H.E. WILLIAMS, INC.

IES INDOOR REPORT
PHOTOMETRIC FILENAME : GL-4-L300-930-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-L300-930-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	20425
Total Luminaire Efficiency	N.A.
Luminaire Efficacy Rating (LER)	102
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	21701	20677	18001
55	19620	16774	15513
65	15449	12828	12297
75	10651	8722	8698
85	3803	3490	3779

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CANDELA TABULATION

	0.0	22.5	45.0	67.5	90.0
0	7886.970	7886.970	7886.970	7886.970	7886.970
5	8007.365	7892.205	7840.607	7799.479	7787.514
10	7939.316	7808.452	7774.802	7727.691	7717.221
15	7811.443	7682.823	7655.902	7595.331	7587.853
20	7599.070	7507.092	7467.459	7376.228	7393.427
25	7325.378	7258.825	7203.488	7097.301	7122.726
30	6988.871	6932.039	6890.163	6756.308	6738.361
35	6573.099	6488.598	6478.129	6300.154	6169.290
40	6069.086	5985.333	5928.501	5651.818	5377.378
45	5469.356	5405.046	5211.368	4819.524	4536.859
50	4780.639	4720.068	4347.667	3997.700	3840.664
55	4011.160	3927.408	3429.378	3255.890	3171.389
60	3163.163	3086.141	2624.005	2471.455	2493.141
65	2327.131	2242.631	1932.297	1829.101	1852.283
70	1609.998	1455.953	1344.531	1266.761	1282.465
75	982.600	853.232	804.625	762.001	802.382
80	467.370	403.060	379.879	371.653	394.835
85	118.151	109.926	108.430	112.917	117.403
90	0.000	0.000	0.000	0.000	0.000

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ZONAL LUMEN SUMMARY

Zone	Lumens	%Lamp	%Fixt
0-20	2909.99	N.A.	14.20
0-30	6226.16	N.A.	30.50
0-40	10221.05	N.A.	50.00
0-60	17329.12	N.A.	84.80
0-80	20255.88	N.A.	99.20
0-90	20424.84	N.A.	100.00
10-90	19677.05	N.A.	96.30
20-40	7311.06	N.A.	35.80
20-50	11245.48	N.A.	55.10
40-70	9130.46	N.A.	44.70
60-80	2926.76	N.A.	14.30
70-80	904.38	N.A.	4.40
80-90	168.96	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	20424.84	N.A.	100.00

Total Luminaire Efficiency = N.A.%

ZONAL LUMEN SUMMARY

Zone	Lumens
0-10	747.79
10-20	2162.2
20-30	3316.17
30-40	3994.88
40-50	3934.42
50-60	3173.66
60-70	2022.38
70-80	904.38
80-90	168.96
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	22.5	24.1	22.9	24.4	24.7	21.1	22.6	21.4	23.0	23.3
	3H	23.8	25.2	24.2	25.5	25.9	22.3	23.7	22.7	24.1	24.4
	4H	24.1	25.5	24.5	25.8	26.2	22.7	24.1	23.1	24.4	24.8
	6H	24.3	25.6	24.8	25.9	26.3	23.0	24.2	23.4	24.5	24.9
	8H	24.4	25.5	24.8	25.9	26.3	23.0	24.2	23.4	24.6	25.0
	12H	24.4	25.5	24.8	25.9	26.3	23.0	24.1	23.4	24.5	24.9
4H	2H	22.8	24.1	23.2	24.5	24.9	21.6	22.9	22.0	23.3	23.6
	3H	24.3	25.3	24.7	25.7	26.1	23.0	24.1	23.5	24.5	24.9
	4H	24.7	25.7	25.1	26.1	26.5	23.5	24.5	24.0	24.9	25.4
	6H	25.0	25.8	25.4	26.3	26.7	23.8	24.7	24.3	25.1	25.6
	8H	25.0	25.8	25.5	26.3	26.7	23.9	24.7	24.4	25.1	25.6
	12H	25.1	25.8	25.5	26.2	26.7	23.9	24.6	24.4	25.1	25.6
8H	4H	24.8	25.6	25.3	26.0	26.5	23.7	24.5	24.2	24.9	25.4
	6H	25.1	25.8	25.6	26.3	26.7	24.0	24.7	24.5	25.2	25.7
	8H	25.2	25.8	25.7	26.3	26.8	24.1	24.7	24.7	25.2	25.7
	12H	25.3	25.8	25.8	26.3	26.8	24.2	24.7	24.7	25.2	25.8
12H	4H	24.8	25.5	25.3	26.0	26.5	23.7	24.4	24.2	24.9	25.4
	6H	25.1	25.7	25.6	26.2	26.7	24.1	24.7	24.6	25.1	25.7
	8H	25.2	25.7	25.7	26.2	26.8	24.2	24.7	24.7	25.2	25.8

Maximum UGR = 26.8

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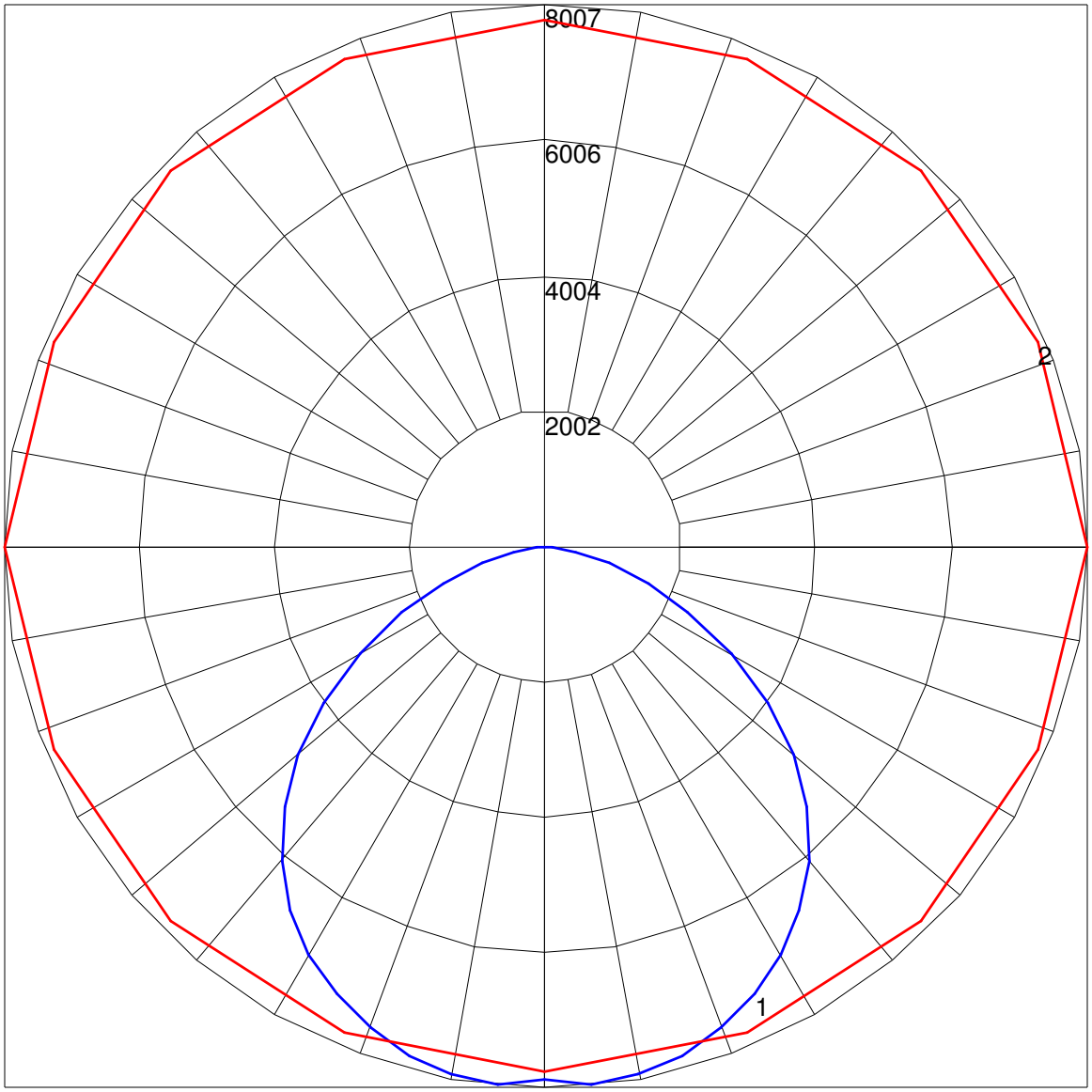
POLAR GRAPH



Maximum Candela = 8007.365 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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