

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: P476200

Luminaire Tested: **14GR-LD5-36-F1-UNV-L850-CD1-U**

Issue Date: 02/10/2021

Test Information

Test Method: LM-79-08
Report Number: P476200
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-L850-CD1-U
Description: GR 1'X4' LED TROFFER w/ F1 LENS
Light Source: 5000K CCT, 80 CRI LEDS
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 3788.9 lumens
Efficiency: N/A
Efficacy: 130.7 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

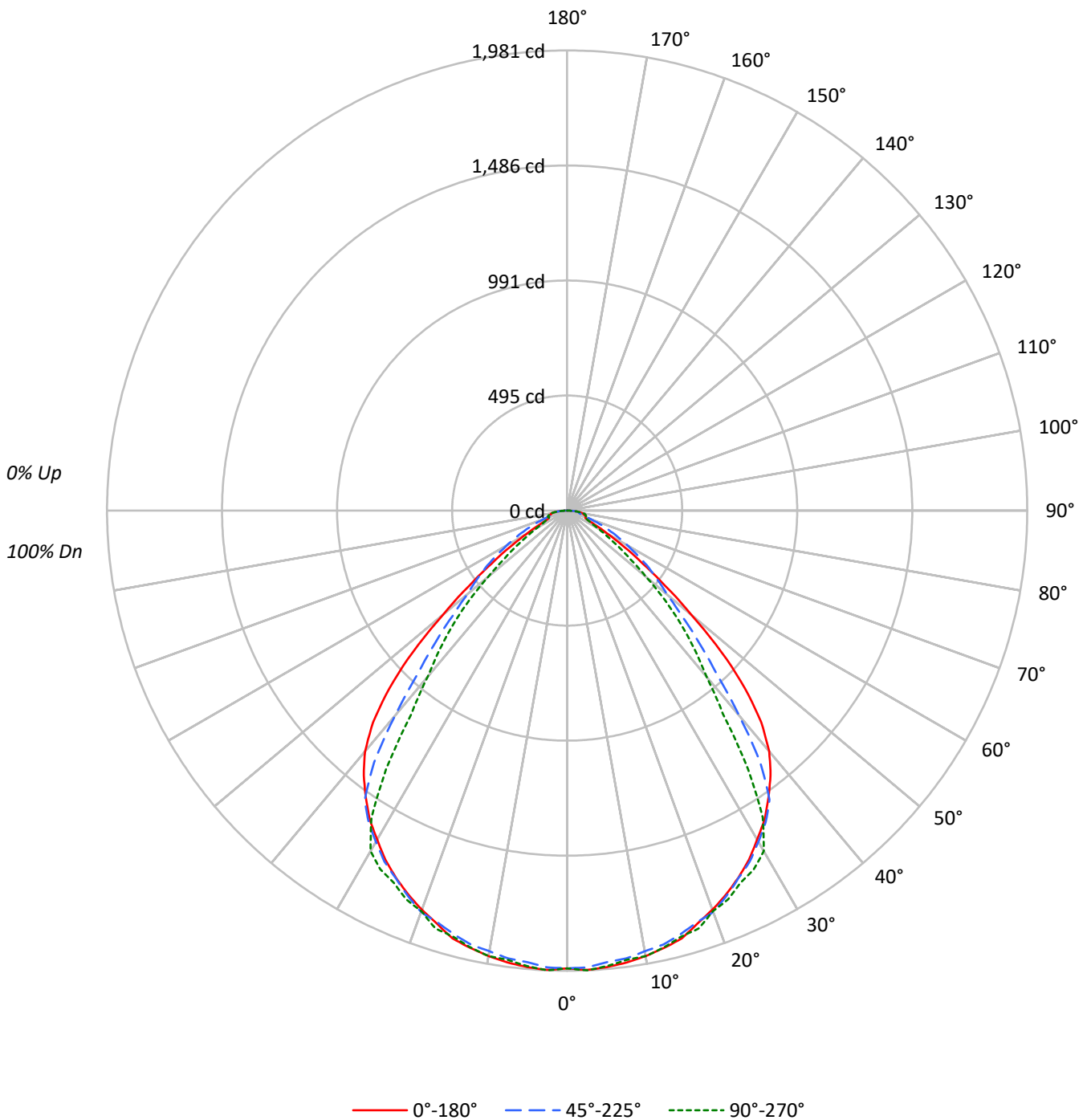
Input Watts (W): 29
Input Voltage (V): 120
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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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°	5303	5303	5303
5°	5329	5271	5317
10°	5321	5263	5321
15°	5312	5259	5289
20°	5236	5266	5254
25°	5177	5183	5246
30°	5082	5115	5259
35°	4961	4989	4459
40°	4754	4046	3279
45°	4125	3051	2648
50°	2930	2344	1856
55°	1861	2010	1244
60°	1096	1610	822
65°	648	1256	635
70°	667	851	651
75°	816	661	860
80°	1052	821	1150
85°	1115	1115	1115



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	186.9	4.9
10°-20°	535.1	14.1
20°-30°	809.1	21.4
30°-40°	901.1	23.8
40°-50°	659.5	17.4
50°-60°	363.5	9.6
60°-70°	185.9	4.9
70°-80°	105.7	2.8
80°-90°	42.1	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°	1531.1	40.4
0°-40°	2432.1	64.2
0°-60°	3455.2	91.2
0°-90°	3788.9	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	3788.9	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	1970	1970	1970	1970	1970	
5°	1973	1973	1951	1964	1968	187
15°	1907	1886	1888	1911	1898	536
25°	1744	1739	1746	1775	1767	803
35°	1510	1512	1519	1415	1358	942
45°	1084	999	802	730	696	816
55°	397	467	428	367	265	371
65°	102	242	197	189	100	117
75°	78	136	64	121	83	82
85°	36	44	36	49	36	39
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	1970.5	1970.5	1970.5	1970.5	1970.5
2.5°	1979.0	1979.0	1968.4	1981.1	1981.1
5°	1972.6	1972.6	1951.4	1964.1	1968.4
7.5°	1962.0	1962.0	1945.0	1955.7	1951.4
10°	1947.2	1936.6	1926.0	1955.7	1947.2
12.5°	1928.1	1906.9	1913.2	1911.1	1926.0
15°	1906.9	1885.7	1887.8	1911.1	1898.4
17.5°	1864.4	1866.6	1858.1	1875.1	1885.7
20°	1828.4	1834.7	1839.0	1849.6	1834.7
22.5°	1788.1	1790.2	1794.4	1809.3	1811.4
25°	1743.5	1739.3	1745.7	1775.4	1766.9
27.5°	1694.8	1692.6	1703.2	1728.7	1741.4
30°	1635.4	1643.9	1646.0	1692.6	1692.6
32.5°	1580.2	1580.2	1590.8	1614.2	1567.5
35°	1510.2	1512.3	1518.7	1414.8	1357.5
37.5°	1438.1	1431.7	1366.0	1177.2	1100.8
40°	1353.3	1338.4	1151.8	982.1	933.3
42.5°	1236.6	1192.1	950.3	848.4	812.4
45°	1083.9	999.0	801.8	729.7	695.7
47.5°	901.5	823.0	666.0	617.2	570.6
50°	700.0	683.0	560.0	517.5	443.3
52.5°	532.4	566.3	492.1	436.9	341.5
55°	396.6	466.6	428.5	366.9	265.1
57.5°	290.6	388.2	360.6	311.8	199.4
60°	203.6	328.8	299.1	263.0	152.7
62.5°	144.2	284.2	246.0	224.8	116.7
65°	101.8	241.8	197.3	188.8	99.7
67.5°	84.8	203.6	150.6	167.6	84.8
70°	84.8	169.7	108.2	148.5	82.7
72.5°	84.8	148.5	80.6	135.8	87.0
75°	78.5	135.8	63.6	120.9	82.7
77.5°	72.1	114.5	55.1	103.9	80.6
80°	67.9	82.7	53.0	84.8	74.2
82.5°	55.1	59.4	48.8	65.8	57.3
85°	36.1	44.5	36.1	48.8	36.1
87.5°	17.0	23.3	17.0	21.2	14.8
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)