

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: P307773

Luminaire Tested: **14FCZ2-44-UNV-L82765-CP187-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: P307773
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: 14FCZ2-44-UNV-L82765-CP187-W2A-U-3000K
Description: 1'X4' TROFFER LED MODULE,RIBBED LENS, 0.187" 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: 3671.0 lumens
Efficiency: N/A
Efficacy: 96.6 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

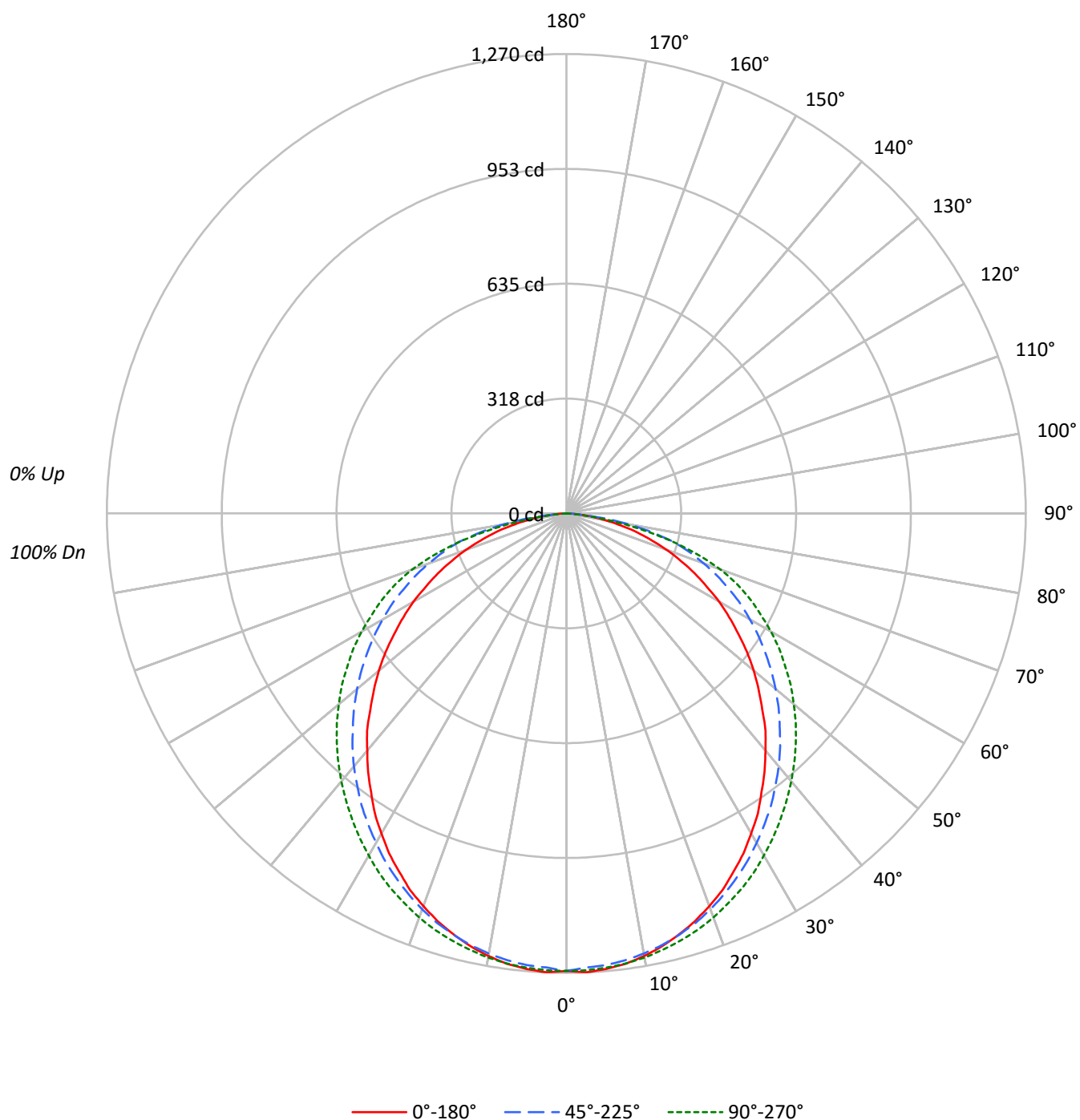
Input Watts (W): 38
Input Voltage (V): NR
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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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	99	95	106	101	97	94	97	94	91		93	90	88		83
2	98	90	83	77	96	88	82	76	84	79	74		81	77	73		69
3	89	79	70	64	87	77	69	63	74	67	62		71	66	61		58
4	82	70	61	54	79	68	60	53	66	58	53		63	57	52		49
5	75	62	53	46	73	61	52	46	59	51	45		57	50	45		42
6	69	56	47	40	67	55	46	40	53	45	40		51	44	39		37
7	64	51	42	35	63	50	41	35	48	41	35		47	40	35		32
8	60	46	37	32	58	45	37	31	44	37	31		43	36	31		29
9	56	42	34	28	54	42	34	28	41	33	28		39	33	28		26
10	52	39	31	26	51	39	31	26	37	30	26		37	30	25		24

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	3403	3403	3403
5°	3414	3385	3405
10°	3393	3375	3407
15°	3357	3359	3405
20°	3308	3336	3403
25°	3245	3303	3400
30°	3174	3268	3393
35°	3090	3240	3391
40°	3008	3209	3396
45°	2916	3174	3414
50°	2830	3159	3437
55°	2723	3149	3468
60°	2626	3154	3515
65°	2492	3164	3570
70°	2338	3188	3568
75°	2119	3217	3225
80°	1737	2779	2297
85°	1288	1315	531



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	119.7	3.3
10°-20°	341.8	9.3
20°-30°	515.0	14.0
30°-40°	618.0	16.8
40°-50°	644.1	17.5
50°-60°	596.3	16.2
60°-70°	481.8	13.1
70°-80°	293.7	8.0
80°-90°	60.6	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°	976.5	26.6
0°-40°	1594.5	43.4
0°-60°	2834.8	77.2
0°-90°	3671.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	3671.0	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	1265	1265	1265	1265	1265	
5°	1264	1261	1253	1262	1261	120
15°	1205	1206	1206	1222	1222	340
25°	1093	1099	1112	1140	1145	504
35°	940	955	986	1022	1032	589
45°	766	789	834	881	897	592
55°	580	611	671	724	739	520
65°	391	430	497	547	561	387
75°	204	249	309	314	310	214
85°	42	62	43	24	17	51
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	1264.7	1264.7	1264.7	1264.7	1264.7
2.5°	1269.6	1265.5	1256.5	1265.5	1263.9
5°	1263.9	1260.6	1253.2	1262.2	1260.6
7.5°	1255.7	1252.4	1245.8	1256.5	1254.8
10°	1241.8	1240.1	1235.2	1247.5	1246.7
12.5°	1225.4	1224.6	1222.1	1236.0	1235.2
15°	1204.9	1205.7	1205.7	1222.1	1222.1
17.5°	1182.0	1183.6	1186.9	1204.9	1207.4
20°	1155.0	1158.3	1164.8	1185.3	1188.5
22.5°	1127.2	1129.6	1139.4	1164.0	1167.3
25°	1092.8	1099.3	1112.4	1140.3	1145.2
27.5°	1060.0	1065.8	1083.8	1112.4	1120.6
30°	1021.6	1030.6	1051.8	1083.0	1092.0
32.5°	984.7	994.5	1019.1	1055.1	1063.3
35°	940.5	955.3	986.4	1022.4	1032.2
37.5°	900.4	914.3	949.5	988.8	1000.3
40°	856.2	873.4	913.5	955.3	966.7
42.5°	815.3	831.7	875.0	917.6	933.2
45°	766.2	789.1	834.1	880.8	897.1
47.5°	721.1	744.1	795.6	845.6	860.3
50°	676.1	700.7	754.7	806.3	821.0
52.5°	629.5	655.7	713.8	765.4	782.5
55°	580.4	610.6	671.2	723.6	739.2
57.5°	533.7	564.8	629.5	682.7	698.2
60°	487.9	519.8	586.1	636.8	653.2
62.5°	437.1	474.8	543.5	593.5	605.7
65°	391.3	429.7	496.9	546.8	560.7
67.5°	343.0	384.7	451.8	497.7	510.8
70°	297.1	340.5	405.2	447.8	453.5
72.5°	248.0	292.2	357.7	384.7	384.7
75°	203.8	248.8	309.4	314.3	310.2
77.5°	155.5	205.5	244.7	234.9	225.1
80°	112.1	161.3	179.3	161.3	148.2
82.5°	75.3	117.1	108.0	85.9	76.1
85°	41.7	62.2	42.6	23.7	17.2
87.5°	15.6	13.9	4.1	4.1	4.1
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)