

IES INDOOR REPORT

PHOTOMETRIC FILENAME : 96-8-L160-835-HIAFR-(L150)-EM10W-DIM-UNV (EMER MODE).IES

DESCRIPTION INFORMATION (From Photometric File)

IESNA:LM-63-2002

[TEST] GEN FROM BALLABS TEST NO. 20206.0

[TESTLAB] BUILDING ACOUSTICS & LIGHTING LABORATORIES, INC

[ISSUEDATE] 08-31-2023

[MANUFAC] WILLIAMS INDOOR

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

[LUMINAIRE] 8' ENCLOSED & GASKETED LED LUMINAIRE

[MORE] WHITE FLAT REFL w/HIAFR RIBBED ACRYLIC DROP LENS

[LUMCAT] 96-8-L160-835-HIAFR-(L150)-EM10W-DIM-UNV (EMER MODE)

[LAMPCAT] HLM 80 CRI 3500K CCT

[_SEARCH_SOURCETYPE] LED

[_SEARCH_APPLICATION] Indoor, Industrial, Manufacturing, Direct, Linear, Hose Down, Wet Location

[_SEARCH_MOUNTING] Surface, Suspended, Wall

[_SEARCH_CLASSIFICATION] IP65, IP66, IP67

CHARACTERISTICS

Lumens Per Lamp	N.A. (absolute)
Total Lamp Lumens	N.A. (absolute)
Luminaire Lumens	1436
Total Luminaire Efficiency	N.A.
Luminaire Efficacy Rating (LER)	144
Total Luminaire Watts	10
Ballast Factor	1.00
CIE Type	Direct
Spacing Criterion (0-180)	1.20
Spacing Criterion (90-270)	1.12
Spacing Criterion (Diagonal)	1.26
Basic Luminous Shape	Rectangular w/Sides
Luminous Length (0-180)	8.29 ft
Luminous Width (90-270)	0.50 ft
Luminous Height	0.17 ft

LUMINANCE DATA (cd/sq.m)

Angle In Degrees	Average 0-Deg	Average 45-Deg	Average 90-Deg
45	1165	877	889
55	960	773	782
65	747	679	660
75	501	510	507
85	270	396	392

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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	538.001	538.001	538.001	538.001	538.001
5	533.887	532.418	529.774	528.304	528.892
10	526.835	522.722	517.727	513.319	511.850
15	518.314	516.257	507.736	495.102	501.860
20	498.334	488.637	479.529	459.548	466.013
25	474.534	466.894	451.027	426.640	436.924
30	433.104	413.711	396.081	380.215	398.726
35	391.968	369.049	356.414	354.064	371.106
40	354.064	329.970	324.387	331.733	342.898
45	324.093	304.701	298.824	313.515	323.212
50	272.086	265.328	265.328	287.658	294.123
55	218.315	216.552	232.125	252.693	255.337
60	168.070	175.710	198.041	214.201	214.495
65	126.934	142.801	170.127	183.055	184.525
70	86.680	110.480	134.574	145.739	148.090
75	53.771	74.633	98.433	109.598	113.712
80	28.208	50.245	73.163	82.272	86.680
85	11.165	32.027	51.420	59.647	63.467
90	3.526	17.042	31.440	39.667	41.724
95	0.588	11.165	24.094	32.027	34.378
100	0.000	7.640	19.980	26.738	29.089
105	0.000	4.701	15.867	22.331	24.682
110	0.000	3.526	13.222	18.805	20.274
115	0.000	2.351	9.109	14.398	16.454
120	0.000	0.000	6.758	11.753	13.222
125	0.000	0.000	3.820	8.227	9.109
130	0.000	0.000	0.000	6.170	6.758
135	0.000	0.000	0.000	0.000	4.701
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

IES INDOOR REPORT**PHOTOMETRIC FILENAME : 96-8-L160-835-HIAFR-(L150)-EM10W-DIM-UNV (EMER MODE)_IES****ZONAL LUMEN SUMMARY**

Zone	Lumens	%Lamp	%Fixt
0-20	192.29	N.A.	13.40
0-30	397.33	N.A.	27.70
0-40	626.85	N.A.	43.60
0-60	1074.49	N.A.	74.80
0-80	1334.14	N.A.	92.90
0-90	1384.2	N.A.	96.40
10-90	1333.91	N.A.	92.90
20-40	434.56	N.A.	30.30
20-50	672.09	N.A.	46.80
40-70	608.03	N.A.	42.30
60-80	259.65	N.A.	18.10
70-80	99.26	N.A.	6.90
80-90	50.06	N.A.	3.50
90-110	38.72	N.A.	2.70
90-120	47.37	N.A.	3.30
90-130	51.20	N.A.	3.60
90-150	51.91	N.A.	3.60
90-180	51.91	N.A.	3.60
110-180	13.19	N.A.	0.90
0-180	1436.11	N.A.	100.00

Total Luminaire Efficiency = N.A. %

ZONAL LUMEN SUMMARY

Zone	Lumens
0-10	50.29
10-20	141.99
20-30	205.05
30-40	229.52
40-50	237.52
50-60	210.11
60-70	160.39
70-80	99.26
80-90	50.06
90-100	23.82
100-110	14.90
110-120	8.65
120-130	3.83
130-140	0.71
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	118	118	118	118	115	115	115	115	109	109	109	104	104	104	99	99	99	96
1	107	102	98	94	104	100	96	92	95	91	88	90	88	85	86	84	82	80
2	98	89	82	76	95	87	81	75	83	78	73	79	75	71	75	72	69	66
3	89	78	70	64	86	77	69	63	73	67	61	70	64	60	67	62	58	56
4	82	70	61	54	79	68	60	54	65	58	52	62	56	51	60	55	50	48
5	75	62	53	47	73	61	53	46	58	51	45	56	50	45	54	48	44	42
6	70	56	47	41	67	55	47	41	53	45	40	51	44	39	49	43	39	37
7	65	51	42	36	63	50	42	36	48	41	35	46	40	35	45	39	34	32
8	60	47	38	32	58	46	38	32	44	37	32	43	36	31	41	35	31	29
9	56	43	35	29	55	42	34	29	41	34	29	39	33	28	38	32	28	26
10	53	40	32	27	51	39	31	26	38	31	26	37	30	26	35	30	26	24

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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	9.8	11.3	10.2	11.7	12.1	11.8	13.4	12.3	13.8	14.2
	3H	11.0	12.4	11.5	12.8	13.3	13.9	15.3	14.3	15.7	16.1
	4H	11.4	12.7	11.8	13.1	13.6	14.7	16.0	15.2	16.4	16.9
	6H	11.5	12.8	12.0	13.2	13.7	15.5	16.7	16.0	17.2	17.7
	8H	11.6	12.7	12.1	13.2	13.7	15.9	17.1	16.4	17.5	18.0
	12H	11.6	12.7	12.0	13.1	13.7	16.3	17.4	16.8	17.9	18.4

UGR Viewed Endwise

4H	2H	10.6	11.9	11.1	12.4	12.9	12.2	13.6	12.7	14.0	14.5
	3H	12.1	13.2	12.6	13.7	14.2	14.5	15.6	15.0	16.1	16.6
	4H	12.6	13.6	13.1	14.1	14.6	15.4	16.5	15.9	17.0	17.5
	6H	12.8	13.7	13.4	14.2	14.8	16.4	17.3	16.9	17.8	18.4
	8H	12.9	13.7	13.4	14.3	14.8	16.9	17.7	17.4	18.2	18.8
	12H	12.9	13.7	13.5	14.2	14.8	17.4	18.2	18.0	18.7	19.3

8H	4H	13.1	13.9	13.6	14.4	15.0	15.6	16.5	16.2	17.0	17.5
	6H	13.5	14.2	14.1	14.8	15.3	16.7	17.4	17.3	18.0	18.5
	8H	13.7	14.3	14.2	14.9	15.4	17.3	17.9	17.9	18.5	19.1
	12H	13.7	14.3	14.3	14.9	15.5	18.0	18.5	18.5	19.1	19.7

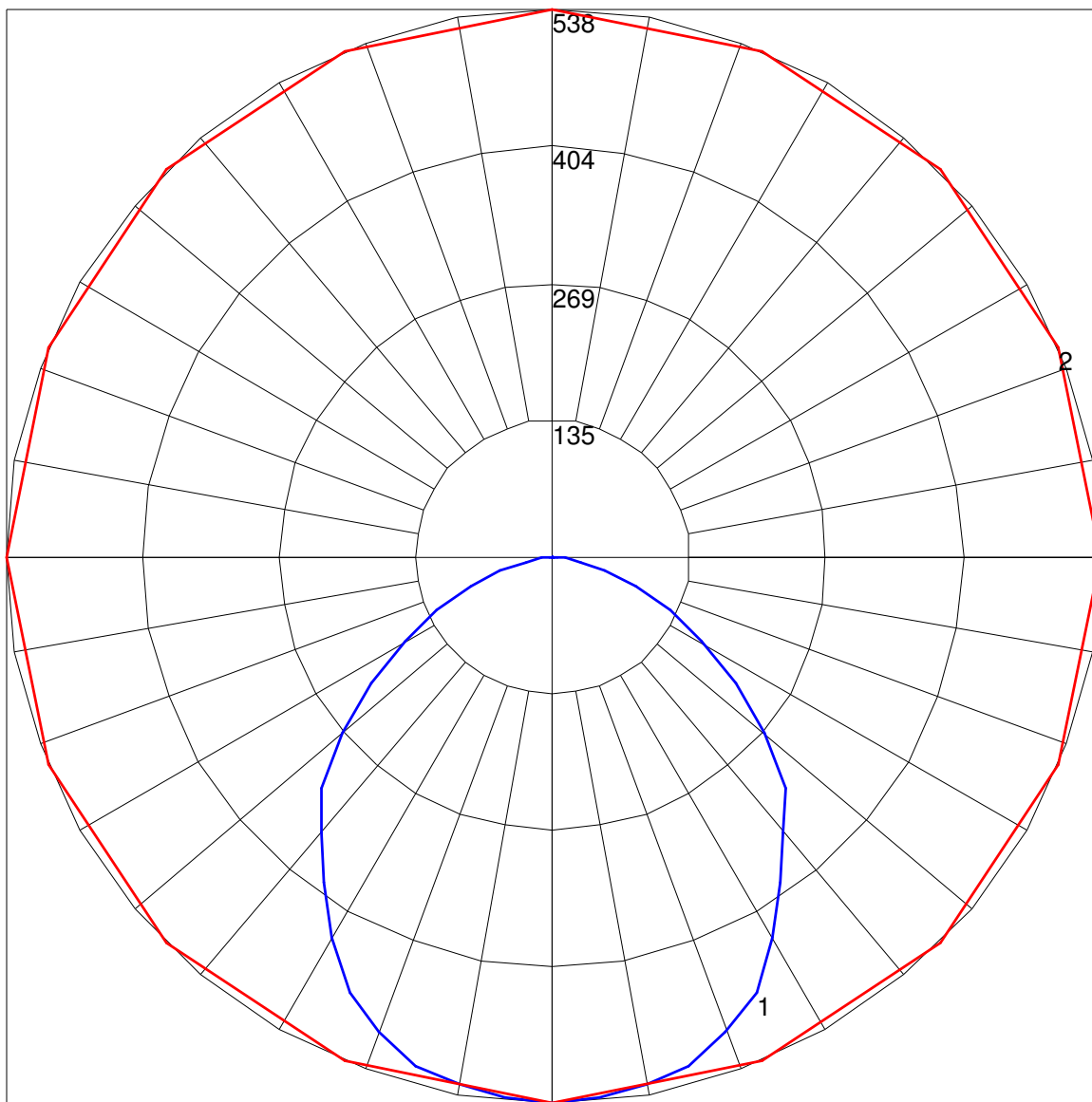
12H	4H	13.2	13.9	13.8	14.5	15.1	15.6	16.4	16.2	16.9	17.5
	6H	13.7	14.3	14.3	14.9	15.5	16.8	17.4	17.4	17.9	18.5
	8H	13.9	14.5	14.5	15.0	15.7	17.4	17.9	18.0	18.5	19.1

Maximum UGR = 19.7

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POLAR GRAPH



Maximum Candela = 538.001 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.)