

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: P241825

Luminaire Tested: **PRS420D010-S4M12-41SNDMB-4000K**

Issue Date: 03/03/2020

Test Information

Test Method: LM-79-08
Report Number: P241825
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: PRS420D010-S4M12-41SNDMB-4000K
Description: HALO COMMERCIAL 4" SQUARE, NEW CONSTRUCTION FRAME, WITH 4" NARROW DISTRIBUTION, DEEP 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: 1357.1 lumens
Efficiency: N/A
Efficacy: 67.9 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

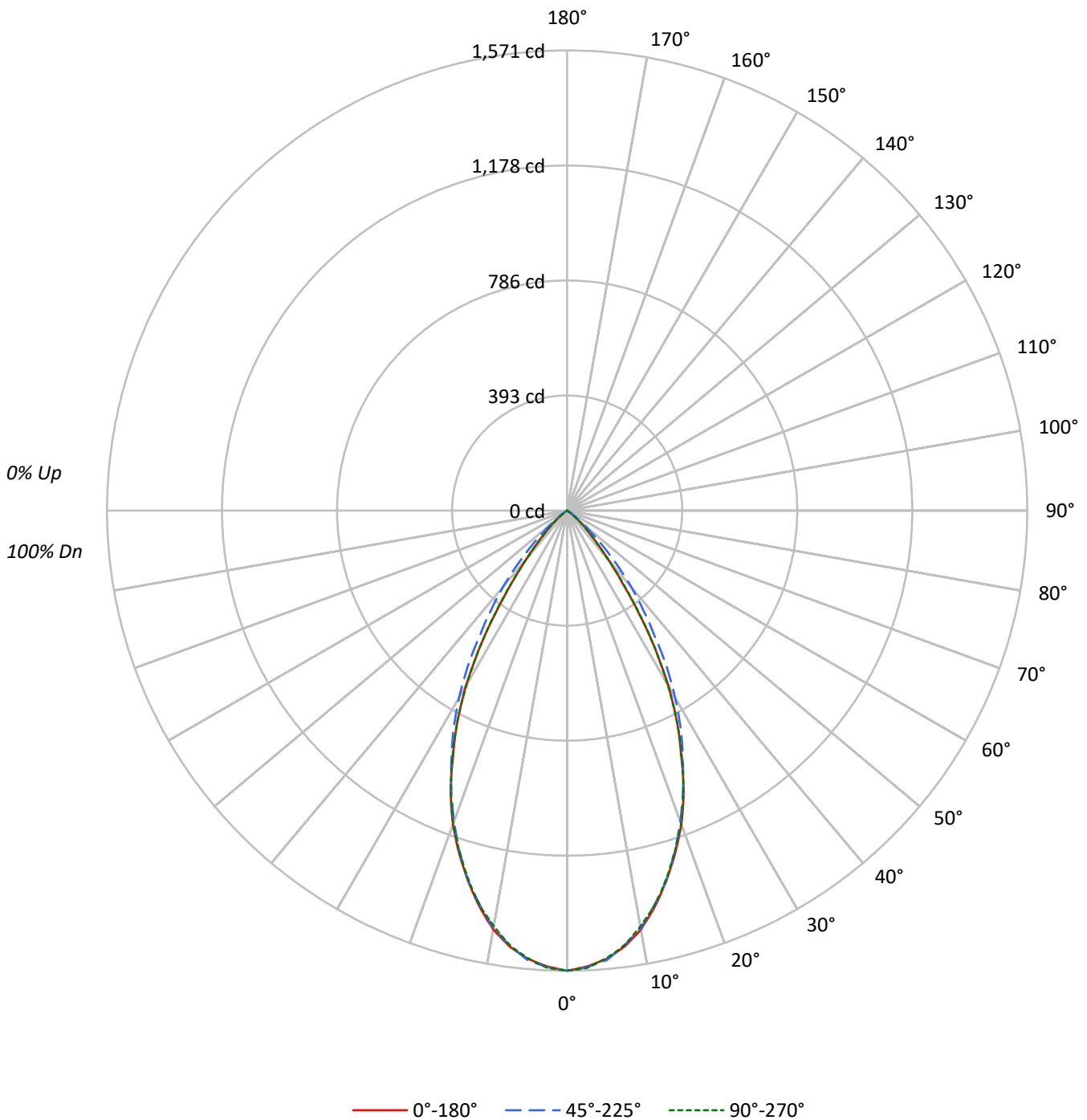
Input Watts (W): 20
Input Voltage (V): NR
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



TEST NUMBER: P241825

CATALOG NUMBER: PRS420D010-S4M12-41SNDMB-4000K

Luminous Intensity Polar Plot





TEST NUMBER: P241825

CATALOG NUMBER: PRS420D010-S4M12-41SNDMB-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	113	111	108	106	111	109	106	104	105	103	101	101	99	98	97	96	95	93					93			
2	108	103	99	95	106	101	98	94	98	95	92	95	93	90	92	90	88	87					87			
3	102	96	91	87	100	94	90	86	92	88	85	89	86	83	87	84	82	81					81			
4	97	89	84	80	95	88	83	79	86	82	78	84	80	77	82	79	76	75					75			
5	92	84	78	73	90	83	77	73	81	76	72	79	75	72	78	74	71	70					70			
6	87	78	72	68	86	78	72	68	76	71	67	75	70	67	73	69	66	65					65			
7	83	74	67	63	82	73	67	63	72	66	63	70	66	62	69	65	62	61					61			
8	79	69	63	59	78	69	63	59	67	62	59	66	62	58	65	61	58	57					57			
9	75	65	59	55	74	65	59	55	64	59	55	63	58	55	62	58	55	53					53			
10	71	62	56	52	70	61	56	52	60	55	52	60	55	51	59	54	51	50					50			

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	120250	120250	120250
5°	118050	118381	117881
10°	112848	112506	112001
15°	103714	103548	103373
20°	92843	91964	92672
25°	77784	78882	78333
30°	61100	65122	60711
35°	39685	48394	40096
40°	21873	33993	21433
45°	10792	19236	11258
50°	4906	8514	4906
55°	294	3176	294
60°	0	658	337
65°	0	0	0
70°	0	0	0
75°	0	0	0
80°	0	0	0
85°	0	0	0



TEST NUMBER: P241825

CATALOG NUMBER: PRS420D010-S4M12-41SNDMB-4000K

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	143.8	10.6
10°-20°	364.0	26.8
20°-30°	424.2	31.3
30°-40°	296.4	21.8
40°-50°	110.9	8.2
50°-60°	17.4	1.3
60°-70°	0.3	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
0°-30°	932.1	68.7
0°-40°	1228.5	90.5
0°-60°	1356.8	100.0
0°-90°	1357.1	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	1357.1	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	1571	1571	1571	1571	1571	
5°	1536	1538	1541	1534	1534	144
15°	1309	1309	1307	1307	1304	365
25°	921	934	934	936	928	421
35°	425	472	518	475	429	268
45°	100	130	178	130	104	85
55°	2	13	24	15	2	10
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	



TEST NUMBER: P241825

CATALOG NUMBER: PRS420D010-S4M12-41SNDMB-4000K

CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	1571.0	1571.0	1571.0	1571.0	1571.0
2.5°	1558.0	1558.0	1560.2	1560.2	1562.4
5°	1536.4	1538.5	1540.7	1534.2	1534.2
7.5°	1501.7	1499.5	1497.4	1497.4	1497.4
10°	1451.9	1449.7	1447.5	1443.2	1441.0
12.5°	1384.7	1382.5	1378.2	1380.4	1380.4
15°	1308.8	1308.8	1306.7	1306.7	1304.5
17.5°	1226.5	1224.3	1220.0	1222.2	1222.2
20°	1139.8	1135.5	1129.0	1131.2	1137.7
22.5°	1040.1	1042.3	1033.6	1038.0	1038.0
25°	921.0	934.0	934.0	936.1	927.5
27.5°	812.6	821.3	840.8	819.1	812.6
30°	691.3	708.6	736.8	706.4	686.9
32.5°	556.9	591.6	632.8	593.7	556.9
35°	424.7	472.4	517.9	474.6	429.1
37.5°	305.5	359.7	424.7	364.0	309.9
40°	218.9	266.5	340.2	266.5	214.5
42.5°	149.5	186.4	253.5	188.5	149.5
45°	99.7	130.0	177.7	130.0	104.0
47.5°	67.2	88.8	114.8	88.8	67.2
50°	41.2	58.5	71.5	58.5	41.2
52.5°	19.5	32.5	41.2	32.5	19.5
55°	2.2	13.0	23.8	15.2	2.2
57.5°	2.2	2.2	13.0	2.2	2.2
60°	0.0	2.2	4.3	2.2	2.2
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)