

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: P475552

Luminaire Tested: **24GR-LD5-34-F1-UNV-L840-CD1-U**

Issue Date: 02/10/2021

Test Information

Test Method: LM-79-08
Report Number: P475552
Test Lab: INNOVATION CENTER(G3)
Issue Date: 02/10/2021
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: METALUX
Catalog Number: 24GR-LD5-34-F1-UNV-L840-CD1-U
Description: GR 2'X4' LED TROFFER w/ F1 LENS
Light Source: 4000K CCT, 80 CRI LEDS
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 3517.5 lumens
Efficiency: N/A
Efficacy: 146.6 lumens/watt
Spacing Criteria (0/90/45): 1.21 / 1.24 / 1.34
Luminous Opening: Rectangular (W 2' x L: 4' x H: 0')
CIE Type: Direct

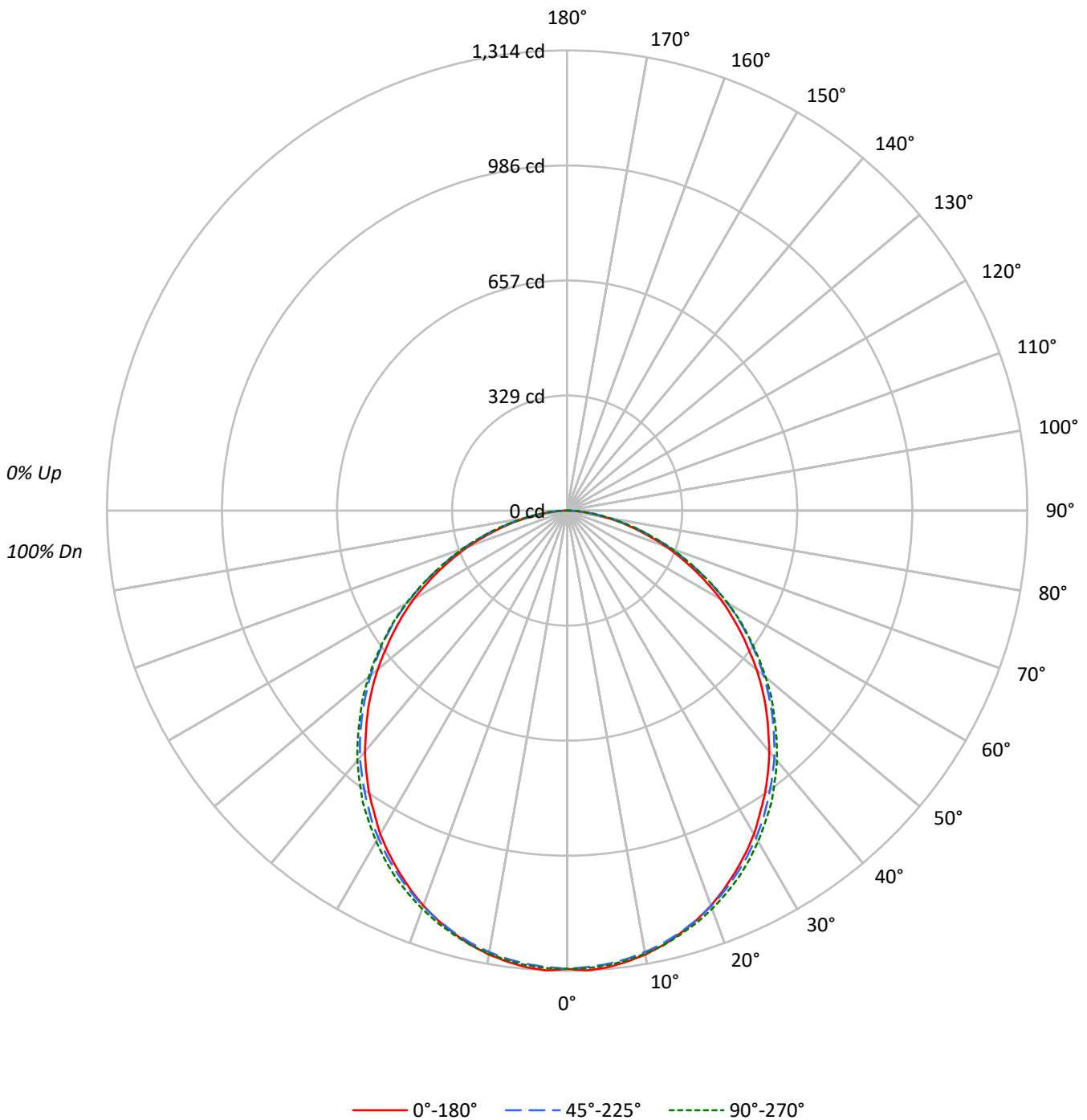
Input Watts (W): 24
Input Voltage (V): 120
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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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	104	100	96	106	102	98	95	98	95	92		94	91	89		90	88	86	84
2	99	91	84	79	97	89	83	78	86	81	76		82	78	74		79	76	73	70
3	91	80	72	66	88	79	71	65	76	69	64		73	67	63		70	66	62	60
4	83	71	62	56	81	70	62	55	67	60	55		65	59	54		63	58	53	51
5	76	64	55	48	74	63	54	48	60	53	47		58	52	47		57	51	46	44
6	71	57	48	42	69	56	48	42	55	47	42		53	46	41		51	45	41	39
7	65	52	43	37	64	51	43	37	50	42	37		48	42	37		47	41	36	34
8	61	48	39	33	59	47	39	33	46	38	33		44	38	33		43	37	33	31
9	57	44	35	30	56	43	35	30	42	35	30		41	34	30		40	34	29	28
10	53	40	32	27	52	40	32	27	39	32	27		38	31	27		37	31	27	25

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	1761	1761	1761
5°	1769	1756	1761
10°	1758	1749	1755
15°	1741	1738	1745
20°	1719	1721	1733
25°	1688	1700	1717
30°	1658	1676	1695
35°	1618	1645	1670
40°	1577	1617	1637
45°	1530	1577	1593
50°	1478	1535	1549
55°	1420	1483	1491
60°	1362	1422	1428
65°	1276	1337	1333
70°	1182	1236	1249
75°	1048	1108	1116
80°	872	935	957
85°	661	724	815



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	123.7	3.5
10°-20°	352.2	10.0
20°-30°	527.7	15.0
30°-40°	626.0	17.8
40°-50°	635.8	18.1
50°-60°	559.9	15.9
60°-70°	411.4	11.7
70°-80°	223.8	6.4
80°-90°	57.0	1.6
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°	1003.5	28.5
0°-40°	1629.6	46.3
0°-60°	2825.3	80.3
0°-90°	3517.5	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	3517.5	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	1309	1309	1309	1309	1309	
5°	1310	1304	1300	1300	1304	124
15°	1250	1247	1247	1249	1253	352
25°	1137	1139	1145	1152	1157	524
35°	985	991	1002	1012	1017	616
45°	804	811	829	838	837	620
55°	605	614	632	638	636	541
65°	401	407	420	423	419	397
75°	202	206	213	214	215	214
85°	43	44	47	51	53	52
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	1308.8	1308.8	1308.8	1308.8	1308.8
2.5°	1314.3	1309.1	1304.7	1304.7	1307.8
5°	1309.5	1304.0	1300.2	1300.2	1303.6
7.5°	1299.5	1295.0	1291.9	1291.9	1295.7
10°	1287.1	1282.6	1280.2	1280.5	1284.6
12.5°	1270.5	1266.4	1265.3	1266.0	1271.2
15°	1249.8	1247.4	1247.4	1249.1	1252.9
17.5°	1226.7	1224.3	1226.0	1228.4	1233.2
20°	1200.5	1198.7	1201.9	1205.6	1210.1
22.5°	1170.5	1169.8	1174.9	1180.1	1184.6
25°	1137.3	1138.7	1144.9	1151.5	1156.7
27.5°	1103.2	1104.6	1113.2	1120.1	1125.3
30°	1067.0	1067.7	1078.7	1087.0	1090.8
32.5°	1024.9	1030.4	1042.1	1050.1	1053.5
35°	985.2	990.7	1001.8	1011.8	1017.0
37.5°	942.1	946.9	961.4	972.1	973.8
40°	897.9	902.4	920.4	929.3	932.1
42.5°	849.6	858.3	874.5	883.5	885.2
45°	804.1	810.7	828.6	838.3	837.2
47.5°	755.5	762.7	780.3	789.6	791.3
50°	706.1	714.4	733.4	739.6	739.9
52.5°	654.4	665.1	682.3	690.6	687.9
55°	605.4	614.0	632.3	638.2	635.8
57.5°	555.0	564.7	581.6	584.7	585.1
60°	506.1	514.0	528.5	531.6	530.6
62.5°	452.2	460.2	473.3	476.4	474.0
65°	400.8	407.4	419.8	422.9	418.8
67.5°	349.8	356.3	366.0	370.8	366.4
70°	300.5	305.6	314.3	317.0	317.4
72.5°	248.0	257.3	263.6	263.2	262.2
75°	201.5	205.6	213.2	213.9	214.6
77.5°	157.0	158.0	165.9	168.0	166.6
80°	112.5	116.3	120.7	123.2	123.5
82.5°	74.2	76.9	80.7	84.9	84.9
85°	42.8	43.8	46.9	51.1	52.8
87.5°	17.2	19.0	22.1	25.2	25.5
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)