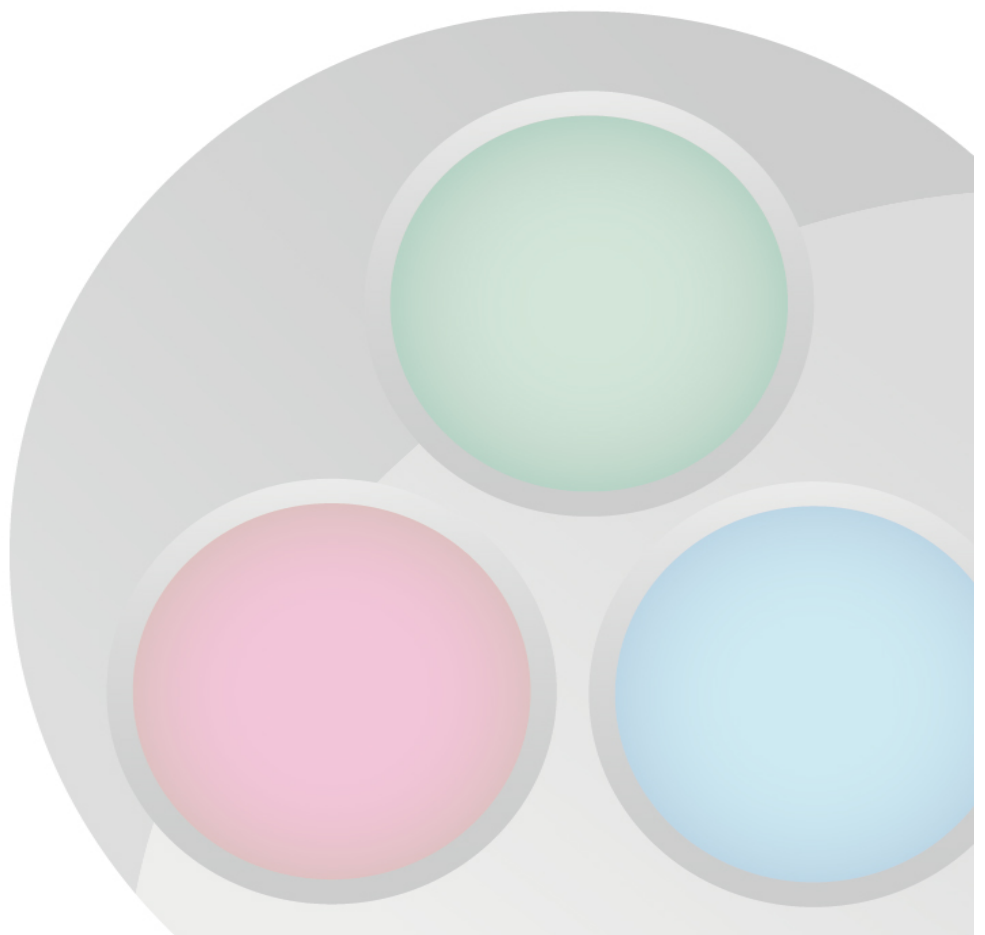


**LED Design Solutions Ltd**

## **Lighting Audit Report**

**Sample Report**





## Quotation Letter

Our Ref: SAMPLE  
Your Ref: SAMPLE

Date: 2015

Dear Client,

Many thanks for the information supplied, and for the opportunity to quote for the supply and installation of LED lights to replace your existing system.

As previously explained LED is the current technology available as an alternative to existing incandescent and low energy compact fluorescents.

The benefits are considerable when taking into account up to 71% energy savings while matching the light output from conventional lighting, and with added benefits such as up to 50,000-hour lamp life and a reduction in maintenance and fluorescent lamp replacement costs.

The figures quoted are based on a survey carried out by us. We have also provided installation and system commissioning costs by our recommended contractors separately.

Continued...



## Final Cost

Our Ref: SAMPLE

Your Ref: SAMPLE

Date: 2015

### To supply, install and commission the following

80 x 45W 600 x 600 panels LDS-P6060/45	Cost each	£90.00
25 x 240mm Circular panels LDS-DP/240/15	Cost each	£45.00
40 x 158W High Bay Light LDS-HB/158	Cost each	£180.00
10 x 100W Flood Lights LDS-FL100	Cost each	£120.00
	Total	£16,725.00
Electrical and mechanical install and commission (includes Access Equipment)		£3,100.00
Total Project cost. (Excluding VAT)		£19,825.00

Should you require any further information or assistance please do not hesitate to contact me.

Yours Sincerely

Alan Sum  
Managing Director



## Introduction

The purpose of this report is to detail the savings available through using our Array Series of low-bay lights. There are fiscal and environmental advantages to using our energy efficient luminaries through the reduction of your carbon footprint and up to 71% electricity savings vs Fluorescent.

### LED Luminaries

LEDs last substantially longer than other lighting options (up to 50,000 hours), making them ideal for high or hard to reach locations. This cuts down on maintenance and replacement costs while providing reliable illumination. Additionally, LEDs achieve full brightness almost instantly - having no warm-up time at all is good for health & safety and productivity.

### Carbon Trust Funding - Provided by Siemens Finance

The carbon trust in partnership with Siemens Finance is able to provide very competitive finance solutions to enable customers to take advantage of the cost savings from using LEDs while paying off their initial cost over a number of years.

We are happy to liaise with the finance provider and your accounts team with regards to any technical information needed throughout the application process.

### Enhanced Capital Allowances

Our energy saving LEDs are ETL (Energy Technology List) compliant which qualifies them for tax relief through Enhanced Capital Allowances.



## Report Summary

Client: Sample  
Site: Sample  
Survey Date: 2015

Based on information gathered from the lighting survey and our proposed lighting solution, we can estimate your current annual lighting energy costs and savings when switching to our LED products.

Energy Breakdown	Current	LED
Annual lighting energy usage	74,438.00 kWh	21,793.85 kWh
Carbon emissions from lighting	36,791.73 kg	10,771.83 kg
Current energy price	£ 0.12 per kWh	
Expected energy cost increase %	2 %	

### Savings Overview

Annual reduction in energy usage	52,644.15 kWh
% Energy savings	70.72%
Reduction in carbon footprint	26.02 tonnes
First year energy savings	£ 6,317.30
Five year energy savings in warranty period	£ 28,146.16
Six year energy savings**	£ 34,117.60
Seven year energy savings**	£ 40,208.47

\*\* Six and seven year savings are estimated savings beyond warranty period

### Total Saving After Initial Cost

Full project cost including installation	£ 19,825.00 +VAT
Estimated payback in 2.5 years	
Savings over 5 years after payback	£ 8,321.16
Savings over 6 years after payback	£ 14,292.60
Savings over 7 years after payback	£ 20,383.47



**5 Year cost savings comparison table**

Job Title:	Sample
Quote Ref:	Sample
Date:	xx/xx/2015
Prepared by:	Alan Sum

Number of days usage per year	Hours per day	Estimate cost per kWh (£)	Yearly energy price increase
260	10	0.12	2%

Existing

							Total Energy Cost							
Location	Type	Count	Unit price	Wattage	Initial Cost	Installation	1st Quarter	Year 1	Year 2	Year 3	Year 4	Year 5	Year 6	Year 7
Offices	Fluorescent Tube T8 2ft	320	2.00	24	640.00	1,600.00	599.04	2,396.16	2,444.08	2,492.96	2,542.82	2,593.68	2,645.55	2,698.47
	2D Downlight	25	15.00	38	375.00	500.00	74.10	296.40	302.33	308.37	314.54	320.83	327.25	333.79
Warehouse	SON Light	40	100.00	400	4,000.00	800.00	1,248.00	4,992.00	5,091.84	5,193.68	5,297.55	5,403.50	5,511.57	5,621.80
Exterior	Halogen Floodlight	10	80.00	400	800.00	200.00	312.00	1,248.00	1,272.96	1,298.42	1,324.39	1,350.88	1,377.89	1,405.45
<b>Totals:</b>		<b>395</b>			<b>£5,815.00</b>	<b>£3,100.00</b>	<b>£2,233.14</b>	<b>£8,932.56</b>	<b>£9,111.21</b>	<b>£9,293.44</b>	<b>£9,479.30</b>	<b>£9,668.89</b>	<b>£9,862.27</b>	<b>£10,059.51</b>

LDS LED

							Total Energy Cost							
Location	Type	Count	Unit Price	Wattage	Initial Cost	Installation	1st Quarter	Year 1	Year 2	Year 3	Year 4	Year 5	Year 6	Year 7
Offices	600 x 600 LED Panel	80	90.00	45.0	7,200.00	1,600.00	280.80	1,123.20	1,145.66	1,168.58	1,191.95	1,215.79	1,240.10	1,264.91
	240mm Circular LED Panel	25	45.00	15.0	1,125.00	500.00	29.25	117.00	119.34	121.73	124.16	126.64	129.18	131.76
Warehouse	158W LED High Bay	40	180.00	158.0	7,200.00	800.00	492.96	1,971.84	2,011.28	2,051.50	2,092.53	2,134.38	2,177.07	2,220.61
Exterior	LED Floodlight	10	120.00	100	1,200.00	200.00	78.00	312.00	318.24	324.60	331.10	337.72	344.47	351.36
<b>Totals:</b>		<b>155</b>			<b>£16,725.00</b>	<b>£3,100.00</b>	<b>£881.01</b>	<b>£3,524.04</b>	<b>£3,594.52</b>	<b>£3,666.41</b>	<b>£3,739.74</b>	<b>£3,814.53</b>	<b>£3,890.82</b>	<b>£3,968.64</b>
					<b>Initial Cost:</b>	<b>£19,825.00</b>								



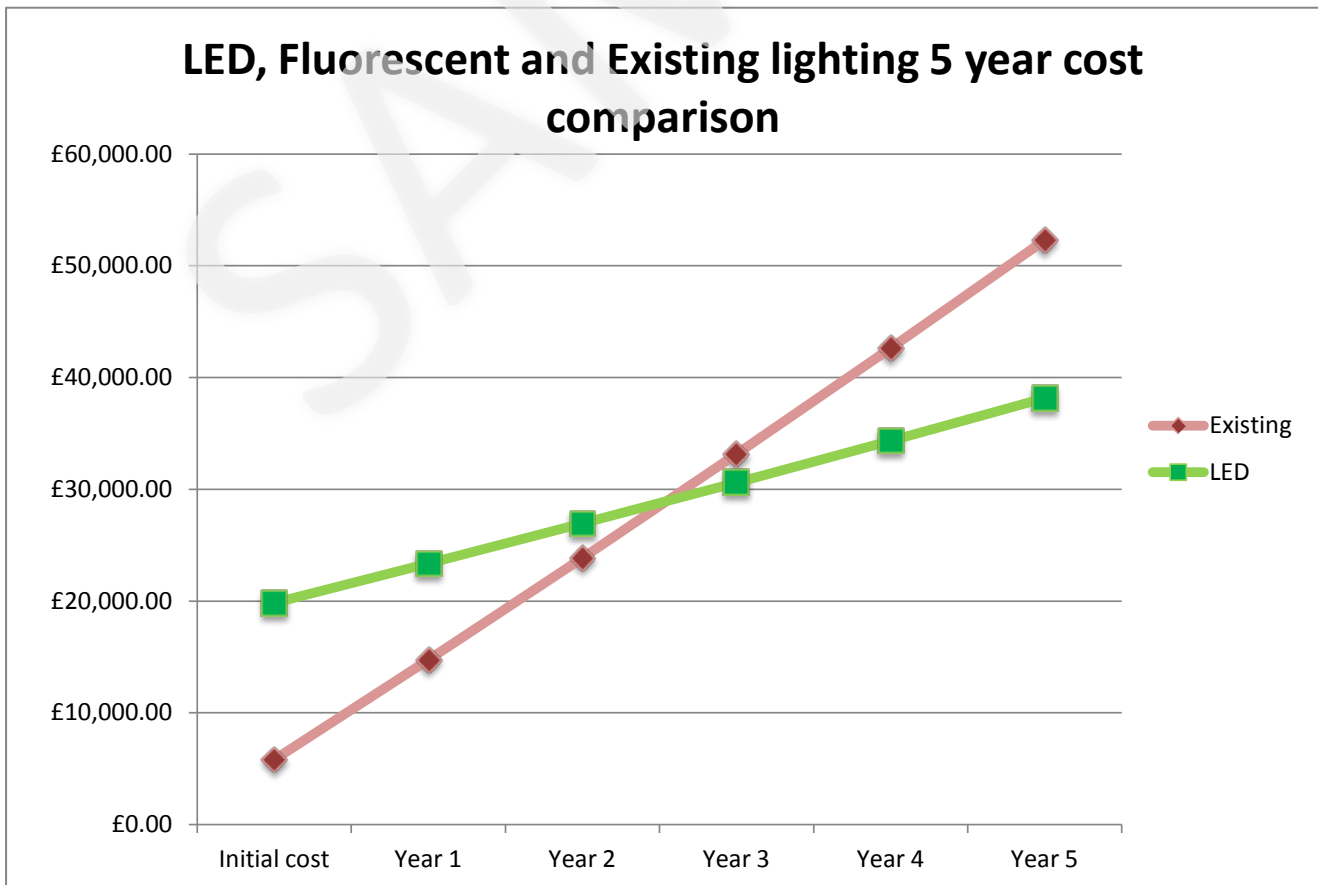
## 5 Year cost savings comparison chart

### Existing and LED lighting 5 year cost comparison

	Initial cost	Year 1	Year 2	Year 3	Year 4	Year 5
Existing	5,815.00	8,932.56	9,111.21	9,293.44	9,479.30	9,668.89
LED	19,825.00	3,524.04	3,594.52	3,666.41	3,739.74	3,814.53
Cumulative LED Savings	-14,010.00	-8,601.48	-3,084.79	2,542.23	8,281.80	14,136.16

### Cumulative Existing and LED lighting 5 year cost comparison

	Initial cost	Year 1	Year 2	Year 3	Year 4	Year 5
Existing	5,815.00	14,747.56	23,858.77	33,152.21	42,631.51	52,300.40
LED	19,825.00	23,349.04	26,943.56	30,609.97	34,349.71	38,164.25



\* The cost savings estimates do not include replacement costs for existing lamps during the expected life of LDS LED lights.



### Lighting Audit Report - Breakdown

#### Offices

Descripton	Cap	Wattage	Days	Hours/Day	Count	kWh	Dimmer	Replacement	Replacement Count	Wattage	Replacement kWh
Fluorescent Tube T8 2ft	G13	24	260	10	320	19,968.00	N/A	600 x 600 LED Panel	80	45	9,360.00
2D Downlight		38	260	10	25	2,470.00	N/A	240mm Circular LED Panel	25	15	975.00
<b>Total</b>						<b>345</b>	<b>2,470.00</b>		<b>105</b>		<b>975.00</b>

#### Warehouse

Descripton	Cap	Wattage	Days/Week	Hours/Day	Count	kWh	Dimmer	Replacement	Replacement Count	Wattage	Replacement kWh
SON Light		400	260	10	40	41,600.00	N/A	LED High Bay	40	158	16,432.00
<b>Total</b>						<b>40</b>	<b>41,600.00</b>		<b>40</b>		<b>16,432.00</b>

#### Exterior

Descripton	Cap	Wattage	Days/Week	Hours/Day	Count	kWh	Dimmer	Replacement	Replacement Count	Wattage	Replacement kWh
Halogen Floodlight		400	260	10	10	10,400.00	N/A	LED Floodlight	10	100	2,600.00
<b>Total</b>						<b>10</b>	<b>10,400.00</b>		<b>10</b>		<b>2,600.00</b>

<b>Grand Total</b>						<b>Count</b>	<b>kWh</b>		<b>Count</b>		<b>Replacement kWh</b>
						<b>395</b>	<b>54,470.00</b>		<b>155</b>		<b>20,007.00</b>