

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: P475569

Luminaire Tested: **24GR-LD5-42-F1-UNV-L850-CD1-U**

Issue Date: 02/10/2021

Test Information

Test Method: LM-79-08
Report Number: P475569
Test Lab: INNOVATION CENTER(G3)
Issue Date: 02/10/2021
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: METALUX
Catalog Number: 24GR-LD5-42-F1-UNV-L850-CD1-U
Description: GR 2'X4' LED TROFFER w/ F1 LENS
Light Source: 5000K CCT, 80 CRI LEDS
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 4374.6 lumens
Efficiency: N/A
Efficacy: 144.4 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

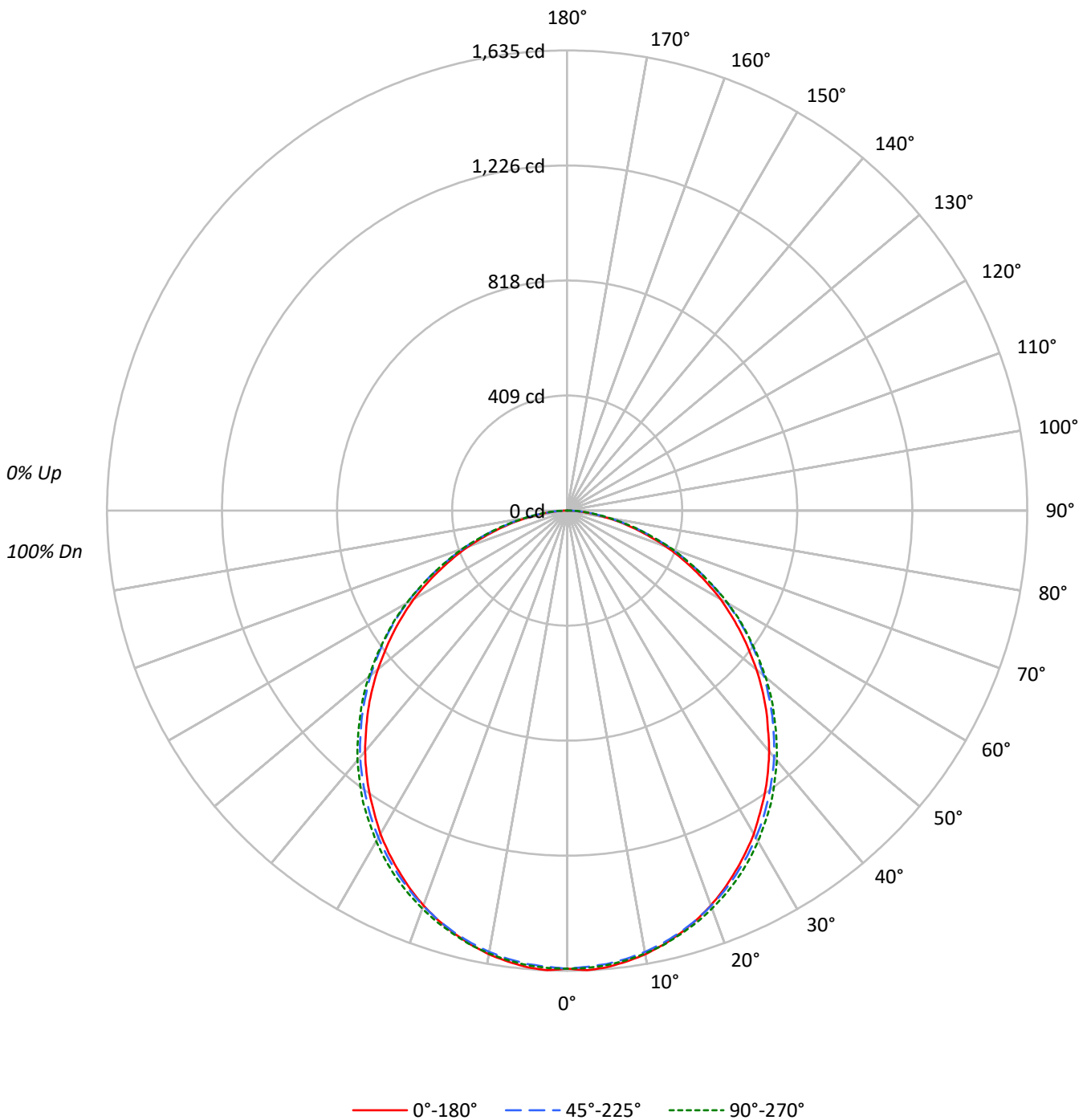
Input Watts (W): 30.3
Input Voltage (V): 120
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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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°	2190	2190	2190
5°	2200	2184	2190
10°	2187	2175	2183
15°	2165	2161	2170
20°	2138	2140	2155
25°	2100	2114	2136
30°	2062	2084	2108
35°	2013	2046	2077
40°	1962	2010	2036
45°	1903	1961	1981
50°	1838	1909	1926
55°	1766	1845	1855
60°	1694	1769	1776
65°	1587	1662	1658
70°	1470	1537	1553
75°	1303	1378	1387
80°	1084	1164	1190
85°	821	900	1013



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	153.8	3.5
10°-20°	438.0	10.0
20°-30°	656.2	15.0
30°-40°	778.6	17.8
40°-50°	790.7	18.1
50°-60°	696.4	15.9
60°-70°	511.7	11.7
70°-80°	278.3	6.4
80°-90°	70.9	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°	1248.1	28.5
0°-40°	2026.7	46.3
0°-60°	3513.7	80.3
0°-90°	4374.6	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	4374.6	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	1628	1628	1628	1628	1628	
5°	1629	1622	1617	1617	1621	154
15°	1554	1551	1551	1554	1558	438
25°	1414	1416	1424	1432	1438	652
35°	1225	1232	1246	1258	1265	766
45°	1000	1008	1030	1042	1041	771
55°	753	764	786	794	791	673
65°	498	507	522	526	521	494
75°	251	256	265	266	267	267
85°	53	54	58	64	66	64
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	1627.7	1627.7	1627.7	1627.7	1627.7
2.5°	1634.6	1628.2	1622.6	1622.6	1626.4
5°	1628.6	1621.7	1617.0	1617.0	1621.3
7.5°	1616.1	1610.6	1606.7	1606.7	1611.4
10°	1600.7	1595.1	1592.1	1592.5	1597.7
12.5°	1580.1	1575.0	1573.7	1574.5	1581.0
15°	1554.4	1551.4	1551.4	1553.5	1558.2
17.5°	1525.6	1522.6	1524.8	1527.8	1533.8
20°	1493.0	1490.9	1494.7	1499.4	1505.0
22.5°	1455.7	1454.8	1461.3	1467.7	1473.3
25°	1414.5	1416.2	1423.9	1432.1	1438.5
27.5°	1372.0	1373.7	1384.5	1393.0	1399.5
30°	1327.0	1327.8	1341.6	1351.9	1356.6
32.5°	1274.6	1281.5	1296.1	1306.0	1310.2
35°	1225.3	1232.2	1245.9	1258.3	1264.8
37.5°	1171.7	1177.7	1195.7	1209.0	1211.1
40°	1116.8	1122.3	1144.6	1155.8	1159.2
42.5°	1056.7	1067.4	1087.6	1098.7	1100.9
45°	1000.1	1008.2	1030.5	1042.5	1041.2
47.5°	939.6	948.6	970.5	982.0	984.2
50°	878.2	888.5	912.1	919.8	920.3
52.5°	813.9	827.2	848.6	858.9	855.5
55°	752.9	763.7	786.4	793.7	790.7
57.5°	690.3	702.3	723.3	727.2	727.6
60°	629.4	639.2	657.3	661.1	659.8
62.5°	562.5	572.3	588.6	592.5	589.5
65°	498.5	506.7	522.1	526.0	520.8
67.5°	435.0	443.2	455.2	461.2	455.6
70°	373.7	380.1	390.8	394.3	394.7
72.5°	308.5	320.1	327.8	327.3	326.1
75°	250.6	255.7	265.1	266.0	266.9
77.5°	195.2	196.5	206.4	208.9	207.2
80°	139.9	144.6	150.2	153.2	153.6
82.5°	92.2	95.7	100.4	105.5	105.5
85°	53.2	54.5	58.3	63.5	65.6
87.5°	21.5	23.6	27.5	31.3	31.7
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)