

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: P302630

Luminaire Tested: **FSP-24-47-50-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: P302630  
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-24-47-50-CP250  
Description: 2x4 Fail Safe Flat Panel Clear Polycarbonate Lens .25"  
Light Source: (238) 5000 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

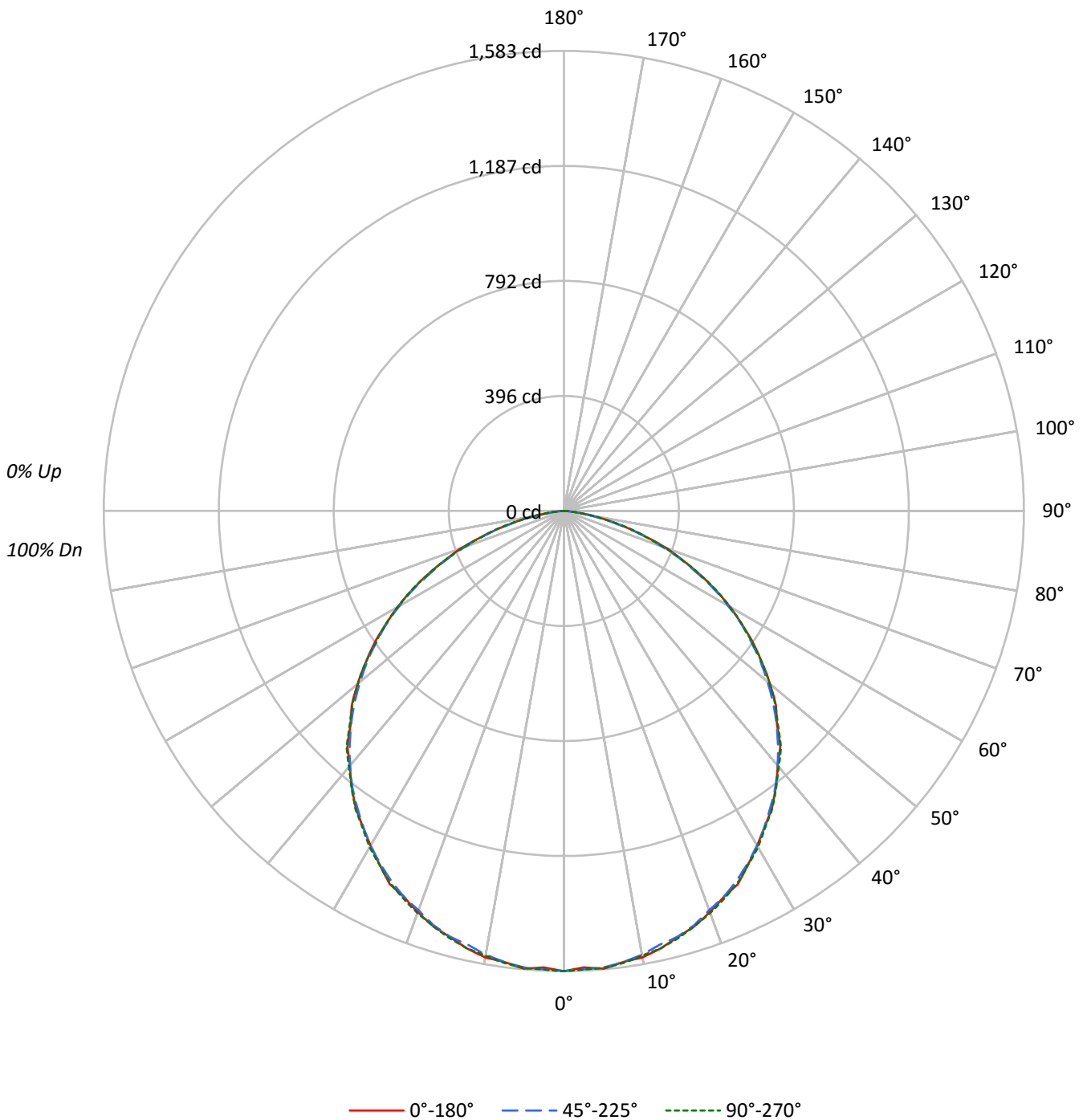
**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 4288.7 lumens  
Efficiency: N/A  
Efficacy: 103.6 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): 41.4  
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°	2130	2130	2130
5°	2135	2130	2132
10°	2131	2118	2122
15°	2114	2112	2119
20°	2103	2093	2108
25°	2104	2086	2098
30°	2066	2066	2076
35°	2049	2039	2054
40°	2010	2010	2020
45°	1974	1969	1982
50°	1939	1914	1937
55°	1870	1848	1857
60°	1775	1757	1775
65°	1645	1612	1641
70°	1492	1419	1456
75°	1196	1147	1216
80°	840	789	850
85°	408	367	408



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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	149.8	3.5
10°-20°	428.4	10.0
20°-30°	648.4	15.1
30°-40°	778.1	18.1
40°-50°	801.0	18.7
50°-60°	705.4	16.4
60°-70°	501.7	11.7
70°-80°	238.0	5.5
80°-90°	37.9	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°	1226.6	28.6
0°-40°	2004.7	46.7
0°-60°	3511.2	81.9
0°-90°	4288.7	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	4288.7	100.0

**CANDELA DISTRIBUTION:**

	0°	22.5°	45°	67.5°	90°	Flux
0°	1583	1583	1583	1583	1583	
5°	1581	1578	1577	1581	1578	150
15°	1517	1519	1516	1517	1521	429
25°	1417	1412	1405	1408	1413	649
35°	1248	1246	1241	1245	1250	778
45°	1038	1039	1035	1039	1042	804
55°	797	786	788	792	792	711
65°	517	493	506	509	516	511
75°	230	210	221	225	234	246
85°	26	22	24	25	26	41
90°	0	0	0	0	0	



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**CANDELA DISTRIBUTION (FULL):**

	0°	22.5°	45°	67.5°	90°
0°	1583.4	1583.4	1583.4	1583.4	1583.4
2.5°	1571.6	1584.8	1578.2	1579.5	1579.5
5°	1580.8	1578.2	1576.8	1580.8	1578.2
7.5°	1564.9	1571.6	1564.9	1568.9	1568.9
10°	1559.7	1555.7	1550.4	1549.1	1553.0
12.5°	1541.2	1538.5	1527.9	1539.8	1541.2
15°	1517.4	1518.7	1516.0	1517.4	1521.3
17.5°	1497.5	1497.5	1493.6	1496.2	1497.5
20°	1468.5	1475.1	1461.8	1468.5	1472.4
22.5°	1438.1	1440.7	1436.7	1438.1	1443.3
25°	1416.9	1411.6	1405.0	1407.7	1412.9
27.5°	1372.0	1374.6	1368.0	1369.3	1373.3
30°	1329.7	1328.4	1329.7	1329.7	1336.3
32.5°	1287.4	1287.4	1286.1	1286.1	1290.0
35°	1247.7	1246.4	1241.1	1245.1	1250.4
37.5°	1198.8	1197.5	1196.2	1197.5	1200.1
40°	1144.6	1148.6	1144.6	1146.0	1149.9
42.5°	1102.3	1097.0	1090.4	1098.4	1106.3
45°	1037.6	1038.9	1034.9	1038.9	1041.5
47.5°	990.0	976.8	976.8	982.1	987.3
50°	926.5	917.3	914.6	921.3	925.2
52.5°	860.5	852.5	853.8	856.5	861.8
55°	797.0	786.4	787.8	791.7	791.7
57.5°	728.3	715.1	724.3	725.6	727.0
60°	659.6	643.7	652.9	654.3	659.6
62.5°	588.2	568.3	582.9	584.2	592.1
65°	516.8	493.0	506.2	508.9	515.5
67.5°	442.8	423.0	437.5	433.5	441.5
70°	379.3	350.3	360.8	363.5	370.1
72.5°	297.4	277.6	293.4	292.1	297.4
75°	230.0	210.2	220.7	224.7	233.9
77.5°	162.6	149.4	158.6	162.6	165.2
80°	108.4	97.8	101.8	105.7	109.7
82.5°	62.1	54.2	58.2	58.2	59.5
85°	26.4	22.5	23.8	25.1	26.4
87.5°	6.6	5.3	5.3	5.3	5.3
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)