

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: P307801

Luminaire Tested: **14FCZ2-20-UNV-L82765-S-CA125-W2A-U-3500K**

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: P307801
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G3-1805-783-40)
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-S-CA125-W2A-U-3500K
Description: 1'X4' TROFFER LED MODULE,SMOOTH LENS, 0.125" ACRYLIC SHEET
Light Source: (168) 3500K 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: 1976.0 lumens
Efficiency: N/A
Efficacy: 119.0 lumens/watt
Spacing Criteria (0/90/45): 1.19 / 1.26 / 1.36
Luminous Opening: Rectangular (W 1' x L: 4' x H: 0')
CIE Type: Direct

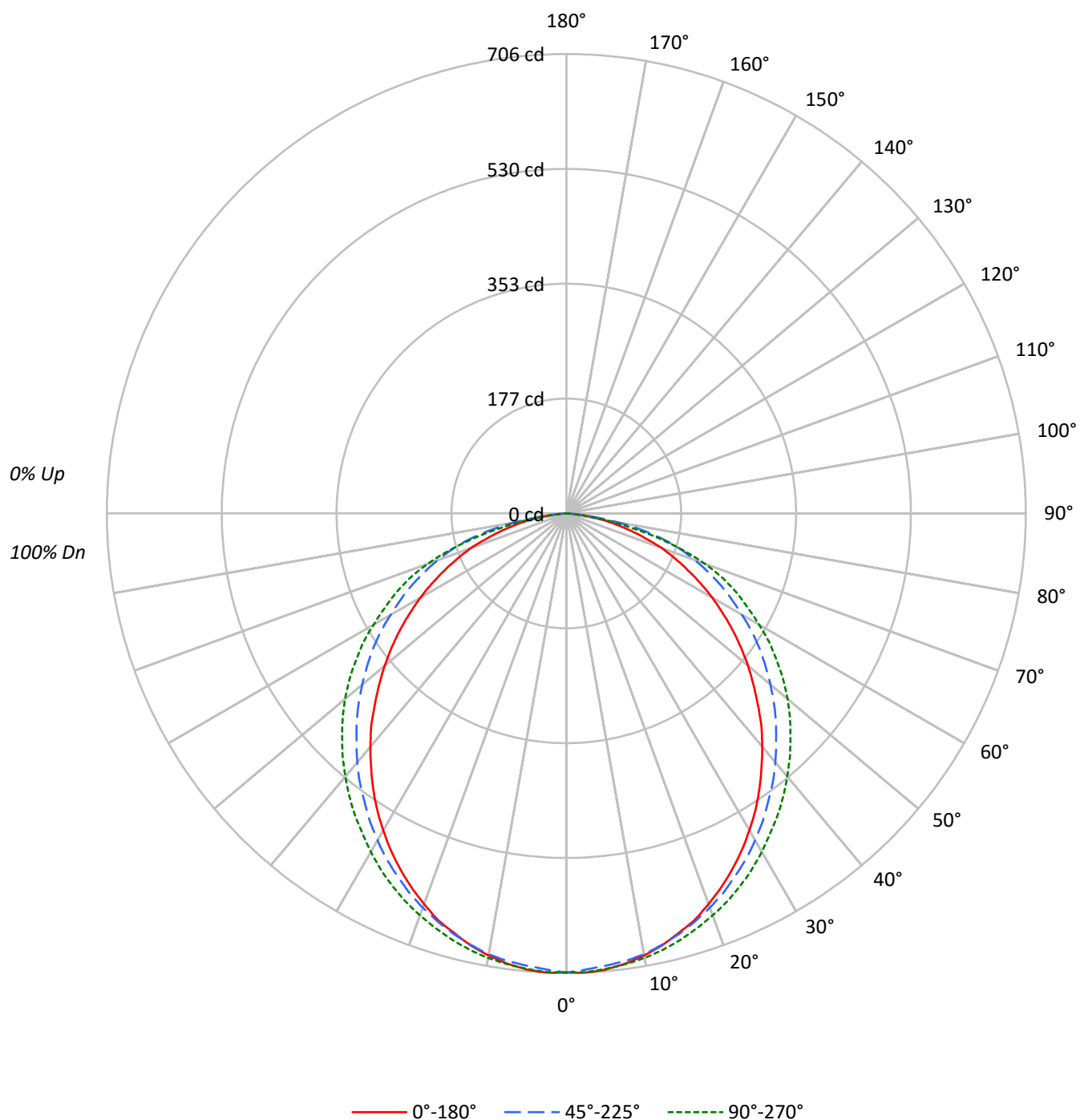
Input Watts (W): 16.6
Input Voltage (V): NR
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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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		94	91	89		84
2	99	90	84	78	96	89	82	77	85	80	75		82	77	73		70
3	90	79	71	65	87	78	70	64	75	68	63		72	66	62		58
4	82	70	61	55	80	69	61	54	66	59	53		64	58	53		50
5	76	63	54	47	74	62	53	47	59	52	46		57	51	46		43
6	70	56	47	41	68	55	47	41	54	46	40		52	45	40		38
7	65	51	42	36	63	50	42	36	49	41	36		47	41	35		33
8	60	47	38	32	59	46	38	32	45	37	32		43	37	32		30
9	56	43	35	29	55	42	34	29	41	34	29		40	33	29		27
10	53	40	32	26	52	39	31	26	38	31	26		37	31	26		24

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	1898	1898	1898
5°	1900	1884	1898
10°	1885	1879	1895
15°	1859	1864	1889
20°	1829	1846	1883
25°	1792	1824	1876
30°	1748	1802	1866
35°	1699	1777	1860
40°	1645	1755	1855
45°	1585	1734	1853
50°	1526	1714	1858
55°	1462	1701	1852
60°	1392	1677	1840
65°	1310	1672	1840
70°	1234	1657	1788
75°	1070	1620	1528
80°	865	1306	1017
85°	574	454	303



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	66.6	3.4
10°-20°	189.5	9.6
20°-30°	284.3	14.4
30°-40°	339.2	17.2
40°-50°	350.6	17.7
50°-60°	320.1	16.2
60°-70°	251.9	12.7
70°-80°	146.7	7.4
80°-90°	27.0	1.4
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°	540.5	27.4
0°-40°	879.6	44.5
0°-60°	1550.4	78.5
0°-90°	1976.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	1976.0	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	705	705	705	705	705	
5°	703	702	698	703	702	67
15°	667	668	669	678	678	188
25°	604	606	614	629	632	278
35°	517	524	541	561	566	323
45°	416	430	456	481	487	322
55°	312	328	362	389	395	279
65°	206	227	263	283	289	204
75°	103	127	156	153	147	109
85°	19	26	15	12	10	24
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	705.4	705.4	705.4	705.4	705.4
2.5°	706.4	704.4	701.5	706.4	705.4
5°	703.4	701.5	697.6	703.4	702.5
7.5°	697.6	695.6	693.6	699.5	698.5
10°	689.7	688.7	687.8	694.6	693.6
12.5°	679.9	679.9	678.9	686.8	686.8
15°	667.2	668.2	669.1	678.0	678.0
17.5°	655.4	654.5	657.4	667.2	668.2
20°	638.8	640.7	644.7	656.4	657.4
22.5°	622.1	624.1	630.9	642.7	645.6
25°	603.5	606.4	614.3	629.0	631.9
27.5°	583.9	587.8	598.6	614.3	617.2
30°	562.4	568.2	580.0	597.6	600.6
32.5°	540.8	546.7	561.4	579.0	582.9
35°	517.3	524.2	540.8	561.4	566.3
37.5°	492.8	501.6	521.2	541.8	547.7
40°	468.3	478.1	499.7	521.2	528.1
42.5°	443.8	453.6	477.1	501.6	508.5
45°	416.4	430.1	455.6	481.0	486.9
47.5°	389.9	404.6	433.0	458.5	466.3
50°	364.5	379.2	409.5	436.0	443.8
52.5°	338.0	353.7	386.0	413.4	420.3
55°	311.6	328.2	362.5	388.9	394.8
57.5°	285.1	302.7	338.0	363.5	370.3
60°	258.6	277.3	311.6	337.0	341.9
62.5°	232.2	251.8	287.1	309.6	314.5
65°	205.7	227.3	262.6	283.1	289.0
67.5°	180.3	201.8	236.1	255.7	260.6
70°	156.8	176.3	210.6	225.3	227.3
72.5°	127.4	151.9	185.2	193.0	188.1
75°	102.9	127.4	155.8	152.8	147.0
77.5°	78.4	102.9	121.5	111.7	103.9
80°	55.8	80.3	84.3	69.6	65.6
82.5°	36.2	55.8	47.0	36.2	29.4
85°	18.6	26.5	14.7	11.8	9.8
87.5°	5.9	3.9	2.0	2.0	1.0
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)