

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: P307703

Luminaire Tested: **14FCZ2-39-UNV-L82765-CA08-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: P307703
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: 14FCZ2-39-UNV-L82765-CA08-W2A-U-4000K
Description: 1'X4' TROFFER LED MODULE, RIBBED LENS, 0.08" 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: 3711.0 lumens
Efficiency: N/A
Efficacy: 110.1 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

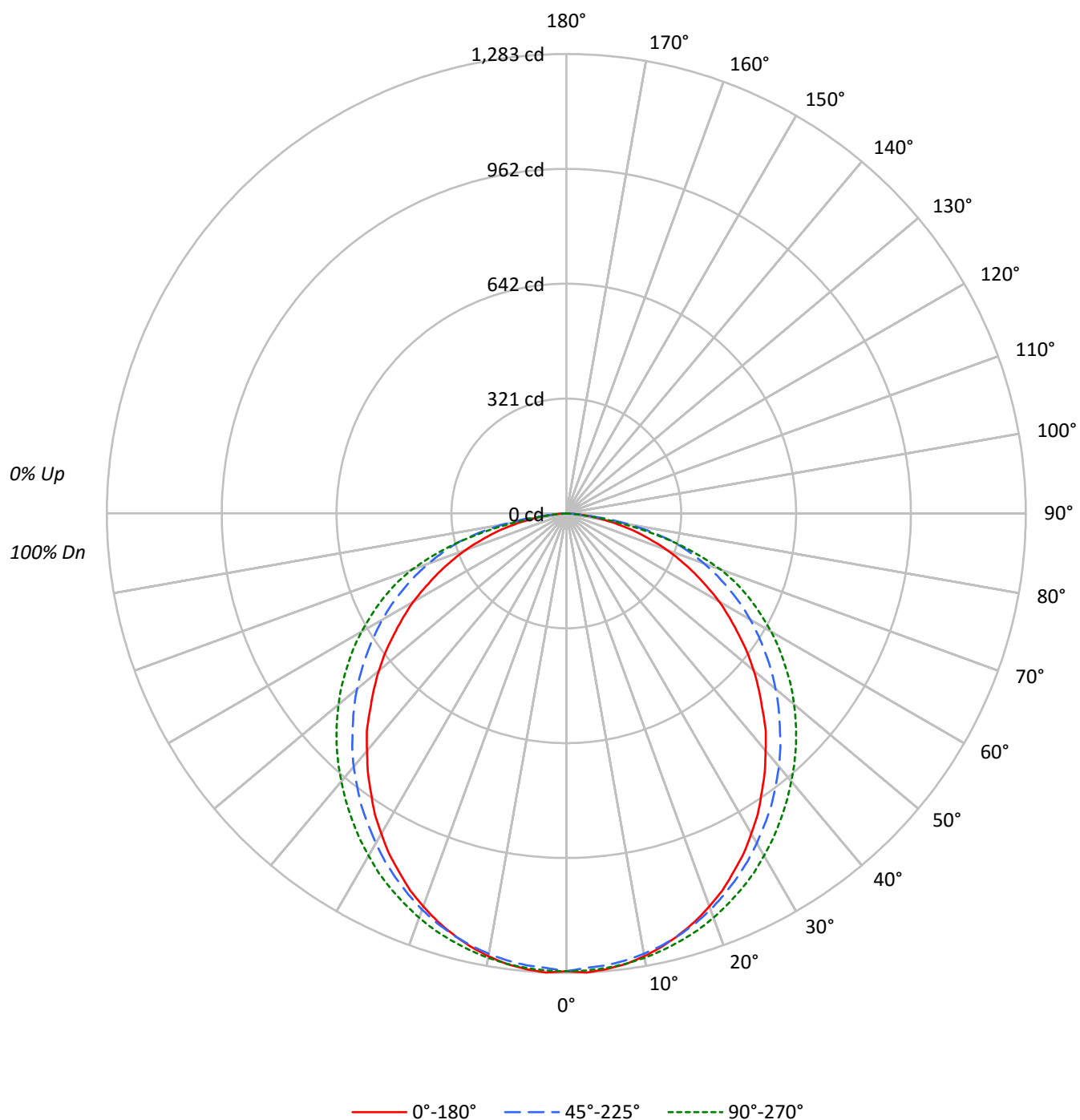
Input Watts (W): 33.7
Input Voltage (V): NR
Input Current (A_{in}): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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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				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°	3440	3440	3440
5°	3451	3422	3442
10°	3430	3412	3443
15°	3393	3396	3442
20°	3344	3372	3441
25°	3280	3339	3437
30°	3209	3304	3430
35°	3123	3276	3428
40°	3040	3244	3433
45°	2947	3209	3451
50°	2861	3194	3475
55°	2753	3183	3506
60°	2654	3189	3554
65°	2518	3198	3609
70°	2364	3223	3607
75°	2142	3252	3261
80°	1757	2808	2321
85°	1303	1328	537



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	121.0	3.3
10°-20°	345.6	9.3
20°-30°	520.6	14.0
30°-40°	624.7	16.8
40°-50°	651.1	17.5
50°-60°	602.8	16.2
60°-70°	487.0	13.1
70°-80°	296.9	8.0
80°-90°	61.3	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°	987.1	26.6
0°-40°	1611.8	43.4
0°-60°	2865.7	77.2
0°-90°	3711.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	3711.0	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	1278	1278	1278	1278	1278	
5°	1278	1274	1267	1276	1274	121
15°	1218	1219	1219	1235	1235	343
25°	1105	1111	1124	1153	1158	509
35°	951	966	997	1034	1043	596
45°	774	798	843	890	907	599
55°	587	617	678	732	747	526
65°	396	434	502	553	567	391
75°	206	252	313	318	314	216
85°	42	63	43	24	17	52
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	1278.5	1278.5	1278.5	1278.5	1278.5
2.5°	1283.4	1279.3	1270.2	1279.3	1277.6
5°	1277.6	1274.3	1266.9	1276.0	1274.3
7.5°	1269.3	1266.0	1259.4	1270.2	1268.5
10°	1255.3	1253.6	1248.7	1261.1	1260.2
12.5°	1238.7	1237.9	1235.4	1249.5	1248.7
15°	1218.0	1218.9	1218.9	1235.4	1235.4
17.5°	1194.9	1196.5	1199.8	1218.0	1220.5
20°	1167.6	1170.9	1177.5	1198.2	1201.5
22.5°	1139.4	1141.9	1151.8	1176.7	1180.0
25°	1104.7	1111.3	1124.5	1152.7	1157.6
27.5°	1071.6	1077.4	1095.6	1124.5	1132.8
30°	1032.7	1041.8	1063.3	1094.8	1103.9
32.5°	995.5	1005.4	1030.2	1066.6	1074.9
35°	950.8	965.7	997.1	1033.5	1043.4
37.5°	910.2	924.3	959.9	999.6	1011.2
40°	865.5	882.9	923.5	965.7	977.3
42.5°	824.2	840.7	884.6	927.6	943.3
45°	774.5	797.7	843.2	890.4	906.9
47.5°	729.0	752.2	804.3	854.8	869.7
50°	683.5	708.3	762.9	815.1	830.0
52.5°	636.3	662.8	721.6	773.7	791.1
55°	586.7	617.3	678.5	731.5	747.2
57.5°	539.5	571.0	636.3	690.1	705.8
60°	493.2	525.4	592.5	643.8	660.3
62.5°	441.9	479.9	549.4	599.9	612.3
65°	395.5	434.4	502.3	552.8	566.8
67.5°	346.7	388.9	456.8	503.1	516.3
70°	300.4	344.2	409.6	452.6	458.4
72.5°	250.7	295.4	361.6	388.9	388.9
75°	206.0	251.6	312.8	317.8	313.6
77.5°	157.2	207.7	247.4	237.5	227.6
80°	113.4	163.0	181.2	163.0	149.8
82.5°	76.1	118.3	109.2	86.9	77.0
85°	42.2	62.9	43.0	24.0	17.4
87.5°	15.7	14.1	4.1	4.1	4.1
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)