

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: P475539

Luminaire Tested: **24GR-LD5-42-F1-UNV-L835-CD1-U**

Issue Date: 02/10/2021

Test Information

Test Method: LM-79-08
Report Number: P475539
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-L835-CD1-U
Description: GR 2'X4' LED TROFFER w/ F1 LENS
Light Source: 3500K CCT, 80 CRI LEDS
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 4288.9 lumens
Efficiency: N/A
Efficacy: 141.5 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

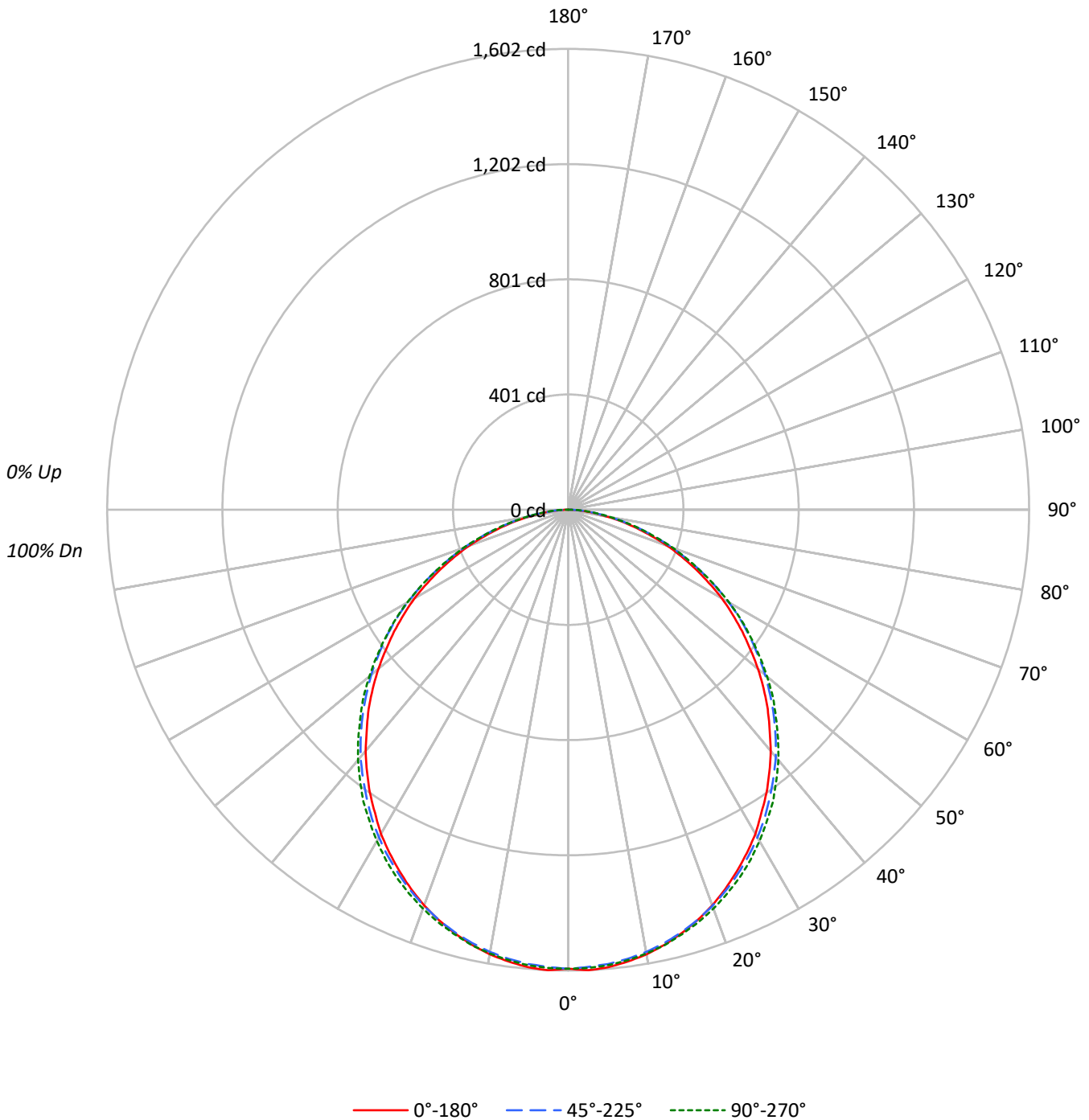
Input Watts (W): 30.3
Input Voltage (V): 120
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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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°	2147	2147	2147
5°	2157	2141	2147
10°	2144	2133	2140
15°	2123	2119	2128
20°	2096	2098	2113
25°	2059	2072	2094
30°	2021	2043	2066
35°	1973	2006	2037
40°	1923	1971	1996
45°	1866	1922	1942
50°	1802	1872	1888
55°	1732	1809	1818
60°	1660	1734	1741
65°	1556	1630	1626
70°	1441	1507	1522
75°	1277	1351	1360
80°	1062	1141	1167
85°	806	883	994



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	150.8	3.5
10°-20°	429.4	10.0
20°-30°	643.4	15.0
30°-40°	763.3	17.8
40°-50°	775.2	18.1
50°-60°	682.7	15.9
60°-70°	501.7	11.7
70°-80°	272.8	6.4
80°-90°	69.5	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°	1223.6	28.5
0°-40°	1986.9	46.3
0°-60°	3444.9	80.3
0°-90°	4288.9	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	4288.9	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	1596	1596	1596	1596	1596	
5°	1597	1590	1585	1585	1590	151
15°	1524	1521	1521	1523	1528	430
25°	1387	1388	1396	1404	1410	639
35°	1201	1208	1222	1234	1240	751
45°	980	988	1010	1022	1021	756
55°	738	749	771	778	775	660
65°	489	497	512	516	511	484
75°	246	251	260	261	262	261
85°	52	53	57	62	64	63
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	1595.8	1595.8	1595.8	1595.8	1595.8
2.5°	1602.5	1596.2	1590.8	1590.8	1594.5
5°	1596.7	1589.9	1585.3	1585.3	1589.5
7.5°	1584.5	1579.0	1575.2	1575.2	1579.8
10°	1569.3	1563.8	1560.9	1561.3	1566.4
12.5°	1549.1	1544.1	1542.8	1543.7	1550.0
15°	1523.9	1520.9	1520.9	1523.0	1527.7
17.5°	1495.7	1492.8	1494.9	1497.8	1503.7
20°	1463.7	1461.6	1465.4	1470.0	1475.5
22.5°	1427.1	1426.3	1432.6	1438.9	1444.4
25°	1386.8	1388.4	1396.0	1404.0	1410.3
27.5°	1345.1	1346.8	1357.3	1365.7	1372.0
30°	1301.0	1301.8	1315.3	1325.4	1330.0
32.5°	1249.6	1256.4	1270.7	1280.3	1284.6
35°	1201.3	1208.0	1221.5	1233.7	1240.0
37.5°	1148.7	1154.6	1172.3	1185.3	1187.4
40°	1094.9	1100.3	1122.2	1133.1	1136.5
42.5°	1036.0	1046.5	1066.3	1077.2	1079.3
45°	980.5	988.4	1010.3	1022.1	1020.8
47.5°	921.1	930.0	951.4	962.8	964.9
50°	861.0	871.1	894.2	901.8	902.2
52.5°	797.9	810.9	832.0	842.1	838.7
55°	738.2	748.7	771.0	778.1	775.2
57.5°	676.8	688.5	709.2	712.9	713.4
60°	617.0	626.7	644.4	648.2	646.9
62.5°	551.4	561.1	577.1	580.9	577.9
65°	488.8	496.7	511.9	515.7	510.6
67.5°	426.5	434.5	446.3	452.2	446.7
70°	366.4	372.7	383.2	386.5	387.0
72.5°	302.4	313.8	321.3	320.9	319.7
75°	245.6	250.7	259.9	260.8	261.6
77.5°	191.4	192.6	202.3	204.8	203.2
80°	137.1	141.7	147.2	150.2	150.6
82.5°	90.4	93.8	98.4	103.5	103.5
85°	52.2	53.4	57.2	62.3	64.4
87.5°	21.0	23.1	26.9	30.7	31.1
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)