

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: P241743

Luminaire Tested: **PRS410D010-S4M12-44SMDH**

Issue Date: 03/03/2020

**Test Information**

Test Method: LM-79-08  
Report Number: P241743  
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G1-1802-584-44)  
Test Lab: INNOVATION CENTER(G1)  
Issue Date: 03/03/2020  
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)  
Product Line: HALO COMMERCIAL  
Catalog Number: PRS410D010-S4M12-44SMDH  
Description: HALO COMMERCIAL 4" SQUARE, NEW CONSTRUCTION FRAME, WITH 4" MEDIUM DISTRIBUTION, SHALLOW TRIM HAZE  
Light Source: ARRAYS OF HIGH LUMEN LEDS 80CRI / 3500K CCT  
Ballast/Driver: ELECTRONIC DRIVER

**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 1006.9 lumens  
Efficiency: N/A  
Efficacy: 100.7 lumens/watt  
Spacing Criteria (0/90/45): 1 / 1 / 1.06  
Luminous Opening: Rectangular (W 0.38' x L: 0.38' x H: 0')  
CIE Type: Direct

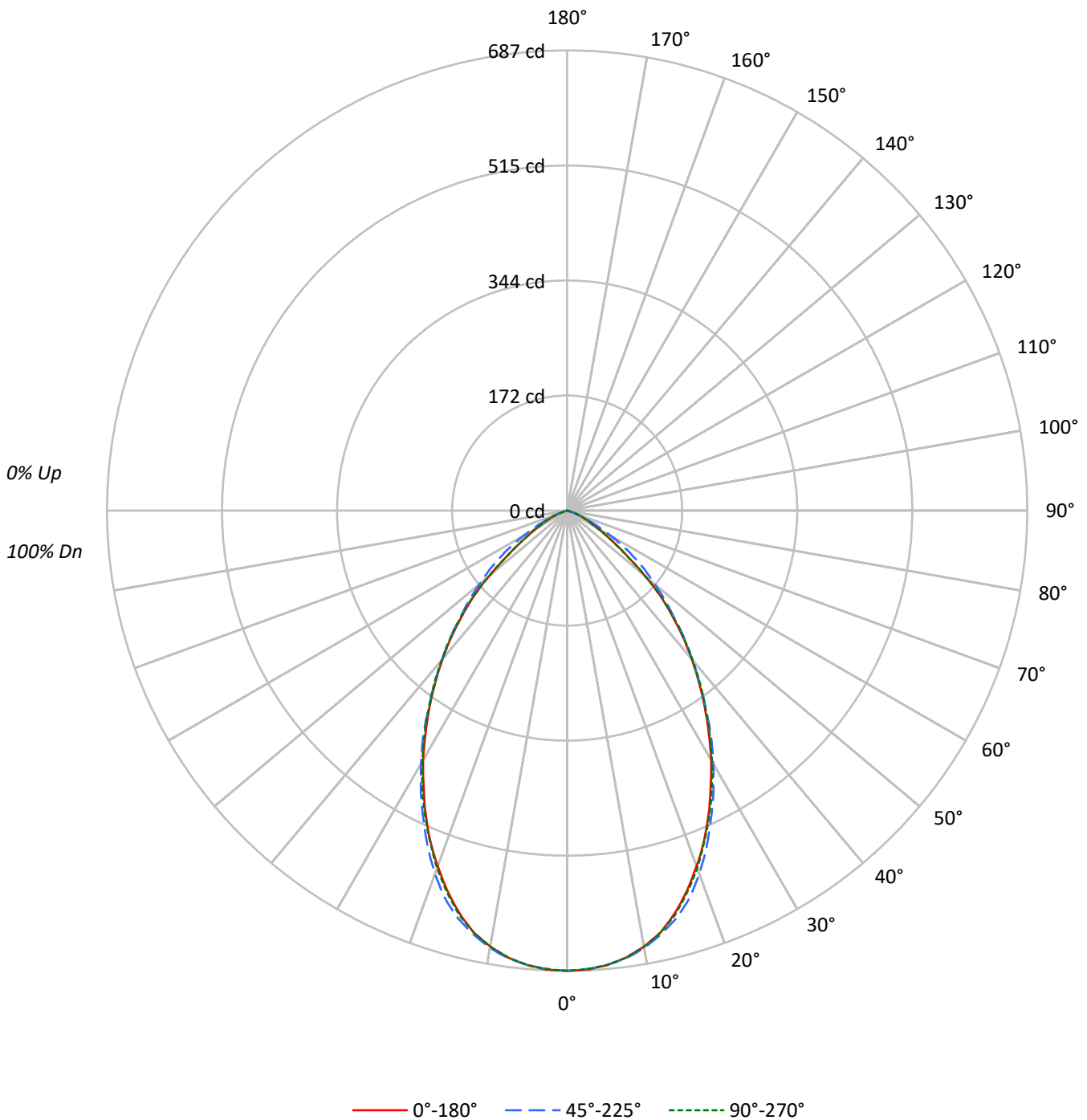
Input Watts (W): 10  
Input Voltage (V): NR  
Input Current (Ain): NR  
Voltage Rise (V): NR  
Power Factor: NR  
Total Harmonic Distortion (THDi): NR  
Frequency (hertz): 60  
Stabilization Time: NR  
Operation Time: NR  
Ambient Temperature (°C): NR  
Test Distance: 25 FT



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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	0
RCR																		
0	119	119	119	119	116	116	116	116	111	111	111	106	106	106	102	102	102	100
1	112	109	106	103	110	107	104	101	102	100	98	99	97	95	95	94	92	91
2	105	99	94	89	102	97	92	88	94	90	86	90	87	85	88	85	83	81
3	98	90	83	79	96	88	83	78	85	81	77	83	79	75	81	77	74	72
4	91	82	75	70	89	81	74	69	78	73	68	76	71	67	74	70	67	65
5	85	75	68	62	83	74	67	62	72	66	61	70	65	61	68	64	60	58
6	80	69	61	56	78	68	61	56	66	60	55	65	59	55	63	58	55	53
7	75	63	56	51	73	63	56	51	61	55	50	60	54	50	59	54	50	48
8	70	59	51	47	69	58	51	46	57	51	46	56	50	46	55	50	46	44
9	66	55	47	43	65	54	47	43	53	47	42	52	46	42	51	46	42	41
10	62	51	44	39	61	50	44	39	49	43	39	49	43	39	48	43	39	37

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

	0°	45°	90°
0°	52593	52593	52593
5°	52333	52333	52333
10°	51376	51531	51376
15°	49289	49923	49448
20°	46023	47000	46267
25°	42228	42904	42397
30°	38005	38536	38182
35°	33452	33733	33639
40°	28877	29077	29077
45°	23923	24464	24248
50°	18100	20363	18100
55°	12010	16414	11877
60°	7961	11482	7961
65°	5615	6882	5434
70°	3133	3581	3133
75°	296	1183	296
80°	0	0	0
85°	0	0	0



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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	64.4	6.4
10°-20°	175.2	17.4
20°-30°	231.8	23.0
30°-40°	225.9	22.4
40°-50°	174.1	17.3
50°-60°	95.1	9.4
60°-70°	35.2	3.5
70°-80°	5.1	0.5
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°	471.5	46.8
0°-40°	697.4	69.3
0°-60°	966.6	96.0
0°-90°	1006.9	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	1006.9	100.0

**CANDELA DISTRIBUTION:**

	0°	22.5°	45°	67.5°	90°	Flux
0°	687	687	687	687	687	
5°	681	681	681	681	681	64
15°	622	626	630	627	624	174
25°	500	506	508	508	502	229
35°	358	362	361	365	360	223
45°	221	227	226	228	224	170
55°	90	101	123	102	89	84
65°	31	34	38	34	30	31
75°	1	2	4	2	1	4
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°	687.1	687.1	687.1	687.1	687.1
2.5°	686.1	685.1	685.1	685.1	685.1
5°	681.1	681.1	681.1	681.1	681.1
7.5°	673.1	673.1	674.1	673.1	673.1
10°	661.0	662.0	663.0	663.0	661.0
12.5°	645.0	647.0	648.0	647.0	645.0
15°	622.0	626.0	630.0	627.0	624.0
17.5°	595.0	600.0	607.0	601.0	597.0
20°	565.0	571.0	577.0	573.0	568.0
22.5°	534.0	539.0	544.0	542.0	535.0
25°	500.0	506.0	508.0	508.0	502.0
27.5°	464.0	471.0	473.0	472.0	468.0
30°	430.0	435.0	436.0	437.0	432.0
32.5°	393.0	398.0	400.0	401.0	396.0
35°	358.0	362.0	361.0	365.0	360.0
37.5°	323.0	327.0	325.0	329.0	326.0
40°	289.0	291.0	291.0	294.0	291.0
42.5°	256.0	258.0	259.0	260.0	258.0
45°	221.0	227.0	226.0	228.0	224.0
47.5°	189.0	194.0	198.0	196.0	190.0
50°	152.0	164.0	171.0	166.0	152.0
52.5°	117.0	131.0	147.0	132.0	117.0
55°	90.0	101.0	123.0	102.0	89.0
57.5°	68.0	77.0	99.0	77.0	68.0
60°	52.0	59.0	75.0	59.0	52.0
62.5°	40.0	45.0	54.0	45.0	40.0
65°	31.0	34.0	38.0	34.0	30.0
67.5°	22.0	25.0	25.0	25.0	22.0
70°	14.0	17.0	16.0	17.0	14.0
72.5°	6.0	9.0	10.0	9.0	6.0
75°	1.0	2.0	4.0	2.0	1.0
77.5°	0.0	1.0	1.0	1.0	1.0
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)