

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: P345349

Luminaire Tested: **PR4FS24D010 PR4M24WD9FSMMS 3000Lm3000K**

Issue Date: 03/03/2020

**Test Information**

Test Method: LM-79-08  
Report Number: P345349  
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G1-1908-453-5)  
Test Lab: INNOVATION CENTER(G1)  
Issue Date: 03/03/2020  
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)  
Product Line: HALO COMMERCIAL  
Catalog Number: PR4FS24D010 PR4M24WD9FSMMS 3000Lm3000K  
Description: PR4 WIDE LENS WITH, MATTE METALLIC SILVER FINISH  
Light Source: ARRAY OF HIGH LUMEN LEDs 90CRI / 3000K CCT  
Ballast/Driver: ELECTRONIC DRIVER

**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 2034.9 lumens  
Efficiency: N/A  
Efficacy: 71.4 lumens/watt  
Spacing Criteria (0/90/45): 1.65 / 1.65 / 1.6  
Luminous Opening: Circular (Dia: 0.4' x H: 0')  
CIE Type: Direct

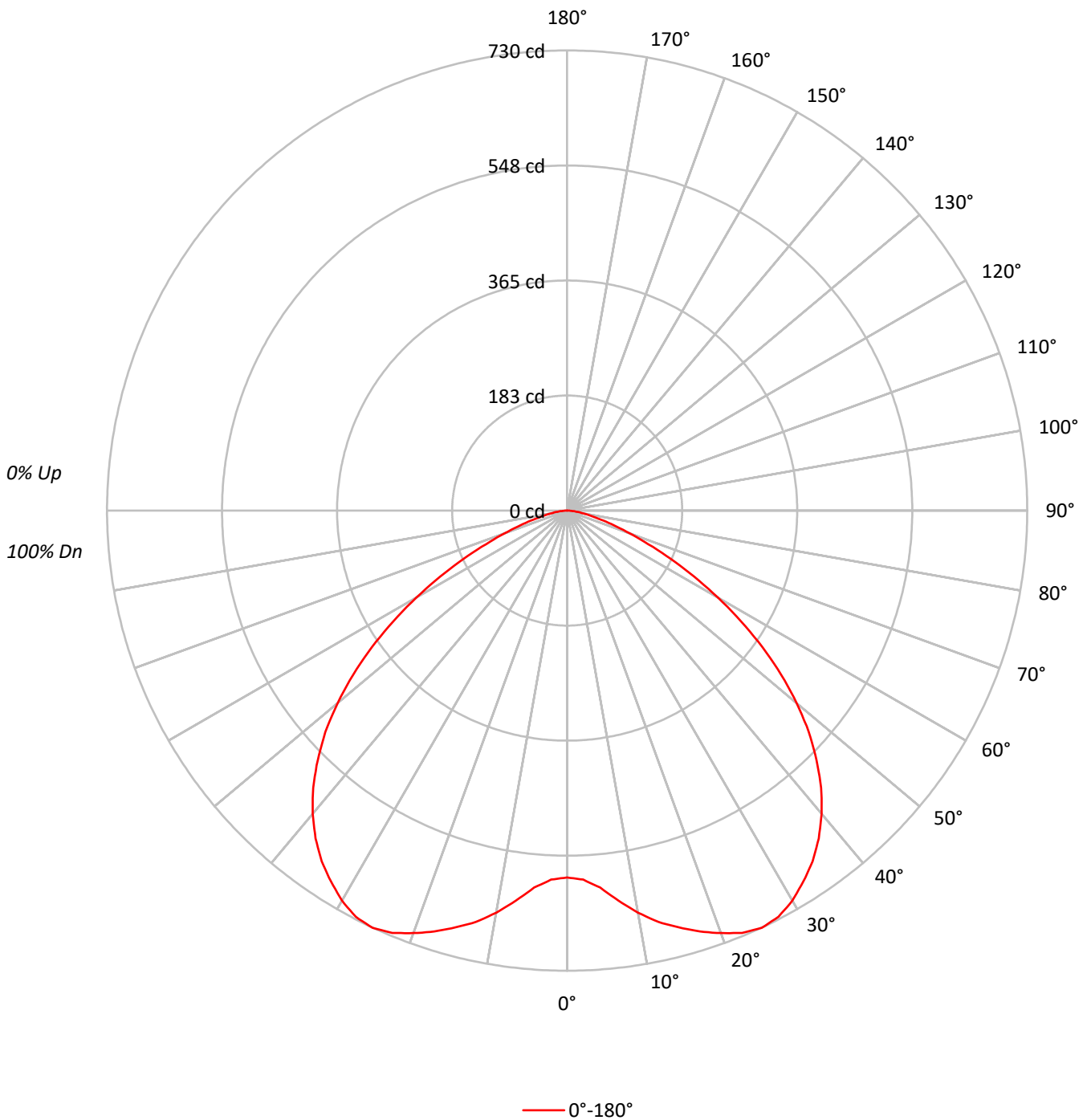
Input Watts (W): 28.5  
Input Voltage (V): NR  
Input Current (Ain): NR  
Voltage Rise (V): NR  
Power Factor: NR  
Total Harmonic Distortion (THDi): NR  
Frequency (hertz): 60  
Stabilization Time: NR  
Operation Time: NR  
Ambient Temperature (°C): NR  
Test Distance: 25 FT



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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	119	119	119	119	116	116	116	116	111	111	111		106	106	106		102	102	102	100
1	110	106	102	99	107	104	100	97	100	97	94		96	93	91		92	90	89	87
2	101	94	87	82	98	92	86	81	88	83	79		85	81	77		82	79	76	74
3	92	83	75	69	90	81	74	69	78	72	67		76	70	66		73	69	65	63
4	85	74	65	59	83	72	65	59	70	63	58		68	62	57		65	60	56	54
5	78	66	57	51	76	65	57	51	63	56	50		61	54	50		59	53	49	47
6	72	59	51	44	70	58	50	44	57	49	44		55	48	43		53	48	43	41
7	67	54	45	39	65	53	45	39	51	44	39		50	43	38		49	43	38	36
8	62	49	41	35	61	48	40	35	47	40	35		46	39	34		44	39	34	32
9	58	45	37	31	56	44	36	31	43	36	31		42	35	31		41	35	31	29
10	54	41	33	28	53	41	33	28	40	33	28		39	32	28		38	32	28	26

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

	0°
0°	50898
5°	52708
10°	57519
15°	61976
20°	66396
25°	70492
30°	72175
35°	72525
40°	71696
45°	69223
50°	64705
55°	57690
60°	48266
65°	37524
70°	26879
75°	18655
80°	13248
85°	9233



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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	58.9	2.9
10°-20°	194.7	9.6
20°-30°	335.1	16.5
30°-40°	423.5	20.8
40°-50°	429.7	21.1
50°-60°	336.8	16.6
60°-70°	182.1	8.9
70°-80°	62.2	3.1
80°-90°	11.8	0.6
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°	588.7	28.9
0°-40°	1012.2	49.7
0°-60°	1778.8	87.4
0°-90°	2034.9	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	2034.9	100.0

**CANDELA DISTRIBUTION:**

	0°	Flux
0°	582	
5°	600	59
15°	684	195
25°	730	335
35°	679	424
45°	560	430
55°	378	337
65°	181	182
75°	55	62
85°	9	12
90°	0	



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**CANDELA DISTRIBUTION (FULL):**

	0°
0°	581.9
2.5°	585.9
5°	600.3
7.5°	624.0
10°	647.6
12.5°	668.6
15°	684.4
17.5°	700.2
20°	713.3
22.5°	725.1
25°	730.4
27.5°	726.4
30°	714.6
32.5°	697.5
35°	679.2
37.5°	655.5
40°	627.9
42.5°	596.4
45°	559.6
47.5°	520.2
50°	475.5
52.5°	428.2
55°	378.3
57.5°	327.1
60°	275.9
62.5°	227.3
65°	181.3
67.5°	139.2
70°	105.1
72.5°	77.5
75°	55.2
77.5°	38.1
80°	26.3
82.5°	17.1
85°	9.2
87.5°	3.9
90°	0.0

(END OF REPORT)