

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: P292966

Luminaire Tested: **24GR-LD5-34-F1-UNV-L82765-W2A1-U-4000K**

Issue Date: 3/3/2020

**Test Information**

Test Method: LM-79-08  
Report Number: P292966  
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-L82765-W2A1-U-4000K  
Description: GRLED 2x4 TUNABLE WHITE TROFFER  
WITH F1 LENS  
Light Source: (336) 80 CRI LEDS TUNED TO 4000K CCT  
Ballast/Driver: ELECTRONIC DRIVER

**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 3485.0 lumens  
Efficiency: N/A  
Efficacy: 149.9 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

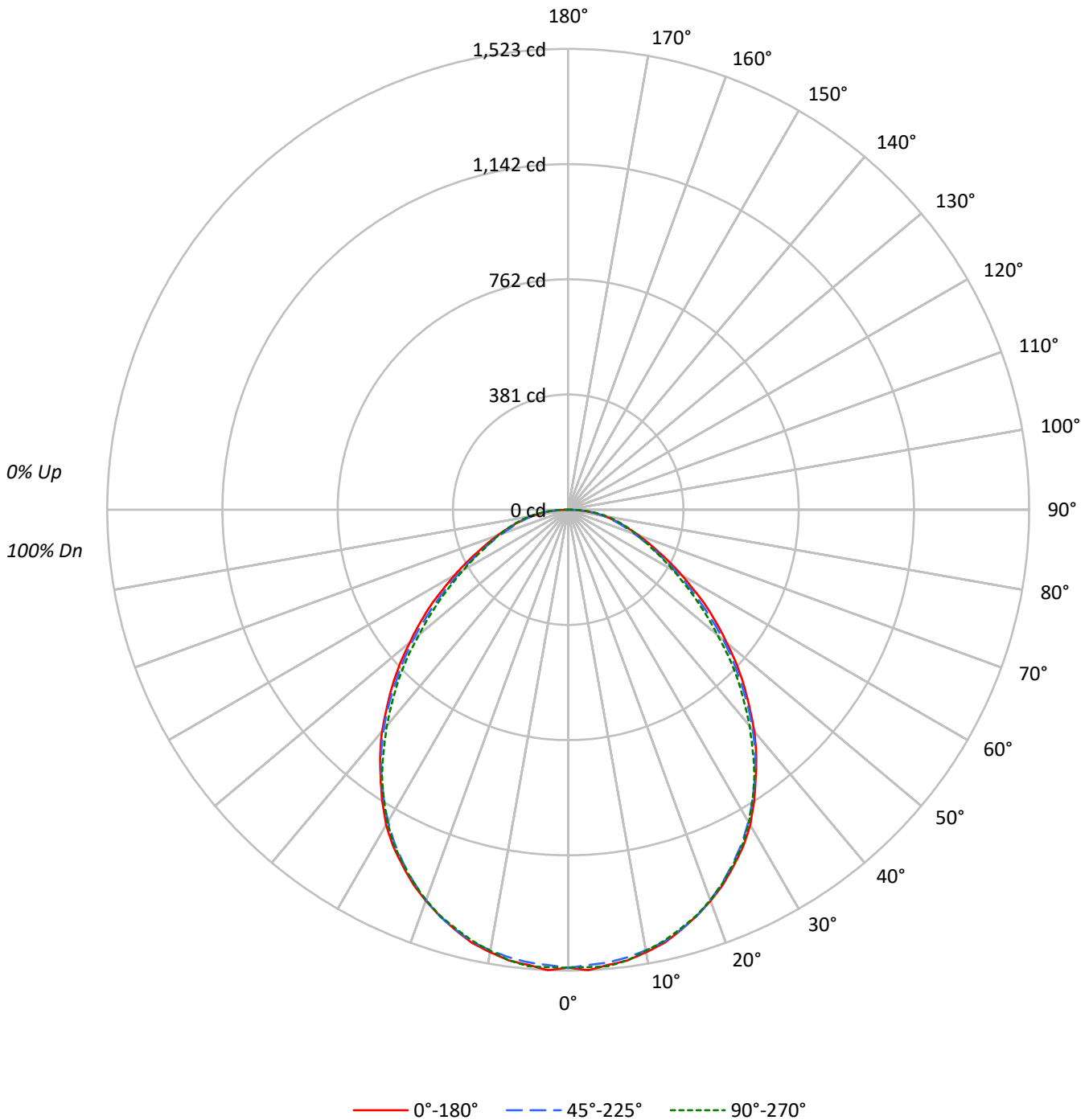
Input Watts (W): 23.25  
Input Voltage (V): 120  
Input Current (Ain): NR  
Voltage Rise (V): NR  
Power Factor: NR  
Total Harmonic Distortion (THDi): NR  
Frequency (hertz): 60  
Stabilization Time: NR  
Operation Time: NR  
Ambient Temperature (°C): NR  
Test Distance: 25 FT



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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	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°	2037	2037	2037
5°	2040	2028	2046
10°	2029	2020	2022
15°	2003	2002	1997
20°	1970	1966	1966
25°	1924	1913	1918
30°	1868	1849	1855
35°	1775	1766	1762
40°	1680	1665	1636
45°	1562	1535	1505
50°	1431	1399	1347
55°	1307	1248	1206
60°	1164	1108	1079
65°	1048	993	979
70°	973	913	950
75°	931	889	964
80°	930	930	1031
85°	965	977	1087



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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	143.0	4.1
10°-20°	404.6	11.6
20°-30°	593.8	17.0
30°-40°	671.3	19.3
40°-50°	620.4	17.8
50°-60°	478.0	13.7
60°-70°	316.5	9.1
70°-80°	188.4	5.4
80°-90°	69.0	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°	1141.3	32.7
0°-40°	1812.6	52.0
0°-60°	2911.0	83.5
0°-90°	3485.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	3485.0	100.0

**CANDELA DISTRIBUTION:**

	0°	22.5°	45°	67.5°	90°	Flux
0°	1514	1514	1514	1514	1514	
5°	1510	1510	1502	1502	1514	144
15°	1438	1436	1437	1436	1433	405
25°	1296	1292	1289	1287	1292	597
35°	1080	1079	1075	1070	1072	676
45°	821	815	806	792	791	632
55°	557	546	532	518	514	497
65°	329	324	312	309	308	330
75°	179	175	171	179	186	191
85°	62	59	63	70	70	66
90°	0	0	0	0	0	



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**CANDELA DISTRIBUTION (FULL):**

	0°	22.5°	45°	67.5°	90°
0°	1513.8	1513.8	1513.8	1513.8	1513.8
2.5°	1523.1	1515.2	1506.6	1506.6	1513.1
5°	1510.2	1510.2	1501.6	1502.3	1514.5
7.5°	1502.3	1498.0	1492.2	1492.2	1501.6
10°	1485.0	1481.5	1478.6	1477.1	1480.0
12.5°	1466.4	1460.6	1462.8	1460.6	1459.9
15°	1438.3	1435.5	1436.9	1436.2	1433.3
17.5°	1408.1	1406.7	1409.6	1404.5	1406.7
20°	1375.8	1371.5	1372.9	1370.0	1372.9
22.5°	1339.1	1336.3	1332.7	1329.1	1334.8
25°	1296.0	1292.4	1288.8	1287.4	1291.7
27.5°	1252.9	1247.1	1242.1	1240.7	1247.1
30°	1202.6	1196.1	1190.3	1188.9	1193.9
32.5°	1142.9	1141.5	1134.3	1131.4	1133.6
35°	1080.4	1078.9	1075.3	1070.3	1072.5
37.5°	1020.7	1020.0	1015.0	1006.3	1000.6
40°	956.7	951.7	948.1	935.9	931.6
42.5°	886.3	884.8	878.4	864.7	859.7
45°	820.9	815.1	806.5	792.1	790.7
47.5°	753.3	745.4	737.5	719.5	718.8
50°	683.6	677.8	668.5	650.5	643.3
52.5°	618.9	611.0	598.0	580.8	577.2
55°	557.1	545.6	531.9	517.5	513.9
57.5°	490.9	485.9	469.4	457.9	453.6
60°	432.7	428.4	411.9	401.1	401.1
62.5°	380.2	373.8	359.4	352.2	352.2
65°	329.2	324.2	312.0	309.1	307.6
67.5°	285.4	278.9	270.3	269.6	273.1
70°	247.3	239.4	232.2	239.4	241.5
72.5°	211.3	206.3	199.8	209.2	213.5
75°	179.0	174.7	171.1	179.0	185.5
77.5°	149.5	145.2	145.2	153.8	159.6
80°	120.0	117.2	120.0	127.2	133.0
82.5°	92.0	89.9	93.4	100.6	104.2
85°	62.5	58.9	63.3	69.7	70.4
87.5°	29.5	28.8	31.6	35.9	35.2
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)