

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: P307525

Luminaire Tested: **14FCZ2-20-UNV-L82765-CA08-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: P307525
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-CA08-W2A-U-5000K
Description: 1'X4' TROFFER LED MODULE,RIBBED LENS, 0.08" ACRYLIC 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: 2069.0 lumens
Efficiency: N/A
Efficacy: 122.4 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

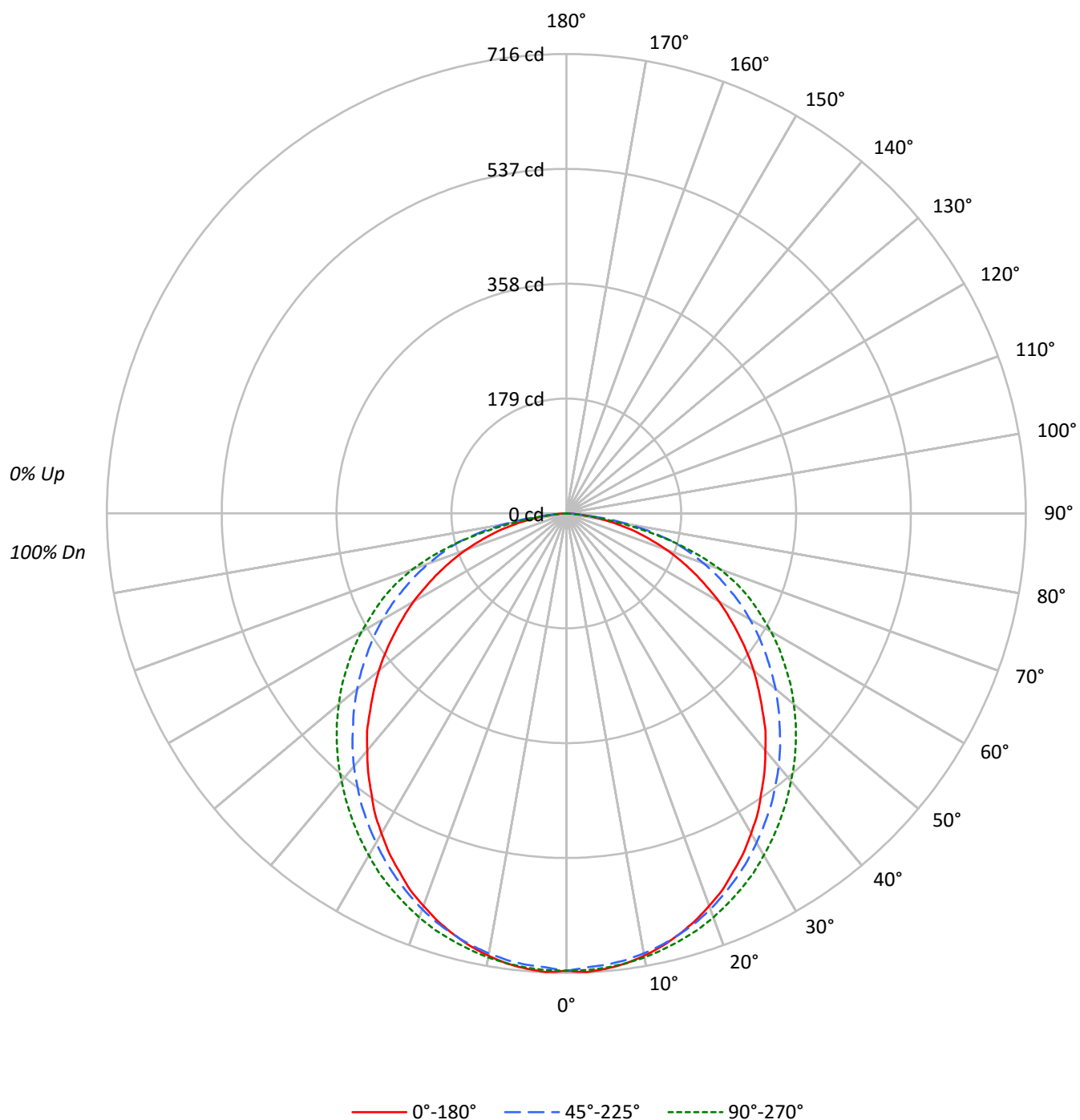
Input Watts (W): 16.9
Input Voltage (V): NR
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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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	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°	1918	1918	1918
5°	1924	1908	1919
10°	1912	1902	1920
15°	1892	1893	1919
20°	1864	1880	1918
25°	1829	1862	1916
30°	1789	1842	1912
35°	1741	1826	1911
40°	1695	1809	1914
45°	1643	1789	1924
50°	1595	1781	1937
55°	1535	1775	1955
60°	1480	1778	1982
65°	1404	1783	2012
70°	1318	1797	2011
75°	1195	1813	1817
80°	979	1565	1294
85°	726	741	299



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	67.4	3.3
10°-20°	192.7	9.3
20°-30°	290.2	14.0
30°-40°	348.3	16.8
40°-50°	363.0	17.5
50°-60°	336.1	16.2
60°-70°	271.5	13.1
70°-80°	165.6	8.0
80°-90°	34.2	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°	550.4	26.6
0°-40°	898.7	43.4
0°-60°	1597.7	77.2
0°-90°	2069.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	2069.0	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	713	713	713	713	713	
5°	712	710	706	711	710	68
15°	679	680	680	689	689	191
25°	616	620	627	643	645	284
35°	530	538	556	576	582	332
45°	432	445	470	496	506	334
55°	327	344	378	408	417	293
65°	220	242	280	308	316	218
75°	115	140	174	177	175	121
85°	24	35	24	13	10	29
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	712.8	712.8	712.8	712.8	712.8
2.5°	715.5	713.2	708.2	713.2	712.3
5°	712.3	710.5	706.3	711.4	710.5
7.5°	707.7	705.9	702.2	708.2	707.2
10°	699.9	698.9	696.2	703.1	702.6
12.5°	690.6	690.2	688.8	696.6	696.2
15°	679.1	679.6	679.6	688.8	688.8
17.5°	666.2	667.1	668.9	679.1	680.5
20°	651.0	652.8	656.5	668.0	669.9
22.5°	635.3	636.7	642.2	656.0	657.9
25°	615.9	619.6	627.0	642.7	645.4
27.5°	597.4	600.7	610.8	627.0	631.6
30°	575.8	580.8	592.8	610.4	615.4
32.5°	555.0	560.5	574.4	594.7	599.3
35°	530.1	538.4	555.9	576.2	581.8
37.5°	507.5	515.3	535.2	557.3	563.8
40°	482.6	492.3	514.9	538.4	544.8
42.5°	459.5	468.7	493.2	517.2	525.9
45°	431.8	444.7	470.1	496.4	505.6
47.5°	406.4	419.4	448.4	476.6	484.9
50°	381.1	394.9	425.4	454.4	462.7
52.5°	354.8	369.5	402.3	431.4	441.0
55°	327.1	344.2	378.3	407.8	416.6
57.5°	300.8	318.3	354.8	384.8	393.5
60°	275.0	293.0	330.3	358.9	368.2
62.5°	246.4	267.6	306.3	334.5	341.4
65°	220.5	242.2	280.0	308.2	316.0
67.5°	193.3	216.8	254.7	280.5	287.9
70°	167.5	191.9	228.4	252.4	255.6
72.5°	139.8	164.7	201.6	216.8	216.8
75°	114.9	140.2	174.4	177.2	174.8
77.5°	87.7	115.8	137.9	132.4	126.9
80°	63.2	90.9	101.0	90.9	83.5
82.5°	42.4	66.0	60.9	48.4	42.9
85°	23.5	35.1	24.0	13.4	9.7
87.5°	8.8	7.8	2.3	2.3	2.3
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)