

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: P307564

Luminaire Tested: **14FCZ2-20-UNV-L82765-CP250-W2A-U-6500K**

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: P307564
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G3-1805-783-49)
Test Lab: INNOVATION CENTER(G3)
Issue Date: 3/3/2020
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: FAIL-SAFE
Catalog Number: 14FCZ2-20-UNV-L82765-CP250-W2A-U-6500K
Description: 1'X4' TROFFER LED MODULE,RIBBED LENS, 0.250" POLYCARB SHEET
Light Source: (168) 6500K 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: 1948.0 lumens
Efficiency: N/A
Efficacy: 113.3 lumens/watt
Spacing Criteria (0/90/45): 1.2 / 1.28 / 1.37
Luminous Opening: Rectangular (W 1' x L: 4' x H: 0')
CIE Type: Direct

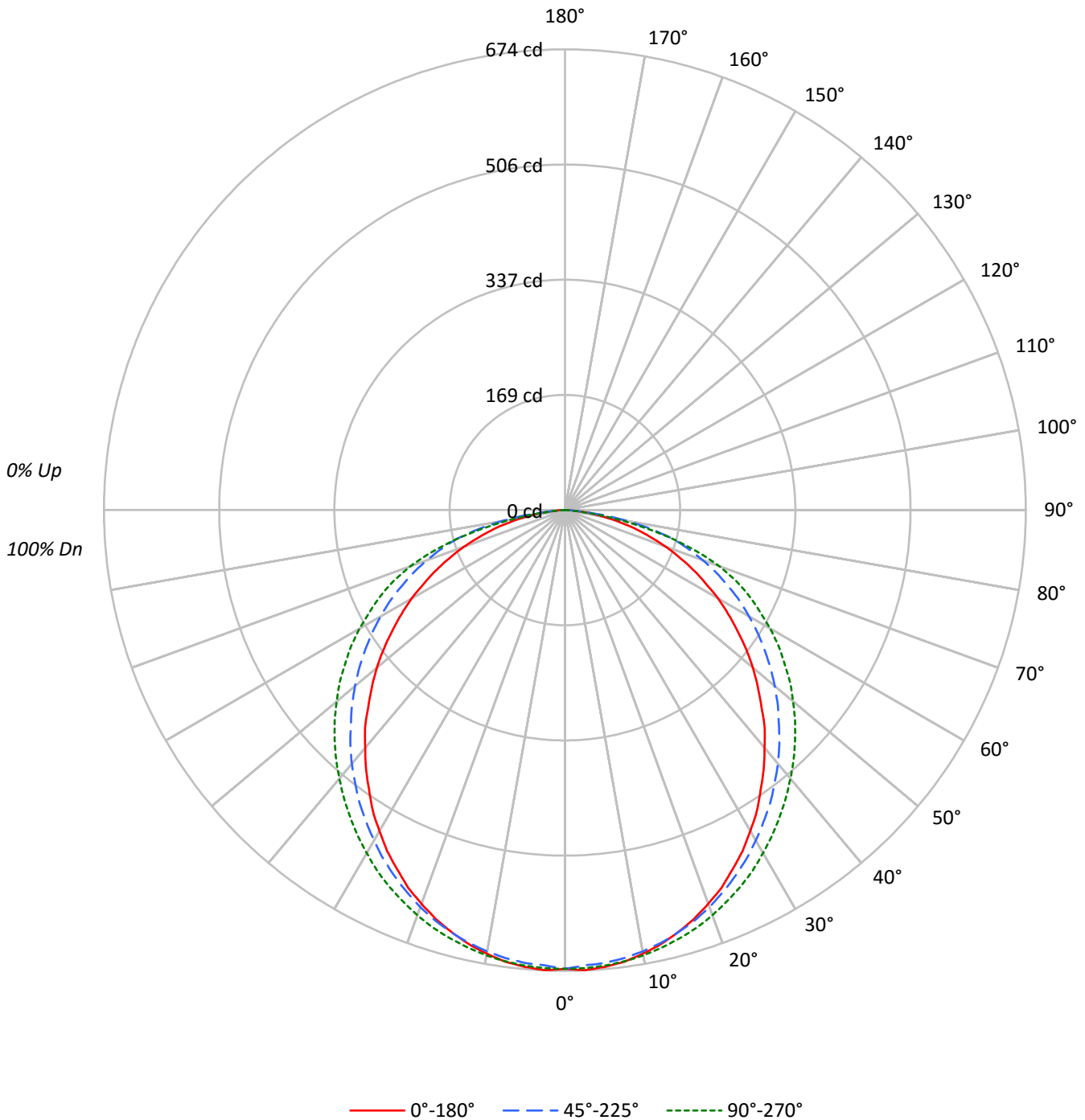
Input Watts (W): 17.2
Input Voltage (V): NR
Input Current (A_{in}): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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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	99	95	106	101	97	94	97	94	91	93	90	88	90	87	85	83
2	98	90	83	77	96	88	82	76	84	79	74	81	77	73	78	74	71	69
3	89	79	70	64	87	77	69	63	74	67	62	71	66	61	69	64	60	58
4	82	70	61	54	79	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	51	42	35	63	50	41	35	48	41	35	47	40	35	45	39	34	32
8	60	46	37	32	58	45	37	31	44	37	31	43	36	31	42	35	31	29
9	56	42	34	28	54	42	34	28	41	33	28	39	33	28	38	32	28	26
10	52	39	31	26	51	39	31	26	37	30	26	37	30	25	36	30	25	24

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	1806	1806	1806
5°	1812	1796	1807
10°	1800	1791	1808
15°	1781	1782	1807
20°	1755	1770	1806
25°	1722	1753	1804
30°	1684	1734	1800
35°	1640	1719	1799
40°	1596	1703	1802
45°	1547	1684	1812
50°	1502	1677	1824
55°	1445	1671	1840
60°	1393	1674	1865
65°	1322	1679	1894
70°	1241	1692	1893
75°	1125	1707	1711
80°	922	1474	1218
85°	685	698	281



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	63.5	3.3
10°-20°	181.4	9.3
20°-30°	273.3	14.0
30°-40°	327.9	16.8
40°-50°	341.8	17.5
50°-60°	316.4	16.2
60°-70°	255.7	13.1
70°-80°	155.9	8.0
80°-90°	32.2	1.7
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°	518.2	26.6
0°-40°	846.1	43.4
0°-60°	1504.3	77.2
0°-90°	1948.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	1948.0	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	671	671	671	671	671	
5°	671	669	665	670	669	64
15°	639	640	640	648	648	180
25°	580	583	590	605	608	267
35°	499	507	523	542	548	313
45°	407	419	443	467	476	314
55°	308	324	356	384	392	276
65°	208	228	264	290	298	205
75°	108	132	164	167	165	114
85°	22	33	23	13	9	27
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	671.1	671.1	671.1	671.1	671.1
2.5°	673.7	671.5	666.7	671.5	670.7
5°	670.7	668.9	665.0	669.8	668.9
7.5°	666.3	664.6	661.1	666.7	665.9
10°	658.9	658.1	655.5	662.0	661.5
12.5°	650.2	649.8	648.5	655.9	655.5
15°	639.4	639.8	639.8	648.5	648.5
17.5°	627.2	628.1	629.8	639.4	640.7
20°	612.9	614.6	618.1	629.0	630.7
22.5°	598.1	599.4	604.6	617.7	619.4
25°	579.9	583.4	590.3	605.1	607.7
27.5°	562.5	565.5	575.1	590.3	594.6
30°	542.1	546.9	558.2	574.7	579.4
32.5°	522.5	527.8	540.8	559.9	564.2
35°	499.1	506.9	523.4	542.5	547.7
37.5°	477.8	485.2	503.9	524.7	530.8
40°	454.3	463.5	484.8	506.9	513.0
42.5°	432.6	441.3	464.3	486.9	495.2
45°	406.6	418.7	442.6	467.4	476.1
47.5°	382.7	394.8	422.2	448.7	456.5
50°	358.8	371.8	400.5	427.8	435.7
52.5°	334.0	347.9	378.8	406.1	415.3
55°	308.0	324.0	356.2	384.0	392.2
57.5°	283.2	299.7	334.0	362.3	370.5
60°	258.9	275.8	311.0	337.9	346.6
62.5°	232.0	251.9	288.4	314.9	321.4
65°	207.6	228.0	263.7	290.2	297.5
67.5°	182.0	204.2	239.8	264.1	271.0
70°	157.7	180.7	215.0	237.6	240.6
72.5°	131.6	155.1	189.8	204.2	204.2
75°	108.2	132.0	164.2	166.8	164.6
77.5°	82.5	109.0	129.9	124.7	119.5
80°	59.5	85.6	95.1	85.6	78.6
82.5°	40.0	62.1	57.3	45.6	40.4
85°	22.2	33.0	22.6	12.6	9.1
87.5°	8.3	7.4	2.2	2.2	2.2
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)