

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: P293055

Luminaire Tested: **24GR-LD5-48-F1-UNV-L93050-W2A1-U-3000K**

Issue Date: 3/3/2020

Test Information

Test Method: LM-79-08
Report Number: P293055
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-L93050-W2A1-U-3000K
Description: GRLED 2x4 TUNABLE WHITE TROFFER
WITH F1 LENS
Light Source: (336) 90 CRI LEDS TUNED TO 3000K CCT
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 3773.0 lumens
Efficiency: N/A
Efficacy: 112.3 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

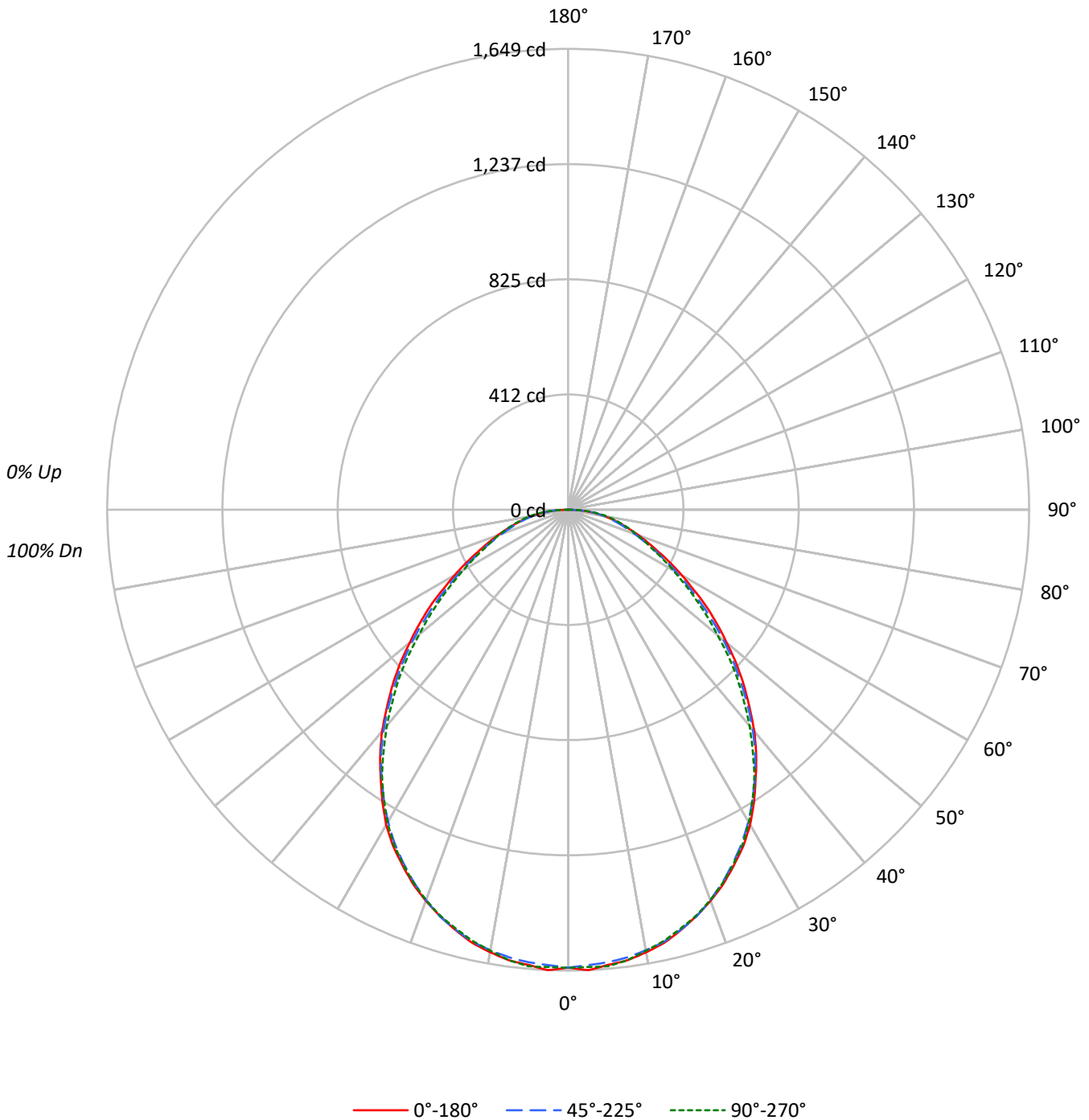
Input Watts (W): 33.584067
Input Voltage (V): 120
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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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	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°	2205	2205	2205
5°	2208	2196	2215
10°	2197	2187	2189
15°	2169	2167	2161
20°	2133	2128	2128
25°	2083	2071	2076
30°	2023	2002	2008
35°	1921	1912	1907
40°	1819	1803	1772
45°	1691	1661	1629
50°	1549	1515	1458
55°	1415	1351	1305
60°	1261	1200	1168
65°	1135	1075	1060
70°	1053	989	1029
75°	1007	963	1044
80°	1007	1007	1116
85°	1045	1057	1178



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	154.8	4.1
10°-20°	438.0	11.6
20°-30°	642.8	17.0
30°-40°	726.8	19.3
40°-50°	671.7	17.8
50°-60°	517.5	13.7
60°-70°	342.7	9.1
70°-80°	204.0	5.4
80°-90°	74.7	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°	1235.6	32.7
0°-40°	1962.4	52.0
0°-60°	3151.6	83.5
0°-90°	3773.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	3773.0	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	1639	1639	1639	1639	1639	
5°	1635	1635	1626	1626	1640	155
15°	1557	1554	1556	1555	1552	439
25°	1403	1399	1395	1394	1398	646
35°	1170	1168	1164	1159	1161	732
45°	889	882	873	858	856	685
55°	603	591	576	560	556	538
65°	356	351	338	335	333	357
75°	194	189	185	194	201	207
85°	68	64	68	76	76	72
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	1638.9	1638.9	1638.9	1638.9	1638.9
2.5°	1649.0	1640.5	1631.1	1631.1	1638.1
5°	1635.0	1635.0	1625.7	1626.5	1639.7
7.5°	1626.5	1621.8	1615.6	1615.6	1625.7
10°	1607.8	1603.9	1600.8	1599.2	1602.3
12.5°	1587.5	1581.3	1583.6	1581.3	1580.5
15°	1557.2	1554.1	1555.6	1554.9	1551.7
17.5°	1524.5	1522.9	1526.1	1520.6	1522.9
20°	1489.5	1484.8	1486.4	1483.3	1486.4
22.5°	1449.8	1446.7	1442.8	1438.9	1445.1
25°	1403.1	1399.2	1395.3	1393.8	1398.4
27.5°	1356.4	1350.2	1344.7	1343.2	1350.2
30°	1301.9	1294.9	1288.7	1287.2	1292.6
32.5°	1237.3	1235.8	1228.0	1224.9	1227.2
35°	1169.6	1168.1	1164.2	1158.7	1161.1
37.5°	1105.1	1104.3	1098.8	1089.5	1083.3
40°	1035.8	1030.3	1026.5	1013.2	1008.6
42.5°	959.5	958.0	951.0	936.2	930.7
45°	888.7	882.5	873.1	857.6	856.0
47.5°	815.6	807.0	798.4	779.0	778.2
50°	740.1	733.8	723.7	704.3	696.5
52.5°	670.0	661.5	647.5	628.8	624.9
55°	603.1	590.7	575.9	560.3	556.4
57.5°	531.5	526.1	508.2	495.7	491.0
60°	468.5	463.8	445.9	434.2	434.2
62.5°	411.7	404.7	389.1	381.3	381.3
65°	356.4	351.0	337.7	334.6	333.1
67.5°	308.9	301.9	292.6	291.8	295.7
70°	267.7	259.1	251.4	259.1	261.5
72.5°	228.8	223.3	216.3	226.5	231.1
75°	193.8	189.1	185.2	193.8	200.8
77.5°	161.9	157.2	157.2	166.5	172.8
80°	130.0	126.8	130.0	137.7	144.0
82.5°	99.6	97.3	101.2	108.9	112.8
85°	67.7	63.8	68.5	75.5	76.3
87.5°	31.9	31.1	34.2	38.9	38.1
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)