

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: 6764.0

Luminaire Tested: **FRR-9-RD-1PLC26-120-82**

Issue Date: 3/3/2020



**Test Information**

Test Method: LM-79-08  
Report Number: 6764.0  
Test Lab:  
Issue Date: 3/3/2020  
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)  
Product Line: FAIL-SAFE  
Catalog Number: FRR-9-RD-1PLC26-120-82  
Description: FAIL-SAFE "QUAD" 9" RND RECESSED LUMINAIRE  
PRISMATIC LENS WATTS=26  
Light Source: 26W PLC  
DULUX D 26W/41  
Ballast/Driver: -

**Summary**

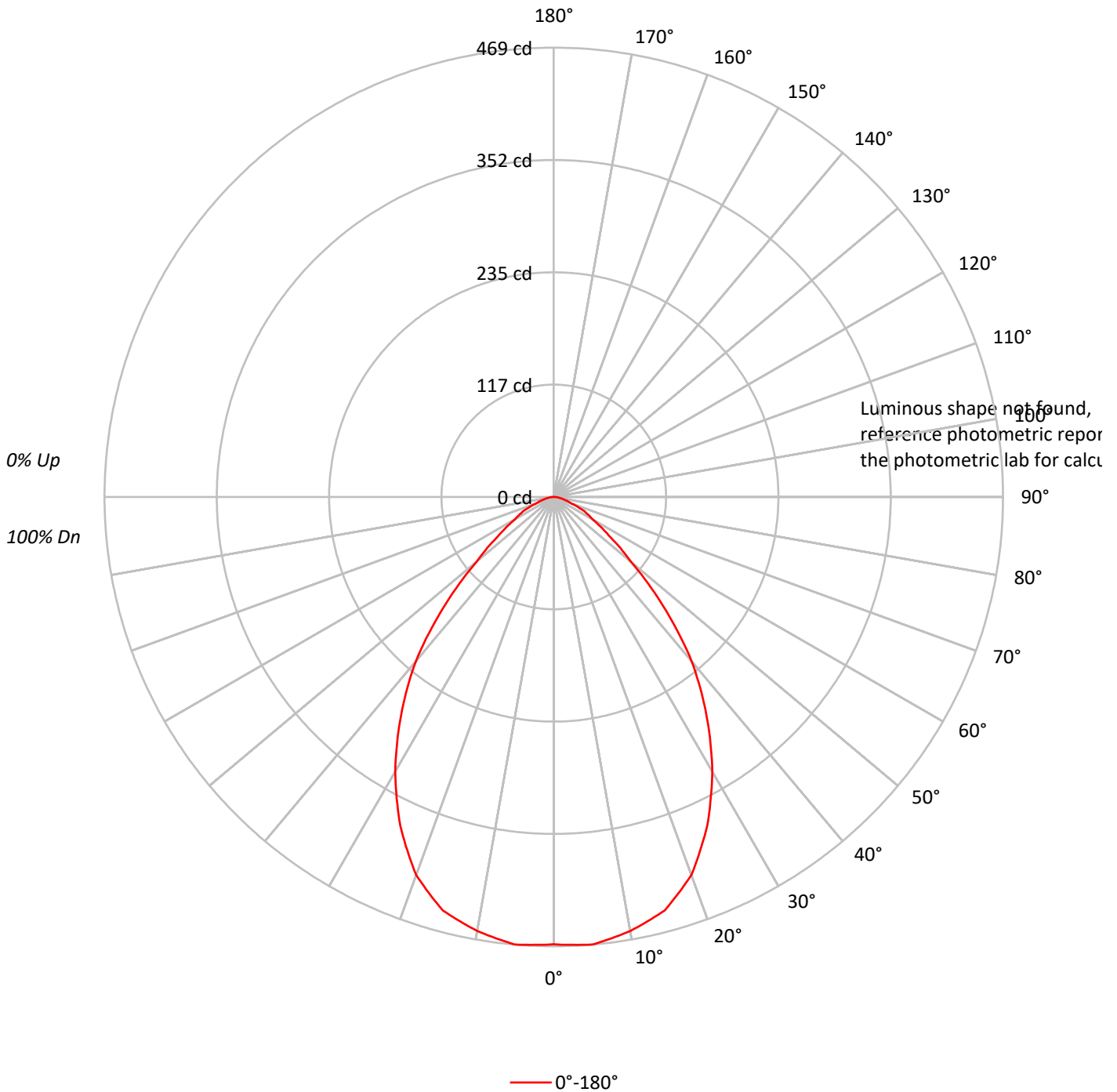
Lumens per Lamp: 1800 (1 lamp)  
Luminaire Lumens: 757.6 lumens  
Efficiency: 42.1%  
Efficacy: 29.1 lumens/watt  
Spacing Criteria (0/90/45): 1.09 / 1.09 / 1.12  
Luminous Opening: (L: 0.75 ' x W: 0 ' x H: 0 '  
CIE Type: Direct

Input Watts (W): 26  
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	50	50	50	50	49	49	49	49	47	47	47	45	45	45	43	43	43	42
1	47	45	44	43	46	45	43	42	43	42	41	41	40	40	40	39	39	38
2	44	41	39	37	43	40	38	37	39	37	36	38	36	35	36	35	34	33
3	41	37	35	32	40	37	34	32	35	33	32	34	33	31	33	32	31	30
4	38	34	31	29	37	33	31	28	32	30	28	32	29	28	31	29	27	27
5	35	31	28	26	35	31	28	25	30	27	25	29	27	25	28	26	25	24
6	33	28	25	23	32	28	25	23	27	25	23	27	24	23	26	24	22	22
7	31	26	23	21	30	26	23	21	25	23	21	25	22	21	24	22	20	20
8	29	24	21	19	29	24	21	19	23	21	19	23	21	19	23	20	19	18
9	27	23	20	17	27	22	19	17	22	19	17	21	19	17	21	19	17	17
10	26	21	18	16	25	21	18	16	20	18	16	20	18	16	20	17	16	15

**AVERAGE LUMINANCE (cd/sqm):**





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**ZONAL LUMENS:**

**CANDELA DISTRIBUTION:**

Zone	Lumens	% Fixture	% Lamp	0°	Flux	
0°-10°	44.4	5.9	2.5	0°	467	
10°-20°	125.3	16.5	7.0	5°	469	44
20°-30°	173.7	22.9	9.6	15°	447	125
30°-40°	173.4	22.9	9.6	25°	379	174
40°-50°	125.4	16.6	7.0	35°	278	173
50°-60°	65.1	8.6	3.6	45°	162	125
60°-70°	33.6	4.4	1.9	55°	70	65
70°-80°	13.2	1.7	0.7	65°	35	34
80°-90°	3.5	0.5	0.2	75°	12	13
90°-100°	0.0	0.0	0.0	85°	3	4
100°-110°	0.0	0.0	0.0	90°	0	
110°-120°	0.0	0.0	0.0			
120°-130°	0.0	0.0	0.0			
130°-140°	0.0	0.0	0.0			
140°-150°	0.0	0.0	0.0			
150°-160°	0.0	0.0	0.0			
160°-170°	0.0	0.0	0.0			
170°-180°	0.0	0.0	0.0			
0°-30°	343.3	45.3	19.1			
0°-40°	516.8	68.2	28.7			
0°-60°	707.3	93.4	39.3			
0°-90°	757.6	100.0	42.1			
90°-120°	0.0	0.0	0.0			
90°-150°	0.0	0.0	0.0			
90°-180°	0.0	0.0	0.0			
0°-180°	757.6	100.0	42.1			



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**CANDELA DISTRIBUTION (FULL):**

	0°
0°	467
5°	469
10°	460
15°	447
20°	420
25°	379
30°	331
35°	278
40°	224
45°	162
50°	105
55°	70
60°	47
65°	35
70°	19
75°	12
80°	7
85°	3
90°	0

(END OF REPORT)