

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: P241750

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

Issue Date: 03/03/2020

Test Information

Test Method: LM-79-08
Report Number: P241750
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G1-1802-584-44)
Test Lab: INNOVATION CENTER(G1)
Issue Date: 03/03/2020
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: HALO COMMERCIAL
Catalog Number: PRS420D010-S4M12-44SMDH-4000K
Description: HALO COMMERCIAL 4" SQUARE, NEW CONSTRUCTION FRAME, WITH 4" MEDIUM DISTRIBUTION, SHALLOW TRIM HAZE
Light Source: ARRAYS OF HIGH LUMEN LEDS 80CRI / 4000K CCT
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 2183.0 lumens
Efficiency: N/A
Efficacy: 109.1 lumens/watt
Spacing Criteria (0/90/45): 1 / 1 / 1.06
Luminous Opening: Rectangular (W 0.38' x L: 0.38' x H: 0')
CIE Type: Direct

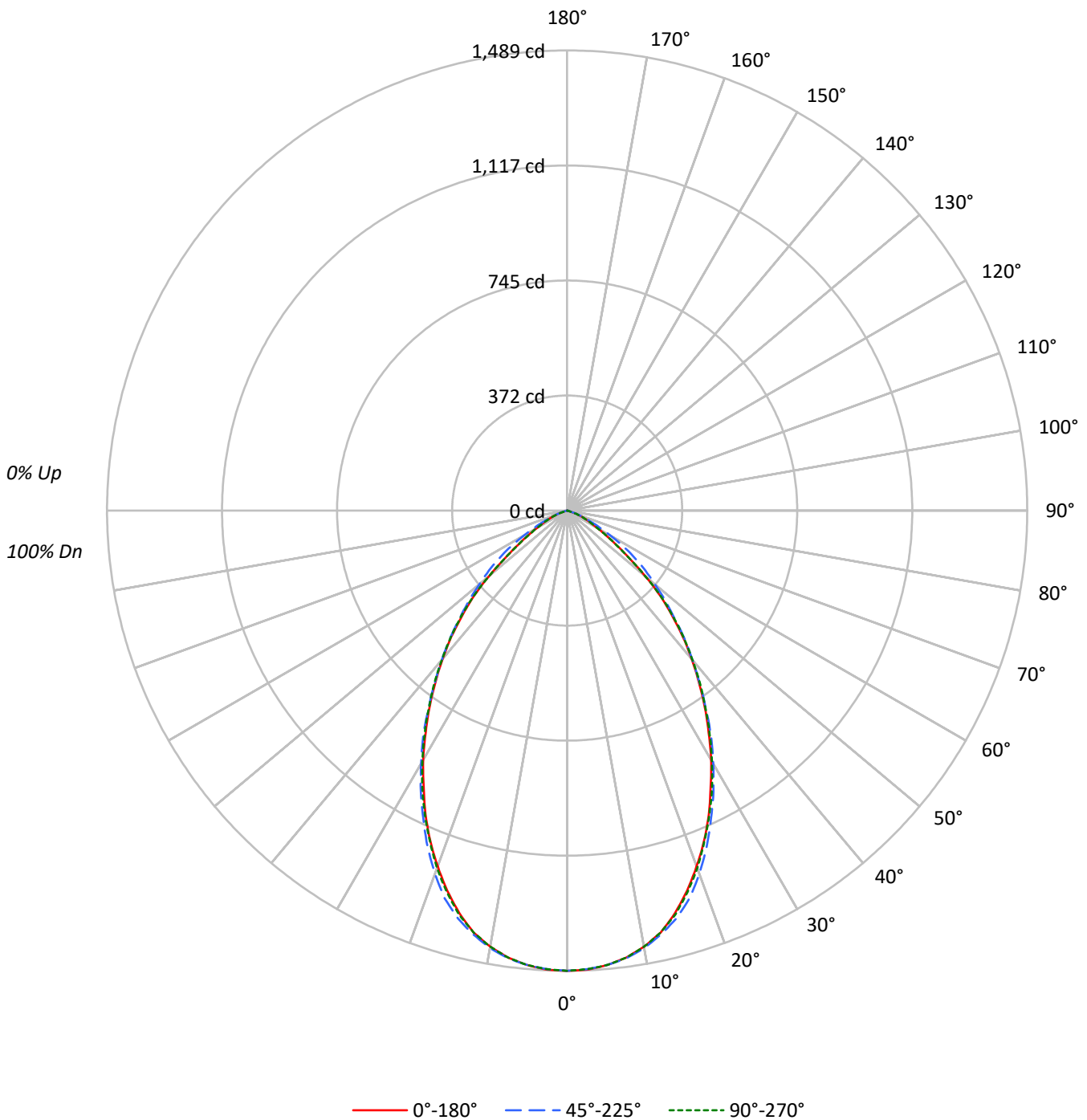
Input Watts (W): 20
Input Voltage (V): NR
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



TEST NUMBER: P241750

CATALOG NUMBER: PRS420D010-S4M12-44SMDH-4000K

Luminous Intensity Polar Plot





TEST NUMBER: P241750

CATALOG NUMBER: PRS420D010-S4M12-44SMDH-4000K

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	109	106	103	110	107	104	101	102	100	98	99	97	95	95	94	92	91					91			
2	105	99	94	89	102	97	92	88	94	90	86	90	87	85	88	85	83	81					81			
3	98	90	83	79	96	88	83	78	85	81	77	83	79	75	81	77	74	72					72			
4	91	82	75	70	89	81	74	69	78	73	68	76	71	67	74	70	67	65					65			
5	85	75	68	62	83	74	67	62	72	66	61	70	65	61	68	64	60	58					58			
6	80	69	61	56	78	68	61	56	66	60	55	65	59	55	63	58	55	53					53			
7	75	63	56	51	73	63	56	51	61	55	50	60	54	50	59	54	50	48					48			
8	70	59	51	47	69	58	51	46	57	51	46	56	50	46	55	50	46	44					44			
9	66	55	47	43	65	54	47	43	53	47	42	52	46	42	51	46	42	41					41			
10	62	51	44	39	61	50	44	39	49	43	39	49	43	39	48	43	39	37					37			

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	114004	114004	114004
5°	113440	113440	113440
10°	111379	111721	111379
15°	106860	108231	107201
20°	99775	101893	100305
25°	91551	93012	91914
30°	82392	83541	82781
35°	72521	73128	72932
40°	62600	63040	63040
45°	51862	53042	52566
50°	39237	44143	39237
55°	26036	35591	25742
60°	17253	24892	17253
65°	12171	14924	11773
70°	6803	7766	6803
75°	651	2573	651
80°	0	0	0
85°	0	0	0



TEST NUMBER: P241750

CATALOG NUMBER: PRS420D010-S4M12-44SMDH-4000K

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	139.6	6.4
10°-20°	379.9	17.4
20°-30°	502.6	23.0
30°-40°	489.8	22.4
40°-50°	377.4	17.3
50°-60°	206.3	9.4
60°-70°	76.3	3.5
70°-80°	11.1	0.5
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°	1022.1	46.8
0°-40°	1511.9	69.3
0°-60°	2095.5	96.0
0°-90°	2183.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	2183.0	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	1489	1489	1489	1489	1489	
5°	1476	1476	1476	1476	1476	140
15°	1348	1357	1366	1359	1353	377
25°	1084	1097	1101	1101	1088	497
35°	776	785	783	791	780	484
45°	479	492	490	494	486	369
55°	195	219	267	221	193	181
65°	67	74	82	74	65	67
75°	2	4	9	4	2	8
85°	0	0	0	0	0	0
90°	0	0	0	0	0	



TEST NUMBER: P241750

CATALOG NUMBER: PRS420D010-S4M12-44SMDH-4000K

CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	1489.4	1489.4	1489.4	1489.4	1489.4
2.5°	1487.2	1485.1	1485.1	1485.1	1485.1
5°	1476.4	1476.4	1476.4	1476.4	1476.4
7.5°	1459.0	1459.0	1461.2	1459.0	1459.0
10°	1433.0	1435.2	1437.4	1437.4	1433.0
12.5°	1398.3	1402.7	1404.8	1402.7	1398.3
15°	1348.5	1357.1	1365.8	1359.3	1352.8
17.5°	1289.9	1300.8	1316.0	1302.9	1294.3
20°	1224.9	1237.9	1250.9	1242.2	1231.4
22.5°	1157.7	1168.5	1179.4	1175.0	1159.9
25°	1084.0	1097.0	1101.3	1101.3	1088.3
27.5°	1005.9	1021.1	1025.4	1023.3	1014.6
30°	932.2	943.1	945.2	947.4	936.6
32.5°	852.0	862.9	867.2	869.4	858.5
35°	776.1	784.8	782.6	791.3	780.5
37.5°	700.3	708.9	704.6	713.3	706.8
40°	626.5	630.9	630.9	637.4	630.9
42.5°	555.0	559.3	561.5	563.7	559.3
45°	479.1	492.1	490.0	494.3	485.6
47.5°	409.7	420.6	429.3	424.9	411.9
50°	329.5	355.5	370.7	359.9	329.5
52.5°	253.7	284.0	318.7	286.2	253.7
55°	195.1	219.0	266.7	221.1	192.9
57.5°	147.4	166.9	214.6	166.9	147.4
60°	112.7	127.9	162.6	127.9	112.7
62.5°	86.7	97.6	117.1	97.6	86.7
65°	67.2	73.7	82.4	73.7	65.0
67.5°	47.7	54.2	54.2	54.2	47.7
70°	30.4	36.9	34.7	36.9	30.4
72.5°	13.0	19.5	21.7	19.5	13.0
75°	2.2	4.3	8.7	4.3	2.2
77.5°	0.0	2.2	2.2	2.2	2.2
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)