H.E. WILLIAMS, INC.

IES INDOOR REPORT
PHOTOMETRIC FILENAME : GL-4-L300-950-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-L300-950-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	23976
Total Luminaire Efficiency	N.A.
Luminaire Efficacy Rating (LER)	120
Total Luminaire Watts	200
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	25716	25189	19227
55	24399	17887	18121
65	20456	15864	15511
75	13281	8938	6599
85	2646	2701	2260

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CANDELA TABULATION

	0.0	22.5	45.0	67.5	90.0
0	8984.741	8984.741	8984.741	8984.741	8984.741
5	9084.914	8981.316	8916.247	8882.856	8891.418
10	9005.289	8901.692	8846.896	8810.081	8822.067
15	8850.321	8775.834	8720.182	8659.393	8681.654
20	8655.112	8548.090	8503.569	8449.629	8483.020
25	8393.978	8256.989	8245.859	8221.030	8226.167
30	8039.520	7913.661	7920.511	7882.839	7905.100
35	7585.745	7436.770	7511.257	7493.278	7498.415
40	7078.031	6911.076	6946.179	7036.934	7023.235
45	6481.274	6325.450	6348.566	5867.394	4845.972
50	5767.221	5676.466	5688.452	4190.996	4231.236
55	4988.098	4939.296	3656.740	3707.255	3704.686
60	4121.645	4079.692	3056.559	3115.635	3115.635
65	3081.388	3131.046	2389.595	2471.788	2336.512
70	2101.063	1664.412	1704.652	1568.520	1239.747
75	1225.192	962.345	824.500	756.006	608.743
80	487.166	423.809	309.937	253.429	235.449
85	82.193	73.631	83.906	84.762	70.207
90	0.000	0.000	0.000	0.000	0.000

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ZONAL LUMEN SUMMARY

Zone	Lumens	%Lamp	%Fixt
0-20	3316.84	N.A.	13.80
0-30	7124.04	N.A.	29.70
0-40	11810.69	N.A.	49.30
0-60	20271.85	N.A.	84.60
0-80	23840.46	N.A.	99.40
0-90	23975.51	N.A.	100.00
10-90	23124.07	N.A.	96.40
20-40	8493.85	N.A.	35.40
20-50	13168.96	N.A.	54.90
40-70	11050.24	N.A.	46.10
60-80	3568.61	N.A.	14.90
70-80	979.53	N.A.	4.10
80-90	135.04	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	23975.51	N.A.	100.00

Total Luminaire Efficiency = N.A.%

ZONAL LUMEN SUMMARY

Zone	Lumens
0-10	851.44
10-20	2465.4
20-30	3807.2
30-40	4686.66
40-50	4675.11
50-60	3786.06
60-70	2589.08
70-80	979.53
80-90	135.04
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	23.7	25.2	24.0	25.5	25.9	21.7	23.3	22.1	23.6	23.9
	3H	24.9	26.3	25.2	26.6	27.0	22.9	24.3	23.3	24.7	25.0
	4H	25.2	26.5	25.6	26.9	27.3	23.1	24.5	23.5	24.8	25.2
	6H	25.4	26.6	25.8	26.9	27.3	23.2	24.4	23.6	24.8	25.2
	8H	25.4	26.5	25.8	26.9	27.3	23.2	24.3	23.6	24.7	25.1
	12H	25.4	26.5	25.8	26.8	27.3	23.2	24.3	23.6	24.7	25.1
4H	2H	23.9	25.2	24.3	25.6	26.0	22.3	23.6	22.7	23.9	24.3
	3H	25.3	26.4	25.7	26.8	27.2	23.7	24.8	24.1	25.2	25.6
	4H	25.7	26.7	26.1	27.1	27.5	24.0	24.9	24.4	25.4	25.8
	6H	25.9	26.7	26.4	27.2	27.7	24.1	24.9	24.5	25.3	25.8
	8H	25.9	26.7	26.4	27.2	27.6	24.0	24.8	24.5	25.3	25.7
	12H	25.9	26.6	26.4	27.1	27.6	24.0	24.7	24.5	25.2	25.7
8H	4H	25.7	26.5	26.2	27.0	27.4	24.1	24.9	24.6	25.3	25.8
	6H	26.0	26.6	26.5	27.1	27.6	24.2	24.9	24.7	25.3	25.8
	8H	26.0	26.6	26.5	27.1	27.6	24.2	24.8	24.7	25.3	25.8
	12H	26.0	26.5	26.5	27.0	27.6	24.2	24.7	24.7	25.2	25.8
12H	4H	25.7	26.4	26.2	26.9	27.4	24.1	24.8	24.6	25.3	25.7
	6H	25.9	26.5	26.5	27.0	27.5	24.2	24.8	24.7	25.2	25.8
	8H	26.0	26.5	26.5	27.0	27.6	24.2	24.7	24.7	25.2	25.8

Maximum UGR = 27.7

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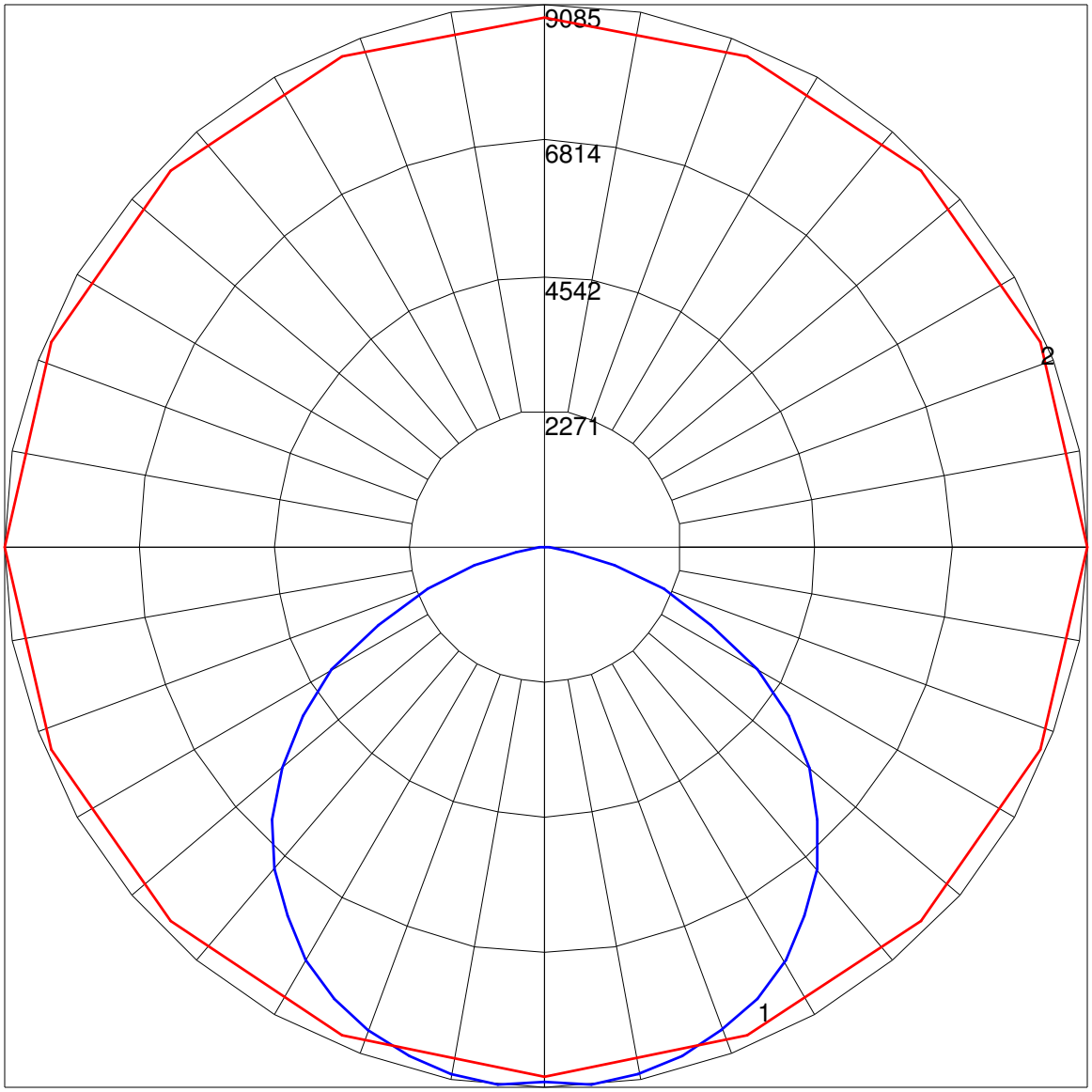
POLAR GRAPH



Maximum Candela = 9084.914 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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