

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: P241954

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

Issue Date: 03/03/2020

Test Information

Test Method: LM-79-08
Report Number: P241954
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G1-1802-584-58)
Test Lab: INNOVATION CENTER(G1)
Issue Date: 03/03/2020
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: HALO COMMERCIAL
Catalog Number: PRS415D010-S4M12-41SNDC
Description: HALO COMMERCIAL 4" SQUARE, NEW CONSTRUCTION FRAME, WITH 4" NARROW DISTRIBUTION, DEEP TRIM SPECULAR
Light Source: ARRAYS OF HIGH LUMEN LEDS 80CRI / 3500K CCT
Ballast/Driver: ELECTRONIC DRIVER

Summary

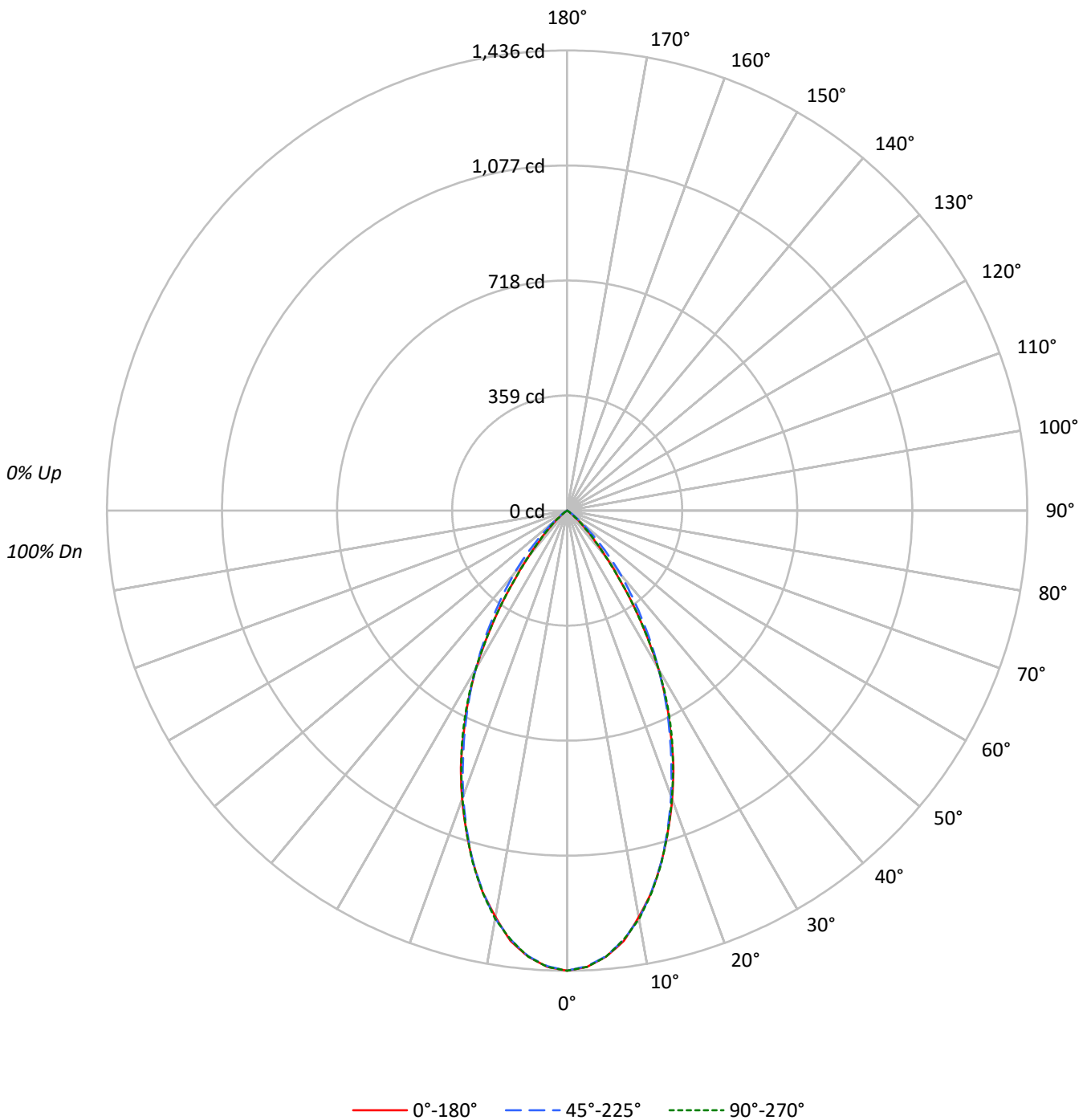
Lumens per Lamp: N/A
Luminaire Lumens: 1132.5 lumens
Efficiency: N/A
Efficacy: 94.4 lumens/watt
Spacing Criteria (0/90/45): 0.8 / 0.79 / 0.83
Luminous Opening: Rectangular (W 0.38' x L: 0.38' x H: 0')
CIE Type: Direct

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	114	111	108	106	111	109	106	104	105	103	101		101	100	98		97	96	95	94
2	108	103	99	96	106	101	98	95	98	95	93		95	93	91		92	91	89	87
3	103	96	91	87	101	95	90	87	92	88	85		90	87	84		87	85	83	81
4	97	90	84	80	96	89	84	80	87	82	79		85	81	78		83	80	77	75
5	92	84	78	74	91	83	78	74	81	77	73		80	76	72		78	75	72	70
6	88	79	73	69	86	78	73	68	77	72	68		75	71	68		74	70	67	66
7	83	74	68	64	82	74	68	64	72	67	63		71	67	63		70	66	63	61
8	79	70	64	60	78	69	64	60	68	63	59		67	63	59		66	62	59	58
9	76	66	60	56	75	66	60	56	65	59	56		64	59	56		63	59	55	54
10	72	62	57	53	71	62	57	53	61	56	53		60	56	52		60	55	52	51

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	109909	109909	109909
5°	107363	107255	107363
10°	100101	100412	100521
15°	90013	89910	90124
20°	78084	77220	77872
25°	64525	63731	65200
30°	50203	50317	50432
35°	33508	37125	33639
40°	18785	25709	18515
45°	9526	14722	9234
50°	3965	6514	3965
55°	173	2496	173
60°	199	612	199
65°	0	0	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°	130.0	11.5
10°-20°	315.5	27.9
20°-30°	347.6	30.7
30°-40°	237.3	21.0
40°-50°	88.4	7.8
50°-60°	13.4	1.2
60°-70°	0.3	0.0
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°	793.1	70.0
0°-40°	1030.3	91.0
0°-60°	1132.1	100.0
0°-90°	1132.5	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	1132.5	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	1436	1436	1436	1436	1436	
5°	1397	1397	1396	1396	1397	130
15°	1136	1135	1135	1135	1137	316
25°	764	764	755	765	772	349
35°	359	380	397	381	360	224
45°	88	105	136	103	85	73
55°	1	11	19	11	1	8
65°	0	0	0	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°	1435.9	1435.9	1435.9	1435.9	1435.9
2.5°	1425.3	1425.3	1422.6	1422.6	1425.3
5°	1397.3	1397.3	1395.9	1395.9	1397.3
7.5°	1354.6	1351.9	1350.6	1351.9	1350.6
10°	1287.9	1289.3	1291.9	1291.9	1293.3
12.5°	1218.6	1217.3	1217.3	1219.9	1219.9
15°	1135.9	1134.6	1134.6	1134.6	1137.3
17.5°	1046.6	1046.6	1042.6	1045.3	1046.6
20°	958.6	954.6	948.0	956.0	956.0
22.5°	866.6	860.0	849.3	861.3	862.6
25°	764.0	764.0	754.6	765.3	772.0
27.5°	668.0	662.6	662.6	666.6	673.3
30°	568.0	569.3	569.3	570.6	570.6
32.5°	460.0	474.6	482.6	474.6	460.0
35°	358.6	380.0	397.3	381.3	360.0
37.5°	261.3	292.0	324.0	290.7	262.7
40°	188.0	216.0	257.3	213.3	185.3
42.5°	128.0	153.3	193.3	149.3	128.0
45°	88.0	105.3	136.0	102.7	85.3
47.5°	57.3	70.7	88.0	69.3	57.3
50°	33.3	45.3	54.7	42.7	33.3
52.5°	16.0	25.3	32.0	25.3	16.0
55°	1.3	10.7	18.7	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°	0.0	0.0	1.3	0.0	0.0
65°	0.0	0.0	0.0	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)