

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: P252913

Luminaire Tested: **PRS410D010-S4M12-44SWDMB-3000K**

Issue Date: 03/03/2020

Test Information

Test Method: LM-79-08
Report Number: P252913
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G1-1804-748-2)
Test Lab: INNOVATION CENTER(G1)
Issue Date: 03/03/2020
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: HALO COMMERCIAL
Catalog Number: PRS410D010-S4M12-44SWDMB-3000K
Description: HALO COMMERCIAL 4" SQUARE, NEW CONSTRUCTION FRAME, WITH 4" WIDE DISTRIBUTION, SHALLOW TRIM MATTE BLACK
Light Source: ARRAYS OF HIGH LUMEN LEDS 80CRI / 3000K CCT
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 840.9 lumens
Efficiency: N/A
Efficacy: 84.1 lumens/watt
Spacing Criteria (0/90/45): 1.29 / 1.29 / 1.41
Luminous Opening: Rectangular (W 0.38' x L: 0.38' x H: 0')
CIE Type: Direct

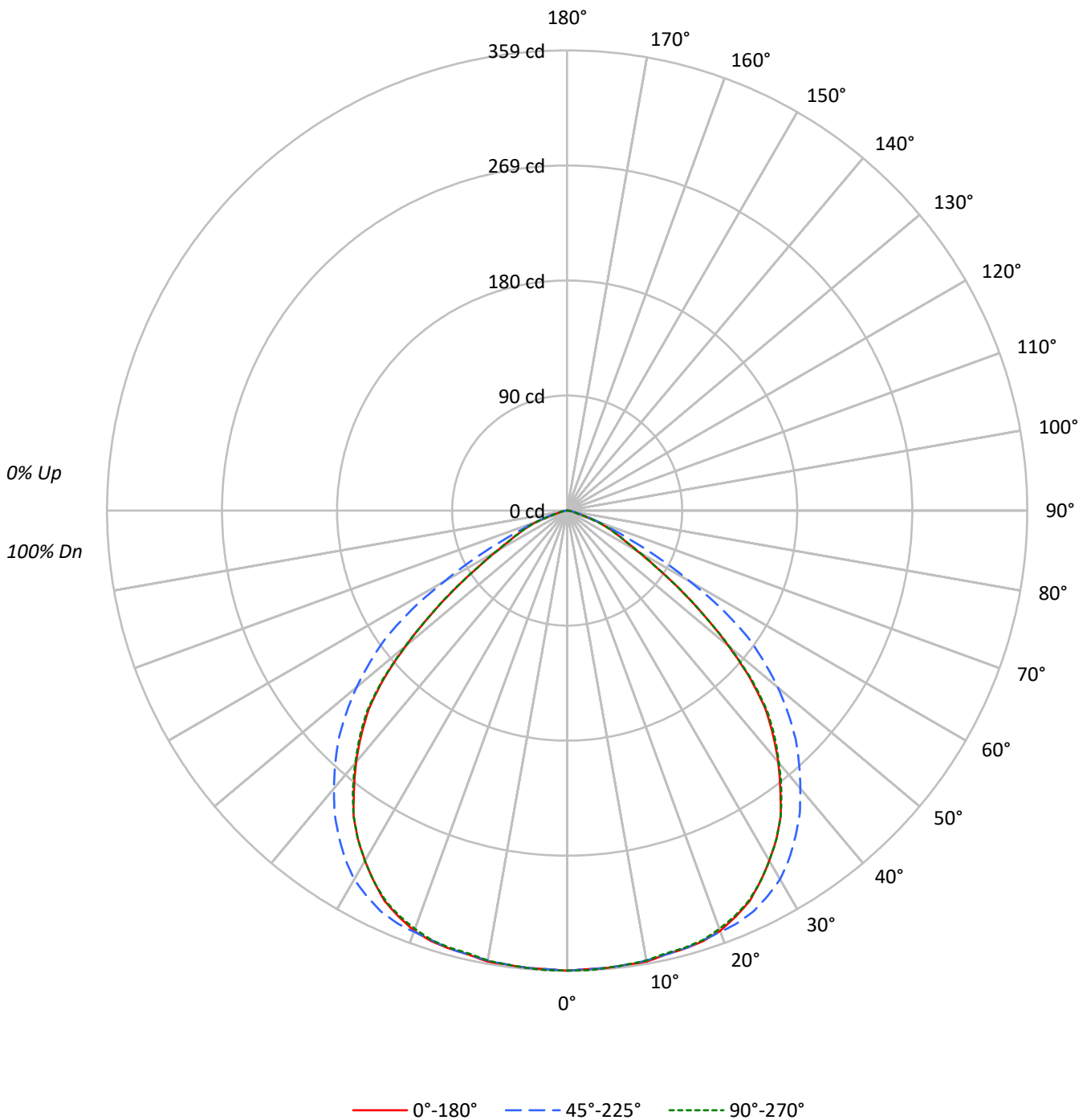
Input Watts (W): 10
Input Voltage (V): NR
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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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	111	107	104	101	108	105	102	99	101	98	96	97	95	93	94	92	90	88
2	103	96	90	85	100	94	89	84	91	86	82	87	84	81	85	82	79	77
3	95	86	79	73	92	84	78	73	81	76	71	79	74	70	76	72	69	67
4	87	77	69	63	85	76	68	63	73	67	62	71	66	61	69	64	61	59
5	81	69	61	55	79	68	61	55	66	60	55	64	59	54	63	58	53	52
6	75	63	55	49	73	62	54	49	60	53	48	59	53	48	57	52	48	46
7	70	57	49	44	68	57	49	43	55	48	43	54	47	43	52	47	43	41
8	65	52	45	39	64	52	44	39	51	44	39	49	43	39	48	43	38	37
9	61	48	41	35	59	48	40	35	47	40	35	46	39	35	45	39	35	33
10	57	45	37	32	56	44	37	32	43	36	32	42	36	32	41	36	32	30

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	27471	27471	27471
5°	27515	27515	27515
10°	27771	27701	27701
15°	28044	28044	27981
20°	28420	28485	28281
25°	28411	29112	28344
30°	27885	29361	27885
35°	27145	29014	27145
40°	25610	28277	25690
45°	23674	27289	23858
50°	19577	25543	19684
55°	14372	22953	14479
60°	9706	16993	9843
65°	7408	10287	7408
70°	5416	5796	5237
75°	2218	3224	2218
80°	1851	1851	1851
85°	1493	1493	1493



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	34.1	4.1
10°-20°	100.0	11.9
20°-30°	156.2	18.6
30°-40°	186.9	22.2
40°-50°	179.6	21.4
50°-60°	120.6	14.3
60°-70°	49.3	5.9
70°-80°	12.2	1.5
80°-90°	1.9	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°	290.4	34.5
0°-40°	477.2	56.8
0°-60°	777.5	92.5
0°-90°	840.9	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	840.9	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	359	359	359	359	359	
5°	358	358	358	358	358	34
15°	354	354	354	353	353	100
25°	336	340	345	339	336	154
35°	290	299	310	300	290	180
45°	219	235	252	235	220	166
55°	108	130	172	131	108	98
65°	41	46	57	46	41	41
75°	8	8	11	8	8	11
85°	2	2	2	2	2	2
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	358.9	358.9	358.9	358.9	358.9
2.5°	358.1	358.1	358.1	358.9	358.9
5°	358.1	358.1	358.1	358.1	358.1
7.5°	357.3	357.3	357.3	357.3	357.3
10°	357.3	356.4	356.4	356.4	356.4
12.5°	354.8	354.8	354.8	354.8	353.9
15°	353.9	353.9	353.9	353.1	353.1
17.5°	352.3	352.3	351.4	351.4	351.4
20°	348.9	349.7	349.7	348.9	347.2
22.5°	343.1	345.6	348.1	344.7	342.2
25°	336.4	339.7	344.7	338.9	335.6
27.5°	326.4	331.4	338.9	331.4	326.4
30°	315.5	322.2	332.2	322.2	315.5
32.5°	303.8	311.3	322.2	311.3	303.8
35°	290.5	298.8	310.5	299.7	290.5
37.5°	273.0	284.6	298.0	286.3	274.6
40°	256.3	268.8	283.0	269.6	257.1
42.5°	237.9	252.1	267.9	252.9	239.6
45°	218.7	234.6	252.1	235.4	220.4
47.5°	193.7	212.9	233.7	215.4	195.3
50°	164.4	188.6	214.5	190.3	165.3
52.5°	135.2	158.6	193.7	160.3	135.2
55°	107.7	130.2	172.0	131.1	108.5
57.5°	82.6	102.7	143.6	104.3	82.6
60°	63.4	78.5	111.0	79.3	64.3
62.5°	50.1	59.3	81.8	58.4	50.1
65°	40.9	45.9	56.8	45.9	40.9
67.5°	32.6	35.9	37.6	35.9	32.6
70°	24.2	27.5	25.9	27.5	23.4
72.5°	14.2	17.5	17.5	17.5	13.4
75°	7.5	8.3	10.9	8.3	7.5
77.5°	5.8	5.8	6.7	5.8	5.8
80°	4.2	4.2	4.2	4.2	4.2
82.5°	2.5	2.5	2.5	2.5	2.5
85°	1.7	1.7	1.7	1.7	1.7
87.5°	0.8	0.8	0.8	0.8	0.8
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)