

Applicant: Savant Technologies LLC, dba GE Lighting, a Savant company  
Product Name: QO DUAL 20A RELAY,WITH CT, PIGTAIL ; QO DUAL 20A RELAY,WITH CT, PON  
Model Number: GPM-Q2R20120-21 ; GPM-QP2R20120-21  
FCC ID: PUU-QP2R20120

## RADIO FRFREQUENCY EXPOSURE COMPLIANCE RESULT:

Test Standard: FCC CFR 47 § 1.1310 : Radiofrequency radiation exposure limits.

TABLE 1—LIMITS FOR MAXIMUM PERMISSIBLE EXPOSURE (MPE)

Frequency range (MHz)	Electric field strength (V/m)	Magnetic field strength (A/m)	Power density (mW/cm <sup>2</sup> )	Averaging time (minutes)
<b>(A) Limits for Occupational/Controlled Exposure</b>				
0.3-3.0	614	1.63	*100	6
3.0-30	1842/f	4.89/f	*900/f <sup>2</sup>	6
30-300	61.4	0.163	1.0	6
300-1,500			f/300	6
1,500-100,000			5	6
<b>(B) Limits for General Population/Uncontrolled Exposure</b>				
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
300-1,500			f/1500	30
1,500-100,000			1.0	30

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

Note:

(1) Occupational/controlled exposure limits apply in situations in which persons are exposed as a consequence of their employment provided those persons are fully aware of the potential for exposure and can exercise control over their exposure. Limits for occupational/controlled exposure also apply in situations when a person is transient through a location where occupational/controlled limits apply provided he or she is made aware of the potential for exposure.

(2) General population/uncontrolled exposure limits apply in situations in which the general public may be exposed, or in which persons who are exposed as a consequence of their employment may not be fully aware of the potential for exposure or cannot exercise control over their exposure.

MPE Calculation Standard:

$$MPE(S) = PG/(4\pi R^2)$$

where: S = power density (in appropriate units, e.g. mW/ cm<sup>2</sup>)

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)

**Calculation Result:**

For this EUT, General population/uncontrolled exposure limits applied.

The limit value  $1.0\text{mW/cm}^2$  is available for this EUT.

Modulation	Peak Output Power		Antenna Gain		MPE	Limit	Verdict
	(dBm)	(mW)	(dBi)	(Numeric)	( $\text{mW/cm}^2$ )	( $\text{mW/cm}^2$ )	
BLE	-1.338	0.73485	1.49	1.40929	0.00021	1.0	Compliant

For R = 20cm