

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: P302503

Luminaire Tested: **FSP-14-42-35-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: P302503
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G3-1905-304-5)
Test Lab: INNOVATION CENTER(G3)
Issue Date: 3/3/2020
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: FAIL-SAFE
Catalog Number: FSP-14-42-35-CP187
Description: 1x4 Fail Safe Flat Panel Clear Polycarbonate Lens .187"
Light Source: (238) 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

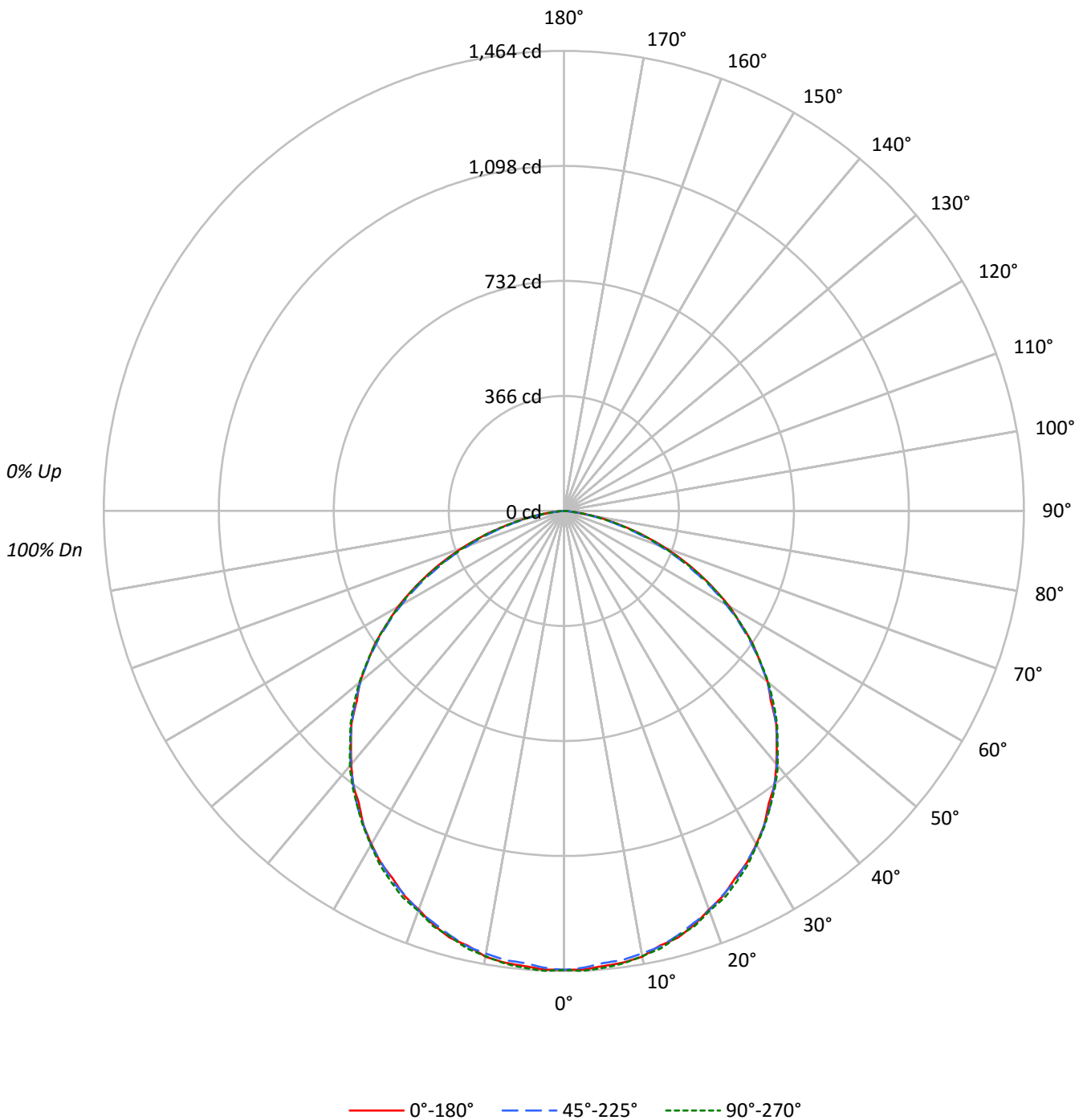
Lumens per Lamp: N/A
Luminaire Lumens: 3953.1 lumens
Efficiency: N/A
Efficacy: 103.2 lumens/watt
Spacing Criteria (0/90/45): 1.25 / 1.25 / 1.36
Luminous Opening: Rectangular (W 1' x L: 4' x H: 0')
CIE Type: Direct

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	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°	3930	3930	3930
5°	3926	3900	3941
10°	3934	3907	3930
15°	3915	3896	3903
20°	3866	3874	3878
25°	3828	3849	3865
30°	3805	3814	3814
35°	3733	3764	3764
40°	3696	3706	3720
45°	3637	3632	3653
50°	3545	3533	3556
55°	3435	3397	3429
60°	3273	3214	3251
65°	3030	2933	3003
70°	2702	2560	2648
75°	2194	2065	2165
80°	1517	1410	1495
85°	722	639	682



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	138.1	3.5
10°-20°	395.2	10.0
20°-30°	597.2	15.1
30°-40°	716.8	18.1
40°-50°	737.5	18.7
50°-60°	650.2	16.4
60°-70°	463.6	11.7
70°-80°	220.2	5.6
80°-90°	34.3	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°	1130.5	28.6
0°-40°	1847.3	46.7
0°-60°	3235.0	81.8
0°-90°	3953.1	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	3953.1	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	1460	1460	1460	1460	1460	
5°	1454	1454	1444	1455	1459	138
15°	1405	1400	1398	1402	1401	395
25°	1289	1294	1296	1299	1302	596
35°	1136	1145	1146	1152	1146	714
45°	956	960	954	960	960	734
55°	732	732	724	728	731	651
65°	476	473	461	468	472	471
75°	211	210	199	201	208	227
85°	23	22	21	21	22	35
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	1460.4	1460.4	1460.4	1460.4	1460.4
2.5°	1460.4	1457.6	1454.8	1459.0	1464.5
5°	1453.5	1453.5	1443.8	1454.8	1459.0
7.5°	1449.3	1441.0	1441.0	1446.6	1452.1
10°	1439.7	1431.4	1430.0	1435.5	1438.3
12.5°	1416.2	1416.2	1419.0	1420.4	1425.9
15°	1405.2	1399.7	1398.3	1402.4	1401.1
17.5°	1380.4	1376.2	1374.9	1383.1	1384.5
20°	1350.0	1351.4	1352.8	1354.2	1354.2
22.5°	1325.2	1326.6	1322.5	1336.2	1333.5
25°	1289.4	1293.5	1296.3	1299.0	1301.8
27.5°	1261.8	1259.0	1259.0	1264.5	1268.7
30°	1224.5	1223.2	1227.3	1230.1	1227.3
32.5°	1185.9	1187.3	1185.9	1190.1	1188.7
35°	1136.3	1144.6	1145.9	1151.5	1145.9
37.5°	1100.4	1100.4	1100.4	1104.6	1104.6
40°	1052.2	1056.3	1054.9	1063.2	1059.1
42.5°	1002.5	1006.7	1005.3	1014.9	1006.7
45°	955.6	959.8	954.3	959.8	959.8
47.5°	893.6	900.5	899.1	908.8	904.6
50°	846.7	852.2	843.9	848.1	849.5
52.5°	786.0	791.5	786.0	788.8	788.8
55°	732.2	732.2	724.0	728.1	730.9
57.5°	666.1	670.2	661.9	664.7	667.4
60°	608.1	606.8	597.1	598.5	604.0
62.5°	541.9	540.6	530.9	532.3	540.6
65°	475.8	473.0	460.6	467.5	471.6
67.5°	409.6	408.2	395.8	397.2	402.7
70°	343.4	342.0	325.4	331.0	336.5
72.5°	275.8	274.4	262.0	266.1	273.0
75°	211.0	209.6	198.6	201.3	208.2
77.5°	153.1	148.9	142.0	146.2	150.3
80°	97.9	97.9	91.0	95.2	96.5
82.5°	53.8	53.8	51.0	52.4	53.8
85°	23.4	22.1	20.7	20.7	22.1
87.5°	4.1	4.1	4.1	4.1	4.1
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)