

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: P247683

Luminaire Tested: **LSR8B90D010 EC8B90840 8LBW0MW**

Issue Date: 03/03/2020

**Test Information**

Test Method: LM-79-08  
Report Number: P247683  
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G1-1801-521-63)  
Test Lab: INNOVATION CENTER(G1)  
Issue Date: 03/03/2020  
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)  
Product Line: PORTFOLIO  
Catalog Number: LSR8B90D010 EC8B90840 8LBW0MW  
Description: PORTFOLIO 8 INCH WIDE DISTRIBUTION 60 DEGREE CUTOFF RECESSED  
DOWNLIGHT- CYLINDEC  
80 CRI 4000 CCT WITH MATTE WHITE TRIM  
Light Source: -  
Ballast/Driver: -

**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 9685.0 lumens  
Efficiency: N/A  
Efficacy: 112.5 lumens/watt  
Spacing Criteria (0/90/45): 1.12 / 1.09 / 1.05  
Luminous Opening: Circular (Dia: 0.67' x H: 0')  
CIE Type: Direct

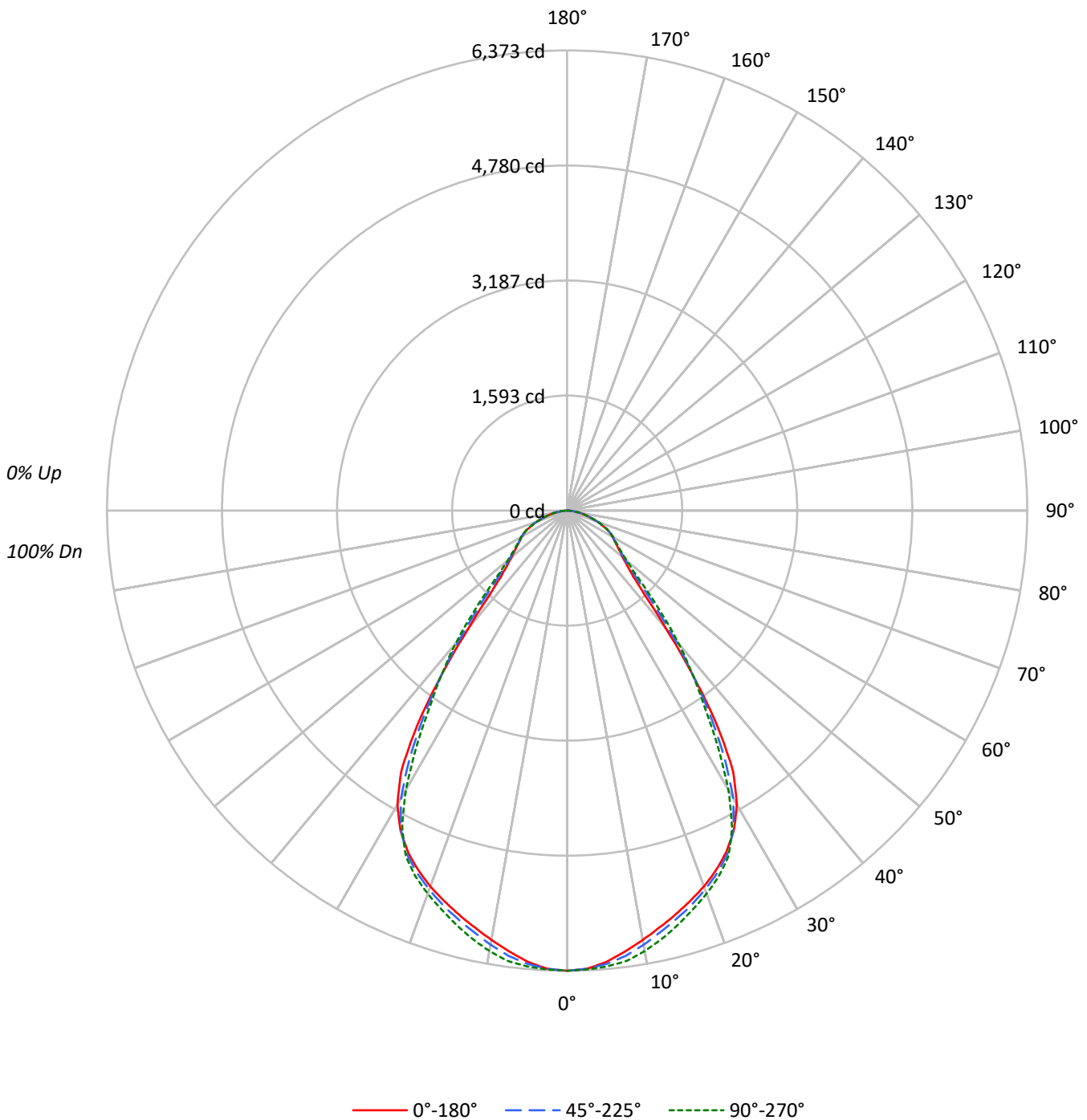
Input Watts (W): 86.1  
Input Voltage (V): NR  
Input Current (A<sub>in</sub>): NR  
Voltage Rise (V): NR  
Power Factor: NR  
Total Harmonic Distortion (THDi): NR  
Frequency (hertz): 60  
Stabilization Time: NR  
Operation Time: NR  
Ambient Temperature (°C): NR  
Test Distance: 25 FT



TEST NUMBER: P247683

CATALOG NUMBER: LSR8B90D010 EC8B90840 8LBW0MW

### Luminous Intensity Polar Plot





TEST NUMBER: P247683

CATALOG NUMBER: LSR8B90D010 EC8B90840 8LBW0MW

**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	111	107	104	101	109	105	102	99	101	99	96	97	95	93	94	92	91	89					89			
2	103	97	91	87	101	95	90	86	92	88	84	89	85	82	86	83	80	78					78			
3	96	88	81	76	94	86	80	75	84	78	74	81	77	73	79	75	72	70					70			
4	90	80	73	67	88	79	72	67	76	71	66	74	69	65	72	68	64	63					63			
5	84	73	66	60	82	72	65	60	70	64	59	68	63	59	67	62	58	57					57			
6	79	67	60	55	77	67	60	54	65	59	54	63	58	54	62	57	53	51					51			
7	74	62	55	50	72	62	55	50	60	54	49	59	53	49	58	53	49	47					47			
8	69	58	51	46	68	57	50	45	56	50	45	55	49	45	54	49	45	43					43			
9	66	54	47	42	64	53	47	42	52	46	42	51	46	42	50	45	41	40					40			
10	62	50	43	39	61	50	43	39	49	43	39	48	42	38	47	42	38	37					37			

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

	0°	45°	90°
0°	196532	196532	196532
5°	194132	195067	196175
10°	189053	191157	193959
15°	184927	186890	189569
20°	181754	183297	185315
25°	177483	178589	179770
30°	167334	163748	158927
35°	135839	129733	124764
40°	84948	92198	96658
45°	56605	61921	67193
50°	48256	49705	51422
55°	45117	45719	46380
60°	44719	44990	45410
65°	43597	44085	44414
70°	39544	39850	40148
75°	34527	34933	35064
80°	29407	29407	30206
85°	23740	23740	23740



TEST NUMBER: P247683

CATALOG NUMBER: LSR8B90D010 EC8B90840 8LBW0MW

**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	595.5	6.1
10°-20°	1652.4	17.1
20°-30°	2388.7	24.7
30°-40°	2137.8	22.1
40°-50°	1156.9	11.9
50°-60°	771.1	8.0
60°-70°	590.5	6.1
70°-80°	312.9	3.2
80°-90°	79.2	0.8
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°	4636.6	47.9
0°-40°	6774.4	69.9
0°-60°	8702.4	89.9
0°-90°	9685.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	9685.0	100.0

**CANDELA DISTRIBUTION:**

	0°	22.5°	45°	67.5°	90°	Flux
0°	6373	6373	6373	6373	6373	
5°	6272	6275	6302	6326	6338	591
15°	5793	5804	5854	5911	5938	1634
25°	5216	5229	5249	5274	5284	2387
35°	3608	3572	3446	3347	3314	2184
45°	1298	1336	1420	1508	1541	1068
55°	839	843	850	859	863	759
65°	598	600	604	609	609	586
75°	290	290	293	294	294	311
85°	67	67	67	68	67	79
90°	0	0	0	0	0	



TEST NUMBER: P247683

CATALOG NUMBER: LSR8B90D010 EC8B90840 8LBW0MW

**CANDELA DISTRIBUTION (FULL):**

	0°	22.5°	45°	67.5°	90°
0°	6373.4	6373.4	6373.4	6373.4	6373.4
2.5°	6352.2	6349.9	6351.0	6357.7	6361.1
5°	6271.6	6274.9	6301.8	6326.4	6337.6
7.5°	6158.6	6173.1	6219.0	6267.1	6291.7
10°	6037.7	6052.3	6104.9	6173.1	6194.4
12.5°	5913.5	5931.4	5978.4	6047.8	6073.5
15°	5792.7	5803.9	5854.2	5911.3	5938.1
17.5°	5668.5	5679.7	5725.6	5770.3	5791.6
20°	5538.7	5551.0	5585.7	5623.7	5647.2
22.5°	5389.9	5402.2	5431.3	5464.8	5486.1
25°	5216.4	5228.7	5248.9	5273.5	5283.6
27.5°	4997.1	5005.0	4985.9	4965.8	4947.9
30°	4699.5	4674.9	4598.8	4501.4	4463.4
32.5°	4276.5	4197.1	4050.5	3931.9	3888.3
35°	3608.5	3571.6	3446.3	3346.7	3314.3
37.5°	2829.8	2854.4	2845.4	2838.7	2845.4
40°	2110.3	2167.4	2290.4	2374.4	2401.2
42.5°	1597.8	1652.7	1791.4	1907.8	1948.1
45°	1298.0	1336.0	1419.9	1508.3	1540.8
47.5°	1120.0	1141.3	1183.8	1230.8	1246.5
50°	1005.9	1014.9	1036.1	1063.0	1071.9
52.5°	915.3	919.8	932.1	946.6	948.9
55°	839.2	842.6	850.4	859.3	862.7
57.5°	775.4	778.8	781.0	786.6	788.8
60°	725.1	725.1	729.5	734.0	736.3
62.5°	670.2	670.2	674.7	679.2	679.2
65°	597.5	599.7	604.2	608.7	608.7
67.5°	518.1	519.2	522.5	527.0	525.9
70°	438.6	438.6	442.0	444.2	445.3
72.5°	362.5	361.4	367.0	368.1	364.8
75°	289.8	289.8	293.2	294.3	294.3
77.5°	226.0	224.9	224.9	226.0	227.1
80°	165.6	166.7	165.6	167.8	170.1
82.5°	115.2	114.1	114.1	114.1	113.0
85°	67.1	67.1	67.1	68.3	67.1
87.5°	26.9	26.9	25.7	25.7	24.6
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)