

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: P308037

Luminaire Tested: **14FCZ2-44-UNV-L82765-S-CP125-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: P308037
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-CP125-W2A-U-4500K
Description: 1'X4' TROFFER LED MODULE,SMOOTH LENS, 0.125" POLYCARB 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: 4168.0 lumens
Efficiency: N/A
Efficacy: 106.9 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

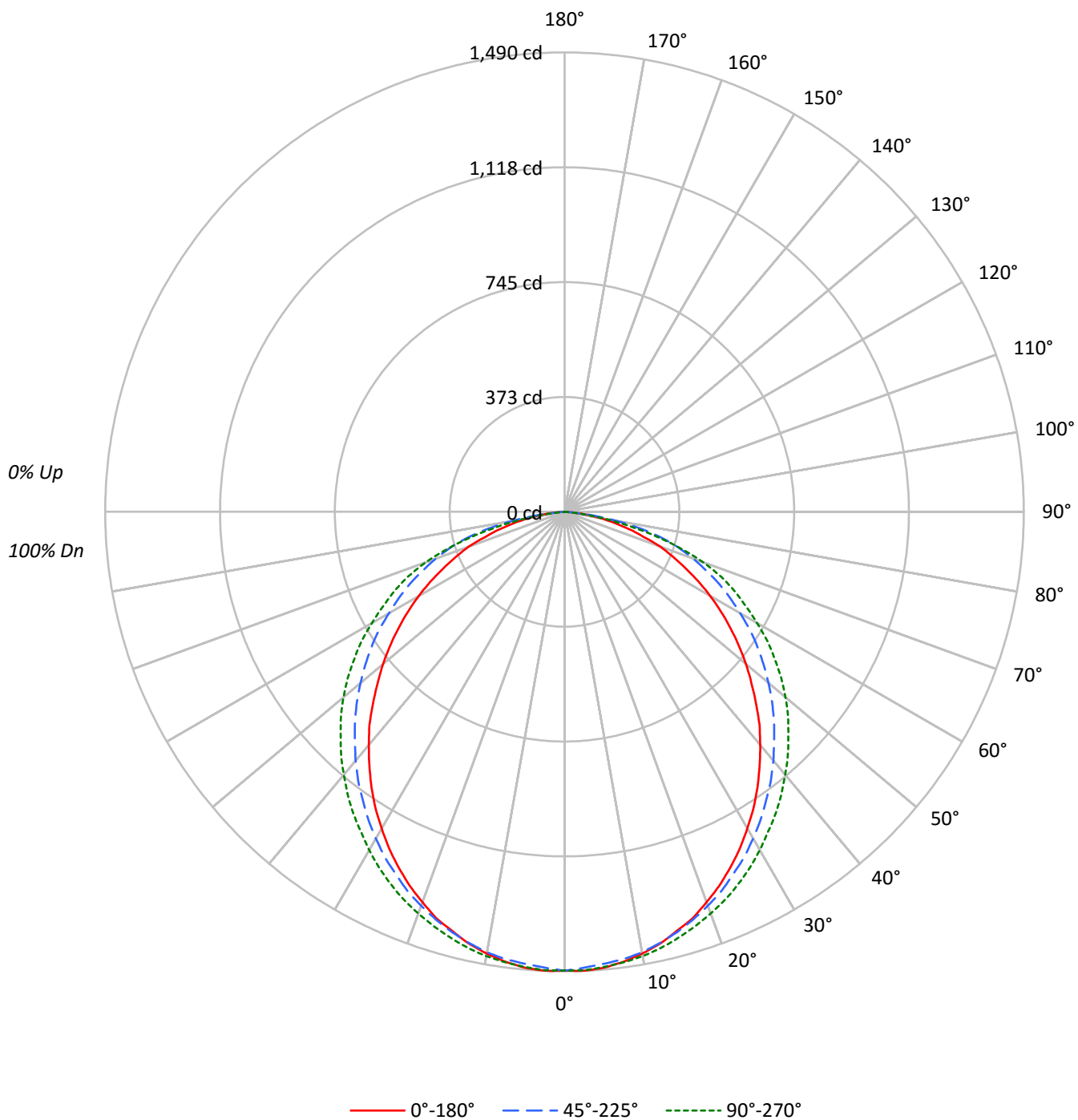
Input Watts (W): 39
Input Voltage (V): NR
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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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°	4004	4004	4004
5°	4008	3975	4002
10°	3975	3964	3998
15°	3921	3932	3984
20°	3859	3894	3971
25°	3780	3847	3958
30°	3686	3801	3936
35°	3584	3747	3924
40°	3470	3702	3913
45°	3342	3657	3909
50°	3219	3616	3919
55°	3083	3587	3907
60°	2936	3537	3881
65°	2763	3526	3882
70°	2601	3496	3772
75°	2256	3417	3223
80°	1826	2754	2146
85°	1213	957	639



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	140.5	3.4
10°-20°	399.8	9.6
20°-30°	599.7	14.4
30°-40°	715.4	17.2
40°-50°	739.6	17.7
50°-60°	675.3	16.2
60°-70°	531.4	12.7
70°-80°	309.3	7.4
80°-90°	57.0	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°	1140.0	27.4
0°-40°	1855.4	44.5
0°-60°	3270.3	78.5
0°-90°	4168.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	4168.0	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	1488	1488	1488	1488	1488	
5°	1484	1480	1471	1484	1482	141
15°	1407	1409	1411	1430	1430	397
25°	1273	1279	1296	1327	1333	586
35°	1091	1106	1141	1184	1194	682
45°	878	907	961	1015	1027	678
55°	657	692	765	820	833	588
65°	434	479	554	597	610	431
75°	217	269	329	322	310	231
85°	39	56	31	25	21	51
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	1487.9	1487.9	1487.9	1487.9	1487.9
2.5°	1490.0	1485.8	1479.6	1490.0	1487.9
5°	1483.8	1479.6	1471.4	1483.8	1481.7
7.5°	1471.4	1467.2	1463.1	1475.5	1473.4
10°	1454.8	1452.8	1450.7	1465.2	1463.1
12.5°	1434.2	1434.2	1432.1	1448.6	1448.6
15°	1407.3	1409.4	1411.4	1430.0	1430.0
17.5°	1382.5	1380.4	1386.6	1407.3	1409.4
20°	1347.4	1351.5	1359.8	1384.6	1386.6
22.5°	1312.3	1316.4	1330.9	1355.6	1361.8
25°	1273.0	1279.2	1295.7	1326.7	1332.9
27.5°	1231.7	1239.9	1262.7	1295.7	1301.9
30°	1186.2	1198.6	1223.4	1260.6	1266.8
32.5°	1140.7	1153.1	1184.1	1221.3	1229.6
35°	1091.1	1105.6	1140.7	1184.1	1194.5
37.5°	1039.5	1058.1	1099.4	1142.8	1155.2
40°	987.8	1008.5	1053.9	1099.4	1113.9
42.5°	936.1	956.8	1006.4	1058.1	1072.5
45°	878.3	907.2	960.9	1014.7	1027.1
47.5°	822.5	853.5	913.4	967.1	983.7
50°	768.8	799.7	863.8	919.6	936.1
52.5°	713.0	746.0	814.2	872.1	886.5
55°	657.2	692.3	764.6	820.4	832.8
57.5°	601.4	638.6	713.0	766.7	781.2
60°	545.6	584.8	657.2	710.9	721.2
62.5°	489.8	531.1	605.5	653.0	663.4
65°	434.0	479.4	553.8	597.2	609.6
67.5°	380.2	425.7	498.0	539.4	549.7
70°	330.6	372.0	444.3	475.3	479.4
72.5°	268.6	320.3	390.6	407.1	396.8
75°	217.0	268.6	328.6	322.4	310.0
77.5°	165.3	217.0	256.3	235.6	219.1
80°	117.8	169.5	177.7	146.7	138.5
82.5°	76.5	117.8	99.2	76.5	62.0
85°	39.3	55.8	31.0	24.8	20.7
87.5°	12.4	8.3	4.1	4.1	2.1
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)