

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: P252928

Luminaire Tested: **PRS410D010-S4M12-41SWDC-3000K**

Issue Date: 03/03/2020

Test Information

Test Method: LM-79-08
Report Number: P252928
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: PRS410D010-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: 862.5 lumens
Efficiency: N/A
Efficacy: 86.2 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

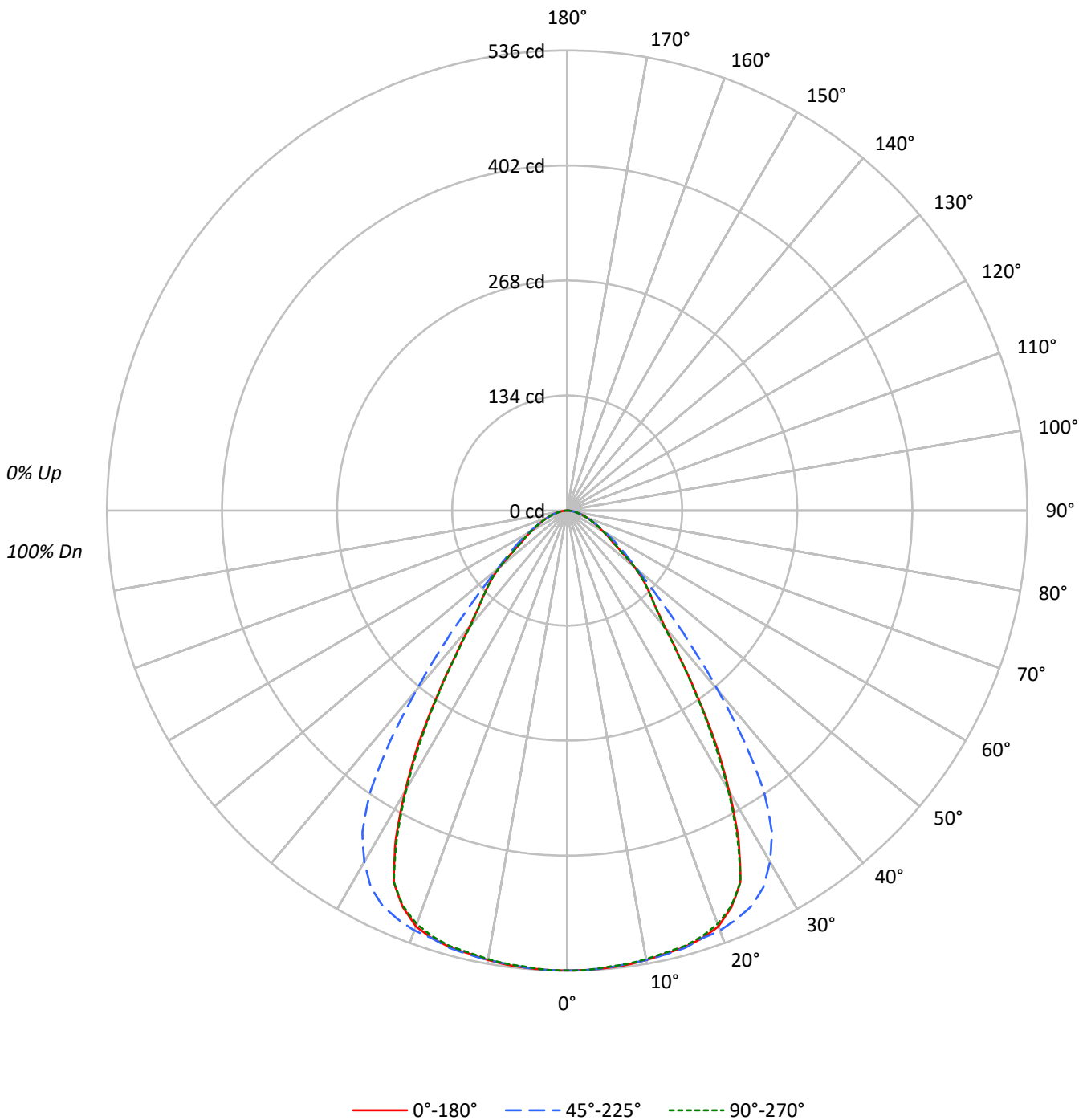
Input Watts (W): 10
Input Voltage (V): NR
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



TEST NUMBER: P252928

CATALOG NUMBER: PRS410D010-S4M12-41SWDC-3000K

Luminous Intensity Polar Plot





TEST NUMBER: P252928

CATALOG NUMBER: PRS410D010-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					90			
2	104	98	93	88	102	96	91	87	93	89	86	90	86	84	87	84	82	80					80			
3	97	89	83	78	95	88	82	77	85	80	76	82	78	75	80	76	73	72					72			
4	91	81	74	69	89	80	74	69	78	72	68	76	71	67	74	70	66	64					64			
5	85	75	67	62	83	74	67	62	72	66	61	70	65	60	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	51	60	54	50	59	54	50	48					48			
8	70	59	52	47	69	58	51	47	57	51	46	56	50	46	55	50	46	44					44			
9	66	55	48	43	65	54	47	43	53	47	43	52	47	42	51	46	42	41					41			
10	63	51	44	40	61	51	44	40	50	44	39	49	43	39	48	43	39	38					38			

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	41004	41004	41004
5°	41084	41084	41007
10°	41318	41318	41240
15°	41722	41809	41642
20°	41974	42390	41730
25°	40336	42921	40336
30°	33374	41762	33100
35°	24697	37377	24501
40°	17636	27228	17436
45°	14689	18110	14689
50°	12277	12634	12277
55°	8714	10075	8848
60°	7348	7961	7348
65°	6285	6466	6285
70°	5483	5483	5483
75°	4821	4821	4821
80°	4055	4055	4055
85°	3601	3601	3601



TEST NUMBER: P252928

CATALOG NUMBER: PRS410D010-S4M12-41SWDC-3000K

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	50.9	5.9
10°-20°	148.8	17.2
20°-30°	222.3	25.8
30°-40°	197.9	22.9
40°-50°	117.8	13.7
50°-60°	66.7	7.7
60°-70°	35.8	4.1
70°-80°	17.5	2.0
80°-90°	4.8	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°	422.0	48.9
0°-40°	619.9	71.9
0°-60°	804.3	93.3
0°-90°	862.5	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	862.5	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	536	536	536	536	536	
5°	535	535	535	535	534	51
15°	526	526	528	526	526	149
25°	478	491	508	490	478	213
35°	264	309	400	308	262	167
45°	136	146	167	145	136	105
55°	65	72	76	72	66	62
65°	35	36	36	36	35	35
75°	16	16	16	16	16	18
85°	4	4	4	4	4	5
90°	0	0	0	0	0	



TEST NUMBER: P252928

CATALOG NUMBER: PRS410D010-S4M12-41SWDC-3000K

CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	535.7	535.7	535.7	535.7	535.7
2.5°	535.7	535.7	535.7	535.7	535.7
5°	534.7	534.7	534.7	534.7	533.7
7.5°	533.7	532.7	532.7	532.7	532.7
10°	531.6	531.6	531.6	530.6	530.6
12.5°	528.6	528.6	529.6	528.6	527.6
15°	526.5	526.5	527.6	525.5	525.5
17.5°	522.5	523.5	522.5	522.5	520.4
20°	515.3	518.4	520.4	517.4	512.3
22.5°	500.0	508.2	515.3	507.1	499.0
25°	477.6	490.8	508.2	489.8	477.6
27.5°	432.7	466.3	494.9	463.3	429.6
30°	377.6	418.4	472.5	415.3	374.5
32.5°	322.5	363.3	443.9	361.2	317.4
35°	264.3	309.2	400.0	308.2	262.2
37.5°	215.3	256.1	338.8	254.1	213.3
40°	176.5	208.2	272.5	207.1	174.5
42.5°	152.0	169.4	215.3	168.4	152.0
45°	135.7	145.9	167.3	144.9	135.7
47.5°	120.4	128.6	131.6	127.6	120.4
50°	103.1	112.2	106.1	112.2	103.1
52.5°	81.6	92.9	88.8	93.9	80.6
55°	65.3	72.4	75.5	72.4	66.3
57.5°	57.1	59.2	63.3	59.2	57.1
60°	48.0	50.0	52.0	50.0	48.0
62.5°	40.8	42.9	42.9	42.9	41.8
65°	34.7	35.7	35.7	35.7	34.7
67.5°	29.6	29.6	29.6	29.6	29.6
70°	24.5	24.5	24.5	24.5	24.5
72.5°	20.4	20.4	20.4	20.4	20.4
75°	16.3	16.3	16.3	16.3	16.3
77.5°	13.3	13.3	12.2	13.3	12.2
80°	9.2	9.2	9.2	9.2	9.2
82.5°	7.1	7.1	7.1	7.1	7.1
85°	4.1	4.1	4.1	4.1	4.1
87.5°	2.0	2.0	2.0	2.0	2.0
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)