

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: P307743

Luminaire Tested: **14FCZ2-39-UNV-L82765-CP250-W2A-U-5700K**

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: P307743
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-5700K
Description: 1'X4' TROFFER LED MODULE,RIBBED LENS, 0.250" POLYCARB SHEET
Light Source: (168) 5700K 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: 3597.0 lumens
Efficiency: N/A
Efficacy: 105.2 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

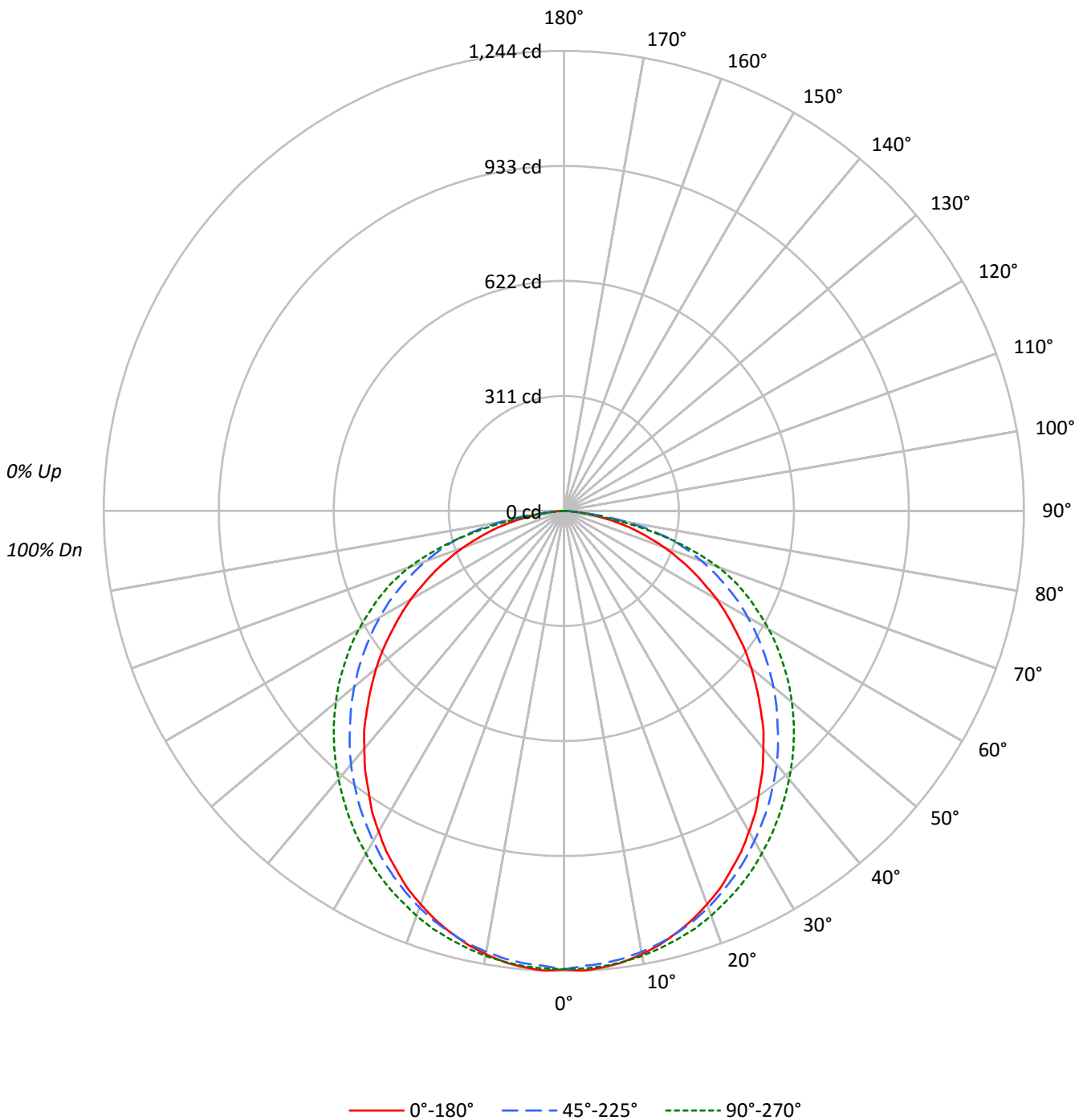
Input Watts (W): 34.2
Input Voltage (V): NR
Input Current (A_{in}): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



TEST NUMBER: P307743

CATALOG NUMBER: 14FCZ2-39-UNV-L82765-CP250-W2A-U-5700K

Luminous Intensity Polar Plot





TEST NUMBER: P307743

CATALOG NUMBER: 14FCZ2-39-UNV-L82765-CP250-W2A-U-5700K

COEFFICIENT OF UTILIZATION - ZONAL CAVITY METHOD:

RF	20				20				20				20				20	
RC	80				70				50				30				10	0
RW	70	50	30	10	70	50	30	10	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	102	102	102	100
1	109	104	99	95	106	101	97	94	97	94	91	93	90	88	90	87	85	83
2	98	90	83	77	96	88	82	76	84	79	74	81	77	73	78	74	71	69
3	89	79	70	64	87	77	69	63	74	67	62	71	66	61	69	64	60	58
4	82	70	61	54	79	68	60	53	66	58	53	63	57	52	61	56	51	49
5	75	62	53	46	73	61	52	46	59	51	45	57	50	45	55	49	44	42
6	69	56	47	40	67	55	46	40	53	45	40	51	44	39	50	44	39	37
7	64	51	42	35	63	50	41	35	48	41	35	47	40	35	45	39	34	32
8	60	46	37	32	58	45	37	31	44	37	31	43	36	31	42	35	31	29
9	56	42	34	28	54	42	34	28	41	33	28	39	33	28	38	32	28	26
10	52	39	31	26	51	39	31	26	37	30	26	37	30	25	36	30	25	24

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	3335	3335	3335
5°	3345	3317	3337
10°	3325	3307	3338
15°	3289	3291	3336
20°	3241	3268	3335
25°	3179	3236	3332
30°	3110	3202	3324
35°	3028	3175	3323
40°	2947	3144	3327
45°	2857	3110	3346
50°	2774	3096	3368
55°	2668	3086	3398
60°	2573	3091	3444
65°	2441	3100	3498
70°	2290	3124	3496
75°	2076	3152	3161
80°	1703	2723	2250
85°	1263	1288	519



TEST NUMBER: P307743

CATALOG NUMBER: 14FCZ2-39-UNV-L82765-CP250-W2A-U-5700K

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	117.3	3.3
10°-20°	335.0	9.3
20°-30°	504.6	14.0
30°-40°	605.5	16.8
40°-50°	631.1	17.5
50°-60°	584.3	16.2
60°-70°	472.1	13.1
70°-80°	287.8	8.0
80°-90°	59.4	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°	956.8	26.6
0°-40°	1562.3	43.4
0°-60°	2777.7	77.2
0°-90°	3597.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	3597.0	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	1239	1239	1239	1239	1239	
5°	1238	1235	1228	1237	1235	118
15°	1181	1181	1181	1198	1198	333
25°	1071	1077	1090	1117	1122	494
35°	922	936	966	1002	1011	577
45°	751	773	817	863	879	580
55°	569	598	658	709	724	509
65°	383	421	487	536	549	379
75°	200	244	303	308	304	210
85°	41	61	42	23	17	50
90°	0	0	0	0	0	



TEST NUMBER: P307743

CATALOG NUMBER: 14FCZ2-39-UNV-L82765-CP250-W2A-U-5700K

CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	1239.2	1239.2	1239.2	1239.2	1239.2
2.5°	1244.0	1240.0	1231.2	1240.0	1238.4
5°	1238.4	1235.2	1227.9	1236.8	1235.2
7.5°	1230.4	1227.1	1220.7	1231.2	1229.6
10°	1216.7	1215.1	1210.3	1222.3	1221.5
12.5°	1200.7	1199.9	1197.5	1211.1	1210.3
15°	1180.6	1181.4	1181.4	1197.5	1197.5
17.5°	1158.2	1159.8	1163.0	1180.6	1183.0
20°	1131.7	1134.9	1141.3	1161.4	1164.6
22.5°	1104.4	1106.8	1116.5	1140.5	1143.7
25°	1070.7	1077.2	1090.0	1117.3	1122.1
27.5°	1038.7	1044.3	1061.9	1090.0	1098.0
30°	1001.0	1009.8	1030.6	1061.1	1069.9
32.5°	964.9	974.5	998.6	1033.9	1041.9
35°	921.6	936.0	966.5	1001.8	1011.4
37.5°	882.3	895.9	930.4	968.9	980.1
40°	839.0	855.8	895.1	936.0	947.2
42.5°	798.8	814.9	857.4	899.1	914.3
45°	750.7	773.2	817.3	863.0	879.1
47.5°	706.6	729.1	779.6	828.5	843.0
50°	662.5	686.6	739.5	790.0	804.5
52.5°	616.8	642.4	699.4	749.9	766.8
55°	568.7	598.3	657.7	709.0	724.3
57.5°	522.9	553.4	616.8	668.9	684.2
60°	478.0	509.3	574.3	624.0	640.0
62.5°	428.3	465.2	532.6	581.5	593.5
65°	383.4	421.1	486.8	535.8	549.4
67.5°	336.1	377.0	442.7	487.7	500.5
70°	291.1	333.7	397.0	438.7	444.3
72.5°	243.0	286.3	350.5	377.0	377.0
75°	199.7	243.8	303.2	308.0	304.0
77.5°	152.4	201.3	239.8	230.2	220.6
80°	109.9	158.0	175.7	158.0	145.2
82.5°	73.8	114.7	105.9	84.2	74.6
85°	40.9	61.0	41.7	23.3	16.8
87.5°	15.2	13.6	4.0	4.0	4.0
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)