



IES INDOOR REPORT

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

DESCRIPTION INFORMATION (From Photometric File)

IESNA:LM-63-2002

[TEST] gen FROM ul #15271106.05

[TESTLAB] UL Verification Services Inc.

[ISSUE DATE] 15 OCT 2024

[TEST DATE] 5/10/2024

[MANUFAC] H E WILLIAMS INC

[LUMCAT] 8CR-TL-xx-L33-RGB940-DMX-UNV-ON-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, 0.347593 A, 41.2302 W, 0.988693 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	3377
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)	0.30
Spacing Criterion (90-270)	0.30
Spacing Criterion (Diagonal)	0.38
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-ON-OF-CS-TD WHITE ONLY.IES****LUMINANCE DATA (cd/sq.m)**

Angle In Degrees	Average 0-Deg	Average 45-Deg	Average 90-Deg
45	10050	10050	10050
55	827	827	827
65	368	368	368
75	200	200	200
85	170	170	170

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

	<u>0</u>
0.0	13159.278
0.5	13121.394
1.0	13014.507
1.5	12841.323
2.0	12603.195
2.5	12320.418
3.0	11980.815
3.5	11593.857
4.0	11148.720
4.5	10653.522
5.0	10179.972
5.5	9696.951
6.0	9147.633
6.5	8611.845
7.0	8097.705
7.5	7613.331
8.0	7157.370
8.5	6731.175
9.0	6340.158
9.5	5984.319
10.0	5654.187
10.5	5352.468
11.0	5077.809
11.5	4824.798
12.0	4594.788
12.5	4390.485
13.0	4203.771
13.5	4031.940
14.0	3877.698
14.5	3735.633
15.0	3611.157
15.5	3496.152
16.0	3391.971
16.5	3295.908
17.0	3207.963
17.5	3125.430
18.0	3044.250
18.5	2965.776
19.0	2887.302
19.5	2807.475
20.0	2726.295
20.5	2649.174
21.0	2573.406
21.5	2500.344
22.0	2432.694
22.5	2367.750
23.0	2306.865
23.5	2245.980
24.0	2186.448
24.5	2128.269
25.0	2072.796
25.5	2018.676
26.0	1965.909
26.5	1911.789

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

27.0	1860.375
27.5	1806.255
28.0	1750.782
28.5	1692.603
29.0	1629.012
29.5	1561.362
30.0	1489.653
30.5	1413.885
31.0	1335.005
31.5	1254.772
32.0	1172.916
32.5	1090.383
33.0	1007.714
33.5	927.211
34.0	848.872
34.5	773.645
35.0	702.884
35.5	636.181
36.0	575.025
36.5	519.417
37.0	468.815
37.5	423.895
38.0	384.252
38.5	349.209
39.0	317.955
39.5	290.624
40.0	266.947
40.5	246.111
41.0	227.845
41.5	211.339
42.0	196.726
42.5	183.467
43.0	171.290
43.5	159.925
44.0	149.507
44.5	139.359
45.0	129.753
45.5	120.146
46.0	110.405
46.5	100.528
47.0	89.569
47.5	76.715
48.0	62.509
48.5	49.520
49.0	38.290
49.5	29.225
50.0	22.325
50.5	17.724
51.0	15.289
51.5	13.936
52.0	12.854
52.5	12.042
53.0	11.230
53.5	10.418
54.0	9.742
54.5	9.200

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55.0	8.659
55.5	8.118
56.0	7.712
56.5	7.171
57.0	6.765
57.5	6.494
58.0	6.089
58.5	5.683
59.0	5.412
59.5	5.141
60.0	4.871
60.5	4.600
61.0	4.330
61.5	4.059
62.0	3.924
62.5	3.653
63.0	3.518
63.5	3.247
64.0	3.112
64.5	2.977
65.0	2.841
65.5	2.706
66.0	2.571
66.5	2.435
67.0	2.300
67.5	2.165
68.0	2.030
68.5	1.894
69.0	1.759
69.5	1.624
70.0	1.624
70.5	1.488
71.0	1.353
71.5	1.353
72.0	1.218
72.5	1.218
73.0	1.082
73.5	1.082
74.0	0.947
74.5	0.947
75.0	0.947
75.5	0.812
76.0	0.812
76.5	0.812
77.0	0.677
77.5	0.677
78.0	0.677
78.5	0.541
79.0	0.541
79.5	0.541
80.0	0.541
80.5	0.541
81.0	0.406
81.5	0.406
82.0	0.406
82.5	0.406

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

83.0	0.406
83.5	0.406
84.0	0.271
84.5	0.271
85.0	0.271
85.5	0.271
86.0	0.271
86.5	0.271
87.0	0.271
87.5	0.135
88.0	0.135
88.5	0.135
89.0	0.135
89.5	0.135
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-ON-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-ON-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

IES INDOOR REPORT**PHOTOMETRIC FILENAME : 8CR-TL-XX-L33-RGB940-DMX-UNV-ON-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

IES INDOOR REPORT**PHOTOMETRIC FILENAME : 8CR-TL-XX-L33-RGB940-DMX-UNV-ON-OF-CS-TD WHITE ONLY.IES****ZONAL LUMEN SUMMARY**

Zone	Lumens	%Lamp	%Fixt
0-20	1849.01	N.A.	54.80
0-30	2798.71	N.A.	82.90
0-40	3264.82	N.A.	96.70
0-60	3372.87	N.A.	99.90
0-80	3376.76	N.A.	100.00
0-90	3377.08	N.A.	100.00
10-90	2565.05	N.A.	76.00
20-40	1415.81	N.A.	41.90
20-50	1515.31	N.A.	44.90
40-70	110.95	N.A.	3.30
60-80	3.90	N.A.	0.10
70-80	0.99	N.A.	0.00
80-90	0.32	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	3377.08	N.A.	100.00

Total Luminaire Efficiency = N.A. %

ZONAL LUMEN SUMMARY

Zone	Lumens
0-10	812.03
10-20	1036.98
20-30	949.70
30-40	466.11
40-50	99.50
50-60	8.55
60-70	2.91
70-80	0.99
80-90	0.32
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

IES INDOOR REPORT

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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	112	110	108	112	110	108	106	106	104	103	102	101	100	99	98	97	95
2	110	105	102	99	107	104	101	98	101	98	96	98	95	94	95	93	92	90
3	105	100	95	92	103	98	94	91	96	92	90	93	91	88	91	89	87	86
4	101	94	90	86	99	93	89	85	91	87	85	89	86	84	87	85	83	81
5	97	90	85	81	95	89	84	81	87	83	80	85	82	79	84	81	79	77
6	93	85	80	77	92	85	80	76	83	79	76	82	78	75	81	77	75	74
7	89	81	76	73	88	81	76	73	80	75	72	79	75	72	77	74	71	70
8	86	78	73	69	85	77	73	69	76	72	69	75	71	69	74	71	68	67
9	83	75	70	66	82	74	69	66	73	69	66	72	69	66	72	68	65	64
10	80	72	67	63	79	71	66	63	70	66	63	70	66	63	69	65	63	62

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UGR TABLE - CORRECTED

Reflectances

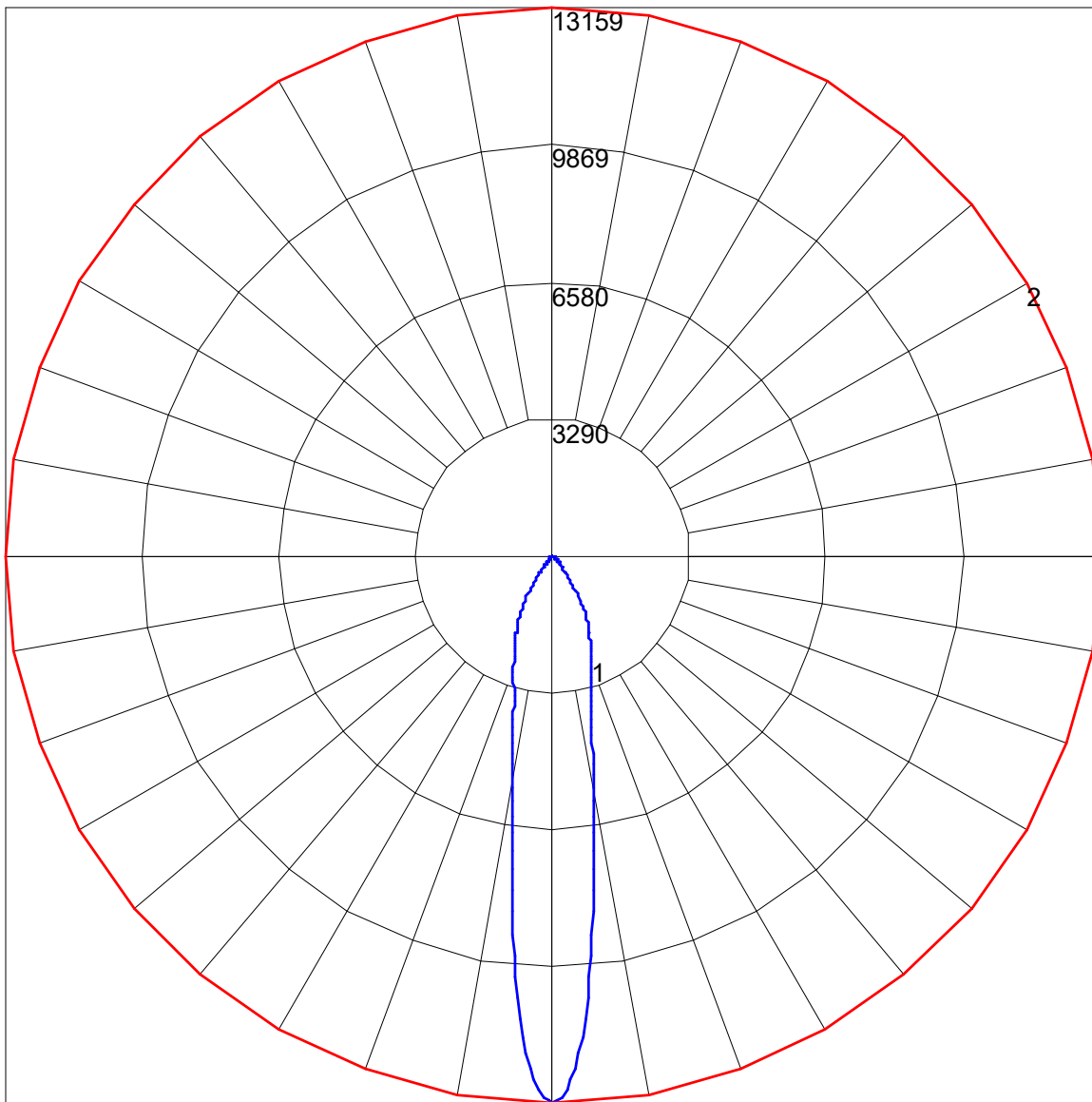
Ceiling Cavity	70	70	50	50	30	70	70	50	50	30
Walls	50	30	50	30	30	50	30	50	30	30
Floor Cavity	20	20	20	20	20	20	20	20	20	20

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

POLAR GRAPH



Maximum Candela = 13159.278 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.)