

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: P302570

Luminaire Tested: **FSP-22-42-35-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: P302570
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G3-1905-304-12)
Test Lab: INNOVATION CENTER(G3)
Issue Date: 3/3/2020
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: FAIL-SAFE
Catalog Number: FSP-22-42-35-CP250
Description: 2x2 Fail Safe Flat Panel Clear Polycarbonate Lens .25"
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

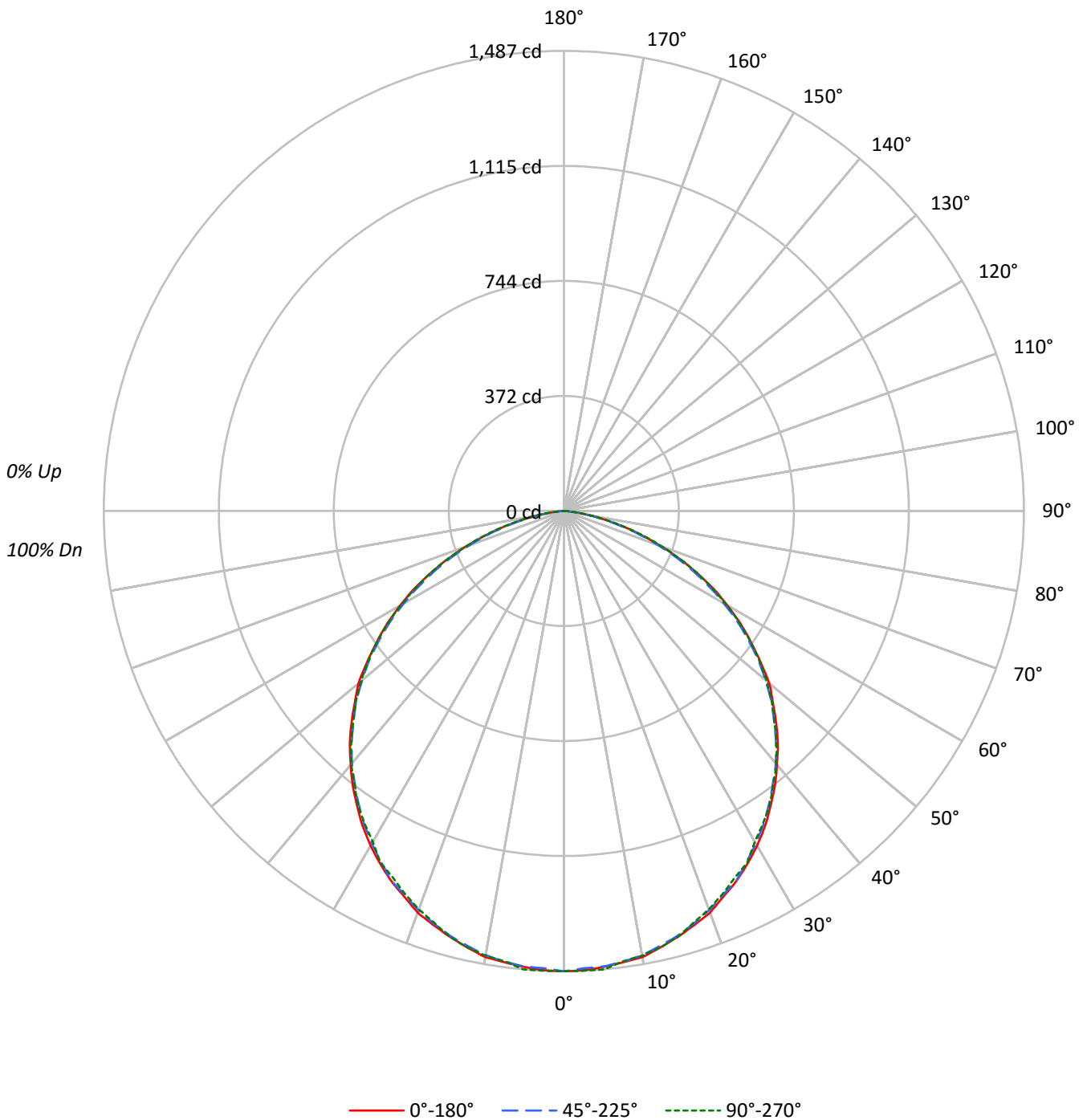
Lumens per Lamp: N/A
Luminaire Lumens: 3985.8 lumens
Efficiency: N/A
Efficacy: 102.7 lumens/watt
Spacing Criteria (0/90/45): 1.25 / 1.24 / 1.35
Luminous Opening: Rectangular (W 2' x L: 2' x H: 0')
CIE Type: Direct

Input Watts (W): 38.8
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	71	62	56	68	61	56	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	28	52	40	33	27	39	32	27	38	32	27	37	31	27	25

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	4003	4003	4003
5°	3996	3991	4018
10°	4001	3983	3988
15°	3969	3959	3969
20°	3956	3933	3923
25°	3920	3915	3881
30°	3882	3856	3835
35°	3826	3799	3810
40°	3766	3743	3755
45°	3696	3658	3664
50°	3630	3560	3581
55°	3462	3415	3454
60°	3286	3215	3268
65°	3024	2950	3034
70°	2655	2564	2669
75°	2150	2030	2184
80°	1461	1384	1512
85°	664	614	664



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	140.6	3.5
10°-20°	401.5	10.1
20°-30°	605.7	15.2
30°-40°	725.5	18.2
40°-50°	744.6	18.7
50°-60°	654.7	16.4
60°-70°	462.9	11.6
70°-80°	216.6	5.4
80°-90°	33.9	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°	1147.7	28.8
0°-40°	1873.2	47.0
0°-60°	3272.5	82.1
0°-90°	3985.8	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	3985.8	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	1487	1487	1487	1487	1487	
5°	1479	1481	1478	1479	1487	141
15°	1425	1425	1421	1420	1425	402
25°	1320	1317	1319	1310	1307	608
35°	1165	1165	1156	1156	1160	729
45°	971	968	961	963	963	749
55°	738	733	728	735	736	660
65°	475	468	463	470	476	470
75°	207	198	195	205	210	221
85°	22	22	20	23	22	34
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	1487.4	1487.4	1487.4	1487.4	1487.4
2.5°	1485.8	1484.1	1479.2	1484.1	1487.4
5°	1479.2	1480.8	1477.5	1479.2	1487.4
7.5°	1470.9	1472.5	1469.2	1469.2	1467.6
10°	1464.3	1464.3	1457.6	1457.6	1459.3
12.5°	1444.4	1447.7	1439.4	1442.8	1444.4
15°	1424.6	1424.6	1421.2	1419.6	1424.6
17.5°	1403.0	1403.0	1398.1	1398.1	1394.8
20°	1381.5	1378.2	1373.3	1368.3	1370.0
22.5°	1348.4	1350.1	1343.5	1343.5	1340.2
25°	1320.3	1317.0	1318.7	1310.4	1307.1
27.5°	1285.6	1283.9	1279.0	1279.0	1282.3
30°	1249.2	1244.2	1240.9	1237.6	1234.3
32.5°	1209.5	1206.2	1201.2	1199.5	1197.9
35°	1164.8	1164.8	1156.5	1156.5	1159.8
37.5°	1120.1	1123.4	1110.2	1111.8	1111.8
40°	1072.1	1073.8	1065.5	1067.2	1068.8
42.5°	1024.2	1020.9	1014.2	1019.2	1017.5
45°	971.2	967.9	961.3	962.9	962.9
47.5°	916.6	913.3	910.0	910.0	911.7
50°	867.0	857.1	850.4	852.1	855.4
52.5°	800.8	799.1	792.5	794.2	797.5
55°	737.9	733.0	728.0	734.6	736.3
57.5°	676.7	671.7	665.1	668.4	673.4
60°	610.5	602.3	597.3	602.3	607.2
62.5°	546.0	534.4	529.5	536.1	541.0
65°	474.9	468.2	463.3	469.9	476.5
67.5°	407.0	395.4	393.8	403.7	408.7
70°	337.5	325.9	325.9	334.2	339.2
72.5°	269.7	258.1	259.8	269.7	274.7
75°	206.8	198.5	195.2	205.2	210.1
77.5°	147.3	139.0	139.0	148.9	148.9
80°	94.3	89.3	89.3	96.0	97.6
82.5°	52.9	51.3	49.6	52.9	54.6
85°	21.5	21.5	19.9	23.2	21.5
87.5°	5.0	5.0	5.0	5.0	5.0
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)