

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: P293541

Luminaire Tested: **24GR-LD5-30-A-UNV-L93050-W2A1-U-4000K**

Issue Date: 3/3/2020

Test Information

Test Method: LM-79-08
Report Number: P293541
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-LD5-30-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: 2831.0 lumens
Efficiency: N/A
Efficacy: 138.0 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

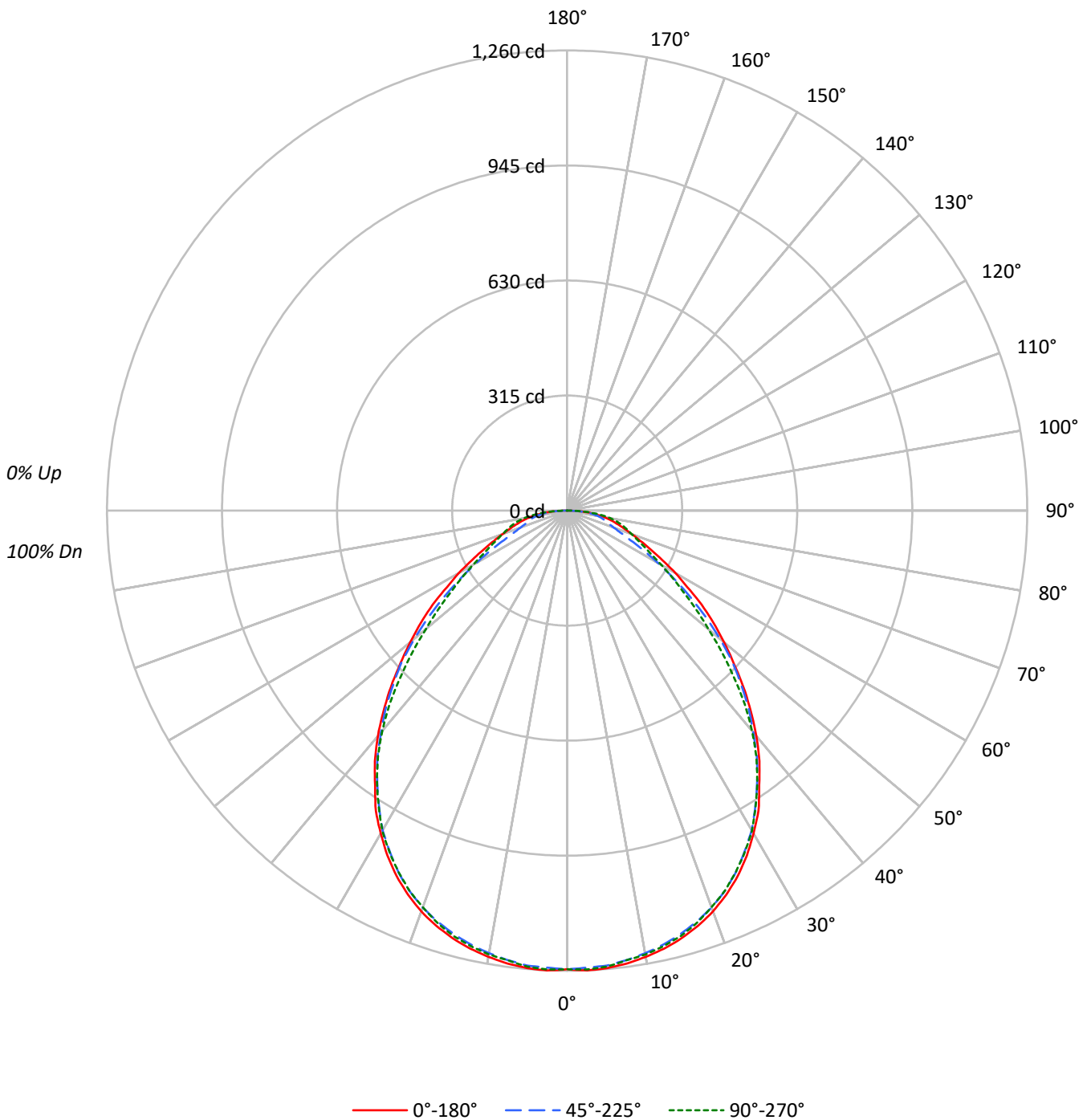
Input Watts (W): 20.51487
Input Voltage (V): 120
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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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°	1690	1690	1690
5°	1698	1689	1693
10°	1695	1681	1686
15°	1689	1672	1679
20°	1673	1656	1655
25°	1640	1623	1621
30°	1586	1570	1573
35°	1506	1489	1491
40°	1417	1392	1384
45°	1298	1281	1230
50°	1174	1142	1056
55°	1054	959	910
60°	923	772	800
65°	805	607	737
70°	736	530	736
75°	737	564	811
80°	800	664	925
85°	878	749	993



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	118.9	4.2
10°-20°	339.5	12.0
20°-30°	503.3	17.8
30°-40°	567.8	20.1
40°-50°	514.3	18.2
50°-60°	371.0	13.1
60°-70°	221.5	7.8
70°-80°	136.9	4.8
80°-90°	57.7	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°	961.7	34.0
0°-40°	1529.5	54.0
0°-60°	2414.9	85.3
0°-90°	2831.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	2831.0	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	1256	1256	1256	1256	1256	
5°	1257	1256	1250	1249	1254	119
15°	1212	1205	1200	1200	1205	342
25°	1105	1099	1093	1089	1092	508
35°	917	916	907	907	908	574
45°	682	678	673	656	646	526
55°	449	435	409	389	388	401
65°	253	223	191	216	231	254
75°	142	123	108	135	156	151
85°	57	50	48	63	64	59
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	1256.1	1256.1	1256.1	1256.1	1256.1
2.5°	1260.5	1257.0	1252.6	1255.2	1257.4
5°	1257.4	1255.6	1250.4	1249.1	1253.5
7.5°	1250.8	1246.5	1241.6	1243.8	1242.1
10°	1240.8	1236.8	1230.7	1231.2	1234.2
12.5°	1228.5	1223.7	1217.2	1218.9	1221.5
15°	1212.3	1204.9	1200.1	1200.5	1205.3
17.5°	1191.8	1186.1	1180.0	1181.3	1183.5
20°	1168.2	1165.1	1156.4	1153.7	1155.9
22.5°	1138.4	1132.7	1127.9	1126.6	1127.1
25°	1104.8	1098.6	1092.9	1089.0	1092.1
27.5°	1065.4	1060.1	1052.7	1051.4	1054.0
30°	1020.8	1016.8	1010.3	1008.5	1012.5
32.5°	975.3	968.7	959.6	959.6	960.4
35°	917.1	915.8	906.6	907.1	907.9
37.5°	864.6	858.5	853.3	848.0	850.7
40°	806.5	799.5	792.5	789.0	787.7
42.5°	743.9	738.7	735.6	722.9	719.9
45°	682.3	677.9	673.1	656.5	646.4
47.5°	619.3	618.4	614.5	585.2	575.1
50°	560.7	559.4	545.4	514.3	504.3
52.5°	505.1	496.4	478.0	447.4	445.7
55°	449.2	435.2	408.9	388.8	387.9
57.5°	390.1	373.5	346.8	335.9	341.6
60°	342.9	317.5	286.9	288.2	297.4
62.5°	293.9	265.5	235.3	248.4	259.4
65°	252.8	222.6	190.7	216.5	231.4
67.5°	216.9	188.9	158.3	192.9	207.3
70°	187.2	164.4	134.7	171.0	187.2
72.5°	163.6	142.6	119.4	153.5	172.3
75°	141.7	122.9	108.5	135.1	156.1
77.5°	122.9	104.5	98.0	119.4	140.0
80°	103.2	86.6	85.7	104.1	119.4
82.5°	80.5	69.1	69.1	87.0	96.2
85°	56.9	49.9	48.5	63.4	64.3
87.5°	29.3	28.0	25.4	33.2	33.2
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)