Test Report N	umber:	LCZE25	5040049			Total	Page(s):2
Applicant Nan	Advance	Advanced Purification Engineering Corporation (APEC)					
Applicant Address:		1550 Va	1550 Valley Vista Dr, Suite 250, Diamond Bar, CA 91765				
Product Name:		Wi-Fi W	Wi-Fi Water Leak Detector				
Model / Type Reference:		SMTD-0	SMTD-001				
FCC ID:		2BOU3-	2BOU3-SMTD-001				
Date of Issue:		2025-04	2025-04-18				
Testing Laboratory:		LCTECH 2/F.,Tec Road, X	LCTECH Guangdong Testing Services Co., Ltd. 2/F.,Technology and Enterprise Development Center, Guangyuan Road, Xiaolan, Zhongshan, Guangdong, China				ngyuan
Test Specification:		KDB 447498 D01 General RF Exposure Guidance v06					
Test Result:	Passed						
Compiled by:		Reviewed by:					
2025-04-18	Rex He	Rex 1	He	2025-04-18	Tension Li	Tension	(;
Date	Name	Signature		Date	Name	Signature	
Remark:							
N/A							
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## **RF Exposure Evaluation**

Frequency range (MHz)	Electric field strength (V/m)	Magnetic field strength (A/m)	Power density(mW /cm²)	Averaging time (minutes)				
(A)Limits for Occupational/Controlled Exposures								
0.3-3.0	614	1.63	*(100)	6				
3.0-30	1842/f	4.89/f	*(900/f <sup>2</sup> )	6				
30-300	61.4	0.163	1.0	6				
300-1500			f/300	6				
1500-100,000			5	6				
(B)Limits for General Population/Uncontrolled Exposure								
0.3-1.34	614	1.63	*(100)	30				
1.34-30	824/f	2.19/f	*(180/f <sup>2</sup> )	30				
30-300	27.5	0.073	0.2	30				
300-1500			f/1500	30				
1500-100,000			1.0	30				

f = frequency in MHz

Friis transmission for mula: Pd = (Pout\*G)/(4\*pi\*r<sup>2</sup>)

Where

Pd =power density in mW/cm<sup>2</sup>, Pout= output power to antenna in mW;

G = gain of antenna in linear scale, Pi=3.1416;

 ${\bf R}$  = distance between observation point and center of the radiator in cm

Pdid the limit of MPE,1mW/cm<sup>2</sup>. If we know the maximum gain of the antenna and the total power input to the antenna, through the calculation, we will know the distancer where the MPE limitisreached.

## **Test Procedure**

Software provided by client enabled the EUT to transmit and receive data at lowest, middle and highest channel individually.

## Test Result of RF Exposure Evaluation

Channel	Outputpower toantenna(dBm )	Outputpower toantenna(mW )	PowerDensity atR=20cm (mW/cm2)	Limit (mW/cm2)	Result
2412MHz	10.727	11.822	0.00882	1.0	PASS

Remark: antenna gain=3.75dBi

The max power density is less than MPE exempt limit, so it is compliance.