



IES INDOOR REPORT

PHOTOMETRIC FILENAME : GA-8-L70-830-N-DIM-UNV_.IES

DESCRIPTION INFORMATION (From Photometric File)

IESNA:LM-63-2002

[TEST] GEN FROM BALLABS TEST NO. 19576.0

[TESTLAB] BUILDING ACOUSTICS & LIGHTING LABORATORIES, INC

[ISSUEDATE] 2023-05-11

[MANUFAC] WILLIAMS INDOOR

[OTHER] H.E. WILLIAMS, INC - CARTHAGE, MO

[LUMINAIRE] 8' LED AISLE LUMINAIRE

[MORE] WHITE FLAT REFLECTOR w/CLEAR ACRYLIC ROD OPTIC

[LUMCAT] GA-8-L70-830-N-DIM-UNV

[LAMPCAT] HLM 80 CRI LED

CHARACTERISTICS

Lumens Per Lamp	N.A. (absolute)
Total Lamp Lumens	N.A. (absolute)
Luminaire Lumens	6812
Total Luminaire Efficiency	N.A.
Luminaire Efficacy Rating (LER)	135
Total Luminaire Watts	50.3
Ballast Factor	1.00
CIE Type	Direct
Spacing Criterion (0-180)	1.46
Spacing Criterion (90-270)	0.58
Spacing Criterion (Diagonal)	0.68
Basic Luminous Shape	Rectangular
Luminous Length (0-180)	8.00 ft
Luminous Width (90-270)	0.39 ft
Luminous Height	0.00 ft

LUMINANCE DATA (cd/sq.m)

Angle In Degrees	Average 0-Deg	Average 45-Deg	Average 90-Deg
45	28504	1960	1349
55	20560	1154	915
65	12240	877	877
75	5884	1246	1551
85	2125	3542	4959

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CANDELA TABULATION

	<u>0.0</u>	<u>22.5</u>	<u>45.0</u>	<u>67.5</u>	<u>90.0</u>
0	6848.510	6848.510	6848.510	6848.510	6848.510
5	6905.491	6857.352	6765.003	6646.130	6637.288
10	6976.226	6733.566	6270.842	5808.118	5697.104
15	7002.751	6460.451	5415.147	4599.731	4334.475
20	6928.087	5640.123	3523.971	2407.933	2019.873
25	6892.719	4833.549	2350.952	1433.363	1146.494
30	7029.277	3713.580	1371.470	788.890	670.016
35	6504.660	2443.300	811.486	515.775	471.566
40	6231.545	1463.819	524.617	370.376	348.762
45	5772.751	891.063	396.901	295.711	273.115
50	4643.940	639.561	295.711	228.906	216.134
55	3377.590	467.636	189.609	150.312	150.312
60	2328.356	295.711	123.786	114.944	123.786
65	1481.502	150.312	106.102	106.102	106.102
70	838.012	114.944	101.190	106.102	110.032
75	436.198	110.032	92.348	114.944	114.944
80	202.380	106.102	101.190	123.786	123.786
85	53.051	92.348	88.419	114.944	123.786
90	3.930	53.051	53.051	74.665	83.506
95	0.000	0.000	21.613	44.209	44.209
100	0.000	0.000	3.930	12.772	12.772
105	0.000	0.000	0.000	3.930	3.930
110	0.000	0.000	0.000	0.000	0.000
115	0.000	0.000	0.000	0.000	0.000
120	0.000	0.000	0.000	0.000	0.000
125	0.000	0.000	0.000	0.000	0.000
130	0.000	0.000	0.000	0.000	0.000
135	0.000	0.000	0.000	0.000	0.000
140	0.000	0.000	0.000	0.000	0.000
145	0.000	0.000	0.000	0.000	0.000
150	0.000	0.000	0.000	0.000	0.000
155	0.000	0.000	0.000	0.000	0.000
160	0.000	0.000	0.000	0.000	0.000
165	0.000	0.000	0.000	0.000	0.000
170	0.000	0.000	0.000	0.000	0.000
175	0.000	0.000	0.000	0.000	0.000
180	0.000	0.000	0.000	0.000	0.000

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ZONAL LUMEN SUMMARY

Zone	Lumens	%Lamp	%Fixt
0-20	2117.62	N.A.	31.10
0-30	3577.17	N.A.	52.50
0-40	4740.74	N.A.	69.60
0-60	6215.23	N.A.	91.20
0-80	6679.6	N.A.	98.10
0-90	6780.92	N.A.	99.50
10-90	6151.5	N.A.	90.30
20-40	2623.12	N.A.	38.50
20-50	3512.12	N.A.	51.60
40-70	1775.36	N.A.	26.10
60-80	464.37	N.A.	6.80
70-80	163.49	N.A.	2.40
80-90	101.32	N.A.	1.50
90-110	31.25	N.A.	0.50
90-120	31.25	N.A.	0.50
90-130	31.25	N.A.	0.50
90-150	31.25	N.A.	0.50
90-180	31.25	N.A.	0.50
110-180	0.00	N.A.	0.00
0-180	6812.17	N.A.	100.00

Total Luminaire Efficiency = N.A. %

ZONAL LUMEN SUMMARY

Zone	Lumens
0-10	629.43
10-20	1488.2
20-30	1459.54
30-40	1163.57
40-50	889.00
50-60	585.49
60-70	300.87
70-80	163.49
80-90	101.32
90-100	28.93
100-110	2.32
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	111	108	104	101	109	105	102	100	101	99	97	97	95	94	94	92	91	89
2	104	98	93	88	102	96	91	87	92	89	85	89	86	83	86	84	81	79
3	97	89	83	78	95	88	82	77	85	80	76	82	78	75	80	76	73	71
4	91	82	75	70	89	81	74	69	78	73	68	76	71	67	74	70	67	65
5	86	75	68	63	84	74	68	63	72	67	62	71	65	61	69	64	61	59
6	81	70	63	58	79	69	62	57	67	61	57	66	60	56	64	60	56	54
7	76	65	58	53	74	64	57	53	63	57	52	61	56	52	60	55	52	50
8	72	61	54	49	70	60	53	49	59	53	49	58	52	48	57	52	48	46
9	68	57	50	45	67	56	50	45	55	49	45	54	49	45	53	48	45	43
10	65	54	47	43	63	53	47	42	52	46	42	51	46	42	50	46	42	40

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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

X=2H	Y=2H	17.3	18.6	17.7	18.9	19.2	6.7	6.7	6.7	6.7	6.7
	3H	19.4	20.6	19.8	20.9	21.3	7.3	8.5	7.7	8.8	9.2
	4H	20.1	21.1	20.5	21.5	21.9	9.2	10.3	9.6	10.6	11.0
	6H	20.4	21.5	20.9	21.8	22.2	11.4	12.5	11.9	12.8	13.2
	8H	20.5	21.5	21.0	21.9	22.3	12.7	13.6	13.1	14.0	14.4
	12H	20.6	21.5	21.0	21.9	22.3	14.1	15.0	14.5	15.4	15.8

UGR Viewed Endwise

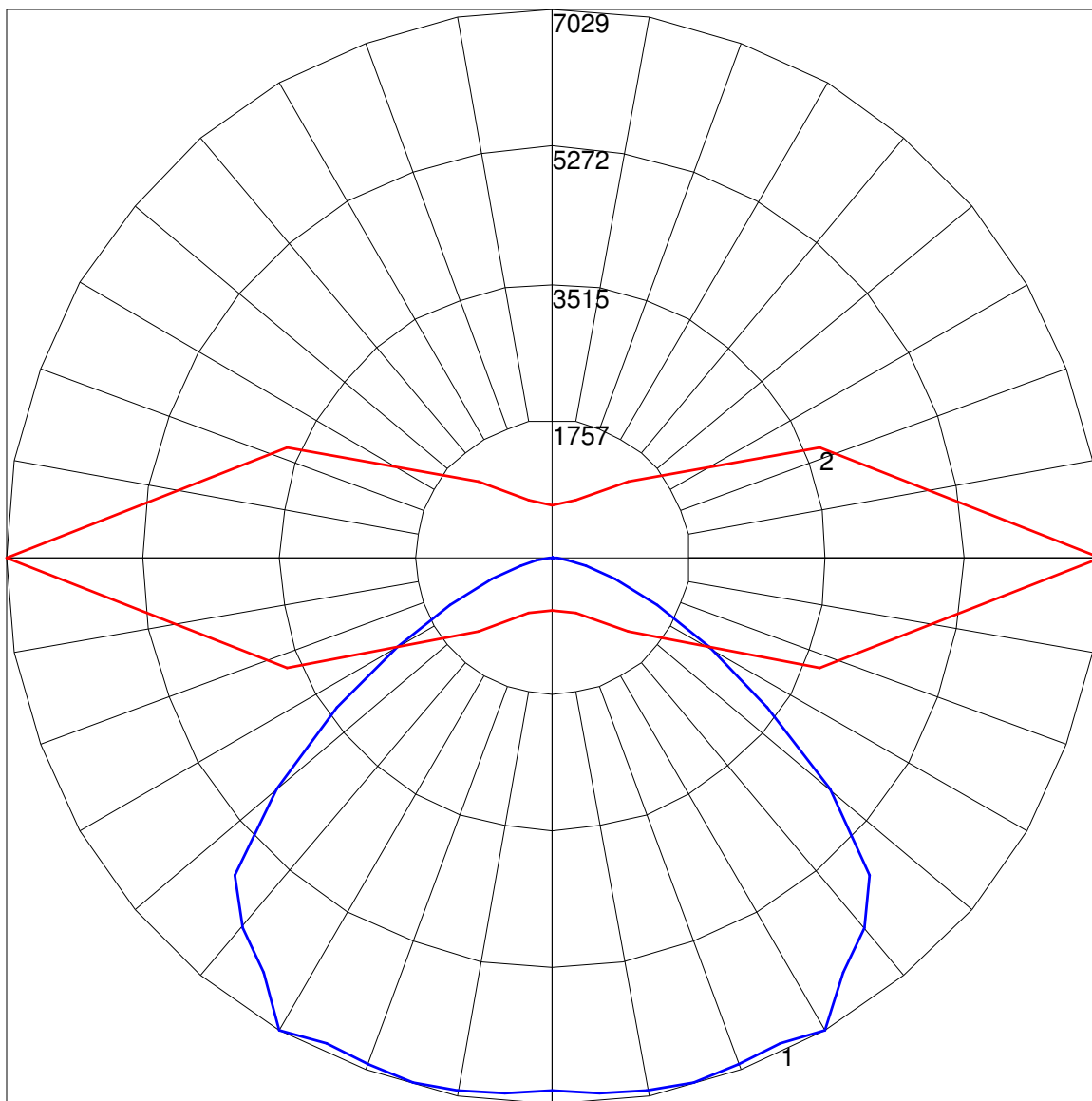
4H	2H	17.1	18.2	17.5	18.5	18.9	6.7	6.7	6.7	6.8	7.2
	3H	19.2	20.1	19.7	20.5	20.9	8.4	9.3	8.8	9.7	10.1
	4H	19.9	20.7	20.3	21.1	21.6	10.5	11.3	10.9	11.7	12.2
	6H	20.4	21.1	20.9	21.5	22.0	13.0	13.7	13.5	14.2	14.7
	8H	20.6	21.2	21.0	21.7	22.1	14.4	15.0	14.8	15.5	15.9
	12H	20.7	21.3	21.2	21.7	22.2	15.9	16.4	16.4	16.9	17.4

8H	4H	19.8	20.5	20.3	20.9	21.4	11.1	11.8	11.6	12.3	12.7
	6H	20.4	20.9	20.9	21.4	21.9	14.0	14.5	14.5	15.0	15.5
	8H	20.6	21.1	21.1	21.6	22.1	15.5	16.0	16.0	16.5	17.0
	12H	20.8	21.3	21.3	21.7	22.3	17.2	17.7	17.7	18.2	18.7

12H	4H	19.8	20.4	20.3	20.8	21.3	11.4	12.0	11.9	12.5	12.9
	6H	20.4	20.9	20.9	21.3	21.9	14.2	14.7	14.8	15.2	15.7
	8H	20.7	21.1	21.2	21.6	22.2	15.9	16.3	16.4	16.8	17.4

Maximum UGR = 22.3

POLAR GRAPH



Maximum Candela = 7029.277 Located At Horizontal Angle = 0, Vertical Angle = 30
1 - Vertical Plane Through Horizontal Angles (0 - 180) (Through Max. Cd.)
2 - Horizontal Cone Through Vertical Angle (30) (Through Max. Cd.)