

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: P345217

Luminaire Tested: **PR4FS12D010 PR4M12MD9FSMMS 1000Lm3000K**

Issue Date: 03/03/2020

Test Information

Test Method: LM-79-08
Report Number: P345217
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G1-1908-453-2)
Test Lab: INNOVATION CENTER(G1)
Issue Date: 03/03/2020
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: HALO COMMERCIAL
Catalog Number: PR4FS12D010 PR4M12MD9FSMMS 1000Lm3000K
Description: PR4 MEDIUM 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: 733.0 lumens
Efficiency: N/A
Efficacy: 70.5 lumens/watt
Spacing Criteria (0/90/45): 1.02 / 1.02 / 1.02
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





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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	108	105	102	109	106	103	100	101	99	97		98	96	94		94	93	91	89
2	104	97	92	88	101	96	91	87	92	88	85		89	86	83		86	83	81	79
3	97	88	82	77	94	87	81	76	84	79	75		81	77	73		79	75	72	70
4	90	80	73	68	88	79	73	67	77	71	67		75	70	66		73	68	65	63
5	84	74	66	61	82	73	66	60	71	65	60		69	63	59		67	62	59	57
6	79	68	60	55	77	67	60	55	65	59	54		64	58	54		62	57	53	52
7	74	63	55	50	72	62	55	50	60	54	49		59	53	49		58	53	49	47
8	70	58	51	46	68	57	50	46	56	50	45		55	49	45		54	49	45	43
9	66	54	47	42	64	53	47	42	52	46	42		51	46	42		51	45	42	40
10	62	50	44	39	61	50	43	39	49	43	39		48	43	39		47	42	39	37

AVERAGE LUMINANCE (cd/sqm):

	0°
0°	44190
5°	43937
10°	43122
15°	41710
20°	39570
25°	36491
30°	32179
35°	26439
40°	20439
45°	15970
50°	12927
55°	11117
60°	9657
65°	8548
70°	7365
75°	5847
80°	4130
85°	2409



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	47.3	6.5
10°-20°	129.1	17.6
20°-30°	172.4	23.5
30°-40°	153.9	21.0
40°-50°	101.4	13.8
50°-60°	65.7	9.0
60°-70°	41.0	5.6
70°-80°	18.8	2.6
80°-90°	3.5	0.5
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°	348.8	47.6
0°-40°	502.7	68.6
0°-60°	669.8	91.4
0°-90°	733.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	733.0	100.0

CANDELA DISTRIBUTION:

	0°	Flux
0°	505	
5°	500	47
15°	461	129
25°	378	172
35°	248	154
45°	129	101
55°	73	66
65°	41	41
75°	17	19
85°	2	3
90°	0	



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CANDELA DISTRIBUTION (FULL):

0°	
0°	505.2
2.5°	504.3
5°	500.4
7.5°	494.2
10°	485.5
12.5°	474.5
15°	460.6
17.5°	444.3
20°	425.1
22.5°	402.5
25°	378.1
27.5°	349.8
30°	318.6
32.5°	284.0
35°	247.6
37.5°	210.6
40°	179.0
42.5°	152.1
45°	129.1
47.5°	109.9
50°	95.0
52.5°	83.0
55°	72.9
57.5°	63.3
60°	55.2
62.5°	48.0
65°	41.3
67.5°	34.5
70°	28.8
72.5°	23.0
75°	17.3
77.5°	12.5
80°	8.2
82.5°	4.8
85°	2.4
87.5°	1.4
90°	0.0

(END OF REPORT)