

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: P345373

Luminaire Tested: **PR4FS12D010 PR4M12WD9FSBZ 2000Lm3000K**

Issue Date: 03/03/2020

**Test Information**

Test Method: LM-79-08  
Report Number: P345373  
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G1-1908-453-6)  
Test Lab: INNOVATION CENTER(G1)  
Issue Date: 03/03/2020  
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)  
Product Line: HALO COMMERCIAL  
Catalog Number: PR4FS12D010 PR4M12WD9FSBZ 2000Lm3000K  
Description: PR4 WIDE LENS WITH, BRONZE FINISH  
Light Source: ARRAY OF HIGH LUMEN LEDs 90CRI / 3000K CCT  
Ballast/Driver: ELECTRONIC DRIVER

**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 1375.0 lumens  
Efficiency: N/A  
Efficacy: 66.4 lumens/watt  
Spacing Criteria (0/90/45): 1.62 / 1.62 / 1.57  
Luminous Opening: Circular (Dia: 0.4' x H: 0')  
CIE Type: Direct

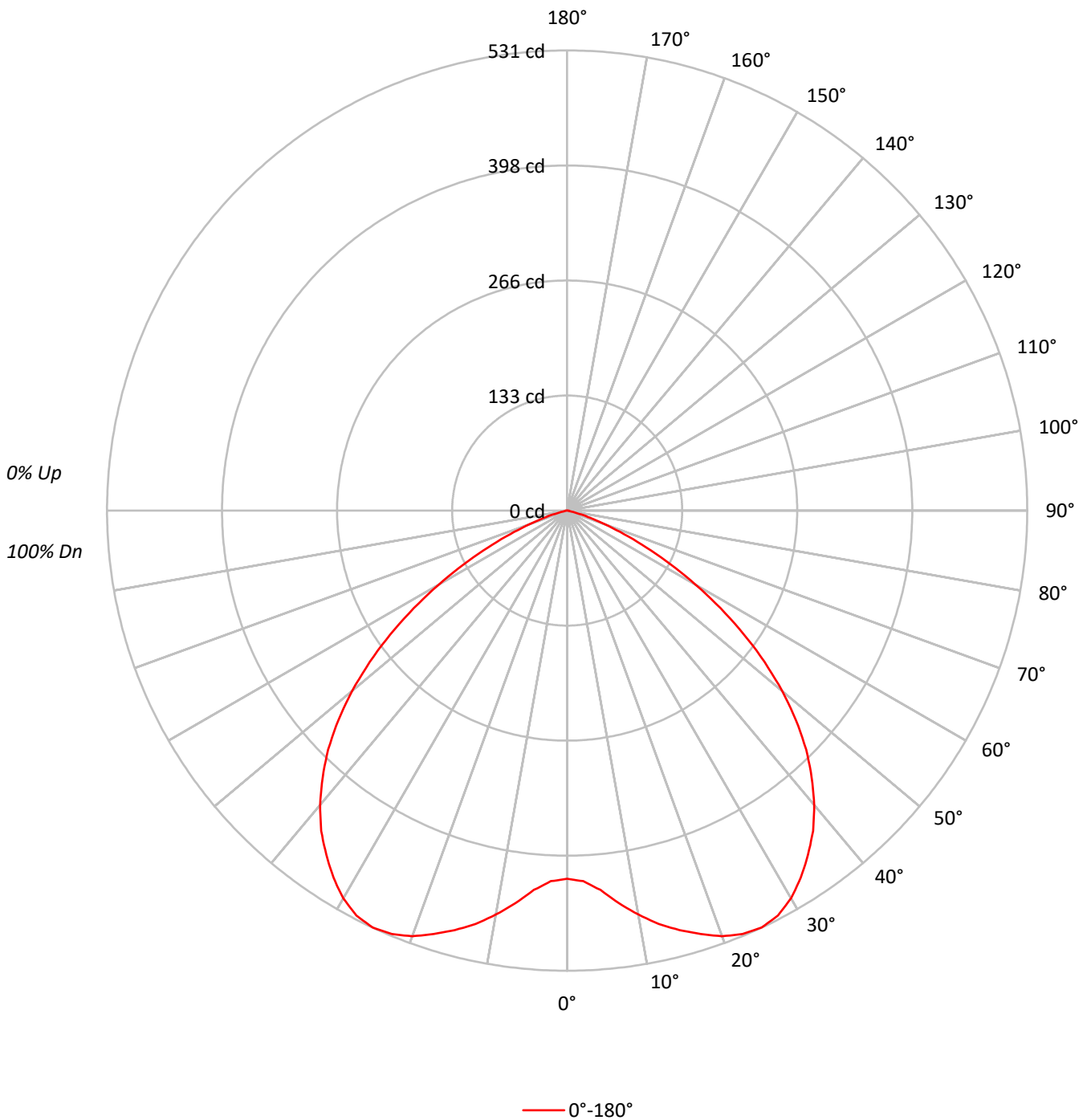
Input Watts (W): 20.7  
Input Voltage (V): NR  
Input Current (Ain): NR  
Voltage Rise (V): NR  
Power Factor: NR  
Total Harmonic Distortion (THDi): NR  
Frequency (hertz): 60  
Stabilization Time: NR  
Operation Time: NR  
Ambient Temperature (°C): NR  
Test Distance: 25 FT



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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	111	107	103	100	108	105	102	99	101	98	96	97	95	93	93	91	90	88
2	102	95	89	84	100	93	88	83	90	85	81	87	83	80	84	81	78	76
3	94	85	77	72	91	83	76	71	80	74	70	77	73	69	75	71	67	65
4	86	75	67	61	84	74	67	61	72	65	60	69	64	59	67	63	59	57
5	80	68	59	53	78	67	59	53	65	58	52	63	57	52	61	56	51	49
6	74	61	53	47	72	60	52	46	58	51	46	57	50	46	55	50	45	43
7	68	55	47	41	67	55	47	41	53	46	41	52	45	41	50	45	40	38
8	63	51	42	37	62	50	42	37	49	41	36	47	41	36	46	40	36	34
9	59	46	38	33	58	46	38	33	45	38	33	44	37	33	43	37	32	31
10	55	43	35	30	54	42	35	30	41	34	30	40	34	30	39	34	29	28

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

	0°
0°	37166
5°	38572
10°	42038
15°	45377
20°	48655
25°	51238
30°	52167
35°	51746
40°	50640
45°	48243
50°	44103
55°	37972
60°	30055
65°	20863
70°	11841
75°	4867
80°	1058
85°	2108



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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	43.1	3.1
10°-20°	142.4	10.4
20°-30°	243.6	17.7
30°-40°	302.7	22.0
40°-50°	298.8	21.7
50°-60°	221.6	16.1
60°-70°	102.3	7.4
70°-80°	18.7	1.4
80°-90°	1.7	0.1
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°	429.2	31.2
0°-40°	731.8	53.2
0°-60°	1252.2	91.1
0°-90°	1375.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	1375.0	100.0

**CANDELA DISTRIBUTION:**

	0°	Flux
0°	425	
5°	439	43
15°	501	142
25°	531	244
35°	485	303
45°	390	299
55°	249	222
65°	101	102
75°	14	19
85°	2	2
90°	0	



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**CANDELA DISTRIBUTION (FULL):**

0°	
0°	424.9
2.5°	428.0
5°	439.3
7.5°	456.8
10°	473.3
12.5°	488.7
15°	501.1
17.5°	512.4
20°	522.7
22.5°	528.9
25°	530.9
27.5°	526.8
30°	516.5
32.5°	502.1
35°	484.6
37.5°	466.1
40°	443.5
42.5°	417.7
45°	390.0
47.5°	358.1
50°	324.1
52.5°	287.1
55°	249.0
57.5°	209.9
60°	171.8
62.5°	134.8
65°	100.8
67.5°	71.0
70°	46.3
72.5°	27.8
75°	14.4
77.5°	5.1
80°	2.1
82.5°	2.1
85°	2.1
87.5°	1.0
90°	0.0

(END OF REPORT)