H.E. WILLIAMS, INC.

IES INDOOR REPORT
PHOTOMETRIC FILENAME : GL-8-L400-835-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-L400-835-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	35202
Total Luminaire Efficiency	N.A.
Luminaire Efficacy Rating (LER)	132
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	17920	17075	14865
55	16202	13852	12810
65	12757	10593	10154
75	8796	7202	7182
85	3141	2882	3121

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CANDELA TABULATION

	0.0	22.5	45.0	67.5	90.0
0	13593.185	13593.185	13593.185	13593.185	13593.185
5	13800.685	13602.207	13513.278	13442.393	13421.772
10	13683.402	13457.859	13399.862	13318.666	13300.623
15	13463.014	13241.337	13194.939	13090.545	13077.657
20	13096.989	12938.464	12870.157	12712.921	12742.564
25	12625.281	12510.576	12415.203	12232.191	12276.011
30	12045.312	11947.362	11875.188	11644.489	11613.557
35	11328.728	11183.091	11165.048	10858.309	10632.765
40	10460.063	10315.716	10217.765	9740.902	9267.905
45	9426.430	9315.591	8981.787	8306.445	7819.271
50	8239.426	8135.032	7493.200	6890.032	6619.380
55	6913.231	6768.883	5910.529	5611.522	5465.886
60	5451.709	5318.960	4522.469	4259.550	4296.926
65	4010.808	3865.171	3330.311	3152.454	3192.407
70	2774.830	2509.333	2317.298	2183.261	2210.326
75	1693.510	1470.544	1386.770	1313.308	1382.904
80	805.513	694.674	654.721	640.544	680.497
85	203.634	189.457	186.879	194.612	202.345
90	0.000	0.000	0.000	0.000	0.000

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ZONAL LUMEN SUMMARY

Zone	Lumens	%Lamp	%Fixt
0-20	5015.36	N.A.	14.20
0-30	10730.79	N.A.	30.50
0-40	17615.96	N.A.	50.00
0-60	29866.72	N.A.	84.80
0-80	34910.99	N.A.	99.20
0-90	35202.19	N.A.	100.00
10-90	33913.38	N.A.	96.30
20-40	12600.6	N.A.	35.80
20-50	19381.57	N.A.	55.10
40-70	15736.34	N.A.	44.70
60-80	5044.27	N.A.	14.30
70-80	1558.69	N.A.	4.40
80-90	291.20	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	35202.19	N.A.	100.00

Total Luminaire Efficiency = N.A.%

ZONAL LUMEN SUMMARY

Zone	Lumens
0-10	1288.82
10-20	3726.55
20-30	5715.42
30-40	6885.17
40-50	6780.97
50-60	5469.79
60-70	3485.57
70-80	1558.69
80-90	291.20
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	21.9	23.4	22.2	23.8	24.1	20.4	22.0	20.8	22.3	22.6
	3H	23.1	24.5	23.5	24.8	25.2	21.7	23.1	22.1	23.4	23.8
	4H	23.5	24.8	23.9	25.2	25.5	22.1	23.4	22.5	23.7	24.1
	6H	23.7	24.9	24.1	25.3	25.7	22.3	23.5	22.7	23.9	24.3
	8H	23.7	24.9	24.2	25.3	25.7	22.4	23.5	22.8	23.9	24.3
	12H	23.7	24.8	24.1	25.2	25.6	22.4	23.5	22.8	23.8	24.3
4H	2H	22.2	23.5	22.6	23.8	24.2	20.9	22.3	21.3	22.6	23.0
	3H	23.6	24.7	24.0	25.1	25.5	22.4	23.5	22.8	23.9	24.3
	4H	24.1	25.0	24.5	25.4	25.9	22.9	23.8	23.3	24.3	24.7
	6H	24.3	25.2	24.8	25.6	26.1	23.2	24.0	23.6	24.5	24.9
	8H	24.4	25.2	24.9	25.6	26.1	23.2	24.0	23.7	24.5	24.9
	12H	24.4	25.1	24.9	25.6	26.1	23.3	24.0	23.7	24.4	24.9
8H	4H	24.1	24.9	24.6	25.4	25.9	23.1	23.8	23.5	24.3	24.8
	6H	24.5	25.1	25.0	25.6	26.1	23.4	24.1	23.9	24.5	25.0
	8H	24.5	25.1	25.1	25.6	26.1	23.5	24.1	24.0	24.6	25.1
	12H	24.6	25.1	25.1	25.6	26.2	23.6	24.1	24.1	24.6	25.1
12H	4H	24.1	24.8	24.6	25.3	25.8	23.1	23.8	23.5	24.2	24.7
	6H	24.5	25.1	25.0	25.5	26.1	23.4	24.0	23.9	24.5	25.0
	8H	24.6	25.1	25.1	25.6	26.1	23.5	24.0	24.0	24.5	25.1

Maximum UGR = 26.2

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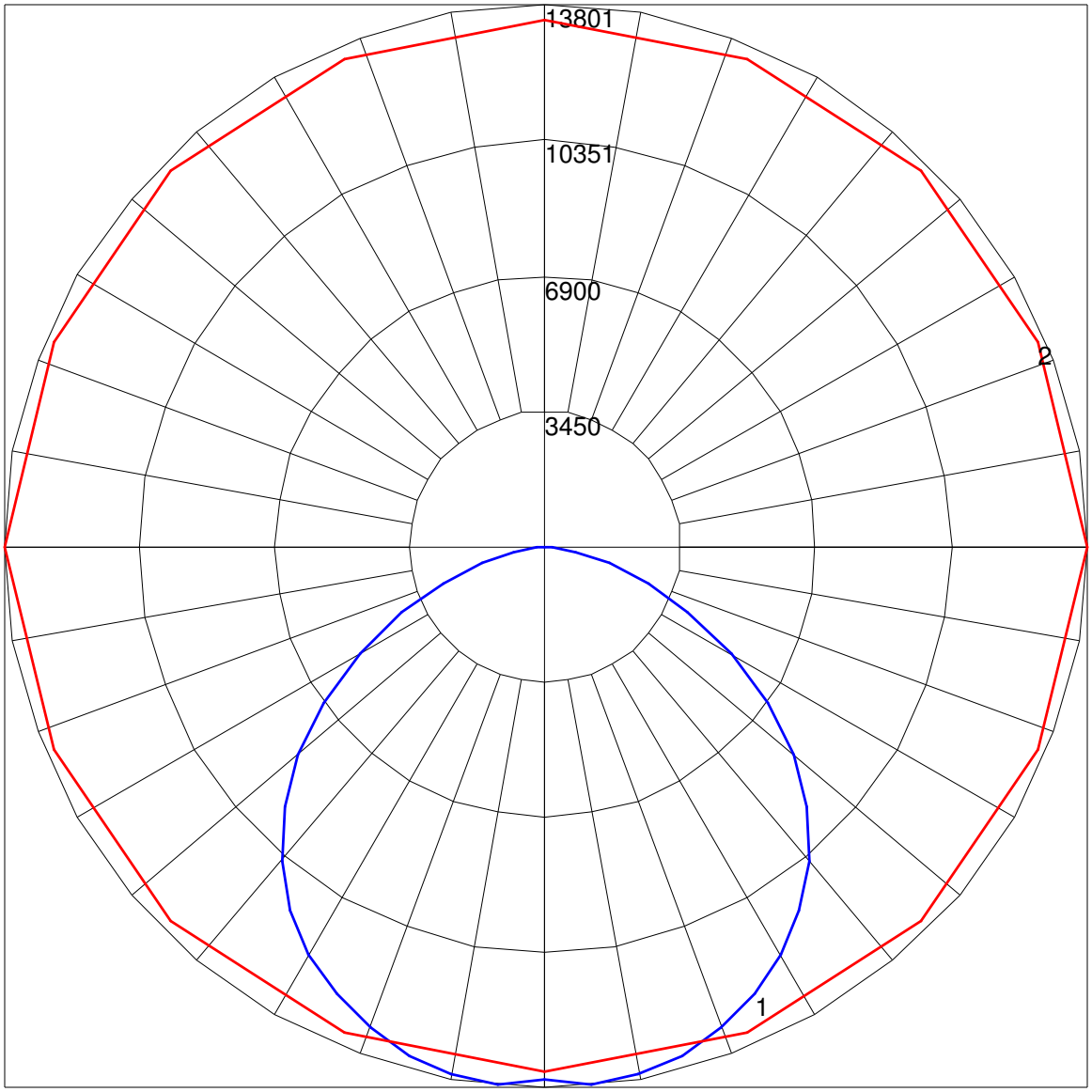
POLAR GRAPH



Maximum Candela = 13800.685 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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