

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: P307691

Luminaire Tested: **14FCZ2-35-UNV-L82765-CP250-W2A-U-2700K**

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: P307691
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G3-1805-783-49)
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-CP250-W2A-U-2700K
Description: 1'X4' TROFFER LED MODULE,RIBBED LENS, 0.250" POLYCARB SHEET
Light Source: (168) 2700K 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: 2869.0 lumens
Efficiency: N/A
Efficacy: 97.3 lumens/watt
Spacing Criteria (0/90/45): 1.2 / 1.28 / 1.37
Luminous Opening: Rectangular (W 1' x L: 4' x H: 0')
CIE Type: Direct

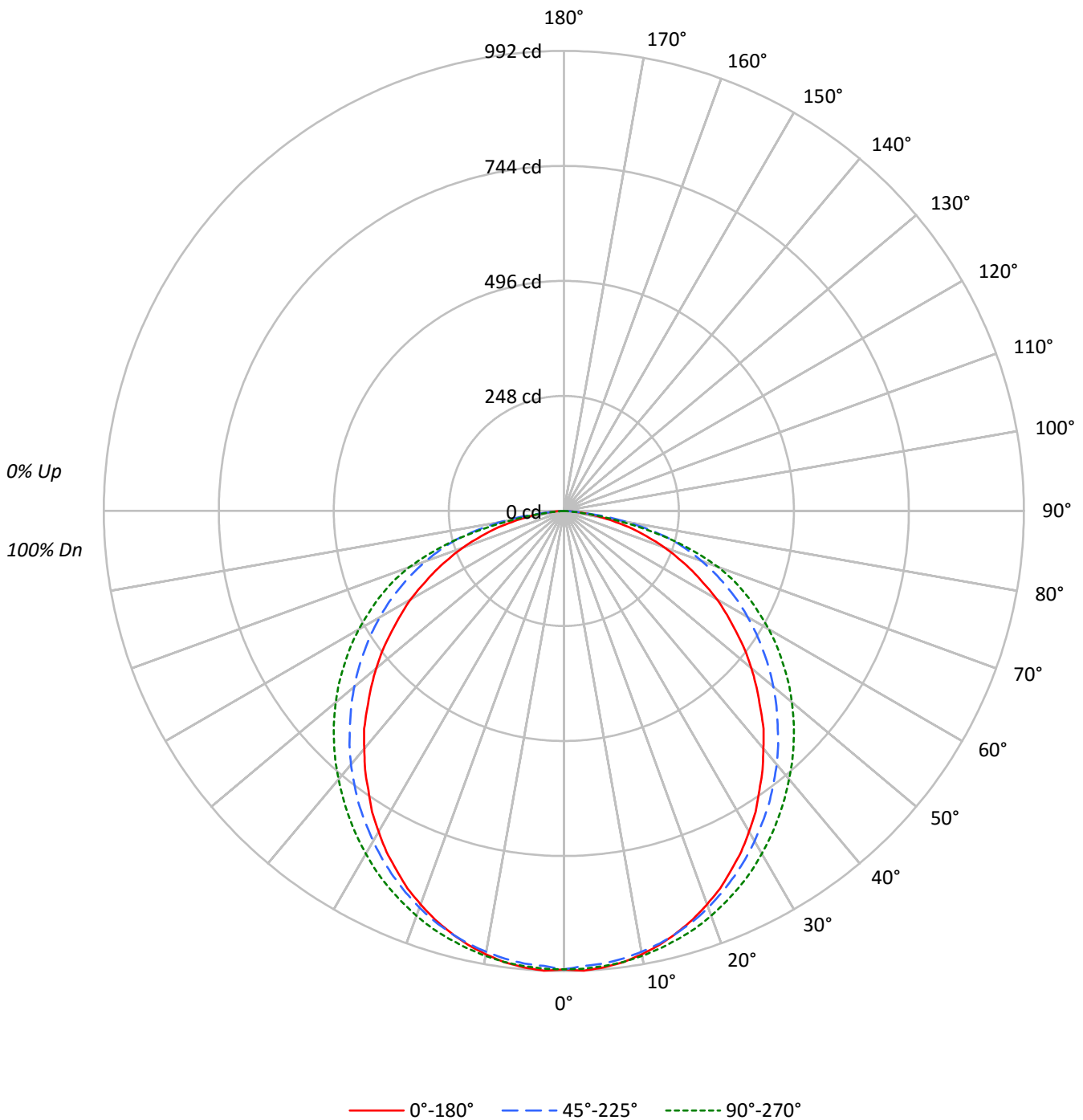
Input Watts (W): 29.5
Input Voltage (V): NR
Input Current (A_{in}): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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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	99	95	106	101	97	94	97	94	91	93	90	88	90	87	85	83
2	98	90	83	77	96	88	82	76	84	79	74	81	77	73	78	74	71	69
3	89	79	70	64	87	77	69	63	74	67	62	71	66	61	69	64	60	58
4	82	70	61	54	79	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	51	42	35	63	50	41	35	48	41	35	47	40	35	45	39	34	32
8	60	46	37	32	58	45	37	31	44	37	31	43	36	31	42	35	31	29
9	56	42	34	28	54	42	34	28	41	33	28	39	33	28	38	32	28	26
10	52	39	31	26	51	39	31	26	37	30	26	37	30	25	36	30	25	24

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	2660	2660	2660
5°	2668	2646	2661
10°	2652	2638	2662
15°	2623	2625	2661
20°	2585	2607	2660
25°	2536	2581	2657
30°	2481	2554	2652
35°	2415	2532	2650
40°	2351	2508	2654
45°	2279	2481	2668
50°	2212	2469	2686
55°	2128	2461	2710
60°	2052	2465	2747
65°	1947	2472	2790
70°	1827	2492	2788
75°	1656	2514	2521
80°	1358	2171	1795
85°	1007	1028	414



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	93.5	3.3
10°-20°	267.2	9.3
20°-30°	402.5	14.0
30°-40°	483.0	16.8
40°-50°	503.4	17.5
50°-60°	466.0	16.2
60°-70°	376.5	13.1
70°-80°	229.6	8.0
80°-90°	47.4	1.7
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°	763.2	26.6
0°-40°	1246.1	43.4
0°-60°	2215.5	77.2
0°-90°	2869.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	2869.0	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	988	988	988	988	988	
5°	988	985	979	986	985	94
15°	942	942	942	955	955	265
25°	854	859	869	891	895	394
35°	735	747	771	799	807	460
45°	599	617	652	688	701	463
55°	454	477	525	566	578	406
65°	306	336	388	427	438	302
75°	159	194	242	246	242	167
85°	33	49	33	19	13	40
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	988.4	988.4	988.4	988.4	988.4
2.5°	992.2	989.0	982.0	989.0	987.7
5°	987.7	985.2	979.4	986.5	985.2
7.5°	981.3	978.8	973.7	982.0	980.7
10°	970.5	969.2	965.3	974.9	974.3
12.5°	957.7	957.0	955.1	966.0	965.3
15°	941.7	942.3	942.3	955.1	955.1
17.5°	923.8	925.0	927.6	941.7	943.6
20°	902.7	905.2	910.3	926.3	928.9
22.5°	880.9	882.8	890.5	909.7	912.3
25°	854.0	859.2	869.4	891.1	895.0
27.5°	828.4	832.9	847.0	869.4	875.8
30°	798.4	805.4	822.1	846.4	853.4
32.5°	769.6	777.3	796.5	824.6	831.0
35°	735.0	746.6	770.9	799.0	806.7
37.5°	703.7	714.6	742.1	772.8	781.7
40°	669.2	682.6	713.9	746.6	755.5
42.5°	637.2	650.0	683.9	717.1	729.3
45°	598.8	616.7	651.9	688.3	701.1
47.5°	563.6	581.5	621.8	660.8	672.4
50°	528.4	547.6	589.8	630.1	641.6
52.5°	492.0	512.4	557.8	598.1	611.6
55°	453.6	477.2	524.6	565.5	577.7
57.5°	417.1	441.4	492.0	533.5	545.7
60°	381.3	406.2	458.0	497.7	510.5
62.5°	341.6	371.0	424.8	463.8	473.4
65°	305.8	335.9	388.3	427.3	438.2
67.5°	268.0	300.7	353.1	389.0	399.2
70°	232.2	266.1	316.7	349.9	354.4
72.5°	193.8	228.4	279.6	300.7	300.7
75°	159.3	194.5	241.8	245.7	242.5
77.5°	121.5	160.6	191.3	183.6	175.9
80°	87.6	126.0	140.1	126.0	115.8
82.5°	58.9	91.5	84.4	67.2	59.5
85°	32.6	48.6	33.3	18.6	13.4
87.5°	12.2	10.9	3.2	3.2	3.2
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)