



## IES INDOOR REPORT

PHOTOMETRIC FILENAME : SLF-4-L52-840-HIA-(L32)-EM10W-DIM-UNV\_(EM MODE).IES

### DESCRIPTION INFORMATION (From Photometric File)

IESNA:LM-63-2002  
 [TEST]GEN FROM BALLABS TEST NO. 20114.0  
 [TESTLAB] BUILDING ACOUSTICS & LIGHTING LABORATORIES, INC  
 [ISSUE DATE] 06-01-2023  
 [MANUFAC] WILLIAMS INDOOR  
 [OTHER] H.E. WILLIAMS, INC - CARTHAGE, MO 64836  
 [LUMINAIRE] 4' LED SURFACE MOUNT LUMINAIRE  
 [LUMCAT] SLF-4-L52-840-HIA-(L32)-EM10W-DIM-UNV (EM MODE)  
 [MORE] WITH FROSTED ACRYLIC LENS  
 [LAMPCAT] HLM 80 CRI 4000K CCT  
 [ \_SEARCH\_SOURCETYPE] LED  
 [ \_SEARCH\_APPLICATION] Indoor, Classroom, Commercial, Industrial, Manufacturing, Office, Direct  
 [ \_SEARCH\_MOUNTING] Pendant, Surface, Suspended

### CHARACTERISTICS

Lumens Per Lamp	N.A. (absolute)
Total Lamp Lumens	N.A. (absolute)
Luminaire Lumens	1339
Total Luminaire Efficiency	N.A.
Luminaire Efficacy Rating (LER)	134
Total Luminaire Watts	10
Ballast Factor	1.00
CIE Type	Direct
Spacing Criterion (0-180)	1.20
Spacing Criterion (90-270)	1.28
Spacing Criterion (Diagonal)	1.34
Basic Luminous Shape	Rectangular w/Sides
Luminous Length (0-180)	4.06 ft
Luminous Width (90-270)	0.47 ft
Luminous Height	0.23 ft

### LUMINANCE DATA (cd/sq.m)

Angle In Degrees	Average 0-Deg	Average 45-Deg	Average 90-Deg
45	1896	1569	1610
55	1605	1345	1428
65	1291	1136	1224
75	907	910	1031
85	277	732	902

# IES INDOOR REPORT

PHOTOMETRIC FILENAME : SLF-4-L52-840-HIA-(L32)-EM10W-DIM-UNV\_(EM MODE).IES

## CANDELA TABULATION

	<u>0.0</u>	<u>22.5</u>	<u>45.0</u>	<u>67.5</u>	<u>90.0</u>
0	432.476	432.476	432.476	432.476	432.476
5	437.091	430.718	428.960	428.520	428.300
10	427.861	423.026	421.927	423.026	421.927
15	414.676	410.940	412.698	414.676	414.236
20	395.118	392.261	398.414	401.930	403.248
25	373.582	369.846	378.636	386.767	387.426
30	347.431	345.233	356.661	368.527	368.967
35	317.984	316.885	331.169	346.552	348.530
40	286.779	283.922	302.381	321.060	325.236
45	250.959	247.882	272.275	293.591	300.184
50	212.502	213.381	242.389	264.803	274.253
55	176.243	181.736	211.843	235.796	246.344
60	141.302	151.191	182.396	208.107	217.337
65	108.339	120.645	155.366	179.539	187.670
70	77.573	92.077	128.556	153.168	159.761
75	50.324	65.706	101.746	128.776	133.391
80	26.590	45.050	79.990	106.800	110.536
85	7.032	29.008	61.092	87.462	91.637
90	0.879	18.240	47.467	71.200	76.474
95	0.220	10.768	35.820	56.477	62.630
100	0.000	6.373	25.931	43.731	49.884
105	0.000	4.395	19.119	33.183	39.775
110	0.000	3.296	15.163	27.030	32.524
115	0.000	2.857	11.427	21.756	25.931
120	0.000	2.637	9.669	17.800	20.877
125	0.000	1.758	7.032	14.064	16.701
130	0.000	1.538	5.714	10.768	12.746
135	0.000	1.099	4.395	8.570	9.889
140	0.000	1.099	3.296	6.593	7.911
145	0.000	0.440	2.857	5.274	5.933
150	0.000	0.000	2.637	4.615	5.274
155	0.000	0.000	1.758	3.296	4.175
160	0.000	0.000	1.538	2.198	2.857
165	0.000	0.000	0.000	1.538	1.758
170	0.000	0.000	0.000	0.000	1.099
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 : SLF-4-L52-840-HIA-(L32)-EM10W-DIM-UNV\_(EM MODE).IES****ZONAL LUMEN SUMMARY**

Zone	Lumens	%Lamp	%Fixt
0-20	157.31	N.A.	11.70
0-30	331.94	N.A.	24.80
0-40	539.42	N.A.	40.30
0-60	938.07	N.A.	70.00
0-80	1191.55	N.A.	89.00
0-90	1254.92	N.A.	93.70
10-90	1214.07	N.A.	90.60
20-40	382.11	N.A.	28.50
20-50	592.42	N.A.	44.20
40-70	548.54	N.A.	41.00
60-80	253.48	N.A.	18.90
70-80	103.60	N.A.	7.70
80-90	63.37	N.A.	4.70
90-110	58.14	N.A.	4.30
90-120	70.59	N.A.	5.30
90-130	77.76	N.A.	5.80
90-150	83.42	N.A.	6.20
90-180	84.48	N.A.	6.30
110-180	26.35	N.A.	2.00
0-180	1339.4	N.A.	100.00

Total Luminaire Efficiency = N.A. %

**ZONAL LUMEN SUMMARY**

Zone	Lumens
0-10	40.84
10-20	116.46
20-30	174.63
30-40	207.47
40-50	210.31
50-60	188.34
60-70	149.88
70-80	103.60
80-90	63.37
90-100	37.22
100-110	20.92
110-120	12.45
120-130	7.17
130-140	3.76
140-150	1.89
150-160	0.86
160-170	0.20
170-180	0.00

# IES INDOOR REPORT

PHOTOMETRIC FILENAME : SLF-4-L52-840-HIA-(L32)-EM10W-DIM-UNV\_(EM MODE).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	118	118	118	118	114	114	114	114	108	108	108	102	102	102	96	96	96	94
1	106	101	96	92	103	98	94	90	92	89	86	87	85	82	83	80	78	76
2	96	87	80	74	93	85	78	73	80	75	70	76	71	67	72	68	65	62
3	88	77	68	61	84	74	67	60	71	64	58	67	61	57	64	59	55	52
4	80	68	59	52	77	66	58	51	63	55	50	60	53	48	57	51	47	45
5	74	61	51	45	71	59	50	44	56	49	43	53	47	42	51	45	41	39
6	68	54	45	39	66	53	45	38	51	43	38	48	42	37	46	41	36	34
7	63	49	41	34	61	48	40	34	46	39	33	44	38	33	42	36	32	30
8	59	45	36	31	57	44	36	30	42	35	30	41	34	29	39	33	29	27
9	55	41	33	28	53	41	33	27	39	32	27	37	31	26	36	30	26	24
10	51	38	30	25	50	37	30	25	36	29	24	35	28	24	33	28	24	22

# IES INDOOR REPORT

PHOTOMETRIC FILENAME : SLF-4-L52-840-HIA-(L32)-EM10W-DIM-UNV\_(EM MODE).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	10.8	12.4	11.3	12.8	13.3	13.9	15.5	14.4	15.9	16.4
	3H	12.1	13.5	12.5	13.9	14.4	16.2	17.6	16.7	18.1	18.6
	4H	12.4	13.7	12.9	14.2	14.7	17.3	18.6	17.8	19.1	19.6
	6H	12.6	13.8	13.1	14.3	14.8	18.3	19.6	18.8	20.0	20.6
	8H	12.6	13.8	13.1	14.3	14.9	18.9	20.1	19.4	20.6	21.1
	12H	12.6	13.8	13.2	14.3	14.8	19.5	20.6	20.0	21.1	21.7

### UGR Viewed Endwise

4H	2H	11.8	13.1	12.3	13.6	14.1	14.3	15.6	14.8	16.1	16.6
	3H	13.3	14.4	13.8	14.9	15.5	16.8	17.9	17.3	18.4	18.9
	4H	13.7	14.8	14.3	15.3	15.8	18.0	19.0	18.5	19.5	20.1
	6H	14.0	14.9	14.6	15.5	16.0	19.3	20.2	19.8	20.7	21.3
	8H	14.1	14.9	14.6	15.5	16.1	19.9	20.8	20.5	21.3	21.9
	12H	14.1	14.8	14.7	15.4	16.0	20.6	21.4	21.2	22.0	22.6

8H	4H	14.5	15.3	15.0	15.9	16.5	18.2	19.0	18.7	19.5	20.1
	6H	14.9	15.6	15.5	16.2	16.8	19.6	20.3	20.1	20.9	21.5
	8H	15.0	15.7	15.6	16.3	16.9	20.4	21.0	21.0	21.6	22.2
	12H	15.1	15.7	15.7	16.3	16.9	21.2	21.8	21.8	22.4	23.1

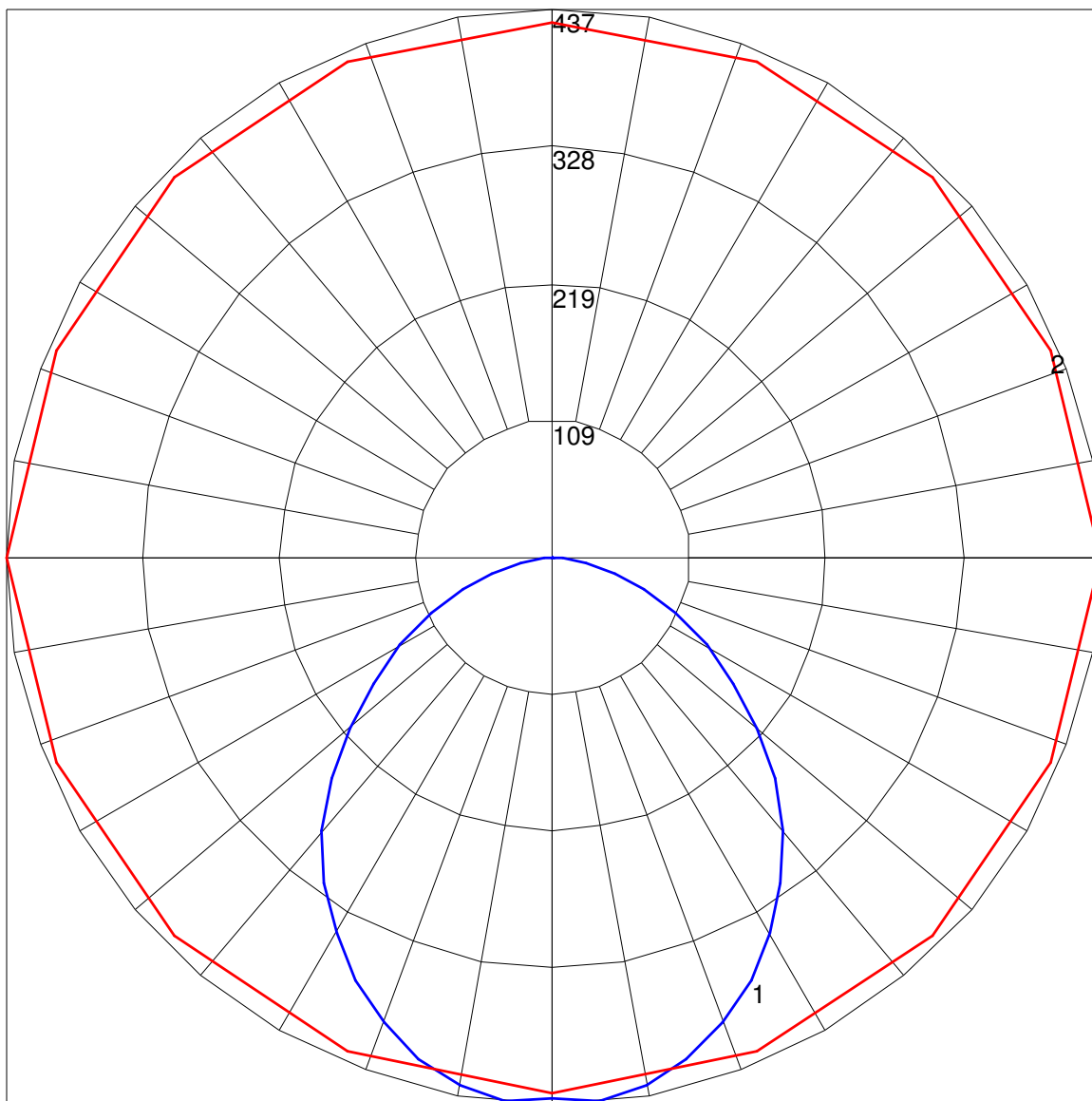
12H	4H	14.7	15.4	15.2	16.0	16.6	18.1	18.9	18.7	19.5	20.1
	6H	15.2	15.9	15.8	16.4	17.1	19.6	20.3	20.2	20.8	21.5
	8H	15.4	16.0	16.0	16.6	17.3	20.4	21.0	21.0	21.6	22.3

Maximum UGR = 23.1

# IES INDOOR REPORT

PHOTOMETRIC FILENAME : SLF-4-L52-840-HIA-(L32)-EM10W-DIM-UNV\_(EM MODE).IES

## POLAR GRAPH



Maximum Candela = 437.091 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.)