

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: P241778

Luminaire Tested: **PRS410D010-S4M12-44SNDC-4000K**

Issue Date: 03/03/2020

Test Information

Test Method: LM-79-08
Report Number: P241778
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G1-1802-584-46)
Test Lab: INNOVATION CENTER(G1)
Issue Date: 03/03/2020
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: HALO COMMERCIAL
Catalog Number: PRS410D010-S4M12-44SNDC-4000K
Description: HALO COMMERCIAL 4" SQUARE, NEW CONSTRUCTION FRAME, WITH 4" NARROW DISTRIBUTION, SHALLOW TRIM SPECULAR
Light Source: ARRAYS OF HIGH LUMEN LEDS 80CRI / 4000K CCT
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 907.9 lumens
Efficiency: N/A
Efficacy: 90.8 lumens/watt
Spacing Criteria (0/90/45): 0.9 / 0.9 / 0.95
Luminous Opening: Rectangular (W 0.38' x L: 0.38' x H: 0')
CIE Type: Direct

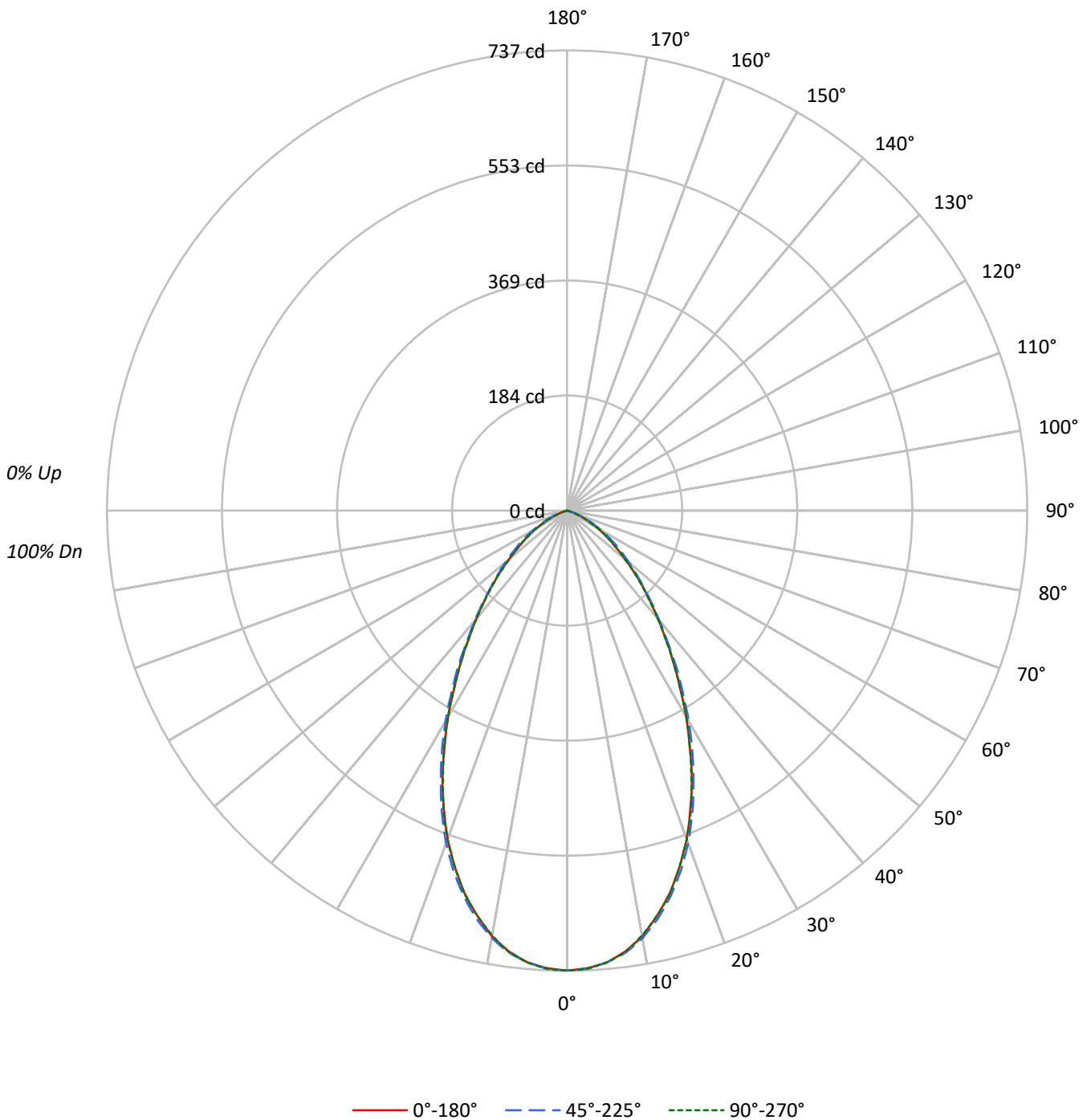
Input Watts (W): 10
Input Voltage (V): NR
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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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	109	106	103	110	107	104	102	103	100	98	99	97	96	95	94	93	91					91			
2	105	99	94	90	103	97	93	89	94	90	87	91	88	85	88	86	83	82					82			
3	98	90	84	80	96	89	83	79	86	81	78	84	80	76	81	78	75	73					73			
4	92	83	76	71	90	82	75	70	79	74	70	77	72	69	75	71	68	66					66			
5	86	76	69	64	84	75	68	63	73	67	63	71	66	62	70	65	62	60					60			
6	81	70	63	58	79	69	63	58	68	62	57	66	61	57	65	60	56	55					55			
7	76	65	58	53	74	64	57	53	63	57	52	62	56	52	60	55	52	50					50			
8	72	60	53	49	70	60	53	48	59	53	48	57	52	48	56	51	48	46					46			
9	68	56	49	45	66	56	49	45	55	49	45	54	48	44	53	48	44	43					43			
10	64	53	46	42	63	52	46	42	51	45	41	51	45	41	50	45	41	40					40			

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	56390	56390	56390
5°	55829	55829	55829
10°	53801	54034	53723
15°	50280	50684	50359
20°	45583	46161	45664
25°	39914	40429	39745
30°	33719	34435	33719
35°	27706	28369	27706
40°	22552	22952	22652
45°	18294	18619	18294
50°	14456	15302	14456
55°	11343	12558	11343
60°	8680	9599	8680
65°	5868	6774	5868
70°	2954	3849	2954
75°	0	887	0
80°	0	0	0
85°	0	0	0



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	68.3	7.5
10°-20°	177.8	19.6
20°-30°	217.8	24.0
30°-40°	188.7	20.8
40°-50°	133.8	14.7
50°-60°	80.9	8.9
60°-70°	36.1	4.0
70°-80°	4.4	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°	464.0	51.1
0°-40°	652.6	71.9
0°-60°	867.4	95.5
0°-90°	907.9	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	907.9	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	737	737	737	737	737	
5°	727	727	727	727	727	68
15°	634	638	640	638	636	177
25°	473	479	479	478	471	216
35°	296	303	304	302	296	186
45°	169	173	172	174	169	131
55°	85	89	94	90	85	77
65°	32	36	37	36	32	33
75°	0	1	3	1	0	3
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°	736.7	736.7	736.7	736.7	736.7
2.5°	733.7	733.7	734.7	734.7	734.7
5°	726.6	726.6	726.6	726.6	726.6
7.5°	712.4	712.4	714.4	713.4	713.4
10°	692.2	692.2	695.2	693.2	691.2
12.5°	664.8	667.9	669.9	667.9	664.8
15°	634.5	637.5	639.6	638.5	635.5
17.5°	598.1	603.1	605.1	603.1	598.1
20°	559.6	563.7	566.7	563.7	560.6
22.5°	516.1	521.2	524.2	521.2	518.1
25°	472.6	478.7	478.7	477.6	470.6
27.5°	425.0	432.1	434.1	432.1	426.0
30°	381.5	386.6	389.6	386.6	381.5
32.5°	336.0	343.1	344.1	343.1	337.0
35°	296.5	302.6	303.6	301.6	296.5
37.5°	259.1	265.1	263.1	265.1	259.1
40°	225.7	230.7	229.7	230.7	226.7
42.5°	196.3	200.4	199.4	200.4	195.3
45°	169.0	173.0	172.0	174.1	169.0
47.5°	144.7	148.8	149.8	148.8	144.7
50°	121.4	127.5	128.5	127.5	121.4
52.5°	101.2	106.3	110.3	107.3	101.2
55°	85.0	89.1	94.1	90.1	85.0
57.5°	69.8	73.9	77.9	74.9	69.8
60°	56.7	60.7	62.7	60.7	56.7
62.5°	43.5	48.6	49.6	48.6	43.5
65°	32.4	36.4	37.4	36.4	32.4
67.5°	22.3	26.3	26.3	26.3	22.3
70°	13.2	16.2	17.2	17.2	13.2
72.5°	5.1	8.1	9.1	8.1	6.1
75°	0.0	1.0	3.0	1.0	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)