

#### FCC IC RF EXPOSURE REPORT

**FOR** 

802.11b/g/n 1X1 WLAN + Bluetooth Atlas

**MODEL NUMBER: Atlas001** 

FCC ID: ZVAOH00003 IC: 9976A-OH00003

REPORT NUMBER: 47887541345-4

ISSUE DATE: Sep 8, 2016

Prepared for

TCL Technoly Electronics(Huizhou) Co.,Ltd
Section 37, Zhongkai High-tech Development Zone, Huizhou City, Guang Dong
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### Prepared by

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### 1. ATTESTATION OF TEST RESULTS

**Applicant Information** 

Company Name: TCL Technoly Electronics(Huizhou) Co.,Ltd

Address: Section 37, Zhongkai High-tech Development Zone, Huizhou City,

Guang Dong Province, China, 516006.

**Manufacturer Information** 

Company Name: Same as applicant

Address: Same as applicant

**EUT Description** 

Product Name Atlas
Brand Name TrackR
Model Name Atlas001
Serial Number N/A
Model Difference N/A

Date Tested July 25, 2016 ~ August 5, 2016

**APPLICABLE STANDARDS** 

STANDARD TEST RESULTS

FCC Guidelines for Human Exposure IEEE Complies

C95.1

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**Laboratory Leader** 

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## 2. TEST METHODOLOGY

The tests documented in this report were performed in accordance with KDB 447498 D01 General RF Exposure Guidance v05.

# 3. FACILITIES AND ACCREDITATION

Test Location	UL Verification Services (Guangzhou) Co., Ltd. Song Shan Lake Branch.
Address	Building 10, Innovation Technology Park, Song Shan Lake Hi tech Development Zone, Dongguan, 523808, China
Accreditation Certificate	The Laboratory has been assessed and proved to be in compliance with IAS, The Certificate Registration Number is TL-702.
Description	All measurement facilities use to collect the measurement data are located at Building 10, Innovation Technology Park, Song Shan Lake Hi tech Development Zone, Dongguan, 523808, China

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## 4. REQUIREMENT

#### **LIMIT**

Limits for General Population/Uncontrolled Exposure

Limits for General Population/Uncontrolled Exposure									
Frequency Range (MHz)	Electric Field Strength (E) (V/m)	Magnetic Field Strength (H) (A/m)	Power Density (S) (mW/cm <sup>2</sup> )	Averaging Time $ E ^2$ , $ H ^2$ or S (minutes)					
0.3-1.34	614	1.63	(100)*	30					
1.34-30	824/f	2.19/f	(180/f2)*	30					
30-300	27.5	0.073	0.2	30					
300-1500			f/150	30					
1500-100,000			1.0	30					

Note 1: f = frequency in MHz, \* means Plane-wave equivalent power density

Note 2: General population/uncontrolled exposures apply in situations in which the general public may be exposed, or in which persons that are exposed as a consequence of their employment may not be fully aware of the potential for exposure or cannot exercise control over their exposure.

Note 3: The limit value 1.0mW/cm<sup>2</sup> is available for this EUT.

### **MPE CALCULATION METHOD**

 $S = PG/(4\pi R)$ 

where: S = power density (in appropriate units, e.g. mW/cm2)

P = power input to the antenna (in appropriate units, e.g., mW) (the measured power value see

Report: F12124 Section 6.6)

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 (appropriate units, e.g., cm)

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# **CALCULATED RESULTS**

Radio Frequency Radiation Exposure Evaluation

BLE GFSK Mode										
Frequency	quency Output Power to Antenna Gain F		Power Density	Limit	Test Result					
(MHz)	(dBm)	(mW)	(dBi)	(Numeric)	(mW/cm2)	(mW/cm2)				
2402	-3.14	0.49	0	1	0.00137	1	Complies			
2440	-3.43	0.45	0	1	0.00155	1	Complies			
2480	-4.30	0.37	0	1	0.00169	1	Complies			

WIFI 802.11b Mode									
Frequency	•	Power to enna	Antenna Gain		Power Density	Limit	Test Result		
(MHz)	(dBm)	(mW)	(dBi)	(Numeric)	(mW/cm2)	(mW/cm2)			
2412	15.56	35.97	3.37	2.17	0.01555	1	Complies		
2437	16.86	48.53	3.37	2.17	0.02098	1	Complies		
2462	16.52	44.87	3.37	2.17	0.01940	1	Complies		

WIFI 802.11g Mode										
Frequency	•	Power to enna	Antenna Gain		Power Density	Limit	Test Result			
(MHz)	(dBm)	(mW)	(dBi)	(Numeric)	(mW/cm2)	(mW/cm2)				
2412	19.41	87.30	3.37	2.17	0.03773	1	Complies			
2437	22.72	187.07	3.37	2.17	0.08086	1	Complies			
2462	19.31	85.31	3.37	2.17	0.03687	1	Complies			

WIFI 802.11n HT20 Mode										
Frequency		Output Power to Antenna Antenna Gain		Power Density	Limit	Test Result				
(MHz)	(dBm)	(mW)	(dBi)	(Numeric)	(mW/cm2)	(mW/cm2)				
2412	18.87	77.09	3.37	2.17	0.03332	1	Complies			
2437	21.71	148.25	3.37	2.17	0.06408	1	Complies			
2462	18.64	73.11	3.37	2.17	0.03160	1	Complies			

Note: the calculated distance is 20cm.

# **END OF REPORT**

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