

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: P293046

Luminaire Tested: **24GR-LD5-38-F1-UNV-L93050-W2A1-U-3500K**

Issue Date: 3/3/2020

Test Information

Test Method: LM-79-08
Report Number: P293046
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-3500K
Description: GRLED 2x4 TUNABLE WHITE TROFFER
WITH F1 LENS
Light Source: (336) 90 CRI LEDS TUNED TO 3500K CCT
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 3271.0 lumens
Efficiency: N/A
Efficacy: 126.4 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

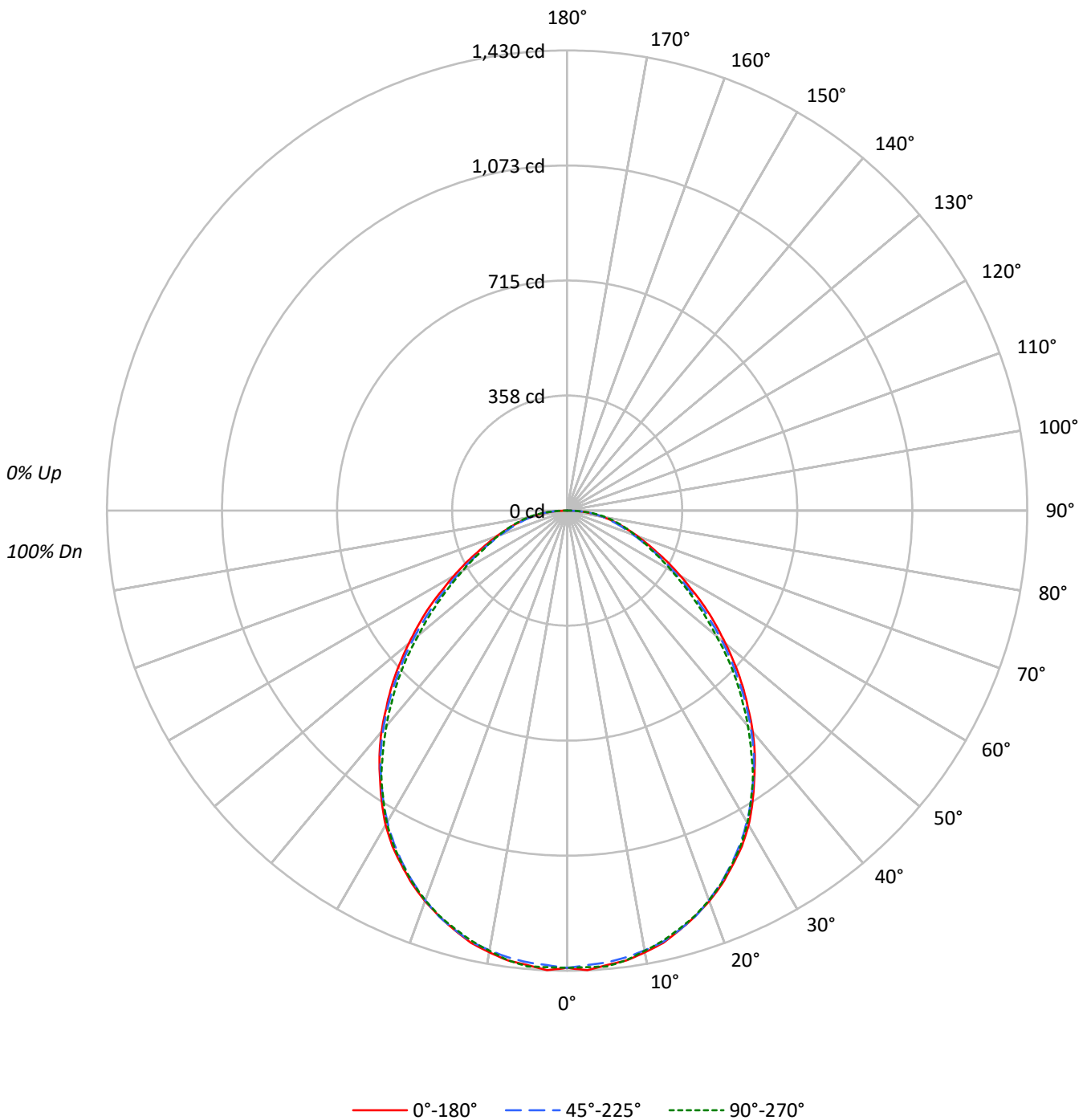
Input Watts (W): 25.871391
Input Voltage (V): 120
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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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°	1912	1912	1912
5°	1915	1904	1920
10°	1904	1896	1898
15°	1880	1879	1874
20°	1849	1845	1845
25°	1806	1796	1800
30°	1754	1736	1741
35°	1666	1658	1653
40°	1577	1563	1536
45°	1466	1440	1412
50°	1343	1313	1264
55°	1227	1171	1132
60°	1093	1040	1013
65°	984	932	919
70°	913	857	892
75°	873	835	905
80°	873	873	967
85°	906	917	1020



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	134.2	4.1
10°-20°	379.7	11.6
20°-30°	557.3	17.0
30°-40°	630.1	19.3
40°-50°	582.3	17.8
50°-60°	448.7	13.7
60°-70°	297.1	9.1
70°-80°	176.9	5.4
80°-90°	64.8	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°	1071.2	32.7
0°-40°	1701.3	52.0
0°-60°	2732.3	83.5
0°-90°	3271.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	3271.0	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	1421	1421	1421	1421	1421	
5°	1418	1418	1409	1410	1422	135
15°	1350	1347	1349	1348	1345	380
25°	1216	1213	1210	1208	1212	560
35°	1014	1013	1009	1005	1007	634
45°	770	765	757	744	742	593
55°	523	512	499	486	482	466
65°	309	304	293	290	289	310
75°	168	164	161	168	174	179
85°	59	55	59	65	66	62
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	1420.8	1420.8	1420.8	1420.8	1420.8
2.5°	1429.6	1422.2	1414.1	1414.1	1420.2
5°	1417.5	1417.5	1409.4	1410.1	1421.5
7.5°	1410.1	1406.0	1400.6	1400.6	1409.4
10°	1393.9	1390.5	1387.8	1386.4	1389.1
12.5°	1376.3	1370.9	1372.9	1370.9	1370.2
15°	1350.0	1347.3	1348.7	1348.0	1345.3
17.5°	1321.7	1320.3	1323.0	1318.3	1320.3
20°	1291.3	1287.3	1288.6	1285.9	1288.6
22.5°	1256.9	1254.2	1250.8	1247.5	1252.9
25°	1216.4	1213.0	1209.7	1208.3	1212.4
27.5°	1175.9	1170.5	1165.8	1164.5	1170.5
30°	1128.7	1122.6	1117.2	1115.9	1120.6
32.5°	1072.7	1071.4	1064.6	1061.9	1063.9
35°	1014.0	1012.7	1009.3	1004.6	1006.6
37.5°	958.0	957.3	952.6	944.5	939.1
40°	898.0	893.3	889.9	878.4	874.4
42.5°	831.9	830.5	824.4	811.6	806.9
45°	770.5	765.1	757.0	743.5	742.1
47.5°	707.0	699.6	692.2	675.3	674.7
50°	641.6	636.2	627.4	610.6	603.8
52.5°	580.9	573.5	561.3	545.1	541.8
55°	522.9	512.1	499.3	485.8	482.4
57.5°	460.8	456.1	440.6	429.8	425.7
60°	406.1	402.1	386.6	376.5	376.5
62.5°	356.9	350.8	337.3	330.6	330.6
65°	309.0	304.3	292.8	290.1	288.8
67.5°	267.8	261.8	253.7	253.0	256.4
70°	232.1	224.7	217.9	224.7	226.7
72.5°	198.4	193.6	187.6	196.3	200.4
75°	168.0	163.9	160.6	168.0	174.1
77.5°	140.3	136.3	136.3	144.4	149.8
80°	112.7	110.0	112.7	119.4	124.8
82.5°	86.4	84.3	87.7	94.5	97.8
85°	58.7	55.3	59.4	65.4	66.1
87.5°	27.7	27.0	29.7	33.7	33.1
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)