H.E. WILLIAMS, INC.

IES INDOOR REPORT
PHOTOMETRIC FILENAME : GL-8-L400-940-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-L400-940-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	30121
Total Luminaire Efficiency	N.A.
Luminaire Efficacy Rating (LER)	113
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	15334	14610	12719
55	13863	11853	10961
65	10916	9064	8689
75	7526	6163	6146
85	2687	2466	2670

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CANDELA TABULATION

	0.0	22.5	45.0	67.5	90.0
0	11631.285	11631.285	11631.285	11631.285	11631.285
5	11808.836	11639.004	11562.911	11502.256	11484.611
10	11708.481	11515.490	11465.864	11396.387	11380.948
15	11519.901	11330.219	11290.518	11201.191	11190.163
20	11206.705	11071.060	11012.611	10878.069	10903.433
25	10803.078	10704.928	10623.321	10466.722	10504.218
30	10306.816	10223.003	10161.245	9963.843	9937.376
35	9693.656	9569.039	9553.600	9291.132	9098.141
40	8950.366	8826.851	8743.038	8335.000	7930.271
45	8065.916	7971.075	7685.448	7107.578	6690.718
50	7050.232	6960.905	6411.708	5895.596	5664.007
55	5915.446	5791.932	5057.464	4801.613	4676.996
60	4664.865	4551.276	3869.743	3644.771	3676.752
65	3431.929	3307.312	2849.648	2697.461	2731.648
70	2374.339	2147.161	1982.843	1868.152	1891.311
75	1449.086	1258.301	1186.618	1123.758	1183.310
80	689.253	594.412	560.225	548.094	582.281
85	174.243	162.112	159.907	166.524	173.140
90	0.000	0.000	0.000	0.000	0.000

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ZONAL LUMEN SUMMARY

Zone	Lumens	%Lamp	%Fixt
0-20	4291.5	N.A.	14.20
0-30	9182.02	N.A.	30.50
0-40	15073.45	N.A.	50.00
0-60	25556.07	N.A.	84.80
0-80	29872.3	N.A.	99.20
0-90	30121.47	N.A.	100.00
10-90	29018.67	N.A.	96.30
20-40	10781.96	N.A.	35.80
20-50	16584.23	N.A.	55.10
40-70	13465.12	N.A.	44.70
60-80	4316.23	N.A.	14.30
70-80	1333.73	N.A.	4.40
80-90	249.17	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	30121.47	N.A.	100.00

Total Luminaire Efficiency = N.A.%

ZONAL LUMEN SUMMARY

Zone	Lumens
0-10	1102.8
10-20	3188.69
20-30	4890.52
30-40	5891.44
40-50	5802.27
50-60	4680.34
60-70	2982.5
70-80	1333.73
80-90	249.17
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	21.3	22.8	21.6	23.2	23.5	19.8	21.4	20.2	21.7	22.0
	3H	22.5	23.9	22.9	24.2	24.6	21.1	22.5	21.5	22.8	23.2
	4H	22.9	24.2	23.3	24.6	24.9	21.5	22.8	21.9	23.1	23.5
	6H	23.1	24.3	23.5	24.7	25.1	21.7	22.9	22.1	23.3	23.7
	8H	23.1	24.3	23.6	24.7	25.1	21.8	22.9	22.2	23.3	23.7
	12H	23.1	24.2	23.5	24.6	25.0	21.8	22.9	22.2	23.2	23.7
4H	2H	21.6	22.9	22.0	23.2	23.6	20.3	21.7	20.7	22.0	22.4
	3H	23.0	24.1	23.4	24.5	24.9	21.8	22.9	22.2	23.3	23.7
	4H	23.5	24.4	23.9	24.8	25.3	22.3	23.2	22.7	23.7	24.1
	6H	23.7	24.6	24.2	25.0	25.5	22.6	23.4	23.0	23.9	24.3
	8H	23.8	24.6	24.3	25.0	25.5	22.6	23.4	23.1	23.9	24.3
	12H	23.8	24.5	24.3	25.0	25.5	22.7	23.4	23.1	23.8	24.3
8H	4H	23.5	24.3	24.0	24.8	25.3	22.5	23.2	22.9	23.7	24.2
	6H	23.9	24.5	24.4	25.0	25.5	22.8	23.5	23.3	23.9	24.4
	8H	23.9	24.5	24.5	25.0	25.5	22.9	23.5	23.4	24.0	24.5
	12H	24.0	24.5	24.5	25.0	25.6	23.0	23.5	23.5	24.0	24.5
12H	4H	23.5	24.2	24.0	24.7	25.2	22.5	23.2	22.9	23.6	24.1
	6H	23.9	24.5	24.4	24.9	25.5	22.8	23.4	23.3	23.9	24.4
	8H	24.0	24.5	24.5	25.0	25.5	22.9	23.4	23.4	23.9	24.5

Maximum UGR = 25.6

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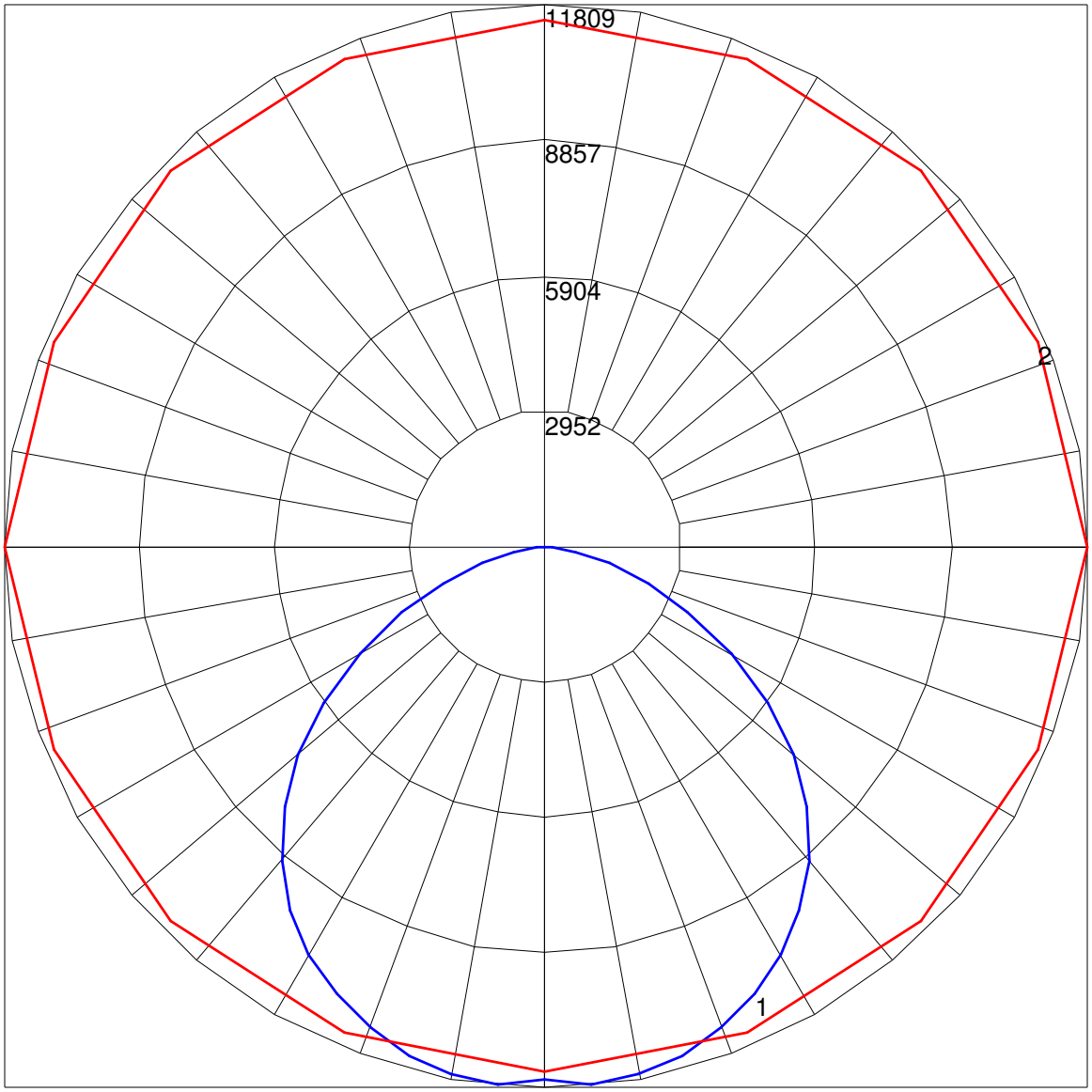
POLAR GRAPH



Maximum Candela = 11808.836 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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