

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: P310280

Luminaire Tested: **24FCZ2-55HE-UNV-L82765-RDP-CA125-W2A-U-5500K**

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: P310280
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-5500K
Description: 2'X4' TROFFER LED MODULE, SMOOTH LENS WITH INSERT, 0.125" ACRYLIC SHEET
Light Source: (336) 5500K 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: 3536.0 lumens
Efficiency: N/A
Efficacy: 79.8 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

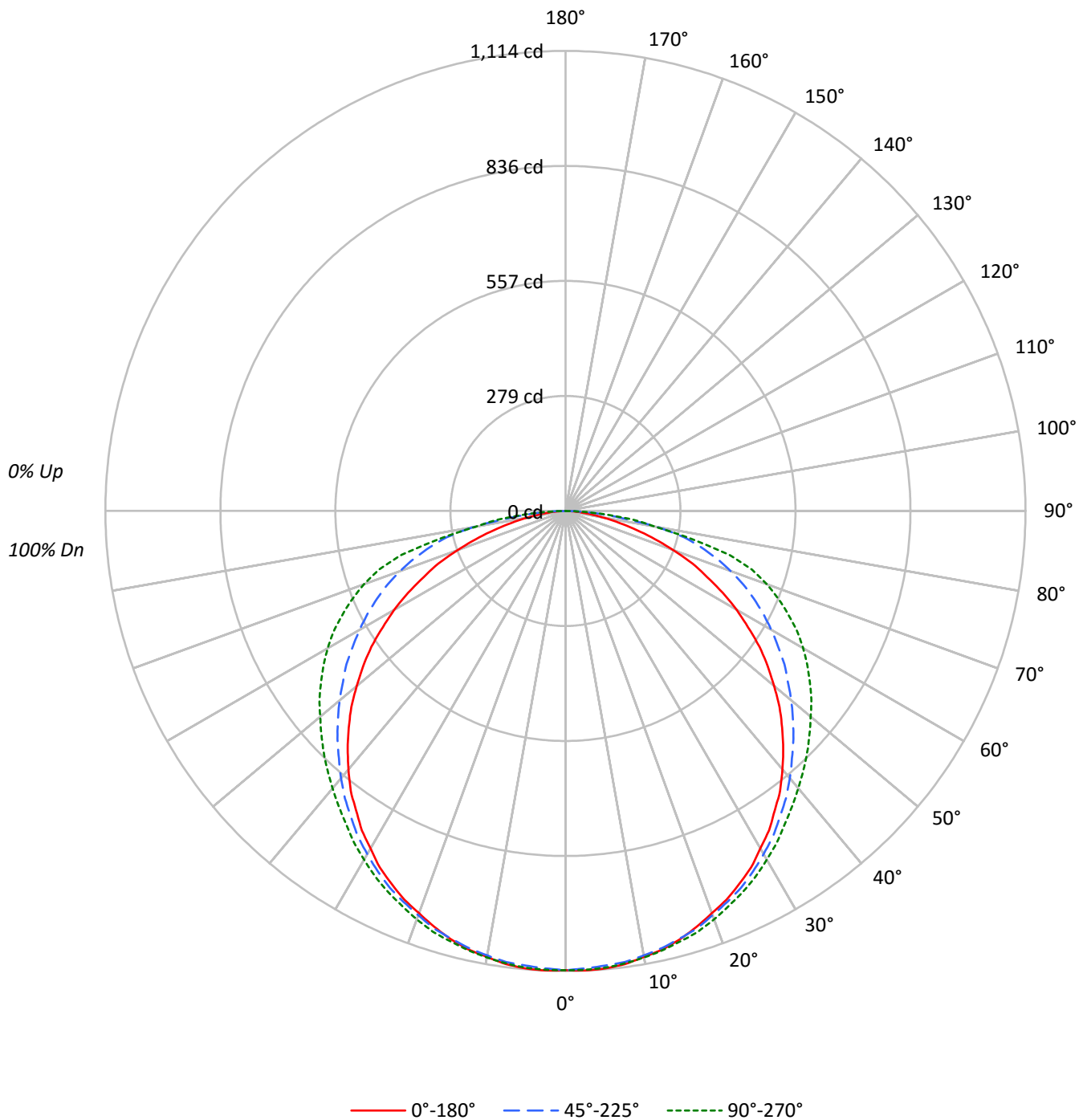
Input Watts (W): 44.3
Input Voltage (V): NR
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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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		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	67	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°	1496	1496	1496
5°	1502	1492	1499
10°	1498	1493	1500
15°	1495	1493	1502
20°	1484	1492	1507
25°	1479	1495	1510
30°	1466	1491	1515
35°	1452	1486	1521
40°	1436	1485	1540
45°	1412	1485	1575
50°	1380	1494	1623
55°	1345	1518	1695
60°	1288	1548	1789
65°	1206	1603	1898
70°	1097	1677	2043
75°	930	1769	2133
80°	734	1781	1726
85°	542	1354	1516



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	105.5	3.0
10°-20°	303.6	8.6
20°-30°	464.2	13.1
30°-40°	567.5	16.0
40°-50°	604.9	17.1
50°-60°	578.3	16.4
60°-70°	489.9	13.9
70°-80°	329.3	9.3
80°-90°	92.9	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°	873.3	24.7
0°-40°	1440.8	40.7
0°-60°	2624.0	74.2
0°-90°	3536.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	3536.0	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	1112	1112	1112	1112	1112	
5°	1112	1110	1105	1110	1110	106
15°	1073	1073	1072	1080	1079	303
25°	996	1000	1007	1016	1017	459
35°	884	891	905	923	926	554
45°	742	754	780	814	828	572
55°	574	595	647	698	723	511
65°	379	417	503	570	596	376
75°	179	244	340	398	410	192
85°	35	72	88	95	98	43
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	1112.0	1112.0	1112.0	1112.0	1112.0
2.5°	1113.7	1113.7	1108.5	1112.0	1112.0
5°	1112.0	1110.2	1105.0	1110.2	1110.2
7.5°	1106.7	1105.0	1101.4	1106.7	1105.0
10°	1096.2	1096.2	1092.7	1097.9	1097.9
12.5°	1087.4	1085.7	1083.9	1090.9	1089.2
15°	1073.4	1073.4	1071.6	1080.4	1078.6
17.5°	1055.8	1057.6	1059.4	1066.4	1068.1
20°	1036.6	1040.1	1041.8	1052.3	1052.3
22.5°	1019.0	1020.8	1024.3	1034.8	1034.8
25°	996.2	999.7	1006.7	1015.5	1017.3
27.5°	973.4	975.2	983.9	996.2	998.0
30°	943.6	948.9	959.4	973.4	975.2
32.5°	917.3	922.6	934.8	948.9	952.4
35°	884.0	891.0	905.0	922.6	926.1
37.5°	854.1	859.4	876.9	896.2	901.5
40°	817.3	827.8	845.4	868.2	876.9
42.5°	780.5	791.0	812.1	841.9	852.4
45°	741.9	754.2	780.5	813.8	827.8
47.5°	703.3	717.3	747.2	785.7	801.5
50°	659.5	677.0	713.8	757.7	775.2
52.5°	617.4	638.4	678.8	727.9	750.7
55°	573.5	594.6	647.2	698.1	722.6
57.5°	524.4	552.5	610.4	668.2	694.5
60°	478.8	505.1	575.3	638.4	664.7
62.5°	429.7	464.8	540.2	606.8	633.2
65°	378.8	417.4	503.4	570.0	596.3
67.5°	333.2	375.3	466.5	533.2	559.5
70°	278.9	331.5	426.2	492.8	519.2
72.5°	228.0	285.9	384.1	449.0	473.6
75°	178.9	243.8	340.3	398.1	410.4
77.5°	133.3	201.7	294.7	319.2	310.4
80°	94.7	161.4	229.8	217.5	222.7
82.5°	61.4	122.8	142.1	161.4	166.6
85°	35.1	71.9	87.7	94.7	98.2
87.5°	15.8	26.3	35.1	35.1	33.3
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)