

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: P345317

Luminaire Tested: **PR4FS24D010 PR4M24WD8FSMW 4000Lm3500K**

Issue Date: 03/03/2020

**Test Information**

Test Method: LM-79-08  
Report Number: P345317  
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: PR4FS24D010 PR4M24WD8FSMW 4000Lm3500K  
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: 4004.4 lumens  
Efficiency: N/A  
Efficacy: 102.7 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

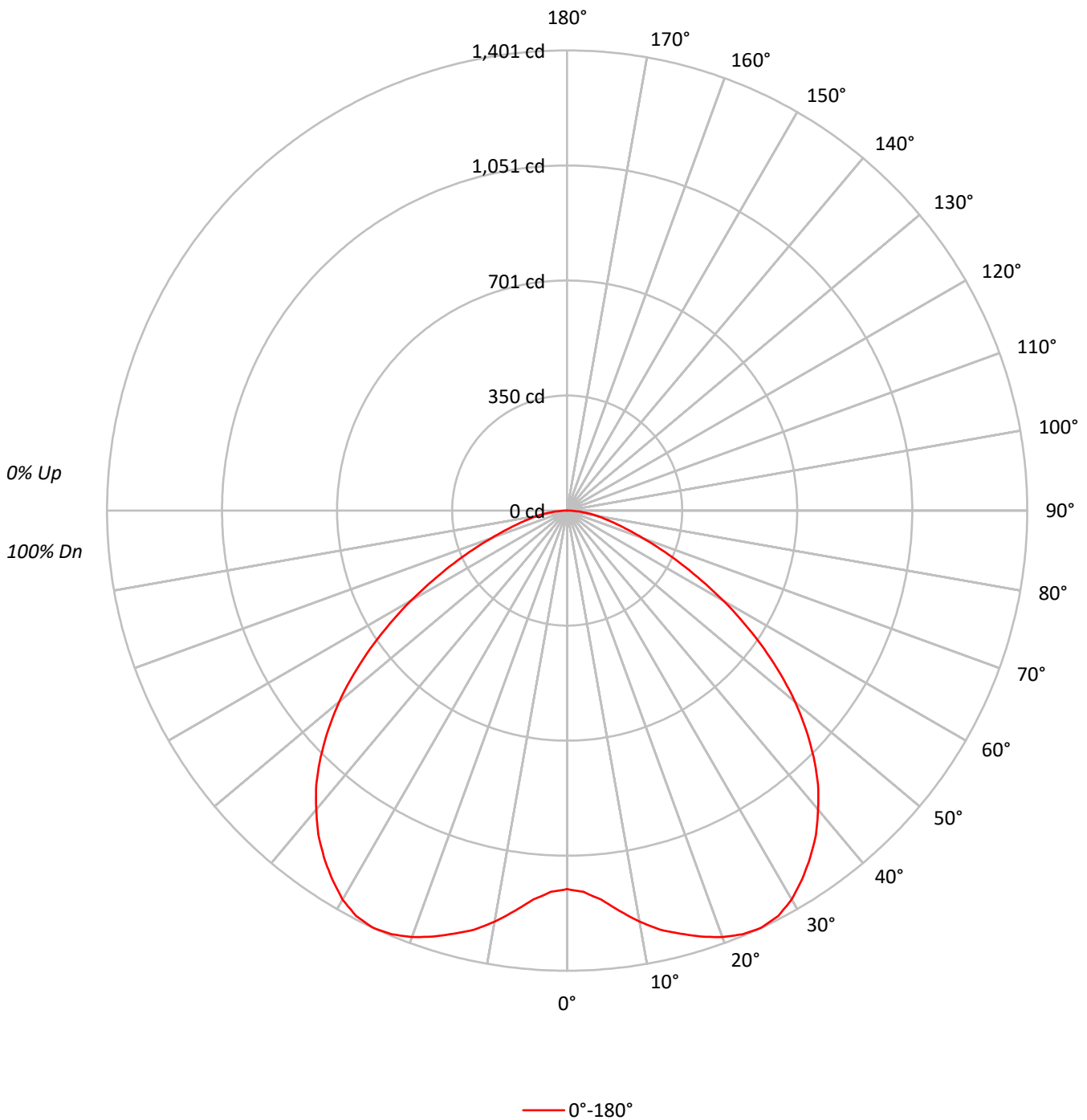
Input Watts (W): 39  
Input Voltage (V): NR  
Input Current (Ain): NR  
Voltage Rise (V): NR  
Power Factor: NR  
Total Harmonic Distortion (THDi): NR  
Frequency (hertz): 60  
Stabilization Time: NR  
Operation Time: NR  
Ambient Temperature (°C): NR  
Test Distance: 25 FT



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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°	100817
5°	104381
10°	112871
15°	120755
20°	128613
25°	135213
30°	138099
35°	137757
40°	135741
45°	131246
50°	123382
55°	111415
60°	96181
65°	78856
70°	62913
75°	51336
80°	46140
85°	38739



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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	116.2	2.9
10°-20°	379.1	9.5
20°-30°	643.6	16.1
30°-40°	805.6	20.1
40°-50°	815.2	20.4
50°-60°	651.3	16.3
60°-70°	382.3	9.5
70°-80°	166.5	4.2
80°-90°	44.6	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°	1138.9	28.4
0°-40°	1944.5	48.6
0°-60°	3411.0	85.2
0°-90°	4004.4	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	4004.4	100.0

**CANDELA DISTRIBUTION:**

	0°	Flux
0°	1153	
5°	1189	116
15°	1334	379
25°	1401	644
35°	1290	806
45°	1061	815
55°	731	651
65°	381	382
75°	152	167
85°	39	45
90°	0	



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**CANDELA DISTRIBUTION (FULL):**

0°	
0°	1152.6
2.5°	1162.3
5°	1188.8
7.5°	1229.8
10°	1270.8
12.5°	1307.0
15°	1333.5
17.5°	1360.0
20°	1381.7
22.5°	1396.2
25°	1401.0
27.5°	1391.4
30°	1367.3
32.5°	1331.1
35°	1290.1
37.5°	1244.3
40°	1188.8
42.5°	1130.9
45°	1061.0
47.5°	986.3
50°	906.7
52.5°	819.9
55°	730.6
57.5°	639.0
60°	549.8
62.5°	460.6
65°	381.0
67.5°	308.7
70°	246.0
72.5°	192.9
75°	151.9
77.5°	118.2
80°	91.6
82.5°	65.1
85°	38.6
87.5°	14.5
90°	0.0

(END OF REPORT)