

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: P229889

Luminaire Tested: **24RLN-LD5-45-UNV-L940-CD1-SVPD1-U**

Issue Date: 3/3/2020

Test Information

Test Method: LM-79-08
Report Number: P229889
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (P36062)
Test Lab: INNOVATION CENTER-P3
Issue Date: 3/3/2020
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: METALUX
Catalog Number: 24RLN-LD5-45-UNV-L940-CD1-SVPD1-U
Description: METALUX 2X4 RLN LED TROFFER WITH SENSOR
Light Source: (252)4000K CCT, 90 CRI LEDs
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 3967.0 lumens
Efficiency: N/A
Efficacy: 116.7 lumens/watt
Spacing Criteria (0/90/45): 1.2 / 1.22 / 1.31
Luminous Opening: Rectangular (W 1.83' x L: 3.83' x H: 0')
CIE Type: Direct

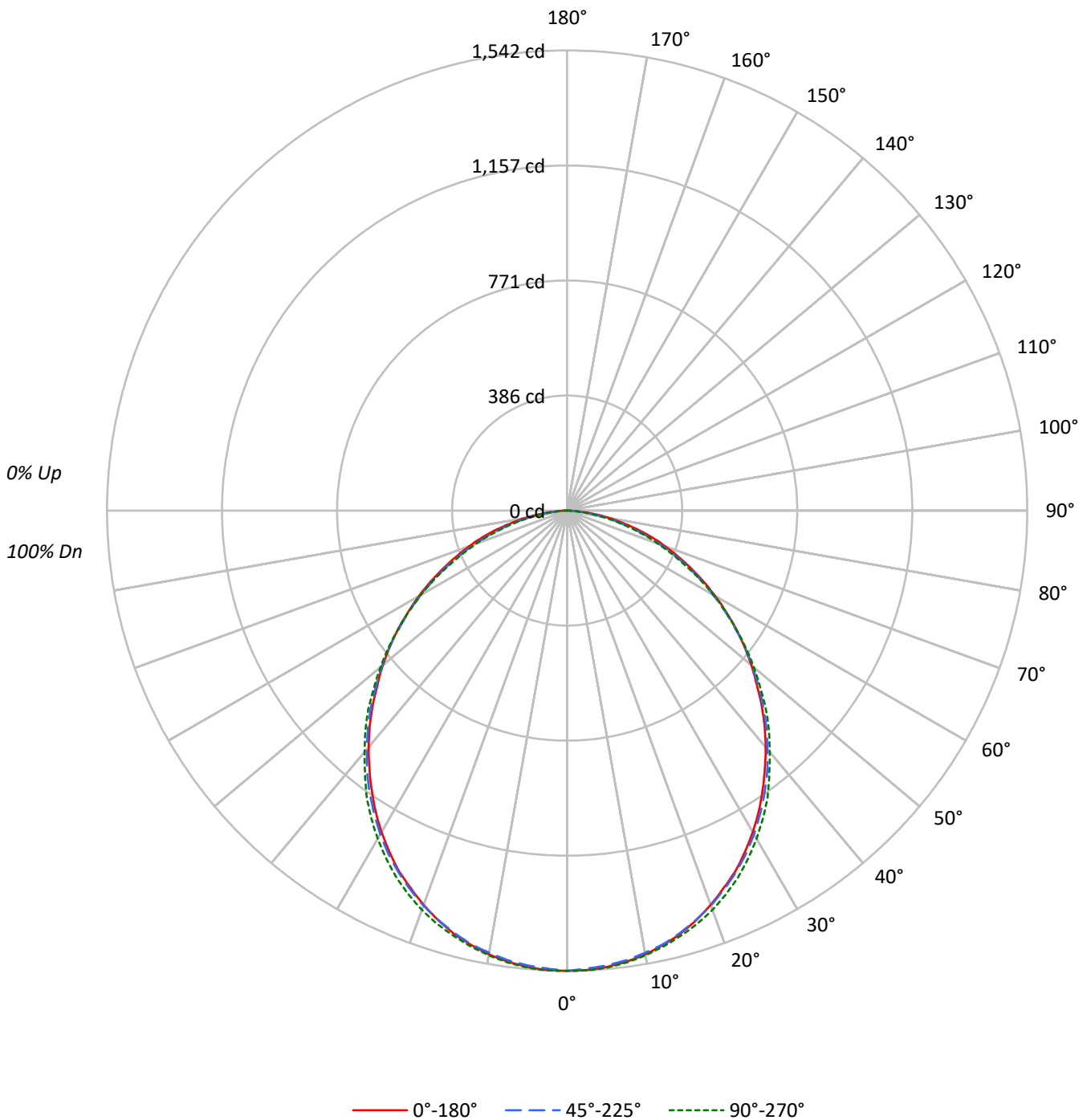
Input Watts (W): 34
Input Voltage (V): 120
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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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	0		
RCR																										
0	119	119	119	119	116	116	116	116	111	111	111	106	106	106	102	102	102	100					100			
1	109	105	101	97	107	102	99	95	98	95	92	94	92	89	91	89	87	85					85			
2	100	92	85	80	97	90	84	79	86	81	77	83	79	75	80	76	73	71					71			
3	91	81	73	67	89	79	72	66	76	70	65	74	68	64	71	66	63	60					60			
4	84	72	63	57	81	71	63	56	68	61	56	66	60	55	64	58	54	52					52			
5	77	64	56	49	75	63	55	49	61	54	48	59	53	48	57	52	47	45					45			
6	71	58	49	43	69	57	49	43	55	48	42	54	47	42	52	46	42	40					40			
7	66	53	44	38	64	52	44	38	50	43	38	49	42	37	48	42	37	35					35			
8	62	48	40	34	60	48	40	34	46	39	34	45	38	34	44	38	33	31					31			
9	58	44	36	31	56	44	36	31	43	35	31	42	35	30	41	35	30	28					28			
10	54	41	33	28	53	40	33	28	39	33	28	39	32	28	38	32	28	26					26			

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	2362	2362	2362
5°	2360	2352	2364
10°	2348	2340	2354
15°	2328	2322	2338
20°	2292	2296	2321
25°	2254	2261	2291
30°	2201	2214	2245
35°	2135	2157	2190
40°	2069	2086	2112
45°	1995	2014	2041
50°	1921	1930	1945
55°	1845	1835	1842
60°	1757	1730	1738
65°	1657	1621	1593
70°	1567	1482	1448
75°	1443	1316	1271
80°	1270	1114	1047
85°	998	777	576



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	145.6	3.7
10°-20°	413.9	10.4
20°-30°	617.0	15.6
30°-40°	721.3	18.2
40°-50°	716.3	18.1
50°-60°	615.1	15.5
60°-70°	443.1	11.2
70°-80°	238.6	6.0
80°-90°	56.2	1.4
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°	1176.5	29.7
0°-40°	1897.8	47.8
0°-60°	3229.1	81.4
0°-90°	3967.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	3967.0	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	1542	1542	1542	1542	1542	
5°	1535	1534	1530	1535	1537	146
15°	1468	1464	1464	1473	1474	413
25°	1334	1329	1338	1352	1356	613
35°	1142	1141	1153	1166	1171	714
45°	921	918	930	937	942	710
55°	691	685	687	691	690	617
65°	457	450	447	443	440	454
75°	244	229	222	216	215	258
85°	57	52	44	35	33	68
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	1542.4	1542.4	1542.4	1542.4	1542.4
2.5°	1541.2	1539.9	1536.1	1541.2	1542.4
5°	1534.9	1533.6	1529.8	1534.9	1537.4
7.5°	1524.8	1522.2	1519.7	1524.8	1527.3
10°	1509.6	1507.1	1504.5	1510.9	1513.4
12.5°	1490.7	1488.1	1488.1	1493.2	1495.7
15°	1467.9	1464.1	1464.1	1473.0	1474.2
17.5°	1438.9	1436.3	1437.6	1447.7	1451.5
20°	1406.0	1404.8	1408.5	1419.9	1423.7
22.5°	1369.4	1368.1	1374.4	1388.3	1390.9
25°	1334.0	1329.0	1337.8	1351.7	1355.5
27.5°	1289.8	1286.0	1297.4	1310.0	1313.8
30°	1244.3	1240.5	1251.9	1265.8	1269.6
32.5°	1195.0	1192.5	1203.9	1217.8	1221.6
35°	1142.0	1140.7	1153.4	1166.0	1171.0
37.5°	1088.9	1087.7	1101.6	1111.7	1112.9
40°	1034.6	1032.1	1043.5	1054.8	1056.1
42.5°	979.0	975.2	987.9	996.7	1000.5
45°	920.9	918.4	929.8	937.3	942.4
47.5°	861.5	861.5	867.9	876.7	878.0
50°	806.0	802.2	809.8	814.8	816.1
52.5°	747.9	744.1	750.4	751.6	754.2
55°	691.0	684.7	687.2	691.0	689.7
57.5°	631.6	621.5	626.6	626.6	629.1
60°	573.5	564.7	564.7	564.7	567.2
62.5°	515.4	506.6	506.6	505.3	504.0
65°	457.3	449.7	447.2	443.4	439.6
67.5°	401.7	392.9	387.8	382.8	379.0
70°	349.9	334.8	331.0	323.4	323.4
72.5°	298.1	283.0	275.4	270.3	269.1
75°	243.8	228.7	222.3	216.0	214.8
77.5°	190.8	180.6	170.5	165.5	163.0
80°	144.0	135.2	126.3	117.5	118.7
82.5°	98.5	89.7	83.4	75.8	73.3
85°	56.8	51.8	44.2	35.4	32.8
87.5°	24.0	17.7	12.6	12.6	12.6
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)