

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: P308125

Luminaire Tested: **22FCZ2-24HE-UNV-L82765-HRP-CP125-W2A-U-3500K**

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: P308125  
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-3500K  
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: 1627.0 lumens  
Efficiency: N/A  
Efficacy: 85.6 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

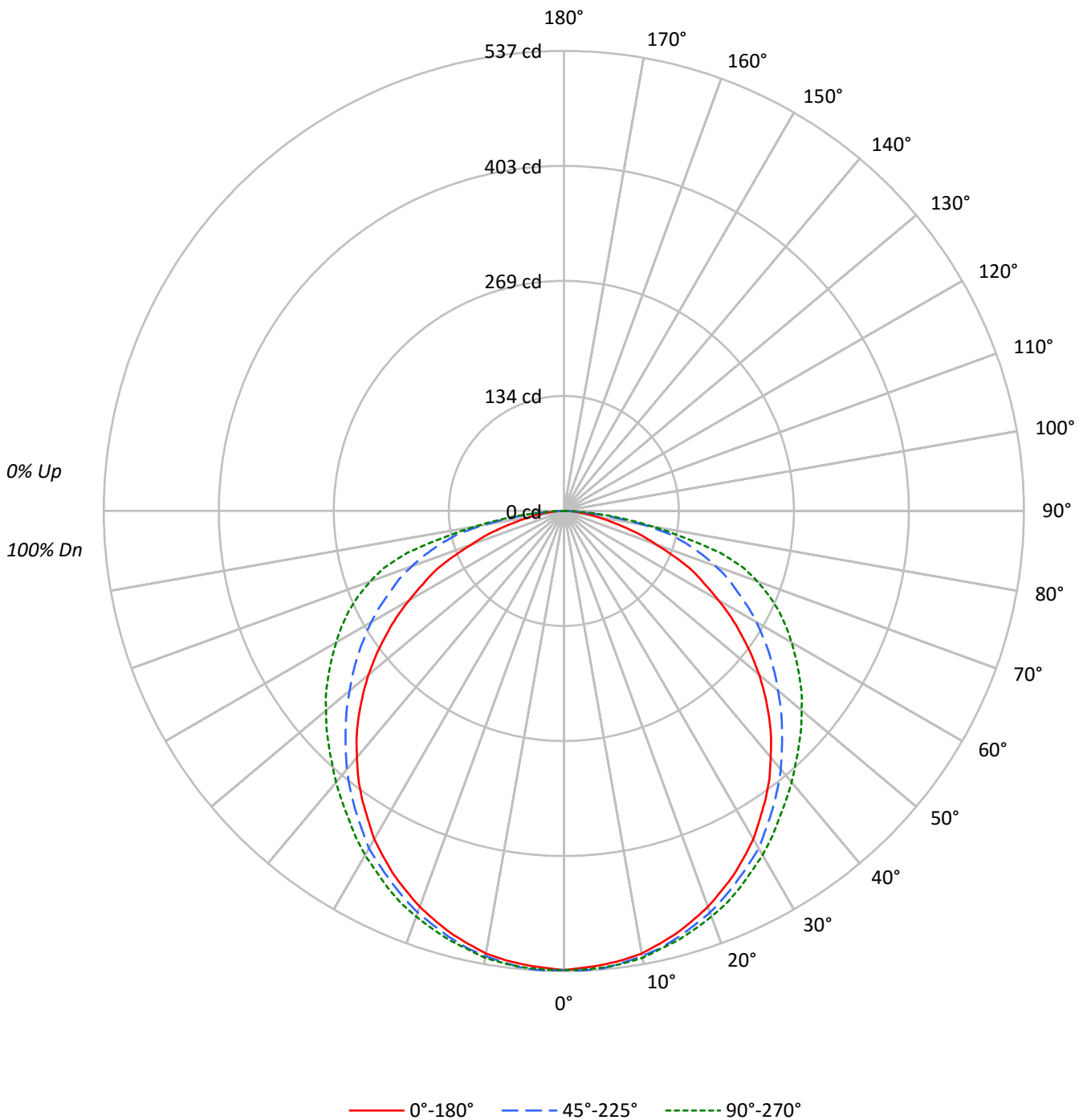
Input Watts (W): 19  
Input Voltage (V): NR  
Input Current (A<sub>in</sub>): NR  
Voltage Rise (V): NR  
Power Factor: NR  
Total Harmonic Distortion (THDi): NR  
Frequency (hertz): 60  
Stabilization Time: NR  
Operation Time: NR  
Ambient Temperature (°C): NR  
Test Distance: 25 FT



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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	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°	1442	1442	1442
5°	1436	1447	1444
10°	1433	1441	1447
15°	1421	1435	1444
20°	1408	1428	1443
25°	1393	1417	1442
30°	1375	1413	1441
35°	1349	1396	1440
40°	1319	1384	1453
45°	1289	1371	1477
50°	1246	1366	1517
55°	1189	1377	1574
60°	1121	1398	1652
65°	1059	1424	1764
70°	905	1485	1890
75°	758	1547	1963
80°	620	1495	1638
85°	537	1108	1204



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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	50.8	3.1
10°-20°	145.2	8.9
20°-30°	220.1	13.5
30°-40°	265.8	16.3
40°-50°	279.3	17.2
50°-60°	262.8	16.2
60°-70°	219.1	13.5
70°-80°	145.2	8.9
80°-90°	38.7	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°	416.1	25.6
0°-40°	681.9	41.9
0°-60°	1224.0	75.2
0°-90°	1627.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	1627.0	100.0

**CANDELA DISTRIBUTION:**

	0°	22.5°	45°	67.5°	90°	Flux
0°	536	536	536	536	536	
5°	532	533	536	536	535	51
15°	510	512	515	517	518	144
25°	469	472	477	483	486	216
35°	410	415	425	434	438	257
45°	339	344	360	379	388	261
55°	254	265	294	323	336	227
65°	166	181	224	261	277	162
75°	73	102	149	180	189	79
85°	17	27	36	39	39	20
90°	0	0	0	0	0	



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**CANDELA DISTRIBUTION (FULL):**

	0°	22.5°	45°	67.5°	90°
0°	535.8	535.8	535.8	535.8	535.8
2.5°	533.7	534.7	536.8	536.8	535.8
5°	531.6	532.7	535.8	535.8	534.7
7.5°	528.6	529.6	531.6	533.7	532.7
10°	524.5	525.5	527.5	529.6	529.6
12.5°	517.3	518.3	522.4	523.4	523.4
15°	510.1	512.1	515.2	517.3	518.3
17.5°	500.9	502.9	507.0	511.1	511.1
20°	491.6	493.7	498.8	502.9	503.9
22.5°	480.3	483.4	488.5	493.7	495.7
25°	469.0	472.1	477.3	483.4	485.5
27.5°	455.7	458.8	466.0	473.1	474.2
30°	442.4	445.4	454.7	460.8	463.9
32.5°	425.9	430.0	439.3	448.5	451.6
35°	410.5	414.6	424.9	434.1	438.2
37.5°	394.1	398.2	409.5	420.8	425.9
40°	375.6	380.8	394.1	406.4	413.6
42.5°	358.2	363.3	376.7	393.1	400.3
45°	338.7	343.8	360.2	378.7	388.0
47.5°	318.2	324.3	343.8	366.4	375.6
50°	297.6	304.8	326.4	352.0	362.3
52.5°	276.1	285.3	310.0	337.7	350.0
55°	253.5	264.8	293.5	323.3	335.6
57.5°	232.0	242.2	276.1	307.9	321.2
60°	208.3	221.7	259.7	292.5	306.9
62.5°	185.8	200.1	242.2	277.1	292.5
65°	166.3	180.6	223.7	260.7	277.1
67.5°	140.6	160.1	208.3	243.2	259.7
70°	115.0	141.6	188.8	224.8	240.2
72.5°	95.5	121.1	169.3	205.3	219.6
75°	72.9	101.6	148.8	179.6	188.8
77.5°	54.4	84.2	127.3	142.7	143.7
80°	40.0	64.7	96.5	101.6	105.7
82.5°	27.7	45.2	62.6	68.8	70.8
85°	17.4	26.7	35.9	39.0	39.0
87.5°	9.2	10.3	12.3	12.3	12.3
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)