H.E. WILLIAMS, INC.

IES INDOOR REPORT
PHOTOMETRIC FILENAME : 75-4-L50-840-DIM-UNV_.IES

DESCRIPTION INFORMATION (From Photometric File)

IESNA:LM-63-2002
[TEST] GEN from BALLABS TEST NO. 17875.0
[TESTLAB] BUILDING ACOUSTICS & LIGHTING LABORATORIES, INC
[ISSUEDATE] 03-16-2022
[MANUFAC] H.E. WILLIAMS, INC - CARTHAGE, MO
[LUMINAIRE] 4' STRIP w/WHITE REFLECTOR
[LUMCAT] 75-4-L50-840-DIM-UNV

CHARACTERISTICS

Lumens Per Lamp	N.A. (absolute)
Total Lamp Lumens	N.A. (absolute)
Luminaire Lumens	5280
Total Luminaire Efficiency	N.A.
Luminaire Efficacy Rating (LER)	160
Total Luminaire Watts	33
Ballast Factor	1.00
CIE Type	Direct
Spacing Criterion (0-180)	1.32
Spacing Criterion (90-270)	1.28
Spacing Criterion (Diagonal)	1.42
Basic Luminous Shape	Rectangular w/Sides
Luminous Length (0-180)	3.62 ft
Luminous Width (90-270)	0.22 ft
Luminous Height	0.01 ft

LUMINANCE DATA (cd/sq.m)

Angle In Degrees	Average 0-Deg	Average 45-Deg	Average 90-Deg
45	23981	22938	22630
55	23378	22114	21664
65	21789	20074	19452
75	18371	16234	15569
85	9637	9172	7572

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CANDELA TABULATION

	0.0	22.5	45.0	67.5	90.0
0	1792.568	1792.568	1792.568	1792.568	1792.568
5	1805.666	1794.439	1786.955	1781.965	1780.094
10	1785.707	1774.480	1765.748	1760.759	1758.264
15	1755.769	1741.423	1732.691	1725.207	1727.701
20	1708.366	1696.515	1686.536	1679.051	1683.417
25	1648.489	1638.510	1624.164	1617.927	1615.432
30	1581.127	1566.782	1550.565	1545.575	1532.477
35	1495.054	1483.204	1464.492	1460.750	1447.028
40	1395.259	1370.310	1360.331	1353.470	1349.728
45	1278.624	1248.062	1241.824	1236.211	1231.845
50	1149.514	1121.447	1116.457	1113.962	1099.616
55	1011.672	982.357	977.991	977.991	965.517
60	861.980	835.783	823.309	828.922	810.211
65	695.447	676.111	661.766	673.616	648.668
70	527.042	502.717	495.233	507.707	488.372
75	359.886	336.184	336.184	336.184	328.700
80	191.482	187.739	187.739	184.621	177.136
85	64.243	67.362	71.728	68.609	62.372
90	5.613	5.613	8.732	5.613	5.613
95	0.000	0.000	0.000	0.000	0.000
100	0.000	0.000	0.000	0.000	0.000
105	0.000	0.000	0.000	0.000	0.000
110	0.000	0.000	0.000	0.000	0.000
115	0.000	0.000	0.000	0.000	0.000
120	0.000	0.000	0.000	0.000	0.000
125	0.000	0.000	0.000	0.000	0.000
130	0.000	0.000	0.000	0.000	0.000
135	0.000	0.000	0.000	0.000	0.000
140	0.000	0.000	0.000	0.000	0.000
145	0.000	0.000	0.000	0.000	0.000
150	0.000	0.000	0.000	0.000	0.000
155	0.000	0.000	0.000	0.000	0.000
160	0.000	0.000	0.000	0.000	0.000
165	0.000	0.000	0.000	0.000	0.000
170	0.000	0.000	0.000	0.000	0.000
175	0.000	0.000	0.000	0.000	0.000
180	0.000	0.000	0.000	0.000	0.000

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ZONAL LUMEN SUMMARY

Zone	Lumens	%Lamp	%Fixt
0-20	660.15	N.A.	12.50
0-30	1410.93	N.A.	26.70
0-40	2329.19	N.A.	44.10
0-60	4165.93	N.A.	78.90
0-80	5188.63	N.A.	98.30
0-90	5277.91	N.A.	100.00
10-90	5107.84	N.A.	96.70
20-40	1669.04	N.A.	31.60
20-50	2629.98	N.A.	49.80
40-70	2499.19	N.A.	47.30
60-80	1022.7	N.A.	19.40
70-80	360.26	N.A.	6.80
80-90	89.28	N.A.	1.70
90-110	1.75	N.A.	0.00
90-120	1.75	N.A.	0.00
90-130	1.75	N.A.	0.00
90-150	1.75	N.A.	0.00
90-180	1.75	N.A.	0.00
110-180	0.00	N.A.	0.00
0-180	5279.66	N.A.	100.00

Total Luminaire Efficiency = N.A.%

ZONAL LUMEN SUMMARY

Zone	Lumens
0-10	170.07
10-20	490.07
20-30	750.78
30-40	918.26
40-50	960.94
50-60	875.81
60-70	662.44
70-80	360.26
80-90	89.28
90-100	1.75
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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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	119	119	119	119	116	116	116	116	111	111	111	106	106	106	102	102	102	100
1	109	104	100	96	106	102	98	94	97	94	91	93	91	88	90	88	86	84
2	99	90	84	78	96	89	82	77	85	80	75	82	77	73	79	75	72	70
3	90	79	71	65	87	78	70	64	75	68	63	72	66	62	69	65	61	58
4	82	70	61	55	80	69	61	54	66	59	53	64	58	53	62	56	52	50
5	76	63	54	47	73	61	53	47	59	52	46	57	51	46	55	50	45	43
6	70	56	47	41	68	55	47	41	53	46	40	52	45	40	50	44	39	37
7	65	51	42	36	63	50	42	36	49	41	35	47	40	35	46	40	35	33
8	60	46	38	32	59	46	38	32	44	37	32	43	36	31	42	36	31	29
9	56	43	34	29	55	42	34	29	41	34	28	40	33	28	39	33	28	26
10	53	39	31	26	51	39	31	26	38	31	26	37	30	26	36	30	26	24

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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					UGR Viewed Endwise				
X=2H	Y=2H	23.1	24.7	23.4	25.0	25.3	23.0	24.7	23.4	25.0	25.3
	3H	24.8	26.3	25.2	26.6	27.0	24.8	26.3	25.1	26.6	26.9
	4H	25.4	26.8	25.8	27.2	27.6	25.4	26.8	25.8	27.1	27.5
	6H	25.8	27.1	26.2	27.5	27.9	25.7	27.0	26.1	27.4	27.8
	8H	25.9	27.2	26.4	27.6	28.0	25.8	27.1	26.3	27.5	27.9
	12H	26.0	27.2	26.4	27.6	28.0	25.9	27.1	26.3	27.5	27.9
4H	2H	23.7	25.1	24.1	25.4	25.8	23.6	25.0	24.0	25.4	25.8
	3H	25.6	26.8	26.0	27.2	27.6	25.6	26.8	26.0	27.2	27.6
	4H	26.3	27.4	26.8	27.8	28.3	26.3	27.4	26.7	27.8	28.2
	6H	26.8	27.8	27.3	28.2	28.7	26.8	27.7	27.3	28.2	28.6
	8H	27.0	27.8	27.4	28.3	28.8	26.9	27.8	27.4	28.3	28.7
	12H	27.0	27.8	27.5	28.3	28.8	27.0	27.8	27.5	28.3	28.7
8H	4H	26.6	27.5	27.1	27.9	28.4	26.6	27.4	27.0	27.9	28.3
	6H	27.2	27.9	27.7	28.4	28.9	27.2	27.9	27.7	28.4	28.8
	8H	27.4	28.0	27.9	28.5	29.0	27.4	28.0	27.9	28.5	29.0
	12H	27.5	28.1	28.0	28.6	29.1	27.5	28.1	28.0	28.6	29.1
12H	4H	26.6	27.4	27.1	27.9	28.4	26.6	27.4	27.1	27.8	28.3
	6H	27.3	27.9	27.8	28.4	28.9	27.2	27.9	27.7	28.3	28.9
	8H	27.5	28.0	28.0	28.5	29.1	27.4	28.0	27.9	28.5	29.1

Maximum UGR = 29.1

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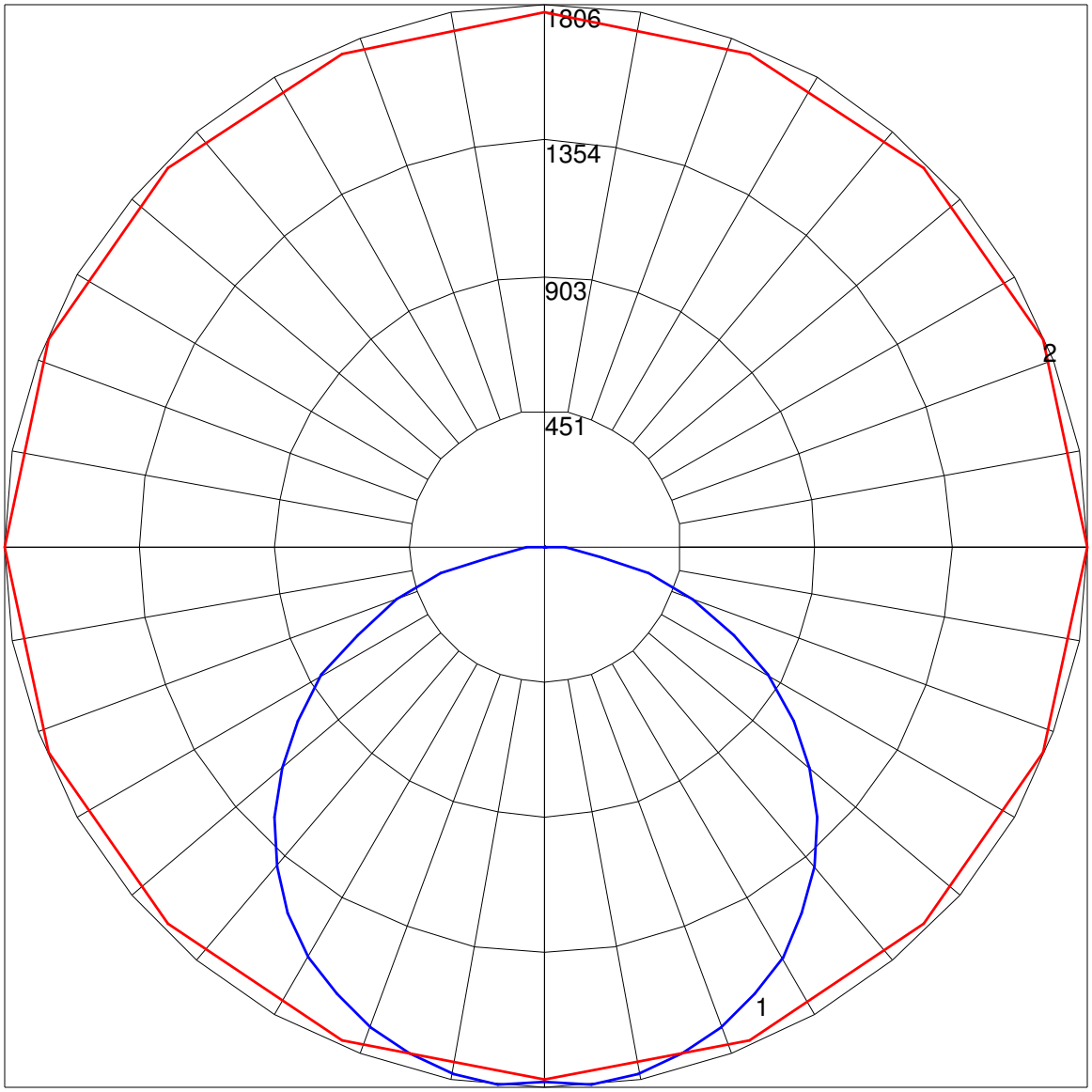
POLAR GRAPH



Maximum Candela = 1805.666 Located At Horizontal Angle = 0, Vertical Angle = 5
1 - Vertical Plane Through Horizontal Angles (0 - 180) (Through Max. Cd.)
2 - Horizontal Cone Through Vertical Angle (5) (Through Max. Cd.)

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