

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: P308263

Luminaire Tested: **22FCZ2-39HE-UNV-L82765-HRP-CP125-W2A-U-5000K**

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: P308263
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-CP125-W2A-U-5000K
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: 2772.0 lumens
Efficiency: N/A
Efficacy: 83.5 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

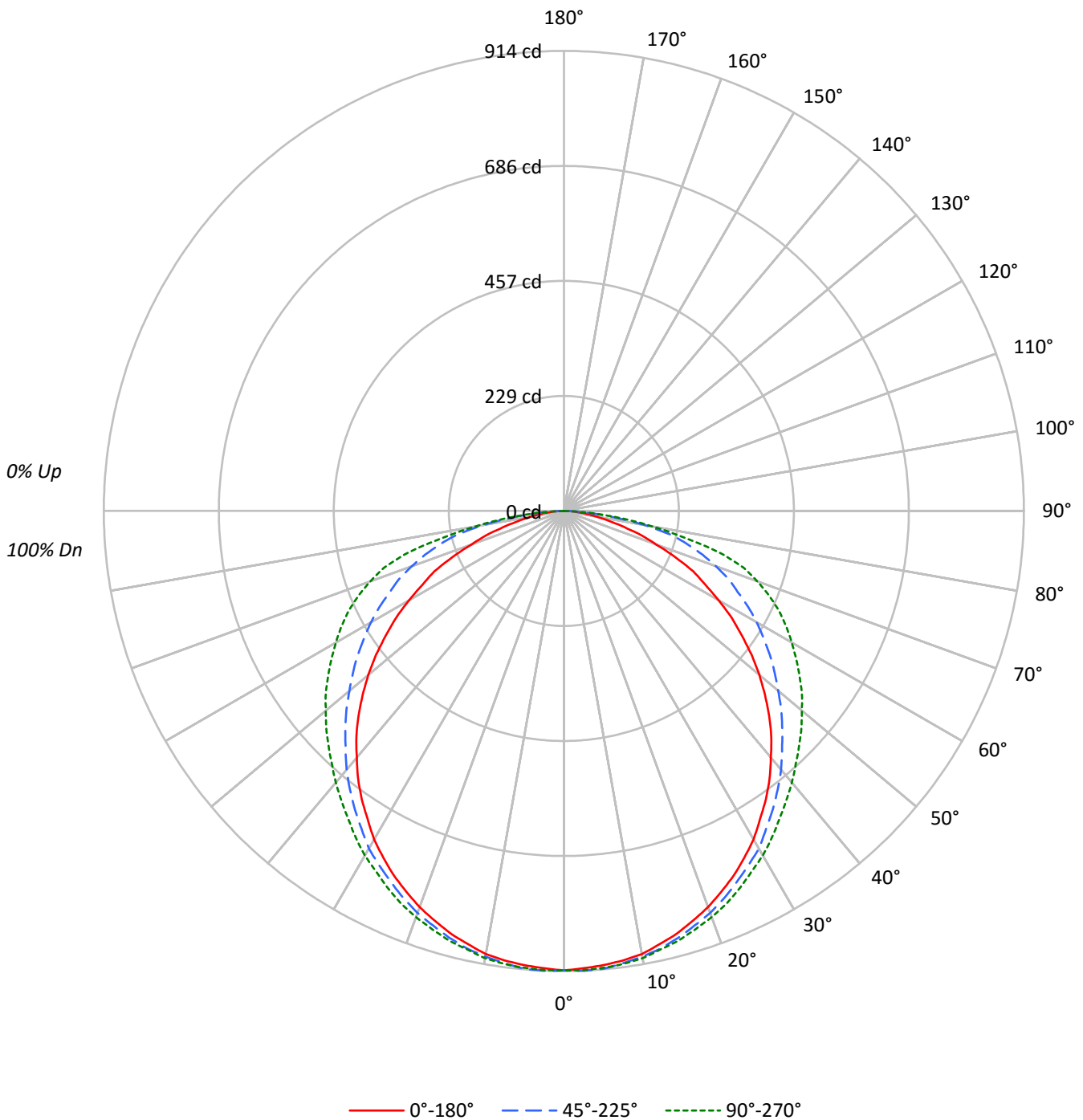
Input Watts (W): 33.2
Input Voltage (V): NR
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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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°	2456	2456	2456
5°	2447	2466	2461
10°	2442	2456	2466
15°	2421	2445	2460
20°	2399	2434	2459
25°	2373	2414	2456
30°	2342	2407	2456
35°	2298	2378	2453
40°	2248	2359	2475
45°	2196	2336	2516
50°	2123	2328	2584
55°	2026	2346	2683
60°	1911	2381	2814
65°	1804	2427	3006
70°	1541	2531	3220
75°	1291	2637	3345
80°	1057	2548	2791
85°	917	1890	2050



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	86.5	3.1
10°-20°	247.5	8.9
20°-30°	375.0	13.5
30°-40°	452.9	16.3
40°-50°	475.8	17.2
50°-60°	447.7	16.2
60°-70°	373.3	13.5
70°-80°	247.3	8.9
80°-90°	65.9	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°	709.0	25.6
0°-40°	1161.9	41.9
0°-60°	2085.4	75.2
0°-90°	2772.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	2772.0	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	913	913	913	913	913	
5°	906	908	913	913	911	86
15°	869	873	878	881	883	245
25°	799	804	813	824	827	368
35°	700	706	724	740	747	437
45°	577	586	614	645	661	444
55°	432	451	500	551	572	386
65°	283	308	381	444	472	276
75°	124	173	254	306	322	135
85°	30	46	61	66	66	34
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	912.8	912.8	912.8	912.8	912.8
2.5°	909.3	911.0	914.5	914.5	912.8
5°	905.8	907.5	912.8	912.8	911.0
7.5°	900.5	902.3	905.8	909.3	907.5
10°	893.6	895.3	898.8	902.3	902.3
12.5°	881.3	883.1	890.1	891.8	891.8
15°	869.1	872.6	877.8	881.3	883.1
17.5°	853.3	856.8	863.8	870.8	870.8
20°	837.6	841.1	849.8	856.8	858.6
22.5°	818.4	823.6	832.4	841.1	844.6
25°	799.1	804.4	813.1	823.6	827.1
27.5°	776.4	781.6	793.9	806.1	807.9
30°	753.7	758.9	774.6	785.1	790.4
32.5°	725.7	732.7	748.4	764.2	769.4
35°	699.5	706.4	723.9	739.7	746.7
37.5°	671.5	678.5	697.7	716.9	725.7
40°	640.0	648.7	671.5	692.5	704.7
42.5°	610.3	619.0	641.7	669.7	682.0
45°	577.1	585.8	613.8	645.2	661.0
47.5°	542.1	552.6	585.8	624.3	640.0
50°	507.1	519.3	556.1	599.8	617.3
52.5°	470.4	486.1	528.1	575.3	596.3
55°	431.9	451.1	500.1	550.8	571.8
57.5°	395.2	412.7	470.4	524.6	547.3
60°	355.0	377.7	442.4	498.4	522.8
62.5°	316.5	341.0	412.7	472.1	498.4
65°	283.3	307.8	381.2	444.2	472.1
67.5°	239.6	272.8	355.0	414.4	442.4
70°	195.8	241.3	321.7	383.0	409.2
72.5°	162.6	206.3	288.5	349.7	374.2
75°	124.2	173.1	253.6	306.0	321.7
77.5°	92.7	143.4	216.8	243.1	244.8
80°	68.2	110.2	164.4	173.1	180.1
82.5°	47.2	76.9	106.7	117.2	120.7
85°	29.7	45.5	61.2	66.4	66.4
87.5°	15.7	17.5	21.0	21.0	21.0
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)