

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: P307317

Luminaire Tested: **14FCZ2-25-UNV-L82765-RDP-CP125-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: P307317
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-4500K
Description: 1'X4' TROFFER LED MODULE, SMOOTH LENS WITH INSERT , 0.125" 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: 1493.0 lumens
Efficiency: N/A
Efficacy: 74.6 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

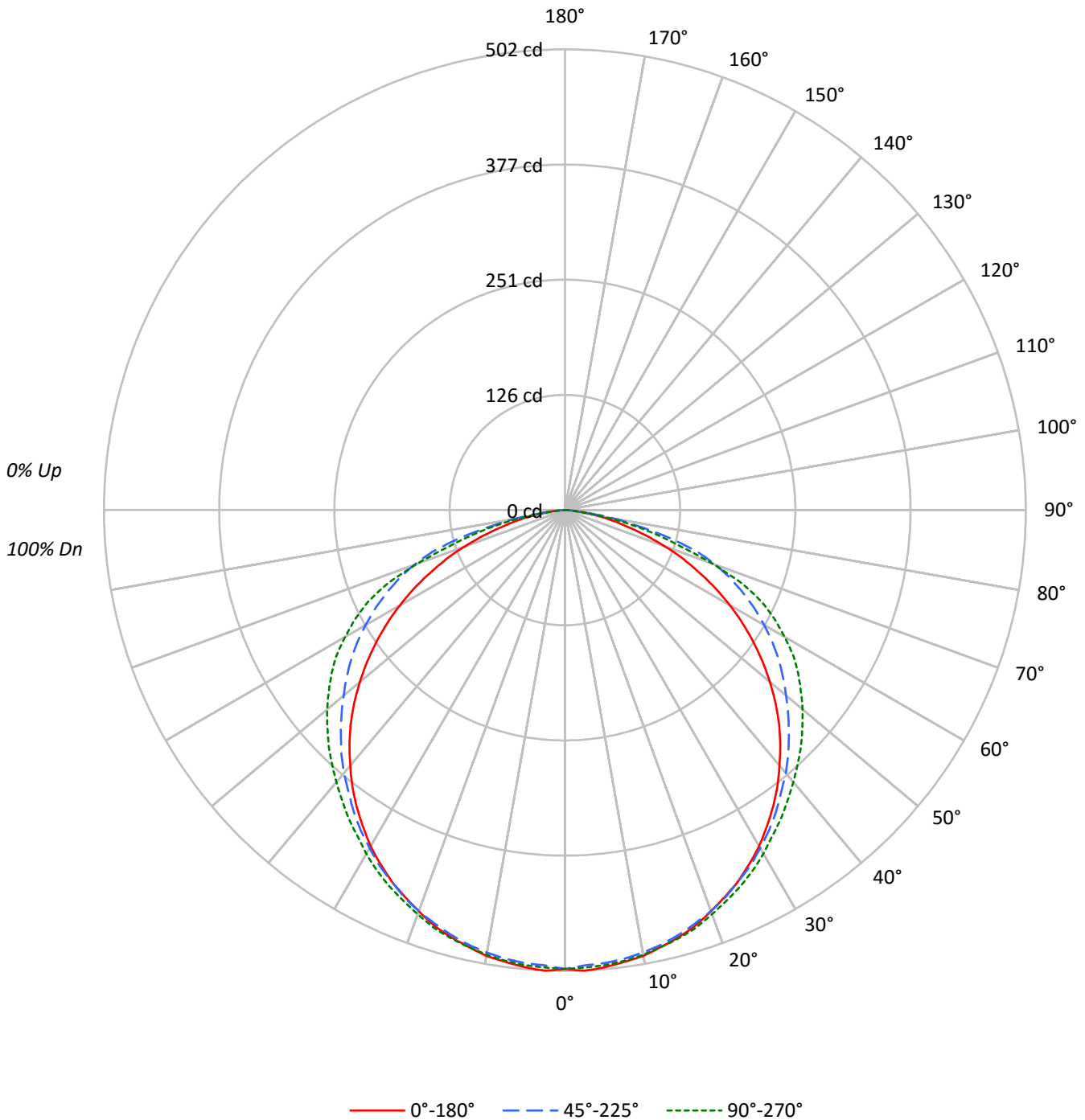
Input Watts (W): 20
Input Voltage (V): NR
Input Current (A_{in}): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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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				10	0
RW	70	50	30	10	70	50	30	10	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	102	102	102	100
1	109	104	100	96	106	102	98	94	97	94	91	93	91	88	90	88	86	84
2	99	90	83	77	96	88	82	76	85	79	75	81	77	73	78	75	71	69
3	90	79	71	64	87	77	70	63	74	68	62	71	66	61	69	64	60	58
4	82	70	61	54	80	68	60	53	66	58	53	63	57	52	61	56	51	49
5	75	62	53	46	73	61	52	46	59	51	45	57	50	45	55	49	44	42
6	69	56	47	40	67	55	46	40	53	45	40	51	44	39	50	44	39	37
7	64	50	42	35	62	50	41	35	48	40	35	47	40	35	45	39	34	32
8	60	46	37	31	58	45	37	31	44	36	31	43	36	31	41	35	31	29
9	56	42	34	28	54	42	34	28	40	33	28	39	33	28	38	32	28	26
10	52	39	31	25	51	38	31	25	37	30	25	36	30	25	35	29	25	23

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	1345	1345	1345
5°	1351	1338	1344
10°	1347	1338	1344
15°	1341	1335	1344
20°	1332	1332	1342
25°	1325	1325	1343
30°	1315	1322	1344
35°	1298	1317	1348
40°	1278	1314	1359
45°	1255	1313	1384
50°	1220	1317	1415
55°	1176	1334	1455
60°	1117	1349	1486
65°	1032	1366	1507
70°	917	1375	1348
75°	739	1236	1078
80°	578	866	705
85°	395	253	179



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	47.3	3.2
10°-20°	135.8	9.1
20°-30°	206.8	13.8
30°-40°	251.8	16.9
40°-50°	267.2	17.9
50°-60°	252.2	16.9
60°-70°	203.6	13.6
70°-80°	110.4	7.4
80°-90°	17.9	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°	389.9	26.1
0°-40°	641.7	43.0
0°-60°	1161.1	77.8
0°-90°	1493.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	1493.0	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	500	500	500	500	500	
5°	500	499	495	499	498	47
15°	481	480	479	483	483	136
25°	446	445	446	451	452	206
35°	395	398	401	409	410	247
45°	330	334	345	358	364	254
55°	251	261	284	303	310	224
65°	162	182	214	232	237	161
75°	71	104	119	107	104	78
85°	13	14	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°	500.0	500.0	500.0	500.0	500.0
2.5°	502.4	500.0	496.5	500.0	498.9
5°	500.0	498.9	495.4	498.9	497.7
7.5°	496.5	496.5	493.1	495.4	495.4
10°	493.1	491.9	489.6	493.1	491.9
12.5°	487.2	486.1	484.9	488.4	487.2
15°	481.4	480.2	479.1	482.6	482.6
17.5°	474.4	473.2	472.1	476.7	476.7
20°	465.1	465.1	465.1	469.7	468.6
22.5°	455.8	455.8	456.9	461.6	460.4
25°	446.4	445.3	446.4	451.1	452.3
27.5°	434.8	435.9	437.1	441.8	442.9
30°	423.1	424.3	425.4	431.3	432.4
32.5°	409.1	411.5	413.8	420.8	420.8
35°	395.1	397.5	401.0	409.1	410.3
37.5°	380.0	382.3	387.0	396.3	398.6
40°	363.7	367.2	374.2	383.5	387.0
42.5°	347.3	352.0	360.2	370.7	375.3
45°	329.9	334.5	345.0	357.8	363.7
47.5°	311.2	317.0	329.9	346.2	350.8
50°	291.4	299.6	314.7	332.2	338.0
52.5°	271.6	280.9	299.6	318.2	324.0
55°	250.6	261.1	284.4	303.1	310.1
57.5°	229.6	241.3	268.1	287.9	294.9
60°	207.5	221.5	250.6	270.4	276.2
62.5°	185.3	201.6	233.1	252.9	257.6
65°	162.0	181.8	214.5	232.0	236.6
67.5°	139.9	163.2	195.8	208.6	208.6
70°	116.6	142.2	174.8	178.3	171.3
72.5°	93.2	122.4	151.5	138.7	132.9
75°	71.1	103.7	118.9	107.2	103.7
77.5°	53.6	83.9	83.9	76.9	74.6
80°	37.3	64.1	55.9	49.0	45.5
82.5°	24.5	36.1	29.1	23.3	19.8
85°	12.8	14.0	8.2	7.0	5.8
87.5°	4.7	2.3	1.2	2.3	1.2
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)