

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: P308748

Luminaire Tested: **22FCZ2-34HE-UNV-L82765-CA125-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: P308748  
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: 22FCZ2-34HE-UNV-L82765-CA125-W2A-U-4500K  
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**

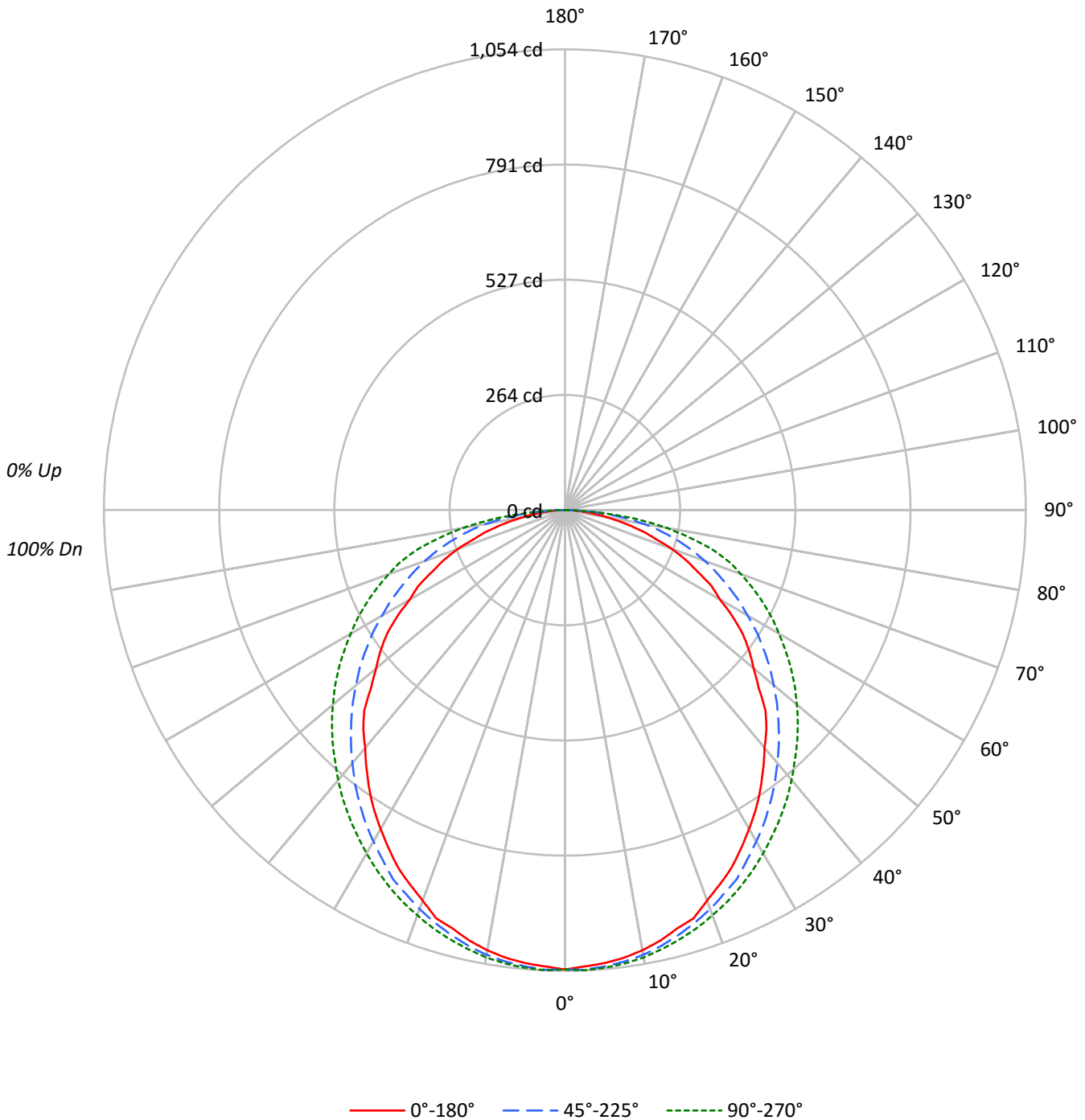
Lumens per Lamp: N/A  
Luminaire Lumens: 3132.0 lumens  
Efficiency: N/A  
Efficacy: 111.5 lumens/watt  
Spacing Criteria (0/90/45): 1.2 / 1.28 / 1.37  
Luminous Opening: Rectangular (W 2' x L: 2' x H: 0')  
CIE Type: Direct  
  
Input Watts (W): 28.1  
Input Voltage (V): NR  
Input Current (A<sub>in</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	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					100			
1	108	103	98	94	105	100	96	92	96	93	90	92	89	87	89	86	84	82					82			
2	98	89	82	76	95	87	80	75	83	78	73	80	75	71	77	73	70	67					67			
3	89	78	69	62	86	76	68	62	73	66	61	70	64	60	68	63	59	56					56			
4	81	69	60	53	79	67	59	52	65	57	51	62	56	51	60	55	50	48					48			
5	74	61	52	45	72	60	51	45	58	50	44	56	49	44	54	48	43	41					41			
6	69	55	46	39	67	54	45	39	52	44	39	51	44	38	49	43	38	36					36			
7	64	50	41	35	62	49	40	34	47	40	34	46	39	34	45	38	34	32					32			
8	59	45	37	31	58	45	36	31	43	36	30	42	35	30	41	35	30	28					28			
9	55	42	33	28	54	41	33	28	40	33	27	39	32	27	38	32	27	25					25			
10	52	38	30	25	51	38	30	25	37	30	25	36	29	25	35	29	25	23					23			

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

	0°	45°	90°
0°	2828	2828	2828
5°	2810	2830	2838
10°	2793	2822	2839
15°	2761	2802	2831
20°	2722	2782	2825
25°	2679	2764	2822
30°	2618	2720	2818
35°	2561	2689	2822
40°	2496	2654	2833
45°	2470	2630	2858
50°	2359	2611	2899
55°	2335	2602	2961
60°	2202	2598	3041
65°	2138	2615	3179
70°	2052	2677	3373
75°	1870	2758	3632
80°	1602	2858	3670
85°	1297	2729	3146



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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	99.4	3.2
10°-20°	283.7	9.1
20°-30°	426.9	13.6
30°-40°	512.4	16.4
40°-50°	535.5	17.1
50°-60°	499.1	15.9
60°-70°	409.3	13.1
70°-80°	275.8	8.8
80°-90°	89.8	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°	810.0	25.9
0°-40°	1322.4	42.2
0°-60°	2357.0	75.3
0°-90°	3132.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	3132.0	100.0

**CANDELA DISTRIBUTION:**

	0°	22.5°	45°	67.5°	90°	Flux
0°	1051	1051	1051	1051	1051	
5°	1040	1043	1048	1049	1051	99
15°	991	997	1006	1015	1016	280
25°	902	908	931	944	950	415
35°	780	790	818	847	859	487
45°	649	654	691	733	751	496
55°	498	507	555	607	631	441
65°	336	351	411	471	499	334
75°	180	199	265	325	349	189
85°	42	60	88	103	102	50
90°	0	0	0	0	0	



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**CANDELA DISTRIBUTION (FULL):**

	0°	22.5°	45°	67.5°	90°
0°	1050.8	1050.8	1050.8	1050.8	1050.8
2.5°	1044.8	1047.8	1052.3	1053.8	1053.8
5°	1040.3	1043.3	1047.8	1049.3	1050.8
7.5°	1032.8	1035.8	1041.8	1044.8	1046.3
10°	1022.3	1025.3	1032.8	1037.3	1038.8
12.5°	1008.8	1011.8	1020.8	1026.8	1028.3
15°	990.9	996.8	1005.8	1014.8	1016.3
17.5°	978.9	977.4	989.4	999.8	1002.8
20°	950.4	957.9	971.4	983.4	986.4
22.5°	926.4	932.4	950.4	963.9	969.9
25°	902.4	908.4	930.9	944.4	950.4
27.5°	872.4	881.4	902.4	921.9	929.4
30°	842.4	851.4	875.4	897.9	906.9
32.5°	812.5	823.0	848.4	872.4	882.9
35°	779.5	790.0	818.5	846.9	858.9
37.5°	745.0	758.5	788.5	820.0	833.5
40°	710.5	724.0	755.5	791.5	806.5
42.5°	682.1	688.0	724.0	763.0	778.0
45°	649.1	653.6	691.0	733.0	751.0
47.5°	601.1	617.6	658.1	704.5	722.5
50°	563.6	581.6	623.6	673.1	692.5
52.5°	532.2	544.1	590.6	640.1	662.6
55°	497.7	506.7	554.6	607.1	631.1
57.5°	455.7	472.2	520.2	574.1	598.1
60°	409.2	430.2	482.7	541.1	565.1
62.5°	379.3	391.2	448.2	506.7	533.7
65°	335.8	350.8	410.7	470.7	499.2
67.5°	299.8	314.8	376.3	436.2	464.7
70°	260.8	275.8	340.3	400.2	428.7
72.5°	215.9	236.8	304.3	364.3	394.2
75°	179.9	199.4	265.3	325.3	349.3
77.5°	139.4	164.9	226.4	275.8	293.8
80°	103.4	128.9	184.4	220.4	236.8
82.5°	70.5	95.9	137.9	164.9	173.9
85°	42.0	60.0	88.4	103.4	101.9
87.5°	19.5	25.5	36.0	36.0	34.5
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)