

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: P308027

Luminaire Tested: **14FCZ2-44-UNV-L82765-S-CA125-W2A-U-4000K**

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: P308027
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-4000K
Description: 1'X4' TROFFER LED MODULE,SMOOTH LENS, 0.125" ACRYLIC SHEET
Light Source: (168) 4000K 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: 4177.0 lumens
Efficiency: N/A
Efficacy: 107.9 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

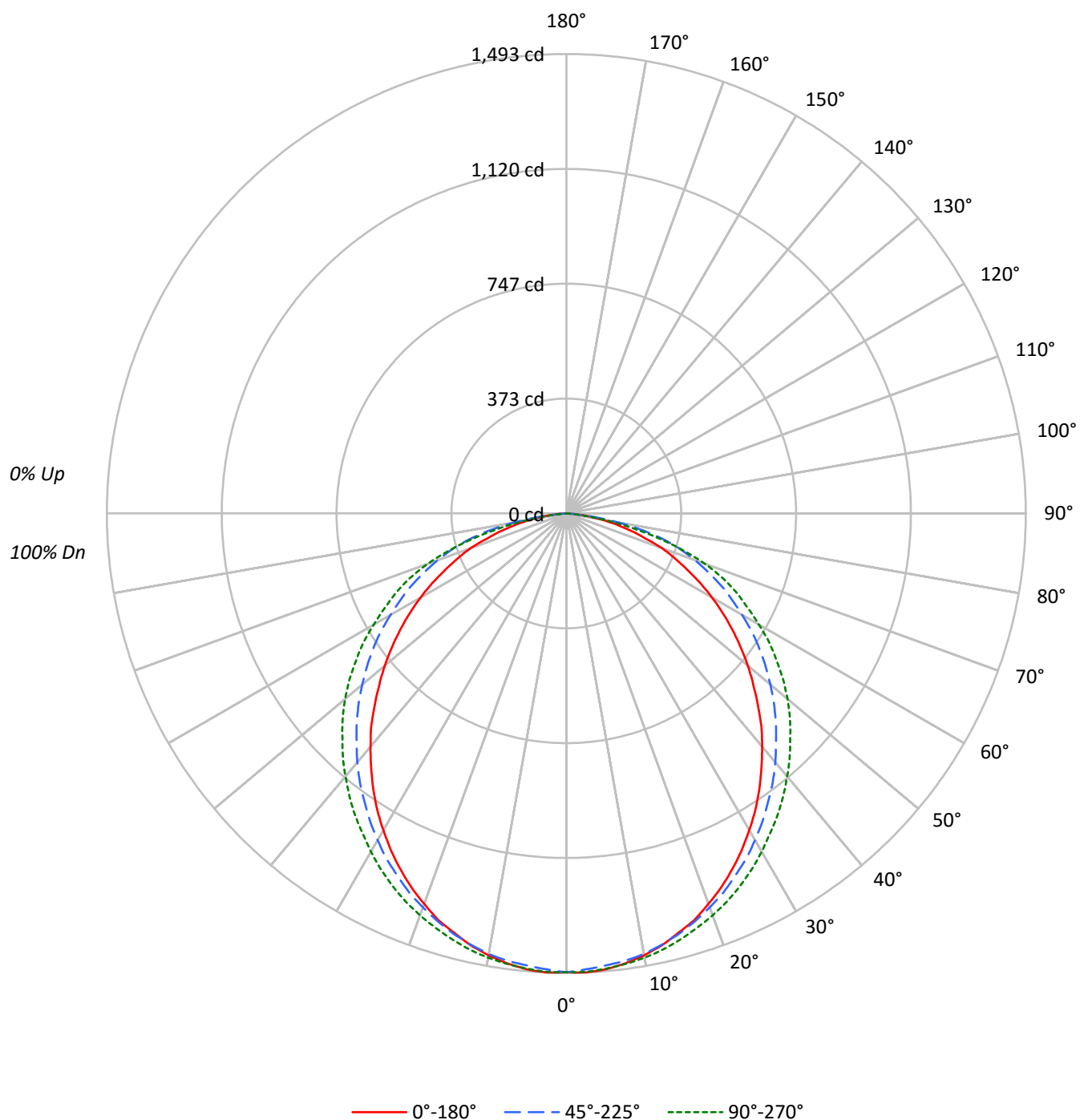
Input Watts (W): 38.7
Input Voltage (V): NR
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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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°	4013	4013	4013
5°	4017	3983	4011
10°	3984	3972	4007
15°	3929	3941	3992
20°	3867	3902	3979
25°	3788	3855	3966
30°	3694	3810	3945
35°	3592	3756	3932
40°	3477	3710	3921
45°	3350	3665	3917
50°	3225	3624	3928
55°	3090	3595	3916
60°	2942	3545	3890
65°	2769	3534	3890
70°	2607	3504	3781
75°	2261	3424	3229
80°	1829	2760	2151
85°	1213	960	639



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	140.8	3.4
10°-20°	400.7	9.6
20°-30°	601.0	14.4
30°-40°	717.0	17.2
40°-50°	741.2	17.7
50°-60°	676.7	16.2
60°-70°	532.5	12.7
70°-80°	310.0	7.4
80°-90°	57.1	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°	1142.5	27.4
0°-40°	1859.5	44.5
0°-60°	3277.4	78.5
0°-90°	4177.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	4177.0	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	1491	1491	1491	1491	1491	
5°	1487	1483	1475	1487	1485	141
15°	1410	1412	1414	1433	1433	398
25°	1276	1282	1298	1330	1336	587
35°	1094	1108	1143	1187	1197	684
45°	880	909	963	1017	1029	680
55°	659	694	766	822	835	589
65°	435	480	555	598	611	432
75°	218	269	329	323	311	231
85°	39	56	31	25	21	51
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	1491.1	1491.1	1491.1	1491.1	1491.1
2.5°	1493.2	1489.0	1482.8	1493.2	1491.1
5°	1487.0	1482.8	1474.6	1487.0	1484.9
7.5°	1474.6	1470.4	1466.3	1478.7	1476.6
10°	1458.0	1455.9	1453.8	1468.3	1466.3
12.5°	1437.3	1437.3	1435.2	1451.8	1451.8
15°	1410.4	1412.4	1414.5	1433.1	1433.1
17.5°	1385.5	1383.4	1389.6	1410.4	1412.4
20°	1350.3	1354.4	1362.7	1387.6	1389.6
22.5°	1315.1	1319.2	1333.7	1358.6	1364.8
25°	1275.7	1281.9	1298.5	1329.6	1335.8
27.5°	1234.3	1242.6	1265.4	1298.5	1304.7
30°	1188.8	1201.2	1226.0	1263.3	1269.5
32.5°	1143.2	1155.6	1186.7	1224.0	1232.2
35°	1093.5	1108.0	1143.2	1186.7	1197.0
37.5°	1041.7	1060.4	1101.8	1145.3	1157.7
40°	989.9	1010.6	1056.2	1101.8	1116.3
42.5°	938.2	958.9	1008.6	1060.4	1074.8
45°	880.2	909.2	963.0	1016.9	1029.3
47.5°	824.3	855.3	915.4	969.2	985.8
50°	770.4	801.5	865.7	921.6	938.2
52.5°	714.5	747.6	816.0	874.0	888.5
55°	658.6	693.8	766.3	822.2	834.6
57.5°	602.7	639.9	714.5	768.3	782.8
60°	546.7	586.1	658.6	712.4	722.8
62.5°	490.8	532.2	606.8	654.4	664.8
65°	434.9	480.5	555.0	598.5	610.9
67.5°	381.1	426.6	499.1	540.5	550.9
70°	331.4	372.8	445.3	476.3	480.5
72.5°	269.2	321.0	391.4	408.0	397.6
75°	217.5	269.2	329.3	323.1	310.6
77.5°	165.7	217.5	256.8	236.1	219.5
80°	118.0	169.8	178.1	147.0	138.8
82.5°	76.6	118.0	99.4	76.6	62.1
85°	39.3	55.9	31.1	24.9	20.7
87.5°	12.4	8.3	4.1	4.1	2.1
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)