

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: P184378

Luminaire Tested: **ENW/ENC-24-2-LD1-39-40-CP187-UNV-EDC1**

Issue Date: 3/3/2020



**Test Information**

Test Method: LM-79-08  
Report Number: P184378  
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-LD1-39-40-CP187-UNV-EDC1  
Description: FAIL-SAFE 2X2 ENCOUNTER W/ 0.187" THICK CLEAR POLY LENS  
Light Source: 4000K LEDS  
Ballast/Driver: -

**Summary**

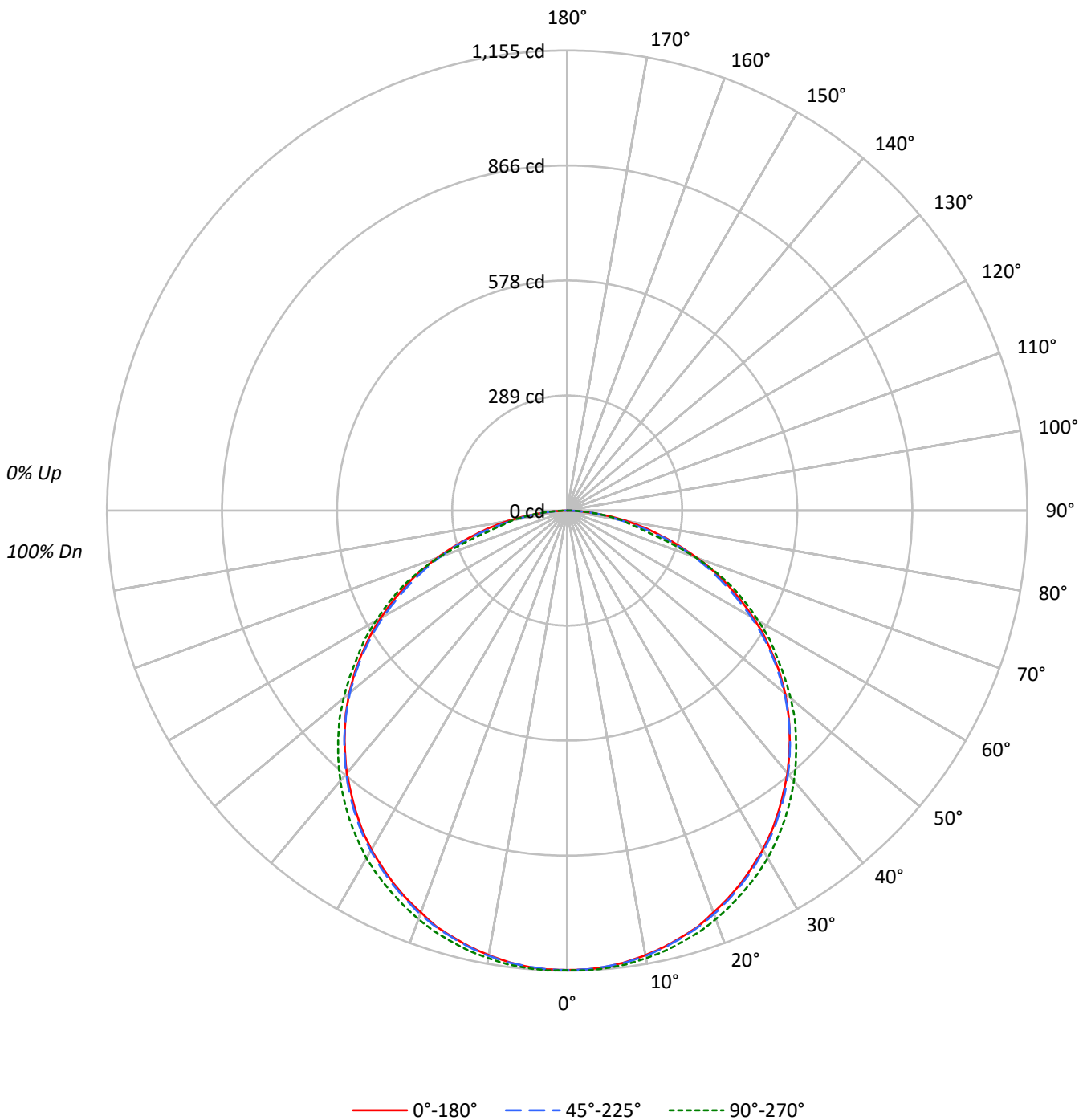
Lumens per Lamp: N/A  
Luminaire Lumens: 3415.0 lumens  
Efficiency: N/A  
Efficacy: 82.1 lumens/watt  
Spacing Criteria (0/90/45): 1.27 / 1.29 / 1.39  
Luminous Opening: Rectangular w/ Sides (W: 2' x L: 2' x H: 0.1')  
CIE Type: Direct

Input Watts (W): 41.6  
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

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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	0
RCR																		
0	119	119	119	119	116	116	116	116	111	111	111	106	106	106	102	102	102	100
1	109	104	99	95	106	101	97	94	97	94	91	93	91	88	90	87	85	83
2	99	90	83	77	96	88	82	76	85	79	75	81	77	73	78	75	71	69
3	90	79	71	64	87	77	70	63	74	68	62	72	66	61	69	64	60	58
4	82	70	61	54	80	68	60	54	66	59	53	64	57	52	61	56	51	49
5	75	62	53	46	73	61	52	46	59	51	46	57	50	45	55	49	45	42
6	69	56	47	40	68	55	46	40	53	45	40	51	45	39	50	44	39	37
7	64	51	42	36	63	50	41	35	48	41	35	47	40	35	45	39	35	33
8	60	46	38	32	58	45	37	32	44	37	31	43	36	31	42	36	31	29
9	56	42	34	28	54	42	34	28	41	33	28	39	33	28	38	32	28	26
10	52	39	31	26	51	38	31	26	37	30	26	37	30	25	36	30	25	24

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

	0°	45°	90°
0°	3104	3104	3104
5°	3091	3083	3100
10°	3069	3063	3090
15°	3047	3035	3080
20°	3019	3009	3070
25°	2994	2976	3053
30°	2968	2944	3042
35°	2933	2906	3016
40°	2900	2861	2986
45°	2862	2810	2945
50°	2821	2747	2891
55°	2758	2666	2818
60°	2678	2556	2745
65°	2567	2401	2644
70°	2399	2235	2369
75°	2153	1944	1809
80°	1817	1429	1672
85°	1086	1002	1169



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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	109.3	3.2
10°-20°	314.1	9.2
20°-30°	478.9	14.0
30°-40°	583.4	17.1
40°-50°	613.7	18.0
50°-60°	563.8	16.5
60°-70°	437.6	12.8
70°-80°	246.2	7.2
80°-90°	68.0	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°	902.3	26.4
0°-40°	1485.7	43.5
0°-60°	2663.2	78.0
0°-90°	3415.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	3415.0	100.0

**CANDELA DISTRIBUTION:**

	0°	22.5°	45°	67.5°	90°	Flux
0°	1154	1154	1154	1154	1154	
5°	1149	1148	1148	1152	1153	109
15°	1108	1108	1110	1117	1120	313
25°	1032	1032	1035	1045	1052	476
35°	924	924	928	940	950	578
45°	790	789	790	802	813	609
55°	630	629	626	633	644	563
65°	446	441	434	446	460	441
75°	246	244	236	211	206	261
85°	55	55	59	59	60	70
90°	0	0	0	0	0	



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**CANDELA DISTRIBUTION (FULL):**

	0°	22.5°	45°	67.5°	90°
0°	1153.5	1153.5	1153.5	1153.5	1153.5
2.5°	1152.6	1151.8	1152.6	1154.3	1155.2
5°	1149.3	1148.4	1148.4	1151.8	1152.6
7.5°	1142.5	1141.6	1143.3	1145.8	1148.4
10°	1133.1	1133.1	1134.8	1138.2	1140.8
12.5°	1122.1	1122.1	1123.8	1128.8	1132.3
15°	1108.5	1108.5	1110.1	1117.0	1120.3
17.5°	1094.0	1092.3	1095.7	1101.6	1107.6
20°	1073.6	1074.5	1077.8	1084.6	1091.5
22.5°	1054.1	1054.1	1057.5	1066.0	1072.8
25°	1032.0	1032.0	1035.3	1044.7	1052.3
27.5°	1007.3	1008.1	1011.5	1021.8	1031.1
30°	982.6	983.5	986.0	998.0	1007.3
32.5°	954.6	954.6	958.8	969.9	979.3
35°	924.0	924.0	928.3	940.1	950.3
37.5°	891.7	892.5	896.8	907.8	918.9
40°	860.3	859.4	862.8	874.7	885.8
42.5°	825.4	824.5	827.1	839.8	850.0
45°	789.7	788.8	790.5	802.5	812.6
47.5°	753.1	750.6	751.5	763.3	775.3
50°	714.0	712.3	711.5	721.7	731.8
52.5°	673.3	671.5	669.0	679.2	688.5
55°	629.8	629.0	625.6	633.3	643.5
57.5°	586.5	584.0	579.7	586.5	602.7
60°	540.6	537.2	533.0	539.8	554.2
62.5°	493.8	488.8	482.8	492.2	507.5
65°	446.3	441.2	434.3	445.5	459.8
67.5°	398.7	391.8	386.8	394.5	404.6
70°	346.8	341.7	339.2	337.5	342.5
72.5°	295.8	293.3	290.7	275.4	273.7
75°	245.7	244.0	236.3	210.8	206.5
77.5°	198.0	195.5	179.3	159.8	164.0
80°	150.5	147.9	129.2	132.6	138.5
82.5°	103.7	99.5	96.0	96.9	97.8
85°	55.3	55.3	58.7	58.7	59.5
87.5°	23.0	23.0	25.5	26.3	27.2
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)