

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: P293053

Luminaire Tested: **24GR-LD5-42-F1-UNV-L93050-W2A1-U-4500K**

Issue Date: 3/3/2020

Test Information

Test Method: LM-79-08
Report Number: P293053
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-LD5-42-F1-UNV-L93050-W2A1-U-4500K
Description: GRLED 2x4 TUNABLE WHITE TROFFER
WITH F1 LENS
Light Source: (336) 90 CRI LEDS TUNED TO 4500K CCT
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 3915.0 lumens
Efficiency: N/A
Efficacy: 134.2 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

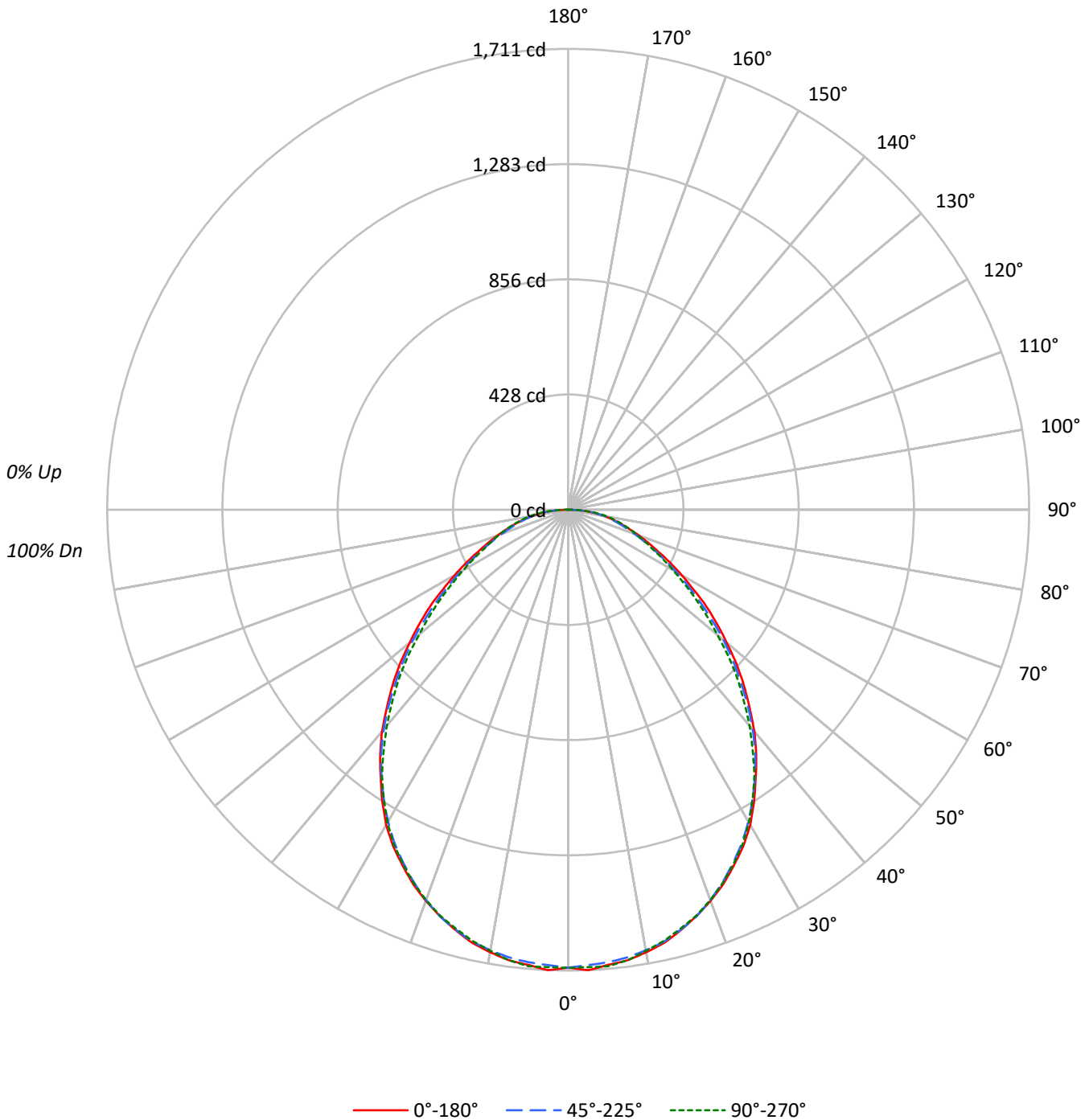
Input Watts (W): 29.168706
Input Voltage (V): 120
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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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°	2288	2288	2288
5°	2291	2278	2298
10°	2279	2269	2272
15°	2251	2249	2243
20°	2213	2208	2208
25°	2161	2149	2154
30°	2099	2078	2084
35°	1994	1984	1979
40°	1888	1871	1838
45°	1755	1724	1690
50°	1607	1572	1513
55°	1468	1402	1354
60°	1308	1245	1213
65°	1177	1116	1100
70°	1093	1026	1067
75°	1045	999	1083
80°	1045	1045	1158
85°	1085	1098	1221



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	160.6	4.1
10°-20°	454.5	11.6
20°-30°	667.0	17.0
30°-40°	754.1	19.3
40°-50°	697.0	17.8
50°-60°	537.0	13.7
60°-70°	355.6	9.1
70°-80°	211.7	5.4
80°-90°	77.5	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°	1282.1	32.7
0°-40°	2036.3	52.0
0°-60°	3270.2	83.5
0°-90°	3915.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	3915.0	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	1701	1701	1701	1701	1701	
5°	1696	1696	1687	1688	1701	161
15°	1616	1613	1614	1613	1610	455
25°	1456	1452	1448	1446	1451	670
35°	1214	1212	1208	1202	1205	759
45°	922	916	906	890	888	710
55°	626	613	598	581	577	558
65°	370	364	350	347	346	371
75°	201	196	192	201	208	214
85°	70	66	71	78	79	75
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	1700.6	1700.6	1700.6	1700.6	1700.6
2.5°	1711.1	1702.2	1692.5	1692.5	1699.8
5°	1696.5	1696.5	1686.9	1687.7	1701.4
7.5°	1687.7	1682.8	1676.4	1676.4	1686.9
10°	1668.3	1664.2	1661.0	1659.4	1662.6
12.5°	1647.3	1640.8	1643.3	1640.8	1640.0
15°	1615.8	1612.6	1614.2	1613.4	1610.1
17.5°	1581.9	1580.3	1583.5	1577.8	1580.3
20°	1545.5	1540.7	1542.3	1539.1	1542.3
22.5°	1504.4	1501.1	1497.1	1493.1	1499.5
25°	1455.9	1451.9	1447.8	1446.2	1451.1
27.5°	1407.5	1401.0	1395.4	1393.7	1401.0
30°	1350.9	1343.7	1337.2	1335.6	1341.2
32.5°	1283.9	1282.3	1274.2	1271.0	1273.4
35°	1213.7	1212.0	1208.0	1202.4	1204.8
37.5°	1146.6	1145.8	1140.2	1130.5	1124.0
40°	1074.8	1069.1	1065.1	1051.4	1046.5
42.5°	995.6	994.0	986.8	971.4	965.8
45°	922.2	915.7	906.0	889.9	888.2
47.5°	846.3	837.4	828.5	808.3	807.5
50°	767.9	761.5	751.0	730.8	722.7
52.5°	695.3	686.4	671.8	652.5	648.4
55°	625.8	612.9	597.5	581.4	577.4
57.5°	551.5	545.9	527.3	514.4	509.5
60°	486.1	481.3	462.7	450.6	450.6
62.5°	427.2	419.9	403.7	395.7	395.7
65°	369.8	364.2	350.5	347.2	345.6
67.5°	320.6	313.3	303.6	302.8	306.8
70°	277.8	268.9	260.8	268.9	271.3
72.5°	237.4	231.8	224.5	235.0	239.8
75°	201.1	196.2	192.2	201.1	208.3
77.5°	168.0	163.1	163.1	172.8	179.3
80°	134.9	131.6	134.9	142.9	149.4
82.5°	103.4	100.9	105.0	113.0	117.1
85°	70.3	66.2	71.1	78.3	79.1
87.5°	33.1	32.3	35.5	40.4	39.6
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)