

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: P310290

Luminaire Tested: **24FCZ2-55HE-UNV-L82765-RDP-CP125-W2A-U-5700K**

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: P310290
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-CP125-W2A-U-5700K
Description: 2'X4' TROFFER LED MODULE, SMOOTH LENS WITH INSERT, 0.125" POLYCARB SHEET
Light Source: (336) 5700K 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: 3476.0 lumens
Efficiency: N/A
Efficacy: 78.5 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

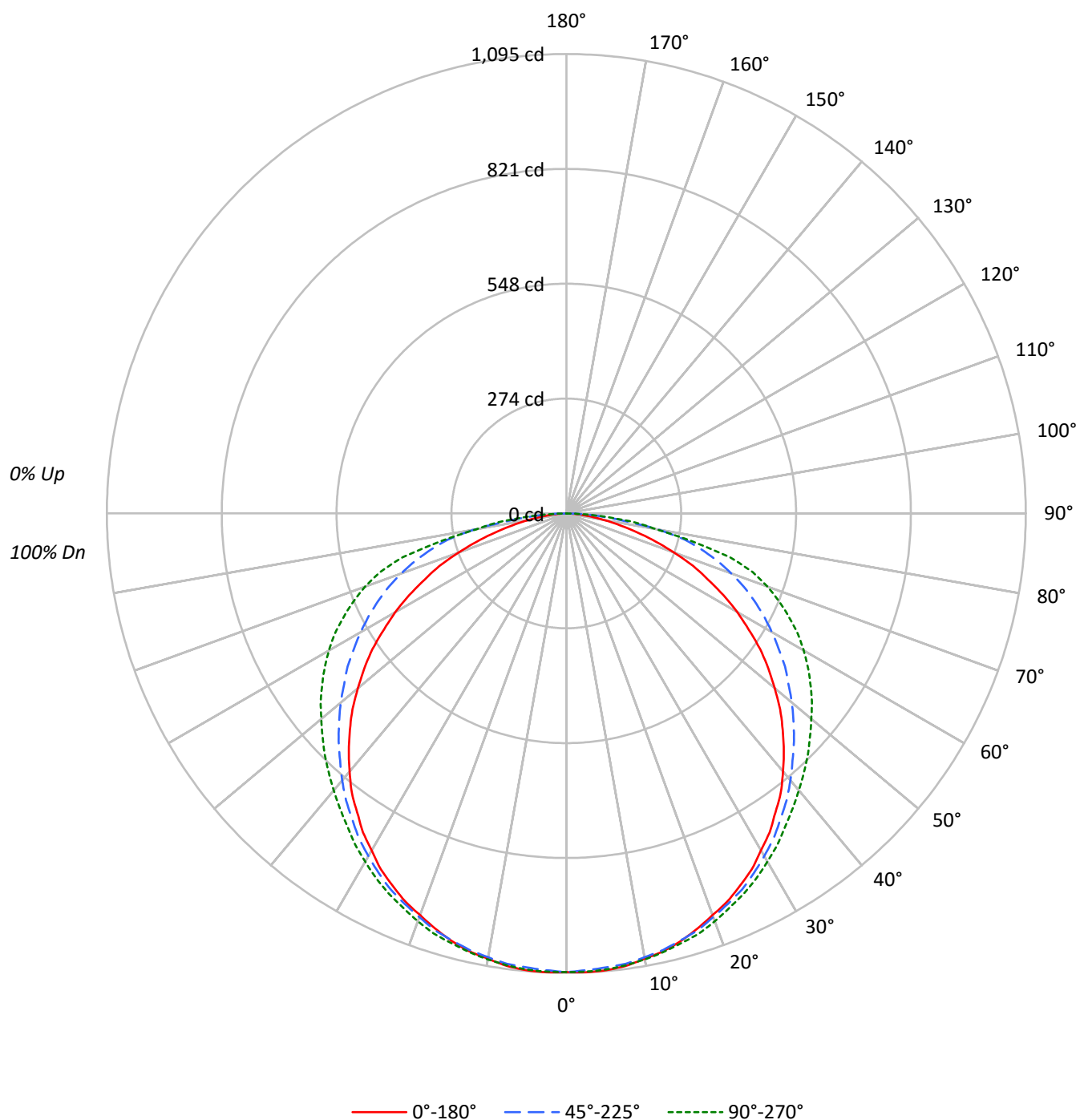
Input Watts (W): 44.3
Input Voltage (V): NR
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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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	50	30	10	50	30	10
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°	1471	1471	1471
5°	1476	1467	1474
10°	1472	1467	1475
15°	1470	1467	1477
20°	1459	1466	1481
25°	1454	1469	1485
30°	1441	1465	1489
35°	1427	1461	1495
40°	1411	1460	1514
45°	1388	1460	1549
50°	1357	1469	1595
55°	1323	1492	1666
60°	1267	1522	1758
65°	1186	1575	1866
70°	1078	1648	2007
75°	914	1739	2097
80°	721	1750	1697
85°	533	1331	1491



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	103.7	3.0
10°-20°	298.4	8.6
20°-30°	456.3	13.1
30°-40°	557.9	16.0
40°-50°	594.6	17.1
50°-60°	568.5	16.4
60°-70°	481.6	13.9
70°-80°	323.7	9.3
80°-90°	91.3	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°	858.5	24.7
0°-40°	1416.3	40.7
0°-60°	2579.4	74.2
0°-90°	3476.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	3476.0	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	1093	1093	1093	1093	1093	
5°	1093	1091	1086	1091	1091	104
15°	1055	1055	1053	1062	1060	298
25°	979	983	990	998	1000	451
35°	869	876	890	907	910	544
45°	729	741	767	800	814	563
55°	564	584	636	686	710	502
65°	372	410	495	560	586	370
75°	176	240	334	391	403	188
85°	34	71	86	93	97	43
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	1093.1	1093.1	1093.1	1093.1	1093.1
2.5°	1094.8	1094.8	1089.7	1093.1	1093.1
5°	1093.1	1091.4	1086.2	1091.4	1091.4
7.5°	1087.9	1086.2	1082.8	1087.9	1086.2
10°	1077.6	1077.6	1074.1	1079.3	1079.3
12.5°	1069.0	1067.2	1065.5	1072.4	1070.7
15°	1055.2	1055.2	1053.4	1062.1	1060.3
17.5°	1037.9	1039.7	1041.4	1048.3	1050.0
20°	1019.0	1022.4	1024.1	1034.5	1034.5
22.5°	1001.7	1003.4	1006.9	1017.2	1017.2
25°	979.3	982.8	989.7	998.3	1000.0
27.5°	956.9	958.6	967.2	979.3	981.0
30°	927.6	932.8	943.1	956.9	958.6
32.5°	901.7	906.9	919.0	932.8	936.2
35°	869.0	875.9	889.7	906.9	910.3
37.5°	839.7	844.8	862.1	881.0	886.2
40°	803.4	813.8	831.0	853.4	862.1
42.5°	767.2	777.6	798.3	827.6	837.9
45°	729.3	741.4	767.2	800.0	813.8
47.5°	691.4	705.2	734.5	772.4	787.9
50°	648.3	665.5	701.7	744.8	762.1
52.5°	606.9	627.6	667.2	715.5	737.9
55°	563.8	584.5	636.2	686.2	710.3
57.5°	515.5	543.1	600.0	656.9	682.8
60°	470.7	496.6	565.5	627.6	653.4
62.5°	422.4	456.9	531.0	596.6	622.4
65°	372.4	410.3	494.8	560.3	586.2
67.5°	327.6	369.0	458.6	524.1	550.0
70°	274.1	325.9	419.0	484.5	510.3
72.5°	224.1	281.0	377.6	441.4	465.5
75°	175.9	239.7	334.5	391.4	403.4
77.5°	131.0	198.3	289.7	313.8	305.2
80°	93.1	158.6	225.9	213.8	219.0
82.5°	60.3	120.7	139.7	158.6	163.8
85°	34.5	70.7	86.2	93.1	96.6
87.5°	15.5	25.9	34.5	34.5	32.8
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)