

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: P307809

Luminaire Tested: **14FCZ2-20-UNV-L82765-S-CP125-W2A-U-3000K**

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: P307809
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-CP125-W2A-U-3000K
Description: 1'X4' TROFFER LED MODULE,SMOOTH LENS, 0.125" POLYCARB SHEET
Light Source: (168) 3000K 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: 1872.0 lumens
Efficiency: N/A
Efficacy: 114.1 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

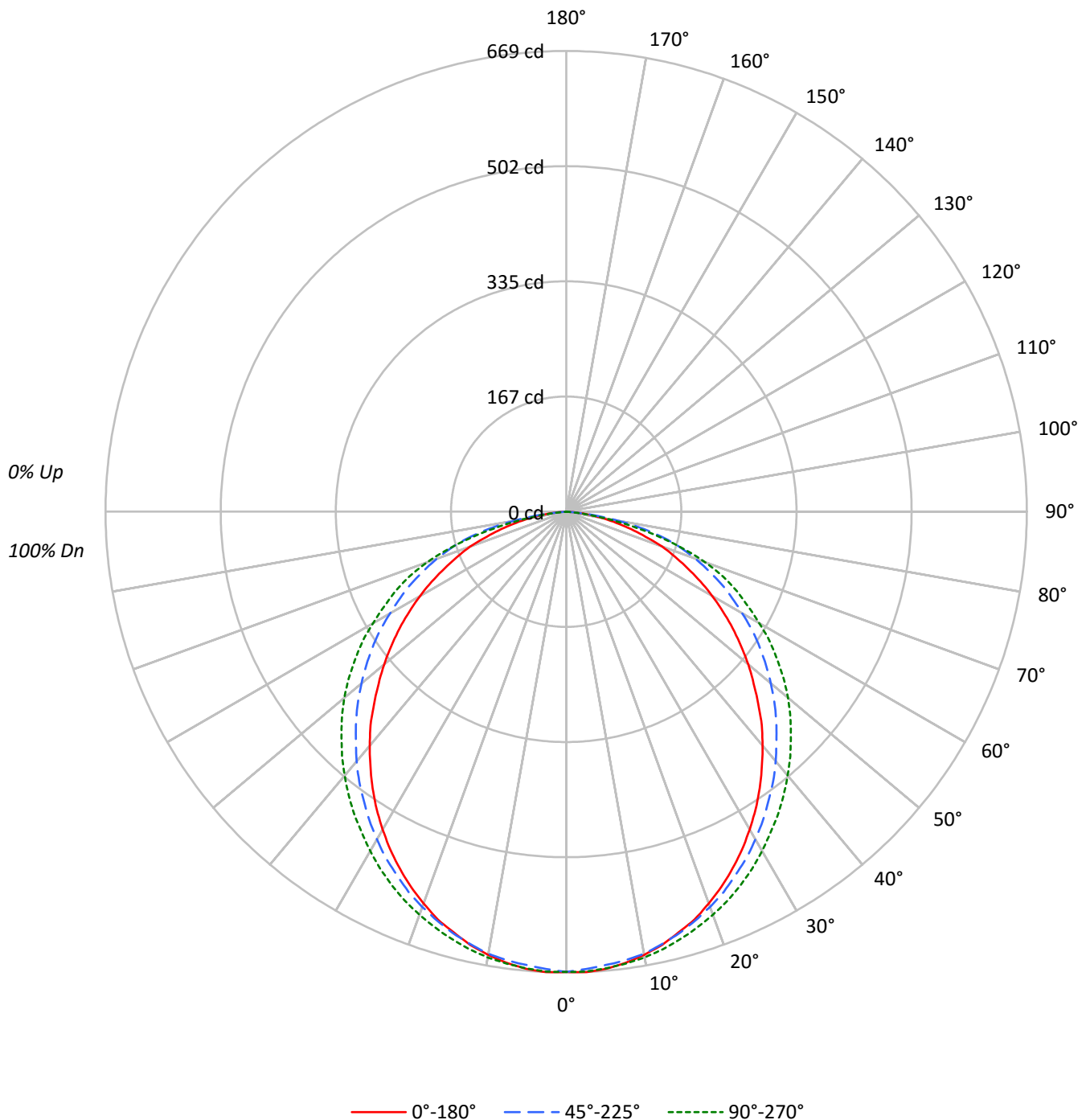
Input Watts (W): 16.4
Input Voltage (V): NR
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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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°	1798	1798	1798
5°	1800	1785	1798
10°	1785	1780	1796
15°	1761	1766	1789
20°	1733	1749	1783
25°	1697	1728	1778
30°	1656	1707	1768
35°	1610	1683	1762
40°	1559	1663	1757
45°	1501	1643	1756
50°	1446	1624	1760
55°	1385	1611	1755
60°	1319	1589	1743
65°	1241	1584	1743
70°	1168	1570	1694
75°	1014	1535	1447
80°	820	1237	964
85°	543	429	287



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	63.1	3.4
10°-20°	179.6	9.6
20°-30°	269.4	14.4
30°-40°	321.3	17.2
40°-50°	332.2	17.7
50°-60°	303.3	16.2
60°-70°	238.7	12.7
70°-80°	138.9	7.4
80°-90°	25.6	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°	512.0	27.4
0°-40°	833.4	44.5
0°-60°	1468.8	78.5
0°-90°	1872.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	1872.0	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	668	668	668	668	668	
5°	666	665	661	666	666	63
15°	632	633	634	642	642	178
25°	572	574	582	596	599	263
35°	490	497	512	532	536	306
45°	394	408	432	456	461	305
55°	295	311	343	368	374	264
65°	195	215	249	268	274	194
75°	98	121	148	145	139	104
85°	18	25	14	11	9	23
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	668.3	668.3	668.3	668.3	668.3
2.5°	669.2	667.3	664.6	669.2	668.3
5°	666.4	664.6	660.8	666.4	665.5
7.5°	660.8	659.0	657.1	662.7	661.8
10°	653.4	652.5	651.6	658.1	657.1
12.5°	644.1	644.1	643.2	650.6	650.6
15°	632.1	633.0	633.9	642.3	642.3
17.5°	620.9	620.0	622.8	632.1	633.0
20°	605.2	607.0	610.7	621.9	622.8
22.5°	589.4	591.2	597.7	608.9	611.7
25°	571.7	574.5	582.0	595.9	598.7
27.5°	553.2	556.9	567.1	582.0	584.7
30°	532.8	538.3	549.5	566.2	569.0
32.5°	512.3	517.9	531.8	548.5	552.3
35°	490.1	496.6	512.3	531.8	536.5
37.5°	466.9	475.2	493.8	513.3	518.8
40°	443.7	452.9	473.4	493.8	500.3
42.5°	420.5	429.7	452.0	475.2	481.7
45°	394.5	407.5	431.6	455.7	461.3
47.5°	369.4	383.3	410.2	434.4	441.8
50°	345.3	359.2	388.0	413.0	420.5
52.5°	320.2	335.1	365.7	391.7	398.2
55°	295.2	310.9	343.4	368.5	374.0
57.5°	270.1	286.8	320.2	344.3	350.8
60°	245.0	262.7	295.2	319.3	323.9
62.5°	220.0	238.5	271.9	293.3	297.9
65°	194.9	215.3	248.7	268.2	273.8
67.5°	170.8	191.2	223.7	242.2	246.9
70°	148.5	167.1	199.6	213.5	215.3
72.5°	120.7	143.9	175.4	182.8	178.2
75°	97.5	120.7	147.6	144.8	139.2
77.5°	74.3	97.5	115.1	105.8	98.4
80°	52.9	76.1	79.8	65.9	62.2
82.5°	34.3	52.9	44.6	34.3	27.8
85°	17.6	25.1	13.9	11.1	9.3
87.5°	5.6	3.7	1.9	1.9	0.9
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)