

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: P294252

Luminaire Tested: **24GR-LD5-48-FGW080-UNV-L82765-W2A1-U-3500K**

Issue Date: 3/3/2020

**Test Information**

Test Method: LM-79-08  
Report Number: P294252  
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-LD5-48-FGW080-UNV-L82765-W2A1-U-3500K  
Description: GRLED 2x4 TUNABLE WHITE TROFFER  
WITH FGW080 LENS  
Light Source: (336) 80 CRI LEDS TUNED TO 3500K CCT  
Ballast/Driver: ELECTRONIC DRIVER

**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 4129.0 lumens  
Efficiency: N/A  
Efficacy: 125.1 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

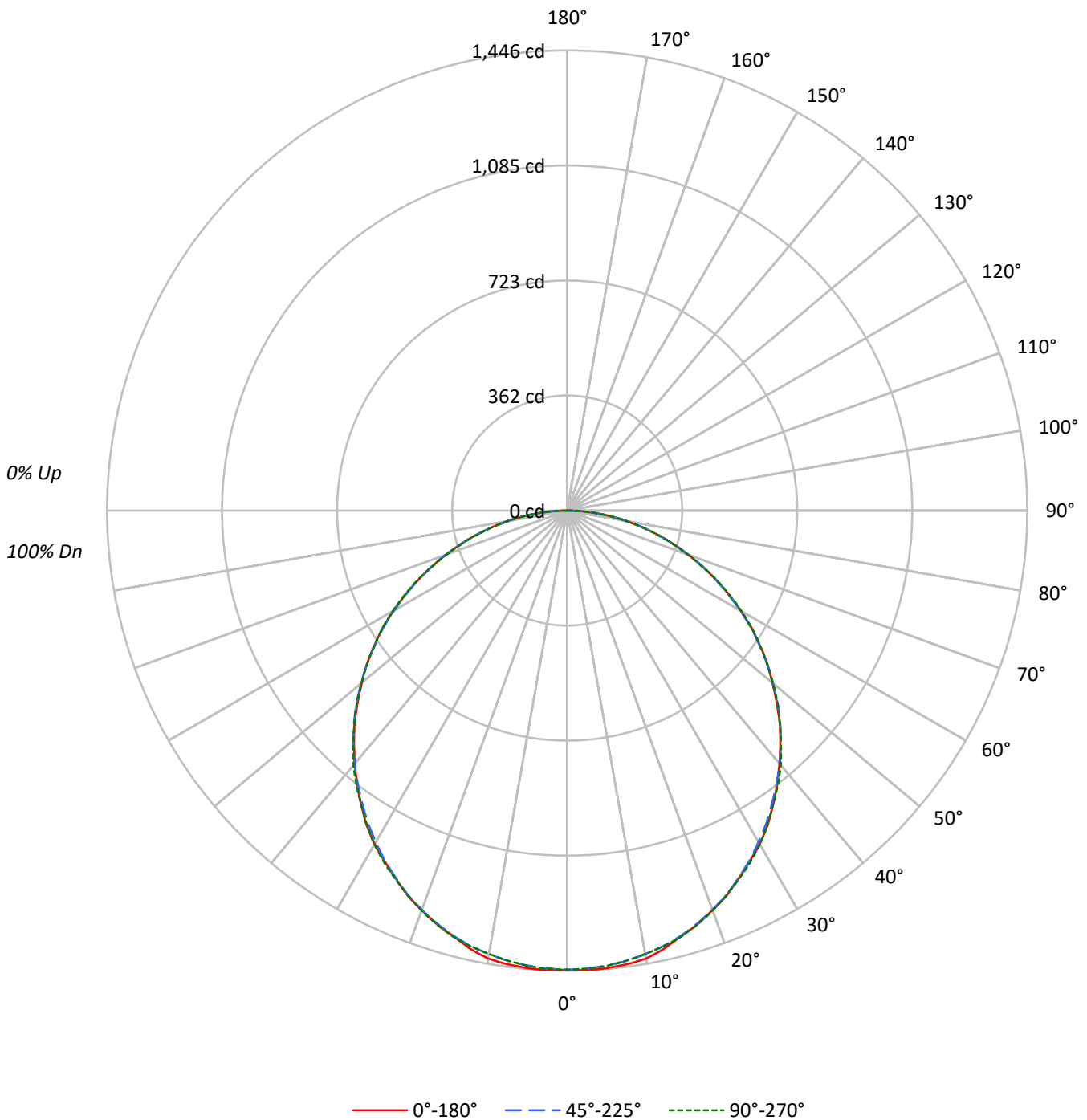
Input Watts (W): 33.015  
Input Voltage (V): 120  
Input Current (Ain): NR  
Voltage Rise (V): NR  
Power Factor: NR  
Total Harmonic Distortion (THDi): NR  
Frequency (hertz): 60  
Stabilization Time: NR  
Operation Time: NR  
Ambient Temperature (°C): NR  
Test Distance: 25 FT



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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°	1942	1942	1942
5°	1949	1939	1940
10°	1953	1933	1933
15°	1927	1926	1930
20°	1913	1912	1916
25°	1892	1891	1897
30°	1881	1868	1882
35°	1854	1844	1854
40°	1823	1825	1835
45°	1797	1803	1799
50°	1763	1769	1765
55°	1736	1731	1736
60°	1695	1690	1706
65°	1643	1649	1656
70°	1590	1598	1586
75°	1534	1534	1534
80°	1449	1449	1464
85°	1338	1352	1308



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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	136.5	3.3
10°-20°	390.1	9.4
20°-30°	587.9	14.2
30°-40°	704.1	17.1
40°-50°	728.8	17.7
50°-60°	660.8	16.0
60°-70°	512.3	12.4
70°-80°	311.6	7.5
80°-90°	96.9	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°	1114.4	27.0
0°-40°	1818.5	44.0
0°-60°	3208.2	77.7
0°-90°	4129.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	4129.0	100.0

**CANDELA DISTRIBUTION:**

	0°	22.5°	45°	67.5°	90°	Flux
0°	1443	1443	1443	1443	1443	
5°	1443	1434	1435	1433	1436	137
15°	1384	1385	1383	1378	1386	391
25°	1275	1275	1274	1278	1278	588
35°	1129	1121	1123	1128	1129	706
45°	945	946	948	944	946	728
55°	740	736	738	741	740	661
65°	516	519	518	516	520	512
75°	295	294	295	294	295	312
85°	87	86	88	87	85	97
90°	0	0	0	0	0	



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**CANDELA DISTRIBUTION (FULL):**

	0°	22.5°	45°	67.5°	90°
0°	1443.1	1443.1	1443.1	1443.1	1443.1
2.5°	1446.1	1440.2	1440.2	1438.3	1441.2
5°	1443.1	1434.4	1435.3	1433.4	1436.3
7.5°	1438.3	1426.6	1427.6	1425.6	1426.6
10°	1429.5	1415.9	1414.9	1413.9	1414.9
12.5°	1410.0	1402.2	1401.3	1399.3	1402.2
15°	1383.7	1384.7	1382.8	1377.9	1385.7
17.5°	1363.3	1362.3	1360.4	1355.5	1363.3
20°	1336.0	1337.0	1335.0	1333.1	1338.0
22.5°	1309.7	1306.8	1307.8	1306.8	1307.8
25°	1274.7	1274.7	1273.7	1277.6	1277.6
27.5°	1242.5	1238.6	1240.6	1244.5	1246.4
30°	1210.4	1200.7	1202.6	1206.5	1211.4
32.5°	1172.4	1162.7	1164.6	1168.5	1170.5
35°	1128.6	1120.8	1122.8	1127.6	1128.6
37.5°	1083.8	1078.9	1080.9	1084.8	1087.7
40°	1038.0	1036.1	1039.0	1038.0	1044.9
42.5°	991.3	990.3	993.2	993.2	994.2
45°	944.6	946.5	947.5	943.6	945.5
47.5°	893.0	893.9	897.8	895.9	896.8
50°	842.3	841.3	845.2	846.2	843.3
52.5°	793.6	788.8	792.7	794.6	792.7
55°	740.1	736.2	738.1	741.0	740.1
57.5°	687.5	683.6	684.6	689.4	687.5
60°	630.0	629.1	628.1	632.0	633.9
62.5°	573.6	572.6	570.6	574.5	576.5
65°	516.1	519.0	518.0	516.1	520.0
67.5°	461.6	464.5	461.6	459.6	459.6
70°	404.1	407.0	406.1	404.1	403.1
72.5°	350.6	350.6	348.6	347.6	348.6
75°	295.1	294.1	295.1	294.1	295.1
77.5°	240.5	241.5	241.5	241.5	240.5
80°	187.0	187.0	187.0	187.9	188.9
82.5°	137.3	134.4	137.3	135.4	136.3
85°	86.7	85.7	87.6	86.7	84.7
87.5°	39.0	39.9	39.9	40.9	40.9
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)