H.E. WILLIAMS, INC.

IES INDOOR REPORT
PHOTOMETRIC FILENAME : GL-8-L400-840-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-L400-840-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	36291
Total Luminaire Efficiency	N.A.
Luminaire Efficacy Rating (LER)	136
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	18474	17603	15324
55	16703	14280	13206
65	13152	10920	10468
75	9068	7425	7405
85	3238	2971	3217

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CANDELA TABULATION

	0.0	22.5	45.0	67.5	90.0
0	14013.588	14013.588	14013.588	14013.588	14013.588
5	14227.506	14022.889	13931.210	13858.133	13836.874
10	14106.596	13874.077	13814.286	13730.580	13711.978
15	13879.392	13650.859	13603.026	13495.403	13482.116
20	13502.047	13338.619	13268.199	13106.100	13136.660
25	13015.750	12897.497	12799.175	12610.502	12655.677
30	12417.844	12316.864	12242.458	12004.624	11972.736
35	11679.098	11528.957	11510.355	11194.129	10961.610
40	10783.567	10634.755	10533.775	10042.164	9554.538
45	9717.966	9603.699	9259.571	8563.343	8061.102
50	8494.251	8386.628	7724.946	7103.123	6824.101
55	7127.040	6978.228	6093.327	5785.073	5634.932
60	5620.317	5483.463	4662.338	4391.288	4429.819
65	4134.852	3984.711	3433.309	3249.951	3291.140
70	2860.648	2586.940	2388.967	2250.784	2278.686
75	1745.886	1516.024	1429.660	1353.925	1425.674
80	830.425	716.159	674.969	660.354	701.543
85	209.931	195.316	192.659	200.631	208.603
90	0.000	0.000	0.000	0.000	0.000

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ZONAL LUMEN SUMMARY

Zone	Lumens	%Lamp	%Fixt
0-20	5170.48	N.A.	14.20
0-30	11062.66	N.A.	30.50
0-40	18160.78	N.A.	50.00
0-60	30790.43	N.A.	84.80
0-80	35990.7	N.A.	99.20
0-90	36290.91	N.A.	100.00
10-90	34962.23	N.A.	96.30
20-40	12990.3	N.A.	35.80
20-50	19980.99	N.A.	55.10
40-70	16223.02	N.A.	44.70
60-80	5200.27	N.A.	14.30
70-80	1606.9	N.A.	4.40
80-90	300.21	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	36290.91	N.A.	100.00

Total Luminaire Efficiency = N.A.%

ZONAL LUMEN SUMMARY

Zone	Lumens
0-10	1328.68
10-20	3841.8
20-30	5892.19
30-40	7098.12
40-50	6990.69
50-60	5638.96
60-70	3593.37
70-80	1606.9
80-90	300.21
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	22.0	23.5	22.3	23.9	24.2	20.5	22.1	20.9	22.4	22.7
	3H	23.2	24.6	23.6	24.9	25.3	21.8	23.2	22.2	23.5	23.9
	4H	23.6	24.9	24.0	25.3	25.6	22.2	23.5	22.6	23.8	24.2
	6H	23.8	25.0	24.2	25.4	25.8	22.4	23.6	22.8	24.0	24.4
	8H	23.8	25.0	24.3	25.4	25.8	22.5	23.6	22.9	24.0	24.4
	12H	23.8	24.9	24.2	25.3	25.7	22.5	23.6	22.9	23.9	24.4
4H	2H	22.3	23.6	22.7	23.9	24.3	21.0	22.4	21.4	22.7	23.1
	3H	23.7	24.8	24.1	25.2	25.6	22.5	23.6	22.9	24.0	24.4
	4H	24.2	25.1	24.6	25.5	26.0	23.0	23.9	23.4	24.4	24.8
	6H	24.4	25.3	24.9	25.7	26.2	23.3	24.1	23.7	24.6	25.0
	8H	24.5	25.3	25.0	25.7	26.2	23.3	24.1	23.8	24.6	25.0
	12H	24.5	25.2	25.0	25.7	26.2	23.4	24.1	23.8	24.5	25.0
8H	4H	24.2	25.0	24.7	25.5	26.0	23.2	23.9	23.6	24.4	24.9
	6H	24.6	25.2	25.1	25.7	26.2	23.5	24.2	24.0	24.6	25.1
	8H	24.6	25.2	25.2	25.7	26.2	23.6	24.2	24.1	24.7	25.2
	12H	24.7	25.2	25.2	25.7	26.3	23.7	24.2	24.2	24.7	25.2
12H	4H	24.2	24.9	24.7	25.4	25.9	23.2	23.9	23.6	24.3	24.8
	6H	24.6	25.2	25.1	25.6	26.2	23.5	24.1	24.0	24.6	25.1
	8H	24.7	25.2	25.2	25.7	26.2	23.6	24.1	24.1	24.6	25.2

Maximum UGR = 26.3

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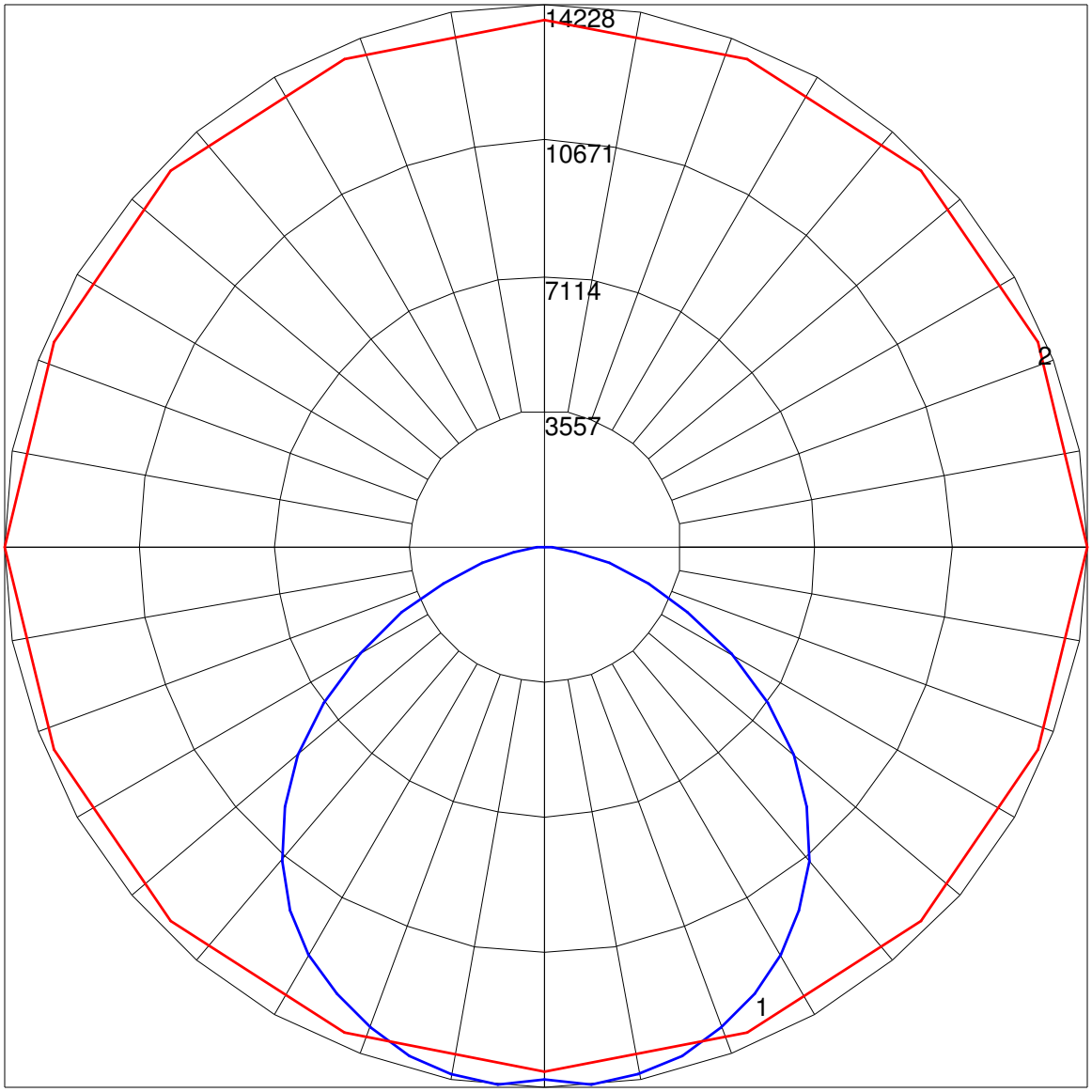
POLAR GRAPH



Maximum Candela = 14227.506 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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