H.E. WILLIAMS, INC.

IES INDOOR REPORT
PHOTOMETRIC FILENAME : GL-8-L400-830-DIM-UNV_.IES

DESCRIPTION INFORMATION (From Photometric File)

IESNA:LM-63-2002
[TEST] GEN FROM BALLABS TEST NO. 19438.0
[TESTLAB] BUILDING ACOUSTICS & LIGHTING LABORATORIES, INC
[ISSUEDATE] 2023-07-18
[MANUFAC] WILLIAMS INDOOR
[OTHER] H.E. WILLIAMS, INC - CARTHAGE, MO
[LUMINAIRE] 96 INCH LONG, LOW PROFILE LED HIGHBAY LUMINAIRE
[MORE] WHITE REFLECTOR w/OPEN BOTTOM
[MORE] 0-10V DIMMING DRIVERS
[LUMCAT] GL-8-L400-830-DIM-UNV
[LAMPCAT] 22 INCH HLM LED ARRAYS
[_SEARCH_SOURCETYPE] LED
[_SEARCH_APPLICATION] Indoor, Commercial, Industrial, Manufacturing, Warehouse, High Bay
[_SEARCH_MOUNTING] Pendant, Suspended

CHARACTERISTICS

Lumens Per Lamp	N.A. (absolute)
Total Lamp Lumens	N.A. (absolute)
Luminaire Lumens	38582
Total Luminaire Efficiency	N.A.
Luminaire Efficacy Rating (LER)	145
Total Luminaire Watts	266
Ballast Factor	1.00
CIE Type	Direct
Spacing Criterion (0-180)	1.24
Spacing Criterion (90-270)	1.24
Spacing Criterion (Diagonal)	1.42
Basic Luminous Shape	Rectangular
Luminous Length (0-180)	8.00 ft
Luminous Width (90-270)	1.05 ft
Luminous Height	0.00 ft

LUMINANCE DATA (cd/sq.m)

Angle In Degrees	Average 0-Deg	Average 45-Deg	Average 90-Deg
45	17923	17963	18160
55	16547	17268	13017
65	15564	12467	12692
75	11929	7951	7345
85	6544	4235	4816

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CANDELA TABULATION

	0.0	22.5	45.0	67.5	90.0
0	14033.039	14033.039	14033.039	14033.039	14033.039
5	13831.117	13827.253	13831.117	13835.948	13839.813
10	13818.558	13808.896	13818.558	13835.948	13835.948
15	13529.685	13547.075	13585.720	13590.551	13585.720
20	13004.110	13016.670	13038.891	13056.281	13056.281
25	12260.190	12294.971	12321.056	12272.750	12272.750
30	11551.050	11590.662	11559.746	11551.050	11546.220
35	10793.605	10845.776	10810.995	10833.216	10837.080
40	10312.472	10378.169	10325.032	10355.948	10386.864
45	9918.291	9970.462	9940.512	10014.904	10049.684
50	8766.664	8849.751	8928.974	8989.840	8933.804
55	7427.608	7554.171	7751.261	6097.247	5843.154
60	6223.810	6346.508	6351.339	5028.707	5050.928
65	5147.541	5213.238	4123.443	4246.141	4197.835
70	3772.738	3947.607	3225.908	2823.032	2262.677
75	2416.291	1996.025	1610.539	1641.455	1487.840
80	1343.887	1203.798	691.749	481.133	424.131
85	446.352	288.873	288.873	323.654	328.484
90	0.000	0.000	0.000	0.000	0.000

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ZONAL LUMEN SUMMARY

Zone	Lumens	%Lamp	%Fixt
0-20	5140.05	N.A.	13.30
0-30	10814.51	N.A.	28.00
0-40	17644.91	N.A.	45.70
0-60	31655.17	N.A.	82.00
0-80	38184.71	N.A.	99.00
0-90	38581.99	N.A.	100.00
10-90	37259.55	N.A.	96.60
20-40	12504.86	N.A.	32.40
20-50	20084.48	N.A.	52.10
40-70	18519.13	N.A.	48.00
60-80	6529.55	N.A.	16.90
70-80	2020.68	N.A.	5.20
80-90	397.27	N.A.	1.00
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	38581.99	N.A.	100.00

Total Luminaire Efficiency = N.A.%

ZONAL LUMEN SUMMARY

Zone	Lumens
0-10	1322.43
10-20	3817.62
20-30	5674.46
30-40	6830.39
40-50	7579.62
50-60	6430.64
60-70	4508.87
70-80	2020.68
80-90	397.27
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	109	105	101	97	107	103	99	96	98	95	93	94	92	90	91	89	87	85
2	100	92	85	80	97	90	84	79	86	81	77	83	79	75	80	77	73	71
3	91	81	73	66	89	79	72	66	76	70	65	73	68	64	71	66	62	60
4	83	72	63	56	81	70	62	56	68	61	55	65	59	54	63	58	54	52
5	77	64	55	49	75	63	54	48	61	53	48	59	52	47	57	51	47	45
6	71	58	49	42	69	57	48	42	55	47	42	53	46	41	52	46	41	39
7	66	52	43	37	64	51	43	37	50	42	37	48	42	37	47	41	36	34
8	61	48	39	33	59	47	39	33	46	38	33	44	38	33	43	37	33	31
9	57	44	35	30	56	43	35	30	42	35	30	41	34	30	40	34	29	28
10	53	40	32	27	52	40	32	27	39	32	27	38	31	27	37	31	27	25

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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	22.2	23.8	22.6	24.2	24.5	20.7	22.3	21.0	22.6	22.9
	3H	24.0	25.5	24.4	25.8	26.2	22.1	23.6	22.5	23.9	24.3
	4H	24.5	25.9	24.9	26.2	26.6	22.5	23.9	22.9	24.2	24.6
	6H	24.8	26.1	25.2	26.5	26.9	22.6	23.9	23.0	24.3	24.6
	8H	24.9	26.1	25.4	26.5	26.9	22.6	23.8	23.1	24.2	24.6
	12H	25.0	26.1	25.4	26.5	26.9	22.7	23.8	23.1	24.2	24.6
4H	2H	22.6	24.0	23.0	24.3	24.7	21.3	22.7	21.7	23.1	23.4
	3H	24.6	25.8	25.0	26.2	26.6	23.0	24.2	23.4	24.6	25.0
	4H	25.2	26.2	25.6	26.6	27.1	23.5	24.5	23.9	24.9	25.4
	6H	25.6	26.5	26.1	27.0	27.4	23.6	24.5	24.1	25.0	25.4
	8H	25.8	26.6	26.2	27.0	27.5	23.7	24.5	24.1	24.9	25.4
	12H	25.8	26.6	26.3	27.1	27.5	23.7	24.4	24.2	24.9	25.4
8H	4H	25.3	26.1	25.8	26.6	27.0	23.7	24.5	24.2	25.0	25.5
	6H	25.8	26.5	26.3	27.0	27.5	23.9	24.6	24.4	25.1	25.5
	8H	26.0	26.6	26.5	27.1	27.6	23.9	24.5	24.4	25.1	25.5
	12H	26.1	26.6	26.6	27.1	27.7	24.0	24.6	24.5	25.0	25.6
12H	4H	25.3	26.0	25.8	26.5	27.0	23.7	24.5	24.2	25.0	25.4
	6H	25.8	26.4	26.3	26.9	27.4	23.9	24.5	24.4	25.0	25.5
	8H	26.0	26.5	26.5	27.0	27.6	24.0	24.5	24.5	25.0	25.6

Maximum UGR = 27.7

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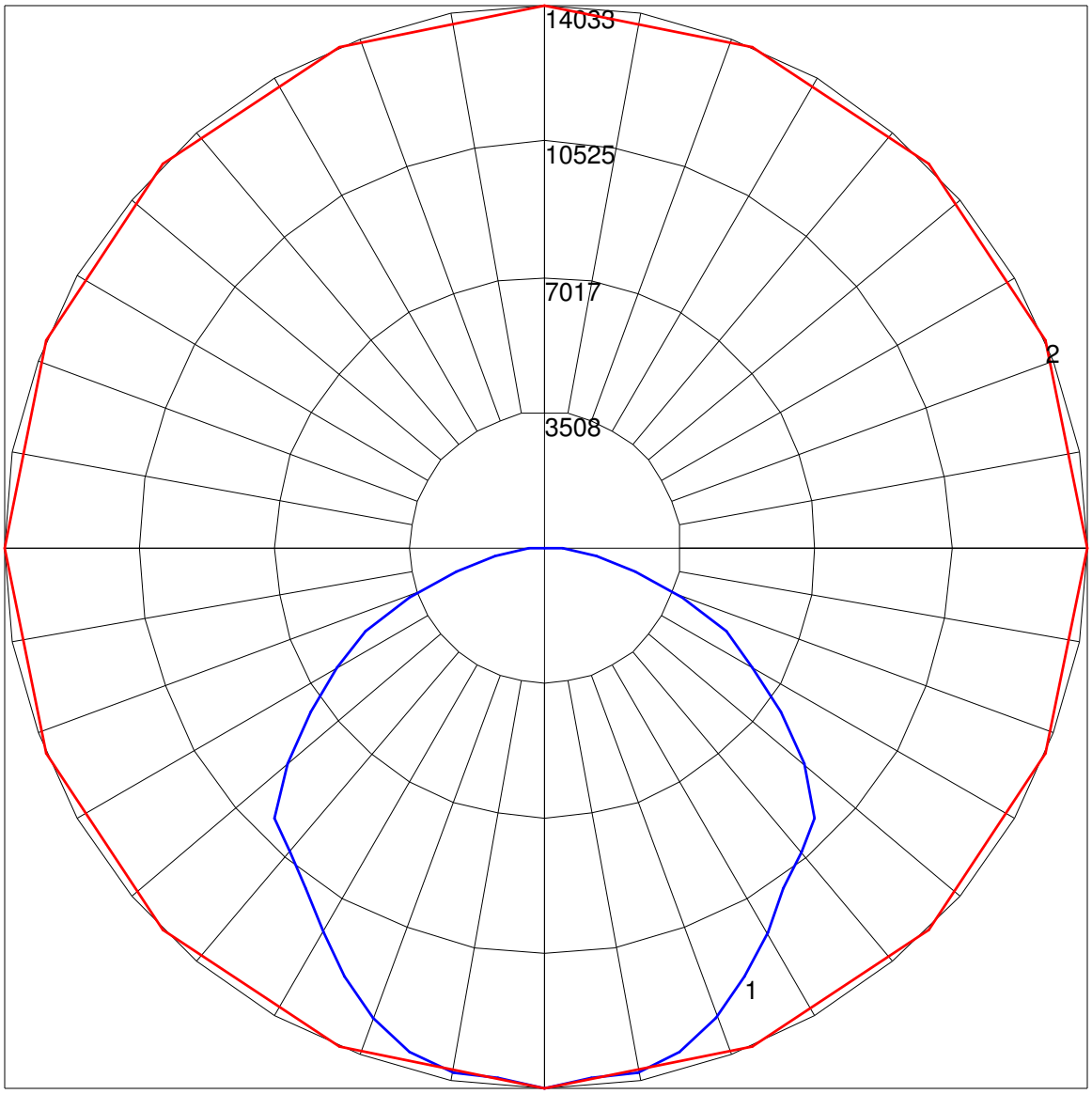
POLAR GRAPH



Maximum Candela = 14033.039 Located At Horizontal Angle = 0, Vertical Angle = 0
1 - Vertical Plane Through Horizontal Angles (0 - 180) (Through Max. Cd.)
2 - Horizontal Cone Through Vertical Angle (0) (Through Max. Cd.)

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