

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: P250178

Luminaire Tested: **LSR8B100D010 EC8B100940 8LBM0WH**

Issue Date: 03/03/2020

**Test Information**

Test Method: LM-79-08  
Report Number: P250178  
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (P13942)  
Test Lab: INNOVATION CENTER-P1  
Issue Date: 03/03/2020  
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)  
Product Line: PORTFOLIO  
Catalog Number: LSR8B100D010 EC8B100940 8LBM0WH  
Description: PORTFOLIO 8 INCH MEDIUM DISTRIBUTION 55 DEG CUTOFF RECESSED  
DOWNLIGHT- CYLINDEC  
90 CRI 4000 CCT WITH WHEAT TRIM  
Light Source: -  
Ballast/Driver: -

**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 9717.0 lumens  
Efficiency: N/A  
Efficacy: 91.4 lumens/watt  
Spacing Criteria (0/90/45): 0.84 / 0.8 / 0.85  
Luminous Opening: Circular (Dia: 0.67' x H: 0')  
CIE Type: Direct

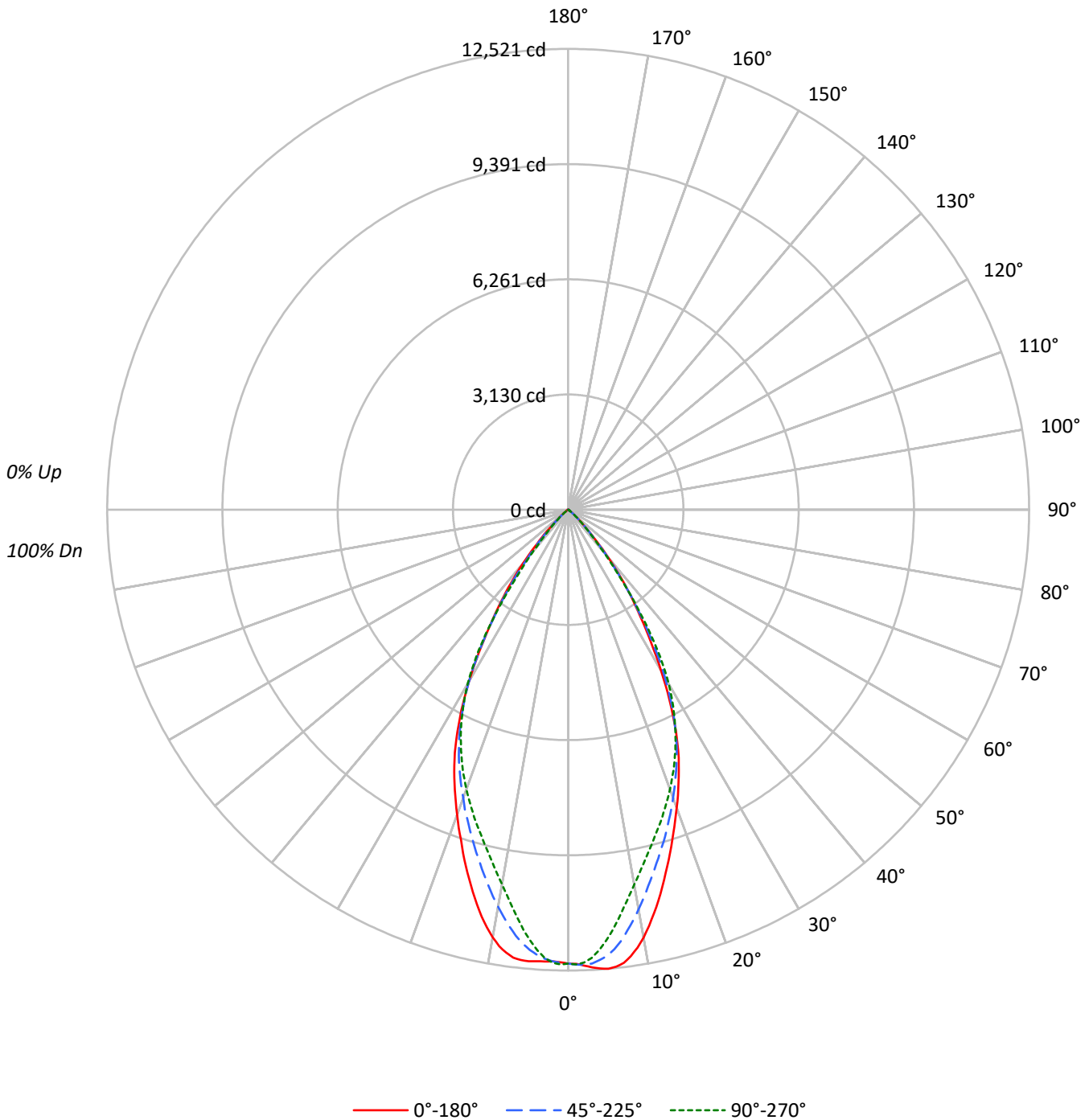
Input Watts (W): 106.3  
Input Voltage (V): NR  
Input Current (Ain): NR  
Voltage Rise (V): NR  
Power Factor: NR  
Total Harmonic Distortion (THDi): NR  
Frequency (hertz): 60  
Stabilization Time: NR  
Operation Time: NR  
Ambient Temperature (°C): NR  
Test Distance: 25 FT



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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	111	108	106	111	109	107	105	105	103	101	101	100	98	98	97	96	94
2	108	103	99	96	106	102	98	95	98	95	93	95	93	91	93	91	89	87
3	103	97	92	88	101	95	91	87	93	89	86	90	87	84	88	85	83	81
4	98	90	85	81	96	89	84	80	87	83	79	85	81	78	83	80	77	76
5	93	85	79	75	91	84	78	74	82	77	74	80	76	73	79	75	72	71
6	88	80	74	69	87	79	73	69	77	72	69	76	72	68	75	71	68	66
7	84	75	69	65	83	74	69	65	73	68	64	72	67	64	71	67	64	62
8	80	71	65	61	79	70	64	61	69	64	60	68	63	60	67	63	60	58
9	76	67	61	57	75	66	61	57	65	60	57	64	60	56	64	59	56	55
10	73	63	57	54	72	63	57	54	62	57	53	61	56	53	60	56	53	52

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

	0°	90°	180°
0°	380264	380264	380264
5°	387564	364085	381252
10°	369513	323888	369419
15°	326296	292125	331845
20°	282766	265154	289457
25°	238914	234831	247685
30°	179565	194406	191842
35°	120202	127087	130362
40°	67345	57809	77243
45°	27064	23798	32166
50°	9350	9062	11077
55°	2581	3064	2903
60°	1480	1850	1665
65°	1313	1094	876
70°	0	811	541
75°	0	0	0
80°	0	0	533
85°	0	0	0



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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	1119.5	11.5
10°-20°	2707.6	27.9
20°-30°	3173.5	32.7
30°-40°	2088.0	21.5
40°-50°	544.9	5.6
50°-60°	67.0	0.7
60°-70°	13.9	0.1
70°-80°	2.6	0.0
80°-90°	0.1	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°	7000.6	72.0
0°-40°	9088.5	93.5
0°-60°	9700.4	99.8
0°-90°	9717.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	9717.0	100.0

**CANDELA DISTRIBUTION:**

	0°	45°	90°	135°	180°	Flux
0°	12332	12332	12332	12332	12332	
5°	12521	12164	11762	12005	12317	###
15°	10221	9642	9151	9642	10395	2849
25°	7022	6953	6902	7019	7280	3166
35°	3193	3265	3376	3409	3463	1999
45°	621	585	546	633	738	556
55°	48	51	57	57	54	64
65°	18	15	15	12	12	13
75°	0	3	0	0	0	2
85°	0	0	0	0	0	0
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°	12331.7	12331.7	12331.7	12331.7	12331.7	12331.7	12331.7	12331.7	12331.7
1°	12340.7	12358.7	12364.7	12382.7	12355.7	12337.8	12313.8	12295.7	12298.7
2°	12394.7	12403.7	12370.7	12358.7	12310.8	12295.7	12277.7	12274.7	12277.7
3°	12451.7	12433.6	12346.7	12265.8	12193.8	12184.8	12217.8	12265.8	12292.7
4°	12496.7	12448.7	12265.8	12115.8	12001.9	11993.0	12124.9	12247.7	12298.7
5°	12520.6	12433.6	12163.8	11912.0	11762.1	11819.0	12004.9	12223.8	12316.7
6°	12487.6	12358.7	12007.9	11672.1	11501.2	11576.2	11849.0	12166.8	12304.7
7°	12403.7	12238.8	11807.1	11411.3	11201.4	11318.3	11666.1	12070.9	12259.8
8°	12247.7	12049.9	11552.2	11108.4	10901.6	11033.5	11441.3	11932.9	12151.9
9°	12043.9	11825.0	11300.3	10832.6	10610.7	10766.6	11207.4	11750.1	12001.9
10°	11801.0	11567.2	11021.5	10544.8	10343.9	10490.8	10955.5	11537.2	11798.0
11°	11516.2	11291.3	10742.7	10275.0	10083.1	10227.0	10703.7	11282.4	11564.2
12°	11207.4	11000.5	10457.9	10014.1	9834.2	9972.1	10433.9	11018.5	11297.3
13°	10898.5	10691.7	10182.0	9762.2	9597.3	9729.2	10170.0	10730.7	11009.5
14°	10565.8	10376.9	9906.2	9522.4	9372.5	9498.4	9900.2	10439.8	10703.7
15°	10221.0	10071.0	9642.3	9291.5	9150.6	9270.5	9642.3	10140.0	10394.8
16°	9897.2	9759.2	9387.4	9063.6	8946.8	9042.6	9381.5	9840.2	10083.1
17°	9567.3	9441.4	9132.6	8838.8	8733.9	8826.8	9114.6	9537.4	9756.2
18°	9237.6	9132.6	8853.8	8602.0	8509.0	8592.9	8850.8	9231.5	9429.4
19°	8931.7	8835.8	8598.9	8386.1	8302.1	8377.0	8619.9	8937.7	9135.6
20°	8616.9	8538.9	8332.1	8158.2	8080.2	8149.2	8338.1	8646.9	8820.8
21°	8314.1	8245.1	8065.2	7918.3	7855.4	7912.4	8086.2	8365.1	8518.0
22°	7999.3	7960.3	7798.4	7675.5	7633.5	7669.5	7828.4	8068.2	8212.2
23°	7690.4	7654.5	7531.5	7429.6	7393.6	7429.6	7570.6	7786.4	7915.4
24°	7378.6	7339.7	7249.8	7183.7	7153.8	7183.7	7303.7	7486.6	7609.5
25°	7021.9	7015.9	6952.9	6916.9	6901.9	6934.9	7018.9	7177.8	7279.7
26°	6680.0	6662.1	6644.1	6638.1	6641.1	6659.0	6728.0	6848.0	6928.9
27°	6260.3	6287.3	6314.2	6350.3	6362.2	6377.3	6410.2	6497.1	6557.1
28°	5858.5	5909.5	5975.5	6047.4	6080.4	6080.4	6083.4	6131.4	6182.3
29°	5459.8	5513.7	5618.7	5726.6	5771.6	5765.6	5741.6	5762.6	5792.6
30°	5043.0	5112.0	5252.9	5393.8	5459.8	5435.8	5390.8	5369.9	5387.8
31°	4635.3	4704.2	4860.1	5013.0	5100.0	5073.0	4995.1	4980.1	4989.0
32°	4245.5	4314.5	4458.3	4620.2	4719.2	4683.3	4602.3	4578.3	4581.3
33°	3867.7	3921.7	4053.6	4203.6	4284.5	4275.4	4209.5	4179.6	4182.5
34°	3510.9	3555.9	3654.8	3768.8	3846.7	3843.7	3795.7	3798.7	3807.8
35°	3193.1	3217.1	3265.0	3328.1	3376.0	3403.0	3409.0	3433.0	3463.0
37.5°	2413.6	2422.6	2365.6	2302.6	2290.6	2368.6	2503.5	2620.5	2665.5
40°	1673.0	1652.0	1580.1	1469.1	1436.1	1523.1	1694.0	1858.9	1918.9
42.5°	1040.4	1031.4	986.4	902.5	872.5	923.5	1052.4	1178.3	1238.3
45°	620.6	608.6	584.6	551.7	545.7	566.6	632.6	704.6	737.6
47.5°	356.8	353.8	338.8	326.8	323.8	338.8	368.8	410.8	419.8
50°	194.9	191.9	188.9	188.9	188.9	197.9	212.9	224.9	230.9
52.5°	96.0	99.0	96.0	99.0	102.0	107.9	104.9	116.9	116.9
55°	48.0	45.0	51.0	57.0	57.0	57.0	57.0	57.0	54.0
57.5°	35.9	39.0	33.0	35.9	33.0	33.0	30.0	33.0	35.9



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**CANDELA DISTRIBUTION (continued):**

	0°	22.5°	45°	67.5°	90°	112.5°	135°	157.5°	180°
60°	24.0	21.0	24.0	27.0	30.0	27.0	21.0	24.0	27.0
62.5°	12.0	12.0	12.0	18.0	27.0	21.0	18.0	15.0	15.0
65°	18.0	12.0	15.0	18.0	15.0	15.0	12.0	15.0	12.0
67.5°	9.0	15.0	9.0	6.0	9.0	12.0	9.0	6.0	6.0
70°	0.0	3.0	3.0	9.0	9.0	9.0	9.0	6.0	6.0
72.5°	3.0	3.0	3.0	6.0	3.0	6.0	3.0	3.0	6.0
75°	0.0	0.0	3.0	3.0	0.0	3.0	0.0	0.0	0.0
77.5°	3.0	0.0	3.0	3.0	0.0	0.0	0.0	3.0	0.0
80°	0.0	0.0	3.0	0.0	0.0	0.0	0.0	0.0	3.0
82.5°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
85°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
87.5°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
90°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)