

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: P238022

Luminaire Tested: **PRS640D010-S6M24-64SMDMW-4000K**

Issue Date: 03/03/2020

**Test Information**

Test Method: LM-79-08  
Report Number: P238022  
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G1-1802-584-5)  
Test Lab: INNOVATION CENTER(G1)  
Issue Date: 03/03/2020  
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)  
Product Line: HALO COMMERCIAL  
Catalog Number: PRS640D010-S6M24-64SMDMW-4000K  
Description: HALO COMMERCIAL 6" SQUARE, NEW CONSTRUCTION FRAME, WITH 6" MEDIUM 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: 4266.0 lumens  
Efficiency: N/A  
Efficacy: 112.3 lumens/watt  
Spacing Criteria (0/90/45): 0.94 / 0.95 / 1.01  
Luminous Opening: Rectangular (W 0.5' x L: 0.5' x H: 0')  
CIE Type: Direct

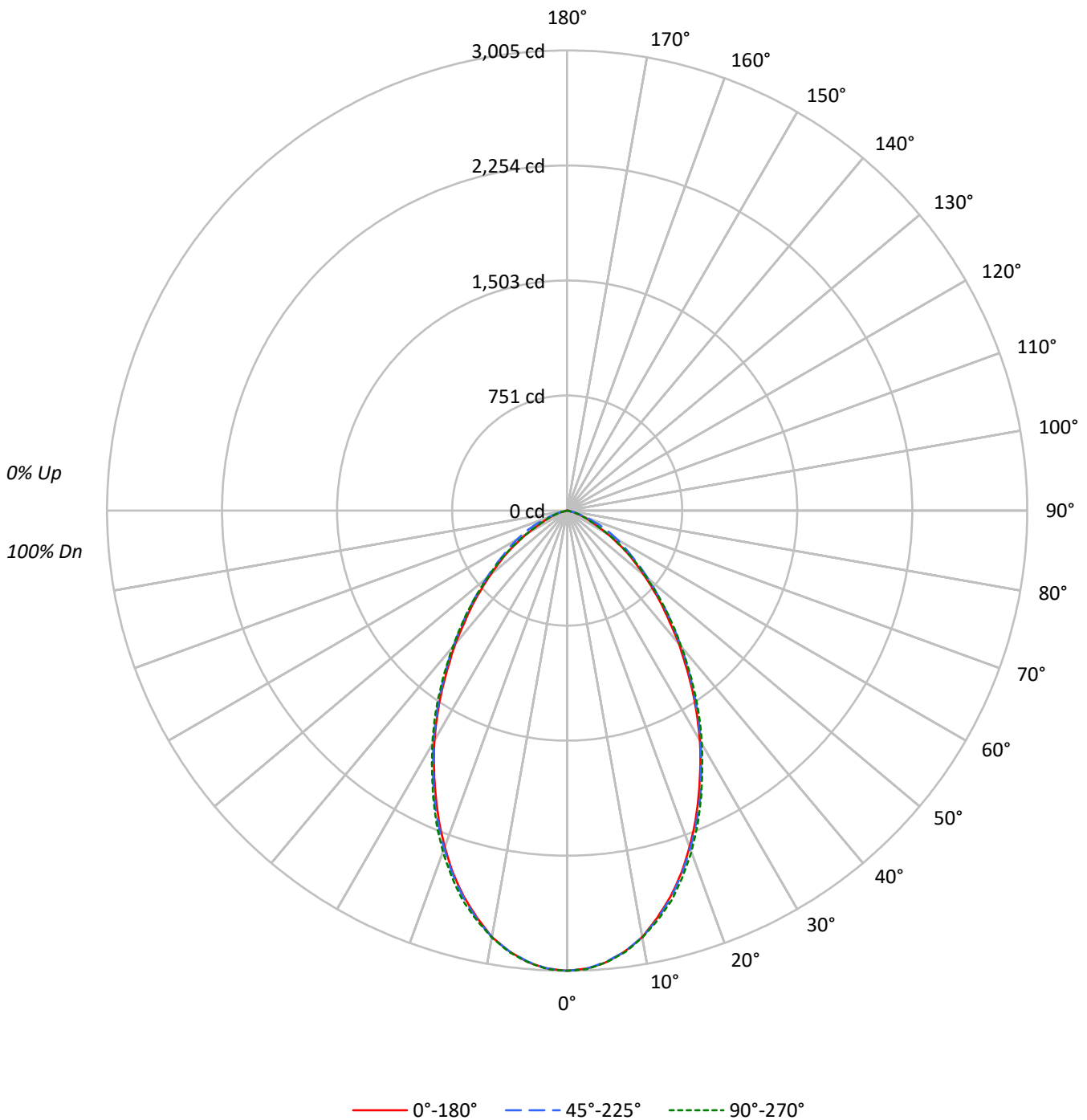
Input Watts (W): 38  
Input Voltage (V): NR  
Input Current (Ain): NR  
Voltage Rise (V): NR  
Power Factor: NR  
Total Harmonic Distortion (THDi): NR  
Frequency (hertz): 60  
Stabilization Time: NR  
Operation Time: NR  
Ambient Temperature (°C): NR  
Test Distance: 25 FT



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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	112	108	105	102	109	106	103	101	102	100	97	98	96	95	95	93	92	90					90			
2	104	98	93	88	102	96	91	87	93	89	85	90	86	83	87	84	82	80					80			
3	97	89	82	77	95	87	81	76	84	79	75	82	78	74	79	76	73	71					71			
4	90	81	74	68	88	79	73	68	77	71	67	75	70	66	73	69	65	63					63			
5	84	74	66	61	82	73	66	60	71	65	60	69	64	59	67	62	59	57					57			
6	79	68	60	55	77	67	60	55	65	59	54	64	58	54	62	57	53	52					52			
7	74	62	55	50	72	62	55	50	60	54	49	59	53	49	58	52	49	47					47			
8	69	58	50	45	68	57	50	45	56	50	45	55	49	45	54	48	45	43					43			
9	65	54	47	42	64	53	46	42	52	46	41	51	45	41	50	45	41	39					39			
10	62	50	43	38	61	50	43	38	49	43	38	48	42	38	47	42	38	36					36			

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

	0°	45°	90°
0°	129378	129378	129378
5°	127914	127750	127914
10°	123614	123614	123780
15°	116273	116607	117449
20°	107065	107583	108623
25°	96662	97735	98277
30°	86144	86705	87456
35°	74805	75599	76393
40°	63866	64923	65136
45°	53327	54935	54935
50°	43994	46017	45006
55°	35423	38253	36272
60°	26006	32507	26651
65°	17686	25765	18073
70°	12828	16630	12828
75°	7536	8784	6904
80°	1860	2802	1860
85°	1877	1877	1877



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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	278.3	6.5
10°-20°	732.4	17.2
20°-30°	940.3	22.0
30°-40°	898.5	21.1
40°-50°	695.9	16.3
50°-60°	447.6	10.5
60°-70°	212.1	5.0
70°-80°	56.7	1.3
80°-90°	4.2	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°	1951.0	45.7
0°-40°	2849.5	66.8
0°-60°	3992.9	93.6
0°-90°	4266.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	4266.0	100.0

**CANDELA DISTRIBUTION:**

	0°	22.5°	45°	67.5°	90°	Flux
0°	3005	3005	3005	3005	3005	
5°	2960	2960	2956	2960	2960	278
15°	2608	2612	2616	2627	2635	729
25°	2035	2038	2057	2061	2069	934
35°	1423	1427	1438	1446	1453	888
45°	876	895	902	910	902	677
55°	472	498	510	506	483	421
65°	174	200	253	200	177	182
75°	45	53	53	53	42	49
85°	4	4	4	4	4	4
90°	0	0	0	0	0	



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**CANDELA DISTRIBUTION (FULL):**

	0°	22.5°	45°	67.5°	90°
0°	3004.9	3004.9	3004.9	3004.9	3004.9
2.5°	2993.5	2993.5	2993.5	2993.5	2997.3
5°	2959.6	2959.6	2955.8	2959.6	2959.6
7.5°	2902.9	2902.9	2902.9	2906.7	2906.7
10°	2827.4	2827.4	2827.4	2831.2	2831.2
12.5°	2721.7	2725.5	2729.3	2736.8	2736.8
15°	2608.5	2612.3	2616.0	2627.4	2634.9
17.5°	2480.1	2483.9	2487.7	2502.8	2506.6
20°	2336.7	2336.7	2348.0	2366.9	2370.7
22.5°	2189.5	2193.2	2204.6	2212.1	2223.4
25°	2034.7	2038.5	2057.3	2061.1	2068.7
27.5°	1883.7	1883.7	1895.0	1902.6	1910.1
30°	1732.7	1732.7	1744.0	1747.8	1759.1
32.5°	1574.2	1577.9	1589.3	1596.8	1608.1
35°	1423.2	1426.9	1438.3	1445.8	1453.4
37.5°	1268.4	1287.3	1294.8	1302.4	1302.4
40°	1136.3	1147.6	1155.1	1166.5	1158.9
42.5°	992.8	1019.2	1023.0	1034.3	1026.8
45°	875.8	894.7	902.2	909.8	902.2
47.5°	758.8	781.4	789.0	792.7	781.4
50°	656.8	675.7	687.0	687.0	671.9
52.5°	558.7	581.3	592.7	592.7	577.6
55°	471.9	498.3	509.6	505.8	483.2
57.5°	381.3	415.2	441.7	422.8	392.6
60°	302.0	339.7	377.5	343.5	309.5
62.5°	226.5	264.2	313.3	268.0	230.3
65°	173.6	200.1	252.9	200.1	177.4
67.5°	135.9	151.0	188.7	151.0	135.9
70°	101.9	113.2	132.1	113.2	101.9
72.5°	71.7	83.0	86.8	83.0	71.7
75°	45.3	52.8	52.8	52.8	41.5
77.5°	15.1	22.6	30.2	22.6	15.1
80°	7.5	7.5	11.3	7.5	7.5
82.5°	7.5	7.5	7.5	7.5	7.5
85°	3.8	3.8	3.8	3.8	3.8
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)