

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: P241969

Luminaire Tested: **PRS415D010-S4M12-41SMDC**

Issue Date: 03/03/2020

Test Information

Test Method: LM-79-08
Report Number: P241969
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G1-1802-584-59)
Test Lab: INNOVATION CENTER(G1)
Issue Date: 03/03/2020
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: HALO COMMERCIAL
Catalog Number: PRS415D010-S4M12-41SMDC
Description: HALO COMMERCIAL 4" SQUARE, NEW CONSTRUCTION FRAME, WITH 4" MEDIUM DISTRIBUTION, DEEP TRIM SPECULAR
Light Source: ARRAYS OF HIGH LUMEN LEDS 80CRI / 3500K CCT
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 1253.9 lumens
Efficiency: N/A
Efficacy: 104.5 lumens/watt
Spacing Criteria (0/90/45): 0.82 / 0.82 / 0.85
Luminous Opening: Rectangular (W 0.38' x L: 0.38' x H: 0')
CIE Type: Direct

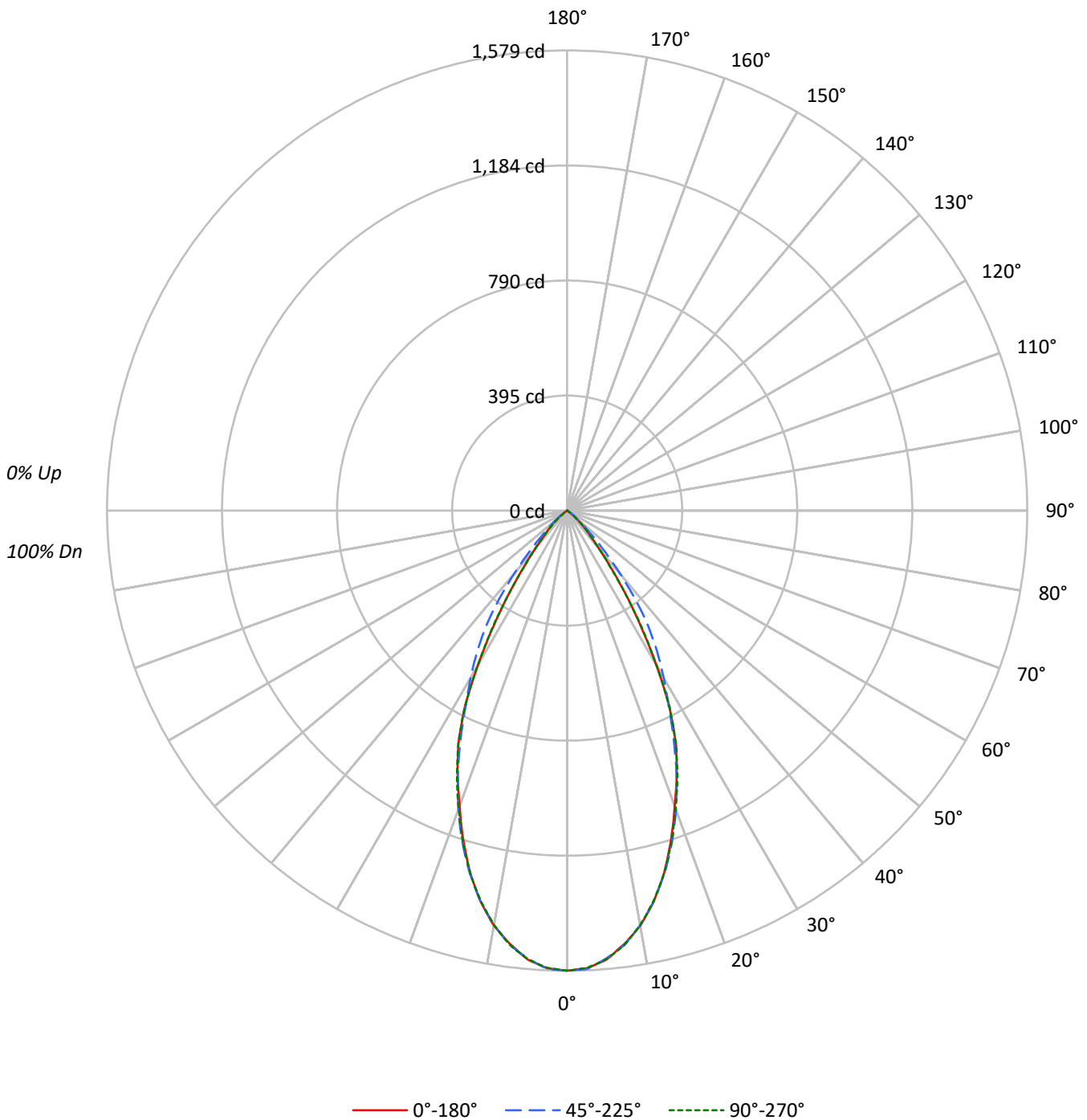
Input Watts (W): 12
Input Voltage (V): NR
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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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	0	
RCR																						
0	119	119	119	119	116	116	116	116	111	111	111	106	106	106	102	102	102	100				100
1	114	111	108	106	111	109	107	105	105	103	101	101	100	98	98	96	95	94				94
2	108	103	99	96	106	102	98	95	98	95	93	95	93	91	93	91	89	87				87
3	103	96	92	88	101	95	91	87	92	89	86	90	87	84	88	85	83	81				81
4	98	90	85	81	96	89	84	80	87	83	79	85	81	78	83	80	77	76				76
5	93	85	79	75	91	84	78	74	82	77	74	80	76	73	79	75	72	71				71
6	88	79	73	69	87	79	73	69	77	72	69	76	71	68	74	71	68	66				66
7	84	75	69	65	83	74	68	64	73	68	64	72	67	64	70	66	63	62				62
8	80	70	65	61	79	70	64	60	69	64	60	68	63	60	67	63	60	58				58
9	76	67	61	57	75	66	61	57	65	60	57	64	60	56	63	59	56	55				55
10	73	63	57	54	72	63	57	53	62	57	53	61	56	53	60	56	53	52				52

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	120831	120831	120831
5°	118834	118527	118734
10°	112436	112226	112226
15°	101955	102169	101955
20°	87858	88950	88624
25°	74541	72970	74541
30°	54206	58449	54091
35°	32518	45469	32396
40°	16917	27978	16787
45°	9234	13282	8952
50°	4132	5561	3965
55°	360	2309	173
60°	199	612	199
65°	0	235	0
70°	0	0	0
75°	0	0	0
80°	0	0	0
85°	0	0	0



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	144.3	11.5
10°-20°	357.4	28.5
20°-30°	398.4	31.8
30°-40°	256.4	20.5
40°-50°	83.6	6.7
50°-60°	13.1	1.0
60°-70°	0.6	0.1
70°-80°	0.0	0.0
80°-90°	0.0	0.0
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°	900.1	71.8
0°-40°	1156.5	92.2
0°-60°	1253.2	99.9
0°-90°	1253.9	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	1253.9	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	1579	1579	1579	1579	1579	
5°	1547	1547	1543	1548	1545	144
15°	1287	1287	1289	1289	1287	357
25°	883	881	864	881	883	395
35°	348	401	487	400	347	223
45°	85	97	123	95	83	69
55°	3	11	17	11	1	8
65°	0	0	1	0	0	0
75°	0	0	0	0	0	0
85°	0	0	0	0	0	0
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	1578.6	1578.6	1578.6	1578.6	1578.6
2.5°	1571.9	1573.3	1574.6	1573.3	1570.6
5°	1546.6	1546.6	1542.6	1547.9	1545.3
7.5°	1499.9	1501.3	1503.9	1501.3	1503.9
10°	1446.6	1443.9	1443.9	1443.9	1443.9
12.5°	1373.3	1371.9	1373.3	1371.9	1371.9
15°	1286.6	1286.6	1289.3	1289.3	1286.6
17.5°	1185.3	1188.0	1194.6	1193.3	1190.6
20°	1078.6	1084.0	1092.0	1085.3	1088.0
22.5°	982.6	977.3	980.0	977.3	988.0
25°	882.6	881.3	864.0	881.3	882.6
27.5°	760.0	778.6	753.3	780.0	760.0
30°	613.3	660.0	661.3	665.3	612.0
32.5°	470.6	525.3	574.6	528.0	476.0
35°	348.0	401.3	486.6	400.0	346.7
37.5°	242.7	290.7	385.3	289.3	240.0
40°	169.3	201.3	280.0	202.7	168.0
42.5°	118.7	140.0	190.7	136.0	117.3
45°	85.3	97.3	122.7	94.7	82.7
47.5°	58.7	68.0	76.0	66.7	57.3
50°	34.7	45.3	46.7	45.3	33.3
52.5°	16.0	25.3	29.3	25.3	16.0
55°	2.7	10.7	17.3	10.7	1.3
57.5°	1.3	1.3	9.3	1.3	1.3
60°	1.3	1.3	4.0	1.3	1.3
62.5°	1.3	1.3	1.3	1.3	1.3
65°	0.0	0.0	1.3	0.0	0.0
67.5°	0.0	0.0	0.0	0.0	0.0
70°	0.0	0.0	0.0	0.0	0.0
72.5°	0.0	0.0	0.0	0.0	0.0
75°	0.0	0.0	0.0	0.0	0.0
77.5°	0.0	0.0	0.0	0.0	0.0
80°	0.0	0.0	0.0	0.0	0.0
82.5°	0.0	0.0	0.0	0.0	0.0
85°	0.0	0.0	0.0	0.0	0.0
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)