

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: P295970

Luminaire Tested: **24RLN-LD5-45-UNV-L93050-W2A1-U-4000K**

Issue Date: 3/3/2020

Test Information

Test Method: LM-79-08
Report Number: P295970
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G3-1901-085-1)
Test Lab: INNOVATION CENTER(G3)
Issue Date: 3/3/2020
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: METALUX
Catalog Number: 24RLN-LD5-45-UNV-L93050-W2A1-U-4000K
Description: RLN LED 2x4 TUNABLE WHITE TROFFER WITH STANDARD LENS
Light Source: (504) 90 CRI LEDS TUNED TO 4000K CCT
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 4174.0 lumens
Efficiency: N/A
Efficacy: 129.0 lumens/watt
Spacing Criteria (0/90/45): 1.2 / 1.19 / 1.29
Luminous Opening: Rectangular (W 2' x L: 4' x H: 0')
CIE Type: Direct

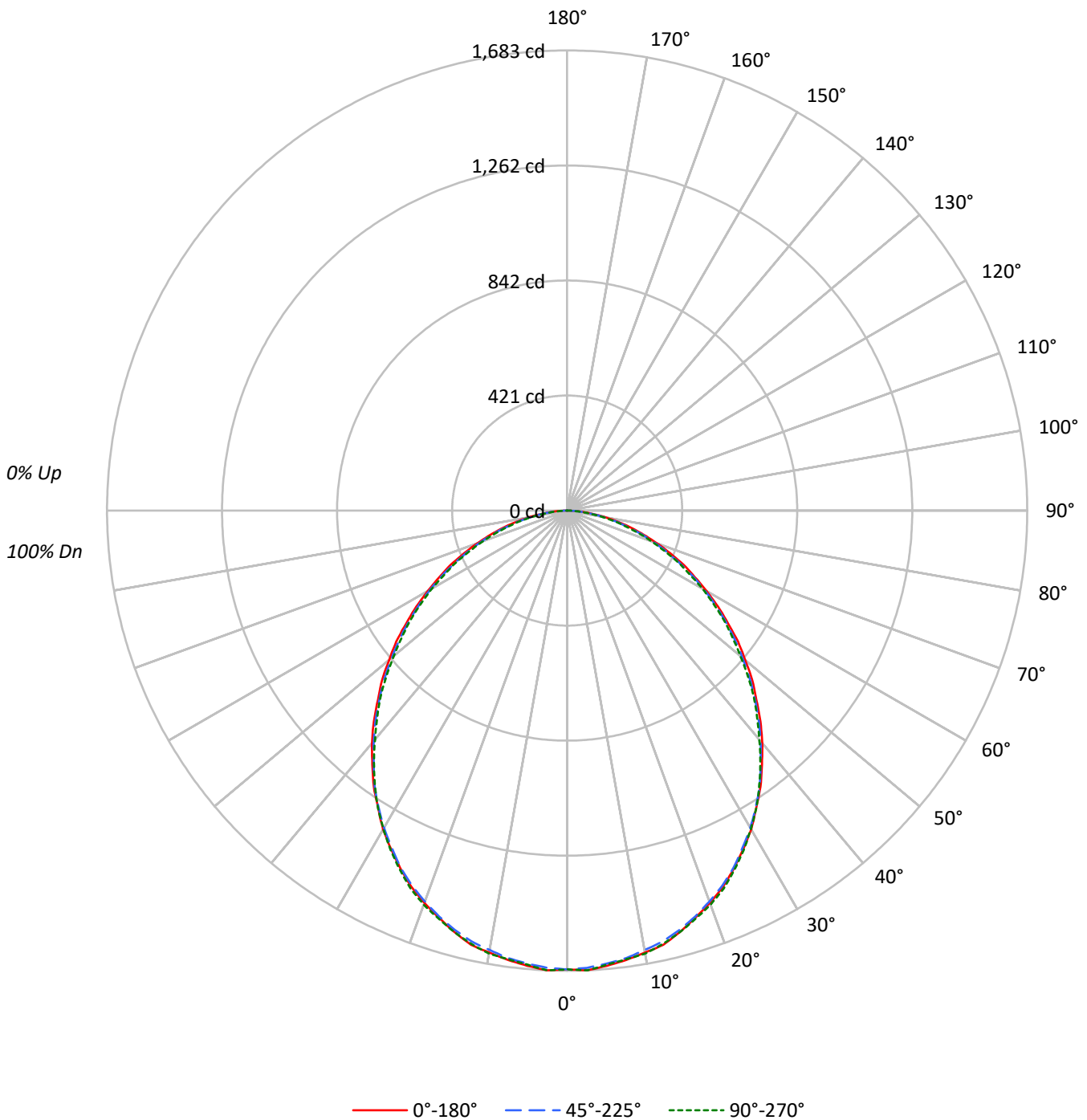
Input Watts (W): 32.364
Input Voltage (V): 120
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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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	74	72
3	91	81	73	67	89	80	72	66	77	70	65	74	69	64	71	67	63	61
4	84	72	64	57	82	71	63	57	68	62	56	66	60	55	64	59	55	52
5	77	65	56	50	75	64	55	49	62	54	49	60	53	48	58	52	48	46
6	72	59	50	44	70	58	49	43	56	48	43	54	48	43	53	47	42	40
7	66	53	45	39	65	52	44	39	51	44	38	49	43	38	48	42	38	36
8	62	49	40	35	60	48	40	35	47	39	34	45	39	34	44	38	34	32
9	58	45	37	31	57	44	36	31	43	36	31	42	36	31	41	35	31	29
10	54	41	34	28	53	41	33	28	40	33	28	39	33	28	38	32	28	26

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	2257	2257	2257
5°	2257	2246	2252
10°	2243	2230	2248
15°	2223	2211	2223
20°	2186	2179	2196
25°	2143	2139	2151
30°	2092	2082	2088
35°	2026	2017	2013
40°	1951	1932	1920
45°	1863	1845	1837
50°	1779	1750	1731
55°	1684	1658	1643
60°	1584	1555	1536
65°	1496	1440	1428
70°	1372	1319	1293
75°	1260	1183	1134
80°	1106	1033	970
85°	894	832	707



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	158.3	3.8
10°-20°	448.8	10.8
20°-30°	663.9	15.9
30°-40°	766.2	18.4
40°-50°	748.3	17.9
50°-60°	631.9	15.1
60°-70°	450.1	10.8
70°-80°	243.7	5.8
80°-90°	62.9	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°	1271.0	30.4
0°-40°	2037.1	48.8
0°-60°	3417.3	81.9
0°-90°	4174.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	4174.0	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	1678	1678	1678	1678	1678	
5°	1671	1671	1663	1667	1667	159
15°	1596	1589	1588	1594	1596	449
25°	1444	1435	1441	1446	1449	665
35°	1234	1224	1228	1224	1225	770
45°	979	971	970	966	966	757
55°	718	708	707	700	700	643
65°	470	460	452	447	448	463
75°	242	234	228	222	218	257
85°	58	57	54	47	46	68
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	1677.8	1677.8	1677.8	1677.8	1677.8
2.5°	1683.2	1676.5	1673.8	1675.1	1683.2
5°	1671.1	1671.1	1663.0	1667.1	1667.1
7.5°	1657.6	1659.0	1650.9	1657.6	1654.9
10°	1641.5	1637.4	1632.0	1642.8	1645.5
12.5°	1626.7	1617.2	1614.5	1621.3	1622.6
15°	1595.7	1589.0	1587.6	1594.3	1595.7
17.5°	1560.7	1562.0	1556.6	1566.1	1564.7
20°	1527.0	1524.3	1521.6	1532.4	1533.7
22.5°	1489.3	1481.2	1483.9	1493.3	1496.0
25°	1443.5	1435.4	1440.8	1446.2	1448.9
27.5°	1395.0	1391.0	1389.7	1396.4	1399.1
30°	1346.6	1339.8	1339.8	1347.9	1343.9
32.5°	1287.3	1281.9	1284.6	1287.3	1288.7
35°	1233.5	1224.0	1228.1	1224.0	1225.4
37.5°	1170.2	1163.4	1162.1	1160.7	1160.7
40°	1110.9	1105.5	1100.1	1100.1	1093.4
42.5°	1046.3	1039.6	1036.9	1032.8	1028.8
45°	979.0	970.9	969.5	965.5	965.5
47.5°	918.4	906.2	904.9	896.8	896.8
50°	849.7	841.6	836.2	830.8	826.8
52.5°	787.7	779.7	771.6	766.2	762.2
55°	717.7	708.3	707.0	700.2	700.2
57.5°	654.4	646.4	641.0	632.9	634.2
60°	588.5	580.4	577.7	570.9	570.9
62.5°	526.5	519.8	515.7	509.0	503.6
65°	470.0	460.5	452.4	447.1	448.4
67.5°	408.0	397.2	393.2	387.8	383.8
70°	348.8	342.0	335.3	328.6	328.6
72.5°	293.6	286.8	282.8	274.7	272.0
75°	242.4	234.3	227.6	222.2	218.1
77.5°	191.2	183.1	179.1	172.4	172.4
80°	142.7	137.4	133.3	130.6	125.2
82.5°	98.3	95.6	91.6	87.5	83.5
85°	57.9	56.6	53.9	47.1	45.8
87.5°	22.9	22.9	20.2	18.9	17.5
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)