

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: P308504

Luminaire Tested: **22FCZ2-34HE-UNV-L82765-RDP-CP250-W2A-U-4000K**

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: P308504
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G3-1805-783-24)
Test Lab: INNOVATION CENTER(G3)
Issue Date: 3/3/2020
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: FAIL-SAFE
Catalog Number: 22FCZ2-34HE-UNV-L82765-RDP-CP250-W2A-U-4000K
Description: 2'X2' 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: 1919.0 lumens
Efficiency: N/A
Efficacy: 68.8 lumens/watt
Spacing Criteria (0/90/45): 1.25 / 1.3 / 1.41
Luminous Opening: Rectangular (W 2' x L: 2' x H: 0')
CIE Type: Direct

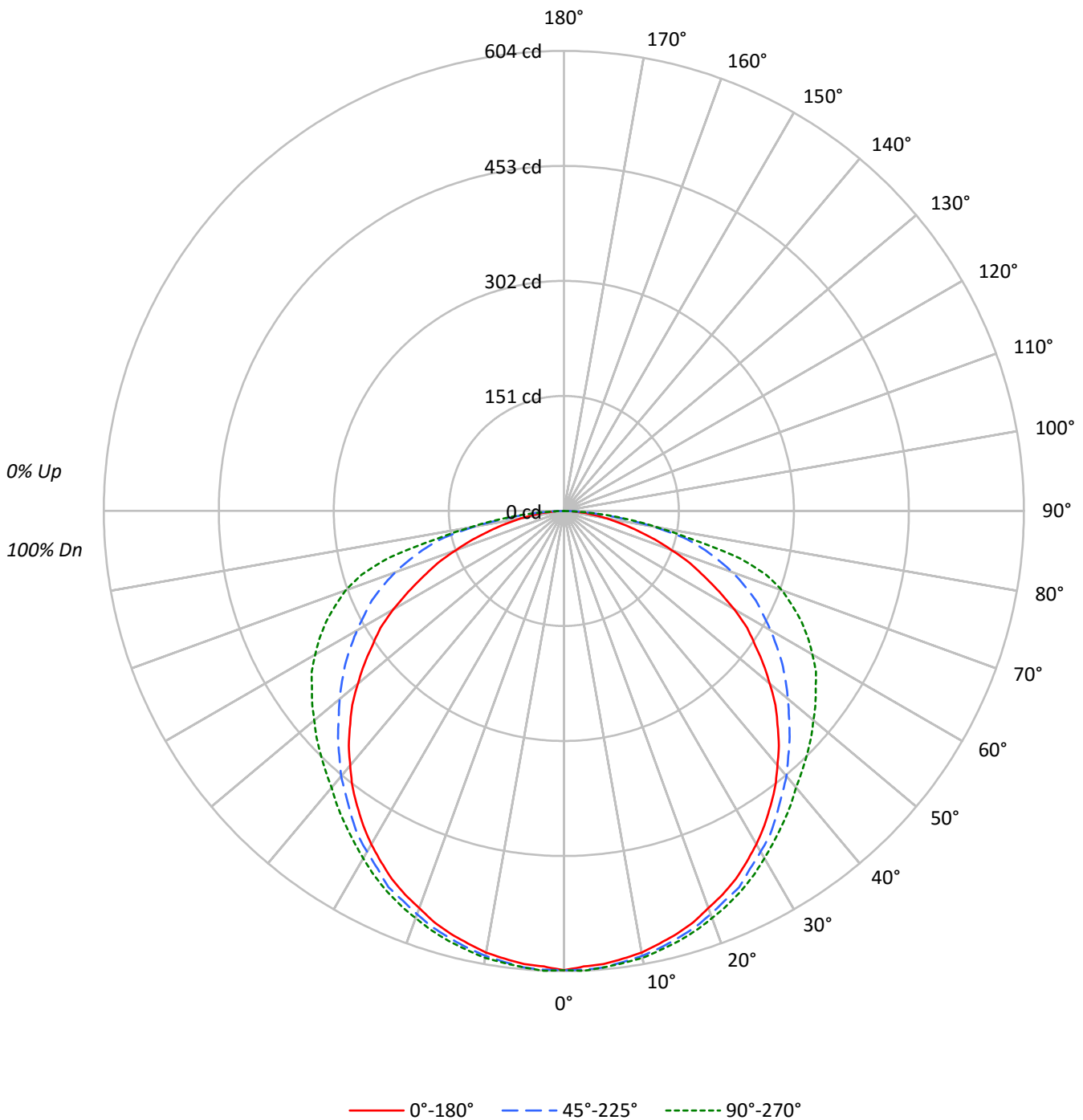
Input Watts (W): 27.9
Input Voltage (V): NR
Input Current (A_{in}): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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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	50	30	10	0	
RCR																						
0	119	119	119	119	116	116	116	116	111	111	111	106	106	106	102	102	102	100				100
1	108	103	98	94	105	100	96	92	96	92	89	92	89	86	88	86	84	82				82
2	97	88	81	75	95	86	80	74	83	77	72	80	75	71	76	72	69	67				67
3	88	77	68	61	86	75	67	61	72	65	60	70	64	59	67	62	58	55				55
4	80	68	59	51	78	66	58	51	64	56	50	61	55	50	59	54	49	47				47
5	74	60	51	44	72	59	50	44	57	49	43	55	48	43	53	47	42	40				40
6	68	54	45	38	66	53	44	38	51	43	38	50	43	37	48	42	37	35				35
7	63	49	40	33	61	48	39	33	47	39	33	45	38	33	44	37	33	31				31
8	59	45	36	30	57	44	35	30	43	35	29	41	34	29	40	34	29	27				27
9	55	41	32	27	53	40	32	27	39	32	26	38	31	26	37	31	26	24				24
10	51	38	30	24	50	37	29	24	36	29	24	35	29	24	34	28	24	22				22

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	1622	1622	1622
5°	1613	1625	1625
10°	1609	1620	1628
15°	1601	1616	1628
20°	1589	1613	1629
25°	1584	1618	1635
30°	1570	1606	1636
35°	1554	1600	1646
40°	1532	1597	1666
45°	1510	1596	1719
50°	1477	1608	1791
55°	1437	1643	1894
60°	1390	1687	2028
65°	1294	1771	2194
70°	1189	1855	2399
75°	1042	1953	2481
80°	897	1860	1946
85°	784	1352	1482



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	57.0	3.0
10°-20°	163.7	8.5
20°-30°	249.8	13.0
30°-40°	305.0	15.9
40°-50°	326.1	17.0
50°-60°	314.7	16.4
60°-70°	270.9	14.1
70°-80°	183.3	9.6
80°-90°	48.4	2.5
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°	470.5	24.5
0°-40°	775.5	40.4
0°-60°	1416.3	73.8
0°-90°	1919.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	1919.0	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	603	603	603	603	603	
5°	597	599	601	601	601	57
15°	575	576	580	583	584	162
25°	534	536	545	548	551	246
35°	473	477	487	497	501	296
45°	397	404	419	440	452	306
55°	306	316	350	385	404	274
65°	203	223	278	322	344	202
75°	100	133	188	226	239	108
85°	25	35	44	45	48	29
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	602.8	602.8	602.8	602.8	602.8
2.5°	598.6	600.0	602.8	602.8	604.2
5°	597.1	598.6	601.4	601.4	601.4
7.5°	592.9	594.3	597.1	598.6	598.6
10°	588.7	590.1	592.9	594.3	595.7
12.5°	581.6	583.0	587.3	590.1	590.1
15°	574.6	576.0	580.2	583.0	584.4
17.5°	566.1	568.9	573.1	576.0	577.4
20°	554.8	557.6	563.3	567.5	568.9
22.5°	544.9	547.7	553.4	557.6	560.4
25°	533.6	536.4	544.9	547.7	550.6
27.5°	519.5	522.3	529.4	535.0	539.3
30°	505.4	508.2	516.7	523.7	526.6
32.5°	489.9	494.1	504.0	509.6	513.9
35°	472.9	477.2	487.0	496.9	501.1
37.5°	456.0	460.2	470.1	482.8	488.4
40°	436.2	441.9	454.6	471.5	474.3
42.5°	417.9	424.9	436.2	456.0	463.0
45°	396.7	403.7	419.3	440.4	451.7
47.5°	376.9	384.0	400.9	426.3	440.4
50°	352.9	362.8	384.0	413.6	427.7
52.5°	330.3	338.8	367.0	399.5	416.4
55°	306.3	316.2	350.1	385.4	403.7
57.5°	285.2	293.6	331.7	371.3	392.4
60°	258.3	269.6	313.4	355.7	376.9
62.5°	230.1	247.0	295.0	338.8	361.4
65°	203.3	223.0	278.1	321.9	344.5
67.5°	179.3	200.5	256.9	303.5	324.7
70°	151.1	177.9	235.8	280.9	304.9
72.5°	125.6	155.3	211.8	256.9	278.1
75°	100.2	132.7	187.8	225.9	238.6
77.5°	77.6	108.7	160.9	172.2	173.6
80°	57.9	86.1	120.0	121.4	125.6
82.5°	39.5	60.7	77.6	84.7	86.1
85°	25.4	35.3	43.8	45.2	48.0
87.5°	11.3	12.7	15.5	14.1	14.1
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)