

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: P307561

Luminaire Tested: **14FCZ2-20-UNV-L82765-CP250-W2A-U-5000K**

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: P307561
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-5000K
Description: 1'X4' TROFFER LED MODULE, RIBBED LENS, 0.250" POLYCARB SHEET
Light Source: (168) 5000K 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: 1920.0 lumens
Efficiency: N/A
Efficacy: 113.6 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

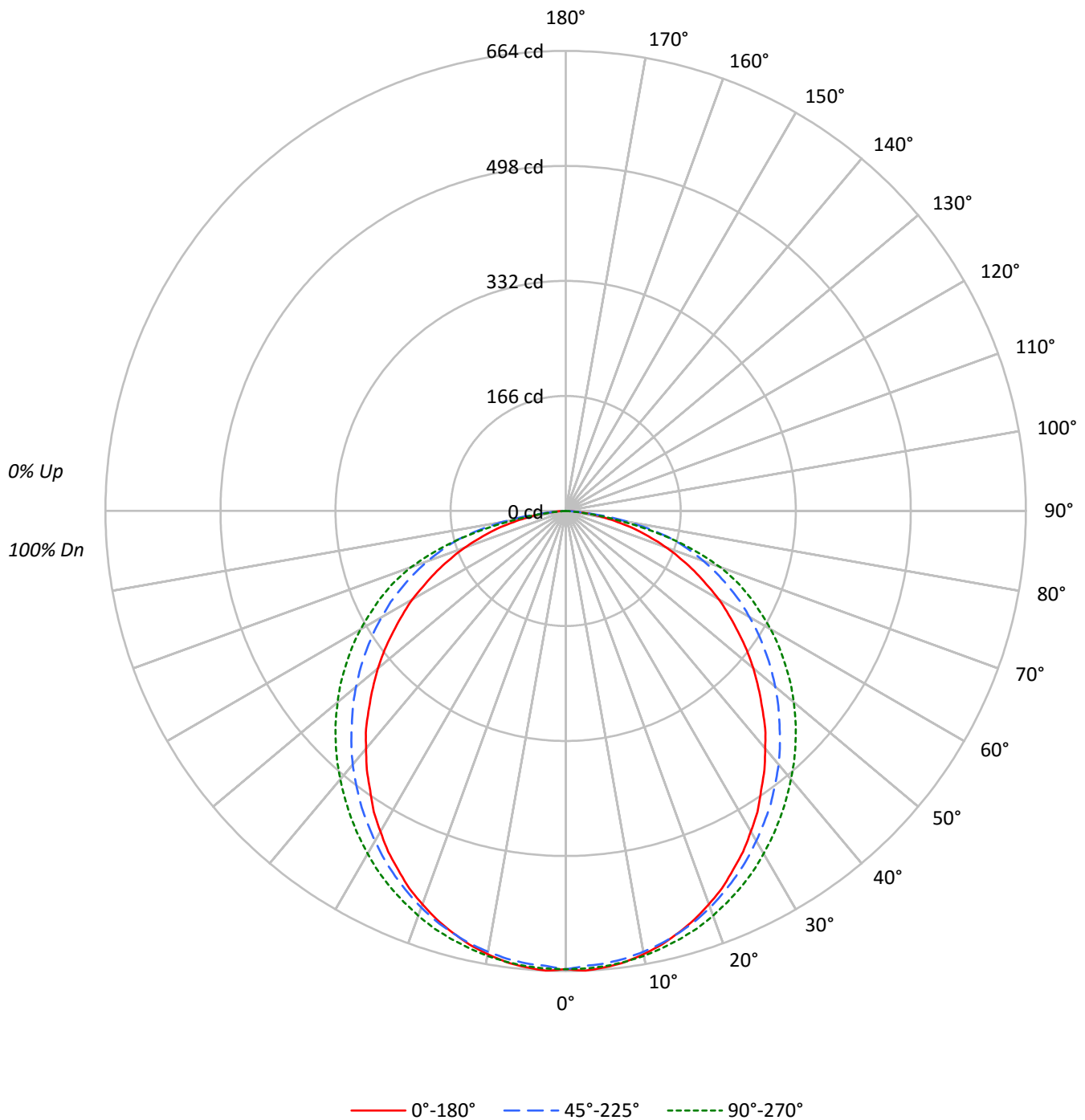
Input Watts (W): 16.9
Input Voltage (V): NR
Input Current (A_{in}): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	1780	1780	1780
5°	1786	1771	1781
10°	1775	1765	1782
15°	1756	1757	1781
20°	1730	1745	1780
25°	1697	1727	1778
30°	1660	1709	1775
35°	1616	1695	1774
40°	1573	1678	1776
45°	1525	1660	1786
50°	1480	1652	1798
55°	1424	1647	1814
60°	1373	1650	1838
65°	1303	1655	1868
70°	1223	1667	1866
75°	1108	1682	1687
80°	910	1454	1201
85°	673	689	278



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	62.6	3.3
10°-20°	178.8	9.3
20°-30°	269.3	14.0
30°-40°	323.2	16.8
40°-50°	336.9	17.5
50°-60°	311.9	16.2
60°-70°	252.0	13.1
70°-80°	153.6	8.0
80°-90°	31.7	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°	510.7	26.6
0°-40°	833.9	43.4
0°-60°	1482.7	77.2
0°-90°	1920.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	1920.0	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	661	661	661	661	661	
5°	661	659	656	660	659	63
15°	630	631	631	639	639	178
25°	572	575	582	596	599	263
35°	492	500	516	535	540	308
45°	401	413	436	461	469	310
55°	304	319	351	378	387	272
65°	205	225	260	286	293	202
75°	107	130	162	164	162	112
85°	22	32	22	12	9	27
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	661.4	661.4	661.4	661.4	661.4
2.5°	664.0	661.9	657.2	661.9	661.0
5°	661.0	659.3	655.5	660.2	659.3
7.5°	656.7	655.0	651.6	657.2	656.3
10°	649.5	648.6	646.0	652.5	652.0
12.5°	640.9	640.5	639.2	646.5	646.0
15°	630.2	630.6	630.6	639.2	639.2
17.5°	618.2	619.1	620.8	630.2	631.5
20°	604.1	605.8	609.2	619.9	621.6
22.5°	589.5	590.8	595.9	608.8	610.5
25°	571.5	575.0	581.8	596.4	598.9
27.5°	554.4	557.4	566.8	581.8	586.1
30°	534.3	539.0	550.1	566.4	571.1
32.5°	515.0	520.2	533.0	551.8	556.1
35°	491.9	499.6	515.9	534.7	539.9
37.5°	470.9	478.2	496.6	517.2	523.2
40°	447.8	456.8	477.8	499.6	505.6
42.5°	426.4	435.0	457.7	479.9	488.1
45°	400.7	412.7	436.3	460.7	469.2
47.5°	377.2	389.2	416.1	442.2	450.0
50°	353.6	366.5	394.7	421.7	429.4
52.5°	329.2	342.9	373.3	400.3	409.3
55°	303.5	319.4	351.1	378.5	386.6
57.5°	279.1	295.4	329.2	357.1	365.2
60°	255.2	271.9	306.5	333.1	341.6
62.5°	228.6	248.3	284.3	310.4	316.8
65°	204.6	224.8	259.9	286.0	293.3
67.5°	179.4	201.2	236.3	260.3	267.1
70°	155.4	178.1	211.9	234.2	237.2
72.5°	129.7	152.8	187.1	201.2	201.2
75°	106.6	130.1	161.8	164.4	162.3
77.5°	81.3	107.5	128.0	122.9	117.7
80°	58.7	84.3	93.8	84.3	77.5
82.5°	39.4	61.2	56.5	45.0	39.8
85°	21.8	32.5	22.3	12.4	9.0
87.5°	8.1	7.3	2.1	2.1	2.1
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)