

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: P274765

Luminaire Tested: **22CZ2-39-RDP-UNV-L940-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: P274765
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-L940-CD1-U
Description: 2'X2' TROFFER LED MODULE,SMOOTH LENS WITH INSERT, 90CRI
Light Source: (98) 4000K CCT, 90 CRI LEDS
Ballast/Driver: ELECTRONIC DRIVER
Luminaire Equipment: Sample No. Condition Description

Summary

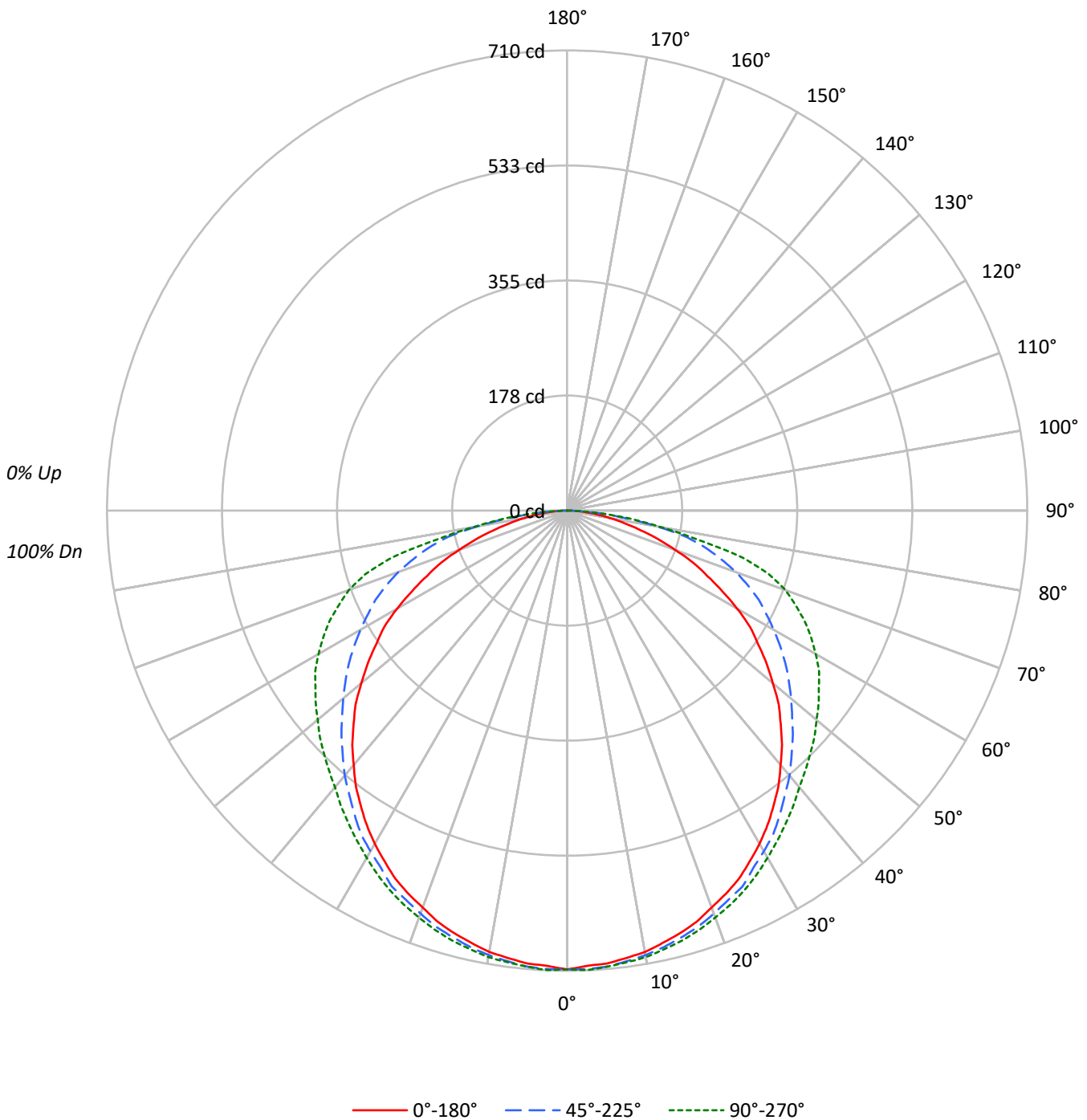
Lumens per Lamp: N/A
Luminaire Lumens: 2254.0 lumens
Efficiency: N/A
Efficacy: 65.3 lumens/watt
Spacing Criteria (0/90/45): 1.25 / 1.3 / 1.41
Luminous Opening: Rectangular (W 2' x L: 2' x H: 0')
CIE Type: Direct

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°	1905	1905	1905
5°	1895	1908	1908
10°	1889	1903	1912
15°	1880	1899	1913
20°	1866	1895	1914
25°	1861	1900	1920
30°	1844	1886	1922
35°	1825	1879	1934
40°	1800	1875	1957
45°	1773	1874	2019
50°	1735	1888	2103
55°	1688	1929	2225
60°	1633	1981	2383
65°	1521	2080	2576
70°	1396	2179	2818
75°	1224	2293	2913
80°	1054	2183	2287
85°	920	1587	1741



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	67.0	3.0
10°-20°	192.3	8.5
20°-30°	293.4	13.0
30°-40°	358.2	15.9
40°-50°	383.0	17.0
50°-60°	369.7	16.4
60°-70°	318.3	14.1
70°-80°	215.3	9.6
80°-90°	56.8	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°	552.7	24.5
0°-40°	910.9	40.4
0°-60°	1663.6	73.8
0°-90°	2254.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	2254.0	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	708	708	708	708	708	
5°	701	703	706	706	706	67
15°	675	676	682	685	686	190
25°	627	630	640	643	647	288
35°	556	560	572	584	589	348
45°	466	474	492	517	531	360
55°	360	371	411	453	474	322
65°	239	262	327	378	405	237
75°	118	156	220	265	280	126
85°	30	42	51	53	56	34
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	708.0	708.0	708.0	708.0	708.0
2.5°	703.0	704.7	708.0	708.0	709.7
5°	701.4	703.0	706.4	706.4	706.4
7.5°	696.4	698.1	701.4	703.0	703.0
10°	691.4	693.1	696.4	698.1	699.7
12.5°	683.1	684.8	689.8	693.1	693.1
15°	674.9	676.5	681.5	684.8	686.5
17.5°	664.9	668.2	673.2	676.5	678.2
20°	651.6	655.0	661.6	666.6	668.2
22.5°	640.0	643.4	650.0	655.0	658.3
25°	626.8	630.1	640.0	643.4	646.7
27.5°	610.2	613.5	621.8	628.4	633.4
30°	593.6	596.9	606.9	615.2	618.5
32.5°	575.4	580.3	592.0	598.6	603.6
35°	555.5	560.4	572.1	583.7	588.6
37.5°	535.6	540.5	552.2	567.1	573.7
40°	512.4	519.0	533.9	553.8	557.1
42.5°	490.8	499.1	512.4	535.6	543.9
45°	465.9	474.2	492.5	517.3	530.6
47.5°	442.7	451.0	470.9	500.8	517.3
50°	414.5	426.1	451.0	485.8	502.4
52.5°	388.0	398.0	431.1	469.3	489.1
55°	359.8	371.4	411.2	452.7	474.2
57.5°	334.9	344.9	389.7	436.1	461.0
60°	303.4	316.7	368.1	417.8	442.7
62.5°	270.3	290.2	346.5	398.0	424.5
65°	238.8	262.0	326.7	378.1	404.6
67.5°	210.6	235.5	301.8	356.5	381.4
70°	177.4	208.9	276.9	330.0	358.2
72.5°	147.6	182.4	248.7	301.8	326.7
75°	117.7	155.9	220.5	265.3	280.2
77.5°	91.2	127.7	189.0	202.3	203.9
80°	68.0	101.1	140.9	142.6	147.6
82.5°	46.4	71.3	91.2	99.5	101.1
85°	29.8	41.5	51.4	53.1	56.4
87.5°	13.3	14.9	18.2	16.6	16.6
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)