RF Exposure Evaluation

FCC ID: 2AACU-PD20

1. Client Information

Applicant	:	ShenZhen Link-Create Technology Co., Ltd.
Address	:	6/F., 17 Building, Pingshan Industrial Park, Taoyuan Street, Nanshan, Shenzhen, China
Manufacturer	:	ShenZhen Link-Create Technology Co., Ltd.
Address	:	6/F., 17 Building, Pingshan Industrial Park, Taoyuan Street, Nanshan, Shenzhen, China

2. General Description of EUT

EUT Name	:	MID	
Models No.	:	PD20, PD10-PD100, PD200-PD900, PA10-PA100, PX1-PA100, PM10-PM100, PW10-PW100, AP10-AP100, SP1-SP100, SX1-SX100, PH10-PH100	
Model Difference	:	The different models are identical in schematic, structure and critical component, the only different is the appearance.	
Product Description	:	Operation Frequency: 802.11b/g/n(HT20): 2412MHz~2462MHz 802.11n(HT40): 2422MHz~2452MHz	
		Number of Channel:	802.11b/g/n(HT20):11 channels 802.11n(HT40): 7 channels
		Out Power:	802.11b: 9.47 dBm 802.11g: 8.64 dBm 802.11n (HT20): 8.63 dBm 802.11n (HT40): 8.78 dBm
		Antenna Gain:	0 dBi Printed Antenna
		Modulation Type:	802.11b: DSSS (CCK, QPSK, BPSK) 802.11g: OFDM 802.11n: OFDM
		Bit Rate of Transmitter:	802.11b:11/5.5/2/1 Mbps 802.11g:54/48/36/24/18/12/9/6 Mbps 802.11n:up to 150Mbps
Power Supply	:	DC power by AC/DC Adapter. USB DC power from Host system. DC Voltage supplied from Li-Polymer battery.	
Power Rating	:	AC/DC Adapter Input: 100~240V 50/60 Hz 0.2A Output: DC 5V 2A	

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		DC 3.7V 3000mAh from Li-Polymer battery
Connecting I/O Port(S)	**:**	Please refer to the User's Manual

Note

For a more detailed features description, please refer to the RF Test Report.

MPE Calculations

1. FCC: According to KDB 447498 D01 Mobile and Portable Devices RF Exposure Procedures and Equipment Authorization Policies V05.

Appendix A: SAR Test Thresholds for 100MHz~6GHz and ≤50mm.

SAR can be exempted if the output power is less than the SAR exclusion

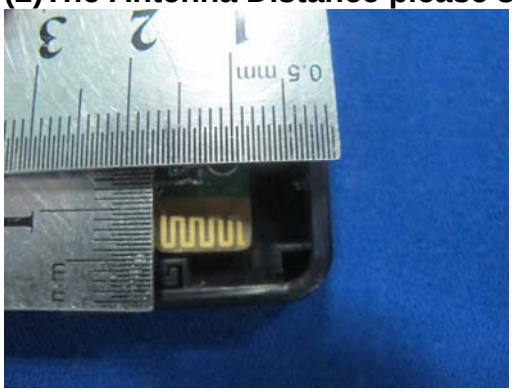
(1)Threshold: For F=2450, and Distance=5mm, the output power is less than 10mW (10 dBm).

Please see the follow table:

MHz	5	10	15	20	25	mm
150	39	77	116	155	194	SAR Test Exclusion Threshold (mW)
300	27	55	82	110	137	
450	22	45	67	89	112	
835	16	33	49	66	82	
900	16	32	47	63	79	
1500	12	24	37	49	61	
1900	11	22	33	44	54	
2450	10	19	29	38	48	
3600	8	16	24	32	40	
5200	7	13	20	26	33	
5400	6	13	19	26	32	
5800	6	12	19	25	31	

MHz	30	35	40	45	50	mm
150	232	271	310	349	387	SAR Test Exclusion Threshold (mW)
300	164	192	219	246	274	
450	134	157	179	201	224	
835	98	115	131	148	164	
900	95	111	126	142	158	
1500	73	86	98	110	122	
1900	65	76	87	98	109	
2450	57	67	77	86	96	
3600	47	55	63	71	79	
5200	39	46	53	59	66	
5400	39	45	52	58	65	
5800	37	44	50	56	62	

(2)The Antenna Distance please see the actual photo such bellow:



2. Calculation:

EIRP= P+G

Where P=Conducted Output Power (dBm)

G=Power Gain of the Antenna (dBi)

So

802.11b/g/n(HT20)				
Test Mode	Conducted Power (dBm)	Antenna Gain (dBi)	EIRP (dBm)	EIRP (mW)
802.11b	9.47	0	9.47	8.8512
802.11g	8.64	0	8.64	7.3114
802.11n(HT20)	8.63	0	8.63	7.2946
802.11n(HT40)	8.78	0	8.78	7.5509

3. Conclusion:

No SAR Evaluation required since Transmitter output power is bellow FCC threshold and IC standards.