

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: P307735

Luminaire Tested: **14FCZ2-39-UNV-L82765-CP187-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: P307735
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-CP187-W2A-U-6500K
Description: 1'X4' TROFFER LED MODULE,RIBBED LENS, 0.187" 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

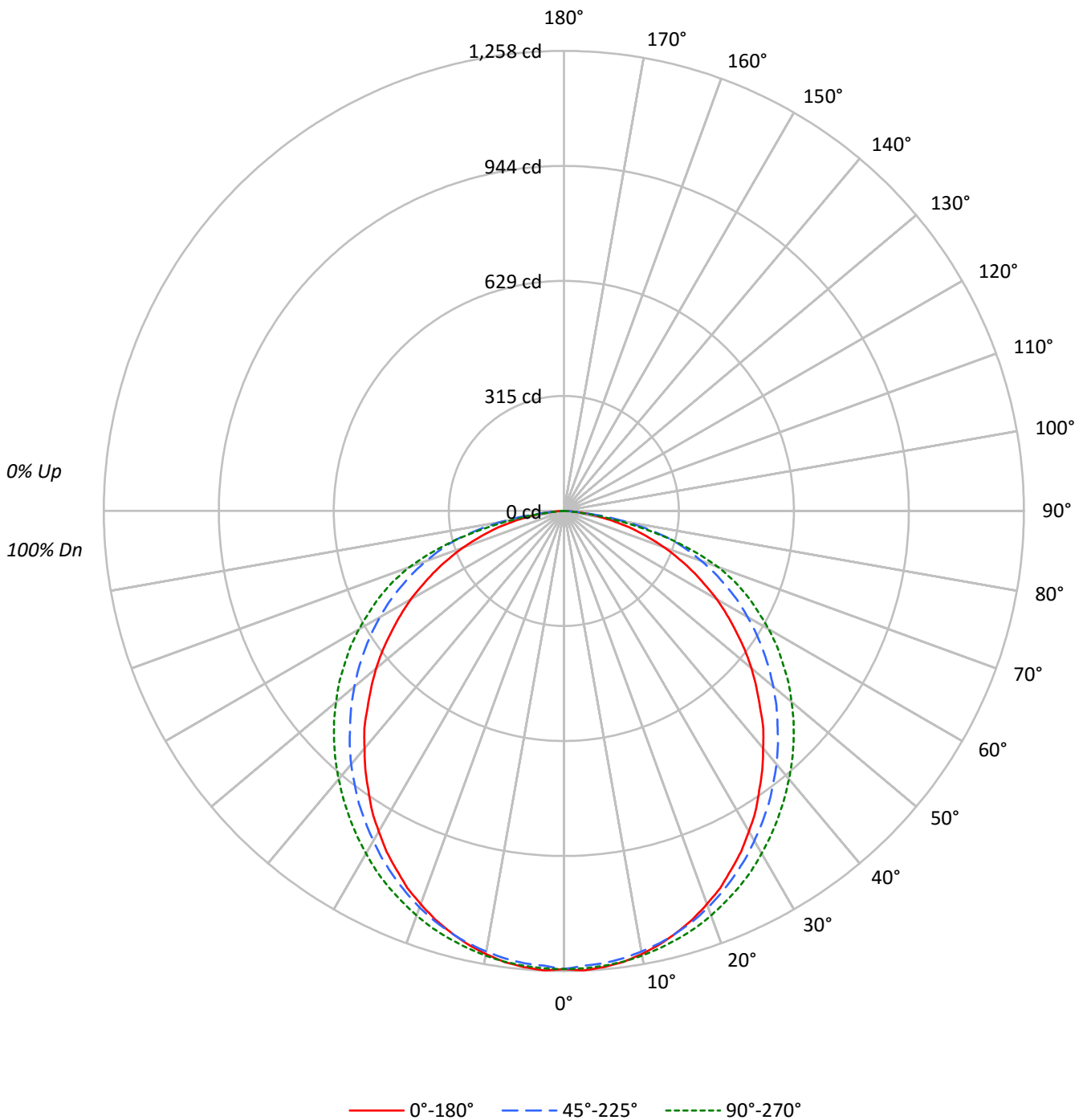
Lumens per Lamp: N/A
Luminaire Lumens: 3636.0 lumens
Efficiency: N/A
Efficacy: 104.5 lumens/watt
Spacing Criteria (0/90/45): 1.2 / 1.28 / 1.37
Luminous Opening: Rectangular (W 1' x L: 4' x H: 0')
CIE Type: Direct

Input Watts (W): 34.8
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°	3371	3371	3371
5°	3381	3353	3373
10°	3361	3343	3374
15°	3325	3327	3372
20°	3276	3304	3371
25°	3214	3271	3368
30°	3144	3237	3361
35°	3060	3210	3359
40°	2979	3178	3364
45°	2888	3144	3382
50°	2804	3129	3404
55°	2697	3119	3435
60°	2601	3124	3482
65°	2467	3133	3536
70°	2316	3157	3534
75°	2099	3187	3195
80°	1722	2752	2273
85°	1275	1303	525



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	118.5	3.3
10°-20°	338.6	9.3
20°-30°	510.1	14.0
30°-40°	612.1	16.8
40°-50°	638.0	17.5
50°-60°	590.6	16.2
60°-70°	477.2	13.1
70°-80°	291.0	8.0
80°-90°	60.1	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°	967.2	26.6
0°-40°	1579.3	43.4
0°-60°	2807.8	77.2
0°-90°	3636.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	3636.0	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	1253	1253	1253	1253	1253	
5°	1252	1249	1241	1250	1249	119
15°	1193	1194	1194	1210	1210	336
25°	1082	1089	1102	1129	1134	499
35°	932	946	977	1013	1022	584
45°	759	782	826	872	889	587
55°	575	605	665	717	732	515
65°	388	426	492	542	555	383
75°	202	246	306	311	307	212
85°	41	62	42	24	17	51
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	1252.6	1252.6	1252.6	1252.6	1252.6
2.5°	1257.5	1253.4	1244.5	1253.4	1251.8
5°	1251.8	1248.6	1241.3	1250.2	1248.6
7.5°	1243.7	1240.5	1234.0	1244.5	1242.9
10°	1229.9	1228.3	1223.4	1235.6	1234.8
12.5°	1213.7	1212.9	1210.5	1224.2	1223.4
15°	1193.4	1194.2	1194.2	1210.5	1210.5
17.5°	1170.7	1172.3	1175.6	1193.4	1195.9
20°	1144.0	1147.2	1153.7	1174.0	1177.2
22.5°	1116.4	1118.8	1128.6	1152.9	1156.1
25°	1082.4	1088.8	1101.8	1129.4	1134.2
27.5°	1049.9	1055.6	1073.4	1101.8	1109.9
30°	1011.8	1020.7	1041.8	1072.6	1081.5
32.5°	975.3	985.1	1009.4	1045.1	1053.2
35°	931.6	946.1	977.0	1012.6	1022.4
37.5°	891.8	905.6	940.5	979.4	990.7
40°	848.0	865.1	904.8	946.1	957.5
42.5°	807.5	823.7	866.7	908.9	924.3
45°	758.9	781.6	826.2	872.4	888.6
47.5°	714.3	737.0	788.1	837.5	852.1
50°	669.7	694.0	747.5	798.6	813.2
52.5°	623.5	649.4	707.0	758.1	775.1
55°	574.8	604.8	664.8	716.7	732.1
57.5°	528.6	559.4	623.5	676.2	691.6
60°	483.2	514.8	580.5	630.8	647.0
62.5°	432.9	470.2	538.3	587.8	600.0
65°	387.5	425.6	492.1	541.6	555.4
67.5°	339.7	381.1	447.5	492.9	505.9
70°	294.3	337.3	401.3	443.5	449.2
72.5°	245.7	289.4	354.3	381.1	381.1
75°	201.9	246.5	306.5	311.3	307.3
77.5°	154.0	203.5	242.4	232.7	223.0
80°	111.1	159.7	177.6	159.7	146.7
82.5°	74.6	115.9	107.0	85.1	75.4
85°	41.3	61.6	42.2	23.5	17.0
87.5°	15.4	13.8	4.1	4.1	4.1
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)