

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: P307744

Luminaire Tested: **14FCZ2-39-UNV-L82765-CP250-W2A-U-6500K**

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: P307744
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-6500K
Description: 1'X4' TROFFER LED MODULE,RIBBED LENS, 0.250" POLYCARB SHEET
Light Source: (168) 6500K 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: 3607.0 lumens
Efficiency: N/A
Efficacy: 103.6 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

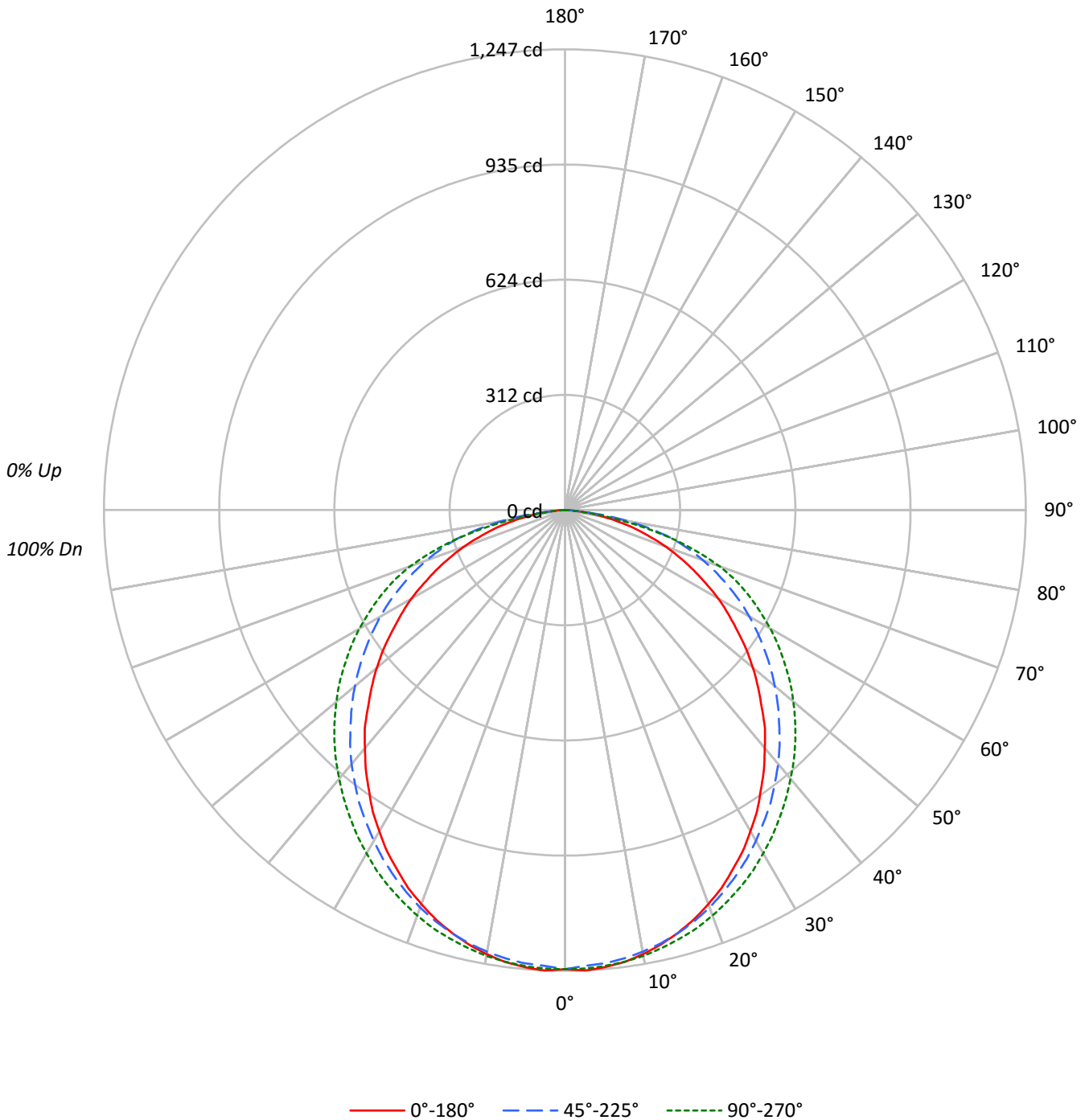
Input Watts (W): 34.8
Input Voltage (V): NR
Input Current (A_{in}): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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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				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°	3344	3344	3344
5°	3354	3326	3346
10°	3334	3316	3347
15°	3298	3300	3345
20°	3250	3277	3344
25°	3188	3245	3341
30°	3119	3211	3334
35°	3036	3184	3332
40°	2955	3153	3337
45°	2865	3119	3355
50°	2781	3105	3377
55°	2675	3094	3407
60°	2580	3099	3454
65°	2448	3109	3508
70°	2297	3132	3506
75°	2083	3161	3169
80°	1708	2729	2256
85°	1266	1291	522



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	117.6	3.3
10°-20°	335.9	9.3
20°-30°	506.0	14.0
30°-40°	607.2	16.8
40°-50°	632.9	17.5
50°-60°	585.9	16.2
60°-70°	473.4	13.1
70°-80°	288.6	8.0
80°-90°	59.6	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°	959.5	26.6
0°-40°	1566.7	43.4
0°-60°	2785.4	77.2
0°-90°	3607.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	3607.0	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	1243	1243	1243	1243	1243	
5°	1242	1239	1231	1240	1239	118
15°	1184	1185	1185	1201	1201	334
25°	1074	1080	1093	1120	1125	495
35°	924	939	969	1005	1014	579
45°	753	775	820	865	882	582
55°	570	600	660	711	726	511
65°	384	422	488	537	551	380
75°	200	244	304	309	305	210
85°	41	61	42	23	17	50
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	1242.6	1242.6	1242.6	1242.6	1242.6
2.5°	1247.4	1243.4	1234.6	1243.4	1241.8
5°	1241.8	1238.6	1231.4	1240.2	1238.6
7.5°	1233.8	1230.6	1224.1	1234.6	1233.0
10°	1220.1	1218.5	1213.7	1225.7	1224.9
12.5°	1204.0	1203.2	1200.8	1214.5	1213.7
15°	1183.9	1184.7	1184.7	1200.8	1200.8
17.5°	1161.4	1163.0	1166.2	1183.9	1186.3
20°	1134.8	1138.1	1144.5	1164.6	1167.8
22.5°	1107.5	1109.9	1119.6	1143.7	1146.9
25°	1073.7	1080.2	1093.0	1120.4	1125.2
27.5°	1041.6	1047.2	1064.9	1093.0	1101.1
30°	1003.8	1012.6	1033.5	1064.1	1072.9
32.5°	967.6	977.2	1001.3	1036.7	1044.8
35°	924.1	938.6	969.2	1004.6	1014.2
37.5°	884.7	898.4	933.0	971.6	982.8
40°	841.3	858.2	897.6	938.6	949.9
42.5°	801.1	817.2	859.8	901.6	916.9
45°	752.8	775.3	819.6	865.4	881.5
47.5°	708.6	731.1	781.8	830.8	845.3
50°	664.3	688.5	741.6	792.2	806.7
52.5°	618.5	644.2	701.3	752.0	768.9
55°	570.2	600.0	659.5	711.0	726.3
57.5°	524.4	555.0	618.5	670.8	686.1
60°	479.4	510.7	575.9	625.7	641.8
62.5°	429.5	466.5	534.0	583.1	595.2
65°	384.4	422.3	488.2	537.3	550.9
67.5°	337.0	378.0	444.0	489.0	501.9
70°	292.0	334.6	398.1	439.9	445.6
72.5°	243.7	287.1	351.5	378.0	378.0
75°	200.3	244.5	304.0	308.8	304.8
77.5°	152.8	201.9	240.5	230.8	221.2
80°	110.2	158.4	176.1	158.4	145.6
82.5°	74.0	115.0	106.2	84.5	74.8
85°	41.0	61.1	41.8	23.3	16.9
87.5°	15.3	13.7	4.0	4.0	4.0
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)