



# NEMA LED HID Wattage Equivalency

In February of 2021, the National Electrical Manufacturers Association (NEMA) published NEMA LL 10-2020 *Replacing HID Lamps with LED Lamps: Light Output Equivalency Claims*. Current uses this Standard for LED products replacing HID lamps, meeting or exceeding the minimum LED light output for equivalency claims. The LED wattage equivalency varies based on the type of HID lamp being replaced - Metal Halide (MH) or High Pressure Sodium (HPS).

Metal Halide Lamp Wattage (W)	Metal Halide Initial Light Output (lm)	Minimum LED Lamp Initial Light Output (lm)	Current LED Ordinary Location Retrofit Lamps	Current LED Hazardous Location Retrofit Lamps
50	3200	2000	LED21ED17	LED21ED17/HAZ
70	5200	3000	LED21ED17	LED21ED17/HAZ
100	8100	5000	LED35ED17; LED45ED17	LED35ED17/HAZ; LED45ED17/HAZ
150	12000	7500	LED50ED23.5	
175	11000	7000	LED45ED17; LED50ED23.5	
250	19100	12000	LED80ED23.5	LED80ED23.5/HAZ
320	25600	16500	LED115ED28	
350	28400	18000	LED115ED28	
360	29400	19000	LED150ED28	LED150ED28/HAZ
400	33100	21500	LED150ED28; LED200ED37	LED150ED28/HAZ
750	72300	46500	LED360ED37	
1000	100280	65000	LED450BT56	

Ordinary Location      Hazardous Location



ED17



ED17 HAZ



ED23.5



ED23.5 HAZ



ED28



ED28 HAZ



ED37



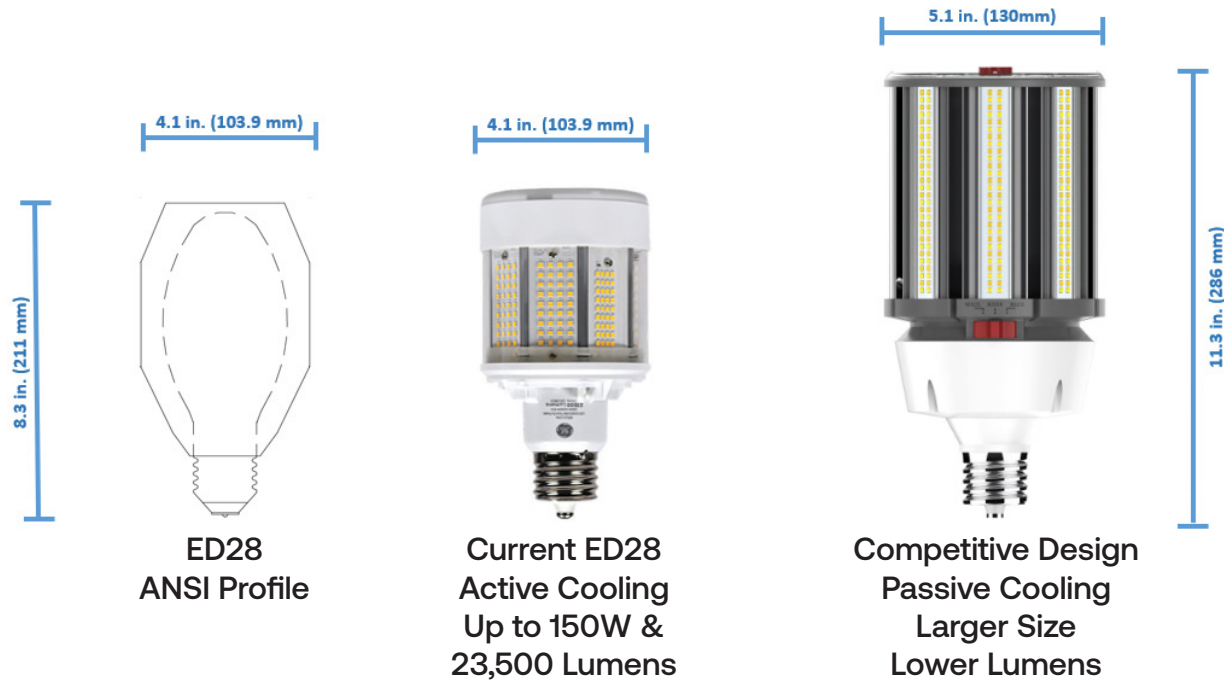
BT56

HPS Lamp Wattage (W)	HPS Initial Light Output (lm)	Minimum LED Lamp Initial Light Output (lm)	Current LED Ordinary Location Retrofit Lamps	Current LED Hazardous Location Retrofit Lamps
50	4500	2500	LED21ED17	LED21ED17/HAZ
70	6300	4000	LED35ED17	LED35ED17/HAZ
100	9500	6000	LED45ED17; LED50ED23.5	LED45ED17/HAZ
150	13000	8500	LED80ED23.5	LED80ED23.5/HAZ
200	19500	12500	LED115ED28	
250	26000	17000	LED150ED28	LED150ED28/HAZ
310	33200	21500	LED200ED37; LED270BT56	
400	44000	29000	LED200ED37; LED270BT56	
600	66000	42500	LED360ED37	
750	82500	53500	LED450BT56	
1000	110000	73000		



# LED HID Lamp Size & Applications

Proprietary design with active cooling allows high output from a compact size.



Lamps fit in a variety of fixtures & can match traditional HID output.



High Bay



Post Top



Shoe Box



Wall Pack