

ENERGY SURVEY/RETURN ON INVESTMENT

PREPARED FOR: _____

PREPARED BY: _____
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PRESENT CONDITION				RECOMMENDATION			
1		Total Watts				See Below for Details	
2	\$	Annual Power Costs Per Watt		\$		See Below for Energy Cost Guide	
3	\$	*Power Costs – 1st Year		\$		#1 x #2	
4	\$	*Power Costs – 2nd Year		\$		#3 x 105%	
5	\$	*Power Costs – 3rd Year		\$		#4 x 105%	
6	\$	*Total Power Costs		\$		Add #3 thru #5	
7	\$	Total Lamp Replacement Costs		\$		Lamp Quantity x Cost	
8	\$	← GRAND TOTAL →		\$		#6 + #7	
9	ENERGY COST SAVINGS →			\$		Present Condition Cost Minus Recommendation	
10	AIR CONDITIONING ENERGY SAVINGS →			\$		See Below (HVAC calculation)	
11	TOTAL ENERGY SAVINGS →			\$		#9 + #10	
12	Average Monthly Savings Over		Years (Months)	\$		#11 Divided by # of Months	
INVESTMENT – PAYBACK – RETURN ON INVESTMENT							
13	TOTAL COST OF ENERGY SAVING SYSTEM			\$		Quantity x Cost	
14	PAYBACK			Months		#13 Divided by #12	
15	RETURN ON INVESTMENT			%		(#12 x #12) Divided by #13 x 100	

NOTE: Line #1 above) # of fixtures x # of lamps x # of watts per fixture
 Lines #4 & #5 above) Rates increase an average of 5% per year

ENERGY COST CALCULATOR GUIDE ONE WATT – ONE YEAR

COST PER KILOWATT HOUR IN CENTS																										
CENTS	4	45	5	55	6	65	7	75	8	85	9	95	10	105	11	115	12	125	13	135	14	145	15	155	16	
H	8	10	11	12	14	15	16	17	19	20	21	22	24	25	26	27	29	30	31	32	34	35	36	37	39	40
O	10	12	14	16	17	19	20	22	23	25	27	28	30	31	33	34	36	38	39	41	42	44	45	47	48	50
U	12	15	17	19	21	22	24	26	28	30	32	34	36	37	39	41	43	45	47	49	51	52	54	56	58	60
R	14	17	20	22	24	26	28	31	33	35	37	39	41	44	46	48	50	52	55	57	59	61	63	66	68	70
S	18	22	25	28	31	34	37	39	42	45	48	51	53	56	59	62	65	67	70	73	76	79	81	84	87	90

ANNUAL COST PER CONSUMED WATT BASED ON SIX (6) DAY USAGE * * Add 1/6 for 7 Days ... Subtract 1/6 for 5 days

Example: 7.5¢ per KW x 12 hours of daily use = 28¢ per watt, per year

COST PER WATT - 24 HOURS * 7 DAYS * 52 WEEKS (8760 HOURS)																									
35	40	43	48	53	57	61	65	70	75	78	83	88	92	96	100	105	110	114	118	123	127	131	136	140	

One (1) Kilowatt Hour (KWH) = 1,000 Watts used one hour

HVAC - AIR CONDITIONING COST REDUCTION

The U.S. Federal Energy Administration estimates that for each THREE watts of lighting saved, ONE watt of air conditioning load will be saved. In order to calculate this saving:

MULTIPLY THE ENERGY COST SAVINGS (#9 ABOVE) x .333 x THE NUMBER OF MONTHS AIR CONDITIONING IS OPERATED, DIVIDED BY 12.

\$ _____ x .333 x _____ DIVIDED BY 12
 Energy Cost Saving # Months

(ENTER YOUR ANSWER ON LINE #10 ABOVE.)