H.E. WILLIAMS, INC.

IES INDOOR REPORT
PHOTOMETRIC FILENAME : GL-8-L400-940-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-L400-940-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	31690
Total Luminaire Efficiency	N.A.
Luminaire Efficacy Rating (LER)	121
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	39025	4165	3079
55	26744	3091	2311
65	16184	2344	2378
75	7925	2589	2159
85	3038	957	957

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CANDELA TABULATION

	0.0	22.5	45.0	67.5	90.0
0	31961.271	31961.271	31961.271	31961.271	31961.271
5	31246.812	30998.452	30500.599	30088.934	29850.781
10	30998.452	29981.198	27730.085	25794.241	25437.012
15	30576.581	28336.808	24052.322	20783.955	19702.060
20	31095.981	25956.412	18144.993	13243.577	11685.375
25	29688.610	22375.044	13286.671	8980.637	7703.684
30	29018.380	17938.594	8071.120	4955.851	4274.280
35	26464.472	12864.800	4770.999	3126.609	2835.155
40	24744.100	8818.467	3094.855	2347.508	2196.678
45	21390.678	5496.799	2282.867	1785.014	1687.484
50	16499.469	3689.104	1796.354	1460.672	1374.483
55	11890.641	2737.626	1374.483	1124.990	1027.460
60	8179.990	1947.185	1071.689	941.272	876.630
65	5301.740	1200.972	767.760	811.988	779.101
70	3137.950	865.289	660.024	681.571	605.589
75	1589.955	648.683	519.400	464.965	433.212
80	767.760	476.306	324.342	205.265	173.511
85	205.265	151.964	64.642	64.642	64.642
90	0.000	0.000	0.000	0.000	0.000

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ZONAL LUMEN SUMMARY

Zone	Lumens	%Lamp	%Fixt
0-20	9601.2	N.A.	30.30
0-30	16836.65	N.A.	53.10
0-40	22526.88	N.A.	71.10
0-60	29321.42	N.A.	92.50
0-80	31532.79	N.A.	99.50
0-90	31689.85	N.A.	100.00
10-90	28851.26	N.A.	91.00
20-40	12925.68	N.A.	40.80
20-50	17054.66	N.A.	53.80
40-70	8290.89	N.A.	26.20
60-80	2211.36	N.A.	7.00
70-80	715.02	N.A.	2.30
80-90	157.07	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	31689.85	N.A.	100.00

Total Luminaire Efficiency = N.A.%

ZONAL LUMEN SUMMARY

Zone	Lumens
0-10	2838.59
10-20	6762.61
20-30	7235.46
30-40	5690.22
40-50	4128.98
50-60	2665.57
60-70	1496.35
70-80	715.02
80-90	157.07
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	18.9	20.2	19.3	20.6	20.9	12.0	12.0	12.0	12.0	12.0
	3H	20.8	22.0	21.2	22.3	22.6	12.0	13.2	12.4	13.5	13.9
	4H	21.3	22.4	21.7	22.7	23.1	12.8	13.8	13.2	14.2	14.6
	6H	21.6	22.6	22.1	23.0	23.4	13.1	14.1	13.5	14.4	14.8
	8H	21.7	22.6	22.1	23.0	23.4	13.1	14.1	13.6	14.5	14.9
	12H	21.7	22.6	22.2	23.0	23.4	13.1	14.0	13.6	14.4	14.8
4H	2H	18.8	19.9	19.2	20.2	20.6	12.0	12.0	12.0	12.0	12.4
	3H	20.7	21.6	21.1	22.0	22.4	12.9	13.8	13.4	14.2	14.6
	4H	21.3	22.0	21.7	22.5	22.9	13.8	14.6	14.2	15.0	15.4
	6H	21.7	22.4	22.2	22.8	23.3	14.2	14.9	14.7	15.3	15.8
	8H	21.8	22.4	22.3	22.9	23.4	14.3	14.9	14.7	15.4	15.8
	12H	21.9	22.4	22.3	22.9	23.4	14.3	14.9	14.8	15.3	15.8
8H	4H	21.2	21.8	21.6	22.3	22.7	14.2	14.9	14.7	15.3	15.8
	6H	21.7	22.2	22.2	22.7	23.2	14.7	15.3	15.2	15.8	16.2
	8H	21.8	22.3	22.3	22.8	23.3	14.9	15.3	15.4	15.8	16.3
	12H	21.9	22.3	22.4	22.8	23.4	14.9	15.3	15.4	15.8	16.4
12H	4H	21.2	21.7	21.6	22.2	22.7	14.3	14.9	14.8	15.4	15.9
	6H	21.6	22.1	22.2	22.6	23.1	14.9	15.3	15.4	15.8	16.4
	8H	21.8	22.2	22.3	22.7	23.3	15.0	15.4	15.5	15.9	16.5

Maximum UGR = 23.4

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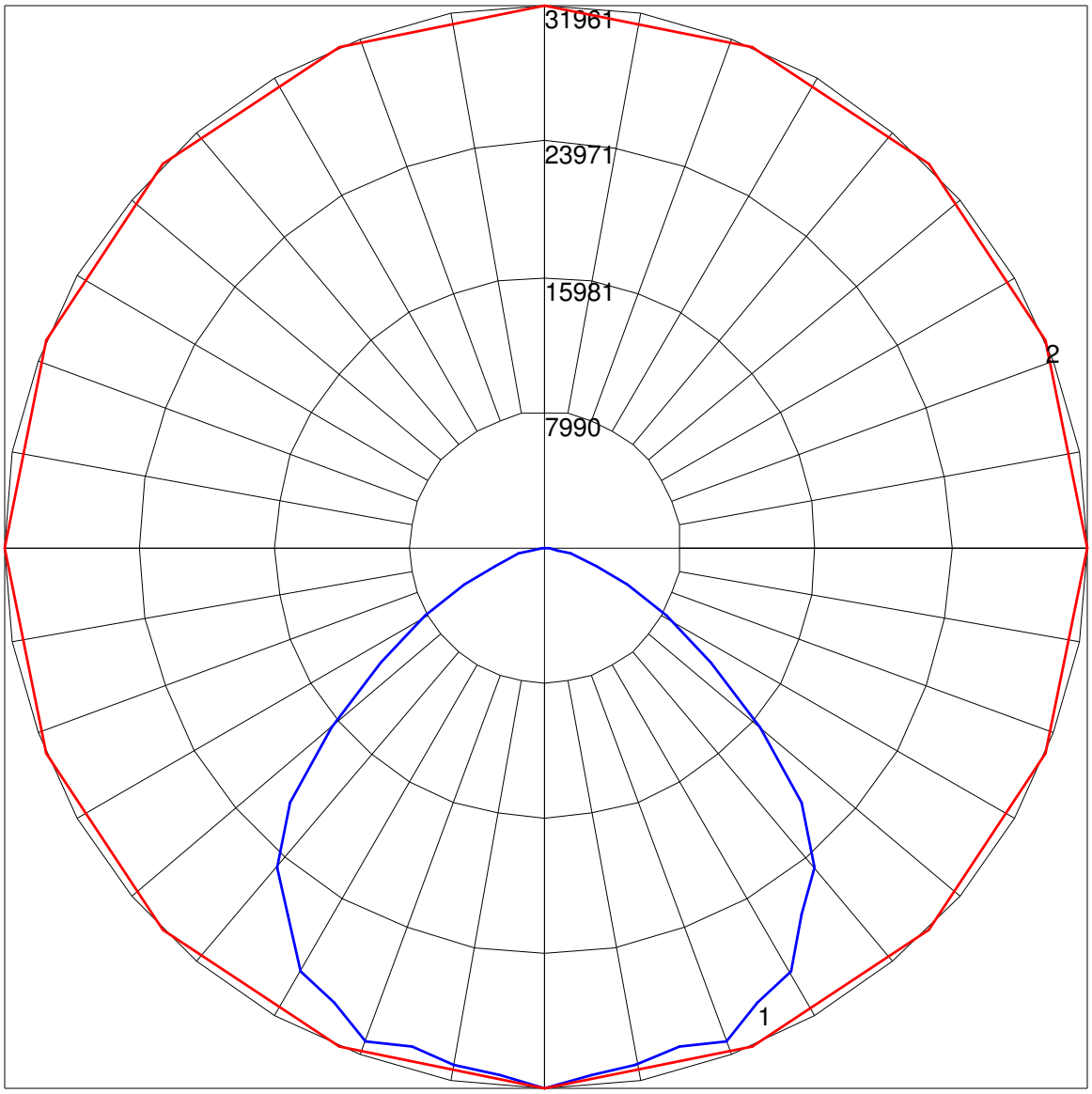
POLAR GRAPH



Maximum Candela = 31961.271 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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