

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: P307289

Luminaire Tested: **14FCZ2-20-UNV-L82765-RDP-CP250-W2A-U-4000K**

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: P307289
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: 14FCZ2-20-UNV-L82765-RDP-CP250-W2A-U-4000K
Description: 1'X4' TROFFER LED MODULE, SMOOTH LENS WITH INSERT , 0.250" POLYCARB SHEET
Light Source: (168) 4000K 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: 1194.0 lumens
Efficiency: N/A
Efficacy: 71.5 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

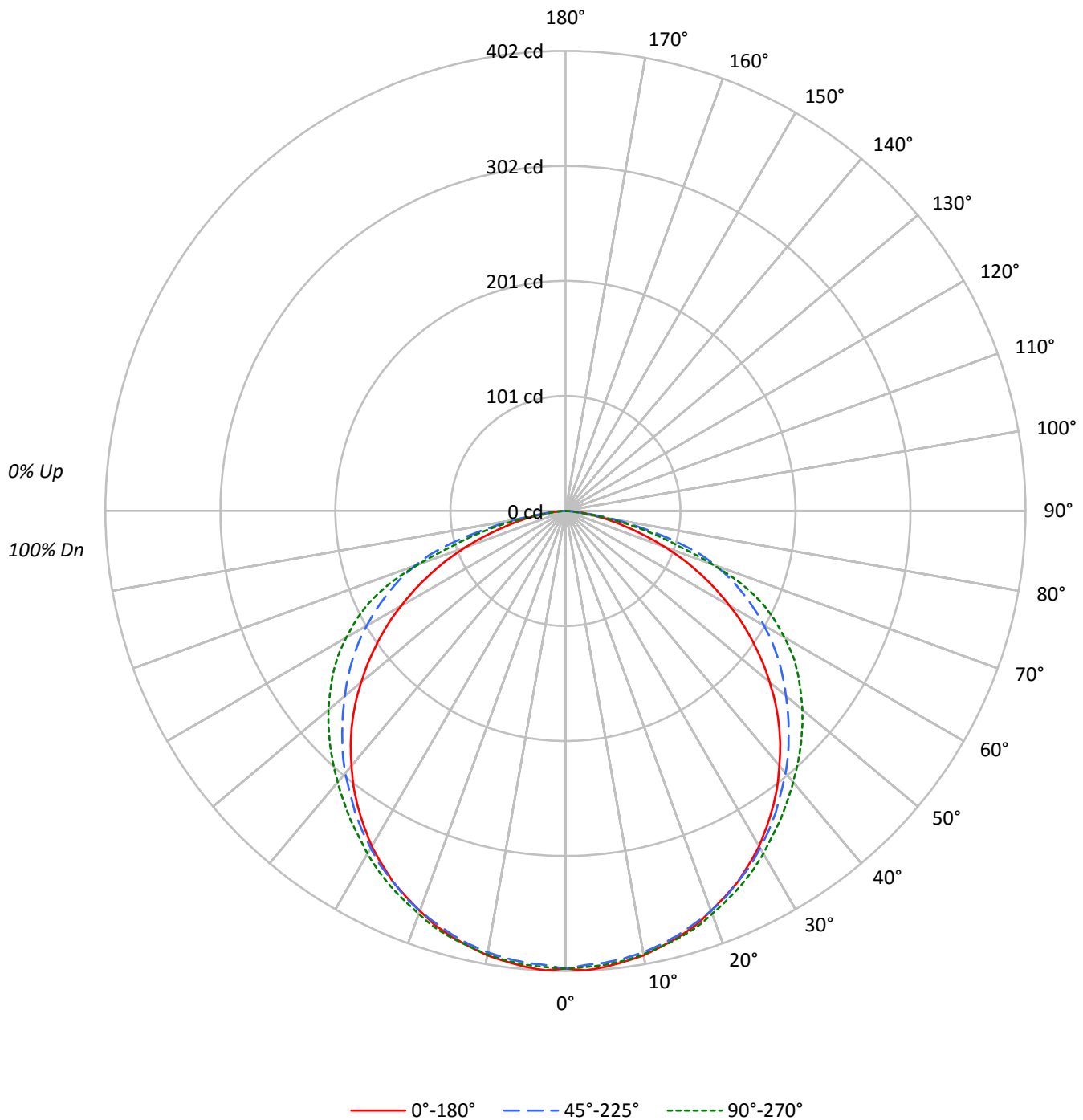
Input Watts (W): 16.7
Input Voltage (V): NR
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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Luminous Intensity Polar Plot





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COEFFICIENT OF UTILIZATION - ZONAL CAVITY METHOD:

RF	20				20				20				20				20
RC	80				70				50				30				0
RW	70	50	30	10	70	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		100
1	109	104	100	96	106	102	98	94	97	94	91		93	91	88		84
2	99	90	83	77	96	88	82	76	85	79	75		81	77	73		69
3	90	79	71	64	87	77	70	63	74	68	62		71	66	61		58
4	82	70	61	54	80	68	60	53	66	58	53		63	57	52		49
5	75	62	53	46	73	61	52	46	59	51	45		57	50	45		42
6	69	56	47	40	67	55	46	40	53	45	40		51	44	39		37
7	64	50	42	35	62	50	41	35	48	40	35		47	40	35		32
8	60	46	37	31	58	45	37	31	44	36	31		43	36	31		29
9	56	42	34	28	54	42	34	28	40	33	28		39	33	28		26
10	52	39	31	25	51	38	31	25	37	30	25		36	30	25		23

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	1076	1076	1076
5°	1080	1070	1075
10°	1077	1070	1075
15°	1073	1067	1075
20°	1065	1065	1073
25°	1060	1060	1074
30°	1052	1057	1074
35°	1038	1054	1078
40°	1022	1051	1087
45°	1004	1050	1107
50°	975	1054	1132
55°	940	1067	1164
60°	893	1079	1189
65°	825	1092	1205
70°	733	1100	1078
75°	592	989	863
80°	462	693	564
85°	318	201	145



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	37.9	3.2
10°-20°	108.6	9.1
20°-30°	165.4	13.8
30°-40°	201.4	16.9
40°-50°	213.7	17.9
50°-60°	201.7	16.9
60°-70°	162.8	13.6
70°-80°	88.3	7.4
80°-90°	14.3	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°	311.8	26.1
0°-40°	513.2	43.0
0°-60°	928.6	77.8
0°-90°	1194.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	1194.0	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	400	400	400	400	400	
5°	400	399	396	399	398	38
15°	385	384	383	386	386	109
25°	357	356	357	361	362	164
35°	316	318	321	327	328	198
45°	264	268	276	286	291	203
55°	200	209	227	242	248	179
65°	130	145	172	186	189	128
75°	57	83	95	86	83	62
85°	10	11	6	6	5	13
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	399.9	399.9	399.9	399.9	399.9
2.5°	401.8	399.9	397.1	399.9	399.0
5°	399.9	399.0	396.2	399.0	398.0
7.5°	397.1	397.1	394.3	396.2	396.2
10°	394.3	393.4	391.5	394.3	393.4
12.5°	389.6	388.7	387.8	390.6	389.6
15°	385.0	384.1	383.1	385.9	385.9
17.5°	379.4	378.5	377.5	381.3	381.3
20°	371.9	371.9	371.9	375.7	374.7
22.5°	364.5	364.5	365.4	369.1	368.2
25°	357.0	356.1	357.0	360.7	361.7
27.5°	347.7	348.6	349.6	353.3	354.2
30°	338.4	339.3	340.2	344.9	345.8
32.5°	327.2	329.1	330.9	336.5	336.5
35°	316.0	317.9	320.7	327.2	328.1
37.5°	303.9	305.8	309.5	316.9	318.8
40°	290.8	293.6	299.2	306.7	309.5
42.5°	277.8	281.5	288.0	296.4	300.2
45°	263.8	267.5	275.9	286.2	290.8
47.5°	248.9	253.6	263.8	276.9	280.6
50°	233.0	239.6	251.7	265.7	270.3
52.5°	217.2	224.7	239.6	254.5	259.1
55°	200.4	208.8	227.4	242.4	248.0
57.5°	183.6	193.0	214.4	230.2	235.8
60°	165.9	177.1	200.4	216.3	220.9
62.5°	148.2	161.3	186.4	202.3	206.0
65°	129.6	145.4	171.5	185.5	189.2
67.5°	111.9	130.5	156.6	166.9	166.9
70°	93.2	113.7	139.8	142.6	137.0
72.5°	74.6	97.9	121.2	110.9	106.3
75°	56.9	83.0	95.1	85.8	83.0
77.5°	42.9	67.1	67.1	61.5	59.7
80°	29.8	51.3	44.7	39.2	36.4
82.5°	19.6	28.9	23.3	18.6	15.8
85°	10.3	11.2	6.5	5.6	4.7
87.5°	3.7	1.9	0.9	1.9	0.9
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)