

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: P293118

Luminaire Tested: **24GR-LD5-48-F1-UNV-L92765-W2A1-U-3500K**

Issue Date: 3/3/2020

Test Information

Test Method: LM-79-08
Report Number: P293118
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-3500K
Description: GRLED 2x4 TUNABLE WHITE TROFFER
WITH F1 LENS
Light Source: (336) 90 CRI LEDS TUNED TO 3500K CCT
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 4149.0 lumens
Efficiency: N/A
Efficacy: 126.0 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

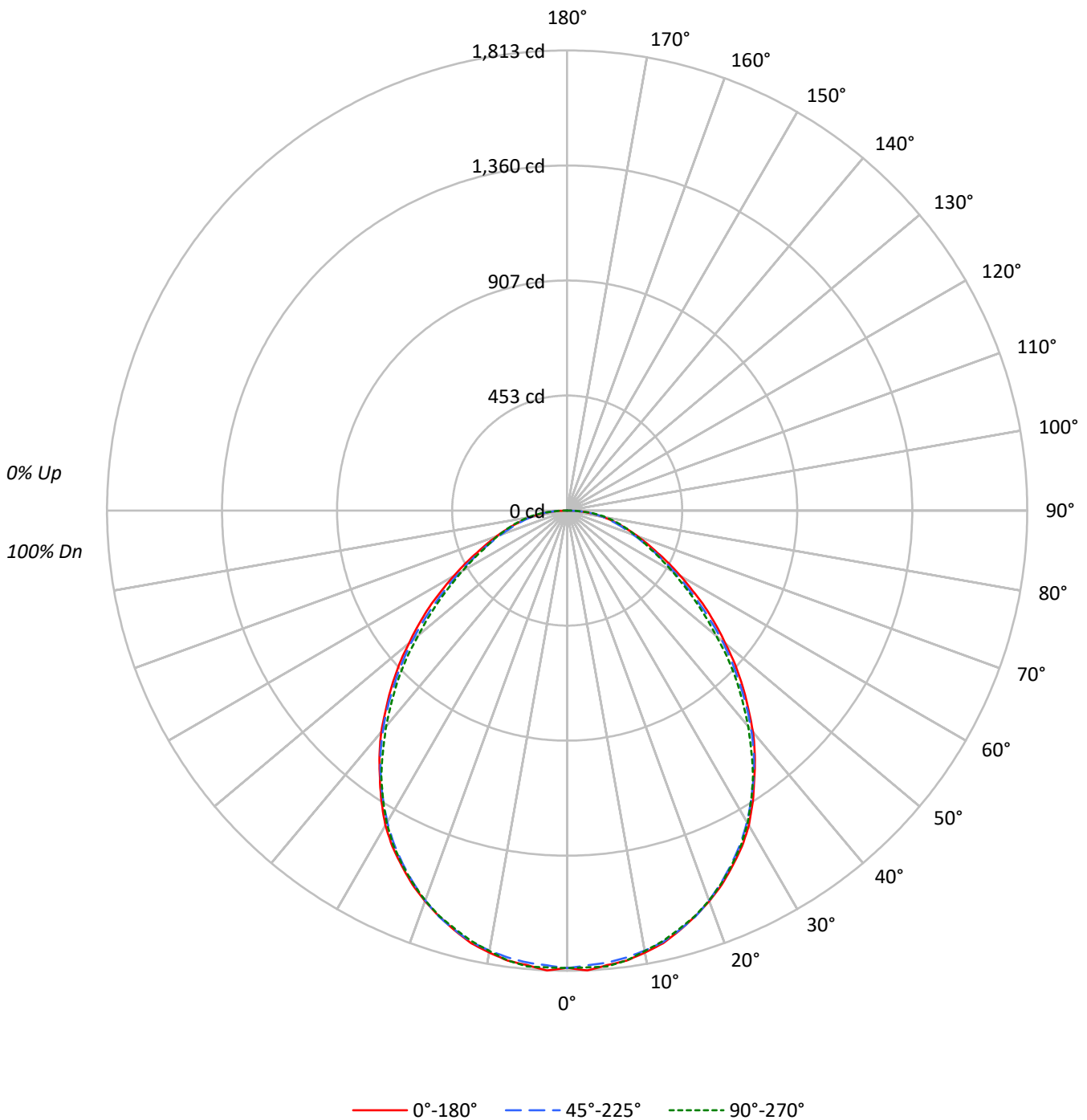
Input Watts (W): 32.922
Input Voltage (V): 120
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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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	93	86	81	98	91	85	80	87	82	78	84	80	76	81	78	75	72					72			
3	92	82	74	68	90	81	73	68	78	72	67	75	70	65	72	68	64	62					62			
4	85	73	65	59	83	72	64	58	70	63	58	67	62	57	65	60	56	54					54			
5	78	66	58	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	45	56	49	44	54	48	44	42					42			
7	68	55	46	40	66	54	46	40	52	45	40	51	44	40	50	44	39	37					37			
8	63	50	42	36	62	49	42	36	48	41	36	47	40	36	46	40	36	34					34			
9	59	46	38	33	58	46	38	33	44	38	33	43	37	32	42	37	32	31					31			
10	56	43	35	30	54	42	35	30	41	34	30	40	34	30	39	34	30	28					28			

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	2425	2425	2425
5°	2428	2415	2435
10°	2416	2405	2407
15°	2385	2383	2377
20°	2345	2340	2340
25°	2291	2278	2283
30°	2224	2202	2208
35°	2113	2103	2097
40°	2001	1982	1948
45°	1860	1827	1791
50°	1703	1666	1603
55°	1556	1486	1435
60°	1386	1319	1285
65°	1248	1182	1166
70°	1158	1087	1131
75°	1108	1059	1148
80°	1107	1107	1227
85°	1150	1162	1295



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	170.2	4.1
10°-20°	481.7	11.6
20°-30°	706.9	17.0
30°-40°	799.2	19.3
40°-50°	738.6	17.8
50°-60°	569.1	13.7
60°-70°	376.8	9.1
70°-80°	224.3	5.4
80°-90°	82.2	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°	1358.8	32.7
0°-40°	2158.0	52.0
0°-60°	3465.7	83.5
0°-90°	4149.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	4149.0	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	1802	1802	1802	1802	1802	
5°	1798	1798	1788	1788	1803	171
15°	1712	1709	1711	1710	1706	483
25°	1543	1539	1534	1533	1538	710
35°	1286	1284	1280	1274	1277	805
45°	977	970	960	943	941	753
55°	663	650	633	616	612	592
65°	392	386	371	368	366	393
75°	213	208	204	213	221	227
85°	74	70	75	83	84	79
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	1802.2	1802.2	1802.2	1802.2	1802.2
2.5°	1813.4	1803.9	1793.7	1793.7	1801.4
5°	1797.9	1797.9	1787.7	1788.5	1803.1
7.5°	1788.5	1783.4	1776.6	1776.6	1787.7
10°	1768.0	1763.7	1760.3	1758.6	1762.0
12.5°	1745.7	1738.9	1741.5	1738.9	1738.0
15°	1712.4	1708.9	1710.7	1709.8	1706.4
17.5°	1676.4	1674.7	1678.1	1672.2	1674.7
20°	1637.9	1632.8	1634.5	1631.1	1634.5
22.5°	1594.3	1590.9	1586.6	1582.3	1589.1
25°	1542.9	1538.7	1534.4	1532.7	1537.8
27.5°	1491.6	1484.7	1478.8	1477.0	1484.7
30°	1431.7	1424.0	1417.1	1415.4	1421.4
32.5°	1360.7	1358.9	1350.4	1347.0	1349.5
35°	1286.2	1284.5	1280.2	1274.2	1276.8
37.5°	1215.2	1214.3	1208.3	1198.1	1191.2
40°	1139.0	1133.0	1128.7	1114.2	1109.1
42.5°	1055.2	1053.4	1045.7	1029.5	1023.5
45°	977.3	970.4	960.2	943.0	941.3
47.5°	896.8	887.4	878.0	856.6	855.8
50°	813.8	807.0	795.9	774.5	765.9
52.5°	736.8	727.4	712.0	691.5	687.2
55°	663.2	649.5	633.3	616.1	611.9
57.5°	584.5	578.5	558.8	545.1	540.0
60°	515.2	510.0	490.3	477.5	477.5
62.5°	452.7	445.0	427.9	419.3	419.3
65°	391.9	385.9	371.4	368.0	366.3
67.5°	339.7	332.0	321.8	320.9	325.2
70°	294.4	285.0	276.4	285.0	287.5
72.5°	251.6	245.6	237.9	249.0	254.2
75°	213.1	207.9	203.7	213.1	220.8
77.5°	178.0	172.9	172.9	183.1	190.0
80°	142.9	139.5	142.9	151.5	158.3
82.5°	109.5	107.0	111.2	119.8	124.1
85°	74.5	70.2	75.3	83.0	83.9
87.5°	35.1	34.2	37.7	42.8	41.9
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)