

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: P307251

Luminaire Tested: **14FCZ2-20-UNV-L82765-RDP-CA08-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: P307251
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-CA08-W2A-U-3000K
Description: 1'X4' TROFFER LED MODULE, SMOOTH LENS WITH INSERT , 0.08" ACRYLIC 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: 1217.0 lumens
Efficiency: N/A
Efficacy: 74.2 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

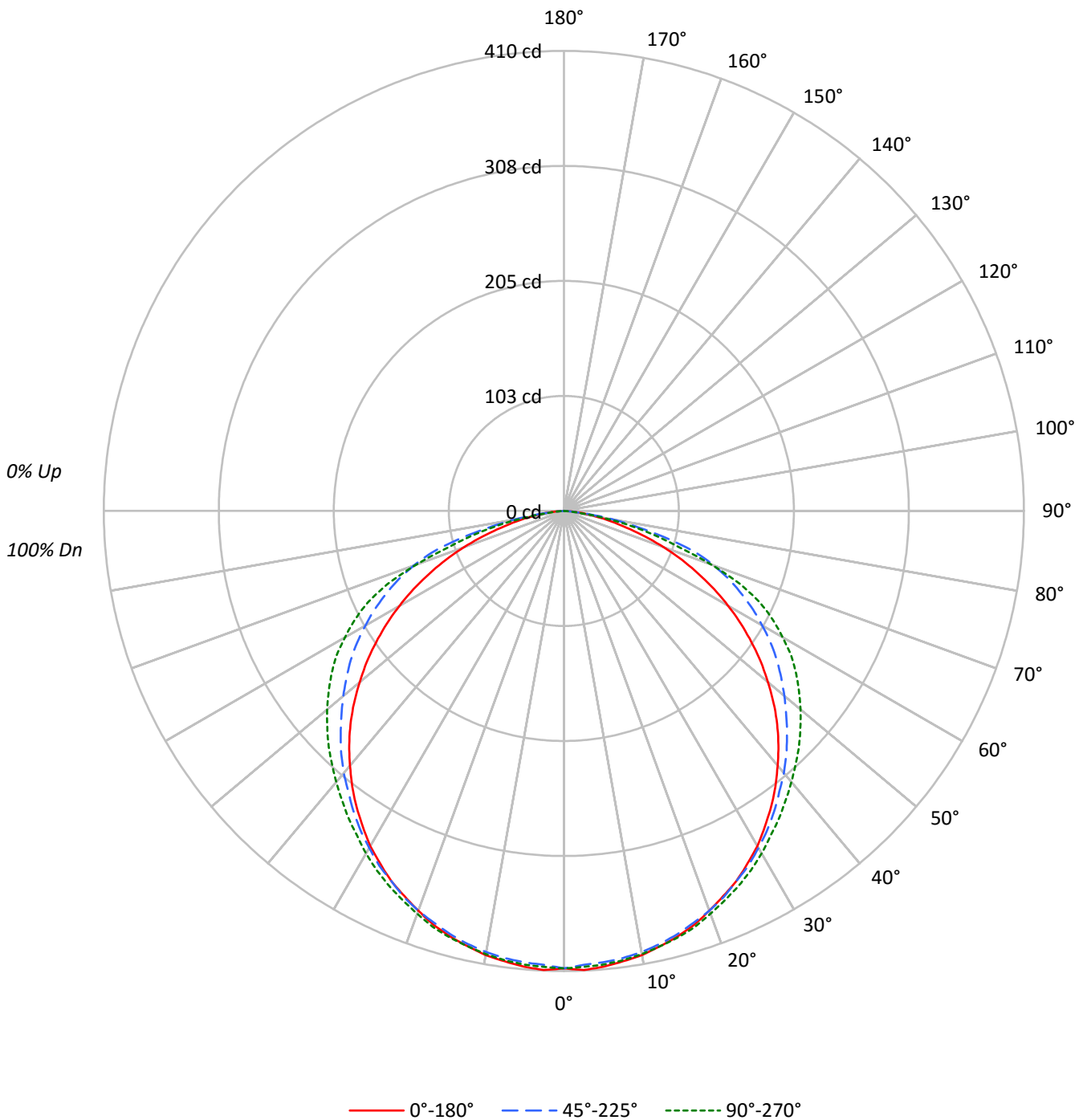
Input Watts (W): 16.4
Input Voltage (V): NR
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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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				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°	1097	1097	1097
5°	1101	1091	1096
10°	1098	1091	1096
15°	1093	1088	1096
20°	1086	1086	1094
25°	1080	1080	1094
30°	1072	1078	1095
35°	1058	1074	1099
40°	1041	1071	1108
45°	1023	1070	1128
50°	994	1074	1153
55°	958	1088	1186
60°	910	1100	1212
65°	841	1113	1228
70°	747	1121	1099
75°	603	1007	880
80°	471	707	575
85°	324	207	148



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	38.6	3.2
10°-20°	110.7	9.1
20°-30°	168.5	13.8
30°-40°	205.3	16.9
40°-50°	217.8	17.9
50°-60°	205.5	16.9
60°-70°	166.0	13.6
70°-80°	90.0	7.4
80°-90°	14.6	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°	317.8	26.1
0°-40°	523.1	43.0
0°-60°	946.4	77.8
0°-90°	1217.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	1217.0	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	408	408	408	408	408	
5°	408	407	404	407	406	39
15°	392	392	390	393	393	111
25°	364	363	364	368	369	168
35°	322	324	327	334	334	201
45°	269	273	281	292	296	207
55°	204	213	232	247	253	182
65°	132	148	175	189	193	131
75°	58	85	97	87	85	63
85°	10	11	7	6	5	13
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	407.6	407.6	407.6	407.6	407.6
2.5°	409.5	407.6	404.8	407.6	406.7
5°	407.6	406.7	403.8	406.7	405.7
7.5°	404.8	404.8	401.9	403.8	403.8
10°	401.9	401.0	399.1	401.9	401.0
12.5°	397.2	396.2	395.3	398.1	397.2
15°	392.4	391.5	390.5	393.4	393.4
17.5°	386.7	385.8	384.8	388.6	388.6
20°	379.1	379.1	379.1	382.9	382.0
22.5°	371.5	371.5	372.4	376.3	375.3
25°	363.9	362.9	363.9	367.7	368.6
27.5°	354.4	355.3	356.3	360.1	361.0
30°	344.9	345.8	346.8	351.5	352.5
32.5°	333.5	335.4	337.3	343.0	343.0
35°	322.1	324.0	326.8	333.5	334.4
37.5°	309.7	311.6	315.4	323.0	324.9
40°	296.4	299.3	305.0	312.6	315.4
42.5°	283.1	286.9	293.6	302.1	305.9
45°	268.9	272.7	281.2	291.7	296.4
47.5°	253.7	258.4	268.9	282.2	286.0
50°	237.5	244.2	256.5	270.8	275.5
52.5°	221.4	229.0	244.2	259.4	264.1
55°	204.3	212.8	231.8	247.0	252.7
57.5°	187.2	196.7	218.5	234.7	240.4
60°	169.1	180.5	204.3	220.4	225.2
62.5°	151.1	164.4	190.0	206.2	210.0
65°	132.1	148.2	174.8	189.1	192.9
67.5°	114.0	133.0	159.6	170.1	170.1
70°	95.0	115.9	142.5	145.4	139.7
72.5°	76.0	99.8	123.5	113.1	108.3
75°	58.0	84.6	96.9	87.4	84.6
77.5°	43.7	68.4	68.4	62.7	60.8
80°	30.4	52.3	45.6	39.9	37.1
82.5°	20.0	29.5	23.8	19.0	16.2
85°	10.5	11.4	6.7	5.7	4.8
87.5°	3.8	1.9	1.0	1.9	1.0
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)