IES INDOOR REPORT
PHOTOMETRIC FILENAME : SL-2-L10-830-RD-DIM-UNV_.IES

DESCRIPTION INFORMATION (From Photometric File)

IESNA:LM-63-2002
[TEST] BALLABS TEST NO. 21002.0
[TESTLAB] BUILDING ACOUSTICS & LIGHTING LABORATORIES, INC
[ISSUEDATE] 2023-04-25
[MANUFAC] WILLIAMS INDOOR
[OTHER] H.E. WILLIAMS, INC - CARTHAGE, MO
[LUMINAIRE] SL LED SLIMLINE ARCHITECTURAL LUMINAIRE
[MORE] 1.375 WIDE ALUM CHANNEL w/1"WIDE WHITE RADIAL ACRYLIC LENS
[LUMCAT] SL-2-L10-830-RD-DIM-UNV
[LAMPCAT] HLM 80 CRI 3500K CCT
[_SEARCH_SOURCETYPE] LED
[_SEARCH_APPLICATION] INDOOR, COVE, CLASSROOM
[_SEARCH_MOUNTING] SURFACE, WALL

CHARACTERISTICS

Lumens Per Lamp	N.A. (absolute)
Total Lamp Lumens	N.A. (absolute)
Luminaire Lumens	1921
Total Luminaire Efficiency	N.A.
Luminaire Efficacy Rating (LER)	105
Total Luminaire Watts	18.3
Ballast Factor	1.00
CIE Type	Direct
Spacing Criterion (0-180)	1.26
Spacing Criterion (90-270)	1.28
Spacing Criterion (Diagonal)	1.38
Basic Luminous Shape	Rectangular w/Sides
Luminous Length (0-180)	2.00 ft
Luminous Width (90-270)	0.13 ft
Luminous Height	0.05 ft

LUMINANCE DATA (cd/sq.m)

Angle In Degrees	Average 0-Deg	Average 45-Deg	Average 90-Deg
45	23478	19018	18207
55	22053	16982	16424
65	19474	14558	14615
75	16035	11934	13008
85	8088	9821	11713

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CANDELA TABULATION

	0.0	22.5	45.0	67.5	90.0
0	604.89	604.89	604.89	604.89	604.89
5	606.87	603.90	599.94	598.95	599.94
10	597.96	594.99	591.03	591.03	593.01
15	585.09	582.12	578.16	579.15	579.15
20	565.29	562.32	557.37	561.33	562.32
25	540.54	537.57	536.58	539.55	541.53
30	509.85	509.85	509.85	513.81	512.82
35	477.18	477.18	477.18	481.14	484.11
40	437.58	438.57	439.56	446.49	450.45
45	395.01	397.98	400.95	408.87	411.84
50	348.48	351.45	358.38	370.26	376.20
55	303.93	304.92	317.79	327.69	336.60
60	252.45	257.40	275.22	294.03	299.97
65	200.97	208.89	229.68	250.47	259.38
70	153.45	161.37	187.11	212.85	220.77
75	104.94	118.80	147.51	176.22	188.10
80	61.38	76.23	114.84	143.55	156.42
85	20.79	48.51	84.15	112.86	125.73
90	0.00	26.73	62.37	88.11	98.01
95	0.00	13.86	42.57	68.31	77.22
100	0.00	6.93	29.70	50.49	59.40
105	0.00	3.96	20.79	36.63	44.55
110	0.00	2.97	13.86	26.73	31.68
115	0.00	1.98	8.91	18.81	23.76
120	0.00	0.00	4.95	11.88	14.85
125	0.00	0.00	3.96	7.92	9.90
130	0.00	0.00	0.00	4.95	5.94
135	0.00	0.00	0.00	0.00	3.96
140	0.00	0.00	0.00	0.00	0.00
145	0.00	0.00	0.00	0.00	0.00
150	0.00	0.00	0.00	0.00	0.00
155	0.00	0.00	0.00	0.00	0.00
160	0.00	0.00	0.00	0.00	0.00
165	0.00	0.00	0.00	0.00	0.00
170	0.00	0.00	0.00	0.00	0.00
175	0.00	0.00	0.00	0.00	0.00
180	0.00	0.00	0.00	0.00	0.00

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ZONAL LUMEN SUMMARY

Zone	Lumens	%Lamp	%Fixt
0-20	220.86	N.A.	11.50
0-30	469.08	N.A.	24.40
0-40	768.59	N.A.	40.00
0-60	1363.94	N.A.	71.00
0-80	1748.87	N.A.	91.00
0-90	1837.96	N.A.	95.70
10-90	1780.8	N.A.	92.70
20-40	547.74	N.A.	28.50
20-50	858.45	N.A.	44.70
40-70	823.81	N.A.	42.90
60-80	384.93	N.A.	20.00
70-80	156.47	N.A.	8.10
80-90	89.09	N.A.	4.60
90-110	68.46	N.A.	3.60
90-120	78.85	N.A.	4.10
90-130	82.57	N.A.	4.30
90-150	83.16	N.A.	4.30
90-180	83.16	N.A.	4.30
110-180	14.70	N.A.	0.80
0-180	1921.12	N.A.	100.00

Total Luminaire Efficiency = N.A.%

ZONAL LUMEN SUMMARY

Zone	Lumens
0-10	57.16
10-20	163.70
20-30	248.22
30-40	299.52
40-50	310.71
50-60	284.64
60-70	228.46
70-80	156.47
80-90	89.09
90-100	45.70
100-110	22.76
110-120	10.39
120-130	3.72
130-140	0.59
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	118	118	118	118	115	115	115	115	109	109	109	103	103	103	98	98	98	96
1	106	101	96	92	103	98	94	90	93	90	86	89	86	83	84	82	80	77
2	96	87	80	74	93	85	78	73	81	75	70	77	72	68	73	69	66	63
3	88	76	68	61	85	75	67	60	71	64	59	68	62	57	64	60	55	53
4	80	68	58	51	77	66	57	51	63	55	50	60	54	49	57	52	47	45
5	74	60	51	44	71	59	50	44	56	49	43	54	47	42	51	46	41	39
6	68	54	45	38	66	53	44	38	51	43	37	49	42	37	47	41	36	34
7	63	49	40	34	61	48	40	34	46	39	33	44	38	32	43	37	32	30
8	59	45	36	30	57	44	36	30	42	35	29	41	34	29	39	33	29	27
9	55	41	33	27	53	40	32	27	39	32	27	37	31	26	36	30	26	24
10	51	38	30	25	50	37	30	24	36	29	24	35	28	24	33	28	23	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	20.8	22.4	21.2	22.8	23.2	22.5	24.0	22.9	24.4	24.9
	3H	22.3	23.7	22.7	24.1	24.6	24.7	26.2	25.2	26.6	27.0
	4H	22.7	24.1	23.2	24.5	25.0	25.8	27.2	26.3	27.6	28.1
	6H	23.0	24.3	23.5	24.7	25.2	27.0	28.2	27.4	28.7	29.2
	8H	23.1	24.3	23.6	24.8	25.3	27.5	28.8	28.0	29.2	29.7
	12H	23.1	24.3	23.6	24.7	25.3	28.2	29.3	28.7	29.8	30.3
4H	2H	21.6	22.9	22.0	23.4	23.8	22.9	24.2	23.3	24.7	25.1
	3H	23.3	24.4	23.7	24.9	25.4	25.4	26.5	25.9	27.0	27.5
	4H	23.8	24.9	24.3	25.4	25.9	26.6	27.7	27.1	28.2	28.7
	6H	24.2	25.2	24.7	25.7	26.2	27.9	28.9	28.5	29.4	29.9
	8H	24.3	25.2	24.8	25.7	26.3	28.6	29.5	29.1	30.0	30.6
	12H	24.4	25.2	24.9	25.7	26.3	29.4	30.2	29.9	30.7	31.3
8H	4H	24.4	25.3	24.9	25.8	26.3	26.8	27.7	27.3	28.2	28.8
	6H	24.9	25.6	25.4	26.2	26.8	28.3	29.0	28.8	29.6	30.1
	8H	25.1	25.7	25.6	26.3	26.9	29.1	29.8	29.6	30.3	30.9
	12H	25.2	25.8	25.7	26.3	27.0	30.0	30.6	30.5	31.1	31.8
12H	4H	24.5	25.3	25.1	25.9	26.4	26.8	27.6	27.4	28.2	28.7
	6H	25.1	25.8	25.7	26.3	27.0	28.3	29.0	28.9	29.5	30.2
	8H	25.4	26.0	25.9	26.5	27.2	29.2	29.8	29.7	30.3	31.0

Maximum UGR = 31.8

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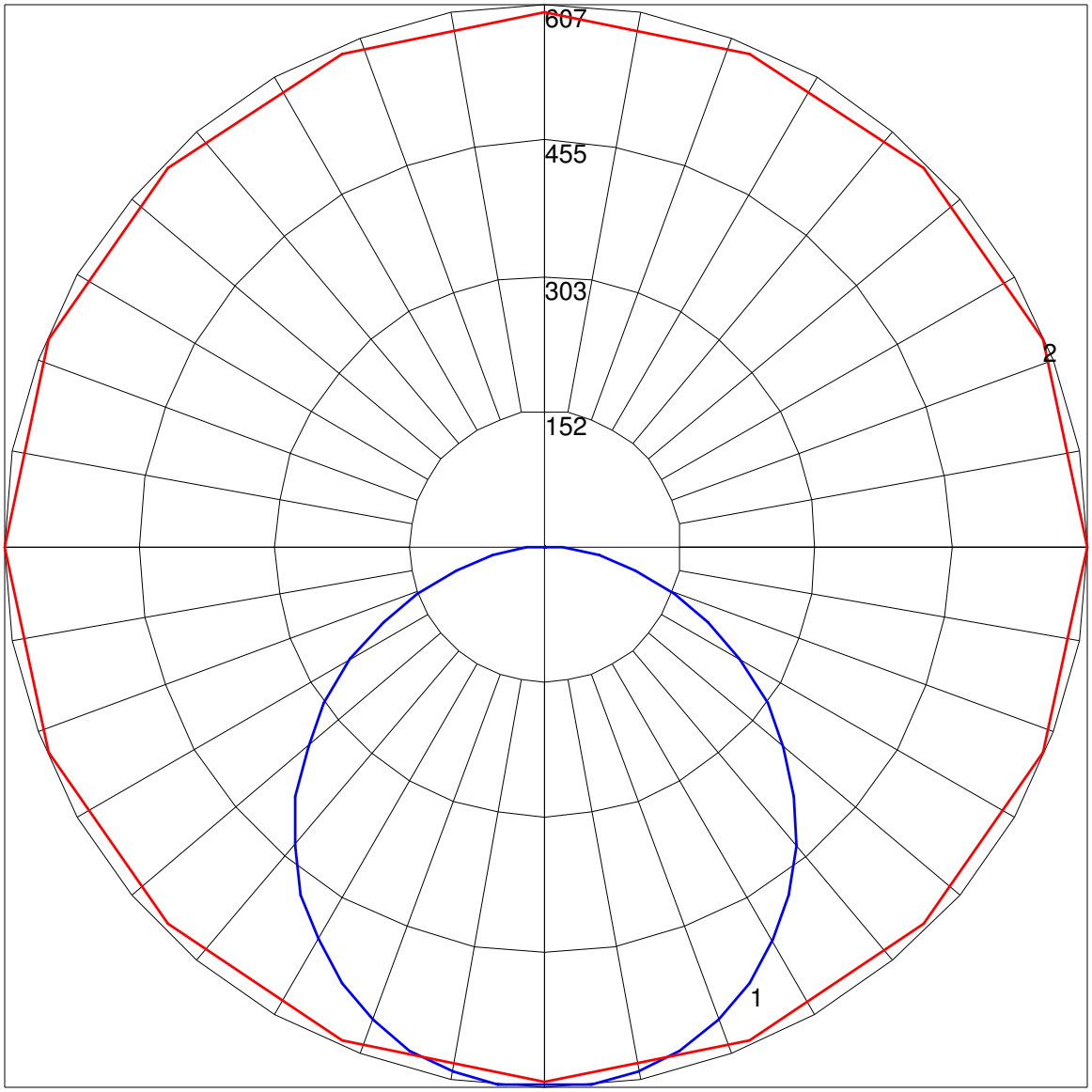
POLAR GRAPH



Maximum Candela = 606.87 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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