

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: P307740

Luminaire Tested: **14FCZ2-39-UNV-L82765-CP250-W2A-U-4500K**

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: P307740
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-CP250-W2A-U-4500K
Description: 1'X4' TROFFER LED MODULE,RIBBED LENS, 0.250" POLYCARB SHEET
Light Source: (168) 4500K 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: 3505.0 lumens
Efficiency: N/A
Efficacy: 103.4 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

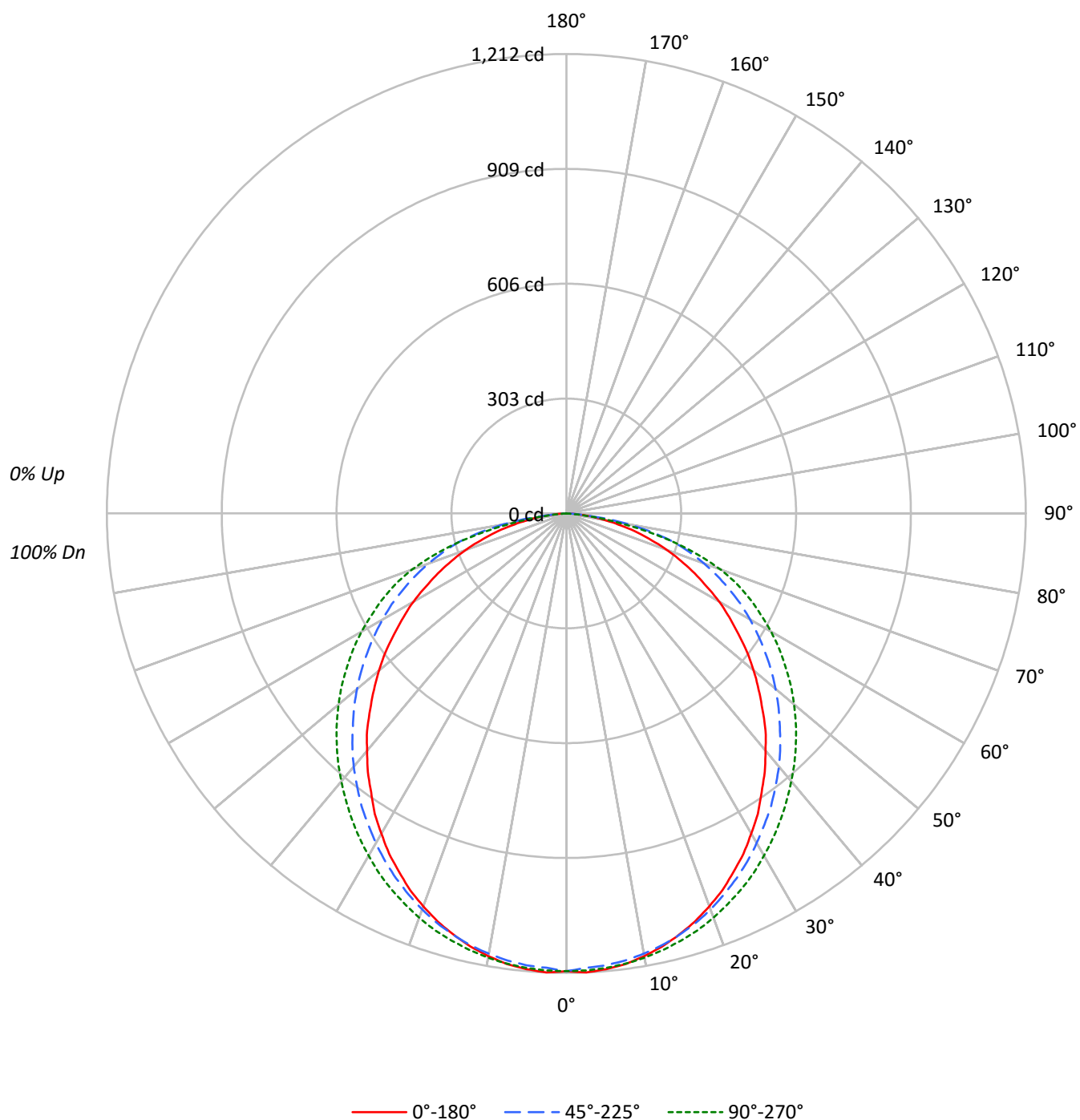
Input Watts (W): 33.9
Input Voltage (V): NR
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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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°	3249	3249	3249
5°	3260	3232	3251
10°	3240	3222	3252
15°	3205	3207	3251
20°	3158	3185	3250
25°	3098	3154	3246
30°	3031	3121	3240
35°	2950	3094	3237
40°	2872	3064	3242
45°	2784	3031	3260
50°	2703	3017	3282
55°	2600	3007	3311
60°	2507	3012	3357
65°	2379	3021	3409
70°	2232	3044	3407
75°	2023	3071	3080
80°	1660	2653	2193
85°	1232	1254	506



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	114.3	3.3
10°-20°	326.4	9.3
20°-30°	491.7	14.0
30°-40°	590.0	16.8
40°-50°	615.0	17.5
50°-60°	569.3	16.2
60°-70°	460.0	13.1
70°-80°	280.5	8.0
80°-90°	57.9	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°	932.3	26.6
0°-40°	1522.4	43.4
0°-60°	2706.6	77.2
0°-90°	3505.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	3505.0	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	1208	1208	1208	1208	1208	
5°	1207	1204	1196	1205	1204	115
15°	1150	1151	1151	1167	1167	324
25°	1043	1050	1062	1089	1093	481
35°	898	912	942	976	986	563
45°	732	753	796	841	857	565
55°	554	583	641	691	706	496
65°	374	410	474	522	535	369
75°	195	238	295	300	296	204
85°	40	59	41	23	16	49
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	1207.5	1207.5	1207.5	1207.5	1207.5
2.5°	1212.2	1208.3	1199.7	1208.3	1206.7
5°	1206.7	1203.6	1196.5	1205.1	1203.6
7.5°	1198.9	1195.8	1189.5	1199.7	1198.1
10°	1185.6	1184.0	1179.3	1191.1	1190.3
12.5°	1170.0	1169.2	1166.8	1180.1	1179.3
15°	1150.4	1151.2	1151.2	1166.8	1166.8
17.5°	1128.5	1130.1	1133.2	1150.4	1152.8
20°	1102.8	1105.9	1112.1	1131.7	1134.8
22.5°	1076.2	1078.5	1087.9	1111.4	1114.5
25°	1043.4	1049.6	1062.1	1088.7	1093.4
27.5°	1012.1	1017.6	1034.8	1062.1	1069.9
30°	975.4	984.0	1004.3	1034.0	1042.6
32.5°	940.2	949.6	973.0	1007.4	1015.2
35°	898.0	912.1	941.8	976.1	985.5
37.5°	859.7	873.0	906.6	944.1	955.0
40°	817.5	833.9	872.2	912.1	923.0
42.5°	778.4	794.0	835.5	876.1	891.0
45°	731.5	753.4	796.4	840.9	856.6
47.5°	688.5	710.4	759.7	807.3	821.4
50°	645.6	669.0	720.6	769.8	783.9
52.5°	601.0	626.0	681.5	730.7	747.2
55°	554.1	583.0	640.9	690.9	705.7
57.5°	509.6	539.3	601.0	651.8	666.7
60°	465.8	496.3	559.6	608.0	623.7
62.5°	417.3	453.3	518.9	566.6	578.3
65°	373.6	410.3	474.4	522.1	535.4
67.5°	327.5	367.3	431.4	475.2	487.7
70°	283.7	325.1	386.9	427.5	433.0
72.5°	236.8	279.0	341.5	367.3	367.3
75°	194.6	237.6	295.4	300.1	296.2
77.5°	148.5	196.2	233.7	224.3	214.9
80°	107.1	154.0	171.2	154.0	141.5
82.5°	71.9	111.8	103.2	82.1	72.7
85°	39.9	59.4	40.6	22.7	16.4
87.5°	14.8	13.3	3.9	3.9	3.9
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)