

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: P293228

Luminaire Tested: **24GR-LD5-38-F125-UNV-L82765-W2A1-U-4500K**

Issue Date: 3/3/2020

**Test Information**

Test Method: LM-79-08  
Report Number: P293228  
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-LD5-38-F125-UNV-L82765-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: 3909.0 lumens  
Efficiency: N/A  
Efficacy: 151.2 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

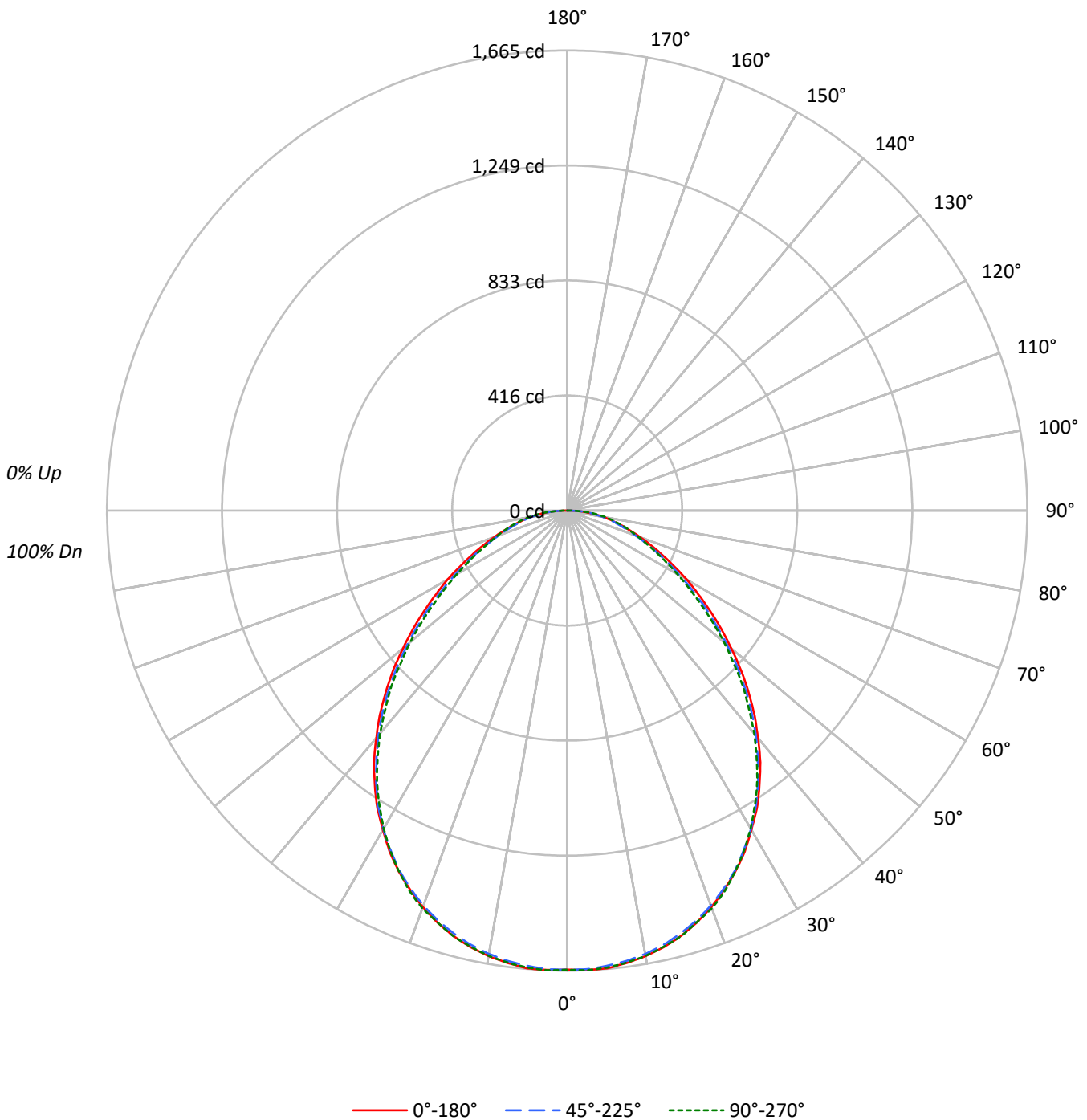
Input Watts (W): 25.854  
Input Voltage (V): 120  
Input Current (Ain): NR  
Voltage Rise (V): NR  
Power Factor: NR  
Total Harmonic Distortion (THDi): NR  
Frequency (hertz): 60  
Stabilization Time: NR  
Operation Time: NR  
Ambient Temperature (°C): NR  
Test Distance: 25 FT



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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	72	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°	2235	2235	2235
5°	2245	2233	2242
10°	2236	2225	2236
15°	2219	2207	2221
20°	2186	2178	2193
25°	2139	2133	2138
30°	2071	2068	2063
35°	1993	1978	1970
40°	1887	1865	1850
45°	1765	1732	1711
50°	1622	1578	1551
55°	1479	1425	1383
60°	1343	1271	1238
65°	1210	1142	1123
70°	1108	1036	1065
75°	1036	988	1061
80°	1027	1008	1108
85°	1047	1056	1207



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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	157.2	4.0
10°-20°	447.0	11.4
20°-30°	660.4	16.9
30°-40°	750.8	19.2
40°-50°	701.1	17.9
50°-60°	545.2	13.9
60°-70°	361.8	9.3
70°-80°	209.4	5.4
80°-90°	76.1	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°	1264.6	32.4
0°-40°	2015.4	51.6
0°-60°	3261.7	83.4
0°-90°	3909.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	3909.0	100.0

**CANDELA DISTRIBUTION:**

	0°	22.5°	45°	67.5°	90°	Flux
0°	1661	1661	1661	1661	1661	
5°	1662	1654	1653	1656	1660	158
15°	1593	1585	1584	1584	1594	449
25°	1441	1435	1437	1434	1440	662
35°	1214	1207	1204	1196	1199	758
45°	928	920	910	899	899	715
55°	631	621	607	592	590	565
65°	380	368	359	352	353	380
75°	199	194	190	199	204	213
85°	68	67	68	78	78	74
90°	0	0	0	0	0	



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**CANDELA DISTRIBUTION (FULL):**

	0°	22.5°	45°	67.5°	90°
0°	1661.3	1661.3	1661.3	1661.3	1661.3
2.5°	1663.8	1658.9	1661.3	1659.5	1665.0
5°	1662.5	1654.0	1653.4	1656.4	1660.1
7.5°	1650.9	1641.8	1643.6	1643.6	1649.7
10°	1636.9	1627.7	1628.9	1629.6	1636.3
12.5°	1617.9	1608.8	1609.4	1608.8	1615.5
15°	1592.9	1584.9	1584.3	1583.7	1594.1
17.5°	1562.3	1551.3	1555.0	1555.6	1561.1
20°	1526.9	1518.3	1520.8	1520.2	1531.8
22.5°	1484.7	1478.6	1480.5	1479.2	1490.2
25°	1440.8	1434.6	1437.1	1434.0	1440.1
27.5°	1391.3	1387.0	1384.5	1382.7	1387.0
30°	1333.2	1330.8	1330.8	1322.8	1327.7
32.5°	1278.2	1270.3	1270.3	1267.2	1264.2
35°	1213.5	1207.3	1204.3	1195.7	1199.4
37.5°	1148.7	1134.6	1133.4	1126.7	1126.7
40°	1074.1	1066.2	1061.9	1054.6	1053.4
42.5°	1003.3	995.3	988.0	975.8	973.3
45°	927.5	920.2	910.4	898.8	899.4
47.5°	852.4	842.0	832.8	818.7	816.9
50°	774.8	767.4	754.0	741.8	741.1
52.5°	702.0	690.4	678.2	663.6	663.6
55°	630.6	621.4	607.3	591.5	589.6
57.5°	562.1	553.6	537.7	526.1	523.0
60°	499.2	487.0	472.3	462.5	460.1
62.5°	436.3	425.3	414.3	404.5	403.9
65°	380.0	368.4	358.7	351.9	352.6
67.5°	329.3	319.6	308.6	306.7	307.3
70°	281.7	271.3	263.3	267.6	270.7
72.5°	236.5	231.0	225.5	231.6	235.8
75°	199.2	194.3	190.0	198.6	204.1
77.5°	165.0	161.3	160.7	168.0	172.9
80°	132.6	128.3	130.1	138.7	143.0
82.5°	100.8	97.8	98.4	108.8	111.8
85°	67.8	66.6	68.4	77.6	78.2
87.5°	36.0	36.0	37.3	42.8	40.9
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)