

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: P307766

Luminaire Tested: **14FCZ2-44-UNV-L82765-CP125-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: P307766
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-CP125-W2A-U-4000K
Description: 1'X4' TROFFER LED MODULE,RIBBED LENS, 0.125" POLYCARB 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: 4053.0 lumens
Efficiency: N/A
Efficacy: 104.7 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

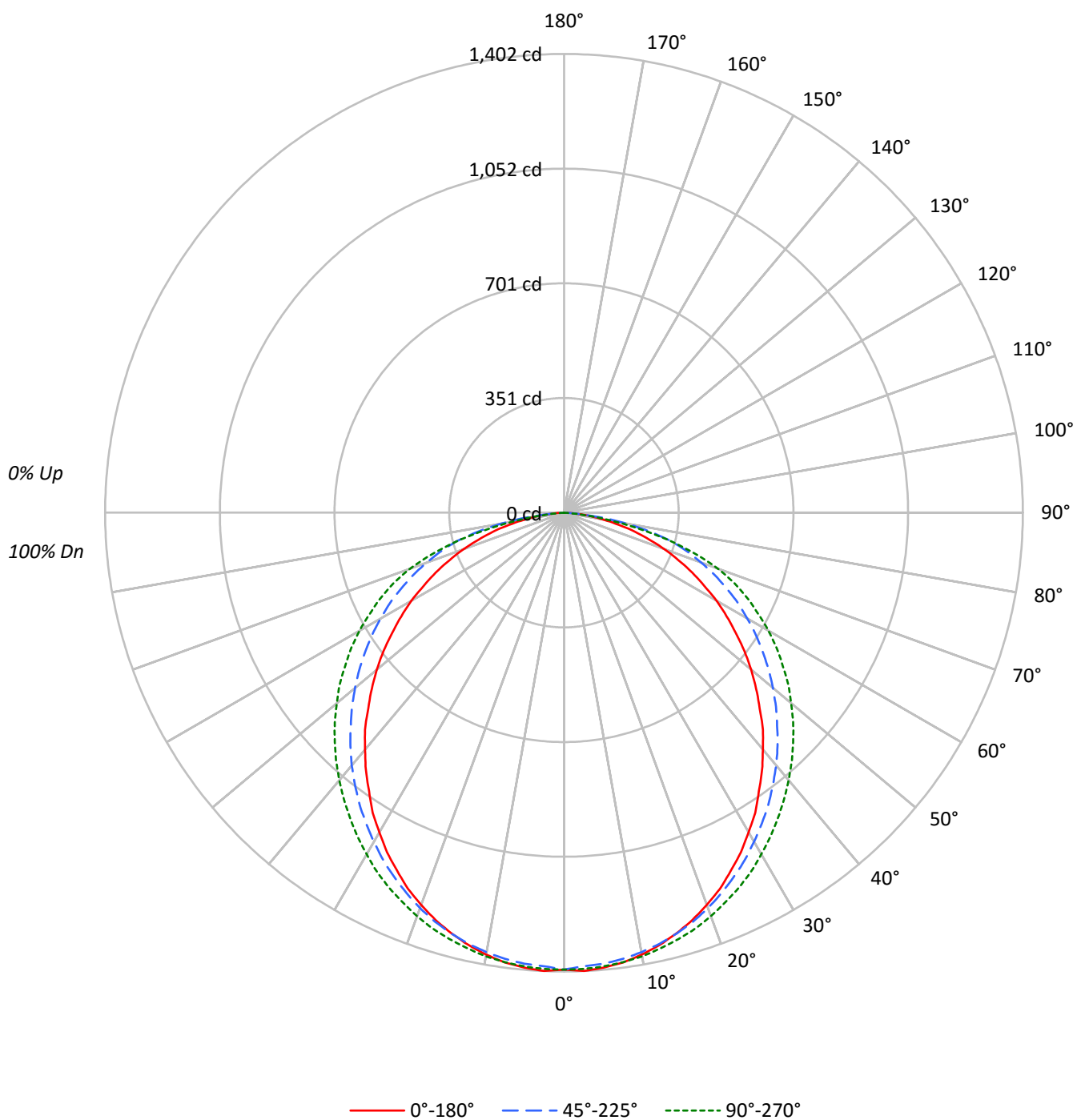
Input Watts (W): 38.7
Input Voltage (V): NR
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	3757	3757	3757
5°	3769	3737	3760
10°	3746	3726	3761
15°	3706	3709	3759
20°	3652	3683	3758
25°	3582	3647	3754
30°	3505	3608	3746
35°	3411	3577	3744
40°	3321	3543	3749
45°	3219	3505	3769
50°	3125	3488	3795
55°	3006	3477	3829
60°	2899	3483	3881
65°	2751	3493	3942
70°	2581	3519	3939
75°	2339	3552	3561
80°	1918	3067	2535
85°	1423	1451	587



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	132.1	3.3
10°-20°	377.4	9.3
20°-30°	568.6	14.0
30°-40°	682.3	16.8
40°-50°	711.1	17.5
50°-60°	658.3	16.2
60°-70°	531.9	13.1
70°-80°	324.3	8.0
80°-90°	66.9	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°	1078.1	26.6
0°-40°	1760.4	43.4
0°-60°	3129.8	77.2
0°-90°	4053.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	4053.0	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	1396	1396	1396	1396	1396	
5°	1395	1392	1384	1394	1392	132
15°	1330	1331	1331	1349	1349	375
25°	1206	1214	1228	1259	1264	556
35°	1038	1055	1089	1129	1140	650
45°	846	871	921	972	990	654
55°	641	674	741	799	816	574
65°	432	474	549	604	619	427
75°	225	275	342	347	342	236
85°	46	69	47	26	19	57
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	1396.3	1396.3	1396.3	1396.3	1396.3
2.5°	1401.7	1397.2	1387.2	1397.2	1395.4
5°	1395.4	1391.8	1383.6	1393.6	1391.8
7.5°	1386.3	1382.7	1375.5	1387.2	1385.4
10°	1371.0	1369.2	1363.7	1377.3	1376.4
12.5°	1352.9	1352.0	1349.3	1364.6	1363.7
15°	1330.3	1331.2	1331.2	1349.3	1349.3
17.5°	1305.0	1306.8	1310.4	1330.3	1333.0
20°	1275.2	1278.8	1286.0	1308.6	1312.2
22.5°	1244.4	1247.2	1258.0	1285.1	1288.7
25°	1206.5	1213.7	1228.2	1258.9	1264.3
27.5°	1170.3	1176.7	1196.5	1228.2	1237.2
30°	1127.9	1137.8	1161.3	1195.6	1205.6
32.5°	1087.2	1098.0	1125.2	1164.9	1174.0
35°	1038.4	1054.7	1089.0	1128.8	1139.6
37.5°	994.1	1009.5	1048.3	1091.7	1104.4
40°	945.3	964.3	1008.6	1054.7	1067.3
42.5°	900.1	918.2	966.1	1013.1	1030.3
45°	845.9	871.2	920.9	972.4	990.5
47.5°	796.2	821.5	878.4	933.6	949.8
50°	746.5	773.6	833.2	890.2	906.4
52.5°	695.0	723.9	788.1	845.0	864.0
55°	640.7	674.2	741.1	798.9	816.1
57.5°	589.2	623.6	695.0	753.7	770.9
60°	538.6	573.9	647.1	703.1	721.2
62.5°	482.6	524.2	600.1	655.2	668.8
65°	432.0	474.5	548.6	603.7	619.1
67.5°	378.7	424.8	498.9	549.5	563.9
70°	328.1	376.0	447.3	494.3	500.7
72.5°	273.8	322.6	394.9	424.8	424.8
75°	225.0	274.7	341.6	347.0	342.5
77.5°	171.7	226.8	270.2	259.4	248.5
80°	123.8	178.0	197.9	178.0	163.6
82.5°	83.1	129.2	119.3	94.9	84.0
85°	46.1	68.7	47.0	26.2	19.0
87.5°	17.2	15.4	4.5	4.5	4.5
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)