

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: P308750

Luminaire Tested: **22FCZ2-34HE-UNV-L82765-CA125-W2A-U-5500K**

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: P308750
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: 22FCZ2-34HE-UNV-L82765-CA125-W2A-U-5500K
Description: 2'X2' TROFFER LED MODULE, RIBBED 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: 3207.0 lumens
Efficiency: N/A
Efficacy: 112.9 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

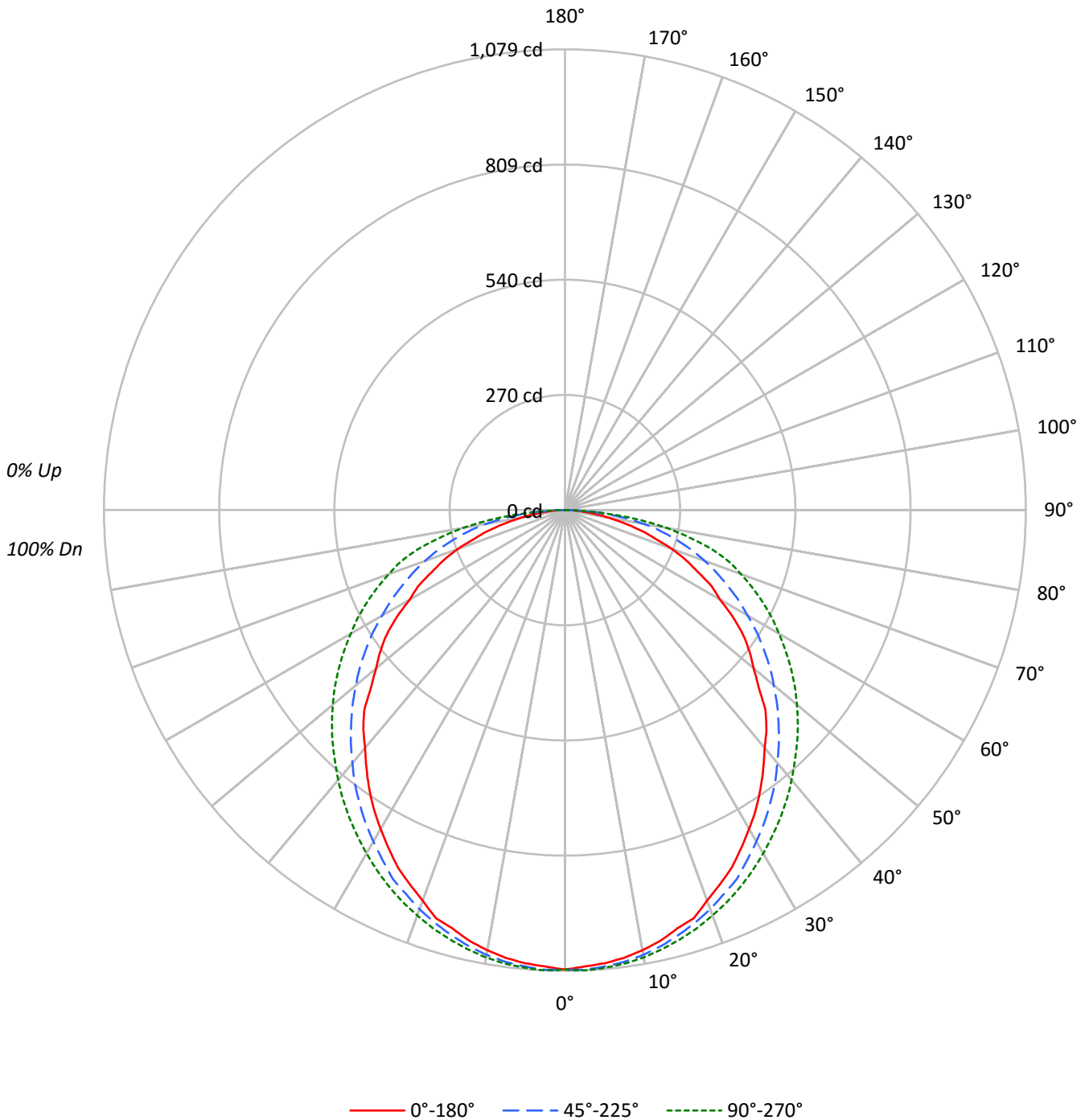
Input Watts (W): 28.4
Input Voltage (V): NR
Input Current (A_{in}): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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Luminous Intensity Polar Plot





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CATALOG NUMBER: 22FC22-34HE-UNV-L82765-CA125-W2A-U-5500K

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°	2895	2895	2895
5°	2877	2898	2907
10°	2860	2890	2907
15°	2827	2869	2899
20°	2787	2848	2892
25°	2744	2830	2889
30°	2680	2785	2885
35°	2622	2753	2889
40°	2556	2718	2901
45°	2529	2693	2927
50°	2416	2673	2969
55°	2391	2664	3032
60°	2255	2660	3115
65°	2189	2678	3254
70°	2102	2741	3454
75°	1915	2825	3718
80°	1641	2926	3758
85°	1328	2797	3223



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	101.8	3.2
10°-20°	290.4	9.1
20°-30°	437.1	13.6
30°-40°	524.7	16.4
40°-50°	548.4	17.1
50°-60°	511.0	15.9
60°-70°	419.1	13.1
70°-80°	282.4	8.8
80°-90°	92.0	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°	829.4	25.9
0°-40°	1354.1	42.2
0°-60°	2413.4	75.3
0°-90°	3207.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	3207.0	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	1076	1076	1076	1076	1076	
5°	1065	1068	1073	1074	1076	101
15°	1015	1021	1030	1039	1041	287
25°	924	930	953	967	973	425
35°	798	809	838	867	880	499
45°	665	669	708	751	769	508
55°	510	519	568	622	646	452
65°	344	359	421	482	511	342
75°	184	204	272	333	358	194
85°	43	61	91	106	104	51
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	1076.0	1076.0	1076.0	1076.0	1076.0
2.5°	1069.8	1072.9	1077.5	1079.0	1079.0
5°	1065.2	1068.3	1072.9	1074.4	1076.0
7.5°	1057.6	1060.6	1066.8	1069.8	1071.4
10°	1046.8	1049.9	1057.6	1062.2	1063.7
12.5°	1033.0	1036.1	1045.3	1051.4	1053.0
15°	1014.6	1020.7	1029.9	1039.1	1040.7
17.5°	1002.3	1000.8	1013.0	1023.8	1026.9
20°	973.1	980.8	994.6	1006.9	1010.0
22.5°	948.6	954.7	973.1	987.0	993.1
25°	924.0	930.2	953.2	967.0	973.1
27.5°	893.3	902.5	924.0	944.0	951.6
30°	862.6	871.8	896.4	919.4	928.6
32.5°	831.9	842.7	868.8	893.3	904.1
35°	798.2	808.9	838.1	867.2	879.5
37.5°	762.9	776.7	807.4	839.6	853.4
40°	727.5	741.4	773.6	810.4	825.8
42.5°	698.4	704.5	741.4	781.3	796.6
45°	664.6	669.2	707.6	750.6	769.0
47.5°	615.5	632.4	673.8	721.4	739.8
50°	577.1	595.5	638.5	689.2	709.1
52.5°	544.9	557.2	604.8	655.4	678.4
55°	509.6	518.8	567.9	621.6	646.2
57.5°	466.6	483.5	532.6	587.9	612.4
60°	419.0	440.5	494.2	554.1	578.7
62.5°	388.3	400.6	458.9	518.8	546.4
65°	343.8	359.2	420.6	482.0	511.1
67.5°	307.0	322.3	385.3	446.7	475.8
70°	267.1	282.4	348.4	409.8	439.0
72.5°	221.0	242.5	311.6	373.0	403.7
75°	184.2	204.1	271.7	333.1	357.6
77.5°	142.7	168.8	231.8	282.4	300.8
80°	105.9	132.0	188.8	225.6	242.5
82.5°	72.1	98.2	141.2	168.8	178.1
85°	43.0	61.4	90.6	105.9	104.4
87.5°	20.0	26.1	36.8	36.8	35.3
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)