H.E. WILLIAMS, INC.

IES INDOOR REPORT
PHOTOMETRIC FILENAME : GL-4-L300-935-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-L300-935-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	22303
Total Luminaire Efficiency	N.A.
Luminaire Efficacy Rating (LER)	112
Total Luminaire Watts	200
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	23922	23432	17886
55	22697	16639	16857
65	19029	14757	14429
75	12354	8314	6138
85	2461	2513	2102

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CANDELA TABULATION

	0.0	22.5	45.0	67.5	90.0
0	8357.899	8357.899	8357.899	8357.899	8357.899
5	8451.083	8354.713	8294.183	8263.122	8271.086
10	8377.014	8280.644	8229.671	8195.424	8206.574
15	8232.857	8163.566	8111.797	8055.250	8075.957
20	8051.267	7951.712	7910.297	7860.121	7891.182
25	7808.352	7680.920	7670.567	7647.470	7652.248
30	7478.623	7361.546	7367.917	7332.874	7353.581
35	7056.507	6917.926	6987.216	6970.491	6975.270
40	6584.215	6428.908	6461.562	6545.985	6533.242
45	6029.092	5884.139	5905.643	5458.041	4507.881
50	5364.857	5280.434	5291.584	3898.601	3936.034
55	4640.091	4594.694	3401.619	3448.609	3446.220
60	3834.089	3795.063	2843.310	2898.265	2898.265
65	2866.407	2912.601	2222.879	2299.338	2173.500
70	1954.477	1548.290	1585.723	1459.088	1153.253
75	1139.713	895.205	766.977	703.261	566.273
80	453.177	394.241	288.313	235.748	219.023
85	76.459	68.494	78.052	78.848	65.309
90	0.000	0.000	0.000	0.000	0.000

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ZONAL LUMEN SUMMARY

Zone	Lumens	%Lamp	%Fixt
0-20	3085.43	N.A.	13.80
0-30	6627.01	N.A.	29.70
0-40	10986.69	N.A.	49.30
0-60	18857.54	N.A.	84.60
0-80	22177.18	N.A.	99.40
0-90	22302.8	N.A.	100.00
10-90	21510.76	N.A.	96.40
20-40	7901.26	N.A.	35.40
20-50	12250.19	N.A.	54.90
40-70	10279.29	N.A.	46.10
60-80	3319.64	N.A.	14.90
70-80	911.19	N.A.	4.10
80-90	125.62	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	22302.8	N.A.	100.00

Total Luminaire Efficiency = N.A.%

ZONAL LUMEN SUMMARY

Zone	Lumens
0-10	792.04
10-20	2293.4
20-30	3541.58
30-40	4359.68
40-50	4348.93
50-60	3521.91
60-70	2408.45
70-80	911.19
80-90	125.62
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	23.5	25.0	23.8	25.3	25.7	21.5	23.1	21.9	23.4	23.7
	3H	24.7	26.1	25.0	26.4	26.8	22.7	24.1	23.1	24.5	24.8
	4H	25.0	26.3	25.4	26.7	27.1	22.9	24.3	23.3	24.6	25.0
	6H	25.2	26.4	25.6	26.7	27.1	23.0	24.2	23.4	24.6	25.0
	8H	25.2	26.3	25.6	26.7	27.1	23.0	24.1	23.4	24.5	24.9
	12H	25.2	26.3	25.6	26.6	27.1	23.0	24.1	23.4	24.5	24.9
4H	2H	23.7	25.0	24.1	25.4	25.8	22.1	23.4	22.5	23.7	24.1
	3H	25.1	26.2	25.5	26.6	27.0	23.5	24.6	23.9	25.0	25.4
	4H	25.5	26.5	25.9	26.9	27.3	23.8	24.7	24.2	25.2	25.6
	6H	25.7	26.5	26.2	27.0	27.5	23.9	24.7	24.3	25.1	25.6
	8H	25.7	26.5	26.2	27.0	27.4	23.8	24.6	24.3	25.1	25.5
	12H	25.7	26.4	26.2	26.9	27.4	23.8	24.5	24.3	25.0	25.5
8H	4H	25.5	26.3	26.0	26.8	27.2	23.9	24.7	24.4	25.1	25.6
	6H	25.8	26.4	26.3	26.9	27.4	24.0	24.7	24.5	25.1	25.6
	8H	25.8	26.4	26.3	26.9	27.4	24.0	24.6	24.5	25.1	25.6
	12H	25.8	26.3	26.3	26.8	27.4	24.0	24.5	24.5	25.0	25.6
12H	4H	25.5	26.2	26.0	26.7	27.2	23.9	24.6	24.4	25.1	25.5
	6H	25.7	26.3	26.3	26.8	27.3	24.0	24.6	24.5	25.0	25.6
	8H	25.8	26.3	26.3	26.8	27.4	24.0	24.5	24.5	25.0	25.6

Maximum UGR = 27.5

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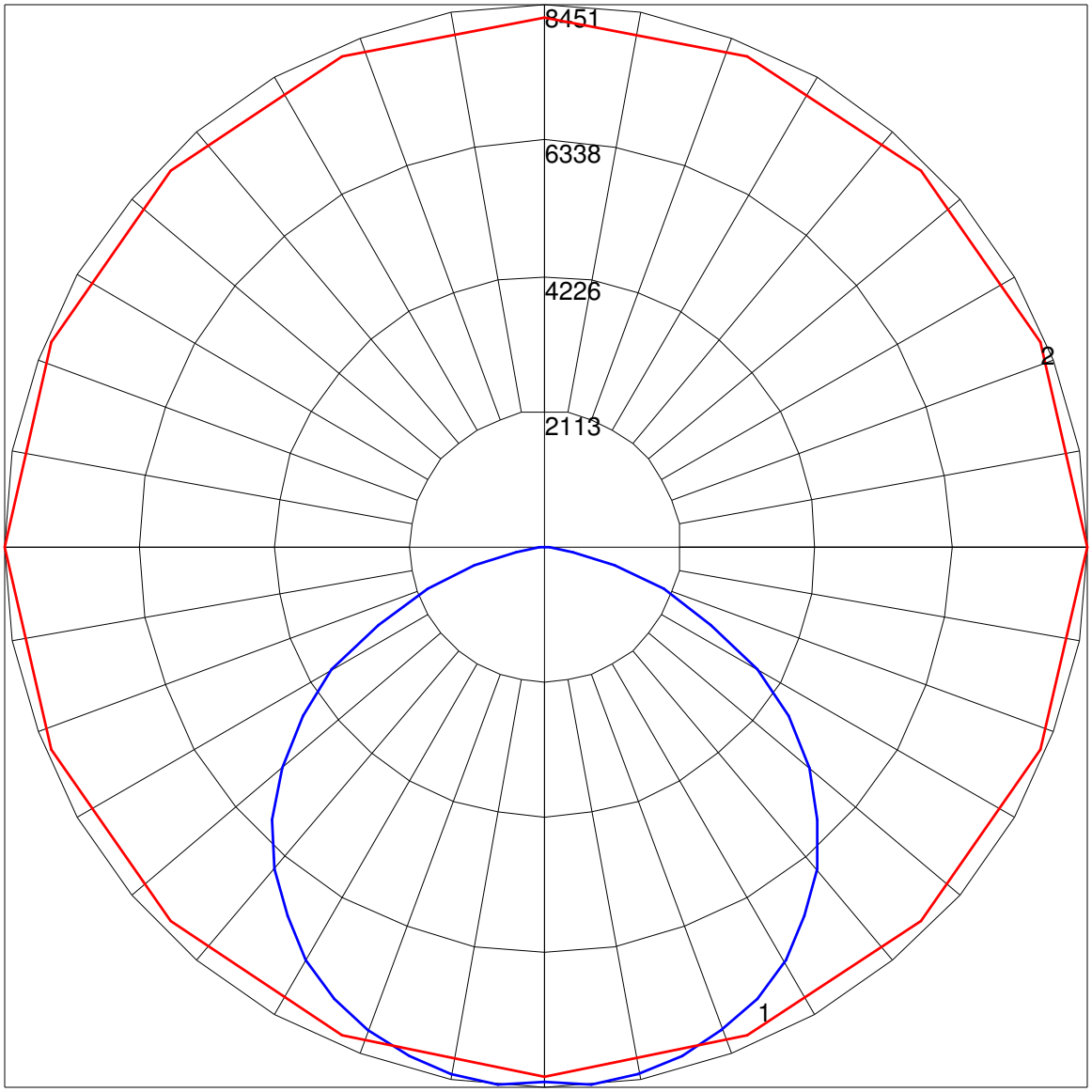
POLAR GRAPH



Maximum Candela = 8451.083 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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