

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: P250122

Luminaire Tested: **LSR8B100D010 EC8B100827 8LBM0WH**

Issue Date: 03/03/2020

Test Information

Test Method: LM-79-08
Report Number: P250122
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 EC8B100827 8LBM0WH
Description: PORTFOLIO 8 INCH MEDIUM DISTRIBUTION 55 DEG CUTOFF RECESSED
DOWNLIGHT- CYLINDEC
80 CRI 2700 CCT WITH WHEAT TRIM
Light Source: -
Ballast/Driver: -

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 10235.0 lumens
Efficiency: N/A
Efficacy: 96.3 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

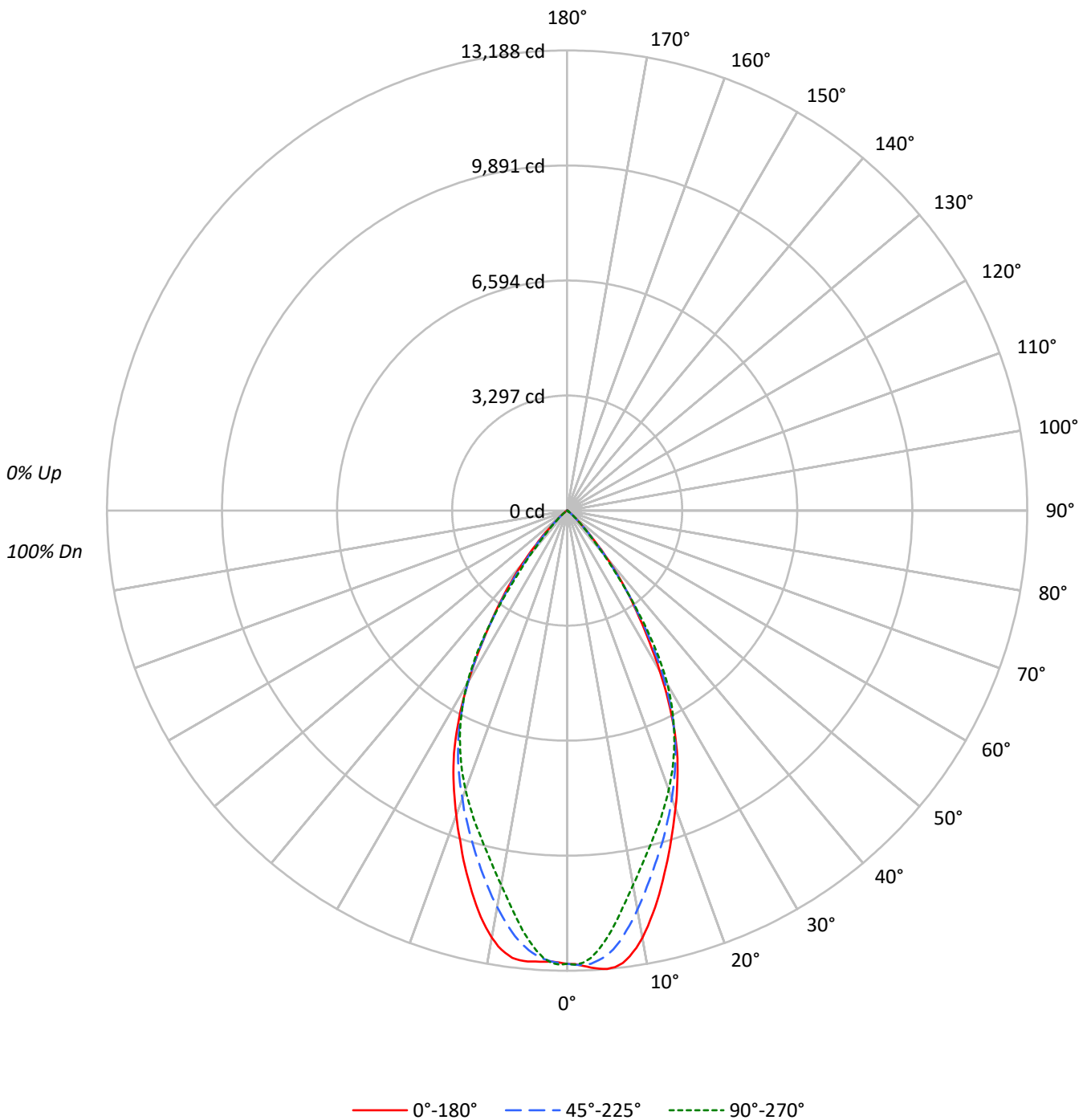
Input Watts (W): 106.3
Input Voltage (V): NR
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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

AVERAGE LUMINANCE (cd/sqm):

	0°	90°	180°
0°	400536	400536	400536
5°	408226	383493	401577
10°	389211	341154	389114
15°	343688	307697	349537
20°	297842	279291	304887
25°	251649	247352	260890
30°	189139	204771	202068
35°	126612	133863	137311
40°	70936	60892	81357
45°	28507	25067	33880
50°	9844	9547	11667
55°	2715	3226	3059
60°	1560	1949	1752
65°	1379	1153	919
70°	0	857	568
75°	0	0	0
80°	0	0	568
85°	0	0	0



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	1179.2	11.5
10°-20°	2852.0	27.9
20°-30°	3342.6	32.7
30°-40°	2199.3	21.5
40°-50°	573.9	5.6
50°-60°	70.6	0.7
60°-70°	14.6	0.1
70°-80°	2.7	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°	7373.8	72.0
0°-40°	9573.1	93.5
0°-60°	10217.5	99.8
0°-90°	10235.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	10235.0	100.0

CANDELA DISTRIBUTION:

	0°	45°	90°	135°	180°	Flux
0°	12989	12989	12989	12989	12989	
5°	13188	12812	12389	12645	12973	###
15°	10766	10156	9638	10156	10949	3001
25°	7396	7324	7270	7393	7668	3334
35°	3363	3439	3556	3591	3648	2106
45°	654	616	575	666	777	586
55°	50	54	60	60	57	67
65°	19	16	16	13	13	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°	12989.1	12989.1	12989.1	12989.1	12989.1	12989.1	12989.1	12989.1	12989.1
1°	12998.6	13017.6	13023.8	13042.8	13014.4	12995.5	12970.2	12951.2	12954.4
2°	13055.4	13064.9	13030.2	13017.6	12967.0	12951.2	12932.3	12929.1	12932.3
3°	13115.5	13096.5	13004.9	12919.7	12843.9	12834.4	12869.1	12919.7	12948.0
4°	13162.8	13112.3	12919.7	12761.7	12641.7	12632.3	12771.2	12900.7	12954.4
5°	13188.1	13096.5	12812.3	12547.0	12389.1	12449.1	12644.9	12875.4	12973.3
6°	13153.3	13017.6	12648.0	12294.4	12114.3	12193.3	12480.7	12815.4	12960.7
7°	13064.9	12891.2	12436.5	12019.6	11798.5	11921.7	12288.0	12714.3	12913.3
8°	12900.7	12692.2	12168.0	11700.6	11482.7	11621.6	12051.2	12569.1	12799.7
9°	12685.9	12455.4	11902.8	11410.1	11176.4	11340.6	11804.8	12376.4	12641.7
10°	12430.1	12183.8	11609.0	11106.9	10895.3	11050.1	11539.6	12152.2	12427.0
11°	12130.1	11893.2	11315.3	10822.7	10620.6	10772.2	11274.3	11883.8	12180.6
12°	11804.8	11586.9	11015.4	10547.9	10358.5	10503.7	10990.1	11605.9	11899.6
13°	11479.5	11261.6	10724.8	10282.7	10108.9	10247.9	10712.1	11302.7	11596.4
14°	11129.0	10930.0	10434.3	10030.0	9872.1	10004.7	10427.9	10996.3	11274.3
15°	10765.8	10607.9	10156.3	9786.8	9638.4	9764.7	10156.3	10680.5	10949.0
16°	10424.8	10279.5	9887.9	9546.8	9423.7	9524.7	9881.6	10364.8	10620.6
17°	10077.3	9944.7	9619.4	9310.0	9199.5	9297.4	9600.5	10045.8	10276.3
18°	9730.0	9619.4	9325.8	9060.5	8962.6	9051.0	9322.6	9723.7	9932.1
19°	9407.9	9306.8	9057.3	8833.1	8744.7	8823.6	9079.4	9414.2	9622.6
20°	9076.3	8994.1	8776.2	8593.1	8511.0	8583.6	8782.6	9107.9	9291.0
21°	8757.3	8684.7	8495.2	8340.4	8274.1	8334.2	8517.3	8811.0	8972.0
22°	8425.7	8384.7	8214.1	8084.6	8040.4	8078.3	8245.7	8498.4	8650.0
23°	8100.4	8062.5	7933.0	7825.7	7787.8	7825.7	7974.1	8201.5	8337.3
24°	7772.0	7731.0	7636.2	7566.7	7535.2	7566.7	7693.0	7885.7	8015.2
25°	7396.2	7389.9	7323.6	7285.6	7269.9	7304.6	7393.0	7560.4	7667.8
26°	7036.1	7017.2	6998.3	6991.9	6995.1	7014.0	7086.7	7213.0	7298.3
27°	6594.1	6622.5	6650.8	6688.8	6701.4	6717.2	6751.9	6843.5	6906.7
28°	6170.8	6224.5	6294.0	6369.8	6404.6	6404.6	6407.7	6458.2	6511.9
29°	5750.9	5807.7	5918.2	6031.9	6079.3	6072.9	6047.7	6069.8	6101.4
30°	5311.9	5384.5	5532.9	5681.4	5750.9	5725.6	5678.2	5656.1	5675.0
31°	4882.4	4955.0	5119.2	5280.3	5371.8	5343.5	5261.3	5245.6	5255.0
32°	4471.8	4544.5	4696.0	4866.5	4970.8	4932.9	4847.6	4822.3	4825.5
33°	4073.9	4130.8	4269.7	4427.6	4512.9	4503.4	4433.9	4402.4	4405.5
34°	3698.1	3745.5	3849.6	3969.7	4051.8	4048.6	3998.1	4001.3	4010.8
35°	3363.4	3388.6	3439.1	3505.5	3556.0	3584.4	3590.7	3616.0	3647.6
37.5°	2542.3	2551.7	2491.7	2425.4	2412.8	2494.9	2637.0	2760.2	2807.5
40°	1762.2	1740.1	1664.3	1547.5	1512.7	1604.3	1784.3	1958.0	2021.1
42.5°	1095.9	1086.4	1039.0	950.6	919.0	972.7	1108.5	1241.2	1304.3
45°	653.7	641.1	615.8	581.1	574.8	596.9	666.3	742.1	776.9
47.5°	375.8	372.7	356.8	344.2	341.1	356.8	388.4	432.6	442.2
50°	205.2	202.1	199.0	199.0	199.0	208.4	224.2	236.8	243.2
52.5°	101.1	104.2	101.1	104.2	107.4	113.7	110.5	123.2	123.2
55°	50.5	47.4	53.7	60.0	60.0	60.0	60.0	60.0	56.9
57.5°	37.9	41.0	34.8	37.9	34.8	34.8	31.6	34.8	37.9



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CANDELA DISTRIBUTION (continued):

	0°	22.5°	45°	67.5°	90°	112.5°	135°	157.5°	180°
60°	25.3	22.1	25.3	28.4	31.6	28.4	22.1	25.3	28.4
62.5°	12.6	12.6	12.6	18.9	28.4	22.1	18.9	15.8	15.8
65°	18.9	12.6	15.8	18.9	15.8	15.8	12.6	15.8	12.6
67.5°	9.5	15.8	9.5	6.3	9.5	12.6	9.5	6.3	6.3
70°	0.0	3.2	3.2	9.5	9.5	9.5	9.5	6.3	6.3
72.5°	3.2	3.2	3.2	6.3	3.2	6.3	3.2	3.2	6.3
75°	0.0	0.0	3.2	3.2	0.0	3.2	0.0	0.0	0.0
77.5°	3.2	0.0	3.2	3.2	0.0	0.0	0.0	3.2	0.0
80°	0.0	0.0	3.2	0.0	0.0	0.0	0.0	0.0	3.2
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)