H.E. WILLIAMS, INC.

IES INDOOR REPORT
PHOTOMETRIC FILENAME : 75-4-L65-835-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-L65/835-DIM-UNV

CHARACTERISTICS

Lumens Per Lamp	N.A. (absolute)
Total Lamp Lumens	N.A. (absolute)
Luminaire Lumens	6313
Total Luminaire Efficiency	N.A.
Luminaire Efficacy Rating (LER)	149
Total Luminaire Watts	42.3
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	28674	27427	27059
55	27952	26442	25904
65	26053	24002	23259
75	21966	19411	18616
85	11522	10967	9054

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CANDELA TABULATION

	0.0	22.5	45.0	67.5	90.0
0	2143.362	2143.362	2143.362	2143.362	2143.362
5	2159.024	2145.600	2136.650	2130.684	2128.447
10	2135.159	2121.735	2111.294	2105.328	2102.345
15	2099.361	2082.209	2071.768	2062.818	2065.801
20	2042.682	2028.513	2016.580	2007.631	2012.851
25	1971.088	1959.155	1942.003	1934.545	1931.562
30	1890.544	1873.391	1854.001	1848.035	1832.373
35	1787.627	1773.457	1751.084	1746.609	1730.202
40	1668.303	1638.471	1626.539	1618.335	1613.861
45	1528.842	1492.299	1484.841	1478.129	1472.909
50	1374.466	1340.907	1334.940	1331.957	1314.804
55	1209.650	1174.598	1169.378	1169.378	1154.462
60	1030.663	999.341	984.425	991.137	968.764
65	831.541	808.422	791.269	805.439	775.608
70	630.181	601.096	592.147	607.062	583.943
75	430.313	401.974	401.974	401.974	393.024
80	228.953	224.479	224.479	220.750	211.801
85	76.815	80.544	85.764	82.035	74.578
90	6.712	6.712	10.441	6.712	6.712
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	789.33	N.A.	12.50
0-30	1687.04	N.A.	26.70
0-40	2784.99	N.A.	44.10
0-60	4981.18	N.A.	78.90
0-80	6204.01	N.A.	98.30
0-90	6310.76	N.A.	100.00
10-90	6107.41	N.A.	96.70
20-40	1995.66	N.A.	31.60
20-50	3144.64	N.A.	49.80
40-70	2988.26	N.A.	47.30
60-80	1222.84	N.A.	19.40
70-80	430.76	N.A.	6.80
80-90	106.75	N.A.	1.70
90-110	2.09	N.A.	0.00
90-120	2.09	N.A.	0.00
90-130	2.09	N.A.	0.00
90-150	2.09	N.A.	0.00
90-180	2.09	N.A.	0.00
110-180	0.00	N.A.	0.00
0-180	6312.86	N.A.	100.00

Total Luminaire Efficiency = N.A.%

ZONAL LUMEN SUMMARY

Zone	Lumens
0-10	203.36
10-20	585.98
20-30	897.70
30-40	1097.96
40-50	1148.99
50-60	1047.2
60-70	792.08
70-80	430.76
80-90	106.75
90-100	2.09
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	23.7	25.3	24.0	25.6	25.9	23.6	25.3	24.0	25.6	25.9
	3H	25.4	26.9	25.8	27.2	27.6	25.4	26.9	25.7	27.2	27.5
	4H	26.0	27.4	26.4	27.8	28.2	26.0	27.4	26.4	27.7	28.1
	6H	26.4	27.7	26.8	28.1	28.5	26.3	27.6	26.7	28.0	28.4
	8H	26.5	27.8	27.0	28.2	28.6	26.4	27.7	26.9	28.1	28.5
	12H	26.6	27.8	27.0	28.2	28.6	26.5	27.7	26.9	28.1	28.5
4H	2H	24.3	25.7	24.7	26.0	26.4	24.2	25.6	24.6	26.0	26.4
	3H	26.2	27.4	26.6	27.8	28.2	26.2	27.4	26.6	27.8	28.2
	4H	26.9	28.0	27.4	28.4	28.9	26.9	28.0	27.3	28.4	28.8
	6H	27.4	28.4	27.9	28.8	29.3	27.4	28.3	27.9	28.8	29.2
	8H	27.6	28.4	28.0	28.9	29.4	27.5	28.4	28.0	28.9	29.3
	12H	27.6	28.4	28.1	28.9	29.4	27.6	28.4	28.1	28.9	29.3
8H	4H	27.2	28.1	27.7	28.5	29.0	27.2	28.0	27.6	28.5	28.9
	6H	27.8	28.5	28.3	29.0	29.5	27.8	28.5	28.3	29.0	29.5
	8H	28.0	28.6	28.5	29.1	29.6	28.0	28.6	28.5	29.1	29.6
	12H	28.1	28.7	28.6	29.2	29.7	28.1	28.7	28.6	29.2	29.7
12H	4H	27.2	28.0	27.7	28.5	29.0	27.2	28.0	27.7	28.4	28.9
	6H	27.9	28.5	28.4	29.0	29.5	27.8	28.5	28.3	28.9	29.5
	8H	28.1	28.6	28.6	29.1	29.7	28.0	28.6	28.5	29.1	29.7

Maximum UGR = 29.7

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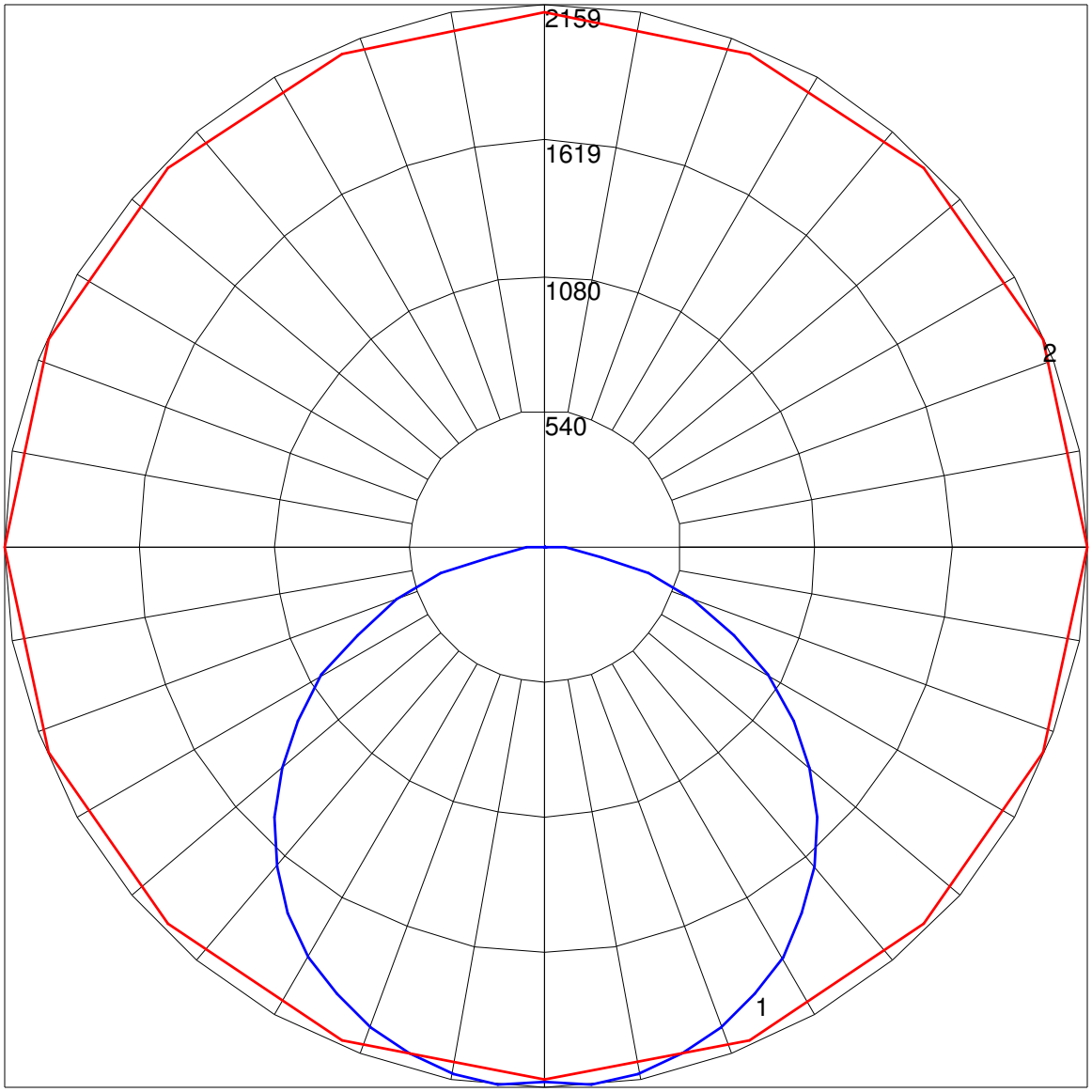
POLAR GRAPH



Maximum Candela = 2159.024 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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