

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: P293092

Luminaire Tested: **24GR-LD5-34-F1-UNV-L92765-W2A1-U-4000K**

Issue Date: 3/3/2020

**Test Information**

Test Method: LM-79-08  
Report Number: P293092  
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-4000K  
Description: GRLED 2x4 TUNABLE WHITE TROFFER  
WITH F1 LENS  
Light Source: (336) 90 CRI LEDS TUNED TO 4000K CCT  
Ballast/Driver: ELECTRONIC DRIVER

**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 3083.0 lumens  
Efficiency: N/A  
Efficacy: 132.6 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

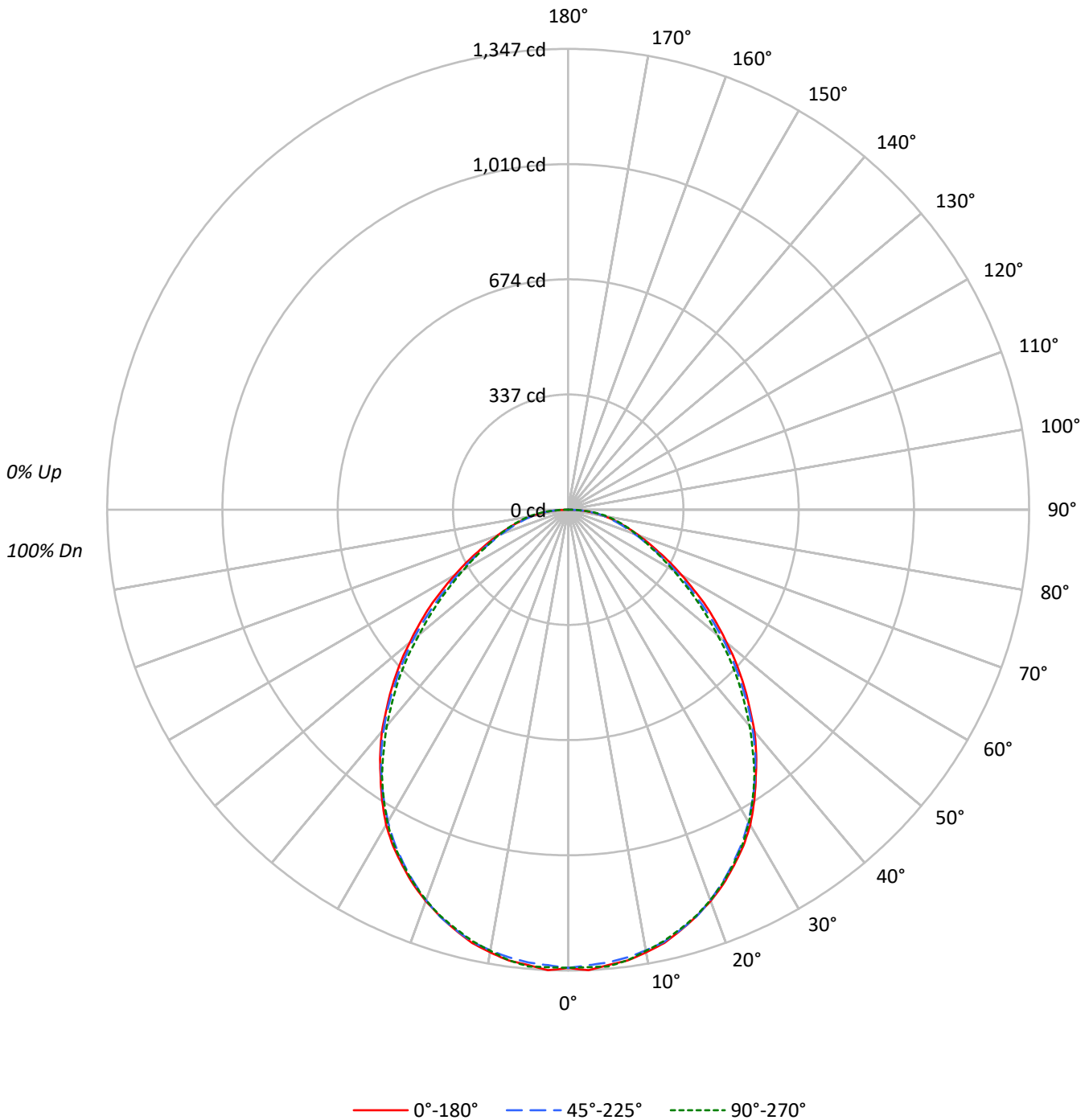
Input Watts (W): 23.25  
Input Voltage (V): 120  
Input Current (Ain): NR  
Voltage Rise (V): NR  
Power Factor: NR  
Total Harmonic Distortion (THDi): NR  
Frequency (hertz): 60  
Stabilization Time: NR  
Operation Time: NR  
Ambient Temperature (°C): NR  
Test Distance: 25 FT



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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°	1802	1802	1802
5°	1804	1794	1810
10°	1795	1787	1789
15°	1772	1771	1766
20°	1743	1739	1739
25°	1702	1693	1696
30°	1653	1636	1641
35°	1570	1563	1558
40°	1487	1473	1447
45°	1382	1358	1331
50°	1266	1238	1191
55°	1156	1104	1067
60°	1030	981	955
65°	927	879	867
70°	860	808	841
75°	823	787	853
80°	823	823	911
85°	854	865	962



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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	126.5	4.1
10°-20°	357.9	11.6
20°-30°	525.3	17.0
30°-40°	593.9	19.3
40°-50°	548.9	17.8
50°-60°	422.9	13.7
60°-70°	280.0	9.1
70°-80°	166.7	5.4
80°-90°	61.1	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°	1009.6	32.7
0°-40°	1603.5	52.0
0°-60°	2575.2	83.5
0°-90°	3083.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	3083.0	100.0

**CANDELA DISTRIBUTION:**

	0°	22.5°	45°	67.5°	90°	Flux
0°	1339	1339	1339	1339	1339	
5°	1336	1336	1328	1329	1340	127
15°	1272	1270	1271	1270	1268	359
25°	1146	1143	1140	1139	1143	528
35°	956	954	951	947	949	598
45°	726	721	714	701	700	559
55°	493	483	471	458	455	440
65°	291	287	276	273	272	292
75°	158	154	151	158	164	169
85°	55	52	56	62	62	59
90°	0	0	0	0	0	



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**CANDELA DISTRIBUTION (FULL):**

	0°	22.5°	45°	67.5°	90°
0°	1339.2	1339.2	1339.2	1339.2	1339.2
2.5°	1347.4	1340.5	1332.8	1332.8	1338.5
5°	1336.0	1336.0	1328.4	1329.0	1339.8
7.5°	1329.0	1325.2	1320.1	1320.1	1328.4
10°	1313.7	1310.6	1308.0	1306.8	1309.3
12.5°	1297.2	1292.1	1294.0	1292.1	1291.5
15°	1272.4	1269.9	1271.1	1270.5	1268.0
17.5°	1245.7	1244.4	1247.0	1242.5	1244.4
20°	1217.1	1213.3	1214.5	1212.0	1214.5
22.5°	1184.7	1182.1	1178.9	1175.8	1180.8
25°	1146.5	1143.3	1140.1	1138.9	1142.7
27.5°	1108.4	1103.3	1098.8	1097.5	1103.3
30°	1063.8	1058.1	1053.0	1051.8	1056.2
32.5°	1011.1	1009.8	1003.4	1000.9	1002.8
35°	955.7	954.5	951.3	946.8	948.7
37.5°	903.0	902.3	897.9	890.2	885.2
40°	846.4	841.9	838.7	827.9	824.1
42.5°	784.1	782.8	777.1	765.0	760.5
45°	726.2	721.1	713.5	700.7	699.5
47.5°	666.4	659.4	652.4	636.5	635.9
50°	604.7	599.6	591.4	575.5	569.1
52.5°	547.5	540.5	529.1	513.8	510.6
55°	492.8	482.6	470.6	457.8	454.7
57.5°	434.3	429.9	415.2	405.1	401.2
60°	382.8	379.0	364.4	354.8	354.8
62.5°	336.4	330.7	317.9	311.6	311.6
65°	291.2	286.8	276.0	273.4	272.2
67.5°	252.4	246.7	239.1	238.5	241.6
70°	218.7	211.8	205.4	211.8	213.7
72.5°	187.0	182.5	176.8	185.0	188.9
75°	158.3	154.5	151.3	158.3	164.1
77.5°	132.3	128.4	128.4	136.1	141.2
80°	106.2	103.6	106.2	112.6	117.6
82.5°	81.4	79.5	82.7	89.0	92.2
85°	55.3	52.1	56.0	61.7	62.3
87.5°	26.1	25.4	28.0	31.8	31.2
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)