

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: P475522

Luminaire Tested: **24GR-LD5-34-F1-UNV-L830-CD1-U**

Issue Date: 02/10/2021

Test Information

Test Method: LM-79-08
Report Number: P475522
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-L830-CD1-U
Description: GR 2'X4' LED TROFFER w/ F1 LENS
Light Source: 3000K CCT, 80 CRI LEDS
Ballast/Driver: ELECTRONIC DRIVER

Summary

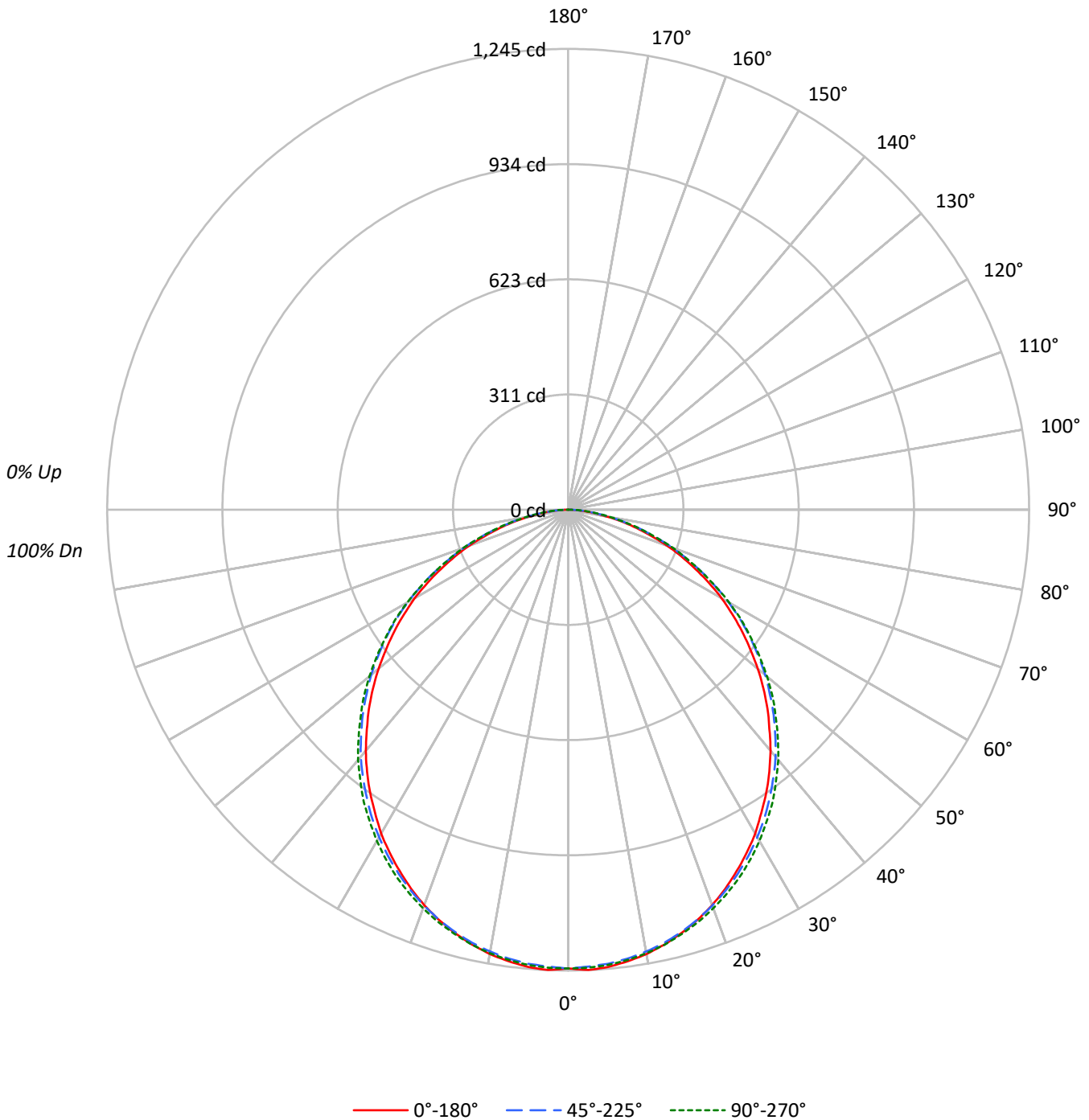
Lumens per Lamp: N/A
Luminaire Lumens: 3331.1 lumens
Efficiency: N/A
Efficacy: 138.8 lumens/watt
Spacing Criteria (0/90/45): 1.21 / 1.24 / 1.34
Luminous Opening: Rectangular (W 2' x L: 4' x H: 0')
CIE Type: Direct

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



TEST NUMBER: P475522
CATALOG NUMBER: 24GR-LD5-34-F1-UNV-L830-CD1-U

Luminous Intensity Polar Plot





TEST NUMBER: P475522

CATALOG NUMBER: 24GR-LD5-34-F1-UNV-L830-CD1-U

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°	1668	1668	1668
5°	1675	1663	1667
10°	1665	1656	1662
15°	1649	1645	1653
20°	1628	1630	1641
25°	1599	1610	1626
30°	1570	1587	1605
35°	1532	1558	1582
40°	1494	1531	1550
45°	1449	1493	1509
50°	1400	1454	1467
55°	1345	1405	1412
60°	1290	1347	1352
65°	1209	1266	1263
70°	1119	1171	1182
75°	992	1050	1056
80°	825	886	907
85°	625	685	772



TEST NUMBER: P475522

CATALOG NUMBER: 24GR-LD5-34-F1-UNV-L830-CD1-U

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	117.1	3.5
10°-20°	333.5	10.0
20°-30°	499.7	15.0
30°-40°	592.9	17.8
40°-50°	602.1	18.1
50°-60°	530.2	15.9
60°-70°	389.6	11.7
70°-80°	211.9	6.4
80°-90°	54.0	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°	950.4	28.5
0°-40°	1543.2	46.3
0°-60°	2675.6	80.3
0°-90°	3331.1	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	3331.1	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	1239	1239	1239	1239	1239	
5°	1240	1235	1231	1231	1234	118
15°	1184	1181	1181	1183	1186	334
25°	1077	1078	1084	1090	1095	496
35°	933	938	949	958	963	583
45°	762	768	785	794	793	587
55°	573	582	599	604	602	513
65°	380	386	398	400	397	376
75°	191	195	202	202	203	203
85°	40	42	44	48	50	49
90°	0	0	0	0	0	



TEST NUMBER: P475522

CATALOG NUMBER: 24GR-LD5-34-F1-UNV-L830-CD1-U

CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	1239.4	1239.4	1239.4	1239.4	1239.4
2.5°	1244.7	1239.8	1235.5	1235.5	1238.5
5°	1240.1	1234.9	1231.3	1231.3	1234.5
7.5°	1230.6	1226.4	1223.4	1223.4	1227.0
10°	1218.9	1214.6	1212.3	1212.6	1216.6
12.5°	1203.2	1199.3	1198.3	1198.9	1203.8
15°	1183.6	1181.3	1181.3	1182.9	1186.5
17.5°	1161.7	1159.4	1161.0	1163.3	1167.9
20°	1136.9	1135.2	1138.2	1141.8	1146.0
22.5°	1108.4	1107.8	1112.7	1117.6	1121.8
25°	1077.1	1078.4	1084.3	1090.5	1095.4
27.5°	1044.7	1046.0	1054.2	1060.7	1065.6
30°	1010.4	1011.1	1021.5	1029.4	1033.0
32.5°	970.6	975.8	986.9	994.4	997.7
35°	933.0	938.2	948.7	958.2	963.1
37.5°	892.2	896.7	910.5	920.6	922.2
40°	850.4	854.6	871.6	880.1	882.7
42.5°	804.6	812.8	828.1	836.6	838.3
45°	761.5	767.7	784.7	793.8	792.9
47.5°	715.4	722.3	739.0	747.8	749.4
50°	668.7	676.6	694.5	700.4	700.7
52.5°	619.7	629.8	646.2	654.0	651.4
55°	573.3	581.5	598.8	604.4	602.1
57.5°	525.6	534.8	550.8	553.7	554.1
60°	479.2	486.8	500.5	503.4	502.4
62.5°	428.3	435.8	448.2	451.1	448.9
65°	379.6	385.8	397.6	400.5	396.6
67.5°	331.3	337.5	346.6	351.2	346.9
70°	284.5	289.4	297.6	300.2	300.5
72.5°	234.9	243.7	249.6	249.3	248.3
75°	190.8	194.7	201.9	202.5	203.2
77.5°	148.6	149.6	157.1	159.1	157.8
80°	106.5	110.1	114.3	116.6	117.0
82.5°	70.2	72.9	76.4	80.4	80.4
85°	40.5	41.5	44.4	48.3	50.0
87.5°	16.3	18.0	20.9	23.8	24.2
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)