

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: P290661

Luminaire Tested: **14GR-LD5-24-F1-UNV-L93050-W2A1-U-3500K**

Issue Date: 3/3/2020

Test Information

Test Method: LM-79-08
Report Number: P290661
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G3-1901-084-7)
Test Lab: INNOVATION CENTER(G3)
Issue Date: 3/3/2020
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: METALUX
Catalog Number: 14GR-LD5-24-F1-UNV-L93050-W2A1-U-3500K
Description: GRLED 1x4 TUNABLE WHITE TROFFER
WITH F1 LENS
Light Source: (168) 90 CRI LEDS TUNED TO 3500K CCT
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 2051.0 lumens
Efficiency: N/A
Efficacy: 110.3 lumens/watt
Spacing Criteria (0/90/45): 1.18 / 1.15 / 1.23
Luminous Opening: Rectangular (W 1' x L: 4' x H: 0')
CIE Type: Direct

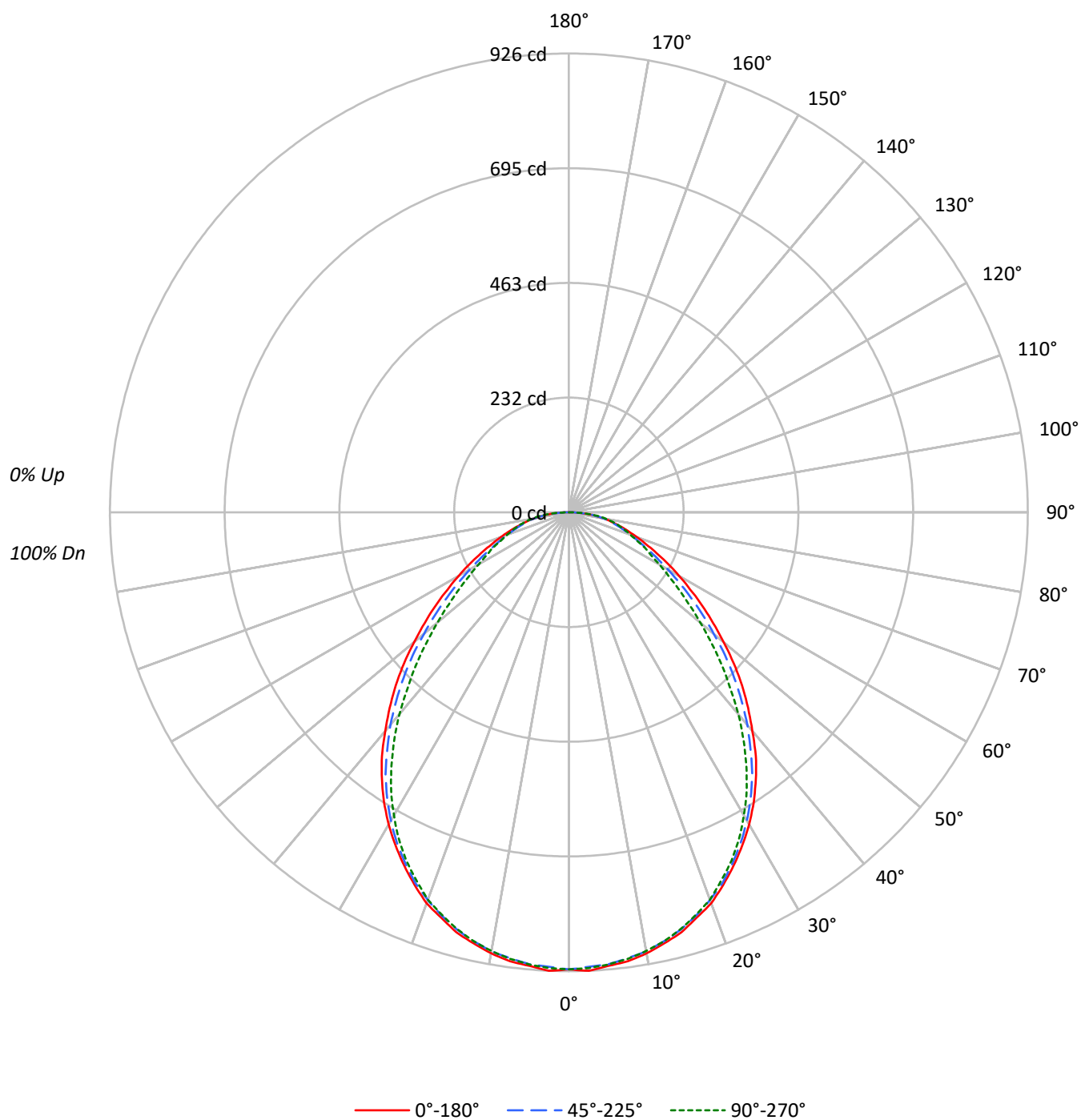
Input Watts (W): 18.6
Input Voltage (V): 120
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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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					0
RW	70	50	30	10	70	50	30	10		50	30	10		50	30	10		50	30	10
RCR																				
0	119	119	119	119	116	116	116	116		111	111	111		106	106	106		102	102	102
1	110	105	101	98	107	103	99	96		99	96	93		95	92	90		91	89	87
2	101	93	87	81	98	91	85	80		88	83	78		84	80	77		81	78	75
3	92	83	75	69	90	81	74	68		78	72	67		75	70	66		73	69	65
4	85	74	66	59	83	73	65	59		70	64	58		68	62	57		66	61	57
5	79	67	58	52	77	66	58	52		64	57	51		62	55	51		60	54	50
6	73	61	52	46	71	60	52	46		58	51	45		56	50	45		55	49	45
7	68	55	47	41	66	54	47	41		53	46	41		52	45	40		50	44	40
8	64	51	43	37	62	50	42	37		49	42	37		47	41	36		46	41	36
9	60	47	39	34	58	46	39	33		45	38	33		44	38	33		43	37	33
10	56	43	36	31	55	43	35	31		42	35	30		41	35	30		40	34	30

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	2482	2482	2482
5°	2481	2472	2474
10°	2469	2458	2456
15°	2444	2430	2426
20°	2404	2384	2382
25°	2335	2320	2303
30°	2260	2232	2194
35°	2161	2119	2050
40°	2023	1967	1870
45°	1878	1794	1664
50°	1704	1598	1449
55°	1542	1412	1266
60°	1384	1237	1129
65°	1242	1105	1081
70°	1146	1028	1039
75°	1095	1031	1090
80°	1108	1100	1187
85°	1145	1133	1263



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	87.1	4.2
10°-20°	246.2	12.0
20°-30°	359.5	17.5
30°-40°	400.6	19.5
40°-50°	360.9	17.6
50°-60°	269.8	13.2
60°-70°	178.0	8.7
70°-80°	108.6	5.3
80°-90°	40.3	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°	692.8	33.8
0°-40°	1093.3	53.3
0°-60°	1724.1	84.1
0°-90°	2051.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	2051.0	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	922	922	922	922	922	
5°	919	918	915	920	916	87
15°	877	874	872	877	871	247
25°	786	784	781	783	776	362
35°	658	652	645	634	624	410
45°	494	488	472	450	437	380
55°	329	323	301	276	270	294
65°	195	189	174	166	170	196
75°	105	103	99	102	105	112
85°	37	36	37	40	41	40
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	922.4	922.4	922.4	922.4	922.4
2.5°	926.1	921.9	918.2	923.8	920.5
5°	918.6	917.7	915.3	920.0	915.8
7.5°	913.9	910.6	907.8	913.5	908.8
10°	903.6	901.7	899.4	904.1	898.9
12.5°	890.9	889.0	886.7	892.3	886.7
15°	877.3	874.0	872.1	877.3	870.7
17.5°	857.5	856.1	853.3	858.4	851.9
20°	839.6	834.5	832.6	836.4	831.7
22.5°	813.8	810.0	809.6	811.9	803.9
25°	786.5	783.7	781.3	782.8	775.7
27.5°	757.8	754.1	751.3	750.8	743.3
30°	727.3	722.6	718.4	714.6	706.1
32.5°	693.9	688.3	682.6	676.5	667.6
35°	657.7	652.1	645.0	633.7	623.9
37.5°	619.6	613.0	601.8	588.6	578.7
40°	575.9	572.6	559.9	543.0	532.2
42.5°	535.0	531.2	515.3	496.5	481.9
45°	493.6	488.5	471.5	449.9	437.2
47.5°	451.3	446.1	427.3	400.5	389.3
50°	407.1	404.3	381.7	357.3	346.0
52.5°	366.7	363.4	340.4	315.9	305.6
55°	328.6	323.4	300.9	276.0	269.9
57.5°	290.5	284.9	263.7	242.6	238.4
60°	257.2	250.1	229.9	213.4	209.7
62.5°	225.7	217.7	200.7	188.1	186.2
65°	195.1	189.0	173.5	166.4	169.7
67.5°	168.8	162.7	151.4	148.6	147.6
70°	145.7	140.1	130.7	131.6	132.1
72.5°	124.6	121.3	114.2	116.6	118.5
75°	105.3	103.4	99.2	102.5	104.8
77.5°	87.9	86.5	84.6	87.4	91.2
80°	71.5	70.5	71.0	72.9	76.6
82.5°	55.0	53.1	54.5	58.3	60.6
85°	37.1	35.7	36.7	40.4	40.9
87.5°	17.4	17.4	16.9	19.7	19.7
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)