

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: P310021

Luminaire Tested: **24FCZ2-40HE-UNV-L82765-RDP-CP125-W2A-U-6500K**

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: P310021
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G3-1808-918-19)
Test Lab: INNOVATION CENTER(G3)
Issue Date: 3/3/2020
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: FAIL-SAFE
Catalog Number: 24FCZ2-40HE-UNV-L82765-RDP-CP125-W2A-U-6500K
Description: 2'X4' TROFFER LED MODULE, SMOOTH LENS WITH INSERT, 0.125" POLYCARB SHEET
Light Source: (336) 6500K 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: 2558.0 lumens
Efficiency: N/A
Efficacy: 80.4 lumens/watt
Spacing Criteria (0/90/45): 1.26 / 1.3 / 1.41
Luminous Opening: Rectangular (W 2' x L: 4' x H: 0')
CIE Type: Direct

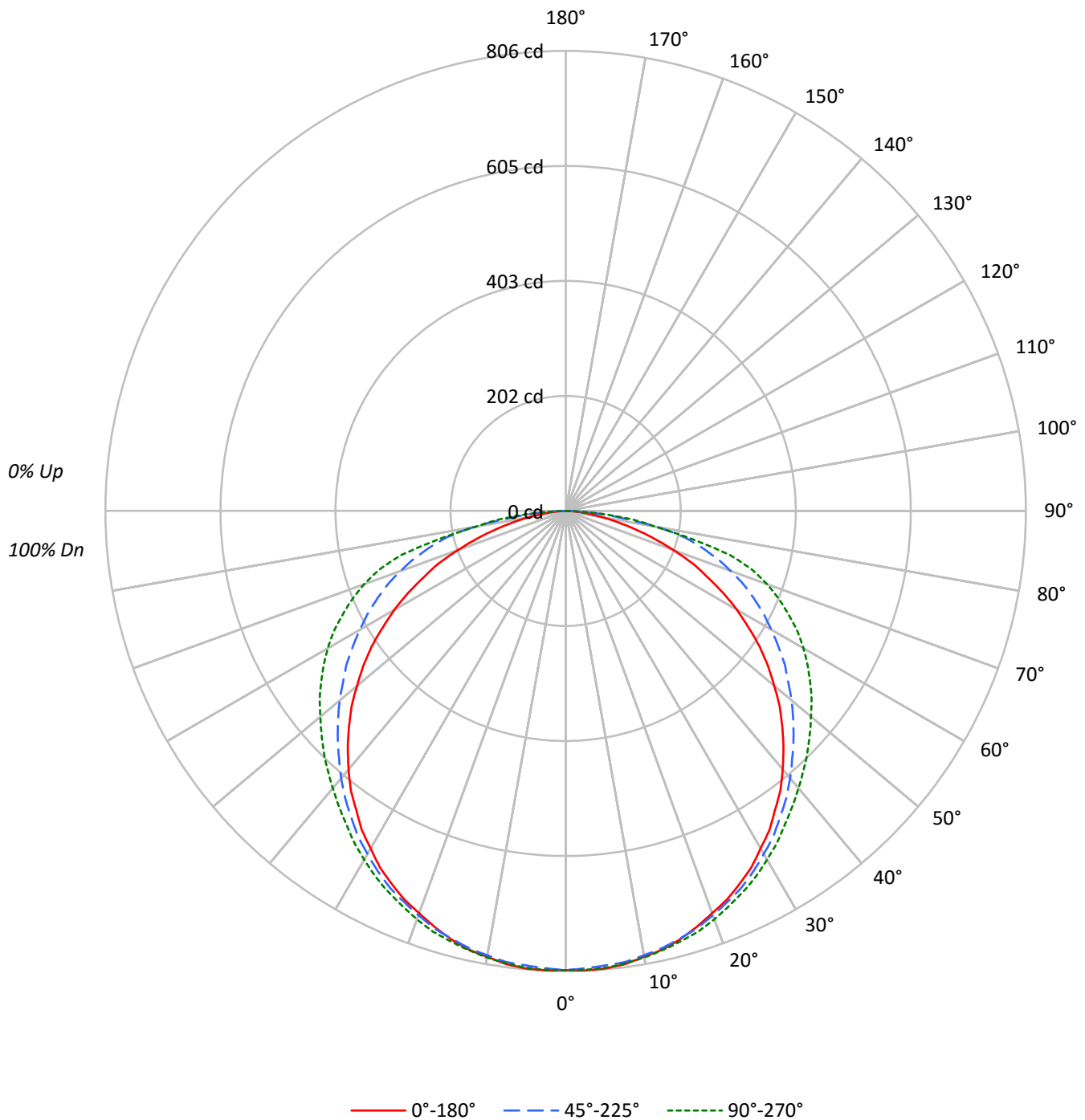
Input Watts (W): 31.8
Input Voltage (V): NR
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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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	108	103	98	94	105	100	96	92	96	93	89		92	89	87		82
2	97	89	81	75	95	87	80	74	83	77	72		80	75	71		67
3	88	77	68	62	86	76	68	61	72	66	60		70	64	59		56
4	81	68	59	52	78	67	58	51	64	57	51		62	55	50		47
5	74	60	51	44	72	59	51	44	57	49	43		55	48	43		40
6	68	54	45	38	66	53	45	38	51	44	38		50	43	37		35
7	63	49	40	34	61	48	40	34	47	39	33		45	38	33		31
8	59	45	36	30	57	44	36	30	43	35	30		41	34	29		27
9	55	41	33	27	53	40	32	27	39	32	27		38	31	26		24
10	51	38	30	24	50	37	29	24	36	29	24		35	29	24		22

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	1082	1082	1082
5°	1086	1080	1085
10°	1083	1080	1085
15°	1082	1080	1087
20°	1074	1079	1090
25°	1070	1081	1093
30°	1061	1078	1096
35°	1050	1075	1100
40°	1039	1074	1114
45°	1021	1074	1140
50°	999	1081	1174
55°	973	1098	1226
60°	932	1120	1294
65°	873	1159	1373
70°	793	1213	1478
75°	673	1279	1543
80°	531	1288	1248
85°	392	979	1098



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	76.3	3.0
10°-20°	219.6	8.6
20°-30°	335.8	13.1
30°-40°	410.6	16.0
40°-50°	437.6	17.1
50°-60°	418.4	16.4
60°-70°	354.4	13.9
70°-80°	238.2	9.3
80°-90°	67.2	2.6
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°	631.7	24.7
0°-40°	1042.3	40.7
0°-60°	1898.2	74.2
0°-90°	2558.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	2558.0	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	804	804	804	804	804	
5°	804	803	799	803	803	76
15°	776	776	775	782	780	219
25°	721	723	728	735	736	332
35°	640	644	655	667	670	401
45°	537	546	565	589	599	414
55°	415	430	468	505	523	370
65°	274	302	364	412	431	272
75°	129	176	246	288	297	139
85°	25	52	63	68	71	31
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	804.4	804.4	804.4	804.4	804.4
2.5°	805.7	805.7	801.9	804.4	804.4
5°	804.4	803.1	799.3	803.1	803.1
7.5°	800.6	799.3	796.8	800.6	799.3
10°	793.0	793.0	790.5	794.3	794.3
12.5°	786.7	785.4	784.1	789.2	787.9
15°	776.5	776.5	775.2	781.6	780.3
17.5°	763.8	765.1	766.4	771.4	772.7
20°	749.9	752.4	753.7	761.3	761.3
22.5°	737.2	738.4	741.0	748.6	748.6
25°	720.7	723.2	728.3	734.6	735.9
27.5°	704.2	705.5	711.8	720.7	721.9
30°	682.6	686.4	694.0	704.2	705.5
32.5°	663.6	667.4	676.3	686.4	689.0
35°	639.5	644.5	654.7	667.4	669.9
37.5°	617.9	621.7	634.4	648.4	652.2
40°	591.3	598.9	611.6	628.1	634.4
42.5°	564.6	572.2	587.5	609.0	616.6
45°	536.7	545.6	564.6	588.7	598.9
47.5°	508.8	518.9	540.5	568.4	579.8
50°	477.1	489.8	516.4	548.1	560.8
52.5°	446.6	461.8	491.0	526.6	543.0
55°	414.9	430.1	468.2	505.0	522.7
57.5°	379.4	399.7	441.5	483.4	502.4
60°	346.4	365.4	416.2	461.8	480.9
62.5°	310.9	336.2	390.8	439.0	458.0
65°	274.1	302.0	364.1	412.4	431.4
67.5°	241.1	271.5	337.5	385.7	404.7
70°	201.7	239.8	308.3	356.5	375.6
72.5°	164.9	206.8	277.9	324.8	342.6
75°	129.4	176.4	246.1	288.0	296.9
77.5°	96.4	145.9	213.2	230.9	224.6
80°	68.5	116.7	166.2	157.3	161.1
82.5°	44.4	88.8	102.8	116.7	120.5
85°	25.4	52.0	63.4	68.5	71.1
87.5°	11.4	19.0	25.4	25.4	24.1
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)