taiwan, R.O.C.
Test Site:	MRT Technology (Suzhou) Co., Ltd
Test Site Address:	D8 Building, No.2 Tian'edang Rd., Wuzhong Economic Development Zone, Suzhou, China

Test Facility / Accreditations

Measurements were performed at MRT Laboratory located in Tian'edang Rd., Suzhou, China.

- **MRT facility is an FCC registered (MRT Reg. No. CN1166) test facility with the site description report on file and has met all the requirements specified in ANSI C63.4-2014.**
- **MRT facility is an IC registered (MRT Reg. No. 11384A-1) test laboratory with the site description on file at Industry Canada.**
- **MRT facility is a VCCI registered (R-20025, G-20034, C-20020, T-20020) test laboratory with the site description on file at VCCI Council.**
- **MRT Lab is accredited to ISO 17025 by the American Association for Laboratory Accreditation (A2LA) under the American Association for Laboratory Accreditation Program (A2LA Cert. No. 3628.01) in EMC, Telecommunications, Radio and SAR testing.**

1. PRODUCT INFORMATION

1.1. Equipment Description

Product Name:	Indoor Camera
Model No.:	SCH2R0-29xxxxx (the 1st x should be “blank” or “-”; the rest x could be 0 to 9, A to Z, a to z, “blank” or “-”, for the marketing purpose)
Brand Name:	ADT
DECT Specification:	
Frequency Range:	1921.536 ~ 1928.448MHz
Number of Channels:	5
Type of Modulation:	Digital (Gaussian Frequency Shift Keying)
Antenna Gain:	0dBi
Antenna Type:	PCB Antenna
Wi-Fi Specification:	
Frequency Range:	802.11b/g/n-HT20: 2412 ~ 2462 MHz
Type of Modulation:	802.11b: DSSS, DBPSK, DQPSK, CCK 802.11g/n-20M: OFDM, BPSK, QPSK, 16QAM, 64QAM
Antenna Gain:	2.67dBi
Antenna Type:	FPCB Antenna

2. RF Exposure Evaluation

2.1. 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^2)	Average Time (Minutes)
(A) Limits for Occupational/ Control Exposures				
300-1500	--	--	f/300	6
1500-100,000	--	--	5	6
(B) Limits for General Population/ Uncontrolled Exposures				
300-1500	--	--	f/1500	6
1500-100,000	--	--	1	30

f= Frequency in MHz

Calculation Formula: $Pd = (Pout*G)/(4*pi*r^2)$

Where
Pd = power density in mW/cm^2
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 is the limit of MPE, $1mW/cm^2$. 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.

2.2. Test Result of RF Exposure Evaluation

Product	Indoor Camera
Test Item	RF Exposure Evaluation

Test Mode	Frequency Band (MHz)	Maximum EIRP (dBm)	Power Density at R = 20 cm (mW/cm^2)	Limit (mW/cm^2)
DECT	1921.536 ~ 1928.44	19.01	0.01584	1
Wi-Fi	2412 ~ 2462	21.09	0.02557	1

CONCLUSION:

The max Power Density at R (20 cm) = 0.01584mW/cm^2 + 0.02557 mW/cm^2 =0.04141mW/cm^2 < 1 mW/cm^2.

Therefore, the Min Safety Distance is 20cm.

The End

Appendix A – Test Setup Photograph

Refer to “2007RSU069-UT” file.

Appendix B – EUT Photograph

Refer to “2007RSU069-UE” file.