

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: P308847

Luminaire Tested: **22FCZ2-44HE-UNV-L82765-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: P308847
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-4500K
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: 3950.0 lumens
Efficiency: N/A
Efficacy: 104.2 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

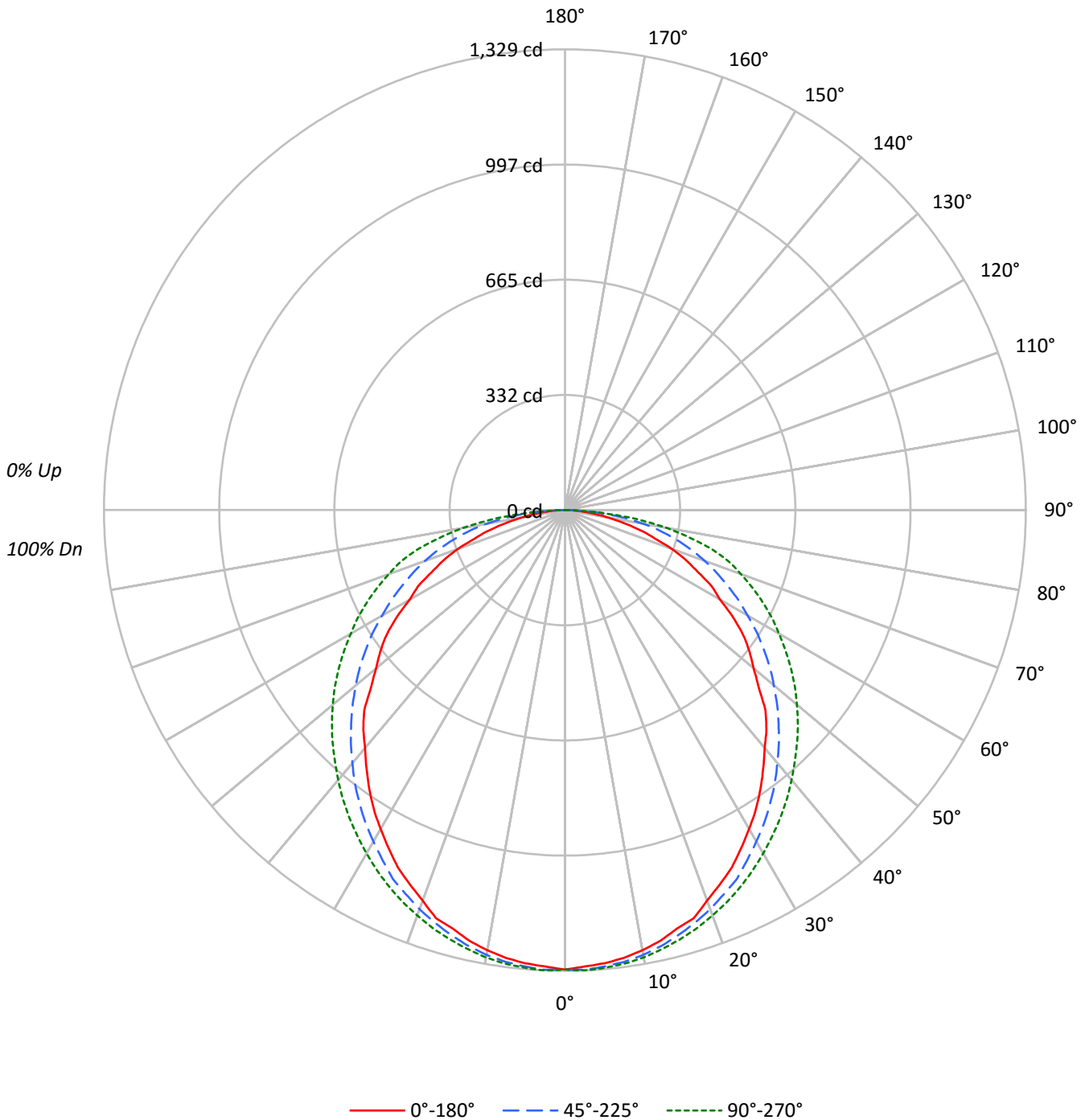
Input Watts (W): 37.9
Input Voltage (V): NR
Input Current (A_{in}): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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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°	3566	3566	3566
5°	3544	3570	3580
10°	3523	3559	3580
15°	3481	3534	3571
20°	3432	3508	3562
25°	3379	3486	3559
30°	3301	3431	3554
35°	3230	3391	3559
40°	3148	3347	3573
45°	3115	3317	3605
50°	2976	3293	3656
55°	2945	3282	3734
60°	2778	3276	3836
65°	2697	3298	4008
70°	2589	3376	4254
75°	2359	3479	4580
80°	2021	3603	4629
85°	1633	3443	3971



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	125.4	3.2
10°-20°	357.7	9.1
20°-30°	538.4	13.6
30°-40°	646.2	16.4
40°-50°	675.4	17.1
50°-60°	629.4	15.9
60°-70°	516.2	13.1
70°-80°	347.9	8.8
80°-90°	113.3	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°	1021.5	25.9
0°-40°	1667.7	42.2
0°-60°	2972.6	75.3
0°-90°	3950.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	3950.0	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	1325	1325	1325	1325	1325	
5°	1312	1316	1322	1323	1325	125
15°	1250	1257	1268	1280	1282	353
25°	1138	1146	1174	1191	1199	523
35°	983	996	1032	1068	1083	615
45°	819	824	872	924	947	625
55°	628	639	700	766	796	556
65°	424	442	518	594	630	421
75°	227	251	335	410	440	238
85°	53	76	112	130	129	63
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	1325.3	1325.3	1325.3	1325.3	1325.3
2.5°	1317.7	1321.5	1327.1	1329.0	1329.0
5°	1312.0	1315.8	1321.5	1323.4	1325.3
7.5°	1302.6	1306.4	1313.9	1317.7	1319.6
10°	1289.3	1293.1	1302.6	1308.2	1310.1
12.5°	1272.3	1276.1	1287.4	1295.0	1296.9
15°	1249.6	1257.2	1268.5	1279.9	1281.8
17.5°	1234.5	1232.6	1247.7	1261.0	1264.8
20°	1198.6	1208.0	1225.1	1240.2	1244.0
22.5°	1168.3	1175.9	1198.6	1215.6	1223.2
25°	1138.1	1145.7	1174.0	1191.0	1198.6
27.5°	1100.3	1111.6	1138.1	1162.7	1172.1
30°	1062.5	1073.8	1104.1	1132.4	1143.8
32.5°	1024.7	1037.9	1070.0	1100.3	1113.5
35°	983.1	996.3	1032.2	1068.1	1083.3
37.5°	939.6	956.6	994.4	1034.1	1051.1
40°	896.1	913.1	952.8	998.2	1017.1
42.5°	860.2	867.8	913.1	962.3	981.2
45°	818.6	824.3	871.5	924.5	947.2
47.5°	758.1	778.9	829.9	888.5	911.2
50°	710.8	733.5	786.5	848.8	873.4
52.5°	671.1	686.3	744.9	807.3	835.6
55°	627.7	639.0	699.5	765.7	795.9
57.5°	574.7	595.5	656.0	724.1	754.3
60°	516.1	542.6	608.7	682.5	712.7
62.5°	478.3	493.4	565.3	639.0	673.0
65°	423.5	442.4	518.0	593.6	629.5
67.5°	378.1	397.0	474.5	550.1	586.1
70°	329.0	347.9	429.1	504.8	540.7
72.5°	272.2	298.7	383.8	459.4	497.2
75°	226.9	251.4	334.6	410.2	440.5
77.5°	175.8	208.0	285.5	347.9	370.5
80°	130.4	162.6	232.5	277.9	298.7
82.5°	88.9	121.0	173.9	208.0	219.3
85°	52.9	75.6	111.5	130.4	128.6
87.5°	24.6	32.1	45.4	45.4	43.5
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)