

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: P302591

Luminaire Tested: **FSP-24-31-35-CA125**

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: P302591  
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G3-1905-304-15)  
Test Lab: INNOVATION CENTER(G3)  
Issue Date: 3/3/2020  
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)  
Product Line: FAIL-SAFE  
Catalog Number: FSP-24-31-35-CA125  
Description: 2x4 Fail Safe Flat Panel Clear Acrylic Lens .125"  
Light Source: (266) 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

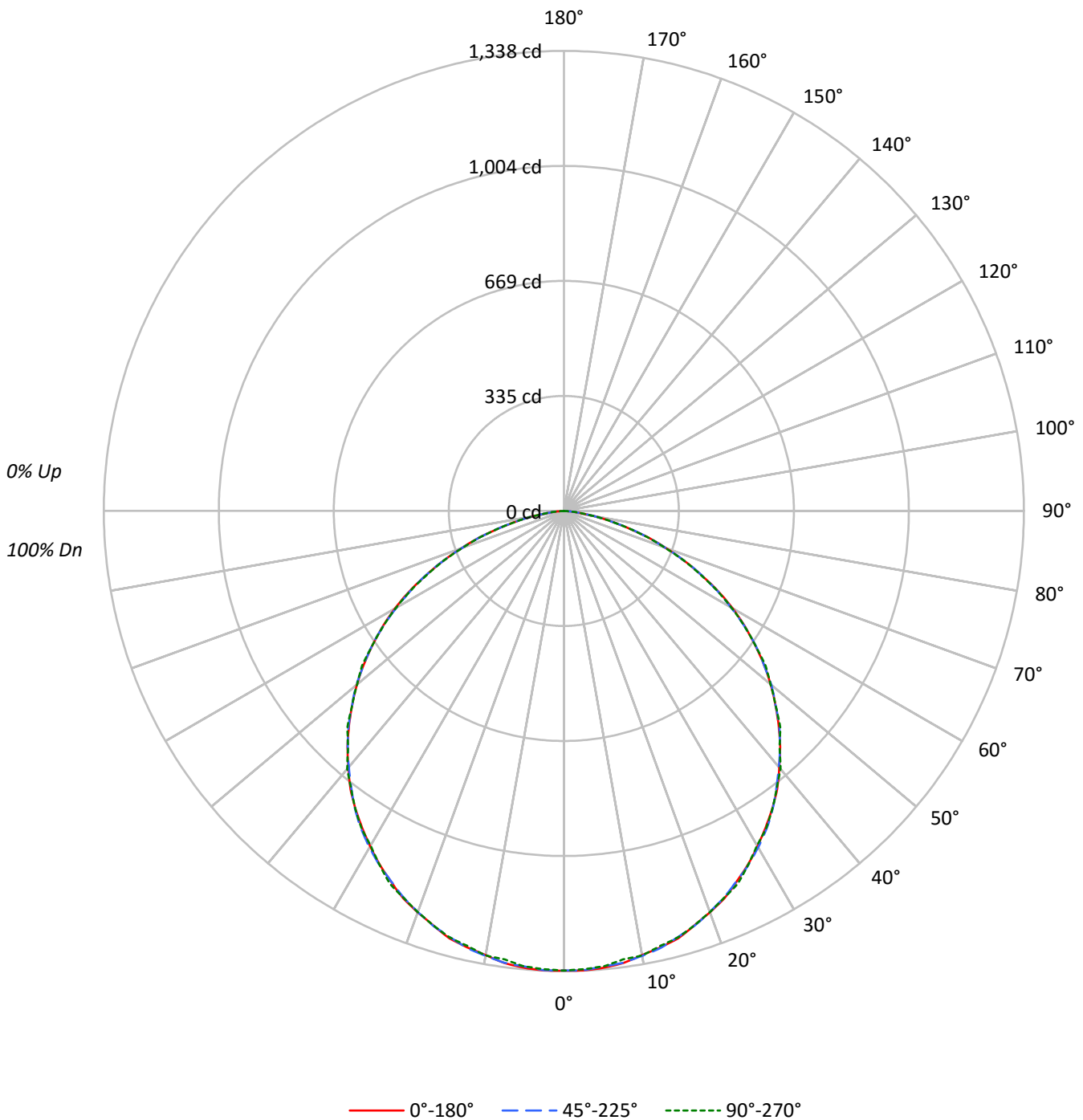
**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 3668.8 lumens  
Efficiency: N/A  
Efficacy: 125.2 lumens/watt  
Spacing Criteria (0/90/45): 1.25 / 1.25 / 1.37  
Luminous Opening: Rectangular (W 2' x L: 4' x H: 0')  
CIE Type: Direct  
  
Input Watts (W): 29.3  
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	95	98	95	92	94	92	90	91	89	87	85
2	100	92	85	79	97	90	84	78	86	81	77	83	79	75	80	76	73	71
3	91	81	73	66	88	79	72	66	76	70	64	73	68	63	71	66	62	60
4	83	71	63	56	81	70	62	56	68	61	55	65	59	54	63	58	54	51
5	77	64	55	48	74	63	54	48	61	53	48	59	52	47	57	51	47	44
6	71	57	49	42	69	57	48	42	55	47	42	53	46	41	51	46	41	39
7	66	52	43	37	64	51	43	37	50	42	37	48	42	37	47	41	36	34
8	61	48	39	33	59	47	39	33	46	38	33	44	38	33	43	37	33	31
9	57	44	35	30	56	43	35	30	42	35	30	41	34	30	40	34	29	28
10	53	40	32	27	52	40	32	27	39	32	27	38	31	27	37	31	27	25

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

	0°	45°	90°
0°	1799	1799	1799
5°	1801	1795	1795
10°	1792	1794	1793
15°	1793	1787	1788
20°	1779	1777	1777
25°	1766	1764	1777
30°	1750	1755	1746
35°	1736	1739	1737
40°	1713	1709	1722
45°	1682	1686	1694
50°	1645	1650	1643
55°	1593	1595	1593
60°	1527	1510	1516
65°	1408	1412	1395
70°	1248	1240	1235
75°	1015	1026	1020
80°	724	724	715
85°	344	344	360



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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	126.3	3.4
10°-20°	362.1	9.9
20°-30°	548.5	14.9
30°-40°	660.7	18.0
40°-50°	682.2	18.6
50°-60°	606.8	16.5
60°-70°	436.5	11.9
70°-80°	210.7	5.7
80°-90°	34.9	1.0
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°	1036.8	28.3
0°-40°	1697.5	46.3
0°-60°	2986.5	81.4
0°-90°	3668.8	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	3668.8	100.0

**CANDELA DISTRIBUTION:**

	0°	22.5°	45°	67.5°	90°	Flux
0°	1337	1337	1337	1337	1337	
5°	1334	1328	1329	1326	1329	127
15°	1287	1285	1283	1286	1284	362
25°	1189	1189	1188	1188	1197	548
35°	1057	1056	1059	1058	1058	661
45°	884	885	886	885	890	682
55°	679	678	680	681	679	607
65°	442	444	444	444	438	438
75°	195	196	197	197	196	211
85°	22	23	22	22	23	35
90°	0	0	0	0	0	



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**CANDELA DISTRIBUTION (FULL):**

	0°	22.5°	45°	67.5°	90°
0°	1336.7	1336.7	1336.7	1336.7	1336.7
2.5°	1337.8	1336.7	1336.7	1330.4	1333.6
5°	1333.6	1328.3	1329.3	1326.1	1329.3
7.5°	1326.1	1322.9	1325.1	1317.6	1315.5
10°	1311.3	1312.3	1313.4	1308.1	1312.3
12.5°	1299.6	1302.8	1301.7	1296.4	1295.4
15°	1286.9	1284.8	1282.6	1285.8	1283.7
17.5°	1263.5	1261.4	1264.6	1263.5	1263.5
20°	1242.3	1241.3	1241.3	1238.1	1241.3
22.5°	1220.0	1216.9	1216.9	1221.1	1217.9
25°	1189.3	1189.3	1188.2	1188.2	1196.7
27.5°	1159.6	1158.5	1161.7	1163.8	1160.6
30°	1126.7	1126.7	1129.9	1127.7	1123.5
32.5°	1091.7	1090.6	1097.0	1093.8	1094.9
35°	1056.7	1055.6	1058.8	1057.7	1057.7
37.5°	1019.5	1013.2	1015.3	1020.6	1016.3
40°	975.0	973.9	972.8	975.0	980.3
42.5°	931.5	929.4	930.4	932.5	928.3
45°	883.7	884.8	885.9	884.8	890.1
47.5°	834.9	837.1	834.9	840.2	834.9
50°	786.1	785.1	788.3	788.3	785.1
52.5°	733.1	734.1	733.1	737.3	739.5
55°	679.0	677.9	680.0	681.1	679.0
57.5°	623.8	623.8	622.8	627.0	622.8
60°	567.6	563.3	561.2	563.3	563.3
62.5°	506.1	502.9	502.9	502.9	502.9
65°	442.4	443.5	443.5	444.5	438.2
67.5°	380.9	378.7	380.9	377.7	378.7
70°	317.2	318.3	315.1	317.2	314.0
72.5°	257.8	257.8	257.8	255.7	255.7
75°	195.2	196.3	197.3	197.3	196.3
77.5°	142.2	141.1	142.2	142.2	142.2
80°	93.4	91.2	93.4	92.3	92.3
82.5°	52.0	53.0	53.0	54.1	54.1
85°	22.3	23.3	22.3	22.3	23.3
87.5°	6.4	6.4	6.4	6.4	6.4
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)