

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: P252958

Luminaire Tested: **PRS410D010-S4M12-41SWDMW-3000K**

Issue Date: 03/03/2020

Test Information

Test Method: LM-79-08
Report Number: P252958
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-3000K
Description: HALO COMMERCIAL 4" SQUARE, NEW CONSTRUCTION FRAME, WITH 4" WIDE DISTRIBUTION, DEEP TRIM MATTE WHITE
Light Source: ARRAYS OF HIGH LUMEN LEDS 80CRI / 3000K CCT
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 825.0 lumens
Efficiency: N/A
Efficacy: 82.5 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

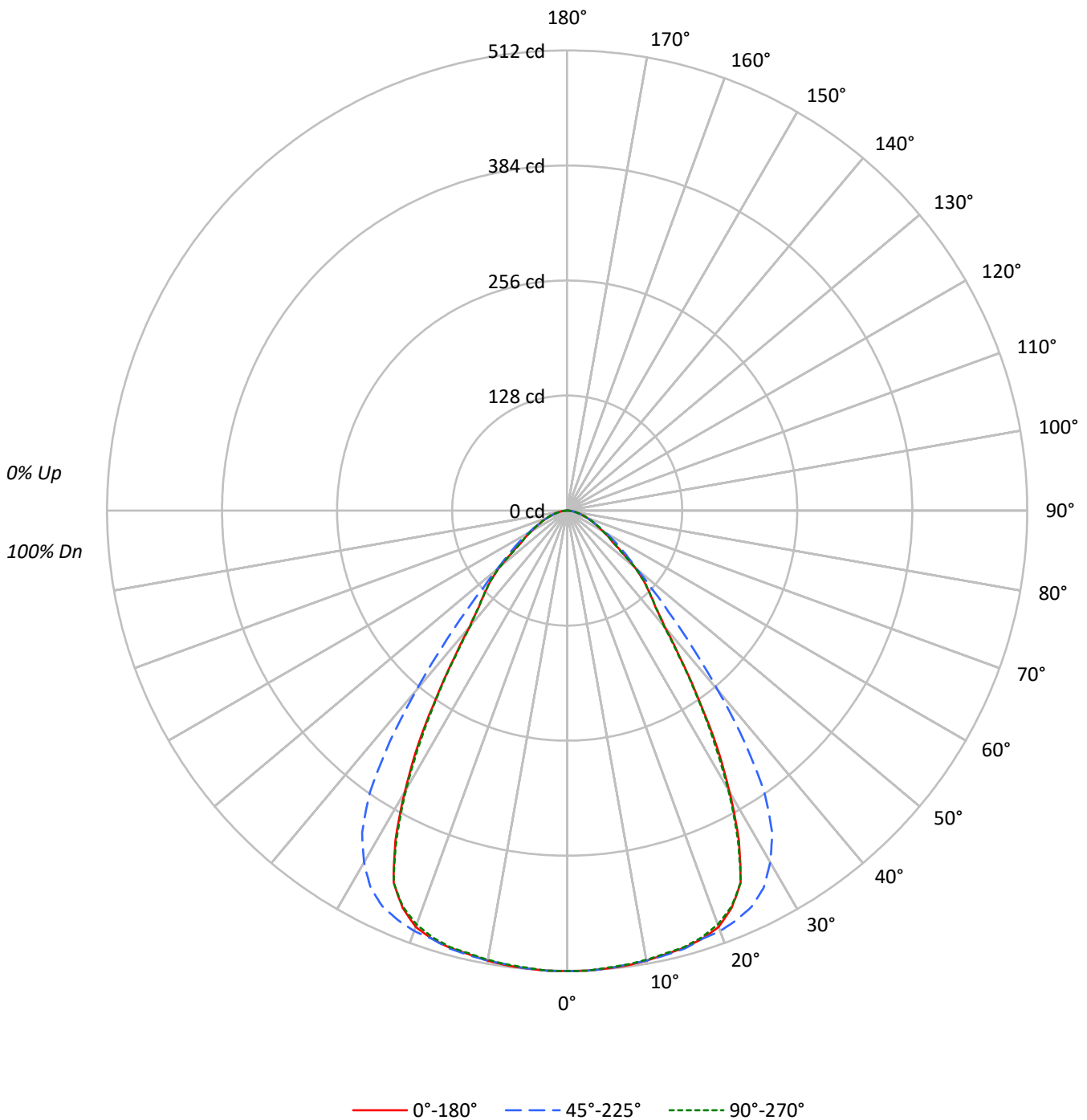
Input Watts (W): 10
Input Voltage (V): NR
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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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°	39221	39221	39221
5°	39302	39302	39225
10°	39523	39523	39445
15°	39907	39986	39836
20°	40150	40549	39913
25°	38580	41054	38580
30°	31916	39941	31659
35°	23622	35751	23435
40°	16877	26039	16677
45°	14051	17331	14051
50°	11741	12087	11741
55°	8341	9635	8461
60°	7027	7624	7027
65°	6013	6194	6013
70°	5237	5237	5237
75°	4614	4614	4614
80°	3879	3879	3879
85°	3425	3425	3425



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	48.7	5.9
10°-20°	142.3	17.2
20°-30°	212.6	25.8
30°-40°	189.3	22.9
40°-50°	112.6	13.7
50°-60°	63.8	7.7
60°-70°	34.2	4.1
70°-80°	16.7	2.0
80°-90°	4.7	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°	403.6	48.9
0°-40°	592.9	71.9
0°-60°	769.4	93.3
0°-90°	825.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	825.0	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	512	512	512	512	512	
5°	512	512	512	512	510	49
15°	504	504	505	503	503	142
25°	457	470	486	468	457	204
35°	253	296	383	295	251	160
45°	130	140	160	139	130	101
55°	62	69	72	69	63	60
65°	33	34	34	34	33	33
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°	512.4	512.4	512.4	512.4	512.4
2.5°	512.4	512.4	512.4	512.4	512.4
5°	511.5	511.5	511.5	511.5	510.5
7.5°	510.5	509.5	509.5	509.5	509.5
10°	508.5	508.5	508.5	507.5	507.5
12.5°	505.6	505.6	506.6	505.6	504.6
15°	503.6	503.6	504.6	502.7	502.7
17.5°	499.7	500.7	499.7	499.7	497.8
20°	492.9	495.8	497.8	494.9	490.0
22.5°	478.3	486.1	492.9	485.1	477.3
25°	456.8	469.5	486.1	468.5	456.8
27.5°	413.8	446.1	473.4	443.1	410.9
30°	361.1	400.2	451.9	397.3	358.2
32.5°	308.4	347.5	424.6	345.5	303.6
35°	252.8	295.7	382.6	294.8	250.8
37.5°	205.9	245.0	324.0	243.0	204.0
40°	168.9	199.1	260.6	198.1	166.9
42.5°	145.4	162.0	205.9	161.0	145.4
45°	129.8	139.6	160.1	138.6	129.8
47.5°	115.2	123.0	125.9	122.0	115.2
50°	98.6	107.4	101.5	107.4	98.6
52.5°	78.1	88.8	84.9	89.8	77.1
55°	62.5	69.3	72.2	69.3	63.4
57.5°	54.7	56.6	60.5	56.6	54.7
60°	45.9	47.8	49.8	47.8	45.9
62.5°	39.0	41.0	41.0	41.0	40.0
65°	33.2	34.2	34.2	34.2	33.2
67.5°	28.3	28.3	28.3	28.3	28.3
70°	23.4	23.4	23.4	23.4	23.4
72.5°	19.5	19.5	19.5	19.5	19.5
75°	15.6	15.6	15.6	15.6	15.6
77.5°	12.7	12.7	11.7	12.7	11.7
80°	8.8	8.8	8.8	8.8	8.8
82.5°	6.8	6.8	6.8	6.8	6.8
85°	3.9	3.9	3.9	3.9	3.9
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)