



## IES INDOOR REPORT

PHOTOMETRIC FILENAME : 96-4-L62-940-HIAFR-(L50)-EM10WDIM-UNV\_EMER MODE.IES

### DESCRIPTION INFORMATION (From Photometric File)

IESNA:LM-63-2002

[TEST] GEN FROM BALLABS TEST NO. 19227.0

[TESTLAB] BUILDING ACOUSTICS & LIGHTING LABORATORIES, INC

[ISSUEDATE] 10-11-2021

[MANUFAC] WILLIAMS INDOOR

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

[LUMINAIRE] 4'SUSPENDED ENCLOSED & GASKETED LUMINAIRE

[MORE] WHITE REFLECTOR w/FROSTED ACRYLIC LINEAR RIBBED DIFFUSER

[LUMCAT] 96-4-L62-940-HIAFR-(L50)-EM10W-DIM-UNV

[LAMPCAT] HLM 90 CRI 4000K CCT

### CHARACTERISTICS

Lumens Per Lamp	N.A. (absolute)
Total Lamp Lumens	N.A. (absolute)
Luminaire Lumens	1430
Total Luminaire Efficiency	N.A.
Luminaire Efficacy Rating (LER)	143
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)	1.30
Basic Luminous Shape	Rectangular w/Sides
Luminous Length (0-180)	4.23 ft
Luminous Width (90-270)	0.50 ft
Luminous Height	0.18 ft

### LUMINANCE DATA (cd/sq.m)

Angle In Degrees	Average 0-Deg	Average 45-Deg	Average 90-Deg
45	2155	1699	1654
55	1833	1446	1428
65	1344	1175	1268
75	824	990	1093
85	304	777	933

# IES INDOOR REPORT

PHOTOMETRIC FILENAME : 96-4-L62-940-HIAFR-(L50)-EM10WDIM-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	505.186	505.186	505.186	505.186	505.186
5	509.615	503.088	499.824	497.493	496.793
10	502.855	494.695	489.566	487.701	485.836
15	490.266	480.941	473.247	468.818	466.254
20	472.082	462.524	451.100	441.775	441.542
25	450.634	440.377	423.591	411.702	407.972
30	423.591	410.536	387.923	384.426	384.892
35	390.254	376.966	355.518	366.009	371.604
40	352.255	340.132	329.641	341.298	345.960
45	312.157	300.734	302.365	304.930	311.457
50	267.163	256.206	265.998	270.427	274.623
55	219.139	213.544	228.231	237.090	242.452
60	170.183	176.011	189.765	205.385	213.078
65	121.692	138.944	156.195	178.808	185.336
70	83.226	102.110	129.152	152.698	156.661
75	48.490	71.104	103.042	124.956	129.152
80	22.846	47.325	77.165	98.146	102.110
85	7.693	30.073	55.950	76.466	80.662
90	3.264	18.184	40.797	57.349	61.545
95	2.564	12.589	32.638	45.227	49.190
100	2.331	7.693	26.810	37.767	39.865
105	1.865	4.663	20.282	30.306	32.405
110	1.166	1.399	14.221	23.546	25.877
115	0.699	0.699	9.325	17.485	20.282
120	0.000	0.000	4.663	12.589	15.153
125	0.000	0.000	1.399	7.693	10.024
130	0.000	0.000	0.000	3.963	5.595
135	0.000	0.000	0.000	0.933	2.098
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-L62-940-HIAFR-(L50)-EM10WDIM-UNV\_EMER MODE.IES****ZONAL LUMEN SUMMARY**

Zone	Lumens	%Lamp	%Fixt
0-20	181.40	N.A.	12.70
0-30	377.77	N.A.	26.40
0-40	609.11	N.A.	42.60
0-60	1047.79	N.A.	73.30
0-80	1307.2	N.A.	91.40
0-90	1364.93	N.A.	95.40
10-90	1317.4	N.A.	92.10
20-40	427.71	N.A.	29.90
20-50	662.48	N.A.	46.30
40-70	594.79	N.A.	41.60
60-80	259.41	N.A.	18.10
70-80	103.30	N.A.	7.20
80-90	57.74	N.A.	4.00
90-110	51.65	N.A.	3.60
90-120	61.21	N.A.	4.30
90-130	64.59	N.A.	4.50
90-150	65.13	N.A.	4.60
90-180	65.13	N.A.	4.60
110-180	13.48	N.A.	0.90
0-180	1430.06	N.A.	100.00

Total Luminaire Efficiency = N.A. %

**ZONAL LUMEN SUMMARY**

Zone	Lumens
0-10	47.53
10-20	133.87
20-30	196.38
30-40	231.33
40-50	234.77
50-60	203.90
60-70	156.11
70-80	103.30
80-90	57.74
90-100	32.39
100-110	19.26
110-120	9.56
120-130	3.38
130-140	0.53
140-150	0.00
150-160	0.00
160-170	0.00
170-180	0.00

# IES INDOOR REPORT

PHOTOMETRIC FILENAME : 96-4-L62-940-HIAFR-(L50)-EM10WDIM-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	95
1	107	102	97	93	104	99	95	91	94	90	87	89	86	84	85	83	81	78
2	97	89	82	76	94	86	80	74	82	77	72	78	73	70	74	71	67	65
3	89	78	69	63	86	76	68	62	72	66	60	69	63	59	66	61	57	55
4	81	69	60	53	78	67	59	53	64	57	51	61	55	50	59	53	49	47
5	75	62	53	46	72	60	52	46	58	50	45	55	49	44	53	47	43	41
6	69	56	47	40	67	54	46	40	52	45	39	50	43	38	48	42	38	36
7	64	50	42	36	62	49	41	35	47	40	35	46	39	34	44	38	34	32
8	60	46	38	32	58	45	37	32	44	36	31	42	35	31	40	35	30	28
9	56	42	34	29	54	42	34	28	40	33	28	39	32	28	37	32	27	25
10	52	39	31	26	51	38	31	26	37	30	25	36	30	25	35	29	25	23

# IES INDOOR REPORT

PHOTOMETRIC FILENAME : 96-4-L62-940-HIAFR-(L50)-EM10WDIM-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	11.9	13.4	12.3	13.8	14.3	13.6	15.1	14.0	15.5	16.0
	3H	13.0	14.4	13.5	14.8	15.3	15.9	17.2	16.3	17.7	18.2
	4H	13.3	14.6	13.8	15.1	15.6	16.9	18.2	17.4	18.7	19.1
	6H	13.4	14.6	13.9	15.1	15.6	17.9	19.1	18.4	19.6	20.1
	8H	13.4	14.6	13.9	15.1	15.6	18.4	19.5	18.9	20.0	20.5
	12H	13.4	14.5	13.9	15.0	15.6	18.9	20.0	19.4	20.5	21.0

### UGR Viewed Endwise

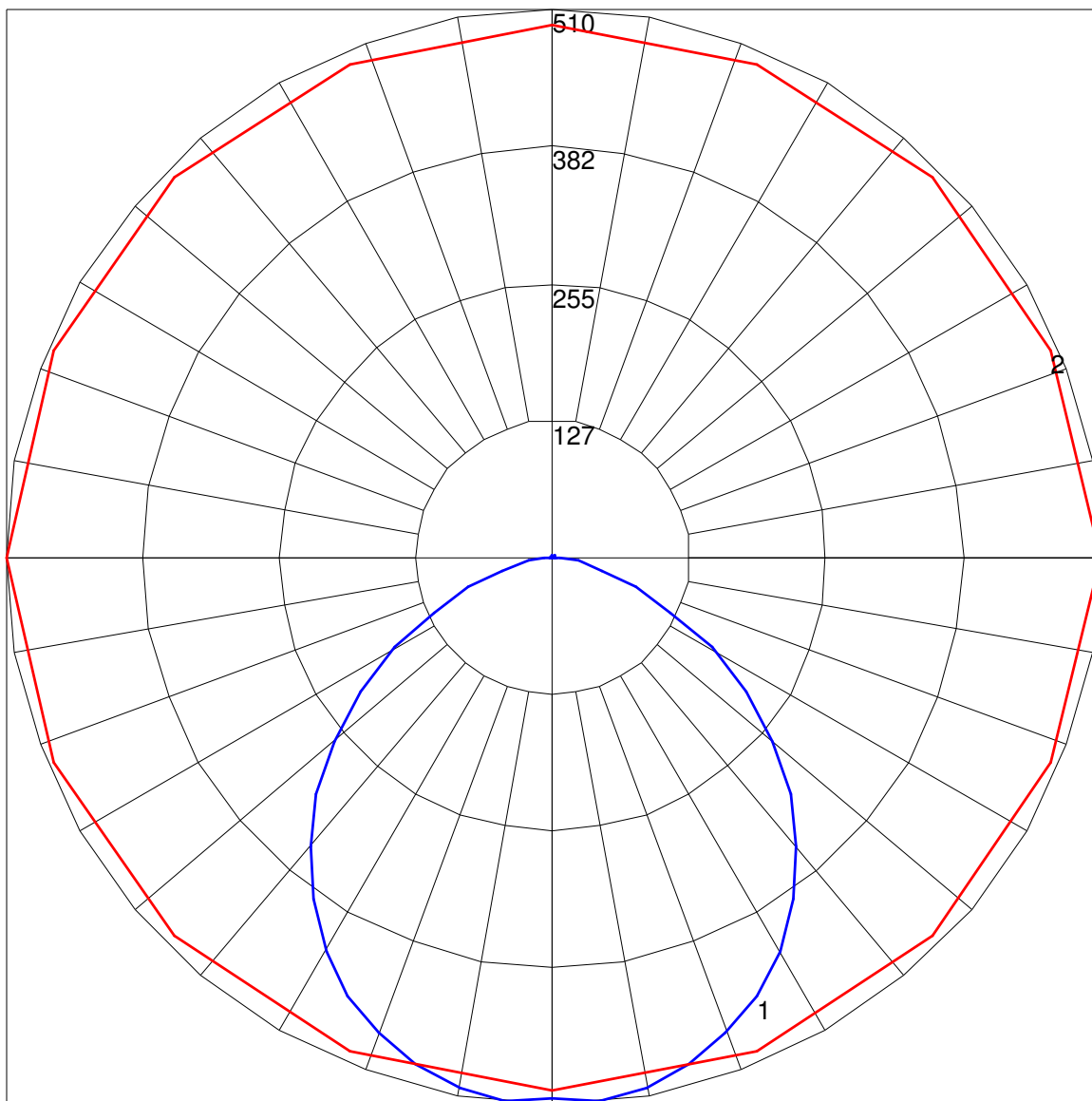
4H	2H	12.6	13.9	13.1	14.3	14.8	14.0	15.3	14.4	15.7	16.2
	3H	14.0	15.1	14.5	15.6	16.1	16.5	17.6	17.0	18.1	18.6
	4H	14.4	15.4	14.9	15.9	16.5	17.7	18.7	18.2	19.2	19.7
	6H	14.6	15.5	15.2	16.1	16.6	18.9	19.7	19.4	20.3	20.8
	8H	14.7	15.5	15.2	16.1	16.6	19.4	20.3	20.0	20.8	21.4
	12H	14.7	15.5	15.3	16.0	16.6	20.1	20.8	20.6	21.4	22.0
8H	4H	15.0	15.8	15.5	16.4	17.0	17.9	18.7	18.4	19.2	19.8
	6H	15.4	16.1	16.0	16.7	17.3	19.2	19.9	19.8	20.5	21.1
	8H	15.5	16.2	16.1	16.7	17.3	19.9	20.5	20.5	21.1	21.7
	12H	15.6	16.2	16.2	16.7	17.4	20.7	21.3	21.3	21.8	22.5
12H	4H	15.2	15.9	15.7	16.5	17.1	17.9	18.6	18.4	19.2	19.8
	6H	15.7	16.3	16.2	16.8	17.5	19.2	19.9	19.8	20.4	21.1
	8H	15.9	16.4	16.4	17.0	17.6	20.0	20.5	20.6	21.1	21.8

Maximum UGR = 22.5

# IES INDOOR REPORT

PHOTOMETRIC FILENAME : 96-4-L62-940-HIAFR-(L50)-EM10WDIM-UNV\_EMER MODE.IES

## POLAR GRAPH



Maximum Candela = 509.615 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.)