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# RF EXPOSURE REPORT





**Applicant:** Westermo Neratec AG

Rosswiesstrasse 29, 8608 Bubikon, Switzerland

Manufacturer: Westermo Neratec AG

Rosswiesstrasse 29, 8608 Bubikon, Switzerland

Product Name: WLAN Access Point

Brand Name: WESTERMO

Model No.: lbex-1510-T2G2.5 NA

**FCC ID** 2AEJD-3628-15102

Date of EUT Received: Oct. 09, 2024

**Issue Date:** Jan. 14, 2025

Approved By

John Yeh

### We hereby certify that:

The above equipment was evaluated by SGS Taiwan Ltd. The evaluation in this report is in compliance with FCC Rule Part §2.1091, KDB 447498 D01 v06.

The results of this report relate only to the sample identified in this report.

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Revision History								
Report Number	Revision	Description	Issue Date	Revised By	Remark			
TESA2410000634ES	00	Original	Dec. 04, 2024	Kimmy Chiou				
TESA2410000634ES	01	Modify comment	ify comment Jan. 08, 2025 Kimmy Chiou		*			
TESA2410000634ES	<b>0</b> 2	Modify comment	nt Jan. 14, 2025 Kimmy Chiou		*			

### Note:

1 . The remark "\*" indicates modification of the report upon requests from certification body.

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## **DESCRIPTION OF EQUIPMENT UNDER TEST (EUT)**

### **Product Description**

Product Name:	WLAN Access Point
Brand Name:	WESTERMO
Model No.:	lbex-1510-T2G2.5 NA

#### 1.2 **Evaluation site**

Laboratory	Site Address [		FCC Designation number	ISED Company Number	CAB Identifier	
SGS Taiwan Ltd. Central RF Lab. (TAF code 3702)	$\boxtimes$	No. 134, Wu Kung Road, New Taipei Industrial Park, Wuku District, New TW0027 4620A Taipei City, 24803, Taiwan.		4620A		
		No. 2, Keji 1st Rd., Guishan Township, Taoyuan County, 333 Taiwan.	TW0028	4620E	TW3702	
		1F, No. 8, Alley 15, Lane 120, Sec. 1, Nei Hu Road, Neihu District, Taipei City, 222 Taiwan.	TW0029	23862		

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### **Antenna Information:**

Antenna Type	Brand	Model	Freq. (MHz)	Peak Antenna Gain (dBi)
Dinolo	Dinala Llubar 9 Cubrar	SENCITV® Omni SD 2v2 MIMO (1200 25 0009)	2400-2483.5	4.00
Dipole Hu	Huber & Suhner	SENCITY® Omni-SR 3x3 MIMO (1399.35.0008)	5150-5850	6.00
Patch	Westermo	ICL-5	5150-5960	4.00

**Note:** Antenna information is provided by the applicant.

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## **MAXIMUM PERMISSIBLE EXPOSURE (MPE)**

#### 2.1 **FCC Standard Applicable**

According to §1.1307(b)(1), systems operating under the provisions of this section shall be operated in a manner that ensure that the public is not exposed to radio frequency energy level in excess of the Commission's guideline.

This is a Mobile device, the MPE is required.

According to §1.1310 and §2.1091 RF exposure is calculated.

Limits for Maximum Permissive Exposure (MPE)

Frequency Range	Electric Field	Magnetic Field	Power Density	Averaging Time				
(MHz)	Strength (V/m)	n (V/m) Strength (A/m) (mW/cm²)		(minute)				
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				
1500-100000	/	/	1.0	30				

f = frequency in MHz

Prediction of MPE limit at a given distance

 $S=PG/4\pi R^2$ 

Where: S = Power density

P = Power input to antenna

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

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<sup>\* =</sup> Plane-wave equipment power density



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### **Power Density Calculation (Worst Case)**

Operation Mode	Evaluation Frequency (MHz)	Operation Distance (cm)	Max.Output Power Include Tolerance (dBm)	Antenna Gain (dBi)	Max. EIRP (mW)	Power Density (PD) (mW/cm²)	Limit (mW/cm <sup>2</sup> )	Pass / Fail	Power Density / Limit
WLAN 2.4G	2442.00	20	25	4.00	794.33	0.158	1.000	Pass	0.158
WLAN 5.2G	5180.00	20	15	6.00	125.89	0.025	1.000	Pass	0.025
WLAN 5.3G	5350.00	20	23	6.00	794.33	0.158	1.000	Pass	0.158
WLAN 5.6G	5470.00	20	23	6.00	794.33	0.158	1.000	Pass	0.158
WLAN 5.8G	5725.00	20	25	6.00	1258.93	0.251	1.000	Pass	0.251

Note: For conservativeness, the lowest uplink frequency of each band is used to determine the MPE limit of that band.

~ End of Report ~

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