

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: P241819

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

Issue Date: 03/03/2020

Test Information

Test Method: LM-79-08
Report Number: P241819
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G1-1802-584-49)
Test Lab: INNOVATION CENTER(G1)
Issue Date: 03/03/2020
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: HALO COMMERCIAL
Catalog Number: PRS415D010-S4M12-41SNDMB
Description: HALO COMMERCIAL 4" SQUARE, NEW CONSTRUCTION FRAME, WITH 4" NARROW DISTRIBUTION, DEEP TRIM MATTE BLACK
Light Source: ARRAYS OF HIGH LUMEN LEDS 80CRI / 3500K CCT
Ballast/Driver: ELECTRONIC DRIVER

Summary

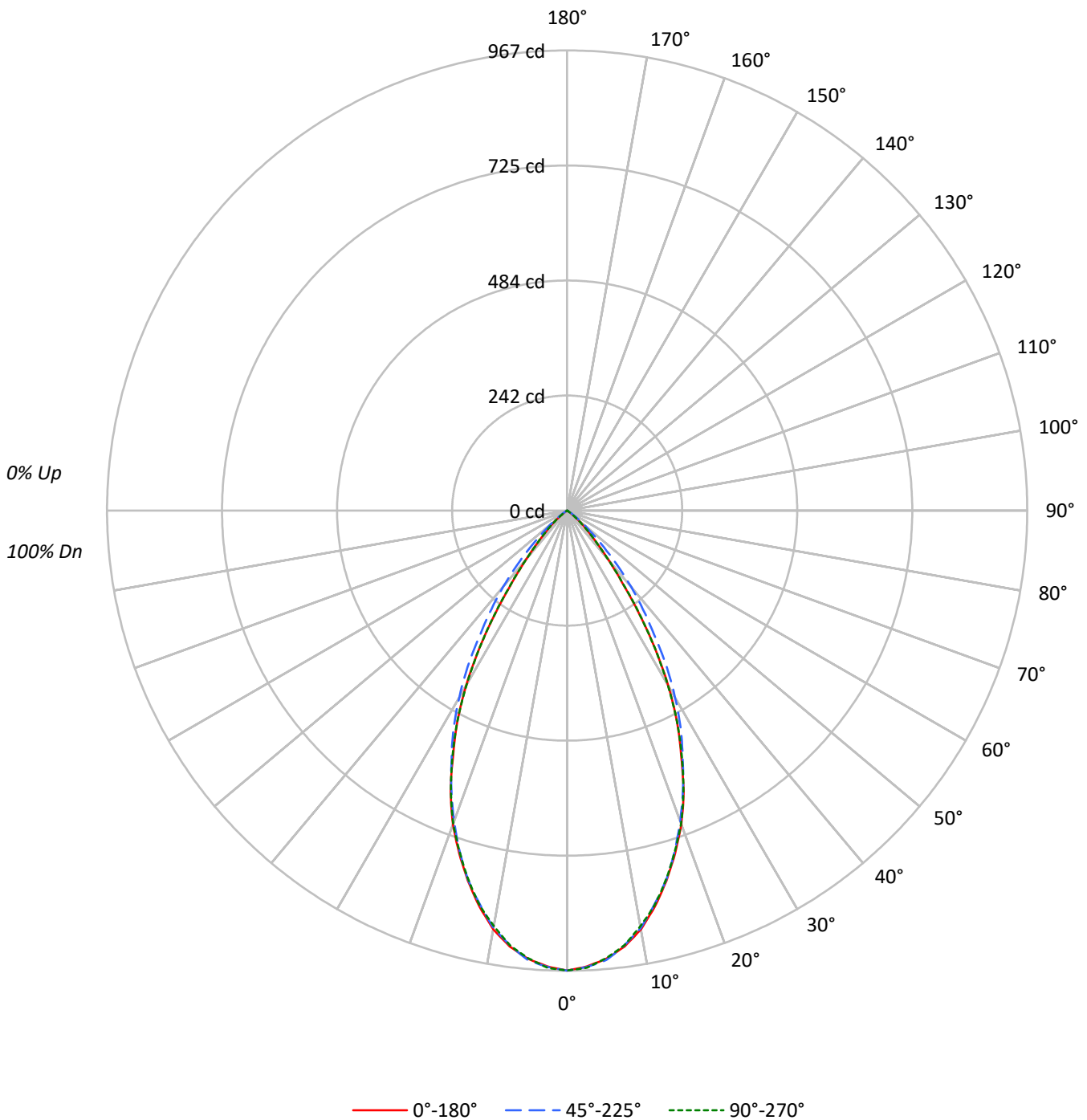
Lumens per Lamp: N/A
Luminaire Lumens: 835.0 lumens
Efficiency: N/A
Efficacy: 69.6 lumens/watt
Spacing Criteria (0/90/45): 0.85 / 0.85 / 0.89
Luminous Opening: Rectangular (W 0.38' x L: 0.38' x H: 0')
CIE Type: Direct

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				
1	113	111	108	106	111	109	106	104	105	103	101	101	99	98	97	96	95	93				
2	108	103	99	95	106	101	98	94	98	95	92	95	93	90	92	90	88	87				
3	102	96	91	87	100	94	90	86	92	88	85	89	86	83	87	84	82	81				
4	97	89	84	80	95	88	83	79	86	82	78	84	80	77	82	79	76	75				
5	92	84	78	73	90	83	77	73	81	76	72	79	75	72	78	74	71	70				
6	87	78	72	68	86	78	72	68	76	71	67	75	70	67	73	69	66	65				
7	83	74	67	63	82	73	67	63	72	66	63	70	66	62	69	65	62	61				
8	79	69	63	59	78	69	63	59	67	62	59	66	62	58	65	61	58	57				
9	75	65	59	55	74	65	59	55	64	59	55	63	58	55	62	58	55	53				
10	71	62	56	52	70	61	56	52	60	55	52	60	55	51	59	54	51	50				

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	73995	73995	73995
5°	72641	72840	72533
10°	69439	69229	68918
15°	63823	63712	63609
20°	57133	56587	57019
25°	47861	48537	48199
30°	37599	40074	37360
35°	24416	29780	24669
40°	13459	20913	13189
45°	6636	11832	6928
50°	3013	5240	3013
55°	173	1962	173
60°	0	413	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°	88.5	10.6
10°-20°	224.0	26.8
20°-30°	261.0	31.3
30°-40°	182.4	21.8
40°-50°	68.2	8.2
50°-60°	10.7	1.3
60°-70°	0.2	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
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0°-30°	573.5	68.7
0°-40°	755.9	90.5
0°-60°	834.8	100.0
0°-90°	835.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	835.0	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	967	967	967	967	967	
5°	945	947	948	944	944	89
15°	805	805	804	804	803	225
25°	567	575	575	576	571	259
35°	261	291	319	292	264	165
45°	61	80	109	80	64	52
55°	1	8	15	9	1	6
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°	966.7	966.7	966.7	966.7	966.7
2.5°	958.7	958.7	960.0	960.0	961.4
5°	945.4	946.7	948.0	944.0	944.0
7.5°	924.0	922.7	921.4	921.4	921.4
10°	893.4	892.0	890.7	888.0	886.7
12.5°	852.0	850.7	848.0	849.4	849.4
15°	805.4	805.4	804.0	804.0	802.7
17.5°	754.7	753.4	750.7	752.0	752.0
20°	701.4	698.7	694.7	696.0	700.0
22.5°	640.0	641.4	636.0	638.7	638.7
25°	566.7	574.7	574.7	576.0	570.7
27.5°	500.0	505.4	517.4	504.0	500.0
30°	425.4	436.0	453.4	434.7	422.7
32.5°	342.7	364.0	389.3	365.3	342.7
35°	261.3	290.7	318.7	292.0	264.0
37.5°	188.0	221.3	261.3	224.0	190.7
40°	134.7	164.0	209.3	164.0	132.0
42.5°	92.0	114.7	156.0	116.0	92.0
45°	61.3	80.0	109.3	80.0	64.0
47.5°	41.3	54.7	70.7	54.7	41.3
50°	25.3	36.0	44.0	36.0	25.3
52.5°	12.0	20.0	25.3	20.0	12.0
55°	1.3	8.0	14.7	9.3	1.3
57.5°	1.3	1.3	8.0	1.3	1.3
60°	0.0	1.3	2.7	1.3	1.3
62.5°	0.0	0.0	0.0	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)