H.E. WILLIAMS, INC.

IES INDOOR REPORT
PHOTOMETRIC FILENAME : GL-4-L200-835-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-L200-835-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	18030
Total Luminaire Efficiency	N.A.
Luminaire Efficacy Rating (LER)	136
Total Luminaire Watts	133
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	19339	18943	14459
55	18348	13451	13628
65	15383	11930	11665
75	9988	6721	4962
85	1990	2031	1700

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CANDELA TABULATION

	0.0	22.5	45.0	67.5	90.0
0	6756.752	6756.752	6756.752	6756.752	6756.752
5	6832.084	6754.176	6705.242	6680.131	6686.570
10	6772.205	6694.297	6653.089	6625.403	6634.417
15	6655.664	6599.648	6557.796	6512.082	6528.822
20	6508.863	6428.379	6394.898	6354.334	6379.445
25	6312.483	6209.464	6201.094	6182.421	6186.285
30	6045.921	5951.273	5956.424	5928.093	5944.834
35	5704.671	5592.638	5648.655	5635.134	5638.997
40	5322.857	5197.303	5223.702	5291.952	5281.650
45	4874.081	4756.897	4774.282	4412.428	3644.293
50	4337.095	4268.845	4277.860	3151.734	3181.996
55	3751.175	3714.475	2749.961	2787.949	2786.017
60	3099.581	3068.031	2298.609	2343.036	2343.036
65	2317.281	2354.626	1797.036	1858.847	1757.116
70	1580.052	1251.680	1281.941	1179.566	932.321
75	921.375	723.708	620.045	568.536	457.790
80	366.361	318.715	233.080	190.585	177.064
85	61.811	55.373	63.099	63.743	52.797
90	0.000	0.000	0.000	0.000	0.000

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ZONAL LUMEN SUMMARY

Zone	Lumens	%Lamp	%Fixt
0-20	2494.35	N.A.	13.80
0-30	5357.45	N.A.	29.70
0-40	8881.94	N.A.	49.30
0-60	15244.94	N.A.	84.60
0-80	17928.63	N.A.	99.40
0-90	18030.18	N.A.	100.00
10-90	17389.88	N.A.	96.40
20-40	6387.59	N.A.	35.40
20-50	9903.39	N.A.	54.90
40-70	8310.06	N.A.	46.10
60-80	2683.69	N.A.	14.90
70-80	736.63	N.A.	4.10
80-90	101.55	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	18030.18	N.A.	100.00

Total Luminaire Efficiency = N.A.%

ZONAL LUMEN SUMMARY

Zone	Lumens
0-10	640.30
10-20	1854.04
20-30	2863.11
30-40	3524.48
40-50	3515.8
50-60	2847.21
60-70	1947.05
70-80	736.63
80-90	101.55
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	22.7	24.2	23.0	24.5	24.9	20.7	22.3	21.1	22.6	22.9
	3H	23.9	25.3	24.2	25.6	26.0	21.9	23.3	22.3	23.7	24.0
	4H	24.2	25.5	24.6	25.9	26.3	22.1	23.5	22.5	23.8	24.2
	6H	24.4	25.6	24.8	25.9	26.3	22.2	23.4	22.6	23.8	24.2
	8H	24.4	25.5	24.8	25.9	26.3	22.2	23.3	22.6	23.7	24.1
	12H	24.4	25.5	24.8	25.8	26.3	22.2	23.3	22.6	23.7	24.1
4H	2H	22.9	24.2	23.3	24.6	25.0	21.3	22.6	21.7	22.9	23.3
	3H	24.3	25.4	24.7	25.8	26.2	22.7	23.8	23.1	24.2	24.6
	4H	24.7	25.7	25.1	26.1	26.5	23.0	23.9	23.4	24.4	24.8
	6H	24.9	25.7	25.4	26.2	26.7	23.1	23.9	23.5	24.3	24.8
	8H	24.9	25.7	25.4	26.2	26.6	23.0	23.8	23.5	24.3	24.7
	12H	24.9	25.6	25.4	26.1	26.6	23.0	23.7	23.5	24.2	24.7
8H	4H	24.7	25.5	25.2	26.0	26.4	23.1	23.9	23.6	24.3	24.8
	6H	25.0	25.6	25.5	26.1	26.6	23.2	23.9	23.7	24.3	24.8
	8H	25.0	25.6	25.5	26.1	26.6	23.2	23.8	23.7	24.3	24.8
	12H	25.0	25.5	25.5	26.0	26.6	23.2	23.7	23.7	24.2	24.8
12H	4H	24.7	25.4	25.2	25.9	26.4	23.1	23.8	23.6	24.3	24.7
	6H	24.9	25.5	25.5	26.0	26.5	23.2	23.8	23.7	24.2	24.8
	8H	25.0	25.5	25.5	26.0	26.6	23.2	23.7	23.7	24.2	24.8

Maximum UGR = 26.7

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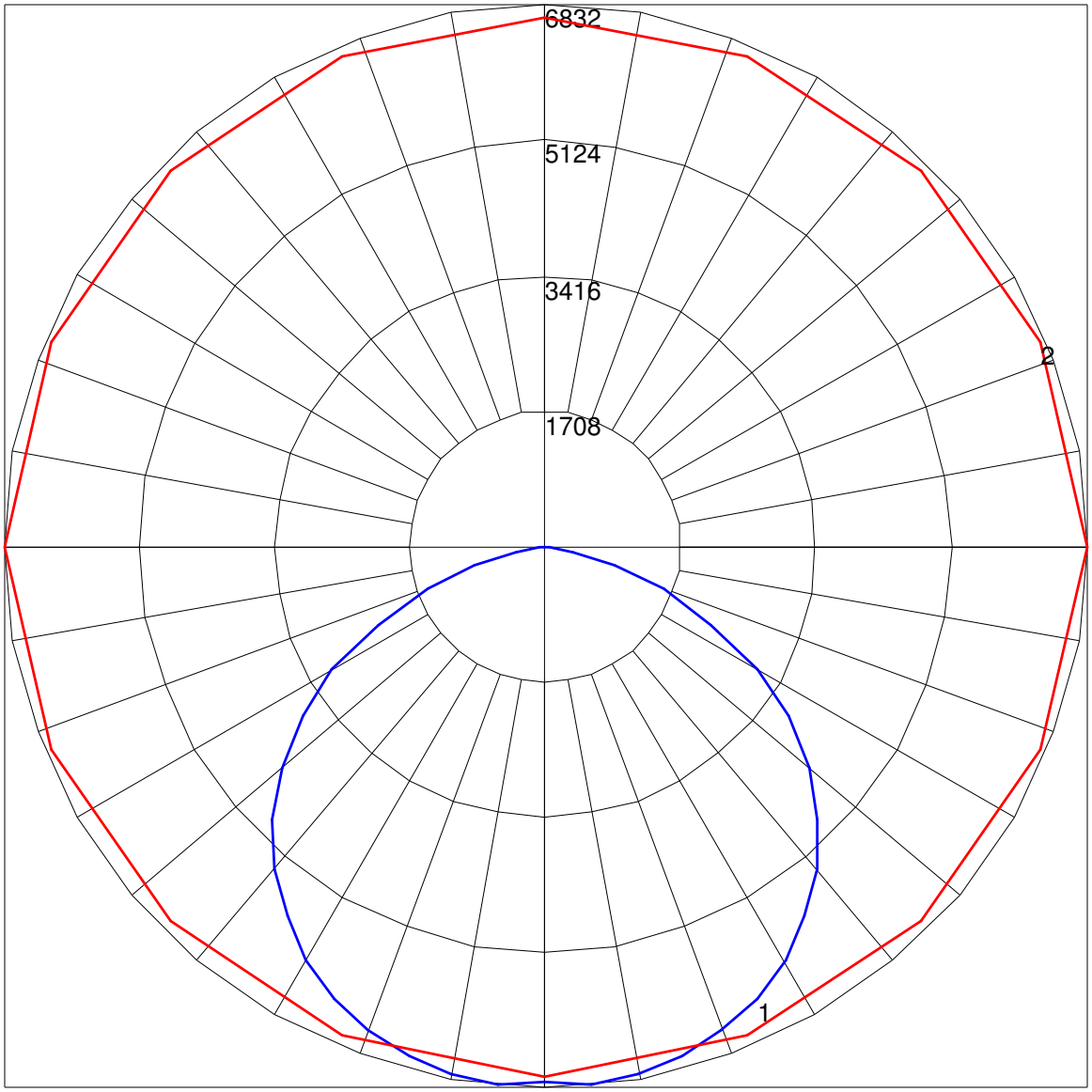
POLAR GRAPH



Maximum Candela = 6832.084 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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