

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: P293087

Luminaire Tested: **24GR-LD5-30-F1-UNV-L92765-W2A1-U-5700K**

Issue Date: 3/3/2020

**Test Information**

Test Method: LM-79-08  
Report Number: P293087  
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-LD5-30-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: 2873.0 lumens  
Efficiency: N/A  
Efficacy: 139.2 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

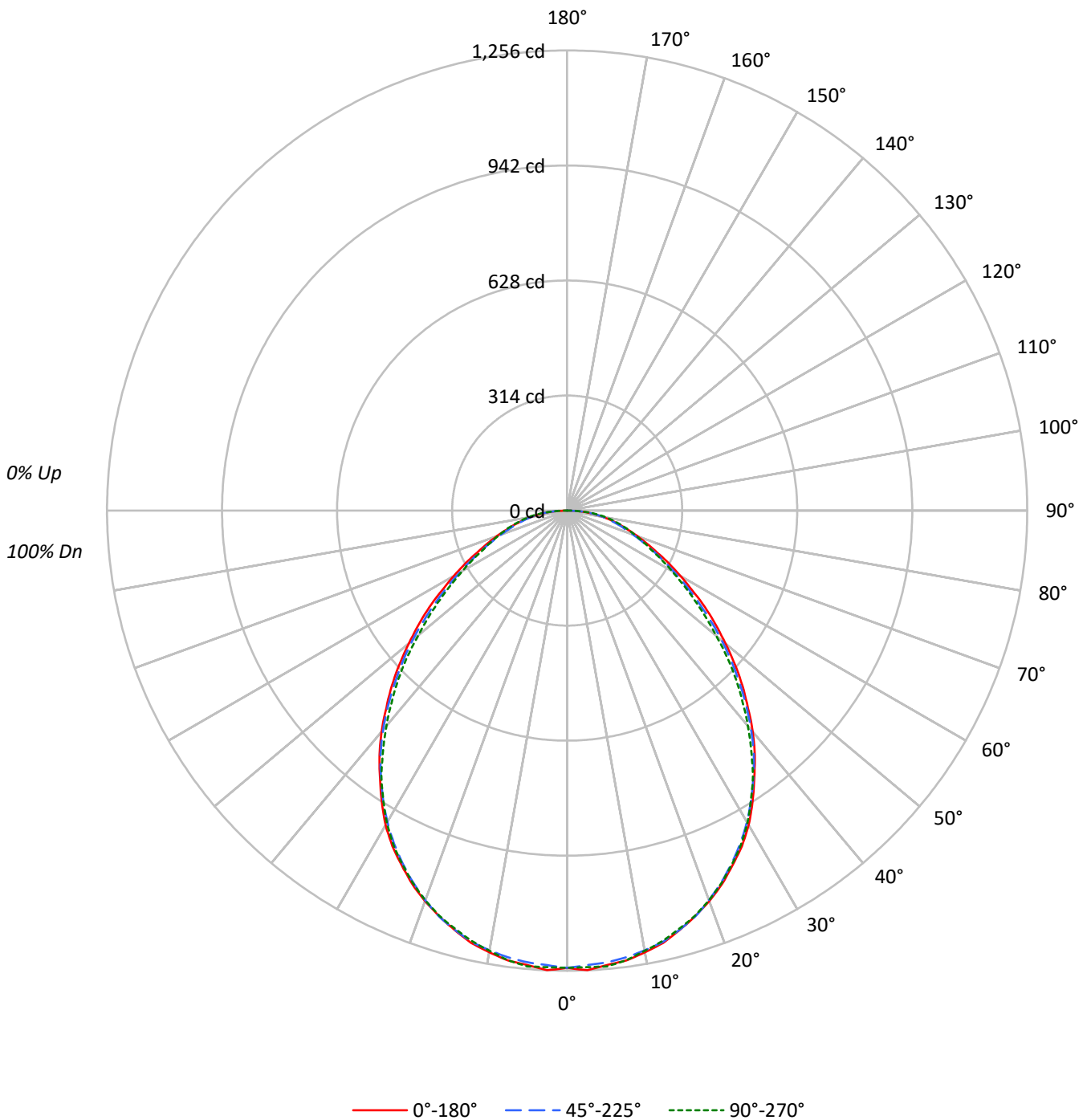
Input Watts (W): 20.646  
Input Voltage (V): 120  
Input Current (Ain): NR  
Voltage Rise (V): NR  
Power Factor: NR  
Total Harmonic Distortion (THDi): NR  
Frequency (hertz): 60  
Stabilization Time: NR  
Operation Time: NR  
Ambient Temperature (°C): NR  
Test Distance: 25 FT



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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°	1679	1679	1679
5°	1682	1672	1686
10°	1673	1665	1667
15°	1652	1650	1646
20°	1624	1621	1621
25°	1586	1577	1581
30°	1540	1525	1529
35°	1463	1456	1452
40°	1385	1373	1349
45°	1288	1265	1240
50°	1180	1154	1110
55°	1077	1029	994
60°	960	914	890
65°	864	819	807
70°	802	753	783
75°	767	733	795
80°	767	767	849
85°	797	804	897



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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	117.9	4.1
10°-20°	333.5	11.6
20°-30°	489.5	17.0
30°-40°	553.4	19.3
40°-50°	511.5	17.8
50°-60°	394.1	13.7
60°-70°	260.9	9.1
70°-80°	155.3	5.4
80°-90°	56.9	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°	940.9	32.7
0°-40°	1494.3	52.0
0°-60°	2399.8	83.5
0°-90°	2873.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	2873.0	100.0

**CANDELA DISTRIBUTION:**

	0°	22.5°	45°	67.5°	90°	Flux
0°	1248	1248	1248	1248	1248	
5°	1245	1245	1238	1238	1249	118
15°	1186	1183	1185	1184	1182	334
25°	1068	1065	1062	1061	1065	492
35°	891	890	886	882	884	557
45°	677	672	665	653	652	521
55°	459	450	438	427	424	410
65°	271	267	257	255	254	272
75°	148	144	141	148	153	157
85°	52	49	52	58	58	55
90°	0	0	0	0	0	



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**CANDELA DISTRIBUTION (FULL):**

	0°	22.5°	45°	67.5°	90°
0°	1248.0	1248.0	1248.0	1248.0	1248.0
2.5°	1255.7	1249.1	1242.0	1242.0	1247.4
5°	1245.0	1245.0	1237.9	1238.5	1248.6
7.5°	1238.5	1234.9	1230.2	1230.2	1237.9
10°	1224.3	1221.3	1218.9	1217.7	1220.1
12.5°	1208.9	1204.1	1205.9	1204.1	1203.5
15°	1185.7	1183.4	1184.6	1184.0	1181.6
17.5°	1160.9	1159.7	1162.0	1157.9	1159.7
20°	1134.2	1130.6	1131.8	1129.4	1131.8
22.5°	1104.0	1101.6	1098.6	1095.7	1100.4
25°	1068.4	1065.4	1062.5	1061.3	1064.9
27.5°	1032.9	1028.1	1024.0	1022.8	1028.1
30°	991.4	986.0	981.3	980.1	984.3
32.5°	942.2	941.0	935.1	932.7	934.5
35°	890.6	889.5	886.5	882.3	884.1
37.5°	841.5	840.9	836.7	829.6	824.9
40°	788.7	784.6	781.6	771.5	768.0
42.5°	730.6	729.5	724.1	712.9	708.7
45°	676.7	672.0	664.9	653.0	651.8
47.5°	621.0	614.5	608.0	593.2	592.6
50°	563.5	558.8	551.1	536.3	530.4
52.5°	510.2	503.7	493.0	478.8	475.8
55°	459.2	449.8	438.5	426.7	423.7
57.5°	404.7	400.6	387.0	377.5	373.9
60°	356.7	353.2	339.5	330.7	330.7
62.5°	313.5	308.1	296.3	290.4	290.4
65°	271.4	267.3	257.2	254.8	253.6
67.5°	235.3	229.9	222.8	222.2	225.2
70°	203.8	197.3	191.4	197.3	199.1
72.5°	174.2	170.1	164.7	172.4	176.0
75°	147.6	144.0	141.0	147.6	152.9
77.5°	123.3	119.7	119.7	126.8	131.6
80°	99.0	96.6	99.0	104.9	109.6
82.5°	75.8	74.1	77.0	83.0	85.9
85°	51.6	48.6	52.1	57.5	58.1
87.5°	24.3	23.7	26.1	29.6	29.0
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)