

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: P307310

Luminaire Tested: **14FCZ2-25-UNV-L82765-RDP-CA125-W2A-U-5500K**

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: P307310
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-CA125-W2A-U-5500K
Description: 1'X4' TROFFER LED MODULE, SMOOTH LENS WITH INSERT , 0.125" ACRYLIC SHEET
Light Source: (168) 5500K 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: 1559.0 lumens
Efficiency: N/A
Efficacy: 77.2 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

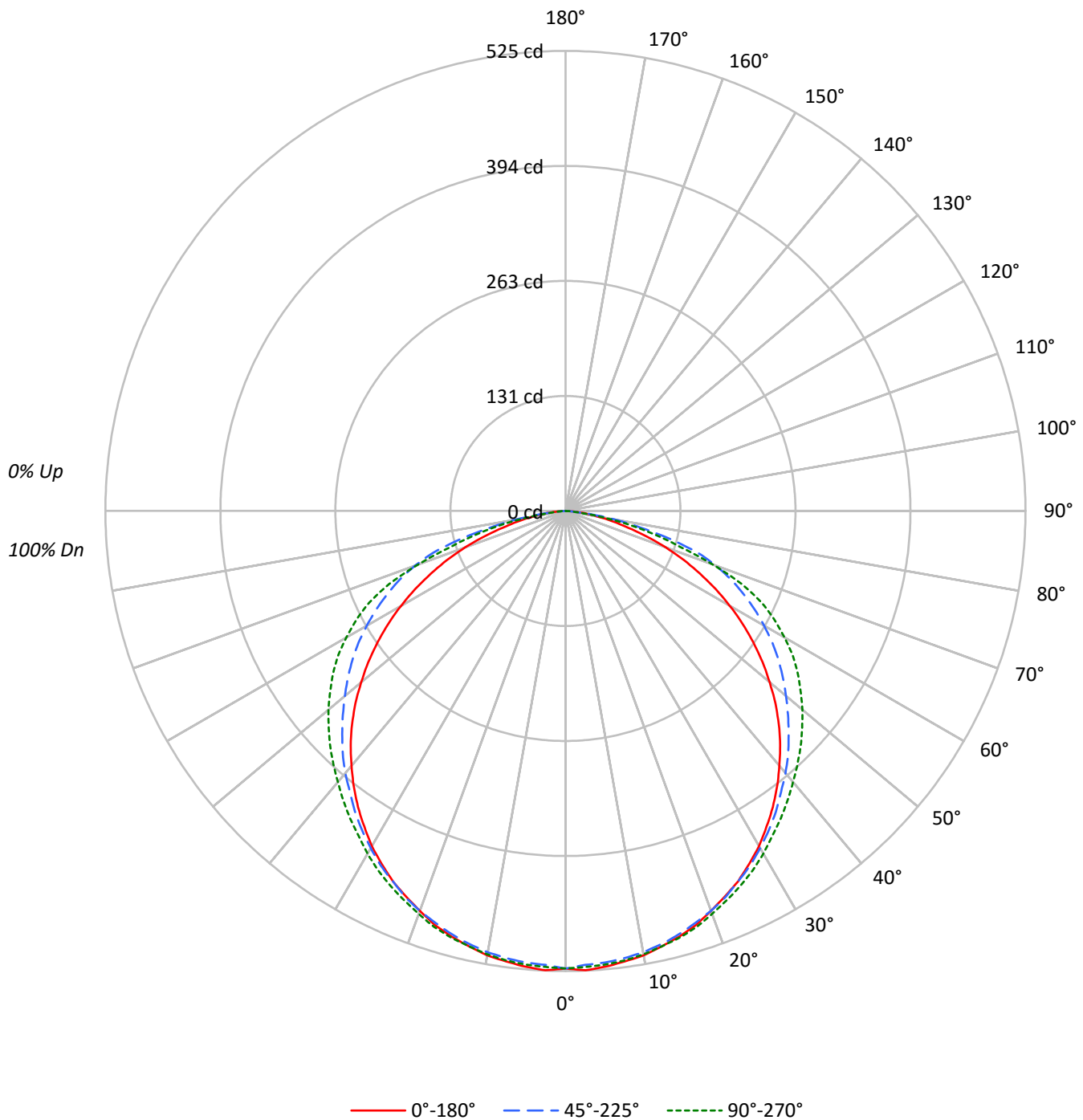
Input Watts (W): 20.2
Input Voltage (V): NR
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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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°	1405	1405	1405
5°	1410	1397	1404
10°	1407	1397	1403
15°	1400	1394	1404
20°	1391	1391	1401
25°	1384	1384	1402
30°	1373	1381	1403
35°	1355	1375	1407
40°	1334	1372	1420
45°	1311	1371	1445
50°	1274	1376	1478
55°	1228	1393	1519
60°	1166	1408	1553
65°	1077	1426	1573
70°	958	1437	1408
75°	771	1290	1126
80°	603	905	736
85°	414	262	188



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	49.4	3.2
10°-20°	141.8	9.1
20°-30°	215.9	13.8
30°-40°	263.0	16.9
40°-50°	279.0	17.9
50°-60°	263.3	16.9
60°-70°	212.6	13.6
70°-80°	115.3	7.4
80°-90°	18.6	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°	407.1	26.1
0°-40°	670.1	43.0
0°-60°	1212.4	77.8
0°-90°	1559.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	1559.0	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	522	522	522	522	522	
5°	522	521	517	521	520	50
15°	503	502	500	504	504	142
25°	466	465	466	471	472	215
35°	413	415	419	427	428	258
45°	344	349	360	374	380	265
55°	262	273	297	316	324	234
65°	169	190	224	242	247	168
75°	74	108	124	112	108	81
85°	13	15	8	7	6	17
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	522.1	522.1	522.1	522.1	522.1
2.5°	524.6	522.1	518.5	522.1	520.9
5°	522.1	520.9	517.3	520.9	519.7
7.5°	518.5	518.5	514.8	517.3	517.3
10°	514.8	513.6	511.2	514.8	513.6
12.5°	508.8	507.5	506.3	510.0	508.8
15°	502.7	501.5	500.2	503.9	503.9
17.5°	495.4	494.2	492.9	497.8	497.8
20°	485.6	485.6	485.6	490.5	489.3
22.5°	475.9	475.9	477.1	482.0	480.8
25°	466.2	464.9	466.2	471.0	472.2
27.5°	454.0	455.2	456.4	461.3	462.5
30°	441.8	443.0	444.3	450.3	451.6
32.5°	427.2	429.6	432.1	439.4	439.4
35°	412.6	415.0	418.7	427.2	428.4
37.5°	396.8	399.2	404.1	413.8	416.3
40°	379.7	383.4	390.7	400.4	404.1
42.5°	362.7	367.6	376.1	387.0	391.9
45°	344.4	349.3	360.3	373.7	379.7
47.5°	325.0	331.1	344.4	361.5	366.4
50°	304.3	312.8	328.6	346.9	353.0
52.5°	283.6	293.3	312.8	332.3	338.4
55°	261.7	272.6	297.0	316.5	323.8
57.5°	239.8	251.9	279.9	300.6	307.9
60°	216.6	231.3	261.7	282.4	288.5
62.5°	193.5	210.6	243.4	264.1	269.0
65°	169.2	189.9	224.0	242.2	247.1
67.5°	146.1	170.4	204.5	217.9	217.9
70°	121.7	148.5	182.6	186.2	178.9
72.5°	97.4	127.8	158.2	144.8	138.8
75°	74.2	108.3	124.1	112.0	108.3
77.5°	56.0	87.6	87.6	80.3	77.9
80°	38.9	66.9	58.4	51.1	47.5
82.5°	25.6	37.7	30.4	24.3	20.7
85°	13.4	14.6	8.5	7.3	6.1
87.5°	4.9	2.4	1.2	2.4	1.2
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)