

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: P293114

Luminaire Tested: **24GR-LD5-42-F1-UNV-L92765-W2A1-U-5700K**

Issue Date: 3/3/2020

**Test Information**

Test Method: LM-79-08  
Report Number: P293114  
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G3-1901-084-12)  
Test Lab: INNOVATION CENTER(G3)  
Issue Date: 3/3/2020  
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)  
Product Line: METALUX  
Catalog Number: 24GR-LD5-42-F1-UNV-L92765-W2A1-U-5700K  
Description: GRLED 2x4 TUNABLE WHITE TROFFER  
WITH F1 LENS  
Light Source: (336) 90 CRI LEDS TUNED TO 5700K CCT  
Ballast/Driver: ELECTRONIC DRIVER

**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 3952.0 lumens  
Efficiency: N/A  
Efficacy: 137.1 lumens/watt  
Spacing Criteria (0/90/45): 1.18 / 1.18 / 1.25  
Luminous Opening: Rectangular (W 2' x L: 4' x H: 0')  
CIE Type: Direct

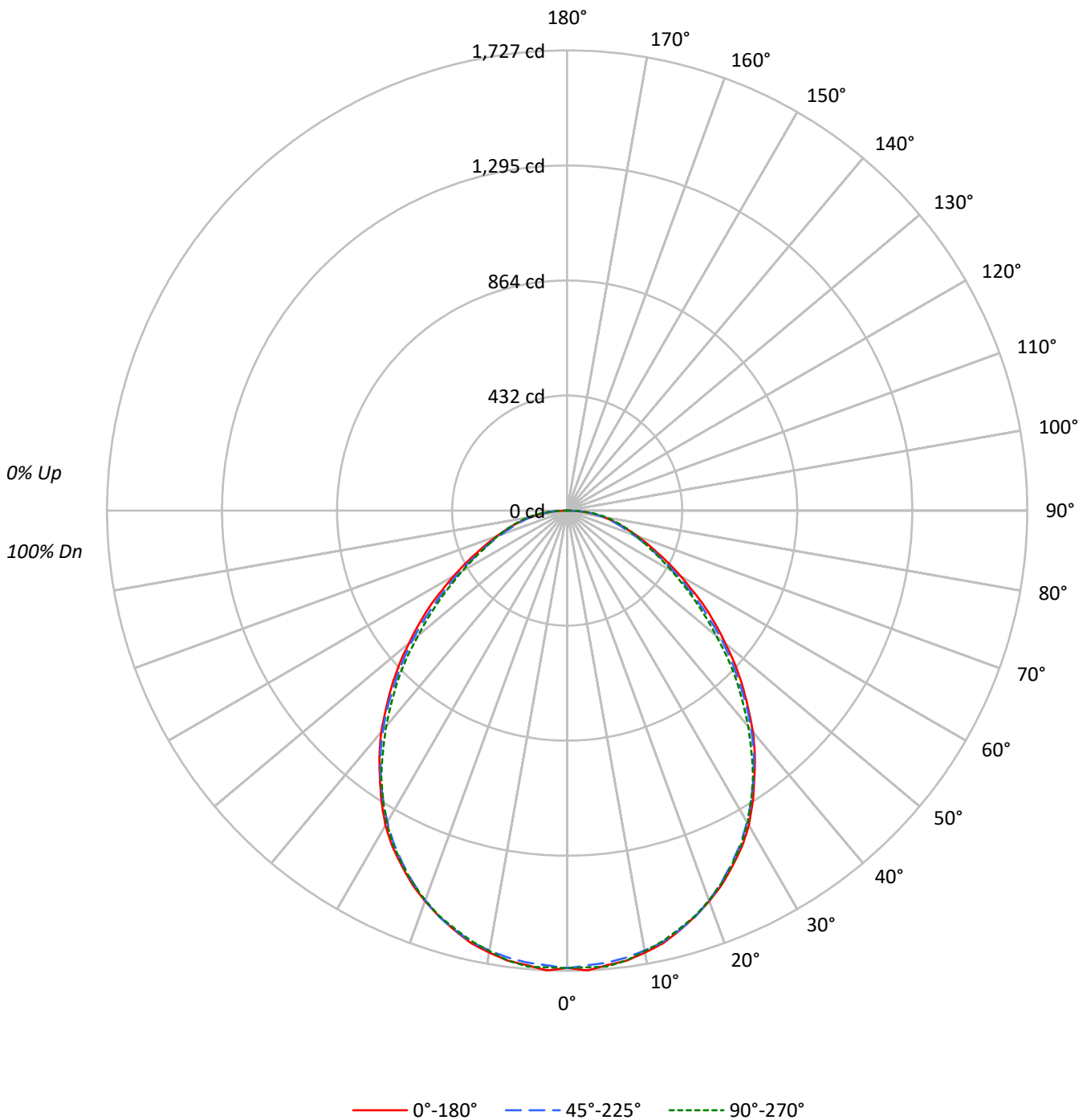
Input Watts (W): 28.83  
Input Voltage (V): 120  
Input Current (Ain): NR  
Voltage Rise (V): NR  
Power Factor: NR  
Total Harmonic Distortion (THDi): NR  
Frequency (hertz): 60  
Stabilization Time: NR  
Operation Time: NR  
Ambient Temperature (°C): NR  
Test Distance: 25 FT



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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	103	99	96	98	95	93	95	92	90	91	89	87	85					85			
2	100	93	86	81	98	91	85	80	87	82	78	84	80	76	81	78	75	72					72			
3	92	82	74	68	90	81	73	68	78	72	67	75	70	65	72	68	64	62					62			
4	85	73	65	59	83	72	64	58	70	63	58	67	62	57	65	60	56	54					54			
5	78	66	58	51	76	65	57	51	63	56	50	61	55	50	59	54	49	47					47			
6	73	60	51	45	71	59	51	45	57	50	45	56	49	44	54	48	44	42					42			
7	68	55	46	40	66	54	46	40	52	45	40	51	44	40	50	44	39	37					37			
8	63	50	42	36	62	49	42	36	48	41	36	47	40	36	46	40	36	34					34			
9	59	46	38	33	58	46	38	33	44	38	33	43	37	32	42	37	32	31					31			
10	56	43	35	30	54	42	35	30	41	34	30	40	34	30	39	34	30	28					28			

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

	0°	45°	90°
0°	2310	2310	2310
5°	2313	2300	2320
10°	2301	2291	2293
15°	2272	2270	2264
20°	2234	2229	2229
25°	2182	2170	2175
30°	2119	2097	2103
35°	2012	2003	1998
40°	1906	1888	1855
45°	1771	1740	1706
50°	1623	1587	1527
55°	1482	1415	1367
60°	1320	1257	1224
65°	1188	1126	1111
70°	1103	1036	1078
75°	1055	1009	1093
80°	1055	1055	1168
85°	1095	1107	1233



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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	162.1	4.1
10°-20°	458.8	11.6
20°-30°	673.3	17.0
30°-40°	761.3	19.3
40°-50°	703.6	17.8
50°-60°	542.1	13.7
60°-70°	358.9	9.1
70°-80°	213.7	5.4
80°-90°	78.3	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°	1294.2	32.7
0°-40°	2055.5	52.0
0°-60°	3301.1	83.5
0°-90°	3952.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	3952.0	100.0

**CANDELA DISTRIBUTION:**

	0°	22.5°	45°	67.5°	90°	Flux
0°	1717	1717	1717	1717	1717	
5°	1713	1713	1703	1704	1718	163
15°	1631	1628	1629	1629	1625	460
25°	1470	1466	1462	1460	1465	677
35°	1225	1224	1219	1214	1216	767
45°	931	924	915	898	897	717
55°	632	619	603	587	583	563
65°	373	368	354	350	349	374
75°	203	198	194	203	210	216
85°	71	67	72	79	80	75
90°	0	0	0	0	0	



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**CANDELA DISTRIBUTION (FULL):**

	0°	22.5°	45°	67.5°	90°
0°	1716.7	1716.7	1716.7	1716.7	1716.7
2.5°	1727.3	1718.3	1708.5	1708.5	1715.8
5°	1712.6	1712.6	1702.8	1703.6	1717.5
7.5°	1703.6	1698.7	1692.2	1692.2	1702.8
10°	1684.1	1680.0	1676.7	1675.1	1678.3
12.5°	1662.9	1656.3	1658.8	1656.3	1655.5
15°	1631.1	1627.8	1629.4	1628.6	1625.4
17.5°	1596.8	1595.2	1598.5	1592.8	1595.2
20°	1560.2	1555.3	1556.9	1553.6	1556.9
22.5°	1518.6	1515.3	1511.2	1507.2	1513.7
25°	1469.7	1465.6	1461.5	1459.9	1464.8
27.5°	1420.8	1414.2	1408.5	1406.9	1414.2
30°	1363.7	1356.4	1349.8	1348.2	1353.9
32.5°	1296.1	1294.4	1286.3	1283.0	1285.5
35°	1225.1	1223.5	1219.4	1213.7	1216.2
37.5°	1157.5	1156.7	1151.0	1141.2	1134.7
40°	1084.9	1079.2	1075.2	1061.3	1056.4
42.5°	1005.1	1003.4	996.1	980.6	974.9
45°	930.9	924.4	914.6	898.3	896.6
47.5°	854.3	845.3	836.3	815.9	815.1
50°	775.2	768.7	758.1	737.7	729.5
52.5°	701.8	692.9	678.2	658.6	654.5
55°	631.7	618.7	603.2	586.9	582.8
57.5°	556.7	551.0	532.3	519.2	514.3
60°	490.7	485.8	467.1	454.8	454.8
62.5°	431.2	423.9	407.6	399.4	399.4
65°	373.3	367.6	353.8	350.5	348.9
67.5°	323.6	316.3	306.5	305.7	309.7
70°	280.4	271.4	263.3	271.4	273.9
72.5°	239.6	233.9	226.6	237.2	242.1
75°	203.0	198.1	194.0	203.0	210.3
77.5°	169.5	164.7	164.7	174.4	181.0
80°	136.1	132.9	136.1	144.3	150.8
82.5°	104.3	101.9	106.0	114.1	118.2
85°	70.9	66.8	71.7	79.1	79.9
87.5°	33.4	32.6	35.9	40.8	39.9
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)