

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: P252930

Luminaire Tested: **PRS420D010-S4M12-41SWDC-3000K**

Issue Date: 03/03/2020

Test Information

Test Method: LM-79-08
Report Number: P252930
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G1-1805-776-2)
Test Lab: INNOVATION CENTER(G1)
Issue Date: 03/03/2020
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: HALO COMMERCIAL
Catalog Number: PRS420D010-S4M12-41SWDC-3000K
Description: HALO COMMERCIAL 4" SQUARE, NEW CONSTRUCTION FRAME, WITH 4" WIDE DISTRIBUTION, DEEP TRIM SPECULAR
Light Source: ARRAYS OF HIGH LUMEN LEDS 80CRI / 3000K CCT
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 1847.3 lumens
Efficiency: N/A
Efficacy: 92.4 lumens/watt
Spacing Criteria (0/90/45): 1.11 / 1.1 / 1.15
Luminous Opening: Rectangular (W 0.38' x L: 0.38' x H: 0')
CIE Type: Direct

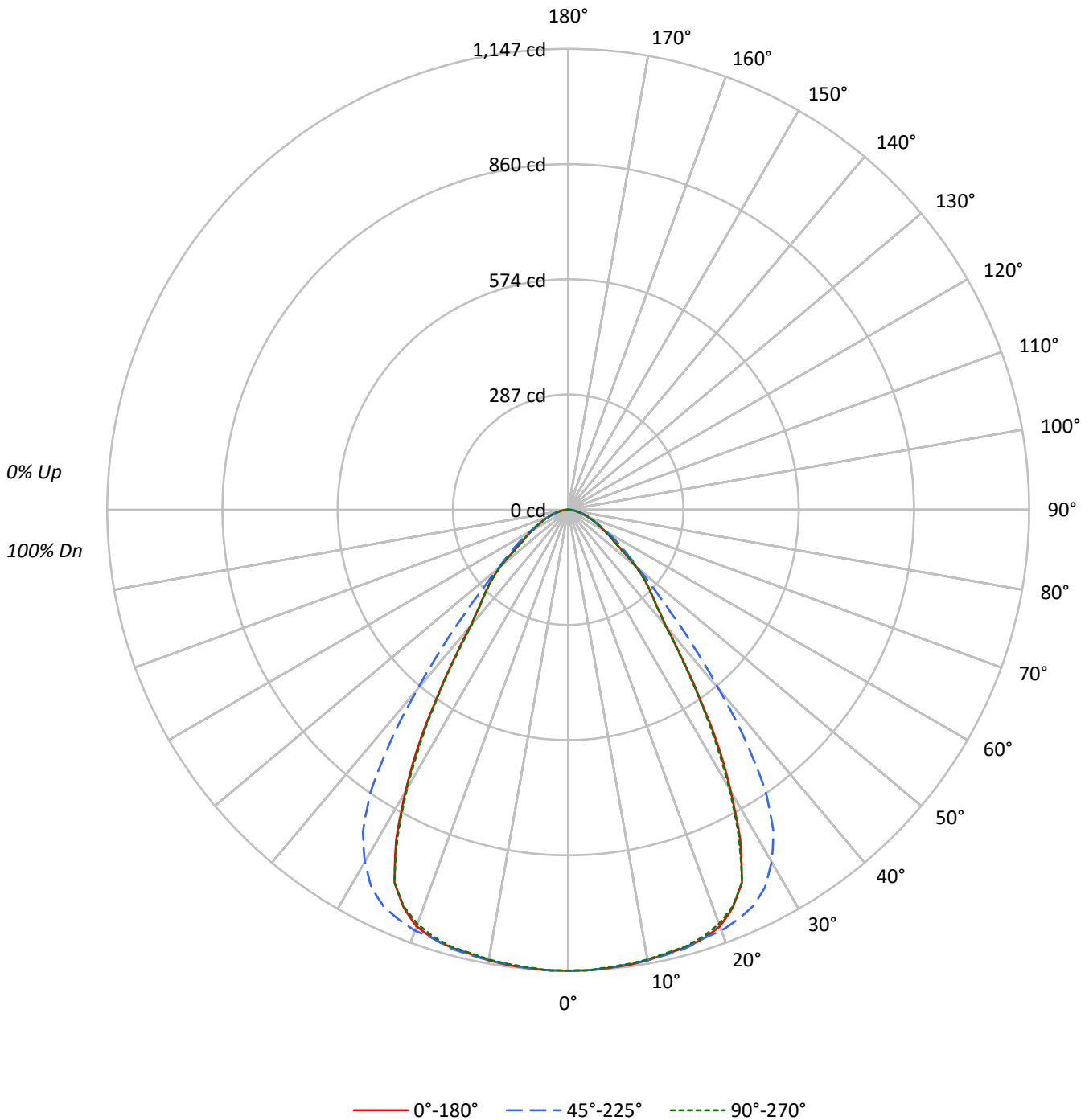
Input Watts (W): 20
Input Voltage (V): NR
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



TEST NUMBER: P252930

CATALOG NUMBER: PRS420D010-S4M12-41SWDC-3000K

Luminous Intensity Polar Plot





TEST NUMBER: P252930

CATALOG NUMBER: PRS420D010-S4M12-41SWDC-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	100	102	99	97	98	96	94	95	93	92					90				
2	104	98	93	88	102	96	91	87	93	89	86	90	86	84	87	84	82					80				
3	97	89	83	78	95	88	82	77	85	80	76	82	78	75	80	76	73					72				
4	91	81	74	69	89	80	74	69	78	72	68	76	71	67	74	70	66					64				
5	85	75	67	62	83	74	67	62	72	66	61	70	65	60	68	64	60					58				
6	80	69	61	56	78	68	61	56	66	60	55	65	59	55	63	58	55					53				
7	75	63	56	51	73	63	56	51	61	55	51	60	54	50	59	54	50					48				
8	70	59	52	47	69	58	51	47	57	51	46	56	50	46	55	50	46					44				
9	66	55	48	43	65	54	47	43	53	47	43	52	47	42	51	46	42					41				
10	63	51	44	40	61	51	44	40	50	44	39	49	43	39	48	43	39					38				

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	87826	87826	87826
5°	88000	88000	87831
10°	88505	88505	88334
15°	89371	89545	89197
20°	89903	90799	89373
25°	86390	91922	86390
30°	71477	89436	70893
35°	52898	80061	52487
40°	37780	58313	37340
45°	31468	38796	31468
50°	26281	27067	26281
55°	18670	21579	18963
60°	15722	17069	15722
65°	13457	13855	13457
70°	11749	11749	11749
75°	10351	10351	10351
80°	8684	8684	8684
85°	7641	7641	7641



TEST NUMBER: P252930

CATALOG NUMBER: PRS420D010-S4M12-41SWDC-3000K

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	109.0	5.9
10°-20°	318.6	17.2
20°-30°	476.2	25.8
30°-40°	423.9	22.9
40°-50°	252.2	13.7
50°-60°	142.9	7.7
60°-70°	76.6	4.1
70°-80°	37.5	2.0
80°-90°	10.4	0.6
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°	903.8	48.9
0°-40°	1327.7	71.9
0°-60°	1722.8	93.3
0°-90°	1847.3	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	1847.3	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	1147	1147	1147	1147	1147	
5°	1145	1145	1145	1145	1143	109
15°	1128	1128	1130	1126	1126	318
25°	1023	1051	1088	1049	1023	456
35°	566	662	857	660	562	358
45°	291	312	358	310	291	226
55°	140	155	162	155	142	133
65°	74	76	76	76	74	75
75°	35	35	35	35	35	38
85°	9	9	9	9	9	10
90°	0	0	0	0	0	



TEST NUMBER: P252930

CATALOG NUMBER: PRS420D010-S4M12-41SWDC-3000K

CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	1147.4	1147.4	1147.4	1147.4	1147.4
2.5°	1147.4	1147.4	1147.4	1147.4	1147.4
5°	1145.3	1145.3	1145.3	1145.3	1143.1
7.5°	1143.1	1140.9	1140.9	1140.9	1140.9
10°	1138.7	1138.7	1138.7	1136.5	1136.5
12.5°	1132.1	1132.1	1134.3	1132.1	1130.0
15°	1127.8	1127.8	1130.0	1125.6	1125.6
17.5°	1119.0	1121.2	1119.0	1119.0	1114.7
20°	1103.7	1110.3	1114.7	1108.1	1097.2
22.5°	1070.9	1088.4	1103.7	1086.2	1068.8
25°	1022.9	1051.3	1088.4	1049.1	1022.9
27.5°	926.7	998.8	1060.0	992.3	920.1
30°	808.7	896.1	1011.9	889.5	802.1
32.5°	690.7	778.1	950.7	773.7	679.7
35°	566.1	662.2	856.8	660.1	561.7
37.5°	461.2	548.6	725.6	544.2	456.8
40°	378.1	445.9	583.6	443.7	373.7
42.5°	325.7	362.8	461.2	360.6	325.7
45°	290.7	312.5	358.4	310.4	290.7
47.5°	257.9	275.4	281.9	273.2	257.9
50°	220.7	240.4	227.3	240.4	220.7
52.5°	174.8	198.9	190.1	201.1	172.7
55°	139.9	155.2	161.7	155.2	142.1
57.5°	122.4	126.8	135.5	126.8	122.4
60°	102.7	107.1	111.5	107.1	102.7
62.5°	87.4	91.8	91.8	91.8	89.6
65°	74.3	76.5	76.5	76.5	74.3
67.5°	63.4	63.4	63.4	63.4	63.4
70°	52.5	52.5	52.5	52.5	52.5
72.5°	43.7	43.7	43.7	43.7	43.7
75°	35.0	35.0	35.0	35.0	35.0
77.5°	28.4	28.4	26.2	28.4	26.2
80°	19.7	19.7	19.7	19.7	19.7
82.5°	15.3	15.3	15.3	15.3	15.3
85°	8.7	8.7	8.7	8.7	8.7
87.5°	4.4	4.4	4.4	4.4	4.4
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)