



MPE Report

Report No.: STS2512494H01

Issued for

4 Dimensions Distribution Corp.

15 CHARLOTTE AVE, HICKSVILLE, NY, United States 11801

Product Name: Performance POS Terminal

Brand Name: **VOLCORA**

Model Name: V-DDTS-A2B-I512TH16G256

Series Model(s): More models Ref. the 2.1

FCC ID: 2A86P-T3UKST

Test Standard: FCC 47CFR §2.1091

The test results presented in this report relate only to the object tested. This report shall not be reproduced, except in full, without the written approval of the ShenZhen STS Test Services Co., Ltd.

**TEST REPORT**

Applicant's Name: 4 Dimensions Distribution Corp.
Address: 15 CHARLOTTE AVE, HICKSVILLE, NY, United States 11801
Manufacturer's Name.....: 4 Dimensions Distribution Corp.
Address: 15 CHARLOTTE AVE, HICKSVILLE, NY, United States 11801

Product Description

Product Name.....: Performance POS Terminal
Brand Name.....: **VOLCORA**
Model Name: V-DDTS-A2B-I512TH16G256
Series Model(s).....: More models Ref. the 2.1

Test Standards: FCC 47CFR §2.1091
447498 D01 Interim General RF Exposure Guidance v06

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Date of Test

Date of receipt of test item..... 2025-12-09
Date (s) of performance of tests 2025-12-10 to 2025-12-22
Date of Issue 2025-12-29
Test Result..... **Pass**

Testing Engineer :

Aaron Bu

(Aaron Bu)

Technical Manager :

Skylar Li

(Skylar Li)

Authorized Signatory :

Bovey Yang

(Bovey Yang)





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**Revision History**

Rev.	Issue Date	Report No.	Effect Page	Contents
00	2025-12-29	STS2512494H01	ALL	Initial Issue



1. GENERAL INFORMATION

1.1 GENERAL DESCRIPTION OF THE EUT

Product Name	Performance POS Terminal
Brand Name	VOLCORA
Model Name	V-DDTS-A2B-I512TH16G256
Series Model(s)	V-SDTS-A2B-I54TH8G128, V-SDTS-A2W-I54TH8G128, V-DDTS-A2B-I54TH8G128, V-DDTS-A2W-I54TH8G128, V-SDTS-A2B-I54TH16G256, V-SDTS-A2W-I54TH16G256, V-DDTS-A2B-I54TH16G256, V-DDTS-A2W-I54TH16G256, V-SDTS-A2B-I55TH8G128, V-SDTS-A2W-I55TH8G128, V-DDTS-A2B-I55TH8G128, V-DDTS-A2W-I55TH8G128, V-SDTS-A2B-I55TH16G256, V-SDTS-A2W-I55TH16G256, V-DDTS-A2B-I55TH16G256, V-DDTS-A2W-I55TH16G256, V-SDTS-A2B-I510TH8G128, V-SDTS-A2W-I510TH8G128, V-DDTS-A2B-I510TH8G128, V-DDTS-A2W-I510TH8G128, V-SDTS-A2B-I510TH16G256, V-SDTS-A2W-I510TH16G256, V-DDTS-A2B-I510TH16G256, V-DDTS-A2W-I510TH16G256, V-SDTS-A2B-I512TH16G256, V-SDTS-A2W-I512TH16G256, V-DDTS-A2W-I512TH16G256, V-SDTS-A2B-I710TH16G256, V-SDTS-A2W-I710TH16G256, V-DDTS-A2B-I710TH16G256, V-DDTS-A2W-I710TH16G256, V-SDTS-A2B-N978G128, V-SDTS-A2W-N978G128, V-DDTS-A2B-N978G128, V-DDTS-A2W-N978G128, V-SDTS-A2B-N9716G256, V-SDTS-A2W-N9716G256, V-DDTS-A2B-N9716G256, V-DDTS-A2W-N9716G256, V-SDTS-A4G-I511TH16G128, V-DDTS-A4G-I511TH16G128, V-SDTS-A4B-I511TH16G128, V-DDTS-A4B-I511TH16G128, V-SDTS-A4W-I511TH16G128, V-DDTS-A4W-I511TH16G128, V-SDTS-A5B-I54TH8G128, V-SDTS-A5W-I54TH8G128, V-DDTS-A5B-I54TH8G128, V-DDTS-A5W-I54TH8G128, V-SDTS-A5B-I54TH16G256, V-SDTS-A5W-I54TH16G256, V-DDTS-A5B-I54TH16G256, V-DDTS-A5W-I54TH16G256, V-SDTS-A5B-I55TH8G128, V-SDTS-A5W-I55TH8G128, V-DDTS-A5B-I55TH8G128, V-DDTS-A5W-I55TH8G128, V-SDTS-A5B-I55TH16G256, V-SDTS-A5W-I55TH16G256, V-DDTS-A5B-I55TH16G256, V-DDTS-A5W-I55TH16G256, V-SDTS-A5B-I510TH8G128, V-SDTS-A5W-I510TH8G128, V-DDTS-A5B-I510TH8G128, V-DDTS-A5W-I510TH8G128, V-SDTS-A5B-I510TH16G256, V-SDTS-A5W-I510TH16G256, V-DDTS-A5B-I510TH16G256, V-DDTS-A5W-I510TH16G256, V-SDTS-A5B-I512TH16G256, V-SDTS-A5W-I512TH16G256, V-DDTS-A5B-I512TH16G256, V-DDTS-A5W-I512TH16G256, V-SDTS-A5B-I710TH16G256, V-SDTS-A5W-I710TH16G256, V-DDTS-A5B-I710TH16G256, V-DDTS-A5W-I710TH16G256, V-SDTS-A5B-N978G128, V-SDTS-A5W-N978G128, V-DDTS-A5B-N978G128, V-DDTS-A5W-N978G128, V-SDTS-A5B-N9716G256, V-SDTS-A5W-N9716G256, V-DDTS-A5B-N9716G256, V-DDTS-A5W-N9716G256, V-SDTS-A6B-I54TH8G128, V-SDTS-A6W-I54TH8G128, V-DDTS-A6B-I54TH8G128, V-DDTS-A6W-I54TH8G128, V-SDTS-A6B-I54TH16G256, V-SDTS-A6W-I54TH16G256, V-DDTS-A6B-I54TH16G256, V-DDTS-A6W-I54TH16G256, V-SDTS-A6B-I55TH8G128, V-SDTS-A6W-I55TH8G128, V-DDTS-A6B-I55TH8G128, V-DDTS-A6W-I55TH8G128, V-SDTS-A6B-I55TH16G256,



V-SDTS-A6W-I55TH16G256, V-DDTS-A6B-I55TH16G256,
V-DDTS-A6W-I55TH16G256, V-SDTS-A6B-I510TH8G128,
V-SDTS-A6W-I510TH8G128, V-DDTS-A6B-I510TH8G128,
V-DDTS-A6W-I510TH8G128, V-SDTS-A6B-I510TH16G256,
V-SDTS-A6W-I510TH16G256, V-DDTS-A6B-I510TH16G256,
V-DDTS-A6W-I510TH16G256, V-SDTS-A6B-I512TH16G256,
V-SDTS-A6W-I512TH16G256, V-DDTS-A6B-I512TH16G256,
V-DDTS-A6W-I512TH16G256, V-SDTS-A6B-I710TH16G256,
V-SDTS-A6W-I710TH16G256, V-DDTS-A6B-I710TH16G256,
V-DDTS-A6W-I710TH16G256, V-SDTS-A6B-N978G128,
V-SDTS-A6W-N978G128, V-DDTS-A6B-N978G128,
V-DDTS-A6W-N978G128, V-SDTS-A6B-N9716G256,
V-SDTS-A6W-N9716G256, V-DDTS-A6B-N9716G256,
V-DDTS-A6W-N9716G256, V-SDTS-A7B-I54TH8G128,
V-SDTS-A7W-I54TH8G128, V-DDTS-A7B-I54TH8G128,
V-DDTS-A7W-I54TH8G128, V-SDTS-A7B-I54TH16G256,
V-SDTS-A7W-I54TH16G256, V-DDTS-A7B-I54TH16G256,
V-DDTS-A7W-I54TH16G256, V-SDTS-A7B-I55TH8G128,
V-SDTS-A7W-I55TH8G128, V-DDTS-A7B-I55TH8G128,
V-DDTS-A7W-I55TH8G128, V-SDTS-A7B-I55TH16G256,
V-SDTS-A7W-I55TH16G256, V-DDTS-A7B-I55TH16G256,
V-DDTS-A7W-I55TH16G256, V-SDTS-A7B-N978G128,
V-SDTS-A7W-N978G128, V-DDTS-A7B-N978G128,
V-DDTS-A7W-N978G128, V-SDTS-A7B-N9716G256,
V-SDTS-A7W-N9716G256, V-DDTS-A7B-N9716G256,
V-DDTS-A7W-N9716G256, V-SDTS-A7B-I512TH16G256,
V-SDTS-A7W-I512TH16G256, V-DDTS-A7B-I512TH16G256,
V-DDTS-A7W-I512TH16G256, V-SDTS-A7B-I710TH16G256,
V-SDTS-A7W-I710TH16G256, V-DDTS-A7B-I710TH16G256,
V-DDTS-A7W-I710TH16G256, V-SDTS-A1B, V-SDTS-A1W, V-DDTS-A1B,
V-DDTS-A1W, V-SDTS-A2B, V-SDTS-A2W, V-DDTS-A2B, V-DDTS-A2W,
V-SDTS-A3B, V-SDTS-A3W, V-DDTS-A3B, V-DDTS-A3W, V-SDTS-A4G,
V-SDTS-A4B, V-SDTS-A4W, V-DDTS-A4G, V-DDTS-A4B, V-DDTS-A4W,
V-SDTS-A5B, V-SDTS-A5W, V-DDTS-A5B, V-DDTS-A5W, V-SDTS-A6B,
V-SDTS-A6W, V-DDTS-A6B, V-DDTS-A6W, V-SDTS-A7B, V-SDTS-A7W,
V-DDTS-A7B, V-DDTS-A7W, V-SDTS-A8B, V-SDTS-A8W, V-DDTS-A8B,
V-DDTS-A8W, V-KIOSK-A1B, V-KIOSK-A1W, V-KIOSK-A2B,
V-KIOSK-A2W, V-KIOSK-A3B, V-KIOSK-A3W, V-KIOSK-A4B,
V-KIOSK-A4W, V-KIOSK-A5B, V-KIOSK-A5W, V-KIOSK-A1B, V-KDS-A1W,
V-KDS-A2B, V-KDS-A2W, V-KDS-A3B, V-KDS-A3W, V-KDS-A4B,
V-KDS-A4W, V-KDS-A5B, V-KDS-A5W, VOC-V-SDTS-A2B-I54TH8G128,
VOC-V-SDTS-A2W-I54TH8G128, VOC-V-DDTS-A2B-I54TH8G128,
VOC-V-DDTS-A2W-I54TH8G128, VOC-V-SDTS-A2B-I54TH16G256,
VOC-V-SDTS-A2W-I54TH16G256, VOC-V-DDTS-A2B-I54TH16G256,
VOC-V-DDTS-A2W-I54TH16G256, VOC-V-SDTS-A2B-I55TH8G128,
VOC-V-SDTS-A2W-I55TH8G128, VOC-V-DDTS-A2B-I55TH8G128,
VOC-V-DDTS-A2W-I55TH8G128, VOC-V-SDTS-A2B-I55TH16G256,
VOC-V-SDTS-A2W-I55TH16G256, VOC-V-DDTS-A2B-I55TH16G256,
VOC-V-DDTS-A2W-I55TH16G256, VOC-V-SDTS-A2B-I510TH8G128,
VOC-V-SDTS-A2W-I510TH8G128, VOC-V-DDTS-A2B-I510TH8G128,
VOC-V-DDTS-A2W-I510TH8G128, VOC-V-SDTS-A2B-I510TH16G256,
VOC-V-SDTS-A2W-I510TH16G256, VOC-V-DDTS-A2B-I510TH16G256,
VOC-V-DDTS-A2W-I510TH16G256, VOC-V-SDTS-A2B-I512TH16G256,
VOC-V-SDTS-A2W-I512TH16G256, VOC-V-DDTS-A2B-I512TH16G256,
VOC-V-DDTS-A2W-I512TH16G256, VOC-V-SDTS-A2B-I710TH16G256,
VOC-V-SDTS-A2W-I710TH16G256, VOC-V-DDTS-A2B-I710TH16G256,
VOC-V-DDTS-A2W-I710TH16G256, VOC-V-SDTS-A2B-N978G128,
VOC-V-SDTS-A2W-N978G128, VOC-V-DDTS-A2B-N978G128,



VOC-V-DDTS-A2W-N978G128, VOC-V-SDTS-A2B-N9716G256,
VOC-V-SDTS-A2W-N9716G256, VOC-V-DDTS-A2B-N9716G256,
VOC-V-DDTS-A2W-N9716G256, VOC-V-SDTS-A4G-I511TH16G128,
VOC-V-DDTS-A4G-I511TH16G128, VOC-V-SDTS-A4B-I511TH16G128,
VOC-V-DDTS-A4B-I511TH16G128, VOC-V-SDTS-A4W-I511TH16G128,
VOC-V-DDTS-A4W-I511TH16G128, VOC-V-SDTS-A5B-I54TH8G128,
VOC-V-SDTS-A5W-I54TH8G128, VOC-V-DDTS-A5B-I54TH8G128,
VOC-V-DDTS-A5W-I54TH8G128, VOC-V-SDTS-A5B-I54TH16G256,
VOC-V-SDTS-A5W-I54TH16G256, VOC-V-DDTS-A5B-I54TH16G256,
VOC-V-DDTS-A5W-I54TH16G256, VOC-V-SDTS-A5B-I55TH8G128,
VOC-V-SDTS-A5W-I55TH8G128, VOC-V-DDTS-A5B-I55TH8G128,
VOC-V-DDTS-A5W-I55TH8G128, VOC-V-SDTS-A5B-I55TH16G256,
VOC-V-SDTS-A5W-I55TH16G256, VOC-V-DDTS-A5B-I55TH16G256,
VOC-V-DDTS-A5W-I55TH16G256, VOC-V-SDTS-A5B-I510TH8G128,
VOC-V-SDTS-A5W-I510TH8G128, VOC-V-DDTS-A5B-I510TH8G128,
VOC-V-DDTS-A5W-I510TH8G128, VOC-V-SDTS-A5B-I510TH16G256,
VOC-V-SDTS-A5W-I510TH16G256, VOC-V-DDTS-A5B-I510TH16G256,
VOC-V-DDTS-A5W-I510TH16G256, VOC-V-SDTS-A5B-I512TH16G256,
VOC-V-SDTS-A5W-I512TH16G256, VOC-V-DDTS-A5B-I512TH16G256,
VOC-V-DDTS-A5W-I512TH16G256, VOC-V-SDTS-A5B-I710TH16G256,
VOC-V-SDTS-A5W-I710TH16G256, VOC-V-DDTS-A5B-I710TH16G256,
VOC-V-DDTS-A5W-I710TH16G256, VOC-V-SDTS-A5B-N978G128,
VOC-V-SDTS-A5W-N978G128, VOC-V-DDTS-A5B-N978G128,
VOC-V-DDTS-A5W-N978G128, VOC-V-SDTS-A5B-N9716G256,
VOC-V-SDTS-A5W-N9716G256, VOC-V-DDTS-A5B-N9716G256,
VOC-V-DDTS-A5W-N9716G256, VOC-V-SDTS-A6B-I54TH8G128,
VOC-V-SDTS-A6W-I54TH8G128, VOC-V-DDTS-A6B-I54TH8G128,
VOC-V-DDTS-A6W-I54TH8G128, VOC-V-SDTS-A6B-I54TH16G256,
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VOC-V-SDTS-A6W-I512TH16G256, VOC-V-DDTS-A6B-I512TH16G256,
VOC-V-DDTS-A6W-I512TH16G256, VOC-V-SDTS-A6B-I710TH16G256,
VOC-V-SDTS-A6W-I710TH16G256, VOC-V-DDTS-A6B-I710TH16G256,
VOC-V-DDTS-A6W-I710TH16G256, VOC-V-SDTS-A6B-N978G128,
VOC-V-SDTS-A6W-N978G128, VOC-V-DDTS-A6B-N978G128,
VOC-V-DDTS-A6W-N978G128, VOC-V-SDTS-A6B-N9716G256,
VOC-V-SDTS-A6W-N9716G256, VOC-V-DDTS-A6B-N9716G256,
VOC-V-DDTS-A6W-N9716G256, VOC-V-SDTS-A7B-I54TH8G128,
VOC-V-SDTS-A7W-I54TH8G128, VOC-V-DDTS-A7B-I54TH8G128,
VOC-V-DDTS-A7W-I54TH8G128, VOC-V-SDTS-A7B-I54TH16G256,
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VOC-V-DDTS-A7W-I54TH16G256, VOC-V-SDTS-A7B-I55TH8G128,
VOC-V-SDTS-A7W-I55TH8G128, VOC-V-DDTS-A7B-I55TH8G128,
VOC-V-DDTS-A7W-I55TH8G128, VOC-V-SDTS-A7B-I55TH16G256,
VOC-V-SDTS-A7W-I55TH16G256, VOC-V-DDTS-A7B-I55TH16G256,
VOC-V-DDTS-A7W-I55TH16G256, VOC-V-SDTS-A7B-N978G128,
VOC-V-SDTS-A7W-N978G128, VOC-V-DDTS-A7B-N978G128,
VOC-V-DDTS-A7W-N978G128, VOC-V-SDTS-A7B-N9716G256,
VOC-V-SDTS-A7W-N9716G256, VOC-V-DDTS-A7B-N9716G256,
VOC-V-DDTS-A7W-N9716G256, VOC-V-SDTS-A7B-I512TH16G256,



	VOC-V-SDTS-A7W-I512TH16G256, VOC-V-DDTS-A7B-I512TH16G256, VOC-V-DDTS-A7W-I512TH16G256, VOC-V-SDTS-A7B-I710TH16G256, VOC-V-SDTS-A7W-I710TH16G256, VOC-V-DDTS-A7B-I710TH16G256, VOC-V-DDTS-A7W-I710TH16G256, VOC-V-SDTS-A1B, VOC-V-SDTS-A1W, VOC-V-DDTS-A1B, VOC-V-DDTS-A1W, VOC-V-SDTS-A2B, VOC-V-SDTS-A2W, VOC-V-DDTS-A2B, VOC-V-DDTS-A2W, VOC-V-SDTS-A3B, VOC-V-SDTS-A3W, VOC-V-DDTS-A3B, VOC-V-DDTS-A3W, VOC-V-SDTS-A4G, VOC-V-SDTS-A4B, VOC-V-SDTS-A4W, VOC-V-DDTS-A4G, VOC-V-DDTS-A4B, VOC-V-DDTS-A4W, VOC-V-SDTS-A5B, VOC-V-SDTS-A5W, VOC-V-DDTS-A5B, VOC-V-DDTS-A5W, VOC-V-SDTS-A6B, VOC-V-SDTS-A6W, VOC-V-DDTS-A6B, VOC-V-DDTS-A6W, VOC-V-SDTS-A7B, VOC-V-SDTS-A7W, VOC-V-DDTS-A7B, VOC-V-DDTS-A7W, VOC-V-SDTS-A8B, VOC-V-SDTS-A8W, VOC-V-DDTS-A8B, VOC-V-DDTS-A8W, VOC-V-KIOSK-A1B, VOC-V-KIOSK-A1W, VOC-V-KIOSK-A2B, VOC-V-KIOSK-A2W, VOC-V-KIOSK-A3B, VOC-V-KIOSK-A3W, VOC-V-KIOSK-A4B, VOC-V-KIOSK-A4W, VOC-V-KIOSK-A5B, VOC-V-KIOSK-A5W, VOC-V-KDS-A1B, VOC-V-KDS-A1W, VOC-V-KDS-A2B, VOC-V-KDS-A2W, VOC-V-KDS-A3B, VOC-V-KDS-A3W, VOC-V-KDS-A4B, VOC-V-KDS-A4W, VOC-V-KDS-A5B, VOC-V-KDS-A5W	
Model Difference	All models are the same circuit and RF module, except the model name and appearance color, memory, hard disk size is not the same.	
Product Description	The EUT is Performance POS Terminal	
	Operation Frequency:	2402~2480 MHz
	Modulation Type:	GFSK
	Radio Technology:	BLE
	Bluetooth Configuration:	BLE(Support 1M)
	Number Of Channel:	40
	Antenna Type:	FPC antenna
	Antenna Gain (dBi)	3.47
	Operation Frequency:	2402~2480 MHz
	Modulation Type:	GFSK(1Mbps), $\pi/4$ -DQPSK(2Mbps), 8DPSK(3Mbps)
	Bluetooth Configuration:	BR+EDR
	Number Of Channel:	79
	Antenna Type:	FPC antenna
	Antenna Gain (dBi)	3.47
	Operation Frequency:	802.11b/g/n20/ac20: 2412~2462 MHz 802.11n40/ac40: 2422~2452 MHz
	Modulation Type:	802.11b(DSSS):CCK,DQPSK,DBPSK 802.11g(OFDM):BPSK,QPSK,16-QAM,64-QAM 802.11n/ac(OFDM):BPSK,QPSK,16-QAM,64-QAM
Bit Rate of Transmitter:	802.11b:11/5.5/2/1 Mbps 802.11g:54/48/36/24/18/12/9/6Mbps 802.11n/ac:Up to 150Mbps	



	Number of Channel:	802.11b/g/n20/ac20:11CH 802.11n40/ac40:7CH
	Antenna Type:	FPC antenna
	Antenna Gain (dBi):	3.47
	Operation Frequency:	IEEE 802.11a/ n(HT20)/ac(VHT20): 5.180GHz-5.240GHz IEEE 802.11n(HT40)/ac(VHT40): 5.190GHz-5.230GHz IEEE 802.11ac(VHT80): 5.210GHz
		IEEE 802.11a/n(HT20)/ac(VHT20): 5.260GHz-5.320GHz IEEE 802.11 n(HT40)/ac(VHT40): 5.270GHz-5.310GHz IEEE 802.11ac(VHT80): 5.290GHz
		IEEE 802.11a/ n(HT20)/ac(VHT20): 5.500GHz-5.700GHz IEEE 802.11 n(HT40)/ac(VHT40): 5.510GHz-5.670GHz IEEE 802.11ac(VHT80): 5.530GHz
		IEEE 802.11a/ n(HT20)/ac(VHT20): 5.745GHz-5.825GHz IEEE 802.11 n(HT40)/ac(VHT40): 5.755GHz-5.795GHz IEEE 802.11ac(VHT80): 5.775GHz
	Modulation Type:	OFDM with BPSK/QPSK/16QAM/64QAM/256QAM
	Antenna Type:	FPC antenna
	Antenna Gain:	2.7 dBi
Power Rating	DC 12V From Adapter	
Adapter	Model: ADP-96H12 Input: 100-240V- 50/60Hz 1.5A MAX Output: +12V 8A Hunan Dajing Power Technology Co.,Ltd. Made in China	
Battery	N/A	
Hardware Version	N/A	
Software Version	N/A	

1.2 TEST FACTORY

SHENZHEN STS TEST SERVICES CO., LTD

Add. : 101, Building B, Zhuoke Science Park, No.190 Chongqing Road, ZhanChengShequ, Fuhai Sub-District, Bao'an District, Shenzhen, Guang Dong, China

FCC test Firm Registration Number: 625569



IC test Firm Registration Number: 12108A

A2LA Certificate No.: 4338.01

2. FCC 47CFR §2.1091 REQUIREMENT

2.1 TEST STANDARDS

The limit for Maximum Permissible Exposure (MPE) specified in FCC 1.1310 is followed. The gain of the antennas used in the product is extracted from the Antenna data sheets provided and also the maximum total power input to the antenna is measured. Through the Friis transmission formula and the maximum gain of the antenna, we can calculate the distance, away from the product, where the limit of MPE is reached.

Although the Friis Transmission formula is far field assumption, the calculated result of that is an over-prediction for near field power density. It is taken as worst case to specify the safety range.

2.2 LIMIT

According to FCC 1.1310: The criteria listed in the following table shall be used to evaluate the environmental impact of the 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)
Limits for Occupational / controlled Exposures			
300 - 1500	--	--	F/300
3.0-30	1842/f	4.89/f	*(900/f ²)
1500 – 100000	--	--	5.0
Limits for General population / Uncontrolled Exposure			
300 - 1500	--	--	F/1500
1.34-30	824/f	2.19/f	*(180f ²)
1500 – 100000	--	--	1.0

F= Frequency in MHz

Friss Formula

Friss 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 the center of radiator in cm

If we know the maximum gain of the antenna and the total output power to the antenna, through calculation, we will know MPE value at distance 20cm.



2.3 TEST RESULT

Tune up

Mode	Detector	Tune up Power
BLE	PK	5±1dBm
BT	PK	7±1dBm
2.4GWIFI	PK	18±1dBm
5GWIFI	PK	18±1dBm

Note: The test data refer to Report No.: FR692918AA, FR692918AB, FR692918AC, FR692918AD, FCC ID: TX2-RTL8821CE.

Protocol	Fre. (GHz)	Separation distance (cm)	Max Tune up power (dBm)	ANT Gain (dBi)	Max EIRP (dBm)	Max EIRP (mW)	Power Density (mW/cm ²)	Limit (mW/cm ²)	Ratio	Result
5GWIFI	5.240	20	19	2.7	21.7	147.91	0.02940	1	0.02940	Pass
2.4GWIFI	2.437	20	19	3.47	22.47	176.60	0.03509	1	0.03509	Pass
BLE	2.440	20	6	3.47	9.47	8.85	0.00176	1	0.00176	Pass
BT	2.480	20	8	3.47	11.47	14.03	0.00279	1	0.00279	Pass

Multiple transmission:

$$5GWIFI+2.4GWIFI+BLE+BT = 0.02940+0.03509+0.00176+0.00279=0.06904 < 1$$

Note: 1. The Maximum power is less than the limit, complies with the exemption requirements.

2. The Bluetooth and WLAN can't simultaneous transmission at the same time.

3. ERP = EIRP - 2.15

※※※※※END OF THE REPORT※※※※※