

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: P241833

Luminaire Tested: **PRS410D010-S4M12-41SMDMB**

Issue Date: 03/03/2020

Test Information

Test Method: LM-79-08
Report Number: P241833
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G1-1802-584-50)
Test Lab: INNOVATION CENTER(G1)
Issue Date: 03/03/2020
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: HALO COMMERCIAL
Catalog Number: PRS410D010-S4M12-41SMDMB
Description: HALO COMMERCIAL 4" SQUARE, NEW CONSTRUCTION FRAME, WITH 4" MEDIUM DISTRIBUTION, DEEP TRIM MATTE BLACK
Light Source: ARRAYS OF HIGH LUMEN LEDS 80CRI / 3500K CCT
Ballast/Driver: ELECTRONIC DRIVER

Summary

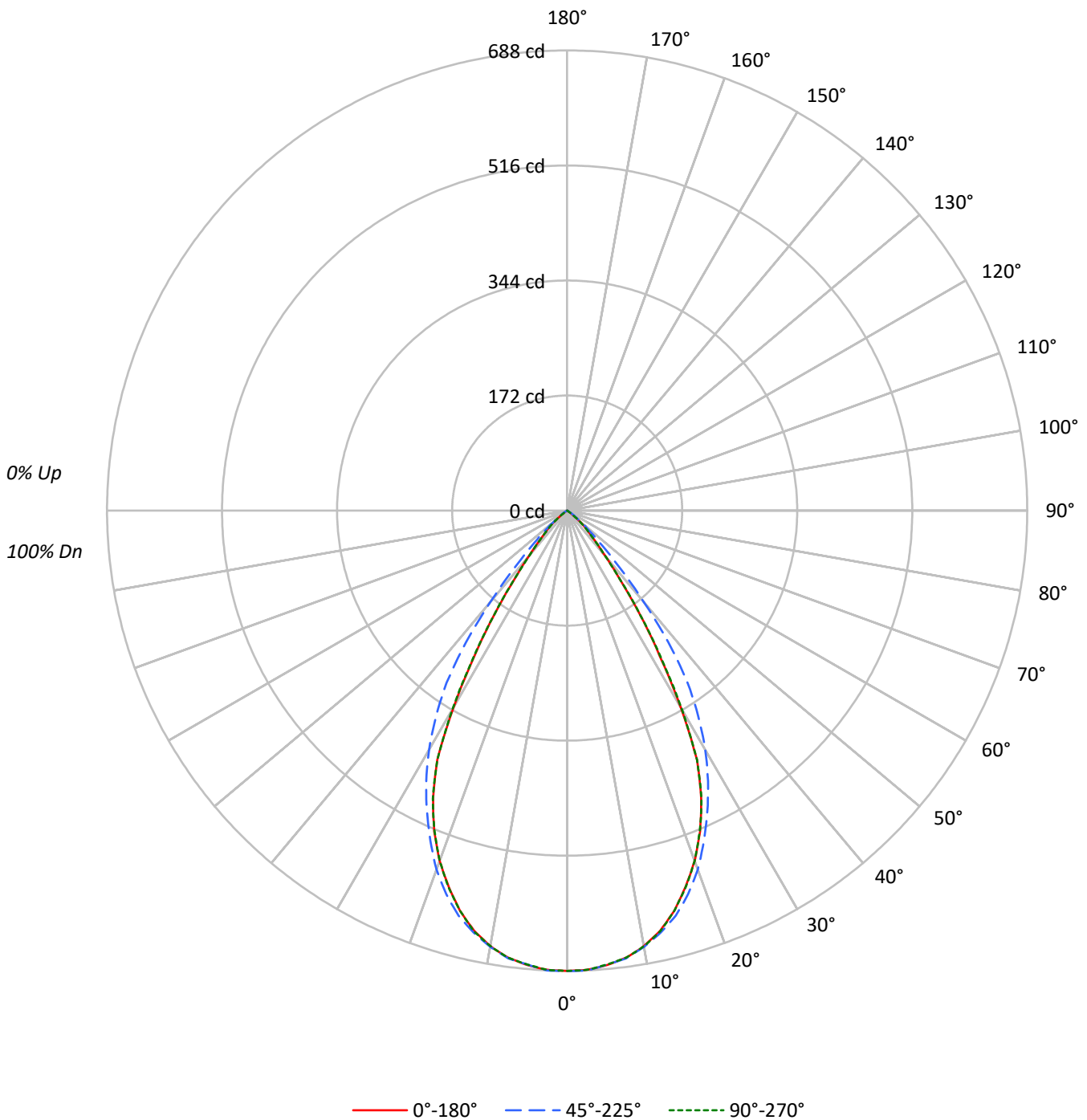
Lumens per Lamp: N/A
Luminaire Lumens: 667.0 lumens
Efficiency: N/A
Efficacy: 66.7 lumens/watt
Spacing Criteria (0/90/45): 0.95 / 0.95 / 0.98
Luminous Opening: Rectangular (W 0.38' x L: 0.38' x H: 0')
CIE Type: Direct

Input Watts (W): 10
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	50	30	10	0	
RCR																						
0	119	119	119	119	116	116	116	116	111	111	111	106	106	106	102	102	102	100				100
1	113	111	108	106	111	109	106	104	104	103	101	101	99	98	97	96	95	93				93
2	108	103	99	95	106	101	97	94	98	95	92	95	92	90	92	90	88	87				87
3	102	96	91	87	100	94	90	86	92	88	85	89	86	83	87	84	82	80				80
4	97	89	84	79	95	88	83	79	86	82	78	84	80	77	82	79	76	75				75
5	92	83	77	73	90	82	77	73	81	76	72	79	75	71	77	74	71	69				69
6	87	78	72	68	86	77	72	67	76	71	67	74	70	66	73	69	66	65				65
7	83	73	67	63	81	73	67	63	71	66	62	70	65	62	69	65	62	60				60
8	78	69	63	59	77	68	62	58	67	62	58	66	61	58	65	61	58	56				56
9	75	65	59	55	74	64	59	55	63	58	54	62	58	54	62	57	54	53				53
10	71	61	55	51	70	61	55	51	60	55	51	59	54	51	58	54	51	49				49

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	52685	52685	52685
5°	52425	52348	52348
10°	51399	51477	51399
15°	49068	49702	49068
20°	45387	46528	45387
25°	40049	41907	40134
30°	30060	36521	30325
35°	17670	29350	17763
40°	8793	17796	8693
45°	4871	8010	4871
50°	2382	3334	2382
55°	133	1468	133
60°	153	306	153
65°	0	0	0
70°	0	0	0
75°	0	0	0
80°	0	0	0
85°	0	0	0



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	64.5	9.7
10°-20°	174.0	26.1
20°-30°	220.5	33.1
30°-40°	151.2	22.7
40°-50°	48.7	7.3
50°-60°	7.9	1.2
60°-70°	0.2	0.0
70°-80°	0.0	0.0
80°-90°	0.0	0.0
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°	458.9	68.8
0°-40°	610.1	91.5
0°-60°	666.8	100.0
0°-90°	667.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	667.0	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	688	688	688	688	688	
5°	682	683	681	683	681	64
15°	619	623	627	623	619	173
25°	474	488	496	487	475	213
35°	189	233	314	235	190	121
45°	45	56	74	55	45	37
55°	1	6	11	6	1	5
65°	0	0	0	0	0	0
75°	0	0	0	0	0	0
85°	0	0	0	0	0	0
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	688.3	688.3	688.3	688.3	688.3
2.5°	687.3	687.3	688.3	687.3	687.3
5°	682.3	683.3	681.3	683.3	681.3
7.5°	674.3	673.3	675.3	673.3	674.3
10°	661.3	660.3	662.3	660.3	661.3
12.5°	643.2	644.2	646.2	645.2	644.2
15°	619.2	623.2	627.2	623.2	619.2
17.5°	589.2	594.2	601.2	594.2	590.2
20°	557.2	562.2	571.2	563.2	557.2
22.5°	519.2	529.2	534.2	528.2	518.2
25°	474.2	488.2	496.2	487.2	475.2
27.5°	420.2	442.2	456.2	442.2	420.2
30°	340.1	383.1	413.2	383.1	343.1
32.5°	258.1	308.1	365.1	306.1	261.1
35°	189.1	233.1	314.1	235.1	190.1
37.5°	129.0	168.1	248.1	166.1	130.0
40°	88.0	116.0	178.1	115.0	87.0
42.5°	62.0	79.0	118.0	79.0	61.0
45°	45.0	56.0	74.0	55.0	45.0
47.5°	33.0	41.0	46.0	40.0	32.0
50°	20.0	28.0	28.0	28.0	20.0
52.5°	9.0	16.0	17.0	16.0	9.0
55°	1.0	6.0	11.0	6.0	1.0
57.5°	1.0	1.0	6.0	1.0	1.0
60°	1.0	1.0	2.0	1.0	1.0
62.5°	0.0	0.0	1.0	0.0	0.0
65°	0.0	0.0	0.0	0.0	0.0
67.5°	0.0	0.0	0.0	0.0	0.0
70°	0.0	0.0	0.0	0.0	0.0
72.5°	0.0	0.0	0.0	0.0	0.0
75°	0.0	0.0	0.0	0.0	0.0
77.5°	0.0	0.0	0.0	0.0	0.0
80°	0.0	0.0	0.0	0.0	0.0
82.5°	0.0	0.0	0.0	0.0	0.0
85°	0.0	0.0	0.0	0.0	0.0
87.5°	0.0	0.0	0.0	0.0	0.0
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)