H.E. WILLIAMS, INC.

IES INDOOR REPORT
PHOTOMETRIC FILENAME : GL-4-L150-850-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-L150-850-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	14338
Total Luminaire Efficiency	N.A.
Luminaire Efficacy Rating (LER)	149
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	15379	15064	11498
55	14591	10697	10837
65	12233	9487	9276
75	7942	5345	3946
85	1582	1615	1352

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CANDELA TABULATION

	0.0	22.5	45.0	67.5	90.0
0	5373.077	5373.077	5373.077	5373.077	5373.077
5	5432.983	5371.029	5332.116	5312.147	5317.268
10	5385.365	5323.412	5290.643	5268.626	5275.794
15	5292.691	5248.146	5214.865	5178.512	5191.824
20	5175.952	5111.950	5085.325	5053.068	5073.037
25	5019.787	4937.865	4931.209	4916.360	4919.433
30	4807.813	4732.547	4736.643	4714.115	4727.427
35	4536.446	4447.355	4491.901	4481.148	4484.220
40	4232.821	4132.979	4153.971	4208.245	4200.053
45	3875.948	3782.761	3796.585	3508.833	2898.000
50	3448.928	3394.654	3401.822	2506.310	2530.374
55	2982.995	2953.810	2186.813	2217.022	2215.485
60	2464.836	2439.748	1827.891	1863.220	1863.220
65	1842.739	1872.436	1429.032	1478.185	1397.287
70	1256.483	995.356	1019.420	938.010	741.397
75	732.692	575.504	493.070	452.109	364.042
80	291.336	253.447	185.349	151.556	140.804
85	49.153	44.033	50.177	50.689	41.985
90	0.000	0.000	0.000	0.000	0.000

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ZONAL LUMEN SUMMARY

Zone	Lumens	%Lamp	%Fixt
0-20	1983.54	N.A.	13.80
0-30	4260.33	N.A.	29.70
0-40	7063.06	N.A.	49.30
0-60	12123.02	N.A.	84.60
0-80	14257.13	N.A.	99.40
0-90	14337.89	N.A.	100.00
10-90	13828.71	N.A.	96.40
20-40	5079.51	N.A.	35.40
20-50	7875.33	N.A.	54.90
40-70	6608.29	N.A.	46.10
60-80	2134.11	N.A.	14.90
70-80	585.78	N.A.	4.10
80-90	80.76	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	14337.89	N.A.	100.00

Total Luminaire Efficiency = N.A.%

ZONAL LUMEN SUMMARY

Zone	Lumens
0-10	509.18
10-20	1474.36
20-30	2276.79
30-40	2802.73
40-50	2795.82
50-60	2264.15
60-70	1548.33
70-80	585.78
80-90	80.76
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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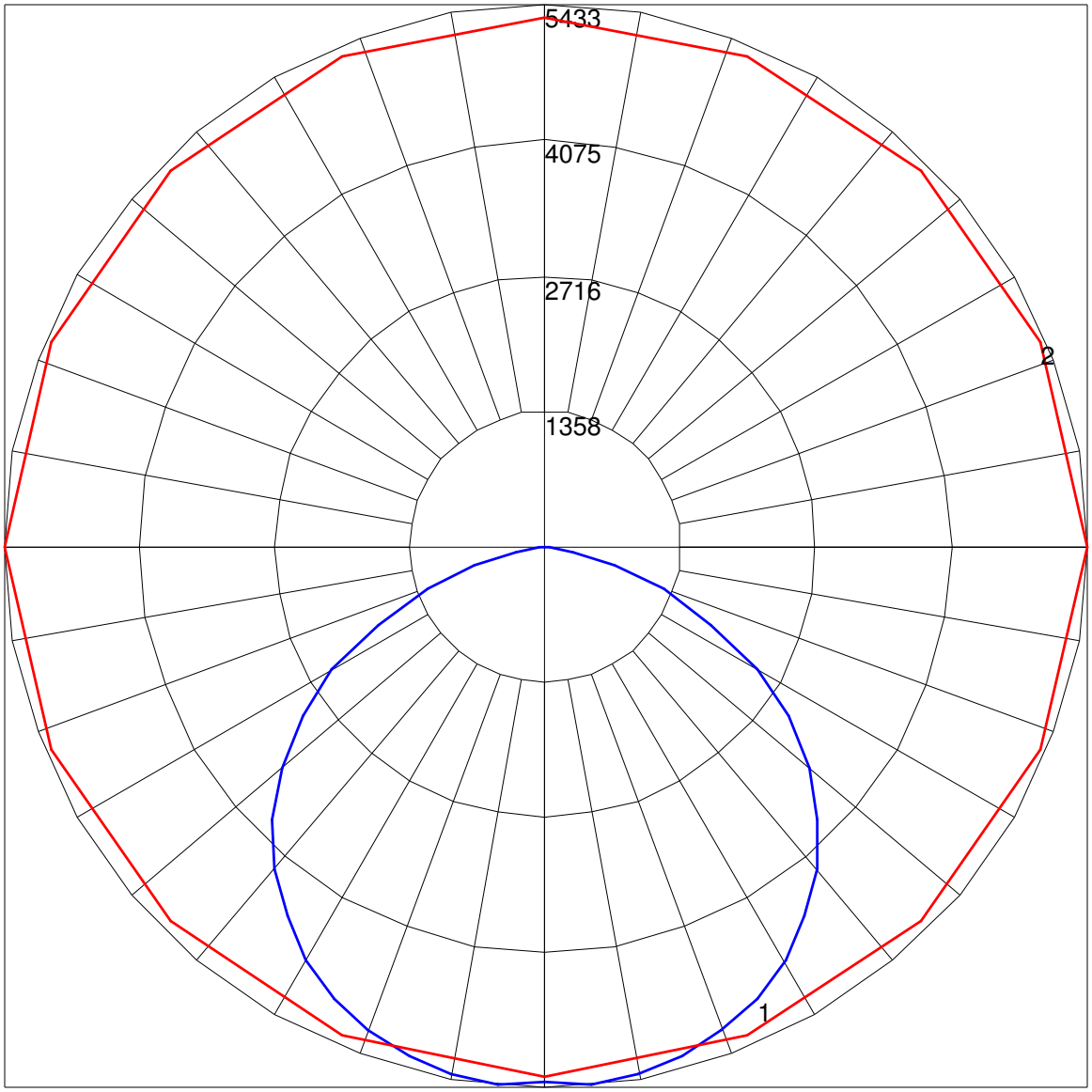
POLAR GRAPH



Maximum Candela = 5432.983 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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