

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: P307462

Luminaire Tested: **14FCZ2-39-UNV-L82765-RDP-CP187-W2A-U-5000K**

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: P307462
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: 14FCZ2-39-UNV-L82765-RDP-CP187-W2A-U-5000K
Description: 1'X4' TROFFER LED MODULE, SMOOTH LENS WITH INSERT , 0.187" POLYCARB SHEET
Light Source: (168) 5000K 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: 2299.0 lumens
Efficiency: N/A
Efficacy: 67.4 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

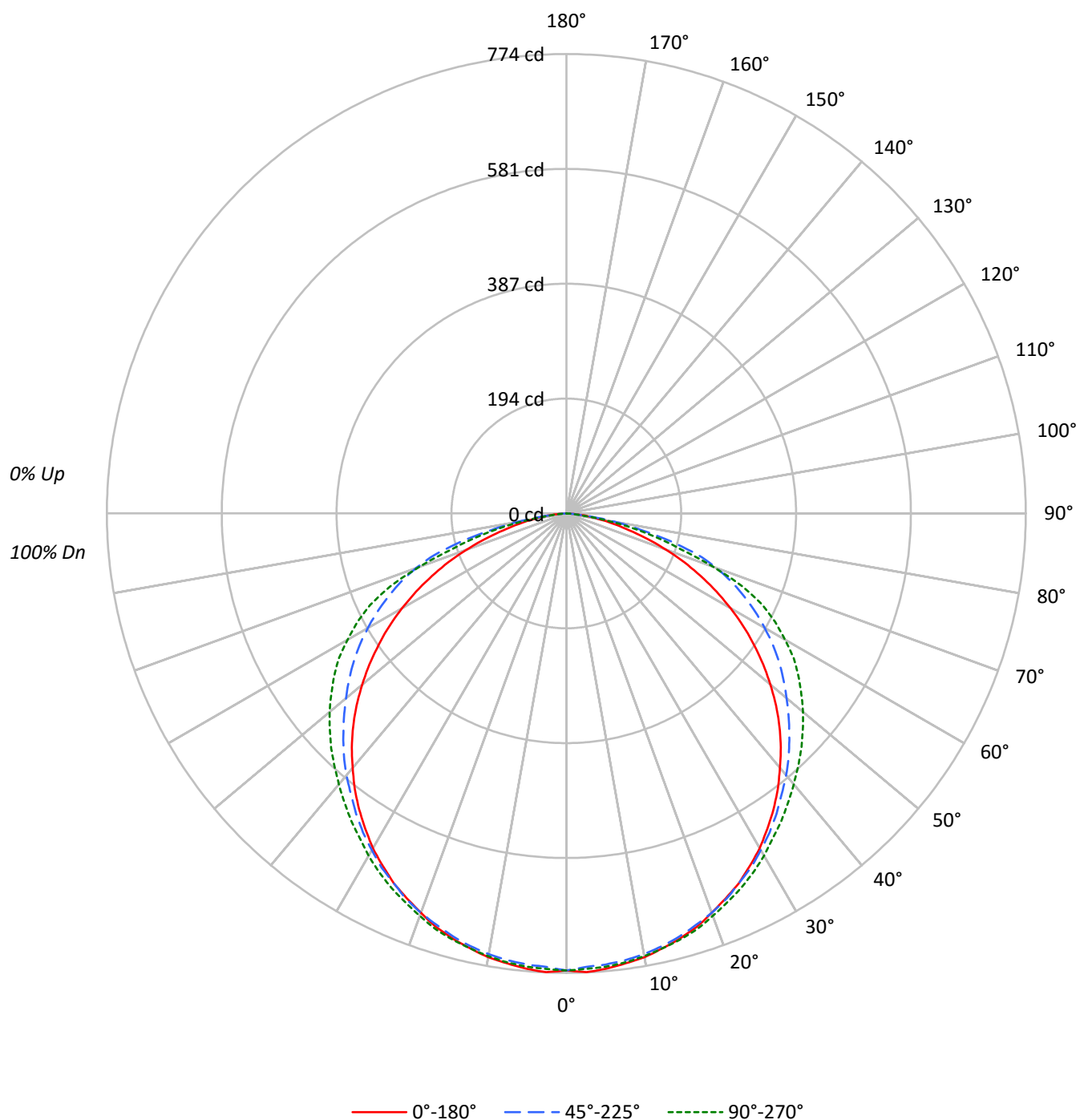
Input Watts (W): 34.1
Input Voltage (V): NR
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



TEST NUMBER: P307462

CATALOG NUMBER: 14FCZ2-39-UNV-L82765-RDP-CP187-W2A-U-5000K

Luminous Intensity Polar Plot





TEST NUMBER: P307462

CATALOG NUMBER: 14FCZ2-39-UNV-L82765-RDP-CP187-W2A-U-5000K

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		93	91	88		84
2	99	90	83	77	96	88	82	76	85	79	75		81	77	73		69
3	90	79	71	64	87	77	70	63	74	68	62		71	66	61		58
4	82	70	61	54	80	68	60	53	66	58	53		63	57	52		49
5	75	62	53	46	73	61	52	46	59	51	45		57	50	45		42
6	69	56	47	40	67	55	46	40	53	45	40		51	44	39		37
7	64	50	42	35	62	50	41	35	48	40	35		47	40	35		32
8	60	46	37	31	58	45	37	31	44	36	31		43	36	31		29
9	56	42	34	28	54	42	34	28	40	33	28		39	33	28		26
10	52	39	31	25	51	38	31	25	37	30	25		36	30	25		23

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	2072	2072	2072
5°	2080	2061	2070
10°	2075	2060	2070
15°	2065	2055	2070
20°	2051	2051	2066
25°	2041	2041	2068
30°	2024	2036	2069
35°	1999	2028	2076
40°	1967	2024	2093
45°	1933	2022	2131
50°	1878	2029	2179
55°	1810	2054	2240
60°	1720	2077	2289
65°	1589	2103	2320
70°	1412	2118	2076
75°	1138	1904	1660
80°	890	1336	1085
85°	608	389	278



TEST NUMBER: P307462

CATALOG NUMBER: 14FCZ2-39-UNV-L82765-RDP-CP187-W2A-U-5000K

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	72.9	3.2
10°-20°	209.1	9.1
20°-30°	318.4	13.8
30°-40°	387.8	16.9
40°-50°	411.4	17.9
50°-60°	388.3	16.9
60°-70°	313.5	13.6
70°-80°	170.1	7.4
80°-90°	27.5	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°	600.4	26.1
0°-40°	988.2	43.0
0°-60°	1787.9	77.8
0°-90°	2299.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	2299.0	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	770	770	770	770	770	
5°	770	768	763	768	766	73
15°	741	740	738	743	743	209
25°	687	686	687	695	696	316
35°	608	612	617	630	632	380
45°	508	515	531	551	560	391
55°	386	402	438	467	477	345
65°	250	280	330	357	364	247
75°	110	160	183	165	160	120
85°	20	22	13	11	9	25
90°	0	0	0	0	0	



TEST NUMBER: P307462

CATALOG NUMBER: 14FCZ2-39-UNV-L82765-RDP-CP187-W2A-U-5000K

CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	770.0	770.0	770.0	770.0	770.0
2.5°	773.6	770.0	764.6	770.0	768.2
5°	770.0	768.2	762.8	768.2	766.4
7.5°	764.6	764.6	759.2	762.8	762.8
10°	759.2	757.4	753.8	759.2	757.4
12.5°	750.3	748.5	746.7	752.0	750.3
15°	741.3	739.5	737.7	743.1	743.1
17.5°	730.5	728.7	726.9	734.1	734.1
20°	716.1	716.1	716.1	723.3	721.5
22.5°	701.8	701.8	703.6	710.8	709.0
25°	687.4	685.6	687.4	694.6	696.4
27.5°	669.5	671.3	673.1	680.3	682.0
30°	651.5	653.3	655.1	664.1	665.9
32.5°	630.0	633.6	637.2	647.9	647.9
35°	608.5	612.0	617.4	630.0	631.8
37.5°	585.1	588.7	595.9	610.3	613.8
40°	560.0	565.4	576.1	590.5	595.9
42.5°	534.9	542.0	554.6	570.8	577.9
45°	507.9	515.1	531.3	551.0	560.0
47.5°	479.2	488.2	507.9	533.1	540.3
50°	448.7	461.3	484.6	511.5	520.5
52.5°	418.2	432.6	461.3	490.0	499.0
55°	385.9	402.0	437.9	466.7	477.4
57.5°	353.6	371.5	412.8	443.3	454.1
60°	319.5	341.0	385.9	416.4	425.4
62.5°	285.4	310.5	359.0	389.5	396.7
65°	249.5	280.0	330.3	357.2	364.4
67.5°	215.4	251.3	301.5	321.3	321.3
70°	179.5	219.0	269.2	274.6	263.8
72.5°	143.6	188.5	233.3	213.6	204.6
75°	109.5	159.7	183.1	165.1	159.7
77.5°	82.6	129.2	129.2	118.5	114.9
80°	57.4	98.7	86.2	75.4	70.0
82.5°	37.7	55.6	44.9	35.9	30.5
85°	19.7	21.5	12.6	10.8	9.0
87.5°	7.2	3.6	1.8	3.6	1.8
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)