

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: P307113

Luminaire Tested: **14FCZ2-29-UNV-L82765-HRP-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: P307113
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G3-1808-918-18)
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-HRP-CP250-W2A-U-5700K
Description: 1'X4' TROFFER LED MODULE, HIGH EFFICIENCY RND PERF. LENS, 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: 2056.0 lumens
Efficiency: N/A
Efficacy: 83.9 lumens/watt
Spacing Criteria (0/90/45): 1.24 / 1.29 / 1.39
Luminous Opening: Rectangular (W 1' x L: 4' x H: 0')
CIE Type: Direct

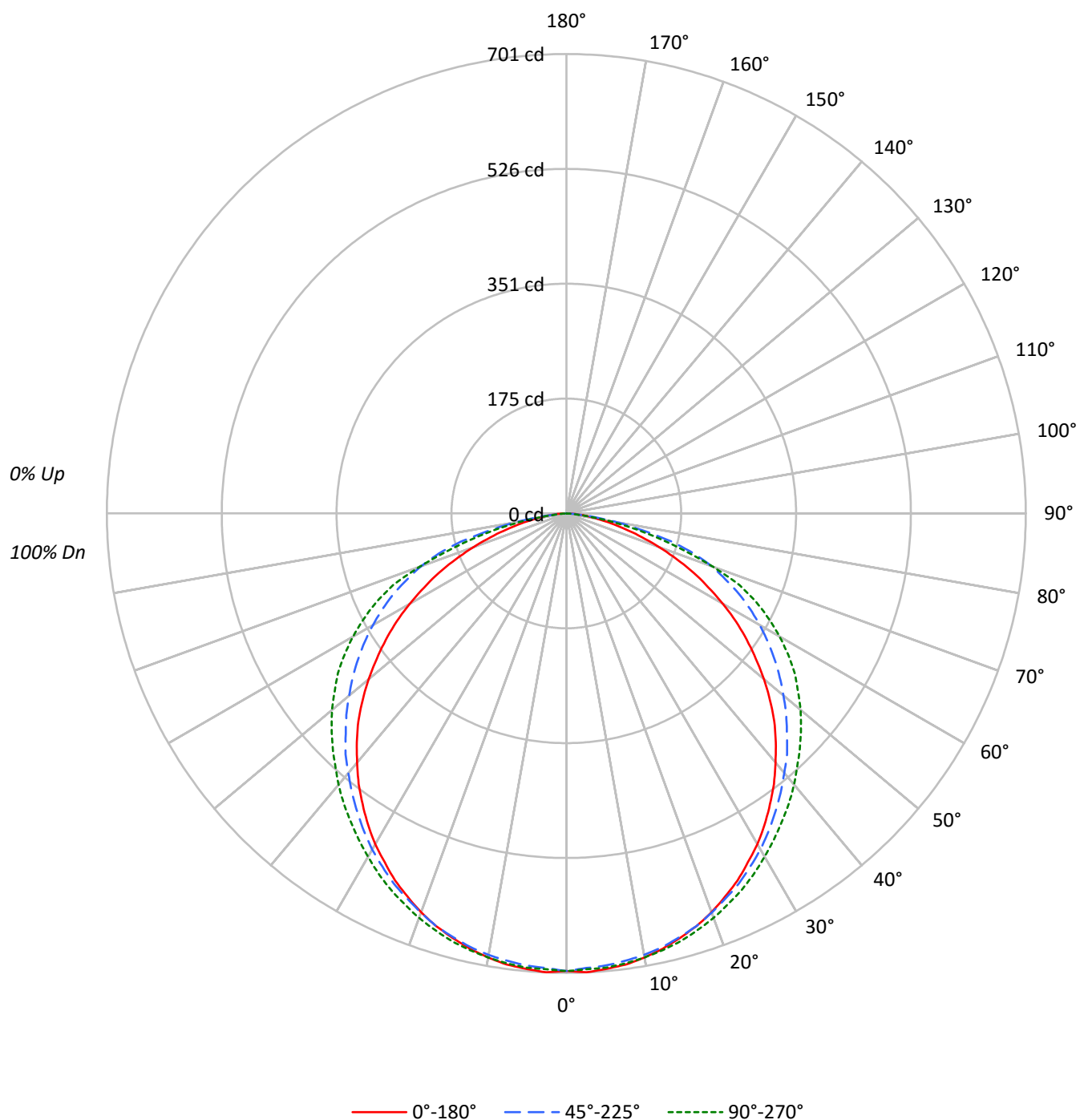
Input Watts (W): 24.5
Input Voltage (V): NR
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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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	78	96	88	82	77	85	79	75		82	77	73		69
3	90	79	71	64	87	77	70	64	74	68	62		72	66	61		58
4	82	70	61	54	80	68	60	54	66	59	53		64	57	52		49
5	75	62	53	46	73	61	53	46	59	51	46		57	50	45		42
6	69	56	47	40	68	55	46	40	53	45	40		51	45	39		37
7	64	51	42	36	63	50	41	35	48	41	35		47	40	35		33
8	60	46	38	32	58	45	37	32	44	37	31		43	36	31		29
9	56	42	34	28	54	42	34	28	41	33	28		39	33	28		26
10	52	39	31	26	51	38	31	26	37	30	26		37	30	25		24

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	1879	1879	1879
5°	1884	1870	1879
10°	1880	1869	1880
15°	1868	1864	1882
20°	1855	1857	1881
25°	1835	1850	1881
30°	1812	1840	1880
35°	1780	1827	1884
40°	1744	1817	1899
45°	1708	1811	1919
50°	1648	1811	1954
55°	1577	1820	1996
60°	1482	1834	2021
65°	1366	1852	2034
70°	1190	1857	1872
75°	981	1728	1513
80°	772	1243	1012
85°	599	479	241



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	66.1	3.2
10°-20°	189.7	9.2
20°-30°	288.0	14.0
30°-40°	349.0	17.0
40°-50°	367.8	17.9
50°-60°	343.3	16.7
60°-70°	274.4	13.3
70°-80°	151.0	7.3
80°-90°	26.7	1.3
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°	543.8	26.5
0°-40°	892.8	43.4
0°-60°	1604.0	78.0
0°-90°	2056.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	2056.0	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	698	698	698	698	698	
5°	698	696	692	697	696	66
15°	670	670	669	676	676	189
25°	618	619	623	632	634	285
35°	542	547	556	570	574	339
45°	449	457	476	497	504	345
55°	336	353	388	415	425	300
65°	215	242	291	315	319	211
75°	94	135	166	149	146	102
85°	19	25	16	10	8	24
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	698.2	698.2	698.2	698.2	698.2
2.5°	700.8	698.9	694.3	698.2	696.3
5°	697.6	695.6	692.4	696.9	695.6
7.5°	694.3	691.8	688.5	693.7	692.4
10°	687.9	685.9	684.0	688.5	687.9
12.5°	680.1	679.5	677.5	682.7	682.1
15°	670.4	670.4	669.1	675.6	675.6
17.5°	660.1	659.4	660.1	667.2	666.5
20°	647.8	647.8	648.4	656.9	656.9
22.5°	632.9	633.6	635.5	645.9	645.2
25°	618.1	619.4	623.2	632.3	633.6
27.5°	600.0	603.2	607.7	618.7	620.0
30°	583.1	585.1	592.2	602.5	605.1
32.5°	563.1	567.0	574.7	586.4	589.6
35°	541.8	546.9	556.0	570.2	573.5
37.5°	520.4	525.0	537.2	552.1	557.9
40°	496.5	504.3	517.2	534.0	540.5
42.5°	473.2	481.0	498.5	515.9	521.7
45°	448.7	457.1	475.8	497.2	504.3
47.5°	421.5	431.2	455.1	477.8	485.5
50°	393.7	406.0	432.5	457.7	466.8
52.5°	364.6	380.1	410.5	437.0	445.4
55°	336.2	353.0	387.9	415.1	425.4
57.5°	307.1	325.2	364.6	395.7	401.5
60°	275.4	297.4	340.7	367.9	375.6
62.5°	244.4	269.6	316.1	342.0	348.5
65°	214.6	241.8	290.9	314.8	319.4
67.5°	182.3	214.6	263.1	285.1	286.4
70°	151.3	188.8	236.0	246.3	237.9
72.5°	120.9	161.0	204.3	195.9	188.8
75°	94.4	135.1	166.2	149.3	145.5
77.5°	69.8	110.6	119.0	109.9	102.8
80°	49.8	87.3	80.2	68.5	65.3
82.5°	34.3	55.0	44.0	34.3	29.7
85°	19.4	24.6	15.5	9.7	7.8
87.5°	8.4	5.8	3.2	2.6	2.6
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)