

## Lighting Energy Saving Solution

### Evaluation and comparison of different lighting systems

	Original T8 Luminaire	Nanoflex™ Solution
<b>Fluorescent Tube</b>		
Quantity of Tubes per Luminaire	3	2
Rated Power (W) <sup>(1)</sup>	34.5	34.5
Life Span (hours)	8,000 - 10,000	15,000 - 18,000
Light Output (lumen)	2500	3250
Lamp Efficacy (lumen/watt)	69.4	90.3
Total Installed Power (W per luminaire) <sup>(1),(2)</sup>	103.5	69.0
Change in Lighting level (%)		
Floor A	-	78
Floor B	-	0
<b>Technicality</b>		
Installation	-	Easy and Quick

(1) The average of 4 types of luminaires.

(2) Total installed power (per luminaire) excludes ballast losses to simplify the calculation.

### Cost benefit analysis (per luminaire)

	Original T8 Luminaire	Nanoflex™ Solution
Total Installed Power (W) <sup>(1)</sup>	103.5	69.0
Annual Operation Hours	3252	3252
Electricity Tariff (HK\$/kWh) <sup>(2)</sup>	0.89	0.89
Annual Electricity Cost (HK\$)	299.56	199.71
Annual Cost Saving (HK\$)	-	99.85
Payback Period (Year)	-	< 2
Reduction in Lamp Replacement Cost (%)	-	33
Reduction in A/C Energy Cost	-	Yes

(1) The average of 4 types of luminaires.

(2) 0.89HK\$/kWh is the average unit electricity price.



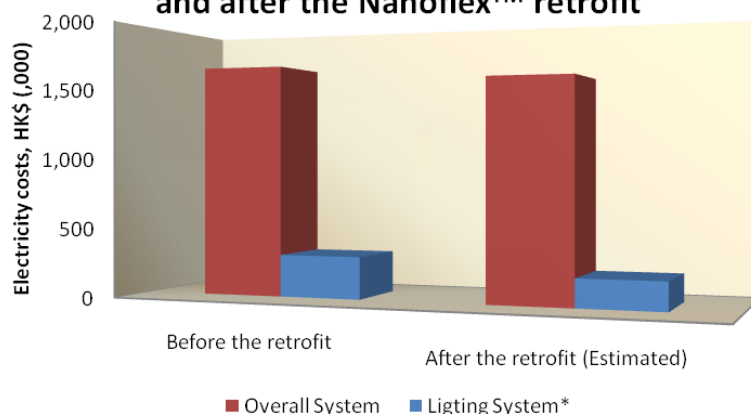
Before the installation of Nanoflex™



After the installation of Nanoflex™

	Lighting system	Overall system
Electricity cost saving, %	33.3	6.0

### Comparison on the electricity costs before and after the Nanoflex™ retrofit



\* Based on the data indicated in the tables above