

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: P293415

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

Issue Date: 3/3/2020

**Test Information**

Test Method: LM-79-08  
Report Number: P293415  
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-L83050-W2A1-U-4000K  
Description: GRLED 2x4 TUNABLE WHITE TROFFER  
WITH A LENS  
Light Source: (336) 80 CRI LEDS TUNED TO 4000K CCT  
Ballast/Driver: ELECTRONIC DRIVER

**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 3238.0 lumens  
Efficiency: N/A  
Efficacy: 158.3 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

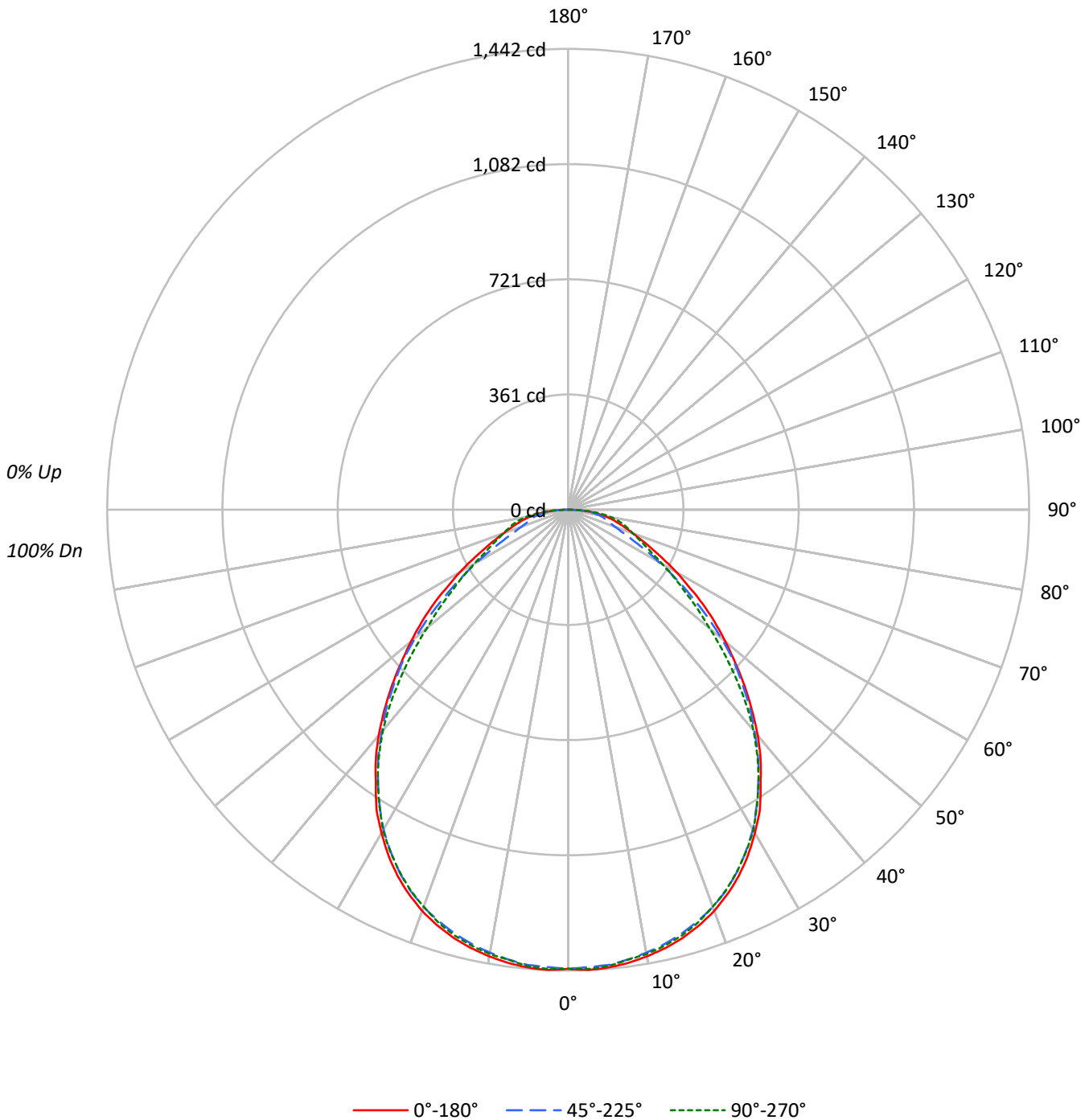
Input Watts (W): 20.46  
Input Voltage (V): 120  
Input Current (A<sub>in</sub>): NR  
Voltage Rise (V): NR  
Power Factor: NR  
Total Harmonic Distortion (THDi): NR  
Frequency (hertz): 60  
Stabilization Time: NR  
Operation Time: NR  
Ambient Temperature (°C): NR  
Test Distance: 25 FT



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

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

	0°	45°	90°
0°	1933	1933	1933
5°	1942	1932	1936
10°	1939	1923	1929
15°	1931	1912	1920
20°	1913	1894	1893
25°	1876	1856	1854
30°	1814	1795	1799
35°	1723	1703	1706
40°	1620	1592	1582
45°	1485	1465	1407
50°	1342	1306	1207
55°	1205	1097	1041
60°	1055	883	915
65°	920	694	842
70°	842	606	842
75°	843	645	928
80°	915	759	1058
85°	1003	857	1135



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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	136.0	4.2
10°-20°	388.2	12.0
20°-30°	575.7	17.8
30°-40°	649.5	20.1
40°-50°	588.2	18.2
50°-60°	424.4	13.1
60°-70°	253.4	7.8
70°-80°	156.6	4.8
80°-90°	66.0	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°	1100.0	34.0
0°-40°	1749.5	54.0
0°-60°	2762.0	85.3
0°-90°	3238.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	3238.0	100.0

**CANDELA DISTRIBUTION:**

	0°	22.5°	45°	67.5°	90°	Flux
0°	1437	1437	1437	1437	1437	
5°	1438	1436	1430	1429	1434	137
15°	1387	1378	1373	1373	1379	391
25°	1264	1257	1250	1246	1249	580
35°	1049	1048	1037	1038	1038	656
45°	780	775	770	751	739	601
55°	514	498	468	445	444	459
65°	289	255	218	248	265	291
75°	162	141	124	155	179	173
85°	65	57	56	72	74	68
90°	0	0	0	0	0	



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**CANDELA DISTRIBUTION (FULL):**

	0°	22.5°	45°	67.5°	90°
0°	1436.7	1436.7	1436.7	1436.7	1436.7
2.5°	1441.7	1437.7	1432.7	1435.7	1438.2
5°	1438.2	1436.2	1430.2	1428.7	1433.7
7.5°	1430.7	1425.7	1420.2	1422.7	1420.7
10°	1419.2	1414.7	1407.6	1408.1	1411.7
12.5°	1405.1	1399.6	1392.1	1394.1	1397.1
15°	1386.6	1378.1	1372.6	1373.1	1378.6
17.5°	1363.1	1356.6	1349.6	1351.1	1353.6
20°	1336.1	1332.6	1322.6	1319.6	1322.1
22.5°	1302.1	1295.6	1290.1	1288.6	1289.1
25°	1263.6	1256.6	1250.1	1245.6	1249.1
27.5°	1218.6	1212.6	1204.1	1202.6	1205.6
30°	1167.5	1163.0	1155.5	1153.5	1158.0
32.5°	1115.5	1108.0	1097.5	1097.5	1098.5
35°	1049.0	1047.5	1037.0	1037.5	1038.5
37.5°	989.0	982.0	976.0	969.9	972.9
40°	922.4	914.4	906.4	902.4	900.9
42.5°	850.9	844.9	841.4	826.9	823.4
45°	780.4	775.4	769.9	750.8	739.3
47.5°	708.3	707.3	702.8	669.3	657.8
50°	641.3	639.8	623.8	588.3	576.8
52.5°	577.8	567.8	546.8	511.7	509.7
55°	513.7	497.7	467.7	444.7	443.7
57.5°	446.2	427.2	396.7	384.2	390.7
60°	392.2	363.2	328.2	329.7	340.2
62.5°	336.2	303.6	269.1	284.1	296.6
65°	289.1	254.6	218.1	247.6	264.6
67.5°	248.1	216.1	181.1	220.6	237.1
70°	214.1	188.1	154.1	195.6	214.1
72.5°	187.1	163.1	136.6	175.6	197.1
75°	162.1	140.6	124.1	154.6	178.6
77.5°	140.6	119.6	112.1	136.6	160.1
80°	118.1	99.0	98.0	119.1	136.6
82.5°	92.0	79.0	79.0	99.5	110.1
85°	65.0	57.0	55.5	72.5	73.5
87.5°	33.5	32.0	29.0	38.0	38.0
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)