

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: P307731

Luminaire Tested: **14FCZ2-39-UNV-L82765-CP187-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: P307731
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-4500K
Description: 1'X4' TROFFER LED MODULE,RIBBED LENS, 0.187" 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: 3534.0 lumens
Efficiency: N/A
Efficacy: 104.2 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

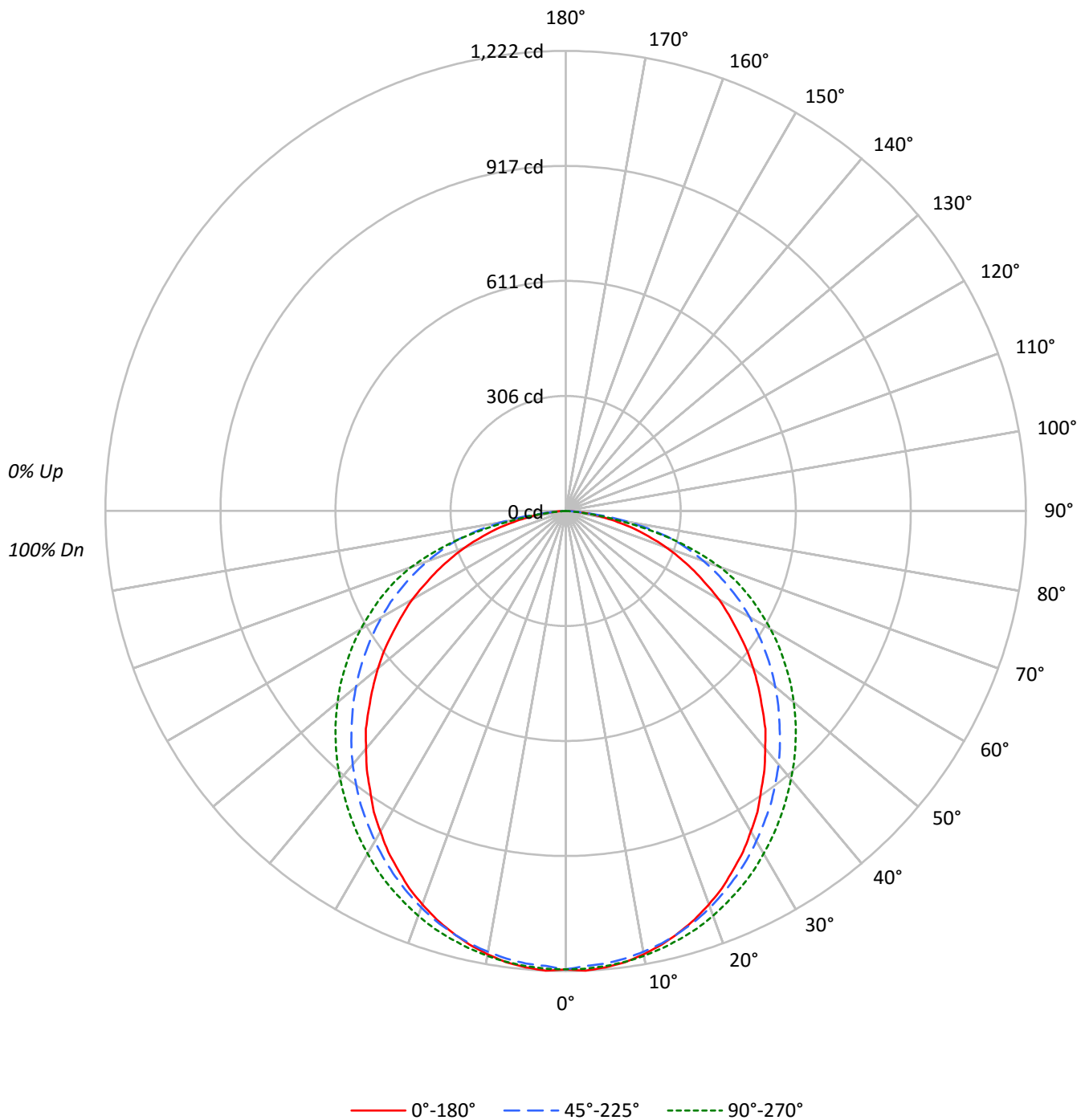
Input Watts (W): 33.9
Input Voltage (V): NR
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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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°	3276	3276	3276
5°	3287	3259	3278
10°	3266	3249	3279
15°	3231	3234	3278
20°	3184	3211	3277
25°	3124	3180	3273
30°	3056	3146	3266
35°	2974	3120	3264
40°	2896	3089	3269
45°	2807	3056	3287
50°	2725	3041	3309
55°	2621	3032	3339
60°	2528	3037	3384
65°	2399	3046	3437
70°	2250	3069	3435
75°	2040	3097	3106
80°	1674	2675	2210
85°	1241	1266	509



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	115.2	3.3
10°-20°	329.1	9.3
20°-30°	495.7	14.0
30°-40°	594.9	16.8
40°-50°	620.1	17.5
50°-60°	574.0	16.2
60°-70°	463.8	13.1
70°-80°	282.8	8.0
80°-90°	58.4	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°	940.0	26.6
0°-40°	1534.9	43.4
0°-60°	2729.0	77.2
0°-90°	3534.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	3534.0	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	1218	1218	1218	1218	1218	
5°	1217	1214	1206	1215	1214	115
15°	1160	1161	1161	1176	1176	327
25°	1052	1058	1071	1098	1102	485
35°	905	920	950	984	994	567
45°	738	760	803	848	864	570
55°	559	588	646	697	712	501
65°	377	414	478	526	540	372
75°	196	240	298	303	299	206
85°	40	60	41	23	16	49
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	1217.5	1217.5	1217.5	1217.5	1217.5
2.5°	1222.2	1218.3	1209.6	1218.3	1216.7
5°	1216.7	1213.5	1206.4	1215.1	1213.5
7.5°	1208.8	1205.7	1199.4	1209.6	1208.0
10°	1195.4	1193.8	1189.1	1200.9	1200.1
12.5°	1179.7	1178.9	1176.5	1189.9	1189.1
15°	1159.9	1160.7	1160.7	1176.5	1176.5
17.5°	1137.9	1139.5	1142.6	1159.9	1162.3
20°	1111.9	1115.0	1121.3	1141.0	1144.2
22.5°	1085.1	1087.5	1096.9	1120.5	1123.7
25°	1052.0	1058.3	1070.9	1097.7	1102.4
27.5°	1020.5	1026.0	1043.3	1070.9	1078.8
30°	983.4	992.1	1012.6	1042.5	1051.2
32.5°	948.0	957.4	981.1	1015.7	1023.6
35°	905.4	919.6	949.6	984.2	993.7
37.5°	866.8	880.2	914.1	951.9	962.9
40°	824.3	840.8	879.4	919.6	930.6
42.5°	784.9	800.6	842.4	883.4	898.3
45°	737.6	759.6	803.0	847.9	863.7
47.5°	694.2	716.3	765.9	814.0	828.2
50°	650.9	674.5	726.5	776.2	790.4
52.5°	606.0	631.2	687.1	736.8	753.3
55°	558.7	587.9	646.2	696.6	711.6
57.5°	513.8	543.7	606.0	657.2	672.2
60°	469.7	500.4	564.2	613.1	628.8
62.5°	420.8	457.0	523.2	571.3	583.1
65°	376.7	413.7	478.3	526.4	539.8
67.5°	330.2	370.4	435.0	479.1	491.7
70°	286.0	327.8	390.1	431.0	436.6
72.5°	238.8	281.3	344.4	370.4	370.4
75°	196.2	239.6	297.9	302.6	298.7
77.5°	149.7	197.8	235.6	226.2	216.7
80°	108.0	155.2	172.6	155.2	142.6
82.5°	72.5	112.7	104.0	82.7	73.3
85°	40.2	59.9	41.0	22.9	16.5
87.5°	15.0	13.4	3.9	3.9	3.9
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)