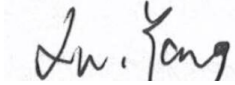


TEST REPORT

For RF Expose

Report No.....	CHTW25090086		
Project No	SHT2508094501W		
FCC ID	SK4BDR-4550		
Applicant's name.....	BridgeIP, LLC		
Address	113 S. Bridge St. Smithville Missouri 64089 United States		
Product Name	Digital/Analog Repeater		
Trade Mark.....	BridgeCom System, 		
Model No.....	BDR-4550		
Listed Model(s)	-		
Standard.....	FCC Part 2 (Section 2.1091)		
Date of receipt of test sample.....	2025/09/01		
Date of testing.....	2025/09/01- 2025/09/26		
Date of issue.....	2025/09/28		
Result	Pass		
Compiled by (Position+Printed name+Signature). :	File administrator	Xiaodong Zhao	
Supervised by (Position+Printed name+Signature). :	Project Engineer	Kiki Kong	
Approved by (Position+Printed name+Signature). :	RF Manager	Xu Yang	
Testing Laboratory Name.....	Shenzhen Huatongwei International Inspection Co., Ltd.		
Address	Building 7, Baiwang Idea Factory, No.1051, Songbai Road, Yangguang Community, Xili Subdistrict, Nanshan District, Shenzhen, Guangdong, China		
Test Report Form No.	R0066		
Test Report Form(s) Originator.....	Shenzhen Huatongwei International Inspection Co., Ltd.		
Master TRF	Dated 2025-07		
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1. TEST STANDARDS AND REPORT VERSION

1.1. Test standards

The tests were performed according to following standards:

[FCC Part 2 \(Section 2.1091\)](#)- Radiofrequency radiation exposure evaluation: mobile devices.

[KDB 447498 D04 Interim General RF Exposure Guidance v01](#)- RF Exposure Procedures and Equipment Authorization Policies for Mobile and Portable Devices

[FCC Part 1 \(Section 1.1307\)](#)- Actions that may have a significant environmental effect, for which Environmental Assessments (EAs) must be prepared.

1.2. Report version information

Revision No.	Date of issue	Description
N/A	2025-09-28	Original

2. SUMMARY

2.1. Client Information

Applicant:	BridgeIP, LLC
Address:	113 S. Bridge St. Smithville Missouri 64089 United States
Manufacturer:	BridgeIP, LLC
Address:	113 S. Bridge St. Smithville Missouri 64089 United States
Factory:	BridgeIP, LLC
Address:	113 S. Bridge St. Smithville Missouri 64089 United States

2.2. Product Description

Product name:	Digital/Analog Repeater
Trade mark:	BridgeCom System, 
Model No.:	BDR-4550
Listed model(s):	-
Power supply:	DC 13.8V or AC 110V
EXPOSURE	☒ Occupational/Controlled ☐ General Population/Uncontrolled
Hardware version:	H2.1.6.8(U1)
Software version:	S0.4.58DU1GD

2.3. Radio Specification Description

Operation Frequency Range:	400~470MHz	
Rated Output Power:	☒ High Power: 50W	☒ Low Power: 25W
Modulation Type:	Analog: FM	
	Digital: 4FSK	
Channel Separation:	Analog:	☒ 12.5kHz ☐ 25kHz
	Digital(DMR) :	☒ 12.5kHz
	Digital(NXDN) :	☒ 6.25kHz

Note

#1: Please refer to RF report for detailed technical specifications

2.4. Testing Laboratory Information

Laboratory Name	Shenzhen Huatongwei International Inspection Co., Ltd.
Laboratory Location	Building 7, Baiwang Idea Factory, No.1051, Songbai Road, Yangguang Community, Xili Subdistrict, Nanshan District, Shenzhen, Guangdong, China
Contact information:	Tel: 400-963-0755 E-mail: cs@szhtw.com.cn http://www.szhtw.com.cn

3. RF EXPOSURE

LIMIT

© **Single transmitter:**

The criteria listed in the following table shall be used to evaluate the environment impact of human exposure to radio frequency (RF) radiation as specified in 1.1307(b)

Limits for Maximum Permissible Exposure (MPE)

Frequency range (MHz)	Electric field strength (V/m)	Magnetic field strength (A/m)	Power density (mW/cm ²)	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 ²)	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 ²)	30
30–300	27.5	0.073	0.2	30
300–1500	-	-	f/1500	30
1500–100,000	-	-	1.0	30

Note: f = frequency in MHz

© **Simultaneous transmission:**

Simultaneous transmission MPE test exclusion applies when the sum of the MPE ratios for all simultaneously transmitting antennas incorporated in a host device is ≤1.0.

EVALUATION METHOD

Transmission formula: $P_d = (P_{out} * G) / (4 * \pi * r^2)$

Where

P_d = power density in mW/cm², **P_{out}** = output power to antenna in mW, **G** = gain of antenna in linear scale;

P_i = 3.1416, **R** = distance between observation point and center of the radiator in cm

TEST RESULT☒ **Passed**☐ **Not Applicable**

Radio Type	Frequency range (MHz)	Conducted Power (dBm)	Maximum Tune-up (dBm)	Antenna Gain(dBi)	r(m)	Power Density (mW/cm ²)	Limit (mW/cm ²)	Result
PMR	400-470	47.10	47.50	10	1.84	1.3224	1.333	Pass
PMR	400-470	47.10	47.50	5	1.04	1.3081	1.333	Pass
PMR	400-470	47.10	47.50	2	0.73	1.3275	1.333	Pass
PMR	400-470	47.10	47.50	0	0.58	1.3309	1.333	Pass
PMR	400-470	47.10	47.50	-2	0.46	1.3330	1.333	Pass
PMR	400-470	47.10	47.50	-5	0.33	1.3156	1.333	Pass
PMR	400-470	47.10	47.50	-10	0.19	1.2402	1.333	Pass

Note:

- 1) *r* is the distance from observation point to the antenna which is declared by the applicant.
- 2) *: refer to the RF report.

If the gain of the antenna is 0dBi, the separation distance is at least 0.58m from body and the antenna, so meet this standard requirement.

4. EXTERNAL AND INTERNAL PHOTOS OF THE EUT

Reference to the test report No. CHTW25090085

-----End of Report-----