H.E. WILLIAMS, INC.

IES INDOOR REPORT
PHOTOMETRIC FILENAME : GL-4-L300-950-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] 2023-07-17
[MANUFAC] WILLIAMS INDOOR
[OTHER] H.E. WILLIAMS, INC - CARTHAGE, MO
[LUMINAIRE] 48 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-4-L300-950-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	24623
Total Luminaire Efficiency	N.A.
Luminaire Efficacy Rating (LER)	126
Total Luminaire Watts	195
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)	4.00 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	60646	6472	4784
55	41560	4804	3591
65	25150	3642	3696
75	12315	4023	3356
85	4721	1487	1487

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CANDELA TABULATION

	0.0	22.5	45.0	67.5	90.0
0	24834.121	24834.121	24834.121	24834.121	24834.121
5	24278.981	24086.004	23699.169	23379.303	23194.256
10	24086.004	23295.591	21546.462	20042.298	19764.728
15	23758.208	22017.889	18688.815	16149.272	15308.632
20	24161.785	20168.306	14098.781	10290.348	9079.615
25	23068.249	17385.559	10323.832	6978.015	5985.814
30	22547.475	13938.407	6271.314	3850.729	3321.144
35	20563.072	9996.035	3707.098	2429.396	2202.934
40	19226.331	6852.007	2404.723	1824.030	1706.834
45	16620.700	4271.049	1773.803	1386.968	1311.187
50	12820.197	2866.458	1395.779	1134.952	1067.983
55	9239.107	2127.154	1067.983	874.124	798.343
60	6355.907	1512.975	832.709	731.374	681.147
65	4119.487	933.163	596.555	630.920	605.366
70	2438.208	672.336	512.843	529.585	470.547
75	1235.406	504.031	403.578	361.281	336.608
80	596.555	370.093	252.016	159.492	134.820
85	159.492	118.077	50.227	50.227	50.227
90	0.000	0.000	0.000	0.000	0.000

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ZONAL LUMEN SUMMARY

Zone	Lumens	%Lamp	%Fixt
0-20	7460.19	N.A.	30.30
0-30	13082.19	N.A.	53.10
0-40	17503.53	N.A.	71.10
0-60	22782.94	N.A.	92.50
0-80	24501.19	N.A.	99.50
0-90	24623.23	N.A.	100.00
10-90	22417.62	N.A.	91.00
20-40	10043.34	N.A.	40.80
20-50	13251.58	N.A.	53.80
40-70	6442.08	N.A.	26.20
60-80	1718.24	N.A.	7.00
70-80	555.57	N.A.	2.30
80-90	122.04	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	24623.23	N.A.	100.00

Total Luminaire Efficiency = N.A.%

ZONAL LUMEN SUMMARY

Zone	Lumens
0-10	2205.61
10-20	5254.59
20-30	5622.00
30-40	4421.34
40-50	3208.25
50-60	2071.16
60-70	1162.67
70-80	555.57
80-90	122.04
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	20.6	21.9	20.9	22.2	22.5	11.6	12.9	11.9	13.2	13.5
	3H	22.4	23.6	22.8	23.9	24.3	13.6	14.8	14.0	15.1	15.5
	4H	22.9	24.0	23.3	24.4	24.7	14.4	15.4	14.8	15.8	16.2
	6H	23.2	24.2	23.7	24.6	25.0	14.7	15.7	15.1	16.0	16.4
	8H	23.3	24.3	23.7	24.6	25.0	14.7	15.7	15.2	16.1	16.5
	12H	23.3	24.2	23.8	24.6	25.0	14.7	15.6	15.2	16.0	16.5
4H	2H	20.4	21.5	20.8	21.8	22.2	12.2	13.3	12.6	13.6	14.0
	3H	22.3	23.2	22.7	23.6	24.0	14.6	15.4	15.0	15.8	16.2
	4H	22.9	23.7	23.3	24.1	24.5	15.4	16.2	15.8	16.6	17.1
	6H	23.3	24.0	23.8	24.4	24.9	15.8	16.5	16.3	16.9	17.4
	8H	23.4	24.0	23.9	24.5	25.0	15.9	16.5	16.3	17.0	17.4
	12H	23.5	24.0	24.0	24.5	25.0	15.9	16.5	16.4	17.0	17.4
8H	4H	22.8	23.4	23.3	23.9	24.3	15.8	16.5	16.3	16.9	17.4
	6H	23.3	23.8	23.8	24.3	24.8	16.3	16.9	16.8	17.4	17.8
	8H	23.4	23.9	23.9	24.4	24.9	16.5	16.9	17.0	17.4	17.9
	12H	23.5	23.9	24.0	24.4	25.0	16.5	16.9	17.0	17.4	18.0
12H	4H	22.8	23.3	23.3	23.8	24.3	15.9	16.5	16.4	17.0	17.5
	6H	23.2	23.7	23.8	24.2	24.7	16.5	17.0	17.0	17.4	18.0
	8H	23.4	23.8	23.9	24.3	24.9	16.6	17.0	17.2	17.5	18.1

Maximum UGR = 25.0

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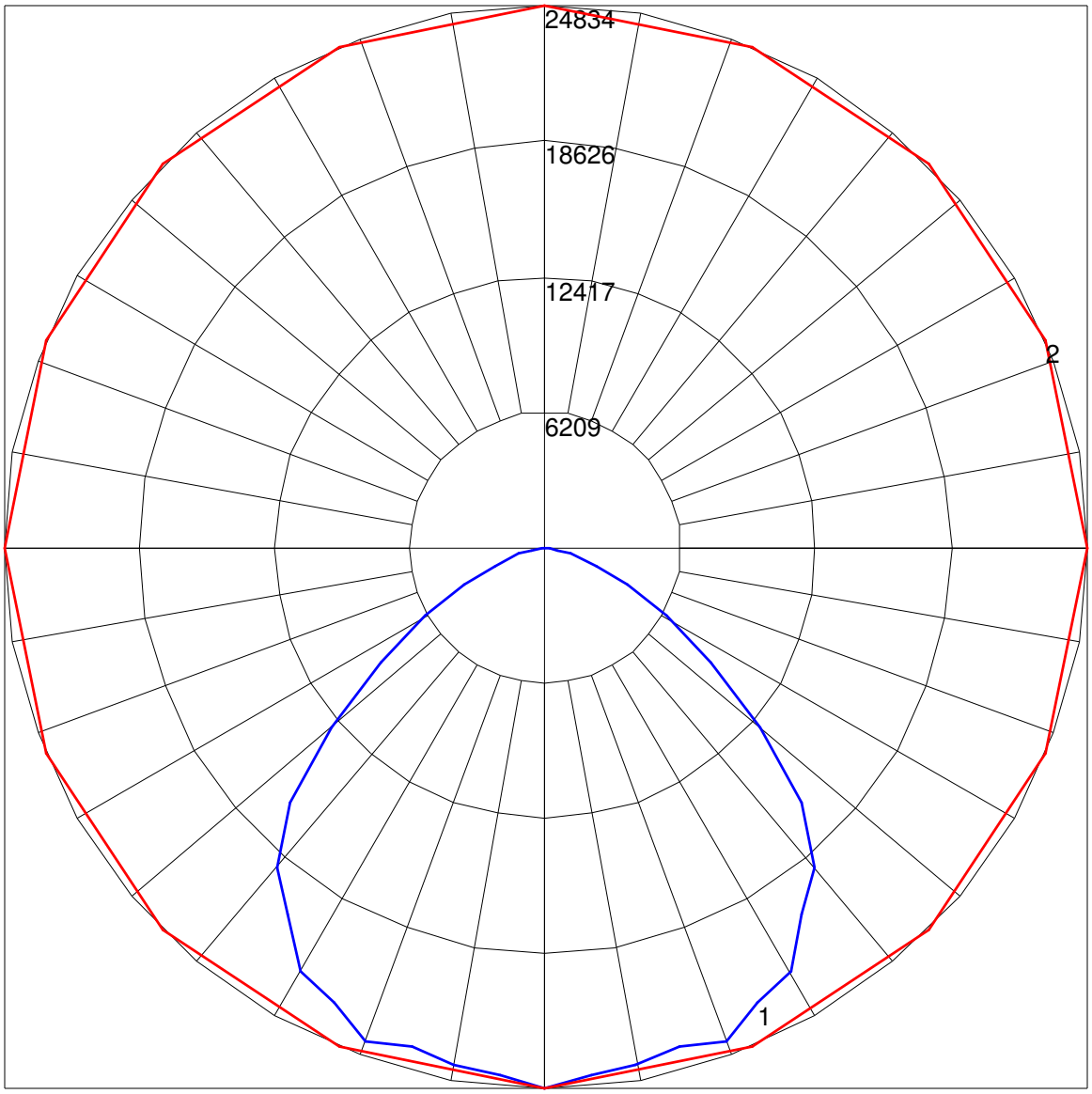
POLAR GRAPH



Maximum Candela = 24834.121 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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