

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: P238232

Luminaire Tested: **PRS640D010-S6M24-61SNDH-4000K**

Issue Date: 03/03/2020

**Test Information**

Test Method: LM-79-08  
Report Number: P238232  
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G1-1802-584-19)  
Test Lab: INNOVATION CENTER(G1)  
Issue Date: 03/03/2020  
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)  
Product Line: HALO COMMERCIAL  
Catalog Number: PRS640D010-S6M24-61SNDH-4000K  
Description: HALO COMMERCIAL 6" SQUARE, NEW CONSTRUCTION FRAME, WITH 6" NARROW DISTRIBUTION, DEEP TRIM HAZE  
Light Source: ARRAYS OF HIGH LUMEN LEDS 80CRI / 4000K CCT  
Ballast/Driver: ELECTRONIC DRIVER

**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 4100.0 lumens  
Efficiency: N/A  
Efficacy: 107.9 lumens/watt  
Spacing Criteria (0/90/45): 0.81 / 0.81 / 0.84  
Luminous Opening: Rectangular (W 0.5' x L: 0.5' x H: 0')  
CIE Type: Direct

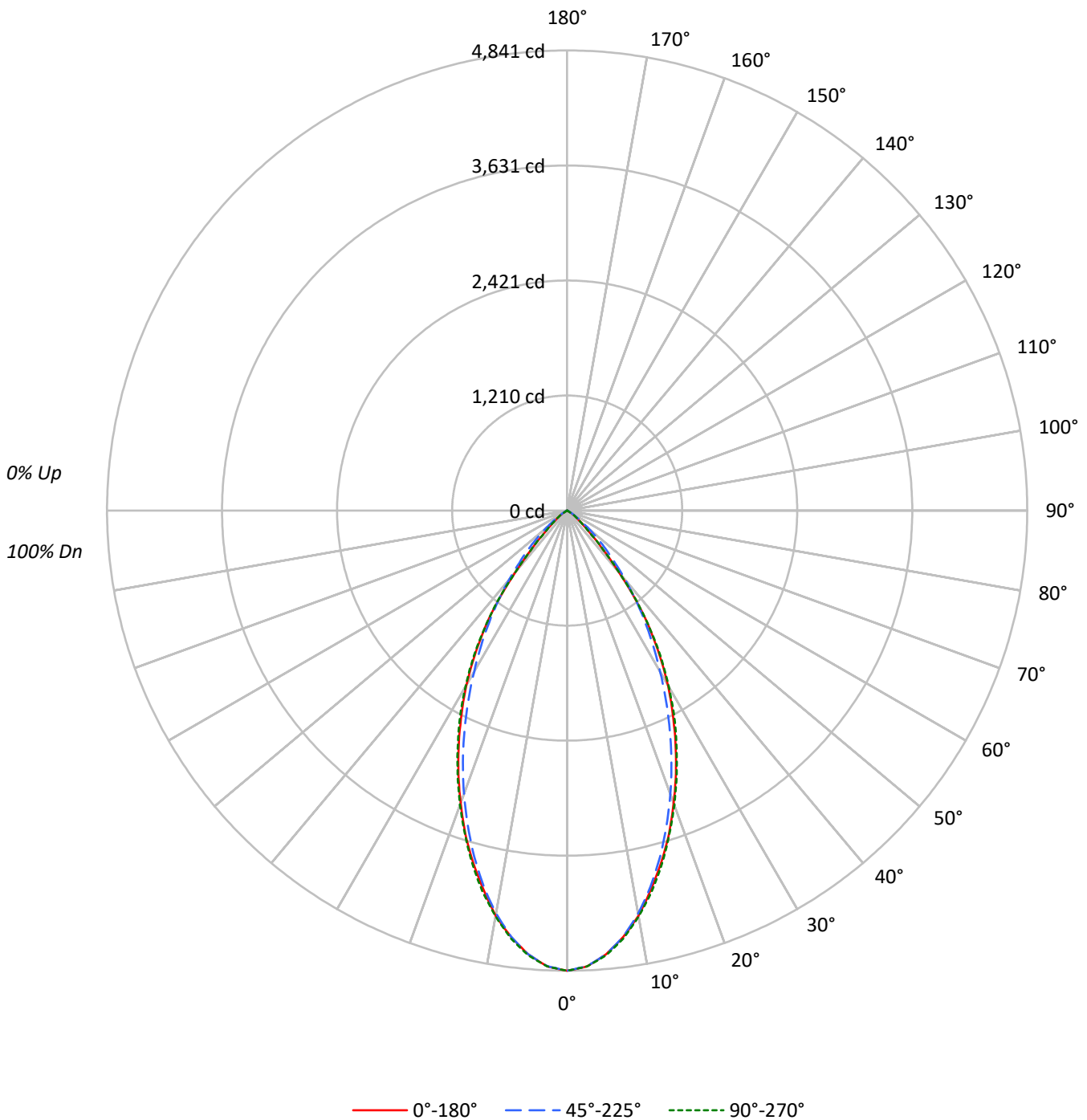
Input Watts (W): 38  
Input Voltage (V): NR  
Input Current (Ain): NR  
Voltage Rise (V): NR  
Power Factor: NR  
Total Harmonic Distortion (THDi): NR  
Frequency (hertz): 60  
Stabilization Time: NR  
Operation Time: NR  
Ambient Temperature (°C): NR  
Test Distance: 25 FT



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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	113	111	108	106	111	108	106	104	104	102	101	101	99	98	97	96	95	93					93			
2	108	102	98	95	105	101	97	94	98	94	92	95	92	90	92	90	88	86					86			
3	102	95	90	86	100	94	89	85	91	87	84	89	85	83	86	84	81	80					80			
4	96	89	83	79	95	87	82	78	85	81	77	83	79	76	81	78	75	74					74			
5	91	83	77	72	90	82	76	72	80	75	71	78	74	71	77	73	70	68					68			
6	87	77	71	67	85	77	71	66	75	70	66	74	69	66	72	68	65	64					64			
7	82	72	66	62	81	72	66	62	70	65	61	69	65	61	68	64	61	59					59			
8	78	68	62	58	77	68	62	58	66	61	57	65	61	57	64	60	57	55					55			
9	74	64	58	54	73	64	58	54	63	57	54	62	57	53	61	57	53	52					52			
10	71	61	55	51	69	60	54	51	59	54	50	58	54	50	58	53	50	49					49			

**AVERAGE LUMINANCE (cd/sqm):**

	0°	45°	90°
0°	208432	208432	208432
5°	202538	202538	203027
10°	189198	188205	189526
15°	170676	168153	171688
20°	150006	145337	151047
25°	128087	121446	129342
30°	105508	97245	106259
35°	79588	75026	79988
40°	47752	53485	47752
45°	22535	34951	22535
50°	11635	19981	11380
55°	6523	8790	6523
60°	2601	3901	2601
65°	774	1538	774
70°	478	478	478
75°	0	0	0
80°	0	0	0
85°	0	0	0



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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	435.8	10.6
10°-20°	1059.3	25.8
20°-30°	1201.6	29.3
30°-40°	908.7	22.2
40°-50°	381.5	9.3
50°-60°	98.9	2.4
60°-70°	12.7	0.3
70°-80°	1.5	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°	2696.7	65.8
0°-40°	3605.4	87.9
0°-60°	4085.8	99.7
0°-90°	4100.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	4100.0	100.0

**CANDELA DISTRIBUTION:**

	0°	22.5°	45°	67.5°	90°	Flux
0°	4841	4841	4841	4841	4841	
5°	4686	4690	4686	4694	4698	436
15°	3829	3803	3772	3810	3852	1067
25°	2696	2621	2556	2636	2723	1232
35°	1514	1450	1427	1461	1522	927
45°	370	453	574	453	370	320
55°	87	102	117	102	87	82
65°	8	4	15	4	8	9
75°	0	0	0	0	0	1
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°	4841.0	4841.0	4841.0	4841.0	4841.0
2.5°	4799.5	4795.7	4795.7	4799.5	4799.5
5°	4686.2	4690.0	4686.2	4693.7	4697.5
7.5°	4523.8	4523.8	4520.0	4527.6	4538.9
10°	4327.5	4312.3	4304.8	4319.9	4335.0
12.5°	4078.2	4066.9	4051.8	4078.2	4108.4
15°	3829.0	3802.6	3772.4	3810.1	3851.7
17.5°	3564.7	3511.8	3477.8	3526.9	3572.2
20°	3273.9	3221.0	3172.0	3224.8	3296.6
22.5°	2990.7	2915.2	2866.1	2926.5	3009.6
25°	2696.2	2620.6	2556.4	2635.7	2722.6
27.5°	2401.6	2322.3	2250.6	2337.4	2439.4
30°	2122.2	2024.0	1956.0	2046.7	2137.3
32.5°	1812.5	1721.9	1684.2	1748.4	1842.8
35°	1514.2	1450.0	1427.4	1461.4	1521.8
37.5°	1189.5	1174.4	1181.9	1197.0	1208.4
40°	849.6	921.4	951.6	925.2	849.6
42.5°	566.4	664.6	743.9	664.6	574.0
45°	370.1	453.1	574.0	453.1	370.1
47.5°	241.7	305.9	426.7	302.1	241.7
50°	173.7	203.9	298.3	203.9	169.9
52.5°	124.6	143.5	192.6	143.5	124.6
55°	86.9	102.0	117.1	102.0	86.9
57.5°	56.6	68.0	68.0	68.0	56.6
60°	30.2	41.5	45.3	41.5	30.2
62.5°	7.6	18.9	26.4	18.9	7.6
65°	7.6	3.8	15.1	3.8	7.6
67.5°	3.8	3.8	7.6	3.8	3.8
70°	3.8	3.8	3.8	3.8	3.8
72.5°	3.8	3.8	3.8	3.8	3.8
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)