

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: P307325

Luminaire Tested: **14FCZ2-25-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: P307325
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-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: 1405.0 lumens
Efficiency: N/A
Efficacy: 71.0 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

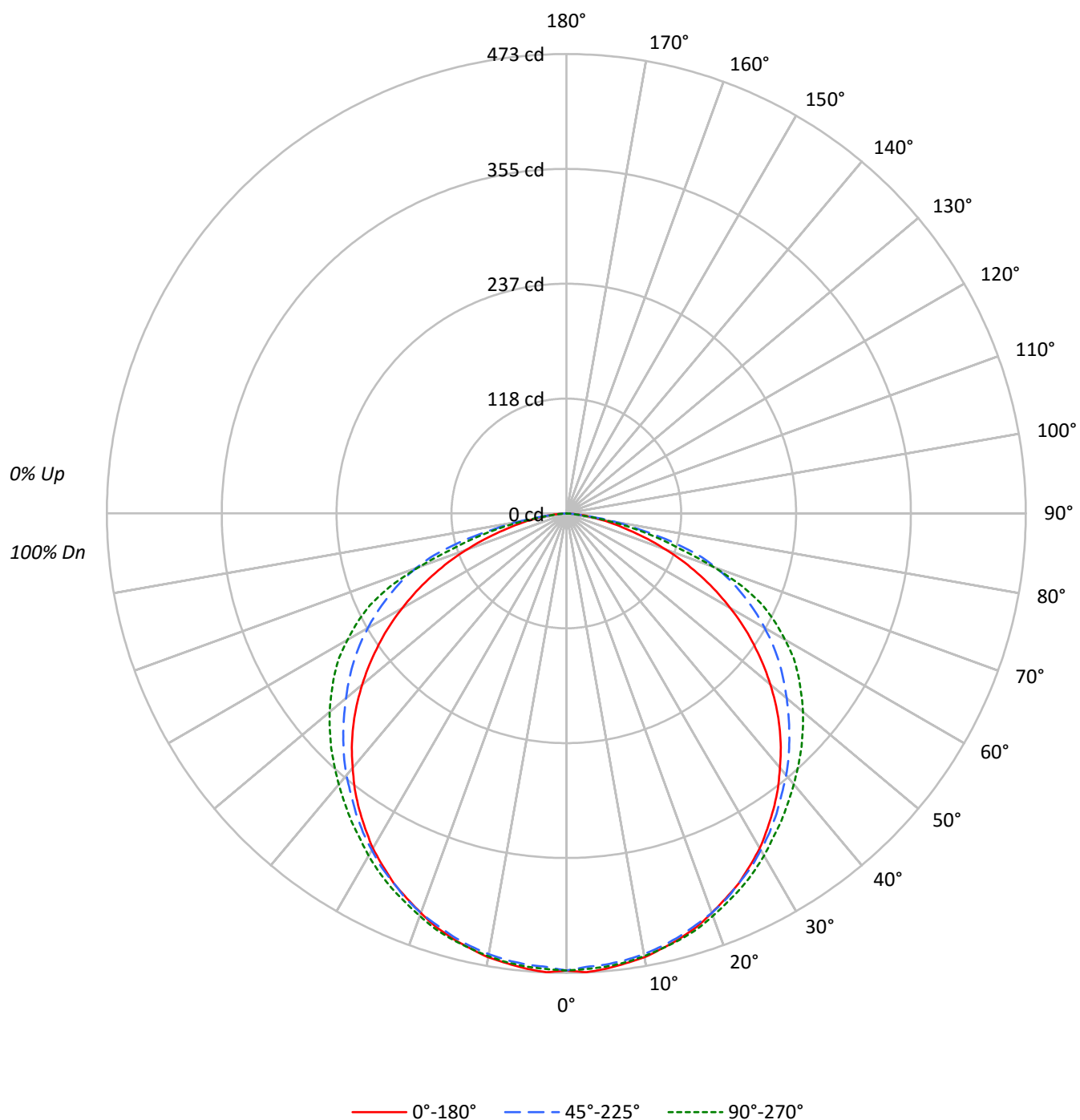
Input Watts (W): 19.8
Input Voltage (V): NR
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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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°	1266	1266	1266
5°	1271	1259	1265
10°	1268	1259	1265
15°	1262	1256	1265
20°	1253	1253	1263
25°	1247	1247	1264
30°	1237	1244	1265
35°	1221	1239	1268
40°	1202	1237	1279
45°	1181	1236	1302
50°	1148	1240	1332
55°	1106	1255	1369
60°	1051	1269	1399
65°	971	1285	1418
70°	863	1294	1268
75°	696	1163	1015
80°	544	817	663
85°	374	238	170



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	44.5	3.2
10°-20°	127.8	9.1
20°-30°	194.6	13.8
30°-40°	237.0	16.9
40°-50°	251.4	17.9
50°-60°	237.3	16.9
60°-70°	191.6	13.6
70°-80°	103.9	7.4
80°-90°	16.8	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°	366.9	26.1
0°-40°	603.9	43.0
0°-60°	1092.6	77.8
0°-90°	1405.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	1405.0	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	471	471	471	471	471	
5°	471	470	466	470	468	45
15°	453	452	451	454	454	128
25°	420	419	420	424	426	193
35°	372	374	377	385	386	232
45°	310	315	325	337	342	239
55°	236	246	268	285	292	211
65°	152	171	202	218	223	151
75°	67	98	112	101	98	73
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°	470.6	470.6	470.6	470.6	470.6
2.5°	472.8	470.6	467.3	470.6	469.5
5°	470.6	469.5	466.2	469.5	468.4
7.5°	467.3	467.3	464.0	466.2	466.2
10°	464.0	462.9	460.7	464.0	462.9
12.5°	458.5	457.4	456.3	459.6	458.5
15°	453.0	451.9	450.8	454.1	454.1
17.5°	446.4	445.3	444.2	448.6	448.6
20°	437.7	437.7	437.7	442.1	441.0
22.5°	428.9	428.9	430.0	434.4	433.3
25°	420.1	419.0	420.1	424.5	425.6
27.5°	409.1	410.2	411.3	415.7	416.8
30°	398.2	399.3	400.4	405.9	407.0
32.5°	385.0	387.2	389.4	396.0	396.0
35°	371.8	374.0	377.3	385.0	386.1
37.5°	357.6	359.8	364.2	372.9	375.1
40°	342.2	345.5	352.1	360.9	364.2
42.5°	326.9	331.3	338.9	348.8	353.2
45°	310.4	314.8	324.7	336.7	342.2
47.5°	292.9	298.4	310.4	325.8	330.2
50°	274.2	281.9	296.2	312.6	318.1
52.5°	255.6	264.4	281.9	299.5	304.9
55°	235.8	245.7	267.6	285.2	291.8
57.5°	216.1	227.1	252.3	270.9	277.5
60°	195.2	208.4	235.8	254.5	260.0
62.5°	174.4	189.8	219.4	238.0	242.4
65°	152.5	171.1	201.8	218.3	222.7
67.5°	131.6	153.6	184.3	196.3	196.3
70°	109.7	133.8	164.5	167.8	161.2
72.5°	87.8	115.2	142.6	130.5	125.0
75°	66.9	97.6	111.9	100.9	97.6
77.5°	50.5	79.0	79.0	72.4	70.2
80°	35.1	60.3	52.7	46.1	42.8
82.5°	23.0	34.0	27.4	21.9	18.6
85°	12.1	13.2	7.7	6.6	5.5
87.5°	4.4	2.2	1.1	2.2	1.1
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)