

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: P251367

Luminaire Tested: **LSR8B70D010 EC8B70940 8LBN0B**

Issue Date: 03/03/2020

**Test Information**

Test Method: LM-79-08  
Report Number: P251367  
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (P201749)  
Test Lab: INNOVATION CENTER-P1  
Issue Date: 03/03/2020  
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)  
Product Line: PORTFOLIO  
Catalog Number: LSR8B70D010 EC8B70940 8LBN0B  
Description: PORTFOLIO 8 INCH NARROW DISTRIBUTION 50 DEGREE CUTOFF RECESSED  
DOWNLIGHT- CYLINDEC  
90 CRI 4000 CCT WITH SPECULAR BLACK TRIM  
Light Source: -  
Ballast/Driver: -

**Summary**

Lumens per Lamp: 1887 (1 lamp)  
Luminaire Lumens: 3856.0 lumens  
Efficiency: 204.3%  
Efficacy: 50.8 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

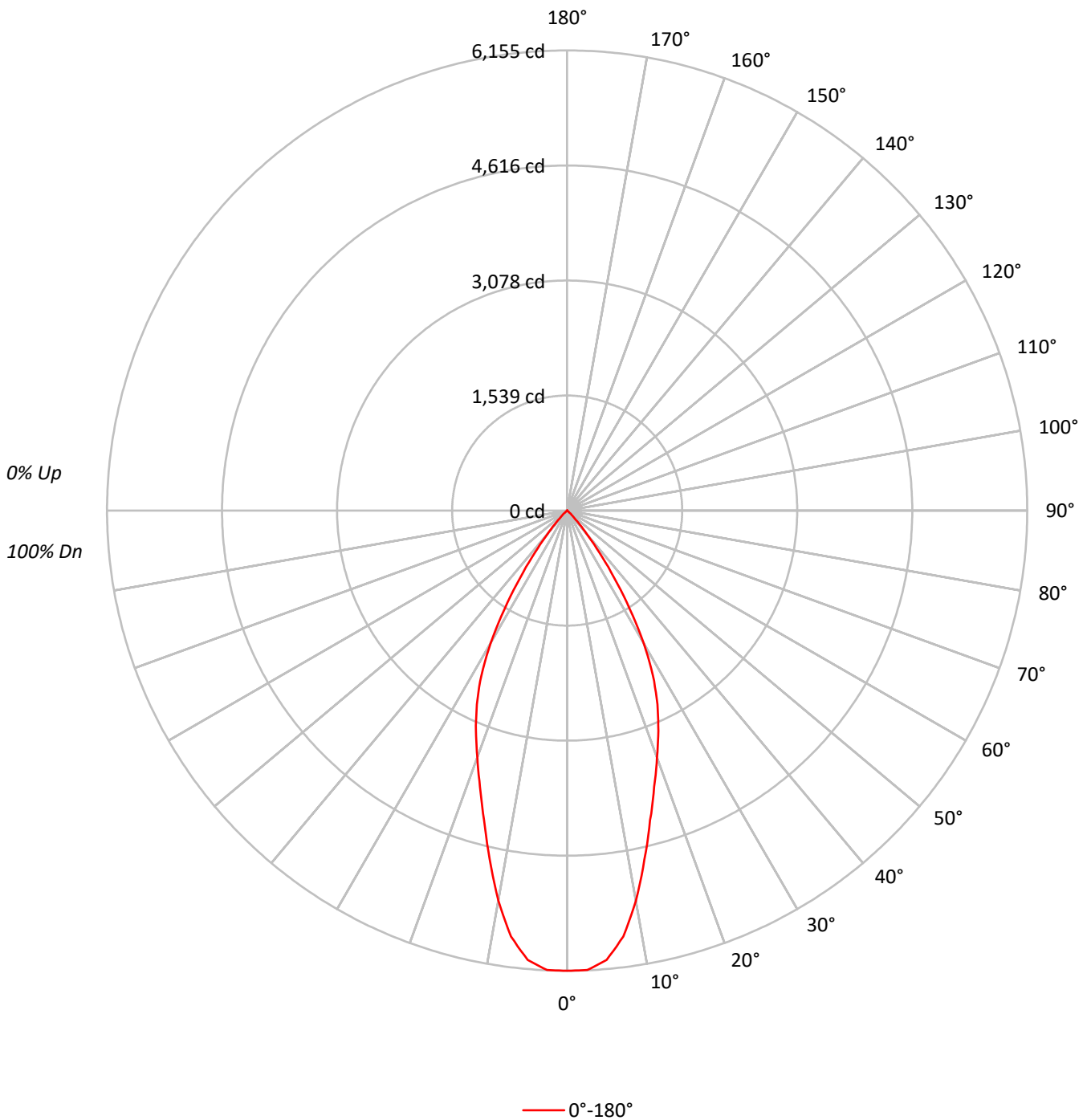
Input Watts (W): 75.9  
Input Voltage (V): NR  
Input Current (Ain): NR  
Voltage Rise (V): NR  
Power Factor: NR  
Total Harmonic Distortion (THDi): NR  
Frequency (hertz): 60  
Stabilization Time: NR  
Operation Time: NR  
Ambient Temperature (°C): NR  
Test Distance: 25 FT



TEST NUMBER: P251367

CATALOG NUMBER: LSR8B70D010 EC8B70940 8LBN0B

### Luminous Intensity Polar Plot





TEST NUMBER: P251367

CATALOG NUMBER: LSR8B70D010 EC8B70940 8LBN0B

**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	243	243	243	243	238	238	238	238	227	227	227	217	217	217	209	209	209	204					204			
1	233	228	223	219	228	223	219	215	215	212	208	207	205	202	200	198	196	193					193			
2	222	213	206	199	218	210	203	197	203	197	193	197	193	189	192	188	185	181					181			
3	212	200	191	183	208	197	189	182	192	185	179	187	181	176	183	178	174	170					170			
4	203	188	178	170	199	186	176	169	182	174	167	178	171	165	174	168	163	160					160			
5	193	178	167	159	190	176	165	158	172	163	156	169	161	155	166	159	154	151					151			
6	185	168	157	148	182	166	156	148	163	154	147	161	152	146	158	151	145	142					142			
7	176	159	148	140	174	158	147	139	155	145	138	153	144	138	150	143	137	134					134			
8	169	151	139	132	166	150	139	131	147	138	131	145	137	130	143	136	130	127					127			
9	161	143	132	124	159	142	131	124	140	131	124	139	130	123	137	129	123	120					120			
10	155	136	125	118	153	135	125	118	134	124	117	132	123	117	131	123	117	114					114			

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

	0°
0°	189791
5°	186793
10°	165938
15°	136922
20°	115290
25°	97244
30°	72837
35°	41194
40°	16267
45°	4352
50°	878
55°	0
60°	123
65°	0
70°	0
75°	0
80°	0
85°	0



TEST NUMBER: P251367

CATALOG NUMBER: LSR8B70D010 EC8B70940 8LBN0B

**ZONAL LUMENS:**

**CANDELA DISTRIBUTION:**

Zone	Lumens	% Fixture	% Lamp	0°	Flux	
0°-10°	552.2	14.3	29.3	0°	6155	
10°-20°	1203.5	31.2	63.8	5°	6034	552
20°-30°	1289.3	33.4	68.3	15°	4289	1204
30°-40°	698.7	18.1	37.0	25°	2858	1289
40°-50°	108.5	2.8	5.8	35°	1094	699
50°-60°	3.1	0.1	0.2	45°	100	109
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°	3045.0	79.0	161.4	165°	0	0
0°-40°	3743.7	97.1	198.4	175°	0	0
0°-60°	3855.3	100.0	204.3	180°	0	0
0°-90°	3856.0	100.0	204.3			
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°	3856.0	100.0	204.3			



TEST NUMBER: P251367

CATALOG NUMBER: LSR8B70D010 EC8B70940 8LBN0B

**CANDELA DISTRIBUTION (FULL):**

0°	
0°	6154.8
2.5°	6150.8
5°	6034.5
7.5°	5746.6
10°	5299.5
12.5°	4778.9
15°	4289.0
17.5°	3874.6
20°	3513.3
22.5°	3188.7
25°	2858.1
27.5°	2484.5
30°	2045.6
32.5°	1559.7
35°	1094.3
37.5°	700.4
40°	404.1
42.5°	216.3
45°	99.8
47.5°	53.0
50°	18.3
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: P251367

CATALOG NUMBER: LSR8B70D010 EC8B70940 8LBN0B

**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)