

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: P857199

Luminaire Tested: **LD4C20D010 EU4209050 4LBMDSWGPH**

Issue Date: 4/12/2024



**Test Information**

Test Method: LM-79-08  
Report Number: P857199  
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G2-2309-186-3)  
Test Lab: INNOVATION CENTER  
Issue Date: 4/12/2024  
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)  
Product Line: PORTFOLIO  
Catalog Number: LD4C20D010 EU4209050 4LBMDSWGPH  
Description: 4 INCH 2000 LUMEN PORTFOLIO LED DOWNLIGHT WITH, 5000K, 90CRI LEDS  
AND 4LBMDSW TRIM WITH GPH FINISH  
Light Source: -  
Ballast/Driver: -

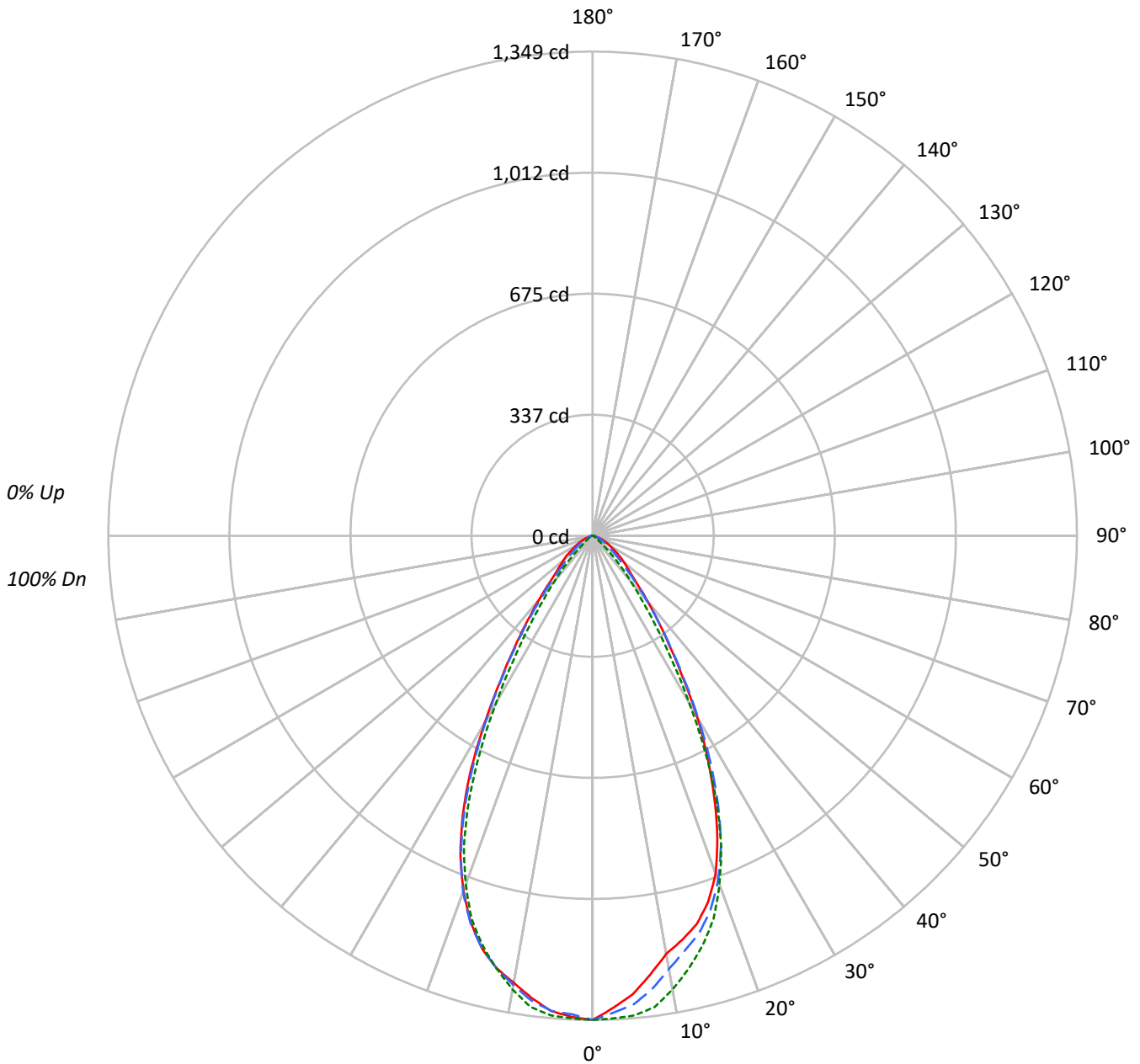
**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 1228.0 lumens  
Efficiency: N/A  
Efficacy: 56.3 lumens/watt  
Spacing Criteria (0/90/45): 0.88 / 0.88 / 0.85  
Luminous Opening: Circular (Dia: 0.33' x H: 0')  
CIE Type: Direct  
  
Input Watts (W): 21.8  
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: P857199

CATALOG NUMBER: LD4C20D010 EU4209050 4LBMDSWGPB

### Luminous Intensity Polar Plot





TEST NUMBER: P857199

CATALOG NUMBER: LD4C20D010 EU4209050 4LBMDSWGPH

**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	113	110	107	105	111	108	105	103	104	102	100	100	99	97	97	95	94	92				92				
2	107	102	97	94	105	100	96	93	97	93	91	94	91	89	91	89	87	85				85				
3	101	94	89	85	99	93	88	84	90	86	83	88	84	81	85	83	80	78				78				
4	96	88	82	77	94	86	81	77	84	80	76	82	78	75	80	77	74	72				72				
5	91	82	75	71	89	81	75	71	79	74	70	77	73	69	76	72	69	67				67				
6	86	76	70	66	84	76	70	65	74	69	65	73	68	64	71	67	64	62				62				
7	81	72	65	61	80	71	65	61	70	64	60	68	64	60	67	63	60	58				58				
8	77	67	61	57	76	67	61	57	66	60	56	65	60	56	64	59	56	55				55				
9	74	63	57	53	72	63	57	53	62	57	53	61	56	53	60	56	53	51				51				
10	70	60	54	50	69	60	54	50	59	53	50	58	53	50	57	53	49	48				48				

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

	0°	90°	180°
0°	165717	165717	165717
5°	158137	165450	163908
10°	147490	160090	157757
15°	142424	150374	151429
20°	131012	135092	137549
25°	108579	110558	115926
30°	82604	76391	84974
35°	55926	45773	56556
40°	38089	26221	36918
45°	26426	13204	24967
50°	21502	5371	20106
55°	17392	3341	15850
60°	13809	2555	12531
65°	10901	2122	9680
70°	8226	1868	7471
75°	5933	1471	5459
80°	4386	1486	3679
85°	2960	1410	2960



TEST NUMBER: P857199

CATALOG NUMBER: LD4C20D010 EU4209050 4LBMDSWGPH

**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	124.0	10.1
10°-20°	325.9	26.5
20°-30°	373.9	30.4
30°-40°	227.1	18.5
40°-50°	97.3	7.9
50°-60°	46.7	3.8
60°-70°	22.7	1.8
70°-80°	8.4	0.7
80°-90°	1.9	0.2
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°	823.8	67.1
0°-40°	1050.9	85.6
0°-60°	1194.9	97.3
0°-90°	1228.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	1228.0	100.0

**CANDELA DISTRIBUTION:**

	0°	45°	90°	135°	180°	Flux
0°	1349	1349	1349	1349	1349	
5°	1282	1310	1342	1328	1329	119
15°	1120	1146	1182	1190	1191	312
25°	801	827	816	847	855	363
35°	373	378	305	369	377	239
45°	152	135	76	122	144	124
55°	81	60	16	54	74	73
65°	38	25	7	23	33	38
75°	12	8	3	7	12	14
85°	2	2	1	1	2	3
90°	0	0	0	0	0	



TEST NUMBER: P857199

CATALOG NUMBER: LD4C20D010 EU4209050 4LBMDSWGPB

**CANDELA DISTRIBUTION (FULL):**

	0°	22.5°	45°	67.5°	90°	112.5°	135°	157.5°	180°
0°	1348.9	1348.9	1348.9	1348.9	1348.9	1348.9	1348.9	1348.9	1348.9
2.5°	1316.6	1331.2	1330.2	1342.7	1345.8	1342.7	1334.4	1342.7	1341.6
5°	1282.3	1298.9	1310.4	1331.2	1341.6	1339.6	1328.1	1330.2	1329.1
7.5°	1232.3	1253.1	1272.9	1304.1	1323.9	1322.9	1306.2	1303.1	1298.9
10°	1182.3	1202.1	1225.0	1257.3	1283.3	1287.5	1270.8	1266.6	1264.6
12.5°	1153.1	1168.7	1184.4	1212.5	1235.4	1243.7	1234.4	1235.4	1234.4
15°	1119.8	1135.4	1145.8	1166.7	1182.3	1193.7	1189.6	1195.8	1190.6
17.5°	1069.8	1088.5	1092.7	1108.3	1119.8	1127.1	1131.2	1137.5	1129.2
20°	1002.1	1016.7	1021.9	1028.1	1033.3	1042.7	1055.2	1061.4	1052.1
22.5°	907.3	935.4	934.4	931.2	936.4	939.6	959.4	969.8	962.5
25°	801.0	830.2	827.1	814.6	815.6	821.9	846.9	860.4	855.2
27.5°	689.6	716.7	709.4	685.4	679.2	688.5	720.8	736.4	733.3
30°	582.3	600.0	588.5	545.8	538.5	550.0	591.7	607.3	599.0
32.5°	466.7	480.2	475.0	422.9	410.4	421.9	470.8	485.4	476.0
35°	372.9	385.4	378.1	316.7	305.2	317.7	368.7	385.4	377.1
37.5°	299.0	308.3	299.0	233.3	222.9	235.4	284.4	306.2	295.8
40°	237.5	244.8	232.3	171.9	163.5	169.8	215.6	237.5	230.2
42.5°	187.5	192.7	179.2	126.0	116.7	125.0	162.5	182.3	178.1
45°	152.1	152.1	135.4	87.5	76.0	84.4	121.9	142.7	143.7
47.5°	130.2	127.1	106.2	58.3	43.7	55.2	96.9	118.7	121.9
50°	112.5	108.3	87.5	42.7	28.1	39.6	80.2	102.1	105.2
52.5°	96.9	93.7	72.9	33.3	19.8	30.2	67.7	88.5	91.7
55°	81.2	79.2	60.4	26.0	15.6	22.9	54.2	71.9	74.0
57.5°	66.7	63.5	49.0	21.9	12.5	18.7	44.8	59.4	61.5
60°	56.2	53.1	39.6	17.7	10.4	14.6	36.5	49.0	51.0
62.5°	46.9	43.7	32.3	14.6	8.3	12.5	29.2	39.6	41.7
65°	37.5	35.4	25.0	11.5	7.3	9.4	22.9	31.2	33.3
67.5°	30.2	28.1	19.8	9.4	6.2	7.3	17.7	25.0	27.1
70°	22.9	20.8	14.6	7.3	5.2	6.2	13.5	18.7	20.8
72.5°	16.7	15.6	11.5	6.2	4.2	5.2	9.4	13.5	15.6
75°	12.5	11.5	8.3	4.2	3.1	4.2	7.3	10.4	11.5
77.5°	8.3	8.3	6.2	3.1	3.1	3.1	5.2	7.3	7.3
80°	6.2	5.2	4.2	2.1	2.1	2.1	3.1	5.2	5.2
82.5°	4.2	3.1	3.1	2.1	2.1	2.1	2.1	3.1	3.1
85°	2.1	2.1	2.1	1.0	1.0	1.0	1.0	2.1	2.1
87.5°	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0
90°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0



Report Generated By 670246072 / DESKTOP-50001EG







— 0°-180°    - - 45°-225°    - - - - 90°-270°







(END OF REPORT)