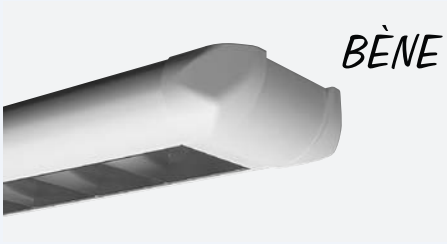
BÈNE

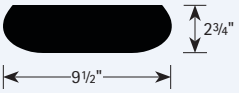
1, 2, 3-Lamp T5, T5HO, T8, Direct/Indirect Distribution



FEATURES

- Extruded aluminum housing
- Direct/Indirect Luminaire
- Available with either T8, T5, or T5HO lamps
- Die cast aluminum couplers and end caps
- Controls compatible
- Attractive, contoured end cap
- Modular suspension points offer ease of installation
- Adjustable yoke cable hanger allows vertical adjustments and horizontal balancing
- Fixed louver stays in housing, even if fixture is struck or damaged

SHAPE AND DIMENSIONS



PROJECT INFORMATION

Project Name | Type

Catalog No. | Date

CONSTRUCTION

—4', 8', and 12' housings

—Reinforcement provides maximum rigidity across the entire housing.

—Diecast aluminum end caps provide zero tolerance alignment between fixtures, resulting in consistently straight rows with no snaking.

—Upper reflectors are constructed of specular anodized aluminum for precise upward distribution.

—Relamped from above

FINISH

The housing is finished with a baked powder coat matte white finish as standard. Diecast end caps and intermediate couplers are painted to match the housing. Hanging stems and canopies are painted white. Cable fittings are standard chrome.

SHIELDING

Louvers are securely attached to the housing from the top, eliminating any chance of loosening or falling from the fixture.

—Constructed of semi-specular anodized aluminum, the eleven-cell louver (LD) measures 1½" high and provides maximum efficiency and a glare-free environment.

—Specular aluminum is available (LS). A variety of lenses are available.

—The lenses slide into a track in the bottom of the extrusion to make it completely captive. This captivity makes the lensed Bene ideal for laboratories, hallways, or schools.

MOUNTING

Bene utilizes a unique hanging system that makes vertical and horizontal adjustment effortless. The aircraft cable assembly is totally adjustable. Precise horizontal balancing is accomplished by sliding a cable gripper along a metal yoke on each end. The cable gripper is simply turned and locked into place once the fixture is leveled. The double hanging system allows the suspension points to be placed on 48" centers for quick and easy installation. Rigid stems are available as options. Extruded aluminum corners are available to make up patterns.

LABELS AND ELECTRICAL

—UL 1598 or CUL labels

—Prewired w/ either T5, T5HO, or T8 electronic ballasts

—Damp label available on most models

—Quick connect plugs standard

Name:	BENE-3T8-LD18-E
Test #:	2630
Efficiency:	90.3%
LER:	78

ORDERING INFORMATION

EXAMPLE: BENE-8-3T8-CM48-LD-EU-MW

BENE - ___ - ___ - ___ - CM ___ - ___ - ___ - ___

MODEL

BENE	Bène

LAMP TYPE AND PROFILE

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]
1T8	One T8 Lamp
2T8	Two T8 Lamps
3T8	Three T8 Lamps

MOUNTING METHOD

CM	Adjustable Aircraft Cable Mount (Std.)

ADJUSTABLE CABLE LENGTH

48	48"
96	96"

Other lengths available on request.

BALLAST

E	Electronic, Instant Start, (Std. for T8)
EP	Electronic, Programmed Start (Std. for T5 & T5HO, optional for T8)
ED	Electronic, Dimming (Must specify)

Unless specified, Alera will use fewest ballasts possible.

VOLTAGE

U	120V-277V
120	120V
277	277V
347	347V

FINISH

MW	Matte White (Std.)
ZT	ZET Metallic Silver

See MTX-1 for other color selections.

ROW LENGTH

4	4' Single
8	8' Single
12	12' Single
—	Indicate row length over 12' in 4' increments

Note: Rows over 12' will be configured by Alera. Example: 16' will be (2) 8'. Alternate configurations: contact factory.

DISTRIBUTION

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 for A/V Mode

SHIELDING

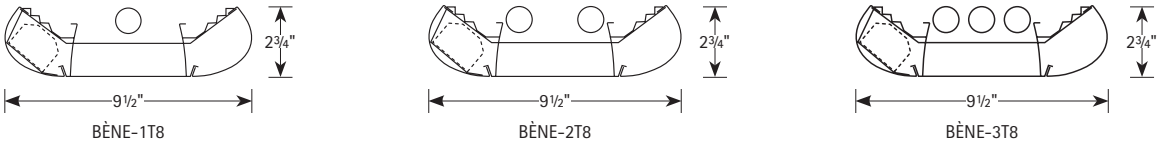
LD	Low Iridescent Semi-Specular Louver (Std.)
LS	Low Iridescent Specular Louver
LD18	Low Iridescent Semi-Specular 18-Cell Louver
LS18	Low Iridescent Specular 18-Cell Louver
A12	Pattern 12 Acrylic Lens
A19	Pattern 19 Acrylic Lens

OPTIONS

DC	Dust Cover
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
DL	Damp Label (Available on most models)

[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 row with through wiring. (Standard is one 4ft lamp per circuit.)

CROSS SECTION



BÈNE-1T8 BÈNE-2T8 BÈNE-3T8

PHOTOMETRIC DATA

LUMINAIRE DATA Test 15291

Luminaire	BÈNE-1T820/80-LD-E Bène Curves 9" × 48" 1L w/1 × 11 Cell Semi-Specular Louver & Perf Lamp Cover
Ballast	RCN-1S32-SC
Ballast Factor	0.88
Lamp	F32T8
Lumens per Lamp	2900
Watts	34
Mounting	Pendant
Shielding Angle	0° = 21 90° = 35
Spacing Criterion	0° = 1.25 90° = 1.75
Luminous Opening in Feet	Length: 3.80 Width: 0.37 Height: 0.00

AVG. LUMINANCE (Candela/Sq. M.)

Angle	0.0	22.5	45.0	67.5	90.0
0	4471	4471	4471	4471	4471
30	4349	4721	5189	5622	5773
40	4127	4797	5736	6766	6966
45	3844	4656	5976	6648	6864
50	3454	4395	5681	6134	6467
55	2883	3937	4912	5232	5446
60	2036	3154	3797	3950	4318
65	996	1775	2373	2645	2898
70	157	403	1052	1119	1030
75	118	207	325	503	532
80	88	176	220	309	309
85	88	88	176	176	176

ZONAL LUMEN SUMMARY

Zone	Lumens	% Lamp	% Fixt.
0-30	493	17.0	22.2
0-40	857	29.6	38.6
0-60	1561	53.8	70.4
0-90	1706	58.8	76.9
90-120	105	3.6	4.7
90-130	191	6.6	8.6
90-150	383	13.2	17.3
90-180	513	17.7	23.1
0-180	2218	76.5	100.0

COEFFICIENTS OF UTILIZATION (%)

RC	80				70				50			0
RW	70	50	30	10	70	50	30	10	50	30	10	0
1	80	77	75	72	77	74	72	69	68	66	64	52
2	74	68	64	60	70	66	62	58	60	57	54	44
3	68	61	55	51	64	58	53	49	53	49	46	38
4	62	54	48	43	59	52	46	42	48	43	40	33
5	57	48	42	37	54	46	41	36	43	38	34	29
6	53	43	37	32	50	42	36	32	38	34	30	25
7	49	39	33	28	46	38	32	28	35	30	26	22
8	45	35	29	25	43	34	29	25	32	27	23	20
9	42	32	26	22	40	31	26	22	29	24	21	17
10	39	30	24	20	37	29	23	20	27	22	19	16

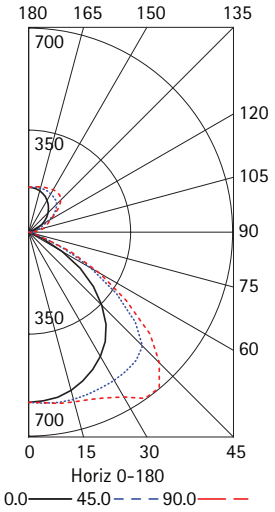
RCR

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

ENERGY DATA

Total Luminaire Efficiency	76.5%
Luminaire Efficacy Rating (LER)	57
ANSI/IESNA RP-1-2004 Compliance	Yes-VDT Normal Use
Comparative Yearly Lighting Energy Cost per 1000 Lumens	$4.21 based on 3000 hrs. and $0.08 per KWH

INDOOR CANDELA PLOT



Test Date 5/2/00

PHOTOMETRIC DATA

LUMINAIRE DATA Test 15290

Luminaire	BÈNE-2T820/80-LD-E Bène Curves 9" × 48" 2L w/1 × 11 Cell Semi-Specular Louver & Perf Lamp Cover
Ballast	RCN-2P32-SC
Ballast Factor	0.88
Lamp	F32T8
Lumens per Lamp	2900
Watts	62
Mounting	Pendant
Shielding Angle	0° = 21 90° = 24
Spacing Criterion	0° = 1.23 90° = 1.28
Luminous Opening in Feet	Length: 3.80 Width: 0.37 Height: 0.00

AVG. LUMINANCE (Candela/Sq. M.)

Angle	0.0	22.5	45.0	67.5	90.0
0	9432	9432	9432	9432	9432
30	9035	9618	9521	9556	9503
40	8515	9004	9164	9334	9434
45	7914	8369	8813	9603	10047
50	7110	7539	8468	10338	11505
55	5993	6460	8115	10811	12026
60	4287	4946	7533	9248	10458
65	2192	2953	5290	6213	6521
70	336	851	2216	2171	2015
75	237	385	592	947	1065
80	176	309	397	573	661
85	176	176	264	351	351

ZONAL LUMEN SUMMARY

Zone	Lumens	% Lamp	% Fixt.
0-30	1001	17.3	22.9
0-40	1626	28.0	37.2
0-60	2831	48.8	64.8
0-90	3133	54.0	71.7
90-120	253	4.4	5.8
90-130	461	7.9	10.6
90-150	914	15.8	20.9
90-180	1234	21.3	28.3
0-180	4367	75.3	100.0

COEFFICIENTS OF UTILIZATION (%)

RC	80				70				50			0
RW	70	50	30	10	70	50	30	10	50	30	10	0
1	78	75	73	70	74	72	69	67	65	63	61	47
2	72	67	62	59	68	63	60	56	57	54	52	41
3	66	59	54	49	62	56	51	48	51	47	44	35
4	60	52	47	42	57	50	45	41	46	41	38	30
5	56	47	41	36	53	45	39	35	41	36	33	27
6	51	42	36	32	49	40	35	31	37	32	29	23
7	48	38	32	28	45	37	31	27	34	29	26	21
8	44	35	29	25	42	33	28	24	31	26	23	19
9	41	32	26	22	39	31	25	22	28	24	20	17
10	39	29	24	20	37	28	23	20	26	22	19	15

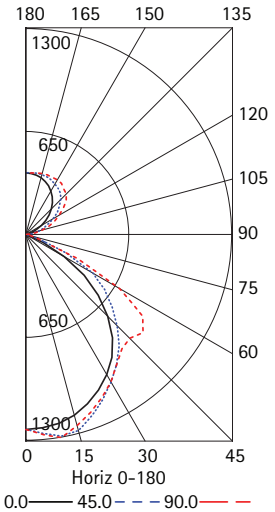
RCR

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

ENERGY DATA

Total Luminaire Efficiency	75.3%
Luminaire Efficacy Rating (LER)	62
ANSI/IESNA RP-1-2004 Compliance	Noncompliant
Comparative Yearly Lighting Energy Cost per 1000 Lumens	$3.87 based on 3000 hrs. and $0.08 per KWH

INDOOR CANDELA PLOT



Test Date 4/24/00

PHOTOMETRIC DATA

LUMINAIRE DATA Test 15289

Luminaire	BÈNE-3T820/80-LD-E Bène Curves 9" × 48" 3L w/1 × 11 Cell Semi-Specular Louver & Perf Lamp Cover
Ballast	B332I120RH-A
Ballast Factor	0.88
Lamp	F32T8
Lumens per Lamp	2900
Watts	87
Mounting	Pendant
Shielding Angle	0° = 21 90° = 23
Spacing Criterion	0° = 1.23 90° = 1.33
Luminous Opening in Feet	Length: 3.80 Width: 0.37 Height: 0.00

AVG. LUMINANCE (Candela/Sq. M.)

Angle	0.0	22.5	45.0	67.5	90.0
0	14064	14064	14064	14064	14064
30	13393	14162	14268	14560	14595
40	12562	13212	13672	14601	14801
45	11660	12321	13252	13826	14086
50	10457	11124	12184	12780	13292
55	8809	9543	10438	11425	12466
60	6293	7380	8314	9524	10626
65	3188	4221	5742	6159	6467
70	448	1007	2328	2194	2104
75	325	473	710	1065	1154
80	265	397	485	661	705
85	176	264	264	351	351

ZONAL LUMEN SUMMARY

Zone	Lumens	% Lamp	% Fixt.
0-30	1488	17.1	23.7
0-40	2431	27.9	38.7
0-60	4063	46.7	64.6
0-90	4403	50.6	70.0
90-120	327	3.8	5.2
90-130	636	7.3	10.1
90-150	1354	15.6	21.5
90-180	1883	21.6	30.0
0-180	6286	72.3	100.0

COEFFICIENTS OF UTILIZATION (%)

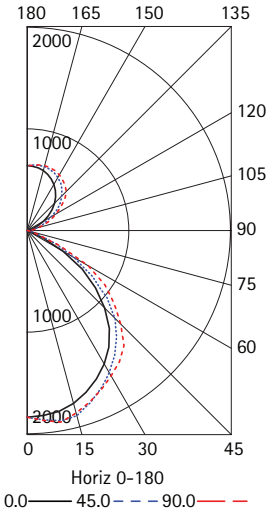
RCR	RC	80				70				50			0
	RW	70	50	30	10	70	50	30	10	50	30	10	0
1		75	72	70	67	71	68	66	64	62	60	58	45
2		69	64	60	57	65	61	57	54	55	52	50	39
3		63	57	52	48	60	54	50	46	49	46	43	34
4		58	51	45	41	55	48	43	40	44	40	37	29
5		54	46	40	36	51	43	38	34	40	35	32	26
6		50	41	35	31	47	39	34	30	36	32	28	23
7		46	37	32	28	44	36	30	27	33	28	25	20
8		43	34	28	24	40	33	27	24	30	26	22	18
9		40	31	26	22	38	30	25	21	27	23	20	16
10		37	29	23	20	35	27	23	19	25	21	18	15

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

ENERGY DATA

Total Luminaire Efficiency	72.3%
Luminaire Efficacy Rating (LER)	64
ANSI/IESNA RP-1-2004 Compliance	Noncompliant
Comparative Yearly Lighting Energy Cost per 1000 Lumens	$3.75 based on 3000 hrs. and $0.08 per KWH

INDOOR CANDELA PLOT



Test Date 2/4/00