

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: FAIL-SAFE

Report Number: P184331

Luminaire Tested: **ENW/ENC-24-2-LD1-43-40-CA080-UNV-EDC1**

Issue Date: 3/3/2020



**Test Information**

Test Method: LM-79-08  
Report Number: P184331  
Test Lab: INNOVATION CENTER-P3  
Issue Date: 3/3/2020  
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)  
Product Line: FAIL-SAFE  
Catalog Number: ENW/ENC-24-2-LD1-43-40-CA080-UNV-EDC1  
Description: \*\*\*THIS IS A REVISION OF P32403 TO UPDATE LUMINAIRE WATTAGE  
\*\*\*FAIL-SAFE 2X2 ENCOUNTER W/ 0.080" THICK CLEAR ACRYLIC LENS  
Light Source: 4000K LEDS  
Ballast/Driver: -

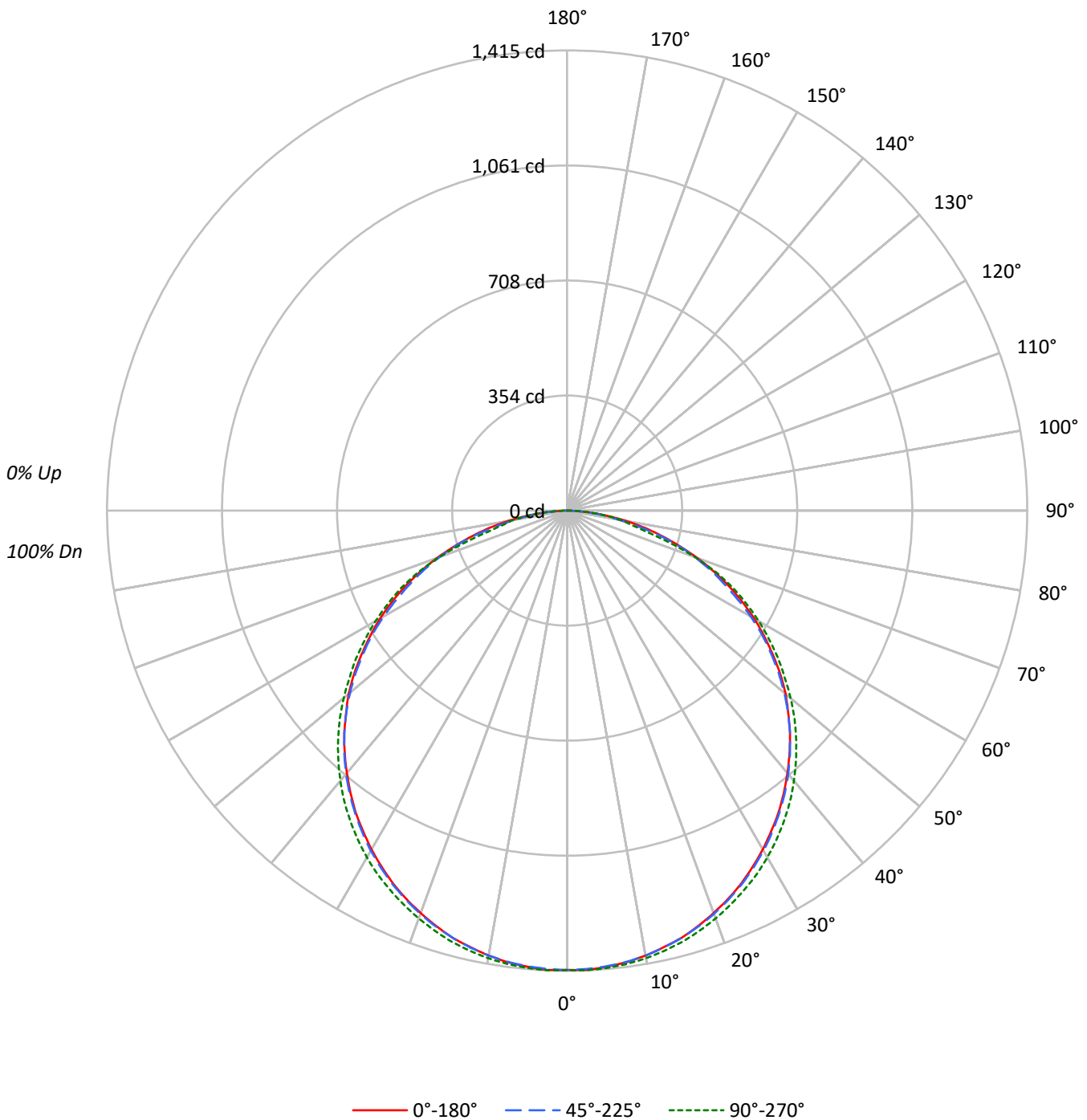
**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 4184.7 lumens  
Efficiency: N/A  
Efficacy: 88.3 lumens/watt  
Spacing Criteria (0/90/45): 1.27 / 1.29 / 1.39  
Luminous Opening: Rectangular w/ Sides (W: 2' x L: 2' x H: 0.1')  
CIE Type: Direct  
  
Input Watts (W): 47.4  
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

TEST NUMBER: P184331

CATALOG NUMBER: ENW/ENC-24-2-LD1-43-40-CA080-UNV-EDC1

### Luminous Intensity Polar Plot





TEST NUMBER: P184331

CATALOG NUMBER: ENW/ENC-24-2-LD1-43-40-CA080-UNV-EDC1

**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	109	104	99	95	106	101	97	94	97	94	91	93	91	88	90	87	85	83					83			
2	98	90	83	77	96	88	82	76	85	79	75	81	77	73	78	75	71	69					69			
3	90	79	71	64	87	77	70	63	74	68	62	72	66	61	69	64	60	58					58			
4	82	70	61	54	80	68	60	54	66	59	53	64	57	52	61	56	51	49					49			
5	75	62	53	46	73	61	52	46	59	51	46	57	50	45	55	49	45	42					42			
6	69	56	47	40	67	55	46	40	53	45	40	51	45	39	50	44	39	37					37			
7	64	51	42	36	63	50	41	35	48	41	35	47	40	35	45	39	35	33					33			
8	60	46	38	32	58	45	37	32	44	37	31	43	36	31	42	36	31	29					29			
9	56	42	34	28	54	42	34	28	41	33	28	39	33	28	38	32	28	26					26			
10	52	39	31	26	51	38	31	26	37	30	26	37	30	25	36	30	25	24					24			

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

	0°	45°	90°
0°	3802	3802	3802
5°	3787	3775	3797
10°	3763	3750	3786
15°	3739	3719	3773
20°	3704	3685	3754
25°	3674	3648	3737
30°	3634	3606	3719
35°	3598	3557	3694
40°	3552	3507	3657
45°	3512	3444	3611
50°	3465	3365	3543
55°	3379	3261	3470
60°	3292	3123	3371
65°	3151	2941	3238
70°	2939	2750	2894
75°	2644	2397	2199
80°	2224	1758	2043
85°	1403	1204	1422



TEST NUMBER: P184331

CATALOG NUMBER: ENW/ENC-24-2-LD1-43-40-CA080-UNV-EDC1

**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	133.9	3.2
10°-20°	384.7	9.2
20°-30°	586.6	14.0
30°-40°	714.7	17.1
40°-50°	752.1	18.0
50°-60°	690.4	16.5
60°-70°	536.6	12.8
70°-80°	302.6	7.2
80°-90°	83.1	2.0
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°	1105.2	26.4
0°-40°	1819.9	43.5
0°-60°	3262.4	78.0
0°-90°	4184.7	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	4184.7	100.0

**CANDELA DISTRIBUTION:**

	0°	22.5°	45°	67.5°	90°	Flux
0°	1413	1413	1413	1413	1413	
5°	1408	1406	1406	1410	1412	134
15°	1360	1357	1360	1368	1372	384
25°	1266	1264	1269	1280	1288	583
35°	1134	1132	1136	1152	1164	709
45°	969	966	969	983	996	747
55°	772	769	765	774	792	691
65°	548	540	532	544	563	541
75°	302	300	291	259	251	319
85°	71	68	70	70	72	87
90°	0	0	0	0	0	



TEST NUMBER: P184331

CATALOG NUMBER: ENW/ENC-24-2-LD1-43-40-CA080-UNV-EDC1

**CANDELA DISTRIBUTION (FULL):**

	0°	22.5°	45°	67.5°	90°
0°	1412.8	1412.8	1412.8	1412.8	1412.8
2.5°	1413.8	1410.9	1410.9	1413.8	1414.7
5°	1408.1	1406.2	1406.2	1410.0	1411.9
7.5°	1400.6	1399.7	1399.7	1404.4	1406.2
10°	1389.3	1389.3	1389.3	1395.0	1397.8
12.5°	1375.2	1374.3	1376.2	1382.7	1386.5
15°	1360.2	1357.4	1360.2	1367.7	1372.4
17.5°	1339.5	1337.6	1341.4	1348.9	1354.5
20°	1316.9	1316.0	1319.8	1329.2	1334.8
22.5°	1292.5	1291.6	1295.3	1305.7	1312.2
25°	1266.2	1264.3	1269.0	1280.3	1287.8
27.5°	1235.2	1235.2	1238.9	1252.1	1261.5
30°	1203.2	1203.2	1207.9	1221.1	1231.4
32.5°	1168.4	1169.4	1173.1	1188.2	1198.5
35°	1133.6	1131.8	1136.5	1151.5	1163.7
37.5°	1094.2	1093.2	1098.9	1113.0	1126.1
40°	1053.7	1053.7	1057.5	1071.6	1084.8
42.5°	1012.4	1011.4	1014.3	1030.2	1041.5
45°	969.1	966.3	969.1	983.2	996.4
47.5°	922.1	920.3	921.2	934.4	948.5
50°	877.0	872.3	871.4	883.6	896.8
52.5°	826.3	821.6	819.7	831.0	843.2
55°	771.7	768.9	765.2	773.6	792.4
57.5°	718.2	714.4	710.6	719.1	736.0
60°	664.6	658.0	651.4	659.9	680.6
62.5°	607.2	598.8	591.3	604.4	622.3
65°	548.0	540.5	532.0	544.3	563.1
67.5°	486.9	482.2	475.6	484.1	494.4
70°	424.9	421.1	417.4	416.4	418.3
72.5°	362.8	360.0	358.1	340.3	333.7
75°	301.7	299.9	291.4	259.4	251.0
77.5°	242.5	240.6	221.8	197.4	200.2
80°	184.2	179.5	158.9	162.6	169.2
82.5°	126.0	122.2	117.5	118.4	120.3
85°	71.4	67.7	70.5	70.5	72.4
87.5°	30.1	27.3	30.1	32.0	32.9
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)