H.E. WILLIAMS, INC.

IES INDOOR REPORT
PHOTOMETRIC FILENAME : GL-4-L300-830-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-L300-830-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	24820
Total Luminaire Efficiency	N.A.
Luminaire Efficacy Rating (LER)	124
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	26371	25127	21875
55	23842	20384	18851
65	18773	15588	14943
75	12943	10599	10569
85	4622	4242	4593

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CANDELA TABULATION

	0.0	22.5	45.0	67.5	90.0
0	9584.166	9584.166	9584.166	9584.166	9584.166
5	9730.469	9590.527	9527.826	9477.847	9463.308
10	9647.776	9488.752	9447.860	9390.611	9377.889
15	9492.387	9336.088	9303.375	9229.769	9220.682
20	9234.313	9122.542	9074.380	8963.517	8984.418
25	8901.725	8820.850	8753.605	8624.568	8655.464
30	8492.805	8423.743	8372.856	8210.196	8188.387
35	7987.562	7884.878	7872.156	7655.883	7496.859
40	7375.092	7273.316	7204.254	6868.032	6534.535
45	6646.306	6568.157	6332.801	5856.637	5513.145
50	5809.384	5735.779	5283.241	4857.965	4667.135
55	4874.321	4772.546	4167.345	3956.524	3853.840
60	3843.844	3750.247	3188.664	3003.287	3029.640
65	2827.906	2725.222	2348.107	2222.705	2250.875
70	1956.453	1769.259	1633.861	1539.355	1558.438
75	1194.045	1036.838	977.772	925.976	975.046
80	567.944	489.795	461.625	451.629	479.799
85	143.576	133.580	131.763	137.215	142.667
90	0.000	0.000	0.000	0.000	0.000

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ZONAL LUMEN SUMMARY

Zone	Lumens	%Lamp	%Fixt
0-20	3536.19	N.A.	14.20
0-30	7565.97	N.A.	30.50
0-40	12420.51	N.A.	50.00
0-60	21058.17	N.A.	84.80
0-80	24614.74	N.A.	99.20
0-90	24820.06	N.A.	100.00
10-90	23911.35	N.A.	96.30
20-40	8884.32	N.A.	35.80
20-50	13665.39	N.A.	55.10
40-70	11095.24	N.A.	44.70
60-80	3556.57	N.A.	14.30
70-80	1098.99	N.A.	4.40
80-90	205.32	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	24820.06	N.A.	100.00

Total Luminaire Efficiency = N.A.%

ZONAL LUMEN SUMMARY

Zone	Lumens
0-10	908.71
10-20	2627.48
20-30	4029.78
30-40	4854.54
40-50	4781.07
50-60	3856.6
60-70	2457.58
70-80	1098.99
80-90	205.32
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	27.1	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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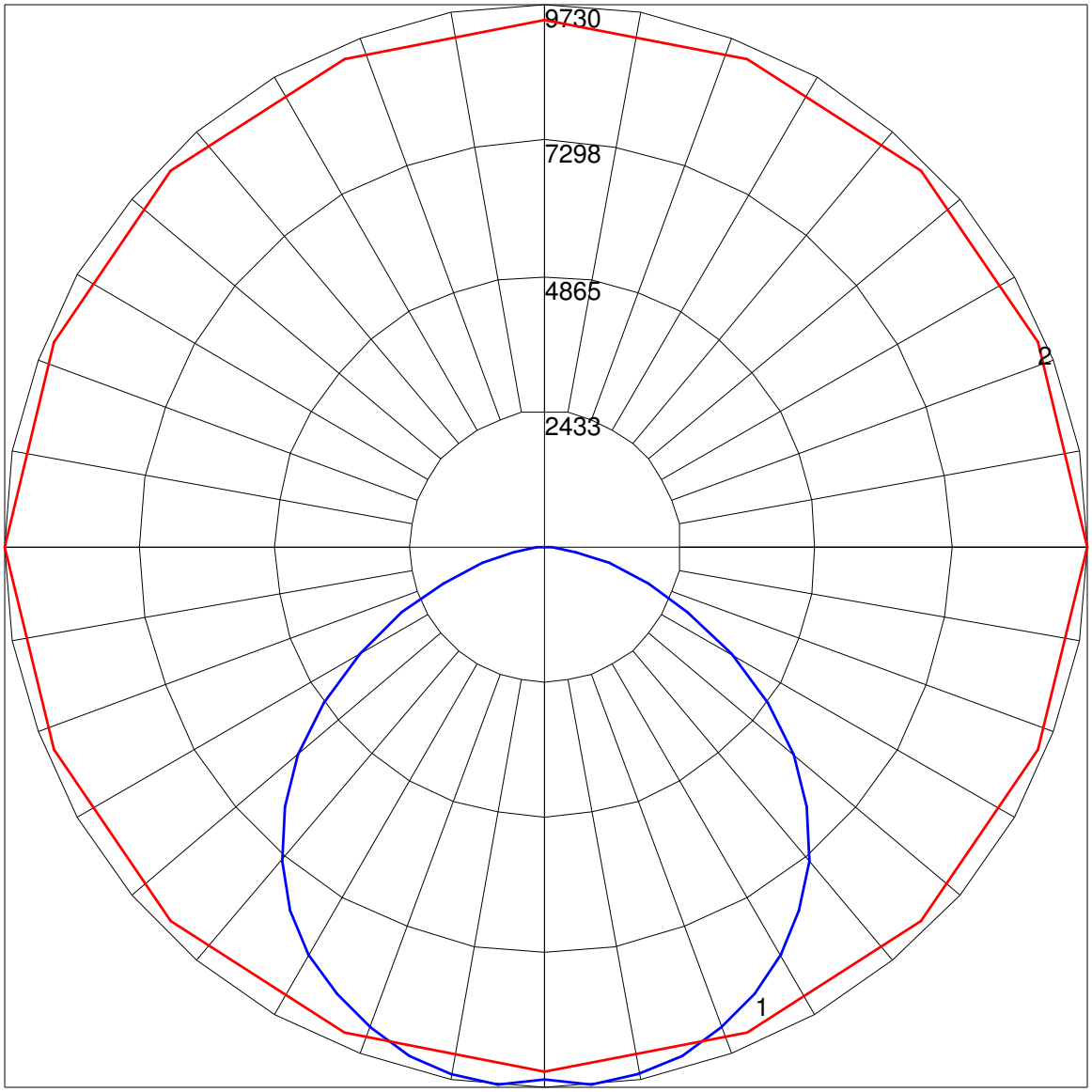
POLAR GRAPH



Maximum Candela = 9730.469 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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