

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: P241653

Luminaire Tested: **PRS410D010-S4M12-44SMDMB**

Issue Date: 03/03/2020

Test Information

Test Method: LM-79-08
Report Number: P241653
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G1-1802-584-38)
Test Lab: INNOVATION CENTER(G1)
Issue Date: 03/03/2020
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: HALO COMMERCIAL
Catalog Number: PRS410D010-S4M12-44SMDMB
Description: HALO COMMERCIAL 4" SQUARE, NEW CONSTRUCTION FRAME, WITH 4" MEDIUM DISTRIBUTION, SHALLOW TRIM MATTE BLACK
Light Source: ARRAYS OF HIGH LUMEN LEDS 80CRI / 3500K CCT
Ballast/Driver: ELECTRONIC DRIVER

Summary

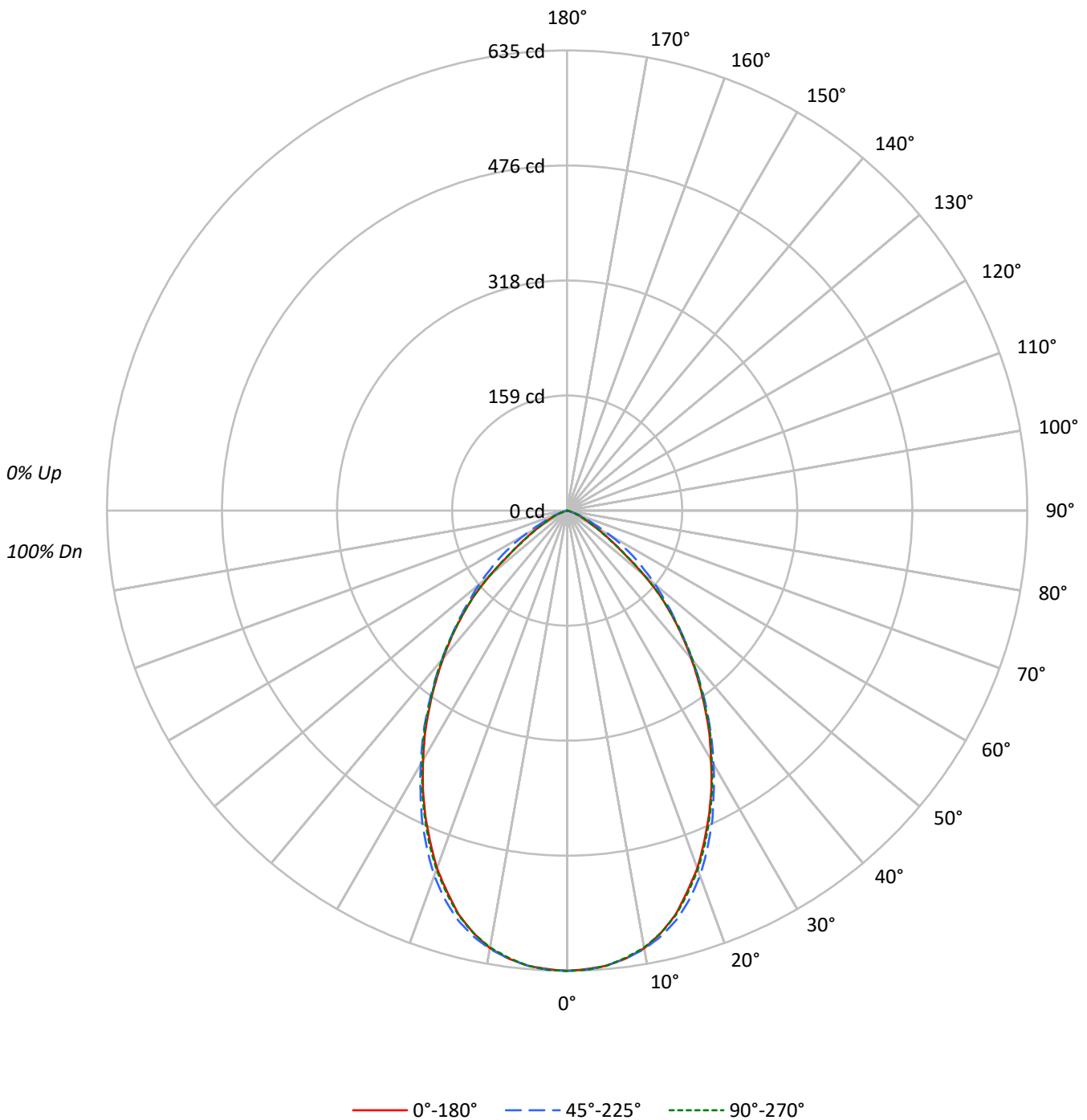
Lumens per Lamp: N/A
Luminaire Lumens: 926.0 lumens
Efficiency: N/A
Efficacy: 92.6 lumens/watt
Spacing Criteria (0/90/45): 1 / 1 / 1.06
Luminous Opening: Rectangular (W 0.38' x L: 0.38' x H: 0')
CIE Type: Direct

Input Watts (W): 10
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	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	101	103	100	98	99	97	95	95	94	93	91				91
2	105	99	94	90	103	97	93	89	94	90	87	91	88	85	88	85	83	81				81
3	98	90	84	79	96	88	83	78	86	81	77	83	79	76	81	77	74	73				73
4	91	82	75	70	89	81	74	70	78	73	69	76	72	68	74	70	67	65				65
5	85	75	68	63	84	74	67	62	72	66	62	70	65	61	69	64	61	59				59
6	80	69	62	56	78	68	61	56	66	60	56	65	60	55	64	59	55	53				53
7	75	64	56	51	73	63	56	51	62	55	51	60	55	50	59	54	50	48				48
8	70	59	52	47	69	58	51	47	57	51	46	56	50	46	55	50	46	44				44
9	66	55	48	43	65	54	48	43	53	47	43	52	47	43	51	46	42	41				41
10	63	51	44	40	61	51	44	40	50	44	39	49	43	39	48	43	39	38				38

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	48620	48620	48620
5°	48422	48422	48422
10°	47660	47738	47583
15°	45739	46294	45819
20°	42781	43677	42943
25°	39120	39965	39289
30°	35098	35716	35274
35°	30939	31406	31126
40°	26589	26889	26889
45°	22094	22635	22202
50°	16433	18827	16552
55°	10409	15080	10276
60°	6583	10563	6430
65°	4347	5977	4347
70°	2462	3133	2462
75°	0	887	0
80°	0	0	0
85°	0	0	0



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	59.6	6.4
10°-20°	162.5	17.5
20°-30°	215.0	23.2
30°-40°	209.4	22.6
40°-50°	160.4	17.3
50°-60°	85.5	9.2
60°-70°	29.7	3.2
70°-80°	3.8	0.4
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°	437.1	47.2
0°-40°	646.5	69.8
0°-60°	892.4	96.4
0°-90°	926.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	926.0	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	635	635	635	635	635	
5°	630	630	630	630	630	60
15°	577	581	584	581	578	161
25°	463	470	473	470	465	212
35°	331	336	336	338	333	207
45°	204	208	209	210	205	157
55°	78	90	113	91	77	73
65°	24	29	33	28	24	25
75°	0	1	3	1	0	3
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°	635.2	635.2	635.2	635.2	635.2
2.5°	633.2	633.2	634.2	633.2	634.2
5°	630.2	630.2	630.2	630.2	630.2
7.5°	623.2	623.2	623.2	623.2	622.2
10°	613.2	613.2	614.2	613.2	612.2
12.5°	597.2	599.2	601.2	600.2	597.2
15°	577.2	581.2	584.2	581.2	578.2
17.5°	551.2	556.2	562.2	557.2	553.2
20°	525.2	529.2	536.2	531.2	527.2
22.5°	494.2	500.2	505.2	502.2	497.2
25°	463.2	470.2	473.2	470.2	465.2
27.5°	431.1	436.1	438.1	439.1	433.1
30°	397.1	403.1	404.1	405.1	399.1
32.5°	365.1	370.1	370.1	373.1	368.1
35°	331.1	336.1	336.1	338.1	333.1
37.5°	298.1	303.1	302.1	305.1	300.1
40°	266.1	270.1	269.1	271.1	269.1
42.5°	235.1	239.1	238.1	240.1	237.1
45°	204.1	208.1	209.1	210.1	205.1
47.5°	174.1	179.1	182.1	181.1	174.1
50°	138.0	150.1	158.1	152.1	139.0
52.5°	103.0	120.0	134.0	121.0	105.0
55°	78.0	90.0	113.0	91.0	77.0
57.5°	58.0	68.0	91.0	67.0	57.0
60°	43.0	51.0	69.0	50.0	42.0
62.5°	32.0	38.0	48.0	37.0	32.0
65°	24.0	29.0	33.0	28.0	24.0
67.5°	18.0	21.0	22.0	21.0	17.0
70°	11.0	14.0	14.0	14.0	11.0
72.5°	5.0	7.0	8.0	7.0	5.0
75°	0.0	1.0	3.0	1.0	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)