

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: P307753

Luminaire Tested: **14FCZ2-44-UNV-L82765-CA08-W2A-U-6500K**

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: P307753
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-6500K
Description: 1'X4' TROFFER LED MODULE,RIBBED LENS, 0.08" ACRYLIC SHEET
Light Source: (168) 6500K 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: 4343.0 lumens
Efficiency: N/A
Efficacy: 108.6 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

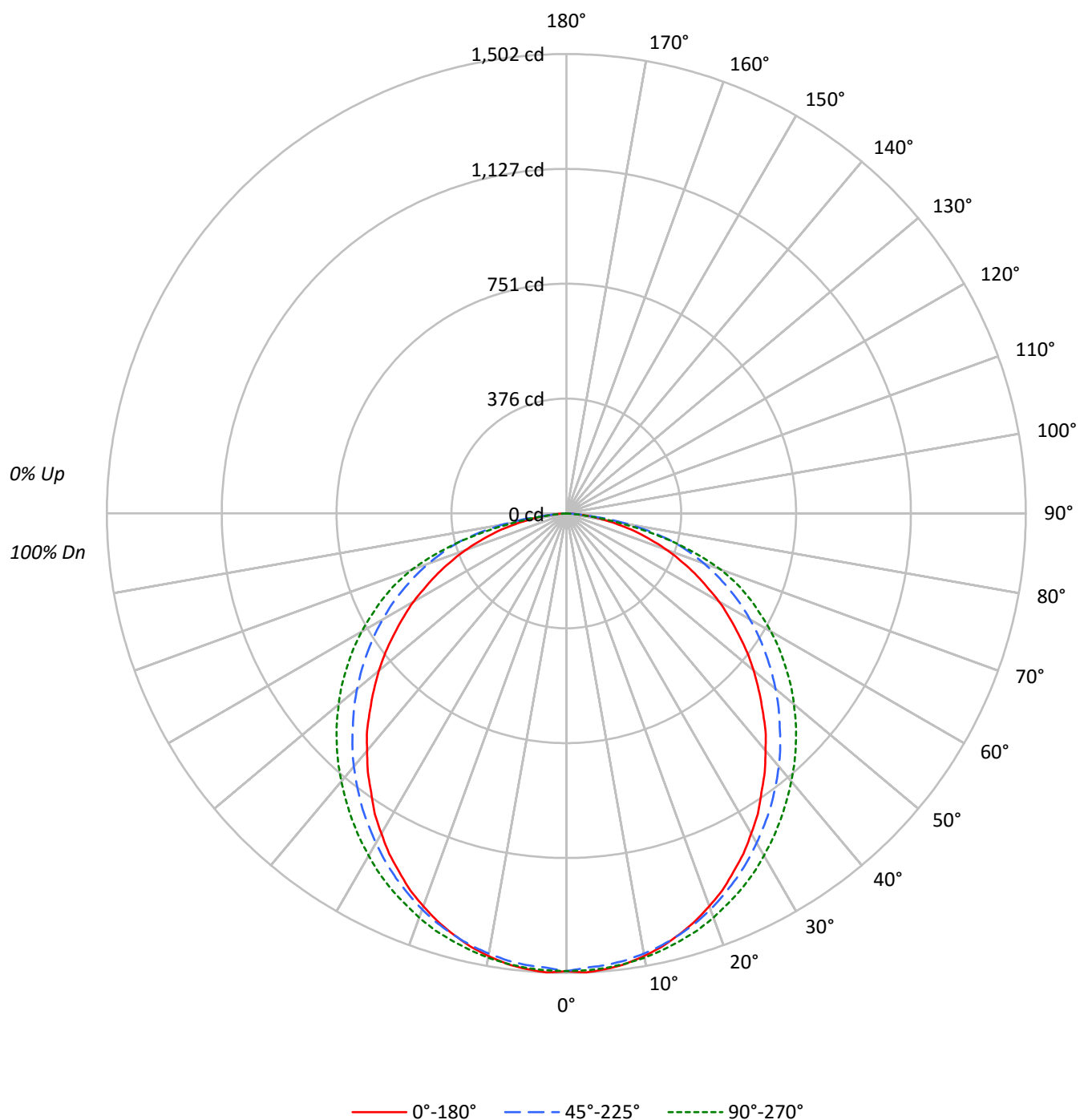
Input Watts (W): 40
Input Voltage (V): NR
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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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	50	30	10	50	30	10
RCR																				
0	119	119	119	119	116	116	116	116	111	111	111	106	106	106	102	102	102	100		
1	109	104	99	95	106	101	97	94	97	94	91	93	90	88	90	87	85	83		
2	98	90	83	77	96	88	82	76	84	79	74	81	77	73	78	74	71	69		
3	89	79	70	64	87	77	69	63	74	67	62	71	66	61	69	64	60	58		
4	82	70	61	54	79	68	60	53	66	58	53	63	57	52	61	56	51	49		
5	75	62	53	46	73	61	52	46	59	51	45	57	50	45	55	49	44	42		
6	69	56	47	40	67	55	46	40	53	45	40	51	44	39	50	44	39	37		
7	64	51	42	35	63	50	41	35	48	41	35	47	40	35	45	39	34	32		
8	60	46	37	32	58	45	37	31	44	37	31	43	36	31	42	35	31	29		
9	56	42	34	28	54	42	34	28	41	33	28	39	33	28	38	32	28	26		
10	52	39	31	26	51	39	31	26	37	30	26	37	30	25	36	30	25	24		

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	4026	4026	4026
5°	4039	4005	4028
10°	4014	3993	4030
15°	3971	3974	4028
20°	3913	3946	4027
25°	3839	3908	4023
30°	3755	3867	4014
35°	3655	3833	4012
40°	3558	3796	4018
45°	3449	3755	4039
50°	3349	3738	4066
55°	3221	3726	4103
60°	3106	3732	4159
65°	2947	3743	4224
70°	2766	3772	4221
75°	2507	3806	3816
80°	2056	3287	2717
85°	1525	1556	627



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	141.6	3.3
10°-20°	404.4	9.3
20°-30°	609.2	14.0
30°-40°	731.1	16.8
40°-50°	762.0	17.5
50°-60°	705.4	16.2
60°-70°	570.0	13.1
70°-80°	347.5	8.0
80°-90°	71.7	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°	1155.3	26.6
0°-40°	1886.3	43.4
0°-60°	3353.8	77.2
0°-90°	4343.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	4343.0	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	1496	1496	1496	1496	1496	
5°	1495	1491	1483	1493	1491	142
15°	1426	1426	1426	1446	1446	402
25°	1293	1301	1316	1349	1355	596
35°	1113	1130	1167	1210	1221	697
45°	906	934	987	1042	1061	701
55°	687	722	794	856	874	615
65°	463	508	588	647	663	458
75°	241	294	366	372	367	253
85°	49	74	50	28	20	61
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	1496.2	1496.2	1496.2	1496.2	1496.2
2.5°	1502.0	1497.1	1486.5	1497.1	1495.2
5°	1495.2	1491.3	1482.6	1493.3	1491.3
7.5°	1485.5	1481.7	1473.9	1486.5	1484.6
10°	1469.1	1467.1	1461.3	1475.8	1474.9
12.5°	1449.7	1448.7	1445.8	1462.3	1461.3
15°	1425.5	1426.5	1426.5	1445.8	1445.8
17.5°	1398.4	1400.3	1404.2	1425.5	1428.4
20°	1366.4	1370.3	1378.0	1402.2	1406.1
22.5°	1333.5	1336.4	1348.0	1377.1	1380.9
25°	1292.8	1300.6	1316.1	1349.0	1354.8
27.5°	1254.1	1260.9	1282.2	1316.1	1325.7
30°	1208.6	1219.2	1244.4	1281.2	1291.8
32.5°	1165.0	1176.6	1205.7	1248.3	1258.0
35°	1112.7	1130.1	1166.9	1209.5	1221.2
37.5°	1065.2	1081.7	1123.3	1169.8	1183.4
40°	1012.9	1033.3	1080.7	1130.1	1143.7
42.5°	964.5	983.9	1035.2	1085.6	1104.0
45°	906.4	933.5	986.8	1042.0	1061.4
47.5°	853.2	880.3	941.3	1000.4	1017.8
50°	799.9	829.0	892.9	953.9	971.3
52.5°	744.7	775.7	844.4	905.5	925.8
55°	686.6	722.4	794.1	856.1	874.5
57.5°	631.4	668.2	744.7	807.6	826.0
60°	577.2	614.9	693.4	753.4	772.8
62.5°	517.1	561.7	643.0	702.1	716.6
65°	462.9	508.4	587.8	646.9	663.4
67.5°	405.8	455.1	534.6	588.8	604.3
70°	351.5	402.9	479.4	529.7	536.5
72.5°	293.4	345.7	423.2	455.1	455.1
75°	241.1	294.4	366.1	371.9	367.0
77.5°	184.0	243.1	289.6	277.9	266.3
80°	132.7	190.8	212.1	190.8	175.3
82.5°	89.1	138.5	127.8	101.7	90.1
85°	49.4	73.6	50.4	28.1	20.3
87.5°	18.4	16.5	4.8	4.8	4.8
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)