H.E. WILLIAMS, INC.

IES INDOOR REPORT
PHOTOMETRIC FILENAME : GL-8-L400-850-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-L400-850-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	37380
Total Luminaire Efficiency	N.A.
Luminaire Efficacy Rating (LER)	141
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	19028	18131	15784
55	17204	14709	13602
65	13546	11248	10782
75	9340	7648	7627
85	3335	3061	3314

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CANDELA TABULATION

	0.0	22.5	45.0	67.5	90.0
0	14434.002	14434.002	14434.002	14434.002	14434.002
5	14654.337	14443.582	14349.152	14273.883	14251.986
10	14529.800	14290.305	14228.721	14142.503	14123.343
15	14295.779	14060.390	14011.123	13900.271	13886.586
20	13907.114	13738.783	13666.250	13499.288	13530.765
25	13406.228	13284.428	13183.155	12988.823	13035.353
30	12790.384	12686.375	12609.737	12364.768	12331.923
35	12029.475	11874.830	11855.671	11529.958	11290.463
40	11107.079	10953.802	10849.793	10343.433	9841.178
45	10009.509	9891.814	9537.362	8820.247	8302.938
50	8749.083	8638.231	7956.697	7316.220	7028.827
55	7340.854	7187.577	6276.129	5958.628	5803.982
60	5788.928	5647.969	4802.210	4523.028	4562.716
65	4258.900	4104.254	3536.310	3347.451	3389.876
70	2946.469	2664.549	2460.637	2318.308	2347.048
75	1798.263	1561.505	1472.550	1394.543	1468.444
80	855.338	737.644	695.219	680.165	722.590
85	216.229	201.176	198.438	206.650	214.861
90	0.000	0.000	0.000	0.000	0.000

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ZONAL LUMEN SUMMARY

Zone	Lumens	%Lamp	%Fixt
0-20	5325.59	N.A.	14.20
0-30	11394.55	N.A.	30.50
0-40	18705.61	N.A.	50.00
0-60	31714.15	N.A.	84.80
0-80	37070.44	N.A.	99.20
0-90	37379.65	N.A.	100.00
10-90	36011.11	N.A.	96.30
20-40	13380.02	N.A.	35.80
20-50	20580.43	N.A.	55.10
40-70	16709.72	N.A.	44.70
60-80	5356.28	N.A.	14.30
70-80	1655.11	N.A.	4.40
80-90	309.22	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	37379.65	N.A.	100.00

Total Luminaire Efficiency = N.A.%

ZONAL LUMEN SUMMARY

Zone	Lumens
0-10	1368.54
10-20	3957.05
20-30	6068.96
30-40	7311.06
40-50	7200.41
50-60	5808.13
60-70	3701.18
70-80	1655.11
80-90	309.22
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	22.1	23.6	22.4	24.0	24.3	20.6	22.2	21.0	22.5	22.8
	3H	23.3	24.7	23.7	25.0	25.4	21.9	23.3	22.3	23.6	24.0
	4H	23.7	25.0	24.1	25.4	25.7	22.3	23.6	22.7	23.9	24.3
	6H	23.9	25.1	24.3	25.5	25.9	22.5	23.7	22.9	24.1	24.5
	8H	23.9	25.1	24.4	25.5	25.9	22.6	23.7	23.0	24.1	24.5
	12H	23.9	25.0	24.3	25.4	25.8	22.6	23.7	23.0	24.0	24.5
4H	2H	22.4	23.7	22.8	24.0	24.4	21.1	22.5	21.5	22.8	23.2
	3H	23.8	24.9	24.2	25.3	25.7	22.6	23.7	23.0	24.1	24.5
	4H	24.3	25.2	24.7	25.6	26.1	23.1	24.0	23.5	24.5	24.9
	6H	24.5	25.4	25.0	25.8	26.3	23.4	24.2	23.8	24.7	25.1
	8H	24.6	25.4	25.1	25.8	26.3	23.4	24.2	23.9	24.7	25.1
	12H	24.6	25.3	25.1	25.8	26.3	23.5	24.2	23.9	24.6	25.1
8H	4H	24.3	25.1	24.8	25.6	26.1	23.3	24.0	23.7	24.5	25.0
	6H	24.7	25.3	25.2	25.8	26.3	23.6	24.3	24.1	24.7	25.2
	8H	24.7	25.3	25.3	25.8	26.3	23.7	24.3	24.2	24.8	25.3
	12H	24.8	25.3	25.3	25.8	26.4	23.8	24.3	24.3	24.8	25.3
12H	4H	24.3	25.0	24.8	25.5	26.0	23.3	24.0	23.7	24.4	24.9
	6H	24.7	25.3	25.2	25.7	26.3	23.6	24.2	24.1	24.7	25.2
	8H	24.8	25.3	25.3	25.8	26.3	23.7	24.2	24.2	24.7	25.3

Maximum UGR = 26.4

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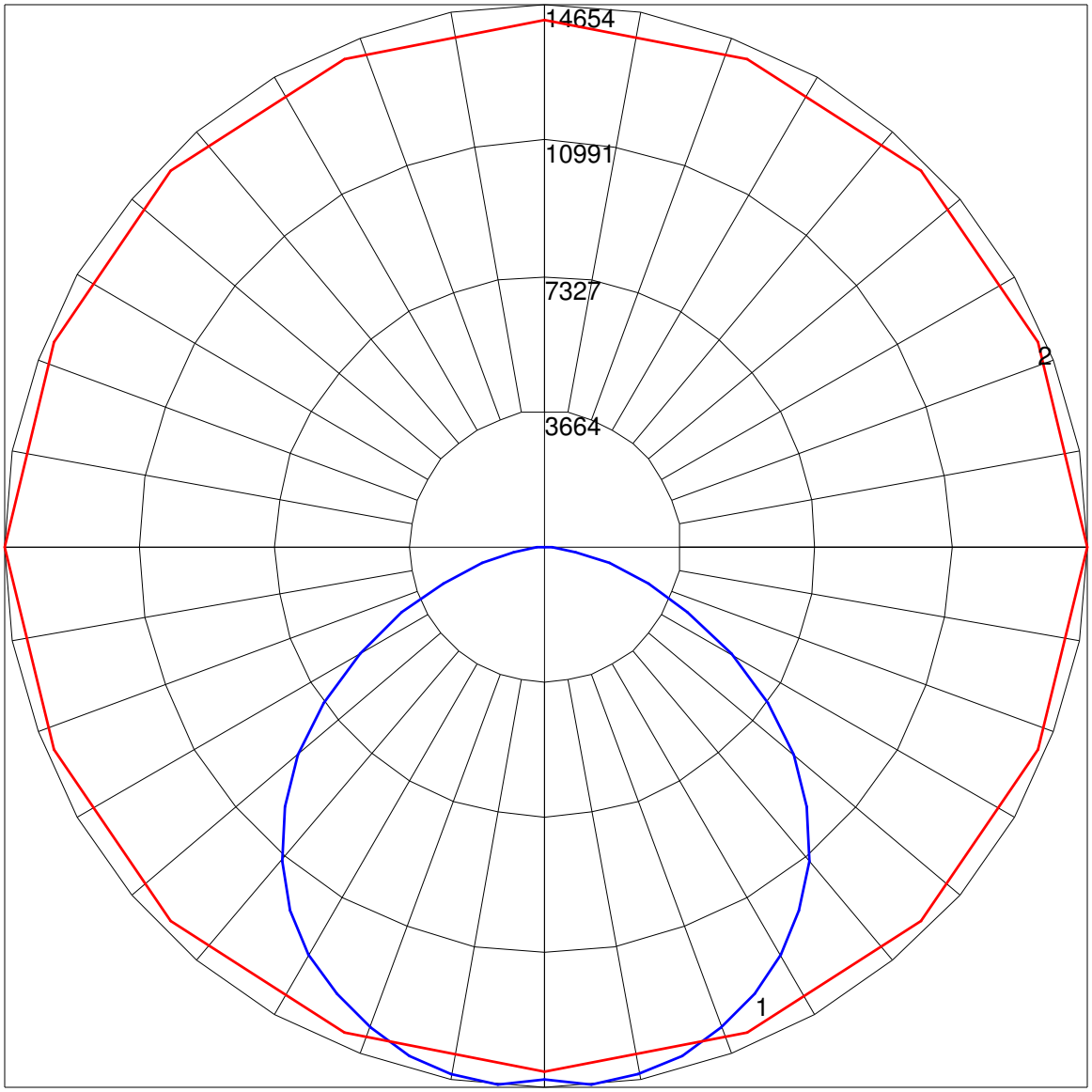
POLAR GRAPH



Maximum Candela = 14654.337 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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