

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: P307542

Luminaire Tested: **14FCZ2-20-UNV-L82765-CP125-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: P307542
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: 14FCZ2-20-UNV-L82765-CP125-W2A-U-4500K
Description: 1'X4' TROFFER LED MODULE, RIBBED LENS, 0.125" 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: 1993.0 lumens
Efficiency: N/A
Efficacy: 118.6 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

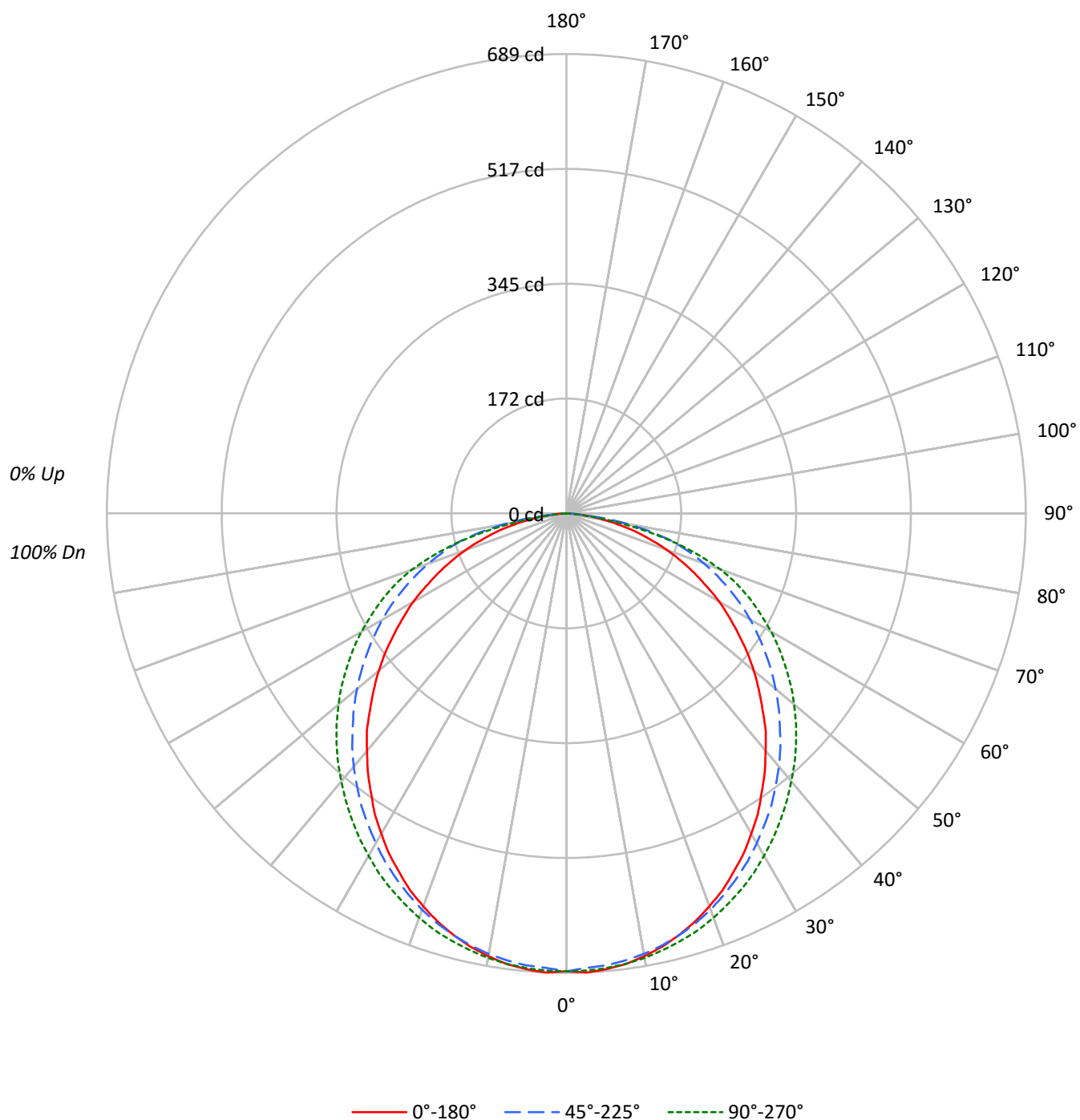
Input Watts (W): 16.8
Input Voltage (V): NR
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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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°	1848	1848	1848
5°	1854	1838	1849
10°	1842	1832	1849
15°	1823	1824	1848
20°	1796	1811	1848
25°	1762	1793	1846
30°	1723	1775	1842
35°	1677	1759	1841
40°	1633	1742	1844
45°	1583	1723	1854
50°	1537	1715	1866
55°	1478	1710	1883
60°	1426	1713	1908
65°	1352	1717	1938
70°	1269	1731	1937
75°	1151	1747	1751
80°	944	1508	1246
85°	701	713	287



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	65.0	3.3
10°-20°	185.6	9.3
20°-30°	279.6	14.0
30°-40°	335.5	16.8
40°-50°	349.7	17.5
50°-60°	323.7	16.2
60°-70°	261.6	13.1
70°-80°	159.5	8.0
80°-90°	32.9	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°	530.1	26.6
0°-40°	865.6	43.4
0°-60°	1539.0	77.2
0°-90°	1993.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	1993.0	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	687	687	687	687	687	
5°	686	684	680	685	684	65
15°	654	655	655	664	664	184
25°	593	597	604	619	622	273
35°	511	519	536	555	560	320
45°	416	428	453	478	487	322
55°	315	332	364	393	401	282
65°	212	233	270	297	304	210
75°	111	135	168	171	168	116
85°	23	34	23	13	9	28
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	686.6	686.6	686.6	686.6	686.6
2.5°	689.3	687.0	682.2	687.0	686.2
5°	686.2	684.4	680.4	685.3	684.4
7.5°	681.7	679.9	676.4	682.2	681.3
10°	674.2	673.3	670.6	677.3	676.8
12.5°	665.3	664.8	663.5	671.0	670.6
15°	654.2	654.6	654.6	663.5	663.5
17.5°	641.7	642.6	644.4	654.2	655.5
20°	627.0	628.8	632.4	643.5	645.3
22.5°	611.9	613.3	618.6	631.9	633.7
25°	593.3	596.8	603.9	619.0	621.7
27.5°	575.5	578.6	588.4	603.9	608.4
30°	554.6	559.5	571.1	587.9	592.8
32.5°	534.6	539.9	553.3	572.8	577.3
35°	510.6	518.6	535.5	555.1	560.4
37.5°	488.8	496.4	515.5	536.8	543.1
40°	464.8	474.2	495.9	518.6	524.8
42.5°	442.6	451.5	475.1	498.2	506.6
45°	416.0	428.4	452.8	478.2	487.1
47.5°	391.5	404.0	432.0	459.1	467.1
50°	367.1	380.4	409.7	437.7	445.7
52.5°	341.7	356.0	387.5	415.5	424.8
55°	315.1	331.5	364.4	392.8	401.3
57.5°	289.7	306.6	341.7	370.6	379.1
60°	264.9	282.2	318.2	345.7	354.6
62.5°	237.3	257.8	295.1	322.2	328.9
65°	212.4	233.3	269.7	296.9	304.4
67.5°	186.2	208.9	245.3	270.2	277.3
70°	161.3	184.9	220.0	243.1	246.2
72.5°	134.7	158.7	194.2	208.9	208.9
75°	110.7	135.1	168.0	170.6	168.4
77.5°	84.4	111.5	132.9	127.5	122.2
80°	60.9	87.5	97.3	87.5	80.4
82.5°	40.9	63.5	58.7	46.7	41.3
85°	22.7	33.8	23.1	12.9	9.3
87.5°	8.4	7.6	2.2	2.2	2.2
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)