

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: P296398

Luminaire Tested: **22RLN-LD5-44-UNV-L83050-W2A1-U-3000K**

Issue Date: 3/3/2020

**Test Information**

Test Method: LM-79-08  
Report Number: P296398  
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G3-1901-085-11)  
Test Lab: INNOVATION CENTER(G3)  
Issue Date: 3/3/2020  
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)  
Product Line: METALUX  
Catalog Number: 22RLN-LD5-44-UNV-L83050-W2A1-U-3000K  
Description: RLN LED 2x2 TUNABLE WHITE TROFFER  
WITH STANDARD LENS  
Light Source: (252) 80 CRI LEDS TUNED TO 3000K CCT  
Ballast/Driver: ELECTRONIC DRIVER

**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 4144.0 lumens  
Efficiency: N/A  
Efficacy: 116.6 lumens/watt  
Spacing Criteria (0/90/45): 1.18 / 1.23 / 1.3  
Luminous Opening: Rectangular (W 2' x L: 2' x H: 0')  
CIE Type: Direct

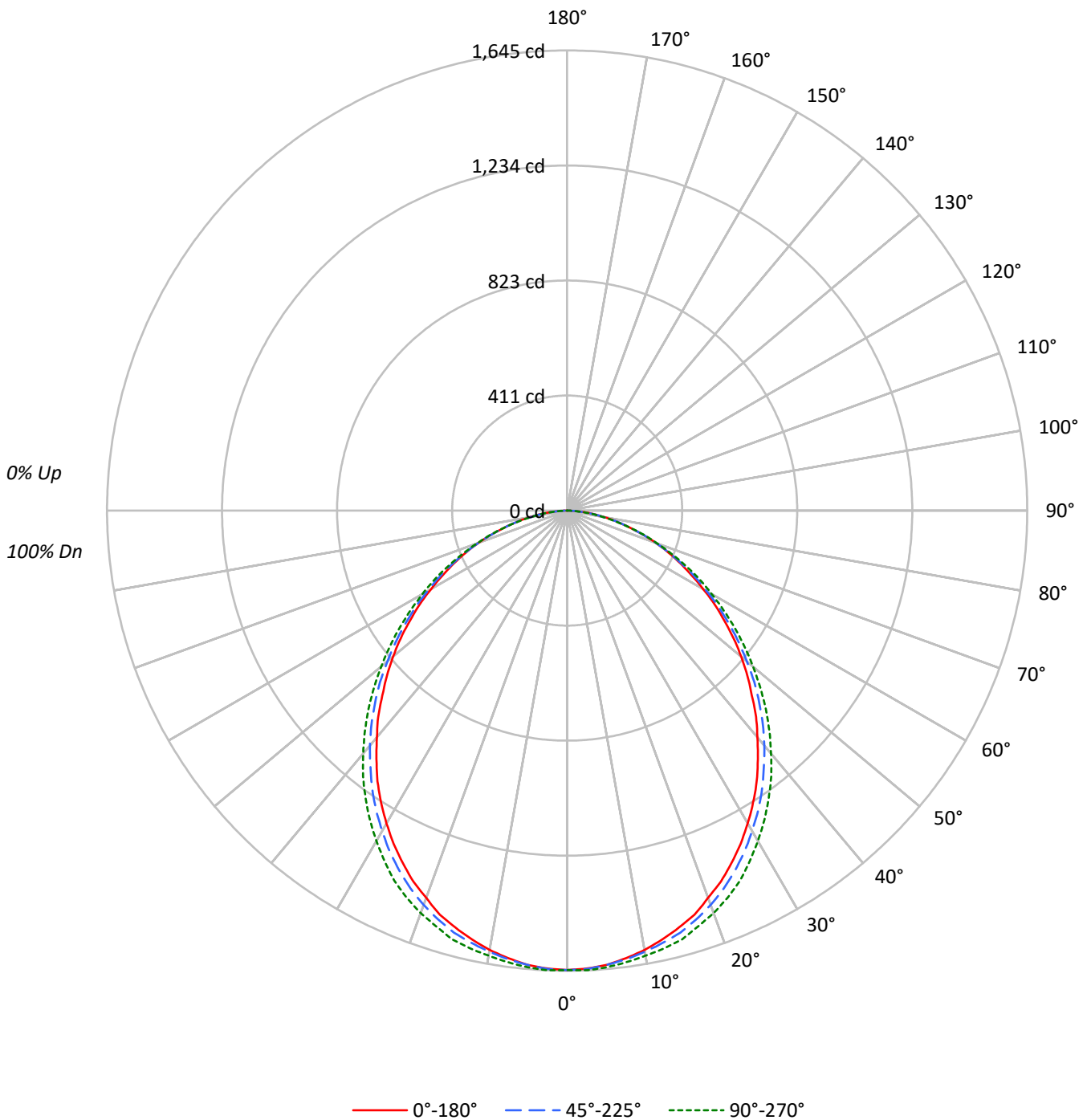
Input Watts (W): 35.526  
Input Voltage (V): 120  
Input Current (Ain): NR  
Voltage Rise (V): NR  
Power Factor: NR  
Total Harmonic Distortion (THDi): NR  
Frequency (hertz): 60  
Stabilization Time: NR  
Operation Time: NR  
Ambient Temperature (°C): NR  
Test Distance: 25 FT



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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	74	71
3	91	81	73	67	89	79	72	66	77	70	65	74	68	64	71	67	63	61
4	84	72	64	57	81	71	63	57	68	61	56	66	60	55	64	59	54	52
5	77	65	56	49	75	64	55	49	61	54	49	59	53	48	58	52	48	46
6	71	58	50	43	70	57	49	43	56	48	43	54	47	42	52	47	42	40
7	66	53	44	38	65	52	44	38	51	43	38	49	43	38	48	42	38	36
8	62	49	40	34	60	48	40	34	47	39	34	45	39	34	44	38	34	32
9	58	45	37	31	56	44	36	31	43	36	31	42	35	31	41	35	31	29
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°	4420	4420	4420
5°	4404	4404	4426
10°	4359	4376	4415
15°	4300	4352	4421
20°	4219	4296	4384
25°	4129	4214	4337
30°	4012	4109	4237
35°	3882	3991	4127
40°	3716	3854	3985
45°	3554	3696	3821
50°	3399	3512	3633
55°	3218	3315	3431
60°	3025	3103	3214
65°	2842	2895	2986
70°	2650	2650	2699
75°	2363	2363	2363
80°	2081	2018	2018
85°	1658	1596	1467



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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	154.9	3.7
10°-20°	440.4	10.6
20°-30°	654.2	15.8
30°-40°	759.3	18.3
40°-50°	747.6	18.0
50°-60°	632.7	15.3
60°-70°	451.2	10.9
70°-80°	242.5	5.9
80°-90°	61.1	1.5
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°	1249.6	30.2
0°-40°	2008.9	48.5
0°-60°	3389.2	81.8
0°-90°	4144.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	4144.0	100.0

**CANDELA DISTRIBUTION:**

	0°	22.5°	45°	67.5°	90°	Flux
0°	1643	1643	1643	1643	1643	
5°	1630	1630	1630	1636	1638	154
15°	1543	1548	1562	1576	1587	435
25°	1390	1395	1419	1446	1461	640
35°	1182	1184	1215	1244	1256	737
45°	934	940	971	994	1004	722
55°	686	688	707	725	731	614
65°	446	446	455	463	469	443
75°	227	225	227	227	227	244
85°	54	52	52	48	48	64
90°	0	0	0	0	0	



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**CANDELA DISTRIBUTION (FULL):**

	0°	22.5°	45°	67.5°	90°
0°	1642.6	1642.6	1642.6	1642.6	1642.6
2.5°	1638.5	1638.5	1640.5	1642.6	1644.7
5°	1630.2	1630.2	1630.2	1636.4	1638.5
7.5°	1613.7	1615.7	1617.8	1624.0	1628.1
10°	1595.1	1597.1	1601.3	1611.6	1615.7
12.5°	1570.3	1576.5	1582.7	1597.1	1603.3
15°	1543.4	1547.5	1562.0	1576.5	1586.8
17.5°	1514.5	1516.6	1533.1	1553.7	1557.9
20°	1473.2	1479.4	1500.0	1520.7	1531.0
22.5°	1436.0	1440.1	1462.8	1489.7	1498.0
25°	1390.5	1394.7	1419.4	1446.3	1460.8
27.5°	1343.0	1347.1	1374.0	1402.9	1413.2
30°	1291.3	1295.5	1322.3	1353.3	1363.7
32.5°	1237.6	1241.8	1270.7	1297.5	1312.0
35°	1181.8	1183.9	1214.9	1243.8	1256.2
37.5°	1119.9	1126.1	1155.0	1183.9	1198.4
40°	1057.9	1064.1	1097.1	1124.0	1134.3
42.5°	1000.0	1008.3	1035.1	1059.9	1070.3
45°	933.9	940.1	971.1	993.8	1004.1
47.5°	874.0	880.2	907.0	929.8	936.0
50°	812.0	816.1	838.9	859.5	867.8
52.5°	750.0	752.1	772.7	793.4	799.6
55°	686.0	688.0	706.6	725.2	731.4
57.5°	626.0	626.0	642.6	657.0	663.2
60°	562.0	562.0	576.5	590.9	597.1
62.5°	502.1	502.1	516.5	526.9	535.1
65°	446.3	446.3	454.6	462.8	469.0
67.5°	392.6	386.4	394.6	405.0	402.9
70°	336.8	330.6	336.8	340.9	343.0
72.5°	281.0	276.9	281.0	283.1	287.2
75°	227.3	225.2	227.3	227.3	227.3
77.5°	181.8	175.6	179.8	177.7	175.6
80°	134.3	132.2	130.2	128.1	130.2
82.5°	93.0	90.9	90.9	86.8	86.8
85°	53.7	51.7	51.7	47.5	47.5
87.5°	20.7	20.7	18.6	18.6	18.6
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)