

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: P252882

Luminaire Tested: **PRS440D010-S4M24-44SWDC-4000K**

Issue Date: 03/03/2020

**Test Information**

Test Method: LM-79-08  
Report Number: P252882  
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G1-1804-748-2)  
Test Lab: INNOVATION CENTER(G1)  
Issue Date: 03/03/2020  
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)  
Product Line: HALO COMMERCIAL  
Catalog Number: PRS440D010-S4M24-44SWDC-4000K  
Description: HALO COMMERCIAL 4" SQUARE, NEW CONSTRUCTION FRAME, WITH 4" WIDE DISTRIBUTION, SHALLOW TRIM SPECULAR  
Light Source: ARRAYS OF HIGH LUMEN LEDS 80CRI / 4000K CCT  
Ballast/Driver: ELECTRONIC DRIVER

**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 3625.6 lumens  
Efficiency: N/A  
Efficacy: 95.4 lumens/watt  
Spacing Criteria (0/90/45): 1.29 / 1.29 / 1.41  
Luminous Opening: Rectangular (W 0.38' x L: 0.38' x H: 0')  
CIE Type: Direct

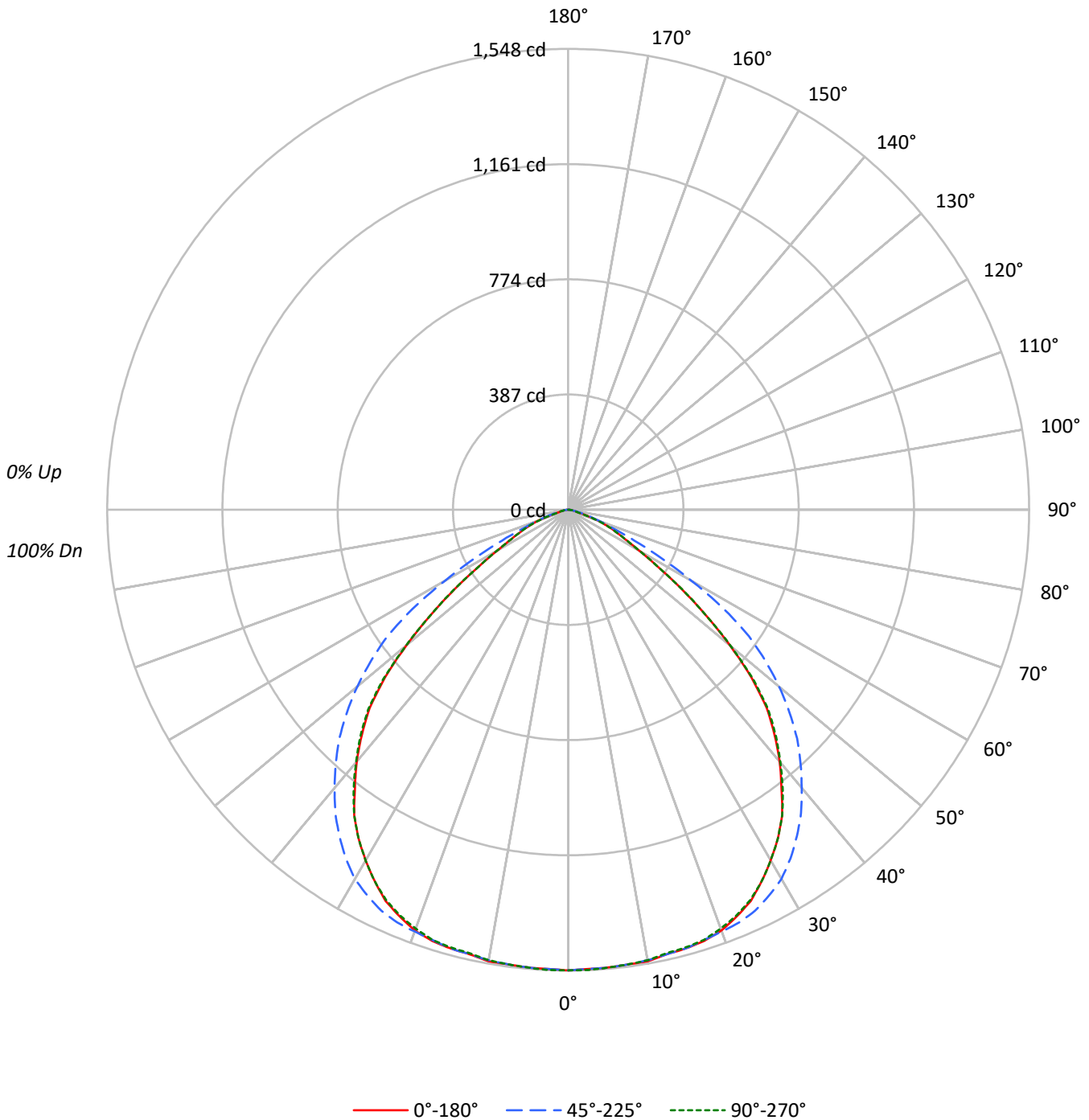
Input Watts (W): 38  
Input Voltage (V): NR  
Input Current (Ain): NR  
Voltage Rise (V): NR  
Power Factor: NR  
Total Harmonic Distortion (THDi): NR  
Frequency (hertz): 60  
Stabilization Time: NR  
Operation Time: NR  
Ambient Temperature (°C): NR  
Test Distance: 25 FT



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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	0
RCR																		
0	119	119	119	119	116	116	116	116	111	111	111	106	106	106	102	102	102	100
1	111	107	104	101	108	105	102	99	101	98	96	97	95	93	94	92	90	88
2	103	96	90	85	100	94	89	84	91	86	82	87	84	81	85	82	79	77
3	95	86	79	73	92	84	78	73	81	76	71	79	74	70	76	72	69	67
4	87	77	69	63	85	76	68	63	73	67	62	71	66	61	69	64	61	59
5	81	69	61	55	79	68	61	55	66	60	55	64	59	54	63	58	53	52
6	75	63	55	49	73	62	54	49	60	53	48	59	53	48	57	52	48	46
7	70	57	49	44	68	57	49	43	55	48	43	54	47	43	52	47	43	41
8	65	52	45	39	64	52	44	39	51	44	39	49	43	39	48	43	38	37
9	61	48	41	35	59	48	40	35	47	40	35	46	39	35	45	39	35	33
10	57	45	37	32	56	44	37	32	43	36	32	42	36	32	41	36	32	30

**AVERAGE LUMINANCE (cd/sqm):**

	0°	45°	90°
0°	118451	118451	118451
5°	118627	118627	118627
10°	119719	119439	119439
15°	120918	120918	120632
20°	122534	122827	121947
25°	122487	125527	122183
30°	120239	126593	120239
35°	117027	125100	117027
40°	110392	121903	110752
45°	102068	117656	102847
50°	84428	110137	84857
55°	61961	98939	62441
60°	41869	73267	42420
65°	31931	44319	31931
70°	23365	24976	22559
75°	9582	13841	9582
80°	7934	7934	7934
85°	6323	6323	6323



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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	147.1	4.1
10°-20°	431.2	11.9
20°-30°	673.6	18.6
30°-40°	805.7	22.2
40°-50°	774.4	21.4
50°-60°	520.1	14.3
60°-70°	212.4	5.9
70°-80°	52.8	1.5
80°-90°	8.3	0.2
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°	1251.9	34.5
0°-40°	2057.6	56.8
0°-60°	3352.1	92.5
0°-90°	3625.6	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	3625.6	100.0

**CANDELA DISTRIBUTION:**

	0°	22.5°	45°	67.5°	90°	Flux
0°	1548	1548	1548	1548	1548	
5°	1544	1544	1544	1544	1544	147
15°	1526	1526	1526	1522	1522	432
25°	1450	1465	1486	1461	1447	666
35°	1252	1288	1339	1292	1252	778
45°	943	1011	1087	1015	950	714
55°	464	561	741	565	468	421
65°	176	198	245	198	176	178
75°	32	36	47	36	32	47
85°	7	7	7	7	7	8
90°	0	0	0	0	0	



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**CANDELA DISTRIBUTION (FULL):**

	0°	22.5°	45°	67.5°	90°
0°	1547.5	1547.5	1547.5	1547.5	1547.5
2.5°	1543.9	1543.9	1543.9	1547.5	1547.5
5°	1543.9	1543.9	1543.9	1543.9	1543.9
7.5°	1540.3	1540.3	1540.3	1540.3	1540.3
10°	1540.3	1536.7	1536.7	1536.7	1536.7
12.5°	1529.5	1529.5	1529.5	1529.5	1525.9
15°	1525.9	1525.9	1525.9	1522.3	1522.3
17.5°	1518.7	1518.7	1515.1	1515.1	1515.1
20°	1504.3	1507.9	1507.9	1504.3	1497.1
22.5°	1479.1	1489.9	1500.7	1486.3	1475.5
25°	1450.3	1464.7	1486.3	1461.1	1446.7
27.5°	1407.2	1428.7	1461.1	1428.7	1407.2
30°	1360.4	1389.2	1432.3	1389.2	1360.4
32.5°	1310.0	1342.4	1389.2	1342.4	1310.0
35°	1252.4	1288.4	1338.8	1292.0	1252.4
37.5°	1176.8	1227.2	1284.8	1234.4	1184.0
40°	1104.8	1158.8	1220.0	1162.4	1108.4
42.5°	1025.7	1086.9	1155.2	1090.5	1032.9
45°	942.9	1011.3	1086.9	1014.9	950.1
47.5°	834.9	917.7	1007.7	928.5	842.1
50°	709.0	813.3	924.9	820.5	712.6
52.5°	583.0	683.8	834.9	691.0	583.0
55°	464.3	561.4	741.4	565.0	467.9
57.5°	356.3	442.7	619.0	449.9	356.3
60°	273.5	338.3	478.6	341.9	277.1
62.5°	215.9	255.5	352.7	251.9	215.9
65°	176.3	197.9	244.7	197.9	176.3
67.5°	140.4	154.8	161.9	154.8	140.4
70°	104.4	118.8	111.6	118.8	100.8
72.5°	61.2	75.6	75.6	75.6	57.6
75°	32.4	36.0	46.8	36.0	32.4
77.5°	25.2	25.2	28.8	25.2	25.2
80°	18.0	18.0	18.0	18.0	18.0
82.5°	10.8	10.8	10.8	10.8	10.8
85°	7.2	7.2	7.2	7.2	7.2
87.5°	3.6	3.6	3.6	3.6	3.6
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)