

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: 767196

Luminaire Tested: **QDUCPP56N120**

Issue Date: 3/3/2020



Test Information

Test Method: LM-79-08
Report Number: 767196
Test Lab:
Issue Date: 3/3/2020
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: FAIL-SAFE
Catalog Number: QDUCPP56N120
Description:
Light Source: (2) PHILIPS PLC 15MM/28W 3200 LUMENS
TOTAL INPUT WATTS: 48.0 AT 120 VOLTS
Ballast/Driver: (2) QSE #486-081692

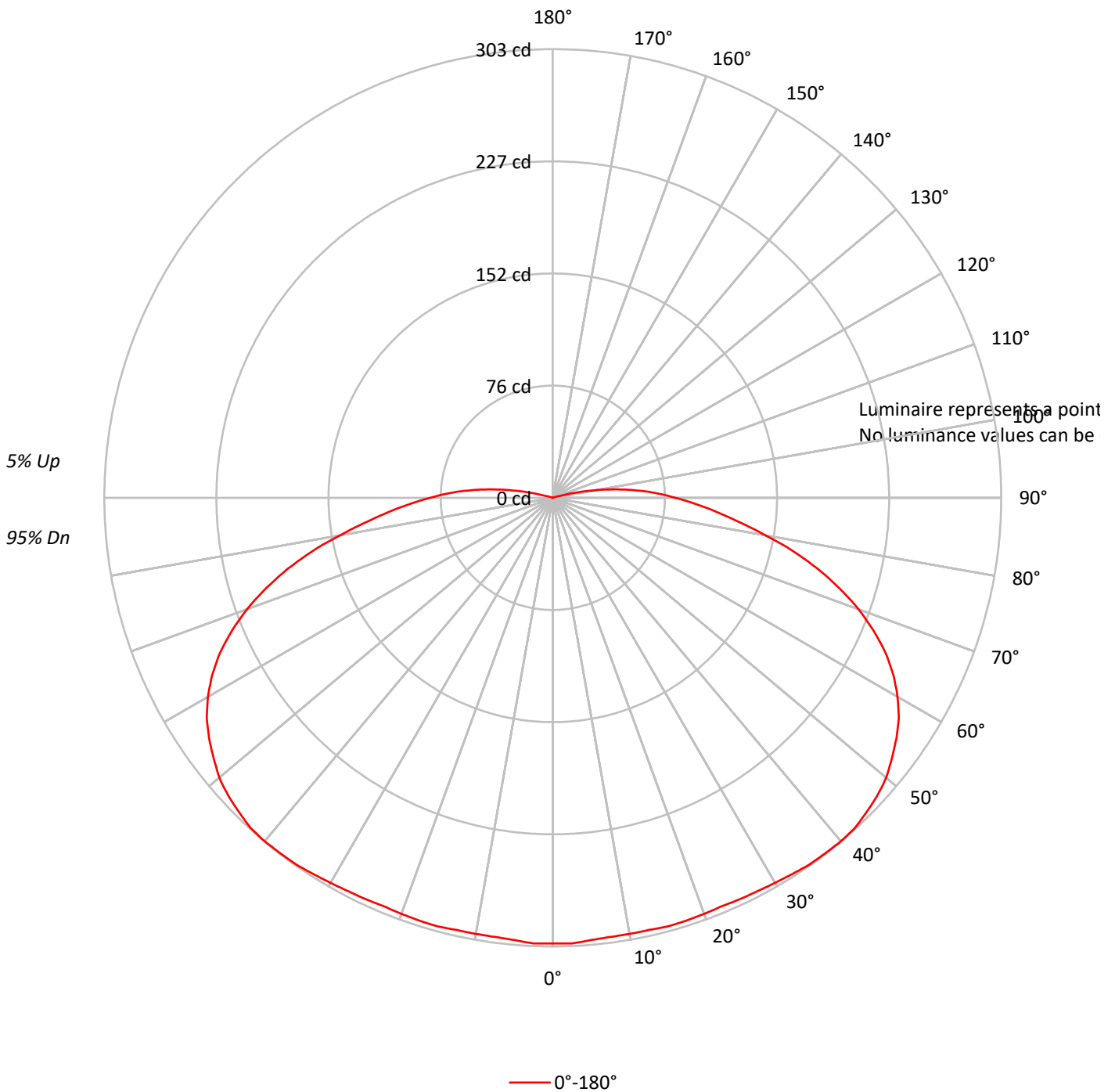
Summary

Lumens per Lamp: 1600 (2 lamps)
Luminaire Lumens: 1561.1 lumens
Efficiency: 48.8%
Efficacy: 27.9 lumens/watt
Spacing Criteria (0/90/45): 1.54 / 1.54 / 1.72
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	58	58	58	58	56	56	56	56	53	53	53	50	50	50	48	48	48	47
1	51	47	45	42	49	46	44	41	44	41	39	41	39	38	39	38	36	35
2	45	40	36	32	43	39	35	32	37	33	31	35	32	30	33	31	29	27
3	40	34	30	26	39	33	29	25	31	28	25	30	27	24	28	25	23	22
4	37	30	25	21	35	29	24	21	27	23	20	26	23	20	25	22	19	18
5	33	26	21	18	32	26	21	17	24	20	17	23	19	17	22	19	16	15
6	31	23	19	15	30	23	18	15	22	18	15	21	17	14	20	16	14	13
7	28	21	16	13	27	21	16	13	20	16	13	19	15	12	18	15	12	11
8	26	19	15	11	25	19	14	11	18	14	11	17	13	11	16	13	11	10
9	24	17	13	10	24	17	13	10	16	12	10	15	12	10	15	12	9	8
10	23	16	12	9	22	16	12	9	15	11	9	14	11	9	14	11	8	8

AVERAGE LUMINANCE (cd/sqm):





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ZONAL LUMENS:

CANDELA DISTRIBUTION:

Zone	Lumens	% Fixture	% Lamp	0°	Flux	
0°-10°	28.6	1.8	0.9	0°	301	
10°-20°	84.8	5.4	2.7	5°	300	29
20°-30°	138.5	8.9	4.3	15°	300	85
30°-40°	189.7	12.2	5.9	25°	299	138
40°-50°	231.9	14.9	7.2	35°	302	190
50°-60°	253.5	16.2	7.9	45°	300	232
60°-70°	244.6	15.7	7.6	55°	283	253
70°-80°	194.8	12.5	6.1	65°	248	245
80°-90°	122.7	7.9	3.8	75°	185	195
90°-100°	62.1	4.0	1.9	85°	111	98
100°-110°	10.0	0.6	0.3	90°	83	46
110°-120°	0.0	0.0	0.0	95°	57	41
120°-130°	0.0	0.0	0.0	105°	5	10
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°	251.9	16.1	7.9	165°	0	0
0°-40°	441.6	28.3	13.8	175°	0	0
0°-60°	927.0	59.4	29.0	180°	0	0
0°-90°	1489.0	95.4	46.5			
90°-120°	72.1	4.6	2.3			
90°-150°	72.1	4.6	2.3			
90°-180°	72.0	4.6	2.3			
0°-180°	1561.1	100.0	48.8			



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CANDELA DISTRIBUTION (FULL):

0°	
0°	300.9
2.5°	301.2
5°	299.7
7.5°	299.1
10°	299.0
12.5°	299.0
15°	299.7
17.5°	299.4
20°	299.0
22.5°	298.5
25°	299.1
27.5°	299.5
30°	300.2
32.5°	301.2
35°	302.3
37.5°	302.5
40°	302.8
42.5°	302.3
45°	300.0
47.5°	297.5
50°	294.1
52.5°	288.8
55°	283.4
57.5°	277.2
60°	269.0
62.5°	259.5
65°	248.2
67.5°	234.7
70°	219.8
72.5°	203.1
75°	185.3
77.5°	166.3
80°	146.0
82.5°	127.6
85°	111.4
87.5°	96.7
90°	82.8
92.5°	70.4
95°	57.1
97.5°	43.4
100°	30.0
102.5°	16.4
105°	5.4
107.5°	0.5
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)