



IES INDOOR REPORT

PHOTOMETRIC FILENAME : 4AR-L7-9DW-DIM-UNV-OM-OF-CS_0 DEGREE TILT_.IES

DESCRIPTION INFORMATION (From Photometric File)

IESNA:LM-63-2002

[TEST] GEN from BALLABS TEST NO. 20448.0

[TESTLAB] BUILDING ACOUSTICS & LIGHTING LABORATORIES, INC

[ISSUEDATE] 11-MAR-2020

[MANUFAC] WILLIAMS INDOOR

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

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

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

[LUMCAT] 4AR-L7-9DW-DIM-UNV-OM-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	648
Total Luminaire Efficiency	N.A.
Luminaire Efficacy Rating (LER)	46
Total Luminaire Watts	14
Ballast Factor	1.00
CIE Type	Direct
Spacing Criterion (0-180)	0.54
Spacing Criterion (90-270)	0.54
Spacing Criterion (Diagonal)	0.48
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	179	179	179
55	74	74	74
65	0	0	0
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	2392.325	2392.325	2392.325	2392.325	2392.325	2392.325	2392.325	2392.325	2392.325
5	2381.023	2357.391	2354.309	2352.596	2352.939	2360.816	2358.761	2357.391	2351.226
10	2107.712	2097.438	2108.397	2099.150	2089.218	2036.131	2039.556	2045.721	1993.319
15	1256.613	1266.545	1357.306	1313.125	1285.725	1166.194	1040.156	1044.609	976.110
20	439.421	448.668	467.163	470.245	444.901	393.869	370.922	351.057	332.220
25	184.947	191.455	199.674	201.387	196.592	165.082	147.273	142.135	127.066
30	66.786	66.786	69.526	69.869	63.362	57.539	48.977	45.209	39.044
35	11.987	10.960	11.645	11.302	10.960	10.275	8.905	8.905	8.905
40	4.452	4.110	3.767	3.767	3.767	3.767	3.425	3.425	3.082
45	1.027	1.027	1.027	1.027	1.027	1.027	0.685	1.027	1.027
50	0.342	0.342	0.342	0.342	0.342	0.342	0.000	0.000	0.342
55	0.342	0.342	0.342	0.000	0.342	0.685	0.000	0.685	0.000
60	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
65	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
70	0.000	0.000	0.000	0.000	0.000	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-L7-9DW-DIM-UNV-OM-OF-CS_0 DEGREE TILT_.IES****ZONAL LUMEN SUMMARY**

Zone	Lumens	%Lamp	%Fixt
0-20	542.27	N.A.	83.70
0-30	633.95	N.A.	97.80
0-40	646.58	N.A.	99.80
0-60	647.90	N.A.	100.00
0-80	647.90	N.A.	100.00
0-90	647.90	N.A.	100.00
10-90	432.70	N.A.	66.80
20-40	104.31	N.A.	16.10
20-50	105.43	N.A.	16.30
40-70	1.32	N.A.	0.20
60-80	0.00	N.A.	0.00
70-80	0.00	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	647.90	N.A.	100.00

Total Luminaire Efficiency = N.A. %

ZONAL LUMEN SUMMARY

Zone	Lumens
0-10	215.20
10-20	327.07
20-30	91.68
30-40	12.62
40-50	1.12
50-60	0.20
60-70	0.00
70-80	0.00
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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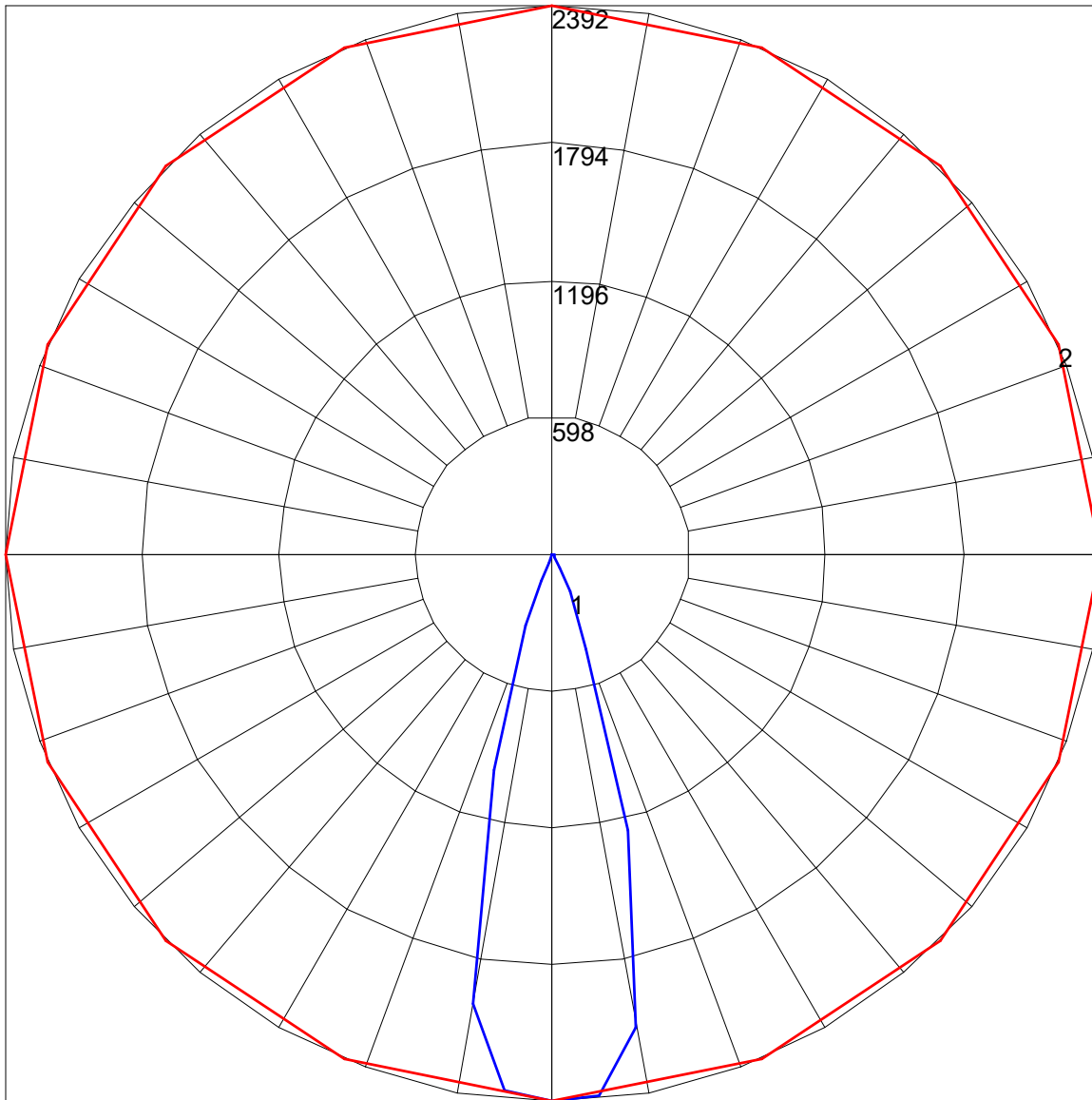
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COEFFICIENTS OF UTILIZATION - ZONAL CAVITY METHOD

Effective Floor Cavity Reflectance 0.20

RC 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	82	82	82	82	80	80	80	80	76	76	76	73	73	73	70	70	70	68
1	79	77	76	75	77	76	75	74	73	72	72	71	70	69	68	68	67	66
2	76	74	72	70	75	73	71	69	71	69	68	69	68	67	67	66	65	64
3	74	71	68	67	73	70	68	66	68	66	65	67	65	64	65	64	63	62
4	72	68	66	64	71	67	65	63	66	64	62	65	63	62	64	62	61	60
5	70	66	63	61	69	65	63	61	64	62	60	63	61	60	62	61	59	59
6	68	64	61	59	67	63	61	59	62	60	58	61	59	58	61	59	58	57
7	66	62	59	57	65	61	59	57	60	58	56	60	58	56	59	57	56	55
8	64	60	57	55	63	59	57	55	59	56	55	58	56	55	58	56	54	54
9	62	58	55	53	62	58	55	53	57	55	53	57	55	53	56	54	53	52
10	61	56	54	52	60	56	54	52	56	53	52	55	53	52	55	53	52	51

POLAR GRAPH



Maximum Candela = 2392.325 Located At Horizontal Angle = 0, Vertical Angle = 0
1 - Vertical Plane Through Horizontal Angles (0 - 180) (Through Max. Cd.)
2 - Horizontal Cone Through Vertical Angle (0) (Through Max. Cd.)