

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: P293181

Luminaire Tested: **24GR-LD5-48-F125-UNV-L83050-W2A1-U-3000K**

Issue Date: 3/3/2020

**Test Information**

Test Method: LM-79-08  
Report Number: P293181  
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (P33304)  
Test Lab: INNOVATION CENTER-P3  
Issue Date: 3/3/2020  
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)  
Product Line: METALUX  
Catalog Number: 24GR-LD5-48-F125-UNV-L83050-W2A1-U-3000K  
Description: GRLED 2x4 TUNABLE WHITE TROFFER  
WITH F125 LENS  
Light Source: (336) 80 CRI LEDS TUNED TO 3000K CCT  
Ballast/Driver: ELECTRONIC DRIVER

**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 4582.0 lumens  
Efficiency: N/A  
Efficacy: 140.0 lumens/watt  
Spacing Criteria (0/90/45): 1.2 / 1.19 / 1.27  
Luminous Opening: Rectangular (W 2' x L: 4' x H: 0')  
CIE Type: Direct

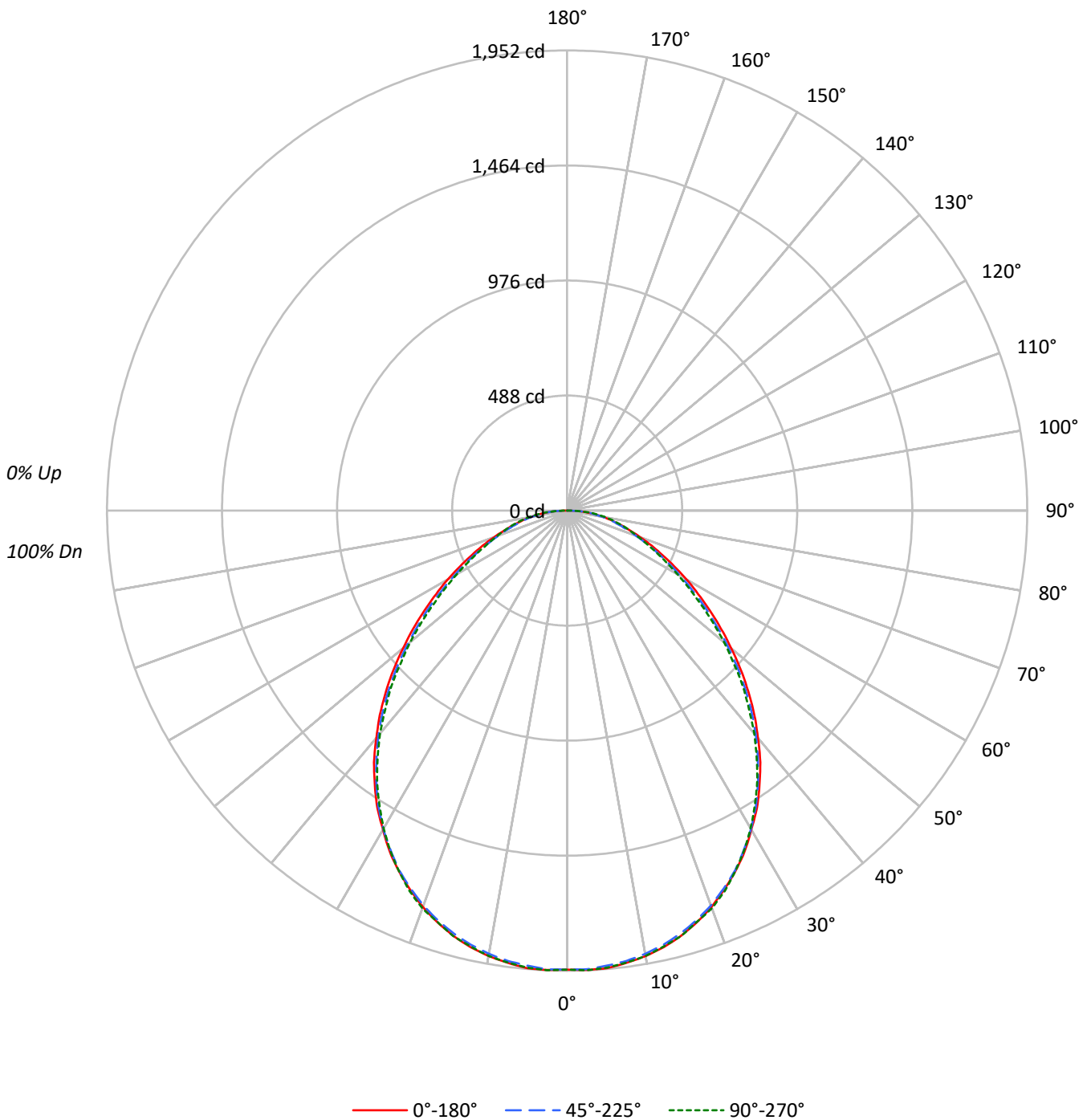
Input Watts (W): 32.736  
Input Voltage (V): 120  
Input Current (Ain): NR  
Voltage Rise (V): NR  
Power Factor: NR  
Total Harmonic Distortion (THDi): NR  
Frequency (hertz): 60  
Stabilization Time: NR  
Operation Time: NR  
Ambient Temperature (°C): NR  
Test Distance: 25 FT



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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	92	86	81	98	91	85	80	87	82	78	84	80	76	81	77	74	72
3	92	82	74	68	90	80	73	68	78	71	66	75	70	65	72	68	64	62
4	85	73	65	59	82	72	64	58	70	63	57	67	61	57	65	60	56	54
5	78	66	57	51	76	65	57	51	63	56	50	61	55	50	59	54	49	47
6	72	60	51	45	71	59	51	45	57	50	44	55	49	44	54	48	44	42
7	67	54	46	40	66	54	46	40	52	45	40	51	44	39	49	44	39	37
8	63	50	42	36	61	49	41	36	48	41	36	47	40	36	46	40	35	33
9	59	46	38	33	58	45	38	33	44	37	32	43	37	32	42	36	32	30
10	55	43	35	30	54	42	35	30	41	34	30	40	34	29	39	33	29	28

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

	0°	45°	90°
0°	2620	2620	2620
5°	2632	2618	2628
10°	2621	2609	2620
15°	2601	2587	2603
20°	2563	2552	2571
25°	2507	2501	2506
30°	2428	2424	2418
35°	2336	2319	2309
40°	2211	2186	2169
45°	2069	2030	2006
50°	1901	1850	1819
55°	1734	1670	1621
60°	1574	1490	1451
65°	1418	1338	1316
70°	1299	1214	1248
75°	1214	1158	1243
80°	1204	1182	1299
85°	1227	1238	1416



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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	184.3	4.0
10°-20°	524.0	11.4
20°-30°	774.1	16.9
30°-40°	880.0	19.2
40°-50°	821.8	17.9
50°-60°	639.1	13.9
60°-70°	424.1	9.3
70°-80°	245.4	5.4
80°-90°	89.3	1.9
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°	1482.3	32.4
0°-40°	2362.4	51.6
0°-60°	3823.3	83.4
0°-90°	4582.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	4582.0	100.0

**CANDELA DISTRIBUTION:**

	0°	22.5°	45°	67.5°	90°	Flux
0°	1947	1947	1947	1947	1947	
5°	1949	1939	1938	1942	1946	185
15°	1867	1858	1857	1856	1869	526
25°	1689	1682	1684	1681	1688	776
35°	1422	1415	1412	1402	1406	888
45°	1087	1079	1067	1054	1054	838
55°	739	728	712	693	691	663
65°	446	432	420	412	413	445
75°	234	228	223	233	239	250
85°	80	78	80	91	92	86
90°	0	0	0	0	0	



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**CANDELA DISTRIBUTION (FULL):**

	0°	22.5°	45°	67.5°	90°
0°	1947.3	1947.3	1947.3	1947.3	1947.3
2.5°	1950.2	1944.5	1947.3	1945.2	1951.6
5°	1948.8	1938.8	1938.0	1941.6	1945.9
7.5°	1935.2	1924.4	1926.6	1926.6	1933.7
10°	1918.7	1908.0	1909.4	1910.1	1918.0
12.5°	1896.5	1885.8	1886.5	1885.8	1893.6
15°	1867.1	1857.8	1857.1	1856.4	1868.6
17.5°	1831.3	1818.4	1822.7	1823.4	1829.9
20°	1789.8	1779.8	1782.6	1781.9	1795.5
22.5°	1740.4	1733.2	1735.4	1733.9	1746.8
25°	1688.8	1681.6	1684.5	1680.9	1688.1
27.5°	1630.8	1625.8	1622.9	1620.8	1625.8
30°	1562.7	1559.9	1559.9	1550.6	1556.3
32.5°	1498.3	1489.0	1489.0	1485.4	1481.8
35°	1422.4	1415.2	1411.6	1401.6	1405.9
37.5°	1346.5	1330.0	1328.6	1320.7	1320.7
40°	1259.1	1249.8	1244.8	1236.2	1234.7
42.5°	1176.0	1166.7	1158.1	1143.8	1140.9
45°	1087.2	1078.6	1067.1	1053.5	1054.2
47.5°	999.1	986.9	976.2	959.7	957.6
50°	908.1	899.5	883.8	869.5	868.8
52.5°	822.9	809.3	795.0	777.8	777.8
55°	739.1	728.4	711.9	693.3	691.1
57.5°	658.9	648.9	630.3	616.6	613.1
60°	585.1	570.8	553.6	542.2	539.3
62.5°	511.4	498.5	485.6	474.1	473.4
65°	445.5	431.9	420.4	412.5	413.2
67.5°	386.0	374.6	361.7	359.5	360.2
70°	330.2	318.0	308.7	313.7	317.3
72.5°	277.2	270.7	264.3	271.4	276.5
75°	233.5	227.8	222.7	232.8	239.2
77.5°	193.4	189.1	188.4	197.0	202.7
80°	155.4	150.4	152.6	162.6	167.6
82.5°	118.2	114.6	115.3	127.5	131.1
85°	79.5	78.1	80.2	91.0	91.7
87.5°	42.3	42.3	43.7	50.1	48.0
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)