

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: P307410

Luminaire Tested: **14FCZ2-35-UNV-L82765-RDP-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: P307410
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G3-1805-783-43)
Test Lab: INNOVATION CENTER(G3)
Issue Date: 3/3/2020
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: FAIL-SAFE
Catalog Number: 14FCZ2-35-UNV-L82765-RDP-CP125-W2A-U-5700K
Description: 1'X4' TROFFER LED MODULE, SMOOTH LENS WITH INSERT , 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: 2202.0 lumens
Efficiency: N/A
Efficacy: 72.7 lumens/watt
Spacing Criteria (0/90/45): 1.25 / 1.28 / 1.4
Luminous Opening: Rectangular (W 1' x L: 4' x H: 0')
CIE Type: Direct

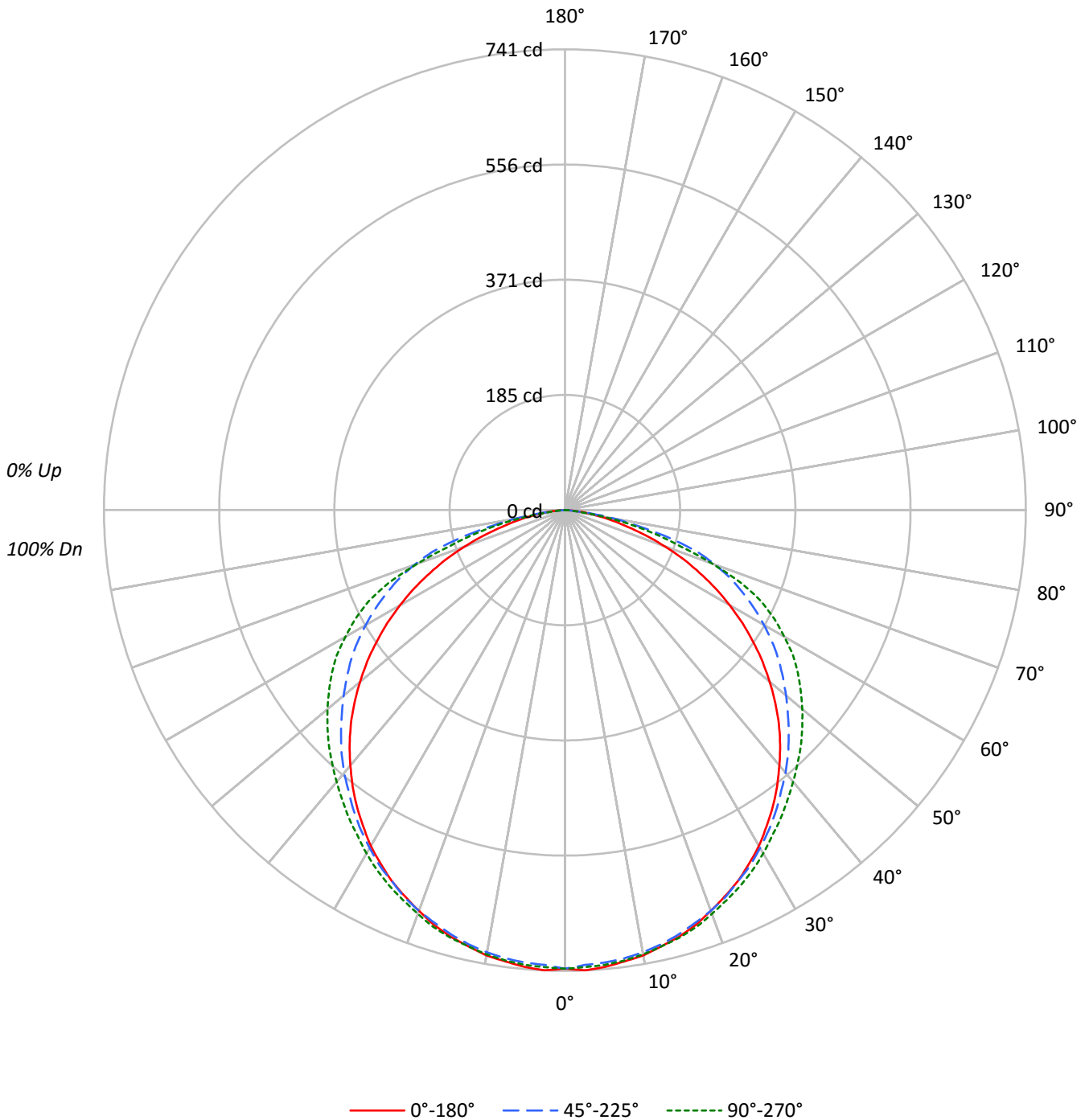
Input Watts (W): 30.3
Input Voltage (V): NR
Input Current (A_{in}): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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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	100	96	106	102	98	94	97	94	91	93	91	88	90	88	86	84
2	99	90	83	77	96	88	82	76	85	79	75	81	77	73	78	75	71	69
3	90	79	71	64	87	77	70	63	74	68	62	71	66	61	69	64	60	58
4	82	70	61	54	80	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	50	42	35	62	50	41	35	48	40	35	47	40	35	45	39	34	32
8	60	46	37	31	58	45	37	31	44	36	31	43	36	31	41	35	31	29
9	56	42	34	28	54	42	34	28	40	33	28	39	33	28	38	32	28	26
10	52	39	31	25	51	38	31	25	37	30	25	36	30	25	35	29	25	23

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	1985	1985	1985
5°	1992	1974	1983
10°	1987	1973	1982
15°	1978	1969	1983
20°	1964	1964	1979
25°	1955	1955	1980
30°	1939	1950	1982
35°	1915	1943	1988
40°	1884	1938	2005
45°	1851	1937	2041
50°	1799	1943	2087
55°	1734	1968	2145
60°	1647	1989	2193
65°	1522	2014	2222
70°	1352	2029	1988
75°	1091	1824	1591
80°	852	1278	1038
85°	584	371	266



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	69.8	3.2
10°-20°	200.3	9.1
20°-30°	305.0	13.8
30°-40°	371.4	16.9
40°-50°	394.1	17.9
50°-60°	371.9	16.9
60°-70°	300.3	13.6
70°-80°	162.9	7.4
80°-90°	26.3	1.2
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°	575.0	26.1
0°-40°	946.5	43.0
0°-60°	1712.5	77.8
0°-90°	2202.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	2202.0	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	738	738	738	738	738	
5°	738	736	731	736	734	70
15°	710	708	707	712	712	200
25°	658	657	658	665	667	303
35°	583	586	591	603	605	364
45°	486	493	509	528	536	375
55°	370	385	420	447	457	330
65°	239	268	316	342	349	237
75°	105	153	175	158	153	115
85°	19	21	12	10	9	24
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	737.5	737.5	737.5	737.5	737.5
2.5°	740.9	737.5	732.3	737.5	735.8
5°	737.5	735.8	730.6	735.8	734.1
7.5°	732.3	732.3	727.2	730.6	730.6
10°	727.2	725.5	722.0	727.2	725.5
12.5°	718.6	716.9	715.2	720.3	718.6
15°	710.0	708.3	706.6	711.7	711.7
17.5°	699.7	698.0	696.2	703.1	703.1
20°	685.9	685.9	685.9	692.8	691.1
22.5°	672.2	672.2	673.9	680.8	679.1
25°	658.4	656.7	658.4	665.3	667.0
27.5°	641.2	643.0	644.7	651.5	653.3
30°	624.0	625.8	627.5	636.1	637.8
32.5°	603.4	606.9	610.3	620.6	620.6
35°	582.8	586.2	591.4	603.4	605.1
37.5°	560.4	563.9	570.8	584.5	587.9
40°	536.4	541.5	551.8	565.6	570.8
42.5°	512.3	519.2	531.2	546.7	553.6
45°	486.5	493.4	508.9	527.8	536.4
47.5°	459.0	467.6	486.5	510.6	517.5
50°	429.8	441.8	464.2	490.0	498.5
52.5°	400.6	414.3	441.8	469.3	477.9
55°	369.6	385.1	419.5	447.0	457.3
57.5°	338.7	355.9	395.4	424.6	434.9
60°	306.0	326.6	369.6	398.8	407.4
62.5°	273.3	297.4	343.8	373.1	379.9
65°	239.0	268.2	316.3	342.1	349.0
67.5°	206.3	240.7	288.8	307.7	307.7
70°	171.9	209.7	257.9	263.0	252.7
72.5°	137.5	180.5	223.5	204.6	196.0
75°	104.9	153.0	175.4	158.2	153.0
77.5°	79.1	123.8	123.8	113.5	110.0
80°	55.0	94.6	82.5	72.2	67.0
82.5°	36.1	53.3	43.0	34.4	29.2
85°	18.9	20.6	12.0	10.3	8.6
87.5°	6.9	3.4	1.7	3.4	1.7
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)