

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: P307587

Luminaire Tested: **14FCZ2-25-UNV-L82765-CP125-W2A-U-4500K**

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: P307587
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-L82765-CP125-W2A-U-4500K
Description: 1'X4' TROFFER LED MODULE,RIBBED LENS, 0.125" POLYCARB SHEET
Light Source: (168) 4500K 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: 2327.0 lumens
Efficiency: N/A
Efficacy: 116.3 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

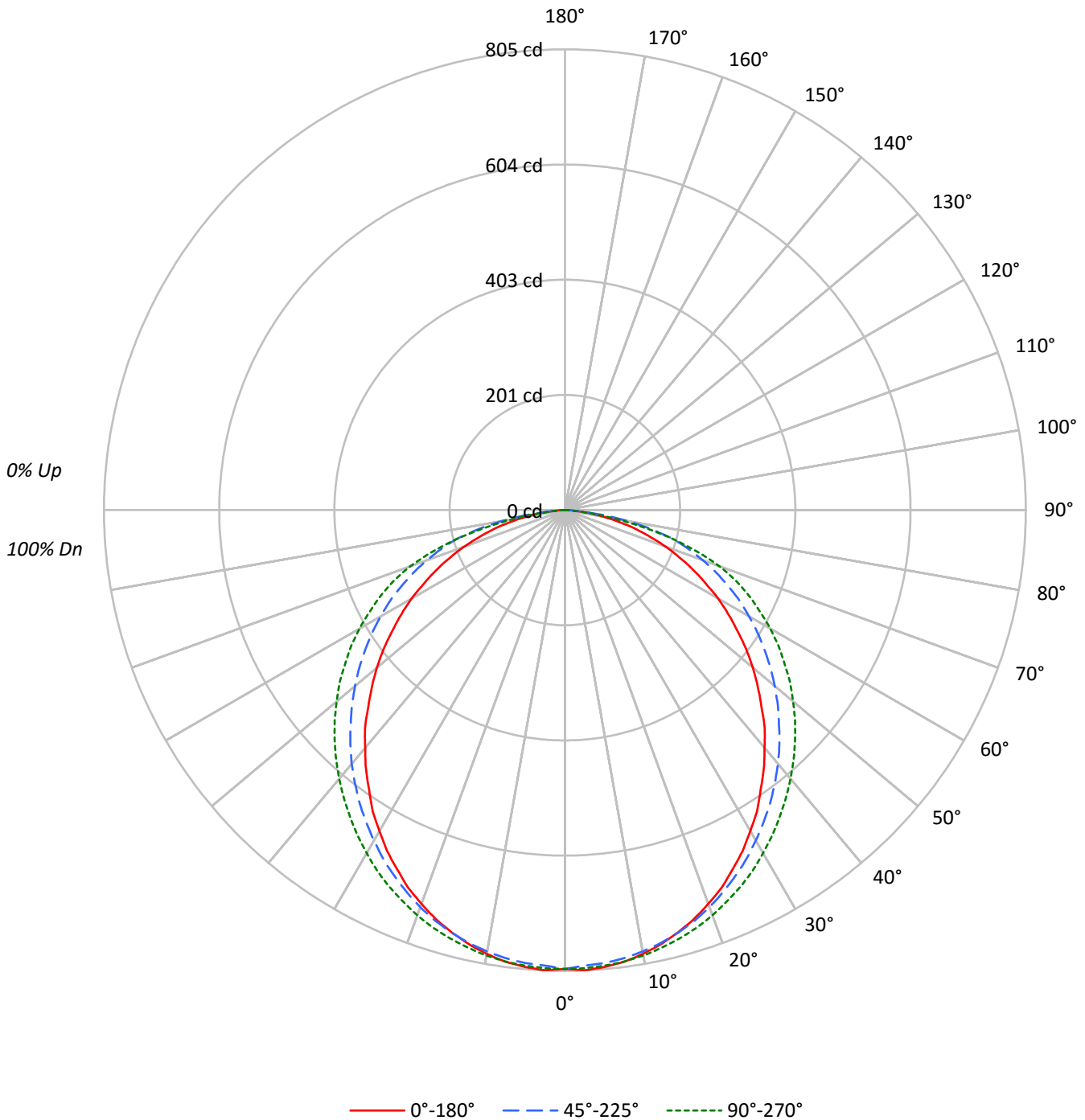
Input Watts (W): 20
Input Voltage (V): NR
Input Current (A_{in}): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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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°	2157	2157	2157
5°	2164	2146	2159
10°	2151	2140	2159
15°	2128	2129	2158
20°	2096	2115	2157
25°	2057	2094	2155
30°	2012	2072	2151
35°	1959	2054	2149
40°	1906	2034	2153
45°	1848	2012	2164
50°	1794	2003	2179
55°	1726	1996	2198
60°	1664	1999	2229
65°	1579	2006	2263
70°	1482	2020	2262
75°	1343	2039	2045
80°	1102	1760	1455
85°	818	834	337



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	75.9	3.3
10°-20°	216.7	9.3
20°-30°	326.4	14.0
30°-40°	391.7	16.8
40°-50°	408.3	17.5
50°-60°	378.0	16.2
60°-70°	305.4	13.1
70°-80°	186.2	8.0
80°-90°	38.4	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°	619.0	26.6
0°-40°	1010.7	43.4
0°-60°	1797.0	77.2
0°-90°	2327.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	2327.0	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	802	802	802	802	802	
5°	801	799	794	800	799	76
15°	764	764	764	775	775	215
25°	693	697	705	723	726	319
35°	596	606	625	648	654	373
45°	486	500	529	558	569	375
55°	368	387	426	459	468	330
65°	248	272	315	347	355	245
75°	129	158	196	199	197	136
85°	26	39	27	15	11	33
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	801.7	801.7	801.7	801.7	801.7
2.5°	804.8	802.2	796.5	802.2	801.1
5°	801.1	799.1	794.4	800.1	799.1
7.5°	796.0	793.9	789.7	796.5	795.4
10°	787.1	786.1	783.0	790.8	790.2
12.5°	776.8	776.2	774.7	783.5	783.0
15°	763.8	764.3	764.3	774.7	774.7
17.5°	749.3	750.3	752.4	763.8	765.3
20°	732.1	734.2	738.4	751.3	753.4
22.5°	714.5	716.0	722.3	737.8	739.9
25°	692.7	696.8	705.1	722.8	725.9
27.5°	671.9	675.6	687.0	705.1	710.3
30°	647.6	653.3	666.8	686.5	692.2
32.5°	624.2	630.4	646.0	668.8	674.0
35°	596.2	605.5	625.2	648.1	654.3
37.5°	570.8	579.6	601.9	626.8	634.1
40°	542.7	553.6	579.1	605.5	612.8
42.5°	516.8	527.2	554.7	581.7	591.5
45°	485.7	500.2	528.7	558.3	568.7
47.5°	457.1	471.7	504.3	536.0	545.3
50°	428.6	444.2	478.4	511.1	520.4
52.5°	399.0	415.6	452.5	485.1	496.0
55°	367.9	387.1	425.5	458.7	468.5
57.5°	338.3	358.0	399.0	432.7	442.6
60°	309.2	329.5	371.5	403.7	414.1
62.5°	277.1	300.9	344.5	376.2	384.0
65°	248.0	272.4	315.0	346.6	355.4
67.5°	217.4	243.9	286.4	315.5	323.8
70°	188.4	215.9	256.8	283.8	287.5
72.5°	157.2	185.2	226.7	243.9	243.9
75°	129.2	157.7	196.1	199.2	196.7
77.5°	98.6	130.2	155.1	148.9	142.7
80°	71.1	102.2	113.6	102.2	93.9
82.5°	47.7	74.2	68.5	54.5	48.3
85°	26.5	39.4	27.0	15.0	10.9
87.5°	9.9	8.8	2.6	2.6	2.6
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)