

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: P296536

Luminaire Tested: **22RLN-LD5-44-UNV-L92765-W2A1-U-4500K**

Issue Date: 3/3/2020

**Test Information**

Test Method: LM-79-08  
Report Number: P296536  
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-L92765-W2A1-U-4500K  
Description: RLN LED 2x2 TUNABLE WHITE TROFFER  
WITH STANDARD LENS  
Light Source: (252) 90 CRI LEDS TUNED TO 4500K CCT  
Ballast/Driver: ELECTRONIC DRIVER

**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 3973.0 lumens  
Efficiency: N/A  
Efficacy: 109.5 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

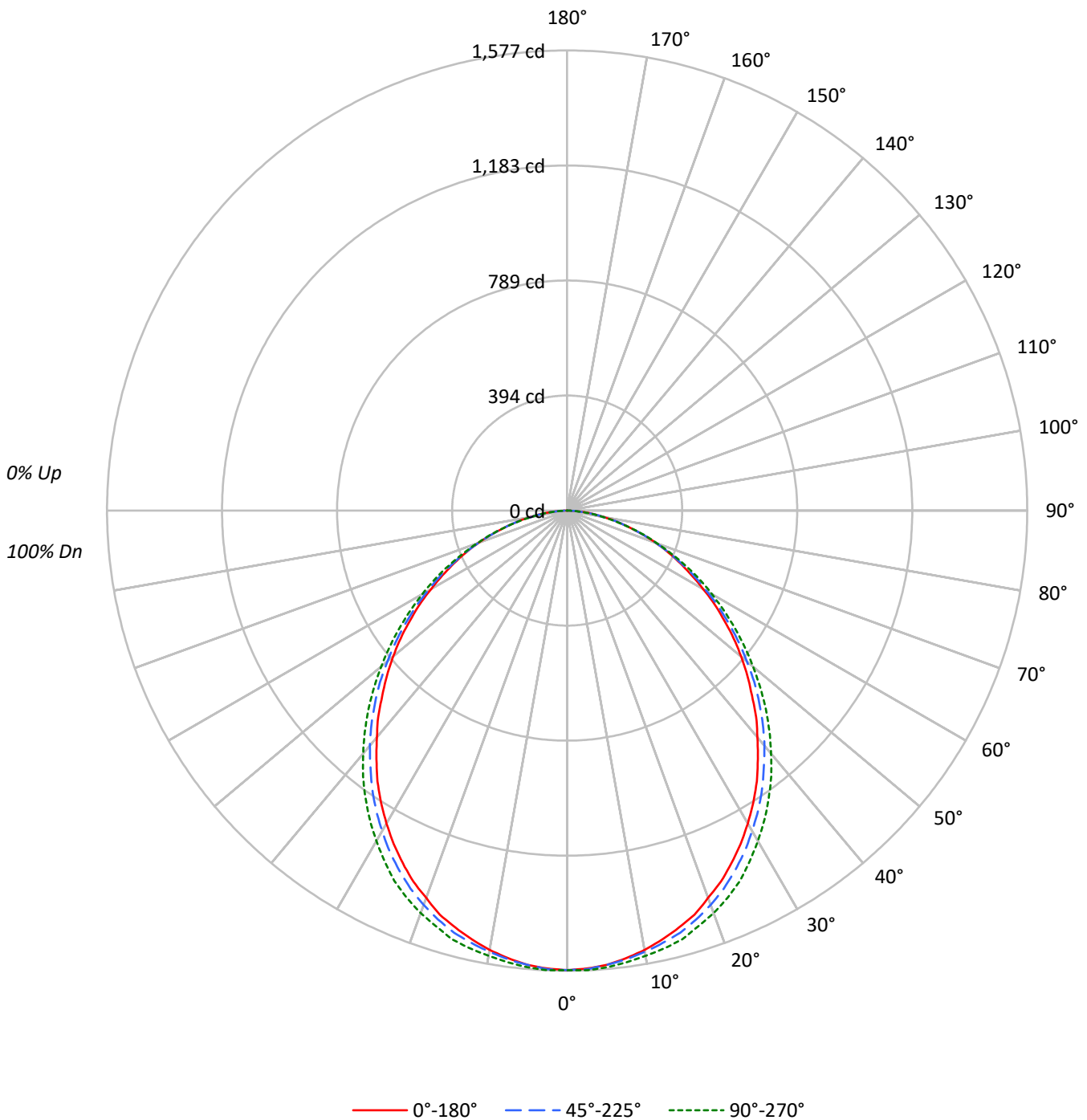
Input Watts (W): 36.27  
Input Voltage (V): 120  
Input Current (Ain): NR  
Voltage Rise (V): NR  
Power Factor: NR  
Total Harmonic Distortion (THDi): NR  
Frequency (hertz): 60  
Stabilization Time: NR  
Operation Time: NR  
Ambient Temperature (°C): NR  
Test Distance: 25 FT



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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	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°	4238	4238	4238
5°	4222	4222	4243
10°	4179	4195	4233
15°	4122	4172	4238
20°	4045	4118	4203
25°	3958	4041	4158
30°	3847	3939	4062
35°	3722	3826	3957
40°	3563	3695	3820
45°	3408	3543	3664
50°	3259	3367	3483
55°	3086	3179	3290
60°	2900	2975	3081
65°	2725	2775	2863
70°	2541	2541	2587
75°	2266	2266	2266
80°	1996	1934	1934
85°	1590	1528	1408



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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	148.5	3.7
10°-20°	422.2	10.6
20°-30°	627.2	15.8
30°-40°	728.0	18.3
40°-50°	716.8	18.0
50°-60°	606.6	15.3
60°-70°	432.6	10.9
70°-80°	232.5	5.9
80°-90°	58.6	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°	1198.0	30.2
0°-40°	1926.0	48.5
0°-60°	3249.4	81.8
0°-90°	3973.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	3973.0	100.0

**CANDELA DISTRIBUTION:**

	0°	22.5°	45°	67.5°	90°	Flux
0°	1575	1575	1575	1575	1575	
5°	1563	1563	1563	1569	1571	148
15°	1480	1484	1498	1511	1521	417
25°	1333	1337	1361	1387	1400	614
35°	1133	1135	1165	1192	1204	707
45°	895	901	931	953	963	692
55°	658	660	678	695	701	589
65°	428	428	436	444	450	425
75°	218	216	218	218	218	234
85°	52	50	50	46	46	61
90°	0	0	0	0	0	



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**CANDELA DISTRIBUTION (FULL):**

	0°	22.5°	45°	67.5°	90°
0°	1574.8	1574.8	1574.8	1574.8	1574.8
2.5°	1570.8	1570.8	1572.8	1574.8	1576.8
5°	1562.9	1562.9	1562.9	1568.9	1570.8
7.5°	1547.1	1549.1	1551.0	1557.0	1560.9
10°	1529.2	1531.2	1535.2	1545.1	1549.1
12.5°	1505.5	1511.4	1517.4	1531.2	1537.2
15°	1479.7	1483.7	1497.6	1511.4	1521.3
17.5°	1452.0	1454.0	1469.8	1489.6	1493.6
20°	1412.4	1418.3	1438.1	1457.9	1467.8
22.5°	1376.7	1380.7	1402.5	1428.2	1436.1
25°	1333.1	1337.1	1360.9	1386.6	1400.5
27.5°	1287.6	1291.5	1317.3	1345.0	1354.9
30°	1238.1	1242.0	1267.8	1297.5	1307.4
32.5°	1186.6	1190.5	1218.2	1244.0	1257.9
35°	1133.1	1135.1	1164.8	1192.5	1204.4
37.5°	1073.6	1079.6	1107.3	1135.1	1148.9
40°	1014.2	1020.2	1051.9	1077.6	1087.5
42.5°	958.8	966.7	992.4	1016.2	1026.1
45°	895.4	901.3	931.0	952.8	962.7
47.5°	837.9	843.9	869.6	891.4	897.3
50°	778.5	782.5	804.2	824.1	832.0
52.5°	719.1	721.0	740.9	760.7	766.6
55°	657.7	659.6	677.5	695.3	701.2
57.5°	600.2	600.2	616.1	629.9	635.9
60°	538.8	538.8	552.7	566.5	572.5
62.5°	481.4	481.4	495.2	505.1	513.1
65°	427.9	427.9	435.8	443.7	449.7
67.5°	376.4	370.4	378.4	388.3	386.3
70°	322.9	316.9	322.9	326.8	328.8
72.5°	269.4	265.4	269.4	271.4	275.3
75°	217.9	215.9	217.9	217.9	217.9
77.5°	174.3	168.4	172.3	170.4	168.4
80°	128.8	126.8	124.8	122.8	124.8
82.5°	89.1	87.2	87.2	83.2	83.2
85°	51.5	49.5	49.5	45.6	45.6
87.5°	19.8	19.8	17.8	17.8	17.8
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)