

# Q-RAY™

Not all LED bulbs are created equal



**wamco™**  
LIGHTING



**NEW!**

## DownLED LED Recessed Downlight

(Downlight Replacement)

### Product Description

The Q-RAY™ DownLED is developed to replace conventional lighting systems (Fixtures + Ballast + Bulb). It saves energy and conserves the environment by reducing carbon footprint. It operates on 115 VAC line voltage and adopts an easy 'plug-and-play' model, which makes it a perfect choice for those who opt for aesthetics and functionality.

### Applications

Superior choice for residential general illumination applications. Suitable for indoor and semi outdoor installations.

### Design Concept

Q-RAY™ DownLED offers good color rendering for better visibility and comfort lighting. It offers exact dimensions for retrofitting to existing fixtures. As usual, Q-RAY™ line of products ensures long term reliability and durability. Energy conservation and comfort lighting are Q-RAY™'s design guiding principles.



Long lasting, No mercury, No UV.  
Environmental Friendly

c  US  
**LISTED**

**LED lighting facts**  
LED Product Partner



ROHS

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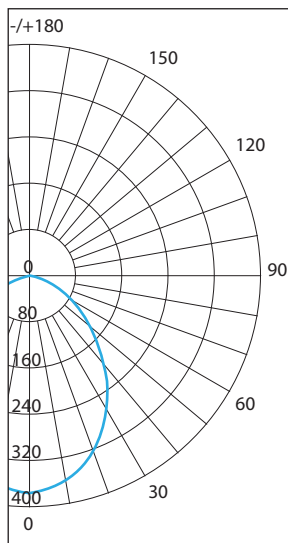
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## Q-RAY™ DLE Photometric Data (base on LM79 test method)

Digital Lighting Inc - 6" LED Downlight Luminaire  
with Frosted RIM (QDL06-USW-30G24E)  
Luminaire Lumen Output - 750 lm  
Lamp Operating at 120 VAC And 14.0W CCT - 3000K Nominal

### Intensity (Candlepower) Summary

Angle	Mean CP	Lumens
0	375	
5	370	9
10	362	26
15	347	42
20	326	55
25	300	66
30	271	72
35	237	75
40	204	73
45	170	69
50	139	62
55	113	55
60	88	46
65	63	37
70	41	26
75	23	16
80	9	8
85	4	3
90	2	2



### Zonal Lumens And Percentages

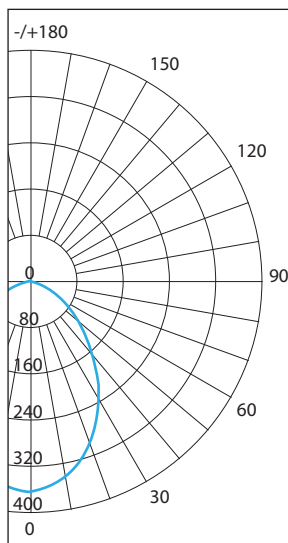
Zone	Lumens	%Lamp	%Luminaire
0-30	270	46.5	46.5
0-40	418	65.6	65.6
0-60	650	92.5	92.5
0-90	742	100	100

**\*\* Efficacy: 54 Lumens/watt \*\***

Digital Lighting Inc - 5" LED Downlight Luminaire  
with Frosted RIM (QDL05-USW-30G24E)  
Luminaire Lumen Output - 600 lm  
Lamp Operating at 120 VAC and 12W CCT - 3000K Nominal

### Intensity (Candlepower) Summary

Angle	Mean CP	Lumens
0	365	
5	358	7
10	348	23
15	330	38
20	306	50
25	277	59
30	245	64
35	211	65
40	178	63
45	148	58
50	119	52
55	92	44
60	67	34
65	46	25
70	27	16
75	14	9
80	6	2
85	3	1
90	2	0



### Zonal Lumens And Percentages

Zone	Lumens	%Lamp	%Luminaire
0-30	253	49.5	49.5
0-40	385	68.9	68.9
0-60	581	94.1	94.1
0-90	646	100	100

**\*\* Efficacy: 50 Lumens/watt \*\***

## Application Requirements

Using Q-RAY™ DownLED is simple. For new installation, the method is similar to conventional downlight. For retrofitting, it is a 'plug and play' conversion.

We recommend a ceiling height of between 8 to 12 feet to unleash the full potential of DownLED.

The DownLED 5" is designed to retrofit within PAR30 CAN while the 6" version retrofits within the PAR38 CAN.

## Light Emitting Diodes

Only lighting Class LEDs suitable for General Illumination are used.

## Body Material & Constructions

The advanced thermal management system design ensures 50,000 hours of operating life without color shift.

## Optical Properties

Q-RAY™ products are designed with wide angle so that the lumens (luminance) are directed to a wider area to enhance general illumination.

## Technical Specifications

Input Voltage	105 to 125 VAC
Power Factor	0.95
Typical Power	5" (12 W) 6" (14 W)
Illumination Angle	5" (80°) 6" (85°)
Recommended Installation Height	8 to 12 feet Ceiling
CCT*	Incandescent Warm 2700K Halogen Warm 3000K
CRI (Minimum)	80

Note: \* Nominal or Typical Color Temperature Referenced to ANSI C78.377-2008 specifications.

Typical Reading	5"	6"
Light Output (lm)	600	750
Power (W)	12	14
System Efficacy (lpw)	50	54
Color Accuracy	80	80
Light Color (K)	2700K or 3000K (warm)	

## Benefits of Q-RAY™ DownLED

- No UV light or heat generated through the light beam protect valuables on display and cooling during summer months.
- Low power consumption to minimize carbon emission.
- Durable & long lasting up to 50,000 hours or more.
- No reflector required. Light loss is minimal with long lumens maintenance hours.
- Dimmable\* down to 5%.
- No mercury content.

## Ordering Information

Part Number	
QDL05-USW-27G24E	Q-RAY™ DownLED 5", 2700K CCT, GU24, 50lpw
QDL05-USW-30G24E	Q-RAY™ DownLED 5", 3000K CCT, GU24, 50lpw
QDL06-USW-27G24E	Q-RAY™ DownLED 6", 2700K CCT, GU24, 54lpw
QDL06-USW-30G24E	Q-RAY™ DownLED 6", 3000K CCT, GU24, 54lpw

\* Depending on the dimmer used.

Note: While every effort has been made to ensure that the information contained herein is correct at the time of publication, specifications may change without prior notice.

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