H.E. WILLIAMS, INC.

IES INDOOR REPORT
PHOTOMETRIC FILENAME : GL-8-L400-830-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-L400-830-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	34839
Total Luminaire Efficiency	N.A.
Luminaire Efficacy Rating (LER)	131
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	17735	16899	14711
55	16035	13709	12678
65	12626	10484	10049
75	8705	7128	7108
85	3108	2853	3089

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CANDELA TABULATION

	0.0	22.5	45.0	67.5	90.0
0	13453.046	13453.046	13453.046	13453.046	13453.046
5	13658.407	13461.975	13373.963	13303.809	13283.400
10	13542.333	13319.115	13261.716	13181.358	13163.500
15	13324.217	13104.826	13058.906	12955.588	12942.833
20	12961.966	12805.075	12737.472	12581.857	12611.194
25	12495.121	12381.598	12287.209	12106.083	12149.451
30	11921.131	11824.191	11752.761	11524.440	11493.828
35	11211.935	11067.800	11049.942	10746.365	10523.147
40	10352.226	10209.366	10112.425	9640.478	9172.358
45	9329.248	9219.552	8889.189	8220.810	7738.658
50	8154.482	8051.164	7415.949	6818.999	6551.137
55	6841.959	6699.099	5849.594	5553.671	5409.535
60	5395.504	5264.125	4475.845	4215.636	4252.627
65	3969.459	3825.323	3295.977	3119.954	3159.495
70	2746.222	2483.463	2293.408	2160.753	2187.539
75	1676.050	1455.383	1372.473	1299.768	1368.647
80	797.208	687.512	647.971	633.940	673.481
85	201.534	187.503	184.952	192.605	200.259
90	0.000	0.000	0.000	0.000	0.000

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ZONAL LUMEN SUMMARY

Zone	Lumens	%Lamp	%Fixt
0-20	4963.66	N.A.	14.20
0-30	10620.16	N.A.	30.50
0-40	17434.35	N.A.	50.00
0-60	29558.81	N.A.	84.80
0-80	34551.07	N.A.	99.20
0-90	34839.28	N.A.	100.00
10-90	33563.75	N.A.	96.30
20-40	12470.69	N.A.	35.80
20-50	19181.75	N.A.	55.10
40-70	15574.1	N.A.	44.70
60-80	4992.26	N.A.	14.30
70-80	1542.62	N.A.	4.40
80-90	288.20	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	34839.28	N.A.	100.00

Total Luminaire Efficiency = N.A.%

ZONAL LUMEN SUMMARY

Zone	Lumens
0-10	1275.53
10-20	3688.13
20-30	5656.5
30-40	6814.19
40-50	6711.06
50-60	5413.4
60-70	3449.64
70-80	1542.62
80-90	288.20
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	21.8	23.3	22.1	23.7	24.0	20.3	21.9	20.7	22.2	22.5
	3H	23.0	24.4	23.4	24.7	25.1	21.6	23.0	22.0	23.3	23.7
	4H	23.4	24.7	23.8	25.1	25.4	22.0	23.3	22.4	23.6	24.0
	6H	23.6	24.8	24.0	25.2	25.6	22.2	23.4	22.6	23.8	24.2
	8H	23.6	24.8	24.1	25.2	25.6	22.3	23.4	22.7	23.8	24.2
	12H	23.6	24.7	24.0	25.1	25.5	22.3	23.4	22.7	23.7	24.2
4H	2H	22.1	23.4	22.5	23.7	24.1	20.8	22.2	21.2	22.5	22.9
	3H	23.5	24.6	23.9	25.0	25.4	22.3	23.4	22.7	23.8	24.2
	4H	24.0	24.9	24.4	25.3	25.8	22.8	23.7	23.2	24.2	24.6
	6H	24.2	25.1	24.7	25.5	26.0	23.1	23.9	23.5	24.4	24.8
	8H	24.3	25.1	24.8	25.5	26.0	23.1	23.9	23.6	24.4	24.8
	12H	24.3	25.0	24.8	25.5	26.0	23.2	23.9	23.6	24.3	24.8
8H	4H	24.0	24.8	24.5	25.3	25.8	23.0	23.7	23.4	24.2	24.7
	6H	24.4	25.0	24.9	25.5	26.0	23.3	24.0	23.8	24.4	24.9
	8H	24.4	25.0	25.0	25.5	26.0	23.4	24.0	23.9	24.5	25.0
	12H	24.5	25.0	25.0	25.5	26.1	23.5	24.0	24.0	24.5	25.0
12H	4H	24.0	24.7	24.5	25.2	25.7	23.0	23.7	23.4	24.1	24.6
	6H	24.4	25.0	24.9	25.4	26.0	23.3	23.9	23.8	24.4	24.9
	8H	24.5	25.0	25.0	25.5	26.0	23.4	23.9	23.9	24.4	25.0

Maximum UGR = 26.1

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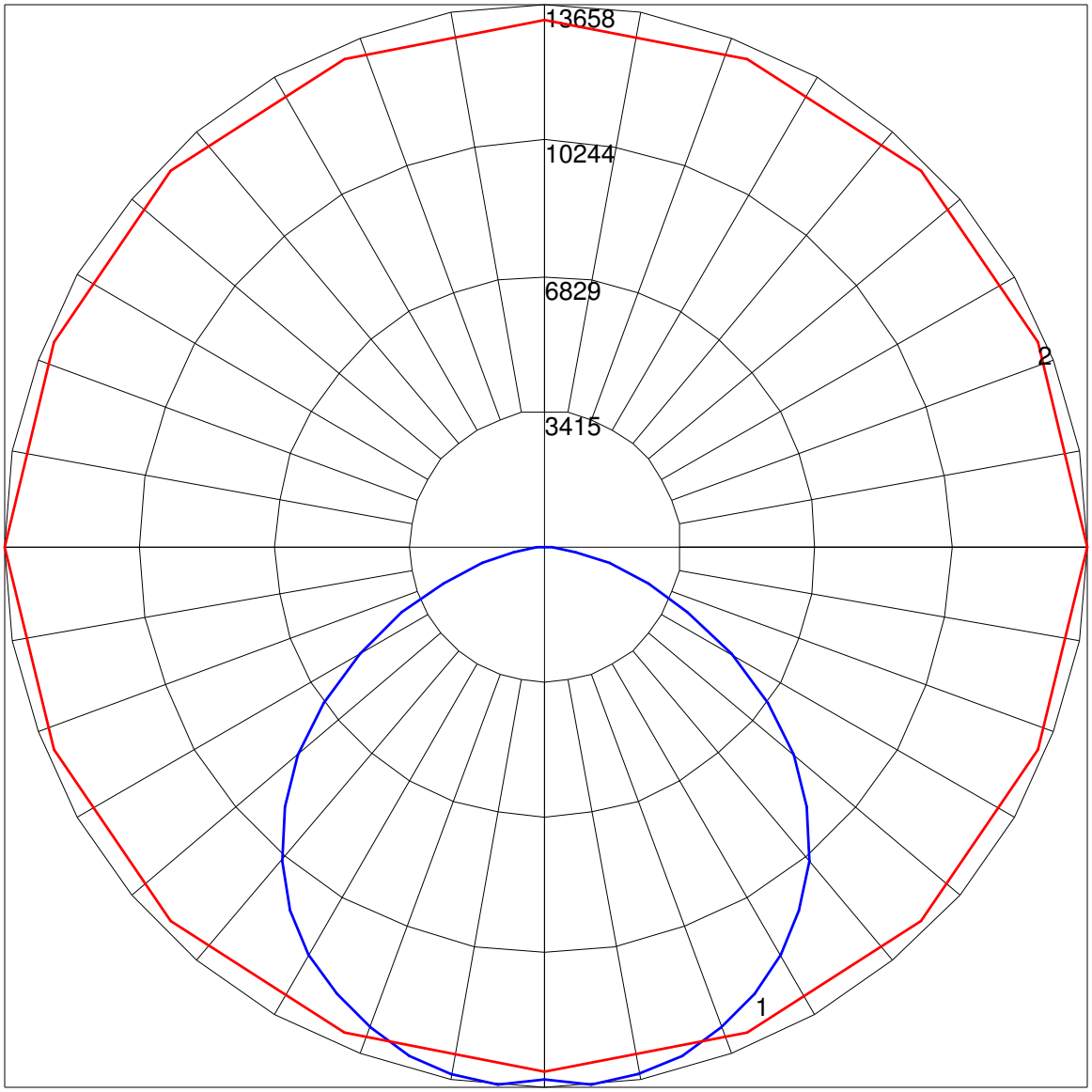
POLAR GRAPH



Maximum Candela = 13658.407 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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