

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: P293184

Luminaire Tested: **24GR-LD5-48-F125-UNV-L83050-W2A1-U-4500K**

Issue Date: 3/3/2020

**Test Information**

Test Method: LM-79-08  
Report Number: P293184  
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-4500K  
Description: GRLED 2x4 TUNABLE WHITE TROFFER  
WITH F125 LENS  
Light Source: (336) 80 CRI LEDS TUNED TO 4500K CCT  
Ballast/Driver: ELECTRONIC DRIVER

**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 5140.0 lumens  
Efficiency: N/A  
Efficacy: 149.4 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

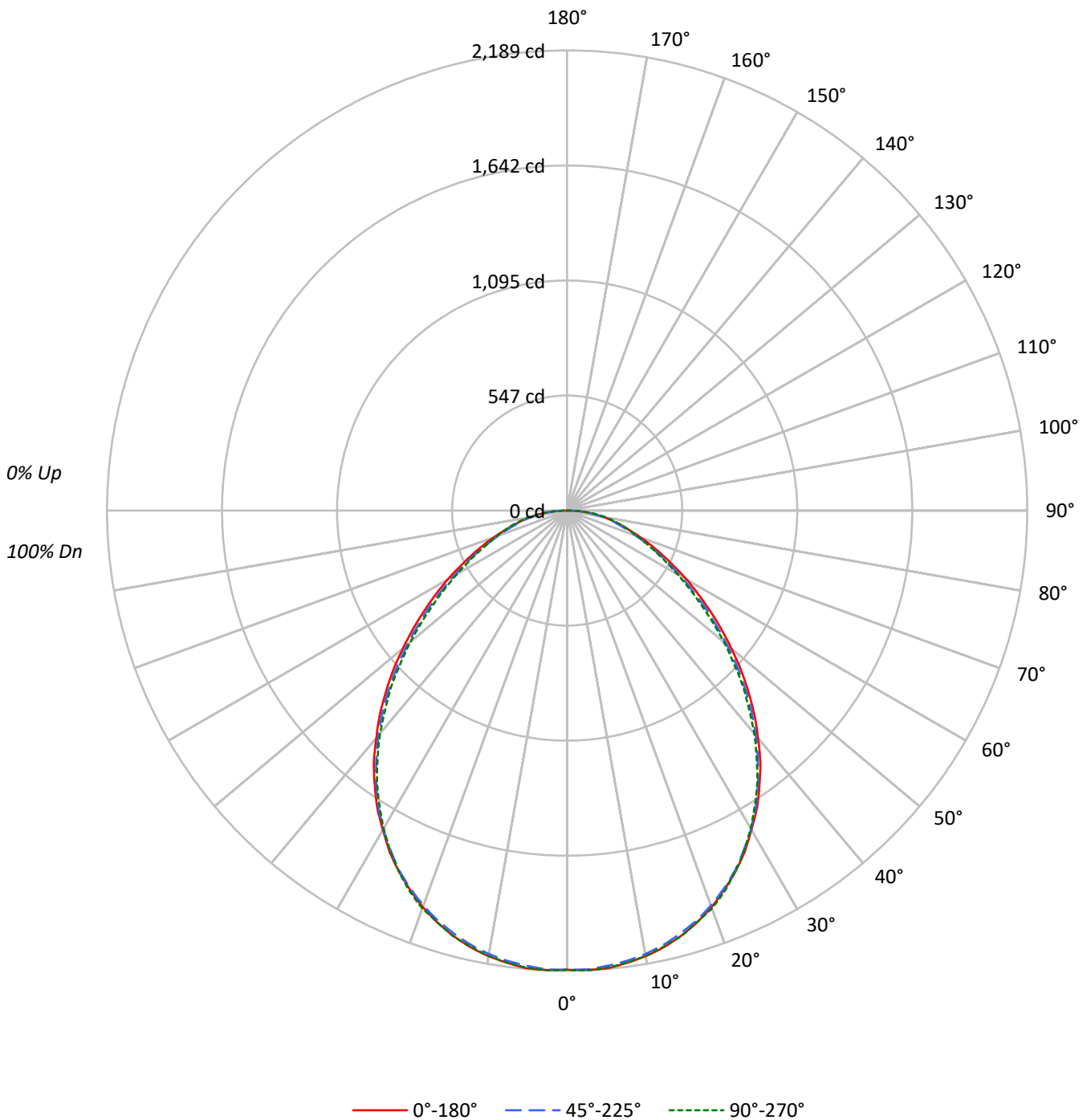
Input Watts (W): 34.41  
Input Voltage (V): 120  
Input Current (Ain): NR  
Voltage Rise (V): NR  
Power Factor: NR  
Total Harmonic Distortion (THDi): NR  
Frequency (hertz): 60  
Stabilization Time: NR  
Operation Time: NR  
Ambient Temperature (°C): NR  
Test Distance: 25 FT



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

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

	0°	45°	90°
0°	2939	2939	2939
5°	2953	2936	2948
10°	2941	2926	2940
15°	2918	2902	2920
20°	2875	2863	2884
25°	2813	2805	2811
30°	2724	2719	2712
35°	2621	2601	2590
40°	2481	2452	2433
45°	2321	2278	2250
50°	2132	2075	2040
55°	1945	1873	1819
60°	1766	1671	1628
65°	1591	1501	1476
70°	1457	1362	1400
75°	1362	1299	1395
80°	1351	1326	1457
85°	1377	1389	1587



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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	206.7	4.0
10°-20°	587.8	11.4
20°-30°	868.3	16.9
30°-40°	987.2	19.2
40°-50°	921.9	17.9
50°-60°	716.9	13.9
60°-70°	475.7	9.3
70°-80°	275.3	5.4
80°-90°	100.1	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°	1662.8	32.4
0°-40°	2650.0	51.6
0°-60°	4288.9	83.4
0°-90°	5140.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	5140.0	100.0

**CANDELA DISTRIBUTION:**

	0°	22.5°	45°	67.5°	90°	Flux
0°	2184	2184	2184	2184	2184	
5°	2186	2175	2174	2178	2183	207
15°	2094	2084	2083	2082	2096	590
25°	1894	1886	1890	1886	1894	871
35°	1596	1588	1584	1572	1577	996
45°	1220	1210	1197	1182	1183	940
55°	829	817	799	778	775	744
65°	500	484	472	463	464	499
75°	262	256	250	261	268	280
85°	89	88	90	102	103	97
90°	0	0	0	0	0	



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**CANDELA DISTRIBUTION (FULL):**

	0°	22.5°	45°	67.5°	90°
0°	2184.5	2184.5	2184.5	2184.5	2184.5
2.5°	2187.7	2181.3	2184.5	2182.1	2189.3
5°	2186.1	2174.9	2174.1	2178.1	2182.9
7.5°	2170.8	2158.8	2161.2	2161.2	2169.2
10°	2152.4	2140.3	2141.9	2142.7	2151.6
12.5°	2127.5	2115.4	2116.2	2115.4	2124.2
15°	2094.5	2084.1	2083.3	2082.5	2096.1
17.5°	2054.3	2039.9	2044.7	2045.5	2052.7
20°	2007.7	1996.5	1999.7	1998.9	2014.2
22.5°	1952.3	1944.3	1946.7	1945.1	1959.5
25°	1894.5	1886.4	1889.6	1885.6	1893.7
27.5°	1829.4	1823.8	1820.6	1818.1	1823.8
30°	1753.1	1749.8	1749.8	1739.4	1745.8
32.5°	1680.8	1670.3	1670.3	1666.3	1662.3
35°	1595.6	1587.6	1583.5	1572.3	1577.1
37.5°	1510.4	1492.0	1490.3	1481.5	1481.5
40°	1412.4	1402.0	1396.3	1386.7	1385.1
42.5°	1319.2	1308.8	1299.1	1283.1	1279.8
45°	1219.6	1210.0	1197.1	1181.8	1182.6
47.5°	1120.8	1107.1	1095.1	1076.6	1074.2
50°	1018.7	1009.1	991.4	975.4	974.5
52.5°	923.1	907.9	891.8	872.5	872.5
55°	829.1	817.1	798.6	777.7	775.3
57.5°	739.1	727.9	707.0	691.7	687.7
60°	656.4	640.3	621.0	608.2	605.0
62.5°	573.6	559.2	544.7	531.9	531.1
65°	499.7	484.5	471.6	462.8	463.6
67.5°	433.0	420.2	405.7	403.3	404.1
70°	370.4	356.7	346.3	351.9	355.9
72.5°	310.9	303.7	296.5	304.5	310.1
75°	261.9	255.5	249.9	261.1	268.3
77.5°	216.9	212.1	211.3	220.9	227.4
80°	174.3	168.7	171.1	182.4	188.0
82.5°	132.6	128.5	129.4	143.0	147.0
85°	89.2	87.6	90.0	102.0	102.8
87.5°	47.4	47.4	49.0	56.2	53.8
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)