

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: P308127

Luminaire Tested: **22FCZ2-24HE-UNV-L82765-HRP-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: P308127  
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G3-1808-918-22)  
Test Lab: INNOVATION CENTER(G3)  
Issue Date: 3/3/2020  
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)  
Product Line: FAIL-SAFE  
Catalog Number: 22FCZ2-24HE-UNV-L82765-HRP-CP125-W2A-U-4500K  
Description: 2'X2' TROFFER LED MODULE, HIGH EFFICIENCY RND PERF. 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**

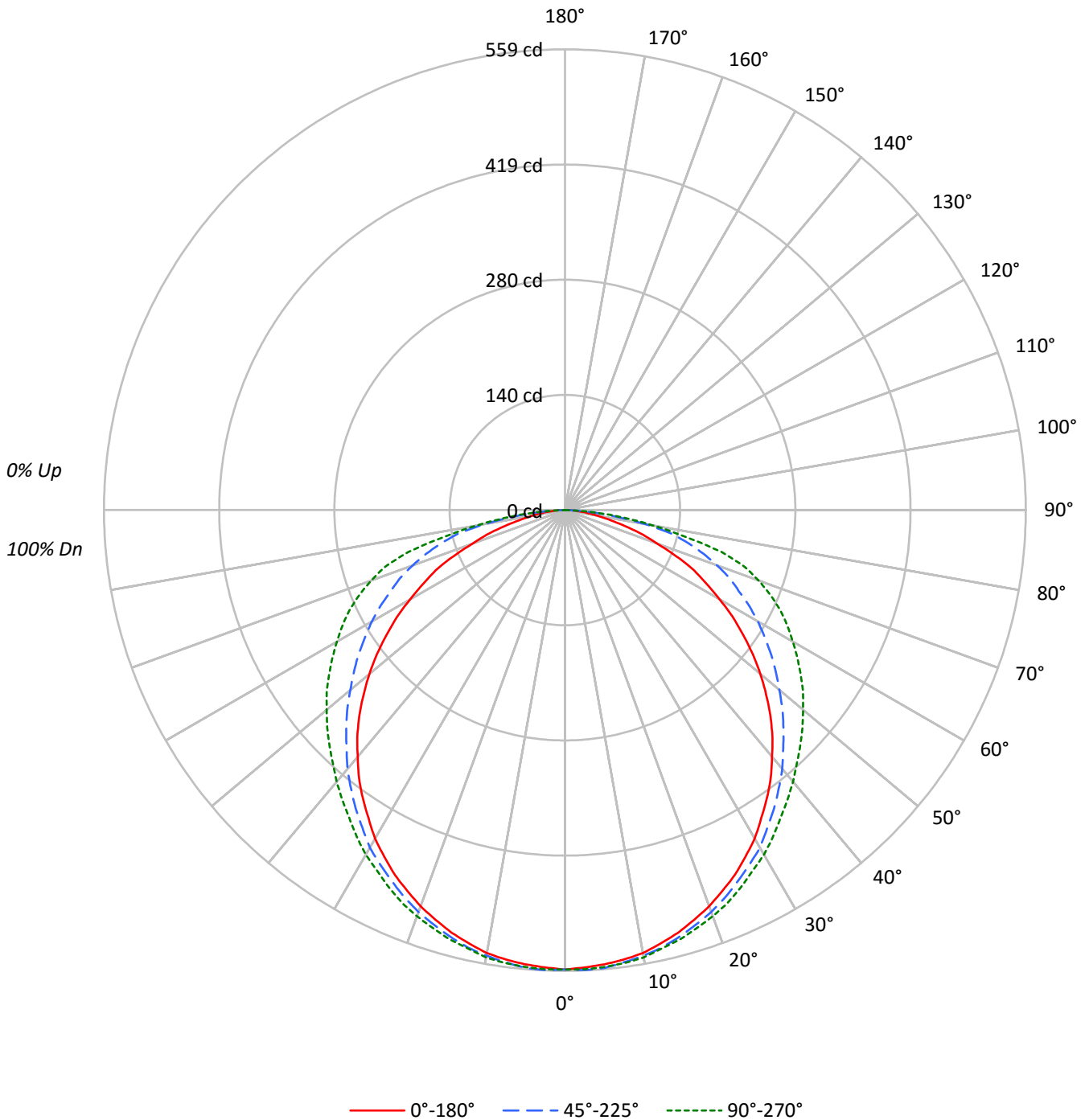
Lumens per Lamp: N/A  
Luminaire Lumens: 1693.0 lumens  
Efficiency: N/A  
Efficacy: 87.7 lumens/watt  
Spacing Criteria (0/90/45): 1.23 / 1.29 / 1.38  
Luminous Opening: Rectangular (W 2' x L: 2' x H: 0')  
CIE Type: Direct  
  
Input Watts (W): 19.3  
Input Voltage (V): NR  
Input Current (Ain): NR  
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	101	96	93	96	93	90	92	90	87	89	87	84	82
2	98	89	82	76	95	87	80	75	84	78	73	80	75	71	77	73	70	68
3	89	78	69	62	86	76	68	62	73	66	61	70	64	60	68	63	59	56
4	81	69	59	52	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	50	43	38	49	43	38	36
7	64	50	41	34	62	49	40	34	47	40	34	46	39	34	44	38	33	31
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	27	40	32	27	39	32	27	38	31	27	25
10	52	38	30	25	50	38	30	25	37	30	25	36	29	25	35	29	24	23

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

	0°	45°	90°
0°	1500	1500	1500
5°	1494	1506	1503
10°	1491	1500	1506
15°	1479	1494	1502
20°	1465	1486	1502
25°	1449	1474	1500
30°	1430	1470	1500
35°	1403	1452	1498
40°	1373	1441	1512
45°	1341	1427	1536
50°	1297	1422	1578
55°	1238	1433	1638
60°	1167	1454	1718
65°	1102	1482	1836
70°	941	1546	1966
75°	788	1611	2043
80°	646	1556	1705
85°	562	1155	1254



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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	52.8	3.1
10°-20°	151.1	8.9
20°-30°	229.1	13.5
30°-40°	276.6	16.3
40°-50°	290.6	17.2
50°-60°	273.4	16.2
60°-70°	228.0	13.5
70°-80°	151.1	8.9
80°-90°	40.3	2.4
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°	433.0	25.6
0°-40°	709.6	41.9
0°-60°	1273.7	75.2
0°-90°	1693.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	1693.0	100.0

**CANDELA DISTRIBUTION:**

	0°	22.5°	45°	67.5°	90°	Flux
0°	558	558	558	558	558	
5°	553	554	558	558	556	53
15°	531	533	536	538	539	150
25°	488	491	497	503	505	225
35°	427	432	442	452	456	267
45°	352	358	375	394	404	271
55°	264	276	305	336	349	236
65°	173	188	233	271	288	168
75°	76	106	155	187	196	82
85°	18	28	37	41	41	21
90°	0	0	0	0	0	



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**CANDELA DISTRIBUTION (FULL):**

	0°	22.5°	45°	67.5°	90°
0°	557.5	557.5	557.5	557.5	557.5
2.5°	555.3	556.4	558.6	558.6	557.5
5°	553.2	554.3	557.5	557.5	556.4
7.5°	550.0	551.1	553.2	555.3	554.3
10°	545.7	546.8	548.9	551.1	551.1
12.5°	538.3	539.3	543.6	544.7	544.7
15°	530.8	532.9	536.1	538.3	539.3
17.5°	521.2	523.3	527.6	531.9	531.9
20°	511.6	513.7	519.0	523.3	524.4
22.5°	499.8	503.0	508.4	513.7	515.8
25°	488.1	491.3	496.6	503.0	505.2
27.5°	474.2	477.4	484.9	492.3	493.4
30°	460.3	463.5	473.1	479.5	482.7
32.5°	443.2	447.5	457.1	466.7	469.9
35°	427.2	431.5	442.1	451.8	456.0
37.5°	410.1	414.4	426.1	437.9	443.2
40°	390.9	396.2	410.1	422.9	430.4
42.5°	372.7	378.1	391.9	409.0	416.5
45°	352.4	357.8	374.9	394.1	403.7
47.5°	331.1	337.5	357.8	381.3	390.9
50°	309.7	317.2	339.6	366.3	377.0
52.5°	287.3	296.9	322.5	351.4	364.2
55°	263.8	275.5	305.4	336.4	349.2
57.5°	241.4	252.0	287.3	320.4	334.3
60°	216.8	230.7	270.2	304.4	319.3
62.5°	193.3	208.3	252.0	288.4	304.4
65°	173.0	188.0	232.8	271.3	288.4
67.5°	146.3	166.6	216.8	253.1	270.2
70°	119.6	147.4	196.5	233.9	249.9
72.5°	99.3	126.0	176.2	213.6	228.5
75°	75.8	105.7	154.9	186.9	196.5
77.5°	56.6	87.6	132.4	148.4	149.5
80°	41.7	67.3	100.4	105.7	110.0
82.5°	28.8	47.0	65.1	71.6	73.7
85°	18.2	27.8	37.4	40.6	40.6
87.5°	9.6	10.7	12.8	12.8	12.8
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)