

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: P302642

Luminaire Tested: **FSP-24-64-40-CP250**

Issue Date: 3/3/2020

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: P302642  
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G3-1905-304-18)  
Test Lab: INNOVATION CENTER(G3)  
Issue Date: 3/3/2020  
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)  
Product Line: FAIL-SAFE  
Catalog Number: FSP-24-64-40-CP250  
Description: 2x4 Fail Safe Flat Panel Clear Polycarbonate Lens .25"  
Light Source: (308) 4000 CCT, 80 CRI LEDS  
Ballast/Driver: ELECTRONIC DRIVER  
Luminaire Equipment: 

<u>Sample No.</u>	<u>Condition</u>	<u>Description</u>
AS-5443-1	Good	WHITE TWIN R-EVOLVE FLOOD
AS-5443-2	Good	REFLECTOR
AS-5443-3	Good	DRIVER
AS-5443-4	Good	UPPER MODULE
AS-5443-5	Good	LENS
AS-5443-6	Good	DRIVER 2
AS-5443-7	Good	TRIM RING

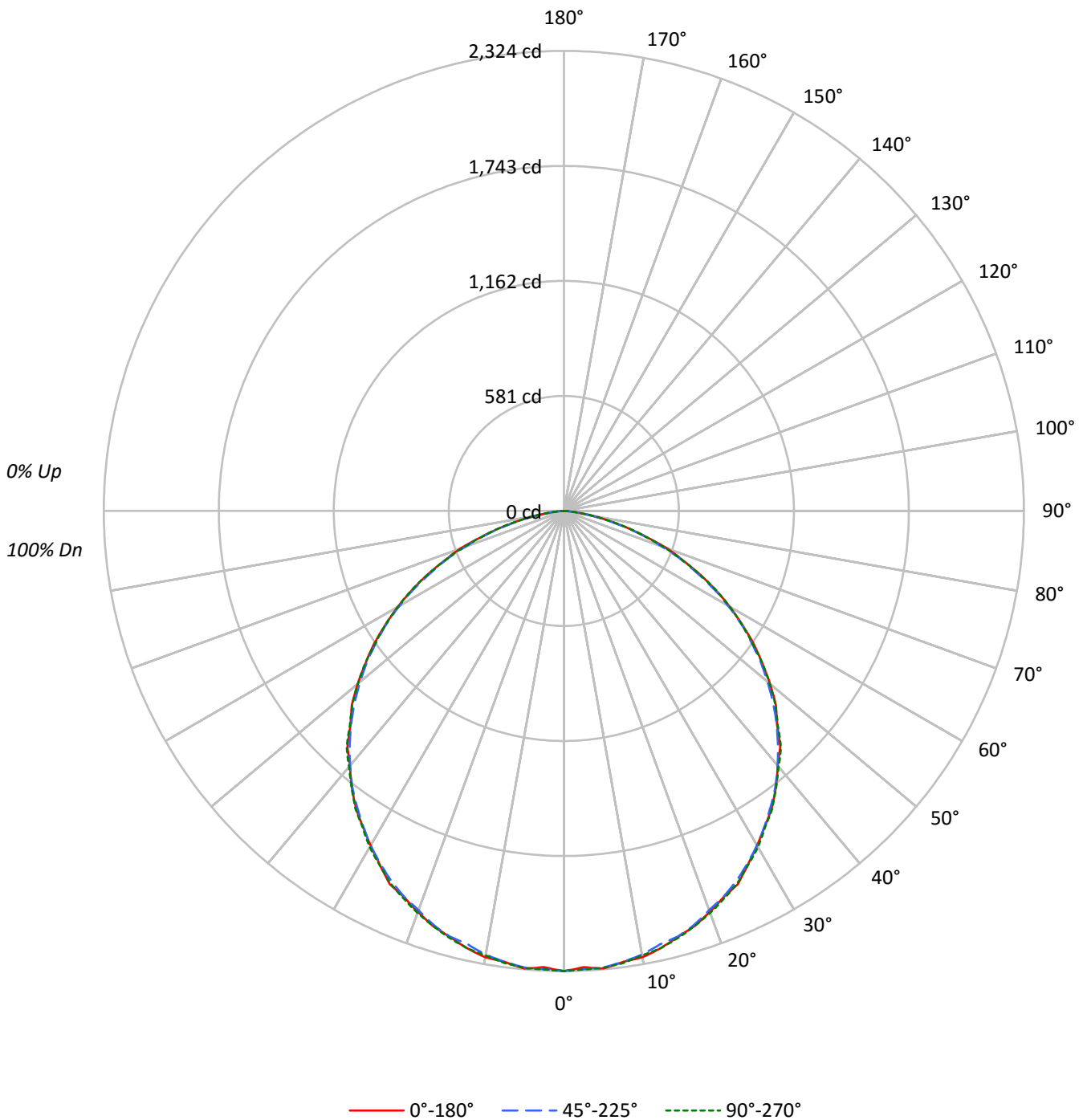
**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 6294.6 lumens  
Efficiency: N/A  
Efficacy: 101.2 lumens/watt  
Spacing Criteria (0/90/45): 1.25 / 1.25 / 1.36  
Luminous Opening: Rectangular (W 2' x L: 4' x H: 0')  
CIE Type: Direct  
  
Input Watts (W): 62.2  
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	105	101	97	107	103	99	96	98	95	93	95	92	90	91	89	87	85
2	100	92	85	80	97	90	84	79	86	81	77	83	79	75	80	77	74	71
3	91	81	73	67	89	79	72	66	76	70	65	74	68	64	71	66	63	60
4	83	72	63	57	81	70	62	56	68	61	55	66	60	55	63	58	54	52
5	77	64	55	49	75	63	55	48	61	54	48	59	52	47	57	51	47	45
6	71	58	49	43	69	57	48	42	55	48	42	53	47	42	52	46	41	39
7	66	52	44	38	64	52	43	37	50	43	37	49	42	37	47	41	37	35
8	61	48	39	34	60	47	39	33	46	38	33	45	38	33	43	37	33	31
9	57	44	36	30	56	43	35	30	42	35	30	41	35	30	40	34	30	28
10	54	40	33	27	52	40	32	27	39	32	27	38	32	27	37	31	27	25

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

	0°	45°	90°
0°	3127	3127	3127
5°	3134	3126	3128
10°	3127	3109	3114
15°	3102	3099	3110
20°	3086	3072	3094
25°	3087	3062	3079
30°	3032	3032	3047
35°	3008	2992	3014
40°	2951	2951	2964
45°	2898	2890	2909
50°	2847	2810	2843
55°	2744	2712	2726
60°	2605	2579	2605
65°	2415	2365	2409
70°	2190	2083	2137
75°	1755	1684	1785
80°	1233	1158	1247
85°	599	539	599



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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	219.9	3.5
10°-20°	628.8	10.0
20°-30°	951.7	15.1
30°-40°	1142.0	18.1
40°-50°	1175.7	18.7
50°-60°	1035.4	16.4
60°-70°	736.3	11.7
70°-80°	349.3	5.5
80°-90°	55.7	0.9
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°	1800.3	28.6
0°-40°	2942.3	46.7
0°-60°	5153.4	81.9
0°-90°	6294.6	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	6294.6	100.0

**CANDELA DISTRIBUTION:**

	0°	22.5°	45°	67.5°	90°	Flux
0°	2324	2324	2324	2324	2324	
5°	2320	2316	2314	2320	2316	220
15°	2227	2229	2225	2227	2233	629
25°	2080	2072	2062	2066	2074	953
35°	1831	1829	1822	1827	1835	1143
45°	1523	1525	1519	1525	1529	1180
55°	1170	1154	1156	1162	1162	1043
65°	758	724	743	747	757	750
75°	338	308	324	330	343	361
85°	39	33	35	37	39	60
90°	0	0	0	0	0	



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**CANDELA DISTRIBUTION (FULL):**

	0°	22.5°	45°	67.5°	90°
0°	2324.1	2324.1	2324.1	2324.1	2324.1
2.5°	2306.6	2326.0	2316.3	2318.2	2318.2
5°	2320.2	2316.3	2314.4	2320.2	2316.3
7.5°	2296.9	2306.6	2296.9	2302.7	2302.7
10°	2289.1	2283.3	2275.6	2273.6	2279.4
12.5°	2262.0	2258.1	2242.6	2260.0	2262.0
15°	2227.1	2229.0	2225.1	2227.1	2232.9
17.5°	2198.0	2198.0	2192.1	2196.0	2198.0
20°	2155.3	2165.0	2145.6	2155.3	2161.1
22.5°	2110.7	2114.5	2108.7	2110.7	2118.4
25°	2079.6	2071.9	2062.2	2066.0	2073.8
27.5°	2013.7	2017.5	2007.8	2009.8	2015.6
30°	1951.6	1949.6	1951.6	1951.6	1961.3
32.5°	1889.5	1889.5	1887.6	1887.6	1893.4
35°	1831.3	1829.4	1821.6	1827.4	1835.2
37.5°	1759.5	1757.6	1755.7	1757.6	1761.5
40°	1680.0	1685.8	1680.0	1681.9	1687.8
42.5°	1617.9	1610.2	1600.5	1612.1	1623.7
45°	1522.9	1524.8	1519.0	1524.8	1528.7
47.5°	1453.0	1433.6	1433.6	1441.4	1449.1
50°	1359.9	1346.3	1342.4	1352.1	1358.0
52.5°	1262.9	1251.3	1253.2	1257.1	1264.8
55°	1169.8	1154.3	1156.2	1162.0	1162.0
57.5°	1068.9	1049.5	1063.1	1065.0	1067.0
60°	968.0	944.8	958.3	960.3	968.0
62.5°	863.3	834.2	855.5	857.5	869.1
65°	758.5	723.6	743.0	746.9	756.6
67.5°	649.9	620.8	642.1	636.3	647.9
70°	556.8	514.1	529.6	533.5	543.2
72.5°	436.5	407.4	430.7	428.7	436.5
75°	337.6	308.5	324.0	329.8	343.4
77.5°	238.6	219.2	232.8	238.6	242.5
80°	159.1	143.6	149.4	155.2	161.0
82.5°	91.2	79.5	85.4	85.4	87.3
85°	38.8	33.0	34.9	36.9	38.8
87.5°	9.7	7.8	7.8	7.8	7.8
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)