

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: P302648

Luminaire Tested: **FSP-24-64-50-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: P302648
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-24-64-50-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

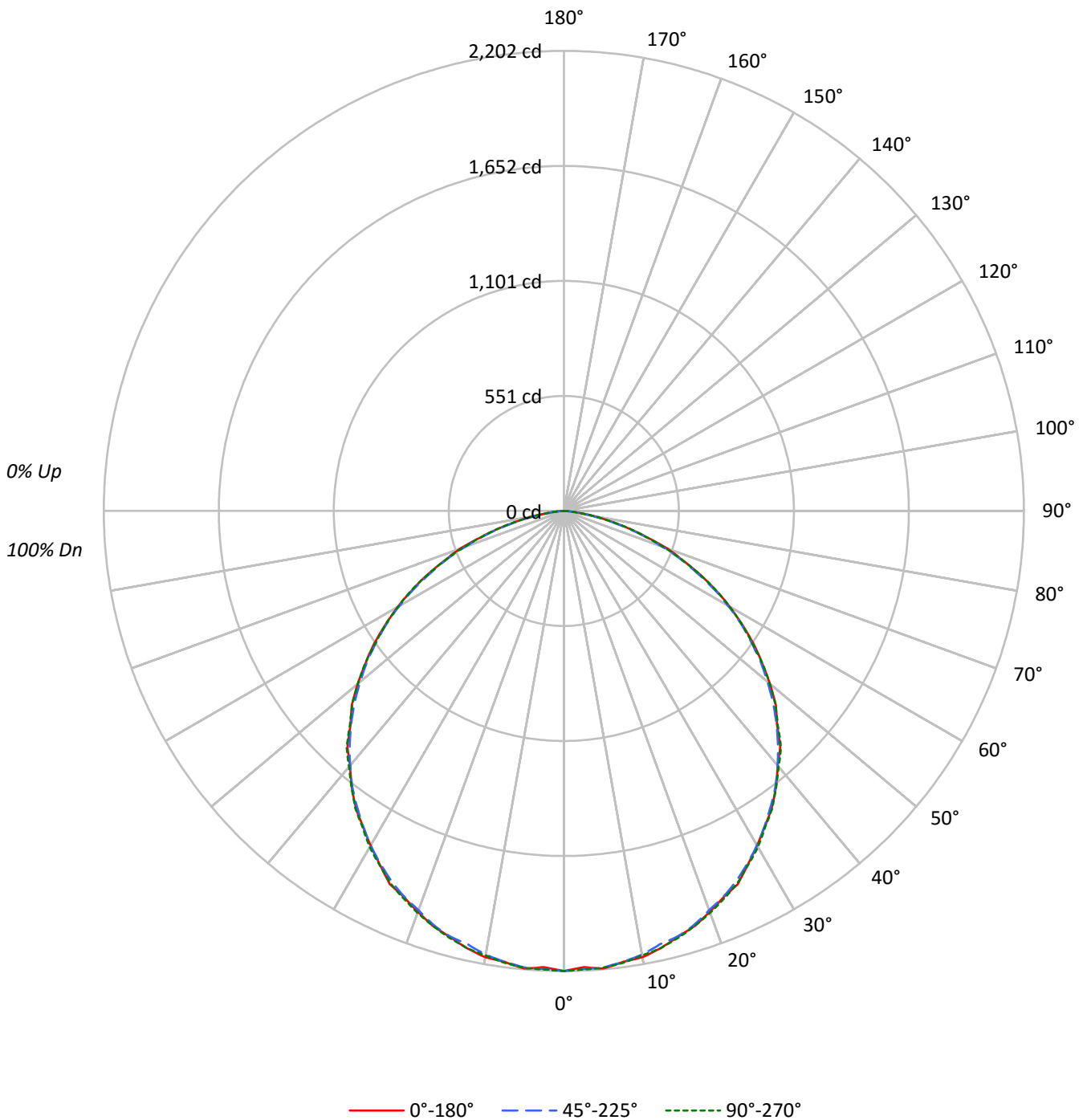
Lumens per Lamp: N/A
Luminaire Lumens: 5963.9 lumens
Efficiency: N/A
Efficacy: 97.0 lumens/watt
Spacing Criteria (0/90/45): 1.25 / 1.25 / 1.36
Luminous Opening: Rectangular (W 2' x L: 4' x H: 0')
CIE Type: Direct

Input Watts (W): 61.5
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



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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°	2963	2963	2963
5°	2969	2962	2964
10°	2963	2946	2951
15°	2939	2937	2947
20°	2924	2911	2932
25°	2925	2901	2917
30°	2873	2873	2887
35°	2850	2835	2856
40°	2796	2796	2809
45°	2745	2739	2756
50°	2697	2662	2693
55°	2600	2570	2583
60°	2468	2443	2468
65°	2288	2241	2282
70°	2075	1974	2024
75°	1663	1595	1691
80°	1168	1096	1182
85°	568	511	568



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	208.3	3.5
10°-20°	595.7	10.0
20°-30°	901.7	15.1
30°-40°	1082.0	18.1
40°-50°	1113.9	18.7
50°-60°	981.0	16.4
60°-70°	697.6	11.7
70°-80°	330.9	5.5
80°-90°	52.7	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°	1705.7	28.6
0°-40°	2787.7	46.7
0°-60°	4882.6	81.9
0°-90°	5963.9	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	5963.9	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	2202	2202	2202	2202	2202	
5°	2198	2195	2193	2198	2195	208
15°	2110	2112	2108	2110	2116	596
25°	1970	1963	1954	1958	1965	903
35°	1735	1733	1726	1731	1739	1083
45°	1443	1445	1439	1445	1448	1118
55°	1108	1094	1096	1101	1101	988
65°	719	686	704	708	717	711
75°	320	292	307	312	325	342
85°	37	31	33	35	37	56
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	2201.9	2201.9	2201.9	2201.9	2201.9
2.5°	2185.4	2203.8	2194.6	2196.4	2196.4
5°	2198.3	2194.6	2192.7	2198.3	2194.6
7.5°	2176.2	2185.4	2176.2	2181.7	2181.7
10°	2168.9	2163.3	2156.0	2154.2	2159.7
12.5°	2143.1	2139.4	2124.7	2141.3	2143.1
15°	2110.0	2111.9	2108.2	2110.0	2115.6
17.5°	2082.5	2082.5	2077.0	2080.6	2082.5
20°	2042.0	2051.2	2032.8	2042.0	2047.5
22.5°	1999.8	2003.4	1997.9	1999.8	2007.1
25°	1970.3	1963.0	1953.8	1957.5	1964.8
27.5°	1907.9	1911.5	1902.3	1904.2	1909.7
30°	1849.0	1847.2	1849.0	1849.0	1858.2
32.5°	1790.2	1790.2	1788.4	1788.4	1793.9
35°	1735.1	1733.2	1725.9	1731.4	1738.8
37.5°	1667.1	1665.2	1663.4	1665.2	1668.9
40°	1591.7	1597.2	1591.7	1593.6	1599.1
42.5°	1532.9	1525.6	1516.4	1527.4	1538.4
45°	1442.8	1444.7	1439.2	1444.7	1448.4
47.5°	1376.7	1358.3	1358.3	1365.6	1373.0
50°	1288.4	1275.6	1271.9	1281.1	1286.6
52.5°	1196.5	1185.5	1187.4	1191.0	1198.4
55°	1108.3	1093.6	1095.5	1101.0	1101.0
57.5°	1012.7	994.4	1007.2	1009.1	1010.9
60°	917.2	895.1	908.0	909.8	917.2
62.5°	817.9	790.3	810.6	812.4	823.4
65°	718.7	685.6	704.0	707.6	716.8
67.5°	615.7	588.2	608.4	602.9	613.9
70°	527.5	487.1	501.8	505.5	514.6
72.5°	413.6	386.0	408.0	406.2	413.6
75°	319.8	292.2	306.9	312.5	325.3
77.5°	226.1	207.7	220.6	226.1	229.8
80°	150.7	136.0	141.5	147.0	152.6
82.5°	86.4	75.4	80.9	80.9	82.7
85°	36.8	31.2	33.1	34.9	36.8
87.5°	9.2	7.4	7.4	7.4	7.4
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)