

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: P241695

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

Issue Date: 03/03/2020

Test Information

Test Method: LM-79-08
Report Number: P241695
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G1-1802-584-41)
Test Lab: INNOVATION CENTER(G1)
Issue Date: 03/03/2020
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: HALO COMMERCIAL
Catalog Number: PRS420D010-S4M12-44SMDMW-3000K
Description: HALO COMMERCIAL 4" SQUARE, NEW CONSTRUCTION FRAME, WITH 4" MEDIUM DISTRIBUTION, SHALLOW TRIM MATTE WHITE
Light Source: ARRAYS OF HIGH LUMEN LEDS 80CRI / 3000K CCT
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 2167.0 lumens
Efficiency: N/A
Efficacy: 108.4 lumens/watt
Spacing Criteria (0/90/45): 1.01 / 1.01 / 1.08
Luminous Opening: Rectangular (W 0.38' x L: 0.38' x H: 0')
CIE Type: Direct

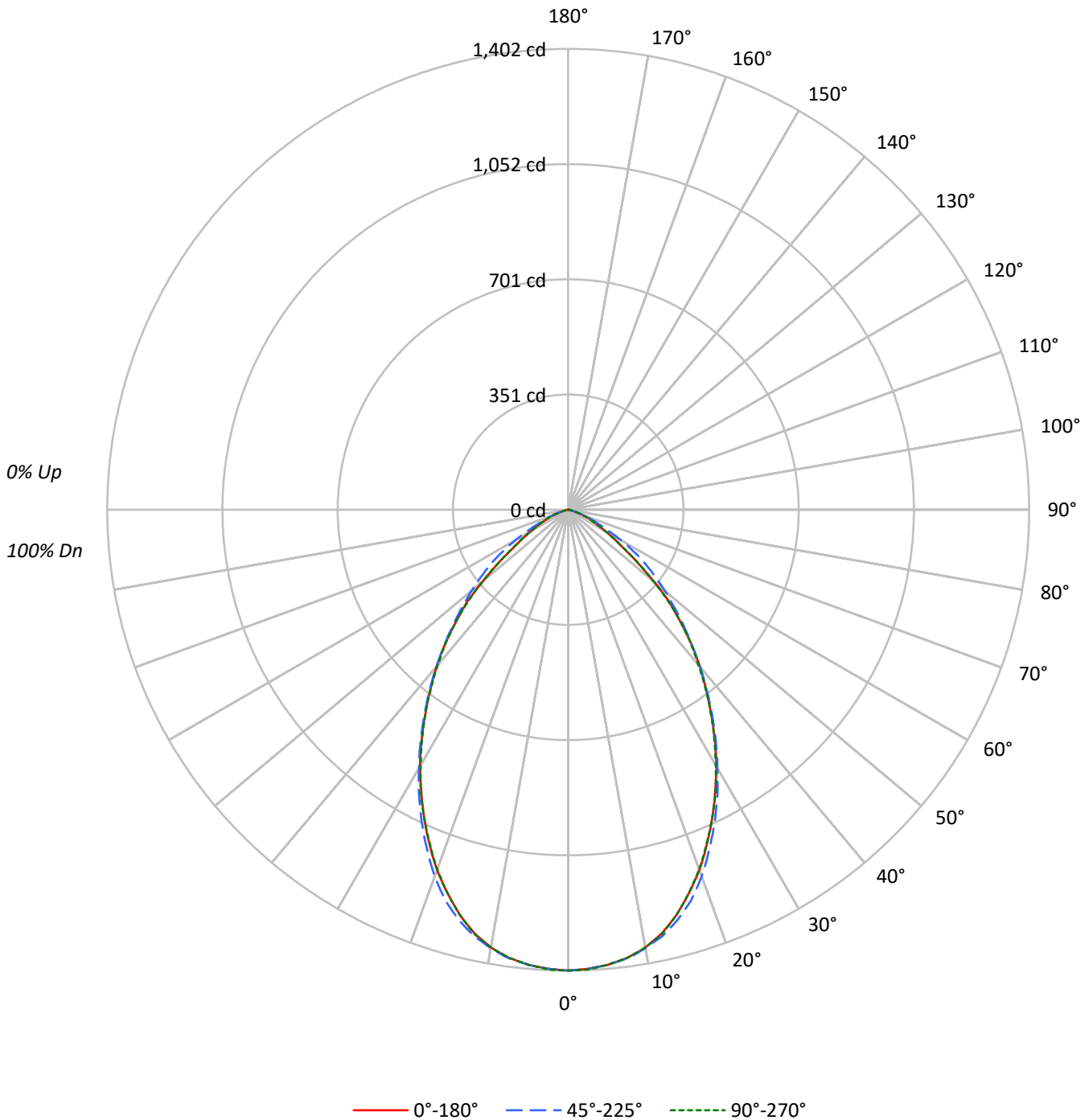
Input Watts (W): 20
Input Voltage (V): NR
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



TEST NUMBER: P241695

CATALOG NUMBER: PRS420D010-S4M12-44SMDMW-3000K

Luminous Intensity Polar Plot





TEST NUMBER: P241695

CATALOG NUMBER: PRS420D010-S4M12-44SMDMW-3000K

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	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	112	108	105	102	109	106	103	101	102	100	98	98	96	95	95	93	92					90				
2	104	98	93	88	102	96	91	87	93	89	85	90	86	84	87	84	82					80				
3	97	89	82	77	95	87	81	77	84	79	75	82	78	74	79	76	73					71				
4	90	81	74	68	88	79	73	68	77	71	67	75	70	66	73	69	65					63				
5	84	74	66	61	82	73	66	60	71	65	60	69	64	59	67	62	59					57				
6	79	68	60	55	77	67	60	54	65	59	54	63	58	54	62	57	53					51				
7	74	62	55	49	72	61	54	49	60	54	49	59	53	49	57	52	48					47				
8	69	57	50	45	68	57	50	45	56	49	45	54	49	45	53	48	44					43				
9	65	53	46	41	64	53	46	41	52	45	41	51	45	41	50	45	41					39				
10	61	50	43	38	60	49	43	38	48	42	38	47	42	38	47	41	38					36				

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	107321	107321	107321
5°	106779	106779	106779
10°	105114	105277	105114
15°	101107	102256	101107
20°	95002	96688	94839
25°	87497	88899	87497
30°	79688	80236	79325
35°	70726	71306	70726
40°	62200	62200	61571
45°	52154	53497	52382
50°	40380	45560	40380
55°	27878	38086	28144
60°	19947	28168	19947
65°	14978	17985	14616
70°	9713	11570	10183
75°	3667	6122	3667
80°	2733	3659	2733
85°	1844	1844	1844



TEST NUMBER: P241695

CATALOG NUMBER: PRS420D010-S4M12-44SMDMW-3000K

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	131.6	6.1
10°-20°	359.2	16.6
20°-30°	479.8	22.1
30°-40°	476.5	22.0
40°-50°	379.0	17.5
50°-60°	221.4	10.2
60°-70°	93.3	4.3
70°-80°	22.9	1.1
80°-90°	3.3	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°	970.6	44.8
0°-40°	1447.1	66.8
0°-60°	2047.5	94.5
0°-90°	2167.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	2167.0	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	1402	1402	1402	1402	1402	
5°	1390	1390	1390	1390	1390	131
15°	1276	1284	1290	1284	1276	357
25°	1036	1050	1053	1048	1036	475
35°	757	769	763	765	757	473
45°	482	494	494	494	484	372
55°	209	238	285	238	211	195
65°	83	91	99	91	81	83
75°	12	14	21	16	12	20
85°	2	2	2	2	2	3
90°	0	0	0	0	0	



TEST NUMBER: P241695

CATALOG NUMBER: PRS420D010-S4M12-44SMDMW-3000K

CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	1402.1	1402.1	1402.1	1402.1	1402.1
2.5°	1397.9	1397.9	1397.9	1397.9	1400.0
5°	1389.7	1389.7	1389.7	1389.7	1389.7
7.5°	1375.2	1375.2	1377.3	1377.3	1375.2
10°	1352.4	1352.4	1354.5	1354.5	1352.4
12.5°	1319.4	1323.5	1327.6	1323.5	1321.4
15°	1275.9	1284.2	1290.4	1284.2	1275.9
17.5°	1222.2	1232.5	1244.9	1232.5	1222.2
20°	1166.3	1176.7	1187.0	1174.6	1164.3
22.5°	1102.2	1114.6	1120.8	1112.6	1100.1
25°	1036.0	1050.5	1052.6	1048.5	1036.0
27.5°	967.8	978.1	982.3	980.2	969.9
30°	901.6	912.0	907.8	909.9	897.5
32.5°	829.2	839.6	835.5	835.5	827.2
35°	756.9	769.3	763.1	765.1	756.9
37.5°	688.6	694.8	692.8	694.8	686.6
40°	622.5	626.6	622.5	626.6	616.2
42.5°	554.2	560.4	556.3	560.4	552.1
45°	481.8	494.2	494.2	494.2	483.9
47.5°	419.8	430.1	436.3	430.1	413.6
50°	339.1	370.2	382.6	368.1	339.1
52.5°	268.8	299.9	332.9	299.9	270.9
55°	208.9	237.8	285.4	237.8	210.9
57.5°	165.4	186.1	235.7	186.1	165.4
60°	130.3	146.8	184.0	146.8	130.3
62.5°	103.4	115.8	136.5	115.8	103.4
65°	82.7	91.0	99.3	91.0	80.7
67.5°	64.1	70.3	72.4	70.3	62.0
70°	43.4	51.7	51.7	51.7	45.5
72.5°	26.9	33.1	35.2	33.1	26.9
75°	12.4	14.5	20.7	16.5	12.4
77.5°	10.3	10.3	10.3	10.3	10.3
80°	6.2	8.3	8.3	8.3	6.2
82.5°	4.1	4.1	4.1	4.1	4.1
85°	2.1	2.1	2.1	2.1	2.1
87.5°	2.1	2.1	2.1	2.1	2.1
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)