

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: P307932

Luminaire Tested: **14FCZ2-35-UNV-L82765-S-CA08-W2A-U-5700K**

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: P307932
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G3-1805-783-40)
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-S-CA08-W2A-U-5700K
Description: 1'X4' TROFFER LED MODULE,SMOOTH LENS, 0.08" ACRYLIC SHEET
Light Source: (168) 5700K 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: 3549.0 lumens
Efficiency: N/A
Efficacy: 117.1 lumens/watt
Spacing Criteria (0/90/45): 1.19 / 1.26 / 1.36
Luminous Opening: Rectangular (W 1' x L: 4' x H: 0')
CIE Type: Direct

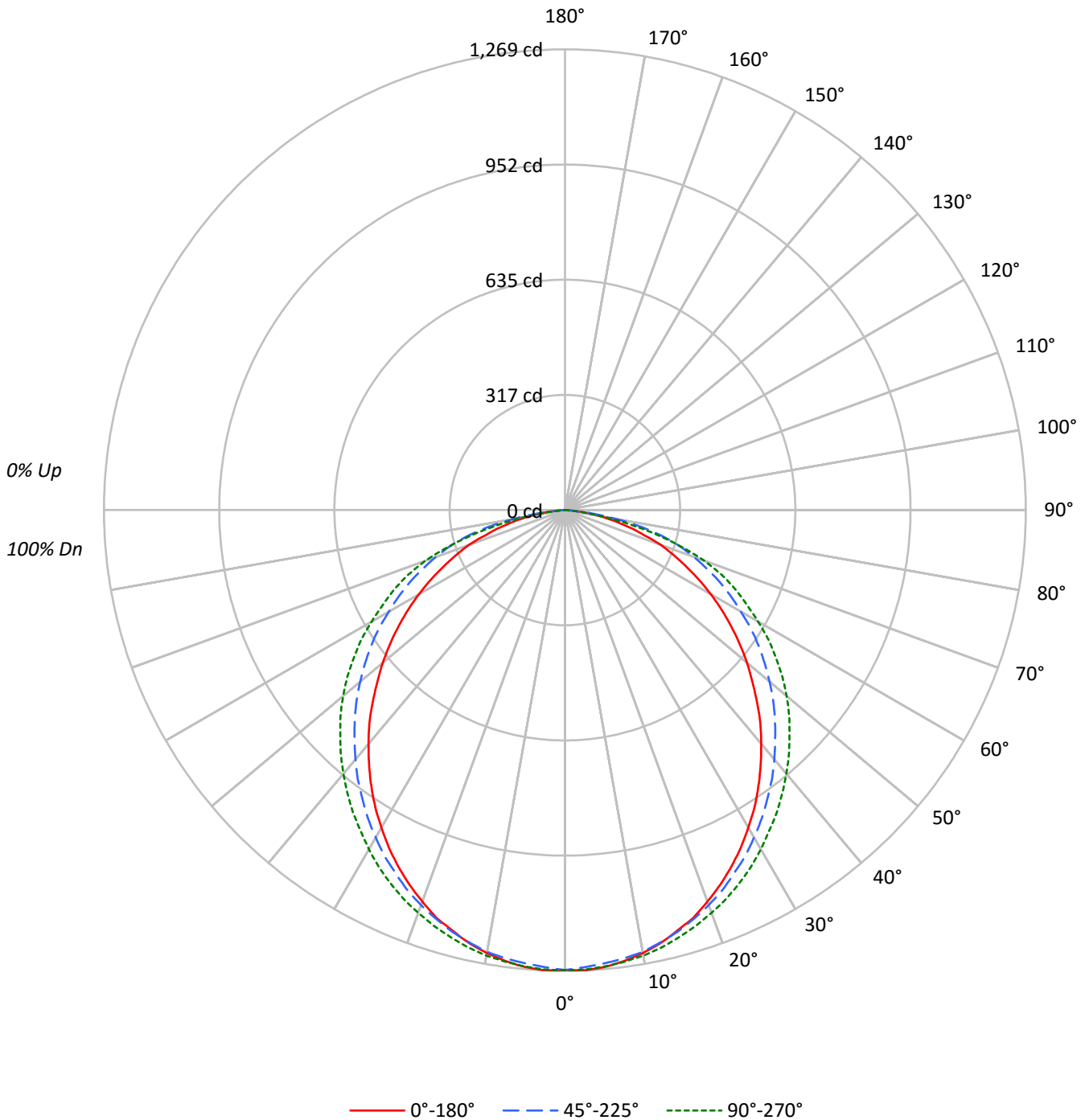
Input Watts (W): 30.3
Input Voltage (V): NR
Input Current (A_{in}): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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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				10	0
RW	70	50	30	10	70	50	30	10	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	102	102	102	100
1	109	104	100	96	106	102	98	94	97	94	91	94	91	89	90	88	86	84
2	99	90	84	78	96	89	82	77	85	80	75	82	77	73	79	75	72	70
3	90	79	71	65	87	78	70	64	75	68	63	72	66	62	69	65	61	58
4	82	70	61	55	80	69	61	54	66	59	53	64	58	53	62	56	52	50
5	76	63	54	47	74	62	53	47	59	52	46	57	51	46	56	50	45	43
6	70	56	47	41	68	55	47	41	54	46	40	52	45	40	50	44	40	38
7	65	51	42	36	63	50	42	36	49	41	36	47	41	35	46	40	35	33
8	60	47	38	32	59	46	38	32	45	37	32	43	37	32	42	36	32	30
9	56	43	35	29	55	42	34	29	41	34	29	40	33	29	39	33	28	27
10	53	40	32	26	52	39	31	26	38	31	26	37	31	26	36	30	26	24

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	3409	3409	3409
5°	3413	3384	3408
10°	3385	3375	3404
15°	3338	3348	3392
20°	3285	3316	3381
25°	3218	3276	3370
30°	3138	3237	3352
35°	3052	3191	3341
40°	2955	3152	3332
45°	2846	3114	3328
50°	2740	3079	3337
55°	2625	3055	3327
60°	2500	3012	3305
65°	2353	3003	3305
70°	2215	2976	3212
75°	1921	2909	2744
80°	1554	2345	1827
85°	1031	815	543



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	119.6	3.4
10°-20°	340.4	9.6
20°-30°	510.7	14.4
30°-40°	609.2	17.2
40°-50°	629.7	17.7
50°-60°	575.0	16.2
60°-70°	452.5	12.7
70°-80°	263.4	7.4
80°-90°	48.5	1.4
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°	970.7	27.4
0°-40°	1579.9	44.5
0°-60°	2784.6	78.5
0°-90°	3549.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	3549.0	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	1267	1267	1267	1267	1267	
5°	1263	1260	1253	1263	1262	120
15°	1198	1200	1202	1218	1218	338
25°	1084	1089	1103	1130	1135	499
35°	929	941	971	1008	1017	581
45°	748	772	818	864	874	577
55°	560	590	651	699	709	500
65°	370	408	472	508	519	367
75°	185	229	280	274	264	196
85°	33	48	26	21	18	43
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	1266.9	1266.9	1266.9	1266.9	1266.9
2.5°	1268.7	1265.2	1259.9	1268.7	1266.9
5°	1263.4	1259.9	1252.9	1263.4	1261.7
7.5°	1252.9	1249.3	1245.8	1256.4	1254.6
10°	1238.8	1237.0	1235.3	1247.6	1245.8
12.5°	1221.2	1221.2	1219.4	1233.5	1233.5
15°	1198.3	1200.1	1201.8	1217.7	1217.7
17.5°	1177.2	1175.4	1180.7	1198.3	1200.1
20°	1147.3	1150.8	1157.8	1179.0	1180.7
22.5°	1117.4	1120.9	1133.2	1154.3	1159.6
25°	1083.9	1089.2	1103.3	1129.7	1135.0
27.5°	1048.7	1055.8	1075.1	1103.3	1108.6
30°	1010.0	1020.6	1041.7	1073.4	1078.7
32.5°	971.3	981.9	1008.3	1039.9	1047.0
35°	929.1	941.4	971.3	1008.3	1017.1
37.5°	885.1	900.9	936.1	973.1	983.6
40°	841.1	858.7	897.4	936.1	948.4
42.5°	797.1	814.7	856.9	900.9	913.2
45°	747.8	772.5	818.2	864.0	874.5
47.5°	700.3	726.7	777.8	823.5	837.6
50°	654.6	681.0	735.5	783.0	797.1
52.5°	607.1	635.2	693.3	742.6	754.9
55°	559.6	589.5	651.1	698.6	709.1
57.5°	512.1	543.7	607.1	652.8	665.1
60°	464.5	498.0	559.6	605.3	614.1
62.5°	417.0	452.2	515.6	556.0	564.8
65°	369.5	408.2	471.6	508.5	519.1
67.5°	323.8	362.5	424.1	459.3	468.1
70°	281.5	316.7	378.3	404.7	408.2
72.5°	228.8	272.7	332.6	346.6	337.8
75°	184.8	228.8	279.8	274.5	263.9
77.5°	140.8	184.8	218.2	200.6	186.5
80°	100.3	144.3	151.3	124.9	117.9
82.5°	65.1	100.3	84.5	65.1	52.8
85°	33.4	47.5	26.4	21.1	17.6
87.5°	10.6	7.0	3.5	3.5	1.8
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)