

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: P245600

Luminaire Tested: **LSR8B20D010 EC8B20827 8LBN0GPH**

Issue Date: 03/03/2020

**Test Information**

Test Method: LM-79-08  
Report Number: P245600  
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: LSR8B20D010 EC8B20827 8LBN0GPH  
Description: PORTFOLIO 8 INCH NARROW DISTRIBUTION 50 DEGREE CUTOFF RECESSED  
DOWNLIGHT- CYLINDEC  
80 CRI 2700 CCT WITH GRAPHITE TRIM  
Light Source: -  
Ballast/Driver: -

**Summary**

Lumens per Lamp: 2183 (1 lamp)  
Luminaire Lumens: 1694.0 lumens  
Efficiency: 77.6%  
Efficacy: 79.5 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

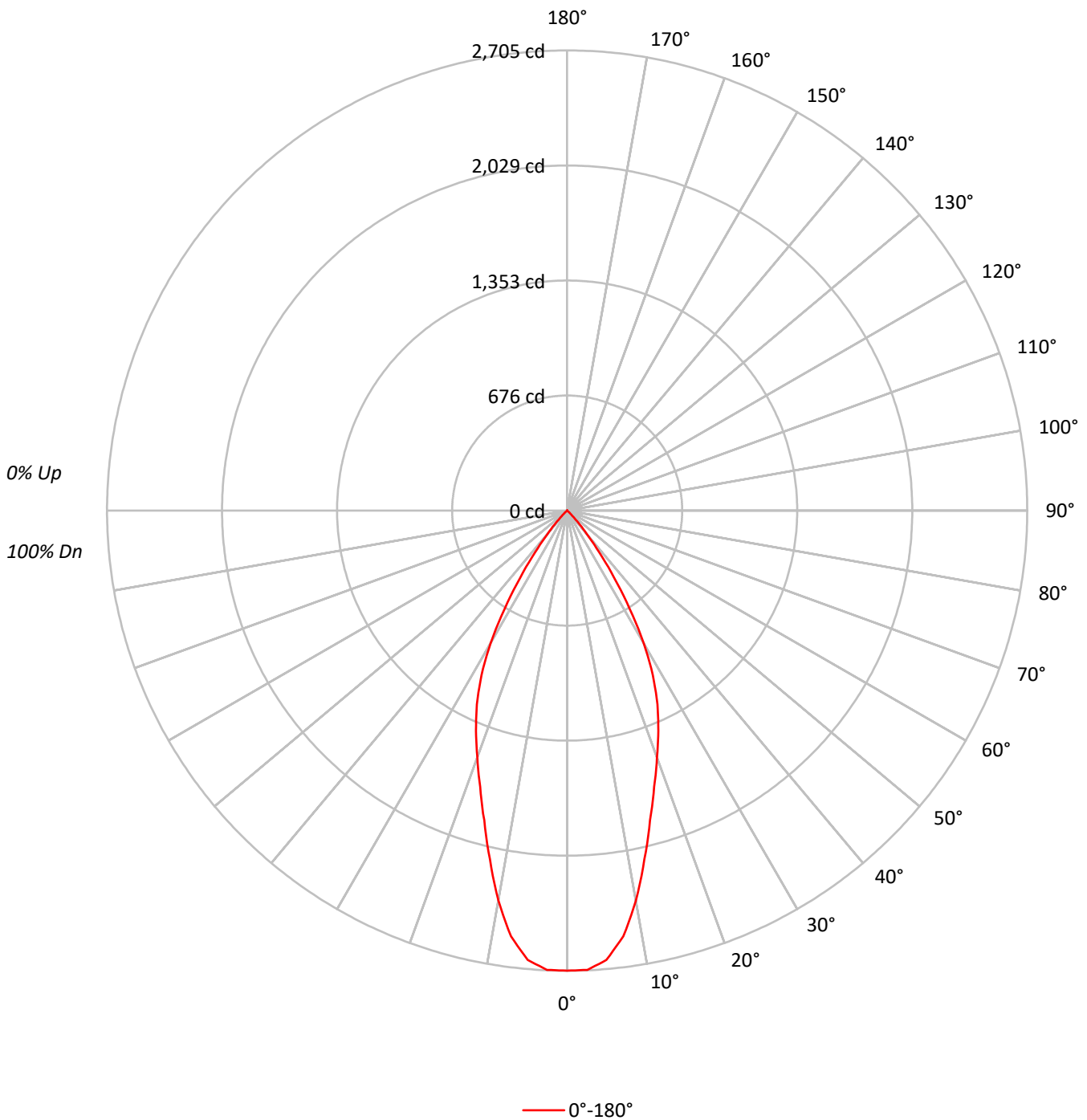
Input Watts (W): 21.3  
Input Voltage (V): NR  
Input Current (A<sub>in</sub>): NR  
Voltage Rise (V): NR  
Power Factor: NR  
Total Harmonic Distortion (THDi): NR  
Frequency (hertz): 60  
Stabilization Time: NR  
Operation Time: NR  
Ambient Temperature (°C): NR  
Test Distance: 25 FT



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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	0
RCR																				
0	92	92	92	92	90	90	90	90	86	86	86		83	83	83		79	79	79	78
1	88	86	85	83	87	85	83	82	82	80	79		79	78	77		76	75	75	73
2	84	81	78	76	83	80	77	75	77	75	73		75	73	72		73	71	70	69
3	81	76	72	70	79	75	72	69	73	70	68		71	69	67		69	68	66	65
4	77	72	68	65	76	71	67	64	69	66	63		68	65	63		66	64	62	61
5	73	67	63	60	72	67	63	60	65	62	59		64	61	59		63	60	58	57
6	70	64	59	56	69	63	59	56	62	58	56		61	58	55		60	57	55	54
7	67	60	56	53	66	60	56	53	59	55	53		58	55	52		57	54	52	51
8	64	57	53	50	63	57	53	50	56	52	50		55	52	49		54	51	49	48
9	61	54	50	47	60	54	50	47	53	50	47		53	49	47		52	49	47	46
10	59	52	48	45	58	51	47	45	51	47	45		50	47	44		50	47	44	43

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

	0°
0°	83400
5°	82062
10°	72916
15°	60161
20°	50647
25°	42731
30°	31989
35°	18092
40°	7145
45°	1928
50°	369
55°	0
60°	49
65°	0
70°	0
75°	0
80°	0
85°	0



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**ZONAL LUMENS:**

**CANDELA DISTRIBUTION:**

Zone	Lumens	% Fixture	% Lamp	0°	Flux	
0°-10°	242.6	14.3	11.1	0°	2705	
10°-20°	528.8	31.2	24.2	5°	2651	243
20°-30°	566.4	33.4	25.9	15°	1884	529
30°-40°	306.9	18.1	14.1	25°	1256	566
40°-50°	47.8	2.8	2.2	35°	481	307
50°-60°	1.3	0.1	0.1	45°	44	48
60°-70°	0.3	0.0	0.0	55°	0	1
70°-80°	0.0	0.0	0.0	65°	0	0
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°	1337.8	79.0	61.3	165°	0	0
0°-40°	1644.7	97.1	75.3	175°	0	0
0°-60°	1693.7	100.0	77.6	180°	0	0
0°-90°	1694.0	100.0	77.6			
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°	1694.0	100.0	77.6			



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**CANDELA DISTRIBUTION (FULL):**

0°	
0°	2704.6
2.5°	2702.4
5°	2651.1
7.5°	2524.8
10°	2328.7
12.5°	2099.2
15°	1884.5
17.5°	1702.3
20°	1543.4
22.5°	1400.8
25°	1255.9
27.5°	1091.4
30°	898.4
32.5°	685.2
35°	480.6
37.5°	307.8
40°	177.5
42.5°	94.6
45°	44.2
47.5°	24.1
50°	7.7
52.5°	0.8
55°	0.0
57.5°	0.8
60°	0.8
62.5°	0.0
65°	0.0
67.5°	0.8
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



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**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)