

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: P308252

Luminaire Tested: **22FCZ2-39HE-UNV-L82765-HRP-CA125-W2A-U-4000K**

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: P308252
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-CA125-W2A-U-4000K
Description: 2'X2' TROFFER LED MODULE, HIGH EFFICIENCY RND PERF. 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: 2741.0 lumens
Efficiency: N/A
Efficacy: 83.6 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

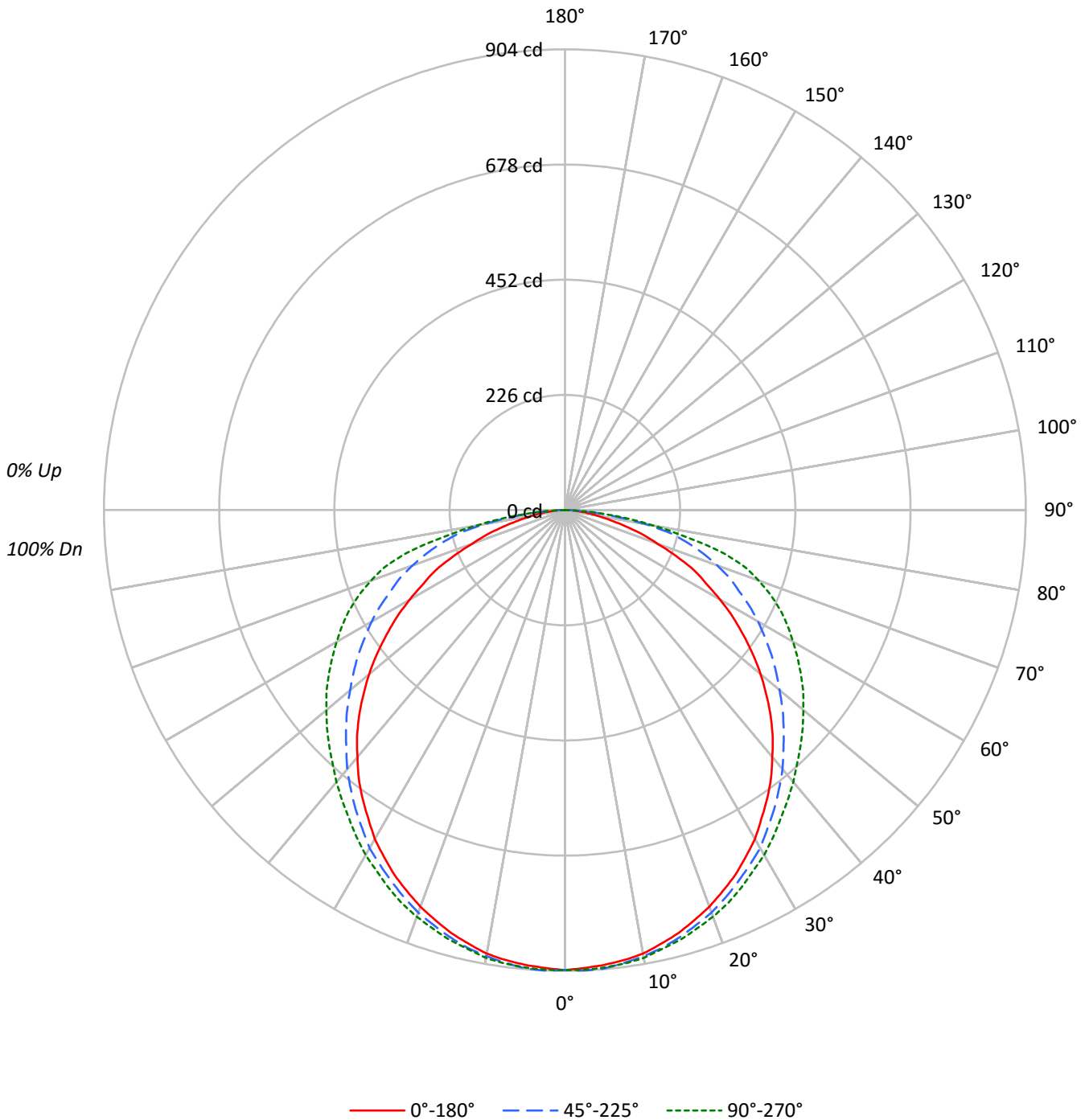
Input Watts (W): 32.8
Input Voltage (V): NR
Input Current (A_{in}): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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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°	2429	2429	2429
5°	2420	2438	2434
10°	2414	2428	2438
15°	2394	2418	2433
20°	2372	2406	2431
25°	2346	2387	2428
30°	2316	2380	2428
35°	2272	2351	2425
40°	2223	2333	2448
45°	2171	2310	2487
50°	2099	2302	2555
55°	2004	2320	2653
60°	1889	2355	2782
65°	1784	2400	2973
70°	1524	2504	3183
75°	1277	2607	3308
80°	1044	2518	2760
85°	908	1868	2029



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	85.5	3.1
10°-20°	244.7	8.9
20°-30°	370.8	13.5
30°-40°	447.8	16.3
40°-50°	470.5	17.2
50°-60°	442.7	16.2
60°-70°	369.1	13.5
70°-80°	244.6	8.9
80°-90°	65.2	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°	701.1	25.6
0°-40°	1148.9	41.9
0°-60°	2062.1	75.2
0°-90°	2741.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	2741.0	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	903	903	903	903	903	
5°	896	897	903	903	901	85
15°	859	863	868	872	873	242
25°	790	795	804	814	818	364
35°	692	698	716	731	738	432
45°	571	579	607	638	654	439
55°	427	446	494	545	565	382
65°	280	304	377	439	467	273
75°	123	171	251	303	318	133
85°	29	45	60	66	66	34
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	902.6	902.6	902.6	902.6	902.6
2.5°	899.1	900.9	904.3	904.3	902.6
5°	895.7	897.4	902.6	902.6	900.9
7.5°	890.5	892.2	895.7	899.1	897.4
10°	883.6	885.3	888.7	892.2	892.2
12.5°	871.5	873.2	880.1	881.8	881.8
15°	859.4	862.8	868.0	871.5	873.2
17.5°	843.8	847.2	854.2	861.1	861.1
20°	828.2	831.7	840.3	847.2	849.0
22.5°	809.2	814.4	823.0	831.7	835.1
25°	790.2	795.4	804.0	814.4	817.9
27.5°	767.7	772.9	785.0	797.1	798.8
30°	745.2	750.4	766.0	776.4	781.5
32.5°	717.6	724.5	740.0	755.6	760.8
35°	691.6	698.5	715.8	731.4	738.3
37.5°	664.0	670.9	689.9	708.9	717.6
40°	632.8	641.5	664.0	684.7	696.8
42.5°	603.4	612.1	634.6	662.2	674.3
45°	570.6	579.2	606.9	638.0	653.6
47.5°	536.0	546.4	579.2	617.3	632.8
50°	501.4	513.5	549.8	593.1	610.4
52.5°	465.1	480.7	522.2	568.9	589.6
55°	427.1	446.1	494.5	544.7	565.4
57.5°	390.8	408.1	465.1	518.7	541.2
60°	351.0	373.5	437.5	492.8	517.0
62.5°	313.0	337.2	408.1	466.9	492.8
65°	280.1	304.3	376.9	439.2	466.9
67.5°	236.9	269.7	351.0	409.8	437.5
70°	193.7	238.6	318.2	378.7	404.6
72.5°	160.8	204.0	285.3	345.8	370.0
75°	122.8	171.2	250.7	302.6	318.2
77.5°	91.6	141.8	214.4	240.3	242.1
80°	67.4	108.9	162.5	171.2	178.1
82.5°	46.7	76.1	105.5	115.8	119.3
85°	29.4	45.0	60.5	65.7	65.7
87.5°	15.6	17.3	20.7	20.7	20.7
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)