

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: P252978

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

Issue Date: 03/03/2020

Test Information

Test Method: LM-79-08
Report Number: P252978
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-S4M12-41SWDMB
Description: HALO COMMERCIAL 4" SQUARE, NEW CONSTRUCTION FRAME, WITH 4" WIDE DISTRIBUTION, DEEP 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: 561.3 lumens
Efficiency: N/A
Efficacy: 56.1 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

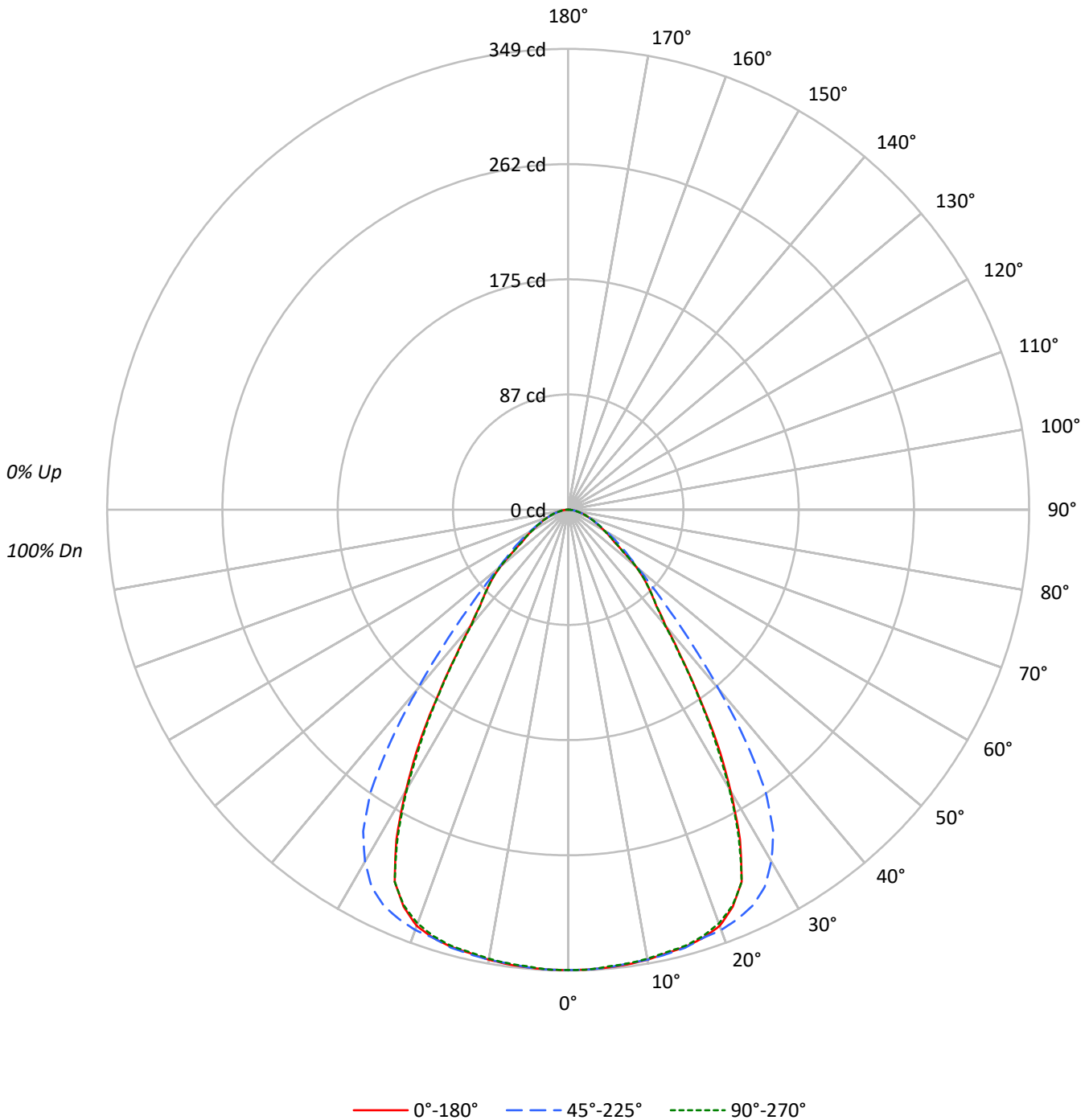
Input Watts (W): 10
Input Voltage (V): NR
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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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	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	
2	104	98	93	88	102	96	91	87	93	89	86	90	86	84	87	84	82				80	
3	97	89	83	78	95	88	82	77	85	80	76	82	78	75	80	76	73				72	
4	91	81	74	69	89	80	74	69	78	72	68	76	71	67	74	70	66				64	
5	85	75	67	62	83	74	67	62	72	66	61	70	65	60	68	64	60				58	
6	80	69	61	56	78	68	61	56	66	60	55	65	59	55	63	58	55				53	
7	75	63	56	51	73	63	56	51	61	55	51	60	54	50	59	54	50				48	
8	70	59	52	47	69	58	51	47	57	51	46	56	50	46	55	50	46				44	
9	66	55	48	43	65	54	47	43	53	47	43	52	47	42	51	46	42				41	
10	63	51	44	40	61	51	44	40	50	44	39	49	43	39	48	43	39				38	

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	26683	26683	26683
5°	26739	26739	26685
10°	26893	26893	26838
15°	27157	27204	27101
20°	27320	27589	27157
25°	26249	27930	26249
30°	21716	27178	21539
35°	16072	24323	15951
40°	11481	17716	11351
45°	9558	11788	9558
50°	7990	8228	7990
55°	5672	6552	5765
60°	4776	5190	4776
65°	4093	4202	4093
70°	3558	3558	3558
75°	3135	3135	3135
80°	2645	2645	2645
85°	2371	2371	2371



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	33.1	5.9
10°-20°	96.8	17.2
20°-30°	144.7	25.8
30°-40°	128.8	22.9
40°-50°	76.6	13.7
50°-60°	43.4	7.7
60°-70°	23.3	4.1
70°-80°	11.4	2.0
80°-90°	3.2	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°	274.6	48.9
0°-40°	403.4	71.9
0°-60°	523.5	93.3
0°-90°	561.3	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	561.3	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	349	349	349	349	349	
5°	348	348	348	348	347	33
15°	343	343	343	342	342	97
25°	311	319	331	319	311	139
35°	172	201	260	200	171	109
45°	88	95	109	94	88	69
55°	42	47	49	47	43	41
65°	23	23	23	23	23	23
75°	11	11	11	11	11	11
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°	348.6	348.6	348.6	348.6	348.6
2.5°	348.6	348.6	348.6	348.6	348.6
5°	348.0	348.0	348.0	348.0	347.3
7.5°	347.3	346.6	346.6	346.6	346.6
10°	346.0	346.0	346.0	345.3	345.3
12.5°	344.0	344.0	344.7	344.0	343.3
15°	342.7	342.7	343.3	342.0	342.0
17.5°	340.0	340.7	340.0	340.0	338.7
20°	335.4	337.3	338.7	336.7	333.4
22.5°	325.4	330.7	335.4	330.0	324.7
25°	310.8	319.4	330.7	318.8	310.8
27.5°	281.6	303.5	322.1	301.5	279.6
30°	245.7	272.3	307.5	270.3	243.7
32.5°	209.8	236.4	288.9	235.1	206.5
35°	172.0	201.2	260.3	200.5	170.7
37.5°	140.1	166.7	220.5	165.4	138.8
40°	114.9	135.5	177.3	134.8	113.6
42.5°	98.9	110.2	140.1	109.6	98.9
45°	88.3	95.0	108.9	94.3	88.3
47.5°	78.4	83.7	85.7	83.0	78.4
50°	67.1	73.0	69.1	73.0	67.1
52.5°	53.1	60.4	57.8	61.1	52.5
55°	42.5	47.1	49.1	47.1	43.2
57.5°	37.2	38.5	41.2	38.5	37.2
60°	31.2	32.5	33.9	32.5	31.2
62.5°	26.6	27.9	27.9	27.9	27.2
65°	22.6	23.2	23.2	23.2	22.6
67.5°	19.3	19.3	19.3	19.3	19.3
70°	15.9	15.9	15.9	15.9	15.9
72.5°	13.3	13.3	13.3	13.3	13.3
75°	10.6	10.6	10.6	10.6	10.6
77.5°	8.6	8.6	8.0	8.6	8.0
80°	6.0	6.0	6.0	6.0	6.0
82.5°	4.6	4.6	4.6	4.6	4.6
85°	2.7	2.7	2.7	2.7	2.7
87.5°	1.3	1.3	1.3	1.3	1.3
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)