

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: P296031

Luminaire Tested: **24RLN-LD5-45-UNV-L92765-W2A1-U-3000K**

Issue Date: 3/3/2020

Test Information

Test Method: LM-79-08
Report Number: P296031
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-L92765-W2A1-U-3000K
Description: RLN LED 2x4 TUNABLE WHITE TROFFER
WITH STANDARD LENS
Light Source: (504) 90 CRI LEDS TUNED TO 3000K CCT
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 3705.0 lumens
Efficiency: N/A
Efficacy: 118.6 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

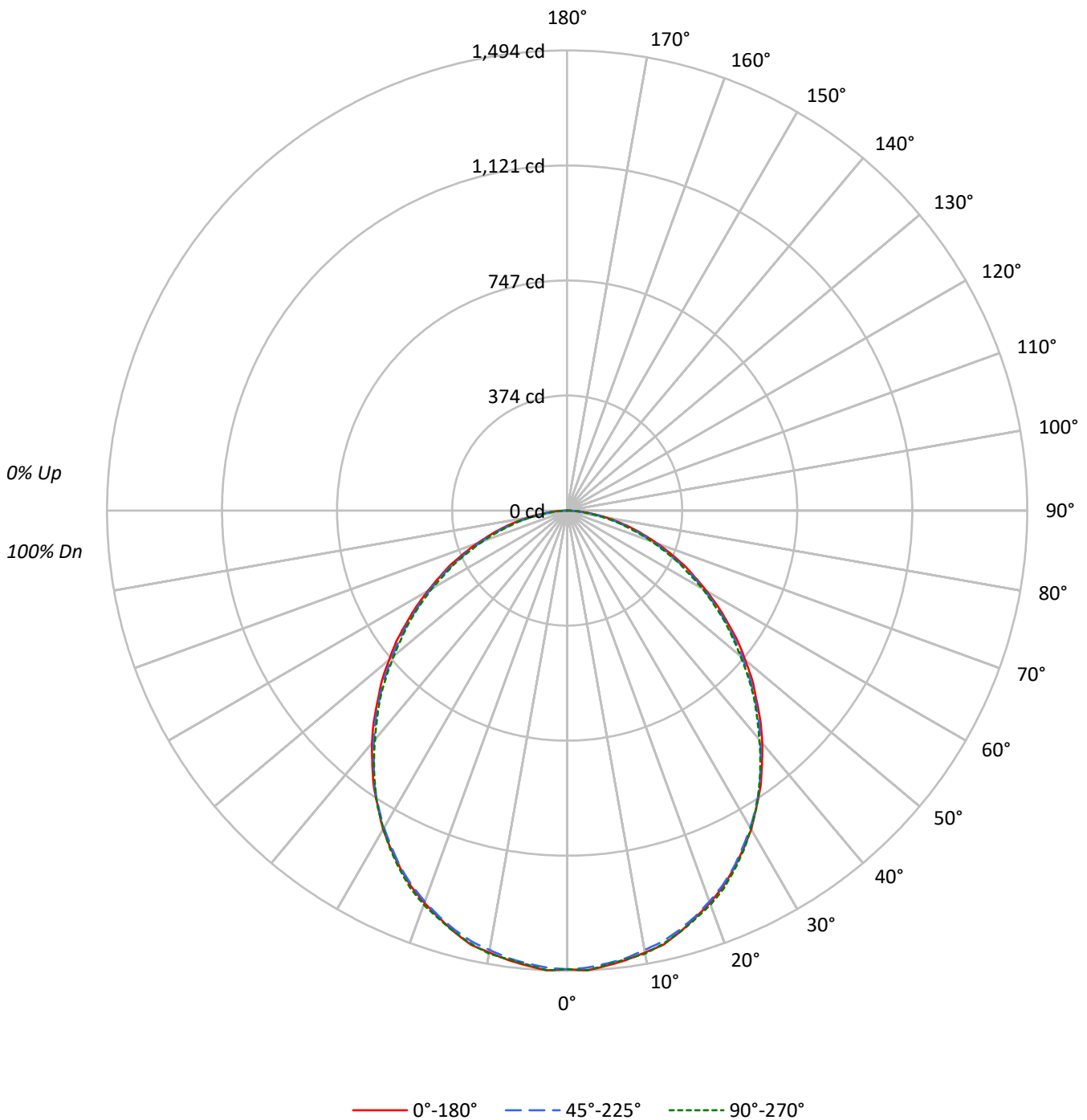
Input Watts (W): 31.248
Input Voltage (V): 120
Input Current (A_{in}): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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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°	2004	2004	2004
5°	2003	1994	1999
10°	1991	1979	1996
15°	1973	1963	1973
20°	1941	1934	1949
25°	1902	1899	1909
30°	1857	1848	1853
35°	1798	1791	1787
40°	1732	1715	1705
45°	1654	1638	1631
50°	1579	1554	1536
55°	1495	1472	1458
60°	1405	1380	1364
65°	1328	1279	1267
70°	1218	1171	1147
75°	1118	1050	1006
80°	982	917	862
85°	794	738	627



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	140.5	3.8
10°-20°	398.4	10.8
20°-30°	589.3	15.9
30°-40°	680.1	18.4
40°-50°	664.2	17.9
50°-60°	560.9	15.1
60°-70°	399.5	10.8
70°-80°	216.3	5.8
80°-90°	55.8	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°	1128.2	30.4
0°-40°	1808.2	48.8
0°-60°	3033.3	81.9
0°-90°	3705.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	3705.0	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	1489	1489	1489	1489	1489	
5°	1483	1483	1476	1480	1480	141
15°	1416	1410	1409	1415	1416	399
25°	1281	1274	1279	1284	1286	590
35°	1095	1086	1090	1086	1088	683
45°	869	862	861	857	857	672
55°	637	629	628	622	622	571
65°	417	409	402	397	398	411
75°	215	208	202	197	194	228
85°	51	50	48	42	41	60
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	1489.3	1489.3	1489.3	1489.3	1489.3
2.5°	1494.1	1488.1	1485.7	1486.9	1494.1
5°	1483.3	1483.3	1476.2	1479.7	1479.7
7.5°	1471.4	1472.6	1465.4	1471.4	1469.0
10°	1457.0	1453.4	1448.7	1458.2	1460.6
12.5°	1443.9	1435.5	1433.1	1439.1	1440.3
15°	1416.4	1410.4	1409.2	1415.2	1416.4
17.5°	1385.3	1386.5	1381.7	1390.1	1388.9
20°	1355.4	1353.0	1350.7	1360.2	1361.4
22.5°	1322.0	1314.8	1317.2	1325.6	1327.9
25°	1281.3	1274.2	1278.9	1283.7	1286.1
27.5°	1238.3	1234.7	1233.5	1239.5	1241.9
30°	1195.3	1189.3	1189.3	1196.5	1192.9
32.5°	1142.7	1137.9	1140.3	1142.7	1143.9
35°	1094.9	1086.5	1090.1	1086.5	1087.7
37.5°	1038.7	1032.7	1031.5	1030.3	1030.3
40°	986.1	981.3	976.5	976.5	970.6
42.5°	928.7	922.7	920.4	916.8	913.2
45°	869.0	861.8	860.6	857.0	857.0
47.5°	815.2	804.4	803.2	796.0	796.0
50°	754.2	747.0	742.3	737.5	733.9
52.5°	699.2	692.1	684.9	680.1	676.5
55°	637.1	628.7	627.5	621.5	621.5
57.5°	580.9	573.7	568.9	561.8	563.0
60°	522.3	515.2	512.8	506.8	506.8
62.5°	467.3	461.4	457.8	451.8	447.0
65°	417.1	408.8	401.6	396.8	398.0
67.5°	362.2	352.6	349.0	344.2	340.7
70°	309.6	303.6	297.6	291.6	291.6
72.5°	260.6	254.6	251.0	243.8	241.4
75°	215.1	208.0	202.0	197.2	193.6
77.5°	169.7	162.6	159.0	153.0	153.0
80°	126.7	121.9	118.3	115.9	111.2
82.5°	87.3	84.9	81.3	77.7	74.1
85°	51.4	50.2	47.8	41.8	40.6
87.5°	20.3	20.3	17.9	16.7	15.5
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)