

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: P475523

Luminaire Tested: **24GR-LD5-38-F1-UNV-L830-CD1-U**

Issue Date: 02/10/2021

Test Information

Test Method: LM-79-08
Report Number: P475523
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-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: 3679.4 lumens
Efficiency: N/A
Efficacy: 138.3 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

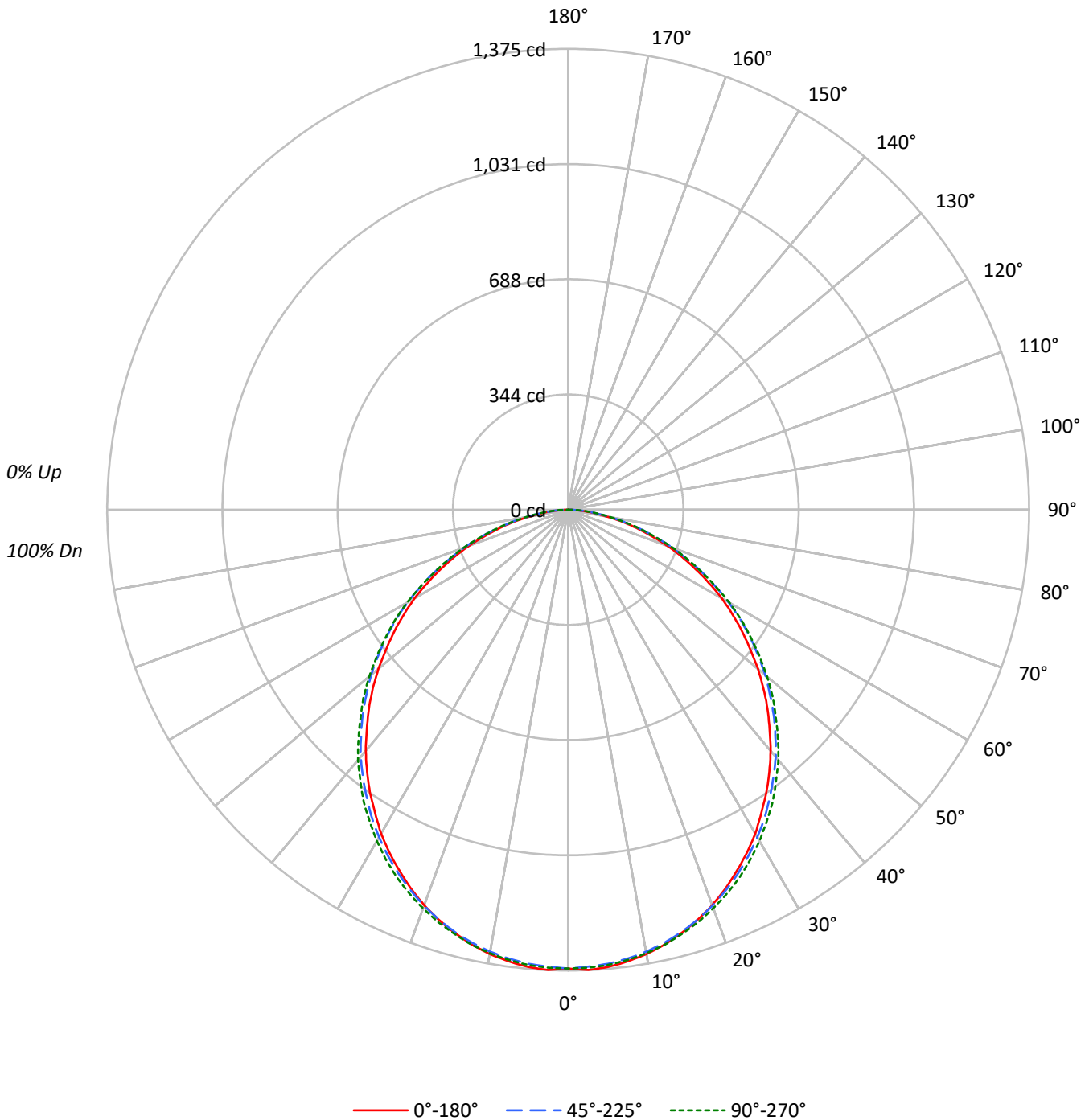
Input Watts (W): 26.6
Input Voltage (V): 120
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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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°	1842	1842	1842
5°	1850	1837	1842
10°	1839	1830	1836
15°	1821	1818	1826
20°	1798	1800	1812
25°	1766	1778	1796
30°	1734	1753	1773
35°	1693	1721	1747
40°	1650	1691	1713
45°	1600	1649	1666
50°	1546	1606	1620
55°	1486	1552	1560
60°	1425	1488	1493
65°	1335	1398	1395
70°	1236	1293	1306
75°	1095	1159	1167
80°	911	979	1001
85°	690	758	852



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	129.4	3.5
10°-20°	368.4	10.0
20°-30°	552.0	15.0
30°-40°	654.9	17.8
40°-50°	665.1	18.1
50°-60°	585.7	15.9
60°-70°	430.4	11.7
70°-80°	234.1	6.4
80°-90°	59.6	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°	1049.7	28.5
0°-40°	1704.6	46.3
0°-60°	2955.4	80.3
0°-90°	3679.4	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	3679.4	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	1369	1369	1369	1369	1369	
5°	1370	1364	1360	1360	1364	130
15°	1307	1305	1305	1307	1311	369
25°	1190	1191	1198	1204	1210	548
35°	1031	1036	1048	1058	1064	644
45°	841	848	867	877	876	648
55°	633	642	661	668	665	566
65°	419	426	439	442	438	416
75°	211	215	223	224	224	224
85°	45	46	49	53	55	54
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	1369.0	1369.0	1369.0	1369.0	1369.0
2.5°	1374.8	1369.4	1364.7	1364.7	1368.0
5°	1369.8	1364.0	1360.0	1360.0	1363.6
7.5°	1359.3	1354.6	1351.4	1351.4	1355.3
10°	1346.3	1341.6	1339.1	1339.5	1343.8
12.5°	1329.0	1324.7	1323.6	1324.3	1329.7
15°	1307.3	1304.8	1304.8	1306.6	1310.6
17.5°	1283.2	1280.6	1282.4	1285.0	1290.0
20°	1255.7	1253.9	1257.2	1261.2	1265.8
22.5°	1224.3	1223.6	1229.0	1234.5	1239.1
25°	1189.7	1191.2	1197.6	1204.5	1209.9
27.5°	1154.0	1155.4	1164.4	1171.7	1177.1
30°	1116.1	1116.8	1128.4	1137.0	1141.0
32.5°	1072.1	1077.8	1090.1	1098.4	1102.0
35°	1030.6	1036.3	1047.9	1058.4	1063.8
37.5°	985.5	990.5	1005.7	1016.9	1018.7
40°	939.3	944.0	962.7	972.1	975.0
42.5°	888.8	897.8	914.7	924.1	925.9
45°	841.1	848.0	866.8	876.9	875.8
47.5°	790.3	797.8	816.2	826.0	827.8
50°	738.7	747.3	767.2	773.7	774.0
52.5°	684.5	695.7	713.8	722.4	719.5
55°	633.3	642.3	661.4	667.6	665.0
57.5°	580.6	590.7	608.4	611.6	612.0
60°	529.4	537.7	552.8	556.1	555.0
62.5°	473.1	481.4	495.1	498.3	495.8
65°	419.3	426.2	439.1	442.4	438.1
67.5°	365.9	372.8	382.9	387.9	383.2
70°	314.3	319.7	328.7	331.6	332.0
72.5°	259.4	269.2	275.7	275.3	274.2
75°	210.7	215.1	223.0	223.7	224.4
77.5°	164.2	165.3	173.6	175.7	174.3
80°	117.6	121.6	126.3	128.8	129.2
82.5°	77.6	80.5	84.4	88.8	88.8
85°	44.7	45.8	49.1	53.4	55.2
87.5°	18.0	19.8	23.1	26.3	26.7
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)