H.E. WILLIAMS, INC.

IES INDOOR REPORT
PHOTOMETRIC FILENAME : GL-8-L600-940-SAF118-DIM-UNV_.IES

DESCRIPTION INFORMATION (From Photometric File)

IESNA:LM-63-2002
[TEST] GEN FROM BALLABS TEST NO. 19726.0
[TESTLAB] BUILDING ACOUSTICS & LIGHTING LABORATORIES, INC
[ISSUEDATE] 2023-07-20
[MANUFAC] WILLIAMS INDOOR
[OTHER] H.E. WILLIAMS, INC - CARTHAGE, MO
[LUMINAIRE] 96 INCH LOW PROFILE LED HIGHBAY LUMINAIRE
[MORE] WHITE REFLECTOR w/.118"THK FROSTED ACRYLIC LENS
[MORE] 0-10V LED DRIVERS
[LUMCAT] GL-8-L600-940-SAF118-DIM-UNV
[LAMPCAT] 22 INCH HLM LED ARRAYS
[_SEARCH_SOURCETYPE] LED
[_SEARCH_APPLICATION] Indoor, Commercial, Industrial, Manufacturing, High Bay
[_SEARCH_MOUNTING] Cable, Pendant, Suspended

CHARACTERISTICS

Lumens Per Lamp	N.A. (absolute)
Total Lamp Lumens	N.A. (absolute)
Luminaire Lumens	45177
Total Luminaire Efficiency	N.A.
Luminaire Efficacy Rating (LER)	113
Total Luminaire Watts	400
Ballast Factor	1.00
CIE Type	Direct
Spacing Criterion (0-180)	1.32
Spacing Criterion (90-270)	1.26
Spacing Criterion (Diagonal)	1.38
Basic Luminous Shape	Rectangular
Luminous Length (0-180)	8.00 ft
Luminous Width (90-270)	1.00 ft
Luminous Height	0.00 ft

LUMINANCE DATA (cd/sq.m)

Angle In Degrees	Average 0-Deg	Average 45-Deg	Average 90-Deg
45	22998	21913	19077
55	20793	17777	16440
65	16372	13594	13031
75	11288	9243	9218
85	4031	3699	4005

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CANDELA TABULATION

	0.0	22.5	45.0	67.5	90.0
0	17444.886	17444.886	17444.886	17444.886	17444.886
5	17711.182	17456.464	17342.337	17251.366	17224.902
10	17560.667	17271.214	17196.783	17092.581	17069.424
15	17277.830	16993.340	16933.795	16799.820	16783.280
20	16808.090	16604.646	16516.984	16315.194	16353.236
25	16202.721	16055.514	15933.117	15698.247	15754.483
30	15458.415	15332.710	15240.085	14944.016	14904.320
35	14538.783	14351.879	14328.723	13935.068	13645.615
40	13423.978	13238.728	13113.023	12501.038	11894.015
45	12097.458	11955.213	11526.824	10660.120	10034.903
50	10574.111	10440.136	9616.437	8842.359	8495.016
55	8872.131	8686.881	7585.308	7201.577	7014.673
60	6996.479	6826.116	5803.935	5466.516	5514.483
65	5147.292	4960.388	4273.972	4045.718	4096.993
70	3561.092	3220.365	2973.917	2801.900	2836.634
75	2173.374	1887.230	1779.719	1685.440	1774.757
80	1033.759	891.514	840.239	822.045	873.319
85	261.334	243.140	239.832	249.756	259.680
90	0.000	0.000	0.000	0.000	0.000

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ZONAL LUMEN SUMMARY

Zone	Lumens	%Lamp	%Fixt
0-20	6436.49	N.A.	14.20
0-30	13771.41	N.A.	30.50
0-40	22607.53	N.A.	50.00
0-60	38329.62	N.A.	84.80
0-80	44803.2	N.A.	99.20
0-90	45176.92	N.A.	100.00
10-90	43522.91	N.A.	96.30
20-40	16171.04	N.A.	35.80
20-50	24873.44	N.A.	55.10
40-70	20195.31	N.A.	44.70
60-80	6473.59	N.A.	14.30
70-80	2000.36	N.A.	4.40
80-90	373.72	N.A.	0.80
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	45176.92	N.A.	100.00

Total Luminaire Efficiency = N.A.%

ZONAL LUMEN SUMMARY

Zone	Lumens
0-10	1654.01
10-20	4782.48
20-30	7334.92
30-40	8836.12
40-50	8702.39
50-60	7019.69
60-70	4473.23
70-80	2000.36
80-90	373.72
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	110	106	102	98	107	103	100	97	99	96	94	95	93	91	92	90	88	86
2	101	93	87	81	98	91	85	80	88	83	79	84	80	77	81	78	75	73
3	92	82	75	68	90	81	74	68	78	72	67	75	70	66	73	68	64	62
4	85	73	65	59	82	72	64	58	69	63	57	67	61	57	65	60	56	54
5	78	66	57	51	76	65	57	50	63	55	50	61	54	49	59	53	49	47
6	72	59	51	45	70	58	50	44	57	49	44	55	48	44	53	48	43	41
7	67	54	45	39	65	53	45	39	52	44	39	50	44	39	49	43	38	37
8	62	49	41	35	61	49	41	35	47	40	35	46	40	35	45	39	35	33
9	58	45	37	32	57	45	37	32	44	36	32	42	36	31	41	36	31	29
10	55	42	34	29	53	41	34	29	40	33	29	39	33	29	38	33	28	27

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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	22.7	24.2	23.0	24.6	24.9	21.2	22.8	21.6	23.1	23.4
	3H	23.9	25.3	24.3	25.6	26.0	22.5	23.9	22.9	24.2	24.6
	4H	24.3	25.6	24.7	26.0	26.3	22.9	24.2	23.3	24.5	24.9
	6H	24.5	25.7	24.9	26.1	26.5	23.1	24.3	23.5	24.7	25.1
	8H	24.5	25.7	25.0	26.1	26.5	23.2	24.3	23.6	24.7	25.1
	12H	24.5	25.6	24.9	26.0	26.4	23.2	24.3	23.6	24.6	25.1
4H	2H	23.0	24.3	23.4	24.6	25.0	21.7	23.1	22.1	23.4	23.8
	3H	24.4	25.5	24.8	25.9	26.3	23.2	24.3	23.6	24.7	25.1
	4H	24.9	25.8	25.3	26.2	26.7	23.7	24.6	24.1	25.1	25.5
	6H	25.1	26.0	25.6	26.4	26.9	24.0	24.8	24.4	25.3	25.7
	8H	25.2	26.0	25.7	26.4	26.9	24.0	24.8	24.5	25.3	25.7
	12H	25.2	25.9	25.7	26.4	26.9	24.1	24.8	24.5	25.2	25.7
8H	4H	24.9	25.7	25.4	26.2	26.7	23.9	24.6	24.3	25.1	25.6
	6H	25.3	25.9	25.8	26.4	26.9	24.2	24.9	24.7	25.3	25.8
	8H	25.3	25.9	25.9	26.4	26.9	24.3	24.9	24.8	25.4	25.9
	12H	25.4	25.9	25.9	26.4	27.0	24.4	24.9	24.9	25.4	25.9
12H	4H	24.9	25.6	25.4	26.1	26.6	23.9	24.6	24.3	25.0	25.5
	6H	25.3	25.9	25.8	26.3	26.9	24.2	24.8	24.7	25.3	25.8
	8H	25.4	25.9	25.9	26.4	26.9	24.3	24.8	24.8	25.3	25.9

Maximum UGR = 27.0

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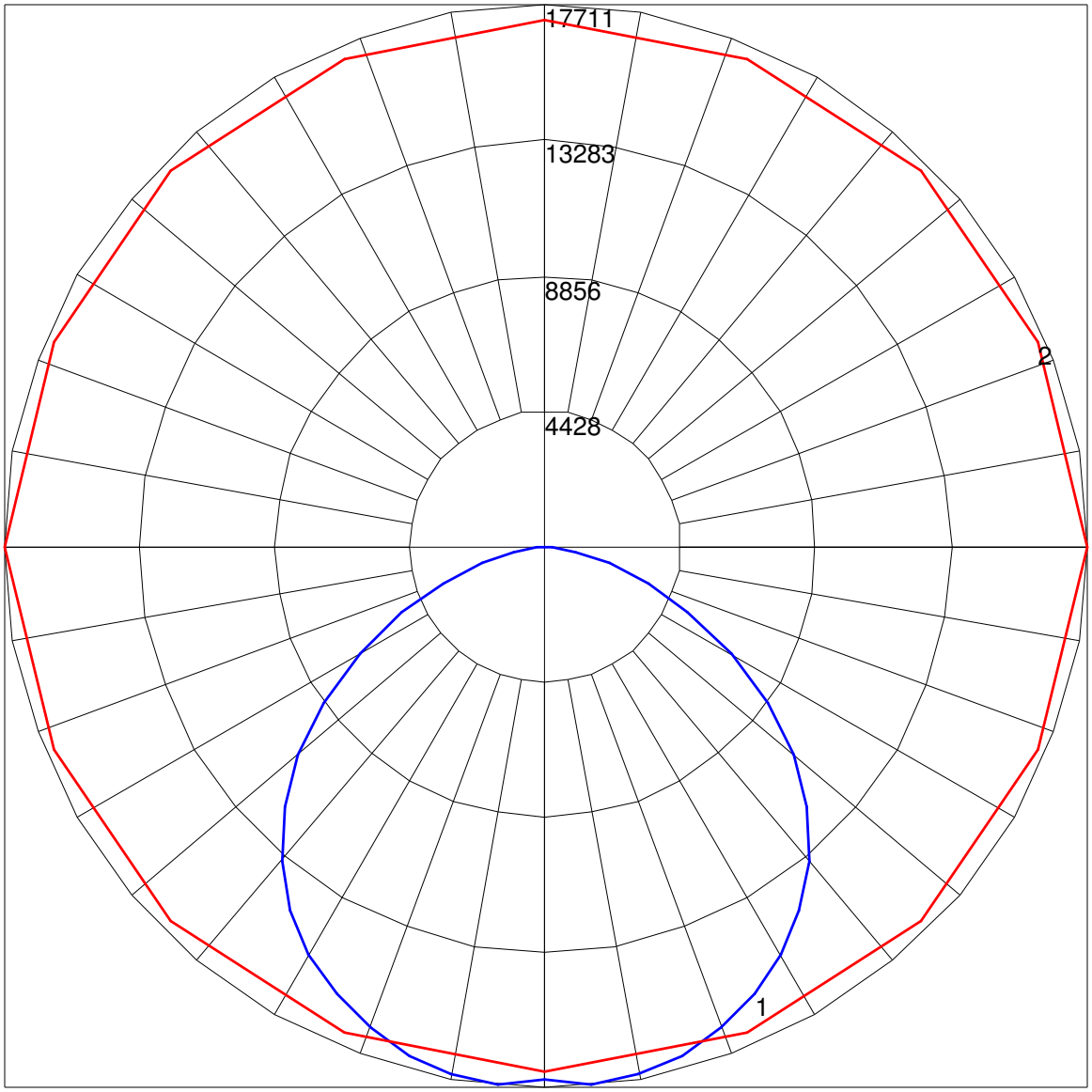
POLAR GRAPH



Maximum Candela = 17711.182 Located At Horizontal Angle = 0, Vertical Angle = 5
1 - Vertical Plane Through Horizontal Angles (0 - 180) (Through Max. Cd.)
2 - Horizontal Cone Through Vertical Angle (5) (Through Max. Cd.)

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