

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: P302577

Luminaire Tested: **FSP-22-42-40-CP375**

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: P302577
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G3-1905-304-20)
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-CP375
Description: 2x2 Fail Safe Flat Panel Clear Polycarbonate Lens .375"
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

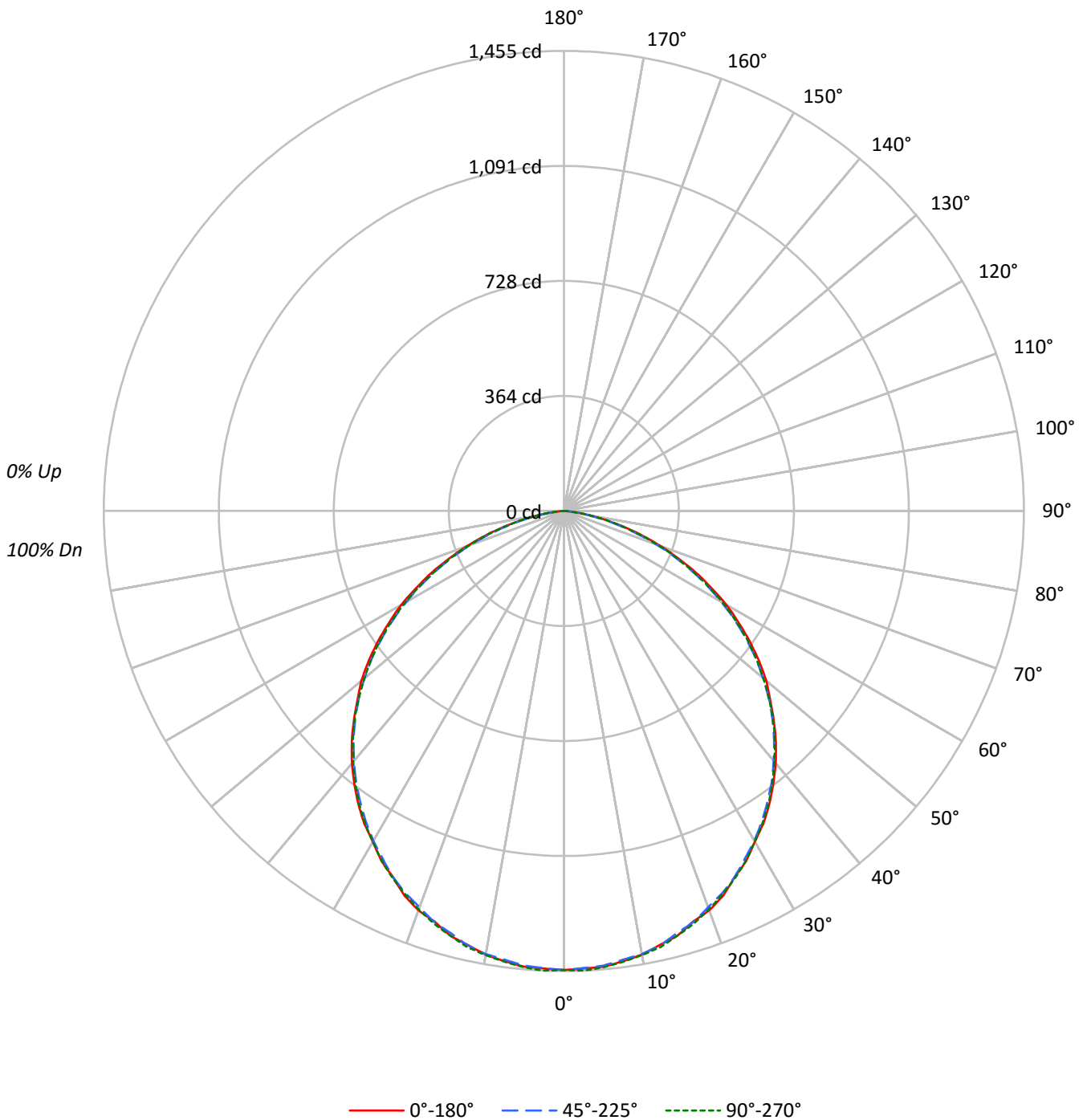
Lumens per Lamp: N/A
Luminaire Lumens: 3854.2 lumens
Efficiency: N/A
Efficacy: 100.6 lumens/watt
Spacing Criteria (0/90/45): 1.24 / 1.24 / 1.35
Luminous Opening: Rectangular (W 2' x L: 2' x H: 0')
CIE Type: Direct

Input Watts (W): 38.3
Input Voltage (V): NR
Input Current (Ain): 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	99	96	93	95	92	90	91	89	87	85
2	100	92	85	80	97	90	84	79	87	82	77	83	79	75	80	77	74	72
3	91	81	73	67	89	79	72	66	77	70	65	74	68	64	71	67	63	61
4	84	72	63	57	81	71	63	56	68	61	56	66	60	55	64	58	54	52
5	77	64	56	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	54	47	42	52	46	42	40
7	66	53	44	38	64	52	44	38	50	43	38	49	42	37	48	42	37	35
8	61	48	40	34	60	47	39	34	46	39	34	45	38	33	44	38	33	31
9	57	44	36	30	56	44	36	30	42	35	30	41	35	30	40	34	30	28
10	54	41	33	28	53	40	33	28	39	32	27	38	32	27	37	31	27	25

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	3906	3906	3906
5°	3908	3898	3912
10°	3892	3888	3897
15°	3873	3849	3873
20°	3849	3820	3840
25°	3794	3794	3804
30°	3753	3742	3753
35°	3721	3687	3710
40°	3661	3625	3637
45°	3577	3551	3564
50°	3499	3442	3449
55°	3362	3297	3321
60°	3195	3094	3131
65°	2933	2824	2846
70°	2577	2470	2510
75°	2075	1951	2022
80°	1401	1322	1401
85°	633	580	633



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	137.1	3.6
10°-20°	391.3	10.2
20°-30°	589.0	15.3
30°-40°	704.4	18.3
40°-50°	720.5	18.7
50°-60°	630.1	16.3
60°-70°	443.1	11.5
70°-80°	206.6	5.4
80°-90°	32.1	0.8
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°	1117.4	29.0
0°-40°	1821.8	47.3
0°-60°	3172.3	82.3
0°-90°	3854.2	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	3854.2	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	1452	1452	1452	1452	1452	
5°	1447	1441	1443	1440	1448	137
15°	1390	1389	1382	1385	1390	392
25°	1278	1279	1278	1276	1281	591
35°	1133	1131	1122	1122	1129	708
45°	940	936	933	933	936	725
55°	716	710	703	699	708	640
65°	461	452	444	442	447	454
75°	200	194	188	189	194	214
85°	20	19	19	20	20	34
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	1451.7	1451.7	1451.7	1451.7	1451.7
2.5°	1448.3	1451.7	1446.6	1444.8	1455.1
5°	1446.6	1441.4	1443.1	1439.7	1448.3
7.5°	1436.3	1436.3	1431.2	1432.9	1438.0
10°	1424.4	1421.0	1422.7	1422.7	1426.1
12.5°	1405.6	1409.0	1407.3	1407.3	1412.4
15°	1390.3	1388.6	1381.7	1385.1	1390.3
17.5°	1361.3	1366.4	1363.0	1363.0	1368.1
20°	1344.2	1340.8	1334.0	1337.4	1340.8
22.5°	1316.9	1313.5	1308.4	1310.1	1311.8
25°	1277.7	1279.4	1277.7	1276.0	1281.1
27.5°	1248.7	1243.6	1240.1	1240.1	1247.0
30°	1207.7	1211.1	1204.3	1204.3	1207.7
32.5°	1173.6	1171.9	1165.1	1166.8	1170.2
35°	1132.7	1131.0	1122.4	1122.4	1129.3
37.5°	1088.3	1084.9	1079.8	1076.4	1083.2
40°	1042.3	1042.3	1032.0	1028.6	1035.4
42.5°	992.8	986.0	984.3	986.0	987.7
45°	939.9	936.5	933.1	933.1	936.5
47.5°	885.3	883.6	880.2	876.8	880.2
50°	835.9	825.6	822.2	822.2	823.9
52.5°	777.9	767.6	764.2	760.8	765.9
55°	716.5	709.6	702.8	699.4	707.9
57.5°	655.0	646.5	639.7	641.4	643.1
60°	593.6	581.7	574.9	573.2	581.7
62.5°	525.4	518.6	510.0	510.0	513.5
65°	460.6	452.0	443.5	441.8	446.9
67.5°	390.6	387.2	378.7	375.3	385.5
70°	327.5	317.3	313.9	310.5	319.0
72.5°	262.7	252.5	249.1	250.8	257.6
75°	199.6	194.5	187.6	189.3	194.5
77.5°	141.6	138.2	133.1	136.5	141.6
80°	90.4	88.7	85.3	87.0	90.4
82.5°	52.9	51.2	47.8	49.5	49.5
85°	20.5	18.8	18.8	20.5	20.5
87.5°	5.1	5.1	5.1	3.4	5.1
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)