

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: P308309

Luminaire Tested: **22FCZ2-44HE-UNV-L82765-HRP-CP125-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: P308309
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: 22FCZ2-44HE-UNV-L82765-HRP-CP125-W2A-U-5500K
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: 3141.0 lumens
Efficiency: N/A
Efficacy: 82.2 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

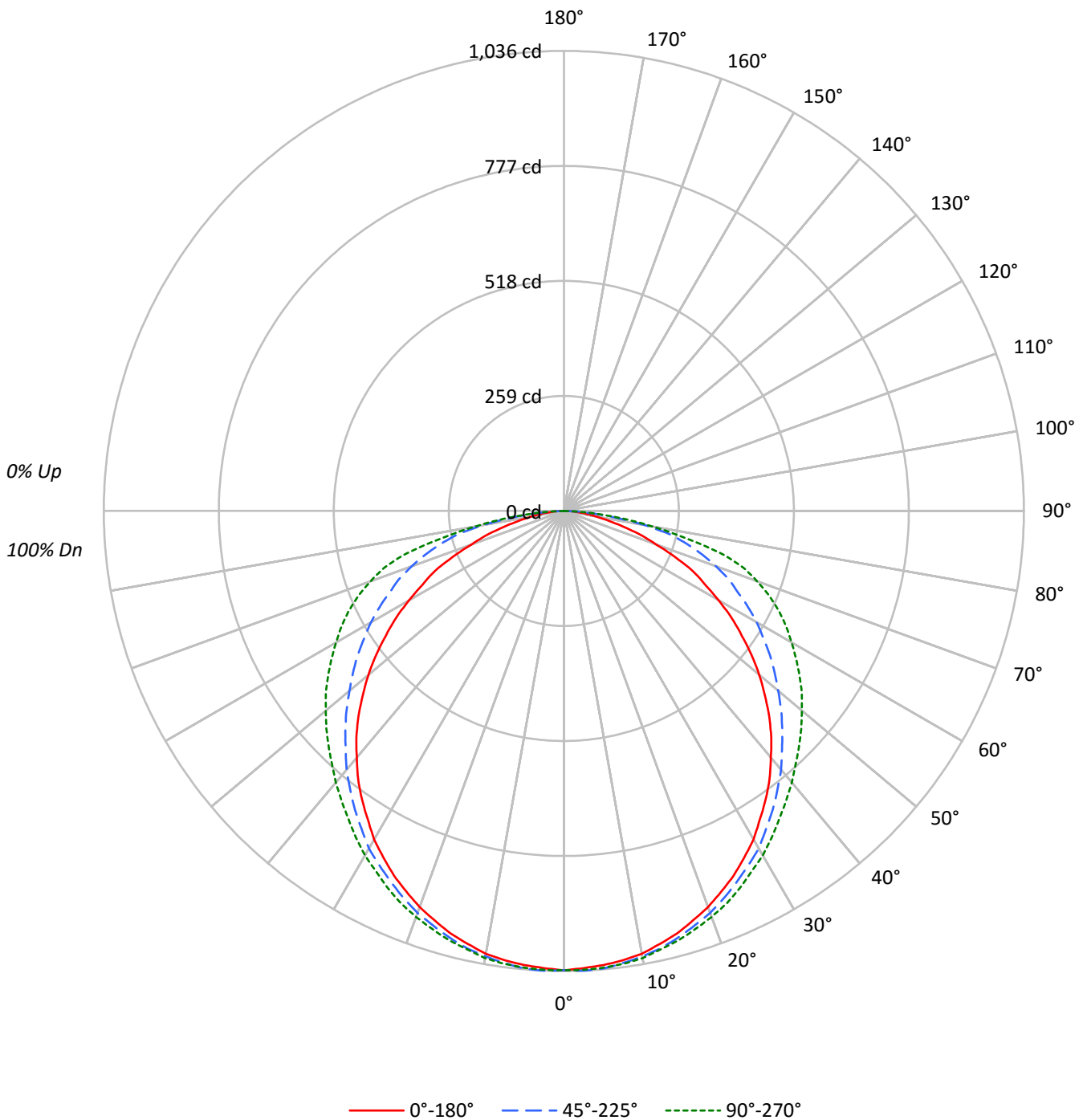
Input Watts (W): 38.2
Input Voltage (V): NR
Input Current (A_{in}): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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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	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°	2783	2783	2783
5°	2773	2794	2789
10°	2767	2783	2794
15°	2744	2771	2788
20°	2718	2758	2786
25°	2689	2736	2783
30°	2654	2728	2783
35°	2604	2695	2780
40°	2547	2673	2805
45°	2488	2647	2850
50°	2406	2638	2928
55°	2296	2659	3040
60°	2165	2698	3188
65°	2044	2750	3407
70°	1746	2869	3648
75°	1463	2987	3791
80°	1198	2887	3163
85°	1041	2140	2325



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	98.0	3.1
10°-20°	280.4	8.9
20°-30°	425.0	13.5
30°-40°	513.1	16.3
40°-50°	539.2	17.2
50°-60°	507.3	16.2
60°-70°	423.0	13.5
70°-80°	280.3	8.9
80°-90°	74.7	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°	803.4	25.6
0°-40°	1316.5	41.9
0°-60°	2363.0	75.2
0°-90°	3141.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	3141.0	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	1034	1034	1034	1034	1034	
5°	1026	1028	1034	1034	1032	98
15°	985	989	995	999	1001	278
25°	906	911	921	933	937	417
35°	793	800	820	838	846	496
45°	654	664	696	731	749	504
55°	489	511	567	624	648	438
65°	321	349	432	503	535	312
75°	141	196	287	347	365	153
85°	34	52	69	75	75	39
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	1034.3	1034.3	1034.3	1034.3	1034.3
2.5°	1030.3	1032.3	1036.3	1036.3	1034.3
5°	1026.4	1028.4	1034.3	1034.3	1032.3
7.5°	1020.4	1022.4	1026.4	1030.3	1028.4
10°	1012.5	1014.5	1018.4	1022.4	1022.4
12.5°	998.6	1000.6	1008.5	1010.5	1010.5
15°	984.8	988.7	994.7	998.6	1000.6
17.5°	966.9	970.9	978.8	986.7	986.7
20°	949.1	953.1	963.0	970.9	972.9
22.5°	927.3	933.2	943.2	953.1	957.0
25°	905.5	911.4	921.4	933.2	937.2
27.5°	879.7	885.7	899.6	913.4	915.4
30°	854.0	859.9	877.8	889.7	895.6
32.5°	822.3	830.2	848.0	865.9	871.8
35°	792.6	800.5	820.3	838.1	846.1
37.5°	760.9	768.8	790.6	812.4	822.3
40°	725.2	735.1	760.9	784.6	798.5
42.5°	691.5	701.4	727.2	758.9	772.7
45°	653.9	663.8	695.5	731.1	749.0
47.5°	614.2	626.1	663.8	707.4	725.2
50°	574.6	588.5	630.1	679.6	699.4
52.5°	533.0	550.8	598.4	651.9	675.7
55°	489.4	511.2	566.7	624.1	647.9
57.5°	447.8	467.6	533.0	594.4	620.2
60°	402.2	428.0	501.3	564.7	592.4
62.5°	358.6	386.4	467.6	535.0	564.7
65°	321.0	348.7	431.9	503.3	535.0
67.5°	271.5	309.1	402.2	469.6	501.3
70°	221.9	273.4	364.6	433.9	463.6
72.5°	184.3	233.8	326.9	396.3	424.0
75°	140.7	196.2	287.3	346.7	364.6
77.5°	105.0	162.5	245.7	275.4	277.4
80°	77.3	124.8	186.3	196.2	204.1
82.5°	53.5	87.2	120.9	132.8	136.7
85°	33.7	51.5	69.3	75.3	75.3
87.5°	17.8	19.8	23.8	23.8	23.8
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)