

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: P307722

Luminaire Tested: **14FCZ2-39-UNV-L82765-CP125-W2A-U-4500K**

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: P307722
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-4500K
Description: 1'X4' TROFFER LED MODULE,RIBBED LENS, 0.125" POLYCARB SHEET
Light Source: (168) 4500K 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: 3690.0 lumens
Efficiency: N/A
Efficacy: 108.8 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

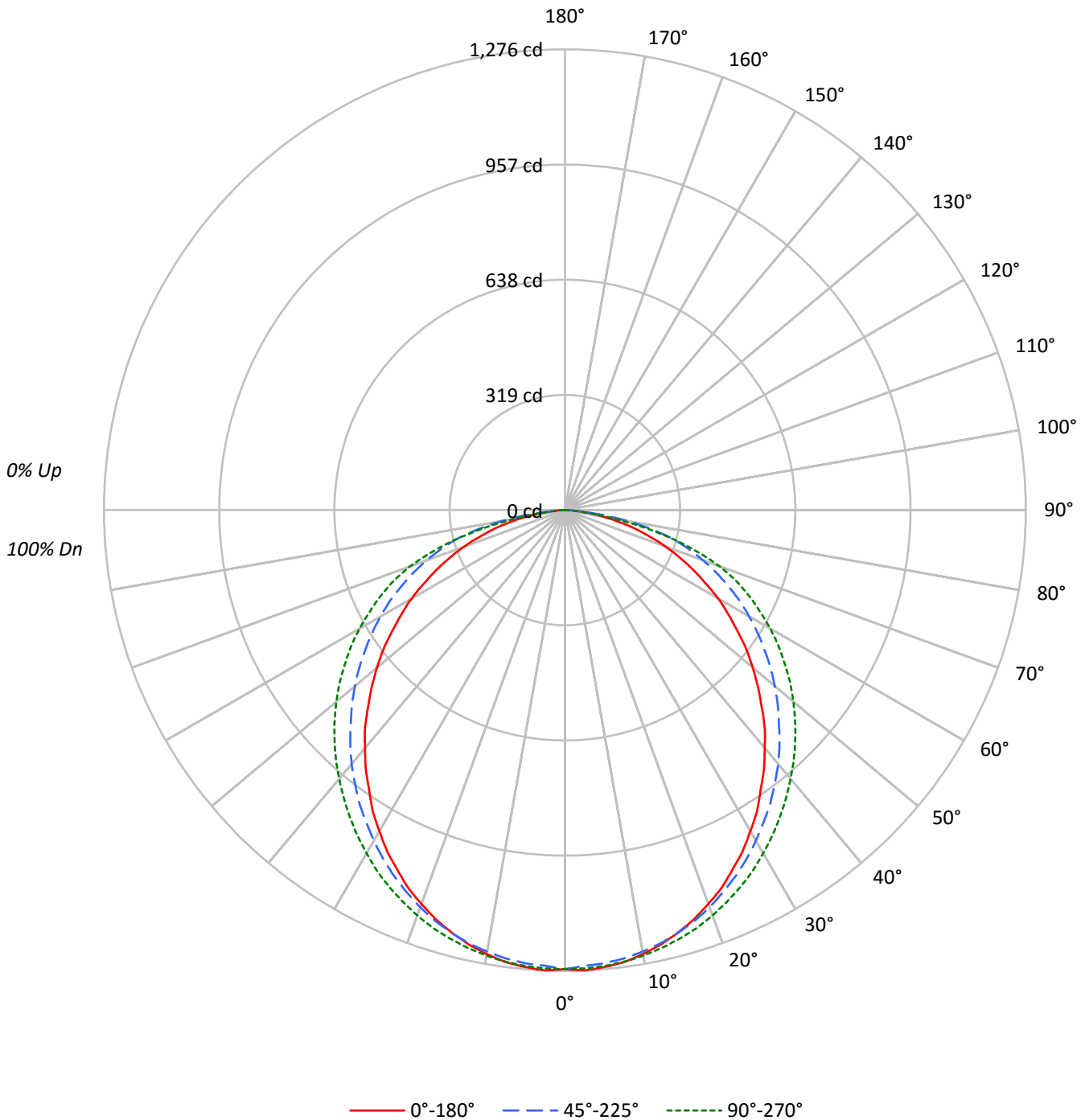
Input Watts (W): 33.9
Input Voltage (V): NR
Input Current (A_{in}): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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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°	3421	3421	3421
5°	3432	3403	3423
10°	3411	3393	3424
15°	3374	3377	3422
20°	3325	3353	3421
25°	3261	3320	3418
30°	3191	3285	3411
35°	3106	3257	3408
40°	3023	3225	3413
45°	2931	3191	3432
50°	2845	3176	3455
55°	2737	3165	3486
60°	2639	3171	3534
65°	2504	3180	3589
70°	2350	3205	3586
75°	2130	3234	3242
80°	1746	2793	2307
85°	1297	1321	534



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	120.3	3.3
10°-20°	343.6	9.3
20°-30°	517.6	14.0
30°-40°	621.2	16.8
40°-50°	647.4	17.5
50°-60°	599.4	16.2
60°-70°	484.3	13.1
70°-80°	295.3	8.0
80°-90°	61.0	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°	981.6	26.6
0°-40°	1602.7	43.4
0°-60°	2849.5	77.2
0°-90°	3690.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	3690.0	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	1271	1271	1271	1271	1271	
5°	1270	1267	1260	1269	1267	121
15°	1211	1212	1212	1228	1228	341
25°	1098	1105	1118	1146	1151	506
35°	945	960	992	1028	1038	592
45°	770	793	838	885	902	595
55°	583	614	675	727	743	523
65°	393	432	499	550	564	389
75°	205	250	311	316	312	215
85°	42	62	43	24	17	52
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	1271.2	1271.2	1271.2	1271.2	1271.2
2.5°	1276.2	1272.0	1263.0	1272.0	1270.4
5°	1270.4	1267.1	1259.7	1268.7	1267.1
7.5°	1262.2	1258.9	1252.3	1263.0	1261.3
10°	1248.2	1246.5	1241.6	1253.9	1253.1
12.5°	1231.7	1230.9	1228.4	1242.4	1241.6
15°	1211.2	1212.0	1212.0	1228.4	1228.4
17.5°	1188.1	1189.8	1193.1	1211.2	1213.6
20°	1161.0	1164.3	1170.8	1191.4	1194.7
22.5°	1133.0	1135.5	1145.3	1170.0	1173.3
25°	1098.4	1105.0	1118.2	1146.2	1151.1
27.5°	1065.5	1071.3	1089.4	1118.2	1126.4
30°	1026.8	1035.9	1057.3	1088.6	1097.6
32.5°	989.8	999.7	1024.4	1060.6	1068.8
35°	945.4	960.2	991.5	1027.7	1037.5
37.5°	905.1	919.1	954.4	993.9	1005.5
40°	860.6	877.9	918.2	960.2	971.7
42.5°	819.5	836.0	879.6	922.4	938.0
45°	770.1	793.2	838.4	885.3	901.8
47.5°	724.9	747.9	799.8	849.9	864.8
50°	679.6	704.3	758.6	810.5	825.3
52.5°	632.7	659.1	717.5	769.3	786.6
55°	583.4	613.8	674.7	727.4	743.0
57.5°	536.5	567.7	632.7	686.2	701.8
60°	490.4	522.5	589.1	640.1	656.6
62.5°	439.4	477.2	546.3	596.5	608.9
65°	393.3	432.0	499.4	549.6	563.6
67.5°	344.8	386.7	454.2	500.3	513.4
70°	298.7	342.3	407.3	450.1	455.8
72.5°	249.3	293.7	359.6	386.7	386.7
75°	204.9	250.1	311.0	316.0	311.8
77.5°	156.3	206.5	246.0	236.1	226.3
80°	112.7	162.1	180.2	162.1	148.9
82.5°	75.7	117.7	108.6	86.4	76.5
85°	42.0	62.5	42.8	23.9	17.3
87.5°	15.6	14.0	4.1	4.1	4.1
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)