

Cost Comparison of LED Lighting Solution to Generic Lighting Solution

**A Room Fitted with a Total of Six MR16 Downlight Fittings
Comparison between using 50 Watt Halogen Bulbs against a 6 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>
Power Usage			
Watts per 6 light fittings	36	300	264
Kilowatts per 6light fittings	0.036	0.3	0.264
Power Costs			
Rate per day (2006 price + 20%)	10.224	10.224	
Cost per hour in pence	0.37	3.07	2.70
Estimated average hours usage per day	7	7	
Cost per day in £	£0.03	£0.21	£0.19
Estimated average hours usage per year	2,555	2,555	
Cost per year in £	£9.40	£78.37	£68.96
<u>OVERALL ENERGY SAVING OVER A 20 YEAR PERIOD</u>			
Energy in Kilowatts	1,840	15,330	13,490
Power Costs	£188.08	£1,567.34	
	£188.08	£1,567.34	£1,379.26

Chart Showing Comparison of Energy Consumption

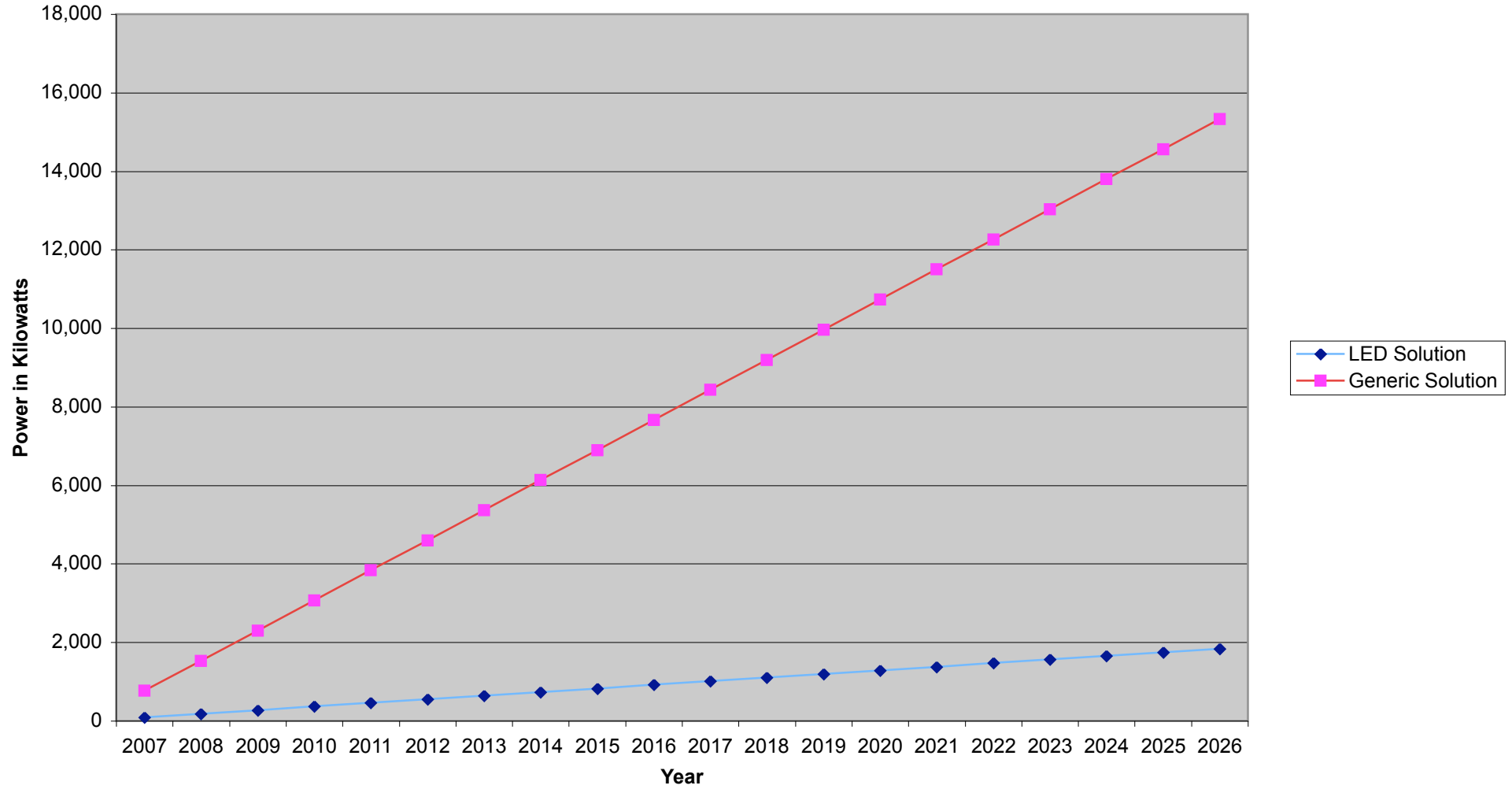
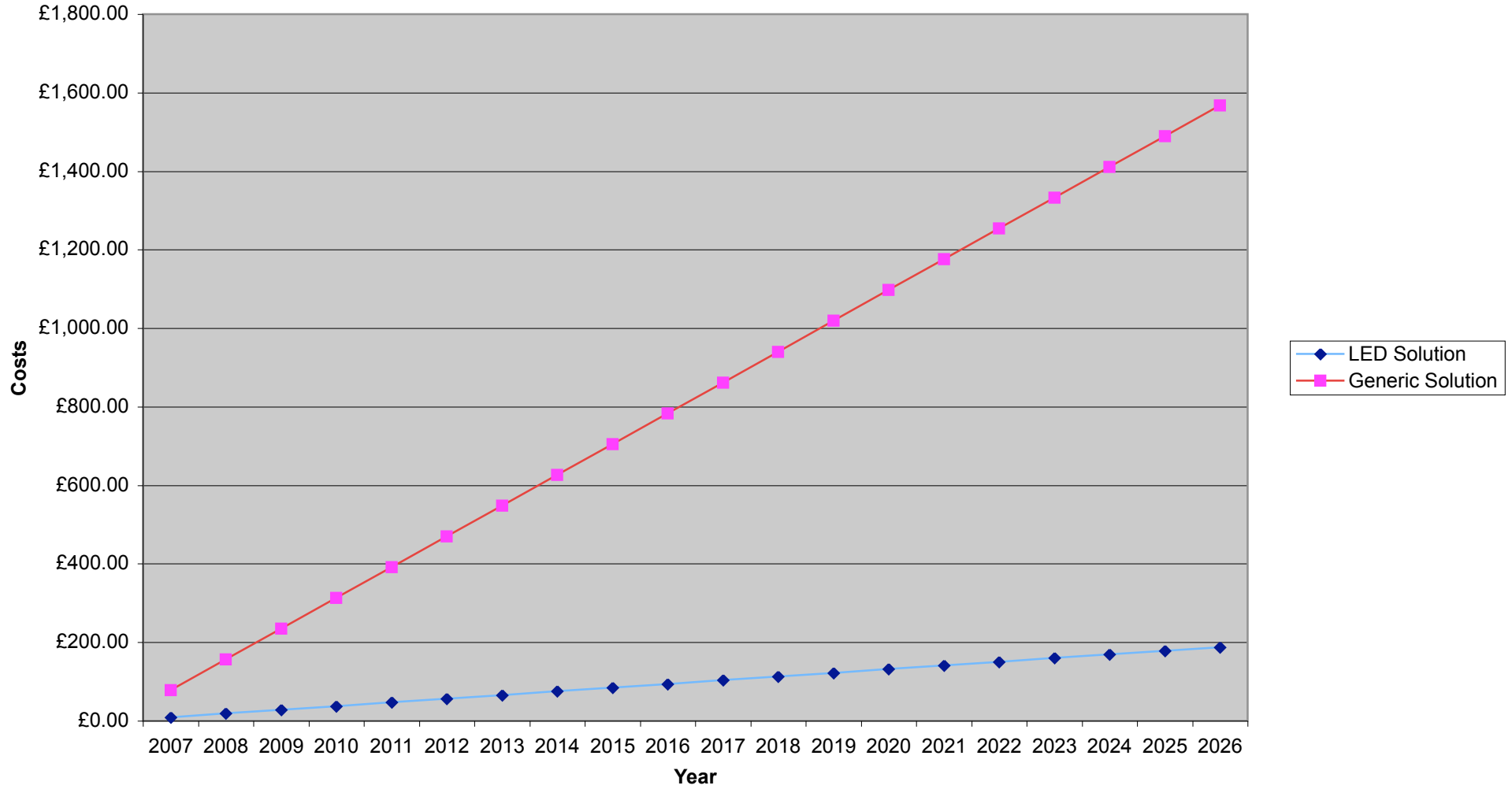


Chart Showing Comparison of Power Costs



Annual Data

Time	Year	LED kw / h	Generic kw / h	LED £ / h	Generic £ / h
t0	Jan-07	0.04	0.30	£0.0037	£0.0307
t1	Dec-07	92	767	£9.40	£78.37
t2	Dec-08	184	1,533	£18.81	£156.73
t3	Dec-09	276	2,300	£28.21	£235.10
t4	Dec-10	368	3,066	£37.62	£313.47
t5	Dec-11	460	3,833	£47.02	£391.83
t6	Dec-12	552	4,599	£56.42	£470.20
t7	Dec-13	644	5,366	£65.83	£548.57
t8	Dec-14	736	6,132	£75.23	£626.94
t9	Dec-15	828	6,899	£84.64	£705.30
t10	Dec-16	920	7,665	£94.04	£783.67
t11	Dec-17	1,012	8,432	£103.44	£862.04
t12	Dec-18	1,104	9,198	£112.85	£940.40
t13	Dec-19	1,196	9,965	£122.25	£1,018.77
t14	Dec-20	1,288	10,731	£131.66	£1,097.14
t15	Dec-21	1,380	11,498	£141.06	£1,175.50
t16	Dec-22	1,472	12,264	£150.46	£1,253.87
t17	Dec-23	1,564	13,031	£159.87	£1,332.24
t18	Dec-24	1,656	13,797	£169.27	£1,410.61
t19	Dec-25	1,748	14,564	£178.68	£1,488.97
t20	Dec-26	1,840	15,330	£188.08	£1,567.34