H.E. WILLIAMS, INC.

IES INDOOR REPORT
PHOTOMETRIC FILENAME : GL-4-L150-940-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] 2023-07-17
[MANUFAC] WILLIAMS INDOOR
[OTHER] H.E. WILLIAMS, INC - CARTHAGE, MO
[LUMINAIRE] 48 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-4-L150-940-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	11866
Total Luminaire Efficiency	N.A.
Luminaire Efficacy Rating (LER)	122
Total Luminaire Watts	97
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)	4.00 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	29226	3119	2306
55	20028	2315	1731
65	12120	1755	1781
75	5935	1939	1617
85	2275	717	717

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CANDELA TABULATION

	0.0	22.5	45.0	67.5	90.0
0	11968.001	11968.001	11968.001	11968.001	11968.001
5	11700.470	11607.471	11421.048	11266.899	11177.722
10	11607.471	11226.557	10383.620	9658.737	9524.971
15	11449.500	10610.810	9006.470	7782.619	7377.500
20	11643.991	9719.462	6794.451	4959.100	4375.627
25	11116.996	8378.408	4975.237	3362.829	2884.669
30	10866.026	6717.164	3022.257	1855.734	1600.518
35	9909.707	4817.266	1786.516	1170.769	1061.633
40	9265.508	3302.103	1158.879	879.032	822.553
45	8009.809	2058.294	854.827	668.404	631.884
50	6178.279	1381.397	672.651	546.953	514.680
55	4452.489	1025.113	514.680	421.256	384.736
60	3063.024	729.130	401.297	352.462	328.257
65	1985.254	449.708	287.490	304.052	291.737
70	1175.015	324.010	247.148	255.217	226.765
75	595.364	242.902	194.491	174.108	162.218
80	287.490	178.354	121.451	76.862	64.972
85	76.862	56.904	24.205	24.205	24.205
90	0.000	0.000	0.000	0.000	0.000

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ZONAL LUMEN SUMMARY

Zone	Lumens	%Lamp	%Fixt
0-20	3595.2	N.A.	30.30
0-30	6304.54	N.A.	53.10
0-40	8435.26	N.A.	71.10
0-60	10979.5	N.A.	92.50
0-80	11807.55	N.A.	99.50
0-90	11866.37	N.A.	100.00
10-90	10803.45	N.A.	91.00
20-40	4840.06	N.A.	40.80
20-50	6386.17	N.A.	53.80
40-70	3104.55	N.A.	26.20
60-80	828.05	N.A.	7.00
70-80	267.74	N.A.	2.30
80-90	58.81	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	11866.37	N.A.	100.00

Total Luminaire Efficiency = N.A.%

ZONAL LUMEN SUMMARY

Zone	Lumens
0-10	1062.92
10-20	2532.28
20-30	2709.34
30-40	2130.72
40-50	1546.11
50-60	998.13
60-70	560.31
70-80	267.74
80-90	58.81
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	18.0	19.3	18.3	19.6	19.9	9.0	10.3	9.3	10.6	10.9
	3H	19.8	21.0	20.2	21.3	21.7	11.0	12.2	11.4	12.5	12.9
	4H	20.3	21.4	20.7	21.8	22.1	11.8	12.8	12.2	13.2	13.6
	6H	20.6	21.6	21.1	22.0	22.4	12.1	13.1	12.5	13.4	13.8
	8H	20.7	21.7	21.1	22.0	22.4	12.1	13.1	12.6	13.5	13.9
	12H	20.7	21.6	21.2	22.0	22.4	12.1	13.0	12.6	13.4	13.9
4H	2H	17.8	18.9	18.2	19.2	19.6	9.6	10.7	10.0	11.0	11.4
	3H	19.7	20.6	20.1	21.0	21.4	12.0	12.8	12.4	13.2	13.6
	4H	20.3	21.1	20.7	21.5	21.9	12.8	13.6	13.2	14.0	14.5
	6H	20.7	21.4	21.2	21.8	22.3	13.2	13.9	13.7	14.3	14.8
	8H	20.8	21.4	21.3	21.9	22.4	13.3	13.9	13.7	14.4	14.8
	12H	20.9	21.4	21.4	21.9	22.4	13.3	13.9	13.8	14.4	14.8
8H	4H	20.2	20.8	20.7	21.3	21.7	13.2	13.9	13.7	14.3	14.8
	6H	20.7	21.2	21.2	21.7	22.2	13.7	14.3	14.2	14.8	15.2
	8H	20.8	21.3	21.3	21.8	22.3	13.9	14.3	14.4	14.8	15.3
	12H	20.9	21.3	21.4	21.8	22.4	13.9	14.3	14.4	14.8	15.4
12H	4H	20.2	20.7	20.7	21.2	21.7	13.3	13.9	13.8	14.4	14.9
	6H	20.6	21.1	21.2	21.6	22.1	13.9	14.4	14.4	14.8	15.4
	8H	20.8	21.2	21.3	21.7	22.3	14.0	14.4	14.6	14.9	15.5

Maximum UGR = 22.4

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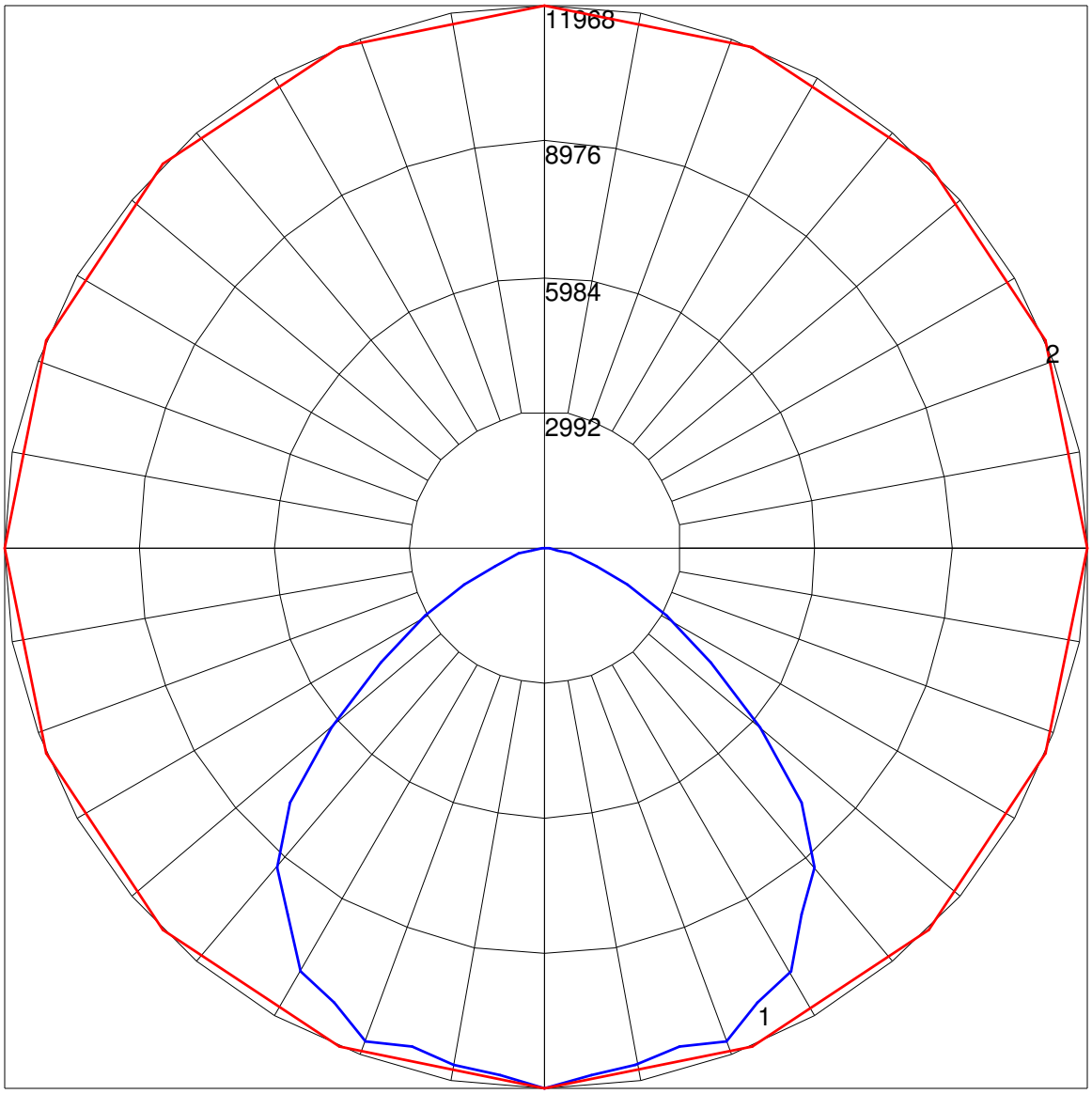
POLAR GRAPH



Maximum Candela = 11968.001 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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