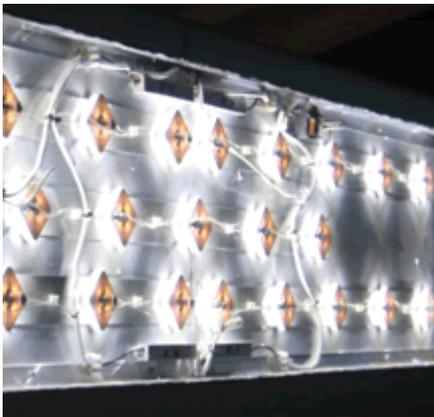
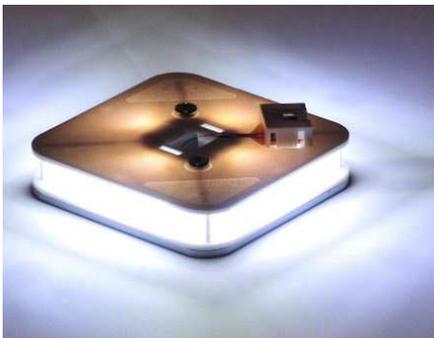


Caffè Ritazza installed QL4 QuarterLites to reduce energy consumption in their Manchester Airport restaurant in the North West of England. The lights were installed behind the existing fret cut fascia's using retro-fit kits.

The QL4's use the latest high power LEDs to reduce energy consumption by 84%. The light output more than matched the fluorescent tubes they were replacing in this high (ambient) brightness area. They require no maintenance for over 50,000 hours.

**Energy saving 84%**

**Maintenance free 10.5 years**



### QL4 Specification:



Light output	400 - 428 Lm
Half life	50,000 + hours
Input current	350mA, 4-12v, 4w
Wave guides	Silver ABS plastic
Heat Sink	Aluminium
Op/temperature	Ambient + 6° C
Size	80 x 80 x 24 mm
Weight	75 g
Guarantee	2 years

### Sign Lights Ltd

Unit 25, Wirral Business Centre  
 Birkenhead, CH41 1JW  
 T: 0151 639 6975  
 E: [sales@sign-lights.co.uk](mailto:sales@sign-lights.co.uk)  
 W: [www.sign-lights.co.uk](http://www.sign-lights.co.uk)



The existing fluorescent tubes and control gear was removed and replaced with 5 QL-FS5 retro-fit kits. These factory assembled kits make it very quick and easy to replace existing lights on site.

Fluorescent Size	Qty	Item	Wh Unit	Wh Total	Wh 13/365 kWh	Total cost 5Y	CO2 Kgs	Carbon Kgs	
4200 x 800	8	4' Fluorescent Tube	36	288	1,367	701.32			
	8	3' Fluorescent Tubes	30	240	1,139	584.43			
	16	Ballast	10	160	759	389.62			
					<b>kWh per year</b>	<b>3,265</b>	<b>1,364.26</b>		
					New tubes	174.40			
					Tube disposal	164.00			
					<b>Total cost</b>	<b>1,702.66</b>	<b>8,765</b>	<b>2,391</b>	
QuarterLite Size	Qty	Item	Wh Unit	Wh Total	Wh 13/365 kWh	Total cost 5Y	CO2 Kgs	Carbon Kgs	
4200 x 800	5	QL-Kit 5	22	110	522	267.86			
					<b>kWh per year</b>	<b>522</b>	<b>£267.86</b>	<b>1,401</b>	<b>382</b>
					<b>Saving</b>	<b>2743</b>	<b>£1,434.79</b>	<b>7,364</b>	<b>2,009</b>
					<b>84.01%</b>	<b>84.27%</b>	<b>84.01%</b>	<b>84.01%</b>	

### Key:

**Wh (Unit)** = Watts of electricity used per hour by each tube or QL4

**Wh (Total)** = Qty x Wh (unit)

**12/365\* (kWh)** = Wh (total) x 12 hours x 365 days / 1000 = kWh per year

**Energy (cost 5/Y)** = kWh x cost of energy\*\* of 5 years.

**CO2** = The amount of CO2 (Kgs) produced as a result of generating the **Total kWh per year**

**Carbon** = the equivalent Carbon (Kgs) produced from the **Total kWh per year**

**Total kWh per year** = Total energy use in 1 year for each lighting system

**New Tubes / Disposal** = cost of replacing and disposing of fluorescent tubes over 5 years

**Saving** = difference between the two lighting systems in kWh, Energy costs, CO2 and Carbon (note: This excludes the savings in maintenance)

\*\*Over 10.5 year's maintenance free. \*Energy cost forecasts from UK Government source.