

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: P302625

Luminaire Tested: **FSP-24-47-40-CP375**

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: P302625
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G3-1905-304-21)
Test Lab: INNOVATION CENTER(G3)
Issue Date: 3/3/2020
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: FAIL-SAFE
Catalog Number: FSP-24-47-40-CP375
Description: 2x4 Fail Safe Flat Panel Clear Polycarbonate Lens .375"
Light Source: (238) 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

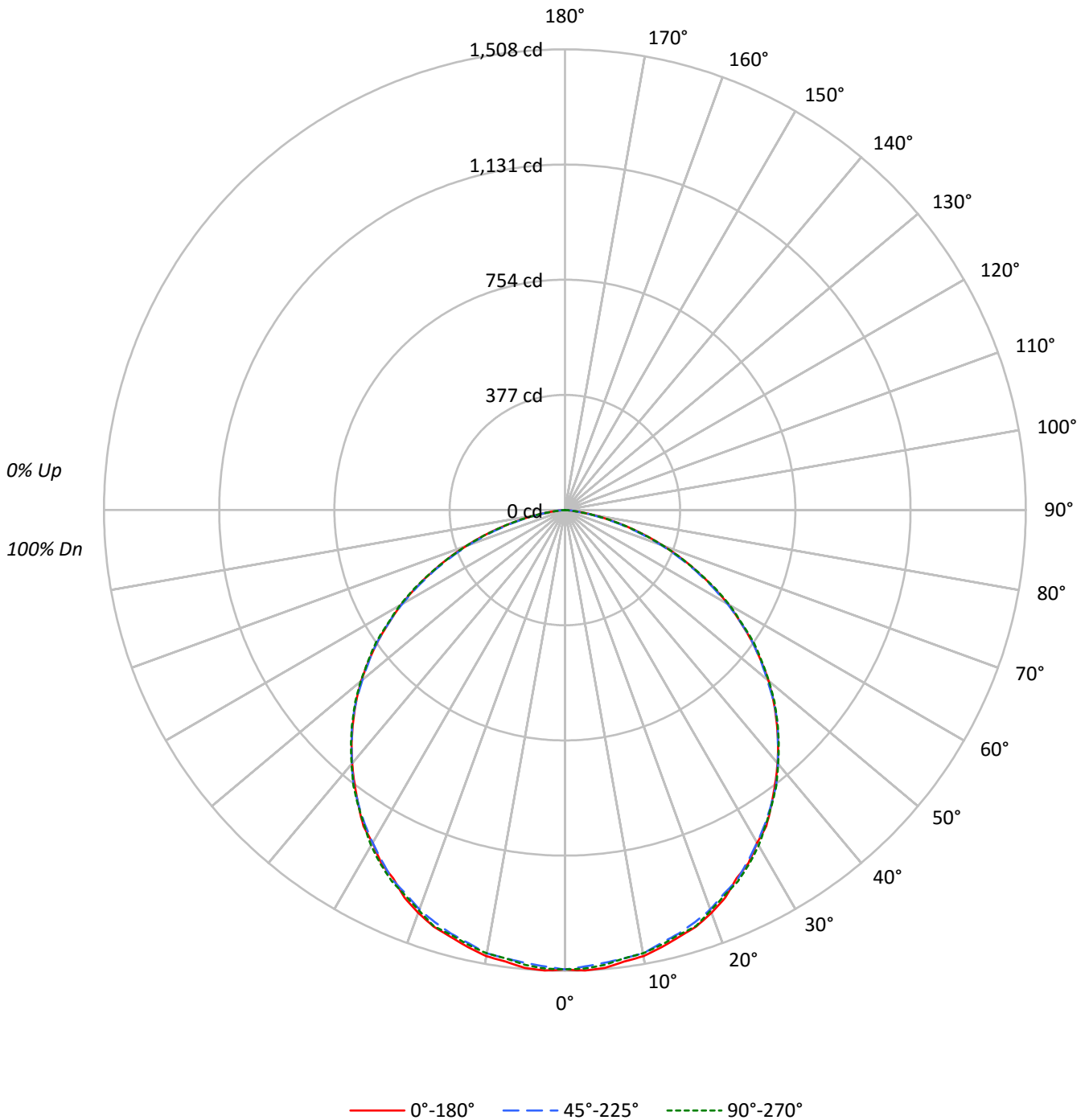
Lumens per Lamp: N/A
Luminaire Lumens: 4044.1 lumens
Efficiency: N/A
Efficacy: 97.7 lumens/watt
Spacing Criteria (0/90/45): 1.25 / 1.25 / 1.36
Luminous Opening: Rectangular (W 2' x L: 4' x H: 0')
CIE Type: Direct

Input Watts (W): 41.4
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	96	98	95	93	95	92	90	91	89	87	85
2	100	92	85	80	97	90	84	79	87	81	77	83	79	75	80	77	74	72
3	91	81	73	67	89	79	72	66	76	70	65	74	68	64	71	67	63	61
4	84	72	63	57	81	70	62	56	68	61	55	66	60	55	64	58	54	52
5	77	64	55	49	75	63	55	49	61	54	48	59	53	48	57	52	47	45
6	71	58	49	43	69	57	49	43	55	48	42	53	47	42	52	46	41	39
7	66	52	44	38	64	52	43	38	50	43	37	49	42	37	47	41	37	35
8	61	48	39	34	60	47	39	34	46	39	33	45	38	33	43	37	33	31
9	57	44	36	30	56	43	36	30	42	35	30	41	35	30	40	34	30	28
10	54	41	33	27	52	40	33	27	39	32	27	38	32	27	37	31	27	25

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	2023	2023	2023
5°	2032	2009	2018
10°	2025	2013	2013
15°	2014	1999	2005
20°	2008	1992	1997
25°	1974	1981	1989
30°	1954	1954	1970
35°	1935	1933	1937
40°	1902	1904	1906
45°	1864	1871	1871
50°	1821	1810	1823
55°	1749	1752	1768
60°	1662	1655	1676
65°	1526	1509	1534
70°	1356	1315	1351
75°	1100	1052	1093
80°	759	708	759
85°	343	303	323



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	142.0	3.5
10°-20°	406.6	10.1
20°-30°	614.1	15.2
30°-40°	736.1	18.2
40°-50°	755.7	18.7
50°-60°	664.7	16.4
60°-70°	470.2	11.6
70°-80°	220.7	5.5
80°-90°	34.0	0.8
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°	1162.7	28.8
0°-40°	1898.8	47.0
0°-60°	3319.2	82.1
0°-90°	4044.1	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	4044.1	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	1503	1503	1503	1503	1503	
5°	1504	1501	1488	1494	1494	143
15°	1446	1442	1435	1437	1439	409
25°	1330	1330	1335	1331	1340	615
35°	1178	1174	1177	1178	1179	737
45°	980	977	983	985	983	756
55°	746	746	747	743	754	666
65°	479	473	474	472	482	475
75°	212	205	202	205	210	226
85°	22	22	20	21	21	36
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	1503.2	1503.2	1503.2	1503.2	1503.2
2.5°	1508.4	1505.8	1495.4	1498.0	1501.9
5°	1504.5	1500.6	1487.5	1494.1	1494.1
7.5°	1490.1	1486.2	1479.7	1483.6	1479.7
10°	1482.3	1481.0	1473.2	1471.9	1473.2
12.5°	1465.3	1461.4	1452.3	1458.8	1457.5
15°	1445.7	1441.8	1435.3	1436.6	1439.2
17.5°	1428.8	1426.1	1414.4	1418.3	1427.5
20°	1402.6	1393.5	1390.9	1392.2	1394.8
22.5°	1372.6	1366.1	1359.5	1362.2	1364.8
25°	1329.5	1329.5	1334.7	1330.8	1340.0
27.5°	1302.1	1299.5	1295.5	1295.5	1306.0
30°	1257.7	1257.7	1257.7	1261.6	1268.1
32.5°	1226.3	1221.1	1218.5	1219.8	1222.4
35°	1178.0	1174.1	1176.7	1178.0	1179.3
37.5°	1129.7	1128.4	1134.9	1131.0	1136.2
40°	1082.7	1080.1	1084.0	1081.4	1085.3
42.5°	1033.0	1027.8	1031.7	1034.3	1035.7
45°	979.5	976.9	983.4	984.7	983.4
47.5°	926.0	922.0	926.0	929.9	929.9
50°	869.8	864.6	864.6	868.5	871.1
52.5°	808.4	803.2	805.8	809.7	811.0
55°	745.7	745.7	747.0	743.1	753.6
57.5°	680.4	675.2	680.4	677.8	683.0
60°	617.7	613.8	615.1	609.9	623.0
62.5°	548.5	544.6	543.3	542.0	553.7
65°	479.3	472.8	474.1	471.5	481.9
67.5°	412.7	406.2	403.6	403.6	411.4
70°	344.8	334.3	334.3	331.7	343.5
72.5°	276.9	269.0	265.1	267.7	276.9
75°	211.6	205.0	202.4	205.0	210.3
77.5°	150.2	147.6	143.7	146.3	151.5
80°	97.9	95.3	91.4	95.3	97.9
82.5°	53.5	52.2	49.6	52.2	52.2
85°	22.2	22.2	19.6	20.9	20.9
87.5°	6.5	5.2	5.2	3.9	3.9
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)