

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: P307699

Luminaire Tested: **14FCZ2-35-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: P307699
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: 14FCZ2-35-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: 3268.0 lumens
Efficiency: N/A
Efficacy: 106.1 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

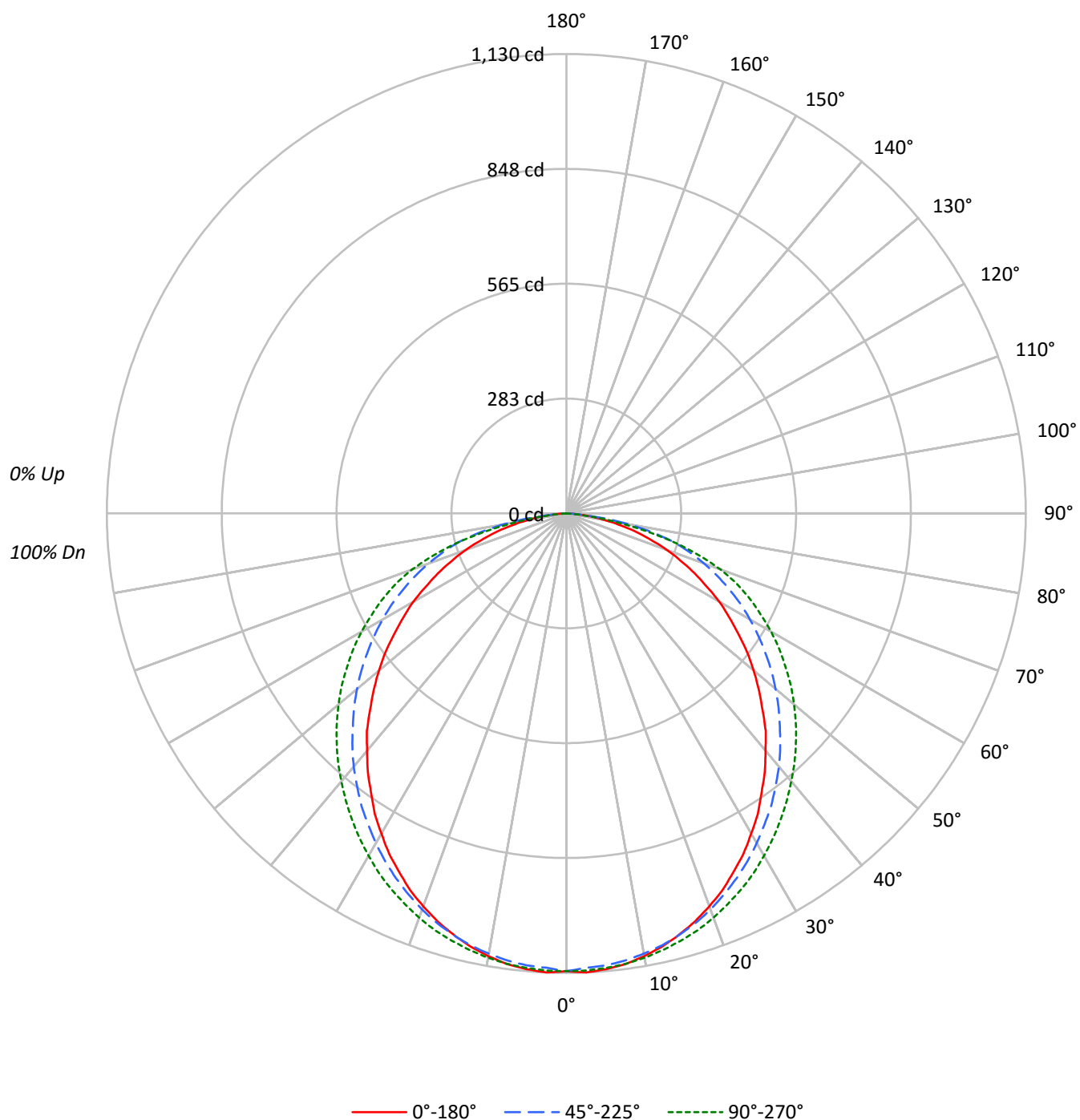
Input Watts (W): 30.8
Input Voltage (V): NR
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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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°	3030	3030	3030
5°	3039	3014	3031
10°	3020	3005	3033
15°	2988	2990	3031
20°	2944	2969	3030
25°	2888	2940	3027
30°	2826	2910	3021
35°	2751	2885	3019
40°	2677	2857	3023
45°	2596	2826	3040
50°	2520	2813	3060
55°	2424	2803	3087
60°	2337	2808	3130
65°	2218	2816	3179
70°	2081	2838	3176
75°	1886	2863	2872
80°	1547	2473	2044
85°	1149	1170	472



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	106.5	3.3
10°-20°	304.3	9.3
20°-30°	458.4	14.0
30°-40°	550.1	16.8
40°-50°	573.4	17.5
50°-60°	530.8	16.2
60°-70°	428.9	13.1
70°-80°	261.5	8.0
80°-90°	54.0	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°	869.3	26.6
0°-40°	1419.4	43.4
0°-60°	2523.6	77.2
0°-90°	3268.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	3268.0	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	1126	1126	1126	1126	1126	
5°	1125	1122	1116	1124	1122	107
15°	1073	1073	1073	1088	1088	302
25°	973	979	990	1015	1019	448
35°	837	850	878	910	919	525
45°	682	702	742	784	799	527
55°	517	544	598	644	658	463
65°	348	383	442	487	499	344
75°	181	222	275	280	276	191
85°	37	55	38	21	15	46
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	1125.8	1125.8	1125.8	1125.8	1125.8
2.5°	1130.2	1126.6	1118.5	1126.6	1125.1
5°	1125.1	1122.2	1115.6	1123.7	1122.2
7.5°	1117.8	1114.9	1109.1	1118.5	1117.1
10°	1105.4	1104.0	1099.6	1110.5	1109.8
12.5°	1090.9	1090.1	1087.9	1100.3	1099.6
15°	1072.6	1073.4	1073.4	1087.9	1087.9
17.5°	1052.2	1053.7	1056.6	1072.6	1074.8
20°	1028.2	1031.1	1036.9	1055.2	1058.1
22.5°	1003.4	1005.6	1014.3	1036.2	1039.1
25°	972.8	978.6	990.3	1015.1	1019.4
27.5°	943.7	948.8	964.8	990.3	997.6
30°	909.4	917.4	936.4	964.1	972.1
32.5°	876.6	885.4	907.2	939.3	946.6
35°	837.3	850.4	878.1	910.1	918.9
37.5°	801.6	814.0	845.3	880.3	890.5
40°	762.2	777.5	813.2	850.4	860.6
42.5°	725.8	740.4	779.0	816.9	830.7
45°	682.1	702.5	742.5	784.1	798.7
47.5°	642.0	662.4	708.3	752.7	765.9
50°	601.9	623.8	671.9	717.8	730.9
52.5°	560.4	583.7	635.4	681.3	696.6
55°	516.6	543.6	597.5	644.2	658.0
57.5°	475.1	502.8	560.4	607.7	621.6
60°	434.3	462.7	521.7	566.9	581.5
62.5°	389.1	422.6	483.9	528.3	539.2
65°	348.3	382.6	442.3	486.8	499.2
67.5°	305.3	342.5	402.2	443.0	454.7
70°	264.5	303.1	360.7	398.6	403.7
72.5°	220.8	260.1	318.4	342.5	342.5
75°	181.4	221.5	275.4	279.8	276.2
77.5°	138.5	182.9	217.9	209.1	200.4
80°	99.8	143.6	159.6	143.6	131.9
82.5°	67.0	104.2	96.2	76.5	67.8
85°	37.2	55.4	37.9	21.1	15.3
87.5°	13.8	12.4	3.6	3.6	3.6
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)