

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: P345299

Luminaire Tested: **PR4FS12D010 PR4M12WD8FSMW 2000Lm3500K**

Issue Date: 03/03/2020

**Test Information**

Test Method: LM-79-08  
Report Number: P345299  
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G1-1908-453-4)  
Test Lab: INNOVATION CENTER(G1)  
Issue Date: 03/03/2020  
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)  
Product Line: HALO COMMERCIAL  
Catalog Number: PR4FS12D010 PR4M12WD8FSMW 2000Lm3500K  
Description: PR4 WIDE LENS WITH, MATTE WHITE FINISH  
Light Source: ARRAY OF HIGH LUMEN LEDs 80CRI / 3500K CCT  
Ballast/Driver: ELECTRONIC DRIVER

**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 2177.0 lumens  
Efficiency: N/A  
Efficacy: 109.9 lumens/watt  
Spacing Criteria (0/90/45): 1.61 / 1.61 / 1.58  
Luminous Opening: Circular (Dia: 0.4' x H: 0')  
CIE Type: Direct

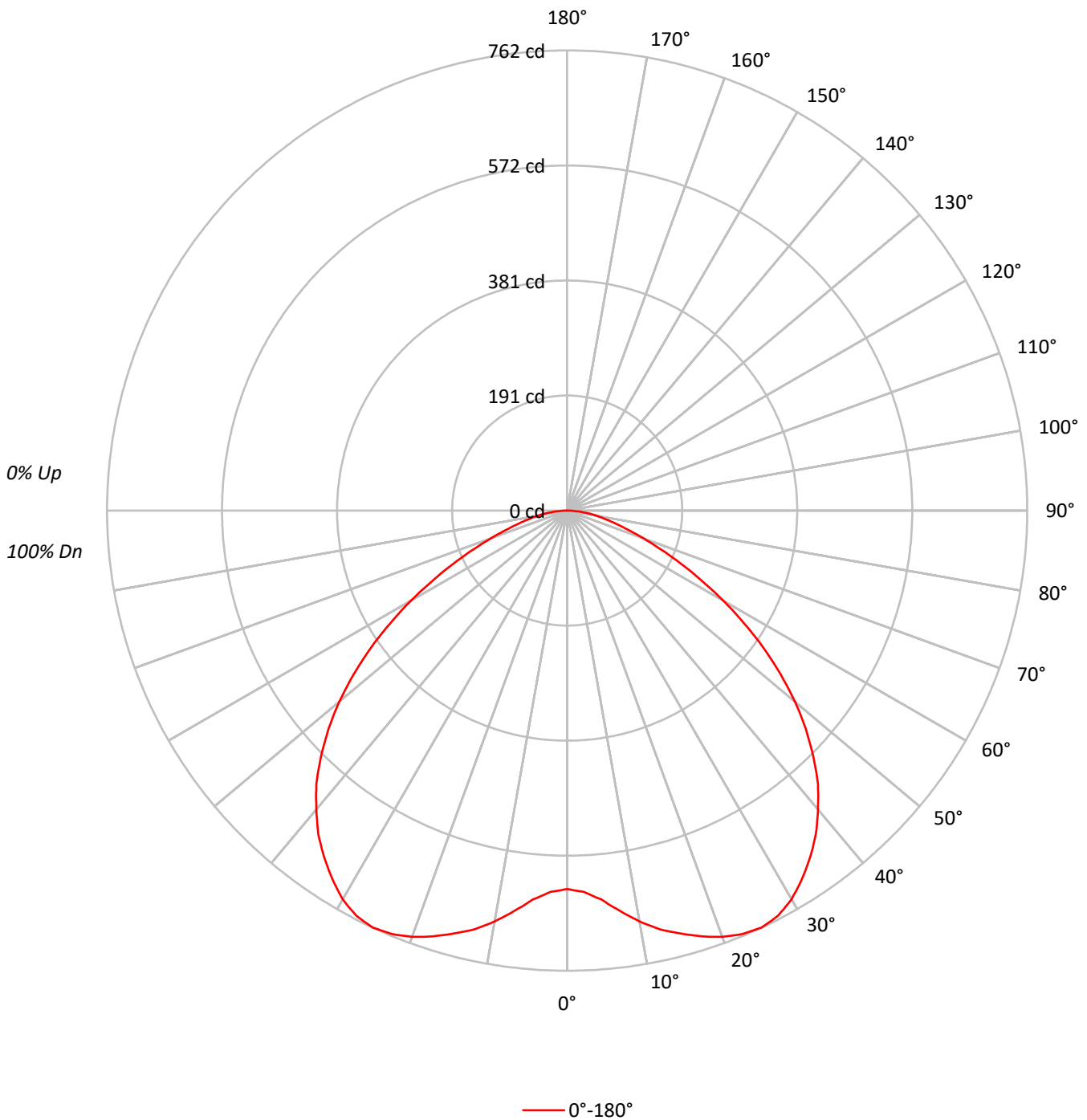
Input Watts (W): 19.8  
Input Voltage (V): NR  
Input Current (Ain): NR  
Voltage Rise (V): NR  
Power Factor: NR  
Total Harmonic Distortion (THDi): NR  
Frequency (hertz): 60  
Stabilization Time: NR  
Operation Time: NR  
Ambient Temperature (°C): NR  
Test Distance: 25 FT



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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	105	101	98	107	103	100	96	99	96	93		95	93	90		91	90	88	86
2	100	93	86	81	98	91	85	80	87	82	78		84	80	76		81	78	75	73
3	92	82	74	68	89	80	73	67	77	71	66		75	69	65		72	68	64	62
4	84	73	64	58	82	71	63	57	69	62	57		67	61	56		64	59	55	53
5	77	65	56	50	75	64	56	50	62	55	49		60	54	49		58	52	48	46
6	72	59	50	44	70	58	49	43	56	48	43		54	48	43		53	47	42	40
7	66	53	44	38	65	52	44	38	51	43	38		49	43	38		48	42	37	35
8	62	48	40	34	60	48	40	34	46	39	34		45	38	34		44	38	33	32
9	57	44	36	31	56	44	36	31	42	35	30		41	35	30		40	34	30	28
10	54	41	33	28	52	40	33	28	39	32	27		38	32	27		37	31	27	25

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

	0°
0°	54808
5°	56747
10°	61365
15°	65652
20°	69924
25°	73513
30°	75074
35°	74896
40°	73797
45°	71350
50°	67073
55°	60572
60°	52289
65°	42864
70°	34193
75°	27915
80°	25085
85°	21076



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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	63.2	2.9
10°-20°	206.1	9.5
20°-30°	349.9	16.1
30°-40°	438.0	20.1
40°-50°	443.2	20.4
50°-60°	354.1	16.3
60°-70°	207.8	9.5
70°-80°	90.5	4.2
80°-90°	24.3	1.1
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°	619.1	28.4
0°-40°	1057.1	48.6
0°-60°	1854.4	85.2
0°-90°	2177.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	2177.0	100.0

**CANDELA DISTRIBUTION:**

	0°	Flux
0°	627	
5°	646	63
15°	725	206
25°	762	350
35°	701	438
45°	577	443
55°	397	354
65°	207	208
75°	83	91
85°	21	24
90°	0	



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**CANDELA DISTRIBUTION (FULL):**

	0°
0°	626.6
2.5°	631.9
5°	646.3
7.5°	668.6
10°	690.9
12.5°	710.5
15°	725.0
17.5°	739.4
20°	751.2
22.5°	759.0
25°	761.7
27.5°	756.4
30°	743.3
32.5°	723.7
35°	701.4
37.5°	676.5
40°	646.3
42.5°	614.8
45°	576.8
47.5°	536.2
50°	492.9
52.5°	445.7
55°	397.2
57.5°	347.4
60°	298.9
62.5°	250.4
65°	207.1
67.5°	167.8
70°	133.7
72.5°	104.9
75°	82.6
77.5°	64.2
80°	49.8
82.5°	35.4
85°	21.0
87.5°	7.9
90°	0.0

(END OF REPORT)