H.E. WILLIAMS, INC.

IES INDOOR REPORT
PHOTOMETRIC FILENAME : 75-4-L50-835-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] 11-NOV-2019
[MANUFAC] H.E. WILLIAMS, INC - CARTHAGE, MO
[LUMINAIRE] 4' STRIP w/WHITE REFLECTOR
[LUMCAT] 75-4-L50/835-DIM-UNV

CHARACTERISTICS

Lumens Per Lamp	N.A. (absolute)
Total Lamp Lumens	N.A. (absolute)
Luminaire Lumens	5126
Total Luminaire Efficiency	N.A.
Luminaire Efficacy Rating (LER)	155
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	23282	22270	21971
55	22697	21470	21033
65	21154	19489	18886
75	17836	15762	15115
85	9356	8905	7351

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CANDELA TABULATION

	0.0	22.5	45.0	67.5	90.0
0	1740.357	1740.357	1740.357	1740.357	1740.357
5	1753.074	1742.174	1734.907	1730.063	1728.246
10	1733.696	1722.796	1714.318	1709.474	1707.052
15	1704.629	1690.702	1682.224	1674.957	1677.380
20	1658.607	1647.102	1637.413	1630.147	1634.385
25	1600.474	1590.786	1576.858	1570.802	1568.380
30	1535.075	1521.147	1505.403	1500.558	1487.842
35	1451.509	1440.003	1421.837	1418.203	1404.881
40	1354.620	1330.398	1320.709	1314.048	1310.415
45	1241.382	1211.710	1205.654	1200.204	1195.966
50	1116.033	1088.783	1083.938	1081.516	1067.589
55	982.206	953.745	949.506	949.506	937.395
60	836.873	811.440	799.329	804.779	786.612
65	675.191	656.419	642.491	653.996	629.774
70	511.692	488.075	480.808	492.919	474.147
75	349.404	326.393	326.393	326.393	319.126
80	185.905	182.271	182.271	179.243	171.977
85	62.372	65.400	69.639	66.611	60.555
90	5.450	5.450	8.478	5.450	5.450
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	640.92	N.A.	12.50
0-30	1369.83	N.A.	26.70
0-40	2261.34	N.A.	44.10
0-60	4044.59	N.A.	78.90
0-80	5037.5	N.A.	98.30
0-90	5124.18	N.A.	100.00
10-90	4959.06	N.A.	96.70
20-40	1620.42	N.A.	31.60
20-50	2553.37	N.A.	49.80
40-70	2426.39	N.A.	47.30
60-80	992.91	N.A.	19.40
70-80	349.77	N.A.	6.80
80-90	86.68	N.A.	1.70
90-110	1.70	N.A.	0.00
90-120	1.70	N.A.	0.00
90-130	1.70	N.A.	0.00
90-150	1.70	N.A.	0.00
90-180	1.70	N.A.	0.00
110-180	0.00	N.A.	0.00
0-180	5125.88	N.A.	100.00

Total Luminaire Efficiency = N.A.%

ZONAL LUMEN SUMMARY

Zone	Lumens
0-10	165.12
10-20	475.80
20-30	728.91
30-40	891.51
40-50	932.95
50-60	850.30
60-70	643.15
70-80	349.77
80-90	86.68
90-100	1.70
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	36	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	23.0	24.6	23.3	24.9	25.2	22.9	24.6	23.3	24.9	25.2
	3H	24.7	26.2	25.1	26.5	26.9	24.7	26.2	25.0	26.5	26.8
	4H	25.3	26.7	25.7	27.1	27.5	25.3	26.7	25.7	27.0	27.4
	6H	25.7	27.0	26.1	27.4	27.8	25.6	26.9	26.0	27.3	27.7
	8H	25.8	27.1	26.3	27.5	27.9	25.7	27.0	26.2	27.4	27.8
	12H	25.9	27.1	26.3	27.5	27.9	25.8	27.0	26.2	27.4	27.8
4H	2H	23.6	25.0	24.0	25.3	25.7	23.5	24.9	23.9	25.3	25.7
	3H	25.5	26.7	25.9	27.1	27.5	25.5	26.7	25.9	27.1	27.5
	4H	26.2	27.3	26.7	27.7	28.2	26.2	27.3	26.6	27.7	28.1
	6H	26.7	27.7	27.2	28.1	28.6	26.7	27.6	27.2	28.1	28.5
	8H	26.9	27.7	27.3	28.2	28.7	26.8	27.7	27.3	28.2	28.6
	12H	26.9	27.7	27.4	28.2	28.7	26.9	27.7	27.4	28.2	28.6
8H	4H	26.5	27.4	27.0	27.8	28.3	26.5	27.3	26.9	27.8	28.2
	6H	27.1	27.8	27.6	28.3	28.8	27.1	27.8	27.6	28.3	28.8
	8H	27.3	27.9	27.8	28.4	28.9	27.3	27.9	27.8	28.4	28.9
	12H	27.4	28.0	27.9	28.5	29.0	27.4	28.0	27.9	28.5	29.0
12H	4H	26.5	27.3	27.0	27.8	28.3	26.5	27.3	27.0	27.7	28.2
	6H	27.2	27.8	27.7	28.3	28.8	27.1	27.8	27.6	28.2	28.8
	8H	27.4	27.9	27.9	28.4	29.0	27.3	27.9	27.8	28.4	29.0

Maximum UGR = 29.0

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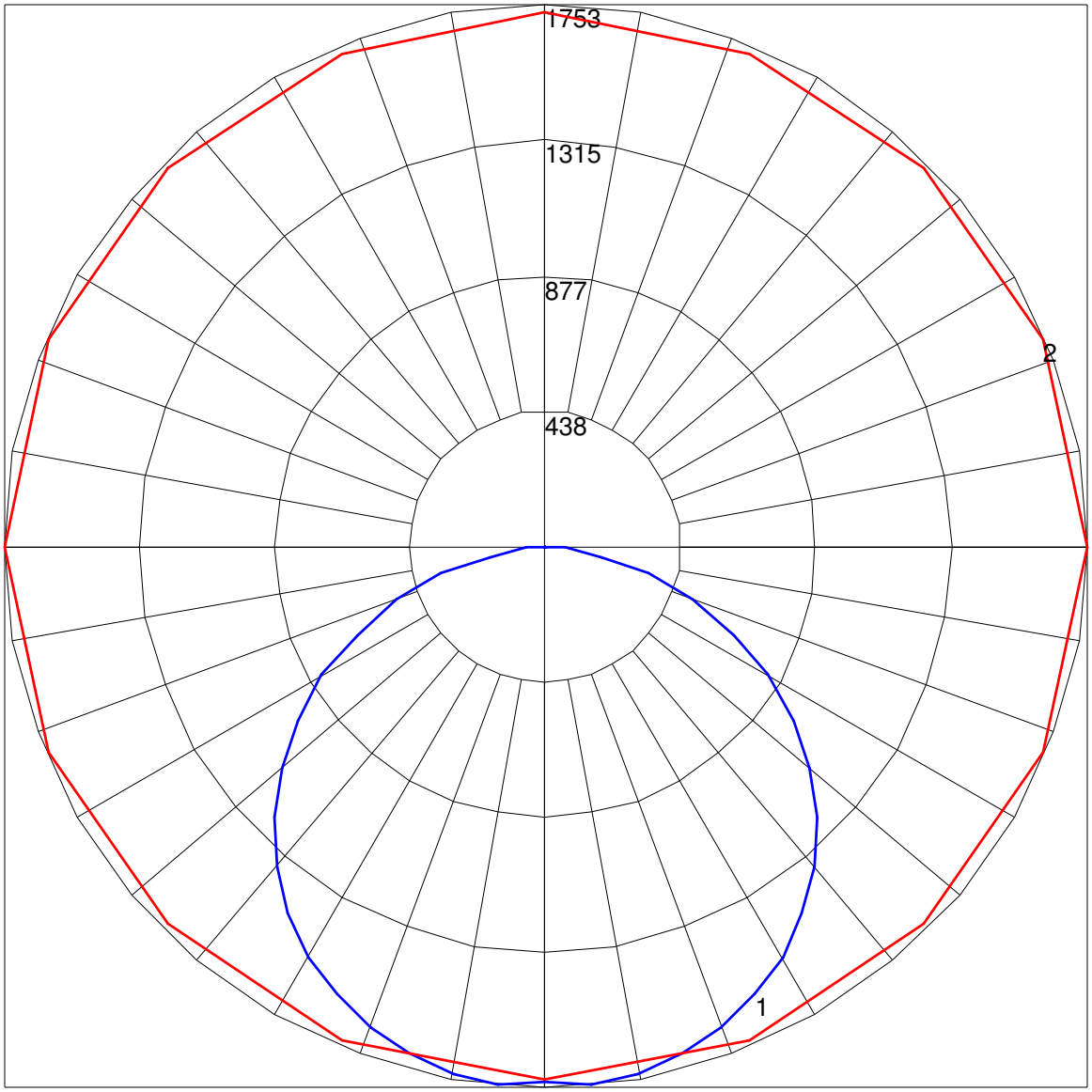
POLAR GRAPH



Maximum Candela = 1753.074 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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