



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

DESCRIPTION INFORMATION (From Photometric File)

IESNA:LM-63-2002
[TEST] GEN from UL #15271106.02
[TESTLAB] UL Verification Services Inc.
[ISSUE DATE] 15 OCT, 2024
[TEST DATE] 5/9/2024
[MANUFAC] H E WILLIAMS INC
[LUMCAT] 8CR-TL-xx-L33-RGB940-DMX-UNV-OW-OF-WH-TD WHITE ONLY
[LUMINAIRE] 8" dia aluminum cylindrical housing
[LAMP] 28 white LEDs
[BALLAST] ERP VLM60W-24-S
[OTHER] 24.9 C, 119.97 V, 0.347062 A, 41.169 W, 0.988755 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	2903
Total Luminaire Efficiency	N.A.
Luminaire Efficacy Rating (LER)	52
Total Luminaire Watts	55.4
Ballast Factor	1.00
CIE Type	Direct
Spacing Criterion (0-180)	1.04
Spacing Criterion (90-270)	1.04
Spacing Criterion (Diagonal)	0.94
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-WH-TD WHITE ONLY.IES****LUMINANCE DATA (cd/sq.m)**

Angle In Degrees	Average 0-Deg	Average 45-Deg	Average 90-Deg
45	32020	32020	32020
55	27543	27543	27543
65	21558	21558	21558
75	16347	16347	16347
85	11217	11217	11217

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

	<u>0</u>
0.0	2271.00
0.5	2271.00
1.0	2271.00
1.5	2269.50
2.0	2266.50
2.5	2263.50
3.0	2257.50
3.5	2251.50
4.0	2242.50
4.5	2232.00
5.0	2220.00
5.5	2206.50
6.0	2193.00
6.5	2181.00
7.0	2167.50
7.5	2155.50
8.0	2142.00
8.5	2130.00
9.0	2116.50
9.5	2104.50
10.0	2091.00
10.5	2077.50
11.0	2062.50
11.5	2049.00
12.0	2034.00
12.5	2019.00
13.0	2005.50
13.5	1993.50
14.0	1983.00
14.5	1974.00
15.0	1966.50
15.5	1960.50
16.0	1954.50
16.5	1948.50
17.0	1944.00
17.5	1938.00
18.0	1932.00
18.5	1924.50
19.0	1915.50
19.5	1906.50
20.0	1896.00
20.5	1887.00
21.0	1876.50
21.5	1864.50
22.0	1854.00
22.5	1843.50
23.0	1830.00
23.5	1816.50
24.0	1803.00
24.5	1785.00
25.0	1767.00
25.5	1744.50
26.0	1717.50
26.5	1687.50

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

27.0	1653.00
27.5	1614.00
28.0	1570.50
28.5	1521.00
29.0	1468.05
29.5	1410.90
30.0	1349.10
30.5	1285.65
31.0	1220.85
31.5	1159.35
32.0	1099.05
32.5	1036.95
33.0	972.60
33.5	911.25
34.0	853.05
34.5	798.00
35.0	748.20
35.5	703.35
36.0	663.15
36.5	628.20
37.0	597.75
37.5	571.50
38.0	548.70
38.5	529.20
39.0	512.25
39.5	497.70
40.0	485.10
40.5	474.00
41.0	464.10
41.5	455.10
42.0	447.15
42.5	440.10
43.0	433.65
43.5	427.80
44.0	422.55
44.5	417.75
45.0	413.40
45.5	409.50
46.0	405.75
46.5	402.15
47.0	398.25
47.5	394.05
48.0	389.40
48.5	384.30
49.0	378.60
49.5	371.85
50.0	364.65
50.5	357.45
51.0	349.80
51.5	342.00
52.0	334.05
52.5	326.25
53.0	318.45
53.5	310.80
54.0	303.15
54.5	295.80

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55.0	288.45
55.5	281.40
56.0	274.20
56.5	267.15
57.0	260.10
57.5	253.20
58.0	246.60
58.5	240.15
59.0	233.85
59.5	227.70
60.0	221.70
60.5	215.85
61.0	210.00
61.5	204.30
62.0	198.75
62.5	193.05
63.0	187.65
63.5	182.10
64.0	176.70
64.5	171.45
65.0	166.35
65.5	161.25
66.0	156.45
66.5	151.65
67.0	146.85
67.5	142.05
68.0	137.25
68.5	132.60
69.0	127.80
69.5	123.15
70.0	118.35
70.5	113.70
71.0	109.20
71.5	104.85
72.0	100.50
72.5	96.30
73.0	92.25
73.5	88.35
74.0	84.60
74.5	81.00
75.0	77.25
75.5	73.80
76.0	70.35
76.5	66.90
77.0	63.60
77.5	60.15
78.0	56.85
78.5	53.70
79.0	50.40
79.5	47.25
80.0	44.25
80.5	41.25
81.0	38.40
81.5	35.55
82.0	32.85
82.5	30.15

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83.0	27.60
83.5	25.05
84.0	22.65
84.5	20.25
85.0	17.85
85.5	15.60
86.0	13.20
86.5	11.10
87.0	8.85
87.5	6.90
88.0	4.95
88.5	3.15
89.0	1.50
89.5	0.45
90.0	0.00
90.5	0.00
91.0	0.00
91.5	0.00
92.0	0.00
92.5	0.00
93.0	0.00
93.5	0.00
94.0	0.00
94.5	0.00
95.0	0.00
95.5	0.00
96.0	0.00
96.5	0.00
97.0	0.00
97.5	0.00
98.0	0.00
98.5	0.00
99.0	0.00
99.5	0.00
100.0	0.00
100.5	0.00
101.0	0.00
101.5	0.00
102.0	0.00
102.5	0.00
103.0	0.00
103.5	0.00
104.0	0.00
104.5	0.00
105.0	0.00
105.5	0.00
106.0	0.00
106.5	0.00
107.0	0.00
107.5	0.00
108.0	0.00
108.5	0.00
109.0	0.00
109.5	0.00
110.0	0.00
110.5	0.00

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

111.0	0.00
111.5	0.00
112.0	0.00
112.5	0.00
113.0	0.00
113.5	0.00
114.0	0.00
114.5	0.00
115.0	0.00
115.5	0.00
116.0	0.00
116.5	0.00
117.0	0.00
117.5	0.00
118.0	0.00
118.5	0.00
119.0	0.00
119.5	0.00
120.0	0.00
120.5	0.00
121.0	0.00
121.5	0.00
122.0	0.00
122.5	0.00
123.0	0.00
123.5	0.00
124.0	0.00
124.5	0.00
125.0	0.00
125.5	0.00
126.0	0.00
126.5	0.00
127.0	0.00
127.5	0.00
128.0	0.00
128.5	0.00
129.0	0.00
129.5	0.00
130.0	0.00
130.5	0.00
131.0	0.00
131.5	0.00
132.0	0.00
132.5	0.00
133.0	0.00
133.5	0.00
134.0	0.00
134.5	0.00
135.0	0.00
135.5	0.00
136.0	0.00
136.5	0.00
137.0	0.00
137.5	0.00
138.0	0.00
138.5	0.00

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139.0	0.00
139.5	0.00
140.0	0.00
140.5	0.00
141.0	0.00
141.5	0.00
142.0	0.00
142.5	0.00
143.0	0.00
143.5	0.00
144.0	0.00
144.5	0.00
145.0	0.00
145.5	0.00
146.0	0.00
146.5	0.00
147.0	0.00
147.5	0.00
148.0	0.00
148.5	0.00
149.0	0.00
149.5	0.00
150.0	0.00
150.5	0.00
151.0	0.00
151.5	0.00
152.0	0.00
152.5	0.00
153.0	0.00
153.5	0.00
154.0	0.00
154.5	0.00
155.0	0.00
155.5	0.00
156.0	0.00
156.5	0.00
157.0	0.00
157.5	0.00
158.0	0.00
158.5	0.00
159.0	0.00
159.5	0.00
160.0	0.00
160.5	0.00
161.0	0.00
161.5	0.00
162.0	0.00
162.5	0.00
163.0	0.00
163.5	0.00
164.0	0.00
164.5	0.00
165.0	0.00
165.5	0.00
166.0	0.00
166.5	0.00

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CANDELA TABULATION - (Cont.)

167.0	0.00
167.5	0.00
168.0	0.00
168.5	0.00
169.0	0.00
169.5	0.00
170.0	0.00
170.5	0.00
171.0	0.00
171.5	0.00
172.0	0.00
172.5	0.00
173.0	0.00
173.5	0.00
174.0	0.00
174.5	0.00
175.0	0.00
175.5	0.00
176.0	0.00
176.5	0.00
177.0	0.00
177.5	0.00
178.0	0.00
178.5	0.00
179.0	0.00
179.5	0.00
180.0	0.00

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Zone	Lumens	%Lamp	%Fixt
0-20	765.71	N.A.	26.40
0-30	1553.15	N.A.	53.50
0-40	2052.01	N.A.	70.70
0-60	2633.34	N.A.	90.70
0-80	2882.04	N.A.	99.30
0-90	2902.67	N.A.	100.00
10-90	2695.2	N.A.	92.90
20-40	1286.29	N.A.	44.30
20-50	1608.6	N.A.	55.40
40-70	747.17	N.A.	25.70
60-80	248.70	N.A.	8.60
70-80	82.86	N.A.	2.90
80-90	20.63	N.A.	0.70
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	2902.67	N.A.	100.00

Total Luminaire Efficiency = N.A. %

ZONAL LUMEN SUMMARY

Zone	Lumens
0-10	207.47
10-20	558.24
20-30	787.44
30-40	498.85
40-50	322.31
50-60	259.02
60-70	165.83
70-80	82.86
80-90	20.63
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	111	108	105	102	109	106	103	100	101	99	97	98	96	94	94	93	91	89
2	104	98	92	88	102	96	91	87	92	88	85	89	86	83	86	84	81	79
3	97	89	82	77	95	87	81	77	84	79	75	82	78	74	80	76	73	71
4	91	81	74	69	89	80	73	68	78	72	68	75	71	67	73	69	66	64
5	85	75	67	62	83	74	67	62	72	66	61	70	65	61	68	64	60	58
6	80	69	62	56	78	68	61	56	66	60	56	65	59	55	63	59	55	53
7	75	64	57	52	74	63	56	51	62	56	51	60	55	51	59	54	51	49
8	71	60	52	48	69	59	52	47	58	52	47	57	51	47	56	50	47	45
9	67	56	49	44	66	55	48	44	54	48	44	53	48	44	52	47	43	42
10	63	52	45	41	62	52	45	41	51	45	41	50	44	41	49	44	40	39

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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	20.8	22.1	21.1	22.4	22.7
	3H	22.1	23.3	22.5	23.6	24.0
	4H	22.6	23.6	23.0	24.0	24.4
	6H	22.8	23.8	23.3	24.2	24.6
	8H	22.9	23.9	23.4	24.3	24.7
	12H	23.0	23.9	23.4	24.3	24.7

UGR Viewed Endwise

20.8	22.1	21.1	22.4	22.7
22.1	23.3	22.5	23.6	24.0
22.6	23.6	23.0	24.0	24.4
22.8	23.8	23.3	24.2	24.6
22.9	23.9	23.4	24.3	24.7
23.0	23.9	23.4	24.3	24.7

4H	2H	21.2	22.3	21.6	22.6	23.0	21.2	22.3	21.6	22.6	23.0
	3H	22.7	23.6	23.1	24.0	24.4	22.7	23.6	23.1	24.0	24.4
	4H	23.3	24.1	23.7	24.5	24.9	23.3	24.1	23.7	24.5	24.9
	6H	23.7	24.4	24.2	24.8	25.3	23.7	24.4	24.2	24.8	25.3
	8H	23.8	24.5	24.3	24.9	25.4	23.8	24.5	24.3	24.9	25.4
	12H	23.9	24.4	24.4	24.9	25.4	23.9	24.4	24.4	24.9	25.4

8H	4H	23.4	24.1	23.9	24.5	25.0	23.4	24.1	23.9	24.5	25.0
	6H	24.0	24.5	24.5	25.0	25.5	24.0	24.5	24.5	25.0	25.5
	8H	24.1	24.6	24.6	25.1	25.6	24.1	24.6	24.6	25.1	25.6
	12H	24.3	24.7	24.8	25.2	25.7	24.3	24.7	24.8	25.2	25.7

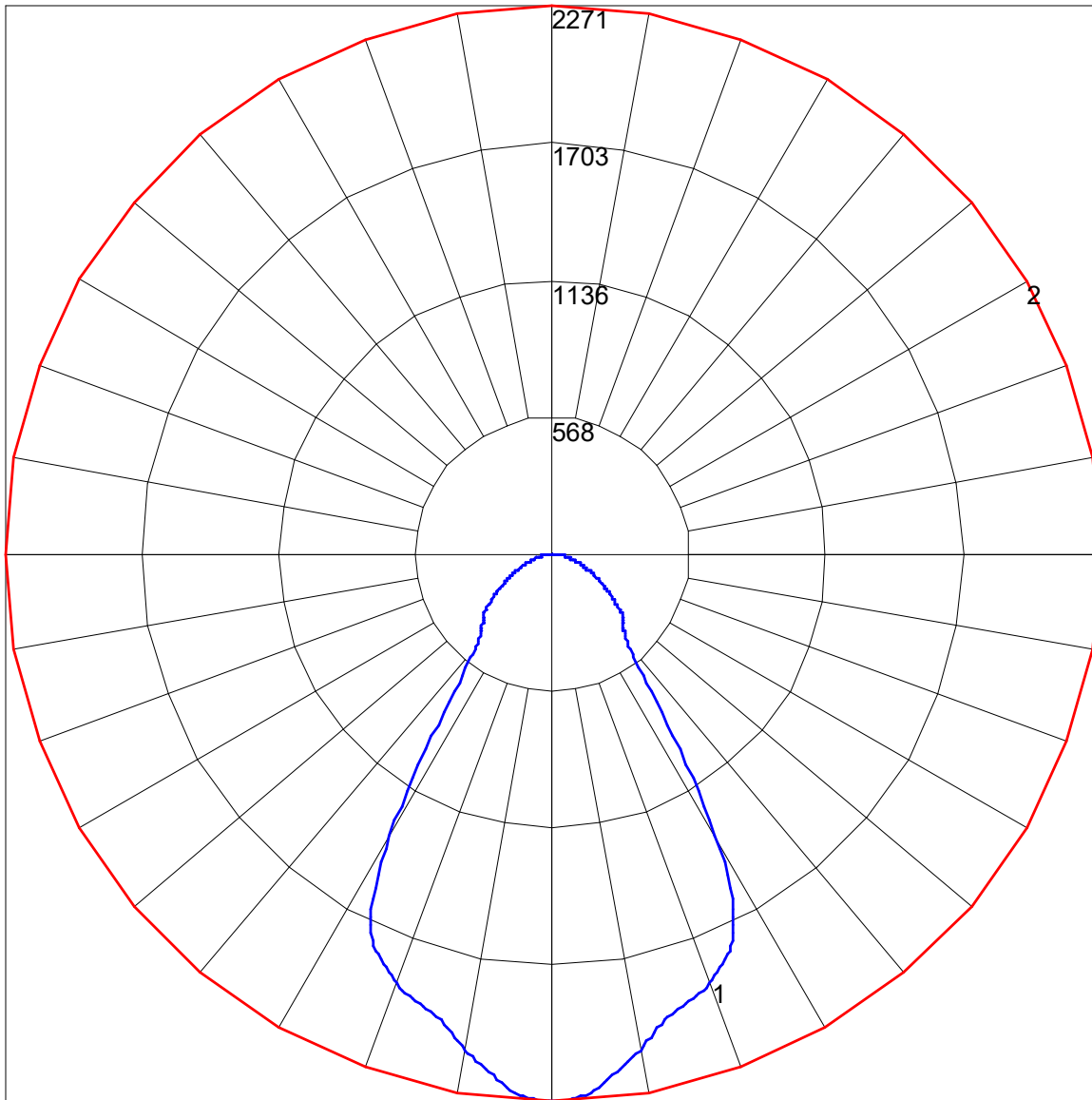
12H	4H	23.4	24.0	23.9	24.5	25.0	23.4	24.0	23.9	24.5	25.0
	6H	24.0	24.5	24.5	24.9	25.5	24.0	24.5	24.5	24.9	25.5
	8H	24.2	24.6	24.7	25.1	25.7	24.2	24.6	24.7	25.1	25.7

Maximum UGR = 25.7

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POLAR GRAPH



Maximum Candela = 2271 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.)