

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: P307746

Luminaire Tested: **14FCZ2-44-UNV-L82765-CA08-W2A-U-3000K**

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: P307746
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-CA08-W2A-U-3000K
Description: 1'X4' TROFFER LED MODULE,RIBBED LENS, 0.08" ACRYLIC SHEET
Light Source: (168) 3000K 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: 3923.0 lumens
Efficiency: N/A
Efficacy: 103.2 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

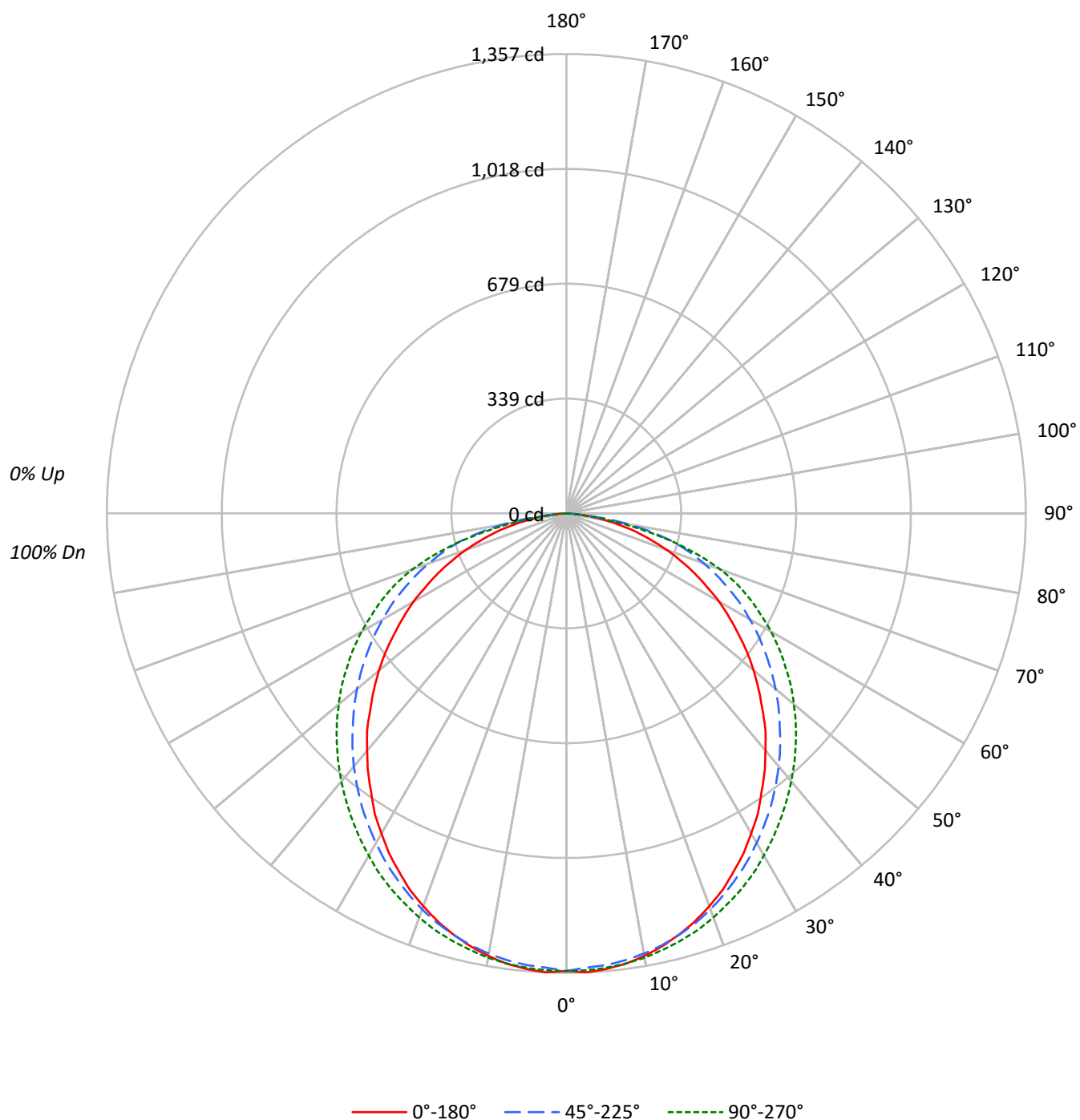
Input Watts (W): 38
Input Voltage (V): NR
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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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°	3637	3637	3637
5°	3648	3618	3639
10°	3626	3607	3640
15°	3587	3590	3638
20°	3535	3565	3637
25°	3467	3530	3634
30°	3392	3493	3626
35°	3302	3463	3624
40°	3214	3429	3629
45°	3116	3392	3648
50°	3025	3376	3673
55°	2910	3365	3706
60°	2806	3371	3757
65°	2662	3381	3815
70°	2498	3407	3813
75°	2264	3438	3447
80°	1857	2969	2453
85°	1377	1405	568



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	127.9	3.3
10°-20°	365.3	9.3
20°-30°	550.3	14.0
30°-40°	660.4	16.8
40°-50°	688.3	17.5
50°-60°	637.2	16.2
60°-70°	514.8	13.1
70°-80°	313.9	8.0
80°-90°	64.8	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°	1043.5	26.6
0°-40°	1703.9	43.4
0°-60°	3029.4	77.2
0°-90°	3923.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	3923.0	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	1352	1352	1352	1352	1352	
5°	1351	1347	1339	1349	1347	128
15°	1288	1288	1288	1306	1306	363
25°	1168	1175	1189	1218	1224	538
35°	1005	1021	1054	1093	1103	630
45°	819	843	891	941	959	633
55°	620	653	717	773	790	556
65°	418	459	531	584	599	413
75°	218	266	331	336	332	229
85°	45	66	46	25	18	55
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	1351.5	1351.5	1351.5	1351.5	1351.5
2.5°	1356.7	1352.4	1342.7	1352.4	1350.6
5°	1350.6	1347.1	1339.2	1348.9	1347.1
7.5°	1341.9	1338.4	1331.4	1342.7	1341.0
10°	1327.0	1325.2	1320.0	1333.1	1332.2
12.5°	1309.5	1308.6	1306.0	1320.9	1320.0
15°	1287.6	1288.5	1288.5	1306.0	1306.0
17.5°	1263.1	1264.9	1268.4	1287.6	1290.3
20°	1234.3	1237.8	1244.8	1266.6	1270.1
22.5°	1204.5	1207.2	1217.6	1243.9	1247.4
25°	1167.8	1174.8	1188.8	1218.5	1223.8
27.5°	1132.8	1138.9	1158.2	1188.8	1197.5
30°	1091.7	1101.3	1124.1	1157.3	1166.9
32.5°	1052.3	1062.8	1089.1	1127.6	1136.3
35°	1005.1	1020.8	1054.1	1092.6	1103.1
37.5°	962.2	977.1	1014.7	1056.7	1068.9
40°	915.0	933.4	976.2	1020.8	1033.1
42.5°	871.2	888.7	935.1	980.6	997.2
45°	818.8	843.3	891.4	941.2	958.7
47.5°	770.7	795.1	850.3	903.6	919.4
50°	722.5	748.8	806.5	861.6	877.4
52.5°	672.7	700.7	762.8	817.9	836.3
55°	620.2	652.6	717.3	773.3	789.9
57.5°	570.3	603.6	672.7	729.5	746.2
60°	521.4	555.5	626.3	680.6	698.0
62.5°	467.1	507.4	580.8	634.2	647.3
65°	418.1	459.2	531.0	584.3	599.2
67.5°	366.5	411.1	482.9	531.8	545.8
70°	317.5	363.9	433.0	478.5	484.6
72.5°	265.0	312.3	382.3	411.1	411.1
75°	217.8	265.9	330.7	335.9	331.5
77.5°	166.2	219.6	261.5	251.1	240.6
80°	119.8	172.3	191.6	172.3	158.3
82.5°	80.5	125.1	115.5	91.8	81.4
85°	44.6	66.5	45.5	25.4	18.4
87.5°	16.6	14.9	4.4	4.4	4.4
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)