

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: P307178

Luminaire Tested: **14FCZ2-39-UNV-L82765-HRP-CP125-W2A-U-2700K**

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: P307178
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G3-1808-918-18)
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-HRP-CP125-W2A-U-2700K
Description: 1'X4' TROFFER LED MODULE, HIGH EFFICIENCY RND PERF. LENS, 0.125" POLYCARB SHEET
Light Source: (168) 2700K 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: 2529.0 lumens
Efficiency: N/A
Efficacy: 75.9 lumens/watt
Spacing Criteria (0/90/45): 1.24 / 1.29 / 1.39
Luminous Opening: Rectangular (W 1' x L: 4' x H: 0')
CIE Type: Direct

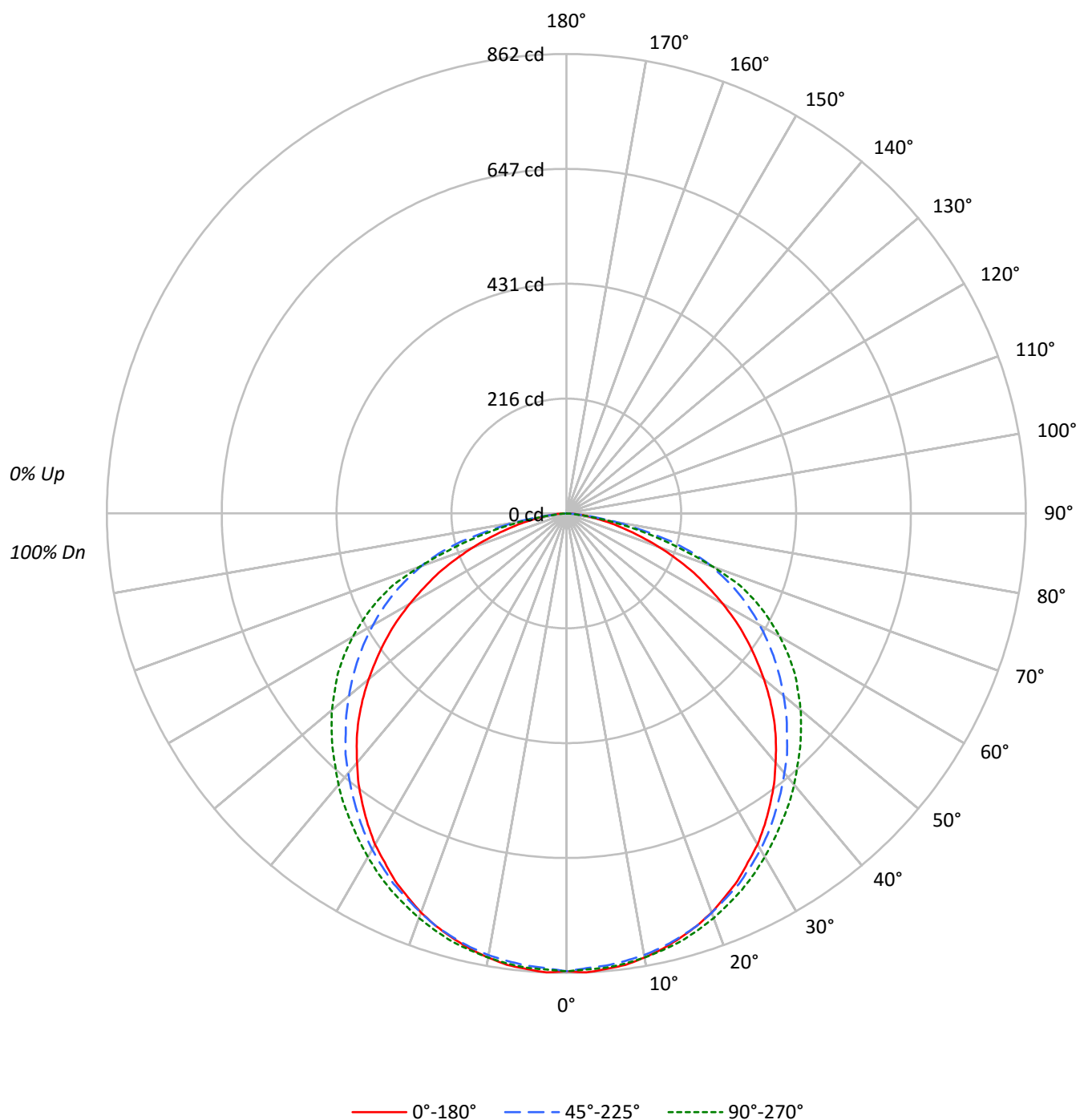
Input Watts (W): 33.3
Input Voltage (V): NR
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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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				0
RW	70	50	30	10	70	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		100
1	109	104	100	96	106	102	98	94	97	94	91		93	91	88		84
2	99	90	83	78	96	88	82	77	85	79	75		82	77	73		69
3	90	79	71	64	87	77	70	64	74	68	62		72	66	61		58
4	82	70	61	54	80	68	60	54	66	59	53		64	57	52		49
5	75	62	53	46	73	61	53	46	59	51	46		57	50	45		42
6	69	56	47	40	68	55	46	40	53	45	40		51	45	39		37
7	64	51	42	36	63	50	41	35	48	41	35		47	40	35		33
8	60	46	38	32	58	45	37	32	44	37	31		43	36	31		29
9	56	42	34	28	54	42	34	28	41	33	28		39	33	28		26
10	52	39	31	26	51	38	31	26	37	30	26		37	30	25		24

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	2311	2311	2311
5°	2318	2301	2311
10°	2312	2299	2312
15°	2298	2293	2315
20°	2282	2284	2314
25°	2257	2276	2314
30°	2229	2263	2313
35°	2189	2247	2317
40°	2145	2235	2335
45°	2100	2227	2361
50°	2027	2227	2404
55°	1940	2238	2455
60°	1823	2256	2486
65°	1681	2279	2501
70°	1464	2284	2302
75°	1207	2125	1860
80°	948	1528	1244
85°	738	590	293



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	81.3	3.2
10°-20°	233.3	9.2
20°-30°	354.3	14.0
30°-40°	429.3	17.0
40°-50°	452.4	17.9
50°-60°	422.3	16.7
60°-70°	337.5	13.3
70°-80°	185.7	7.3
80°-90°	32.8	1.3
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°	668.9	26.5
0°-40°	1098.2	43.4
0°-60°	1973.0	78.0
0°-90°	2529.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	2529.0	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	859	859	859	859	859	
5°	858	856	852	857	856	82
15°	825	825	823	831	831	233
25°	760	762	767	778	779	350
35°	666	673	684	701	705	417
45°	552	562	585	612	620	425
55°	414	434	477	510	523	369
65°	264	297	358	387	393	260
75°	116	166	204	184	179	125
85°	24	30	19	12	10	29
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	858.9	858.9	858.9	858.9	858.9
2.5°	862.0	859.7	854.1	858.9	856.5
5°	858.1	855.7	851.7	857.3	855.7
7.5°	854.1	850.9	846.9	853.3	851.7
10°	846.1	843.8	841.4	846.9	846.1
12.5°	836.6	835.8	833.4	839.8	839.0
15°	824.7	824.7	823.1	831.0	831.0
17.5°	811.9	811.1	811.9	820.7	819.9
20°	796.8	796.8	797.6	808.0	808.0
22.5°	778.5	779.3	781.7	794.4	793.7
25°	760.3	761.8	766.6	777.7	779.3
27.5°	738.0	742.0	747.5	761.0	762.6
30°	717.3	719.7	728.4	741.2	744.3
32.5°	692.7	697.4	707.0	721.3	725.3
35°	666.4	672.8	683.9	701.4	705.4
37.5°	640.2	645.7	660.8	679.1	686.3
40°	610.7	620.3	636.2	656.9	664.8
42.5°	582.1	591.7	613.1	634.6	641.8
45°	551.9	562.2	585.3	611.5	620.3
47.5°	518.5	530.4	559.9	587.7	597.2
50°	484.3	499.4	532.0	563.0	574.2
52.5°	448.5	467.6	505.0	537.6	547.9
55°	413.5	434.2	477.1	510.5	523.3
57.5°	377.7	400.0	448.5	486.7	493.8
60°	338.8	365.8	419.1	452.5	462.0
62.5°	300.6	331.6	388.9	420.7	428.6
65°	264.0	297.4	357.9	387.3	392.8
67.5°	224.3	264.0	323.7	350.7	352.3
70°	186.1	232.2	290.3	303.0	292.6
72.5°	148.7	198.0	251.3	241.0	232.2
75°	116.1	166.2	204.4	183.7	178.9
77.5°	85.9	136.0	146.3	135.2	126.4
80°	61.2	107.4	98.6	84.3	80.3
82.5°	42.1	67.6	54.1	42.1	36.6
85°	23.9	30.2	19.1	11.9	9.5
87.5°	10.3	7.2	4.0	3.2	3.2
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)