

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: P241749

Luminaire Tested: **PRS415D010-S4M12-44SMDH-4000K**

Issue Date: 03/03/2020

Test Information

Test Method: LM-79-08
Report Number: P241749
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G1-1802-584-44)
Test Lab: INNOVATION CENTER(G1)
Issue Date: 03/03/2020
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: HALO COMMERCIAL
Catalog Number: PRS415D010-S4M12-44SMDH-4000K
Description: HALO COMMERCIAL 4" SQUARE, NEW CONSTRUCTION FRAME, WITH 4" MEDIUM DISTRIBUTION, SHALLOW TRIM HAZE
Light Source: ARRAYS OF HIGH LUMEN LEDS 80CRI / 4000K CCT
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 1359.6 lumens
Efficiency: N/A
Efficacy: 113.3 lumens/watt
Spacing Criteria (0/90/45): 1 / 1 / 1.06
Luminous Opening: Rectangular (W 0.38' x L: 0.38' x H: 0')
CIE Type: Direct

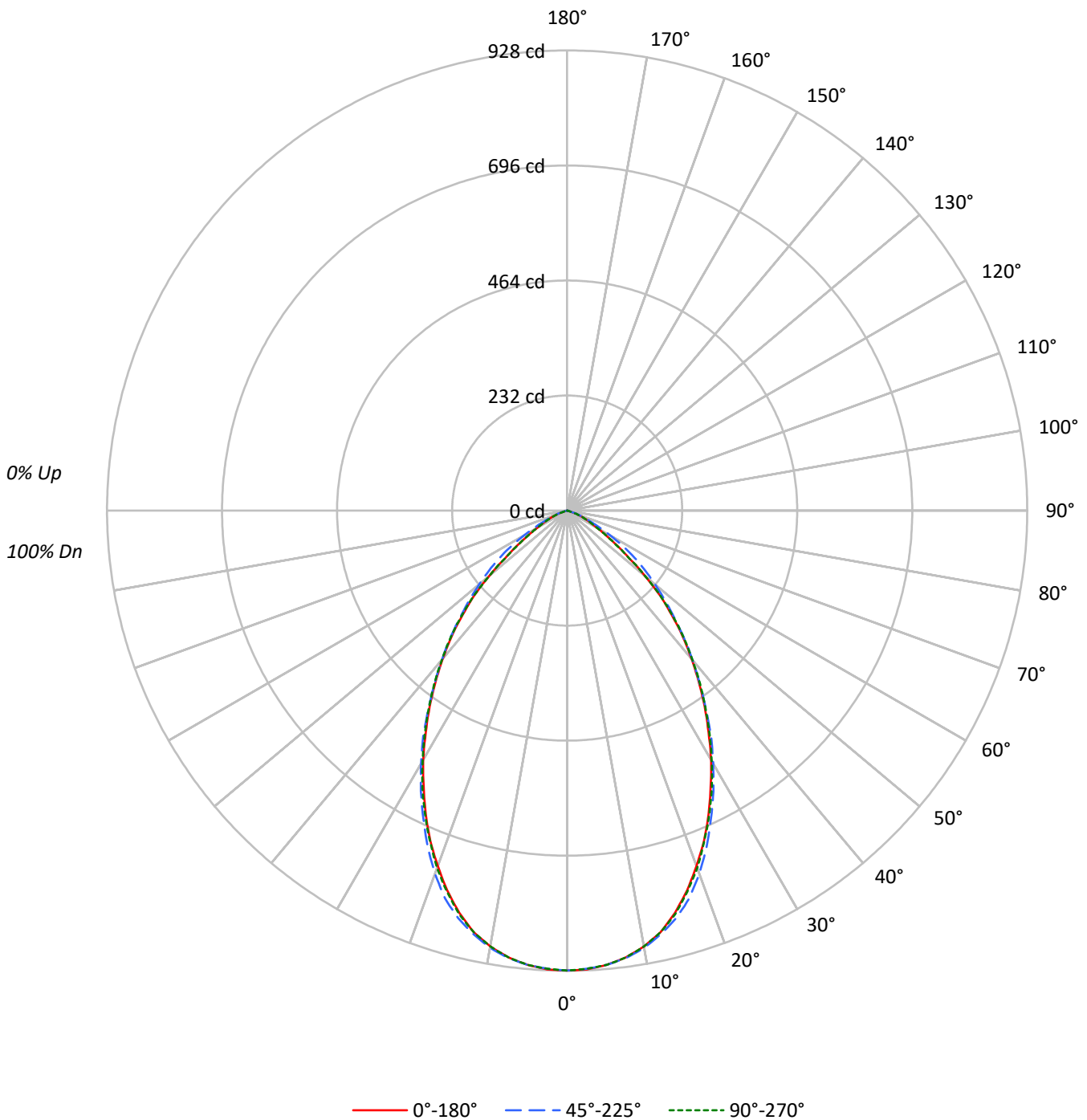
Input Watts (W): 12
Input Voltage (V): NR
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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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	109	106	103	110	107	104	101	102	100	98	99	97	95	95	94	92	91					91			
2	105	99	94	89	102	97	92	88	94	90	86	90	87	85	88	85	83	81					81			
3	98	90	83	79	96	88	83	78	85	81	77	83	79	75	81	77	74	72					72			
4	91	82	75	70	89	81	74	69	78	73	68	76	71	67	74	70	67	65					65			
5	85	75	68	62	83	74	67	62	72	66	61	70	65	61	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	50	60	54	50	59	54	50	48					48			
8	70	59	51	47	69	58	51	46	57	51	46	56	50	46	55	50	46	44					44			
9	66	55	47	43	65	54	47	43	53	47	42	52	46	42	51	46	42	41					41			
10	62	51	44	39	61	50	44	39	49	43	39	49	43	39	48	43	39	37					37			

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	71002	71002	71002
5°	70650	70650	70650
10°	69369	69579	69369
15°	66549	67405	66763
20°	62134	63454	62468
25°	57016	57929	57244
30°	51316	52032	51555
35°	45170	45544	45422
40°	38989	39259	39259
45°	32301	33027	32734
50°	24435	27496	24435
55°	16214	22166	16041
60°	10747	15508	10747
65°	7589	9291	7335
70°	4230	4834	4230
75°	414	1597	414
80°	0	0	0
85°	0	0	0



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	87.0	6.4
10°-20°	236.6	17.4
20°-30°	313.0	23.0
30°-40°	305.0	22.4
40°-50°	235.0	17.3
50°-60°	128.5	9.4
60°-70°	47.5	3.5
70°-80°	6.9	0.5
80°-90°	0.0	0.0
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°	636.6	46.8
0°-40°	941.6	69.3
0°-60°	1305.1	96.0
0°-90°	1359.6	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	1359.6	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	928	928	928	928	928	
5°	920	920	920	920	920	87
15°	840	845	851	847	842	235
25°	675	683	686	686	678	309
35°	483	489	487	493	486	302
45°	298	306	305	308	302	230
55°	122	136	166	138	120	113
65°	42	46	51	46	40	42
75°	1	3	5	3	1	5
85°	0	0	0	0	0	0
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	927.6	927.6	927.6	927.6	927.6
2.5°	926.2	924.9	924.9	924.9	924.9
5°	919.5	919.5	919.5	919.5	919.5
7.5°	908.7	908.7	910.0	908.7	908.7
10°	892.5	893.8	895.2	895.2	892.5
12.5°	870.9	873.6	874.9	873.6	870.9
15°	839.8	845.2	850.6	846.6	842.5
17.5°	803.3	810.1	819.6	811.4	806.0
20°	762.8	770.9	779.0	773.6	766.9
22.5°	721.0	727.7	734.5	731.8	722.3
25°	675.1	683.2	685.9	685.9	677.8
27.5°	626.5	635.9	638.6	637.3	631.9
30°	580.6	587.3	588.7	590.0	583.3
32.5°	530.6	537.4	540.1	541.4	534.7
35°	483.4	488.8	487.4	492.8	486.1
37.5°	436.1	441.5	438.8	444.2	440.2
40°	390.2	392.9	392.9	396.9	392.9
42.5°	345.6	348.3	349.7	351.0	348.3
45°	298.4	306.5	305.1	307.8	302.4
47.5°	255.2	261.9	267.3	264.6	256.5
50°	205.2	221.4	230.9	224.1	205.2
52.5°	158.0	176.9	198.5	178.2	158.0
55°	121.5	136.4	166.1	137.7	120.2
57.5°	91.8	104.0	133.7	104.0	91.8
60°	70.2	79.7	101.3	79.7	70.2
62.5°	54.0	60.8	72.9	60.8	54.0
65°	41.9	45.9	51.3	45.9	40.5
67.5°	29.7	33.8	33.8	33.8	29.7
70°	18.9	23.0	21.6	23.0	18.9
72.5°	8.1	12.2	13.5	12.2	8.1
75°	1.4	2.7	5.4	2.7	1.4
77.5°	0.0	1.4	1.4	1.4	1.4
80°	0.0	0.0	0.0	0.0	0.0
82.5°	0.0	0.0	0.0	0.0	0.0
85°	0.0	0.0	0.0	0.0	0.0
87.5°	0.0	0.0	0.0	0.0	0.0
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)