

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: P292956

Luminaire Tested: **24GR-LD5-30-F1-UNV-L82765-W2A1-U-3500K**

Issue Date: 3/3/2020

**Test Information**

Test Method: LM-79-08  
Report Number: P292956  
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-3500K  
Description: GRLED 2x4 TUNABLE WHITE TROFFER  
WITH F1 LENS  
Light Source: (336) 80 CRI LEDS TUNED TO 3500K CCT  
Ballast/Driver: ELECTRONIC DRIVER

**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 2977.0 lumens  
Efficiency: N/A  
Efficacy: 148.2 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

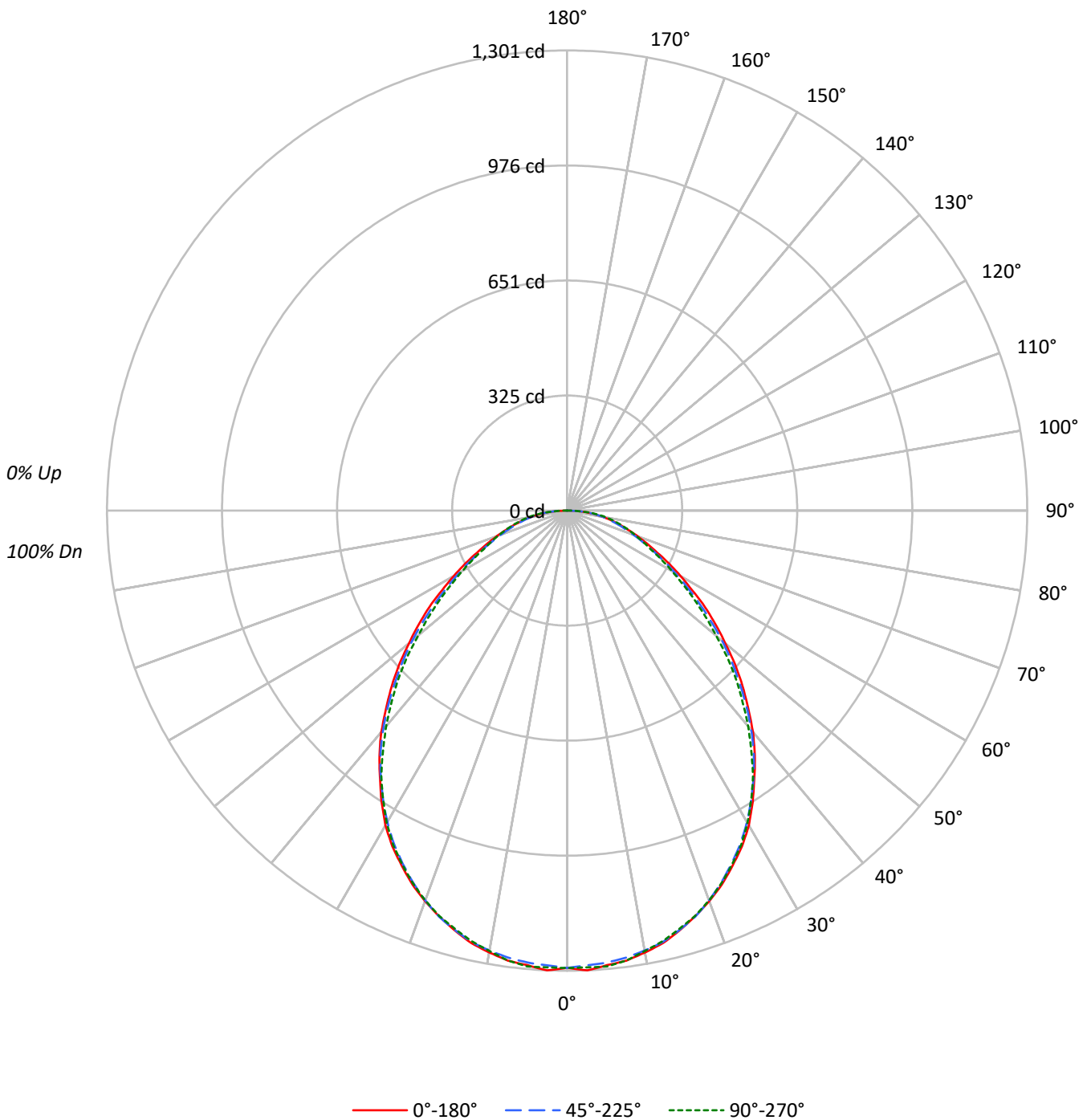
Input Watts (W): 20.088  
Input Voltage (V): 120  
Input Current (Ain): NR  
Voltage Rise (V): NR  
Power Factor: NR  
Total Harmonic Distortion (THDi): NR  
Frequency (hertz): 60  
Stabilization Time: NR  
Operation Time: NR  
Ambient Temperature (°C): NR  
Test Distance: 25 FT



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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°	1740	1740	1740
5°	1742	1732	1747
10°	1733	1726	1727
15°	1712	1710	1706
20°	1683	1679	1679
25°	1644	1634	1638
30°	1596	1580	1585
35°	1516	1509	1505
40°	1436	1423	1398
45°	1334	1311	1285
50°	1222	1195	1150
55°	1116	1066	1030
60°	995	947	922
65°	895	848	837
70°	831	780	812
75°	795	760	823
80°	794	794	880
85°	824	834	929



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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	122.1	4.1
10°-20°	345.6	11.6
20°-30°	507.2	17.0
30°-40°	573.4	19.3
40°-50°	530.0	17.8
50°-60°	408.3	13.7
60°-70°	270.4	9.1
70°-80°	160.9	5.4
80°-90°	59.0	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°	974.9	32.7
0°-40°	1548.4	52.0
0°-60°	2486.7	83.5
0°-90°	2977.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	2977.0	100.0

**CANDELA DISTRIBUTION:**

	0°	22.5°	45°	67.5°	90°	Flux
0°	1293	1293	1293	1293	1293	
5°	1290	1290	1283	1283	1294	123
15°	1229	1226	1227	1227	1224	346
25°	1107	1104	1101	1100	1103	510
35°	923	922	919	914	916	577
45°	701	696	689	677	675	540
55°	476	466	454	442	439	424
65°	281	277	266	264	263	282
75°	153	149	146	153	158	163
85°	53	50	54	60	60	57
90°	0	0	0	0	0	



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**CANDELA DISTRIBUTION (FULL):**

	0°	22.5°	45°	67.5°	90°
0°	1293.1	1293.1	1293.1	1293.1	1293.1
2.5°	1301.1	1294.4	1287.0	1287.0	1292.5
5°	1290.1	1290.1	1282.7	1283.3	1293.8
7.5°	1283.3	1279.6	1274.7	1274.7	1282.7
10°	1268.6	1265.5	1263.1	1261.8	1264.3
12.5°	1252.6	1247.7	1249.5	1247.7	1247.1
15°	1228.7	1226.2	1227.4	1226.8	1224.4
17.5°	1202.9	1201.6	1204.1	1199.8	1201.6
20°	1175.2	1171.6	1172.8	1170.3	1172.8
22.5°	1143.9	1141.5	1138.4	1135.3	1140.2
25°	1107.1	1104.0	1100.9	1099.7	1103.4
27.5°	1070.2	1065.3	1061.0	1059.8	1065.3
30°	1027.3	1021.7	1016.8	1015.6	1019.9
32.5°	976.3	975.1	968.9	966.5	968.3
35°	922.9	921.7	918.6	914.3	916.1
37.5°	871.9	871.3	867.0	859.6	854.7
40°	817.3	813.0	809.9	799.5	795.8
42.5°	757.1	755.9	750.3	738.7	734.4
45°	701.2	696.3	688.9	676.7	675.4
47.5°	643.5	636.7	630.0	614.6	614.0
50°	583.9	579.0	571.0	555.7	549.6
52.5°	528.7	521.9	510.9	496.1	493.1
55°	475.9	466.0	454.4	442.1	439.0
57.5°	419.4	415.1	401.0	391.1	387.5
60°	369.6	366.0	351.8	342.6	342.6
62.5°	324.8	319.3	307.0	300.9	300.9
65°	281.2	276.9	266.5	264.0	262.8
67.5°	243.8	238.2	230.9	230.3	233.3
70°	211.2	204.5	198.3	204.5	206.3
72.5°	180.5	176.2	170.7	178.7	182.4
75°	152.9	149.2	146.1	152.9	158.4
77.5°	127.7	124.0	124.0	131.4	136.3
80°	102.5	100.1	102.5	108.7	113.6
82.5°	78.6	76.8	79.8	86.0	89.0
85°	53.4	50.4	54.0	59.6	60.2
87.5°	25.2	24.6	27.0	30.7	30.1
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)