

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: P290678

Luminaire Tested: **14GR-LD5-36-F1-UNV-L93050-W2A1-U-4500K**

Issue Date: 3/3/2020

Test Information

Test Method: LM-79-08
Report Number: P290678
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-LD5-36-F1-UNV-L93050-W2A1-U-4500K
Description: GRLED 1x4 TUNABLE WHITE TROFFER
WITH F1 LENS
Light Source: (168) 90 CRI LEDS TUNED TO 4500K CCT
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 3414.0 lumens
Efficiency: N/A
Efficacy: 111.9 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

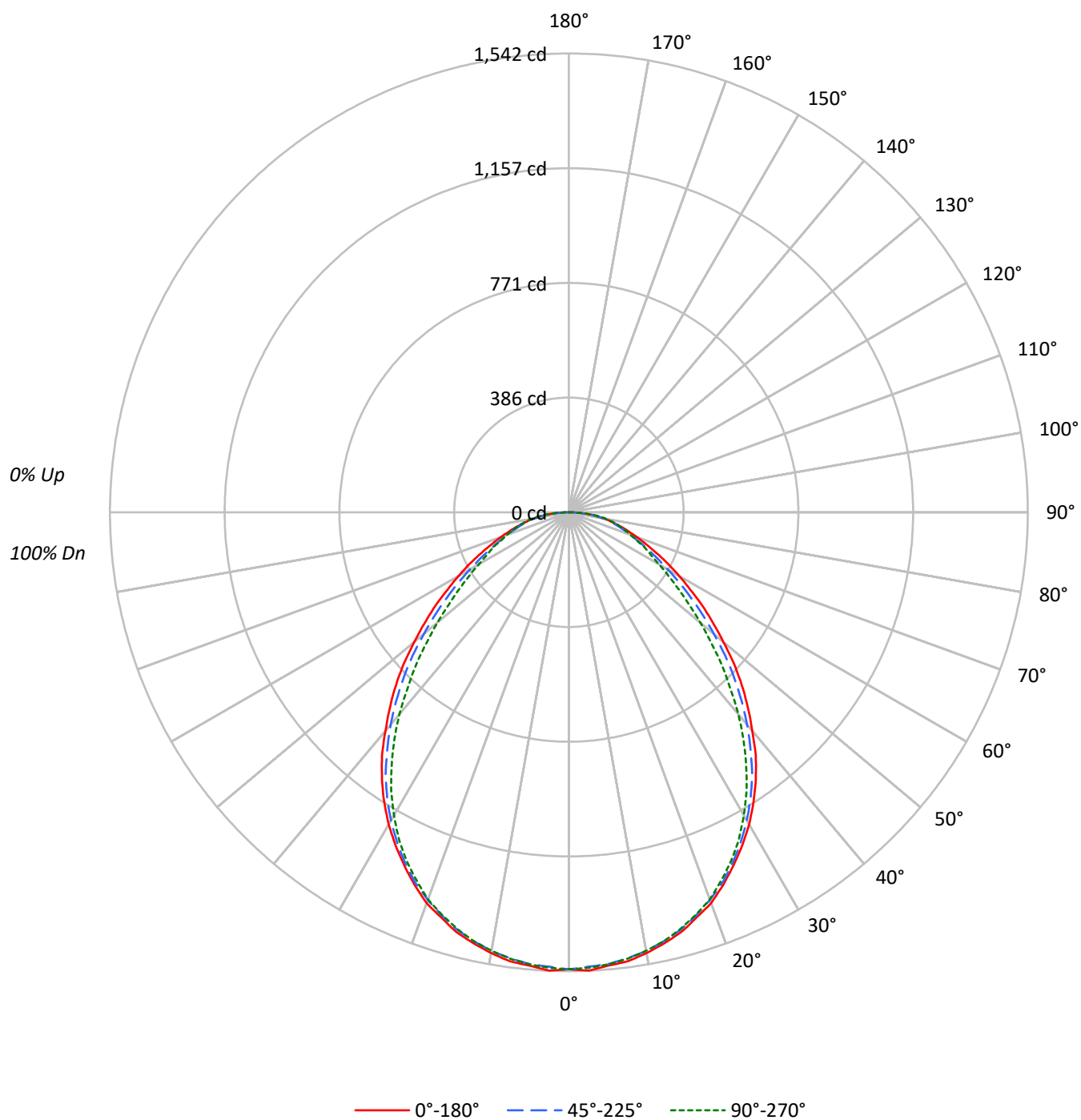
Input Watts (W): 30.504
Input Voltage (V): 120
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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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		50	30	10
RCR																				
0	119	119	119	119	116	116	116	116		111	111	111		106	106	106		102	102	102
1	110	105	101	98	107	103	99	96		99	96	93		95	92	90		91	89	87
2	101	93	87	81	98	91	85	80		88	83	78		84	80	77		81	78	75
3	92	83	75	69	90	81	74	68		78	72	67		75	70	66		73	69	65
4	85	74	66	59	83	73	65	59		70	64	58		68	62	57		66	61	57
5	79	67	58	52	77	66	58	52		64	57	51		62	55	51		60	54	50
6	73	61	52	46	71	60	52	46		58	51	45		56	50	45		55	49	45
7	68	55	47	41	66	54	47	41		53	46	41		52	45	40		50	44	40
8	64	51	43	37	62	50	42	37		49	42	37		47	41	36		46	41	36
9	60	47	39	34	58	46	39	33		45	38	33		44	38	33		43	37	33
10	56	43	36	31	55	43	35	31		42	35	30		41	35	30		40	34	30

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	4132	4132	4132
5°	4130	4116	4118
10°	4110	4091	4088
15°	4068	4044	4038
20°	4002	3969	3964
25°	3887	3862	3834
30°	3762	3715	3652
35°	3597	3527	3411
40°	3367	3274	3112
45°	3127	2987	2770
50°	2837	2660	2411
55°	2566	2350	2107
60°	2304	2060	1878
65°	2068	1839	1799
70°	1909	1711	1730
75°	1823	1717	1814
80°	1843	1832	1977
85°	1908	1883	2103



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	144.9	4.2
10°-20°	409.8	12.0
20°-30°	598.4	17.5
30°-40°	666.8	19.5
40°-50°	600.8	17.6
50°-60°	449.1	13.2
60°-70°	296.2	8.7
70°-80°	180.9	5.3
80°-90°	67.1	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°	1153.1	33.8
0°-40°	1819.9	53.3
0°-60°	2869.8	84.1
0°-90°	3414.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	3414.0	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	1535	1535	1535	1535	1535	
5°	1529	1528	1524	1531	1524	145
15°	1460	1455	1452	1460	1449	411
25°	1309	1304	1301	1303	1291	603
35°	1095	1085	1074	1055	1038	683
45°	822	813	785	749	728	632
55°	547	538	501	459	449	490
65°	325	315	289	277	282	326
75°	175	172	165	171	174	187
85°	62	60	61	67	68	66
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	1535.4	1535.4	1535.4	1535.4	1535.4
2.5°	1541.6	1534.6	1528.3	1537.7	1532.2
5°	1529.1	1527.5	1523.6	1531.4	1524.4
7.5°	1521.3	1515.8	1511.1	1520.5	1512.7
10°	1504.1	1500.9	1497.0	1504.8	1496.2
12.5°	1482.9	1479.8	1475.9	1485.3	1475.9
15°	1460.2	1454.8	1451.6	1460.2	1449.3
17.5°	1427.4	1425.0	1420.3	1428.9	1418.0
20°	1397.6	1389.0	1385.9	1392.2	1384.3
22.5°	1354.6	1348.3	1347.6	1351.5	1338.2
25°	1309.2	1304.5	1300.6	1302.9	1291.2
27.5°	1261.5	1255.2	1250.5	1249.7	1237.2
30°	1210.6	1202.8	1195.7	1189.5	1175.4
32.5°	1155.0	1145.7	1136.3	1126.1	1111.2
35°	1094.8	1085.4	1073.7	1054.9	1038.4
37.5°	1031.4	1020.4	1001.7	979.8	963.3
40°	958.6	953.1	932.0	903.8	885.8
42.5°	890.5	884.3	857.7	826.4	802.1
45°	821.7	813.1	784.9	748.9	727.8
47.5°	751.2	742.6	711.3	666.7	648.0
50°	677.7	673.0	635.4	594.7	576.0
52.5°	610.4	604.9	566.6	525.9	508.7
55°	547.0	538.4	500.8	459.4	449.2
57.5°	483.6	474.2	439.0	403.8	396.8
60°	428.1	416.3	382.7	355.3	349.0
62.5°	375.6	362.3	334.1	313.0	309.9
65°	324.8	314.6	288.8	277.0	282.5
67.5°	280.9	270.8	252.0	247.3	245.7
70°	242.6	233.2	217.5	219.1	219.9
72.5°	207.4	201.9	190.2	194.1	197.2
75°	175.3	172.2	165.1	170.6	174.5
77.5°	146.3	144.0	140.9	145.6	151.8
80°	118.9	117.4	118.2	121.3	127.6
82.5°	91.6	88.4	90.8	97.0	100.9
85°	61.8	59.5	61.0	67.3	68.1
87.5°	29.0	29.0	28.2	32.9	32.9
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)