

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: P309112

Luminaire Tested: **22FCZ2-44HE-UNV-L82765-S-CA125-W2A-U-6500K**

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: P309112  
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G3-1805-783-23)  
Test Lab: INNOVATION CENTER(G3)  
Issue Date: 3/3/2020  
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)  
Product Line: FAIL-SAFE  
Catalog Number: 22FCZ2-44HE-UNV-L82765-S-CA125-W2A-U-6500K  
Description: 2'X2' TROFFER LED MODULE, SMOOTH LENS, 0.125" ACRYLIC SHEET  
Light Source: (168) 3000K 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**

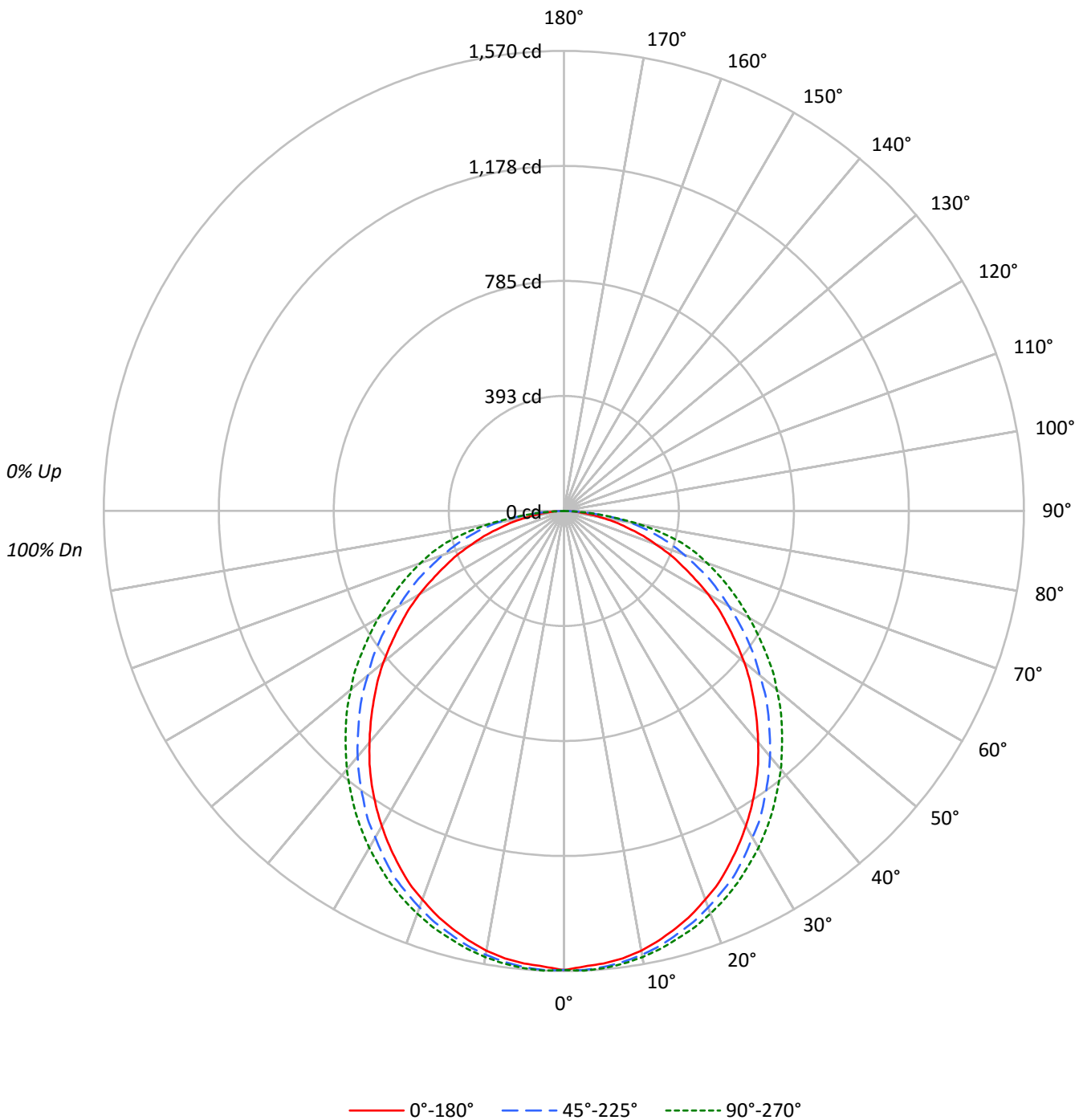
Lumens per Lamp: N/A  
Luminaire Lumens: 4371.0 lumens  
Efficiency: N/A  
Efficacy: 112.4 lumens/watt  
Spacing Criteria (0/90/45): 1.18 / 1.26 / 1.34  
Luminous Opening: Rectangular (W 2' x L: 2' x H: 0')  
CIE Type: Direct  
  
Input Watts (W): 38.9  
Input Voltage (V): NR  
Input Current (A<sub>in</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	99	95	106	101	97	94	97	94	91	93	90	88	89	87	85	83
2	98	90	83	77	96	88	82	76	84	79	74	81	77	73	78	74	71	69
3	90	79	71	64	87	77	70	63	74	68	62	72	66	61	69	64	60	58
4	82	70	61	54	80	69	60	54	66	59	53	64	57	52	61	56	52	49
5	75	62	53	47	73	61	53	46	59	52	46	57	51	45	55	50	45	43
6	70	56	47	41	68	55	47	41	53	46	40	52	45	40	50	44	39	37
7	65	51	42	36	63	50	42	36	49	41	36	47	40	35	46	40	35	33
8	60	47	38	32	59	46	38	32	45	37	32	43	37	32	42	36	31	30
9	56	43	35	29	55	42	34	29	41	34	29	40	33	29	39	33	28	27
10	53	40	32	26	51	39	31	26	38	31	26	37	31	26	36	30	26	24

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

	0°	45°	90°
0°	4215	4215	4215
5°	4187	4220	4231
10°	4163	4202	4224
15°	4108	4165	4204
20°	4042	4123	4188
25°	3960	4081	4160
30°	3859	3999	4126
35°	3752	3926	4087
40°	3625	3847	4048
45°	3492	3757	4005
50°	3364	3654	3970
55°	3205	3588	3942
60°	3062	3502	3929
65°	2857	3480	3974
70°	2632	3450	4091
75°	2375	3499	4304
80°	2055	3603	4045
85°	1701	3023	3023



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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	148.1	3.4
10°-20°	421.5	9.6
20°-30°	630.7	14.4
30°-40°	746.9	17.1
40°-50°	761.2	17.4
50°-60°	682.2	15.6
60°-70°	534.1	12.2
70°-80°	344.4	7.9
80°-90°	101.7	2.3
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°	1200.3	27.5
0°-40°	1947.3	44.5
0°-60°	3390.7	77.6
0°-90°	4371.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	4371.0	100.0

**CANDELA DISTRIBUTION:**

	0°	22.5°	45°	67.5°	90°	Flux
0°	1566	1566	1566	1566	1566	
5°	1550	1554	1562	1564	1566	147
15°	1474	1483	1495	1507	1509	416
25°	1334	1346	1375	1393	1401	614
35°	1142	1156	1195	1232	1244	714
45°	918	938	987	1038	1052	709
55°	683	706	765	818	840	613
65°	449	475	547	600	624	446
75°	228	263	336	394	414	245
85°	55	76	98	98	98	65
90°	0	0	0	0	0	



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**CANDELA DISTRIBUTION (FULL):**

	0°	22.5°	45°	67.5°	90°
0°	1566.3	1566.3	1566.3	1566.3	1566.3
2.5°	1556.1	1560.1	1568.3	1570.3	1570.3
5°	1550.0	1554.0	1562.2	1564.2	1566.3
7.5°	1539.8	1541.8	1552.0	1556.1	1558.1
10°	1523.4	1527.5	1537.7	1543.8	1545.9
12.5°	1501.0	1507.1	1519.4	1527.5	1529.6
15°	1474.5	1482.6	1494.9	1507.1	1509.2
17.5°	1445.9	1454.1	1470.4	1484.7	1488.8
20°	1411.3	1421.5	1439.8	1456.1	1462.3
22.5°	1376.6	1384.8	1407.2	1427.6	1433.7
25°	1333.8	1346.0	1374.6	1392.9	1401.1
27.5°	1288.9	1303.2	1331.7	1356.2	1364.4
30°	1242.0	1256.3	1286.9	1317.5	1327.7
32.5°	1193.1	1209.4	1246.1	1276.7	1286.9
35°	1142.1	1156.3	1195.1	1231.8	1244.0
37.5°	1089.0	1101.3	1146.1	1184.9	1197.1
40°	1031.9	1048.3	1095.2	1140.0	1152.3
42.5°	974.8	993.2	1040.1	1089.0	1101.3
45°	917.7	938.1	987.1	1038.1	1052.3
47.5°	862.7	879.0	934.0	983.0	1003.4
50°	803.5	819.8	872.9	927.9	948.3
52.5°	742.3	764.8	821.9	874.9	899.4
55°	683.2	705.6	764.8	817.8	840.2
57.5°	628.1	646.5	707.7	762.7	785.2
60°	569.0	585.3	650.6	709.7	730.1
62.5°	505.8	530.2	597.5	652.6	677.1
65°	448.7	475.2	546.6	599.6	624.1
67.5°	395.6	420.1	489.5	546.6	573.1
70°	334.5	367.1	438.5	495.6	520.0
72.5°	285.5	314.1	387.5	444.6	471.1
75°	228.4	263.1	336.5	393.6	414.0
77.5°	181.5	216.2	285.5	330.4	340.6
80°	132.6	167.2	232.5	254.9	261.0
82.5°	89.7	122.4	167.2	173.3	175.4
85°	55.1	75.5	97.9	97.9	97.9
87.5°	26.5	30.6	34.7	32.6	32.6
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)