

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: P308554

Luminaire Tested: **22FCZ2-39HE-UNV-L82765-RDP-CP250-W2A-U-6500K**

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: P308554  
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: 22FCZ2-39HE-UNV-L82765-RDP-CP250-W2A-U-6500K  
Description: 2'X2' TROFFER LED MODULE, SMOOTH LENS WITH INSERT, 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: 2303.0 lumens  
Efficiency: N/A  
Efficacy: 68.1 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

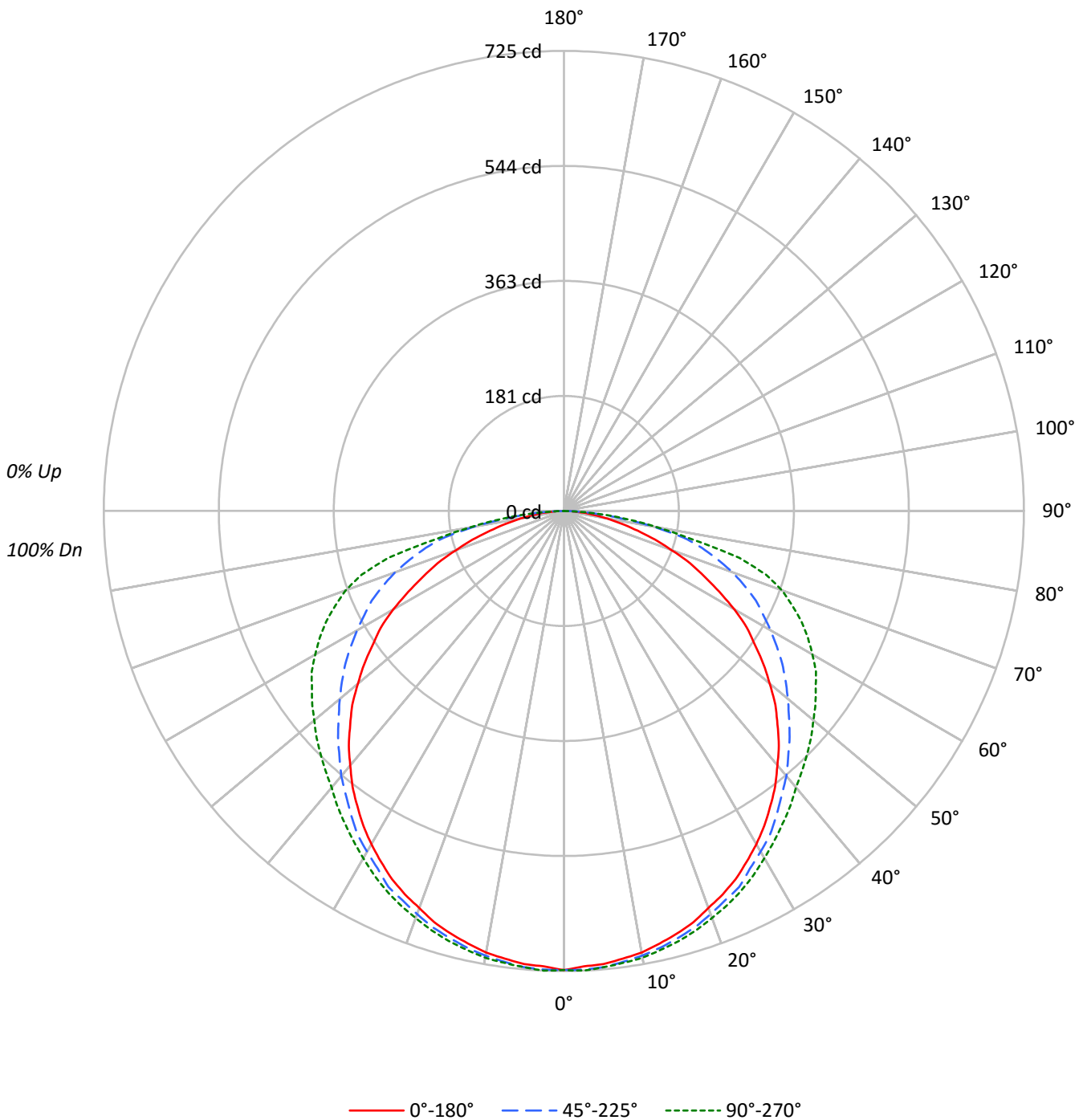
Input Watts (W): 33.8  
Input Voltage (V): NR  
Input Current (Ain): NR  
Voltage Rise (V): NR  
Power Factor: NR  
Total Harmonic Distortion (THDi): NR  
Frequency (hertz): 60  
Stabilization Time: NR  
Operation Time: NR  
Ambient Temperature (°C): NR  
Test Distance: 25 FT



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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°	1947	1947	1947
5°	1936	1949	1949
10°	1931	1944	1953
15°	1921	1940	1954
20°	1907	1936	1955
25°	1901	1942	1962
30°	1885	1927	1963
35°	1864	1920	1976
40°	1839	1916	1999
45°	1812	1915	2063
50°	1773	1929	2149
55°	1725	1971	2273
60°	1668	2024	2434
65°	1554	2125	2632
70°	1426	2226	2879
75°	1251	2342	2977
80°	1077	2232	2337
85°	942	1621	1778



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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	68.4	3.0
10°-20°	196.5	8.5
20°-30°	299.8	13.0
30°-40°	366.0	15.9
40°-50°	391.3	17.0
50°-60°	377.7	16.4
60°-70°	325.2	14.1
70°-80°	220.0	9.6
80°-90°	58.0	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°	564.7	24.5
0°-40°	930.7	40.4
0°-60°	1699.8	73.8
0°-90°	2303.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	2303.0	100.0

**CANDELA DISTRIBUTION:**

	0°	22.5°	45°	67.5°	90°	Flux
0°	723	723	723	723	723	
5°	717	718	722	722	722	68
15°	690	691	696	700	701	195
25°	640	644	654	657	661	295
35°	568	573	584	596	601	355
45°	476	484	503	529	542	367
55°	368	380	420	462	484	329
65°	244	268	334	386	413	243
75°	120	159	225	271	286	129
85°	30	42	52	54	58	34
90°	0	0	0	0	0	



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**CANDELA DISTRIBUTION (FULL):**

	0°	22.5°	45°	67.5°	90°
0°	723.4	723.4	723.4	723.4	723.4
2.5°	718.3	720.0	723.4	723.4	725.1
5°	716.6	718.3	721.7	721.7	721.7
7.5°	711.6	713.2	716.6	718.3	718.3
10°	706.5	708.2	711.6	713.2	714.9
12.5°	698.0	699.7	704.8	708.2	708.2
15°	689.5	691.2	696.3	699.7	701.4
17.5°	679.4	682.8	687.8	691.2	692.9
20°	665.8	669.2	676.0	681.1	682.8
22.5°	654.0	657.3	664.1	669.2	672.6
25°	640.4	643.8	654.0	657.3	660.7
27.5°	623.5	626.8	635.3	642.1	647.2
30°	606.5	609.9	620.1	628.5	631.9
32.5°	587.9	593.0	604.8	611.6	616.7
35°	567.5	572.6	584.5	596.3	601.4
37.5°	547.2	552.3	564.2	579.4	586.2
40°	523.5	530.3	545.5	565.9	569.2
42.5°	501.5	509.9	523.5	547.2	555.7
45°	476.1	484.5	503.2	528.6	542.1
47.5°	452.3	460.8	481.1	511.6	528.6
50°	423.5	435.4	460.8	496.4	513.3
52.5°	396.4	406.6	440.5	479.5	499.8
55°	367.6	379.5	420.2	462.5	484.5
57.5°	342.2	352.4	398.1	445.6	471.0
60°	310.0	323.6	376.1	426.9	452.3
62.5°	276.2	296.5	354.1	406.6	433.7
65°	244.0	267.7	333.8	386.3	413.4
67.5°	215.2	240.6	308.3	364.2	389.7
70°	181.3	213.5	282.9	337.1	365.9
72.5°	150.8	186.4	254.1	308.3	333.8
75°	120.3	159.3	225.3	271.1	286.3
77.5°	93.2	130.5	193.1	206.7	208.4
80°	69.5	103.3	144.0	145.7	150.8
82.5°	47.4	72.8	93.2	101.7	103.3
85°	30.5	42.4	52.5	54.2	57.6
87.5°	13.6	15.2	18.6	16.9	16.9
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)