

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: P345332

Luminaire Tested: **PR4FS12D010 PR4M12WD9FSMMS 1500Lm3500K**

Issue Date: 03/03/2020

**Test Information**

Test Method: LM-79-08  
Report Number: P345332  
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: PR4FS12D010 PR4M12WD9FSMMS 1500Lm3500K  
Description: PR4 WIDE LENS WITH, MATTE METALLIC SILVER FINISH  
Light Source: ARRAY OF HIGH LUMEN LEDs 90CRI / 3500K CCT  
Ballast/Driver: ELECTRONIC DRIVER

**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 1051.4 lumens  
Efficiency: N/A  
Efficacy: 79.1 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

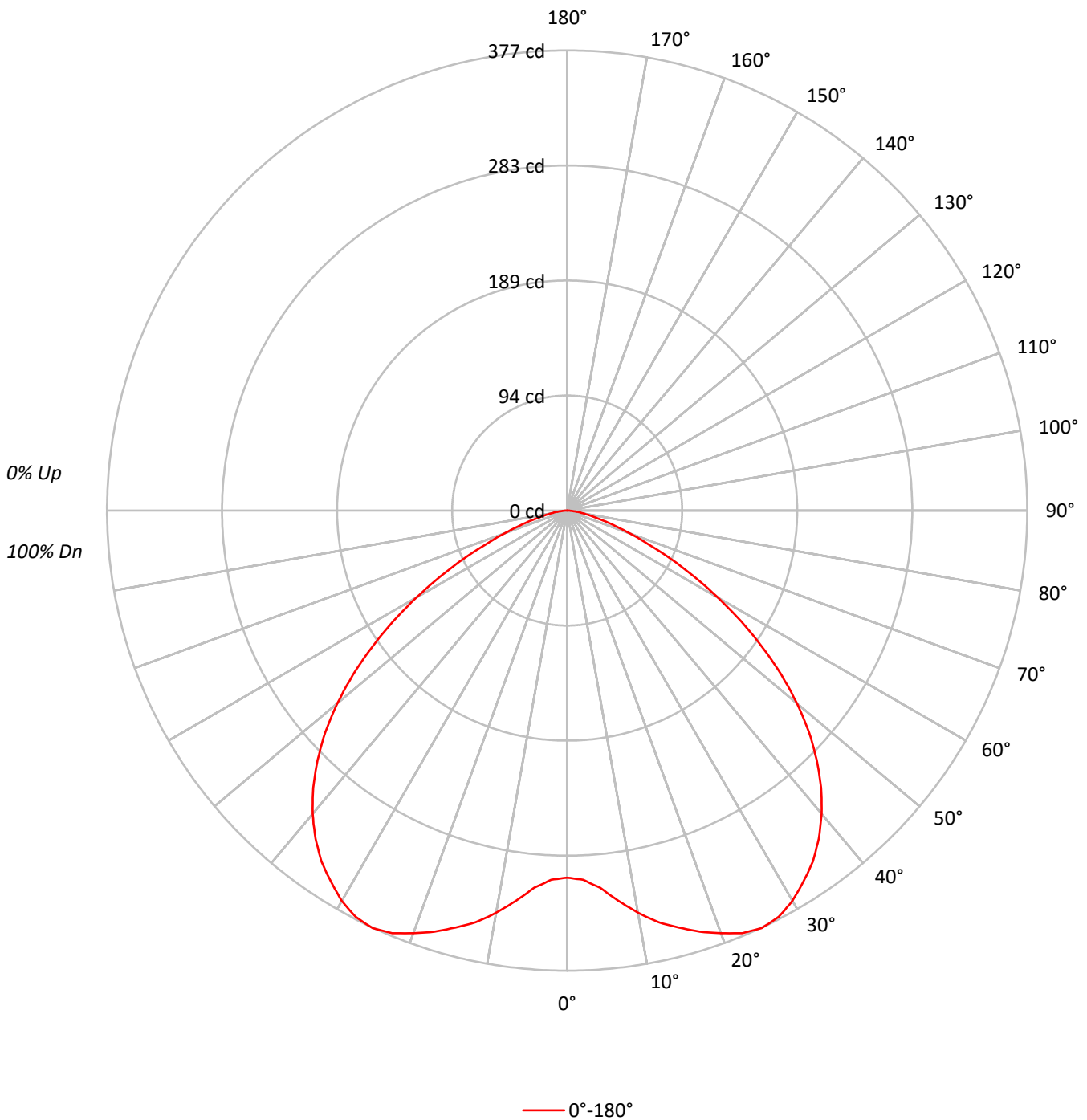
Input Watts (W): 13.3  
Input Voltage (V): NR  
Input Current (Ain): NR  
Voltage Rise (V): NR  
Power Factor: NR  
Total Harmonic Distortion (THDi): NR  
Frequency (hertz): 60  
Stabilization Time: NR  
Operation Time: NR  
Ambient Temperature (°C): NR  
Test Distance: 25 FT



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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°	26302
5°	27237
10°	29719
15°	32020
20°	34301
25°	36424
30°	37290
35°	37469
40°	37041
45°	35762
50°	33434
55°	29813
60°	24929
65°	19393
70°	13887
75°	9632
80°	6851
85°	4817



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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	30.4	2.9
10°-20°	100.6	9.6
20°-30°	173.2	16.5
30°-40°	218.8	20.8
40°-50°	222.0	21.1
50°-60°	174.0	16.6
60°-70°	94.1	8.9
70°-80°	32.1	3.1
80°-90°	6.1	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°	304.2	28.9
0°-40°	523.0	49.7
0°-60°	919.1	87.4
0°-90°	1051.4	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	1051.4	100.0

**CANDELA DISTRIBUTION:**

	0°	Flux
0°	301	
5°	310	30
15°	354	101
25°	377	173
35°	351	219
45°	289	222
55°	196	174
65°	94	94
75°	28	32
85°	5	6
90°	0	



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**CANDELA DISTRIBUTION (FULL):**

0°	
0°	300.7
2.5°	302.7
5°	310.2
7.5°	322.4
10°	334.6
12.5°	345.5
15°	353.6
17.5°	361.8
20°	368.5
22.5°	374.7
25°	377.4
27.5°	375.3
30°	369.2
32.5°	360.4
35°	350.9
37.5°	338.7
40°	324.4
42.5°	308.1
45°	289.1
47.5°	268.8
50°	245.7
52.5°	221.3
55°	195.5
57.5°	169.0
60°	142.5
62.5°	117.4
65°	93.7
67.5°	71.9
70°	54.3
72.5°	40.0
75°	28.5
77.5°	19.7
80°	13.6
82.5°	8.8
85°	4.8
87.5°	2.0
90°	0.0

(END OF REPORT)