

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: P238142

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

Issue Date: 03/03/2020

**Test Information**

Test Method: LM-79-08  
Report Number: P238142  
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G1-1802-584-13)  
Test Lab: INNOVATION CENTER(G1)  
Issue Date: 03/03/2020  
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)  
Product Line: HALO COMMERCIAL  
Catalog Number: PRS640D010-S6M24-61SNDMB-4000K  
Description: HALO COMMERCIAL 6" SQUARE, NEW CONSTRUCTION FRAME, WITH 6" NARROW DISTRIBUTION, DEEP TRIM MATTE BLACK  
Light Source: ARRAYS OF HIGH LUMEN LEDS 80CRI / 4000K CCT  
Ballast/Driver: ELECTRONIC DRIVER

**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 3639.3 lumens  
Efficiency: N/A  
Efficacy: 95.8 lumens/watt  
Spacing Criteria (0/90/45): 0.82 / 0.83 / 0.85  
Luminous Opening: Rectangular (W 0.5' x L: 0.5' x H: 0')  
CIE Type: Direct

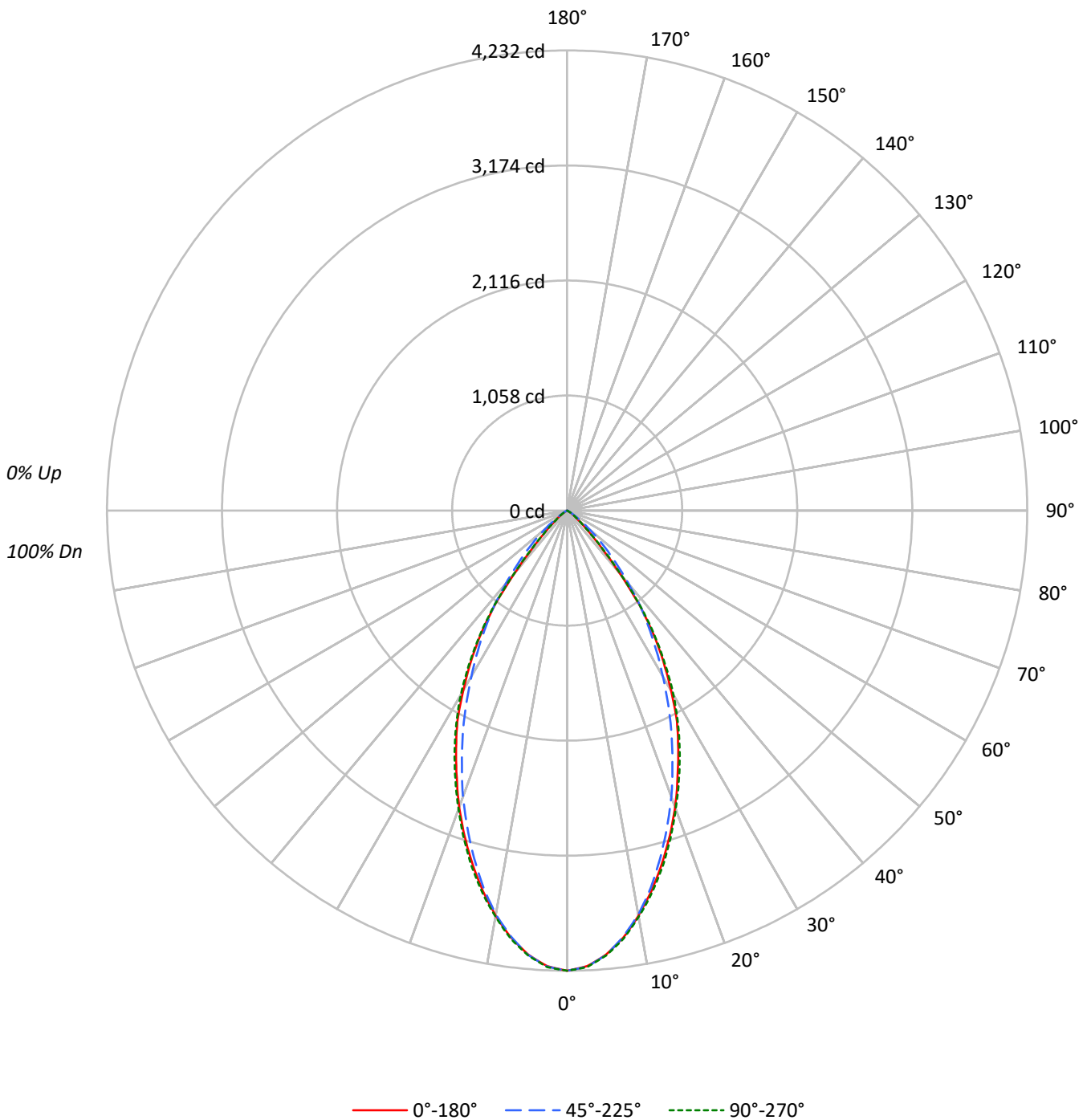
Input Watts (W): 38  
Input Voltage (V): NR  
Input Current (Ain): NR  
Voltage Rise (V): NR  
Power Factor: NR  
Total Harmonic Distortion (THDi): NR  
Frequency (hertz): 60  
Stabilization Time: NR  
Operation Time: NR  
Ambient Temperature (°C): NR  
Test Distance: 25 FT



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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	103	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	67	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	56	53	52					52			
10	70	60	55	51	69	60	54	50	59	54	50	58	54	50	58	53	50	49					49			

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

	0°	45°	90°
0°	182212	182212	182212
5°	177198	177358	177522
10°	165379	164885	165878
15°	149935	147412	151112
20°	133017	128348	133883
25°	114781	107968	116396
30°	94968	87461	97220
35°	72424	68456	73817
40°	42013	49224	43284
45°	18620	32180	19077
50°	8848	17951	8848
55°	4819	7371	4819
60°	1628	2928	1628
65°	0	774	0
70°	0	0	0
75°	0	0	0
80°	0	0	0
85°	0	0	0



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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	381.3	10.5
10°-20°	931.0	25.6
20°-30°	1073.3	29.5
30°-40°	827.6	22.7
40°-50°	339.6	9.3
50°-60°	80.0	2.2
60°-70°	6.6	0.2
70°-80°	0.0	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°	2385.5	65.5
0°-40°	3213.1	88.3
0°-60°	3632.7	99.8
0°-90°	3639.3	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	3639.3	100.0

**CANDELA DISTRIBUTION:**

	0°	22.5°	45°	67.5°	90°	Flux
0°	4232	4232	4232	4232	4232	
5°	4100	4100	4104	4107	4107	381
15°	3364	3337	3307	3341	3390	939
25°	2416	2333	2273	2356	2450	1105
35°	1378	1310	1302	1340	1404	839
45°	306	396	528	408	313	269
55°	64	83	98	83	64	59
65°	0	0	8	0	0	2
75°	0	0	0	0	0	0
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°	4232.0	4232.0	4232.0	4232.0	4232.0
2.5°	4194.2	4198.0	4198.0	4201.8	4201.8
5°	4099.9	4099.9	4103.6	4107.4	4107.4
7.5°	3960.2	3956.4	3952.6	3960.2	3971.5
10°	3782.7	3771.4	3771.4	3779.0	3794.1
12.5°	3582.6	3563.8	3552.4	3567.5	3601.5
15°	3363.7	3337.3	3307.1	3341.0	3390.1
17.5°	3137.2	3099.4	3054.1	3103.2	3159.8
20°	2903.1	2842.7	2801.2	2854.0	2922.0
22.5°	2654.0	2589.8	2529.4	2608.7	2684.2
25°	2416.1	2333.1	2272.7	2355.7	2450.1
27.5°	2185.8	2076.4	2012.2	2102.8	2208.5
30°	1910.2	1831.0	1759.2	1853.6	1955.5
32.5°	1646.0	1562.9	1528.9	1589.4	1680.0
35°	1377.9	1310.0	1302.4	1340.2	1404.4
37.5°	1079.7	1075.9	1098.6	1091.0	1102.4
40°	747.5	838.1	875.8	845.6	770.1
42.5°	483.2	588.9	683.3	604.0	509.6
45°	305.8	396.4	528.5	407.7	313.3
47.5°	192.5	256.7	396.4	264.3	196.3
50°	132.1	169.9	268.0	169.9	132.1
52.5°	90.6	117.0	166.1	117.0	94.4
55°	64.2	83.1	98.2	83.1	64.2
57.5°	37.8	52.9	56.6	52.9	41.5
60°	18.9	30.2	34.0	30.2	18.9
62.5°	0.0	11.3	18.9	11.3	0.0
65°	0.0	0.0	7.6	0.0	0.0
67.5°	0.0	0.0	3.8	0.0	0.0
70°	0.0	0.0	0.0	0.0	0.0
72.5°	0.0	0.0	0.0	0.0	0.0
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)