

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: P302617

Luminaire Tested: **FSP-24-47-35-CP187**

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: P302617  
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G3-1905-304-17)  
Test Lab: INNOVATION CENTER(G3)  
Issue Date: 3/3/2020  
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)  
Product Line: FAIL-SAFE  
Catalog Number: FSP-24-47-35-CP187  
Description: 2x4 Fail Safe Flat Panel Clear Polycarbonate Lens .187"  
Light Source: (252) 3500 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

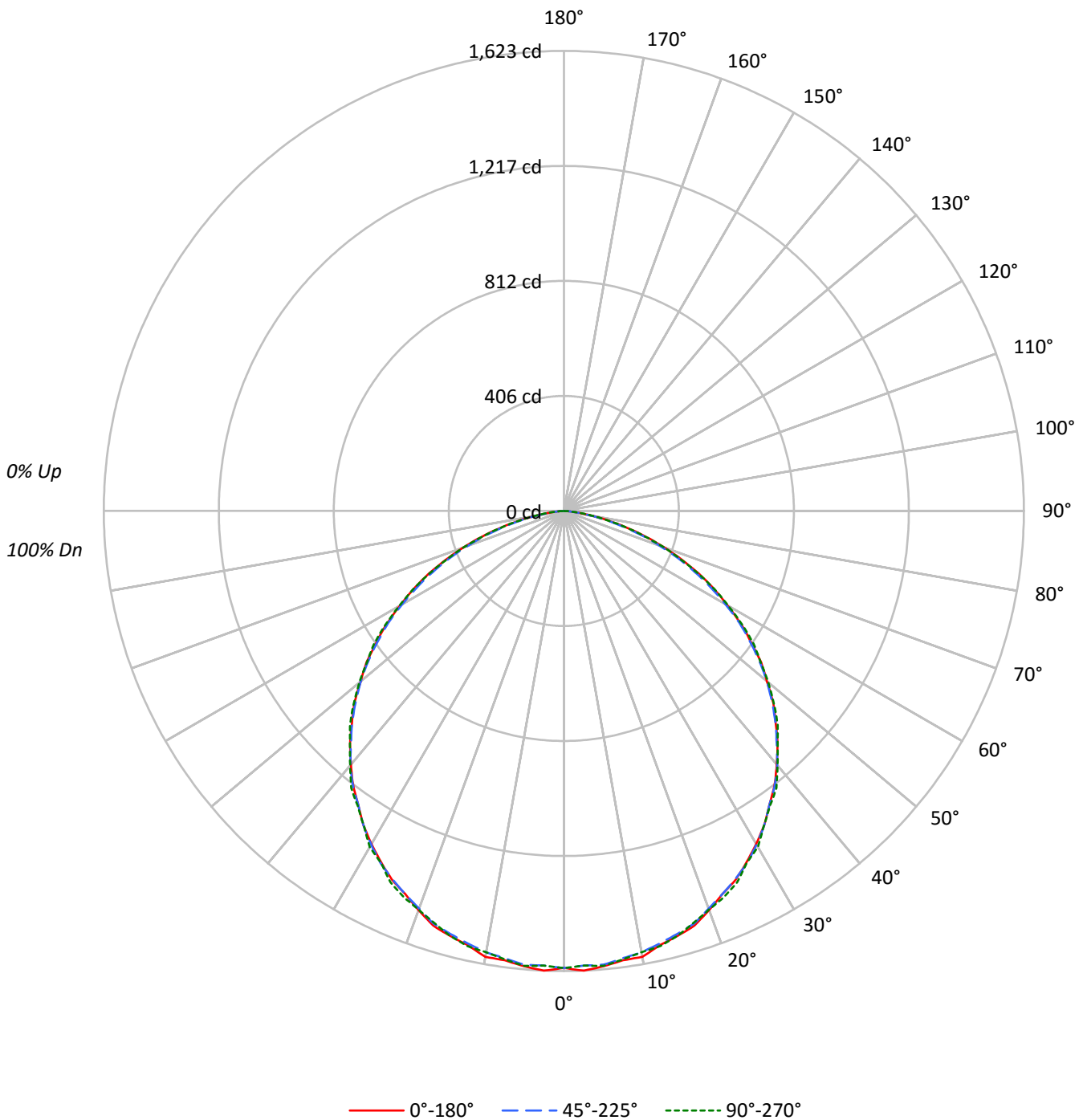
**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 4373.5 lumens  
Efficiency: N/A  
Efficacy: 105.6 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	73	71
3	91	81	73	67	89	79	72	66	76	70	65	74	68	64	71	66	63	60
4	83	72	63	56	81	70	62	56	68	61	55	66	59	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	34	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°	2169	2169	2169
5°	2177	2170	2175
10°	2182	2159	2159
15°	2161	2152	2161
20°	2145	2137	2143
25°	2130	2126	2147
30°	2108	2112	2127
35°	2077	2077	2084
40°	2053	2057	2060
45°	2012	2009	2030
50°	1957	1957	1972
55°	1891	1878	1917
60°	1796	1770	1803
65°	1679	1626	1666
70°	1485	1421	1485
75°	1221	1142	1207
80°	841	798	862
85°	403	381	403



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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	152.5	3.5
10°-20°	436.9	10.0
20°-30°	660.8	15.1
30°-40°	793.7	18.1
40°-50°	815.3	18.6
50°-60°	719.3	16.4
60°-70°	512.0	11.7
70°-80°	243.6	5.6
80°-90°	39.3	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°	1250.2	28.6
0°-40°	2043.9	46.7
0°-60°	3578.6	81.8
0°-90°	4373.5	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	4373.5	100.0

**CANDELA DISTRIBUTION:**

	0°	22.5°	45°	67.5°	90°	Flux
0°	1612	1612	1612	1612	1612	
5°	1612	1611	1607	1602	1611	153
15°	1552	1548	1545	1550	1552	438
25°	1435	1432	1432	1435	1446	660
35°	1265	1266	1265	1277	1269	793
45°	1057	1056	1056	1063	1067	816
55°	806	807	801	806	817	721
65°	527	523	511	515	523	519
75°	235	229	220	224	232	251
85°	26	25	25	26	26	41
90°	0	0	0	0	0	



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**CANDELA DISTRIBUTION (FULL):**

	0°	22.5°	45°	67.5°	90°
0°	1612.1	1612.1	1612.1	1612.1	1612.1
2.5°	1623.1	1610.7	1605.2	1602.5	1605.2
5°	1612.1	1610.7	1606.6	1602.5	1610.7
7.5°	1598.4	1595.6	1591.5	1588.8	1595.6
10°	1597.0	1586.0	1580.5	1581.9	1580.5
12.5°	1568.2	1569.5	1562.7	1565.4	1572.3
15°	1551.7	1547.6	1544.8	1550.3	1551.7
17.5°	1533.8	1532.5	1527.0	1518.7	1522.8
20°	1498.1	1496.8	1492.6	1499.5	1496.8
22.5°	1462.4	1470.7	1462.4	1472.0	1474.8
25°	1435.0	1432.2	1432.2	1435.0	1445.9
27.5°	1396.5	1392.4	1400.6	1393.8	1397.9
30°	1356.7	1352.6	1359.4	1359.4	1369.0
32.5°	1315.5	1311.4	1315.5	1312.7	1314.1
35°	1264.7	1266.1	1264.7	1277.0	1268.8
37.5°	1220.7	1218.0	1222.1	1222.1	1231.7
40°	1168.6	1168.6	1171.3	1168.6	1172.7
42.5°	1116.4	1108.1	1110.9	1115.0	1116.4
45°	1057.3	1056.0	1056.0	1062.8	1066.9
47.5°	1002.4	996.9	995.5	998.3	1005.2
50°	935.1	935.1	935.1	939.2	942.0
52.5°	877.5	873.3	869.2	872.0	874.7
55°	806.0	807.4	800.6	806.0	817.0
57.5°	740.1	738.8	734.6	734.6	745.6
60°	667.4	667.4	657.7	664.6	670.1
62.5°	598.7	597.3	583.6	587.7	600.1
65°	527.3	523.2	510.8	514.9	523.2
67.5°	451.8	447.7	436.7	439.4	446.3
70°	377.6	374.9	361.1	365.3	377.6
72.5°	304.8	299.4	291.1	292.5	300.7
75°	234.8	229.3	219.7	223.8	232.1
77.5°	168.9	166.2	159.3	160.7	168.9
80°	108.5	107.1	103.0	105.7	111.2
82.5°	63.2	60.4	56.3	59.0	61.8
85°	26.1	24.7	24.7	26.1	26.1
87.5°	5.5	5.5	6.9	6.9	6.9
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)