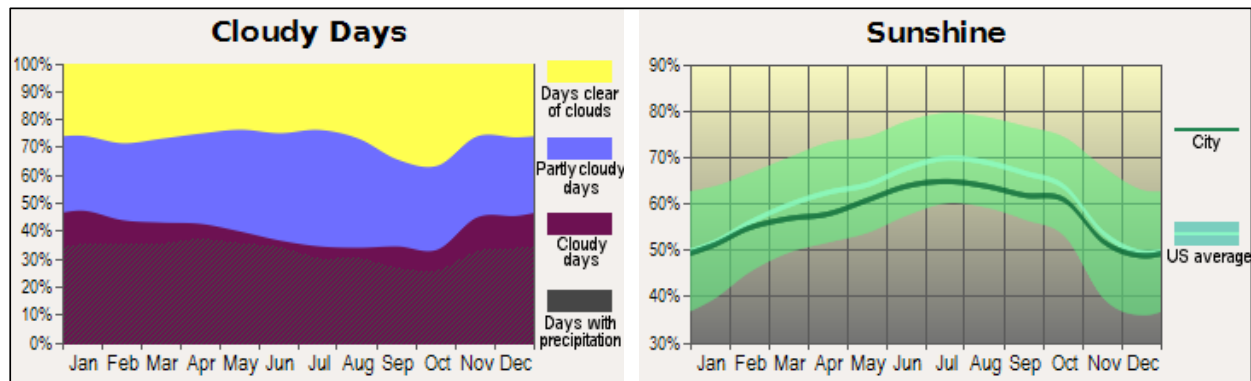


US Custom House: Rotunda Relighting

ESTIMATED EXISTING Energy Usage

Daily Usage (hours): 10
 Utility Rate (per KWH): \$0.1913

	Load	KW	Sunny Day	Night	Total Hours	KWh	Daily Energy Cost	Weekly Energy Cost	Yearly Cost	
Torchieres (6)	6,000	6.00	0	4	4	24	\$4.59	\$32.14		
Downlights (64)	10,560	10.56	0	4	4	42	\$8.08	\$56.56		
Display (220 ft rope lts)	123	0.12	6	4	10	1	\$0.24	\$1.65		
Skylight Fluorscents (144 ft)	1,296	1.30	0	4	4	5	\$0.99	\$6.94		
								<u>\$97.29</u>	32 weeks	\$3,113.31
	Load	KW	Cloudy Day	Night	Total Hours	KWh	Daily Energy Cost	Weekly Energy Cost	Yearly Cost	
Torchieres (6)	6,000	6.00	6	4	10	60	\$11.48	\$80.35		
Downlights (64)	10,560	10.56	6	4	10	106	\$20.20	\$141.41		
Display (220 ft rope lts)	123	0.12	6	4	10	1	\$0.24	\$1.65		
Skylight Fluorscents (144 ft)	1,296	1.30	0	4	4	5	\$0.99	\$6.94		
								<u>\$230.34</u>	20 weeks	\$4,606.88
									Existing Total Yearly Energy Cost	\$7,720.19



Based on data reported by over 4,000 weather stations (city-data.com)

US Custom House: Rotunda Relighting

PROPOSED Energy Usage

Daily Usage (hours): 10
 Utility Rate (per KWH): \$0.1913

	Load	KW		Sunny Day	Night	Total Hours	KWh	Daily Energy Cost	Weekly Energy Cost	Yearly Cost	
Torchieres (LED)*	2,304	2.30	↓	0	4	4	9	\$1.76	\$12.34		
Torchieres (Halogen)*	1,350	1.35	↓	0	4	4	5	\$1.03	\$7.23		
Special Event Downlights	840	0.84	↓	0	0	0	0	\$0.00	\$0.00		
Display (LED rope lts)	413	0.41	↑	6	4	10	4	\$0.79	\$5.53		
Skylight Fluorscents (deleted)	0	0.00	↓	0	0	0	0	\$0.00	\$0.00		
<i>*dimmable, calculated at full output</i>									\$25.10	32 weeks	\$803.29

	Load	KW		Cloudy Day	Night	Total Hours	KWh	Daily Energy Cost	Weekly Energy Cost		
Torchieres (LED)*	2,304	2.30	↓	6	4	10	23	\$4.41	\$30.85		
Torchieres (Halogen)*	1,350	1.35	↓	6	4	10	14	\$2.58	\$18.08		
Special Event Downlights	840	0.84	↓	0	0	0	0	\$0.00	\$0.00		
Display (LED rope lts)	413	0.41	↑	6	4	10	4	\$0.79	\$5.52		
Skylight Fluorscents (deleted)	0	0.00	↓	0	0	0	0	\$0.00	\$0.00		
<i>*dimmable, calculated at full output</i>									\$54.45	20 weeks	\$1,089.09

	Load	KW		Day	Night	Total Hours	KWh	Daily Energy Cost	Weekly Energy Cost	
Special Event Downlights	840	0.84		0	6	6	5	\$0.96	\$6.75	40 days
									\$6.75	\$269.96

Proposed Total Yearly Energy Cost \$2,162.34

Existing Total Yearly Energy Cost \$7,720.19

Savings \$5,557.85

percent savings 72.0%