TESTING LABORATORY
CERTIFICATE #4820.01

MAXIMUM PERMISSIBLE EXPOSURE

TEST REPORT

For

Hytera Communications Corporation Limited

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China

FCC ID: YAMHR106XU1S

Report Type:	**Product Type:**
Original Report	DIGITAL REPEATER

Report Number: DG2210621-24327E-20A

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FCC §1.1310 &FCC §2.1091- MAXIMUM PERMISSIBLE EXPOSURE (MPE)

Product Description for Equipment under Test (EUT)

Product Name:	DIGITAL REPEATER
Test Model:	HR1062 U1
Multiple Models:	HR1065 U1, HR1066 U1, HR1068 U1, HDR1062 U1, HDR1065 U1, HDR1066 U1, HDR1068 U1
Model Difference:	Refer to the DOS letter
Rated Input Voltage:	AC 120V or DC 13.6V
Serial Number:	Basic Version (single Ethernet interface configuration): DG2210621-24327E-RF -S1 Advanced Version (double Ethernet interface configuration): DG2210621-24327E-RF -S2
EUT Received Date:	2021.06.25
EUT Received Status:	Good

Declarations

BACL is not responsible for the authenticity of any test data provided by the applicant. Data included from the applicant that may affect test results are marked with a triangle symbol "▲". Customer model name, addresses, names, trademarks etc. are not considered data.

Unless otherwise stated the results shown in this test report refer only to the sample(s) tested.

Otherwise required by the applicant or Product Regulations, Decision Rule in this report did not consider the uncertainty.

The extended uncertainty given in this report is obtained by combining the standard uncertainty times the coverage factor K with the 95% confidence interval.

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Applicable Standard

According to 1.1307 (b)(1), 2.1091 systems operating under the provisions of this section shall be operated in a manner that ensures the public is not exposed to RF energy level in excess of the communication guidelines.

Limits for Maximum Permissible Exposure (MPE)

Limits for Occupational/Controlled Exposure				
Frequency Range (MHz)	**Electric Field Strength (V/m)**	**Magnetic Field Strength (A/m)**	**Power Density (mW/cm^2)**	**Averaging Time (minutes)**
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

f = frequency in MHz;
* = Plane-wave equivalent power density;

MPE Calculation

Prediction of power density at the distance of the applicable MPE limit

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

Where: S = power density (in appropriate units, e.g. mW/cm^2);
P = power input to the antenna (in appropriate units, e.g., mW);
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 (appropriate units, e.g., cm);

MPE Results

Frequency (MHz)	**Maximum Allowable Antenna Gain (dBi)**	**Cable Loss (dB)**	**Maximum Average output power including Tune-up Tolerance (dBm)**	**Operation Duty Cycle (%)**	**Evaluation Distance (cm)**	**Power Density (mW/cm^2)**	**Power Density Limit (mW/cm^2)**
400-470	5	1	47	50	63	1.265	1.333

Result: Device meet MPE requirement at 63 cm distance away from Antenna.

Result: Compliance

******* END OF REPORT *******