

ROI Energy Calculator

Engineer: Bruce Nell
Date: 02/07/2021

Project: Hatherly House

FPoC: Andy Seaman

Customer: Exeter University

Existing Installation:

Lamp Configuration:	Power (W):	Quantity:	Hours Per Day:	Days Per Week:	Weeks Per Year:	Annual Hours:	Annual Kwh:	CO ₂ (T)	Electricity Cost (Kwh)	Annual Cost:
BH2D 16w	23	2	12	5	42	2520	116	0.06	£0.10	£11.59
BH2D 28w	36	36	12	5	42	2520	3,266	1.62	£0.10	£326.59
BHLED 35w	35	2	12	5	42	2520	176	0.09	£0.10	£17.64
DLLED 18 (11w)	18	15	12	5	42	2520	680	0.34	£0.10	£68.04
DLPL 2by26w	68	12	12	5	42	2520	2,056	1.02	£0.10	£205.63
LinearT8 18w	26	2	12	5	42	2520	131	0.07	£0.10	£13.10
LinearLED 18w	18	12	12	5	42	2520	544	0.27	£0.10	£54.43
LinearT8 36w	43	16	12	5	42	2520	1,734	0.86	£0.10	£173.38
LinearLED 42w	42	18	12	5	42	2520	1,905	0.95	£0.10	£190.51
LinearT8 58w	67	142	12	5	42	2520	23,975	11.90	£0.10	£2,397.53
LinearT8 70w	80	1	12	5	42	2520	202	0.10	£0.10	£20.16
LinearT8 2by58w	134	65	12	5	42	2520	21,949	10.89	£0.10	£2,194.92
LinearT8 2by70w	160	18	12	5	42	2520	7,258	3.60	£0.10	£725.76
ModularLed 42w	42	81	12	5	42	2520	8,573	4.26	£0.10	£857.30
ModularPL 2by55w	122	6	12	5	42	2520	1,845	0.92	£0.10	£184.46
WMPL 1by55	4	61	12	5	42	2520	615	0.31	£0.10	£61.49
ModularT8 4 x 18w	86	54	12	5	42	2520	11,703	5.81	£0.10	£1,170.29
ModularT8 34by36w	172	4	12	5	42	2520	1,734	0.86	£0.10	£173.38
Total:							75,025	37.24	Total (£):	£8,846.21

Proposed Installation:

Lamp Configuration:	Power (W):	Quantity:	Hours Per Day:	Days Per Week:	Weeks Per Year:	Annual Hours:	Annual Kwh:	CO ₂ (T)	Electricity Cost (Kwh)	Annual Cost:
ULT260LED/1100/N4M	11	6	12	5	42	2520	166	0.08	£0.10	£16.63
TMPO41R220/N4M	20	11	12	5	42	2520	554	0.28	£0.10	£55.44
ULT200LED/1100/N4M	11	9	12	5	42	2520	249	0.12	£0.10	£24.95
EWPL1430/N4M	23	15	12	5	42	2520	869	0.43	£0.10	£86.94
EWPL1537/N4M	28	18	12	5	42	2520	1,270	0.63	£0.10	£127.01
TMPO42R440/N4M	39	10	12	5	42	2520	983	0.49	£0.10	£98.28
TMPO51R578/N4M	54	24	12	5	42	2520	3,266	1.62	£0.10	£326.59
PLG66310NW/N4M	30	83	12	5	42	2520	6,275	3.11	£0.10	£627.48
PLG126600NW/N4M	60	9	12	5	42	2520	1,361	0.68	£0.10	£136.08
TMPO51R355/N4M	35	140	12	5	42	2520	12,348	6.13	£0.10	£1,234.80
TMPO52R540/N4M	48	10	12	5	42	2520	1,210	0.60	£0.10	£120.96
TMPO52R717/N4M	70	6	12	5	42	2520	1,058	0.53	£0.10	£105.84
LUN220/N4M	24	24	12	5	42	2520	1,452	0.72	£0.10	£145.15
LUN110/N4M	13	1	12	5	42	2520	33	0.02	£0.10	£3.28
ModularIP6/290	33	6	12	5	42	2520	499	0.25	£0.10	£49.90
ModularIP6/390	43	37	12	5	42	2520	4,009	1.99	£0.10	£400.93
ModularIP12/780	86	4	12	5	42	2520	867	0.43	£0.10	£86.69
CNIM	17	6	12	5	42	2520	257	0.13	£0.10	£25.70
Total:							18.23	Total (£):	£3,672.65	

Total Saving (£):	£5,173.56
% Saving Over Existing Installation:	58.48%
MF Savings PA	£1,094.00
Total Saving (£):	£6,267.56
Annual Carbon Emissions Saved (CO ₂ (T)):	19.01
Total Saving with Occupancy (£):	£7,302.27
% Saving Over Existing Installation:	82.55%
Annual Carbon Emissions Saved (CO ₂ (T)):	23
Total Saving Smart with Occupancy (£):	£8,078.31
% Saving Over Existing Installation:	91.32%
Annual Carbon Emissions Saved (CO ₂ (T)):	25.66

