

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: P308307

Luminaire Tested: **22FCZ2-44HE-UNV-L82765-HRP-CP125-W2A-U-4500K**

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: P308307
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-4500K
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: 3068.0 lumens
Efficiency: N/A
Efficacy: 80.9 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

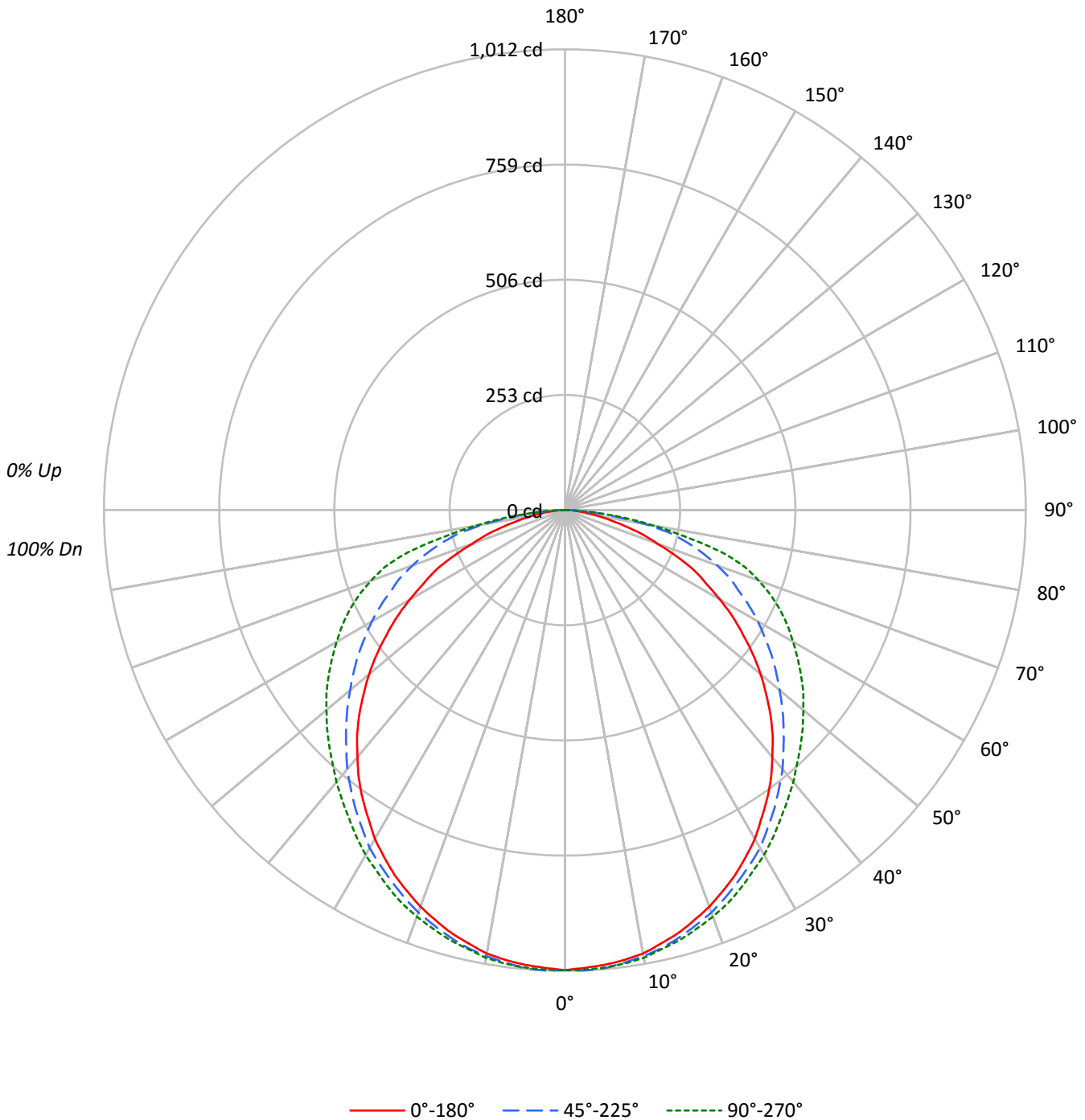
Input Watts (W): 37.9
Input Voltage (V): NR
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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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°	2719	2719	2719
5°	2708	2729	2724
10°	2702	2718	2729
15°	2680	2707	2723
20°	2655	2694	2721
25°	2626	2672	2718
30°	2592	2664	2718
35°	2543	2632	2715
40°	2488	2611	2740
45°	2431	2585	2784
50°	2350	2576	2860
55°	2243	2597	2969
60°	2115	2635	3115
65°	1996	2686	3327
70°	1706	2802	3563
75°	1429	2917	3702
80°	1170	2819	3088
85°	1016	2090	2269



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	95.7	3.1
10°-20°	273.9	8.9
20°-30°	415.1	13.5
30°-40°	501.2	16.3
40°-50°	526.6	17.2
50°-60°	495.5	16.2
60°-70°	413.2	13.5
70°-80°	273.8	8.9
80°-90°	73.0	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°	784.7	25.6
0°-40°	1285.9	41.9
0°-60°	2308.1	75.2
0°-90°	3068.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	3068.0	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	1010	1010	1010	1010	1010	
5°	1002	1004	1010	1010	1008	95
15°	962	966	972	975	977	271
25°	884	890	900	912	915	407
35°	774	782	801	819	826	484
45°	639	648	679	714	732	492
55°	478	499	554	610	633	428
65°	314	341	422	492	522	305
75°	137	192	281	339	356	149
85°	33	50	68	74	74	38
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	1010.3	1010.3	1010.3	1010.3	1010.3
2.5°	1006.4	1008.3	1012.2	1012.2	1010.3
5°	1002.5	1004.5	1010.3	1010.3	1008.3
7.5°	996.7	998.6	1002.5	1006.4	1004.5
10°	989.0	990.9	994.8	998.6	998.6
12.5°	975.4	977.4	985.1	987.0	987.0
15°	961.9	965.7	971.6	975.4	977.4
17.5°	944.5	948.3	956.1	963.8	963.8
20°	927.0	930.9	940.6	948.3	950.3
22.5°	905.7	911.6	921.2	930.9	934.8
25°	884.5	890.3	899.9	911.6	915.4
27.5°	859.3	865.1	878.7	892.2	894.1
30°	834.1	839.9	857.4	869.0	874.8
32.5°	803.2	810.9	828.3	845.8	851.6
35°	774.1	781.9	801.2	818.7	826.4
37.5°	743.2	750.9	772.2	793.5	803.2
40°	708.3	718.0	743.2	766.4	780.0
42.5°	675.4	685.1	710.3	741.2	754.8
45°	638.7	648.3	679.3	714.1	731.6
47.5°	600.0	611.6	648.3	690.9	708.3
50°	561.3	574.8	615.4	663.8	683.2
52.5°	520.6	538.0	584.5	636.7	660.0
55°	478.0	499.3	553.5	609.6	632.9
57.5°	437.4	456.7	520.6	580.6	605.8
60°	392.9	418.0	489.6	551.6	578.7
62.5°	350.3	377.4	456.7	522.5	551.6
65°	313.5	340.6	421.9	491.6	522.5
67.5°	265.1	301.9	392.9	458.7	489.6
70°	216.8	267.1	356.1	423.8	452.9
72.5°	180.0	228.4	319.3	387.1	414.2
75°	137.4	191.6	280.6	338.7	356.1
77.5°	102.6	158.7	240.0	269.0	271.0
80°	75.5	121.9	181.9	191.6	199.3
82.5°	52.3	85.2	118.1	129.7	133.5
85°	32.9	50.3	67.7	73.5	73.5
87.5°	17.4	19.4	23.2	23.2	23.2
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)