PHILIPS

Day-Brite

CFI

Linear

Eye-Q Low Bay Indirect/Direct

3 lamp, T8, T5, or T5HO, 4′ or 8′

Project:

Location:

Cat.No:

Type:

Lamps: Qty:

Notes:

The Philips Day-Brite / Philips Eye-Q Low Bay Indirect/Direct is a surface or suspended luminaire utilizing T8, T5, or T5HO lamps and a 14 or 42 cell louver. Available with 2 different uplight/downlight distributions, the Eye-Q Low Bay is an energy saving replacement for traditional low bays. It is ideal for schools, labs, retail applications, or warehouses.

Ordering guide

Example: EYS414FR332UNV-1/3-EB

Family	Side	Length	Shielding	Finish	Distribution	Lamp quantity (per x-section)	Lamp Type	Voltage	Options
EY	S			F		3		–	
EY Eye-Q	**S** Solid	**4** 48″ **8** 96″	**14** 14 cell louver, 1 row **42** 42 cell louver 3 rows	**F** Flat white (standard)	**X** No reflector, (45% downlight, 55% uplight) **R** 10% uplight reflector	**3** 3 lamps	**28** 28WT5 **32** 32WT8 **54** 54WT5HO	**UNV** 120-277V **120** 120V **277** 277V **347** 347V	**1/3** One 3-lamp ballast **1/21** 2-lamp & 1-lamp ballasts **1/42** 4-lamp & 2-lamp ballasts **3/2** Three 2-lamp ballasts **EB** Electronic ballast, <20% THD **EB10I** T8 electronic ballast, instant start, <10% THD **EB10R** Electronic ballast, program rapid start, <10% THD **EBHE** T8 electronic ballast, high efficiency, std. ballast factor **EBLHE** T8 electronic ballast, high efficiency, low ballast factor **EBHHE** T8 electronic ballast, high efficiency, high ballast factor **EBSD** T8 Electronic ballast, step dimming, std. (.88) ballast factor **EBD** Electronic dimming ballast **ESNOLP** Electronic ballast for energy savings (25/28/30W) T8 lamps, use when lamps are not specificed with luminaire **EBSD95** 28WT5 electronic step dimming ballast, .95 ballast factor **EBSD115** 28WT5 electronic step dimming ballast, 1.15 ballast factor **E6LP** DEB-6LP emerg. ballast, US or Canada Market, T5/T5HO/T8, 1250 lumens, 120/277 **E7LP** DEB-7LP emerg. ballast, T5/T5HO/T8, 600-700 lumens **GLR#** Fusing, fast blow (# = number of ballasts)

Accessories (order separately)

- **FKR-126** – chain hanger set
- **MD360** – luminaire mount motion sensor, 360˚ coverage, up to 40ft mounting distance (requires HBEM3 extension bracket, purchased separately)
- **HBEM3** – extension bracket for MD360

Stem and Canopy Sets

- **CS-400** – Rigid canopy (one)
- **CS-500** – 42˚ swivel canopy (one)
- **CS-48** – 48″ long 3/8″ trade size stem (5/8″ O.D.) (one). Locknuts included. Specify length as needed (CS-XX). XX = stem length in inches, i.e. CS-12, CS-24, etc.

Cable Hanger Sets

- **ACH48** – 48″ 2mm aircraft cable hanger (one), 5″ diameter white canopy, adjustable 1/2″ diameter grip coupler. Suffix with **–SC** for white straight 3-wire power cord, or **–CC** for coiled cord (i.e. ACH48-CC). For longer lengths specify cable length as needed (ACHXX).
- **EY COUPLER** – coupler - required for continous row mounting (see p.2 for details)

EYS Eye-Q Low Bay Indirect/Direct

3 lamp, T8, T5, or T5HO, 4′ or 8′

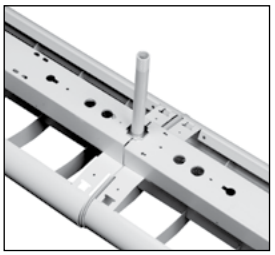
Features

- Energy savings replacement for HID Low Bay.
- Ideal for stores, schools, labs, warehouses.
- Reflector option (R) is 90% downlight, 10% uplight. No reflector option (X) is 45% downlight, 55% uplight.
- 91.9% efficient (3 lamp 54W T5). 79.3% efficient (3 lamp 32W T8) with 10% uplight (R) reflector option.
- 1.2 spacing mounting ratio (3 lamp 54W T5).
- 1.2 spacing mounting ratio (3 lamp 32W T8).
- Can be pendant or surface mounted.
- 48" or 96" modular lengths.
- 95% reflective specular aluminum top reflector.
- Steel housing, ends and side reflectors.
- Flat white acrylic baked enamel, post painted.
- Louver can hinge from either side.
- Louver safety chain standard.
- Removeable upper end cap for thru wiring.
- Can be stem or cable mounted at fixture joints.
- K.O. in upper end cap for occupancy sensor.
- Heavy duty coupler available.

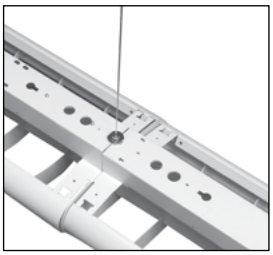
Specifications

- **Materials:** Housing is die-formed code gauge cold rolled steel with full length channel for thru wiring.
- **Fixture Ends:** Cold rolled steel.
- **Louver:** Cold rolled steel.
- **Side Reflectors:** Solid cold rolled steel.
- **Finish:** Post painted white acrylic baked enamel.
- **Electrical:** Thermally protected class "P" ballast, non PCB. If K.O. is within 3" of ballast, use wire suitable for at least 90°. UL Listed for damp locations.
- **Labels:** cULus listed. Suitable for damp locations.

Mounting methods

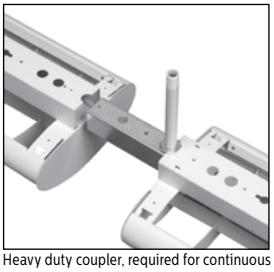


Can be stem mounted at fixture joints



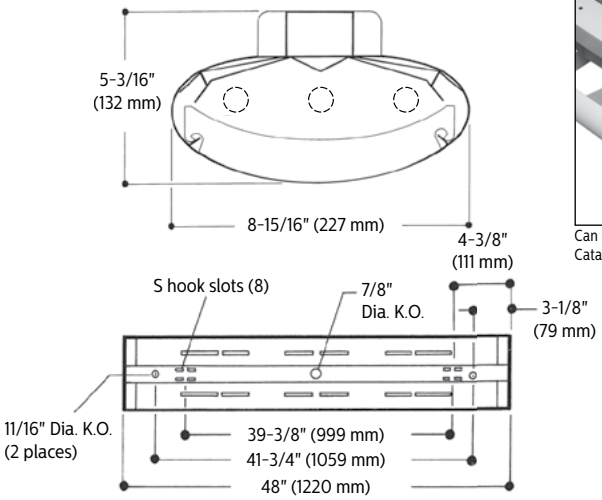
Can be cable mounted at fixture joints

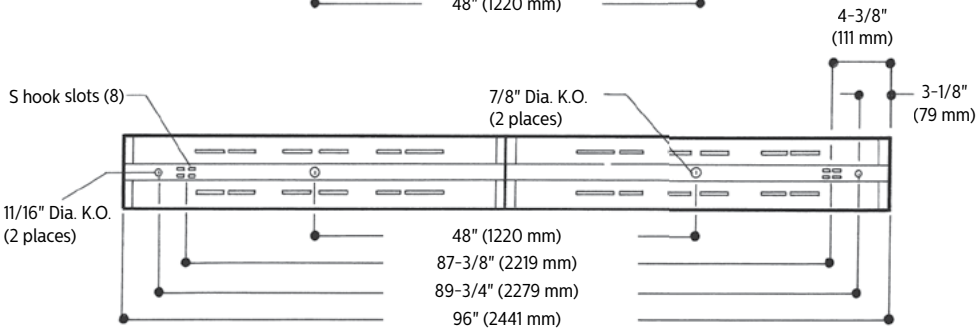
Can be suspended with chain hanger sets. Catalog no. **FKR-126**

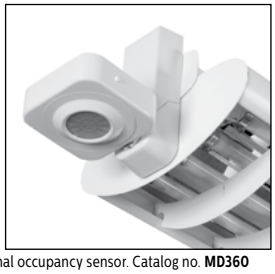


Heavy duty coupler, required for continuous row mounting. Catalog no. **EY COUPLER**

Dimensions







Optional occupancy sensor. Catalog no. **MD360**

Luminaire mounted motion sensor, 360° coverage, up to 40 ft. mounting distance. Field installed.

- Line voltage accepts 120 through 277 volt applications.
- Uses passive infrared (PIR) technology shielded by a fresnel lens; upon detection of infrared energy levels, the sensor is triggered and switches the light on.
- Light shuts off after a time delay unit that is factory preset at 10 minutes, manually adjustable from 30 sec. to 20 min. using tool included.
- Mounts on either end using 7/8" knockouts provided.
- Requires HBEM3 extension bracket, purchased separately.

EYS Eye-Q Low Bay Indirect/Direct

3 lamp, T8, T5, or T5HO, 4′ or 8′

Photometry

Model No. EYS414FR332UNV-1/3-EB

LER = 68.2 TER - 58 IW - 88.5 BF - 0.89
Comparative yearly lighting energy cost per 1000 lumens = $3.52

Report Number: G2005274
Catalog Number: EYS414FR332UNV-1/3-EB
Lamps: F32T8/TL841
Luminaire: Eye-Q LB with solid sides, 14 cell flat white louver and 10% uplight specular reflector
Ballast: B332I120RH-A Triad
Report is based on 2850 Lumens per lamp.
Efficiency: 79.3%
CIE Type-Semi Direct

Plane:	0-Deg	90-Deg
Spacing Criteria:	1.1	1.2
Shielding Angles:	90	90
Plane:	0-Deg	90-Deg
Luminous Length:	48.000	9.000
Height of Side:	3.960	3.960

COEFFICIENTS OF UTILIZATION – ZONAL CAVITY METHOD. EFFECTIVE FLOOR CAVITY REFLECTANCE 0.20

RC	80			50			30		
RW	70	50	30	50	30	10	50	30	10
1	84	80	77	73	70	68	68	66	64
2	76	70	65	63	59	56	59	56	53
3	70	62	55	56	51	47	52	48	45
4	64	55	48	50	44	40	47	42	39
5	59	49	42	45	39	35	42	37	33
6	54	44	37	40	35	30	38	33	29
7	50	40	33	37	31	27	35	30	26
8	47	36	30	33	28	24	32	27	23
9	44	33	27	31	25	22	29	24	21
10	41	31	24	28	23	20	27	22	19

LUMINANCE DATA IN CANDELA/SQ. METER

AVERAGE IN DEG.	AVERAGE 0-DEG.	AVERAGE 45-DEG.	AVERAGE 90-DEG.
45	5637.	4772.	6059.
55	4615.	4332.	5699.
65	3166.	3403.	4624.
75	2109.	2253.	2864.
85	1101.	1142.	519.

CANDELA DISTRIBUTION

	0.0	45.0	90.0	FLUX
0	2310	2310	2310	
5	2288	2281	2301	217
15	2114	2137	2141	600
25	1853	1834	1913	859
35	1539	1558	1799	1009
45	1203	1289	1720	1060
55	825	1059	1484	978
65	439	719	1059	720
75	199	387	546	399
85	52	145	76	130
90	6	96	26	
95	19	54	56	54
105	58	67	76	67
115	104	68	83	82
125	150	103	86	105
135	193	175	126	129
145	230	240	209	143
155	260	262	270	122
165	282	280	282	79
175	294	288	289	28
180	290	290	290	

ZONAL LUMEN SUMMARY

ZONE	LUMENS	% LAMP	% FIXT
0- 30	1675	19.6	24.7
0- 40	2684	31.4	39.6
0- 60	4722	55.2	69.6
0- 90	5971	69.8	88.1
90-120	203	2.4	3.0
90-130	308	3.6	4.5
90-150	580	6.8	8.6
90-180	808	9.5	11.9
0-180	6780	79.3	100.0

Model No. EYS414FR354UNV-1/3-EB

LER = 71.5 TER - 61 IW - 169.8 BF - 1.00
Comparative yearly lighting energy cost per 1000 lumens = $3.36

Report Number: G2005289
Catalog Number: EYS414FR354UNV-1/3-EB
Lamps: FP54/835
Luminaire: Eye-Q LB with solid sides, 14 cell flat white louver and 10% uplight specular reflector.
Ballast: B454IUNV-E Universal
Report is based on 4400 Lumens per lamp.
Efficiency: 91.9%
CIE Type-Semi Direct

Plane:	0-Deg	90-Deg
Spacing Criteria:	1.1	1.2
Shielding Angles:	90	90
Plane:	0-Deg	90-Deg
Luminous Length:	48.000	9.000
Height of Side:	3.960	3.960

COEFFICIENTS OF UTILIZATION – ZONAL CAVITY METHOD. EFFECTIVE FLOOR CAVITY REFLECTANCE 0.20

RC	80			50			30		
RW	70	50	30	50	30	10	50	30	10
1	97	93	89	84	81	79	79	76	74
2	89	81	75	73	69	65	69	65	62
3	81	71	64	65	59	54	61	56	52
4	74	63	55	58	51	46	54	49	45
5	68	56	48	52	45	40	49	43	39
6	63	51	43	47	40	35	44	38	34
7	58	46	38	42	36	31	40	34	30
8	54	42	34	39	32	28	37	31	27
9	51	38	31	36	29	25	34	28	24
10	47	35	28	33	27	23	31	26	22

LUMINANCE DATA IN CANDELA/SQ. METER

AVERAGE IN DEG.	AVERAGE 0-DEG.	AVERAGE 45-DEG.	AVERAGE 90-DEG.
45	10393.	8396.	10536.
55	8458.	7781.	10288.
65	5834.	6318.	7257.
75	3867.	4058.	6341.
85	1970.	1961.	949.

CANDELA DISTRIBUTION

	0.0	45.0	90.0	FLUX
0	4130	4130	4130	
5	4099	4078	4120	390
15	3817	3823	3688	1067
25	3351	3216	3526	1546
35	2787	2907	3081	1801
45	2218	2268	2991	1883
55	1512	1902	2679	1759
65	809	1335	1662	1258
75	365	697	1209	774
85	93	249	139	234
90	9	162	34	
95	40	92	101	92
105	137	110	122	111
115	247	60	90	115
125	358	135	56	153
135	461	257	157	217
145	552	396	295	254
155	624	502	452	239
165	675	616	573	174
175	699	686	681	65
180	695	695	695	

ZONAL LUMEN SUMMARY

ZONE	LUMENS	% LAMP	% FIXT
0- 30	3003	22.7	24.8
0- 40	4804	36.4	39.6
0- 60	8446	64.0	69.6
0- 90	10711	81.1	88.3
90-120	318	2.4	2.6
90-130	470	3.6	3.9
90-150	942	7.1	7.8
90-180	1420	10.8	11.7
0-180	12131	91.9	100.0

Hg

Some luminaires use fluorescent or high intensity discharge (HID) lamps that contain small amounts of mercury. Such lamps are labeled, “Contain Mercury” and/or the symbol “HG”. Lamps that contain mercury must be disposed of in accordance with local requirements. Information regarding lamp recycling and disposal can be found at www.lamprecycle.org

EYS Eye-Q Low Bay Indirect/Direct

3 lamp, T8, T5, or T5HO, 4′ or 8′

Eye-Q Low Bay 3 lamp T8, 14 cell louver, no reflector — Efficiency – 88.7% — LER – 74 — TER – 58

Catalog No.	EYS414FX332UNV-1/3-EB
Test No.	G2005280
S/MH	1.7
Lamp Type	32WT8
Lumens/Lamp	2850
Ballast Factor	0.88
Input Watts	90

Comparative yearly lighting energy cost per 1000 lumens – **$3.24** based on 3000 hrs. and $.08 pwr KWH.

Candlepower

Angle	End	45	Cross
0	1201	1201	1201
5	1185	1232	1274
15	1113	1302	1455
25	993	1339	1620
35	834	1295	1516
45	678	1075	1171
55	483	731	1145
65	292	558	917
75	144	319	509
85	38	135	109
95	57	223	253
105	212	415	528
115	370	474	655
125	509	501	636
135	631	560	612
145	734	713	643
155	810	844	803
165	858	882	895
175	876	877	886

Light Distribution

Degrees	Lumens	% Lamp	% Luminaire
0-30	1099	12.9	14.4
0-40	1870	21.9	24.6
0-60	3359	39.3	44.1
0-90	4400	51.5	57.8
90-180	3209	37.5	42.2
0-180	7609	89.0	100.0

Average Luminance

Angle	End	45°	Cross
45	3178	3983	4126
55	2703	2993	4399
65	2106	2643	4006
75	1526	1859	2671
85	805	1064	744

Coefficients of Utilization

EFFECTIVE FLOOR CAVITY REFLECTANCE 20 PER (pfc=0.20)

pcc	80			70			50	
pw	70	50	30	70	50	30	50	30
RCR								
0	96	96	96	90	90	90	78	78
1	88	83	80	81	78	75	68	65
2	80	72	67	73	68	63	58	55
3	72	64	56	67	59	54	52	46
4	66	56	48	60	53	46	46	40
5	60	50	41	56	46	40	40	34
6	56	45	36	52	41	34	36	30
7	52	40	33	47	38	30	33	28
8	47	36	28	44	34	28	29	25
9	45	33	26	40	30	25	28	22
10	41	30	23	39	28	23	25	20

Eye-Q Low Bay 3 lamp T5, 14 cell louver, no reflector — Efficiency – 90.0% — LER – 68 — TER – 53

Catalog No.	EYS414FX354UNV-1/3-EB
Test No.	G2005299
S/MH	1.7
Lamp Type	54WT5
Lumens/Lamp	4400
Ballast Factor	1.00
Input Watts	175

Comparative yearly lighting energy cost per 1000 lumens – **$3.53** based on 3000 hrs. and $.08 pwr KWH.

Candlepower

Angle	End	45	Cross
0	1847	1847	1847
5	1823	1963	2061
15	1726	2181	2413
25	1563	2146	2429
35	1324	1972	2411
45	1106	1729	1868
55	799	1207	2051
65	498	1004	1437
75	248	558	1102
85	65	225	184
95	137	379	219
105	403	571	845
115	633	686	808
125	824	639	861
135	991	708	725
145	1122	1126	793
155	1214	1238	1253
165	1264	1258	1269
175	1277	1269	1279

Light Distribution

Degrees	Lumens	% Lamp	% Luminaire
0-30	1761	13.3	14.7
0-40	2988	22.6	25.0
0-60	5463	41.4	45.7
0-90	7299	55.3	61.1
90-180	4644	35.2	38.9
0-180	11943	90.5	100.0

Average Luminance

Angle	End	45°	Cross
45	5184	6406	6582
55	4471	4942	7879
65	3592	4756	6277
75	2629	3252	5782
85	1377	1773	1256

Coefficients of Utilization

EFFECTIVE FLOOR CAVITY REFLECTANCE 20 PER (pfc=0.20)

pcc	80			70			50	
pw	70	50	30	70	50	30	50	30
RCR								
0	98	98	98	93	93	93	81	81
1	90	85	81	83	80	77	69	67
2	81	73	68	76	69	64	60	56
3	73	65	57	68	60	54	53	47
4	68	56	50	63	54	46	46	40
5	61	51	42	57	47	40	41	35
6	56	45	38	53	42	35	38	32
7	53	40	33	48	38	32	34	28
8	48	36	29	45	34	28	30	25
9	45	34	27	41	32	25	28	23
10	41	30	23	40	28	23	26	20

EYS Eye-Q Low Bay Indirect/Direct

3 lamp, T8, T5, or T5HO, 4′ or 8′

Model No. EYS442FX332UNV-1/3-EB

LER = 67.0 TER = 53 IW = 90.0 BF = 0.88
Comparative yearly lighting energy cost per 1000 lumens = $3.58

Report Number: G2005281
Catalog Number: EYS442FX332UNV-1/3-EB
Lamps: F32T8/TL841
Luminaire: Eye-Q LB with solid sides, 42 cell flat white louver and 45% uplight specular reflector
Ballast: Triad B332I120RH-A
Report is based on 2850 Lumens per lamp.
Efficiency: 80.2%
CIE Type-General Diffuse

Plane:	0-Deg	90-Deg
Spacing Criteria:	1.1	1.4
Shielding Angles:	90	90
Plane:	0-Deg	90-Deg
Luminous Length:	48.000	9.000
Height of Side:	3.960	3.960

COEFFICIENTS OF UTILIZATION – ZONAL CAVITY METHOD. EFFECTIVE FLOOR CAVITY REFLECTANCE 0.20

RC	80			50			30		
RW	70	50	30	50	30	10	50	30	10
1	79	75	72	60	58	56	50	49	48
2	72	66	61	52	49	46	44	42	40
3	66	58	52	46	42	39	39	36	34
4	60	51	45	41	37	33	35	32	29
5	55	46	39	37	32	29	33	28	25
6	51	41	35	33	29	25	29	25	22
7	47	37	31	30	26	22	26	22	20
8	44	34	28	28	23	20	24	20	18
9	41	31	25	25	21	18	22	18	16
10	38	28	23	23	19	16	20	17	14

LUMINANCE DATA IN CANDELA/SQ. METER

AVERAGE IN DEG.	AVERAGE 0-DEG.	AVERAGE 45-DEG.	AVERAGE 90-DEG.
45	3303.	3258.	3198.
55	2747.	2463.	2435.
65	2055.	1713.	1768.
75	1462.	1118.	1343.
85	720.	913.	1024.

CANDELA DISTRIBUTION

	0.0	45.0	90.0	FLUX
0	1288	1288	1288	
5	1270	1308	1343	125
15	1186	1338	1456	378
25	1052	1336	1411	588
35	874	1125	1189	672
45	705	880	908	661
55	491	602	634	533
65	285	362	405	370
75	138	192	256	209
85	34	116	150	117
90	6	101	118	
95	57	223	253	216
105	212	415	528	406
115	370	474	655	478
125	509	501	636	482
135	631	560	612	468
145	734	713	643	442
155	810	844	803	379
165	858	882	895	249
175	876	877	886	84
180	876	876	876	

ZONAL LUMEN SUMMARY

ZONE	LUMENS	% LAMP	% FIXT
0- 30	1091	12.8	15.9
0- 40	1764	20.6	25.7
0- 60	2958	34.6	43.1
0- 90	3654	42.7	53.3
90-120	1100	12.9	16.0
90-130	1581	18.5	23.1
90-150	2491	29.1	36.3
90-180	3203	37.5	46.7
0-180	6857	80.2	100.0

Model No. EYS442FX354UNV-1/3-EB

LER = 60.2 TER = 48 IW = 175.5 BF = 1.00
Comparative yearly lighting energy cost per 1000 lumens = $3.99

Report Number: G2005300
Catalog Number: EYS442FX354UNV-1/3-EB
Lamps: FP54/835
Luminaire: Eye-Q LB with solid sides, 42 cell flat white louver and 45% uplight specular reflector.
Ballast: Universal B454IUNV-E
Report is based on 4400 Lumens per lamp.
Efficiency: 79.9%
CIE Type-General Diffuse

Plane:	0-Deg	90-Deg
Spacing Criteria:	1.1	1.5
Shielding Angles:	90	90
Plane:	0-Deg	90-Deg
Luminous Length:	48.000	9.000
Height of Side:	3.960	3.960

COEFFICIENTS OF UTILIZATION – ZONAL CAVITY METHOD. EFFECTIVE FLOOR CAVITY REFLECTANCE 0.20

RC	80			50			30		
RW	70	50	30	50	30	10	50	30	10
1	79	76	72	61	59	57	52	50	49
2	72	66	61	53	50	47	46	43	41
3	66	58	52	47	43	40	40	37	35
4	60	52	45	42	38	34	36	33	30
5	55	46	40	38	33	29	32	29	26
6	51	41	35	34	29	26	29	26	23
7	47	37	31	31	26	23	27	23	20
8	44	34	28	28	24	20	24	21	18
9	41	31	25	26	21	18	23	19	16
10	38	29	23	24	19	16	21	17	15

LUMINANCE DATA IN CANDELA/SQ. METER

AVERAGE IN DEG.	AVERAGE 0-DEG.	AVERAGE 45-DEG.	AVERAGE 90-DEG.
45	5309.	5360.	5632.
55	4475.	4316.	3425.
65	3418.	2617.	3017.
75	2416.	1875.	2266.
85	1207.	1543.	1686.

CANDELA DISTRIBUTION

	0.0	45.0	90.0	FLUX
0	1996	1996	1996	
5	1972	2120	2221	203
15	1850	2288	2445	626
25	1655	2138	2086	933
35	1389	1664	1949	1080
45	1133	1448	1599	1112
55	800	1055	892	834
65	474	553	691	596
75	228	322	432	352
85	57	196	247	197
90	11	172	205	
95	137	379	219	333
105	403	571	845	627
115	633	686	808	658
125	824	639	861	683
135	991	708	725	640
145	1122	1126	793	639
155	1214	1238	1253	568
165	1264	1258	1269	357
175	1277	1269	1279	121
180	1272	1272	1272	

ZONAL LUMEN SUMMARY

ZONE	LUMENS	% LAMP	% FIXT
0- 30	1763	13.4	16.7
0- 40	2842	21.5	26.9
0- 60	4788	36.3	45.3
0- 90	5934	45.0	56.2
90-120	1618	12.3	15.3
90-130	2301	17.4	21.8
90-150	3580	27.1	33.9
90-180	4626	35.0	43.8
0-180	10561	80.0	100.0

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