

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: P302618

Luminaire Tested: **FSP-24-47-35-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: P302618
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G3-1905-304-18)
Test Lab: INNOVATION CENTER(G3)
Issue Date: 3/3/2020
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: FAIL-SAFE
Catalog Number: FSP-24-47-35-CP250
Description: 2x4 Fail Safe Flat Panel Clear Polycarbonate Lens .25"
Light Source: (252) 3500 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

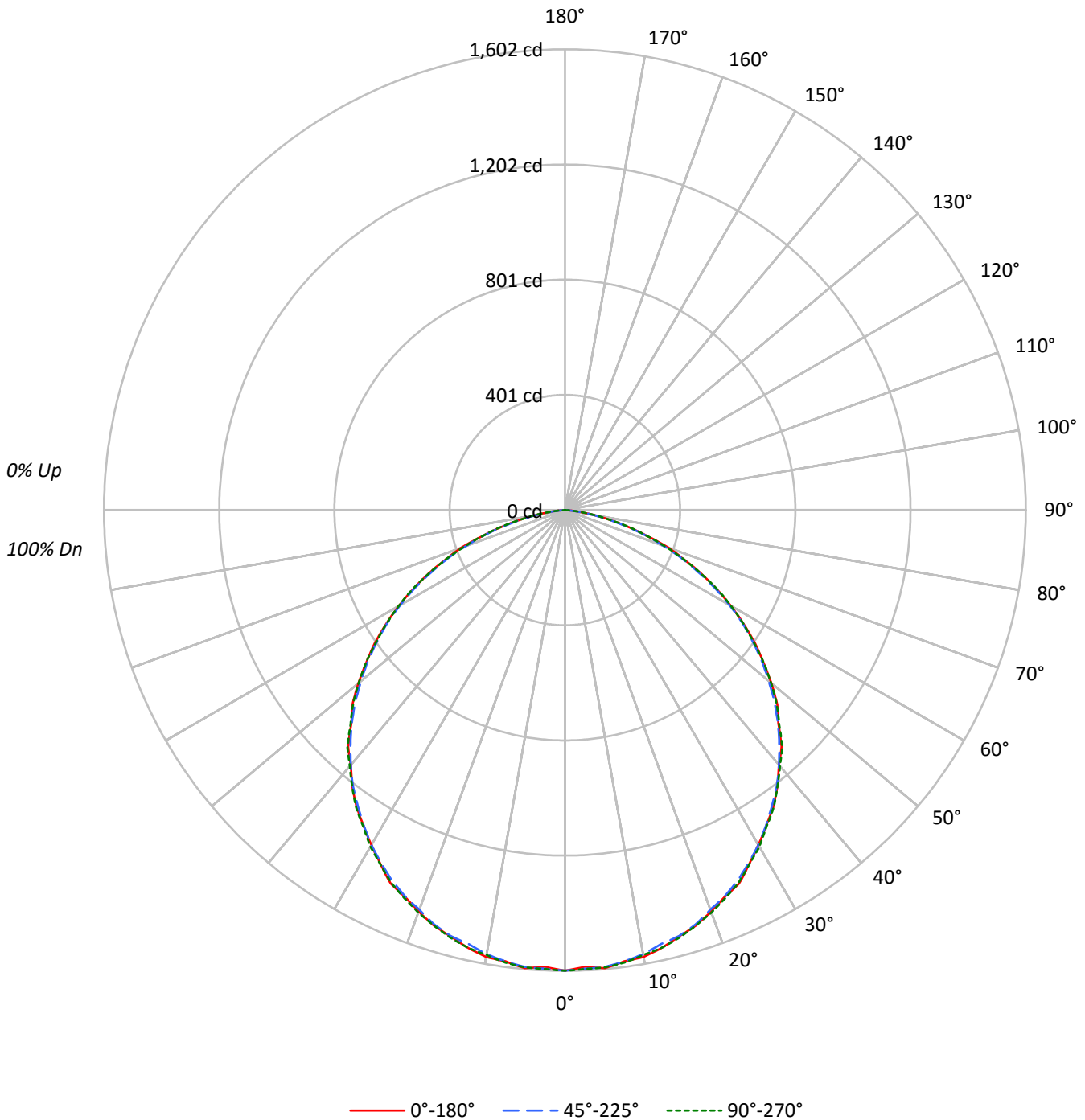
Lumens per Lamp: N/A
Luminaire Lumens: 4337.5 lumens
Efficiency: N/A
Efficacy: 104.8 lumens/watt
Spacing Criteria (0/90/45): 1.25 / 1.25 / 1.36
Luminous Opening: Rectangular (W 2' x L: 4' x H: 0')
CIE Type: Direct

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	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°	2155	2155	2155
5°	2159	2154	2156
10°	2155	2142	2146
15°	2138	2136	2143
20°	2127	2117	2132
25°	2127	2110	2121
30°	2089	2089	2100
35°	2073	2062	2077
40°	2033	2033	2043
45°	1997	1992	2004
50°	1962	1936	1959
55°	1891	1869	1878
60°	1795	1777	1795
65°	1664	1630	1660
70°	1509	1435	1472
75°	1209	1160	1230
80°	849	797	860
85°	412	372	412



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	151.5	3.5
10°-20°	433.3	10.0
20°-30°	655.8	15.1
30°-40°	786.9	18.1
40°-50°	810.2	18.7
50°-60°	713.5	16.4
60°-70°	507.4	11.7
70°-80°	240.7	5.5
80°-90°	38.3	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°	1240.6	28.6
0°-40°	2027.5	46.7
0°-60°	3551.1	81.9
0°-90°	4337.5	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	4337.5	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	1602	1602	1602	1602	1602	
5°	1599	1596	1595	1599	1596	151
15°	1535	1536	1533	1535	1539	434
25°	1433	1428	1421	1424	1429	657
35°	1262	1261	1255	1259	1265	787
45°	1049	1051	1047	1051	1053	813
55°	806	795	797	801	801	719
65°	523	499	512	515	521	517
75°	233	212	223	227	237	249
85°	27	23	24	25	27	41
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	1601.5	1601.5	1601.5	1601.5	1601.5
2.5°	1589.4	1602.8	1596.1	1597.5	1597.5
5°	1598.8	1596.1	1594.8	1598.8	1596.1
7.5°	1582.7	1589.4	1582.7	1586.8	1586.8
10°	1577.4	1573.4	1568.0	1566.7	1570.7
12.5°	1558.7	1556.0	1545.3	1557.3	1558.7
15°	1534.6	1536.0	1533.3	1534.6	1538.6
17.5°	1514.6	1514.6	1510.6	1513.2	1514.6
20°	1485.2	1491.8	1478.5	1485.2	1489.2
22.5°	1454.4	1457.1	1453.1	1454.4	1459.8
25°	1433.0	1427.7	1421.0	1423.7	1429.0
27.5°	1387.6	1390.3	1383.6	1384.9	1388.9
30°	1344.8	1343.5	1344.8	1344.8	1351.5
32.5°	1302.0	1302.0	1300.7	1300.7	1304.7
35°	1261.9	1260.6	1255.2	1259.2	1264.6
37.5°	1212.5	1211.1	1209.8	1211.1	1213.8
40°	1157.7	1161.7	1157.7	1159.0	1163.0
42.5°	1114.9	1109.5	1102.8	1110.9	1118.9
45°	1049.4	1050.7	1046.7	1050.7	1053.4
47.5°	1001.2	987.9	987.9	993.2	998.6
50°	937.1	927.7	925.1	931.7	935.7
52.5°	870.2	862.2	863.6	866.2	871.6
55°	806.1	795.4	796.7	800.7	800.7
57.5°	736.6	723.2	732.6	733.9	735.2
60°	667.1	651.0	660.4	661.7	667.1
62.5°	594.9	574.8	589.5	590.9	598.9
65°	522.7	498.6	512.0	514.7	521.3
67.5°	447.8	427.8	442.5	438.5	446.5
70°	383.7	354.2	364.9	367.6	374.3
72.5°	300.8	280.7	296.8	295.4	300.8
75°	232.6	212.5	223.2	227.3	236.6
77.5°	164.4	151.1	160.4	164.4	167.1
80°	109.6	98.9	102.9	106.9	111.0
82.5°	62.8	54.8	58.8	58.8	60.2
85°	26.7	22.7	24.1	25.4	26.7
87.5°	6.7	5.3	5.3	5.3	5.3
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)