

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: P302575

Luminaire Tested: **FSP-22-42-40-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: P302575
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G3-1905-304-11)
Test Lab: INNOVATION CENTER(G3)
Issue Date: 3/3/2020
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: FAIL-SAFE
Catalog Number: FSP-22-42-40-CP187
Description: 2x2 Fail Safe Flat Panel Clear Polycarbonate Lens .187"
Light Source: (210) 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

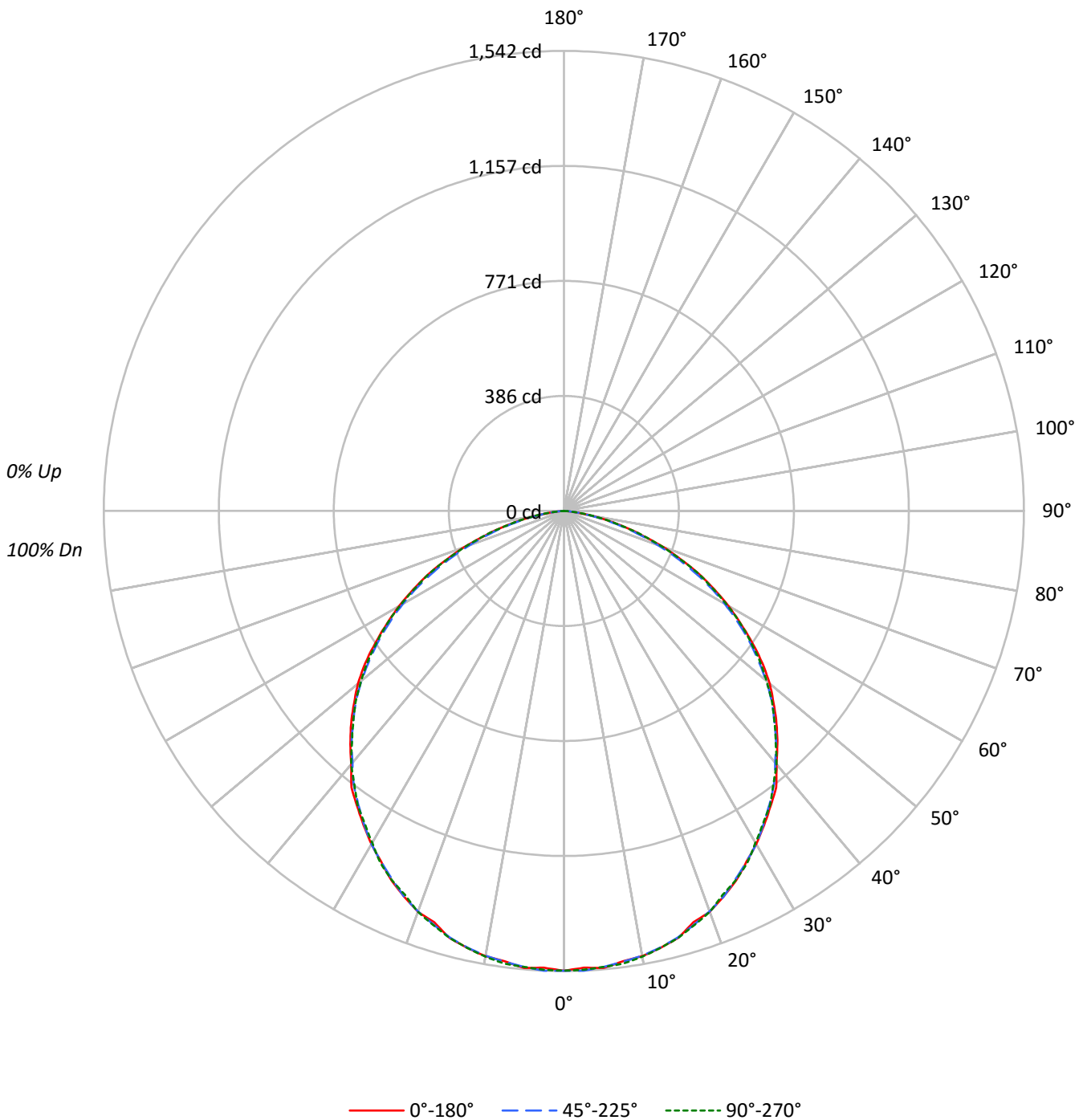
Lumens per Lamp: N/A
Luminaire Lumens: 4144.2 lumens
Efficiency: N/A
Efficacy: 108.2 lumens/watt
Spacing Criteria (0/90/45): 1.24 / 1.24 / 1.36
Luminous Opening: Rectangular (W 2' x L: 2' x H: 0')
CIE Type: Direct

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	67	63	61
4	84	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	49	61	54	48	59	53	48	57	52	47	45
6	71	58	49	43	69	57	49	42	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°	4146	4146	4146
5°	4153	4143	4143
10°	4140	4135	4145
15°	4126	4121	4126
20°	4094	4090	4094
25°	4058	4043	4053
30°	4008	4008	3992
35°	3968	3946	3957
40°	3896	3872	3896
45°	3837	3798	3798
50°	3772	3707	3714
55°	3618	3554	3586
60°	3434	3352	3407
65°	3183	3053	3183
70°	2792	2658	2779
75°	2288	2128	2235
80°	1561	1480	1587
85°	685	738	738



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	145.9	3.5
10°-20°	417.3	10.1
20°-30°	628.3	15.2
30°-40°	752.8	18.2
40°-50°	772.8	18.6
50°-60°	680.7	16.4
60°-70°	482.9	11.7
70°-80°	227.5	5.5
80°-90°	36.0	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°	1191.5	28.8
0°-40°	1944.3	46.9
0°-60°	3397.8	82.0
0°-90°	4144.2	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	4144.2	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	1541	1541	1541	1541	1541	
5°	1537	1541	1534	1534	1534	146
15°	1481	1478	1479	1479	1481	417
25°	1367	1367	1362	1365	1365	629
35°	1208	1205	1201	1201	1205	756
45°	1008	1005	998	1003	998	777
55°	771	764	758	763	764	689
65°	500	486	479	491	500	492
75°	220	210	205	215	215	233
85°	22	22	24	24	24	36
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	1540.7	1540.7	1540.7	1540.7	1540.7
2.5°	1532.1	1544.1	1542.4	1539.0	1539.0
5°	1537.3	1540.7	1533.8	1533.8	1533.8
7.5°	1521.9	1528.7	1523.6	1523.6	1530.4
10°	1515.1	1518.5	1513.4	1513.4	1516.8
12.5°	1499.7	1501.4	1498.0	1498.0	1499.7
15°	1481.0	1477.5	1479.2	1479.2	1481.0
17.5°	1445.1	1458.8	1453.7	1458.8	1455.4
20°	1429.8	1431.5	1428.1	1426.4	1429.8
22.5°	1399.1	1393.9	1399.1	1395.6	1392.2
25°	1366.6	1366.6	1361.5	1364.9	1364.9
27.5°	1325.7	1327.4	1325.7	1325.7	1330.8
30°	1289.9	1289.9	1289.9	1288.2	1284.7
32.5°	1248.9	1248.9	1245.5	1247.2	1242.1
35°	1208.0	1204.6	1201.1	1201.1	1204.6
37.5°	1168.7	1161.9	1156.8	1156.8	1153.4
40°	1109.0	1112.4	1102.2	1103.9	1109.0
42.5°	1059.5	1059.5	1052.7	1057.8	1051.0
45°	1008.3	1004.9	998.1	1003.2	998.1
47.5°	953.7	948.6	945.2	943.5	946.9
50°	900.9	888.9	885.5	887.2	887.2
52.5°	839.4	827.5	820.7	825.8	829.2
55°	771.2	764.4	757.5	762.7	764.4
57.5°	702.9	696.1	691.0	694.4	701.2
60°	638.1	627.9	622.8	629.6	633.0
62.5°	568.2	557.9	552.8	563.0	561.3
65°	499.9	486.3	479.4	491.4	499.9
67.5°	424.8	416.3	407.8	419.7	421.4
70°	354.9	341.2	337.8	353.2	353.2
72.5°	281.5	276.4	269.6	281.5	284.9
75°	220.1	209.9	204.7	215.0	215.0
77.5°	155.3	150.1	146.7	155.3	158.7
80°	100.7	95.5	95.5	99.0	102.4
82.5°	54.6	54.6	52.9	56.3	58.0
85°	22.2	22.2	23.9	23.9	23.9
87.5°	5.1	5.1	5.1	5.1	5.1
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)