

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: P292955

Luminaire Tested: **24GR-LD5-30-F1-UNV-L82765-W2A1-U-3000K**

Issue Date: 3/3/2020

**Test Information**

Test Method: LM-79-08  
Report Number: P292955  
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-L82765-W2A1-U-3000K  
Description: GRLED 2x4 TUNABLE WHITE TROFFER  
WITH F1 LENS  
Light Source: (336) 80 CRI LEDS TUNED TO 3000K CCT  
Ballast/Driver: ELECTRONIC DRIVER

**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 2878.0 lumens  
Efficiency: N/A  
Efficacy: 145.3 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

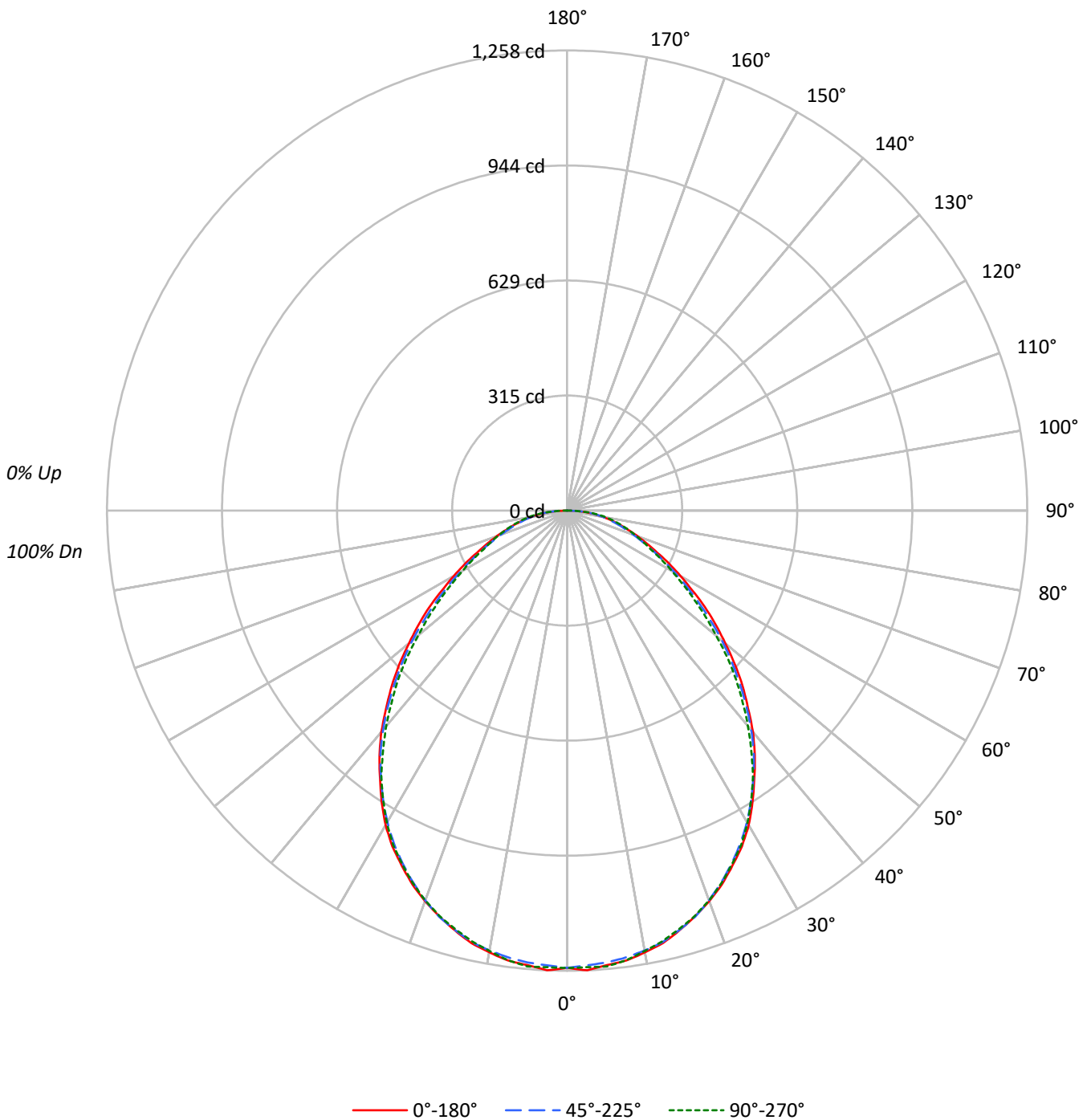
Input Watts (W): 19.809  
Input Voltage (V): 120  
Input Current (Ain): NR  
Voltage Rise (V): NR  
Power Factor: NR  
Total Harmonic Distortion (THDi): NR  
Frequency (hertz): 60  
Stabilization Time: NR  
Operation Time: NR  
Ambient Temperature (°C): NR  
Test Distance: 25 FT



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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°	1682	1682	1682
5°	1685	1675	1689
10°	1676	1668	1670
15°	1655	1653	1649
20°	1627	1623	1623
25°	1589	1580	1584
30°	1543	1527	1532
35°	1465	1459	1455
40°	1388	1375	1351
45°	1290	1267	1243
50°	1182	1156	1112
55°	1079	1031	996
60°	962	915	891
65°	866	820	809
70°	803	754	785
75°	768	735	796
80°	768	768	851
85°	797	806	898



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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	118.1	4.1
10°-20°	334.1	11.6
20°-30°	490.3	17.0
30°-40°	554.4	19.3
40°-50°	512.4	17.8
50°-60°	394.7	13.7
60°-70°	261.4	9.1
70°-80°	155.6	5.4
80°-90°	57.0	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°	942.5	32.7
0°-40°	1496.9	52.0
0°-60°	2404.0	83.5
0°-90°	2878.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	2878.0	100.0

**CANDELA DISTRIBUTION:**

	0°	22.5°	45°	67.5°	90°	Flux
0°	1250	1250	1250	1250	1250	
5°	1247	1247	1240	1241	1251	119
15°	1188	1185	1187	1186	1184	335
25°	1070	1067	1064	1063	1067	493
35°	892	891	888	884	886	558
45°	678	673	666	654	653	522
55°	460	450	439	427	424	410
65°	272	268	258	255	254	273
75°	148	144	141	148	153	158
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°	1250.1	1250.1	1250.1	1250.1	1250.1
2.5°	1257.9	1251.3	1244.2	1244.2	1249.5
5°	1247.2	1247.2	1240.0	1240.6	1250.7
7.5°	1240.6	1237.1	1232.3	1232.3	1240.0
10°	1226.4	1223.4	1221.0	1219.9	1222.2
12.5°	1211.0	1206.2	1208.0	1206.2	1205.6
15°	1187.8	1185.4	1186.6	1186.0	1183.7
17.5°	1162.9	1161.7	1164.1	1159.9	1161.7
20°	1136.2	1132.6	1133.8	1131.4	1133.8
22.5°	1105.9	1103.5	1100.5	1097.6	1102.3
25°	1070.3	1067.3	1064.3	1063.1	1066.7
27.5°	1034.7	1029.9	1025.8	1024.6	1029.9
30°	993.1	987.8	983.0	981.8	986.0
32.5°	943.8	942.6	936.7	934.3	936.1
35°	892.2	891.0	888.0	883.9	885.7
37.5°	842.9	842.3	838.2	831.0	826.3
40°	790.1	785.9	783.0	772.9	769.3
42.5°	731.9	730.7	725.4	714.1	710.0
45°	677.9	673.1	666.0	654.2	653.0
47.5°	622.1	615.6	609.0	594.2	593.6
50°	564.5	559.8	552.1	537.2	531.3
52.5°	511.1	504.6	493.9	479.6	476.7
55°	460.0	450.5	439.3	427.4	424.4
57.5°	405.4	401.3	387.6	378.1	374.6
60°	357.4	353.8	340.1	331.2	331.2
62.5°	314.0	308.7	296.8	290.9	290.9
65°	271.9	267.7	257.6	255.3	254.1
67.5°	235.7	230.3	223.2	222.6	225.6
70°	204.2	197.7	191.7	197.7	199.5
72.5°	174.5	170.4	165.0	172.7	176.3
75°	147.8	144.2	141.3	147.8	153.2
77.5°	123.5	119.9	119.9	127.0	131.8
80°	99.1	96.8	99.1	105.1	109.8
82.5°	76.0	74.2	77.2	83.1	86.1
85°	51.6	48.7	52.2	57.6	58.2
87.5°	24.3	23.7	26.1	29.7	29.1
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)