H.E. WILLIAMS, INC.

IES INDOOR REPORT
PHOTOMETRIC FILENAME : GL-4-L300-940-DIM-UNV_.IES

DESCRIPTION INFORMATION (From Photometric File)

IESNA:LM-63-2002
[TEST] GEN FROM BALLABS TEST NO. 19438.0
[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 HIGHBAY LUMINAIRE
[MORE] WHITE REFLECTOR w/OPEN BOTTOM
[MORE] 0-10V DIMMING DRIVERS
[LUMCAT] GL-4-L300-940-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	25015
Total Luminaire Efficiency	N.A.
Luminaire Efficacy Rating (LER)	125
Total Luminaire Watts	200
Ballast Factor	1.00
CIE Type	Direct
Spacing Criterion (0-180)	1.24
Spacing Criterion (90-270)	1.24
Spacing Criterion (Diagonal)	1.42
Basic Luminous Shape	Rectangular
Luminous Length (0-180)	4.00 ft
Luminous Width (90-270)	1.05 ft
Luminous Height	0.00 ft

LUMINANCE DATA (cd/sq.m)

Angle In Degrees	Average 0-Deg	Average 45-Deg	Average 90-Deg
45	23241	23293	23549
55	21457	22392	16880
65	20182	16167	16458
75	15469	10311	9525
85	8486	5492	6245

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CANDELA TABULATION

	0.0	22.5	45.0	67.5	90.0
0	9098.490	9098.490	9098.490	9098.490	9098.490
5	8967.572	8965.067	8967.572	8970.704	8973.210
10	8959.429	8953.165	8959.429	8970.704	8970.704
15	8772.135	8783.410	8808.466	8811.598	8808.466
20	8431.372	8439.515	8453.922	8465.198	8465.198
25	7949.042	7971.593	7988.506	7957.186	7957.186
30	7489.263	7514.946	7494.901	7489.263	7486.131
35	6998.164	7031.990	7009.439	7023.847	7026.352
40	6686.216	6728.811	6694.359	6714.404	6734.449
45	6430.644	6464.469	6445.051	6493.284	6515.834
50	5683.972	5737.843	5789.208	5828.671	5792.340
55	4815.779	4897.838	5025.624	3953.224	3788.480
60	4035.282	4114.835	4117.967	3260.423	3274.830
65	3337.470	3380.066	2673.484	2753.037	2721.717
70	2446.100	2559.479	2091.557	1830.347	1467.034
75	1566.632	1294.147	1044.212	1064.257	964.659
80	871.325	780.497	448.504	311.948	274.991
85	289.398	187.294	187.294	209.845	212.977
90	0.000	0.000	0.000	0.000	0.000

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ZONAL LUMEN SUMMARY

Zone	Lumens	%Lamp	%Fixt
0-20	3332.62	N.A.	13.30
0-30	7011.72	N.A.	28.00
0-40	11440.29	N.A.	45.70
0-60	20524.01	N.A.	82.00
0-80	24757.52	N.A.	99.00
0-90	25015.1	N.A.	100.00
10-90	24157.68	N.A.	96.60
20-40	8107.67	N.A.	32.40
20-50	13022.01	N.A.	52.10
40-70	12007.1	N.A.	48.00
60-80	4233.51	N.A.	16.90
70-80	1310.13	N.A.	5.20
80-90	257.58	N.A.	1.00
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	25015.1	N.A.	100.00

Total Luminaire Efficiency = N.A.%

ZONAL LUMEN SUMMARY

Zone	Lumens
0-10	857.42
10-20	2475.2
20-30	3679.11
30-40	4428.57
40-50	4914.34
50-60	4169.38
60-70	2923.38
70-80	1310.13
80-90	257.58
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	109	105	101	97	107	103	99	96	98	95	93	94	92	90	91	89	87	85
2	100	92	85	80	97	90	84	79	86	81	77	83	79	75	80	77	73	71
3	91	81	73	66	89	79	72	66	76	70	65	73	68	64	71	66	62	60
4	83	72	63	56	81	70	62	56	68	61	55	65	59	54	63	58	54	52
5	77	64	55	49	75	63	54	48	61	53	48	59	52	47	57	51	47	45
6	71	58	49	42	69	57	48	42	55	47	42	53	46	41	52	46	41	39
7	66	52	43	37	64	51	43	37	50	42	37	48	42	37	47	41	36	34
8	61	48	39	33	59	47	39	33	46	38	33	44	38	33	43	37	33	31
9	57	44	35	30	56	43	35	30	42	35	30	41	34	30	40	34	29	28
10	53	40	32	27	52	40	32	27	39	32	27	38	31	27	37	31	27	25

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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	23.1	24.8	23.5	25.1	25.4	21.6	23.2	22.0	23.5	23.8
	3H	24.9	26.4	25.3	26.7	27.1	23.1	24.5	23.4	24.8	25.2
	4H	25.4	26.8	25.8	27.1	27.5	23.4	24.8	23.8	25.1	25.5
	6H	25.7	27.0	26.2	27.4	27.8	23.5	24.8	23.9	25.2	25.6
	8H	25.8	27.0	26.3	27.4	27.8	23.5	24.8	24.0	25.1	25.5
	12H	25.9	27.0	26.3	27.4	27.8	23.6	24.7	24.0	25.1	25.5
4H	2H	23.5	24.9	23.9	25.2	25.6	22.3	23.6	22.6	24.0	24.3
	3H	25.5	26.7	25.9	27.1	27.5	23.9	25.1	24.3	25.5	25.9
	4H	26.1	27.1	26.5	27.5	28.0	24.4	25.4	24.8	25.8	26.3
	6H	26.6	27.4	27.0	27.9	28.3	24.5	25.4	25.0	25.9	26.3
	8H	26.7	27.5	27.1	28.0	28.4	24.6	25.4	25.0	25.8	26.3
	12H	26.7	27.5	27.2	28.0	28.4	24.6	25.3	25.1	25.8	26.3
8H	4H	26.2	27.0	26.7	27.5	27.9	24.6	25.5	25.1	25.9	26.4
	6H	26.7	27.4	27.2	27.9	28.4	24.8	25.5	25.3	26.0	26.5
	8H	26.9	27.5	27.4	28.0	28.5	24.8	25.5	25.3	26.0	26.4
	12H	27.0	27.5	27.5	28.0	28.6	24.9	25.5	25.4	26.0	26.5
12H	4H	26.2	26.9	26.7	27.4	27.9	24.6	25.4	25.1	25.9	26.3
	6H	26.7	27.3	27.2	27.8	28.3	24.8	25.5	25.3	25.9	26.4
	8H	26.9	27.4	27.4	27.9	28.5	24.9	25.4	25.4	25.9	26.5

Maximum UGR = 28.6

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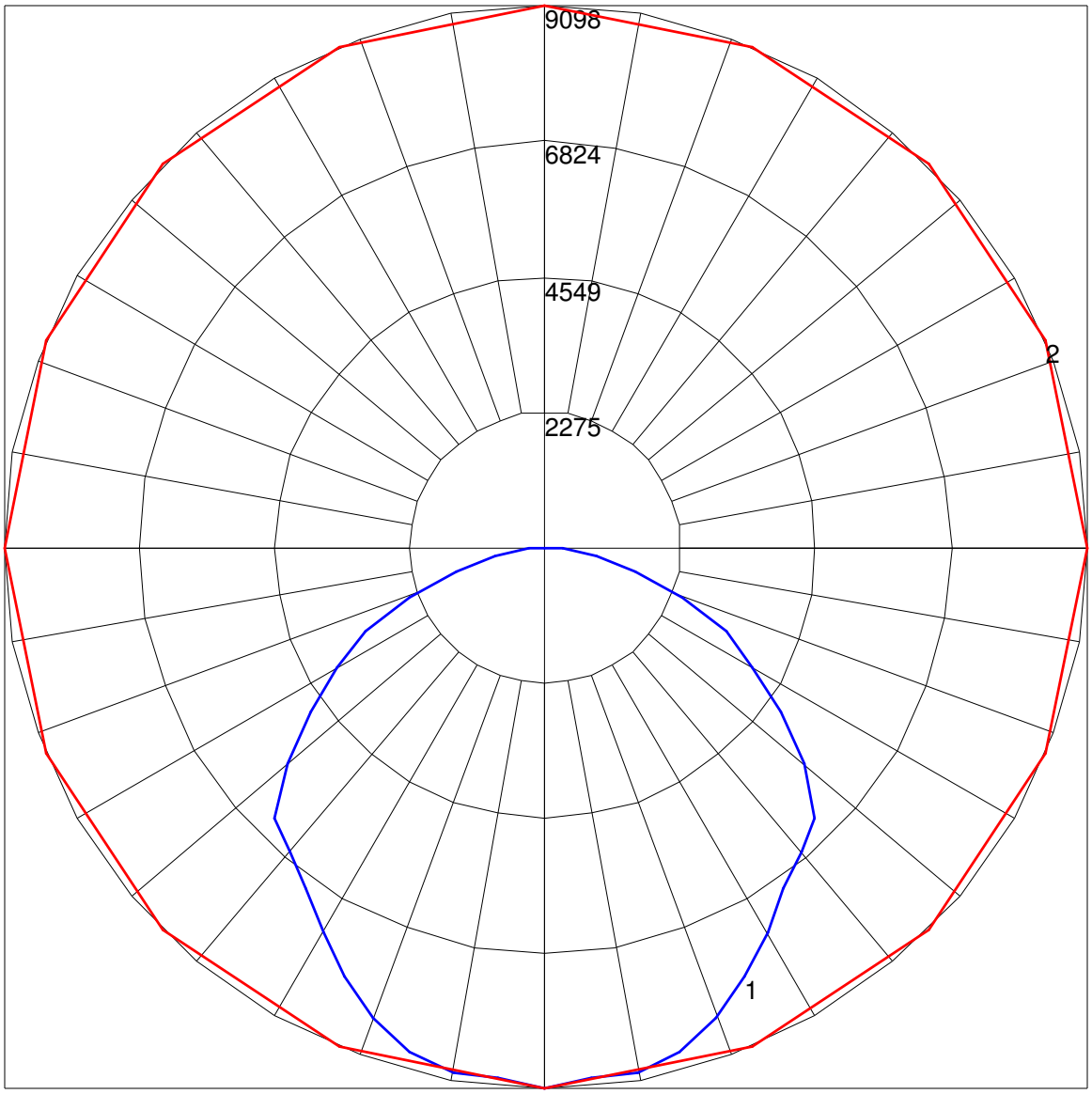
POLAR GRAPH



Maximum Candela = 9098.49 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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