

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: P308801

Luminaire Tested: **22FCZ2-39HE-UNV-L82765-CP125-W2A-U-4000K**

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: P308801
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: 22FCZ2-39HE-UNV-L82765-CP125-W2A-U-4000K
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: 3460.0 lumens
Efficiency: N/A
Efficacy: 105.5 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

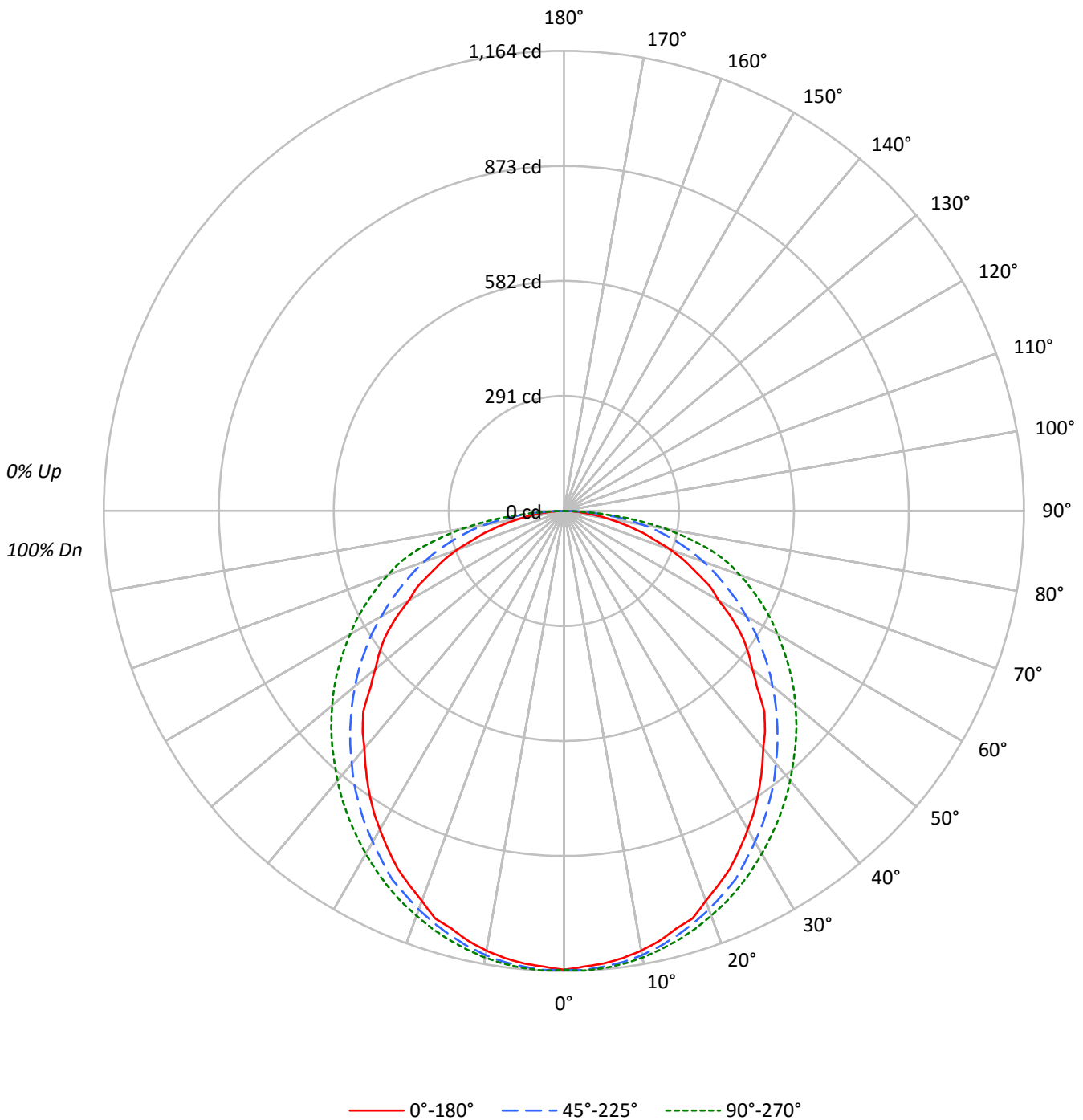
Input Watts (W): 32.8
Input Voltage (V): NR
Input Current (A_{in}): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



TEST NUMBER: P308801

CATALOG NUMBER: 22FCZ2-39HE-UNV-L82765-CP125-W2A-U-4000K

Luminous Intensity Polar Plot





TEST NUMBER: P308801

CATALOG NUMBER: 22FCZ2-39HE-UNV-L82765-CP125-W2A-U-4000K

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°	3124	3124	3124
5°	3105	3127	3136
10°	3086	3118	3136
15°	3049	3096	3128
20°	3007	3073	3121
25°	2960	3053	3117
30°	2892	3005	3113
35°	2829	2970	3117
40°	2757	2932	3130
45°	2729	2905	3158
50°	2607	2884	3203
55°	2579	2875	3271
60°	2433	2870	3360
65°	2362	2889	3511
70°	2267	2958	3726
75°	2066	3047	4011
80°	1771	3157	4054
85°	1433	3017	3477



TEST NUMBER: P308801

CATALOG NUMBER: 22FCZ2-39HE-UNV-L82765-CP125-W2A-U-4000K

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	109.8	3.2
10°-20°	313.4	9.1
20°-30°	471.6	13.6
30°-40°	566.0	16.4
40°-50°	591.6	17.1
50°-60°	551.3	15.9
60°-70°	452.2	13.1
70°-80°	304.7	8.8
80°-90°	99.2	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°	894.8	25.9
0°-40°	1460.9	42.2
0°-60°	2603.8	75.3
0°-90°	3460.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	3460.0	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	1161	1161	1161	1161	1161	
5°	1149	1153	1158	1159	1161	109
15°	1095	1101	1111	1121	1123	309
25°	997	1004	1028	1043	1050	458
35°	861	873	904	936	949	538
45°	717	722	763	810	830	548
55°	550	560	613	671	697	487
65°	371	388	454	520	551	369
75°	199	220	293	359	386	209
85°	46	66	98	114	113	55
90°	0	0	0	0	0	



TEST NUMBER: P308801

CATALOG NUMBER: 22FCZ2-39HE-UNV-L82765-CP125-W2A-U-4000K

CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	1160.9	1160.9	1160.9	1160.9	1160.9
2.5°	1154.2	1157.5	1162.5	1164.2	1164.2
5°	1149.3	1152.6	1157.5	1159.2	1160.9
7.5°	1141.0	1144.3	1150.9	1154.2	1155.9
10°	1129.4	1132.7	1141.0	1146.0	1147.6
12.5°	1114.5	1117.8	1127.7	1134.4	1136.0
15°	1094.6	1101.2	1111.2	1121.1	1122.8
17.5°	1081.4	1079.7	1093.0	1104.6	1107.9
20°	1049.9	1058.2	1073.1	1086.3	1089.7
22.5°	1023.4	1030.0	1049.9	1064.8	1071.4
25°	996.9	1003.5	1028.4	1043.3	1049.9
27.5°	963.8	973.7	996.9	1018.4	1026.7
30°	930.7	940.6	967.1	991.9	1001.9
32.5°	897.6	909.1	937.3	963.8	975.4
35°	861.1	872.7	904.2	935.6	948.9
37.5°	823.0	837.9	871.1	905.8	920.7
40°	784.9	799.9	834.6	874.4	890.9
42.5°	753.5	760.1	799.9	842.9	859.5
45°	717.1	722.0	763.4	809.8	829.7
47.5°	664.1	682.3	727.0	778.3	798.2
50°	622.7	642.5	688.9	743.5	765.1
52.5°	587.9	601.1	652.5	707.1	732.0
55°	549.8	559.7	612.7	670.7	697.2
57.5°	503.4	521.6	574.6	634.2	660.7
60°	452.1	475.3	533.2	597.8	624.3
62.5°	419.0	432.2	495.1	559.7	589.5
65°	370.9	387.5	453.7	520.0	551.4
67.5°	331.2	347.8	415.7	481.9	513.4
70°	288.1	304.7	375.9	442.2	473.6
72.5°	238.5	261.6	336.2	402.4	435.5
75°	198.7	220.2	293.1	359.4	385.8
77.5°	154.0	182.2	250.1	304.7	324.6
80°	114.3	142.4	203.7	243.4	261.6
82.5°	77.8	106.0	152.4	182.2	192.1
85°	46.4	66.2	97.7	114.3	112.6
87.5°	21.5	28.2	39.7	39.7	38.1
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)