

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: P252929

Luminaire Tested: **PRS415D010-S4M12-41SWDC-3000K**

Issue Date: 03/03/2020

Test Information

Test Method: LM-79-08
Report Number: P252929
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: PRS415D010-S4M12-41SWDC-3000K
Description: HALO COMMERCIAL 4" SQUARE, NEW CONSTRUCTION FRAME, WITH 4" WIDE DISTRIBUTION, DEEP TRIM SPECULAR
Light Source: ARRAYS OF HIGH LUMEN LEDS 80CRI / 3000K CCT
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 1150.4 lumens
Efficiency: N/A
Efficacy: 95.9 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

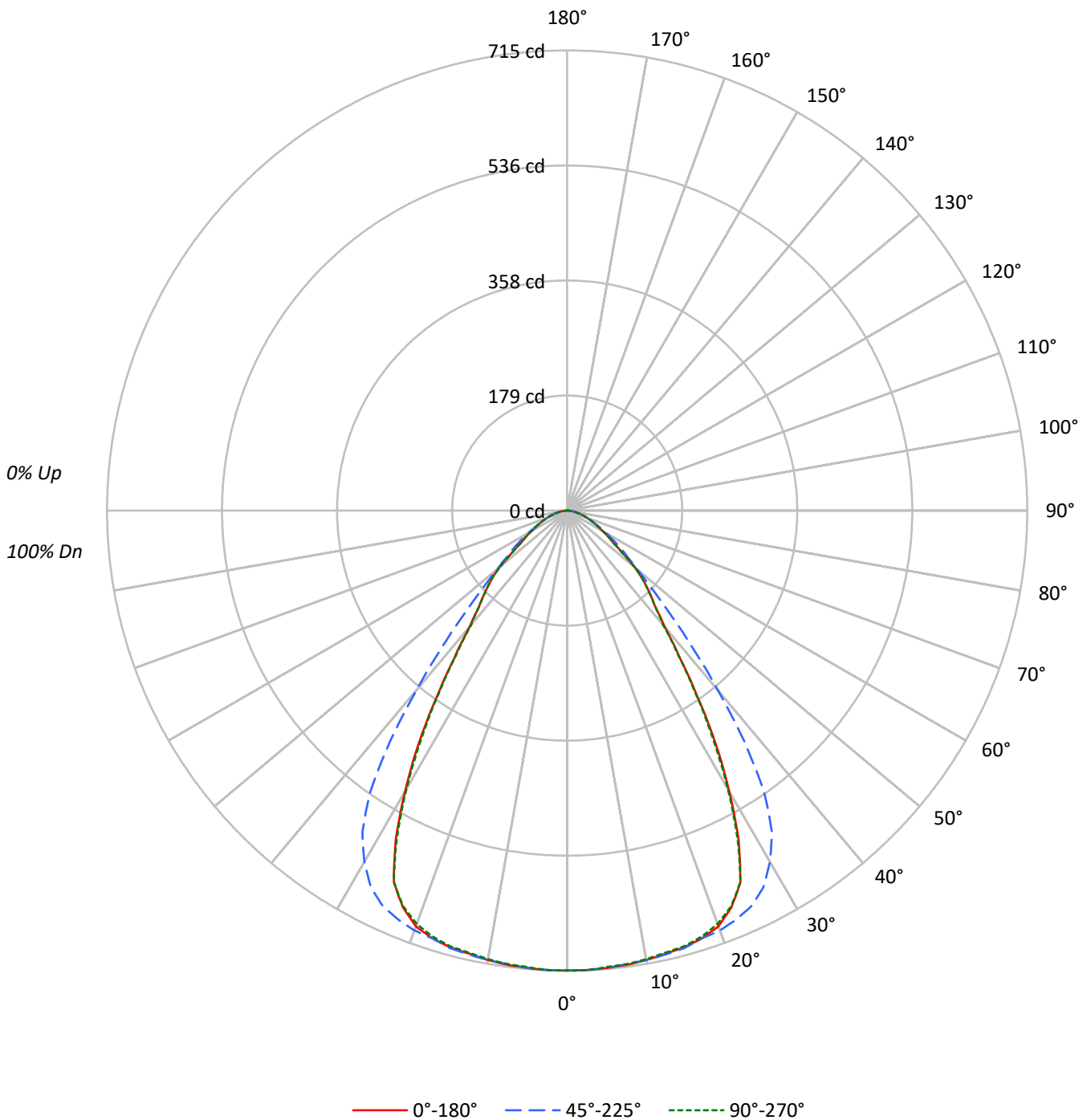
Input Watts (W): 12
Input Voltage (V): NR
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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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°	54698	54698	54698
5°	54799	54799	54699
10°	55122	55122	55013
15°	55661	55764	55550
20°	55993	56547	55659
25°	53799	57253	53799
30°	44511	55700	44148
35°	32938	49861	32686
40°	23531	36311	23261
45°	19593	24161	19593
50°	16374	16862	16374
55°	11623	13438	11810
60°	9798	10624	9798
65°	8386	8621	8386
70°	7318	7318	7318
75°	6447	6447	6447
80°	5422	5422	5422
85°	4742	4742	4742



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	67.9	5.9
10°-20°	198.4	17.2
20°-30°	296.5	25.8
30°-40°	264.0	22.9
40°-50°	157.1	13.7
50°-60°	89.0	7.7
60°-70°	47.7	4.1
70°-80°	23.4	2.0
80°-90°	6.5	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°	562.9	48.9
0°-40°	826.9	71.9
0°-60°	1072.9	93.3
0°-90°	1150.4	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	1150.4	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	715	715	715	715	715	
5°	713	713	713	713	712	68
15°	702	702	704	701	701	198
25°	637	655	678	653	637	284
35°	352	412	534	411	350	223
45°	181	195	223	193	181	141
55°	87	97	101	97	88	83
65°	46	48	48	48	46	47
75°	22	22	22	22	22	24
85°	5	5	5	5	5	6
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	714.6	714.6	714.6	714.6	714.6
2.5°	714.6	714.6	714.6	714.6	714.6
5°	713.2	713.2	713.2	713.2	711.9
7.5°	711.9	710.5	710.5	710.5	710.5
10°	709.2	709.2	709.2	707.8	707.8
12.5°	705.1	705.1	706.4	705.1	703.7
15°	702.4	702.4	703.7	701.0	701.0
17.5°	696.9	698.3	696.9	696.9	694.2
20°	687.4	691.5	694.2	690.1	683.3
22.5°	667.0	677.9	687.4	676.5	665.6
25°	637.0	654.7	677.9	653.4	637.0
27.5°	577.1	622.0	660.2	618.0	573.0
30°	503.6	558.1	630.2	554.0	499.5
32.5°	430.1	484.6	592.1	481.8	423.3
35°	352.5	412.4	533.6	411.1	349.8
37.5°	287.2	341.6	451.9	338.9	284.5
40°	235.5	277.7	363.4	276.3	232.8
42.5°	202.8	226.0	287.2	224.6	202.8
45°	181.0	194.6	223.2	193.3	181.0
47.5°	160.6	171.5	175.6	170.1	160.6
50°	137.5	149.7	141.6	149.7	137.5
52.5°	108.9	123.9	118.4	125.2	107.5
55°	87.1	96.6	100.7	96.6	88.5
57.5°	76.2	78.9	84.4	78.9	76.2
60°	64.0	66.7	69.4	66.7	64.0
62.5°	54.4	57.2	57.2	57.2	55.8
65°	46.3	47.6	47.6	47.6	46.3
67.5°	39.5	39.5	39.5	39.5	39.5
70°	32.7	32.7	32.7	32.7	32.7
72.5°	27.2	27.2	27.2	27.2	27.2
75°	21.8	21.8	21.8	21.8	21.8
77.5°	17.7	17.7	16.3	17.7	16.3
80°	12.3	12.3	12.3	12.3	12.3
82.5°	9.5	9.5	9.5	9.5	9.5
85°	5.4	5.4	5.4	5.4	5.4
87.5°	2.7	2.7	2.7	2.7	2.7
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)