

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: P241869

Luminaire Tested: **PRS415D010-S4M12-41SNDMW-4000K**

Issue Date: 03/03/2020

Test Information

Test Method: LM-79-08
Report Number: P241869
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G1-1802-584-52)
Test Lab: INNOVATION CENTER(G1)
Issue Date: 03/03/2020
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: HALO COMMERCIAL
Catalog Number: PRS415D010-S4M12-41SNDMW-4000K
Description: HALO COMMERCIAL 4" SQUARE, NEW CONSTRUCTION FRAME, WITH 4" NARROW DISTRIBUTION, DEEP TRIM MATTE WHITE
Light Source: ARRAYS OF HIGH LUMEN LEDS 80CRI / 4000K CCT
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 1139.5 lumens
Efficiency: N/A
Efficacy: 95.0 lumens/watt
Spacing Criteria (0/90/45): 0.89 / 0.89 / 0.93
Luminous Opening: Rectangular (W 0.38' x L: 0.38' x H: 0')
CIE Type: Direct

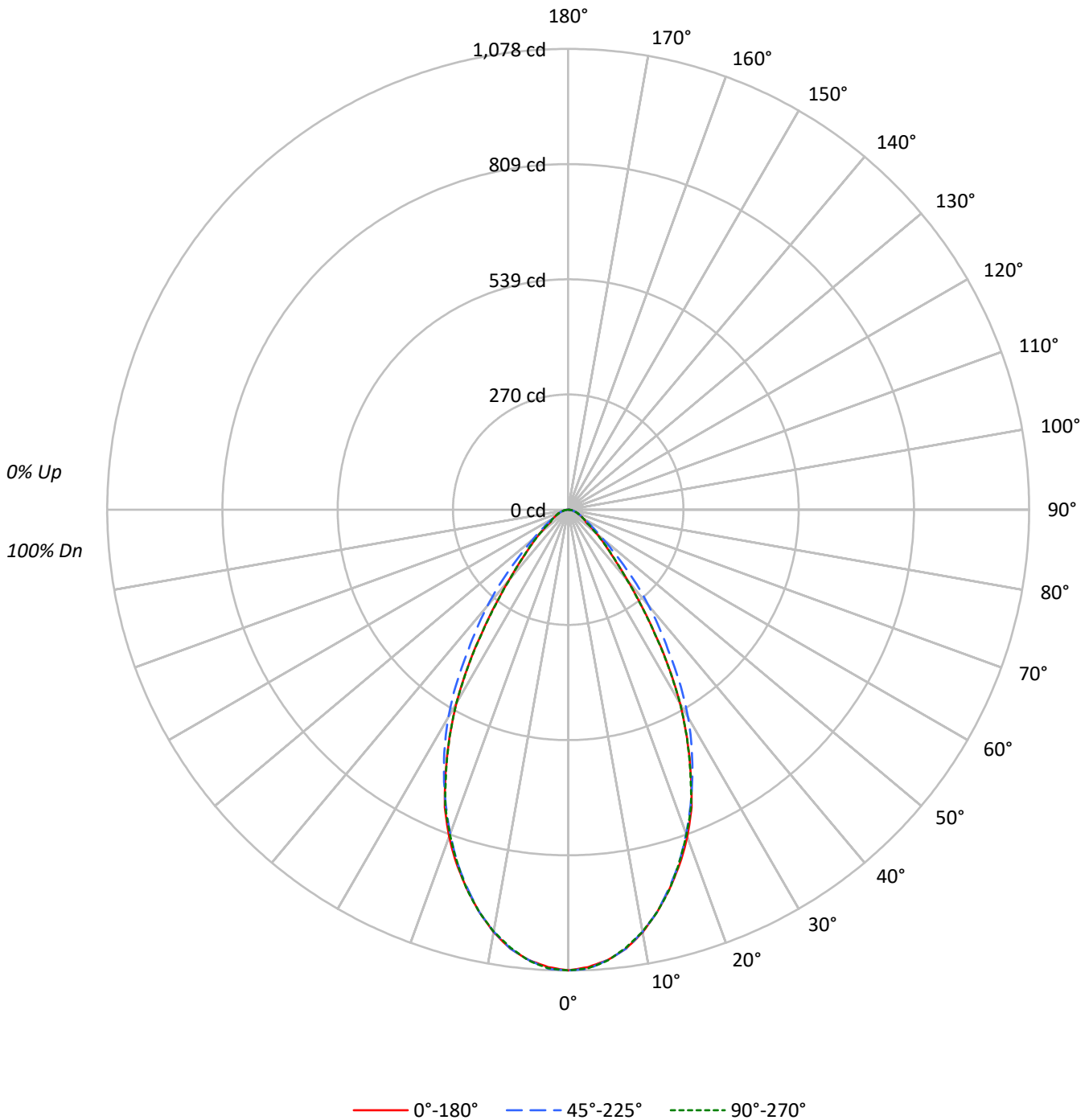
Input Watts (W): 12
Input Voltage (V): NR
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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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	0
RCR																				
0	119	119	119	119	116	116	116	116	111	111	111		106	106	106		102	102	102	100
1	112	109	106	104	110	107	104	102	103	101	99		99	97	96		96	94	93	91
2	106	100	95	91	103	98	94	90	95	91	88		92	89	86		89	87	85	83
3	99	92	86	82	97	91	85	81	88	83	80		85	82	78		83	80	77	75
4	94	85	79	74	92	84	78	73	81	76	72		79	75	71		77	74	71	69
5	88	79	72	67	86	78	71	67	76	70	66		74	69	66		72	68	65	63
6	83	73	66	61	82	72	66	61	71	65	61		69	64	60		68	63	60	58
7	79	68	61	57	77	67	61	57	66	60	56		65	60	56		64	59	56	54
8	74	64	57	53	73	63	57	52	62	56	52		61	56	52		60	55	52	50
9	70	60	53	49	69	59	53	49	58	53	49		57	52	48		56	52	48	47
10	67	56	50	46	66	56	50	46	55	49	45		54	49	45		53	49	45	44

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	82491	82491	82491
5°	81246	81246	81354
10°	77988	77887	77887
15°	72666	72452	72769
20°	66329	65670	65890
25°	57253	58055	57025
30°	46190	49540	46190
35°	32938	38741	32686
40°	21453	29287	21183
45°	14321	19734	14473
50°	10289	12539	10134
55°	6846	8834	6846
60°	6200	6613	6200
65°	5633	5633	5633
70°	5147	5147	5147
75°	4407	4407	4407
80°	4188	4188	4188
85°	3601	3601	3601



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	99.3	8.7
10°-20°	255.9	22.5
20°-30°	311.1	27.3
30°-40°	240.8	21.1
40°-50°	124.0	10.9
50°-60°	56.1	4.9
60°-70°	31.2	2.7
70°-80°	16.4	1.4
80°-90°	4.8	0.4
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°	666.3	58.5
0°-40°	907.0	79.6
0°-60°	1087.2	95.4
0°-90°	1139.5	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	1139.5	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	1078	1078	1078	1078	1078	
5°	1057	1060	1057	1059	1059	99
15°	917	917	914	916	918	256
25°	678	686	687	685	675	309
35°	352	388	415	386	350	222
45°	132	153	182	153	134	107
55°	51	59	66	59	51	51
65°	31	31	31	31	31	31
75°	15	15	15	15	15	16
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°	1077.7	1077.7	1077.7	1077.7	1077.7
2.5°	1070.9	1072.3	1075.0	1073.6	1073.6
5°	1057.4	1060.1	1057.4	1058.8	1058.8
7.5°	1035.8	1035.8	1035.8	1033.1	1033.1
10°	1003.4	1002.1	1002.1	1002.1	1002.1
12.5°	962.9	964.3	962.9	964.3	962.9
15°	917.0	917.0	914.3	915.6	918.3
17.5°	868.4	867.0	864.3	863.0	864.3
20°	814.3	810.3	806.2	808.9	808.9
22.5°	753.6	752.2	748.2	749.5	750.9
25°	677.9	686.0	687.4	684.7	675.2
27.5°	601.0	610.4	625.3	610.4	601.0
30°	522.6	537.5	560.5	537.5	522.6
32.5°	437.6	464.6	490.2	465.9	436.2
35°	352.5	387.6	414.6	386.2	349.8
37.5°	276.9	310.6	351.1	312.0	275.5
40°	214.7	245.8	293.1	245.8	212.0
42.5°	167.5	194.5	236.3	193.1	167.5
45°	132.3	152.6	182.3	152.6	133.7
47.5°	108.0	122.9	137.8	122.9	108.0
50°	86.4	97.2	105.3	97.2	85.1
52.5°	67.5	77.0	82.4	77.0	67.5
55°	51.3	59.4	66.2	59.4	51.3
57.5°	45.9	47.3	54.0	47.3	45.9
60°	40.5	40.5	43.2	40.5	40.5
62.5°	35.1	36.5	36.5	36.5	35.1
65°	31.1	31.1	31.1	31.1	31.1
67.5°	25.7	27.0	27.0	27.0	25.7
70°	23.0	23.0	23.0	23.0	23.0
72.5°	18.9	18.9	18.9	18.9	18.9
75°	14.9	14.9	14.9	14.9	14.9
77.5°	12.2	12.2	12.2	12.2	12.2
80°	9.5	9.5	9.5	9.5	9.5
82.5°	6.8	6.8	6.8	6.8	6.8
85°	4.1	4.1	4.1	4.1	4.1
87.5°	1.4	1.4	1.4	2.7	2.7
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)