

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: P307280

Luminaire Tested: **14FCZ2-20-UNV-L82765-RDP-CP187-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: P307280
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: 14FCZ2-20-UNV-L82765-RDP-CP187-W2A-U-4000K
Description: 1'X4' TROFFER LED MODULE, SMOOTH LENS WITH INSERT , 0.187" POLYCARB 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: 1204.0 lumens
Efficiency: N/A
Efficacy: 72.1 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

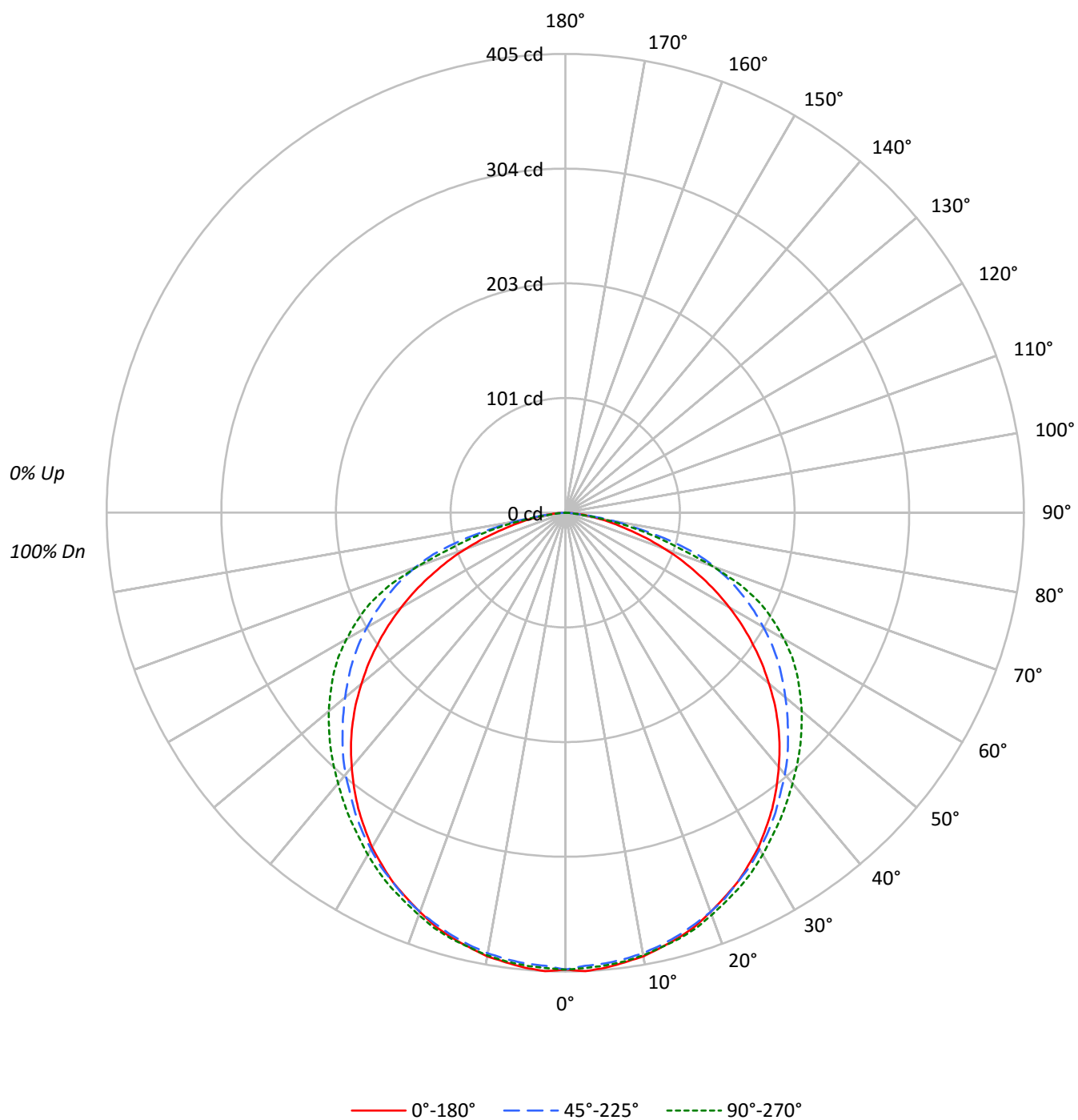
Input Watts (W): 16.7
Input Voltage (V): NR
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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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°	1085	1085	1085
5°	1089	1079	1084
10°	1086	1079	1084
15°	1081	1076	1084
20°	1074	1074	1082
25°	1069	1069	1083
30°	1060	1066	1084
35°	1047	1062	1087
40°	1030	1060	1096
45°	1012	1059	1116
50°	984	1063	1141
55°	948	1076	1173
60°	900	1088	1199
65°	832	1102	1215
70°	740	1109	1087
75°	596	997	870
80°	466	699	569
85°	318	204	145



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	38.2	3.2
10°-20°	109.5	9.1
20°-30°	166.7	13.8
30°-40°	203.1	16.9
40°-50°	215.5	17.9
50°-60°	203.4	16.9
60°-70°	164.2	13.6
70°-80°	89.1	7.4
80°-90°	14.4	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°	314.4	26.1
0°-40°	517.5	43.0
0°-60°	936.4	77.8
0°-90°	1204.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	1204.0	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	403	403	403	403	403	
5°	403	402	400	402	401	38
15°	388	387	386	389	389	110
25°	360	359	360	364	365	166
35°	319	320	323	330	331	199
45°	266	270	278	289	293	205
55°	202	211	229	244	250	181
65°	131	147	173	187	191	129
75°	57	84	96	86	84	63
85°	10	11	7	6	5	13
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	403.3	403.3	403.3	403.3	403.3
2.5°	405.1	403.3	400.4	403.3	402.3
5°	403.3	402.3	399.5	402.3	401.4
7.5°	400.4	400.4	397.6	399.5	399.5
10°	397.6	396.7	394.8	397.6	396.7
12.5°	392.9	392.0	391.0	393.9	392.9
15°	388.2	387.3	386.3	389.2	389.2
17.5°	382.6	381.6	380.7	384.5	384.5
20°	375.1	375.1	375.1	378.8	377.9
22.5°	367.5	367.5	368.5	372.2	371.3
25°	360.0	359.1	360.0	363.8	364.7
27.5°	350.6	351.6	352.5	356.3	357.2
30°	341.2	342.2	343.1	347.8	348.7
32.5°	329.9	331.8	333.7	339.3	339.3
35°	318.7	320.5	323.4	329.9	330.9
37.5°	306.4	308.3	312.1	319.6	321.5
40°	293.3	296.1	301.7	309.3	312.1
42.5°	280.1	283.9	290.5	298.9	302.7
45°	266.0	269.8	278.2	288.6	293.3
47.5°	251.0	255.7	266.0	279.2	282.9
50°	235.0	241.6	253.8	267.9	272.6
52.5°	219.0	226.5	241.6	256.6	261.3
55°	202.1	210.6	229.4	244.4	250.0
57.5°	185.2	194.6	216.2	232.2	237.8
60°	167.3	178.6	202.1	218.1	222.8
62.5°	149.5	162.6	188.0	204.0	207.7
65°	130.7	146.6	173.0	187.1	190.8
67.5°	112.8	131.6	157.9	168.3	168.3
70°	94.0	114.7	141.0	143.8	138.2
72.5°	75.2	98.7	122.2	111.9	107.2
75°	57.3	83.7	95.9	86.5	83.7
77.5°	43.2	67.7	67.7	62.0	60.2
80°	30.1	51.7	45.1	39.5	36.7
82.5°	19.7	29.1	23.5	18.8	16.0
85°	10.3	11.3	6.6	5.6	4.7
87.5°	3.8	1.9	0.9	1.9	0.9
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)