

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: P241644

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

Issue Date: 03/03/2020

Test Information

Test Method: LM-79-08
Report Number: P241644
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G1-1802-584-37)
Test Lab: INNOVATION CENTER(G1)
Issue Date: 03/03/2020
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: HALO COMMERCIAL
Catalog Number: PRS415D010-S4M12-44SNDMB-4000K
Description: HALO COMMERCIAL 4" SQUARE, NEW CONSTRUCTION FRAME, WITH 4" NARROW DISTRIBUTION, SHALLOW TRIM MATTE BLACK
Light Source: ARRAYS OF HIGH LUMEN LEDS 80CRI / 4000K CCT
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 1086.8 lumens
Efficiency: N/A
Efficacy: 90.6 lumens/watt
Spacing Criteria (0/90/45): 0.87 / 0.87 / 0.91
Luminous Opening: Rectangular (W 0.38' x L: 0.38' x H: 0')
CIE Type: Direct

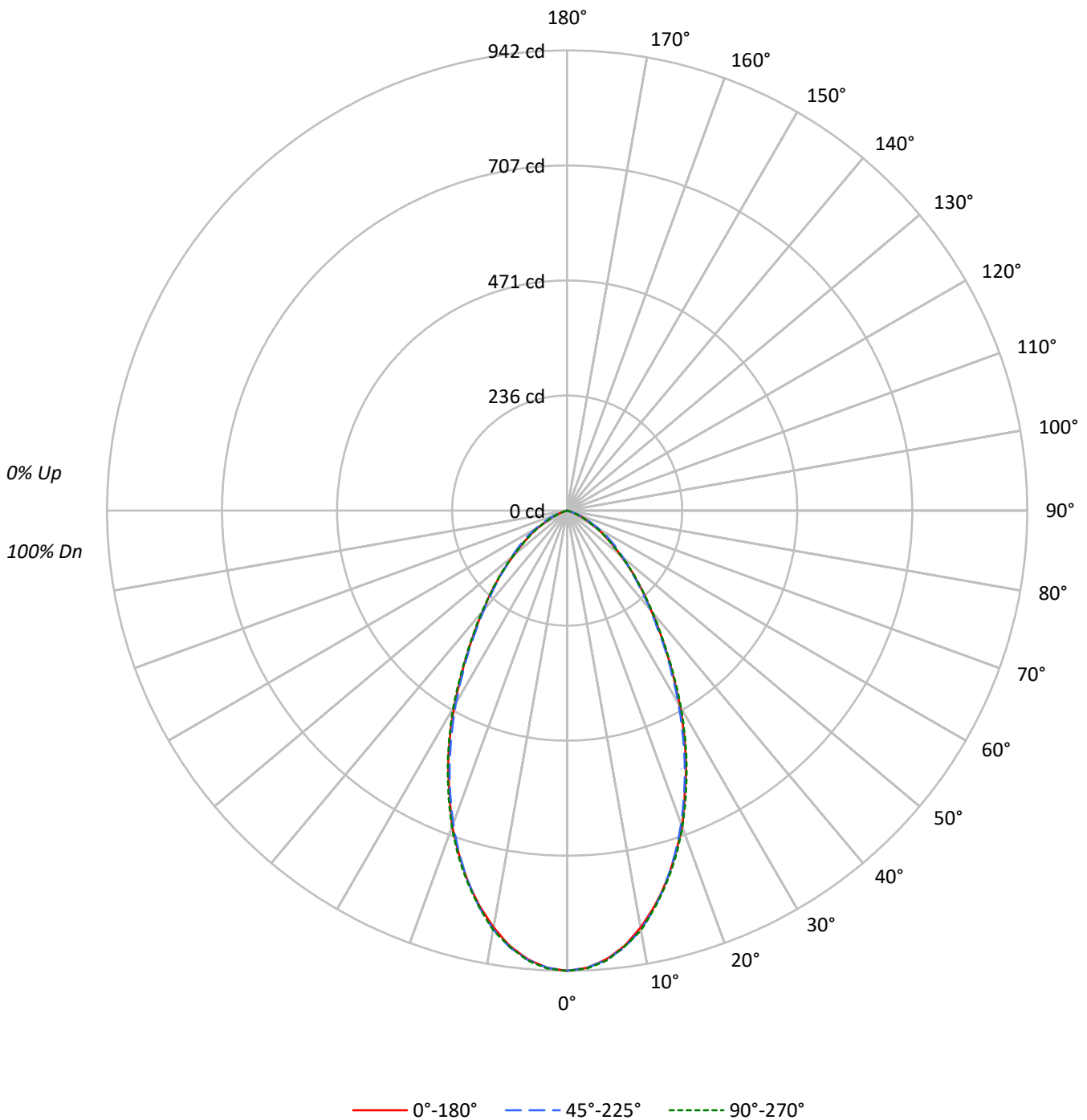
Input Watts (W): 12
Input Voltage (V): NR
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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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	102	103	101	99	99	97	96	95	94	93	91					91			
2	105	99	95	90	103	98	93	89	94	91	87	91	88	85	88	86	84	82					82			
3	98	91	85	80	96	89	84	79	87	82	78	84	80	77	82	78	75	74					74			
4	92	83	76	71	90	82	76	71	80	74	70	78	73	69	76	72	68	67					67			
5	86	76	70	64	85	75	69	64	74	68	63	72	67	63	70	66	62	61					61			
6	81	71	64	58	80	70	63	58	68	62	58	67	61	57	65	61	57	55					55			
7	76	66	58	53	75	65	58	53	63	57	53	62	57	53	61	56	52	51					51			
8	72	61	54	49	71	60	54	49	59	53	49	58	53	49	57	52	48	47					47			
9	68	57	50	46	67	56	50	45	55	49	45	54	49	45	54	49	45	43					43			
10	64	53	47	42	63	53	47	42	52	46	42	51	46	42	50	45	42	40					40			

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	72112	72112	72112
5°	70835	70935	71042
10°	67340	67659	67768
15°	62230	62230	62444
20°	56042	55602	56156
25°	48630	48064	48858
30°	40737	40259	41214
35°	33219	32836	33471
40°	26739	26469	27148
45°	21801	21368	21953
50°	17064	17707	17064
55°	13532	14786	13345
60°	9935	11374	9935
65°	6846	8078	6611
70°	3335	4543	3335
75°	0	1213	0
80°	0	0	0
85°	0	0	0



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	86.4	8.0
10°-20°	219.3	20.2
20°-30°	262.0	24.1
30°-40°	222.3	20.5
40°-50°	155.8	14.3
50°-60°	94.0	8.6
60°-70°	41.7	3.8
70°-80°	5.2	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°	567.7	52.2
0°-40°	790.0	72.7
0°-60°	1039.8	95.7
0°-90°	1086.8	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	1086.8	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	942	942	942	942	942	
5°	922	923	923	923	925	86
15°	785	785	785	789	788	219
25°	576	573	569	574	578	263
35°	356	354	351	357	358	223
45°	201	200	197	201	203	156
55°	101	103	111	103	100	91
65°	38	42	45	42	36	38
75°	0	1	4	1	0	4
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°	942.1	942.1	942.1	942.1	942.1
2.5°	936.7	936.7	936.7	936.7	938.1
5°	921.9	923.2	923.2	923.2	924.6
7.5°	898.9	898.9	901.6	901.6	900.2
10°	866.4	866.4	870.5	871.9	871.9
12.5°	828.6	828.6	831.3	832.7	831.3
15°	785.3	785.3	785.3	789.4	788.0
17.5°	736.7	736.7	735.3	739.4	740.7
20°	688.0	685.3	682.6	685.3	689.4
22.5°	628.5	628.5	625.8	631.3	634.0
25°	575.8	573.1	569.1	574.5	578.5
27.5°	519.1	516.4	510.9	515.0	521.8
30°	460.9	459.6	455.5	459.6	466.3
32.5°	405.5	404.2	400.1	405.5	409.6
35°	355.5	354.1	351.4	356.9	358.2
37.5°	309.5	306.8	304.1	309.5	312.2
40°	267.6	267.6	264.9	267.6	271.7
42.5°	233.8	232.5	228.4	232.5	235.2
45°	201.4	200.1	197.4	201.4	202.8
47.5°	171.7	173.0	170.3	173.0	173.0
50°	143.3	147.3	148.7	147.3	143.3
52.5°	120.3	123.0	128.4	123.0	119.0
55°	101.4	102.7	110.8	102.7	100.0
57.5°	82.5	85.2	91.9	85.2	81.1
60°	64.9	70.3	74.3	68.9	64.9
62.5°	51.4	55.4	58.1	54.1	50.0
65°	37.8	41.9	44.6	41.9	36.5
67.5°	25.7	31.1	32.4	29.7	24.3
70°	14.9	18.9	20.3	18.9	14.9
72.5°	6.8	9.5	10.8	9.5	6.8
75°	0.0	1.4	4.1	1.4	0.0
77.5°	0.0	0.0	0.0	0.0	0.0
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)