

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: P241703

Luminaire Tested: **PRS410D010-S4M12-44SMDMW-4000K**

Issue Date: 03/03/2020

Test Information

Test Method: LM-79-08
Report Number: P241703
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G1-1802-584-41)
Test Lab: INNOVATION CENTER(G1)
Issue Date: 03/03/2020
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: HALO COMMERCIAL
Catalog Number: PRS410D010-S4M12-44SMDMW-4000K
Description: HALO COMMERCIAL 4" SQUARE, NEW CONSTRUCTION FRAME, WITH 4" MEDIUM 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: 1060.7 lumens
Efficiency: N/A
Efficacy: 106.1 lumens/watt
Spacing Criteria (0/90/45): 1.01 / 1.01 / 1.08
Luminous Opening: Rectangular (W 0.38' x L: 0.38' x H: 0')
CIE Type: Direct

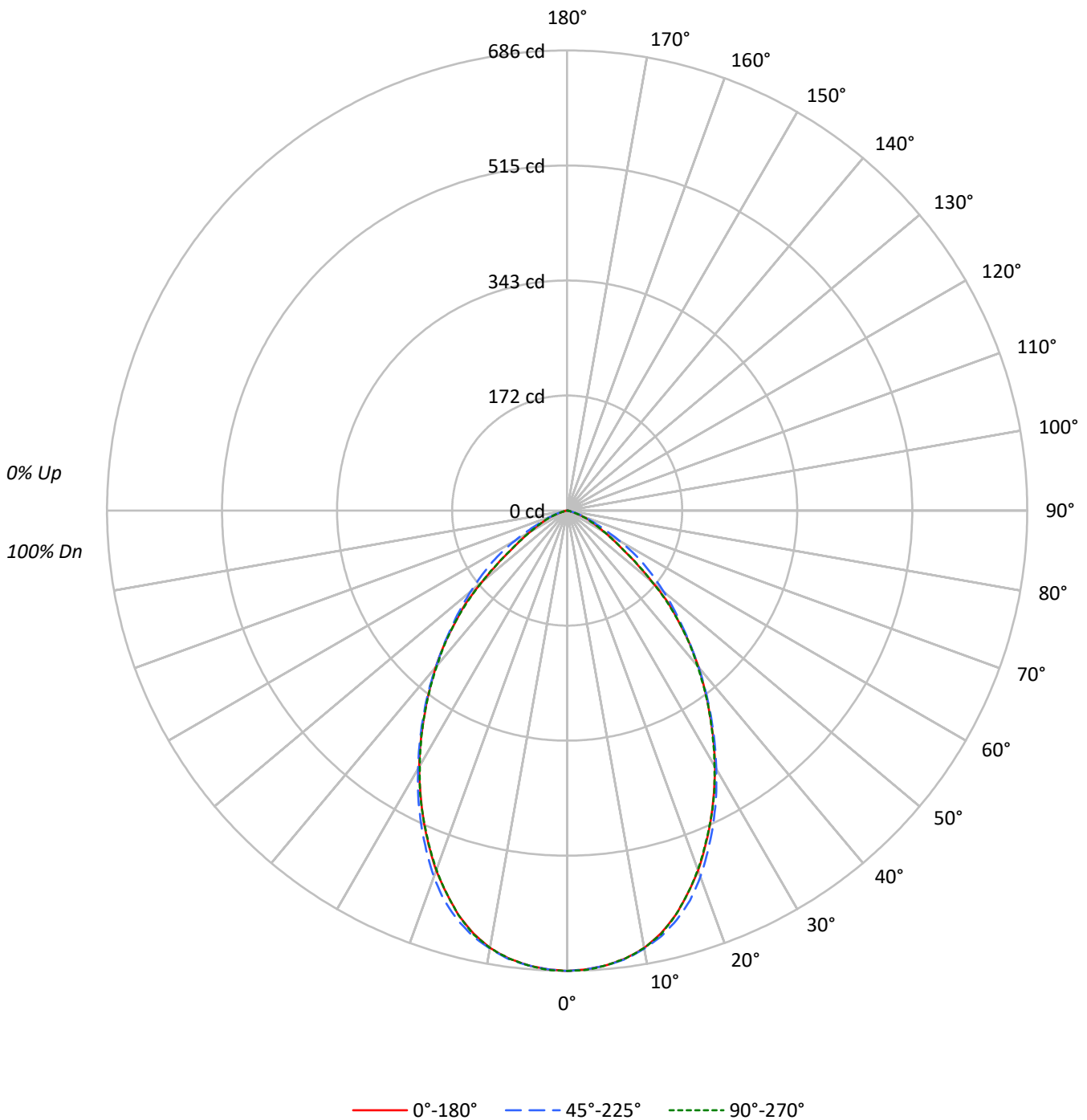
Input Watts (W): 10
Input Voltage (V): NR
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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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	0
RCR																		
0	119	119	119	119	116	116	116	116	111	111	111	106	106	106	102	102	102	100
1	112	108	105	102	109	106	103	101	102	100	98	98	96	95	95	93	92	90
2	104	98	93	88	102	96	91	87	93	89	85	90	86	84	87	84	82	80
3	97	89	82	77	95	87	81	77	84	79	75	82	78	74	79	76	73	71
4	90	81	74	68	88	79	73	68	77	71	67	75	70	66	73	69	65	63
5	84	74	66	61	82	73	66	60	71	65	60	69	64	59	67	62	59	57
6	79	68	60	55	77	67	60	54	65	59	54	63	58	54	62	57	53	51
7	74	62	55	49	72	61	54	49	60	54	49	59	53	49	57	52	48	47
8	69	57	50	45	68	57	50	45	56	49	45	54	49	45	53	48	44	43
9	65	53	46	41	64	53	46	41	52	45	41	51	45	41	50	45	41	39
10	61	50	43	38	60	49	43	38	48	42	38	47	42	38	47	41	38	36

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	52532	52532	52532
5°	52264	52264	52264
10°	51453	51531	51453
15°	49488	50050	49488
20°	46503	47326	46422
25°	42828	43512	42828
30°	39004	39278	38827
35°	34620	34901	34620
40°	30446	30446	30136
45°	25525	26185	25644
50°	19767	22304	19767
55°	13639	18643	13772
60°	9767	13793	9767
65°	7335	8802	7154
70°	4767	5662	4991
75°	1804	2987	1804
80°	1322	1763	1322
85°	878	878	878



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	64.4	6.1
10°-20°	175.8	16.6
20°-30°	234.9	22.1
30°-40°	233.2	22.0
40°-50°	185.5	17.5
50°-60°	108.4	10.2
60°-70°	45.7	4.3
70°-80°	11.2	1.1
80°-90°	1.6	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°	475.1	44.8
0°-40°	708.3	66.8
0°-60°	1002.2	94.5
0°-90°	1060.7	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	1060.7	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	686	686	686	686	686	
5°	680	680	680	680	680	64
15°	624	629	632	629	624	175
25°	507	514	515	513	507	233
35°	370	376	374	374	370	232
45°	236	242	242	242	237	182
55°	102	116	140	116	103	96
65°	40	44	49	44	40	41
75°	6	7	10	8	6	10
85°	1	1	1	1	1	1
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	686.3	686.3	686.3	686.3	686.3
2.5°	684.3	684.3	684.3	684.3	685.3
5°	680.2	680.2	680.2	680.2	680.2
7.5°	673.1	673.1	674.1	674.1	673.1
10°	662.0	662.0	663.0	663.0	662.0
12.5°	645.8	647.8	649.8	647.8	646.8
15°	624.5	628.6	631.6	628.6	624.5
17.5°	598.2	603.3	609.3	603.3	598.2
20°	570.9	575.9	581.0	574.9	569.9
22.5°	539.5	545.6	548.6	544.6	538.5
25°	507.1	514.2	515.2	513.2	507.1
27.5°	473.7	478.8	480.8	479.8	474.7
30°	441.3	446.4	444.4	445.4	439.3
32.5°	405.9	411.0	408.9	408.9	404.9
35°	370.5	376.5	373.5	374.5	370.5
37.5°	337.1	340.1	339.1	340.1	336.1
40°	304.7	306.7	304.7	306.7	301.6
42.5°	271.3	274.3	272.3	274.3	270.3
45°	235.8	241.9	241.9	241.9	236.9
47.5°	205.5	210.5	213.6	210.5	202.4
50°	166.0	181.2	187.3	180.2	166.0
52.5°	131.6	146.8	163.0	146.8	132.6
55°	102.2	116.4	139.7	116.4	103.2
57.5°	81.0	91.1	115.4	91.1	81.0
60°	63.8	71.9	90.1	71.9	63.8
62.5°	50.6	56.7	66.8	56.7	50.6
65°	40.5	44.5	48.6	44.5	39.5
67.5°	31.4	34.4	35.4	34.4	30.4
70°	21.3	25.3	25.3	25.3	22.3
72.5°	13.2	16.2	17.2	16.2	13.2
75°	6.1	7.1	10.1	8.1	6.1
77.5°	5.1	5.1	5.1	5.1	5.1
80°	3.0	4.0	4.0	4.0	3.0
82.5°	2.0	2.0	2.0	2.0	2.0
85°	1.0	1.0	1.0	1.0	1.0
87.5°	1.0	1.0	1.0	1.0	1.0
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)