

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: P293419

Luminaire Tested: **24GR-LD5-34-A-UNV-L83050-W2A1-U-3500K**

Issue Date: 3/3/2020

**Test Information**

Test Method: LM-79-08  
Report Number: P293419  
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-3500K  
Description: GRLED 2x4 TUNABLE WHITE TROFFER  
WITH A LENS  
Light Source: (336) 80 CRI LEDS TUNED TO 3500K CCT  
Ballast/Driver: ELECTRONIC DRIVER

**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 3532.0 lumens  
Efficiency: N/A  
Efficacy: 153.8 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

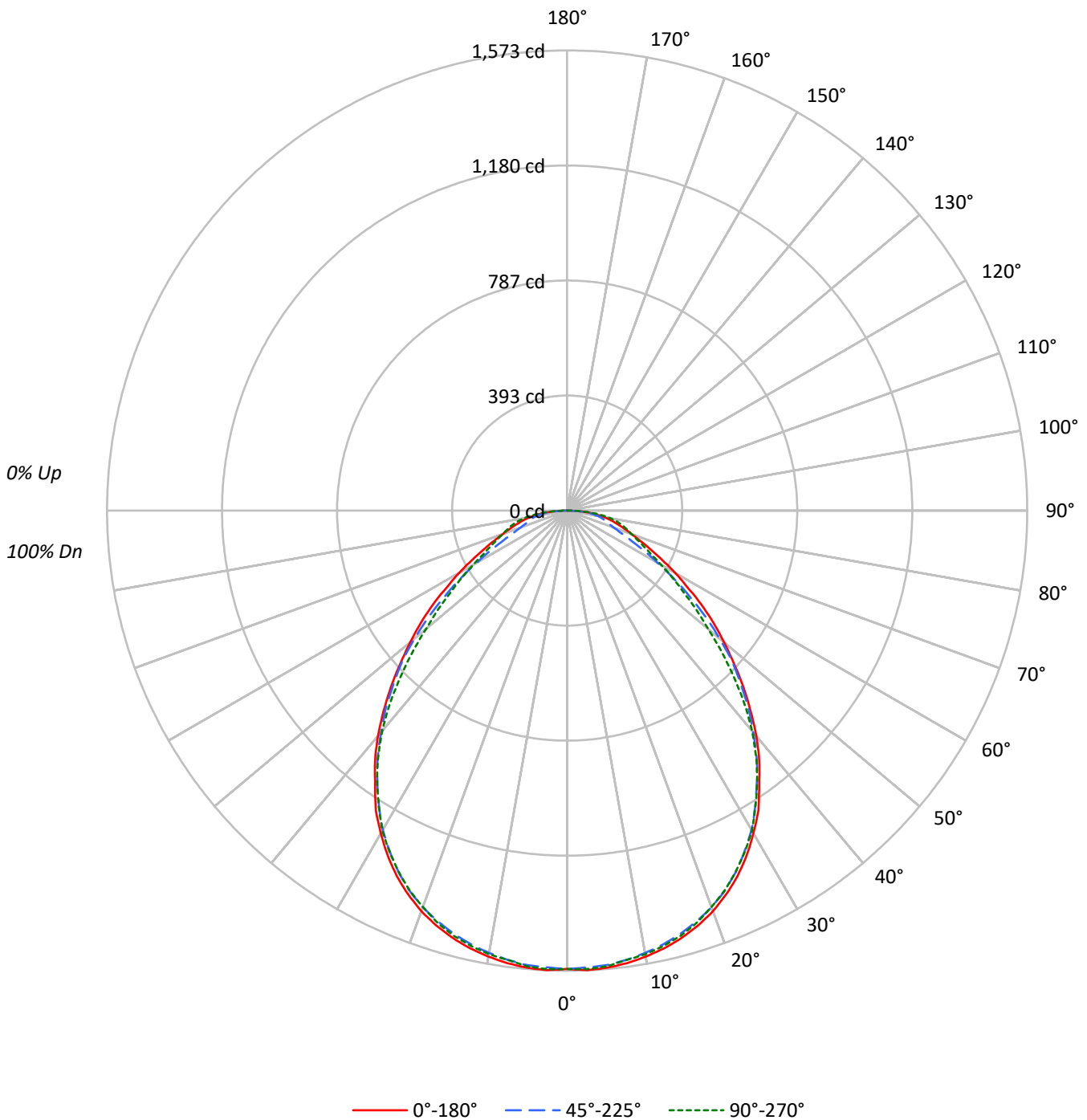
Input Watts (W): 22.971  
Input Voltage (V): 120  
Input Current (Ain): NR  
Voltage Rise (V): NR  
Power Factor: NR  
Total Harmonic Distortion (THDi): NR  
Frequency (hertz): 60  
Stabilization Time: NR  
Operation Time: NR  
Ambient Temperature (°C): NR  
Test Distance: 25 FT



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

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

	0°	45°	90°
0°	2109	2109	2109
5°	2119	2107	2112
10°	2115	2098	2104
15°	2107	2086	2095
20°	2087	2066	2065
25°	2046	2024	2023
30°	1979	1958	1963
35°	1879	1858	1861
40°	1767	1737	1726
45°	1620	1598	1535
50°	1464	1424	1317
55°	1315	1197	1135
60°	1151	963	998
65°	1004	757	919
70°	919	661	919
75°	919	703	1013
80°	998	828	1155
85°	1095	936	1238



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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	148.4	4.2
10°-20°	423.5	12.0
20°-30°	628.0	17.8
30°-40°	708.4	20.1
40°-50°	641.6	18.2
50°-60°	462.9	13.1
60°-70°	276.4	7.8
70°-80°	170.8	4.8
80°-90°	72.0	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°	1199.9	34.0
0°-40°	1908.3	54.0
0°-60°	3012.8	85.3
0°-90°	3532.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	3532.0	100.0

**CANDELA DISTRIBUTION:**

	0°	22.5°	45°	67.5°	90°	Flux
0°	1567	1567	1567	1567	1567	
5°	1569	1567	1560	1558	1564	149
15°	1512	1503	1497	1498	1504	426
25°	1378	1371	1364	1359	1362	633
35°	1144	1143	1131	1132	1133	716
45°	851	846	840	819	806	656
55°	560	543	510	485	484	500
65°	315	278	238	270	289	317
75°	177	153	135	169	195	189
85°	71	62	61	79	80	74
90°	0	0	0	0	0	



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**CANDELA DISTRIBUTION (FULL):**

	0°	22.5°	45°	67.5°	90°
0°	1567.1	1567.1	1567.1	1567.1	1567.1
2.5°	1572.6	1568.2	1562.7	1566.0	1568.7
5°	1568.7	1566.6	1560.0	1558.4	1563.8
7.5°	1560.6	1555.1	1549.1	1551.8	1549.6
10°	1548.0	1543.1	1535.5	1536.0	1539.8
12.5°	1532.7	1526.7	1518.5	1520.7	1524.0
15°	1512.5	1503.3	1497.3	1497.8	1503.8
17.5°	1486.9	1479.8	1472.2	1473.8	1476.5
20°	1457.4	1453.6	1442.7	1439.4	1442.2
22.5°	1420.3	1413.2	1407.2	1405.6	1406.1
25°	1378.3	1370.7	1363.6	1358.7	1362.5
27.5°	1329.2	1322.7	1313.4	1311.7	1315.0
30°	1273.5	1268.6	1260.5	1258.3	1263.2
32.5°	1216.8	1208.6	1197.2	1197.2	1198.2
35°	1144.2	1142.6	1131.1	1131.7	1132.8
37.5°	1078.8	1071.1	1064.6	1058.0	1061.3
40°	1006.2	997.4	988.7	984.4	982.7
42.5°	928.2	921.6	917.8	902.0	898.1
45°	851.2	845.8	839.8	819.0	806.5
47.5°	772.6	771.5	766.6	730.1	717.5
50°	699.5	697.9	680.4	641.7	629.1
52.5°	630.2	619.3	596.4	558.2	556.0
55°	560.4	542.9	510.2	485.1	484.0
57.5°	486.7	466.0	432.7	419.1	426.2
60°	427.8	396.1	357.9	359.6	371.0
62.5°	366.7	331.2	293.6	309.9	323.6
65°	315.4	277.7	237.9	270.1	288.6
67.5°	270.6	235.7	197.5	240.6	258.6
70°	233.5	205.2	168.1	213.3	233.5
72.5°	204.1	177.9	149.0	191.5	215.0
75°	176.8	153.3	135.3	168.6	194.8
77.5°	153.3	130.4	122.2	149.0	174.6
80°	128.8	108.0	106.9	129.9	149.0
82.5°	100.4	86.2	86.2	108.6	120.0
85°	70.9	62.2	60.6	79.1	80.2
87.5°	36.6	34.9	31.6	41.5	41.5
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)