H.E. WILLIAMS, INC.

IES INDOOR REPORT
PHOTOMETRIC FILENAME : GL-8-L400-930-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] 2023-07-20
[MANUFAC] WILLIAMS INDOOR
[OTHER] H.E. WILLIAMS, INC - CARTHAGE, MO
[LUMINAIRE] 96 INCH LOW PROFILE LED HIGHBAY LUMINAIRE
[MORE] WHITE REFLECTOR w/.118"THK FROSTED ACRYLIC LENS
[MORE] 0-10V LED DRIVERS
[LUMCAT] GL-8-L400-930-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	28670
Total Luminaire Efficiency	N.A.
Luminaire Efficacy Rating (LER)	108
Total Luminaire Watts	266
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)	8.00 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	14595	13906	12106
55	13195	11281	10433
65	10390	8627	8270
75	7163	5866	5850
85	2558	2347	2542

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CANDELA TABULATION

	0.0	22.5	45.0	67.5	90.0
0	11070.742	11070.742	11070.742	11070.742	11070.742
5	11239.737	11078.090	11005.664	10947.932	10931.138
10	11144.218	10960.528	10913.294	10847.165	10832.470
15	10964.727	10784.186	10746.398	10661.376	10650.879
20	10666.624	10537.516	10481.884	10353.826	10377.968
25	10282.449	10189.030	10111.355	9962.304	9997.992
30	9810.103	9730.329	9671.548	9483.659	9458.468
35	9226.493	9107.882	9093.187	8843.368	8659.678
40	8519.024	8401.462	8321.688	7933.315	7548.090
45	7677.198	7586.928	7315.066	6765.045	6368.275
50	6710.463	6625.441	6102.711	5611.471	5391.043
55	5630.365	5512.804	4813.731	4570.211	4451.599
60	4440.053	4331.938	3683.250	3469.119	3499.560
65	3266.536	3147.924	2712.316	2567.463	2600.003
70	2259.914	2043.684	1887.285	1778.121	1800.163
75	1379.251	1197.660	1129.432	1069.601	1126.283
80	656.036	565.766	533.226	521.680	554.219
85	165.846	154.300	152.200	158.498	164.796
90	0.000	0.000	0.000	0.000	0.000

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ZONAL LUMEN SUMMARY

Zone	Lumens	%Lamp	%Fixt
0-20	4084.68	N.A.	14.20
0-30	8739.51	N.A.	30.50
0-40	14347.02	N.A.	50.00
0-60	24324.45	N.A.	84.80
0-80	28432.67	N.A.	99.20
0-90	28669.84	N.A.	100.00
10-90	27620.18	N.A.	96.30
20-40	10262.35	N.A.	35.80
20-50	15784.99	N.A.	55.10
40-70	12816.2	N.A.	44.70
60-80	4108.22	N.A.	14.30
70-80	1269.45	N.A.	4.40
80-90	237.17	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	28669.84	N.A.	100.00

Total Luminaire Efficiency = N.A.%

ZONAL LUMEN SUMMARY

Zone	Lumens
0-10	1049.66
10-20	3035.02
20-30	4654.83
30-40	5607.51
40-50	5522.65
50-60	4454.78
60-70	2838.77
70-80	1269.45
80-90	237.17
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	21.2	22.7	21.5	23.1	23.4	19.7	21.3	20.1	21.6	21.9
	3H	22.4	23.8	22.8	24.1	24.5	21.0	22.4	21.4	22.7	23.1
	4H	22.8	24.1	23.2	24.5	24.8	21.4	22.7	21.8	23.0	23.4
	6H	23.0	24.2	23.4	24.6	25.0	21.6	22.8	22.0	23.2	23.6
	8H	23.0	24.2	23.5	24.6	25.0	21.7	22.8	22.1	23.2	23.6
	12H	23.0	24.1	23.4	24.5	24.9	21.7	22.8	22.1	23.1	23.6
4H	2H	21.5	22.8	21.9	23.1	23.5	20.2	21.6	20.6	21.9	22.3
	3H	22.9	24.0	23.3	24.4	24.8	21.7	22.8	22.1	23.2	23.6
	4H	23.4	24.3	23.8	24.7	25.2	22.2	23.1	22.6	23.6	24.0
	6H	23.6	24.5	24.1	24.9	25.4	22.5	23.3	22.9	23.8	24.2
	8H	23.7	24.5	24.2	24.9	25.4	22.5	23.3	23.0	23.8	24.2
	12H	23.7	24.4	24.2	24.9	25.4	22.6	23.3	23.0	23.7	24.2
8H	4H	23.4	24.2	23.9	24.7	25.2	22.4	23.1	22.8	23.6	24.1
	6H	23.8	24.4	24.3	24.9	25.4	22.7	23.4	23.2	23.8	24.3
	8H	23.8	24.4	24.4	24.9	25.4	22.8	23.4	23.3	23.9	24.4
	12H	23.9	24.4	24.4	24.9	25.5	22.9	23.4	23.4	23.9	24.4
12H	4H	23.4	24.1	23.9	24.6	25.1	22.4	23.1	22.8	23.5	24.0
	6H	23.8	24.4	24.3	24.8	25.4	22.7	23.3	23.2	23.8	24.3
	8H	23.9	24.4	24.4	24.9	25.4	22.8	23.3	23.3	23.8	24.4

Maximum UGR = 25.5

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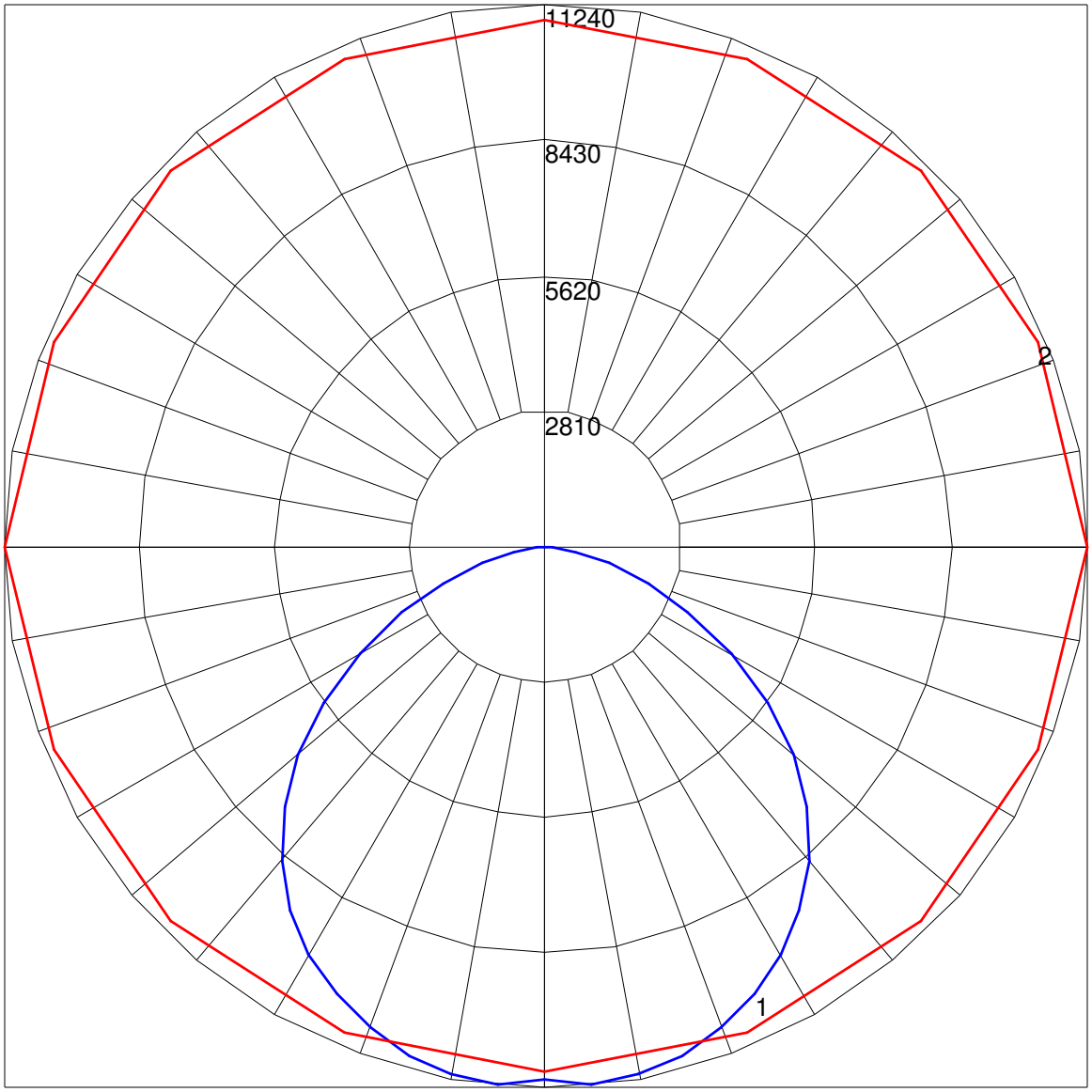
POLAR GRAPH



Maximum Candela = 11239.737 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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