

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: P307713

Luminaire Tested: **14FCZ2-39-UNV-L82765-CA125-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: P307713
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G3-1805-783-49)
Test Lab: INNOVATION CENTER(G3)
Issue Date: 3/3/2020
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: FAIL-SAFE
Catalog Number: 14FCZ2-39-UNV-L82765-CA125-W2A-U-4500K
Description: 1'X4' TROFFER LED MODULE,RIBBED LENS, 0.125" ACRYLIC SHEET
Light Source: (168) 4500K 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: 3763.0 lumens
Efficiency: N/A
Efficacy: 111.0 lumens/watt
Spacing Criteria (0/90/45): 1.2 / 1.28 / 1.37
Luminous Opening: Rectangular (W 1' x L: 4' x H: 0')
CIE Type: Direct

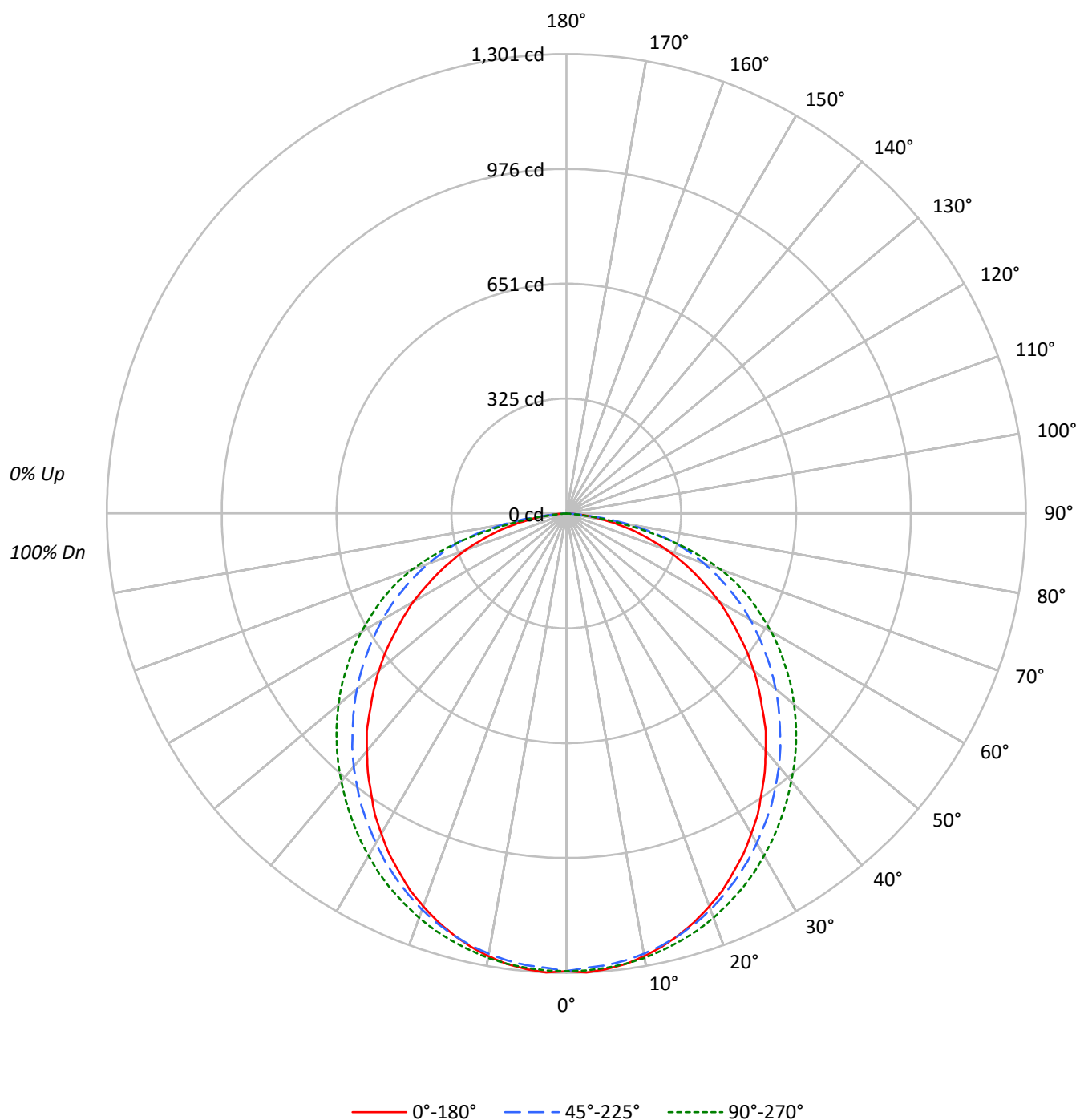
Input Watts (W): 33.9
Input Voltage (V): NR
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



TEST NUMBER: P307713

CATALOG NUMBER: 14FCZ2-39-UNV-L82765-CA125-W2A-U-4500K

Luminous Intensity Polar Plot





TEST NUMBER: P307713

CATALOG NUMBER: 14FCZ2-39-UNV-L82765-CA125-W2A-U-4500K

COEFFICIENT OF UTILIZATION - ZONAL CAVITY METHOD:

RF	20				20				20				20				20
RC	80				70				50				30				0
RW	70	50	30	10	70	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		100
1	109	104	99	95	106	101	97	94	97	94	91		93	90	88		83
2	98	90	83	77	96	88	82	76	84	79	74		81	77	73		69
3	89	79	70	64	87	77	69	63	74	67	62		71	66	61		58
4	82	70	61	54	79	68	60	53	66	58	53		63	57	52		49
5	75	62	53	46	73	61	52	46	59	51	45		57	50	45		42
6	69	56	47	40	67	55	46	40	53	45	40		51	44	39		37
7	64	51	42	35	63	50	41	35	48	41	35		47	40	35		32
8	60	46	37	32	58	45	37	31	44	37	31		43	36	31		29
9	56	42	34	28	54	42	34	28	41	33	28		39	33	28		26
10	52	39	31	26	51	39	31	26	37	30	26		37	30	25		24

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	3489	3489	3489
5°	3499	3470	3491
10°	3478	3460	3492
15°	3441	3443	3490
20°	3390	3419	3489
25°	3326	3386	3486
30°	3254	3350	3478
35°	3167	3322	3476
40°	3083	3289	3481
45°	2989	3254	3500
50°	2902	3239	3523
55°	2791	3228	3555
60°	2692	3233	3604
65°	2554	3243	3660
70°	2397	3268	3657
75°	2172	3298	3306
80°	1782	2848	2354
85°	1321	1346	543



TEST NUMBER: P307713

CATALOG NUMBER: 14FCZ2-39-UNV-L82765-CA125-W2A-U-4500K

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	122.7	3.3
10°-20°	350.4	9.3
20°-30°	527.9	14.0
30°-40°	633.5	16.8
40°-50°	660.2	17.5
50°-60°	611.2	16.2
60°-70°	493.9	13.1
70°-80°	301.1	8.0
80°-90°	62.2	1.7
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°	1001.0	26.6
0°-40°	1634.4	43.4
0°-60°	2905.9	77.2
0°-90°	3763.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	3763.0	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	1296	1296	1296	1296	1296	
5°	1296	1292	1285	1294	1292	123
15°	1235	1236	1236	1253	1253	348
25°	1120	1127	1140	1169	1174	516
35°	964	979	1011	1048	1058	604
45°	785	809	855	903	920	607
55°	595	626	688	742	758	533
65°	401	440	509	560	575	397
75°	209	255	317	322	318	219
85°	43	64	44	24	18	53
90°	0	0	0	0	0	



TEST NUMBER: P307713

CATALOG NUMBER: 14FCZ2-39-UNV-L82765-CA125-W2A-U-4500K

CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	1296.4	1296.4	1296.4	1296.4	1296.4
2.5°	1301.4	1297.2	1288.0	1297.2	1295.5
5°	1295.5	1292.2	1284.6	1293.8	1292.2
7.5°	1287.1	1283.8	1277.1	1288.0	1286.3
10°	1272.9	1271.2	1266.2	1278.7	1277.9
12.5°	1256.1	1255.3	1252.7	1267.0	1266.2
15°	1235.1	1236.0	1236.0	1252.7	1252.7
17.5°	1211.6	1213.3	1216.7	1235.1	1237.6
20°	1183.9	1187.3	1194.0	1215.0	1218.3
22.5°	1155.4	1157.9	1168.0	1193.2	1196.5
25°	1120.2	1126.9	1140.3	1168.8	1173.9
27.5°	1086.6	1092.5	1110.9	1140.3	1148.7
30°	1047.2	1056.4	1078.2	1110.1	1119.3
32.5°	1009.4	1019.5	1044.6	1081.6	1090.0
35°	964.1	979.2	1011.1	1048.0	1058.1
37.5°	923.0	937.2	973.3	1013.6	1025.3
40°	877.7	895.3	936.4	979.2	990.9
42.5°	835.7	852.5	897.0	940.6	956.5
45°	785.4	808.9	855.0	902.8	919.6
47.5°	739.2	762.7	815.6	866.8	881.9
50°	693.1	718.2	773.6	826.5	841.6
52.5°	645.2	672.1	731.7	784.5	802.2
55°	594.9	625.9	688.0	741.7	757.7
57.5°	547.1	579.0	645.2	699.8	715.7
60°	500.1	532.8	600.8	652.8	669.6
62.5°	448.1	486.7	557.1	608.3	620.9
65°	401.1	440.5	509.3	560.5	574.8
67.5°	351.6	394.4	463.2	510.2	523.6
70°	304.6	349.1	415.3	459.0	464.8
72.5°	254.2	299.5	366.7	394.4	394.4
75°	208.9	255.1	317.2	322.2	318.0
77.5°	159.4	210.6	250.9	240.8	230.7
80°	115.0	165.3	183.8	165.3	151.9
82.5°	77.2	120.0	110.8	88.1	78.0
85°	42.8	63.8	43.6	24.3	17.6
87.5°	15.9	14.3	4.2	4.2	4.2
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)