

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: P296118

Luminaire Tested: **24RLN-LD5-55-RDP-UNV-L83050-W2A1-U-3000K**

Issue Date: 3/3/2020

**Test Information**

Test Method: LM-79-08  
Report Number: P296118  
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-LD5-55-RDP-UNV-L83050-W2A1-U-3000K  
Description: RLN LED 2x4 TUNABLE WHITE TROFFER  
WITH RDP LENS  
Light Source: (504) 80 CRI LEDS TUNED TO 3000K CCT  
Ballast/Driver: ELECTRONIC DRIVER

**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 4348.0 lumens  
Efficiency: N/A  
Efficacy: 113.8 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

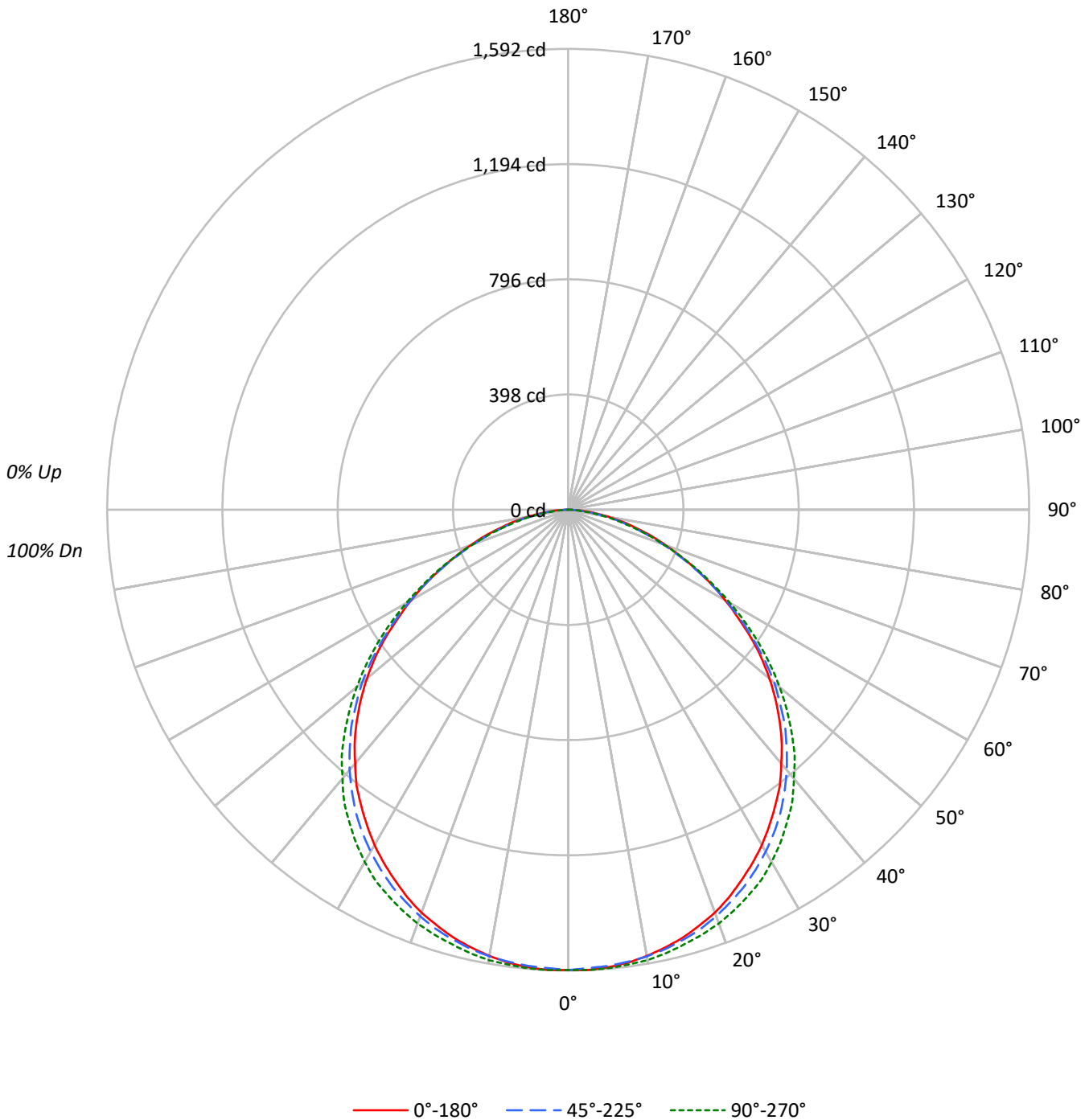
Input Watts (W): 38.223  
Input Voltage (V): 120  
Input Current (Ain): NR  
Voltage Rise (V): NR  
Power Factor: NR  
Total Harmonic Distortion (THDi): NR  
Frequency (hertz): 60  
Stabilization Time: NR  
Operation Time: NR  
Ambient Temperature (°C): NR  
Test Distance: 25 FT



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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	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°	2139	2139	2139
5°	2143	2136	2148
10°	2139	2141	2159
15°	2132	2141	2164
20°	2121	2140	2178
25°	2099	2133	2184
30°	2078	2119	2183
35°	2048	2100	2165
40°	2011	2063	2129
45°	1965	2015	2078
50°	1899	1944	1996
55°	1807	1830	1884
60°	1687	1696	1740
65°	1549	1539	1575
70°	1408	1369	1376
75°	1252	1183	1175
80°	1086	972	946
85°	891	687	534



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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	150.8	3.5
10°-20°	434.7	10.0
20°-30°	663.6	15.3
30°-40°	800.0	18.4
40°-50°	815.8	18.8
50°-60°	698.2	16.1
60°-70°	480.9	11.1
70°-80°	246.5	5.7
80°-90°	57.4	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°	1249.1	28.7
0°-40°	2049.1	47.1
0°-60°	3563.1	81.9
0°-90°	4348.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	4348.0	100.0

**CANDELA DISTRIBUTION:**

	0°	22.5°	45°	67.5°	90°	Flux
0°	1590	1590	1590	1590	1590	
5°	1587	1584	1582	1587	1590	151
15°	1531	1529	1537	1549	1554	432
25°	1414	1418	1437	1461	1471	652
35°	1247	1252	1278	1306	1318	780
45°	1033	1034	1059	1085	1092	796
55°	770	765	780	797	803	687
65°	487	475	483	487	495	484
75°	241	231	228	228	226	260
85°	58	51	44	40	35	67
90°	0	0	0	0	0	



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**CANDELA DISTRIBUTION (FULL):**

	0°	22.5°	45°	67.5°	90°
0°	1590.1	1590.1	1590.1	1590.1	1590.1
2.5°	1591.7	1588.4	1585.1	1588.4	1591.7
5°	1586.8	1583.5	1581.8	1586.8	1590.1
7.5°	1578.5	1575.2	1575.2	1581.8	1585.1
10°	1565.3	1563.7	1567.0	1573.6	1580.2
12.5°	1548.8	1548.8	1553.8	1562.0	1568.6
15°	1530.7	1529.1	1537.3	1548.8	1553.8
17.5°	1506.0	1507.6	1519.2	1532.3	1538.9
20°	1481.2	1482.9	1494.4	1512.6	1520.8
22.5°	1449.9	1453.2	1466.4	1489.5	1497.7
25°	1413.6	1418.5	1436.7	1461.4	1471.3
27.5°	1377.3	1382.2	1402.0	1430.1	1443.3
30°	1337.7	1344.3	1364.1	1393.8	1405.3
32.5°	1293.2	1298.1	1322.9	1352.6	1364.1
35°	1247.0	1251.9	1278.3	1306.4	1317.9
37.5°	1200.8	1200.8	1227.2	1260.2	1271.7
40°	1144.7	1146.4	1174.4	1205.8	1212.4
42.5°	1091.9	1091.9	1116.7	1146.4	1157.9
45°	1032.6	1034.2	1059.0	1085.3	1091.9
47.5°	971.5	971.5	993.0	1017.7	1024.3
50°	907.2	903.9	928.6	948.4	953.4
52.5°	841.2	836.3	856.1	872.6	879.2
55°	770.3	765.3	780.2	796.7	803.3
57.5°	696.1	689.5	706.0	720.8	724.1
60°	626.8	616.9	630.1	638.3	646.6
62.5°	557.5	546.0	555.9	560.8	567.4
65°	486.6	475.0	483.3	486.6	494.8
67.5°	419.0	410.7	412.4	417.3	420.6
70°	357.9	348.0	348.0	348.0	349.7
72.5°	301.9	287.0	285.4	287.0	287.0
75°	240.8	230.9	227.6	227.6	226.0
77.5°	193.0	179.8	178.1	174.8	171.5
80°	140.2	128.7	125.4	123.7	122.1
82.5°	97.3	87.4	84.1	80.8	75.9
85°	57.7	51.1	44.5	39.6	34.6
87.5°	21.4	19.8	16.5	14.8	14.8
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)