



IES INDOOR REPORT

PHOTOMETRIC FILENAME : LT-22-L39-850-AF-DIM-UNV_.IES

DESCRIPTION INFORMATION (From Photometric File)

IESNA:LM-63-2002
 [TEST] GEN FROM BALLABS TEST NO. 20203.0
 [TESTLAB] BUILDING ACOUSTICS & LIGHTING LABORATORIES, INC
 [ISSUEDATE] 2023-07-21
 [MANUFAC] WILLIAMS INDOOR
 [OTHER] H.E. WILLIAMS, INC - CARTHAGE, MO
 [LUMINAIRE] 2x2 RECESSED LED LUMINAIRE
 [MORE] WHITE REFLECTOR w/FROSTED ACRYLIC CENTER LENS
 [MORE] 0-10V DIMMING DRIVER
 [LUMCAT] LT-22-L39-850-AF-DIM-UNV
 [LAMPCAT] 22 INCH LED ARRAY
 [_SEARCH_SOURCETYPE] LED
 [_SEARCH_APPLICATION] Indoor, Classroom, Office, Direct
 [_SEARCH_MOUNTING] Recessed

CHARACTERISTICS

Lumens Per Lamp	N.A. (absolute)
Total Lamp Lumens	N.A. (absolute)
Luminaire Lumens	4170
Total Luminaire Efficiency	N.A.
Luminaire Efficacy Rating (LER)	126
Total Luminaire Watts	33.1
Ballast Factor	1.00
CIE Type	Direct
Spacing Criterion (0-180)	1.22
Spacing Criterion (90-270)	1.30
Spacing Criterion (Diagonal)	1.40
Basic Luminous Shape	Rectangular
Luminous Length (0-180)	1.92 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	3606	3873	4170
55	3268	3811	4299
65	2880	3774	4659
75	2216	4000	5446
85	963	3250	3170

IES INDOOR REPORT
 PHOTOMETRIC FILENAME : LT-22-L39-850-AF-DIM-UNV_.IES

CANDELA TABULATION

	<u>0.0</u>	<u>22.5</u>	<u>45.0</u>	<u>67.5</u>	<u>90.0</u>
0	1387.623	1387.623	1387.623	1387.623	1387.623
5	1386.427	1380.451	1379.256	1374.475	1378.061
10	1362.523	1356.547	1361.328	1356.547	1360.133
15	1326.668	1324.277	1331.448	1333.839	1337.424
20	1269.298	1277.665	1288.421	1300.373	1302.764
25	1203.562	1220.295	1235.833	1254.956	1259.737
30	1133.046	1152.169	1174.878	1203.562	1213.124
35	1055.358	1072.091	1099.580	1142.607	1152.169
40	966.914	983.646	1021.893	1067.310	1082.848
45	871.298	886.835	935.838	983.646	1007.550
50	758.949	779.268	841.418	890.421	925.082
55	640.625	669.310	746.998	800.781	842.613
60	528.277	560.547	650.187	718.313	758.949
65	415.928	450.589	545.009	637.039	672.895
70	305.970	343.021	448.199	548.595	585.646
75	196.012	241.430	353.778	452.979	481.664
80	96.811	151.790	243.820	333.460	323.898
85	28.685	58.565	96.811	163.742	94.420
90	0.000	0.000	0.000	0.000	0.000

IES INDOOR REPORT
PHOTOMETRIC FILENAME : LT-22-L39-850-AF-DIM-UNV_.IES

ZONAL LUMEN SUMMARY

Zone	Lumens	%Lamp	%Fixt
0-20	506.36	N.A.	12.10
0-30	1076.25	N.A.	25.80
0-40	1767.26	N.A.	42.40
0-60	3151.68	N.A.	75.60
0-80	4054.13	N.A.	97.20
0-90	4169.86	N.A.	100.00
10-90	4038.84	N.A.	96.90
20-40	1260.9	N.A.	30.20
20-50	1982.58	N.A.	47.50
40-70	1923.93	N.A.	46.10
60-80	902.45	N.A.	21.60
70-80	362.94	N.A.	8.70
80-90	115.73	N.A.	2.80
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	4169.86	N.A.	100.00

Total Luminaire Efficiency = N.A. %

ZONAL LUMEN SUMMARY

Zone	Lumens
0-10	131.02
10-20	375.33
20-30	569.89
30-40	691.01
40-50	721.68
50-60	662.74
60-70	539.51
70-80	362.94
80-90	115.73
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

IES INDOOR REPORT
PHOTOMETRIC FILENAME : LT-22-L39-850-AF-DIM-UNV_.IES

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	98	94	105	101	96	93	96	93	90	92	90	87	89	86	84	82
2	98	89	82	76	95	87	81	75	84	78	73	80	76	71	77	73	70	68
3	89	78	69	63	86	76	68	62	73	66	61	70	65	60	68	63	59	56
4	81	69	60	53	79	67	59	52	65	57	52	62	56	51	60	55	50	48
5	75	61	52	45	72	60	51	45	58	50	44	56	49	44	54	48	43	41
6	69	55	46	39	67	54	45	39	52	45	39	51	44	38	49	43	38	36
7	64	50	41	35	62	49	41	35	48	40	34	46	39	34	45	38	34	32
8	59	46	37	31	58	45	37	31	43	36	31	42	35	30	41	35	30	28
9	55	42	33	28	54	41	33	28	40	33	27	39	32	27	38	32	27	25
10	52	39	30	25	51	38	30	25	37	30	25	36	29	25	35	29	25	23

IES INDOOR REPORT
PHOTOMETRIC FILENAME : LT-22-L39-850-AF-DIM-UNV_.IES

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

X=2H	Y=2H	15.9	17.6	16.3	17.9	18.2	UGR Viewed Endwise			
	3H	17.5	19.1	17.9	19.4	19.7	17.5	19.2	17.9	19.5
	4H	18.1	19.5	18.5	19.9	20.3	20.1	21.6	20.4	21.9
	6H	18.4	19.8	18.8	20.1	20.5	21.2	22.7	21.6	23.0
	8H	18.5	19.8	18.9	20.2	20.6	22.2	23.5	22.6	23.9
	12H	18.5	19.8	19.0	20.1	20.6	22.5	23.8	22.9	24.2
							22.6	23.9	23.1	24.3

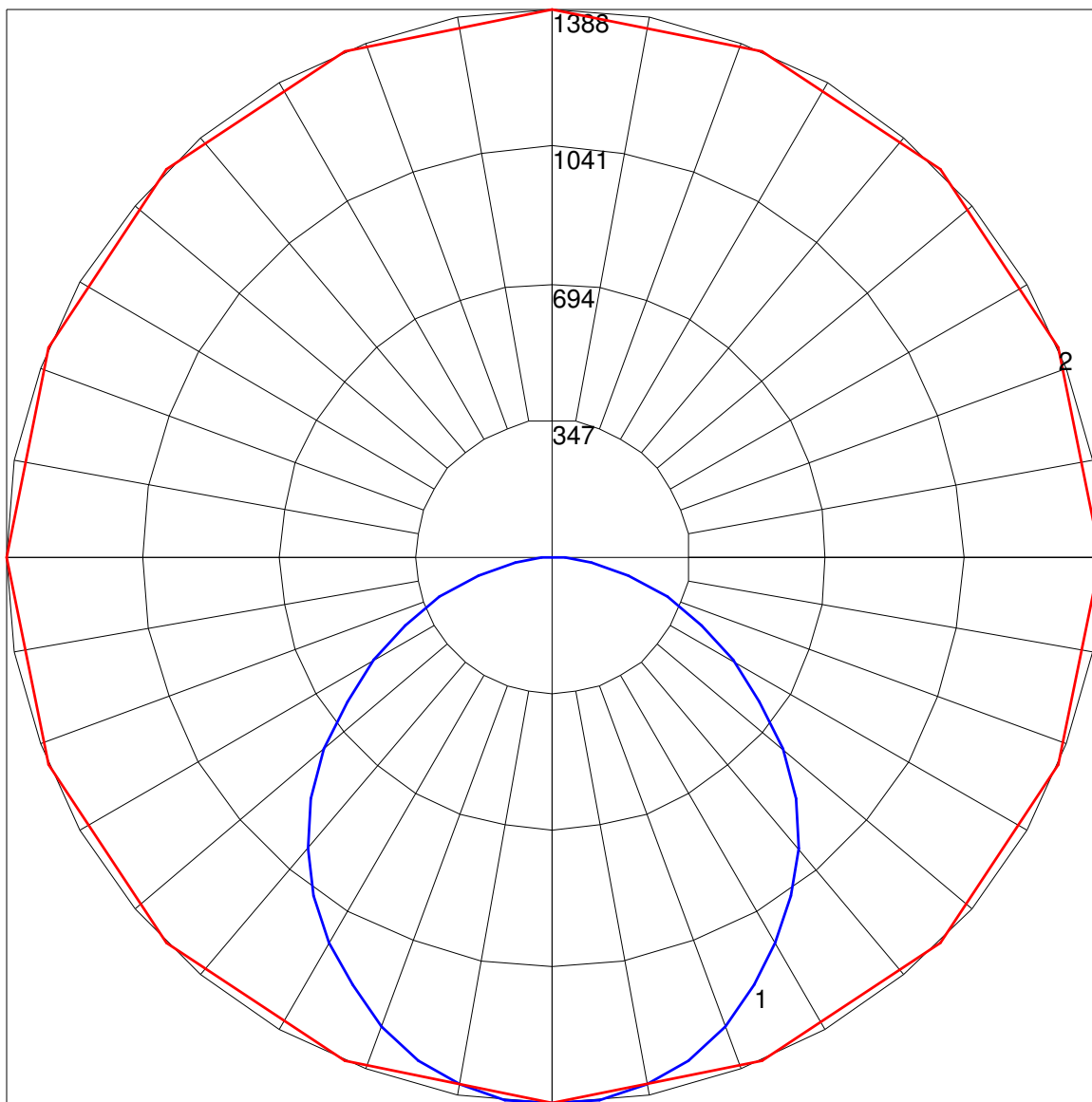
4H	2H	16.8	18.3	17.2	18.6	19.0	18.1	19.5	18.5	19.9
	3H	18.7	19.9	19.1	20.3	20.7	20.9	22.1	21.3	22.5
	4H	19.4	20.5	19.8	20.9	21.4	22.2	23.4	22.7	23.8
	6H	19.9	20.8	20.3	21.3	21.7	23.4	24.4	23.9	24.9
	8H	20.0	20.9	20.4	21.3	21.8	23.8	24.7	24.3	25.2
	12H	20.0	20.9	20.5	21.3	21.8	24.0	24.9	24.5	25.3

8H	4H	20.1	21.0	20.6	21.5	22.0	22.5	23.5	23.0	23.9
	6H	20.8	21.5	21.3	22.0	22.5	23.9	24.7	24.4	25.2
	8H	21.0	21.7	21.5	22.2	22.6	24.5	25.2	25.0	25.7
	12H	21.1	21.7	21.6	22.2	22.7	24.8	25.4	25.3	25.9

12H	4H	20.3	21.1	20.8	21.6	22.1	22.6	23.4	23.0	23.9
	6H	21.0	21.7	21.6	22.2	22.7	24.0	24.7	24.5	25.1
	8H	21.3	21.9	21.8	22.4	23.0	24.6	25.2	25.1	25.7

Maximum UGR = 26.5

POLAR GRAPH



Maximum Candela = 1387.623 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.)