

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: P293469

Luminaire Tested: **24GR-LD5-34-A-UNV-L82765-W2A1-U-3500K**

Issue Date: 3/3/2020

Test Information

Test Method: LM-79-08
Report Number: P293469
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-L82765-W2A1-U-3500K
Description: GRLED 2x4 TUNABLE WHITE TROFFER
WITH A LENS
Light Source: (336) 80 CRI LEDS TUNED TO 3500K CCT
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 3450.0 lumens
Efficiency: N/A
Efficacy: 149.6 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

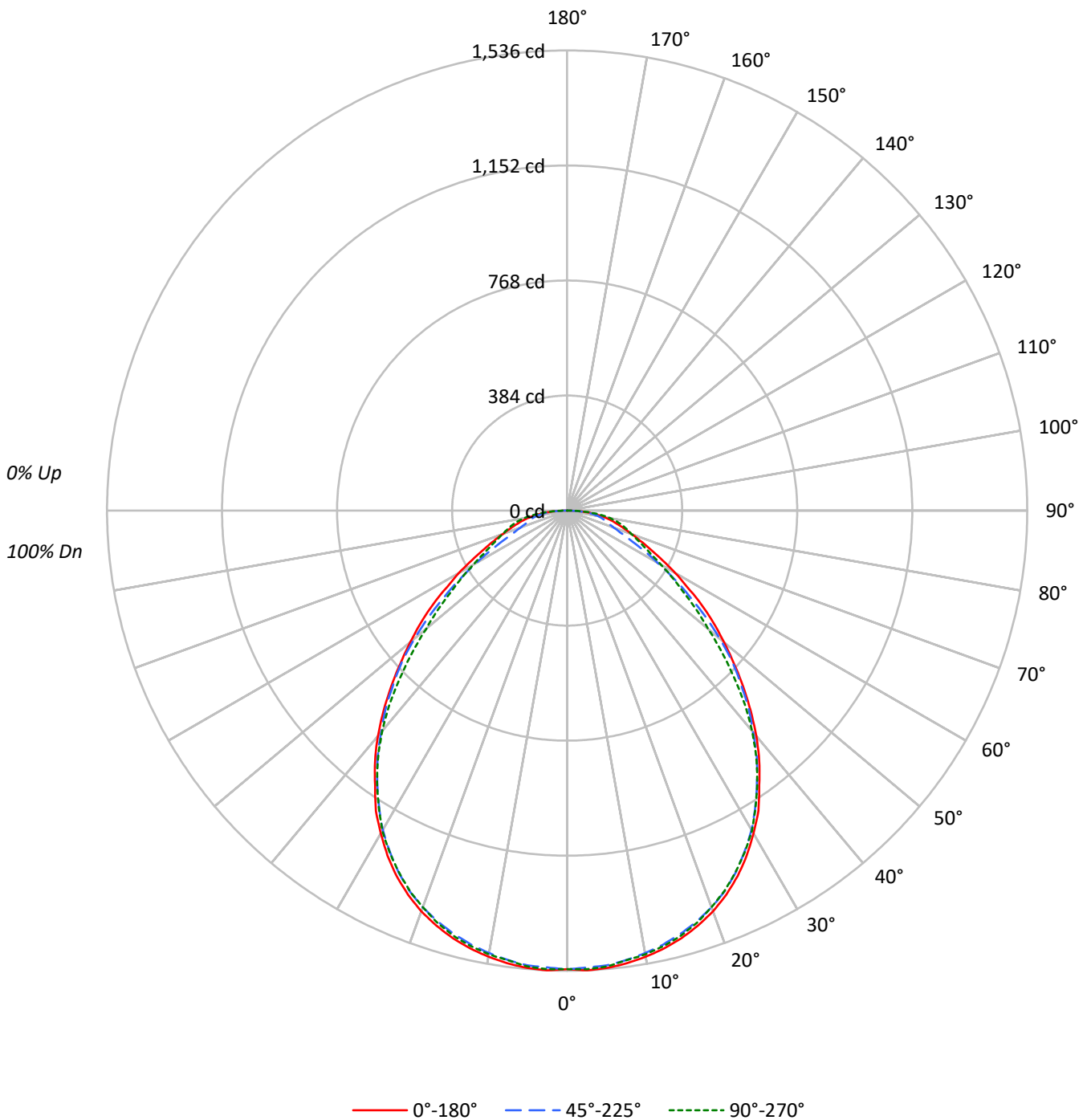
Input Watts (W): 23.064
Input Voltage (V): 120
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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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	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°	2060	2060	2060
5°	2070	2058	2063
10°	2066	2049	2055
15°	2058	2037	2046
20°	2038	2018	2017
25°	1999	1977	1976
30°	1933	1913	1917
35°	1836	1815	1817
40°	1726	1696	1686
45°	1582	1561	1499
50°	1430	1391	1286
55°	1284	1169	1109
60°	1125	941	975
65°	981	740	897
70°	897	646	897
75°	898	687	989
80°	975	810	1127
85°	1070	914	1209



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	145.0	4.2
10°-20°	413.7	12.0
20°-30°	613.4	17.8
30°-40°	692.0	20.1
40°-50°	626.7	18.2
50°-60°	452.1	13.1
60°-70°	270.0	7.8
70°-80°	166.9	4.8
80°-90°	70.3	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°	1172.0	34.0
0°-40°	1864.0	54.0
0°-60°	2942.9	85.3
0°-90°	3450.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	3450.0	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	1531	1531	1531	1531	1531	
5°	1532	1530	1524	1522	1528	146
15°	1477	1468	1462	1463	1469	416
25°	1346	1339	1332	1327	1331	618
35°	1118	1116	1105	1105	1106	699
45°	832	826	820	800	788	641
55°	547	530	498	474	473	489
65°	308	271	232	264	282	310
75°	173	150	132	165	190	184
85°	69	61	59	77	78	72
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	1530.7	1530.7	1530.7	1530.7	1530.7
2.5°	1536.1	1531.8	1526.5	1529.7	1532.3
5°	1532.3	1530.2	1523.8	1522.2	1527.5
7.5°	1524.3	1519.0	1513.1	1515.8	1513.7
10°	1512.1	1507.3	1499.8	1500.3	1504.1
12.5°	1497.1	1491.3	1483.3	1485.4	1488.6
15°	1477.4	1468.4	1462.5	1463.0	1468.9
17.5°	1452.4	1445.4	1438.0	1439.6	1442.2
20°	1423.6	1419.9	1409.2	1406.0	1408.7
22.5°	1387.4	1380.4	1374.6	1373.0	1373.5
25°	1346.3	1338.9	1331.9	1327.1	1330.9
27.5°	1298.3	1291.9	1282.9	1281.3	1284.5
30°	1244.0	1239.2	1231.2	1229.1	1233.9
32.5°	1188.6	1180.6	1169.4	1169.4	1170.4
35°	1117.7	1116.1	1104.9	1105.4	1106.5
37.5°	1053.7	1046.2	1039.8	1033.5	1036.7
40°	982.8	974.3	965.8	961.5	959.9
42.5°	906.6	900.2	896.5	881.0	877.3
45°	831.5	826.1	820.3	800.0	787.7
47.5°	754.7	753.6	748.8	713.1	700.9
50°	683.3	681.7	664.6	626.8	614.5
52.5°	615.6	604.9	582.5	545.2	543.1
55°	547.4	530.3	498.3	473.8	472.8
57.5°	475.4	455.2	422.7	409.3	416.3
60°	417.9	386.9	349.6	351.2	362.4
62.5°	358.2	323.5	286.7	302.7	316.1
65°	308.1	271.3	232.4	263.8	281.9
67.5°	264.4	230.2	192.9	235.0	252.6
70°	228.1	200.4	164.2	208.4	228.1
72.5°	199.3	173.8	145.5	187.1	210.0
75°	172.7	149.8	132.2	164.7	190.3
77.5°	149.8	127.4	119.4	145.5	170.6
80°	125.8	105.5	104.5	126.8	145.5
82.5°	98.1	84.2	84.2	106.1	117.3
85°	69.3	60.8	59.2	77.3	78.3
87.5°	35.7	34.1	30.9	40.5	40.5
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)