

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: P252912

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

Issue Date: 03/03/2020

**Test Information**

Test Method: LM-79-08  
Report Number: P252912  
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-S4M24-44SWDMW-4000K  
Description: HALO COMMERCIAL 4" SQUARE, NEW CONSTRUCTION FRAME, WITH 4" WIDE DISTRIBUTION, SHALLOW TRIM MATTE WHITE  
Light Source: ARRAYS OF HIGH LUMEN LEDS 80CRI / 4000K CCT  
Ballast/Driver: ELECTRONIC DRIVER

**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 3759.7 lumens  
Efficiency: N/A  
Efficacy: 98.9 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

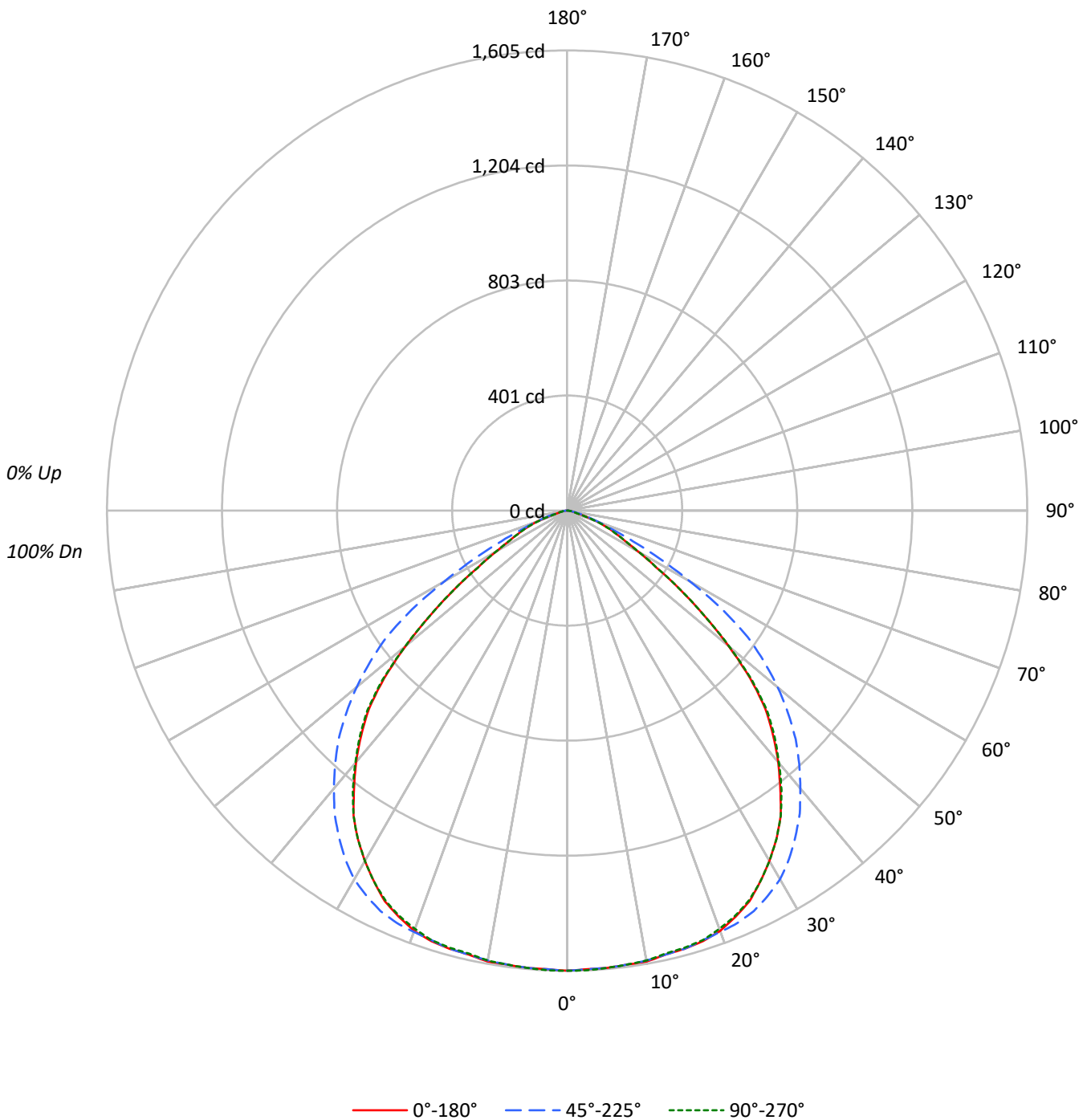
Input Watts (W): 38  
Input Voltage (V): NR  
Input Current (Ain): NR  
Voltage Rise (V): NR  
Power Factor: NR  
Total Harmonic Distortion (THDi): NR  
Frequency (hertz): 60  
Stabilization Time: NR  
Operation Time: NR  
Ambient Temperature (°C): NR  
Test Distance: 25 FT



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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°	122837	122837	122837
5°	123014	123014	123014
10°	124149	123861	123861
15°	125395	125395	125094
20°	127071	127372	126460
25°	127022	130172	126710
30°	124684	131278	124684
35°	121353	129726	121353
40°	114479	126419	114858
45°	105846	122007	106657
50°	87548	114210	87988
55°	64243	102596	64750
60°	43415	75992	43997
65°	33126	45968	33126
70°	24215	25893	23387
75°	9937	14343	9937
80°	8243	8243	8243
85°	6587	6587	6587



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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	152.6	4.1
10°-20°	447.2	11.9
20°-30°	698.5	18.6
30°-40°	835.5	22.2
40°-50°	803.0	21.4
50°-60°	539.4	14.3
60°-70°	220.2	5.9
70°-80°	54.7	1.5
80°-90°	8.6	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°	1298.3	34.5
0°-40°	2133.8	56.8
0°-60°	3476.1	92.5
0°-90°	3759.7	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	3759.7	100.0

**CANDELA DISTRIBUTION:**

	0°	22.5°	45°	67.5°	90°	Flux
0°	1605	1605	1605	1605	1605	
5°	1601	1601	1601	1601	1601	153
15°	1582	1582	1582	1579	1579	448
25°	1504	1519	1541	1515	1500	690
35°	1299	1336	1388	1340	1299	806
45°	978	1049	1127	1052	985	741
55°	481	582	769	586	485	437
65°	183	205	254	205	183	185
75°	34	37	48	37	34	49
85°	8	8	8	8	8	9
90°	0	0	0	0	0	



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**CANDELA DISTRIBUTION (FULL):**

	0°	22.5°	45°	67.5°	90°
0°	1604.8	1604.8	1604.8	1604.8	1604.8
2.5°	1601.0	1601.0	1601.0	1604.8	1604.8
5°	1601.0	1601.0	1601.0	1601.0	1601.0
7.5°	1597.3	1597.3	1597.3	1597.3	1597.3
10°	1597.3	1593.6	1593.6	1593.6	1593.6
12.5°	1586.1	1586.1	1586.1	1586.1	1582.4
15°	1582.4	1582.4	1582.4	1578.6	1578.6
17.5°	1574.9	1574.9	1571.2	1571.2	1571.2
20°	1560.0	1563.7	1563.7	1560.0	1552.5
22.5°	1533.9	1545.1	1556.2	1541.3	1530.1
25°	1504.0	1518.9	1541.3	1515.2	1500.3
27.5°	1459.2	1481.6	1515.2	1481.6	1459.2
30°	1410.7	1440.6	1485.3	1440.6	1410.7
32.5°	1358.5	1392.0	1440.6	1392.0	1358.5
35°	1298.7	1336.1	1388.3	1339.8	1298.7
37.5°	1220.4	1272.6	1332.3	1280.1	1227.8
40°	1145.7	1201.7	1265.2	1205.4	1149.5
42.5°	1063.6	1127.1	1198.0	1130.8	1071.1
45°	977.8	1048.7	1127.1	1052.4	985.3
47.5°	865.8	951.7	1045.0	962.9	873.3
50°	735.2	843.4	959.1	850.9	738.9
52.5°	604.6	709.1	865.8	716.5	604.6
55°	481.4	582.2	768.8	585.9	485.2
57.5°	369.5	459.0	641.9	466.5	369.5
60°	283.6	350.8	496.4	354.5	287.4
62.5°	223.9	265.0	365.7	261.2	223.9
65°	182.9	205.3	253.8	205.3	182.9
67.5°	145.5	160.5	167.9	160.5	145.5
70°	108.2	123.2	115.7	123.2	104.5
72.5°	63.4	78.4	78.4	78.4	59.7
75°	33.6	37.3	48.5	37.3	33.6
77.5°	26.1	26.1	29.9	26.1	26.1
80°	18.7	18.7	18.7	18.7	18.7
82.5°	11.2	11.2	11.2	11.2	11.2
85°	7.5	7.5	7.5	7.5	7.5
87.5°	3.7	3.7	3.7	3.7	3.7
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)