



IES INDOOR REPORT

PHOTOMETRIC FILENAME : AXA-4-P14-8TW-S-LVRS-POE 4000K_.IES

DESCRIPTION INFORMATION (From Photometric File)

IESNA:LM-63-2002

[TEST] GEN FROM BALLABS TEST NO. 18640.0

[TESTLAB] BUILDING ACOUSTICS & LIGHTING LABORATORIES, INC

[ISSUEDATE] 14-JUL-2020

[MANUFAC] WILLIAMS INDOOR

[OTHER] H.E. WILLIAMS, INC - CARTHAGE, MO

[LUMINAIRE] 2-56 LED 22" ARRAYS 4' SUSPEND BIDIRECT WHITE REFL LUMINAIRE

[MORE] 23 PER SIDE .125"X2"SLOTS w/WHT ACRYLIC OVERLAY & 24CELL

[MORE] 2" OC 1.25" DP WHT BLADE LVR w/OVERLAY

[LUMCAT] AXA-4-P14-8TW-S-LVRS-PoE 4000k

[_SEARCH_SOURCE] LED

[_SEARCH_APPLICATION] Architectural, Classroom, Office, Direct-Indirect

[_SEARCH_MOUNTING] Suspended

CHARACTERISTICS

Lumens Per Lamp	N.A. (absolute)
Total Lamp Lumens	N.A. (absolute)
Luminaire Lumens	5396
Total Luminaire Efficiency	N.A.
Luminaire Efficacy Rating (LER)	113
Total Luminaire Watts	47.9
Ballast Factor	1.00
CIE Type	Direct
Spacing Criterion (0-180)	1.10
Spacing Criterion (90-270)	1.14
Spacing Criterion (Diagonal)	1.20
Basic Luminous Shape	Rectangular w/Sides
Luminous Length (0-180)	3.84 ft
Luminous Width (90-270)	0.31 ft
Luminous Height	0.26 ft

LUMINANCE DATA (cd/sq.m)

Angle In Degrees	Average 0-Deg	Average 45-Deg	Average 90-Deg
45	15563	9859	9060
55	12665	6728	5582
65	9643	3954	2912
75	6152	1944	1501
85	3725	728	607

IES INDOOR REPORT
PHOTOMETRIC FILENAME : AXA-4-P14-8TW-S-LVRS-POE 4000K_.IES

CANDELA TABULATION

	<u>0.0</u>	<u>22.5</u>	<u>45.0</u>	<u>67.5</u>	<u>90.0</u>
0	2523.194	2523.194	2523.194	2523.194	2523.194
5	2458.792	2457.642	2463.392	2471.442	2476.043
10	2382.889	2385.189	2400.140	2419.690	2431.191
15	2266.735	2274.785	2286.286	2313.887	2338.037
20	2122.979	2131.030	2141.380	2177.031	2214.983
25	1947.023	1948.173	1957.373	1989.574	2032.126
30	1819.368	1815.918	1819.368	1846.969	1896.421
35	1619.261	1614.660	1612.360	1633.061	1681.363
40	1447.904	1441.004	1428.353	1437.554	1483.555
45	1314.499	1299.549	1275.398	1268.497	1312.199
50	1086.791	1070.690	1037.339	1012.038	1038.489
55	891.283	869.433	823.431	776.279	783.179
60	681.976	658.975	606.073	550.871	545.120
65	522.120	496.819	441.617	393.315	382.964
70	355.363	332.362	295.561	266.810	256.460
75	223.108	211.608	189.757	179.407	178.257
80	142.605	133.405	118.454	117.304	117.304
85	64.402	57.502	58.652	60.952	62.102
90	5.750	9.200	16.101	18.401	21.851
95	0.000	6.900	12.650	17.251	18.401
100	2.300	9.200	13.801	18.401	20.701
105	2.300	9.200	13.801	20.701	20.701
110	5.750	12.650	18.401	21.851	23.001
115	6.900	12.650	20.701	21.851	23.001
120	9.200	16.101	21.851	26.451	26.451
125	9.200	17.251	25.301	26.451	26.451
130	12.650	20.701	25.301	26.451	26.451
135	16.101	21.851	28.751	28.751	29.901
140	21.851	26.451	29.901	33.351	33.351
145	23.001	26.451	29.901	33.351	29.901
150	26.451	28.751	32.201	34.501	33.351
155	26.451	29.901	32.201	34.501	33.351
160	28.751	31.051	34.501	35.651	34.501
165	31.051	36.801	39.101	41.402	39.101
170	33.351	33.351	33.351	37.951	34.501
175	34.501	34.501	34.501	34.501	32.201
180	32.201	32.201	32.201	32.201	32.201

IES INDOOR REPORT
PHOTOMETRIC FILENAME : AXA-4-P14-8TW-S-LVRS-POE 4000K_.IES

ZONAL LUMEN SUMMARY

Zone	Lumens	%Lamp	%Fixt
0-20	879.07	N.A.	16.30
0-30	1793.47	N.A.	33.20
0-40	2815.7	N.A.	52.20
0-60	4531.97	N.A.	84.00
0-80	5192.19	N.A.	96.20
0-90	5262.82	N.A.	97.50
10-90	5029.04	N.A.	93.20
20-40	1936.63	N.A.	35.90
20-50	2914.34	N.A.	54.00
40-70	2161.31	N.A.	40.10
60-80	660.23	N.A.	12.20
70-80	215.18	N.A.	4.00
80-90	70.62	N.A.	1.30
90-110	29.04	N.A.	0.50
90-120	47.00	N.A.	0.90
90-130	66.49	N.A.	1.20
90-150	105.10	N.A.	1.90
90-180	133.32	N.A.	2.50
110-180	104.28	N.A.	1.90
0-180	5396.14	N.A.	100.00

Total Luminaire Efficiency = N.A. %

ZONAL LUMEN SUMMARY

Zone	Lumens
0-10	233.78
10-20	645.30
20-30	914.40
30-40	1022.23
40-50	977.71
50-60	738.55
60-70	445.04
70-80	215.18
80-90	70.62
90-100	13.80
100-110	15.24
110-120	17.96
120-130	19.49
130-140	19.99
140-150	18.63
150-160	14.77
160-170	10.19
170-180	3.26

IES INDOOR REPORT

PHOTOMETRIC FILENAME : AXA-4-P14-8TW-S-LVRS-POE 4000K_.IES

COEFFICIENTS OF UTILIZATION - ZONAL CAVITY METHOD

Effective Floor Cavity Reflectance 0.20

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	0
0	234	234	234	234	228	228	228	228	216	216	216	206	206	206	197	197	197	192
1	216	207	200	193	210	202	196	190	193	188	183	185	180	176	177	174	170	166
2	198	184	172	161	193	180	168	159	172	163	155	165	157	151	158	152	147	142
3	182	163	149	137	177	160	146	136	154	142	133	148	138	130	142	134	127	123
4	168	146	130	118	163	143	129	117	138	125	115	133	122	113	128	119	111	107
5	155	132	115	103	151	129	114	103	125	111	101	121	109	100	117	106	98	94
6	144	120	103	91	140	118	102	91	114	100	90	110	98	88	106	96	87	83
7	134	109	93	81	131	107	92	81	104	90	80	101	88	79	98	87	78	75
8	125	100	84	73	122	98	83	73	96	82	72	93	81	72	90	79	71	67
9	117	92	77	66	114	91	76	66	88	75	66	86	74	65	84	73	64	61
10	110	85	71	61	108	84	70	60	82	69	60	80	68	59	78	67	59	56

IES INDOOR REPORT

PHOTOMETRIC FILENAME : AXA-4-P14-8TW-S-LVRS-POE 4000K_.IES

UGR TABLE - CORRECTED

Reflectances

Ceiling Cavity	70	70	50	50	30	70	70	50	50	30
Walls	50	30	50	30	30	50	30	50	30	30
Floor Cavity	20	20	20	20	20	20	20	20	20	20

Room Size UGR Viewed Crosswise

X=2H	Y=2H	15.3	16.8	15.7	17.1	17.5	UGR Viewed Endwise			
	3H	16.3	17.6	16.7	18.0	18.4	15.7	17.1	16.1	17.5
	4H	16.5	17.7	16.9	18.1	18.6	16.7	18.0	17.1	18.4
	6H	16.6	17.8	17.1	18.2	18.7	17.0	18.2	17.5	18.6
	8H	16.7	17.7	17.2	18.2	18.7	17.3	18.4	17.8	18.9
	12H	16.7	17.7	17.2	18.1	18.6	17.4	18.5	17.9	18.9

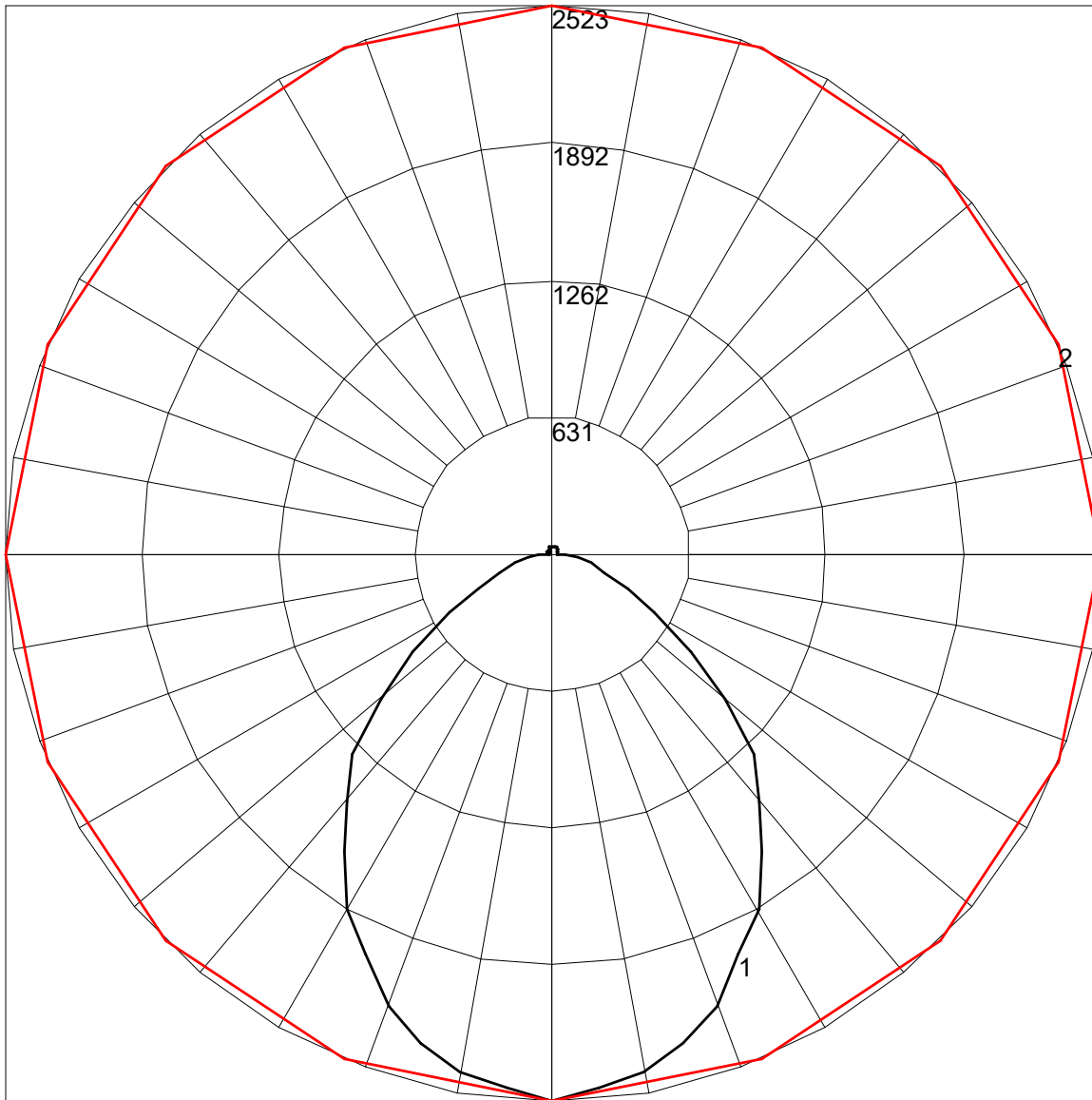
4H	2H	15.6	16.8	16.1	17.2	17.7	15.9	17.2	16.4	17.6
	3H	16.7	17.7	17.2	18.2	18.7	17.1	18.1	17.5	18.5
	4H	17.0	17.9	17.5	18.4	18.9	17.5	18.4	18.0	18.9
	6H	17.3	18.0	17.8	18.5	19.1	17.9	18.6	18.4	19.1
	8H	17.3	18.0	17.8	18.5	19.1	18.0	18.7	18.5	19.2
	12H	17.3	18.0	17.9	18.5	19.1	18.1	18.7	18.6	19.3

8H	4H	17.1	17.9	17.6	18.4	18.9	17.5	18.3	18.1	18.8
	6H	17.4	18.0	17.9	18.5	19.1	18.0	18.6	18.5	19.1
	8H	17.5	18.0	18.0	18.6	19.1	18.1	18.7	18.7	19.2
	12H	17.5	18.0	18.1	18.5	19.2	18.3	18.8	18.8	19.3

12H	4H	17.1	17.8	17.7	18.3	18.8	17.5	18.2	18.1	18.7
	6H	17.4	17.9	18.0	18.5	19.1	18.0	18.5	18.5	19.0
	8H	17.5	18.0	18.1	18.5	19.1	18.1	18.6	18.7	19.2

Maximum UGR = 19.9

POLAR GRAPH



Maximum Candela = 2523.194 Located At Horizontal Angle = 0, Vertical Angle = 0
1 - Vertical Plane Through Horizontal Angles (90 - 270)
2 - Horizontal Cone Through Vertical Angle (0) (Through Max. Cd.)