

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: P307672

Luminaire Tested: **14FCZ2-35-UNV-L82765-CA125-W2A-U-6500K**

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: P307672
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-CA125-W2A-U-6500K
Description: 1'X4' TROFFER LED MODULE,RIBBED LENS, 0.125" ACRYLIC SHEET
Light Source: (168) 6500K 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: 3509.0 lumens
Efficiency: N/A
Efficacy: 113.9 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

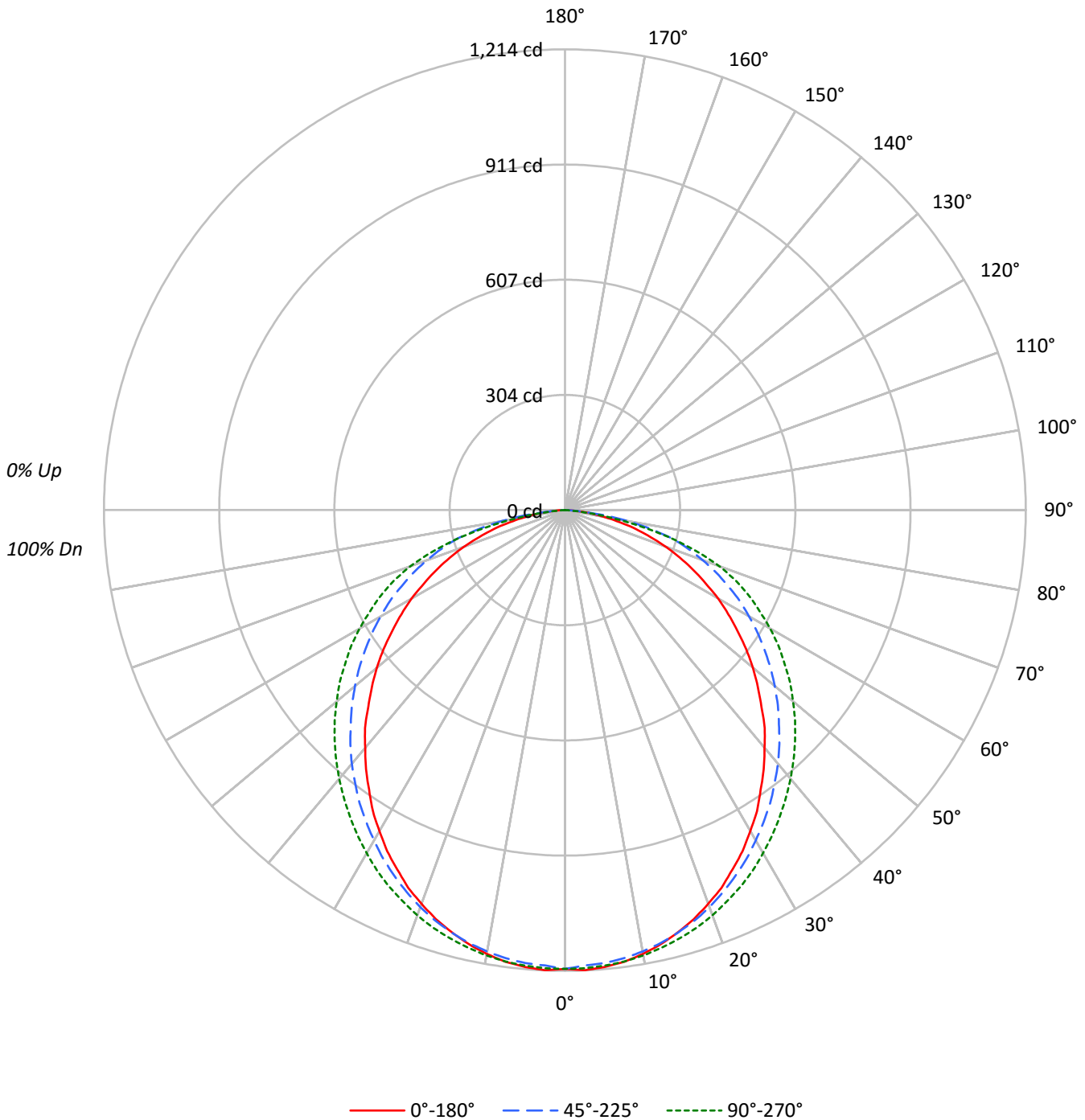
Input Watts (W): 30.8
Input Voltage (V): NR
Input Current (A_{in}): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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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	99	95	106	101	97	94	97	94	91	93	90	88	90	87	85	83
2	98	90	83	77	96	88	82	76	84	79	74	81	77	73	78	74	71	69
3	89	79	70	64	87	77	69	63	74	67	62	71	66	61	69	64	60	58
4	82	70	61	54	79	68	60	53	66	58	53	63	57	52	61	56	51	49
5	75	62	53	46	73	61	52	46	59	51	45	57	50	45	55	49	44	42
6	69	56	47	40	67	55	46	40	53	45	40	51	44	39	50	44	39	37
7	64	51	42	35	63	50	41	35	48	41	35	47	40	35	45	39	34	32
8	60	46	37	32	58	45	37	31	44	37	31	43	36	31	42	35	31	29
9	56	42	34	28	54	42	34	28	41	33	28	39	33	28	38	32	28	26
10	52	39	31	26	51	39	31	26	37	30	26	37	30	25	36	30	25	24

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	3253	3253	3253
5°	3263	3236	3255
10°	3243	3226	3256
15°	3209	3211	3254
20°	3162	3188	3253
25°	3102	3157	3250
30°	3034	3124	3243
35°	2953	3097	3241
40°	2875	3067	3246
45°	2787	3034	3263
50°	2706	3020	3286
55°	2602	3010	3315
60°	2510	3015	3360
65°	2381	3024	3413
70°	2234	3047	3411
75°	2025	3075	3083
80°	1661	2656	2194
85°	1232	1257	506



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	114.4	3.3
10°-20°	326.8	9.3
20°-30°	492.2	14.0
30°-40°	590.7	16.8
40°-50°	615.7	17.5
50°-60°	570.0	16.2
60°-70°	460.5	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°	933.4	26.6
0°-40°	1524.1	43.4
0°-60°	2709.7	77.2
0°-90°	3509.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	3509.0	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	1209	1209	1209	1209	1209	
5°	1208	1205	1198	1206	1205	115
15°	1152	1152	1152	1168	1168	325
25°	1045	1051	1063	1090	1095	481
35°	899	913	943	977	987	563
45°	732	754	797	842	858	566
55°	555	584	642	692	706	497
65°	374	411	475	523	536	370
75°	195	238	296	300	296	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°	1208.9	1208.9	1208.9	1208.9	1208.9
2.5°	1213.6	1209.6	1201.0	1209.6	1208.1
5°	1208.1	1204.9	1197.9	1206.5	1204.9
7.5°	1200.3	1197.1	1190.9	1201.0	1199.5
10°	1187.0	1185.4	1180.7	1192.4	1191.6
12.5°	1171.3	1170.5	1168.2	1181.5	1180.7
15°	1151.7	1152.5	1152.5	1168.2	1168.2
17.5°	1129.8	1131.4	1134.5	1151.7	1154.1
20°	1104.0	1107.1	1113.4	1133.0	1136.1
22.5°	1077.4	1079.8	1089.1	1112.6	1115.8
25°	1044.6	1050.8	1063.3	1089.9	1094.6
27.5°	1013.3	1018.7	1035.9	1063.3	1071.2
30°	976.5	985.1	1005.4	1035.2	1043.8
32.5°	941.3	950.7	974.1	1008.6	1016.4
35°	899.0	913.1	942.8	977.3	986.7
37.5°	860.7	874.0	907.6	945.2	956.1
40°	818.4	834.9	873.2	913.1	924.1
42.5°	779.3	795.0	836.4	877.1	892.0
45°	732.4	754.3	797.3	841.9	857.5
47.5°	689.3	711.2	760.5	808.3	822.3
50°	646.3	669.8	721.4	770.7	784.8
52.5°	601.7	626.7	682.3	731.6	748.0
55°	554.7	583.7	641.6	691.7	706.5
57.5°	510.1	539.9	601.7	652.6	667.4
60°	466.3	496.8	560.2	608.7	624.4
62.5°	417.8	453.8	519.5	567.3	579.0
65°	374.0	410.8	474.9	522.7	536.0
67.5°	327.8	367.7	431.9	475.7	488.2
70°	284.0	325.5	387.3	428.0	433.5
72.5°	237.1	279.3	341.9	367.7	367.7
75°	194.8	237.9	295.8	300.5	296.5
77.5°	148.7	196.4	233.9	224.6	215.2
80°	107.2	154.1	171.4	154.1	141.6
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)