

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: P312176

Luminaire Tested: **14FCZ2-25-UNV-L83050-CP125-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: P312176
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: 14FCZ2-25-UNV-L83050-CP125-W2A-U-3500K
Description: 1'X4' TROFFER LED MODULE, RIBBED LENS, 0.125" POLYCARB 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: 2290.0 lumens
Efficiency: N/A
Efficacy: 116.8 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

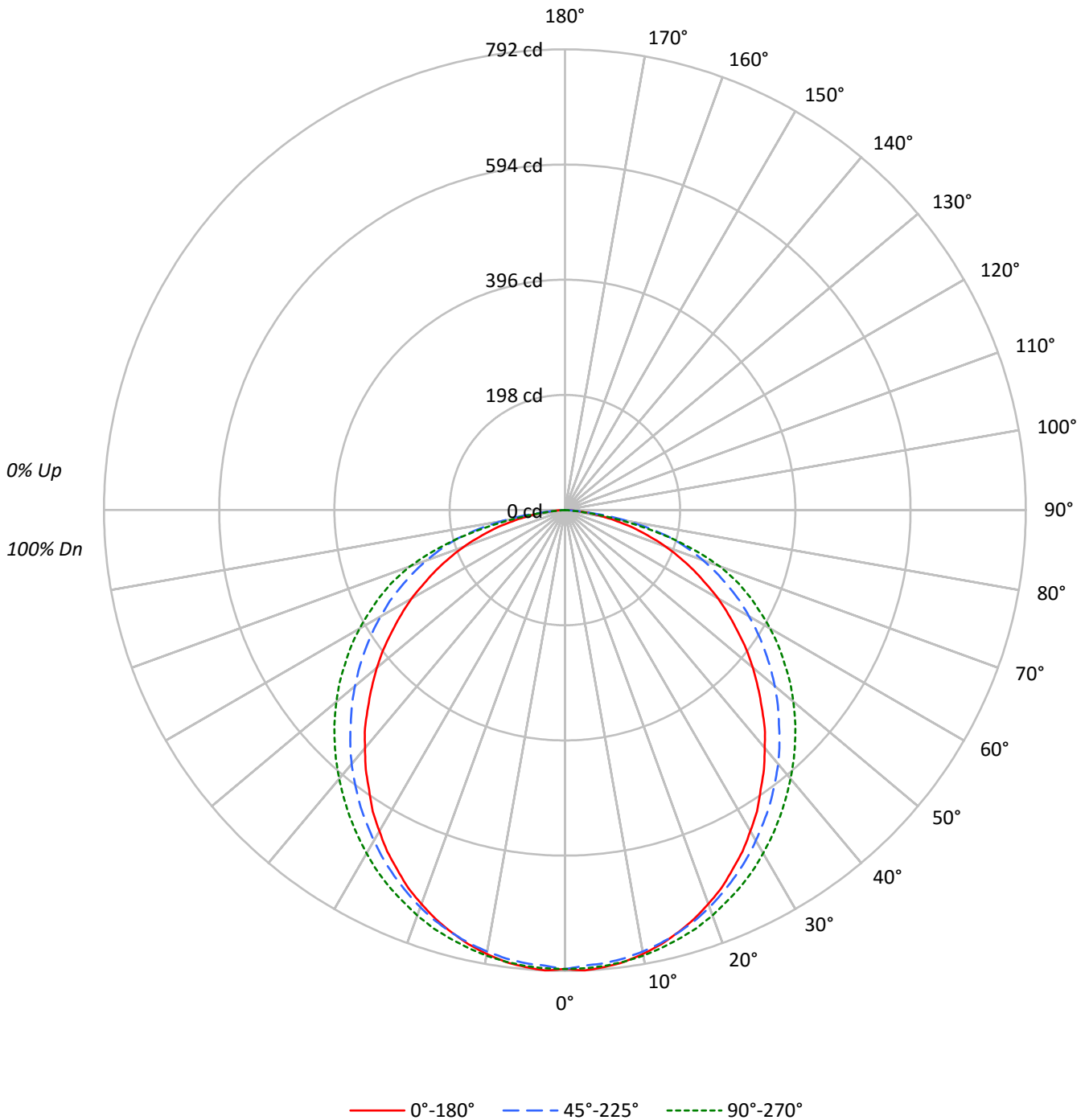
Input Watts (W): 19.6
Input Voltage (V): NR
Input Current (A_{in}): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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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°	2123	2123	2123
5°	2130	2112	2124
10°	2117	2105	2125
15°	2094	2095	2124
20°	2063	2081	2123
25°	2024	2060	2121
30°	1980	2039	2117
35°	1927	2021	2115
40°	1876	2002	2118
45°	1819	1980	2130
50°	1766	1971	2144
55°	1698	1964	2163
60°	1638	1968	2193
65°	1554	1973	2227
70°	1459	1989	2226
75°	1321	2007	2012
80°	1085	1733	1432
85°	803	821	330



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	74.7	3.3
10°-20°	213.2	9.3
20°-30°	321.2	14.0
30°-40°	385.5	16.8
40°-50°	401.8	17.5
50°-60°	372.0	16.2
60°-70°	300.5	13.1
70°-80°	183.2	8.0
80°-90°	37.8	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°	609.1	26.6
0°-40°	994.6	43.4
0°-60°	1768.4	77.2
0°-90°	2290.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	2290.0	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	789	789	789	789	789	
5°	788	786	782	787	786	75
15°	752	752	752	762	762	212
25°	682	686	694	711	714	314
35°	587	596	615	638	644	368
45°	478	492	520	549	560	369
55°	362	381	419	451	461	324
65°	244	268	310	341	350	241
75°	127	155	193	196	194	134
85°	26	39	27	15	11	32
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	788.9	788.9	788.9	788.9	788.9
2.5°	792.0	789.4	783.8	789.4	788.4
5°	788.4	786.4	781.8	787.4	786.4
7.5°	783.3	781.3	777.2	783.8	782.8
10°	774.6	773.6	770.5	778.2	777.7
12.5°	764.4	763.9	762.4	771.0	770.5
15°	751.6	752.1	752.1	762.4	762.4
17.5°	737.3	738.4	740.4	751.6	753.2
20°	720.5	722.5	726.6	739.4	741.4
22.5°	703.1	704.7	710.8	726.1	728.1
25°	681.7	685.8	693.9	711.3	714.4
27.5°	661.3	664.8	676.1	693.9	699.0
30°	637.3	642.9	656.2	675.6	681.2
32.5°	614.3	620.4	635.7	658.2	663.3
35°	586.7	595.9	615.3	637.8	643.9
37.5°	561.7	570.4	592.3	616.8	624.0
40°	534.1	544.8	569.9	595.9	603.0
42.5°	508.6	518.8	545.9	572.4	582.1
45°	477.9	492.2	520.3	549.4	559.6
47.5°	449.9	464.2	496.3	527.5	536.7
50°	421.8	437.1	470.8	503.0	512.2
52.5°	392.7	409.0	445.3	477.4	488.2
55°	362.0	380.9	418.7	451.4	461.1
57.5°	332.9	352.3	392.7	425.9	435.6
60°	304.3	324.2	365.6	397.3	407.5
62.5°	272.7	296.2	339.1	370.2	377.9
65°	244.1	268.1	309.9	341.1	349.8
67.5°	214.0	240.0	281.9	310.5	318.6
70°	185.4	212.4	252.8	279.3	282.9
72.5°	154.7	182.3	223.1	240.0	240.0
75°	127.1	155.2	193.0	196.1	193.5
77.5°	97.0	128.2	152.7	146.5	140.4
80°	70.0	100.6	111.8	100.6	92.4
82.5°	47.0	73.0	67.4	53.6	47.5
85°	26.0	38.8	26.6	14.8	10.7
87.5°	9.7	8.7	2.6	2.6	2.6
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)