

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: P252963

Luminaire Tested: **PRS410D010-S4M12-41SWDMW**

Issue Date: 03/03/2020

Test Information

Test Method: LM-79-08
Report Number: P252963
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G1-1805-776-2)
Test Lab: INNOVATION CENTER(G1)
Issue Date: 03/03/2020
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: HALO COMMERCIAL
Catalog Number: PRS410D010-S4M12-41SWDMW
Description: HALO COMMERCIAL 4" SQUARE, NEW CONSTRUCTION FRAME, WITH 4" WIDE DISTRIBUTION, DEEP TRIM MATTE WHITE
Light Source: ARRAYS OF HIGH LUMEN LEDS 80CRI / 3500K CCT
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 854.5 lumens
Efficiency: N/A
Efficacy: 85.5 lumens/watt
Spacing Criteria (0/90/45): 1.11 / 1.1 / 1.15
Luminous Opening: Rectangular (W 0.38' x L: 0.38' x H: 0')
CIE Type: Direct

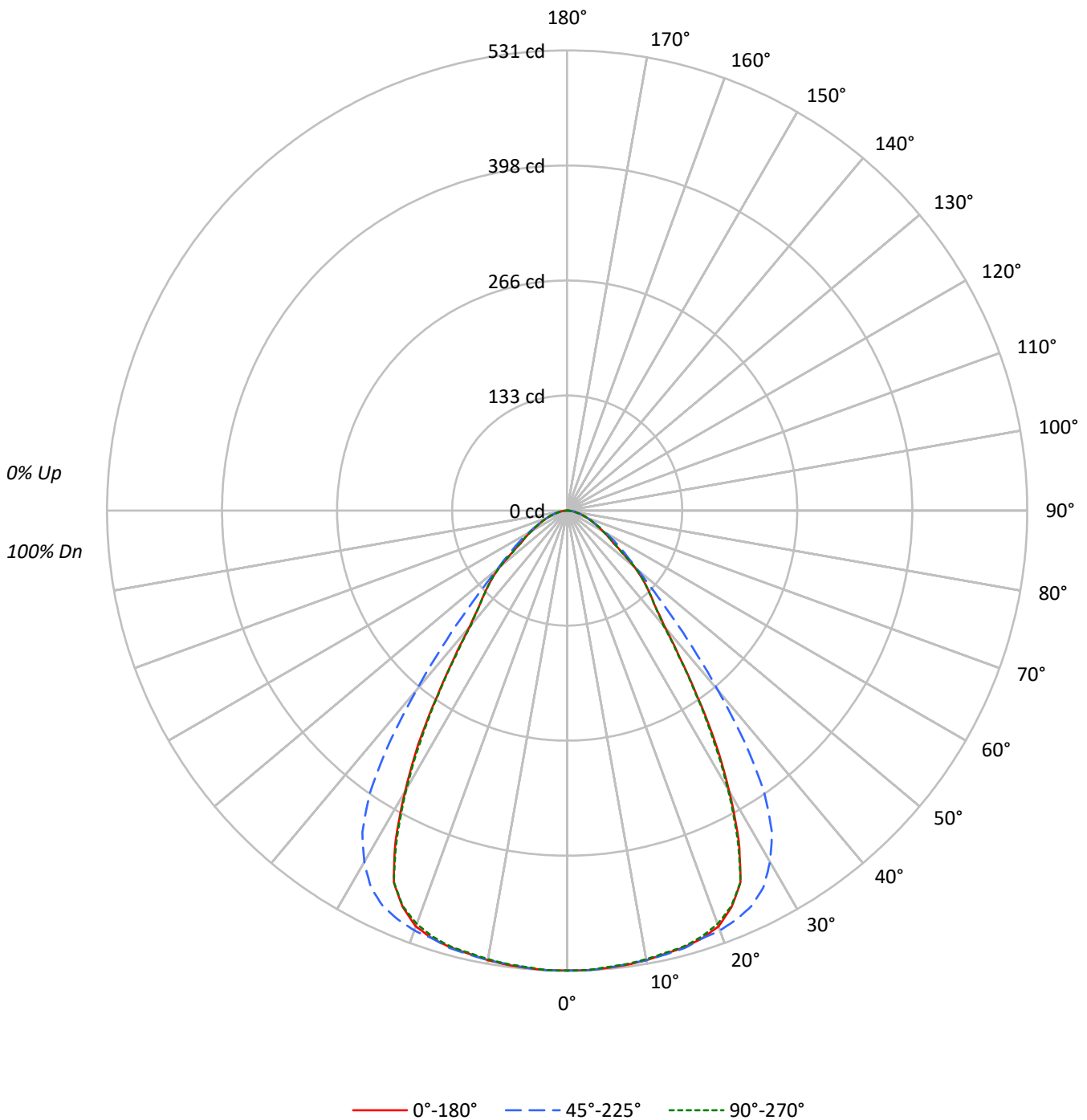
Input Watts (W): 10
Input Voltage (V): NR
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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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	108	105	102	109	106	103	100	102	99	97	98	96	94	95	93	92	90					90			
2	104	98	93	88	102	96	91	87	93	89	86	90	86	84	87	84	82	80					80			
3	97	89	83	78	95	88	82	77	85	80	76	82	78	75	80	76	73	72					72			
4	91	81	74	69	89	80	74	69	78	72	68	76	71	67	74	70	66	64					64			
5	85	75	67	62	83	74	67	62	72	66	61	70	65	60	68	64	60	58					58			
6	80	69	61	56	78	68	61	56	66	60	55	65	59	55	63	58	55	53					53			
7	75	63	56	51	73	63	56	51	61	55	51	60	54	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	47	43	53	47	43	52	47	42	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°	40629	40629	40629
5°	40708	40708	40631
10°	40937	40937	40860
15°	41341	41421	41262
20°	41591	41999	41339
25°	39965	42524	39965
30°	33065	41373	32800
35°	24473	37031	24276
40°	17476	26968	17276
45°	14559	17948	14559
50°	12158	12515	12158
55°	8634	9982	8768
60°	7272	7899	7272
65°	6230	6412	6230
70°	5438	5438	5438
75°	4791	4791	4791
80°	4011	4011	4011
85°	3513	3513	3513



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	50.4	5.9
10°-20°	147.4	17.2
20°-30°	220.3	25.8
30°-40°	196.1	22.9
40°-50°	116.7	13.7
50°-60°	66.1	7.7
60°-70°	35.4	4.1
70°-80°	17.4	2.0
80°-90°	4.8	0.6
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°	418.1	48.9
0°-40°	614.2	71.9
0°-60°	796.9	93.3
0°-90°	854.5	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	854.5	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	531	531	531	531	531	
5°	530	530	530	530	529	50
15°	522	522	523	521	521	147
25°	473	486	504	485	473	211
35°	262	306	396	305	260	165
45°	134	145	166	144	134	104
55°	65	72	75	72	66	62
65°	34	35	35	35	34	35
75°	16	16	16	16	16	17
85°	4	4	4	4	4	5
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	530.8	530.8	530.8	530.8	530.8
2.5°	530.8	530.8	530.8	530.8	530.8
5°	529.8	529.8	529.8	529.8	528.8
7.5°	528.8	527.8	527.8	527.8	527.8
10°	526.7	526.7	526.7	525.7	525.7
12.5°	523.7	523.7	524.7	523.7	522.7
15°	521.7	521.7	522.7	520.7	520.7
17.5°	517.7	518.7	517.7	517.7	515.6
20°	510.6	513.6	515.6	512.6	507.5
22.5°	495.4	503.5	510.6	502.5	494.4
25°	473.2	486.3	503.5	485.3	473.2
27.5°	428.7	462.0	490.4	459.0	425.6
30°	374.1	414.5	468.1	411.5	371.1
32.5°	319.5	359.9	439.8	357.9	314.4
35°	261.9	306.3	396.3	305.3	259.8
37.5°	213.3	253.8	335.7	251.7	211.3
40°	174.9	206.3	269.9	205.2	172.9
42.5°	150.6	167.8	213.3	166.8	150.6
45°	134.5	144.6	165.8	143.6	134.5
47.5°	119.3	127.4	130.4	126.4	119.3
50°	102.1	111.2	105.1	111.2	102.1
52.5°	80.9	92.0	88.0	93.0	79.9
55°	64.7	71.8	74.8	71.8	65.7
57.5°	56.6	58.6	62.7	58.6	56.6
60°	47.5	49.5	51.6	49.5	47.5
62.5°	40.4	42.5	42.5	42.5	41.5
65°	34.4	35.4	35.4	35.4	34.4
67.5°	29.3	29.3	29.3	29.3	29.3
70°	24.3	24.3	24.3	24.3	24.3
72.5°	20.2	20.2	20.2	20.2	20.2
75°	16.2	16.2	16.2	16.2	16.2
77.5°	13.1	13.1	12.1	13.1	12.1
80°	9.1	9.1	9.1	9.1	9.1
82.5°	7.1	7.1	7.1	7.1	7.1
85°	4.0	4.0	4.0	4.0	4.0
87.5°	2.0	2.0	2.0	2.0	2.0
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)