



**Parking Deck
San Antonio**

LED Lighting Retrofit

Conventional Fixture details				LED Fixture Details			
Fixture Type	Qty	Unit Cons Wattage	Power Consumed(W)	Fixture Type	Qty	Unit Cons Wattage	Power Consumed (W)
OUTDOOR FIXTURE DETAIL				OUTDOOR FIXTURE DETAIL			
T12 fluorescent fixtures 40 Watts Fixture 2 tubes T12 Lamp,	393	80	31440	LED Canopy	393	27	10611
2x4 Troffer, Recessed, Fixture Height, (4 tubes) 40W T12 Lamp,	49	160	7840	LED Canopy	49	35	1715
Walpack	5	150	750	Walpack	5	37	185
Pole light	4	200	800	Pole light	4	100	400
6 in Can	20	100	2000	6 in Can	20	16	320
Wall sconces L	18	100	1800	Wall sconces L	18	16	288
Wall sconces Sq	30	100	3000	Wall sconces Sq	30	16	480
Global Lamp	87	100	8700	G30 Global Lamp	87	8	696
Electronic Ballasts	442	20	8840				
		Total Consumption	65170			Total Consumption	14695
No. of working Hours (Indoor)			24	No. of working Hours (Indoor)			24
Power consumed in a day (w) (Indoor)			1564080	Power consumed in a day (w) (Indoor)			352680
Power consumed in a year (w) (Indoor)			406660800	Power consumed in a year (w) (Indoor)			91696800
Power consumed in KW in one year			406660.8	Power consumed in KW in one year			91696.8
Price per KW consumption (\$)			\$ 0.09	Price per KW consumption (\$)			\$ 0.09
Total Paid to CPS in a Year			\$ 36,599.47	Total Paid to CPS in a Year			\$ 8,252.71

Amount Initially invested in \$	\$ 97,122.81
Amount Saved by Using LED in \$ per year	\$ 28,346.76
Amount Saved Replacement product \$ per year	\$ 2,486.00
Rebate Amount in \$ - up front LED Material saving	\$ 51,263.00
LED Saving per yr. + Replacement per yr. + Rebate	\$ 82,095.76
	\$ 15,027.05
ROI for Investment in Years	0.49



Led Retrofitting Project `

Overview:

10 story parking deck that is including the rooftop. 9 floors covered parking.

2 drive-in entrance :

Handicap

Public / client parking

2 Stairwell – 1 of the stairwells is permanently closed.

The stairwell goes to rooftop to Lower Level which is 1 level below the street.

1 Elevator – runs Rooftop to Lower Level

Highest point of ceiling is 21 feet which is in the front of entrance, the main deck is 12 ft.

Currently 214 blubs are dead and 18 fixtures are damaged and not working.

MAJOR PROBLEM- Security issues - stairwell (2 person sleeping together in stairwell) (1 person changing outfit)



Lighting:

Total of 720 fixture in the facility.

442 troffers (1x4=393) (2x4=49)

48 wall sconces in stairwell – replace, 40 wall sconces.

5 Walpack's on the rooftop – replace.

2 (13ft) poles on rooftop with 2 fixtures each – replace fixtures.

110 - Can lights and Globe blubs total – recommended just LED upgrade.

Rebate in product -	\$51,263.00
Amount Saved Replacement product \$ per year -	\$28,346.00
Product replacement cost -	\$2,486.00

Total all in investment (labor, product, recycling.)	\$97,122.81
LED Saving per yr. + Replacement per yr. + Rebate	<u>\$82,095.76</u>
Difference -	\$15,027.05

Payback -	0.49 years
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