

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: P310265

Luminaire Tested: **24FCZ2-55HE-UNV-L82765-RDP-CA08-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: P310265  
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-2700K  
Description: 2'X4' TROFFER LED MODULE, SMOOTH LENS WITH INSERT, 0.08" 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**

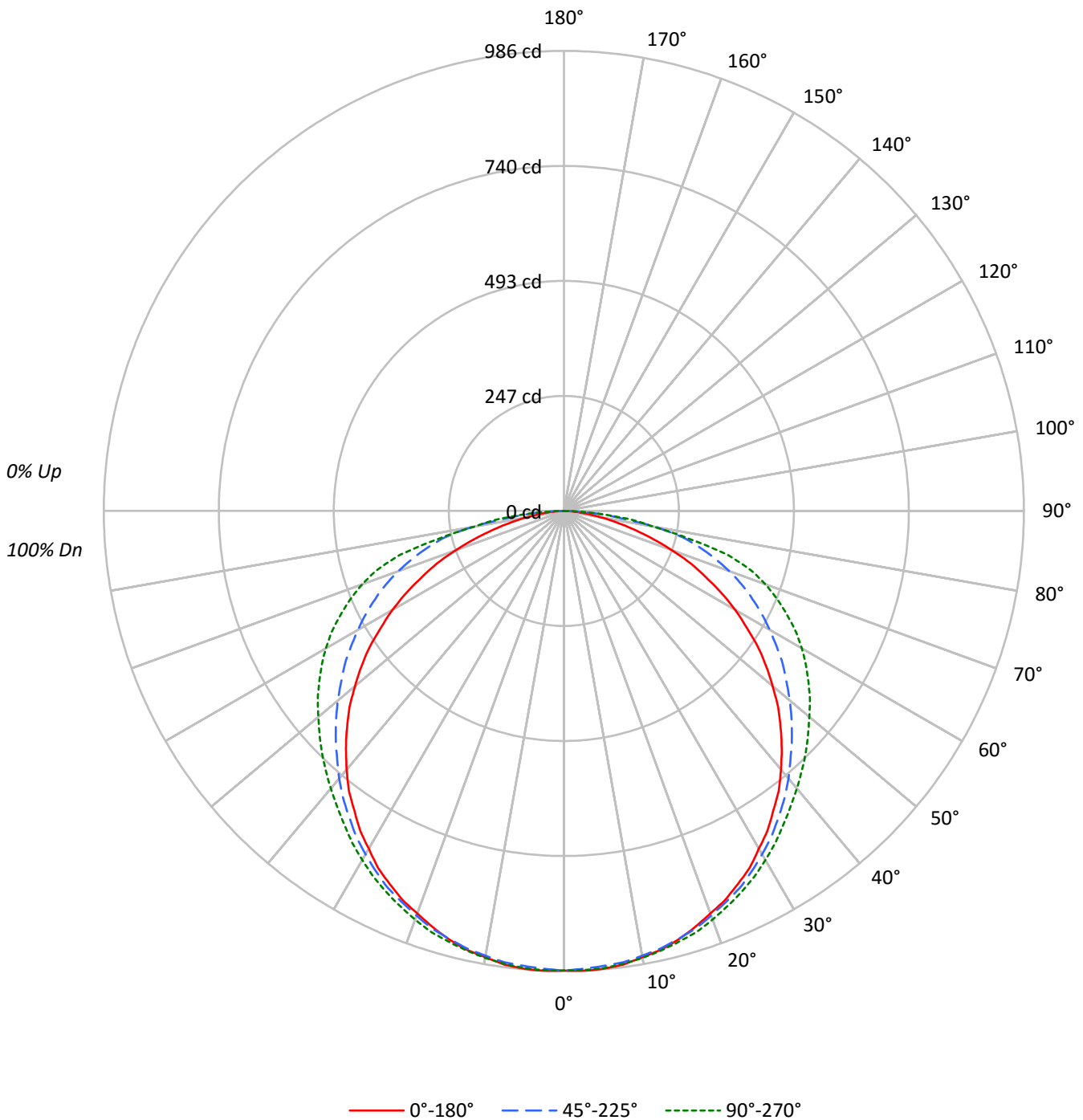
Lumens per Lamp: N/A  
Luminaire Lumens: 3132.0 lumens  
Efficiency: N/A  
Efficacy: 72.7 lumens/watt  
Spacing Criteria (0/90/45): 1.26 / 1.3 / 1.41  
Luminous Opening: Rectangular (W 2' x L: 4' x H: 0')  
CIE Type: Direct  
  
Input Watts (W): 43.1  
Input Voltage (V): NR  
Input Current (Ain): NR  
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°	1325	1325	1325
5°	1330	1322	1328
10°	1326	1322	1329
15°	1324	1322	1331
20°	1315	1321	1335
25°	1310	1324	1338
30°	1299	1320	1342
35°	1286	1317	1347
40°	1271	1315	1364
45°	1250	1315	1395
50°	1223	1324	1437
55°	1192	1345	1501
60°	1141	1371	1584
65°	1068	1420	1682
70°	972	1485	1809
75°	824	1567	1890
80°	650	1577	1529
85°	480	1200	1343



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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	93.4	3.0
10°-20°	268.9	8.6
20°-30°	411.2	13.1
30°-40°	502.7	16.0
40°-50°	535.8	17.1
50°-60°	512.2	16.4
60°-70°	433.9	13.9
70°-80°	291.6	9.3
80°-90°	82.3	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°	773.5	24.7
0°-40°	1276.2	40.7
0°-60°	2324.2	74.2
0°-90°	3132.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	3132.0	100.0

**CANDELA DISTRIBUTION:**

	0°	22.5°	45°	67.5°	90°	Flux
0°	985	985	985	985	985	
5°	985	983	979	983	983	94
15°	951	951	949	957	955	268
25°	882	886	892	900	901	407
35°	783	789	802	817	820	491
45°	657	668	691	721	733	507
55°	508	527	573	618	640	452
65°	336	370	446	505	528	333
75°	158	216	301	353	364	170
85°	31	64	78	84	87	38
90°	0	0	0	0	0	



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**CANDELA DISTRIBUTION (FULL):**

	0°	22.5°	45°	67.5°	90°
0°	984.9	984.9	984.9	984.9	984.9
2.5°	986.5	986.5	981.8	984.9	984.9
5°	984.9	983.4	978.7	983.4	983.4
7.5°	980.3	978.7	975.6	980.3	978.7
10°	970.9	970.9	967.8	972.5	972.5
12.5°	963.2	961.6	960.1	966.3	964.7
15°	950.7	950.7	949.2	957.0	955.4
17.5°	935.2	936.8	938.3	944.5	946.1
20°	918.1	921.2	922.8	932.1	932.1
22.5°	902.6	904.1	907.2	916.6	916.6
25°	882.4	885.5	891.7	899.5	901.0
27.5°	862.2	863.8	871.5	882.4	883.9
30°	835.8	840.4	849.8	862.2	863.8
32.5°	812.5	817.1	828.0	840.4	843.6
35°	783.0	789.2	801.6	817.1	820.3
37.5°	756.6	761.2	776.8	793.8	798.5
40°	723.9	733.3	748.8	769.0	776.8
42.5°	691.3	700.6	719.3	745.7	755.0
45°	657.1	668.0	691.3	720.8	733.3
47.5°	623.0	635.4	661.8	696.0	710.0
50°	584.1	599.7	632.3	671.1	686.7
52.5°	546.8	565.5	601.2	644.7	664.9
55°	508.0	526.6	573.2	618.3	640.0
57.5°	464.5	489.4	540.6	591.9	615.2
60°	424.1	447.4	509.6	565.5	588.8
62.5°	380.6	411.7	478.5	537.5	560.8
65°	335.6	369.7	445.9	504.9	528.2
67.5°	295.2	332.5	413.2	472.3	495.6
70°	247.0	293.6	377.5	436.5	459.8
72.5°	202.0	253.2	340.2	397.7	419.4
75°	158.5	215.9	301.4	352.6	363.5
77.5°	118.1	178.7	261.0	282.7	275.0
80°	83.9	142.9	203.5	192.6	197.3
82.5°	54.4	108.7	125.8	142.9	147.6
85°	31.1	63.7	77.7	83.9	87.0
87.5°	14.0	23.3	31.1	31.1	29.5
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)