Applicant: Savant Technologies LLC, dba GE Lighting, a Savant company

Product Name: QO 240V 2-POLE RELAY, WITH CT, PIGTAIL; QO 240V 2-POLE RELAY, WITH CT, PON

Model Number: GPM-Q1R30240-21; GPM-QP1R30240-21

FCC ID: PUU-QP1R30240

## RADIO FRREQUENCY 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)	
	(A) Limits for O	ccupational/Controlled Expo	sure		
0.3-3.0	614	1.63	*100	6	
3.0-30	1842/1	4.89/1	*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) Limits for Gener	ral Population/Uncontrolled I	xposure		
0.3-1.34	614	1.63	*100	30	
1.34-30	824/1	2.19/1	*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 1.0mW/cm² is available for this EUT.

Modulation -	Peak Output Power		Antenna Gain		MPE	Limit	\/o.rdi.at
	(dBm)	(mW)	(dBi)	(Numeric)	(mW/cm <sup>2</sup> )	(mW/cm <sup>2</sup> )	Verdict
BLE	-1.338	0.73485	1.49	1.40929	0.00021	1.0	Compliant

For R = 20cm