

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: P247416

Luminaire Tested: **LSR8B100D010 EC8B100940 8LBW0WH**

Issue Date: 03/03/2020

Test Information

Test Method: LM-79-08
Report Number: P247416
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (P13927)
Test Lab: INNOVATION CENTER-P1
Issue Date: 03/03/2020
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: PORTFOLIO
Catalog Number: LSR8B100D010 EC8B100940 8LBW0WH
Description: PORTFOLIO 8 INCH WIDE DISTRIBUTION 60 DEGREE CUTOFF RECESSED
DOWNLIGHT- CYLINDEC
90 CRI 4000 CCT WITH WHEAT TRIM
Light Source: -
Ballast/Driver: -

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 10071.0 lumens
Efficiency: N/A
Efficacy: 94.7 lumens/watt
Spacing Criteria (0/90/45): 1.23 / 1.24 / 1.12
Luminous Opening: Circular (Dia: 0.67' x H: 0')
CIE Type: Direct

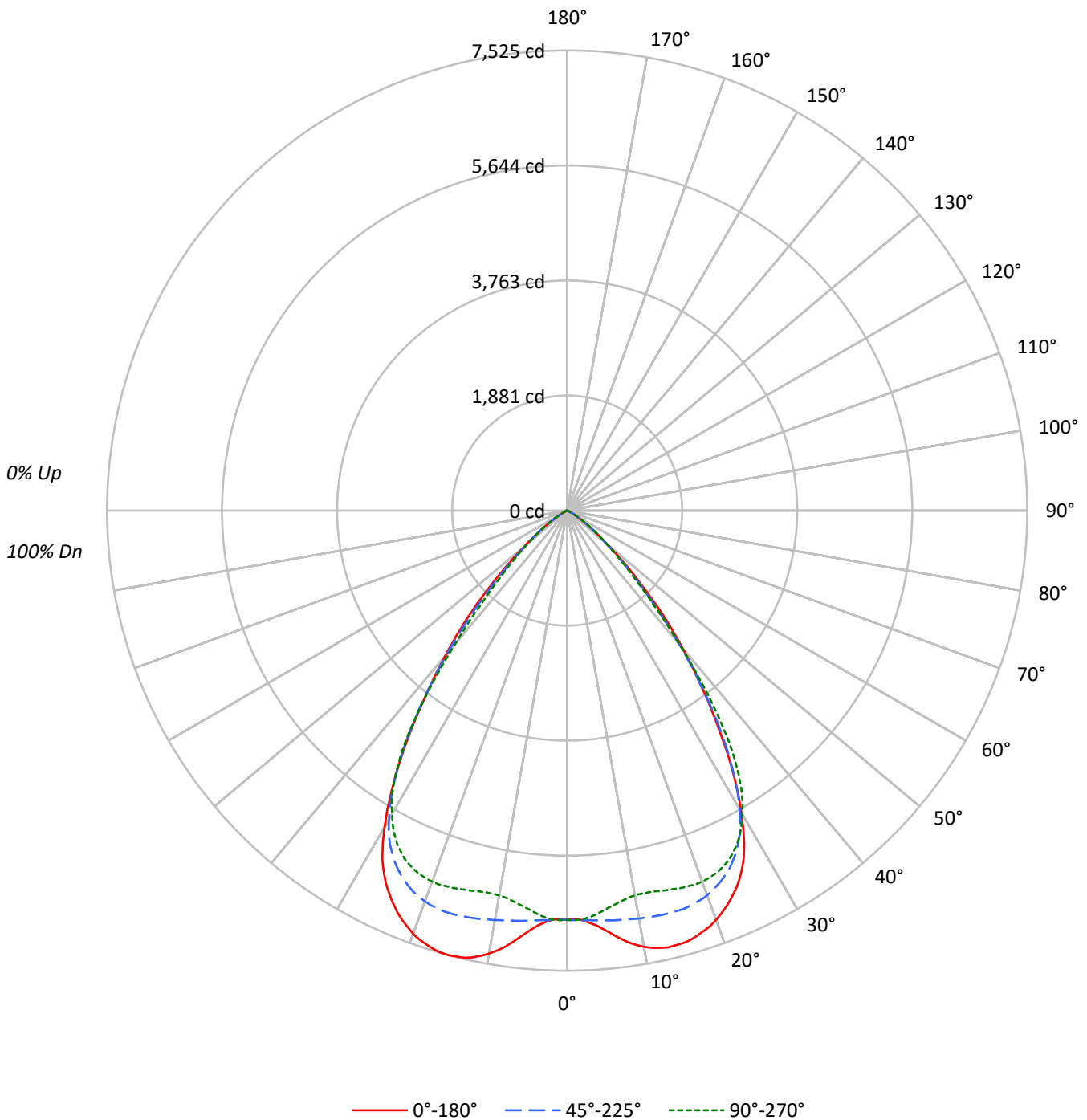
Input Watts (W): 106.3
Input Voltage (V): NR
Input Current (A_{in}): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



TEST NUMBER: P247416

CATALOG NUMBER: LSR8B100D010 EC8B100940 8LBW0WH

Luminous Intensity Polar Plot





TEST NUMBER: P247416

CATALOG NUMBER: LSR8B100D010 EC8B100940 8LBW0WH

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			
1	113	110	107	105	110	108	105	103	104	102	100	100	98	97	96	95	94					92				
2	106	101	96	93	104	99	95	92	96	92	90	93	90	88	90	88	86					84				
3	100	93	87	83	98	91	86	82	89	84	81	86	83	79	84	81	78					76				
4	94	85	79	74	92	84	79	74	82	77	73	80	76	72	78	74	71					70				
5	88	79	72	67	87	78	72	67	76	71	67	74	70	66	73	69	65					64				
6	83	73	66	61	81	72	66	61	71	65	61	69	64	60	68	63	60					58				
7	78	68	61	56	77	67	61	56	66	60	56	64	59	55	63	59	55					53				
8	74	63	56	52	72	62	56	51	61	55	51	60	55	51	59	54	51					49				
9	70	59	52	48	68	58	52	48	57	51	47	56	51	47	55	50	47					45				
10	66	55	48	44	65	54	48	44	54	48	44	53	47	44	52	47	44					42				

AVERAGE LUMINANCE (cd/sqm):

	0°	90°	180°
0°	206424	206424	206424
5°	212760	203517	213113
10°	226796	200084	230356
15°	233774	204991	240216
20°	233766	211836	241698
25°	226604	213831	234732
30°	202819	204034	212540
35°	161539	173634	170532
40°	118021	114816	124771
45°	75400	67215	81972
50°	40791	39971	43794
55°	20940	21709	20940
60°	9115	9115	6661
65°	1868	2495	2072
70°	1280	1794	2047
75°	0	1013	0
80°	497	497	2024
85°	0	991	0



TEST NUMBER: P247416

CATALOG NUMBER: LSR8B100D010 EC8B100940 8LBW0WH

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	645.2	6.4
10°-20°	1941.3	19.3
20°-30°	2954.8	29.3
30°-40°	2749.8	27.3
40°-50°	1338.3	13.3
50°-60°	381.3	3.8
60°-70°	49.8	0.5
70°-80°	7.9	0.1
80°-90°	2.4	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°	5541.4	55.0
0°-40°	8291.2	82.3
0°-60°	10010.9	99.4
0°-90°	10071.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	10071.0	100.0

CANDELA DISTRIBUTION:

	0°	45°	90°	135°	180°	Flux
0°	6694	6694	6694	6694	6694	
5°	6873	6723	6575	6728	6885	670
15°	7323	6791	6421	6856	7525	2060
25°	6660	6370	6285	6509	6899	3023
35°	4291	4351	4612	4564	4530	2668
45°	1729	1601	1541	1726	1880	1367
55°	390	390	404	395	390	382
65°	26	31	34	31	28	49
75°	0	3	8	3	0	5
85°	0	3	3	6	0	1
90°	0	0	0	0	0	



TEST NUMBER: P247416

CATALOG NUMBER: LSR8B100D010 EC8B100940 8LBW0WH

CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°	112.5°	135°	157.5°	180°
0°	6694.2	6694.2	6694.2	6694.2	6694.2	6694.2	6694.2	6694.2	6694.2
1°	6685.6	6694.2	6699.9	6697.1	6699.9	6697.1	6691.4	6680.0	6680.0
2°	6697.1	6708.5	6705.5	6699.9	6691.4	6691.4	6708.5	6685.6	6691.4
3°	6742.5	6742.5	6708.5	6677.2	6665.8	6677.2	6705.5	6722.6	6736.9
4°	6799.4	6788.1	6719.8	6648.8	6626.0	6654.4	6717.0	6771.0	6799.4
5°	6873.4	6839.2	6722.6	6614.6	6574.8	6617.4	6728.4	6830.7	6884.8
6°	6958.7	6907.5	6739.7	6577.6	6526.5	6586.2	6745.5	6901.8	6984.2
7°	7044.1	6961.5	6748.3	6549.2	6483.7	6566.3	6759.6	6981.4	7089.5
8°	7123.7	7012.7	6756.8	6523.6	6443.9	6529.3	6771.0	7052.5	7194.7
9°	7189.1	7061.0	6762.4	6503.8	6409.9	6506.6	6785.3	7115.1	7282.8
10°	7243.1	7098.0	6773.9	6492.3	6390.0	6495.2	6799.4	7169.2	7356.8
11°	7285.8	7123.7	6776.7	6486.7	6381.4	6486.7	6810.8	7223.2	7419.4
12°	7311.3	7146.4	6785.3	6489.5	6384.2	6495.2	6827.9	7246.0	7470.6
13°	7328.4	7154.9	6790.9	6498.0	6390.0	6500.8	6839.2	7265.9	7504.7
14°	7328.4	7149.3	6790.9	6506.6	6407.1	6512.2	6847.8	7280.0	7513.2
15°	7322.8	7146.4	6790.9	6520.7	6421.2	6523.6	6856.3	7288.6	7524.6
16°	7305.7	7129.3	6788.1	6529.3	6435.4	6535.0	6859.1	7282.8	7516.1
17°	7271.5	7120.8	6776.7	6537.8	6449.7	6546.4	6859.1	7268.7	7496.1
18°	7226.0	7061.0	6748.3	6529.3	6452.5	6543.5	6842.1	7231.7	7459.2
19°	7186.2	7027.0	6728.4	6523.6	6463.8	6552.1	6830.7	7206.1	7419.4
20°	7123.7	6970.1	6694.2	6506.6	6455.4	6535.0	6802.4	7160.6	7365.4
21°	7046.9	6904.7	6645.9	6478.1	6441.1	6512.2	6762.4	7098.0	7291.4
22°	6970.1	6830.7	6594.7	6449.7	6418.4	6492.3	6719.8	7032.6	7214.6
23°	6879.0	6748.3	6529.3	6401.3	6384.2	6446.9	6660.1	6961.5	7123.7
24°	6776.7	6651.6	6458.2	6347.3	6341.6	6398.5	6591.9	6867.7	7015.6
25°	6660.1	6549.2	6370.1	6279.0	6284.7	6333.1	6509.4	6762.4	6899.0
26°	6520.7	6418.4	6267.7	6196.6	6205.2	6253.5	6415.5	6640.2	6771.0
27°	6364.3	6270.5	6148.3	6097.0	6119.8	6162.4	6301.8	6506.6	6611.8
28°	6168.2	6094.2	6006.0	5983.3	6011.8	6060.1	6176.7	6344.4	6438.3
29°	5940.6	5900.8	5832.6	5843.9	5883.7	5923.5	6020.2	6142.5	6216.5
30°	5696.1	5679.0	5639.2	5684.7	5730.2	5764.3	5829.8	5912.2	5969.1
31°	5445.8	5425.9	5431.6	5505.5	5573.8	5596.5	5633.5	5673.3	5716.0
32°	5164.3	5158.6	5181.3	5289.5	5377.6	5388.9	5391.8	5403.1	5425.9
33°	4877.1	4868.5	4914.1	5047.7	5147.2	5155.8	5133.0	5121.6	5138.7
34°	4578.5	4578.5	4638.2	4777.6	4894.2	4902.6	4857.2	4851.4	4834.4
35°	4291.2	4282.7	4350.9	4481.8	4612.5	4615.5	4564.2	4532.9	4530.1
37.5°	3580.3	3566.1	3588.8	3657.1	3753.7	3805.0	3799.3	3787.9	3779.4
40°	2931.9	2897.9	2852.3	2823.9	2852.3	2957.5	3048.5	3091.2	3099.6
42.5°	2320.6	2272.2	2175.5	2095.8	2107.3	2204.0	2343.3	2439.9	2488.3
45°	1729.0	1680.6	1601.0	1541.3	1541.3	1609.6	1726.2	1825.7	1879.7
47.5°	1234.2	1202.9	1157.4	1131.8	1148.9	1177.3	1242.7	1316.7	1339.4
50°	850.3	841.7	816.2	816.2	833.2	856.0	867.4	904.3	912.9
52.5°	594.4	580.1	582.9	585.8	600.0	602.9	619.9	611.4	625.6
55°	389.5	389.5	389.5	398.1	403.8	403.8	395.3	389.5	389.5
57.5°	247.4	241.7	244.5	250.3	250.3	241.7	227.5	224.6	210.5



TEST NUMBER: P247416

CATALOG NUMBER: LSR8B100D010 EC8B100940 8LBW0WH

CANDELA DISTRIBUTION (continued):

	0°	22.5°	45°	67.5°	90°	112.5°	135°	157.5°	180°
60°	147.8	147.8	150.8	150.8	147.8	139.3	125.1	113.8	108.0
62.5°	76.8	79.6	79.6	93.9	79.6	71.1	65.4	51.2	48.3
65°	25.6	31.3	31.3	31.3	34.2	31.3	31.3	28.4	28.4
67.5°	17.1	19.9	19.9	22.7	22.7	22.7	22.7	28.4	19.9
70°	14.2	14.2	17.1	19.9	19.9	22.7	17.1	14.2	22.7
72.5°	8.5	11.4	8.5	14.2	11.4	11.4	11.4	11.4	11.4
75°	0.0	5.7	2.8	0.0	8.5	5.7	2.8	5.7	0.0
77.5°	2.8	2.8	2.8	2.8	5.7	5.7	5.7	5.7	2.8
80°	2.8	2.8	5.7	2.8	2.8	5.7	0.0	0.0	11.4
82.5°	2.8	2.8	2.8	2.8	2.8	2.8	0.0	2.8	2.8
85°	0.0	2.8	2.8	2.8	2.8	2.8	5.7	5.7	0.0
87.5°	0.0	2.8	0.0	2.8	0.0	0.0	0.0	5.7	0.0
90°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)