

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: P241739

Luminaire Tested: **PRS415D010-S4M12-44SMDH-3000K**

Issue Date: 03/03/2020

Test Information

Test Method: LM-79-08
Report Number: P241739
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-3000K
Description: HALO COMMERCIAL 4" SQUARE, NEW CONSTRUCTION FRAME, WITH 4" MEDIUM DISTRIBUTION, SHALLOW TRIM HAZE
Light Source: ARRAYS OF HIGH LUMEN LEDS 80CRI / 3000K CCT
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 1296.8 lumens
Efficiency: N/A
Efficacy: 108.1 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

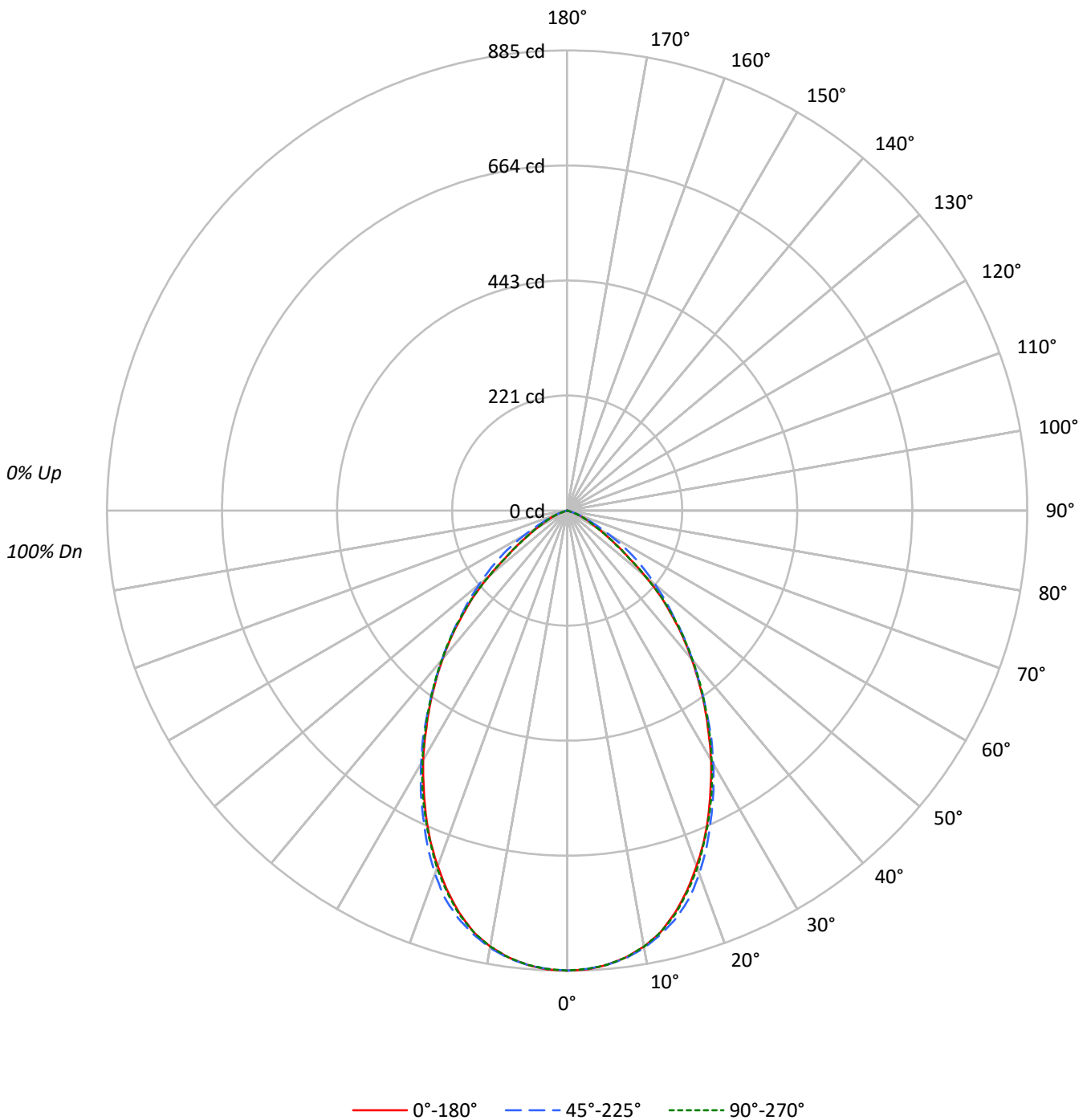
Input Watts (W): 12
Input Voltage (V): NR
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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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°	67726	67726	67726
5°	67385	67385	67385
10°	66167	66361	66167
15°	63474	64290	63680
20°	59267	60530	59585
25°	54381	55251	54601
30°	48947	49628	49177
35°	43086	43441	43320
40°	37190	37450	37450
45°	30808	31511	31230
50°	23316	26222	23316
55°	15467	21138	15293
60°	10257	14788	10257
65°	7227	8857	6991
70°	4028	4610	4028
75°	384	1538	384
80°	0	0	0
85°	0	0	0



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	82.9	6.4
10°-20°	225.7	17.4
20°-30°	298.5	23.0
30°-40°	290.9	22.4
40°-50°	224.2	17.3
50°-60°	122.5	9.4
60°-70°	45.3	3.5
70°-80°	6.6	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°	607.2	46.8
0°-40°	898.1	69.3
0°-60°	1244.8	96.0
0°-90°	1296.8	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	1296.8	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	885	885	885	885	885	
5°	877	877	877	877	877	83
15°	801	806	811	808	804	224
25°	644	652	654	654	646	295
35°	461	466	465	470	464	288
45°	285	292	291	294	288	219
55°	116	130	158	131	115	108
65°	40	44	49	44	39	40
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°	884.8	884.8	884.8	884.8	884.8
2.5°	883.5	882.2	882.2	882.2	882.2
5°	877.0	877.0	877.0	877.0	877.0
7.5°	866.7	866.7	868.0	866.7	866.7
10°	851.3	852.6	853.8	853.8	851.3
12.5°	830.7	833.2	834.5	833.2	830.7
15°	801.0	806.2	811.3	807.5	803.6
17.5°	766.3	772.7	781.7	774.0	768.8
20°	727.6	735.4	743.1	737.9	731.5
22.5°	687.7	694.2	700.6	698.0	689.0
25°	643.9	651.7	654.2	654.2	646.5
27.5°	597.6	606.6	609.2	607.9	602.7
30°	553.8	560.2	561.5	562.8	556.4
32.5°	506.1	512.6	515.1	516.4	510.0
35°	461.1	466.2	464.9	470.1	463.6
37.5°	416.0	421.1	418.6	423.7	419.8
40°	372.2	374.8	374.8	378.6	374.8
42.5°	329.7	332.3	333.6	334.8	332.3
45°	284.6	292.3	291.1	293.6	288.5
47.5°	243.4	249.8	255.0	252.4	244.7
50°	195.8	211.2	220.2	213.8	195.8
52.5°	150.7	168.7	189.3	170.0	150.7
55°	115.9	130.1	158.4	131.4	114.6
57.5°	87.6	99.2	127.5	99.2	87.6
60°	67.0	76.0	96.6	76.0	67.0
62.5°	51.5	58.0	69.5	58.0	51.5
65°	39.9	43.8	48.9	43.8	38.6
67.5°	28.3	32.2	32.2	32.2	28.3
70°	18.0	21.9	20.6	21.9	18.0
72.5°	7.7	11.6	12.9	11.6	7.7
75°	1.3	2.6	5.2	2.6	1.3
77.5°	0.0	1.3	1.3	1.3	1.3
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)