Maximum Permissible Exposure Report

FCC ID: 2ALZB-D14MED

Report No.	:	BTL-FCCP-5-2011T053
Equipment	:	Gateway
Model Name	:	SYS-D14-MED-XXXX-1XX0-CX (X=0-9 ,A-Z ,a-z or blank)
Brand Name	:	SECO
Applicant	:	SECO S.p.A
Address	:	Via Achille Grandi 20, 52100 AREZZO Italy
Standard(s)	:	FCC CFR Title 47, Part 2 (2.1091) FCC Guidelines for Human Exposure IEEE C95.1
Date of Receipt	:	2020/11/18
Date of Test	:	2020/11/18 ~ 2020/12/16
Issued Date	:	2021/2/1

The above equipment has been tested and found in compliance with the requirement of the above standards by BTL Inc.

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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 manufacture's responsibility to ensure that additional production units of this model are manufactured with the identical electrical and mechanical components. **BTL** shall have no liability for any declarations, inferences or generalizations drawn by the client or others from **BTL** issued reports.

This report is the confidential property of the client. As a mutual protection to the clients, the public and ourselves, the test report shall not be reproduced, except in full, without our written approval.

BTL's laboratory quality assurance procedures are in compliance with the **ISO/IEC 17025** requirements, and accredited by the conformity assessment authorities listed in this test report.

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.

REPORT ISSUED HISTORY

Report Version	Description	Issued Date
R00	Original Issue.	2021/2/1

MPE CALCULATION METHOD:

Calculation Method of RF Safety Distance:

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

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

Table for Filed Antenna:

Antenna	Manufacture	Part number	Type	Connector	Frequency Range (MHz)	Gain (dBi)
Main	Pulse Electronics	W1043	Dipole	RP SMA plug	2400-2500	1
					5150-5350	3
					5470-5725	2.5
Aux	Pulse Electronics	W1043	Dipole	RP SMA plug	2400-2500	1
					5150-5350	3
					5470-5725	2.5

Maximum RF OUTPUT POWER:

Mode		Maximum Average Power (dBm)
WLAN 2.4 GHz	IEEE 802.11b	24.15
	IEEE 802.11g	29.92
	IEEE 802.11n (HT20)	29.93
	IEEE 802.11n (HT40)	26.34
RLAN 5 GHz	IEEE 802.11a	21.85
	IEEE 802.11n (HT20)	24.57
	IEEE 802.11n (HT40)	23.05
	IEEE 802.11ac (VHT80)	22.95
	IEEE 802.11ac (VHT160)	15.33
Bluetooth BR / EDR		11.56
Bluetooth LE		10.12

NOTE: The values are adopted from test report: 170524-01.TR01, 170524-01.TR02, 170524-01.TR03, 170524-01.TR04, 170524-01.TR05

TEST RESULTS

BT:

Antenna Gain (dBi)	Antenna Gain (numeric)	Max. Output Power (dBm)	Max. Output Power (mW)	Power Density (S) (mW/cm2)	Limit of Power Density (S) (mW/cm2)	Test Result
1.0	1.2589	11.56	14.3219	0.00358881	1	Complies

BLE:

Antenna Gain (dBi)	Antenna Gain (numeric)	Max. Output Power (dBm)	Max. Output Power (mW)	Power Density (S) (mW/cm2)	Limit of Power Density (S) (mW/cm2)	Test Result
1.0	1.2589	10.12	10.2802	0.00257603	1	Complies

2.4G WLAN:

Antenna Gain (dBi)	Antenna Gain (numeric)	Max. Output Power (dBm)	Max. Output Power (mW)	Power Density (S) (mW/cm2)	Limit of Power Density (S) (mW/cm2)	Test Result
1.0	1.2589	29.93	984.0111	0.24657575	1	Complies

5G RLAN:

Antenna Gain (dBi)	Antenna Gain (numeric)	Max. Output Power (dBm)	Max. Output Power (mW)	Power Density (S) (mW/cm2)	Limit of Power Density (S) (mW/cm2)	Test Result
3.0	1.9953	24.57	286.4178	0.11374973	1	Complies

Note:
1. The calculated distance is 20 cm.

EUT PHOTO

Please refer to document Appendix No.: EP-2011T053-1 (APPENDIX-EUT PHOTOS).

End of Test Report