

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: P252910

Luminaire Tested: **PRS420D010-S4M12-44SWDMW-4000K**

Issue Date: 03/03/2020

Test Information

Test Method: LM-79-08
Report Number: P252910
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-4000K
Description: HALO COMMERCIAL 4" SQUARE, NEW CONSTRUCTION FRAME, WITH 4" WIDE DISTRIBUTION, SHALLOW TRIM MATTE WHITE
Light Source: ARRAYS OF HIGH LUMEN LEDS 80CRI / 4000K CCT
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 2183.0 lumens
Efficiency: N/A
Efficacy: 109.1 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

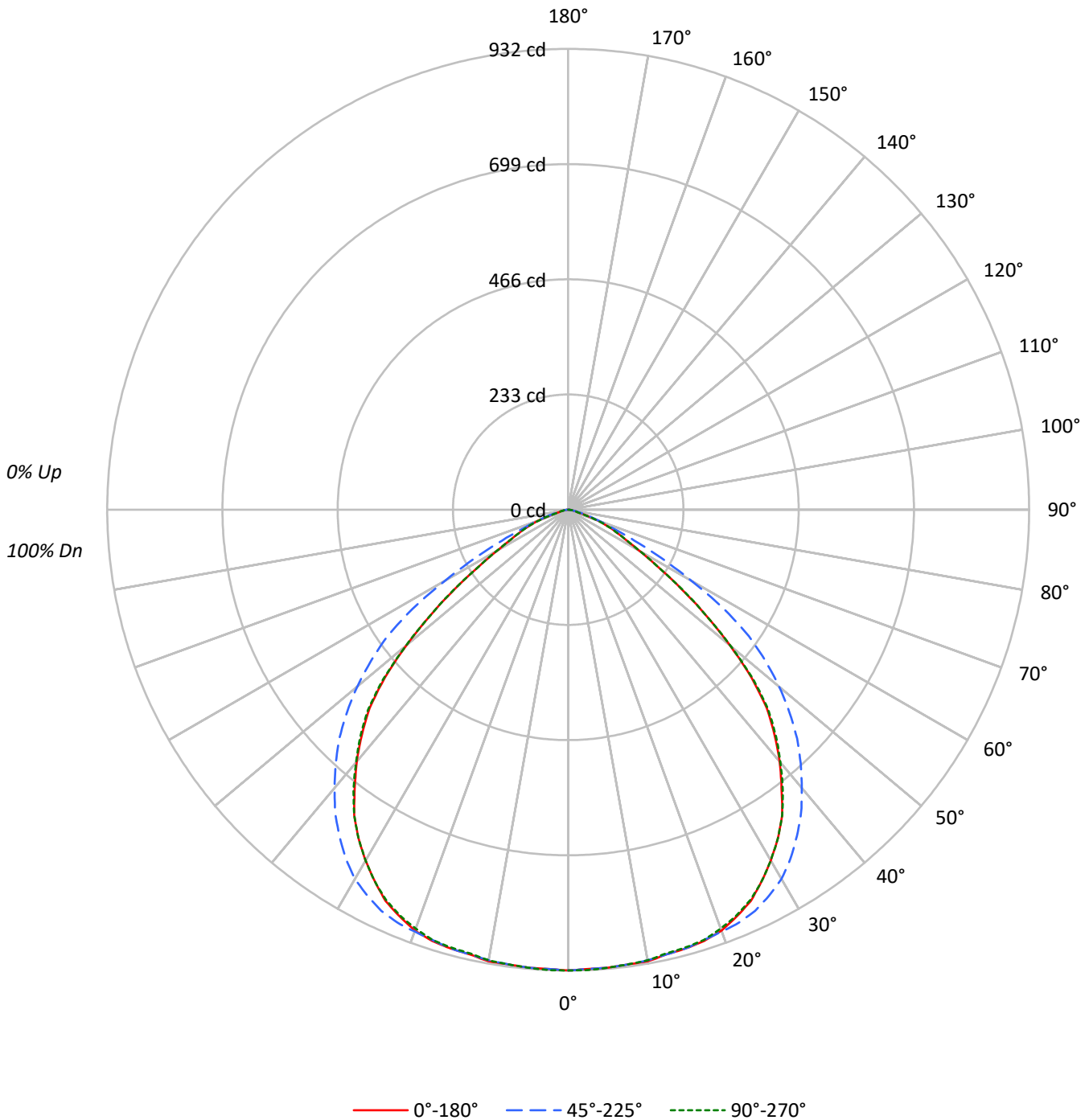
Input Watts (W): 20
Input Voltage (V): NR
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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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	0
RCR																		
0	119	119	119	119	116	116	116	116	111	111	111	106	106	106	102	102	102	100
1	111	107	104	101	108	105	102	99	101	98	96	97	95	93	94	92	90	88
2	103	96	90	85	100	94	89	84	91	86	82	87	84	81	85	82	79	77
3	95	86	79	73	92	84	78	73	81	76	71	79	74	70	76	72	69	67
4	87	77	69	63	85	76	68	63	73	67	62	71	66	61	69	64	61	59
5	81	69	61	55	79	68	61	55	66	60	55	64	59	54	63	58	53	52
6	75	63	55	49	73	62	54	49	60	53	48	59	53	48	57	52	48	46
7	70	57	49	44	68	57	49	43	55	48	43	54	47	43	52	47	43	41
8	65	52	45	39	64	52	44	39	51	44	39	49	43	39	48	43	38	37
9	61	48	41	35	59	48	40	35	47	40	35	46	39	35	45	39	35	33
10	57	45	37	32	56	44	37	32	43	36	32	42	36	32	41	36	32	30

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	71323	71323	71323
5°	71427	71427	71427
10°	72081	71918	71918
15°	72809	72809	72635
20°	73783	73954	73424
25°	73756	75580	73570
30°	72396	76223	72396
35°	70465	75324	70465
40°	66467	73401	66687
45°	61453	70838	61929
50°	50835	66316	51085
55°	37299	59572	37593
60°	25213	44120	25550
65°	19235	26679	19235
70°	14055	15039	13585
75°	5767	8340	5767
80°	4761	4761	4761
85°	3776	3776	3776



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	88.6	4.1
10°-20°	259.7	11.9
20°-30°	405.6	18.6
30°-40°	485.1	22.2
40°-50°	466.3	21.4
50°-60°	313.2	14.3
60°-70°	127.9	5.9
70°-80°	31.8	1.5
80°-90°	5.0	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°	753.8	34.5
0°-40°	1238.9	56.8
0°-60°	2018.3	92.5
0°-90°	2183.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	2183.0	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	932	932	932	932	932	
5°	930	930	930	930	930	89
15°	919	919	919	917	917	260
25°	873	882	895	880	871	401
35°	754	776	806	778	754	468
45°	568	609	654	611	572	430
55°	280	338	446	340	282	254
65°	106	119	147	119	106	107
75°	20	22	28	22	20	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°	931.8	931.8	931.8	931.8	931.8
2.5°	929.6	929.6	929.6	931.8	931.8
5°	929.6	929.6	929.6	929.6	929.6
7.5°	927.4	927.4	927.4	927.4	927.4
10°	927.4	925.3	925.3	925.3	925.3
12.5°	920.9	920.9	920.9	920.9	918.8
15°	918.8	918.8	918.8	916.6	916.6
17.5°	914.4	914.4	912.3	912.3	912.3
20°	905.8	907.9	907.9	905.8	901.4
22.5°	890.6	897.1	903.6	894.9	888.4
25°	873.3	881.9	894.9	879.8	871.1
27.5°	847.3	860.3	879.8	860.3	847.3
30°	819.1	836.4	862.4	836.4	819.1
32.5°	788.8	808.3	836.4	808.3	788.8
35°	754.1	775.8	806.1	777.9	754.1
37.5°	708.6	738.9	773.6	743.2	712.9
40°	665.2	697.7	734.6	699.9	667.4
42.5°	617.6	654.4	695.6	656.6	621.9
45°	567.7	608.9	654.4	611.1	572.1
47.5°	502.7	552.6	606.7	559.1	507.1
50°	426.9	489.7	556.9	494.1	429.0
52.5°	351.0	411.7	502.7	416.0	351.0
55°	279.5	338.0	446.4	340.2	281.7
57.5°	214.5	266.5	372.7	270.9	214.5
60°	164.7	203.7	288.2	205.9	166.9
62.5°	130.0	153.9	212.4	151.7	130.0
65°	106.2	119.2	147.3	119.2	106.2
67.5°	84.5	93.2	97.5	93.2	84.5
70°	62.8	71.5	67.2	71.5	60.7
72.5°	36.8	45.5	45.5	45.5	34.7
75°	19.5	21.7	28.2	21.7	19.5
77.5°	15.2	15.2	17.3	15.2	15.2
80°	10.8	10.8	10.8	10.8	10.8
82.5°	6.5	6.5	6.5	6.5	6.5
85°	4.3	4.3	4.3	4.3	4.3
87.5°	2.2	2.2	2.2	2.2	2.2
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)