

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: P241638

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

Issue Date: 03/03/2020

Test Information

Test Method: LM-79-08
Report Number: P241638
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: PRS410D010-S4M12-44SNDMB
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

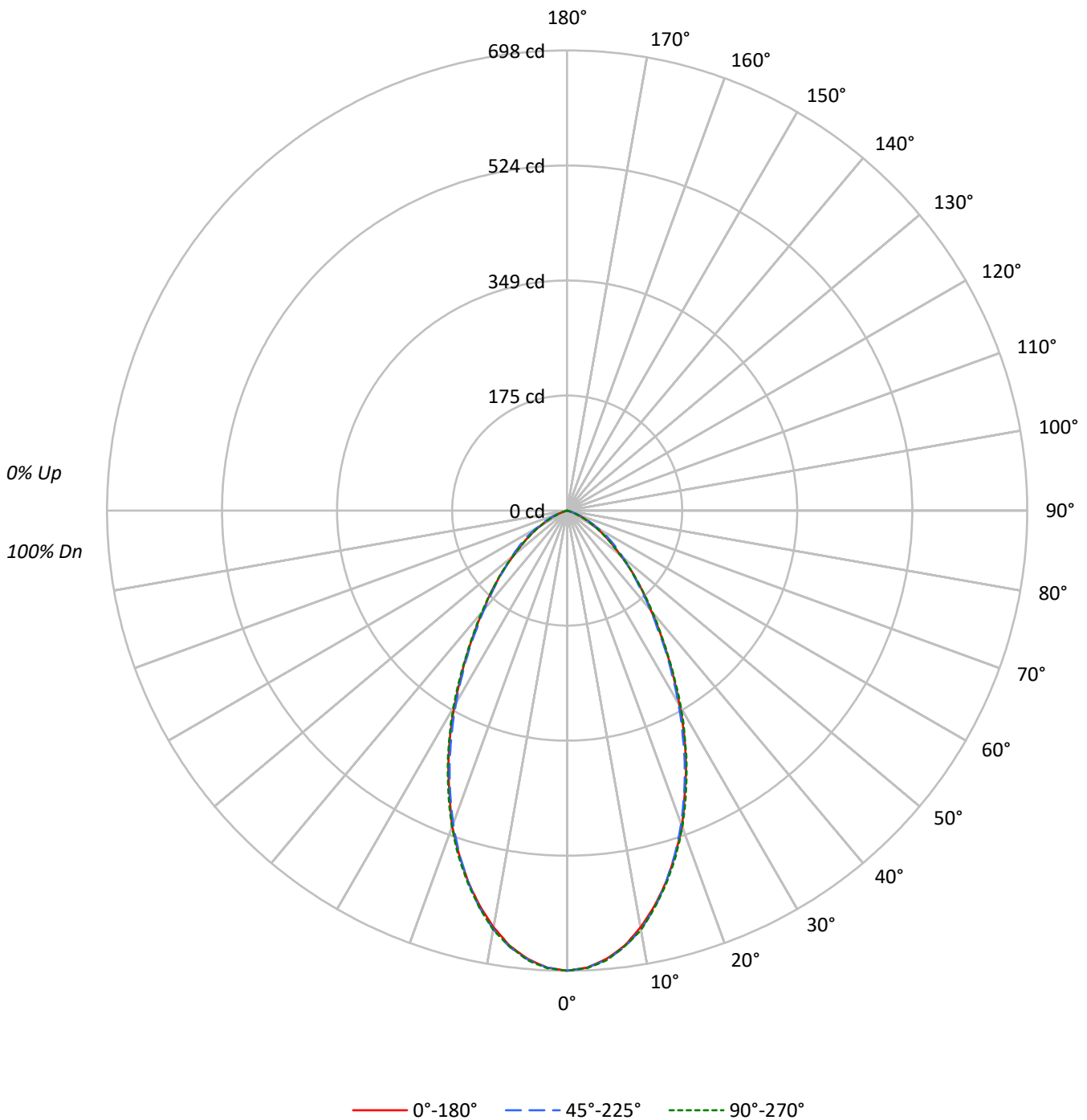
Lumens per Lamp: N/A
Luminaire Lumens: 805.0 lumens
Efficiency: N/A
Efficacy: 80.5 lumens/watt
Spacing Criteria (0/90/45): 0.87 / 0.87 / 0.91
Luminous Opening: Rectangular (W 0.38' x L: 0.38' x H: 0')
CIE Type: Direct

Input Watts (W): 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	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°	53420	53420	53420
5°	52463	52540	52617
10°	49883	50117	50194
15°	46096	46096	46254
20°	41510	41184	41591
25°	36021	35598	36190
30°	30175	29821	30528
35°	24603	24323	24790
40°	19804	19604	20104
45°	16151	15826	16259
50°	12634	13111	12634
55°	10022	10956	9889
60°	7363	8435	7363
65°	5071	5977	4890
70°	2462	3357	2462
75°	0	887	0
80°	0	0	0
85°	0	0	0



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	64.0	8.0
10°-20°	162.4	20.2
20°-30°	194.1	24.1
30°-40°	164.7	20.5
40°-50°	115.4	14.3
50°-60°	69.6	8.6
60°-70°	30.9	3.8
70°-80°	3.8	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°	420.5	52.2
0°-40°	585.2	72.7
0°-60°	770.2	95.7
0°-90°	805.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	805.0	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	698	698	698	698	698	
5°	683	684	684	684	685	64
15°	582	582	582	585	584	162
25°	426	424	422	426	428	195
35°	263	262	260	264	265	165
45°	149	148	146	149	150	116
55°	75	76	82	76	74	67
65°	28	31	33	31	27	28
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°	697.9	697.9	697.9	697.9	697.9
2.5°	693.8	693.8	693.8	693.8	694.8
5°	682.8	683.8	683.8	683.8	684.8
7.5°	665.8	665.8	667.8	667.8	666.8
10°	641.8	641.8	644.8	645.8	645.8
12.5°	613.7	613.7	615.8	616.8	615.8
15°	581.7	581.7	581.7	584.7	583.7
17.5°	545.7	545.7	544.7	547.7	548.7
20°	509.6	507.6	505.6	507.6	510.6
22.5°	465.6	465.6	463.6	467.6	469.6
25°	426.5	424.5	421.5	425.5	428.5
27.5°	384.5	382.5	378.5	381.5	386.5
30°	341.4	340.4	337.4	340.4	345.4
32.5°	300.4	299.4	296.4	300.4	303.4
35°	263.3	262.3	260.3	264.3	265.3
37.5°	229.3	227.3	225.3	229.3	231.3
40°	198.2	198.2	196.2	198.2	201.2
42.5°	173.2	172.2	169.2	172.2	174.2
45°	149.2	148.2	146.2	149.2	150.2
47.5°	127.2	128.2	126.2	128.2	128.2
50°	106.1	109.1	110.1	109.1	106.1
52.5°	89.1	91.1	95.1	91.1	88.1
55°	75.1	76.1	82.1	76.1	74.1
57.5°	61.1	63.1	68.1	63.1	60.1
60°	48.1	52.1	55.1	51.1	48.1
62.5°	38.0	41.1	43.1	40.0	37.0
65°	28.0	31.0	33.0	31.0	27.0
67.5°	19.0	23.0	24.0	22.0	18.0
70°	11.0	14.0	15.0	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)