H.E. WILLIAMS, INC.

IES INDOOR REPORT
PHOTOMETRIC FILENAME : GL-8-L400-950-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-L400-950-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	31210
Total Luminaire Efficiency	N.A.
Luminaire Efficacy Rating (LER)	117
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	15888	15138	13179
55	14364	12281	11357
65	11311	9392	9003
75	7798	6386	6368
85	2785	2555	2767

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CANDELA TABULATION

	0.0	22.5	45.0	67.5	90.0
0	12051.698	12051.698	12051.698	12051.698	12051.698
5	12235.667	12059.697	11980.853	11918.006	11899.724
10	12131.685	11931.718	11880.298	11808.310	11792.313
15	11936.289	11739.750	11698.614	11606.058	11594.632
20	11611.772	11471.224	11410.662	11271.257	11297.539
25	11193.556	11091.859	11007.301	10845.043	10883.893
30	10679.356	10592.514	10528.524	10323.987	10296.563
35	10044.034	9914.913	9898.915	9626.961	9426.994
40	9273.877	9145.899	9059.056	8636.269	8216.911
45	8357.459	8259.190	7963.239	7364.482	6932.555
50	7305.064	7212.508	6643.460	6108.692	5868.732
55	6129.260	6001.282	5240.266	4975.168	4846.046
60	4833.477	4715.783	4009.615	3776.511	3809.648
65	3555.977	3426.855	2952.649	2794.961	2830.384
70	2460.160	2224.771	2054.513	1935.676	1959.672
75	1501.463	1303.782	1229.509	1164.377	1226.081
80	714.166	615.897	580.474	567.905	603.328
85	180.541	167.972	165.687	172.543	179.399
90	0.000	0.000	0.000	0.000	0.000

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ZONAL LUMEN SUMMARY

Zone	Lumens	%Lamp	%Fixt
0-20	4446.61	N.A.	14.20
0-30	9513.9	N.A.	30.50
0-40	15618.28	N.A.	50.00
0-60	26479.79	N.A.	84.80
0-80	30952.03	N.A.	99.20
0-90	31210.21	N.A.	100.00
10-90	30067.55	N.A.	96.30
20-40	11171.67	N.A.	35.80
20-50	17183.67	N.A.	55.10
40-70	13951.81	N.A.	44.70
60-80	4472.24	N.A.	14.30
70-80	1381.94	N.A.	4.40
80-90	258.18	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	31210.21	N.A.	100.00

Total Luminaire Efficiency = N.A.%

ZONAL LUMEN SUMMARY

Zone	Lumens
0-10	1142.66
10-20	3303.95
20-30	5067.29
30-40	6104.39
40-50	6012.00
50-60	4849.51
60-70	3090.3
70-80	1381.94
80-90	258.18
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	21.5	23.0	21.8	23.4	23.7	20.0	21.6	20.4	21.9	22.2
	3H	22.7	24.1	23.1	24.4	24.8	21.3	22.7	21.7	23.0	23.4
	4H	23.1	24.4	23.5	24.8	25.1	21.7	23.0	22.1	23.3	23.7
	6H	23.3	24.5	23.7	24.9	25.3	21.9	23.1	22.3	23.5	23.9
	8H	23.3	24.5	23.8	24.9	25.3	22.0	23.1	22.4	23.5	23.9
	12H	23.3	24.4	23.7	24.8	25.2	22.0	23.1	22.4	23.4	23.9
4H	2H	21.8	23.1	22.2	23.4	23.8	20.5	21.9	20.9	22.2	22.6
	3H	23.2	24.3	23.6	24.7	25.1	22.0	23.1	22.4	23.5	23.9
	4H	23.7	24.6	24.1	25.0	25.5	22.5	23.4	22.9	23.9	24.3
	6H	23.9	24.8	24.4	25.2	25.7	22.8	23.6	23.2	24.1	24.5
	8H	24.0	24.8	24.5	25.2	25.7	22.8	23.6	23.3	24.1	24.5
	12H	24.0	24.7	24.5	25.2	25.7	22.9	23.6	23.3	24.0	24.5
8H	4H	23.7	24.5	24.2	25.0	25.5	22.7	23.4	23.1	23.9	24.4
	6H	24.1	24.7	24.6	25.2	25.7	23.0	23.7	23.5	24.1	24.6
	8H	24.1	24.7	24.7	25.2	25.7	23.1	23.7	23.6	24.2	24.7
	12H	24.2	24.7	24.7	25.2	25.8	23.2	23.7	23.7	24.2	24.7
12H	4H	23.7	24.4	24.2	24.9	25.4	22.7	23.4	23.1	23.8	24.3
	6H	24.1	24.7	24.6	25.1	25.7	23.0	23.6	23.5	24.1	24.6
	8H	24.2	24.7	24.7	25.2	25.7	23.1	23.6	23.6	24.1	24.7

Maximum UGR = 25.8

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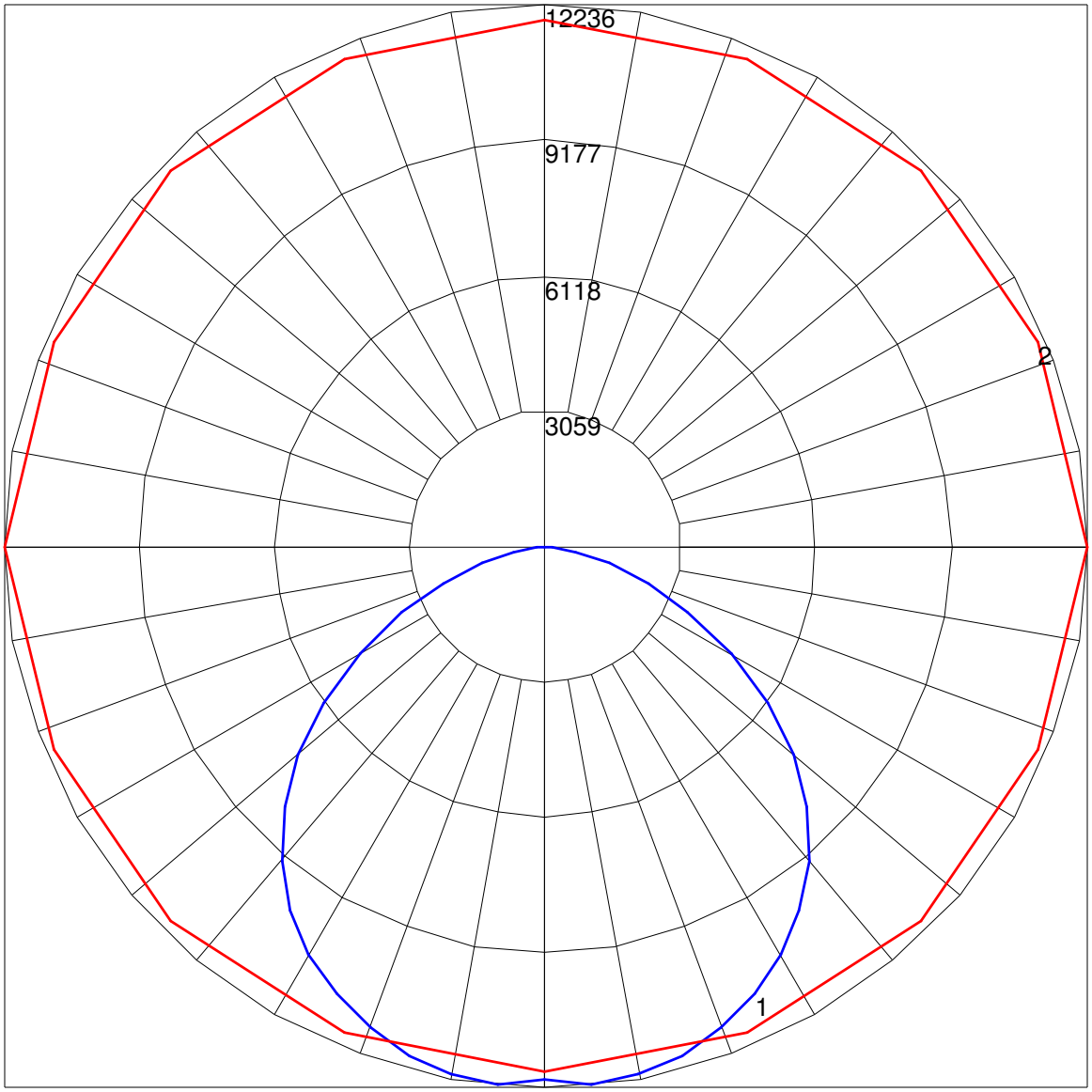
POLAR GRAPH



Maximum Candela = 12235.667 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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