

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: P307700

Luminaire Tested: **14FCZ2-39-UNV-L82765-CA08-W2A-U-2700K**

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: P307700
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-2700K
Description: 1'X4' TROFFER LED MODULE,RIBBED LENS, 0.08" ACRYLIC SHEET
Light Source: (168) 2700K 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: 3412.0 lumens
Efficiency: N/A
Efficacy: 102.5 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

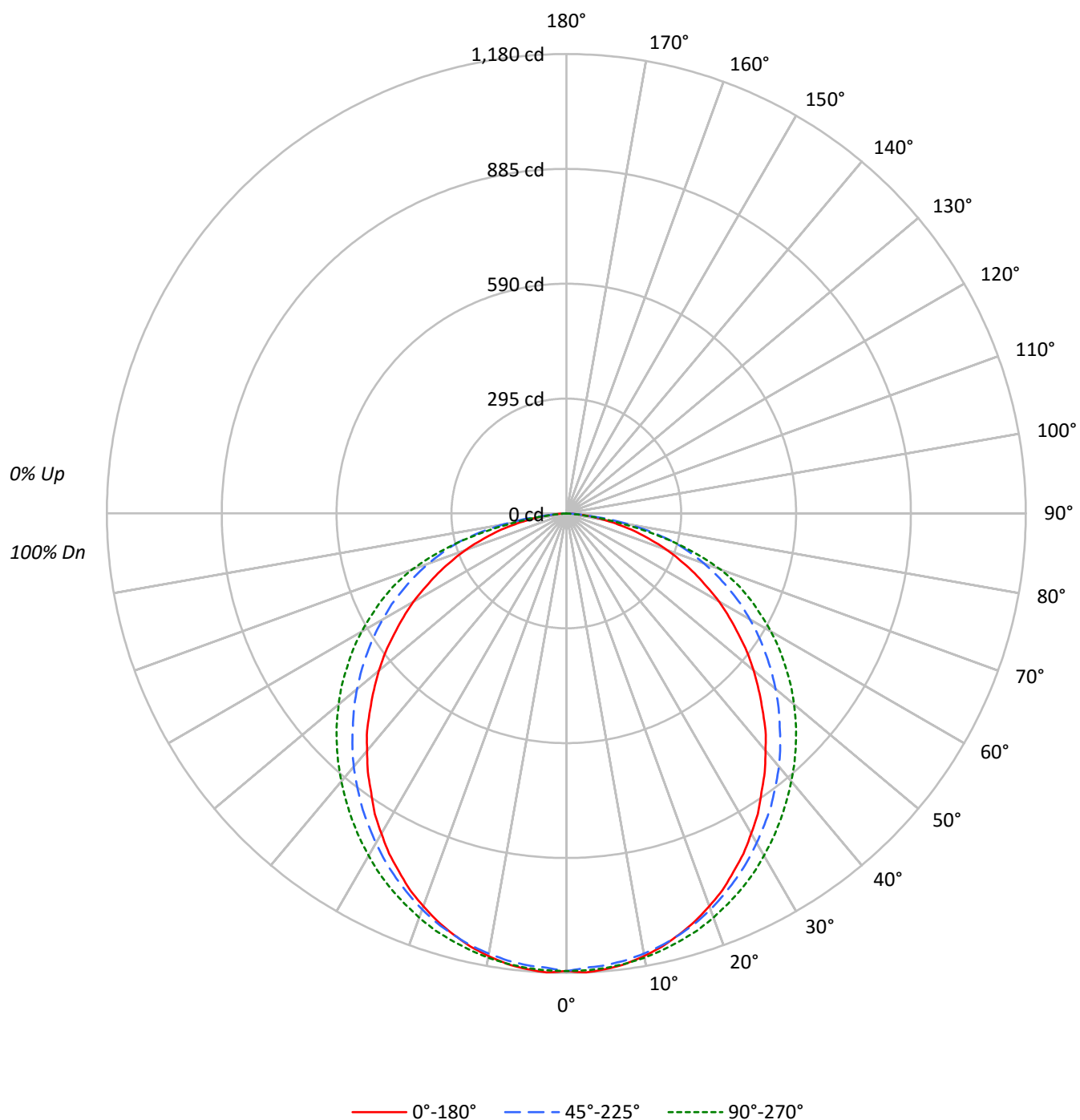
Input Watts (W): 33.3
Input Voltage (V): NR
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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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°	3163	3163	3163
5°	3173	3146	3165
10°	3154	3137	3166
15°	3120	3122	3165
20°	3074	3100	3164
25°	3016	3070	3160
30°	2950	3038	3154
35°	2872	3012	3152
40°	2796	2983	3156
45°	2710	2950	3173
50°	2631	2937	3195
55°	2531	2927	3223
60°	2440	2932	3267
65°	2316	2940	3319
70°	2173	2963	3316
75°	1969	2990	2997
80°	1615	2582	2134
85°	1198	1223	494



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	111.2	3.3
10°-20°	317.7	9.3
20°-30°	478.6	14.0
30°-40°	574.4	16.8
40°-50°	598.7	17.5
50°-60°	554.2	16.2
60°-70°	447.8	13.1
70°-80°	273.0	8.0
80°-90°	56.4	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°	907.6	26.6
0°-40°	1482.0	43.4
0°-60°	2634.8	77.2
0°-90°	3412.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	3412.0	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	1175	1175	1175	1175	1175	
5°	1175	1172	1165	1173	1172	111
15°	1120	1121	1121	1136	1136	316
25°	1016	1022	1034	1060	1064	468
35°	874	888	917	950	959	548
45°	712	733	775	819	834	550
55°	539	568	624	673	687	483
65°	364	399	462	508	521	360
75°	189	231	288	292	288	199
85°	39	58	40	22	16	48
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	1175.4	1175.4	1175.4	1175.4	1175.4
2.5°	1180.0	1176.2	1167.8	1176.2	1174.7
5°	1174.7	1171.6	1164.8	1173.2	1171.6
7.5°	1167.1	1164.0	1157.9	1167.8	1166.3
10°	1154.1	1152.6	1148.1	1159.5	1158.7
12.5°	1138.9	1138.2	1135.9	1148.8	1148.1
15°	1119.9	1120.7	1120.7	1135.9	1135.9
17.5°	1098.6	1100.1	1103.2	1119.9	1122.2
20°	1073.5	1076.5	1082.6	1101.6	1104.7
22.5°	1047.6	1049.9	1059.0	1081.9	1084.9
25°	1015.7	1021.8	1033.9	1059.8	1064.4
27.5°	985.2	990.6	1007.3	1033.9	1041.5
30°	949.5	957.9	977.6	1006.5	1014.9
32.5°	915.2	924.4	947.2	980.7	988.3
35°	874.2	887.9	916.8	950.2	959.4
37.5°	836.9	849.8	882.5	919.1	929.7
40°	795.8	811.8	849.1	887.9	898.5
42.5°	757.8	773.0	813.3	852.9	867.3
45°	712.1	733.4	775.3	818.6	833.8
47.5°	670.3	691.6	739.5	785.9	799.6
50°	628.4	651.2	701.5	749.4	763.1
52.5°	585.1	609.4	663.4	711.4	727.3
55°	539.4	567.6	623.9	672.6	687.0
57.5°	496.0	525.0	585.1	634.5	649.0
60°	453.4	483.1	544.7	591.9	607.1
62.5°	406.3	441.3	505.2	551.6	563.0
65°	363.7	399.4	461.8	508.2	521.2
67.5°	318.8	357.6	420.0	462.6	474.7
70°	276.2	316.5	376.6	416.2	421.5
72.5°	230.5	271.6	332.5	357.6	357.6
75°	189.4	231.3	287.6	292.1	288.3
77.5°	144.6	191.0	227.5	218.4	209.2
80°	104.2	149.9	166.6	149.9	137.7
82.5°	70.0	108.8	100.4	79.9	70.8
85°	38.8	57.8	39.6	22.1	16.0
87.5°	14.5	12.9	3.8	3.8	3.8
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)