

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: P293089

Luminaire Tested: **24GR-LD5-34-F1-UNV-L92765-W2A1-U-2700K**

Issue Date: 3/3/2020

**Test Information**

Test Method: LM-79-08  
Report Number: P293089  
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-LD5-34-F1-UNV-L92765-W2A1-U-2700K  
Description: GRLED 2x4 TUNABLE WHITE TROFFER  
WITH F1 LENS  
Light Source: (336) 90 CRI LEDS TUNED TO 2700K CCT  
Ballast/Driver: ELECTRONIC DRIVER

**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 2736.0 lumens  
Efficiency: N/A  
Efficacy: 119.6 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

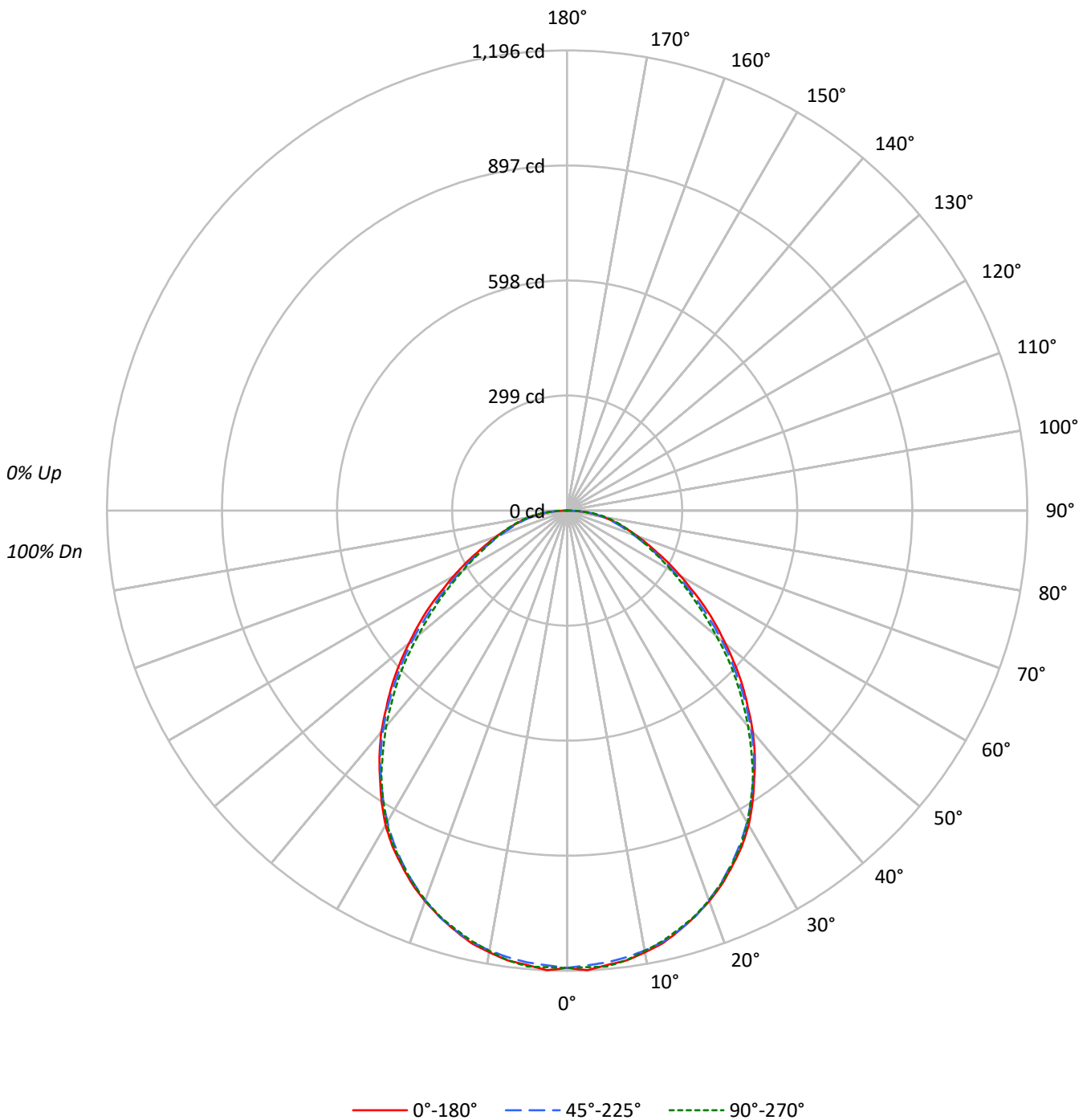
Input Watts (W): 22.878  
Input Voltage (V): 120  
Input Current (Ain): NR  
Voltage Rise (V): NR  
Power Factor: NR  
Total Harmonic Distortion (THDi): NR  
Frequency (hertz): 60  
Stabilization Time: NR  
Operation Time: NR  
Ambient Temperature (°C): NR  
Test Distance: 25 FT



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

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

	0°	45°	90°
0°	1599	1599	1599
5°	1601	1592	1606
10°	1593	1586	1587
15°	1573	1571	1567
20°	1547	1543	1543
25°	1511	1502	1506
30°	1467	1452	1456
35°	1393	1387	1383
40°	1319	1307	1285
45°	1226	1205	1181
50°	1123	1099	1057
55°	1026	980	947
60°	914	870	847
65°	823	780	769
70°	764	717	746
75°	730	698	757
80°	730	730	809
85°	758	767	854



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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	112.2	4.1
10°-20°	317.6	11.6
20°-30°	466.2	17.0
30°-40°	527.0	19.3
40°-50°	487.1	17.8
50°-60°	375.3	13.7
60°-70°	248.5	9.1
70°-80°	147.9	5.4
80°-90°	54.2	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°	896.0	32.7
0°-40°	1423.0	52.0
0°-60°	2285.4	83.5
0°-90°	2736.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	2736.0	100.0

**CANDELA DISTRIBUTION:**

	0°	22.5°	45°	67.5°	90°	Flux
0°	1188	1188	1188	1188	1188	
5°	1186	1186	1179	1179	1189	113
15°	1129	1127	1128	1128	1125	318
25°	1018	1015	1012	1011	1014	468
35°	848	847	844	840	842	531
45°	644	640	633	622	621	496
55°	437	428	418	406	404	390
65°	258	254	245	243	242	259
75°	140	137	134	140	146	150
85°	49	46	50	55	55	52
90°	0	0	0	0	0	



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**CANDELA DISTRIBUTION (FULL):**

	0°	22.5°	45°	67.5°	90°
0°	1188.5	1188.5	1188.5	1188.5	1188.5
2.5°	1195.8	1189.6	1182.8	1182.8	1187.9
5°	1185.6	1185.6	1178.9	1179.4	1189.0
7.5°	1179.4	1176.0	1171.5	1171.5	1178.9
10°	1165.9	1163.1	1160.8	1159.7	1161.9
12.5°	1151.2	1146.7	1148.4	1146.7	1146.1
15°	1129.2	1126.9	1128.1	1127.5	1125.2
17.5°	1105.5	1104.4	1106.6	1102.7	1104.4
20°	1080.1	1076.7	1077.8	1075.6	1077.8
22.5°	1051.3	1049.1	1046.2	1043.4	1047.9
25°	1017.5	1014.6	1011.8	1010.7	1014.1
27.5°	983.6	979.1	975.1	974.0	979.1
30°	944.1	939.0	934.5	933.4	937.3
32.5°	897.3	896.1	890.5	888.2	889.9
35°	848.2	847.0	844.2	840.3	842.0
37.5°	801.3	800.8	796.8	790.0	785.5
40°	751.1	747.2	744.3	734.7	731.4
42.5°	695.8	694.7	689.6	678.9	674.9
45°	644.5	639.9	633.2	621.9	620.7
47.5°	591.4	585.2	579.0	564.9	564.3
50°	536.7	532.2	524.8	510.7	505.1
52.5°	485.9	479.7	469.5	456.0	453.1
55°	437.3	428.3	417.6	406.3	403.5
57.5°	385.4	381.5	368.5	359.5	356.1
60°	339.7	336.3	323.4	314.9	314.9
62.5°	298.5	293.4	282.2	276.5	276.5
65°	258.5	254.5	244.9	242.7	241.5
67.5°	224.0	219.0	212.2	211.6	214.4
70°	194.1	187.9	182.3	187.9	189.6
72.5°	165.9	162.0	156.9	164.2	167.6
75°	140.5	137.1	134.3	140.5	145.6
77.5°	117.4	114.0	114.0	120.8	125.3
80°	94.2	92.0	94.2	99.9	104.4
82.5°	72.2	70.5	73.4	79.0	81.8
85°	49.1	46.3	49.7	54.7	55.3
87.5°	23.1	22.6	24.8	28.2	27.7
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)