H.E. WILLIAMS, INC.

IES INDOOR REPORT
PHOTOMETRIC FILENAME : GL-8-L400-830-ND-DIM-UNV_.IES

DESCRIPTION INFORMATION (From Photometric File)

IESNA:LM-63-2002
[TEST] GEN FROM BALLABS TEST NO. 19459.0
[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 REFL w/CLEAR ACRYLIC ROD DIFFUSERS OVER LED
[MORE] 0-10V UNIVERSAL VOLTAGE 120-277 DRIVERS
[LUMCAT] GL-8-L400-830-ND-DIM-UNV
[LAMPCAT] 22 INCH HLM LED ARRAYS
[_SEARCH_SOURCETYPE] LED
[_SEARCH_APPLICATION] Indoor, Commercial, Industrial, Manufacturing, Warehouse, High Bay
[_SEARCH_MOUNTING] Pendant, Suspended

CHARACTERISTICS

Lumens Per Lamp	N.A. (absolute)
Total Lamp Lumens	N.A. (absolute)
Luminaire Lumens	36653
Total Luminaire Efficiency	N.A.
Luminaire Efficacy Rating (LER)	140
Total Luminaire Watts	262
Ballast Factor	1.00
CIE Type	Direct
Spacing Criterion (0-180)	1.32
Spacing Criterion (90-270)	0.58
Spacing Criterion (Diagonal)	0.72
Basic Luminous Shape	Rectangular
Luminous Length (0-180)	8.00 ft
Luminous Width (90-270)	1.04 ft
Luminous Height	0.00 ft

LUMINANCE DATA (cd/sq.m)

Angle In Degrees	Average 0-Deg	Average 45-Deg	Average 90-Deg
45	45138	4817	3561
55	30932	3576	2673
65	18718	2711	2751
75	9166	2994	2497
85	3514	1107	1107

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CANDELA TABULATION

	0.0	22.5	45.0	67.5	90.0
0	36967.248	36967.248	36967.248	36967.248	36967.248
5	36140.885	35853.626	35277.796	34801.654	34526.200
10	35853.626	34677.044	32073.347	29834.299	29421.118
15	35365.679	32775.099	27819.549	24039.270	22787.922
20	35966.431	30021.870	20986.977	15317.870	13515.613
25	34338.629	25879.566	15367.714	10387.242	8910.283
30	33563.422	20748.250	9335.270	5732.068	4943.745
35	30609.505	14879.766	5518.263	3616.318	3279.215
40	28619.678	10199.671	3579.591	2715.190	2540.736
45	24741.022	6357.742	2640.424	2064.594	1951.789
50	19083.720	4266.915	2077.711	1689.452	1589.763
55	13753.028	3166.410	1589.763	1301.193	1188.388
60	9461.191	2252.165	1239.543	1088.699	1013.933
65	6132.132	1389.076	888.011	939.167	901.128
70	3629.435	1000.816	763.401	788.323	700.440
75	1838.984	750.284	600.752	537.791	501.064
80	888.011	550.908	375.142	237.415	200.688
85	237.415	175.766	74.766	74.766	74.766
90	0.000	0.000	0.000	0.000	0.000

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ZONAL LUMEN SUMMARY

Zone	Lumens	%Lamp	%Fixt
0-20	11105.00	N.A.	30.30
0-30	19473.72	N.A.	53.10
0-40	26055.18	N.A.	71.10
0-60	33913.93	N.A.	92.50
0-80	36471.65	N.A.	99.50
0-90	36653.32	N.A.	100.00
10-90	33370.13	N.A.	91.00
20-40	14950.18	N.A.	40.80
20-50	19725.87	N.A.	53.80
40-70	9589.47	N.A.	26.20
60-80	2557.72	N.A.	7.00
70-80	827.01	N.A.	2.30
80-90	181.67	N.A.	0.50
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	36653.32	N.A.	100.00

Total Luminaire Efficiency = N.A.%

ZONAL LUMEN SUMMARY

Zone	Lumens
0-10	3283.19
10-20	7821.81
20-30	8368.72
30-40	6581.46
40-50	4775.69
50-60	3083.06
60-70	1730.71
70-80	827.01
80-90	181.67
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	112	108	105	102	109	106	103	101	102	100	98	98	96	95	95	93	92	90
2	105	98	93	89	102	97	92	88	93	89	86	90	87	84	87	85	82	81
3	98	90	84	79	96	88	83	78	86	81	77	83	79	75	81	77	74	72
4	92	82	76	70	90	81	75	70	79	73	69	77	72	68	75	71	67	66
5	86	76	69	64	84	75	68	63	73	67	63	71	66	62	69	65	62	60
6	81	70	63	58	79	69	63	58	68	62	57	66	61	57	65	60	56	55
7	76	65	58	53	75	65	58	53	63	57	53	62	56	52	61	56	52	51
8	72	61	54	49	71	60	54	49	59	53	49	58	53	49	57	52	48	47
9	68	57	50	46	67	57	50	46	56	50	45	55	49	45	54	49	45	44
10	65	54	47	43	64	53	47	43	52	46	42	51	46	42	51	46	42	41

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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	19.6	20.8	19.9	21.2	21.5	12.6	12.6	12.6	12.6	12.6
	3H	21.4	22.6	21.8	22.9	23.2	12.6	13.8	13.0	14.1	14.5
	4H	21.9	23.0	22.3	23.3	23.7	13.4	14.4	13.8	14.8	15.2
	6H	22.2	23.2	22.7	23.6	24.0	13.7	14.7	14.1	15.0	15.4
	8H	22.3	23.2	22.7	23.6	24.0	13.7	14.7	14.2	15.1	15.5
	12H	22.3	23.2	22.8	23.6	24.0	13.7	14.6	14.2	15.0	15.4
4H	2H	19.4	20.5	19.8	20.8	21.2	12.6	12.6	12.6	12.6	13.0
	3H	21.3	22.2	21.7	22.6	23.0	13.5	14.4	14.0	14.8	15.2
	4H	21.9	22.6	22.3	23.1	23.5	14.4	15.2	14.8	15.6	16.0
	6H	22.3	23.0	22.8	23.4	23.9	14.8	15.5	15.3	15.9	16.4
	8H	22.4	23.0	22.9	23.5	24.0	14.9	15.5	15.3	16.0	16.4
	12H	22.5	23.0	22.9	23.5	24.0	14.9	15.5	15.4	15.9	16.4
8H	4H	21.8	22.4	22.2	22.9	23.3	14.8	15.5	15.3	15.9	16.4
	6H	22.3	22.8	22.8	23.3	23.8	15.3	15.9	15.8	16.4	16.8
	8H	22.4	22.9	22.9	23.4	23.9	15.5	15.9	16.0	16.4	16.9
	12H	22.5	22.9	23.0	23.4	24.0	15.5	15.9	16.0	16.4	17.0
12H	4H	21.8	22.3	22.2	22.8	23.3	14.9	15.5	15.4	16.0	16.5
	6H	22.2	22.7	22.8	23.2	23.7	15.5	15.9	16.0	16.4	17.0
	8H	22.4	22.8	22.9	23.3	23.9	15.6	16.0	16.1	16.5	17.1

Maximum UGR = 24.0

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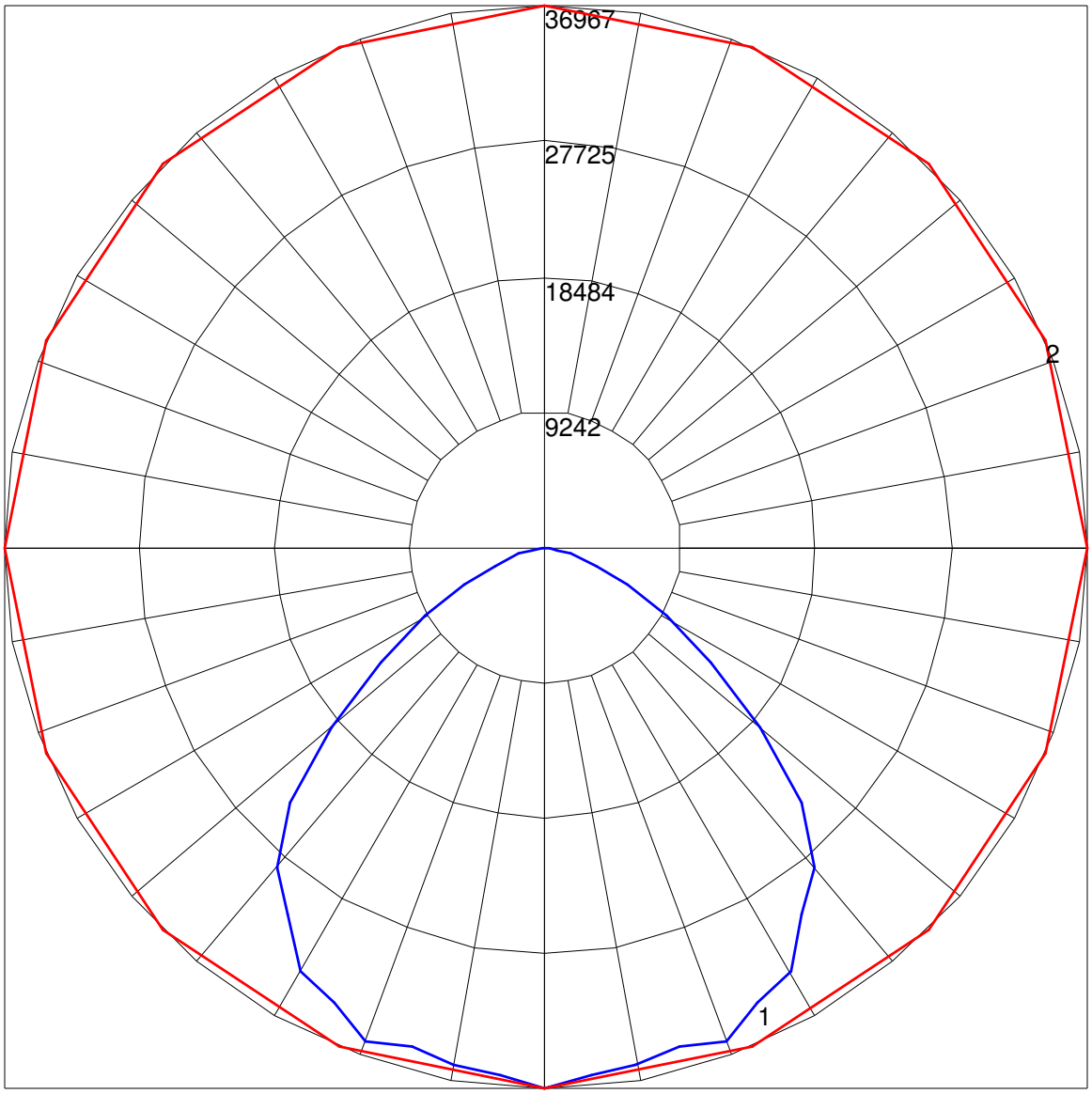
POLAR GRAPH



Maximum Candela = 36967.248 Located At Horizontal Angle = 0, Vertical Angle = 0
1 - Vertical Plane Through Horizontal Angles (0 - 180) (Through Max. Cd.)
2 - Horizontal Cone Through Vertical Angle (0) (Through Max. Cd.)

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