

# **CÛRV RADIAL LENS**

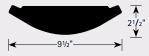
1, 2, 3-Lamp T5, T5HO, T8, Direct/Indirect Distribution



#### **FEATURES**

- Acrylic radial lens combines with curved shape for direct/indirect distribution
- Sturdy 20-gauge steel construction for excellent housing rigidity
- Controls compatible
- Available with optional installed open or closed loop daylight sensors (DSPL, DSL) when daylight dimming systems are desired
- Flat end caps standard (5/16" length)
- Sculpted or bull nose end cap option
- Modular mounting points for convenient hanging
- Aircraft cable mounting
- Patented die cast aluminum, tongue and groove couplers provide zero tolerance alignment resulting in consistently straight rows (Patent# 6,796,676B2)

#### **SHAPE AND DIMENSIONS**



#### **PROJECT INFORMATION**

Type Catalog No. Date

## CONSTRUCTION

- Up to three T8, T5, T5HO lamps in cross section.
- -Modular mounting points maintain convenient, predictable locations and fixture lengths in 48' increments.
- The housing is designed to wrap around the end plates and secures on top with concealed screws to ensure housing tolerances are consistent.
- -Patented die cast aluminum, tongue and groove couplers provide zero tolerance alignment resulting in consistently straight rows (Patent# 6,796,676B2).
- -Lens is securely positioned with a structural frame to provide consistent placement which will not dislodge if jostled from below.

Housing and all painted parts are treated with a multistage phosphate prior to finish. Parts are then finished with a white powder coat for maximum consistent coverage and longevity. Other colors may be specified; refer to Color Guide of the e-PSG or contact your local Alera Lighting representative.

#### **SHIELDING**

Opal Acrylic lens conforms to the radius of the housing and provides an indirect and a soft glow direct illumination. Standard distribution pattern is 70% indirect/30% direct. Optional distribution covers to modify the indirect/direct pattern are available. Distribution covers are shipped separately to be field installed, no tools required.

#### **MOUNTING**

To maintain consistent, predictable mounting points, 1and 3-lamp fixtures use a yoke hanger and 2-lamp units use a single-point mounting system at each hanging location. Fixed cable has a total vertical adjustment of 11/4". The end of the cable barrel screws into a standard 1/4-20 bolt brought down from the ceiling. All fixtures are suspended in modular increments and must be supported at each fixture housing end.

### **AESTHETIC OPTIONS**

- —Sculpted End Cap
- -Bull Nose End Cap

#### LABELS AND ELECTRICAL

- -All luminaires are built to UI 1598 Standards and bear appropriate UL and cUL or CSA labels. Damp location labeling is standard.
- Quick-connect plugs standard.

## **CONTROLS COMPATIBILITY**

When used with Occupancy Sensors, most lamp vendors recommend Program Start ballast (EP) to extend lamp life. For daylight sensors installed, see information below.

#### **ARCHITECTURAL SENSORS INSTALLED**

Daylight sensors are used to measure available sunlight and reduce electric light for energy savings. Alera sensors are installed to be both accessible and visible below the housing.

DSPL: Philips Luxsense, Mark 7 0-10V dimming ballast. Closed loop sensor measures reflected light in a cone below the sensor. Pre-commissioned by Philips to 45fc standard; modest manual adjustability via sensor ring. DSL: Lutron EcoSystem, digital dimming ballast. Open loop sensor must be pointed directly at the source of natural light. System requires proprietary commissioning

Additional technical data: see TID sheets, Alera website and sensor manufacturer websites.

Name: CVRL-2T5-EP Test #: ITL72475 Efficiency: 91.4% LER: 77 Definitions on page 182

#### ORDERING INFORMATION

# **EXAMPLE: CVRL-8-2T8-CM48-OA-EU-MW**

CVRL -	-		- CM	-			-		-			
MODEL	LAMP TYPE AND PROFILE		LAMP TYPE AND PROFILE		MOUNTING METHOD		CABLE	VOLTAGE			COLOR	
CVRL Cûrv Radial Opal Acrylic Lens	1T5 One T5 Lamp¹ 2T5 Two T5 Lamps¹ 3T5 Three T5 Lamps¹	•	CM Adjustable Aircraft Cable Mount	48 48" 96 96"		U 120 277	120V-2 120V 277V	77V	MW Matte White MB Black ZT ZET Metallic Silver			
ROW LENGTH	1T5HO One T5HO Lamp <sup>1</sup> 2T5HO Two T5HO Lamps <sup>1</sup>		DISTRIBUTION	Other length available on		347	347V		See Color Selection Guide for other colors.			
<ul><li>4 4' Single</li><li>8 8' Single</li></ul>	3T5HO Three T5HO Lamps <sup>1</sup> 1T8 One T8 Lamp	Blank	k (70% Uplight, 30% Downlight	BALLAST			OPTIONS					
<ul> <li>Indicate row length over 8' in 4'</li> </ul>	2T8 Two T8 Lamps	0/100	0% Uplight, 100% Downlight <sup>2, 6, 8</sup>		Electronic, Instant Start, (Std. for T8)		DC	C Dust Cover (T8 and T5 with standard distribution) <sup>8</sup>				
increments Note: Rows over 8'	3T8 Three T8 Lamps	1hree 18 Lamps 20/80				Programmed for T5 & T5HO,		SCE BN	CE Sculpted End Cap (55/16")8  SN Bull Nose End Cap (51/16")8			
vill be configured by Alera. Example: 16'		40/60 85/15	40% Uplight, 60% Downlight <sup>2, 6, 8</sup>	optional for <b>ELW</b> Electronic T8		r T8)		LR IBOB	OB Inboard/Outboard Switching	nly)		
will be (2) 8'. Alternate configurations: contact			85% Uplight, 15% Downlight <sup>2, 6, 8</sup>	Instant Start  EPLW Electronic T8, Low Wattage,			J .		(3-Lamp only)  EL One Emergency Battery Pack <sup>3, 4</sup>			
factory.		CLC	Center Lamp Cover A/V Mode <sup>2, 6, 8</sup>	Programmed				NLC	One Emergency Circuit <sup>4, 5</sup> Night Light Circuit <sup>4, 5</sup>			
T5/T5HO at risk for socket sha	adow in downlight component.			9	specify)	٠,		GLR	Fast Blow Fuse			

- <sup>2</sup> Dust cover not available when using these optical distribution covers.
- <sup>3</sup> Specify voltage. For additional, specify quantity before nomenclature (Example: 2EL120).
- <sup>4</sup> Not available with all configurations; some limitations apply. Contact factory for details.
- $^{\rm 5}$  One extra feed drop per EMC/NLC. (For through wiring, contact factory).
- Optional distribution covers provide approximate patterns. Distribution pattern results vary according to specific lamp configurations. Contact factory for additional information.
- 8 Ships separately,

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<sup>7</sup>Lutron EcoSystem® series ballast. Contact factory for other Lutron ballasts.

ballasts possible.

ESD Electronic, Step Dimming

Electronic Dimming Philips

EcoSystem Digital Dimming

Advance Mark 7 (0-10V)

EDUMK7 Universal Voltage,

**EDULUTES** Universal Voltage, Lutron

- GMF Slow Blow Fuse TBAR T-Bar Mounting Philips LuxSense Daylight Sensor
- (Must Specify Philips Advance 0-10V Dimming Ballast)<sup>4</sup>
- Lutron Daylight Sensor (Must Specify Lutron EcoSystem [EC5 Series] Dimming Ballast)4

Ballast<sup>4, 7</sup> Unless specified, Alera will use fewest CLIRVES / CVRI

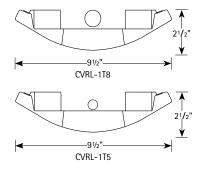


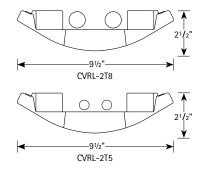


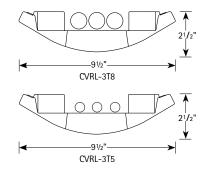
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# **CROSS SECTION**







# **PHOTOMETRIC DATA**

Test Date 4/11/2012

# LUMINAIRE DATA Test ITL72475 AVG. LUMINANCE (Candela/Sq. M.) COEFFICIENTS OF UTILIZATION (%)

Luminaire	CVRL-4-2T5-EPU					
	CVR Curv Radial, Curves					
	9.5" x 48" 2-lamp with					
	linear prismed frosted opal lens					
Ballast	ICN-2S28-N					
Ballast Factor	1.00					
Lamp	F28T5					
Lumens per Lamp	2600					
Watts	62					
Mounting	Pendant					
Shielding Angle	0° = 90 90° = 90					
Spacing Criterion	0° = 1.20 90° = 1.29					
Luminous	Length: 4.00					
Opening in Feet	Width: 0.31					
	Height: 0.00					

# 0.0 | 22.5 | 45.0 | 67.5 | 90.0

		0.0	22.5	45.0	67.5	90.0
	0	4661	4661	4661	4661	4661
	30	4350	4430	4531	4651	4691
	40	4170	4249	4453	4635	4714
	45	4014	4125	4346	4579	4653
	50	3876	4024	4240	4565	4632
Angle	55	3768	3905	4192	4510	4616
Ā	60	3628	3785	4063	4392	4531
-	65	3471	3636	3923	4313	4396
	70	3350	3579	3807	4289	4340
	75	3253	3421	3756	4192	4360
	80	3049	3249	3599	4249	4449
	85	2888	3187	4084	5279	5777
ZC	)NA	AL LU	MEN	ISUN	1MAI	RY

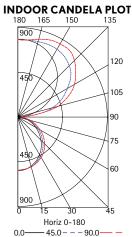
Zone	Lumens	% Lamp	% Fixt.		
0-30	417	8.0	8.8		
0-40	682	13.1	14.4		
0-60	1204	23.1	25.3		
0-90	1562	30.0	32.9		
90-120	958	18.4	20.2		
90-130	1506	29.0	31.7		
90-150	2532	48.7	53.3		
90-180	3192	61.4	67.1		
0-180	4754	91.4	100.0		

	RC	80				70				50			0
	RW	70	50	30	10	70	50	30	10	50	30	10	0
	1	86	82	78	75	77	74	71	68	59	57	55	25
	2	78	71	66	61	70	64	60	56	51	48	45	21
	3	71	62	56	51	64	56	51	46	45	41	38	17
	4	65	55	48	42	58	50	44	39	40	35	32	15
Z,	5	59	49	42	36	53	44	38	33	36	31	27	13
~	6	54	44	36	31	49	40	33	29	32	27	24	11
	7	50	39	32	27	45	36	29	25	29	24	21	10
	8	46	35	29	24	42	32	26	22	26	21	18	9
	9	43	32	26	21	39	29	23	19	24	19	16	8
	10	40	29	23	19	36	27	21	17	22	17	14	7

RCR = Room Cavity Ratio RC = Effective Ceiling Cavity Reflectance RW = Wall Reflectance

## **ENERGY DATA**

Total Luminaire Efficiency	91.4%
Luminaire Efficacy Rating (LER)	77
ANSI/IESNA RP-1-2004 Compliance	Yes-VDT Normal Use
Comparative Yearly Lighting Energy Cost per 1000 Lumens	\$3.12 based on 3000 hrs. and \$0.08 per KWH



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