

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: P293559

Luminaire Tested: **24GR-LD5-48-A-UNV-L93050-W2A1-U-3000K**

Issue Date: 3/3/2020

Test Information

Test Method: LM-79-08
Report Number: P293559
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-LD5-48-A-UNV-L93050-W2A1-U-3000K
Description: GRLED 2x4 TUNABLE WHITE TROFFER
WITH A LENS
Light Source: (336) 90 CRI LEDS TUNED TO 3000K CCT
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 3817.0 lumens
Efficiency: N/A
Efficacy: 113.7 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

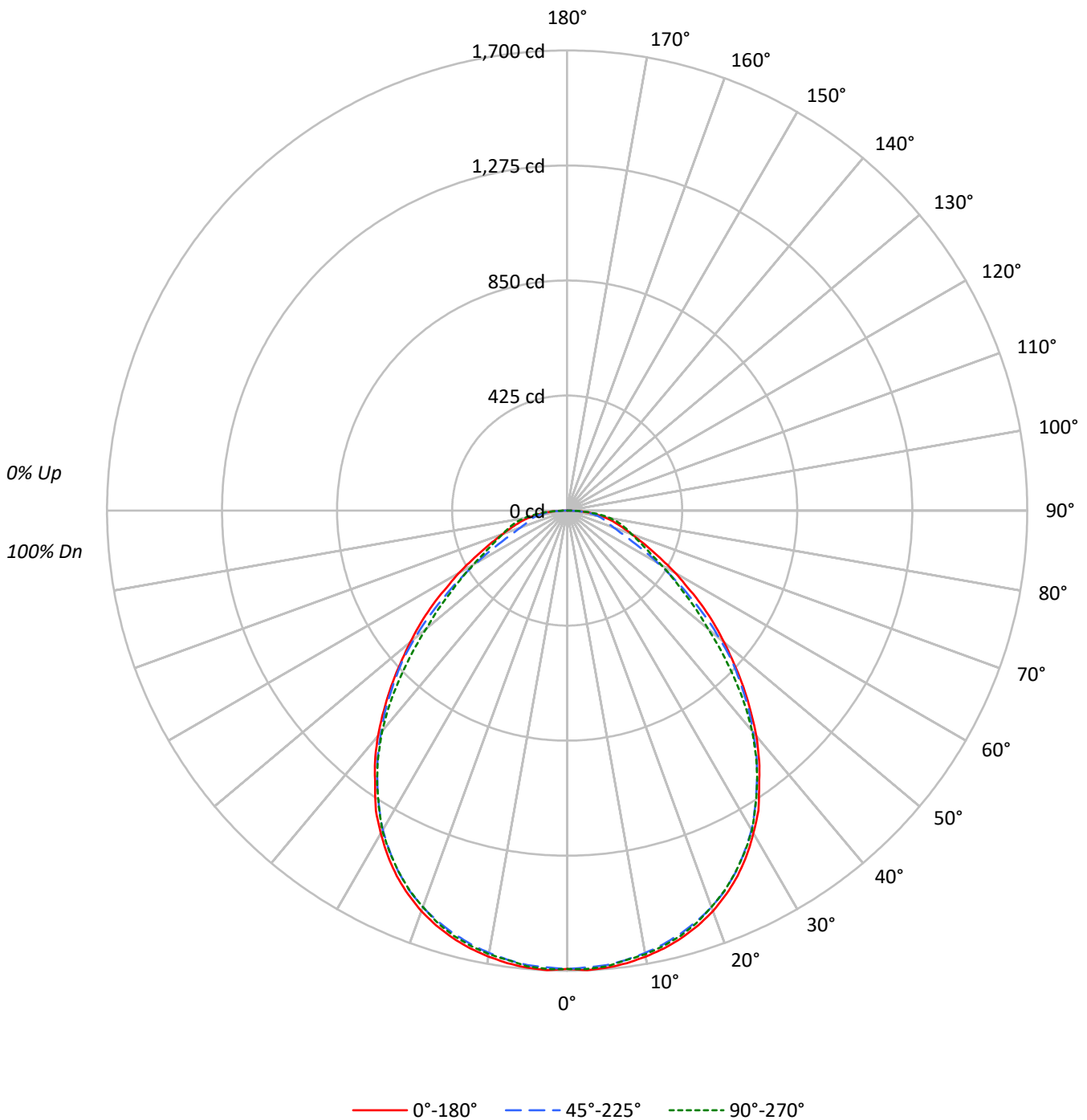
Input Watts (W): 33.584067
Input Voltage (V): 120
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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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°	2279	2279	2279
5°	2290	2277	2283
10°	2286	2267	2274
15°	2277	2254	2264
20°	2255	2232	2232
25°	2211	2188	2186
30°	2138	2116	2121
35°	2031	2008	2011
40°	1910	1877	1865
45°	1750	1727	1658
50°	1582	1539	1423
55°	1421	1293	1227
60°	1244	1041	1079
65°	1085	819	993
70°	993	714	993
75°	993	760	1094
80°	1079	896	1247
85°	1184	1011	1338



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	160.4	4.2
10°-20°	457.7	12.0
20°-30°	678.6	17.8
30°-40°	765.6	20.1
40°-50°	693.4	18.2
50°-60°	500.2	13.1
60°-70°	298.7	7.8
70°-80°	184.6	4.8
80°-90°	77.8	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°	1296.7	34.0
0°-40°	2062.3	54.0
0°-60°	3255.9	85.3
0°-90°	3817.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	3817.0	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	1694	1694	1694	1694	1694	
5°	1695	1693	1686	1684	1690	161
15°	1635	1625	1618	1619	1625	461
25°	1490	1481	1474	1468	1472	684
35°	1237	1235	1222	1223	1224	774
45°	920	914	908	885	872	709
55°	606	587	551	524	523	541
65°	341	300	257	292	312	343
75°	191	166	146	182	210	204
85°	77	67	66	86	87	80
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	1693.6	1693.6	1693.6	1693.6	1693.6
2.5°	1699.5	1694.7	1688.8	1692.4	1695.3
5°	1695.3	1693.0	1685.9	1684.1	1690.0
7.5°	1686.5	1680.6	1674.1	1677.0	1674.7
10°	1672.9	1667.6	1659.4	1659.9	1664.1
12.5°	1656.4	1649.9	1641.1	1643.4	1647.0
15°	1634.6	1624.6	1618.1	1618.7	1625.2
17.5°	1606.9	1599.2	1591.0	1592.7	1595.7
20°	1575.0	1570.9	1559.1	1555.6	1558.5
22.5°	1534.9	1527.3	1520.8	1519.0	1519.6
25°	1489.5	1481.3	1473.6	1468.3	1472.4
27.5°	1436.5	1429.4	1419.4	1417.6	1421.1
30°	1376.3	1371.0	1362.2	1359.8	1365.1
32.5°	1315.0	1306.1	1293.8	1293.8	1294.9
35°	1236.6	1234.8	1222.4	1223.0	1224.2
37.5°	1165.8	1157.5	1150.5	1143.4	1146.9
40°	1087.4	1077.9	1068.5	1063.8	1062.0
42.5°	1003.0	996.0	991.8	974.7	970.6
45°	919.9	914.0	907.5	885.1	871.5
47.5°	835.0	833.8	828.5	789.0	775.4
50°	756.0	754.2	735.3	693.5	679.9
52.5°	681.1	669.3	644.5	603.2	600.9
55°	605.6	586.7	551.4	524.2	523.0
57.5°	526.0	503.6	467.6	452.9	460.5
60°	462.3	428.1	386.8	388.6	401.0
62.5°	396.3	357.9	317.2	334.9	349.7
65°	340.8	300.1	257.1	291.9	311.9
67.5°	292.5	254.7	213.5	260.0	279.5
70°	252.4	221.7	181.6	230.6	252.4
72.5°	220.5	192.2	161.0	207.0	232.3
75°	191.1	165.7	146.2	182.2	210.5
77.5°	165.7	140.9	132.1	161.0	188.7
80°	139.2	116.8	115.6	140.3	161.0
82.5°	108.5	93.2	93.2	117.3	129.7
85°	76.7	67.2	65.5	85.5	86.7
87.5°	39.5	37.7	34.2	44.8	44.8
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)