H.E. WILLIAMS, INC.

IES INDOOR REPORT
PHOTOMETRIC FILENAME : GL-4-L300-850-SAF118-DIM-UNV_.IES

DESCRIPTION INFORMATION (From Photometric File)

IESNA:LM-63-2002
[TEST] GEN FROM BALLABS TEST NO. 19726.0
[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 FROSTED ACRYLIC LENS
[MORE] 0-10V LED DRIVERS
[LUMCAT] GL-4-L300-850-SAF118-DIM-UNV
[LAMPCAT] 22 INCH HLM 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	26630
Total Luminaire Efficiency	N.A.
Luminaire Efficacy Rating (LER)	133
Total Luminaire Watts	200
Ballast Factor	1.00
CIE Type	Direct
Spacing Criterion (0-180)	1.32
Spacing Criterion (90-270)	1.26
Spacing Criterion (Diagonal)	1.38
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	28293	26959	23470
55	25581	21870	20225
65	20142	16725	16032
75	13887	11372	11340
85	4959	4551	4927

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CANDELA TABULATION

	0.0	22.5	45.0	67.5	90.0
0	10283.013	10283.013	10283.013	10283.013	10283.013
5	10439.983	10289.838	10222.565	10168.941	10153.342
10	10351.261	10180.641	10136.767	10075.344	10061.695
15	10184.541	10016.846	9981.747	9902.774	9893.025
20	9907.649	9787.728	9736.054	9617.108	9639.532
25	9550.810	9464.038	9391.890	9253.444	9286.593
30	9112.073	9037.976	8983.377	8808.858	8785.458
35	8569.990	8459.818	8446.169	8214.126	8043.506
40	7912.860	7803.663	7729.565	7368.826	7011.012
45	7130.934	7047.086	6794.569	6283.684	5915.145
50	6232.986	6154.013	5668.478	5212.192	5007.448
55	5229.741	5120.545	4471.214	4245.021	4134.849
60	4124.125	4023.703	3421.171	3222.277	3250.551
65	3034.108	2923.936	2519.324	2384.778	2415.002
70	2099.111	1898.267	1752.997	1651.600	1672.074
75	1281.111	1112.441	1049.068	993.495	1046.143
80	609.357	525.509	495.285	484.560	514.784
85	154.045	143.321	141.371	147.221	153.070
90	0.000	0.000	0.000	0.000	0.000

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ZONAL LUMEN SUMMARY

Zone	Lumens	%Lamp	%Fixt
0-20	3794.04	N.A.	14.20
0-30	8117.66	N.A.	30.50
0-40	13326.17	N.A.	50.00
0-60	22593.67	N.A.	84.80
0-80	26409.57	N.A.	99.20
0-90	26629.86	N.A.	100.00
10-90	25654.89	N.A.	96.30
20-40	9532.14	N.A.	35.80
20-50	14661.83	N.A.	55.10
40-70	11904.27	N.A.	44.70
60-80	3815.9	N.A.	14.30
70-80	1179.12	N.A.	4.40
80-90	220.29	N.A.	0.80
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	26629.86	N.A.	100.00

Total Luminaire Efficiency = N.A.%

ZONAL LUMEN SUMMARY

Zone	Lumens
0-10	974.97
10-20	2819.07
20-30	4323.62
30-40	5208.52
40-50	5129.69
50-60	4137.81
60-70	2636.78
70-80	1179.12
80-90	220.29
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	79	84	80	77	81	78	75	73
3	92	82	75	68	90	81	74	68	78	72	67	75	70	66	73	68	64	62
4	85	73	65	59	82	72	64	58	69	63	57	67	61	57	65	60	56	54
5	78	66	57	51	76	65	57	50	63	55	50	61	54	49	59	53	49	47
6	72	59	51	45	70	58	50	44	57	49	44	55	48	44	53	48	43	41
7	67	54	45	39	65	53	45	39	52	44	39	50	44	39	49	43	38	37
8	62	49	41	35	61	49	41	35	47	40	35	46	40	35	45	39	35	33
9	58	45	37	32	57	45	37	32	44	36	32	42	36	31	41	36	31	29
10	55	42	34	29	53	41	34	29	40	33	29	39	33	29	38	33	28	27

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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	23.4	25.0	23.8	25.3	25.6	22.0	23.5	22.3	23.9	24.2
	3H	24.7	26.1	25.1	26.4	26.8	23.2	24.6	23.6	25.0	25.3
	4H	25.0	26.4	25.4	26.7	27.1	23.6	25.0	24.0	25.3	25.7
	6H	25.2	26.5	25.7	26.8	27.2	23.9	25.1	24.3	25.4	25.8
	8H	25.3	26.4	25.7	26.8	27.2	23.9	25.1	24.3	25.5	25.9
	12H	25.3	26.4	25.7	26.8	27.2	23.9	25.0	24.3	25.4	25.8
4H	2H	23.7	25.0	24.1	25.4	25.8	22.5	23.8	22.9	24.2	24.5
	3H	25.2	26.2	25.6	26.6	27.0	23.9	25.0	24.4	25.4	25.8
	4H	25.6	26.6	26.0	27.0	27.4	24.4	25.4	24.9	25.8	26.3
	6H	25.9	26.7	26.3	27.2	27.6	24.7	25.6	25.2	26.0	26.5
	8H	25.9	26.7	26.4	27.2	27.6	24.8	25.6	25.3	26.0	26.5
	12H	26.0	26.7	26.4	27.1	27.6	24.8	25.5	25.3	26.0	26.5
8H	4H	25.7	26.5	26.2	26.9	27.4	24.6	25.4	25.1	25.8	26.3
	6H	26.0	26.7	26.5	27.2	27.6	24.9	25.6	25.4	26.1	26.6
	8H	26.1	26.7	26.6	27.2	27.7	25.0	25.6	25.6	26.1	26.6
	12H	26.2	26.7	26.7	27.2	27.7	25.1	25.6	25.6	26.1	26.7
12H	4H	25.7	26.4	26.2	26.9	27.4	24.6	25.3	25.1	25.8	26.3
	6H	26.0	26.6	26.5	27.1	27.6	25.0	25.6	25.5	26.0	26.6
	8H	26.1	26.6	26.6	27.1	27.7	25.1	25.6	25.6	26.1	26.7

Maximum UGR = 27.7

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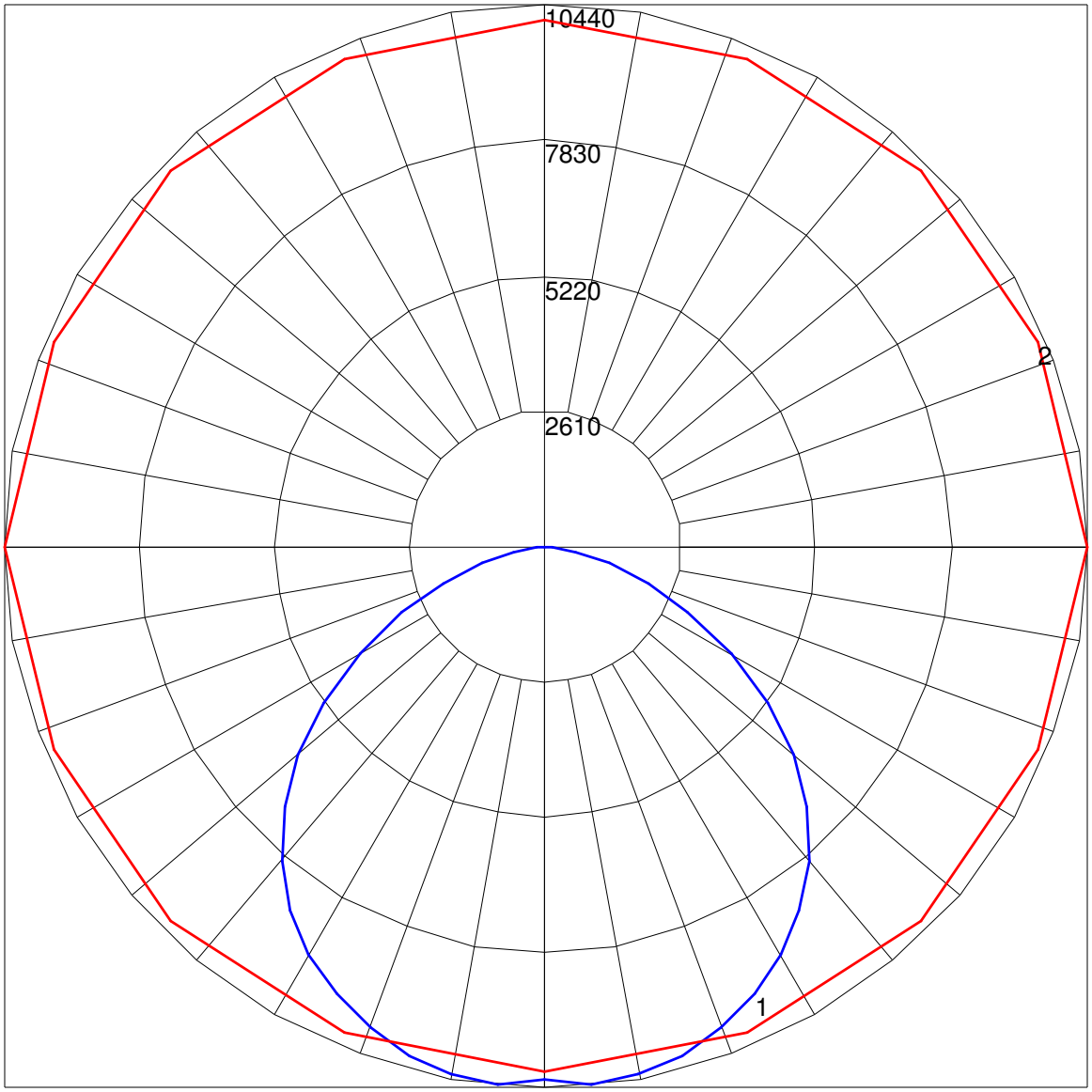
POLAR GRAPH



Maximum Candela = 10439.983 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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