

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: P307329

Luminaire Tested: **14FCZ2-25-UNV-L82765-RDP-CP187-W2A-U-5700K**

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: P307329
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-CP187-W2A-U-5700K
Description: 1'X4' TROFFER LED MODULE, SMOOTH LENS WITH INSERT , 0.187" POLYCARB SHEET
Light Source: (168) 5700K 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: 1468.0 lumens
Efficiency: N/A
Efficacy: 72.7 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

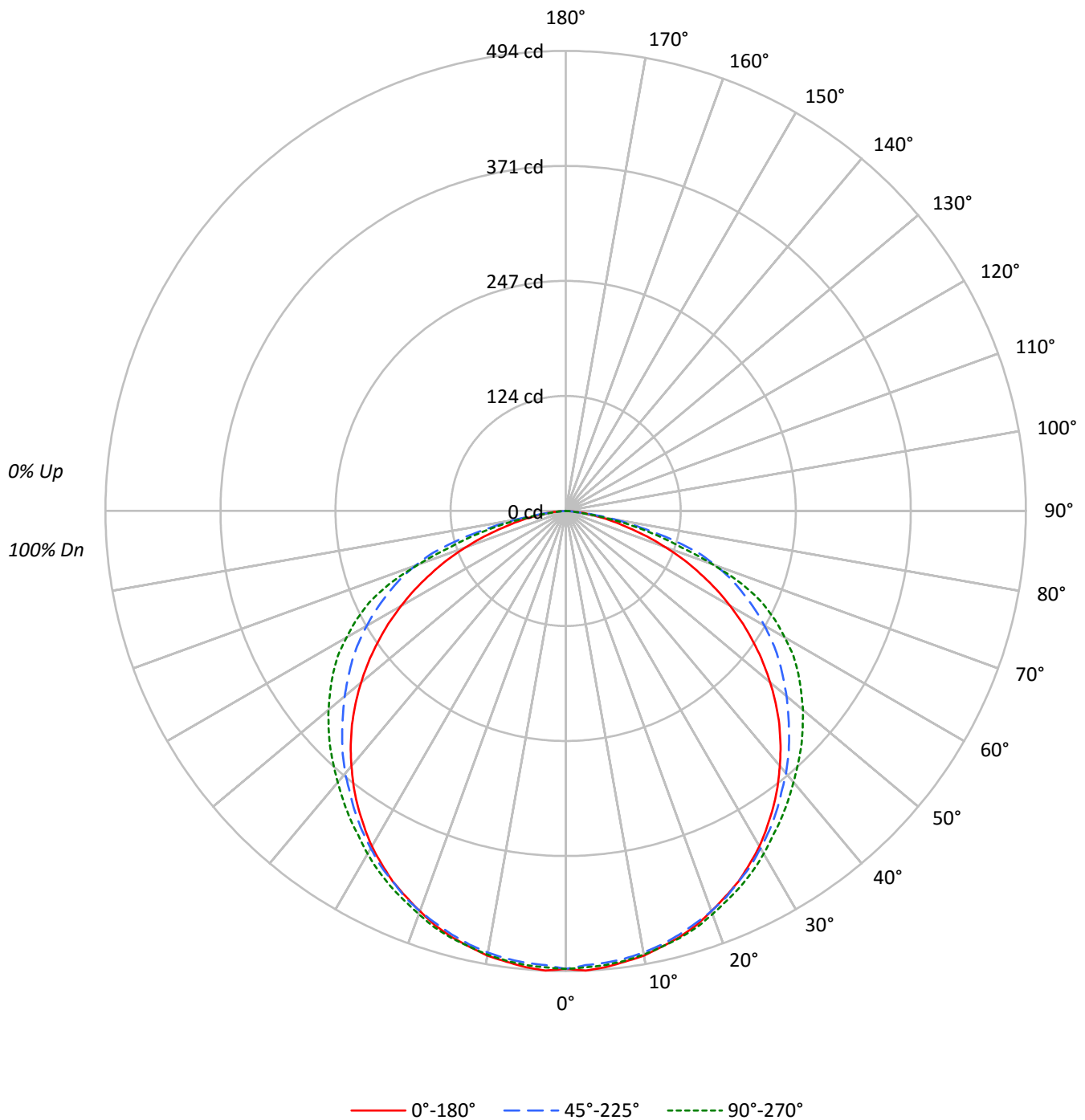
Input Watts (W): 20.2
Input Voltage (V): NR
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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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°	1323	1323	1323
5°	1328	1316	1322
10°	1325	1315	1321
15°	1319	1312	1322
20°	1310	1310	1319
25°	1303	1303	1320
30°	1293	1300	1321
35°	1276	1295	1325
40°	1256	1292	1337
45°	1234	1291	1361
50°	1199	1295	1392
55°	1156	1312	1430
60°	1098	1326	1462
65°	1014	1343	1482
70°	902	1352	1326
75°	727	1215	1061
80°	569	852	693
85°	389	247	176



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	46.5	3.2
10°-20°	133.5	9.1
20°-30°	203.3	13.8
30°-40°	247.6	16.9
40°-50°	262.7	17.9
50°-60°	247.9	16.9
60°-70°	200.2	13.6
70°-80°	108.6	7.4
80°-90°	17.6	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°	383.4	26.1
0°-40°	631.0	43.0
0°-60°	1141.6	77.8
0°-90°	1468.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	1468.0	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	492	492	492	492	492	
5°	492	490	487	490	489	47
15°	473	472	471	474	474	134
25°	439	438	439	444	445	202
35°	388	391	394	402	403	243
45°	324	329	339	352	358	250
55°	246	257	280	298	305	220
65°	159	179	211	228	233	158
75°	70	102	117	105	102	76
85°	13	14	8	7	6	16
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	491.7	491.7	491.7	491.7	491.7
2.5°	494.0	491.7	488.2	491.7	490.5
5°	491.7	490.5	487.1	490.5	489.4
7.5°	488.2	488.2	484.8	487.1	487.1
10°	484.8	483.6	481.4	484.8	483.6
12.5°	479.1	477.9	476.8	480.2	479.1
15°	473.3	472.2	471.0	474.5	474.5
17.5°	466.5	465.3	464.2	468.7	468.7
20°	457.3	457.3	457.3	461.9	460.7
22.5°	448.1	448.1	449.3	453.8	452.7
25°	439.0	437.8	439.0	443.5	444.7
27.5°	427.5	428.6	429.8	434.4	435.5
30°	416.0	417.2	418.3	424.1	425.2
32.5°	402.3	404.6	406.9	413.7	413.7
35°	388.5	390.8	394.3	402.3	403.4
37.5°	373.6	375.9	380.5	389.7	392.0
40°	357.6	361.0	367.9	377.1	380.5
42.5°	341.5	346.1	354.1	364.5	369.0
45°	324.3	328.9	339.2	351.8	357.6
47.5°	306.0	311.7	324.3	340.4	345.0
50°	286.5	294.5	309.4	326.6	332.4
52.5°	267.0	276.2	294.5	312.9	318.6
55°	246.4	256.7	279.6	298.0	304.9
57.5°	225.8	237.2	263.6	283.1	290.0
60°	204.0	217.8	246.4	265.9	271.6
62.5°	182.2	198.3	229.2	248.7	253.3
65°	159.3	178.8	210.9	228.1	232.7
67.5°	137.5	160.5	192.5	205.1	205.1
70°	114.6	139.8	171.9	175.4	168.5
72.5°	91.7	120.3	149.0	136.4	130.7
75°	69.9	102.0	116.9	105.4	102.0
77.5°	52.7	82.5	82.5	75.6	73.3
80°	36.7	63.0	55.0	48.1	44.7
82.5°	24.1	35.5	28.7	22.9	19.5
85°	12.6	13.8	8.0	6.9	5.7
87.5°	4.6	2.3	1.1	2.3	1.1
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)