

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: P395331

Luminaire Tested: **8FSN6-SL1-CP250-L8SCT3-4000K-HI**

Issue Date: 5/5/2020

This test was performed under the Supervised Manufacturer's Testing Program. The results of this test have not been influenced by sources from within Cooper Lighting Solutions or from external interests.

**Test Information**

Test Method: LM-79-08  
Report Number: P395331  
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G2-1901-099-13)  
Test Lab: INNOVATIONS CENTER(G2)  
Issue Date: 5/5/2020  
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)  
Product Line: FAIL-SAFE  
Catalog Number: 8FSN6-SL1-CP250-L8SCT3-4000K-HI  
Description: 8FT FSN LINEAR LED FIXTURE WITH HIGH LUMEN SETTING, 4000K LEDS AND CP250 LENS CONFIGURATION

Light Source: -  
Ballast/Driver: -

Luminaire Equipment: Sample No.    Condition    Description

**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 7800.0 lumens  
Efficiency: N/A  
Efficacy: 99.1 lumens/watt  
Spacing Criteria (0/90/45): 1.25 / 1.24 / 1.37  
Luminous Opening: Rectangular (W 0.5' x L: 8' x H: 0')  
CIE Type: Direct

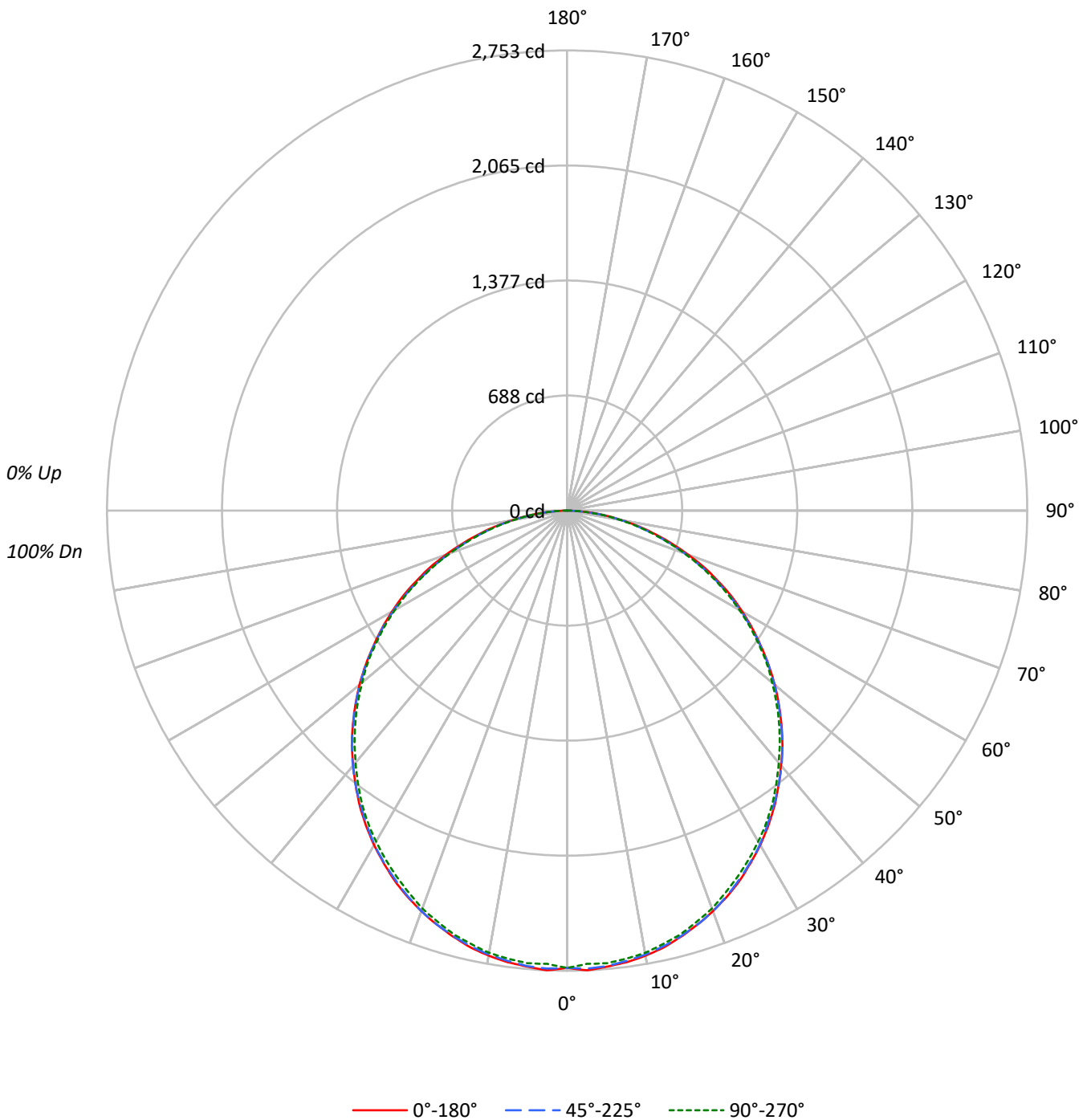
Input Watts (W): 78.7  
Input Voltage (V): NR  
Input Current (Ain): NR  
Voltage Rise (V): NR  
Power Factor: NR  
Total Harmonic Distortion (THDi): NR  
Frequency (hertz): 60  
Stabilization Time: NR  
Operation Time: NR  
Ambient Temperature (°C): NR  
Test Distance: 25 FT



TEST NUMBER: P395331

CATALOG NUMBER: 8FSN6-SL1-CP250-L8SCT3-4000K-HI

### Luminous Intensity Polar Plot





TEST NUMBER: P395331

CATALOG NUMBER: 8FSN6-SL1-CP250-L8SCT3-4000K-HI

**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	78	96	88	82	77	85	79	75	81	77	73	78	75	71	69
3	90	79	71	64	87	78	70	64	75	68	63	72	66	61	69	64	60	58
4	82	70	61	54	80	69	60	54	66	59	53	64	58	53	62	56	52	50
5	76	63	53	47	73	61	53	47	59	52	46	57	51	45	55	50	45	43
6	70	56	47	41	68	55	47	41	54	46	40	52	45	40	50	44	40	37
7	65	51	42	36	63	50	42	36	49	41	36	47	40	35	46	40	35	33
8	60	47	38	32	59	46	38	32	45	37	32	43	37	32	42	36	31	29
9	56	43	34	29	55	42	34	29	41	34	29	40	33	28	39	33	28	26
10	53	39	31	26	51	39	31	26	38	31	26	37	30	26	36	30	26	24

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

	0°	45°	90°
0°	7361	7361	7361
5°	7398	7389	7342
10°	7389	7370	7341
15°	7349	7339	7310
20°	7305	7305	7255
25°	7254	7233	7171
30°	7180	7170	7105
35°	7100	7077	7031
40°	6993	7005	6920
45°	6900	6887	6821
50°	6790	6775	6702
55°	6645	6629	6580
60°	6518	6462	6406
65°	6337	6227	6183
70°	6051	5887	5860
75°	5681	5500	5464
80°	5177	5069	4962
85°	4514	4298	4190



TEST NUMBER: P395331

CATALOG NUMBER: 8FSN6-SL1-CP250-L8SCT3-4000K-HI

**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	258.9	3.3
10°-20°	740.8	9.5
20°-30°	1117.6	14.3
30°-40°	1342.2	17.2
40°-50°	1390.2	17.8
50°-60°	1259.4	16.1
60°-70°	966.6	12.4
70°-80°	563.4	7.2
80°-90°	160.7	2.1
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°	2117.4	27.1
0°-40°	3459.6	44.4
0°-60°	6109.2	78.3
0°-90°	7800.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	7800.0	100.0

**CANDELA DISTRIBUTION:**

	0°	22.5°	45°	67.5°	90°	Flux
0°	2735	2735	2735	2735	2735	
5°	2739	2718	2735	2718	2718	260
15°	2638	2617	2634	2621	2624	745
25°	2443	2422	2436	2412	2415	1125
35°	2161	2147	2154	2130	2140	1351
45°	1813	1810	1810	1785	1792	1399
55°	1416	1420	1413	1392	1402	1268
65°	995	985	978	968	971	985
75°	546	539	529	522	526	580
85°	146	146	139	132	136	167
90°	0	0	0	0	0	



TEST NUMBER: P395331

CATALOG NUMBER: 8FSN6-SL1-CP250-L8SCT3-4000K-HI

**CANDELA DISTRIBUTION (FULL):**

	0°	22.5°	45°	67.5°	90°
0°	2735.4	2735.4	2735.4	2735.4	2735.4
2.5°	2752.8	2728.5	2742.4	2728.5	2714.5
5°	2738.9	2718.0	2735.4	2718.0	2718.0
7.5°	2725.0	2704.1	2718.0	2700.6	2704.1
10°	2704.1	2683.2	2697.1	2683.2	2686.7
12.5°	2676.3	2651.9	2669.3	2655.4	2655.4
15°	2638.0	2617.1	2634.5	2620.6	2624.1
17.5°	2596.2	2575.3	2596.2	2578.8	2578.8
20°	2551.0	2530.1	2551.0	2530.1	2533.6
22.5°	2498.8	2481.4	2495.3	2470.9	2474.4
25°	2443.1	2422.2	2436.1	2411.8	2415.2
27.5°	2377.0	2359.6	2373.5	2349.1	2352.6
30°	2310.8	2293.4	2307.4	2279.5	2286.5
32.5°	2237.8	2220.4	2230.8	2209.9	2216.9
35°	2161.2	2147.3	2154.2	2129.9	2140.3
37.5°	2077.7	2067.2	2077.7	2049.8	2056.8
40°	1990.7	1983.7	1994.1	1966.3	1969.8
42.5°	1907.1	1896.7	1907.1	1879.3	1882.8
45°	1813.2	1809.7	1809.7	1785.3	1792.3
47.5°	1719.2	1715.7	1715.7	1691.4	1698.3
50°	1621.8	1621.8	1618.3	1593.9	1600.9
52.5°	1520.8	1520.8	1517.4	1496.5	1506.9
55°	1416.4	1419.9	1413.0	1392.1	1402.5
57.5°	1315.5	1315.5	1308.5	1291.1	1298.1
60°	1211.1	1207.6	1200.7	1183.3	1190.2
62.5°	1106.7	1099.7	1089.3	1075.4	1082.3
65°	995.3	984.9	977.9	967.5	971.0
67.5°	887.4	873.5	863.1	849.2	856.1
70°	769.1	758.7	748.2	737.8	744.8
72.5°	657.8	647.3	636.9	629.9	633.4
75°	546.4	539.4	529.0	522.0	525.5
77.5°	442.0	431.5	428.1	417.6	421.1
80°	334.1	330.6	327.1	316.7	320.2
82.5°	236.7	236.7	229.7	222.7	226.2
85°	146.2	146.2	139.2	132.2	135.7
87.5°	62.6	59.2	59.2	55.7	55.7
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)