

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: P308799

Luminaire Tested: **22FCZ2-39HE-UNV-L82765-CP125-W2A-U-3000K**

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: P308799
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G3-1805-783-33)
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-CP125-W2A-U-3000K
Description: 2'X2' TROFFER LED MODULE, RIBBED 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: 3272.0 lumens
Efficiency: N/A
Efficacy: 101.6 lumens/watt
Spacing Criteria (0/90/45): 1.2 / 1.28 / 1.37
Luminous Opening: Rectangular (W 2' x L: 2' x H: 0')
CIE Type: Direct

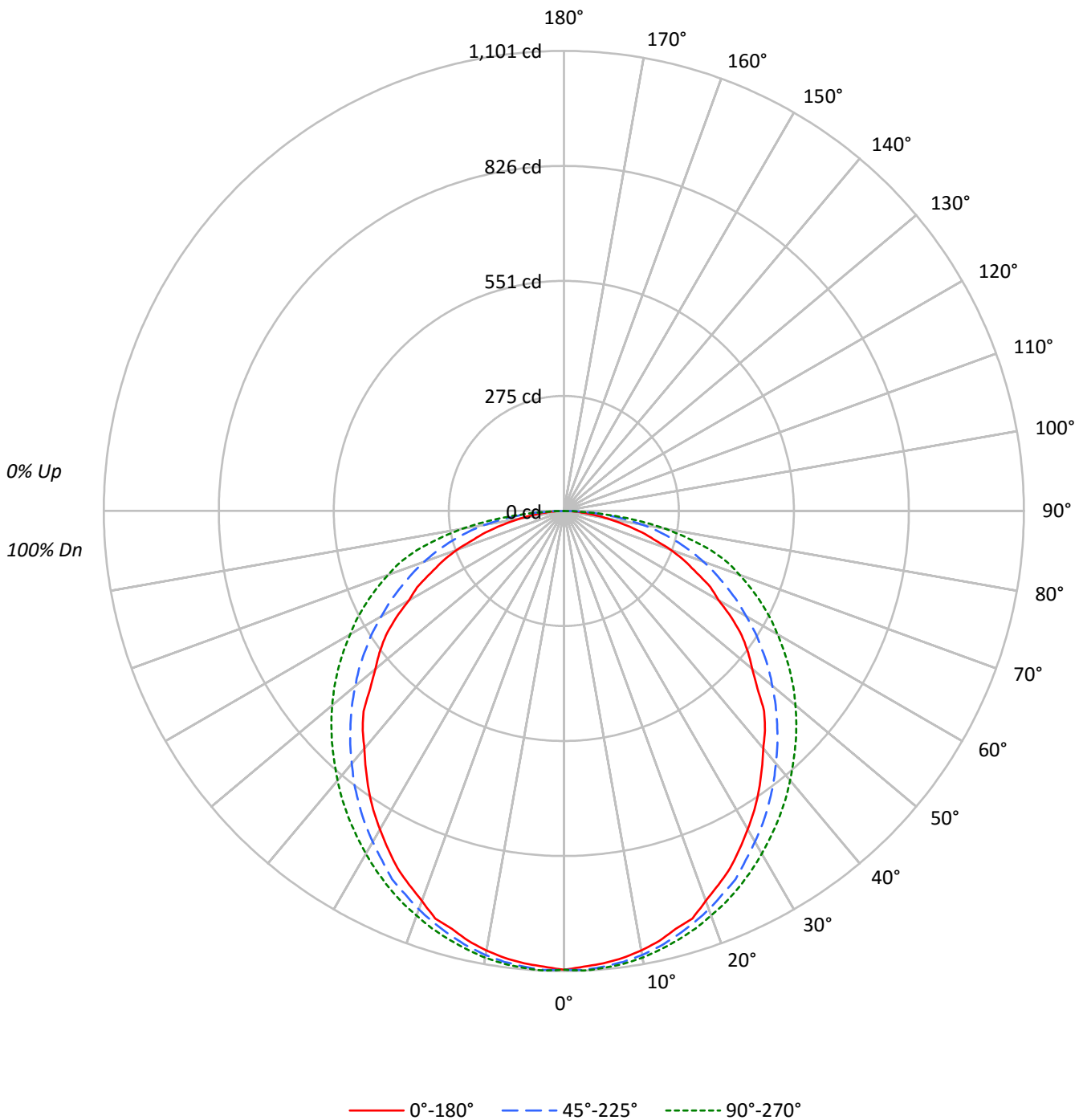
Input Watts (W): 32.2
Input Voltage (V): NR
Input Current (A_{in}): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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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	100	96	92	96	93	90	92	89	87	89	86	84	82
2	98	89	82	76	95	87	80	75	83	78	73	80	75	71	77	73	70	67
3	89	78	69	62	86	76	68	62	73	66	61	70	64	60	68	63	59	56
4	81	69	60	53	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	51	44	38	49	43	38	36
7	64	50	41	35	62	49	40	34	47	40	34	46	39	34	45	38	34	32
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	28	40	33	27	39	32	27	38	32	27	25
10	52	38	30	25	51	38	30	25	37	30	25	36	29	25	35	29	25	23

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	2954	2954	2954
5°	2936	2957	2965
10°	2918	2948	2966
15°	2884	2927	2958
20°	2843	2906	2951
25°	2799	2888	2948
30°	2735	2842	2944
35°	2675	2809	2948
40°	2608	2773	2960
45°	2581	2747	2986
50°	2465	2727	3029
55°	2439	2718	3093
60°	2301	2714	3178
65°	2234	2732	3321
70°	2144	2797	3524
75°	1954	2882	3794
80°	1675	2985	3834
85°	1352	2853	3288



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	103.9	3.2
10°-20°	296.3	9.1
20°-30°	446.0	13.6
30°-40°	535.3	16.4
40°-50°	559.5	17.1
50°-60°	521.4	15.9
60°-70°	427.6	13.1
70°-80°	288.1	8.8
80°-90°	93.9	2.9
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°	846.2	25.9
0°-40°	1381.5	42.2
0°-60°	2462.3	75.3
0°-90°	3272.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	3272.0	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	1098	1098	1098	1098	1098	
5°	1087	1090	1095	1096	1098	103
15°	1035	1041	1051	1060	1062	293
25°	943	949	972	987	993	433
35°	814	825	855	885	897	509
45°	678	683	722	766	785	518
55°	520	529	579	634	659	461
65°	351	366	429	492	522	349
75°	188	208	277	340	365	198
85°	44	63	92	108	106	52
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	1097.8	1097.8	1097.8	1097.8	1097.8
2.5°	1091.5	1094.7	1099.3	1100.9	1100.9
5°	1086.8	1090.0	1094.7	1096.2	1097.8
7.5°	1079.0	1082.1	1088.4	1091.5	1093.1
10°	1068.0	1071.2	1079.0	1083.7	1085.3
12.5°	1053.9	1057.1	1066.5	1072.7	1074.3
15°	1035.1	1041.4	1050.8	1060.2	1061.8
17.5°	1022.6	1021.0	1033.6	1044.5	1047.7
20°	992.9	1000.7	1014.8	1027.3	1030.4
22.5°	967.8	974.1	992.9	1007.0	1013.2
25°	942.7	949.0	972.5	986.6	992.9
27.5°	911.4	920.8	942.7	963.1	970.9
30°	880.1	889.5	914.6	938.0	947.4
32.5°	848.8	859.7	886.4	911.4	922.4
35°	814.3	825.3	855.0	884.8	897.3
37.5°	778.3	792.4	823.7	856.6	870.7
40°	742.3	756.4	789.3	826.9	842.5
42.5°	712.5	718.8	756.4	797.1	812.8
45°	678.1	682.8	721.9	765.8	784.6
47.5°	628.0	645.2	687.5	736.0	754.8
50°	588.8	607.6	651.5	703.1	723.5
52.5°	555.9	568.5	617.0	668.7	692.2
55°	519.9	529.3	579.4	634.2	659.3
57.5°	476.1	493.3	543.4	599.8	624.8
60°	427.5	449.4	504.3	565.3	590.4
62.5°	396.2	408.7	468.2	529.3	557.5
65°	350.8	366.4	429.1	491.7	521.5
67.5°	313.2	328.9	393.1	455.7	485.5
70°	272.5	288.1	355.5	418.1	447.9
72.5°	225.5	247.4	317.9	380.5	411.9
75°	187.9	208.3	277.2	339.8	364.9
77.5°	145.6	172.3	236.5	288.1	306.9
80°	108.1	134.7	192.6	230.2	247.4
82.5°	73.6	100.2	144.1	172.3	181.7
85°	43.8	62.6	92.4	108.1	106.5
87.5°	20.4	26.6	37.6	37.6	36.0
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)