

Cost Comparison of LED Lighting Solution to Generic Lighting Solution

An Exterior Floodlighting Scenario
Comparison between using 3 x 500 Watt Halogen Bulbs against 36 Watt LED Modules
LED Modules can be in either White, Single Colour or RGB Colour-Change

	<u>LED</u>	<u>Generic</u>	<u>Saving</u>
Energy Usage			
Watts per 3 light fittings	108	1500	1392
Kilowatts per 3 light fittings	0.108	1.5	1.392
Power Costs			
Rate per day (2006 price + 20%)	10.224	10.224	
Cost per hour in pence	1.10	15.34	14.23
Estimated average hours usage per day	7	7	
Cost per day in £	£0.08	£1.07	£1.00
Estimated average hours usage per year	2,555	2,555	
Cost per year in £	£28.21	£391.83	£363.62
<u>OVERALL ENERGY SAVING OVER A 20 YEAR PERIOD</u>			
Energy in kilowatts	5,519	76,650	71,131
Power cost	£564.24	£7,836.70	
	£564.24	£7,836.70	£7,272.45

Chart Showing Comparison of Energy Consumption

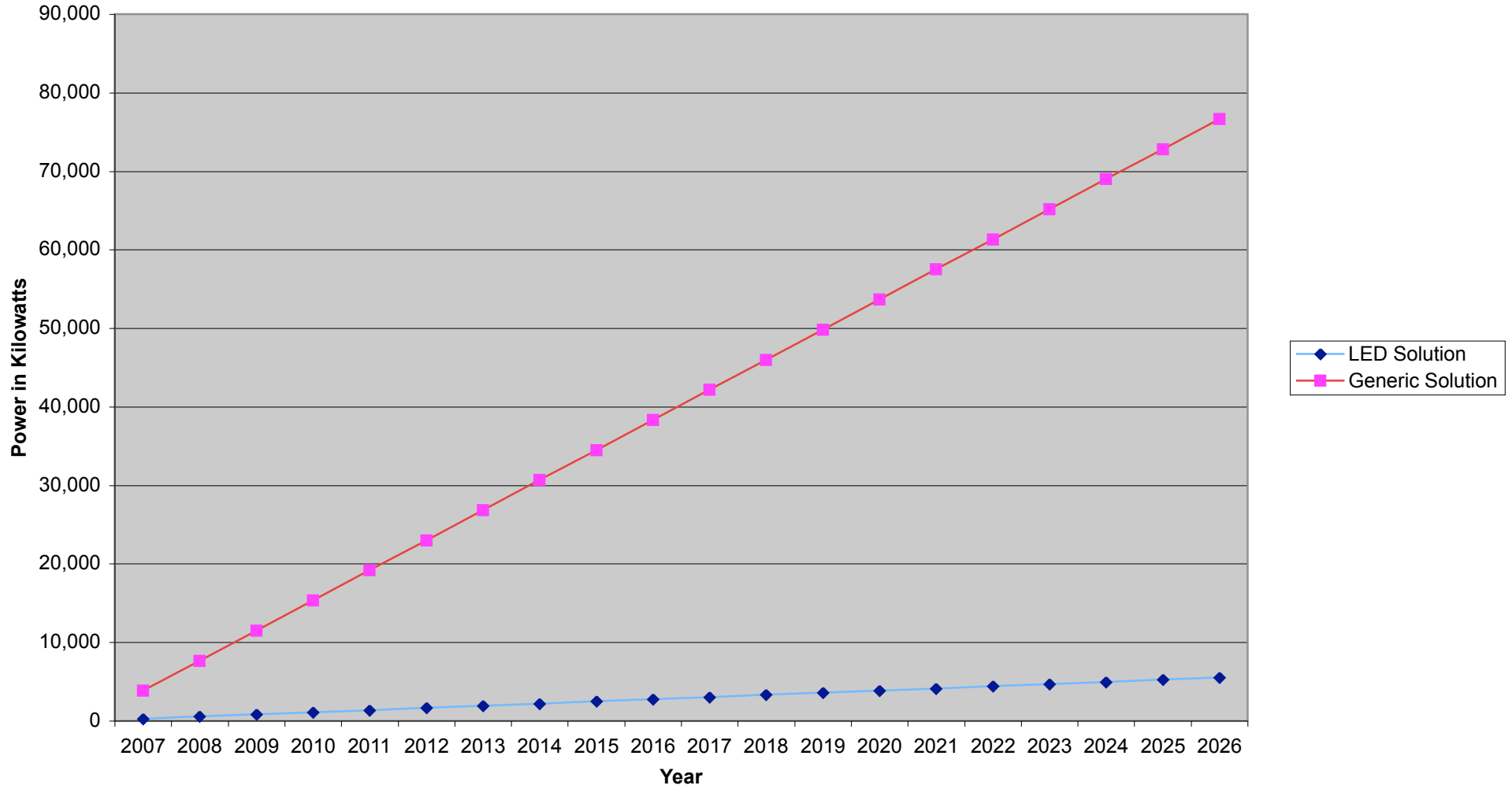
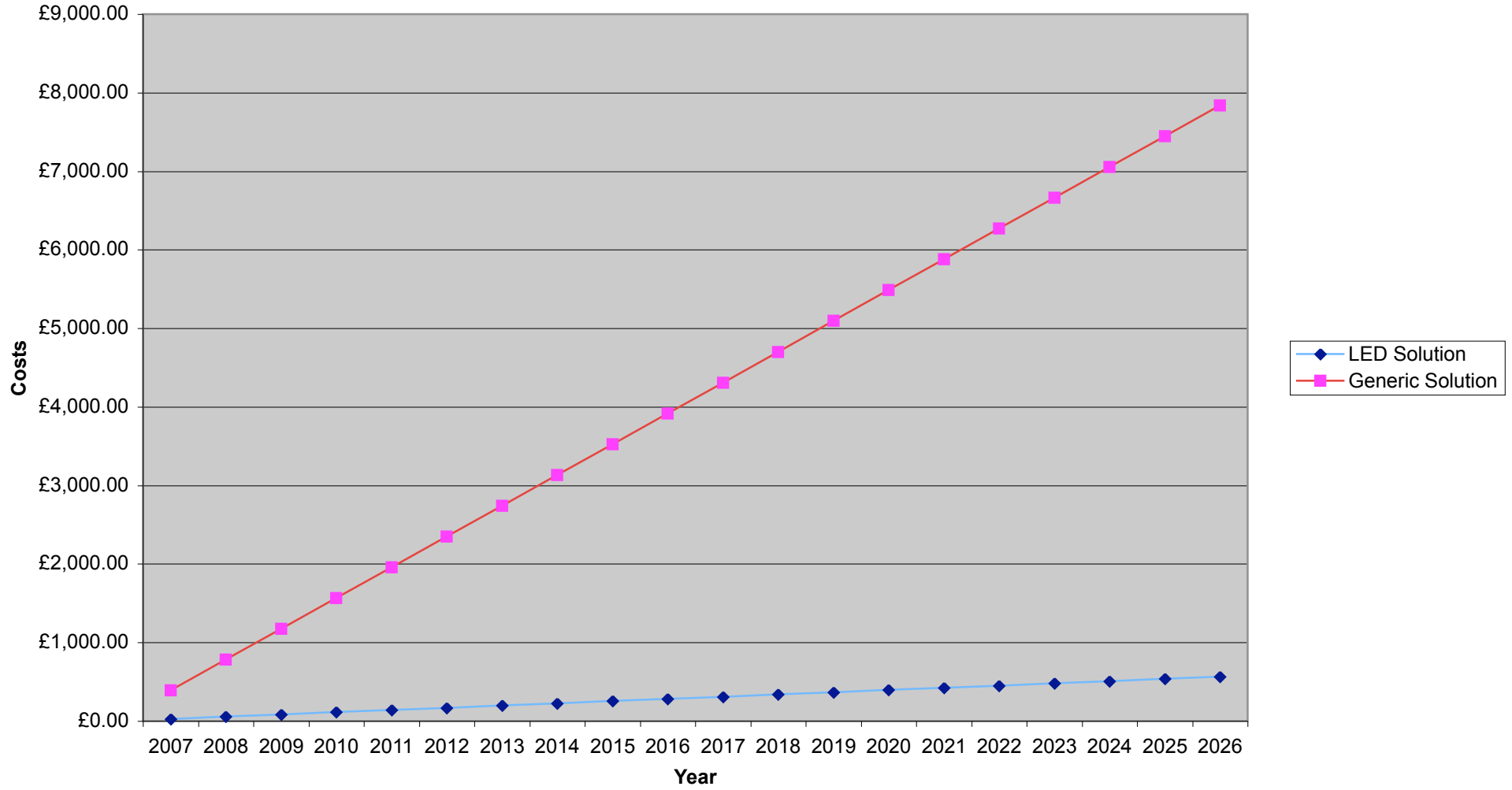


Chart Showing Comparison of Power Costs



Annual Data

Time	Year	LED kw / h	Generic kw / h	LED £ / h	Generic £ / h
		0.11	1.50	£0.0110	£0.1534
t0	Jan-07				
t1	Dec-07	276	3,833	£28.21	£391.83
t2	Dec-08	552	7,665	£56.42	£783.67
t3	Dec-09	828	11,498	£84.64	£1,175.50
t4	Dec-10	1,104	15,330	£112.85	£1,567.34
t5	Dec-11	1,380	19,163	£141.06	£1,959.17
t6	Dec-12	1,656	22,995	£169.27	£2,351.01
t7	Dec-13	1,932	26,828	£197.48	£2,742.84
t8	Dec-14	2,208	30,660	£225.70	£3,134.68
t9	Dec-15	2,483	34,493	£253.91	£3,526.51
t10	Dec-16	2,759	38,325	£282.12	£3,918.35
t11	Dec-17	3,035	42,158	£310.33	£4,310.18
t12	Dec-18	3,311	45,990	£338.55	£4,702.02
t13	Dec-19	3,587	49,823	£366.76	£5,093.85
t14	Dec-20	3,863	53,655	£394.97	£5,485.69
t15	Dec-21	4,139	57,488	£423.18	£5,877.52
t16	Dec-22	4,415	61,320	£451.39	£6,269.36
t17	Dec-23	4,691	65,153	£479.61	£6,661.19
t18	Dec-24	4,967	68,985	£507.82	£7,053.03
t19	Dec-25	5,243	72,818	£536.03	£7,444.86
t20	Dec-26	5,519	76,650	£564.24	£7,836.70