

DOCKETED

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Filer:	Ingrid Neumann
Organization:	City of Chula Vista
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Policy Summary | Outdoor Lighting Efficiency Requirements

Policy Overview

- Applies to specific commercial outdoor lighting applications
- Adjusts outdoor lighting power allowances (LPAs) downward to levels that can now be achieved at the same level of lighting output because of progress in LED lighting technology
- Updates are based on a 2017 study prepared for the CEC in development of 2019 energy codes that found market availability of lighting fixtures, performance and cost competitiveness has rapidly improved
- Expected to reduce GHG emissions by roughly 3,300 metric tons over the useful life of the products.
- Shown to be cost-effective. In 7 out of 10 lighting categories, the higher efficiency lighting actually costs less, in the other two cases, lifecycle benefits are more than 7 times the extra cost

Proposed Requirements

- Applicable to new non-residential construction and retrofits where at least 50% of lights are replaced
- Affects 10 commercial outdoor lighting application categories
- Reduces maximum outdoor LPAs by 32-81%
- Adjusted allowances are shown in table below:

Outdoor Lighting Application	Lighting Zone 0	Lighting Zone 1	Lighting Zone 2	Lighting Zone 3	Lighting Zone 4
Building Entrances or Exits (watts)	NA	15 → 9	25 → 15	35 → 19	45 → 21
Primary Entrances to Senior Care, Police Stations, Hospitals, Fire Stations, and Emergency Vehicle Facilities (watts)	NA	45 → 20	80 → 40	120 → 57	130 → 60
Drive-Up Windows (watts)	NA	40 → 16	75 → 30	125 → 50	200 → 75
Outdoor Sales Frontage (W/ft)	NA	None	22.5 → 11	36 → 19	45 → 25
Building Facades (W/ft ²)	NA	None	0.18 → 0.1	0.35 → 0.17	0.50 → 0.225
Outdoor Sales Lots	NA	0.164 → 0.06	0.555 → 0.21	0.758 → 0.28	1.285 → 0.485
Vehicle Service Station Hardscape (W/ft ²)	NA	0.014 →	0.155 →	0.308 →	0.485 →

		0.006	0.068	0.138	0.200
Vehicle Service Station Canopies (W/ft ²)	NA	0.514 → 0.22	1.005 → 0.43	1.3 → 0.580	2.2 → 1.010
Non-Sales Canopies (W/ft ²)	NA	0.084 → 0.057	0.205 → 0.137	0.408 → 0.27	0.585 → 0.37
Outdoor Dining (W/ft ²)	NA	0.014 → 0.004	0.135 → 0.03	0.24 → 0.05	0.400 → 0.075