Catalog # :	Project :
Prepared By :	Date :

Constitution - XCN4
LED Decorative Pedestrian & Area Light

This latest iteration of the LED Constitution decorative and pedestrian area light features LSI's innovative and high-performance silicone optics, as also featured in LSI's ground-breaking, patent-pending Mirada Series fixtures. The Constitution is designed to illuminate pathways, walkway areas and campus sites. Its contemporary, sleek design complements architectural design elements well.

Features & Specifications
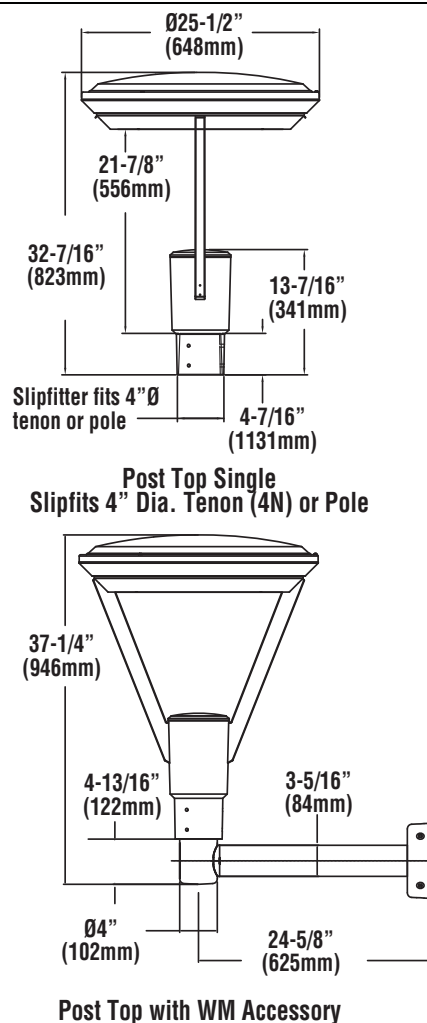
Optical System

• State-of-the-Art one piece silicone optic sheet delivers industry leading optical control with an integrated gasket to provide IP66 rated sealed optical chamber in 1 component.

• Proprietary silicone refractor optics provide exceptional coverage and uniformity in IES Types 2, 3, 5W and FT.

• Silicone optical material does not yellow or crack with age and provides a minimum light transmittance of 93%.

• Optical distributions are field rotatable (in 90˚ increments).

• Available in 5000K, 4000K, and 3000K (+/- 275K) color temperatures.

• Minimum CRI of 70. Consult Factory for Higher CRI requirements.

• Integral Louver (IL) option available for improved back-light control without sacrificing street side performance. See page 4 for more details.

Electrical

• High-performance driver features over-voltage, under-voltage, short-circuit and over temperature protection.

• 0-10V dimming (10% - 100%) standard.

• Standard Universal Voltage (120-277 Vac) Input 50/60 Hz or optional High Voltage (347-480 Vac).

• L70 Calculated Life: >100k Hours (See Lumen Maintenance on Page 2)

• Total harmonic distortion: <20%

• Operating temperature: - -40°C to +50°C (-40°F to +122°F)

• Power factor: >.90

• Input power stays constant over life.

• Field replaceable surge protection device meets a minimum Category C Low operation (per ANSI/IEEE C62.41.2).

• High-efficacy LEDs mounted to metal-core circuit board to maximize heat dissipation

• Terminal block provided accepts up to 10ga wire, however the luminaire is supplied with a 32' 3 conductor wire harness.

• Components are fully encased in potting material for moisture resistance. Driver complies with FCC standards. Driver and key electronic components can easily be accessed.

Product Dimensions

Ø25-1/2"
(648mm)

21-7/8"
(556mm)

32-7/16"
(823mm)

13-7/16"
(341mm)

Slipfitter fits 4"Ø tenon or pole

4-7/16"
(1131mm)

**Post Top Single
Slipfits 4" Dia. Tenon (4N) or Pole**

37-1/4"
(946mm)

4-13/16"
(122mm)

3-5/16"
(84mm)

Ø4"
(102mm)

24-5/8"
(625mm)

Post Top with WM Accessory

Features & Specifications (Cont.)

Construction

• Rugged die-cast aluminum housing.

• Cast aluminum wiring access door located in lower hub/fitter.

• Rigid die-cast aluminum arms for consistency and strength.

• Precision die cast aluminum heatsink and optical frame.

• Removable spun aluminum cap/driver enclosure is retained by captive stainless steel fasteners and safety cables. Housing and top cap interface is sealed with a one-piece extruded silicone gasket. Tool-less entry option is available.

• All exposed fasteners are black oxide coated stainless steel. Internal fasteners are stainless steel or zinc electroplated steel.

• Luminaire is proudly made in the U.S.

• IP65 rated luminaire protects integral components from harsh environments.

• 1.5G rated for ANSI C136.31 high vibration applications

• Fixtures are finished with LSI's DuraGrip® polyester powder coat finishing process. The DuraGrip finish withstands extreme weather changes without cracking or peeling. Other standard LSI finishes available. Consult factory.

• Shipping weight: 45 lbs in carton.

Controls

• Optional integral passive infrared motion and daylight sensor activates switching of luminaire light levels (see page 5 for more details).

• 7-pin ANSI C136.41-2013 photocontrol receptacle option available for twist lock photocontrols or wireless control modules.

• LSI's Gold and Platinum wireless control system options reduce energy and maintenance costs while optimizing light quality 24/7. (see page 5 for more details)

Installation

• Mounts to 4" O.D. pole or tenon.

• Secures to pole with 6 stainless steel set screws.

• 32' wire leads are provided bundled in the slip fitter hub for ease of wiring.

Warranty

• LSI LED Fixtures carry a 5-year warranty.

Listings

• Listed to UL 1598 and UL 8750.

• RoHS Compliant.

• State of California Title 24.

• DesignLights Consortium® (DLC) qualified product. Not all versions of this product may be DLC qualified. Please check the DLC Qualified Products List at www.designlights.org/QPL to confirm which versions are qualified.

• American Recovery and Reinvestment Act Funding Compliant.

• Lighting Facts Approved.

• Suitable For wet Locations.

• IP65 rated Luminaire. IP66 rated optical chamber.

• 1.5G rated for ANSI C136.31 high vibration applications

Performance

ELECTRICAL DATA*

| Lumens	120V	208V	240V	277V	347V	480V	Watts
10L	0.63	0.36A	0.31A	0.27A	0.22A	0.16A	75
18L	1.29A	0.75A	0.65A	0.56A	0.45A	0.32A	155
25L	1.98A	1.14A	.99A	.86A	0.68A	0.49A	237

*Electrical data at 25C (77F). Actual wattage may differ by +/-10%.

RECOMMENDED LUMEN MAINTENANCE[1]

Ambient	Initial[2]	25 hr[2]	50 hr[2]	75 hr[3]	100 hr[3]
0 C	1.06	1.05	1.05	1.05	1.04
10 C	1.04	1.02	1.02	1.02	1.01
20 C	1.01	1.00	0.99	0.99	0.99
25 C	1.00	0.98	0.97	0.97	0.96
30 C	0.99	0.97	0.96	0.96	0.95
40 C	0.97	0.92	0.89	0.86	0.83

1 - Lumen maintenance values at 25C are calculated per TM-21 based on LM-80 data and in-situ testing.
2 - In accordance with IESNA TM-21-11, Projected Values represent interpolated value based on time durations that are within six times the IESNA LM-80-08 total test duration for the device under testing.
3 - In accordance with IESNA TM-21-11, Calculated Values represent time durations that exceed six times the IESNA LM-80-08 total test duration for the device under testing.

3-5/16" (84mm)
Ø4" (102mm)
24-1/2" (622mm)
Ø4" (102mm) or Ø5" (127mm)
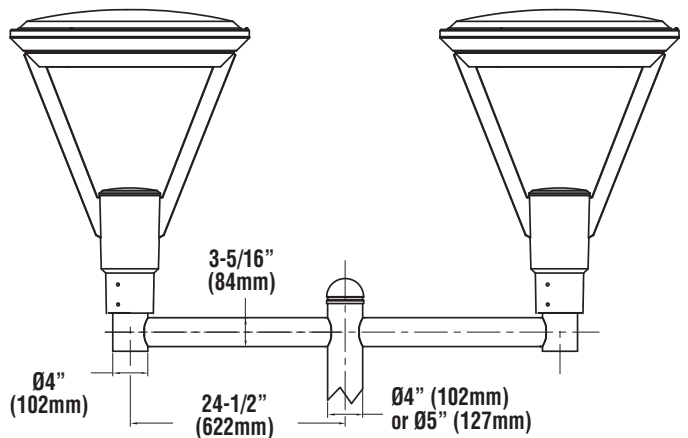
Post Top with BK MPT BO (x2)
Mounts to 4" or 5" Dia. D180 Bolt-on Pole
(select 3" reduced drilling pattern)

LUMINAIRE EPA CHART - Constitution

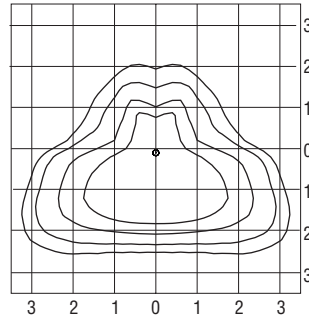|	MOUNTING STYLE	EPA
■ PT Single	PT	1.0
▬■▬■ PT D180° with BK MPT BO (2)	PT	2.0

Performance (Cont.)

All published luminaire photometric testing performed to IESNA LM-79 standards by NVLAP, certified laboratory. ISO footcandle plots below demonstrate the Constitution (XCN4) light patterns only. Not for total fixture output. For complete specifications and IES files, see website.
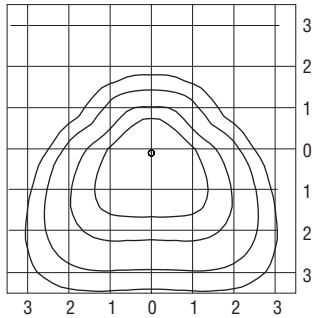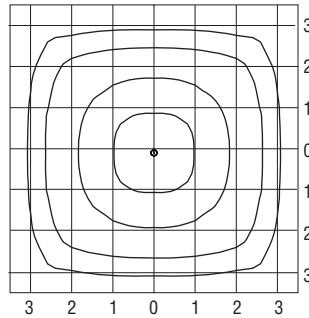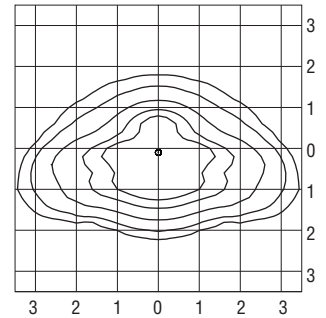
FT   5W   Type 3   Type 2

PERFORMANCE		3000K			4000K			5000K			
Lumens	Distribution Type	Delivered Lumens	Efficacy	BUG Rating	Delivered Lumens	Efficacy	BUG Rating	Delivered Lumens	Efficacy	BUG Rating	Wattage
10L	2	8,879	118	B3-U2-G3	9,578	128	B3-U2-G3	9,634	128	B3-U2-G3	75
	3	9,312	124	B2-U2-G3	10,045	134	B2-U2-G3	10,187	136	B2-U2-G3	75
	FT	9,066	121	B3-U2-G3	9,780	130	B3-U2-G3	9,847	131	B3-U2-G3	75
	5W	8,921	119	B4-U2-G2	9,624	128	B4-U2-G2	9,771	130	B4-U2-G2	75
18L	2	16,620	107	B3-U2-G3	17,929	114	B4-U2-G4	18,108	117	B4-U2-G4	155
	3	17,475	113	B3-U2-G3	18,851	122	B3-U2-G4	18,982	122	B3-U2-G3	155
	FT	17,042	110	B4-U2-G2	18,384	119	B3-U2-G4	18,738	121	B3-U2-G4	155
	5W	17,241	111	B3-U2-G3	18,599	120	B4-U2-G2	18,606	120	B3-U2-G3	155
25L	2	22,583	95	B4-U2-G3	24,361	103	B4-U2-G3	24,546	104	B4-U2-G3	237
	3	23,660	100	B3-U2-G4	25,523	108	B3-U2-G4	25,834	109	B3-U2-G4	237
	FT	23,217	98	B3-U2-G4	25,045	106	B3-U2-G4	25,449	107	B3-U2-G4	237
	5W	22,687	96	B5-U2-G3	24,474	103	B5-U2-G3	24,905	105	B5-U2-G4	237

Ordering Guide

TYPICAL ORDER EXAMPLE:	**XCN4**	**PT**	**LED**	**18L**	**50**	**UE**	**BRZ**	**IMS**

Luminaire Prefix	Distribution	Light Source	Lumens	Color Temp	Line Voltage	Finish	Optional Controls	Options
XCN4 - Constitution	2 - Type II 3 - Type III 5W - Type 5 Wide FT - Forward Throw (Type IV)	LED	10L - 10,000 Lumens 18L - 18,000 Lumens 25L - 25,000 Lumens	50 - 5000K 40 - 4000K 30 - 3000K	UE - Universal Voltage (120-277v) HV - High Voltage (347-480v)	BRZ - Bronze BLK - Black GPT - Graphite MSV - Metallic Silver WHT - White PLP - Platinum Plus SVG - Satin Verde Green	**Stand-Alone Control** (Blank) - None IMS - Integral Motion Sensor[6]	PCR 7P - Photoelectric Control Receptacle[1] IL - Integral Louver Shield TE - Tooless Access

ACCESSORY ORDERING INFORMATION   (Accessories are field installed)

Description	Order Number	Description	Order Number
BK MPT BO4 - Bolt on Bracket (for PT 180) For 4" O.D. Round Poles	490025CLR[5]	FK120 Single Fusing (120V)	FK120 [3]
BK MPT BO5 - Bolt on Bracket (for PT 180) For 5" O.D. Round Poles	490035CLR[5]	FK277 Single Fusing (277V)	FK277 [3]
IL - Integral Louver Shield (Black only)	654939	DFK208,240 Double Fusing (208V, 240V)	DFK208, 240 [3]
PC120 Photocell for use with PCR option (120V)	159514 [2,4]	DFK480 Double Fusing (480V)	DFK480 [3]
PC208-277 Photocell for use with PCR option (208V, 240V, 277V)	122515 [2,4]	FK347 Single Fusing (347V)	FK347 [3]
PC347 Photocell for use with PCR option (347V)	122516 [2,4]	ALSC UNV TL5 - AirLink 5 Pin Twist Lock Controller	661409
PC480 Photocell for use with PCR option (480V)	1225180 [2,4]	ALSC UNV TL7 - AirLink 7 Pin Twist Lock Controller	661410
WM - Wall Mount Bracket (PT Only)	C/F		

FOOTNOTES:
1 - Photocell must be ordered separately. See Accessories.
2 - Factory installed PCR option required. See Options.
3 - Fusing must be located in hand hole of pole.
4 - These photocells provide Dusk/Dawn, on-off control only. Consult factory for alternate photocells providing additional functionality.

5 - Order poles with 3" reduced drilling pattern. For PT mounting configurations other than D180, consult factory. Order one bracket per fixture
6 - Consists of a daylight & motion dual sensor. Light levels are field adjustable via a handheld remote configurator tool. Not available PCR 7P.

Accessories/Options

Integral Louver (IL)

Optional Integral Louver available for improved back-light control without sacrificing street side performance.

Fixture Shown with Integral Louver (IL)
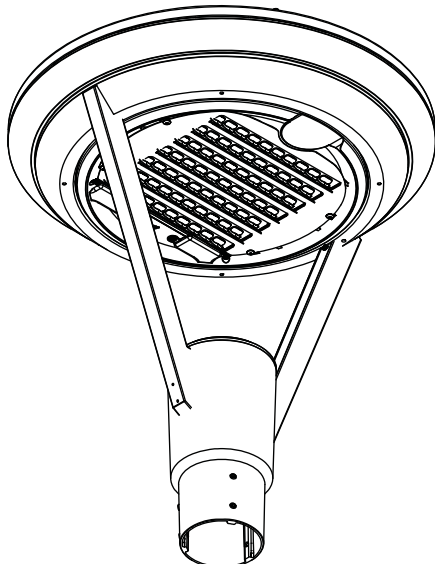
7 Pin Photoelectric Control

7-pin ANSI C136.41-2013 photocontrol receptacle option available for twist lock photocontrols or wireless control modules. Control accessories sold separately. Dimming leads from the receptacle will be connected to the driver dimming leads (Consult factory for alternate wiring).

Fixture Shown with PCR 7P
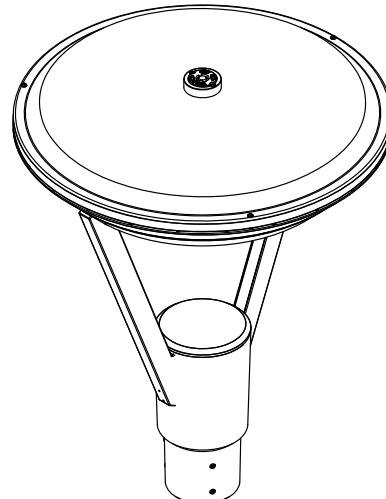
Controls

Occupancy Sensor / Daylight Sensor (IMS)

Optional integral passive infrared motion and daylight sensor activates switching of luminaire light levels. Standard Factory settings: High level light is activated and increased to full bright upon detection of motion. Low light level (30% maximum drive current) is activated when target zone is absent of motion activity for ~5 minutes. Sensor has a detection cone of approximately 45°, see coverage diagram. Optional configurator tool allows for easy and safe programming of each luminaire from the ground level.
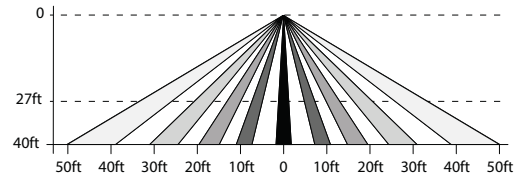
Fixture Shown with IMS
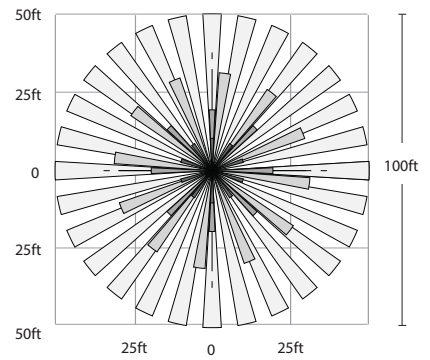

IMS
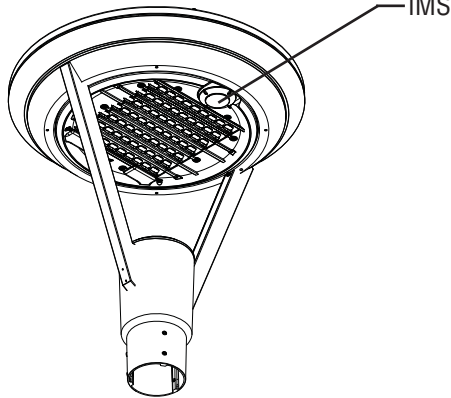
IMS/PC Remote Configurator Tool

Optional IMS Coverage Diagram

SIDE VIEW

TOP VIEW

AirLink™
enabled by Synapse®

Wireless Lighting Controller 5 Pin & 7 Pin Twist Lock

The 5 Pin Twist Lock Controller (TL5) & The 7 Pin Twist Lock Controller (TL7) are intelligent wireless lighting controllers with exceptional fault tolerance & a multitude of features. Each TL5 & TL7 provides intelligent On/Off switching, dimming, control, highly accurate power metering, status monitoring of your lighting fixtures & digital sensor input (TL7 only).

Features

- Integrated Photocell
- ANSI C136.41 Dimming Receptacle Support
- Utility grade power monitoring
- Remote control and scheduling
- Flexible Dimming Controls
- Secure, over-the-air upgrades to support future enhancements
- Seamless integration into the AirLink Site Manager system
- Digital sensor input for motion sensing (TL7 only)

Power and Performance

- Operating environmental: -40°F to 158°F (-40°C to 70°C); 20% to 90% RH non-condensing; IP66

- Input power: 100–277 VAC +/- 10% (Max 305V)50/60 Hz
- Switched output: Default ON
- Load rating: 5A @ 100V to 277V (+/- 10%)
- Dimming control: 0–10V with short circuit protection
- Dimming output: maximum current 10mA
- Sensor input: One digital input that can be used for motion-based lighting controls (TL7 only)
- Power monitoring: Utility grade - 2% accuracy
- Power readings: Voltage, Watts

Other

- Dimensions: 4.53" W x 2.68" H (115mm W x 68mm H)
- Radio: SNAP 2.4 GHz; 802.15.4; +20 dBm Transmit Power; -104 dBm Receive Sensitivity
- Warranty: 5 years

Wiring
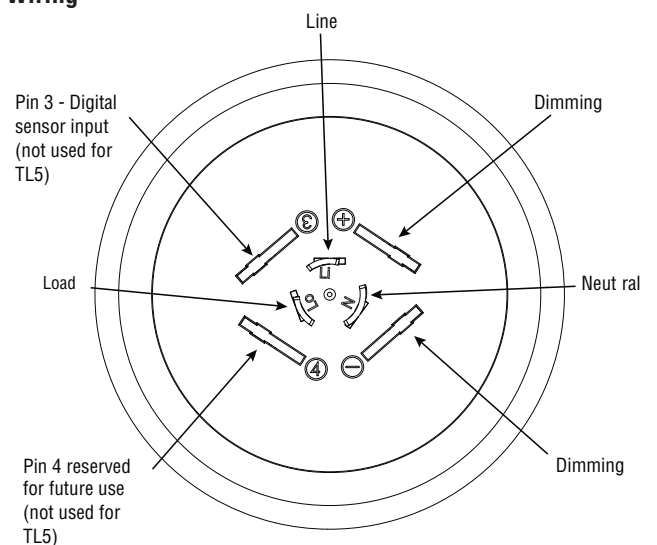
Contact LSI Controls

Sales
controls.sales@lsi-industries.com

Support
controls.support@lsi-industries.com
1 (800) 436-7800 (support, option 8)

More information
For more information on AirLink, visit our website at **www.lsi-airlink.com/airlink**