

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: P302598

Luminaire Tested: **FSP-24-31-40-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: P302598
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-24-31-40-CP125
Description: 2x4 Fail Safe Flat Panel Clear Polycarbonate 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

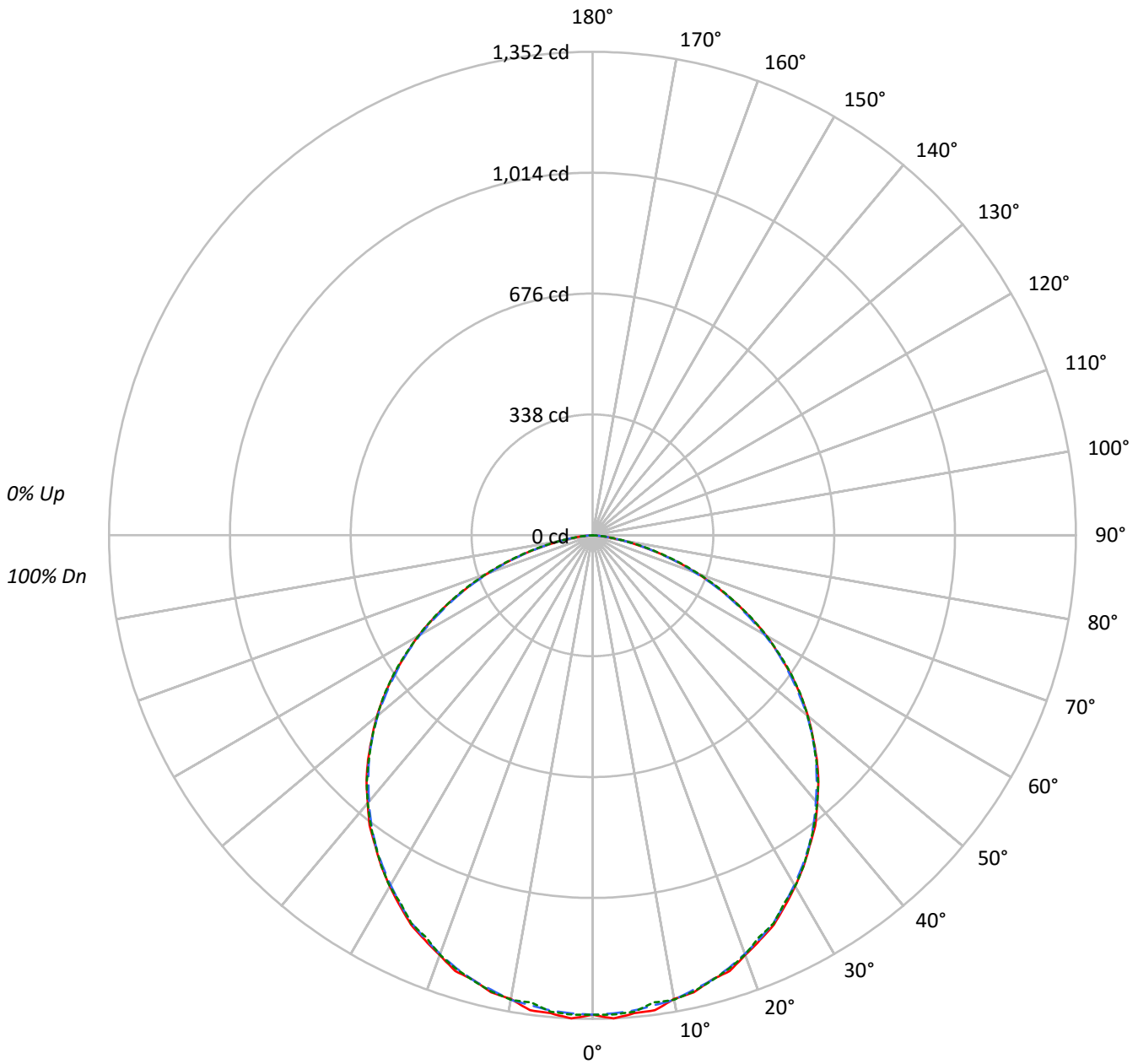
Lumens per Lamp: N/A
Luminaire Lumens: 3657.0 lumens
Efficiency: N/A
Efficacy: 124.4 lumens/watt
Spacing Criteria (0/90/45): 1.26 / 1.26 / 1.37
Luminous Opening: Rectangular (W 2' x L: 4' x H: 0')
CIE Type: Direct

Input Watts (W): 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



TEST NUMBER: P302598
CATALOG NUMBER: FSP-24-31-40-CP125

Luminous Intensity Polar Plot



— 0°-180° - - 45°-225° - - - 90°-270°



TEST NUMBER: P302598

CATALOG NUMBER: FSP-24-31-40-CP125

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°	1803	1803	1803
5°	1812	1801	1806
10°	1798	1801	1801
15°	1793	1794	1796
20°	1788	1783	1787
25°	1783	1776	1778
30°	1761	1754	1761
35°	1740	1736	1738
40°	1717	1708	1717
45°	1689	1682	1682
50°	1648	1641	1643
55°	1589	1576	1594
60°	1512	1497	1512
65°	1394	1376	1397
70°	1229	1208	1246
75°	996	996	1030
80°	692	692	734
85°	337	337	371



TEST NUMBER: P302598
 CATALOG NUMBER: FSP-24-31-40-CP125

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	126.9	3.5
10°-20°	363.6	9.9
20°-30°	550.6	15.1
30°-40°	661.9	18.1
40°-50°	682.4	18.7
50°-60°	602.7	16.5
60°-70°	429.8	11.8
70°-80°	205.2	5.6
80°-90°	34.0	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
<hr/>		
0°-30°	1041.1	28.5
0°-40°	1703.0	46.6
0°-60°	2988.1	81.7
0°-90°	3657.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	3657.0	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	1340	1340	1340	1340	1340	
5°	1341	1335	1334	1332	1337	128
15°	1287	1290	1288	1287	1289	364
25°	1201	1197	1197	1194	1198	552
35°	1059	1056	1057	1058	1058	664
45°	887	885	884	885	884	684
55°	677	675	672	674	679	604
65°	438	440	432	431	439	432
75°	192	194	192	187	198	205
85°	22	22	22	23	24	34
90°	0	0	0	0	0	



TEST NUMBER: P302598

CATALOG NUMBER: FSP-24-31-40-CP125

CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	1340.3	1340.3	1340.3	1340.3	1340.3
2.5°	1352.3	1340.3	1338.1	1340.3	1341.4
5°	1341.4	1334.9	1333.8	1331.6	1337.0
7.5°	1339.2	1330.5	1325.1	1325.1	1317.4
10°	1316.3	1320.7	1318.5	1314.2	1318.5
12.5°	1308.7	1304.4	1302.2	1302.2	1306.5
15°	1286.9	1290.2	1288.0	1286.9	1289.1
17.5°	1277.1	1271.7	1268.4	1267.4	1270.6
20°	1248.8	1245.6	1245.6	1246.7	1247.8
22.5°	1224.9	1220.5	1221.6	1224.9	1216.2
25°	1200.9	1196.6	1196.6	1194.4	1197.7
27.5°	1167.2	1165.0	1162.8	1165.0	1160.6
30°	1133.4	1130.2	1129.1	1132.3	1133.4
32.5°	1098.6	1096.4	1094.2	1095.3	1097.5
35°	1059.4	1056.1	1057.2	1058.3	1058.3
37.5°	1023.5	1018.0	1016.9	1020.2	1019.1
40°	977.7	979.9	972.3	976.6	977.7
42.5°	935.3	930.9	927.6	937.4	934.2
45°	887.4	885.2	884.1	885.2	884.1
47.5°	836.2	837.3	834.0	838.4	835.1
50°	787.2	788.3	783.9	783.9	785.0
52.5°	732.8	736.0	727.3	726.2	734.9
55°	677.2	675.0	671.8	674.0	679.4
57.5°	618.4	619.5	617.3	618.4	620.6
60°	561.8	559.6	556.4	550.9	561.8
62.5°	499.8	501.9	492.1	492.1	503.0
65°	437.7	439.9	432.2	431.2	438.8
67.5°	374.5	374.5	371.3	365.8	380.0
70°	312.5	312.5	307.0	307.0	316.8
72.5°	250.4	249.3	248.2	245.0	255.9
75°	191.6	193.8	191.6	187.3	198.2
77.5°	137.2	139.4	136.1	137.2	142.6
80°	89.3	89.3	89.3	88.2	94.7
82.5°	52.3	51.2	51.2	52.3	54.4
85°	21.8	21.8	21.8	22.9	24.0
87.5°	5.4	5.4	6.5	5.4	6.5
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)