

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: P307545

Luminaire Tested: **14FCZ2-20-UNV-L82765-CP125-W2A-U-5700K**

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: P307545
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-CP125-W2A-U-5700K
Description: 1'X4' TROFFER LED MODULE,RIBBED LENS, 0.125" POLYCARB SHEET
Light Source: (168) 5700K 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: 2046.0 lumens
Efficiency: N/A
Efficacy: 120.4 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

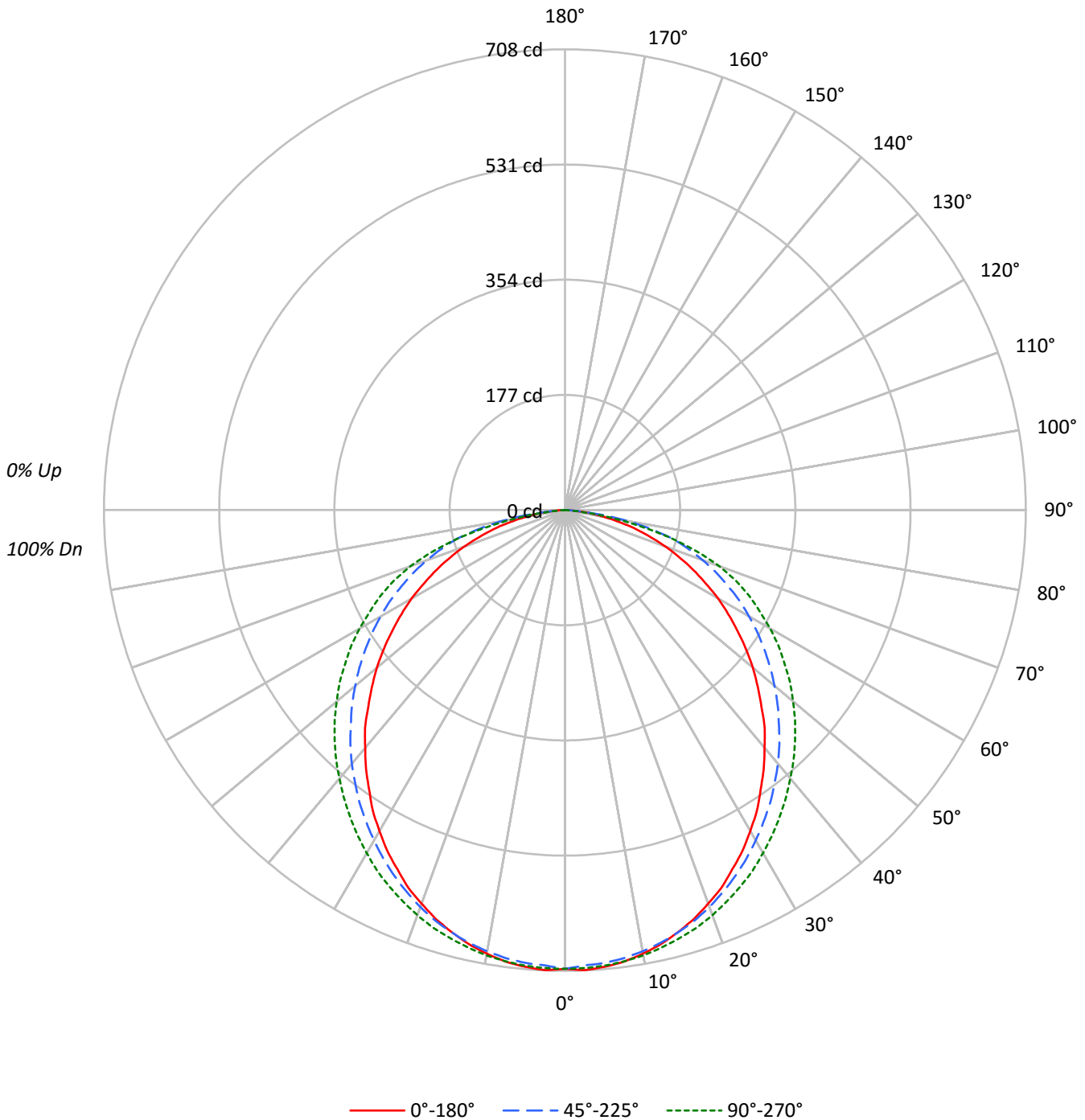
Input Watts (W): 17
Input Voltage (V): NR
Input Current (A_{in}): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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Luminous Intensity Polar Plot





TEST NUMBER: P307545

CATALOG NUMBER: 14FC22-20-UNV-L82765-CP125-W2A-U-5700K

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°	1897	1897	1897
5°	1903	1887	1898
10°	1891	1881	1899
15°	1871	1872	1897
20°	1843	1859	1897
25°	1808	1841	1895
30°	1769	1821	1891
35°	1722	1806	1890
40°	1676	1788	1893
45°	1625	1769	1903
50°	1577	1761	1916
55°	1518	1755	1933
60°	1463	1758	1960
65°	1389	1763	1990
70°	1303	1777	1988
75°	1181	1792	1798
80°	969	1548	1280
85°	719	732	296



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	66.7	3.3
10°-20°	190.5	9.3
20°-30°	287.0	14.0
30°-40°	344.4	16.8
40°-50°	359.0	17.5
50°-60°	332.3	16.2
60°-70°	268.5	13.1
70°-80°	163.7	8.0
80°-90°	33.8	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°	544.2	26.6
0°-40°	888.7	43.4
0°-60°	1580.0	77.2
0°-90°	2046.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	2046.0	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	705	705	705	705	705	
5°	704	703	698	704	703	67
15°	672	672	672	681	681	189
25°	609	613	620	636	638	281
35°	524	532	550	570	575	328
45°	427	440	465	491	500	330
55°	324	340	374	403	412	290
65°	218	240	277	305	312	216
75°	114	139	172	175	173	119
85°	23	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°	704.9	704.9	704.9	704.9	704.9
2.5°	707.6	705.3	700.3	705.3	704.4
5°	704.4	702.6	698.5	703.5	702.6
7.5°	699.8	698.0	694.4	700.3	699.4
10°	692.1	691.2	688.4	695.3	694.8
12.5°	683.0	682.5	681.1	688.9	688.4
15°	671.5	672.0	672.0	681.1	681.1
17.5°	658.8	659.7	661.5	671.5	672.9
20°	643.7	645.5	649.2	660.6	662.4
22.5°	628.2	629.6	635.1	648.7	650.6
25°	609.0	612.7	620.0	635.5	638.2
27.5°	590.8	594.0	604.0	620.0	624.6
30°	569.4	574.4	586.2	603.6	608.6
32.5°	548.8	554.3	568.0	588.1	592.6
35°	524.2	532.4	549.7	569.8	575.3
37.5°	501.8	509.6	529.2	551.1	557.5
40°	477.2	486.8	509.1	532.4	538.8
42.5°	454.4	463.5	487.7	511.4	520.1
45°	427.0	439.8	464.9	490.9	500.0
47.5°	401.9	414.7	443.4	471.3	479.5
50°	376.8	390.5	420.6	449.4	457.6
52.5°	350.8	365.4	397.8	426.6	436.1
55°	323.5	340.3	374.1	403.3	412.0
57.5°	297.5	314.8	350.8	380.5	389.2
60°	271.9	289.7	326.7	354.9	364.1
62.5°	243.6	264.6	302.9	330.8	337.6
65°	218.1	239.5	276.9	304.8	312.5
67.5°	191.2	214.4	251.8	277.4	284.7
70°	165.6	189.8	225.8	249.6	252.7
72.5°	138.2	162.9	199.4	214.4	214.4
75°	113.6	138.7	172.4	175.2	172.9
77.5°	86.7	114.5	136.4	130.9	125.5
80°	62.5	89.9	99.9	89.9	82.6
82.5°	42.0	65.2	60.2	47.9	42.4
85°	23.3	34.7	23.7	13.2	9.6
87.5°	8.7	7.8	2.3	2.3	2.3
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)