

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: P302512

Luminaire Tested: **FSP-14-42-50-CA08**

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: P302512
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G3-1905-304-2)
Test Lab: INNOVATION CENTER(G3)
Issue Date: 3/3/2020
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: FAIL-SAFE
Catalog Number: FSP-14-42-50-CA08
Description: 1x4 Fail Safe Flat Panel Clear Acrylic Lens .08"
Light Source: (210) 5000 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

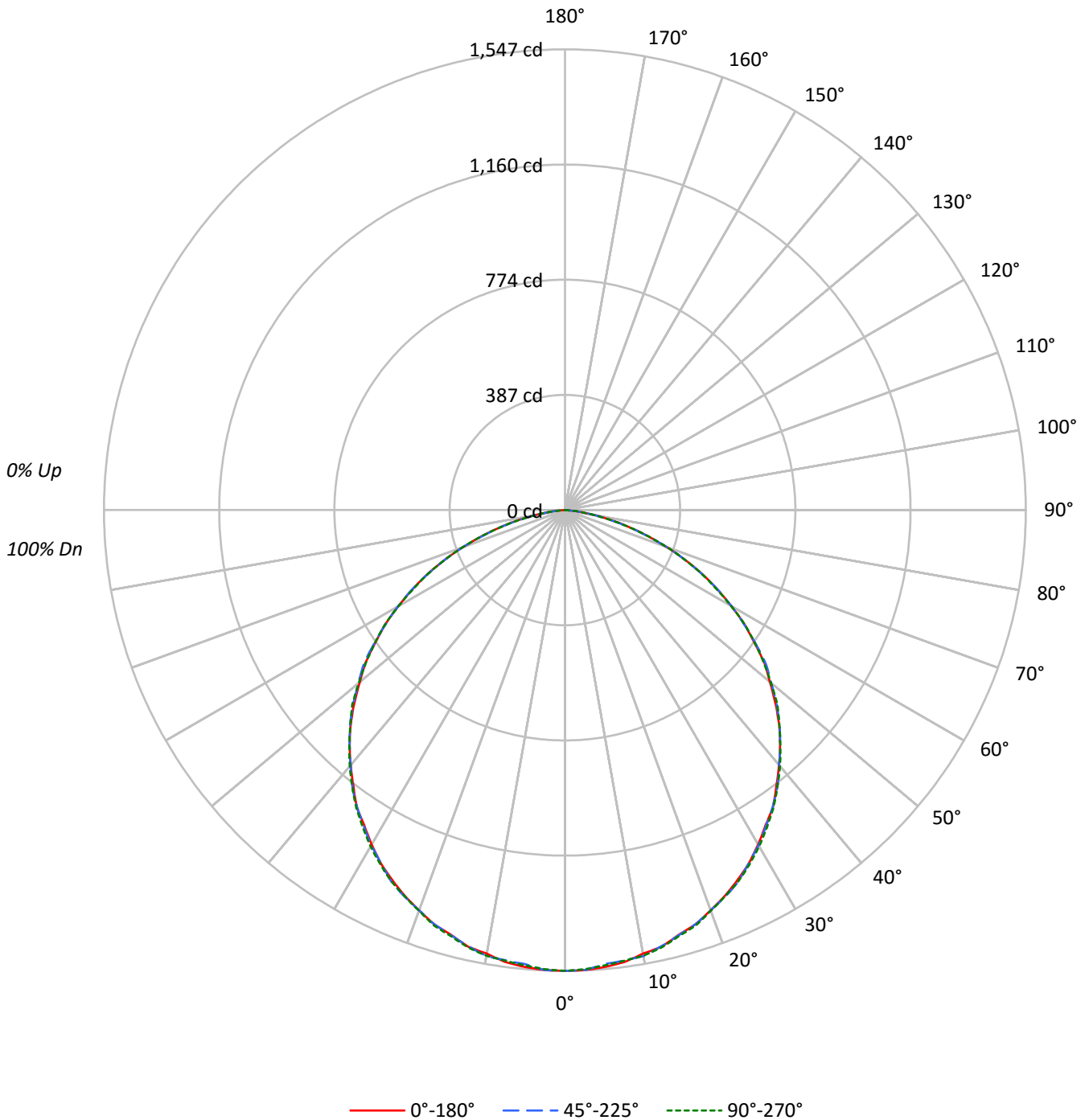
Lumens per Lamp: N/A
Luminaire Lumens: 4224.5 lumens
Efficiency: N/A
Efficacy: 110.3 lumens/watt
Spacing Criteria (0/90/45): 1.25 / 1.25 / 1.37
Luminous Opening: Rectangular (W 1' x L: 4' x H: 0')
CIE Type: Direct

Input Watts (W): 38.3
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: P302512
CATALOG NUMBER: FSP-14-42-50-CA08

Luminous Intensity Polar Plot





TEST NUMBER: P302512

CATALOG NUMBER: FSP-14-42-50-CA08

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	79	86	81	77	83	79	75	80	76	73	71
3	91	81	73	66	88	79	72	66	76	70	65	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	75	63	54	48	61	53	48	59	52	47	57	51	47	45
6	71	58	49	42	69	57	48	42	55	47	42	53	46	41	52	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	36	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°	4163	4163	4163
5°	4160	4134	4145
10°	4132	4155	4151
15°	4113	4116	4124
20°	4096	4096	4100
25°	4070	4090	4086
30°	4030	4039	4052
35°	4001	3996	4010
40°	3927	3932	3947
45°	3868	3879	3874
50°	3761	3785	3779
55°	3642	3668	3655
60°	3476	3476	3468
65°	3245	3228	3228
70°	2852	2862	2873
75°	2368	2354	2339
80°	1678	1678	1635
85°	858	815	815



TEST NUMBER: P302512
 CATALOG NUMBER: FSP-14-42-50-CA08

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	146.3	3.5
10°-20°	418.6	9.9
20°-30°	633.4	15.0
30°-40°	761.2	18.0
40°-50°	785.5	18.6
50°-60°	696.8	16.5
60°-70°	500.8	11.9
70°-80°	241.5	5.7
80°-90°	40.5	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°	1198.2	28.4
0°-40°	1959.4	46.4
0°-60°	3441.7	81.5
0°-90°	4224.5	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	4224.5	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	1547	1547	1547	1547	1547	
5°	1540	1540	1530	1542	1534	146
15°	1476	1486	1478	1489	1480	417
25°	1371	1374	1378	1378	1376	632
35°	1218	1218	1216	1219	1221	759
45°	1016	1018	1019	1021	1018	782
55°	776	782	782	780	779	695
65°	510	511	507	503	507	501
75°	228	225	226	226	225	243
85°	28	26	26	28	26	41
90°	0	0	0	0	0	



TEST NUMBER: P302512

CATALOG NUMBER: FSP-14-42-50-CA08

CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	1547.0	1547.0	1547.0	1547.0	1547.0
2.5°	1545.7	1549.8	1545.7	1548.4	1542.9
5°	1540.1	1540.1	1530.4	1541.5	1534.5
7.5°	1530.4	1531.8	1524.8	1535.9	1526.2
10°	1512.3	1522.0	1520.7	1524.8	1519.3
12.5°	1501.2	1505.4	1499.8	1508.2	1504.0
15°	1476.2	1485.9	1477.6	1488.7	1480.4
17.5°	1458.2	1459.6	1458.2	1463.7	1462.3
20°	1430.4	1433.2	1430.4	1440.1	1431.8
22.5°	1402.6	1405.4	1405.4	1409.6	1404.0
25°	1370.7	1373.5	1377.6	1377.6	1376.2
27.5°	1337.3	1336.0	1336.0	1345.7	1341.5
30°	1297.1	1302.6	1299.8	1306.8	1304.0
32.5°	1254.0	1259.6	1256.8	1263.7	1262.4
35°	1217.9	1217.9	1216.5	1219.3	1220.7
37.5°	1166.5	1167.9	1172.1	1174.9	1172.1
40°	1117.9	1122.1	1119.3	1122.1	1123.5
42.5°	1069.3	1073.5	1069.3	1076.3	1070.7
45°	1016.5	1017.9	1019.3	1020.7	1017.9
47.5°	958.2	965.2	963.8	966.6	967.9
50°	898.5	908.2	904.1	906.8	902.7
52.5°	844.3	844.3	851.3	843.0	841.6
55°	776.3	781.9	781.9	780.5	779.1
57.5°	715.2	718.0	712.4	715.2	716.6
60°	645.8	648.5	645.8	644.4	644.4
62.5°	576.3	579.1	579.1	577.7	573.5
65°	509.7	511.1	506.9	502.7	506.9
67.5°	437.4	436.1	436.1	433.3	436.1
70°	362.5	366.6	363.8	361.1	365.2
72.5°	293.0	295.8	291.6	290.2	293.0
75°	227.8	225.0	226.4	226.4	225.0
77.5°	168.0	163.9	161.1	161.1	162.5
80°	108.3	106.9	108.3	105.5	105.5
82.5°	61.1	61.1	61.1	61.1	62.5
85°	27.8	26.4	26.4	27.8	26.4
87.5°	6.9	6.9	8.3	6.9	6.9
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)