H.E. WILLIAMS, INC.

IES INDOOR REPORT
PHOTOMETRIC FILENAME : GL-4-L300-830-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-L300-830-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	27486
Total Luminaire Efficiency	N.A.
Luminaire Efficacy Rating (LER)	141
Total Luminaire Watts	195
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	67698	7225	5341
55	46392	5363	4009
65	28074	4065	4126
75	13747	4491	3746
85	5271	1660	1660

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CANDELA TABULATION

	0.0	22.5	45.0	67.5	90.0
0	27721.807	27721.807	27721.807	27721.807	27721.807
5	27102.117	26886.700	26454.884	26097.825	25891.261
10	26886.700	26004.379	24051.862	22372.796	22062.951
15	26520.788	24578.107	20861.931	18027.093	17088.704
20	26971.293	22513.456	15738.173	11486.899	10135.383
25	25750.601	19407.134	11524.277	7789.412	6681.838
30	25169.272	15559.151	7000.536	4298.488	3707.323
35	22954.125	11158.364	4138.156	2711.884	2459.089
40	21461.949	7648.752	2684.342	2036.126	1905.303
45	18553.338	4767.683	1980.059	1548.243	1463.650
50	14310.917	3199.767	1558.079	1266.923	1192.167
55	10313.421	2374.497	1192.167	975.767	891.174
60	7094.965	1688.903	929.536	816.418	760.350
65	4598.497	1041.670	665.921	704.283	675.758
70	2721.720	750.514	572.476	591.165	525.262
75	1379.057	562.640	450.505	403.291	375.749
80	665.921	413.127	281.320	178.038	150.496
85	178.038	131.807	56.067	56.067	56.067
90	0.000	0.000	0.000	0.000	0.000

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ZONAL LUMEN SUMMARY

Zone	Lumens	%Lamp	%Fixt
0-20	8327.66	N.A.	30.30
0-30	14603.38	N.A.	53.10
0-40	19538.83	N.A.	71.10
0-60	25432.12	N.A.	92.50
0-80	27350.16	N.A.	99.50
0-90	27486.39	N.A.	100.00
10-90	25024.32	N.A.	91.00
20-40	11211.17	N.A.	40.80
20-50	14792.47	N.A.	53.80
40-70	7191.16	N.A.	26.20
60-80	1918.04	N.A.	7.00
70-80	620.18	N.A.	2.30
80-90	136.23	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	27486.39	N.A.	100.00

Total Luminaire Efficiency = N.A.%

ZONAL LUMEN SUMMARY

Zone	Lumens
0-10	2462.07
10-20	5865.59
20-30	6275.72
30-40	4935.45
40-50	3581.3
50-60	2312.00
60-70	1297.86
70-80	620.18
80-90	136.23
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	21.0	22.3	21.3	22.6	22.9	12.0	13.3	12.3	13.6	13.9
	3H	22.8	24.0	23.2	24.3	24.7	14.0	15.2	14.4	15.5	15.9
	4H	23.3	24.4	23.7	24.8	25.1	14.8	15.8	15.2	16.2	16.6
	6H	23.6	24.6	24.1	25.0	25.4	15.1	16.1	15.5	16.4	16.8
	8H	23.7	24.7	24.1	25.0	25.4	15.1	16.1	15.6	16.5	16.9
	12H	23.7	24.6	24.2	25.0	25.4	15.1	16.0	15.6	16.4	16.9
4H	2H	20.8	21.9	21.2	22.2	22.6	12.6	13.7	13.0	14.0	14.4
	3H	22.7	23.6	23.1	24.0	24.4	15.0	15.8	15.4	16.2	16.6
	4H	23.3	24.1	23.7	24.5	24.9	15.8	16.6	16.2	17.0	17.5
	6H	23.7	24.4	24.2	24.8	25.3	16.2	16.9	16.7	17.3	17.8
	8H	23.8	24.4	24.3	24.9	25.4	16.3	16.9	16.7	17.4	17.8
	12H	23.9	24.4	24.4	24.9	25.4	16.3	16.9	16.8	17.4	17.8
8H	4H	23.2	23.8	23.7	24.3	24.7	16.2	16.9	16.7	17.3	17.8
	6H	23.7	24.2	24.2	24.7	25.2	16.7	17.3	17.2	17.8	18.2
	8H	23.8	24.3	24.3	24.8	25.3	16.9	17.3	17.4	17.8	18.3
	12H	23.9	24.3	24.4	24.8	25.4	16.9	17.3	17.4	17.8	18.4
12H	4H	23.2	23.7	23.7	24.2	24.7	16.3	16.9	16.8	17.4	17.9
	6H	23.6	24.1	24.2	24.6	25.1	16.9	17.4	17.4	17.8	18.4
	8H	23.8	24.2	24.3	24.7	25.3	17.0	17.4	17.6	17.9	18.5

Maximum UGR = 25.4

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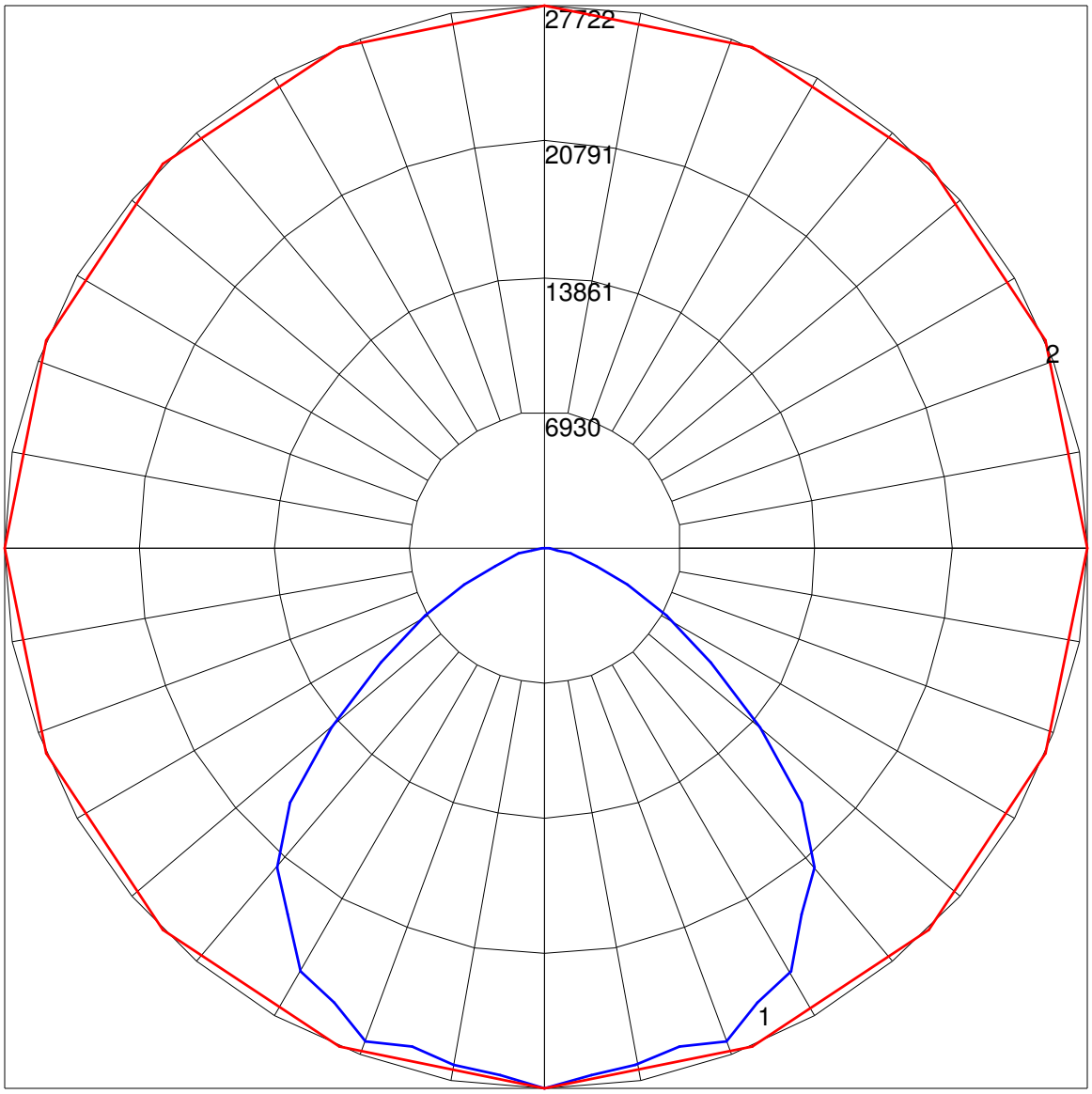
POLAR GRAPH



Maximum Candela = 27721.807 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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