H.E. WILLIAMS, INC.

IES INDOOR REPORT
PHOTOMETRIC FILENAME : GL-4-L150-940-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-L150-940-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	11554
Total Luminaire Efficiency	N.A.
Luminaire Efficacy Rating (LER)	120
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	12392	12139	9266
55	11758	8620	8733
65	9858	7645	7475
75	6400	4307	3180
85	1275	1302	1089

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CANDELA TABULATION

	0.0	22.5	45.0	67.5	90.0
0	4329.763	4329.763	4329.763	4329.763	4329.763
5	4378.036	4328.112	4296.755	4280.664	4284.790
10	4339.665	4289.741	4263.335	4245.593	4251.370
15	4264.985	4229.090	4202.271	4172.977	4183.704
20	4170.914	4119.340	4097.885	4071.891	4087.982
25	4045.073	3979.058	3973.694	3961.729	3964.204
30	3874.259	3813.607	3816.908	3798.754	3809.481
35	3655.584	3583.792	3619.688	3611.024	3613.499
40	3410.916	3330.460	3347.376	3391.111	3384.509
45	3123.337	3048.245	3059.385	2827.507	2335.283
50	2779.234	2735.499	2741.275	2019.648	2039.040
55	2403.773	2380.255	1762.189	1786.532	1785.295
60	1986.228	1966.011	1472.961	1501.430	1501.430
65	1484.926	1508.857	1151.550	1191.159	1125.969
70	1012.506	802.083	821.475	755.872	597.436
75	590.422	463.756	397.328	364.321	293.354
80	234.766	204.234	149.359	122.128	113.463
85	39.609	35.483	40.434	40.847	33.833
90	0.000	0.000	0.000	0.000	0.000

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ZONAL LUMEN SUMMARY

Zone	Lumens	%Lamp	%Fixt
0-20	1598.39	N.A.	13.80
0-30	3433.09	N.A.	29.70
0-40	5691.59	N.A.	49.30
0-60	9769.04	N.A.	84.60
0-80	11488.76	N.A.	99.40
0-90	11553.84	N.A.	100.00
10-90	11143.53	N.A.	96.40
20-40	4093.2	N.A.	35.40
20-50	6346.14	N.A.	54.90
40-70	5325.13	N.A.	46.10
60-80	1719.72	N.A.	14.90
70-80	472.04	N.A.	4.10
80-90	65.08	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	11553.84	N.A.	100.00

Total Luminaire Efficiency = N.A.%

ZONAL LUMEN SUMMARY

Zone	Lumens
0-10	410.31
10-20	1188.08
20-30	1834.7
30-40	2258.51
40-50	2252.94
50-60	1824.51
60-70	1247.68
70-80	472.04
80-90	65.08
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	21.2	22.7	21.5	23.0	23.4	19.2	20.8	19.6	21.1	21.4
	3H	22.4	23.8	22.7	24.1	24.5	20.4	21.8	20.8	22.2	22.5
	4H	22.7	24.0	23.1	24.4	24.8	20.6	22.0	21.0	22.3	22.7
	6H	22.9	24.1	23.3	24.4	24.8	20.7	21.9	21.1	22.3	22.7
	8H	22.9	24.0	23.3	24.4	24.8	20.7	21.8	21.1	22.2	22.6
	12H	22.9	24.0	23.3	24.3	24.8	20.7	21.8	21.1	22.2	22.6
4H	2H	21.4	22.7	21.8	23.1	23.5	19.8	21.1	20.2	21.4	21.8
	3H	22.8	23.9	23.2	24.3	24.7	21.2	22.3	21.6	22.7	23.1
	4H	23.2	24.2	23.6	24.6	25.0	21.5	22.4	21.9	22.9	23.3
	6H	23.4	24.2	23.9	24.7	25.2	21.6	22.4	22.0	22.8	23.3
	8H	23.4	24.2	23.9	24.7	25.1	21.5	22.3	22.0	22.8	23.2
	12H	23.4	24.1	23.9	24.6	25.1	21.5	22.2	22.0	22.7	23.2
8H	4H	23.2	24.0	23.7	24.5	24.9	21.6	22.4	22.1	22.8	23.3
	6H	23.5	24.1	24.0	24.6	25.1	21.7	22.4	22.2	22.8	23.3
	8H	23.5	24.1	24.0	24.6	25.1	21.7	22.3	22.2	22.8	23.3
	12H	23.5	24.0	24.0	24.5	25.1	21.7	22.2	22.2	22.7	23.3
12H	4H	23.2	23.9	23.7	24.4	24.9	21.6	22.3	22.1	22.8	23.2
	6H	23.4	24.0	24.0	24.5	25.0	21.7	22.3	22.2	22.7	23.3
	8H	23.5	24.0	24.0	24.5	25.1	21.7	22.2	22.2	22.7	23.3

Maximum UGR = 25.2

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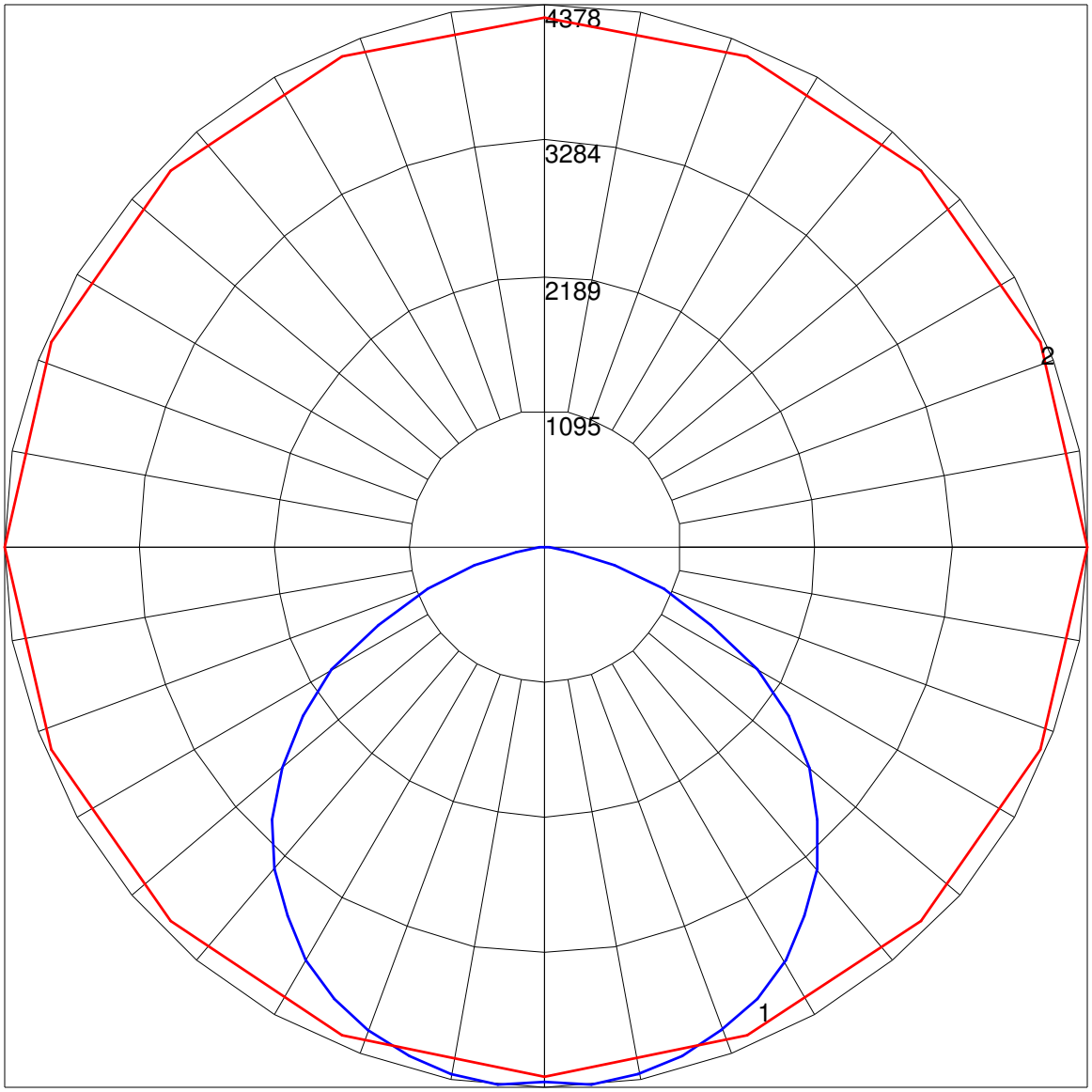
POLAR GRAPH



Maximum Candela = 4378.036 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.)

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