H.E. WILLIAMS, INC.

IES INDOOR REPORT
PHOTOMETRIC FILENAME : GL-4-L300-835-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-L300-835-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	27773
Total Luminaire Efficiency	N.A.
Luminaire Efficacy Rating (LER)	142
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	68403	7300	5396
55	46876	5419	4050
65	28366	4108	4168
75	13891	4538	3785
85	5325	1677	1677

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CANDELA TABULATION

	0.0	22.5	45.0	67.5	90.0
0	28010.580	28010.580	28010.580	28010.580	28010.580
5	27384.434	27166.774	26730.460	26369.680	26160.965
10	27166.774	26275.262	24302.406	22605.849	22292.776
15	26797.050	24834.133	21079.246	18214.878	17266.714
20	27252.248	22747.974	15902.114	11606.555	10240.961
25	26018.840	19609.294	11644.323	7870.553	6751.441
30	25431.456	15721.227	7073.459	4343.265	3745.942
35	23193.233	11274.599	4181.262	2740.133	2484.705
40	21685.514	7728.427	2712.304	2057.336	1925.150
45	18746.605	4817.347	2000.685	1564.370	1478.897
50	14459.991	3233.099	1574.309	1280.120	1204.585
55	10420.854	2399.231	1204.585	985.931	900.457
60	7168.872	1706.496	939.219	824.922	768.271
65	4646.399	1052.521	672.858	711.620	682.797
70	2750.072	758.332	578.439	597.323	530.733
75	1393.423	568.501	455.198	407.492	379.663
80	672.858	417.430	284.250	179.893	152.064
85	179.893	133.180	56.651	56.651	56.651
90	0.000	0.000	0.000	0.000	0.000

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ZONAL LUMEN SUMMARY

Zone	Lumens	%Lamp	%Fixt
0-20	8414.41	N.A.	30.30
0-30	14755.5	N.A.	53.10
0-40	19742.36	N.A.	71.10
0-60	25697.04	N.A.	92.50
0-80	27635.06	N.A.	99.50
0-90	27772.71	N.A.	100.00
10-90	25284.99	N.A.	91.00
20-40	11327.95	N.A.	40.80
20-50	14946.56	N.A.	53.80
40-70	7266.07	N.A.	26.20
60-80	1938.02	N.A.	7.00
70-80	626.64	N.A.	2.30
80-90	137.65	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	27772.71	N.A.	100.00

Total Luminaire Efficiency = N.A.%

ZONAL LUMEN SUMMARY

Zone	Lumens
0-10	2487.72
10-20	5926.69
20-30	6341.09
30-40	4986.86
40-50	3618.6
50-60	2336.08
60-70	1311.38
70-80	626.64
80-90	137.65
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	46	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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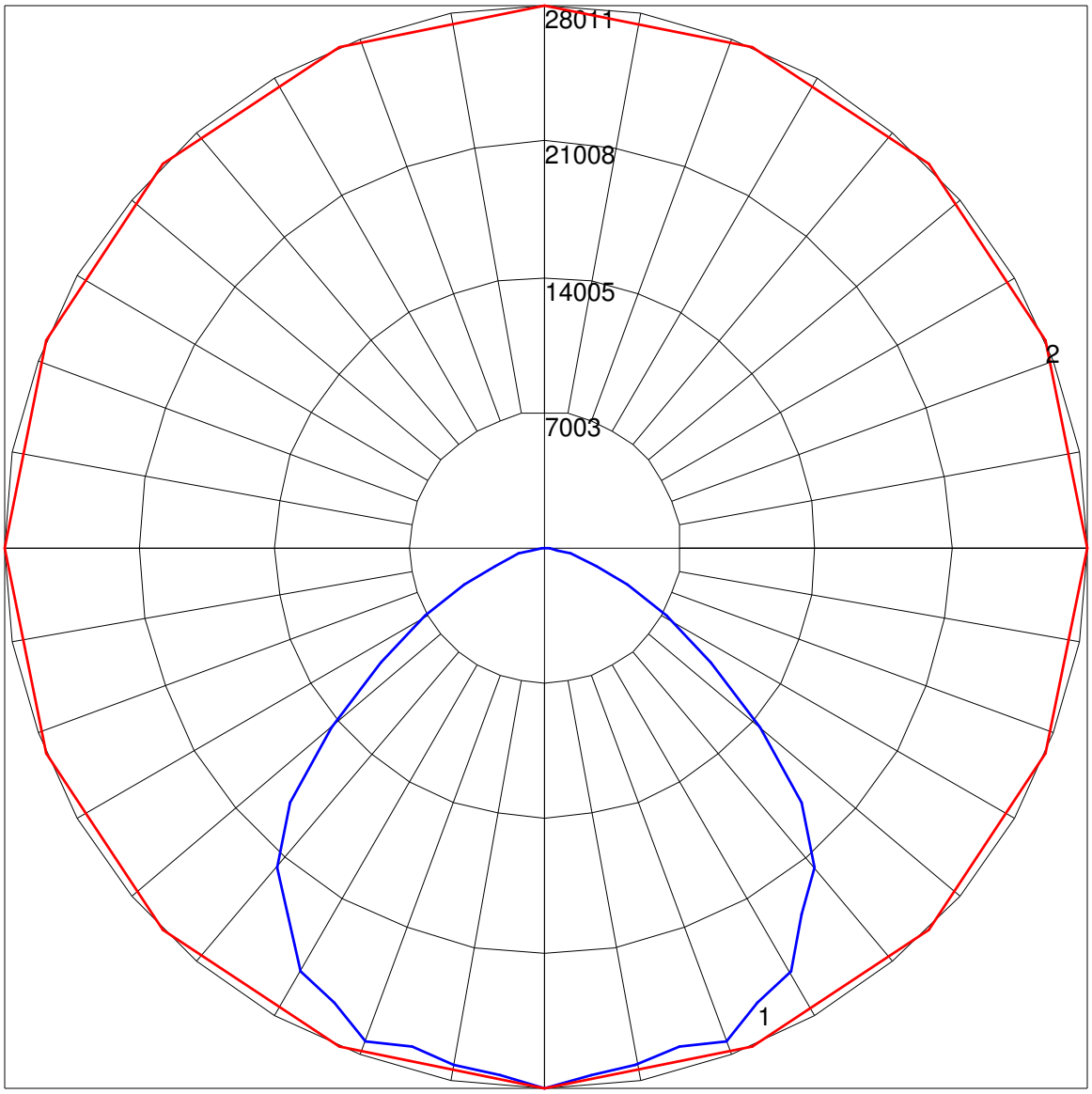
POLAR GRAPH



Maximum Candela = 28010.58 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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