

RF Exposure Evaluation Report

Product Name : Access Control System

Model No. : ACS6000, ACS6008, B-ACS6000, B-ACS6008,
B-ACS6000-A, B-ACS6000-E, B-ACS6000-S,
B-ACS6008-A, B-ACS6008-E, B-ACS6008-S,
B-ACS6100R, B-ACS6100L, B-ACS6100R-A,
B-ACS6100R-E, B-ACS6100R-S, B-ACS6100L-A,
B-ACS6100L-E, B-ACS6100L-S

FCC ID : O9U-ACS6000-02

Applicant : Brivo Systems, Inc.

Address : 7700 Old Georgetown Rd, Suite 300 BETHESDA MD 20814 United States

Date of Receipt : Jan. 27, 2021

Date of Declaration : Apr. 13, 2021

Report No. : 2110909R-E3082100013

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 report of the equipment and evaluated measurement uncertainty herein.

This report must not be used to claim product endorsement by TAF or any agency of the government.

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Measurement uncertainties evaluated for each testing system and associated connections are given here to provide the system information for reference. Compliance determinations do not take into account measurement uncertainties for each testing system, but are based on the results of the compliance measurement.

Issued Date: Apr. 13, 2021

Report No.: 2110909R-E3082100013



Product Name	Access Control System	
Applicant	Brivo Systems, Inc.	
Address	7700 Old Georgetown Rd, Suite 300 BETHESDA MD 20814 United States	
Manufacturer	TELE System Communications Pte. Ltd.	
Model No.	ACS6000, ACS6008, B-ACS6000, B-ACS6008, B-ACS6000-A, B-ACS6000-E, B-ACS6000-S, B-ACS6008-A, B-ACS6008-E, B-ACS6008-S, B-ACS6100R, B-ACS6100L, B-ACS6100R-A, B-ACS6100R-E, B-ACS6100R-S, B-ACS6100L-A, B-ACS6100L-E, B-ACS6100L-S	
FCC ID.	O9U-ACS6000-02	
Trade Name	Brivo	
Applicable Standard	KDB 447498 D01 v06	<input checked="" type="checkbox"/> Minimum test separation distance ≥ 20 cm <input type="checkbox"/> For low power devices
Test Result	Complied	

Documented By :



(Senior Adm. Specialist / Rita Huang)

Tested By :



(Supervisor / Wen Lee)

Approved By :



(Director / Vincent Lin)

Revision History

Report No.	Version	Description	Issued Date
2110909R-E3082100013	V1.0	Initial issue of report.	2021-04-13

1. GENERAL INFORMATION

1.1. EUT Description

Product Name	Access Control System
Trade Name	Brivo
Model No.	ACS6000, ACS6008, B-ACS6000, B-ACS6008, B-ACS6000-A, B-ACS6000-E, B-ACS6000-S, B-ACS6008-A, B-ACS6008-E, B-ACS6008-S, B-ACS6100R, B-ACS6100L, B-ACS6100R-A, B-ACS6100R-E, B-ACS6100R-S, B-ACS6100L-A, B-ACS6100L-E, B-ACS6100L-S
FCC ID.	O9U-ACS6000-02
Frequency Range	2412-2462MHz for 802.11b/g/n-20BW, 2422-2452MHz for 802.11n-40BW
Number of Channels	802.11b/g/n-20MHz: 11, n-40MHz: 7
Data Speed	802.11b: 1-11Mbps, 802.11g: 6-54Mbps, 802.11n: up to 150Mbps
Channel separation	802.11b/g/n: 5 MHz
Type of Modulation	802.11b: DSSS (DBPSK, DQPSK, CCK) 802.11g/n: OFDM (BPSK, QPSK, 16QAM, 64QAM)
Antenna Type	Dipole Antenna
Antenna Gain	Refer to the table “Antenna List”
Channel Control	Auto

Antenna List

No.	Manufacturer	Part No.	Antenna Type	Peak Gain
1	LYNWAVE	EAN00EB000Y0	Dipole Antenna	2.21dBi for 2.4GHz

2. RF Exposure Evaluation

2.1. Standard Applicable

According to KDB 447498 D01 (7.1), A minimum test separation distance ≥ 20 cm is required between the antenna and radiating structures of the device and nearby persons to apply mobile device exposure limits.

2.2. 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

Friis Formula

Friis transmission formula: $P_d = (P_{out} * G) / (4 * \pi * r^2)$

Where

P_d = power density in mW/cm²

P_{out} = output power to antenna in mW

G = gain of antenna in linear scale

π = 3.1416

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

2.3. Test Result of RF Exposure Evaluation

Product : Access Control System
Test Item : RF Exposure Evaluation

WLAN 2.4G Peak Gain: 2.21 dBi

Channel	Frequency	Conducted Peak Power (dBm)	Output Power to Antenna (mW)	Power Density at R = 20 cm (mW/cm ²)	Limit (mWc/m ²)	Pass/Fail
01	2412	23.06	202.302	0.0669	1	Pass

Note: The conducted output power is refer to report No.: 2110909R-E3032110113 from the DEKRA.