

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: P308059

Luminaire Tested: **14FCZ2-44-UNV-L82765-S-CP250-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: P308059
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-6500K
Description: 1'X4' TROFFER LED MODULE,SMOOTH LENS, 0.250" POLYCARB 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: 4073.0 lumens
Efficiency: N/A
Efficacy: 101.8 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

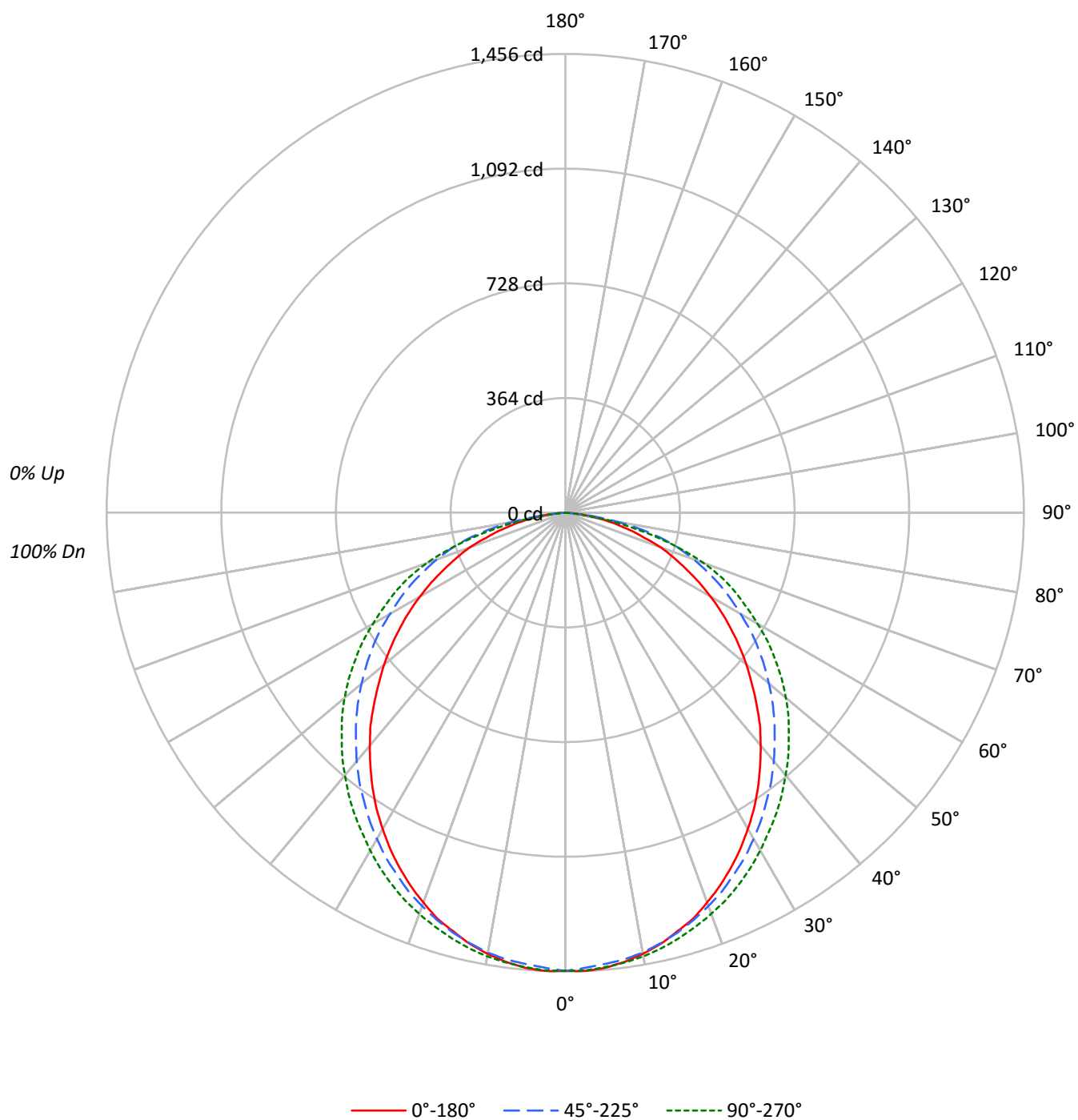
Input Watts (W): 40
Input Voltage (V): NR
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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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		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°	3913	3913	3913
5°	3917	3884	3911
10°	3885	3874	3907
15°	3831	3843	3893
20°	3771	3805	3880
25°	3694	3760	3867
30°	3602	3715	3846
35°	3503	3662	3834
40°	3391	3618	3824
45°	3266	3573	3820
50°	3145	3534	3830
55°	3013	3506	3818
60°	2869	3456	3793
65°	2700	3446	3793
70°	2542	3416	3686
75°	2204	3339	3149
80°	1784	2692	2097
85°	1186	936	624



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	137.3	3.4
10°-20°	390.7	9.6
20°-30°	586.1	14.4
30°-40°	699.1	17.2
40°-50°	722.7	17.7
50°-60°	659.9	16.2
60°-70°	519.3	12.7
70°-80°	302.3	7.4
80°-90°	55.7	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°	1114.1	27.4
0°-40°	1813.2	44.5
0°-60°	3195.7	78.5
0°-90°	4073.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	4073.0	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	1454	1454	1454	1454	1454	
5°	1450	1446	1438	1450	1448	137
15°	1375	1377	1379	1397	1397	388
25°	1244	1250	1266	1296	1302	573
35°	1066	1080	1115	1157	1167	666
45°	858	886	939	992	1004	663
55°	642	676	747	802	814	574
65°	424	468	541	584	596	421
75°	212	262	321	315	303	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°	1454.0	1454.0	1454.0	1454.0	1454.0
2.5°	1456.0	1452.0	1445.9	1456.0	1454.0
5°	1450.0	1445.9	1437.8	1450.0	1447.9
7.5°	1437.8	1433.8	1429.8	1441.9	1439.9
10°	1421.7	1419.7	1417.6	1431.8	1429.8
12.5°	1401.5	1401.5	1399.5	1415.6	1415.6
15°	1375.2	1377.3	1379.3	1397.4	1397.4
17.5°	1351.0	1349.0	1355.0	1375.2	1377.3
20°	1316.7	1320.7	1328.8	1353.0	1355.0
22.5°	1282.3	1286.4	1300.5	1324.7	1330.8
25°	1244.0	1250.0	1266.2	1296.5	1302.5
27.5°	1203.6	1211.7	1233.9	1266.2	1272.2
30°	1159.2	1171.3	1195.5	1231.9	1237.9
32.5°	1114.7	1126.8	1157.1	1193.5	1201.6
35°	1066.3	1080.4	1114.7	1157.1	1167.2
37.5°	1015.8	1034.0	1074.3	1116.7	1128.9
40°	965.3	985.5	1029.9	1074.3	1088.5
42.5°	914.8	935.0	983.5	1034.0	1048.1
45°	858.3	886.5	939.0	991.5	1003.7
47.5°	803.7	834.0	892.6	945.1	961.3
50°	751.2	781.5	844.1	898.6	914.8
52.5°	696.7	729.0	795.7	852.2	866.3
55°	642.2	676.5	747.2	801.7	813.8
57.5°	587.7	624.0	696.7	749.2	763.3
60°	533.1	571.5	642.2	694.7	704.8
62.5°	478.6	519.0	591.7	638.1	648.2
65°	424.1	468.5	541.2	583.6	595.7
67.5°	371.6	416.0	486.7	527.1	537.2
70°	323.1	363.5	434.2	464.5	468.5
72.5°	262.5	313.0	381.7	397.8	387.7
75°	212.0	262.5	321.1	315.0	302.9
77.5°	161.6	212.0	250.4	230.2	214.1
80°	115.1	165.6	173.7	143.4	135.3
82.5°	74.7	115.1	96.9	74.7	60.6
85°	38.4	54.5	30.3	24.2	20.2
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)