

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: P307420

Luminaire Tested: **14FCZ2-35-UNV-L82765-RDP-CP187-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: P307420
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G3-1805-783-43)
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-RDP-CP187-W2A-U-6500K
Description: 1'X4' TROFFER LED MODULE, SMOOTH LENS WITH INSERT , 0.187" 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: 2115.0 lumens
Efficiency: N/A
Efficacy: 68.7 lumens/watt
Spacing Criteria (0/90/45): 1.25 / 1.28 / 1.4
Luminous Opening: Rectangular (W 1' x L: 4' x H: 0')
CIE Type: Direct

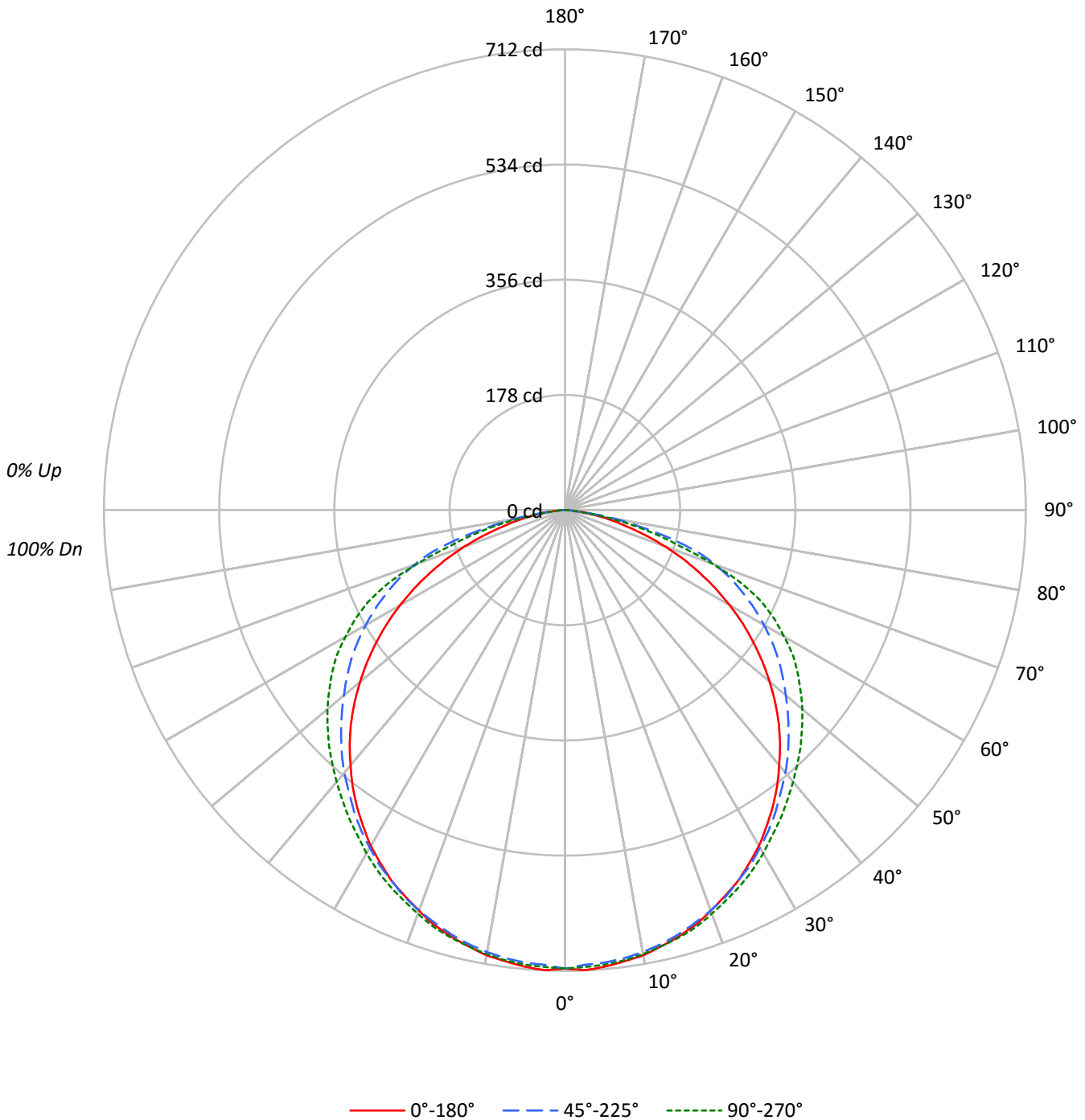
Input Watts (W): 30.8
Input Voltage (V): NR
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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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				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	100	96	106	102	98	94	97	94	91	93	91	88	90	88	86	84
2	99	90	83	77	96	88	82	76	85	79	75	81	77	73	78	75	71	69
3	90	79	71	64	87	77	70	63	74	68	62	71	66	61	69	64	60	58
4	82	70	61	54	80	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	50	42	35	62	50	41	35	48	40	35	47	40	35	45	39	34	32
8	60	46	37	31	58	45	37	31	44	36	31	43	36	31	41	35	31	29
9	56	42	34	28	54	42	34	28	40	33	28	39	33	28	38	32	28	26
10	52	39	31	25	51	38	31	25	37	30	25	36	30	25	35	29	25	23

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	1906	1906	1906
5°	1914	1896	1905
10°	1909	1895	1904
15°	1900	1891	1904
20°	1887	1887	1901
25°	1878	1878	1902
30°	1863	1873	1904
35°	1839	1866	1909
40°	1810	1862	1926
45°	1778	1860	1961
50°	1728	1866	2004
55°	1666	1890	2061
60°	1582	1911	2106
65°	1461	1934	2134
70°	1299	1949	1910
75°	1047	1751	1528
80°	818	1229	998
85°	562	358	256



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	67.0	3.2
10°-20°	192.4	9.1
20°-30°	292.9	13.8
30°-40°	356.8	16.9
40°-50°	378.5	17.9
50°-60°	357.2	16.9
60°-70°	288.4	13.6
70°-80°	156.5	7.4
80°-90°	25.3	1.2
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°	552.3	26.1
0°-40°	909.1	43.0
0°-60°	1644.8	77.8
0°-90°	2115.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	2115.0	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	708	708	708	708	708	
5°	708	707	702	707	705	67
15°	682	680	679	684	684	192
25°	632	631	632	639	641	291
35°	560	563	568	580	581	350
45°	467	474	489	507	515	360
55°	355	370	403	429	439	317
65°	230	258	304	329	335	227
75°	101	147	168	152	147	110
85°	18	20	12	10	8	23
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	708.4	708.4	708.4	708.4	708.4
2.5°	711.7	708.4	703.4	708.4	706.7
5°	708.4	706.7	701.8	706.7	705.1
7.5°	703.4	703.4	698.5	701.8	701.8
10°	698.5	696.8	693.5	698.5	696.8
12.5°	690.2	688.6	686.9	691.9	690.2
15°	681.9	680.3	678.6	683.6	683.6
17.5°	672.0	670.4	668.7	675.3	675.3
20°	658.8	658.8	658.8	665.4	663.8
22.5°	645.6	645.6	647.3	653.9	652.2
25°	632.4	630.8	632.4	639.0	640.7
27.5°	615.9	617.6	619.2	625.8	627.5
30°	599.4	601.0	602.7	610.9	612.6
32.5°	579.6	582.9	586.2	596.1	596.1
35°	559.8	563.1	568.0	579.6	581.2
37.5°	538.3	541.6	548.2	561.4	564.7
40°	515.2	520.1	530.0	543.2	548.2
42.5°	492.1	498.7	510.2	525.1	531.7
45°	467.3	473.9	488.8	506.9	515.2
47.5°	440.9	449.1	467.3	490.4	497.0
50°	412.8	424.4	445.8	470.6	478.8
52.5°	384.7	397.9	424.4	450.8	459.0
55°	355.0	369.9	402.9	429.3	439.2
57.5°	325.3	341.8	379.8	407.8	417.8
60°	293.9	313.7	355.0	383.1	391.3
62.5°	262.5	285.7	330.2	358.3	364.9
65°	229.5	257.6	303.8	328.6	335.2
67.5°	198.1	231.2	277.4	295.6	295.6
70°	165.1	201.4	247.7	252.6	242.7
72.5°	132.1	173.4	214.7	196.5	188.2
75°	100.7	147.0	168.4	151.9	147.0
77.5°	76.0	118.9	118.9	109.0	105.7
80°	52.8	90.8	79.3	69.4	64.4
82.5°	34.7	51.2	41.3	33.0	28.1
85°	18.2	19.8	11.6	9.9	8.3
87.5°	6.6	3.3	1.7	3.3	1.7
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)