

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: P241953

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

Issue Date: 03/03/2020

Test Information

Test Method: LM-79-08
Report Number: P241953
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G1-1802-584-58)
Test Lab: INNOVATION CENTER(G1)
Issue Date: 03/03/2020
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: HALO COMMERCIAL
Catalog Number: PRS410D010-S4M12-41SNDC
Description: HALO COMMERCIAL 4" SQUARE, NEW CONSTRUCTION FRAME, WITH 4" NARROW DISTRIBUTION, DEEP TRIM SPECULAR
Light Source: ARRAYS OF HIGH LUMEN LEDS 80CRI / 3500K CCT
Ballast/Driver: ELECTRONIC DRIVER

Summary

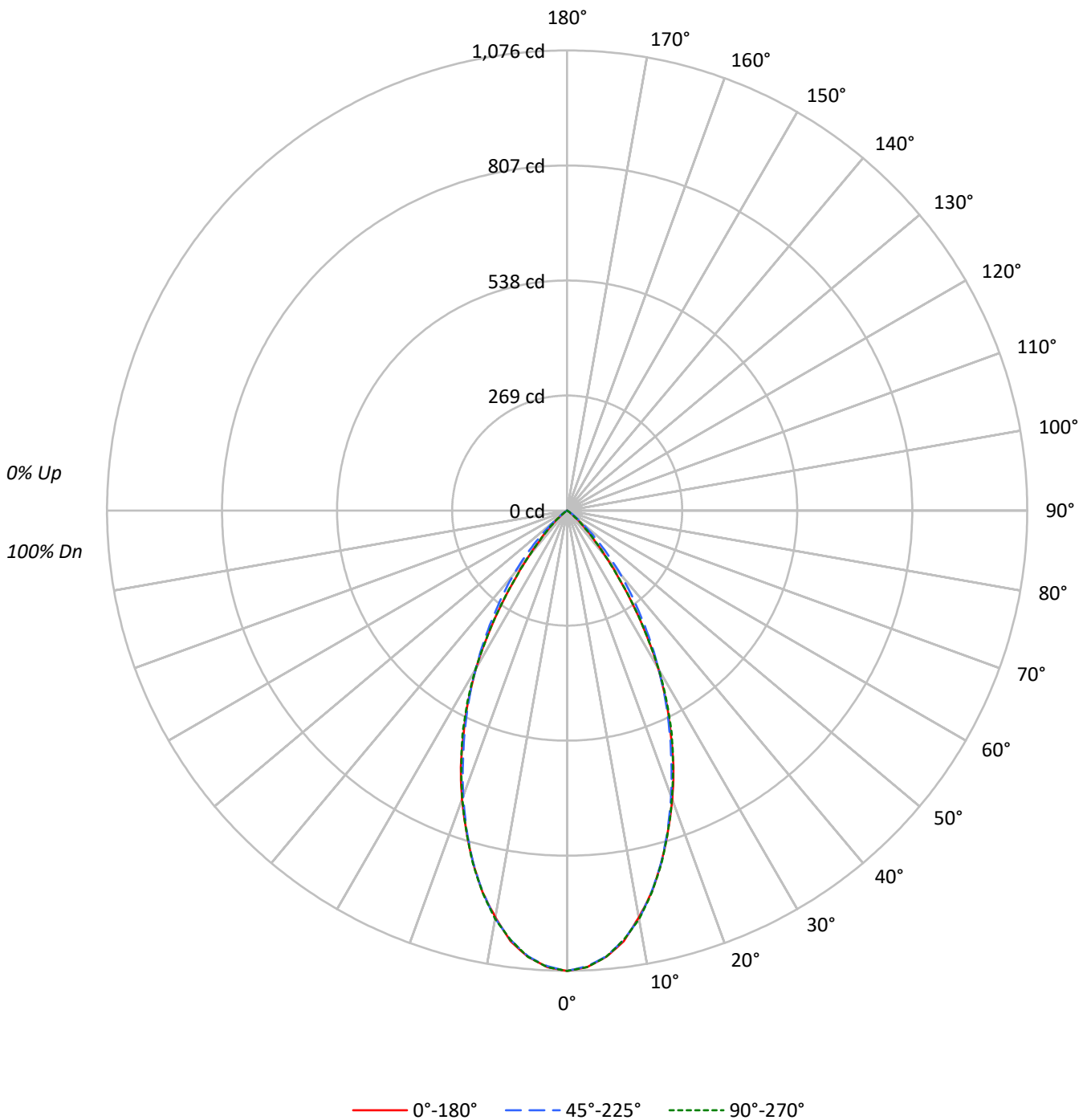
Lumens per Lamp: N/A
Luminaire Lumens: 849.0 lumens
Efficiency: N/A
Efficacy: 84.9 lumens/watt
Spacing Criteria (0/90/45): 0.8 / 0.79 / 0.83
Luminous Opening: Rectangular (W 0.38' x L: 0.38' x H: 0')
CIE Type: Direct

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	114	111	108	106	111	109	106	104	105	103	101	101	100	98	97	96	95					94				
2	108	103	99	96	106	101	98	95	98	95	93	95	93	91	92	91	89					87				
3	103	96	91	87	101	95	90	87	92	88	85	90	87	84	87	85	83					81				
4	97	90	84	80	96	89	84	80	87	82	79	85	81	78	83	80	77					75				
5	92	84	78	74	91	83	78	74	81	77	73	80	76	72	78	75	72					70				
6	88	79	73	69	86	78	73	68	77	72	68	75	71	68	74	70	67					66				
7	83	74	68	64	82	74	68	64	72	67	63	71	67	63	70	66	63					61				
8	79	70	64	60	78	69	64	60	68	63	59	67	63	59	66	62	59					58				
9	76	66	60	56	75	66	60	56	65	59	56	64	59	56	63	59	55					54				
10	72	62	57	53	71	62	57	53	61	56	53	60	56	52	60	55	52					51				

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	82399	82399	82399
5°	80485	80409	80485
10°	75043	75276	75354
15°	67484	67405	67563
20°	58542	57891	58379
25°	48368	47777	48875
30°	37634	37723	37811
35°	25127	27836	25220
40°	14079	19275	13879
45°	7144	11041	6928
50°	2977	4882	2977
55°	133	1868	133
60°	153	459	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°	97.4	11.5
10°-20°	236.5	27.9
20°-30°	260.6	30.7
30°-40°	177.9	21.0
40°-50°	66.3	7.8
50°-60°	10.0	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°	594.6	70.0
0°-40°	772.4	91.0
0°-60°	848.8	100.0
0°-90°	849.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	849.0	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	1076	1076	1076	1076	1076	
5°	1048	1048	1046	1046	1048	97
15°	852	851	851	851	853	237
25°	573	573	566	574	579	262
35°	269	285	298	286	270	168
45°	66	79	102	77	64	55
55°	1	8	14	8	1	6
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°	1076.5	1076.5	1076.5	1076.5	1076.5
2.5°	1068.5	1068.5	1066.5	1066.5	1068.5
5°	1047.5	1047.5	1046.5	1046.5	1047.5
7.5°	1015.5	1013.5	1012.5	1013.5	1012.5
10°	965.5	966.5	968.5	968.5	969.5
12.5°	913.6	912.6	912.6	914.6	914.6
15°	851.6	850.6	850.6	850.6	852.6
17.5°	784.6	784.6	781.6	783.6	784.6
20°	718.7	715.7	710.7	716.7	716.7
22.5°	649.7	644.7	636.7	645.7	646.7
25°	572.7	572.7	565.7	573.7	578.7
27.5°	500.8	496.8	496.8	499.8	504.8
30°	425.8	426.8	426.8	427.8	427.8
32.5°	344.8	355.8	361.8	355.8	344.8
35°	268.9	284.9	297.9	285.9	269.9
37.5°	195.9	218.9	242.9	217.9	196.9
40°	140.9	161.9	192.9	159.9	138.9
42.5°	96.0	114.9	144.9	111.9	96.0
45°	66.0	79.0	102.0	77.0	64.0
47.5°	43.0	53.0	66.0	52.0	43.0
50°	25.0	34.0	41.0	32.0	25.0
52.5°	12.0	19.0	24.0	19.0	12.0
55°	1.0	8.0	14.0	8.0	1.0
57.5°	1.0	1.0	7.0	1.0	1.0
60°	1.0	1.0	3.0	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)