

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: P307847

Luminaire Tested: **14FCZ2-25-UNV-L82765-S-CA125-W2A-U-4000K**

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: P307847
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: 14FCZ2-25-UNV-L82765-S-CA125-W2A-U-4000K
Description: 1'X4' TROFFER LED MODULE,SMOOTH LENS, 0.125" ACRYLIC SHEET
Light Source: (168) 4000K 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: 2357.0 lumens
Efficiency: N/A
Efficacy: 119.0 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

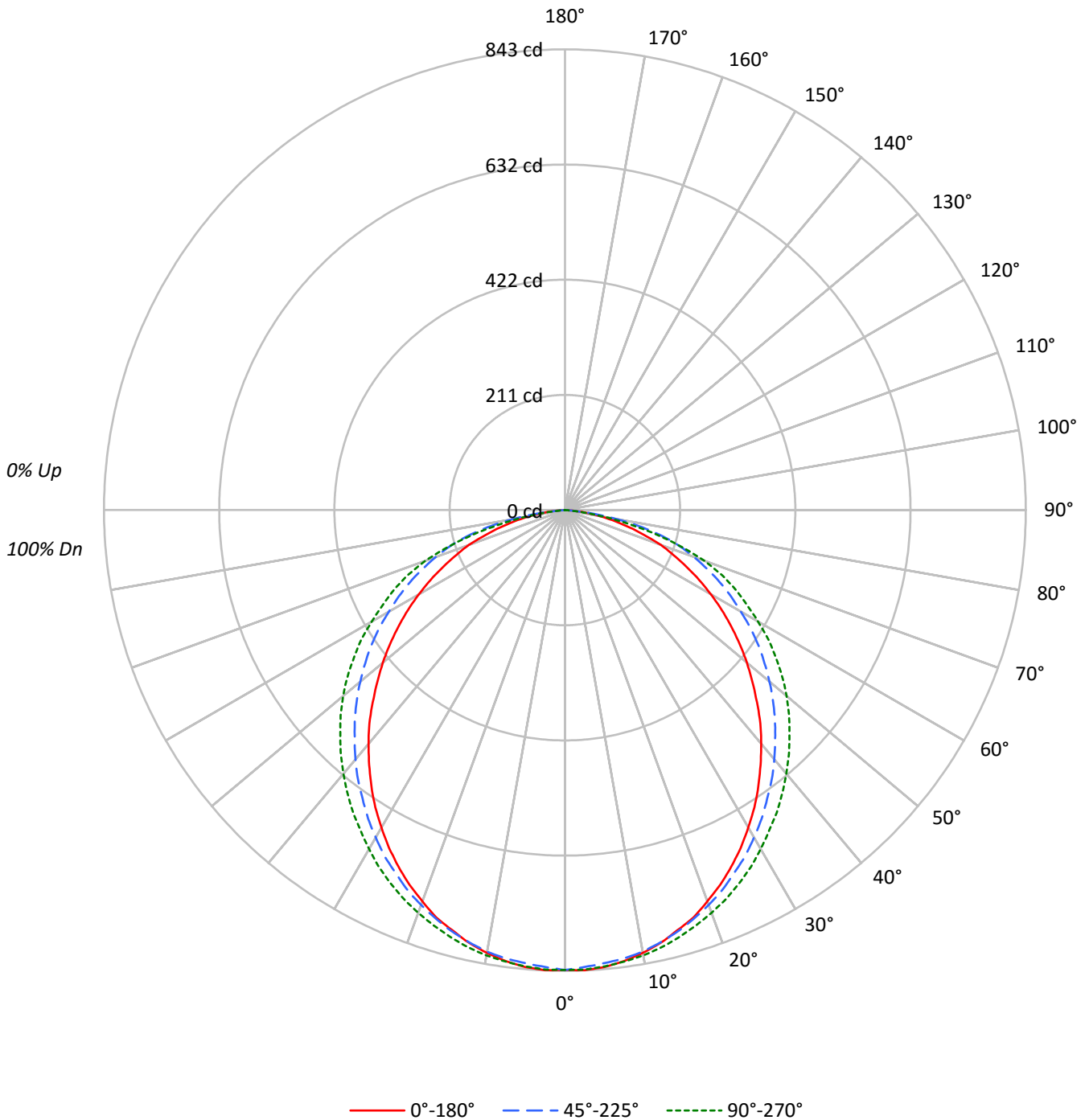
Input Watts (W): 19.8
Input Voltage (V): NR
Input Current (A_{in}): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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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	94	91	89	90	88	86	84
2	99	90	84	78	96	89	82	77	85	80	75	82	77	73	79	75	72	70
3	90	79	71	65	87	78	70	64	75	68	63	72	66	62	69	65	61	58
4	82	70	61	55	80	69	61	54	66	59	53	64	58	53	62	56	52	50
5	76	63	54	47	74	62	53	47	59	52	46	57	51	46	56	50	45	43
6	70	56	47	41	68	55	47	41	54	46	40	52	45	40	50	44	40	38
7	65	51	42	36	63	50	42	36	49	41	36	47	41	35	46	40	35	33
8	60	47	38	32	59	46	38	32	45	37	32	43	37	32	42	36	32	30
9	56	43	35	29	55	42	34	29	41	34	29	40	33	29	39	33	28	27
10	53	40	32	26	52	39	31	26	38	31	26	37	31	26	36	30	26	24

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	2264	2264	2264
5°	2267	2248	2263
10°	2248	2242	2261
15°	2217	2224	2253
20°	2182	2202	2245
25°	2138	2176	2238
30°	2084	2150	2226
35°	2027	2119	2219
40°	1962	2094	2213
45°	1890	2068	2210
50°	1820	2045	2216
55°	1743	2029	2210
60°	1660	2000	2195
65°	1563	1994	2195
70°	1471	1977	2133
75°	1276	1932	1823
80°	1032	1557	1213
85°	685	540	361



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	79.5	3.4
10°-20°	226.1	9.6
20°-30°	339.1	14.4
30°-40°	404.6	17.2
40°-50°	418.2	17.7
50°-60°	381.9	16.2
60°-70°	300.5	12.7
70°-80°	174.9	7.4
80°-90°	32.2	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°	644.7	27.4
0°-40°	1049.2	44.5
0°-60°	1849.3	78.5
0°-90°	2357.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	2357.0	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	841	841	841	841	841	
5°	839	837	832	839	838	80
15°	796	797	798	809	809	225
25°	720	723	733	750	754	331
35°	617	625	645	670	676	386
45°	497	513	543	574	581	384
55°	372	392	432	464	471	332
65°	245	271	313	338	345	244
75°	123	152	186	182	175	130
85°	22	32	18	14	12	29
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	841.4	841.4	841.4	841.4	841.4
2.5°	842.6	840.2	836.7	842.6	841.4
5°	839.1	836.7	832.1	839.1	837.9
7.5°	832.1	829.7	827.4	834.4	833.2
10°	822.7	821.5	820.4	828.6	827.4
12.5°	811.0	811.0	809.9	819.2	819.2
15°	795.8	797.0	798.2	808.7	808.7
17.5°	781.8	780.6	784.1	795.8	797.0
20°	761.9	764.3	769.0	783.0	784.1
22.5°	742.1	744.4	752.6	766.6	770.1
25°	719.9	723.4	732.7	750.3	753.8
27.5°	696.5	701.2	714.0	732.7	736.2
30°	670.8	677.8	691.8	712.9	716.4
32.5°	645.1	652.1	669.6	690.7	695.3
35°	617.0	625.2	645.1	669.6	675.5
37.5°	587.8	598.3	621.7	646.2	653.3
40°	558.6	570.3	596.0	621.7	629.9
42.5°	529.4	541.1	569.1	598.3	606.5
45°	496.7	513.0	543.4	573.8	580.8
47.5°	465.1	482.6	516.5	546.9	556.3
50°	434.7	452.3	488.5	520.0	529.4
52.5°	403.2	421.9	460.4	493.2	501.3
55°	371.6	391.5	432.4	463.9	471.0
57.5°	340.1	361.1	403.2	433.6	441.7
60°	308.5	330.7	371.6	402.0	407.9
62.5°	277.0	300.3	342.4	369.3	375.1
65°	245.4	271.1	313.2	337.7	344.7
67.5°	215.0	240.7	281.6	305.0	310.9
70°	187.0	210.4	251.3	268.8	271.1
72.5°	151.9	181.1	220.9	230.2	224.4
75°	122.7	151.9	185.8	182.3	175.3
77.5°	93.5	122.7	144.9	133.2	123.9
80°	66.6	95.8	100.5	83.0	78.3
82.5°	43.2	66.6	56.1	43.2	35.1
85°	22.2	31.6	17.5	14.0	11.7
87.5°	7.0	4.7	2.3	2.3	1.2
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)