

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: P250137

Luminaire Tested: **LSR8B120D010 EC8B120835 8LBM0WH**

Issue Date: 03/03/2020

**Test Information**

Test Method: LM-79-08  
Report Number: P250137  
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: LSR8B120D010 EC8B120835 8LBM0WH  
Description: PORTFOLIO 8 INCH MEDIUM DISTRIBUTION 55 DEG CUTOFF RECESSED  
DOWNLIGHT- CYLINDEC  
80 CRI 3500 CCT WITH WHEAT TRIM  
Light Source: -  
Ballast/Driver: -

**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 12368.0 lumens  
Efficiency: N/A  
Efficacy: 104.5 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

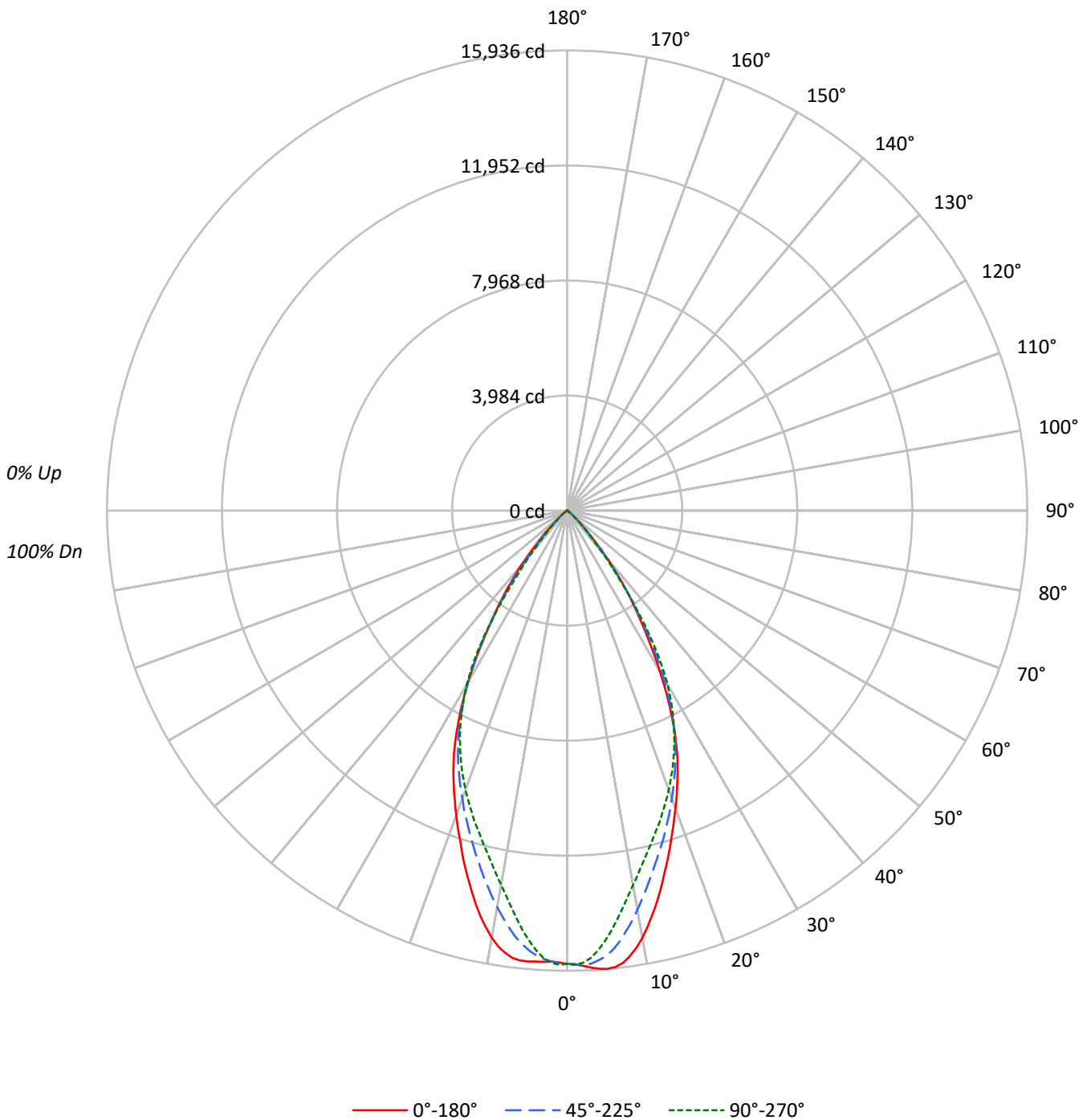
Input Watts (W): 118.3  
Input Voltage (V): NR  
Input Current (Ain): NR  
Voltage Rise (V): NR  
Power Factor: NR  
Total Harmonic Distortion (THDi): NR  
Frequency (hertz): 60  
Stabilization Time: NR  
Operation Time: NR  
Ambient Temperature (°C): NR  
Test Distance: 25 FT



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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	50	30	10	0	
RCR																						
0	119	119	119	119	116	116	116	116	111	111	111	106	106	106	102	102	102	100				100
1	114	111	108	106	111	109	107	105	105	103	101	101	100	98	98	97	96	94				94
2	108	103	99	96	106	102	98	95	98	95	93	95	93	91	93	91	89	87				87
3	103	97	92	88	101	95	91	87	93	89	86	90	87	84	88	85	83	81				81
4	98	90	85	81	96	89	84	80	87	83	79	85	81	78	83	80	77	76				76
5	93	85	79	75	91	84	78	74	82	77	74	80	76	73	79	75	72	71				71
6	88	80	74	69	87	79	73	69	77	72	69	76	72	68	75	71	68	66				66
7	84	75	69	65	83	74	69	65	73	68	64	72	67	64	71	67	64	62				62
8	80	71	65	61	79	70	64	61	69	64	60	68	63	60	67	63	60	58				58
9	76	67	61	57	75	66	61	57	65	60	57	64	60	56	64	59	56	55				55
10	73	63	57	54	72	63	57	54	62	57	53	61	56	53	60	56	53	52				52

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

	0°	90°	180°
0°	484010	484010	484010
5°	493300	463414	485267
10°	470325	412254	470206
15°	415317	371823	422381
20°	359912	337496	368427
25°	304094	298898	315257
30°	228556	247442	244180
35°	152997	161761	165924
40°	85717	73580	98316
45°	34451	30287	40940
50°	11897	11533	14099
55°	3285	3903	3693
60°	1881	2356	2122
65°	1671	1394	1109
70°	0	1037	694
75°	0	0	0
80°	0	0	675
85°	0	0	0



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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	1424.9	11.5
10°-20°	3446.3	27.9
20°-30°	4039.3	32.7
30°-40°	2657.6	21.5
40°-50°	693.5	5.6
50°-60°	85.3	0.7
60°-70°	17.7	0.1
70°-80°	3.3	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°	8910.5	72.0
0°-40°	11568.1	93.5
0°-60°	12346.9	99.8
0°-90°	12368.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	12368.0	100.0

**CANDELA DISTRIBUTION:**

	0°	45°	90°	135°	180°	Flux
0°	15696	15696	15696	15696	15696	
5°	15936	15482	14971	15280	15677	###
15°	13010	12273	11647	12273	13231	3626
25°	8938	8850	8785	8934	9266	4029
35°	4064	4156	4297	4339	4408	2545
45°	790	744	694	805	939	708
55°	61	65	73	73	69	81
65°	23	19	19	15	15	16
75°	0	4	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°	15696.1	15696.1	15696.1	15696.1	15696.1	15696.1	15696.1	15696.1	15696.1
1°	15707.5	15730.5	15738.0	15761.0	15726.6	15703.8	15673.2	15650.2	15654.1
2°	15776.2	15787.7	15745.7	15730.5	15669.4	15650.2	15627.4	15623.5	15627.4
3°	15848.8	15825.8	15715.1	15612.1	15520.5	15509.1	15551.1	15612.1	15646.4
4°	15906.0	15844.9	15612.1	15421.3	15276.3	15264.9	15432.8	15589.2	15654.1
5°	15936.5	15825.8	15482.4	15161.8	14971.0	15043.5	15280.1	15558.6	15677.0
6°	15894.5	15730.5	15283.9	14856.5	14639.0	14734.4	15081.7	15486.2	15661.7
7°	15787.7	15577.8	15028.3	14524.5	14257.4	14406.2	14848.9	15364.1	15604.5
8°	15589.2	15337.3	14703.9	14139.0	13875.7	14043.6	14562.7	15188.5	15467.1
9°	15329.7	15051.1	14383.3	13788.0	13505.6	13704.0	14265.0	14955.7	15276.3
10°	15020.6	14722.9	14028.4	13421.6	13166.0	13352.9	13944.4	14684.7	15016.8
11°	14658.0	14371.8	13673.5	13078.2	12833.9	13017.1	13623.9	14360.4	14719.1
12°	14265.0	14001.7	13311.0	12746.2	12517.2	12692.7	13280.4	14024.6	14379.5
13°	13871.9	13608.6	12959.9	12425.6	12215.7	12383.6	12944.6	13658.2	14013.1
14°	13448.3	13207.9	12608.8	12120.3	11929.5	12089.7	12601.1	13288.0	13623.9
15°	13009.5	12818.6	12272.9	11826.4	11647.1	11799.7	12272.9	12906.4	13230.8
16°	12597.3	12421.8	11948.5	11536.4	11387.6	11509.7	11941.0	12524.8	12833.9
17°	12177.5	12017.3	11624.1	11250.2	11116.6	11234.9	11601.3	12139.4	12417.9
18°	11757.8	11624.1	11269.3	10948.7	10830.4	10937.3	11265.5	11750.1	12001.9
19°	11368.5	11246.3	10944.9	10673.9	10567.1	10662.5	10971.6	11376.1	11628.0
20°	10967.8	10868.5	10605.2	10383.9	10284.7	10372.4	10612.9	11006.0	11227.3
21°	10582.3	10494.6	10265.6	10078.6	9998.5	10071.0	10292.3	10647.2	10841.8
22°	10181.7	10132.1	9926.0	9769.5	9716.1	9761.8	9964.1	10269.4	10452.6
23°	9788.5	9742.8	9586.3	9456.6	9410.7	9456.6	9636.0	9910.7	10074.8
24°	9391.7	9342.1	9227.6	9143.6	9105.5	9143.6	9296.3	9529.1	9685.6
25°	8937.6	8930.0	8849.8	8804.0	8784.9	8826.9	8933.8	9136.0	9265.7
26°	8502.5	8479.6	8456.7	8449.1	8452.9	8475.8	8563.5	8716.2	8819.3
27°	7968.3	8002.6	8036.9	8082.7	8098.0	8117.1	8159.0	8269.7	8346.1
28°	7456.8	7521.7	7605.7	7697.3	7739.3	7739.3	7743.0	7804.1	7869.0
29°	6949.3	7018.0	7151.6	7289.0	7346.2	7338.5	7308.0	7334.7	7372.9
30°	6418.9	6506.6	6686.0	6865.4	6949.3	6918.8	6861.6	6834.9	6857.7
31°	5899.9	5987.7	6186.1	6380.7	6491.3	6457.1	6357.8	6338.8	6350.2
32°	5403.8	5491.6	5674.7	5880.7	6006.7	5961.0	5857.9	5827.3	5831.2
33°	4922.9	4991.6	5159.5	5350.4	5453.4	5441.9	5357.9	5319.8	5323.6
34°	4468.8	4526.0	4651.9	4797.0	4896.2	4892.4	4831.3	4835.1	4846.6
35°	4064.3	4094.8	4155.8	4236.0	4297.1	4331.4	4339.0	4369.5	4407.7
37.5°	3072.1	3083.5	3011.0	2930.8	2915.6	3014.8	3186.6	3335.4	3392.6
40°	2129.4	2102.7	2011.1	1870.0	1827.9	1938.7	2156.2	2366.1	2442.4
42.5°	1324.3	1312.8	1255.5	1148.7	1110.5	1175.4	1339.5	1499.8	1576.1
45°	790.0	774.7	744.1	702.2	694.5	721.2	805.2	896.8	938.8
47.5°	454.1	450.4	431.2	416.0	412.2	431.2	469.4	522.8	534.3
50°	248.0	244.3	240.4	240.4	240.4	251.8	271.0	286.2	293.9
52.5°	122.1	126.0	122.1	126.0	129.8	137.4	133.5	148.8	148.8
55°	61.1	57.2	64.9	72.6	72.6	72.6	72.6	72.6	68.7
57.5°	45.8	49.6	42.0	45.8	42.0	42.0	38.2	42.0	45.8



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**CANDELA DISTRIBUTION (continued):**

	0°	22.5°	45°	67.5°	90°	112.5°	135°	157.5°	180°
60°	30.5	26.7	30.5	34.4	38.2	34.4	26.7	30.5	34.4
62.5°	15.2	15.2	15.2	22.9	34.4	26.7	22.9	19.1	19.1
65°	22.9	15.2	19.1	22.9	19.1	19.1	15.2	19.1	15.2
67.5°	11.5	19.1	11.5	7.7	11.5	15.2	11.5	7.7	7.7
70°	0.0	3.8	3.8	11.5	11.5	11.5	11.5	7.7	7.7
72.5°	3.8	3.8	3.8	7.7	3.8	7.7	3.8	3.8	7.7
75°	0.0	0.0	3.8	3.8	0.0	3.8	0.0	0.0	0.0
77.5°	3.8	0.0	3.8	3.8	0.0	0.0	0.0	3.8	0.0
80°	0.0	0.0	3.8	0.0	0.0	0.0	0.0	0.0	3.8
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)