H.E. WILLIAMS, INC.

IES INDOOR REPORT
PHOTOMETRIC FILENAME : GL-4-L300-835-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-L300-835-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	25079
Total Luminaire Efficiency	N.A.
Luminaire Efficacy Rating (LER)	125
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	26645	25388	22102
55	24091	20596	19047
65	18969	15751	15098
75	13078	10709	10680
85	4670	4286	4640

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CANDELA TABULATION

	0.0	22.5	45.0	67.5	90.0
0	9684.002	9684.002	9684.002	9684.002	9684.002
5	9831.829	9690.429	9627.075	9576.576	9561.885
10	9748.275	9587.594	9546.276	9488.431	9475.576
15	9591.266	9433.340	9400.286	9325.914	9316.732
20	9330.504	9217.569	9168.905	9056.888	9078.006
25	8994.452	8912.734	8844.789	8714.408	8745.626
30	8581.273	8511.491	8460.074	8295.720	8273.684
35	8070.767	7967.013	7954.159	7735.633	7574.952
40	7451.916	7349.081	7279.299	6939.574	6602.604
45	6715.539	6636.576	6398.769	5917.644	5570.574
50	5869.899	5795.527	5338.275	4908.569	4715.752
55	4925.096	4822.260	4210.755	3997.738	3893.984
60	3883.884	3789.312	3221.880	3034.572	3061.199
65	2857.364	2753.610	2372.567	2245.858	2274.322
70	1976.833	1787.689	1650.880	1555.390	1574.672
75	1206.483	1047.639	987.957	935.621	985.203
80	573.860	494.897	466.433	456.333	484.797
85	145.072	134.972	133.136	138.645	144.154
90	0.000	0.000	0.000	0.000	0.000

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ZONAL LUMEN SUMMARY

Zone	Lumens	%Lamp	%Fixt
0-20	3573.02	N.A.	14.20
0-30	7644.78	N.A.	30.50
0-40	12549.89	N.A.	50.00
0-60	21277.53	N.A.	84.80
0-80	24871.15	N.A.	99.20
0-90	25078.61	N.A.	100.00
10-90	24160.43	N.A.	96.30
20-40	8976.87	N.A.	35.80
20-50	13807.74	N.A.	55.10
40-70	11210.82	N.A.	44.70
60-80	3593.62	N.A.	14.30
70-80	1110.44	N.A.	4.40
80-90	207.46	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	25078.61	N.A.	100.00

Total Luminaire Efficiency = N.A.%

ZONAL LUMEN SUMMARY

Zone	Lumens
0-10	918.17
10-20	2654.85
20-30	4071.76
30-40	4905.11
40-50	4830.87
50-60	3896.77
60-70	2483.18
70-80	1110.44
80-90	207.46
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	23.2	24.8	23.6	25.1	25.4	21.8	23.3	22.1	23.7	24.0
	3H	24.5	25.9	24.9	26.2	26.6	23.0	24.4	23.4	24.8	25.1
	4H	24.8	26.2	25.2	26.5	26.9	23.4	24.8	23.8	25.1	25.5
	6H	25.0	26.3	25.5	26.6	27.0	23.7	24.9	24.1	25.2	25.6
	8H	25.1	26.2	25.5	26.6	27.0	23.7	24.9	24.1	25.3	25.7
	12H	25.1	26.2	25.5	26.6	27.0	23.7	24.8	24.1	25.2	25.6
4H	2H	23.5	24.8	23.9	25.2	25.6	22.3	23.6	22.7	24.0	24.3
	3H	25.0	26.0	25.4	26.4	26.8	23.7	24.8	24.2	25.2	25.6
	4H	25.4	26.4	25.8	26.8	27.2	24.2	25.2	24.7	25.6	26.1
	6H	25.7	26.5	26.1	27.0	27.4	24.5	25.4	25.0	25.8	26.3
	8H	25.7	26.5	26.2	27.0	27.4	24.6	25.4	25.1	25.8	26.3
	12H	25.8	26.5	26.2	26.9	27.4	24.6	25.3	25.1	25.8	26.3
8H	4H	25.5	26.3	26.0	26.7	27.2	24.4	25.2	24.9	25.6	26.1
	6H	25.8	26.5	26.3	27.0	27.4	24.7	25.4	25.2	25.9	26.4
	8H	25.9	26.5	26.4	27.0	27.5	24.8	25.4	25.4	25.9	26.4
	12H	26.0	26.5	26.5	27.0	27.5	24.9	25.4	25.4	25.9	26.5
12H	4H	25.5	26.2	26.0	26.7	27.2	24.4	25.1	24.9	25.6	26.1
	6H	25.8	26.4	26.3	26.9	27.4	24.8	25.4	25.3	25.8	26.4
	8H	25.9	26.4	26.4	26.9	27.5	24.9	25.4	25.4	25.9	26.5

Maximum UGR = 27.5

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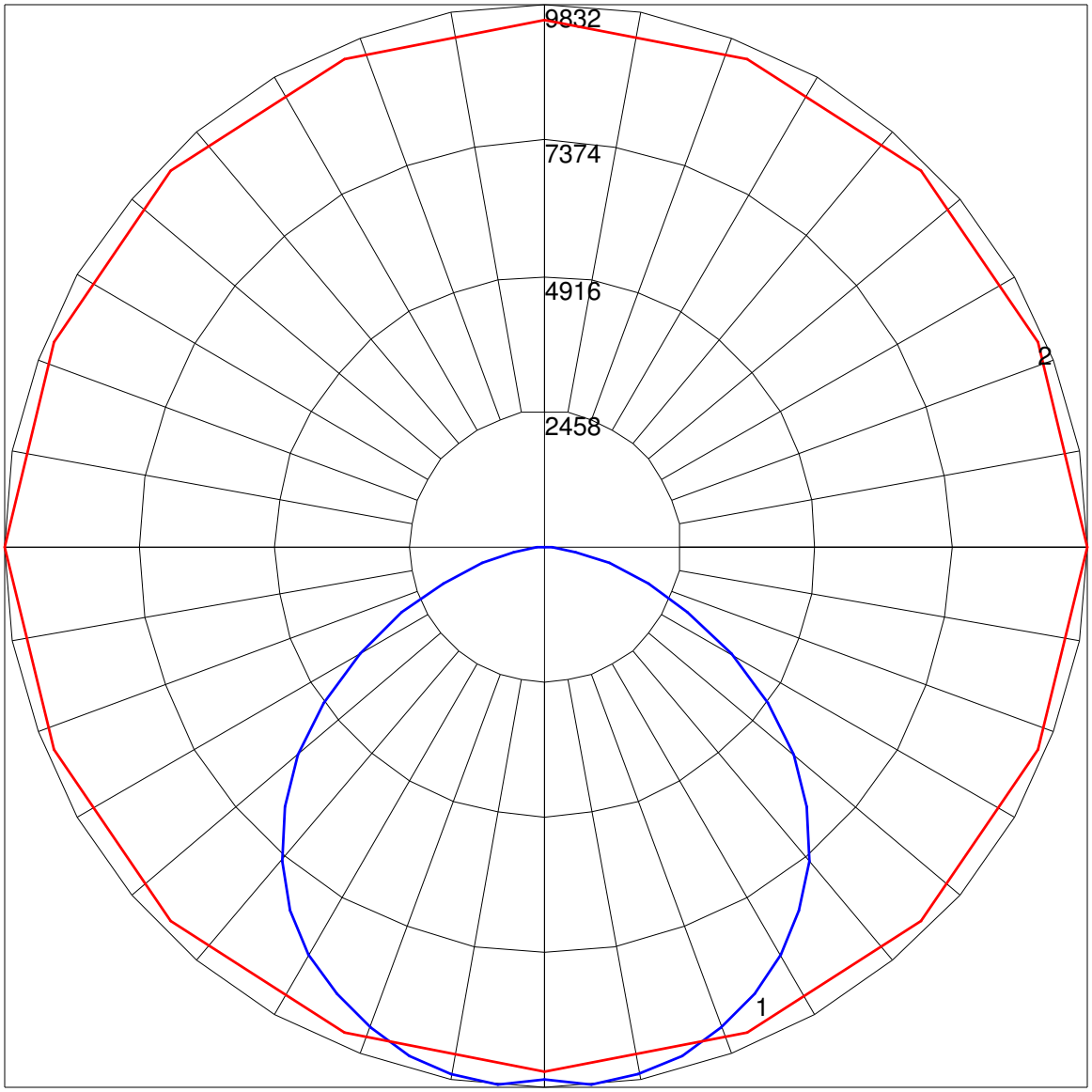
POLAR GRAPH



Maximum Candela = 9831.829 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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