

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: P476245

Luminaire Tested: **14GR-LD5-36-A19/156-UNV-L830-CD1-U**

Issue Date: 02/10/2021

Test Information

Test Method: LM-79-08
Report Number: P476245
Test Lab: INNOVATION CENTER(G3)
Issue Date: 02/10/2021
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: METALUX
Catalog Number: 14GR-LD5-36-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: 3405.5 lumens
Efficiency: N/A
Efficacy: 117.4 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

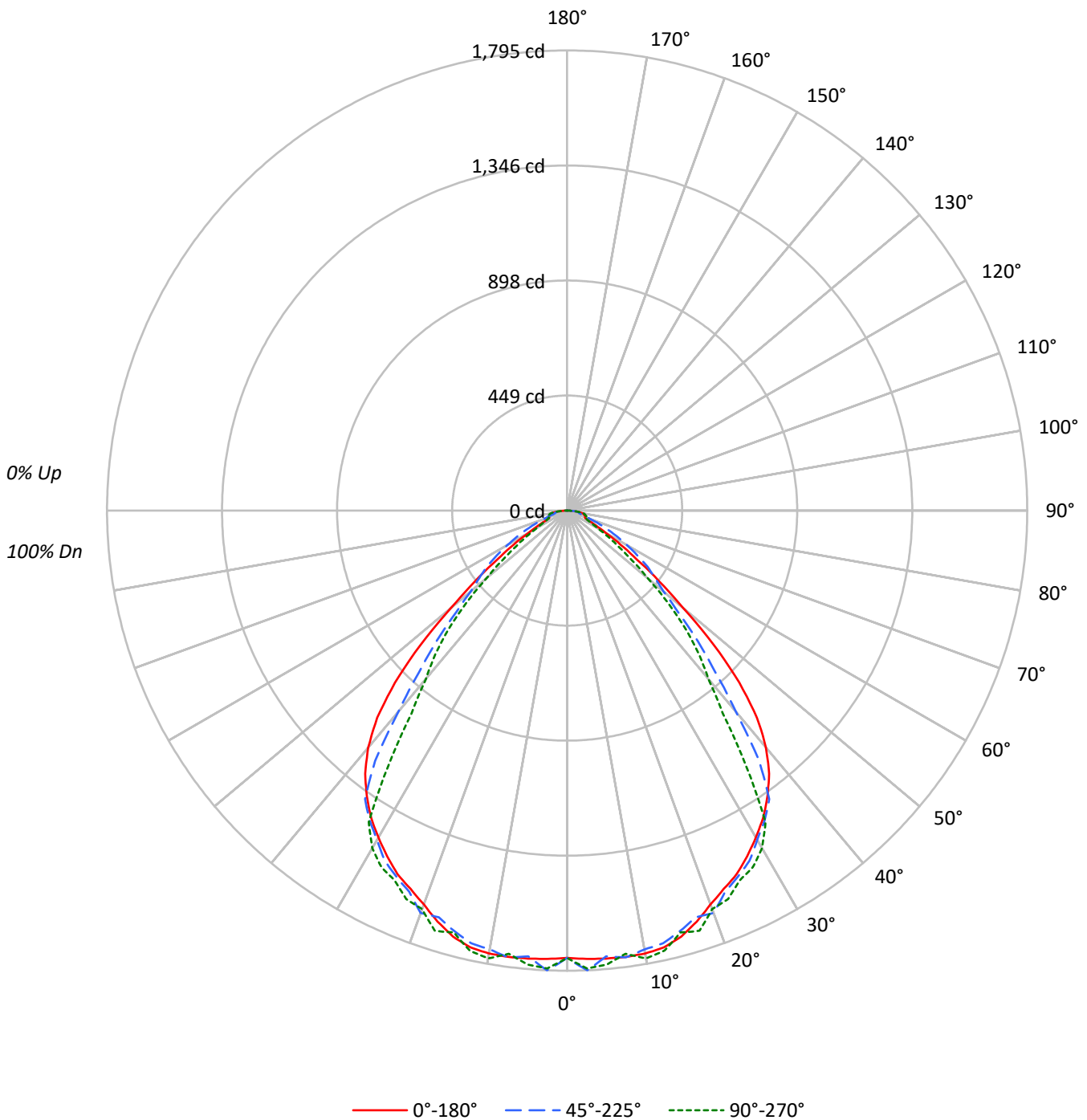
Input Watts (W): 29
Input Voltage (V): 120
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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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	50	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°	4696	4696	4696
5°	4738	4714	4801
10°	4793	4749	4847
15°	4792	4733	4748
20°	4681	4783	4737
25°	4647	4679	4727
30°	4575	4608	4725
35°	4474	4515	4005
40°	4239	3594	3012
45°	3616	2741	2496
50°	2470	2052	1724
55°	1556	1798	1146
60°	940	1439	739
65°	590	1112	567
70°	589	744	603
75°	741	593	779
80°	967	717	1023
85°	936	991	991



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	168.4	4.9
10°-20°	482.6	14.2
20°-30°	728.4	21.4
30°-40°	812.4	23.9
40°-50°	590.8	17.3
50°-60°	324.0	9.5
60°-70°	164.8	4.8
70°-80°	96.8	2.8
80°-90°	37.4	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°	1379.3	40.5
0°-40°	2191.7	64.4
0°-60°	3106.5	91.2
0°-90°	3405.5	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	3405.5	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	1745	1745	1745	1745	1745	
5°	1754	1792	1745	1777	1777	167
15°	1720	1713	1699	1734	1704	483
25°	1565	1565	1576	1606	1592	720
35°	1362	1360	1374	1282	1219	848
45°	950	877	720	668	656	714
55°	332	410	383	342	244	313
65°	93	198	175	180	89	103
75°	71	127	57	114	75	74
85°	30	39	32	41	32	34
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	1745.2	1745.2	1745.2	1745.2	1745.2
2.5°	1750.5	1786.2	1795.1	1795.1	1788.0
5°	1754.1	1791.5	1745.2	1777.3	1777.3
7.5°	1755.9	1761.2	1757.7	1764.8	1743.4
10°	1754.1	1741.6	1738.1	1782.6	1773.7
12.5°	1745.2	1697.1	1729.1	1714.9	1757.7
15°	1720.2	1713.1	1698.8	1734.5	1704.2
17.5°	1681.0	1684.6	1663.2	1681.0	1718.4
20°	1634.7	1650.7	1670.3	1675.7	1654.3
22.5°	1597.2	1602.6	1609.7	1627.5	1640.0
25°	1565.1	1565.1	1575.8	1606.1	1591.9
27.5°	1520.6	1524.1	1540.2	1549.1	1568.7
30°	1472.4	1476.0	1483.1	1524.1	1520.6
32.5°	1422.5	1426.1	1433.2	1460.0	1440.4
35°	1361.9	1360.1	1374.4	1281.7	1219.3
37.5°	1294.2	1292.4	1230.0	1055.3	996.5
40°	1206.8	1199.7	1023.2	886.0	857.4
42.5°	1096.3	1066.0	855.7	775.4	761.2
45°	950.1	877.1	720.2	668.5	656.0
47.5°	777.2	722.0	586.5	563.3	533.0
50°	590.0	593.6	490.2	474.2	411.8
52.5°	451.0	493.8	431.4	401.1	319.1
55°	331.6	410.0	383.3	342.3	244.2
57.5°	246.0	340.5	324.4	294.1	187.2
60°	174.7	283.4	267.4	253.1	137.3
62.5°	126.6	237.1	219.3	213.9	105.2
65°	92.7	197.9	174.7	180.0	89.1
67.5°	74.9	165.8	131.9	156.9	76.7
70°	74.9	148.0	94.5	139.0	76.7
72.5°	74.9	139.0	74.9	126.6	80.2
75°	71.3	126.6	57.0	114.1	74.9
77.5°	66.0	103.4	48.1	98.0	71.3
80°	62.4	76.7	46.3	76.7	66.0
82.5°	48.1	53.5	42.8	57.0	51.7
85°	30.3	39.2	32.1	41.0	32.1
87.5°	14.3	21.4	14.3	21.4	14.3
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)