

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: HALO COMMERCIAL

Report Number: P345380

Luminaire Tested: **PR4FS24D010 PR4M24WD9FSBZ 2000Lm3500K**

Issue Date: 03/03/2020

**Test Information**

Test Method: LM-79-08  
Report Number: P345380  
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G1-1908-453-6)  
Test Lab: INNOVATION CENTER(G1)  
Issue Date: 03/03/2020  
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)  
Product Line: HALO COMMERCIAL  
Catalog Number: PR4FS24D010 PR4M24WD9FSBZ 2000Lm3500K  
Description: PR4 WIDE LENS WITH, BRONZE FINISH  
Light Source: ARRAY OF HIGH LUMEN LEDs 90CRI / 3500K CCT  
Ballast/Driver: ELECTRONIC DRIVER

**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 1470.7 lumens  
Efficiency: N/A  
Efficacy: 72.1 lumens/watt  
Spacing Criteria (0/90/45): 1.62 / 1.62 / 1.57  
Luminous Opening: Circular (Dia: 0.4' x H: 0')  
CIE Type: Direct

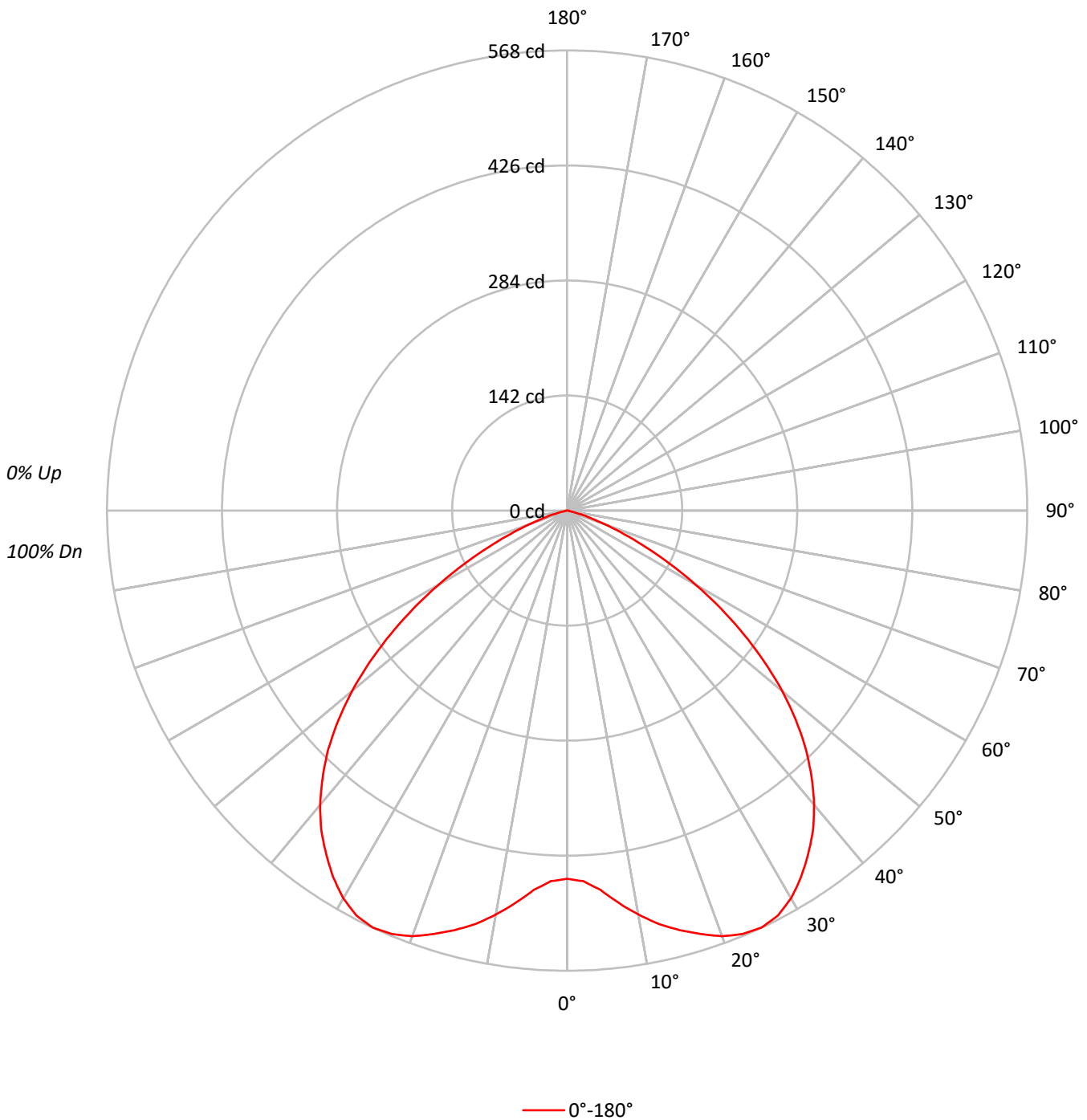
Input Watts (W): 20.4  
Input Voltage (V): NR  
Input Current (A<sub>in</sub>): NR  
Voltage Rise (V): NR  
Power Factor: NR  
Total Harmonic Distortion (THDi): NR  
Frequency (hertz): 60  
Stabilization Time: NR  
Operation Time: NR  
Ambient Temperature (°C): NR  
Test Distance: 25 FT



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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	119	119	119	119	116	116	116	116	111	111	111	106	106	106	102	102	102	100
1	111	107	103	100	108	105	102	99	101	98	96	97	95	93	93	91	90	88
2	102	95	89	84	100	93	88	83	90	85	81	87	83	80	84	81	78	76
3	94	85	77	72	91	83	76	71	80	74	70	77	73	69	75	71	67	65
4	86	75	67	61	84	74	67	61	72	65	60	69	64	59	67	63	59	57
5	80	68	59	53	78	67	59	53	65	58	52	63	57	52	61	56	51	49
6	74	61	53	47	72	60	52	46	58	51	46	57	50	46	55	50	45	43
7	68	55	47	41	67	55	47	41	53	46	41	52	45	41	50	45	40	38
8	63	51	42	37	62	50	42	37	49	41	36	47	41	36	46	40	36	34
9	59	46	38	33	58	46	38	33	45	38	33	44	37	33	43	37	32	31
10	55	43	35	30	54	42	35	30	41	34	30	40	34	30	39	34	29	28

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

	0°
0°	39755
5°	41259
10°	44960
15°	48537
20°	52043
25°	54809
30°	55803
35°	55355
40°	54157
45°	51595
50°	47178
55°	40610
60°	32154
65°	22332
70°	12659
75°	5205
80°	1108
85°	2208



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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	46.1	3.1
10°-20°	152.4	10.4
20°-30°	260.6	17.7
30°-40°	323.7	22.0
40°-50°	319.5	21.7
50°-60°	237.0	16.1
60°-70°	109.5	7.4
70°-80°	20.0	1.4
80°-90°	1.8	0.1
90°-100°	0.0	0.0
100°-110°	0.0	0.0
110°-120°	0.0	0.0
120°-130°	0.0	0.0
130°-140°	0.0	0.0
140°-150°	0.0	0.0
150°-160°	0.0	0.0
160°-170°	0.0	0.0
170°-180°	0.0	0.0
0°-30°	459.1	31.2
0°-40°	782.8	53.2
0°-60°	1339.4	91.1
0°-90°	1470.7	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	1470.7	100.0

**CANDELA DISTRIBUTION:**

	0°	Flux
0°	454	
5°	470	46
15°	536	152
25°	568	261
35°	518	324
45°	417	320
55°	266	237
65°	108	109
75°	15	20
85°	2	2
90°	0	



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**CANDELA DISTRIBUTION (FULL):**

	0°
0°	454.5
2.5°	457.8
5°	469.9
7.5°	488.6
10°	506.2
12.5°	522.8
15°	536.0
17.5°	548.1
20°	559.1
22.5°	565.7
25°	567.9
27.5°	563.5
30°	552.5
32.5°	537.1
35°	518.4
37.5°	498.5
40°	474.3
42.5°	446.8
45°	417.1
47.5°	383.0
50°	346.7
52.5°	307.0
55°	266.3
57.5°	224.5
60°	183.8
62.5°	144.2
65°	107.9
67.5°	75.9
70°	49.5
72.5°	29.7
75°	15.4
77.5°	5.5
80°	2.2
82.5°	2.2
85°	2.2
87.5°	1.1
90°	0.0

(END OF REPORT)