



IES INDOOR REPORT

PHOTOMETRIC FILENAME : SLF-2-L13-835-HIA-(L10)-DIM-UNV_.IES

DESCRIPTION INFORMATION (From Photometric File)

IESNA:LM-63-2002
 [TEST] GEN FROM BALLABS TEST NO. 17259.0
 [TESTLAB] BUILDING ACOUSTICS & LIGHTING LABORATORIES, INC
 [ISSUEDATE] 04-24-2024
 [MANUFAC] WILLIAMS INDOOR
 [OTHER] H.E. WILLIAMS, INC - CARTHAGE, MO64836
 [LUMINAIRE] 2' LED DIRECT/INDIRECT STAIRWELL LIGHT
 [MORE] WITH FROSTED POLYCARBONATE LENS
 [LUMCAT] SLF-2-L13-835-HIA-(L10)-DIM-UNV
 [LAMPCAT] HLM 80 CRI 3500K CCT
 [_SEARCH_SOURCETYPE]LED
 [_SEARCH_APPLICATION]INDOOR,COMMERCIAL,DIRECT,LINEAR
 [_SEARCH_MOUNTING]CEILING,SURFACE,WALL

CHARACTERISTICS

Lumens Per Lamp	N.A. (absolute)
Total Lamp Lumens	N.A. (absolute)
Luminaire Lumens	1012
Total Luminaire Efficiency	N.A.
Luminaire Efficacy Rating (LER)	123
Total Luminaire Watts	8.25
Ballast Factor	1.00
CIE Type	Direct
Spacing Criterion (0-180)	1.18
Spacing Criterion (90-270)	1.30
Spacing Criterion (Diagonal)	1.36
Basic Luminous Shape	Rectangular w/Sides
Luminous Length (0-180)	2.06 ft
Luminous Width (90-270)	0.50 ft
Luminous Height	0.24 ft

LUMINANCE DATA (cd/sq.m)

Angle In Degrees	Average 0-Deg	Average 45-Deg	Average 90-Deg
45	2319	2097	2273
55	1936	1765	2035
65	1500	1454	1767
75	1067	1202	1504
85	455	1010	1327

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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	318.963	318.963	318.963	318.963	318.963
5	319.819	317.820	316.393	316.678	314.965
10	314.108	313.252	312.395	314.108	313.252
15	304.114	303.828	304.971	307.541	307.826
20	291.550	292.692	294.976	299.831	301.544
25	272.132	274.702	280.699	287.266	290.407
30	251.001	255.855	266.135	274.988	278.414
35	228.442	233.582	247.574	260.139	264.993
40	202.172	209.025	225.587	242.435	247.574
45	175.615	183.896	202.172	222.160	228.157
50	147.631	159.339	177.614	200.744	207.311
55	124.216	135.638	155.626	181.326	188.751
60	98.801	111.366	133.353	158.482	167.334
65	75.957	88.236	112.222	136.209	145.346
70	56.254	68.533	94.518	117.077	124.501
75	37.979	49.686	76.814	98.801	104.227
80	22.273	35.980	62.251	81.954	87.379
85	8.852	24.843	49.115	68.533	71.959
90	0.000	15.134	38.264	55.397	58.253
95	0.000	10.565	30.554	45.688	48.258
100	0.000	6.853	22.559	36.551	38.550
105	0.000	5.997	19.418	29.698	32.839
110	0.000	3.712	13.992	23.415	25.985
115	0.000	3.427	12.279	19.703	22.273
120	0.000	3.141	9.709	16.277	18.846
125	0.000	2.284	7.424	13.135	15.134
130	0.000	0.000	7.139	11.708	12.850
135	0.000	0.000	4.854	8.567	10.565
140	0.000	0.000	4.283	7.424	8.281
145	0.000	0.000	0.000	5.711	6.853
150	0.000	0.000	0.000	4.854	5.711
155	0.000	0.000	0.000	3.998	3.998
160	0.000	0.000	0.000	3.427	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	2.284	0.000
180	0.000	0.000	0.000	0.000	0.000

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ZONAL LUMEN SUMMARY

Zone	Lumens	%Lamp	%Fixt
0-20	116.45	N.A.	11.50
0-30	246.11	N.A.	24.30
0-40	400.40	N.A.	39.60
0-60	697.12	N.A.	68.90
0-80	887.79	N.A.	87.70
0-90	938.14	N.A.	92.70
10-90	907.98	N.A.	89.70
20-40	283.95	N.A.	28.10
20-50	440.25	N.A.	43.50
40-70	408.26	N.A.	40.30
60-80	190.68	N.A.	18.80
70-80	79.13	N.A.	7.80
80-90	50.35	N.A.	5.00
90-110	49.06	N.A.	4.80
90-120	60.60	N.A.	6.00
90-130	67.61	N.A.	6.70
90-150	73.10	N.A.	7.20
90-180	73.88	N.A.	7.30
110-180	24.82	N.A.	2.50
0-180	1012.02	N.A.	100.00

Total Luminaire Efficiency = N.A. %

ZONAL LUMEN SUMMARY

Zone	Lumens
0-10	30.16
10-20	86.29
20-30	129.66
30-40	154.29
40-50	156.30
50-60	140.41
60-70	111.55
70-80	79.13
80-90	50.35
90-100	30.36
100-110	18.70
110-120	11.54
120-130	7.01
130-140	3.82
140-150	1.66
150-160	0.68
160-170	0.07
170-180	0.03

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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	117	117	117	117	114	114	114	114	107	107	107	101	101	101	95	95	95	93
1	106	100	96	91	102	97	93	89	92	88	85	86	84	81	82	79	77	75
2	96	87	80	74	92	84	78	72	80	74	69	75	71	67	71	67	64	61
3	87	76	68	61	84	74	66	60	70	63	58	66	61	56	63	58	54	52
4	80	67	58	51	77	66	57	51	62	55	49	59	53	48	56	51	46	44
5	73	60	51	44	71	59	50	44	56	48	43	53	46	41	50	45	40	38
6	68	54	45	39	65	53	44	38	50	43	37	48	41	36	46	40	35	33
7	63	49	40	34	61	48	40	34	46	38	33	44	37	32	42	36	31	29
8	58	45	36	30	56	44	36	30	42	35	29	40	34	29	38	33	28	26
9	55	41	33	27	53	40	32	27	39	31	26	37	31	26	35	30	25	24
10	51	38	30	25	50	37	30	24	36	29	24	34	28	24	33	27	23	21

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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	11.7	13.2	12.2	13.7	14.2	14.9	16.4	15.4	16.9	17.4
	3H	12.9	14.3	13.4	14.8	15.3	17.1	18.5	17.6	19.0	19.5
	4H	13.3	14.6	13.8	15.1	15.6	18.2	19.5	18.7	20.0	20.5
	6H	13.5	14.7	14.1	15.2	15.8	19.2	20.4	19.7	20.9	21.5
	8H	13.6	14.7	14.1	15.3	15.8	19.7	20.9	20.2	21.4	21.9
	12H	13.6	14.7	14.1	15.2	15.8	20.2	21.3	20.7	21.8	22.4

UGR Viewed Endwise

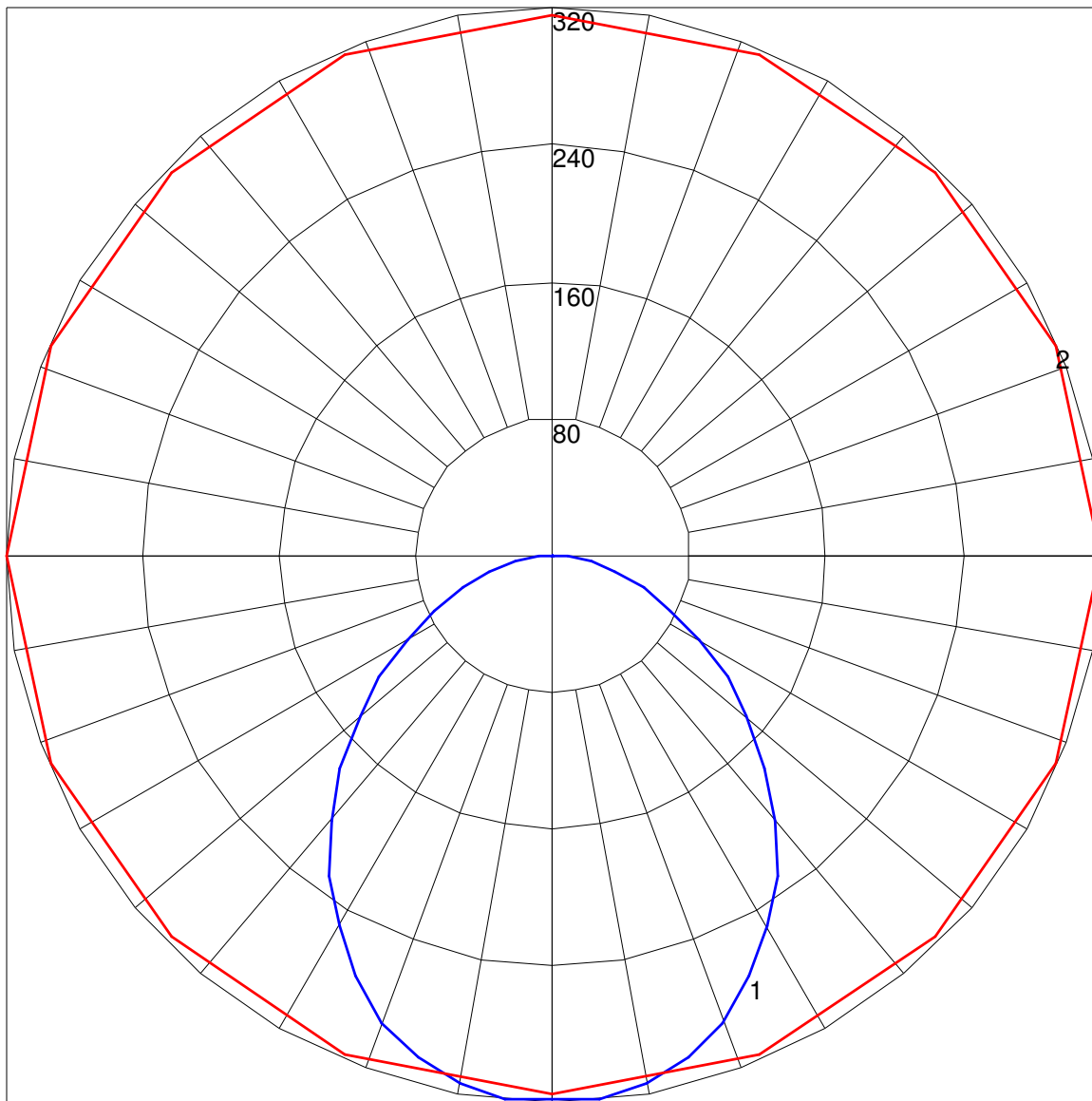
4H	2H	12.6	13.9	13.1	14.4	15.0	15.2	16.5	15.7	17.0	17.5
	3H	14.1	15.2	14.6	15.7	16.3	17.7	18.8	18.2	19.3	19.9
	4H	14.6	15.6	15.1	16.1	16.7	18.9	19.9	19.4	20.4	21.0
	6H	14.9	15.8	15.5	16.4	17.0	20.1	21.0	20.7	21.6	22.2
	8H	15.0	15.8	15.6	16.4	17.0	20.7	21.6	21.3	22.1	22.7
	12H	15.0	15.8	15.6	16.4	17.0	21.4	22.1	21.9	22.7	23.3

8H	4H	15.3	16.2	15.9	16.7	17.3	19.0	19.9	19.6	20.4	21.1
	6H	15.8	16.5	16.4	17.1	17.8	20.4	21.1	21.0	21.7	22.4
	8H	16.0	16.6	16.6	17.2	17.9	21.2	21.8	21.8	22.4	23.1
	12H	16.1	16.7	16.7	17.3	18.0	22.0	22.5	22.6	23.2	23.9

12H	4H	15.5	16.3	16.1	16.9	17.5	19.0	19.8	19.6	20.4	21.0
	6H	16.1	16.8	16.8	17.4	18.1	20.5	21.1	21.1	21.7	22.4
	8H	16.4	17.0	17.0	17.6	18.3	21.2	21.8	21.8	22.4	23.1

Maximum UGR = 23.9

POLAR GRAPH



Maximum Candela = 319.819 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.)