



IES INDOOR REPORT

PHOTOMETRIC FILENAME : 4AR-P37-835-POE-OW-OF-CS_0 DEGREE TILT_.IES

DESCRIPTION INFORMATION (From Photometric File)

IESNA:LM-63-2002

[TEST] GEN FROM BALLABS TEST NO. 20445.0

[TESTLAB] BUILDING ACOUSTICS & LIGHTING LABORATORIES, INC

[ISSUEDATE] 12-MAR-2020

[MANUFAC] WILLAIMS INDOOR

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

[LUMINAIRE] GEN7 V13 LED 4" SHORT HEATSINK 4" RND ADJ DOWNLIGHT @ 0 TILT

[MORE] ACRYLIC WIDE TIR OPTIC & 4" OPEN ASYM SEMI-SPEC TRIM

[LUMCAT] 4AR-P37-835-PoE-OW-OF-CS_0 DEGREE TILT

[_SEARCH_SOURCETYPE] LED

[_SEARCH_APPLICATION] Indoor, Classroom, Commercial, Industrial, Direct, Downlight

[_SEARCH_MOUNTING] Recessed

CHARACTERISTICS

Lumens Per Lamp	N.A. (absolute)
Total Lamp Lumens	N.A. (absolute)
Luminaire Lumens	2276
Total Luminaire Efficiency	N.A.
Luminaire Efficacy Rating (LER)	46
Total Luminaire Watts	50
Ballast Factor	1.00
CIE Type	Direct
Spacing Criterion (0-180)	0.76
Spacing Criterion (90-270)	0.76
Spacing Criterion (Diagonal)	0.64
Basic Luminous Shape	Circular
Luminous Length (0-180)	0.33 ft (Diameter)
Luminous Width (90-270)	0.33 ft (Diameter)
Luminous Height	0.00 ft

LUMINANCE DATA (cd/sq.m)

Angle In Degrees	Average 0-Deg	Average 45-Deg	Average 90-Deg
45	1440	1152	2304
55	1420	1420	1420
65	1446	482	482
75	0	0	0
85	0	0	0

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CANDELA TABULATION

	<u>0.0</u>	<u>22.5</u>	<u>45.0</u>	<u>67.5</u>	<u>90.0</u>	<u>112.5</u>	<u>135.0</u>	<u>157.5</u>	<u>180.0</u>
0	4423.409	4423.409	4423.409	4423.409	4423.409	4423.409	4423.409	4423.409	4423.409
5	4561.950	4552.054	4545.457	4537.210	4533.912	4540.509	4547.106	4563.599	4553.703
10	4715.334	4697.192	4683.998	4688.946	4698.841	4735.126	4754.917	4773.060	4776.358
15	4421.760	4370.632	4347.542	4355.788	4378.878	4469.589	4532.263	4542.158	4557.002
20	2986.873	2863.176	2892.863	2751.024	2925.849	2835.138	3074.286	3138.608	3275.500
25	1114.923	1083.587	1134.715	1194.090	1203.985	1180.895	1144.611	1136.364	1124.819
30	296.873	306.769	283.679	239.148	296.873	315.015	268.835	244.096	285.328
35	34.635	32.986	34.635	39.583	52.777	56.076	49.479	47.830	49.479
40	13.194	13.194	13.194	19.792	23.090	24.739	21.441	21.441	21.441
45	8.246	8.246	6.597	6.597	13.194	14.844	11.545	11.545	11.545
50	11.545	6.597	4.948	8.246	8.246	11.545	6.597	8.246	8.246
55	6.597	6.597	6.597	3.299	6.597	4.948	4.948	4.948	4.948
60	4.948	3.299	1.649	3.299	3.299	1.649	1.649	1.649	3.299
65	4.948	4.948	1.649	1.649	1.649	0.000	0.000	0.000	0.000
70	3.299	1.649	3.299	0.000	1.649	0.000	0.000	0.000	0.000
75	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
80	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
85	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
90	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000

IES INDOOR REPORT**PHOTOMETRIC FILENAME : 4AR-P37-835-POE-OW-OF-CS_0 DEGREE TILT_.IES****ZONAL LUMEN SUMMARY**

Zone	Lumens	%Lamp	%Fixt
0-20	1590.9	N.A.	69.90
0-30	2202.08	N.A.	96.70
0-40	2260.58	N.A.	99.30
0-60	2274.56	N.A.	99.90
0-80	2276.49	N.A.	100.00
0-90	2276.49	N.A.	100.00
10-90	1837.65	N.A.	80.70
20-40	669.68	N.A.	29.40
20-50	678.86	N.A.	29.80
40-70	15.63	N.A.	0.70
60-80	1.92	N.A.	0.10
70-80	0.27	N.A.	0.00
80-90	0.00	N.A.	0.00
90-110	0.00	N.A.	0.00
90-120	0.00	N.A.	0.00
90-130	0.00	N.A.	0.00
90-150	0.00	N.A.	0.00
90-180	0.00	N.A.	0.00
110-180	0.00	N.A.	0.00
0-180	2276.49	N.A.	100.00

Total Luminaire Efficiency = N.A. %

ZONAL LUMEN SUMMARY

Zone	Lumens
0-10	438.84
10-20	1152.06
20-30	611.17
30-40	58.50
40-50	9.19
50-60	4.79
60-70	1.65
70-80	0.27
80-90	0.00
90-100	0.00
100-110	0.00
110-120	0.00
120-130	0.00
130-140	0.00
140-150	0.00
150-160	0.00
160-170	0.00
170-180	0.00

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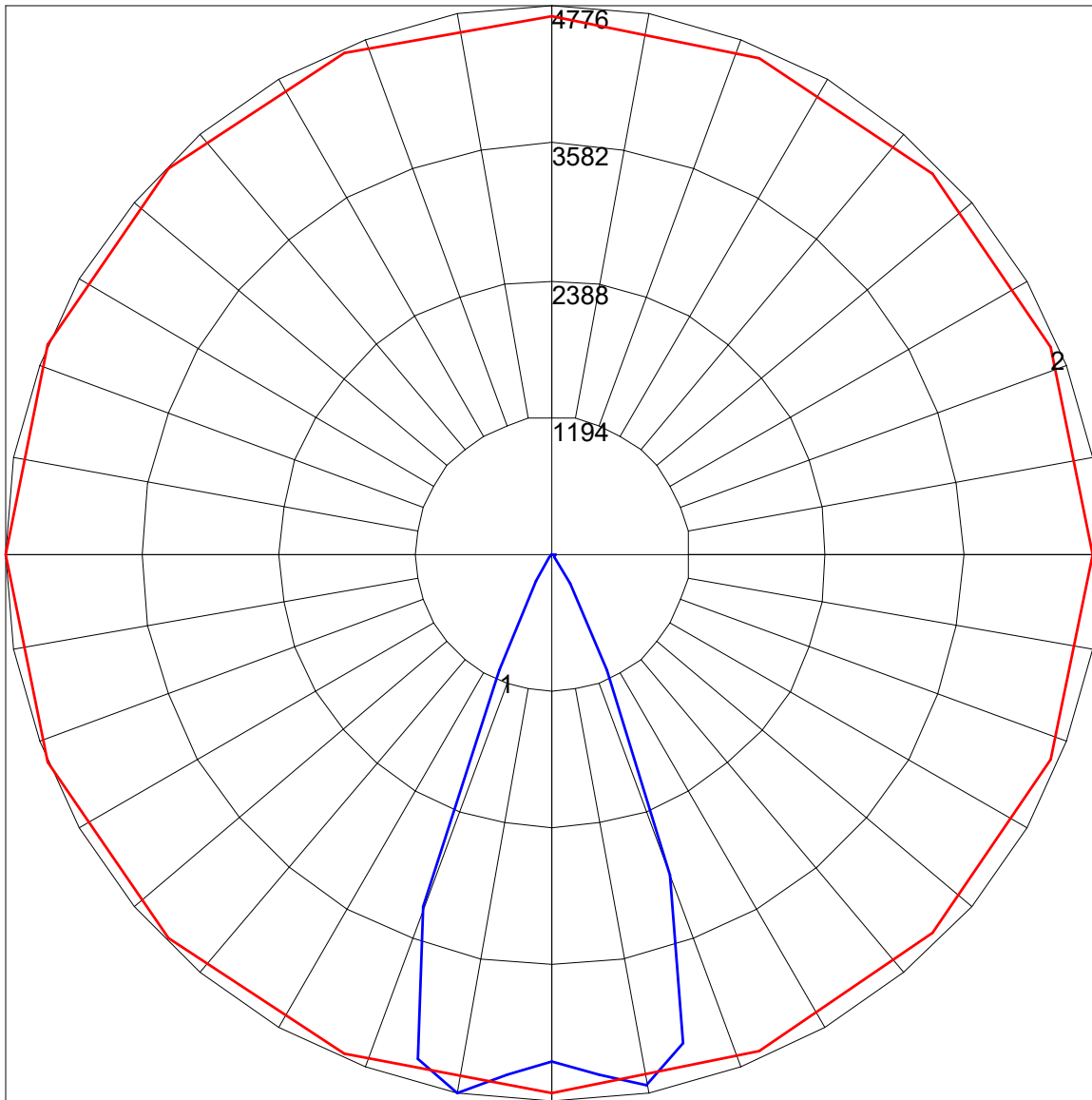
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COEFFICIENTS OF UTILIZATION - ZONAL CAVITY METHOD

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	355	355	355	355	346	346	346	346	331	331	331	317	317	317	304	304	304	298
1	342	335	329	323	334	328	323	318	316	312	308	306	302	299	295	293	291	285
2	329	317	308	299	323	312	303	296	303	296	290	294	289	284	286	282	278	273
3	317	302	290	281	311	298	287	278	290	281	274	283	276	270	277	271	266	262
4	306	288	275	265	301	285	273	263	279	268	260	273	264	258	268	261	255	251
5	295	275	262	252	290	273	260	251	268	257	248	263	254	246	259	251	244	241
6	284	264	250	240	281	262	249	239	257	246	238	254	244	236	250	241	235	231
7	275	253	239	229	271	251	238	229	248	236	228	245	234	226	242	232	225	222
8	265	243	229	220	262	242	228	219	239	227	218	236	225	218	233	224	217	214
9	256	234	220	211	254	233	220	211	230	218	210	228	217	209	226	216	209	206
10	248	225	212	203	245	224	211	203	222	210	202	220	209	202	218	208	201	198

POLAR GRAPH



Maximum Candela = 4776.358 Located At Horizontal Angle = 180, Vertical Angle = 10
1 - Vertical Plane Through Horizontal Angles (180 - 0) (Through Max. Cd.)
2 - Horizontal Cone Through Vertical Angle (10) (Through Max. Cd.)