H.E. WILLIAMS, INC.

IES INDOOR REPORT
PHOTOMETRIC FILENAME : GL-4-L200-930-SCHA118-DIM-UNV_.IES

DESCRIPTION INFORMATION (From Photometric File)

IESNA:LM-63-2002
[TEST] GEN FROM BALLABS TEST NO. 19725.0
[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 REFLECTOR w/.118"THK CLEAR ACRYLIC LENS
[MORE] 0-10V UNIVERSAL VOLTAGE 122-277V DRIVERS
[LUMCAT] GL-4-L200-930-SCHA118-DIM-UNV_
[LAMPCAT] 22 INCH HLM LINEAR LED ARRAYS
[_SEARCH_SOURCETYPE] LED
[_SEARCH_APPLICATION] Indoor, Commercial, Industrial, Manufacturing, High Bay
[_SEARCH_MOUNTING] Cable, Pendant, Suspended

CHARACTERISTICS

Lumens Per Lamp	N.A. (absolute)
Total Lamp Lumens	N.A. (absolute)
Luminaire Lumens	14684
Total Luminaire Efficiency	N.A.
Luminaire Efficacy Rating (LER)	110
Total Luminaire Watts	133
Ballast Factor	1.00
CIE Type	Direct
Spacing Criterion (0-180)	1.34
Spacing Criterion (90-270)	1.32
Spacing Criterion (Diagonal)	1.42
Basic Luminous Shape	Rectangular
Luminous Length (0-180)	3.83 ft
Luminous Width (90-270)	1.00 ft
Luminous Height	0.00 ft

LUMINANCE DATA (cd/sq.m)

Angle In Degrees	Average 0-Deg	Average 45-Deg	Average 90-Deg
45	15750	15428	11776
55	14944	10955	11099
65	12529	9716	9500
75	8134	5474	4042
85	1621	1654	1384

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CANDELA TABULATION

	0.0	22.5	45.0	67.5	90.0
0	5502.923	5502.923	5502.923	5502.923	5502.923
5	5564.277	5500.826	5460.972	5440.521	5445.765
10	5515.509	5452.058	5418.497	5395.948	5403.290
15	5420.595	5374.973	5340.888	5303.656	5317.290
20	5301.034	5235.486	5208.218	5175.181	5195.632
25	5141.096	5057.194	5050.377	5035.170	5038.316
30	4924.000	4846.915	4851.110	4828.037	4841.671
35	4646.074	4554.831	4600.452	4589.440	4592.587
40	4335.112	4232.857	4254.357	4309.942	4301.551
45	3969.614	3874.176	3888.334	3593.628	2968.034
50	3532.275	3476.690	3484.031	2566.877	2591.524
55	3055.082	3025.192	2239.659	2270.598	2269.025
60	2524.402	2498.707	1872.064	1908.246	1908.246
65	1887.271	1917.685	1463.566	1513.907	1431.054
70	1286.847	1019.409	1044.056	960.678	759.313
75	750.399	589.412	504.985	463.034	372.840
80	298.377	259.572	189.828	155.219	144.207
85	50.341	45.097	51.390	51.914	43.000
90	0.000	0.000	0.000	0.000	0.000

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ZONAL LUMEN SUMMARY

Zone	Lumens	%Lamp	%Fixt
0-20	2031.48	N.A.	13.80
0-30	4363.29	N.A.	29.70
0-40	7233.74	N.A.	49.30
0-60	12415.99	N.A.	84.60
0-80	14601.67	N.A.	99.40
0-90	14684.38	N.A.	100.00
10-90	14162.9	N.A.	96.40
20-40	5202.27	N.A.	35.40
20-50	8065.65	N.A.	54.90
40-70	6767.99	N.A.	46.10
60-80	2185.68	N.A.	14.90
70-80	599.94	N.A.	4.10
80-90	82.71	N.A.	0.60
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	14684.38	N.A.	100.00

Total Luminaire Efficiency = N.A.%

ZONAL LUMEN SUMMARY

Zone	Lumens
0-10	521.48
10-20	1509.99
20-30	2331.81
30-40	2870.46
40-50	2863.38
50-60	2318.86
60-70	1585.75
70-80	599.94
80-90	82.71
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	110	106	102	98	107	103	100	97	99	96	94	95	93	91	92	90	88	86
2	101	93	87	81	98	91	85	80	88	83	78	84	80	77	81	78	75	73
3	92	82	74	68	90	81	73	68	78	72	67	75	70	65	72	68	64	62
4	84	73	65	58	82	72	64	58	69	62	57	67	61	56	65	60	56	53
5	78	65	57	50	76	64	56	50	62	55	50	60	54	49	58	53	49	46
6	72	59	50	44	70	58	50	44	56	49	44	55	48	43	53	47	43	41
7	67	54	45	39	65	53	45	39	51	44	39	50	43	38	48	43	38	36
8	62	49	41	35	61	48	40	35	47	40	35	46	39	34	44	39	34	32
9	58	45	37	31	57	44	37	31	43	36	31	42	36	31	41	35	31	29
10	54	41	34	28	53	41	33	28	40	33	28	39	33	28	38	32	28	26

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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	22.0	23.5	22.3	23.8	24.2	20.0	21.6	20.4	21.9	22.2
	3H	23.2	24.6	23.5	24.9	25.3	21.2	22.6	21.6	23.0	23.3
	4H	23.5	24.8	23.9	25.2	25.6	21.4	22.8	21.8	23.1	23.5
	6H	23.7	24.9	24.1	25.2	25.6	21.5	22.7	21.9	23.1	23.5
	8H	23.7	24.8	24.1	25.2	25.6	21.5	22.6	21.9	23.0	23.4
	12H	23.7	24.8	24.1	25.1	25.6	21.5	22.6	21.9	23.0	23.4
4H	2H	22.2	23.5	22.6	23.9	24.3	20.6	21.9	21.0	22.2	22.6
	3H	23.6	24.7	24.0	25.1	25.5	22.0	23.1	22.4	23.5	23.9
	4H	24.0	25.0	24.4	25.4	25.8	22.3	23.2	22.7	23.7	24.1
	6H	24.2	25.0	24.7	25.5	26.0	22.4	23.2	22.8	23.6	24.1
	8H	24.2	25.0	24.7	25.5	25.9	22.3	23.1	22.8	23.6	24.0
	12H	24.2	24.9	24.7	25.4	25.9	22.3	23.0	22.8	23.5	24.0
8H	4H	24.0	24.8	24.5	25.3	25.7	22.4	23.2	22.9	23.6	24.1
	6H	24.3	24.9	24.8	25.4	25.9	22.5	23.2	23.0	23.6	24.1
	8H	24.3	24.9	24.8	25.4	25.9	22.5	23.1	23.0	23.6	24.1
	12H	24.3	24.8	24.8	25.3	25.9	22.5	23.0	23.0	23.5	24.1
12H	4H	24.0	24.7	24.5	25.2	25.7	22.4	23.1	22.9	23.6	24.0
	6H	24.2	24.8	24.8	25.3	25.8	22.5	23.1	23.0	23.5	24.1
	8H	24.3	24.8	24.8	25.3	25.9	22.5	23.0	23.0	23.5	24.1

Maximum UGR = 26.0

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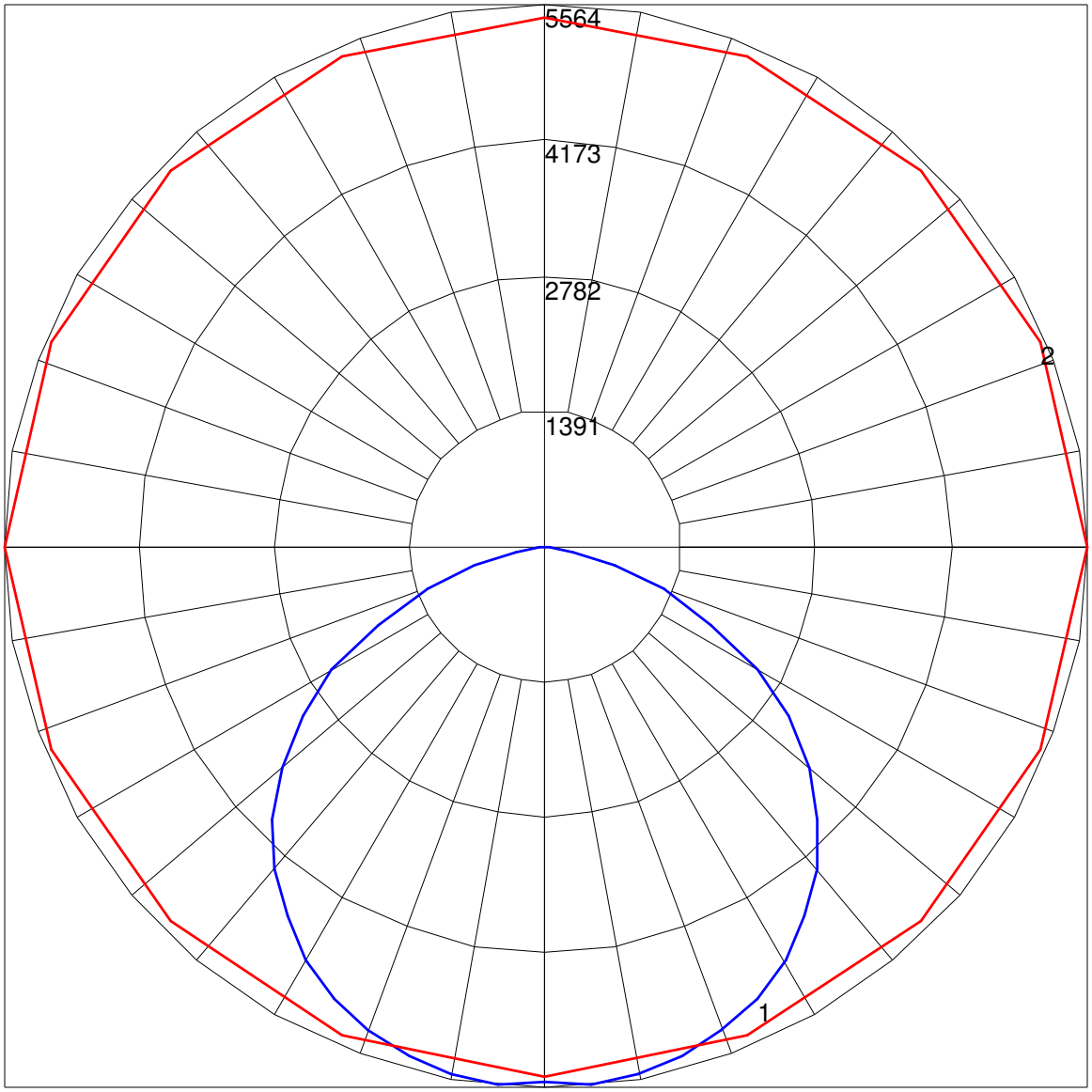
POLAR GRAPH



Maximum Candela = 5564.277 Located At Horizontal Angle = 0, Vertical Angle = 5
1 - Vertical Plane Through Horizontal Angles (0 - 180) (Through Max. Cd.)
2 - Horizontal Cone Through Vertical Angle (5) (Through Max. Cd.)

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