

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: P312395

Luminaire Tested: **14FCZ2-39-UNV-L83050-S-CA125-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: P312395  
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: 14FCZ2-39-UNV-L83050-S-CA125-W2A-U-3000K  
Description: 1'X4' TROFFER LED MODULE,SMOOTH LENS, 0.125" ACRYLIC 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**

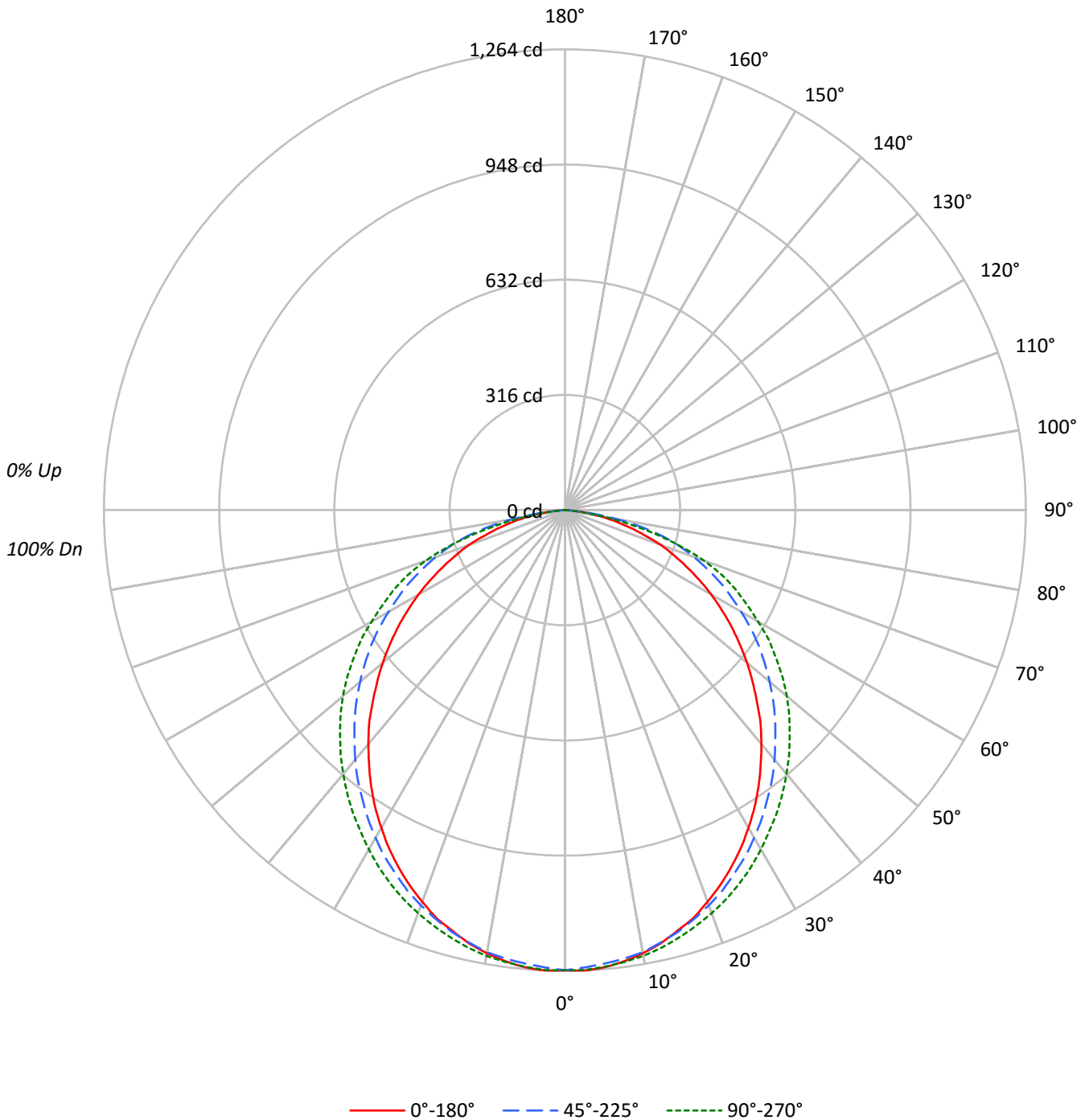
Lumens per Lamp: N/A  
Luminaire Lumens: 3537.0 lumens  
Efficiency: N/A  
Efficacy: 106.5 lumens/watt  
Spacing Criteria (0/90/45): 1.19 / 1.26 / 1.36  
Luminous Opening: Rectangular (W 1' x L: 4' x H: 0')  
CIE Type: Direct  
  
Input Watts (W): 33.2  
Input Voltage (V): NR  
Input Current (A<sub>in</sub>): 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°	3398	3398	3398
5°	3401	3373	3397
10°	3374	3364	3393
15°	3327	3337	3381
20°	3274	3304	3370
25°	3208	3265	3358
30°	3128	3226	3340
35°	3042	3180	3330
40°	2945	3142	3320
45°	2836	3103	3317
50°	2731	3069	3326
55°	2616	3044	3316
60°	2492	3002	3294
65°	2345	2993	3294
70°	2208	2966	3201
75°	1914	2899	2735
80°	1550	2337	1821
85°	1028	812	540



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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	119.2	3.4
10°-20°	339.3	9.6
20°-30°	508.9	14.4
30°-40°	607.1	17.2
40°-50°	627.6	17.7
50°-60°	573.0	16.2
60°-70°	450.9	12.7
70°-80°	262.5	7.4
80°-90°	48.4	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°	967.4	27.4
0°-40°	1574.6	44.5
0°-60°	2775.2	78.5
0°-90°	3537.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	3537.0	100.0

**CANDELA DISTRIBUTION:**

	0°	22.5°	45°	67.5°	90°	Flux
0°	1263	1263	1263	1263	1263	
5°	1259	1256	1249	1259	1257	119
15°	1194	1196	1198	1214	1214	337
25°	1080	1086	1100	1126	1131	497
35°	926	938	968	1005	1014	579
45°	745	770	816	861	872	576
55°	558	588	649	696	707	499
65°	368	407	470	507	517	366
75°	184	228	279	274	263	196
85°	33	47	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°	1262.7	1262.7	1262.7	1262.7	1262.7
2.5°	1264.4	1260.9	1255.6	1264.4	1262.7
5°	1259.1	1255.6	1248.6	1259.1	1257.4
7.5°	1248.6	1245.1	1241.6	1252.1	1250.4
10°	1234.6	1232.8	1231.1	1243.4	1241.6
12.5°	1217.1	1217.1	1215.3	1229.3	1229.3
15°	1194.3	1196.0	1197.8	1213.5	1213.5
17.5°	1173.2	1171.5	1176.7	1194.3	1196.0
20°	1143.4	1146.9	1153.9	1175.0	1176.7
22.5°	1113.6	1117.1	1129.4	1150.4	1155.7
25°	1080.3	1085.5	1099.6	1125.9	1131.1
27.5°	1045.2	1052.2	1071.5	1099.6	1104.8
30°	1006.6	1017.1	1038.2	1069.7	1075.0
32.5°	968.0	978.6	1004.9	1036.4	1043.4
35°	925.9	938.2	968.0	1004.9	1013.6
37.5°	882.1	897.9	933.0	969.8	980.3
40°	838.3	855.8	894.4	933.0	945.2
42.5°	794.4	812.0	854.0	897.9	910.2
45°	745.3	769.9	815.5	861.1	871.6
47.5°	698.0	724.3	775.1	820.7	834.8
50°	652.4	678.7	733.0	780.4	794.4
52.5°	605.0	633.1	691.0	740.1	752.3
55°	557.7	587.5	648.9	696.2	706.7
57.5°	510.3	541.9	605.0	650.6	662.9
60°	463.0	496.3	557.7	603.3	612.0
62.5°	415.6	450.7	513.8	554.2	562.9
65°	368.3	406.9	470.0	506.8	517.3
67.5°	322.7	361.3	422.6	457.7	466.5
70°	280.6	315.7	377.0	403.3	406.9
72.5°	228.0	271.8	331.4	345.5	336.7
75°	184.1	228.0	278.8	273.6	263.1
77.5°	140.3	184.1	217.5	199.9	185.9
80°	100.0	143.8	150.8	124.5	117.5
82.5°	64.9	100.0	84.2	64.9	52.6
85°	33.3	47.3	26.3	21.0	17.5
87.5°	10.5	7.0	3.5	3.5	1.8
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)