

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: P307788

Luminaire Tested: **14FCZ2-44-UNV-L82765-CP250-W2A-U-5700K**

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: P307788
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G3-1805-783-49)
Test Lab: INNOVATION CENTER(G3)
Issue Date: 3/3/2020
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: FAIL-SAFE
Catalog Number: 14FCZ2-44-UNV-L82765-CP250-W2A-U-5700K
Description: 1'X4' TROFFER LED MODULE,RIBBED LENS, 0.250" POLYCARB SHEET
Light Source: (168) 5700K TUNABLE 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: 4021.0 lumens
Efficiency: N/A
Efficacy: 102.1 lumens/watt
Spacing Criteria (0/90/45): 1.2 / 1.28 / 1.37
Luminous Opening: Rectangular (W 1' x L: 4' x H: 0')
CIE Type: Direct

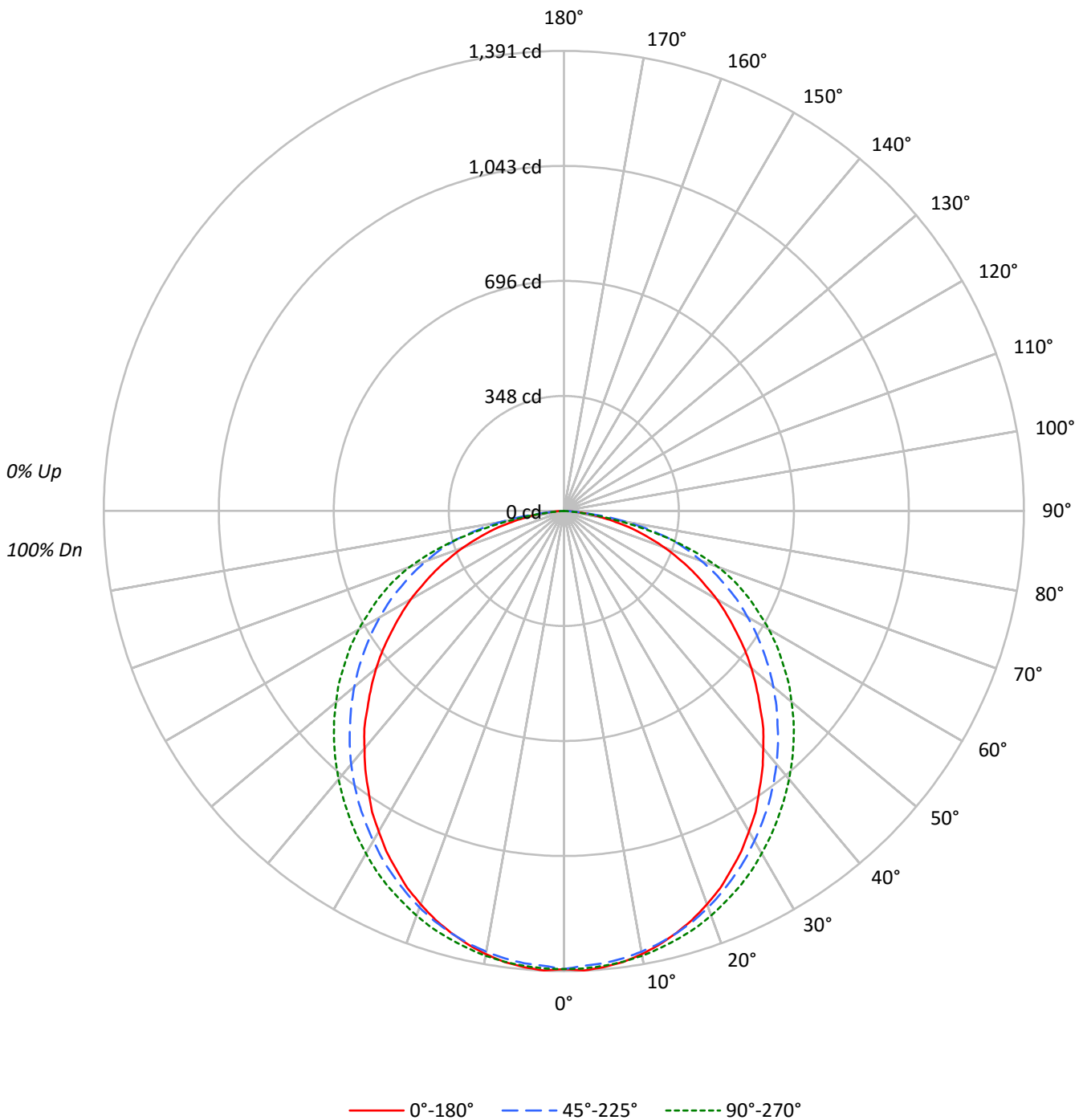
Input Watts (W): 39.4
Input Voltage (V): NR
Input Current (A_{in}): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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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	104	99	95	106	101	97	94	97	94	91	93	90	88	90	87	85	83
2	98	90	83	77	96	88	82	76	84	79	74	81	77	73	78	74	71	69
3	89	79	70	64	87	77	69	63	74	67	62	71	66	61	69	64	60	58
4	82	70	61	54	79	68	60	53	66	58	53	63	57	52	61	56	51	49
5	75	62	53	46	73	61	52	46	59	51	45	57	50	45	55	49	44	42
6	69	56	47	40	67	55	46	40	53	45	40	51	44	39	50	44	39	37
7	64	51	42	35	63	50	41	35	48	41	35	47	40	35	45	39	34	32
8	60	46	37	32	58	45	37	31	44	37	31	43	36	31	42	35	31	29
9	56	42	34	28	54	42	34	28	41	33	28	39	33	28	38	32	28	26
10	52	39	31	26	51	39	31	26	37	30	26	37	30	25	36	30	25	24

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	3728	3728	3728
5°	3740	3708	3730
10°	3716	3697	3731
15°	3677	3679	3729
20°	3623	3654	3728
25°	3554	3618	3724
30°	3477	3580	3717
35°	3384	3549	3714
40°	3294	3515	3720
45°	3194	3477	3740
50°	3100	3461	3765
55°	2982	3449	3798
60°	2876	3455	3851
65°	2729	3465	3911
70°	2561	3492	3908
75°	2322	3524	3533
80°	1903	3044	2515
85°	1411	1439	580



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	131.1	3.3
10°-20°	374.4	9.3
20°-30°	564.1	14.0
30°-40°	676.9	16.8
40°-50°	705.5	17.5
50°-60°	653.1	16.2
60°-70°	527.7	13.1
70°-80°	321.8	8.0
80°-90°	66.4	1.7
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°	1069.6	26.6
0°-40°	1746.5	43.4
0°-60°	3105.1	77.2
0°-90°	4021.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	4021.0	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	1385	1385	1385	1385	1385	
5°	1384	1381	1373	1383	1381	131
15°	1320	1321	1321	1339	1339	372
25°	1197	1204	1218	1249	1254	552
35°	1030	1046	1080	1120	1131	645
45°	839	864	914	965	983	649
55°	636	669	735	793	810	570
65°	429	471	544	599	614	424
75°	223	273	339	344	340	234
85°	46	68	47	26	19	56
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	1385.2	1385.2	1385.2	1385.2	1385.2
2.5°	1390.6	1386.1	1376.3	1386.1	1384.4
5°	1384.4	1380.8	1372.7	1382.6	1380.8
7.5°	1375.4	1371.8	1364.6	1376.3	1374.5
10°	1360.1	1358.3	1353.0	1366.4	1365.5
12.5°	1342.2	1341.3	1338.6	1353.9	1353.0
15°	1319.8	1320.7	1320.7	1338.6	1338.6
17.5°	1294.7	1296.5	1300.1	1319.8	1322.5
20°	1265.1	1268.7	1275.9	1298.3	1301.9
22.5°	1234.6	1237.3	1248.1	1275.0	1278.6
25°	1197.0	1204.1	1218.5	1249.0	1254.3
27.5°	1161.1	1167.4	1187.1	1218.5	1227.4
30°	1119.0	1128.8	1152.1	1186.2	1196.1
32.5°	1078.6	1089.4	1116.3	1155.7	1164.7
35°	1030.2	1046.3	1080.4	1119.9	1130.6
37.5°	986.3	1001.5	1040.1	1083.1	1095.6
40°	937.8	956.7	1000.6	1046.3	1058.9
42.5°	893.0	910.9	958.5	1005.1	1022.1
45°	839.2	864.3	913.6	964.7	982.7
47.5°	789.9	815.0	871.5	926.2	942.3
50°	740.6	767.5	826.7	883.2	899.3
52.5°	689.5	718.2	781.8	838.3	857.1
55°	635.7	668.9	735.2	792.6	809.6
57.5°	584.6	618.7	689.5	747.8	764.8
60°	534.4	569.3	642.0	697.6	715.5
62.5°	478.8	520.0	595.3	650.0	663.5
65°	428.6	470.7	544.2	598.9	614.2
67.5°	375.7	421.4	494.9	545.1	559.5
70°	325.5	373.0	443.8	490.4	496.7
72.5°	271.7	320.1	391.8	421.4	421.4
75°	223.3	272.6	338.9	344.3	339.8
77.5°	170.4	225.0	268.1	257.3	246.6
80°	122.8	176.6	196.4	176.6	162.3
82.5°	82.5	128.2	118.4	94.1	83.4
85°	45.7	68.1	46.6	26.0	18.8
87.5°	17.0	15.2	4.5	4.5	4.5
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)