



## IES INDOOR REPORT

PHOTOMETRIC FILENAME : 96-4-L81-830-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] 06-29-2022  
 [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  
 [MORE] EVERLINE LED DRIVER #D15CC55UNVTW-C @ 1029mA  
 [LUMCAT] 96-4-L81-830-HIAFR-EM10W-DIM-UNV  
 [LAMPCAT] HLM 80 CRI 3000K CCT

### CHARACTERISTICS

Lumens Per Lamp	N.A. (absolute)
Total Lamp Lumens	N.A. (absolute)
Luminaire Lumens	1200
Total Luminaire Efficiency	N.A.
Luminaire Efficacy Rating (LER)	120
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	1760	1456	1390
55	1469	1203	1183
65	1125	991	1077
75	735	825	972
85	284	677	811

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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	432.328	432.328	432.328	432.328	432.328
5	438.670	430.090	428.598	426.920	425.801
10	432.142	423.749	419.086	415.169	412.558
15	421.324	411.253	404.538	398.943	395.400
20	405.285	393.534	386.074	375.070	370.407
25	385.328	371.340	362.387	349.332	347.840
30	360.522	345.602	336.649	330.308	332.359
35	331.986	316.693	310.724	312.962	317.812
40	296.923	282.002	285.732	286.478	291.141
45	255.518	245.633	257.196	256.264	259.061
50	214.672	210.569	222.132	225.303	225.863
55	175.878	177.930	187.815	196.394	198.073
60	138.949	146.223	156.854	173.081	175.505
65	101.834	111.906	129.624	149.580	154.430
70	70.127	80.945	106.124	126.826	133.914
75	43.084	55.207	83.743	105.751	111.719
80	21.262	35.623	63.973	85.235	88.219
85	7.087	22.195	46.814	66.024	67.330
90	2.798	14.361	34.504	49.238	50.731
95	2.611	9.885	27.976	38.607	40.472
100	2.238	6.155	21.262	30.028	32.080
105	1.492	3.544	15.667	23.314	25.738
110	0.933	1.306	11.191	18.091	20.143
115	0.746	0.373	7.274	13.429	15.853
120	0.373	0.187	4.476	9.698	11.377
125	0.000	0.000	1.492	5.968	7.833
130	0.000	0.000	0.000	2.798	4.476
135	0.000	0.000	0.000	0.933	1.679
140	0.000	0.000	0.000	0.746	0.746
145	0.000	0.000	0.000	0.373	0.373
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-L81-830-HIAFR-EM10W-DIM-UNV\_(EMER MODE).IES****ZONAL LUMEN SUMMARY**

Zone	Lumens	%Lamp	%Fixt
0-20	154.91	N.A.	12.90
0-30	322.22	N.A.	26.90
0-40	519.50	N.A.	43.30
0-60	883.76	N.A.	73.60
0-80	1098.81	N.A.	91.60
0-90	1147.12	N.A.	95.60
10-90	1106.43	N.A.	92.20
20-40	364.60	N.A.	30.40
20-50	560.51	N.A.	46.70
40-70	493.51	N.A.	41.10
60-80	215.05	N.A.	17.90
70-80	85.80	N.A.	7.20
80-90	48.31	N.A.	4.00
90-110	42.08	N.A.	3.50
90-120	49.56	N.A.	4.10
90-130	52.28	N.A.	4.40
90-150	52.85	N.A.	4.40
90-180	52.85	N.A.	4.40
110-180	10.77	N.A.	0.90
0-180	1199.97	N.A.	100.00

Total Luminaire Efficiency = N.A. %

**ZONAL LUMEN SUMMARY**

Zone	Lumens
0-10	40.69
10-20	114.21
20-30	167.31
30-40	197.28
40-50	195.91
50-60	168.35
60-70	129.25
70-80	85.80
80-90	48.31
90-100	26.98
100-110	15.10
110-120	7.48
120-130	2.72
130-140	0.48
140-150	0.09
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	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	49	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	34	44	38	34	32
8	60	46	38	32	58	45	37	32	44	37	31	42	36	31	41	35	30	29
9	56	43	34	29	54	42	34	29	40	33	28	39	33	28	38	32	28	26
10	52	39	31	26	51	39	31	26	37	31	26	36	30	25	35	29	25	23

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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

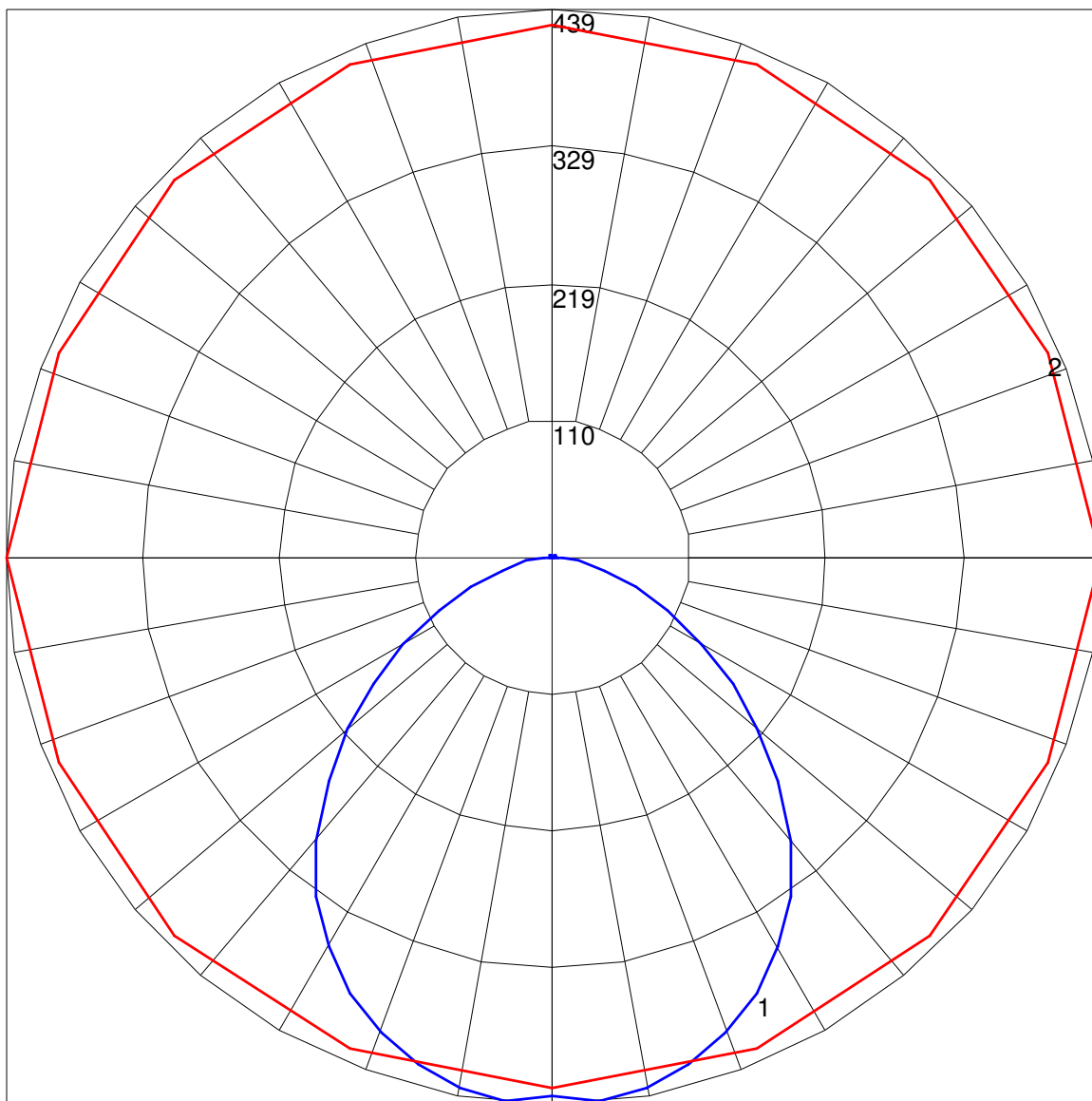
X=2H	Y=2H	11.3	12.8	11.7	13.2	13.6	13.0	14.5	13.4	14.9	15.4
	3H	12.4	13.8	12.8	14.2	14.7	15.3	16.7	15.7	17.1	17.6
	4H	12.7	14.0	13.1	14.4	14.9	16.4	17.7	16.8	18.1	18.6
	6H	12.8	14.1	13.3	14.5	15.0	17.4	18.7	17.9	19.1	19.6
	8H	12.9	14.0	13.3	14.5	15.0	17.9	19.1	18.4	19.6	20.1
	12H	12.8	14.0	13.3	14.4	15.0	18.4	19.6	18.9	20.0	20.6

### UGR Viewed Endwise

4H	2H	12.0	13.3	12.4	13.7	14.2	13.4	14.7	13.8	15.1	15.6
	3H	13.4	14.5	13.8	15.0	15.4	15.9	17.0	16.4	17.5	18.0
	4H	13.8	14.8	14.3	15.3	15.8	17.2	18.2	17.7	18.7	19.2
	6H	14.0	14.9	14.5	15.4	15.9	18.4	19.3	18.9	19.8	20.4
	8H	14.0	14.9	14.6	15.4	16.0	19.0	19.9	19.5	20.4	20.9
	12H	14.1	14.8	14.6	15.4	15.9	19.6	20.4	20.2	20.9	21.5
8H	4H	14.4	15.2	14.9	15.7	16.3	17.3	18.2	17.9	18.7	19.3
	6H	14.7	15.5	15.3	16.0	16.6	18.7	19.4	19.3	20.0	20.6
	8H	14.8	15.5	15.4	16.1	16.6	19.5	20.1	20.0	20.7	21.3
	12H	14.9	15.5	15.5	16.0	16.7	20.3	20.8	20.8	21.4	22.0
12H	4H	14.5	15.3	15.1	15.8	16.4	17.3	18.1	17.9	18.6	19.2
	6H	15.0	15.7	15.6	16.2	16.8	18.8	19.4	19.3	19.9	20.6
	8H	15.2	15.8	15.7	16.3	17.0	19.5	20.1	20.1	20.7	21.3

Maximum UGR = 22.0

POLAR GRAPH



Maximum Candela = 438.67 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.)