

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: P312135

Luminaire Tested: **14FCZ2-44-UNV-L83050-RDP-CP250-W2A-U-3000K**

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: P312135
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: 14FCZ2-44-UNV-L83050-RDP-CP250-W2A-U-3000K
Description: 1'X4' TROFFER LED MODULE, SMOOTH LENS WITH INSERT , 0.250" POLYCARB SHEET
Light Source: (168) 3000K 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: 2339.0 lumens
Efficiency: N/A
Efficacy: 61.2 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

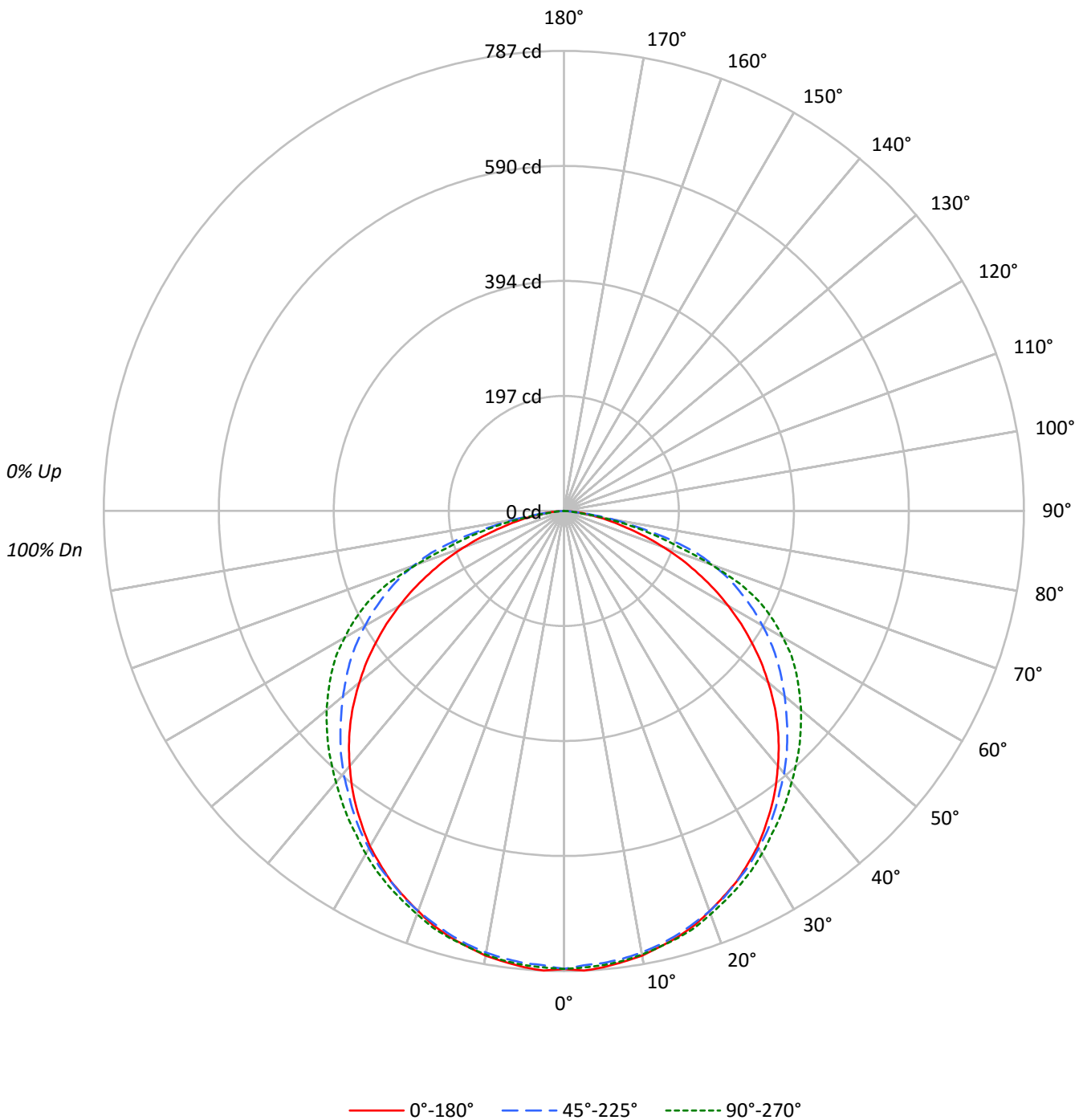
Input Watts (W): 38.2
Input Voltage (V): NR
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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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				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°	2108	2108	2108
5°	2116	2096	2106
10°	2111	2096	2106
15°	2101	2091	2106
20°	2086	2086	2102
25°	2077	2077	2104
30°	2060	2071	2105
35°	2033	2064	2112
40°	2001	2059	2130
45°	1967	2057	2168
50°	1911	2064	2217
55°	1842	2091	2279
60°	1749	2113	2329
65°	1616	2139	2360
70°	1437	2155	2112
75°	1158	1937	1690
80°	905	1359	1103
85°	621	395	281



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	74.1	3.2
10°-20°	212.7	9.1
20°-30°	323.9	13.8
30°-40°	394.6	16.9
40°-50°	418.6	17.9
50°-60°	395.1	16.9
60°-70°	319.0	13.6
70°-80°	173.0	7.4
80°-90°	28.0	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°	610.8	26.1
0°-40°	1005.4	43.0
0°-60°	1819.0	77.8
0°-90°	2339.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	2339.0	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	783	783	783	783	783	
5°	783	782	776	782	780	74
15°	754	752	750	756	756	213
25°	699	698	699	707	708	322
35°	619	623	628	641	643	387
45°	517	524	540	561	570	398
55°	393	409	446	475	486	351
65°	254	285	336	363	371	251
75°	111	162	186	168	162	122
85°	20	22	13	11	9	26
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	783.4	783.4	783.4	783.4	783.4
2.5°	787.0	783.4	777.9	783.4	781.6
5°	783.4	781.6	776.1	781.6	779.7
7.5°	777.9	777.9	772.4	776.1	776.1
10°	772.4	770.6	767.0	772.4	770.6
12.5°	763.3	761.5	759.7	765.1	763.3
15°	754.2	752.3	750.5	756.0	756.0
17.5°	743.2	741.4	739.6	746.9	746.9
20°	728.6	728.6	728.6	735.9	734.1
22.5°	714.0	714.0	715.8	723.1	721.3
25°	699.4	697.6	699.4	706.7	708.5
27.5°	681.1	683.0	684.8	692.1	693.9
30°	662.9	664.7	666.5	675.7	677.5
32.5°	641.0	644.6	648.3	659.2	659.2
35°	619.0	622.7	628.2	641.0	642.8
37.5°	595.3	599.0	606.3	620.9	624.5
40°	569.7	575.2	586.2	600.8	606.3
42.5°	544.2	551.5	564.3	580.7	588.0
45°	516.8	524.1	540.5	560.6	569.7
47.5°	487.6	496.7	516.8	542.3	549.7
50°	456.5	469.3	493.0	520.4	529.6
52.5°	425.5	440.1	469.3	498.5	507.7
55°	392.6	409.0	445.6	474.8	485.7
57.5°	359.7	378.0	420.0	451.0	462.0
60°	325.0	347.0	392.6	423.7	432.8
62.5°	290.3	315.9	365.2	396.3	403.6
65°	253.8	284.9	336.0	363.4	370.7
67.5°	219.1	255.7	306.8	326.9	326.9
70°	182.6	222.8	273.9	279.4	268.4
72.5°	146.1	191.7	237.4	217.3	208.2
75°	111.4	162.5	186.3	168.0	162.5
77.5°	84.0	131.5	131.5	120.5	116.9
80°	58.4	100.4	87.7	76.7	71.2
82.5°	38.3	56.6	45.7	36.5	31.0
85°	20.1	21.9	12.8	11.0	9.1
87.5°	7.3	3.7	1.8	3.7	1.8
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)