

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: P252905

Luminaire Tested: **PRS420D010-S4M12-44SWDMW**

Issue Date: 03/03/2020

Test Information

Test Method: LM-79-08
Report Number: P252905
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G1-1804-748-2)
Test Lab: INNOVATION CENTER(G1)
Issue Date: 03/03/2020
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: HALO COMMERCIAL
Catalog Number: PRS420D010-S4M12-44SWDMW
Description: HALO COMMERCIAL 4" SQUARE, NEW CONSTRUCTION FRAME, WITH 4" WIDE DISTRIBUTION, SHALLOW TRIM MATTE WHITE
Light Source: ARRAYS OF HIGH LUMEN LEDS 80CRI / 3500K CCT
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 2156.9 lumens
Efficiency: N/A
Efficacy: 107.8 lumens/watt
Spacing Criteria (0/90/45): 1.29 / 1.29 / 1.41
Luminous Opening: Rectangular (W 0.38' x L: 0.38' x H: 0')
CIE Type: Direct

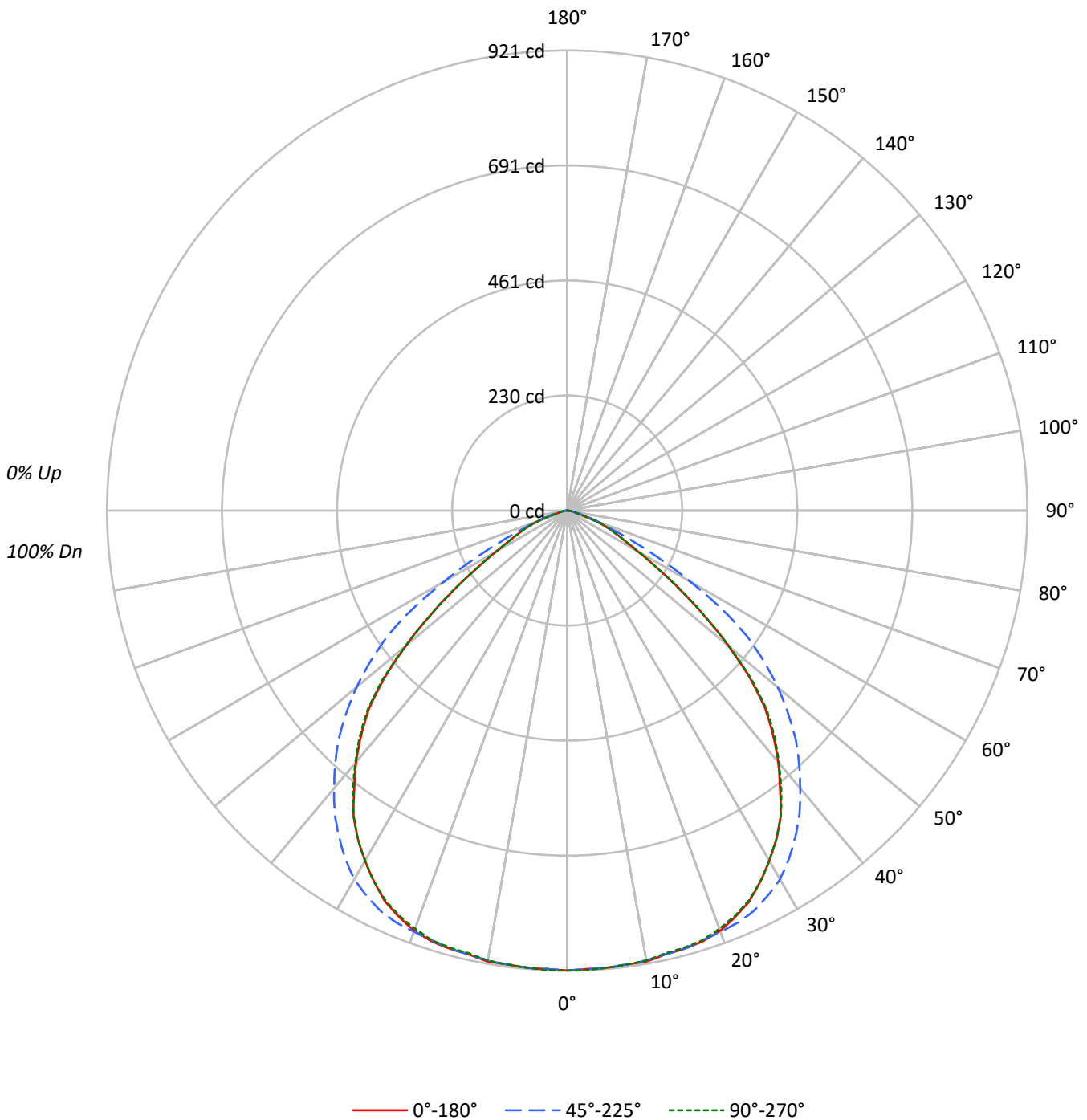
Input Watts (W): 20
Input Voltage (V): NR
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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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	111	107	104	101	108	105	102	99	101	98	96	97	95	93	94	92	90	88					88			
2	103	96	90	85	100	94	89	84	91	86	82	87	84	81	85	82	79	77					77			
3	95	86	79	73	92	84	78	73	81	76	71	79	74	70	76	72	69	67					67			
4	87	77	69	63	85	76	68	63	73	67	62	71	66	61	69	64	61	59					59			
5	81	69	61	55	79	68	61	55	66	60	55	64	59	54	63	58	53	52					52			
6	75	63	55	49	73	62	54	49	60	53	48	59	53	48	57	52	48	46					46			
7	70	57	49	44	68	57	49	43	55	48	43	54	47	43	52	47	43	41					41			
8	65	52	45	39	64	52	44	39	51	44	39	49	43	39	48	43	38	37					37			
9	61	48	41	35	59	48	40	35	47	40	35	46	39	35	45	39	35	33					33			
10	57	45	37	32	56	44	37	32	43	36	32	42	36	32	41	36	32	30					30			

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	70466	70466	70466
5°	70574	70574	70574
10°	71219	71055	71055
15°	71937	71937	71763
20°	72895	73074	72545
25°	72869	74676	72692
30°	71530	75313	71530
35°	69624	74417	69624
40°	65678	72522	65887
45°	60717	69994	61182
50°	50228	65518	50478
55°	36859	58851	37139
60°	24907	43599	25244
65°	18999	26371	18999
70°	13898	14860	13405
75°	5708	8222	5708
80°	4717	4717	4717
85°	3776	3776	3776



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	87.5	4.1
10°-20°	256.6	11.9
20°-30°	400.7	18.6
30°-40°	479.3	22.2
40°-50°	460.7	21.4
50°-60°	309.4	14.3
60°-70°	126.4	5.9
70°-80°	31.4	1.5
80°-90°	4.9	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°	744.8	34.5
0°-40°	1224.1	56.8
0°-60°	1994.2	92.5
0°-90°	2156.9	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	2156.9	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	921	921	921	921	921	
5°	918	918	918	918	918	88
15°	908	908	908	906	906	257
25°	863	871	884	869	861	396
35°	745	766	796	769	745	463
45°	561	602	647	604	565	425
55°	276	334	441	336	278	251
65°	105	118	146	118	105	106
75°	19	21	28	21	19	28
85°	4	4	4	4	4	5
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	920.6	920.6	920.6	920.6	920.6
2.5°	918.5	918.5	918.5	920.6	920.6
5°	918.5	918.5	918.5	918.5	918.5
7.5°	916.3	916.3	916.3	916.3	916.3
10°	916.3	914.2	914.2	914.2	914.2
12.5°	909.9	909.9	909.9	909.9	907.8
15°	907.8	907.8	907.8	905.6	905.6
17.5°	903.5	903.5	901.4	901.4	901.4
20°	894.9	897.1	897.1	894.9	890.6
22.5°	879.9	886.4	892.8	884.2	877.8
25°	862.8	871.4	884.2	869.2	860.7
27.5°	837.1	850.0	869.2	850.0	837.1
30°	809.3	826.4	852.1	826.4	809.3
32.5°	779.3	798.6	826.4	798.6	779.3
35°	745.1	766.5	796.4	768.6	745.1
37.5°	700.1	730.1	764.3	734.4	704.4
40°	657.3	689.4	725.8	691.5	659.4
42.5°	610.2	646.6	687.3	648.7	614.5
45°	560.9	601.6	646.6	603.8	565.2
47.5°	496.7	545.9	599.5	552.4	501.0
50°	421.8	483.9	550.2	488.1	423.9
52.5°	346.8	406.8	496.7	411.1	346.8
55°	276.2	334.0	441.0	336.1	278.3
57.5°	212.0	263.3	368.2	267.6	212.0
60°	162.7	201.3	284.8	203.4	164.9
62.5°	128.5	152.0	209.8	149.9	128.5
65°	104.9	117.8	145.6	117.8	104.9
67.5°	83.5	92.1	96.3	92.1	83.5
70°	62.1	70.7	66.4	70.7	59.9
72.5°	36.4	45.0	45.0	45.0	34.3
75°	19.3	21.4	27.8	21.4	19.3
77.5°	15.0	15.0	17.1	15.0	15.0
80°	10.7	10.7	10.7	10.7	10.7
82.5°	6.4	6.4	6.4	6.4	6.4
85°	4.3	4.3	4.3	4.3	4.3
87.5°	2.1	2.1	2.1	2.1	2.1
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)