H.E. WILLIAMS, INC.

IES INDOOR REPORT
PHOTOMETRIC FILENAME : GL-8-L400-835-DIM-UNV_.IES

DESCRIPTION INFORMATION (From Photometric File)

IESNA:LM-63-2002
[TEST] GEN FROM BALLABS TEST NO. 19438.0
[TESTLAB] BUILDING ACOUSTICS & LIGHTING LABORATORIES, INC
[ISSUEDATE] 2023-07-18
[MANUFAC] WILLIAMS INDOOR
[OTHER] H.E. WILLIAMS, INC - CARTHAGE, MO
[LUMINAIRE] 96 INCH LONG, LOW PROFILE LED HIGHBAY LUMINAIRE
[MORE] WHITE REFLECTOR w/OPEN BOTTOM
[MORE] 0-10V DIMMING DRIVERS
[LUMCAT] GL-8-L400-835-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	38984
Total Luminaire Efficiency	N.A.
Luminaire Efficacy Rating (LER)	147
Total Luminaire Watts	266
Ballast Factor	1.00
CIE Type	Direct
Spacing Criterion (0-180)	1.24
Spacing Criterion (90-270)	1.24
Spacing Criterion (Diagonal)	1.42
Basic Luminous Shape	Rectangular
Luminous Length (0-180)	8.00 ft
Luminous Width (90-270)	1.05 ft
Luminous Height	0.00 ft

LUMINANCE DATA (cd/sq.m)

Angle In Degrees	Average 0-Deg	Average 45-Deg	Average 90-Deg
45	18110	18150	18350
55	16719	17448	13153
65	15726	12597	12824
75	12053	8034	7422
85	6612	4279	4866

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CANDELA TABULATION

	0.0	22.5	45.0	67.5	90.0
0	14179.215	14179.215	14179.215	14179.215	14179.215
5	13975.190	13971.285	13975.190	13980.071	13983.976
10	13962.500	13952.738	13962.500	13980.071	13980.071
15	13670.618	13688.189	13727.237	13732.118	13727.237
20	13139.568	13152.259	13174.711	13192.283	13192.283
25	12387.899	12423.042	12449.399	12400.590	12400.590
30	11671.373	11711.397	11680.159	11671.373	11666.492
35	10906.037	10958.751	10923.608	10946.061	10949.966
40	10419.892	10486.274	10432.583	10463.821	10495.059
45	10021.605	10074.320	10044.058	10119.225	10154.368
50	8857.982	8941.935	9021.983	9083.483	9026.864
55	7504.978	7632.859	7832.003	6160.759	5904.020
60	6288.640	6412.617	6417.498	5081.089	5103.541
65	5201.160	5267.542	4166.395	4290.372	4241.562
70	3812.037	3988.728	3259.511	2852.438	2286.246
75	2441.461	2016.816	1627.315	1658.553	1503.338
80	1357.886	1216.337	698.955	486.145	428.549
85	451.002	291.882	291.882	327.025	331.906
90	0.000	0.000	0.000	0.000	0.000

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ZONAL LUMEN SUMMARY

Zone	Lumens	%Lamp	%Fixt
0-20	5193.59	N.A.	13.30
0-30	10927.16	N.A.	28.00
0-40	17828.71	N.A.	45.70
0-60	31984.9	N.A.	82.00
0-80	38582.46	N.A.	99.00
0-90	38983.88	N.A.	100.00
10-90	37647.67	N.A.	96.60
20-40	12635.11	N.A.	32.40
20-50	20293.69	N.A.	52.10
40-70	18712.03	N.A.	48.00
60-80	6597.56	N.A.	16.90
70-80	2041.73	N.A.	5.20
80-90	401.41	N.A.	1.00
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	38983.88	N.A.	100.00

Total Luminaire Efficiency = N.A.%

ZONAL LUMEN SUMMARY

Zone	Lumens
0-10	1336.21
10-20	3857.39
20-30	5733.57
30-40	6901.54
40-50	7658.58
50-60	6497.62
60-70	4555.83
70-80	2041.73
80-90	401.41
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	109	105	101	97	107	103	99	96	98	95	93	94	92	90	91	89	87	85
2	100	92	85	80	97	90	84	79	86	81	77	83	79	75	80	77	73	71
3	91	81	73	66	89	79	72	66	76	70	65	73	68	64	71	66	62	60
4	83	72	63	56	81	70	62	56	68	61	55	65	59	54	63	58	54	52
5	77	64	55	49	75	63	54	48	61	53	48	59	52	47	57	51	47	45
6	71	58	49	42	69	57	48	42	55	47	42	53	46	41	52	46	41	39
7	66	52	43	37	64	51	43	37	50	42	37	48	42	37	47	41	36	34
8	61	48	39	33	59	47	39	33	46	38	33	44	38	33	43	37	33	31
9	57	44	35	30	56	43	35	30	42	35	30	41	34	30	40	34	29	28
10	53	40	32	27	52	40	32	27	39	32	27	38	31	27	37	31	27	25

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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	22.2	23.8	22.6	24.2	24.5	20.7	22.3	21.0	22.6	22.9
	3H	24.0	25.5	24.4	25.8	26.2	22.1	23.6	22.5	23.9	24.3
	4H	24.5	25.9	24.9	26.2	26.6	22.5	23.9	22.9	24.2	24.6
	6H	24.8	26.1	25.2	26.5	26.9	22.6	23.9	23.0	24.3	24.6
	8H	24.9	26.1	25.4	26.5	26.9	22.6	23.8	23.1	24.2	24.6
	12H	25.0	26.1	25.4	26.5	26.9	22.7	23.8	23.1	24.2	24.6
4H	2H	22.6	24.0	23.0	24.3	24.7	21.3	22.7	21.7	23.1	23.4
	3H	24.6	25.8	25.0	26.2	26.6	23.0	24.2	23.4	24.6	25.0
	4H	25.2	26.2	25.6	26.6	27.1	23.5	24.5	23.9	24.9	25.4
	6H	25.6	26.5	26.1	27.0	27.4	23.6	24.5	24.1	25.0	25.4
	8H	25.8	26.6	26.2	27.0	27.5	23.7	24.5	24.1	24.9	25.4
	12H	25.8	26.6	26.3	27.1	27.5	23.7	24.4	24.2	24.9	25.4
8H	4H	25.3	26.1	25.8	26.6	27.0	23.7	24.5	24.2	25.0	25.5
	6H	25.8	26.5	26.3	27.0	27.5	23.9	24.6	24.4	25.1	25.5
	8H	26.0	26.6	26.5	27.1	27.6	23.9	24.5	24.4	25.1	25.5
	12H	26.1	26.6	26.6	27.1	27.7	24.0	24.6	24.5	25.0	25.6
12H	4H	25.3	26.0	25.8	26.5	27.0	23.7	24.5	24.2	25.0	25.4
	6H	25.8	26.4	26.3	26.9	27.4	23.9	24.5	24.4	25.0	25.5
	8H	26.0	26.5	26.5	27.0	27.6	24.0	24.5	24.5	25.0	25.6

Maximum UGR = 27.7

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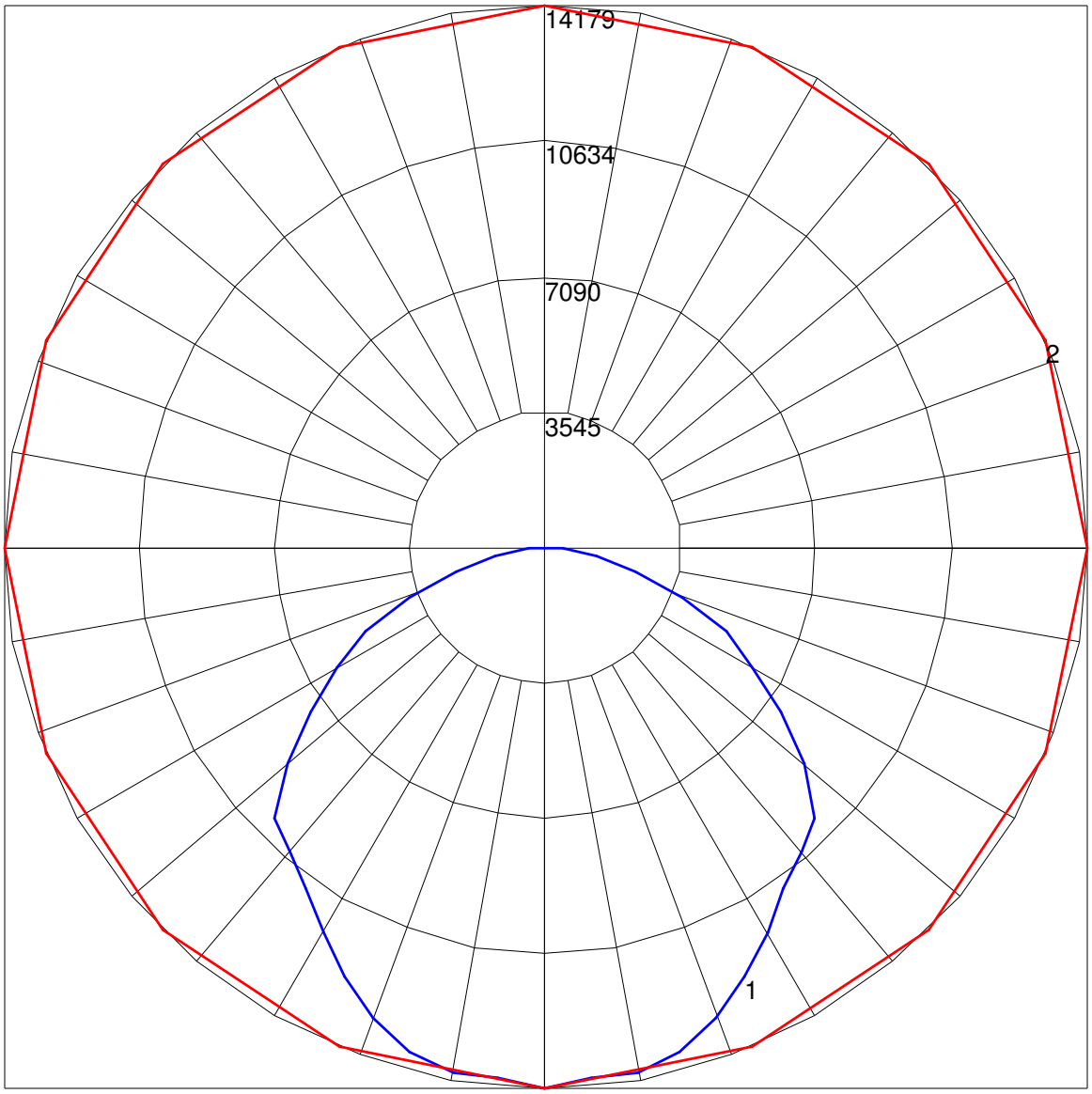
POLAR GRAPH



Maximum Candela = 14179.215 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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