H.E. WILLIAMS, INC.

IES INDOOR REPORT
PHOTOMETRIC FILENAME : 75-4-L65-935-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] 12-30-2020
[MANUFAC] H.E. WILLIAMS, INC - CARTHAGE, MO
[LUMINAIRE] 4' STRIP w/WHITE REFLECTOR
[LUMCAT] 75-4-L65/935-DIM-UNV

CHARACTERISTICS

Lumens Per Lamp	N.A. (absolute)
Total Lamp Lumens	N.A. (absolute)
Luminaire Lumens	5351
Total Luminaire Efficiency	N.A.
Luminaire Efficacy Rating (LER)	127
Total Luminaire Watts	42
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	24304	23248	22936
55	23693	22413	21957
65	22083	20344	19715
75	18619	16453	15779
85	9767	9296	7674

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CANDELA TABULATION

	0.0	22.5	45.0	67.5	90.0
0	1816.748	1816.748	1816.748	1816.748	1816.748
5	1830.023	1818.645	1811.059	1806.002	1804.106
10	1809.795	1798.416	1789.567	1784.509	1781.981
15	1779.452	1764.913	1756.064	1748.478	1751.006
20	1731.410	1719.400	1709.286	1701.700	1706.125
25	1670.726	1660.612	1646.072	1639.751	1637.223
30	1602.455	1587.916	1571.481	1566.424	1553.149
35	1515.221	1503.211	1484.247	1480.454	1466.547
40	1414.080	1388.795	1378.681	1371.727	1367.934
45	1295.871	1264.897	1258.575	1252.886	1248.461
50	1165.020	1136.574	1131.517	1128.988	1114.449
55	1025.319	995.608	991.183	991.183	978.541
60	873.607	847.057	834.415	840.104	821.140
65	704.828	685.231	670.692	682.703	657.418
70	534.152	509.499	501.913	514.556	494.960
75	364.740	340.719	340.719	340.719	333.134
80	194.065	190.272	190.272	187.111	179.526
85	65.110	68.270	72.695	69.535	63.213
90	5.689	5.689	8.850	5.689	5.689
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	669.05	N.A.	12.50
0-30	1429.96	N.A.	26.70
0-40	2360.6	N.A.	44.10
0-60	4222.12	N.A.	78.90
0-80	5258.62	N.A.	98.30
0-90	5349.1	N.A.	100.00
10-90	5176.74	N.A.	96.70
20-40	1691.55	N.A.	31.60
20-50	2665.45	N.A.	49.80
40-70	2532.9	N.A.	47.30
60-80	1036.5	N.A.	19.40
70-80	365.12	N.A.	6.80
80-90	90.48	N.A.	1.70
90-110	1.77	N.A.	0.00
90-120	1.77	N.A.	0.00
90-130	1.77	N.A.	0.00
90-150	1.77	N.A.	0.00
90-180	1.77	N.A.	0.00
110-180	0.00	N.A.	0.00
0-180	5350.88	N.A.	100.00

Total Luminaire Efficiency = N.A.%

ZONAL LUMEN SUMMARY

Zone	Lumens
0-10	172.37
10-20	496.68
20-30	760.91
30-40	930.65
40-50	973.90
50-60	887.62
60-70	671.38
70-80	365.12
80-90	90.48
90-100	1.77
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	23.1	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	28.9
	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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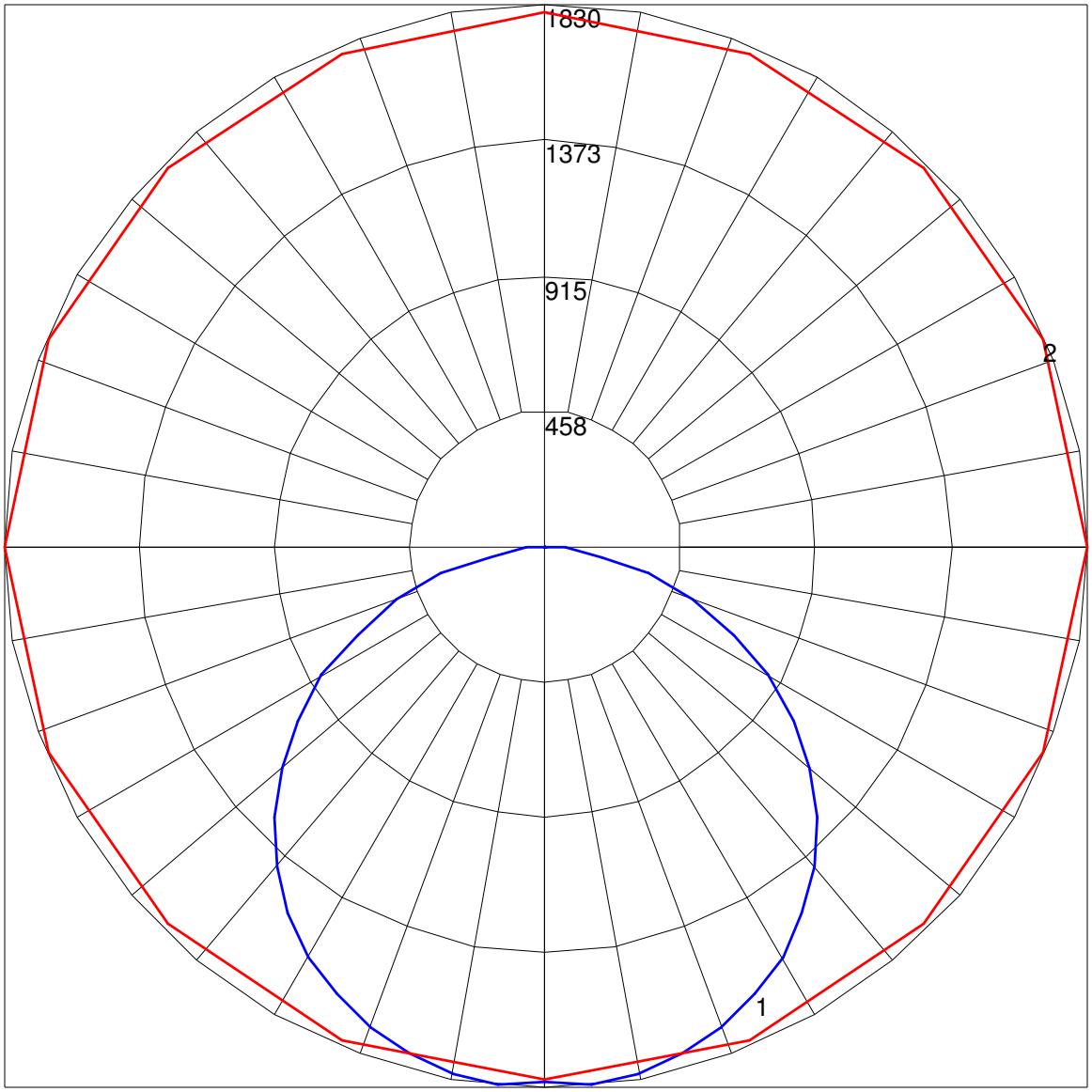
POLAR GRAPH



Maximum Candela = 1830.023 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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