

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: P475657

Luminaire Tested: **24GR-LD5-34-A19/156-UNV-L835-CD1-U**

Issue Date: 02/10/2021

Test Information

Test Method: LM-79-08
Report Number: P475657
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-L835-CD1-U
Description: GR 2'X4' LED TROFFER w/ A19/156 LENS
Light Source: 3500K CCT, 80 CRI LEDS
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 3279.3 lumens
Efficiency: N/A
Efficacy: 136.6 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

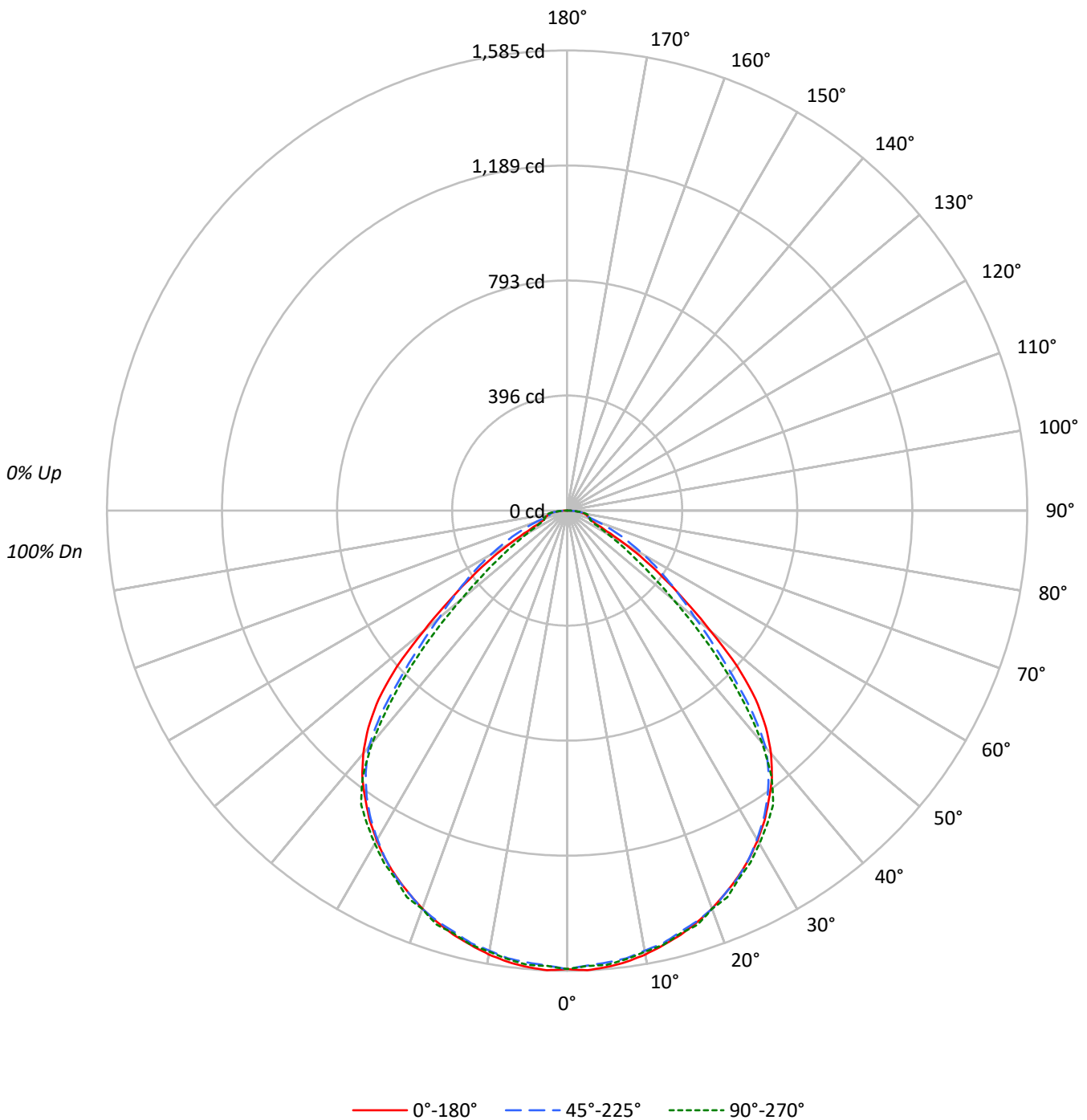
Input Watts (W): 24
Input Voltage (V): 120
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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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	50	30	10	0	
RCR																						
0	119	119	119	119	116	116	116	116	111	111	111	106	106	106	102	102	102	100				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°	2125	2125	2125
5°	2131	2111	2122
10°	2121	2103	2108
15°	2107	2094	2101
20°	2089	2090	2089
25°	2067	2070	2077
30°	2038	2032	2059
35°	1992	1977	2032
40°	1919	1869	1835
45°	1747	1537	1450
50°	1348	1205	997
55°	958	1006	659
60°	606	812	430
65°	352	639	315
70°	326	440	334
75°	375	335	398
80°	468	463	525
85°	511	542	562



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	148.8	4.5
10°-20°	425.6	13.0
20°-30°	642.2	19.6
30°-40°	753.8	23.0
40°-50°	634.6	19.4
50°-60°	360.5	11.0
60°-70°	179.9	5.5
70°-80°	94.3	2.9
80°-90°	39.3	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°	1216.7	37.1
0°-40°	1970.5	60.1
0°-60°	2965.7	90.4
0°-90°	3279.3	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	3279.3	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	1579	1579	1579	1579	1579	
5°	1578	1567	1563	1565	1571	150
15°	1513	1509	1503	1507	1508	427
25°	1392	1393	1394	1398	1399	641
35°	1212	1206	1204	1224	1237	757
45°	918	881	808	794	762	691
55°	408	437	429	370	281	371
65°	110	229	201	170	99	126
75°	72	111	64	97	76	76
85°	33	39	35	44	36	35
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	1579.1	1579.1	1579.1	1579.1	1579.1
2.5°	1584.8	1577.1	1568.4	1566.1	1570.1
5°	1578.1	1566.8	1562.7	1565.4	1570.8
7.5°	1567.8	1556.1	1555.4	1550.7	1558.7
10°	1552.4	1544.7	1539.0	1541.7	1542.7
12.5°	1533.0	1530.7	1526.4	1522.7	1531.7
15°	1512.7	1509.0	1503.0	1507.0	1508.0
17.5°	1486.6	1484.6	1483.6	1486.6	1495.3
20°	1458.9	1458.9	1459.9	1460.6	1459.3
22.5°	1425.9	1424.9	1426.2	1428.9	1441.6
25°	1392.2	1392.8	1394.5	1398.2	1399.2
27.5°	1354.8	1355.1	1354.4	1358.1	1366.8
30°	1311.7	1310.4	1307.7	1315.7	1325.0
32.5°	1265.0	1262.3	1259.3	1271.6	1281.6
35°	1212.5	1205.9	1203.5	1223.9	1236.9
37.5°	1158.8	1145.1	1140.1	1155.1	1156.8
40°	1092.7	1072.3	1064.0	1049.3	1044.9
42.5°	1013.2	992.2	947.1	924.4	908.4
45°	918.1	881.4	807.9	793.9	762.2
47.5°	795.2	756.2	682.7	652.7	616.6
50°	644.0	621.3	575.9	538.5	476.1
52.5°	514.8	519.5	498.1	446.4	368.9
55°	408.3	436.7	428.7	369.6	281.1
57.5°	314.2	375.2	365.6	304.1	214.7
60°	225.3	321.5	301.8	250.4	159.9
62.5°	154.6	274.4	247.4	206.7	122.5
65°	110.5	229.0	200.6	170.3	98.8
67.5°	90.8	187.3	153.9	144.6	86.1
70°	82.8	150.9	111.8	126.2	84.8
72.5°	78.8	126.5	82.1	110.5	80.8
75°	72.1	111.2	64.4	96.8	76.5
77.5°	66.8	96.1	60.1	84.8	74.4
80°	60.4	76.1	59.8	71.8	67.8
82.5°	48.7	55.4	50.4	58.8	54.8
85°	33.1	39.4	35.1	44.4	36.4
87.5°	16.4	19.4	15.7	21.0	16.0
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)