

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: P290685

Luminaire Tested: **14GR-LD5-43-F1-UNV-L93050-W2A1-U-3000K**

Issue Date: 3/3/2020

Test Information

Test Method: LM-79-08
Report Number: P290685
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G3-1901-084-7)
Test Lab: INNOVATION CENTER(G3)
Issue Date: 3/3/2020
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: METALUX
Catalog Number: 14GR-LD5-43-F1-UNV-L93050-W2A1-U-3000K
Description: GRLED 1x4 TUNABLE WHITE TROFFER
WITH F1 LENS
Light Source: (168) 90 CRI LEDS TUNED TO 3000K CCT
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 3394.0 lumens
Efficiency: N/A
Efficacy: 90.8 lumens/watt
Spacing Criteria (0/90/45): 1.18 / 1.15 / 1.23
Luminous Opening: Rectangular (W 1' x L: 4' x H: 0')
CIE Type: Direct

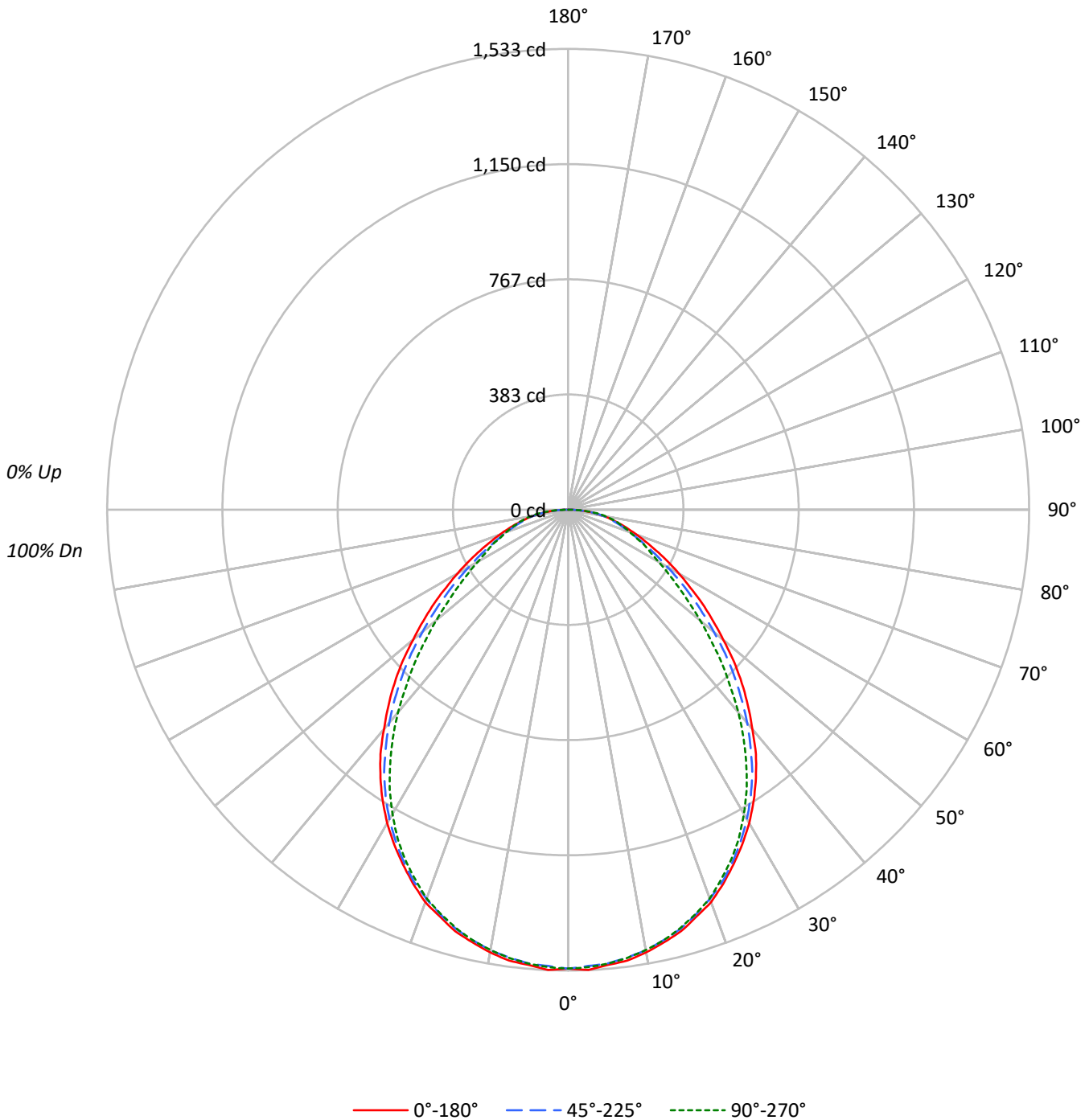
Input Watts (W): 37.386
Input Voltage (V): 120
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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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	110	105	101	98	107	103	99	96	99	96	93	95	92	90	91	89	87	85					85			
2	101	93	87	81	98	91	85	80	88	83	78	84	80	77	81	78	75	73					73			
3	92	83	75	69	90	81	74	68	78	72	67	75	70	66	73	69	65	63					63			
4	85	74	66	59	83	73	65	59	70	64	58	68	62	57	66	61	57	55					55			
5	79	67	58	52	77	66	58	52	64	57	51	62	55	51	60	54	50	48					48			
6	73	61	52	46	71	60	52	46	58	51	45	56	50	45	55	49	45	43					43			
7	68	55	47	41	66	54	47	41	53	46	41	52	45	40	50	44	40	38					38			
8	64	51	43	37	62	50	42	37	49	42	37	47	41	36	46	41	36	34					34			
9	60	47	39	34	58	46	39	33	45	38	33	44	38	33	43	37	33	31					31			
10	56	43	36	31	55	43	35	31	42	35	30	41	35	30	40	34	30	29					29			

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	4108	4108	4108
5°	4106	4092	4094
10°	4086	4066	4065
15°	4044	4020	4014
20°	3979	3946	3941
25°	3864	3839	3811
30°	3740	3694	3631
35°	3575	3506	3392
40°	3348	3255	3094
45°	3109	2970	2753
50°	2820	2645	2397
55°	2551	2336	2095
60°	2290	2047	1868
65°	2056	1828	1788
70°	1898	1702	1720
75°	1812	1707	1804
80°	1833	1821	1965
85°	1899	1874	2090



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	144.1	4.2
10°-20°	407.4	12.0
20°-30°	594.9	17.5
30°-40°	662.9	19.5
40°-50°	597.3	17.6
50°-60°	446.5	13.2
60°-70°	294.5	8.7
70°-80°	179.8	5.3
80°-90°	66.7	2.0
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°	1146.4	33.8
0°-40°	1809.3	53.3
0°-60°	2853.0	84.1
0°-90°	3394.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	3394.0	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	1526	1526	1526	1526	1526	
5°	1520	1519	1515	1522	1516	144
15°	1452	1446	1443	1452	1441	409
25°	1302	1297	1293	1295	1284	599
35°	1088	1079	1067	1049	1032	679
45°	817	808	780	744	724	629
55°	544	535	498	457	447	487
65°	323	313	287	275	281	324
75°	174	171	164	170	174	186
85°	62	59	61	67	68	65
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	1526.4	1526.4	1526.4	1526.4	1526.4
2.5°	1532.6	1525.6	1519.4	1528.7	1523.3
5°	1520.1	1518.6	1514.7	1522.5	1515.5
7.5°	1512.4	1506.9	1502.3	1511.6	1503.8
10°	1495.2	1492.1	1488.2	1496.0	1487.5
12.5°	1474.2	1471.1	1467.2	1476.6	1467.2
15°	1451.7	1446.2	1443.1	1451.7	1440.8
17.5°	1419.0	1416.7	1412.0	1420.6	1409.7
20°	1389.4	1380.9	1377.8	1384.0	1376.2
22.5°	1346.7	1340.4	1339.7	1343.5	1330.3
25°	1301.5	1296.9	1293.0	1295.3	1283.6
27.5°	1254.1	1247.9	1243.2	1242.4	1230.0
30°	1203.5	1195.7	1188.7	1182.5	1168.5
32.5°	1148.3	1138.9	1129.6	1119.5	1104.7
35°	1088.4	1079.0	1067.4	1048.7	1032.4
37.5°	1025.4	1014.5	995.8	974.0	957.7
40°	953.0	947.6	926.6	898.5	880.7
42.5°	885.3	879.1	852.6	821.5	797.4
45°	816.9	808.3	780.3	744.5	723.5
47.5°	746.8	738.3	707.2	662.8	644.2
50°	673.7	669.1	631.7	591.3	572.6
52.5°	606.8	601.4	563.2	522.8	505.7
55°	543.8	535.2	497.9	456.7	446.6
57.5°	480.8	471.4	436.4	401.4	394.4
60°	425.5	413.9	380.4	353.2	347.0
62.5°	373.4	360.2	332.2	311.2	308.1
65°	322.9	312.7	287.1	275.4	280.8
67.5°	279.3	269.2	250.5	245.8	244.3
70°	241.2	231.8	216.3	217.8	218.6
72.5°	206.2	200.7	189.0	192.9	196.0
75°	174.3	171.2	164.2	169.6	173.5
77.5°	145.5	143.1	140.0	144.7	150.9
80°	118.3	116.7	117.5	120.6	126.8
82.5°	91.0	87.9	90.2	96.5	100.4
85°	61.5	59.1	60.7	66.9	67.7
87.5°	28.8	28.8	28.0	32.7	32.7
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)