

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: P307660

Luminaire Tested: **14FCZ2-35-UNV-L82765-CA08-W2A-U-5000K**

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: P307660
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: 14FCZ2-35-UNV-L82765-CA08-W2A-U-5000K
Description: 1'X4' TROFFER LED MODULE,RIBBED LENS, 0.08" ACRYLIC SHEET
Light Source: (168) 5000K 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: 3469.0 lumens
Efficiency: N/A
Efficacy: 114.9 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

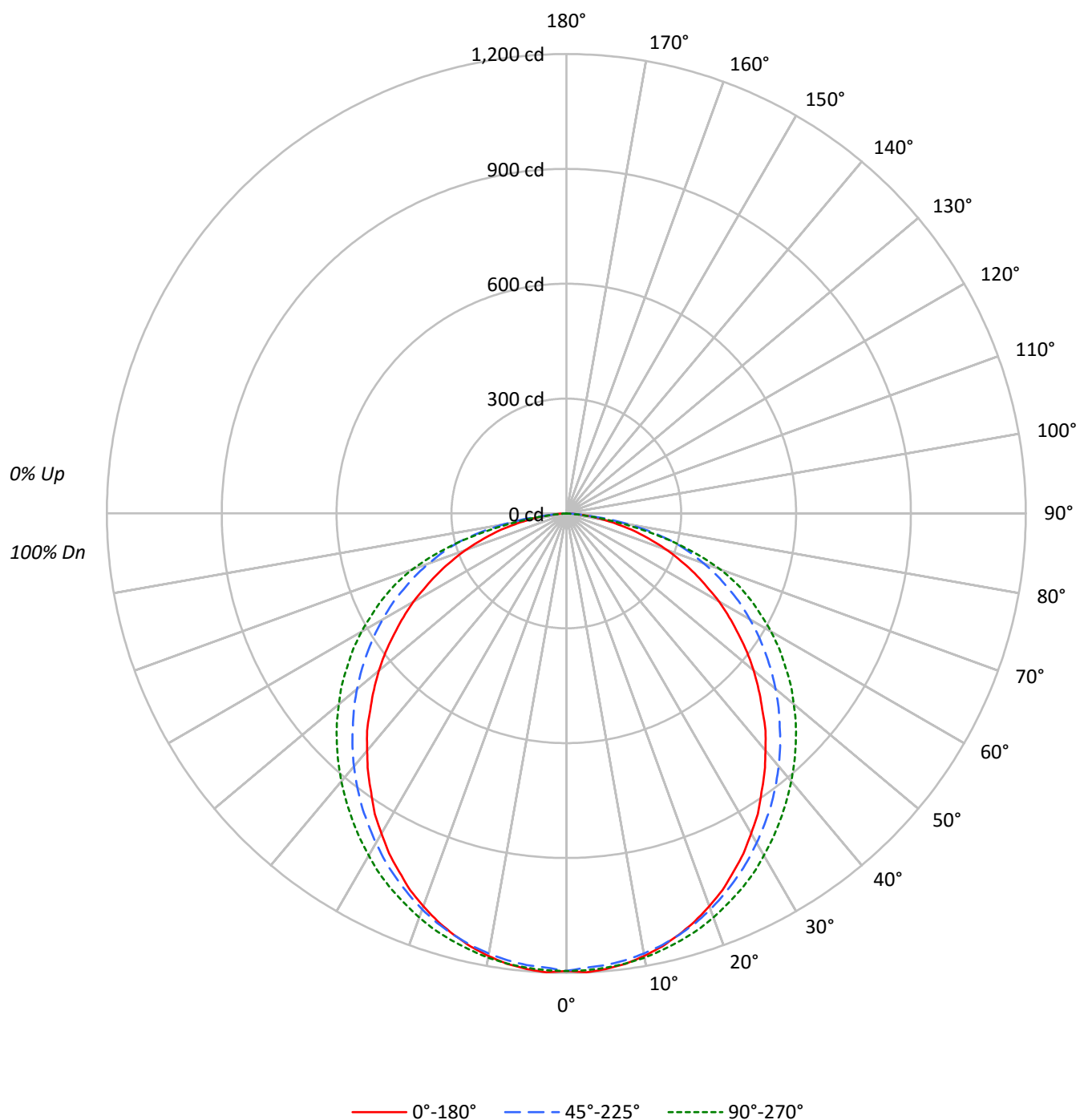
Input Watts (W): 30.2
Input Voltage (V): NR
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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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°	3216	3216	3216
5°	3226	3199	3218
10°	3206	3189	3219
15°	3172	3174	3217
20°	3125	3152	3216
25°	3066	3121	3213
30°	2999	3089	3206
35°	2920	3062	3204
40°	2842	3032	3209
45°	2755	3000	3226
50°	2675	2986	3248
55°	2573	2976	3277
60°	2481	2981	3322
65°	2354	2989	3374
70°	2209	3013	3371
75°	2002	3040	3048
80°	1643	2625	2170
85°	1216	1241	500



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	113.1	3.3
10°-20°	323.0	9.3
20°-30°	486.6	14.0
30°-40°	584.0	16.8
40°-50°	608.6	17.5
50°-60°	563.5	16.2
60°-70°	455.3	13.1
70°-80°	277.6	8.0
80°-90°	57.3	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°	922.8	26.6
0°-40°	1506.7	43.4
0°-60°	2678.8	77.2
0°-90°	3469.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	3469.0	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	1195	1195	1195	1195	1195	
5°	1194	1191	1184	1193	1191	113
15°	1139	1139	1139	1155	1155	321
25°	1033	1039	1051	1078	1082	476
35°	889	903	932	966	975	557
45°	724	746	788	832	848	560
55°	548	577	634	684	698	491
65°	370	406	470	517	530	366
75°	193	235	292	297	293	202
85°	39	59	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°	1195.1	1195.1	1195.1	1195.1	1195.1
2.5°	1199.7	1195.9	1187.3	1195.9	1194.3
5°	1194.3	1191.2	1184.3	1192.8	1191.2
7.5°	1186.6	1183.5	1177.3	1187.3	1185.8
10°	1173.4	1171.9	1167.2	1178.8	1178.1
12.5°	1158.0	1157.2	1154.9	1168.0	1167.2
15°	1138.6	1139.4	1139.4	1154.9	1154.9
17.5°	1117.0	1118.5	1121.6	1138.6	1140.9
20°	1091.4	1094.5	1100.7	1120.1	1123.1
22.5°	1065.1	1067.5	1076.7	1099.9	1103.0
25°	1032.6	1038.8	1051.2	1077.5	1082.1
27.5°	1001.7	1007.1	1024.1	1051.2	1058.9
30°	965.3	973.9	994.0	1023.4	1031.9
32.5°	930.5	939.8	963.0	997.1	1004.8
35°	888.8	902.7	932.1	966.1	975.4
37.5°	850.9	864.0	897.3	934.4	945.2
40°	809.1	825.3	863.2	902.7	913.5
42.5°	770.4	785.9	826.9	867.1	881.8
45°	724.0	745.7	788.2	832.3	847.8
47.5°	681.5	703.1	751.9	799.0	813.0
50°	638.9	662.1	713.2	761.9	775.8
52.5°	594.8	619.6	674.5	723.2	739.5
55°	548.4	577.0	634.3	683.8	698.5
57.5°	504.3	533.7	594.8	645.1	659.8
60°	461.0	491.2	553.8	601.8	617.3
62.5°	413.1	448.6	513.6	560.8	572.4
65°	369.7	406.1	469.5	516.7	529.9
67.5°	324.1	363.6	427.0	470.3	482.7
70°	280.8	321.8	382.9	423.1	428.5
72.5°	234.4	276.1	338.0	363.6	363.6
75°	192.6	235.1	292.4	297.0	293.2
77.5°	147.0	194.2	231.3	222.0	212.7
80°	106.0	152.4	169.4	152.4	140.0
82.5°	71.2	110.6	102.1	81.2	71.9
85°	39.4	58.8	40.2	22.4	16.2
87.5°	14.7	13.1	3.9	3.9	3.9
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)