

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: P312114

Luminaire Tested: **14FCZ2-39-UNV-L83050-RDP-CP250-W2A-U-5000K**

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: P312114
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: 14FCZ2-39-UNV-L83050-RDP-CP250-W2A-U-5000K
Description: 1'X4' TROFFER LED MODULE, SMOOTH LENS WITH INSERT , 0.250" POLYCARB SHEET
Light Source: (168) 5000K 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: 2347.0 lumens
Efficiency: N/A
Efficacy: 67.2 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

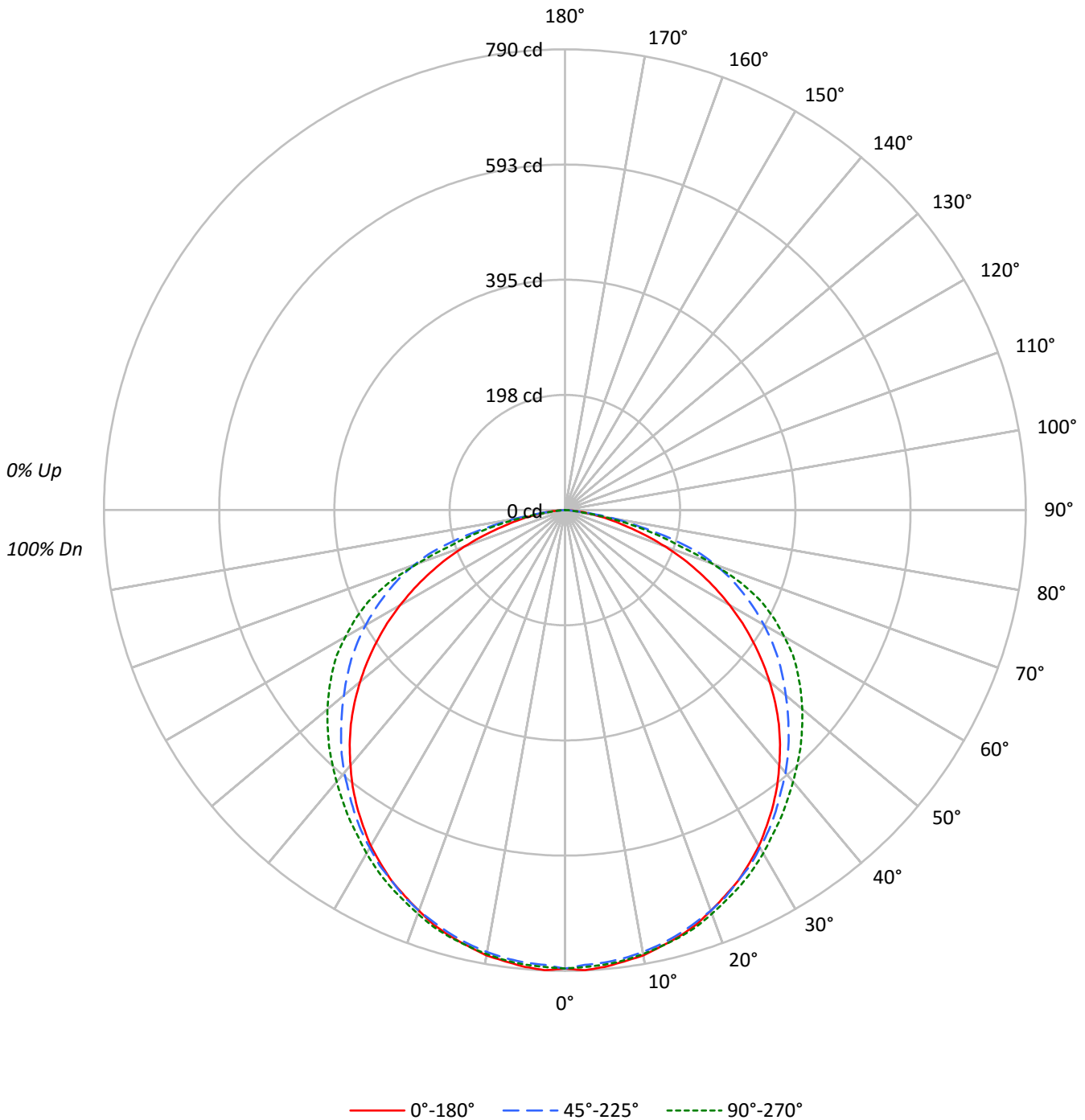
Input Watts (W): 34.9
Input Voltage (V): NR
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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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°	2115	2115	2115
5°	2123	2103	2113
10°	2118	2103	2113
15°	2108	2098	2113
20°	2094	2094	2109
25°	2084	2084	2111
30°	2067	2078	2112
35°	2041	2071	2119
40°	2008	2066	2137
45°	1973	2064	2176
50°	1918	2071	2225
55°	1848	2098	2287
60°	1756	2120	2337
65°	1622	2146	2369
70°	1441	2162	2120
75°	1162	1943	1696
80°	908	1364	1108
85°	624	395	284



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	74.4	3.2
10°-20°	213.5	9.1
20°-30°	325.0	13.8
30°-40°	395.9	16.9
40°-50°	420.0	17.9
50°-60°	396.4	16.9
60°-70°	320.0	13.6
70°-80°	173.6	7.4
80°-90°	28.1	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°	612.9	26.1
0°-40°	1008.8	43.0
0°-60°	1825.2	77.8
0°-90°	2347.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	2347.0	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	786	786	786	786	786	
5°	786	784	779	784	782	75
15°	757	755	753	759	759	214
25°	702	700	702	709	711	323
35°	621	625	630	643	645	388
45°	518	526	542	562	572	399
55°	394	410	447	476	487	352
65°	255	286	337	365	372	252
75°	112	163	187	169	163	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°	786.1	786.1	786.1	786.1	786.1
2.5°	789.7	786.1	780.6	786.1	784.2
5°	786.1	784.2	778.7	784.2	782.4
7.5°	780.6	780.6	775.1	778.7	778.7
10°	775.1	773.2	769.6	775.1	773.2
12.5°	765.9	764.1	762.2	767.7	765.9
15°	756.8	754.9	753.1	758.6	758.6
17.5°	745.8	743.9	742.1	749.4	749.4
20°	731.1	731.1	731.1	738.4	736.6
22.5°	716.4	716.4	718.3	725.6	723.8
25°	701.8	700.0	701.8	709.1	710.9
27.5°	683.5	685.3	687.1	694.5	696.3
30°	665.1	667.0	668.8	678.0	679.8
32.5°	643.1	646.8	650.5	661.5	661.5
35°	621.2	624.8	630.3	643.1	645.0
37.5°	597.3	601.0	608.3	623.0	626.7
40°	571.7	577.2	588.2	602.8	608.3
42.5°	546.0	553.4	566.2	582.7	590.0
45°	518.5	525.9	542.4	562.5	571.7
47.5°	489.2	498.4	518.5	544.2	551.5
50°	458.1	470.9	494.7	522.2	531.4
52.5°	426.9	441.6	470.9	500.2	509.4
55°	394.0	410.4	447.1	476.4	487.4
57.5°	361.0	379.3	421.4	452.6	463.6
60°	326.2	348.1	394.0	425.1	434.3
62.5°	291.3	317.0	366.5	397.6	404.9
65°	254.7	285.8	337.1	364.6	372.0
67.5°	219.9	256.5	307.8	328.0	328.0
70°	183.2	223.5	274.8	280.3	269.4
72.5°	146.6	192.4	238.2	218.0	208.9
75°	111.8	163.1	186.9	168.6	163.1
77.5°	84.3	131.9	131.9	120.9	117.3
80°	58.6	100.8	88.0	77.0	71.5
82.5°	38.5	56.8	45.8	36.6	31.1
85°	20.2	22.0	12.8	11.0	9.2
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)