



ElectroMagnetic Field(EMF) Radiation Exposure

Compliance Test Report

For
Deity Connect

3rd Floor, Building 21, Longjun industrial estate, Longhua, Bao'an, Shenzhen,

P.Shenzhen,China

Model: Deity Connect

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Modified History

REV.	Modification Description	Issued Date
REV 1.0	Initial Test Report Release	Mar. 26, 2019





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1. General information

1.1 EUT Description

Device Information:			
Product Type:	Deity Connect		
Model:	Deity Connect DUO-RX		
Trade Name:			
Device Type:	☒ Engineering Sample. ☐ Product Sample, ☐ Mass Product Sample.		
Exposure Category:	uncontrolled environment / general population		
Hardware version:	V2.2		
Software version :	Deity Connect DUO-RX		
Antenna Type :	Integral Antenna		
EUT Power Rating:	Battery: JMD 805053 Voltage: 3.7V Capacity: 2200mAh		
Device Operating Configurations:			
Supporting Mode(s) :	FHSS		
Modulation:	shaped-2FSK, shaped-8FSK		
Operating Frequency Range(s)	Band	TX(MHz)	RX(MHz)
	FHSS	2406~2474	2406~2474
	1-10-18 (FHSS)		



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2. Test specification(s)

ANSI Std C95.1-2005	Safety Levels with Respect to Human Exposure to Radio Frequency Electromagnetic Fields, 3 kHz to 300 GHz.
IEEE Std 1528-2013	Recommended Practice for Determining the Peak Spatial-Average Specific Absorption Rate (SAR) in the Human Head from Wireless Communications Devices: Measurement Techniques





3 Testing laboratory

Test Site	QTC Certification & Testing Co., Ltd.
Test Location	2nd Floor, BI Building, Fengyeyuan Industrial Plant, Liuxian 2st. Road, Xin'an Street, Bao'an District, Shenzhen, 518000
Telephone	+86-755-26996144 EXT:8164
Fax	+86-755-26996253

4 Applicant and Manufacturer

Applicant/Client Name:	Aputure Imaging Industries Co. Ltd
Applicant Address:	3rd Floor, Building 21, Longjun industrial estate, Longhua, Bao'an, Shenzhen, P. Shenzhen, China
Manufacturer Name:	Aputure Imaging Industries Co. Ltd
Manufacturer Address:	3rd Floor, Building 21, Longjun industrial estate, Longhua, Bao'an, Shenzhen, P. Shenzhen, China

5 RF Exposure

An estimation of EMF in this application for product is used to ensure if it comply with the reference level of IEEE Std 1528

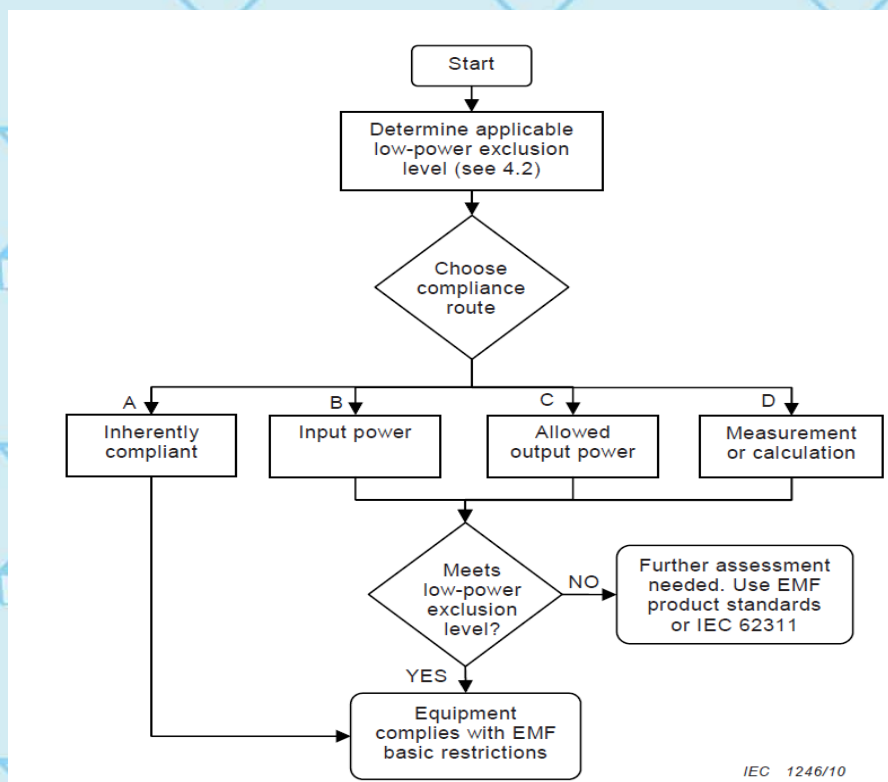
The assessment of compliance boundary shall be performed by calculation and/or measurement in accordance with IEEE Std 1528

Specified condition on device output power, which may also depend on other variables. Such as frequency and distance of radiating source from persons, such that exposure level produced by the source will not exceed a specific basic restriction. if the device out power is less than P_{max} , then the device is deemed to comply with the basic restrictions.





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Low-power electronic and electrical equipment is deemed to comply with the provisions of this standard if it can be demonstrated using routes B, C or D that the available antenna power and/or the average total radiated power is less than or equal to the applicable low-power exclusion level P_{max} .

5.1 Low-power exclusion level (P_{max})

5.1.1 Low-power exclusion level (P_{max}) based on considerations of SAR

When SAR is the basic restriction, a conservative minimum value for P_{max} can be derived, equal to the localized SAR limit (SAR_{max}) multiplied by the averaging mass (m):

$$P_{max} = SAR_{max} \cdot m$$

. Example values of P_{max} is gave in Table5.1





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Table 5.1 – Example values of SAR-based $P_{\max}$ for some cases described by ICNIRP

Guideline / Standard	SAR limit, $SAR_{\max}$ W/kg	Averaging mass, m g	$P_{\max}$ mW	Exposure tier*	Region of body*
ICNIRP [1]	2	10	20	General public	Head and trunk
	4	10	40	General public	Limbs
	10	10	100	Occupational	Head and trunk
	20	10	200	Occupational	Limbs
IEEE Std C95.1-1999 [2]	1.6	1	1.6	Uncontrolled environment	Head, trunk, arms, legs
	4	10	40	Uncontrolled environment	Hands, wrists, feet and ankles
	8	1	8	Controlled environment	Head, trunk, arms, legs
	20	10	200	Controlled environment	Hands, wrists, feet and ankles
IEEE Std C95.1-2005 [3]	2	10	20	Action level	Body except extremities and pinnae
	4	10	40	Action level	Extremities and pinnae
	10	10	100	Controlled environment	Body except extremities and pinnae
	20	10	200	Controlled environment	Extremities and pinnae

* Consult the appropriate standard for more information and definitions of terms.



6 TEST RESULTS

Refer to report XE04 WSCT-R&E19010048A-BT for more details.

6.1. Calculation and conclusion

Calculation and conclusion of BLE

Item	EIRP(dBm)	Max Power(mW)	Limit (mW)	Result
BT	16	16	20	PASS





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EUT Photographs

Appearance photograph of EUT



Internal photograph of EUT



— END OF REPORT —

