

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: P252954

Luminaire Tested: **PRS415D010-S4M12-41SWDH-4000K**

Issue Date: 03/03/2020

Test Information

Test Method: LM-79-08
Report Number: P252954
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G1-1805-776-2)
Test Lab: INNOVATION CENTER(G1)
Issue Date: 03/03/2020
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: HALO COMMERCIAL
Catalog Number: PRS415D010-S4M12-41SWDH-4000K
Description: HALO COMMERCIAL 4" SQUARE, NEW CONSTRUCTION FRAME, WITH 4" WIDE DISTRIBUTION, DEEP TRIM HAZE
Light Source: ARRAYS OF HIGH LUMEN LEDS 80CRI / 4000K CCT
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 1120.9 lumens
Efficiency: N/A
Efficacy: 93.4 lumens/watt
Spacing Criteria (0/90/45): 1.11 / 1.1 / 1.15
Luminous Opening: Rectangular (W 0.38' x L: 0.38' x H: 0')
CIE Type: Direct

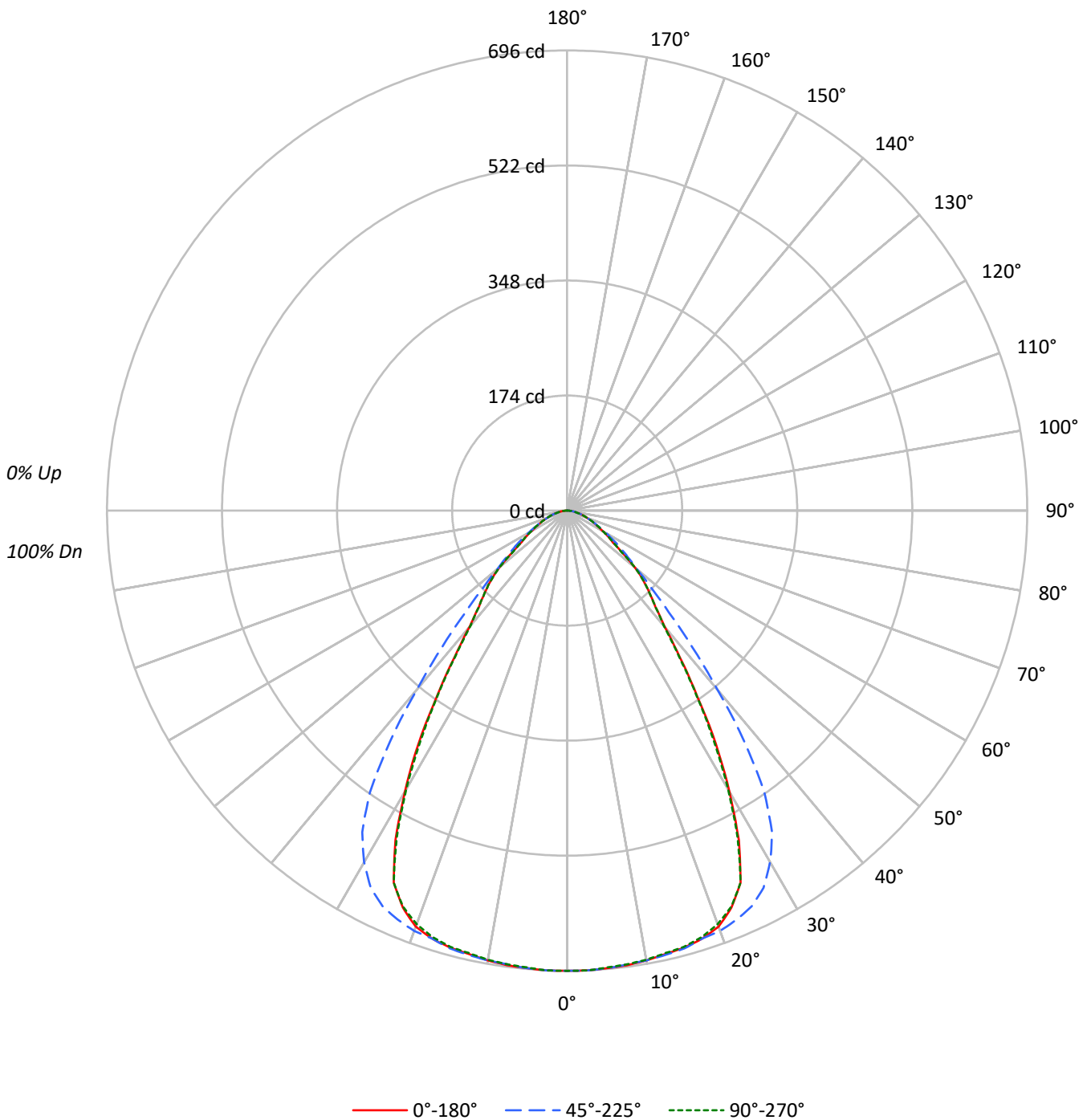
Input Watts (W): 12
Input Voltage (V): NR
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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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	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	100	102	99	97	98	96	94	95	93	92				90	
2	104	98	93	88	102	96	91	87	93	89	86	90	86	84	87	84	82				80	
3	97	89	83	78	95	88	82	77	85	80	76	82	78	75	80	76	73				72	
4	91	81	74	69	89	80	74	69	78	72	68	76	71	67	74	70	66				64	
5	85	75	67	62	83	74	67	62	72	66	61	70	65	60	68	64	60				58	
6	80	69	61	56	78	68	61	56	66	60	55	65	59	55	63	58	55				53	
7	75	63	56	51	73	63	56	51	61	55	51	60	54	50	59	54	50				48	
8	70	59	52	47	69	58	51	47	57	51	46	56	50	46	55	50	46				44	
9	66	55	48	43	65	54	47	43	53	47	43	52	47	42	51	46	42				41	
10	63	51	44	40	61	51	44	40	50	44	39	49	43	39	48	43	39				38	

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	53290	53290	53290
5°	53393	53393	53293
10°	53700	53700	53599
15°	54226	54329	54123
20°	54551	55097	54225
25°	52422	55775	52422
30°	43370	54268	43017
35°	32097	48581	31845
40°	22922	35382	22662
45°	19095	23544	19095
50°	15945	16421	15945
55°	11330	13091	11503
60°	9537	10349	9537
65°	8168	8404	8168
70°	7117	7117	7117
75°	6270	6270	6270
80°	5245	5245	5245
85°	4655	4655	4655



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	66.2	5.9
10°-20°	193.3	17.2
20°-30°	288.9	25.8
30°-40°	257.2	22.9
40°-50°	153.0	13.7
50°-60°	86.7	7.7
60°-70°	46.5	4.1
70°-80°	22.7	2.0
80°-90°	6.3	0.6
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°	548.4	48.9
0°-40°	805.6	71.9
0°-60°	1045.3	93.3
0°-90°	1120.9	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	1120.9	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	696	696	696	696	696	
5°	695	695	695	695	694	66
15°	684	684	686	683	683	193
25°	621	638	660	637	621	277
35°	344	402	520	400	341	217
45°	176	190	218	188	176	137
55°	85	94	98	94	86	81
65°	45	46	46	46	45	45
75°	21	21	21	21	21	23
85°	5	5	5	5	5	6
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	696.2	696.2	696.2	696.2	696.2
2.5°	696.2	696.2	696.2	696.2	696.2
5°	694.9	694.9	694.9	694.9	693.6
7.5°	693.6	692.3	692.3	692.3	692.3
10°	690.9	690.9	690.9	689.6	689.6
12.5°	687.0	687.0	688.3	687.0	685.6
15°	684.3	684.3	685.6	683.0	683.0
17.5°	679.0	680.3	679.0	679.0	676.4
20°	669.7	673.7	676.4	672.4	665.7
22.5°	649.8	660.4	669.7	659.1	648.5
25°	620.7	637.9	660.4	636.6	620.7
27.5°	562.3	606.1	643.2	602.1	558.3
30°	490.7	543.7	614.0	539.8	486.7
32.5°	419.1	472.1	576.9	469.5	412.4
35°	343.5	401.8	519.9	400.5	340.8
37.5°	279.8	332.9	440.3	330.2	277.2
40°	229.4	270.5	354.1	269.2	226.8
42.5°	197.6	220.1	279.8	218.8	197.6
45°	176.4	189.6	217.5	188.3	176.4
47.5°	156.5	167.1	171.1	165.8	156.5
50°	133.9	145.9	137.9	145.9	133.9
52.5°	106.1	120.7	115.4	122.0	104.8
55°	84.9	94.2	98.1	94.2	86.2
57.5°	74.3	76.9	82.2	76.9	74.3
60°	62.3	65.0	67.6	65.0	62.3
62.5°	53.0	55.7	55.7	55.7	54.4
65°	45.1	46.4	46.4	46.4	45.1
67.5°	38.5	38.5	38.5	38.5	38.5
70°	31.8	31.8	31.8	31.8	31.8
72.5°	26.5	26.5	26.5	26.5	26.5
75°	21.2	21.2	21.2	21.2	21.2
77.5°	17.2	17.2	15.9	17.2	15.9
80°	11.9	11.9	11.9	11.9	11.9
82.5°	9.3	9.3	9.3	9.3	9.3
85°	5.3	5.3	5.3	5.3	5.3
87.5°	2.7	2.7	2.7	2.7	2.7
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)