H.E. WILLIAMS, INC.

IES INDOOR REPORT
PHOTOMETRIC FILENAME : GL-8-L400-850-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] 2023-07-18
[MANUFAC] WILLIAMS INDOOR
[OTHER] H.E. WILLIAMS, INC - CARTHAGE, MO
[LUMINAIRE] 96 INCH LONG, LOW PROFILE LED HIGHBAY LUMINAIRE
[MORE] WHITE REFLECTOR w/OPEN BOTTOM
[MORE] 0-10V DIMMING DRIVERS
[LUMCAT] GL-8-L400-850-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	41395
Total Luminaire Efficiency	N.A.
Luminaire Efficacy Rating (LER)	156
Total Luminaire Watts	266
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)	8.00 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	19230	19273	19485
55	17753	18527	13966
65	16698	13376	13618
75	12799	8531	7881
85	7021	4544	5167

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CANDELA TABULATION

	0.0	22.5	45.0	67.5	90.0
0	15056.281	15056.281	15056.281	15056.281	15056.281
5	14839.636	14835.490	14839.636	14844.819	14848.965
10	14826.161	14815.795	14826.161	14844.819	14844.819
15	14516.224	14534.883	14576.346	14581.528	14576.346
20	13952.326	13965.802	13989.643	14008.301	14008.301
25	13154.162	13191.479	13219.466	13167.637	13167.637
30	12393.314	12435.814	12402.644	12393.314	12388.132
35	11580.638	11636.613	11599.296	11623.138	11627.284
40	11064.423	11134.910	11077.898	11111.069	11144.239
45	10641.499	10697.474	10665.341	10745.157	10782.474
50	9405.900	9495.045	9580.045	9645.349	9585.227
55	7969.204	8104.995	8316.457	6541.837	6269.218
60	6677.629	6809.274	6814.457	5395.383	5419.224
65	5522.882	5593.369	4424.111	4555.756	4503.927
70	4047.833	4235.454	3461.131	3028.878	2427.663
75	2592.479	2141.568	1727.974	1761.144	1596.329
80	1441.879	1291.575	742.189	516.215	455.057
85	478.899	309.937	309.937	347.253	352.436
90	0.000	0.000	0.000	0.000	0.000

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ZONAL LUMEN SUMMARY

Zone	Lumens	%Lamp	%Fixt
0-20	5514.85	N.A.	13.30
0-30	11603.07	N.A.	28.00
0-40	18931.52	N.A.	45.70
0-60	33963.35	N.A.	82.00
0-80	40969.01	N.A.	99.00
0-90	41395.26	N.A.	100.00
10-90	39976.39	N.A.	96.60
20-40	13416.67	N.A.	32.40
20-50	21548.97	N.A.	52.10
40-70	19869.48	N.A.	48.00
60-80	7005.66	N.A.	16.90
70-80	2168.02	N.A.	5.20
80-90	426.24	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	41395.26	N.A.	100.00

Total Luminaire Efficiency = N.A.%

ZONAL LUMEN SUMMARY

Zone	Lumens
0-10	1418.86
10-20	4095.99
20-30	6088.22
30-40	7328.44
40-50	8132.3
50-60	6899.54
60-70	4837.64
70-80	2168.02
80-90	426.24
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	22.4	24.0	22.8	24.4	24.7	20.9	22.5	21.2	22.8	23.1
	3H	24.2	25.7	24.6	26.0	26.4	22.3	23.8	22.7	24.1	24.5
	4H	24.7	26.1	25.1	26.4	26.8	22.7	24.1	23.1	24.4	24.8
	6H	25.0	26.3	25.4	26.7	27.1	22.8	24.1	23.2	24.5	24.8
	8H	25.1	26.3	25.6	26.7	27.1	22.8	24.0	23.3	24.4	24.8
	12H	25.2	26.3	25.6	26.7	27.1	22.9	24.0	23.3	24.4	24.8
4H	2H	22.8	24.2	23.2	24.5	24.9	21.5	22.9	21.9	23.3	23.6
	3H	24.8	26.0	25.2	26.4	26.8	23.2	24.4	23.6	24.8	25.2
	4H	25.4	26.4	25.8	26.8	27.3	23.7	24.7	24.1	25.1	25.6
	6H	25.8	26.7	26.3	27.2	27.6	23.8	24.7	24.3	25.2	25.6
	8H	26.0	26.8	26.4	27.2	27.7	23.9	24.7	24.3	25.1	25.6
	12H	26.0	26.8	26.5	27.3	27.7	23.9	24.6	24.4	25.1	25.6
8H	4H	25.5	26.3	26.0	26.8	27.2	23.9	24.7	24.4	25.2	25.7
	6H	26.0	26.7	26.5	27.2	27.7	24.1	24.8	24.6	25.3	25.7
	8H	26.2	26.8	26.7	27.3	27.8	24.1	24.7	24.6	25.3	25.7
	12H	26.3	26.8	26.8	27.3	27.9	24.2	24.8	24.7	25.2	25.8
12H	4H	25.5	26.2	26.0	26.7	27.2	23.9	24.7	24.4	25.2	25.6
	6H	26.0	26.6	26.5	27.1	27.6	24.1	24.7	24.6	25.2	25.7
	8H	26.2	26.7	26.7	27.2	27.8	24.2	24.7	24.7	25.2	25.8

Maximum UGR = 27.9

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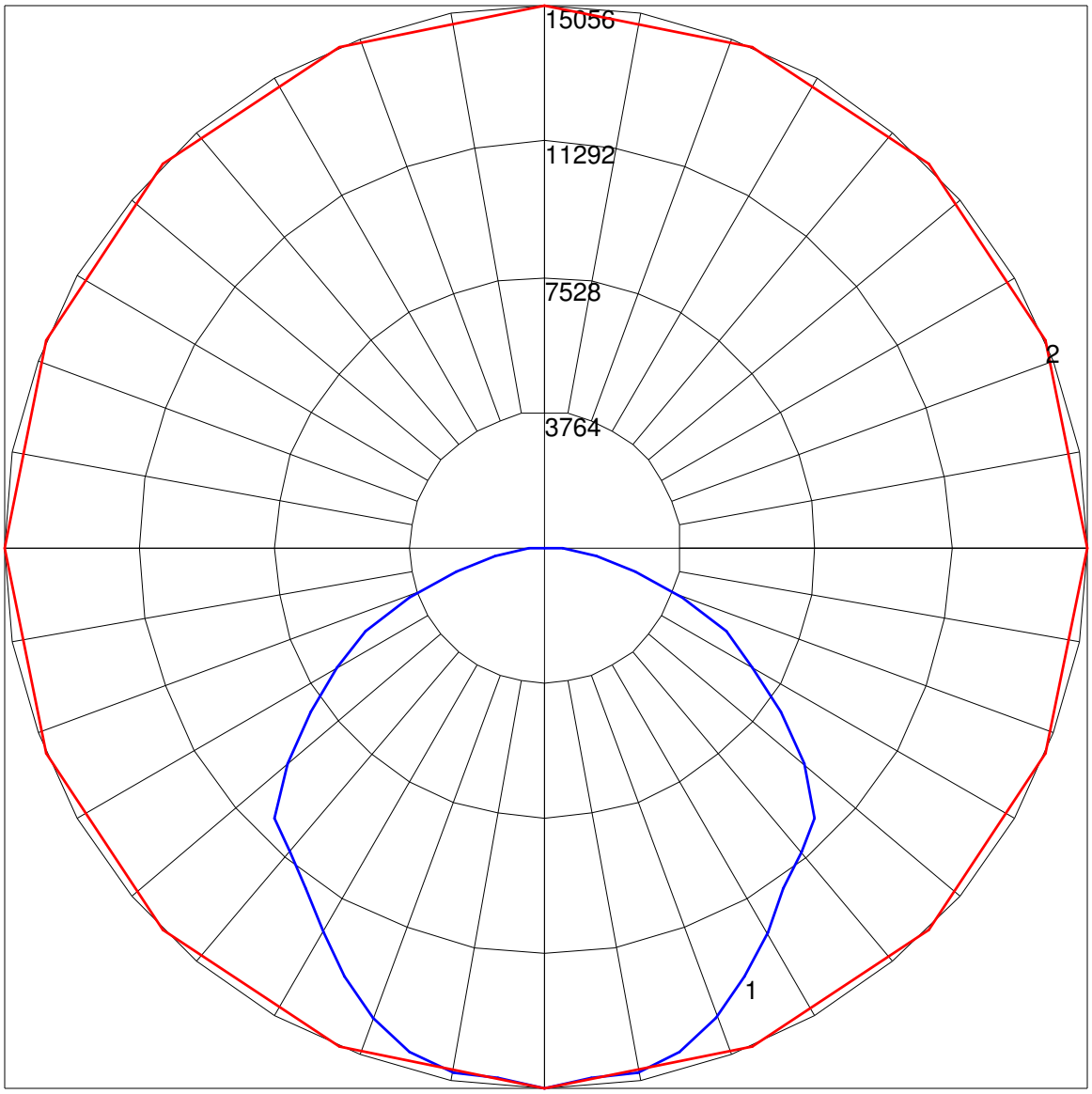
POLAR GRAPH



Maximum Candela = 15056.281 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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