

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: P307467

Luminaire Tested: **14FCZ2-39-UNV-L82765-RDP-CP250-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: P307467
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G3-1805-783-43)
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-RDP-CP250-W2A-U-3000K
Description: 1'X4' TROFFER LED MODULE, SMOOTH LENS WITH INSERT , 0.250" POLYCARB 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: 2090.0 lumens
Efficiency: N/A
Efficacy: 63.1 lumens/watt
Spacing Criteria (0/90/45): 1.25 / 1.28 / 1.4
Luminous Opening: Rectangular (W 1' x L: 4' x H: 0')
CIE Type: Direct

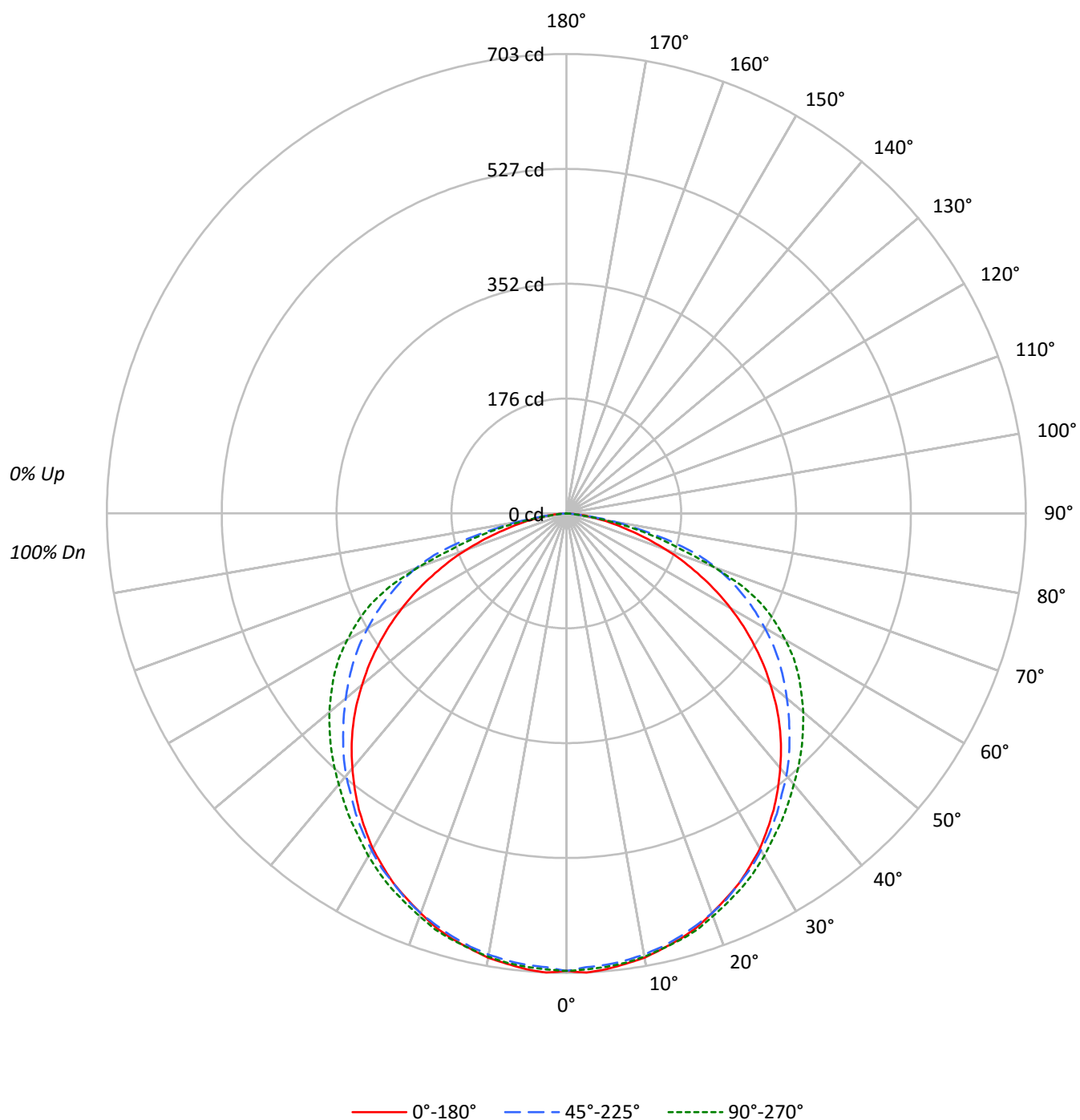
Input Watts (W): 33.1
Input Voltage (V): NR
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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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	77	96	88	82	76	85	79	75		81	77	73		69
3	90	79	71	64	87	77	70	63	74	68	62		71	66	61		58
4	82	70	61	54	80	68	60	53	66	58	53		63	57	52		49
5	75	62	53	46	73	61	52	46	59	51	45		57	50	45		42
6	69	56	47	40	67	55	46	40	53	45	40		51	44	39		37
7	64	50	42	35	62	50	41	35	48	40	35		47	40	35		32
8	60	46	37	31	58	45	37	31	44	36	31		43	36	31		29
9	56	42	34	28	54	42	34	28	40	33	28		39	33	28		26
10	52	39	31	25	51	38	31	25	37	30	25		36	30	25		23

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	1884	1884	1884
5°	1891	1873	1882
10°	1886	1873	1882
15°	1877	1868	1882
20°	1864	1864	1878
25°	1855	1855	1880
30°	1840	1851	1881
35°	1817	1844	1887
40°	1788	1840	1903
45°	1757	1838	1937
50°	1708	1845	1981
55°	1646	1868	2036
60°	1563	1888	2081
65°	1444	1911	2109
70°	1284	1926	1888
75°	1035	1730	1510
80°	809	1213	986
85°	553	352	253



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	66.3	3.2
10°-20°	190.1	9.1
20°-30°	289.4	13.8
30°-40°	352.5	16.9
40°-50°	374.0	17.9
50°-60°	353.0	16.9
60°-70°	285.0	13.6
70°-80°	154.6	7.4
80°-90°	25.0	1.2
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°	545.8	26.1
0°-40°	898.3	43.0
0°-60°	1625.3	77.8
0°-90°	2090.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	2090.0	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	700	700	700	700	700	
5°	700	698	694	698	697	66
15°	674	672	671	676	676	190
25°	625	623	625	632	633	288
35°	553	556	561	573	574	346
45°	462	468	483	501	509	356
55°	351	366	398	424	434	313
65°	227	254	300	325	331	225
75°	100	145	166	150	145	109
85°	18	20	11	10	8	23
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	700.0	700.0	700.0	700.0	700.0
2.5°	703.3	700.0	695.1	700.0	698.4
5°	700.0	698.4	693.5	698.4	696.7
7.5°	695.1	695.1	690.2	693.5	693.5
10°	690.2	688.6	685.3	690.2	688.6
12.5°	682.0	680.4	678.8	683.7	682.0
15°	673.9	672.3	670.6	675.5	675.5
17.5°	664.1	662.5	660.8	667.4	667.4
20°	651.0	651.0	651.0	657.6	655.9
22.5°	638.0	638.0	639.6	646.1	644.5
25°	624.9	623.3	624.9	631.5	633.1
27.5°	608.6	610.3	611.9	618.4	620.0
30°	592.3	593.9	595.6	603.7	605.4
32.5°	572.7	576.0	579.2	589.0	589.0
35°	553.1	556.4	561.3	572.7	574.4
37.5°	531.9	535.2	541.7	554.8	558.0
40°	509.1	514.0	523.8	536.8	541.7
42.5°	486.2	492.8	504.2	518.9	525.4
45°	461.8	468.3	483.0	500.9	509.1
47.5°	435.7	443.8	461.8	484.6	491.1
50°	407.9	419.3	440.6	465.0	473.2
52.5°	380.2	393.2	419.3	445.5	453.6
55°	350.8	365.5	398.1	424.2	434.0
57.5°	321.4	337.8	375.3	403.0	412.8
60°	290.4	310.0	350.8	378.6	386.7
62.5°	259.4	282.3	326.3	354.1	360.6
65°	226.8	254.5	300.2	324.7	331.2
67.5°	195.8	228.4	274.1	292.1	292.1
70°	163.2	199.1	244.8	249.6	239.9
72.5°	130.5	171.3	212.1	194.2	186.0
75°	99.5	145.2	166.4	150.1	145.2
77.5°	75.1	117.5	117.5	107.7	104.4
80°	52.2	89.7	78.3	68.5	63.6
82.5°	34.3	50.6	40.8	32.6	27.7
85°	17.9	19.6	11.4	9.8	8.2
87.5°	6.5	3.3	1.6	3.3	1.6
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)