

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: P241688

Luminaire Tested: **PRS410D010-S4M12-44SNDMW-4000K**

Issue Date: 03/03/2020

Test Information

Test Method: LM-79-08
Report Number: P241688
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G1-1802-584-40)
Test Lab: INNOVATION CENTER(G1)
Issue Date: 03/03/2020
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: HALO COMMERCIAL
Catalog Number: PRS410D010-S4M12-44SNDMW-4000K
Description: HALO COMMERCIAL 4" SQUARE, NEW CONSTRUCTION FRAME, WITH 4" NARROW DISTRIBUTION, SHALLOW TRIM MATTE WHITE
Light Source: ARRAYS OF HIGH LUMEN LEDS 80CRI / 4000K CCT
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 948.3 lumens
Efficiency: N/A
Efficacy: 94.8 lumens/watt
Spacing Criteria (0/90/45): 0.89 / 0.89 / 0.94
Luminous Opening: Rectangular (W 0.38' x L: 0.38' x H: 0')
CIE Type: Direct

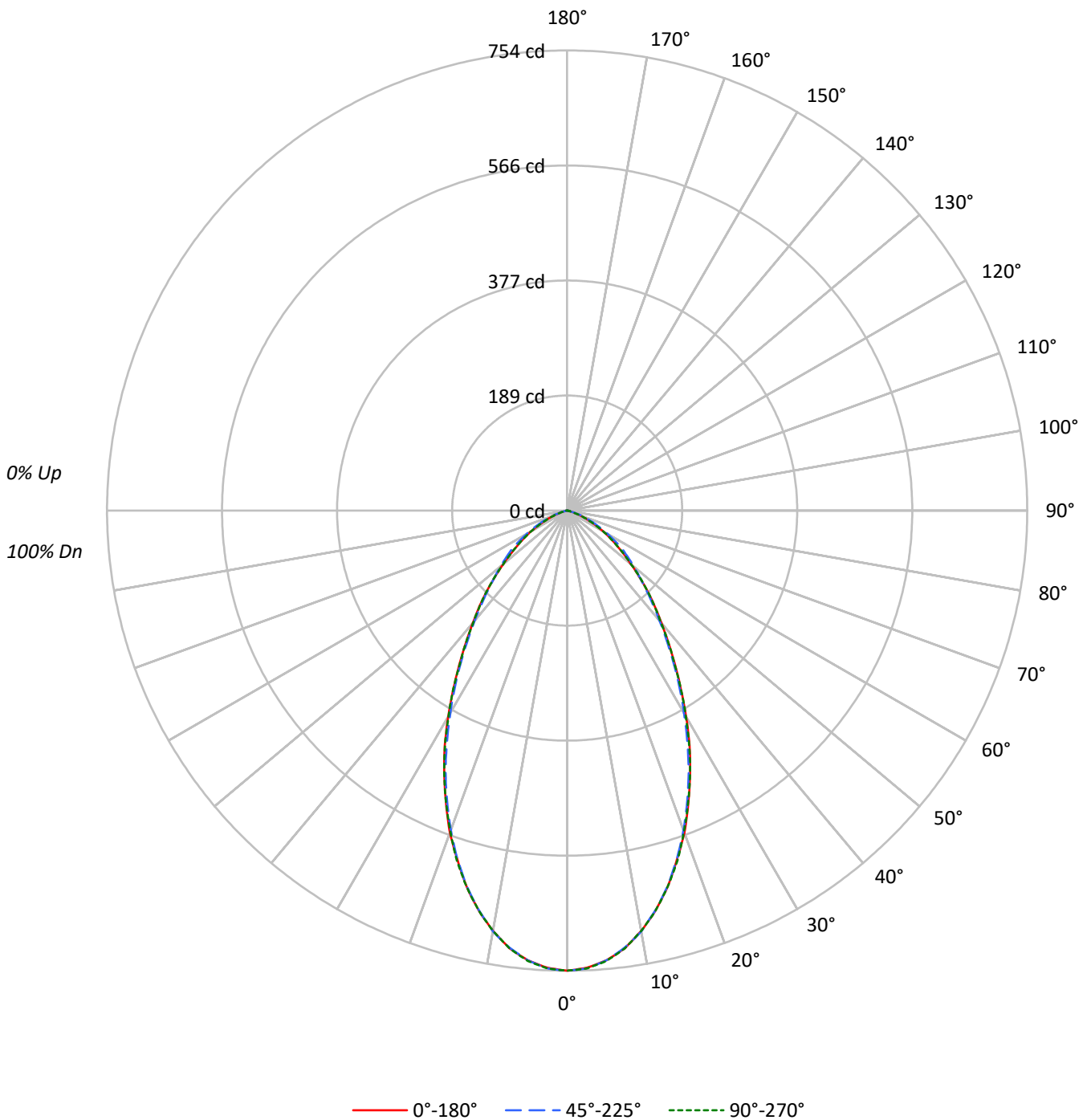
Input Watts (W): 10
Input Voltage (V): NR
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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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	108	105	103	109	106	104	101	102	100	98	98	97	95	95	93	92	90					90			
2	105	98	93	89	102	97	92	88	93	89	86	90	87	84	87	85	82	81					81			
3	98	89	83	78	95	88	82	78	85	80	76	83	78	75	80	77	74	72					72			
4	91	82	75	69	89	80	74	69	78	73	68	76	71	67	74	70	66	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	62	56	78	68	61	56	66	60	56	65	59	55	63	59	55	53					53			
7	75	64	56	51	73	63	56	51	62	55	51	60	55	51	59	54	50	49					49			
8	71	59	52	47	69	59	52	47	57	51	47	56	51	47	55	50	46	45					45			
9	67	55	48	43	65	55	48	43	54	47	43	53	47	43	52	47	43	41					41			
10	63	52	45	40	62	51	45	40	50	44	40	49	44	40	49	43	40	38					38			

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	57706	57706	57706
5°	56835	56835	56912
10°	54345	54422	54345
15°	50518	50439	50518
20°	45746	45412	45583
25°	40252	39821	40252
30°	34435	33807	34346
35°	28743	28369	28649
40°	23961	23561	23861
45°	20048	19712	20156
50°	16266	16993	16266
55°	13105	14719	13238
60°	10379	11619	10379
65°	7516	8802	7516
70°	4521	5662	4521
75°	1508	2396	1508
80°	1322	1322	1322
85°	878	878	878



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	69.3	7.3
10°-20°	177.7	18.7
20°-30°	216.9	22.9
30°-40°	191.7	20.2
40°-50°	143.1	15.1
50°-60°	92.8	9.8
60°-70°	45.7	4.8
70°-80°	9.9	1.0
80°-90°	1.2	0.1
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°	464.0	48.9
0°-40°	655.7	69.1
0°-60°	891.5	94.0
0°-90°	948.3	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	948.3	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	754	754	754	754	754	
5°	740	740	740	741	741	69
15°	638	638	636	638	638	178
25°	477	476	472	475	477	218
35°	308	306	304	306	307	193
45°	185	185	182	184	186	143
55°	98	101	110	102	99	89
65°	42	46	49	46	42	42
75°	5	6	8	6	5	9
85°	1	1	1	1	1	1
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	753.9	753.9	753.9	753.9	753.9
2.5°	749.8	749.8	750.8	750.8	750.8
5°	739.7	739.7	739.7	740.7	740.7
7.5°	723.5	722.5	722.5	723.5	723.5
10°	699.2	699.2	700.2	698.2	699.2
12.5°	670.9	670.9	669.9	670.9	670.9
15°	637.5	637.5	636.5	637.5	637.5
17.5°	599.0	599.0	598.0	600.0	601.1
20°	561.6	560.6	557.5	559.6	559.6
22.5°	519.1	518.1	514.0	517.1	518.1
25°	476.6	475.6	471.5	474.6	476.6
27.5°	434.1	430.1	426.0	431.1	433.1
30°	389.6	386.5	382.5	386.5	388.6
32.5°	347.1	346.1	342.0	345.1	347.1
35°	307.6	305.6	303.6	305.6	306.6
37.5°	272.2	270.2	267.1	270.2	272.2
40°	239.8	237.8	235.8	236.8	238.8
42.5°	212.5	210.5	207.4	209.5	211.5
45°	185.2	185.2	182.1	184.2	186.2
47.5°	159.9	161.9	160.9	161.9	160.9
50°	136.6	140.7	142.7	140.7	136.6
52.5°	116.4	119.4	125.5	119.4	116.4
55°	98.2	101.2	110.3	102.2	99.2
57.5°	83.0	86.0	93.1	86.0	83.0
60°	67.8	71.8	75.9	71.8	67.8
62.5°	54.6	58.7	61.7	58.7	53.6
65°	41.5	46.5	48.6	45.5	41.5
67.5°	30.4	34.4	36.4	34.4	30.4
70°	20.2	24.3	25.3	24.3	20.2
72.5°	12.1	15.2	15.2	14.2	12.1
75°	5.1	6.1	8.1	6.1	5.1
77.5°	4.0	4.0	4.0	4.0	4.0
80°	3.0	3.0	3.0	3.0	3.0
82.5°	2.0	2.0	2.0	2.0	2.0
85°	1.0	1.0	1.0	1.0	1.0
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)