

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: P308052

Luminaire Tested: **14FCZ2-44-UNV-L82765-S-CP250-W2A-U-3000K**

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: P308052
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G3-1805-783-40)
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-S-CP250-W2A-U-3000K
Description: 1'X4' TROFFER LED MODULE,SMOOTH LENS, 0.250" POLYCARB SHEET
Light Source: (168) 3000K 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: 3679.0 lumens
Efficiency: N/A
Efficacy: 96.8 lumens/watt
Spacing Criteria (0/90/45): 1.19 / 1.26 / 1.36
Luminous Opening: Rectangular (W 1' x L: 4' x H: 0')
CIE Type: Direct

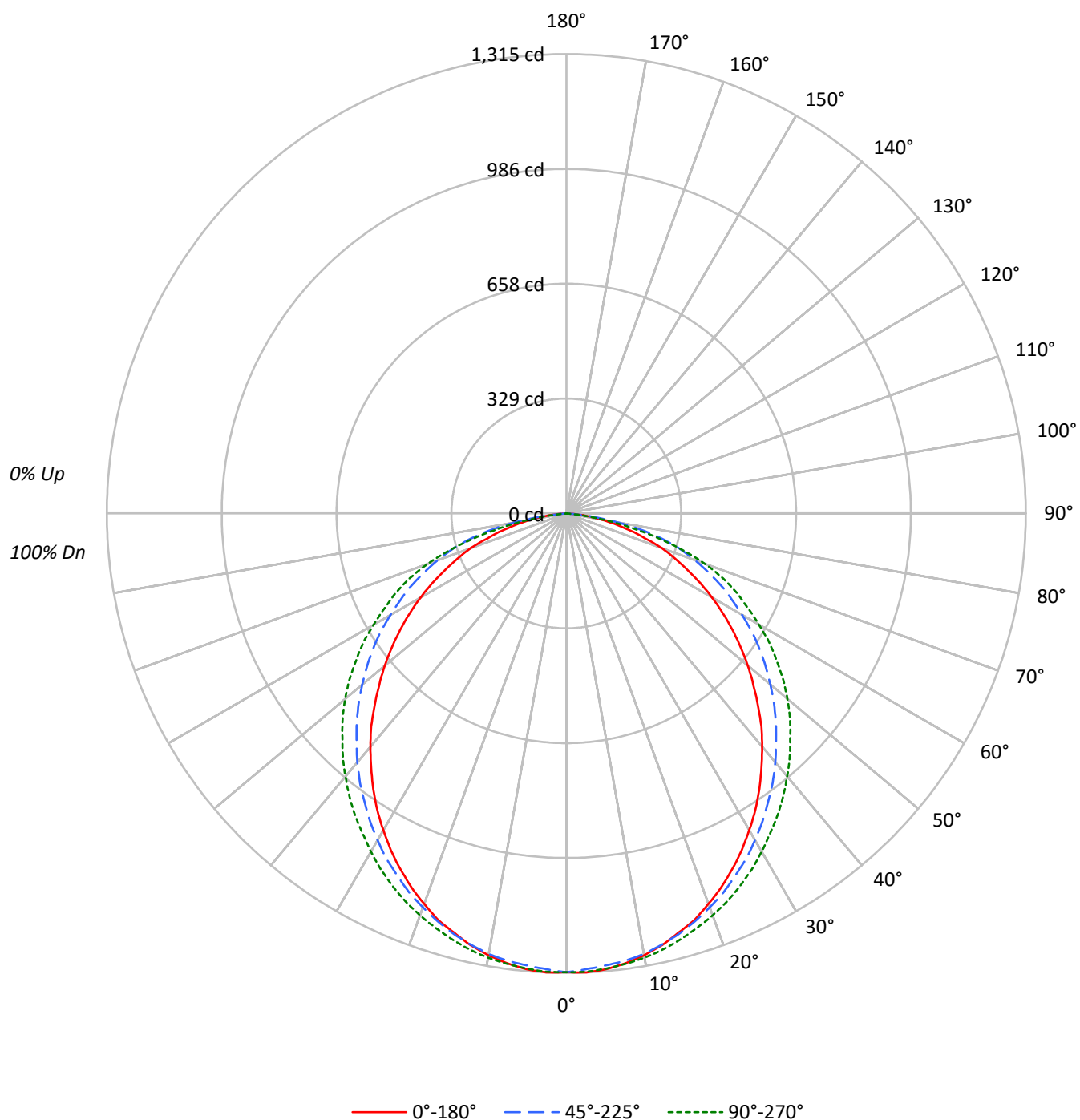
Input Watts (W): 38
Input Voltage (V): NR
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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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				0
RW	70	50	30	10	70	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		100
1	109	104	100	96	106	102	98	94	97	94	91		94	91	89		84
2	99	90	84	78	96	89	82	77	85	80	75		82	77	73		70
3	90	79	71	65	87	78	70	64	75	68	63		72	66	62		58
4	82	70	61	55	80	69	61	54	66	59	53		64	58	53		50
5	76	63	54	47	74	62	53	47	59	52	46		57	51	46		43
6	70	56	47	41	68	55	47	41	54	46	40		52	45	40		38
7	65	51	42	36	63	50	42	36	49	41	36		47	41	35		33
8	60	47	38	32	59	46	38	32	45	37	32		43	37	32		30
9	56	43	35	29	55	42	34	29	41	34	29		40	33	29		27
10	53	40	32	26	52	39	31	26	38	31	26		37	31	26		24

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	3534	3534	3534
5°	3538	3508	3533
10°	3509	3499	3529
15°	3461	3471	3517
20°	3406	3437	3505
25°	3336	3396	3493
30°	3253	3356	3475
35°	3164	3308	3463
40°	3063	3268	3454
45°	2950	3228	3450
50°	2841	3192	3459
55°	2722	3166	3449
60°	2592	3122	3426
65°	2439	3113	3426
70°	2297	3086	3330
75°	1991	3015	2845
80°	1612	2431	1894
85°	1071	846	562



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	124.0	3.4
10°-20°	352.9	9.6
20°-30°	529.4	14.4
30°-40°	631.5	17.2
40°-50°	652.8	17.7
50°-60°	596.0	16.2
60°-70°	469.1	12.7
70°-80°	273.0	7.4
80°-90°	50.3	1.4
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°	1006.3	27.4
0°-40°	1637.8	44.5
0°-60°	2886.6	78.5
0°-90°	3679.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	3679.0	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	1313	1313	1313	1313	1313	
5°	1310	1306	1299	1310	1308	124
15°	1242	1244	1246	1262	1262	351
25°	1124	1129	1144	1171	1176	517
35°	963	976	1007	1045	1054	602
45°	775	801	848	896	907	599
55°	580	611	675	724	735	519
65°	383	423	489	527	538	380
75°	192	237	290	285	274	204
85°	35	49	27	22	18	45
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	1313.3	1313.3	1313.3	1313.3	1313.3
2.5°	1315.2	1311.5	1306.0	1315.2	1313.3
5°	1309.7	1306.0	1298.7	1309.7	1307.9
7.5°	1298.7	1295.1	1291.5	1302.4	1300.6
10°	1284.2	1282.3	1280.5	1293.3	1291.5
12.5°	1265.9	1265.9	1264.1	1278.7	1278.7
15°	1242.2	1244.0	1245.9	1262.3	1262.3
17.5°	1220.3	1218.5	1224.0	1242.2	1244.0
20°	1189.3	1193.0	1200.2	1222.1	1224.0
22.5°	1158.3	1161.9	1174.7	1196.6	1202.1
25°	1123.6	1129.1	1143.7	1171.1	1176.5
27.5°	1087.2	1094.5	1114.5	1143.7	1149.2
30°	1047.0	1058.0	1079.9	1112.7	1118.2
32.5°	1006.9	1017.8	1045.2	1078.0	1085.3
35°	963.1	975.9	1006.9	1045.2	1054.3
37.5°	917.5	933.9	970.4	1008.7	1019.7
40°	871.9	890.2	930.3	970.4	983.2
42.5°	826.3	844.6	888.3	933.9	946.7
45°	775.2	800.8	848.2	895.6	906.6
47.5°	726.0	753.3	806.2	853.7	868.3
50°	678.6	705.9	762.5	811.7	826.3
52.5°	629.3	658.5	718.7	769.8	782.5
55°	580.1	611.1	674.9	724.2	735.1
57.5°	530.8	563.6	629.3	676.7	689.5
60°	481.6	516.2	580.1	627.5	636.6
62.5°	432.3	468.8	534.5	576.4	585.5
65°	383.1	423.2	488.9	527.2	538.1
67.5°	335.6	375.8	439.6	476.1	485.2
70°	291.9	328.3	392.2	419.5	423.2
72.5°	237.1	282.7	344.8	359.3	350.2
75°	191.5	237.1	290.0	284.6	273.6
77.5°	145.9	191.5	226.2	207.9	193.4
80°	104.0	149.6	156.9	129.5	122.2
82.5°	67.5	104.0	87.6	67.5	54.7
85°	34.7	49.3	27.4	21.9	18.2
87.5°	10.9	7.3	3.6	3.6	1.8
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)