

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: P296479

Luminaire Tested: **22RLN-LD5-40-UNV-L93050-W2A1-U-4000K**

Issue Date: 3/3/2020

**Test Information**

Test Method: LM-79-08  
Report Number: P296479  
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-LD5-40-UNV-L93050-W2A1-U-4000K  
Description: RLN LED 2x2 TUNABLE WHITE TROFFER  
WITH STANDARD LENS  
Light Source: (252) 90 CRI LEDS TUNED TO 4000K CCT  
Ballast/Driver: ELECTRONIC DRIVER

**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 3676.0 lumens  
Efficiency: N/A  
Efficacy: 111.7 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

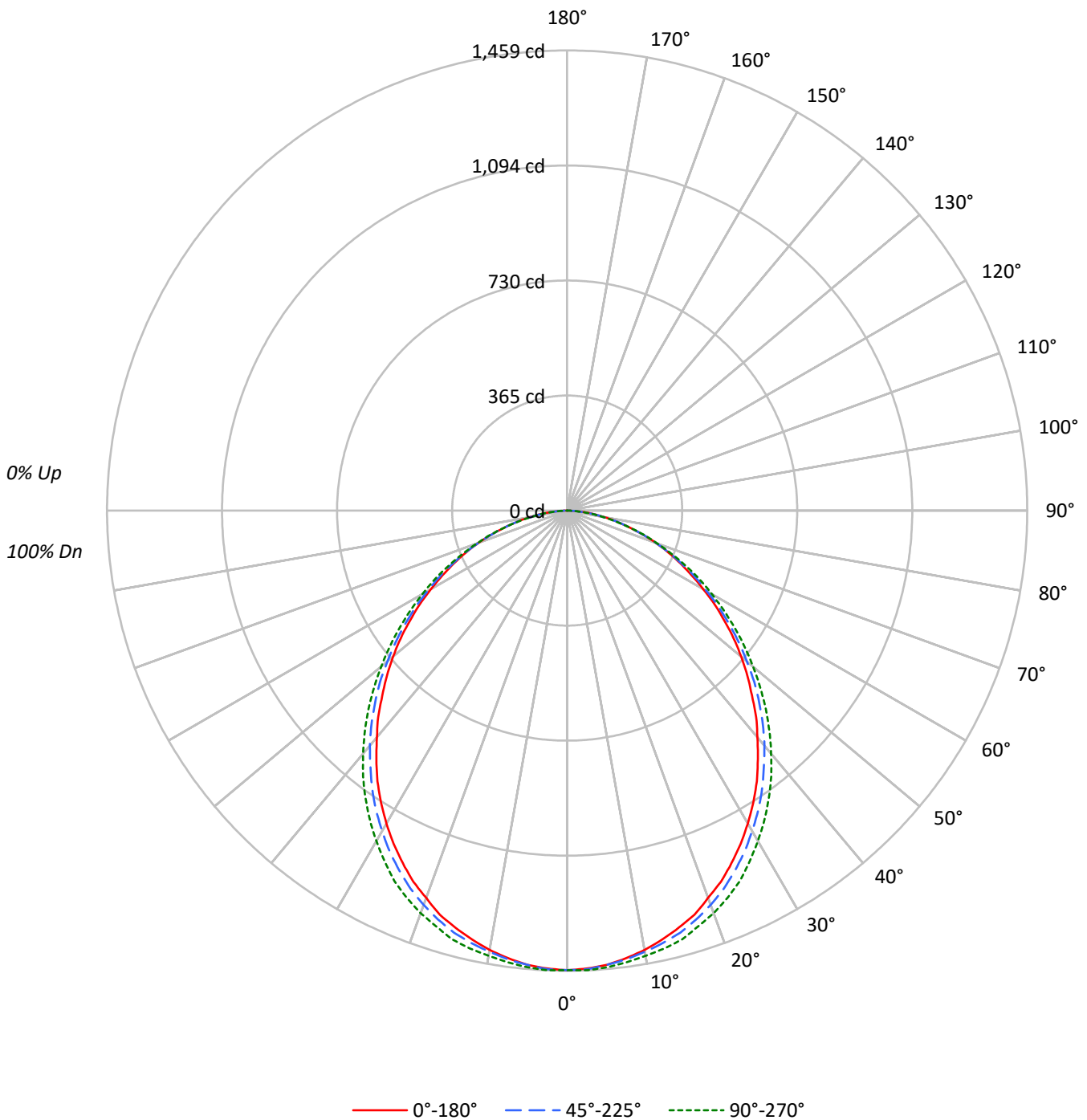
Input Watts (W): 32.922  
Input Voltage (V): 120  
Input Current (Ain): NR  
Voltage Rise (V): NR  
Power Factor: NR  
Total Harmonic Distortion (THDi): NR  
Frequency (hertz): 60  
Stabilization Time: NR  
Operation Time: NR  
Ambient Temperature (°C): NR  
Test Distance: 25 FT



TEST NUMBER: P296479

CATALOG NUMBER: 22RLN-LD5-40-UNV-L93050-W2A1-U-4000K

### Luminous Intensity Polar Plot





TEST NUMBER: P296479

CATALOG NUMBER: 22RLN-LD5-40-UNV-L93050-W2A1-U-4000K

**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	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	109	105	101	97	107	102	99	95	98	95	92	94	92	90	91	89	87	85					85			
2	100	92	85	80	97	90	84	79	86	81	77	83	79	75	80	77	74	71					71			
3	91	81	73	67	89	79	72	66	77	70	65	74	68	64	71	67	63	61					61			
4	84	72	64	57	81	71	63	57	68	61	56	66	60	55	64	59	54	52					52			
5	77	65	56	49	75	64	55	49	61	54	49	59	53	48	58	52	48	46					46			
6	71	58	50	43	70	57	49	43	56	48	43	54	47	42	52	47	42	40					40			
7	66	53	44	38	65	52	44	38	51	43	38	49	43	38	48	42	38	36					36			
8	62	49	40	34	60	48	40	34	47	39	34	45	39	34	44	38	34	32					32			
9	58	45	37	31	56	44	36	31	43	36	31	42	35	31	41	35	31	29					29			
10	54	41	33	28	53	41	33	28	40	33	28	39	32	28	38	32	28	26					26			

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

	0°	45°	90°
0°	3921	3921	3921
5°	3906	3906	3926
10°	3866	3881	3916
15°	3814	3860	3921
20°	3742	3810	3889
25°	3662	3738	3847
30°	3559	3645	3759
35°	3444	3540	3661
40°	3296	3419	3535
45°	3153	3278	3390
50°	3015	3115	3223
55°	2855	2941	3044
60°	2683	2752	2851
65°	2521	2567	2649
70°	2350	2350	2393
75°	2096	2096	2096
80°	1846	1790	1790
85°	1473	1414	1303



TEST NUMBER: P296479

CATALOG NUMBER: 22RLN-LD5-40-UNV-L93050-W2A1-U-4000K

**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	137.4	3.7
10°-20°	390.7	10.6
20°-30°	580.4	15.8
30°-40°	673.5	18.3
40°-50°	663.2	18.0
50°-60°	561.2	15.3
60°-70°	400.3	10.9
70°-80°	215.1	5.9
80°-90°	54.2	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°	1108.4	30.2
0°-40°	1782.0	48.5
0°-60°	3006.4	81.8
0°-90°	3676.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	3676.0	100.0

**CANDELA DISTRIBUTION:**

	0°	22.5°	45°	67.5°	90°	Flux
0°	1457	1457	1457	1457	1457	
5°	1446	1446	1446	1452	1453	137
15°	1369	1373	1386	1398	1408	386
25°	1234	1237	1259	1283	1296	568
35°	1048	1050	1078	1103	1114	654
45°	828	834	861	882	891	640
55°	608	610	627	643	649	545
65°	396	396	403	411	416	393
75°	202	200	202	202	202	216
85°	48	46	46	42	42	57
90°	0	0	0	0	0	



TEST NUMBER: P296479

CATALOG NUMBER: 22RLN-LD5-40-UNV-L93050-W2A1-U-4000K

**CANDELA DISTRIBUTION (FULL):**

	0°	22.5°	45°	67.5°	90°
0°	1457.1	1457.1	1457.1	1457.1	1457.1
2.5°	1453.4	1453.4	1455.3	1457.1	1458.9
5°	1446.1	1446.1	1446.1	1451.6	1453.4
7.5°	1431.4	1433.3	1435.1	1440.6	1444.3
10°	1414.9	1416.8	1420.4	1429.6	1433.3
12.5°	1392.9	1398.4	1403.9	1416.8	1422.3
15°	1369.1	1372.8	1385.6	1398.4	1407.6
17.5°	1343.5	1345.3	1359.9	1378.3	1381.9
20°	1306.8	1312.3	1330.6	1349.0	1358.1
22.5°	1273.8	1277.5	1297.6	1321.5	1328.8
25°	1233.5	1237.1	1259.1	1283.0	1295.8
27.5°	1191.3	1195.0	1218.8	1244.5	1253.6
30°	1145.5	1149.2	1173.0	1200.5	1209.7
32.5°	1097.9	1101.5	1127.2	1151.0	1163.8
35°	1048.4	1050.2	1077.7	1103.4	1114.4
37.5°	993.4	998.9	1024.5	1050.2	1063.0
40°	938.4	943.9	973.2	997.1	1006.2
42.5°	887.1	894.4	918.2	940.2	949.4
45°	828.4	833.9	861.4	881.6	890.7
47.5°	775.3	780.8	804.6	824.8	830.3
50°	720.3	724.0	744.1	762.5	769.8
52.5°	665.3	667.1	685.5	703.8	709.3
55°	608.5	610.3	626.8	643.3	648.8
57.5°	555.3	555.3	570.0	582.8	588.3
60°	498.5	498.5	511.4	524.2	529.7
62.5°	445.4	445.4	458.2	467.4	474.7
65°	395.9	395.9	403.2	410.6	416.0
67.5°	348.2	342.7	350.1	359.2	357.4
70°	298.7	293.3	298.7	302.4	304.2
72.5°	249.3	245.6	249.3	251.1	254.8
75°	201.6	199.8	201.6	201.6	201.6
77.5°	161.3	155.8	159.5	157.6	155.8
80°	119.1	117.3	115.5	113.6	115.5
82.5°	82.5	80.6	80.6	77.0	77.0
85°	47.7	45.8	45.8	42.2	42.2
87.5°	18.3	18.3	16.5	16.5	16.5
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)