H.E. WILLIAMS, INC.

IES INDOOR REPORT
PHOTOMETRIC FILENAME : GL-8-L400-840-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-L400-840-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	40190
Total Luminaire Efficiency	N.A.
Luminaire Efficacy Rating (LER)	151
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	18670	18712	18917
55	17236	17987	13559
65	16212	12987	13221
75	12426	8282	7651
85	6817	4412	5017

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CANDELA TABULATION

	0.0	22.5	45.0	67.5	90.0
0	14617.742	14617.742	14617.742	14617.742	14617.742
5	14407.407	14403.382	14407.407	14412.439	14416.465
10	14394.324	14384.260	14394.324	14412.439	14412.439
15	14093.415	14111.530	14151.785	14156.817	14151.785
20	13545.942	13559.025	13582.172	13600.286	13600.286
25	12771.025	12807.255	12834.428	12784.108	12784.108
30	12032.339	12073.600	12041.396	12032.339	12027.307
35	11243.333	11297.678	11261.448	11284.595	11288.620
40	10742.153	10810.587	10755.236	10787.440	10819.645
45	10331.548	10385.893	10354.695	10432.187	10468.416
50	9131.937	9218.486	9301.010	9364.412	9306.042
55	7737.088	7868.924	8074.227	6351.296	6086.616
60	6483.132	6610.943	6615.975	5238.234	5261.381
65	5362.019	5430.453	4295.251	4423.062	4372.743
70	3929.933	4112.089	3360.319	2940.657	2356.954
75	2516.969	2079.191	1677.644	1709.848	1549.833
80	1399.881	1253.956	720.572	501.180	441.803
85	464.950	300.909	300.909	337.139	342.171
90	0.000	0.000	0.000	0.000	0.000

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ZONAL LUMEN SUMMARY

Zone	Lumens	%Lamp	%Fixt
0-20	5354.22	N.A.	13.30
0-30	11265.11	N.A.	28.00
0-40	18380.1	N.A.	45.70
0-60	32974.12	N.A.	82.00
0-80	39775.72	N.A.	99.00
0-90	40189.55	N.A.	100.00
10-90	38812.02	N.A.	96.60
20-40	13025.88	N.A.	32.40
20-50	20921.32	N.A.	52.10
40-70	19290.75	N.A.	48.00
60-80	6801.61	N.A.	16.90
70-80	2104.87	N.A.	5.20
80-90	413.83	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	40189.55	N.A.	100.00

Total Luminaire Efficiency = N.A.%

ZONAL LUMEN SUMMARY

Zone	Lumens
0-10	1377.53
10-20	3976.68
20-30	5910.89
30-40	7114.99
40-50	7895.44
50-60	6698.58
60-70	4696.73
70-80	2104.87
80-90	413.83
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	22.3	23.9	22.7	24.3	24.6	20.8	22.4	21.1	22.7	23.0
	3H	24.1	25.6	24.5	25.9	26.3	22.2	23.7	22.6	24.0	24.4
	4H	24.6	26.0	25.0	26.3	26.7	22.6	24.0	23.0	24.3	24.7
	6H	24.9	26.2	25.3	26.6	27.0	22.7	24.0	23.1	24.4	24.7
	8H	25.0	26.2	25.5	26.6	27.0	22.7	23.9	23.2	24.3	24.7
	12H	25.1	26.2	25.5	26.6	27.0	22.8	23.9	23.2	24.3	24.7
4H	2H	22.7	24.1	23.1	24.4	24.8	21.4	22.8	21.8	23.2	23.5
	3H	24.7	25.9	25.1	26.3	26.7	23.1	24.3	23.5	24.7	25.1
	4H	25.3	26.3	25.7	26.7	27.2	23.6	24.6	24.0	25.0	25.5
	6H	25.7	26.6	26.2	27.1	27.5	23.7	24.6	24.2	25.1	25.5
	8H	25.9	26.7	26.3	27.1	27.6	23.8	24.6	24.2	25.0	25.5
	12H	25.9	26.7	26.4	27.2	27.6	23.8	24.5	24.3	25.0	25.5
8H	4H	25.4	26.2	25.9	26.7	27.1	23.8	24.6	24.3	25.1	25.6
	6H	25.9	26.6	26.4	27.1	27.6	24.0	24.7	24.5	25.2	25.6
	8H	26.1	26.7	26.6	27.2	27.7	24.0	24.6	24.5	25.2	25.6
	12H	26.2	26.7	26.7	27.2	27.8	24.1	24.7	24.6	25.1	25.7
12H	4H	25.4	26.1	25.9	26.6	27.1	23.8	24.6	24.3	25.1	25.5
	6H	25.9	26.5	26.4	27.0	27.5	24.0	24.6	24.5	25.1	25.6
	8H	26.1	26.6	26.6	27.1	27.7	24.1	24.6	24.6	25.1	25.7

Maximum UGR = 27.8

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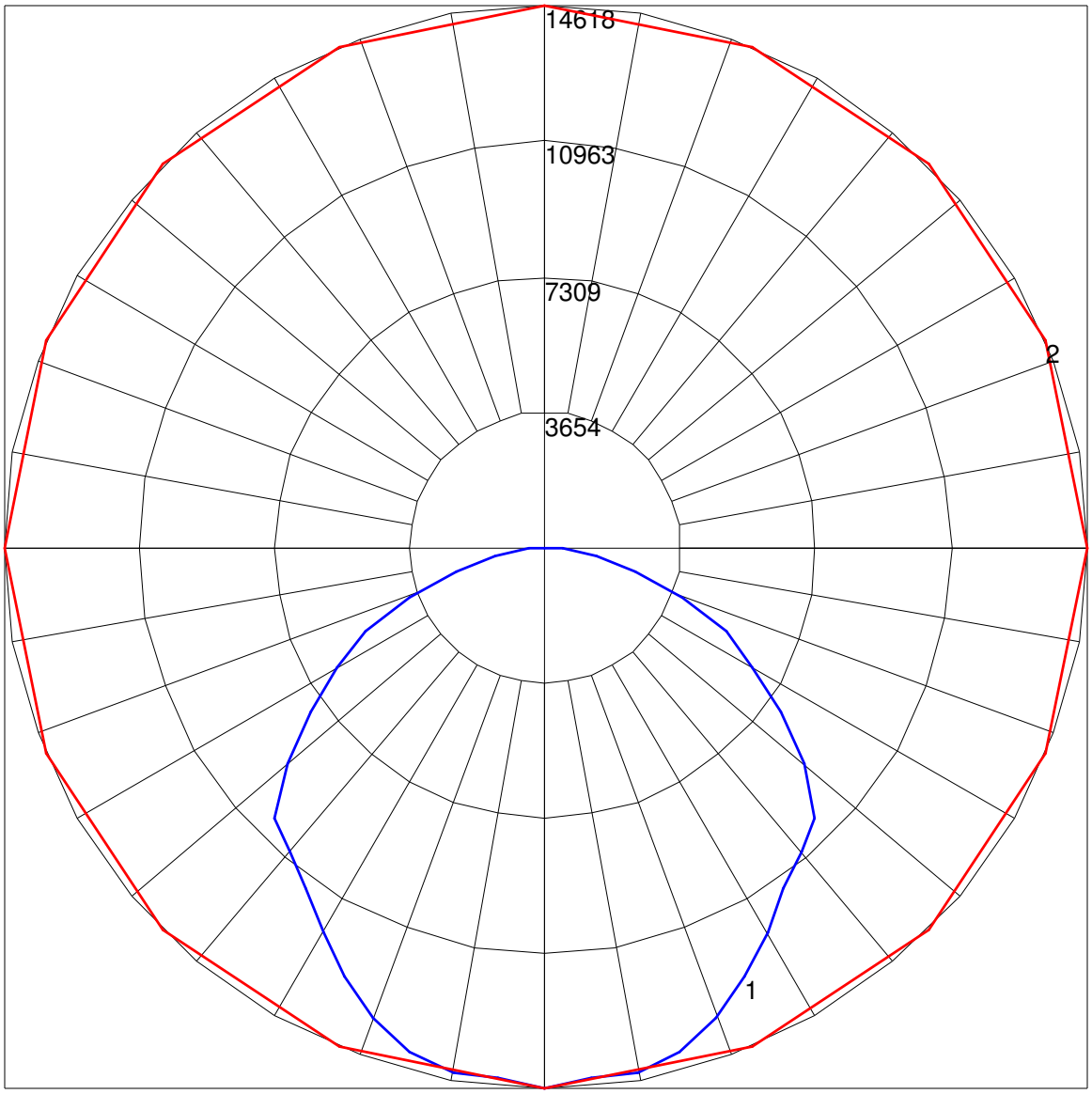
POLAR GRAPH



Maximum Candela = 14617.742 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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