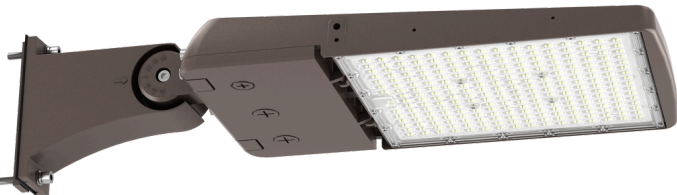# RAB® DESIGN

JAG1S-LED
Selectable Area Light

The JAG1S-LED is an exceptionally versatile lighting fixture, featuring field-adjustable beam distribution, high efficiency, and advanced controls to optimize lighting layouts for any area light application. Additionally, the standard fixture includes selectable features such as colour selection, wattage selection, and a wide voltage range of 120-347V, making it one of the most feature-rich area lights available on the market.

(Shown with Direct Mount for Round/Square Poles)

IDEAL APPLICATIONS

- ✓ Commercial Plazas
- ✓ Dealerships
- ✓ Schools and Campuses
- ✓ Parking Lots
- ✓ Transit Stations
- ✓ Pathways
- ✓ Perimeter Lighting

SPECIFICATIONS

	LED100A60	LED150A100
PERFORMANCE		
Light Output	16700/13400/10000 lm	25000/20000/16700 lm
Efficacy	167 lm/W	
CCT	CCT Selectable - 3000K/4000K/5000K	
Beam Distribution	Variable Distribution - VD1 (Type III/Type IV/Type V); VD2 (Type II/Type III/Type IV) (Optional) Adjust beam distribution effortlessly using a switch—no need to swap or reorient optics.	
LED Lifetime (L85)	100,000 Hours	
CRI	84	
ELECTRICAL		
Wattage	100/80/60 W	150/120/100 W
Voltage	120-347 V	
Surge Protection	6 kV Internal & 10 kV External per UL1449	
Power Factor	0.99	
THD	4.49%	4.36%
Dimming	0-10 V (0-100%)	
Replaces Up to	250W MH	400W MH
Cable Specs	Input Power - 1 m Cabtire Cable (3x18 AWG) Dimming - 1 m Cabtire Cable (2x18 AWG)	
AMBIENT OPERATING TEMPERATURE		
Fixture	-40°C to 50°C (-40°F to +122°F)	
DEFAULT SETTINGS		
CCT	4000K	
Wattage	100W	150W
Beam Distribution	VD1 - Type III VD2 - Type II	

CERTIFICATIONS
cULus Certified as per UL 1598 & CSA C22.2, IP66, Wet Location, DLC Premium

FACTORY INSTALLED CONTROLS
Smart Bluetooth Controls (using CONTROLLED mobile app), DHFS Motion Sensor, PBLS Control, Twist Lock Photocell, 3 PIN or 7 PIN Receptacle with Shorting Cap ANSI C136 compliant, 20 kV Surge Protection (120-277 V)

OPTIONS SOLD SEPERATELY
Slip Fitter, Direct Mount for Round/Square Poles, Trunnion Mount, Yoke Mount, House Side Cutoff, Side Cutoff, DHFS Motion Sensor Remote Control, Bluetooth Controlled, PBLS Remote Control, Bluetooth 3-Key AC Line Voltage Wall Switch

CONSTRUCTION
Housing	Die-cast Aluminum
Lens/Optics	Polycarbonate Lens/Optics with integral field-adjustable light distribution allows beam distribution changes without replacing or re-orienting the lens/optics.
Paint	Weather and Corrosion Resistant Polyester Powder Coat Finish
Housing Finish	Bronze, Custom Colours

WEIGHT (FIXTURE ONLY)
4.8kg (10.58lbs)

MAX AMPERAGE DRAW (A)
	120V	208V	240V	277V	347V
LED100A60 (100W)	0.875	0.505	0.438	0.379	0.303
LED150A100 (150W)	1.313	0.757	0.656	0.569	0.454

LUMEN MAINTENANCE
	L90	L80	L70
LED100A60 & LED150A100	68,000 Hours	> 100,000 Hours	> 100,000 Hours

Electrical and Light Performance data is based on LM79 test report at 4000K, Type IV and 120V. Life hours are derived from IESNA LM-80 testing report and projected per IESNA TM-21 calculations.

CONTROLLED

UL CERTIFIED SAFETY US·CA E361278 | DLC LISTED PREMIUM™

Beam Adjustable | 120-347V | Lumen Adjustable | CCT 3K/4K/5K | IP66 RATED | APPROVED FOR WET LOCATION | 5 YEAR WARRANTY

Note: IP66 rating applies to standard configuration fixture or fixture with photocell

ORDERING GUIDE

| JAG1S | | | | VK | | | | DIM | | |

Fixture	Wattage	Voltage	Colour Temp.	Beam Distribution	Finish	Dimming	Controls	Surge Protection
JAG1S	LED100A60	H - 120-347V[a]	VK - CCT Selectable (3000K/ 4000K/ 5000K)	VD1 - Variable Distribution[a] (Type III/Type IV/ Type V)	BRZ - Bronze[a]	DIM - 0-10V Dimming	Blank - No Controls [a]	SP10 - 10kV Surge Protection[a]
	LED150A100	B - 120-277V[b]		VD2 - Variable Distribution (Type II/Type III/ Type IV)	CST - Custom Finish		PBLS - Photocell Beam Lumen Sensor[c]	SP20 - 20kV Surge Protection[b]
							DHFS - Dimming High Frequency Motion Sensor[d]	
							PC - Photocontrol	
							BC - Bluetooth ControlLED	
							3PIN - 3PIN Receptacle	
							7PIN - 7PIN Receptacle	

a - Standard Configuration
b - B voltage (120-277V) is only applicable to SP20
c - One RC107 remote control is required for PBLS
d - One RC100 remote control is required for DHFS

STOCK CODES

084100	JAG1S-LED100A60-H-VK-VD1-BRZ-DIM-SP10
084150	JAG1S-LED150A100-H-VK-VD1-BRZ-DIM-SP10
084191	JAG1S-LED100A60-H-VK-VD1-BRZ-DIM-PBLS-SP10
084197	JAG1S-LED150A100-H-VK-VD1-BRZ-DIM-PBLS-SP10

NOTE:
- "**VD1**" offers selectable beam distribution options (Type III, Type IV, Type V).
- For **Type II** beam distribution, please order "**VD2**" which offers selectable beam distribution options (**Type II,** Type III, Type IV).
- "**PBLS**" allows **remote** adjustment of the photocell, beam distribution, and lumen output.
- All fixture configuration with controls options are rated IP65 or higher

ACCESSORIES SOLD SEPARATELY

002421	JAG1 HOUSE CUTOFF SHIELD BRZ		**020052**	YOKE MOUNT BRZ F/JAG1	
002422	JAG1 SIDE CUTOFF SHIELD BRZ		**020009**	SLIP FITTER BRZ F/HELIX1/2 & JAG1/2	
087016	RC-100 MOTION SENSOR REMOTE CONTROL		**020010**	DIRECT MOUNT F/RND & SQR POLE BRZ F/HELIX1/2 & JAG1/2	
087034	RC-107 PHOTOCONTROL REMOTE CONTROL		**020011**	DIRECT TRUNNION MOUNT BRZ F/HELIX1/2 & JAG1/2	
084215	BLUETOOTH 3-KEY AC LINE VOLTAGE WALL SWITCH 120-277VAC, 3-KEYS(ON/OFF, DIM+, DIM-)				

ADDITIONAL DETAILS

EPA (ft²)			
	Tilt 0°	**Tilt 45°**	**Tilt 90°**
JAG1S	0.59	1.55	2.18
JAG1S (with HCO)	0.82	1.55	2.18
JAG1S (with SCO)	1.21	1.62	2.18

*EPA calculation includes both fixture and slipfitter mount

PHOTOCELL/BEAM DISTRIBUTION/LUMEN SENSOR (PBLS)

PBLS Controller allows the Installer to adjust beam, brightness, and photocontrol settings using a remote control after installation.

SPECIFICATIONS	
INPUT POWER	LED INPUT : MAX . 250VDC 3A; SENSOR INPUT: 10-14VDC, >30MA
SINKING CURRENT	MAX. 25MA
CONTROL OUTPUT	0-10V OUTPUT SIGNALS
POWER CONSUMPTION	MAX.0.5W
OPERATE LEVEL	10-20LUX ON, 30-80LUX OFF
HUMIDITY	99%RH
OPERATING TEMPERATURE	-40°F to +122°F (-40°C to +50°C)

FUNCTIONS

PHOTOCELL	BEAM	LUMEN
When the ambient light is above set lux values, fixture will not switch on. When the ambient light is below set lux values, fixture will switch on.	Adjust beam distribution between types III/IV/V (VD1) or II/III/IV (VD2)	Light levels can be dimmed up or down by increments of 10% Light levels can be lowered to 50% after specified time period for improved energy savings.

RC107 REMOTE SPECIFICATIONS
(FOR PBLS CONTROLLER)

DEFAULT FACTORY SETTING	
TASK LIGHT LEVEL	100%
HOLD TIME	DISABLE
PHOTOCELL	LOW
CCT (BEAM DISTRIBUTION)	Type IV for VD1, Type III for VD2

FEATURES	
	ON: Turn on the fixture, the brightness is according to the task level you set. **OFF:** Turn off the fixture, the fixture is permanently off. **RESET:** Task Light Level:100%; Hold Time: Disable; Photocell: Low; CCT/Beam: NW (Type IV for VD1), Type III (for VD2) **REPEAT:** Send the same setting to different fixtures installed.
	DIM+: With each push of the button, brightness increases by 10%. **DIM-:** With each push of the button, brightness decreases by 10%;
	Select the task brightness of the fixture as needed.
	HOLD TIME: The "hold time" starts to count right after the fixture turns on. When the "hold time is up, the fixture adjusts to 50% brightness until the light control turns the light fixture off. **DISABLE:** When you choose disabled, the fixture maintains the task light level
	LOW: When the ambient lux is less than 30lux, the fixture turn on at the task level you set, when the ambient lux is more than 50lux, the fixture turns off. **MIDDLE:** When the ambient lux is less than 80lux, the fixture turn on at the task level you set, when the ambientent lux is more than 100lux, the fixture turns off. **HIGH:** When the ambient lux is less than 150lux, the fixture turn on at the task level you set, when the ambient lux is more than 180lux, the fixture turns off; **DISABLE:** Photoelectric switch disabled
	Adjust Beam Distribution Setting: For **VD1**: **WW** - Type III, **NW** - Type IV, **CW** - Type V, For **VD2**: **WW** - Type II, **NW** - Type III, **CW** - Type IV

**Note:** Custom settings can be done based on requirements in the Factory.

DIMMING HIGH FREQUENCY MOTION SENSOR (DHFS)

DHFS Microwave motion sensor offers a range of control features based on motion detection allowing the Installer to adjust the brightness of the fixture, hold time and daylight settings using a remote control after installation.

SPECIFICATIONS	
POWER SUPPLY	12V-24V DC
HIGH FREQUENCY SYSTEM	5.8GHZ +/-75MHZ
DIM CONTROL OUTPUT	0-10V, MAX. 25MA SINKING CURRENT
DETECTION RADIUS/ANGLE	MAX 26FT (8M)/360°
MOUNTING HEIGHT	MAX 40FT
REMOTE RANGE	50FT. (15M) INDOOR, NO BACKLIGHT
HUMIDITY	MAX. 95% RH
TEMPERATURE	-40°F - 158° F (-40°C- 70°C)

SENSOR COVERAGE
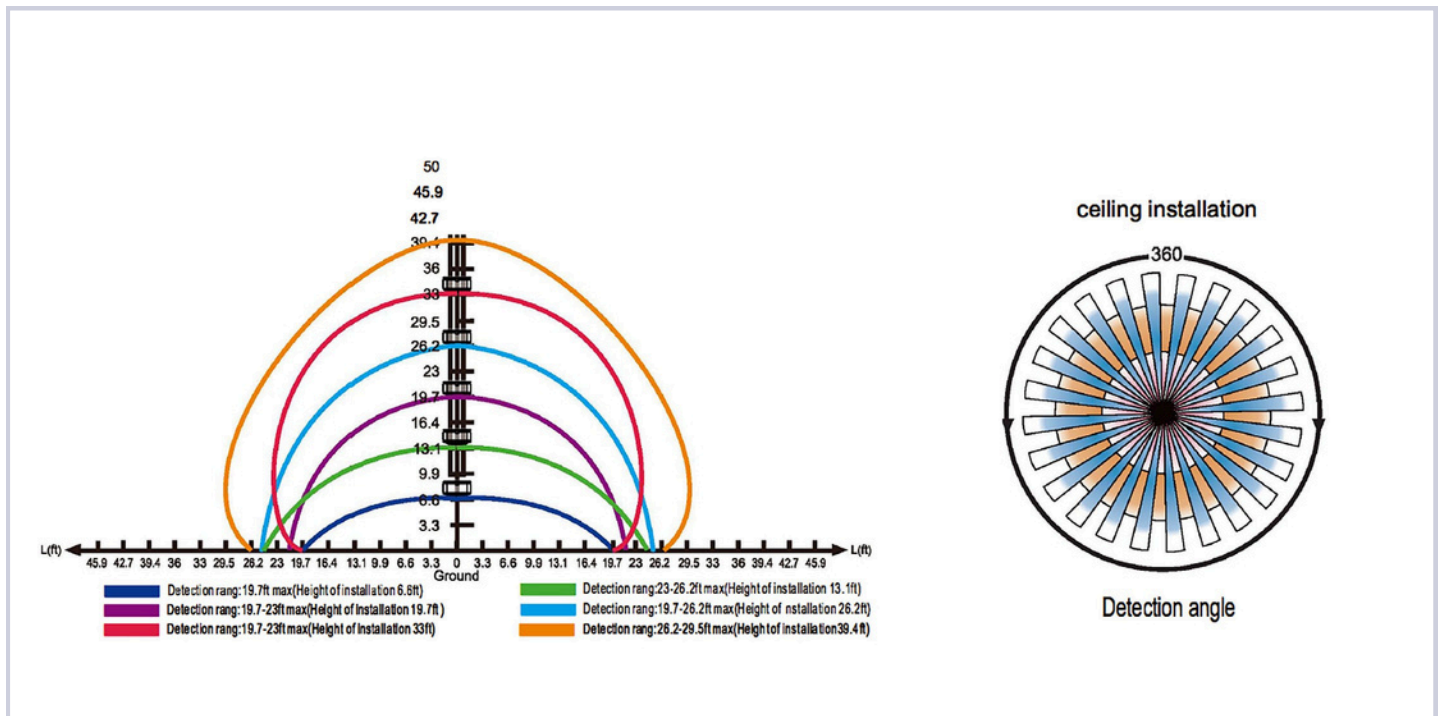
Refer to page 6 for more details on the DHFS Remote Control Usability

RC100 REMOTE SPECIFICATIONS
(FOR DHFS CONTROLLER)

DEFAULT FACTORY SETTING	
BRIGHTNESS	100%
SENSITIVITY	100%
HOLD TIME	5 MINS
DAYLIGHT SENSOR	☼
STAND-BY DIM	30%
STAND-BY TIME	60 MINS
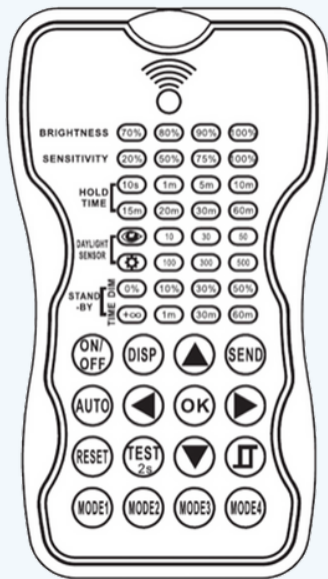
| FEATURES	
	BRIGHTNESS: Sets the highest light fixture brightness when motion is detected.
	SENSITIVITY: Sets the sensitivity to which the sensor will detect motion.
	HOLD TIME: The time the light fixture will remain at the brightness setting after it detects motion.
	DAYLIGHT SENSOR: The lux setting that the light fixture will turn on/off. If the ambient lux is more than the defined lux setting, the fixture & sensor function will turn off and remain off until the ambient lux is below the setting. To disable the lux sensor, select the SUN icon. To set the lux to match current room conditions, select the EYE icon.
	STAND-BY DIM: The Dim level that the light fixture will dim down after the Hold Time has expired. To disable dimming and only have ON/OFF, select the 0% icon.
	STAND-BY TIME: The time the light fixture will remain in the dim down state before it shuts off. To disable the light from shutting off, select the INFINITY icon.

RC100 REMOTE CONTROL SPECIFICATION	
POWER SUPPLY	2 x AAA 1.5V Batteries
COMMUNICATION PROTOCOL	940 nm IR Tx & Rx
COMMUNICATION RANGE	Up to 15m (50 ft)
OPERATING TEMP	0 °C to 50°C (32°F to 122°F)
DIMENSIONS	123x70x20.3mm (4.84"x2.76"x0.8")

CONTROL**LED**

RAB®
DESIGN

ControlLED Network Lighting Controls (NLC) delivers secure, wireless lighting management with Bluetooth Mesh and the ControlLED App. Integrated sensors enable automatic adjustments for comfort, safety, and efficiency.

Maximum Bluetooth transmittance of 860ft between fixtures (unobstructed) and 200ft between user and any one fixture.
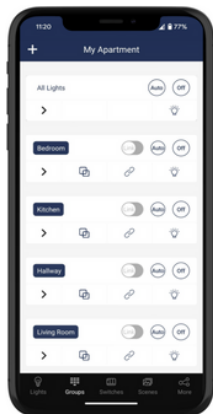
Organized Fields:
Create Zones and Groups

Dimming Lights:
Set dim level for groups or individual lights.

Scenes:
Create custom scenes for different scenarios.

Schedules:
Create custom schedules for recurring events.

Share Access:
Share access using QR codes.

Get the App!

GET IT ON
Google Play

Download on the
App Store

BLUETOOTH CONTROL

FEATURES
- Bluetooth mesh network
- DLC - Networked Lighting Control (NLC) & Luminaire Level Lighting Control (LLLC)
- Group and Individual fixture dimming
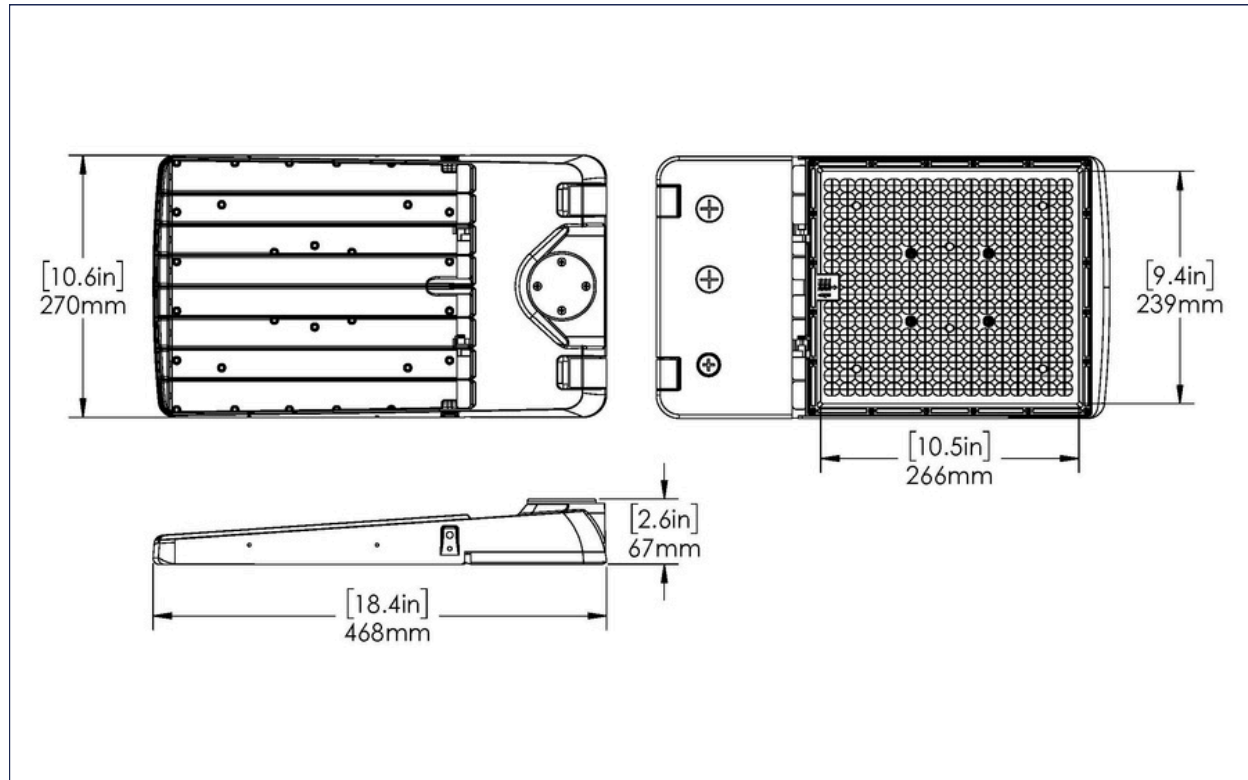- Scenes & Schedules

SPECIFICATIONS	
Input Voltage	12 VDC
Input Current	Min 150mA
Output Current	10mA Max.
Dimming	Class 2, 0-10 VDC
Bluetooth Transmit	860ft Max.
Radio Frequency	2.4GHz ±75MHz
Bluetooth Version	5.0

RAB®
DESIGN
Engineered by skilled hands, for skilled hands.

DIMENSIONS

FIXTURE WITHOUT MOUNT

FIXTURE WITH YOKE MOUNT

ENLARGED VIEW OF YOKE MOUNT BRACKET
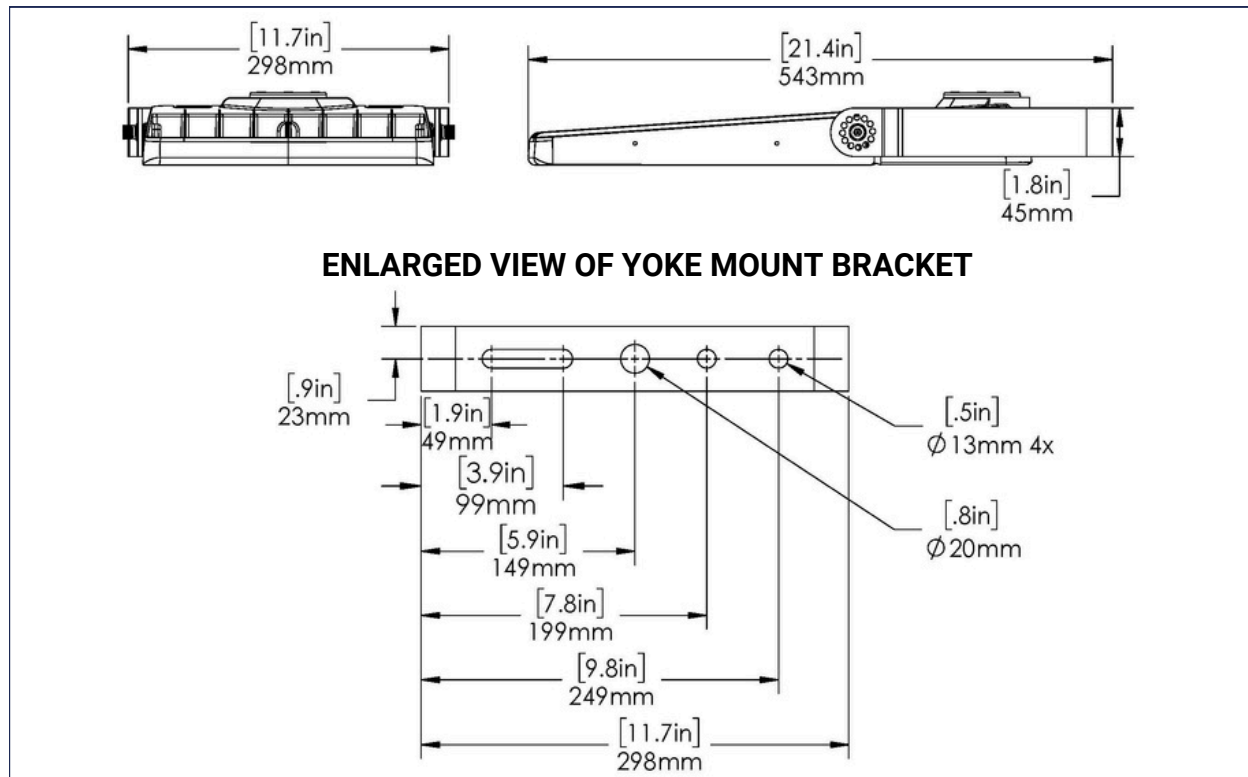
*Angle marking increment - 30°

FIXTURE WITH DIRECT MOUNT

[10.6in]
270mm

[26.5in]
674mm

[6.3in]
160mm

ENLARGED VIEW OF DIRECT MOUNT BRACKET

[.3in]
Ø9mm

[.4in]
10mm

[.7in]
Ø18mm

[1.5in]
38mm

[2.2in]
55mm

[3.6in]
91mm

[6.3in]
160mm

[5.9in]
150mm

[1.2in]
30mm
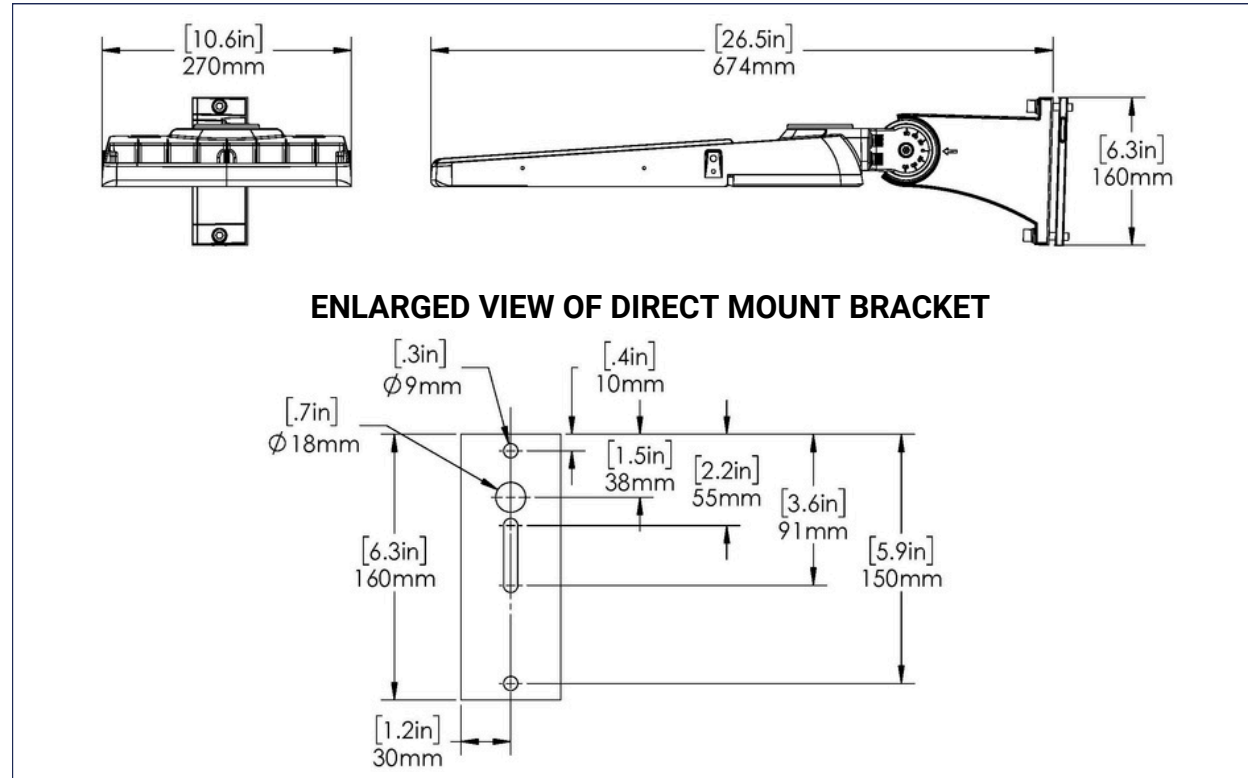
*Angle marking increment - 30°

FIXTURE WITH SLIPFITTER

[10.6in]
270mm

[25.2in]
640mm

[6.9in]
175mm

[2.8in]
72mm

[6.2in]
158mm

ENLARGED VIEW OF SLIPFITTER

[3.6in]
91mm

[2.6in]
67mm

For use with 2 3/8" Tenon
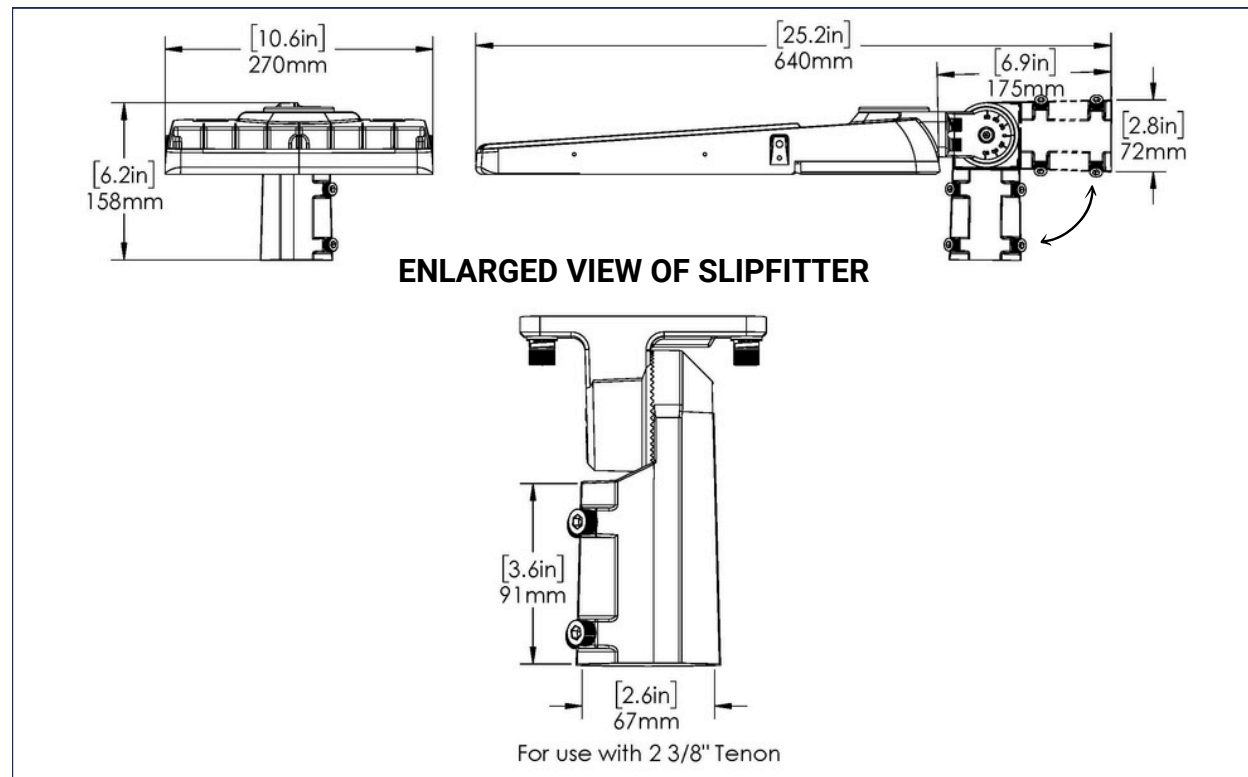
*Angle marking increment - 30°

FIXTURE WITH TRUNNION MOUNT

[10.6in] 270mm

[23.1in] 588mm

[4.8in] 121mm

[1.8in] 45mm

ENLARGED VIEW OF TRUNNION MOUNT BRACKET

[.2in] R6mm

[.8in] Ø 20mm

[.6in] 14mm

[1.8in] 45mm

[.6in] 17mm

[1.3in] 34mm

[.3in] R9mm

[1.6in] 40mm
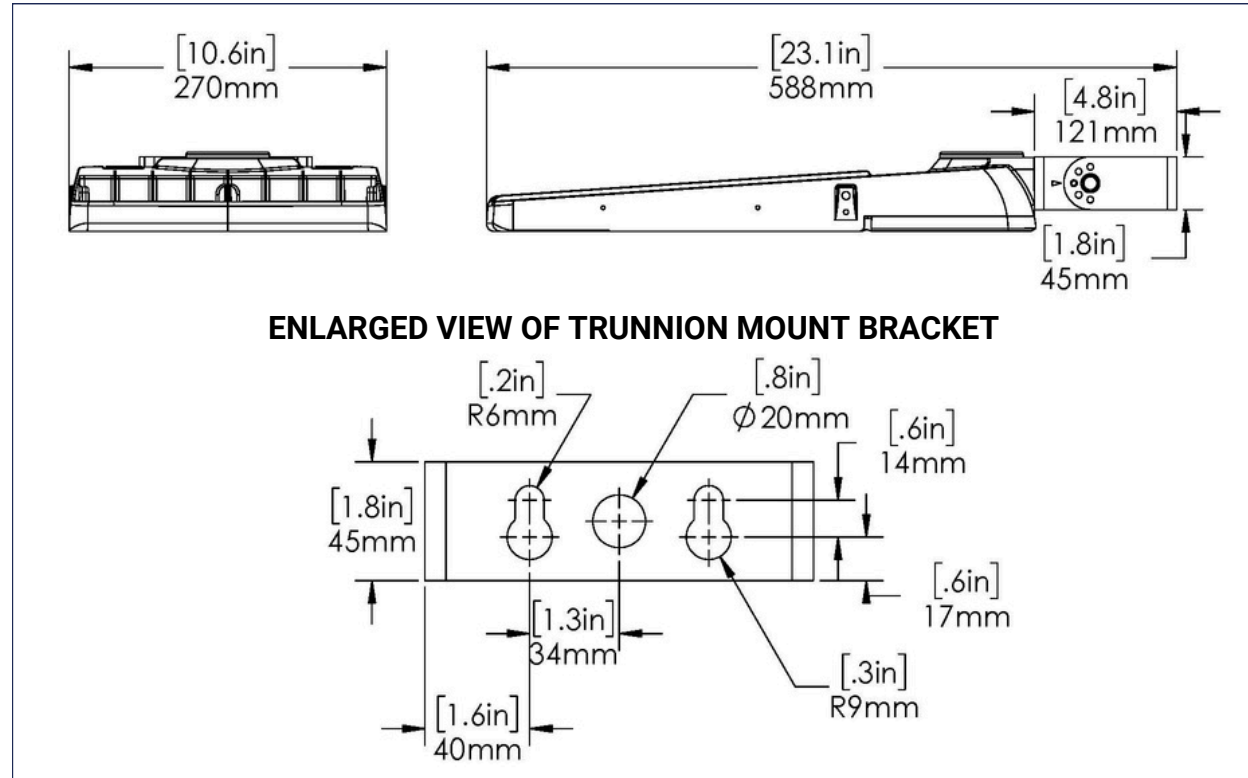
*Angle marking increment - 45°

FIXTURE WITH HOUSE SIDE CUTOFF (HCO)

[10.7in] 273mm

55deg

[5.4in] 137mm

[6.5in] 165mm

[9.0in] 228mm
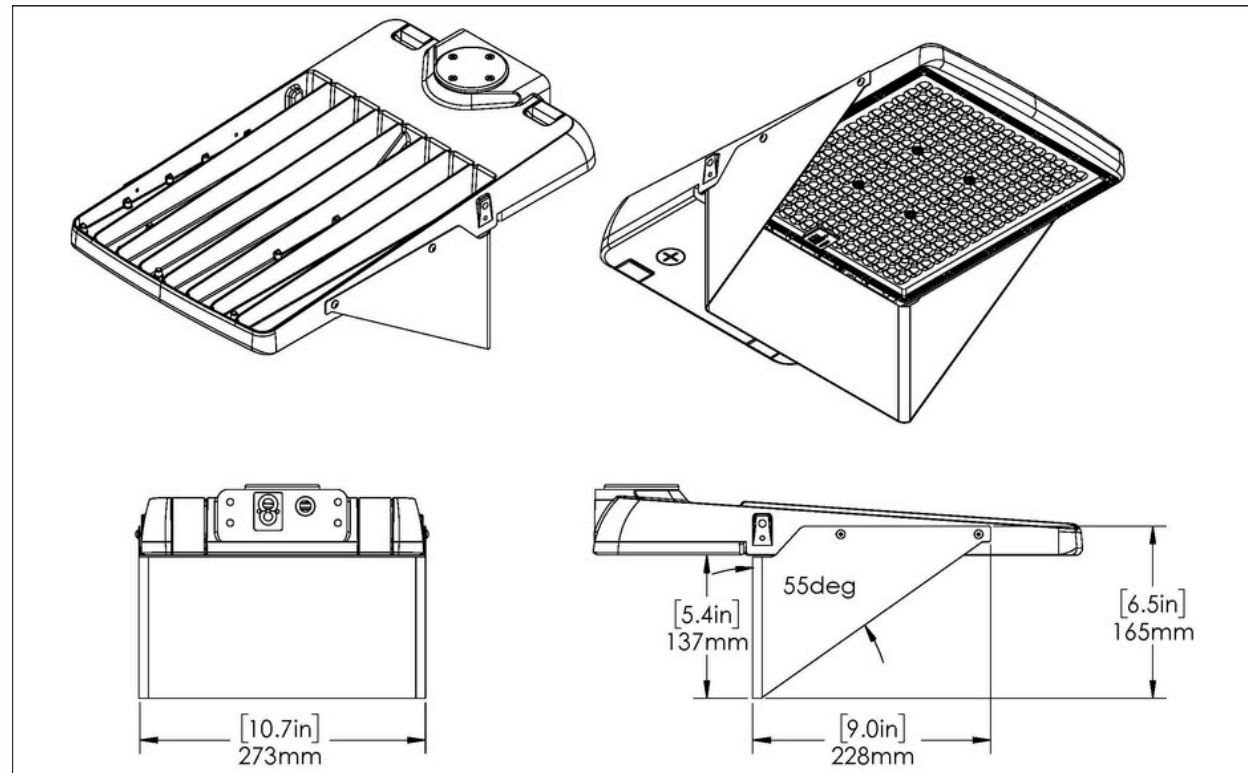
FIXTURE WITH SIDE CUTOFF (SCO)

[6.5in]
165mm

90deg

[5.4in]
137mm

[13.1in]
332mm
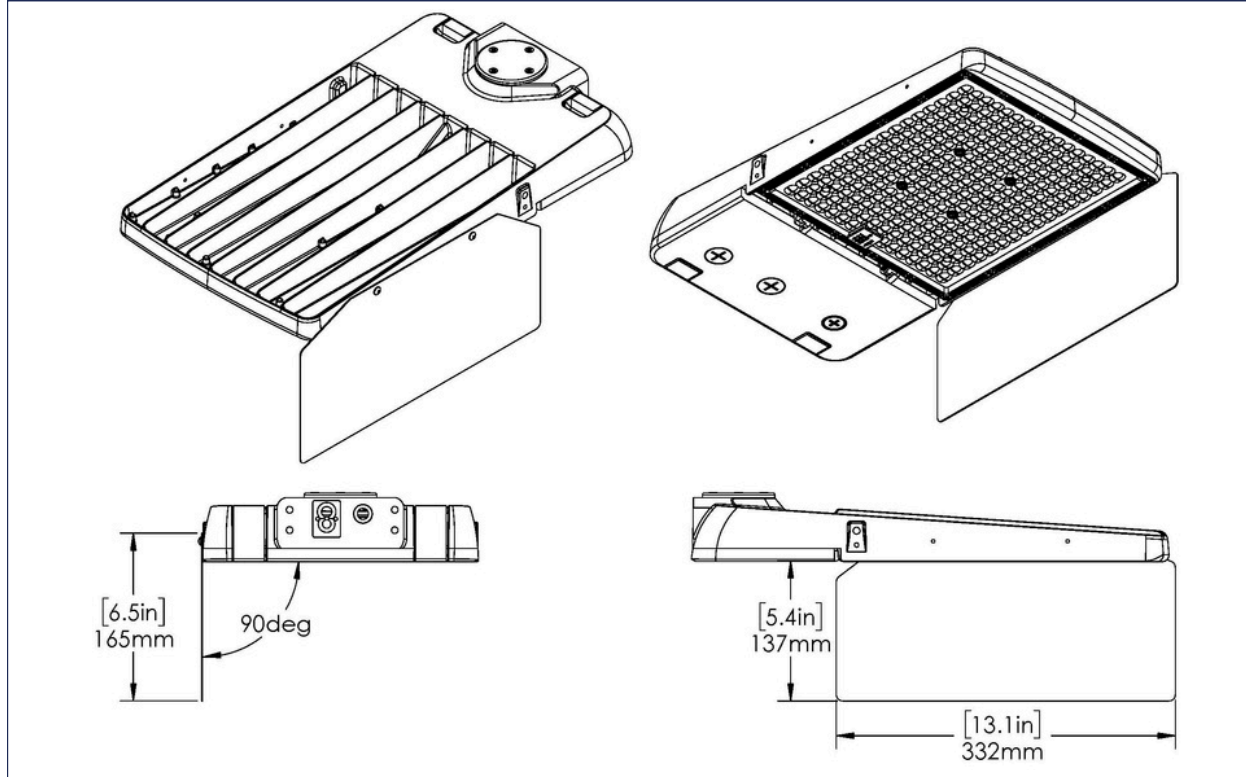
PHOTOMETRIC PLOTS

JAG1S-LED100A60-H-VK-VD1-BRZ-DIM-SP10
(100W, 4000K, TYPE III)
MOUNTED AT 20 FEET

LUMENS 15723.5   MAX CALCULATED VALUE 10.40fc

JAG1S-LED100A60-H-VK-VD1-BRZ-DIM-SP10
(100W, 4000K, TYPE IV)
MOUNTED AT 20 FEET

LUMENS 15872.6   MAX CALCULATED VALUE 19.11fc

RAB DESIGN
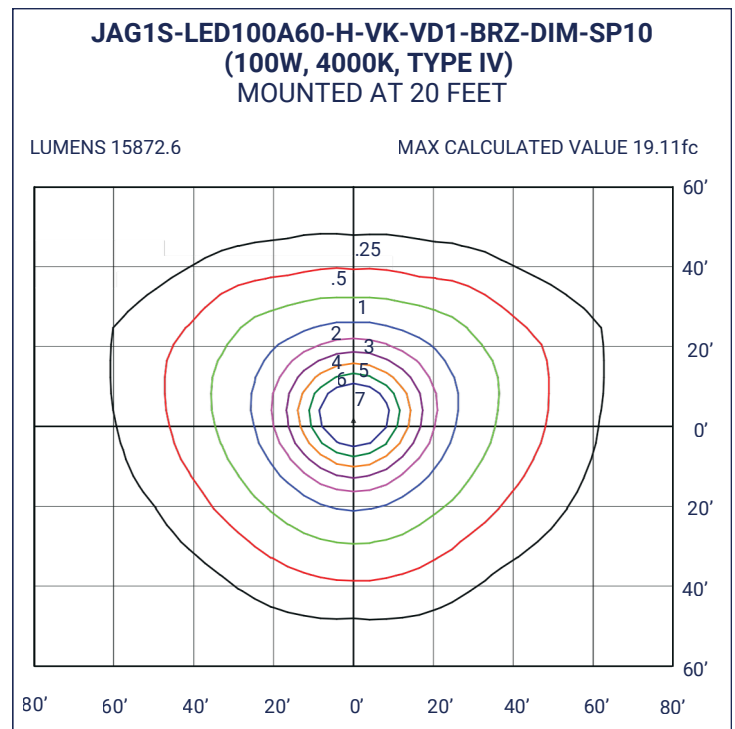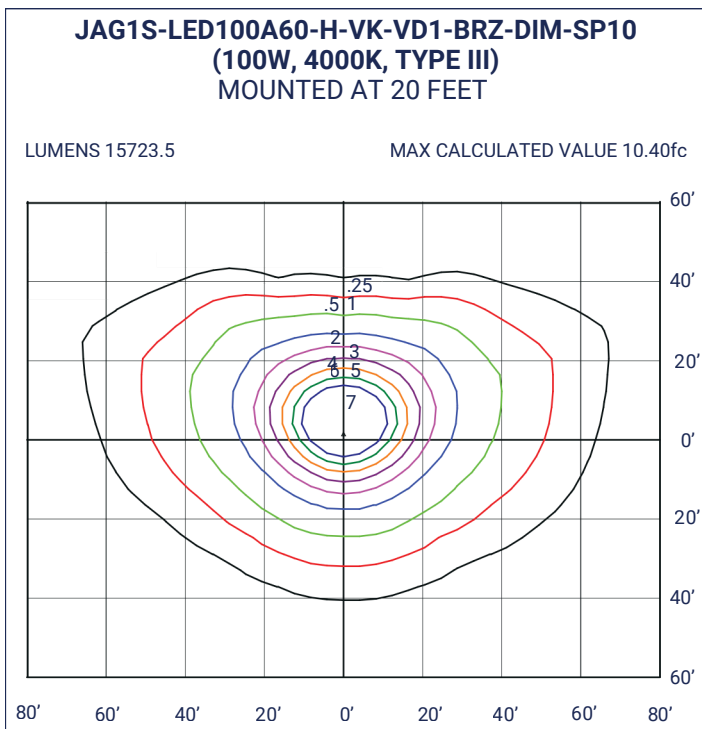
JAG1S-LED100A60-H-VK-VD1-BRZ-DIM-SP10
(100W, 4000K, TYPE V)
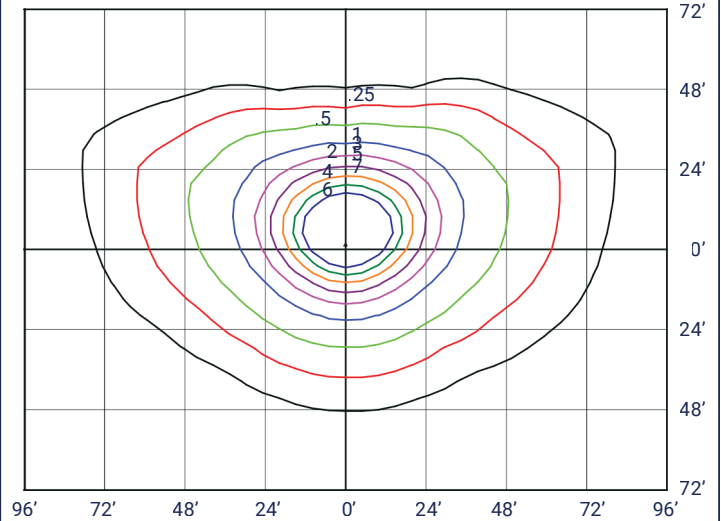### MOUNTED AT 20 FEET

LUMENS 15380.2   MAX CALCULATED VALUE 7.94fc
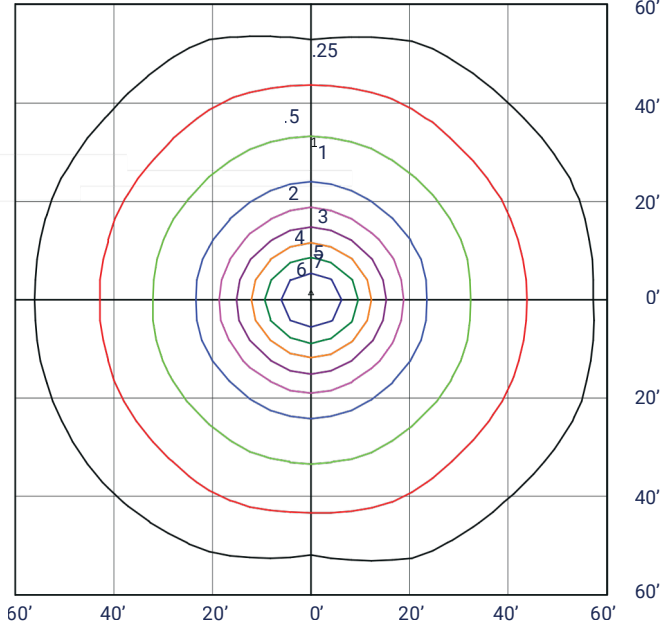
JAG1S-LED150A100-H-VK-VD1-BRZ-DIM-SP10
(150W, 4000K, TYPE III)
MOUNTED AT 24 FEET

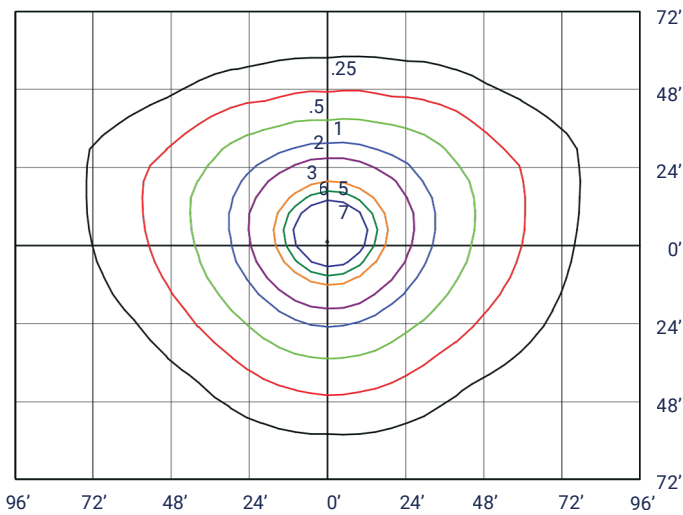LUMENS 22761.5   MAX CALCULATED VALUE 10.68fc

JAG1S-LED150A100-H-VK-VD1-BRZ-DIM-SP10
(150W, 4000K, TYPE IV)
MOUNTED AT 24 FEET

LUMENS 23493.8   MAX CALCULATED VALUE 9.50fc

JAG1S-LED150A100-H-VK-VD1-BRZ-DIM-SP10
(150W, 4000K, TYPE V)
MOUNTED AT 24 FEET

LUMENS 23022   MAX CALCULATED VALUE 8.30fc