H.E. WILLIAMS, INC.

IES INDOOR REPORT
PHOTOMETRIC FILENAME : GL-4-L150-950-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-L150-950-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	11971
Total Luminaire Efficiency	N.A.
Luminaire Efficacy Rating (LER)	125
Total Luminaire Watts	96
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	12840	12577	9601
55	12183	8931	9048
65	10214	7921	7745
75	6631	4463	3295
85	1321	1349	1128

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CANDELA TABULATION

	0.0	22.5	45.0	67.5	90.0
0	4486.260	4486.260	4486.260	4486.260	4486.260
5	4536.279	4484.550	4452.060	4435.387	4439.662
10	4496.521	4444.792	4417.432	4399.049	4405.034
15	4419.142	4381.949	4354.161	4323.808	4334.923
20	4321.670	4268.232	4246.001	4219.068	4235.741
25	4191.281	4122.879	4117.322	4104.924	4107.489
30	4014.293	3951.449	3954.869	3936.059	3947.174
35	3787.714	3713.327	3750.521	3741.543	3744.108
40	3534.202	3450.838	3468.366	3513.682	3506.841
45	3236.229	3158.423	3169.966	2929.707	2419.691
50	2879.688	2834.373	2840.358	2092.648	2112.741
55	2490.657	2466.289	1825.883	1851.106	1849.824
60	2058.020	2037.072	1526.201	1555.699	1555.699
65	1538.598	1563.394	1193.173	1234.213	1166.667
70	1049.103	831.074	851.167	783.193	619.030
75	611.763	480.518	411.689	377.489	303.958
80	243.252	211.616	154.758	126.542	117.564
85	41.041	36.766	41.896	42.323	35.056
90	0.000	0.000	0.000	0.000	0.000

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ZONAL LUMEN SUMMARY

Zone	Lumens	%Lamp	%Fixt
0-20	1656.16	N.A.	13.80
0-30	3557.17	N.A.	29.70
0-40	5897.31	N.A.	49.30
0-60	10122.14	N.A.	84.60
0-80	11904.02	N.A.	99.40
0-90	11971.45	N.A.	100.00
10-90	11546.31	N.A.	96.40
20-40	4241.15	N.A.	35.40
20-50	6575.52	N.A.	54.90
40-70	5517.61	N.A.	46.10
60-80	1781.88	N.A.	14.90
70-80	489.10	N.A.	4.10
80-90	67.43	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	11971.45	N.A.	100.00

Total Luminaire Efficiency = N.A.%

ZONAL LUMEN SUMMARY

Zone	Lumens
0-10	425.14
10-20	1231.02
20-30	1901.01
30-40	2340.14
40-50	2334.37
50-60	1890.45
60-70	1292.78
70-80	489.10
80-90	67.43
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	21.3	22.8	21.6	23.1	23.5	19.3	20.9	19.7	21.2	21.5
	3H	22.5	23.9	22.8	24.2	24.6	20.5	21.9	20.9	22.3	22.6
	4H	22.8	24.1	23.2	24.5	24.9	20.7	22.1	21.1	22.4	22.8
	6H	23.0	24.2	23.4	24.5	24.9	20.8	22.0	21.2	22.4	22.8
	8H	23.0	24.1	23.4	24.5	24.9	20.8	21.9	21.2	22.3	22.7
	12H	23.0	24.1	23.4	24.4	24.9	20.8	21.9	21.2	22.3	22.7
4H	2H	21.5	22.8	21.9	23.2	23.6	19.9	21.2	20.3	21.5	21.9
	3H	22.9	24.0	23.3	24.4	24.8	21.3	22.4	21.7	22.8	23.2
	4H	23.3	24.3	23.7	24.7	25.1	21.6	22.5	22.0	23.0	23.4
	6H	23.5	24.3	24.0	24.8	25.3	21.7	22.5	22.1	22.9	23.4
	8H	23.5	24.3	24.0	24.8	25.2	21.6	22.4	22.1	22.9	23.3
	12H	23.5	24.2	24.0	24.7	25.2	21.6	22.3	22.1	22.8	23.3
8H	4H	23.3	24.1	23.8	24.6	25.0	21.7	22.5	22.2	22.9	23.4
	6H	23.6	24.2	24.1	24.7	25.2	21.8	22.5	22.3	22.9	23.4
	8H	23.6	24.2	24.1	24.7	25.2	21.8	22.4	22.3	22.9	23.4
	12H	23.6	24.1	24.1	24.6	25.2	21.8	22.3	22.3	22.8	23.4
12H	4H	23.3	24.0	23.8	24.5	25.0	21.7	22.4	22.2	22.9	23.3
	6H	23.5	24.1	24.1	24.6	25.1	21.8	22.4	22.3	22.8	23.4
	8H	23.6	24.1	24.1	24.6	25.2	21.8	22.3	22.3	22.8	23.4

Maximum UGR = 25.3

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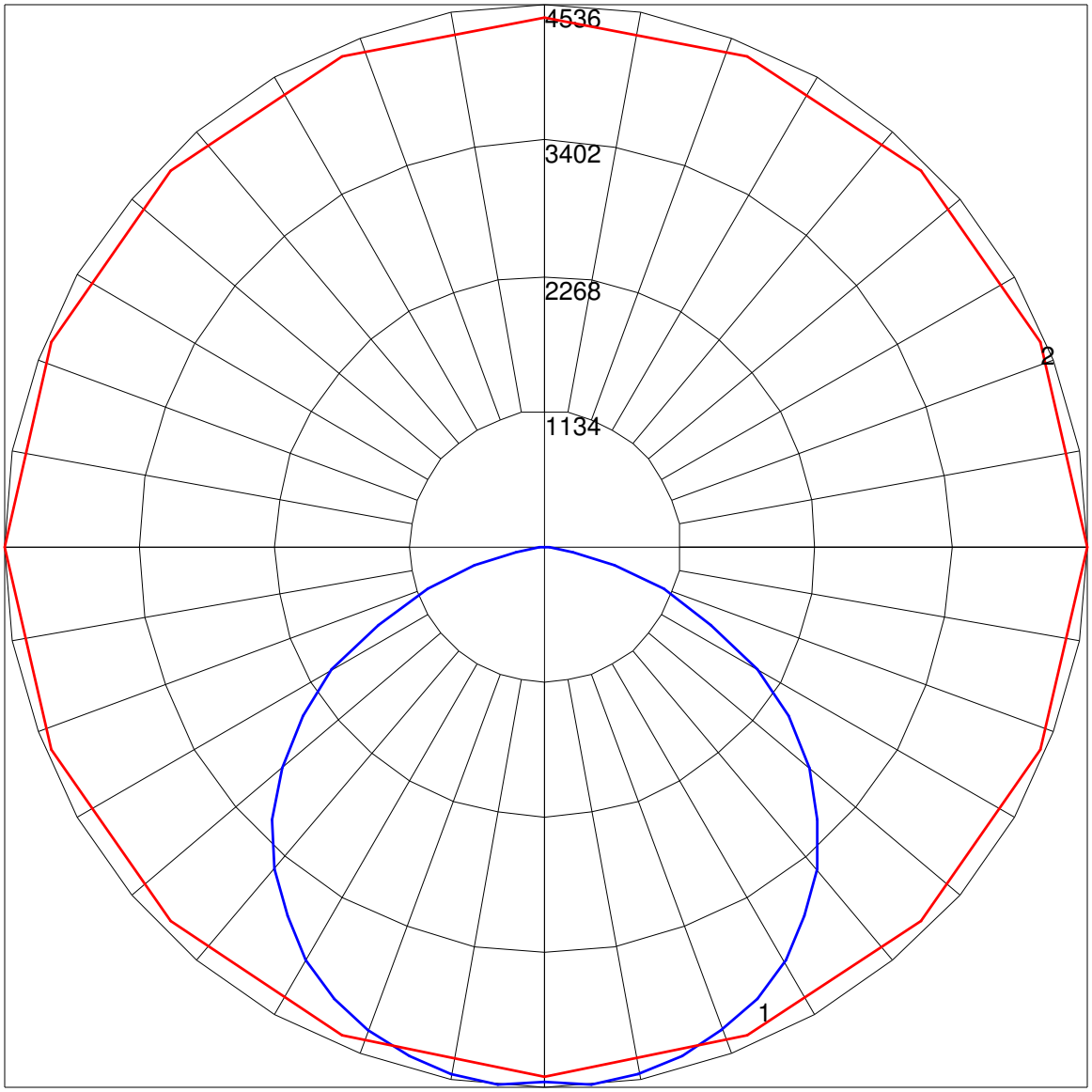
POLAR GRAPH



Maximum Candela = 4536.279 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.)