

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: P247802

Luminaire Tested: **LSR8B150D010 EC8B150827 8LBN0LI**

Issue Date: 03/03/2020

**Test Information**

Test Method: LM-79-08  
Report Number: P247802  
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G1-1801-521-89)  
Test Lab: INNOVATION CENTER(G1)  
Issue Date: 03/03/2020  
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)  
Product Line: PORTFOLIO  
Catalog Number: LSR8B150D010 EC8B150827 8LBN0LI  
Description: PORTFOLIO 8 INCH NARROW DISTRIBUTION 50 DEGREE CUTOFF RECESSED  
DOWNLIGHT- CYLINDEC  
80 CRI 2700 CCT WITH SPECULAR CLEAR TRIM  
Light Source: -  
Ballast/Driver: -

**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 14078.0 lumens  
Efficiency: N/A  
Efficacy: 88.8 lumens/watt  
Spacing Criteria (0/90/45): 0.55 / 0.55 / 0.63  
Luminous Opening: Circular (Dia: 0.67' x H: 0')  
CIE Type: Direct

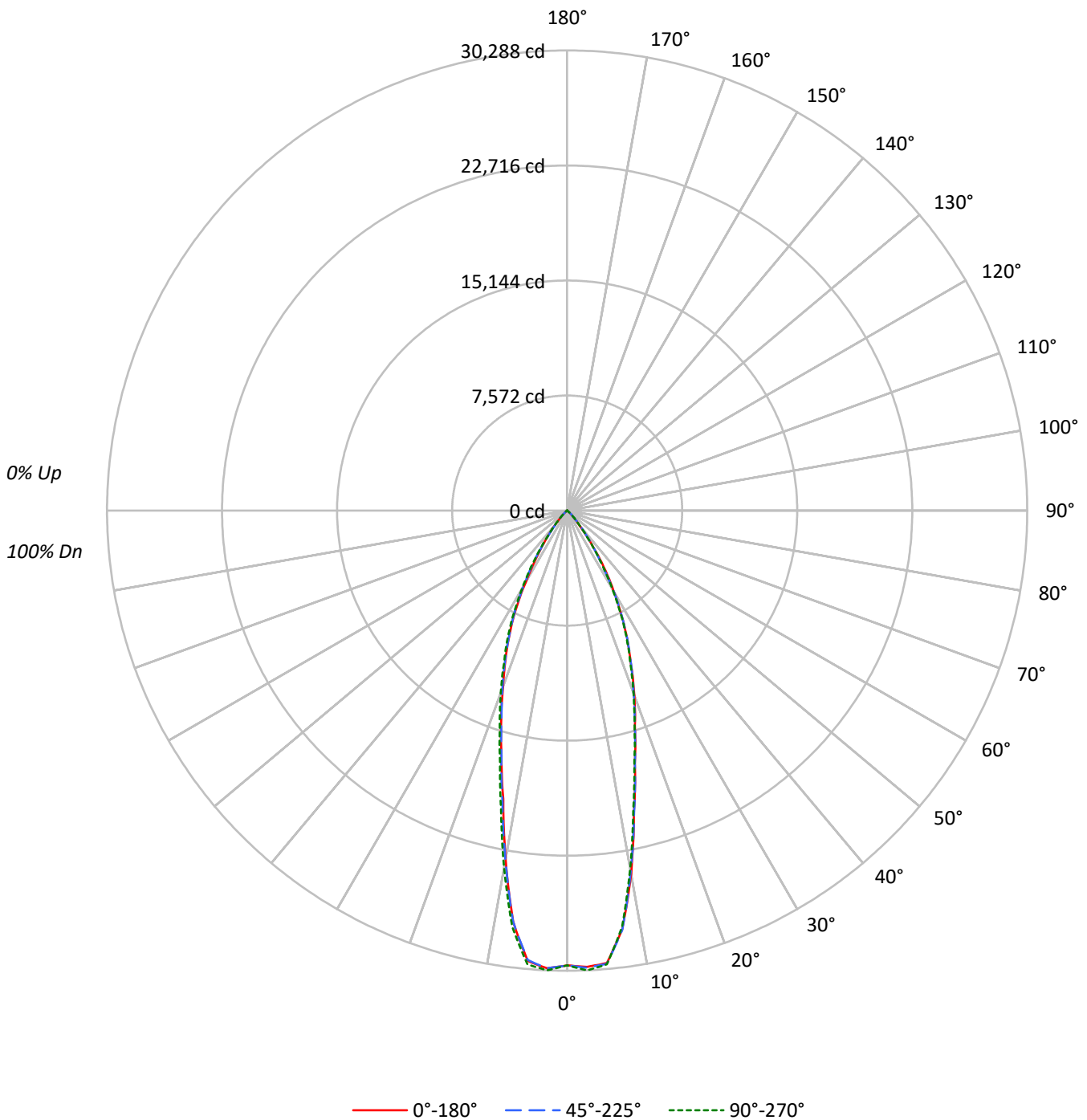
Input Watts (W): 158.5  
Input Voltage (V): NR  
Input Current (Ain): NR  
Voltage Rise (V): NR  
Power Factor: NR  
Total Harmonic Distortion (THDi): NR  
Frequency (hertz): 60  
Stabilization Time: NR  
Operation Time: NR  
Ambient Temperature (°C): NR  
Test Distance: 25 FT



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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	0
RCR																		
0	119	119	119	119	116	116	116	116	111	111	111	106	106	106	102	102	102	100
1	114	112	109	107	112	109	107	106	105	104	102	102	101	99	98	97	97	95
2	109	105	101	98	107	103	100	97	100	97	95	97	95	93	94	93	91	90
3	105	99	95	91	103	98	94	90	95	92	89	93	90	88	90	88	86	85
4	100	94	89	85	98	92	88	84	90	87	83	88	85	83	87	84	82	80
5	96	89	83	80	94	88	83	79	86	82	79	84	81	78	83	80	77	76
6	92	84	79	75	91	83	78	75	82	78	74	81	77	74	79	76	73	72
7	88	80	75	71	87	79	74	71	78	74	71	77	73	70	76	73	70	69
8	85	76	71	67	84	76	71	67	75	70	67	74	70	67	73	69	67	65
9	81	73	68	64	80	72	67	64	72	67	64	71	67	64	70	66	63	62
10	78	70	65	61	77	69	64	61	69	64	61	68	64	61	67	63	61	60

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

	0°	90°	180°
0°	923002	923002	923002
5°	925453	927893	921302
10°	759905	747891	729266
15°	550617	545018	532468
20°	424778	418989	405167
25°	318969	315172	304672
30°	217660	211582	195046
35°	123040	117777	107817
40°	49508	51473	49545
45°	20413	20945	19393
50°	6212	6121	4457
55°	1763	1312	909
60°	1388	1270	345
65°	613	1299	277
70°	343	676	0
75°	1894	1120	786
80°	1492	675	1829
85°	1981	3644	4989



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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	2645.7	18.8
10°-20°	4794.4	34.1
20°-30°	4177.5	29.7
30°-40°	1989.8	14.1
40°-50°	413.4	2.9
50°-60°	32.9	0.2
60°-70°	12.7	0.1
70°-80°	5.7	0.0
80°-90°	5.9	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°	11617.6	82.5
0°-40°	13607.4	96.7
0°-60°	14053.7	99.8
0°-90°	14078.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	14078.0	100.0

**CANDELA DISTRIBUTION:**

	0°	45°	90°	135°	180°	Flux
0°	29932	29932	29932	29932	29932	
5°	29898	29945	29976	29695	29764	###
15°	17248	17250	17072	16719	16679	4871
25°	9375	9366	9263	8985	8955	4262
35°	3268	3158	3129	2970	2864	2092
45°	468	518	480	431	445	414
55°	33	25	24	22	17	36
65°	8	14	18	6	4	12
75°	16	10	9	11	7	8
85°	6	6	10	7	14	5
90°	0	0	0	0	0	



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**CANDELA DISTRIBUTION (FULL):**

	0°	22.5°	45°	67.5°	90°	112.5°	135°	157.5°	180°
0°	29932.3	29932.3	29932.3	29932.3	29932.3	29932.3	29932.3	29932.3	29932.3
2.5°	30062.7	30068.3	30115.3	30249.4	30287.9	30257.9	30156.5	30119.9	30156.5
5°	29897.6	29877.9	29945.4	30044.9	29976.4	29853.5	29695.0	29658.4	29763.5
7.5°	27781.2	27768.0	27831.8	27824.3	27643.3	27411.5	27279.3	27175.1	27265.2
10°	24268.8	24151.5	24109.3	24183.4	23885.1	23565.2	23374.7	23445.1	23290.3
12.5°	20314.5	20298.5	20373.6	20282.6	20110.0	19913.9	19680.3	19554.6	19442.0
15°	17247.7	17289.9	17249.6	17212.1	17072.3	16925.0	16718.6	16631.4	16679.2
17.5°	14840.4	14828.3	14786.0	14848.9	14741.0	14529.9	14348.9	14379.8	14432.4
20°	12944.5	12892.9	12793.4	12819.7	12768.1	12603.9	12438.8	12328.1	12346.9
22.5°	10990.3	11035.3	11023.2	10945.3	10864.6	10744.5	10663.8	10519.4	10586.9
25°	9374.8	9382.3	9365.5	9354.2	9263.2	9147.8	8984.6	8949.9	8954.6
27.5°	7721.8	7757.5	7743.4	7695.6	7603.6	7507.0	7405.7	7325.9	7318.4
30°	6112.9	6163.6	6063.2	5994.7	5942.2	5925.3	5755.5	5636.3	5477.8
32.5°	4730.1	4655.1	4335.1	4336.1	4438.3	4478.7	4316.4	4046.2	4002.1
35°	3268.5	3255.3	3157.8	3127.8	3128.7	3089.3	2970.2	2865.1	2864.1
37.5°	2048.9	2097.7	2152.1	2139.9	2019.8	1897.9	1840.6	1902.5	1920.4
40°	1229.9	1293.7	1359.4	1366.9	1278.7	1138.0	1120.1	1177.4	1230.8
42.5°	770.2	797.4	841.5	850.0	787.1	735.5	702.7	743.9	743.9
45°	468.1	493.5	517.9	519.7	480.3	437.2	430.6	446.6	444.7
47.5°	275.8	276.8	286.1	279.6	266.4	245.8	237.3	245.8	247.7
50°	129.5	126.6	131.3	143.5	127.6	107.9	109.8	103.2	92.9
52.5°	31.0	28.1	33.8	36.6	35.6	37.5	35.6	35.6	27.2
55°	32.8	20.6	25.3	26.3	24.4	26.3	22.5	15.0	16.9
57.5°	22.5	23.5	23.5	26.3	22.5	28.1	23.5	16.9	18.8
60°	22.5	15.9	15.0	25.3	20.6	14.1	15.9	21.6	5.6
62.5°	16.9	15.9	17.8	25.3	17.8	20.6	15.9	25.3	16.9
65°	8.4	14.1	14.1	14.1	17.8	15.9	5.6	11.3	3.8
67.5°	12.2	6.6	5.6	12.2	15.0	10.3	4.7	4.7	8.4
70°	3.8	5.6	2.8	6.6	7.5	6.6	4.7	0.9	0.0
72.5°	6.6	2.8	6.6	5.6	9.4	6.6	5.6	4.7	3.8
75°	15.9	12.2	10.3	11.3	9.4	5.6	11.3	11.3	6.6
77.5°	0.0	0.0	1.9	0.0	0.0	0.0	0.9	0.0	0.0
80°	8.4	6.6	6.6	6.6	3.8	5.6	2.8	0.9	10.3
82.5°	8.4	10.3	10.3	4.7	12.2	7.5	6.6	1.9	10.3
85°	5.6	10.3	5.6	4.7	10.3	8.4	6.6	2.8	14.1
87.5°	0.0	5.6	5.6	3.8	5.6	1.9	4.7	2.8	0.0
90°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)