

COMPARISONS LED VS TRADITIONAL LIGHT

Fluorescent Lighting		
600mm (2 foot)	LED Tube	Traditional Fluorescent Light
wattage	9W	36W
Lifespan	50,000 hrs (10 years +)	8,000 hrs (1 - 1.5 years)
Ballast	n/a	required
Brightness Device	n/a	required
Power Consumption	9W	48W due to ballast
Power usage at 40 hours per week (5 x 8 hours)	0.36 KWHrs	1.92 KWHrs
Power usage at 40 hours per week, for 1 year	18.72 KWHrs	99.8 KWHrs
Running cost per year (AED 0.33 per KWH)	AED 6.17	AED 33.00
Power usage at 84 hours per week (7 x 12 hours)	0.75 KWHrs	4 KWHrs
Power usage at 84 hours per week, for 1 year	39 KWHrs	208 KWHrs
Running cost per year (AED 0.33 per KWH)	AED 12.87	AED 68.6
1200mm (4 foot)		
wattage	15W	40W
Lifespan	50,000 hrs (10 years +)	8,000 hrs (1 - 1.5 years)
Ballast	n/a	required
Brightness Device	n/a	required
Power Consumption	15W	52W due to ballast
Power usage at 40 hours per week (5 x 8 hours)	0.6 KWHrs	2.1 KWHrs
Power usage at 40 hours per week, for 1 year	31.2 KWHrs	109.2 KWHrs
Running cost per year (AED 0.33 per KWH)	AED 10.30	AED 36.00
Power usage at 84 hours per week (7 x 12 hours)	1.26 KWHrs	4.36 KWHrs
Power usage at 84 hours per week, for 1 year	65.5 KWHrs	227.1 KWHrs
Running cost per year (AED 0.33 per KWH)	AED 21.61	AED 74.95
1500mm (5 foot)		
wattage	20W	60W
Lifespan	50,000 hrs (10 years +)	8,000 hrs (1 - 1.5 years)
Ballast	n/a	required
Brightness Device	n/a	required
Power Consumption	20W	72W due to ballast
Power usage at 40 hours per week (5 x 8 hours)	0.8KWHrs	2.88 KWHrs
Power usage at 40 hours per week, for 1 year	41.6 KWHrs	149.8 KWHrs

Running cost per year (AED 0.33 per KWH)	AED 13.72	AED 49.45
Power usage at 84 hours per week (7 x 12 hours)	1.68 KWHrs	6.04 KWHrs
Power usage at 84 hours per week, for 1 year	87.36 KWHrs	314 KWHrs
Running cost per year (AED 0.33 per KWH)	AED 28.8	AED 103.62
Misc internal lighting		
MR16		
wattage	1W	30W
Lifespan		
Power usage at 40 hours per week (5 x 8 hours)	0.04 KWHrs	1.2 KWHrs
Power usage at 40 hours per week, for 1 year	2.08 KWHrs	62.4 KWHrs
Running cost per year (AED 0.33 per KWH)	AED 0.68	AED 20.60
Power usage at 84 hours per week (7 x 12 hours)	0.08 KWHrs	2.52 KWHrs
Power usage at 84 hours per week, for 1 year	4.36 KWHrs	131 KWHrs
Running cost per year (AED 0.33 per KWH)	AED 1.44	AED 43.25
MR16		
wattage	3W	40W
Lifespan		
Power usage at 40 hours per week (5 x 8 hours)	0.12 KWHrs	1.6 KWHrs
Power usage at 40 hours per week, for 1 year	6.24 KWHrs	83.2 KWHrs
Running cost per year (AED 0.33 per KWH)	AED 2.05	AED 27.45
Power usage at 84 hours per week (7 x 12 hours)	0.25 KWHrs	3.36 KWHrs
Power usage at 84 hours per week, for 1 year	13.1 KWHrs	175 KWHrs
Running cost per year (AED 0.33 per KWH)	AED 4.32	AED 57.75
GU10		
wattage	1W	30W
Lifespan		
Power usage at 40 hours per week (5 x 8 hours)	0.04 KWHrs	1.2 KWHrs
Power usage at 40 hours per week, for 1 year	2.08 KWHrs	62.4 KWHrs
Running cost per year (AED 0.33 per KWH)	AED 0.68	AED 20.60
Power usage at 84 hours per week (7 x 12 hours)	0.08 KWHrs	2.52 KWHrs
Power usage at 84 hours per week, for 1 year	4.36 KWHrs	131 KWHrs
Running cost per year (AED 0.33 per KWH)	AED 1.44	AED 43.25

GU10		
wattage	3W	40W
Lifespan		
Power usage at 40 hours per week (5 x 8 hours)	0.12 KWHrs	1.6 KWHrs
Power usage at 40 hours per week, for 1 year	6.24 KWHrs	83.2 KWHrs
Running cost per year (AED 0.33 per KWH)	AED 2.05	AED 27.45
Power usage at 84 hours per week (7 x 12 hours)	0.25 KWHrs	3.36 KWHrs
Power usage at 84 hours per week, for 1 year	13.1 KWHrs	175 KWHrs
Running cost per year (AED 0.33 per KWH)	AED 4.32	AED 57.75
E27 Sunlight / Cool		
wattage	1W	40W
Lifespan		
Power usage at 40 hours per week (5 x 8 hours)	0.04 KWHrs	1.6 KWHrs
Power usage at 40 hours per week, for 1 year	2.08 KWHrs	83.2 KWHrs
Running cost per year (AED 0.33 per KWH)	AED 0.68	AED 27.45
Power usage at 84 hours per week (7 x 12 hours)	0.08 KWHrs	3.36 KWHrs
Power usage at 84 hours per week, for 1 year	4.36 KWHrs	175 KWHrs
Running cost per year (AED 0.33 per KWH)	AED 1.44	AED 57.75
E27 Sunlight / Cool		
wattage	3W	60W
Lifespan		
Power usage at 40 hours per week (5 x 8 hours)	0.12 KWHrs	2.4 KWHrs
Power usage at 40 hours per week, for 1 year	6.24 KWHrs	124.8 KWHrs
Running cost per year (AED 0.33 per KWH)	AED 2.05	AED 41.2
Power usage at 84 hours per week (7 x 12 hours)	0.25 KWHrs	5.04 KWHrs
Power usage at 84 hours per week, for 1 year	13.1 KWHrs	262.1 KWHrs
Running cost per year (AED 0.33 per KWH)	AED 4.32	AED 86.50
E27 Sunlight / Cool		
wattage	5W	75W
Lifespan		
Power usage at 40 hours per week (5 x 8 hours)	0.2 KWHrs	3 KWHrs
Power usage at 40 hours per week, for 1 year	10.4 KWHrs	156 KWHrs

Running cost per year (AED 0.33 per KWH)	AED 3.43	AED 51.5
Power usage at 84 hours per week (7 x 12 hours)	0.42 KWHrs	6.3 KWHrs
Power usage at 84 hours per week, for 1 year	21.84 KWHrs	327.6 KWHrs
Running cost per year (AED 0.33 per KWH)	AED 7.20	AED 108.10
E27 Sunlight / Cool		
wattage	7W	100W
Lifespan		
Power usage at 40 hours per week (5 x 8 hours)	0.28 KWHrs	4 KWHrs
Power usage at 40 hours per week, for 1 year	14.56 KWHrs	208 KWHrs
Running cost per year (AED 0.33 per KWH)	AED 4.80	AED 68.65
Power usage at 84 hours per week (7 x 12 hours)	0.59 KWHrs	8.4 KWHrs
Power usage at 84 hours per week, for 1 year	30.68 KWHrs	436.8 KWHrs
Running cost per year (AED 0.33 per KWH)	AED 10.12	AED 144.15
E27 Sunlight / Cool		
wattage	12W	150W
Lifespan		
Power usage at 40 hours per week (5 x 8 hours)	0.48 KWHrs	6 KWHrs
Power usage at 40 hours per week, for 1 year	25 KWHrs	312 KWHrs
Running cost per year (AED 0.33 per KWH)	AED 8.25	AED 103.00
Power usage at 84 hours per week (7 x 12 hours)	1 KWHr	12.6 KWHrs
Power usage at 84 hours per week, for 1 year	52 KWHrs	655.2 KWHrs
Running cost per year (AED 0.33 per KWH)	AED 17.16	AED 216.20
Ceiling Panels		
60 x 60cm cool / warm white		
Wattage	28W	120W
Lifespan	100,000 hours (10 yrs +)	8,000 hours (1 - 1.5 years)
Power Usage @ 48 hours per week (6 x 8 hours)	1.34KWHrs	5.76KWHrs
Power Usage @ 48 hours per week, for 1 year	69.7 KWHrs	299.5 KWHrs
Running cost per year (AED 0.33 per KWH)	AED 23.00	AED 98.80
Replacement / maintenance	None	Yes, approx 40 tubes
Power Usage @ 84 hours per week (7 x 12 hours)	2.35KWHrs	10.08KWHrs

Power Usage @ 84 hours per week, for 1 year	122.3 KWHrs	524.16 KWHrs
Running cost per year (AED 0.33 per KWH)	AED 40.35	AED 172.97
30 x 120cm cool / warm white		
Wattage	32W	120W
Lifespan		
Power Usage @ 48 hours per week (6 x 8 hours)	0.12 KWHrs	5.76 KWHrs
Power Usage @ 48 hours per week, for 1 year	6.65 KWHrs	299.5 KWHrs
Running cost per year (AED 0.33 per KWH)	AED 2.19	AED 98.80
Replacement / maintenance		
Power Usage @ 84 hours per week (7 x 12 hours)	2.69 KWHrs	10.08 KWHrs
Power Usage @ 84 hours per week, for 1 year	139.78 KWHrs	524.16 KWHrs
Running cost per year (AED 0.33 per KWH)	AED 46.12	AED 173.00
60 x 120cm cool / warm white		
Wattage	76W	160W
Lifespan		
Power Usage @ 48 hours per week (6 x 8 hours)	3.65 KWHrs	7.68 KWHrs
Power Usage @ 48 hours per week, for 1 year	189.8 KWHrs	399.4 KWHrs
Running cost per year (AED 0.33 per KWH)	AED 62.65	AED 131.80
Replacement / maintenance		
Power Usage @ 84 hours per week (7 x 12 hours)	6.39 KWHrs	13.44 KWHrs
Power Usage @ 84 hours per week, for 1 year	332 KWHrs	699 KWHrs
Running cost per year (AED 0.33 per KWH)	AED 109.55	AED 230.70
Street/Flood Lighting		
515 x 306 x 105mm		
Wattage	62W	700W
Lifespan	50,000 hours	
Power Usage @ 84 hours per week (7 x 12 hours)	5.2 KWHrs	58.8 KWHrs
Power Usage @ 84 hours per week, for 1 year	270 KWHrs	3057.6 KWHrs
Running cost per year (AED 0.33 per KWH)	AED 89.10	AED 1009.00
755 x 306 x 105mm		
Wattage	140W	1000W
Lifespan		
Power Usage @ 84 hours per week (7 x 12 hours)	11.76 KWHrs	84 KWHrs

Power Usage @ 84 hours per week, for 1 year	611.52 KWHrs	4368 KWHrs
Running cost per year (AED 0.33 per KWH)	AED 201.80	AED 1441.45
Floodlight 307 x 280 x 201mm		
Wattage	28W	500W
Lifespan		
Power Usage @ 84 hours per week (7 x 12 hours)	2.35 KWHrs	42 KWHrs
Power Usage @ 84 hours per week, for 1 year	122.3 KWHrs	2184 KWHrs
Running cost per year (AED 0.33 per KWH)	AED 40.35	AED 720.72
Halogen		
wattage	5W (save 90%)	50W
Lifespan	50,000 hrs (10 yrs +)	2,000 hrs (6 months)
Power usage at 84 hours per week	0.42 KWHrs	4.2 KWHrs
Power usage at 84 hours per week, for 1 year	21.8 KWHrs	218.4 KWHrs
Running cost per year (AED 0.33 per KWH)	AED 7.20	AED 72.00
Replacement / maintenance	None	Yes - approx 20 replacement bulbs
Flood / Spotlight		
Par 30 warm / sunlight / cool		
wattage	7W	500W
Lifespan		
Power usage at 40 hours per week (5 x 8 hours)	0.28 KWHrs	20 KWHrs
Power usage at 40 hours per week, for 1 year	14.56 KWHrs	1040 KWHrs
Running cost per year (AED 0.33 per KWH)	AED 4.80	AED 343.30
Power usage at 84 hours per week (7 x 12 hours)	0.59 KWHrs	42 KWHrs
Power usage at 84 hours per week, for 1 year	30.68 KWHrs	2184 KWHrs
Running cost per year (AED 0.33 per KWH)	AED 10.12	AED 720.70