

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: P252925

Luminaire Tested: **PRS420D010-S4M12-44SWDMB-4000K**

Issue Date: 03/03/2020

Test Information

Test Method: LM-79-08
Report Number: P252925
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-4000K
Description: HALO COMMERCIAL 4" SQUARE, NEW CONSTRUCTION FRAME, WITH 4" WIDE DISTRIBUTION, SHALLOW TRIM MATTE BLACK
Light Source: ARRAYS OF HIGH LUMEN LEDS 80CRI / 4000K CCT
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 1888.3 lumens
Efficiency: N/A
Efficacy: 94.4 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

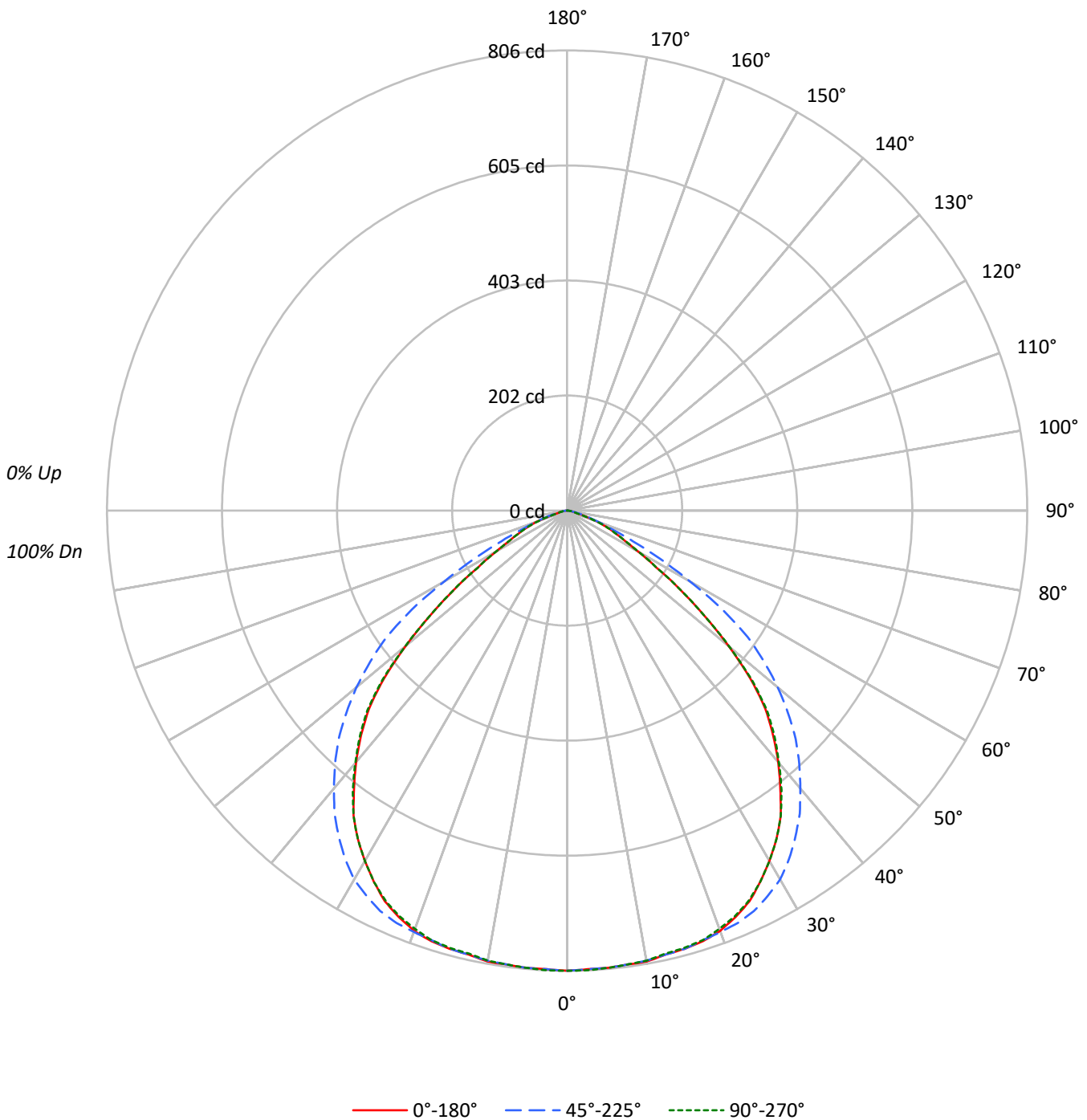
Input Watts (W): 20
Input Voltage (V): NR
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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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°	61694	61694	61694
5°	61784	61784	61784
10°	62350	62210	62210
15°	62975	62975	62832
20°	63821	63975	63511
25°	63798	65378	63638
30°	62621	65935	62621
35°	60952	65157	60952
40°	57494	63489	57684
45°	53161	61280	53561
50°	43964	57361	44191
55°	32268	51525	32522
60°	21815	38165	22090
65°	16627	23092	16627
70°	12175	13003	11749
75°	4998	7216	4998
80°	4143	4143	4143
85°	3249	3249	3249



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	76.6	4.1
10°-20°	224.6	11.9
20°-30°	350.8	18.6
30°-40°	419.6	22.2
40°-50°	403.3	21.4
50°-60°	270.9	14.3
60°-70°	110.6	5.9
70°-80°	27.5	1.5
80°-90°	4.3	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°	652.1	34.5
0°-40°	1071.7	56.8
0°-60°	1745.9	92.5
0°-90°	1888.3	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	1888.3	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	806	806	806	806	806	
5°	804	804	804	804	804	77
15°	795	795	795	793	793	225
25°	755	763	774	761	754	347
35°	652	671	697	673	652	405
45°	491	527	566	529	495	372
55°	242	292	386	294	244	219
65°	92	103	128	103	92	93
75°	17	19	24	19	17	25
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°	806.0	806.0	806.0	806.0	806.0
2.5°	804.1	804.1	804.1	806.0	806.0
5°	804.1	804.1	804.1	804.1	804.1
7.5°	802.2	802.2	802.2	802.2	802.2
10°	802.2	800.4	800.4	800.4	800.4
12.5°	796.6	796.6	796.6	796.6	794.7
15°	794.7	794.7	794.7	792.9	792.9
17.5°	791.0	791.0	789.1	789.1	789.1
20°	783.5	785.4	785.4	783.5	779.7
22.5°	770.4	776.0	781.6	774.1	768.5
25°	755.4	762.9	774.1	761.0	753.5
27.5°	732.9	744.1	761.0	744.1	732.9
30°	708.5	723.5	746.0	723.5	708.5
32.5°	682.3	699.1	723.5	699.1	682.3
35°	652.3	671.0	697.3	672.9	652.3
37.5°	612.9	639.2	669.1	642.9	616.7
40°	575.4	603.5	635.4	605.4	577.3
42.5°	534.2	566.1	601.7	567.9	537.9
45°	491.1	526.7	566.1	528.6	494.8
47.5°	434.9	478.0	524.8	483.6	438.6
50°	369.2	423.6	481.7	427.4	371.1
52.5°	303.6	356.1	434.9	359.9	303.6
55°	241.8	292.4	386.1	294.3	243.7
57.5°	185.6	230.5	322.4	234.3	185.6
60°	142.5	176.2	249.3	178.1	144.3
62.5°	112.5	133.1	183.7	131.2	112.5
65°	91.8	103.1	127.5	103.1	91.8
67.5°	73.1	80.6	84.3	80.6	73.1
70°	54.4	61.9	58.1	61.9	52.5
72.5°	31.9	39.4	39.4	39.4	30.0
75°	16.9	18.7	24.4	18.7	16.9
77.5°	13.1	13.1	15.0	13.1	13.1
80°	9.4	9.4	9.4	9.4	9.4
82.5°	5.6	5.6	5.6	5.6	5.6
85°	3.7	3.7	3.7	3.7	3.7
87.5°	1.9	1.9	1.9	1.9	1.9
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)