Inheritance to Renaissance

Tempo LED

BVP163 22,000lm/220W
BVP162 11,000lm/110W

Public Segment, PLS, Growth Market
August 20th 2014

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Tempo LED

Cost performance New outdoor LED Floodlight

- **High Efficency**: More than 50% energy saving compared to conventional HPI-T flood light with approximately 839.5KWH energy saving per year.
- **Perfect replacement**: one to one easy replacement of conventional HPI-T flood.
- **Billboard optimize light distribution**: Uniformity of billboard application could be increased by 36.6%.
- **Modern Product Apprearance Design**: The unique color and simple design, Superior quality product.
- **Superior Design**: Design for outdoor application with IP65 degree of protection against water and dust.

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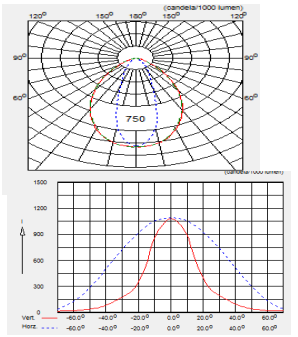
Tempo LED – BVP162/163 Product Spec

BVP163

BVP162

Model	BVP162/163
Optic	LED module (Nichia mid power)
System Efficacy	100 lm/w (NW, CW), 91lm/W (WW)
IP level	IP65
Installation	U shape bracket, it's billboard recommended installation angle mark (10°,25°,35°)on the bracket
Driver	Philips Fixed driver (Fixed current-1.0A)
Surge protection	6KV
Input voltage/frequency	220~240V 50/60Hz
Lifespan (B50L70)	30,000 hours

Type	Lumen Output	Power	CCT	Light Distribution
Tempo LED BVP163	22,000 lm	220W	NW, 4000K CW, 5700K WW, 3000K	Multipurpose LED light Distribution
Tempo LED BVP162	11,000 lm	110W		



Note: WW's lumen output will be about 9% lower than NW/CW

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Tempo LED – BVP162/163 Product Spec

Product type		BVP 162/163		Memo
Application		Billboard, General outdoor area lighting, Crossroad high pole , parking lot, Outdoor stadium(non-professional),		
LED	CCT	WW:3000K, NW:4000K , CW: 5700K		
	CRI	Typical 70		
Optics	Lumen Output	11,000lm	22,000lm	
	Lense	Billboard optimize + Multipurpose LED Flood light		
Electric	Power	110w	220w	
	Input voltage	220-240V,50/60hz,		
	PF	Min 0.9		
Efficency		100 lm/w		
Working temperature		- 40ºC < Ta< 45ºC		
IP level		IP65		Philips test report
Surge protection		6KV		Philips SPD
Salty spray		200 hrs		
IK level		IK07		Philips test report
Wind proof		Can protect under 14level typhoon		Philips test report
Vibration proof		Pass Philips internal vibration proof test		

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Tempo LED - BVP162/163 Product Spec

Product type	BVP 162/163	Memo
Size	BVP163: 510 x 500 x 53mm BVP162: 510 x 365 x 53mm	
Weight	BVP163: 7 kg BVP162: 5 kg	
Package	Colour packaging	
Lifespan	30,000 hrs @ L70B50, Outdoor Ta=35	
Installation	U shape bracket, it's billboard recommended installation angle mark (10°,25°,35°)on the bracket	U shape bracket
Approbation	CQC, CB/EMC, RoHS, CE	
Luminaire material	ADC1	
Lense	Equipped with Anti-Dust flat lens and UV resistant plastic, Design for outdoor application with IP65 degree of protection against water and dust	
ETO	No dimming	
Production Leadtime	35Days (FCST)	
Supplier	Philips Chengdu factory	
Release time	August 2014	

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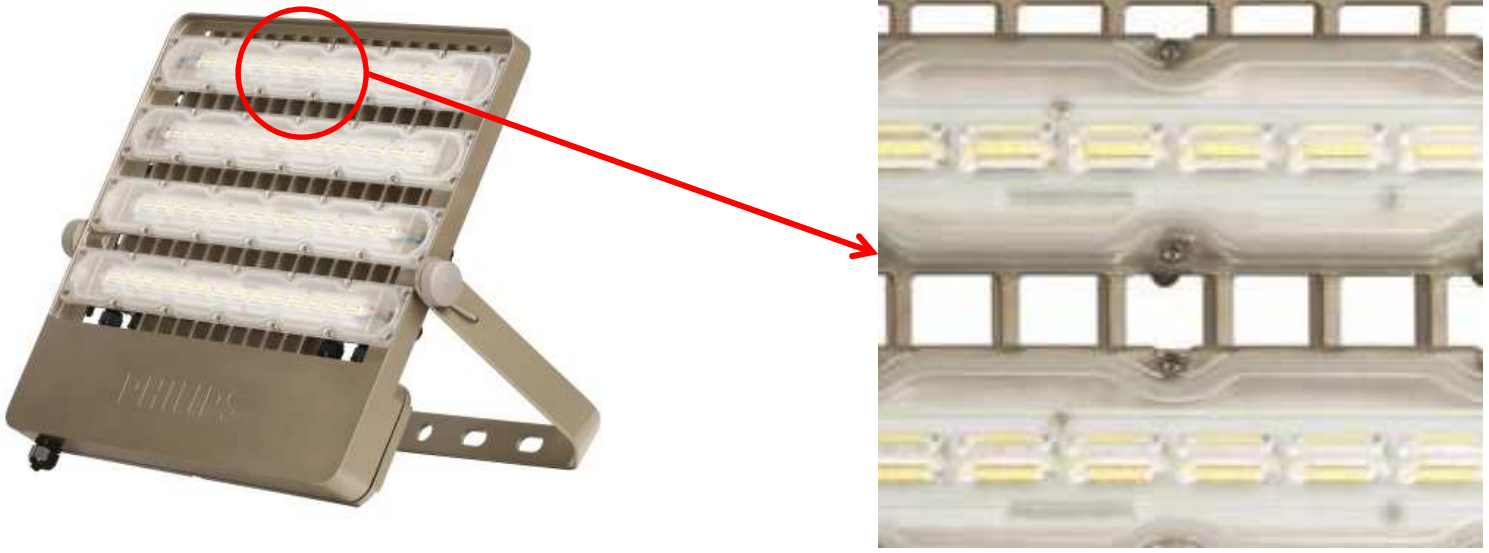
Tempo LED - Anti-Dust flat lens

- **Equipped with Anti-Dust flat lens and UV resistant plastic**
- **Design for outdoor application with IP65 degree of protection against water and dust**
- Can resist 14 level typhoon



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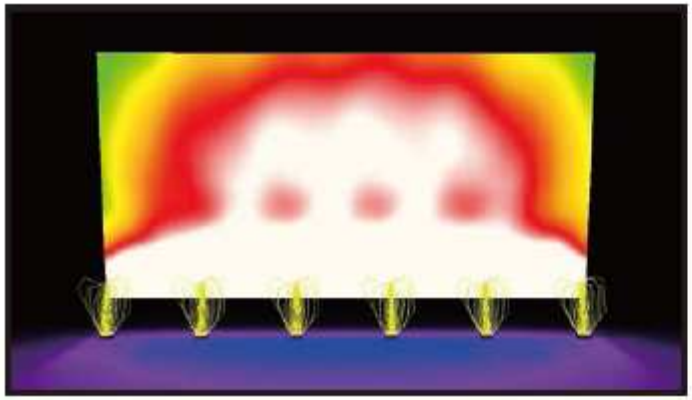
Billboard optimize photometric-Tempo LED

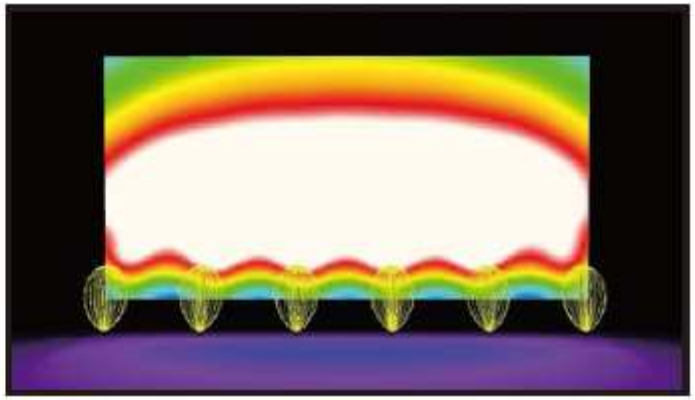
- Billboard optimize photometric, it can greatly promote the uniformity & visual effects. It almost can promote around 36.6% uniformity.
  (see below an example – 12 ×6 m billboard single installation)
- Good uniformity, no parasitic light.
- Single photometric can meet billboard and general outdoor application.

Uniformity simulation comparison (12 ×6 m billboard single installation – 6pcs Lumi.)



Conv. 400W HPI-T

Have obvious area between light and shade



Tempo LED BVP163 220W

There is no non uniform area

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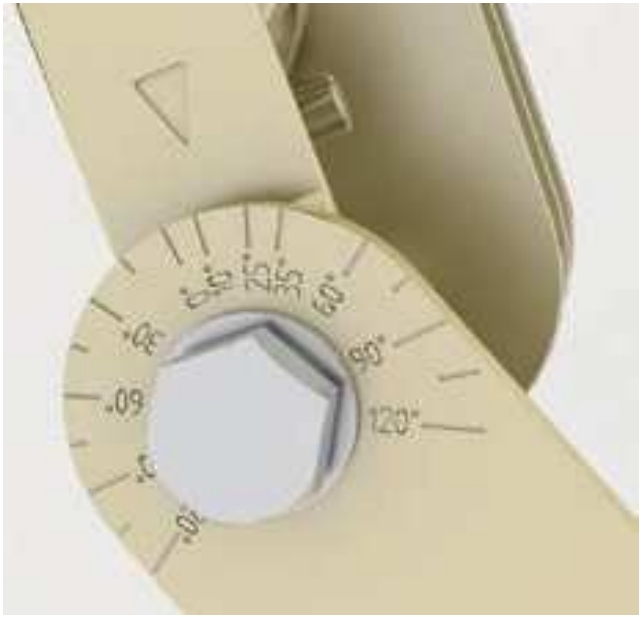
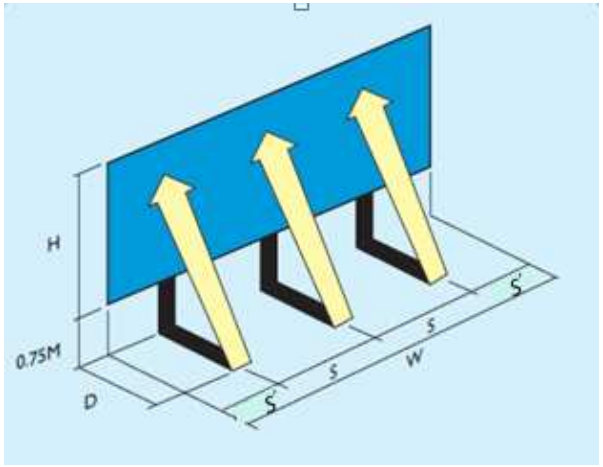
Billboard installation -Tempo LED

- Best installation angle in the bracket
  constructors can directly install the luminaire in terms of the recommendation angle to achieve a best uniformity effect. Give an example of 12mx6m billboard:
  - Single installation for 6pcs luminaire, recommend to install in 10°angle (distance between luminaire need to be adjusted accordingly)
  - Bilateral installation for 8pcs luminaire, upside luminaire 35°angle, downside luminaire 25° angle.



Single Installation：

- Distance between Lumi. And billboard D=1.5m
- Installed in the below 0.75m,
- Distance between Lumi. S，
- S'= S/4,
- Luminaire elevation is 10°



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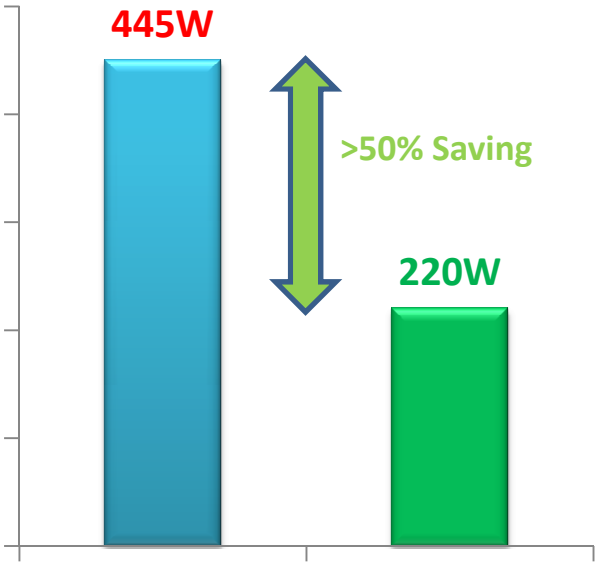
Tempo LED Vs conTempo



- More than 50% energy savings compared to conTempo 400W HPI-T, it saves 839.5 KWH / per year, approximately 130 $ electric charge
- 30,000hrs lifetime, can greatly reduce the maintenance cost of lamp
- Efficacy over 100lm/W, One to one replacement of HPI-T
- Low weight design, 45% lighter than ConTempo

Note1: Assume 10hrs ignition every day & AVG electric charge is 0.12 $/ KWH
Note2: can save (445-220)*10*365/1000 kwh/ per year
Note3: Assume the PF of conTempo driver is 0.9

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Tango G2 LED Vs Tempo LED

BVP163

BVP162

Tempo LED BVP162/163

- **Prof/Trade channel both**
- 30,000 hrs lifetime
- One-for all photometric
- DON'T suggest use in harbor/port
- No front chemical tempered glass
- Only 110W & 220W.
- **No dimming**
- CRI 70
- 7kg & 5kg lighter weight

BVP281

BVP282/283

Tango G2 BVP281/282/283

- **Project** channel only
- 50,000 hrs lifetime
- Many Photometric options
- Harbor/Port (BVP283)
- Chemical tempered glass IK07
- 40W~335W, also can ETO
- Dimming & Dali via ETO
- CRI 85
- 13.2kg/12.8kg/11kg

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Tempo LED Product Proposition

Avrg system* NNSP ($)

>500

400

200

100

NNSP: 520$

Tango LED:
Model name: BVP361,BVP363
Lifetime: 50,000hrs @ L70
Efficacy: 100lm/w with High power Ledgine3.0

NNSP: 399$

Tango G2 LED:
Model name: BVP281/2/3
Lifetime: 50,000hrs @ L70
Efficacy: 100lm/w
Mid power (BVP281/2)
High power Ledgine3.0 (BVP283)

NNSP: 180$(110w)
270$(220w)

Tempo LED:
Model name: BVP162/BVP163
Lifetime: 30,000hrs @ L70
Efficacy: 100lm/w with Mid power

NNSP: 130$

Tango:
Model name: MMF183/283/383
Lifetime: 25,000hrs
Efficacy: 50lm/w

NNSP: 75$

ConTempo:
Model name: RVP150/250/350
Lifetime: 25,000hrs
Efficacy: 50lm/w

* System: Flood+Lamp+Gear

Performance (Light technical / Features)

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Tempo LED Product Image

BVP163

BVP162


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