

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: P307417

Luminaire Tested: **14FCZ2-35-UNV-L82765-RDP-CP187-W2A-U-5000K**

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: P307417
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-5000K
Description: 1'X4' TROFFER LED MODULE, SMOOTH LENS WITH INSERT , 0.187" POLYCARB SHEET
Light Source: (168) 5000K 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: 2083.0 lumens
Efficiency: N/A
Efficacy: 69.0 lumens/watt
Spacing Criteria (0/90/45): 1.25 / 1.29 / 1.4
Luminous Opening: Rectangular (W 1' x L: 4' x H: 0')
CIE Type: Direct

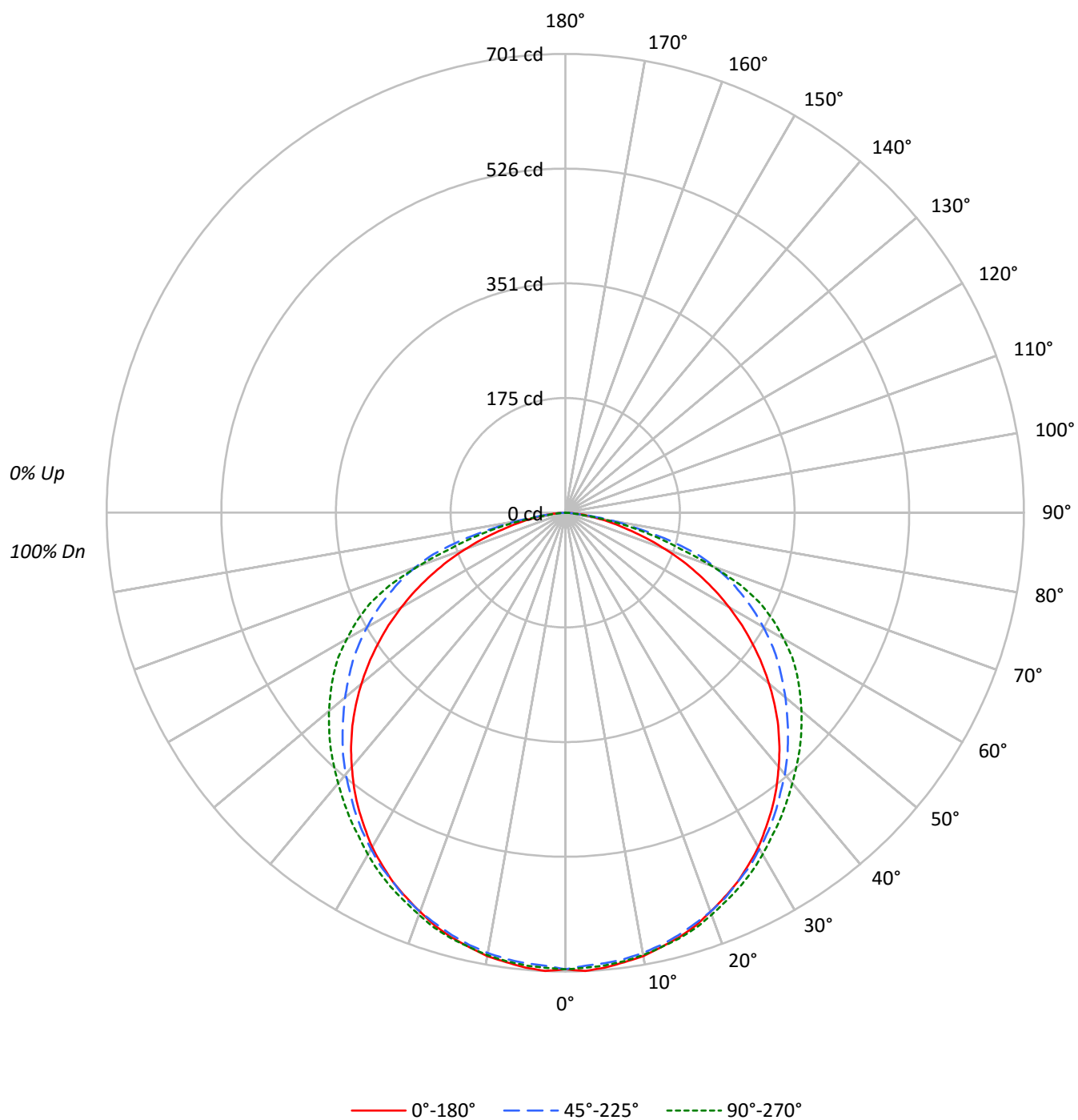
Input Watts (W): 30.2
Input Voltage (V): NR
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	1877	1877	1877
5°	1884	1867	1876
10°	1880	1866	1875
15°	1871	1862	1876
20°	1858	1858	1872
25°	1849	1849	1874
30°	1834	1844	1875
35°	1811	1838	1880
40°	1782	1834	1897
45°	1751	1832	1931
50°	1702	1838	1974
55°	1640	1862	2030
60°	1558	1882	2074
65°	1439	1905	2102
70°	1279	1919	1881
75°	1031	1725	1504
80°	806	1210	982
85°	553	352	250



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	66.0	3.2
10°-20°	189.5	9.1
20°-30°	288.5	13.8
30°-40°	351.4	16.9
40°-50°	372.8	17.9
50°-60°	351.8	16.9
60°-70°	284.1	13.6
70°-80°	154.1	7.4
80°-90°	24.9	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°	544.0	26.1
0°-40°	895.3	43.0
0°-60°	1619.9	77.8
0°-90°	2083.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	2083.0	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	698	698	698	698	698	
5°	698	696	691	696	694	66
15°	672	670	668	673	673	189
25°	623	621	623	629	631	287
35°	551	554	559	571	572	345
45°	460	467	481	499	507	354
55°	350	364	397	423	433	312
65°	226	254	299	324	330	224
75°	99	145	166	150	145	108
85°	18	20	11	10	8	23
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	697.6	697.6	697.6	697.6	697.6
2.5°	700.9	697.6	692.8	697.6	696.0
5°	697.6	696.0	691.1	696.0	694.4
7.5°	692.8	692.8	687.9	691.1	691.1
10°	687.9	686.3	683.0	687.9	686.3
12.5°	679.8	678.1	676.5	681.4	679.8
15°	671.6	670.0	668.4	673.3	673.3
17.5°	661.9	660.2	658.6	665.1	665.1
20°	648.9	648.9	648.9	655.4	653.7
22.5°	635.9	635.9	637.5	644.0	642.4
25°	622.8	621.2	622.8	629.3	631.0
27.5°	606.6	608.2	609.8	616.3	618.0
30°	590.3	591.9	593.6	601.7	603.3
32.5°	570.8	574.1	577.3	587.1	587.1
35°	551.3	554.5	559.4	570.8	572.4
37.5°	530.1	533.4	539.9	552.9	556.2
40°	507.4	512.3	522.0	535.0	539.9
42.5°	484.6	491.1	502.5	517.1	523.6
45°	460.2	466.7	481.4	499.3	507.4
47.5°	434.2	442.3	460.2	483.0	489.5
50°	406.6	417.9	439.1	463.5	471.6
52.5°	378.9	391.9	417.9	444.0	452.1
55°	349.6	364.3	396.8	422.8	432.6
57.5°	320.4	336.6	374.0	401.7	411.4
60°	289.5	309.0	349.6	377.3	385.4
62.5°	258.6	281.3	325.2	352.9	359.4
65°	226.0	253.7	299.2	323.6	330.1
67.5°	195.1	227.7	273.2	291.1	291.1
70°	162.6	198.4	243.9	248.8	239.1
72.5°	130.1	170.8	211.4	193.5	185.4
75°	99.2	144.7	165.9	149.6	144.7
77.5°	74.8	117.1	117.1	107.3	104.1
80°	52.0	89.4	78.1	68.3	63.4
82.5°	34.2	50.4	40.7	32.5	27.6
85°	17.9	19.5	11.4	9.8	8.1
87.5°	6.5	3.3	1.6	3.3	1.6
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)