H.E. WILLIAMS, INC.

IES INDOOR REPORT
PHOTOMETRIC FILENAME : 75-4-L30-835-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] 25-OCT-2019
[MANUFAC] H.E. WILLIAMS, INC - CARTHAGE, MO
[LUMINAIRE] 4' STRIP w/WHITE REFLECTOR
[LUMCAT] 75-4-L30-835-DIM-UNV

CHARACTERISTICS

Lumens Per Lamp	N.A. (absolute)
Total Lamp Lumens	N.A. (absolute)
Luminaire Lumens	3071
Total Luminaire Efficiency	N.A.
Luminaire Efficacy Rating (LER)	156
Total Luminaire Watts	19.7
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	13949	13342	13163
55	13598	12863	12601
65	12674	11676	11315
75	10686	9443	9056
85	5605	5335	4404

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CANDELA TABULATION

	0.0	22.5	45.0	67.5	90.0
0	1042.652	1042.652	1042.652	1042.652	1042.652
5	1050.271	1043.741	1039.387	1036.485	1035.397
10	1038.662	1032.132	1027.053	1024.150	1022.699
15	1021.248	1012.904	1007.825	1003.471	1004.922
20	993.676	986.783	980.978	976.625	979.165
25	958.848	953.044	944.700	941.072	939.621
30	919.667	911.323	901.891	898.988	891.370
35	869.603	862.710	851.826	849.649	841.668
40	811.557	797.045	791.240	787.250	785.073
45	743.715	725.939	722.311	719.046	716.506
50	668.618	652.293	649.390	647.939	639.595
55	588.442	571.391	568.851	568.851	561.596
60	501.373	486.136	478.880	482.145	471.261
65	404.509	393.262	384.918	391.811	377.299
70	306.556	292.407	288.054	295.309	284.063
75	209.329	195.543	195.543	195.543	191.189
80	111.376	109.199	109.199	107.385	103.032
85	37.367	39.181	41.721	39.907	36.279
90	3.265	3.265	5.079	3.265	3.265
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	383.98	N.A.	12.50
0-30	820.67	N.A.	26.70
0-40	1354.78	N.A.	44.10
0-60	2423.13	N.A.	78.90
0-80	3017.98	N.A.	98.30
0-90	3069.91	N.A.	100.00
10-90	2970.99	N.A.	96.70
20-40	970.80	N.A.	31.60
20-50	1529.73	N.A.	49.80
40-70	1453.66	N.A.	47.30
60-80	594.86	N.A.	19.40
70-80	209.55	N.A.	6.80
80-90	51.93	N.A.	1.70
90-110	1.02	N.A.	0.00
90-120	1.02	N.A.	0.00
90-130	1.02	N.A.	0.00
90-150	1.02	N.A.	0.00
90-180	1.02	N.A.	0.00
110-180	0.00	N.A.	0.00
0-180	3070.93	N.A.	100.00

Total Luminaire Efficiency = N.A.%

ZONAL LUMEN SUMMARY

Zone	Lumens
0-10	98.92
10-20	285.05
20-30	436.69
30-40	534.11
40-50	558.93
50-60	509.42
60-70	385.31
70-80	209.55
80-90	51.93
90-100	1.02
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	21.2	22.8	21.5	23.1	23.4	21.1	22.8	21.5	23.1	23.4
	3H	22.9	24.4	23.3	24.7	25.1	22.9	24.4	23.2	24.7	25.0
	4H	23.5	24.9	23.9	25.3	25.7	23.5	24.9	23.9	25.2	25.6
	6H	23.9	25.2	24.3	25.6	26.0	23.8	25.1	24.2	25.5	25.9
	8H	24.0	25.3	24.5	25.7	26.1	23.9	25.2	24.4	25.6	26.0
	12H	24.1	25.3	24.5	25.7	26.1	24.0	25.2	24.4	25.6	26.0
4H	2H	21.8	23.2	22.2	23.5	23.9	21.7	23.1	22.1	23.5	23.9
	3H	23.7	24.9	24.1	25.3	25.7	23.7	24.9	24.1	25.3	25.7
	4H	24.4	25.5	24.9	25.9	26.4	24.4	25.5	24.8	25.9	26.3
	6H	24.9	25.9	25.4	26.3	26.8	24.9	25.8	25.4	26.3	26.7
	8H	25.1	25.9	25.5	26.4	26.9	25.0	25.9	25.5	26.4	26.8
	12H	25.1	25.9	25.6	26.4	26.9	25.1	25.9	25.6	26.4	26.8
8H	4H	24.7	25.6	25.2	26.0	26.5	24.7	25.5	25.1	26.0	26.4
	6H	25.3	26.0	25.8	26.5	27.0	25.3	26.0	25.8	26.5	27.0
	8H	25.5	26.1	26.0	26.6	27.1	25.5	26.1	26.0	26.6	27.1
	12H	25.6	26.2	26.1	26.7	27.2	25.6	26.2	26.1	26.7	27.2
12H	4H	24.7	25.5	25.2	26.0	26.5	24.7	25.5	25.2	25.9	26.4
	6H	25.4	26.0	25.9	26.5	27.0	25.3	26.0	25.8	26.4	27.0
	8H	25.6	26.1	26.1	26.6	27.2	25.5	26.1	26.0	26.6	27.2

Maximum UGR = 27.2

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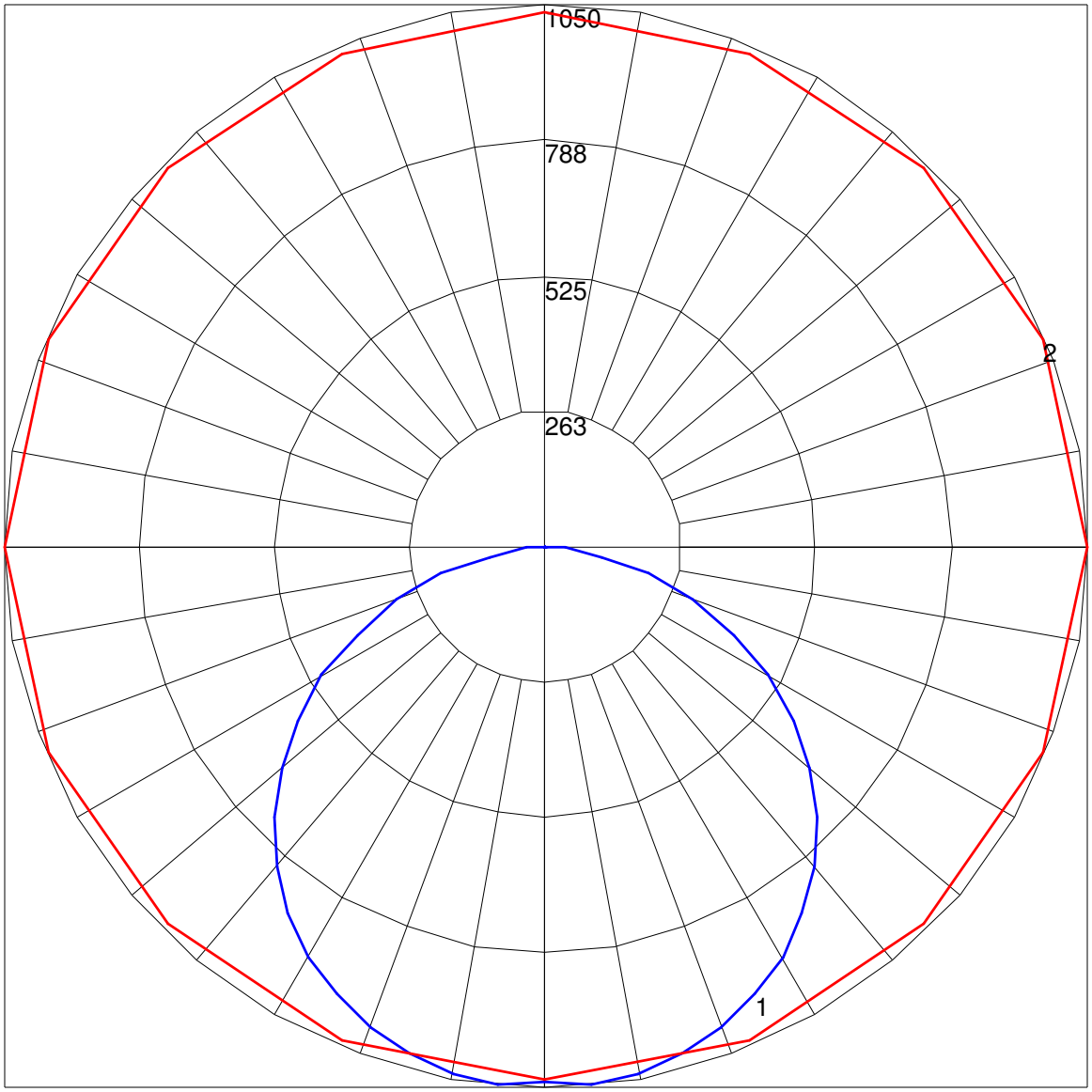
POLAR GRAPH



Maximum Candela = 1050.271 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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