IES INDOOR REPORT
PHOTOMETRIC FILENAME : 76R-8-L60-840-DRV-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] 10-FEB-2020
[MANUFAC] H.E. WILLIAMS, INC - CARTHAGE, MO
[LUMINAIRE] 72 LED 23.75", 68 LED 22.375"ARRAYS 8' 76R SURFACE LUMINAIRE
[MORE] WHITE REFLECTOR w/RADIAL RIBBED FROST ACRYLIC LENS
[LUMCAT] 76R-8-L60/840-DRV-UNV

CHARACTERISTICS

Lumens Per Lamp	N.A. (absolute)
Total Lamp Lumens	N.A. (absolute)
Luminaire Lumens	6134
Total Luminaire Efficiency	N.A.
Luminaire Efficacy Rating (LER)	154
Total Luminaire Watts	39.8
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)	7.98 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	5449	4955	5034
55	4681	4307	4476
65	3811	3582	3875
75	3031	3055	3348
85	1568	2785	3117

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CANDELA TABULATION

	0.0	22.5	45.0	67.5	90.0
0	1980.791	1980.791	1980.791	1980.791	1980.791
5	1997.399	1971.209	1966.099	1966.099	1960.351
10	1960.989	1938.633	1939.910	1945.020	1938.633
15	1895.197	1877.951	1892.003	1907.334	1905.417
20	1810.242	1803.216	1826.211	1854.317	1855.594
25	1692.711	1700.376	1741.895	1778.943	1788.524
30	1568.791	1582.205	1641.610	1689.517	1708.041
35	1414.212	1445.511	1524.078	1586.677	1608.394
40	1266.659	1300.513	1395.049	1482.559	1502.999
45	1091.639	1140.823	1255.800	1350.336	1375.886
50	928.116	988.798	1114.634	1218.752	1246.857
55	766.510	825.915	970.274	1078.225	1111.440
60	613.208	680.278	828.470	928.116	965.803
65	465.655	536.557	681.556	808.669	836.135
70	343.652	406.251	558.275	681.556	714.132
75	233.147	302.772	456.712	567.218	591.491
80	129.668	214.623	365.370	465.655	500.148
85	45.991	144.998	289.996	383.255	411.999
90	0.000	95.814	226.121	317.463	335.987
95	0.000	61.321	178.214	259.975	288.080
100	0.000	40.881	136.694	215.262	237.618
105	0.000	27.467	107.950	173.742	198.654
110	0.000	12.775	85.594	142.443	166.077
115	0.000	8.304	68.347	120.087	136.694
120	0.000	0.000	54.294	98.369	115.615
125	0.000	0.000	42.158	78.567	91.981
130	0.000	0.000	33.215	61.960	73.457
135	0.000	0.000	26.828	47.907	58.766
140	0.000	0.000	14.053	36.409	44.713
145	0.000	0.000	5.110	28.105	32.577
150	0.000	0.000	0.000	24.273	27.467
155	0.000	0.000	0.000	22.995	24.273
160	0.000	0.000	0.000	13.414	22.357
165	0.000	0.000	0.000	4.471	7.665
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	721.78	N.A.	11.80
0-30	1523.7	N.A.	24.80
0-40	2473.39	N.A.	40.30
0-60	4289.61	N.A.	69.90
0-80	5418.72	N.A.	88.30
0-90	5709.24	N.A.	93.10
10-90	5521.99	N.A.	90.00
20-40	1751.61	N.A.	28.60
20-50	2714.04	N.A.	44.20
40-70	2482.23	N.A.	40.50
60-80	1129.11	N.A.	18.40
70-80	463.10	N.A.	7.60
80-90	290.52	N.A.	4.70
90-110	287.20	N.A.	4.70
90-120	353.38	N.A.	5.80
90-130	391.41	N.A.	6.40
90-150	419.85	N.A.	6.80
90-180	424.53	N.A.	6.90
110-180	137.33	N.A.	2.20
0-180	6133.77	N.A.	100.00

Total Luminaire Efficiency = N.A.%

ZONAL LUMEN SUMMARY

Zone	Lumens
0-10	187.25
10-20	534.53
20-30	801.93
30-40	949.69
40-50	962.43
50-60	853.80
60-70	666.00
70-80	463.10
80-90	290.52
90-100	177.79
100-110	109.41
110-120	66.18
120-130	38.03
130-140	20.11
140-150	8.32
150-160	3.88
160-170	0.80
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	235	235	235	235	228	228	228	228	215	215	215	202	202	202	191	191	191	186
1	212	201	192	183	205	195	187	179	184	177	171	174	168	163	165	160	156	151
2	192	175	160	148	185	170	157	145	160	149	140	152	143	135	144	136	130	124
3	175	153	136	123	169	149	133	121	141	128	117	134	122	113	127	117	110	104
4	160	136	118	104	154	132	115	103	125	111	100	119	107	97	113	103	94	89
5	147	121	103	90	142	118	101	88	112	97	86	107	94	84	102	91	82	77
6	136	109	91	78	131	106	90	77	101	87	75	97	84	74	92	81	72	68
7	126	99	81	69	122	97	80	68	92	78	67	88	75	65	84	73	64	60
8	117	90	73	61	114	88	72	61	84	70	60	81	68	58	78	66	57	53
9	110	83	66	55	106	81	65	55	78	64	54	75	62	53	72	60	52	48
10	103	76	61	50	100	75	60	50	72	58	49	69	57	48	67	55	47	44

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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	15.6	17.1	16.1	17.6	18.1	17.8	19.3	18.3	19.7	20.2
	3H	17.1	18.4	17.6	18.9	19.4	20.0	21.4	20.5	21.9	22.4
	4H	17.6	18.9	18.1	19.4	19.9	21.1	22.4	21.6	22.9	23.4
	6H	17.9	19.2	18.5	19.7	20.2	22.2	23.4	22.7	23.9	24.4
	8H	18.1	19.2	18.6	19.7	20.3	22.8	23.9	23.3	24.4	25.0
	12H	18.1	19.2	18.6	19.7	20.3	23.4	24.5	23.9	25.0	25.6
4H	2H	16.3	17.6	16.8	18.1	18.7	18.1	19.4	18.6	19.9	20.4
	3H	18.0	19.1	18.5	19.6	20.2	20.6	21.7	21.1	22.2	22.8
	4H	18.6	19.7	19.2	20.2	20.8	21.8	22.8	22.3	23.4	24.0
	6H	19.1	20.0	19.7	20.6	21.2	23.1	24.0	23.7	24.6	25.2
	8H	19.3	20.1	19.8	20.7	21.3	23.8	24.6	24.3	25.2	25.8
	12H	19.4	20.1	20.0	20.7	21.4	24.5	25.3	25.1	25.9	26.5
8H	4H	19.2	20.0	19.7	20.6	21.2	22.0	22.8	22.5	23.4	24.0
	6H	19.8	20.5	20.4	21.1	21.8	23.4	24.1	24.0	24.7	25.4
	8H	20.1	20.7	20.7	21.3	22.0	24.2	24.9	24.8	25.5	26.1
	12H	20.3	20.8	20.9	21.4	22.2	25.2	25.7	25.8	26.3	27.0
12H	4H	19.3	20.0	19.9	20.6	21.3	22.0	22.7	22.6	23.3	24.0
	6H	20.0	20.7	20.7	21.3	22.0	23.5	24.1	24.1	24.7	25.4
	8H	20.4	20.9	21.0	21.6	22.3	24.3	24.9	24.9	25.5	26.2

Maximum UGR = 27.0

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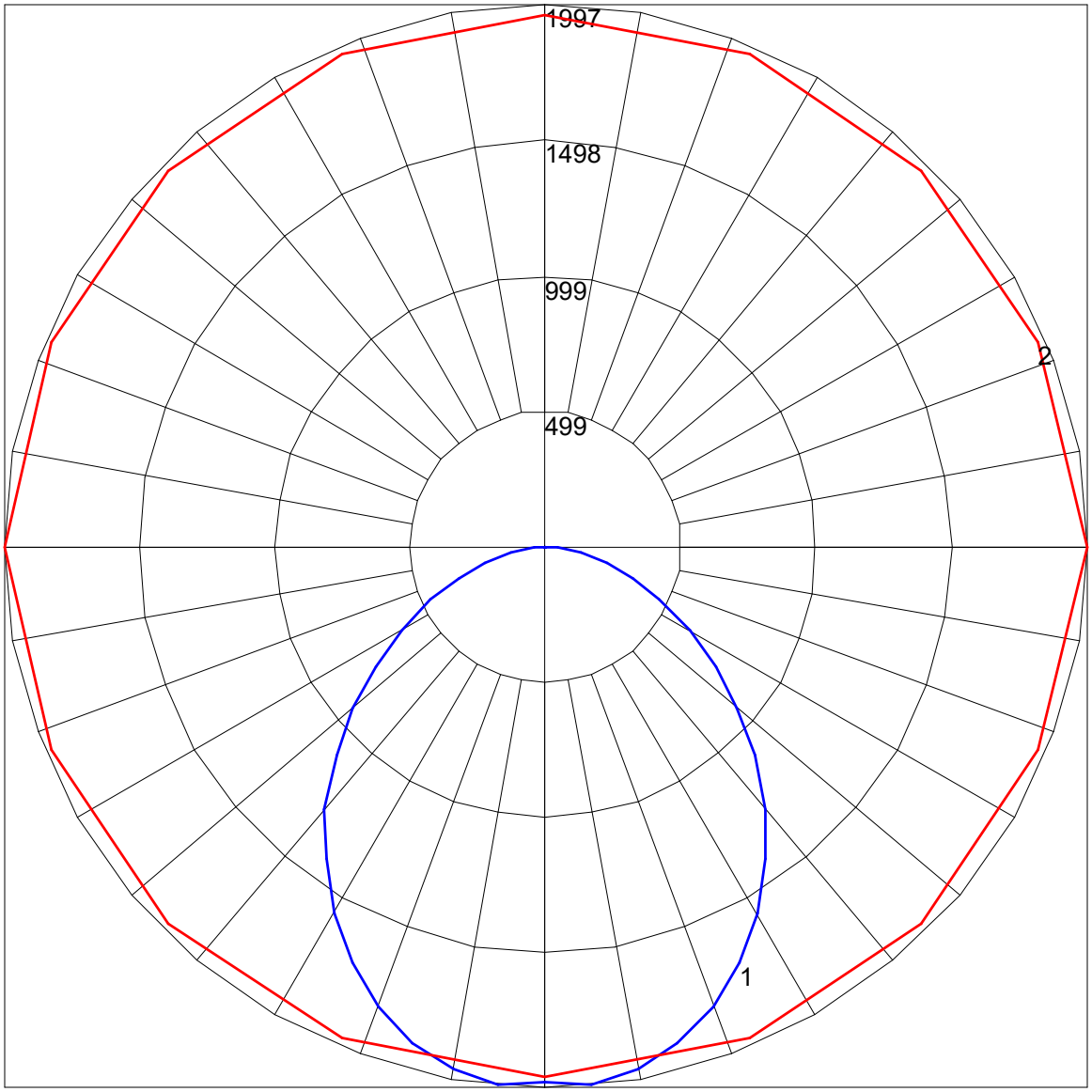
POLAR GRAPH



Maximum Candela = 1997.399 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.)