

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: P229829

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

Issue Date: 3/3/2020

**Test Information**

Test Method: LM-79-08  
Report Number: P229829  
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (P36059)  
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-L940-CD1-U  
Description: METALUX 2X4 RLN LED TROFFER WITH RDP LENS  
Light Source: (252)4000K CCT, 90 CRI LEDs  
Ballast/Driver: ELECTRONIC DRIVER

**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 3331.0 lumens  
Efficiency: N/A  
Efficacy: 98.0 lumens/watt  
Spacing Criteria (0/90/45): 1.25 / 1.3 / 1.38  
Luminous Opening: Rectangular (W 1.83' x L: 3.83' x H: 0')  
CIE Type: Direct

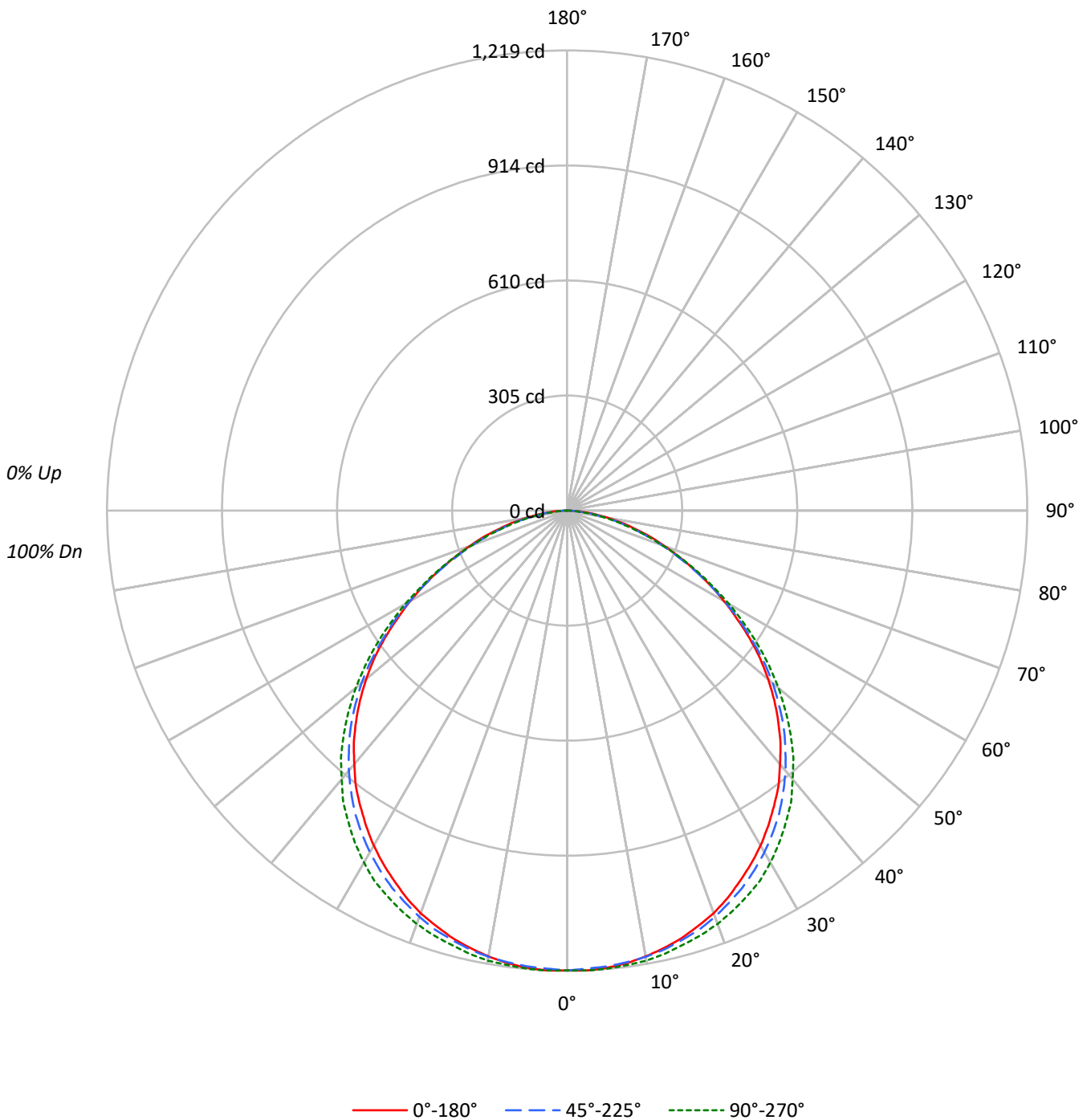
Input Watts (W): 34  
Input Voltage (V): 120  
Input Current (Ain): NR  
Voltage Rise (V): NR  
Power Factor: NR  
Total Harmonic Distortion (THDi): NR  
Frequency (hertz): 60  
Stabilization Time: NR  
Operation Time: NR  
Ambient Temperature (°C): NR  
Test Distance: 25 FT



TEST NUMBER: P229829

CATALOG NUMBER: 24RLN-LD5-45-RDP-UNV-L940-CD1-U

### Luminous Intensity Polar Plot





TEST NUMBER: P229829

CATALOG NUMBER: 24RLN-LD5-45-RDP-UNV-L940-CD1-U

**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°	1866	1866	1866
5°	1869	1863	1873
10°	1865	1867	1883
15°	1860	1867	1888
20°	1850	1866	1899
25°	1830	1860	1905
30°	1812	1848	1904
35°	1786	1831	1888
40°	1754	1799	1857
45°	1713	1757	1812
50°	1656	1695	1740
55°	1576	1596	1643
60°	1471	1479	1518
65°	1351	1342	1374
70°	1228	1194	1200
75°	1092	1032	1024
80°	947	847	825
85°	777	599	466



TEST NUMBER: P229829

CATALOG NUMBER: 24RLN-LD5-45-RDP-UNV-L940-CD1-U

**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	115.5	3.5
10°-20°	333.1	10.0
20°-30°	508.4	15.3
30°-40°	612.9	18.4
40°-50°	625.0	18.8
50°-60°	534.9	16.1
60°-70°	368.4	11.1
70°-80°	188.9	5.7
80°-90°	44.0	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°	956.9	28.7
0°-40°	1569.8	47.1
0°-60°	2729.7	81.9
0°-90°	3331.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	3331.0	100.0

**CANDELA DISTRIBUTION:**

	0°	22.5°	45°	67.5°	90°	Flux
0°	1218	1218	1218	1218	1218	
5°	1216	1213	1212	1216	1218	116
15°	1173	1171	1178	1187	1190	331
25°	1083	1087	1101	1120	1127	499
35°	955	959	979	1001	1010	598
45°	791	792	811	832	836	609
55°	590	586	598	610	615	526
65°	373	364	370	373	379	370
75°	184	177	174	174	173	199
85°	44	39	34	30	26	51
90°	0	0	0	0	0	



TEST NUMBER: P229829

CATALOG NUMBER: 24RLN-LD5-45-RDP-UNV-L940-CD1-U

**CANDELA DISTRIBUTION (FULL):**

	0°	22.5°	45°	67.5°	90°
0°	1218.2	1218.2	1218.2	1218.2	1218.2
2.5°	1219.4	1216.9	1214.4	1216.9	1219.4
5°	1215.6	1213.1	1211.8	1215.6	1218.2
7.5°	1209.3	1206.8	1206.8	1211.8	1214.4
10°	1199.2	1197.9	1200.5	1205.5	1210.6
12.5°	1186.6	1186.6	1190.4	1196.7	1201.7
15°	1172.7	1171.4	1177.7	1186.6	1190.4
17.5°	1153.7	1155.0	1163.8	1173.9	1179.0
20°	1134.8	1136.0	1144.9	1158.8	1165.1
22.5°	1110.7	1113.3	1123.4	1141.1	1147.4
25°	1082.9	1086.7	1100.6	1119.6	1127.2
27.5°	1055.1	1058.9	1074.1	1095.6	1105.7
30°	1024.8	1029.9	1045.0	1067.8	1076.6
32.5°	990.7	994.5	1013.4	1036.2	1045.0
35°	955.3	959.1	979.3	1000.8	1009.7
37.5°	919.9	919.9	940.2	965.4	974.3
40°	877.0	878.2	899.7	923.7	928.8
42.5°	836.5	836.5	855.5	878.2	887.1
45°	791.0	792.3	811.3	831.5	836.5
47.5°	744.3	744.3	760.7	779.7	784.7
50°	695.0	692.5	711.4	726.6	730.4
52.5°	644.5	640.7	655.8	668.5	673.5
55°	590.1	586.3	597.7	610.3	615.4
57.5°	533.3	528.2	540.8	552.2	554.7
60°	480.2	472.6	482.7	489.0	495.4
62.5°	427.1	418.3	425.9	429.6	434.7
65°	372.8	363.9	370.2	372.8	379.1
67.5°	321.0	314.6	315.9	319.7	322.2
70°	274.2	266.6	266.6	266.6	267.9
72.5°	231.2	219.9	218.6	219.9	219.9
75°	184.5	176.9	174.4	174.4	173.1
77.5°	147.8	137.7	136.5	133.9	131.4
80°	107.4	98.6	96.0	94.8	93.5
82.5°	74.6	67.0	64.4	61.9	58.1
85°	44.2	39.2	34.1	30.3	26.5
87.5°	16.4	15.2	12.6	11.4	11.4
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)