

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: P307535

Luminaire Tested: **14FCZ2-20-UNV-L82765-CA125-W2A-U-5500K**

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: P307535
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-CA125-W2A-U-5500K
Description: 1'X4' TROFFER LED MODULE,RIBBED LENS, 0.125" ACRYLIC SHEET
Light Source: (168) 5500K 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

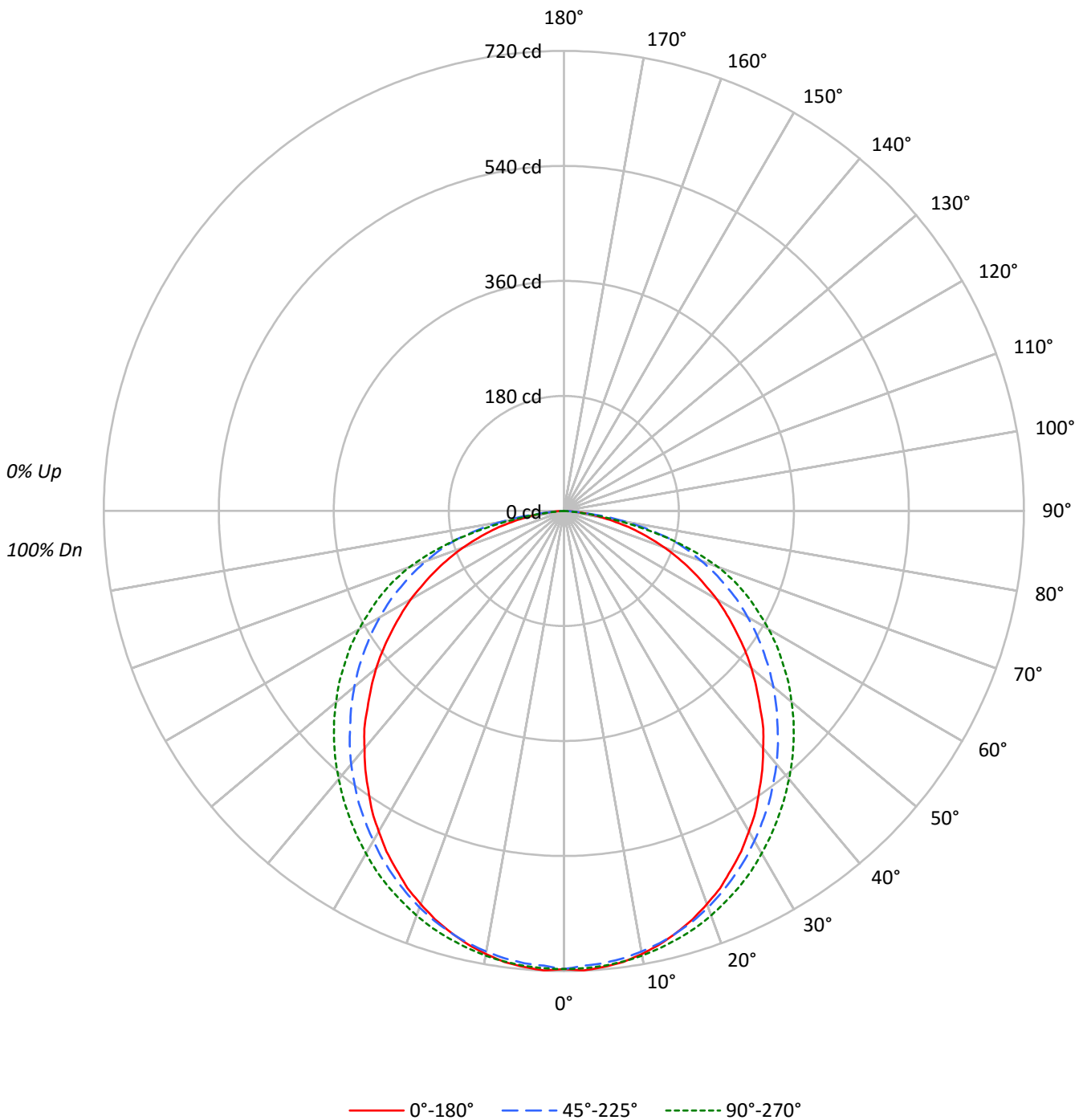
Lumens per Lamp: N/A
Luminaire Lumens: 2081.0 lumens
Efficiency: N/A
Efficacy: 122.4 lumens/watt
Spacing Criteria (0/90/45): 1.2 / 1.28 / 1.37
Luminous Opening: Rectangular (W 1' x L: 4' x H: 0')
CIE Type: Direct

Input Watts (W): 17
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				10	0
RW	70	50	30	10	70	50	30	10	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	102	102	102	100
1	109	104	99	95	106	101	97	94	97	94	91	93	90	88	90	87	85	83
2	98	90	83	77	96	88	82	76	84	79	74	81	77	73	78	74	71	69
3	89	79	70	64	87	77	69	63	74	67	62	71	66	61	69	64	60	58
4	82	70	61	54	79	68	60	53	66	58	53	63	57	52	61	56	51	49
5	75	62	53	46	73	61	52	46	59	51	45	57	50	45	55	49	44	42
6	69	56	47	40	67	55	46	40	53	45	40	51	44	39	50	44	39	37
7	64	51	42	35	63	50	41	35	48	41	35	47	40	35	45	39	34	32
8	60	46	37	32	58	45	37	31	44	37	31	43	36	31	42	35	31	29
9	56	42	34	28	54	42	34	28	41	33	28	39	33	28	38	32	28	26
10	52	39	31	26	51	39	31	26	37	30	26	37	30	25	36	30	25	24

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	1929	1929	1929
5°	1935	1919	1930
10°	1923	1913	1931
15°	1903	1904	1930
20°	1875	1891	1930
25°	1839	1872	1928
30°	1799	1853	1923
35°	1752	1837	1922
40°	1705	1819	1925
45°	1653	1799	1936
50°	1605	1791	1948
55°	1544	1785	1966
60°	1489	1788	1993
65°	1412	1794	2024
70°	1325	1807	2023
75°	1201	1824	1829
80°	986	1574	1302
85°	732	744	299



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	67.8	3.3
10°-20°	193.8	9.3
20°-30°	291.9	14.0
30°-40°	350.3	16.8
40°-50°	365.1	17.5
50°-60°	338.0	16.2
60°-70°	273.1	13.1
70°-80°	166.5	8.0
80°-90°	34.4	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°	553.6	26.6
0°-40°	903.9	43.4
0°-60°	1607.0	77.2
0°-90°	2081.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	2081.0	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	717	717	717	717	717	
5°	716	715	710	716	715	68
15°	683	684	684	693	693	193
25°	620	623	631	646	649	286
35°	533	542	559	580	585	334
45°	434	447	473	499	509	336
55°	329	346	380	410	419	295
65°	222	244	282	310	318	219
75°	116	141	175	178	176	121
85°	24	35	24	14	10	29
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	716.9	716.9	716.9	716.9	716.9
2.5°	719.7	717.4	712.3	717.4	716.4
5°	716.4	714.6	710.4	715.5	714.6
7.5°	711.8	710.0	706.2	712.3	711.3
10°	703.9	703.0	700.2	707.2	706.7
12.5°	694.6	694.2	692.8	700.7	700.2
15°	683.0	683.5	683.5	692.8	692.8
17.5°	670.0	671.0	672.8	683.0	684.4
20°	654.7	656.6	660.3	671.9	673.8
22.5°	639.0	640.3	645.9	659.8	661.7
25°	619.5	623.2	630.6	646.4	649.2
27.5°	600.9	604.2	614.4	630.6	635.2
30°	579.1	584.2	596.3	613.9	619.0
32.5°	558.2	563.8	577.7	598.1	602.8
35°	533.2	541.5	559.1	579.6	585.1
37.5°	510.4	518.3	538.3	560.5	567.0
40°	485.4	495.1	517.8	541.5	548.0
42.5°	462.2	471.4	496.0	520.2	529.0
45°	434.3	447.3	472.8	499.3	508.6
47.5°	408.8	421.8	451.0	479.3	487.7
50°	383.3	397.2	427.8	457.1	465.4
52.5°	356.8	371.7	404.6	433.9	443.6
55°	329.0	346.2	380.5	410.2	419.0
57.5°	302.5	320.2	356.8	387.0	395.8
60°	276.6	294.7	332.2	361.0	370.3
62.5°	247.8	269.1	308.1	336.4	343.4
65°	221.8	243.6	281.7	310.0	317.9
67.5°	194.4	218.1	256.1	282.1	289.5
70°	168.4	193.0	229.7	253.8	257.1
72.5°	140.6	165.7	202.8	218.1	218.1
75°	115.5	141.1	175.4	178.2	175.9
77.5°	88.2	116.5	138.7	133.2	127.6
80°	63.6	91.4	101.6	91.4	84.0
82.5°	42.7	66.4	61.3	48.7	43.2
85°	23.7	35.3	24.1	13.5	9.7
87.5°	8.8	7.9	2.3	2.3	2.3
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)