H.E. WILLIAMS, INC.

IES INDOOR REPORT
PHOTOMETRIC FILENAME : 76R-8-L144-835-(L107)-SD50-UNV_.IES

DESCRIPTION INFORMATION (From Photometric File)

IESNA:LM-63-2002
[TEST] GEN FROM BALLABS TEST NO. 20990.0
[TESTLAB] BUILDING ACOUSTICS & LIGHTING LABORATORIES, INC
[ISSUEDATE] 24-APRIL-2020
[MANUFAC] H.E. WILLIAMS, INC - CARTHAGE, MO
[LUMINAIRE] 8' SURFACE STRIP LED LUMINAIRE
[MORE] WHITE REFLECTOR w/RADIAL RIBBED FROST ACRYLIC LENS
[LUMCAT] 76R-8-L144-835-(L107)-SD50-UNV
[LAMPCAT] HLM 80 CRI 3500K CCT

CHARACTERISTICS

Lumens Per Lamp	N.A. (absolute)
Total Lamp Lumens	N.A. (absolute)
Luminaire Lumens	10547
Total Luminaire Efficiency	N.A.
Luminaire Efficacy Rating (LER)	143
Total Luminaire Watts	74
Ballast Factor	1.00
CIE Type	Direct
Spacing Criterion (0-180)	1.20
Spacing Criterion (90-270)	1.28
Spacing Criterion (Diagonal)	1.36
Basic Luminous Shape	Rectangular w/Sides
Luminous Length (0-180)	8.00 ft
Luminous Width (90-270)	0.38 ft
Luminous Height	0.15 ft

LUMINANCE DATA (cd/sq.m)

Angle In Degrees	Average 0-Deg	Average 45-Deg	Average 90-Deg
45	9345	8497	8632
55	8027	7386	7675
65	6535	6143	6646
75	5198	5240	5742
85	2691	4776	5346

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CANDELA TABULATION

	0.0	22.5	45.0	67.5	90.0
0	3405.837	3405.837	3405.837	3405.837	3405.837
5	3434.393	3389.363	3380.577	3380.577	3370.692
10	3371.790	3333.349	3335.546	3344.333	3333.349
15	3258.665	3229.011	3253.173	3279.533	3276.238
20	3112.591	3100.509	3140.048	3188.373	3190.570
25	2910.503	2923.682	2995.072	3058.774	3075.248
30	2697.432	2720.496	2822.639	2905.011	2936.862
35	2431.643	2485.460	2620.551	2728.185	2765.527
40	2177.935	2236.145	2398.694	2549.161	2584.307
45	1877.000	1961.569	2159.264	2321.812	2365.745
50	1595.834	1700.173	1916.539	2095.562	2143.887
55	1317.964	1420.106	1668.322	1853.935	1911.047
60	1054.371	1169.693	1424.499	1595.834	1660.634
65	800.663	922.574	1171.889	1390.452	1437.679
70	590.887	698.521	959.917	1171.889	1227.903
75	400.881	520.596	785.287	975.293	1017.029
80	222.956	369.030	628.229	800.663	859.971
85	79.078	249.315	498.630	658.982	708.405
90	0.000	164.745	388.799	545.857	577.707
95	0.000	105.437	306.427	447.009	495.335
100	0.000	70.291	235.037	370.128	408.569
105	0.000	47.227	185.613	298.738	341.572
110	0.000	21.966	147.173	244.922	285.559
115	0.000	14.278	117.518	206.481	235.037
120	0.000	0.000	93.356	169.139	198.793
125	0.000	0.000	72.488	135.091	158.156
130	0.000	0.000	57.112	106.535	126.305
135	0.000	0.000	46.129	82.373	101.044
140	0.000	0.000	24.163	62.603	76.881
145	0.000	0.000	8.786	48.325	56.013
150	0.000	0.000	0.000	41.736	47.227
155	0.000	0.000	0.000	39.539	41.736
160	0.000	0.000	0.000	23.064	38.441
165	0.000	0.000	0.000	7.688	13.180
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	1241.05	N.A.	11.80
0-30	2619.91	N.A.	24.80
0-40	4252.83	N.A.	40.30
0-60	7375.71	N.A.	69.90
0-80	9317.13	N.A.	88.30
0-90	9816.65	N.A.	93.10
10-90	9494.69	N.A.	90.00
20-40	3011.78	N.A.	28.60
20-50	4666.61	N.A.	44.20
40-70	4268.02	N.A.	40.50
60-80	1941.42	N.A.	18.40
70-80	796.28	N.A.	7.60
80-90	499.53	N.A.	4.70
90-110	493.82	N.A.	4.70
90-120	607.62	N.A.	5.80
90-130	673.00	N.A.	6.40
90-150	721.90	N.A.	6.80
90-180	729.95	N.A.	6.90
110-180	236.13	N.A.	2.20
0-180	10546.6	N.A.	100.00

Total Luminaire Efficiency = N.A.%

ZONAL LUMEN SUMMARY

Zone	Lumens
0-10	321.96
10-20	919.08
20-30	1378.86
30-40	1632.92
40-50	1654.83
50-60	1468.05
60-70	1145.15
70-80	796.28
80-90	499.53
90-100	305.70
100-110	188.12
110-120	113.80
120-130	65.39
130-140	34.58
140-150	14.31
150-160	6.67
160-170	1.38
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	117	117	117	117	114	114	114	114	107	107	107	101	101	101	96	96	96	93
1	106	101	96	92	102	98	93	90	92	89	85	87	84	82	82	80	78	75
2	96	87	80	74	93	85	78	73	80	75	70	76	71	67	72	68	65	62
3	88	77	68	61	84	74	67	60	70	64	58	67	61	57	63	59	55	52
4	80	68	59	52	77	66	58	51	63	55	50	59	53	48	57	51	47	45
5	74	61	51	45	71	59	51	44	56	49	43	53	47	42	51	45	41	39
6	68	55	46	39	66	53	45	39	51	43	38	48	42	37	46	40	36	34
7	63	49	41	34	61	48	40	34	46	39	33	44	38	33	42	36	32	30
8	59	45	37	31	57	44	36	30	42	35	30	40	34	29	39	33	29	27
9	55	41	33	28	53	41	33	27	39	32	27	37	31	26	36	30	26	24
10	51	38	30	25	50	37	30	25	36	29	24	35	28	24	33	28	24	22

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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	16.7	18.2	17.1	18.6	19.1	19.7	21.2	20.2	21.7	22.2
	3H	17.9	19.2	18.4	19.7	20.2	22.0	23.4	22.5	23.8	24.4
	4H	18.2	19.6	18.8	20.0	20.6	23.1	24.4	23.6	24.9	25.4
	6H	18.5	19.7	19.0	20.2	20.7	24.2	25.4	24.7	25.9	26.5
	8H	18.5	19.7	19.1	20.2	20.8	24.8	26.0	25.3	26.5	27.0
	12H	18.5	19.6	19.1	20.2	20.7	25.5	26.6	26.0	27.1	27.7
4H	2H	17.6	18.9	18.1	19.4	19.9	20.0	21.3	20.5	21.8	22.4
	3H	19.1	20.2	19.6	20.7	21.3	22.6	23.7	23.1	24.2	24.7
	4H	19.6	20.6	20.1	21.1	21.7	23.8	24.8	24.3	25.4	25.9
	6H	19.9	20.8	20.5	21.3	22.0	25.1	26.0	25.7	26.6	27.2
	8H	20.0	20.8	20.5	21.4	22.0	25.8	26.7	26.4	27.2	27.8
	12H	20.0	20.8	20.6	21.4	22.0	26.6	27.4	27.2	28.0	28.6
8H	4H	20.3	21.2	20.9	21.7	22.3	24.0	24.8	24.5	25.4	26.0
	6H	20.8	21.5	21.4	22.1	22.8	25.5	26.2	26.1	26.8	27.4
	8H	21.0	21.6	21.6	22.2	22.9	26.3	26.9	26.9	27.5	28.2
	12H	21.1	21.7	21.7	22.3	23.0	27.3	27.8	27.9	28.4	29.1
12H	4H	20.5	21.3	21.1	21.9	22.5	24.0	24.7	24.5	25.3	25.9
	6H	21.2	21.8	21.8	22.4	23.1	25.5	26.1	26.1	26.7	27.4
	8H	21.4	22.0	22.0	22.6	23.3	26.4	26.9	27.0	27.6	28.3

Maximum UGR = 29.1

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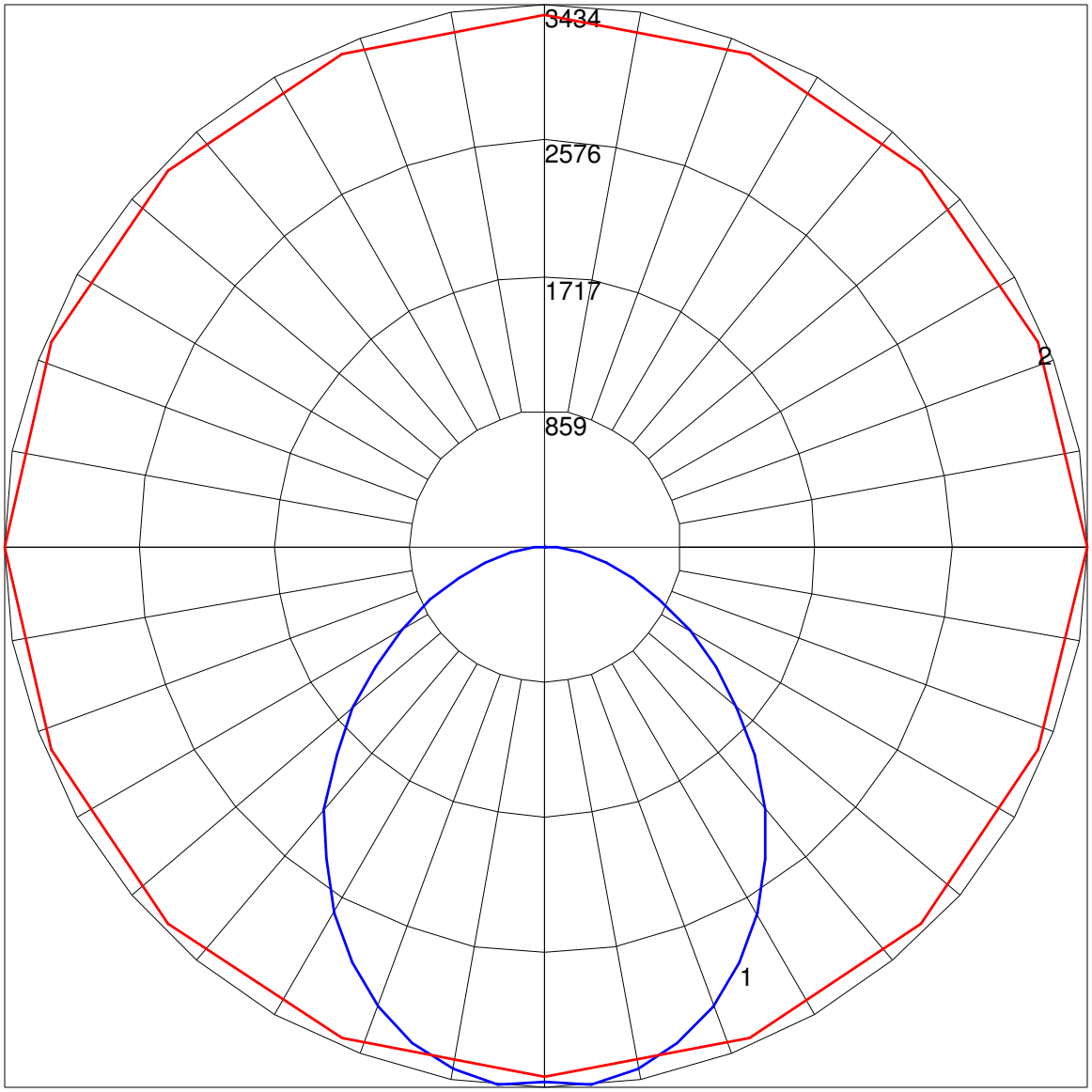
POLAR GRAPH



Maximum Candela = 3434.393 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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