H.E. WILLIAMS, INC.

IES INDOOR REPORT
PHOTOMETRIC FILENAME : GL-4-L300-840-SAF118-DIM-UNV_.IES

DESCRIPTION INFORMATION (From Photometric File)

IESNA:LM-63-2002
[TEST] GEN FROM BALLABS TEST NO. 19726.0
[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 FROSTED ACRYLIC LENS
[MORE] 0-10V LED DRIVERS
[LUMCAT] GL-4-L300-840-SAF118-DIM-UNV
[LAMPCAT] 22 INCH HLM 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	25854
Total Luminaire Efficiency	N.A.
Luminaire Efficacy Rating (LER)	129
Total Luminaire Watts	200
Ballast Factor	1.00
CIE Type	Direct
Spacing Criterion (0-180)	1.32
Spacing Criterion (90-270)	1.26
Spacing Criterion (Diagonal)	1.38
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	27469	26174	22786
55	24836	21233	19636
65	19556	16238	15565
75	13483	11041	11010
85	4814	4418	4784

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CANDELA TABULATION

	0.0	22.5	45.0	67.5	90.0
0	9983.508	9983.508	9983.508	9983.508	9983.508
5	10135.906	9990.134	9924.820	9872.758	9857.613
10	10049.768	9884.117	9841.522	9781.887	9768.635
15	9887.904	9725.093	9691.016	9614.344	9604.878
20	9619.077	9502.648	9452.480	9336.998	9358.769
25	9272.631	9188.386	9118.340	8983.926	9016.110
30	8846.673	8774.734	8721.725	8552.289	8529.571
35	8320.378	8213.416	8200.164	7974.879	7809.229
40	7682.388	7576.372	7504.432	7154.200	6806.808
45	6923.236	6841.831	6596.669	6100.664	5742.860
50	6051.442	5974.770	5503.377	5060.380	4861.600
55	5077.419	4971.402	4340.985	4121.380	4014.417
60	4004.005	3906.508	3321.525	3128.424	3155.875
65	2945.736	2838.773	2445.945	2315.318	2344.662
70	2037.972	1842.978	1701.939	1603.495	1623.373
75	1243.797	1080.040	1018.513	964.558	1015.673
80	591.608	510.203	480.859	470.447	499.791
85	149.559	139.146	137.253	142.933	148.612
90	0.000	0.000	0.000	0.000	0.000

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ZONAL LUMEN SUMMARY

Zone	Lumens	%Lamp	%Fixt
0-20	3683.53	N.A.	14.20
0-30	7881.22	N.A.	30.50
0-40	12938.03	N.A.	50.00
0-60	21935.6	N.A.	84.80
0-80	25640.36	N.A.	99.20
0-90	25854.23	N.A.	100.00
10-90	24907.66	N.A.	96.30
20-40	9254.5	N.A.	35.80
20-50	14234.78	N.A.	55.10
40-70	11557.54	N.A.	44.70
60-80	3704.76	N.A.	14.30
70-80	1144.78	N.A.	4.40
80-90	213.87	N.A.	0.80
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	25854.23	N.A.	100.00

Total Luminaire Efficiency = N.A.%

ZONAL LUMEN SUMMARY

Zone	Lumens
0-10	946.57
10-20	2736.96
20-30	4197.69
30-40	5056.81
40-50	4980.28
50-60	4017.29
60-70	2559.98
70-80	1144.78
80-90	213.87
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	79	84	80	77	81	78	75	73
3	92	82	75	68	90	81	74	68	78	72	67	75	70	66	73	68	64	62
4	85	73	65	59	82	72	64	58	69	63	57	67	61	57	65	60	56	54
5	78	66	57	51	76	65	57	50	63	55	50	61	54	49	59	53	49	47
6	72	59	51	45	70	58	50	44	57	49	44	55	48	44	53	48	43	41
7	67	54	45	39	65	53	45	39	52	44	39	50	44	39	49	43	38	37
8	62	49	41	35	61	49	41	35	47	40	35	46	40	35	45	39	35	33
9	58	45	37	32	57	45	37	32	44	36	32	42	36	31	41	36	31	29
10	55	42	34	29	53	41	34	29	40	33	29	39	33	29	38	33	28	27

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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	23.3	24.9	23.7	25.2	25.5	21.9	23.4	22.2	23.8	24.1
	3H	24.6	26.0	25.0	26.3	26.7	23.1	24.5	23.5	24.9	25.2
	4H	24.9	26.3	25.3	26.6	27.0	23.5	24.9	23.9	25.2	25.6
	6H	25.1	26.4	25.6	26.7	27.1	23.8	25.0	24.2	25.3	25.7
	8H	25.2	26.3	25.6	26.7	27.1	23.8	25.0	24.2	25.4	25.8
	12H	25.2	26.3	25.6	26.7	27.1	23.8	24.9	24.2	25.3	25.7
4H	2H	23.6	24.9	24.0	25.3	25.7	22.4	23.7	22.8	24.1	24.4
	3H	25.1	26.1	25.5	26.5	26.9	23.8	24.9	24.3	25.3	25.7
	4H	25.5	26.5	25.9	26.9	27.3	24.3	25.3	24.8	25.7	26.2
	6H	25.8	26.6	26.2	27.1	27.5	24.6	25.5	25.1	25.9	26.4
	8H	25.8	26.6	26.3	27.1	27.5	24.7	25.5	25.2	25.9	26.4
	12H	25.9	26.6	26.3	27.0	27.5	24.7	25.4	25.2	25.9	26.4
8H	4H	25.6	26.4	26.1	26.8	27.3	24.5	25.3	25.0	25.7	26.2
	6H	25.9	26.6	26.4	27.1	27.5	24.8	25.5	25.3	26.0	26.5
	8H	26.0	26.6	26.5	27.1	27.6	24.9	25.5	25.5	26.0	26.5
	12H	26.1	26.6	26.6	27.1	27.6	25.0	25.5	25.5	26.0	26.6
12H	4H	25.6	26.3	26.1	26.8	27.3	24.5	25.2	25.0	25.7	26.2
	6H	25.9	26.5	26.4	27.0	27.5	24.9	25.5	25.4	25.9	26.5
	8H	26.0	26.5	26.5	27.0	27.6	25.0	25.5	25.5	26.0	26.6

Maximum UGR = 27.6

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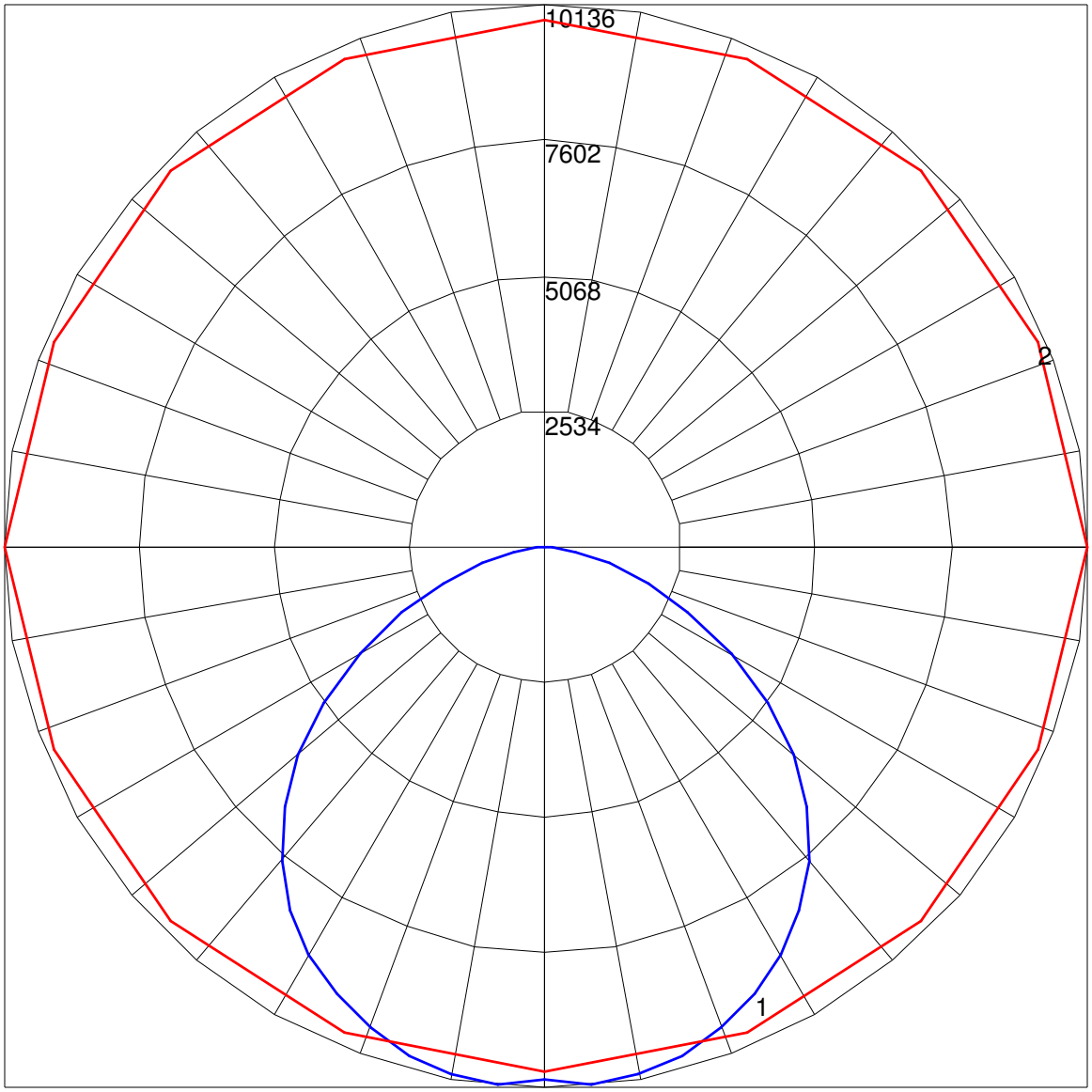
POLAR GRAPH



Maximum Candela = 10135.906 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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