

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: P307719

Luminaire Tested: **14FCZ2-39-UNV-L82765-CP125-W2A-U-3000K**

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: P307719
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-CP125-W2A-U-3000K
Description: 1'X4' TROFFER LED MODULE,RIBBED LENS, 0.125" POLYCARB SHEET
Light Source: (168) 3000K 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: 3429.0 lumens
Efficiency: N/A
Efficacy: 103.6 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

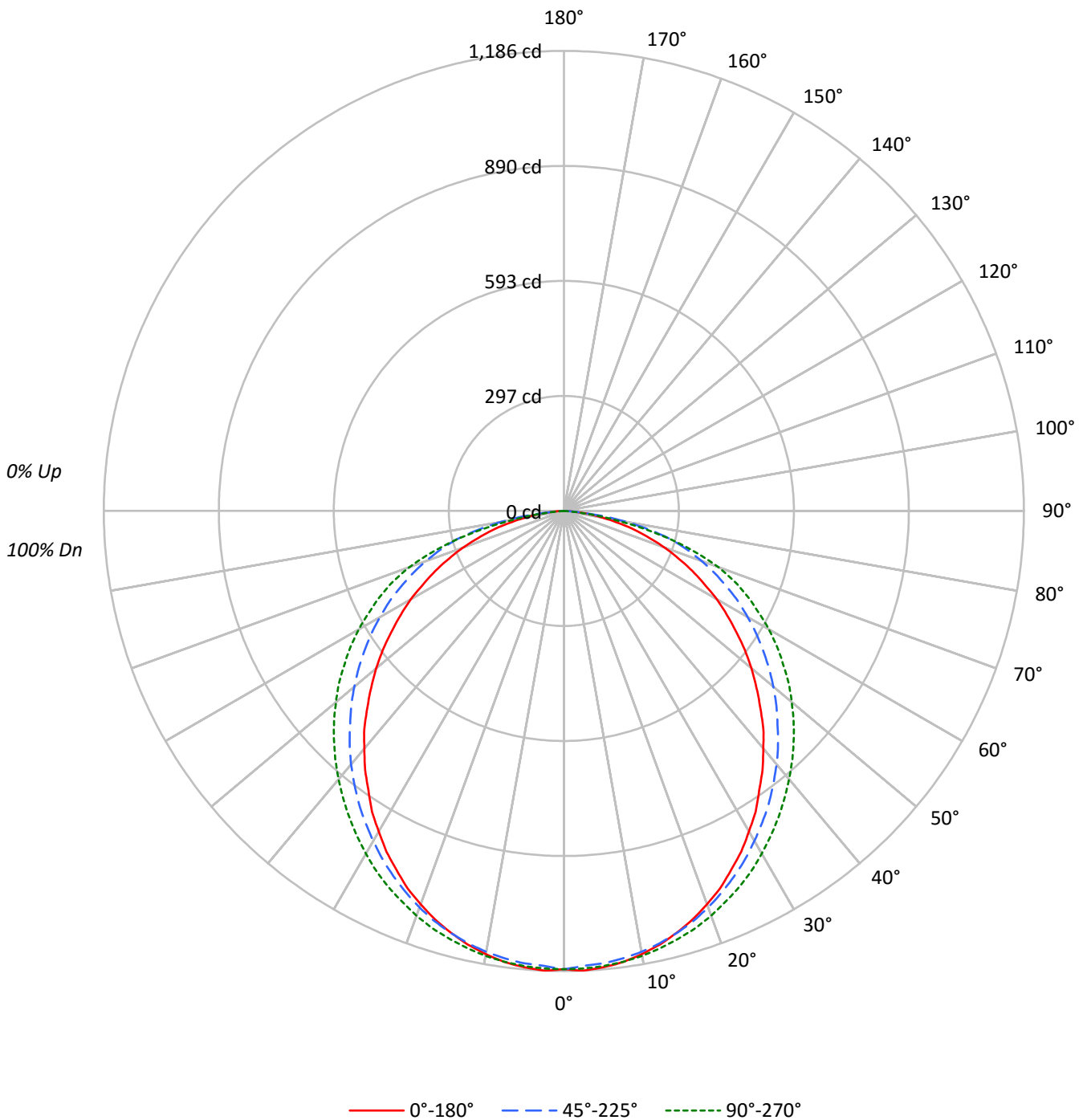
Input Watts (W): 33.1
Input Voltage (V): NR
Input Current (A_{in}): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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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°	3179	3179	3179
5°	3189	3162	3181
10°	3169	3153	3182
15°	3136	3138	3180
20°	3089	3116	3179
25°	3031	3085	3176
30°	2965	3053	3169
35°	2886	3027	3167
40°	2810	2997	3172
45°	2724	2965	3189
50°	2644	2951	3211
55°	2543	2942	3239
60°	2453	2947	3284
65°	2327	2955	3335
70°	2183	2978	3333
75°	1980	3005	3013
80°	1623	2594	2145
85°	1204	1229	497



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	111.8	3.3
10°-20°	319.3	9.3
20°-30°	481.0	14.0
30°-40°	577.2	16.8
40°-50°	601.6	17.5
50°-60°	557.0	16.2
60°-70°	450.0	13.1
70°-80°	274.4	8.0
80°-90°	56.6	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°	912.1	26.6
0°-40°	1489.3	43.4
0°-60°	2648.0	77.2
0°-90°	3429.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	3429.0	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	1181	1181	1181	1181	1181	
5°	1180	1178	1171	1179	1178	112
15°	1126	1126	1126	1142	1142	317
25°	1021	1027	1039	1065	1070	470
35°	878	892	921	955	964	550
45°	716	737	779	823	838	553
55°	542	570	627	676	690	486
65°	366	401	464	511	524	361
75°	190	232	289	294	290	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°	1181.3	1181.3	1181.3	1181.3	1181.3
2.5°	1185.9	1182.1	1173.7	1182.1	1180.5
5°	1180.5	1177.5	1170.6	1179.0	1177.5
7.5°	1172.9	1169.8	1163.7	1173.7	1172.1
10°	1159.9	1158.4	1153.8	1165.2	1164.5
12.5°	1144.6	1143.8	1141.5	1154.5	1153.8
15°	1125.5	1126.3	1126.3	1141.5	1141.5
17.5°	1104.1	1105.6	1108.7	1125.5	1127.8
20°	1078.8	1081.9	1088.0	1107.1	1110.2
22.5°	1052.8	1055.1	1064.3	1087.3	1090.3
25°	1020.7	1026.9	1039.1	1065.1	1069.7
27.5°	990.2	995.5	1012.3	1039.1	1046.7
30°	954.2	962.6	982.5	1011.6	1020.0
32.5°	919.8	929.0	951.9	985.6	993.2
35°	878.5	892.3	921.3	955.0	964.2
37.5°	841.1	854.1	886.9	923.6	934.3
40°	799.8	815.8	853.3	892.3	903.0
42.5°	761.5	776.8	817.4	857.1	871.6
45°	715.7	737.1	779.1	822.7	838.0
47.5°	673.6	695.0	743.2	789.8	803.6
50°	631.6	654.5	705.0	753.1	766.9
52.5°	588.0	612.4	666.7	714.9	731.0
55°	542.1	570.4	627.0	675.9	690.4
57.5°	498.5	527.6	588.0	637.7	652.2
60°	455.7	485.5	547.5	594.9	610.1
62.5°	408.3	443.5	507.7	554.3	565.8
65°	365.5	401.4	464.1	510.8	523.7
67.5°	320.4	359.4	422.1	464.9	477.1
70°	277.5	318.1	378.5	418.2	423.6
72.5°	231.7	273.0	334.1	359.4	359.4
75°	190.4	232.4	289.0	293.6	289.8
77.5°	145.3	191.9	228.6	219.4	210.3
80°	104.7	150.6	167.4	150.6	138.4
82.5°	70.3	109.3	100.9	80.3	71.1
85°	39.0	58.1	39.8	22.2	16.1
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)