

RYVL 55L

TRI-LENS ARCHITECTURAL TROFFER

DATE:	LOCATION:
TYPE:	PROJECT:
CATALOG #:	

FEATURES

- Variable Intensity technology provides a range of specifiable outputs and resulting fixture wattages
- Up to 8000 delivered lumens
- Two interchangeable door styles
- No exposed door hardware



CONTROL TECHNOLOGY



SERVICE PROGRAM

QS10

SPECIFICATIONS

CONSTRUCTION

- Die formed steel housing and door frame assembly
- High reflectance aluminum reflectors mounted with tool-less fasteners
- Hinged door frame and spring interface provide no visible fasteners and easy access to electronics from below
- All lenses are UV stabilized, impact resistant acrylic with matte textured surface

OPTICS

- ≤ 3 SDCM CCT consistency, 80 or 90 CRI. Optional SpectraSync™ offers Tunable White solutions and integrates seamlessly into a variety of control systems
- **ASO Door:** Angled side diffusers, dropped center lens, Aluminum center rails
- **FHE Door:** Flat side diffusers, flat center lens, Aluminum center rails

ELECTRICAL

- Variable Intensity (VI) technology allows precise specification of fixture output/wattage. Fixture will be programmed and labeled to specification.
- LED boards and solid state constant current driver are field-serviceable from below.
- Electrical system ratings based on maximum 25°C ambient environment

ELECTRICAL (CONTINUED)

- 100%–1% dimming range. Fixture will be wired for low voltage 0–10V dimming control.
- 10W battery powered driver available. Provides a minimum of 90 minutes of emergency lighting. Inverter-Compatible provided by others.

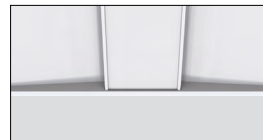
INSTALLATION

- Intended for recessed installation in exposed, inverted T-bar grid ceilings
- Drywall option ships with frame kit to be installed in ceiling prior to fixture install
- Pendant and surface mount options available
- Holes in housing provided for wire-on-chain mounting support to building structure
- Fixtures can be mounted end to end, but cannot be physically row mounted. See instruction sheets for additional information
- Fixture weights:
 - 1x4 19 lbs
 - 2x2 15 lbs
 - 2x4 24 lbs

CONTROLS

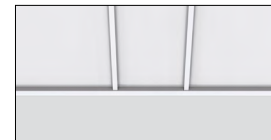
- Sensors install centered at one side of door
- Optional SpectraSync™ offers Tunable White solutions and integrates seamlessly into a variety of control systems.
- For other control requests, contact factory

RYVL



ASO Door

- Angled side diffusers
- Dropped center lens
- Aluminum center rails



FHE Door

- Flat side diffusers
- Flat center lens
- Aluminum center rails

CERTIFICATIONS

- CSA listed for damp locations
- UL924
- IC rated
- CCEA available for 2x2 and 2x4
- DLC® (DesignLights Consortium) Qualified, with some Premium Qualified configurations. Please refer to the DLC website for specific product qualifications at designlights.org
- This product meets federal procurement law requirements under the Trade Agreements Act (FAR 52.225–11). See [Buy America\(n\) Solutions](#).
- Emergency Battery Backup options are California Energy Commission (CEC) Title 20 Compliant.

WARRANTY

- LED boards: 5 years
- LED drivers (standard): 5 years

KEY DATA	
Lumen Range	2,500–8,000
SDCM	3
Efficacy Range (LPW)	115–154
Rated Life (Hours)	L90 > 50,000 Hours

RYVL 55L

TRI-LENS ARCHITECTURAL TROFFER

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ORDERING GUIDE

Gray
Highlighting

= 10 Day Quick Ship Program

QS10

Example: 55L-G-D-22-ASO-WHS-35K-D25-D01-UNV

CATALOG #

55L					
Series	Ceiling Type	Distribution	Size	Center Visual Design	Finish/Color
55L RYVL Tri-Lens Architectural Troffer	G 15/16" or 9/16" Grid SS 9/16" Screw Slot DW Drywall P Pendant S Surface	D Direct	14 1' x 4' Fixture 22 2' x 2' Fixture 24 2' x 4' Fixture	ASO Angled side diffusers, dropped center lens, extruded center rails FHE Flat side diffusers, flat center lens, extruded center rails	WHS Smooth Matte White (Default) AMW Anti-Microbial Smooth Matte White ¹ CC Custom Color ¹

Color Temperature	Output ²	Driver	Voltage
30K 3000K, 80 CRI	D25 2500	D01 1% Dimming, 0–10V	UNV Universal Voltage (120V through 277V)
30K9 3000K, 90 CRI	to	D05 5% Dimming, 0–10V	347 347 Volt ¹
35K 3500K, 80 CRI	D80 8000	LEC Hi-lume 1% EcoSystem LED driver ¹	
35K9 3500K, 90 CRI		DALI DALI 2 ^{1,3}	
40K 4000K, 80 CRI			
40K9 4000K, 90 CRI			
2765T 2700K - 6500K SpectraSync™ Tunable White ^{1,7}			

OPTIONAL

Emergency	Air Modification	Flex Whip	Finish Options
EF 10W Emergency Battery Backup (CEC Title 20 Compliant) ⁴	CCEA Chicago Environmental Air Modification ⁸	FW Flex Whip	PAF Paint After Fabrication ¹
DTS Dimming Bypass Module	AR Air Return		

Control Options

NX Networked – Wired

NXE	NX Wired Dual RJ45 SmartPORTS, without Sensor ^{5,6}
NXESM	NX Wired Dual RJ45 SmartPORTS and Integral NXSMP2-SMI PIR Occupancy Sensor with Automatic Dimming Photocell and Bluetooth® Programming ^{5,6}

NX Networked – Wireless

NXW	NX Networked Wireless Radio Module NXRM2 and Bluetooth® Programming, without Sensor ^{5,6}
NXWSM	NX Networked Wireless Enabled Integral NXSMP2-SMI PIR Occupancy Sensor with Automatic Dimming Photocell and Bluetooth Programming ^{5,6}
NXWRM	NX Networked Wireless Enabled Integral NXSMP2-LMI PIR Occupancy Sensor with Automatic Dimming Photocell and Bluetooth Programming ^{5,6}
BTSL	Bluetooth® Programmable, BTSMP-SMI PIR Occupancy Sensor with Automatic Dimming Photocell and 360° Lens

Notes:

- Additional lead time may be applicable. Contact factory.
- Specifiable in 100 lumen increments. Reference the Performance Data Table for full performance offering and exceptions.
- Required for use with ODPG or ODWG sensors
- EF - 10W battery powered driver. Provides a minimum of 90 minutes of emergency lighting. Inverter Compatible. Provided by others.
- Only available with 0–10V Driver options.
- Refer to NX Integrated Controls Reference Table for Functionality of Options.
- Must be ordered with D05 Driver option
- Available with 22 and 24 size only

DATE:

LOCATION:







TYPE:

PROJECT:

CATALOG #:

CONTROLS OPTIONS AND FUNCTIONALITY



Control Option Ordering Logic & Description			Control Option Functionality									Control Option Components	
			Sensor	Networkable	Grouping	Scheduling	Occupancy/ Motion	Daylight Harvesting	0-10V Dimming	On/Off Control	Bluetooth® App Programming		
NX Wired	NXE	NX Wired Dual RJ45 SmartPORTS, without Sensor	N/A	✓	✓	✓	–	–	✓	✓	Requires ¹ NXBTC dongle	–	 NXDSP
	NXESM	NX Wired Dual RJ45 SmartPORTS and Integral NXSMP2-SMI PIR Occupancy Sensor with Automatic Dimming Photocell and Bluetooth® Programming	NXSMP2-SMI	✓	✓	✓	✓	✓	✓	✓	Max: 12'	 	NXSMP2-SMI NXDSP
NX Wireless	NXWSM	NX Networked Wireless Enabled Integral NXSMP2-SMI PIR Occupancy Sensor with Automatic Dimming Photocell and Bluetooth® Programming	NXSMP2-SMI	✓	✓	✓	✓	✓	✓	✓	Max: 12'		NXSMP2-SMI
	NXW	NX Networked Wireless Radio Module NXRM2 and Bluetooth® Programming, without Sensor	N/A	✓	✓	✓	–	–	✓	✓	–		NXRM2-H
	NXWRM	NX Networked Wireless Enabled Integral NXSMP2-LMI PIR Occupancy Sensor with Automatic Dimming Photocell and Bluetooth Programming	NXSMP2-LMI	✓	✓	✓	✓	✓	✓	✓	–		NXSMP2-LMI

1 NXBTC needs to be plugged into an available NX SmartPort™ on the fixture network

CONTROLS TECHNICAL SUPPORT

1-800-888-8006 (7:00 am–7:00 pm est)

APP INFORMATION

NX Lighting Controls App



The NX Lighting Controls App is a free to use mobile application for programming both an NX Lighting Controls System or Standalone Bluetooth Sensors. The mobile app allows you to configure devices, discover and setup wireless enabled luminaires and program your NX system settings.



Android



Apple iOS

NX Connect App



The NX Connect mobile App is a free to use mobile application for programming a NX Connect System. The mobile App allows you to discover, configure and share your NX Connect system.



Apple iOS

CONTROLS OPTIONS AND FUNCTIONALITY (CONTINUED)

SpectraSync™ Color Tuning Technology:

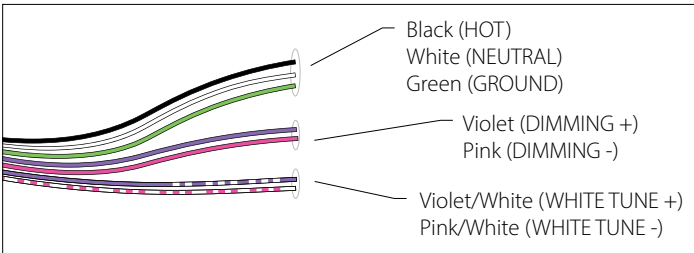
Control your space based on the needs of the application, specific activities throughout the day and preferences of the occupants with distinct SpectraSync™ Color Tuning Technologies.



SPECTRASync COLOR TUNING TECHNOLOGY		
Mode	Kelvin Range	Description
Tunable White	2700K–6500K	Offers users the ability to tailor CCT to their personal preference, enhancing task visibility, material and colors or the aesthetics of the space
Scheduled White	2700K–6500K	Mimics the rhythm of natural light or follows an alternative user-defined schedule throughout the day, enhancing an occupant's mood and well-being

SpectraSync Tunable White

Available in 2765T (2700K–6500K). Requires two 0–10V controllers, one for intensity and one for CCT. Minimum 5% dimming.

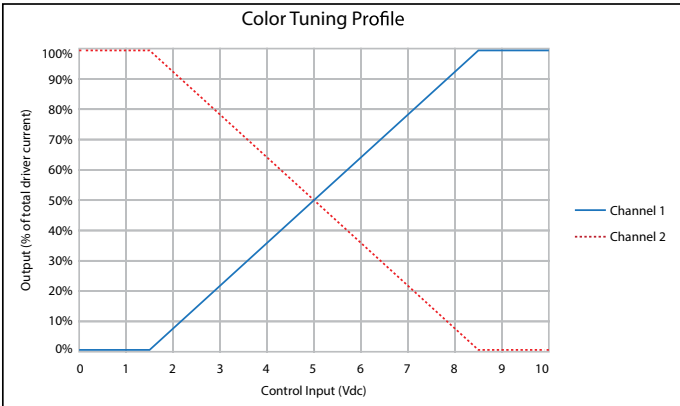


SpectraSync Tunable White luminaires are provided with two 0–10V circuits. The violet and pink circuit is for wiring to any qualified 0–10V controller for dimming. The violet/white and pink/white circuit is for wiring to any qualified 0–10V controller for Tunable White CCT control.

Controller Manufacturer Data

SpectraSync Tunable White was designed to be used with sinking style dimmers (provided by others) and is compatible with:

- Current: NX Lighting Controls Room Controllers (NXRCFX2) and In-fixture Controllers (NXFM2)
- Lutron: DDTV, DVSTV, and NDTV dimmers
- Wattstopper: ADF120277 and CD4BL (Titan) dimmers



PERFORMANCE DATA TABLE

The table below shows the delivered lumens for the various lumen outputs.
Use this chart in connection with the output multiplier capability to deliver any output required

Nomenclature	Output (Lm)	2x2		2x4		1x4	
		Wattage	Efficacy (ASO & FHE)	Wattage	Efficacy (ASO & FHE)	Wattage	Efficacy (ASO & FHE)
D25	2500	201	127	17.7	143	20.5	122
D26	2600	20.8	127	18.5	142	21.5	121
D27	2700	21.6	126	19.4	142	22.5	121
D28	2800	22.4	126	20.2	142	23.5	120
D29	2900	23.2	126	21.0	141	24.5	119
D30	3000	24.0	126	21.9	141	25.5	118
D31	3100	24.8	126	22.5	141	26.4	118
D32	3200	25.7	125	23.2	141	27.3	118
D33	3300	26.5	125	23.9	140	28.2	118
D34	3400	27.4	124	24.6	140	29.2	118
D35	3500	28.3	124	25.2	140	301	118
D36	3600	29.2	124	26.0	140	31.0	117
D37	3700	30.2	123	26.8	140	31.9	117
D38	3800	31.2	123	27.6	140	32.9	116
D39	3900	32.2	122	28.4	140	33.8	116
D40	4000	33.2	122	29.2	139	34.7	116
D41	4100	34.1	122	29.9	139	35.8	115
D42	4200	35.1	122	30.6	139	36.9	115
D43	4300	36.0	121	31.2	139	37.9	115
D44	4400	37.0	121	31.9	139	39.0	115
D45	4500	37.9	121	32.6	139	40.1	115
D46	4600	38.4	121	33.0	140	40.5	115
D47	4700	38.9	122	33.4	142	41.0	116
D48	4800	39.5	123	33.9	143	41.4	117
D49	4900	40.0	123	34.3	144	41.9	118
D50	5000	40.5	124	34.7	145	42.3	119
D51	5100	41.4	124	35.7	144	43.3	119
D52	5200	42.3	123	36.6	143	44.4	118
D53	5300	43.2	123	37.5	142	45.4	118
D54	5400	44.1	123	38.4	141	46.4	118
D55	5500	45.0	123	39.3	140	47.4	118
D56	5600	46.0	122	40.0	140	48.3	117
D57	5700	46.9	122	40.8	141	49.2	117
D58	5800	47.9	121	41.5	141	50.2	117
D59	5900	48.9	121	42.2	141	51.1	117
D60	6000	49.8	121	43.0	142	52.0	116
D61	6100	50.9	120	43.6	142	52.9	116
D62	6200	52.1	120	44.3	142	53.8	116
D63	6300	53.2	119	44.9	142	54.8	116
D64	6400	54.4	119	45.5	142	55.7	117
D65	6500	55.5	118	46.2	142	56.6	117
D66	6600	56.2	118	47.1	141	57.5	116
D67	6700	56.9	119	48.0	141	58.3	116
D68	6800	57.6	119	48.9	141	59.2	116
D69	6900	58.3	119	49.8	141	60.1	116
D70	7000	59.0	119	50.7	140	60.9	116
D71	7100	60.1	119	51.5	140	61.7	116
D72	7200	61.1	118	52.2	140	62.5	116
D73	7300	62.2	118	52.9	139	63.3	116
D74	7400	63.3	118	53.7	139	64.1	116
D75	7500	64.4	118	54.4	139	64.9	116
D76	7600	65.3	117	55.0	139	65.6	116
D77	7700	66.2	117	55.7	140	66.4	115
D78	7800	67.0	117	56.3	140	67.1	115
D79	7900	67.9	117	56.9	140	67.8	115
D80	8000	68.8	116	57.5	141	68.5	115

Output Multiplier Table

Photometrics and outputs published on this spec sheet are based on nominal 3500K temperature at 80 CRI.
This table may be used to approximate the lumen values at different Kelvin temperatures. Power consumption would stay the same.

CCT	80 CRI	90 CRI
3000K	0.99	.89
3500K	1	.90
4000K	1.03	.93

*Driver options listed below are not available for the output and length as shown.

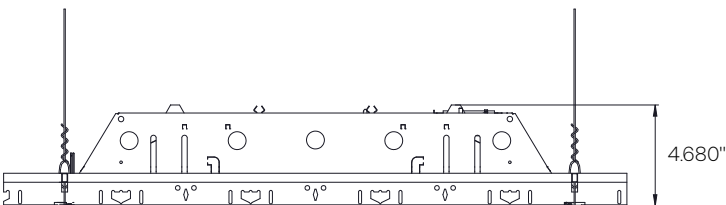
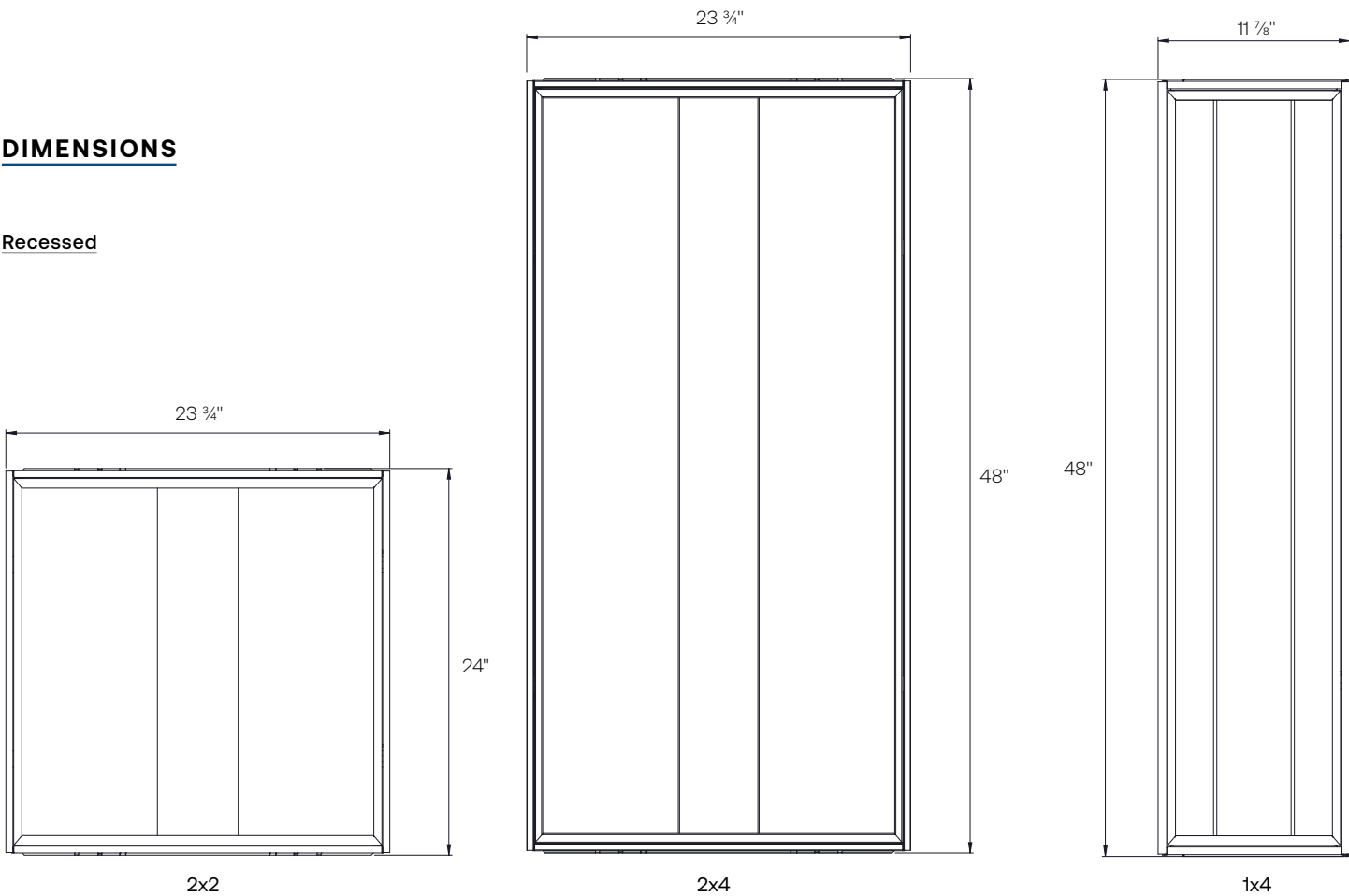
RYVL 55L

TRI-LENS ARCHITECTURAL TROFFER

DATE:	LOCATION:
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DIMENSIONS

Recessed



ASO Door



FHE Door

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DATE:

LOCATION:

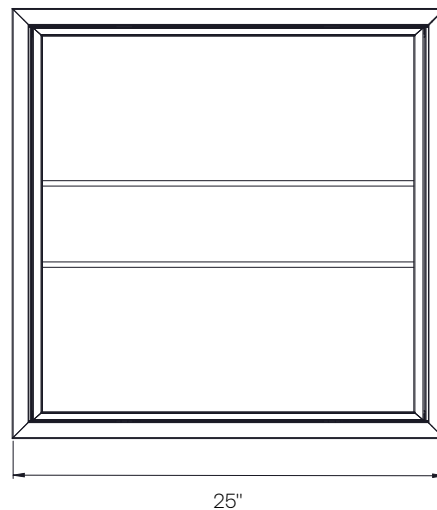
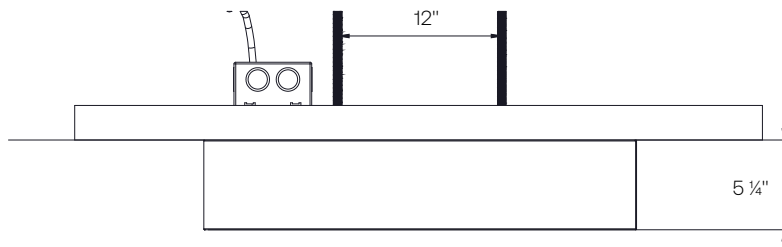
TYPE:

PROJECT:

CATALOG #:

DIMENSIONS CONTINUED

Surface



CENTER VISUAL DESIGNS



ASO Door

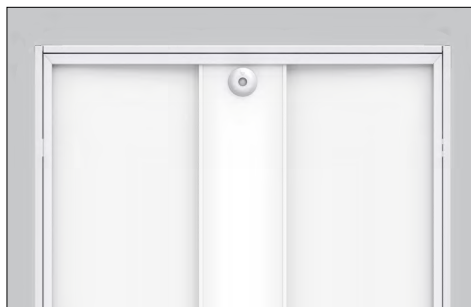
- Angled side diffusers
- Dropped center lens
- Aluminum center rails



FHE Door

- Flat side diffusers
- Flat center lens
- Aluminum center rails

NX CONTROLS



LMI Sensor



RYVL 55L

TRI-LENS ARCHITECTURAL TROFFER

DATE:	LOCATION:
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PHOTOMETRY

55L-XX-D-14-ASO-XX-35K-D80-D01-UNV-XX

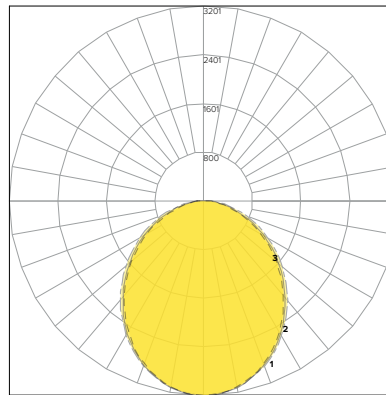
LUMINAIRE DATA

Test No.	22.01274
Description	1'x4' Tri-Lens Architectural Troffer
Delivered Lumens	7874
Watts	68.5W
Efficacy	115
Mounting	Recessed Troffer

ZONAL LUMEN SUMMARY

Zone	Lumens	% Luminaire
0-40	3772	47.9
0-60	6371	80.9
0-90	7874	100.0
0-180	7874	100.0

POLAR GRAPH



Maximum Candela = 3201.3 Located At Horizontal Angle = 45, Vertical Angle = 2.5
 --- Vertical Plane Through Horizontal Angles (0°-180°)
 --- Vertical Plane Through Horizontal Angles (45°-225°)
 --- Vertical Plane Through Horizontal Angles (90°-270°)

55L-XX-D-22-ASO-XX-35K-D80-D01-UNV-XX

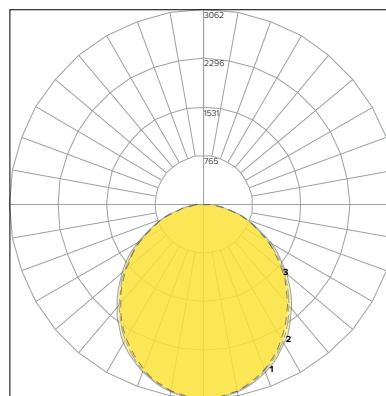
LUMINAIRE DATA

Test No.	22.01227
Description	2'x2' Tri-Lens Architectural Troffer
Delivered Lumens	8008
Watts	68.8W
Efficacy	116
Mounting	Recessed Troffer

ZONAL LUMEN SUMMARY

Zone	Lumens	% Luminaire
0-40	3730	46.6
0-60	6410	80.0
0-90	8080	100.0
0-180	8080	100.0

POLAR GRAPH



Maximum Candela = 3061.8 Located At Horizontal Angle = 0, Vertical Angle = 0
 --- Vertical Plane Through Horizontal Angles (0°-180°)
 --- Vertical Plane Through Horizontal Angles (45°-225°)
 --- Vertical Plane Through Horizontal Angles (90°-270°)

55L-XX-D-24-ASO-XX-35K-D80-D01-UNV-XX

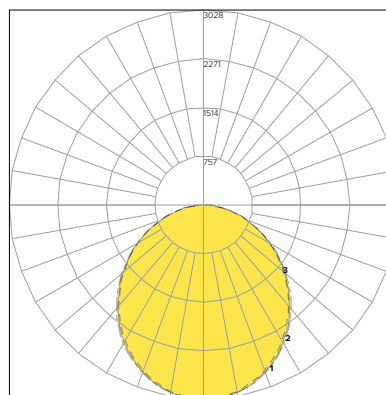
LUMINAIRE DATA

Test No.	22.01228
Description	2'x4' Tri-Lens Architectural Troffer
Delivered Lumens	8103
Watts	57.5W
Efficacy	141
Mounting	Recessed Troffer

ZONAL LUMEN SUMMARY

Zone	Lumens	% Luminaire
0-40	3742	46.3
0-60	6464	79.8
0-90	8103	100.0
0-180	8103	100.0

POLAR GRAPH

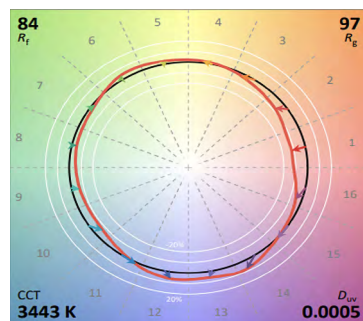


Maximum Candela = 3027.823 Located At Horizontal Angle = 45, Vertical Angle = 2.5
 --- Vertical Plane Through Horizontal Angles (0°-180°)
 --- Vertical Plane Through Horizontal Angles (45°-225°)
 --- Vertical Plane Through Horizontal Angles (90°-270°)

TM-30 DATA

TEST RESULTS		
Value	35K	40K
CCT (K)	3443	3997
CIE R _a	83	83
D _{uv}	0.0005	0.0012
R _f	84	84
R _g	97	97
x	0.4091	0.3814
y	0.3938	0.38

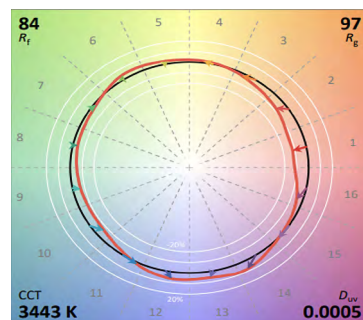
35K



— Reference Illuminant — Test Source

	HUE-ANGLE BIN (J)															
	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16
Chroma Shift (Rcs,hj)	-12	-8	-3	1	3	4	-2	-4	-7	-7	1	6	6	7	-1	-6
Hue Shift (Rhs,hj)	-0.01	0.07	0.12	0.08	0.05	-0.02	-0.06	-0.02	0.02	0.1	0.14	0.06	-0.03	-0.13	-0.14	-0.12
Fidelity (Rf,hj)	80	82	77	86	91	92	90	92	89	81	79	83	89	82	80	79

40K



— Reference Illuminant — Test Source

	HUE-ANGLE BIN (J)															
	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16
Chroma Shift (Rcs,hj)	-11%	-8	-4	1	3	4	-2	-5	-7	-8	1	6	8	7	0	-5
Hue Shift (Rhs,hj)	-0.01	0.06	0.12	0.08	0.05	-0.01	-0.04	-0.02	0.04	0.11	0.15	0.09	-0.04	-0.06	-0.16	-0.13
Fidelity (Rf,hj)	81	84	77	86	89	93	92	90	88	78	77	81	86	88	78	78

CRI: 80 MINIMUM

CCT	CRI	R1	R2	R3	R4	R5	R6	R7	R8	R9	R10	R11	R12	R13	R14
35K	83	81	89	96	82	81	86	85	62	75	74	81	65	83	98
40K	83	81	88	93	83	81	83	87	66	9	71	82	61	83	96

Additional Information

Rated Life: 2x2 6,000-8,000 Lumen options may result in lower Rated Life projections, contact factory.