

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: P307383

Luminaire Tested: **14FCZ2-29-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: P307383
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-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: 1740.0 lumens
Efficiency: N/A
Efficacy: 71.0 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

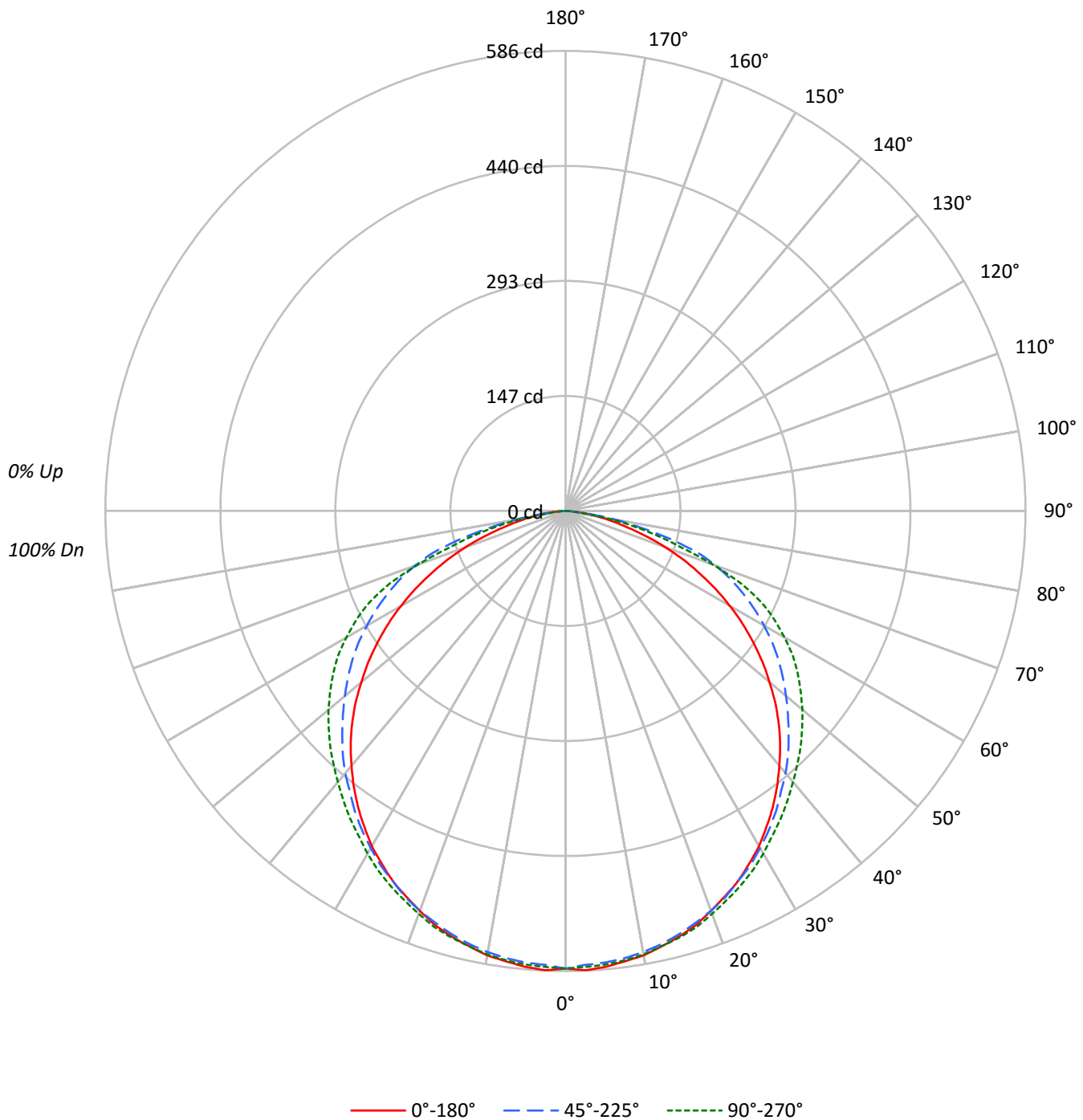
Input Watts (W): 24.5
Input Voltage (V): NR
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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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°	1568	1568	1568
5°	1574	1559	1567
10°	1570	1559	1567
15°	1563	1555	1567
20°	1552	1552	1564
25°	1545	1545	1565
30°	1532	1541	1566
35°	1513	1535	1571
40°	1489	1532	1584
45°	1463	1530	1613
50°	1422	1536	1649
55°	1370	1555	1695
60°	1301	1572	1733
65°	1202	1592	1756
70°	1068	1603	1571
75°	862	1441	1257
80°	674	1010	821
85°	460	293	210



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	55.2	3.2
10°-20°	158.3	9.1
20°-30°	241.0	13.8
30°-40°	293.5	16.9
40°-50°	311.4	17.9
50°-60°	293.9	16.9
60°-70°	237.3	13.6
70°-80°	128.7	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°	454.4	26.1
0°-40°	747.9	43.0
0°-60°	1353.2	77.8
0°-90°	1740.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	1740.0	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	583	583	583	583	583	
5°	583	581	577	581	580	55
15°	561	560	558	562	562	158
25°	520	519	520	526	527	240
35°	460	463	467	477	478	288
45°	384	390	402	417	424	296
55°	292	304	332	353	361	261
65°	189	212	250	270	276	187
75°	83	121	139	125	121	91
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°	582.8	582.8	582.8	582.8	582.8
2.5°	585.5	582.8	578.7	582.8	581.4
5°	582.8	581.4	577.3	581.4	580.1
7.5°	578.7	578.7	574.6	577.3	577.3
10°	574.6	573.3	570.5	574.6	573.3
12.5°	567.8	566.5	565.1	569.2	567.8
15°	561.0	559.7	558.3	562.4	562.4
17.5°	552.9	551.5	550.2	555.6	555.6
20°	542.0	542.0	542.0	547.5	546.1
22.5°	531.1	531.1	532.5	537.9	536.6
25°	520.3	518.9	520.3	525.7	527.1
27.5°	506.7	508.1	509.4	514.8	516.2
30°	493.1	494.5	495.8	502.6	504.0
32.5°	476.8	479.5	482.2	490.4	490.4
35°	460.5	463.2	467.3	476.8	478.2
37.5°	442.9	445.6	451.0	461.9	464.6
40°	423.8	427.9	436.1	446.9	451.0
42.5°	404.8	410.2	419.8	432.0	437.4
45°	384.4	389.9	402.1	417.0	423.8
47.5°	362.7	369.5	384.4	403.5	408.9
50°	339.6	349.1	366.8	387.2	393.9
52.5°	316.5	327.4	349.1	370.9	377.6
55°	292.1	304.3	331.5	353.2	361.3
57.5°	267.6	281.2	312.4	335.5	343.7
60°	241.8	258.1	292.1	315.2	322.0
62.5°	216.0	235.0	271.7	294.8	300.2
65°	188.8	211.9	250.0	270.3	275.8
67.5°	163.0	190.2	228.2	243.2	243.2
70°	135.8	165.7	203.8	207.8	199.7
72.5°	108.7	142.6	176.6	161.7	154.9
75°	82.9	120.9	138.6	125.0	120.9
77.5°	62.5	97.8	97.8	89.7	86.9
80°	43.5	74.7	65.2	57.1	53.0
82.5°	28.5	42.1	34.0	27.2	23.1
85°	14.9	16.3	9.5	8.2	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)