

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: P307706

Luminaire Tested: **14FCZ2-39-UNV-L82765-CA08-W2A-U-5500K**

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: P307706
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-5500K
Description: 1'X4' TROFFER LED MODULE,RIBBED LENS, 0.08" ACRYLIC SHEET
Light Source: (168) 5500K 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: 3865.0 lumens
Efficiency: N/A
Efficacy: 113.0 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

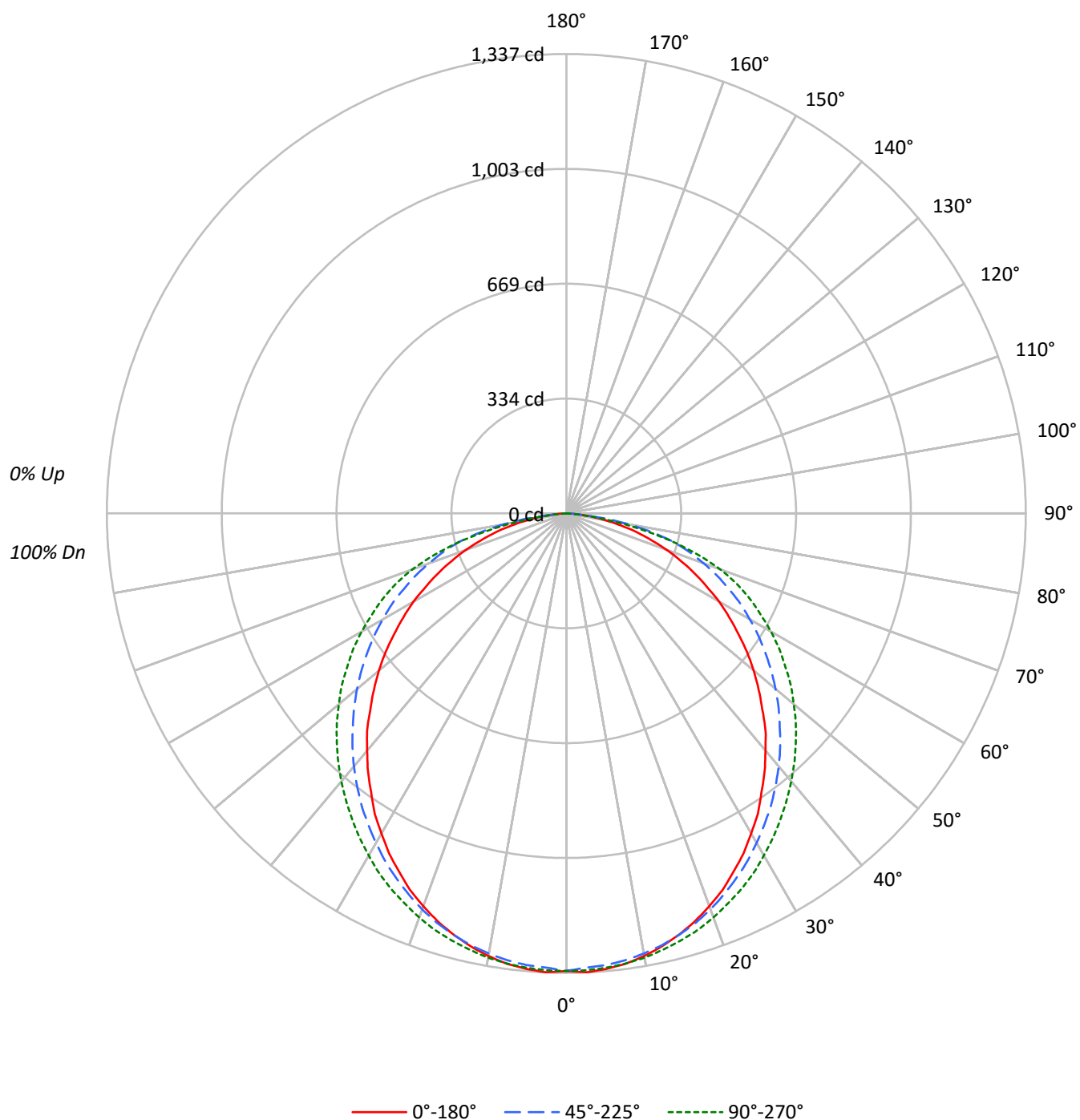
Input Watts (W): 34.2
Input Voltage (V): NR
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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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°	3583	3583	3583
5°	3594	3564	3585
10°	3572	3554	3586
15°	3534	3537	3585
20°	3482	3512	3584
25°	3416	3477	3580
30°	3342	3441	3572
35°	3253	3412	3570
40°	3167	3379	3575
45°	3070	3342	3594
50°	2980	3327	3619
55°	2867	3316	3651
60°	2764	3321	3701
65°	2623	3331	3759
70°	2461	3356	3756
75°	2231	3387	3396
80°	1830	2924	2417
85°	1359	1383	559



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	126.0	3.3
10°-20°	359.9	9.3
20°-30°	542.2	14.0
30°-40°	650.6	16.8
40°-50°	678.1	17.5
50°-60°	627.8	16.2
60°-70°	507.2	13.1
70°-80°	309.3	8.0
80°-90°	63.9	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°	1028.1	26.6
0°-40°	1678.7	43.4
0°-60°	2984.6	77.2
0°-90°	3865.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	3865.0	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	1332	1332	1332	1332	1332	
5°	1331	1327	1319	1329	1327	126
15°	1269	1270	1270	1287	1287	358
25°	1150	1157	1171	1200	1206	530
35°	990	1006	1038	1076	1087	620
45°	807	831	878	927	944	624
55°	611	643	707	762	778	547
65°	412	452	523	576	590	407
75°	215	262	326	331	327	225
85°	44	66	45	25	18	54
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	1331.5	1331.5	1331.5	1331.5	1331.5
2.5°	1336.7	1332.4	1322.9	1332.4	1330.6
5°	1330.6	1327.2	1319.4	1328.9	1327.2
7.5°	1322.0	1318.6	1311.7	1322.9	1321.2
10°	1307.4	1305.7	1300.5	1313.4	1312.5
12.5°	1290.1	1289.3	1286.7	1301.3	1300.5
15°	1268.6	1269.5	1269.5	1286.7	1286.7
17.5°	1244.5	1246.2	1249.6	1268.6	1271.2
20°	1216.0	1219.5	1226.4	1247.9	1251.4
22.5°	1186.7	1189.3	1199.6	1225.5	1228.9
25°	1150.5	1157.4	1171.2	1200.5	1205.7
27.5°	1116.1	1122.1	1141.0	1171.2	1179.8
30°	1075.5	1085.0	1107.4	1140.2	1149.7
32.5°	1036.8	1047.1	1073.0	1110.9	1119.5
35°	990.2	1005.7	1038.5	1076.4	1086.7
37.5°	948.0	962.6	999.7	1041.1	1053.1
40°	901.5	919.6	961.8	1005.7	1017.8
42.5°	858.4	875.6	921.3	966.1	982.5
45°	806.7	830.8	878.2	927.3	944.5
47.5°	759.3	783.4	837.7	890.3	905.8
50°	711.9	737.7	794.6	848.9	864.4
52.5°	662.7	690.3	751.5	805.8	823.9
55°	611.0	642.9	706.7	761.8	778.2
57.5°	561.9	594.7	662.7	718.8	735.1
60°	513.6	547.3	617.1	670.5	687.7
62.5°	460.2	499.9	572.2	624.8	637.7
65°	411.9	452.5	523.1	575.7	590.3
67.5°	361.1	405.1	475.7	524.0	537.8
70°	312.8	358.5	426.6	471.4	477.4
72.5°	261.1	307.7	376.6	405.1	405.1
75°	214.6	262.0	325.8	330.9	326.6
77.5°	163.7	216.3	257.7	247.3	237.0
80°	118.1	169.8	188.7	169.8	156.0
82.5°	79.3	123.2	113.8	90.5	80.1
85°	44.0	65.5	44.8	25.0	18.1
87.5°	16.4	14.7	4.3	4.3	4.3
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)