H.E. WILLIAMS, INC.

IES INDOOR REPORT
PHOTOMETRIC FILENAME : GL-4-L300-840-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-L300-840-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	30139
Total Luminaire Efficiency	N.A.
Luminaire Efficacy Rating (LER)	151
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	28001	28064	28372
55	25851	26978	20337
65	24315	19478	19829
75	18637	12422	11476
85	10224	6617	7524

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CANDELA TABULATION

	0.0	22.5	45.0	67.5	90.0
0	10962.037	10962.037	10962.037	10962.037	10962.037
5	10804.305	10801.286	10804.305	10808.078	10811.097
10	10794.494	10786.947	10794.494	10808.078	10808.078
15	10568.838	10582.423	10612.611	10616.384	10612.611
20	10158.281	10168.092	10185.450	10199.034	10199.034
25	9577.160	9604.330	9624.707	9586.972	9586.972
30	9023.210	9054.152	9030.002	9023.210	9019.436
35	8431.524	8472.278	8445.108	8462.467	8465.485
40	8055.682	8107.002	8065.494	8089.644	8113.794
45	7747.764	7788.518	7765.122	7823.234	7850.404
50	6848.160	6913.065	6974.950	7022.496	6978.724
55	5802.144	5901.010	6054.969	4762.920	4564.434
60	4861.786	4957.633	4961.407	3928.221	3945.579
65	4021.049	4072.369	3221.065	3316.913	3279.177
70	2947.109	3083.710	2519.948	2205.237	1767.511
75	1887.508	1559.213	1258.087	1282.238	1162.240
80	1049.790	940.358	540.366	375.841	331.314
85	348.672	225.656	225.656	252.825	256.598
90	0.000	0.000	0.000	0.000	0.000

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ZONAL LUMEN SUMMARY

Zone	Lumens	%Lamp	%Fixt
0-20	4015.2	N.A.	13.30
0-30	8447.86	N.A.	28.00
0-40	13783.48	N.A.	45.70
0-60	24727.73	N.A.	82.00
0-80	29828.34	N.A.	99.00
0-90	30138.68	N.A.	100.00
10-90	29105.64	N.A.	96.60
20-40	9768.28	N.A.	32.40
20-50	15689.17	N.A.	52.10
40-70	14466.39	N.A.	48.00
60-80	5100.62	N.A.	16.90
70-80	1578.47	N.A.	5.20
80-90	310.33	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	30138.68	N.A.	100.00

Total Luminaire Efficiency = N.A.%

ZONAL LUMEN SUMMARY

Zone	Lumens
0-10	1033.03
10-20	2982.17
20-30	4432.66
30-40	5335.63
40-50	5920.89
50-60	5023.35
60-70	3522.14
70-80	1578.47
80-90	310.33
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	23.7	25.4	24.1	25.7	26.0	22.2	23.8	22.6	24.1	24.4
	3H	25.5	27.0	25.9	27.3	27.7	23.7	25.1	24.0	25.4	25.8
	4H	26.0	27.4	26.4	27.7	28.1	24.0	25.4	24.4	25.7	26.1
	6H	26.3	27.6	26.8	28.0	28.4	24.1	25.4	24.5	25.8	26.2
	8H	26.4	27.6	26.9	28.0	28.4	24.1	25.4	24.6	25.7	26.1
	12H	26.5	27.6	26.9	28.0	28.4	24.2	25.3	24.6	25.7	26.1
4H	2H	24.1	25.5	24.5	25.8	26.2	22.9	24.2	23.2	24.6	24.9
	3H	26.1	27.3	26.5	27.7	28.1	24.5	25.7	24.9	26.1	26.5
	4H	26.7	27.7	27.1	28.1	28.6	25.0	26.0	25.4	26.4	26.9
	6H	27.2	28.0	27.6	28.5	28.9	25.1	26.0	25.6	26.5	26.9
	8H	27.3	28.1	27.7	28.6	29.0	25.2	26.0	25.6	26.4	26.9
	12H	27.3	28.1	27.8	28.6	29.0	25.2	25.9	25.7	26.4	26.9
8H	4H	26.8	27.6	27.3	28.1	28.5	25.2	26.1	25.7	26.5	27.0
	6H	27.3	28.0	27.8	28.5	29.0	25.4	26.1	25.9	26.6	27.1
	8H	27.5	28.1	28.0	28.6	29.1	25.4	26.1	25.9	26.6	27.0
	12H	27.6	28.1	28.1	28.6	29.2	25.5	26.1	26.0	26.6	27.1
12H	4H	26.8	27.5	27.3	28.0	28.5	25.2	26.0	25.7	26.5	26.9
	6H	27.3	27.9	27.8	28.4	28.9	25.4	26.1	25.9	26.5	27.0
	8H	27.5	28.0	28.0	28.5	29.1	25.5	26.0	26.0	26.5	27.1

Maximum UGR = 29.2

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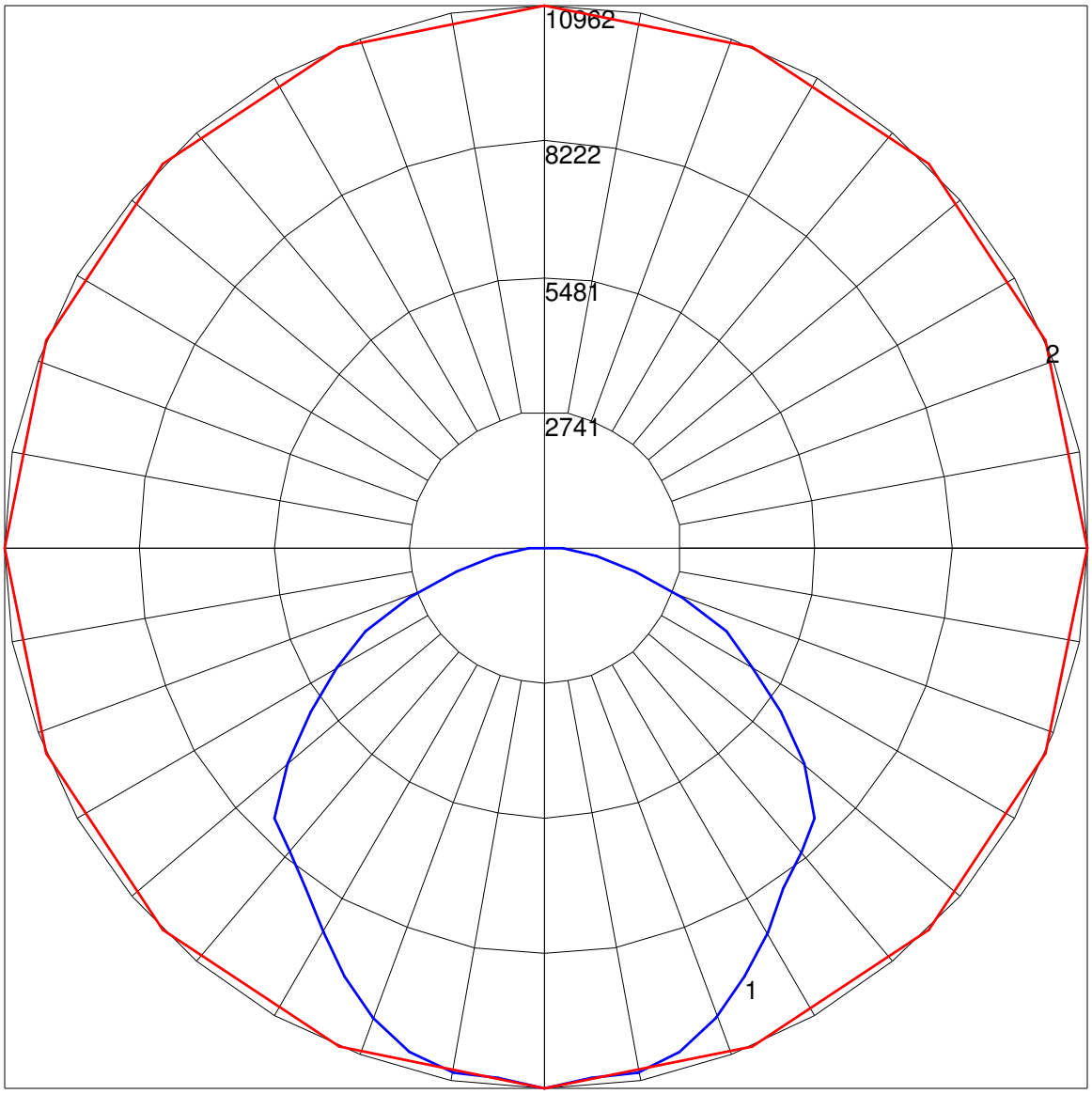
POLAR GRAPH



Maximum Candela = 10962.037 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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