



IES INDOOR REPORT

PHOTOMETRIC FILENAME : 96-4-L40-850-HIAFR-EM10W-DIM-UNV_(EMER MODE).IES

DESCRIPTION INFORMATION (From Photometric File)

IESNA:LM-63-2002
 [TEST]GEN FROM BALLABS TEST NO. 20205.0
 [TESTLAB] BUILDING ACOUSTICS & LIGHTING LABORATORIES, INC
 [ISSUEDATE] 02-11-2022
 [MANUFAC] WILLIAMS INDOOR
 [OTHER] H.E. WILLIAMS, INC - CARTHAGE, MO
 [LUMINAIRE] 2-56 LED 22"ARRAYS 4'ENCLOSED & GASKETED LUMINAIRE
 [MORE] WHITE FLAT REFL w/HIAFR RIBBED ACRYLIC DROP LENS
 [MORE] OT150/120-277/1A4 DIM-1-G2 #57452
 [LUMCAT] 96-4-L40-850-HIAFR-EM10W-DIM-UNV
 [LAMPCAT] HLM2256_5630 REV A 10560223

CHARACTERISTICS

Lumens Per Lamp	N.A. (absolute)
Total Lamp Lumens	N.A. (absolute)
Luminaire Lumens	1400
Total Luminaire Efficiency	N.A.
Luminaire Efficacy Rating (LER)	140
Total Luminaire Watts	10
Ballast Factor	1.00
CIE Type	Direct
Spacing Criterion (0-180)	1.26
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	2130	1693	1608
55	1761	1422	1435
65	1398	1177	1255
75	898	968	1071
85	373	789	879

IES INDOOR REPORT

PHOTOMETRIC FILENAME : 96-4-L40-850-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	501.469	501.469	501.469	501.469	501.469
5	511.427	498.899	495.686	491.189	489.261
10	504.039	490.546	484.764	478.017	475.447
15	490.867	475.769	468.701	457.136	454.566
20	473.199	456.494	445.571	433.364	429.188
25	451.675	432.400	414.410	404.130	400.918
30	425.333	405.415	384.855	381.964	382.607
35	394.172	372.327	358.192	362.368	362.368
40	354.979	333.456	331.849	332.813	332.492
45	309.362	293.300	299.082	296.833	299.725
50	258.926	252.822	260.211	261.817	269.527
55	210.739	213.309	221.983	229.371	240.294
60	168.013	174.117	185.039	199.816	209.454
65	126.572	135.246	153.878	172.832	179.899
70	87.058	99.587	125.608	147.453	151.308
75	52.685	68.747	98.302	118.862	123.038
80	25.379	45.617	73.245	91.877	96.696
85	9.316	29.234	54.612	70.675	72.923
90	3.534	18.311	39.835	52.685	55.255
95	3.534	12.529	31.804	43.047	44.654
100	2.891	7.067	25.057	34.374	36.301
105	2.249	4.176	18.311	27.306	28.591
110	1.927	2.249	13.171	21.524	22.487
115	1.285	0.964	8.352	15.741	18.311
120	0.964	0.321	4.497	11.565	13.171
125	0.000	0.000	0.964	7.067	8.674
130	0.000	0.000	0.000	3.534	4.497
135	0.000	0.000	0.000	0.321	1.927
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 : 96-4-L40-850-HIAFR-EM10W-DIM-UNV_(EMER MODE).IES****ZONAL LUMEN SUMMARY**

Zone	Lumens	%Lamp	%Fixt
0-20	179.11	N.A.	12.80
0-30	372.87	N.A.	26.60
0-40	602.38	N.A.	43.00
0-60	1032.07	N.A.	73.70
0-80	1284.72	N.A.	91.80
0-90	1339.47	N.A.	95.70
10-90	1292.4	N.A.	92.30
20-40	423.27	N.A.	30.20
20-50	653.44	N.A.	46.70
40-70	582.59	N.A.	41.60
60-80	252.65	N.A.	18.00
70-80	99.75	N.A.	7.10
80-90	54.74	N.A.	3.90
90-110	48.24	N.A.	3.40
90-120	57.11	N.A.	4.10
90-130	60.16	N.A.	4.30
90-150	60.58	N.A.	4.30
90-180	60.58	N.A.	4.30
110-180	12.33	N.A.	0.90
0-180	1400.05	N.A.	100.00

Total Luminaire Efficiency = N.A. %

ZONAL LUMEN SUMMARY

Zone	Lumens
0-10	47.07
10-20	132.04
20-30	193.76
30-40	229.52
40-50	230.17
50-60	199.52
60-70	152.91
70-80	99.75
80-90	54.74
90-100	30.65
100-110	17.59
110-120	8.86
120-130	3.06
130-140	0.42
140-150	0.00
150-160	0.00
160-170	0.00
170-180	0.00

IES INDOOR REPORT

PHOTOMETRIC FILENAME : 96-4-L40-850-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	64	57	52	62	56	51	59	54	49	47
5	75	62	53	46	72	61	52	46	58	51	45	55	49	44	53	48	43	41
6	69	56	47	40	67	55	46	40	52	45	39	50	44	39	48	43	38	36
7	64	51	42	36	62	50	41	35	48	40	35	46	39	34	44	38	34	32
8	60	46	38	32	58	45	37	32	44	36	31	42	36	31	41	35	30	28
9	56	42	34	29	54	42	34	29	40	33	28	39	32	28	38	32	27	26
10	52	39	31	26	51	39	31	26	37	30	26	36	30	25	35	29	25	23

IES INDOOR REPORT

PHOTOMETRIC FILENAME : 96-4-L40-850-HIAFR-EM10W-DIM-UNV_(EMER MODE).IES

UGR TABLE - CORRECTED

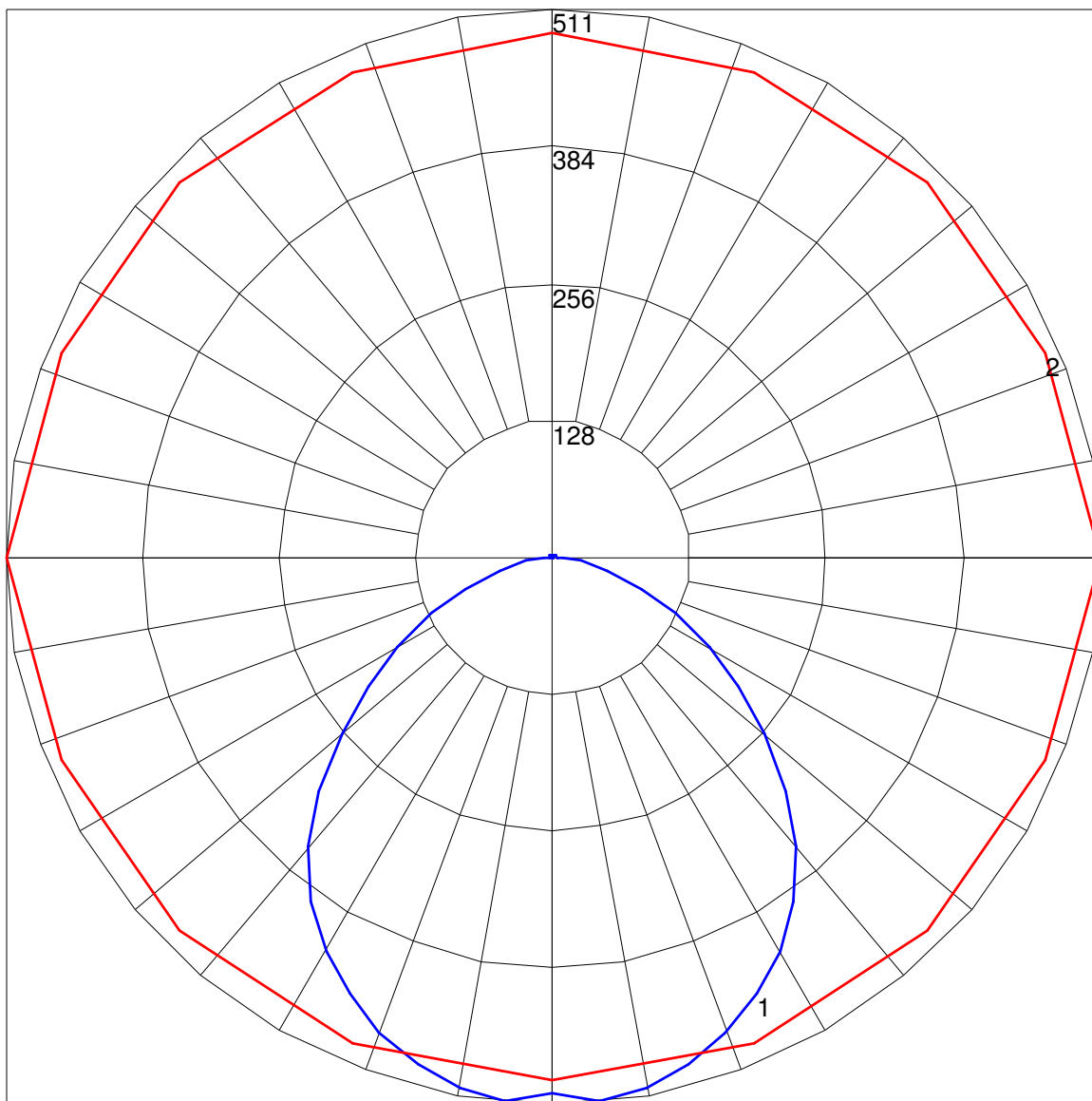
Reflectances

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					UGR Viewed Endwise				
X=2H	Y=2H	12.0	13.6	12.5	14.0	14.4	13.6	15.2	14.0	15.5	16.0
	3H	13.2	14.6	13.7	15.0	15.5	15.8	17.3	16.3	17.7	18.1
	4H	13.5	14.9	14.0	15.3	15.8	16.9	18.2	17.3	18.6	19.1
	6H	13.7	14.9	14.2	15.4	15.9	17.8	19.1	18.3	19.5	20.0
	8H	13.7	14.9	14.2	15.4	15.9	18.3	19.5	18.8	19.9	20.4
	12H	13.7	14.8	14.2	15.3	15.8	18.8	19.9	19.2	20.4	20.9
4H	2H	12.7	14.1	13.2	14.5	15.0	14.0	15.3	14.5	15.8	16.2
	3H	14.2	15.3	14.6	15.8	16.3	16.5	17.6	17.0	18.1	18.6
	4H	14.6	15.6	15.1	16.1	16.6	17.7	18.7	18.2	19.2	19.7
	6H	14.9	15.8	15.4	16.3	16.8	18.8	19.7	19.3	20.2	20.8
	8H	14.9	15.8	15.4	16.3	16.8	19.4	20.2	19.9	20.7	21.3
	12H	14.9	15.7	15.5	16.2	16.8	19.9	20.7	20.5	21.2	21.8
8H	4H	15.2	16.0	15.7	16.5	17.1	17.8	18.7	18.4	19.2	19.7
	6H	15.6	16.3	16.1	16.8	17.4	19.1	19.8	19.7	20.4	21.0
	8H	15.7	16.3	16.3	16.9	17.5	19.8	20.4	20.4	21.0	21.6
	12H	15.8	16.3	16.3	16.9	17.5	20.5	21.1	21.1	21.7	22.3
12H	4H	15.3	16.1	15.8	16.6	17.2	17.8	18.6	18.4	19.1	19.7
	6H	15.8	16.4	16.4	17.0	17.6	19.1	19.8	19.7	20.3	21.0
	8H	16.0	16.6	16.5	17.1	17.8	19.9	20.5	20.4	21.0	21.7

Maximum UGR = 22.3

POLAR GRAPH



Maximum Candela = 511.427 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.)