

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: P296178

Luminaire Tested: **24RLN-LD5-45-RDP-UNV-L82765-W2A1-U-6500K**

Issue Date: 3/3/2020

**Test Information**

Test Method: LM-79-08  
Report Number: P296178  
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (P36059-R2)  
Test Lab: INNOVATION CENTER-P3  
Issue Date: 3/3/2020  
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)  
Product Line: METALUX  
Catalog Number: 24RLN-LD5-45-RDP-UNV-L82765-W2A1-U-6500K  
Description: RLN LED 2x4 TUNABLE WHITE TROFFER  
WITH RDP LENS  
Light Source: (504) 80 CRI LEDS TUNED TO 6500K CCT  
Ballast/Driver: ELECTRONIC DRIVER

**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 3941.0 lumens  
Efficiency: N/A  
Efficacy: 119.7 lumens/watt  
Spacing Criteria (0/90/45): 1.25 / 1.3 / 1.38  
Luminous Opening: Rectangular (W 2' x L: 4' x H: 0')  
CIE Type: Direct

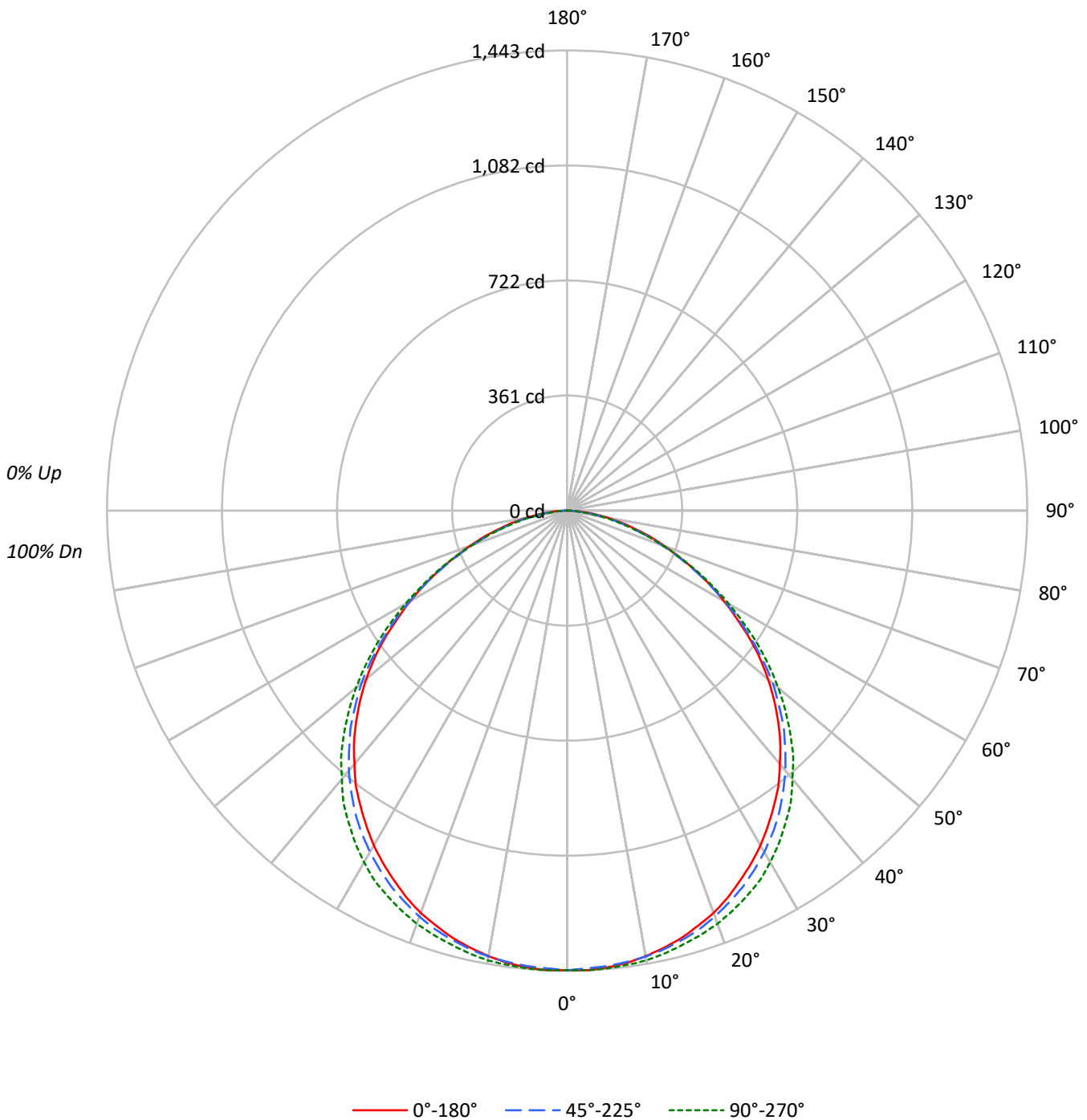
Input Watts (W): 32.922  
Input Voltage (V): 120  
Input Current (Ain): NR  
Voltage Rise (V): NR  
Power Factor: NR  
Total Harmonic Distortion (THDi): NR  
Frequency (hertz): 60  
Stabilization Time: NR  
Operation Time: NR  
Ambient Temperature (°C): NR  
Test Distance: 25 FT



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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	66	63	60
4	83	72	63	57	81	70	62	56	68	61	55	66	60	55	63	58	54	52
5	77	64	55	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	42	53	47	42	52	46	41	39
7	66	52	44	38	64	52	43	38	50	43	37	49	42	37	47	41	37	35
8	61	48	39	34	60	47	39	34	46	39	33	45	38	33	43	37	33	31
9	57	44	36	30	56	43	36	30	42	35	30	41	35	30	40	34	30	28
10	54	41	33	27	52	40	33	27	39	32	27	38	32	27	37	31	27	25

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

	0°	45°	90°
0°	1939	1939	1939
5°	1942	1937	1947
10°	1938	1940	1957
15°	1933	1941	1962
20°	1922	1939	1974
25°	1902	1933	1980
30°	1884	1921	1979
35°	1857	1903	1962
40°	1822	1870	1930
45°	1781	1826	1883
50°	1721	1762	1809
55°	1638	1659	1708
60°	1529	1537	1577
65°	1404	1395	1428
70°	1276	1241	1247
75°	1135	1072	1065
80°	985	880	857
85°	807	624	485



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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	136.7	3.5
10°-20°	394.0	10.0
20°-30°	601.5	15.3
30°-40°	725.1	18.4
40°-50°	739.5	18.8
50°-60°	632.8	16.1
60°-70°	435.9	11.1
70°-80°	223.5	5.7
80°-90°	52.0	1.3
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°	1132.2	28.7
0°-40°	1857.3	47.1
0°-60°	3229.6	81.9
0°-90°	3941.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	3941.0	100.0

**CANDELA DISTRIBUTION:**

	0°	22.5°	45°	67.5°	90°	Flux
0°	1441	1441	1441	1441	1441	
5°	1438	1435	1434	1438	1441	137
15°	1387	1386	1393	1404	1408	391
25°	1281	1286	1302	1325	1334	591
35°	1130	1135	1159	1184	1195	707
45°	936	937	960	984	990	721
55°	698	694	707	722	728	623
65°	441	431	438	441	448	438
75°	218	209	206	206	205	235
85°	52	46	40	36	31	61
90°	0	0	0	0	0	



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**CANDELA DISTRIBUTION (FULL):**

	0°	22.5°	45°	67.5°	90°
0°	1441.2	1441.2	1441.2	1441.2	1441.2
2.5°	1442.7	1439.7	1436.8	1439.7	1442.7
5°	1438.2	1435.3	1433.8	1438.2	1441.2
7.5°	1430.8	1427.8	1427.8	1433.8	1436.8
10°	1418.8	1417.3	1420.3	1426.3	1432.3
12.5°	1403.9	1403.9	1408.3	1415.8	1421.8
15°	1387.4	1385.9	1393.4	1403.9	1408.3
17.5°	1365.0	1366.5	1377.0	1388.9	1394.9
20°	1342.6	1344.1	1354.5	1371.0	1378.4
22.5°	1314.2	1317.1	1329.1	1350.0	1357.5
25°	1281.3	1285.8	1302.2	1324.6	1333.6
27.5°	1248.4	1252.9	1270.8	1296.2	1308.2
30°	1212.5	1218.5	1236.4	1263.3	1273.8
32.5°	1172.1	1176.6	1199.0	1225.9	1236.4
35°	1130.3	1134.8	1158.7	1184.1	1194.6
37.5°	1088.4	1088.4	1112.3	1142.2	1152.7
40°	1037.6	1039.1	1064.5	1092.9	1098.9
42.5°	989.7	989.7	1012.2	1039.1	1049.5
45°	935.9	937.4	959.8	983.8	989.7
47.5°	880.6	880.6	900.0	922.5	928.4
50°	822.3	819.3	841.7	859.7	864.1
52.5°	762.5	758.0	775.9	790.9	796.9
55°	698.2	693.7	707.2	722.1	728.1
57.5°	630.9	624.9	639.9	653.3	656.3
60°	568.1	559.2	571.1	578.6	586.1
62.5°	505.3	494.9	503.8	508.3	514.3
65°	441.0	430.6	438.1	441.0	448.5
67.5°	379.7	372.3	373.8	378.3	381.2
70°	324.4	315.5	315.5	315.5	317.0
72.5°	273.6	260.1	258.6	260.1	260.1
75°	218.3	209.3	206.3	206.3	204.8
77.5°	174.9	163.0	161.5	158.5	155.5
80°	127.1	116.6	113.6	112.1	110.6
82.5°	88.2	79.2	76.2	73.3	68.8
85°	52.3	46.3	40.4	35.9	31.4
87.5°	19.4	17.9	15.0	13.5	13.5
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)