

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: P307738

Luminaire Tested: **14FCZ2-39-UNV-L82765-CP250-W2A-U-3500K**

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: P307738
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-CP250-W2A-U-3500K
Description: 1'X4' TROFFER LED MODULE,RIBBED LENS, 0.250" POLYCARB SHEET
Light Source: (168) 3500K 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: 3370.0 lumens
Efficiency: N/A
Efficacy: 100.6 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

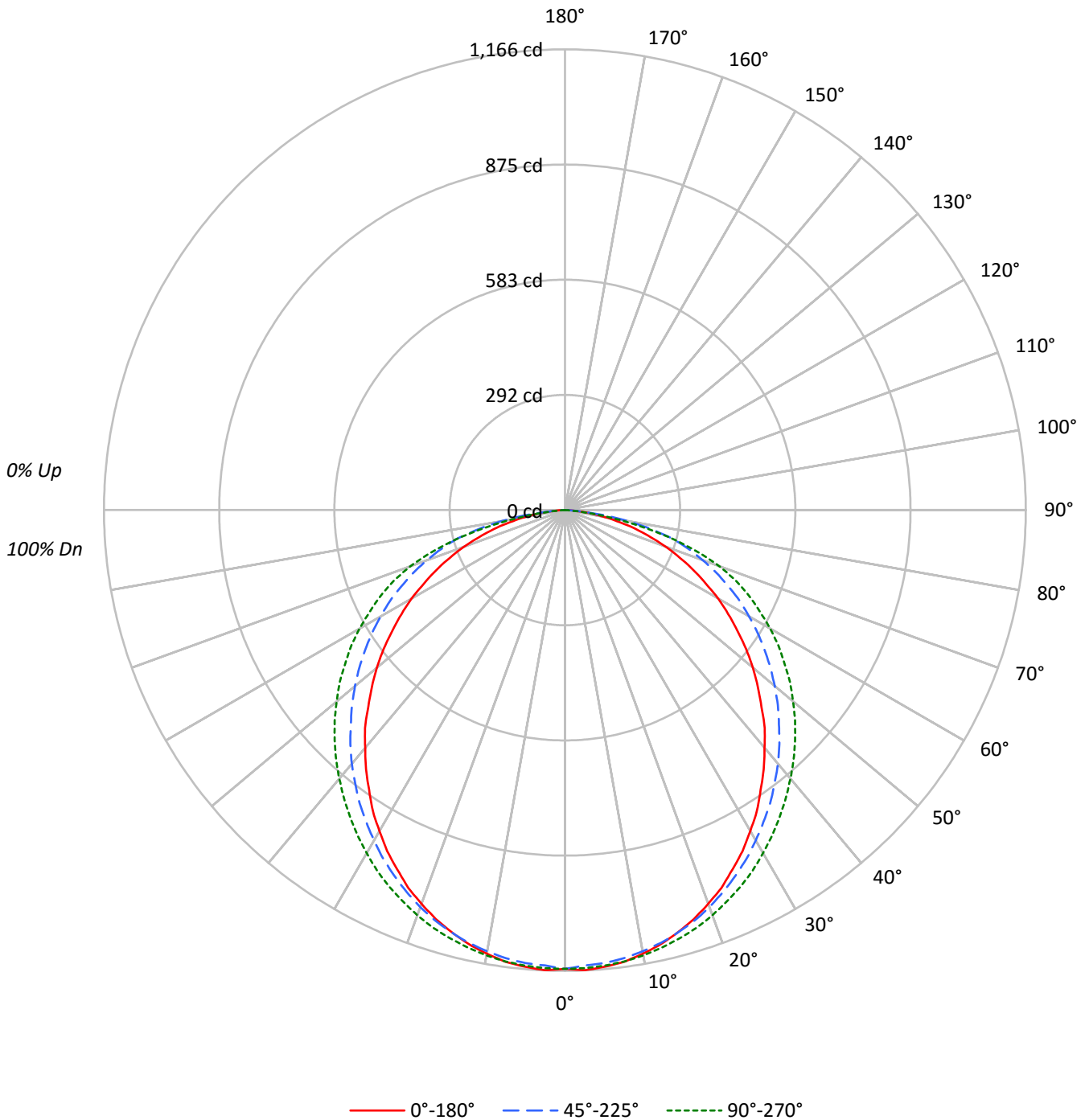
Input Watts (W): 33.5
Input Voltage (V): NR
Input Current (A_{in}): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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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°	3124	3124	3124
5°	3134	3108	3126
10°	3115	3098	3127
15°	3081	3084	3126
20°	3036	3062	3125
25°	2979	3032	3121
30°	2914	3000	3115
35°	2836	2975	3113
40°	2761	2946	3118
45°	2676	2914	3134
50°	2599	2900	3155
55°	2500	2891	3184
60°	2411	2895	3227
65°	2287	2904	3277
70°	2146	2927	3275
75°	1945	2953	2961
80°	1595	2551	2108
85°	1183	1207	488



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	109.9	3.3
10°-20°	313.8	9.3
20°-30°	472.7	14.0
30°-40°	567.3	16.8
40°-50°	591.3	17.5
50°-60°	547.4	16.2
60°-70°	442.3	13.1
70°-80°	269.7	8.0
80°-90°	55.7	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°	896.4	26.6
0°-40°	1463.7	43.4
0°-60°	2602.4	77.2
0°-90°	3370.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	3370.0	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	1161	1161	1161	1161	1161	
5°	1160	1157	1150	1159	1157	110
15°	1106	1107	1107	1122	1122	312
25°	1003	1009	1021	1047	1051	462
35°	863	877	906	938	948	541
45°	703	724	766	809	824	544
55°	533	561	616	664	679	477
65°	359	394	456	502	515	355
75°	187	228	284	289	285	196
85°	38	57	39	22	16	47
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	1161.0	1161.0	1161.0	1161.0	1161.0
2.5°	1165.5	1161.7	1153.5	1161.7	1160.2
5°	1160.2	1157.2	1150.5	1158.7	1157.2
7.5°	1152.7	1149.7	1143.7	1153.5	1152.0
10°	1139.9	1138.4	1133.9	1145.2	1144.4
12.5°	1124.9	1124.2	1121.9	1134.7	1133.9
15°	1106.1	1106.9	1106.9	1121.9	1121.9
17.5°	1085.1	1086.6	1089.6	1106.1	1108.4
20°	1060.3	1063.3	1069.3	1088.1	1091.1
22.5°	1034.7	1037.0	1046.0	1068.5	1071.6
25°	1003.2	1009.2	1021.2	1046.8	1051.3
27.5°	973.1	978.4	994.9	1021.2	1028.7
30°	937.8	946.1	965.6	994.2	1002.4
32.5°	904.0	913.0	935.5	968.6	976.1
35°	863.4	876.9	905.5	938.5	947.6
37.5°	826.6	839.4	871.7	907.7	918.3
40°	786.0	801.8	838.6	876.9	887.5
42.5°	748.4	763.5	803.3	842.4	856.6
45°	703.3	724.4	765.7	808.6	823.6
47.5°	662.0	683.1	730.4	776.2	789.8
50°	620.7	643.2	692.8	740.2	753.7
52.5°	577.9	601.9	655.3	702.6	718.4
55°	532.8	560.6	616.2	664.3	678.6
57.5°	489.9	518.5	577.9	626.7	641.0
60°	447.9	477.2	538.0	584.6	599.6
62.5°	401.3	435.8	499.0	544.8	556.1
65°	359.2	394.5	456.1	502.0	514.7
67.5°	314.9	353.2	414.8	456.9	468.9
70°	272.8	312.6	372.0	411.0	416.3
72.5°	227.7	268.3	328.4	353.2	353.2
75°	187.1	228.4	284.0	288.6	284.8
77.5°	142.8	188.6	224.7	215.7	206.6
80°	102.9	148.0	164.6	148.0	136.0
82.5°	69.1	107.5	99.2	78.9	69.9
85°	38.3	57.1	39.1	21.8	15.8
87.5°	14.3	12.8	3.8	3.8	3.8
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)