

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: P307326

Luminaire Tested: **14FCZ2-25-UNV-L82765-RDP-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: P307326
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: 14FCZ2-25-UNV-L82765-RDP-CP187-W2A-U-4500K
Description: 1'X4' TROFFER LED MODULE, SMOOTH LENS WITH INSERT , 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: 1430.0 lumens
Efficiency: N/A
Efficacy: 71.5 lumens/watt
Spacing Criteria (0/90/45): 1.25 / 1.29 / 1.4
Luminous Opening: Rectangular (W 1' x L: 4' x H: 0')
CIE Type: Direct

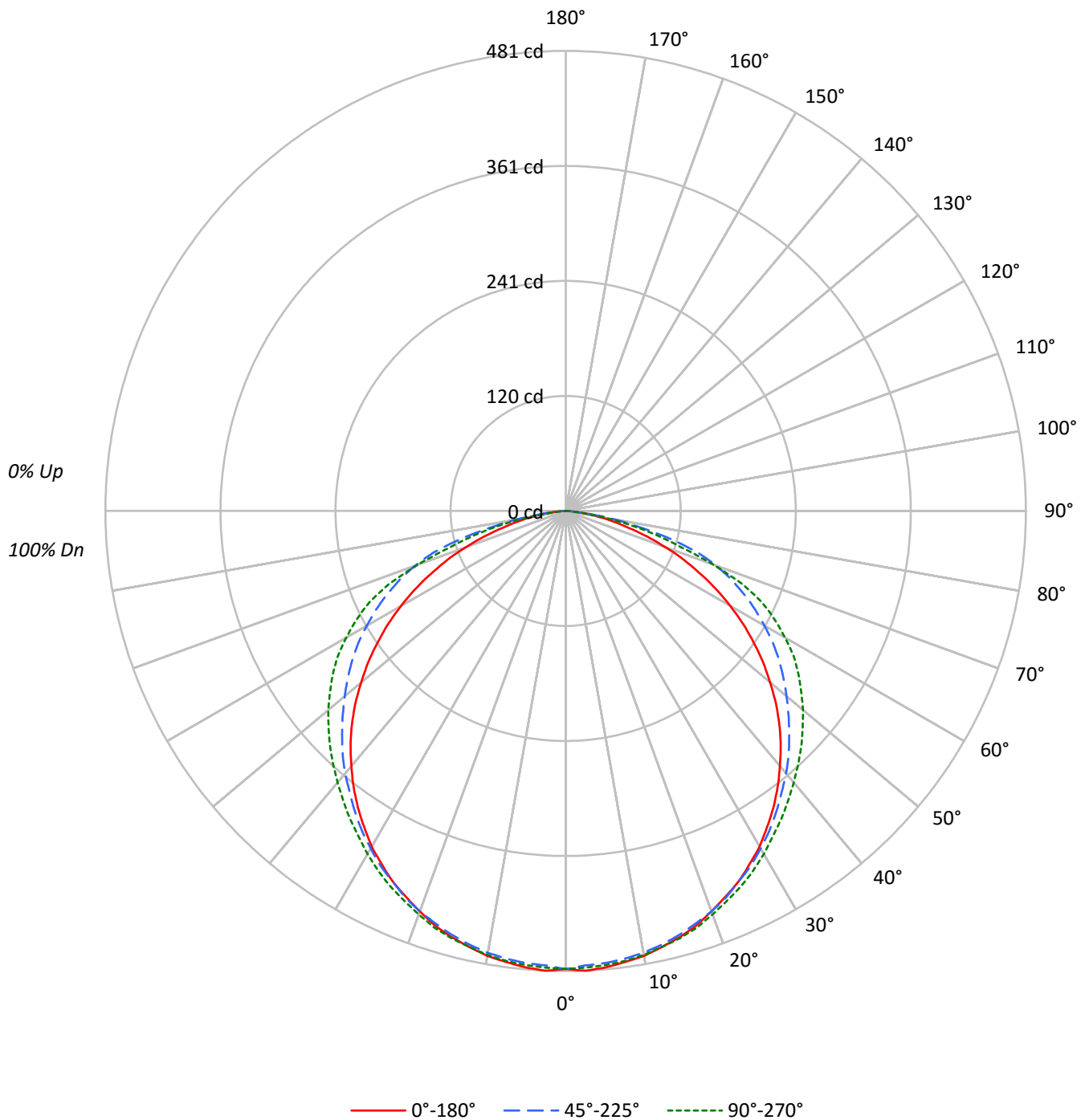
Input Watts (W): 20
Input Voltage (V): NR
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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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°	1289	1289	1289
5°	1294	1282	1288
10°	1290	1281	1287
15°	1285	1278	1288
20°	1276	1276	1285
25°	1270	1270	1286
30°	1259	1266	1287
35°	1243	1261	1291
40°	1224	1259	1302
45°	1202	1258	1325
50°	1168	1262	1356
55°	1126	1278	1393
60°	1069	1292	1424
65°	988	1308	1443
70°	878	1318	1291
75°	708	1184	1033
80°	553	831	674
85°	380	241	173



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	45.3	3.2
10°-20°	130.1	9.1
20°-30°	198.0	13.8
30°-40°	241.2	16.9
40°-50°	255.9	17.9
50°-60°	241.5	16.9
60°-70°	195.0	13.6
70°-80°	105.8	7.4
80°-90°	17.1	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°	373.4	26.1
0°-40°	614.7	43.0
0°-60°	1112.1	77.8
0°-90°	1430.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	1430.0	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	479	479	479	479	479	
5°	479	478	474	478	477	45
15°	461	460	459	462	462	130
25°	428	426	428	432	433	197
35°	378	381	384	392	393	237
45°	316	320	330	343	348	243
55°	240	250	272	290	297	214
65°	155	174	205	222	227	154
75°	68	99	114	103	99	74
85°	12	13	8	7	6	16
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	478.9	478.9	478.9	478.9	478.9
2.5°	481.2	478.9	475.6	478.9	477.8
5°	478.9	477.8	474.5	477.8	476.7
7.5°	475.6	475.6	472.2	474.5	474.5
10°	472.2	471.1	468.9	472.2	471.1
12.5°	466.7	465.5	464.4	467.8	466.7
15°	461.1	460.0	458.8	462.2	462.2
17.5°	454.4	453.3	452.1	456.6	456.6
20°	445.5	445.5	445.5	449.9	448.8
22.5°	436.5	436.5	437.6	442.1	441.0
25°	427.6	426.5	427.6	432.1	433.2
27.5°	416.4	417.5	418.7	423.1	424.2
30°	405.3	406.4	407.5	413.1	414.2
32.5°	391.9	394.1	396.3	403.0	403.0
35°	378.5	380.7	384.0	391.9	393.0
37.5°	364.0	366.2	370.7	379.6	381.8
40°	348.3	351.7	358.4	367.3	370.7
42.5°	332.7	337.2	345.0	355.0	359.5
45°	315.9	320.4	330.5	342.7	348.3
47.5°	298.1	303.7	315.9	331.6	336.0
50°	279.1	286.9	301.4	318.2	323.8
52.5°	260.1	269.1	286.9	304.8	310.4
55°	240.0	250.1	272.4	290.3	297.0
57.5°	219.9	231.1	256.8	275.8	282.5
60°	198.7	212.1	240.0	259.0	264.6
62.5°	177.5	193.1	223.3	242.3	246.7
65°	155.2	174.2	205.4	222.2	226.6
67.5°	134.0	156.3	187.6	199.8	199.8
70°	111.6	136.2	167.5	170.8	164.1
72.5°	89.3	117.2	145.1	132.9	127.3
75°	68.1	99.4	113.9	102.7	99.4
77.5°	51.4	80.4	80.4	73.7	71.5
80°	35.7	61.4	53.6	46.9	43.5
82.5°	23.4	34.6	27.9	22.3	19.0
85°	12.3	13.4	7.8	6.7	5.6
87.5°	4.5	2.2	1.1	2.2	1.1
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)