

**Cost Comparison of LED Lighting Solution to Generic Lighting Solution**

**Comparison between using 1 x 500 Watt Halogen Bulb against a 36 Watt LED Module**  
**LED Modules can be in either White, Single Colour or RGB Colour-Change**

	<b><u>LED</u></b>	<b><u>Generic</u></b>	<b><u>Saving</u></b>
<b>Energy Usage</b>			
Watts per light fitting	36	500	464
Kilowatts per light fitting	0.036	0.5	0.464
<b>Power Costs</b>			
Rate per day (2006 price + 20%)	10.224	10.224	
Cost per hour in pence	0.37	5.11	4.74
Estimated average hours usage per day	7	7	
Cost per day in £	£0.03	£0.36	£0.33
Estimated average hours usage per year	2,555	2,555	
Cost per year in £	£9.40	£130.61	£121.21
<b><u>OVERALL ENERGY SAVING OVER A 20 YEAR PERIOD</u></b>			
Energy in kilowatts	1,840	25,550	23,710
Power cost	£188.08	£2,612.23	
	<b>£188.08</b>	<b>£2,612.23</b>	<b>£2,424.15</b>

Chart Showing Comparison of Energy Consumption

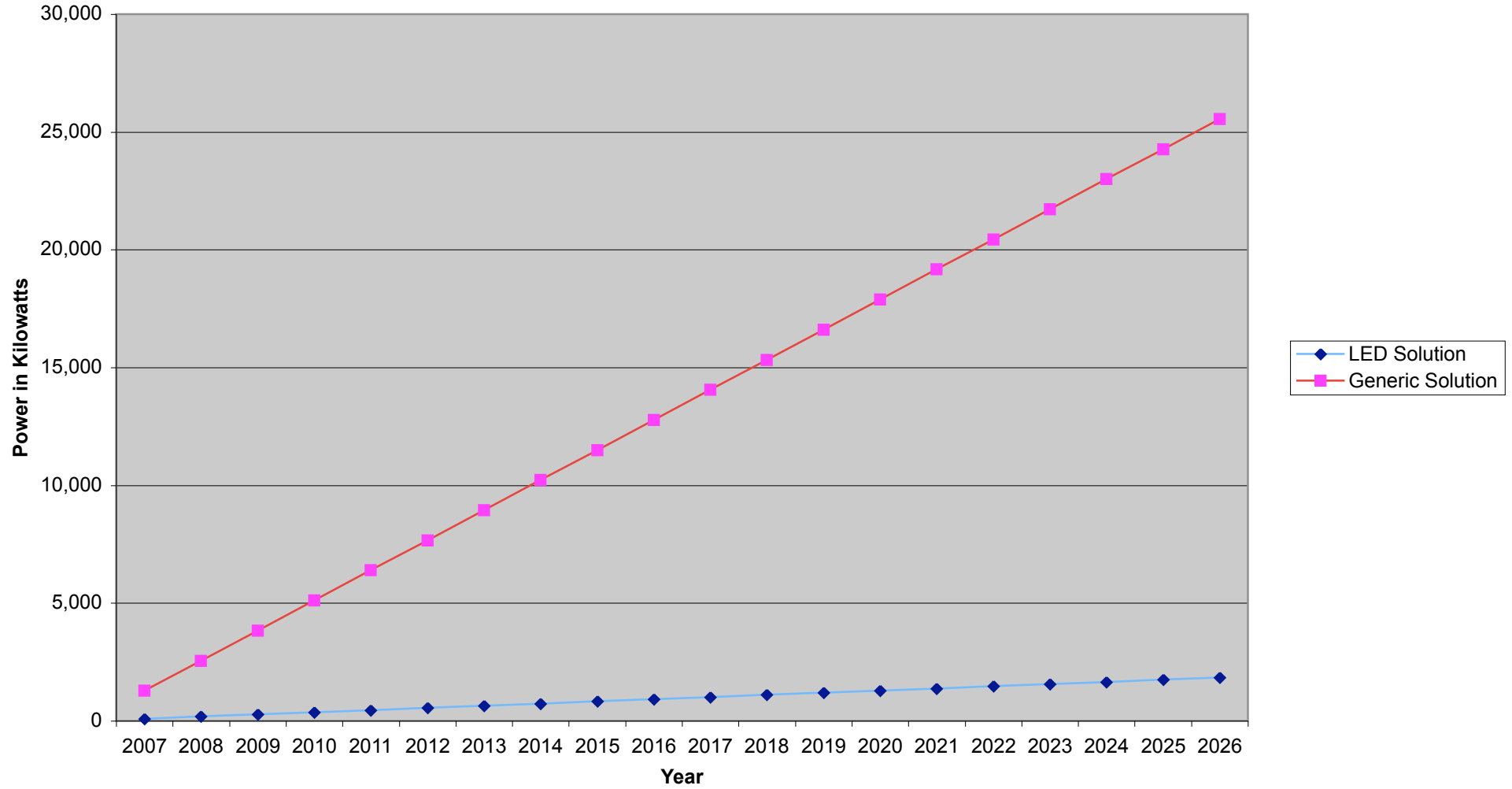
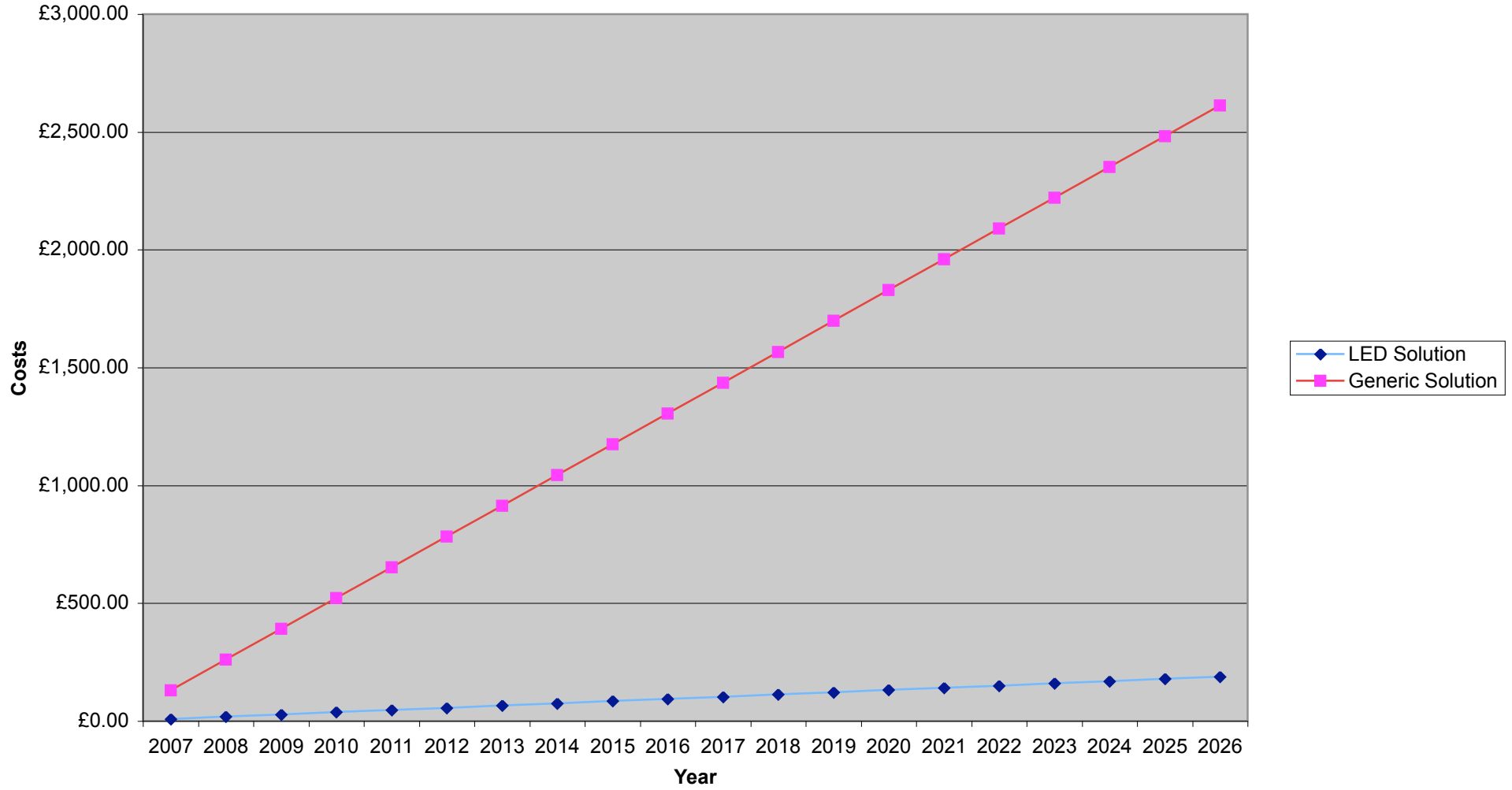


Chart Showing Comparison of Power Costs



## Annual Data

Time	Year	LED kw / h	Generic kw / h	LED £ / h	Generic £ / h
		0.04	0.50	£0.0037	£0.0511
t0	Jan-07				
t1	Dec-07	92	1,278	£9.40	£130.61
t2	Dec-08	184	2,555	£18.81	£261.22
t3	Dec-09	276	3,833	£28.21	£391.83
t4	Dec-10	368	5,110	£37.62	£522.45
t5	Dec-11	460	6,388	£47.02	£653.06
t6	Dec-12	552	7,665	£56.42	£783.67
t7	Dec-13	644	8,943	£65.83	£914.28
t8	Dec-14	736	10,220	£75.23	£1,044.89
t9	Dec-15	828	11,498	£84.64	£1,175.50
t10	Dec-16	920	12,775	£94.04	£1,306.12
t11	Dec-17	1,012	14,053	£103.44	£1,436.73
t12	Dec-18	1,104	15,330	£112.85	£1,567.34
t13	Dec-19	1,196	16,608	£122.25	£1,697.95
t14	Dec-20	1,288	17,885	£131.66	£1,828.56
t15	Dec-21	1,380	19,163	£141.06	£1,959.17
t16	Dec-22	1,472	20,440	£150.46	£2,089.79
t17	Dec-23	1,564	21,718	£159.87	£2,220.40
t18	Dec-24	1,656	22,995	£169.27	£2,351.01
t19	Dec-25	1,748	24,273	£178.68	£2,481.62
t20	Dec-26	<b>1,840</b>	<b>25,550</b>	<b>£188.08</b>	<b>£2,612.23</b>