



IES INDOOR REPORT

PHOTOMETRIC FILENAME : GA-8-L110-840-N-(L90)-DRV-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] 03-24-2022
 [MANUFAC] WILLIAMS INDOOR
 [OTHER] H.E. WILLIAMS, INC - CARTHAGE, MO
 [LUMINAIRE] 8' LED STRIP LUMINAIRE
 [MORE] WHITE FLAT REFLECTOR
 [MORE] w/CLEAR ACRYLIC ROD LED DIFFUSERS
 [LUMCAT] GA-8-L110-840-N-(L90)-DRV-UNV
 [LAMPCAT] HLM 80 CRI 4000K CCT

CHARACTERISTICS

Lumens Per Lamp	N.A. (absolute)
Total Lamp Lumens	N.A. (absolute)
Luminaire Lumens	9140
Total Luminaire Efficiency	N.A.
Luminaire Efficacy Rating (LER)	147
Total Luminaire Watts	62
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	38245	2629	1809
55	27586	1549	1228
65	16422	1176	1176
75	7895	1671	2080
85	2852	4752	6653

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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	9188.775	9188.775	9188.775	9188.775	9188.775
5	9265.227	9200.638	9076.733	8917.237	8905.374
10	9360.134	9034.552	8413.707	7792.861	7643.911
15	9395.723	8668.108	7265.604	6171.546	5815.647
20	9295.545	7567.459	4728.179	3230.769	2710.102
25	9248.091	6485.264	3154.316	1923.171	1538.273
30	9431.313	4982.581	1840.128	1058.469	898.974
35	8727.425	3278.222	1088.786	692.025	632.709
40	8360.981	1964.033	703.888	496.940	467.941
45	7745.408	1195.556	532.530	396.761	366.444
50	6230.862	858.111	396.761	307.127	289.991
55	4531.776	627.436	254.402	201.676	201.676
60	3123.999	396.761	166.086	154.223	166.086
65	1987.760	201.676	142.359	142.359	142.359
70	1124.376	154.223	135.769	142.359	147.632
75	585.255	147.632	123.905	154.223	154.223
80	271.537	142.359	135.769	166.086	166.086
85	71.180	123.905	118.633	154.223	166.086
90	5.273	71.180	71.180	100.179	112.042
95	0.000	0.000	28.999	59.316	59.316
100	0.000	0.000	5.273	17.136	17.136
105	0.000	0.000	0.000	5.273	5.273
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	2841.26	N.A.	31.10
0-30	4799.55	N.A.	52.50
0-40	6360.74	N.A.	69.60
0-60	8339.1	N.A.	91.20
0-80	8962.14	N.A.	98.10
0-90	9098.09	N.A.	99.50
10-90	8253.58	N.A.	90.30
20-40	3519.49	N.A.	38.50
20-50	4712.28	N.A.	51.60
40-70	2382.04	N.A.	26.10
60-80	623.05	N.A.	6.80
70-80	219.36	N.A.	2.40
80-90	135.95	N.A.	1.50
90-110	41.93	N.A.	0.50
90-120	41.93	N.A.	0.50
90-130	41.93	N.A.	0.50
90-150	41.93	N.A.	0.50
90-180	41.93	N.A.	0.50
110-180	0.00	N.A.	0.00
0-180	9140.02	N.A.	100.00

Total Luminaire Efficiency = N.A. %

ZONAL LUMEN SUMMARY

Zone	Lumens
0-10	844.51
10-20	1996.74
20-30	1958.3
30-40	1561.19
40-50	1192.79
50-60	785.57
60-70	403.69
70-80	219.36
80-90	135.95
90-100	38.81
100-110	3.12
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

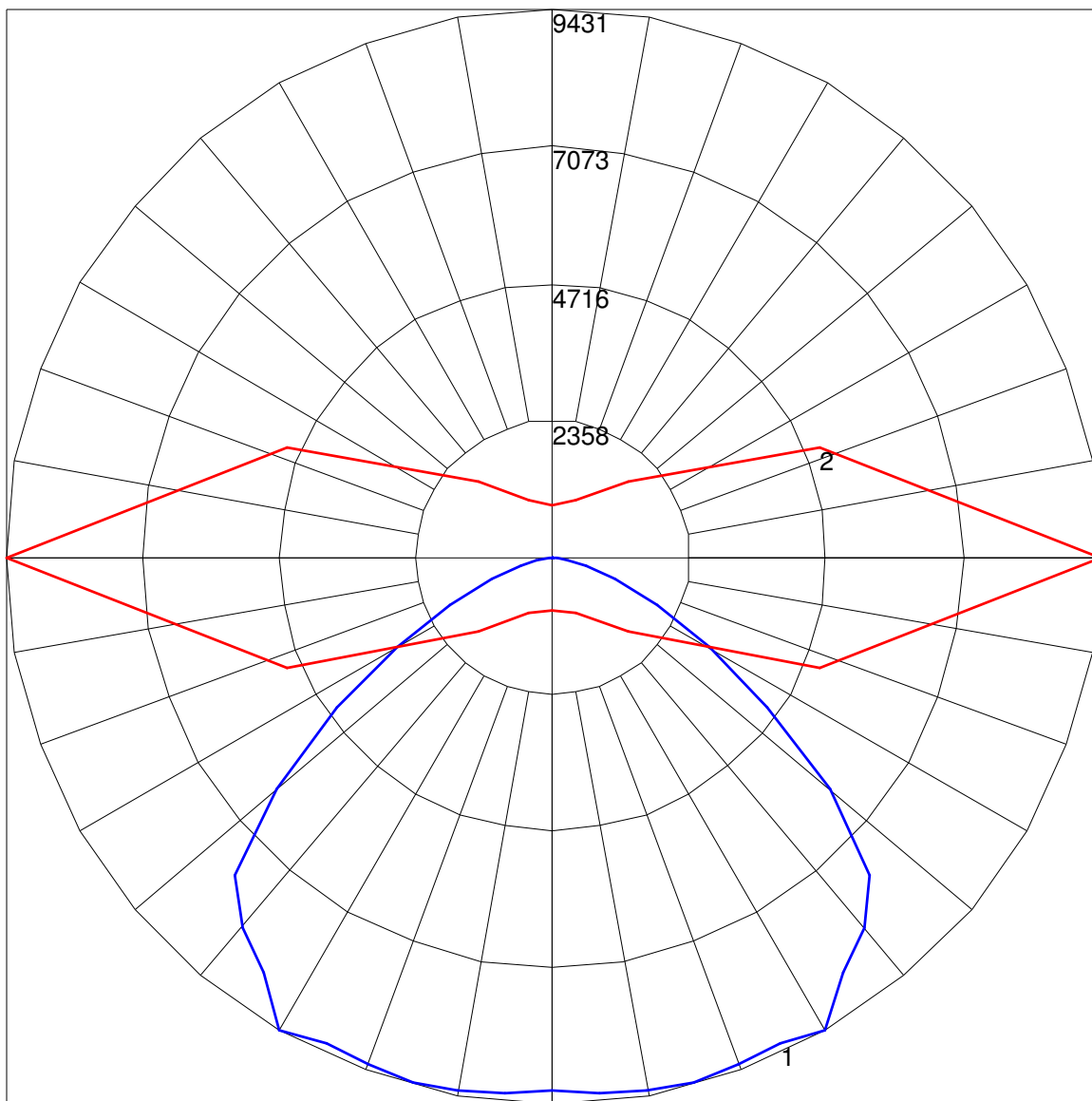
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UGR TABLE - CORRECTED

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					UGR Viewed Endwise				
X=2H	Y=2H	18.4	19.7	18.8	20.0	20.3	7.8	7.8	7.8	7.8	7.8
	3H	20.5	21.7	20.9	22.0	22.4	8.4	9.6	8.8	9.9	10.3
	4H	21.2	22.2	21.6	22.6	23.0	10.3	11.4	10.7	11.7	12.1
	6H	21.5	22.6	22.0	22.9	23.3	12.5	13.6	13.0	13.9	14.3
	8H	21.6	22.6	22.1	23.0	23.4	13.8	14.7	14.2	15.1	15.5
	12H	21.7	22.6	22.1	23.0	23.4	15.2	16.1	15.6	16.5	16.9
4H	2H	18.2	19.3	18.6	19.6	20.0	7.8	7.8	7.8	7.9	8.3
	3H	20.3	21.2	20.8	21.6	22.0	9.5	10.4	9.9	10.8	11.2
	4H	21.0	21.8	21.4	22.2	22.7	11.6	12.4	12.0	12.8	13.3
	6H	21.5	22.2	22.0	22.6	23.1	14.1	14.8	14.6	15.3	15.8
	8H	21.7	22.3	22.1	22.8	23.2	15.5	16.1	15.9	16.6	17.0
	12H	21.8	22.4	22.3	22.8	23.3	17.0	17.5	17.5	18.0	18.5
8H	4H	20.9	21.6	21.4	22.0	22.5	12.2	12.9	12.7	13.4	13.8
	6H	21.5	22.0	22.0	22.5	23.0	15.1	15.6	15.6	16.1	16.6
	8H	21.7	22.2	22.2	22.7	23.2	16.6	17.1	17.1	17.6	18.1
	12H	21.9	22.4	22.4	22.8	23.4	18.3	18.8	18.9	19.3	19.8
12H	4H	20.9	21.5	21.4	21.9	22.4	12.5	13.1	13.0	13.6	14.0
	6H	21.5	22.0	22.0	22.4	23.0	15.3	15.8	15.9	16.3	16.8
	8H	21.8	22.2	22.3	22.7	23.3	17.0	17.4	17.5	17.9	18.5

Maximum UGR = 23.4

POLAR GRAPH



Maximum Candela = 9431.313 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.)