

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: P302629

Luminaire Tested: **FSP-24-47-50-CP187**

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: P302629
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G3-1905-304-17)
Test Lab: INNOVATION CENTER(G3)
Issue Date: 3/3/2020
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: FAIL-SAFE
Catalog Number: FSP-24-47-50-CP187
Description: 2x4 Fail Safe Flat Panel Clear Polycarbonate Lens .187"
Light Source: (238) 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

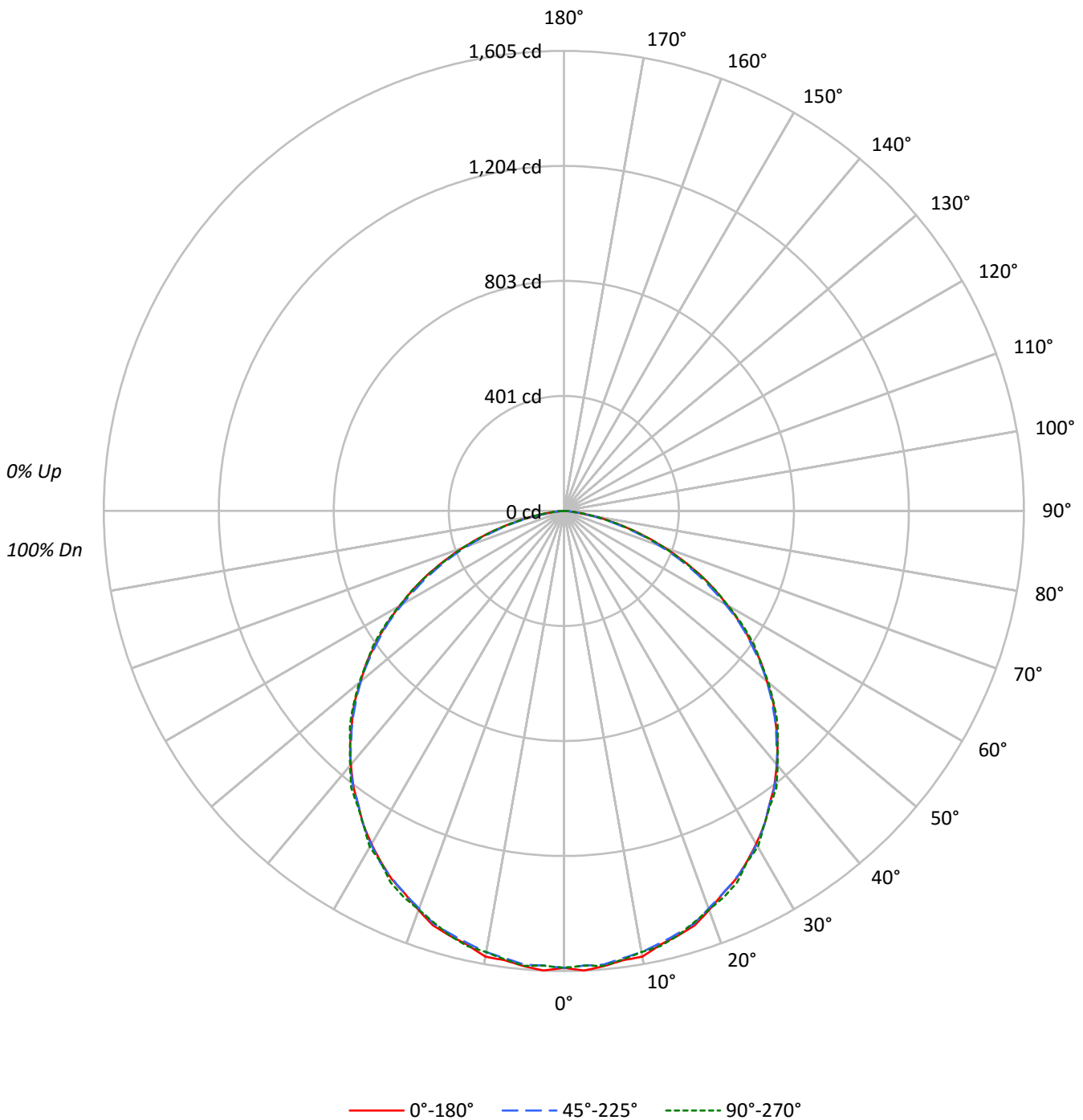
Lumens per Lamp: N/A
Luminaire Lumens: 4324.3 lumens
Efficiency: N/A
Efficacy: 104.5 lumens/watt
Spacing Criteria (0/90/45): 1.25 / 1.25 / 1.36
Luminous Opening: Rectangular (W 2' x L: 4' x H: 0')
CIE Type: Direct

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



TEST NUMBER: P302629
CATALOG NUMBER: FSP-24-47-50-CP187

Luminous Intensity Polar Plot





TEST NUMBER: P302629

CATALOG NUMBER: FSP-24-47-50-CP187

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	73	71
3	91	81	73	67	89	79	72	66	76	70	65	74	68	64	71	66	63	60
4	83	72	63	56	81	70	62	56	68	61	55	66	59	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	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°	2145	2145	2145
5°	2153	2145	2151
10°	2157	2135	2135
15°	2137	2128	2137
20°	2121	2113	2119
25°	2106	2102	2123
30°	2084	2088	2103
35°	2054	2054	2061
40°	2029	2034	2037
45°	1989	1987	2007
50°	1935	1935	1950
55°	1870	1857	1895
60°	1776	1750	1783
65°	1660	1608	1647
70°	1469	1405	1469
75°	1207	1129	1193
80°	831	789	852
85°	398	377	398



TEST NUMBER: P302629

CATALOG NUMBER: FSP-24-47-50-CP187

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	150.8	3.5
10°-20°	432.0	10.0
20°-30°	653.4	15.1
30°-40°	784.8	18.1
40°-50°	806.2	18.6
50°-60°	711.3	16.4
60°-70°	506.3	11.7
70°-80°	240.8	5.6
80°-90°	38.8	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°	1236.1	28.6
0°-40°	2020.9	46.7
0°-60°	3538.4	81.8
0°-90°	4324.3	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	4324.3	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	1594	1594	1594	1594	1594	
5°	1594	1593	1588	1584	1593	151
15°	1534	1530	1527	1533	1534	433
25°	1419	1416	1416	1419	1430	653
35°	1250	1252	1250	1263	1254	784
45°	1045	1044	1044	1051	1055	807
55°	797	798	792	797	808	713
65°	521	517	505	509	517	514
75°	232	227	217	221	230	248
85°	26	24	24	26	26	40
90°	0	0	0	0	0	



TEST NUMBER: P302629

CATALOG NUMBER: FSP-24-47-50-CP187

CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	1594.0	1594.0	1594.0	1594.0	1594.0
2.5°	1604.8	1592.6	1587.2	1584.5	1587.2
5°	1594.0	1592.6	1588.5	1584.5	1592.6
7.5°	1580.4	1577.7	1573.6	1570.9	1577.7
10°	1579.0	1568.2	1562.7	1564.1	1562.7
12.5°	1550.5	1551.9	1545.1	1547.8	1554.6
15°	1534.2	1530.2	1527.4	1532.9	1534.2
17.5°	1516.6	1515.2	1509.8	1501.6	1505.7
20°	1481.3	1479.9	1475.8	1482.6	1479.9
22.5°	1446.0	1454.1	1446.0	1455.5	1458.2
25°	1418.8	1416.1	1416.1	1418.8	1429.7
27.5°	1380.8	1376.7	1384.9	1378.1	1382.2
30°	1341.4	1337.4	1344.1	1344.1	1353.6
32.5°	1300.7	1296.6	1300.7	1298.0	1299.3
35°	1250.5	1251.8	1250.5	1262.7	1254.5
37.5°	1207.0	1204.3	1208.4	1208.4	1217.9
40°	1155.4	1155.4	1158.1	1155.4	1159.5
42.5°	1103.8	1095.7	1098.4	1102.5	1103.8
45°	1045.4	1044.1	1044.1	1050.9	1054.9
47.5°	991.1	985.7	984.3	987.1	993.9
50°	924.6	924.6	924.6	928.7	931.4
52.5°	867.6	863.5	859.4	862.2	864.9
55°	797.0	798.3	791.6	797.0	807.8
57.5°	731.8	730.5	726.4	726.4	737.2
60°	659.9	659.9	650.3	657.1	662.6
62.5°	592.0	590.6	577.0	581.1	593.3
65°	521.4	517.3	505.1	509.1	517.3
67.5°	446.7	442.6	431.8	434.5	441.3
70°	373.4	370.7	357.1	361.2	373.4
72.5°	301.4	296.0	287.8	289.2	297.3
75°	232.2	226.7	217.2	221.3	229.5
77.5°	167.0	164.3	157.5	158.9	167.0
80°	107.3	105.9	101.8	104.5	110.0
82.5°	62.5	59.7	55.7	58.4	61.1
85°	25.8	24.4	24.4	25.8	25.8
87.5°	5.4	5.4	6.8	6.8	6.8
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)