

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: P293049

Luminaire Tested: **24GR-LD5-38-F1-UNV-L93050-W2A1-U-5000K**

Issue Date: 3/3/2020

Test Information

Test Method: LM-79-08
Report Number: P293049
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-LD5-38-F1-UNV-L93050-W2A1-U-5000K
Description: GRLED 2x4 TUNABLE WHITE TROFFER
WITH F1 LENS
Light Source: (336) 90 CRI LEDS TUNED TO 5000K CCT
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 3594.0 lumens
Efficiency: N/A
Efficacy: 135.9 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

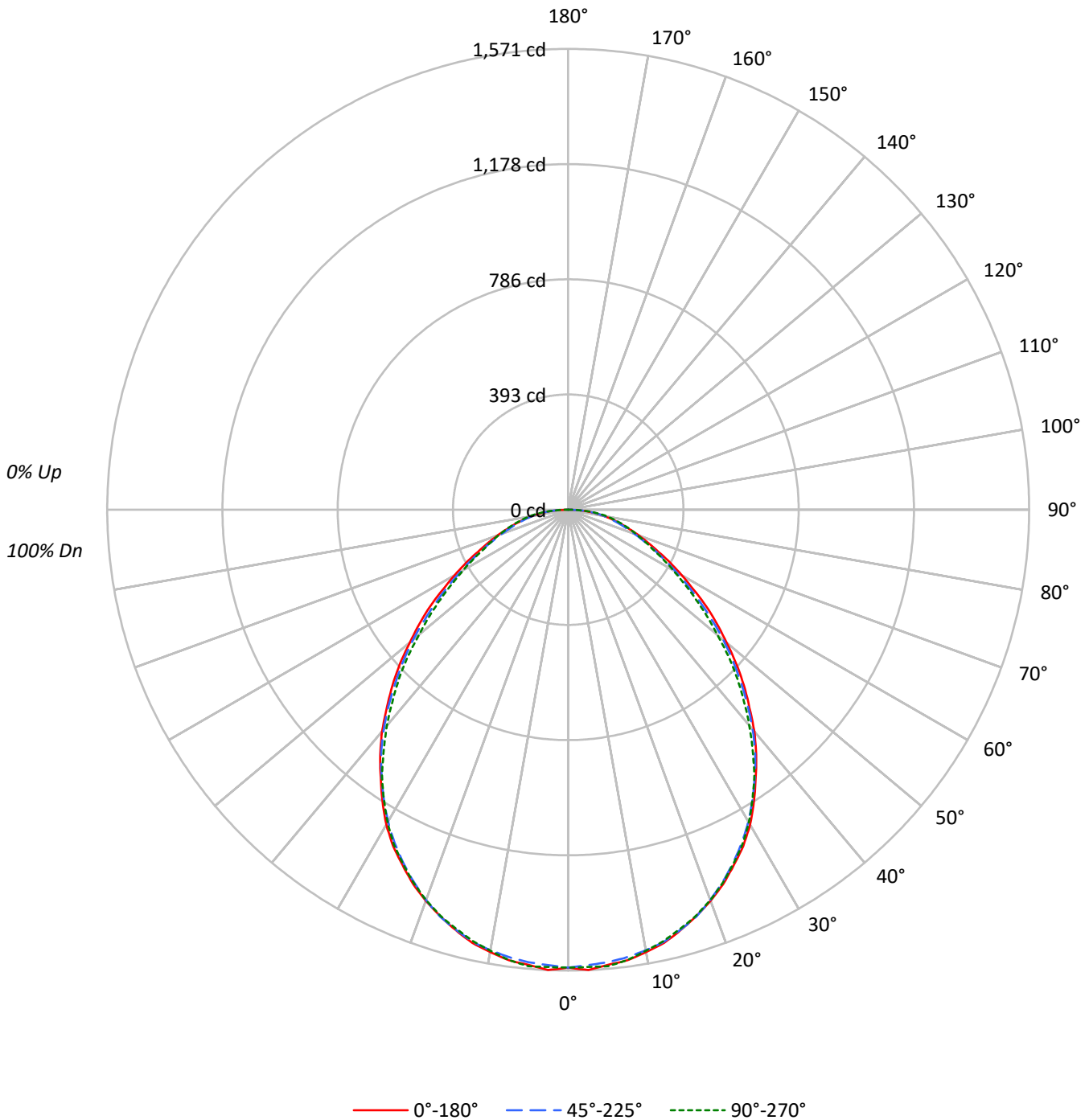
Input Watts (W): 26.455338
Input Voltage (V): 120
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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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°	2100	2100	2100
5°	2103	2091	2110
10°	2092	2083	2085
15°	2066	2064	2059
20°	2031	2027	2027
25°	1984	1973	1978
30°	1927	1907	1913
35°	1830	1822	1817
40°	1733	1717	1687
45°	1611	1583	1552
50°	1476	1443	1389
55°	1348	1287	1243
60°	1201	1143	1113
65°	1081	1024	1010
70°	1003	942	980
75°	960	917	994
80°	959	959	1062
85°	996	1007	1121



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	147.4	4.1
10°-20°	417.2	11.6
20°-30°	612.3	17.0
30°-40°	692.3	19.3
40°-50°	639.8	17.8
50°-60°	493.0	13.7
60°-70°	326.4	9.1
70°-80°	194.3	5.4
80°-90°	71.2	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°	1177.0	32.7
0°-40°	1869.3	52.0
0°-60°	3002.1	83.5
0°-90°	3594.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	3594.0	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	1561	1561	1561	1561	1561	
5°	1557	1557	1548	1549	1562	148
15°	1483	1480	1482	1481	1478	418
25°	1336	1333	1329	1328	1332	615
35°	1114	1113	1109	1104	1106	697
45°	846	841	832	817	815	652
55°	574	563	549	534	530	512
65°	340	334	322	319	317	340
75°	185	180	176	185	191	197
85°	64	61	65	72	73	68
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	1561.1	1561.1	1561.1	1561.1	1561.1
2.5°	1570.8	1562.6	1553.7	1553.7	1560.4
5°	1557.4	1557.4	1548.5	1549.3	1561.9
7.5°	1549.3	1544.8	1538.9	1538.9	1548.5
10°	1531.5	1527.8	1524.8	1523.3	1526.3
12.5°	1512.2	1506.3	1508.5	1506.3	1505.6
15°	1483.3	1480.3	1481.8	1481.1	1478.1
17.5°	1452.2	1450.7	1453.7	1448.5	1450.7
20°	1418.8	1414.4	1415.9	1412.9	1415.9
22.5°	1381.0	1378.1	1374.3	1370.6	1376.6
25°	1336.5	1332.8	1329.1	1327.6	1332.1
27.5°	1292.1	1286.1	1280.9	1279.5	1286.1
30°	1240.2	1233.5	1227.6	1226.1	1231.3
32.5°	1178.6	1177.2	1169.7	1166.8	1169.0
35°	1114.2	1112.7	1109.0	1103.8	1106.0
37.5°	1052.6	1051.9	1046.7	1037.8	1031.9
40°	986.7	981.5	977.8	965.2	960.7
42.5°	914.0	912.5	905.9	891.8	886.6
45°	846.5	840.6	831.7	816.9	815.4
47.5°	776.9	768.7	760.6	742.0	741.3
50°	705.0	699.0	689.4	670.9	663.5
52.5°	638.2	630.1	616.7	599.0	595.3
55°	574.5	562.6	548.6	533.7	530.0
57.5°	506.3	501.1	484.1	472.2	467.8
60°	446.3	441.8	424.8	413.6	413.6
62.5°	392.1	385.5	370.6	363.2	363.2
65°	339.5	334.3	321.7	318.8	317.3
67.5°	294.3	287.6	278.7	278.0	281.7
70°	255.0	246.8	239.4	246.8	249.1
72.5°	217.9	212.7	206.1	215.7	220.2
75°	184.6	180.1	176.4	184.6	191.3
77.5°	154.2	149.7	149.7	158.6	164.6
80°	123.8	120.8	123.8	131.2	137.1
82.5°	94.9	92.7	96.4	103.8	107.5
85°	64.5	60.8	65.2	71.9	72.6
87.5°	30.4	29.7	32.6	37.1	36.3
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)