H.E. WILLIAMS, INC.

IES INDOOR REPORT
PHOTOMETRIC FILENAME : GL-4-L150-840-SCHA118-DIM-UNV_.IES

DESCRIPTION INFORMATION (From Photometric File)

IESNA:LM-63-2002
[TEST] GEN FROM BALLABS TEST NO. 19725.0
[TESTLAB] BUILDING ACOUSTICS & LIGHTING LABORATORIES, INC
[ISSUEDATE] 2023-07-17
[MANUFAC] WILLIAMS INDOOR
[OTHER] H.E. WILLIAMS, INC - CARTHAGE, MO
[LUMINAIRE] 48 INCH LOW PROFILE LED HIGHBAY LUMINAIRE
[MORE] WHITE REFLECTOR w/.118"THK CLEAR ACRYLIC LENS
[MORE] 0-10V UNIVERSAL VOLTAGE 122-277V DRIVERS
[LUMCAT] GL-4-L150-840-SCHA118-DIM-UNV_
[LAMPCAT] 22 INCH HLM LINEAR LED ARRAYS
[_SEARCH_SOURCETYPE] LED
[_SEARCH_APPLICATION] Indoor, Commercial, Industrial, Manufacturing, High Bay
[_SEARCH_MOUNTING] Cable, Pendant, Suspended

CHARACTERISTICS

Lumens Per Lamp	N.A. (absolute)
Total Lamp Lumens	N.A. (absolute)
Luminaire Lumens	13920
Total Luminaire Efficiency	N.A.
Luminaire Efficacy Rating (LER)	145
Total Luminaire Watts	96
Ballast Factor	1.00
CIE Type	Direct
Spacing Criterion (0-180)	1.34
Spacing Criterion (90-270)	1.32
Spacing Criterion (Diagonal)	1.42
Basic Luminous Shape	Rectangular
Luminous Length (0-180)	3.83 ft
Luminous Width (90-270)	1.00 ft
Luminous Height	0.00 ft

LUMINANCE DATA (cd/sq.m)

Angle In Degrees	Average 0-Deg	Average 45-Deg	Average 90-Deg
45	14931	14625	11164
55	14166	10385	10521
65	11877	9210	9006
75	7711	5189	3831
85	1536	1568	1312

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CANDELA TABULATION

	0.0	22.5	45.0	67.5	90.0
0	5216.580	5216.580	5216.580	5216.580	5216.580
5	5274.741	5214.591	5176.812	5157.425	5162.396
10	5228.510	5168.361	5136.547	5115.171	5122.131
15	5138.535	5095.287	5062.976	5027.681	5040.606
20	5025.196	4963.058	4937.209	4905.892	4925.279
25	4873.580	4794.044	4787.582	4773.166	4776.148
30	4667.780	4594.706	4598.683	4576.811	4589.735
35	4404.317	4317.821	4361.069	4350.630	4353.612
40	4109.536	4012.601	4032.982	4085.675	4077.721
45	3763.056	3672.584	3686.005	3406.634	2813.593
50	3348.474	3295.781	3302.740	2433.310	2456.674
55	2896.112	2867.777	2123.119	2152.448	2150.957
60	2393.045	2368.687	1774.651	1808.951	1808.951
65	1789.067	1817.899	1387.409	1435.131	1356.589
70	1219.886	966.365	989.728	910.689	719.803
75	711.352	558.742	478.708	438.940	353.439
80	282.851	246.065	179.951	147.142	136.703
85	47.722	42.751	48.716	49.213	40.762
90	0.000	0.000	0.000	0.000	0.000

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ZONAL LUMEN SUMMARY

Zone	Lumens	%Lamp	%Fixt
0-20	1925.77	N.A.	13.80
0-30	4136.25	N.A.	29.70
0-40	6857.34	N.A.	49.30
0-60	11769.93	N.A.	84.60
0-80	13841.88	N.A.	99.40
0-90	13920.28	N.A.	100.00
10-90	13425.93	N.A.	96.40
20-40	4931.57	N.A.	35.40
20-50	7645.95	N.A.	54.90
40-70	6415.82	N.A.	46.10
60-80	2071.95	N.A.	14.90
70-80	568.72	N.A.	4.10
80-90	78.41	N.A.	0.60
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	13920.28	N.A.	100.00

Total Luminaire Efficiency = N.A.%

ZONAL LUMEN SUMMARY

Zone	Lumens
0-10	494.35
10-20	1431.42
20-30	2210.48
30-40	2721.09
40-50	2714.39
50-60	2198.2
60-70	1503.23
70-80	568.72
80-90	78.41
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

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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	111	111	111	106	106	106	102	102	102	100
1	110	106	102	98	107	103	100	97	99	96	94	95	93	91	92	90	88	86
2	101	93	87	81	98	91	85	80	88	83	78	84	80	77	81	78	75	73
3	92	82	74	68	90	81	73	68	78	72	67	75	70	65	72	68	64	62
4	84	73	65	58	82	72	64	58	69	62	57	67	61	56	65	60	56	53
5	78	65	57	50	76	64	56	50	62	55	50	60	54	49	58	53	49	46
6	72	59	50	44	70	58	50	44	56	49	44	55	48	43	53	47	43	41
7	67	54	45	39	65	53	45	39	51	44	39	50	43	38	48	43	38	36
8	62	49	41	35	61	48	40	35	47	40	35	46	39	34	44	39	34	32
9	58	45	37	31	57	44	37	31	43	36	31	42	36	31	41	35	31	29
10	54	41	34	28	53	41	33	28	40	33	28	39	33	28	38	32	28	26

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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					UGR Viewed Endwise				
X=2H	Y=2H	21.8	23.3	22.1	23.6	24.0	19.8	21.4	20.2	21.7	22.0
	3H	23.0	24.4	23.3	24.7	25.1	21.0	22.4	21.4	22.8	23.1
	4H	23.3	24.6	23.7	25.0	25.4	21.2	22.6	21.6	22.9	23.3
	6H	23.5	24.7	23.9	25.0	25.4	21.3	22.5	21.7	22.9	23.3
	8H	23.5	24.6	23.9	25.0	25.4	21.3	22.4	21.7	22.8	23.2
	12H	23.5	24.6	23.9	24.9	25.4	21.3	22.4	21.7	22.8	23.2
4H	2H	22.0	23.3	22.4	23.7	24.1	20.4	21.7	20.8	22.0	22.4
	3H	23.4	24.5	23.8	24.9	25.3	21.8	22.9	22.2	23.3	23.7
	4H	23.8	24.8	24.2	25.2	25.6	22.1	23.0	22.5	23.5	23.9
	6H	24.0	24.8	24.5	25.3	25.8	22.2	23.0	22.6	23.4	23.9
	8H	24.0	24.8	24.5	25.3	25.7	22.1	22.9	22.6	23.4	23.8
	12H	24.0	24.7	24.5	25.2	25.7	22.1	22.8	22.6	23.3	23.8
8H	4H	23.8	24.6	24.3	25.1	25.5	22.2	23.0	22.7	23.4	23.9
	6H	24.1	24.7	24.6	25.2	25.7	22.3	23.0	22.8	23.4	23.9
	8H	24.1	24.7	24.6	25.2	25.7	22.3	22.9	22.8	23.4	23.9
	12H	24.1	24.6	24.6	25.1	25.7	22.3	22.8	22.8	23.3	23.9
12H	4H	23.8	24.5	24.3	25.0	25.5	22.2	22.9	22.7	23.4	23.8
	6H	24.0	24.6	24.6	25.1	25.6	22.3	22.9	22.8	23.3	23.9
	8H	24.1	24.6	24.6	25.1	25.7	22.3	22.8	22.8	23.3	23.9

Maximum UGR = 25.8

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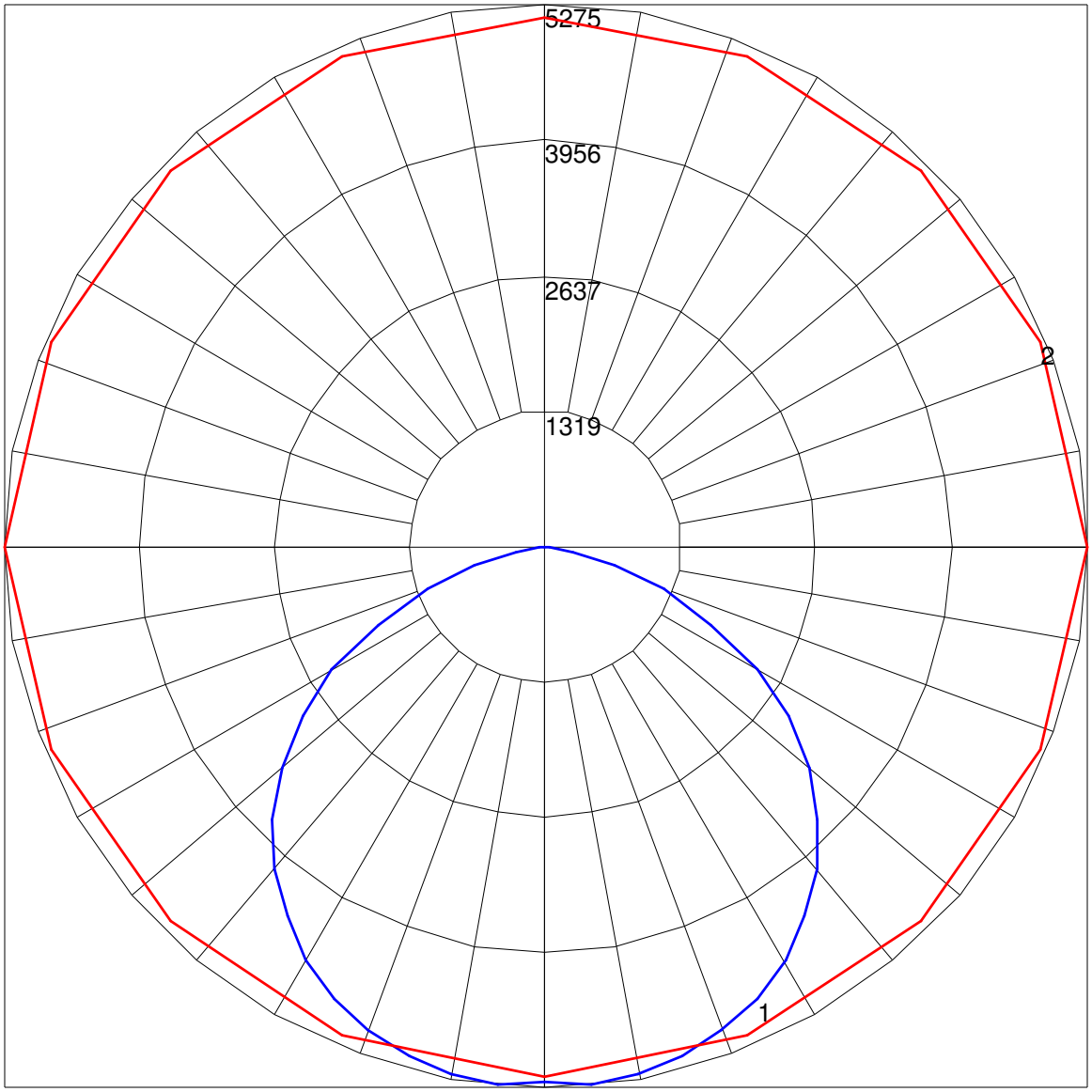
POLAR GRAPH



Maximum Candela = 5274.741 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.)