

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: P475642

Luminaire Tested: **24GR-LD5-34-A19/156-UNV-L830-CD1-U**

Issue Date: 02/10/2021

Test Information

Test Method: LM-79-08
Report Number: P475642
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-L830-CD1-U
Description: GR 2'X4' LED TROFFER w/ A19/156 LENS
Light Source: 3000K CCT, 80 CRI LEDS
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 3164.5 lumens
Efficiency: N/A
Efficacy: 131.9 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

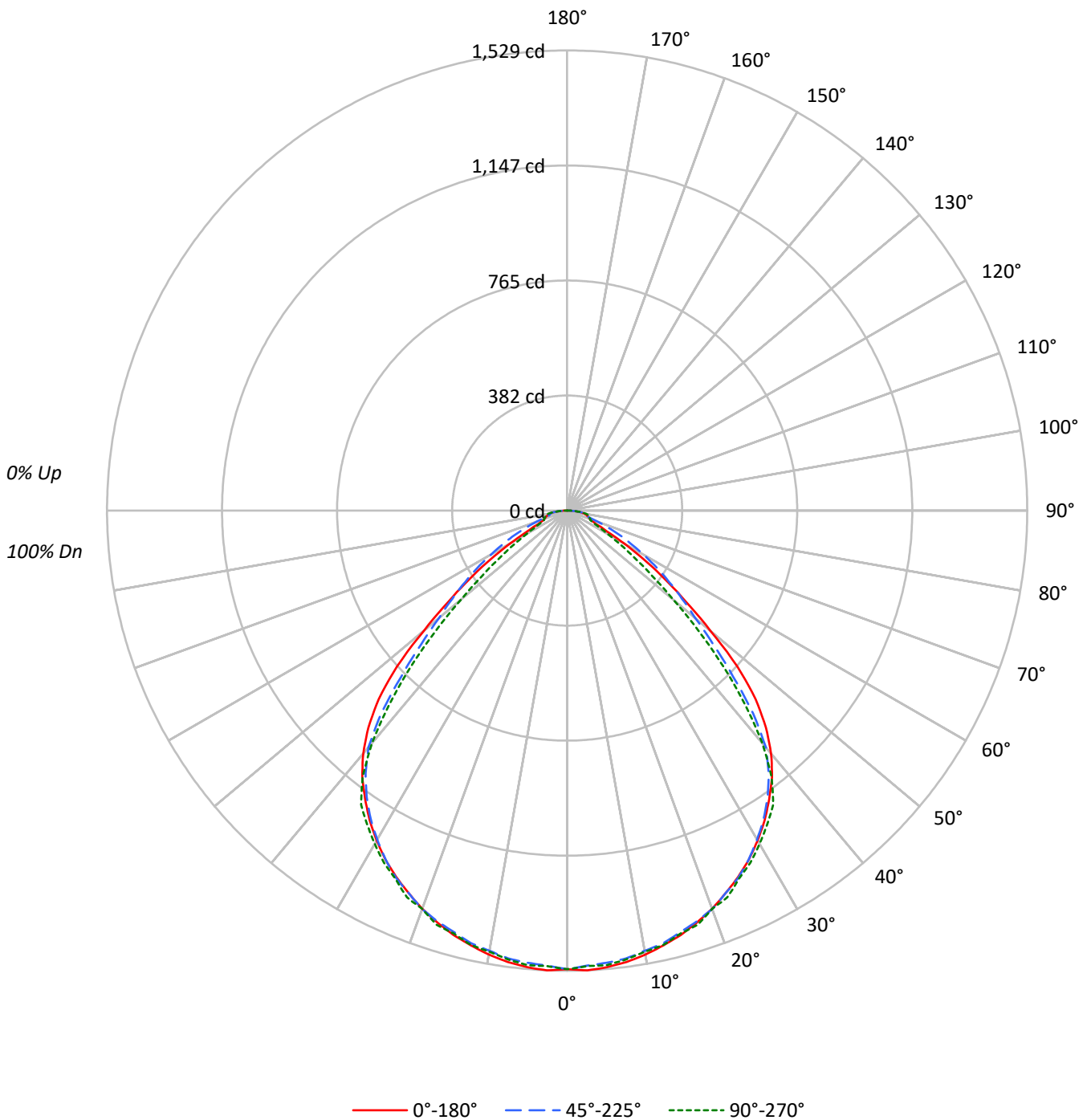
Input Watts (W): 24
Input Voltage (V): 120
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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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°	2050	2050	2050
5°	2057	2037	2047
10°	2047	2029	2034
15°	2033	2020	2027
20°	2016	2017	2016
25°	1994	1998	2004
30°	1967	1961	1987
35°	1922	1908	1961
40°	1852	1803	1771
45°	1686	1483	1400
50°	1301	1163	962
55°	924	970	636
60°	585	784	415
65°	339	616	304
70°	314	424	322
75°	362	323	384
80°	452	447	507
85°	492	522	542



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	143.6	4.5
10°-20°	410.8	13.0
20°-30°	619.8	19.6
30°-40°	727.5	23.0
40°-50°	612.4	19.4
50°-60°	347.9	11.0
60°-70°	173.6	5.5
70°-80°	91.0	2.9
80°-90°	37.9	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°	1174.1	37.1
0°-40°	1901.6	60.1
0°-60°	2861.9	90.4
0°-90°	3164.5	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	3164.5	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	1524	1524	1524	1524	1524	
5°	1523	1512	1508	1511	1516	145
15°	1460	1456	1450	1454	1455	412
25°	1343	1344	1346	1349	1350	619
35°	1170	1164	1161	1181	1194	731
45°	886	850	780	766	736	667
55°	394	421	414	357	271	358
65°	107	221	194	164	95	121
75°	70	107	62	93	74	74
85°	32	38	34	43	35	34
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	1523.8	1523.8	1523.8	1523.8	1523.8
2.5°	1529.3	1521.9	1513.5	1511.3	1515.1
5°	1522.9	1511.9	1508.1	1510.6	1515.8
7.5°	1512.9	1501.6	1501.0	1496.5	1504.2
10°	1498.1	1490.7	1485.2	1487.8	1488.7
12.5°	1479.4	1477.1	1472.9	1469.4	1478.1
15°	1459.7	1456.2	1450.4	1454.3	1455.2
17.5°	1434.6	1432.7	1431.7	1434.6	1443.0
20°	1407.9	1407.9	1408.8	1409.5	1408.2
22.5°	1376.0	1375.0	1376.3	1378.9	1391.1
25°	1343.4	1344.1	1345.7	1349.2	1350.2
27.5°	1307.3	1307.7	1307.0	1310.6	1318.9
30°	1265.8	1264.5	1261.9	1269.6	1278.7
32.5°	1220.7	1218.1	1215.2	1227.1	1236.8
35°	1170.1	1163.7	1161.4	1181.1	1193.6
37.5°	1118.2	1105.0	1100.2	1114.7	1116.3
40°	1054.4	1034.8	1026.7	1012.6	1008.4
42.5°	977.8	957.5	914.0	892.1	876.6
45°	886.0	850.5	779.6	766.1	735.5
47.5°	767.4	729.7	658.8	629.8	595.0
50°	621.5	599.5	555.7	519.7	459.4
52.5°	496.8	501.3	480.7	430.7	356.0
55°	394.0	421.4	413.7	356.6	271.3
57.5°	303.2	362.1	352.8	293.5	207.2
60°	217.5	310.2	291.2	241.6	154.3
62.5°	149.2	264.8	238.7	199.4	118.2
65°	106.6	221.0	193.6	164.3	95.4
67.5°	87.6	180.7	148.5	139.5	83.1
70°	79.9	145.6	107.9	121.8	81.8
72.5°	76.0	122.1	79.3	106.6	78.0
75°	69.6	107.3	62.2	93.4	73.8
77.5°	64.4	92.8	58.0	81.8	71.8
80°	58.3	73.5	57.7	69.3	65.4
82.5°	47.0	53.5	48.6	56.7	52.8
85°	31.9	38.0	33.8	42.8	35.1
87.5°	15.8	18.7	15.1	20.3	15.5
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)