H.E. WILLIAMS, INC.

IES INDOOR REPORT
PHOTOMETRIC FILENAME : GL-8-L600-950-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-L600-950-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	46810
Total Luminaire Efficiency	N.A.
Luminaire Efficacy Rating (LER)	117
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	23829	22705	19766
55	21544	18419	17034
65	16964	14086	13502
75	11696	9577	9551
85	4176	3833	4150

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CANDELA TABULATION

	0.0	22.5	45.0	67.5	90.0
0	18075.417	18075.417	18075.417	18075.417	18075.417
5	18351.338	18087.413	17969.161	17874.902	17847.482
10	18195.382	17895.468	17818.347	17710.378	17686.385
15	17902.323	17607.550	17545.853	17407.036	17389.898
20	17415.605	17204.808	17113.977	16904.893	16944.311
25	16788.355	16635.827	16509.006	16265.647	16323.916
30	16017.147	15886.898	15790.925	15484.156	15443.025
35	15064.275	14870.616	14846.623	14438.739	14138.825
40	13909.176	13717.231	13586.982	12952.878	12323.914
45	12534.711	12387.325	11943.451	11045.421	10397.606
50	10956.304	10817.486	9964.016	9161.959	8802.061
55	9192.807	9000.862	7859.473	7461.872	7268.213
60	7249.361	7072.840	6013.714	5664.099	5713.799
65	5333.336	5139.677	4428.451	4191.947	4245.075
70	3689.805	3336.763	3081.407	2903.172	2939.162
75	2251.929	1955.442	1844.046	1746.359	1838.904
80	1071.123	923.737	870.609	851.757	904.885
85	270.780	251.928	248.501	258.783	269.066
90	0.000	0.000	0.000	0.000	0.000

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ZONAL LUMEN SUMMARY

Zone	Lumens	%Lamp	%Fixt
0-20	6669.13	N.A.	14.20
0-30	14269.17	N.A.	30.50
0-40	23424.67	N.A.	50.00
0-60	39715.01	N.A.	84.80
0-80	46422.58	N.A.	99.20
0-90	46809.8	N.A.	100.00
10-90	45096.01	N.A.	96.30
20-40	16755.53	N.A.	35.80
20-50	25772.46	N.A.	55.10
40-70	20925.25	N.A.	44.70
60-80	6707.57	N.A.	14.30
70-80	2072.66	N.A.	4.40
80-90	387.23	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	46809.8	N.A.	100.00

Total Luminaire Efficiency = N.A.%

ZONAL LUMEN SUMMARY

Zone	Lumens
0-10	1713.79
10-20	4955.34
20-30	7600.03
30-40	9155.5
40-50	9016.93
50-60	7273.41
60-70	4634.91
70-80	2072.66
80-90	387.23
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	22.9	24.4	23.2	24.8	25.1	21.4	23.0	21.8	23.3	23.6
	3H	24.1	25.5	24.5	25.8	26.2	22.7	24.1	23.1	24.4	24.8
	4H	24.5	25.8	24.9	26.2	26.5	23.1	24.4	23.5	24.7	25.1
	6H	24.7	25.9	25.1	26.3	26.7	23.3	24.5	23.7	24.9	25.3
	8H	24.7	25.9	25.2	26.3	26.7	23.4	24.5	23.8	24.9	25.3
	12H	24.7	25.8	25.1	26.2	26.6	23.4	24.5	23.8	24.8	25.3
4H	2H	23.2	24.5	23.6	24.8	25.2	21.9	23.3	22.3	23.6	24.0
	3H	24.6	25.7	25.0	26.1	26.5	23.4	24.5	23.8	24.9	25.3
	4H	25.1	26.0	25.5	26.4	26.9	23.9	24.8	24.3	25.3	25.7
	6H	25.3	26.2	25.8	26.6	27.1	24.2	25.0	24.6	25.5	25.9
	8H	25.4	26.2	25.9	26.6	27.1	24.2	25.0	24.7	25.5	25.9
	12H	25.4	26.1	25.9	26.6	27.1	24.3	25.0	24.7	25.4	25.9
8H	4H	25.1	25.9	25.6	26.4	26.9	24.1	24.8	24.5	25.3	25.8
	6H	25.5	26.1	26.0	26.6	27.1	24.4	25.1	24.9	25.5	26.0
	8H	25.5	26.1	26.1	26.6	27.1	24.5	25.1	25.0	25.6	26.1
	12H	25.6	26.1	26.1	26.6	27.2	24.6	25.1	25.1	25.6	26.1
12H	4H	25.1	25.8	25.6	26.3	26.8	24.1	24.8	24.5	25.2	25.7
	6H	25.5	26.1	26.0	26.5	27.1	24.4	25.0	24.9	25.5	26.0
	8H	25.6	26.1	26.1	26.6	27.1	24.5	25.0	25.0	25.5	26.1

Maximum UGR = 27.2

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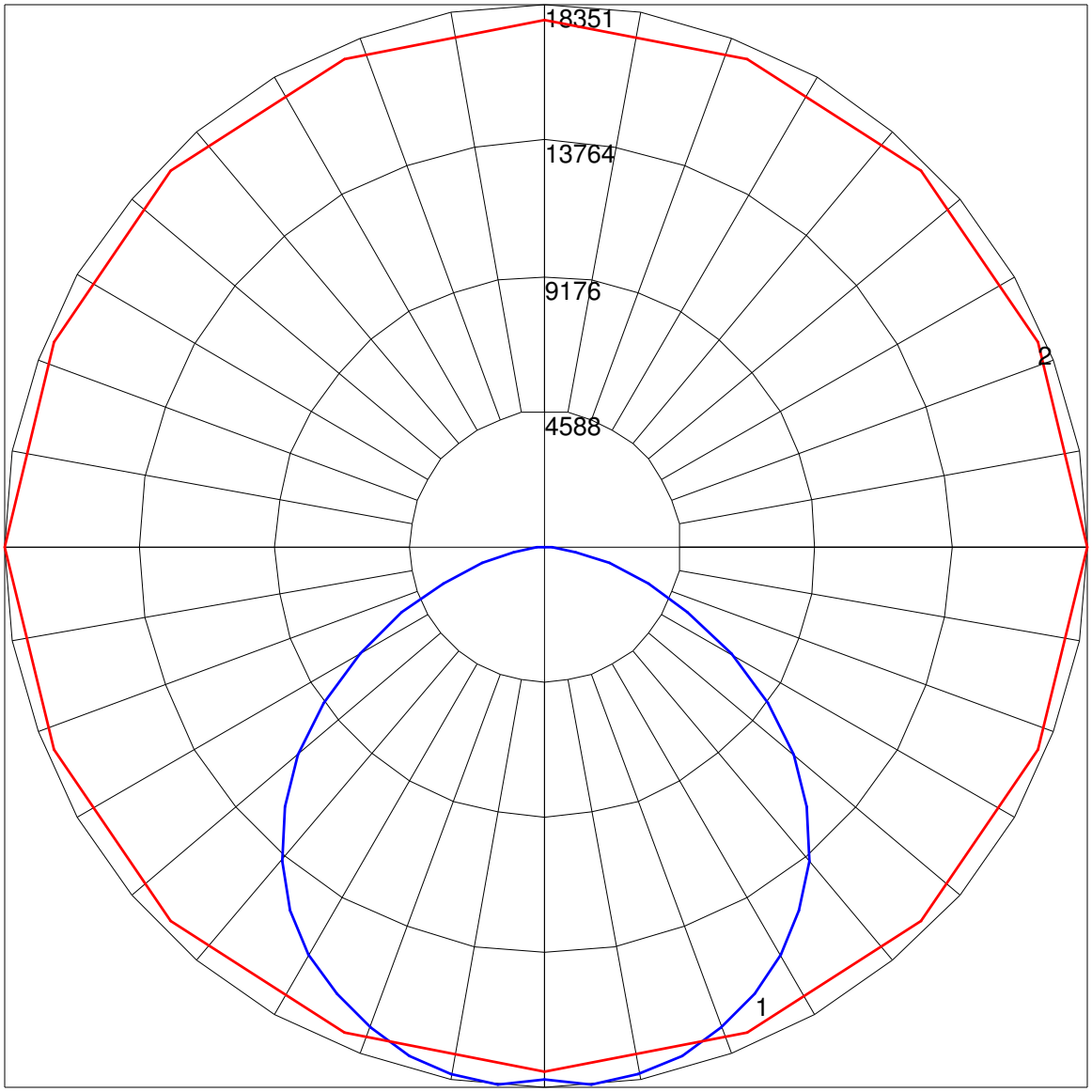
POLAR GRAPH



Maximum Candela = 18351.338 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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