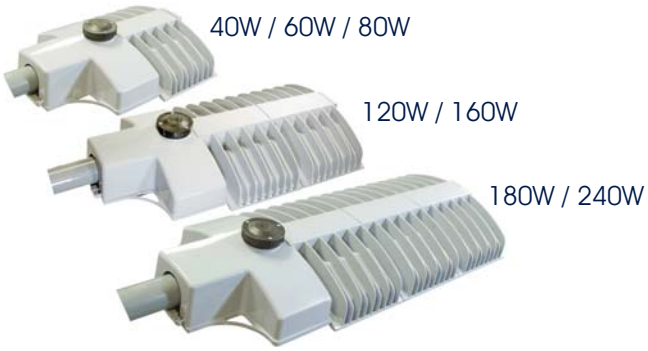
Dialight

Cape Girardeau, MO



40W / 60W / 80W

120W / 160W

180W / 240W

Patent Pending

StreetSense® Series LED Street Light

for roadway and area illumination

Meets Buy American

DESIGNLIGHTS CONSORTIUM

GSA Schedule Contract GS-07F-0664X

StreetSense® LED Street Light
Features and Benefits

Patented Optics
Precision optics and unique mechanical design delivers precise light placement and uniform illumination while minimizing light trespass

- Uniform light distribution delivering sharp cut-off
- Precision, injection molded and coated highly specular vacuum-metalized reflectors

- Dedicated IP 66 sealed optical cavities feature optically optimized glass lenses maximizing efficacy and control of distribution from each light engine module
- Optical light engines are optimally aimed to maximize light collection and directional distribution onto the application area
- High brightness LEDs deliver exceptional fixture efficacy (up to 92 lm/W) in a choice of three superior quality color temperatures; Cool (5000K ± 300), Neutral (4300K ± 300), Warm (3300K ± 300) with a typical CRI of 70
- Scotopic to photopic (S/P ratio) of LED is 1:1.6 for 4000K


Shown with optional house side shield

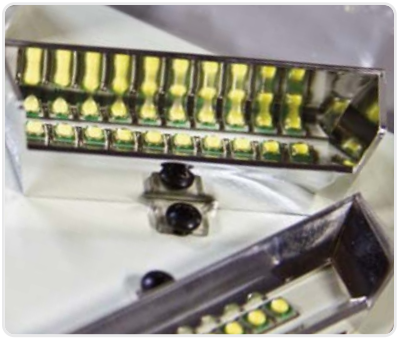
- No UV or IR emissions
- Optional black anodized house-side shield is available to further reduce back-side light trespass in residential areas
- In additional to glass, UV and abrasion resistant polycarbonate lenses are also available

Innovative Design
Designed for new construction and easy retrofit of existing HID cobra heads.

- High grade aluminum alloy A360 construction for superior strength and durability
- Wide, angled troughs are self-cleaning to prevent debris build-up between heat sink fins
- Vent openings in light engine casting paired with fins increased air flow velocity providing exceptional passive thermal managment

StreetSense® LED Street Light

Features and Benefits



- Metal clad LED PCBs are secured directly to the cast aluminum housing for superior thermal transfer
- Thermal protection circuitry prevents internal temperatures from reaching high levels, increasing long term reliability and allowing operation up to 74°C
- Rugged cast aluminum housing is subjected to a multistage (cleaning and sealing) per process AAMA 2604 and top coated with a super durable, polyester powder coated finish, available in 5 colors
- Finish is resistant to blistering, excessive fading or corrosion during warranty period

- Rugged heavy gauge, 4 bolt, aluminum clamp with stainless steel hardware secures fixture to pole arm
- Adjustable pole mount clamp can accommodate up to 2" IP (2.375" OD) pipe with provision for adjustmentment of ± 5° at 2.5° increments
- Unique hinged polycarbonate bottom cover provides tool-less access to terminal blocks and pole arm via a single trigger-latch

- Terminal block sized to allow for wire gauges from #14 AWG to #6 AWG and is accessible from under side of fixture
- Salt spray tested for corrosion - 3,000 hours per ASTM B117-97
- Withstands shock & vibration to Caltrans 611 levels – 3.0G peak-to-peak, 2 million cycles
- Stainless steel, SAE, captive hardware
- Large, easy to read two axis bubble level for quick and efficient fixture leveling during installation

Electrical

Ruggedized driver design and thermal management system ensure maximum energy efficiency and reliability

- Dialight's custom IP 65 rated LED drivers are constant current sources well suited for the load and the particular lighting application
- Field replaceable, primary fused, output isolated drivers are fully potted and encased in an aluminum extrusion for EMI noise immunity and thermal protection
- High efficiency, high power factor, ultra low THD, LED drivers incorporate overload and no load protection circuitry
- Universal inputs 100-277V AC, 50/60Hz and 347-480V AC, 50/60Hz
- LED Driver MTBF per Telcordia SR-332 – 5,102,040 hrs at 13.8C (average yearly temperature of five major cities)

StreetSense® LED Street Light
Features and Benefits

- Safety grommets in casting through-holes prevent abrasions to electrical wire insulation
- Robust, integrated 6kV/6kVA standard or optional 10kV/10kVA surge protection circuitry incorporate MOVs designed to clamp line voltages to safe levels per ANSI/IEEE C62.41.2-2002 Cat C

Lifetime

L70 / TM-21 Lifetime Report at 500mA – Calculated lifetime = 914,000 hrs; Reported lifetime = 60,500 hrs

- 7 year full performance warranty
- Factory burn-in (24 hr to avoid infant fatality)

Dialight Lumitrol™ Street Light Control System

Dialight-Airinet's revolutionary Lumitrol™ Street Light Control System (SLCS) instantly upgrades an ordinary street light to a "smart", energy conscious street light without any modification to existing equipment. The plug, twist and play Lumitrol™ Nodes provide real-time monitoring and control of street lights in lighting networks both large and small. A full suite of control features include remote on/off, dimming, flexible scheduling, daylight harvesting, emergency management and smart grid demand/ response energy management. Enhanced fault monitoring and management are standard features allowing operators to retrieve real-time power consumption data, temperature readings, and ambient light lamp light levels from a central server accessible via a secure web connection. Contact your Dialight sales representative for more information.

- Compatability with most existing street lights means quick access to the benefits of scheduling, dimming, reporting new and existing instillation
- Tool-less installation of up to 2,000 nodes per gateway
- Mesh Network (2.4GHz, 900MHz IEEE 8021.15.4 Open Protocol)
- Self registering via gps allows for error free installation

- An intuitive, secure, web based, customized interface includes details such as location, Volts, Amps, Watts, cumulative Watt hours, power factor, VAR, phase angle, and cost
- Full functioning data reports, allow for historical record keeping, future forecasting and real time performance statistics
- Non-intrusive installation provides full control, including dimming, without the need to install other components inside of the streetlight
- Visit www.dialight.com for more information

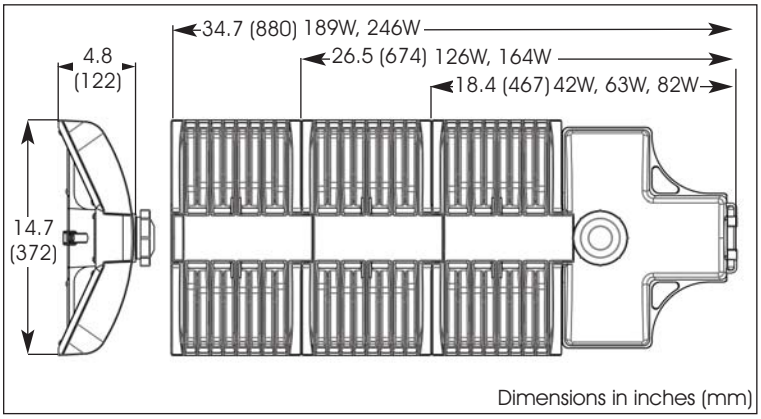
LC2 Gateway

Meets Buy American

DESIGNLIGHTS CONSORTIUM

GSA Schedule Contract GS-07F-0664X

StreetSense® Series LED Street Light



Dimensions in inches (mm)

Certifications and Ratings:

- UL 1598 (Suitable for Wet Locations)
- UL 8750
- UL 1012
- UL 1449
- CE
- CSA C22.2 No. 250.0-08
- IP66

Compliances:

- RP-8-00 (R2005)
- IEC 60529 (IP 66)
- ANSI 1012
- ANSI C 136.15-2011
- ANSI/IEEE C62.41.2-2002
- ANSI/NEMA/ANSLG C78.377-2008
- ANSI C136.2-2004 (R2009)
- ANSI C136.3-2005
- ANSI C136.10-2006
- ANSI C136.21-2004
- ANSI C136.25-2009/IEC 60529
- ANSI C136.31-2001
- ANSI C136.32-2006
- ANSI C136.37-2011
- ASTM B117-97
- ASTM B117 - salt spray (3000 hours)
- Conforms with CALTRANS vibration test 611 – 3G vibration (2,000,000 cycles)
- Meets ARRA requirements (must be specified when ordering)
- IDA Dark Sky
- RoHS

Test Reports:

- LM-79
- LM-80
- RP-8-00
- TM21
- Telcordia SR-332

Accessories (ordered separately):

- Photo Controller - part number - SLPC01R
- House side shield - part number - SLSHIELDKIT
- LUMITROL™ Streetlight control module - LC111
- LUMITROL™ Streetlight control gateway - LC2
- ANSI Label (consult factory)

Mechanical Information

Fixture Weight:	16lbs (42W, 63W, 82W) 25lbs (126W, 164W) 34lbs (189W, 246W)
EPA (Sq. ft):	0.60 (42W, 63W, 82W) 0.87 (126W, 164W) 1.13 (189W, 246W)
Mounting:	Accommodates 1.25" (1.66" OD) - 2" (2.375" OD) 31.75mm (42.16mm OD) - 50.8mm (60.32mm OD) pipe. Provision for adjustment of +/- 5° at 2.5° increments

Electrical Specifications

Operating Voltage:	Universal inputs 100-277VAC, 50/60Hz 347-480VAC 50/60Hz
Total System Power Consumption:	See ordering info on pg. 6
Operating Temp:	-40°F to 165°F (-40°C to 74°C) ambient
Terminal Block:	#14 AWG (1.6mm) to #6 AWG (4.1mm) wire and accessible via hinged tool less entry
Noise Requirements / EMC:	FCC Title 47, Subpart B, Section 15, class A device. RF Immunity; 10V/m, 80MHz-1GHz
Transient Protection 100-277VAC, 50/60Hz: 347-480VAC 50/60Hz:	Open circuit surge protection 6kV standard per ANSI/IEEE C62.41. 2.2002 cat C low or Open circuit surge protection 10kV standard per ANSI/IEEE C62.41. 2.2002 cat C high Open circuit surge protection 10kV standard per ANSI/IEEE C62.41. 2.2002 cat C high
THD:	<15% (100 - 240V AC) <20% (277V AC) <20% (347-480V AC)
Power Factor:	>0.9

Material

Housing:	Die cast aluminum alloy A360 Polymeric materials UL94 V0 flame retardant materials
Finish:	Polyester powder coat for superior corrosion resistance Gray - RAL 7040 Bronze - RAL 7022 Green - RAL 6020 Black - RAL 9005 White - RAL 9010
Lens:	Abrasion and UV resistant polycarbonate Optically optimized, tempered glass
Photo controller Socket:	Standard NEMA three prong twist lock, socket with shorting cap, as per ANSI C136.10

Photometric Information

CRI:	70
CCT:	5,000K (cool white) 4,300K (neutral white) 3,300K (warm white)
Optics:	IES Type II, III, IV, V

All values typical unless otherwise stated
All lumen values are typical (tolerance +/- 10%)

StreetSense® LED Street Light

Ordering Information

S L -	3	C	4	C	L	G	G	_
	IES Type	CCT	Voltage	Wattage	Controller	Housing Color	Lens	Certification
	2 - II	C - 5,000K	4 - 120-277V AC 6kV surge protection	B - 42W	N - No photo controller receptacle	G - Gray	G - Glass	Blank - UL
	3 - III	N - 4,300K		C - 63W		B - Bronze	H - Polycarbonate	EU - CE
	4 - IV	W - 3,300K	5 - 120-277V AC 10kV surge protection	D - 82W	R - Photo controller receptacle only	R - Green		
	5 - V			H - 126W	L - Shorting cap	K - Black		
			7 - 347-480V AC 10kV surge protection	I - 164W		W - White		
				R - 189W	I - LUMITROL™ Streetlight control module (LC111)			
				S - 246W				

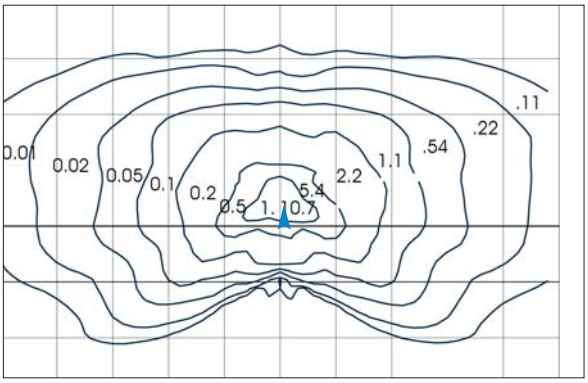
Part Number	Initial Fixture Lumens[1]	Total System Power Consumption	Lumen Per Watt	Color	BUG Rating	EPA (SQ. ft)	Number of Light Engines
SL3C4BLGG	3,800	42	90	Cool White	B1U1G1	0.60	1
SL3C4CLGG	5,700	63	90	Cool White	B1U2G1	0.60	1
SL3C4DLGG	6,900	82	84	Cool White	B2U3G2	0.60	1
SL3C4HLGG	11,500	126	91	Cool White	B2U3G2	0.87	2
SL3C4ILGG	13,750	164	84	Cool White	B3U3G3	0.87	2
SL3C4RLGG	17,000	189	90	Cool White	B3U3G3	1.13	3
SL3C4SLGG	20,750	246	84	Cool White	B3U3G3	1.13	3
SL3N4BLGG	3,800	42	90	Neutral White	B1U1G1	0.60	1
SL3N4CLGG	5,700	63	90	Neutral White	B1U2G1	0.60	1
SL3N4DLGG	6,900	82	84	Neutral White	B2U3G2	0.60	1
SL3N4HLGG	11,500	126	91	Neutral White	B2U3G2	0.87	2
SL3N4ILGG	13,750	164	84	Neutral White	B3U3G3	0.87	2
SL3N4RLGG	17,000	189	90	Neutral White	B3U3G3	1.13	3
SL3N4SLGG	20,750	246	84	Neutral White	B3U3G3	1.13	3
SL3W4BLGG	3,100	42	74	Warm White	B1U1G1	0.60	1
SL3W4CLGG	4,700	63	75	Warm White	B1U2G1	0.60	1
SL3W4DLGG	5,700	82	70	Warm White	B2U2G2	0.60	1
SL3W4HLGG	9,250	126	73	Warm White	B2U3G2	0.87	2
SL3W4ILGG	11,500	164	70	Warm White	B3U3G3	0.87	2
SL3W4RLGG	14,000	189	74	Warm White	B3U3G3	1.13	3
SL3W4SLGG	17,000	246	69	Warm White	B3U3G3	1.13	3

[1]Polycarbonate lens option will decrease lumen values by 8%

Measurement Data - IES Type III

40 Watt

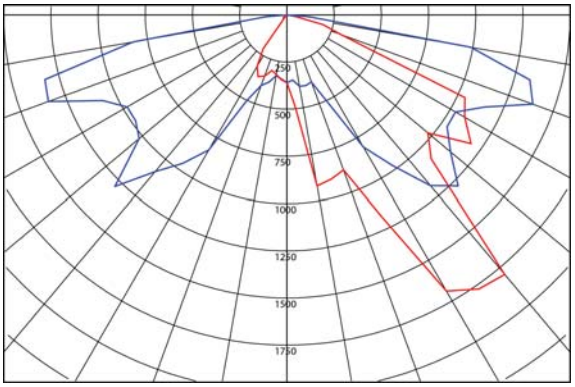
Iso-Illuminance Chart
← FC - Lux →



Mounting height - 25′ (7.6m)

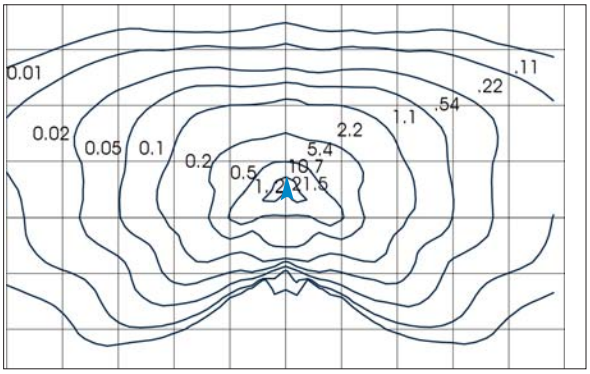
Mounting Height	Multiplier
10′ (3.0m)	6.25
15′ (4.6m)	2.778
20′ (6.1m)	1.563
25′ (7.6m)	1
30′ (9.1m)	0.694
35′ (10.7m)	0.51
40′ (12.7m)	0.391
45′ (13.4m)	0.309
50′ (15.2m)	0.25

Intensity Distribution Curve (cd)



60 Watt

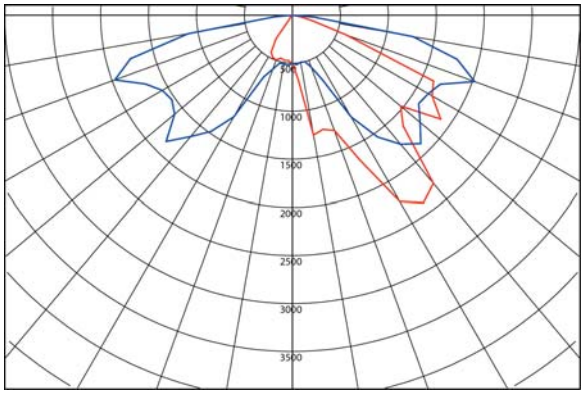
Iso-Illuminance Chart



Mounting height - 25′ (7.6m)

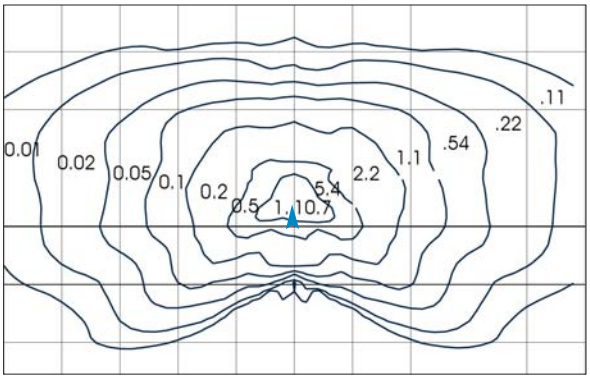
Mounting Height	Multiplier
10′ (3.0m)	6.25
15′ (4.6m)	2.778
20′ (6.1m)	1.563
25′ (7.6m)	1
30′ (9.1m)	0.694
35′ (10.7m)	0.51
40′ (12.7m)	0.391
45′ (13.4m)	0.309
50′ (15.2m)	0.25

Intensity Distribution Curve (cd)



80 Watt

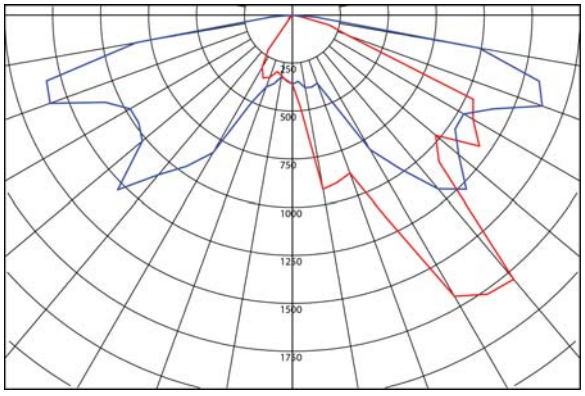
Iso-Illuminance Chart



Mounting height - 25′ (7.6m)

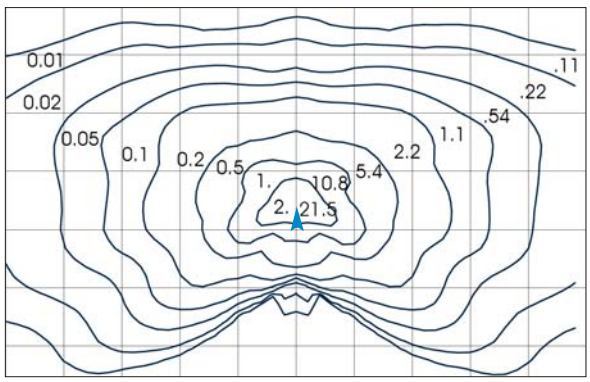
Mounting Height	Multiplier
10′ (3.0m)	6.25
15′ (4.6m)	2.778
20′ (6.1m)	1.563
25′ (7.6m)	1
30′ (9.1m)	0.694
35′ (10.7m)	0.51
40′ (12.7m)	0.391
45′ (13.4m)	0.309
50′ (15.2m)	0.25

Intensity Distribution Curve (cd)



120 Watt

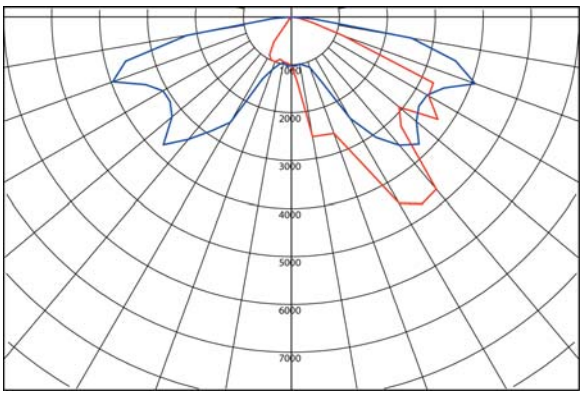
Iso-Illuminance Chart



Mounting height - 30′ (9.1m)

Mounting Height	Foot Candle Multiplier
10′ (3.0m)	9
15′ (4.6m)	4
20′ (6.1m)	2.25
25′ (7.6m)	1.44
30′ (9.1m)	1
35′ (10.7m)	0.735
40′ (12.7m)	0.563
45′ (13.4m)	0.444
50′ (15.2m)	0.36

Intensity Distribution Curve (cd)

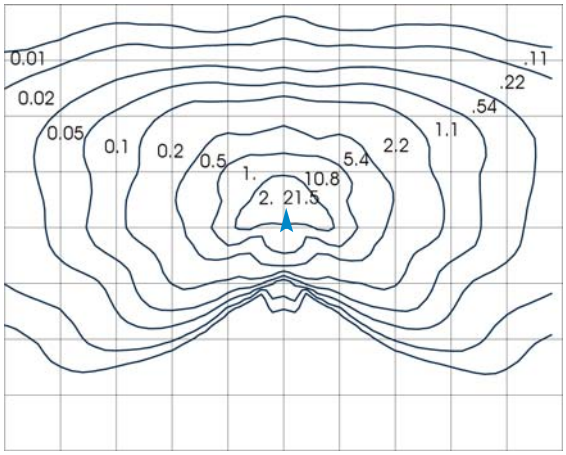


▲- Location of streetlight
Spacing of each box is equal to mounting height in feet (meters).
Ex: 40′ (12.2m) mounting height = each box is 40′ (12.2m), 30′ (9.1m) mounting height = each box is 30′ (9.1m)
Values shown are for cool white and neutral white units, for warm white multiply the Fc or Lux value by .82

Measurement Data - IES Type III

160 Watt

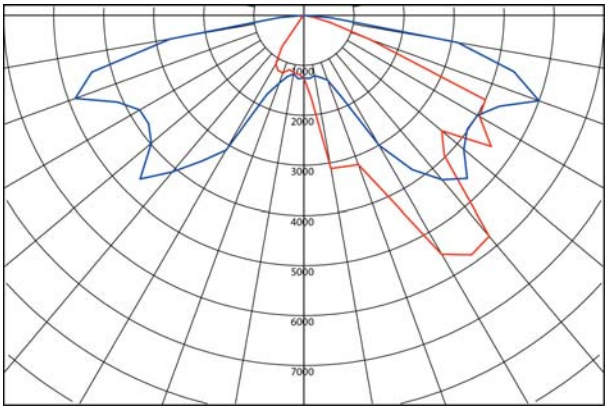
Iso-Illuminance Chart
← FC - Lux →



Mounting height - 30′ (9.1m)

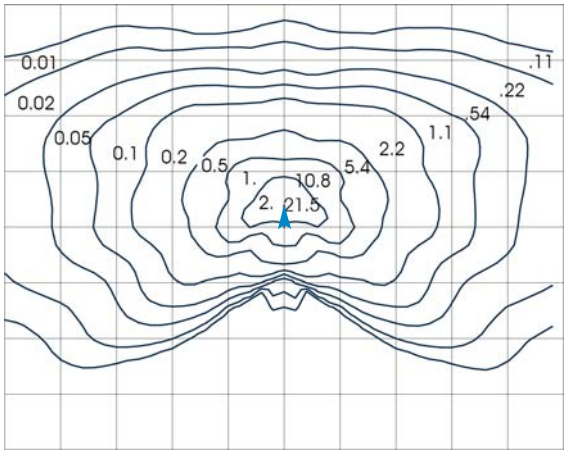
Mounting Height	Multiplier
10′ (3.0m)	9
15′ (4.6m)	4
20′ (6.1m)	2.25
25′ (7.6m)	1.44
30′ (9.1m)	1
35′ (10.7m)	0.735
40′ (12.7m)	0.563
45′ (13.4m)	0.444
50′ (15.2m)	0.250

Intensity Distribution Curve (cd)



180 Watt

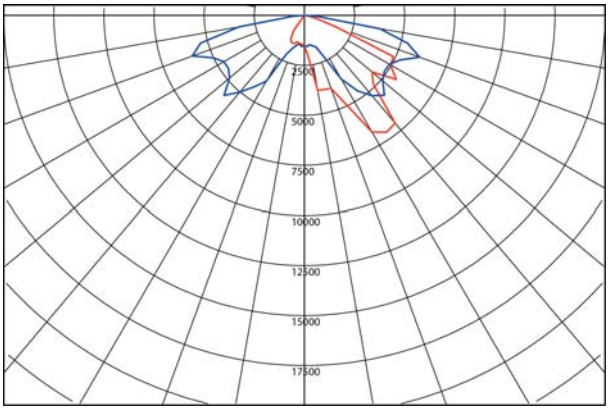
Iso-Illuminance Chart



Mounting height - 35′ (9.1m)

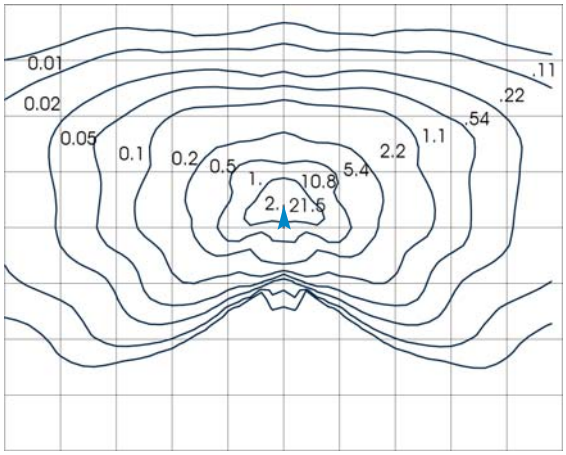
Mounting Height	Multiplier
10′ (3.0m)	12.250
15′ (4.6m)	5.444
20′ (6.1m)	3.063
25′ (7.6m)	1.960
30′ (9.1m)	1.361
35′ (10.7m)	1.000
40′ (12.7m)	0.766
45′ (13.4m)	0.605
50′ (15.2m)	0.490

Intensity Distribution Curve (cd)



240 Watt

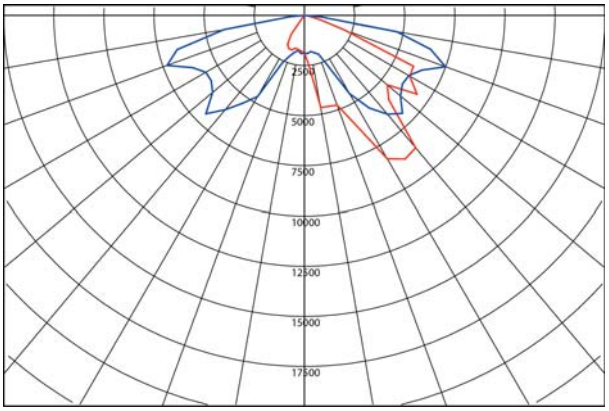
Iso-Illuminance Chart



Mounting height - 40′ (12.1m)

Mounting Height	Multiplier
10′ (3.0m)	16.000
15′ (4.6m)	7.111
20′ (6.1m)	4.000
25′ (7.6m)	2.560
30′ (9.1m)	1.778
35′ (10.7m)	1.306
40′ (12.7m)	1.000
45′ (13.4m)	0.790
50′ (15.2m)	0.640

Intensity Distribution Curve (cd)



▲- Location of streetlight
Spacing of each box is equal to mounting height in feet (meters).
Ex: 40′ (12.2m) mounting height = each box is 40′ (12.2m), 30′ (9.1m) mounting height = each box is 30′ (9.1m)
Values shown are for cool white and neutral white units, for warm white multiply the Fc or Lux value by .82