



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

DESCRIPTION INFORMATION (From Photometric File)

IESNA:LM-63-2002
[TEST] GEN from UL #15271106.03
[TESTLAB] UL Verification Services Inc.
[ISSUEDATE] 15 OCT 2024
[TESTDATE] 5/9/2024
[MANUFAC] H E WILLIAMS INC
[LUMCAT] 8CR-TL-xx-L33-RGB940-DMX-UNV-OM-OF-CS-TD WHITE ONLY
[LUMINAIRE] 8" dia. aluminum cylindrical housing
[LAMP] 28 white LEDs
[BALLAST] ERP VLM60W-24-S
[OTHER] 24.8 C, 119.973 V, 0.346944 A, 41.1553 W, 0.988744 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	3358
Total Luminaire Efficiency	N.A.
Luminaire Efficacy Rating (LER)	61
Total Luminaire Watts	55.4
Ballast Factor	1.00
CIE Type	Direct
Spacing Criterion (0-180)	0.52
Spacing Criterion (90-270)	0.52
Spacing Criterion (Diagonal)	0.68
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-OM-OF-CS-TD WHITE ONLY.IES****LUMINANCE DATA (cd/sq.m)**

Angle In Degrees	Average 0-Deg	Average 45-Deg	Average 90-Deg
45	14367	14367	14367
55	1358	1358	1358
65	498	498	498
75	211	211	211
85	179	179	179

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

	<u>0</u>
0.0	6890.590
0.5	6883.478
1.0	6856.450
1.5	6813.775
2.0	6756.875
2.5	6681.483
3.0	6596.133
3.5	6495.135
4.0	6378.490
4.5	6254.733
5.0	6119.595
5.5	5978.768
6.0	5835.095
6.5	5690.000
7.0	5544.905
7.5	5402.655
8.0	5263.250
8.5	5129.535
9.0	4998.665
9.5	4873.485
10.0	4752.573
10.5	4635.928
11.0	4519.283
11.5	4404.060
12.0	4291.683
12.5	4183.573
13.0	4081.153
13.5	3981.578
14.0	3887.693
14.5	3796.653
15.0	3707.035
15.5	3620.263
16.0	3539.180
16.5	3463.788
17.0	3389.818
17.5	3317.270
18.0	3247.568
18.5	3177.865
19.0	3109.585
19.5	3045.573
20.0	2982.983
20.5	2921.815
21.0	2860.648
21.5	2800.903
22.0	2742.580
22.5	2684.258
23.0	2628.780
23.5	2574.725
24.0	2517.825
24.5	2458.080
25.0	2395.490
25.5	2328.633
26.0	2260.353
26.5	2190.650

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27.0	2119.525
27.5	2044.133
28.0	1965.895
28.5	1883.390
29.0	1800.885
29.5	1718.380
30.0	1634.453
30.5	1549.103
31.0	1460.908
31.5	1372.001
32.0	1281.957
32.5	1195.469
33.0	1111.684
33.5	1031.882
34.0	955.209
34.5	878.678
35.0	806.842
35.5	741.549
36.0	682.658
36.5	628.461
37.0	578.246
37.5	531.162
38.0	488.344
38.5	450.933
39.0	417.788
39.5	388.058
40.0	361.031
40.5	336.137
41.0	312.950
41.5	292.182
42.0	273.689
42.5	256.619
43.0	240.829
43.5	225.609
44.0	211.241
44.5	197.728
45.0	185.494
45.5	173.972
46.0	163.019
46.5	152.350
47.0	141.966
47.5	131.581
48.0	121.339
48.5	110.813
49.0	99.717
49.5	87.342
50.0	73.543
50.5	60.456
51.0	48.792
51.5	39.119
52.0	31.153
52.5	25.036
53.0	20.911
53.5	18.350
54.0	16.643
54.5	15.363

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55.0	14.225
55.5	13.229
56.0	12.234
56.5	11.380
57.0	10.669
57.5	9.958
58.0	9.246
58.5	8.677
59.0	8.108
59.5	7.682
60.0	7.113
60.5	6.686
61.0	6.401
61.5	5.975
62.0	5.548
62.5	5.263
63.0	4.979
63.5	4.694
64.0	4.410
64.5	4.125
65.0	3.841
65.5	3.556
66.0	3.414
66.5	3.272
67.0	2.987
67.5	2.845
68.0	2.703
68.5	2.418
69.0	2.276
69.5	2.134
70.0	1.992
70.5	1.849
71.0	1.707
71.5	1.707
72.0	1.565
72.5	1.423
73.0	1.280
73.5	1.280
74.0	1.138
74.5	1.138
75.0	0.996
75.5	0.996
76.0	0.854
76.5	0.854
77.0	0.711
77.5	0.711
78.0	0.711
78.5	0.569
79.0	0.569
79.5	0.569
80.0	0.569
80.5	0.427
81.0	0.427
81.5	0.427
82.0	0.427
82.5	0.285

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

83.0	0.285
83.5	0.285
84.0	0.285
84.5	0.285
85.0	0.285
85.5	0.142
86.0	0.142
86.5	0.142
87.0	0.142
87.5	0.142
88.0	0.142
88.5	0.142
89.0	0.000
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-OM-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

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

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

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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	1577.08	N.A.	47.00
0-30	2650.59	N.A.	78.90
0-40	3184.76	N.A.	94.80
0-60	3352.47	N.A.	99.80
0-80	3357.66	N.A.	100.00
0-90	3357.92	N.A.	100.00
10-90	2820.65	N.A.	84.00
20-40	1607.68	N.A.	47.90
20-50	1756.93	N.A.	52.30
40-70	171.75	N.A.	5.10
60-80	5.19	N.A.	0.20
70-80	1.15	N.A.	0.00
80-90	0.26	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	3357.92	N.A.	100.00

Total Luminaire Efficiency = N.A. %

ZONAL LUMEN SUMMARY

Zone	Lumens
0-10	537.26
10-20	1039.82
20-30	1073.51
30-40	534.16
40-50	149.25
50-60	18.46
60-70	4.04
70-80	1.15
80-90	0.26
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	114	111	109	107	111	109	107	105	105	104	102	101	100	99	98	97	96	94
2	109	104	101	97	107	103	99	96	99	97	94	96	94	92	94	92	90	89
3	104	98	93	90	102	97	92	89	94	90	88	92	89	86	89	87	85	83
4	99	92	87	83	97	91	86	83	89	85	82	87	84	81	85	82	80	78
5	95	87	82	78	93	86	81	77	84	80	77	83	79	76	81	78	75	74
6	90	82	77	73	89	81	76	73	80	75	72	79	75	72	77	74	71	70
7	86	78	72	69	85	77	72	68	76	71	68	75	71	68	74	70	67	66
8	83	74	68	65	82	73	68	65	72	68	64	71	67	64	70	67	64	62
9	79	70	65	61	78	70	65	61	69	64	61	68	64	61	67	63	61	59
10	76	67	62	58	75	67	62	58	66	61	58	65	61	58	64	60	58	56

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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

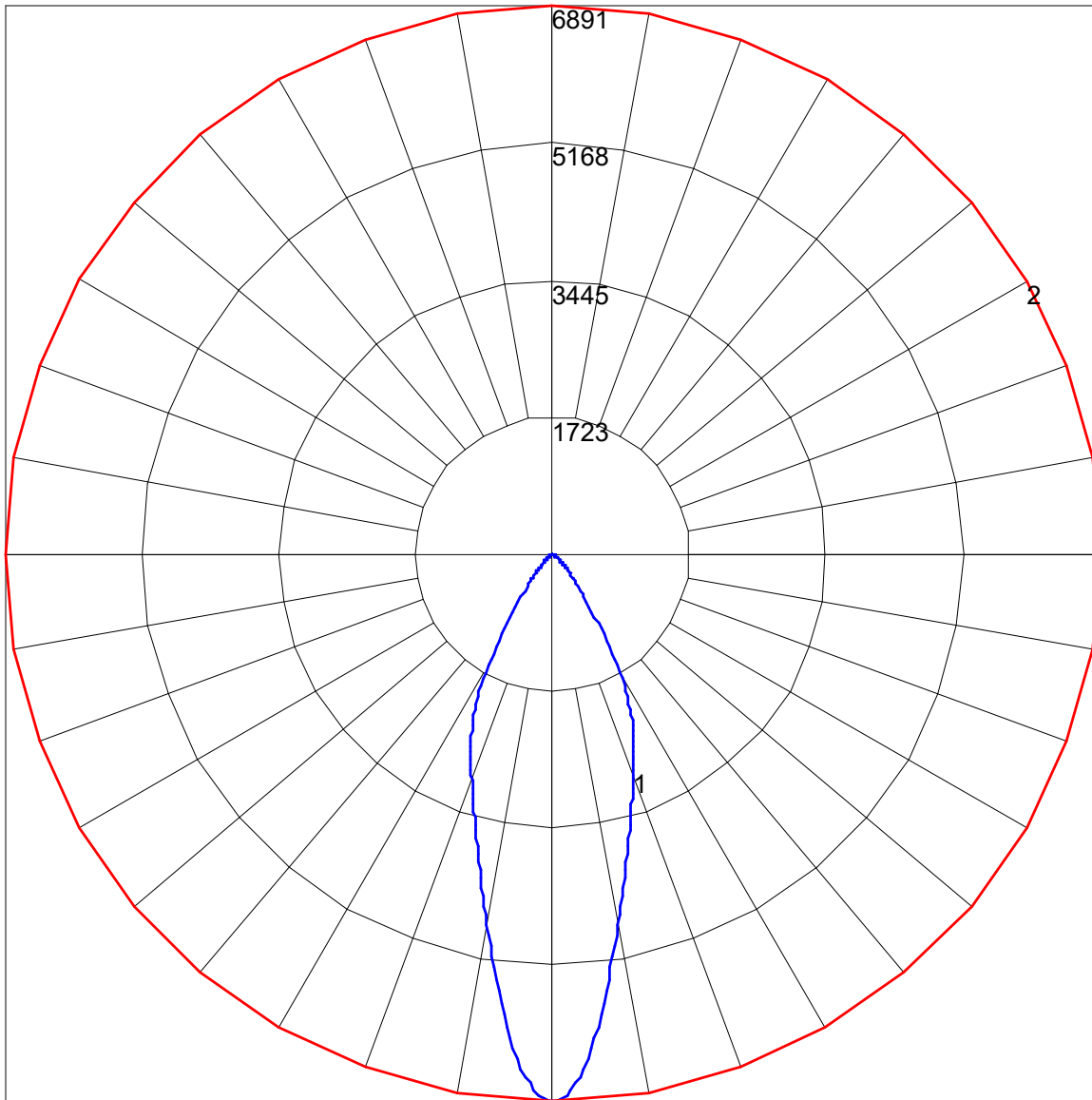
X=2H	Y=2H	4.3	4.3	4.3	4.3	4.3	UGR Viewed Endwise	4.3	4.3	4.3	4.3	4.3
	3H	4.3	4.3	4.3	4.3	4.3	4.3	4.3	4.3	4.3	4.3	4.3
	4H	4.3	4.3	4.3	4.3	4.3	4.3	4.3	4.3	4.3	4.3	4.3
	6H	4.3	4.3	4.3	4.3	4.3	4.3	4.3	4.3	4.3	4.3	4.3
	8H	4.3	4.3	4.3	4.3	4.3	4.3	4.3	4.3	4.3	4.3	4.3
	12H	4.3	4.3	4.3	4.3	4.3	4.3	4.3	4.3	4.3	4.3	4.3
4H	2H	4.3	4.3	4.3	4.3	4.3	4.3	4.3	4.3	4.3	4.3	4.3
	3H	4.3	4.3	4.3	4.3	4.3	4.3	4.3	4.3	4.3	4.3	4.3
	4H	4.3	4.3	4.3	4.3	4.3	4.3	4.3	4.3	4.3	4.3	4.3
	6H	4.3	4.3	4.3	4.3	4.3	4.3	4.3	4.3	4.3	4.3	4.3
	8H	4.3	4.3	4.3	4.3	4.3	4.3	4.3	4.3	4.3	4.3	4.3
	12H	4.3	4.3	4.3	4.3	4.3	4.3	4.3	4.3	4.3	4.3	4.3
8H	4H	4.3	4.3	4.3	4.3	4.3	4.3	4.3	4.3	4.3	4.3	4.3
	6H	4.3	4.3	4.3	4.3	4.3	4.3	4.3	4.3	4.3	4.3	4.3
	8H	4.3	4.3	4.3	4.3	4.3	4.3	4.3	4.3	4.3	4.3	4.3
	12H	4.3	4.3	4.3	4.3	4.3	4.3	4.3	4.3	4.3	4.3	4.3
12H	4H	4.3	4.3	4.3	4.3	4.3	4.3	4.3	4.3	4.3	4.3	4.3
	6H	4.3	4.3	4.3	4.3	4.3	4.3	4.3	4.3	4.3	4.3	4.3
	8H	4.3	4.3	4.3	4.3	4.3	4.3	4.3	4.3	4.3	4.3	4.3

Maximum UGR = 4.3

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POLAR GRAPH



Maximum Candela = 6890.59 Located At Horizontal Angle = 0, Vertical Angle = 0

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

2 - Horizontal Cone Through Vertical Angle (0) (Through Max. Cd.)