

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: P291072

Luminaire Tested: **14GR-LD5-40-A-UNV-L93050-W2A1-U-3000K**

Issue Date: 3/3/2020

Test Information

Test Method: LM-79-08
Report Number: P291072
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (P33314)
Test Lab: INNOVATION CENTER-P3
Issue Date: 3/3/2020
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: METALUX
Catalog Number: 14GR-LD5-40-A-UNV-L93050-W2A1-U-3000K
Description: GRLED 1x4 TUNABLE WHITE TROFFER
WITH A LENS
Light Source: (168) 90 CRI LEDS TUNED TO 3000K CCT
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 3216.0 lumens
Efficiency: N/A
Efficacy: 93.5 lumens/watt
Spacing Criteria (0/90/45): 1.23 / 1.21 / 1.26
Luminous Opening: Rectangular (W 1' x L: 4' x H: 0')
CIE Type: Direct

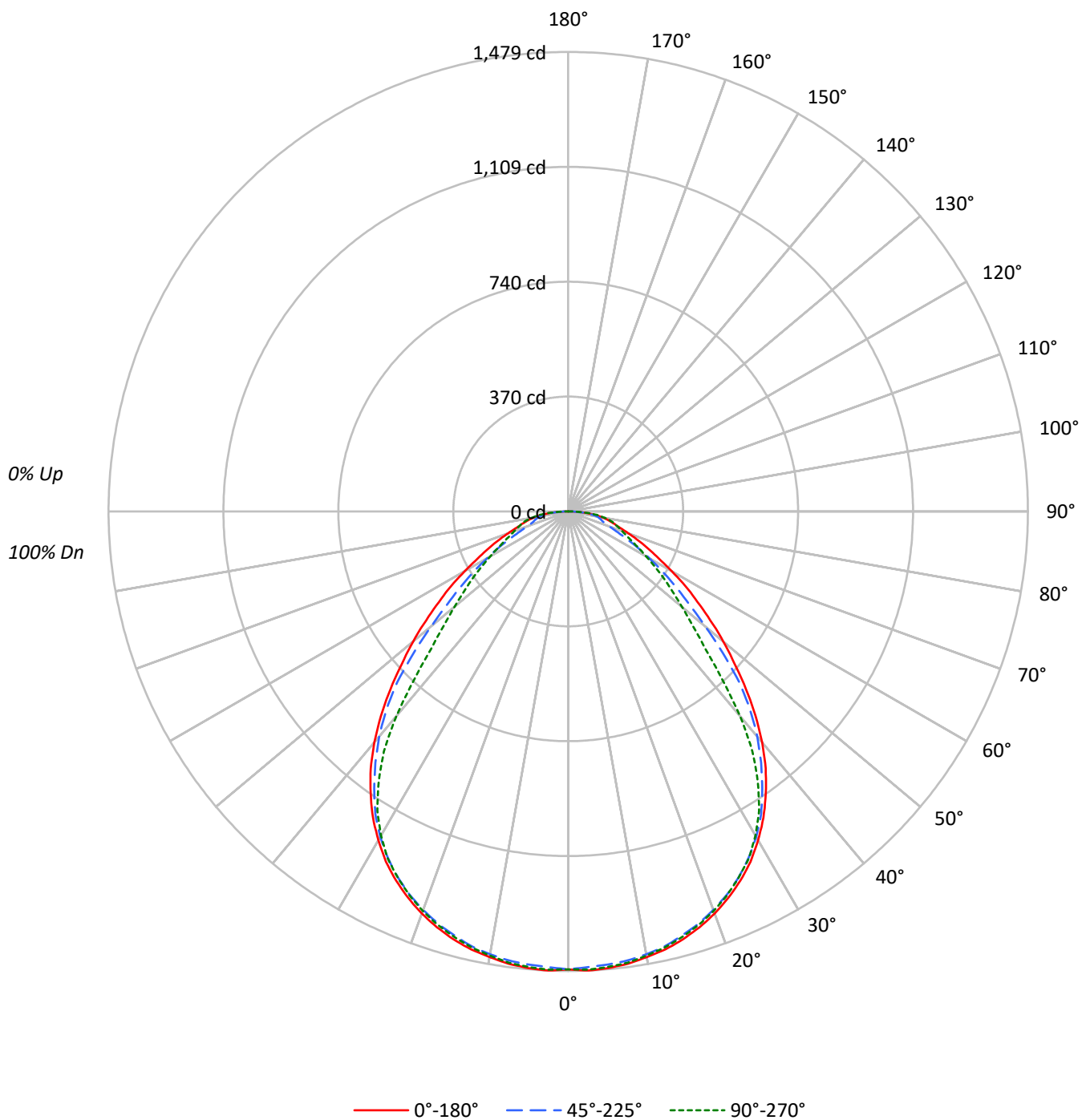
Input Watts (W): 34.41
Input Voltage (V): 120
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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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				0
RW	70	50	30	10	70	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		100
1	110	106	102	98	107	103	100	97	99	96	94		95	93	91		86
2	101	94	88	83	99	92	86	82	88	84	80		85	81	78		74
3	93	84	76	71	91	82	75	70	79	74	69		77	72	68		64
4	86	75	67	61	84	74	67	61	72	65	60		69	64	59		56
5	80	68	60	54	78	67	59	53	65	58	53		63	57	52		50
6	74	62	54	48	72	61	53	47	59	52	47		58	51	47		44
7	69	57	48	43	67	56	48	43	54	47	42		53	47	42		40
8	65	52	44	38	63	51	44	38	50	43	38		49	43	38		36
9	61	48	40	35	59	47	40	35	46	39	35		45	39	35		33
10	57	44	37	32	56	44	37	32	43	36	32		42	36	32		30

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	3966	3966	3966
5°	3985	3955	3975
10°	3980	3956	3966
15°	3972	3937	3950
20°	3944	3908	3919
25°	3892	3855	3857
30°	3797	3758	3741
35°	3642	3575	3494
40°	3408	3322	3023
45°	3078	2962	2362
50°	2730	2405	1998
55°	2383	1973	1763
60°	2066	1624	1556
65°	1812	1303	1436
70°	1616	1105	1445
75°	1576	1164	1616
80°	1748	1471	1852
85°	1822	1568	2167



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	139.8	4.3
10°-20°	400.6	12.5
20°-30°	599.2	18.6
30°-40°	676.4	21.0
40°-50°	573.8	17.8
50°-60°	388.2	12.1
60°-70°	231.8	7.2
70°-80°	145.1	4.5
80°-90°	61.0	1.9
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°	1139.6	35.4
0°-40°	1816.0	56.5
0°-60°	2778.1	86.4
0°-90°	3216.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	3216.0	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	1474	1474	1474	1474	1474	
5°	1475	1471	1464	1474	1472	140
15°	1426	1423	1413	1423	1418	402
25°	1311	1306	1298	1304	1299	603
35°	1108	1101	1088	1079	1064	691
45°	809	812	778	667	621	623
55°	508	484	420	376	376	458
65°	285	236	205	218	226	284
75°	152	135	112	148	155	163
85°	59	56	51	66	70	64
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	1473.7	1473.7	1473.7	1473.7	1473.7
2.5°	1478.9	1474.5	1467.7	1476.7	1476.0
5°	1475.2	1470.7	1464.0	1474.5	1471.5
7.5°	1468.5	1464.8	1458.0	1467.7	1464.8
10°	1456.5	1453.5	1447.6	1455.8	1451.3
12.5°	1443.8	1441.6	1434.1	1441.6	1437.1
15°	1425.9	1422.9	1413.2	1422.9	1417.7
17.5°	1403.5	1399.8	1391.6	1399.8	1395.3
20°	1377.4	1372.9	1364.7	1372.9	1368.4
22.5°	1346.0	1342.3	1334.8	1342.3	1336.3
25°	1310.9	1306.4	1298.2	1304.2	1298.9
27.5°	1270.5	1264.6	1257.1	1261.6	1258.6
30°	1222.0	1214.5	1209.3	1209.3	1204.1
32.5°	1169.0	1163.7	1154.8	1149.5	1142.8
35°	1108.5	1101.0	1088.3	1078.6	1063.6
37.5°	1043.5	1034.5	1018.8	994.2	974.0
40°	970.3	959.1	945.6	897.1	860.5
42.5°	891.8	889.6	866.5	783.5	732.7
45°	808.9	811.9	778.3	667.0	620.7
47.5°	725.3	735.7	674.5	565.4	541.5
50°	652.1	655.8	574.4	490.7	477.3
52.5°	576.6	570.7	490.0	431.7	422.0
55°	507.9	484.0	420.5	376.5	375.7
57.5°	447.4	403.3	359.3	326.4	330.1
60°	383.9	334.6	301.8	283.8	289.1
62.5°	327.9	280.8	251.7	246.5	255.5
65°	284.6	236.0	204.7	218.1	225.6
67.5°	243.5	202.4	166.6	198.7	201.7
70°	205.4	175.5	140.4	183.0	183.7
72.5°	174.0	155.4	121.8	165.8	168.1
75°	151.6	135.2	112.0	147.9	155.4
77.5°	133.0	115.8	103.8	127.7	140.4
80°	112.8	93.4	94.9	106.8	119.5
82.5°	86.6	72.5	75.4	88.1	97.1
85°	59.0	56.0	50.8	65.7	70.2
87.5°	31.4	29.9	26.1	37.3	35.1
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)