

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: P253062

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

Issue Date: 03/03/2020

**Test Information**

Test Method: LM-79-08  
Report Number: P253062  
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G1-1805-776-1)  
Test Lab: INNOVATION CENTER(G1)  
Issue Date: 03/03/2020  
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)  
Product Line: HALO COMMERCIAL  
Catalog Number: PRS640D010-S6M24-61SWDC-4000K  
Description: HALO COMMERCIAL 6" SQUARE, NEW CONSTRUCTION FRAME, WITH 6" WIDE DISTRIBUTION, DEEP TRIM SPECULAR  
Light Source: ARRAYS OF HIGH LUMEN LEDS 80CRI / 4000K CCT  
Ballast/Driver: ELECTRONIC DRIVER

**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 3667.6 lumens  
Efficiency: N/A  
Efficacy: 96.5 lumens/watt  
Spacing Criteria (0/90/45): 1.26 / 1.28 / 1.33  
Luminous Opening: Rectangular (W 0.5' x L: 0.5' x H: 0')  
CIE Type: Direct

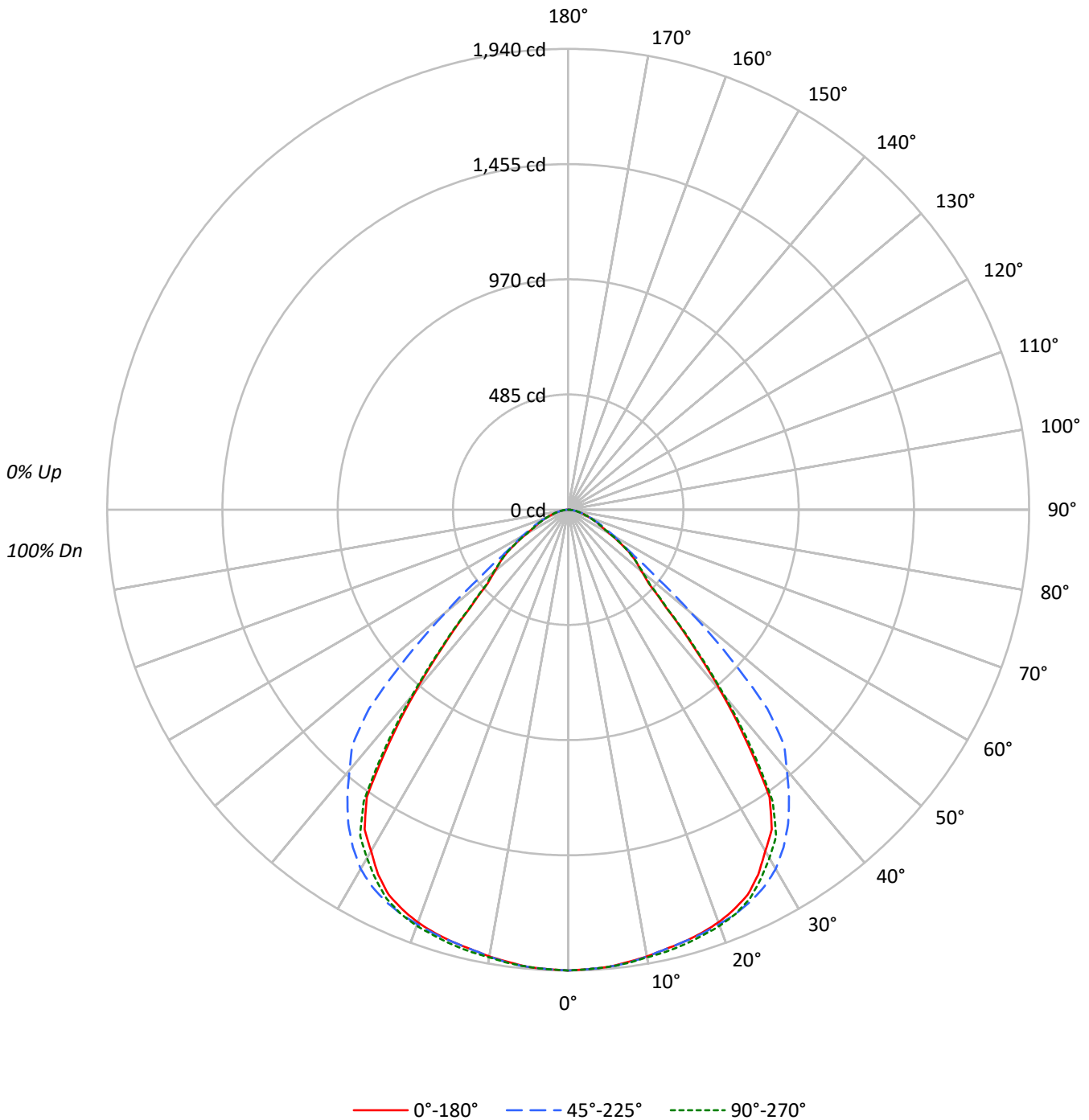
Input Watts (W): 38  
Input Voltage (V): NR  
Input Current (Ain): NR  
Voltage Rise (V): NR  
Power Factor: NR  
Total Harmonic Distortion (THDi): NR  
Frequency (hertz): 60  
Stabilization Time: NR  
Operation Time: NR  
Ambient Temperature (°C): NR  
Test Distance: 25 FT



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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	100	102	99	97	98	96	94	94	93	91	89					89			
2	104	97	92	88	101	96	91	87	92	88	85	89	86	83	86	84	81	79					79			
3	97	88	82	76	94	87	81	76	84	79	75	81	77	73	79	75	72	70					70			
4	90	80	73	67	88	79	72	67	77	71	66	74	69	65	72	68	65	63					63			
5	84	73	66	60	82	72	65	60	70	64	59	68	63	59	66	62	58	56					56			
6	78	67	59	54	76	66	59	54	64	58	53	63	57	53	61	56	52	51					51			
7	73	61	54	49	71	61	53	48	59	53	48	58	52	48	57	51	47	46					46			
8	68	57	49	44	67	56	49	44	55	48	44	54	48	43	52	47	43	42					42			
9	64	52	45	40	63	52	45	40	51	44	40	50	44	40	49	43	40	38					38			
10	60	49	42	37	59	48	41	37	47	41	37	46	41	37	46	40	36	35					35			

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

	0°	45°	90°
0°	83532	83532	83532
5°	83523	83523	83523
10°	83492	83492	83658
15°	83943	83943	84451
20°	84719	85067	85416
25°	84956	86396	85854
30°	82489	86830	84185
35°	77628	84813	78826
40°	56334	80452	57616
45°	35371	72130	36065
50°	26961	45267	27463
55°	23653	25365	23653
60°	17326	19289	17326
65°	14314	15475	14314
70°	11947	12425	11947
75°	10098	10098	10098
80°	8480	8480	8480
85°	7509	7509	7509



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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	183.7	5.0
10°-20°	533.7	14.6
20°-30°	830.5	22.6
30°-40°	949.1	25.9
40°-50°	634.9	17.3
50°-60°	303.9	8.3
60°-70°	148.1	4.0
70°-80°	66.6	1.8
80°-90°	17.1	0.5
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°	1548.0	42.2
0°-40°	2497.0	68.1
0°-60°	3435.8	93.7
0°-90°	3667.6	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	3667.6	100.0

**CANDELA DISTRIBUTION:**

	0°	22.5°	45°	67.5°	90°	Flux
0°	1940	1940	1940	1940	1940	
5°	1932	1932	1932	1932	1932	184
15°	1883	1883	1883	1891	1895	532
25°	1788	1800	1819	1815	1807	819
35°	1477	1560	1614	1583	1500	877
45°	581	748	1185	759	592	482
55°	315	338	338	342	315	275
65°	140	144	152	144	140	141
75°	61	61	61	61	61	65
85°	15	15	15	15	15	17
90°	0	0	0	0	0	



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**CANDELA DISTRIBUTION (FULL):**

	0°	22.5°	45°	67.5°	90°
0°	1940.1	1940.1	1940.1	1940.1	1940.1
2.5°	1936.3	1936.3	1936.3	1936.3	1936.3
5°	1932.5	1932.5	1932.5	1932.5	1932.5
7.5°	1921.1	1921.1	1924.9	1921.1	1924.9
10°	1909.7	1909.7	1909.7	1913.5	1913.5
12.5°	1894.6	1894.6	1894.6	1902.2	1905.9
15°	1883.2	1883.2	1883.2	1890.8	1894.6
17.5°	1868.0	1868.0	1871.8	1879.4	1879.4
20°	1849.0	1852.8	1856.6	1864.2	1864.2
22.5°	1822.4	1830.0	1841.4	1845.2	1841.4
25°	1788.3	1799.6	1818.6	1814.8	1807.2
27.5°	1731.3	1757.9	1788.3	1773.1	1754.1
30°	1659.2	1700.9	1746.5	1716.1	1693.3
32.5°	1594.6	1628.8	1685.7	1651.6	1628.8
35°	1476.9	1560.4	1613.6	1583.2	1499.7
37.5°	1237.7	1423.8	1526.3	1446.5	1268.1
40°	1002.3	1199.8	1431.4	1214.9	1025.1
42.5°	778.3	968.2	1344.0	983.3	793.5
45°	580.9	748.0	1184.6	759.3	592.3
47.5°	459.4	554.3	922.6	565.7	467.0
50°	402.5	440.4	675.8	448.0	410.0
52.5°	360.7	383.5	470.8	387.3	360.7
55°	315.1	337.9	337.9	341.7	315.1
57.5°	254.4	288.5	265.8	288.5	258.2
60°	201.2	227.8	224.0	227.8	201.2
62.5°	163.3	178.4	182.2	178.4	163.3
65°	140.5	144.3	151.9	144.3	140.5
67.5°	117.7	121.5	121.5	121.5	113.9
70°	94.9	98.7	98.7	98.7	94.9
72.5°	75.9	79.7	79.7	79.7	75.9
75°	60.7	60.7	60.7	60.7	60.7
77.5°	45.6	49.4	45.6	49.4	45.6
80°	34.2	34.2	34.2	34.2	34.2
82.5°	22.8	22.8	22.8	22.8	22.8
85°	15.2	15.2	15.2	15.2	15.2
87.5°	7.6	7.6	7.6	7.6	7.6
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)