

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: P293165

Luminaire Tested: **24GR-LD5-30-F125-UNV-L83050-W2A1-U-5000K**

Issue Date: 3/3/2020

**Test Information**

Test Method: LM-79-08  
Report Number: P293165  
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (P33304)  
Test Lab: INNOVATION CENTER-P3  
Issue Date: 3/3/2020  
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)  
Product Line: METALUX  
Catalog Number: 24GR-LD5-30-F125-UNV-L83050-W2A1-U-5000K  
Description: GRLED 2x4 TUNABLE WHITE TROFFER  
WITH F125 LENS  
Light Source: (336) 80 CRI LEDS TUNED TO 5000K CCT  
Ballast/Driver: ELECTRONIC DRIVER

**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 3231.0 lumens  
Efficiency: N/A  
Efficacy: 153.7 lumens/watt  
Spacing Criteria (0/90/45): 1.2 / 1.19 / 1.27  
Luminous Opening: Rectangular (W 2' x L: 4' x H: 0')  
CIE Type: Direct

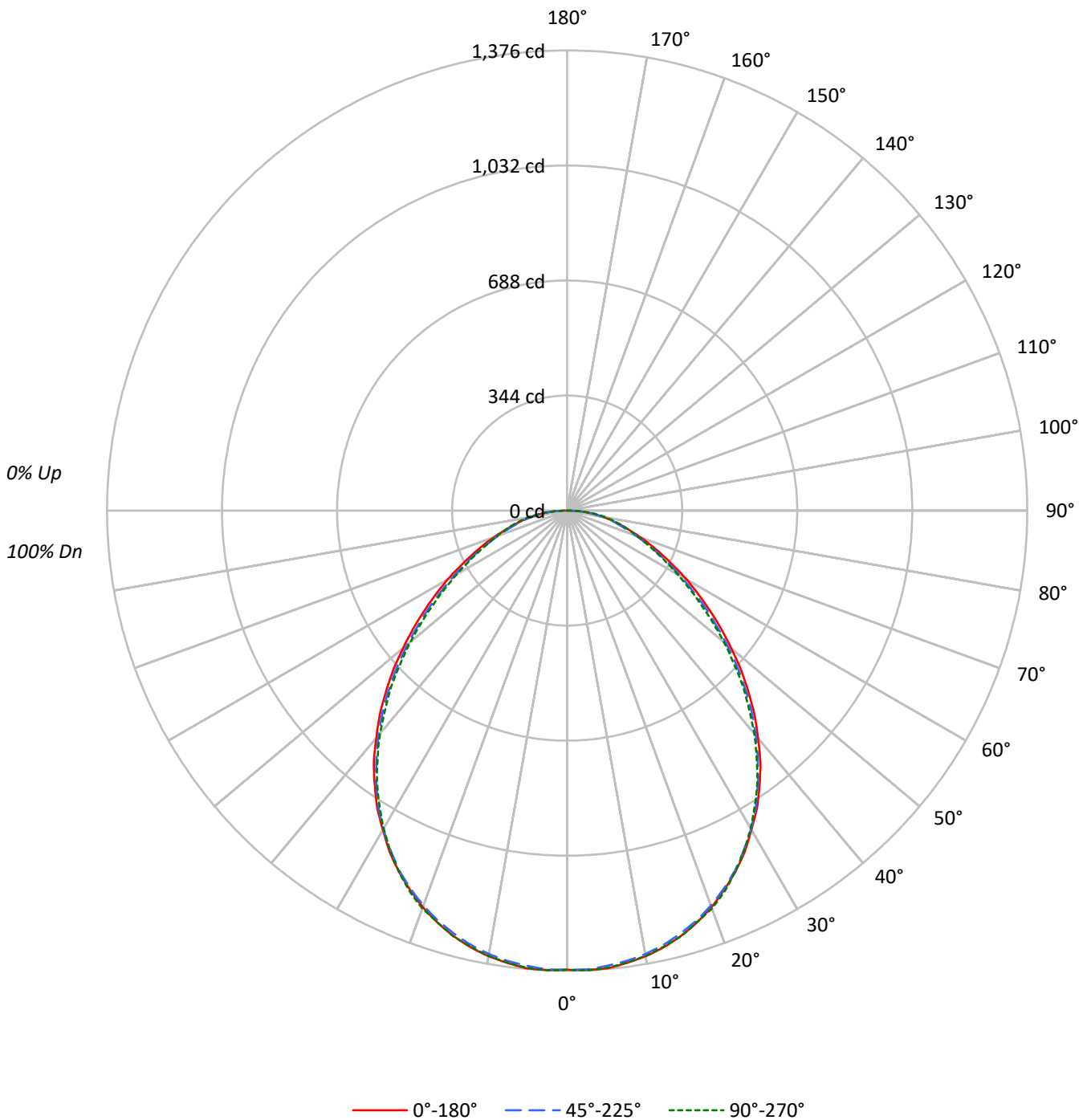
Input Watts (W): 21.018  
Input Voltage (V): 120  
Input Current (Ain): NR  
Voltage Rise (V): NR  
Power Factor: NR  
Total Harmonic Distortion (THDi): NR  
Frequency (hertz): 60  
Stabilization Time: NR  
Operation Time: NR  
Ambient Temperature (°C): NR  
Test Distance: 25 FT



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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	109	105	101	97	107	103	99	96	98	95	93	95	92	90	91	89	87	85					85			
2	100	92	86	81	98	91	85	80	87	82	78	84	80	76	81	77	74	72					72			
3	92	82	74	68	90	80	73	68	78	71	66	75	70	65	72	68	64	62					62			
4	85	73	65	59	82	72	64	58	70	63	57	67	61	57	65	60	56	54					54			
5	78	66	57	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	44	55	49	44	54	48	44	42					42			
7	67	54	46	40	66	54	46	40	52	45	40	51	44	39	49	44	39	37					37			
8	63	50	42	36	61	49	41	36	48	41	36	47	40	36	46	40	35	33					33			
9	59	46	38	33	58	45	38	33	44	37	32	43	37	32	42	36	32	30					30			
10	55	43	35	30	54	42	35	30	41	34	30	40	34	29	39	33	29	28					28			

**AVERAGE LUMINANCE (cd/sqm):**

	0°	45°	90°
0°	1848	1848	1848
5°	1856	1846	1853
10°	1849	1840	1848
15°	1834	1824	1835
20°	1807	1800	1813
25°	1768	1763	1767
30°	1712	1709	1705
35°	1647	1635	1628
40°	1559	1542	1529
45°	1459	1432	1415
50°	1340	1304	1282
55°	1223	1178	1143
60°	1110	1051	1023
65°	1000	944	928
70°	916	856	880
75°	856	817	877
80°	849	834	916
85°	866	874	997



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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	130.0	4.0
10°-20°	369.5	11.4
20°-30°	545.8	16.9
30°-40°	620.6	19.2
40°-50°	579.5	17.9
50°-60°	450.7	13.9
60°-70°	299.0	9.3
70°-80°	173.0	5.4
80°-90°	62.9	1.9
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°	1045.3	32.4
0°-40°	1665.8	51.6
0°-60°	2696.0	83.4
0°-90°	3231.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	3231.0	100.0

**CANDELA DISTRIBUTION:**

	0°	22.5°	45°	67.5°	90°	Flux
0°	1373	1373	1373	1373	1373	
5°	1374	1367	1367	1369	1372	130
15°	1317	1310	1310	1309	1318	371
25°	1191	1186	1188	1185	1190	548
35°	1003	998	995	988	991	626
45°	767	761	752	743	743	591
55°	521	514	502	489	487	467
65°	314	304	296	291	291	314
75°	165	161	157	164	169	176
85°	56	55	57	64	65	61
90°	0	0	0	0	0	



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**CANDELA DISTRIBUTION (FULL):**

	0°	22.5°	45°	67.5°	90°
0°	1373.2	1373.2	1373.2	1373.2	1373.2
2.5°	1375.2	1371.2	1373.2	1371.7	1376.2
5°	1374.2	1367.1	1366.6	1369.1	1372.2
7.5°	1364.6	1357.0	1358.5	1358.5	1363.6
10°	1353.0	1345.4	1346.4	1346.9	1352.5
12.5°	1337.3	1329.7	1330.2	1329.7	1335.3
15°	1316.6	1310.0	1309.5	1309.0	1317.6
17.5°	1291.4	1282.3	1285.3	1285.8	1290.3
20°	1262.1	1255.0	1257.0	1256.5	1266.1
22.5°	1227.2	1222.2	1223.7	1222.7	1231.8
25°	1190.9	1185.8	1187.8	1185.3	1190.4
27.5°	1150.0	1146.4	1144.4	1142.9	1146.4
30°	1102.0	1100.0	1100.0	1093.4	1097.4
32.5°	1056.5	1050.0	1050.0	1047.4	1044.9
35°	1003.0	997.9	995.4	988.3	991.4
37.5°	949.5	937.8	936.8	931.3	931.3
40°	887.8	881.3	877.7	871.7	870.7
42.5°	829.3	822.7	816.6	806.5	804.5
45°	766.6	760.6	752.5	742.9	743.4
47.5°	704.5	695.9	688.4	676.7	675.2
50°	640.4	634.3	623.2	613.1	612.6
52.5°	580.3	570.7	560.6	548.5	548.5
55°	521.2	513.6	502.0	488.9	487.4
57.5°	464.6	457.6	444.4	434.8	432.3
60°	412.6	402.5	390.4	382.3	380.3
62.5°	360.6	351.5	342.4	334.3	333.8
65°	314.1	304.5	296.5	290.9	291.4
67.5°	272.2	264.1	255.0	253.5	254.0
70°	232.8	224.2	217.7	221.2	223.7
72.5°	195.4	190.9	186.4	191.4	194.9
75°	164.6	160.6	157.1	164.1	168.7
77.5°	136.4	133.3	132.8	138.9	142.9
80°	109.6	106.1	107.6	114.6	118.2
82.5°	83.3	80.8	81.3	89.9	92.4
85°	56.1	55.0	56.6	64.1	64.6
87.5°	29.8	29.8	30.8	35.4	33.8
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)