

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: P241683

Luminaire Tested: **PRS410D010-S4M12-44SNDMW**

Issue Date: 03/03/2020

Test Information

Test Method: LM-79-08
Report Number: P241683
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G1-1802-584-40)
Test Lab: INNOVATION CENTER(G1)
Issue Date: 03/03/2020
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: HALO COMMERCIAL
Catalog Number: PRS410D010-S4M12-44SNDMW
Description: HALO COMMERCIAL 4" SQUARE, NEW CONSTRUCTION FRAME, WITH 4" NARROW DISTRIBUTION, SHALLOW 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: 937.0 lumens
Efficiency: N/A
Efficacy: 93.7 lumens/watt
Spacing Criteria (0/90/45): 0.89 / 0.89 / 0.94
Luminous Opening: Rectangular (W 0.38' x L: 0.38' x H: 0')
CIE Type: Direct

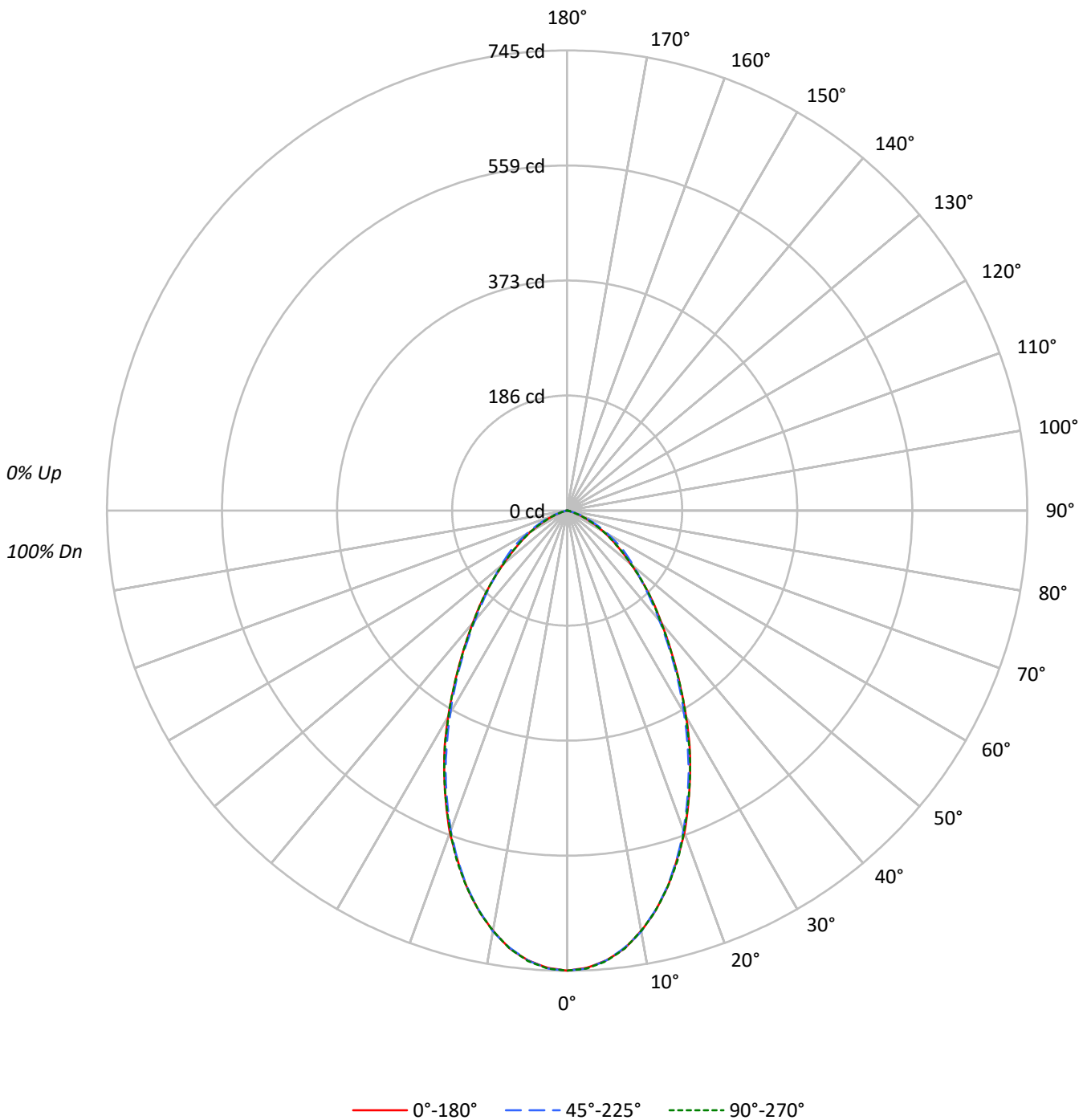
Input Watts (W): 10
Input Voltage (V): NR
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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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	103	109	106	104	101	102	100	98	98	97	95	95	93	92	90					90			
2	105	98	93	89	102	97	92	88	93	89	86	90	87	84	87	85	82	81					81			
3	98	89	83	78	95	88	82	78	85	80	76	83	78	75	80	77	74	72					72			
4	91	82	75	69	89	80	74	69	78	73	68	76	71	67	74	70	66	65					65			
5	85	75	68	62	83	74	67	62	72	66	61	70	65	61	68	64	60	58					58			
6	80	69	62	56	78	68	61	56	66	60	56	65	59	55	63	59	55	53					53			
7	75	64	56	51	73	63	56	51	62	55	51	60	55	51	59	54	50	49					49			
8	71	59	52	47	69	59	52	47	57	51	47	56	51	47	55	50	46	45					45			
9	67	55	48	43	65	55	48	43	54	47	43	53	47	43	52	47	43	41					41			
10	63	52	45	40	62	51	45	40	50	44	40	49	44	40	49	43	40	38					38			

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	57010	57010	57010
5°	56152	56152	56228
10°	53692	53770	53692
15°	49916	49836	49916
20°	45200	44874	45037
25°	39770	39348	39770
30°	34019	33401	33931
35°	28397	28023	28304
40°	23671	23271	23571
45°	19810	19485	19918
50°	16076	16790	16076
55°	12945	14546	13078
60°	10257	11482	10257
65°	7426	8694	7426
70°	4476	5595	4476
75°	1479	2366	1479
80°	1322	1322	1322
85°	878	878	878



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	68.5	7.3
10°-20°	175.6	18.7
20°-30°	214.3	22.9
30°-40°	189.4	20.2
40°-50°	141.4	15.1
50°-60°	91.7	9.8
60°-70°	45.2	4.8
70°-80°	9.8	1.0
80°-90°	1.2	0.1
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°	458.4	48.9
0°-40°	647.8	69.1
0°-60°	880.8	94.0
0°-90°	937.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	937.0	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	745	745	745	745	745	
5°	731	731	731	732	732	69
15°	630	630	629	630	630	176
25°	471	470	466	469	471	216
35°	304	302	300	302	303	191
45°	183	183	180	182	184	142
55°	97	100	109	101	98	88
65°	41	46	48	45	41	42
75°	5	6	8	6	5	9
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°	744.8	744.8	744.8	744.8	744.8
2.5°	740.8	740.8	741.8	741.8	741.8
5°	730.8	730.8	730.8	731.8	731.8
7.5°	714.8	713.8	713.8	714.8	714.8
10°	690.8	690.8	691.8	689.8	690.8
12.5°	662.9	662.9	661.9	662.9	662.9
15°	629.9	629.9	628.9	629.9	629.9
17.5°	591.9	591.9	590.9	592.9	593.9
20°	554.9	553.9	550.9	552.9	552.9
22.5°	512.9	511.9	507.9	510.9	511.9
25°	470.9	469.9	465.9	468.9	470.9
27.5°	428.9	424.9	420.9	425.9	427.9
30°	384.9	381.9	377.9	381.9	383.9
32.5°	342.9	341.9	337.9	340.9	342.9
35°	303.9	301.9	299.9	301.9	302.9
37.5°	268.9	266.9	263.9	266.9	268.9
40°	236.9	234.9	232.9	233.9	235.9
42.5°	210.0	208.0	205.0	207.0	209.0
45°	183.0	183.0	180.0	182.0	184.0
47.5°	158.0	160.0	159.0	160.0	159.0
50°	135.0	139.0	141.0	139.0	135.0
52.5°	115.0	118.0	124.0	118.0	115.0
55°	97.0	100.0	109.0	101.0	98.0
57.5°	82.0	85.0	92.0	85.0	82.0
60°	67.0	71.0	75.0	71.0	67.0
62.5°	54.0	58.0	61.0	58.0	53.0
65°	41.0	46.0	48.0	45.0	41.0
67.5°	30.0	34.0	36.0	34.0	30.0
70°	20.0	24.0	25.0	24.0	20.0
72.5°	12.0	15.0	15.0	14.0	12.0
75°	5.0	6.0	8.0	6.0	5.0
77.5°	4.0	4.0	4.0	4.0	4.0
80°	3.0	3.0	3.0	3.0	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°	0.0	0.0	0.0	0.0	0.0
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)