



IES INDOOR REPORT

PHOTOMETRIC FILENAME : 4AR-P28-835-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-P28-835-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	1698
Total Luminaire Efficiency	N.A.
Luminaire Efficacy Rating (LER)	45
Total Luminaire Watts	37.5
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	1074	859	1719
55	1060	1060	1060
65	1078	359	359
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	3300.027	3300.027	3300.027	3300.027	3300.027	3300.027	3300.027	3300.027	3300.027
5	3403.383	3396.001	3391.079	3384.927	3382.466	3387.388	3392.309	3404.614	3397.231
10	3517.814	3504.279	3494.435	3498.127	3505.509	3532.579	3547.344	3560.879	3563.340
15	3298.796	3260.653	3243.427	3249.579	3266.805	3334.479	3381.235	3388.618	3399.692
20	2228.318	2136.035	2158.183	2052.366	2182.792	2115.118	2293.531	2341.518	2443.644
25	831.774	808.396	846.539	890.835	898.218	880.991	853.922	847.770	839.157
30	221.478	228.861	211.635	178.413	221.478	235.013	200.561	182.104	212.865
35	25.839	24.609	25.839	29.530	39.374	41.835	36.913	35.683	36.913
40	9.843	9.843	9.843	14.765	17.226	18.457	15.996	15.996	15.996
45	6.152	6.152	4.922	4.922	9.843	11.074	8.613	8.613	8.613
50	8.613	4.922	3.691	6.152	6.152	8.613	4.922	6.152	6.152
55	4.922	4.922	4.922	2.461	4.922	3.691	3.691	3.691	3.691
60	3.691	2.461	1.230	2.461	2.461	1.230	1.230	1.230	2.461
65	3.691	3.691	1.230	1.230	1.230	0.000	0.000	0.000	0.000
70	2.461	1.230	2.461	0.000	1.230	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-P28-835-POE-OW-OF-CS_0 DEGREE TILT_.IES****ZONAL LUMEN SUMMARY**

Zone	Lumens	%Lamp	%Fixt
0-20	1186.87	N.A.	69.90
0-30	1642.83	N.A.	96.70
0-40	1686.48	N.A.	99.30
0-60	1696.91	N.A.	99.90
0-80	1698.34	N.A.	100.00
0-90	1698.34	N.A.	100.00
10-90	1370.95	N.A.	80.70
20-40	499.60	N.A.	29.40
20-50	506.46	N.A.	29.80
40-70	11.66	N.A.	0.70
60-80	1.44	N.A.	0.10
70-80	0.20	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	1698.34	N.A.	100.00

Total Luminaire Efficiency = N.A. %

ZONAL LUMEN SUMMARY

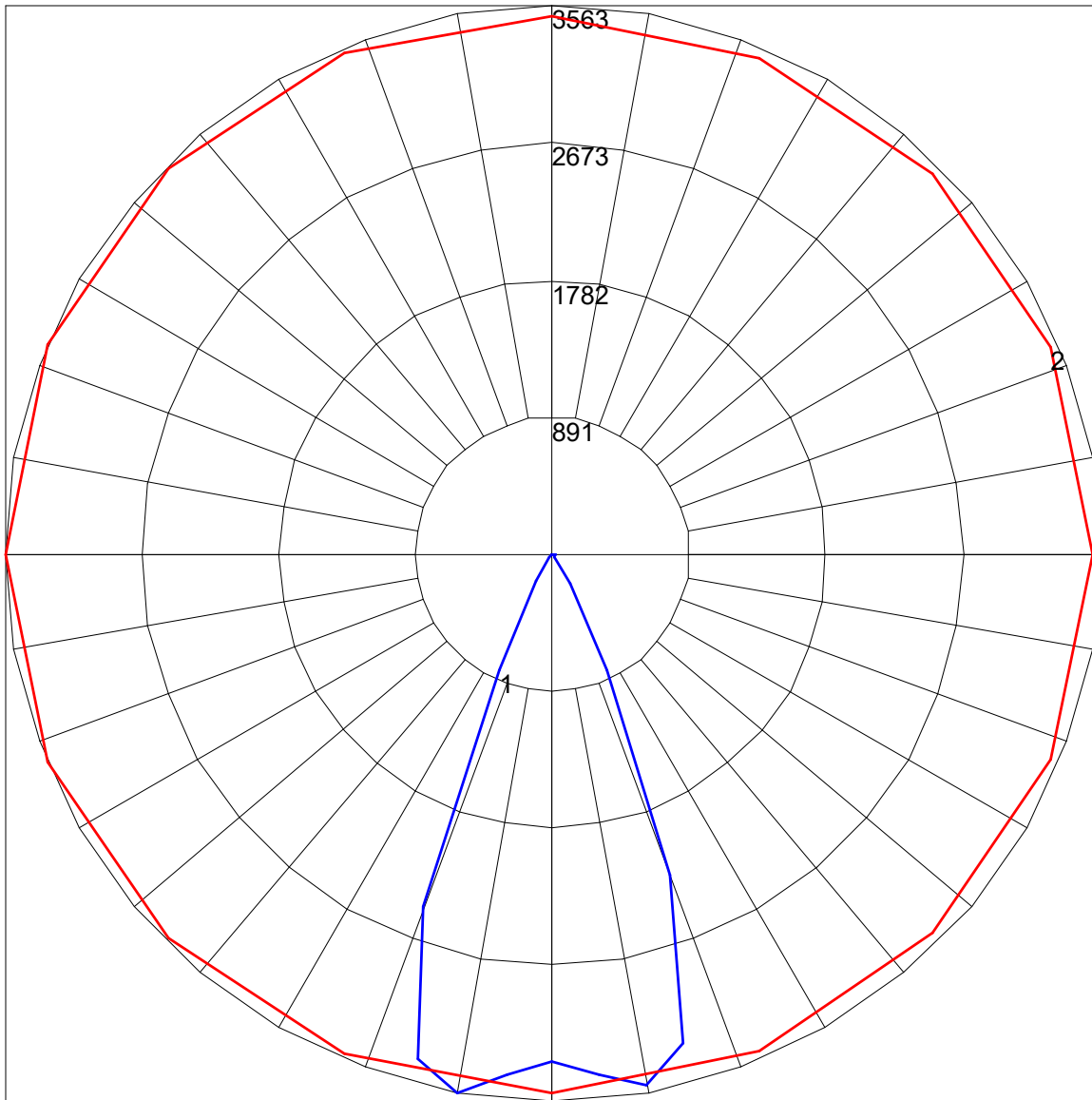
Zone	Lumens
0-10	327.39
10-20	859.48
20-30	455.96
30-40	43.65
40-50	6.85
50-60	3.58
60-70	1.23
70-80	0.20
80-90	0.00
90-100	0.00
100-110	0.00
110-120	0.00
120-130	0.00
130-140	0.00
140-150	0.00
150-160	0.00
160-170	0.00
170-180	0.00

IES INDOOR REPORT**PHOTOMETRIC FILENAME : 4AR-P28-835-POE-OW-OF-CS_0 DEGREE TILT_.IES****COEFFICIENTS OF UTILIZATION - ZONAL CAVITY METHOD**

Effective Floor Cavity Reflectance 0.20

RC RW	80				70				50			30			10			0
	70	50	30	10	70	50	30	10	50	30	10	50	30	10	50	30	10	0
0	265	265	265	265	258	258	258	258	247	247	247	236	236	236	227	227	227	222
1	255	250	245	241	249	245	241	237	236	233	230	228	225	223	220	219	217	213
2	245	237	229	223	241	233	226	221	226	221	216	220	215	212	214	210	207	204
3	236	225	216	209	232	222	214	208	217	210	204	211	206	201	207	202	198	195
4	228	215	205	198	224	212	203	197	208	200	194	204	197	192	200	194	190	187
5	220	205	195	188	217	203	194	187	200	192	185	196	189	184	193	187	182	180
6	212	197	186	179	209	195	185	178	192	184	177	189	182	176	187	180	175	172
7	205	189	178	171	202	187	178	171	185	176	170	182	175	169	180	173	168	166
8	198	181	171	164	196	180	170	164	178	169	163	176	168	162	174	167	162	159
9	191	175	164	157	189	174	164	157	172	163	157	170	162	156	168	161	156	153
10	185	168	158	151	183	167	158	151	166	157	151	164	156	150	163	155	150	148

POLAR GRAPH



Maximum Candela = 3563.34 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.)