

Percentage of
total square
footage

Area Category Method - Lighting Power Density (Watts/sf)					
Standards Vintage					
Function Areas:	1998 and 2001	2005	2008	2013	2016
Auditorium	2.00	1.50	1.50	1.50	1.40
Classroom, Lecture	1.60	1.20	1.20	1.20	1.20
Commercial Storage	0.60	0.60	0.60	0.60	0.60
Corridors, Restrooms, Support	0.60	0.60	0.60	0.60	0.60
Convention, Conference	1.50	1.40	1.40	1.40	1.20
Dining	1.10	1.10	1.10	1.10	1.00
Exercise, Gym	1.00	1.00	1.00	1.00	1.00
Exhibit, Museum	2.00	2.00	2.00	2.00	1.80
General Commercial High Bay	1.20	1.10	1.00	1.00	1.00
General Commercial Low Bay	1.00	1.00	0.90	0.90	0.90
General Commercial, Precision	1.50	1.30	1.20	1.20	1.20
Grocery	1.60	1.60	1.60	1.20	1.20
Hotel	2.20	1.50	1.50	1.50	1.40
Library Reading Areas	1.20	1.20	1.20	1.20	1.10
Library Stacks	1.50	1.50	1.50	1.50	1.50
Lounge	1.10	1.10	1.10	1.10	0.90
Malls	1.20	1.20	1.20	1.20	0.95
Medical and Clinic	1.40	1.20	1.20	1.20	1.20
Office	1.30	1.20	0.95	0.81	0.81
Religious Worship	2.10	1.50	1.50	1.50	1.50
Retail	2.00	1.70	1.60	1.20	1.20
Theater Area	0.90	0.90	0.90	0.90	0.90
Average LPDs	1.39	1.25	1.22	1.17	1.12
Average 2016 Savings Over Vintage for LPDs	19.7%	10.4%	8.2%	4.8%	

1.5%

8.8%

13.8%

2.0%

1.5%

7.3%

1.5%

1.5%

1.5%

1.5%

1.5%

1.5%

5.5%

1.5%

1.5%

1.5%

1.5%

1.5%

3.8%

22.1%

1.5%

15.7%

1.5%

Note 1: The 1998 and 2001 Standards LPDs are very similar

Note 2: Average life of retrofitted lighting system is 10 to 15 years

Vintage Lighting Savings

Percentage of
total square
footage

Area Category Method - Weighted LPD (Watts/sf)						
Standards Vintage						
Function Areas:	1998 and 2001	2005	2008	2013	2016	
1.5% Auditorium	0.030	0.023	0.023	0.023	0.021	
8.8% Classroom, Lecture	0.141	0.106	0.106	0.106	0.106	
13.8% Commercial Storage	0.083	0.083	0.083	0.083	0.083	
2.0% Corridors, Restrooms, Support	0.012	0.012	0.012	0.012	0.012	
1.5% Convention, Conference	0.023	0.021	0.021	0.021	0.018	
7.3% Dining	0.080	0.080	0.080	0.080	0.073	
1.5% Exercise, Gym	0.015	0.015	0.015	0.015	0.015	
1.5% Exhibit, Museum	0.030	0.030	0.030	0.030	0.027	
1.5% General Commercial High Bay	0.018	0.017	0.015	0.015	0.015	
1.5% General Commercial Low Bay	0.015	0.015	0.014	0.014	0.014	
1.5% General Commercial, Precision	0.023	0.020	0.018	0.018	0.018	
1.5% Grocery	0.024	0.024	0.024	0.018	0.018	
5.5% Hotel	0.122	0.083	0.083	0.083	0.077	
1.5% Library Reading Areas	0.018	0.018	0.018	0.018	0.017	
1.5% Library Stacks	0.023	0.023	0.023	0.023	0.023	
1.5% Lounge	0.017	0.017	0.017	0.017	0.014	
1.5% Malls	0.018	0.018	0.018	0.018	0.014	
3.8% Medical and Clinic	0.053	0.045	0.045	0.045	0.045	
22.1% Office	0.287	0.265	0.210	0.179	0.179	
1.5% Religious Worship	0.032	0.023	0.023	0.023	0.023	
15.7% Retail	0.314	0.267	0.251	0.188	0.188	
1.5% Theater Area	0.014	0.014	0.014	0.014	0.014	
Weighted Average LPD for each Vintage	1.39	1.21	1.14	1.04	1.01	
Average 2016 LPD Savings Over Vintage LPDs	27%	17%	11%	3%	0%	
85% of 2016 LPDs	0.86	0.86	0.86	0.86	0.86	
70% of Vintage LPDs (30% reduction)	0.97	0.85	0.80	0.73		
65% of Vintage LPDs (35% reduction)	0.90	0.79	0.74	0.68		