

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: P308442

Luminaire Tested: **22FCZ2-29HE-UNV-L82765-RDP-CP125-W2A-U-4500K**

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: P308442  
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G3-1805-783-24)  
Test Lab: INNOVATION CENTER(G3)  
Issue Date: 3/3/2020  
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)  
Product Line: FAIL-SAFE  
Catalog Number: 22FCZ2-29HE-UNV-L82765-RDP-CP125-W2A-U-4500K  
Description: 2'X2' TROFFER LED MODULE, SMOOTH LENS WITH INSERT, 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**

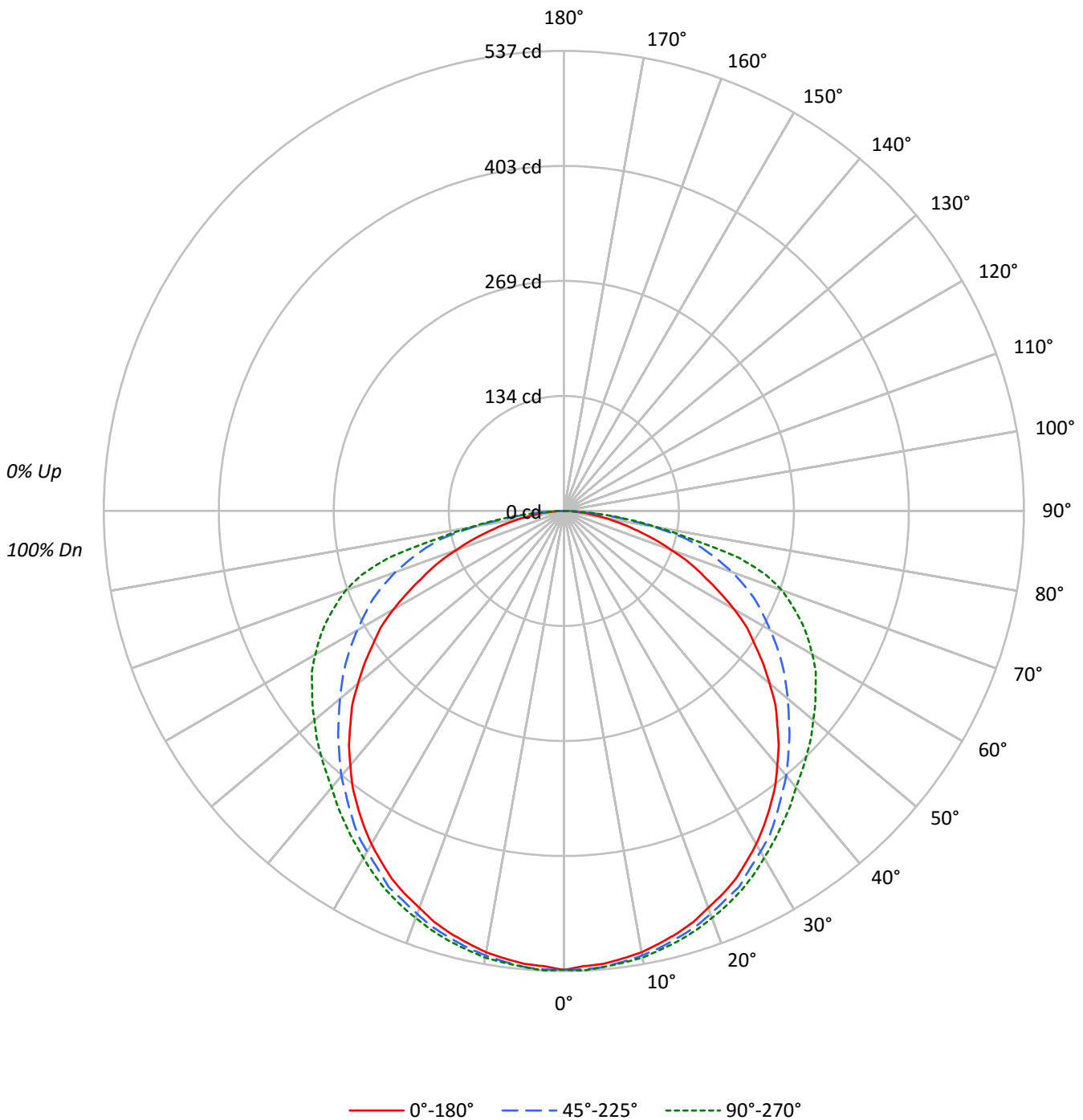
Lumens per Lamp: N/A  
Luminaire Lumens: 1705.0 lumens  
Efficiency: N/A  
Efficacy: 74.8 lumens/watt  
Spacing Criteria (0/90/45): 1.25 / 1.3 / 1.41  
Luminous Opening: Rectangular (W 2' x L: 2' x H: 0')  
CIE Type: Direct  
  
Input Watts (W): 22.8  
Input Voltage (V): NR  
Input Current (Ain): NR  
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	92	89	92	89	86	88	86	84	82
2	97	88	81	75	95	86	80	74	83	77	72	80	75	71	76	72	69	67
3	88	77	68	61	86	75	67	61	72	65	60	70	64	59	67	62	58	55
4	80	68	59	51	78	66	58	51	64	56	50	61	55	50	59	54	49	47
5	74	60	51	44	72	59	50	44	57	49	43	55	48	43	53	47	42	40
6	68	54	45	38	66	53	44	38	51	43	38	50	43	37	48	42	37	35
7	63	49	40	33	61	48	39	33	47	39	33	45	38	33	44	37	33	31
8	59	45	36	30	57	44	35	30	43	35	29	41	34	29	40	34	29	27
9	55	41	32	27	53	40	32	27	39	32	26	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°	1441	1441	1441
5°	1433	1443	1443
10°	1429	1439	1446
15°	1422	1436	1447
20°	1412	1433	1448
25°	1408	1437	1453
30°	1395	1427	1454
35°	1380	1421	1463
40°	1362	1419	1480
45°	1341	1418	1528
50°	1313	1428	1591
55°	1277	1460	1683
60°	1235	1498	1802
65°	1150	1573	1948
70°	1056	1648	2131
75°	926	1734	2204
80°	797	1652	1729
85°	698	1201	1315



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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	50.7	3.0
10°-20°	145.5	8.5
20°-30°	221.9	13.0
30°-40°	271.0	15.9
40°-50°	289.7	17.0
50°-60°	279.7	16.4
60°-70°	240.7	14.1
70°-80°	162.9	9.6
80°-90°	43.0	2.5
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°	418.0	24.5
0°-40°	689.0	40.4
0°-60°	1258.4	73.8
0°-90°	1705.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	1705.0	100.0

**CANDELA DISTRIBUTION:**

	0°	22.5°	45°	67.5°	90°	Flux
0°	536	536	536	536	536	
5°	531	532	534	534	534	50
15°	510	512	516	518	519	144
25°	474	477	484	487	489	218
35°	420	424	433	442	445	263
45°	352	359	372	391	401	272
55°	272	281	311	342	359	244
65°	181	198	247	286	306	180
75°	89	118	167	201	212	96
85°	23	31	39	40	43	25
90°	0	0	0	0	0	



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**CANDELA DISTRIBUTION (FULL):**

	0°	22.5°	45°	67.5°	90°
0°	535.6	535.6	535.6	535.6	535.6
2.5°	531.8	533.1	535.6	535.6	536.8
5°	530.6	531.8	534.3	534.3	534.3
7.5°	526.8	528.0	530.6	531.8	531.8
10°	523.0	524.3	526.8	528.0	529.3
12.5°	516.8	518.0	521.8	524.3	524.3
15°	510.5	511.7	515.5	518.0	519.3
17.5°	503.0	505.5	509.2	511.7	513.0
20°	492.9	495.4	500.5	504.2	505.5
22.5°	484.1	486.7	491.7	495.4	497.9
25°	474.1	476.6	484.1	486.7	489.2
27.5°	461.6	464.1	470.3	475.4	479.1
30°	449.0	451.5	459.1	465.3	467.8
32.5°	435.2	439.0	447.8	452.8	456.6
35°	420.2	423.9	432.7	441.5	445.3
37.5°	405.1	408.9	417.7	429.0	434.0
40°	387.6	392.6	403.9	418.9	421.4
42.5°	371.3	377.5	387.6	405.1	411.4
45°	352.4	358.7	372.5	391.3	401.4
47.5°	334.9	341.2	356.2	378.8	391.3
50°	313.6	322.3	341.2	367.5	380.0
52.5°	293.5	301.0	326.1	355.0	370.0
55°	272.2	281.0	311.1	342.4	358.7
57.5°	253.4	260.9	294.8	329.9	348.7
60°	229.5	239.6	278.4	316.1	334.9
62.5°	204.4	219.5	262.1	301.0	321.1
65°	180.6	198.2	247.1	286.0	306.0
67.5°	159.3	178.1	228.3	269.7	288.5
70°	134.2	158.0	209.5	249.6	270.9
72.5°	111.6	138.0	188.1	228.3	247.1
75°	89.1	117.9	166.8	200.7	212.0
77.5°	69.0	96.6	143.0	153.0	154.3
80°	51.4	76.5	106.6	107.9	111.6
82.5°	35.1	53.9	69.0	75.3	76.5
85°	22.6	31.4	38.9	40.1	42.6
87.5°	10.0	11.3	13.8	12.5	12.5
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)