IES INDOOR REPORT
PHOTOMETRIC FILENAME : 76R-8-L144-840-(L130)-DIM-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] 01-30-2023
[MANUFAC] WILLIAMS INDOOR
[OTHER] H.E. WILLIAMS, INC - CARTHAGE, MO
[LUMINAIRE] 96 INCH LENSED LED LUMINAIRE
[MORE] WHITE REFLECTOR w/RADIAL RIBBED FROST ACRYLIC LENS
[MORE] (2) 0-10V DIMMING DRIVERS
[LUMCAT] 76R-8-L144-840-(L130)-DIM-UNV
[LAMPCAT] HLMX 80 CRI 4000K CCT

CHARACTERISTICS

Lumens Per Lamp	N.A. (absolute)
Total Lamp Lumens	N.A. (absolute)
Luminaire Lumens	13043
Total Luminaire Efficiency	N.A.
Luminaire Efficacy Rating (LER)	153
Total Luminaire Watts	85.4
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	11556	10508	10675
55	9927	9134	9492
65	8082	7597	8218
75	6428	6480	7101
85	3328	5906	6611

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CANDELA TABULATION

	0.0	22.5	45.0	67.5	90.0
0	4211.843	4211.843	4211.843	4211.843	4211.843
5	4247.157	4191.470	4180.604	4180.604	4168.380
10	4169.739	4122.201	4124.917	4135.783	4122.201
15	4029.842	3993.170	4023.051	4055.648	4051.573
20	3849.198	3834.258	3883.154	3942.916	3945.632
25	3599.286	3615.584	3703.869	3782.646	3803.019
30	3335.791	3364.314	3490.628	3592.495	3631.883
35	3007.101	3073.654	3240.715	3373.821	3420.001
40	2693.352	2765.338	2966.355	3152.431	3195.894
45	2321.200	2425.783	2670.263	2871.279	2925.608
50	1973.495	2102.526	2370.096	2591.486	2651.247
55	1629.865	1756.180	2063.138	2292.677	2363.305
60	1303.892	1446.505	1761.613	1973.495	2053.630
65	990.143	1140.906	1449.222	1719.508	1777.911
70	730.723	863.829	1187.085	1449.222	1518.491
75	495.751	643.797	971.128	1206.100	1257.713
80	275.719	456.362	776.902	990.143	1063.487
85	97.792	308.316	616.632	814.933	876.053
90	0.000	203.733	480.810	675.036	714.424
95	0.000	130.389	378.944	552.796	612.558
100	0.000	86.926	290.659	457.720	505.258
105	0.000	58.404	229.539	369.436	422.407
110	0.000	27.164	182.002	302.883	353.137
115	0.000	17.657	145.330	255.346	290.659
120	0.000	0.000	115.449	209.166	245.838
125	0.000	0.000	89.643	167.061	195.584
130	0.000	0.000	70.627	131.747	156.195
135	0.000	0.000	57.045	101.867	124.956
140	0.000	0.000	29.881	77.419	95.075
145	0.000	0.000	10.866	59.762	69.269
150	0.000	0.000	0.000	51.612	58.404
155	0.000	0.000	0.000	48.896	51.612
160	0.000	0.000	0.000	28.523	47.538
165	0.000	0.000	0.000	9.508	16.299
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	1534.75	N.A.	11.80
0-30	3239.92	N.A.	24.80
0-40	5259.28	N.A.	40.30
0-60	9121.2	N.A.	69.90
0-80	11522.07	N.A.	88.30
0-90	12139.81	N.A.	93.10
10-90	11741.65	N.A.	90.00
20-40	3724.53	N.A.	28.60
20-50	5770.99	N.A.	44.20
40-70	5278.07	N.A.	40.50
60-80	2400.87	N.A.	18.40
70-80	984.72	N.A.	7.60
80-90	617.74	N.A.	4.70
90-110	610.68	N.A.	4.70
90-120	751.41	N.A.	5.80
90-130	832.27	N.A.	6.40
90-150	892.74	N.A.	6.80
90-180	902.69	N.A.	6.90
110-180	292.01	N.A.	2.20
0-180	13042.5	N.A.	100.00

Total Luminaire Efficiency = N.A.%

ZONAL LUMEN SUMMARY

Zone	Lumens
0-10	398.16
10-20	1136.59
20-30	1705.17
30-40	2019.36
40-50	2046.45
50-60	1815.47
60-70	1416.15
70-80	984.72
80-90	617.74
90-100	378.05
100-110	232.63
110-120	140.73
120-130	80.86
130-140	42.77
140-150	17.70
150-160	8.25
160-170	1.70
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	17.4	18.9	17.8	19.3	19.8	20.4	21.9	20.9	22.4	22.9
	3H	18.6	19.9	19.1	20.4	20.9	22.7	24.1	23.2	24.5	25.1
	4H	18.9	20.3	19.5	20.7	21.3	23.8	25.1	24.3	25.6	26.1
	6H	19.2	20.4	19.7	20.9	21.4	24.9	26.1	25.4	26.6	27.2
	8H	19.2	20.4	19.8	20.9	21.5	25.5	26.7	26.0	27.2	27.7
	12H	19.2	20.3	19.8	20.9	21.4	26.2	27.3	26.7	27.8	28.4
4H	2H	18.3	19.6	18.8	20.1	20.6	20.7	22.0	21.2	22.5	23.1
	3H	19.8	20.9	20.3	21.4	22.0	23.3	24.4	23.8	24.9	25.4
	4H	20.3	21.3	20.8	21.8	22.4	24.5	25.5	25.0	26.1	26.6
	6H	20.6	21.5	21.2	22.0	22.7	25.8	26.7	26.4	27.3	27.9
	8H	20.7	21.5	21.2	22.1	22.7	26.5	27.4	27.1	27.9	28.5
	12H	20.7	21.5	21.3	22.1	22.7	27.3	28.1	27.9	28.7	29.3
8H	4H	21.0	21.9	21.6	22.4	23.0	24.7	25.5	25.2	26.1	26.7
	6H	21.5	22.2	22.1	22.8	23.5	26.2	26.9	26.8	27.5	28.1
	8H	21.7	22.3	22.3	22.9	23.6	27.0	27.6	27.6	28.2	28.9
	12H	21.8	22.4	22.4	23.0	23.7	28.0	28.5	28.6	29.1	29.8
12H	4H	21.2	22.0	21.8	22.6	23.2	24.7	25.4	25.2	26.0	26.6
	6H	21.9	22.5	22.5	23.1	23.8	26.2	26.8	26.8	27.4	28.1
	8H	22.1	22.7	22.7	23.3	24.0	27.1	27.6	27.7	28.3	29.0

Maximum UGR = 29.8

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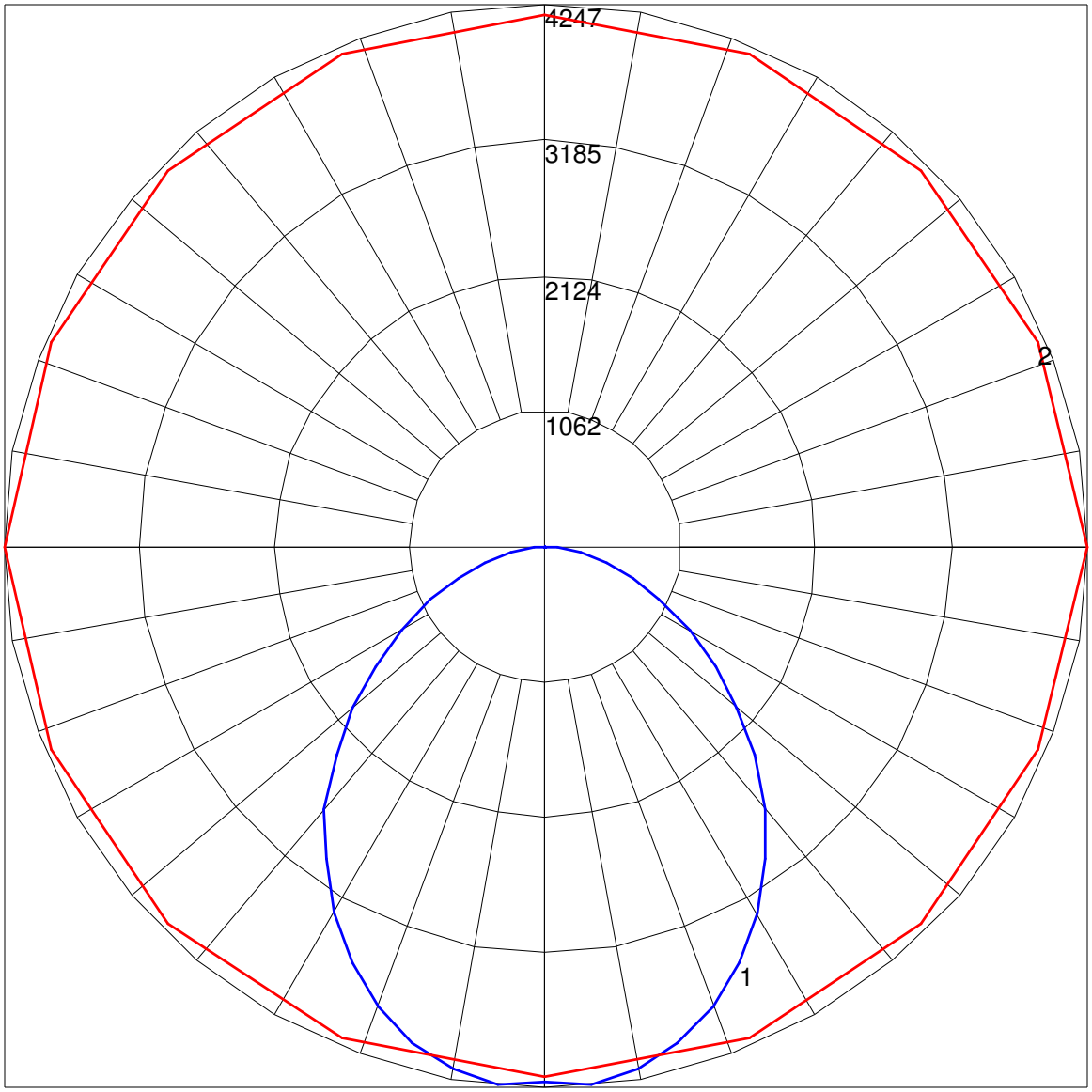
POLAR GRAPH



Maximum Candela = 4247.157 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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