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

Product Name: Direct Connect Full Color BR30 Model Number: CLEDR309CD1, CLEDR309CDRV

FCC ID: PUU-BR30-DMFCVI

## 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	Exposure		
0.3-1.34	614	1.63	*100	30	
1.34-30	824/1	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 1.0mW/cm² is available for this EUT.

Modulation -	Peak Output Power		Antenna Gain		MPE	Limit	Vordiat
	(dBm)	(mW)	(dBi)	(Numeric)	(mW/cm <sup>2</sup> )	(mW/cm <sup>2</sup> )	Verdict
BLE	6.77	4.753352	0.5	1.122018	0.001061	1.0	Compliant
802.11b	15.47	35.23709	0.5	1.122018	0.007866	1.0	Compliant
802.11g	15.26	33.57376	0.5	1.122018	0.007494	1.0	Compliant
802.11n20	13.91	24.60368	0.5	1.122018	0.005492	1.0	Compliant
802.11n40	13.15	20.6538	0.5	1.122018	0.00461	1.0	Compliant

For R = 20cm