DIRECT/INDIRECT

[PLĀNK]

TYPE

Project: _____

Location: _____

CONSTRUCTION

Plank is constructed of a heavy 20-gauge steel body with a 9⅞″ wide by 2″ high profile in housing lengths of 4′, 8′, or 12′ lengths. Fixtures are available with up to three T8, T5, or T5 HO lamps in cross section. An optional perforated pattern on either side of the shielding may be ordered (see ordering guide below). Modular mounting points maintain convenient, predictable locations. The exact shape of the housing is maintained by the use of a patented inner die cast plate at each fixture end (patent 6,796,676 B2) throughout the run to prevent snaking. The housing is designed to wrap around the plate and secures on top with concealed screws to ensure housing tolerances are consistent.

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

Plank includes both direct and indirect lighting elements. Shielding for the direct element may be selected as a white cross baffle (WCB), regressed perforated panel (RPF), flat perforated panel (FPF), opal acrylic (OA), or acrylic pattern 12 (A12). For a dramatic touch, colored lensing material may be selected as an overlay; contact factory.

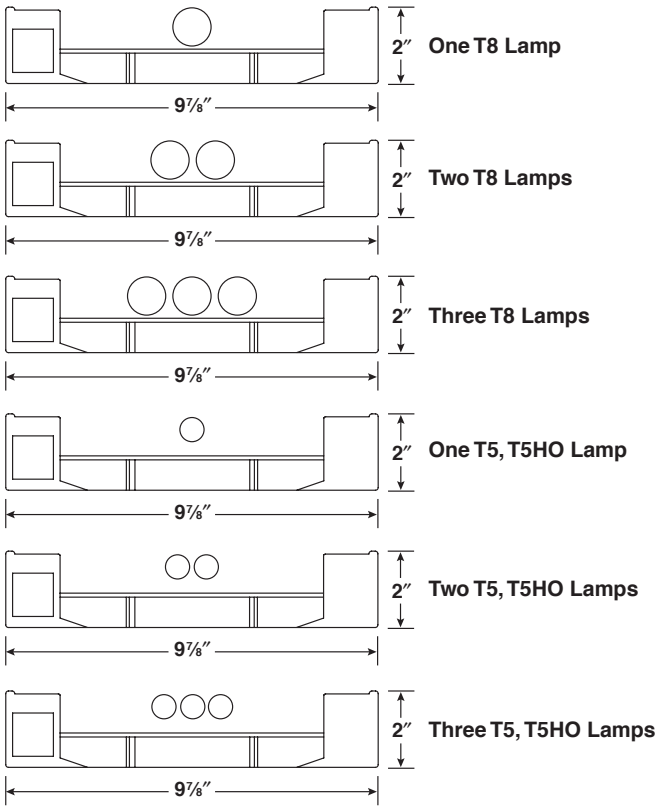
MOUNTING

Plank is designed for ceiling suspension with an aircraft cable mechanism. To maintain consistent, predictable mounting points, fixtures use an aircraft cable yoke mounting mechanism from two points at each hanging location. An adjustable aircraft cable of varying lengths is supplied (see ordering guide below). The end of the cable barrel screws into a standard ¼ 20 bolt brought down from the ceiling. Cover plates are provided to shield the ceiling cutout. A straight (standard) or optional coiled cord is available for feed locations as is a feed canopy. All fixtures are suspended in modular increments and must be supported at each fixture housing end. Refer to the Plank TID sheet for actual hanging points with specific row information.

LABELS AND ELECTRICAL

All fixtures bear appropriate UL or CUL labels. Fixtures are prewired with electronic T8, T5, or T5HO ballasts and are available in 120 or 277 volt. Some ballast options are available as dual-voltage 120/277 volt. All fixtures are wired for single circuit operation. Additional circuits can be supplied as an option on the two and three lamp configurations; see ordering guide below.

CROSS SECTION



ORDERING INFORMATION

PLK - ___ - ___ - ___ - ___ - ___ - ___ - ___ - ___ - ___ - ___

Model
PLK - Plank Rectangular Housing

Row Length
Specify entire row

Lamp Type & Profile
1T8 - One T8 Lamp
2T8 - Two T8 Lamps
3T8 - Three T8 Lamps
1T5 - One T8 Lamp
2T5 - Two T8 Lamps
3T5 - Three T8 Lamps
1T5HO - One T5HO Lamp
2T5HO - Two T5HO Lamps
3T5HO - Three T5HO Lamps

Housing Type
Blank - Solid (Std.)
PFST - Perforated Strip
HSLT - Horizontal Slot Strip
VSLT - Vertical Slot Strip
CLD - Custom Laser Cut Design Strip

Suspension Length
18 - 18″ (Std.)
24 - 24″
36 - 36″
48 - 48″
Other lengths available on request.

Mounting Method
CM - Adjustable Aircraft Cable Mount
See HGR-1 for other hanging methods.

Shielding
WCB - White Cross Baffle
RPF - Regressed Perforated
FPF - Flat Perforated
OA - Opal Acrylic Lens
A12 - Pattern 12 Thick Acrylic Lens

Ballast Type
E - Electronic, Instant Start (Standard for T8)
EP - Electronic, Programmed Start (Standard for T5 & T5HO, optional for T8)
Unless specified, Alera will use fewest ballasts possible.

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

Housing Finish
MW - Matte White (Std.)
See MTX-1 for other color selections.

Fixture Length
Single or Row Individual Lengths.
Note: Fixtures in rows are modular and will be identified as components within the row by their individual lengths.
Lengths for this product are:
4 = 4′ 8 = 8′ 12 = 12′

End Caps (two per row)
Blank - Flat End Cap (Std.)

Options
LR - Left/Right Switching (2-Lamp only)*
IBOB - Inboard/Outboard Switching* (3-Lamp only)
EL - Emergency Battery Pack (Small case only)
GLR - Fast Blow Fuse
GMF - Slow Blow Fuse
CSA - UL listed or CSA certified for Canada
DC - Dust Cover (T8 only)
*Switching configuration must be provided.

Photometric Report

LUMINAIRE: PLK-1T8-WCB-EB8
Plank Architectural Beam
9.75 X 48 1-LAMP WITH GLOSS WHITE CENTER LOUVER AND SIDE REFLECTORS.
BALLAST: REL-1P32-SC
BALLAST FACTOR: 0.92
LAMP: F32T8
LUMENS PER LAMP: 2900
WATTS: 34
MOUNTING: Pendant
SHIELDING ANGLE: 0° = 90 90° = 90
SPACING CRITERION: 0° = 1.03 90° = 1.25
LUMINOUS OPENING IN FEET
LENGTH: 3.67
WIDTH: 0.25
HEIGHT: 0.00

TEST #14038
DATE: 9/16/05
TOTAL LUMINAIRE EFFICIENCY = 96.5%
LUMINAIRE EFFICACY RATING (LER) = 76
ANSI/IESNA RP-1-2004 COMPLIANCE: YES-VDT INTENSIVE USE
COMPARATIVE YEARLY LIGHTING ENERGY COST PER 1000 LUMENS = $3.16
BASED ON 3000 HRS. AND $.08 PER KWH

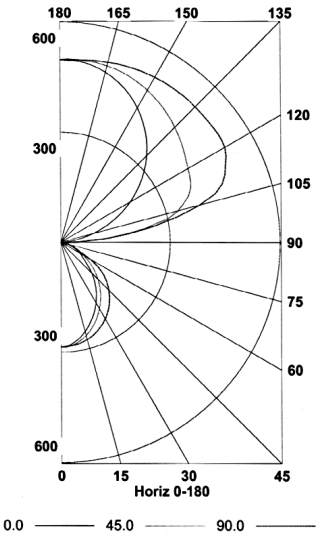
ZONAL LUMENS

ZONE	LUMENS	% LAMP	% FIXTURE
0-30	207	7.1	7.4
0-40	327	11.3	11.7
0-60	529	18.2	18.9
0-90	620	21.4	22.1
90-120	774	26.7	27.7
90-130	1138	39.2	40.6
90-150	1767	60.9	63.1
90-180	2179	75.1	77.9
0-180	2799	96.5	100.0

AVERAGE LUMINANCE / ANGLE	0.0	22.5	45.0	67.5	90.0
0	3344	3344	3344	3344	3344
30	2587	2642	2831	3089	3265
40	2205	2282	2542	2894	3155
45	1974	2074	2373	2771	3069
50	1697	1843	2190	2628	2957
55	1493	1554	1964	2434	2741
60	1408	1455	1713	2135	2276
65	1332	1360	1555	1638	1555
70	1269	1269	1441	1338	1166
75	1224	1269	1315	1179	1133
80	1216	1216	1216	1013	946
85	1212	1077	808	673	673

CANDELA/SQ M

INDOOR CANDELA PLOT



COEFFICIENTS OF UTILIZATION (%) — **ZONAL CAVITY METHOD**

EFFECTIVE FLOOR CAVITY REFLECTANCE = 20%

RC		80%				70%				50%				30%				10%		0%
RW		70%	50%	30%	10%	70%	50%	30%	10%	50%	30%	10%	50%	30%	10%	50%	30%	10%	10%	0%
	0	97	97	97	97	86	86	86	86	66	66	66	47	47	47	29	29	29	29	21
	1	89	85	81	78	78	75	72	70	58	56	54	41	40	39	26	26	25	25	18
	2	81	74	69	64	71	66	61	57	51	48	45	36	35	33	23	22	22	22	16
	3	74	65	59	53	65	58	53	48	45	41	38	32	30	28	21	20	18	18	14
R	4	67	58	51	45	60	51	45	41	40	36	32	29	26	24	19	17	16	16	12
C	5	62	51	44	38	55	46	40	35	35	31	28	26	23	21	17	15	14	14	10
R	6	57	46	38	33	50	41	35	30	32	27	24	23	20	18	15	14	12	12	9
	7	52	41	34	29	46	37	31	26	29	24	21	21	18	16	14	12	11	11	8
	8	48	37	30	25	43	33	27	23	26	22	19	19	16	14	13	11	10	10	7
	9	45	34	27	22	40	30	24	20	24	20	17	18	15	13	12	10	9	9	7
	10	42	31	24	20	37	28	22	18	22	18	15	16	13	11	11	9	8	8	6

RCR = ROOM CAVITY RATIO RC = EFFECTIVE CEILING CAVITY REFLECTANCE RW = WALL REFLECTANCE

This photometric test was performed using a specific lamp/ballast combination. Extrapolation of these data for other lamp/ballast combinations may produce erroneous results. The ballast factor must be applied to the lumen output rating assigned to the lamp(s) or to the candela values shown. Luminaire efficacy rating (LER) per NEMA LE5-1993. This test is run in accordance with current I.E.S.N.A. published procedures.

Photometric Report

LUMINAIRE: PLK-1T8-RPF-EB8
Plank Architectural Beam
9.75 X 48 1-LAMP WITH GLOSS WHITE REGRESS BASKET
BALLAST: REL-1P32-SC
BALLAST FACTOR: 0.92
LAMP: F32T8
LUMENS PER LAMP: 2900
WATTS: 33
MOUNTING: Pendant
SHIELDING ANGLE: 0° = 90 90° = 90
SPACING CRITERION: 0° = 1.24 90° = 1.22
LUMINOUS OPENING IN FEET
LENGTH: 3.67
WIDTH: 0.25
HEIGHT: 0.00

TEST #14034
DATE: 9/9/05
TOTAL LUMINAIRE EFFICIENCY = 92.7%
LUMINAIRE EFFICACY RATING (LER) = 75
ANSI/IESNA RP-1-2004 COMPLIANCE: YES-VDT INTENSIVE USE
COMPARATIVE YEARLY LIGHTING ENERGY COST PER 1000 LUMENS = $3.20
BASED ON 3000 HRS. AND $.08 PER KWH

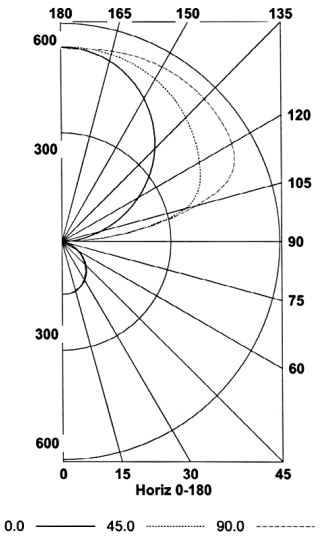
ZONAL LUMENS

ZONE	LUMENS	% LAMP	% FIXTURE
0-30	113	3.9	4.2
0-40	183	6.3	6.8
0-60	309	10.6	11.5
0-90	363	12.5	13.5
90-120	812	28.0	30.2
90-130	1204	41.5	44.8
90-150	1883	64.9	70.1
90-180	2324	80.1	86.5
0-180	2687	92.7	100.0

AVERAGE LUMINANCE / ANGLE	0.0	22.5	45.0	67.5	90.0
0	1713	1713	1713	1713	1713
30	1666	1653	1653	1639	1626
40	1593	1547	1547	1531	1516
45	1526	1493	1477	1460	1443
50	1460	1424	1405	1387	1351
55	1350	1329	1309	1268	1248
60	1220	1197	1197	1126	1079
65	1083	1055	1055	916	833
70	892	892	823	652	583
75	680	725	589	499	499
80	608	608	540	473	473
85	538	538	538	538	538

CANDELA/SQ M

INDOOR CANDELA PLOT



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EFFECTIVE FLOOR CAVITY REFLECTANCE = 20%

RC		80%				70%				50%				30%				10%		0%
RW		70%	50%	30%	10%	70%	50%	30%	10%	50%	30%	10%	50%	30%	10%	50%	30%	10%	10%	0%
	0	91	91	91	91	80	80	80	80	58	58	58	39	39	39	21	21	21	21	13
	1	83	79	76	73	73	70	67	64	51	49	48	34	33	32	19	18	18	18	11
	2	76	69	64	60	66	61	57	53	45	42	40	30	29	27	16	16	15	15	9
	3	69	61	55	50	60	54	48	44	40	36	33	27	25	23	15	14	13	13	8
R	4	63	54	47	42	55	47	42	37	35	31	28	24	21	20	13	12	11	11	7
C	5	58	48	41	36	50	42	36	32	31	27	24	21	19	17	12	11	10	10	6
R	6	53	43	36	31	46	37	32	27	28	24	21	19	17	15	11	9	8	8	5
	7	49	38	31	26	43	34	28	24	25	21	18	17	15	13	10	8	7	7	5
	8	45	34	28	23	39	30	25	21	23	19	16	16	13	11	9	8	7	7	4
	9	42	31	25	20	36	28	22	18	21	17	14	14	12	10	8	7	6	6	4
	10	39	28	22	18	34	25	20	16	19	15	12	13	11	9	7	6	5	5	3

RCR = ROOM CAVITY RATIO RC = EFFECTIVE CEILING CAVITY REFLECTANCE RW = WALL REFLECTANCE

This photometric test was performed using a specific lamp/ballast combination. Extrapolation of these data for other lamp/ballast combinations may produce erroneous results. The ballast factor must be applied to the lumen output rating assigned to the lamp(s) or to the candela values shown. Luminaire efficacy rating (LER) per NEMA LE5-1993. This test is run in accordance with current I.E.S.N.A. published procedures.

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We are architectural fluorescent lighting