

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: P229607

Luminaire Tested: **22RLN-LD5-44-UNV-L940-CD1-U**

Issue Date: 3/3/2020

**Test Information**

Test Method: LM-79-08  
Report Number: P229607  
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (P36050)  
Test Lab: INNOVATION CENTER-P3  
Issue Date: 3/3/2020  
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)  
Product Line: METALUX  
Catalog Number: 22RLN-LD5-44-UNV-L940-CD1-U  
Description: METALUX 2X2 RLN LED TROFFER  
Light Source: (126)4000K CCT, 90 CRI LEDs  
Ballast/Driver: ELECTRONIC DRIVER

**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 3900.0 lumens  
Efficiency: N/A  
Efficacy: 98.5 lumens/watt  
Spacing Criteria (0/90/45): 1.19 / 1.23 / 1.31  
Luminous Opening: Rectangular (W 1.83' x L: 1.83' x H: 0')  
CIE Type: Direct

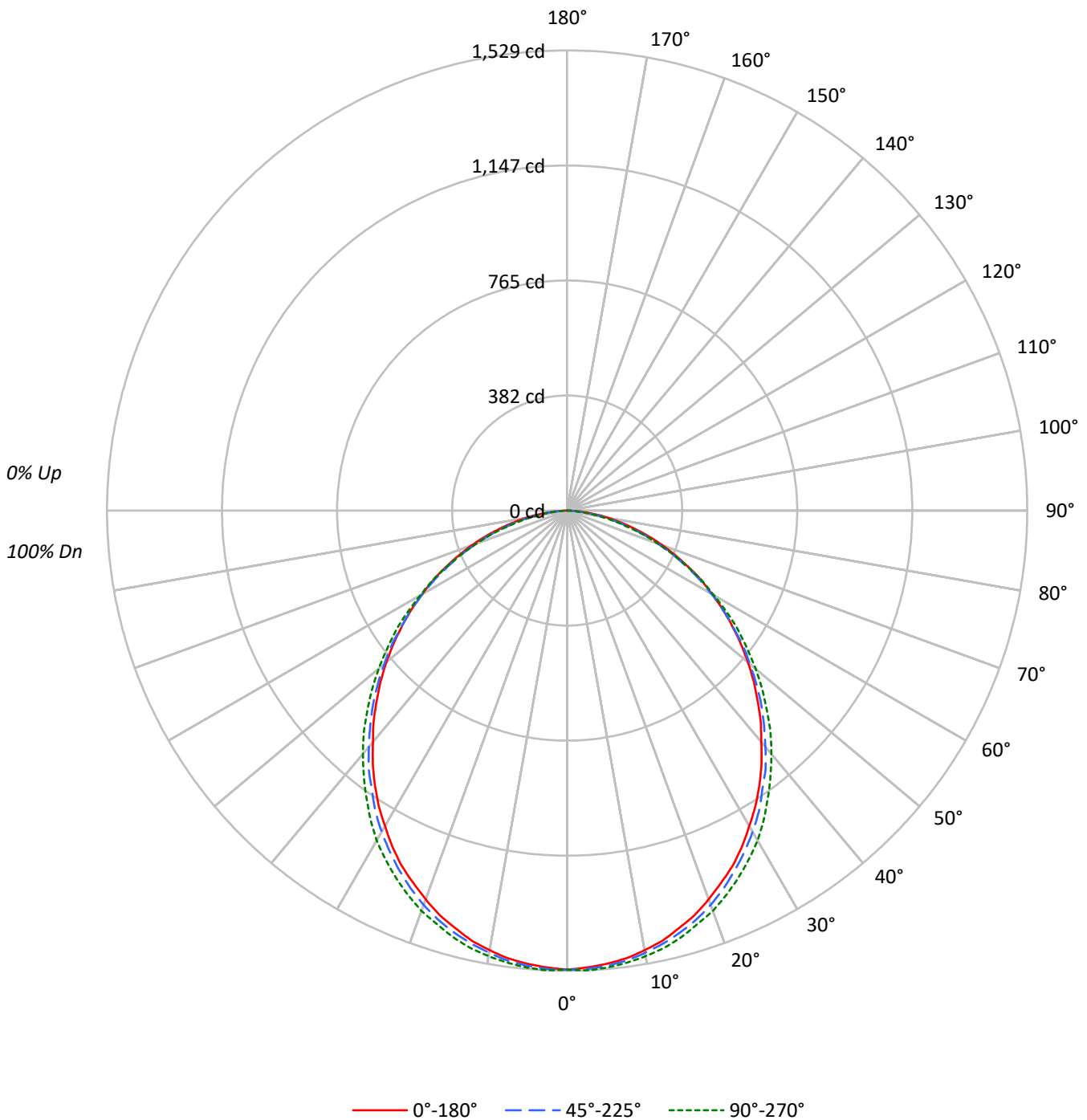
Input Watts (W): 39.6  
Input Voltage (V): 120  
Input Current (Ain): NR  
Voltage Rise (V): NR  
Power Factor: NR  
Total Harmonic Distortion (THDi): NR  
Frequency (hertz): 60  
Stabilization Time: NR  
Operation Time: NR  
Ambient Temperature (°C): NR  
Test Distance: 25 FT



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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	109	105	101	97	107	102	99	95	98	95	92	94	92	90	91	89	87	85
2	100	92	85	80	97	90	84	79	86	81	77	83	79	75	80	77	73	71
3	91	81	73	67	89	79	72	66	76	70	65	74	68	64	71	67	63	61
4	84	72	63	57	81	71	63	56	68	61	56	66	60	55	64	58	54	52
5	77	64	56	49	75	63	55	49	61	54	48	59	53	48	57	52	47	45
6	71	58	49	43	69	57	49	43	55	48	43	54	47	42	52	46	42	40
7	66	53	44	38	64	52	44	38	51	43	38	49	42	38	48	42	37	35
8	62	48	40	34	60	48	40	34	46	39	34	45	38	34	44	38	33	32
9	58	44	36	31	56	44	36	31	43	36	31	42	35	30	41	35	30	28
10	54	41	33	28	53	41	33	28	40	33	28	39	32	28	38	32	28	26

**AVERAGE LUMINANCE (cd/sqm):**

	0°	45°	90°
0°	4886	4886	4886
5°	4861	4881	4900
10°	4824	4853	4889
15°	4763	4812	4866
20°	4685	4753	4824
25°	4600	4661	4757
30°	4476	4558	4682
35°	4355	4423	4548
40°	4197	4285	4414
45°	4054	4132	4250
50°	3905	3949	4072
55°	3742	3748	3879
60°	3563	3548	3603
65°	3373	3298	3345
70°	3160	2998	3010
75°	2861	2631	2555
80°	2530	2211	2053
85°	2043	1543	1319



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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	144.1	3.7
10°-20°	409.3	10.5
20°-30°	608.4	15.6
30°-40°	710.2	18.2
40°-50°	704.9	18.1
50°-60°	604.9	15.5
60°-70°	434.2	11.1
70°-80°	230.0	5.9
80°-90°	53.9	1.4
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°	1161.8	29.8
0°-40°	1872.0	48.0
0°-60°	3181.8	81.6
0°-90°	3900.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	3900.0	100.0

**CANDELA DISTRIBUTION:**

	0°	22.5°	45°	67.5°	90°	Flux
0°	1526	1526	1526	1526	1526	
5°	1512	1514	1518	1523	1524	143
15°	1437	1442	1451	1462	1468	405
25°	1302	1306	1319	1339	1346	598
35°	1114	1118	1131	1156	1163	696
45°	895	899	912	928	938	691
55°	670	666	671	686	695	599
65°	445	434	435	439	441	442
75°	231	220	213	210	206	246
85°	56	48	42	36	36	66
90°	0	0	0	0	0	



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**CANDELA DISTRIBUTION (FULL):**

	0°	22.5°	45°	67.5°	90°
0°	1525.6	1525.6	1525.6	1525.6	1525.6
2.5°	1519.4	1520.6	1524.3	1528.0	1529.3
5°	1512.0	1514.4	1518.2	1523.1	1524.3
7.5°	1500.8	1503.3	1508.3	1513.2	1515.7
10°	1483.5	1487.2	1492.2	1500.8	1503.3
12.5°	1463.8	1466.2	1473.7	1483.5	1488.5
15°	1436.6	1441.5	1451.4	1462.5	1467.5
17.5°	1409.4	1413.1	1425.4	1436.6	1440.3
20°	1374.7	1382.2	1394.5	1408.1	1415.5
22.5°	1337.7	1343.8	1358.7	1374.7	1382.2
25°	1301.8	1305.5	1319.1	1338.9	1346.3
27.5°	1258.5	1262.2	1277.1	1296.9	1306.8
30°	1210.3	1216.5	1232.6	1254.8	1266.0
32.5°	1164.6	1169.5	1185.6	1205.4	1216.5
35°	1113.9	1117.6	1131.2	1155.9	1163.3
37.5°	1060.7	1064.4	1083.0	1101.5	1110.2
40°	1003.9	1008.8	1024.9	1043.4	1055.8
42.5°	951.9	954.4	968.0	989.0	1000.2
45°	895.1	898.8	912.4	928.4	938.3
47.5°	840.7	839.4	853.0	871.6	879.0
50°	783.8	781.3	792.5	811.0	817.2
52.5°	726.9	723.2	735.6	749.2	754.1
55°	670.1	666.4	671.3	686.1	694.8
57.5°	614.4	608.3	614.4	621.9	629.3
60°	556.3	546.4	553.9	562.5	562.5
62.5°	503.2	492.0	495.7	501.9	505.6
65°	445.1	433.9	435.2	438.9	441.4
67.5°	390.7	379.5	377.1	378.3	379.5
70°	337.5	325.1	320.2	317.7	321.4
72.5°	283.1	270.7	268.3	263.3	264.6
75°	231.2	220.1	212.6	210.2	206.5
77.5°	181.7	171.8	165.7	158.2	157.0
80°	137.2	124.9	119.9	115.0	111.3
82.5°	96.4	85.3	76.6	71.7	68.0
85°	55.6	48.2	42.0	35.9	35.9
87.5°	22.3	17.3	14.8	13.6	12.4
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)