IES INDOOR REPORT
PHOTOMETRIC FILENAME : 76R-8-L144-940-(L122)-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] 05/15/2023
[MANUFAC] WILLIAMS INDOOR
[OTHER] H.E. WILLIAMS, INC - CARTHAGE, MO
[LUMINAIRE] 96 INCH LENSED LED SURFACE LUMINAIRE
[MORE] WHITE REFLECTOR w/RADIAL RIBBED FROST ACRYLIC LENS
[LUMCAT] 76R-8-L144-940-(L122)-DIM-UNV
[LAMPCAT] HLMX 90 CRI 4000K CCT

CHARACTERISTICS

Lumens Per Lamp	N.A. (absolute)
Total Lamp Lumens	N.A. (absolute)
Luminaire Lumens	10325
Total Luminaire Efficiency	N.A.
Luminaire Efficacy Rating (LER)	124
Total Luminaire Watts	83.18
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	9148	8318	8450
55	7859	7231	7514
65	6398	6014	6506
75	5089	5130	5621
85	2634	4675	5233

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CANDELA TABULATION

	0.0	22.5	45.0	67.5	90.0
0	3334.149	3334.149	3334.149	3334.149	3334.149
5	3362.103	3318.021	3309.419	3309.419	3299.743
10	3300.818	3263.186	3265.337	3273.938	3263.186
15	3190.074	3161.044	3184.698	3210.502	3207.277
20	3047.074	3035.247	3073.954	3121.262	3123.412
25	2849.240	2862.142	2932.029	2994.390	3010.518
30	2640.654	2663.233	2763.225	2843.864	2875.045
35	2380.459	2433.144	2565.391	2670.759	2707.316
40	2132.092	2189.077	2348.204	2495.504	2529.910
45	1837.491	1920.280	2113.814	2272.941	2315.948
50	1562.244	1664.386	1876.198	2051.453	2098.761
55	1290.222	1390.214	1633.206	1814.912	1870.822
60	1032.178	1145.072	1394.515	1562.244	1625.680
65	783.810	903.155	1147.222	1361.184	1407.417
70	578.449	683.818	939.712	1147.222	1202.057
75	392.443	509.638	768.757	954.764	995.621
80	218.263	361.262	615.006	783.810	841.870
85	77.413	244.067	488.134	645.111	693.494
90	0.000	161.278	380.615	534.367	565.547
95	0.000	103.218	299.977	437.600	484.908
100	0.000	68.812	230.090	362.337	399.969
105	0.000	46.233	181.706	292.450	334.383
110	0.000	21.504	144.075	239.766	279.548
115	0.000	13.977	115.045	202.135	230.090
120	0.000	0.000	91.391	165.578	194.608
125	0.000	0.000	70.962	132.248	154.827
130	0.000	0.000	55.910	104.293	123.646
135	0.000	0.000	45.158	80.639	98.917
140	0.000	0.000	23.654	61.286	75.263
145	0.000	0.000	8.601	47.308	54.834
150	0.000	0.000	0.000	40.857	46.233
155	0.000	0.000	0.000	38.707	40.857
160	0.000	0.000	0.000	22.579	37.631
165	0.000	0.000	0.000	7.526	12.902
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	1214.92	N.A.	11.80
0-30	2564.76	N.A.	24.80
0-40	4163.31	N.A.	40.30
0-60	7220.46	N.A.	69.90
0-80	9121.01	N.A.	88.30
0-90	9610.02	N.A.	93.10
10-90	9294.84	N.A.	90.00
20-40	2948.39	N.A.	28.60
20-50	4568.39	N.A.	44.20
40-70	4178.19	N.A.	40.50
60-80	1900.56	N.A.	18.40
70-80	779.52	N.A.	7.60
80-90	489.01	N.A.	4.70
90-110	483.43	N.A.	4.70
90-120	594.83	N.A.	5.80
90-130	658.84	N.A.	6.40
90-150	706.70	N.A.	6.80
90-180	714.58	N.A.	6.90
110-180	231.16	N.A.	2.20
0-180	10324.61	N.A.	100.00

Total Luminaire Efficiency = N.A.%

ZONAL LUMEN SUMMARY

Zone	Lumens
0-10	315.19
10-20	899.74
20-30	1349.84
30-40	1598.55
40-50	1620.00
50-60	1437.15
60-70	1121.04
70-80	779.52
80-90	489.01
90-100	299.27
100-110	184.16
110-120	111.40
120-130	64.01
130-140	33.86
140-150	14.01
150-160	6.53
160-170	1.35
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	16.6	18.1	17.0	18.5	19.0	19.6	21.1	20.1	21.6	22.1
	3H	17.8	19.1	18.3	19.6	20.1	21.9	23.3	22.4	23.7	24.3
	4H	18.1	19.5	18.7	19.9	20.5	23.0	24.3	23.5	24.8	25.3
	6H	18.4	19.6	18.9	20.1	20.6	24.1	25.3	24.6	25.8	26.4
	8H	18.4	19.6	19.0	20.1	20.7	24.7	25.9	25.2	26.4	26.9
	12H	18.4	19.5	19.0	20.1	20.6	25.4	26.5	25.9	27.0	27.6
4H	2H	17.5	18.8	18.0	19.3	19.8	19.9	21.2	20.4	21.7	22.3
	3H	19.0	20.1	19.5	20.6	21.2	22.5	23.6	23.0	24.1	24.6
	4H	19.5	20.5	20.0	21.0	21.6	23.7	24.7	24.2	25.3	25.8
	6H	19.8	20.7	20.4	21.2	21.9	25.0	25.9	25.6	26.5	27.1
	8H	19.9	20.7	20.4	21.3	21.9	25.7	26.6	26.3	27.1	27.7
	12H	19.9	20.7	20.5	21.3	21.9	26.5	27.3	27.1	27.9	28.5
8H	4H	20.2	21.1	20.8	21.6	22.2	23.9	24.7	24.4	25.3	25.9
	6H	20.7	21.4	21.3	22.0	22.7	25.4	26.1	26.0	26.7	27.3
	8H	20.9	21.5	21.5	22.1	22.8	26.2	26.8	26.8	27.4	28.1
	12H	21.0	21.6	21.6	22.2	22.9	27.2	27.7	27.8	28.3	29.0
12H	4H	20.4	21.2	21.0	21.8	22.4	23.9	24.6	24.4	25.2	25.8
	6H	21.1	21.7	21.7	22.3	23.0	25.4	26.0	26.0	26.6	27.3
	8H	21.3	21.9	21.9	22.5	23.2	26.3	26.8	26.9	27.5	28.2

Maximum UGR = 29.0

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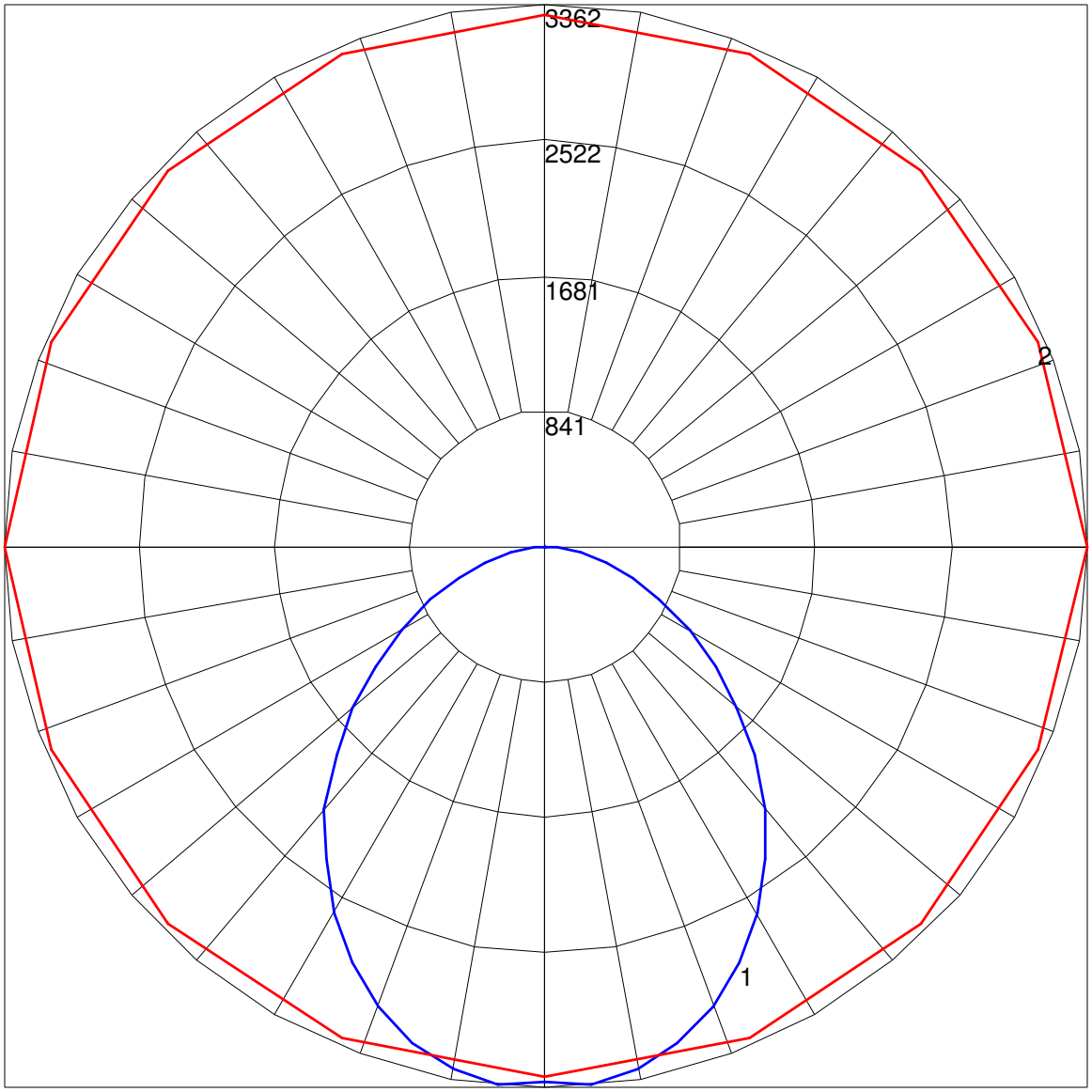
POLAR GRAPH



Maximum Candela = 3362.103 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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