

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: P296391

Luminaire Tested: **22RLN-LD5-35-UNV-L83050-W2A1-U-4500K**

Issue Date: 3/3/2020

**Test Information**

Test Method: LM-79-08  
Report Number: P296391  
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-LD5-35-UNV-L83050-W2A1-U-4500K  
Description: RLN LED 2x2 TUNABLE WHITE TROFFER  
WITH STANDARD LENS  
Light Source: (252) 80 CRI LEDS TUNED TO 4500K CCT  
Ballast/Driver: ELECTRONIC DRIVER

**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 3752.0 lumens  
Efficiency: N/A  
Efficacy: 128.1 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

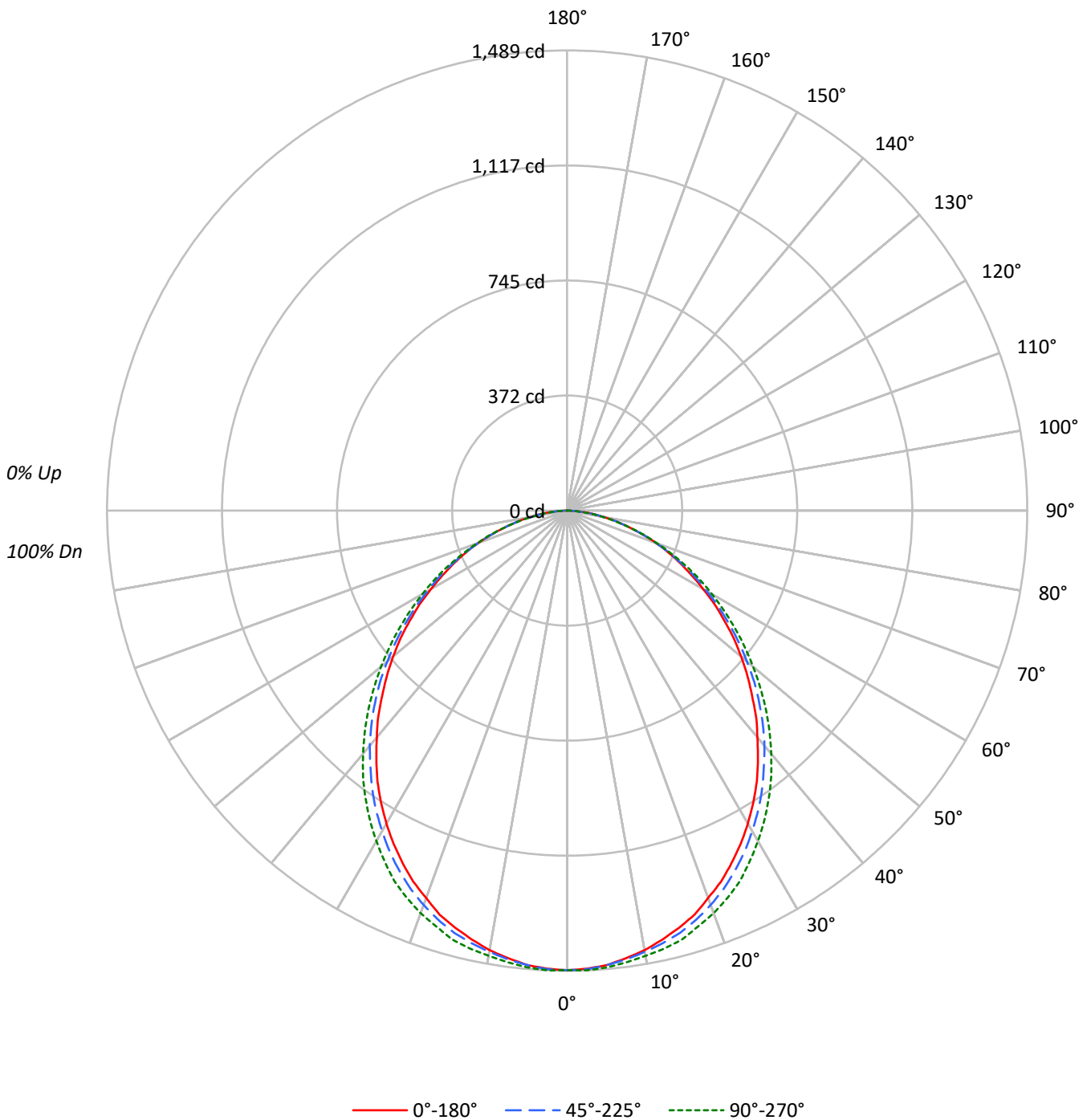
Input Watts (W): 29.295  
Input Voltage (V): 120  
Input Current (Ain): NR  
Voltage Rise (V): NR  
Power Factor: NR  
Total Harmonic Distortion (THDi): NR  
Frequency (hertz): 60  
Stabilization Time: NR  
Operation Time: NR  
Ambient Temperature (°C): NR  
Test Distance: 25 FT



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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	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°	4002	4002	4002
5°	3987	3987	4007
10°	3946	3962	3997
15°	3893	3940	4003
20°	3820	3889	3970
25°	3738	3816	3927
30°	3633	3720	3837
35°	3515	3614	3736
40°	3365	3489	3608
45°	3218	3346	3460
50°	3078	3180	3289
55°	2914	3002	3107
60°	2738	2809	2909
65°	2573	2621	2704
70°	2399	2399	2443
75°	2140	2140	2140
80°	1884	1827	1827
85°	1501	1445	1328



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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	140.3	3.7
10°-20°	398.8	10.6
20°-30°	592.4	15.8
30°-40°	687.5	18.3
40°-50°	676.9	18.0
50°-60°	572.8	15.3
60°-70°	408.5	10.9
70°-80°	219.5	5.9
80°-90°	55.3	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°	1131.4	30.2
0°-40°	1818.8	48.5
0°-60°	3068.6	81.8
0°-90°	3752.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	3752.0	100.0

**CANDELA DISTRIBUTION:**

	0°	22.5°	45°	67.5°	90°	Flux
0°	1487	1487	1487	1487	1487	
5°	1476	1476	1476	1482	1484	140
15°	1397	1401	1414	1427	1437	394
25°	1259	1263	1285	1310	1323	579
35°	1070	1072	1100	1126	1137	668
45°	846	851	879	900	909	654
55°	621	623	640	657	662	556
65°	404	404	412	419	425	401
75°	206	204	206	206	206	221
85°	49	47	47	43	43	58
90°	0	0	0	0	0	



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**CANDELA DISTRIBUTION (FULL):**

	0°	22.5°	45°	67.5°	90°
0°	1487.2	1487.2	1487.2	1487.2	1487.2
2.5°	1483.5	1483.5	1485.3	1487.2	1489.1
5°	1476.0	1476.0	1476.0	1481.6	1483.5
7.5°	1461.0	1462.9	1464.8	1470.4	1474.1
10°	1444.2	1446.1	1449.8	1459.2	1462.9
12.5°	1421.7	1427.3	1433.0	1446.1	1451.7
15°	1397.4	1401.2	1414.3	1427.3	1436.7
17.5°	1371.2	1373.1	1388.1	1406.8	1410.5
20°	1333.8	1339.4	1358.1	1376.8	1386.2
22.5°	1300.1	1303.9	1324.5	1348.8	1356.3
25°	1259.0	1262.7	1285.2	1309.5	1322.6
27.5°	1216.0	1219.7	1244.0	1270.2	1279.6
30°	1169.2	1172.9	1197.3	1225.3	1234.7
32.5°	1120.6	1124.3	1150.5	1174.8	1187.9
35°	1070.0	1071.9	1100.0	1126.2	1137.4
37.5°	1013.9	1019.5	1045.7	1071.9	1085.0
40°	957.8	963.4	993.3	1017.7	1027.0
42.5°	905.4	912.9	937.2	959.7	969.0
45°	845.6	851.2	879.2	899.8	909.2
47.5°	791.3	796.9	821.2	841.8	847.4
50°	735.2	738.9	759.5	778.2	785.7
52.5°	679.1	680.9	699.6	718.4	724.0
55°	621.1	622.9	639.8	656.6	662.2
57.5°	566.8	566.8	581.8	594.9	600.5
60°	508.8	508.8	521.9	535.0	540.6
62.5°	454.6	454.6	467.7	477.0	484.5
65°	404.1	404.1	411.6	419.0	424.7
67.5°	355.4	349.8	357.3	366.7	364.8
70°	304.9	299.3	304.9	308.7	310.5
72.5°	254.4	250.7	254.4	256.3	260.0
75°	205.8	203.9	205.8	205.8	205.8
77.5°	164.6	159.0	162.8	160.9	159.0
80°	121.6	119.7	117.9	116.0	117.9
82.5°	84.2	82.3	82.3	78.6	78.6
85°	48.6	46.8	46.8	43.0	43.0
87.5°	18.7	18.7	16.8	16.8	16.8
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)