

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: P293546

Luminaire Tested: **24GR-LD5-34-A-UNV-L93050-W2A1-U-4000K**

Issue Date: 3/3/2020

Test Information

Test Method: LM-79-08
Report Number: P293546
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (P33306)
Test Lab: INNOVATION CENTER-P3
Issue Date: 3/3/2020
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: METALUX
Catalog Number: 24GR-LD5-34-A-UNV-L93050-W2A1-U-4000K
Description: GRLED 2x4 TUNABLE WHITE TROFFER WITH A LENS
Light Source: (336) 90 CRI LEDS TUNED TO 4000K CCT
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 3243.0 lumens
Efficiency: N/A
Efficacy: 137.6 lumens/watt
Spacing Criteria (0/90/45): 1.21 / 1.2 / 1.26
Luminous Opening: Rectangular (W 2' x L: 4' x H: 0')
CIE Type: Direct

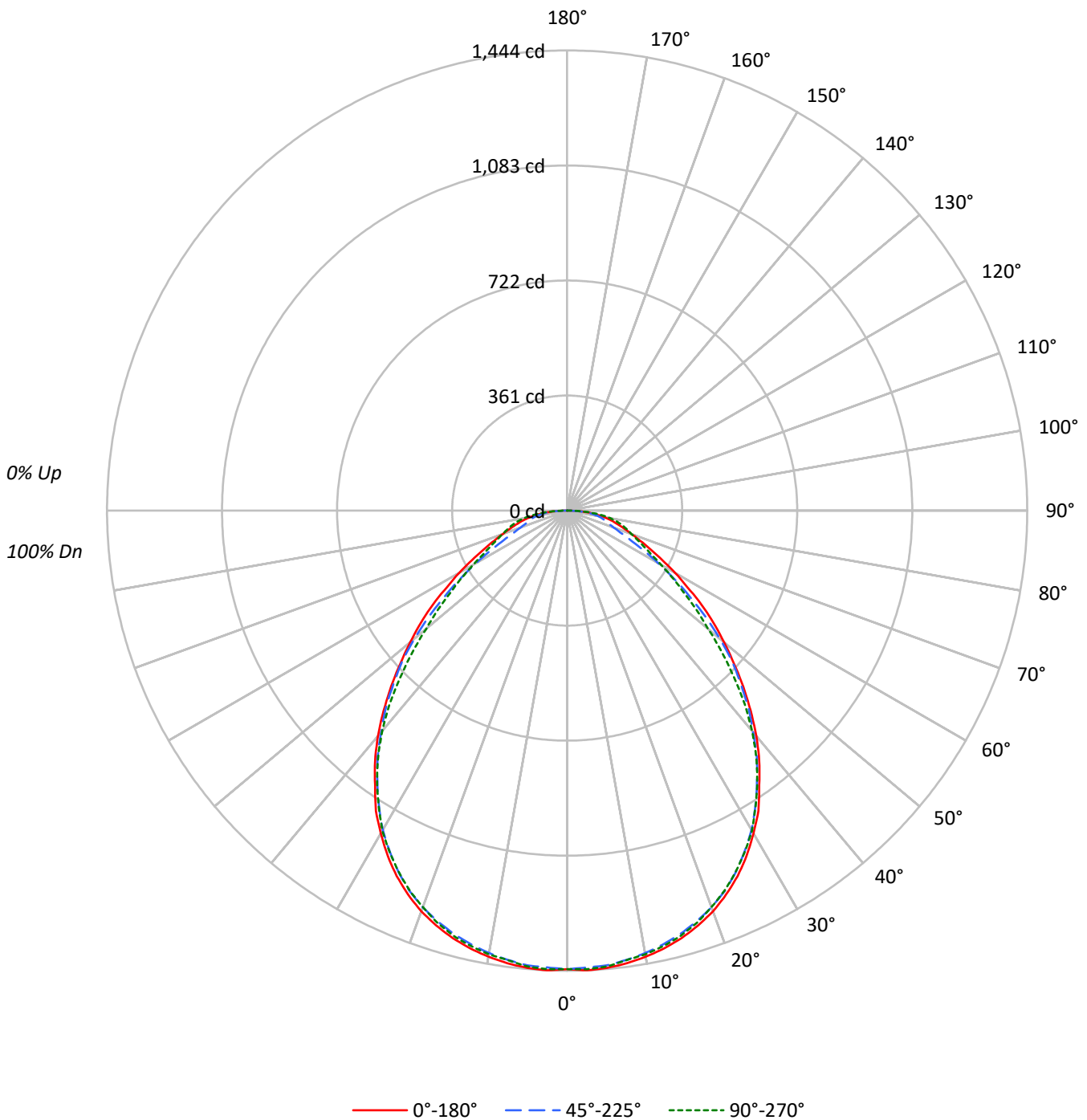
Input Watts (W): 23.568246
Input Voltage (V): 120
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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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	110	105	101	98	107	103	99	96	99	96	93	95	93	90	91	89	88	86
2	101	93	87	82	98	91	86	81	88	83	79	85	81	77	82	78	75	73
3	93	83	75	69	90	81	74	69	79	73	68	76	71	67	73	69	65	63
4	86	74	66	60	83	73	65	60	71	64	59	68	63	58	66	61	57	55
5	79	67	59	53	77	66	58	52	64	57	52	62	56	51	60	55	51	49
6	73	61	53	46	72	60	52	46	58	51	46	57	50	45	55	49	45	43
7	68	56	47	42	67	55	47	41	53	46	41	52	46	41	51	45	41	39
8	64	51	43	37	62	50	43	37	49	42	37	48	41	37	47	41	37	35
9	60	47	39	34	58	46	39	34	45	38	34	44	38	33	43	38	33	32
10	56	44	36	31	55	43	36	31	42	35	31	41	35	31	40	35	30	29

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	1936	1936	1936
5°	1945	1935	1939
10°	1942	1926	1932
15°	1935	1915	1923
20°	1916	1897	1896
25°	1879	1859	1857
30°	1817	1798	1802
35°	1726	1706	1708
40°	1623	1594	1585
45°	1487	1467	1409
50°	1344	1308	1209
55°	1207	1099	1042
60°	1057	885	917
65°	922	695	844
70°	843	607	843
75°	844	646	930
80°	916	761	1060
85°	1005	858	1136



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	136.3	4.2
10°-20°	388.9	12.0
20°-30°	576.6	17.8
30°-40°	650.5	20.1
40°-50°	589.1	18.2
50°-60°	425.0	13.1
60°-70°	253.8	7.8
70°-80°	156.8	4.8
80°-90°	66.1	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°	1101.7	34.0
0°-40°	1752.2	54.0
0°-60°	2766.3	85.3
0°-90°	3243.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	3243.0	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	1439	1439	1439	1439	1439	
5°	1440	1438	1432	1431	1436	137
15°	1389	1380	1375	1375	1381	391
25°	1266	1258	1252	1248	1251	581
35°	1051	1049	1039	1039	1040	657
45°	782	777	771	752	740	602
55°	514	498	468	445	444	459
65°	290	255	218	248	265	291
75°	162	141	124	155	179	173
85°	65	57	56	73	74	68
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	1438.9	1438.9	1438.9	1438.9	1438.9
2.5°	1443.9	1439.9	1434.9	1437.9	1440.4
5°	1440.4	1438.4	1432.4	1430.9	1435.9
7.5°	1432.9	1427.9	1422.3	1424.9	1422.8
10°	1421.3	1416.8	1409.8	1410.3	1413.8
12.5°	1407.3	1401.8	1394.3	1396.3	1399.3
15°	1388.8	1380.3	1374.8	1375.3	1380.8
17.5°	1365.2	1358.7	1351.7	1353.2	1355.7
20°	1338.2	1334.7	1324.7	1321.6	1324.2
22.5°	1304.1	1297.6	1292.1	1290.6	1291.1
25°	1265.5	1258.5	1252.0	1247.5	1251.0
27.5°	1220.4	1214.4	1205.9	1204.4	1207.4
30°	1169.3	1164.8	1157.3	1155.3	1159.8
32.5°	1117.2	1109.7	1099.2	1099.2	1100.2
35°	1050.6	1049.1	1038.6	1039.1	1040.1
37.5°	990.5	983.5	977.5	971.4	974.5
40°	923.9	915.8	907.8	903.8	902.3
42.5°	852.2	846.2	842.7	828.2	824.7
45°	781.6	776.6	771.0	752.0	740.5
47.5°	709.4	708.4	703.9	670.3	658.8
50°	642.3	640.8	624.8	589.2	577.7
52.5°	578.7	568.6	547.6	512.5	510.5
55°	514.5	498.5	468.4	445.4	444.4
57.5°	446.9	427.9	397.3	384.8	391.3
60°	392.8	363.7	328.7	330.2	340.7
62.5°	336.7	304.1	269.5	284.6	297.1
65°	289.6	255.0	218.4	248.0	265.0
67.5°	248.5	216.4	181.4	220.9	237.5
70°	214.4	188.4	154.3	195.9	214.4
72.5°	187.4	163.3	136.8	175.9	197.4
75°	162.3	140.8	124.2	154.8	178.9
77.5°	140.8	119.7	112.2	136.8	160.3
80°	118.2	99.2	98.2	119.2	136.8
82.5°	92.2	79.2	79.2	99.7	110.2
85°	65.1	57.1	55.6	72.6	73.6
87.5°	33.6	32.1	29.1	38.1	38.1
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)