

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: P308845

Luminaire Tested: **22FCZ2-44HE-UNV-L82765-CP125-W2A-U-3500K**

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: P308845
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: 22FCZ2-44HE-UNV-L82765-CP125-W2A-U-3500K
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: 3797.0 lumens
Efficiency: N/A
Efficacy: 101.5 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

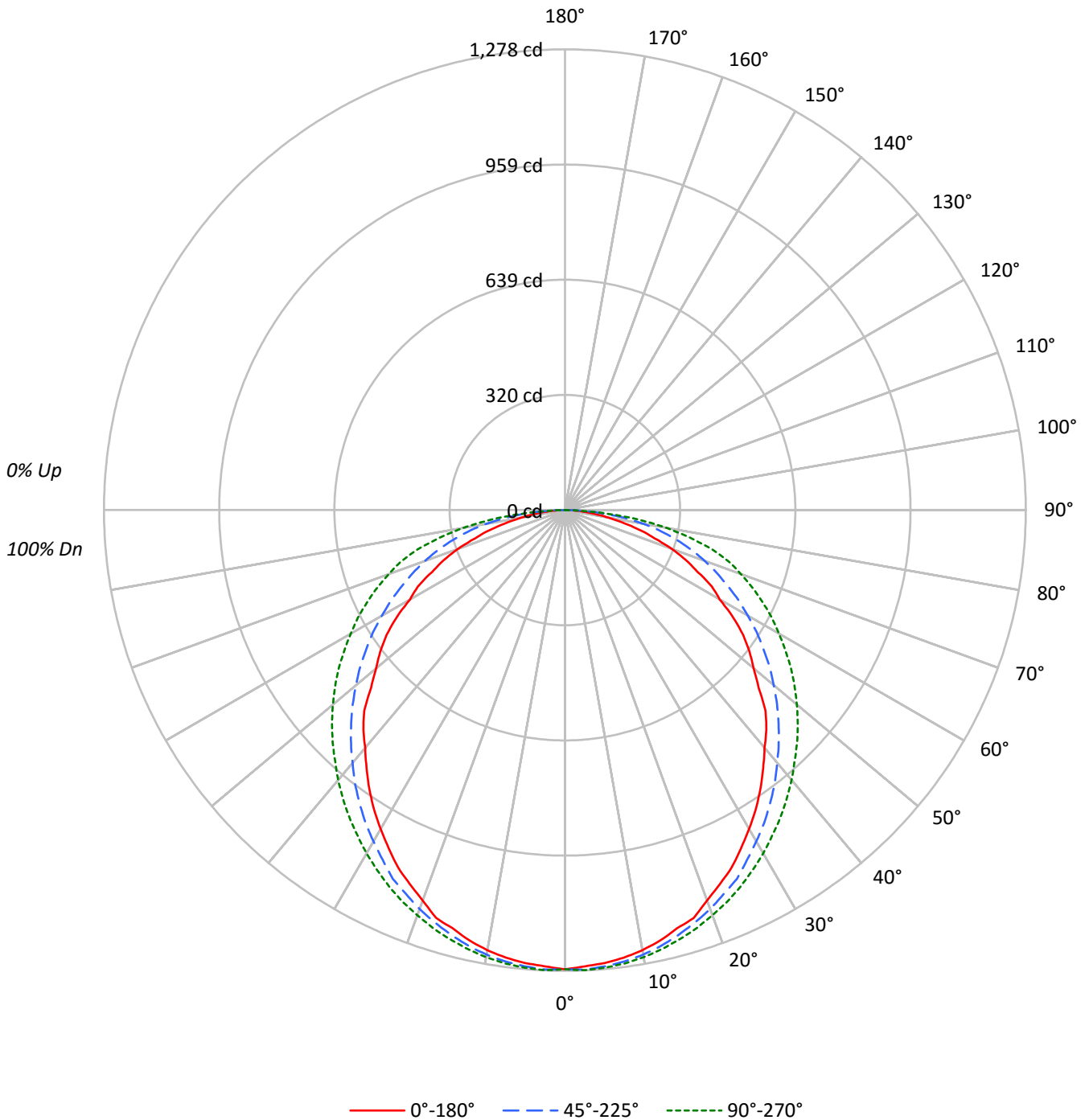
Input Watts (W): 37.4
Input Voltage (V): NR
Input Current (A_{in}): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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Luminous Intensity Polar Plot





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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°	3428	3428	3428
5°	3407	3431	3441
10°	3387	3421	3441
15°	3346	3397	3433
20°	3300	3372	3424
25°	3248	3351	3421
30°	3173	3298	3416
35°	3104	3259	3421
40°	3026	3217	3434
45°	2995	3188	3465
50°	2861	3165	3515
55°	2830	3155	3590
60°	2670	3150	3687
65°	2592	3170	3854
70°	2488	3246	4089
75°	2268	3345	4402
80°	1943	3464	4449
85°	1572	3310	3816



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	120.5	3.2
10°-20°	343.9	9.1
20°-30°	517.6	13.6
30°-40°	621.2	16.4
40°-50°	649.2	17.1
50°-60°	605.0	15.9
60°-70°	496.2	13.1
70°-80°	334.4	8.8
80°-90°	108.9	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°	982.0	25.9
0°-40°	1603.2	42.2
0°-60°	2857.4	75.3
0°-90°	3797.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	3797.0	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	1274	1274	1274	1274	1274	
5°	1261	1265	1270	1272	1274	120
15°	1201	1208	1219	1230	1232	339
25°	1094	1101	1128	1145	1152	503
35°	945	958	992	1027	1041	591
45°	787	792	838	889	910	601
55°	603	614	672	736	765	535
65°	407	425	498	571	605	405
75°	218	242	322	394	423	229
85°	51	73	107	125	124	61
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	1273.9	1273.9	1273.9	1273.9	1273.9
2.5°	1266.7	1270.3	1275.7	1277.6	1277.6
5°	1261.2	1264.8	1270.3	1272.1	1273.9
7.5°	1252.1	1255.8	1263.0	1266.7	1268.5
10°	1239.4	1243.0	1252.1	1257.6	1259.4
12.5°	1223.0	1226.7	1237.6	1244.8	1246.7
15°	1201.2	1208.5	1219.4	1230.3	1232.1
17.5°	1186.7	1184.9	1199.4	1212.1	1215.8
20°	1152.2	1161.3	1177.6	1192.1	1195.8
22.5°	1123.1	1130.4	1152.2	1168.5	1175.8
25°	1094.0	1101.3	1128.5	1144.9	1152.2
27.5°	1057.7	1068.6	1094.0	1117.6	1126.7
30°	1021.3	1032.2	1061.3	1088.6	1099.5
32.5°	985.0	997.7	1028.6	1057.7	1070.4
35°	945.0	957.7	992.2	1026.8	1041.3
37.5°	903.2	919.6	955.9	994.1	1010.4
40°	861.4	877.8	915.9	959.5	977.7
42.5°	826.9	834.1	877.8	925.0	943.2
45°	786.9	792.3	837.8	888.7	910.5
47.5°	728.7	748.7	797.8	854.1	875.9
50°	683.3	705.1	756.0	816.0	839.6
52.5°	645.1	659.7	716.0	776.0	803.2
55°	603.3	614.2	672.4	736.0	765.1
57.5°	552.5	572.4	630.6	696.0	725.1
60°	496.1	521.6	585.2	656.0	685.1
62.5°	459.8	474.3	543.4	614.2	647.0
65°	407.1	425.2	497.9	570.6	605.2
67.5°	363.5	381.6	456.1	528.8	563.4
70°	316.2	334.4	412.5	485.2	519.7
72.5°	261.7	287.1	368.9	441.6	477.9
75°	218.1	241.7	321.7	394.4	423.4
77.5°	169.0	199.9	274.4	334.4	356.2
80°	125.4	156.3	223.5	267.1	287.1
82.5°	85.4	116.3	167.2	199.9	210.8
85°	50.9	72.7	107.2	125.4	123.6
87.5°	23.6	30.9	43.6	43.6	41.8
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)