

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: P237972

Luminaire Tested: **PRS640D010-S6M24-64SMDMB**

Issue Date: 03/03/2020

**Test Information**

Test Method: LM-79-08  
Report Number: P237972  
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G1-1802-584-2)  
Test Lab: INNOVATION CENTER(G1)  
Issue Date: 03/03/2020  
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)  
Product Line: HALO COMMERCIAL  
Catalog Number: PRS640D010-S6M24-64SMDMB  
Description: HALO COMMERCIAL 6" SQUARE, NEW CONSTRUCTION FRAME, WITH 6" MEDIUM DISTRIBUTION, SHALLOW TRIM MATTE BLACK  
Light Source: ARRAYS OF HIGH LUMEN LEDS 80CRI / 3500K CCT  
Ballast/Driver: ELECTRONIC DRIVER

**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 4216.0 lumens  
Efficiency: N/A  
Efficacy: 110.9 lumens/watt  
Spacing Criteria (0/90/45): 0.93 / 0.94 / 1  
Luminous Opening: Rectangular (W 0.5' x L: 0.5' x H: 0')  
CIE Type: Direct

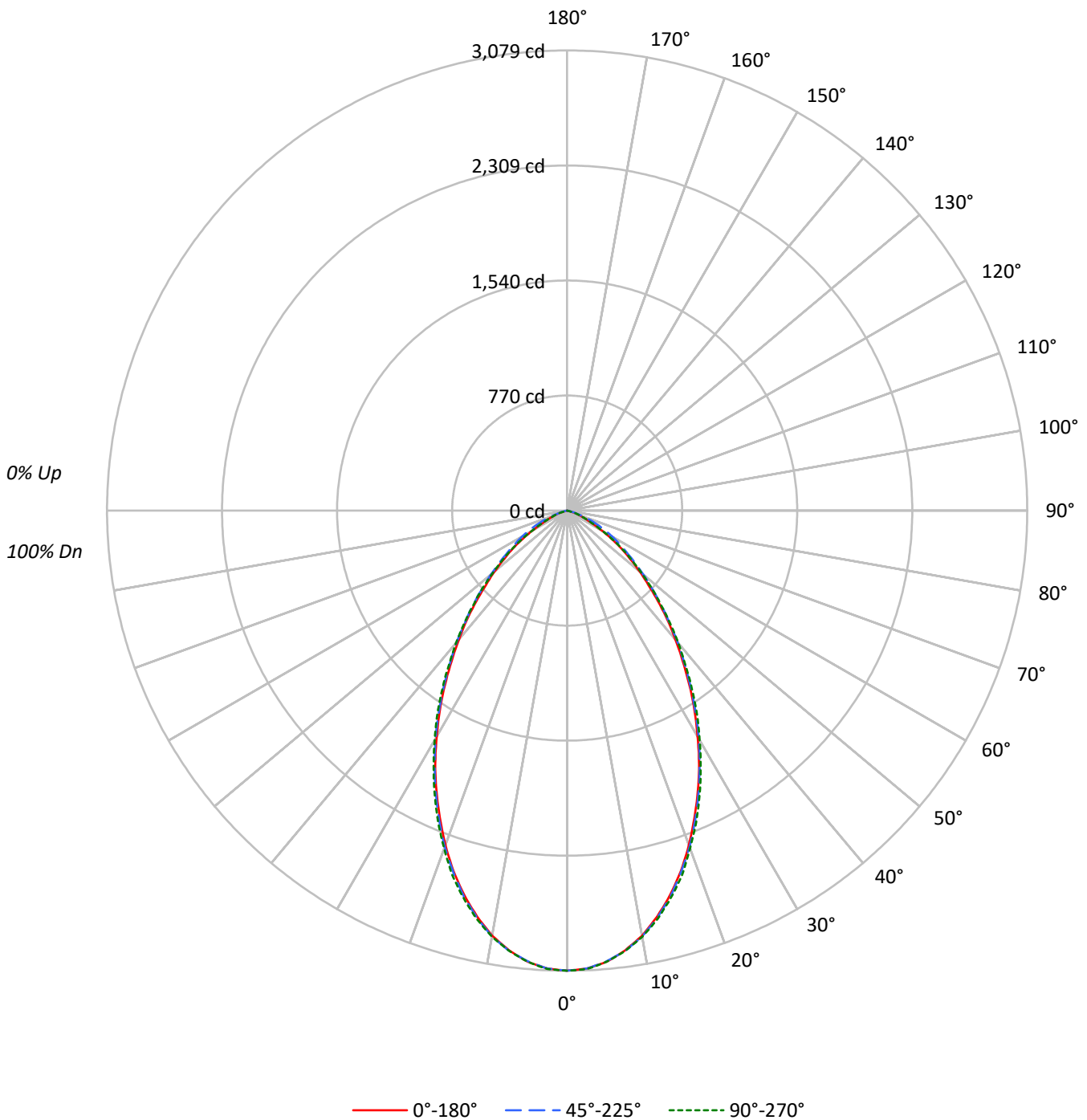
Input Watts (W): 38  
Input Voltage (V): NR  
Input Current (Ain): NR  
Voltage Rise (V): NR  
Power Factor: NR  
Total Harmonic Distortion (THDi): NR  
Frequency (hertz): 60  
Stabilization Time: NR  
Operation Time: NR  
Ambient Temperature (°C): NR  
Test Distance: 25 FT



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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	109	105	103	109	106	104	101	102	100	98	98	97	95	95	94	92	90					90			
2	105	98	93	89	102	97	92	88	93	89	86	90	87	84	87	85	82	80					80			
3	97	89	83	78	95	88	82	77	85	80	76	82	78	75	80	77	74	72					72			
4	91	81	74	69	89	80	74	69	78	72	68	76	71	67	74	70	66	64					64			
5	85	74	67	62	83	73	67	62	71	66	61	70	64	60	68	63	60	58					58			
6	79	68	61	56	78	68	61	56	66	60	55	64	59	55	63	58	54	53					53			
7	74	63	56	51	73	62	55	51	61	55	50	60	54	50	58	53	50	48					48			
8	70	59	51	46	69	58	51	46	57	50	46	56	50	46	54	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°	132555	132555	132555
5°	131009	130836	131009
10°	126294	126468	126639
15°	118711	119063	119589
20°	109150	109695	110236
25°	98320	98885	99636
30°	86760	87546	88137
35°	74879	75709	76540
40°	63388	64501	64945
45°	52286	53973	53729
50°	42407	44530	43472
55°	33269	36242	34162
60°	23173	29984	23853
65°	14915	22984	14915
70°	9958	13445	9958
75°	3943	5922	3943
80°	0	0	0
85°	0	0	0



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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	284.9	6.8
10°-20°	747.1	17.7
20°-30°	953.2	22.6
30°-40°	901.0	21.4
40°-50°	684.3	16.2
50°-60°	422.7	10.0
60°-70°	184.5	4.4
70°-80°	38.5	0.9
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°	1985.1	47.1
0°-40°	2886.2	68.5
0°-60°	3993.1	94.7
0°-90°	4216.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	4216.0	100.0

**CANDELA DISTRIBUTION:**

	0°	22.5°	45°	67.5°	90°	Flux
0°	3079	3079	3079	3079	3079	
5°	3031	3031	3027	3031	3031	285
15°	2663	2663	2671	2679	2683	745
25°	2070	2070	2082	2089	2097	948
35°	1425	1436	1440	1452	1456	890
45°	859	882	886	898	882	666
55°	443	471	483	479	455	395
65°	146	170	226	174	146	153
75°	24	36	36	36	24	30
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°	3078.7	3078.7	3078.7	3078.7	3078.7
2.5°	3066.8	3066.8	3066.8	3066.8	3070.7
5°	3031.2	3031.2	3027.2	3031.2	3031.2
7.5°	2967.9	2971.8	2971.8	2971.8	2971.8
10°	2888.7	2888.7	2892.7	2896.6	2896.6
12.5°	2781.9	2785.8	2789.8	2797.7	2797.7
15°	2663.2	2663.2	2671.1	2679.0	2682.9
17.5°	2528.6	2528.6	2536.5	2544.4	2556.3
20°	2382.2	2382.2	2394.1	2405.9	2405.9
22.5°	2223.9	2223.9	2239.7	2243.7	2255.6
25°	2069.6	2069.6	2081.5	2089.4	2097.3
27.5°	1911.3	1907.3	1919.2	1927.1	1935.0
30°	1745.1	1745.1	1760.9	1760.9	1772.8
32.5°	1586.8	1586.8	1598.7	1606.6	1618.5
35°	1424.6	1436.4	1440.4	1452.3	1456.2
37.5°	1270.2	1290.0	1290.0	1305.9	1297.9
40°	1127.8	1139.7	1147.6	1155.5	1155.5
42.5°	993.2	1009.1	1009.1	1020.9	1017.0
45°	858.7	882.4	886.4	898.3	882.4
47.5°	736.0	763.7	767.7	775.6	767.7
50°	633.1	652.9	664.8	664.8	649.0
52.5°	530.3	554.0	565.9	565.9	546.1
55°	443.2	470.9	482.8	478.8	455.1
57.5°	352.2	383.8	411.5	395.7	364.1
60°	269.1	308.7	348.2	316.6	277.0
62.5°	193.9	233.5	284.9	233.5	201.8
65°	146.4	170.2	225.6	174.1	146.4
67.5°	106.8	122.7	166.2	126.6	106.8
70°	79.1	91.0	106.8	91.0	79.1
72.5°	51.4	63.3	63.3	63.3	51.4
75°	23.7	35.6	35.6	35.6	23.7
77.5°	0.0	7.9	15.8	7.9	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)