

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: P308835

Luminaire Tested: **22FCZ2-44HE-UNV-L82765-CA125-W2A-U-3000K**

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: P308835  
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G3-1805-783-33)  
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-CA125-W2A-U-3000K  
Description: 2'X2' TROFFER LED MODULE, RIBBED 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**

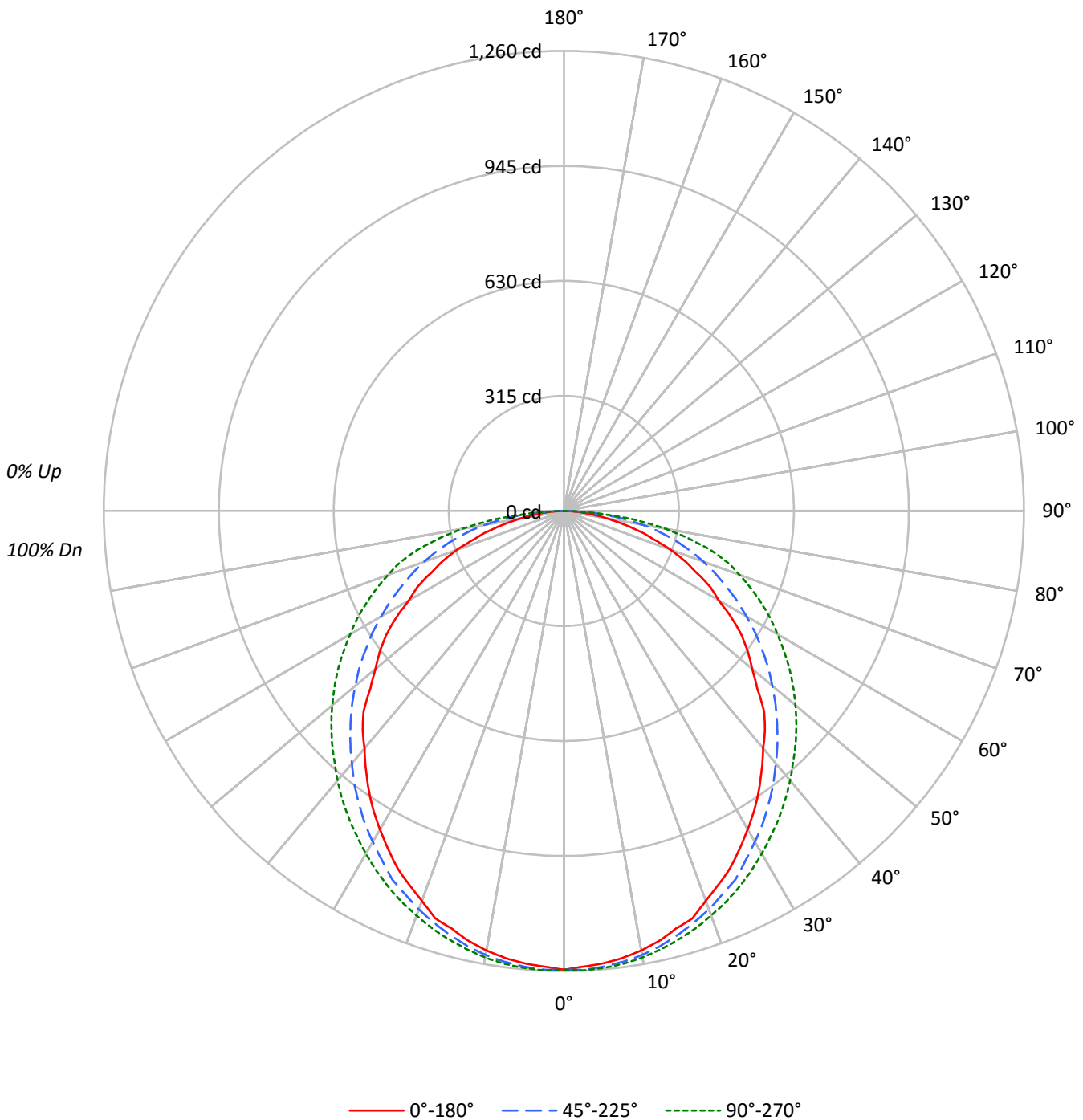
Lumens per Lamp: N/A  
Luminaire Lumens: 3744.0 lumens  
Efficiency: N/A  
Efficacy: 101.5 lumens/watt  
Spacing Criteria (0/90/45): 1.2 / 1.28 / 1.37  
Luminous Opening: Rectangular (W 2' x L: 2' x H: 0')  
CIE Type: Direct  
  
Input Watts (W): 36.9  
Input Voltage (V): NR  
Input Current (A<sub>in</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	98	94	105	100	96	92	96	93	90	92	89	87	89	86	84	82
2	98	89	82	76	95	87	80	75	83	78	73	80	75	71	77	73	70	67
3	89	78	69	62	86	76	68	62	73	66	61	70	64	60	68	63	59	56
4	81	69	60	53	79	67	59	52	65	57	51	62	56	51	60	55	50	48
5	74	61	52	45	72	60	51	45	58	50	44	56	49	44	54	48	43	41
6	69	55	46	39	67	54	45	39	52	44	39	51	44	38	49	43	38	36
7	64	50	41	35	62	49	40	34	47	40	34	46	39	34	45	38	34	32
8	59	45	37	31	58	45	36	31	43	36	30	42	35	30	41	35	30	28
9	55	42	33	28	54	41	33	28	40	33	27	39	32	27	38	32	27	25
10	52	38	30	25	51	38	30	25	37	30	25	36	29	25	35	29	25	23

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

	0°	45°	90°
0°	3380	3380	3380
5°	3359	3384	3393
10°	3339	3374	3393
15°	3300	3350	3385
20°	3253	3325	3377
25°	3203	3304	3373
30°	3129	3252	3369
35°	3061	3214	3373
40°	2984	3172	3387
45°	2953	3144	3417
50°	2821	3121	3466
55°	2791	3111	3539
60°	2633	3105	3636
65°	2556	3126	3799
70°	2453	3201	4032
75°	2235	3298	4341
80°	1915	3415	4387
85°	1550	3264	3764



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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	118.9	3.2
10°-20°	339.1	9.1
20°-30°	510.3	13.6
30°-40°	612.5	16.4
40°-50°	640.2	17.1
50°-60°	596.6	15.9
60°-70°	489.3	13.1
70°-80°	329.7	8.8
80°-90°	107.4	2.9
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°	968.3	25.9
0°-40°	1580.8	42.2
0°-60°	2817.6	75.3
0°-90°	3744.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	3744.0	100.0

**CANDELA DISTRIBUTION:**

	0°	22.5°	45°	67.5°	90°	Flux
0°	1256	1256	1256	1256	1256	
5°	1244	1247	1253	1254	1256	118
15°	1184	1192	1202	1213	1215	335
25°	1079	1086	1113	1129	1136	496
35°	932	944	978	1012	1027	583
45°	776	781	826	876	898	593
55°	595	606	663	726	754	527
65°	401	419	491	563	597	399
75°	215	238	317	389	418	226
85°	50	72	106	124	122	60
90°	0	0	0	0	0	



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**CANDELA DISTRIBUTION (FULL):**

	0°	22.5°	45°	67.5°	90°
0°	1256.1	1256.1	1256.1	1256.1	1256.1
2.5°	1249.0	1252.6	1257.9	1259.7	1259.7
5°	1243.6	1247.2	1252.6	1254.4	1256.1
7.5°	1234.6	1238.2	1245.4	1249.0	1250.8
10°	1222.1	1225.7	1234.6	1240.0	1241.8
12.5°	1206.0	1209.6	1220.3	1227.5	1229.3
15°	1184.5	1191.6	1202.4	1213.1	1214.9
17.5°	1170.1	1168.3	1182.7	1195.2	1198.8
20°	1136.1	1145.0	1161.2	1175.5	1179.1
22.5°	1107.4	1114.6	1136.1	1152.2	1159.4
25°	1078.7	1085.9	1112.8	1128.9	1136.1
27.5°	1042.9	1053.7	1078.7	1102.0	1111.0
30°	1007.1	1017.8	1046.5	1073.4	1084.1
32.5°	971.2	983.8	1014.2	1042.9	1055.4
35°	931.8	944.3	978.4	1012.4	1026.8
37.5°	890.6	906.7	942.6	980.2	996.3
40°	849.4	865.5	903.1	946.1	964.1
42.5°	815.3	822.5	865.5	912.1	930.0
45°	775.9	781.3	826.1	876.3	897.8
47.5°	718.6	738.3	786.7	842.2	863.7
50°	673.8	695.3	745.4	804.6	827.9
52.5°	636.1	650.5	706.0	765.2	792.0
55°	594.9	605.7	663.0	725.7	754.4
57.5°	544.7	564.5	621.8	686.3	715.0
60°	489.2	514.3	577.0	646.9	675.6
62.5°	453.4	467.7	535.8	605.7	637.9
65°	401.4	419.3	491.0	562.7	596.7
67.5°	358.4	376.3	449.8	521.5	555.5
70°	311.8	329.7	406.8	478.4	512.5
72.5°	258.0	283.1	363.8	435.4	471.3
75°	215.0	238.3	317.2	388.8	417.5
77.5°	166.6	197.1	270.6	329.7	351.2
80°	123.6	154.1	220.4	263.4	283.1
82.5°	84.2	114.7	164.9	197.1	207.9
85°	50.2	71.7	105.7	123.6	121.9
87.5°	23.3	30.5	43.0	43.0	41.2
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)