

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: P252915

Luminaire Tested: **PRS420D010-S4M12-44SWDMB-3000K**

Issue Date: 03/03/2020

Test Information

Test Method: LM-79-08
Report Number: P252915
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G1-1804-748-2)
Test Lab: INNOVATION CENTER(G1)
Issue Date: 03/03/2020
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: HALO COMMERCIAL
Catalog Number: PRS420D010-S4M12-44SWDMB-3000K
Description: HALO COMMERCIAL 4" SQUARE, NEW CONSTRUCTION FRAME, WITH 4" WIDE DISTRIBUTION, SHALLOW TRIM MATTE BLACK
Light Source: ARRAYS OF HIGH LUMEN LEDS 80CRI / 3000K CCT
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 1801.1 lumens
Efficiency: N/A
Efficacy: 90.1 lumens/watt
Spacing Criteria (0/90/45): 1.29 / 1.29 / 1.41
Luminous Opening: Rectangular (W 0.38' x L: 0.38' x H: 0')
CIE Type: Direct

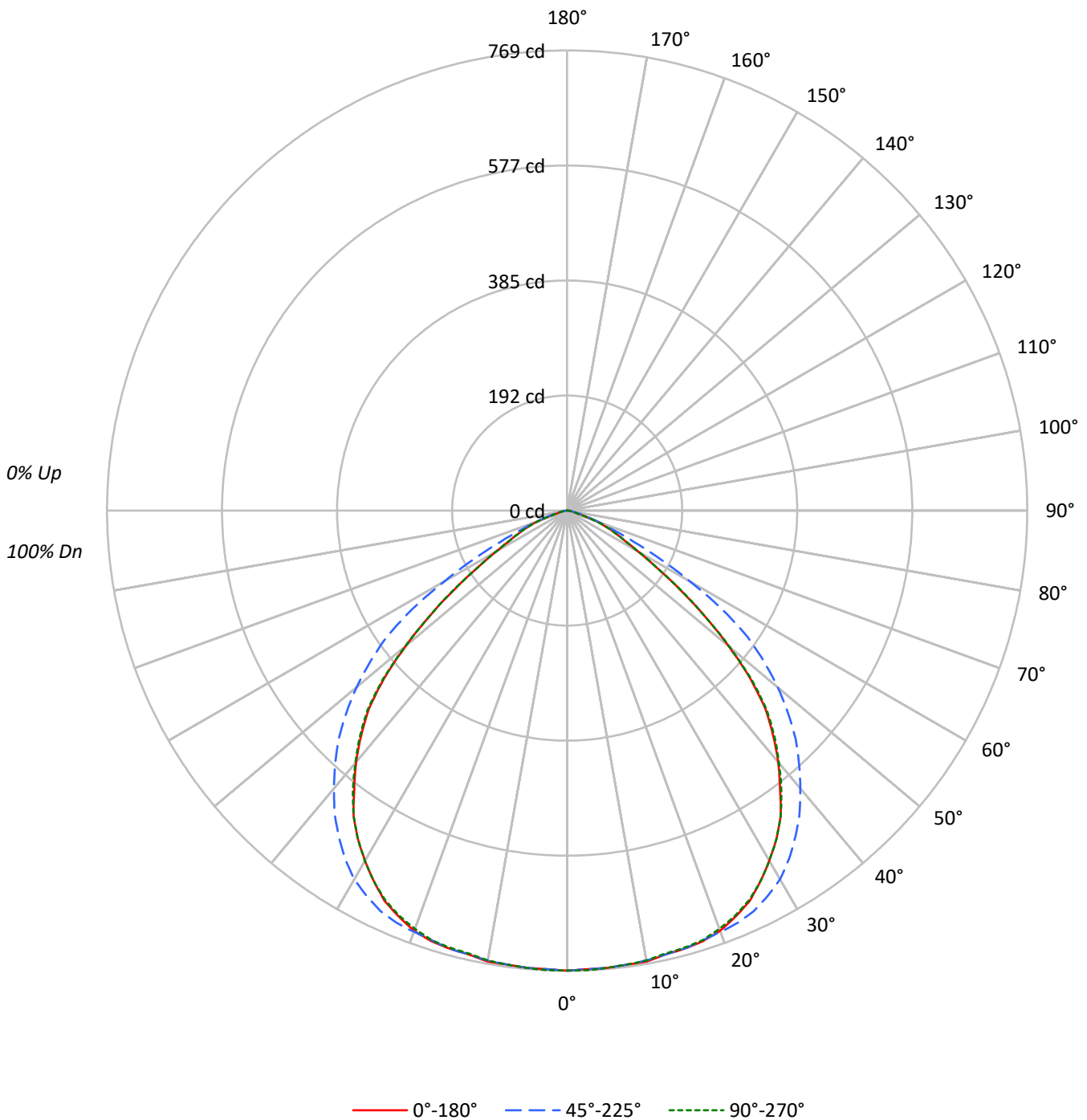
Input Watts (W): 20
Input Voltage (V): NR
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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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	111	107	104	101	108	105	102	99	101	98	96	97	95	93	94	92	90	88
2	103	96	90	85	100	94	89	84	91	86	82	87	84	81	85	82	79	77
3	95	86	79	73	92	84	78	73	81	76	71	79	74	70	76	72	69	67
4	87	77	69	63	85	76	68	63	73	67	62	71	66	61	69	64	61	59
5	81	69	61	55	79	68	61	55	66	60	55	64	59	54	63	58	53	52
6	75	63	55	49	73	62	54	49	60	53	48	59	53	48	57	52	48	46
7	70	57	49	44	68	57	49	43	55	48	43	54	47	43	52	47	43	41
8	65	52	45	39	64	52	44	39	51	44	39	49	43	39	48	43	38	37
9	61	48	41	35	59	48	40	35	47	40	35	46	39	35	45	39	35	33
10	57	45	37	32	56	44	37	32	43	36	32	42	36	32	41	36	32	30

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	58847	58847	58847
5°	58933	58933	58933
10°	59475	59335	59335
15°	60075	60075	59932
20°	60872	61019	60579
25°	60851	62363	60699
30°	59730	62895	59730
35°	58140	62148	58140
40°	54846	60562	55026
45°	50704	58443	51093
50°	41940	54717	42154
55°	30773	49149	31014
60°	20804	36404	21080
65°	15866	22024	15866
70°	11593	12398	11212
75°	4761	6861	4761
80°	3923	3923	3923
85°	3162	3162	3162



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	73.1	4.1
10°-20°	214.2	11.9
20°-30°	334.6	18.6
30°-40°	400.3	22.2
40°-50°	384.7	21.4
50°-60°	258.4	14.3
60°-70°	105.5	5.9
70°-80°	26.2	1.5
80°-90°	4.1	0.2
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°	622.0	34.5
0°-40°	1022.2	56.8
0°-60°	1665.3	92.5
0°-90°	1801.1	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	1801.1	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	769	769	769	769	769	
5°	767	767	767	767	767	73
15°	758	758	758	756	756	214
25°	720	728	738	726	719	331
35°	622	640	665	642	622	386
45°	468	502	540	504	472	355
55°	231	279	368	281	232	209
65°	88	98	122	98	88	88
75°	16	18	23	18	16	23
85°	4	4	4	4	4	4
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	768.8	768.8	768.8	768.8	768.8
2.5°	767.0	767.0	767.0	768.8	768.8
5°	767.0	767.0	767.0	767.0	767.0
7.5°	765.2	765.2	765.2	765.2	765.2
10°	765.2	763.4	763.4	763.4	763.4
12.5°	759.8	759.8	759.8	759.8	758.1
15°	758.1	758.1	758.1	756.3	756.3
17.5°	754.5	754.5	752.7	752.7	752.7
20°	747.3	749.1	749.1	747.3	743.7
22.5°	734.8	740.2	745.5	738.4	733.0
25°	720.5	727.7	738.4	725.9	718.7
27.5°	699.1	709.8	725.9	709.8	699.1
30°	675.8	690.1	711.6	690.1	675.8
32.5°	650.8	666.9	690.1	666.9	650.8
35°	622.2	640.1	665.1	641.8	622.2
37.5°	584.6	609.7	638.3	613.2	588.2
40°	548.9	575.7	606.1	577.5	550.7
42.5°	509.5	539.9	573.9	541.7	513.1
45°	468.4	502.4	539.9	504.2	472.0
47.5°	414.8	455.9	500.6	461.3	418.4
50°	352.2	404.1	459.5	407.6	354.0
52.5°	289.6	339.7	414.8	343.3	289.6
55°	230.6	278.9	368.3	280.7	232.4
57.5°	177.0	219.9	307.5	223.5	177.0
60°	135.9	168.1	237.8	169.8	137.7
62.5°	107.3	126.9	175.2	125.1	107.3
65°	87.6	98.3	121.6	98.3	87.6
67.5°	69.7	76.9	80.5	76.9	69.7
70°	51.8	59.0	55.4	59.0	50.1
72.5°	30.4	37.5	37.5	37.5	28.6
75°	16.1	17.9	23.2	17.9	16.1
77.5°	12.5	12.5	14.3	12.5	12.5
80°	8.9	8.9	8.9	8.9	8.9
82.5°	5.4	5.4	5.4	5.4	5.4
85°	3.6	3.6	3.6	3.6	3.6
87.5°	1.8	1.8	1.8	1.8	1.8
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)