

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: P308248

Luminaire Tested: **22FCZ2-39HE-UNV-L82765-HRP-CA08-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: P308248  
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: 22FCZ2-39HE-UNV-L82765-HRP-CA08-W2A-U-6500K  
Description: 2'X2' TROFFER LED MODULE, HIGH EFFICIENCY RND PERF. LENS, 0.08" 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**

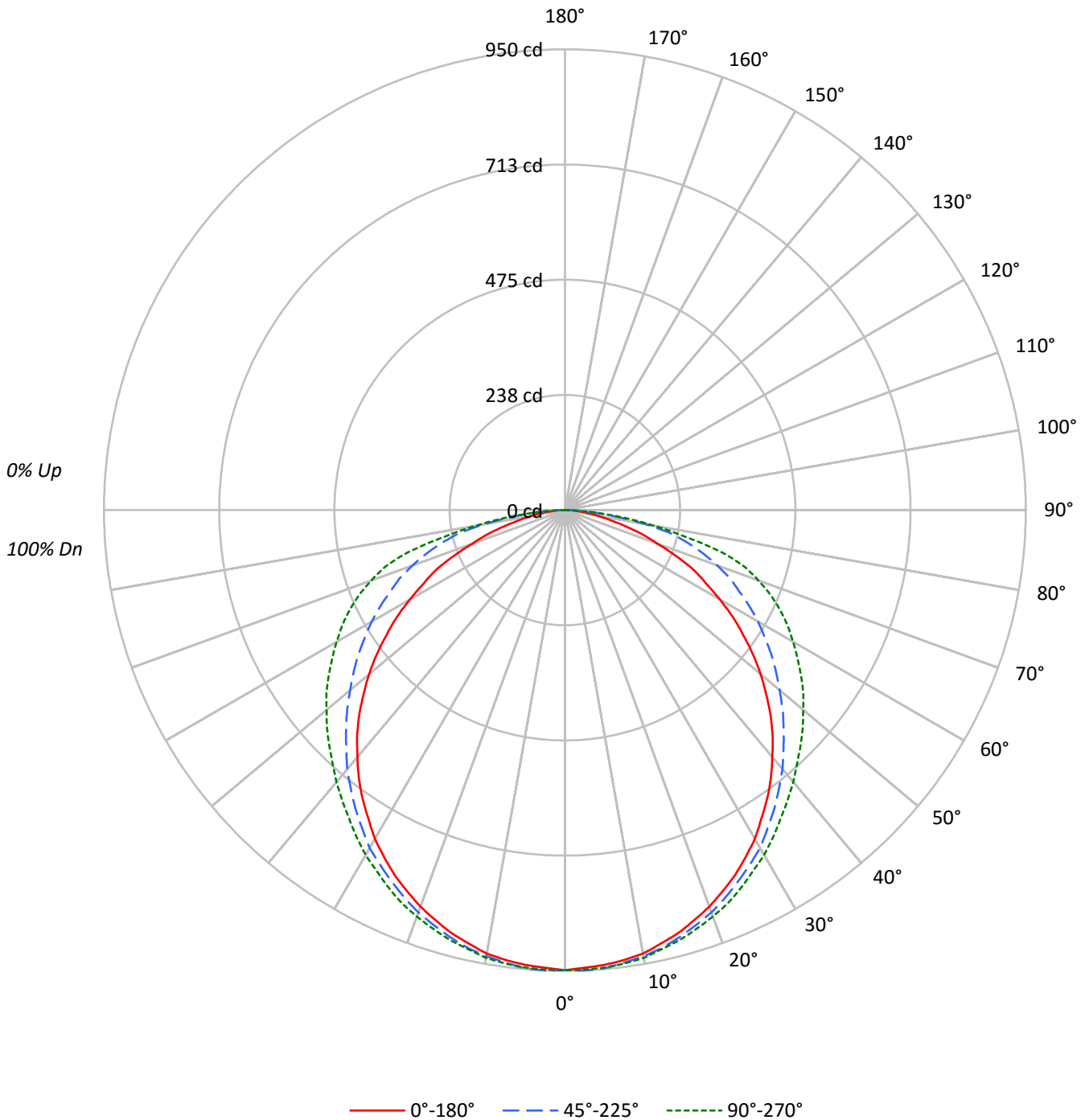
Lumens per Lamp: N/A  
Luminaire Lumens: 2880.0 lumens  
Efficiency: N/A  
Efficacy: 85.2 lumens/watt  
Spacing Criteria (0/90/45): 1.23 / 1.29 / 1.38  
Luminous Opening: Rectangular (W 2' x L: 2' x H: 0')  
CIE Type: Direct  
  
Input Watts (W): 33.8  
Input Voltage (V): NR  
Input Current (Ain): NR  
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	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°	2552	2552	2552
5°	2542	2562	2557
10°	2537	2552	2562
15°	2515	2541	2556
20°	2492	2528	2554
25°	2465	2508	2551
30°	2433	2501	2552
35°	2387	2471	2549
40°	2336	2451	2572
45°	2281	2427	2613
50°	2206	2418	2685
55°	2105	2438	2787
60°	1985	2474	2923
65°	1874	2522	3123
70°	1601	2630	3345
75°	1341	2739	3476
80°	1099	2647	2899
85°	954	1964	2130



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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	89.9	3.1
10°-20°	257.1	8.9
20°-30°	389.6	13.5
30°-40°	470.5	16.3
40°-50°	494.4	17.2
50°-60°	465.2	16.2
60°-70°	387.9	13.5
70°-80°	257.0	8.9
80°-90°	68.5	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°	736.6	25.6
0°-40°	1207.1	41.9
0°-60°	2166.7	75.2
0°-90°	2880.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	2880.0	100.0

**CANDELA DISTRIBUTION:**

	0°	22.5°	45°	67.5°	90°	Flux
0°	948	948	948	948	948	
5°	941	943	948	948	946	89
15°	903	907	912	916	918	255
25°	830	836	845	856	859	382
35°	727	734	752	768	776	454
45°	600	609	638	670	687	462
55°	449	469	520	572	594	401
65°	294	320	396	462	490	286
75°	129	180	263	318	334	140
85°	31	47	64	69	69	36
90°	0	0	0	0	0	



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**CANDELA DISTRIBUTION (FULL):**

	0°	22.5°	45°	67.5°	90°
0°	948.4	948.4	948.4	948.4	948.4
2.5°	944.7	946.5	950.2	950.2	948.4
5°	941.1	942.9	948.4	948.4	946.5
7.5°	935.6	937.5	941.1	944.7	942.9
10°	928.4	930.2	933.8	937.5	937.5
12.5°	915.6	917.5	924.7	926.6	926.6
15°	902.9	906.6	912.0	915.6	917.5
17.5°	886.6	890.2	897.5	904.7	904.7
20°	870.2	873.9	882.9	890.2	892.0
22.5°	850.2	855.7	864.8	873.9	877.5
25°	830.3	835.7	844.8	855.7	859.3
27.5°	806.6	812.1	824.8	837.5	839.3
30°	783.0	788.5	804.8	815.7	821.2
32.5°	754.0	761.2	777.6	793.9	799.4
35°	726.7	734.0	752.1	768.5	775.8
37.5°	697.6	704.9	724.9	744.9	754.0
40°	664.9	674.0	697.6	719.4	732.2
42.5°	634.1	643.1	666.8	695.8	708.5
45°	599.5	608.6	637.7	670.4	686.7
47.5°	563.2	574.1	608.6	648.6	664.9
50°	526.9	539.6	577.7	623.2	641.3
52.5°	488.7	505.1	548.7	597.7	619.5
55°	448.7	468.7	519.6	572.3	594.1
57.5°	410.6	428.8	488.7	545.0	568.6
60°	368.8	392.4	459.6	517.8	543.2
62.5°	328.8	354.3	428.8	490.5	517.8
65°	294.3	319.8	396.1	461.5	490.5
67.5°	248.9	283.4	368.8	430.6	459.6
70°	203.5	250.7	334.3	397.9	425.1
72.5°	169.0	214.4	299.8	363.4	388.8
75°	129.0	179.9	263.4	317.9	334.3
77.5°	96.3	149.0	225.3	252.5	254.3
80°	70.9	114.5	170.8	179.9	187.1
82.5°	49.1	79.9	110.8	121.7	125.4
85°	30.9	47.2	63.6	69.0	69.0
87.5°	16.4	18.2	21.8	21.8	21.8
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)