

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: P307866

Luminaire Tested: **14FCZ2-25-UNV-L82765-S-CP187-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: P307866
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-CP187-W2A-U-4500K
Description: 1'X4' TROFFER LED MODULE,SMOOTH LENS, 0.187" 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: 2252.0 lumens
Efficiency: N/A
Efficacy: 112.6 lumens/watt
Spacing Criteria (0/90/45): 1.19 / 1.27 / 1.36
Luminous Opening: Rectangular (W 1' x L: 4' x H: 0')
CIE Type: Direct

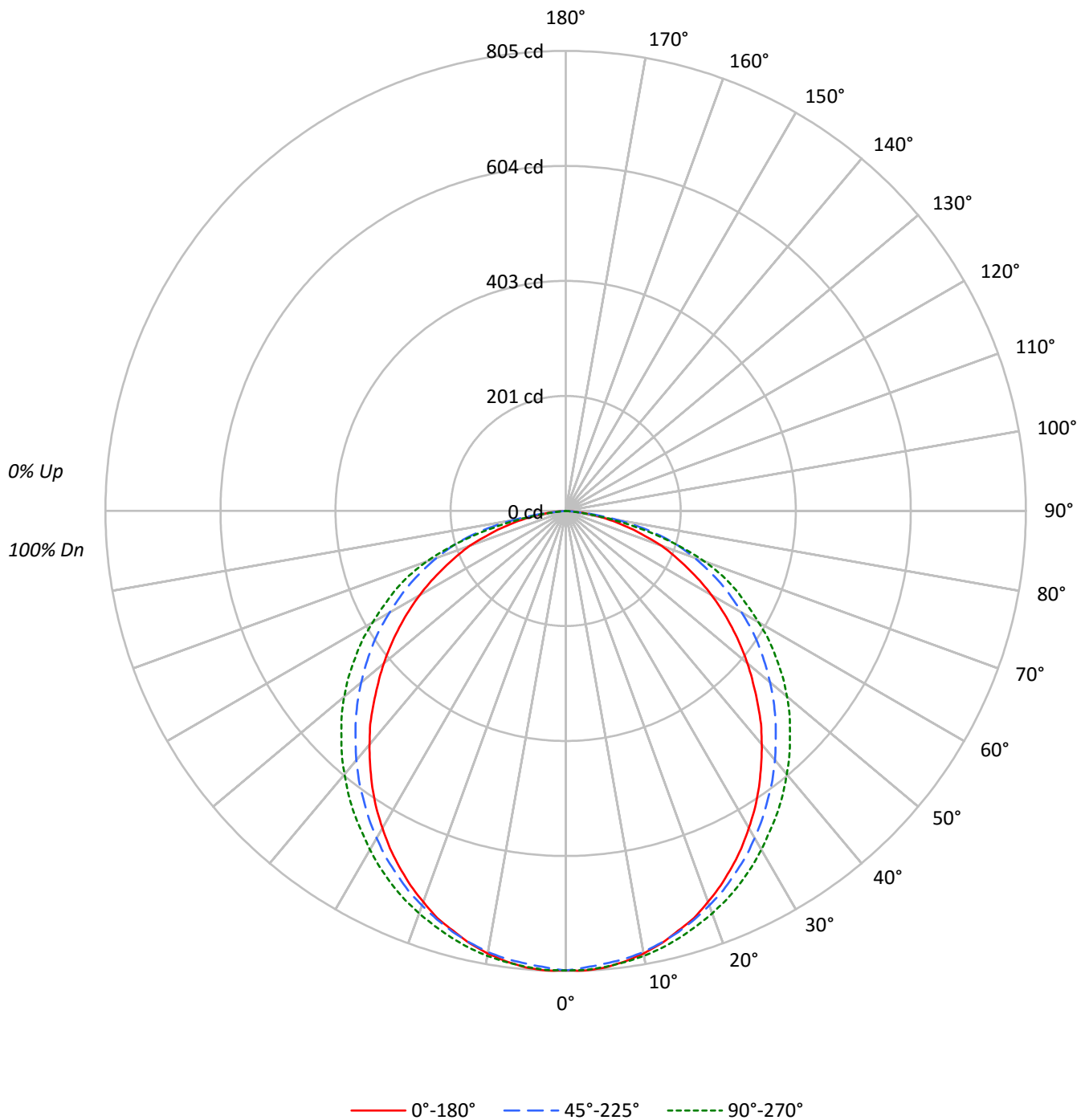
Input Watts (W): 20
Input Voltage (V): NR
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



TEST NUMBER: P307866

CATALOG NUMBER: 14FCZ2-25-UNV-L82765-S-CP187-W2A-U-4500K

Luminous Intensity Polar Plot





TEST NUMBER: P307866

CATALOG NUMBER: 14FCZ2-25-UNV-L82765-S-CP187-W2A-U-4500K

COEFFICIENT OF UTILIZATION - ZONAL CAVITY METHOD:

RF	20				20				20				20				20
RC	80				70				50				30				0
RW	70	50	30	10	70	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		100
1	109	104	100	96	106	102	98	94	97	94	91		94	91	89		84
2	99	90	84	78	96	89	82	77	85	80	75		82	77	73		70
3	90	79	71	65	87	78	70	64	75	68	63		72	66	62		58
4	82	70	61	55	80	69	61	54	66	59	53		64	58	53		50
5	76	63	54	47	74	62	53	47	59	52	46		57	51	46		43
6	70	56	47	41	68	55	47	41	54	46	40		52	45	40		38
7	65	51	42	36	63	50	42	36	49	41	36		47	41	35		33
8	60	47	38	32	59	46	38	32	45	37	32		43	37	32		30
9	56	43	35	29	55	42	34	29	41	34	29		40	33	29		27
10	53	40	32	26	52	39	31	26	38	31	26		37	31	26		24

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	2163	2163	2163
5°	2166	2148	2163
10°	2148	2142	2160
15°	2118	2125	2153
20°	2085	2104	2145
25°	2042	2079	2138
30°	1991	2054	2127
35°	1937	2025	2120
40°	1875	2000	2114
45°	1806	1976	2112
50°	1739	1954	2117
55°	1666	1938	2111
60°	1587	1911	2097
65°	1493	1905	2097
70°	1406	1889	2038
75°	1219	1845	1742
80°	986	1488	1159
85°	655	516	346



TEST NUMBER: P307866

CATALOG NUMBER: 14FCZ2-25-UNV-L82765-S-CP187-W2A-U-4500K

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	75.9	3.4
10°-20°	216.0	9.6
20°-30°	324.0	14.4
30°-40°	386.5	17.2
40°-50°	399.6	17.7
50°-60°	364.8	16.2
60°-70°	287.1	12.7
70°-80°	167.1	7.4
80°-90°	30.8	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°	616.0	27.4
0°-40°	1002.5	44.5
0°-60°	1767.0	78.5
0°-90°	2252.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	2252.0	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	804	804	804	804	804	
5°	802	800	795	802	801	76
15°	760	762	763	773	773	215
25°	688	691	700	717	720	317
35°	590	597	616	640	645	368
45°	474	490	519	548	555	366
55°	355	374	413	443	450	318
65°	234	259	299	323	329	233
75°	117	145	178	174	168	125
85°	21	30	17	13	11	27
90°	0	0	0	0	0	



TEST NUMBER: P307866

CATALOG NUMBER: 14FCZ2-25-UNV-L82765-S-CP187-W2A-U-4500K

CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	803.9	803.9	803.9	803.9	803.9
2.5°	805.0	802.8	799.5	805.0	803.9
5°	801.7	799.5	795.0	801.7	800.6
7.5°	795.0	792.8	790.5	797.2	796.1
10°	786.1	784.9	783.8	791.6	790.5
12.5°	774.9	774.9	773.8	782.7	782.7
15°	760.4	761.5	762.6	772.7	772.7
17.5°	747.0	745.9	749.2	760.4	761.5
20°	728.0	730.2	734.7	748.1	749.2
22.5°	709.0	711.3	719.1	732.5	735.8
25°	687.8	691.2	700.1	716.8	720.2
27.5°	665.5	669.9	682.2	700.1	703.4
30°	640.9	647.6	661.0	681.1	684.5
32.5°	616.3	623.0	639.8	659.9	664.4
35°	589.5	597.4	616.3	639.8	645.4
37.5°	561.6	571.7	594.0	617.5	624.2
40°	533.7	544.9	569.4	594.0	601.8
42.5°	505.8	517.0	543.8	571.7	579.5
45°	474.5	490.2	519.2	548.2	554.9
47.5°	444.4	461.1	493.5	522.6	531.5
50°	415.4	432.1	466.7	496.9	505.8
52.5°	385.2	403.1	439.9	471.2	479.0
55°	355.1	374.0	413.1	443.3	450.0
57.5°	324.9	345.0	385.2	414.2	422.1
60°	294.8	316.0	355.1	384.1	389.7
62.5°	264.6	287.0	327.2	352.8	358.4
65°	234.5	259.0	299.2	322.7	329.4
67.5°	205.4	230.0	269.1	291.4	297.0
70°	178.7	201.0	240.1	256.8	259.0
72.5°	145.2	173.1	211.0	220.0	214.4
75°	117.2	145.2	177.5	174.2	167.5
77.5°	89.3	117.2	138.5	127.3	118.4
80°	63.6	91.6	96.0	79.3	74.8
82.5°	41.3	63.6	53.6	41.3	33.5
85°	21.2	30.1	16.7	13.4	11.2
87.5°	6.7	4.5	2.2	2.2	1.1
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)