H.E. WILLIAMS, INC.

IES INDOOR REPORT
PHOTOMETRIC FILENAME : GL-8-L400-935-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-L400-935-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	32152
Total Luminaire Efficiency	N.A.
Luminaire Efficacy Rating (LER)	121
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	14936	14969	15134
55	13789	14390	10848
65	12970	10389	10577
75	9941	6626	6121
85	5453	3529	4013

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CANDELA TABULATION

	0.0	22.5	45.0	67.5	90.0
0	11694.198	11694.198	11694.198	11694.198	11694.198
5	11525.931	11522.710	11525.931	11529.956	11533.177
10	11515.464	11507.413	11515.464	11529.956	11529.956
15	11274.737	11289.229	11321.433	11325.459	11321.433
20	10836.758	10847.224	10865.742	10880.234	10880.234
25	10216.824	10245.808	10267.546	10227.291	10227.291
30	9625.875	9658.884	9633.121	9625.875	9621.849
35	8994.670	9038.146	9009.162	9027.679	9030.900
40	8593.726	8648.473	8604.192	8629.956	8655.719
45	8265.242	8308.718	8283.759	8345.753	8374.737
50	7305.553	7374.792	7440.811	7491.533	7444.837
55	6189.673	6295.142	6459.384	5081.039	4869.295
60	5186.508	5288.756	5292.782	4190.589	4209.106
65	4289.617	4344.364	3436.202	3538.451	3498.196
70	3143.948	3289.673	2688.257	2352.526	1885.564
75	2013.576	1663.354	1342.116	1367.879	1239.867
80	1119.906	1003.165	576.458	400.944	353.443
85	371.960	240.727	240.727	269.711	273.737
90	0.000	0.000	0.000	0.000	0.000

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ZONAL LUMEN SUMMARY

Zone	Lumens	%Lamp	%Fixt
0-20	4283.38	N.A.	13.30
0-30	9012.09	N.A.	28.00
0-40	14704.09	N.A.	45.70
0-60	26379.3	N.A.	82.00
0-80	31820.59	N.A.	99.00
0-90	32151.65	N.A.	100.00
10-90	31049.63	N.A.	96.60
20-40	10420.71	N.A.	32.40
20-50	16737.06	N.A.	52.10
40-70	15432.6	N.A.	48.00
60-80	5441.29	N.A.	16.90
70-80	1683.9	N.A.	5.20
80-90	331.06	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	32151.65	N.A.	100.00

Total Luminaire Efficiency = N.A.%

ZONAL LUMEN SUMMARY

Zone	Lumens
0-10	1102.03
10-20	3181.35
20-30	4728.72
30-40	5692.00
40-50	6316.35
50-60	5358.86
60-70	3757.39
70-80	1683.9
80-90	331.06
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	21.6	23.2	22.0	23.6	23.9	20.1	21.7	20.4	22.0	22.3
	3H	23.4	24.9	23.8	25.2	25.6	21.5	23.0	21.9	23.3	23.7
	4H	23.9	25.3	24.3	25.6	26.0	21.9	23.3	22.3	23.6	24.0
	6H	24.2	25.5	24.6	25.9	26.3	22.0	23.3	22.4	23.7	24.0
	8H	24.3	25.5	24.8	25.9	26.3	22.0	23.2	22.5	23.6	24.0
	12H	24.4	25.5	24.8	25.9	26.3	22.1	23.2	22.5	23.6	24.0
4H	2H	22.0	23.4	22.4	23.7	24.1	20.7	22.1	21.1	22.5	22.8
	3H	24.0	25.2	24.4	25.6	26.0	22.4	23.6	22.8	24.0	24.4
	4H	24.6	25.6	25.0	26.0	26.5	22.9	23.9	23.3	24.3	24.8
	6H	25.0	25.9	25.5	26.4	26.8	23.0	23.9	23.5	24.4	24.8
	8H	25.2	26.0	25.6	26.4	26.9	23.1	23.9	23.5	24.3	24.8
	12H	25.2	26.0	25.7	26.5	26.9	23.1	23.8	23.6	24.3	24.8
8H	4H	24.7	25.5	25.2	26.0	26.4	23.1	23.9	23.6	24.4	24.9
	6H	25.2	25.9	25.7	26.4	26.9	23.3	24.0	23.8	24.5	24.9
	8H	25.4	26.0	25.9	26.5	27.0	23.3	23.9	23.8	24.5	24.9
	12H	25.5	26.0	26.0	26.5	27.1	23.4	24.0	23.9	24.4	25.0
12H	4H	24.7	25.4	25.2	25.9	26.4	23.1	23.9	23.6	24.4	24.8
	6H	25.2	25.8	25.7	26.3	26.8	23.3	23.9	23.8	24.4	24.9
	8H	25.4	25.9	25.9	26.4	27.0	23.4	23.9	23.9	24.4	25.0

Maximum UGR = 27.1

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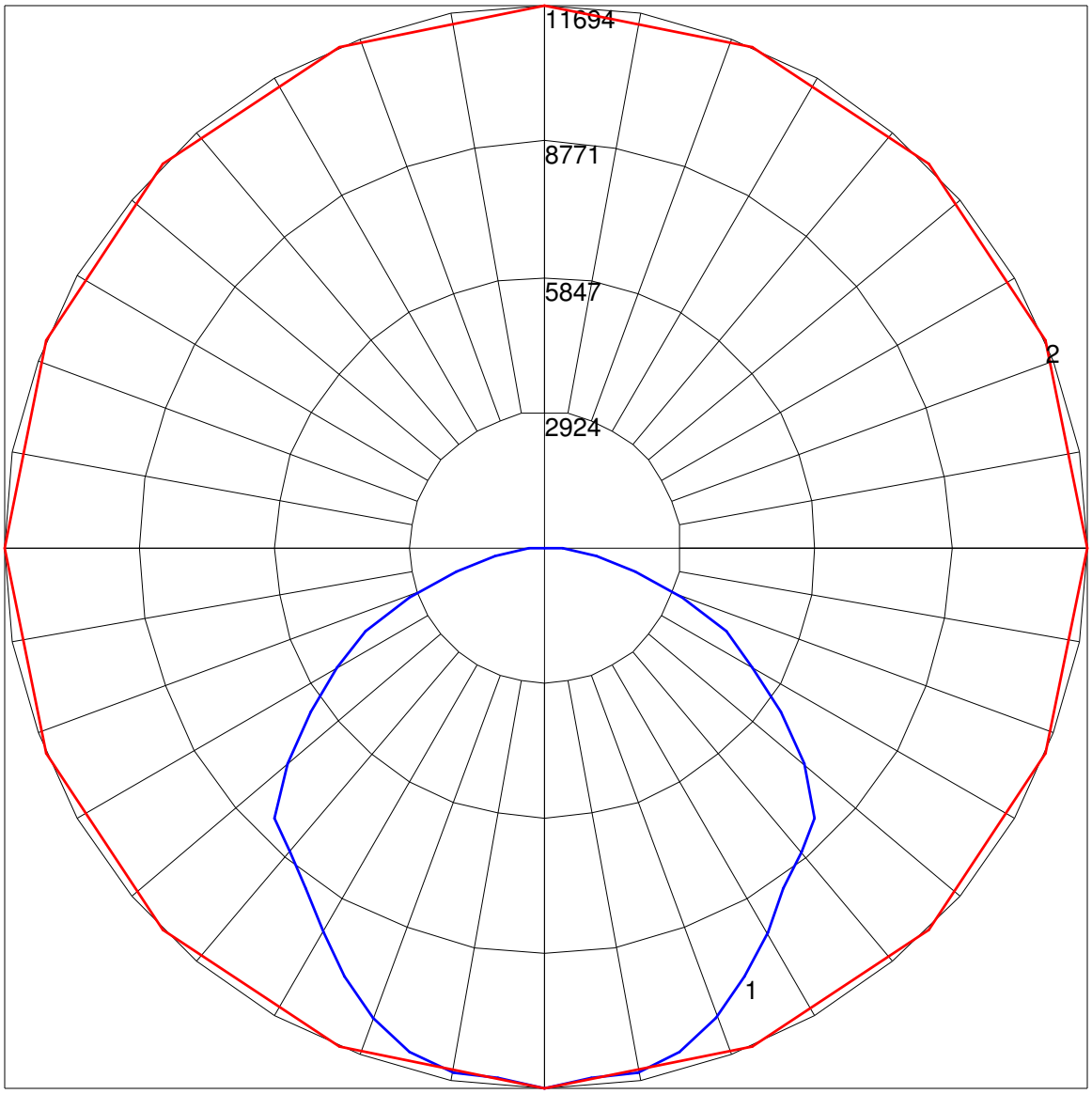
POLAR GRAPH



Maximum Candela = 11694.198 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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