

# Himax

# Business Plan

**EXCEED<sup>®</sup>**

Realize perfect replacement lighting which overcome  
the limit of current LED lighting!!



**2017.01.27**

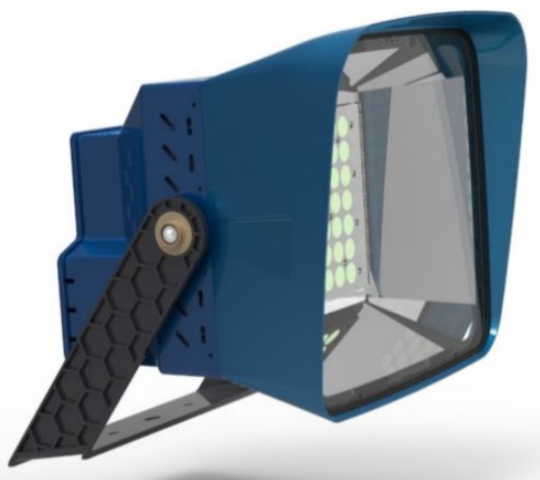


1Kw~2Kw Metal halides lamp > 350W LED

EXCEED<sup>®</sup>-350  
(350W)

## Applications

**Sports Facilities**  
**<Stadium, Golf, Ski>**  
**Aeroplane shed**  
**Airport.**  
**Harbors.**  
**Factories. Plants**  
**Street light.**  
**Security.**



## Comparison

	Exceed	Metal Halide	Merits
W	200-300w	1~2k	60-80% power save
Environment	N/A	mercury	Eco-friendly
Life	50khrs	8month	Easy maintenance
Color	diversity	Cool	Diversity color
Turn on time	immediately	Time	Immediately

## Products ( 12kinds )

200W	250W	300W	350W
			
Radiation : 3kinds ( 15°, 40°, 60° )			





## Core Technology

- **Most reasonable Thermal control Technology in the world**

**Thermal PCB**  
**<CNT>**

**30% ▲**

**CONTROL PCB**

**100% ▲**

**Solenoid Fan**

**Thermal sensor**

**Low energy ( 13W) ,**

**Long Lifecycle( 200khr) 100% ▲**



**Housing: corrosion ZERO**  
**Lightweight**

**100% ▲**

**Optimum LED Diffusion lens**



**Thermal design**

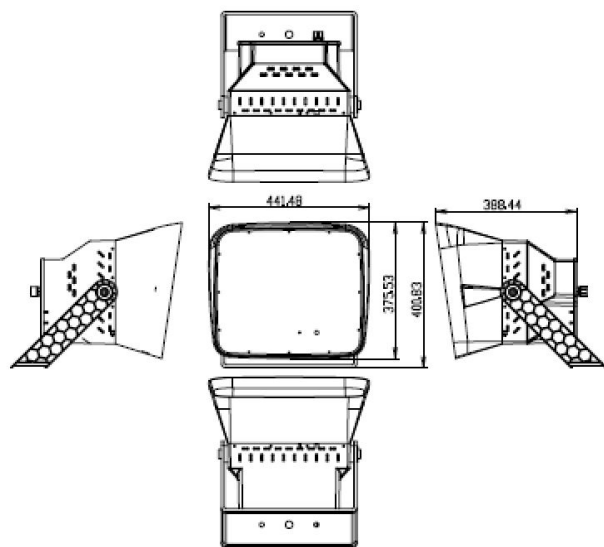
**Materials: Graphite , CNT**

**Lightweight**

**corrosion ZERO 50% ▲**



# EXCEED<sup>®</sup> Product parameters



## OUTDOOR PROJECT( EXCEED 300W) PRODUCT SPECIFICATION

	Unit	EXCEED-300	REMARK
Life time	Hrs	Over 50,000	
LED spec		10W * 54EA	
Dimension	M	441*376*388	
Weight/SET	KG	11	
Input Power	V	AC 220V	DC 36V
Power consumption	W	300	
Color Temp.	K	3000~6500K	
Luminous effeciency	Lm/W	158	
Radiation angle	°	10,40,60	
Operation Temp.	°C	-25° ~ 70°	
Lamp Temp.	°C	40° ~ 60°	
Preheating time	min	immediately	
UV/IR		N/A	
P/F		0.96	



## APEXLED-P1 <2009'>

*EXAMPLE*



**200W, promotion to Kuala Lumpur airport.**





**Cost saving propose to Manila Harbor**  
**< 1K Metal lamp replace to 350W LED lamp.>**



## Economical Analysis of LED light Replacement

※ **Total Cost Savings based on USD 0.16 / KW for 5 years.**

**1EA, 50.000 hr** : USD 10,723.00(a+b+c)x 10000ea=USD 107,230,000.00

1. **Electricity savings rate** – save USD 432,00 / ea.

Current **Metal Halide** 1kw : 1,000w+100w(SMPS) = Actual used power **1,100w**

**Calculate electricity use reduction rate ( 50.000 hr basis)**

**1KW 1 hour Usage charge : ( \$ 0.16 )**

Metal – 1,100w × 50000 hr × 0.16X 1 ea = usd 8,800.00.

LED – 300w × 50000 hr × 0.16= 1 ea = usd 2,400.00

<Reduction rate – **73. USD 6,400,000.0**

2. **Metal Lamp Replacement Cost save** = USD **350 / ea**

Lamp( bulb) price, life time is 1 year. 1 ea per year x 11year = 3,850.00(b)

3. **Labor and equipment charges save (Electricity fee 10%) =**

USD43/ea x 11=473.00 (c)

※ **Calculate the user's profitability**

**when using LED lighting after 5 years of HALOGEN LAMP replacement**

**Reduced cost after replacement ( 10000ea, 50.000 hr )**

– USD 107,230,000.00 (d)

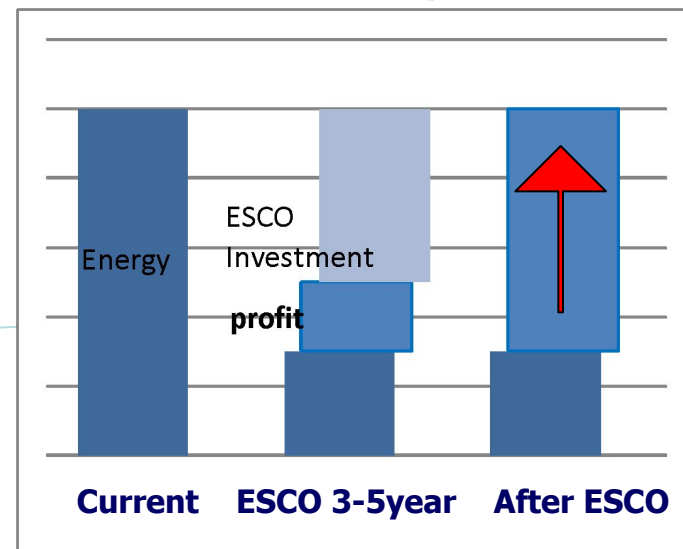
**investment costs ( LED lighting replacement)**

– 10.000ea × USD 2000 = USD 20,000,000 (e)

Installation cost for 10.000 pcs + about USD 2,000,000.00(f)

**Economic profit after user LED lighting replacement**

(d)–(e). (f) = 107,230,000.00 – USD 22,000,000 = USD 85,230,000.00 for 50.000 hr.



**Need simulation base on price of power**  
**Philippines: \$0.23**

	Metal	LED
Power	1K	350W
SMPS	100W	X
Lamp life	10 Month	x
Labor Equipment	10% of Electricity fee	x
<b>1EA 1 YEAR</b>		\$ 825 save
<b>10K 5 YEAR</b>		\$ 19,250,000, save
<b>Profit</b>	<b>\$ 38.9M</b>	<b>\$15.65M invest</b>

고객이 바라는 곳에 HIMA가 있습니다





# Factory View

**SMT, ASSY**



**HOUSING**

