

IES INDOOR REPORT

PHOTOMETRIC FILENAME : 96-4-L81-835-HIAFR-EM10W-DIM-UNV (EMER MODE)_IES

DESCRIPTION INFORMATION (From Photometric File)

IESNA:LM-63-2002
[TEST]GEN FROM BALLABS TEST NO. 20008.0
[TESTLAB] BUILDING ACOUSTICS & LIGHTING LABORATORIES, INC
[ISSUE DATE] 08-22-2023
[MANUFAC] WILLIAMS INDOOR
[OTHER] H.E. WILLIAMS, INC - CARTHAGE, MO
[LUMINAIRE] 2-56 LED 22"ARRAYS 4'VAPORTITE LUMINAIRE
[MORE] WHITE FLAT REFLECTOR w/HIAFR LENS
[LUMCAT] 96-4-L81-835-HIAFR-EM10W-DIM-UNV
[LAMPCAT] HLM 80 CRI 3500K CCT

CHARACTERISTICS

Lumens Per Lamp	N.A. (absolute)
Total Lamp Lumens	N.A. (absolute)
Luminaire Lumens	1303
Total Luminaire Efficiency	N.A.
Luminaire Efficacy Rating (LER)	130
Total Luminaire Watts	10
Ballast Factor	1.00
CIE Type	Direct
Spacing Criterion (0-180)	1.24
Spacing Criterion (90-270)	1.16
Spacing Criterion (Diagonal)	1.32
Basic Luminous Shape	Rectangular w/Sides
Luminous Length (0-180)	4.25 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	1911	1582	1510
55	1596	1307	1285
65	1222	1077	1170
75	798	896	1056
85	308	735	881

IES INDOOR REPORT**PHOTOMETRIC FILENAME : 96-4-L81-835-HIAFR-EM10W-DIM-UNV (EMER MODE)_.IES****CANDELA TABULATION**

	<u>0.0</u>	<u>22.5</u>	<u>45.0</u>	<u>67.5</u>	<u>90.0</u>
0	469.580	469.580	469.580	469.580	469.580
5	476.467	467.149	465.528	463.705	462.489
10	469.377	460.261	455.197	450.942	448.106
15	457.628	446.688	439.395	433.318	429.469
20	440.206	427.443	419.340	407.388	402.323
25	418.530	403.336	393.612	379.432	377.811
30	391.587	375.380	365.656	358.769	360.997
35	360.592	343.980	337.498	339.929	345.196
40	322.507	306.301	310.352	311.162	316.227
45	277.534	266.797	279.357	278.345	281.383
50	233.169	228.712	241.272	244.716	245.324
55	191.033	193.261	203.998	213.316	215.140
60	150.922	158.822	170.370	187.994	190.628
65	110.609	121.548	140.793	162.469	167.736
70	76.170	87.920	115.268	137.754	145.452
75	46.796	59.964	90.958	114.863	121.345
80	23.094	38.693	69.485	92.579	95.820
85	7.698	24.107	50.848	71.713	73.131
90	3.039	15.599	37.477	53.481	55.102
95	2.836	10.737	30.387	41.934	43.960
100	2.431	6.685	23.094	32.615	34.844
105	1.621	3.849	17.017	25.322	27.956
110	1.013	1.418	12.155	19.650	21.879
115	0.810	0.405	7.901	14.586	17.219
120	0.405	0.203	4.862	10.534	12.357
125	0.000	0.000	1.621	6.483	8.508
130	0.000	0.000	0.000	3.039	4.862
135	0.000	0.000	0.000	1.013	1.823
140	0.000	0.000	0.000	0.810	0.810
145	0.000	0.000	0.000	0.405	0.405
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 : 96-4-L81-835-HIAFR-EM10W-DIM-UNV (EMER MODE)_IES****ZONAL LUMEN SUMMARY**

Zone	Lumens	%Lamp	%Fixt
0-20	168.25	N.A.	12.90
0-30	349.98	N.A.	26.90
0-40	564.26	N.A.	43.30
0-60	959.91	N.A.	73.60
0-80	1193.49	N.A.	91.60
0-90	1245.96	N.A.	95.60
10-90	1201.76	N.A.	92.20
20-40	396.01	N.A.	30.40
20-50	608.80	N.A.	46.70
40-70	536.03	N.A.	41.10
60-80	233.58	N.A.	17.90
70-80	93.19	N.A.	7.10
80-90	52.48	N.A.	4.00
90-110	45.71	N.A.	3.50
90-120	53.83	N.A.	4.10
90-130	56.79	N.A.	4.40
90-150	57.40	N.A.	4.40
90-180	57.40	N.A.	4.40
110-180	11.69	N.A.	0.90
0-180	1303.37	N.A.	100.00

Total Luminaire Efficiency = N.A. %

ZONAL LUMEN SUMMARY

Zone	Lumens
0-10	44.20
10-20	124.05
20-30	181.73
30-40	214.28
40-50	212.79
50-60	182.86
60-70	140.39
70-80	93.19
80-90	52.48
90-100	29.31
100-110	16.40
110-120	8.12
120-130	2.95
130-140	0.52
140-150	0.10
150-160	0.00
160-170	0.00
170-180	0.00

IES INDOOR REPORT

PHOTOMETRIC FILENAME : 96-4-L81-835-HIAFR-EM10W-DIM-UNV (EMER MODE)_.IES

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	103	103	103	98	98	98	96
1	107	102	97	93	104	99	95	91	94	91	88	89	87	84	85	83	81	78
2	97	89	82	76	94	86	80	75	82	77	72	78	74	70	75	71	68	65
3	89	78	70	63	86	76	68	62	72	66	61	69	64	59	66	61	57	55
4	81	69	60	54	79	68	59	53	65	57	52	62	56	51	59	54	50	47
5	75	62	53	46	72	61	52	46	58	51	45	56	49	44	53	48	43	41
6	69	56	47	41	67	55	46	40	52	45	39	50	44	39	48	43	38	36
7	64	51	42	36	62	50	41	36	48	40	35	46	39	35	44	38	34	32
8	60	46	38	32	58	46	37	32	44	37	31	42	36	31	41	35	31	29
9	56	43	34	29	54	42	34	29	40	33	28	39	33	28	38	32	28	26
10	53	39	32	26	51	39	31	26	37	31	26	36	30	25	35	29	25	23

IES INDOOR REPORT

PHOTOMETRIC FILENAME : 96-4-L81-835-HIAFR-EM10W-DIM-UNV (EMER MODE)_IES

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	11.6	13.1	12.0	13.5	13.9	13.3	14.8	13.7	15.2	15.6
	3H	12.7	14.1	13.1	14.5	15.0	15.6	17.0	16.0	17.4	17.9
	4H	13.0	14.3	13.4	14.7	15.2	16.7	18.0	17.1	18.4	18.9
	6H	13.1	14.4	13.6	14.8	15.3	17.7	19.0	18.2	19.4	19.9
	8H	13.1	14.3	13.6	14.8	15.3	18.2	19.4	18.7	19.9	20.4
	12H	13.1	14.3	13.6	14.7	15.3	18.7	19.9	19.2	20.3	20.9

UGR Viewed Endwise

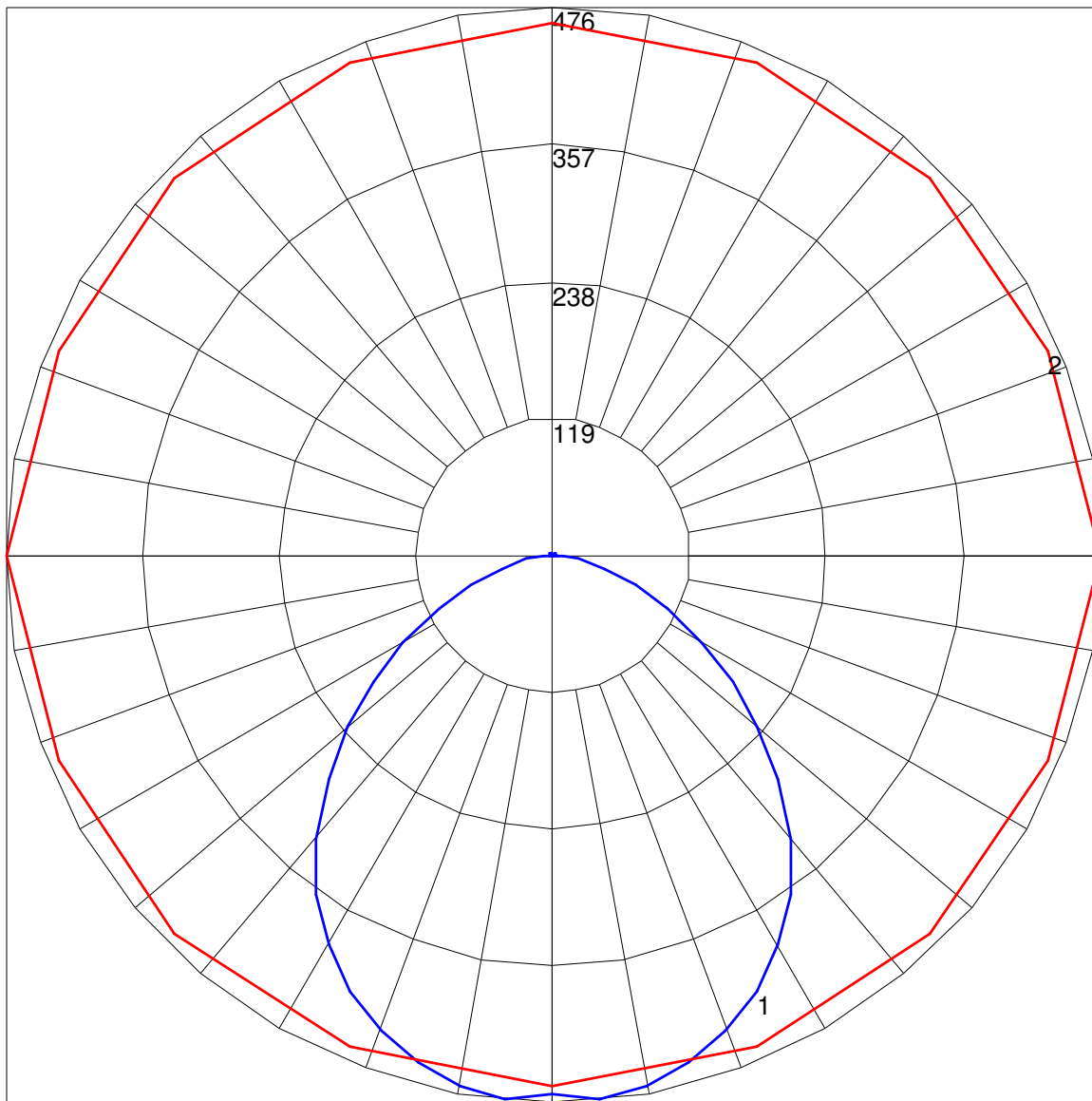
4H	2H	12.3	13.6	12.7	14.0	14.5	13.7	15.0	14.1	15.4	15.9
	3H	13.6	14.8	14.1	15.2	15.7	16.2	17.3	16.7	17.8	18.3
	4H	14.1	15.1	14.6	15.6	16.1	17.5	18.5	18.0	19.0	19.5
	6H	14.3	15.2	14.8	15.7	16.2	18.7	19.6	19.2	20.1	20.7
	8H	14.3	15.2	14.8	15.7	16.2	19.3	20.1	19.8	20.7	21.2
	12H	14.4	15.1	14.9	15.7	16.2	19.9	20.7	20.5	21.2	21.8

8H	4H	14.6	15.5	15.2	16.0	16.6	17.6	18.5	18.1	19.0	19.5
	6H	15.0	15.7	15.6	16.3	16.9	19.0	19.7	19.6	20.3	20.9
	8H	15.1	15.8	15.7	16.4	16.9	19.8	20.4	20.3	21.0	21.6
	12H	15.2	15.8	15.8	16.3	17.0	20.6	21.1	21.1	21.7	22.3

12H	4H	14.8	15.6	15.4	16.1	16.7	17.6	18.4	18.2	18.9	19.5
	6H	15.3	15.9	15.9	16.5	17.1	19.0	19.7	19.6	20.2	20.9
	8H	15.5	16.1	16.0	16.6	17.3	19.8	20.4	20.4	21.0	21.6

Maximum UGR = 22.3

POLAR GRAPH



Maximum Candela = 476.467 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.)