

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: P295889

Luminaire Tested: **24RLN-LD5-42-UNV-L82765-W2A1-U-6500K**

Issue Date: 3/3/2020

**Test Information**

Test Method: LM-79-08  
Report Number: P295889  
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-LD5-42-UNV-L82765-W2A1-U-6500K  
Description: RLN LED 2x4 TUNABLE WHITE TROFFER  
WITH STANDARD LENS  
Light Source: (504) 80 CRI LEDS TUNED TO 6500K CCT  
Ballast/Driver: ELECTRONIC DRIVER

**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 4405.0 lumens  
Efficiency: N/A  
Efficacy: 144.8 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

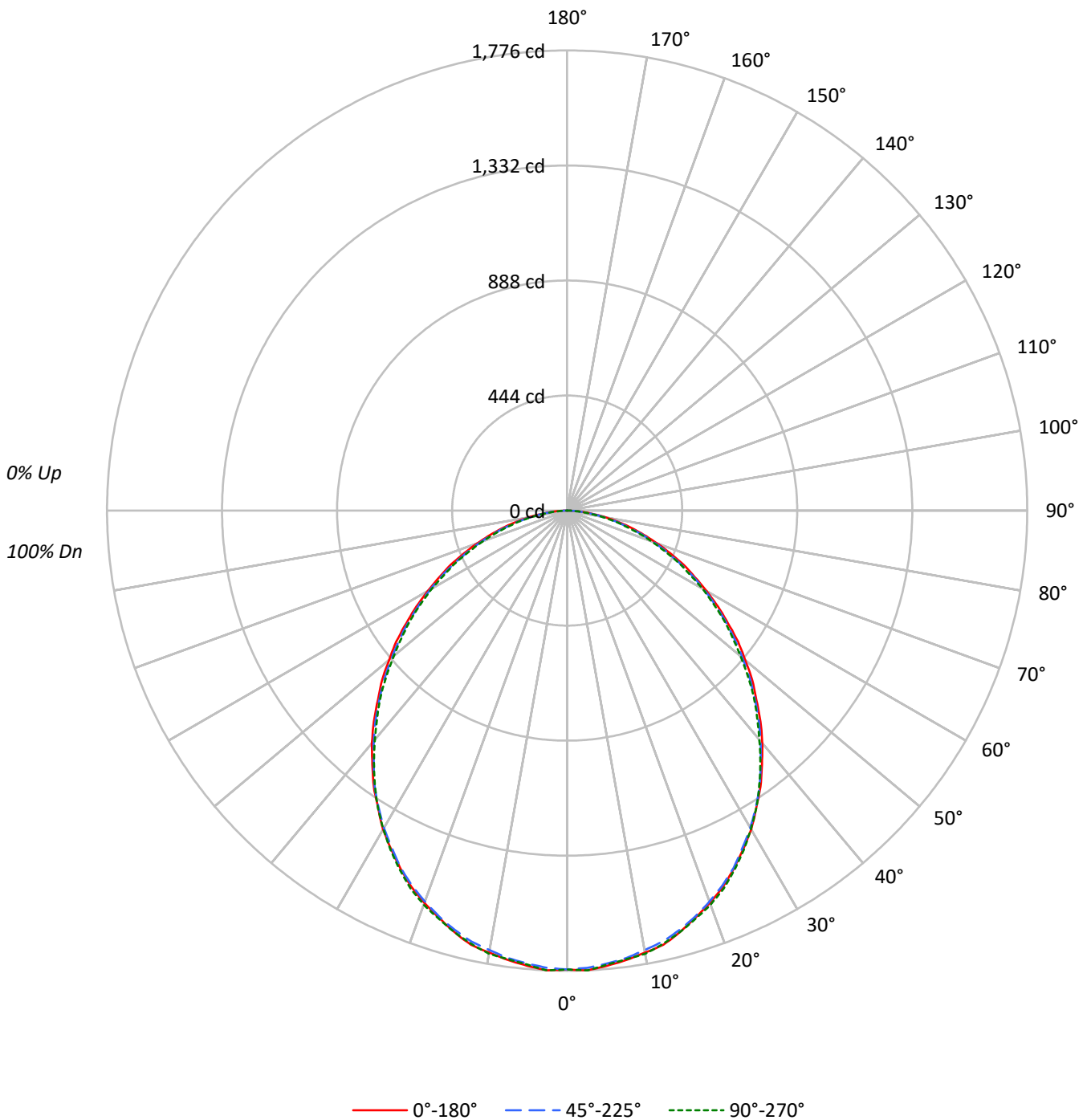
Input Watts (W): 30.411  
Input Voltage (V): 120  
Input Current (Ain): NR  
Voltage Rise (V): NR  
Power Factor: NR  
Total Harmonic Distortion (THDi): NR  
Frequency (hertz): 60  
Stabilization Time: NR  
Operation Time: NR  
Ambient Temperature (°C): NR  
Test Distance: 25 FT



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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	90	91	89	87	85					85			
2	100	92	85	80	97	90	84	79	86	81	77	83	79	75	80	77	74	72					72			
3	91	81	73	67	89	80	72	66	77	70	65	74	69	64	71	67	63	61					61			
4	84	72	64	57	82	71	63	57	68	62	56	66	60	55	64	59	55	52					52			
5	77	65	56	50	75	64	55	49	62	54	49	60	53	48	58	52	48	46					46			
6	72	59	50	44	70	58	49	43	56	48	43	54	48	43	53	47	42	40					40			
7	66	53	45	39	65	52	44	39	51	44	38	49	43	38	48	42	38	36					36			
8	62	49	40	35	60	48	40	35	47	39	34	45	39	34	44	38	34	32					32			
9	58	45	37	31	57	44	36	31	43	36	31	42	36	31	41	35	31	29					29			
10	54	41	34	28	53	41	33	28	40	33	28	39	33	28	38	32	28	26					26			

**AVERAGE LUMINANCE (cd/sqm):**

	0°	45°	90°
0°	2382	2382	2382
5°	2382	2370	2376
10°	2367	2353	2373
15°	2346	2334	2346
20°	2307	2299	2318
25°	2262	2257	2270
30°	2208	2197	2204
35°	2138	2129	2124
40°	2059	2039	2027
45°	1966	1947	1939
50°	1877	1847	1827
55°	1777	1750	1734
60°	1671	1640	1621
65°	1579	1520	1507
70°	1448	1392	1364
75°	1330	1249	1197
80°	1167	1090	1024
85°	943	877	746



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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	167.1	3.8
10°-20°	473.6	10.8
20°-30°	700.6	15.9
30°-40°	808.6	18.4
40°-50°	789.7	17.9
50°-60°	666.9	15.1
60°-70°	475.0	10.8
70°-80°	257.2	5.8
80°-90°	66.4	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°	1341.3	30.4
0°-40°	2149.9	48.8
0°-60°	3606.4	81.9
0°-90°	4405.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	4405.0	100.0

**CANDELA DISTRIBUTION:**

	0°	22.5°	45°	67.5°	90°	Flux
0°	1771	1771	1771	1771	1771	
5°	1764	1764	1755	1759	1759	167
15°	1684	1677	1676	1683	1684	474
25°	1523	1515	1521	1526	1529	701
35°	1302	1292	1296	1292	1293	812
45°	1033	1025	1023	1019	1019	799
55°	757	748	746	739	739	679
65°	496	486	478	472	473	489
75°	256	247	240	234	230	271
85°	61	60	57	50	48	72
90°	0	0	0	0	0	



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**CANDELA DISTRIBUTION (FULL):**

	0°	22.5°	45°	67.5°	90°
0°	1770.7	1770.7	1770.7	1770.7	1770.7
2.5°	1776.4	1769.3	1766.4	1767.8	1776.4
5°	1763.6	1763.6	1755.1	1759.3	1759.3
7.5°	1749.4	1750.8	1742.3	1749.4	1746.5
10°	1732.3	1728.1	1722.4	1733.7	1736.6
12.5°	1716.7	1706.7	1703.9	1711.0	1712.4
15°	1684.0	1676.9	1675.5	1682.6	1684.0
17.5°	1647.0	1648.5	1642.8	1652.7	1651.3
20°	1611.5	1608.7	1605.8	1617.2	1618.6
22.5°	1571.7	1563.2	1566.0	1576.0	1578.8
25°	1523.4	1514.9	1520.6	1526.3	1529.1
27.5°	1472.3	1468.0	1466.6	1473.7	1476.5
30°	1421.1	1414.0	1414.0	1422.5	1418.3
32.5°	1358.6	1352.9	1355.7	1358.6	1360.0
35°	1301.7	1291.8	1296.0	1291.8	1293.2
37.5°	1234.9	1227.8	1226.4	1225.0	1225.0
40°	1172.4	1166.7	1161.0	1161.0	1153.9
42.5°	1104.2	1097.1	1094.2	1090.0	1085.7
45°	1033.1	1024.6	1023.2	1018.9	1018.9
47.5°	969.2	956.4	955.0	946.4	946.4
50°	896.7	888.2	882.5	876.8	872.6
52.5°	831.3	822.8	814.3	808.6	804.3
55°	757.4	747.5	746.1	739.0	739.0
57.5°	690.7	682.1	676.4	667.9	669.3
60°	621.0	612.5	609.6	602.5	602.5
62.5°	555.6	548.5	544.3	537.2	531.5
65°	496.0	486.0	477.5	471.8	473.2
67.5°	430.6	419.2	415.0	409.3	405.0
70°	368.1	361.0	353.9	346.7	346.7
72.5°	309.8	302.7	298.4	289.9	287.1
75°	255.8	247.3	240.2	234.5	230.2
77.5°	201.8	193.3	189.0	181.9	181.9
80°	150.6	145.0	140.7	137.8	132.2
82.5°	103.7	100.9	96.6	92.4	88.1
85°	61.1	59.7	56.8	49.7	48.3
87.5°	24.2	24.2	21.3	19.9	18.5
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)