

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: P292932

Luminaire Tested: **24GR-LD5-48-F1-UNV-L83050-W2A1-U-4500K**

Issue Date: 3/3/2020

Test Information

Test Method: LM-79-08
Report Number: P292932
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-L83050-W2A1-U-4500K
Description: GRLED 2x4 TUNABLE WHITE TROFFER
WITH F1 LENS
Light Source: (336) 80 CRI LEDS TUNED TO 4500K CCT
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 5140.0 lumens
Efficiency: N/A
Efficacy: 149.4 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

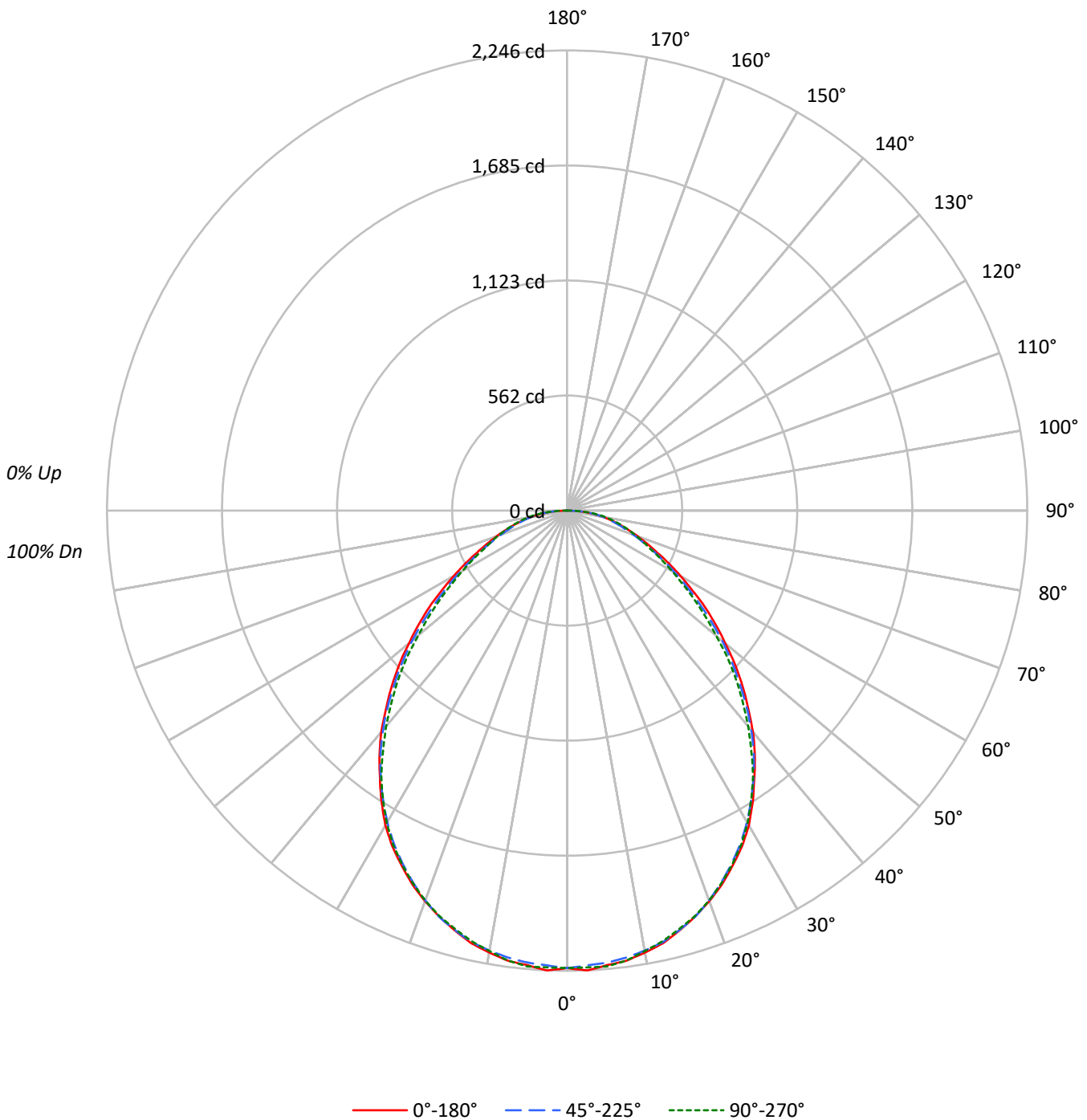
Input Watts (W): 34.41
Input Voltage (V): 120
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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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°	3004	3004	3004
5°	3008	2991	3017
10°	2992	2979	2982
15°	2955	2952	2945
20°	2905	2899	2899
25°	2838	2822	2828
30°	2756	2728	2736
35°	2617	2605	2598
40°	2478	2456	2413
45°	2304	2263	2219
50°	2110	2064	1986
55°	1927	1840	1778
60°	1717	1635	1592
65°	1546	1465	1444
70°	1435	1347	1401
75°	1372	1312	1422
80°	1371	1371	1519
85°	1423	1440	1604



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	210.9	4.1
10°-20°	596.7	11.6
20°-30°	875.7	17.0
30°-40°	990.1	19.3
40°-50°	915.0	17.8
50°-60°	705.0	13.7
60°-70°	466.8	9.1
70°-80°	277.9	5.4
80°-90°	101.8	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°	1683.3	32.7
0°-40°	2673.4	52.0
0°-60°	4293.4	83.5
0°-90°	5140.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	5140.0	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	2233	2233	2233	2233	2233	
5°	2227	2227	2215	2216	2234	212
15°	2121	2117	2119	2118	2114	598
25°	1912	1906	1901	1899	1905	880
35°	1593	1591	1586	1579	1582	997
45°	1211	1202	1190	1168	1166	933
55°	822	805	784	763	758	733
65°	486	478	460	456	454	487
75°	264	258	252	264	274	281
85°	92	87	93	103	104	98
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	2232.7	2232.7	2232.7	2232.7	2232.7
2.5°	2246.5	2234.8	2222.1	2222.1	2231.6
5°	2227.4	2227.4	2214.7	2215.7	2233.8
7.5°	2215.7	2209.4	2200.9	2200.9	2214.7
10°	2190.3	2185.0	2180.7	2178.6	2182.9
12.5°	2162.7	2154.2	2157.4	2154.2	2153.2
15°	2121.4	2117.1	2119.3	2118.2	2114.0
17.5°	2076.9	2074.7	2079.0	2071.6	2074.7
20°	2029.1	2022.8	2024.9	2020.7	2024.9
22.5°	1975.1	1970.8	1965.5	1960.2	1968.7
25°	1911.5	1906.2	1900.9	1898.7	1905.1
27.5°	1847.9	1839.4	1832.0	1829.8	1839.4
30°	1773.6	1764.1	1755.6	1753.5	1760.9
32.5°	1685.7	1683.5	1672.9	1668.7	1671.9
35°	1593.4	1591.3	1586.0	1578.6	1581.8
37.5°	1505.4	1504.4	1496.9	1484.2	1475.7
40°	1411.1	1403.7	1398.3	1380.3	1374.0
42.5°	1307.2	1305.1	1295.5	1275.4	1267.9
45°	1210.7	1202.2	1189.5	1168.3	1166.2
47.5°	1111.0	1099.4	1087.7	1061.2	1060.2
50°	1008.2	999.7	985.9	959.4	948.8
52.5°	912.8	901.1	882.1	856.6	851.3
55°	821.6	804.7	784.5	763.3	758.0
57.5°	724.1	716.7	692.3	675.3	669.0
60°	638.2	631.9	607.5	591.6	591.6
62.5°	560.8	551.3	530.1	519.5	519.5
65°	485.6	478.1	460.1	455.9	453.7
67.5°	420.9	411.3	398.6	397.6	402.9
70°	364.7	353.0	342.4	353.0	356.2
72.5°	311.7	304.3	294.7	308.5	314.9
75°	264.0	257.6	252.3	264.0	273.5
77.5°	220.5	214.2	214.2	226.9	235.4
80°	177.0	172.8	177.0	187.6	196.1
82.5°	135.7	132.5	137.8	148.4	153.7
85°	92.2	86.9	93.3	102.8	103.9
87.5°	43.5	42.4	46.6	53.0	51.9
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)