

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: P252949

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

Issue Date: 03/03/2020

Test Information

Test Method: LM-79-08
Report Number: P252949
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
Description: HALO COMMERCIAL 4" SQUARE, NEW CONSTRUCTION FRAME, WITH 4" WIDE DISTRIBUTION, DEEP TRIM HAZE
Light Source: ARRAYS OF HIGH LUMEN LEDS 80CRI / 3500K CCT
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 1107.5 lumens
Efficiency: N/A
Efficacy: 92.3 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

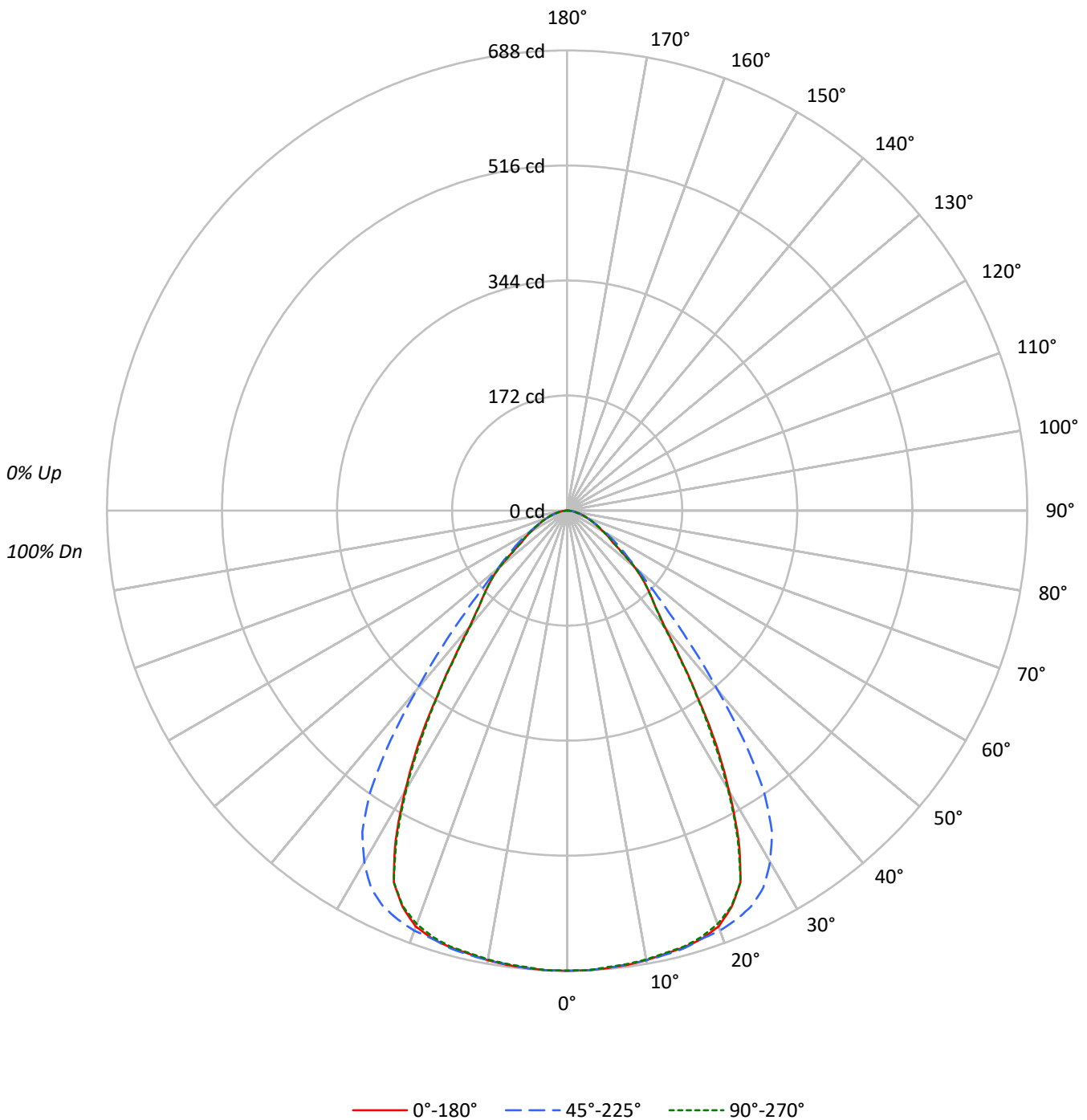
Input Watts (W): 12
Input Voltage (V): NR
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	52654	52654	52654
5°	52755	52755	52656
10°	53062	53062	52961
15°	53577	53680	53474
20°	53899	54437	53582
25°	51789	55108	51789
30°	42849	53623	42504
35°	31714	47992	31471
40°	22652	34962	22392
45°	18868	23263	18868
50°	15754	16231	15754
55°	11196	12945	11370
60°	9430	10226	9430
65°	8078	8313	8078
70°	7027	7027	7027
75°	6211	6211	6211
80°	5201	5201	5201
85°	4567	4567	4567



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	65.4	5.9
10°-20°	191.0	17.2
20°-30°	285.5	25.8
30°-40°	254.1	22.9
40°-50°	151.2	13.7
50°-60°	85.6	7.7
60°-70°	45.9	4.1
70°-80°	22.5	2.0
80°-90°	6.2	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°	541.9	48.9
0°-40°	796.0	71.9
0°-60°	1032.8	93.3
0°-90°	1107.5	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	1107.5	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	688	688	688	688	688	
5°	687	687	687	687	685	65
15°	676	676	677	675	675	191
25°	613	630	652	629	613	274
35°	339	397	514	396	337	214
45°	174	187	215	186	174	135
55°	84	93	97	93	85	80
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°	687.9	687.9	687.9	687.9	687.9
2.5°	687.9	687.9	687.9	687.9	687.9
5°	686.6	686.6	686.6	686.6	685.3
7.5°	685.3	684.0	684.0	684.0	684.0
10°	682.7	682.7	682.7	681.4	681.4
12.5°	678.7	678.7	680.1	678.7	677.4
15°	676.1	676.1	677.4	674.8	674.8
17.5°	670.9	672.2	670.9	670.9	668.3
20°	661.7	665.6	668.3	664.3	657.8
22.5°	642.1	652.5	661.7	651.2	640.7
25°	613.2	630.3	652.5	629.0	613.2
27.5°	555.6	598.8	635.5	594.9	551.6
30°	484.8	537.2	606.7	533.3	480.9
32.5°	414.1	466.5	570.0	463.9	407.5
35°	339.4	397.0	513.6	395.7	336.8
37.5°	276.5	328.9	435.0	326.3	273.9
40°	226.7	267.3	349.9	266.0	224.1
42.5°	195.2	217.5	276.5	216.2	195.2
45°	174.3	187.4	214.9	186.1	174.3
47.5°	154.6	165.1	169.0	163.8	154.6
50°	132.3	144.1	136.3	144.1	132.3
52.5°	104.8	119.2	114.0	120.5	103.5
55°	83.9	93.0	97.0	93.0	85.2
57.5°	73.4	76.0	81.2	76.0	73.4
60°	61.6	64.2	66.8	64.2	61.6
62.5°	52.4	55.0	55.0	55.0	53.7
65°	44.6	45.9	45.9	45.9	44.6
67.5°	38.0	38.0	38.0	38.0	38.0
70°	31.4	31.4	31.4	31.4	31.4
72.5°	26.2	26.2	26.2	26.2	26.2
75°	21.0	21.0	21.0	21.0	21.0
77.5°	17.0	17.0	15.7	17.0	15.7
80°	11.8	11.8	11.8	11.8	11.8
82.5°	9.2	9.2	9.2	9.2	9.2
85°	5.2	5.2	5.2	5.2	5.2
87.5°	2.6	2.6	2.6	2.6	2.6
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)