

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: P296164

Luminaire Tested: **24RLN-LD5-42-RDP-UNV-L82765-W2A1-U-4000K**

Issue Date: 3/3/2020

Test Information

Test Method: LM-79-08
Report Number: P296164
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-LD5-42-RDP-UNV-L82765-W2A1-U-4000K
Description: RLN LED 2x4 TUNABLE WHITE TROFFER
WITH RDP LENS
Light Source: (504) 80 CRI LEDS TUNED TO 4000K CCT
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 3488.0 lumens
Efficiency: N/A
Efficacy: 118.3 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

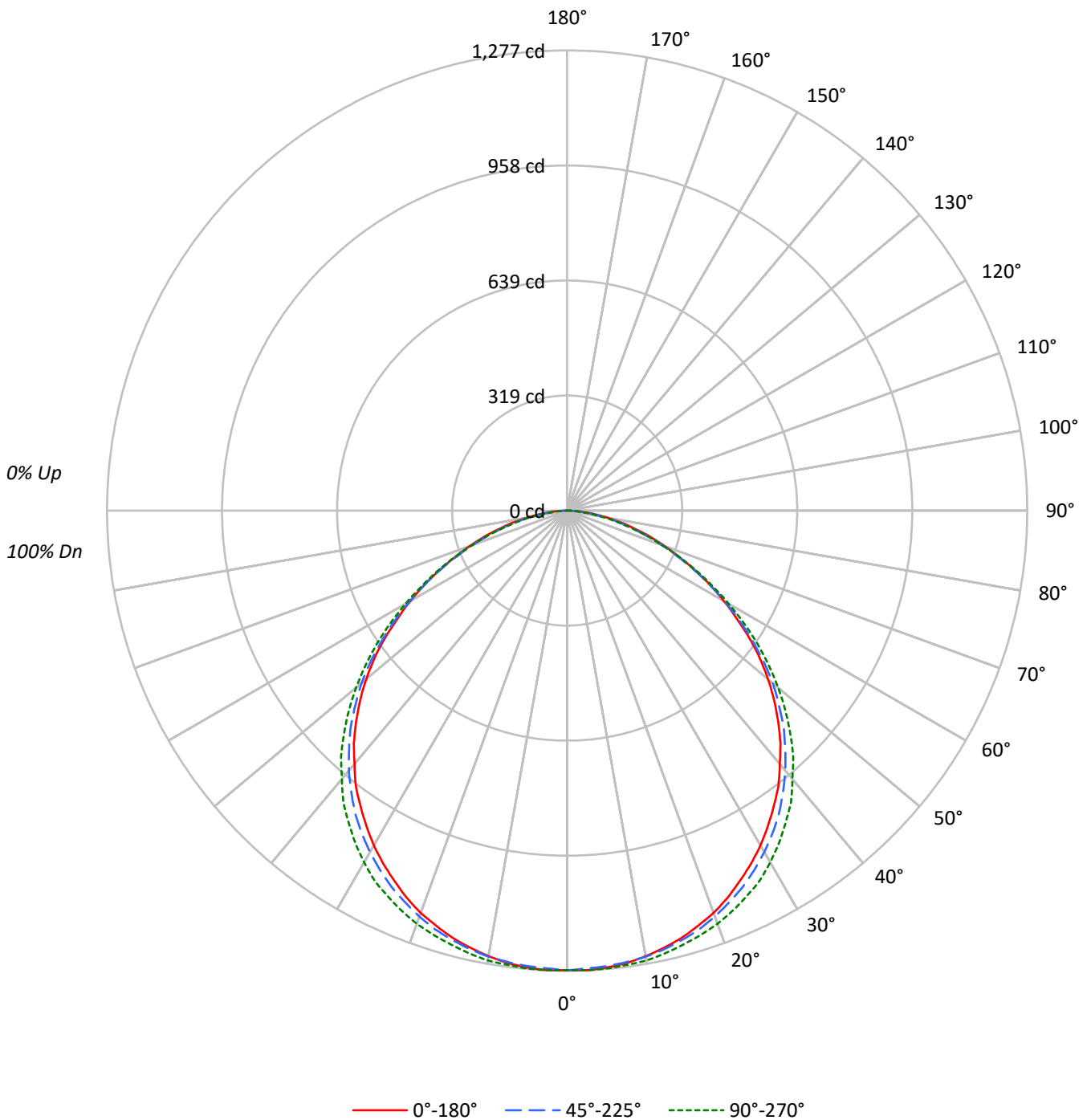
Input Watts (W): 29.481
Input Voltage (V): 120
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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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	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°	1716	1716	1716
5°	1719	1714	1723
10°	1716	1717	1732
15°	1710	1718	1736
20°	1701	1716	1747
25°	1684	1711	1752
30°	1667	1700	1752
35°	1643	1684	1736
40°	1613	1655	1708
45°	1576	1616	1667
50°	1523	1559	1601
55°	1449	1468	1512
60°	1353	1360	1396
65°	1243	1234	1264
70°	1129	1098	1103
75°	1004	949	943
80°	872	779	759
85°	715	551	429



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	121.0	3.5
10°-20°	348.8	10.0
20°-30°	532.3	15.3
30°-40°	641.8	18.4
40°-50°	654.5	18.8
50°-60°	560.1	16.1
60°-70°	385.8	11.1
70°-80°	197.8	5.7
80°-90°	46.0	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°	1002.1	28.7
0°-40°	1643.8	47.1
0°-60°	2858.4	81.9
0°-90°	3488.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	3488.0	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	1276	1276	1276	1276	1276	
5°	1273	1270	1269	1273	1276	121
15°	1228	1227	1233	1242	1246	346
25°	1134	1138	1152	1172	1180	523
35°	1000	1004	1026	1048	1057	626
45°	828	830	850	871	876	638
55°	618	614	626	639	644	551
65°	390	381	388	390	397	388
75°	193	185	183	183	181	208
85°	46	41	36	32	28	54
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	1275.6	1275.6	1275.6	1275.6	1275.6
2.5°	1276.9	1274.3	1271.6	1274.3	1276.9
5°	1272.9	1270.3	1269.0	1272.9	1275.6
7.5°	1266.3	1263.7	1263.7	1269.0	1271.6
10°	1255.7	1254.4	1257.0	1262.3	1267.6
12.5°	1242.5	1242.5	1246.5	1253.1	1258.4
15°	1227.9	1226.6	1233.2	1242.5	1246.5
17.5°	1208.1	1209.4	1218.7	1229.3	1234.6
20°	1188.2	1189.6	1198.8	1213.4	1220.0
22.5°	1163.1	1165.7	1176.3	1194.9	1201.5
25°	1134.0	1138.0	1152.5	1172.4	1180.3
27.5°	1104.9	1108.9	1124.7	1147.2	1157.8
30°	1073.1	1078.4	1094.3	1118.1	1127.4
32.5°	1037.4	1041.4	1061.2	1085.0	1094.3
35°	1000.3	1004.3	1025.5	1048.0	1057.2
37.5°	963.3	963.3	984.5	1010.9	1020.2
40°	918.3	919.6	942.1	967.3	972.6
42.5°	876.0	876.0	895.8	919.6	928.9
45°	828.3	829.7	849.5	870.7	876.0
47.5°	779.4	779.4	796.6	816.4	821.7
50°	727.8	725.1	745.0	760.8	764.8
52.5°	674.8	670.9	686.7	700.0	705.3
55°	617.9	614.0	625.9	639.1	644.4
57.5°	558.4	553.1	566.3	578.2	580.9
60°	502.8	494.9	505.5	512.1	518.7
62.5°	447.2	438.0	445.9	449.9	455.2
65°	390.3	381.1	387.7	390.3	397.0
67.5°	336.1	329.5	330.8	334.8	337.4
70°	287.1	279.2	279.2	279.2	280.5
72.5°	242.1	230.2	228.9	230.2	230.2
75°	193.2	185.2	182.6	182.6	181.3
77.5°	154.8	144.2	142.9	140.3	137.6
80°	112.5	103.2	100.6	99.2	97.9
82.5°	78.1	70.1	67.5	64.8	60.9
85°	46.3	41.0	35.7	31.8	27.8
87.5°	17.2	15.9	13.2	11.9	11.9
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)