

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: P241642

Luminaire Tested: **PRS440D010-S4M24-44SNDMB**

Issue Date: 03/03/2020

Test Information

Test Method: LM-79-08
Report Number: P241642
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: PRS440D010-S4M24-44SNDMB
Description: HALO COMMERCIAL 4" SQUARE, NEW CONSTRUCTION FRAME, WITH 4" NARROW DISTRIBUTION, SHALLOW TRIM MATTE BLACK
Light Source: ARRAYS OF HIGH LUMEN LEDS 80CRI / 3500K CCT
Ballast/Driver: ELECTRONIC DRIVER

Summary

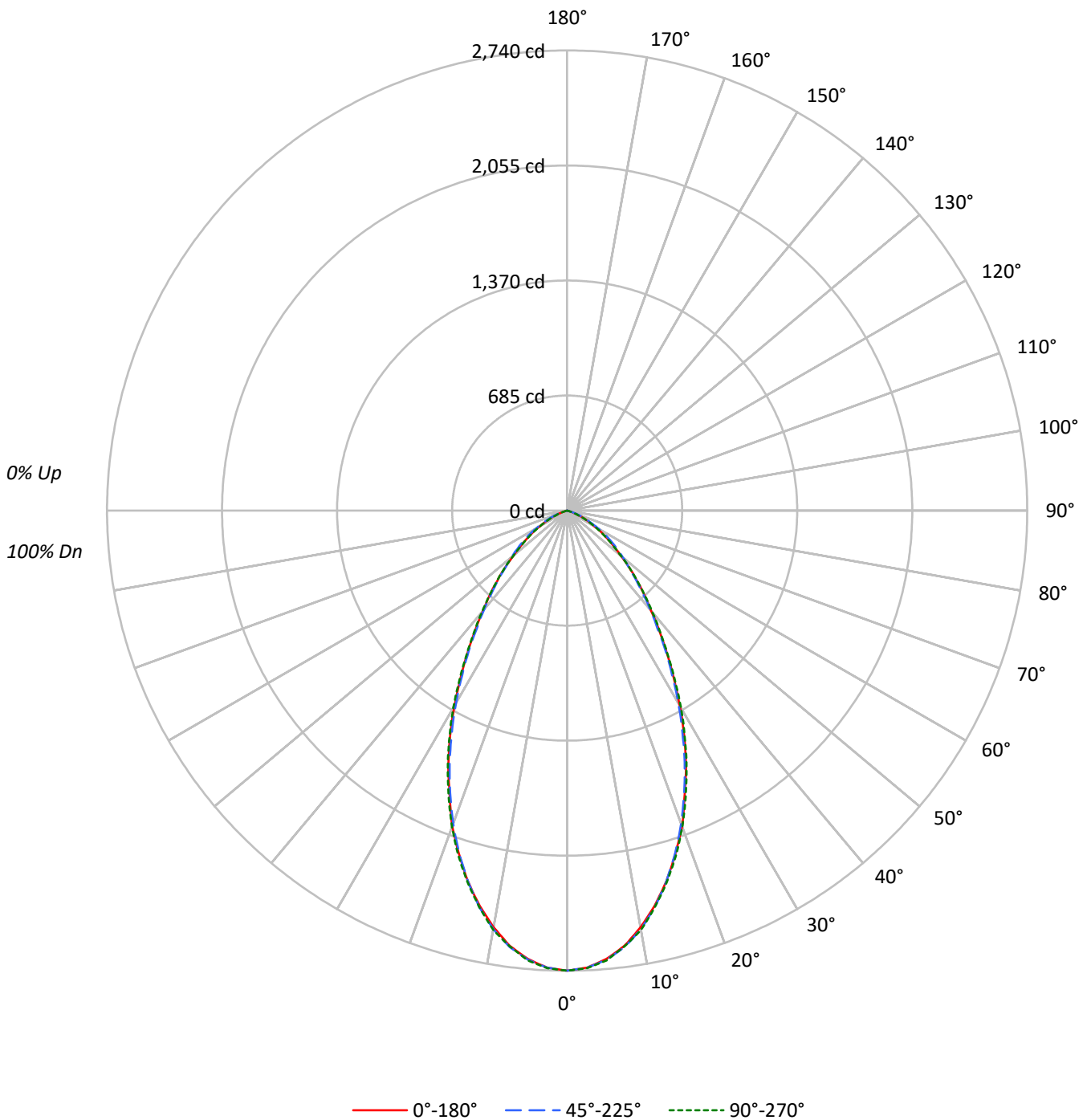
Lumens per Lamp: N/A
Luminaire Lumens: 3160.1 lumens
Efficiency: N/A
Efficacy: 83.2 lumens/watt
Spacing Criteria (0/90/45): 0.87 / 0.87 / 0.91
Luminous Opening: Rectangular (W 0.38' x L: 0.38' x H: 0')
CIE Type: Direct

Input Watts (W): 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	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	86	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	54	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°	209691	209691	209691
5°	205958	206266	206565
10°	195818	196735	197039
15°	180961	180961	181579
20°	162960	161682	163278
25°	141414	139750	142072
30°	118462	117066	119850
35°	96591	95489	97329
40°	77758	76979	78937
45°	63390	62113	63823
50°	49609	51478	49609
55°	39341	43011	38807
60°	28887	33097	28887
65°	19941	23491	19217
70°	9668	13204	9668
75°	0	3490	0
80°	0	0	0
85°	0	0	0



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	251.3	8.0
10°-20°	637.7	20.2
20°-30°	761.9	24.1
30°-40°	646.4	20.5
40°-50°	453.1	14.3
50°-60°	273.3	8.6
60°-70°	121.3	3.8
70°-80°	15.1	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°	1650.9	52.2
0°-40°	2297.3	72.7
0°-60°	3023.6	95.7
0°-90°	3160.1	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	3160.1	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	2740	2740	2740	2740	2740	
5°	2680	2684	2684	2684	2688	251
15°	2284	2284	2284	2295	2291	637
25°	1674	1666	1655	1670	1682	764
35°	1034	1030	1022	1038	1042	648
45°	586	582	574	586	590	454
55°	295	299	322	299	291	264
65°	110	122	130	122	106	111
75°	0	4	12	4	0	11
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°	2739.5	2739.5	2739.5	2739.5	2739.5
2.5°	2723.8	2723.8	2723.8	2723.8	2727.7
5°	2680.5	2684.5	2684.5	2684.5	2688.4
7.5°	2613.7	2613.7	2621.6	2621.6	2617.6
10°	2519.4	2519.4	2531.2	2535.1	2535.1
12.5°	2409.3	2409.3	2417.2	2421.1	2417.2
15°	2283.6	2283.6	2283.6	2295.4	2291.4
17.5°	2142.1	2142.1	2138.1	2149.9	2153.9
20°	2000.6	1992.7	1984.9	1992.7	2004.5
22.5°	1827.6	1827.6	1819.8	1835.5	1843.4
25°	1674.4	1666.5	1654.7	1670.4	1682.2
27.5°	1509.3	1501.4	1485.7	1497.5	1517.1
30°	1340.3	1336.3	1324.5	1336.3	1356.0
32.5°	1179.1	1175.2	1163.4	1179.1	1190.9
35°	1033.7	1029.8	1021.9	1037.6	1041.6
37.5°	900.1	892.2	884.3	900.1	907.9
40°	778.2	778.2	770.4	778.2	790.0
42.5°	680.0	676.0	664.2	676.0	683.9
45°	585.6	581.7	573.8	585.6	589.6
47.5°	499.2	503.1	495.2	503.1	503.1
50°	416.6	428.4	432.3	428.4	416.6
52.5°	349.8	357.7	373.4	357.7	345.9
55°	294.8	298.7	322.3	298.7	290.8
57.5°	239.8	247.6	267.3	247.6	235.8
60°	188.7	204.4	216.2	200.5	188.7
62.5°	149.4	161.1	169.0	157.2	145.4
65°	110.1	121.8	129.7	121.8	106.1
67.5°	74.7	90.4	94.3	86.5	70.7
70°	43.2	55.0	59.0	55.0	43.2
72.5°	19.7	27.5	31.4	27.5	19.7
75°	0.0	3.9	11.8	3.9	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)