

FCC RF EXPOSURE REPORT

FCC ID: 2BMSX-KV01M

Project No. : 2512C281A
Equipment : 5G Remote KVM
Brand Name : KATALYST
Test Model : KAT-KV01M
Model Name : KAT-KV01M
Hardware Version : V1.1
Software Version : V1.9.1
Applicant : Bolt Brands, LLC
Address : 8435 Ellerson Dr, Unit 7 Mechanicsville, VA 23111, United States
Manufacturer : Bolt Brands, LLC
Address : 8435 Ellerson Dr, Unit 7 Mechanicsville, VA 23111, United States
Date of Receipt : Aug. 03, 2026
Date of Test : Aug. 03, 2026 ~ Aug. 20, 2026
Issued Date : Sep. 08, 2026
Test Sample : Engineering Sample No.: DG920251224153
Standard(s) : FCC Guidelines for Human Exposure IEEE C95.1 & FCC Part 2.1091
FCC Title 47 Part 2.1091 & KDB 447498 D01 v06

The above equipment has been tested and found compliance with the requirement of the relative standards by BTL Inc. (Dongguan)

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Declaration

BTL represents to the client that testing is done in accordance with standard procedures as applicable and that test instruments used has been calibrated with standards traceable to international standard(s) and/or national standard(s).

BTL's reports apply only to the specific samples tested under conditions. It is manufacturer's responsibility to ensure that additional production units of this model are manufactured with the identical electrical and mechanical components. BTL assumes no responsibility for the data provided by the customer, any statements, inferences or generalizations drawn by the customer or others from the reports issued by BTL.

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BTL is not responsible for the sampling stage, so the results only apply to the sample as received.

The information, data and test plan are provided by manufacturer which may affect the validity of results, so it is manufacturer's responsibility to ensure that the apparatus meets the essential requirements of applied standards and in all the possible configurations as representative of its intended use.

Limitation

For the use of the authority's logo is limited unless the Test Standard(s)/Scope(s)/Item(s) mentioned in this test report is (are) included in the conformity assessment authorities acceptance respective.

Please note that the measurement uncertainty is provided for informational purpose only and are not use in determining the Pass/Fail results.

REVISION HISTORY

Report No.	Version	Description	Issued Date	Note
BTL-FCCP-4-2512C281A	R00	This is a supplementary report to the original test report (BTL-FCCP-4-2512C281). 1. Changed the product name, model name, brand name, software version and hardware version information. 2. The external Wi-Fi antenna has been changed to an internal one. 3. The WWAN antenna has been lengthened and WWAN div antenna changed to an externa one but the antenna gain are unchanged. 4. Removed the factory information. Based on above described changes so test result are calculated and recorded. Others are kept the same.	Sep. 01, 2026	Invalid
BTL-FCCP-4-2512C281A	R01	This report updated the evaluate results on page 6&7. It is a revision of the report BTL-FCCP-4-2512C281A R00. This is a newly released report, replacing the BTL-FCCP-4-2512C281A R00 report.	Sep. 08, 2026	Valid

1. MPE CALCULATION METHOD

Calculation Method of RF Safety Distance:

$$S = \frac{PG}{4\pi^2} = \frac{EIRP}{4\pi^2}$$

where:

S = power density

P = power input to the 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

2. ANTENNA SPECIFICATION

For 2.4GHz

Ant.	Brand	Model Name	Antenna Type	Connector	Gain (dBi)
1	QUECTEL	Y0RGH0CB3AA	PCB	N/A	4.1

Note: The antenna gain is provided by the manufacturer.

For 5GHz:

Ant.	Brand	Model Name	Antenna Type	Connector	Gain (dBi)
1	QUECTEL	Y0RGH0CB3AA	PCB	N/A	4.5

Note: The antenna gain is provided by the manufacturer.

For LTE:

Brand	Model Name	Antenna Type	Connector	Gain(dBi)	Note
QUECTEL	YECN009AA-0RGHCB3A	Dipole	N/A	1.36	LTE Band 2
				0.77	LTE Band 4
				-0.12	LTE Band 5
				0.92	LTE Band 7
				-1.67	LTE Band 12
				-0.76	LTE Band 13
				-0.86	LTE Band 14
				-1.67	LTE Band 17
				1.36	LTE Band 25
				-0.79	LTE Band 26 (814-824MHz)
				-0.12	LTE Band 26 (824-849MHz)
				-5.92	LTE Band 30
				0.70	LTE Band 38
				0.92	LTE Band 41
				-4.55	LTE Band 42 (3450-3550MHz)
				-7.21	LTE Band 42 (3550-3600MHz)
				-7.21	LTE Band 43 (3700-3800MHz)
				-7.21	LTE Band 43 (3600-3700MHz)
				-7.21	LTE Band 48
				1.06	LTE Band 66
				0.71	LTE Band 70
				-1.69	LTE Band 71

Note: The antenna gain is provided by the manufacturer.

For 5G NR:

Brand	Model Name	Antenna Type	Connector	Gain(dBi)	Note
	YECN009AA-0RGHCB3A	Dipole	N/A	1.36	5G NR n2
				-0.12	5G NR n5
				0.92	5G NR n7
				-1.67	5G NR n12
				-0.76	5G NR n13
				-0.86	5G NR n14
				1.36	5G NR n25
				-0.79	5G NR n26 (814-824MHz)
				-0.12	5G NR n26 (824-849MHz)
				-5.92	5G NR n30
				0.70	5G NR n38
				0.92	5G NR n41
				1.06	5G NR n66
				0.71	5G NR n70
				-1.69	5G NR n71
				-4.34	5G NR n77 (3700-3980MHz)
				-4.55	5G NR n77 (3450-3550MHz)
				-7.21	5G NR n78 (3700-3800MHz)
				-4.55	5G NR n78 (3450-3550MHz)

Note: The antenna gain is provided by the manufacturer.

3. CALCULATED RESULT

For 2.4GHz:

Antenna Gain (dBi)	Antenna Gain (numeric)	Max. Output Power (dBm)	Max. Output Power (mW)	Power Density (S) (mW/cm ²)	Limit of Power Density (S) (mW/cm ²)	Test Result
4.10	2.5704	16.77	47.5335	0.0243	1	Complies

For 5GHz:

Antenna Gain (dBi)	Antenna Gain (numeric)	Max. Output Power (dBm)	Max. Output Power (mW)	Power Density (S) (mW/cm ²)	Limit of Power Density (S) (mW/cm ²)	Test Result
4.50	2.8184	17.31	53.8270	0.0302	1	Complies

For LTE:

Band	Frequency (MHz)	Max. Tune up Power (dBm)	Antenna Gain (dBi)	Antenna Gain (linear)	Output Power to Antenna	Power Density (mW/cm ²)	Power Density Limit (mW/cm ²)	Test Result
LTE Band 2	1850.7	25	1.36	1.3677	432.51	0.0860	1.0000	Complies
LTE Band 4	1710.7	25	0.77	1.1940	377.57	0.0751	1.0000	Complies
LTE Band 5	824.7	25	-0.12	0.9727	307.61	0.0612	0.5498	Complies
LTE Band 7	2502.5	25	0.92	1.2359	390.84	0.0778	1.0000	Complies
LTE Band 12	699.7	25	-1.67	0.6808	215.28	0.0428	0.4665	Complies
LTE Band 13	779.5	25	-0.76	0.8395	265.46	0.0528	0.5197	Complies
LTE Band 14	790.5	25	-0.86	0.8204	259.42	0.0516	0.5270	Complies
LTE Band 17	706.5	25	-1.67	0.6808	215.28	0.0428	0.4710	Complies
LTE Band 25	1850.7	25	1.36	1.3677	432.51	0.0860	1.0000	Complies
LTE Band 26 (814-824MHz)	814.7	25	-0.79	0.8337	263.63	0.0525	0.5431	Complies
LTE Band 26 (824-849MHz)	824.7	25	-0.12	0.9727	307.61	0.0612	0.5498	Complies
LTE Band 30	2307.5	24	-5.92	0.2559	64.27	0.0128	1.0000	Complies
LTE Band 38	2572.5	28	0.70	1.1749	741.31	0.1475	1.0000	Complies
LTE Band 41	2498.5	28	0.92	1.2359	779.83	0.1551	1.0000	Complies
LTE Band 42 (3450-3550 MHz)	3552.5	28	-4.55	0.3508	221.31	0.0440	1.0000	Complies
LTE Band 42 (3550-3600 MHz)	3452.5	28	-7.21	0.1901	119.95	0.0239	1.0000	Complies
LTE Band 43 (3700-3800 MHz)	3702.5	28	-7.21	0.1901	119.95	0.0239	1.0000	Complies
LTE Band 43 (3600-3700 MHz)	3602.5	28	-7.21	0.1901	119.95	0.0239	1.0000	Complies
LTE Band 48	3552.5	25	-7.21	0.1901	60.12	0.0120	1.0000	Complies
LTE Band 66	1710.7	25	1.06	1.2764	403.65	0.0803	1.0000	Complies
LTE Band 70	1697.5	25	0.71	1.1776	372.39	0.0741	1.0000	Complies
LTE Band 71	665.5	25	-1.69	0.6776	214.29	0.0427	0.4437	Complies

For 5G NR:

Band	Frequency (MHz)	Max. Tune up Power (dBm)	Antenna Gain (dBi)	Antenna Gain (linear)	Output Power to Antenna	Power Density (mW/cm ²)	Power Density Limit (mW/cm ²)	Test Result
5G NR n2	1852.5	25	1.36	1.3677	432.51	0.0860	1.0000	Complies
5G NR n5	826.5	25	-0.12	0.9727	307.61	0.0612	0.5510	Complies
5G NR n7	2502.5	25	0.92	1.2359	390.84	0.0778	1.0000	Complies
5G NR n12	701.5	25	-1.67	0.6808	215.28	0.0428	0.4677	Complies
5G NR n13	779.5	25	-0.76	0.8395	265.46	0.0528	0.5197	Complies
5G NR n14	790.5	25	-0.86	0.8204	259.42	0.0516	0.5270	Complies
5G NR n25	1852.5	25	1.36	1.3677	432.51	0.0860	1.0000	Complies
5G NR n26 (814-824MHz)	816.5	25	-0.79	0.8337	263.63	0.0525	0.5443	Complies
5G NR n26 (824-849MHz)	826.5	25	-0.12	0.9727	307.61	0.0612	0.5510	Complies
5G NR n30	2307.5	24	-5.92	0.2559	64.27	0.0128	1.0000	Complies
5G NR n38	2580	28	0.70	1.1749	741.31	0.1475	1.0000	Complies
5G NR n41	2506.02	28	0.92	1.2359	779.83	0.1551	1.0000	Complies
5G NR n66	1712.5	25	1.06	1.2764	403.65	0.0803	1.0000	Complies
5G NR n70	1697.5	25	0.71	1.1776	372.39	0.0741	1.0000	Complies
5G NR n71	665.5	25	-1.69	0.6776	214.29	0.0427	0.4437	Complies
5G NR n77 (3700-3980 MHz)	3705	28	-4.34	0.3681	232.27	0.0462	1.0000	Complies
5G NR n77 (3450-3550 MHz)	3455.01	28	-4.55	0.3508	221.31	0.0440	1.0000	Complies
5G NR n78 (3700-3800 MHz)	3705	28	-7.21	0.1901	119.95	0.0239	1.0000	Complies
5G NR n78 (3450-3550 MHz)	3455.01	28	-4.55	0.3508	221.31	0.0440	1.0000	Complies

For the max simultaneous transmission MPE:

Ratio		Total	Limit of Ratio	Test Result
5G NR	5GHz			
0.1551	0.0302	0.1853	1	Complies

Note:

- (1) The calculated distance is 20 cm.
- (2) Ratio=Power Density (S) (mW/cm²)/Limit of Power Density (S) (mW/cm²)
- (3) The WWAN Max. Tune Up Power test results reference to module report which is provided by the manufacturer.(Report No.: SZCR240400151405)

End of Test Report