H.E. WILLIAMS, INC.

IES INDOOR REPORT
PHOTOMETRIC FILENAME : GL-4-L300-850-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-L300-850-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	29491
Total Luminaire Efficiency	N.A.
Luminaire Efficacy Rating (LER)	151
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	72634	7752	5730
55	49775	5754	4301
65	30121	4362	4426
75	14750	4818	4019
85	5655	1781	1781

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CANDELA TABULATION

	0.0	22.5	45.0	67.5	90.0
0	29743.183	29743.183	29743.183	29743.183	29743.183
5	29078.307	28847.183	28383.880	28000.785	27779.160
10	28847.183	27900.526	25805.638	24004.141	23671.703
15	28454.590	26370.255	22383.109	19341.565	18334.752
20	28937.944	24155.057	16885.744	12324.482	10874.419
25	27628.243	20822.233	12364.586	8357.388	7169.054
30	27004.526	16693.669	7510.990	4611.919	3977.648
35	24627.858	11971.993	4439.895	2909.625	2638.398
40	23026.878	8206.472	2880.075	2184.593	2044.230
45	19906.182	5115.325	2124.438	1661.135	1570.374
50	15354.418	3433.083	1671.689	1359.302	1279.095
55	11065.439	2547.637	1279.095	1046.916	956.155
60	7612.305	1812.051	997.314	875.948	815.793
65	4933.803	1117.625	714.478	755.637	725.032
70	2920.178	805.239	614.219	634.271	563.562
75	1479.613	603.665	483.354	432.697	403.147
80	714.478	443.251	301.833	191.020	161.470
85	191.020	141.418	60.155	60.155	60.155
90	0.000	0.000	0.000	0.000	0.000

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ZONAL LUMEN SUMMARY

Zone	Lumens	%Lamp	%Fixt
0-20	8934.88	N.A.	30.30
0-30	15668.2	N.A.	53.10
0-40	20963.53	N.A.	71.10
0-60	27286.54	N.A.	92.50
0-80	29344.44	N.A.	99.50
0-90	29490.6	N.A.	100.00
10-90	26849.01	N.A.	91.00
20-40	12028.65	N.A.	40.80
20-50	15871.08	N.A.	53.80
40-70	7715.51	N.A.	26.20
60-80	2057.9	N.A.	7.00
70-80	665.40	N.A.	2.30
80-90	146.17	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	29490.6	N.A.	100.00

Total Luminaire Efficiency = N.A.%

ZONAL LUMEN SUMMARY

Zone	Lumens
0-10	2641.6
10-20	6293.29
20-30	6733.32
30-40	5295.33
40-50	3842.43
50-60	2480.58
60-70	1392.5
70-80	665.40
80-90	146.17
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	21.2	22.5	21.5	22.8	23.1	12.2	13.5	12.5	13.8	14.1
	3H	23.0	24.2	23.4	24.5	24.9	14.2	15.4	14.6	15.7	16.1
	4H	23.5	24.6	23.9	25.0	25.3	15.0	16.0	15.4	16.4	16.8
	6H	23.8	24.8	24.3	25.2	25.6	15.3	16.3	15.7	16.6	17.0
	8H	23.9	24.9	24.3	25.2	25.6	15.3	16.3	15.8	16.7	17.1
	12H	23.9	24.8	24.4	25.2	25.6	15.3	16.2	15.8	16.6	17.1
4H	2H	21.0	22.1	21.4	22.4	22.8	12.8	13.9	13.2	14.2	14.6
	3H	22.9	23.8	23.3	24.2	24.6	15.2	16.0	15.6	16.4	16.8
	4H	23.5	24.3	23.9	24.7	25.1	16.0	16.8	16.4	17.2	17.7
	6H	23.9	24.6	24.4	25.0	25.5	16.4	17.1	16.9	17.5	18.0
	8H	24.0	24.6	24.5	25.1	25.6	16.5	17.1	16.9	17.6	18.0
	12H	24.1	24.6	24.6	25.1	25.6	16.5	17.1	17.0	17.6	18.0
8H	4H	23.4	24.0	23.9	24.5	24.9	16.4	17.1	16.9	17.5	18.0
	6H	23.9	24.4	24.4	24.9	25.4	16.9	17.5	17.4	18.0	18.4
	8H	24.0	24.5	24.5	25.0	25.5	17.1	17.5	17.6	18.0	18.5
	12H	24.1	24.5	24.6	25.0	25.6	17.1	17.5	17.6	18.0	18.6
12H	4H	23.4	23.9	23.9	24.4	24.9	16.5	17.1	17.0	17.6	18.1
	6H	23.8	24.3	24.4	24.8	25.3	17.1	17.6	17.6	18.0	18.6
	8H	24.0	24.4	24.5	24.9	25.5	17.2	17.6	17.8	18.1	18.7

Maximum UGR = 25.6

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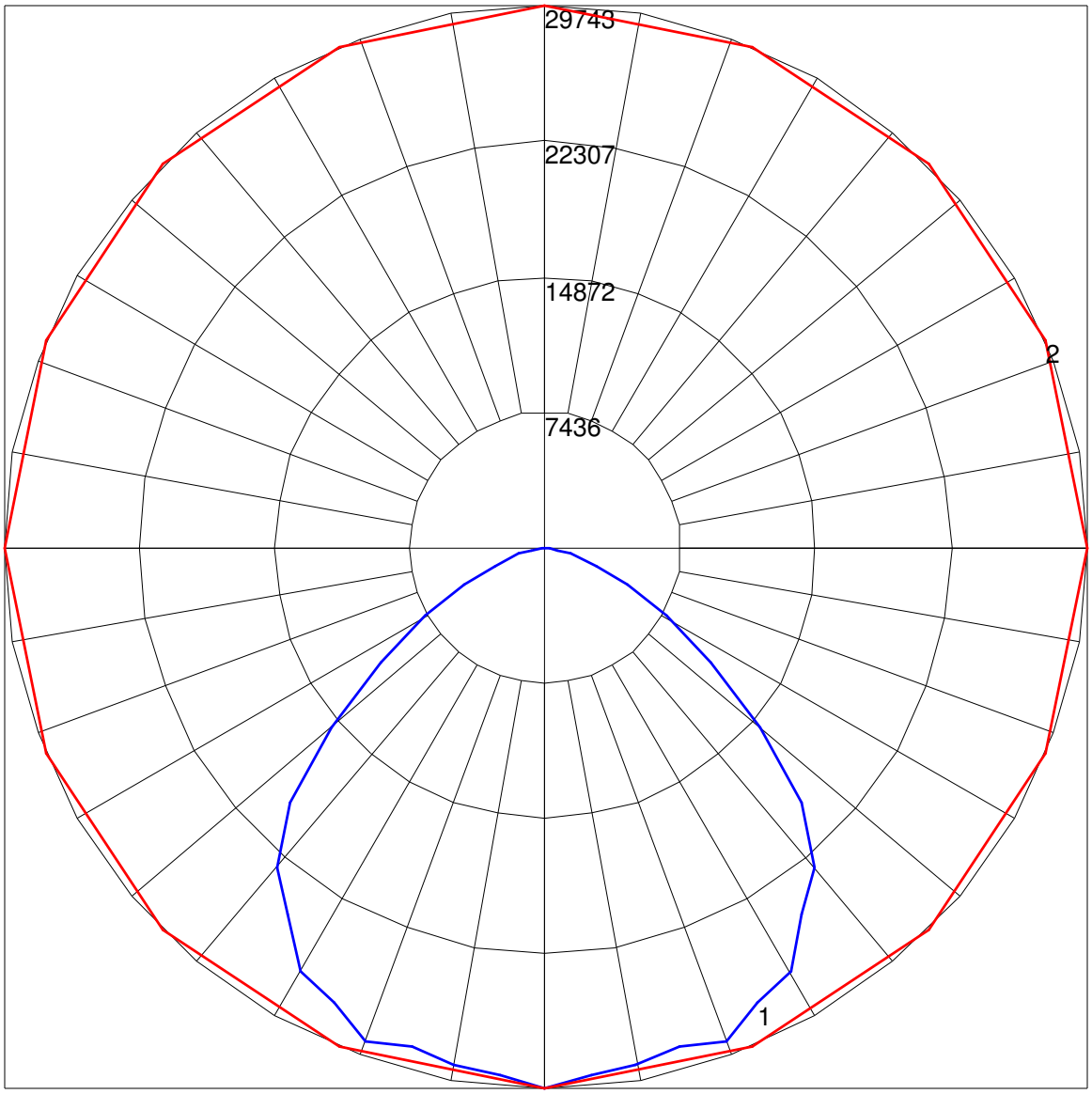
POLAR GRAPH



Maximum Candela = 29743.183 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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