

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: P312269

Luminaire Tested: **14FCZ2-44-UNV-L83050-CA08-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: P312269
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-CA08-W2A-U-5000K
Description: 1'X4' TROFFER LED MODULE,RIBBED LENS, 0.08" 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: 4405.0 lumens
Efficiency: N/A
Efficacy: 109.6 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

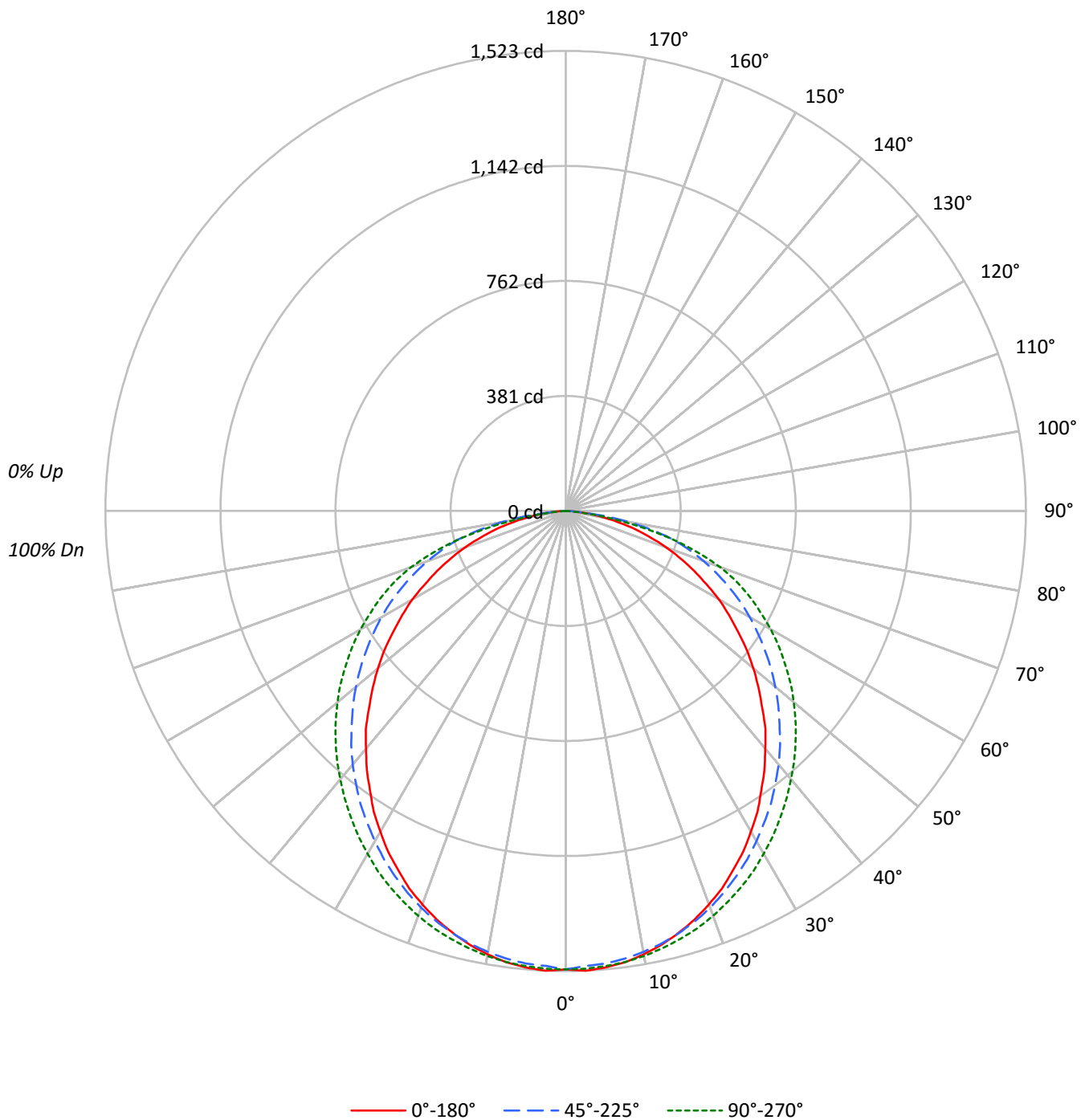
Input Watts (W): 40.2
Input Voltage (V): NR
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



TEST NUMBER: P312269

CATALOG NUMBER: 14FCZ2-44-UNV-L83050-CA08-W2A-U-5000K

Luminous Intensity Polar Plot





TEST NUMBER: P312269

CATALOG NUMBER: 14FCZ2-44-UNV-L83050-CA08-W2A-U-5000K

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°	4084	4084	4084
5°	4097	4062	4086
10°	4071	4050	4088
15°	4028	4031	4086
20°	3969	4003	4084
25°	3893	3963	4080
30°	3809	3922	4071
35°	3708	3888	4069
40°	3609	3851	4075
45°	3499	3809	4097
50°	3396	3791	4124
55°	3267	3779	4161
60°	3151	3785	4218
65°	2989	3796	4284
70°	2805	3825	4282
75°	2543	3860	3871
80°	2086	3333	2755
85°	1547	1578	636



TEST NUMBER: P312269

CATALOG NUMBER: 14FCZ2-44-UNV-L83050-CA08-W2A-U-5000K

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	143.6	3.3
10°-20°	410.2	9.3
20°-30°	617.9	14.0
30°-40°	741.5	16.8
40°-50°	772.9	17.5
50°-60°	715.5	16.2
60°-70°	578.1	13.1
70°-80°	352.5	8.0
80°-90°	72.8	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°	1171.7	26.6
0°-40°	1913.3	43.4
0°-60°	3401.6	77.2
0°-90°	4405.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	4405.0	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	1518	1518	1518	1518	1518	
5°	1517	1513	1504	1515	1513	144
15°	1446	1447	1447	1466	1466	408
25°	1311	1319	1335	1368	1374	604
35°	1129	1146	1184	1227	1239	707
45°	919	947	1001	1057	1076	711
55°	696	733	805	868	887	624
65°	470	516	596	656	673	464
75°	245	299	371	377	372	257
85°	50	75	51	28	21	62
90°	0	0	0	0	0	



TEST NUMBER: P312269

CATALOG NUMBER: 14FCZ2-44-UNV-L83050-CA08-W2A-U-5000K

CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	1517.5	1517.5	1517.5	1517.5	1517.5
2.5°	1523.4	1518.5	1507.7	1518.5	1516.6
5°	1516.6	1512.6	1503.8	1514.6	1512.6
7.5°	1506.7	1502.8	1494.9	1507.7	1505.8
10°	1490.0	1488.1	1482.2	1496.9	1495.9
12.5°	1470.4	1469.4	1466.5	1483.2	1482.2
15°	1445.8	1446.8	1446.8	1466.5	1466.5
17.5°	1418.3	1420.3	1424.2	1445.8	1448.8
20°	1385.9	1389.8	1397.7	1422.3	1426.2
22.5°	1352.5	1355.5	1367.3	1396.7	1400.7
25°	1311.3	1319.1	1334.8	1368.2	1374.1
27.5°	1272.0	1278.9	1300.5	1334.8	1344.7
30°	1225.8	1236.6	1262.2	1299.5	1310.3
32.5°	1181.6	1193.4	1222.9	1266.1	1275.9
35°	1128.6	1146.3	1183.6	1226.8	1238.6
37.5°	1080.4	1097.1	1139.4	1186.5	1200.3
40°	1027.4	1048.0	1096.2	1146.3	1160.0
42.5°	978.3	997.9	1050.0	1101.1	1119.7
45°	919.4	946.9	1000.9	1056.9	1076.5
47.5°	865.3	892.8	954.7	1014.6	1032.3
50°	811.3	840.8	905.6	967.5	985.2
52.5°	755.3	786.8	856.5	918.4	939.0
55°	696.4	732.7	805.4	868.3	886.9
57.5°	640.4	677.7	755.3	819.2	837.8
60°	585.4	623.7	703.3	764.2	783.8
62.5°	524.5	569.7	652.2	712.1	726.8
65°	469.5	515.7	596.2	656.1	672.8
67.5°	411.6	461.6	542.2	597.2	612.9
70°	356.5	408.6	486.2	537.3	544.2
72.5°	297.6	350.7	429.2	461.6	461.6
75°	244.6	298.6	371.3	377.2	372.3
77.5°	186.6	246.5	293.7	281.9	270.1
80°	134.6	193.5	215.1	193.5	177.8
82.5°	90.4	140.5	129.7	103.1	91.3
85°	50.1	74.6	51.1	28.5	20.6
87.5°	18.7	16.7	4.9	4.9	4.9
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)