

Scaled data based on original data using
LM-79-08 Approved Method: Electrical and Photometric Measurements of Solid-State
Lighting Products

Test Report Prepared for
Cooper Lighting Solutions
(formerly Eaton)

Brand: FAIL-SAFE

Report Number: 767197

Luminaire Tested: **QDUWPP56N120**

Issue Date: 3/3/2020



Test Information

Test Method: LM-79-08
Report Number: 767197
Test Lab:
Issue Date: 3/3/2020
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: FAIL-SAFE
Catalog Number: QDUWPP56N120
Description:
Light Source: (2) PHILIPS PLC 15MM/28W 3200 LUMENS
TOTAL INPUT WATTS: 47.7 AT 120 VOLTS
Ballast/Driver: (2) QSE #486-081692

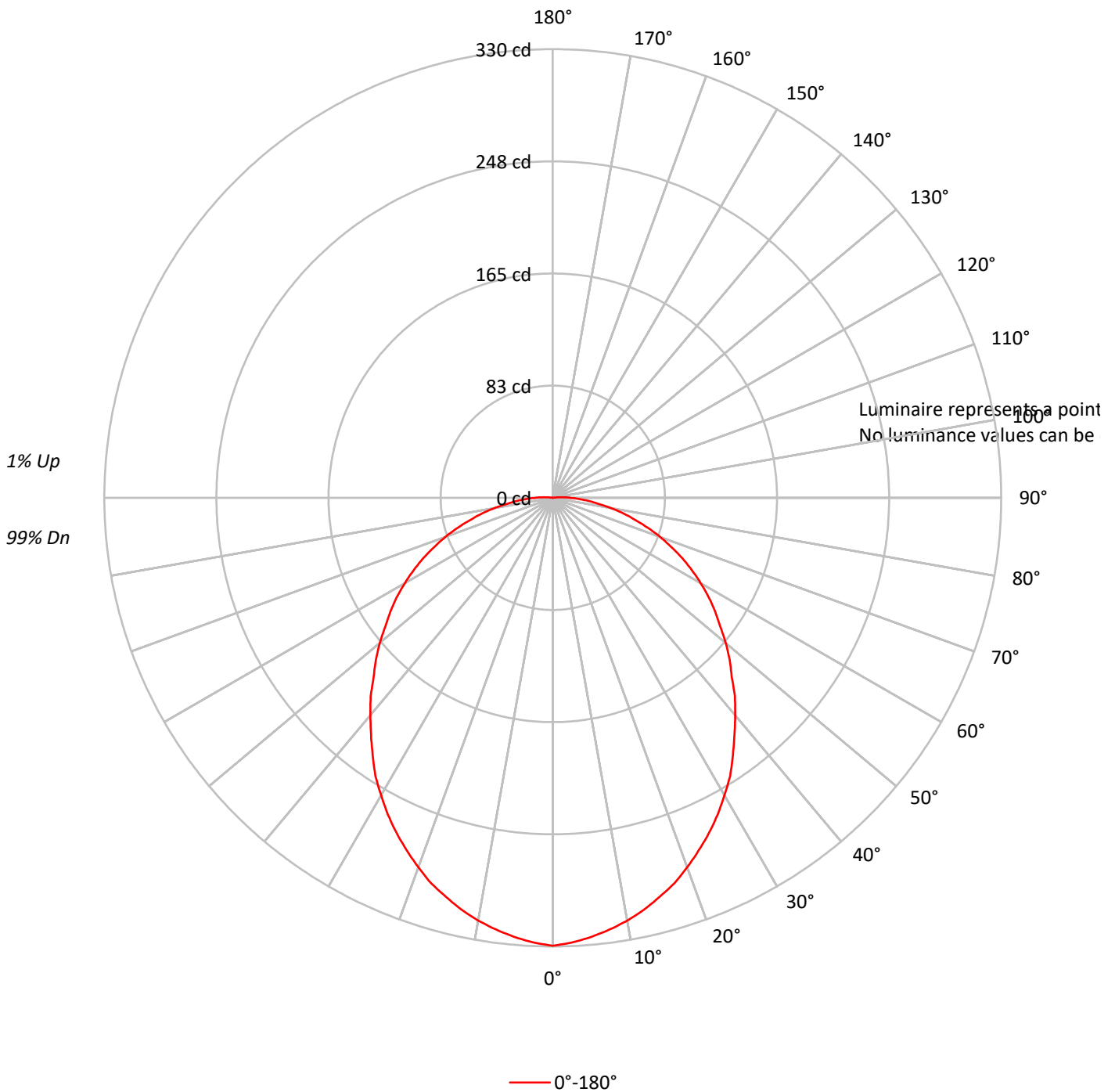
Summary

Lumens per Lamp: 1600 (2 lamps)
Luminaire Lumens: 866.8 lumens
Efficiency: 27.1%
Efficacy: 15.5 lumens/watt
Spacing Criteria (0/90/45): 1.15 / 1.15 / 1.27
Luminous Opening: Point Source (0' x 0' x 0')
CIE Type: Direct

Input Watts (W): 56
Input Voltage (V): NR
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT

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Luminous Intensity Polar Plot





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COEFFICIENT OF UTILIZATION - ZONAL CAVITY METHOD:

RF	20				20				20				20				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
RCR																				
0	32	32	32	32	31	31	31	31	30	30	30		29	29	29		27	27	27	27
1	29	28	27	26	28	27	26	25	26	25	24		25	24	23		24	23	23	22
2	27	24	22	21	26	24	22	20	23	21	20		22	21	19		21	20	19	18
3	24	21	19	17	24	21	19	17	20	18	17		19	18	16		18	17	16	15
4	22	19	16	15	22	18	16	14	18	16	14		17	15	14		17	15	14	13
5	20	17	14	13	20	17	14	13	16	14	12		15	14	12		15	13	12	11
6	19	15	13	11	18	15	13	11	14	12	11		14	12	11		14	12	11	10
7	18	14	11	10	17	14	11	10	13	11	10		13	11	10		12	11	9	9
8	16	13	10	9	16	12	10	9	12	10	9		12	10	9		11	10	9	8
9	15	12	9	8	15	11	9	8	11	9	8		11	9	8		11	9	8	7
10	14	11	9	7	14	11	9	7	10	8	7		10	8	7		10	8	7	7

AVERAGE LUMINANCE (cd/sqm):





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ZONAL LUMENS:

CANDELA DISTRIBUTION:

Zone	Lumens	% Fixture	% Lamp	0°	Flux	
0°-10°	30.7	3.5	1.0	0°	330	
10°-20°	85.7	9.9	2.7	5°	324	31
20°-30°	125.2	14.4	3.9	15°	304	86
30°-40°	144.6	16.7	4.5	25°	272	125
40°-50°	144.5	16.7	4.5	35°	231	145
50°-60°	130.4	15.0	4.1	45°	186	144
60°-70°	103.9	12.0	3.2	55°	146	130
70°-80°	66.8	7.7	2.1	65°	105	104
80°-90°	29.1	3.4	0.9	75°	63	67
90°-100°	5.9	0.7	0.2	85°	26	25
100°-110°	0.0	0.0	0.0	90°	13	7
110°-120°	0.0	0.0	0.0	95°	5	3
120°-130°	0.0	0.0	0.0	105°	0	0
130°-140°	0.0	0.0	0.0	115°	0	0
140°-150°	0.0	0.0	0.0	125°	0	0
150°-160°	0.0	0.0	0.0	135°	0	0
160°-170°	0.0	0.0	0.0	145°	0	0
170°-180°	0.0	0.0	0.0	155°	0	0
0°-30°	241.5	27.9	7.5	165°	0	0
0°-40°	386.1	44.5	12.1	175°	0	0
0°-60°	661.0	76.3	20.7	180°	0	0
0°-90°	860.8	99.3	26.9			
90°-120°	6.0	0.7	0.2			
90°-150°	6.0	0.7	0.2			
90°-180°	6.0	0.7	0.2			
0°-180°	866.8	100.0	27.1			



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CANDELA DISTRIBUTION (FULL):

0°	
0°	329.5
2.5°	327.4
5°	324.2
7.5°	320.3
10°	315.8
12.5°	310.3
15°	303.8
17.5°	297.4
20°	289.2
22.5°	280.7
25°	272.0
27.5°	262.7
30°	252.6
32.5°	242.8
35°	231.0
37.5°	219.7
40°	208.7
42.5°	198.3
45°	186.3
47.5°	176.5
50°	166.1
52.5°	155.2
55°	145.9
57.5°	136.1
60°	125.7
62.5°	115.4
65°	105.2
67.5°	94.1
70°	84.1
72.5°	73.2
75°	62.7
77.5°	53.5
80°	43.5
82.5°	33.7
85°	26.1
87.5°	18.9
90°	12.8
92.5°	8.8
95°	4.9
97.5°	1.5
100°	0.2
102.5°	0.0
105°	0.0
107.5°	0.0
110°	0.0



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CANDELA DISTRIBUTION (continued):

	0°
112.5°	0.0
115°	0.0
117.5°	0.0
120°	0.0
122.5°	0.0
125°	0.0
127.5°	0.0
130°	0.0
132.5°	0.0
135°	0.0
137.5°	0.0
140°	0.0
142.5°	0.0
145°	0.0
147.5°	0.0
150°	0.0
152.5°	0.0
155°	0.0
157.5°	0.0
160°	0.0
162.5°	0.0
165°	0.0
167.5°	0.0
170°	0.0
172.5°	0.0
175°	0.0
177.5°	0.0
180°	0.0

(END OF REPORT)