

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: P292967

Luminaire Tested: **24GR-LD5-34-F1-UNV-L82765-W2A1-U-4500K**

Issue Date: 3/3/2020

**Test Information**

Test Method: LM-79-08  
Report Number: P292967  
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-4500K  
Description: GRLED 2x4 TUNABLE WHITE TROFFER  
WITH F1 LENS  
Light Source: (336) 80 CRI LEDS TUNED TO 4500K CCT  
Ballast/Driver: ELECTRONIC DRIVER

**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 3546.0 lumens  
Efficiency: N/A  
Efficacy: 151.3 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

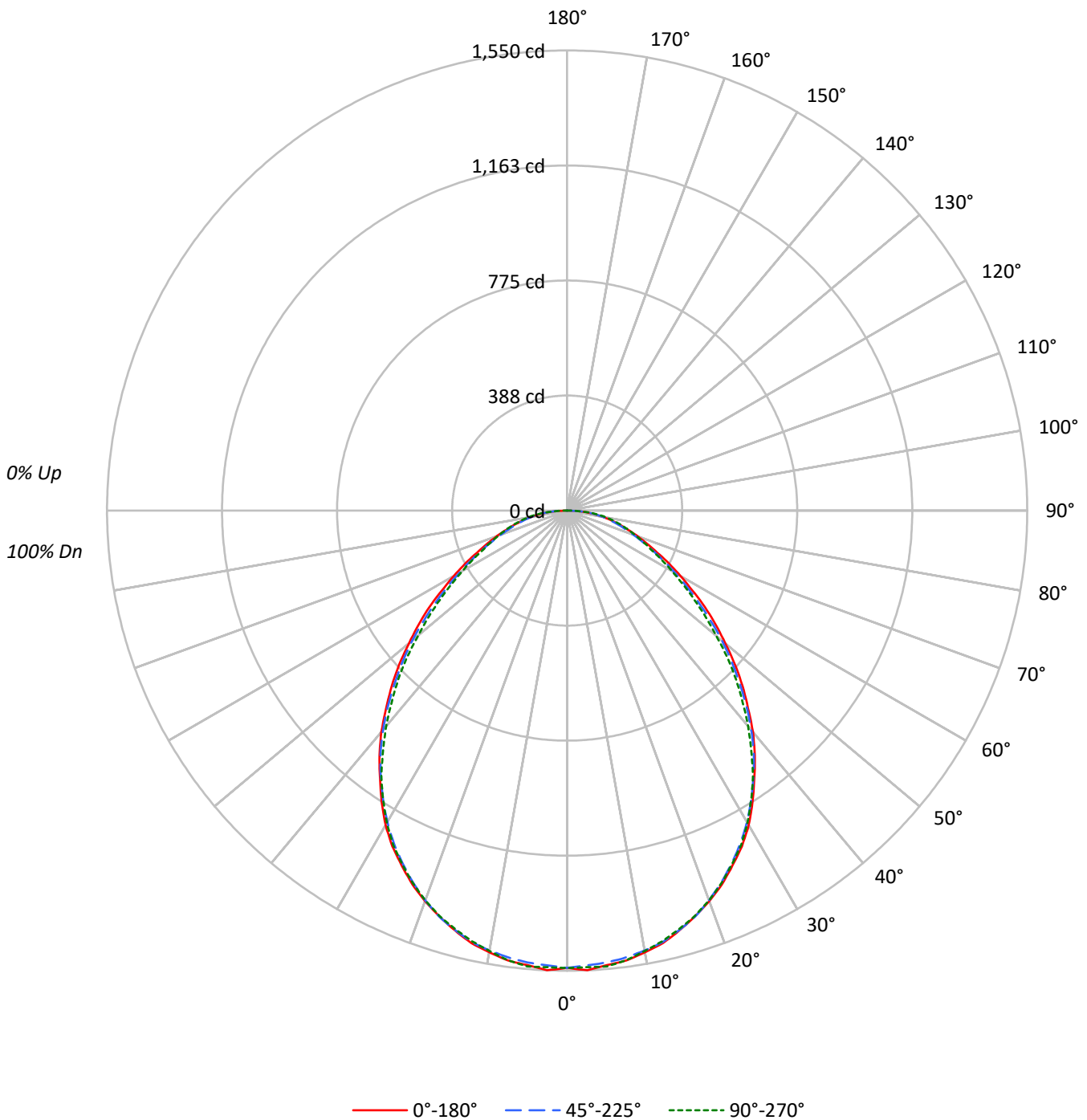
Input Watts (W): 23.436  
Input Voltage (V): 120  
Input Current (Ain): NR  
Voltage Rise (V): NR  
Power Factor: NR  
Total Harmonic Distortion (THDi): NR  
Frequency (hertz): 60  
Stabilization Time: NR  
Operation Time: NR  
Ambient Temperature (°C): NR  
Test Distance: 25 FT



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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°	2072	2072	2072
5°	2075	2064	2081
10°	2064	2056	2057
15°	2039	2036	2031
20°	2004	2000	2000
25°	1958	1947	1951
30°	1901	1882	1887
35°	1806	1797	1792
40°	1710	1694	1665
45°	1589	1561	1531
50°	1456	1424	1370
55°	1330	1270	1227
60°	1185	1128	1098
65°	1067	1011	996
70°	990	929	967
75°	947	905	981
80°	946	946	1048
85°	982	994	1107



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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	145.5	4.1
10°-20°	411.7	11.6
20°-30°	604.2	17.0
30°-40°	683.0	19.3
40°-50°	631.3	17.8
50°-60°	486.4	13.7
60°-70°	322.1	9.1
70°-80°	191.7	5.4
80°-90°	70.2	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°	1161.3	32.7
0°-40°	1844.3	52.0
0°-60°	2962.0	83.5
0°-90°	3546.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	3546.0	100.0

**CANDELA DISTRIBUTION:**

	0°	22.5°	45°	67.5°	90°	Flux
0°	1540	1540	1540	1540	1540	
5°	1537	1537	1528	1529	1541	146
15°	1464	1461	1462	1461	1458	412
25°	1319	1315	1311	1310	1314	607
35°	1099	1098	1094	1089	1091	688
45°	835	829	821	806	804	643
55°	567	555	541	527	523	506
65°	335	330	317	314	313	336
75°	182	178	174	182	189	194
85°	64	60	64	71	72	68
90°	0	0	0	0	0	



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**CANDELA DISTRIBUTION (FULL):**

	0°	22.5°	45°	67.5°	90°
0°	1540.3	1540.3	1540.3	1540.3	1540.3
2.5°	1549.8	1541.8	1533.0	1533.0	1539.6
5°	1536.6	1536.6	1527.9	1528.6	1541.0
7.5°	1528.6	1524.2	1518.4	1518.4	1527.9
10°	1511.0	1507.4	1504.5	1503.0	1505.9
12.5°	1492.0	1486.2	1488.4	1486.2	1485.4
15°	1463.5	1460.6	1462.0	1461.3	1458.4
17.5°	1432.8	1431.3	1434.2	1429.1	1431.3
20°	1399.9	1395.5	1396.9	1394.0	1396.9
22.5°	1362.6	1359.6	1356.0	1352.3	1358.2
25°	1318.7	1315.0	1311.4	1309.9	1314.3
27.5°	1274.8	1269.0	1263.8	1262.4	1269.0
30°	1223.6	1217.0	1211.2	1209.7	1214.8
32.5°	1162.9	1161.4	1154.1	1151.2	1153.4
35°	1099.3	1097.8	1094.2	1089.0	1091.2
37.5°	1038.6	1037.8	1032.7	1023.9	1018.1
40°	973.5	968.4	964.7	952.3	947.9
42.5°	901.8	900.3	893.8	879.9	874.7
45°	835.2	829.4	820.6	806.0	804.5
47.5°	766.5	758.4	750.4	732.1	731.4
50°	695.5	689.7	680.2	661.9	654.6
52.5°	629.7	621.7	608.5	591.0	587.3
55°	566.8	555.1	541.2	526.6	522.9
57.5°	499.5	494.4	477.6	465.9	461.5
60°	440.3	435.9	419.1	408.1	408.1
62.5°	386.9	380.3	365.7	358.4	358.4
65°	335.0	329.9	317.4	314.5	313.0
67.5°	290.4	283.8	275.0	274.3	277.9
70°	251.6	243.6	236.2	243.6	245.7
72.5°	215.0	209.9	203.3	212.8	217.2
75°	182.1	177.7	174.1	182.1	188.7
77.5°	152.1	147.7	147.7	156.5	162.4
80°	122.1	119.2	122.1	129.5	135.3
82.5°	93.6	91.4	95.1	102.4	106.1
85°	63.6	60.0	64.4	70.9	71.7
87.5°	30.0	29.3	32.2	36.6	35.8
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)