

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: P252944

Luminaire Tested: **PRS415D010-S4M12-41SWDH-3000K**

Issue Date: 03/03/2020

Test Information

Test Method: LM-79-08
Report Number: P252944
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-3000K
Description: HALO COMMERCIAL 4" SQUARE, NEW CONSTRUCTION FRAME, WITH 4" WIDE DISTRIBUTION, DEEP TRIM HAZE
Light Source: ARRAYS OF HIGH LUMEN LEDS 80CRI / 3000K CCT
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 1069.2 lumens
Efficiency: N/A
Efficacy: 89.1 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

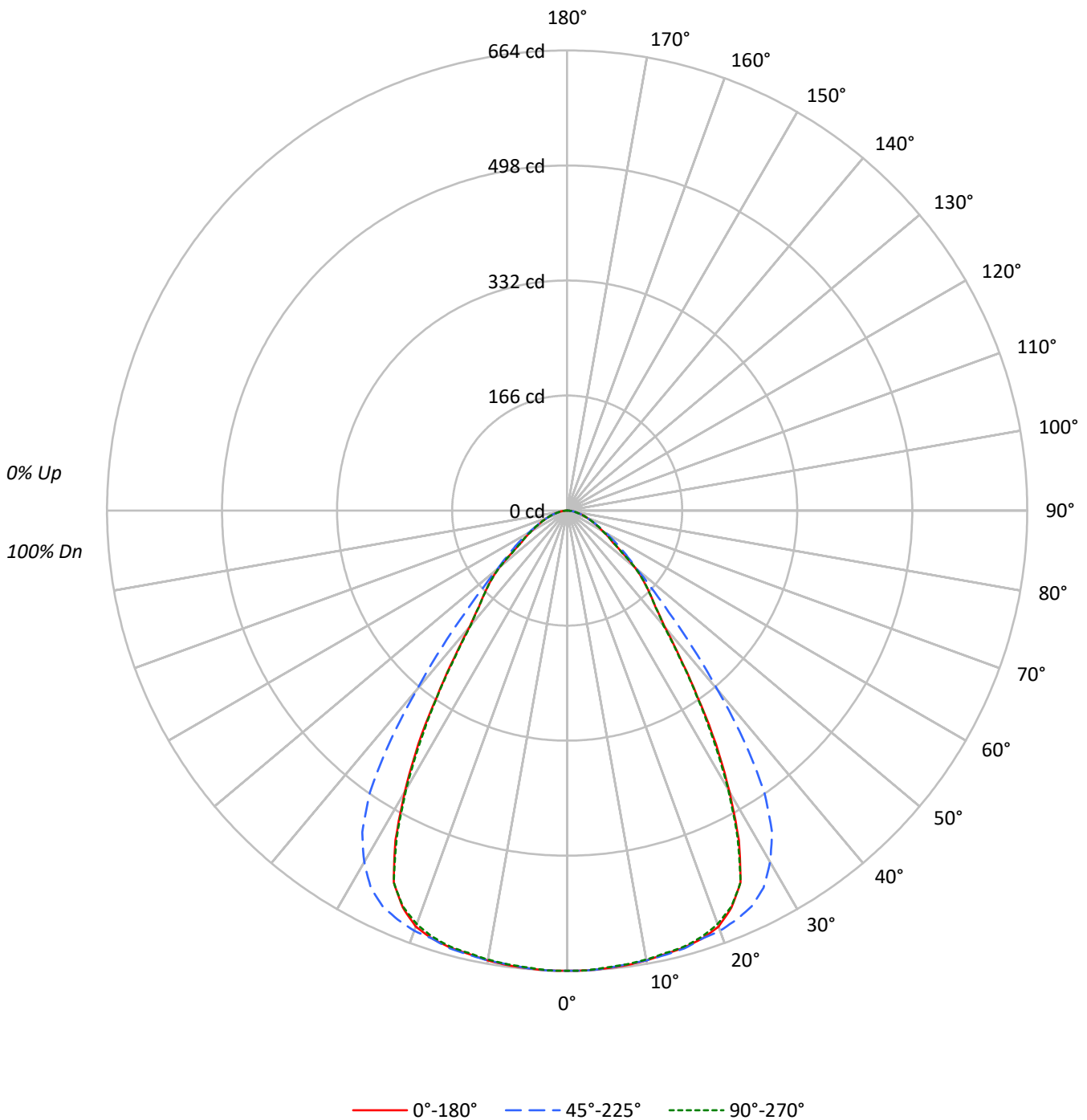
Input Watts (W): 12
Input Voltage (V): NR
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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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°	50832	50832	50832
5°	50927	50927	50835
10°	51228	51228	51127
15°	51722	51825	51627
20°	52034	52547	51724
25°	49998	53207	49998
30°	41364	51767	41028
35°	30612	46338	30378
40°	21863	33743	21613
45°	18207	22462	18207
50°	15218	15671	15218
55°	10809	12491	10970
60°	9109	9874	9109
65°	7788	8023	7788
70°	6803	6803	6803
75°	5974	5974	5974
80°	5025	5025	5025
85°	4479	4479	4479



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	63.1	5.9
10°-20°	184.4	17.2
20°-30°	275.6	25.8
30°-40°	245.3	22.9
40°-50°	146.0	13.7
50°-60°	82.7	7.7
60°-70°	44.3	4.1
70°-80°	21.7	2.0
80°-90°	6.0	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°	523.1	48.9
0°-40°	768.4	71.9
0°-60°	997.1	93.3
0°-90°	1069.2	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	1069.2	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	664	664	664	664	664	
5°	663	663	663	663	662	63
15°	653	653	654	652	652	184
25°	592	608	630	607	592	264
35°	328	383	496	382	325	207
45°	168	181	208	180	168	131
55°	81	90	94	90	82	77
65°	43	44	44	44	43	43
75°	20	20	20	20	20	22
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°	664.1	664.1	664.1	664.1	664.1
2.5°	664.1	664.1	664.1	664.1	664.1
5°	662.8	662.8	662.8	662.8	661.6
7.5°	661.6	660.3	660.3	660.3	660.3
10°	659.1	659.1	659.1	657.8	657.8
12.5°	655.3	655.3	656.5	655.3	654.0
15°	652.7	652.7	654.0	651.5	651.5
17.5°	647.7	648.9	647.7	647.7	645.1
20°	638.8	642.6	645.1	641.3	635.0
22.5°	619.8	630.0	638.8	628.7	618.6
25°	592.0	608.5	630.0	607.2	592.0
27.5°	536.4	578.1	613.5	574.3	532.6
30°	468.0	518.6	585.7	514.8	464.2
32.5°	399.7	450.3	550.3	447.8	393.4
35°	327.6	383.3	495.9	382.0	325.1
37.5°	266.9	317.5	420.0	315.0	264.4
40°	218.8	258.1	337.7	256.8	216.3
42.5°	188.5	210.0	266.9	208.7	188.5
45°	168.2	180.9	207.5	179.6	168.2
47.5°	149.3	159.4	163.2	158.1	149.3
50°	127.8	139.1	131.6	139.1	127.8
52.5°	101.2	115.1	110.1	116.4	99.9
55°	81.0	89.8	93.6	89.8	82.2
57.5°	70.8	73.4	78.4	73.4	70.8
60°	59.5	62.0	64.5	62.0	59.5
62.5°	50.6	53.1	53.1	53.1	51.9
65°	43.0	44.3	44.3	44.3	43.0
67.5°	36.7	36.7	36.7	36.7	36.7
70°	30.4	30.4	30.4	30.4	30.4
72.5°	25.3	25.3	25.3	25.3	25.3
75°	20.2	20.2	20.2	20.2	20.2
77.5°	16.4	16.4	15.2	16.4	15.2
80°	11.4	11.4	11.4	11.4	11.4
82.5°	8.9	8.9	8.9	8.9	8.9
85°	5.1	5.1	5.1	5.1	5.1
87.5°	2.5	2.5	2.5	2.5	2.5
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)