

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: P475568

Luminaire Tested: **24GR-LD5-38-F1-UNV-L850-CD1-U**

Issue Date: 02/10/2021

Test Information

Test Method: LM-79-08
Report Number: P475568
Test Lab: INNOVATION CENTER(G3)
Issue Date: 02/10/2021
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: METALUX
Catalog Number: 24GR-LD5-38-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: 3889.1 lumens
Efficiency: N/A
Efficacy: 146.2 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

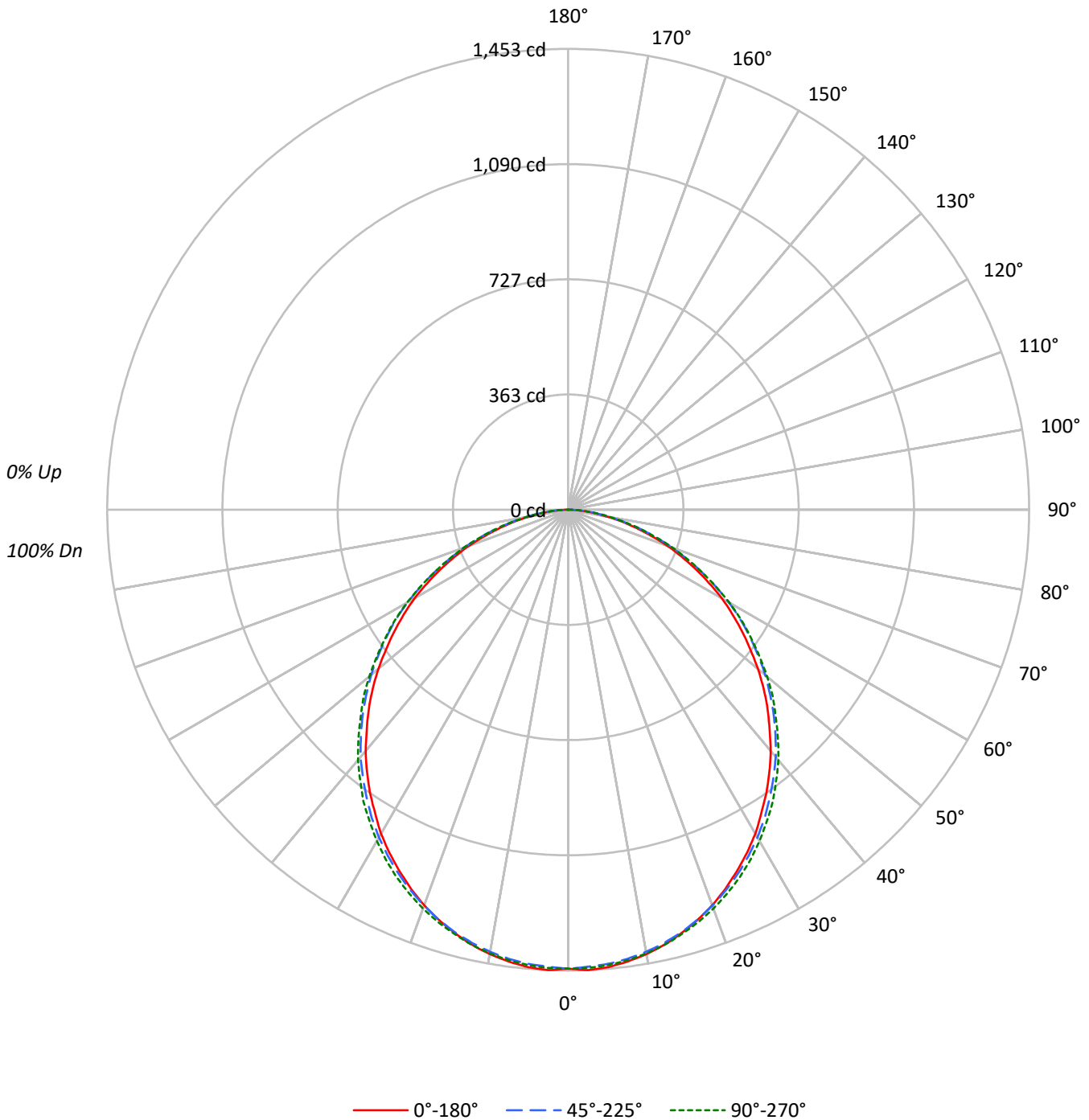
Input Watts (W): 26.6
Input Voltage (V): 120
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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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°	1947	1947	1947
5°	1955	1942	1947
10°	1944	1934	1941
15°	1925	1921	1930
20°	1900	1903	1916
25°	1867	1879	1899
30°	1833	1853	1874
35°	1789	1819	1847
40°	1744	1787	1810
45°	1692	1743	1761
50°	1634	1697	1712
55°	1570	1640	1649
60°	1506	1572	1579
65°	1411	1478	1474
70°	1307	1367	1380
75°	1158	1225	1233
80°	963	1034	1058
85°	730	801	902



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	136.8	3.5
10°-20°	389.4	10.0
20°-30°	583.4	15.0
30°-40°	692.2	17.8
40°-50°	703.0	18.1
50°-60°	619.1	15.9
60°-70°	454.9	11.7
70°-80°	247.4	6.4
80°-90°	63.0	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°	1109.6	28.5
0°-40°	1801.7	46.3
0°-60°	3123.8	80.3
0°-90°	3889.1	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	3889.1	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	1447	1447	1447	1447	1447	
5°	1448	1442	1438	1438	1441	137
15°	1382	1379	1379	1381	1385	390
25°	1258	1259	1266	1273	1279	579
35°	1089	1095	1108	1119	1124	681
45°	889	896	916	927	926	685
55°	669	679	699	706	703	598
65°	443	450	464	468	463	439
75°	223	227	236	236	237	237
85°	47	48	52	56	58	57
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	1447.1	1447.1	1447.1	1447.1	1447.1
2.5°	1453.2	1447.5	1442.5	1442.5	1445.9
5°	1447.8	1441.7	1437.5	1437.5	1441.4
7.5°	1436.8	1431.8	1428.4	1428.4	1432.6
10°	1423.0	1418.1	1415.4	1415.8	1420.4
12.5°	1404.7	1400.2	1399.0	1399.8	1405.5
15°	1381.9	1379.2	1379.2	1381.1	1385.3
17.5°	1356.3	1353.6	1355.5	1358.2	1363.5
20°	1327.3	1325.4	1328.8	1333.0	1338.0
22.5°	1294.1	1293.4	1299.1	1304.8	1309.8
25°	1257.5	1259.0	1265.9	1273.2	1278.9
27.5°	1219.8	1221.3	1230.8	1238.4	1244.2
30°	1179.7	1180.5	1192.7	1201.8	1206.0
32.5°	1133.2	1139.3	1152.2	1161.0	1164.8
35°	1089.3	1095.4	1107.6	1118.7	1124.4
37.5°	1041.6	1047.0	1063.0	1074.8	1076.7
40°	992.8	997.8	1017.6	1027.5	1030.6
42.5°	939.4	949.0	966.9	976.8	978.7
45°	889.1	896.3	916.2	926.8	925.7
47.5°	835.3	843.3	862.8	873.1	875.0
50°	780.8	789.9	810.9	817.7	818.1
52.5°	723.5	735.4	754.4	763.6	760.5
55°	669.4	678.9	699.1	705.6	702.9
57.5°	613.7	624.4	643.1	646.5	646.9
60°	559.5	568.3	584.3	587.8	586.6
62.5°	500.0	508.8	523.3	526.7	524.1
65°	443.2	450.4	464.2	467.6	463.0
67.5°	386.8	394.0	404.7	410.0	405.1
70°	332.2	337.9	347.5	350.5	350.9
72.5°	274.2	284.5	291.4	291.0	289.9
75°	222.7	227.3	235.7	236.5	237.2
77.5°	173.5	174.7	183.5	185.7	184.2
80°	124.3	128.5	133.5	136.2	136.5
82.5°	82.0	85.1	89.3	93.8	93.8
85°	47.3	48.4	51.9	56.4	58.4
87.5°	19.1	21.0	24.4	27.8	28.2
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)