

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: P476173

Luminaire Tested: **14GR-LD5-36-F1-UNV-L830-CD1-U**

Issue Date: 02/10/2021

Test Information

Test Method: LM-79-08
Report Number: P476173
Test Lab: INNOVATION CENTER(G3)
Issue Date: 02/10/2021
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: METALUX
Catalog Number: 14GR-LD5-36-F1-UNV-L830-CD1-U
Description: GR 1'X4' LED TROFFER w/ F1 LENS
Light Source: 3000K CCT, 80 CRI LEDS
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 3584.6 lumens
Efficiency: N/A
Efficacy: 123.6 lumens/watt
Spacing Criteria (0/90/45): 1.23 / 1.24 / 1.2
Luminous Opening: Rectangular (W 1' x L: 4' x H: 0')
CIE Type: Direct

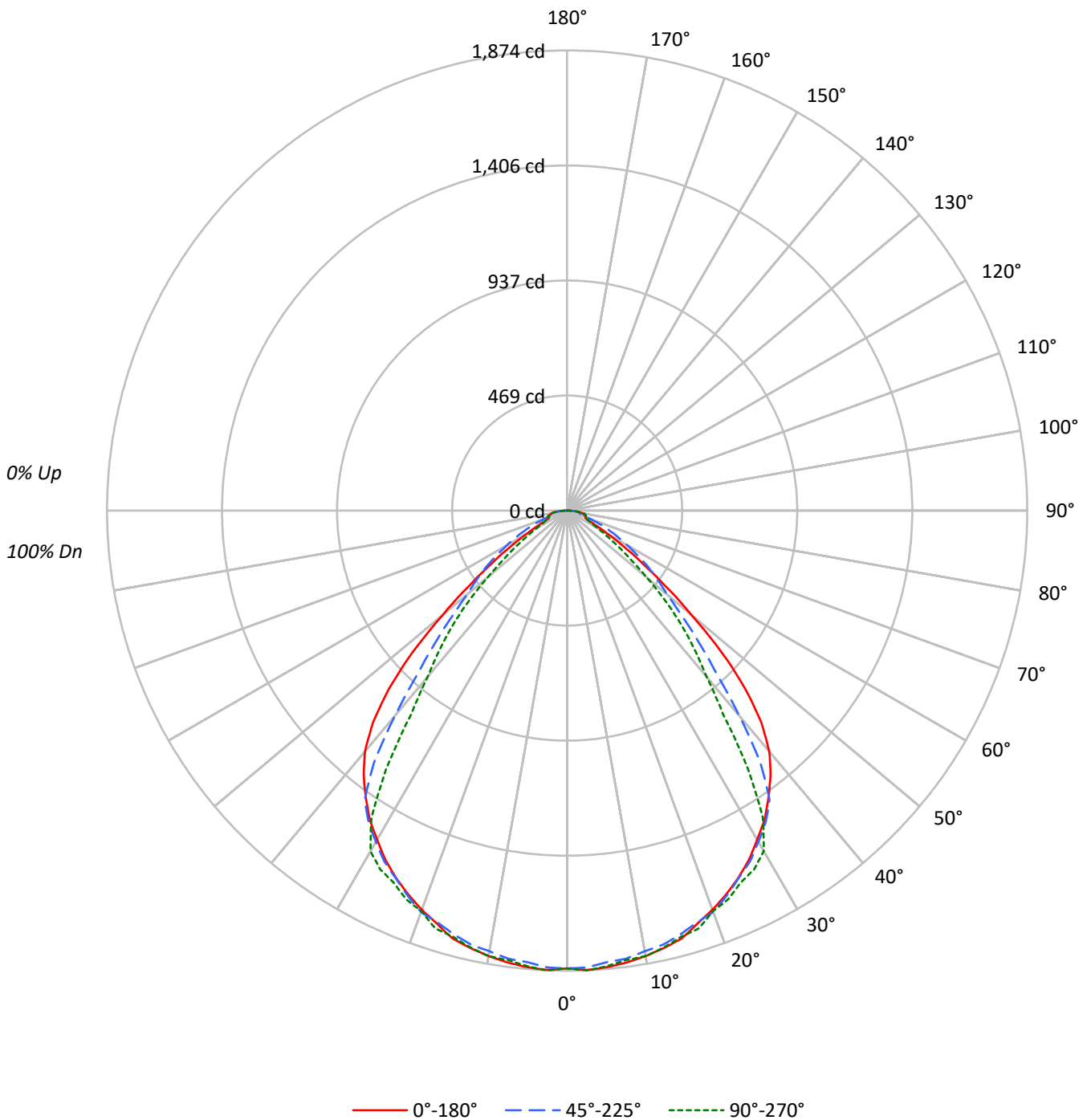
Input Watts (W): 29
Input Voltage (V): 120
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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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	0
RCR																		
0	119	119	119	119	116	116	116	116	111	111	111	106	106	106	102	102	102	100
1	111	107	104	101	108	105	102	99	101	98	96	97	95	93	93	92	90	88
2	103	96	91	86	100	94	89	85	91	87	83	88	84	81	85	82	79	77
3	95	87	80	75	93	85	79	74	82	77	73	80	75	71	77	74	70	68
4	89	79	71	65	87	77	70	65	75	69	64	73	68	63	71	66	63	61
5	82	71	64	58	81	70	63	58	68	62	57	67	61	57	65	60	56	54
6	77	65	57	52	75	64	57	52	63	56	51	61	55	51	60	54	50	49
7	72	60	52	47	70	59	52	47	58	51	46	56	50	46	55	50	46	44
8	67	55	48	42	66	55	47	42	53	47	42	52	46	42	51	46	42	40
9	63	51	44	39	62	50	43	39	49	43	38	48	42	38	47	42	38	36
10	59	47	40	35	58	47	40	35	46	40	35	45	39	35	44	39	35	33

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	5017	5017	5017
5°	5041	4987	5030
10°	5034	4979	5034
15°	5026	4976	5003
20°	4954	4982	4971
25°	4898	4904	4963
30°	4808	4839	4976
35°	4694	4720	4219
40°	4497	3828	3102
45°	3902	2887	2505
50°	2772	2218	1756
55°	1761	1902	1177
60°	1037	1523	778
65°	613	1188	600
70°	632	805	616
75°	771	626	814
80°	995	778	1088
85°	1053	1053	1053



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	176.8	4.9
10°-20°	506.2	14.1
20°-30°	765.5	21.4
30°-40°	852.5	23.8
40°-50°	624.0	17.4
50°-60°	343.9	9.6
60°-70°	175.8	4.9
70°-80°	100.1	2.8
80°-90°	39.8	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°	1448.5	40.4
0°-40°	2301.0	64.2
0°-60°	3268.9	91.2
0°-90°	3584.6	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	3584.6	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	1864	1864	1864	1864	1864	
5°	1866	1866	1846	1858	1862	177
15°	1804	1784	1786	1808	1796	507
25°	1650	1646	1652	1680	1672	759
35°	1429	1431	1437	1338	1284	892
45°	1025	945	758	690	658	772
55°	375	442	405	347	251	351
65°	96	229	187	179	94	111
75°	74	128	60	114	78	78
85°	34	42	34	46	34	37
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	1864.2	1864.2	1864.2	1864.2	1864.2
2.5°	1872.3	1872.3	1862.2	1874.3	1874.3
5°	1866.3	1866.3	1846.2	1858.2	1862.2
7.5°	1856.2	1856.2	1840.2	1850.2	1846.2
10°	1842.2	1832.1	1822.1	1850.2	1842.2
12.5°	1824.1	1804.0	1810.1	1808.1	1822.1
15°	1804.0	1784.0	1786.0	1808.1	1796.0
17.5°	1763.9	1765.9	1757.9	1773.9	1784.0
20°	1729.8	1735.8	1739.8	1749.9	1735.8
22.5°	1691.7	1693.7	1697.7	1711.7	1713.7
25°	1649.5	1645.5	1651.5	1679.6	1671.6
27.5°	1603.4	1601.4	1611.4	1635.5	1647.5
30°	1547.2	1555.2	1557.2	1601.4	1601.4
32.5°	1495.0	1495.0	1505.0	1527.1	1483.0
35°	1428.8	1430.8	1436.8	1338.5	1284.3
37.5°	1360.6	1354.5	1292.3	1113.7	1041.5
40°	1280.3	1266.2	1089.7	929.1	883.0
42.5°	1169.9	1127.8	899.0	802.7	768.6
45°	1025.4	945.2	758.5	690.3	658.2
47.5°	852.9	778.6	630.1	584.0	539.8
50°	662.2	646.2	529.8	489.6	419.4
52.5°	503.7	535.8	465.6	413.4	323.1
55°	375.3	441.5	405.4	347.2	250.8
57.5°	274.9	367.2	341.1	295.0	188.6
60°	192.6	311.0	282.9	248.8	144.5
62.5°	136.5	268.9	232.8	212.7	110.4
65°	96.3	228.8	186.6	178.6	94.3
67.5°	80.3	192.6	142.5	158.5	80.3
70°	80.3	160.5	102.3	140.5	78.3
72.5°	80.3	140.5	76.3	128.4	82.3
75°	74.2	128.4	60.2	114.4	78.3
77.5°	68.2	108.4	52.2	98.3	76.3
80°	64.2	78.3	50.2	80.3	70.2
82.5°	52.2	56.2	46.2	62.2	54.2
85°	34.1	42.1	34.1	46.2	34.1
87.5°	16.1	22.1	16.1	20.1	14.0
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)