

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: P292986

Luminaire Tested: **24GR-LD5-42-F1-UNV-L82765-W2A1-U-5000K**

Issue Date: 3/3/2020

**Test Information**

Test Method: LM-79-08  
Report Number: P292986  
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-L82765-W2A1-U-5000K  
Description: GRLED 2x4 TUNABLE WHITE TROFFER  
WITH F1 LENS  
Light Source: (336) 80 CRI LEDS TUNED TO 5000K CCT  
Ballast/Driver: ELECTRONIC DRIVER

**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 4316.0 lumens  
Efficiency: N/A  
Efficacy: 150.7 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

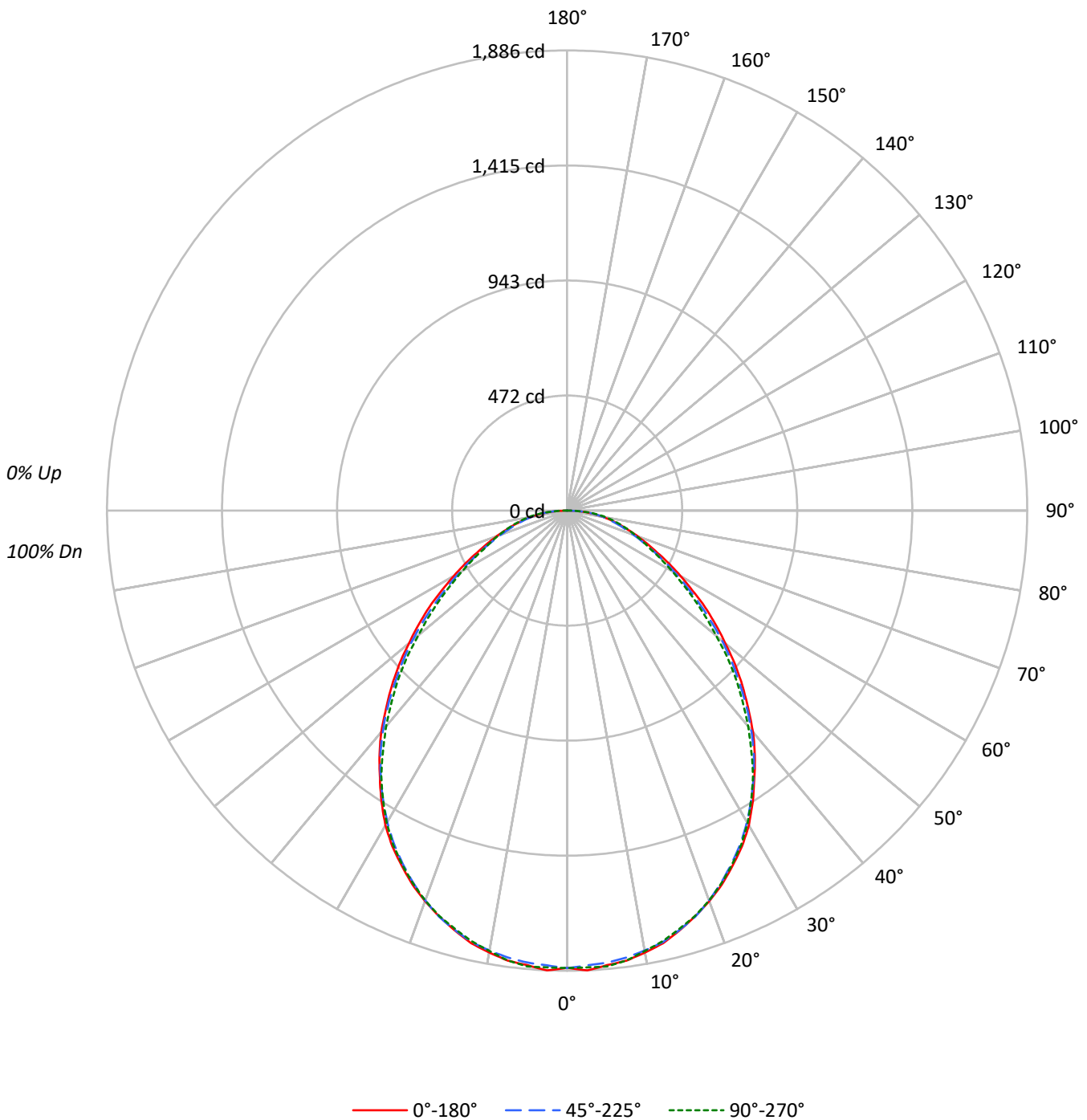
Input Watts (W): 28.644  
Input Voltage (V): 120  
Input Current (Ain): NR  
Voltage Rise (V): NR  
Power Factor: NR  
Total Harmonic Distortion (THDi): NR  
Frequency (hertz): 60  
Stabilization Time: NR  
Operation Time: NR  
Ambient Temperature (°C): NR  
Test Distance: 25 FT



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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	93	86	81	98	91	85	80	87	82	78	84	80	76	81	78	75	72					72			
3	92	82	74	68	90	81	73	68	78	72	67	75	70	65	72	68	64	62					62			
4	85	73	65	59	83	72	64	58	70	63	58	67	62	57	65	60	56	54					54			
5	78	66	58	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	45	56	49	44	54	48	44	42					42			
7	68	55	46	40	66	54	46	40	52	45	40	51	44	40	50	44	39	37					37			
8	63	50	42	36	62	49	42	36	48	41	36	47	40	36	46	40	36	34					34			
9	59	46	38	33	58	46	38	33	44	38	33	43	37	32	42	37	32	31					31			
10	56	43	35	30	54	42	35	30	41	34	30	40	34	30	39	34	30	28					28			

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

	0°	45°	90°
0°	2523	2523	2523
5°	2526	2512	2533
10°	2513	2502	2504
15°	2481	2479	2473
20°	2440	2435	2435
25°	2383	2370	2375
30°	2314	2290	2297
35°	2198	2187	2182
40°	2081	2062	2026
45°	1934	1901	1863
50°	1772	1733	1668
55°	1618	1545	1493
60°	1442	1373	1337
65°	1298	1230	1213
70°	1205	1131	1177
75°	1153	1102	1194
80°	1152	1152	1276
85°	1195	1209	1346



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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	177.1	4.1
10°-20°	501.0	11.6
20°-30°	735.4	17.0
30°-40°	831.4	19.3
40°-50°	768.3	17.8
50°-60°	592.0	13.7
60°-70°	392.0	9.1
70°-80°	233.4	5.4
80°-90°	85.5	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°	1413.4	32.7
0°-40°	2244.8	52.0
0°-60°	3605.2	83.5
0°-90°	4316.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	4316.0	100.0

**CANDELA DISTRIBUTION:**

	0°	22.5°	45°	67.5°	90°	Flux
0°	1875	1875	1875	1875	1875	
5°	1870	1870	1860	1860	1876	178
15°	1781	1778	1780	1779	1775	502
25°	1605	1601	1596	1594	1600	739
35°	1338	1336	1332	1326	1328	837
45°	1017	1010	999	981	979	783
55°	690	676	659	641	636	615
65°	408	402	386	383	381	409
75°	222	216	212	222	230	236
85°	77	73	78	86	87	82
90°	0	0	0	0	0	



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**CANDELA DISTRIBUTION (FULL):**

	0°	22.5°	45°	67.5°	90°
0°	1874.8	1874.8	1874.8	1874.8	1874.8
2.5°	1886.3	1876.5	1865.9	1865.9	1873.9
5°	1870.3	1870.3	1859.6	1860.5	1875.7
7.5°	1860.5	1855.2	1848.1	1848.1	1859.6
10°	1839.2	1834.7	1831.1	1829.4	1832.9
12.5°	1816.0	1808.9	1811.6	1808.9	1808.0
15°	1781.3	1777.7	1779.5	1778.6	1775.1
17.5°	1743.9	1742.1	1745.7	1739.5	1742.1
20°	1703.8	1698.5	1700.3	1696.7	1700.3
22.5°	1658.4	1654.9	1650.4	1646.0	1653.1
25°	1605.0	1600.6	1596.1	1594.4	1599.7
27.5°	1551.6	1544.5	1538.3	1536.5	1544.5
30°	1489.3	1481.3	1474.2	1472.4	1478.6
32.5°	1415.4	1413.6	1404.7	1401.2	1403.9
35°	1338.0	1336.2	1331.7	1325.5	1328.2
37.5°	1264.1	1263.2	1257.0	1246.3	1239.2
40°	1184.9	1178.6	1174.2	1159.0	1153.7
42.5°	1097.6	1095.8	1087.8	1070.9	1064.7
45°	1016.6	1009.5	998.8	981.0	979.2
47.5°	932.9	923.1	913.3	891.1	890.2
50°	846.6	839.5	827.9	805.6	796.7
52.5°	766.5	756.7	740.6	719.3	714.8
55°	689.9	675.7	658.8	640.9	636.5
57.5°	608.0	601.8	581.3	567.1	561.7
60°	535.9	530.6	510.1	496.7	496.7
62.5°	470.9	462.9	445.1	436.2	436.2
65°	407.7	401.5	386.3	382.8	381.0
67.5°	353.4	345.4	334.7	333.8	338.3
70°	306.2	296.4	287.5	296.4	299.1
72.5°	261.7	255.5	247.5	259.0	264.4
75°	221.7	216.3	211.9	221.7	229.7
77.5°	185.2	179.8	179.8	190.5	197.6
80°	148.7	145.1	148.7	157.6	164.7
82.5°	113.9	111.3	115.7	124.6	129.1
85°	77.4	73.0	78.3	86.3	87.2
87.5°	36.5	35.6	39.2	44.5	43.6
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)