H.E. WILLIAMS, INC.

IES INDOOR REPORT
PHOTOMETRIC FILENAME : GL-4-L300-850-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] 2023-07-17
[MANUFAC] WILLIAMS INDOOR
[OTHER] H.E. WILLIAMS, INC - CARTHAGE, MO
[LUMINAIRE] 48 INCH, LOW PROFILE HIGHBAY LUMINAIRE
[MORE] WHITE REFLECTOR w/OPEN BOTTOM
[MORE] 0-10V DIMMING DRIVERS
[LUMCAT] GL-4-L300-850-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	31043
Total Luminaire Efficiency	N.A.
Luminaire Efficacy Rating (LER)	155
Total Luminaire Watts	200
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)	4.00 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	28841	28906	29223
55	26627	27787	20947
65	25045	20062	20424
75	19196	12795	11820
85	10530	6815	7750

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CANDELA TABULATION

	0.0	22.5	45.0	67.5	90.0
0	11290.898	11290.898	11290.898	11290.898	11290.898
5	11128.433	11125.324	11128.433	11132.320	11135.430
10	11118.328	11110.555	11118.328	11132.320	11132.320
15	10885.903	10899.895	10930.989	10934.875	10930.989
20	10463.028	10473.134	10491.013	10505.005	10505.005
25	9864.475	9892.459	9913.447	9874.580	9874.580
30	9293.905	9325.777	9300.902	9293.905	9290.019
35	8684.469	8726.446	8698.461	8716.340	8719.449
40	8297.353	8350.212	8307.458	8332.333	8357.208
45	7980.197	8022.173	7998.076	8057.931	8085.915
50	7053.605	7120.456	7184.198	7233.171	7188.085
55	5976.208	6078.040	6236.618	4905.808	4701.367
60	5007.640	5106.362	5110.249	4046.067	4063.946
65	4141.680	4194.539	3317.697	3416.420	3377.553
70	3035.522	3176.221	2595.546	2271.394	1820.536
75	1944.133	1605.989	1295.830	1320.705	1197.107
80	1081.283	968.569	556.577	387.117	341.253
85	359.132	232.425	232.425	260.410	264.296
90	0.000	0.000	0.000	0.000	0.000

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ZONAL LUMEN SUMMARY

Zone	Lumens	%Lamp	%Fixt
0-20	4135.66	N.A.	13.30
0-30	8701.29	N.A.	28.00
0-40	14196.99	N.A.	45.70
0-60	25469.56	N.A.	82.00
0-80	30723.19	N.A.	99.00
0-90	31042.83	N.A.	100.00
10-90	29978.81	N.A.	96.60
20-40	10061.33	N.A.	32.40
20-50	16159.85	N.A.	52.10
40-70	14900.38	N.A.	48.00
60-80	5253.63	N.A.	16.90
70-80	1625.83	N.A.	5.20
80-90	319.64	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	31042.83	N.A.	100.00

Total Luminaire Efficiency = N.A.%

ZONAL LUMEN SUMMARY

Zone	Lumens
0-10	1064.02
10-20	3071.63
20-30	4565.64
30-40	5495.69
40-50	6098.52
50-60	5174.05
60-70	3627.81
70-80	1625.83
80-90	319.64
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	23.8	25.5	24.2	25.8	26.1	22.3	23.9	22.7	24.2	24.5
	3H	25.6	27.1	26.0	27.4	27.8	23.8	25.2	24.1	25.5	25.9
	4H	26.1	27.5	26.5	27.8	28.2	24.1	25.5	24.5	25.8	26.2
	6H	26.4	27.7	26.9	28.1	28.5	24.2	25.5	24.6	25.9	26.3
	8H	26.5	27.7	27.0	28.1	28.5	24.2	25.5	24.7	25.8	26.2
	12H	26.6	27.7	27.0	28.1	28.5	24.3	25.4	24.7	25.8	26.2
4H	2H	24.2	25.6	24.6	25.9	26.3	23.0	24.3	23.3	24.7	25.0
	3H	26.2	27.4	26.6	27.8	28.2	24.6	25.8	25.0	26.2	26.6
	4H	26.8	27.8	27.2	28.2	28.7	25.1	26.1	25.5	26.5	27.0
	6H	27.3	28.1	27.7	28.6	29.0	25.2	26.1	25.7	26.6	27.0
	8H	27.4	28.2	27.8	28.7	29.1	25.3	26.1	25.7	26.5	27.0
	12H	27.4	28.2	27.9	28.7	29.1	25.3	26.0	25.8	26.5	27.0
8H	4H	26.9	27.7	27.4	28.2	28.6	25.3	26.2	25.8	26.6	27.1
	6H	27.4	28.1	27.9	28.6	29.1	25.5	26.2	26.0	26.7	27.2
	8H	27.6	28.2	28.1	28.7	29.2	25.5	26.2	26.0	26.7	27.1
	12H	27.7	28.2	28.2	28.7	29.3	25.6	26.2	26.1	26.7	27.2
12H	4H	26.9	27.6	27.4	28.1	28.6	25.3	26.1	25.8	26.6	27.0
	6H	27.4	28.0	27.9	28.5	29.0	25.5	26.2	26.0	26.6	27.1
	8H	27.6	28.1	28.1	28.6	29.2	25.6	26.1	26.1	26.6	27.2

Maximum UGR = 29.3

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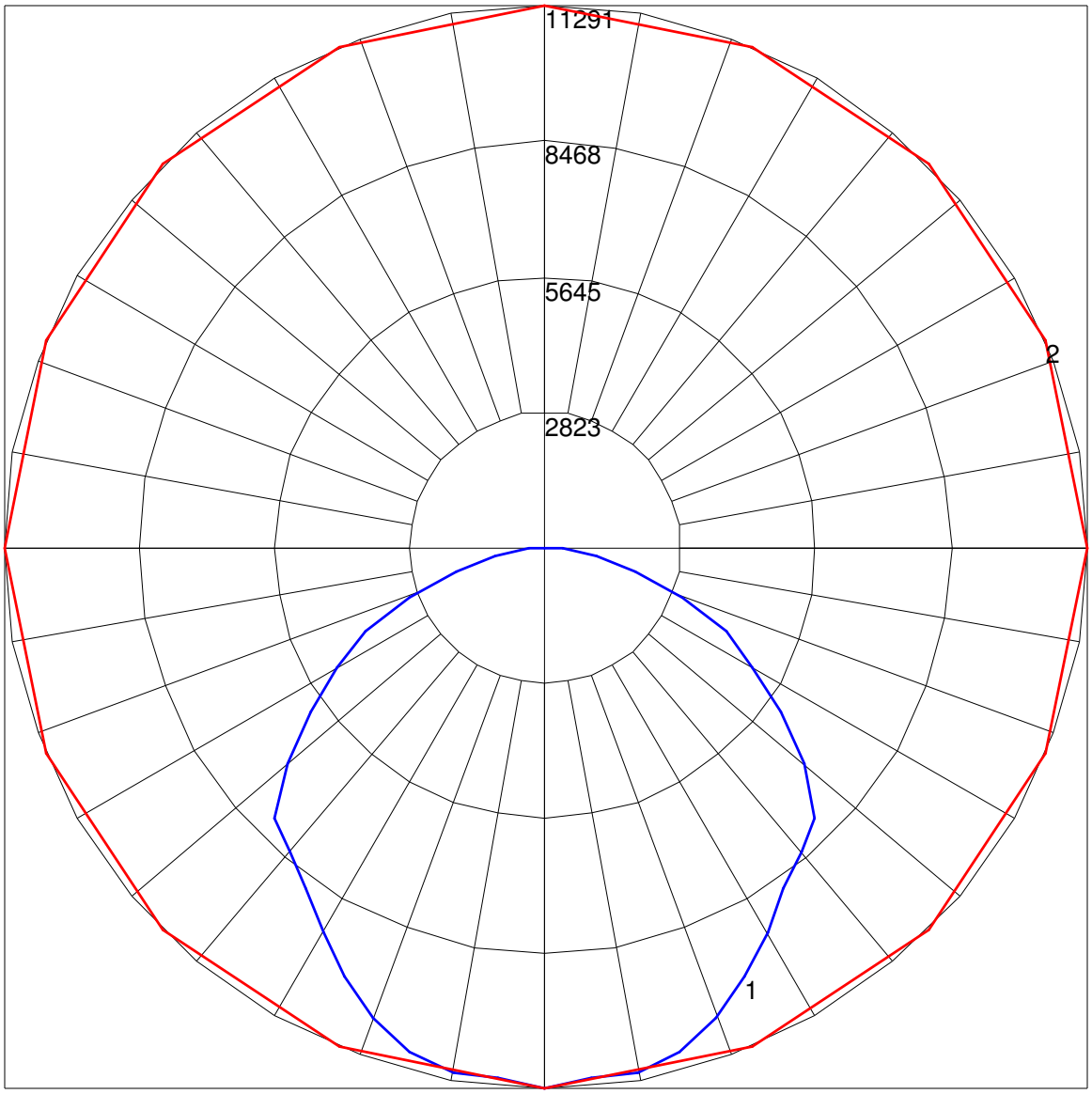
POLAR GRAPH



Maximum Candela = 11290.898 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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