

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: P293422

Luminaire Tested: **24GR-LD5-34-A-UNV-L83050-W2A1-U-5000K**

Issue Date: 3/3/2020

**Test Information**

Test Method: LM-79-08  
Report Number: P293422  
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (P33306)  
Test Lab: INNOVATION CENTER-P3  
Issue Date: 3/3/2020  
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)  
Product Line: METALUX  
Catalog Number: 24GR-LD5-34-A-UNV-L83050-W2A1-U-5000K  
Description: GRLED 2x4 TUNABLE WHITE TROFFER  
WITH A LENS  
Light Source: (336) 80 CRI LEDS TUNED TO 5000K CCT  
Ballast/Driver: ELECTRONIC DRIVER

**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 3743.0 lumens  
Efficiency: N/A  
Efficacy: 155.4 lumens/watt  
Spacing Criteria (0/90/45): 1.21 / 1.2 / 1.26  
Luminous Opening: Rectangular (W 2' x L: 4' x H: 0')  
CIE Type: Direct

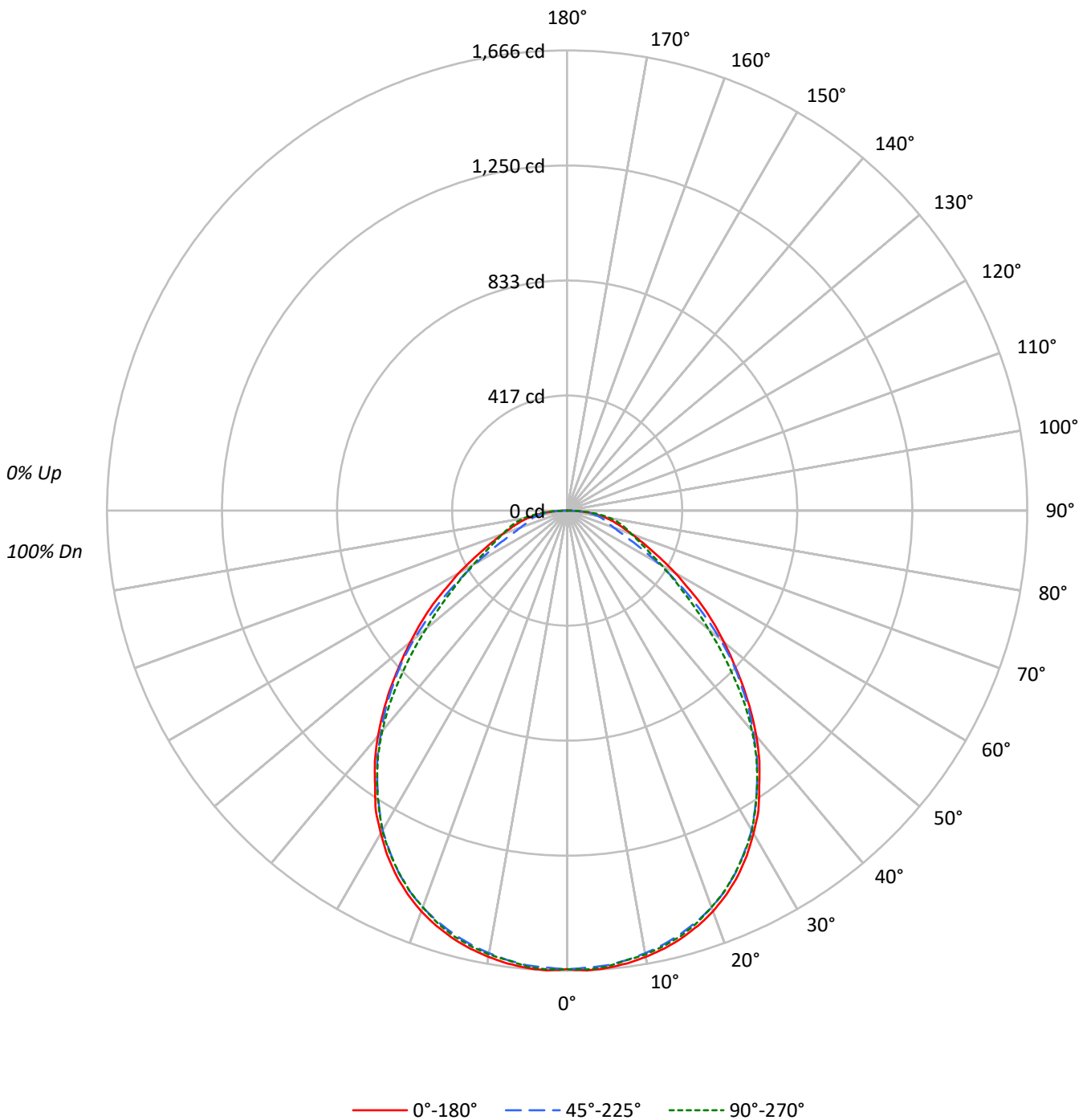
Input Watts (W): 24.087  
Input Voltage (V): 120  
Input Current (Ain): NR  
Voltage Rise (V): NR  
Power Factor: NR  
Total Harmonic Distortion (THDi): NR  
Frequency (hertz): 60  
Stabilization Time: NR  
Operation Time: NR  
Ambient Temperature (°C): NR  
Test Distance: 25 FT



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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	110	105	101	98	107	103	99	96	99	96	93	95	93	90	91	89	88	86					86			
2	101	93	87	82	98	91	86	81	88	83	79	85	81	77	82	78	75	73					73			
3	93	83	75	69	90	81	74	69	79	73	68	76	71	67	73	69	65	63					63			
4	86	74	66	60	83	73	65	60	71	64	59	68	63	58	66	61	57	55					55			
5	79	67	59	53	77	66	58	52	64	57	52	62	56	51	60	55	51	49					49			
6	73	61	53	46	72	60	52	46	58	51	46	57	50	45	55	49	45	43					43			
7	68	56	47	42	67	55	47	41	53	46	41	52	46	41	51	45	41	39					39			
8	64	51	43	37	62	50	43	37	49	42	37	48	41	37	47	41	37	35					35			
9	60	47	39	34	58	46	39	34	45	38	34	44	38	33	43	38	33	32					32			
10	56	44	36	31	55	43	36	31	42	35	31	41	35	31	40	35	30	29					29			

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

	0°	45°	90°
0°	2234	2234	2234
5°	2245	2233	2238
10°	2241	2223	2229
15°	2233	2210	2220
20°	2211	2189	2188
25°	2169	2145	2144
30°	2097	2075	2080
35°	1992	1969	1972
40°	1873	1840	1829
45°	1717	1693	1626
50°	1552	1509	1396
55°	1393	1268	1203
60°	1220	1021	1058
65°	1064	803	974
70°	974	701	974
75°	974	745	1073
80°	1058	878	1223
85°	1161	991	1312



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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	157.3	4.2
10°-20°	448.8	12.0
20°-30°	665.5	17.8
30°-40°	750.7	20.1
40°-50°	680.0	18.2
50°-60°	490.5	13.1
60°-70°	292.9	7.8
70°-80°	181.0	4.8
80°-90°	76.3	2.0
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°	1271.6	34.0
0°-40°	2022.3	54.0
0°-60°	3192.8	85.3
0°-90°	3743.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	3743.0	100.0

**CANDELA DISTRIBUTION:**

	0°	22.5°	45°	67.5°	90°	Flux
0°	1661	1661	1661	1661	1661	
5°	1662	1660	1653	1652	1657	158
15°	1603	1593	1587	1587	1594	452
25°	1461	1453	1445	1440	1444	671
35°	1213	1211	1199	1199	1200	759
45°	902	896	890	868	855	695
55°	594	575	541	514	513	530
65°	334	294	252	286	306	336
75°	187	162	143	179	206	200
85°	75	66	64	84	85	79
90°	0	0	0	0	0	



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**CANDELA DISTRIBUTION (FULL):**

	0°	22.5°	45°	67.5°	90°
0°	1660.7	1660.7	1660.7	1660.7	1660.7
2.5°	1666.5	1661.9	1656.1	1659.6	1662.5
5°	1662.5	1660.1	1653.2	1651.5	1657.3
7.5°	1653.8	1648.0	1641.6	1644.5	1642.2
10°	1640.5	1635.3	1627.2	1627.8	1631.8
12.5°	1624.3	1617.9	1609.3	1611.6	1615.0
15°	1602.9	1593.1	1586.7	1587.3	1593.6
17.5°	1575.7	1568.2	1560.1	1561.8	1564.7
20°	1544.5	1540.5	1528.9	1525.4	1528.3
22.5°	1505.2	1497.7	1491.3	1489.6	1490.1
25°	1460.7	1452.6	1445.0	1439.8	1443.9
27.5°	1408.6	1401.7	1391.8	1390.1	1393.6
30°	1349.6	1344.4	1335.8	1333.4	1338.6
32.5°	1289.5	1280.8	1268.7	1268.7	1269.8
35°	1212.6	1210.8	1198.7	1199.3	1200.4
37.5°	1143.2	1135.1	1128.2	1121.2	1124.7
40°	1066.3	1057.0	1047.8	1043.2	1041.4
42.5°	983.6	976.7	972.6	955.8	951.8
45°	902.1	896.3	889.9	867.9	854.6
47.5°	818.8	817.6	812.4	773.7	760.4
50°	741.3	739.6	721.1	680.0	666.7
52.5°	667.9	656.3	632.0	591.5	589.2
55°	593.9	575.4	540.7	514.1	512.9
57.5°	515.8	493.8	458.5	444.1	451.6
60°	453.3	419.8	379.3	381.1	393.2
62.5°	388.6	351.0	311.1	328.4	342.9
65°	334.2	294.3	252.1	286.2	305.9
67.5°	286.8	249.8	209.3	255.0	274.1
70°	247.5	217.4	178.1	226.1	247.5
72.5°	216.3	188.5	157.9	203.0	227.8
75°	187.4	162.5	143.4	178.7	206.4
77.5°	162.5	138.2	129.5	157.9	185.0
80°	136.5	114.5	113.3	137.6	157.9
82.5°	106.4	91.4	91.4	115.1	127.2
85°	75.2	65.9	64.2	83.8	85.0
87.5°	38.7	37.0	33.5	43.9	43.9
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)