

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: P307388

Luminaire Tested: **14FCZ2-35-UNV-L82765-RDP-CA08-W2A-U-4000K**

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: P307388
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-4000K
Description: 1'X4' TROFFER LED MODULE, SMOOTH LENS WITH INSERT , 0.08" ACRYLIC SHEET
Light Source: (168) 4000K 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: 2158.0 lumens
Efficiency: N/A
Efficacy: 72.4 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

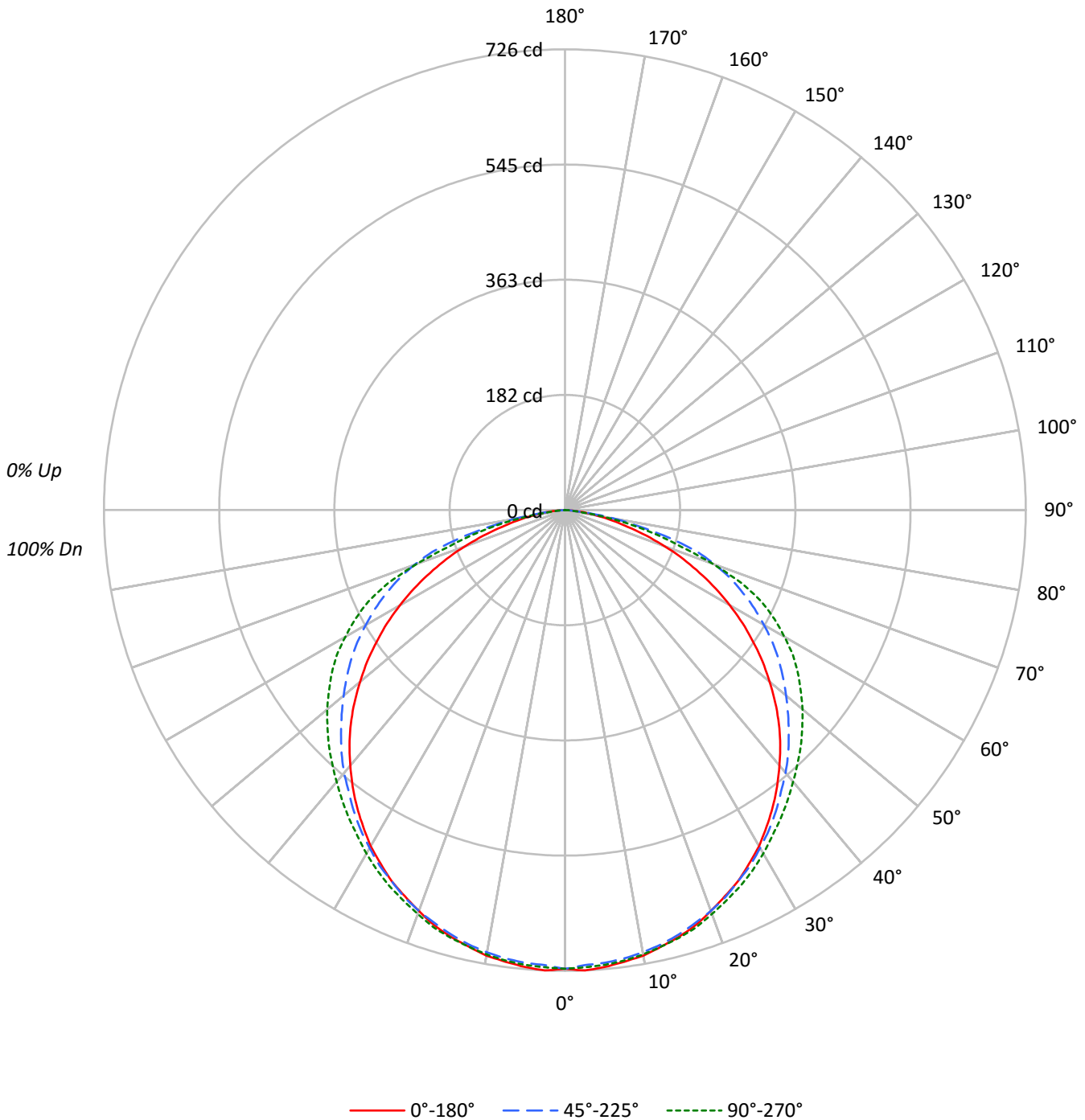
Input Watts (W): 29.8
Input Voltage (V): NR
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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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°	1945	1945	1945
5°	1952	1934	1943
10°	1947	1934	1943
15°	1938	1929	1943
20°	1925	1925	1940
25°	1916	1916	1941
30°	1900	1911	1942
35°	1876	1904	1948
40°	1847	1900	1965
45°	1815	1898	2001
50°	1763	1904	2045
55°	1699	1929	2103
60°	1614	1949	2149
65°	1491	1974	2178
70°	1326	1988	1949
75°	1069	1786	1559
80°	835	1254	1018
85°	571	364	259



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	68.4	3.2
10°-20°	196.3	9.1
20°-30°	298.9	13.8
30°-40°	364.0	16.9
40°-50°	386.2	17.9
50°-60°	364.5	16.9
60°-70°	294.3	13.6
70°-80°	159.6	7.4
80°-90°	25.8	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°	563.5	26.1
0°-40°	927.6	43.0
0°-60°	1678.2	77.8
0°-90°	2158.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	2158.0	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	723	723	723	723	723	
5°	723	721	716	721	719	69
15°	696	694	692	698	698	196
25°	645	644	645	652	654	297
35°	571	574	580	591	593	357
45°	477	484	499	517	526	367
55°	362	377	411	438	448	324
65°	234	263	310	335	342	232
75°	103	150	172	155	150	112
85°	18	20	12	10	8	24
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	722.8	722.8	722.8	722.8	722.8
2.5°	726.1	722.8	717.7	722.8	721.1
5°	722.8	721.1	716.0	721.1	719.4
7.5°	717.7	717.7	712.7	716.0	716.0
10°	712.7	711.0	707.6	712.7	711.0
12.5°	704.2	702.6	700.9	705.9	704.2
15°	695.8	694.1	692.4	697.5	697.5
17.5°	685.7	684.0	682.3	689.1	689.1
20°	672.2	672.2	672.2	679.0	677.3
22.5°	658.7	658.7	660.4	667.2	665.5
25°	645.3	643.6	645.3	652.0	653.7
27.5°	628.4	630.1	631.8	638.5	640.2
30°	611.6	613.3	614.9	623.4	625.1
32.5°	591.4	594.7	598.1	608.2	608.2
35°	571.1	574.5	579.6	591.4	593.0
37.5°	549.2	552.6	559.3	572.8	576.2
40°	525.7	530.7	540.8	554.3	559.3
42.5°	502.1	508.8	520.6	535.8	542.5
45°	476.8	483.5	498.7	517.2	525.7
47.5°	449.8	458.3	476.8	500.4	507.1
50°	421.2	433.0	454.9	480.2	488.6
52.5°	392.6	406.0	433.0	459.9	468.4
55°	362.2	377.4	411.1	438.0	448.2
57.5°	331.9	348.7	387.5	416.1	426.2
60°	299.9	320.1	362.2	390.9	399.3
62.5°	267.9	291.5	337.0	365.6	372.3
65°	234.2	262.8	310.0	335.3	342.0
67.5°	202.2	235.9	283.0	301.6	301.6
70°	168.5	205.5	252.7	257.8	247.7
72.5°	134.8	176.9	219.0	200.5	192.1
75°	102.8	149.9	171.8	155.0	149.9
77.5°	77.5	121.3	121.3	111.2	107.8
80°	53.9	92.7	80.9	70.8	65.7
82.5°	35.4	52.2	42.1	33.7	28.6
85°	18.5	20.2	11.8	10.1	8.4
87.5°	6.7	3.4	1.7	3.4	1.7
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)