

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: METALUX

Report Number: P274763

Luminaire Tested: **22CZ2-39-RDP-UNV-L930-CD1-U**

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: P274763
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: METALUX
Catalog Number: 22CZ2-39-RDP-UNV-L930-CD1-U
Description: 2'X2' TROFFER LED MODULE,SMOOTH LENS WITH INSERT, 90CRI
Light Source: (98) 3000K CCT, 90 CRI LEDS
Ballast/Driver: ELECTRONIC DRIVER
Luminaire Equipment: Sample No. Condition Description

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 2177.0 lumens
Efficiency: N/A
Efficacy: 63.1 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

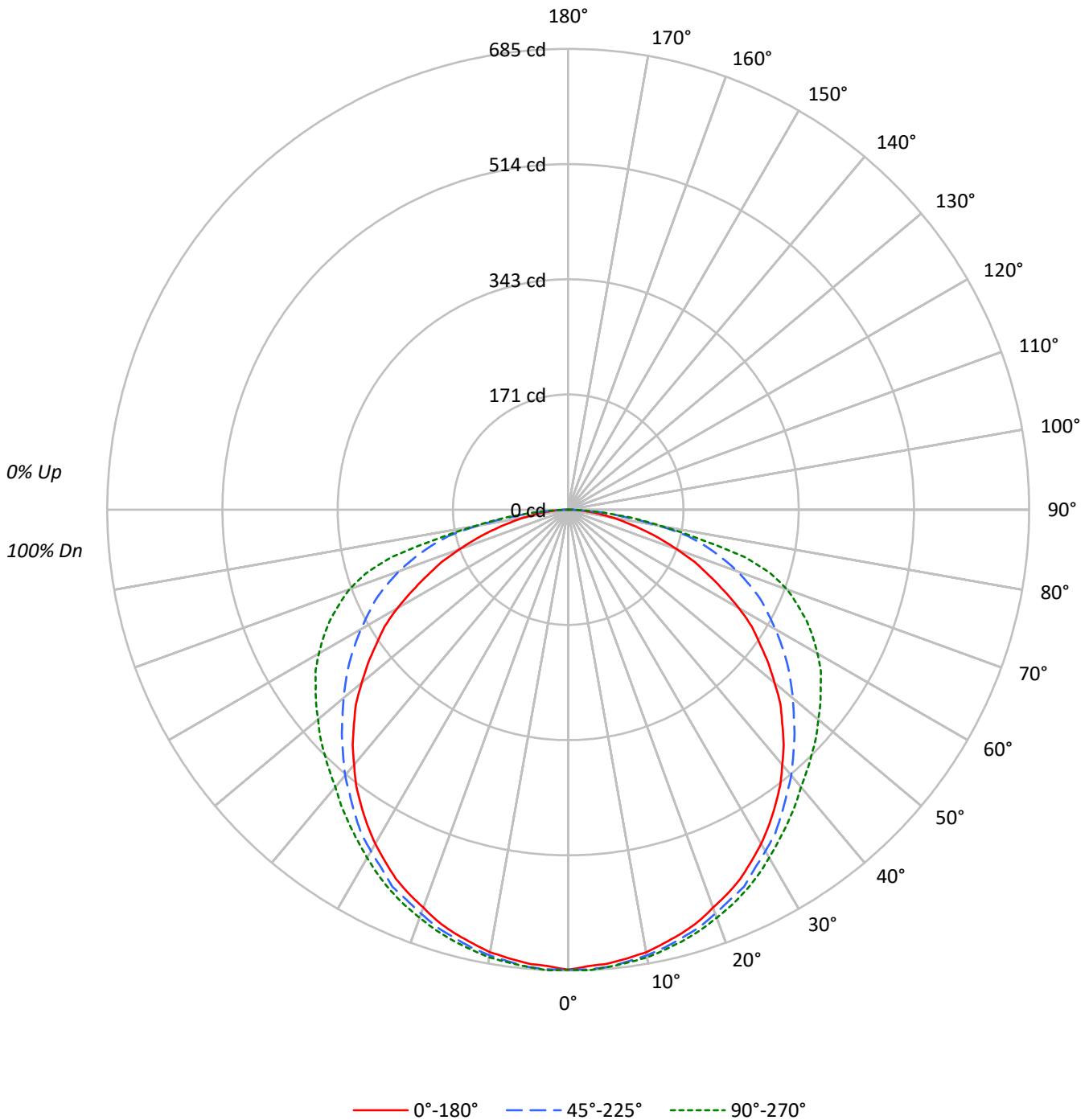
Input Watts (W): 34.5
Input Voltage (V): NR
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	1840	1840	1840
5°	1830	1843	1843
10°	1825	1838	1847
15°	1816	1834	1847
20°	1802	1830	1848
25°	1798	1836	1855
30°	1781	1821	1856
35°	1762	1815	1868
40°	1738	1812	1890
45°	1713	1810	1950
50°	1676	1824	2031
55°	1630	1863	2149
60°	1577	1913	2301
65°	1468	2009	2488
70°	1349	2104	2722
75°	1182	2215	2815
80°	1018	2109	2208
85°	889	1531	1683



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	64.7	3.0
10°-20°	185.7	8.5
20°-30°	283.4	13.0
30°-40°	346.0	15.9
40°-50°	369.9	17.0
50°-60°	357.1	16.4
60°-70°	307.4	14.1
70°-80°	208.0	9.6
80°-90°	54.9	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°	533.8	24.5
0°-40°	879.8	40.4
0°-60°	1606.8	73.8
0°-90°	2177.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	2177.0	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	684	684	684	684	684	
5°	677	679	682	682	682	64
15°	652	653	658	661	663	184
25°	605	609	618	621	625	279
35°	536	541	552	564	568	336
45°	450	458	476	500	512	347
55°	348	359	397	437	458	311
65°	231	253	316	365	391	229
75°	114	150	213	256	271	122
85°	29	40	50	51	54	32
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	683.8	683.8	683.8	683.8	683.8
2.5°	679.0	680.6	683.8	683.8	685.4
5°	677.4	679.0	682.2	682.2	682.2
7.5°	672.6	674.2	677.4	679.0	679.0
10°	667.8	669.4	672.6	674.2	675.8
12.5°	659.8	661.4	666.2	669.4	669.4
15°	651.8	653.4	658.2	661.4	663.0
17.5°	642.2	645.4	650.2	653.4	655.0
20°	629.4	632.6	639.0	643.8	645.4
22.5°	618.2	621.4	627.8	632.6	635.8
25°	605.4	608.6	618.2	621.4	624.6
27.5°	589.3	592.5	600.6	607.0	611.8
30°	573.3	576.5	586.1	594.2	597.4
32.5°	555.7	560.5	571.7	578.1	582.9
35°	536.5	541.3	552.5	563.7	568.5
37.5°	517.3	522.1	533.3	547.7	554.1
40°	494.9	501.3	515.7	534.9	538.1
42.5°	474.0	482.0	494.9	517.3	525.3
45°	450.0	458.0	475.6	499.7	512.5
47.5°	427.6	435.6	454.8	483.6	499.7
50°	400.4	411.6	435.6	469.2	485.2
52.5°	374.7	384.4	416.4	453.2	472.4
55°	347.5	358.7	397.2	437.2	458.0
57.5°	323.5	333.1	376.3	421.2	445.2
60°	293.1	305.9	355.5	403.6	427.6
62.5°	261.0	280.3	334.7	384.4	410.0
65°	230.6	253.0	315.5	365.1	390.8
67.5°	203.4	227.4	291.5	344.3	368.3
70°	171.4	201.8	267.4	318.7	345.9
72.5°	142.5	176.2	240.2	291.5	315.5
75°	113.7	150.5	213.0	256.2	270.7
77.5°	88.1	123.3	182.6	195.4	197.0
80°	65.7	97.7	136.1	137.7	142.5
82.5°	44.8	68.9	88.1	96.1	97.7
85°	28.8	40.0	49.6	51.2	54.5
87.5°	12.8	14.4	17.6	16.0	16.0
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)