H.E. WILLIAMS, INC.

IES INDOOR REPORT
PHOTOMETRIC FILENAME : GL-8-L400-935-ND-DIM-UNV_.IES

DESCRIPTION INFORMATION (From Photometric File)

IESNA:LM-63-2002
[TEST] GEN FROM BALLABS TEST NO. 19459.0
[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 REFL w/CLEAR ACRYLIC ROD DIFFUSERS OVER LED
[MORE] 0-10V UNIVERSAL VOLTAGE 120-277 DRIVERS
[LUMCAT] GL-8-L400-935-ND-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	30544
Total Luminaire Efficiency	N.A.
Luminaire Efficacy Rating (LER)	117
Total Luminaire Watts	262
Ballast Factor	1.00
CIE Type	Direct
Spacing Criterion (0-180)	1.32
Spacing Criterion (90-270)	0.58
Spacing Criterion (Diagonal)	0.72
Basic Luminous Shape	Rectangular
Luminous Length (0-180)	8.00 ft
Luminous Width (90-270)	1.04 ft
Luminous Height	0.00 ft

LUMINANCE DATA (cd/sq.m)

Angle In Degrees	Average 0-Deg	Average 45-Deg	Average 90-Deg
45	37615	4014	2967
55	25777	2980	2227
65	15599	2259	2292
75	7638	2495	2081
85	2928	922	922

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CANDELA TABULATION

	0.0	22.5	45.0	67.5	90.0
0	30806.050	30806.050	30806.050	30806.050	30806.050
5	30117.414	29878.032	29398.173	29001.388	28771.843
10	29878.032	28897.546	26727.798	24861.924	24517.606
15	29471.409	27312.591	23182.965	20032.732	18989.941
20	29972.036	25018.233	17489.153	12764.895	11263.014
25	28615.533	21566.312	12806.432	8656.038	7425.238
30	27969.528	17290.214	7779.394	4776.725	4119.789
35	25507.930	12399.809	4598.554	3013.600	2732.680
40	23849.739	8499.728	2982.994	2262.659	2117.281
45	20617.525	5298.120	2200.354	1720.495	1626.491
50	15903.105	3555.763	1731.426	1407.877	1324.803
55	11460.861	2638.676	1324.803	1084.327	990.323
60	7884.329	1876.805	1032.953	907.250	844.945
65	5110.112	1157.563	740.010	782.640	750.941
70	3024.530	834.014	636.168	656.936	583.700
75	1532.487	625.237	500.627	448.160	417.554
80	740.010	459.090	312.619	197.846	167.240
85	197.846	146.472	62.305	62.305	62.305
90	0.000	0.000	0.000	0.000	0.000

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ZONAL LUMEN SUMMARY

Zone	Lumens	%Lamp	%Fixt
0-20	9254.17	N.A.	30.30
0-30	16228.1	N.A.	53.10
0-40	21712.65	N.A.	71.10
0-60	28261.62	N.A.	92.50
0-80	30393.05	N.A.	99.50
0-90	30544.44	N.A.	100.00
10-90	27808.45	N.A.	91.00
20-40	12458.49	N.A.	40.80
20-50	16438.23	N.A.	53.80
40-70	7991.22	N.A.	26.20
60-80	2131.44	N.A.	7.00
70-80	689.17	N.A.	2.30
80-90	151.39	N.A.	0.50
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	30544.44	N.A.	100.00

Total Luminaire Efficiency = N.A.%

ZONAL LUMEN SUMMARY

Zone	Lumens
0-10	2735.99
10-20	6518.17
20-30	6973.94
30-40	5484.55
40-50	3979.74
50-60	2569.22
60-70	1442.26
70-80	689.17
80-90	151.39
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	112	108	105	102	109	106	103	101	102	100	98	98	96	95	95	93	92	90
2	105	98	93	89	102	97	92	88	93	89	86	90	87	84	87	85	82	81
3	98	90	84	79	96	88	83	78	86	81	77	83	79	75	81	77	74	72
4	92	82	76	70	90	81	75	70	79	73	69	77	72	68	75	71	67	66
5	86	76	69	64	84	75	68	63	73	67	63	71	66	62	69	65	62	60
6	81	70	63	58	79	69	63	58	68	62	57	66	61	57	65	60	56	55
7	76	65	58	53	75	65	58	53	63	57	53	62	56	52	61	56	52	51
8	72	61	54	49	71	60	54	49	59	53	49	58	53	49	57	52	48	47
9	68	57	50	46	67	57	50	46	56	50	45	55	49	45	54	49	45	44
10	65	54	47	43	64	53	47	43	52	47	42	51	46	42	51	46	42	41

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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	18.8	20.1	19.2	20.5	20.8	11.9	11.9	11.9	11.9	11.9
	3H	20.7	21.9	21.1	22.2	22.5	11.9	13.1	12.3	13.4	13.8
	4H	21.2	22.3	21.6	22.6	23.0	12.7	13.7	13.1	14.1	14.5
	6H	21.5	22.5	22.0	22.9	23.3	13.0	14.0	13.4	14.3	14.7
	8H	21.6	22.5	22.0	22.9	23.3	13.0	14.0	13.5	14.4	14.8
	12H	21.6	22.5	22.1	22.9	23.3	13.0	13.9	13.5	14.3	14.7
4H	2H	18.7	19.8	19.1	20.1	20.5	11.9	11.9	11.9	11.9	12.3
	3H	20.6	21.5	21.0	21.9	22.3	12.8	13.7	13.3	14.1	14.5
	4H	21.2	21.9	21.6	22.4	22.8	13.7	14.5	14.1	14.9	15.3
	6H	21.6	22.3	22.1	22.7	23.2	14.1	14.8	14.6	15.2	15.7
	8H	21.7	22.3	22.2	22.8	23.3	14.2	14.8	14.6	15.3	15.7
	12H	21.8	22.3	22.2	22.8	23.3	14.2	14.8	14.7	15.2	15.7
8H	4H	21.1	21.7	21.5	22.2	22.6	14.1	14.8	14.6	15.2	15.7
	6H	21.6	22.1	22.1	22.6	23.1	14.6	15.2	15.1	15.7	16.1
	8H	21.7	22.2	22.2	22.7	23.2	14.8	15.2	15.3	15.7	16.2
	12H	21.8	22.2	22.3	22.7	23.3	14.8	15.2	15.3	15.7	16.3
12H	4H	21.1	21.6	21.5	22.1	22.6	14.2	14.8	14.7	15.3	15.8
	6H	21.5	22.0	22.1	22.5	23.0	14.8	15.2	15.3	15.7	16.3
	8H	21.7	22.1	22.2	22.6	23.2	14.9	15.3	15.4	15.8	16.4

Maximum UGR = 23.3

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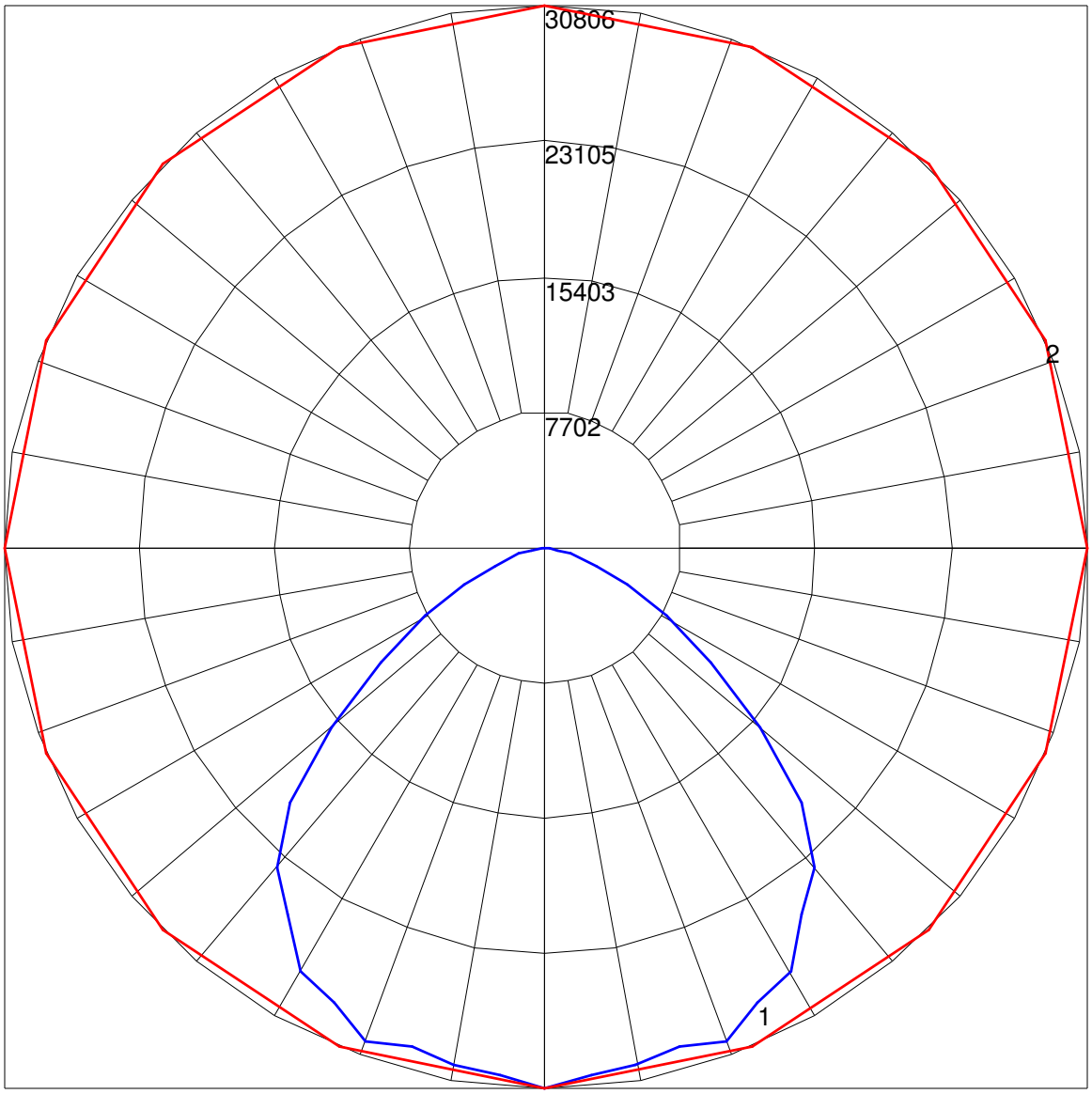
POLAR GRAPH



Maximum Candela = 30806.05 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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