

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: P252959

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

Issue Date: 03/03/2020

Test Information

Test Method: LM-79-08
Report Number: P252959
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-S4M12-41SWDMW-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: 1100.4 lumens
Efficiency: N/A
Efficacy: 91.7 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

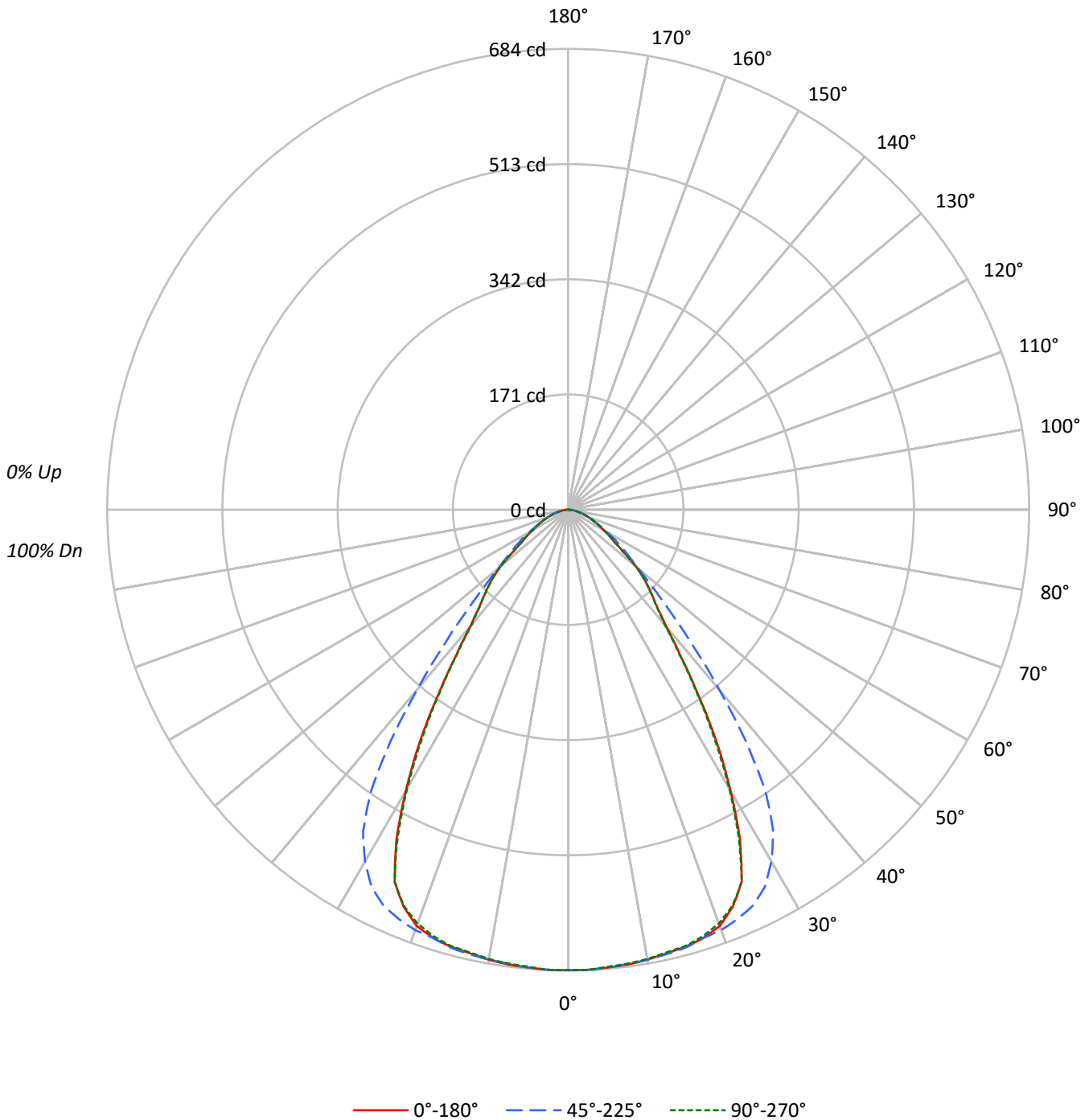
Input Watts (W): 12
Input Voltage (V): NR
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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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°	52317	52317	52317
5°	52417	52417	52317
10°	52720	52720	52619
15°	53236	53339	53133
20°	53557	54087	53239
25°	51459	54761	51459
30°	42575	53278	42230
35°	31509	47693	31266
40°	22502	34732	22242
45°	18749	23111	18749
50°	15659	16123	15659
55°	11116	12851	11290
60°	9369	10165	9369
65°	8023	8259	8023
70°	6982	6982	6982
75°	6151	6151	6151
80°	5157	5157	5157
85°	4567	4567	4567



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	65.0	5.9
10°-20°	189.8	17.2
20°-30°	283.6	25.8
30°-40°	252.5	22.9
40°-50°	150.2	13.7
50°-60°	85.1	7.7
60°-70°	45.6	4.1
70°-80°	22.3	2.0
80°-90°	6.2	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°	538.4	48.9
0°-40°	790.9	71.9
0°-60°	1026.2	93.3
0°-90°	1100.4	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	1100.4	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	684	684	684	684	684	
5°	682	682	682	682	681	65
15°	672	672	673	670	670	190
25°	609	626	648	625	609	272
35°	337	394	510	393	335	213
45°	173	186	214	185	173	134
55°	83	92	96	92	85	79
65°	44	46	46	46	44	45
75°	21	21	21	21	21	22
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°	683.5	683.5	683.5	683.5	683.5
2.5°	683.5	683.5	683.5	683.5	683.5
5°	682.2	682.2	682.2	682.2	680.9
7.5°	680.9	679.6	679.6	679.6	679.6
10°	678.3	678.3	678.3	677.0	677.0
12.5°	674.4	674.4	675.7	674.4	673.1
15°	671.8	671.8	673.1	670.5	670.5
17.5°	666.6	667.9	666.6	666.6	664.0
20°	657.5	661.4	664.0	660.1	653.6
22.5°	638.0	648.4	657.5	647.1	636.7
25°	609.3	626.2	648.4	624.9	609.3
27.5°	552.0	595.0	631.5	591.1	548.1
30°	481.7	533.8	602.8	529.9	477.8
32.5°	411.4	463.5	566.4	460.9	404.9
35°	337.2	394.5	510.4	393.2	334.6
37.5°	274.7	326.8	432.3	324.2	272.1
40°	225.2	265.6	347.6	264.3	222.6
42.5°	194.0	216.1	274.7	214.8	194.0
45°	173.2	186.2	213.5	184.9	173.2
47.5°	153.6	164.0	168.0	162.7	153.6
50°	131.5	143.2	135.4	143.2	131.5
52.5°	104.2	118.5	113.3	119.8	102.9
55°	83.3	92.4	96.3	92.4	84.6
57.5°	72.9	75.5	80.7	75.5	72.9
60°	61.2	63.8	66.4	63.8	61.2
62.5°	52.1	54.7	54.7	54.7	53.4
65°	44.3	45.6	45.6	45.6	44.3
67.5°	37.8	37.8	37.8	37.8	37.8
70°	31.2	31.2	31.2	31.2	31.2
72.5°	26.0	26.0	26.0	26.0	26.0
75°	20.8	20.8	20.8	20.8	20.8
77.5°	16.9	16.9	15.6	16.9	15.6
80°	11.7	11.7	11.7	11.7	11.7
82.5°	9.1	9.1	9.1	9.1	9.1
85°	5.2	5.2	5.2	5.2	5.2
87.5°	2.6	2.6	2.6	2.6	2.6
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)