

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: P307318

Luminaire Tested: **14FCZ2-25-UNV-L82765-RDP-CP125-W2A-U-5000K**

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: P307318
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-CP125-W2A-U-5000K
Description: 1'X4' TROFFER LED MODULE, SMOOTH LENS WITH INSERT , 0.125" POLYCARB SHEET
Light Source: (168) 5000K 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: 1514.0 lumens
Efficiency: N/A
Efficacy: 75.3 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

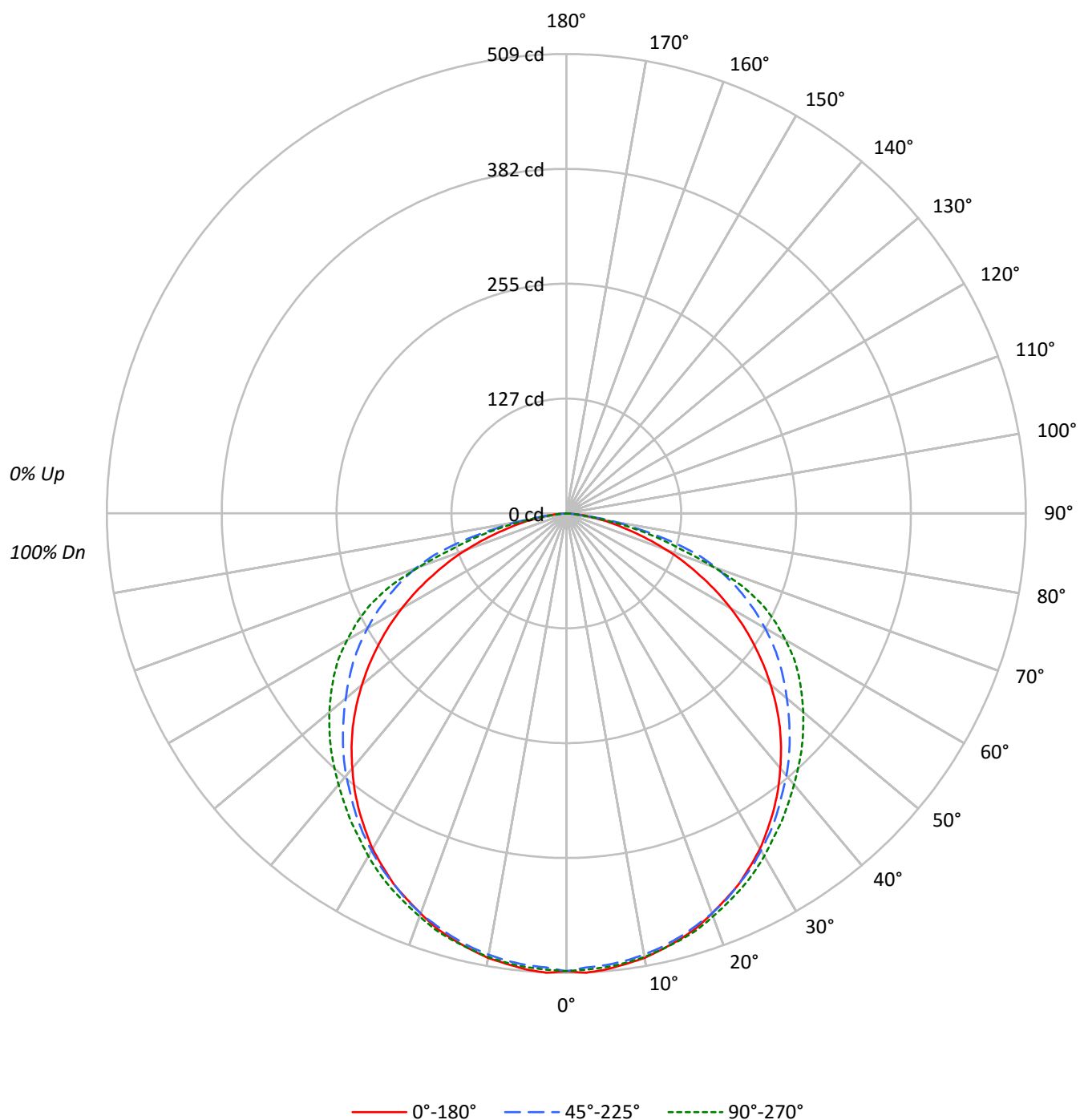
Input Watts (W): 20.1
Input Voltage (V): NR
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



TEST NUMBER: P307318

CATALOG NUMBER: 14FCZ2-25-UNV-L82765-RDP-CP125-W2A-U-5000K

Luminous Intensity Polar Plot





TEST NUMBER: P307318

CATALOG NUMBER: 14FCZ2-25-UNV-L82765-RDP-CP125-W2A-U-5000K

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°	1365	1365	1365
5°	1370	1357	1363
10°	1366	1356	1363
15°	1360	1353	1363
20°	1351	1351	1361
25°	1344	1344	1362
30°	1333	1340	1363
35°	1316	1336	1367
40°	1296	1333	1378
45°	1273	1332	1404
50°	1237	1336	1435
55°	1192	1353	1475
60°	1132	1368	1507
65°	1046	1385	1528
70°	930	1395	1367
75°	750	1254	1094
80°	586	879	714
85°	401	256	182



TEST NUMBER: P307318

CATALOG NUMBER: 14FCZ2-25-UNV-L82765-RDP-CP125-W2A-U-5000K

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	48.0	3.2
10°-20°	137.7	9.1
20°-30°	209.7	13.8
30°-40°	255.4	16.9
40°-50°	270.9	17.9
50°-60°	255.7	16.9
60°-70°	206.5	13.6
70°-80°	112.0	7.4
80°-90°	18.1	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°	395.4	26.1
0°-40°	650.7	43.0
0°-60°	1177.4	77.8
0°-90°	1514.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	1514.0	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	507	507	507	507	507	
5°	507	506	502	506	505	48
15°	488	487	486	489	489	138
25°	453	452	453	457	459	208
35°	401	403	407	415	416	251
45°	334	339	350	363	369	258
55°	254	265	288	307	314	227
65°	164	184	218	235	240	163
75°	72	105	121	109	105	79
85°	13	14	8	7	6	17
90°	0	0	0	0	0	



TEST NUMBER: P307318

CATALOG NUMBER: 14FCZ2-25-UNV-L82765-RDP-CP125-W2A-U-5000K

CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	507.1	507.1	507.1	507.1	507.1
2.5°	509.4	507.1	503.5	507.1	505.9
5°	507.1	505.9	502.3	505.9	504.7
7.5°	503.5	503.5	500.0	502.3	502.3
10°	500.0	498.8	496.4	500.0	498.8
12.5°	494.1	492.9	491.7	495.3	494.1
15°	488.2	487.0	485.8	489.3	489.3
17.5°	481.1	479.9	478.7	483.4	483.4
20°	471.6	471.6	471.6	476.3	475.2
22.5°	462.2	462.2	463.3	468.1	466.9
25°	452.7	451.5	452.7	457.4	458.6
27.5°	440.9	442.1	443.2	448.0	449.2
30°	429.1	430.2	431.4	437.3	438.5
32.5°	414.9	417.2	419.6	426.7	426.7
35°	400.7	403.1	406.6	414.9	416.1
37.5°	385.3	387.7	392.4	401.9	404.2
40°	368.8	372.3	379.4	388.9	392.4
42.5°	352.2	357.0	365.2	375.9	380.6
45°	334.5	339.2	349.9	362.9	368.8
47.5°	315.6	321.5	334.5	351.1	355.8
50°	295.5	303.8	319.1	336.9	342.8
52.5°	275.4	284.9	303.8	322.7	328.6
55°	254.1	264.8	288.4	307.3	314.4
57.5°	232.9	244.7	271.9	292.0	299.0
60°	210.4	224.6	254.1	274.2	280.1
62.5°	187.9	204.5	236.4	256.5	261.2
65°	164.3	184.4	217.5	235.2	239.9
67.5°	141.8	165.5	198.6	211.6	211.6
70°	118.2	144.2	177.3	180.8	173.8
72.5°	94.6	124.1	153.7	140.7	134.7
75°	72.1	105.2	120.6	108.7	105.2
77.5°	54.4	85.1	85.1	78.0	75.6
80°	37.8	65.0	56.7	49.6	46.1
82.5°	24.8	36.6	29.5	23.6	20.1
85°	13.0	14.2	8.3	7.1	5.9
87.5°	4.7	2.4	1.2	2.4	1.2
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)