

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: P307387

Luminaire Tested: **14FCZ2-35-UNV-L82765-RDP-CA08-W2A-U-3500K**

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: P307387
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-CA08-W2A-U-3500K
Description: 1'X4' TROFFER LED MODULE, SMOOTH LENS WITH INSERT , 0.08" ACRYLIC SHEET
Light Source: (168) 3500K 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: 2112.0 lumens
Efficiency: N/A
Efficacy: 71.4 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

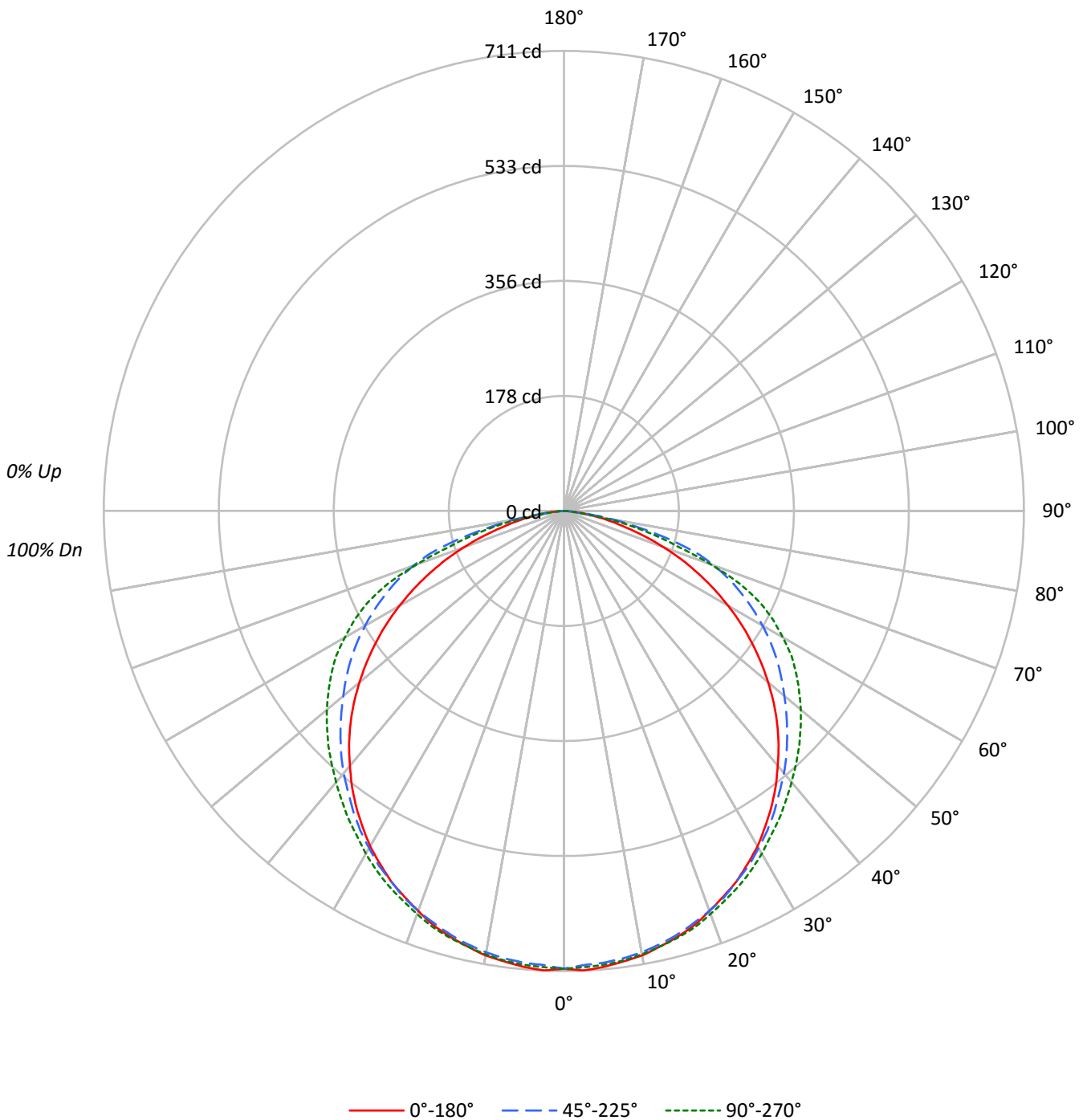
Input Watts (W): 29.6
Input Voltage (V): NR
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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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°	1904	1904	1904
5°	1911	1893	1902
10°	1906	1892	1901
15°	1897	1888	1902
20°	1884	1884	1898
25°	1875	1875	1900
30°	1860	1870	1901
35°	1836	1863	1907
40°	1807	1859	1923
45°	1776	1858	1958
50°	1726	1864	2002
55°	1663	1887	2058
60°	1580	1908	2103
65°	1459	1932	2131
70°	1297	1946	1907
75°	1046	1749	1525
80°	818	1226	996
85°	559	355	253



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	67.0	3.2
10°-20°	192.1	9.1
20°-30°	292.5	13.8
30°-40°	356.2	16.9
40°-50°	378.0	17.9
50°-60°	356.7	16.9
60°-70°	288.0	13.6
70°-80°	156.2	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°	551.5	26.1
0°-40°	907.8	43.0
0°-60°	1642.5	77.8
0°-90°	2112.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	2112.0	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	707	707	707	707	707	
5°	707	706	701	706	704	67
15°	681	679	678	683	683	192
25°	632	630	632	638	640	291
35°	559	562	567	579	580	349
45°	467	473	488	506	514	359
55°	354	369	402	429	439	317
65°	229	257	303	328	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°	707.4	707.4	707.4	707.4	707.4
2.5°	710.7	707.4	702.4	707.4	705.7
5°	707.4	705.7	700.8	705.7	704.1
7.5°	702.4	702.4	697.5	700.8	700.8
10°	697.5	695.8	692.5	697.5	695.8
12.5°	689.2	687.6	685.9	690.9	689.2
15°	681.0	679.3	677.7	682.6	682.6
17.5°	671.1	669.4	667.8	674.4	674.4
20°	657.9	657.9	657.9	664.5	662.8
22.5°	644.7	644.7	646.4	653.0	651.3
25°	631.5	629.9	631.5	638.1	639.8
27.5°	615.0	616.7	618.3	624.9	626.6
30°	598.5	600.2	601.8	610.1	611.7
32.5°	578.8	582.0	585.3	595.2	595.2
35°	559.0	562.3	567.2	578.8	580.4
37.5°	537.5	540.8	547.4	560.6	563.9
40°	514.4	519.4	529.3	542.5	547.4
42.5°	491.4	498.0	509.5	524.3	530.9
45°	466.6	473.2	488.1	506.2	514.4
47.5°	440.2	448.5	466.6	489.7	496.3
50°	412.2	423.8	445.2	469.9	478.2
52.5°	384.2	397.4	423.8	450.1	458.4
55°	354.5	369.3	402.3	428.7	438.6
57.5°	324.8	341.3	379.2	407.3	417.2
60°	293.5	313.3	354.5	382.5	390.8
62.5°	262.2	285.3	329.8	357.8	364.4
65°	229.2	257.2	303.4	328.1	334.7
67.5°	197.9	230.8	277.0	295.1	295.1
70°	164.9	201.2	247.3	252.3	242.4
72.5°	131.9	173.1	214.4	196.2	188.0
75°	100.6	146.7	168.2	151.7	146.7
77.5°	75.8	118.7	118.7	108.8	105.5
80°	52.8	90.7	79.1	69.3	64.3
82.5°	34.6	51.1	41.2	33.0	28.0
85°	18.1	19.8	11.5	9.9	8.2
87.5°	6.6	3.3	1.6	3.3	1.6
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)