

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: P476244

Luminaire Tested: **14GR-LD5-32-A19/156-UNV-L830-CD1-U**

Issue Date: 02/10/2021

Test Information

Test Method: LM-79-08
Report Number: P476244
Test Lab: INNOVATION CENTER(G3)
Issue Date: 02/10/2021
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: METALUX
Catalog Number: 14GR-LD5-32-A19/156-UNV-L830-CD1-U
Description: GR 1'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: 2981.9 lumens
Efficiency: N/A
Efficacy: 119.3 lumens/watt
Spacing Criteria (0/90/45): 1.25 / 1.27 / 1.2
Luminous Opening: Rectangular (W 1' x L: 4' x H: 0')
CIE Type: Direct

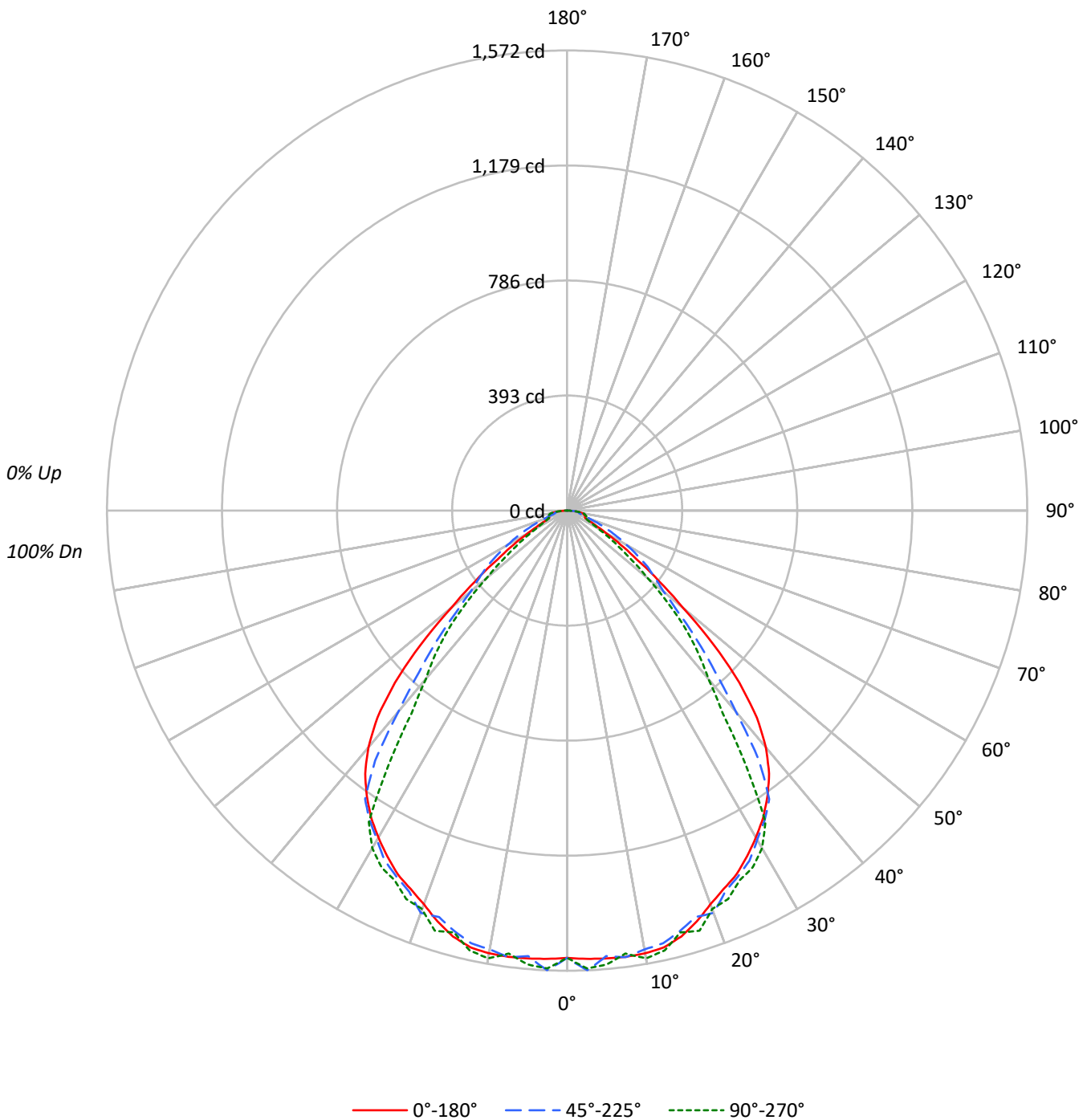
Input Watts (W): 25
Input Voltage (V): 120
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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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	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	104	101	108	105	102	99	101	98	96	97	95	93	93	92	90	88					88			
2	103	96	91	86	101	94	89	85	91	87	83	88	84	81	85	82	79	78					78			
3	96	87	80	75	93	85	79	74	82	77	73	80	75	71	77	74	70	68					68			
4	89	79	71	65	87	77	70	65	75	69	64	73	68	63	71	66	63	61					61			
5	83	71	64	58	81	70	63	58	68	62	57	67	61	57	65	60	56	54					54			
6	77	65	58	52	75	64	57	52	63	56	51	61	55	51	60	55	51	49					49			
7	72	60	52	47	70	59	52	47	58	51	46	56	50	46	55	50	46	44					44			
8	67	55	48	42	66	55	47	42	53	47	42	52	46	42	51	46	42	40					40			
9	63	51	44	39	62	51	43	39	49	43	38	48	43	38	48	42	38	36					36			
10	60	47	40	35	58	47	40	35	46	40	35	45	39	35	44	39	35	33					33			

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	4112	4112	4112
5°	4149	4128	4204
10°	4197	4159	4244
15°	4196	4144	4157
20°	4099	4188	4148
25°	4069	4097	4139
30°	4006	4035	4137
35°	3917	3953	3507
40°	3712	3147	2637
45°	3166	2400	2186
50°	2163	1797	1510
55°	1362	1574	1003
60°	823	1260	647
65°	517	974	497
70°	516	651	528
75°	649	519	682
80°	846	629	896
85°	818	868	868



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	147.4	4.9
10°-20°	422.6	14.2
20°-30°	637.8	21.4
30°-40°	711.3	23.9
40°-50°	517.3	17.3
50°-60°	283.7	9.5
60°-70°	144.3	4.8
70°-80°	84.8	2.8
80°-90°	32.8	1.1
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°	1207.8	40.5
0°-40°	1919.1	64.4
0°-60°	2720.1	91.2
0°-90°	2981.9	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	2981.9	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	1528	1528	1528	1528	1528	
5°	1536	1569	1528	1556	1556	147
15°	1506	1500	1488	1519	1492	423
25°	1370	1370	1380	1406	1394	630
35°	1192	1191	1203	1122	1068	742
45°	832	768	631	585	574	625
55°	290	359	336	300	214	274
65°	81	173	153	158	78	90
75°	62	111	50	100	66	65
85°	26	34	28	36	28	29
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	1528.1	1528.1	1528.1	1528.1	1528.1
2.5°	1532.8	1564.0	1571.8	1571.8	1565.6
5°	1535.9	1568.7	1528.1	1556.2	1556.2
7.5°	1537.5	1542.1	1539.0	1545.3	1526.5
10°	1535.9	1525.0	1521.9	1560.9	1553.1
12.5°	1528.1	1486.0	1514.0	1501.6	1539.0
15°	1506.2	1500.0	1487.5	1518.7	1492.2
17.5°	1471.9	1475.0	1456.3	1471.9	1504.7
20°	1431.3	1445.4	1462.5	1467.2	1448.5
22.5°	1398.5	1403.2	1409.5	1425.1	1436.0
25°	1370.4	1370.4	1379.8	1406.3	1393.9
27.5°	1331.4	1334.5	1348.6	1356.4	1373.6
30°	1289.3	1292.4	1298.6	1334.5	1331.4
32.5°	1245.6	1248.7	1254.9	1278.4	1261.2
35°	1192.5	1190.9	1203.4	1122.3	1067.6
37.5°	1133.2	1131.6	1077.0	924.0	872.5
40°	1056.7	1050.5	895.9	775.8	750.8
42.5°	959.9	933.4	749.2	679.0	666.5
45°	831.9	768.0	630.6	585.3	574.4
47.5°	680.5	632.2	513.5	493.2	466.7
50°	516.6	519.8	429.2	415.2	360.6
52.5°	394.9	432.4	377.7	351.2	279.4
55°	290.3	359.0	335.6	299.7	213.8
57.5°	215.4	298.1	284.1	257.5	163.9
60°	153.0	248.2	234.1	221.6	120.2
62.5°	110.8	207.6	192.0	187.3	92.1
65°	81.2	173.3	153.0	157.6	78.0
67.5°	65.6	145.2	115.5	137.4	67.1
70°	65.6	129.6	82.7	121.7	67.1
72.5°	65.6	121.7	65.6	110.8	70.2
75°	62.4	110.8	49.9	99.9	65.6
77.5°	57.8	90.5	42.1	85.8	62.4
80°	54.6	67.1	40.6	67.1	57.8
82.5°	42.1	46.8	37.5	49.9	45.3
85°	26.5	34.3	28.1	35.9	28.1
87.5°	12.5	18.7	12.5	18.7	12.5
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)