

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: P307418

Luminaire Tested: **14FCZ2-35-UNV-L82765-RDP-CP187-W2A-U-5500K**

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: P307418
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-5500K
Description: 1'X4' TROFFER LED MODULE, SMOOTH LENS WITH INSERT , 0.187" POLYCARB SHEET
Light Source: (168) 5500K 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: 2104.0 lumens
Efficiency: N/A
Efficacy: 69.4 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

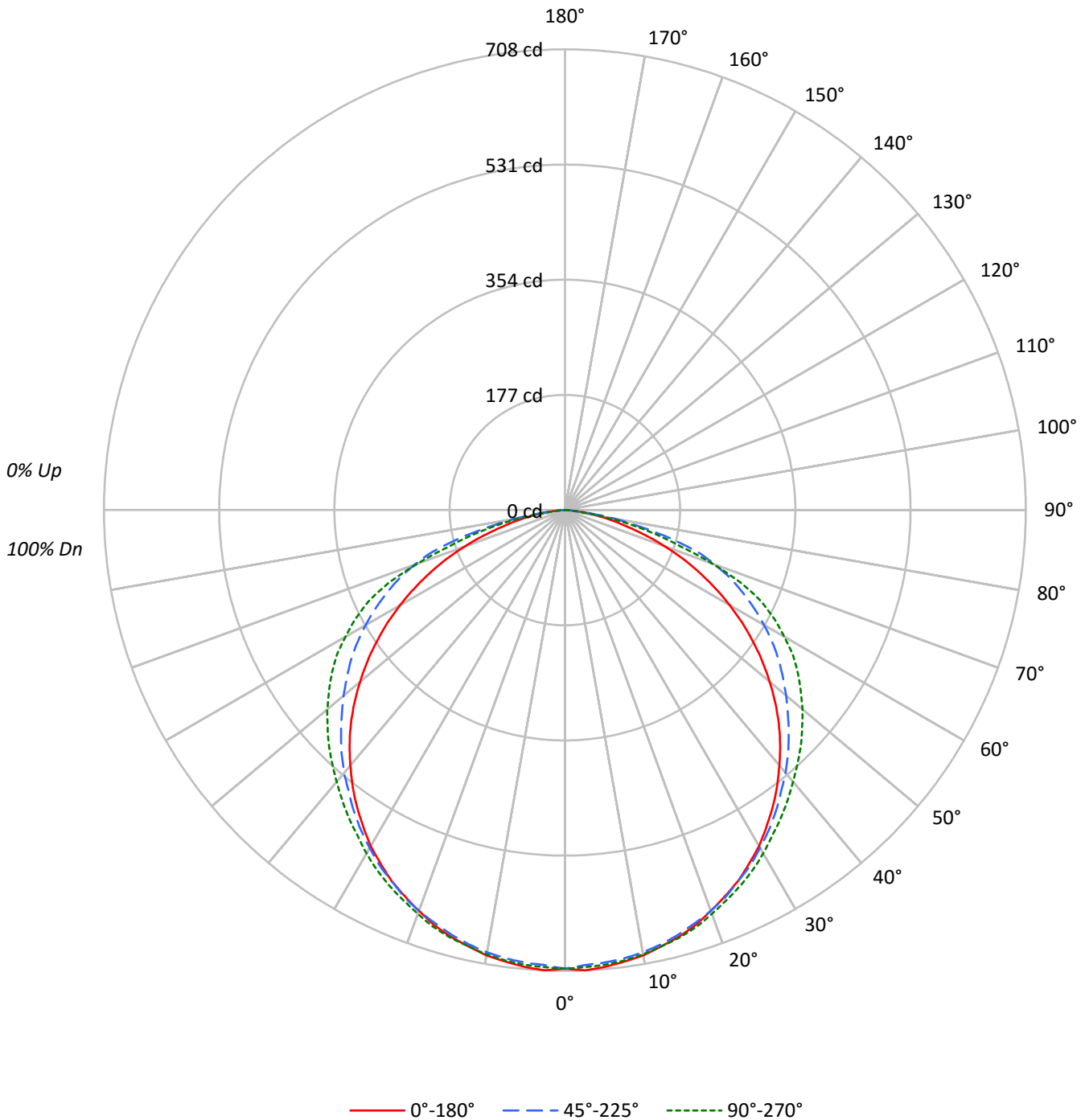
Input Watts (W): 30.3
Input Voltage (V): NR
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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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°	1896	1896	1896
5°	1904	1886	1895
10°	1899	1885	1894
15°	1890	1881	1894
20°	1877	1877	1891
25°	1868	1868	1892
30°	1853	1863	1894
35°	1829	1856	1899
40°	1800	1852	1916
45°	1769	1850	1950
50°	1719	1857	1994
55°	1657	1880	2050
60°	1574	1901	2095
65°	1454	1924	2124
70°	1293	1939	1900
75°	1042	1742	1520
80°	815	1221	993
85°	559	355	253



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	66.7	3.2
10°-20°	191.4	9.1
20°-30°	291.4	13.8
30°-40°	354.9	16.9
40°-50°	376.5	17.9
50°-60°	355.4	16.9
60°-70°	286.9	13.6
70°-80°	155.6	7.4
80°-90°	25.2	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°	549.4	26.1
0°-40°	904.4	43.0
0°-60°	1636.3	77.8
0°-90°	2104.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	2104.0	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	705	705	705	705	705	
5°	705	703	698	703	701	67
15°	678	677	675	680	680	191
25°	629	628	629	636	637	290
35°	557	560	565	577	578	348
45°	465	471	486	504	512	358
55°	353	368	401	427	437	315
65°	228	256	302	327	334	226
75°	100	146	168	151	146	109
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°	704.7	704.7	704.7	704.7	704.7
2.5°	708.0	704.7	699.8	704.7	703.0
5°	704.7	703.0	698.1	703.0	701.4
7.5°	699.8	699.8	694.8	698.1	698.1
10°	694.8	693.2	689.9	694.8	693.2
12.5°	686.6	685.0	683.3	688.3	686.6
15°	678.4	676.8	675.1	680.0	680.0
17.5°	668.5	666.9	665.3	671.8	671.8
20°	655.4	655.4	655.4	662.0	660.3
22.5°	642.3	642.3	643.9	650.5	648.8
25°	629.1	627.5	629.1	635.7	637.3
27.5°	612.7	614.3	616.0	622.6	624.2
30°	596.3	597.9	599.6	607.8	609.4
32.5°	576.6	579.8	583.1	593.0	593.0
35°	556.8	560.1	565.1	576.6	578.2
37.5°	535.5	538.8	545.3	558.5	561.8
40°	512.5	517.4	527.3	540.4	545.3
42.5°	489.5	496.1	507.6	522.4	528.9
45°	464.9	471.4	486.2	504.3	512.5
47.5°	438.6	446.8	464.9	487.9	494.4
50°	410.7	422.2	443.5	468.1	476.4
52.5°	382.7	395.9	422.2	448.4	456.6
55°	353.2	367.9	400.8	427.1	436.9
57.5°	323.6	340.0	377.8	405.7	415.6
60°	292.4	312.1	353.2	381.1	389.3
62.5°	261.2	284.2	328.5	356.4	363.0
65°	228.3	256.2	302.2	326.9	333.5
67.5°	197.1	230.0	276.0	294.0	294.0
70°	164.3	200.4	246.4	251.3	241.5
72.5°	131.4	172.5	213.5	195.5	187.3
75°	100.2	146.2	167.5	151.1	146.2
77.5°	75.6	118.3	118.3	108.4	105.1
80°	52.6	90.3	78.8	69.0	64.1
82.5°	34.5	50.9	41.1	32.9	27.9
85°	18.1	19.7	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)