

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: P307269

Luminaire Tested: **14FCZ2-20-UNV-L82765-RDP-CP125-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: P307269
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-CP125-W2A-U-3000K
Description: 1'X4' TROFFER LED MODULE, SMOOTH LENS WITH INSERT , 0.125" 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: 1189.0 lumens
Efficiency: N/A
Efficacy: 72.5 lumens/watt
Spacing Criteria (0/90/45): 1.25 / 1.29 / 1.4
Luminous Opening: Rectangular (W 1' x L: 4' x H: 0')
CIE Type: Direct

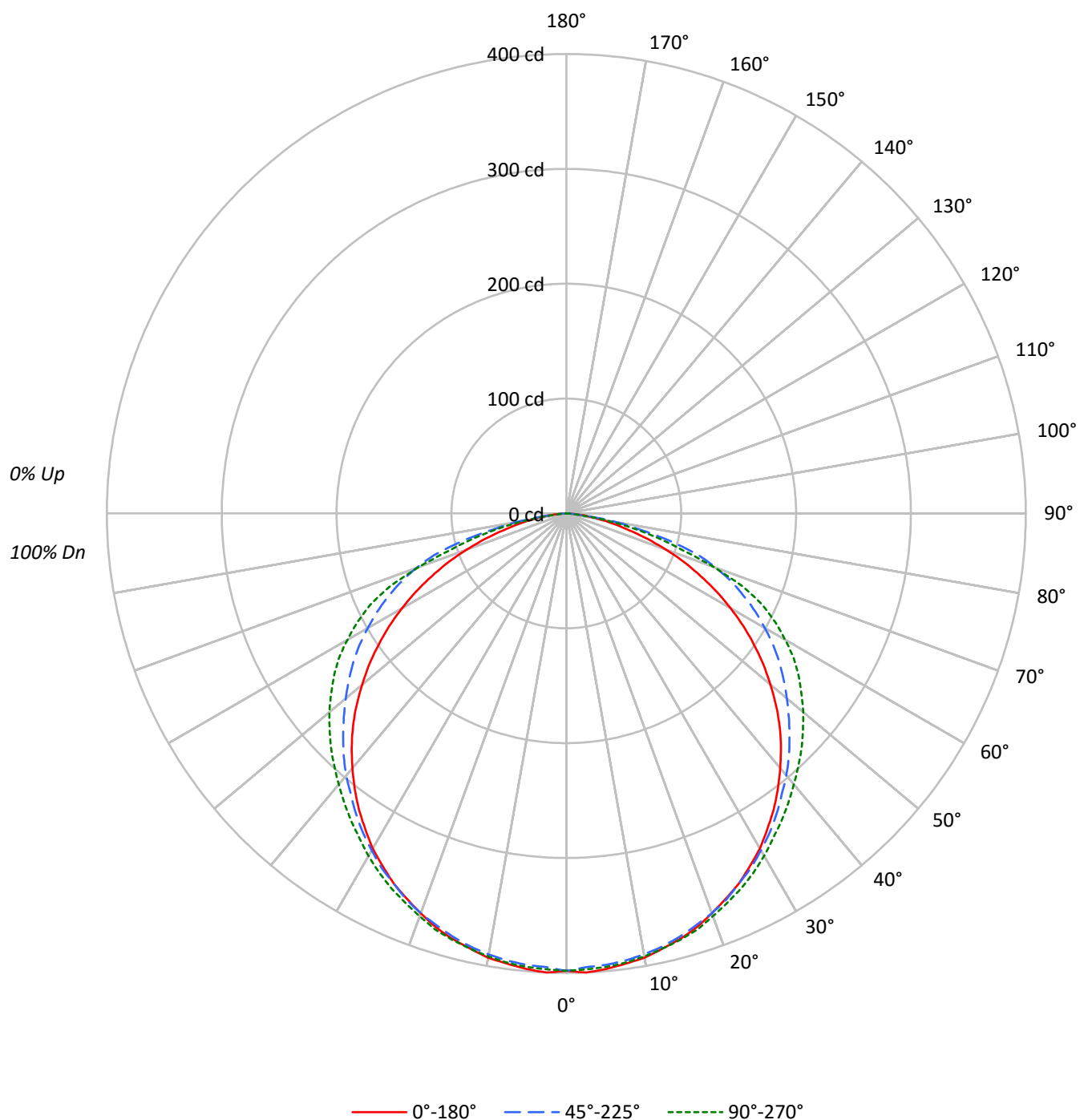
Input Watts (W): 16.4
Input Voltage (V): NR
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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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°	1072	1072	1072
5°	1076	1066	1071
10°	1073	1065	1070
15°	1068	1063	1071
20°	1061	1061	1069
25°	1056	1056	1069
30°	1047	1053	1070
35°	1034	1049	1073
40°	1017	1047	1083
45°	1000	1046	1102
50°	972	1049	1127
55°	936	1063	1158
60°	889	1074	1184
65°	821	1088	1200
70°	730	1095	1074
75°	588	985	859
80°	460	691	561
85°	315	201	142



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	37.7	3.2
10°-20°	108.1	9.1
20°-30°	164.7	13.8
30°-40°	200.6	16.9
40°-50°	212.8	17.9
50°-60°	200.8	16.9
60°-70°	162.1	13.6
70°-80°	88.0	7.4
80°-90°	14.2	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°	310.5	26.1
0°-40°	511.1	43.0
0°-60°	924.7	77.8
0°-90°	1189.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	1189.0	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	398	398	398	398	398	
5°	398	397	394	397	396	38
15°	383	382	382	384	384	108
25°	356	355	356	359	360	164
35°	315	316	319	326	327	197
45°	263	266	275	285	290	202
55°	200	208	226	241	247	178
65°	129	145	171	185	188	128
75°	57	83	95	85	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°	398.2	398.2	398.2	398.2	398.2
2.5°	400.1	398.2	395.4	398.2	397.3
5°	398.2	397.3	394.5	397.3	396.4
7.5°	395.4	395.4	392.7	394.5	394.5
10°	392.7	391.7	389.9	392.7	391.7
12.5°	388.0	387.1	386.2	388.9	388.0
15°	383.4	382.4	381.5	384.3	384.3
17.5°	377.8	376.9	375.9	379.7	379.7
20°	370.4	370.4	370.4	374.1	373.2
22.5°	363.0	363.0	363.9	367.6	366.7
25°	355.5	354.6	355.5	359.2	360.2
27.5°	346.2	347.2	348.1	351.8	352.7
30°	337.0	337.9	338.8	343.5	344.4
32.5°	325.8	327.7	329.5	335.1	335.1
35°	314.7	316.5	319.3	325.8	326.7
37.5°	302.6	304.5	308.2	315.6	317.5
40°	289.6	292.4	298.0	305.4	308.2
42.5°	276.6	280.3	286.8	295.2	298.9
45°	262.7	266.4	274.8	285.0	289.6
47.5°	247.8	252.5	262.7	275.7	279.4
50°	232.1	238.6	250.6	264.6	269.2
52.5°	216.3	223.7	238.6	253.4	258.1
55°	199.6	207.9	226.5	241.3	246.9
57.5°	182.9	192.2	213.5	229.3	234.9
60°	165.2	176.4	199.6	215.4	220.0
62.5°	147.6	160.6	185.7	201.4	205.1
65°	129.0	144.8	170.8	184.7	188.4
67.5°	111.4	130.0	155.9	166.2	166.2
70°	92.8	113.2	139.2	142.0	136.5
72.5°	74.3	97.5	120.7	110.5	105.8
75°	56.6	82.6	94.7	85.4	82.6
77.5°	42.7	66.8	66.8	61.3	59.4
80°	29.7	51.1	44.6	39.0	36.2
82.5°	19.5	28.8	23.2	18.6	15.8
85°	10.2	11.1	6.5	5.6	4.6
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)