

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: P310271

Luminaire Tested: **24FCZ2-55HE-UNV-L82765-RDP-CA08-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: P310271  
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-CA08-W2A-U-5500K  
Description: 2'X4' TROFFER LED MODULE, SMOOTH LENS WITH INSERT, 0.08" 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**

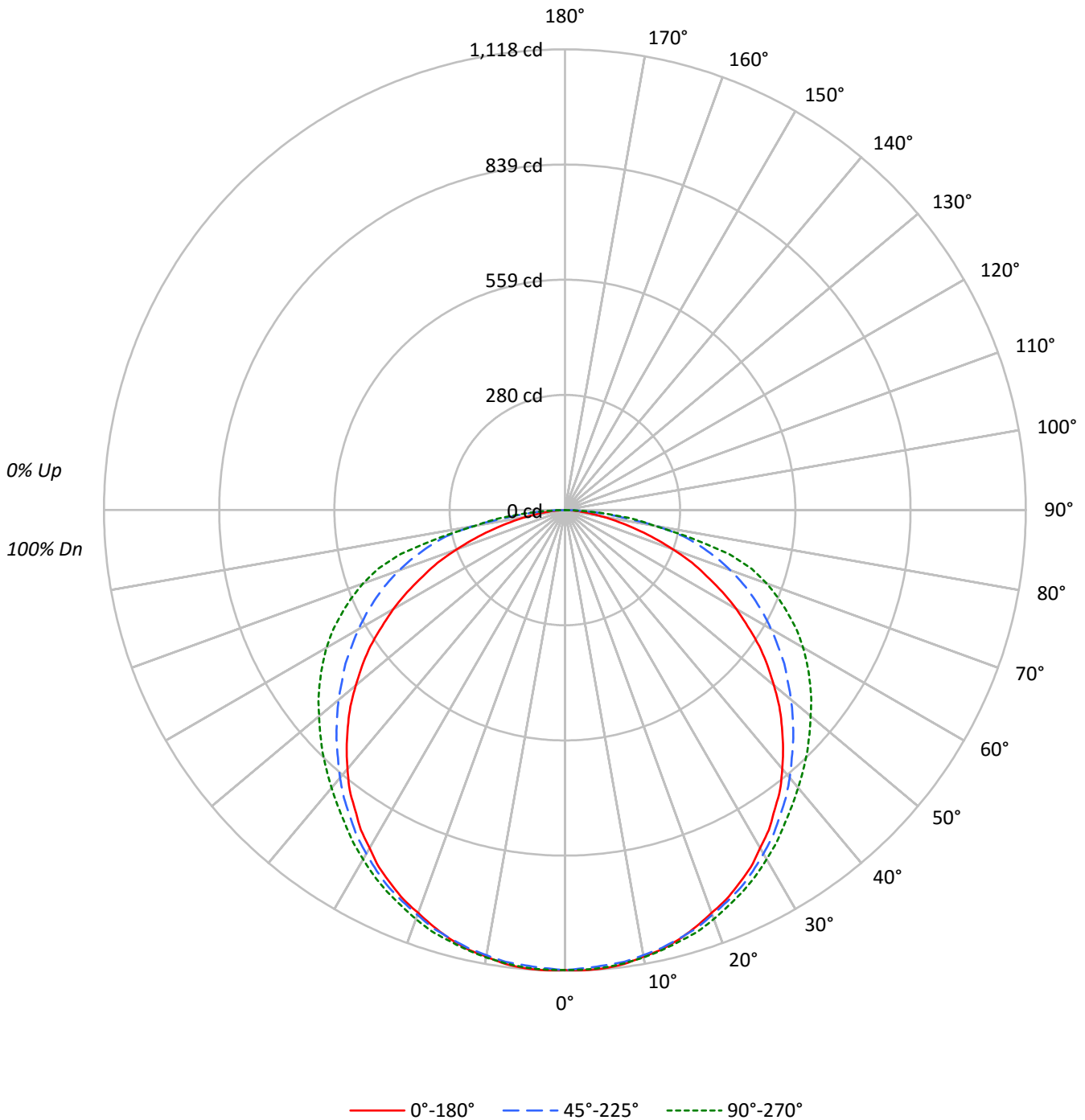
Lumens per Lamp: N/A  
Luminaire Lumens: 3549.0 lumens  
Efficiency: N/A  
Efficacy: 80.1 lumens/watt  
Spacing Criteria (0/90/45): 1.26 / 1.3 / 1.41  
Luminous Opening: Rectangular (W 2' x L: 4' x H: 0')  
CIE Type: Direct  
  
Input Watts (W): 44.3  
Input Voltage (V): NR  
Input Current (A<sub>in</sub>): 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°	1502	1502	1502
5°	1507	1498	1505
10°	1503	1498	1506
15°	1501	1498	1508
20°	1490	1497	1512
25°	1484	1500	1516
30°	1471	1496	1521
35°	1457	1492	1527
40°	1441	1490	1546
45°	1417	1491	1581
50°	1385	1500	1629
55°	1350	1524	1701
60°	1293	1554	1795
65°	1210	1608	1905
70°	1101	1683	2050
75°	934	1775	2141
80°	737	1787	1733
85°	543	1359	1522



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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	105.9	3.0
10°-20°	304.7	8.6
20°-30°	465.9	13.1
30°-40°	569.6	16.0
40°-50°	607.1	17.1
50°-60°	580.5	16.4
60°-70°	491.7	13.9
70°-80°	330.5	9.3
80°-90°	93.2	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°	876.5	24.7
0°-40°	1446.1	40.7
0°-60°	2633.6	74.2
0°-90°	3549.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	3549.0	100.0

**CANDELA DISTRIBUTION:**

	0°	22.5°	45°	67.5°	90°	Flux
0°	1116	1116	1116	1116	1116	
5°	1116	1114	1109	1114	1114	106
15°	1077	1077	1076	1084	1083	304
25°	1000	1003	1010	1019	1021	461
35°	887	894	908	926	930	556
45°	745	757	783	817	831	574
55°	576	597	650	701	725	513
65°	380	419	505	572	598	377
75°	180	245	342	400	412	192
85°	35	72	88	95	99	44
90°	0	0	0	0	0	



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**CANDELA DISTRIBUTION (FULL):**

	0°	22.5°	45°	67.5°	90°
0°	1116.1	1116.1	1116.1	1116.1	1116.1
2.5°	1117.8	1117.8	1112.5	1116.1	1116.1
5°	1116.1	1114.3	1109.0	1114.3	1114.3
7.5°	1110.8	1109.0	1105.5	1110.8	1109.0
10°	1100.2	1100.2	1096.7	1102.0	1102.0
12.5°	1091.4	1089.7	1087.9	1094.9	1093.2
15°	1077.3	1077.3	1075.6	1084.4	1082.6
17.5°	1059.7	1061.5	1063.2	1070.3	1072.1
20°	1040.4	1043.9	1045.6	1056.2	1056.2
22.5°	1022.8	1024.5	1028.0	1038.6	1038.6
25°	999.9	1003.4	1010.4	1019.2	1021.0
27.5°	977.0	978.8	987.6	999.9	1001.6
30°	947.1	952.3	962.9	977.0	978.8
32.5°	920.7	925.9	938.3	952.3	955.9
35°	887.2	894.3	908.3	925.9	929.5
37.5°	857.3	862.6	880.2	899.5	904.8
40°	820.3	830.9	848.5	871.4	880.2
42.5°	783.4	793.9	815.0	845.0	855.5
45°	744.6	756.9	783.4	816.8	830.9
47.5°	705.9	720.0	749.9	788.6	804.5
50°	661.9	679.5	716.5	760.5	778.1
52.5°	619.6	640.8	681.3	730.5	753.4
55°	575.6	596.8	649.6	700.6	725.3
57.5°	526.3	554.5	612.6	670.7	697.1
60°	480.6	507.0	577.4	640.8	667.2
62.5°	431.3	466.5	542.2	609.1	635.5
65°	380.2	419.0	505.2	572.1	598.5
67.5°	334.5	376.7	468.3	535.1	561.6
70°	279.9	332.7	427.8	494.7	521.1
72.5°	228.8	286.9	385.5	450.6	475.3
75°	179.6	244.7	341.5	399.6	411.9
77.5°	133.8	202.4	295.7	320.4	311.6
80°	95.1	162.0	230.6	218.3	223.6
82.5°	61.6	123.2	142.6	162.0	167.2
85°	35.2	72.2	88.0	95.1	98.6
87.5°	15.8	26.4	35.2	35.2	33.4
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)