

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: P312274

Luminaire Tested: **14FCZ2-44-UNV-L83050-CA125-W2A-U-5000K**

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: P312274
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-L83050-CA125-W2A-U-5000K
Description: 1'X4' TROFFER LED MODULE,RIBBED LENS, 0.125" ACRYLIC SHEET
Light Source: (168) 5000K 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: 4389.0 lumens
Efficiency: N/A
Efficacy: 109.2 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

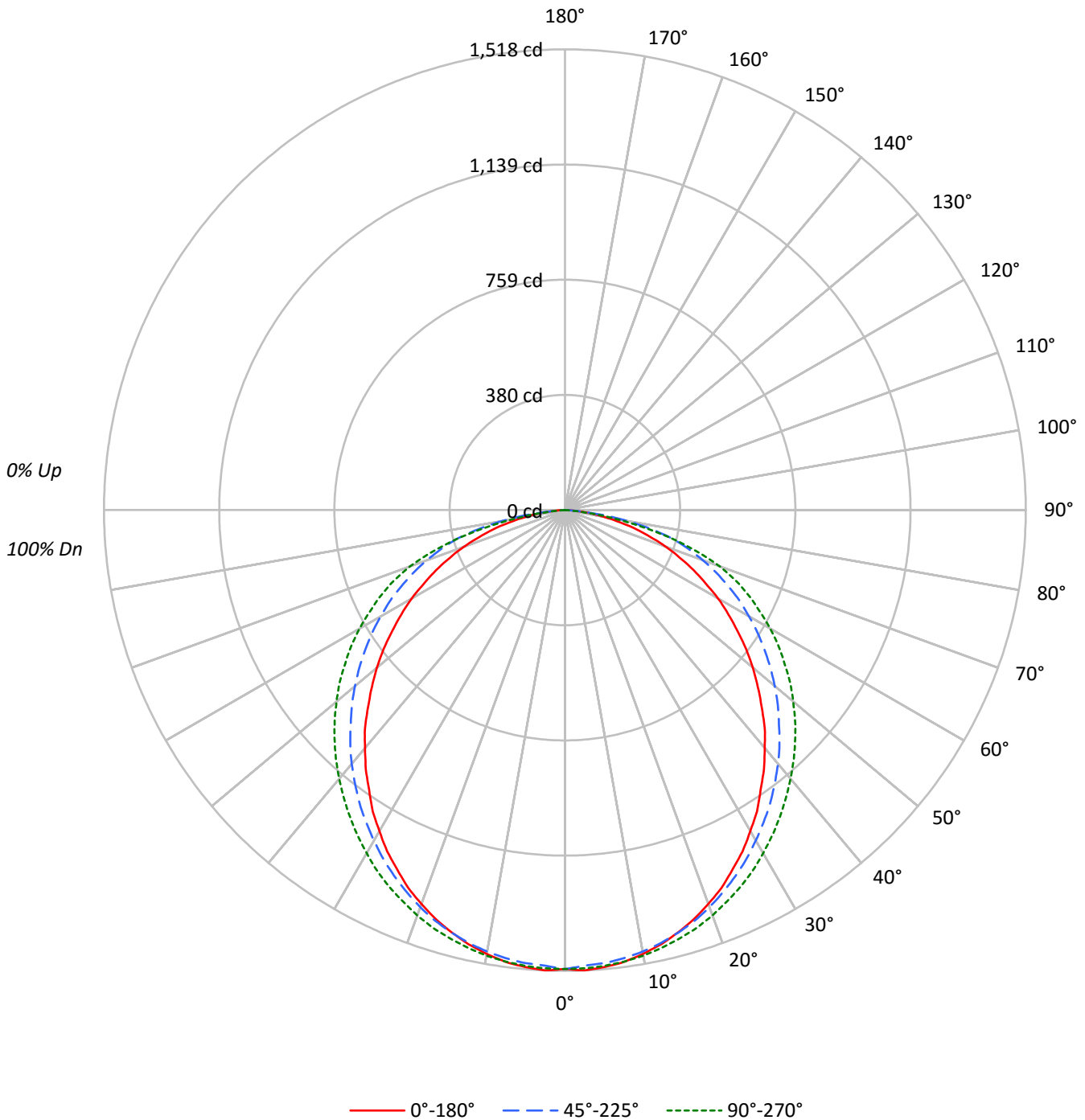
Input Watts (W): 40.2
Input Voltage (V): NR
Input Current (A_{in}): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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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				10	0
RW	70	50	30	10	70	50	30	10	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	102	102	102	100
1	109	104	99	95	106	101	97	94	97	94	91	93	90	88	90	87	85	83
2	98	90	83	77	96	88	82	76	84	79	74	81	77	73	78	74	71	69
3	89	79	70	64	87	77	69	63	74	67	62	71	66	61	69	64	60	58
4	82	70	61	54	79	68	60	53	66	58	53	63	57	52	61	56	51	49
5	75	62	53	46	73	61	52	46	59	51	45	57	50	45	55	49	44	42
6	69	56	47	40	67	55	46	40	53	45	40	51	44	39	50	44	39	37
7	64	51	42	35	63	50	41	35	48	41	35	47	40	35	45	39	34	32
8	60	46	37	32	58	45	37	31	44	37	31	43	36	31	42	35	31	29
9	56	42	34	28	54	42	34	28	41	33	28	39	33	28	38	32	28	26
10	52	39	31	26	51	39	31	26	37	30	26	37	30	25	36	30	25	24

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	4069	4069	4069
5°	4082	4047	4071
10°	4057	4035	4073
15°	4013	4016	4070
20°	3954	3988	4069
25°	3879	3949	4065
30°	3795	3908	4057
35°	3694	3874	4054
40°	3596	3837	4060
45°	3486	3795	4082
50°	3384	3777	4109
55°	3255	3765	4146
60°	3139	3771	4203
65°	2979	3782	4269
70°	2795	3811	4266
75°	2534	3846	3856
80°	2078	3321	2744
85°	1541	1572	636



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	143.1	3.3
10°-20°	408.7	9.3
20°-30°	615.7	14.0
30°-40°	738.8	16.8
40°-50°	770.1	17.5
50°-60°	712.9	16.2
60°-70°	576.0	13.1
70°-80°	351.2	8.0
80°-90°	72.5	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°	1167.5	26.6
0°-40°	1906.3	43.4
0°-60°	3389.3	77.2
0°-90°	4389.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	4389.0	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	1512	1512	1512	1512	1512	
5°	1511	1507	1498	1509	1507	143
15°	1441	1442	1442	1461	1461	406
25°	1306	1314	1330	1363	1369	602
35°	1124	1142	1179	1222	1234	704
45°	916	943	997	1053	1073	708
55°	694	730	802	865	884	622
65°	468	514	594	654	670	463
75°	244	298	370	376	371	256
85°	50	74	51	28	21	61
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	1512.0	1512.0	1512.0	1512.0	1512.0
2.5°	1517.9	1513.0	1502.2	1513.0	1511.0
5°	1511.0	1507.1	1498.3	1509.1	1507.1
7.5°	1501.3	1497.3	1489.5	1502.2	1500.3
10°	1484.6	1482.7	1476.8	1491.5	1490.5
12.5°	1465.0	1464.1	1461.1	1477.8	1476.8
15°	1440.6	1441.6	1441.6	1461.1	1461.1
17.5°	1413.2	1415.1	1419.1	1440.6	1443.5
20°	1380.9	1384.8	1392.6	1417.1	1421.0
22.5°	1347.6	1350.5	1362.3	1391.7	1395.6
25°	1306.5	1314.3	1330.0	1363.3	1369.1
27.5°	1267.4	1274.2	1295.7	1330.0	1339.8
30°	1221.4	1232.1	1257.6	1294.8	1305.5
32.5°	1177.3	1189.1	1218.4	1261.5	1271.3
35°	1124.5	1142.1	1179.3	1222.3	1234.1
37.5°	1076.5	1093.2	1135.2	1182.2	1195.9
40°	1023.7	1044.2	1092.2	1142.1	1155.8
42.5°	974.7	994.3	1046.2	1097.1	1115.7
45°	916.0	943.4	997.3	1053.0	1072.6
47.5°	862.2	889.6	951.3	1011.0	1028.6
50°	808.4	837.7	902.3	964.0	981.6
52.5°	752.6	783.9	853.4	915.0	935.6
55°	693.9	730.1	802.5	865.1	883.7
57.5°	638.1	675.3	752.6	816.2	834.8
60°	583.3	621.4	700.7	761.4	781.0
62.5°	522.6	567.6	649.8	709.5	724.2
65°	467.8	513.8	594.0	653.7	670.4
67.5°	410.1	460.0	540.2	595.0	610.7
70°	355.3	407.1	484.4	535.3	542.2
72.5°	296.5	349.4	427.7	460.0	460.0
75°	243.7	297.5	369.9	375.8	370.9
77.5°	185.9	245.6	292.6	280.9	269.1
80°	134.1	192.8	214.3	192.8	177.1
82.5°	90.0	139.9	129.2	102.8	91.0
85°	49.9	74.4	50.9	28.4	20.6
87.5°	18.6	16.6	4.9	4.9	4.9
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)