

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: P245621

Luminaire Tested: **LSR8B50D010 EC8B50840 8LBN0GPH**

Issue Date: 03/03/2020

**Test Information**

Test Method: LM-79-08  
Report Number: P245621  
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: LSR8B50D010 EC8B50840 8LBN0GPH  
Description: PORTFOLIO 8 INCH NARROW DISTRIBUTION 50 DEGREE CUTOFF RECESSED  
DOWNLIGHT- CYLINDEC  
80 CRI 4000 CCT WITH GRAPHITE TRIM  
Light Source: -  
Ballast/Driver: -

**Summary**

Lumens per Lamp: 2183 (1 lamp)  
Luminaire Lumens: 4425.0 lumens  
Efficiency: 202.7%  
Efficacy: 83.5 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

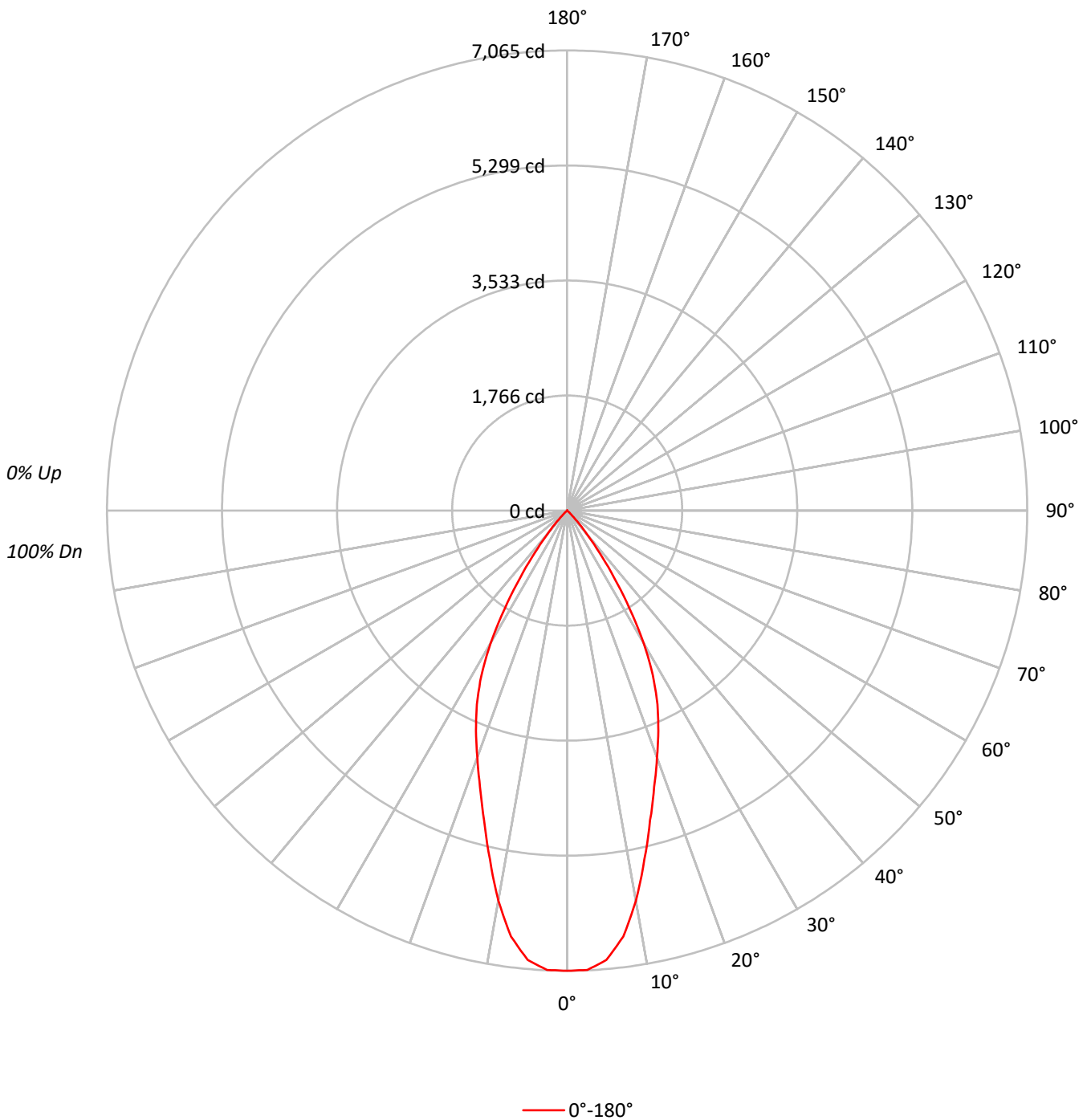
Input Watts (W): 53  
Input Voltage (V): NR  
Input Current (Ain): NR  
Voltage Rise (V): NR  
Power Factor: NR  
Total Harmonic Distortion (THDi): NR  
Frequency (hertz): 60  
Stabilization Time: NR  
Operation Time: NR  
Ambient Temperature (°C): NR  
Test Distance: 25 FT



TEST NUMBER: P245621

CATALOG NUMBER: LSR8B50D010 EC8B50840 8LBN0GPH

### Luminous Intensity Polar Plot





TEST NUMBER: P245621

CATALOG NUMBER: LSR8B50D010 EC8B50840 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	241	241	241	241	236	236	236	236	225	225	225	216	216	216	207	207	207	203		
1	231	226	221	217	226	221	217	213	213	210	207	206	203	201	199	197	195	191		
2	221	211	204	198	216	208	201	195	202	196	191	196	191	187	190	186	183	180		
3	211	199	189	182	207	196	187	180	191	183	178	186	180	175	181	176	172	169		
4	201	187	177	169	197	185	175	168	180	172	166	176	169	164	173	167	162	159		
5	192	176	165	157	189	174	164	157	171	162	155	168	160	154	164	158	153	150		
6	183	166	155	147	180	165	154	147	162	153	146	159	151	145	157	149	144	141		
7	175	158	146	138	172	156	146	138	154	144	137	151	143	137	149	142	136	133		
8	167	149	138	130	165	148	138	130	146	137	130	144	135	129	142	134	129	126		
9	160	142	131	123	158	141	130	123	139	129	123	137	129	122	136	128	122	119		
10	153	135	124	117	151	134	124	117	133	123	116	131	122	116	130	122	116	113		

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

	0°
0°	217855
5°	214363
10°	190468
15°	157153
20°	132298
25°	111616
30°	83562
35°	47262
40°	18662
45°	5028
50°	964
55°	0
60°	123
65°	0
70°	0
75°	0
80°	0
85°	0



TEST NUMBER: P245621

CATALOG NUMBER: LSR8B50D010 EC8B50840 8LBN0GPH

**ZONAL LUMENS:**

**CANDELA DISTRIBUTION:**

Zone	Lumens	% Fixture	% Lamp	0°	Flux	
0°-10°	633.7	14.3	29.0	0°	7065	
10°-20°	1381.2	31.2	63.3	5°	6925	634
20°-30°	1479.5	33.4	67.8	15°	4923	1381
30°-40°	801.8	18.1	36.7	25°	3280	1480
40°-50°	124.8	2.8	5.7	35°	1256	802
50°-60°	3.3	0.1	0.2	45°	115	125
60°-70°	0.7	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°	3494.5	79.0	160.1	165°	0	0
0°-40°	4296.2	97.1	196.8	175°	0	0
0°-60°	4424.3	100.0	202.7	180°	0	0
0°-90°	4425.0	100.0	202.7			
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°	4425.0	100.0	202.7			



TEST NUMBER: P245621

CATALOG NUMBER: LSR8B50D010 EC8B50840 8LBN0GPH

**CANDELA DISTRIBUTION (FULL):**

0°	
0°	7064.9
2.5°	7059.1
5°	6925.2
7.5°	6595.1
10°	6082.9
12.5°	5483.5
15°	4922.7
17.5°	4446.8
20°	4031.6
22.5°	3659.0
25°	3280.5
27.5°	2851.0
30°	2346.8
32.5°	1790.0
35°	1255.5
37.5°	804.1
40°	463.6
42.5°	247.0
45°	115.3
47.5°	63.0
50°	20.1
52.5°	2.0
55°	0.0
57.5°	2.0
60°	2.0
62.5°	0.0
65°	0.0
67.5°	2.0
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: P245621

CATALOG NUMBER: LSR8B50D010 EC8B50840 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)