



IES INDOOR REPORT

PHOTOMETRIC FILENAME : 39-4-L52-835-A-(L50)-DIM-UNV_.IES

DESCRIPTION INFORMATION (From Photometric File)

IESNA:LM-63-2002
 [TEST] GEN from BALLABS TEST NO. 19011.0
 [TESTLAB] BUILDING ACOUSTICS & LIGHTING LABORATORIES, INC
 [ISSUEDATE] 01-18-2021
 [MANUFAC] WILLIAMS INDOOR
 [OTHER] H.E. WILLIAMS, INC - CARTHAGE, MO 64836
 [LUMINAIRE] 4' SURFACE MOUNT LED LUMINAIRE
 [MORE] WITH FROSTED ACRYLIC RIBBED LENS
 [LUMCAT] 39-4-L52-835-A-(L50)-DIM-UNV
 [LAMPCAT]HLM 80 CRI, 3500K CCT
 [_SEARCH_SOURCETYPE] LED
 [_SEARCH_APPLICATION] INDOOR, ARCHITECTURAL, COMMERCIAL, DIRECT, LINEAR
 [_SEARCH_MOUNTING]SURFACE, SUSPENDED

CHARACTERISTICS

Lumens Per Lamp	N.A. (absolute)
Total Lamp Lumens	N.A. (absolute)
Luminaire Lumens	5086
Total Luminaire Efficiency	N.A.
Luminaire Efficacy Rating (LER)	134
Total Luminaire Watts	37.9
Ballast Factor	1.00
CIE Type	Direct
Spacing Criterion (0-180)	1.18
Spacing Criterion (90-270)	1.18
Spacing Criterion (Diagonal)	1.30
Basic Luminous Shape	Rectangular w/Sides
Luminous Length (0-180)	4.01 ft
Luminous Width (90-270)	0.79 ft
Luminous Height	0.18 ft

LUMINANCE DATA (cd/sq.m)

Angle In Degrees	Average 0-Deg	Average 45-Deg	Average 90-Deg
45	5042	4561	4507
55	4206	3749	3768
65	3480	3068	3273
75	2538	2433	2824
85	1496	2027	2631

IES INDOOR REPORT
 PHOTOMETRIC FILENAME : 39-4-L52-835-A-(L50)-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	1943.926	1943.926	1943.926	1943.926	1943.926
5	1954.720	1953.738	1952.757	1952.757	1953.738
10	1911.543	1910.562	1910.562	1911.543	1913.506
15	1843.834	1845.797	1848.741	1850.703	1852.666
20	1787.901	1788.883	1794.770	1795.752	1795.752
25	1637.765	1641.690	1646.596	1649.540	1649.540
30	1513.141	1518.048	1524.917	1528.842	1529.823
35	1408.144	1415.994	1426.788	1431.695	1434.639
40	1235.438	1245.251	1259.970	1268.801	1272.727
45	1098.058	1111.796	1131.422	1145.160	1150.066
50	917.501	931.239	957.734	978.341	986.191
55	756.571	773.253	805.635	830.167	840.961
60	603.490	621.153	655.498	691.806	706.525
65	474.942	493.586	537.744	587.790	603.490
70	345.412	367.982	425.878	479.848	501.437
75	225.696	253.172	316.955	374.851	395.458
80	132.473	167.800	237.471	296.348	316.955
85	57.896	96.166	164.856	220.789	240.415
90	0.000	42.195	98.128	143.268	160.931
95	0.000	17.663	62.802	103.035	118.735
100	0.000	0.000	38.270	69.671	80.465
105	0.000	0.000	24.532	46.120	55.933
110	0.000	0.000	0.000	31.401	38.270
115	0.000	0.000	0.000	23.551	28.457
120	0.000	0.000	0.000	19.626	21.588
125	0.000	0.000	0.000	0.000	0.000
130	0.000	0.000	0.000	0.000	0.000
135	0.000	0.000	0.000	0.000	0.000
140	0.000	0.000	0.000	0.000	0.000
145	0.000	0.000	0.000	0.000	0.000
150	0.000	0.000	0.000	0.000	0.000
155	0.000	0.000	0.000	0.000	0.000
160	0.000	0.000	0.000	0.000	0.000
165	0.000	0.000	0.000	0.000	0.000
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

IES INDOOR REPORT
PHOTOMETRIC FILENAME : 39-4-L52-835-A-(L50)-DIM-UNV_.IES

ZONAL LUMEN SUMMARY

Zone	Lumens	%Lamp	%Fixt
0-20	707.95	N.A.	13.90
0-30	1469.55	N.A.	28.90
0-40	2350.86	N.A.	46.20
0-60	3932.32	N.A.	77.30
0-80	4805.89	N.A.	94.50
0-90	4979.79	N.A.	97.90
10-90	4794.95	N.A.	94.30
20-40	1642.91	N.A.	32.30
20-50	2505.42	N.A.	49.30
40-70	2116.13	N.A.	41.60
60-80	873.57	N.A.	17.20
70-80	338.90	N.A.	6.70
80-90	173.90	N.A.	3.40
90-110	94.36	N.A.	1.90
90-120	104.10	N.A.	2.00
90-130	105.86	N.A.	2.10
90-150	105.86	N.A.	2.10
90-180	105.86	N.A.	2.10
110-180	11.49	N.A.	0.20
0-180	5085.65	N.A.	100.00

Total Luminaire Efficiency = N.A. %

ZONAL LUMEN SUMMARY

Zone	Lumens
0-10	184.84
10-20	523.11
20-30	761.60
30-40	881.31
40-50	862.51
50-60	718.95
60-70	534.67
70-80	338.90
80-90	173.90
90-100	68.11
100-110	26.26
110-120	9.74
120-130	1.76
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 : 39-4-L52-835-A-(L50)-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	110	110	110	105	105	105	100	100	100	98
1	108	103	99	95	105	101	97	93	96	93	90	92	89	86	88	86	83	81
2	98	90	83	77	95	88	82	76	84	79	74	80	76	72	77	74	70	68
3	90	79	71	65	87	78	70	64	74	68	63	71	66	61	69	64	60	58
4	82	71	62	55	80	69	61	55	66	59	54	64	58	53	61	56	52	50
5	76	63	54	48	74	62	54	48	60	52	47	58	51	46	55	50	45	43
6	70	57	48	42	68	56	48	42	54	47	41	52	46	41	50	45	40	38
7	65	52	43	37	64	51	43	37	49	42	37	48	41	36	46	40	36	34
8	61	48	39	33	59	47	39	33	45	38	33	44	37	33	43	37	32	30
9	57	44	36	30	55	43	35	30	42	35	30	41	34	30	39	34	29	27
10	53	40	33	27	52	40	32	27	39	32	27	38	31	27	37	31	27	25

IES INDOOR REPORT
PHOTOMETRIC FILENAME : 39-4-L52-835-A-(L50)-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	15.6	17.1	16.0	17.5	17.9	16.7	18.3	17.1	18.7	19.0
	3H	16.9	18.4	17.3	18.7	19.1	18.8	20.2	19.2	20.6	21.0
	4H	17.3	18.7	17.8	19.1	19.5	19.7	21.0	20.1	21.4	21.8
	6H	17.6	18.9	18.0	19.3	19.7	20.6	21.8	21.0	22.2	22.7
	8H	17.7	18.9	18.1	19.3	19.7	21.0	22.2	21.5	22.6	23.1
	12H	17.7	18.8	18.2	19.3	19.7	21.4	22.6	21.9	23.0	23.5

UGR Viewed Endwise

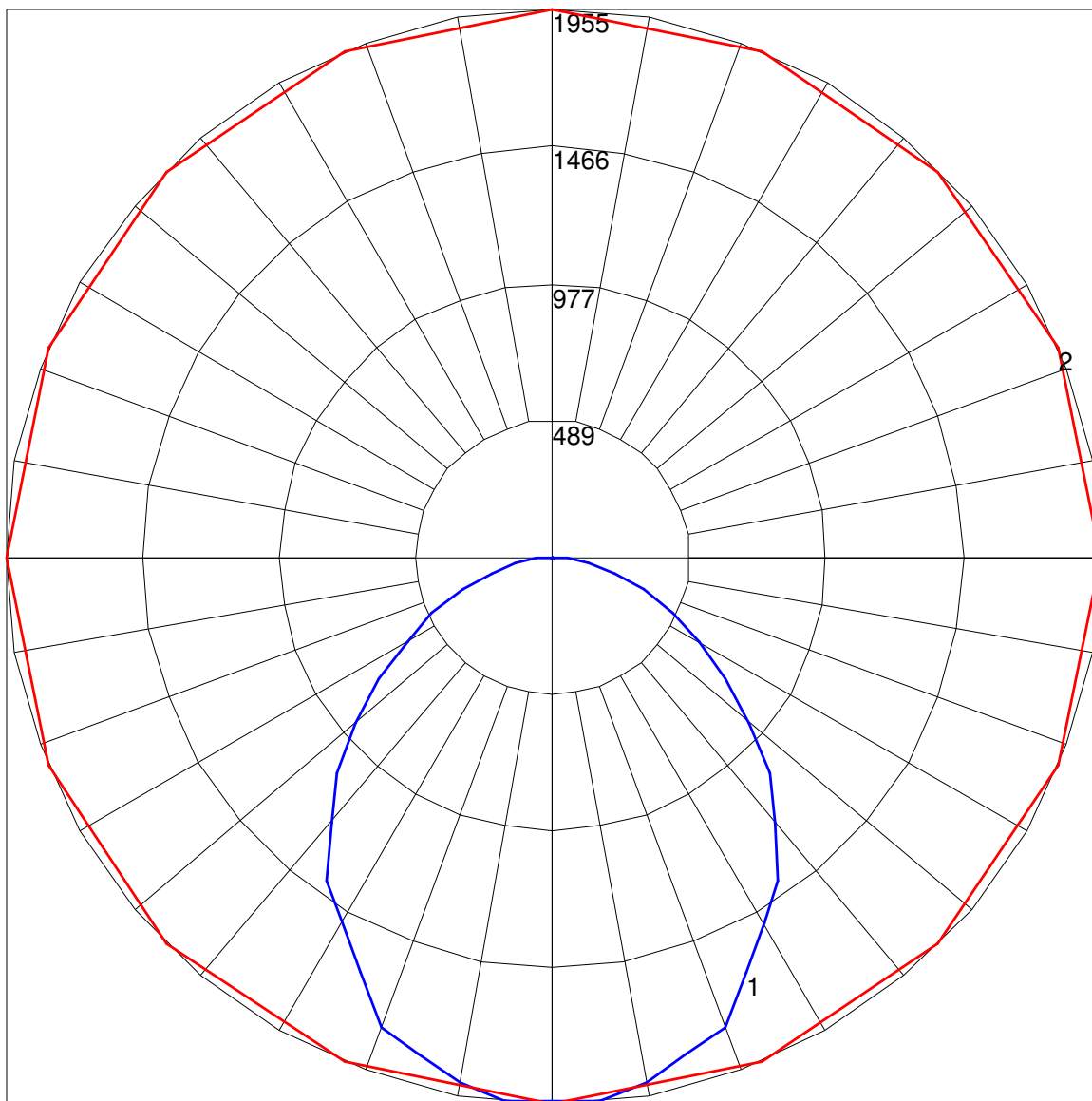
4H	2H	16.2	17.6	16.7	18.0	18.4	17.2	18.5	17.6	18.9	19.3
	3H	17.8	18.9	18.3	19.4	19.8	19.4	20.6	19.9	21.0	21.4
	4H	18.3	19.4	18.8	19.8	20.3	20.5	21.5	21.0	22.0	22.4
	6H	18.7	19.6	19.2	20.1	20.6	21.6	22.5	22.0	22.9	23.4
	8H	18.8	19.7	19.3	20.1	20.6	22.1	22.9	22.6	23.4	23.9
	12H	18.9	19.6	19.4	20.1	20.7	22.6	23.4	23.2	23.9	24.4

8H	4H	18.8	19.6	19.3	20.1	20.6	20.7	21.5	21.2	22.0	22.5
	6H	19.3	20.0	19.8	20.5	21.0	21.9	22.6	22.4	23.1	23.7
	8H	19.4	20.1	20.0	20.6	21.2	22.5	23.2	23.1	23.7	24.3
	12H	19.6	20.1	20.1	20.7	21.3	23.3	23.8	23.8	24.4	25.0

12H	4H	18.9	19.6	19.4	20.2	20.7	20.7	21.4	21.2	22.0	22.5
	6H	19.4	20.1	20.0	20.6	21.2	21.9	22.6	22.5	23.1	23.7
	8H	19.7	20.3	20.2	20.8	21.4	22.6	23.2	23.2	23.7	24.3

Maximum UGR = 25.0

POLAR GRAPH



Maximum Candela = 1954.72 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.)