

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: P292911

Luminaire Tested: **24GR-LD5-30-F1-UNV-L83050-W2A1-U-4000K**

Issue Date: 3/3/2020

Test Information

Test Method: LM-79-08
Report Number: P292911
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G3-1901-084-12)
Test Lab: INNOVATION CENTER(G3)
Issue Date: 3/3/2020
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: METALUX
Catalog Number: 24GR-LD5-30-F1-UNV-L83050-W2A1-U-4000K
Description: GRLED 2x4 TUNABLE WHITE TROFFER
WITH F1 LENS
Light Source: (336) 80 CRI LEDS TUNED TO 4000K CCT
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 3200.0 lumens
Efficiency: N/A
Efficacy: 156.4 lumens/watt
Spacing Criteria (0/90/45): 1.18 / 1.18 / 1.25
Luminous Opening: Rectangular (W 2' x L: 4' x H: 0')
CIE Type: Direct

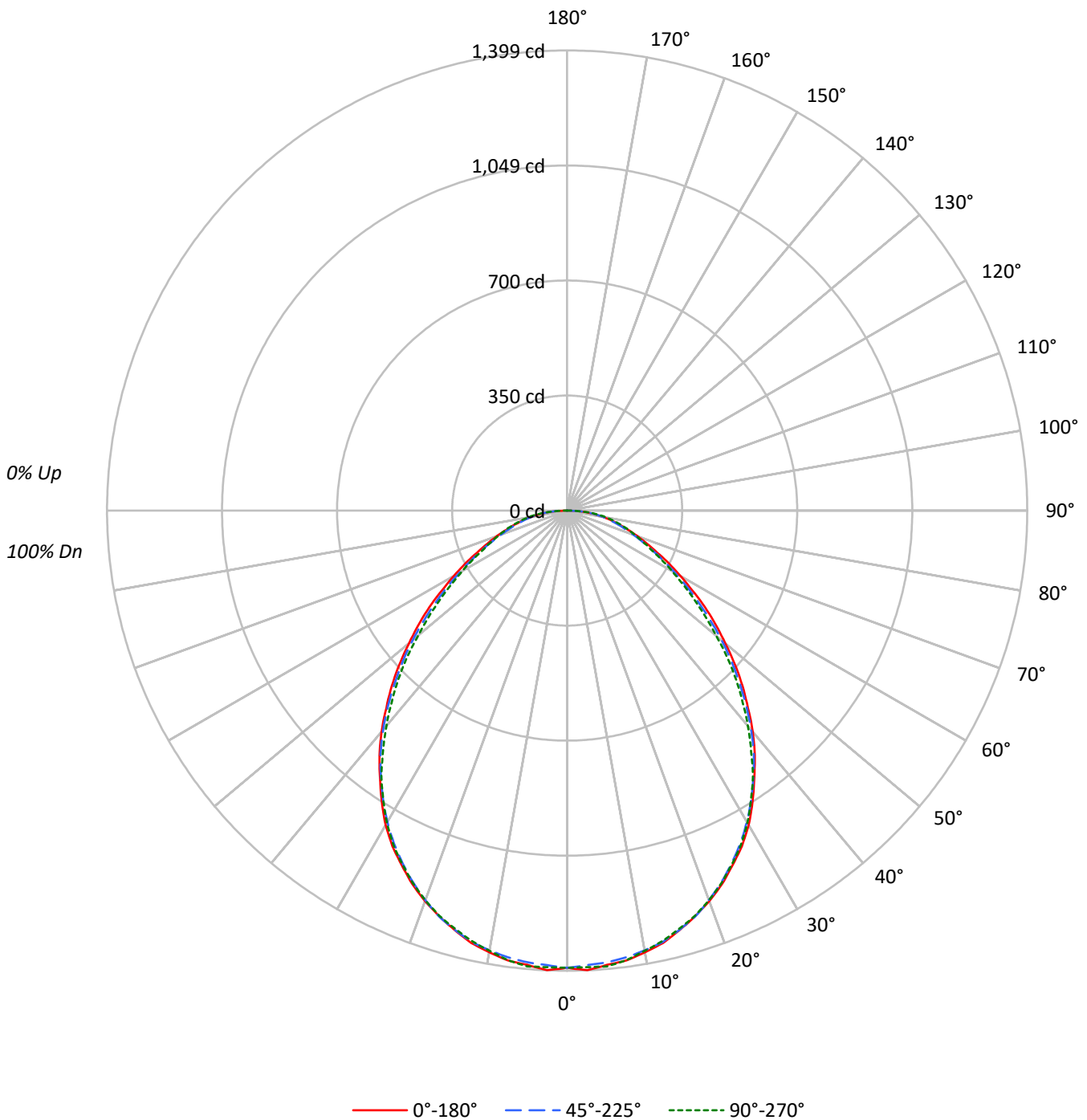
Input Watts (W): 20.46
Input Voltage (V): 120
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



TEST NUMBER: P292911

CATALOG NUMBER: 24GR-LD5-30-F1-UNV-L83050-W2A1-U-4000K

Luminous Intensity Polar Plot





TEST NUMBER: P292911

CATALOG NUMBER: 24GR-LD5-30-F1-UNV-L83050-W2A1-U-4000K

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	109	105	101	97	107	103	99	96	98	95	93	95	92	90	91	89	87	85					85			
2	100	93	86	81	98	91	85	80	87	82	78	84	80	76	81	78	75	72					72			
3	92	82	74	68	90	81	73	68	78	72	67	75	70	65	72	68	64	62					62			
4	85	73	65	59	83	72	64	58	70	63	58	67	62	57	65	60	56	54					54			
5	78	66	58	51	76	65	57	51	63	56	50	61	55	50	59	54	49	47					47			
6	73	60	51	45	71	59	51	45	57	50	45	56	49	44	54	48	44	42					42			
7	68	55	46	40	66	54	46	40	52	45	40	51	44	40	50	44	39	37					37			
8	63	50	42	36	62	49	42	36	48	41	36	47	40	36	46	40	36	34					34			
9	59	46	38	33	58	46	38	33	44	38	33	43	37	32	42	37	32	31					31			
10	56	43	35	30	54	42	35	30	41	34	30	40	34	30	39	34	30	28					28			

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	1870	1870	1870
5°	1873	1862	1878
10°	1863	1855	1857
15°	1840	1838	1833
20°	1809	1805	1805
25°	1767	1757	1761
30°	1716	1698	1703
35°	1629	1622	1618
40°	1543	1529	1502
45°	1434	1409	1381
50°	1314	1285	1236
55°	1200	1146	1107
60°	1069	1018	991
65°	962	912	899
70°	893	839	873
75°	854	817	885
80°	854	854	946
85°	886	897	999



TEST NUMBER: P292911

CATALOG NUMBER: 24GR-LD5-30-F1-UNV-L83050-W2A1-U-4000K

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	131.3	4.1
10°-20°	371.5	11.6
20°-30°	545.2	17.0
30°-40°	616.4	19.3
40°-50°	569.7	17.8
50°-60°	438.9	13.7
60°-70°	290.6	9.1
70°-80°	173.0	5.4
80°-90°	63.4	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°	1048.0	32.7
0°-40°	1664.4	52.0
0°-60°	2673.0	83.5
0°-90°	3200.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	3200.0	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	1390	1390	1390	1390	1390	
5°	1387	1387	1379	1379	1391	132
15°	1321	1318	1319	1319	1316	372
25°	1190	1187	1183	1182	1186	548
35°	992	991	987	983	985	621
45°	754	748	740	727	726	581
55°	512	501	488	475	472	456
65°	302	298	286	284	282	303
75°	164	160	157	164	170	175
85°	57	54	58	64	65	61
90°	0	0	0	0	0	



TEST NUMBER: P292911

CATALOG NUMBER: 24GR-LD5-30-F1-UNV-L83050-W2A1-U-4000K

CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	1390.0	1390.0	1390.0	1390.0	1390.0
2.5°	1398.6	1391.3	1383.4	1383.4	1389.3
5°	1386.7	1386.7	1378.8	1379.4	1390.7
7.5°	1379.4	1375.5	1370.2	1370.2	1378.8
10°	1363.6	1360.3	1357.7	1356.3	1359.0
12.5°	1346.4	1341.2	1343.1	1341.2	1340.5
15°	1320.7	1318.1	1319.4	1318.7	1316.1
17.5°	1293.0	1291.7	1294.3	1289.7	1291.7
20°	1263.3	1259.3	1260.6	1258.0	1260.6
22.5°	1229.6	1227.0	1223.7	1220.4	1225.7
25°	1190.0	1186.7	1183.4	1182.1	1186.1
27.5°	1150.4	1145.1	1140.5	1139.2	1145.1
30°	1104.2	1098.3	1093.0	1091.7	1096.3
32.5°	1049.4	1048.1	1041.5	1038.9	1040.9
35°	992.0	990.7	987.4	982.8	984.8
37.5°	937.2	936.6	931.9	924.0	918.7
40°	878.5	873.9	870.6	859.3	855.4
42.5°	813.8	812.5	806.5	794.0	789.4
45°	753.7	748.5	740.5	727.3	726.0
47.5°	691.7	684.4	677.2	660.7	660.0
50°	627.7	622.4	613.8	597.3	590.7
52.5°	568.3	561.0	549.1	533.3	530.0
55°	511.5	501.0	488.4	475.2	471.9
57.5°	450.8	446.2	431.0	420.4	416.5
60°	397.3	393.4	378.2	368.3	368.3
62.5°	349.2	343.2	330.0	323.4	323.4
65°	302.3	297.7	286.4	283.8	282.5
67.5°	262.0	256.1	248.2	247.5	250.8
70°	227.0	219.8	213.2	219.8	221.8
72.5°	194.0	189.4	183.5	192.1	196.0
75°	164.3	160.4	157.1	164.3	170.3
77.5°	137.3	133.3	133.3	141.2	146.5
80°	110.2	107.6	110.2	116.8	122.1
82.5°	84.5	82.5	85.8	92.4	95.7
85°	57.4	54.1	58.1	64.0	64.7
87.5°	27.1	26.4	29.0	33.0	32.3
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)