

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: P302586

Luminaire Tested: **FSP-24-31-30-CP125**

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: P302586  
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G3-1905-304-16)  
Test Lab: INNOVATION CENTER(G3)  
Issue Date: 3/3/2020  
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)  
Product Line: FAIL-SAFE  
Catalog Number: FSP-24-31-30-CP125  
Description: 2x4 Fail Safe Flat Panel Clear Polycarbonate Lens .125"  
Light Source: (266) 3000 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

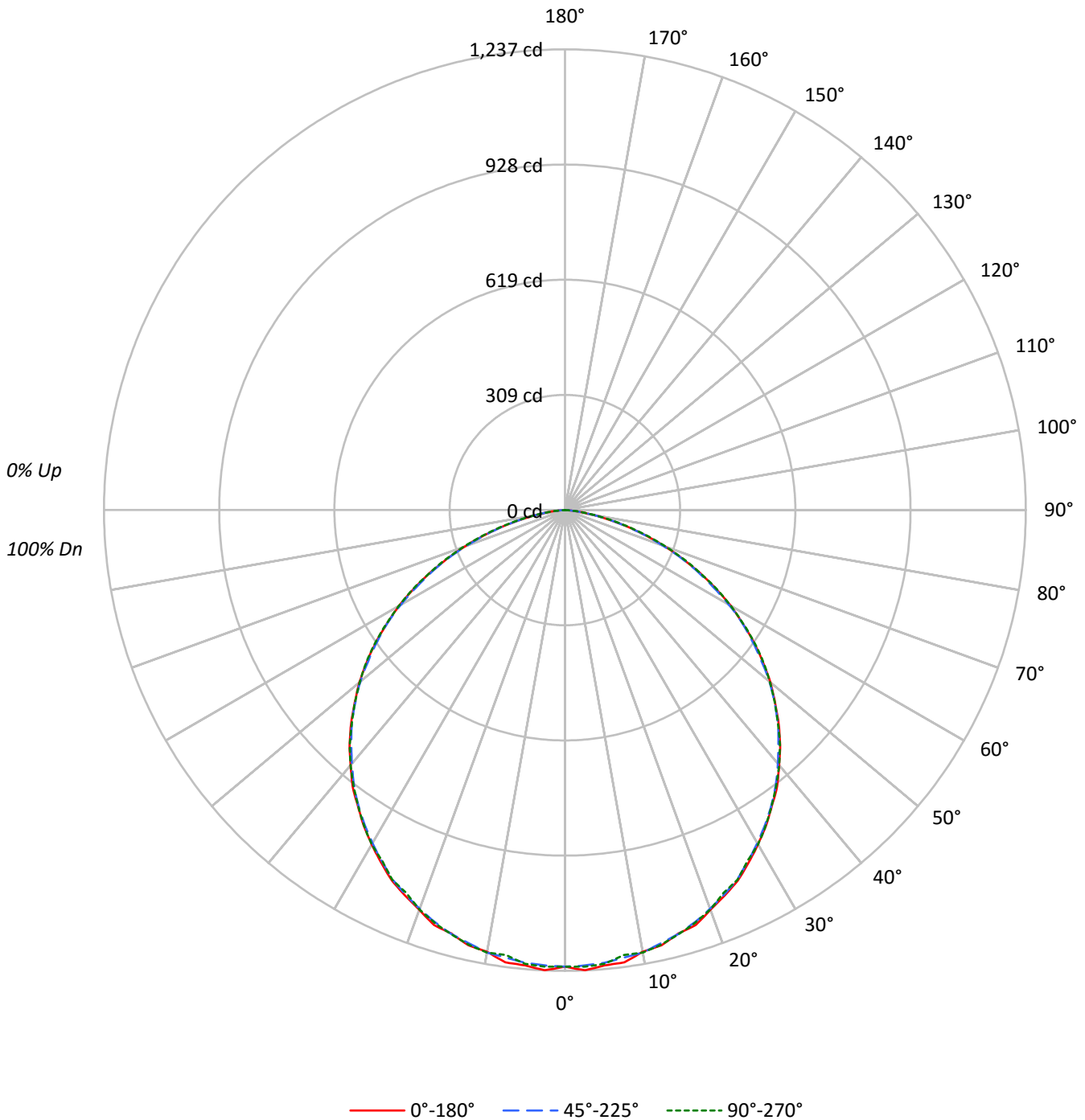
**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 3344.5 lumens  
Efficiency: N/A  
Efficacy: 116.9 lumens/watt  
Spacing Criteria (0/90/45): 1.26 / 1.26 / 1.37  
Luminous Opening: Rectangular (W 2' x L: 4' x H: 0')  
CIE Type: Direct  
  
Input Watts (W): 28.6  
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	94	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	66	89	79	72	66	76	70	65	73	68	64	71	66	62	60
4	83	72	63	56	81	70	62	56	68	61	55	65	59	54	63	58	54	52
5	77	64	55	49	75	63	55	48	61	53	48	59	52	47	57	51	47	45
6	71	58	49	42	69	57	48	42	55	47	42	53	47	42	52	46	41	39
7	66	52	44	38	64	51	43	37	50	42	37	48	42	37	47	41	37	35
8	61	48	39	33	60	47	39	33	46	38	33	44	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°	1649	1649	1649
5°	1657	1647	1652
10°	1645	1648	1648
15°	1640	1641	1642
20°	1635	1631	1634
25°	1631	1625	1626
30°	1611	1604	1611
35°	1591	1588	1590
40°	1571	1562	1571
45°	1544	1539	1539
50°	1507	1501	1503
55°	1453	1441	1458
60°	1383	1369	1383
65°	1274	1259	1278
70°	1124	1105	1140
75°	911	911	942
80°	633	633	671
85°	307	307	338



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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	116.0	3.5
10°-20°	332.5	9.9
20°-30°	503.6	15.1
30°-40°	605.3	18.1
40°-50°	624.1	18.7
50°-60°	551.2	16.5
60°-70°	393.1	11.8
70°-80°	187.6	5.6
80°-90°	31.1	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°	952.1	28.5
0°-40°	1557.5	46.6
0°-60°	2732.8	81.7
0°-90°	3344.5	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	3344.5	100.0

**CANDELA DISTRIBUTION:**

	0°	22.5°	45°	67.5°	90°	Flux
0°	1226	1226	1226	1226	1226	
5°	1227	1221	1220	1218	1223	117
15°	1177	1180	1178	1177	1179	333
25°	1098	1094	1094	1092	1095	505
35°	969	966	967	968	968	607
45°	812	810	809	810	809	625
55°	619	617	614	616	621	553
65°	400	402	395	394	401	396
75°	175	177	175	171	181	188
85°	20	20	20	21	22	31
90°	0	0	0	0	0	



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**CANDELA DISTRIBUTION (FULL):**

	0°	22.5°	45°	67.5°	90°
0°	1225.8	1225.8	1225.8	1225.8	1225.8
2.5°	1236.7	1225.8	1223.8	1225.8	1226.8
5°	1226.8	1220.8	1219.8	1217.8	1222.8
7.5°	1224.8	1216.8	1211.8	1211.8	1204.9
10°	1203.9	1207.9	1205.9	1201.9	1205.9
12.5°	1196.9	1192.9	1190.9	1190.9	1194.9
15°	1177.0	1180.0	1178.0	1177.0	1179.0
17.5°	1168.0	1163.0	1160.1	1159.1	1162.0
20°	1142.1	1139.1	1139.1	1140.1	1141.1
22.5°	1120.2	1116.2	1117.2	1120.2	1112.3
25°	1098.3	1094.3	1094.3	1092.3	1095.3
27.5°	1067.5	1065.5	1063.5	1065.5	1061.5
30°	1036.6	1033.6	1032.6	1035.6	1036.6
32.5°	1004.7	1002.7	1000.7	1001.7	1003.7
35°	968.9	965.9	966.9	967.9	967.9
37.5°	936.0	931.0	930.0	933.0	932.0
40°	894.2	896.2	889.2	893.2	894.2
42.5°	855.4	851.4	848.4	857.3	854.4
45°	811.5	809.5	808.6	809.5	808.6
47.5°	764.7	765.7	762.7	766.7	763.7
50°	719.9	720.9	716.9	716.9	717.9
52.5°	670.1	673.1	665.2	664.2	672.1
55°	619.4	617.4	614.4	616.4	621.4
57.5°	565.6	566.6	564.6	565.6	567.6
60°	513.8	511.8	508.8	503.9	513.8
62.5°	457.1	459.0	450.1	450.1	460.0
65°	400.3	402.3	395.3	394.3	401.3
67.5°	342.5	342.5	339.6	334.6	347.5
70°	285.8	285.8	280.8	280.8	289.8
72.5°	229.0	228.0	227.0	224.0	234.0
75°	175.3	177.2	175.3	171.3	181.2
77.5°	125.5	127.5	124.5	125.5	130.4
80°	81.7	81.7	81.7	80.7	86.6
82.5°	47.8	46.8	46.8	47.8	49.8
85°	19.9	19.9	19.9	20.9	21.9
87.5°	5.0	5.0	6.0	5.0	6.0
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)