H.E. WILLIAMS, INC.

IES INDOOR REPORT
PHOTOMETRIC FILENAME : GL-8-L400-935-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] 2023-07-20
[MANUFAC] WILLIAMS INDOOR
[OTHER] H.E. WILLIAMS, INC - CARTHAGE, MO
[LUMINAIRE] 96 INCH LOW PROFILE LED HIGHBAY LUMINAIRE
[MORE] WHITE REFLECTOR w/.118"THK FROSTED ACRYLIC LENS
[MORE] 0-10V LED DRIVERS
[LUMCAT] GL-8-L400-935-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	29033
Total Luminaire Efficiency	N.A.
Luminaire Efficacy Rating (LER)	109
Total Luminaire Watts	266
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)	8.00 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	14779	14082	12260
55	13362	11424	10565
65	10521	8736	8375
75	7254	5940	5924
85	2590	2377	2574

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CANDELA TABULATION

	0.0	22.5	45.0	67.5	90.0
0	11210.881	11210.881	11210.881	11210.881	11210.881
5	11382.015	11218.322	11144.978	11086.516	11069.509
10	11285.287	11099.272	11051.439	10984.474	10969.592
15	11103.524	10920.697	10882.431	10796.332	10785.703
20	10801.647	10670.905	10614.569	10484.890	10509.337
25	10412.609	10318.007	10239.349	10088.411	10124.551
30	9934.284	9853.500	9793.975	9603.708	9578.197
35	9343.287	9223.174	9208.293	8955.312	8769.296
40	8626.862	8507.812	8427.028	8033.738	7643.638
45	7774.380	7682.967	7407.664	6850.681	6448.887
50	6795.407	6709.309	6179.962	5682.504	5459.286
55	5701.637	5582.587	4874.666	4628.063	4507.950
60	4496.257	4386.774	3729.874	3513.033	3543.859
65	3307.885	3187.772	2746.650	2599.963	2632.915
70	2288.521	2069.554	1911.175	1800.629	1822.951
75	1396.710	1212.820	1143.729	1083.141	1140.540
80	664.341	572.927	539.976	528.284	561.235
85	167.945	156.253	154.127	160.505	166.882
90	0.000	0.000	0.000	0.000	0.000

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ZONAL LUMEN SUMMARY

Zone	Lumens	%Lamp	%Fixt
0-20	4136.38	N.A.	14.20
0-30	8850.14	N.A.	30.50
0-40	14528.64	N.A.	50.00
0-60	24632.37	N.A.	84.80
0-80	28792.59	N.A.	99.20
0-90	29032.76	N.A.	100.00
10-90	27969.81	N.A.	96.30
20-40	10392.25	N.A.	35.80
20-50	15984.81	N.A.	55.10
40-70	12978.43	N.A.	44.70
60-80	4160.22	N.A.	14.30
70-80	1285.52	N.A.	4.40
80-90	240.17	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	29032.76	N.A.	100.00

Total Luminaire Efficiency = N.A.%

ZONAL LUMEN SUMMARY

Zone	Lumens
0-10	1062.94
10-20	3073.44
20-30	4713.75
30-40	5678.5
40-50	5592.56
50-60	4511.17
60-70	2874.7
70-80	1285.52
80-90	240.17
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	21.2	22.7	21.5	23.1	23.4	19.7	21.3	20.1	21.6	21.9
	3H	22.4	23.8	22.8	24.1	24.5	21.0	22.4	21.4	22.7	23.1
	4H	22.8	24.1	23.2	24.5	24.8	21.4	22.7	21.8	23.0	23.4
	6H	23.0	24.2	23.4	24.6	25.0	21.6	22.8	22.0	23.2	23.6
	8H	23.0	24.2	23.5	24.6	25.0	21.7	22.8	22.1	23.2	23.6
	12H	23.0	24.1	23.4	24.5	24.9	21.7	22.8	22.1	23.1	23.6
4H	2H	21.5	22.8	21.9	23.1	23.5	20.2	21.6	20.6	21.9	22.3
	3H	22.9	24.0	23.3	24.4	24.8	21.7	22.8	22.1	23.2	23.6
	4H	23.4	24.3	23.8	24.7	25.2	22.2	23.1	22.6	23.6	24.0
	6H	23.6	24.5	24.1	24.9	25.4	22.5	23.3	22.9	23.8	24.2
	8H	23.7	24.5	24.2	24.9	25.4	22.5	23.3	23.0	23.8	24.2
	12H	23.7	24.4	24.2	24.9	25.4	22.6	23.3	23.0	23.7	24.2
8H	4H	23.4	24.2	23.9	24.7	25.2	22.4	23.1	22.8	23.6	24.1
	6H	23.8	24.4	24.3	24.9	25.4	22.7	23.4	23.2	23.8	24.3
	8H	23.8	24.4	24.4	24.9	25.4	22.8	23.4	23.3	23.9	24.4
	12H	23.9	24.4	24.4	24.9	25.5	22.9	23.4	23.4	23.9	24.4
12H	4H	23.4	24.1	23.9	24.6	25.1	22.4	23.1	22.8	23.5	24.0
	6H	23.8	24.4	24.3	24.8	25.4	22.7	23.3	23.2	23.8	24.3
	8H	23.9	24.4	24.4	24.9	25.4	22.8	23.3	23.3	23.8	24.4

Maximum UGR = 25.5

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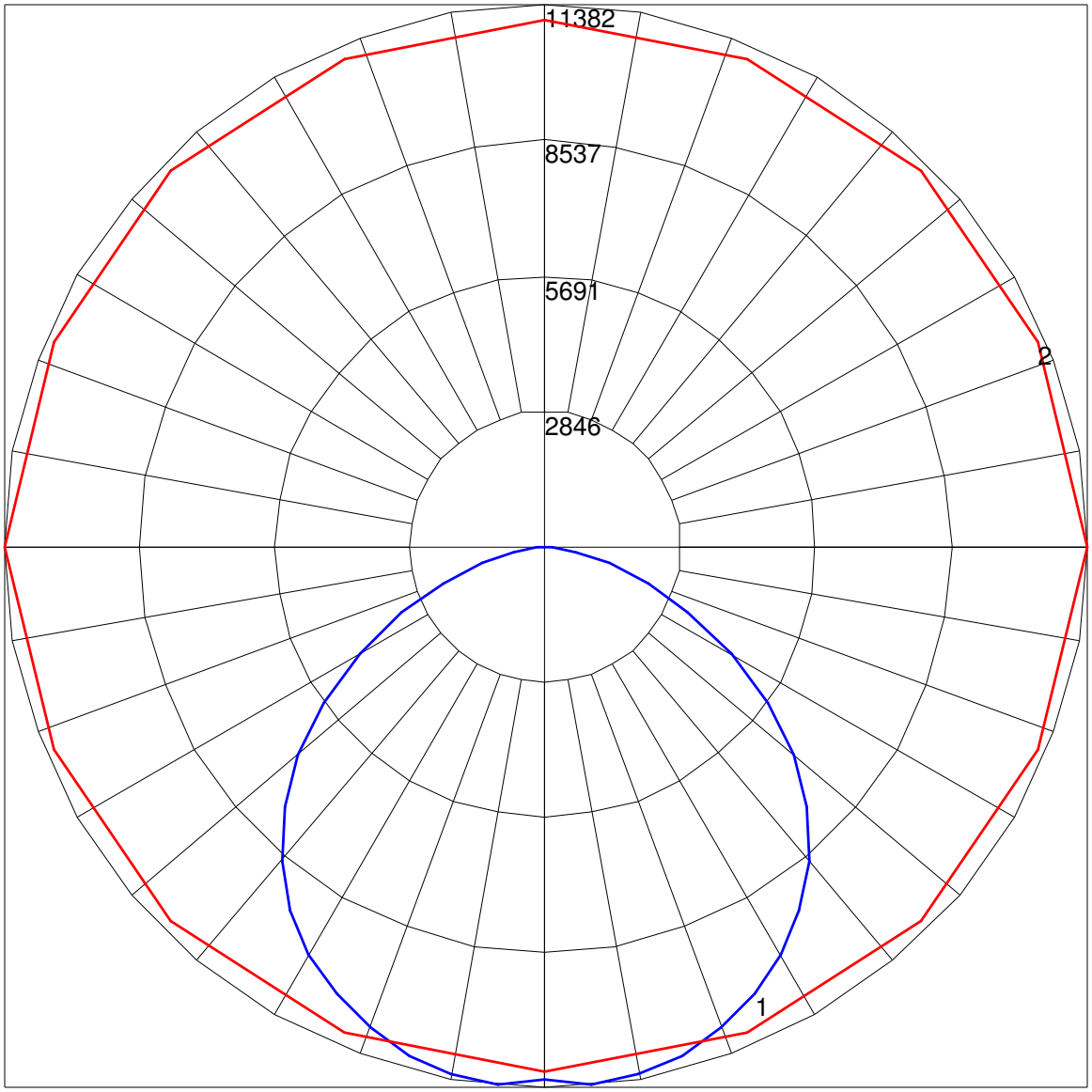
POLAR GRAPH



Maximum Candela = 11382.015 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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