

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: P307701

Luminaire Tested: **14FCZ2-39-UNV-L82765-CA08-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: P307701
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-CA08-W2A-U-3000K
Description: 1'X4' TROFFER LED MODULE,RIBBED LENS, 0.08" ACRYLIC 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: 3510.0 lumens
Efficiency: N/A
Efficacy: 106.0 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

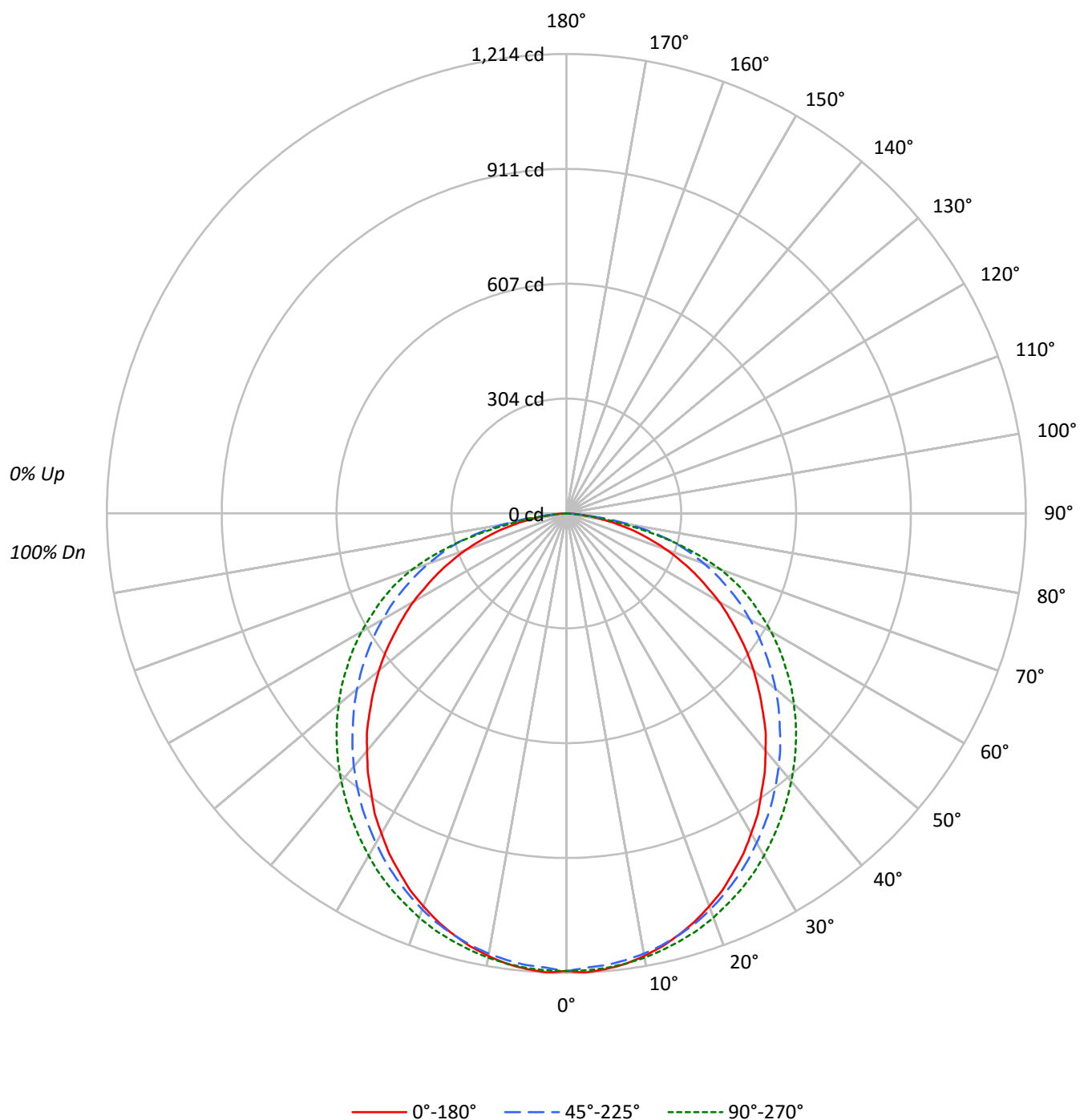
Input Watts (W): 33.1
Input Voltage (V): NR
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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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°	3254	3254	3254
5°	3264	3237	3256
10°	3244	3227	3257
15°	3210	3212	3255
20°	3162	3189	3254
25°	3102	3158	3251
30°	3035	3125	3244
35°	2954	3098	3242
40°	2876	3068	3247
45°	2788	3035	3264
50°	2707	3021	3286
55°	2603	3011	3316
60°	2511	3016	3362
65°	2382	3025	3414
70°	2235	3048	3412
75°	2026	3075	3084
80°	1661	2656	2196
85°	1232	1257	506



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	114.4	3.3
10°-20°	326.9	9.3
20°-30°	492.4	14.0
30°-40°	590.9	16.8
40°-50°	615.8	17.5
50°-60°	570.1	16.2
60°-70°	460.6	13.1
70°-80°	280.8	8.0
80°-90°	58.0	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°	933.7	26.6
0°-40°	1524.5	43.4
0°-60°	2710.5	77.2
0°-90°	3510.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	3510.0	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	1209	1209	1209	1209	1209	
5°	1208	1205	1198	1207	1205	115
15°	1152	1153	1153	1168	1168	325
25°	1045	1051	1064	1090	1095	482
35°	899	913	943	978	987	563
45°	733	754	798	842	858	566
55°	555	584	642	692	707	497
65°	374	411	475	523	536	370
75°	195	238	296	300	297	205
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°	1209.2	1209.2	1209.2	1209.2	1209.2
2.5°	1213.9	1210.0	1201.4	1210.0	1208.4
5°	1208.4	1205.3	1198.2	1206.9	1205.3
7.5°	1200.6	1197.5	1191.2	1201.4	1199.8
10°	1187.3	1185.7	1181.0	1192.8	1192.0
12.5°	1171.6	1170.9	1168.5	1181.8	1181.0
15°	1152.1	1152.9	1152.9	1168.5	1168.5
17.5°	1130.2	1131.7	1134.9	1152.1	1154.4
20°	1104.3	1107.5	1113.7	1133.3	1136.4
22.5°	1077.7	1080.1	1089.5	1112.9	1116.1
25°	1044.8	1051.1	1063.6	1090.2	1094.9
27.5°	1013.5	1019.0	1036.2	1063.6	1071.5
30°	976.8	985.4	1005.7	1035.5	1044.1
32.5°	941.5	950.9	974.4	1008.8	1016.7
35°	899.3	913.4	943.1	977.5	986.9
37.5°	860.9	874.2	907.9	945.5	956.4
40°	818.7	835.1	873.4	913.4	924.3
42.5°	779.5	795.2	836.7	877.4	892.2
45°	732.6	754.5	797.5	842.1	857.8
47.5°	689.5	711.4	760.7	808.5	822.6
50°	646.5	670.0	721.6	770.9	785.0
52.5°	601.9	626.9	682.5	731.8	748.2
55°	554.9	583.9	641.8	691.9	706.7
57.5°	510.3	540.0	601.9	652.7	667.6
60°	466.5	497.0	560.4	608.9	624.6
62.5°	417.9	453.9	519.7	567.4	579.2
65°	374.1	410.9	475.1	522.8	536.1
67.5°	327.9	367.8	432.0	475.9	488.4
70°	284.1	325.6	387.4	428.1	433.6
72.5°	237.1	279.4	342.0	367.8	367.8
75°	194.9	237.9	295.8	300.5	296.6
77.5°	148.7	196.4	234.0	224.6	215.2
80°	107.2	154.2	171.4	154.2	141.7
82.5°	72.0	111.9	103.3	82.2	72.8
85°	39.9	59.5	40.7	22.7	16.4
87.5°	14.9	13.3	3.9	3.9	3.9
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)