

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: P241679

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

Issue Date: 03/03/2020

Test Information

Test Method: LM-79-08
Report Number: P241679
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G1-1802-584-40)
Test Lab: INNOVATION CENTER(G1)
Issue Date: 03/03/2020
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: HALO COMMERCIAL
Catalog Number: PRS415D010-S4M12-44SNDMW-3000K
Description: HALO COMMERCIAL 4" SQUARE, NEW CONSTRUCTION FRAME, WITH 4" NARROW DISTRIBUTION, SHALLOW TRIM MATTE WHITE
Light Source: ARRAYS OF HIGH LUMEN LEDS 80CRI / 3000K CCT
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 1206.6 lumens
Efficiency: N/A
Efficacy: 100.6 lumens/watt
Spacing Criteria (0/90/45): 0.89 / 0.89 / 0.94
Luminous Opening: Rectangular (W 0.38' x L: 0.38' x H: 0')
CIE Type: Direct

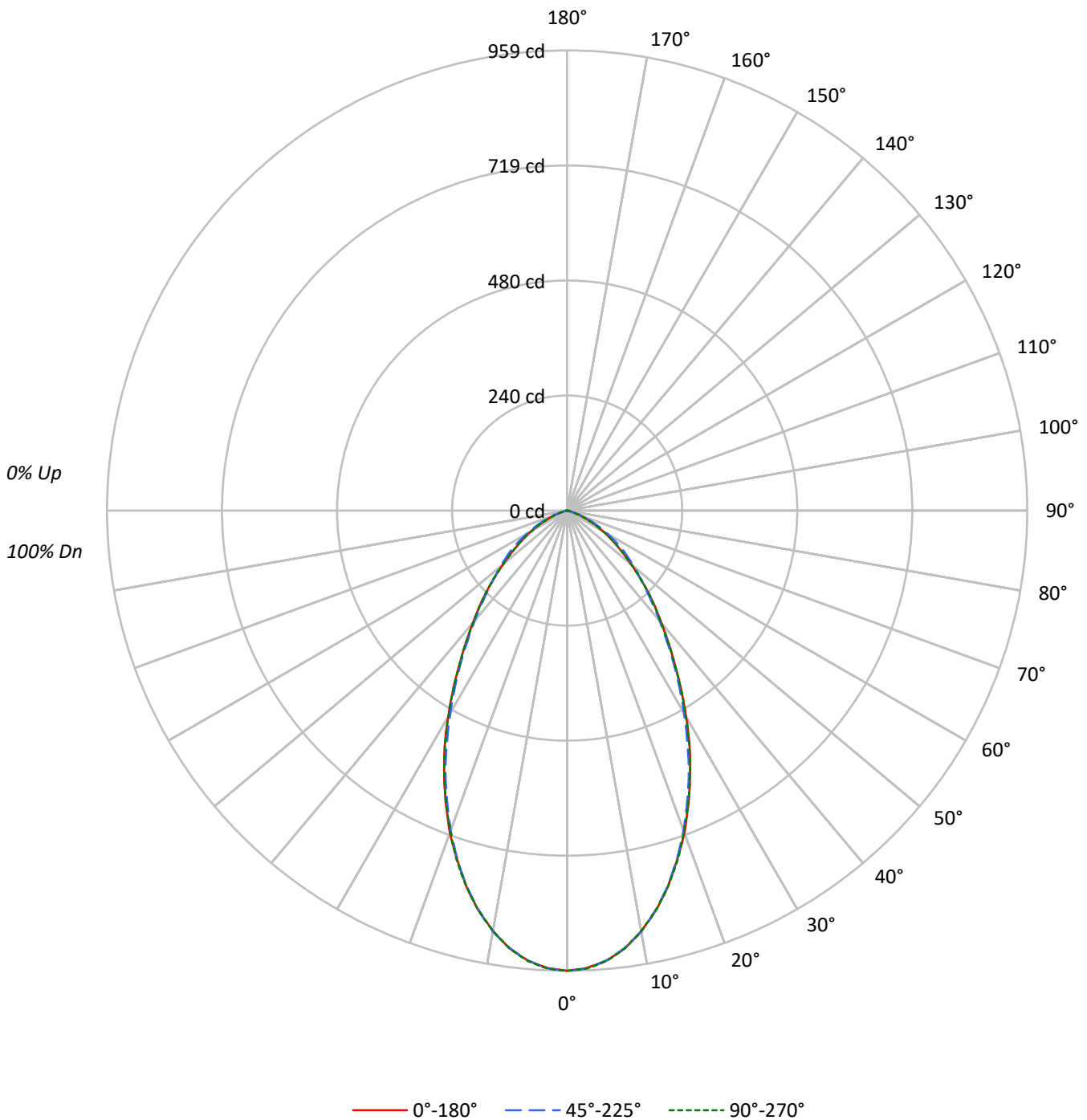
Input Watts (W): 12
Input Voltage (V): NR
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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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	103	109	106	104	101	102	100	98	98	97	95	95	93	92	90					90			
2	105	98	93	89	102	97	92	88	93	89	86	90	87	84	87	85	82	81					81			
3	98	89	83	78	95	88	82	78	85	80	76	83	78	75	80	77	74	72					72			
4	91	82	75	69	89	80	74	69	78	73	68	76	71	67	74	70	66	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	62	56	78	68	61	56	66	60	56	65	59	55	63	59	55	53					53			
7	75	64	56	51	73	63	56	51	62	55	51	60	55	51	59	54	50	49					49			
8	71	59	52	47	69	59	52	47	57	51	47	56	51	47	55	50	46	45					45			
9	67	55	48	43	65	55	48	43	54	47	43	53	47	43	52	47	43	41					41			
10	63	52	45	40	62	51	45	40	50	44	40	49	44	40	49	43	40	38					38			

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	73420	73420	73420
5°	72310	72310	72410
10°	69143	69244	69143
15°	64274	64171	64274
20°	58200	57785	57997
25°	51214	50674	51214
30°	43812	43017	43697
35°	36573	36087	36452
40°	30486	29976	30356
45°	25503	25081	25644
50°	20696	21613	20696
55°	16668	18723	16841
60°	13211	14788	13211
65°	9563	11193	9563
70°	5752	7206	5752
75°	1893	3046	1893
80°	1719	1719	1719
85°	1142	1142	1142



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	88.2	7.3
10°-20°	226.1	18.7
20°-30°	276.0	22.9
30°-40°	243.9	20.2
40°-50°	182.0	15.1
50°-60°	118.0	9.8
60°-70°	58.2	4.8
70°-80°	12.6	1.0
80°-90°	1.6	0.1
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°	590.3	48.9
0°-40°	834.2	69.1
0°-60°	1134.3	94.0
0°-90°	1206.6	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	1206.6	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	959	959	959	959	959	
5°	941	941	941	942	942	88
15°	811	811	810	811	811	226
25°	606	605	600	604	606	278
35°	391	389	386	389	390	246
45°	236	236	232	234	237	182
55°	125	129	140	130	126	113
65°	53	59	62	58	53	53
75°	6	8	10	8	6	11
85°	1	1	1	1	1	2
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	959.2	959.2	959.2	959.2	959.2
2.5°	954.0	954.0	955.3	955.3	955.3
5°	941.1	941.1	941.1	942.4	942.4
7.5°	920.5	919.2	919.2	920.5	920.5
10°	889.6	889.6	890.9	888.4	889.6
12.5°	853.6	853.6	852.3	853.6	853.6
15°	811.1	811.1	809.8	811.1	811.1
17.5°	762.2	762.2	760.9	763.5	764.8
20°	714.5	713.3	709.4	712.0	712.0
22.5°	660.5	659.2	654.0	657.9	659.2
25°	606.4	605.1	600.0	603.8	606.4
27.5°	552.3	547.2	542.0	548.5	551.0
30°	495.7	491.8	486.7	491.8	494.4
32.5°	441.6	440.3	435.2	439.0	441.6
35°	391.4	388.8	386.2	388.8	390.1
37.5°	346.3	343.8	339.9	343.8	346.3
40°	305.1	302.6	300.0	301.3	303.8
42.5°	270.4	267.8	263.9	266.5	269.1
45°	235.6	235.6	231.7	234.3	236.9
47.5°	203.4	206.0	204.7	206.0	204.7
50°	173.8	179.0	181.5	179.0	173.8
52.5°	148.1	151.9	159.6	151.9	148.1
55°	124.9	128.7	140.3	130.0	126.2
57.5°	105.6	109.4	118.4	109.4	105.6
60°	86.3	91.4	96.6	91.4	86.3
62.5°	69.5	74.7	78.5	74.7	68.2
65°	52.8	59.2	61.8	57.9	52.8
67.5°	38.6	43.8	46.3	43.8	38.6
70°	25.7	30.9	32.2	30.9	25.7
72.5°	15.4	19.3	19.3	18.0	15.4
75°	6.4	7.7	10.3	7.7	6.4
77.5°	5.1	5.1	5.1	5.1	5.1
80°	3.9	3.9	3.9	3.9	3.9
82.5°	2.6	2.6	2.6	2.6	2.6
85°	1.3	1.3	1.3	1.3	1.3
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)