

Lighting Energy Saving Solution

Evaluation and comparison of different lighting systems

	Original T8 Luminaire	Nanoflex™ Solution
Florescent Tube		
Quantity of Tubes per Luminaire	3	2
Rated Power (W) ⁽¹⁾	30.8	30.8
Model	36W/33	36W/865
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) ^{(1),(2)}	92.3	61.6
Technicality		
Installation	-	Easy and Quick

(1) The average of 2 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) ⁽¹⁾	92.3	61.6
Annual Operation Hours	2895	2895
Electricity Tariff (HK\$/kWh)	1.14	1.14
Annual Electricity Cost (HK\$)	304.62	203.30
Annual Cost Saving (HK\$)	-	101.32
Payback Period (Year)	-	< 2
Reduction in Lamp Replacement Cost (%)	-	33
Reduction in A/C Energy Cost	-	Yes

(1) The average of 2 types of luminaires.



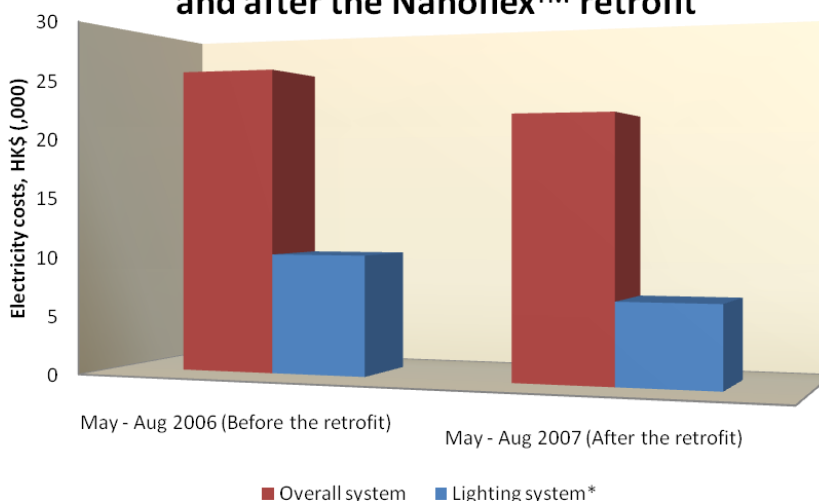
Before the installation of Nanoflex™



After the installation of Nanoflex™

	Lighting system	Overall system
Electricity cost saving, %	33.3	15.9

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



* Based on the data indicated in the tables above