

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: P307659

Luminaire Tested: **14FCZ2-35-UNV-L82765-CA08-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: P307659
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-4500K
Description: 1'X4' TROFFER LED MODULE,RIBBED LENS, 0.08" ACRYLIC 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: 3422.0 lumens
Efficiency: N/A
Efficacy: 113.7 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

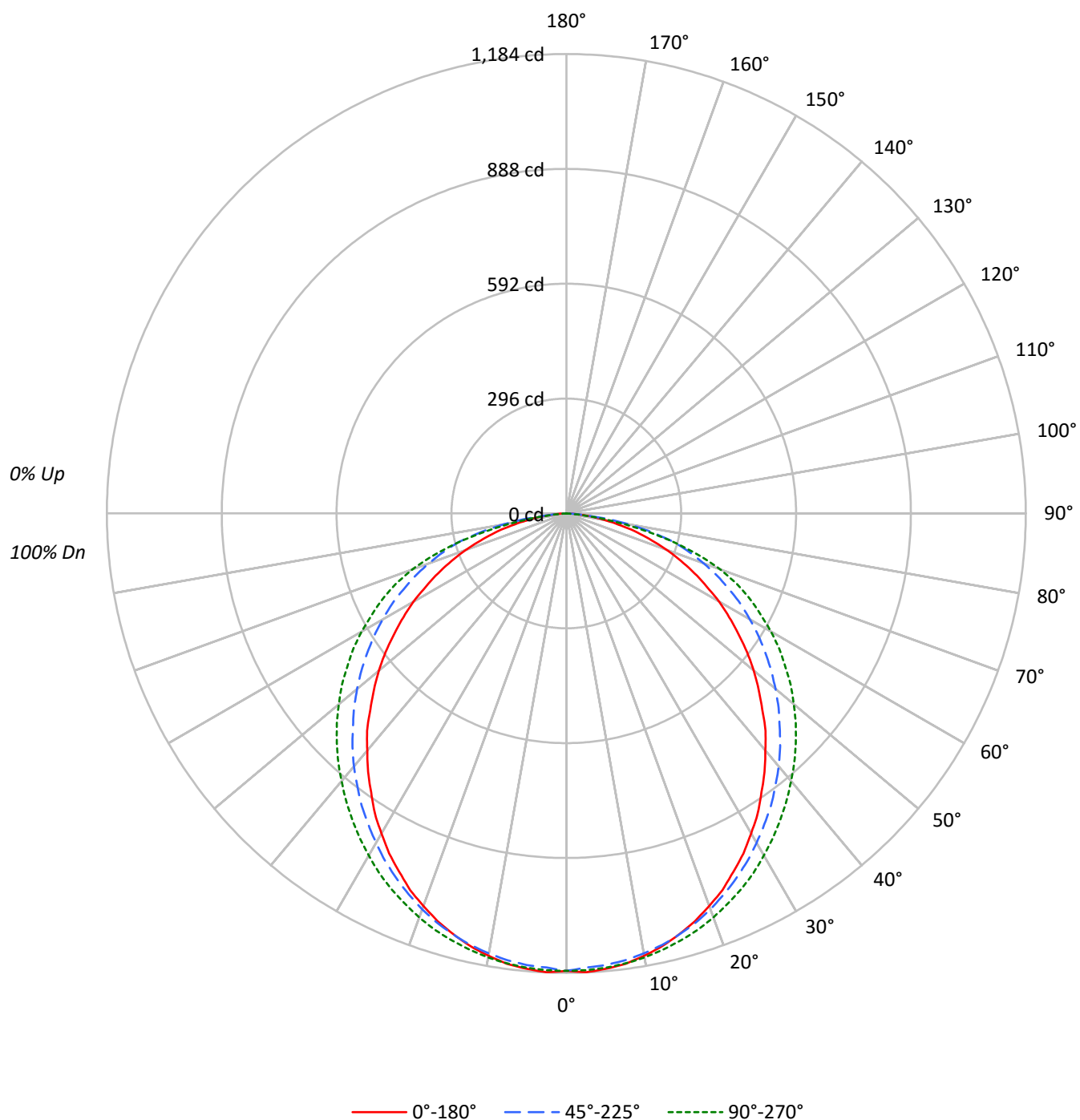
Input Watts (W): 30.1
Input Voltage (V): NR
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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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°	3172	3172	3172
5°	3182	3156	3174
10°	3163	3146	3175
15°	3129	3131	3174
20°	3083	3109	3173
25°	3025	3079	3170
30°	2959	3047	3163
35°	2880	3021	3161
40°	2804	2991	3165
45°	2718	2959	3183
50°	2639	2945	3204
55°	2538	2936	3232
60°	2448	2940	3277
65°	2322	2949	3328
70°	2179	2972	3326
75°	1975	2999	3007
80°	1619	2590	2140
85°	1201	1226	494



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	111.6	3.3
10°-20°	318.7	9.3
20°-30°	480.0	14.0
30°-40°	576.1	16.8
40°-50°	600.4	17.5
50°-60°	555.8	16.2
60°-70°	449.1	13.1
70°-80°	273.8	8.0
80°-90°	56.5	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°	910.3	26.6
0°-40°	1486.3	43.4
0°-60°	2642.6	77.2
0°-90°	3422.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	3422.0	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	1179	1179	1179	1179	1179	
5°	1178	1175	1168	1177	1175	112
15°	1123	1124	1124	1139	1139	317
25°	1019	1025	1037	1063	1068	470
35°	877	890	920	953	962	549
45°	714	736	778	821	836	552
55°	541	569	626	674	689	485
65°	365	401	463	510	523	361
75°	190	232	288	293	289	200
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°	1178.9	1178.9	1178.9	1178.9	1178.9
2.5°	1183.5	1179.7	1171.3	1179.7	1178.1
5°	1178.1	1175.1	1168.2	1176.6	1175.1
7.5°	1170.5	1167.4	1161.3	1171.3	1169.7
10°	1157.5	1156.0	1151.4	1162.9	1162.1
12.5°	1142.3	1141.5	1139.2	1152.2	1151.4
15°	1123.2	1124.0	1124.0	1139.2	1139.2
17.5°	1101.8	1103.3	1106.4	1123.2	1125.5
20°	1076.6	1079.7	1085.8	1104.9	1107.9
22.5°	1050.7	1053.0	1062.1	1085.0	1088.1
25°	1018.7	1024.8	1037.0	1062.9	1067.5
27.5°	988.1	993.5	1010.3	1037.0	1044.6
30°	952.3	960.7	980.5	1009.5	1017.9
32.5°	917.9	927.1	950.0	983.6	991.2
35°	876.7	890.5	919.5	953.0	962.2
37.5°	839.3	852.3	885.1	921.7	932.4
40°	798.1	814.2	851.5	890.5	901.1
42.5°	760.0	775.2	815.7	855.4	869.9
45°	714.2	735.6	777.5	821.0	836.3
47.5°	672.2	693.6	741.7	788.2	802.0
50°	630.3	653.2	703.5	751.6	765.3
52.5°	586.8	611.2	665.4	713.4	729.5
55°	541.0	569.2	625.7	674.5	689.0
57.5°	497.5	526.5	586.8	636.4	650.9
60°	454.8	484.5	546.3	593.6	608.9
62.5°	407.5	442.6	506.7	553.2	564.6
65°	364.7	400.6	463.2	509.7	522.7
67.5°	319.7	358.6	421.2	463.9	476.1
70°	277.0	317.4	377.7	417.4	422.7
72.5°	231.2	272.4	333.4	358.6	358.6
75°	190.0	232.0	288.4	293.0	289.2
77.5°	145.0	191.5	228.1	219.0	209.8
80°	104.5	150.3	167.1	150.3	138.1
82.5°	70.2	109.1	100.7	80.1	71.0
85°	38.9	58.0	39.7	22.1	16.0
87.5°	14.5	13.0	3.8	3.8	3.8
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)