

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: P309121

Luminaire Tested: **22FCZ2-44HE-UNV-L82765-S-CP125-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: P309121  
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-CP125-W2A-U-6500K  
Description: 2'X2' TROFFER LED MODULE, SMOOTH LENS, 0.125" POLYCARB 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: 4286.0 lumens  
Efficiency: N/A  
Efficacy: 110.2 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

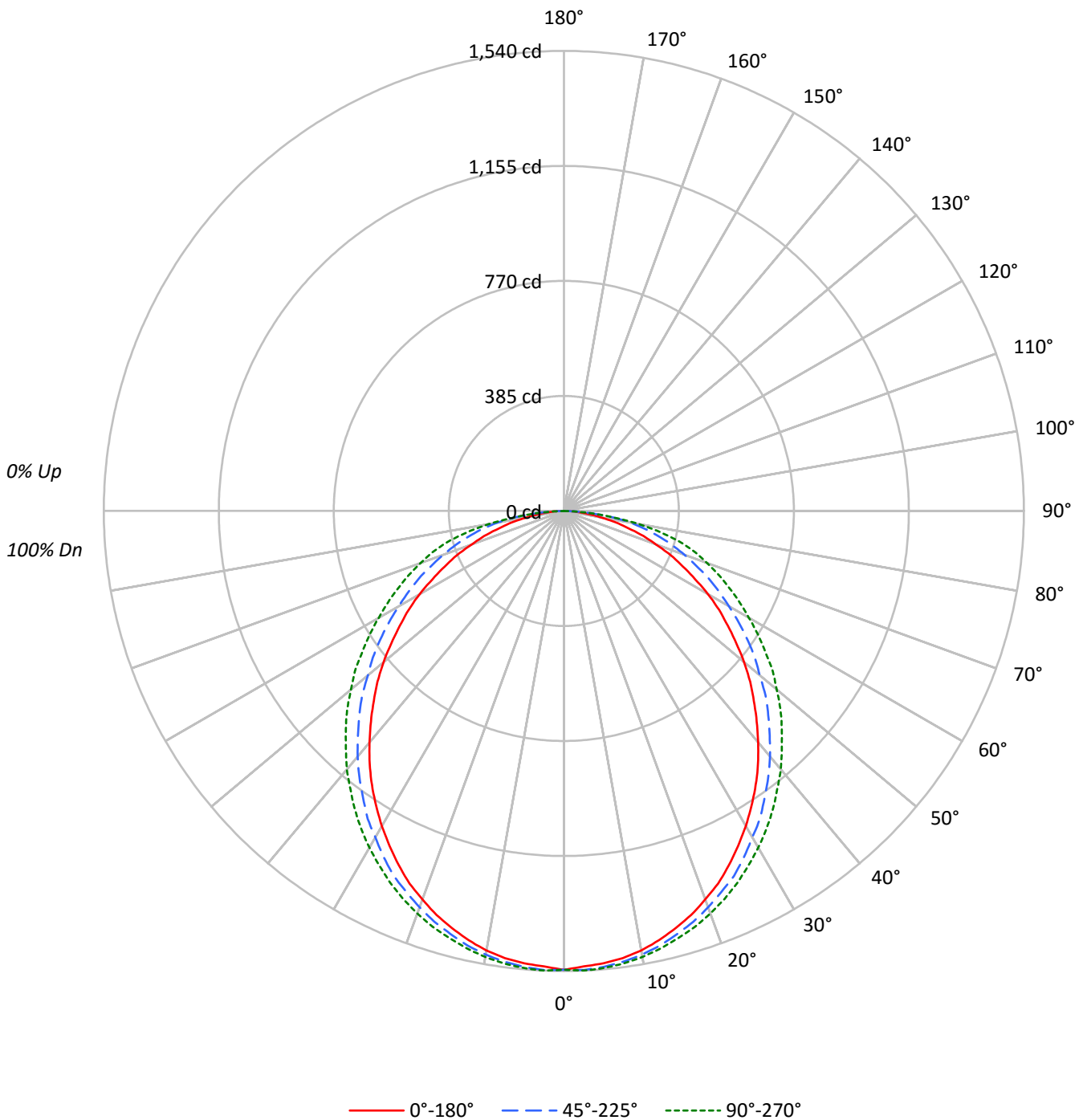
Input Watts (W): 38.9  
Input Voltage (V): NR  
Input Current (A<sub>in</sub>): NR  
Voltage Rise (V): NR  
Power Factor: NR  
Total Harmonic Distortion (THDi): NR  
Frequency (hertz): 60  
Stabilization Time: NR  
Operation Time: NR  
Ambient Temperature (°C): NR  
Test Distance: 25 FT



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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°	4133	4133	4133
5°	4105	4138	4149
10°	4082	4120	4142
15°	4028	4084	4123
20°	3963	4043	4106
25°	3883	4002	4079
30°	3784	3921	4045
35°	3679	3850	4007
40°	3555	3772	3969
45°	3425	3683	3927
50°	3298	3583	3893
55°	3143	3518	3865
60°	3003	3433	3853
65°	2801	3412	3896
70°	2581	3382	4012
75°	2329	3431	4220
80°	2015	3533	3967
85°	1667	2964	2964



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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	145.2	3.4
10°-20°	413.3	9.6
20°-30°	618.4	14.4
30°-40°	732.4	17.1
40°-50°	746.4	17.4
50°-60°	669.0	15.6
60°-70°	523.7	12.2
70°-80°	337.8	7.9
80°-90°	99.8	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°	1177.0	27.5
0°-40°	1909.4	44.5
0°-60°	3324.7	77.6
0°-90°	4286.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	4286.0	100.0

**CANDELA DISTRIBUTION:**

	0°	22.5°	45°	67.5°	90°	Flux
0°	1536	1536	1536	1536	1536	
5°	1520	1524	1532	1534	1536	144
15°	1446	1454	1466	1478	1480	408
25°	1308	1320	1348	1366	1374	602
35°	1120	1134	1172	1208	1220	700
45°	900	920	968	1018	1032	695
55°	670	692	750	802	824	601
65°	440	466	536	588	612	437
75°	224	258	330	386	406	240
85°	54	74	96	96	96	63
90°	0	0	0	0	0	



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**CANDELA DISTRIBUTION (FULL):**

	0°	22.5°	45°	67.5°	90°
0°	1535.8	1535.8	1535.8	1535.8	1535.8
2.5°	1525.8	1529.8	1537.8	1539.8	1539.8
5°	1519.8	1523.8	1531.8	1533.8	1535.8
7.5°	1509.8	1511.8	1521.8	1525.8	1527.8
10°	1493.8	1497.8	1507.8	1513.8	1515.8
12.5°	1471.8	1477.8	1489.8	1497.8	1499.8
15°	1445.8	1453.8	1465.8	1477.8	1479.8
17.5°	1417.8	1425.8	1441.8	1455.8	1459.8
20°	1383.8	1393.8	1411.8	1427.8	1433.8
22.5°	1349.8	1357.8	1379.8	1399.8	1405.8
25°	1307.8	1319.8	1347.8	1365.8	1373.8
27.5°	1263.8	1277.8	1305.8	1329.8	1337.8
30°	1217.8	1231.8	1261.8	1291.8	1301.8
32.5°	1169.9	1185.9	1221.8	1251.8	1261.8
35°	1119.9	1133.9	1171.9	1207.8	1219.8
37.5°	1067.9	1079.9	1123.9	1161.9	1173.9
40°	1011.9	1027.9	1073.9	1117.9	1129.9
42.5°	955.9	973.9	1019.9	1067.9	1079.9
45°	899.9	919.9	967.9	1017.9	1031.9
47.5°	845.9	861.9	915.9	963.9	983.9
50°	787.9	803.9	855.9	909.9	929.9
52.5°	727.9	749.9	805.9	857.9	881.9
55°	669.9	691.9	749.9	801.9	823.9
57.5°	615.9	633.9	693.9	747.9	769.9
60°	557.9	573.9	637.9	695.9	715.9
62.5°	495.9	519.9	585.9	639.9	663.9
65°	439.9	465.9	535.9	587.9	611.9
67.5°	388.0	411.9	479.9	535.9	561.9
70°	328.0	360.0	429.9	485.9	509.9
72.5°	280.0	308.0	380.0	435.9	461.9
75°	224.0	258.0	330.0	386.0	405.9
77.5°	178.0	212.0	280.0	324.0	334.0
80°	130.0	164.0	228.0	250.0	256.0
82.5°	88.0	120.0	164.0	170.0	172.0
85°	54.0	74.0	96.0	96.0	96.0
87.5°	26.0	30.0	34.0	32.0	32.0
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)