

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: P307503

Luminaire Tested: **14FCZ2-44-UNV-L82765-RDP-CP187-W2A-U-3000K**

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: P307503
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: 14FCZ2-44-UNV-L82765-RDP-CP187-W2A-U-3000K
Description: 1'X4' TROFFER LED MODULE, SMOOTH LENS WITH INSERT , 0.187" POLYCARB SHEET
Light Source: (168) 3000K 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: 2356.0 lumens
Efficiency: N/A
Efficacy: 62.0 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

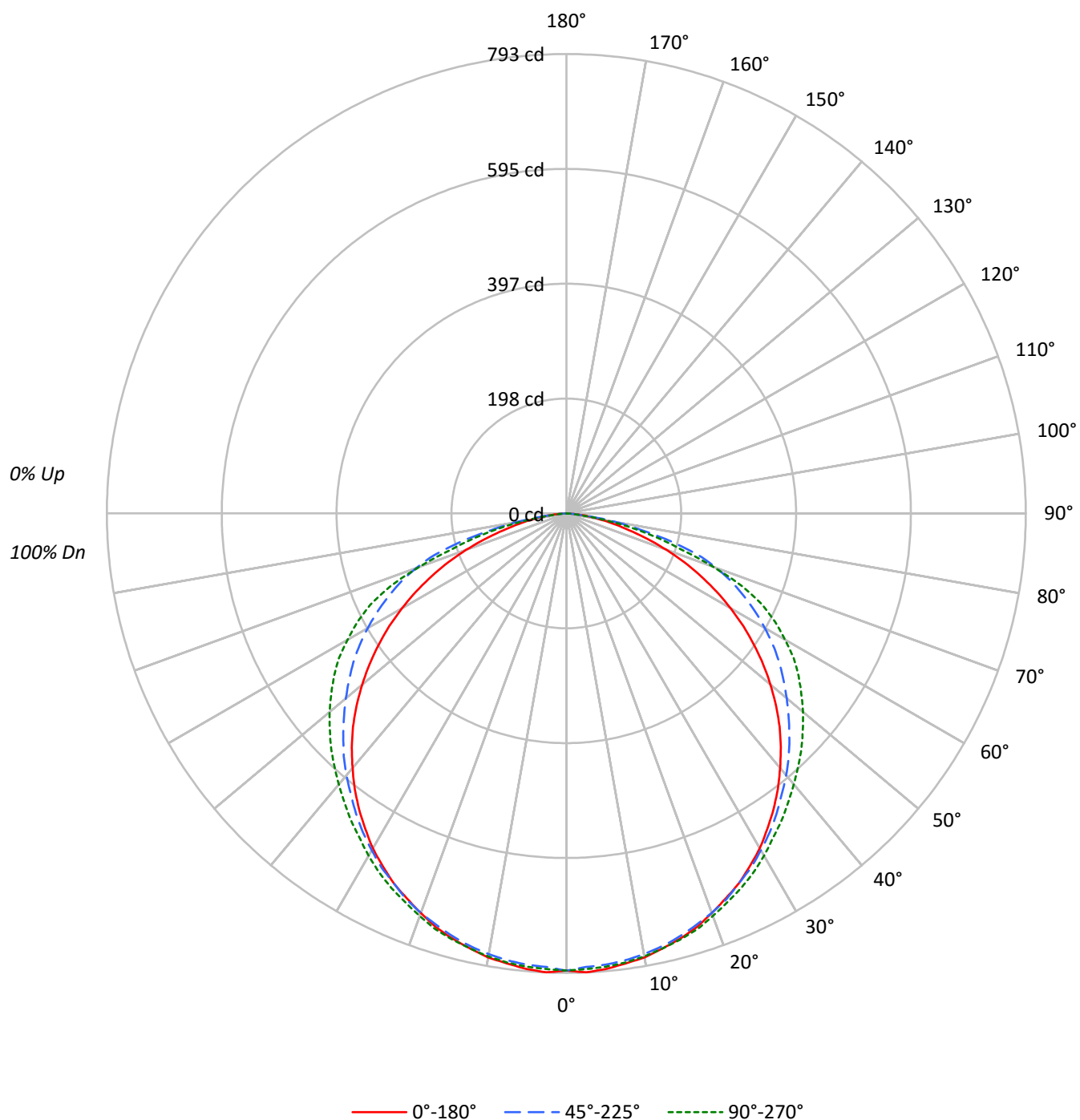
Input Watts (W): 38
Input Voltage (V): NR
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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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				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°	2123	2123	2123
5°	2132	2112	2122
10°	2126	2111	2121
15°	2116	2106	2121
20°	2102	2102	2117
25°	2092	2092	2119
30°	2075	2086	2120
35°	2048	2078	2127
40°	2016	2074	2145
45°	1981	2072	2184
50°	1925	2079	2233
55°	1856	2106	2296
60°	1762	2129	2346
65°	1628	2155	2378
70°	1447	2171	2127
75°	1167	1951	1702
80°	913	1368	1111
85°	624	398	284



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	74.7	3.2
10°-20°	214.3	9.1
20°-30°	326.3	13.8
30°-40°	397.4	16.9
40°-50°	421.6	17.9
50°-60°	397.9	16.9
60°-70°	321.3	13.6
70°-80°	174.3	7.4
80°-90°	28.2	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°	615.3	26.1
0°-40°	1012.7	43.0
0°-60°	1832.2	77.8
0°-90°	2356.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	2356.0	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	789	789	789	789	789	
5°	789	787	782	787	785	75
15°	760	758	756	762	762	214
25°	704	703	704	712	714	324
35°	624	627	633	646	648	390
45°	520	528	544	565	574	401
55°	396	412	449	478	489	353
65°	256	287	338	366	373	253
75°	112	164	188	169	164	123
85°	20	22	13	11	9	26
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	789.1	789.1	789.1	789.1	789.1
2.5°	792.8	789.1	783.6	789.1	787.2
5°	789.1	787.2	781.7	787.2	785.4
7.5°	783.6	783.6	778.0	781.7	781.7
10°	778.0	776.2	772.5	778.0	776.2
12.5°	768.9	767.0	765.2	770.7	768.9
15°	759.7	757.8	756.0	761.5	761.5
17.5°	748.6	746.8	744.9	752.3	752.3
20°	733.9	733.9	733.9	741.3	739.4
22.5°	719.2	719.2	721.0	728.4	726.5
25°	704.5	702.6	704.5	711.8	713.7
27.5°	686.1	687.9	689.8	697.1	699.0
30°	667.7	669.5	671.4	680.6	682.4
32.5°	645.6	649.3	653.0	664.0	664.0
35°	623.5	627.2	632.7	645.6	647.5
37.5°	599.6	603.3	610.7	625.4	629.1
40°	573.9	579.4	590.4	605.1	610.7
42.5°	548.1	555.5	568.4	584.9	592.3
45°	520.5	527.9	544.4	564.7	573.9
47.5°	491.1	500.3	520.5	546.3	553.6
50°	459.8	472.7	496.6	524.2	533.4
52.5°	428.6	443.3	472.7	502.1	511.3
55°	395.5	412.0	448.8	478.2	489.3
57.5°	362.4	380.7	423.1	454.3	465.4
60°	327.4	349.5	395.5	426.7	435.9
62.5°	292.5	318.2	367.9	399.1	406.5
65°	255.7	286.9	338.4	366.0	373.4
67.5°	220.7	257.5	309.0	329.2	329.2
70°	183.9	224.4	275.9	281.4	270.4
72.5°	147.1	193.1	239.1	218.9	209.7
75°	112.2	163.7	187.6	169.2	163.7
77.5°	84.6	132.4	132.4	121.4	117.7
80°	58.9	101.2	88.3	77.3	71.7
82.5°	38.6	57.0	46.0	36.8	31.3
85°	20.2	22.1	12.9	11.0	9.2
87.5°	7.4	3.7	1.8	3.7	1.8
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)