

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: P309946

Luminaire Tested: **24FCZ2-35HE-UNV-L82765-RDP-CP250-W2A-U-5000K**

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: P309946
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G3-1808-918-19)
Test Lab: INNOVATION CENTER(G3)
Issue Date: 3/3/2020
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: FAIL-SAFE
Catalog Number: 24FCZ2-35HE-UNV-L82765-RDP-CP250-W2A-U-5000K
Description: 2'X4' TROFFER LED MODULE, SMOOTH LENS WITH INSERT, 0.250" POLYCARB SHEET
Light Source: (336) 5000K 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: 2068.0 lumens
Efficiency: N/A
Efficacy: 77.7 lumens/watt
Spacing Criteria (0/90/45): 1.26 / 1.3 / 1.41
Luminous Opening: Rectangular (W 2' x L: 4' x H: 0')
CIE Type: Direct

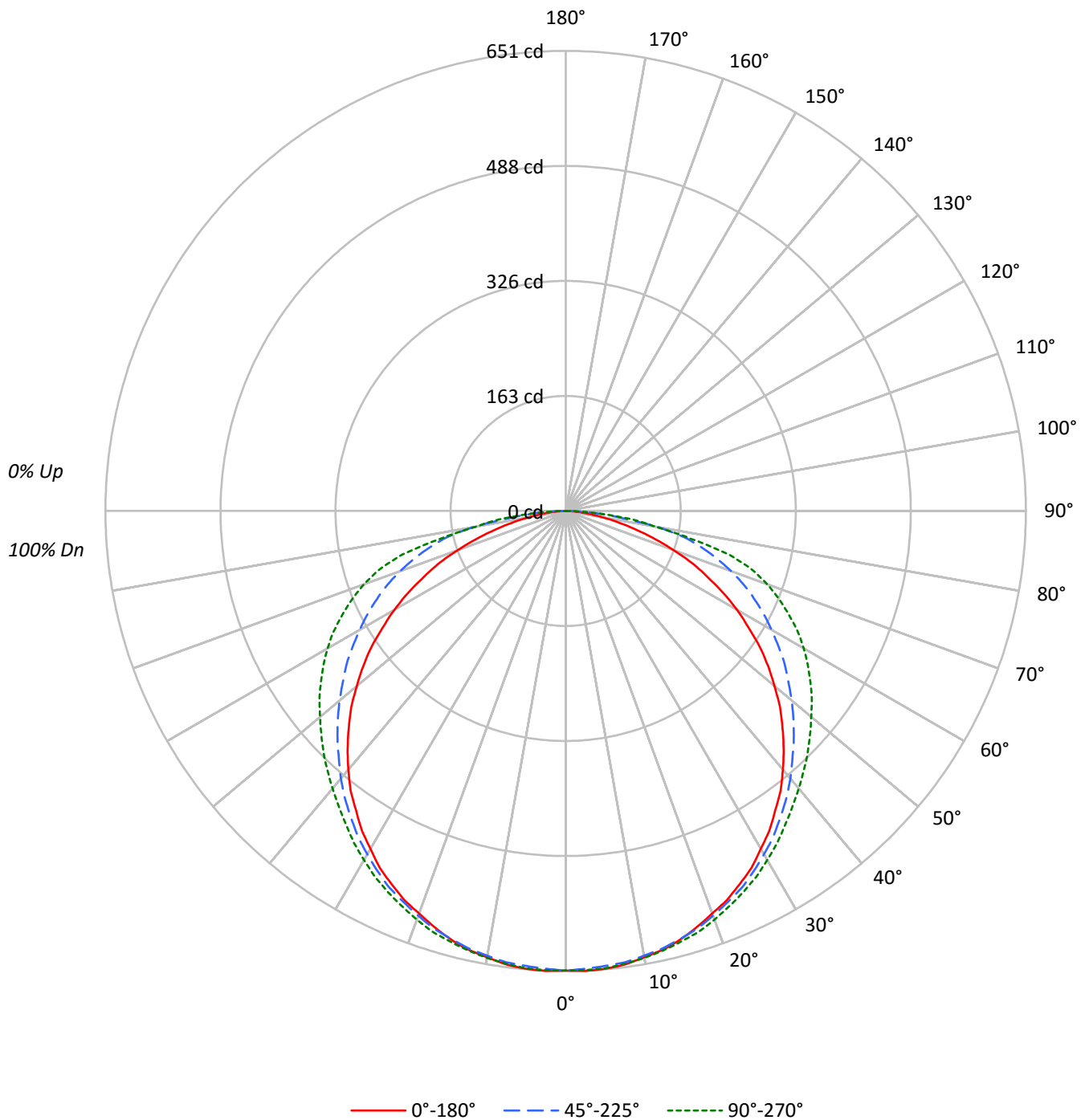
Input Watts (W): 26.6
Input Voltage (V): NR
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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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	108	103	98	94	105	100	96	92	96	93	89		92	89	87		82
2	97	89	81	75	95	87	80	74	83	77	72		80	75	71		67
3	88	77	68	62	86	76	67	61	72	66	60		70	64	59		56
4	81	68	59	52	78	67	58	51	64	57	51		62	55	50		47
5	74	60	51	44	72	59	51	44	57	49	43		55	48	43		40
6	68	54	45	38	66	53	45	38	51	44	38		50	43	37		35
7	63	49	40	34	61	48	40	34	47	39	33		45	38	33		31
8	59	45	36	30	57	44	36	30	43	35	30		41	34	29		27
9	55	41	33	27	53	40	32	27	39	32	27		38	31	26		24
10	51	38	30	24	50	37	29	24	36	29	24		35	29	24		22

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	875	875	875
5°	878	873	877
10°	876	873	877
15°	874	873	879
20°	868	872	881
25°	865	874	883
30°	857	872	886
35°	849	869	890
40°	840	868	901
45°	826	869	921
50°	807	874	949
55°	787	888	991
60°	753	905	1046
65°	706	937	1110
70°	642	981	1194
75°	544	1035	1248
80°	429	1041	1010
85°	316	792	886



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	61.7	3.0
10°-20°	177.5	8.6
20°-30°	271.5	13.1
30°-40°	331.9	16.0
40°-50°	353.7	17.1
50°-60°	338.2	16.4
60°-70°	286.5	13.9
70°-80°	192.6	9.3
80°-90°	54.3	2.6
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°	510.7	24.7
0°-40°	842.6	40.7
0°-60°	1534.6	74.2
0°-90°	2068.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	2068.0	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	650	650	650	650	650	
5°	650	649	646	649	649	62
15°	628	628	627	632	631	177
25°	583	585	589	594	595	269
35°	517	521	529	540	542	324
45°	434	441	456	476	484	335
55°	335	348	378	408	423	299
65°	222	244	294	333	349	220
75°	105	143	199	233	240	112
85°	20	42	51	55	57	25
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	650.3	650.3	650.3	650.3	650.3
2.5°	651.4	651.4	648.3	650.3	650.3
5°	650.3	649.3	646.2	649.3	649.3
7.5°	647.2	646.2	644.2	647.2	646.2
10°	641.1	641.1	639.0	642.1	642.1
12.5°	636.0	634.9	633.9	638.0	637.0
15°	627.8	627.8	626.7	631.9	630.8
17.5°	617.5	618.5	619.6	623.7	624.7
20°	606.2	608.3	609.3	615.5	615.5
22.5°	596.0	597.0	599.0	605.2	605.2
25°	582.6	584.7	588.8	593.9	594.9
27.5°	569.3	570.3	575.4	582.6	583.7
30°	551.9	554.9	561.1	569.3	570.3
32.5°	536.5	539.5	546.7	554.9	557.0
35°	517.0	521.1	529.3	539.5	541.6
37.5°	499.5	502.6	512.9	524.2	527.2
40°	478.0	484.2	494.4	507.7	512.9
42.5°	456.5	462.6	474.9	492.4	498.5
45°	433.9	441.1	456.5	475.9	484.2
47.5°	411.3	419.5	437.0	459.5	468.8
50°	385.7	395.9	417.5	443.1	453.4
52.5°	361.1	373.4	397.0	425.7	439.0
55°	335.4	347.7	378.5	408.2	422.6
57.5°	306.7	323.1	357.0	390.8	406.2
60°	280.0	295.4	336.4	373.4	388.8
62.5°	251.3	271.8	315.9	354.9	370.3
65°	221.6	244.1	294.4	333.4	348.8
67.5°	194.9	219.5	272.9	311.8	327.2
70°	163.1	193.9	249.3	288.2	303.6
72.5°	133.3	167.2	224.6	262.6	277.0
75°	104.6	142.6	199.0	232.8	240.0
77.5°	78.0	118.0	172.3	186.7	181.6
80°	55.4	94.4	134.4	127.2	130.3
82.5°	35.9	71.8	83.1	94.4	97.4
85°	20.5	42.1	51.3	55.4	57.4
87.5°	9.2	15.4	20.5	20.5	19.5
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)