

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: P308055

Luminaire Tested: **14FCZ2-44-UNV-L82765-S-CP250-W2A-U-4500K**

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: P308055
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-4500K
Description: 1'X4' TROFFER LED MODULE,SMOOTH LENS, 0.250" POLYCARB SHEET
Light Source: (168) 4500K 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: 3959.0 lumens
Efficiency: N/A
Efficacy: 101.5 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

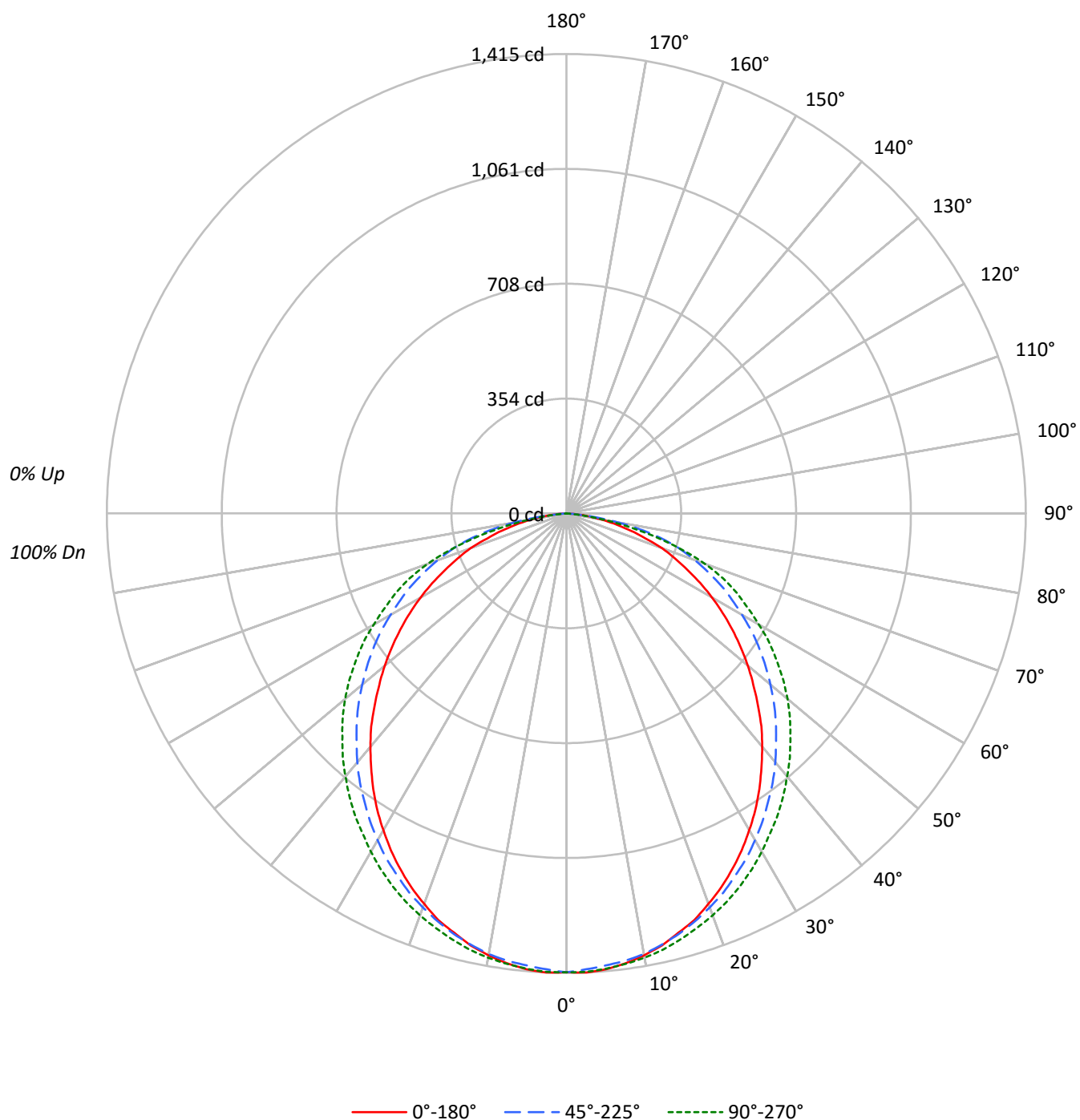
Input Watts (W): 39
Input Voltage (V): NR
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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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°	3803	3803	3803
5°	3807	3775	3802
10°	3776	3765	3797
15°	3724	3735	3784
20°	3665	3699	3772
25°	3590	3654	3759
30°	3501	3611	3739
35°	3405	3559	3727
40°	3296	3517	3717
45°	3175	3474	3713
50°	3057	3435	3723
55°	2928	3407	3712
60°	2789	3359	3687
65°	2625	3350	3687
70°	2471	3320	3583
75°	2143	3245	3061
80°	1734	2616	2038
85°	1152	908	605



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	133.5	3.4
10°-20°	379.8	9.6
20°-30°	569.6	14.4
30°-40°	679.5	17.2
40°-50°	702.5	17.7
50°-60°	641.4	16.2
60°-70°	504.8	12.7
70°-80°	293.8	7.4
80°-90°	54.1	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°	1082.9	27.4
0°-40°	1762.4	44.5
0°-60°	3106.3	78.5
0°-90°	3959.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	3959.0	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	1413	1413	1413	1413	1413	
5°	1409	1405	1398	1409	1407	134
15°	1337	1339	1341	1358	1358	377
25°	1209	1215	1231	1260	1266	557
35°	1036	1050	1084	1125	1135	648
45°	834	862	913	964	976	644
55°	624	658	726	779	791	558
65°	412	455	526	567	579	409
75°	206	255	312	306	294	219
85°	37	53	29	24	20	48
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	1413.3	1413.3	1413.3	1413.3	1413.3
2.5°	1415.3	1411.3	1405.4	1415.3	1413.3
5°	1409.4	1405.4	1397.6	1409.4	1407.4
7.5°	1397.6	1393.7	1389.7	1401.5	1399.6
10°	1381.9	1379.9	1378.0	1391.7	1389.7
12.5°	1362.3	1362.3	1360.3	1376.0	1376.0
15°	1336.7	1338.7	1340.7	1358.3	1358.3
17.5°	1313.2	1311.2	1317.1	1336.7	1338.7
20°	1279.8	1283.7	1291.6	1315.2	1317.1
22.5°	1246.4	1250.4	1264.1	1287.7	1293.6
25°	1209.2	1215.0	1230.7	1260.2	1266.1
27.5°	1169.9	1177.7	1199.3	1230.7	1236.6
30°	1126.7	1138.5	1162.0	1197.4	1203.3
32.5°	1083.5	1095.3	1124.7	1160.1	1167.9
35°	1036.4	1050.2	1083.5	1124.7	1134.6
37.5°	987.3	1005.0	1044.3	1085.5	1097.3
40°	938.3	957.9	1001.1	1044.3	1058.0
42.5°	889.2	908.8	955.9	1005.0	1018.8
45°	834.2	861.7	912.8	963.8	975.6
47.5°	781.2	810.7	867.6	918.6	934.3
50°	730.2	759.6	820.5	873.5	889.2
52.5°	677.2	708.6	773.4	828.3	842.1
55°	624.2	657.6	726.3	779.3	791.1
57.5°	571.2	606.5	677.2	728.2	742.0
60°	518.2	555.5	624.2	675.2	685.1
62.5°	465.2	504.5	575.1	620.3	630.1
65°	412.2	455.4	526.1	567.3	579.1
67.5°	361.2	404.4	473.1	512.3	522.1
70°	314.1	353.3	422.0	451.5	455.4
72.5°	255.2	304.3	371.0	386.7	376.9
75°	206.1	255.2	312.1	306.2	294.4
77.5°	157.0	206.1	243.4	223.8	208.1
80°	111.9	161.0	168.8	139.4	131.5
82.5°	72.6	111.9	94.2	72.6	58.9
85°	37.3	53.0	29.4	23.6	19.6
87.5°	11.8	7.9	3.9	3.9	2.0
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)