IES INDOOR REPORT
PHOTOMETRIC FILENAME : PT-24-L38-835-RA-(L30)-DIM-UNV_.IES

DESCRIPTION INFORMATION (From Photometric File)

IESNA:LM-63-2002
[TEST] GEN FROM BALLABS TEST NO. 19235.0
[TESTLAB] BUILDING ACOUSTICS & LIGHTING LABORATORIES, INC
[ISSUEDATE] 06-28-2023
[MANUFAC] WILLIAMS INDOOR
[OTHER] H.E. WILLIAMS, INC - CARTHAGE, MO
[LUMINAIRE] 2-22" LED ARRAYS 2x4'RECESSED LUMINAIRE
[MORE] WHITE REFLECTOR w/RIBBED FROSTED ACRYLIC CENTER DIFFUSER
[LUMCAT] PT-24-L38-835-RA-(L30)-DIM-UNV
[_SEARCH_SOURCETYPE] LED
[_SEARCH_APPLICATION] Indoor, Architectural, Office, Direct
[_SEARCH_MOUNTING] Recessed

CHARACTERISTICS

Lumens Per Lamp	N.A. (absolute)
Total Lamp Lumens	N.A. (absolute)
Luminaire Lumens	3102
Total Luminaire Efficiency	N.A.
Luminaire Efficacy Rating (LER)	147
Total Luminaire Watts	21.09
Ballast Factor	1.00
CIE Type	Direct
Spacing Criterion (0-180)	1.14
Spacing Criterion (90-270)	1.18
Spacing Criterion (Diagonal)	1.28
Basic Luminous Shape	Rectangular
Luminous Length (0-180)	3.92 ft
Luminous Width (90-270)	1.92 ft
Luminous Height	0.00 ft

LUMINANCE DATA (cd/sq.m)

Angle In Degrees	Average 0-Deg	Average 45-Deg	Average 90-Deg
45	1330	1404	1475
55	1193	1305	1410
65	1048	1242	1411
75	811	1246	1542
85	490	1634	1873

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CANDELA TABULATION

	0.0	22.5	45.0	67.5	90.0
0	1186.757	1186.757	1186.757	1186.757	1186.757
5	1168.636	1167.025	1167.025	1162.998	1160.985
10	1165.012	1165.012	1167.025	1168.636	1168.636
15	1134.406	1136.017	1138.031	1140.850	1142.863
20	1059.504	1063.531	1068.364	1074.807	1076.820
25	999.502	1003.126	1012.791	1021.248	1025.275
30	875.873	848.892	959.232	927.419	922.586
35	807.817	815.468	833.589	848.892	854.932
40	718.820	728.485	748.620	768.755	776.406
45	656.804	665.261	693.047	718.820	728.485
50	570.626	583.915	614.520	641.501	650.764
55	477.602	492.100	522.705	553.310	564.586
60	389.411	404.714	439.346	470.757	482.435
65	309.274	329.409	366.457	403.103	416.392
70	227.928	251.688	295.582	334.241	347.530
75	146.583	175.980	225.109	264.171	278.669
80	80.540	118.797	175.175	213.431	225.109
85	29.800	68.056	99.467	111.951	113.964
90	0.000	0.000	0.000	0.000	0.000

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ZONAL LUMEN SUMMARY

Zone	Lumens	%Lamp	%Fixt
0-20	430.20	N.A.	13.90
0-30	891.58	N.A.	28.70
0-40	1411.69	N.A.	45.50
0-60	2410.86	N.A.	77.70
0-80	3009.31	N.A.	97.00
0-90	3102.08	N.A.	100.00
10-90	2990.52	N.A.	96.40
20-40	981.49	N.A.	31.60
20-50	1511.98	N.A.	48.70
40-70	1360.96	N.A.	43.90
60-80	598.45	N.A.	19.30
70-80	236.66	N.A.	7.60
80-90	92.77	N.A.	3.00
90-110	0.00	N.A.	0.00
90-120	0.00	N.A.	0.00
90-130	0.00	N.A.	0.00
90-150	0.00	N.A.	0.00
90-180	0.00	N.A.	0.00
110-180	0.00	N.A.	0.00
0-180	3102.08	N.A.	100.00

Total Luminaire Efficiency = N.A.%

ZONAL LUMEN SUMMARY

Zone	Lumens
0-10	111.56
10-20	318.64
20-30	461.38
30-40	520.11
40-50	530.49
50-60	468.68
60-70	361.79
70-80	236.66
80-90	92.77
90-100	0.00
100-110	0.00
110-120	0.00
120-130	0.00
130-140	0.00
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	119	119	119	119	116	116	116	116	111	111	111	106	106	106	102	102	102	100
1	108	103	99	95	106	101	97	93	97	93	90	93	90	88	89	87	85	83
2	98	90	83	77	96	88	82	76	85	79	74	81	77	73	78	74	71	69
3	90	79	71	64	87	78	70	64	75	68	63	72	66	61	69	64	60	58
4	82	70	61	55	80	69	61	54	66	59	53	64	58	53	62	56	52	50
5	76	63	54	47	74	62	53	47	60	52	46	58	51	46	56	50	45	43
6	70	57	48	41	68	56	47	41	54	46	41	52	46	40	51	45	40	38
7	65	52	43	37	63	51	42	37	49	42	36	48	41	36	46	40	36	34
8	61	47	39	33	59	46	38	33	45	38	32	44	37	32	43	37	32	30
9	57	43	35	30	55	43	35	30	42	34	29	41	34	29	40	33	29	27
10	53	40	32	27	52	40	32	27	39	32	27	38	31	27	37	31	27	25

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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	12.3	13.9	12.6	14.2	14.5	13.3	14.9	13.6	15.2	15.5
	3H	13.9	15.4	14.3	15.7	16.1	15.4	16.9	15.8	17.3	17.6
	4H	14.5	15.9	14.9	16.2	16.6	16.4	17.8	16.8	18.2	18.6
	6H	14.8	16.2	15.3	16.5	16.9	17.5	18.8	17.9	19.1	19.5
	8H	15.0	16.2	15.4	16.6	17.0	17.9	19.1	18.3	19.5	19.9
	12H	15.0	16.2	15.5	16.6	17.0	18.2	19.4	18.7	19.8	20.2
4H	2H	13.0	14.4	13.4	14.8	15.2	13.8	15.2	14.2	15.6	15.9
	3H	14.9	16.1	15.4	16.5	16.9	16.3	17.5	16.7	17.9	18.3
	4H	15.6	16.7	16.1	17.1	17.6	17.4	18.5	17.9	18.9	19.4
	6H	16.2	17.1	16.6	17.6	18.0	18.7	19.6	19.1	20.1	20.5
	8H	16.3	17.2	16.8	17.7	18.1	19.2	20.1	19.7	20.5	21.0
	12H	16.5	17.3	17.0	17.7	18.2	19.6	20.4	20.1	20.9	21.4
8H	4H	16.2	17.1	16.7	17.6	18.0	17.8	18.7	18.2	19.1	19.6
	6H	17.0	17.7	17.5	18.2	18.7	19.2	20.0	19.7	20.5	20.9
	8H	17.3	17.9	17.8	18.4	18.9	19.9	20.6	20.4	21.1	21.5
	12H	17.5	18.1	18.0	18.6	19.1	20.5	21.0	21.0	21.5	22.1
12H	4H	16.4	17.2	16.9	17.7	18.1	17.8	18.6	18.3	19.1	19.6
	6H	17.2	17.9	17.8	18.4	18.9	19.3	20.0	19.9	20.5	21.0
	8H	17.6	18.2	18.1	18.7	19.3	20.1	20.6	20.6	21.1	21.7

Maximum UGR = 22.1

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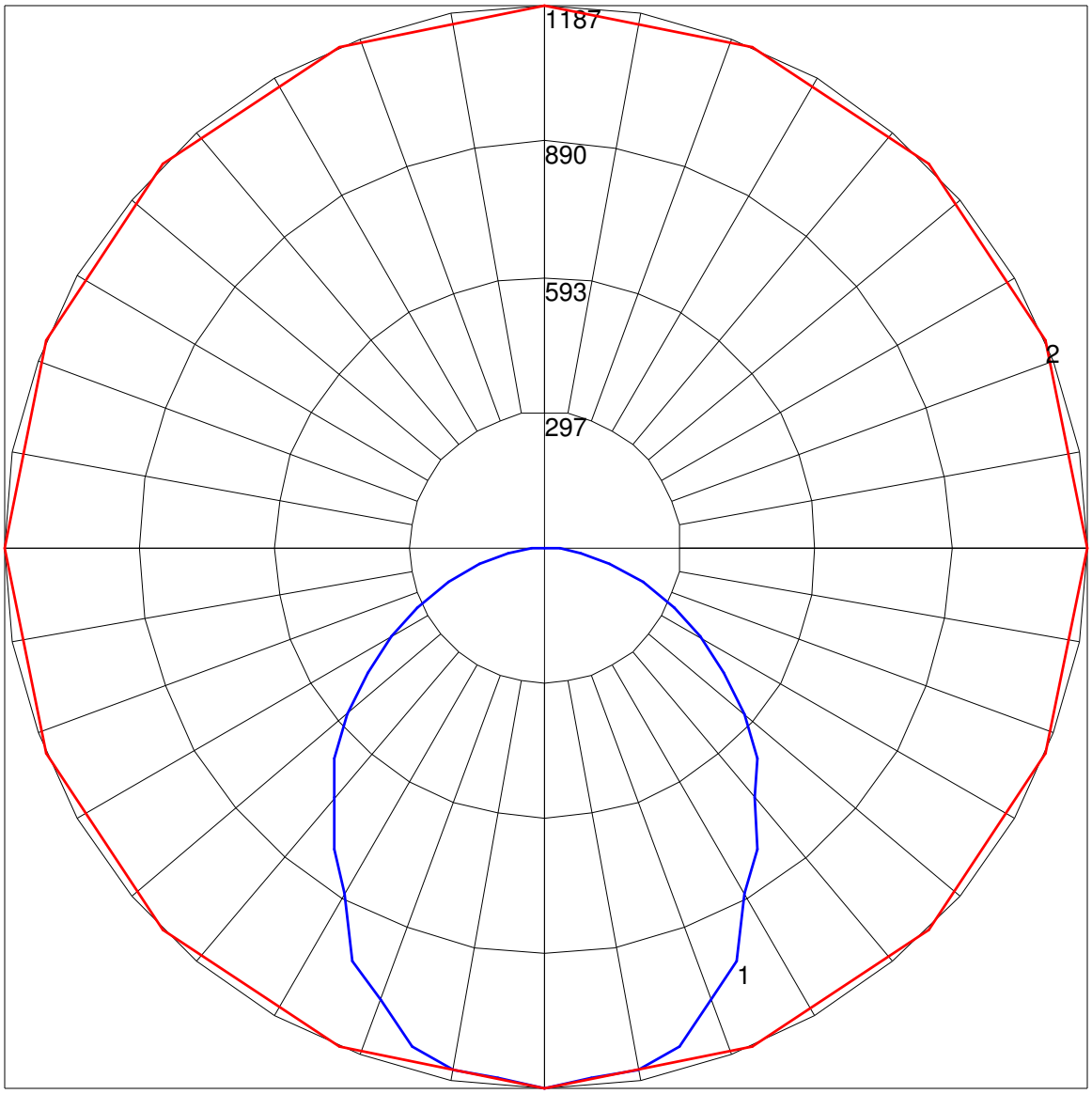
POLAR GRAPH



Maximum Candela = 1186.757 Located At Horizontal Angle = 0, Vertical Angle = 0
1 - Vertical Plane Through Horizontal Angles (0 - 180) (Through Max. Cd.)
2 - Horizontal Cone Through Vertical Angle (0) (Through Max. Cd.)

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