

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: P310274

Luminaire Tested: **24FCZ2-55HE-UNV-L82765-RDP-CA125-W2A-U-2700K**

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: P310274  
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: 24FCZ2-55HE-UNV-L82765-RDP-CA125-W2A-U-2700K  
Description: 2'X4' TROFFER LED MODULE, SMOOTH LENS WITH INSERT, 0.125" ACRYLIC SHEET  
Light Source: (336) 2700K 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**

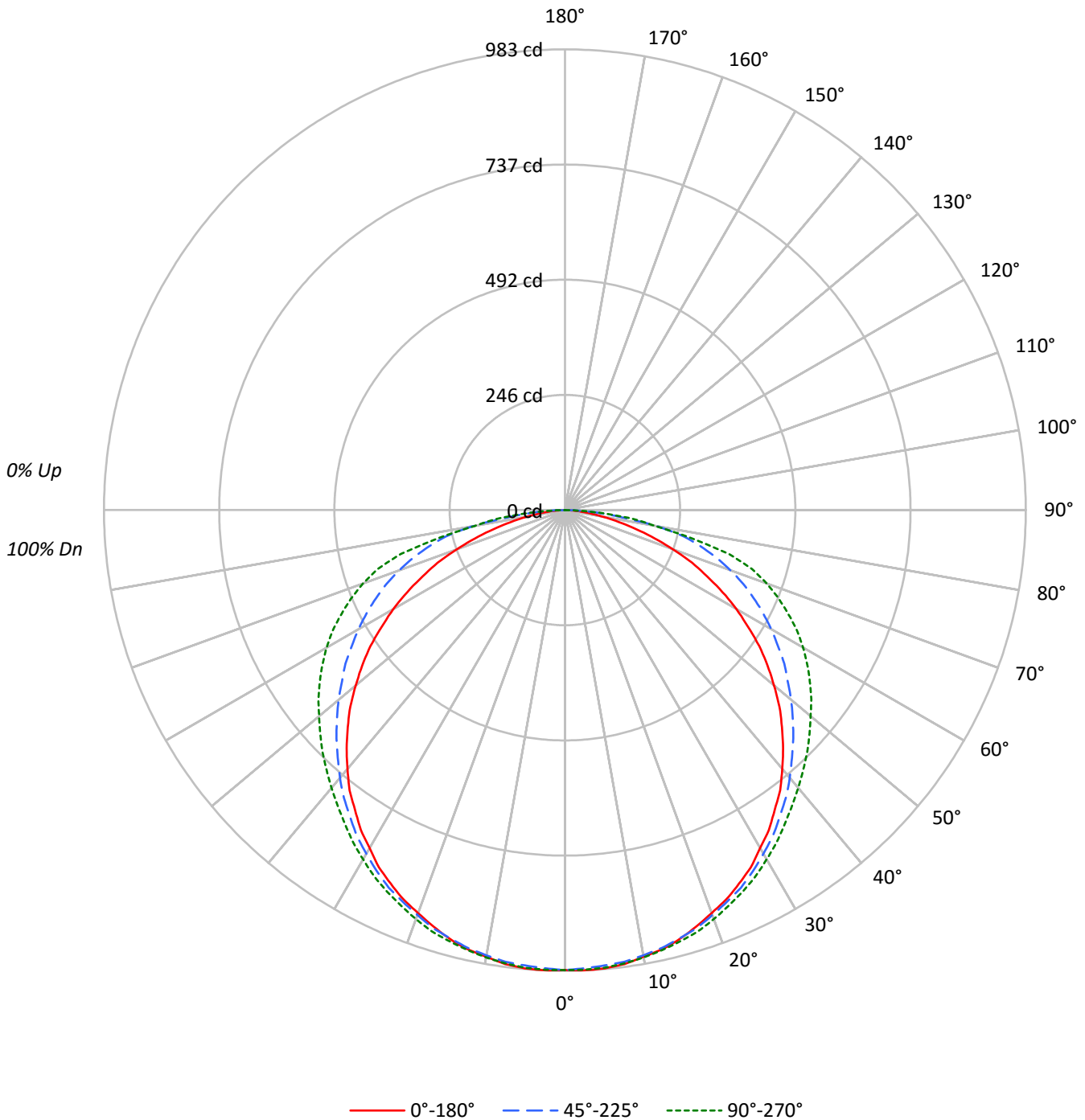
Lumens per Lamp: N/A  
Luminaire Lumens: 3121.0 lumens  
Efficiency: N/A  
Efficacy: 72.4 lumens/watt  
Spacing Criteria (0/90/45): 1.26 / 1.3 / 1.41  
Luminous Opening: Rectangular (W 2' x L: 4' x H: 0')  
CIE Type: Direct  
  
Input Watts (W): 43.1  
Input Voltage (V): NR  
Input Current (Ain): NR  
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



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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	108	103	98	94	105	100	96	92	96	93	89	92	89	87	88	86	84	82
2	97	89	81	75	95	87	80	74	83	77	72	80	75	71	77	73	69	67
3	88	77	68	62	86	76	67	61	72	66	60	70	64	59	67	62	58	56
4	81	68	59	52	78	67	58	51	64	57	51	62	55	50	59	54	49	47
5	74	60	51	44	72	59	51	44	57	49	43	55	48	43	53	47	42	40
6	68	54	45	38	66	53	45	38	51	44	38	50	43	37	48	42	37	35
7	63	49	40	34	61	48	40	34	47	39	33	45	38	33	44	38	33	31
8	59	45	36	30	57	44	36	30	43	35	30	41	34	29	40	34	29	27
9	55	41	33	27	53	40	32	27	39	32	27	38	31	26	37	31	26	24
10	51	38	30	24	50	37	29	24	36	29	24	35	29	24	34	28	24	22

**AVERAGE LUMINANCE (cd/sqm):**

	0°	45°	90°
0°	1321	1321	1321
5°	1326	1317	1323
10°	1322	1318	1324
15°	1320	1318	1326
20°	1310	1317	1330
25°	1305	1319	1333
30°	1294	1316	1337
35°	1282	1312	1343
40°	1267	1311	1359
45°	1246	1311	1390
50°	1218	1319	1432
55°	1187	1340	1496
60°	1137	1366	1579
65°	1065	1415	1676
70°	968	1480	1803
75°	821	1561	1883
80°	648	1571	1523
85°	479	1195	1338



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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	93.1	3.0
10°-20°	267.9	8.6
20°-30°	409.7	13.1
30°-40°	500.9	16.0
40°-50°	533.9	17.1
50°-60°	510.4	16.4
60°-70°	432.4	13.9
70°-80°	290.6	9.3
80°-90°	82.0	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°	770.8	24.7
0°-40°	1271.7	40.7
0°-60°	2316.0	74.2
0°-90°	3121.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	3121.0	100.0

**CANDELA DISTRIBUTION:**

	0°	22.5°	45°	67.5°	90°	Flux
0°	982	982	982	982	982	
5°	982	980	975	980	980	93
15°	947	947	946	954	952	267
25°	879	882	889	896	898	405
35°	780	786	799	814	817	489
45°	655	666	689	718	731	505
55°	506	525	571	616	638	451
65°	334	368	444	503	526	332
75°	158	215	300	351	362	169
85°	31	64	77	84	87	38
90°	0	0	0	0	0	



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**CANDELA DISTRIBUTION (FULL):**

	0°	22.5°	45°	67.5°	90°
0°	981.5	981.5	981.5	981.5	981.5
2.5°	983.0	983.0	978.4	981.5	981.5
5°	981.5	979.9	975.3	979.9	979.9
7.5°	976.8	975.3	972.2	976.8	975.3
10°	967.5	967.5	964.4	969.1	969.1
12.5°	959.8	958.2	956.7	962.9	961.3
15°	947.4	947.4	945.9	953.6	952.1
17.5°	931.9	933.5	935.0	941.2	942.8
20°	914.9	918.0	919.5	928.8	928.8
22.5°	899.4	901.0	904.1	913.4	913.4
25°	879.3	882.4	888.6	896.3	897.9
27.5°	859.2	860.7	868.5	879.3	880.8
30°	832.9	837.5	846.8	859.2	860.7
32.5°	809.6	814.3	825.1	837.5	840.6
35°	780.2	786.4	798.8	814.3	817.4
37.5°	753.9	758.5	774.0	791.1	795.7
40°	721.4	730.7	746.2	766.3	774.0
42.5°	688.9	698.2	716.7	743.1	752.4
45°	654.8	665.7	688.9	718.3	730.7
47.5°	620.8	633.2	659.5	693.5	707.5
50°	582.1	597.5	630.1	668.8	684.2
52.5°	544.9	563.5	599.1	642.4	662.6
55°	506.2	524.8	571.2	616.1	637.8
57.5°	462.9	487.6	538.7	589.8	613.0
60°	422.6	445.8	507.8	563.5	586.7
62.5°	379.3	410.2	476.8	535.6	558.8
65°	334.4	368.4	444.3	503.1	526.3
67.5°	294.1	331.3	411.8	470.6	493.8
70°	246.1	292.6	376.2	435.0	458.2
72.5°	201.2	252.3	339.0	396.3	418.0
75°	157.9	215.2	300.3	351.4	362.2
77.5°	117.7	178.0	260.1	281.7	274.0
80°	83.6	142.4	202.8	192.0	196.6
82.5°	54.2	108.4	125.4	142.4	147.1
85°	31.0	63.5	77.4	83.6	86.7
87.5°	13.9	23.2	31.0	31.0	29.4
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)