

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: P307972

Luminaire Tested: **14FCZ2-39-UNV-L82765-S-CA08-W2A-U-3500K**

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: P307972
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G3-1805-783-40)
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-S-CA08-W2A-U-3500K
Description: 1'X4' TROFFER LED MODULE,SMOOTH LENS, 0.08" ACRYLIC SHEET
Light Source: (168) 3500K 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: 3669.0 lumens
Efficiency: N/A
Efficacy: 109.5 lumens/watt
Spacing Criteria (0/90/45): 1.19 / 1.26 / 1.36
Luminous Opening: Rectangular (W 1' x L: 4' x H: 0')
CIE Type: Direct

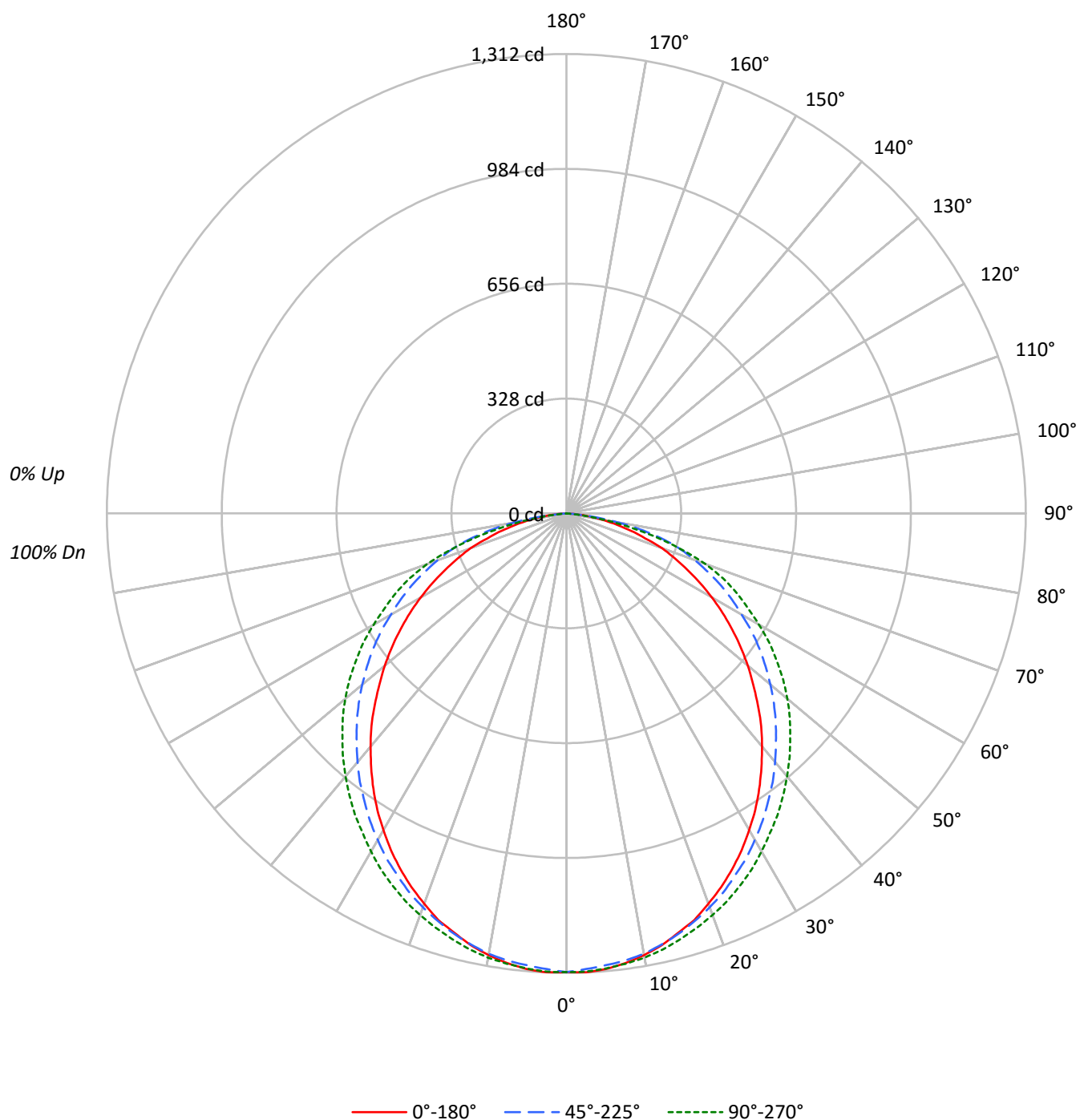
Input Watts (W): 33.5
Input Voltage (V): NR
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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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	100	96	106	102	98	94	97	94	91		94	91	89		84
2	99	90	84	78	96	89	82	77	85	80	75		82	77	73		70
3	90	79	71	65	87	78	70	64	75	68	63		72	66	62		58
4	82	70	61	55	80	69	61	54	66	59	53		64	58	53		50
5	76	63	54	47	74	62	53	47	59	52	46		57	51	46		43
6	70	56	47	41	68	55	47	41	54	46	40		52	45	40		38
7	65	51	42	36	63	50	42	36	49	41	36		47	41	35		33
8	60	47	38	32	59	46	38	32	45	37	32		43	37	32		30
9	56	43	35	29	55	42	34	29	41	34	29		40	33	29		27
10	53	40	32	26	52	39	31	26	38	31	26		37	31	26		24

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	3525	3525	3525
5°	3528	3499	3523
10°	3500	3489	3519
15°	3451	3461	3507
20°	3397	3428	3495
25°	3327	3387	3484
30°	3245	3346	3465
35°	3155	3299	3454
40°	3054	3259	3444
45°	2942	3219	3441
50°	2833	3183	3450
55°	2714	3158	3439
60°	2584	3113	3417
65°	2432	3104	3417
70°	2290	3077	3320
75°	1986	3007	2837
80°	1607	2424	1889
85°	1068	843	562



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	123.7	3.4
10°-20°	351.9	9.6
20°-30°	527.9	14.4
30°-40°	629.8	17.2
40°-50°	651.1	17.7
50°-60°	594.4	16.2
60°-70°	467.8	12.7
70°-80°	272.3	7.4
80°-90°	50.2	1.4
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°	1003.5	27.4
0°-40°	1633.3	44.5
0°-60°	2878.8	78.5
0°-90°	3669.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	3669.0	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	1310	1310	1310	1310	1310	
5°	1306	1302	1295	1306	1304	124
15°	1239	1241	1242	1259	1259	350
25°	1121	1126	1141	1168	1173	516
35°	960	973	1004	1042	1052	600
45°	773	799	846	893	904	597
55°	578	609	673	722	733	517
65°	382	422	488	526	537	379
75°	191	236	289	284	273	203
85°	35	49	27	22	18	45
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	1309.8	1309.8	1309.8	1309.8	1309.8
2.5°	1311.6	1308.0	1302.5	1311.6	1309.8
5°	1306.1	1302.5	1295.2	1306.1	1304.3
7.5°	1295.2	1291.6	1287.9	1298.9	1297.0
10°	1280.7	1278.8	1277.0	1289.8	1287.9
12.5°	1262.5	1262.5	1260.7	1275.2	1275.2
15°	1238.8	1240.6	1242.5	1258.8	1258.8
17.5°	1217.0	1215.2	1220.6	1238.8	1240.6
20°	1186.1	1189.7	1197.0	1218.8	1220.6
22.5°	1155.1	1158.8	1171.5	1193.3	1198.8
25°	1120.6	1126.0	1140.6	1167.9	1173.3
27.5°	1084.2	1091.5	1111.5	1140.6	1146.1
30°	1044.2	1055.1	1076.9	1109.7	1115.1
32.5°	1004.2	1015.1	1042.4	1075.1	1082.4
35°	960.5	973.2	1004.2	1042.4	1051.5
37.5°	915.0	931.4	967.8	1006.0	1016.9
40°	869.5	887.7	927.8	967.8	980.5
42.5°	824.1	842.3	885.9	931.4	944.1
45°	773.1	798.6	845.9	893.2	904.1
47.5°	724.0	751.3	804.1	851.4	865.9
50°	676.7	704.0	760.4	809.5	824.1
52.5°	627.6	656.7	716.7	767.7	780.4
55°	578.5	609.4	673.1	722.2	733.1
57.5°	529.4	562.1	627.6	674.9	687.6
60°	480.2	514.8	578.5	625.8	634.9
62.5°	431.1	467.5	533.0	574.8	583.9
65°	382.0	422.0	487.5	525.7	536.6
67.5°	334.7	374.7	438.4	474.8	483.9
70°	291.1	327.4	391.1	418.4	422.0
72.5°	236.5	282.0	343.8	358.4	349.3
75°	191.0	236.5	289.2	283.8	272.9
77.5°	145.5	191.0	225.6	207.4	192.8
80°	103.7	149.2	156.4	129.2	121.9
82.5°	67.3	103.7	87.3	67.3	54.6
85°	34.6	49.1	27.3	21.8	18.2
87.5°	10.9	7.3	3.6	3.6	1.8
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)