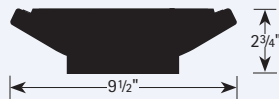


FEATURES

- Parabolic louver combines with curved shape for direct/indirect distribution
- Sturdy 20-gauge steel construction for excellent housing rigidity
- Controls compatible
- High efficiency with wide distribution
- Flat end caps standard (5/16" length)
- Modular mounting points for convenient hanging locations
- Patented die cast aluminum, tongue and groove couplers provide zero tolerance alignment resulting in consistently straight rows (Patent# 6,796,676B2)
- Aircraft cable mounting

SHAPE AND DIMENSIONS



PROJECT INFORMATION

Project Name	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.
- Standard light distribution is 60% uplight, 40% downlight; additional options are available and are field retrofittable.

FINISH

Housing and all painted parts are treated with a multi-stage 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 page MTX-1 or contact your local Alera Lighting representative.

SHIELDING

- Low iridescence semi-specular louver (LD) provides both direct and indirect illumination.
- Specular low iridescence (LS) louver snaps in from below for simplicity and ease of installation.

MOUNTING

To maintain consistent, predictable mounting points, 1- and 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 1 1/4". 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.

LABELS AND ELECTRICAL

- UL 1598 or CSA
- Prewired w/ T8, T5, or T5HO ballasts
- Quick connect plugs standard
- Damp label available on most models

Name:	CVL-3T8-LD-E
Test #:	13588
Efficiency:	88.8%
LER:	80

ORDERING INFORMATION

EXAMPLE: CVL-8-2T8-CM48-LD-EU-MW

MODEL	LAMP TYPE AND PROFILE	MOUNTING METHOD	SHIELDING	VOLTAGE	COLOR
CVL CÛrv Louvered	1T5 One T5 Lamp ¹ 2T5 Two T5 Lamps ¹ 3T5 Three T5 Lamps ¹ 1T5HO One T5HO Lamp ¹ 2T5HO Two T5HO Lamps ¹ 3T5HO Three T5HO Lamps ¹	FCM Fixed Aircraft Cable Mount (2-Lamp only) CM Adjustable Aircraft Cable Mount	LD Low Iridescent Semi-Specular Louver (Std.) LS Low Iridescent Specular Louver GW White Louver	U 120V-277V 120 120V 277 277V 347 347V	MW Matte White ZT ZET Metallic Silver See MTX-1 for other color selections.
ROW LENGTH	DISTRIBUTION	ADJUSTABLE CABLE LENGTH	BALLAST	OPTIONS	
4 4' Single 8 8' Single — Indicate row length over 8' in 4' increments	1T8 One T8 Lamp 2T8 Two T8 Lamps 3T8 Three T8 Lamps Blank 60% Uplight, 40% Downlight 0/100 0% Uplight, 100% Downlight ² 20/80 20% Uplight, 80% Downlight ² 40/60 40% Uplight, 60% Downlight ² 85/15 85% Uplight, 15% Downlight CLC Center Lamp Cover A/V Mode ³	48 48" 96 96" Other lengths available on request.	E Electronic, Instant Start, (Std. for T8) EP Electronic, Programmed Start (Std. for T5 & T5HO, optional for T8) ED Electronic, Dimming (Must specify) ESD Electronic, Step Dimming Unless specified, Alera will use fewest ballasts possible.	DC Dust Cover (T8 and T5 with standard distribution) SCE Sculpted End Cap (5 5/16") BN Bull Nose End Cap (5 1/16") LR Left/Right Switching (2-Lamp only) IBOB Inboard/Outboard Switching (3-Lamp only) EL One Emergency Battery Pack ^{3,4} EMC One Emergency Circuit ^{4,5} NL Night Light Circuit ^{4,5} GLR Fast Blow Fuse GMF Slow Blow Fuse TBAR T-Bar Mounting CSA UL listed or CSA certified for Canada	

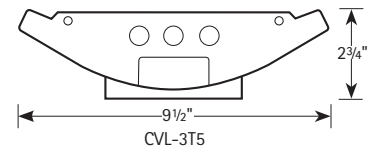
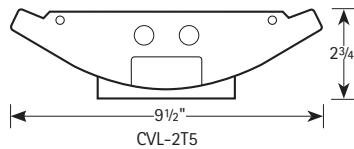
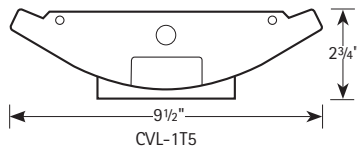
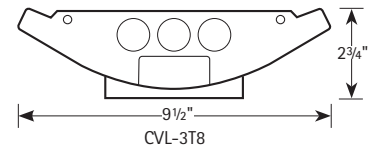
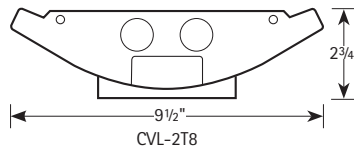
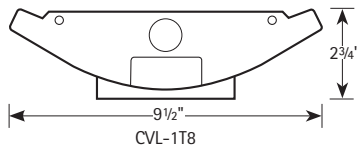
¹ T5/T5HO at risk for socket shadow in downlight component.

² Dust cover not available when using these optical distribution covers.

³ Specify voltage. For additional, specify quantity before nomenclature (Example: 2EL120).

⁴ Not available with all configurations; some limitations apply. Contact factory for details.

⁵ One extra feed drop per EMC. (For through wiring, contact factory.)

CROSS SECTION

PHOTOMETRIC DATA
LUMINAIRE DATA Test 13564

Luminaire	CVL-2T8-LD-E Cûrv Architectural 9.5" x 48" 2-Lamp with 1 x 17 Cell Semi- Specular Louver
Ballast	REL-2P32-SC
Ballast Factor	0.88
Lamp	F32T8
Lumens per Lamp	2950
Watts	60
Mounting	Suspended
Shielding Angle	0° = 29 90° = 25
Spacing Criterion	0° = 1.17 90° = 1.08
Luminous Opening in Feet	Length: 3.58 Width: 0.32 Height: 0.00

AVG. LUMINANCE (Candela/Sq. M.)

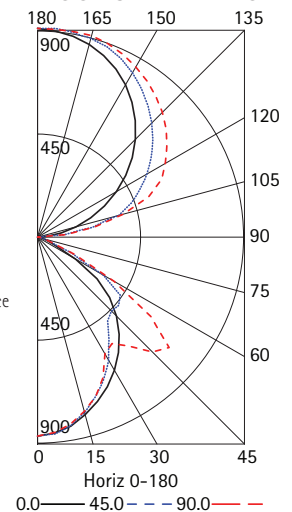
	0.0	22.5	45.0	67.5	90.0
Angle					
0	8165	8165	8165	8165	8165
30	7280	7020	6737	6434	6379
40	6795	6329	5838	6758	7617
45	6471	5900	6059	8039	9421
50	6008	5467	6768	9370	10963
55	5193	4964	7224	8993	9894
60	3608	4172	6239	6765	7254
65	1868	2357	3713	3913	3935
70	1209	1346	1703	1731	1676
75	980	1053	1162	1162	1162
80	920	920	974	920	974
85	970	862	862	755	862

COEFFICIENTS OF UTILIZATION (%)

RC	80	70	50	30	10	50	30	10	50	30	10	0
RW	70	50	30	10	70	50	30	10	50	30	10	0
1	84	81	78	75	76	74	71	68	60	58	56	29
2	77	71	66	62	70	65	60	57	53	50	47	25
3	70	63	56	52	64	57	52	48	47	43	40	22
4	64	55	49	44	58	51	45	40	42	37	34	19
5	59	49	42	37	54	45	39	35	37	33	29	16
6	54	44	37	32	49	40	34	30	34	29	26	14
7	50	40	33	28	46	36	31	26	30	26	22	13
8	47	36	29	25	42	33	27	23	28	23	20	11
9	43	33	26	22	39	30	24	21	25	21	18	10
10	40	30	24	20	37	28	22	18	23	19	16	9

RCR = Room Cavity Ratio

RC = Effective Ceiling Cavity Reflectance RW = Wall Reflectance

INDOOR CANDELA PLOT


Test Date 3/5/04

PHOTOMETRIC DATA
LUMINAIRE DATA Test 13588

Luminaire	CVL-3T8-LD-E Cûrv Louver Architectural Curve 9.5" x 48" 3-Lamp with 1 x 17 Cell Semi- Specular Center Louver
Ballast	REL-3P32-SC
Ballast Factor	0.88
Lamp	F32T8
Lumens per Lamp	2900
Watts	85
Mounting	Suspended
Shielding Angle	0° = 29 90° = 25
Spacing Criterion	0° = 1.16 90° = 1.40
Luminous Opening in Feet	Length: 3.58 Width: 0.32 Height: 0.00

AVG. LUMINANCE (Candela/Sq. M.)

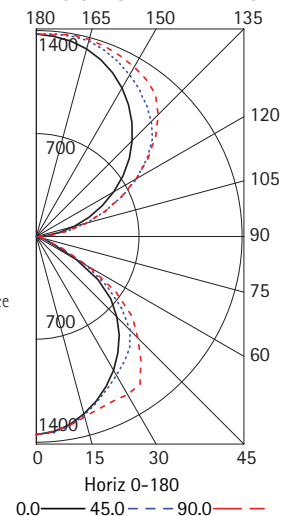
	0.0	22.5	45.0	67.5	90.0
Angle					
0	12647	12647	12647	12647	12647
30	11392	11294	11815	12867	13453
40	10745	10794	12106	13100	13578
45	10285	10564	11999	12304	12942
50	9647	10174	11036	11489	12498
55	8387	9174	9632	10222	10861
60	5901	6840	7460	7479	7874
65	3068	3446	4380	4447	4424
70	1978	2033	2143	2170	2143
75	1597	1597	1561	1561	1597
80	1461	1353	1353	1353	1353
85	1617	1294	1078	1078	1078

COEFFICIENTS OF UTILIZATION (%)

RC	80	70	50	30	10	50	30	10	50	30	10	0
RW	70	50	30	10	70	50	30	10	50	30	10	0
1	86	82	79	76	78	75	72	70	62	60	58	32
2	78	72	67	63	71	66	62	58	55	52	49	27
3	72	64	58	53	65	59	53	49	49	45	42	24
4	66	57	50	45	60	52	46	42	43	39	36	21
5	60	51	44	39	55	47	41	36	39	34	31	18
6	56	45	38	34	51	42	36	31	35	30	27	16
7	51	41	34	29	47	38	32	27	32	27	24	14
8	48	37	30	26	43	34	28	24	29	24	21	13
9	44	34	27	23	40	31	25	22	26	22	19	11
10	41	31	25	21	38	29	23	19	24	20	17	10

RCR = Room Cavity Ratio

RC = Effective Ceiling Cavity Reflectance RW = Wall Reflectance

INDOOR CANDELA PLOT


Test Date 4/8/02

CURVES / CVL

PHOTOMETRIC DATA

LUMINAIRE DATA Test 13673

Luminaire	CVL-2T5HO-LD-EP
	Cûrv Louver
	Architectural Curve
	9.5" x 48" 2-Lamp
	with 1 x 17 Cell Semi-Specular Louver
Ballast	ICN-2554
Ballast Factor	1.00
Lamp	F54T5HO
Lumens per Lamp	4450
Watts	119
Mounting	Suspended
Shielding Angle	0° = 29° 90° = 25°
Spacing Criterion	0° = 1.15 90° = 1.04
Luminous Opening in Feet	Length: 3.58
	Width: 0.32
	Height: 0.00

AVG. LUMINANCE (Candela/Sq. M.)

	0.0	22.5	45.0	67.5	90.0
0	11595	11595	11595	11595	11595
30	10220	11511	10589	8918	8766
40	9383	10254	8242	10426	11959
45	8783	8916	9115	13288	15759
50	7952	7689	10671	15758	18389
55	6667	6962	11582	13842	14219
60	4623	6070	9527	8738	9189
65	2512	3468	5091	5358	5491
70	1703	2033	2418	2500	2418
75	1380	1597	1743	1779	1706
80	1245	1407	1515	1515	1461
85	1294	1402	1186	1186	1186

ZONAL LUMEN SUMMARY

Zone	Lumens	% Lamp	% Fixt.
0-30	971	10.9	12.3
0-40	1510	17.0	19.2
0-60	2708	30.4	34.4
0-90	2998	33.7	38.1
90-120	1424	16.0	18.1
90-130	2257	25.4	28.7
90-150	3843	43.2	48.8
90-180	4870	54.7	61.9
0-180	7868	88.4	100.0

COEFFICIENTS OF UTILIZATION (%)

RC	80	70	50	30	10	70	50	30	10	50	30	10	0
RW	70	50	30	10	70	50	30	10	50	30	10	0	
1	85	81	78	75	77	74	71	69	60	58	57	29	
2	77	71	66	62	70	65	61	57	53	50	48	25	
3	71	63	57	52	64	57	52	48	47	43	40	22	
4	65	56	49	44	59	51	45	41	42	38	34	19	
5	59	50	43	38	54	45	39	35	38	33	30	16	
6	55	44	38	33	50	41	35	30	34	29	26	14	
7	50	40	33	28	46	37	31	27	31	26	23	13	
8	47	36	30	25	42	33	27	23	28	23	20	11	
9	43	33	27	22	40	30	25	21	25	21	18	10	
10	41	30	24	20	37	28	22	19	23	19	16	9	

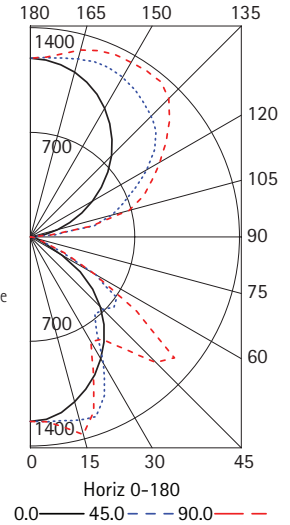
RCR = Room Cavity Ratio

RC = Effective Ceiling Cavity Reflectance RW = Wall Reflectance

ENERGY DATA

Total Luminaire Efficiency	88.4%
Luminaire Efficacy Rating (LER)	66
ANSI/IESNA RP-1-2004 Compliance	Yes-VDT Normal Use
Comparative Yearly Lighting Energy Cost per 1000 Lumens	\$3.64 based on 3000 hrs. and \$0.08 per KWH

INDOOR CANDELA PLOT



Test Date 7/28/04

PHOTOMETRIC DATA

LUMINAIRE DATA Test 13694

Luminaire	CVL-3T5HO-LD-EP
	Cûrv Louver
	Architectural Curve
	9.5" x 48" 3-Lamp
	with 1 x 17 Cell Semi-Specular Louver
Ballast	ICN-4554-90C-2LS
Ballast Factor	1.00
Lamp	F54T5HO
Lumens per Lamp	4450
Watts	185
Mounting	Suspended
Shielding Angle	0° = 29° 90° = 25°
Spacing Criterion	0° = 1.14 90° = 1.55
Luminous Opening in Feet	Length: 3.58
	Width: 0.32
	Height: 0.00

AVG. LUMINANCE (Candela/Sq. M.)

	0.0	22.5	45.0	67.5	90.0
0	17768	17768	17768	17768	17768
30	15612	17034	16762	18140	19735
40	14289	15442	17957	21845	22654
45	13314	14311	19121	20197	21446
50	11972	13360	17409	18798	20976
55	10025	12253	14628	15136	15284
60	6897	9396	11031	9753	10429
65	3602	4647	5958	6203	6425
70	2280	2610	2885	2967	3022
75	1779	1960	1997	2033	2142
80	1569	1623	1623	1623	1786
85	1617	1186	1402	1402	1402

ZONAL LUMEN SUMMARY

Zone	Lumens	% Lamp	% Fixt.
0-30	1492	11.2	12.5
0-40	2480	18.6	20.8
0-60	4250	31.8	35.7
0-90	4604	34.5	38.7
90-120	1985	14.9	16.7
90-130	3288	24.6	27.6
90-150	5702	42.7	47.9
90-180	7301	54.7	61.3
0-180	11905	89.2	100.0

COEFFICIENTS OF UTILIZATION (%)

RC	80	70	50	30	10	70	50	30	10	50	30	10	0
RW	70	50	30	10	70	50	30	10	50	30	10	0	
1	86	82	79	76	78	75	72	70	61	59	58	30	
2	78	72	67	63	71	66	62	58	54	51	49	26	
3	72	64	58	53	65	58	53	49	48	44	41	23	
4	66	57	50	45	60	52	46	42	43	39	35	20	
5	60	51	44	39	55	46	40	36	38	34	31	17	
6	56	45	38	34	50	42	36	31	35	30	27	15	
7	51	41	34	29	47	38	32	27	31	27	23	14	
8	48	37	30	26	43	34	28	24	29	24	21	12	
9	44	34	27	23	40	31	25	21	26	22	19	11	
10	41	31	25	20	38	28	23	19	24	20	17	10	

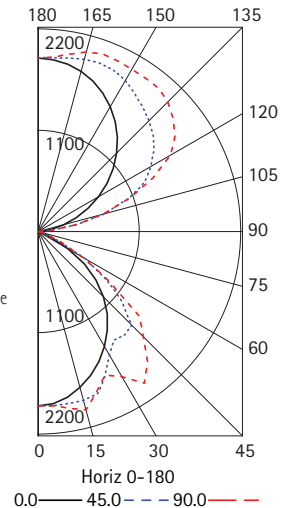
RCR = Room Cavity Ratio

RC = Effective Ceiling Cavity Reflectance RW = Wall Reflectance

ENERGY DATA

Total Luminaire Efficiency	89.2%
Luminaire Efficacy Rating (LER)	64
ANSI/IESNA RP-1-2004 Compliance	Yes-VDT Normal Use
Comparative Yearly Lighting Energy Cost per 1000 Lumens	\$3.75 based on 3000 hrs. and \$0.08 per KWH

INDOOR CANDELA PLOT



Test Date 9/3/04