

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: P308844

Luminaire Tested: **22FCZ2-44HE-UNV-L82765-CP125-W2A-U-3000K**

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: P308844
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-3000K
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: 3671.0 lumens
Efficiency: N/A
Efficacy: 99.5 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

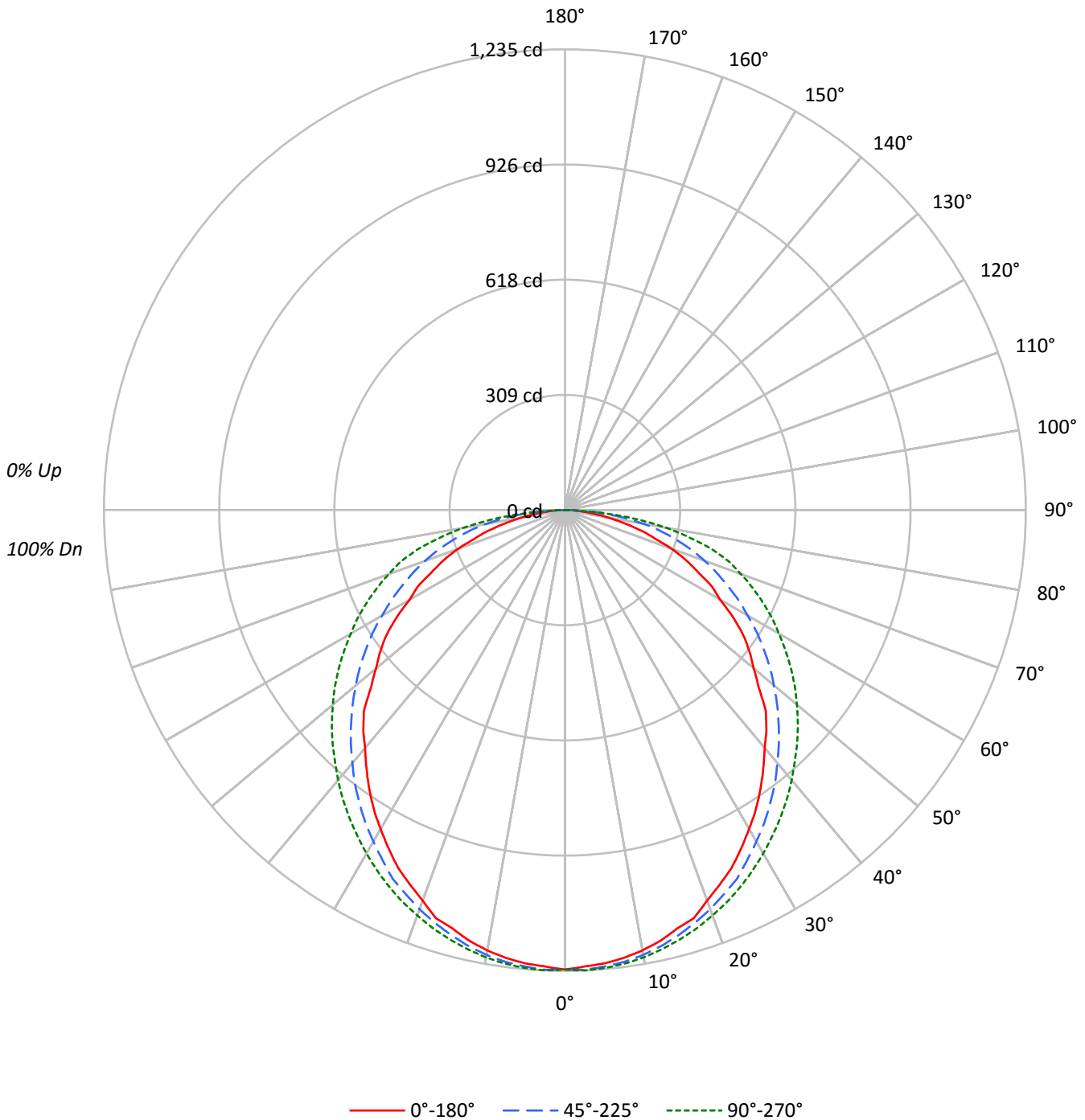
Input Watts (W): 36.9
Input Voltage (V): NR
Input Current (A_{in}): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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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°	3314	3314	3314
5°	3294	3317	3327
10°	3274	3308	3327
15°	3236	3284	3319
20°	3190	3260	3311
25°	3140	3240	3307
30°	3068	3188	3303
35°	3001	3151	3307
40°	2925	3111	3321
45°	2895	3083	3350
50°	2766	3060	3398
55°	2737	3050	3470
60°	2582	3045	3565
65°	2506	3065	3726
70°	2405	3138	3954
75°	2192	3234	4257
80°	1878	3349	4302
85°	1519	3202	3690



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	116.5	3.2
10°-20°	332.5	9.1
20°-30°	500.4	13.6
30°-40°	600.6	16.4
40°-50°	627.7	17.1
50°-60°	585.0	15.9
60°-70°	479.8	13.1
70°-80°	323.3	8.8
80°-90°	105.3	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°	949.4	25.9
0°-40°	1550.0	42.2
0°-60°	2762.6	75.3
0°-90°	3671.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	3671.0	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	1232	1232	1232	1232	1232	
5°	1219	1223	1228	1230	1232	116
15°	1161	1168	1179	1190	1191	328
25°	1058	1065	1091	1107	1114	486
35°	914	926	959	993	1007	571
45°	761	766	810	859	880	581
55°	583	594	650	712	740	517
65°	394	411	481	552	585	392
75°	211	234	311	381	409	222
85°	49	70	104	121	120	59
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	1231.7	1231.7	1231.7	1231.7	1231.7
2.5°	1224.6	1228.1	1233.4	1235.2	1235.2
5°	1219.4	1222.9	1228.1	1229.9	1231.7
7.5°	1210.6	1214.1	1221.1	1224.6	1226.4
10°	1198.3	1201.8	1210.6	1215.8	1217.6
12.5°	1182.5	1186.0	1196.5	1203.5	1205.3
15°	1161.4	1168.4	1178.9	1189.5	1191.2
17.5°	1147.3	1145.6	1159.6	1171.9	1175.4
20°	1113.9	1122.7	1138.5	1152.6	1156.1
22.5°	1085.8	1092.8	1113.9	1129.7	1136.8
25°	1057.7	1064.7	1091.1	1106.9	1113.9
27.5°	1022.6	1033.1	1057.7	1080.6	1089.3
30°	987.4	998.0	1026.1	1052.4	1063.0
32.5°	952.3	964.6	994.5	1022.6	1034.9
35°	913.6	925.9	959.3	992.7	1006.8
37.5°	873.2	889.0	924.2	961.1	976.9
40°	832.8	848.6	885.5	927.7	945.3
42.5°	799.4	806.5	848.6	894.3	911.9
45°	760.8	766.0	810.0	859.2	880.3
47.5°	704.6	723.9	771.3	825.8	846.9
50°	660.6	681.7	730.9	788.9	811.7
52.5°	623.7	637.8	692.3	750.2	776.6
55°	583.3	593.9	650.1	711.6	739.7
57.5°	534.1	553.5	609.7	672.9	701.0
60°	479.7	504.3	565.8	634.3	662.4
62.5°	444.5	458.6	525.3	593.9	625.5
65°	393.6	411.1	481.4	551.7	585.1
67.5°	351.4	369.0	441.0	511.3	544.7
70°	305.7	323.3	398.8	469.1	502.5
72.5°	253.0	277.6	356.7	426.9	462.1
75°	210.8	233.7	311.0	381.3	409.4
77.5°	163.4	193.3	265.3	323.3	344.4
80°	121.2	151.1	216.1	258.3	277.6
82.5°	82.6	112.4	161.6	193.3	203.8
85°	49.2	70.3	103.7	121.2	119.5
87.5°	22.8	29.9	42.2	42.2	40.4
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)