

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: P307335

Luminaire Tested: **14FCZ2-25-UNV-L82765-RDP-CP250-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: P307335
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-CP250-W2A-U-4500K
Description: 1'X4' TROFFER LED MODULE, SMOOTH LENS WITH INSERT , 0.250" 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: 1418.0 lumens
Efficiency: N/A
Efficacy: 70.9 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

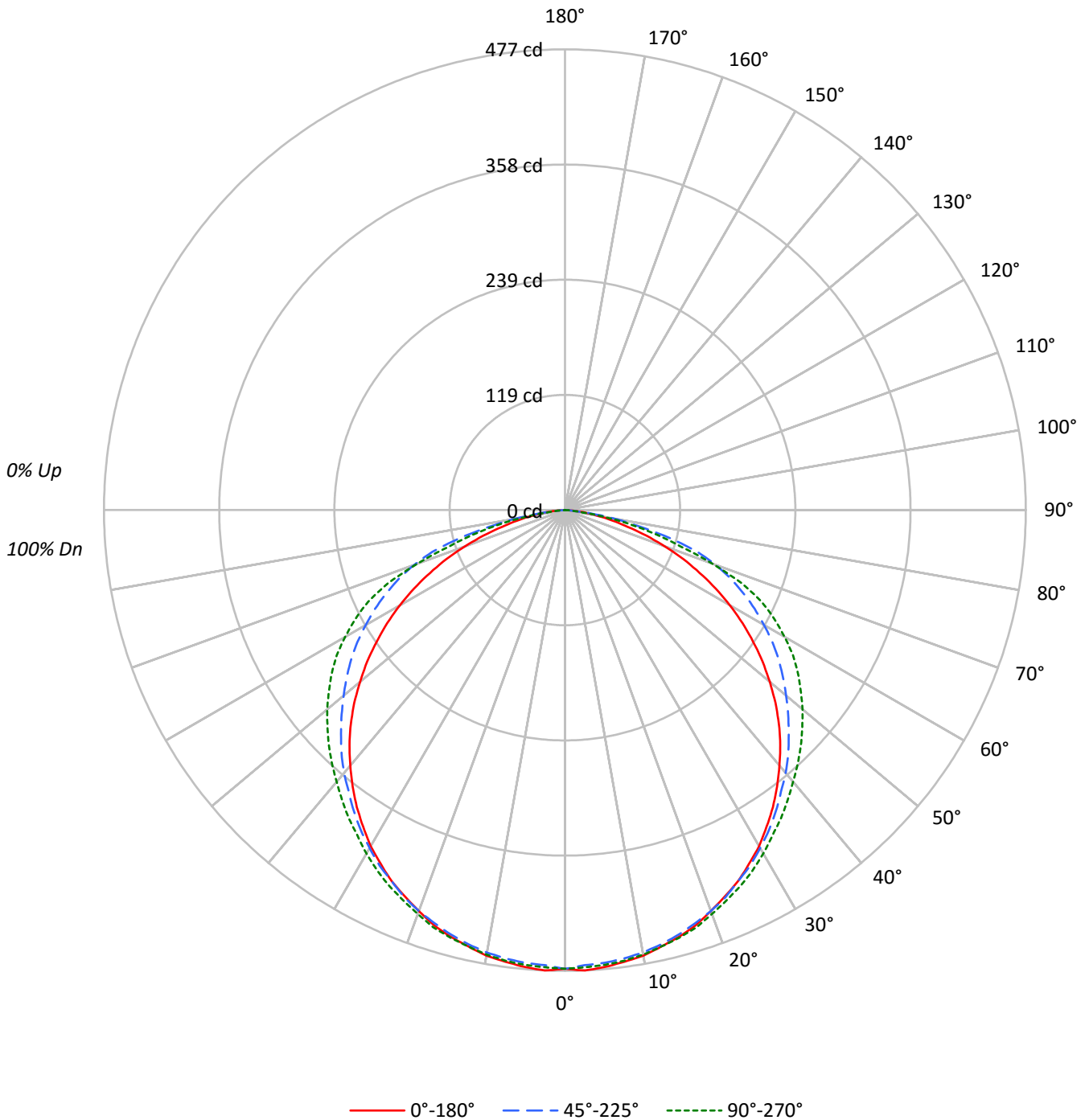
Input Watts (W): 20
Input Voltage (V): NR
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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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				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°	1278	1278	1278
5°	1283	1271	1277
10°	1280	1271	1277
15°	1274	1268	1277
20°	1265	1265	1274
25°	1259	1259	1275
30°	1249	1256	1276
35°	1233	1251	1280
40°	1213	1248	1291
45°	1192	1247	1314
50°	1159	1251	1344
55°	1117	1267	1382
60°	1061	1281	1412
65°	980	1297	1431
70°	871	1307	1280
75°	702	1174	1024
80°	549	823	669
85°	377	238	170



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	45.0	3.2
10°-20°	129.0	9.1
20°-30°	196.4	13.8
30°-40°	239.2	16.9
40°-50°	253.8	17.9
50°-60°	239.5	16.9
60°-70°	193.4	13.6
70°-80°	104.9	7.4
80°-90°	17.0	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°	370.3	26.1
0°-40°	609.5	43.0
0°-60°	1102.7	77.8
0°-90°	1418.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	1418.0	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	475	475	475	475	475	
5°	475	474	470	474	473	45
15°	457	456	455	458	458	129
25°	424	423	424	428	430	195
35°	375	378	381	389	390	235
45°	313	318	328	340	345	241
55°	238	248	270	288	294	213
65°	154	173	204	220	225	152
75°	68	98	113	102	98	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°	474.9	474.9	474.9	474.9	474.9
2.5°	477.1	474.9	471.6	474.9	473.8
5°	474.9	473.8	470.5	473.8	472.7
7.5°	471.6	471.6	468.3	470.5	470.5
10°	468.3	467.2	465.0	468.3	467.2
12.5°	462.7	461.6	460.5	463.9	462.7
15°	457.2	456.1	455.0	458.3	458.3
17.5°	450.6	449.5	448.4	452.8	452.8
20°	441.7	441.7	441.7	446.1	445.0
22.5°	432.9	432.9	434.0	438.4	437.3
25°	424.0	422.9	424.0	428.4	429.5
27.5°	412.9	414.0	415.1	419.6	420.7
30°	401.9	403.0	404.1	409.6	410.7
32.5°	388.6	390.8	393.0	399.6	399.6
35°	375.3	377.5	380.8	388.6	389.7
37.5°	360.9	363.1	367.5	376.4	378.6
40°	345.4	348.7	355.4	364.2	367.5
42.5°	329.9	334.3	342.1	352.0	356.5
45°	313.3	317.7	327.7	339.9	345.4
47.5°	295.6	301.1	313.3	328.8	333.2
50°	276.8	284.5	298.9	315.5	321.0
52.5°	257.9	266.8	284.5	302.2	307.8
55°	238.0	248.0	270.1	287.8	294.5
57.5°	218.1	229.2	254.6	273.4	280.1
60°	197.1	210.3	238.0	256.8	262.4
62.5°	176.0	191.5	221.4	240.2	244.7
65°	153.9	172.7	203.7	220.3	224.7
67.5°	132.8	155.0	186.0	198.2	198.2
70°	110.7	135.1	166.1	169.4	162.7
72.5°	88.6	116.2	143.9	131.7	126.2
75°	67.5	98.5	112.9	101.8	98.5
77.5°	50.9	79.7	79.7	73.1	70.9
80°	35.4	60.9	53.1	46.5	43.2
82.5°	23.2	34.3	27.7	22.1	18.8
85°	12.2	13.3	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)