



IES INDOOR REPORT

PHOTOMETRIC FILENAME : 8CR-TL-XX-L33-RGB940-DMX-UNV-OW-OF-CS-TD WHITE ONLY.IES

DESCRIPTION INFORMATION (From Photometric File)

IESNA:LM-63-2002

[TEST] GEN from UL #15271106.01

[TESTLAB] UL Verification Services Inc.

[ISSUE DATE] 15 OCT 2024

[TEST DATE] 5/9/2024

[MANUFAC] H E WILLIAMS INC

[LUMCAT] 8CR-TLxx-L22-RGB940-DMX-UNV-OW-OF-CS-TD WHITE ONLY

[LUMINAIRE] 8" dia aluminum cylindrical housing

[LAMP] 28 white LEDs

[BALLAST] ERP VLM60W-24-S

[OTHER] 24.4 C, 119.979 V, 0.348082 A, 41.2933 W, 0.988762 PF, 60.0072 Hz

[OTHER] This test was performed using the calibrated photodetector method

[MORE] of absolute photometry.

[OTHER] The reported results were measured in a facility that meets the

[MORE] requirements of ANSI/IES LM-75-19. The device under test emits no

[MORE] detectable uplight as defined by ANSI/IES LM-75-19.

CHARACTERISTICS

Lumens Per Lamp	N.A. (absolute)
Total Lamp Lumens	N.A. (absolute)
Luminaire Lumens	3262
Total Luminaire Efficiency	N.A.
Luminaire Efficacy Rating (LER)	59
Total Luminaire Watts	55.4
Ballast Factor	1.00
CIE Type	Direct
Spacing Criterion (0-180)	1.20
Spacing Criterion (90-270)	1.20
Spacing Criterion (Diagonal)	1.02
Basic Luminous Shape	Circular
Luminous Length (0-180)	0.50 ft (Diameter)
Luminous Width (90-270)	0.50 ft (Diameter)
Luminous Height	0.00 ft

IES INDOOR REPORT**PHOTOMETRIC FILENAME : 8CR-TL-XX-L33-RGB940-DMX-UNV-OW-OF-CS-TD WHITE ONLY.IES****LUMINANCE DATA (cd/sq.m)**

Angle In Degrees	Average 0-Deg	Average 45-Deg	Average 90-Deg
45	27098	27098	27098
55	4403	4403	4403
65	1084	1084	1084
75	387	387	387
85	164	164	164

IES INDOOR REPORT**PHOTOMETRIC FILENAME : 8CR-TL-XX-L33-RGB940-DMX-UNV-OW-OF-CS-TD WHITE ONLY.IES****CANDELA TABULATION**

	<u>0</u>
0.0	2402.469
0.5	2405.082
1.0	2409.001
1.5	2415.533
2.0	2423.372
2.5	2432.517
3.0	2444.274
3.5	2454.725
4.0	2466.483
4.5	2478.241
5.0	2489.998
5.5	2500.449
6.0	2512.207
6.5	2522.658
7.0	2534.416
7.5	2543.561
8.0	2554.012
8.5	2563.157
9.0	2572.301
9.5	2581.446
10.0	2590.591
10.5	2599.736
11.0	2607.574
11.5	2615.413
12.0	2621.945
12.5	2629.783
13.0	2637.621
13.5	2646.766
14.0	2655.911
14.5	2666.362
15.0	2678.120
15.5	2688.571
16.0	2701.635
16.5	2713.393
17.0	2725.150
17.5	2736.908
18.0	2747.359
18.5	2755.197
19.0	2761.729
19.5	2765.649
20.0	2765.649
20.5	2764.342
21.0	2760.423
21.5	2752.585
22.0	2742.133
22.5	2729.069
23.0	2713.393
23.5	2695.103
24.0	2672.894
24.5	2646.766
25.0	2616.719
25.5	2580.140
26.0	2539.641
26.5	2492.611

IES INDOOR REPORT**PHOTOMETRIC FILENAME : 8CR-TL-XX-L33-RGB940-DMX-UNV-OW-OF-CS-TD WHITE ONLY.IES****CANDELA TABULATION - (Cont.)**

27.0	2440.355
27.5	2381.567
28.0	2317.553
28.5	2248.314
29.0	2175.156
29.5	2095.466
30.0	2011.856
30.5	1926.940
31.0	1839.411
31.5	1749.270
32.0	1659.128
32.5	1568.986
33.0	1478.845
33.5	1391.316
34.0	1306.400
34.5	1224.358
35.0	1148.195
35.5	1077.127
36.0	1008.933
36.5	945.834
37.0	888.352
37.5	834.528
38.0	783.840
38.5	736.418
39.0	692.784
39.5	652.416
40.0	614.792
40.5	580.042
41.0	547.251
41.5	516.551
42.0	487.940
42.5	461.029
43.0	435.946
43.5	412.300
44.0	390.352
44.5	369.450
45.0	349.854
45.5	331.434
46.0	313.667
46.5	296.945
47.0	280.745
47.5	264.677
48.0	249.000
48.5	233.715
49.0	218.561
49.5	203.537
50.0	188.252
50.5	172.053
51.0	155.200
51.5	137.825
52.0	120.581
52.5	104.120
53.0	88.966
53.5	75.641
54.0	64.014
54.5	54.216

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55.0	46.116
55.5	39.845
56.0	35.012
56.5	31.223
57.0	28.218
57.5	25.867
58.0	23.776
58.5	21.817
59.0	20.249
59.5	18.682
60.0	17.375
60.5	16.069
61.0	14.893
61.5	13.848
62.0	12.933
62.5	12.019
63.0	11.235
63.5	10.451
64.0	9.667
64.5	9.014
65.0	8.361
65.5	7.838
66.0	7.316
66.5	6.793
67.0	6.401
67.5	5.879
68.0	5.487
68.5	5.095
69.0	4.703
69.5	4.442
70.0	4.050
70.5	3.789
71.0	3.527
71.5	3.266
72.0	3.005
72.5	2.743
73.0	2.613
73.5	2.352
74.0	2.221
74.5	2.090
75.0	1.829
75.5	1.698
76.0	1.568
76.5	1.437
77.0	1.306
77.5	1.176
78.0	1.176
78.5	1.045
79.0	0.914
79.5	0.914
80.0	0.784
80.5	0.653
81.0	0.653
81.5	0.523
82.0	0.523
82.5	0.523

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83.0	0.392
83.5	0.392
84.0	0.392
84.5	0.261
85.0	0.261
85.5	0.261
86.0	0.261
86.5	0.131
87.0	0.131
87.5	0.131
88.0	0.131
88.5	0.131
89.0	0.131
89.5	0.000
90.0	0.000
90.5	0.000
91.0	0.000
91.5	0.000
92.0	0.000
92.5	0.000
93.0	0.000
93.5	0.000
94.0	0.000
94.5	0.000
95.0	0.000
95.5	0.000
96.0	0.000
96.5	0.000
97.0	0.000
97.5	0.000
98.0	0.000
98.5	0.000
99.0	0.000
99.5	0.000
100.0	0.000
100.5	0.000
101.0	0.000
101.5	0.000
102.0	0.000
102.5	0.000
103.0	0.000
103.5	0.000
104.0	0.000
104.5	0.000
105.0	0.000
105.5	0.000
106.0	0.000
106.5	0.000
107.0	0.000
107.5	0.000
108.0	0.000
108.5	0.000
109.0	0.000
109.5	0.000
110.0	0.000
110.5	0.000

IES INDOOR REPORT**PHOTOMETRIC FILENAME : 8CR-TL-XX-L33-RGB940-DMX-UNV-OW-OF-CS-TD WHITE ONLY.IES****CANDELA TABULATION - (Cont.)**

111.0	0.000
111.5	0.000
112.0	0.000
112.5	0.000
113.0	0.000
113.5	0.000
114.0	0.000
114.5	0.000
115.0	0.000
115.5	0.000
116.0	0.000
116.5	0.000
117.0	0.000
117.5	0.000
118.0	0.000
118.5	0.000
119.0	0.000
119.5	0.000
120.0	0.000
120.5	0.000
121.0	0.000
121.5	0.000
122.0	0.000
122.5	0.000
123.0	0.000
123.5	0.000
124.0	0.000
124.5	0.000
125.0	0.000
125.5	0.000
126.0	0.000
126.5	0.000
127.0	0.000
127.5	0.000
128.0	0.000
128.5	0.000
129.0	0.000
129.5	0.000
130.0	0.000
130.5	0.000
131.0	0.000
131.5	0.000
132.0	0.000
132.5	0.000
133.0	0.000
133.5	0.000
134.0	0.000
134.5	0.000
135.0	0.000
135.5	0.000
136.0	0.000
136.5	0.000
137.0	0.000
137.5	0.000
138.0	0.000
138.5	0.000

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139.0	0.000
139.5	0.000
140.0	0.000
140.5	0.000
141.0	0.000
141.5	0.000
142.0	0.000
142.5	0.000
143.0	0.000
143.5	0.000
144.0	0.000
144.5	0.000
145.0	0.000
145.5	0.000
146.0	0.000
146.5	0.000
147.0	0.000
147.5	0.000
148.0	0.000
148.5	0.000
149.0	0.000
149.5	0.000
150.0	0.000
150.5	0.000
151.0	0.000
151.5	0.000
152.0	0.000
152.5	0.000
153.0	0.000
153.5	0.000
154.0	0.000
154.5	0.000
155.0	0.000
155.5	0.000
156.0	0.000
156.5	0.000
157.0	0.000
157.5	0.000
158.0	0.000
158.5	0.000
159.0	0.000
159.5	0.000
160.0	0.000
160.5	0.000
161.0	0.000
161.5	0.000
162.0	0.000
162.5	0.000
163.0	0.000
163.5	0.000
164.0	0.000
164.5	0.000
165.0	0.000
165.5	0.000
166.0	0.000
166.5	0.000

IES INDOOR REPORT**PHOTOMETRIC FILENAME : 8CR-TL-XX-L33-RGB940-DMX-UNV-OW-OF-CS-TD WHITE ONLY.IES****CANDELA TABULATION - (Cont.)**

167.0	0.000
167.5	0.000
168.0	0.000
168.5	0.000
169.0	0.000
169.5	0.000
170.0	0.000
170.5	0.000
171.0	0.000
171.5	0.000
172.0	0.000
172.5	0.000
173.0	0.000
173.5	0.000
174.0	0.000
174.5	0.000
175.0	0.000
175.5	0.000
176.0	0.000
176.5	0.000
177.0	0.000
177.5	0.000
178.0	0.000
178.5	0.000
179.0	0.000
179.5	0.000
180.0	0.000

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Zone	Lumens	%Lamp	%Fixt
0-20	1004.1	N.A.	30.80
0-30	2168.26	N.A.	66.50
0-40	2910.48	N.A.	89.20
0-60	3250.03	N.A.	99.60
0-80	3261.19	N.A.	100.00
0-90	3261.53	N.A.	100.00
10-90	3020.59	N.A.	92.60
20-40	1906.39	N.A.	58.50
20-50	2186.17	N.A.	67.00
40-70	348.55	N.A.	10.70
60-80	11.16	N.A.	0.30
70-80	2.16	N.A.	0.10
80-90	0.34	N.A.	0.00
90-110	0.00	N.A.	0.00
90-120	0.00	N.A.	0.00
90-130	0.00	N.A.	0.00
90-150	0.00	N.A.	0.00
90-180	0.00	N.A.	0.00
110-180	0.00	N.A.	0.00
0-180	3261.53	N.A.	100.00

Total Luminaire Efficiency = N.A. %

ZONAL LUMEN SUMMARY

Zone	Lumens
0-10	240.94
10-20	763.15
20-30	1164.17
30-40	742.22
40-50	279.79
50-60	59.76
60-70	9.00
70-80	2.16
80-90	0.34
90-100	0.00
100-110	0.00
110-120	0.00
120-130	0.00
130-140	0.00
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	119	119	119	119	116	116	116	116	111	111	111	106	106	106	102	102	102	100
1	113	110	108	105	111	108	106	104	104	102	101	100	99	98	97	96	95	93
2	107	102	98	94	105	100	97	93	97	94	91	94	92	89	91	89	87	86
3	101	95	90	85	99	93	89	85	91	87	83	88	85	82	86	83	81	79
4	96	88	82	78	94	87	81	77	85	80	76	83	79	75	81	77	75	73
5	91	82	76	71	89	81	75	71	79	74	70	77	73	70	76	72	69	67
6	86	76	70	66	84	76	70	65	74	69	65	73	68	64	71	67	64	62
7	81	71	65	61	80	71	65	60	69	64	60	68	63	60	67	63	59	58
8	77	67	60	56	76	66	60	56	65	60	56	64	59	55	63	59	55	54
9	73	63	56	52	72	62	56	52	61	56	52	60	55	52	59	55	52	50
10	69	59	53	49	68	58	53	49	58	52	48	57	52	48	56	51	48	47

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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

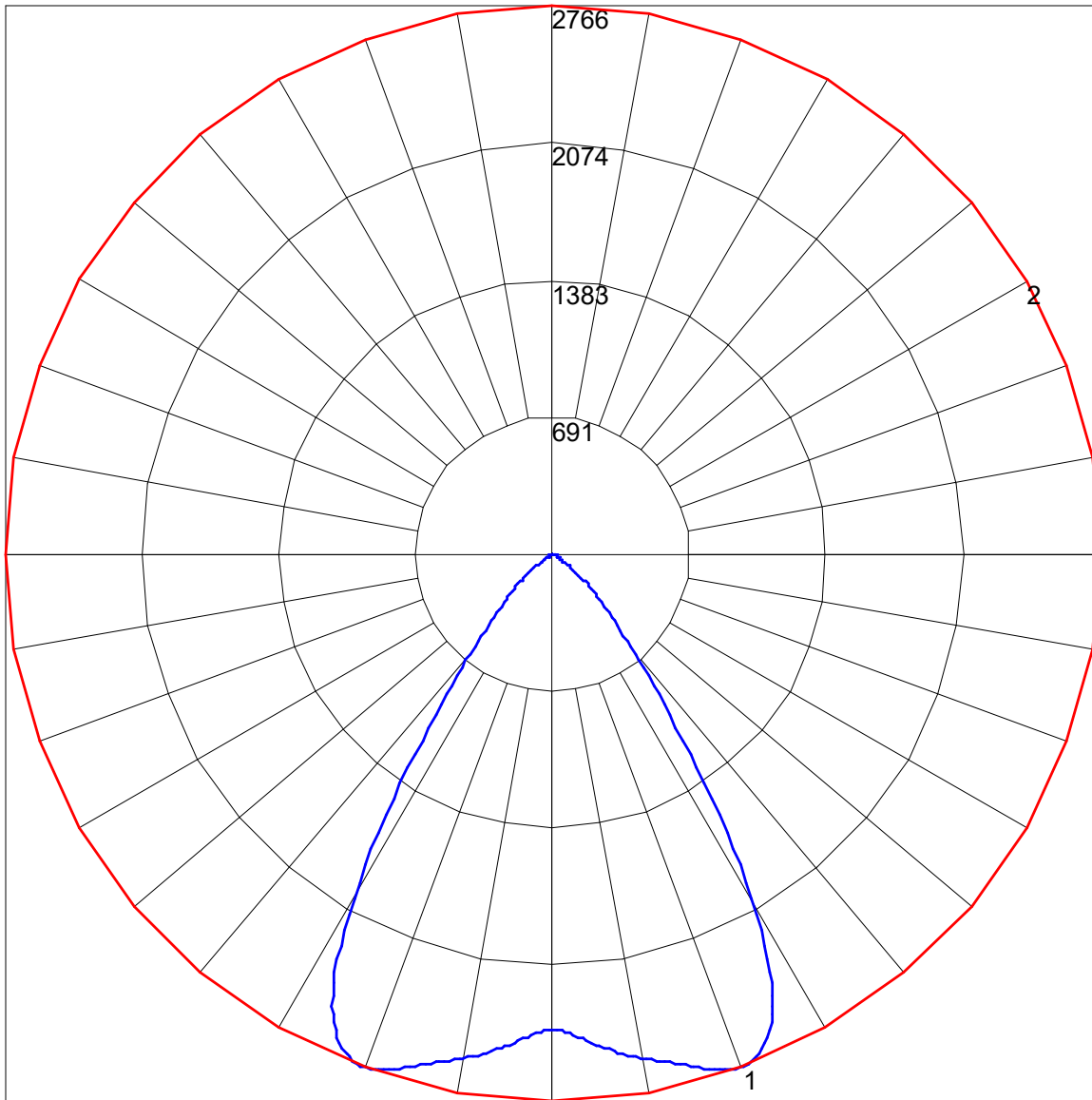
X=2H	Y=2H	4.7	5.7	5.1	6.1	6.4	UGR Viewed Endwise	4.7	5.7	5.1	6.1	6.4
	3H	4.8	5.7	5.2	6.0	6.4		4.8	5.7	5.2	6.0	6.4
	4H	4.7	5.6	5.1	5.9	6.3		4.7	5.6	5.1	5.9	6.3
	6H	4.7	5.4	5.1	5.8	6.2		4.7	5.4	5.1	5.8	6.2
	8H	4.6	5.3	5.1	5.7	6.1		4.6	5.3	5.1	5.7	6.1
	12H	4.6	5.2	5.0	5.6	6.1		4.6	5.2	5.0	5.6	6.1
4H	2H	4.6	5.4	5.0	5.8	6.2		4.6	5.4	5.0	5.8	6.2
	3H	4.7	5.4	5.1	5.8	6.2		4.7	5.4	5.1	5.8	6.2
	4H	4.7	5.3	5.1	5.7	6.2		4.7	5.3	5.1	5.7	6.2
	6H	4.6	5.1	5.1	5.6	6.1		4.6	5.1	5.1	5.6	6.1
	8H	4.6	5.0	5.0	5.5	6.0		4.6	5.0	5.0	5.5	6.0
	12H	4.5	4.9	5.0	5.4	5.9		4.5	4.9	5.0	5.4	5.9
8H	4H	4.6	5.0	5.0	5.5	6.0		4.6	5.0	5.0	5.5	6.0
	6H	4.5	4.9	5.0	5.4	5.8		4.5	4.9	5.0	5.4	5.8
	8H	4.4	4.8	5.0	5.3	5.8		4.4	4.8	5.0	5.3	5.8
	12H	4.4	4.7	4.9	5.2	5.7		4.4	4.7	4.9	5.2	5.7
12H	4H	4.5	4.9	5.0	5.4	5.9		4.5	4.9	5.0	5.4	5.9
	6H	4.4	4.8	4.9	5.2	5.8		4.4	4.8	4.9	5.2	5.8
	8H	4.4	4.7	4.9	5.2	5.7		4.4	4.7	4.9	5.2	5.7

Maximum UGR = 6.4

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POLAR GRAPH



Maximum Candela = 2765.649 Located At Horizontal Angle = 0, Vertical Angle = 19.5

1 - Vertical Plane Through Horizontal Angles (0 - 180) (Through Max. Cd.)

2 - Horizontal Cone Through Vertical Angle (19.5) (Through Max. Cd.)