

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: P241783

Luminaire Tested: **PRS410D010-S4M12-44SMDC-3000K**

Issue Date: 03/03/2020

Test Information

Test Method: LM-79-08
Report Number: P241783
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G1-1802-584-47)
Test Lab: INNOVATION CENTER(G1)
Issue Date: 03/03/2020
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: HALO COMMERCIAL
Catalog Number: PRS410D010-S4M12-44SMDC-3000K
Description: HALO COMMERCIAL 4" SQUARE, NEW CONSTRUCTION FRAME, WITH 4" MEDIUM DISTRIBUTION, SHALLOW TRIM SPECULAR
Light Source: ARRAYS OF HIGH LUMEN LEDS 80CRI / 3000K CCT
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 978.0 lumens
Efficiency: N/A
Efficacy: 97.8 lumens/watt
Spacing Criteria (0/90/45): 1.03 / 1.03 / 1.1
Luminous Opening: Rectangular (W 0.38' x L: 0.38' x H: 0')
CIE Type: Direct

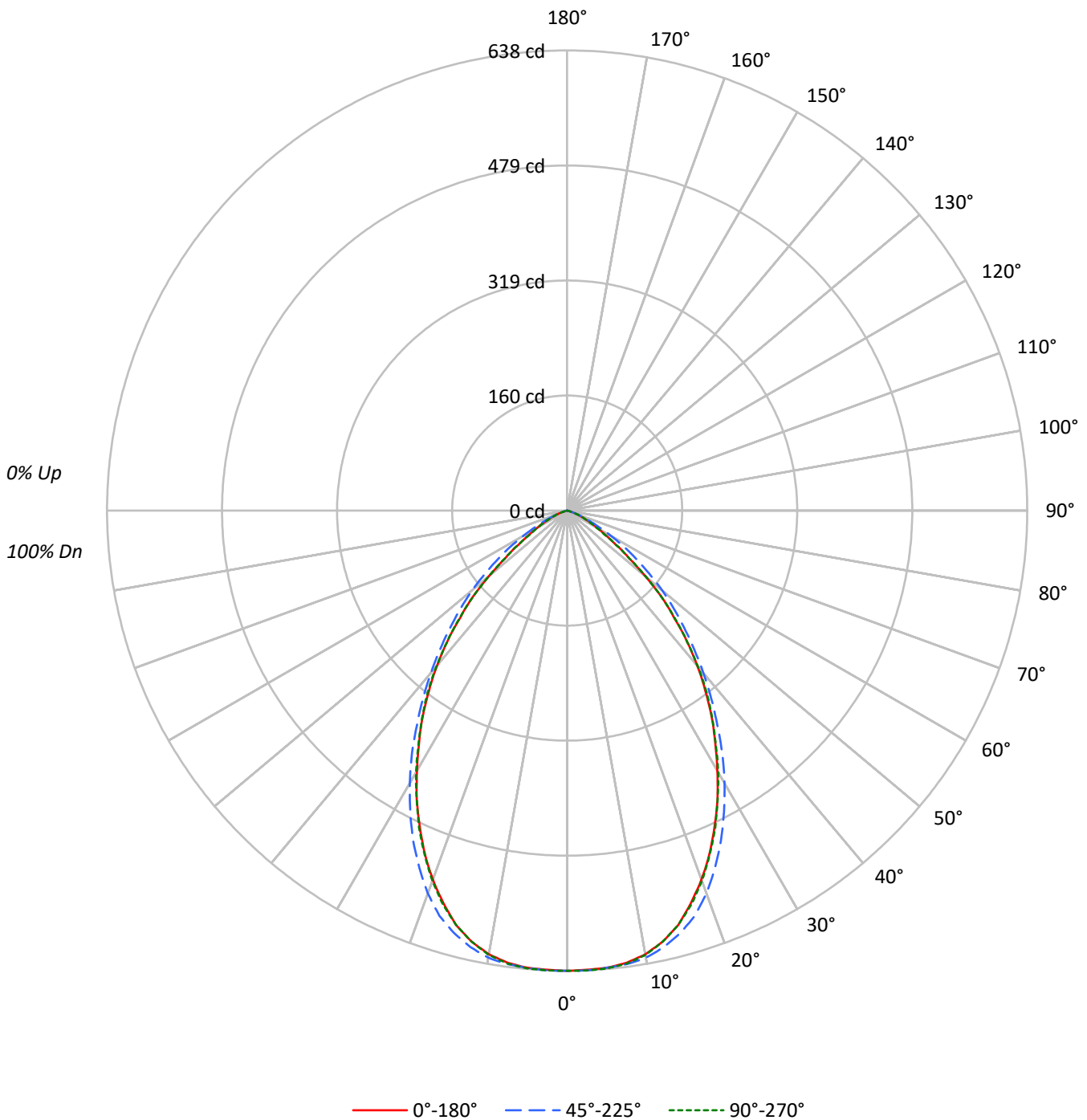
Input Watts (W): 10
Input Voltage (V): NR
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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Luminous Intensity Polar Plot





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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	109	106	103	110	107	104	101	102	100	98	99	97	95	95	94	93	91					91			
2	105	99	94	90	102	97	92	89	94	90	87	91	87	85	88	85	83	81					81			
3	98	90	84	79	96	88	83	78	86	81	77	83	79	75	81	77	74	72					72			
4	91	82	75	70	89	81	74	69	78	73	68	76	71	68	74	70	67	65					65			
5	85	75	68	62	83	74	67	62	72	66	61	70	65	61	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	50	60	54	50	59	54	50	48					48			
8	70	59	51	46	69	58	51	46	57	51	46	56	50	46	55	49	46	44					44			
9	66	54	47	43	65	54	47	43	53	47	42	52	46	42	51	46	42	40					40			
10	62	51	44	39	61	50	44	39	49	43	39	49	43	39	48	43	39	37					37			

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	48842	48842	48842
5°	48883	48883	48960
10°	48547	48927	48624
15°	47126	48045	47126
20°	44353	46006	44507
25°	40852	42642	41012
30°	36777	38571	37033
35°	32658	33920	32742
40°	28068	29327	28168
45°	22678	24767	22884
50°	16790	20458	16898
55°	11076	15587	11076
60°	7394	10793	7088
65°	4890	6303	4890
70°	2820	3245	2820
75°	0	1153	0
80°	0	0	0
85°	0	0	0



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	60.5	6.2
10°-20°	168.2	17.2
20°-30°	227.2	23.2
30°-40°	223.8	22.9
40°-50°	171.0	17.5
50°-60°	90.7	9.3
60°-70°	32.5	3.3
70°-80°	4.1	0.4
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°	455.8	46.6
0°-40°	679.7	69.5
0°-60°	941.3	96.3
0°-90°	978.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	978.0	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	638	638	638	638	638	
5°	636	636	636	637	637	60
15°	595	602	606	600	595	166
25°	484	496	505	498	486	222
35°	350	360	363	361	350	217
45°	210	223	229	224	211	162
55°	83	98	117	98	83	77
65°	27	32	35	32	27	28
75°	0	1	4	1	0	3
85°	0	0	0	0	0	0
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	638.1	638.1	638.1	638.1	638.1
2.5°	637.2	637.2	638.1	638.1	638.1
5°	636.2	636.2	636.2	637.2	637.2
7.5°	632.3	632.3	634.3	633.3	633.3
10°	624.6	626.6	629.5	626.6	625.6
12.5°	612.1	616.9	619.8	616.9	612.1
15°	594.7	601.5	606.3	600.5	594.7
17.5°	570.6	579.3	588.9	579.3	572.5
20°	544.5	555.1	564.8	556.1	546.4
22.5°	515.5	527.1	535.8	528.1	516.5
25°	483.7	496.2	504.9	498.2	485.6
27.5°	451.8	464.4	471.1	465.3	451.8
30°	416.1	429.6	436.4	431.5	419.0
32.5°	382.3	394.9	400.6	395.8	383.3
35°	349.5	360.1	363.0	361.1	350.4
37.5°	314.7	326.3	328.2	328.2	317.6
40°	280.9	291.6	293.5	292.5	281.9
42.5°	246.2	257.8	260.7	257.8	246.2
45°	209.5	223.0	228.8	224.0	211.4
47.5°	178.6	189.2	199.8	190.2	177.6
50°	141.0	159.3	171.8	158.3	141.9
52.5°	108.1	127.4	142.9	126.5	108.1
55°	83.0	97.5	116.8	97.5	83.0
57.5°	62.8	74.3	93.6	73.4	60.8
60°	48.3	57.0	70.5	55.0	46.3
62.5°	36.7	42.5	50.2	41.5	35.7
65°	27.0	31.9	34.8	31.9	27.0
67.5°	19.3	23.2	23.2	23.2	19.3
70°	12.6	15.4	14.5	15.4	12.6
72.5°	4.8	7.7	7.7	7.7	4.8
75°	0.0	1.0	3.9	1.0	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)