

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: P292961

Luminaire Tested: **24GR-LD5-30-F1-UNV-L82765-W2A1-U-5700K**

Issue Date: 3/3/2020

**Test Information**

Test Method: LM-79-08  
Report Number: P292961  
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-5700K  
Description: GRLED 2x4 TUNABLE WHITE TROFFER  
WITH F1 LENS  
Light Source: (336) 80 CRI LEDS TUNED TO 5700K CCT  
Ballast/Driver: ELECTRONIC DRIVER

**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 3178.0 lumens  
Efficiency: N/A  
Efficacy: 154.6 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

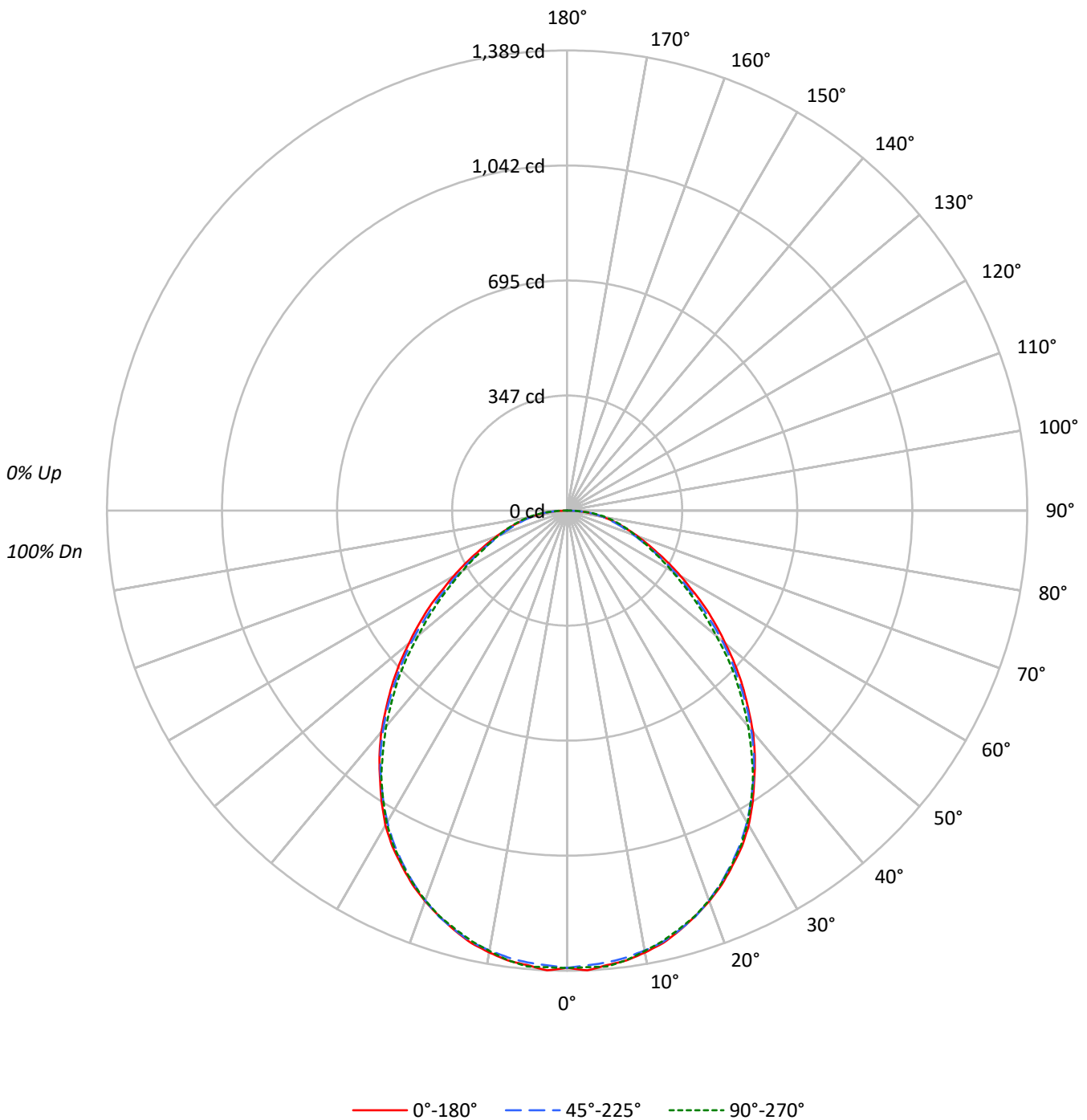
Input Watts (W): 20.553  
Input Voltage (V): 120  
Input Current (Ain): NR  
Voltage Rise (V): NR  
Power Factor: NR  
Total Harmonic Distortion (THDi): NR  
Frequency (hertz): 60  
Stabilization Time: NR  
Operation Time: NR  
Ambient Temperature (°C): NR  
Test Distance: 25 FT



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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°	1857	1857	1857
5°	1860	1849	1865
10°	1850	1842	1844
15°	1827	1825	1821
20°	1796	1793	1793
25°	1754	1745	1749
30°	1704	1686	1692
35°	1618	1611	1606
40°	1532	1519	1492
45°	1424	1400	1372
50°	1305	1276	1228
55°	1192	1138	1099
60°	1062	1011	984
65°	956	906	893
70°	887	833	866
75°	848	811	879
80°	848	848	940
85°	880	891	991



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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	130.4	4.1
10°-20°	368.9	11.6
20°-30°	541.5	17.0
30°-40°	612.2	19.3
40°-50°	565.8	17.8
50°-60°	435.9	13.7
60°-70°	288.6	9.1
70°-80°	171.8	5.4
80°-90°	62.9	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°	1040.8	32.7
0°-40°	1652.9	52.0
0°-60°	2654.6	83.5
0°-90°	3178.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	3178.0	100.0

**CANDELA DISTRIBUTION:**

	0°	22.5°	45°	67.5°	90°	Flux
0°	1380	1380	1380	1380	1380	
5°	1377	1377	1369	1370	1381	131
15°	1312	1309	1310	1310	1307	370
25°	1182	1179	1175	1174	1178	544
35°	985	984	981	976	978	616
45°	749	743	736	722	721	577
55°	508	498	485	472	469	453
65°	300	296	284	282	280	301
75°	163	159	156	163	169	174
85°	57	54	58	64	64	61
90°	0	0	0	0	0	



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**CANDELA DISTRIBUTION (FULL):**

	0°	22.5°	45°	67.5°	90°
0°	1380.4	1380.4	1380.4	1380.4	1380.4
2.5°	1389.0	1381.8	1373.9	1373.9	1379.8
5°	1377.2	1377.2	1369.3	1370.0	1381.1
7.5°	1370.0	1366.0	1360.8	1360.8	1369.3
10°	1354.2	1351.0	1348.3	1347.0	1349.6
12.5°	1337.2	1331.9	1333.9	1331.9	1331.3
15°	1311.6	1309.0	1310.3	1309.7	1307.0
17.5°	1284.1	1282.8	1285.4	1280.8	1282.8
20°	1254.6	1250.7	1252.0	1249.4	1252.0
22.5°	1221.2	1218.5	1215.3	1212.0	1217.2
25°	1181.8	1178.6	1175.3	1174.0	1177.9
27.5°	1142.5	1137.3	1132.7	1131.4	1137.3
30°	1096.6	1090.7	1085.5	1084.2	1088.8
32.5°	1042.2	1040.9	1034.4	1031.7	1033.7
35°	985.2	983.9	980.6	976.0	978.0
37.5°	930.8	930.1	925.5	917.7	912.4
40°	872.4	867.9	864.6	853.4	849.5
42.5°	808.2	806.9	801.0	788.5	784.0
45°	748.6	743.3	735.5	722.3	721.0
47.5°	686.9	679.7	672.5	656.1	655.5
50°	623.4	618.1	609.6	593.2	586.7
52.5°	564.4	557.2	545.4	529.6	526.4
55°	508.0	497.5	485.1	471.9	468.7
57.5°	447.7	443.1	428.0	417.5	413.6
60°	394.6	390.7	375.6	365.8	365.8
62.5°	346.8	340.9	327.7	321.2	321.2
65°	300.2	295.6	284.5	281.9	280.5
67.5°	260.2	254.3	246.5	245.8	249.1
70°	225.5	218.3	211.7	218.3	220.2
72.5°	192.7	188.1	182.2	190.7	194.7
75°	163.2	159.3	156.0	163.2	169.1
77.5°	136.3	132.4	132.4	140.3	145.5
80°	109.5	106.8	109.5	116.0	121.3
82.5°	83.9	81.9	85.2	91.8	95.0
85°	57.0	53.7	57.7	63.6	64.2
87.5°	26.9	26.2	28.8	32.8	32.1
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)