

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: P476198

Luminaire Tested: **14GR-LD5-28-F1-UNV-L850-CD1-U**

Issue Date: 02/10/2021

Test Information

Test Method: LM-79-08
Report Number: P476198
Test Lab: INNOVATION CENTER(G3)
Issue Date: 02/10/2021
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: METALUX
Catalog Number: 14GR-LD5-28-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: 2880.0 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

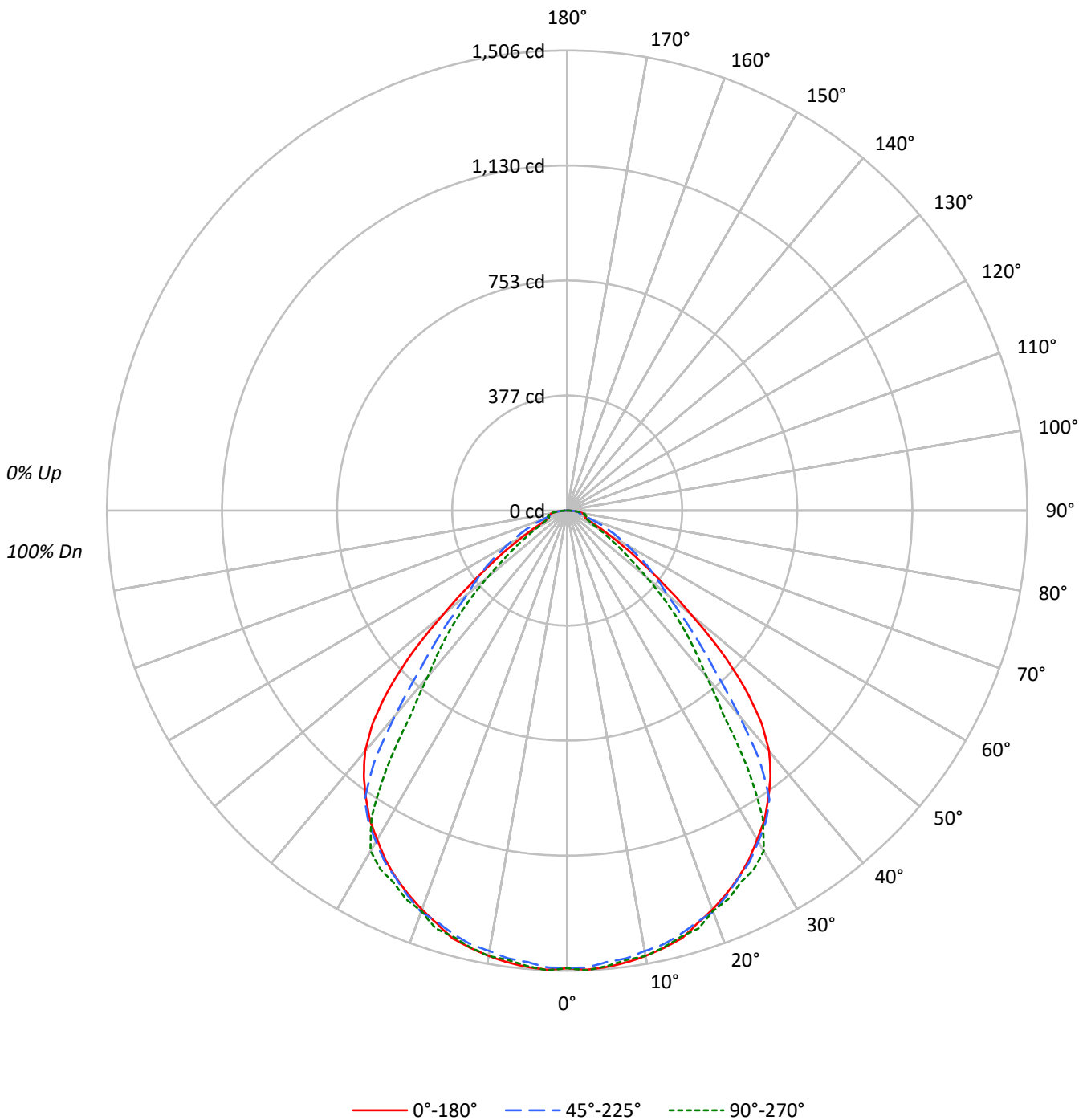
Input Watts (W): 23.3
Input Voltage (V): 120
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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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°	4031	4031	4031
5°	4050	4007	4042
10°	4044	4000	4044
15°	4038	3997	4020
20°	3980	4003	3994
25°	3935	3940	3988
30°	3862	3888	3998
35°	3771	3792	3390
40°	3613	3075	2492
45°	3135	2319	2012
50°	2227	1782	1411
55°	1415	1528	945
60°	833	1223	625
65°	493	954	483
70°	507	647	495
75°	621	503	654
80°	800	625	874
85°	846	846	846



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	142.0	4.9
10°-20°	406.7	14.1
20°-30°	615.0	21.4
30°-40°	684.9	23.8
40°-50°	501.3	17.4
50°-60°	276.3	9.6
60°-70°	141.3	4.9
70°-80°	80.4	2.8
80°-90°	32.0	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°	1163.8	40.4
0°-40°	1848.7	64.2
0°-60°	2626.3	91.2
0°-90°	2880.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	2880.0	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	1498	1498	1498	1498	1498	
5°	1499	1499	1483	1493	1496	142
15°	1449	1433	1435	1453	1443	407
25°	1325	1322	1327	1349	1343	610
35°	1148	1150	1154	1075	1032	716
45°	824	759	609	555	529	620
55°	302	355	326	279	202	282
65°	77	184	150	144	76	89
75°	60	103	48	92	63	63
85°	27	34	27	37	27	29
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	1497.8	1497.8	1497.8	1497.8	1497.8
2.5°	1504.2	1504.2	1496.2	1505.8	1505.8
5°	1499.4	1499.4	1483.3	1492.9	1496.2
7.5°	1491.3	1491.3	1478.4	1486.5	1483.3
10°	1480.0	1472.0	1463.9	1486.5	1480.0
12.5°	1465.5	1449.4	1454.2	1452.6	1463.9
15°	1449.4	1433.3	1434.9	1452.6	1443.0
17.5°	1417.2	1418.8	1412.3	1425.2	1433.3
20°	1389.8	1394.6	1397.8	1405.9	1394.6
22.5°	1359.1	1360.7	1364.0	1375.2	1376.9
25°	1325.3	1322.0	1326.9	1349.4	1343.0
27.5°	1288.2	1286.6	1294.6	1314.0	1323.6
30°	1243.0	1249.5	1251.1	1286.6	1286.6
32.5°	1201.1	1201.1	1209.2	1226.9	1191.4
35°	1147.9	1149.5	1154.4	1075.4	1031.8
37.5°	1093.1	1088.3	1038.3	894.8	836.8
40°	1028.6	1017.3	875.4	746.5	709.4
42.5°	939.9	906.1	722.3	644.9	617.5
45°	823.9	759.4	609.4	554.6	528.8
47.5°	685.2	625.5	506.2	469.2	433.7
50°	532.0	519.1	425.6	393.4	337.0
52.5°	404.7	430.5	374.0	332.1	259.6
55°	301.5	354.7	325.7	278.9	201.5
57.5°	220.9	295.0	274.1	237.0	151.6
60°	154.8	249.9	227.3	199.9	116.1
62.5°	109.6	216.0	187.0	170.9	88.7
65°	77.4	183.8	149.9	143.5	75.8
67.5°	64.5	154.8	114.5	127.4	64.5
70°	64.5	129.0	82.2	112.9	62.9
72.5°	64.5	112.9	61.3	103.2	66.1
75°	59.7	103.2	48.4	91.9	62.9
77.5°	54.8	87.1	41.9	79.0	61.3
80°	51.6	62.9	40.3	64.5	56.4
82.5°	41.9	45.1	37.1	50.0	43.5
85°	27.4	33.9	27.4	37.1	27.4
87.5°	12.9	17.7	12.9	16.1	11.3
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)