

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: P302516

Luminaire Tested: **FSP-14-42-50-CP250**

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: P302516
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G3-1905-304-6)
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-CP250
Description: 1x4 Fail Safe Flat Panel Clear Polycarbonate Lens .25"
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

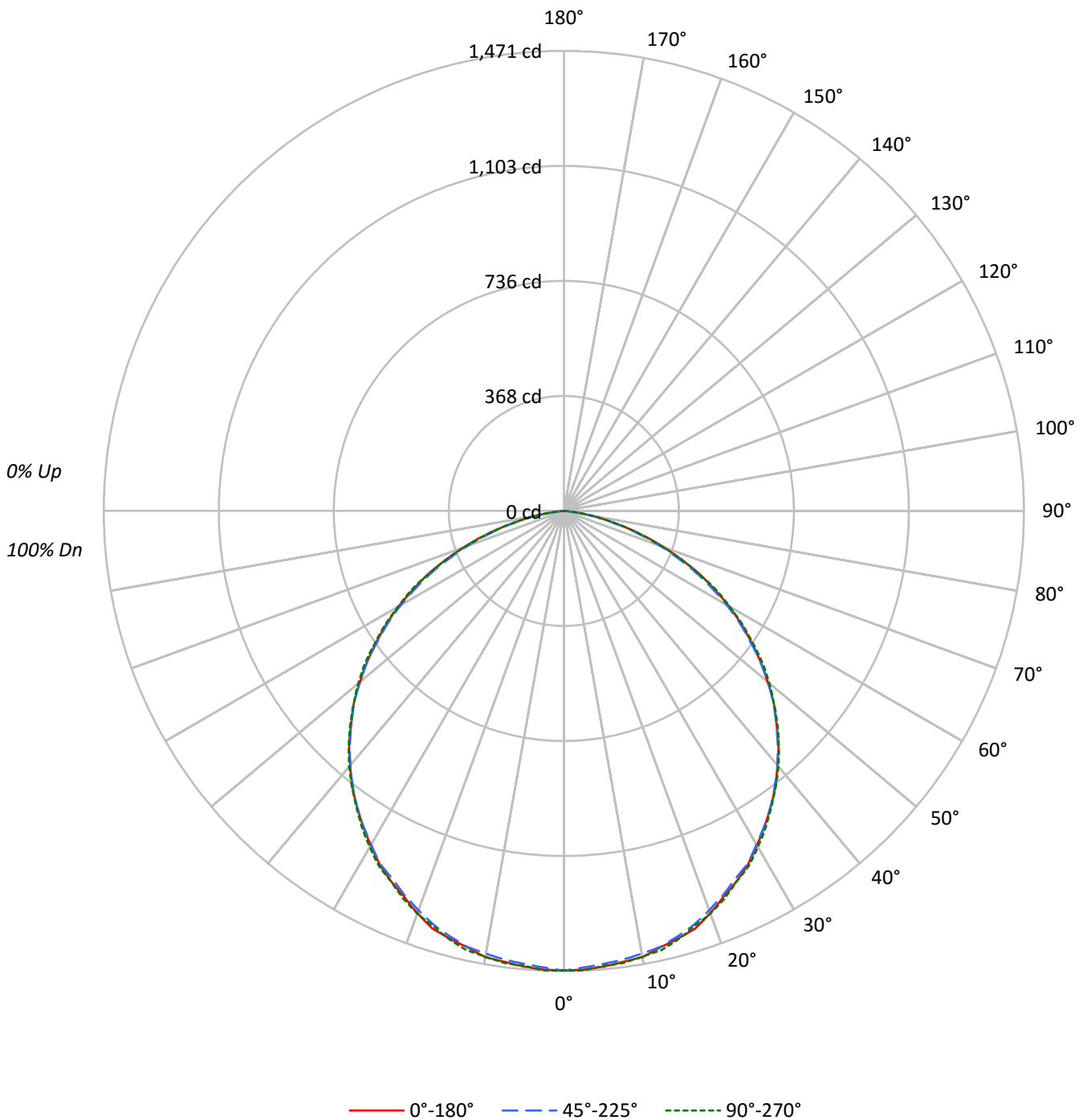
Lumens per Lamp: N/A
Luminaire Lumens: 3976.7 lumens
Efficiency: N/A
Efficacy: 103.8 lumens/watt
Spacing Criteria (0/90/45): 1.25 / 1.25 / 1.36
Luminous Opening: Rectangular (W 1' x L: 4' x H: 0')
CIE Type: Direct

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



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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	95	92	90	91	89	87	85
2	100	92	85	80	97	90	84	79	86	81	77	83	79	75	80	77	74	71
3	91	81	73	67	89	79	72	66	76	70	65	74	68	64	71	66	63	60
4	83	72	63	57	81	70	62	56	68	61	55	66	60	55	63	58	54	52
5	77	64	55	49	75	63	55	48	61	54	48	59	52	47	57	51	47	45
6	71	58	49	43	69	57	48	42	55	48	42	53	47	42	52	46	41	39
7	66	52	44	38	64	52	43	37	50	43	37	49	42	37	47	41	37	35
8	61	48	39	34	60	47	39	33	46	38	33	45	38	33	43	37	33	31
9	57	44	36	30	56	43	35	30	42	35	30	41	35	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°	3954	3954	3954
5°	3950	3927	3942
10°	3957	3927	3953
15°	3941	3922	3949
20°	3919	3891	3923
25°	3881	3852	3881
30°	3836	3827	3857
35°	3789	3789	3798
40°	3732	3732	3752
45°	3660	3655	3676
50°	3564	3564	3593
55°	3437	3410	3463
60°	3280	3235	3295
65°	3053	2964	3044
70°	2684	2596	2662
75°	2166	2078	2166
80°	1495	1452	1495
85°	648	648	648



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	138.8	3.5
10°-20°	398.1	10.0
20°-30°	601.1	15.1
30°-40°	721.7	18.1
40°-50°	742.2	18.7
50°-60°	654.8	16.5
60°-70°	466.0	11.7
70°-80°	220.0	5.5
80°-90°	33.8	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°	1138.1	28.6
0°-40°	1859.8	46.8
0°-60°	3256.8	81.9
0°-90°	3976.7	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	3976.7	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	1469	1469	1469	1469	1469	
5°	1462	1461	1454	1465	1459	139
15°	1415	1409	1408	1413	1418	399
25°	1307	1299	1297	1306	1307	602
35°	1153	1148	1153	1159	1156	722
45°	962	959	960	967	966	742
55°	732	734	727	735	738	655
65°	480	472	466	472	478	471
75°	208	207	200	204	208	224
85°	21	22	21	21	21	35
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	1469.2	1469.2	1469.2	1469.2	1469.2
2.5°	1467.8	1465.0	1460.8	1466.4	1470.6
5°	1462.2	1460.8	1453.8	1465.0	1459.4
7.5°	1453.8	1456.6	1446.8	1453.8	1458.0
10°	1448.2	1439.9	1437.1	1442.6	1446.8
12.5°	1428.7	1428.7	1427.3	1428.7	1438.5
15°	1414.7	1409.1	1407.7	1413.3	1417.5
17.5°	1399.3	1388.1	1386.7	1390.9	1390.9
20°	1368.6	1358.8	1358.8	1365.8	1370.0
22.5°	1335.0	1333.6	1329.4	1342.0	1342.0
25°	1307.0	1298.7	1297.3	1305.7	1307.0
27.5°	1274.9	1267.9	1272.1	1272.1	1280.5
30°	1234.4	1231.6	1231.6	1238.6	1241.3
32.5°	1195.2	1192.4	1193.8	1198.0	1200.8
35°	1153.3	1147.7	1153.3	1158.9	1156.1
37.5°	1111.3	1108.5	1108.5	1112.7	1112.7
40°	1062.4	1058.2	1062.4	1069.4	1068.0
42.5°	1016.3	1010.7	1012.1	1019.1	1017.7
45°	961.8	959.0	960.4	967.4	966.0
47.5°	911.4	907.2	908.6	908.6	911.4
50°	851.3	851.3	851.3	855.5	858.3
52.5°	794.0	792.6	791.2	798.2	802.4
55°	732.5	733.9	726.9	735.3	738.1
57.5°	672.4	672.4	666.8	671.0	678.0
60°	609.5	605.3	601.1	606.7	612.3
62.5°	542.4	539.6	532.6	536.8	552.2
65°	479.5	472.5	465.5	472.5	478.1
67.5°	409.6	404.0	395.6	402.6	409.6
70°	341.1	336.9	329.9	334.1	338.3
72.5°	275.4	268.4	262.8	268.4	271.2
75°	208.3	206.9	199.9	204.1	208.3
77.5°	149.6	146.8	142.6	149.6	149.6
80°	96.5	96.5	93.7	95.1	96.5
82.5°	54.5	51.7	50.3	53.1	51.7
85°	21.0	22.4	21.0	21.0	21.0
87.5°	4.2	2.8	4.2	2.8	2.8
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)