H.E. WILLIAMS, INC.

IES INDOOR REPORT
PHOTOMETRIC FILENAME : GL-4-L150-935-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-L150-935-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	11136
Total Luminaire Efficiency	N.A.
Luminaire Efficacy Rating (LER)	116
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	11945	11700	8931
55	11333	8308	8417
65	9502	7368	7205
75	6169	4151	3065
85	1229	1255	1050

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CANDELA TABULATION

	0.0	22.5	45.0	67.5	90.0
0	4173.265	4173.265	4173.265	4173.265	4173.265
5	4219.794	4171.675	4141.451	4125.941	4129.918
10	4182.810	4134.690	4109.239	4092.138	4097.706
15	4110.829	4076.231	4050.382	4022.147	4032.486
20	4020.158	3970.448	3949.769	3924.715	3940.224
25	3898.865	3835.236	3830.067	3818.534	3820.920
30	3734.225	3675.766	3678.948	3661.450	3671.789
35	3523.454	3454.258	3488.856	3480.505	3482.891
40	3287.630	3210.082	3226.387	3268.541	3262.178
45	3010.446	2938.068	2948.805	2725.308	2250.875
50	2678.780	2636.626	2642.193	1946.649	1965.340
55	2316.890	2294.222	1698.496	1721.959	1720.766
60	1914.437	1894.950	1419.721	1447.161	1447.161
65	1431.254	1454.320	1109.928	1148.105	1085.272
70	975.909	773.092	791.783	728.552	575.842
75	569.082	446.994	382.967	351.152	282.751
80	226.281	196.852	143.961	117.714	109.362
85	38.177	34.201	38.973	39.370	32.610
90	0.000	0.000	0.000	0.000	0.000

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ZONAL LUMEN SUMMARY

Zone	Lumens	%Lamp	%Fixt
0-20	1540.62	N.A.	13.80
0-30	3309.00	N.A.	29.70
0-40	5485.87	N.A.	49.30
0-60	9415.94	N.A.	84.60
0-80	11073.51	N.A.	99.40
0-90	11136.23	N.A.	100.00
10-90	10740.75	N.A.	96.40
20-40	3945.26	N.A.	35.40
20-50	6116.77	N.A.	54.90
40-70	5132.66	N.A.	46.10
60-80	1657.56	N.A.	14.90
70-80	454.98	N.A.	4.10
80-90	62.72	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	11136.23	N.A.	100.00

Total Luminaire Efficiency = N.A.%

ZONAL LUMEN SUMMARY

Zone	Lumens
0-10	395.48
10-20	1145.14
20-30	1768.38
30-40	2176.87
40-50	2171.51
50-60	1758.56
60-70	1202.59
70-80	454.98
80-90	62.72
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	21.1	22.6	21.4	22.9	23.3	19.1	20.7	19.5	21.0	21.3
	3H	22.3	23.7	22.6	24.0	24.4	20.3	21.7	20.7	22.1	22.4
	4H	22.6	23.9	23.0	24.3	24.7	20.5	21.9	20.9	22.2	22.6
	6H	22.8	24.0	23.2	24.3	24.7	20.6	21.8	21.0	22.2	22.6
	8H	22.8	23.9	23.2	24.3	24.7	20.6	21.7	21.0	22.1	22.5
	12H	22.8	23.9	23.2	24.2	24.7	20.6	21.7	21.0	22.1	22.5
4H	2H	21.3	22.6	21.7	23.0	23.4	19.7	21.0	20.1	21.3	21.7
	3H	22.7	23.8	23.1	24.2	24.6	21.1	22.2	21.5	22.6	23.0
	4H	23.1	24.1	23.5	24.5	24.9	21.4	22.3	21.8	22.8	23.2
	6H	23.3	24.1	23.8	24.6	25.1	21.5	22.3	21.9	22.7	23.2
	8H	23.3	24.1	23.8	24.6	25.0	21.4	22.2	21.9	22.7	23.1
	12H	23.3	24.0	23.8	24.5	25.0	21.4	22.1	21.9	22.6	23.1
8H	4H	23.1	23.9	23.6	24.4	24.8	21.5	22.3	22.0	22.7	23.2
	6H	23.4	24.0	23.9	24.5	25.0	21.6	22.3	22.1	22.7	23.2
	8H	23.4	24.0	23.9	24.5	25.0	21.6	22.2	22.1	22.7	23.2
	12H	23.4	23.9	23.9	24.4	25.0	21.6	22.1	22.1	22.6	23.2
12H	4H	23.1	23.8	23.6	24.3	24.8	21.5	22.2	22.0	22.7	23.1
	6H	23.3	23.9	23.9	24.4	24.9	21.6	22.2	22.1	22.6	23.2
	8H	23.4	23.9	23.9	24.4	25.0	21.6	22.1	22.1	22.6	23.2

Maximum UGR = 25.1

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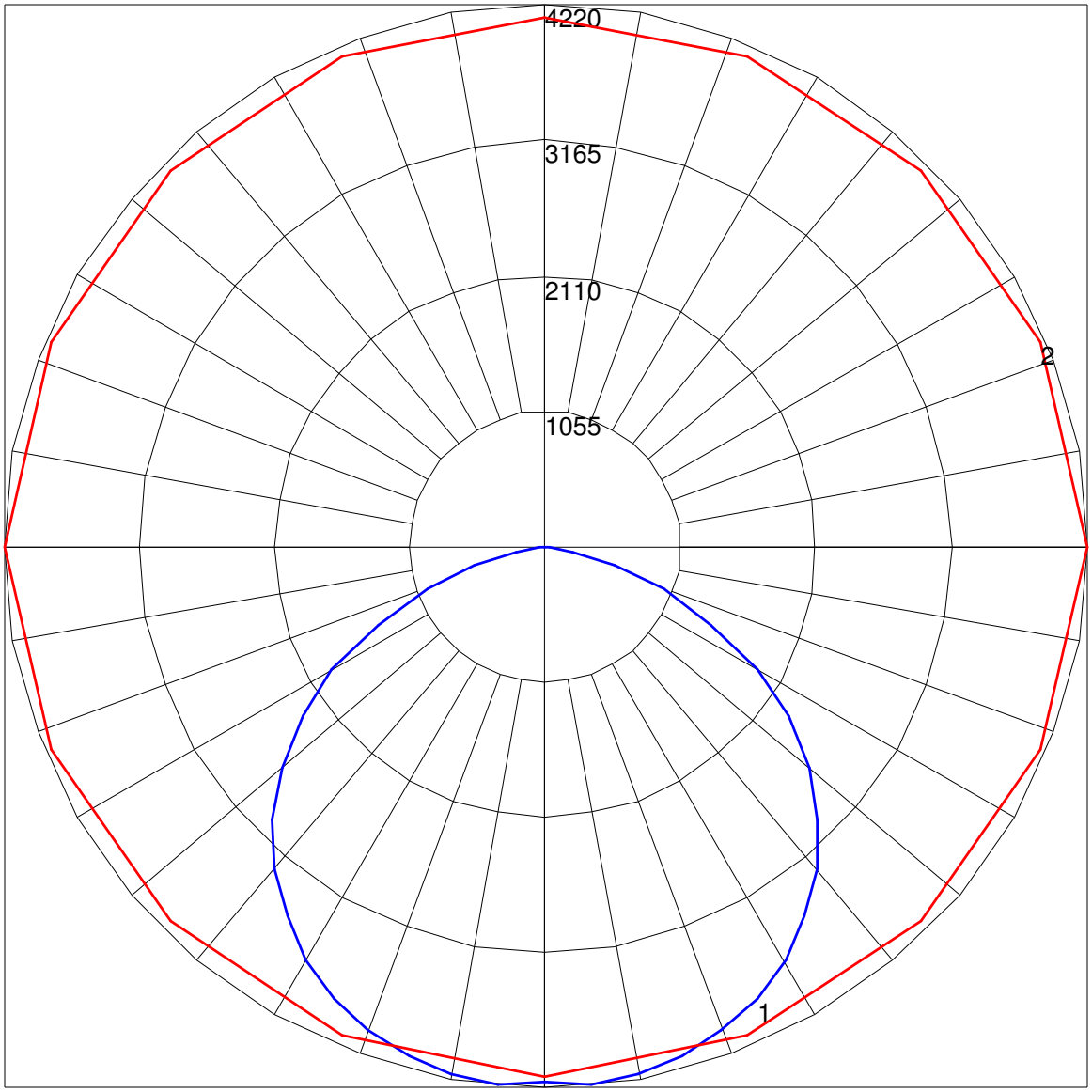
POLAR GRAPH



Maximum Candela = 4219.794 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.)