

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: P294396

Luminaire Tested: **24GR-LD5-64-FGW080-UNV-L92765-W2A1-U-3500K**

Issue Date: 3/3/2020

**Test Information**

Test Method: LM-79-08  
Report Number: P294396  
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G3-1901-084-25)  
Test Lab: INNOVATION CENTER(G3)  
Issue Date: 3/3/2020  
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)  
Product Line: METALUX  
Catalog Number: 24GR-LD5-64-FGW080-UNV-L92765-W2A1-U-3500K  
Description: GRLED 2x4 TUNABLE WHITE TROFFER  
WITH FGW080 LENS  
Light Source: (336) 90 CRI LEDS TUNED TO 3500K CCT  
Ballast/Driver: ELECTRONIC DRIVER

**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 4774.0 lumens  
Efficiency: N/A  
Efficacy: 103.7 lumens/watt  
Spacing Criteria (0/90/45): 1.25 / 1.25 / 1.36  
Luminous Opening: Rectangular (W 2' x L: 4' x H: 0')  
CIE Type: Direct

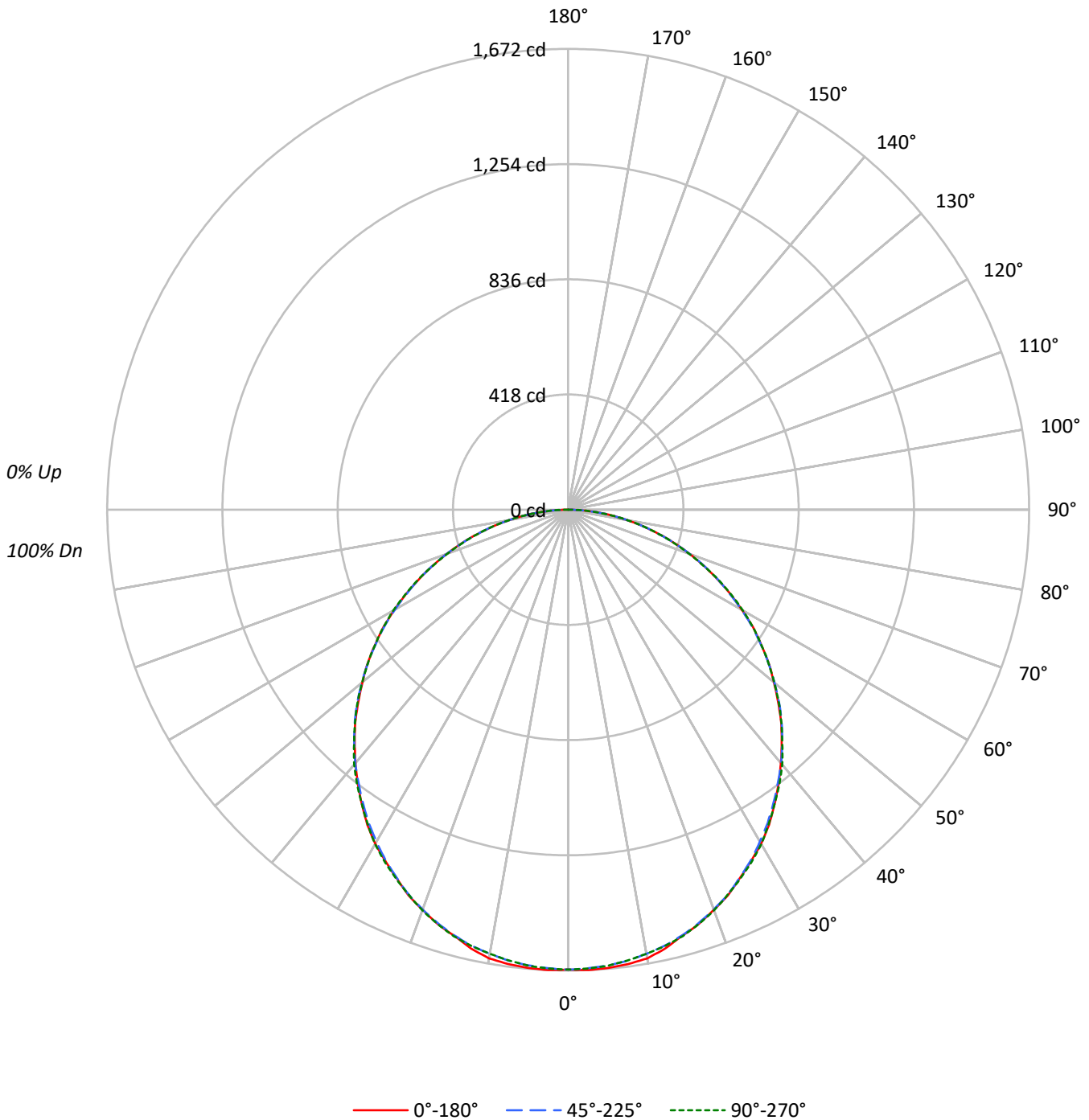
Input Watts (W): 46.035  
Input Voltage (V): 120  
Input Current (Ain): NR  
Voltage Rise (V): NR  
Power Factor: NR  
Total Harmonic Distortion (THDi): NR  
Frequency (hertz): 60  
Stabilization Time: NR  
Operation Time: NR  
Ambient Temperature (°C): NR  
Test Distance: 25 FT



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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	108	103	99	95	106	101	97	94	97	94	91	93	90	88	89	87	85	83					83			
2	98	90	83	77	96	88	82	76	84	79	74	81	77	73	78	74	71	69					69			
3	90	79	71	64	87	77	70	63	74	68	62	71	66	61	69	64	60	58					58			
4	82	70	61	54	80	68	60	54	66	59	53	64	57	52	61	56	51	49					49			
5	75	62	53	46	73	61	53	46	59	51	46	57	50	45	55	49	45	43					43			
6	70	56	47	41	68	55	47	40	53	46	40	52	45	40	50	44	39	37					37			
7	65	51	42	36	63	50	42	36	48	41	35	47	40	35	46	40	35	33					33			
8	60	46	38	32	58	46	37	32	44	37	32	43	36	31	42	36	31	29					29			
9	56	43	34	29	55	42	34	29	41	34	28	40	33	28	39	33	28	26					26			
10	53	39	31	26	51	39	31	26	38	31	26	37	30	26	36	30	26	24					24			

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

	0°	45°	90°
0°	2245	2245	2245
5°	2254	2242	2243
10°	2258	2235	2235
15°	2229	2227	2232
20°	2212	2210	2215
25°	2188	2186	2193
30°	2174	2160	2176
35°	2143	2132	2143
40°	2108	2110	2122
45°	2078	2085	2080
50°	2039	2046	2041
55°	2007	2002	2007
60°	1960	1954	1972
65°	1900	1907	1914
70°	1838	1847	1834
75°	1773	1773	1773
80°	1675	1675	1692
85°	1547	1564	1513



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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	157.8	3.3
10°-20°	451.0	9.4
20°-30°	679.7	14.2
30°-40°	814.1	17.1
40°-50°	842.7	17.7
50°-60°	764.1	16.0
60°-70°	592.4	12.4
70°-80°	360.2	7.5
80°-90°	112.1	2.3
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°	1288.5	27.0
0°-40°	2102.6	44.0
0°-60°	3709.3	77.7
0°-90°	4774.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	4774.0	100.0

**CANDELA DISTRIBUTION:**

	0°	22.5°	45°	67.5°	90°	Flux
0°	1669	1669	1669	1669	1669	
5°	1669	1658	1660	1657	1661	159
15°	1600	1601	1599	1593	1602	452
25°	1474	1474	1473	1477	1477	680
35°	1305	1296	1298	1304	1305	816
45°	1092	1094	1096	1091	1093	841
55°	856	851	853	857	856	765
65°	597	600	599	597	601	592
75°	341	340	341	340	341	360
85°	100	99	101	100	98	112
90°	0	0	0	0	0	



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**CANDELA DISTRIBUTION (FULL):**

	0°	22.5°	45°	67.5°	90°
0°	1668.6	1668.6	1668.6	1668.6	1668.6
2.5°	1671.9	1665.2	1665.2	1662.9	1666.3
5°	1668.6	1658.4	1659.6	1657.3	1660.7
7.5°	1662.9	1649.4	1650.6	1648.3	1649.4
10°	1652.8	1637.0	1635.9	1634.8	1635.9
12.5°	1630.3	1621.3	1620.2	1617.9	1621.3
15°	1599.9	1601.0	1598.8	1593.1	1602.1
17.5°	1576.2	1575.1	1572.9	1567.2	1576.2
20°	1544.7	1545.8	1543.6	1541.3	1547.0
22.5°	1514.3	1510.9	1512.1	1510.9	1512.1
25°	1473.8	1473.8	1472.7	1477.2	1477.2
27.5°	1436.6	1432.1	1434.4	1438.9	1441.1
30°	1399.5	1388.2	1390.5	1395.0	1400.6
32.5°	1355.6	1344.3	1346.6	1351.1	1353.3
35°	1304.9	1295.9	1298.2	1303.8	1304.9
37.5°	1253.1	1247.5	1249.7	1254.2	1257.6
40°	1200.2	1197.9	1201.3	1200.2	1208.1
42.5°	1146.2	1145.0	1148.4	1148.4	1149.5
45°	1092.1	1094.4	1095.5	1091.0	1093.2
47.5°	1032.4	1033.6	1038.1	1035.8	1036.9
50°	973.9	972.8	977.3	978.4	975.0
52.5°	917.6	912.0	916.5	918.7	916.5
55°	855.7	851.2	853.4	856.8	855.7
57.5°	794.9	790.4	791.5	797.1	794.9
60°	728.5	727.3	726.2	730.7	733.0
62.5°	663.1	662.0	659.8	664.3	666.5
65°	596.7	600.1	599.0	596.7	601.2
67.5°	533.7	537.0	533.7	531.4	531.4
70°	467.2	470.6	469.5	467.2	466.1
72.5°	405.3	405.3	403.1	401.9	403.1
75°	341.1	340.0	341.1	340.0	341.1
77.5°	278.1	279.2	279.2	279.2	278.1
80°	216.2	216.2	216.2	217.3	218.4
82.5°	158.8	155.4	158.8	156.5	157.6
85°	100.2	99.1	101.3	100.2	98.0
87.5°	45.0	46.2	46.2	47.3	47.3
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)