

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: P308803

Luminaire Tested: **22FCZ2-39HE-UNV-L82765-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: P308803
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-5000K
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: 3569.0 lumens
Efficiency: N/A
Efficacy: 107.5 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

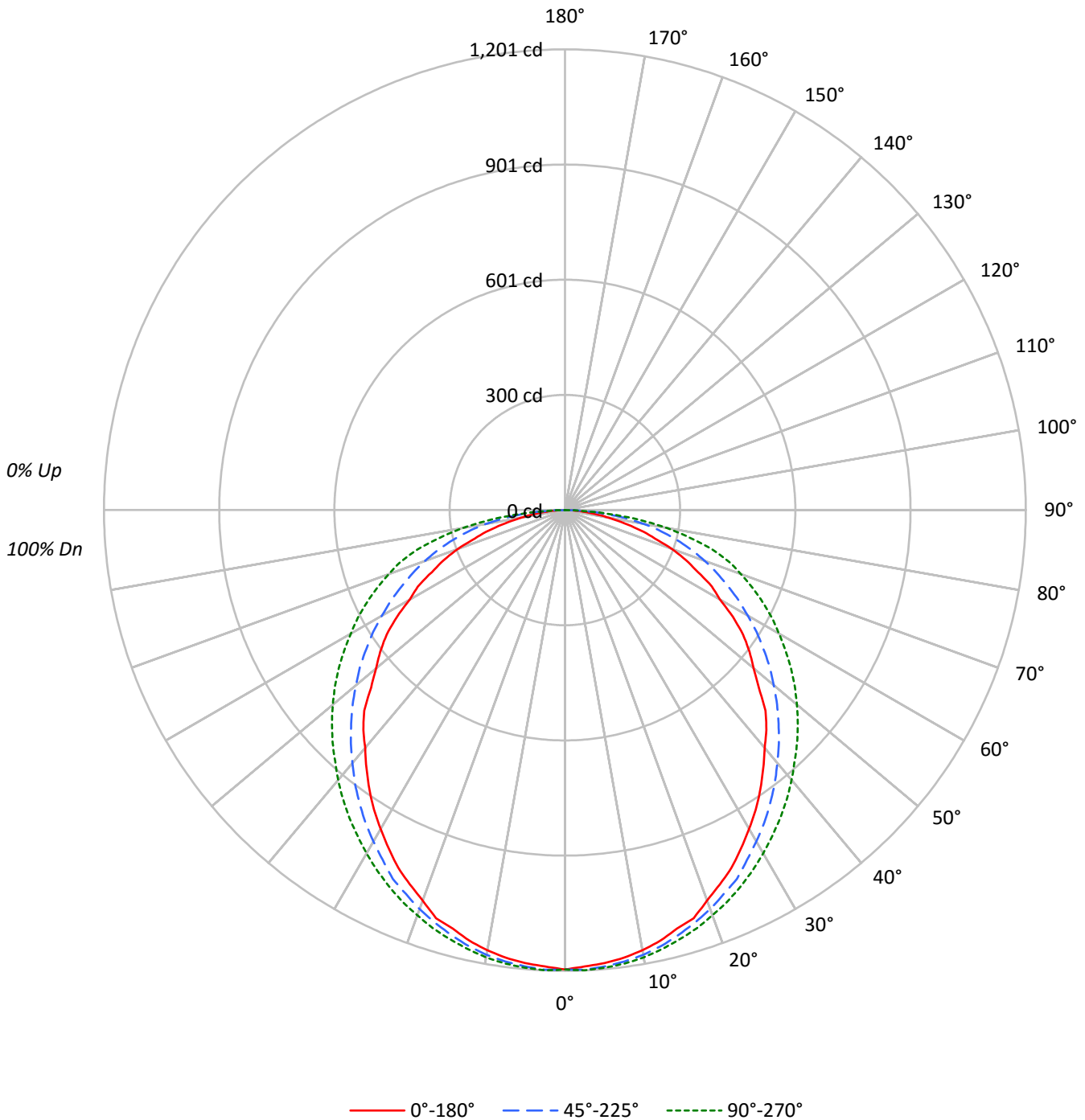
Input Watts (W): 33.2
Input Voltage (V): NR
Input Current (A_{in}): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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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°	3222	3222	3222
5°	3202	3225	3234
10°	3183	3216	3235
15°	3146	3193	3226
20°	3101	3170	3219
25°	3053	3150	3216
30°	2983	3100	3211
35°	2918	3064	3215
40°	2844	3024	3228
45°	2815	2997	3257
50°	2689	2975	3304
55°	2661	2965	3374
60°	2510	2960	3466
65°	2436	2980	3622
70°	2338	3051	3843
75°	2131	3143	4138
80°	1827	3256	4183
85°	1476	3112	3588



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	113.3	3.2
10°-20°	323.2	9.1
20°-30°	486.5	13.6
30°-40°	583.9	16.4
40°-50°	610.3	17.1
50°-60°	568.7	15.9
60°-70°	466.4	13.1
70°-80°	314.3	8.8
80°-90°	102.4	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°	923.0	25.9
0°-40°	1506.9	42.2
0°-60°	2685.9	75.3
0°-90°	3569.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	3569.0	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	1197	1197	1197	1197	1197	
5°	1186	1189	1194	1196	1197	113
15°	1129	1136	1146	1156	1158	319
25°	1028	1035	1061	1076	1083	473
35°	888	900	933	965	979	555
45°	740	745	788	835	856	565
55°	567	577	632	692	719	503
65°	383	400	468	536	569	381
75°	205	227	302	371	398	216
85°	48	68	101	118	116	57
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	1197.4	1197.4	1197.4	1197.4	1197.4
2.5°	1190.6	1194.0	1199.1	1200.8	1200.8
5°	1185.5	1188.9	1194.0	1195.7	1197.4
7.5°	1176.9	1180.3	1187.2	1190.6	1192.3
10°	1165.0	1168.4	1176.9	1182.1	1183.8
12.5°	1149.6	1153.0	1163.3	1170.1	1171.8
15°	1129.1	1135.9	1146.2	1156.4	1158.1
17.5°	1115.4	1113.7	1127.4	1139.4	1142.8
20°	1083.0	1091.5	1106.9	1120.6	1124.0
22.5°	1055.7	1062.5	1083.0	1098.4	1105.2
25°	1028.3	1035.2	1060.8	1076.1	1083.0
27.5°	994.2	1004.4	1028.3	1050.5	1059.1
30°	960.0	970.2	997.6	1023.2	1033.4
32.5°	925.8	937.8	966.8	994.2	1006.1
35°	888.3	900.2	932.7	965.1	978.8
37.5°	849.0	864.3	898.5	934.4	949.7
40°	809.7	825.0	860.9	901.9	919.0
42.5°	777.2	784.1	825.0	869.5	886.5
45°	739.6	744.8	787.5	835.3	855.8
47.5°	685.0	703.8	749.9	802.8	823.3
50°	642.3	662.8	710.6	767.0	789.2
52.5°	606.4	620.1	673.0	729.4	755.0
55°	567.1	577.4	632.0	691.8	719.1
57.5°	519.3	538.1	592.7	654.2	681.6
60°	466.3	490.2	550.0	616.7	644.0
62.5°	432.2	445.8	510.7	577.4	608.1
65°	382.6	399.7	468.0	536.4	568.8
67.5°	341.6	358.7	428.8	497.1	529.5
70°	297.2	314.3	387.8	456.1	488.5
72.5°	246.0	269.9	346.8	415.1	449.2
75°	205.0	227.2	302.3	370.7	398.0
77.5°	158.9	187.9	257.9	314.3	334.8
80°	117.9	146.9	210.1	251.1	269.9
82.5°	80.3	109.3	157.2	187.9	198.1
85°	47.8	68.3	100.8	117.9	116.2
87.5°	22.2	29.0	41.0	41.0	39.3
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)