H.E. WILLIAMS, INC.

IES INDOOR REPORT
PHOTOMETRIC FILENAME : 75-4-L120-835-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] 14-AUG-2020
[MANUFAC] H.E. WILLIAMS, INC - CARTHAGE, MO
[LUMINAIRE] 4' STRIP w/WHITE REFLECTOR
[LUMCAT] 75-4-L120/835-DIM-UNV

CHARACTERISTICS

Lumens Per Lamp	N.A. (absolute)
Total Lamp Lumens	N.A. (absolute)
Luminaire Lumens	12105
Total Luminaire Efficiency	N.A.
Luminaire Efficacy Rating (LER)	141
Total Luminaire Watts	85.9
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	54981	52591	51885
55	53598	50702	49670
65	49956	46023	44599
75	42120	37221	35695
85	22094	21029	17360

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CANDELA TABULATION

	0.0	22.5	45.0	67.5	90.0
0	4109.837	4109.837	4109.837	4109.837	4109.837
5	4139.867	4114.127	4096.967	4085.527	4081.237
10	4094.107	4068.367	4048.347	4036.907	4031.187
15	4025.467	3992.577	3972.557	3955.397	3961.117
20	3916.787	3889.616	3866.736	3849.576	3859.586
25	3779.506	3756.626	3723.736	3709.436	3703.716
30	3625.065	3592.175	3554.995	3543.555	3513.525
35	3427.724	3400.554	3357.654	3349.074	3317.614
40	3198.923	3141.723	3118.843	3103.113	3094.533
45	2931.512	2861.442	2847.142	2834.272	2824.262
50	2635.501	2571.151	2559.711	2553.991	2521.101
55	2319.470	2252.259	2242.249	2242.249	2213.649
60	1976.268	1916.208	1887.608	1900.478	1857.578
65	1594.457	1550.127	1517.236	1544.407	1487.206
70	1208.355	1152.585	1135.425	1164.025	1119.695
75	825.113	770.773	770.773	770.773	753.613
80	439.012	430.432	430.432	423.282	406.122
85	147.291	154.441	164.451	157.301	143.001
90	12.870	12.870	20.020	12.870	12.870
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	1513.53	N.A.	12.50
0-30	3234.85	N.A.	26.70
0-40	5340.15	N.A.	44.10
0-60	9551.27	N.A.	78.90
0-80	11896.02	N.A.	98.30
0-90	12100.71	N.A.	100.00
10-90	11710.79	N.A.	96.70
20-40	3826.62	N.A.	31.60
20-50	6029.77	N.A.	49.80
40-70	5729.9	N.A.	47.30
60-80	2344.76	N.A.	19.40
70-80	825.97	N.A.	6.80
80-90	204.69	N.A.	1.70
90-110	4.01	N.A.	0.00
90-120	4.01	N.A.	0.00
90-130	4.01	N.A.	0.00
90-150	4.01	N.A.	0.00
90-180	4.01	N.A.	0.00
110-180	0.00	N.A.	0.00
0-180	12104.73	N.A.	100.00

Total Luminaire Efficiency = N.A.%

ZONAL LUMEN SUMMARY

Zone	Lumens
0-10	389.93
10-20	1123.6
20-30	1721.32
30-40	2105.3
40-50	2203.15
50-60	2007.97
60-70	1518.78
70-80	825.97
80-90	204.69
90-100	4.01
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	124	124	124	124	121	121	121	121	115	115	115	110	110	110	106	106	106	104
1	113	108	103	99	110	106	101	98	101	98	95	97	94	92	93	91	89	87
2	103	94	87	81	100	92	85	80	88	83	78	85	80	76	82	78	74	72
3	93	82	74	67	91	81	73	66	78	71	65	75	69	64	72	67	63	61
4	85	73	64	57	83	71	63	56	69	61	55	66	60	55	64	59	54	52
5	78	65	56	49	76	64	55	48	62	54	48	59	53	47	58	52	47	44
6	72	58	49	42	70	57	49	42	56	48	42	54	47	41	52	46	41	39
7	67	53	44	37	65	52	43	37	50	43	37	49	42	37	47	41	36	34
8	62	48	39	33	61	47	39	33	46	38	33	45	38	33	44	37	32	30
9	58	44	36	30	57	44	35	30	42	35	30	41	34	29	40	34	29	27
10	55	41	32	27	53	40	32	27	39	32	27	38	31	27	37	31	27	25

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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	25.8	27.4	26.1	27.7	28.0	25.7	27.4	26.1	27.7	28.0
	3H	27.5	29.0	27.9	29.3	29.7	27.5	29.0	27.8	29.3	29.6
	4H	28.1	29.5	28.5	29.9	30.3	28.1	29.5	28.5	29.8	30.2
	6H	28.5	29.8	28.9	30.2	30.6	28.4	29.7	28.8	30.1	30.5
	8H	28.6	29.9	29.1	30.3	30.7	28.5	29.8	29.0	30.2	30.6
	12H	28.7	29.9	29.1	30.3	30.7	28.6	29.8	29.0	30.2	30.6
4H	2H	26.4	27.8	26.8	28.1	28.5	26.3	27.7	26.7	28.1	28.5
	3H	28.3	29.5	28.7	29.9	30.3	28.3	29.5	28.7	29.9	30.3
	4H	29.0	30.1	29.5	30.5	31.0	29.0	30.1	29.4	30.5	30.9
	6H	29.5	30.5	30.0	30.9	31.4	29.5	30.4	30.0	30.9	31.3
	8H	29.7	30.5	30.1	31.0	31.5	29.6	30.5	30.1	31.0	31.4
	12H	29.7	30.5	30.2	31.0	31.5	29.7	30.5	30.2	31.0	31.4
8H	4H	29.3	30.2	29.8	30.6	31.1	29.3	30.1	29.7	30.6	31.0
	6H	29.9	30.6	30.4	31.1	31.6	29.9	30.6	30.4	31.1	31.6
	8H	30.1	30.7	30.6	31.2	31.7	30.1	30.7	30.6	31.2	31.7
	12H	30.2	30.8	30.7	31.3	31.8	30.2	30.8	30.7	31.3	31.8
12H	4H	29.3	30.1	29.8	30.6	31.1	29.3	30.1	29.8	30.5	31.0
	6H	30.0	30.6	30.5	31.1	31.6	29.9	30.6	30.4	31.0	31.6
	8H	30.2	30.7	30.7	31.2	31.8	30.1	30.7	30.6	31.2	31.8

Maximum UGR = 31.8

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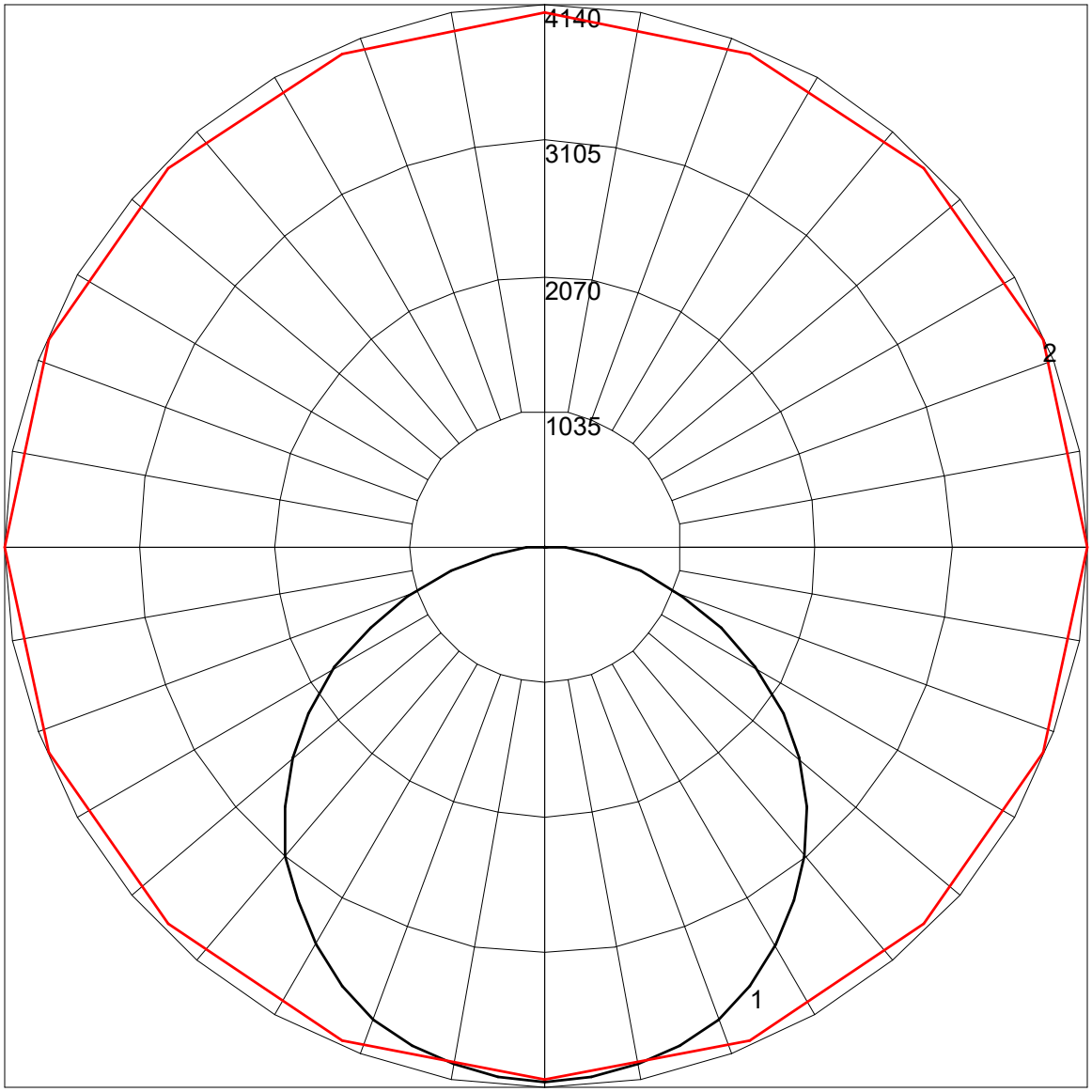
POLAR GRAPH



Maximum Candela = 4139.867 Located At Horizontal Angle = 0, Vertical Angle = 5
1 - Vertical Plane Through Horizontal Angles (90 - 270)
2 - Horizontal Cone Through Vertical Angle (5) (Through Max. Cd.)

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