

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: P308026

Luminaire Tested: **14FCZ2-44-UNV-L82765-S-CA125-W2A-U-3500K**

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: P308026
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-CA125-W2A-U-3500K
Description: 1'X4' TROFFER LED MODULE,SMOOTH LENS, 0.125" ACRYLIC SHEET
Light Source: (168) 3500K 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: 4087.0 lumens
Efficiency: N/A
Efficacy: 106.2 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

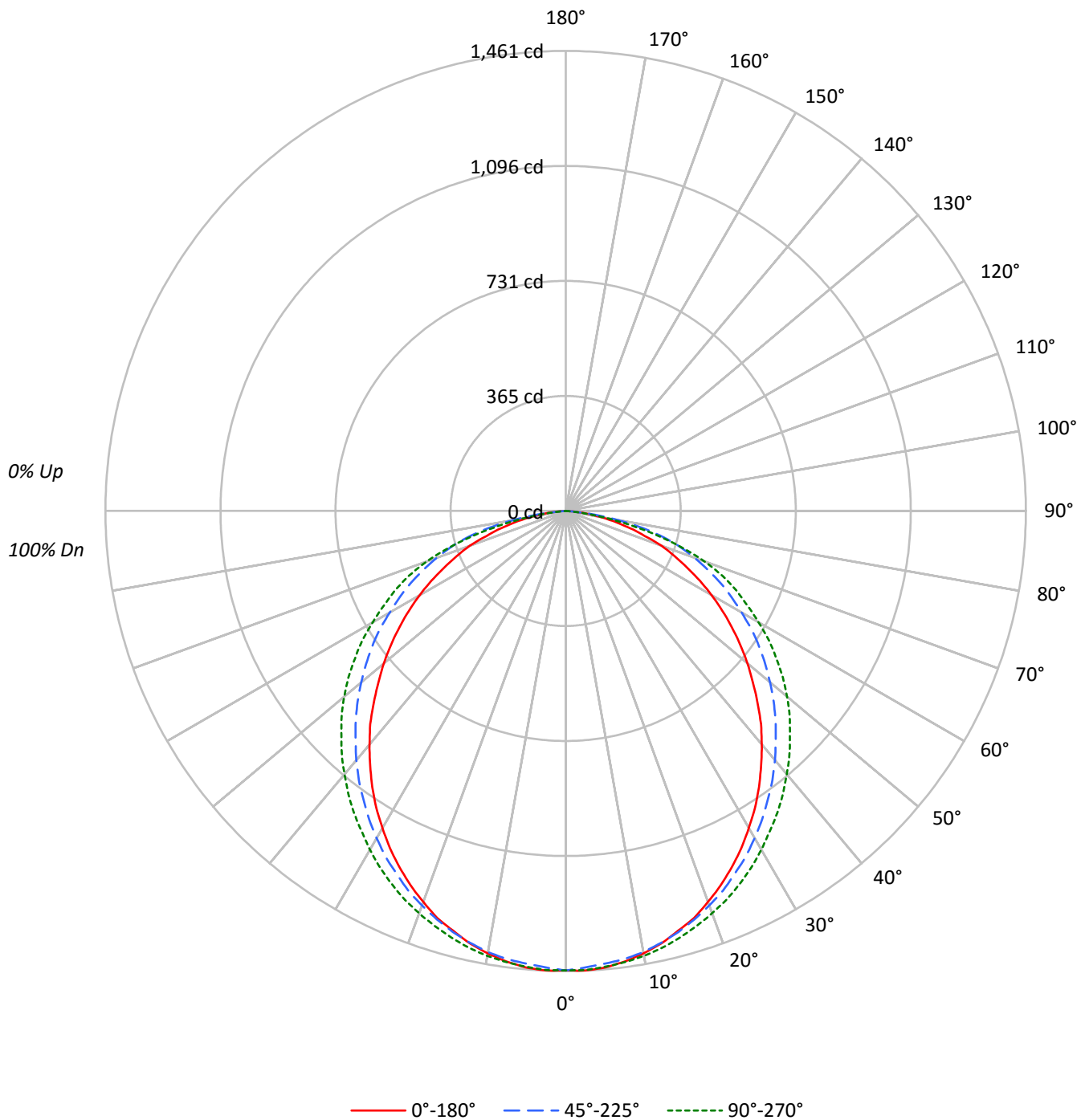
Input Watts (W): 38.5
Input Voltage (V): NR
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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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°	3926	3926	3926
5°	3930	3897	3925
10°	3898	3887	3920
15°	3845	3856	3907
20°	3783	3818	3894
25°	3706	3772	3881
30°	3614	3727	3860
35°	3515	3675	3847
40°	3403	3631	3837
45°	3277	3586	3833
50°	3156	3546	3843
55°	3023	3518	3831
60°	2879	3468	3806
65°	2709	3458	3806
70°	2551	3428	3699
75°	2213	3350	3161
80°	1790	2701	2104
85°	1189	939	627



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	137.8	3.4
10°-20°	392.0	9.6
20°-30°	588.1	14.4
30°-40°	701.5	17.2
40°-50°	725.2	17.7
50°-60°	662.1	16.2
60°-70°	521.1	12.7
70°-80°	303.3	7.4
80°-90°	55.9	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°	1117.9	27.4
0°-40°	1819.4	44.5
0°-60°	3206.7	78.5
0°-90°	4087.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	4087.0	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	1459	1459	1459	1459	1459	
5°	1455	1451	1443	1455	1453	138
15°	1380	1382	1384	1402	1402	389
25°	1248	1254	1270	1301	1307	575
35°	1070	1084	1119	1161	1171	669
45°	861	890	942	995	1007	665
55°	644	679	750	804	817	576
65°	426	470	543	586	598	423
75°	213	263	322	316	304	226
85°	38	55	30	24	20	50
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	1459.0	1459.0	1459.0	1459.0	1459.0
2.5°	1461.0	1457.0	1450.9	1461.0	1459.0
5°	1454.9	1450.9	1442.8	1454.9	1452.9
7.5°	1442.8	1438.7	1434.7	1446.8	1444.8
10°	1426.6	1424.5	1422.5	1436.7	1434.7
12.5°	1406.3	1406.3	1404.3	1420.5	1420.5
15°	1380.0	1382.0	1384.0	1402.3	1402.3
17.5°	1355.6	1353.6	1359.7	1380.0	1382.0
20°	1321.2	1325.3	1333.4	1357.7	1359.7
22.5°	1286.7	1290.8	1305.0	1329.3	1335.4
25°	1248.2	1254.3	1270.5	1300.9	1307.0
27.5°	1207.7	1215.8	1238.1	1270.5	1276.6
30°	1163.1	1175.3	1199.6	1236.1	1242.2
32.5°	1118.6	1130.7	1161.1	1197.6	1205.7
35°	1069.9	1084.1	1118.6	1161.1	1171.2
37.5°	1019.3	1037.5	1078.0	1120.6	1132.7
40°	968.6	988.9	1033.5	1078.0	1092.2
42.5°	917.9	938.2	986.8	1037.5	1051.7
45°	861.2	889.6	942.3	995.0	1007.1
47.5°	806.5	836.9	895.7	948.3	964.6
50°	753.8	784.2	847.0	901.7	917.9
52.5°	699.1	731.5	798.4	855.1	869.3
55°	644.4	678.8	749.8	804.5	816.6
57.5°	589.7	626.2	699.1	751.8	766.0
60°	535.0	573.5	644.4	697.1	707.2
62.5°	480.3	520.8	593.7	640.3	650.5
65°	425.5	470.1	543.1	585.6	597.8
67.5°	372.9	417.4	488.4	528.9	539.0
70°	324.2	364.7	435.7	466.1	470.1
72.5°	263.4	314.1	383.0	399.2	389.1
75°	212.8	263.4	322.2	316.1	304.0
77.5°	162.1	212.8	251.3	231.0	214.8
80°	115.5	166.2	174.3	143.9	135.8
82.5°	75.0	115.5	97.3	75.0	60.8
85°	38.5	54.7	30.4	24.3	20.3
87.5°	12.2	8.1	4.1	4.1	2.0
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)