H.E. WILLIAMS, INC.

IES INDOOR REPORT
PHOTOMETRIC FILENAME : GL-4-L150-830-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-L150-830-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	13363
Total Luminaire Efficiency	N.A.
Luminaire Efficacy Rating (LER)	139
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	14333	14040	10717
55	13599	9970	10100
65	11402	8842	8646
75	7403	4982	3678
85	1475	1505	1260

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CANDELA TABULATION

	0.0	22.5	45.0	67.5	90.0
0	5007.917	5007.917	5007.917	5007.917	5007.917
5	5063.752	5006.008	4969.740	4951.128	4955.901
10	5019.370	4961.627	4931.085	4910.565	4917.246
15	4932.994	4891.476	4860.457	4826.575	4838.982
20	4824.189	4764.536	4739.721	4709.657	4728.268
25	4678.637	4602.283	4596.079	4582.240	4585.103
30	4481.069	4410.919	4414.736	4393.739	4406.146
35	4228.144	4145.109	4186.626	4176.605	4179.468
40	3945.155	3852.097	3871.663	3922.248	3914.613
45	3612.534	3525.681	3538.566	3270.369	2701.049
50	3214.535	3163.950	3170.631	2335.978	2358.407
55	2780.267	2753.066	2038.195	2066.350	2064.919
60	2297.324	2273.940	1703.665	1736.593	1736.593
65	1717.505	1745.183	1331.913	1377.726	1302.326
70	1171.091	927.710	950.139	874.262	691.011
75	682.898	536.392	459.560	421.383	339.301
80	271.537	236.223	172.753	141.256	131.235
85	45.813	41.041	46.767	47.245	39.132
90	0.000	0.000	0.000	0.000	0.000

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ZONAL LUMEN SUMMARY

Zone	Lumens	%Lamp	%Fixt
0-20	1848.74	N.A.	13.80
0-30	3970.8	N.A.	29.70
0-40	6583.05	N.A.	49.30
0-60	11299.13	N.A.	84.60
0-80	13288.2	N.A.	99.40
0-90	13363.47	N.A.	100.00
10-90	12888.9	N.A.	96.40
20-40	4734.31	N.A.	35.40
20-50	7340.12	N.A.	54.90
40-70	6159.19	N.A.	46.10
60-80	1989.07	N.A.	14.90
70-80	545.97	N.A.	4.10
80-90	75.27	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	13363.47	N.A.	100.00

Total Luminaire Efficiency = N.A.%

ZONAL LUMEN SUMMARY

Zone	Lumens
0-10	474.58
10-20	1374.17
20-30	2122.06
30-40	2612.25
40-50	2605.81
50-60	2110.27
60-70	1443.1
70-80	545.97
80-90	75.27
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	21.7	23.2	22.0	23.5	23.9	19.7	21.3	20.1	21.6	21.9
	3H	22.9	24.3	23.2	24.6	25.0	20.9	22.3	21.3	22.7	23.0
	4H	23.2	24.5	23.6	24.9	25.3	21.1	22.5	21.5	22.8	23.2
	6H	23.4	24.6	23.8	24.9	25.3	21.2	22.4	21.6	22.8	23.2
	8H	23.4	24.5	23.8	24.9	25.3	21.2	22.3	21.6	22.7	23.1
	12H	23.4	24.5	23.8	24.8	25.3	21.2	22.3	21.6	22.7	23.1
4H	2H	21.9	23.2	22.3	23.6	24.0	20.3	21.6	20.7	21.9	22.3
	3H	23.3	24.4	23.7	24.8	25.2	21.7	22.8	22.1	23.2	23.6
	4H	23.7	24.7	24.1	25.1	25.5	22.0	22.9	22.4	23.4	23.8
	6H	23.9	24.7	24.4	25.2	25.7	22.1	22.9	22.5	23.3	23.8
	8H	23.9	24.7	24.4	25.2	25.6	22.0	22.8	22.5	23.3	23.7
	12H	23.9	24.6	24.4	25.1	25.6	22.0	22.7	22.5	23.2	23.7
8H	4H	23.7	24.5	24.2	25.0	25.4	22.1	22.9	22.6	23.3	23.8
	6H	24.0	24.6	24.5	25.1	25.6	22.2	22.9	22.7	23.3	23.8
	8H	24.0	24.6	24.5	25.1	25.6	22.2	22.8	22.7	23.3	23.8
	12H	24.0	24.5	24.5	25.0	25.6	22.2	22.7	22.7	23.2	23.8
12H	4H	23.7	24.4	24.2	24.9	25.4	22.1	22.8	22.6	23.3	23.7
	6H	23.9	24.5	24.5	25.0	25.5	22.2	22.8	22.7	23.2	23.8
	8H	24.0	24.5	24.5	25.0	25.6	22.2	22.7	22.7	23.2	23.8

Maximum UGR = 25.7

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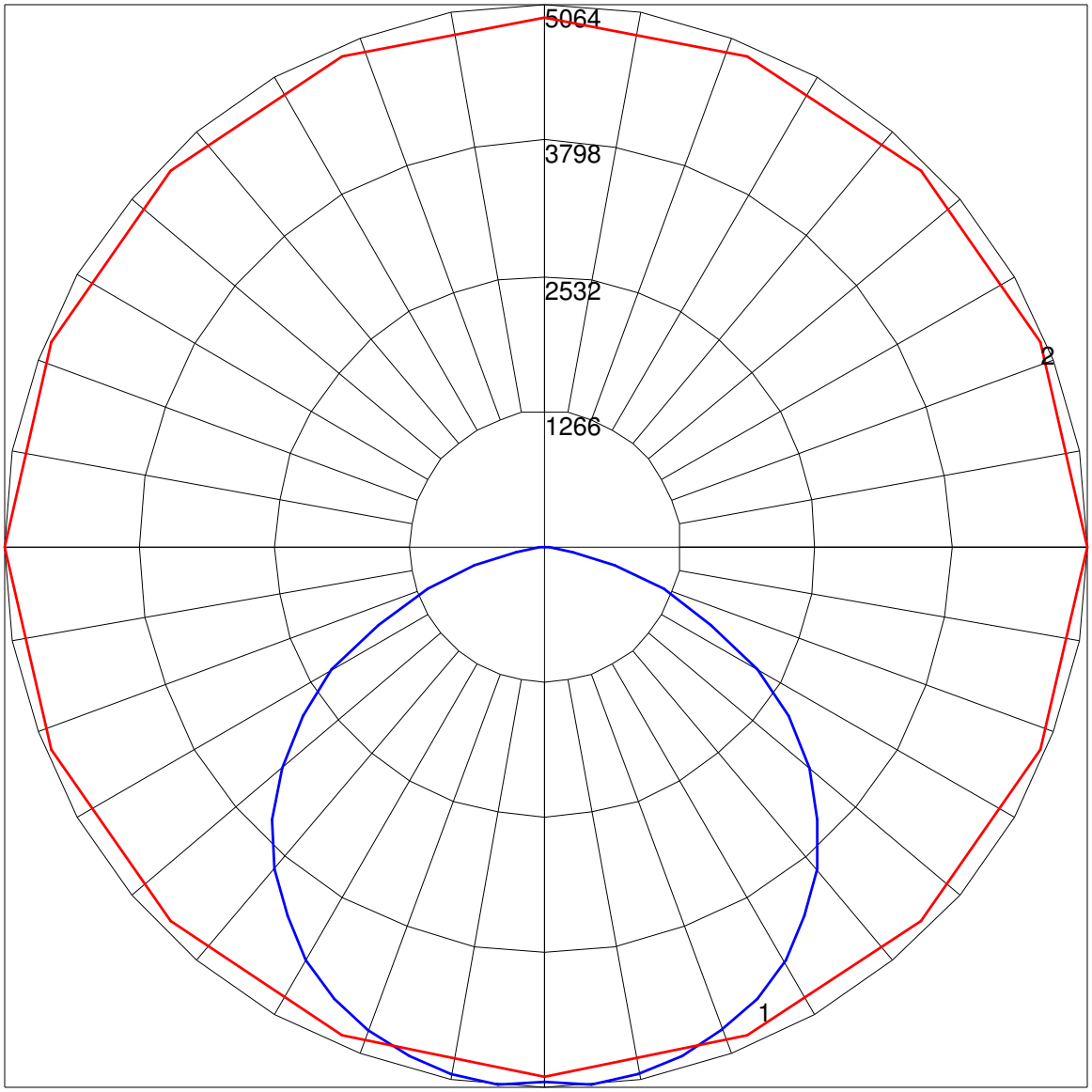
POLAR GRAPH



Maximum Candela = 5063.752 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.)