

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: P293552

Luminaire Tested: **24GR-LD5-38-A-UNV-L93050-W2A1-U-4500K**

Issue Date: 3/3/2020

Test Information

Test Method: LM-79-08
Report Number: P293552
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (P33306)
Test Lab: INNOVATION CENTER-P3
Issue Date: 3/3/2020
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: METALUX
Catalog Number: 24GR-LD5-38-A-UNV-L93050-W2A1-U-4500K
Description: GRLED 2x4 TUNABLE WHITE TROFFER
WITH A LENS
Light Source: (336) 90 CRI LEDS TUNED TO 4500K CCT
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 3636.0 lumens
Efficiency: N/A
Efficacy: 137.4 lumens/watt
Spacing Criteria (0/90/45): 1.21 / 1.2 / 1.26
Luminous Opening: Rectangular (W 2' x L: 4' x H: 0')
CIE Type: Direct

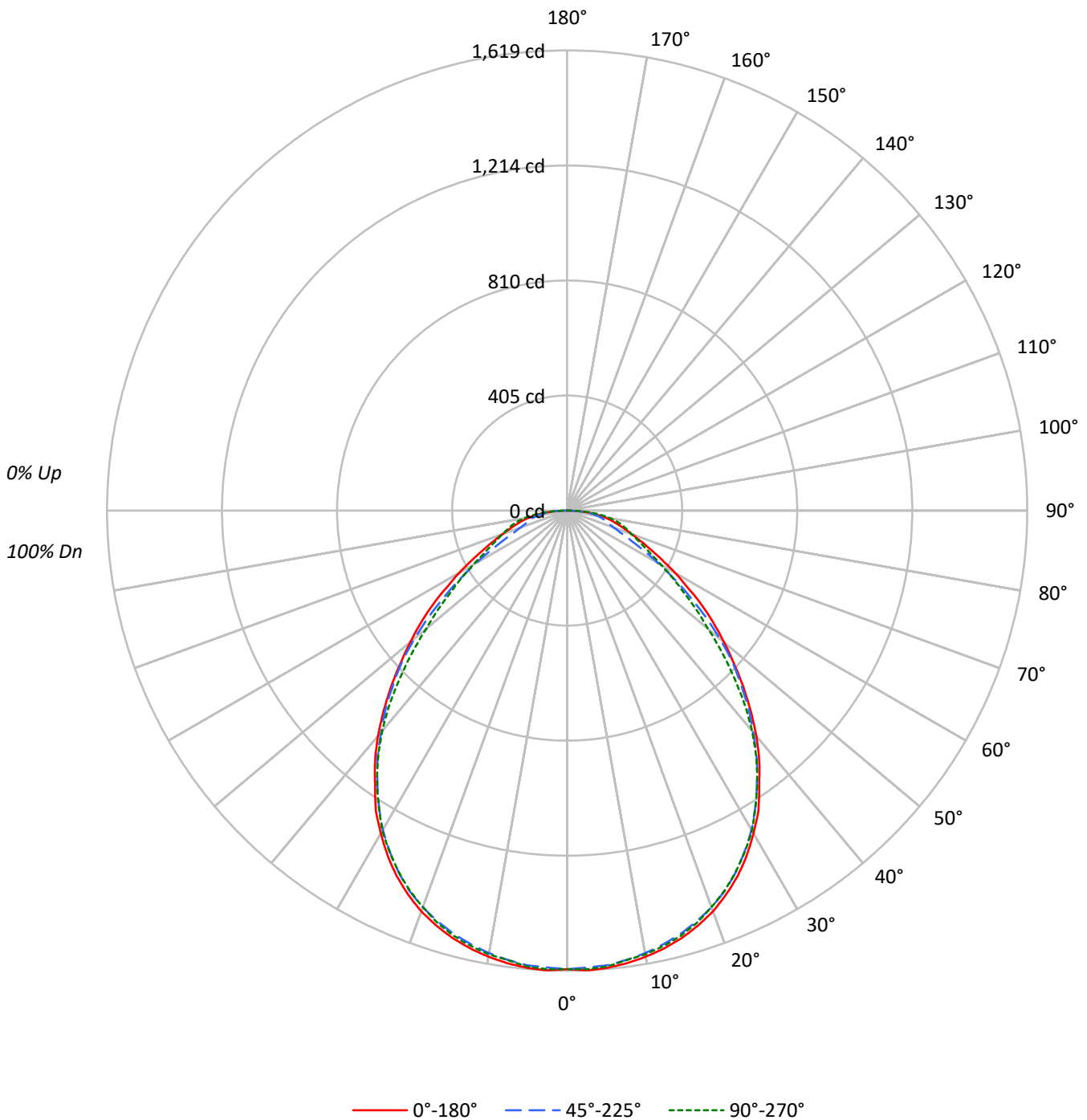
Input Watts (W): 26.455338
Input Voltage (V): 120
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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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	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	110	105	101	98	107	103	99	96	99	96	93	95	93	90	91	89	88	86																												
2	101	93	87	82	98	91	86	81	88	83	79	85	81	77	82	78	75	73																												
3	93	83	75	69	90	81	74	69	79	73	68	76	71	67	73	69	65	63																												
4	86	74	66	60	83	73	65	60	71	64	59	68	63	58	66	61	57	55																												
5	79	67	59	53	77	66	58	52	64	57	52	62	56	51	60	55	51	49																												
6	73	61	53	46	72	60	52	46	58	51	46	57	50	45	55	49	45	43																												
7	68	56	47	42	67	55	47	41	53	46	41	52	46	41	51	45	41	39																												
8	64	51	43	37	62	50	43	37	49	42	37	48	41	37	47	41	37	35																												
9	60	47	39	34	58	46	39	34	45	38	34	44	38	33	43	38	33	32																												
10	56	44	36	31	55	43	36	31	42	35	31	41	35	31	40	35	30	29																												

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	2171	2171	2171
5°	2181	2169	2174
10°	2177	2160	2166
15°	2169	2147	2156
20°	2148	2127	2126
25°	2106	2084	2082
30°	2037	2016	2020
35°	1935	1913	1915
40°	1819	1788	1777
45°	1667	1645	1580
50°	1507	1466	1356
55°	1353	1232	1169
60°	1185	992	1028
65°	1034	780	946
70°	946	681	946
75°	946	724	1042
80°	1027	853	1188
85°	1127	963	1275



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	152.8	4.2
10°-20°	436.0	12.0
20°-30°	646.5	17.8
30°-40°	729.3	20.1
40°-50°	660.5	18.2
50°-60°	476.5	13.1
60°-70°	284.5	7.8
70°-80°	175.8	4.8
80°-90°	74.1	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°	1235.2	34.0
0°-40°	1964.5	54.0
0°-60°	3101.5	85.3
0°-90°	3636.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	3636.0	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	1613	1613	1613	1613	1613	
5°	1615	1613	1606	1604	1610	153
15°	1557	1548	1541	1542	1548	439
25°	1419	1411	1404	1399	1403	652
35°	1178	1176	1164	1165	1166	737
45°	876	871	864	843	830	675
55°	577	559	525	499	498	515
65°	325	286	245	278	297	327
75°	182	158	139	174	200	194
85°	73	64	62	81	83	76
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	1613.3	1613.3	1613.3	1613.3	1613.3
2.5°	1618.9	1614.4	1608.8	1612.1	1614.9
5°	1614.9	1612.7	1605.9	1604.3	1609.9
7.5°	1606.5	1600.9	1594.7	1597.5	1595.3
10°	1593.6	1588.5	1580.7	1581.2	1585.2
12.5°	1577.9	1571.7	1563.3	1565.5	1568.9
15°	1557.1	1547.5	1541.4	1541.9	1548.1
17.5°	1530.7	1523.4	1515.5	1517.2	1520.0
20°	1500.3	1496.4	1485.2	1481.8	1484.6
22.5°	1462.1	1454.8	1448.7	1447.0	1447.5
25°	1418.9	1411.0	1403.7	1398.7	1402.6
27.5°	1368.3	1361.6	1352.1	1350.4	1353.7
30°	1311.0	1306.0	1297.6	1295.3	1300.4
32.5°	1252.6	1244.2	1232.4	1232.4	1233.5
35°	1177.9	1176.2	1164.4	1165.0	1166.1
37.5°	1110.5	1102.7	1095.9	1089.2	1092.5
40°	1035.8	1026.8	1017.8	1013.3	1011.7
42.5°	955.5	948.7	944.8	928.5	924.6
45°	876.3	870.7	864.5	843.1	830.2
47.5°	795.4	794.3	789.2	751.6	738.7
50°	720.1	718.4	700.5	660.6	647.7
52.5°	648.8	637.5	614.0	574.6	572.4
55°	576.9	558.9	525.2	499.4	498.2
57.5°	501.1	479.7	445.4	431.4	438.7
60°	440.4	407.8	368.5	370.2	382.0
62.5°	377.5	341.0	302.2	319.1	333.1
65°	324.7	285.9	244.9	278.0	297.1
67.5°	278.6	242.7	203.3	247.7	266.3
70°	240.4	211.2	173.0	219.6	240.4
72.5°	210.1	183.1	153.3	197.2	221.3
75°	182.0	157.8	139.3	173.6	200.5
77.5°	157.8	134.3	125.8	153.3	179.7
80°	132.6	111.2	110.1	133.7	153.3
82.5°	103.4	88.8	88.8	111.8	123.6
85°	73.0	64.0	62.4	81.4	82.6
87.5°	37.6	35.9	32.6	42.7	42.7
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)