

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: P345326

Luminaire Tested: **PR4FS12D010 PR4M12WD9FSMMS 1000Lm3500K**

Issue Date: 03/03/2020

**Test Information**

Test Method: LM-79-08  
Report Number: P345326  
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 1000Lm3500K  
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: 795.3 lumens  
Efficiency: N/A  
Efficacy: 78.7 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

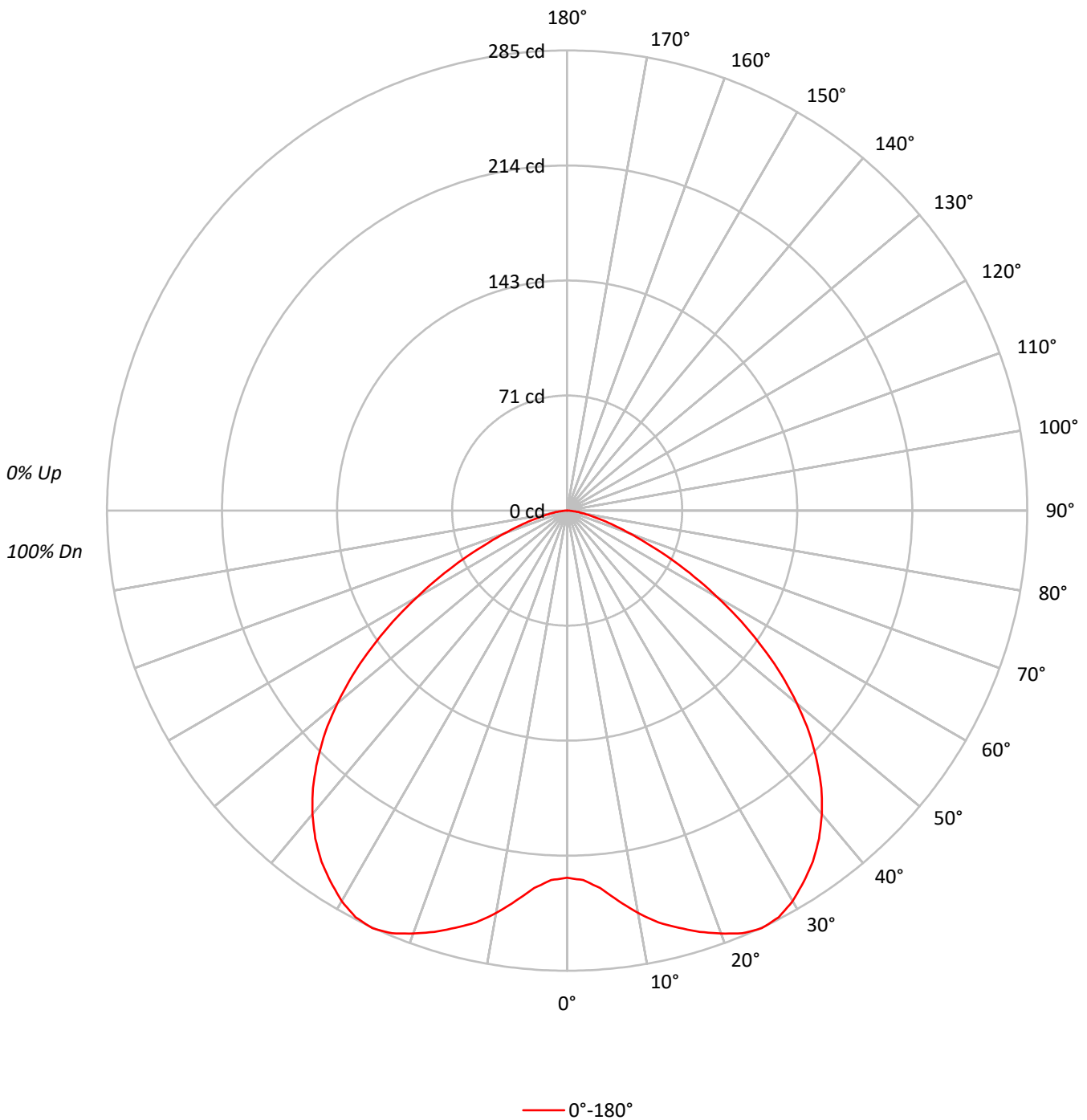
Input Watts (W): 10.1  
Input Voltage (V): NR  
Input Current (A<sub>in</sub>): NR  
Voltage Rise (V): NR  
Power Factor: NR  
Total Harmonic Distortion (THDi): NR  
Frequency (hertz): 60  
Stabilization Time: NR  
Operation Time: NR  
Ambient Temperature (°C): NR  
Test Distance: 25 FT



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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	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°	19891
5°	20599
10°	22480
15°	24223
20°	25952
25°	27544
30°	28210
35°	28340
40°	28021
45°	27053
50°	25283
55°	22539
60°	18858
65°	14654
70°	10511
75°	7300
80°	5188
85°	3613



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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	23.0	2.9
10°-20°	76.1	9.6
20°-30°	131.0	16.5
30°-40°	165.5	20.8
40°-50°	167.9	21.1
50°-60°	131.6	16.5
60°-70°	71.2	8.9
70°-80°	24.3	3.1
80°-90°	4.6	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°	230.1	28.9
0°-40°	395.6	49.7
0°-60°	695.2	87.4
0°-90°	795.3	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	795.3	100.0

**CANDELA DISTRIBUTION:**

	0°	Flux
0°	227	
5°	235	23
15°	268	76
25°	285	131
35°	265	166
45°	219	168
55°	148	132
65°	71	71
75°	22	24
85°	4	5
90°	0	



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**CANDELA DISTRIBUTION (FULL):**

	0°
0°	227.4
2.5°	229.0
5°	234.6
7.5°	243.8
10°	253.1
12.5°	261.3
15°	267.5
17.5°	273.6
20°	278.8
22.5°	283.4
25°	285.4
27.5°	283.9
30°	279.3
32.5°	272.6
35°	265.4
37.5°	256.2
40°	245.4
42.5°	233.1
45°	218.7
47.5°	203.3
50°	185.8
52.5°	167.4
55°	147.8
57.5°	127.8
60°	107.8
62.5°	88.8
65°	70.8
67.5°	54.4
70°	41.1
72.5°	30.3
75°	21.6
77.5°	14.9
80°	10.3
82.5°	6.7
85°	3.6
87.5°	1.5
90°	0.0

(END OF REPORT)