

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: P293123

Luminaire Tested: **24GR-LD5-48-F1-UNV-L92765-W2A1-U-5700K**

Issue Date: 3/3/2020

Test Information

Test Method: LM-79-08
Report Number: P293123
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-LD5-48-F1-UNV-L92765-W2A1-U-5700K
Description: GRLED 2x4 TUNABLE WHITE TROFFER
WITH F1 LENS
Light Source: (336) 90 CRI LEDS TUNED TO 5700K CCT
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 4571.0 lumens
Efficiency: N/A
Efficacy: 135.0 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

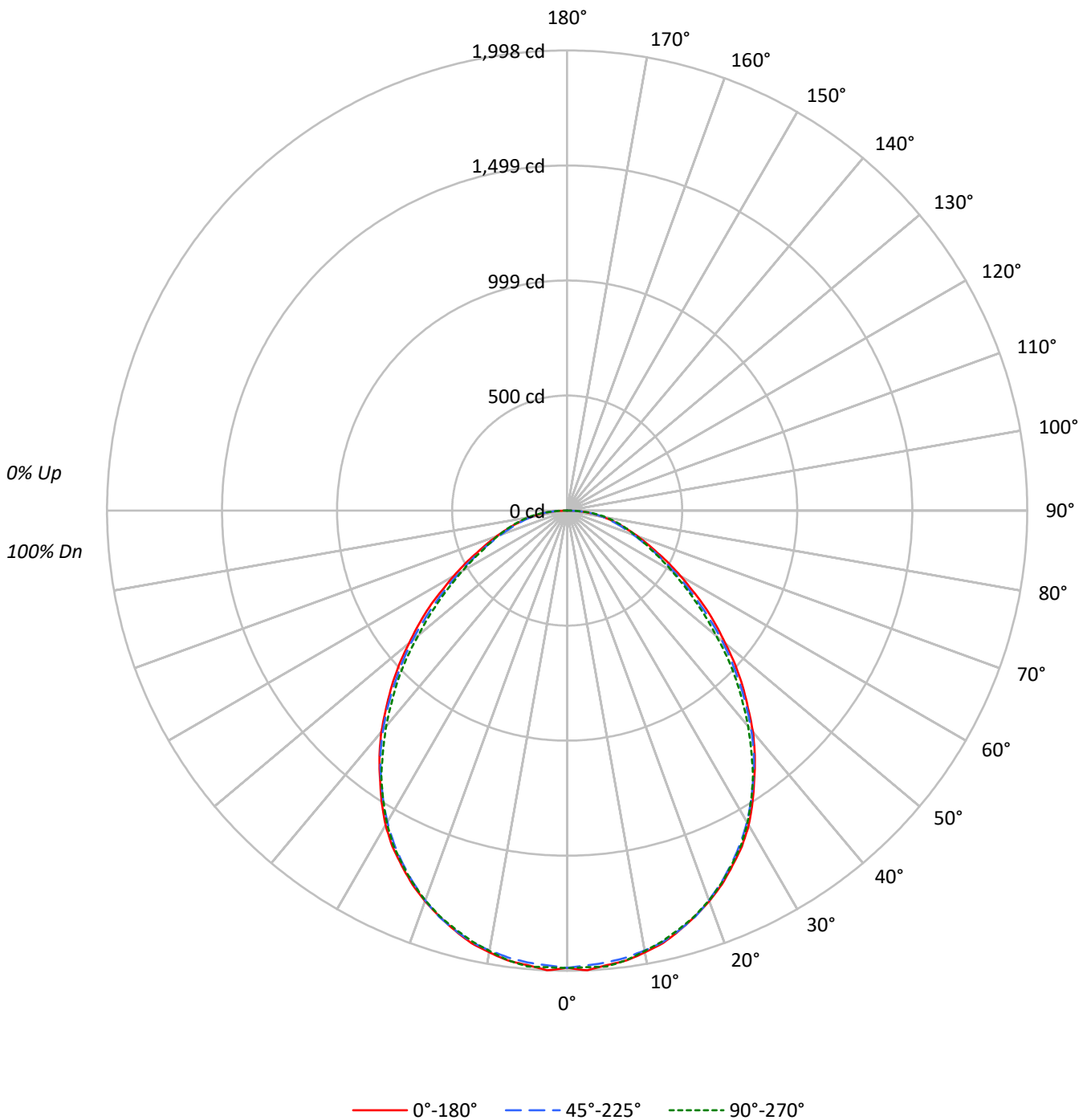
Input Watts (W): 33.852
Input Voltage (V): 120
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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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	0
RCR																		
0	119	119	119	119	116	116	116	116	111	111	111	106	106	106	102	102	102	100
1	109	105	101	97	107	103	99	96	98	95	93	95	92	90	91	89	87	85
2	100	93	86	81	98	91	85	80	87	82	78	84	80	76	81	78	75	72
3	92	82	74	68	90	81	73	68	78	72	67	75	70	65	72	68	64	62
4	85	73	65	59	83	72	64	58	70	63	58	67	62	57	65	60	56	54
5	78	66	58	51	76	65	57	51	63	56	50	61	55	50	59	54	49	47
6	73	60	51	45	71	59	51	45	57	50	45	56	49	44	54	48	44	42
7	68	55	46	40	66	54	46	40	52	45	40	51	44	40	50	44	39	37
8	63	50	42	36	62	49	42	36	48	41	36	47	40	36	46	40	36	34
9	59	46	38	33	58	46	38	33	44	38	33	43	37	32	42	37	32	31
10	56	43	35	30	54	42	35	30	41	34	30	40	34	30	39	34	30	28

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	2671	2671	2671
5°	2675	2660	2683
10°	2661	2650	2652
15°	2628	2625	2619
20°	2584	2578	2578
25°	2524	2510	2515
30°	2451	2426	2433
35°	2327	2317	2311
40°	2204	2184	2146
45°	2049	2013	1973
50°	1877	1835	1766
55°	1714	1637	1581
60°	1527	1454	1416
65°	1375	1303	1285
70°	1276	1198	1246
75°	1221	1167	1264
80°	1220	1220	1351
85°	1266	1281	1426



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	187.5	4.1
10°-20°	530.6	11.6
20°-30°	778.8	17.0
30°-40°	880.5	19.3
40°-50°	813.8	17.8
50°-60°	627.0	13.7
60°-70°	415.2	9.1
70°-80°	247.1	5.4
80°-90°	90.5	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°	1497.0	32.7
0°-40°	2377.5	52.0
0°-60°	3818.2	83.5
0°-90°	4571.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	4571.0	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	1986	1986	1986	1986	1986	
5°	1981	1981	1970	1970	1986	188
15°	1886	1883	1885	1884	1880	532
25°	1700	1695	1690	1689	1694	783
35°	1417	1415	1410	1404	1407	887
45°	1077	1069	1058	1039	1037	829
55°	731	716	698	679	674	652
65°	432	425	409	405	404	433
75°	235	229	224	235	243	250
85°	82	77	83	92	92	87
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	1985.5	1985.5	1985.5	1985.5	1985.5
2.5°	1997.8	1987.4	1976.1	1976.1	1984.6
5°	1980.8	1980.8	1969.5	1970.4	1986.5
7.5°	1970.4	1964.8	1957.3	1957.3	1969.5
10°	1947.8	1943.1	1939.3	1937.5	1941.2
12.5°	1923.3	1915.8	1918.6	1915.8	1914.8
15°	1886.5	1882.8	1884.7	1883.7	1879.9
17.5°	1846.9	1845.1	1848.8	1842.2	1845.1
20°	1804.5	1798.9	1800.7	1797.0	1800.7
22.5°	1756.4	1752.7	1747.9	1743.2	1750.8
25°	1699.9	1695.2	1690.4	1688.6	1694.2
27.5°	1643.3	1635.8	1629.2	1627.3	1635.8
30°	1577.3	1568.8	1561.3	1559.4	1566.0
32.5°	1499.0	1497.2	1487.7	1484.0	1486.8
35°	1417.0	1415.1	1410.4	1403.8	1406.7
37.5°	1338.8	1337.8	1331.2	1319.9	1312.4
40°	1254.9	1248.3	1243.6	1227.5	1221.9
42.5°	1162.5	1160.6	1152.1	1134.2	1127.6
45°	1076.7	1069.1	1057.8	1039.0	1037.1
47.5°	988.1	977.7	967.3	943.7	942.8
50°	896.6	889.1	876.8	853.2	843.8
52.5°	811.7	801.4	784.4	761.8	757.1
55°	730.7	715.6	697.7	678.8	674.1
57.5°	643.9	637.3	615.6	600.6	594.9
60°	567.6	561.9	540.2	526.1	526.1
62.5°	498.7	490.3	471.4	462.0	462.0
65°	431.8	425.2	409.2	405.4	403.5
67.5°	374.3	365.8	354.5	353.5	358.3
70°	324.3	314.0	304.5	314.0	316.8
72.5°	277.2	270.6	262.1	274.4	280.0
75°	234.8	229.1	224.4	234.8	243.2
77.5°	196.1	190.4	190.4	201.8	209.3
80°	157.4	153.7	157.4	166.9	174.4
82.5°	120.7	117.8	122.6	132.0	136.7
85°	82.0	77.3	83.0	91.5	92.4
87.5°	38.7	37.7	41.5	47.1	46.2
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)