

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: P308237

Luminaire Tested: **22FCZ2-34HE-UNV-L82765-HRP-CP250-W2A-U-5500K**

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: P308237  
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: 22FCZ2-34HE-UNV-L82765-HRP-CP250-W2A-U-5500K  
Description: 2'X2' TROFFER LED MODULE, HIGH EFFICIENCY RND PERF. LENS, 0.250"  
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**

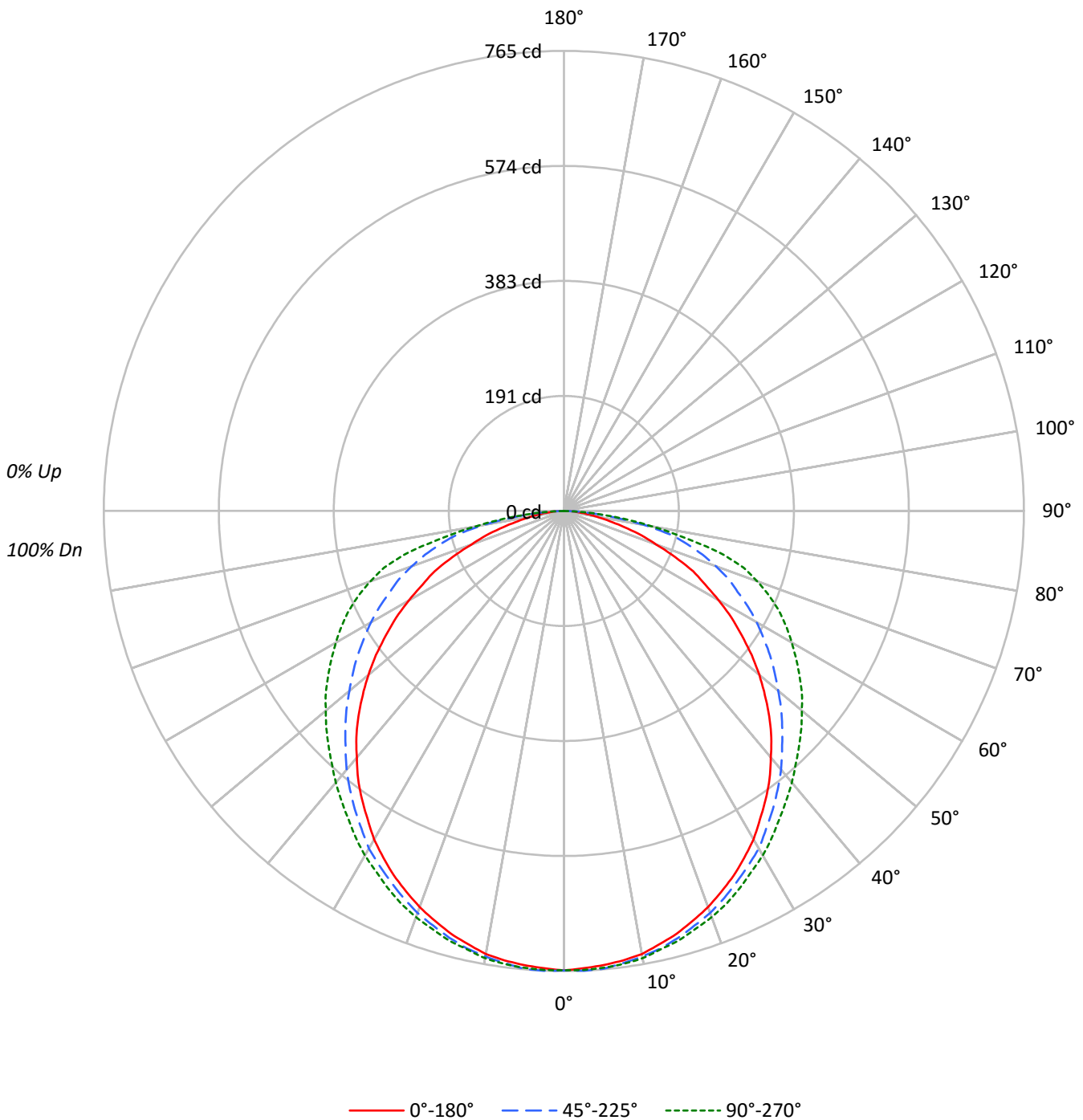
Lumens per Lamp: N/A  
Luminaire Lumens: 2320.0 lumens  
Efficiency: N/A  
Efficacy: 81.7 lumens/watt  
Spacing Criteria (0/90/45): 1.23 / 1.29 / 1.38  
Luminous Opening: Rectangular (W 2' x L: 2' x H: 0')  
CIE Type: Direct  
  
Input Watts (W): 28.4  
Input Voltage (V): NR  
Input Current (Ain): NR  
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°	2056	2056	2056
5°	2048	2063	2060
10°	2044	2055	2064
15°	2026	2047	2059
20°	2007	2037	2058
25°	1986	2021	2055
30°	1960	2014	2055
35°	1923	1990	2053
40°	1881	1974	2072
45°	1838	1955	2105
50°	1777	1948	2163
55°	1696	1964	2245
60°	1599	1993	2355
65°	1510	2031	2516
70°	1290	2119	2695
75°	1080	2206	2800
80°	885	2132	2335
85°	769	1581	1717



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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	72.4	3.1
10°-20°	207.1	8.9
20°-30°	313.9	13.5
30°-40°	379.0	16.3
40°-50°	398.3	17.2
50°-60°	374.7	16.2
60°-70°	312.4	13.5
70°-80°	207.0	8.9
80°-90°	55.2	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°	593.4	25.6
0°-40°	972.4	41.9
0°-60°	1745.4	75.2
0°-90°	2320.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	2320.0	100.0

**CANDELA DISTRIBUTION:**

	0°	22.5°	45°	67.5°	90°	Flux
0°	764	764	764	764	764	
5°	758	760	764	764	762	72
15°	727	730	735	738	739	205
25°	669	673	680	689	692	308
35°	585	591	606	619	625	366
45°	483	490	514	540	553	372
55°	362	378	419	461	479	323
65°	237	258	319	372	395	231
75°	104	145	212	256	269	113
85°	25	38	51	56	56	29
90°	0	0	0	0	0	



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**CANDELA DISTRIBUTION (FULL):**

	0°	22.5°	45°	67.5°	90°
0°	763.9	763.9	763.9	763.9	763.9
2.5°	761.0	762.5	765.4	765.4	763.9
5°	758.1	759.6	763.9	763.9	762.5
7.5°	753.7	755.2	758.1	761.0	759.6
10°	747.9	749.3	752.2	755.2	755.2
12.5°	737.6	739.1	744.9	746.4	746.4
15°	727.4	730.3	734.7	737.6	739.1
17.5°	714.2	717.1	723.0	728.8	728.8
20°	701.0	703.9	711.3	717.1	718.6
22.5°	684.9	689.3	696.6	703.9	706.9
25°	668.8	673.2	680.5	689.3	692.2
27.5°	649.8	654.2	664.4	674.7	676.1
30°	630.8	635.2	648.3	657.1	661.5
32.5°	607.4	613.2	626.4	639.6	643.9
35°	585.4	591.3	605.9	619.1	624.9
37.5°	562.0	567.8	583.9	600.0	607.4
40°	535.6	543.0	562.0	579.5	589.8
42.5°	510.8	518.1	537.1	560.5	570.8
45°	483.0	490.3	513.7	540.0	553.2
47.5°	453.7	462.5	490.3	522.5	535.6
50°	424.4	434.7	465.4	502.0	516.6
52.5°	393.7	406.9	442.0	481.5	499.1
55°	361.5	377.6	418.6	461.0	478.6
57.5°	330.8	345.4	393.7	439.1	458.1
60°	297.1	316.1	370.3	417.1	437.6
62.5°	264.9	285.4	345.4	395.1	417.1
65°	237.1	257.6	319.0	371.7	395.1
67.5°	200.5	228.3	297.1	346.9	370.3
70°	163.9	202.0	269.3	320.5	342.5
72.5°	136.1	172.7	241.5	292.7	313.2
75°	103.9	144.9	212.2	256.1	269.3
77.5°	77.6	120.0	181.5	203.4	204.9
80°	57.1	92.2	137.6	144.9	150.7
82.5°	39.5	64.4	89.3	98.1	101.0
85°	24.9	38.1	51.2	55.6	55.6
87.5°	13.2	14.6	17.6	17.6	17.6
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)