

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: P345325

Luminaire Tested: **PR4FS12D010 PR4M12WD9FSMMS 1000Lm3000K**

Issue Date: 03/03/2020

**Test Information**

Test Method: LM-79-08  
Report Number: P345325  
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 1000Lm3000K  
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: 743.5 lumens  
Efficiency: N/A  
Efficacy: 71.5 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

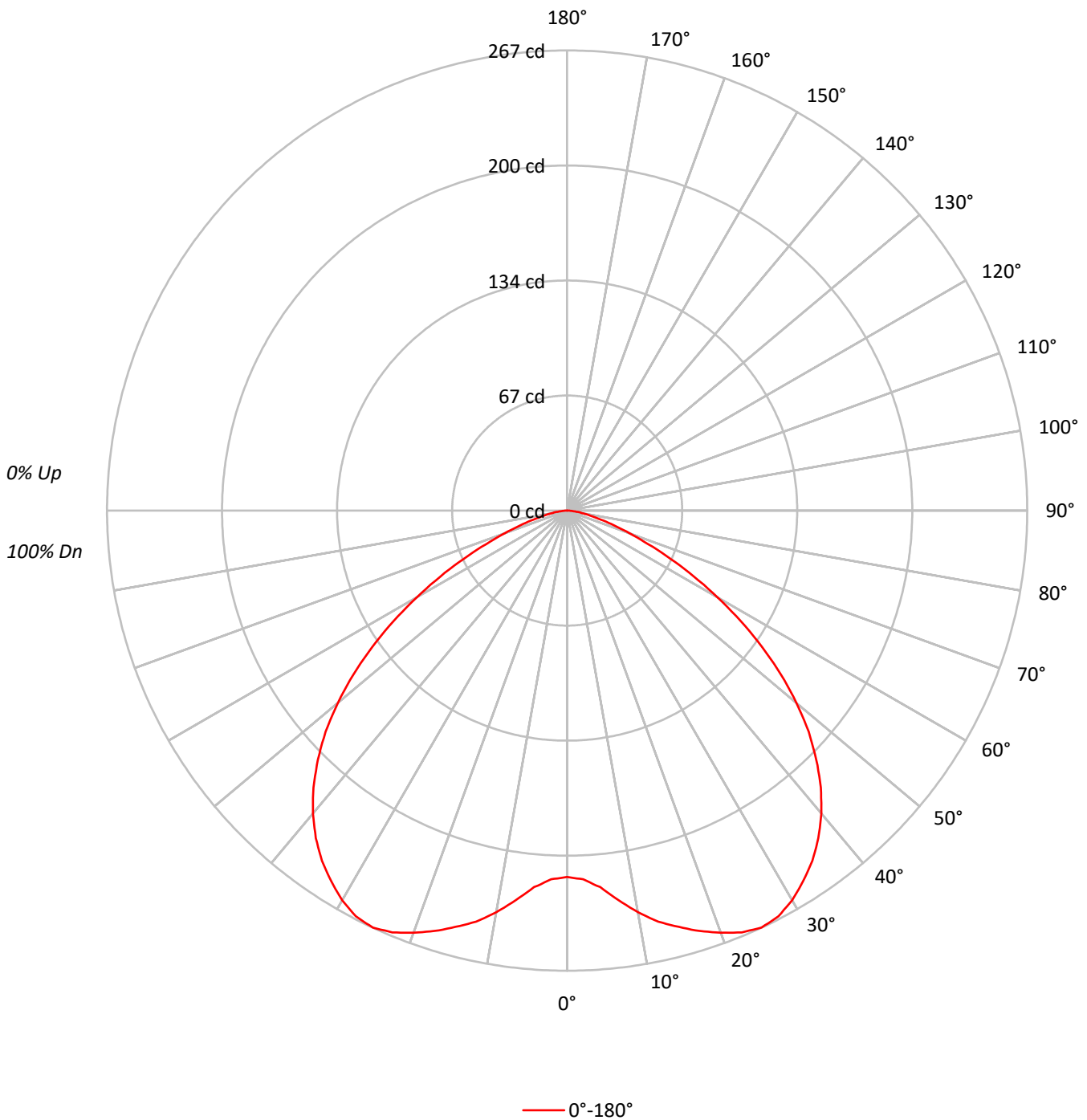
Input Watts (W): 10.4  
Input Voltage (V): NR  
Input Current (Ain): NR  
Voltage Rise (V): NR  
Power Factor: NR  
Total Harmonic Distortion (THDi): NR  
Frequency (hertz): 60  
Stabilization Time: NR  
Operation Time: NR  
Ambient Temperature (°C): NR  
Test Distance: 25 FT



TEST NUMBER: P345325

CATALOG NUMBER: PR4FS12D010 PR4M12WD9FSMMS 1000Lm3000K

### Luminous Intensity Polar Plot





TEST NUMBER: P345325

CATALOG NUMBER: PR4FS12D010 PR4M12WD9FSMMS 1000Lm3000K

**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°	18596
5°	19255
10°	21015
15°	22648
20°	24257
25°	25759
30°	26371
35°	26492
40°	26194
45°	25297
50°	23637
55°	21075
60°	17634
65°	13701
70°	9821
75°	6827
80°	4836
85°	3412



TEST NUMBER: P345325

CATALOG NUMBER: PR4FS12D010 PR4M12WD9FSMMS 1000Lm3000K

**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	21.5	2.9
10°-20°	71.1	9.6
20°-30°	122.4	16.5
30°-40°	154.7	20.8
40°-50°	157.0	21.1
50°-60°	123.1	16.6
60°-70°	66.5	8.9
70°-80°	22.7	3.1
80°-90°	4.3	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°	215.1	28.9
0°-40°	369.8	49.7
0°-60°	649.9	87.4
0°-90°	743.5	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	743.5	100.0

**CANDELA DISTRIBUTION:**

	0°	Flux
0°	213	
5°	219	22
15°	250	71
25°	267	122
35°	248	155
45°	204	157
55°	138	123
65°	66	67
75°	20	23
85°	3	4
90°	0	



TEST NUMBER: P345325

CATALOG NUMBER: PR4FS12D010 PR4M12WD9FSMMS 1000Lm3000K

**CANDELA DISTRIBUTION (FULL):**

	0°
0°	212.6
2.5°	214.1
5°	219.3
7.5°	228.0
10°	236.6
12.5°	244.3
15°	250.1
17.5°	255.8
20°	260.6
22.5°	264.9
25°	266.9
27.5°	265.4
30°	261.1
32.5°	254.9
35°	248.1
37.5°	239.5
40°	229.4
42.5°	217.9
45°	204.5
47.5°	190.1
50°	173.7
52.5°	156.5
55°	138.2
57.5°	119.5
60°	100.8
62.5°	83.0
65°	66.2
67.5°	50.9
70°	38.4
72.5°	28.3
75°	20.2
77.5°	13.9
80°	9.6
82.5°	6.2
85°	3.4
87.5°	1.4
90°	0.0

(END OF REPORT)