

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: P307333

Luminaire Tested: **14FCZ2-25-UNV-L82765-RDP-CP250-W2A-U-3500K**

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: P307333
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: 14FCZ2-25-UNV-L82765-RDP-CP250-W2A-U-3500K
Description: 1'X4' TROFFER LED MODULE, SMOOTH LENS WITH INSERT , 0.250" POLYCARB SHEET
Light Source: (168) 3500K 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: 1364.0 lumens
Efficiency: N/A
Efficacy: 69.2 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

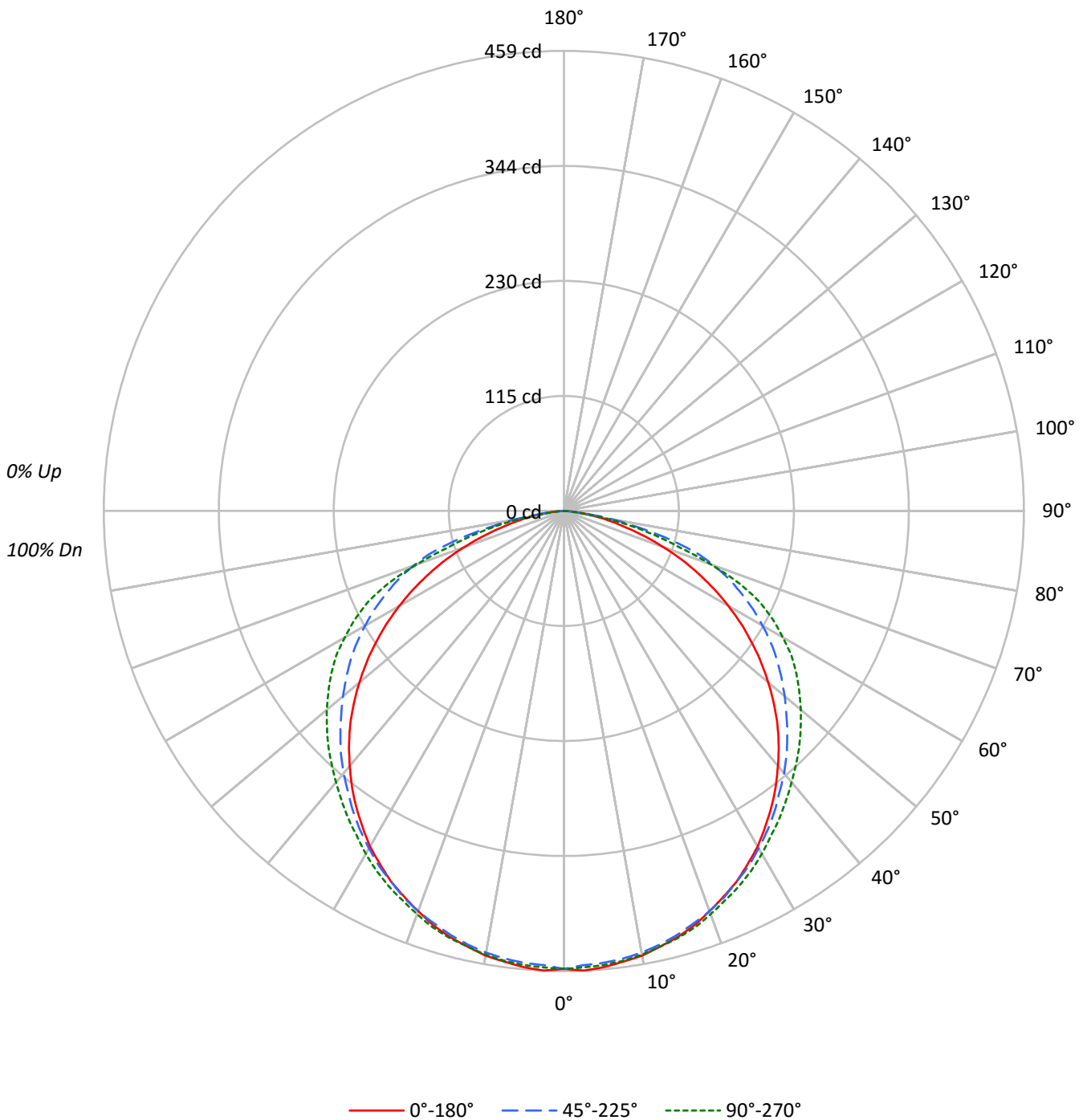
Input Watts (W): 19.7
Input Voltage (V): NR
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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Luminous Intensity Polar Plot





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CATALOG NUMBER: 14FC22-25-UNV-L82765-RDP-CP250-W2A-U-3500K

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°	1229	1229	1229
5°	1234	1223	1228
10°	1231	1222	1228
15°	1225	1219	1228
20°	1217	1217	1226
25°	1211	1211	1227
30°	1201	1208	1228
35°	1186	1203	1231
40°	1167	1201	1242
45°	1147	1200	1264
50°	1114	1204	1293
55°	1074	1219	1329
60°	1020	1232	1358
65°	942	1247	1377
70°	838	1257	1231
75°	676	1129	986
80°	528	792	643
85°	361	232	164



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	43.2	3.2
10°-20°	124.1	9.1
20°-30°	188.9	13.8
30°-40°	230.1	16.9
40°-50°	244.1	17.9
50°-60°	230.4	16.9
60°-70°	186.0	13.6
70°-80°	100.9	7.4
80°-90°	16.3	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°	356.2	26.1
0°-40°	586.3	43.0
0°-60°	1060.7	77.8
0°-90°	1364.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	1364.0	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	457	457	457	457	457	
5°	457	456	453	456	455	43
15°	440	439	438	441	441	124
25°	408	407	408	412	413	188
35°	361	363	366	374	375	226
45°	301	306	315	327	332	232
55°	229	238	260	277	283	205
65°	148	166	196	212	216	147
75°	65	95	109	98	95	71
85°	12	13	8	6	5	15
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	456.8	456.8	456.8	456.8	456.8
2.5°	459.0	456.8	453.6	456.8	455.8
5°	456.8	455.8	452.6	455.8	454.7
7.5°	453.6	453.6	450.4	452.6	452.6
10°	450.4	449.4	447.3	450.4	449.4
12.5°	445.1	444.1	443.0	446.2	445.1
15°	439.8	438.7	437.7	440.9	440.9
17.5°	433.4	432.3	431.3	435.5	435.5
20°	424.9	424.9	424.9	429.2	428.1
22.5°	416.4	416.4	417.4	421.7	420.6
25°	407.9	406.8	407.9	412.1	413.2
27.5°	397.2	398.3	399.3	403.6	404.7
30°	386.6	387.6	388.7	394.0	395.1
32.5°	373.8	375.9	378.0	384.4	384.4
35°	361.0	363.1	366.3	373.8	374.8
37.5°	347.2	349.3	353.5	362.1	364.2
40°	332.2	335.4	341.8	350.3	353.5
42.5°	317.3	321.6	329.1	338.6	342.9
45°	301.4	305.6	315.2	326.9	332.2
47.5°	284.3	289.7	301.4	316.3	320.5
50°	266.2	273.7	287.5	303.5	308.8
52.5°	248.1	256.6	273.7	290.7	296.0
55°	229.0	238.5	259.8	276.9	283.3
57.5°	209.8	220.4	244.9	263.0	269.4
60°	189.6	202.3	229.0	247.1	252.4
62.5°	169.3	184.2	213.0	231.1	235.3
65°	148.0	166.1	195.9	211.9	216.2
67.5°	127.8	149.1	178.9	190.6	190.6
70°	106.5	129.9	159.7	162.9	156.5
72.5°	85.2	111.8	138.4	126.7	121.4
75°	65.0	94.8	108.6	98.0	94.8
77.5°	49.0	76.7	76.7	70.3	68.2
80°	34.1	58.6	51.1	44.7	41.5
82.5°	22.4	33.0	26.6	21.3	18.1
85°	11.7	12.8	7.5	6.4	5.3
87.5°	4.3	2.1	1.1	2.1	1.1
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)