

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: P475687

Luminaire Tested: **24GR-LD5-34-A19/156-UNV-L850-CD1-U**

Issue Date: 02/10/2021

Test Information

Test Method: LM-79-08
Report Number: P475687
Test Lab: INNOVATION CENTER(G3)
Issue Date: 02/10/2021
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: METALUX
Catalog Number: 24GR-LD5-34-A19/156-UNV-L850-CD1-U
Description: GR 2'X4' LED TROFFER w/ A19/156 LENS
Light Source: 5000K CCT, 80 CRI LEDS
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 3344.9 lumens
Efficiency: N/A
Efficacy: 139.4 lumens/watt
Spacing Criteria (0/90/45): 1.23 / 1.25 / 1.28
Luminous Opening: Rectangular (W 2' x L: 4' x H: 0')
CIE Type: Direct

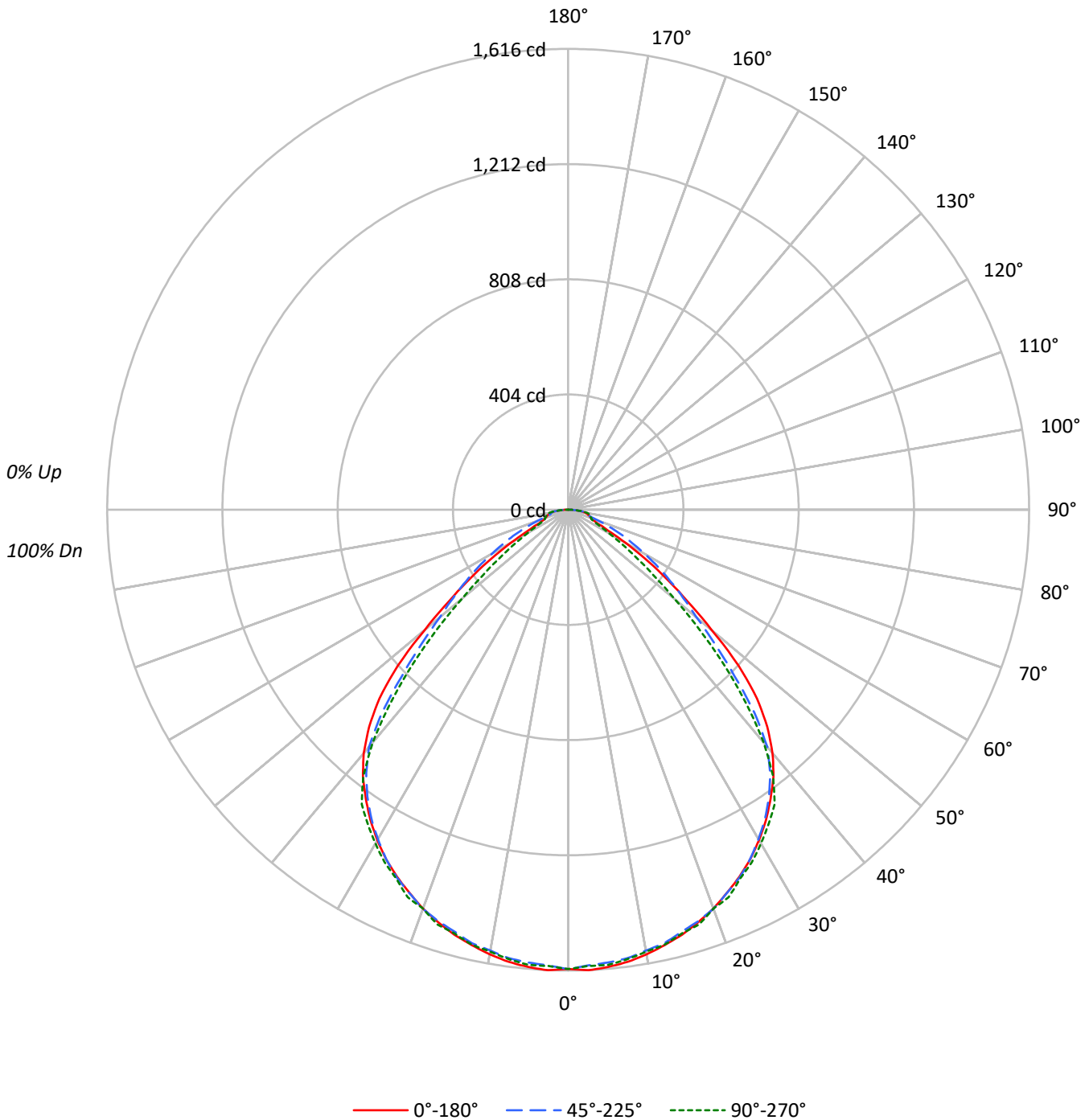
Input Watts (W): 24
Input Voltage (V): 120
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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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	111	107	103	100	108	104	101	98	100	98	95	96	94	92	93	91	90	88
2	102	95	90	85	100	94	88	84	90	86	82	87	83	80	84	81	78	76
3	95	86	79	73	92	84	78	73	81	76	71	79	74	70	76	72	69	67
4	88	77	70	64	86	76	69	63	74	67	63	71	66	62	69	65	61	59
5	81	70	62	56	79	69	62	56	67	60	55	65	59	55	63	58	54	52
6	76	64	56	50	74	63	55	50	61	54	49	60	54	49	58	53	49	47
7	71	58	50	45	69	58	50	45	56	49	44	55	49	44	53	48	44	42
8	66	54	46	40	65	53	46	40	52	45	40	50	44	40	49	44	40	38
9	62	49	42	37	61	49	42	37	48	41	37	47	41	36	46	40	36	34
10	58	46	38	34	57	45	38	34	44	38	33	43	37	33	43	37	33	31

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	2167	2167	2167
5°	2174	2153	2164
10°	2163	2145	2150
15°	2149	2135	2143
20°	2131	2132	2131
25°	2108	2112	2119
30°	2079	2072	2100
35°	2031	2016	2072
40°	1958	1906	1872
45°	1782	1568	1479
50°	1375	1230	1016
55°	977	1026	673
60°	619	828	439
65°	359	652	321
70°	332	449	340
75°	383	342	405
80°	477	473	535
85°	520	553	573



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	151.8	4.5
10°-20°	434.2	13.0
20°-30°	655.1	19.6
30°-40°	768.9	23.0
40°-50°	647.3	19.4
50°-60°	367.7	11.0
60°-70°	183.5	5.5
70°-80°	96.2	2.9
80°-90°	40.1	1.2
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°	1241.0	37.1
0°-40°	2010.0	60.1
0°-60°	3025.0	90.4
0°-90°	3344.9	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	3344.9	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	1611	1611	1611	1611	1611	
5°	1610	1598	1594	1597	1602	153
15°	1543	1539	1533	1537	1538	435
25°	1420	1421	1422	1426	1427	654
35°	1237	1230	1228	1248	1262	772
45°	936	899	824	810	777	705
55°	416	445	437	377	287	379
65°	113	234	205	174	101	128
75°	74	113	66	99	78	78
85°	34	40	36	45	37	36
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	1610.7	1610.7	1610.7	1610.7	1610.7
2.5°	1616.5	1608.6	1599.8	1597.4	1601.5
5°	1609.7	1598.1	1594.0	1596.7	1602.2
7.5°	1599.1	1587.2	1586.5	1581.7	1589.9
10°	1583.4	1575.6	1569.8	1572.5	1573.6
12.5°	1563.7	1561.3	1556.9	1553.1	1562.3
15°	1542.9	1539.2	1533.0	1537.1	1538.2
17.5°	1516.4	1514.3	1513.3	1516.4	1525.2
20°	1488.1	1488.1	1489.1	1489.8	1488.4
22.5°	1454.4	1453.4	1454.7	1457.5	1470.4
25°	1420.0	1420.7	1422.4	1426.1	1427.1
27.5°	1381.9	1382.2	1381.5	1385.3	1394.1
30°	1337.9	1336.6	1333.8	1342.0	1351.5
32.5°	1290.3	1287.5	1284.5	1297.1	1307.3
35°	1236.8	1230.0	1227.6	1248.4	1261.6
37.5°	1182.0	1168.0	1162.9	1178.2	1179.9
40°	1114.5	1093.8	1085.3	1070.3	1065.8
42.5°	1033.5	1012.0	966.1	942.9	926.6
45°	936.4	899.0	824.1	809.8	777.4
47.5°	811.1	771.3	696.4	665.7	629.0
50°	656.9	633.7	587.4	549.3	485.6
52.5°	525.1	529.9	508.1	455.3	376.3
55°	416.5	445.4	437.2	377.0	286.7
57.5°	320.4	382.8	372.9	310.2	219.0
60°	229.9	327.9	307.8	255.4	163.1
62.5°	157.7	279.9	252.3	210.8	125.0
65°	112.7	233.6	204.7	173.7	100.8
67.5°	92.6	191.0	157.0	147.4	87.9
70°	84.5	153.9	114.1	128.7	86.5
72.5°	80.4	129.1	83.8	112.7	82.4
75°	73.6	113.4	65.7	98.8	78.0
77.5°	68.1	98.1	61.3	86.5	75.9
80°	61.6	77.6	61.0	73.2	69.1
82.5°	49.7	56.5	51.4	59.9	55.8
85°	33.7	40.2	35.8	45.3	37.1
87.5°	16.7	19.8	16.0	21.5	16.3
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)