

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: P475551

Luminaire Tested: **24GR-LD5-30-F1-UNV-L840-CD1-U**

Issue Date: 02/10/2021

Test Information

Test Method: LM-79-08
Report Number: P475551
Test Lab: INNOVATION CENTER(G3)
Issue Date: 02/10/2021
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: METALUX
Catalog Number: 24GR-LD5-30-F1-UNV-L840-CD1-U
Description: GR 2'X4' LED TROFFER w/ F1 LENS
Light Source: 4000K CCT, 80 CRI LEDS
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 3127.2 lumens
Efficiency: N/A
Efficacy: 146.8 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

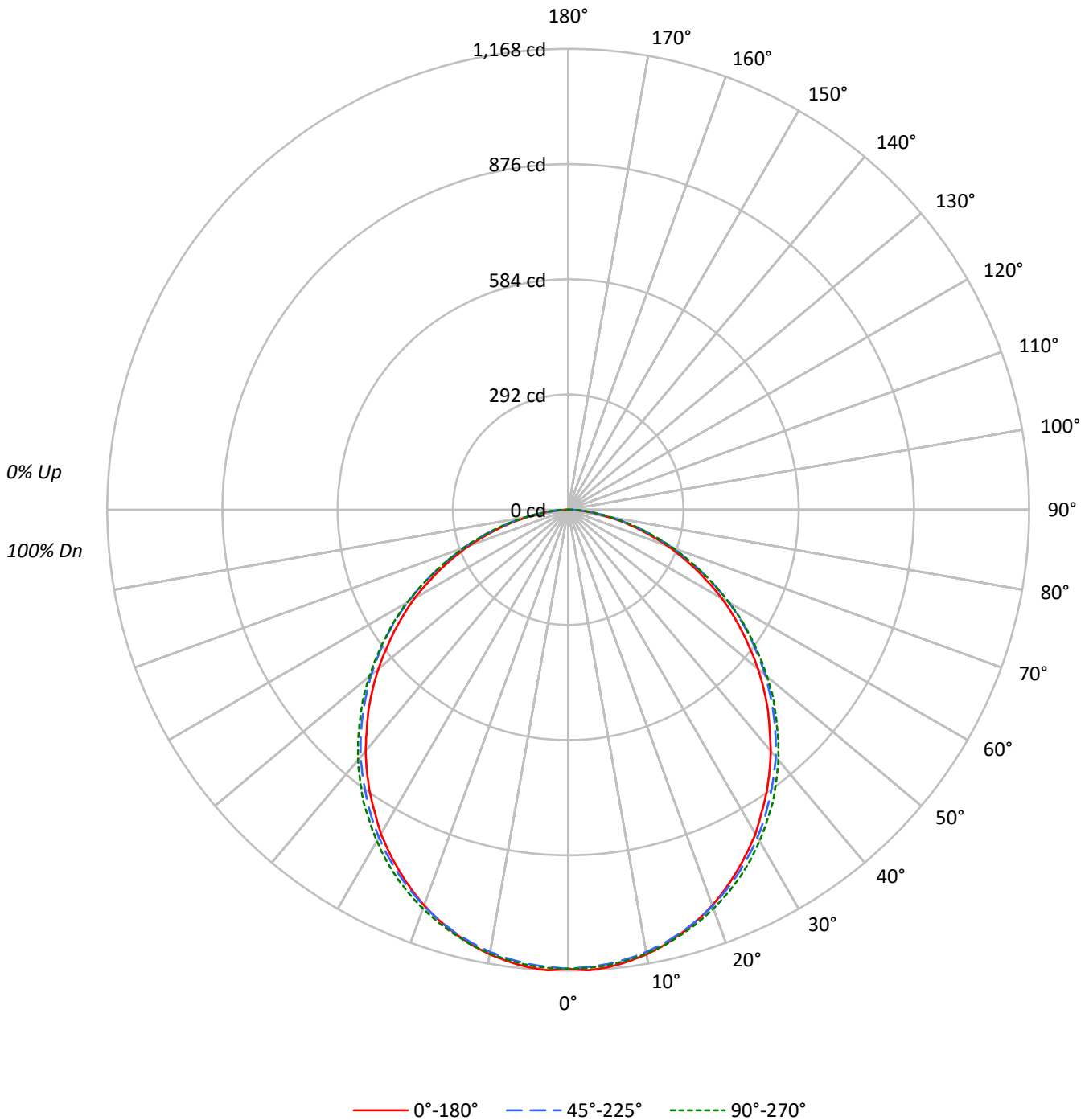
Input Watts (W): 21.3
Input Voltage (V): 120
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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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°	1566	1566	1566
5°	1572	1561	1565
10°	1563	1555	1560
15°	1548	1545	1552
20°	1528	1530	1541
25°	1501	1511	1527
30°	1474	1490	1507
35°	1439	1463	1485
40°	1402	1437	1456
45°	1360	1402	1416
50°	1314	1365	1377
55°	1263	1319	1326
60°	1211	1264	1269
65°	1135	1188	1185
70°	1051	1099	1110
75°	931	985	992
80°	775	831	851
85°	587	644	724



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	110.0	3.5
10°-20°	313.1	10.0
20°-30°	469.1	15.0
30°-40°	556.6	17.8
40°-50°	565.2	18.1
50°-60°	497.8	15.9
60°-70°	365.8	11.7
70°-80°	198.9	6.4
80°-90°	50.7	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°	892.2	28.5
0°-40°	1448.8	46.3
0°-60°	2511.8	80.3
0°-90°	3127.2	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	3127.2	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	1164	1164	1164	1164	1164	
5°	1164	1159	1156	1156	1159	110
15°	1111	1109	1109	1110	1114	313
25°	1011	1012	1018	1024	1028	466
35°	876	881	891	900	904	548
45°	715	721	737	745	744	551
55°	538	546	562	567	565	481
65°	356	362	373	376	372	353
75°	179	183	190	190	191	190
85°	38	39	42	45	47	46
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	1163.6	1163.6	1163.6	1163.6	1163.6
2.5°	1168.5	1163.9	1159.9	1159.9	1162.7
5°	1164.2	1159.3	1155.9	1155.9	1159.0
7.5°	1155.3	1151.3	1148.6	1148.6	1151.9
10°	1144.3	1140.3	1138.1	1138.4	1142.1
12.5°	1129.5	1125.9	1124.9	1125.5	1130.2
15°	1111.1	1109.0	1109.0	1110.5	1113.9
17.5°	1090.6	1088.4	1090.0	1092.1	1096.4
20°	1067.3	1065.7	1068.5	1071.9	1075.9
22.5°	1040.6	1040.0	1044.6	1049.2	1053.2
25°	1011.2	1012.4	1017.9	1023.7	1028.3
27.5°	980.8	982.0	989.7	995.8	1000.4
30°	948.6	949.2	959.0	966.4	969.8
32.5°	911.2	916.1	926.5	933.6	936.6
35°	875.9	880.8	890.6	899.5	904.1
37.5°	837.6	841.9	854.7	864.3	865.8
40°	798.3	802.3	818.2	826.2	828.7
42.5°	755.4	763.0	777.5	785.4	787.0
45°	714.9	720.7	736.7	745.3	744.3
47.5°	671.6	678.1	693.7	702.0	703.5
50°	627.8	635.2	652.0	657.5	657.8
52.5°	581.8	591.3	606.6	614.0	611.5
55°	538.2	545.9	562.2	567.4	565.2
57.5°	493.5	502.1	517.1	519.8	520.1
60°	449.9	457.0	469.8	472.6	471.7
62.5°	402.1	409.1	420.8	423.5	421.4
65°	356.4	362.2	373.2	376.0	372.3
67.5°	311.0	316.8	325.4	329.7	325.7
70°	267.1	271.7	279.4	281.8	282.2
72.5°	220.5	228.8	234.3	234.0	233.1
75°	179.1	182.8	189.5	190.1	190.8
77.5°	139.5	140.5	147.5	149.4	148.1
80°	100.0	103.4	107.3	109.5	109.8
82.5°	65.9	68.4	71.8	75.4	75.4
85°	38.0	38.9	41.7	45.4	46.9
87.5°	15.3	16.9	19.6	22.4	22.7
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)