

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: P293052

Luminaire Tested: **24GR-LD5-42-F1-UNV-L93050-W2A1-U-4000K**

Issue Date: 3/3/2020

**Test Information**

Test Method: LM-79-08  
Report Number: P293052  
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-LD5-42-F1-UNV-L93050-W2A1-U-4000K  
Description: GRLED 2x4 TUNABLE WHITE TROFFER  
WITH F1 LENS  
Light Source: (336) 90 CRI LEDS TUNED TO 4000K CCT  
Ballast/Driver: ELECTRONIC DRIVER

**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 3848.0 lumens  
Efficiency: N/A  
Efficacy: 134.0 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

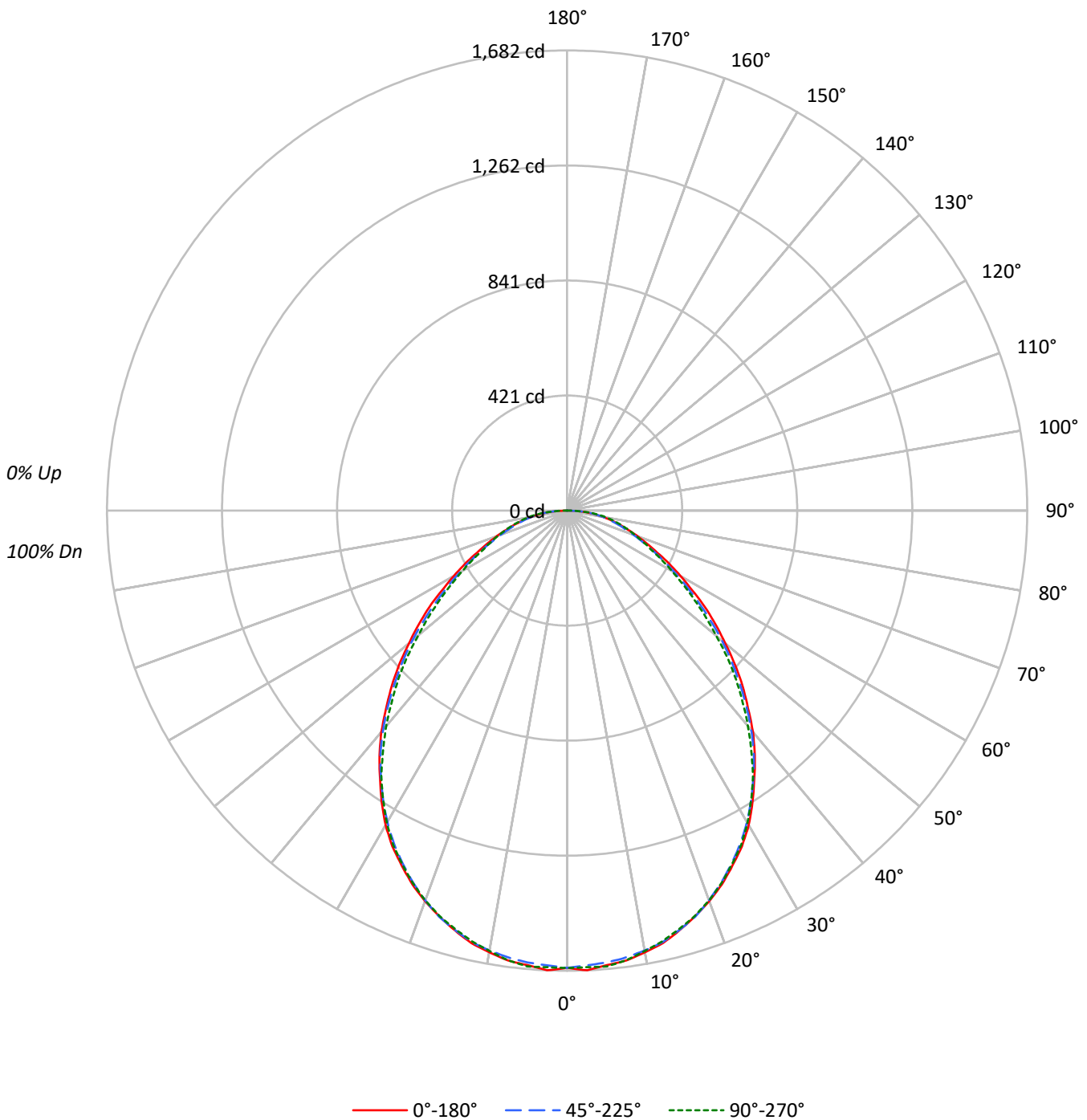
Input Watts (W): 28.720818  
Input Voltage (V): 120  
Input Current (Ain): NR  
Voltage Rise (V): NR  
Power Factor: NR  
Total Harmonic Distortion (THDi): NR  
Frequency (hertz): 60  
Stabilization Time: NR  
Operation Time: NR  
Ambient Temperature (°C): NR  
Test Distance: 25 FT



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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	0
RCR																		
0	119	119	119	119	116	116	116	116	111	111	111	106	106	106	102	102	102	100
1	109	105	101	97	107	103	99	96	98	95	93	95	92	90	91	89	87	85
2	100	93	86	81	98	91	85	80	87	82	78	84	80	76	81	78	75	72
3	92	82	74	68	90	81	73	68	78	72	67	75	70	65	72	68	64	62
4	85	73	65	59	83	72	64	58	70	63	58	67	62	57	65	60	56	54
5	78	66	58	51	76	65	57	51	63	56	50	61	55	50	59	54	49	47
6	73	60	51	45	71	59	51	45	57	50	45	56	49	44	54	48	44	42
7	68	55	46	40	66	54	46	40	52	45	40	51	44	40	50	44	39	37
8	63	50	42	36	62	49	42	36	48	41	36	47	40	36	46	40	36	34
9	59	46	38	33	58	46	38	33	44	38	33	43	37	32	42	37	32	31
10	56	43	35	30	54	42	35	30	41	34	30	40	34	30	39	34	30	28

**AVERAGE LUMINANCE (cd/sqm):**

	0°	45°	90°
0°	2249	2249	2249
5°	2252	2239	2259
10°	2240	2231	2233
15°	2212	2210	2204
20°	2175	2171	2171
25°	2124	2113	2117
30°	2063	2042	2048
35°	1959	1950	1945
40°	1855	1839	1807
45°	1725	1694	1661
50°	1580	1545	1487
55°	1443	1378	1331
60°	1286	1224	1192
65°	1157	1097	1082
70°	1074	1009	1049
75°	1027	982	1065
80°	1027	1027	1137
85°	1065	1078	1201



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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	157.9	4.1
10°-20°	446.7	11.6
20°-30°	655.6	17.0
30°-40°	741.2	19.3
40°-50°	685.0	17.8
50°-60°	527.8	13.7
60°-70°	349.5	9.1
70°-80°	208.0	5.4
80°-90°	76.2	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°	1260.2	32.7
0°-40°	2001.4	52.0
0°-60°	3214.2	83.5
0°-90°	3848.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	3848.0	100.0

**CANDELA DISTRIBUTION:**

	0°	22.5°	45°	67.5°	90°	Flux
0°	1672	1672	1672	1672	1672	
5°	1668	1668	1658	1659	1672	158
15°	1588	1585	1587	1586	1583	448
25°	1431	1427	1423	1422	1426	659
35°	1193	1191	1187	1182	1184	746
45°	906	900	890	875	873	698
55°	615	602	587	571	568	549
65°	364	358	344	341	340	364
75°	198	193	189	198	205	211
85°	69	65	70	77	78	73
90°	0	0	0	0	0	



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**CANDELA DISTRIBUTION (FULL):**

	0°	22.5°	45°	67.5°	90°
0°	1671.5	1671.5	1671.5	1671.5	1671.5
2.5°	1681.8	1673.1	1663.5	1663.5	1670.7
5°	1667.5	1667.5	1658.0	1658.8	1672.3
7.5°	1658.8	1654.0	1647.7	1647.7	1658.0
10°	1639.7	1635.8	1632.6	1631.0	1634.2
12.5°	1619.1	1612.7	1615.1	1612.7	1612.0
15°	1588.1	1585.0	1586.6	1585.8	1582.6
17.5°	1554.8	1553.2	1556.4	1550.8	1553.2
20°	1519.1	1514.3	1515.9	1512.7	1515.9
22.5°	1478.6	1475.4	1471.5	1467.5	1473.9
25°	1431.0	1427.0	1423.1	1421.5	1426.2
27.5°	1383.4	1377.0	1371.5	1369.9	1377.0
30°	1327.8	1320.7	1314.3	1312.7	1318.3
32.5°	1261.9	1260.4	1252.4	1249.2	1251.6
35°	1192.9	1191.3	1187.3	1181.8	1184.2
37.5°	1127.0	1126.2	1120.7	1111.1	1104.8
40°	1056.4	1050.8	1046.9	1033.4	1028.6
42.5°	978.6	977.0	969.9	954.8	949.2
45°	906.4	900.0	890.5	874.6	873.0
47.5°	831.8	823.0	814.3	794.5	793.7
50°	754.8	748.4	738.1	718.3	710.3
52.5°	683.4	674.6	660.3	641.3	637.3
55°	615.1	602.4	587.3	571.4	567.5
57.5°	542.1	536.5	518.3	505.6	500.8
60°	477.8	473.0	454.8	442.9	442.9
62.5°	419.9	412.7	396.8	388.9	388.9
65°	363.5	357.9	344.5	341.3	339.7
67.5°	315.1	307.9	298.4	297.6	301.6
70°	273.0	264.3	256.4	264.3	266.7
72.5°	233.3	227.8	220.6	231.0	235.7
75°	197.6	192.9	188.9	197.6	204.8
77.5°	165.1	160.3	160.3	169.8	176.2
80°	132.5	129.4	132.5	140.5	146.8
82.5°	101.6	99.2	103.2	111.1	115.1
85°	69.0	65.1	69.8	77.0	77.8
87.5°	32.5	31.7	34.9	39.7	38.9
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)