

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: P241693

Luminaire Tested: **PRS410D010-S4M12-44SMDMW-3000K**

Issue Date: 03/03/2020

Test Information

Test Method: LM-79-08
Report Number: P241693
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G1-1802-584-41)
Test Lab: INNOVATION CENTER(G1)
Issue Date: 03/03/2020
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: HALO COMMERCIAL
Catalog Number: PRS410D010-S4M12-44SMDMW-3000K
Description: HALO COMMERCIAL 4" SQUARE, NEW CONSTRUCTION FRAME, WITH 4" MEDIUM DISTRIBUTION, SHALLOW TRIM MATTE WHITE
Light Source: ARRAYS OF HIGH LUMEN LEDS 80CRI / 3000K CCT
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 1011.7 lumens
Efficiency: N/A
Efficacy: 101.2 lumens/watt
Spacing Criteria (0/90/45): 1.01 / 1.01 / 1.08
Luminous Opening: Rectangular (W 0.38' x L: 0.38' x H: 0')
CIE Type: Direct

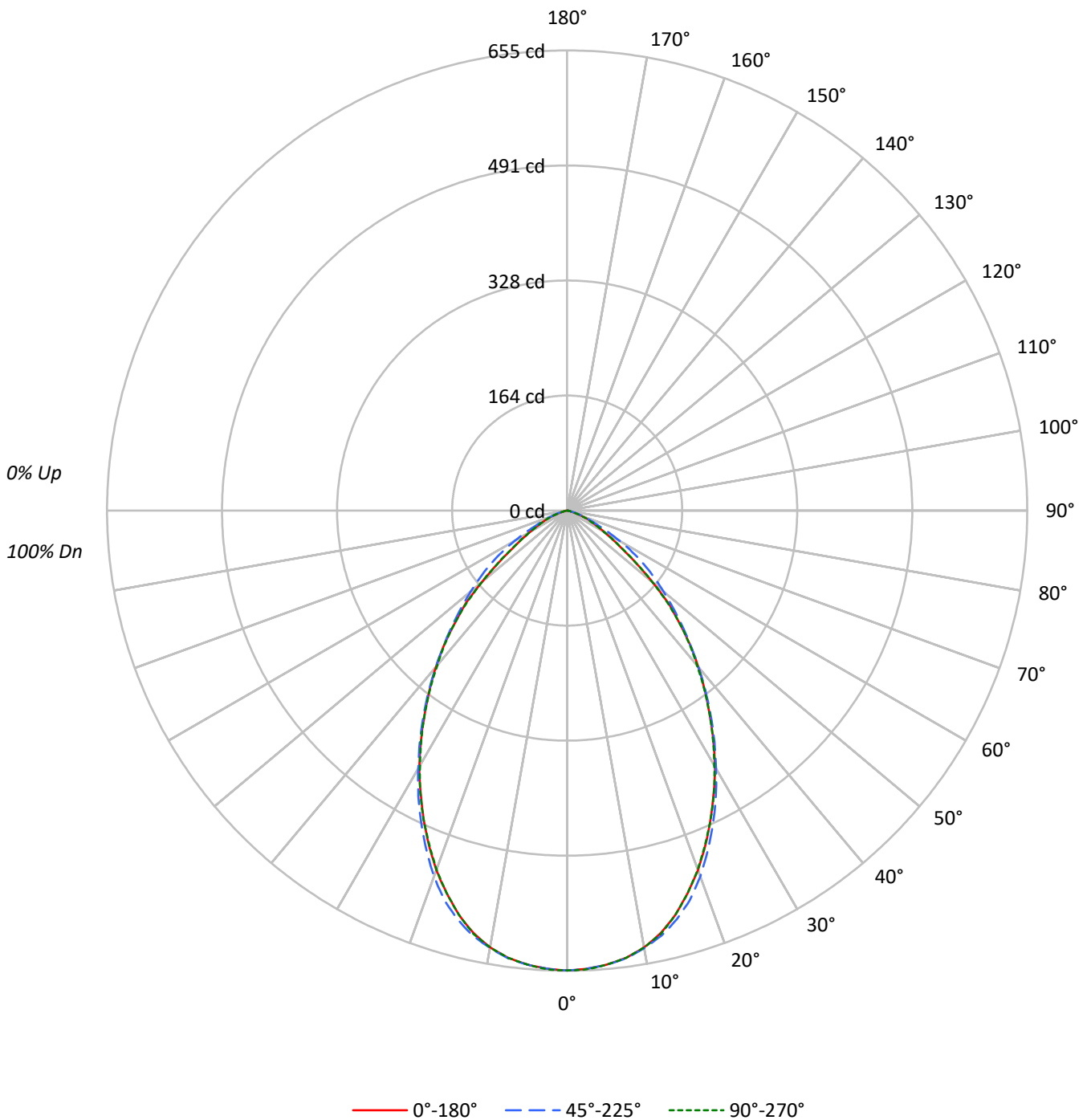
Input Watts (W): 10
Input Voltage (V): NR
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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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	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	112	108	105	102	109	106	103	101	102	100	98	98	96	95	95	93	92					90				
2	104	98	93	88	102	96	91	87	93	89	85	90	86	84	87	84	82					80				
3	97	89	82	77	95	87	81	77	84	79	75	82	78	74	79	76	73					71				
4	90	81	74	68	88	79	73	68	77	71	67	75	70	66	73	69	65					63				
5	84	74	66	61	82	73	66	60	71	65	60	69	64	59	67	62	59					57				
6	79	68	60	55	77	67	60	54	65	59	54	63	58	54	62	57	53					51				
7	74	62	55	49	72	61	54	49	60	54	49	59	53	49	57	52	48					47				
8	69	57	50	45	68	57	50	45	56	49	45	54	49	45	53	48	44					43				
9	65	53	46	41	64	53	46	41	52	45	41	51	45	41	50	45	41					39				
10	61	50	43	38	60	49	43	38	48	42	38	47	42	38	47	41	38					36				

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	50105	50105	50105
5°	49851	49851	49851
10°	49075	49153	49075
15°	47205	47744	47205
20°	44353	45143	44279
25°	40852	41502	40852
30°	37210	37457	37033
35°	33022	33293	33022
40°	29037	29037	28747
45°	24356	24984	24453
50°	18850	21268	18850
55°	13011	17775	13145
60°	9308	13150	9308
65°	6991	8386	6828
70°	4543	5394	4745
75°	1715	2869	1715
80°	1278	1719	1278
85°	878	878	878



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	61.4	6.1
10°-20°	167.7	16.6
20°-30°	224.0	22.1
30°-40°	222.5	22.0
40°-50°	176.9	17.5
50°-60°	103.3	10.2
60°-70°	43.6	4.3
70°-80°	10.7	1.1
80°-90°	1.6	0.2
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°	453.1	44.8
0°-40°	675.6	66.8
0°-60°	955.9	94.5
0°-90°	1011.7	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	1011.7	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	655	655	655	655	655	
5°	649	649	649	649	649	61
15°	596	600	602	600	596	167
25°	484	490	491	490	484	222
35°	353	359	356	357	353	221
45°	225	231	231	231	226	174
55°	98	111	133	111	98	91
65°	39	42	46	42	38	39
75°	6	7	10	8	6	9
85°	1	1	1	1	1	1
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	654.6	654.6	654.6	654.6	654.6
2.5°	652.7	652.7	652.7	652.7	653.6
5°	648.8	648.8	648.8	648.8	648.8
7.5°	642.1	642.1	643.0	643.0	642.1
10°	631.4	631.4	632.4	632.4	631.4
12.5°	616.0	617.9	619.8	617.9	616.9
15°	595.7	599.6	602.5	599.6	595.7
17.5°	570.6	575.4	581.2	575.4	570.6
20°	544.5	549.4	554.2	548.4	543.6
22.5°	514.6	520.4	523.3	519.4	513.6
25°	483.7	490.5	491.4	489.5	483.7
27.5°	451.8	456.7	458.6	457.6	452.8
30°	421.0	425.8	423.8	424.8	419.0
32.5°	387.2	392.0	390.1	390.1	386.2
35°	353.4	359.2	356.3	357.2	353.4
37.5°	321.5	324.4	323.4	324.4	320.5
40°	290.6	292.5	290.6	292.5	287.7
42.5°	258.8	261.6	259.7	261.6	257.8
45°	225.0	230.8	230.8	230.8	225.9
47.5°	196.0	200.8	203.7	200.8	193.1
50°	158.3	172.8	178.6	171.9	158.3
52.5°	125.5	140.0	155.4	140.0	126.5
55°	97.5	111.0	133.2	111.0	98.5
57.5°	77.2	86.9	110.1	86.9	77.2
60°	60.8	68.5	85.9	68.5	60.8
62.5°	48.3	54.1	63.7	54.1	48.3
65°	38.6	42.5	46.3	42.5	37.7
67.5°	29.9	32.8	33.8	32.8	29.0
70°	20.3	24.1	24.1	24.1	21.2
72.5°	12.6	15.4	16.4	15.4	12.6
75°	5.8	6.8	9.7	7.7	5.8
77.5°	4.8	4.8	4.8	4.8	4.8
80°	2.9	3.9	3.9	3.9	2.9
82.5°	1.9	1.9	1.9	1.9	1.9
85°	1.0	1.0	1.0	1.0	1.0
87.5°	1.0	1.0	1.0	1.0	1.0
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)