

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: P302597

Luminaire Tested: **FSP-24-31-40-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: P302597
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-24-31-40-CA125
Description: 2x4 Fail Safe Flat Panel Clear Acrylic Lens .125"
Light Source: (266) 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

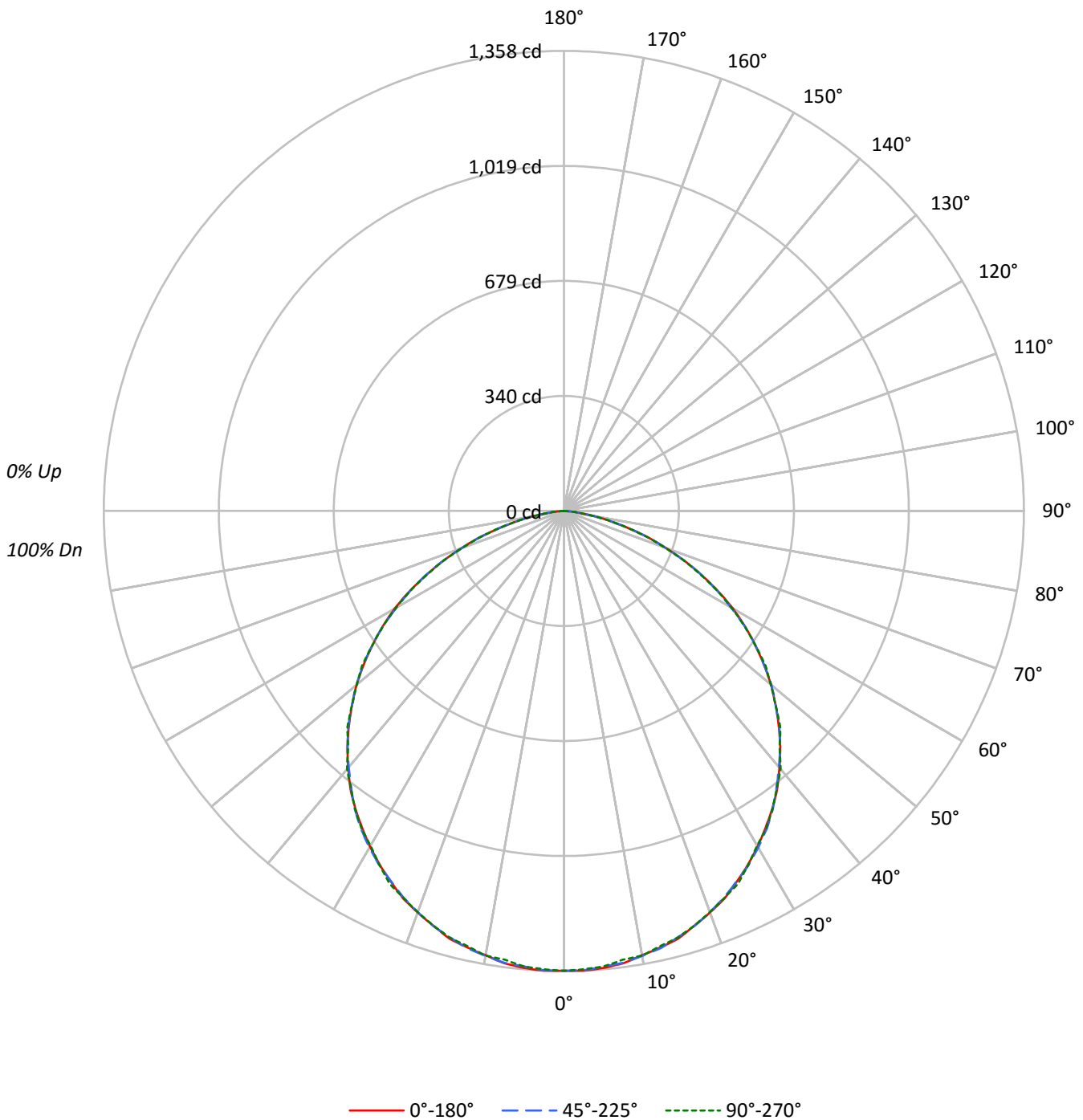
Lumens per Lamp: N/A
Luminaire Lumens: 3724.9 lumens
Efficiency: N/A
Efficacy: 126.7 lumens/watt
Spacing Criteria (0/90/45): 1.25 / 1.25 / 1.37
Luminous Opening: Rectangular (W 2' x L: 4' x H: 0')
CIE Type: Direct

Input Watts (W): 29.4
Input Voltage (V): NR
Input Current (A_{in}): 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°	1826	1826	1826
5°	1829	1823	1823
10°	1819	1822	1820
15°	1820	1814	1816
20°	1806	1805	1805
25°	1793	1791	1804
30°	1777	1782	1772
35°	1762	1766	1764
40°	1739	1735	1748
45°	1707	1711	1720
50°	1671	1675	1668
55°	1617	1620	1617
60°	1551	1533	1539
65°	1430	1434	1416
70°	1267	1258	1254
75°	1030	1042	1036
80°	735	735	726
85°	349	349	366



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	128.3	3.4
10°-20°	367.6	9.9
20°-30°	556.9	14.9
30°-40°	670.8	18.0
40°-50°	692.6	18.6
50°-60°	616.1	16.5
60°-70°	443.2	11.9
70°-80°	213.9	5.7
80°-90°	35.5	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°	1052.7	28.3
0°-40°	1723.5	46.3
0°-60°	3032.3	81.4
0°-90°	3724.9	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	3724.9	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	1357	1357	1357	1357	1357	
5°	1354	1349	1350	1346	1350	129
15°	1307	1304	1302	1306	1303	368
25°	1208	1208	1206	1206	1215	557
35°	1073	1072	1075	1074	1074	671
45°	897	898	899	898	904	692
55°	689	688	690	692	689	616
65°	449	450	450	451	445	445
75°	198	199	200	200	199	214
85°	23	24	23	23	24	35
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	1357.2	1357.2	1357.2	1357.2	1357.2
2.5°	1358.3	1357.2	1357.2	1350.8	1354.0
5°	1354.0	1348.6	1349.7	1346.4	1349.7
7.5°	1346.4	1343.2	1345.4	1337.8	1335.7
10°	1331.4	1332.4	1333.5	1328.1	1332.4
12.5°	1319.5	1322.7	1321.7	1316.3	1315.2
15°	1306.6	1304.4	1302.3	1305.5	1303.4
17.5°	1282.9	1280.7	1284.0	1282.9	1282.9
20°	1261.3	1260.3	1260.3	1257.0	1260.3
22.5°	1238.7	1235.5	1235.5	1239.8	1236.6
25°	1207.5	1207.5	1206.4	1206.4	1215.0
27.5°	1177.3	1176.3	1179.5	1181.6	1178.4
30°	1143.9	1143.9	1147.2	1145.0	1140.7
32.5°	1108.4	1107.3	1113.8	1110.5	1111.6
35°	1072.8	1071.8	1075.0	1073.9	1073.9
37.5°	1035.1	1028.7	1030.8	1036.2	1031.9
40°	989.9	988.8	987.8	989.9	995.3
42.5°	945.7	943.6	944.7	946.8	942.5
45°	897.3	898.3	899.4	898.3	903.7
47.5°	847.7	849.9	847.7	853.1	847.7
50°	798.2	797.1	800.3	800.3	797.1
52.5°	744.3	745.4	744.3	748.6	750.8
55°	689.4	688.3	690.5	691.5	689.4
57.5°	633.4	633.4	632.3	636.6	632.3
60°	576.3	572.0	569.8	572.0	572.0
62.5°	513.8	510.6	510.6	510.6	510.6
65°	449.2	450.3	450.3	451.3	444.9
67.5°	386.7	384.5	386.7	383.5	384.5
70°	322.1	323.1	319.9	322.1	318.8
72.5°	261.7	261.7	261.7	259.6	259.6
75°	198.2	199.3	200.4	200.4	199.3
77.5°	144.3	143.3	144.3	144.3	144.3
80°	94.8	92.6	94.8	93.7	93.7
82.5°	52.8	53.9	53.9	54.9	54.9
85°	22.6	23.7	22.6	22.6	23.7
87.5°	6.5	6.5	6.5	6.5	6.5
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)