



IES INDOOR REPORT

PHOTOMETRIC FILENAME : 4AR-L16-8TW-DIM-UNV-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] 11-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-L16-8TW-DIM-UNV-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	1231
Total Luminaire Efficiency	N.A.
Luminaire Efficacy Rating (LER)	51
Total Luminaire Watts	24
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	779	623	1246
55	768	768	768
65	782	261	261
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	2392.422	2392.422	2392.422	2392.422	2392.422	2392.422	2392.422	2392.422	2392.422
5	2467.352	2462.000	2458.432	2453.972	2452.188	2455.756	2459.324	2468.244	2462.892
10	2550.311	2540.498	2533.362	2536.038	2541.390	2561.015	2571.719	2581.532	2583.316
15	2391.530	2363.877	2351.388	2355.848	2368.337	2417.398	2451.295	2456.648	2464.676
20	1615.464	1548.562	1564.619	1487.904	1582.459	1533.398	1662.742	1697.531	1771.569
25	603.012	586.063	613.716	645.829	651.181	638.693	619.068	614.608	608.364
30	160.565	165.917	153.429	129.344	160.565	170.378	145.401	132.020	154.321
35	18.733	17.841	18.733	21.409	28.545	30.329	26.761	25.869	26.761
40	7.136	7.136	7.136	10.704	12.488	13.380	11.596	11.596	11.596
45	4.460	4.460	3.568	3.568	7.136	8.028	6.244	6.244	6.244
50	6.244	3.568	2.676	4.460	4.460	6.244	3.568	4.460	4.460
55	3.568	3.568	3.568	1.784	3.568	2.676	2.676	2.676	2.676
60	2.676	1.784	0.892	1.784	1.784	0.892	0.892	0.892	1.784
65	2.676	2.676	0.892	0.892	0.892	0.000	0.000	0.000	0.000
70	1.784	0.892	1.784	0.000	0.892	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-L16-8TW-DIM-UNV-OW-OF-CS_0 DEGREE TILT_.IES****ZONAL LUMEN SUMMARY**

Zone	Lumens	%Lamp	%Fixt
0-20	860.45	N.A.	69.90
0-30	1191.00	N.A.	96.70
0-40	1222.65	N.A.	99.30
0-60	1230.21	N.A.	99.90
0-80	1231.25	N.A.	100.00
0-90	1231.25	N.A.	100.00
10-90	993.90	N.A.	80.70
20-40	362.20	N.A.	29.40
20-50	367.17	N.A.	29.80
40-70	8.46	N.A.	0.70
60-80	1.04	N.A.	0.10
70-80	0.15	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	1231.25	N.A.	100.00

Total Luminaire Efficiency = N.A. %

ZONAL LUMEN SUMMARY

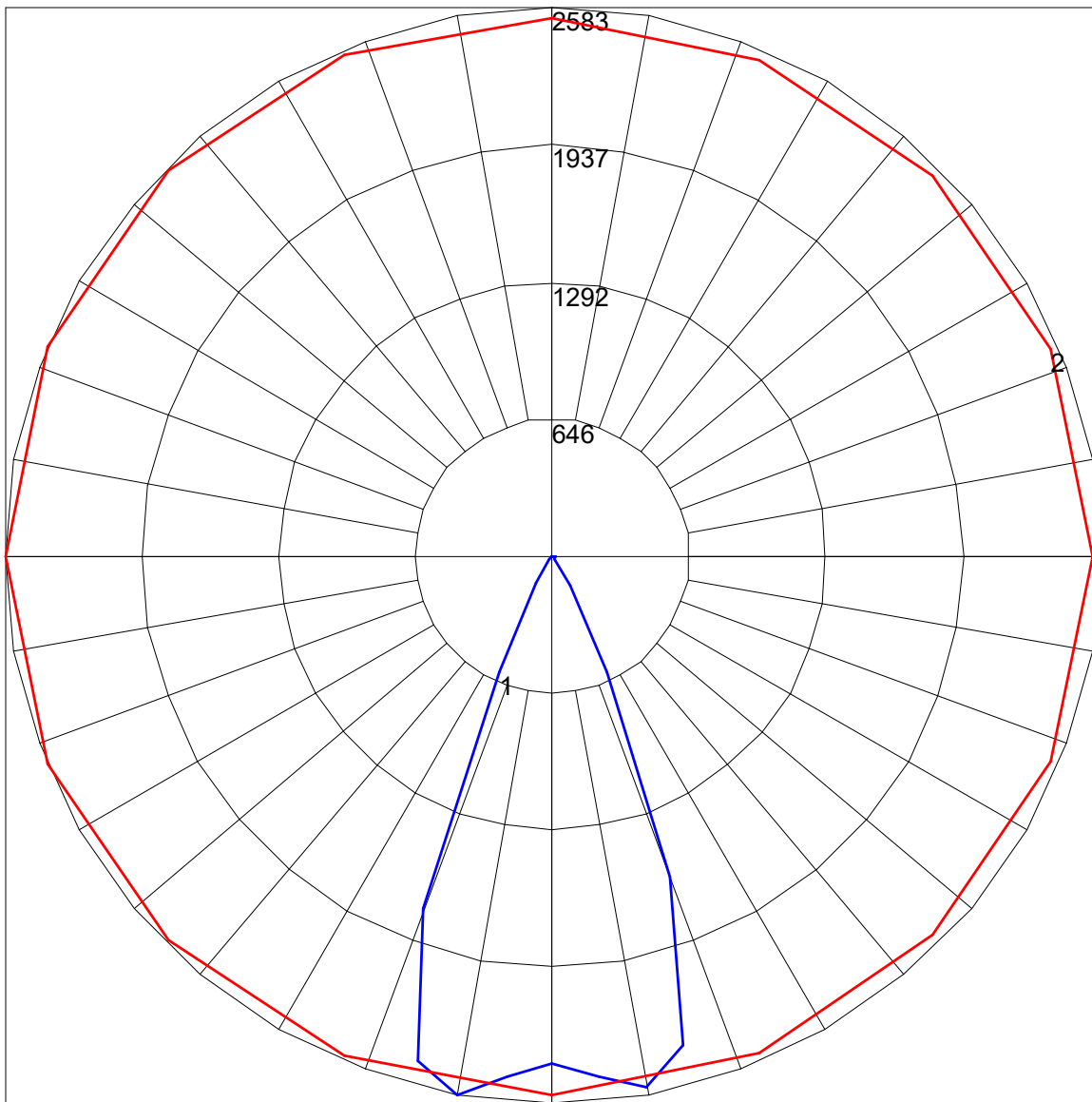
Zone	Lumens
0-10	237.35
10-20	623.10
20-30	330.56
30-40	31.64
40-50	4.97
50-60	2.59
60-70	0.90
70-80	0.15
80-90	0.00
90-100	0.00
100-110	0.00
110-120	0.00
120-130	0.00
130-140	0.00
140-150	0.00
150-160	0.00
160-170	0.00
170-180	0.00

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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	206	206	206	206	201	201	201	201	192	192	192	184	184	184	176	176	176	173
1	198	194	190	187	194	190	187	184	183	181	179	177	175	173	171	170	168	165
2	191	184	178	174	187	181	176	172	176	171	168	171	167	164	166	163	161	158
3	184	175	168	163	181	173	166	161	168	163	159	164	160	156	161	157	154	152
4	177	167	159	154	174	165	158	153	161	156	151	158	153	149	155	151	148	145
5	171	159	152	146	168	158	151	145	155	149	144	152	147	143	150	145	142	139
6	165	153	145	139	163	152	144	139	149	143	138	147	141	137	145	140	136	134
7	159	147	139	133	157	146	138	133	144	137	132	142	136	131	140	135	131	129
8	154	141	133	127	152	140	132	127	138	131	127	137	131	126	135	130	126	124
9	149	136	128	122	147	135	127	122	133	127	122	132	126	121	131	125	121	119
10	144	131	123	118	142	130	122	117	129	122	117	128	121	117	126	121	117	115

POLAR GRAPH



Maximum Candela = 2583.316 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.)