



A Test Lab Techno Corp.

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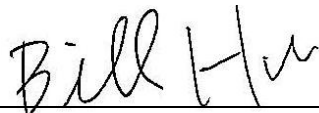


MPE Report

Test Report No.	: 1702FS15
Applicant	: Integrity Tracking LLC, dba MobileHelp
Product Type	: Cellular Base Station Gen4.0
Trade Name	: MobileHelp
Model Number	: CBS4-01
Date of Received	: Feb. 08, 2017
Test Period	: Feb. 10, 2017
Date of Issued	: Mar. 10, 2017
Test Specification	: ANSI / IEEE Std.C95.1-1992 / IEEE Std. 1528-2013 47 CFR § 2.1091 47 CFR § 1.1310
Location of Test Lab.	: Chang-an Lab.


1. The test operations have to be performed with cautious behavior, the test results are as attached.
2. The test results are under chamber environment of A Test Lab Techno Corp. A Test Lab Techno Corp. does not assume responsibility for any conclusions and generalizations drawn from the test results with regard to other specimens or samples.
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Approved By :



(Bill Hu)

Tested By :



(Mark Duan)



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1. Description of Equipment under Test (EUT)

Applicant	Integrity Tracking LLC, dba MobileHelp 3701 FAU Blvd., Suite 300, Boca Raton, Florida 33431, United States		
Manufacturer	Daviscomms (Malaysia) Sdn Bhd Plot 18, Lorong Perusahaan Maju 1, Kawasan Perusahaan Perai 4, 13600 Perai, Malaysia		
Product Type	Cellular Base Station Gen4.0		
Trade Name	MobileHelp		
Model Number	CBS4-01		
FCC ID	PXTCBS4-01		
Frequency Range	Operate Band	Frequency Range (MHz)	
	Bluetooth LE	2402 - 2480	
	Data transmission	433.92	
Antenna information	Band	Antenna Type	Antenna Gain
	Bluetooth LE	Chip Antenna	2.28dBi
	Data transmission	PCB Antenna	-4.23dBi
Temperature Range	-10 ~ +50°C		
RF Evaluation	0.029273 mW/cm ²		

The above equipment was tested by A Test Lab Techno Corp. For compliance with the requirements set forth in 47 CFR § 2.1091 / 47 CFR § 1.1310. The results of testing in this report apply only to the product/system, which was tested. Other similar equipment will not necessarily produce the same results due to production tolerance and measurement uncertainties



2. Human Exposure Assessment

Due to the design and installation of this product, it is not possible to conduct SAR evaluation. This is because client either manufactures or supplies the antenna(s) that will be used in the installation of this product. Therefore, this product will be evaluated as a mobile device per 47 CFR § 1.1310 titled "Radiofrequency radiation exposure limits", generally referred to as MPE limits.

In 47 CFR § 2.1091, paragraph (b) defines a mobile device as "a transmitting device designed to be used in other than fixed locations and to generally be used in such a way that a separation distance of at least 20 cm is normally maintained between the transmitter's radiating structure(s) and the body of the user or nearby persons." This product is intended to be installed into a vehicle such that the unit is physically secured at one location. In the installation guide supplied with the product,

Client has made the following statement: "IMPORTANT: To meet the FCC's RF Exposure Guidelines, the antenna should be installed so there is at least 20 cm of separation between the body of the user and nearby persons and the antenna". Based on the installation of the transceiver and the antenna, the transmitters radiating structure is more than 20 cm from the user. Thus, this product is a "mobile device" as defined in section § 2.1091 paragraph (b).

Exposure evaluation

$$S = \frac{PG}{4\pi R^2}$$

Where

S: power density

P: power input to the antenna

G: power gain of the antenna in the direction of interest relative to an isotropic radiator.

R: distance to the center of radiation of the antenna.



3. RF Output Power

The conducted power turn-up tolerance reference manufacturer specification.

Operate Band	Frequency (MHz)	Average Conducted power (dBm)
Bluetooth LE	2402	-0.94
	2440	-1.40
	2480	-2.14



4. Test Result

Operate Band	Packet Type	Frequency (MHz)	Limit (mw)	Distance [R] (cm)	Max tune-up Power (upper limit) [P] (dBm)	ANT Gain (dBi)	Numeric Gain [G]	Duty Cycle	[P] x [G] with Duty cycle [TP] (mW)	Power Density [S] (mw/cm ²)
Bluetooth LE	---	2402	1.000	20	-0.9	2.28	1.69	1	1.37	0.000273
		2440	1.000	20	-0.9	2.28	1.69	1	1.37	0.000273
		2480	1.000	20	-0.9	2.28	1.69	1	1.37	0.000273
WCDMA BandII	RMC-12.2K	1932.4	1	20	24.00	-2.32	0.59	1	148.2	0.029
		1960.0	1	20	24.00	-2.32	0.59	1	148.2	0.029
		1987.6	1	20	24.00	-2.32	0.59	1	148.2	0.029
WCDMA BandV	RMC-12.2K	871.4	0.581	20	24.00	-3.50	0.45	1	113.03	0.022
		881.6	0.588	20	24.00	-3.50	0.45	1	113.03	0.022
		891.6	0.594	20	24.00	-3.50	0.45	1	113.03	0.022
LTE Band2 QPSK_20MHz	1RB	1930.0	1	20	23.50	-2.32	0.59	1	132.08	0.026
		1960.0	1	20	23.50	-2.32	0.59	1	132.08	0.026
		1990.0	1	20	23.50	-2.32	0.59	1	132.08	0.026
LTE Band4 QPSK_20MHz	1RB	2110.0	1	20	23.50	-2.74	0.53	1	118.65	0.024
		2132.5	1	20	23.50	-2.74	0.53	1	118.65	0.024
		2155.0	1	20	23.50	-2.74	0.53	1	118.65	0.024
LTE Band5 QPSK_20MHz	1RB	869.0	0.579	20	23.50	-3.50	0.45	1	100.74	0.020
		880.0	0.587	20	23.50	-3.50	0.45	1	100.74	0.020
		885.0	0.59	20	23.50	-3.50	0.45	1	100.74	0.020
LTE Band12 QPSK_20MHz	1RB	729.0	0.486	20	23.50	-3.79	0.42	1	94.03	0.019
		737.5	0.492	20	23.50	-3.79	0.42	1	94.03	0.019
		746.0	0.497	20	23.50	-3.79	0.42	1	94.03	0.019

Note:

1. The Numeric Gain calculated by $10^{(\text{ant. Gain(dBi)} / 10)}$.
2. Each band max power which perform MPE of any configurations.
3. Radiated emission result is 65.66dBuV/m, and test distance is 3M.
4. $[\text{dBuV/m} = \text{EIRP(dBm)} - 20 \cdot \log(\text{distance}) + 104.8] = [\text{EIRP(dBm)} = 65.66 + 20 \cdot \log(3) - 104.8 = -29.60 \text{ dBm}]$.
5. EIRP power for TX = power + antenna gain.
6. The 3/4G results is based on manufacturer provided.
7. Simultaneous MPE : $\text{BT MPE} + \text{WWAN MPE} = 0.000273 + 0.029 = 0.029273(\text{mw})/\text{cm}^2 < 1(\text{mw})/\text{cm}^2$