

<b>Test Report Number:</b>	<b>LCZE25080014</b>		<b>Total Page(s):</b> 2		
<b>Applicant Name:</b>	ARTCILUX LIGHTING (HK) CO., LIMITED				
<b>Applicant Address:</b>	RM 705, 7/F, FA YUAN COMMERCIAL BUILDING, NOS. 75-77, FA YUEN STREET, KOWLOON, HK.				
<b>Product Name:</b>	Wireless hand sweep induction remote control switch				
<b>Model / Type Reference:</b>	2S-S1312SE, 2S-S1313SE				
<b>FCC ID:</b>	2BRRRC-S1313SE				
<b>Date of Issue:</b>	2025-08-11				
<b>Testing Laboratory:</b>	LCTECH Guangdong Testing Services Co., Ltd. 2/F, Technology and Enterprise Development Center, Guangyuan Road, Xiaolan, Zhongshan, Guangdong, China				
<b>Test Specification:</b>	KDB 447498 D04 Interim General RF Exposure Guidance v01				
<b>Test Result:</b>	Passed				
<b>Compiled by:</b>	<b>Reviewed by:</b>				
2025-08-11 Rex He	Rex He	2025-08-11 Tension Li	Tension Li		
<i>Date</i>	<i>Name</i>	<i>Signature</i>	<i>Date</i>	<i>Name</i>	<i>Signature</i>
<b>Remark:</b>					
N/A					
<p>The duplication of this report or parts of it and its use for advertising purposes is only allowed with permission of the testing laboratory. This report contains the result of the examination of the product sample submitted by the applicant. A general statement concerning the quality of the products from the series manufacture cannot be derived therefore.</p>					

## RF Exposure evaluation

According to 447498 D04 Interim General RF Exposure Guidance v01

$$P_{th} \text{ (mW)} = ERP_{20 \text{ cm}} \text{ (mW)} = \begin{cases} 2040f & 0.3 \text{ GHz} \leq f < 1.5 \text{ GHz} \\ 3060 & 1.5 \text{ GHz} \leq f \leq 6 \text{ GHz} \end{cases} \quad (\text{B.1})$$

$$P_{th} \text{ (mW)} = \begin{cases} ERP_{20 \text{ cm}}(d/20 \text{ cm})^x & d \leq 20 \text{ cm} \\ ERP_{20 \text{ cm}} & 20 \text{ cm} < d \leq 40 \text{ cm} \end{cases} \quad (\text{B.2})$$

where

$$x = -\log_{10} \left( \frac{60}{ERP_{20 \text{ cm}} \sqrt{f}} \right)$$

and  $f$  is in GHz,  $d$  is the separation distance (cm), and  $ERP_{20\text{cm}}$  is per Formula (B.1). The example values shown in Table B.2 are for illustration only.

Table B.2—Example Power Thresholds (mW)

Frequency (MHz)	Distance (mm)									
	5	10	15	20	25	30	35	40	45	50
300	39	65	88	110	129	148	166	184	201	217
450	22	44	67	89	112	135	158	180	203	226
835	9	25	44	66	90	116	145	175	207	240
1900	3	12	26	44	66	92	122	157	195	236
2450	3	10	22	38	59	83	111	143	179	219
3600	2	8	18	32	49	71	96	125	158	195
5800	1	6	14	25	40	58	80	106	136	169

$$eirp = pt \times gt = (Exd)^2 / 30$$

where: pt = transmitter output power in watts,

gt = numeric gain of the transmitting antenna (unitless),

E = electric field strength in V/m, --- 10  $((dB_{uV}/m)/20) / 10^6$

d = measurement distance in meters (m)---3m Sopt =  $(Exd)^2 / 30 \times gt$

Frequency(MHz)	Field Strength (dB <sub>uV</sub> /m)	eirp(mW)	limit (mW)	min. distance (cm)
2420	80.59	0.034	3	0.50

Then SAR evaluation is not required