

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: P241975

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

Issue Date: 03/03/2020

Test Information

Test Method: LM-79-08
Report Number: P241975
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G1-1802-584-59)
Test Lab: INNOVATION CENTER(G1)
Issue Date: 03/03/2020
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: HALO COMMERCIAL
Catalog Number: PRS420D010-S4M12-41SMDC-4000K
Description: HALO COMMERCIAL 4" SQUARE, NEW CONSTRUCTION FRAME, WITH 4" MEDIUM DISTRIBUTION, DEEP TRIM SPECULAR
Light Source: ARRAYS OF HIGH LUMEN LEDS 80CRI / 4000K CCT
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 2037.8 lumens
Efficiency: N/A
Efficacy: 101.9 lumens/watt
Spacing Criteria (0/90/45): 0.82 / 0.82 / 0.85
Luminous Opening: Rectangular (W 0.38' x L: 0.38' x H: 0')
CIE Type: Direct

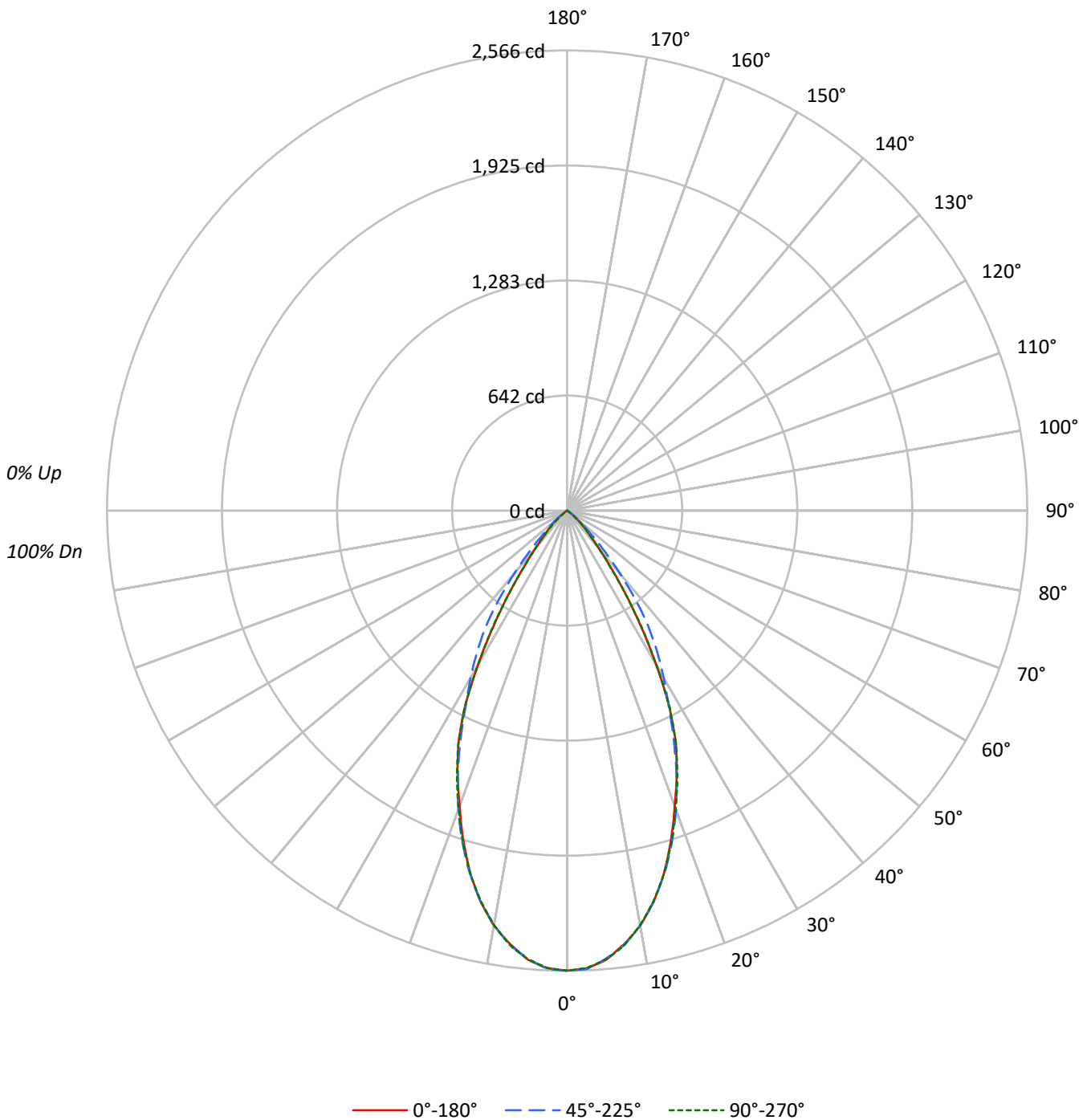
Input Watts (W): 20
Input Voltage (V): NR
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



TEST NUMBER: P241975

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

Luminous Intensity Polar Plot





TEST NUMBER: P241975

CATALOG NUMBER: PRS420D010-S4M12-41SMDC-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	0	
RCR																						
0	119	119	119	119	116	116	116	116	111	111	111	106	106	106	102	102	102	100				100
1	114	111	108	106	111	109	107	105	105	103	101	101	100	98	98	96	95	94				94
2	108	103	99	96	106	102	98	95	98	95	93	95	93	91	93	91	89	87				87
3	103	96	92	88	101	95	91	87	92	89	86	90	87	84	88	85	83	81				81
4	98	90	85	81	96	89	84	80	87	83	79	85	81	78	83	80	77	76				76
5	93	85	79	75	91	84	78	74	82	77	74	80	76	73	79	75	72	71				71
6	88	79	73	69	87	79	73	69	77	72	69	76	71	68	74	71	68	66				66
7	84	75	69	65	83	74	68	64	73	68	64	72	67	64	70	66	63	62				62
8	80	70	65	61	79	70	64	60	69	64	60	68	63	60	67	63	60	58				58
9	76	67	61	57	75	66	61	57	65	60	57	64	60	56	63	59	56	55				55
10	73	63	57	54	72	63	57	53	62	57	53	61	56	53	60	56	53	52				52

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	196372	196372	196372
5°	193127	192627	192958
10°	182730	182388	182388
15°	165690	166039	165690
20°	142784	144551	144022
25°	121144	118585	121144
30°	88093	94987	87907
35°	52842	73903	52645
40°	27498	45464	27278
45°	15014	21574	14538
50°	6704	9026	6454
55°	574	3763	294
60°	337	995	337
65°	0	398	0
70°	0	0	0
75°	0	0	0
80°	0	0	0
85°	0	0	0



TEST NUMBER: P241975

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

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	234.5	11.5
10°-20°	580.8	28.5
20°-30°	647.4	31.8
30°-40°	416.8	20.5
40°-50°	135.9	6.7
50°-60°	21.3	1.0
60°-70°	1.1	0.1
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°	1462.8	71.8
0°-40°	1879.5	92.2
0°-60°	2036.7	99.9
0°-90°	2037.8	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	2037.8	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	2566	2566	2566	2566	2566	
5°	2514	2514	2507	2516	2511	234
15°	2091	2091	2095	2095	2091	580
25°	1434	1432	1404	1432	1434	643
35°	566	652	791	650	563	362
45°	139	158	199	154	134	113
55°	4	17	28	17	2	13
65°	0	0	2	0	0	1
75°	0	0	0	0	0	0
85°	0	0	0	0	0	0
90°	0	0	0	0	0	



TEST NUMBER: P241975

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

CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	2565.5	2565.5	2565.5	2565.5	2565.5
2.5°	2554.6	2556.8	2559.0	2556.8	2552.5
5°	2513.5	2513.5	2507.0	2515.6	2511.3
7.5°	2437.6	2439.8	2444.1	2439.8	2444.1
10°	2351.0	2346.6	2346.6	2346.6	2346.6
12.5°	2231.8	2229.6	2231.8	2229.6	2229.6
15°	2090.9	2090.9	2095.3	2095.3	2090.9
17.5°	1926.3	1930.6	1941.4	1939.3	1934.9
20°	1752.9	1761.6	1774.6	1763.8	1768.1
22.5°	1596.9	1588.3	1592.6	1588.3	1605.6
25°	1434.4	1432.2	1404.1	1432.2	1434.4
27.5°	1235.1	1265.4	1224.2	1267.6	1235.1
30°	996.7	1072.6	1074.7	1081.2	994.6
32.5°	764.9	853.7	933.9	858.0	773.5
35°	565.5	652.2	790.9	650.0	563.4
37.5°	394.4	472.4	626.2	470.2	390.0
40°	275.2	327.2	455.0	329.4	273.0
42.5°	192.8	227.5	309.8	221.0	190.7
45°	138.7	158.2	199.3	153.8	134.3
47.5°	95.3	110.5	123.5	108.3	93.2
50°	56.3	73.7	75.8	73.7	54.2
52.5°	26.0	41.2	47.7	41.2	26.0
55°	4.3	17.3	28.2	17.3	2.2
57.5°	2.2	2.2	15.2	2.2	2.2
60°	2.2	2.2	6.5	2.2	2.2
62.5°	2.2	2.2	2.2	2.2	2.2
65°	0.0	0.0	2.2	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)