

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: P307338

Luminaire Tested: **14FCZ2-25-UNV-L82765-RDP-CP250-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: P307338
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-5700K
Description: 1'X4' TROFFER LED MODULE, SMOOTH LENS WITH INSERT , 0.250" 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: 1456.0 lumens
Efficiency: N/A
Efficacy: 72.1 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

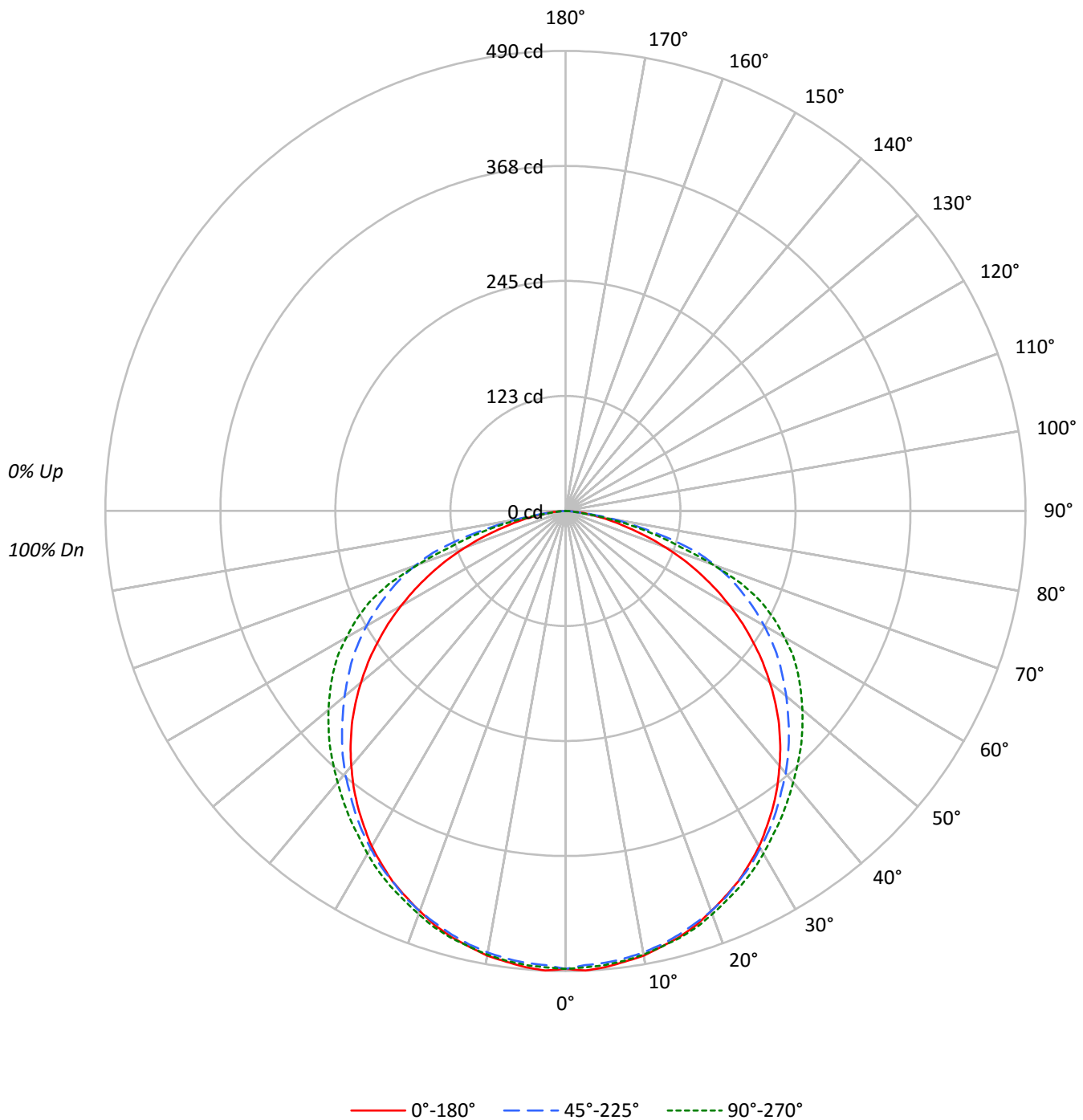
Input Watts (W): 20.2
Input Voltage (V): NR
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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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°	1312	1312	1312
5°	1317	1305	1311
10°	1314	1304	1311
15°	1308	1302	1311
20°	1299	1299	1309
25°	1293	1293	1309
30°	1282	1289	1310
35°	1266	1284	1314
40°	1246	1282	1326
45°	1224	1281	1350
50°	1190	1285	1380
55°	1147	1301	1419
60°	1089	1315	1450
65°	1006	1332	1470
70°	895	1341	1315
75°	721	1205	1052
80°	564	846	687
85°	386	247	176



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	46.2	3.2
10°-20°	132.4	9.1
20°-30°	201.6	13.8
30°-40°	245.6	16.9
40°-50°	260.6	17.9
50°-60°	245.9	16.9
60°-70°	198.6	13.6
70°-80°	107.7	7.4
80°-90°	17.4	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°	380.2	26.1
0°-40°	625.8	43.0
0°-60°	1132.3	77.8
0°-90°	1456.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	1456.0	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	488	488	488	488	488	
5°	488	486	483	486	485	46
15°	470	468	467	471	471	132
25°	435	434	435	440	441	200
35°	385	388	391	399	400	241
45°	322	326	336	349	355	248
55°	244	255	277	296	302	218
65°	158	177	209	226	231	157
75°	69	101	116	105	101	76
85°	12	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°	487.7	487.7	487.7	487.7	487.7
2.5°	489.9	487.7	484.2	487.7	486.5
5°	487.7	486.5	483.1	486.5	485.4
7.5°	484.2	484.2	480.8	483.1	483.1
10°	480.8	479.7	477.4	480.8	479.7
12.5°	475.1	474.0	472.9	476.3	475.1
15°	469.5	468.3	467.2	470.6	470.6
17.5°	462.6	461.5	460.4	464.9	464.9
20°	453.6	453.6	453.6	458.1	457.0
22.5°	444.5	444.5	445.6	450.1	449.0
25°	435.4	434.2	435.4	439.9	441.0
27.5°	424.0	425.1	426.3	430.8	432.0
30°	412.6	413.8	414.9	420.6	421.7
32.5°	399.0	401.3	403.5	410.4	410.4
35°	385.3	387.6	391.0	399.0	400.1
37.5°	370.6	372.8	377.4	386.5	388.8
40°	354.7	358.1	364.9	374.0	377.4
42.5°	338.7	343.3	351.2	361.5	366.0
45°	321.7	326.2	336.5	349.0	354.7
47.5°	303.5	309.2	321.7	337.6	342.2
50°	284.2	292.1	306.9	324.0	329.6
52.5°	264.9	273.9	292.1	310.3	316.0
55°	244.4	254.6	277.4	295.5	302.4
57.5°	223.9	235.3	261.4	280.8	287.6
60°	202.3	216.0	244.4	263.7	269.4
62.5°	180.7	196.7	227.3	246.7	251.2
65°	158.0	177.3	209.2	226.2	230.8
67.5°	136.4	159.1	191.0	203.5	203.5
70°	113.7	138.7	170.5	173.9	167.1
72.5°	90.9	119.4	147.8	135.3	129.6
75°	69.3	101.2	115.9	104.6	101.2
77.5°	52.3	81.8	81.8	75.0	72.7
80°	36.4	62.5	54.6	47.7	44.3
82.5°	23.9	35.2	28.4	22.7	19.3
85°	12.5	13.6	8.0	6.8	5.7
87.5°	4.5	2.3	1.1	2.3	1.1
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)