

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: P241775

Luminaire Tested: **PRS420D010-S4M12-44SNDC**

Issue Date: 03/03/2020

Test Information

Test Method: LM-79-08
Report Number: P241775
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G1-1802-584-46)
Test Lab: INNOVATION CENTER(G1)
Issue Date: 03/03/2020
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: HALO COMMERCIAL
Catalog Number: PRS420D010-S4M12-44SNDC
Description: HALO COMMERCIAL 4" SQUARE, NEW CONSTRUCTION FRAME, WITH 4" NARROW DISTRIBUTION, SHALLOW TRIM SPECULAR
Light Source: ARRAYS OF HIGH LUMEN LEDS 80CRI / 3500K CCT
Ballast/Driver: ELECTRONIC DRIVER

Summary

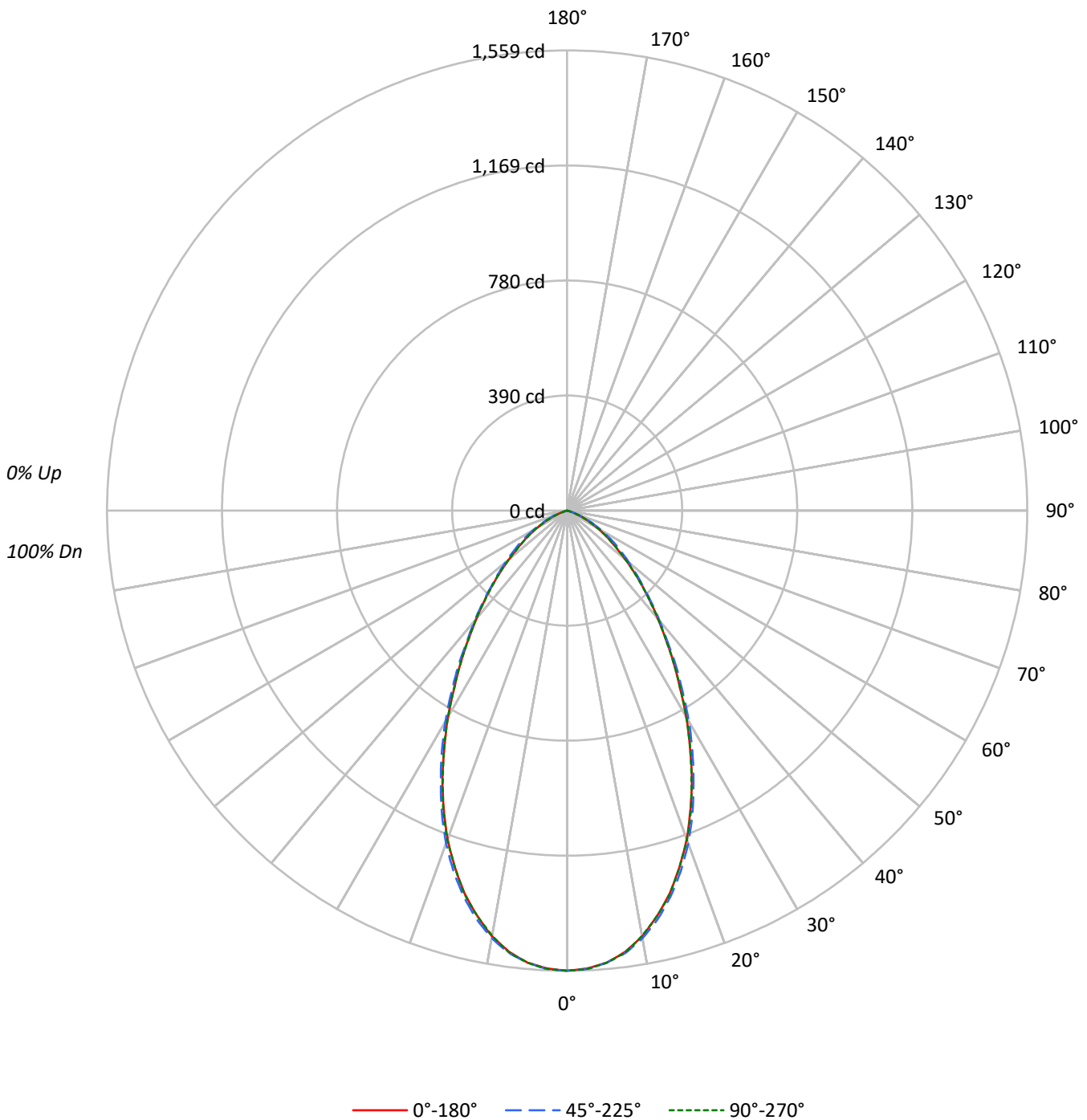
Lumens per Lamp: N/A
Luminaire Lumens: 1921.3 lumens
Efficiency: N/A
Efficacy: 96.1 lumens/watt
Spacing Criteria (0/90/45): 0.9 / 0.9 / 0.95
Luminous Opening: Rectangular (W 0.38' x L: 0.38' x H: 0')
CIE Type: Direct

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: P241775
CATALOG NUMBER: PRS420D010-S4M12-44SND

Luminous Intensity Polar Plot





TEST NUMBER: P241775

CATALOG NUMBER: PRS420D010-S4M12-44SND

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	112	109	106	103	110	107	104	102	103	100	98	99	97	96	95	94	93	91
2	105	99	94	90	103	97	93	89	94	90	87	91	88	85	88	86	83	82
3	98	90	84	80	96	89	83	79	86	81	78	84	80	76	81	78	75	73
4	92	83	76	71	90	82	75	70	79	74	70	77	72	69	75	71	68	66
5	86	76	69	64	84	75	68	63	73	67	63	71	66	62	70	65	62	60
6	81	70	63	58	79	69	63	58	68	62	57	66	61	57	65	60	56	55
7	76	65	58	53	74	64	57	53	63	57	52	62	56	52	60	55	52	50
8	72	60	53	49	70	60	53	48	59	53	48	57	52	48	56	51	48	46
9	68	56	49	45	66	56	49	45	55	49	45	54	48	44	53	48	44	43
10	64	53	46	42	63	52	46	42	51	45	41	51	45	41	50	45	41	40

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	119331	119331	119331
5°	118143	118143	118143
10°	113850	114348	113687
15°	106400	107248	106575
20°	96468	97690	96639
25°	84465	85546	84102
30°	71362	72873	71362
35°	58635	60037	58635
40°	47722	48571	47932
45°	38710	39413	38710
50°	30604	32390	30604
55°	24008	26583	24008
60°	18355	20330	18355
65°	12407	14344	12407
70°	6222	8146	6222
75°	0	1893	0
80°	0	0	0
85°	0	0	0



TEST NUMBER: P241775

CATALOG NUMBER: PRS420D010-S4M12-44SNDC

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	144.5	7.5
10°-20°	376.3	19.6
20°-30°	461.0	24.0
30°-40°	399.3	20.8
40°-50°	283.2	14.7
50°-60°	171.2	8.9
60°-70°	76.4	4.0
70°-80°	9.3	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°	981.9	51.1
0°-40°	1381.1	71.9
0°-60°	1835.5	95.5
0°-90°	1921.3	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	1921.3	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	1559	1559	1559	1559	1559	
5°	1538	1538	1538	1538	1538	144
15°	1343	1349	1353	1351	1345	374
25°	1000	1013	1013	1011	996	456
35°	628	640	642	638	628	393
45°	358	366	364	368	358	278
55°	180	188	199	191	180	163
65°	68	77	79	77	68	69
75°	0	2	6	2	0	6
85°	0	0	0	0	0	0
90°	0	0	0	0	0	



TEST NUMBER: P241775

CATALOG NUMBER: PRS420D010-S4M12-44SND

CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	1559.0	1559.0	1559.0	1559.0	1559.0
2.5°	1552.6	1552.6	1554.7	1554.7	1554.7
5°	1537.6	1537.6	1537.6	1537.6	1537.6
7.5°	1507.6	1507.6	1511.9	1509.8	1509.8
10°	1464.8	1464.8	1471.2	1466.9	1462.7
12.5°	1407.0	1413.4	1417.7	1413.4	1407.0
15°	1342.7	1349.2	1353.4	1351.3	1344.9
17.5°	1265.6	1276.3	1280.6	1276.3	1265.6
20°	1184.3	1192.8	1199.3	1192.8	1186.4
22.5°	1092.2	1102.9	1109.3	1102.9	1096.5
25°	1000.1	1012.9	1012.9	1010.8	995.8
27.5°	899.4	914.4	918.7	914.4	901.6
30°	807.4	818.1	824.5	818.1	807.4
32.5°	711.0	726.0	728.1	726.0	713.1
35°	627.5	640.3	642.5	638.2	627.5
37.5°	548.2	561.1	556.8	561.1	548.2
40°	477.6	488.3	486.1	488.3	479.7
42.5°	415.5	424.0	421.9	424.0	413.3
45°	357.6	366.2	364.1	368.3	357.6
47.5°	306.2	314.8	316.9	314.8	306.2
50°	257.0	269.8	272.0	269.8	257.0
52.5°	214.2	224.9	233.4	227.0	214.2
55°	179.9	188.5	199.2	190.6	179.9
57.5°	147.8	156.3	164.9	158.5	147.8
60°	119.9	128.5	132.8	128.5	119.9
62.5°	92.1	102.8	104.9	102.8	92.1
65°	68.5	77.1	79.2	77.1	68.5
67.5°	47.1	55.7	55.7	55.7	47.1
70°	27.8	34.3	36.4	36.4	27.8
72.5°	10.7	17.1	19.3	17.1	12.8
75°	0.0	2.1	6.4	2.1	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)