

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: P307737

Luminaire Tested: **14FCZ2-39-UNV-L82765-CP250-W2A-U-3000K**

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: P307737
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: 14FCZ2-39-UNV-L82765-CP250-W2A-U-3000K
Description: 1'X4' TROFFER LED MODULE,RIBBED LENS, 0.250" POLYCARB SHEET
Light Source: (168) 3000K 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: 3257.0 lumens
Efficiency: N/A
Efficacy: 98.4 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

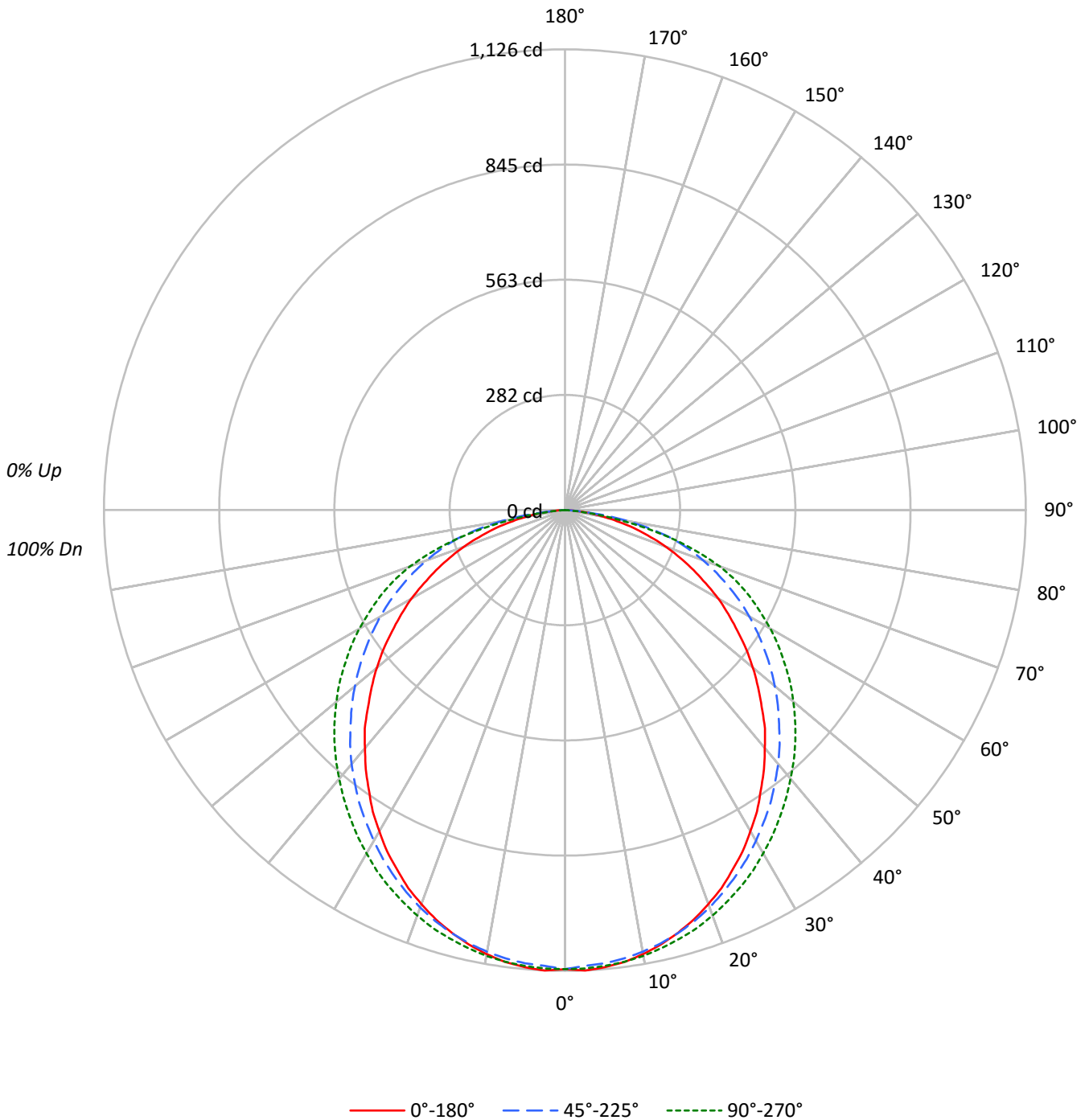
Input Watts (W): 33.1
Input Voltage (V): NR
Input Current (A_{in}): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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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				10	0
RW	70	50	30	10	70	50	30	10	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	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°	3019	3019	3019
5°	3029	3004	3021
10°	3010	2995	3022
15°	2978	2980	3021
20°	2934	2959	3020
25°	2879	2931	3017
30°	2816	2900	3010
35°	2741	2875	3008
40°	2669	2847	3013
45°	2587	2816	3029
50°	2511	2803	3049
55°	2416	2794	3077
60°	2329	2799	3119
65°	2210	2807	3168
70°	2074	2829	3165
75°	1880	2854	2861
80°	1542	2464	2038
85°	1142	1167	472



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	106.2	3.3
10°-20°	303.3	9.3
20°-30°	456.9	14.0
30°-40°	548.3	16.8
40°-50°	571.5	17.5
50°-60°	529.0	16.2
60°-70°	427.4	13.1
70°-80°	260.6	8.0
80°-90°	53.8	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°	866.4	26.6
0°-40°	1414.6	43.4
0°-60°	2515.1	77.2
0°-90°	3257.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	3257.0	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	1122	1122	1122	1122	1122	
5°	1121	1118	1112	1120	1118	106
15°	1069	1070	1070	1084	1084	301
25°	970	975	987	1012	1016	447
35°	834	848	875	907	916	523
45°	680	700	740	781	796	525
55°	515	542	596	642	656	461
65°	347	381	441	485	498	343
75°	181	221	274	279	275	190
85°	37	55	38	21	15	46
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	1122.0	1122.0	1122.0	1122.0	1122.0
2.5°	1126.4	1122.8	1114.8	1122.8	1121.3
5°	1121.3	1118.4	1111.9	1119.9	1118.4
7.5°	1114.1	1111.2	1105.3	1114.8	1113.3
10°	1101.7	1100.3	1095.9	1106.8	1106.1
12.5°	1087.2	1086.5	1084.3	1096.6	1095.9
15°	1069.0	1069.8	1069.8	1084.3	1084.3
17.5°	1048.7	1050.1	1053.1	1069.0	1071.2
20°	1024.7	1027.6	1033.4	1051.6	1054.5
22.5°	1000.0	1002.2	1010.9	1032.7	1035.6
25°	969.5	975.3	987.0	1011.7	1016.0
27.5°	940.5	945.6	961.5	987.0	994.2
30°	906.4	914.3	933.2	960.8	968.8
32.5°	873.7	882.4	904.2	936.1	943.4
35°	834.5	847.5	875.1	907.1	915.8
37.5°	798.9	811.2	842.4	877.3	887.5
40°	759.7	774.9	810.5	847.5	857.7
42.5°	723.3	737.9	776.4	814.1	827.9
45°	679.8	700.1	740.0	781.4	796.0
47.5°	639.8	660.2	705.9	750.2	763.3
50°	599.9	621.7	669.6	715.4	728.4
52.5°	558.5	581.7	633.3	679.0	694.3
55°	514.9	541.8	595.5	642.0	655.8
57.5°	473.5	501.1	558.5	605.7	619.5
60°	432.8	461.2	520.0	565.0	579.5
62.5°	387.8	421.2	482.2	526.5	537.4
65°	347.1	381.3	440.8	485.1	497.5
67.5°	304.3	341.3	400.9	441.6	453.2
70°	263.6	302.1	359.5	397.3	402.3
72.5°	220.1	259.3	317.4	341.3	341.3
75°	180.8	220.8	274.5	278.9	275.2
77.5°	138.0	182.3	217.1	208.4	199.7
80°	99.5	143.1	159.0	143.1	131.5
82.5°	66.8	103.9	95.9	76.3	67.5
85°	37.0	55.2	37.8	21.1	15.3
87.5°	13.8	12.3	3.6	3.6	3.6
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)