

IES INDOOR REPORT

PHOTOMETRIC FILENAME : 39-4-L84-940-A-EM10W-DIM-UNV_EMER MODE ONLY.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] 11-15-2023

[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-L84-940-A-EM10W-DIM-UNV

[LAMPCAT] HLM 90 CRI, 4000K CCT

[_SEARCH_SOURCE] 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	1090
Total Luminaire Efficiency	N.A.
Luminaire Efficacy Rating (LER)	109
Total Luminaire Watts	10
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	1081	978	966
55	901	803	808
65	746	658	701
75	544	521	605
85	321	434	564

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CANDELA TABULATION

	<u>0.0</u>	<u>22.5</u>	<u>45.0</u>	<u>67.5</u>	<u>90.0</u>
0	416.610	416.610	416.610	416.610	416.610
5	418.923	418.713	418.503	418.503	418.713
10	409.670	409.460	409.460	409.670	410.091
15	395.159	395.580	396.211	396.631	397.052
20	383.172	383.382	384.644	384.854	384.854
25	350.996	351.837	352.888	353.519	353.519
30	324.287	325.339	326.811	327.652	327.862
35	301.785	303.467	305.780	306.832	307.463
40	264.771	266.874	270.029	271.922	272.763
45	235.329	238.273	242.479	245.423	246.475
50	196.633	199.577	205.256	209.672	211.354
55	162.144	165.719	172.659	177.916	180.230
60	129.336	133.122	140.482	148.264	151.418
65	101.787	105.782	115.246	125.971	129.336
70	74.027	78.864	91.271	102.838	107.465
75	48.370	54.258	67.928	80.336	84.752
80	28.391	35.962	50.893	63.511	67.928
85	12.408	20.610	35.331	47.318	51.524
90	0.000	9.043	21.030	30.704	34.490
95	0.000	3.785	13.459	22.082	25.447
100	0.000	0.000	8.202	14.932	17.245
105	0.000	0.000	5.258	9.884	11.987
110	0.000	0.000	0.000	6.730	8.202
115	0.000	0.000	0.000	5.047	6.099
120	0.000	0.000	0.000	4.206	4.627
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-L84-940-A-EM10W-DIM-UNV_EMER MODE ONLY.IES****ZONAL LUMEN SUMMARY**

Zone	Lumens	%Lamp	%Fixt
0-20	151.72	N.A.	13.90
0-30	314.94	N.A.	28.90
0-40	503.82	N.A.	46.20
0-60	842.75	N.A.	77.30
0-80	1029.97	N.A.	94.50
0-90	1067.24	N.A.	97.90
10-90	1027.62	N.A.	94.30
20-40	352.10	N.A.	32.30
20-50	536.95	N.A.	49.30
40-70	453.52	N.A.	41.60
60-80	187.22	N.A.	17.20
70-80	72.63	N.A.	6.70
80-90	37.27	N.A.	3.40
90-110	20.22	N.A.	1.90
90-120	22.31	N.A.	2.00
90-130	22.69	N.A.	2.10
90-150	22.69	N.A.	2.10
90-180	22.69	N.A.	2.10
110-180	2.46	N.A.	0.20
0-180	1089.92	N.A.	100.00

Total Luminaire Efficiency = N.A. %

ZONAL LUMEN SUMMARY

Zone	Lumens
0-10	39.61
10-20	112.11
20-30	163.22
30-40	188.88
40-50	184.85
50-60	154.08
60-70	114.59
70-80	72.63
80-90	37.27
90-100	14.60
100-110	5.63
110-120	2.09
120-130	0.38
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	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

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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

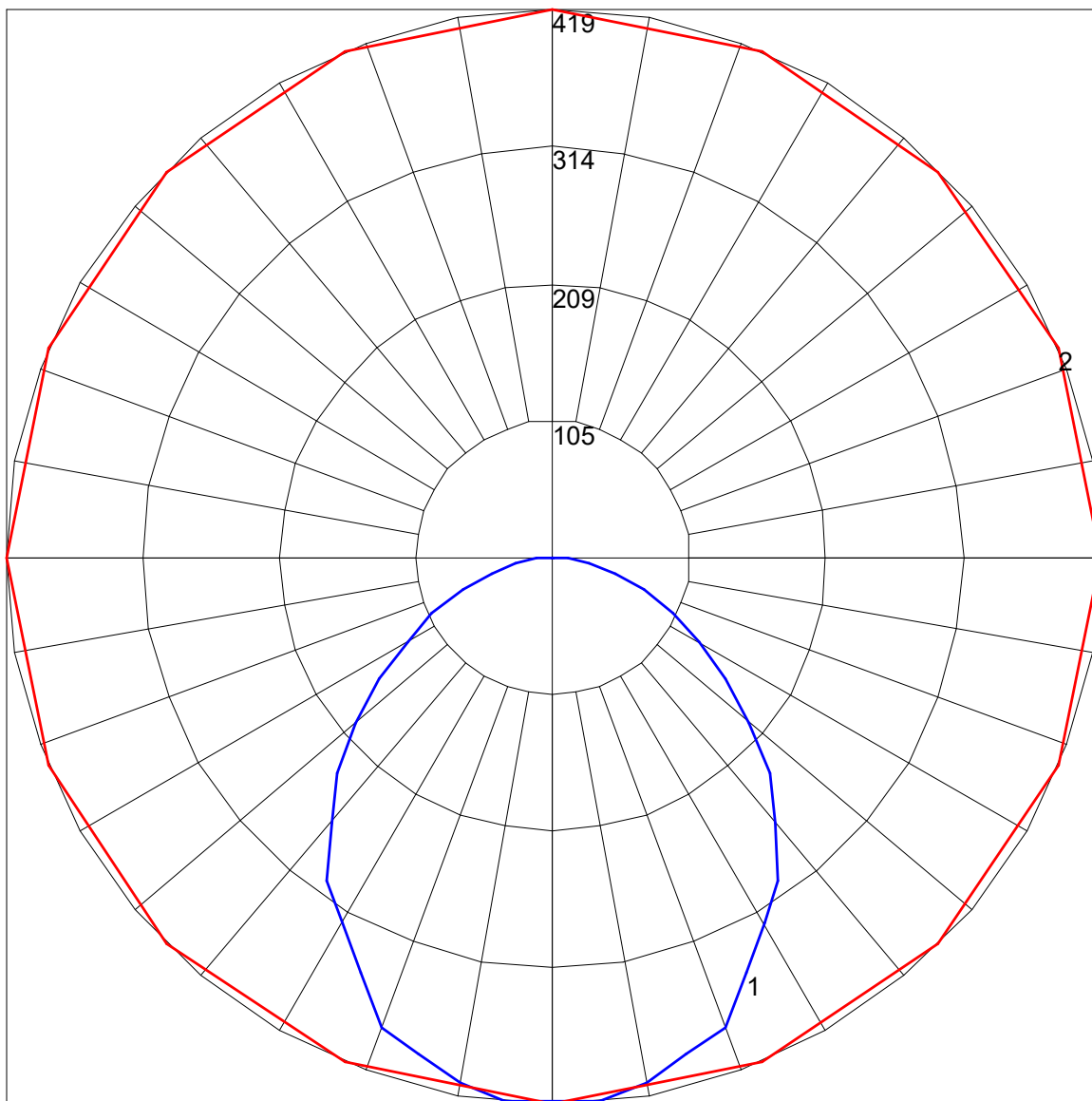
X=2H	Y=2H	10.2	11.7	10.6	12.1	12.5	11.3	12.9	11.7	13.3	13.6
	3H	11.5	13.0	11.9	13.3	13.7	13.4	14.8	13.8	15.2	15.6
	4H	11.9	13.3	12.4	13.7	14.1	14.3	15.6	14.7	16.0	16.4
	6H	12.2	13.5	12.6	13.9	14.3	15.2	16.4	15.6	16.8	17.2
	8H	12.3	13.5	12.7	13.9	14.3	15.6	16.8	16.1	17.2	17.7
	12H	12.3	13.4	12.8	13.9	14.3	16.0	17.2	16.5	17.6	18.1

UGR Viewed Endwise

4H	2H	10.8	12.2	11.3	12.6	13.0	11.8	13.1	12.2	13.5	13.9
	3H	12.4	13.5	12.9	14.0	14.4	14.0	15.2	14.5	15.6	16.0
	4H	12.9	14.0	13.4	14.4	14.9	15.1	16.1	15.5	16.6	17.0
	6H	13.3	14.2	13.8	14.7	15.2	16.2	17.0	16.6	17.5	18.0
	8H	13.4	14.2	13.9	14.7	15.2	16.7	17.5	17.2	18.0	18.5
	12H	13.5	14.2	14.0	14.7	15.3	17.2	18.0	17.8	18.5	19.0
8H	4H	13.4	14.2	13.9	14.7	15.2	15.3	16.1	15.8	16.6	17.1
	6H	13.9	14.6	14.4	15.1	15.6	16.5	17.2	17.0	17.7	18.3
	8H	14.0	14.7	14.6	15.2	15.8	17.1	17.8	17.7	18.3	18.9
	12H	14.2	14.7	14.7	15.3	15.9	17.9	18.4	18.4	19.0	19.6
12H	4H	13.5	14.2	14.0	14.8	15.3	15.3	16.0	15.8	16.6	17.1
	6H	14.0	14.7	14.6	15.2	15.8	16.5	17.2	17.1	17.7	18.3
	8H	14.3	14.9	14.8	15.4	16.0	17.2	17.8	17.8	18.3	18.9

Maximum UGR = 19.6

POLAR GRAPH



Maximum Candela = 418.923 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.)