

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: P307524

Luminaire Tested: **14FCZ2-20-UNV-L82765-CA08-W2A-U-4500K**

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: P307524
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-4500K
Description: 1'X4' TROFFER LED MODULE,RIBBED LENS, 0.08" ACRYLIC SHEET
Light Source: (168) 4500K 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: 2040.0 lumens
Efficiency: N/A
Efficacy: 121.4 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

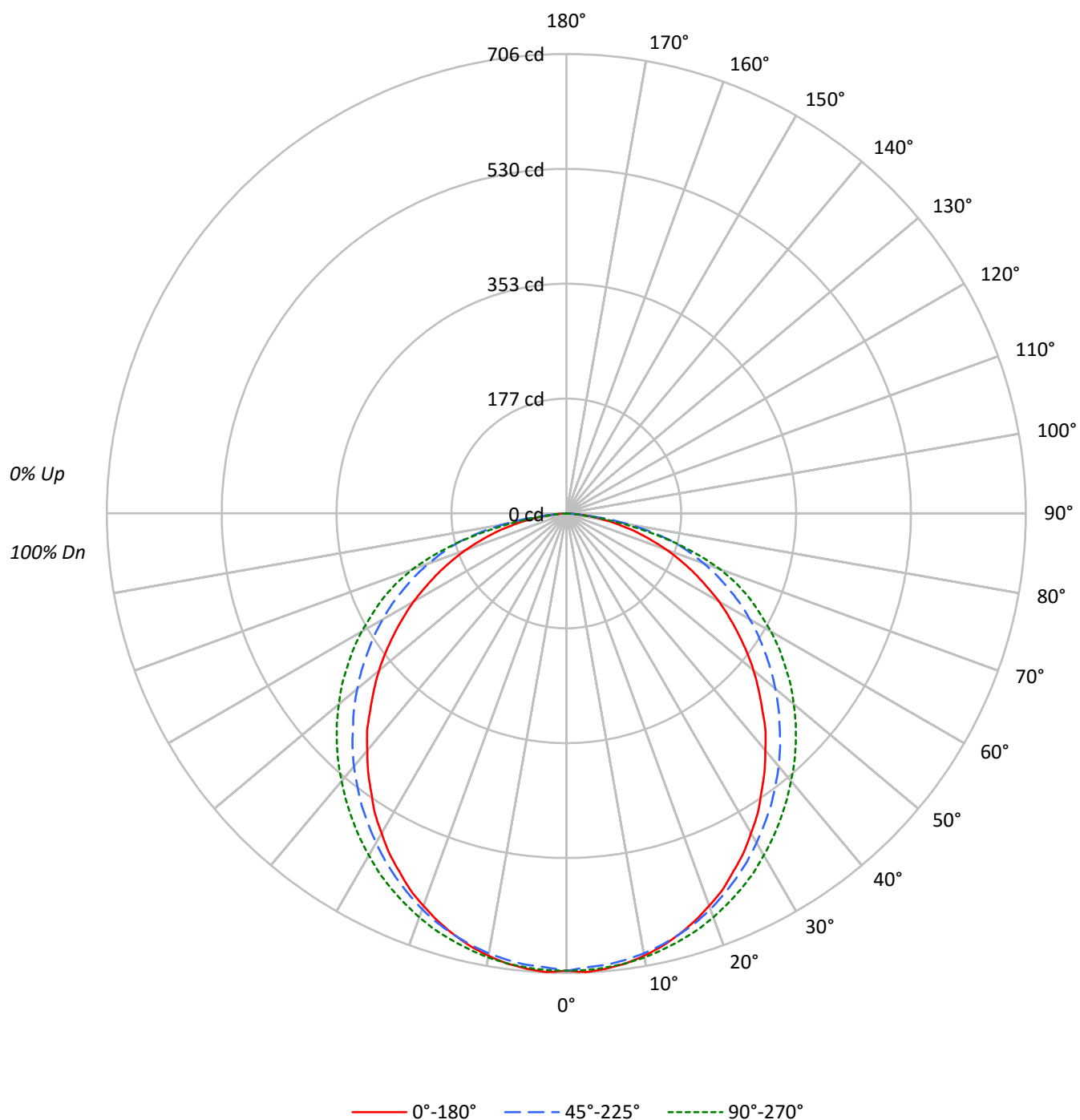
Input Watts (W): 16.8
Input Voltage (V): NR
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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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°	1891	1891	1891
5°	1897	1881	1892
10°	1886	1876	1893
15°	1865	1867	1892
20°	1838	1854	1891
25°	1803	1836	1890
30°	1764	1816	1885
35°	1717	1801	1884
40°	1671	1783	1887
45°	1620	1764	1897
50°	1573	1756	1910
55°	1513	1750	1927
60°	1459	1753	1954
65°	1384	1758	1984
70°	1299	1772	1983
75°	1178	1787	1792
80°	965	1543	1275
85°	716	732	296



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	66.5	3.3
10°-20°	190.0	9.3
20°-30°	286.2	14.0
30°-40°	343.4	16.8
40°-50°	357.9	17.5
50°-60°	331.4	16.2
60°-70°	267.7	13.1
70°-80°	163.2	8.0
80°-90°	33.7	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°	542.6	26.6
0°-40°	886.1	43.4
0°-60°	1575.3	77.2
0°-90°	2040.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	2040.0	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	703	703	703	703	703	
5°	702	700	696	701	700	67
15°	670	670	670	679	679	189
25°	607	611	618	634	636	280
35°	523	531	548	568	574	327
45°	426	438	464	489	498	329
55°	322	339	373	402	411	289
65°	217	239	276	304	312	215
75°	113	138	172	175	172	119
85°	23	35	24	13	10	28
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	702.8	702.8	702.8	702.8	702.8
2.5°	705.5	703.2	698.2	703.2	702.3
5°	702.3	700.5	696.4	701.4	700.5
7.5°	697.8	696.0	692.3	698.2	697.3
10°	690.1	689.1	686.4	693.2	692.8
12.5°	681.0	680.5	679.1	686.9	686.4
15°	669.6	670.0	670.0	679.1	679.1
17.5°	656.8	657.8	659.6	669.6	670.9
20°	641.8	643.7	647.3	658.7	660.5
22.5°	626.4	627.7	633.2	646.8	648.7
25°	607.3	610.9	618.2	633.6	636.4
27.5°	589.1	592.3	602.3	618.2	622.7
30°	567.7	572.7	584.5	601.8	606.8
32.5°	547.2	552.7	566.3	586.3	590.9
35°	522.7	530.8	548.1	568.1	573.6
37.5°	500.4	508.1	527.7	549.5	555.9
40°	475.8	485.4	507.6	530.8	537.2
42.5°	453.1	462.2	486.3	509.9	518.6
45°	425.8	438.5	463.5	489.4	498.5
47.5°	400.7	413.5	442.1	469.9	478.1
50°	375.7	389.4	419.4	448.1	456.2
52.5°	349.8	364.4	396.7	425.3	434.9
55°	322.5	339.3	373.0	402.1	410.8
57.5°	296.6	313.9	349.8	379.4	388.0
60°	271.1	288.8	325.7	353.9	363.0
62.5°	242.9	263.8	302.0	329.8	336.6
65°	217.4	238.8	276.1	303.9	311.6
67.5°	190.6	213.8	251.1	276.6	283.8
70°	165.1	189.2	225.2	248.8	252.0
72.5°	137.8	162.4	198.8	213.8	213.8
75°	113.3	138.3	171.9	174.7	172.4
77.5°	86.4	114.2	136.0	130.6	125.1
80°	62.3	89.6	99.6	89.6	82.3
82.5°	41.8	65.0	60.0	47.8	42.3
85°	23.2	34.6	23.7	13.2	9.6
87.5°	8.6	7.7	2.3	2.3	2.3
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)