

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: P307750

Luminaire Tested: **14FCZ2-44-UNV-L82765-CA08-W2A-U-5000K**

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: P307750
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: 14FCZ2-44-UNV-L82765-CA08-W2A-U-5000K
Description: 1'X4' TROFFER LED MODULE,RIBBED LENS, 0.08" ACRYLIC SHEET
Light Source: (168) 5000K 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: 4279.0 lumens
Efficiency: N/A
Efficacy: 109.2 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

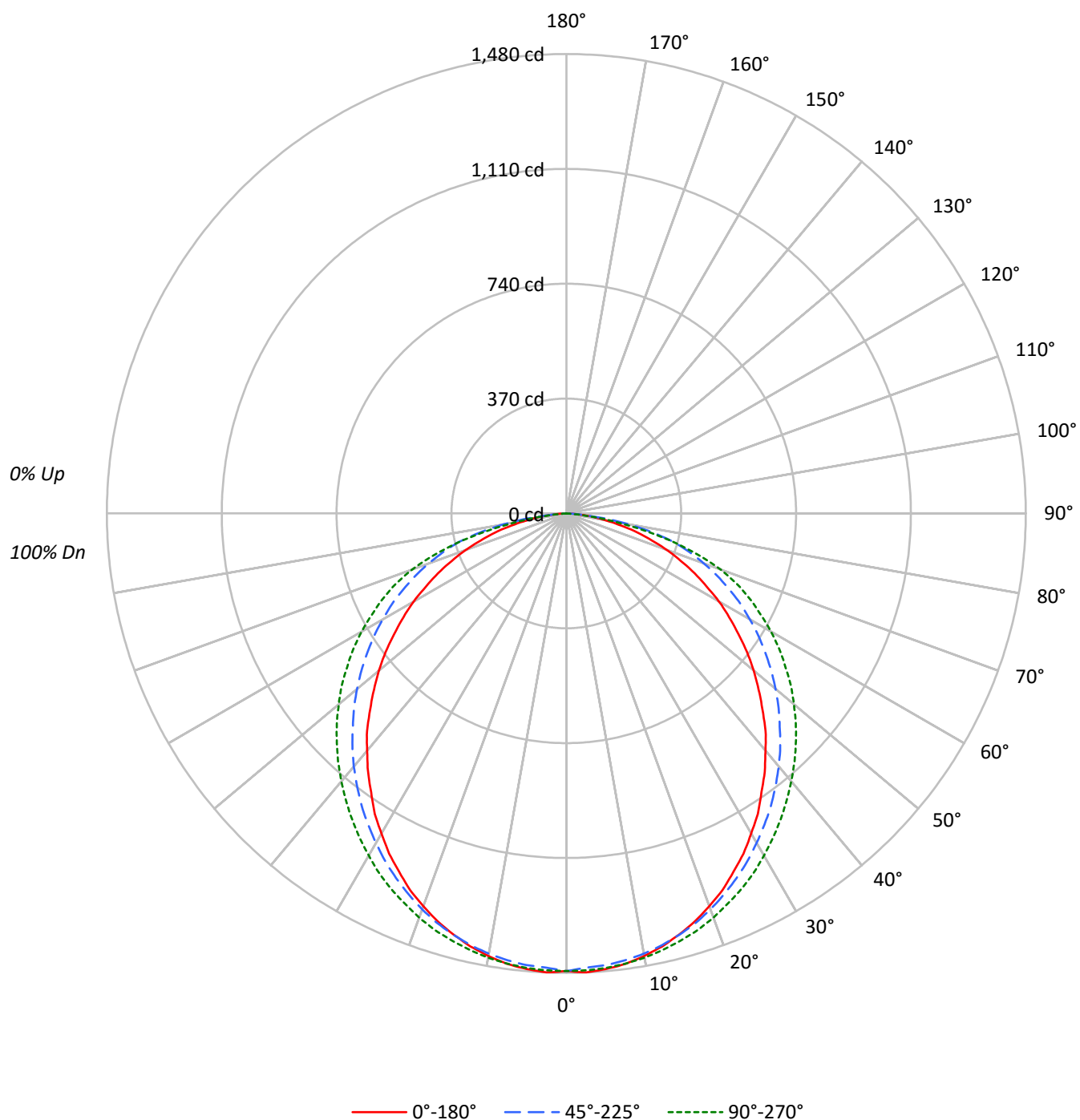
Input Watts (W): 39.2
Input Voltage (V): NR
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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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				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°	3967	3967	3967
5°	3979	3946	3969
10°	3955	3934	3971
15°	3913	3915	3969
20°	3855	3888	3967
25°	3782	3850	3963
30°	3700	3810	3955
35°	3601	3777	3953
40°	3506	3740	3958
45°	3399	3700	3980
50°	3299	3683	4006
55°	3174	3671	4042
60°	3061	3677	4098
65°	2904	3688	4162
70°	2725	3716	4159
75°	2470	3750	3760
80°	2025	3239	2676
85°	1504	1531	618



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	139.5	3.3
10°-20°	398.5	9.3
20°-30°	600.3	14.0
30°-40°	720.3	16.8
40°-50°	750.8	17.5
50°-60°	695.0	16.2
60°-70°	561.6	13.1
70°-80°	342.4	8.0
80°-90°	70.7	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°	1138.2	26.6
0°-40°	1858.5	43.4
0°-60°	3304.4	77.2
0°-90°	4279.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	4279.0	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	1474	1474	1474	1474	1474	
5°	1473	1469	1461	1471	1469	140
15°	1404	1405	1405	1424	1424	396
25°	1274	1281	1297	1329	1335	587
35°	1096	1114	1150	1192	1203	687
45°	893	920	972	1027	1046	690
55°	676	712	782	844	862	606
65°	456	501	579	637	654	451
75°	238	290	361	366	362	249
85°	49	72	50	28	20	60
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	1474.1	1474.1	1474.1	1474.1	1474.1
2.5°	1479.9	1475.1	1464.6	1475.1	1473.2
5°	1473.2	1469.4	1460.8	1471.3	1469.4
7.5°	1463.6	1459.8	1452.2	1464.6	1462.7
10°	1447.4	1445.5	1439.8	1454.1	1453.1
12.5°	1428.3	1427.4	1424.5	1440.7	1439.8
15°	1404.5	1405.4	1405.4	1424.5	1424.5
17.5°	1377.8	1379.7	1383.5	1404.5	1407.3
20°	1346.3	1350.1	1357.7	1381.6	1385.4
22.5°	1313.8	1316.7	1328.1	1356.8	1360.6
25°	1273.8	1281.4	1296.7	1329.1	1334.8
27.5°	1235.6	1242.3	1263.3	1296.7	1306.2
30°	1190.8	1201.2	1226.1	1262.3	1272.8
32.5°	1147.8	1159.3	1187.9	1229.9	1239.4
35°	1096.3	1113.5	1149.7	1191.7	1203.2
37.5°	1049.5	1065.8	1106.8	1152.6	1165.9
40°	998.0	1018.1	1064.8	1113.5	1126.8
42.5°	950.3	969.4	1020.0	1069.6	1087.7
45°	893.1	919.8	972.3	1026.6	1045.7
47.5°	840.6	867.3	927.4	985.6	1002.8
50°	788.1	816.7	879.7	939.8	957.0
52.5°	733.7	764.3	832.0	892.1	912.1
55°	676.5	711.8	782.4	843.5	861.6
57.5°	622.1	658.3	733.7	795.7	813.9
60°	568.7	605.9	683.2	742.3	761.4
62.5°	509.5	553.4	633.5	691.7	706.1
65°	456.1	500.9	579.2	637.4	653.6
67.5°	399.8	448.4	526.7	580.1	595.4
70°	346.3	396.9	472.3	521.9	528.6
72.5°	289.1	340.6	417.0	448.4	448.4
75°	237.6	290.1	360.7	366.4	361.6
77.5°	181.3	239.5	285.3	273.8	262.4
80°	130.7	188.0	209.0	188.0	172.7
82.5°	87.8	136.4	125.9	100.2	88.7
85°	48.7	72.5	49.6	27.7	20.0
87.5°	18.1	16.2	4.8	4.8	4.8
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)