

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: PORTFOLIO

Report Number: P245620

Luminaire Tested: **LD8B40D010 ER8B40840 8LBN0GPH**

Issue Date: 03/03/2020

**Test Information**

Test Method: LM-79-08  
Report Number: P245620  
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (P201794)  
Test Lab: INNOVATION CENTER-P1  
Issue Date: 03/03/2020  
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)  
Product Line: PORTFOLIO  
Catalog Number: LD8B40D010 ER8B40840 8LBN0GPH  
Description: PORTFOLIO 8 INCH NARROW DISTRIBUTION 50 DEGREE CUTOFF RECESSED  
DOWNLIGHT  
80 CRI 4000 CCT WITH GRAPHITE TRIM  
Light Source: -  
Ballast/Driver: -

**Summary**

Lumens per Lamp: 2183 (1 lamp)  
Luminaire Lumens: 3537.0 lumens  
Efficiency: 162.0%  
Efficacy: 86.5 lumens/watt  
Spacing Criteria (0/90/45): 0.69 / 0.69 / 0.77  
Luminous Opening: Circular (Dia: 0.67' x H: 0')  
CIE Type: Direct

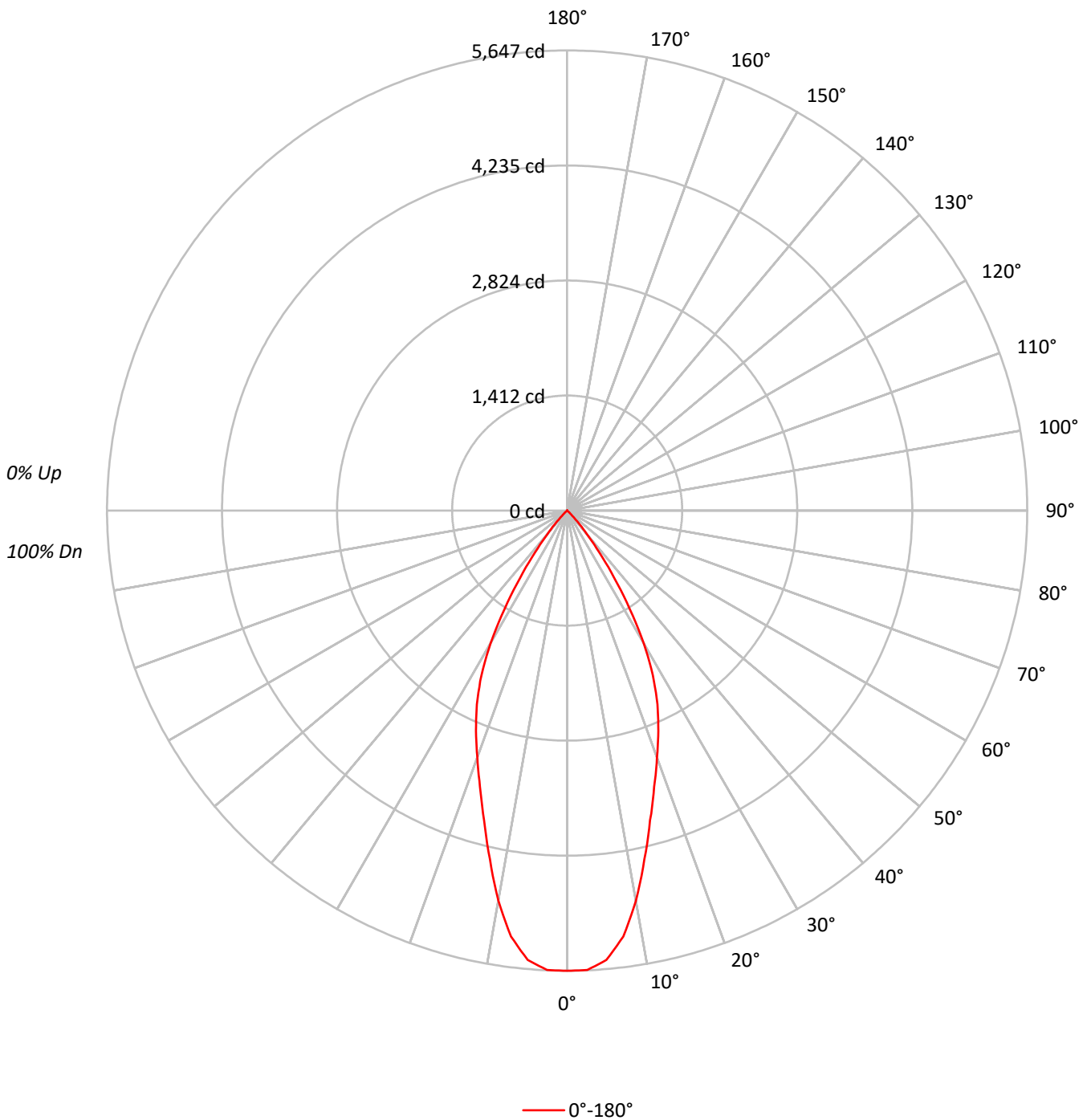
Input Watts (W): 40.9  
Input Voltage (V): NR  
Input Current (A<sub>in</sub>): NR  
Voltage Rise (V): NR  
Power Factor: NR  
Total Harmonic Distortion (THDi): NR  
Frequency (hertz): 60  
Stabilization Time: NR  
Operation Time: NR  
Ambient Temperature (°C): NR  
Test Distance: 25 FT



TEST NUMBER: P245620

CATALOG NUMBER: LD8B40D010 ER8B40840 8LBN0GPH

### Luminous Intensity Polar Plot





TEST NUMBER: P245620

CATALOG NUMBER: LD8B40D010 ER8B40840 8LBN0GPH

**COEFFICIENT OF UTILIZATION - ZONAL CAVITY METHOD:**

RF	20				20				20				20				20					
RC	80				70				50				30				10					
RW	70	50	30	10	70	50	30	10	50	30	10	50	30	10	50	30	10	50	30	10		
RCR																						
0	193	193	193	193	188	188	188	188	180	180	180	172	172	172	165	165	165	162	162	162	162	162
1	185	180	177	173	181	177	174	171	170	168	165	164	162	160	159	157	156	153	153	153	153	153
2	176	169	163	158	173	166	161	156	161	157	153	156	153	149	152	149	146	144	144	144	144	144
3	168	159	151	145	165	157	150	144	152	147	142	148	144	140	145	141	138	135	135	135	135	135
4	161	149	141	135	158	148	140	134	144	138	132	141	135	131	138	133	129	127	127	127	127	127
5	153	141	132	126	151	139	131	125	137	129	124	134	128	123	131	126	122	120	120	120	120	120
6	146	133	124	118	144	132	123	117	129	122	117	127	121	116	125	119	115	113	113	113	113	113
7	140	126	117	111	138	125	116	110	123	115	110	121	114	109	119	113	109	107	107	107	107	107
8	134	119	110	104	132	119	110	104	117	109	104	115	108	103	114	107	103	101	101	101	101	101
9	128	113	105	99	126	113	104	98	111	104	98	110	103	98	109	102	97	95	95	95	95	95
10	123	108	99	93	121	107	99	93	106	98	93	105	98	93	104	97	93	91	91	91	91	91

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

	0°
0°	174136
5°	171346
10°	152245
15°	125615
20°	105747
25°	89218
30°	66791
35°	37776
40°	14914
45°	4021
50°	772
55°	0
60°	99
65°	0
70°	0
75°	0
80°	0
85°	0



TEST NUMBER: P245620

CATALOG NUMBER: LD8B40D010 ER8B40840 8LBN0GPH

**ZONAL LUMENS:**

**CANDELA DISTRIBUTION:**

Zone	Lumens	% Fixture	% Lamp	0°	Flux	
0°-10°	506.5	14.3	23.2	0°	5647	
10°-20°	1104.0	31.2	50.6	5°	5536	507
20°-30°	1182.6	33.4	54.2	15°	3935	1104
30°-40°	640.8	18.1	29.4	25°	2622	1183
40°-50°	99.7	2.8	4.6	35°	1004	641
50°-60°	2.6	0.1	0.1	45°	92	100
60°-70°	0.6	0.0	0.0	55°	0	3
70°-80°	0.0	0.0	0.0	65°	0	1
80°-90°	0.0	0.0	0.0	75°	0	0
90°-100°	0.0	0.0	0.0	85°	0	0
100°-110°	0.0	0.0	0.0	90°	0	0
110°-120°	0.0	0.0	0.0	95°	0	0
120°-130°	0.0	0.0	0.0	105°	0	0
130°-140°	0.0	0.0	0.0	115°	0	0
140°-150°	0.0	0.0	0.0	125°	0	0
150°-160°	0.0	0.0	0.0	135°	0	0
160°-170°	0.0	0.0	0.0	145°	0	0
170°-180°	0.0	0.0	0.0	155°	0	0
0°-30°	2793.2	79.0	128.0	165°	0	0
0°-40°	3434.0	97.1	157.3	175°	0	0
0°-60°	3536.4	100.0	162.0	180°	0	0
0°-90°	3537.0	100.0	162.0			
90°-120°	0.0	0.0	0.0			
90°-150°	0.0	0.0	0.0			
90°-180°	0.0	0.0	0.0			
0°-180°	3537.0	100.0	162.0			



TEST NUMBER: P245620

CATALOG NUMBER: LD8B40D010 ER8B40840 8LBN0GPH

**CANDELA DISTRIBUTION (FULL):**

0°	
0°	5647.1
2.5°	5642.5
5°	5535.5
7.5°	5271.6
10°	4862.2
12.5°	4383.1
15°	3934.8
17.5°	3554.4
20°	3222.5
22.5°	2924.8
25°	2622.2
27.5°	2278.9
30°	1875.8
32.5°	1430.8
35°	1003.5
37.5°	642.7
40°	370.5
42.5°	197.5
45°	92.2
47.5°	50.3
50°	16.1
52.5°	1.6
55°	0.0
57.5°	1.6
60°	1.6
62.5°	0.0
65°	0.0
67.5°	1.6
70°	0.0
72.5°	0.0
75°	0.0
77.5°	0.0
80°	0.0
82.5°	0.0
85°	0.0
87.5°	0.0
90°	0.0
92.5°	0.0
95°	0.0
97.5°	0.0
100°	0.0
102.5°	0.0
105°	0.0
107.5°	0.0
110°	0.0



TEST NUMBER: P245620

CATALOG NUMBER: LD8B40D010 ER8B40840 8LBN0GPH

**CANDELA DISTRIBUTION (continued):**

	0°
112.5°	0.0
115°	0.0
117.5°	0.0
120°	0.0
122.5°	0.0
125°	0.0
127.5°	0.0
130°	0.0
132.5°	0.0
135°	0.0
137.5°	0.0
140°	0.0
142.5°	0.0
145°	0.0
147.5°	0.0
150°	0.0
152.5°	0.0
155°	0.0
157.5°	0.0
160°	0.0
162.5°	0.0
165°	0.0
167.5°	0.0
170°	0.0
172.5°	0.0
175°	0.0
177.5°	0.0
180°	0.0

(END OF REPORT)