

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: P241868

Luminaire Tested: **PRS410D010-S4M12-41SNDMW-4000K**

Issue Date: 03/03/2020

Test Information

Test Method: LM-79-08
Report Number: P241868
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G1-1802-584-52)
Test Lab: INNOVATION CENTER(G1)
Issue Date: 03/03/2020
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: HALO COMMERCIAL
Catalog Number: PRS410D010-S4M12-41SNDMW-4000K
Description: HALO COMMERCIAL 4" SQUARE, NEW CONSTRUCTION FRAME, WITH 4" NARROW DISTRIBUTION, DEEP 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: 854.2 lumens
Efficiency: N/A
Efficacy: 85.4 lumens/watt
Spacing Criteria (0/90/45): 0.89 / 0.89 / 0.93
Luminous Opening: Rectangular (W 0.38' x L: 0.38' x H: 0')
CIE Type: Direct

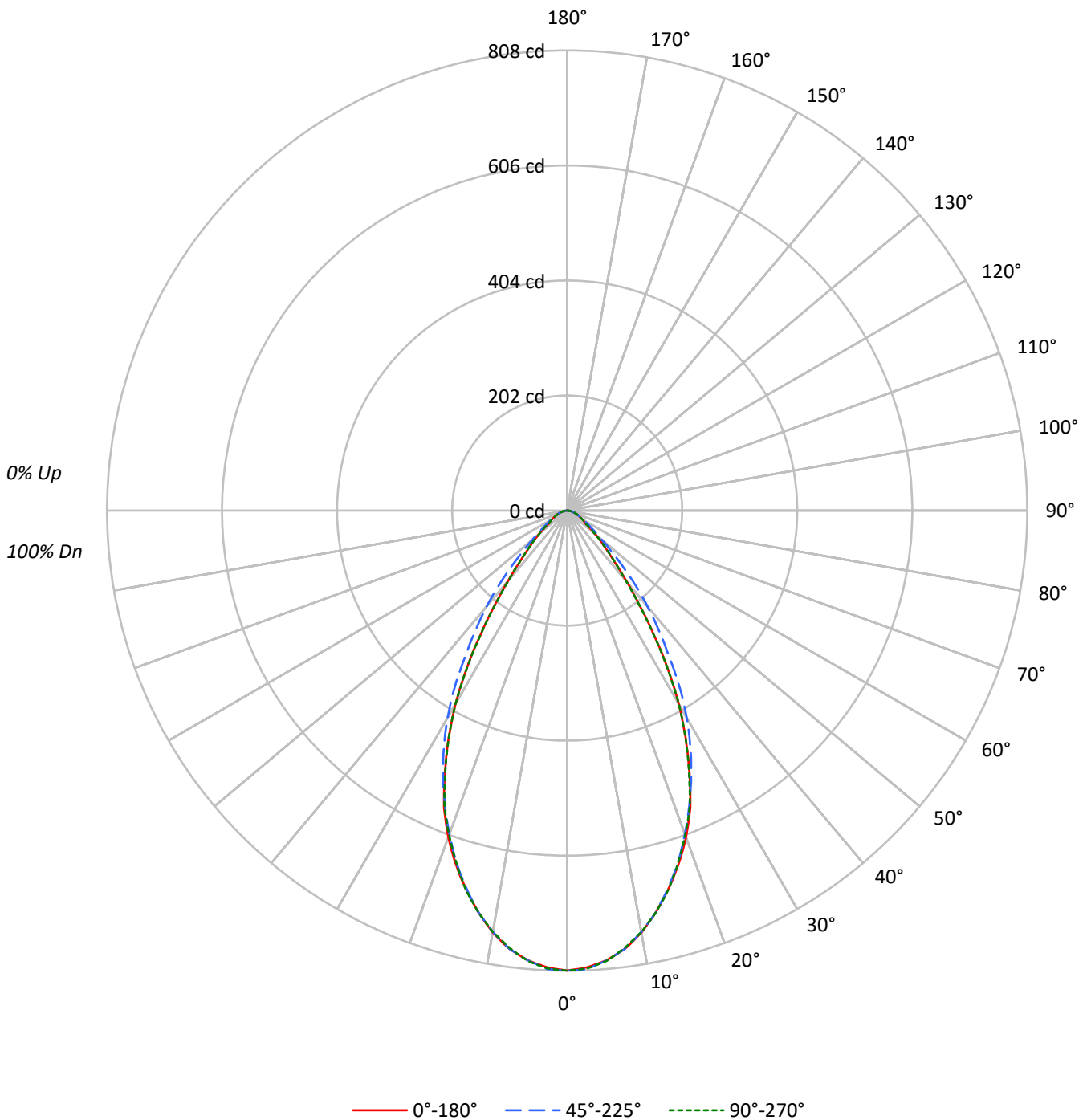
Input Watts (W): 10
Input Voltage (V): NR
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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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	109	106	104	110	107	104	102	103	101	99		99	97	96		96	94	93	91
2	106	100	95	91	103	98	94	90	95	91	88		92	89	86		89	87	85	83
3	99	92	86	82	97	91	85	81	88	83	80		85	82	78		83	80	77	75
4	94	85	79	74	92	84	78	73	81	76	72		79	75	71		77	74	71	69
5	88	79	72	67	86	78	71	67	76	70	66		74	69	66		72	68	65	63
6	83	73	66	62	82	72	66	61	71	65	61		69	64	60		68	63	60	58
7	79	68	61	57	77	67	61	57	66	60	56		65	60	56		64	59	56	54
8	74	64	57	53	73	63	57	52	62	56	52		61	56	52		60	55	52	50
9	70	60	53	49	69	59	53	49	58	53	49		57	52	48		56	52	48	47
10	67	56	50	46	66	56	50	46	55	49	45		54	49	45		53	49	45	44

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	61839	61839	61839
5°	60908	60908	60985
10°	58464	58386	58386
15°	54472	54314	54559
20°	49729	49232	49395
25°	42921	43520	42752
30°	34629	37139	34629
35°	24687	29042	24501
40°	16087	21952	15887
45°	10738	14798	10847
50°	7716	9407	7597
55°	5138	6619	5138
60°	4654	4960	4654
65°	4220	4220	4220
70°	3849	3849	3849
75°	3283	3283	3283
80°	3130	3130	3130
85°	2635	2635	2635



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	74.4	8.7
10°-20°	191.8	22.5
20°-30°	233.2	27.3
30°-40°	180.5	21.1
40°-50°	93.0	10.9
50°-60°	42.1	4.9
60°-70°	23.3	2.7
70°-80°	12.3	1.4
80°-90°	3.5	0.4
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°	499.5	58.5
0°-40°	680.0	79.6
0°-60°	815.1	95.4
0°-90°	854.2	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	854.2	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	808	808	808	808	808	
5°	793	795	793	794	794	74
15°	687	687	685	686	688	192
25°	508	514	515	513	506	231
35°	264	291	311	290	262	166
45°	99	114	137	114	100	80
55°	38	44	50	44	38	38
65°	23	23	23	23	23	23
75°	11	11	11	11	11	12
85°	3	3	3	3	3	3
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	807.9	807.9	807.9	807.9	807.9
2.5°	802.9	803.9	805.9	804.9	804.9
5°	792.7	794.8	792.7	793.7	793.7
7.5°	776.5	776.5	776.5	774.5	774.5
10°	752.2	751.2	751.2	751.2	751.2
12.5°	721.9	722.9	721.9	722.9	721.9
15°	687.4	687.4	685.4	686.4	688.5
17.5°	651.0	650.0	648.0	646.9	648.0
20°	610.5	607.5	604.4	606.4	606.4
22.5°	564.9	563.9	560.9	561.9	562.9
25°	508.2	514.3	515.3	513.3	506.2
27.5°	450.5	457.6	468.8	457.6	450.5
30°	391.8	402.9	420.2	402.9	391.8
32.5°	328.0	348.3	367.5	349.3	327.0
35°	264.2	290.6	310.8	289.6	262.2
37.5°	207.5	232.9	263.2	233.9	206.5
40°	161.0	184.3	219.7	184.3	159.0
42.5°	125.5	145.8	177.2	144.8	125.5
45°	99.2	114.4	136.7	114.4	100.2
47.5°	81.0	92.1	103.3	92.1	81.0
50°	64.8	72.9	79.0	72.9	63.8
52.5°	50.6	57.7	61.8	57.7	50.6
55°	38.5	44.5	49.6	44.5	38.5
57.5°	34.4	35.4	40.5	35.4	34.4
60°	30.4	30.4	32.4	30.4	30.4
62.5°	26.3	27.3	27.3	27.3	26.3
65°	23.3	23.3	23.3	23.3	23.3
67.5°	19.2	20.2	20.2	20.2	19.2
70°	17.2	17.2	17.2	17.2	17.2
72.5°	14.2	14.2	14.2	14.2	14.2
75°	11.1	11.1	11.1	11.1	11.1
77.5°	9.1	9.1	9.1	9.1	9.1
80°	7.1	7.1	7.1	7.1	7.1
82.5°	5.1	5.1	5.1	5.1	5.1
85°	3.0	3.0	3.0	3.0	3.0
87.5°	1.0	1.0	1.0	2.0	2.0
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)