

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: P308058

Luminaire Tested: **14FCZ2-44-UNV-L82765-S-CP250-W2A-U-5700K**

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: P308058
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G3-1805-783-40)
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-S-CP250-W2A-U-5700K
Description: 1'X4' TROFFER LED MODULE,SMOOTH LENS, 0.250" POLYCARB SHEET
Light Source: (168) 5700K 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: 4064.0 lumens
Efficiency: N/A
Efficacy: 103.1 lumens/watt
Spacing Criteria (0/90/45): 1.19 / 1.26 / 1.36
Luminous Opening: Rectangular (W 1' x L: 4' x H: 0')
CIE Type: Direct

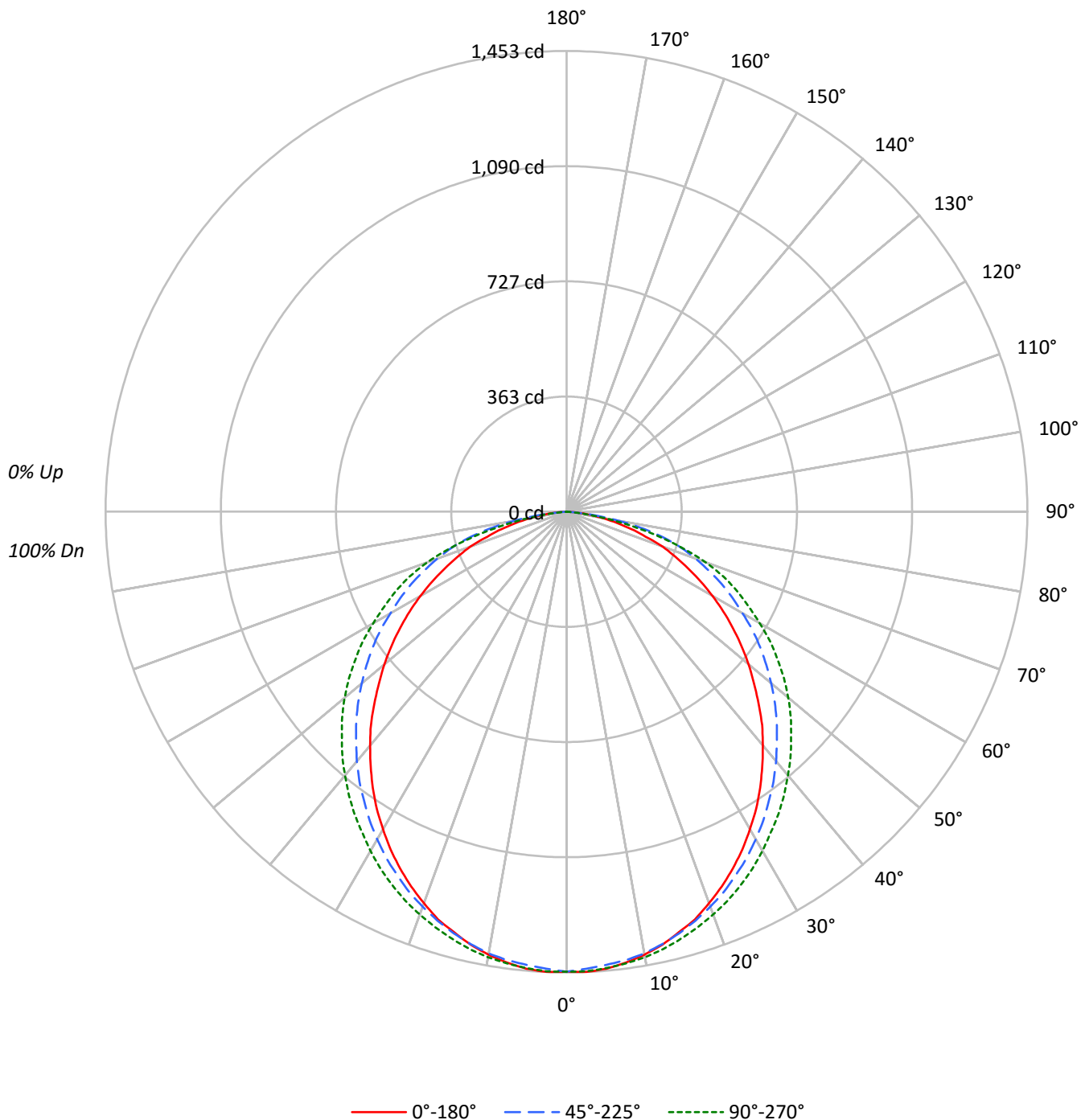
Input Watts (W): 39.4
Input Voltage (V): NR
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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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	100	96	106	102	98	94	97	94	91		94	91	89		84
2	99	90	84	78	96	89	82	77	85	80	75		82	77	73		70
3	90	79	71	65	87	78	70	64	75	68	63		72	66	62		58
4	82	70	61	55	80	69	61	54	66	59	53		64	58	53		50
5	76	63	54	47	74	62	53	47	59	52	46		57	51	46		43
6	70	56	47	41	68	55	47	41	54	46	40		52	45	40		38
7	65	51	42	36	63	50	42	36	49	41	36		47	41	35		33
8	60	47	38	32	59	46	38	32	45	37	32		43	37	32		30
9	56	43	35	29	55	42	34	29	41	34	29		40	33	29		27
10	53	40	32	26	52	39	31	26	38	31	26		37	31	26		24

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	3904	3904	3904
5°	3908	3875	3903
10°	3876	3865	3898
15°	3823	3834	3885
20°	3762	3797	3872
25°	3685	3751	3859
30°	3594	3707	3838
35°	3495	3654	3826
40°	3384	3610	3815
45°	3259	3566	3811
50°	3138	3526	3821
55°	3006	3498	3810
60°	2863	3449	3785
65°	2694	3438	3785
70°	2537	3408	3678
75°	2200	3331	3142
80°	1781	2686	2092
85°	1183	932	621



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	137.0	3.4
10°-20°	389.8	9.6
20°-30°	584.8	14.4
30°-40°	697.6	17.2
40°-50°	721.1	17.7
50°-60°	658.4	16.2
60°-70°	518.1	12.7
70°-80°	301.6	7.4
80°-90°	55.6	1.4
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°	1111.6	27.4
0°-40°	1809.2	44.5
0°-60°	3188.7	78.5
0°-90°	4064.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	4064.0	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	1451	1451	1451	1451	1451	
5°	1447	1443	1435	1447	1445	137
15°	1372	1374	1376	1394	1394	387
25°	1241	1247	1263	1294	1300	571
35°	1064	1078	1112	1155	1165	665
45°	856	885	937	989	1001	661
55°	641	675	746	800	812	573
65°	423	468	540	582	594	420
75°	212	262	320	314	302	225
85°	38	54	30	24	20	50
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	1450.8	1450.8	1450.8	1450.8	1450.8
2.5°	1452.8	1448.8	1442.7	1452.8	1450.8
5°	1446.8	1442.7	1434.7	1446.8	1444.7
7.5°	1434.7	1430.6	1426.6	1438.7	1436.7
10°	1418.5	1416.5	1414.5	1428.6	1426.6
12.5°	1398.4	1398.4	1396.4	1412.5	1412.5
15°	1372.2	1374.2	1376.2	1394.4	1394.4
17.5°	1348.0	1346.0	1352.0	1372.2	1374.2
20°	1313.8	1317.8	1325.9	1350.0	1352.0
22.5°	1279.5	1283.5	1297.6	1321.8	1327.9
25°	1241.2	1247.3	1263.4	1293.6	1299.7
27.5°	1200.9	1209.0	1231.1	1263.4	1269.4
30°	1156.6	1168.7	1192.9	1229.1	1235.2
32.5°	1112.3	1124.4	1154.6	1190.8	1198.9
35°	1063.9	1078.0	1112.3	1154.6	1164.7
37.5°	1013.5	1031.7	1072.0	1114.3	1126.4
40°	963.2	983.3	1027.6	1072.0	1086.1
42.5°	912.8	932.9	981.3	1031.7	1045.8
45°	856.4	884.6	937.0	989.4	1001.4
47.5°	802.0	832.2	890.6	943.0	959.1
50°	749.6	779.8	842.3	896.7	912.8
52.5°	695.2	727.4	793.9	850.3	864.4
55°	640.8	675.0	745.5	799.9	812.0
57.5°	586.4	622.6	695.2	747.6	761.7
60°	532.0	570.2	640.8	693.2	703.2
62.5°	477.5	517.8	590.4	636.7	646.8
65°	423.1	467.5	540.0	582.3	594.4
67.5°	370.8	415.1	485.6	525.9	536.0
70°	322.4	362.7	433.2	463.4	467.5
72.5°	261.9	312.3	380.8	396.9	386.9
75°	211.6	261.9	320.4	314.3	302.2
77.5°	161.2	211.6	249.9	229.7	213.6
80°	114.9	165.2	173.3	143.1	135.0
82.5°	74.6	114.9	96.7	74.6	60.4
85°	38.3	54.4	30.2	24.2	20.1
87.5°	12.1	8.1	4.0	4.0	2.0
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)