

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: P241957

Luminaire Tested: **PRS440D010-S4M24-41SNDC**

Issue Date: 03/03/2020

Test Information

Test Method: LM-79-08
Report Number: P241957
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G1-1802-584-58)
Test Lab: INNOVATION CENTER(G1)
Issue Date: 03/03/2020
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: HALO COMMERCIAL
Catalog Number: PRS440D010-S4M24-41SNDC
Description: HALO COMMERCIAL 4" SQUARE, NEW CONSTRUCTION FRAME, WITH 4" NARROW DISTRIBUTION, DEEP TRIM SPECULAR
Light Source: ARRAYS OF HIGH LUMEN LEDS 80CRI / 3500K CCT
Ballast/Driver: ELECTRONIC DRIVER

Summary

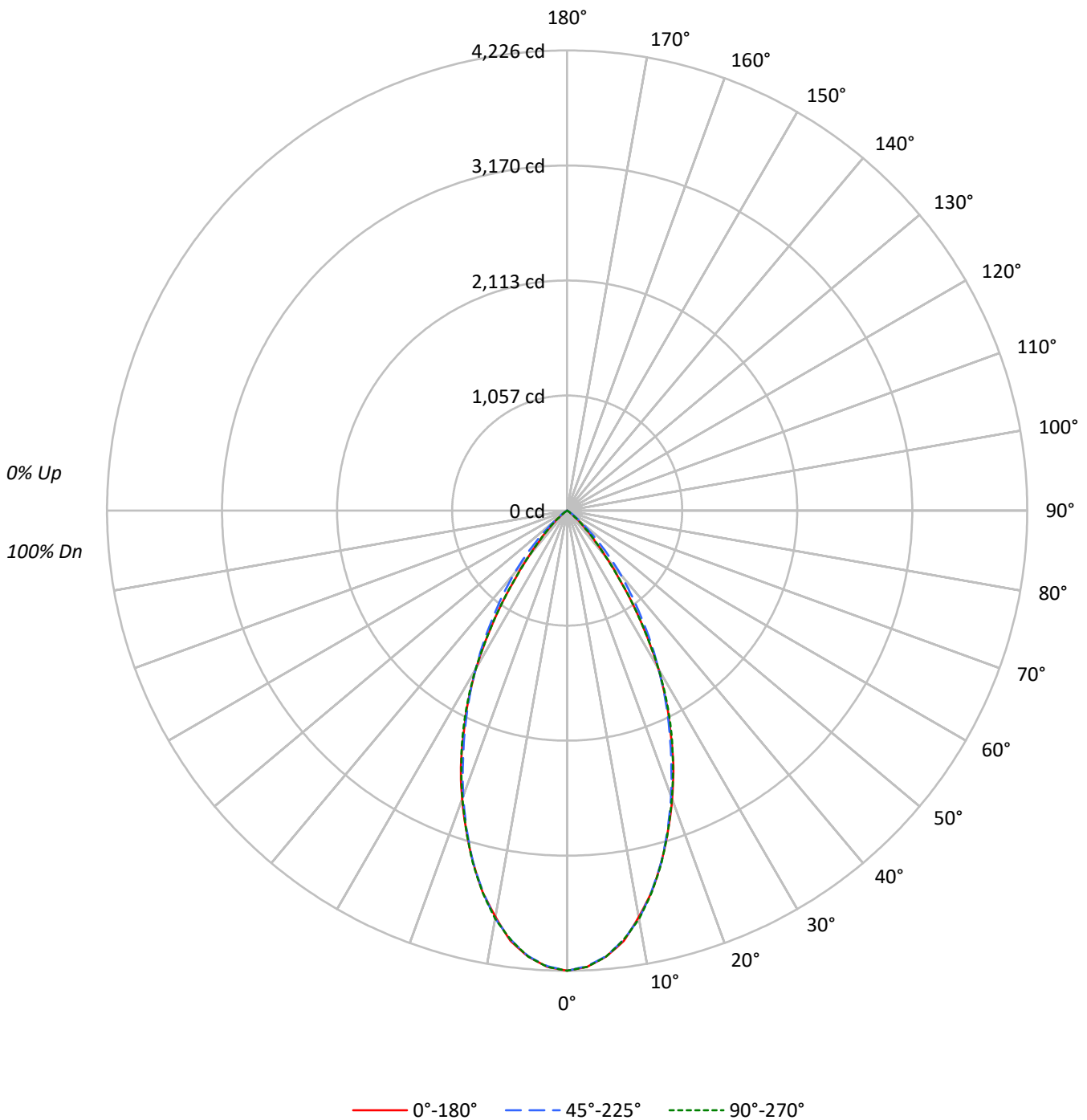
Lumens per Lamp: N/A
Luminaire Lumens: 3332.8 lumens
Efficiency: N/A
Efficacy: 87.7 lumens/watt
Spacing Criteria (0/90/45): 0.8 / 0.79 / 0.83
Luminous Opening: Rectangular (W 0.38' x L: 0.38' x H: 0')
CIE Type: Direct

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	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	114	111	108	106	111	109	106	104	105	103	101	101	100	98	97	96	95	94					94			
2	108	103	99	96	106	101	98	95	98	95	93	95	93	91	92	91	89	87					87			
3	103	96	91	87	101	95	90	87	92	88	85	90	87	84	87	85	83	81					81			
4	97	90	84	80	96	89	84	80	87	82	79	85	81	78	83	80	77	75					75			
5	92	84	78	74	91	83	78	74	81	77	73	80	76	72	78	75	72	70					70			
6	88	79	73	69	86	78	73	68	77	72	68	75	71	68	74	70	67	66					66			
7	83	74	68	64	82	74	68	64	72	67	63	71	67	63	70	66	63	61					61			
8	79	70	64	60	78	69	64	60	68	63	59	67	63	59	66	62	59	58					58			
9	76	66	60	56	75	66	60	56	65	59	56	64	59	56	63	59	55	54					54			
10	72	62	57	53	71	62	57	53	61	56	53	60	56	52	60	55	52	51					51			

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	323465	323465	323465
5°	315956	315649	315956
10°	294598	295515	295818
15°	264911	264602	265220
20°	229803	227245	229160
25°	189883	187561	191868
30°	147735	148080	148433
35°	98628	109262	98993
40°	55276	75670	54497
45°	28036	43321	27181
50°	11682	19160	11682
55°	520	7326	520
60°	597	1806	597
65°	0	0	0
70°	0	0	0
75°	0	0	0
80°	0	0	0
85°	0	0	0



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	382.4	11.5
10°-20°	928.5	27.9
20°-30°	1023.0	30.7
30°-40°	698.3	21.0
40°-50°	260.2	7.8
50°-60°	39.4	1.2
60°-70°	0.9	0.0
70°-80°	0.0	0.0
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°	2333.9	70.0
0°-40°	3032.3	91.0
0°-60°	3331.9	100.0
0°-90°	3332.8	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	3332.8	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	4226	4226	4226	4226	4226	
5°	4112	4112	4108	4108	4112	383
15°	3343	3339	3339	3339	3347	929
25°	2248	2248	2221	2252	2272	1027
35°	1056	1118	1169	1122	1059	660
45°	259	310	400	302	251	214
55°	4	31	55	31	4	23
65°	0	0	0	0	0	0
75°	0	0	0	0	0	0
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°	4225.9	4225.9	4225.9	4225.9	4225.9
2.5°	4194.5	4194.5	4186.6	4186.6	4194.5
5°	4112.1	4112.1	4108.1	4108.1	4112.1
7.5°	3986.5	3978.7	3974.7	3978.7	3974.7
10°	3790.3	3794.2	3802.1	3802.1	3806.0
12.5°	3586.3	3582.4	3582.4	3590.2	3590.2
15°	3343.0	3339.1	3339.1	3339.1	3346.9
17.5°	3080.1	3080.1	3068.4	3076.2	3080.1
20°	2821.2	2809.4	2789.8	2813.3	2813.3
22.5°	2550.4	2530.8	2499.4	2534.7	2538.6
25°	2248.3	2248.3	2220.8	2252.2	2271.8
27.5°	1965.8	1950.1	1950.1	1961.9	1981.5
30°	1671.5	1675.4	1675.4	1679.4	1679.4
32.5°	1353.7	1396.8	1420.4	1396.8	1353.7
35°	1055.5	1118.3	1169.3	1122.2	1059.4
37.5°	769.0	859.3	953.5	855.4	773.0
40°	553.2	635.6	757.3	627.8	545.4
42.5°	376.7	451.2	568.9	439.5	376.7
45°	259.0	310.0	400.2	302.1	251.1
47.5°	168.7	208.0	259.0	204.0	168.7
50°	98.1	133.4	160.9	125.6	98.1
52.5°	47.1	74.6	94.2	74.6	47.1
55°	3.9	31.4	54.9	31.4	3.9
57.5°	3.9	3.9	27.5	3.9	3.9
60°	3.9	3.9	11.8	3.9	3.9
62.5°	0.0	0.0	3.9	0.0	0.0
65°	0.0	0.0	0.0	0.0	0.0
67.5°	0.0	0.0	0.0	0.0	0.0
70°	0.0	0.0	0.0	0.0	0.0
72.5°	0.0	0.0	0.0	0.0	0.0
75°	0.0	0.0	0.0	0.0	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)