

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: P307382

Luminaire Tested: **14FCZ2-29-UNV-L82765-RDP-CP250-W2A-U-5500K**

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: P307382
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: 14FCZ2-29-UNV-L82765-RDP-CP250-W2A-U-5500K
Description: 1'X4' TROFFER LED MODULE, SMOOTH LENS WITH INSERT , 0.250" POLYCARB SHEET
Light Source: (168) 5500K 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: 1735.0 lumens
Efficiency: N/A
Efficacy: 70.8 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

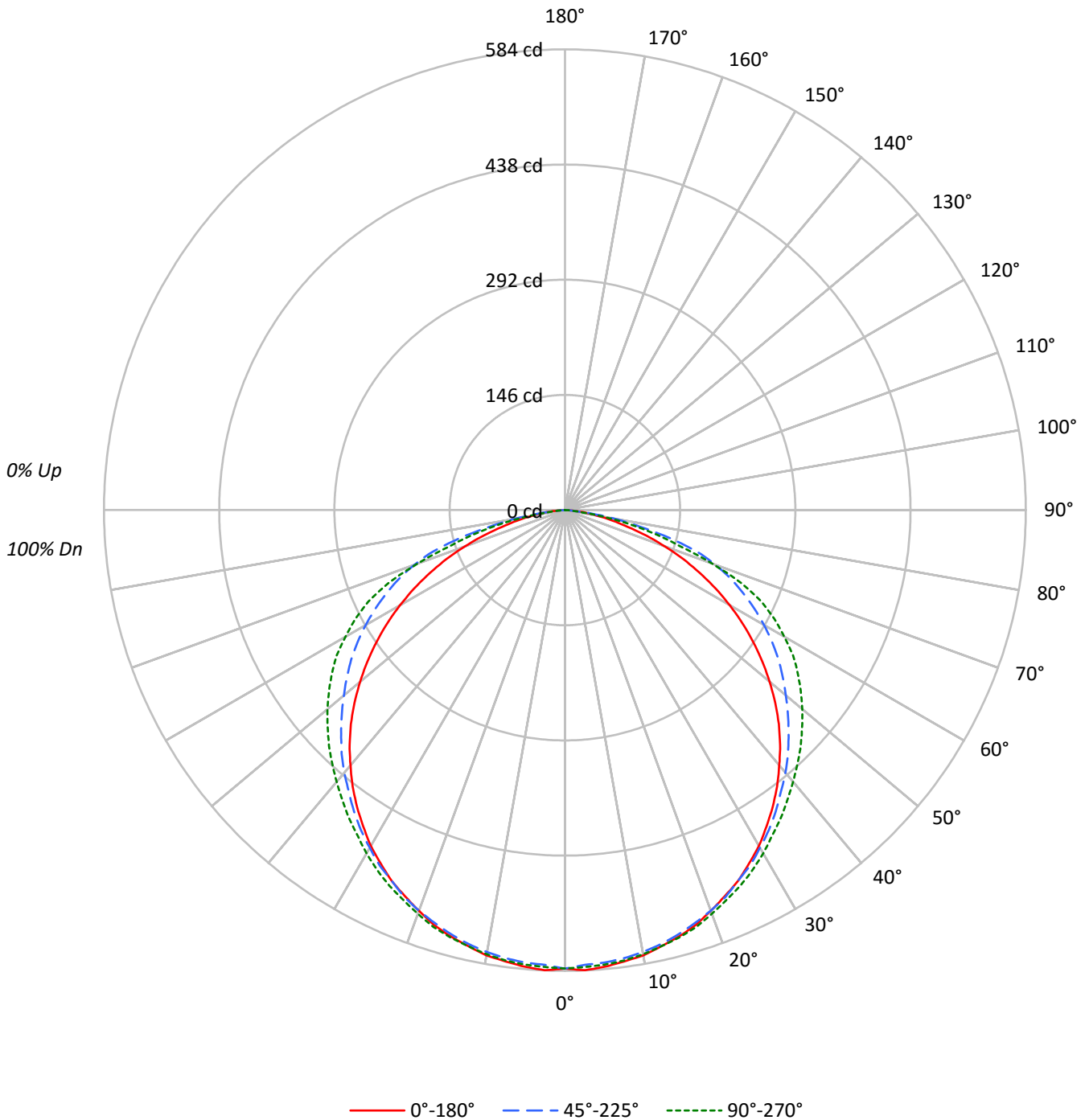
Input Watts (W): 24.5
Input Voltage (V): NR
Input Current (A_{in}): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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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°	1564	1564	1564
5°	1570	1555	1562
10°	1566	1555	1562
15°	1558	1551	1562
20°	1548	1548	1559
25°	1540	1540	1561
30°	1528	1536	1561
35°	1509	1531	1566
40°	1485	1527	1580
45°	1459	1526	1608
50°	1418	1531	1644
55°	1366	1551	1690
60°	1298	1567	1728
65°	1199	1587	1751
70°	1066	1599	1566
75°	859	1437	1254
80°	671	1007	818
85°	460	293	210



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	55.0	3.2
10°-20°	157.8	9.1
20°-30°	240.3	13.8
30°-40°	292.7	16.9
40°-50°	310.5	17.9
50°-60°	293.0	16.9
60°-70°	236.6	13.6
70°-80°	128.4	7.4
80°-90°	20.8	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°	453.1	26.1
0°-40°	745.8	43.0
0°-60°	1349.3	77.8
0°-90°	1735.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	1735.0	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	581	581	581	581	581	
5°	581	580	576	580	578	55
15°	559	558	557	561	561	158
25°	519	517	519	524	526	239
35°	459	462	466	475	477	287
45°	383	389	401	416	423	295
55°	291	303	330	352	360	260
65°	188	211	249	270	275	187
75°	83	121	138	125	121	90
85°	15	16	10	8	7	19
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	581.1	581.1	581.1	581.1	581.1
2.5°	583.8	581.1	577.0	581.1	579.7
5°	581.1	579.7	575.7	579.7	578.4
7.5°	577.0	577.0	573.0	575.7	575.7
10°	573.0	571.6	568.9	573.0	571.6
12.5°	566.2	564.8	563.5	567.6	566.2
15°	559.4	558.1	556.7	560.8	560.8
17.5°	551.3	549.9	548.6	554.0	554.0
20°	540.5	540.5	540.5	545.9	544.5
22.5°	529.6	529.6	531.0	536.4	535.0
25°	518.8	517.4	518.8	524.2	525.6
27.5°	505.2	506.6	508.0	513.4	514.7
30°	491.7	493.1	494.4	501.2	502.5
32.5°	475.4	478.2	480.9	489.0	489.0
35°	459.2	461.9	466.0	475.4	476.8
37.5°	441.6	444.3	449.7	460.5	463.3
40°	422.6	426.7	434.8	445.6	449.7
42.5°	403.7	409.1	418.6	430.7	436.2
45°	383.3	388.8	400.9	415.8	422.6
47.5°	361.7	368.4	383.3	402.3	407.7
50°	338.6	348.1	365.7	386.0	392.8
52.5°	315.6	326.4	348.1	369.8	376.6
55°	291.2	303.4	330.5	352.2	360.3
57.5°	266.8	280.4	311.5	334.6	342.7
60°	241.1	257.4	291.2	314.3	321.0
62.5°	215.4	234.3	270.9	293.9	299.4
65°	188.3	211.3	249.2	269.6	275.0
67.5°	162.5	189.6	227.6	242.5	242.5
70°	135.5	165.3	203.2	207.2	199.1
72.5°	108.4	142.2	176.1	161.2	154.4
75°	82.6	120.6	138.2	124.6	120.6
77.5°	62.3	97.5	97.5	89.4	86.7
80°	43.3	74.5	65.0	56.9	52.8
82.5°	28.4	42.0	33.9	27.1	23.0
85°	14.9	16.3	9.5	8.1	6.8
87.5°	5.4	2.7	1.4	2.7	1.4
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)