

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: P291060

Luminaire Tested: **14GR-LD5-28-A-UNV-L93050-W2A1-U-4500K**

Issue Date: 3/3/2020

Test Information

Test Method: LM-79-08
Report Number: P291060
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (P33314)
Test Lab: INNOVATION CENTER-P3
Issue Date: 3/3/2020
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: METALUX
Catalog Number: 14GR-LD5-28-A-UNV-L93050-W2A1-U-4500K
Description: GRLED 1x4 TUNABLE WHITE TROFFER
WITH A LENS
Light Source: (168) 90 CRI LEDS TUNED TO 4500K CCT
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 2720.0 lumens
Efficiency: N/A
Efficacy: 117.5 lumens/watt
Spacing Criteria (0/90/45): 1.23 / 1.21 / 1.26
Luminous Opening: Rectangular (W 1' x L: 4' x H: 0')
CIE Type: Direct

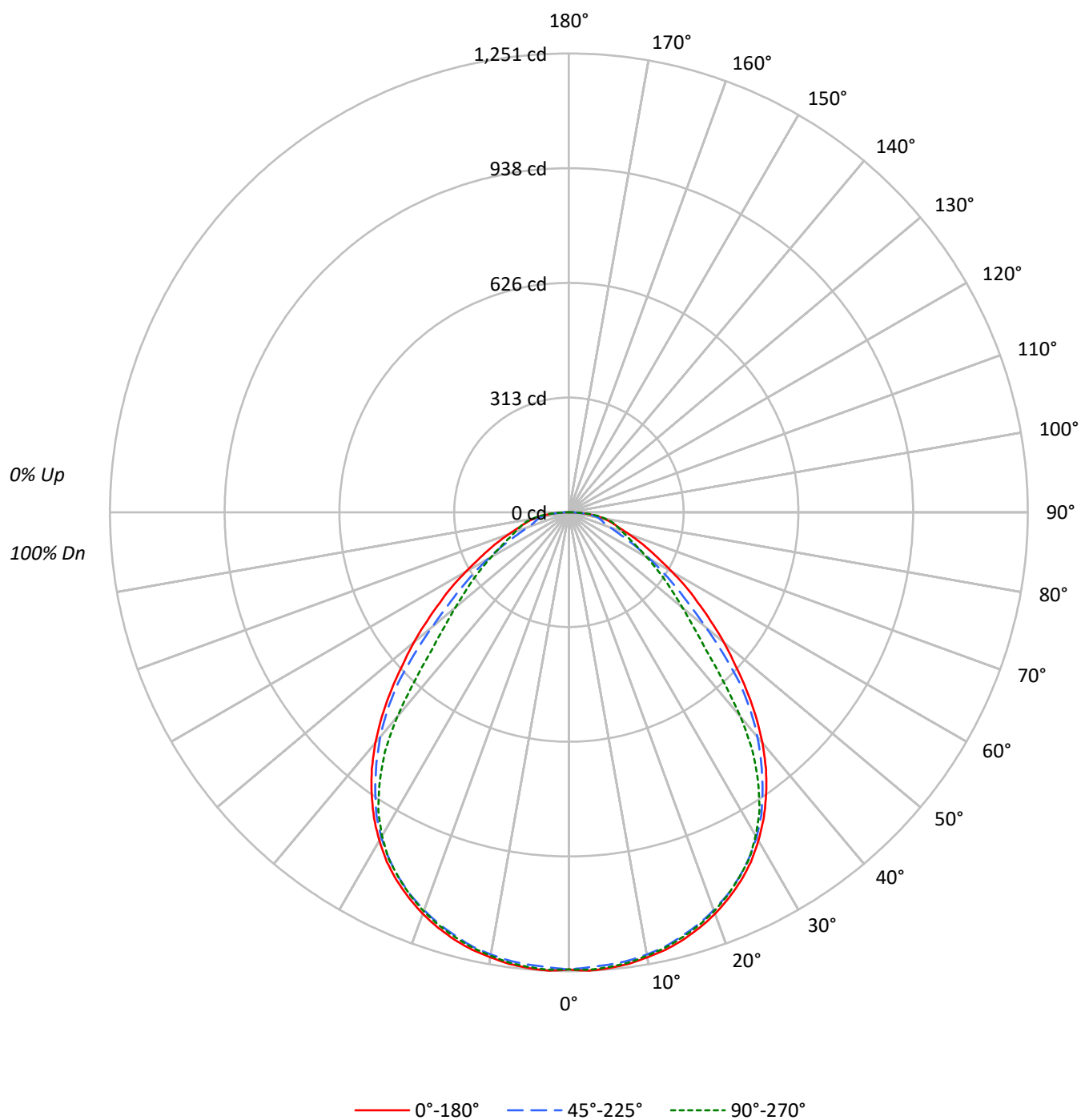
Input Watts (W): 23.157
Input Voltage (V): 120
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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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
RW	70	50	30	10	70	50	30	10	50	30	10		50	30	10		50
RCR																	
0	119	119	119	119	116	116	116	116	111	111	111		106	106	106		102
1	110	106	102	98	107	103	100	97	99	96	94		95	93	91		92
2	101	94	88	83	99	92	86	82	88	84	80		85	81	78		82
3	93	84	76	71	91	82	75	70	79	74	69		77	72	68		74
4	86	75	67	61	84	74	67	61	72	65	60		69	64	59		67
5	80	68	60	54	78	67	59	53	65	58	53		63	57	52		61
6	74	62	54	48	72	61	53	47	59	52	47		58	51	47		56
7	69	57	48	43	67	56	48	43	54	47	42		53	47	42		52
8	65	52	44	38	63	51	44	38	50	43	38		49	43	38		48
9	61	48	40	35	59	47	40	35	46	39	35		45	39	35		44
10	57	44	37	32	56	44	37	32	43	36	32		42	36	32		41

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	3354	3354	3354
5°	3370	3345	3362
10°	3366	3345	3354
15°	3360	3330	3340
20°	3336	3305	3314
25°	3292	3260	3262
30°	3211	3178	3164
35°	3080	3024	2955
40°	2883	2810	2557
45°	2604	2505	1998
50°	2309	2034	1690
55°	2016	1669	1491
60°	1748	1373	1316
65°	1533	1102	1215
70°	1367	935	1223
75°	1333	986	1366
80°	1478	1243	1567
85°	1541	1328	1834



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	118.3	4.3
10°-20°	338.8	12.5
20°-30°	506.8	18.6
30°-40°	572.1	21.0
40°-50°	485.3	17.8
50°-60°	328.4	12.1
60°-70°	196.0	7.2
70°-80°	122.7	4.5
80°-90°	51.6	1.9
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°	963.8	35.4
0°-40°	1535.9	56.5
0°-60°	2349.6	86.4
0°-90°	2720.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	2720.0	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	1246	1246	1246	1246	1246	
5°	1248	1244	1238	1247	1244	119
15°	1206	1204	1195	1204	1199	340
25°	1109	1105	1098	1103	1099	510
35°	938	931	920	912	900	584
45°	684	687	658	564	525	527
55°	430	409	356	318	318	387
65°	241	200	173	184	191	241
75°	128	114	95	125	131	138
85°	50	47	43	56	59	54
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	1246.4	1246.4	1246.4	1246.4	1246.4
2.5°	1250.8	1247.1	1241.4	1249.0	1248.3
5°	1247.7	1243.9	1238.2	1247.1	1244.5
7.5°	1242.0	1238.8	1233.2	1241.4	1238.8
10°	1231.9	1229.4	1224.3	1231.3	1227.5
12.5°	1221.2	1219.3	1212.9	1219.3	1215.5
15°	1206.0	1203.5	1195.3	1203.5	1199.0
17.5°	1187.0	1183.9	1176.9	1183.9	1180.1
20°	1164.9	1161.1	1154.2	1161.1	1157.3
22.5°	1138.4	1135.2	1128.9	1135.2	1130.2
25°	1108.7	1104.9	1098.0	1103.0	1098.6
27.5°	1074.6	1069.5	1063.2	1067.0	1064.5
30°	1033.5	1027.2	1022.8	1022.8	1018.4
32.5°	988.7	984.3	976.7	972.2	966.6
35°	937.5	931.2	920.4	912.2	899.6
37.5°	882.5	875.0	861.7	840.8	823.8
40°	820.6	811.2	799.8	758.7	727.8
42.5°	754.3	752.4	732.8	662.7	619.7
45°	684.2	686.7	658.3	564.1	525.0
47.5°	613.4	622.3	570.5	478.2	458.0
50°	551.5	554.7	485.8	415.1	403.7
52.5°	487.7	482.6	414.4	365.1	356.9
55°	429.6	409.4	355.7	318.4	317.8
57.5°	378.4	341.1	303.9	276.1	279.2
60°	324.7	283.0	255.2	240.1	244.5
62.5°	277.3	237.5	212.9	208.5	216.1
65°	240.7	199.6	173.1	184.5	190.8
67.5°	205.9	171.2	140.9	168.0	170.6
70°	173.7	148.5	118.8	154.8	155.4
72.5°	147.2	131.4	103.0	140.2	142.1
75°	128.2	114.3	94.8	125.1	131.4
77.5°	112.4	97.9	87.8	108.0	118.8
80°	95.4	79.0	80.2	90.3	101.1
82.5°	73.3	61.3	63.8	74.5	82.1
85°	49.9	47.4	43.0	55.6	59.4
87.5°	26.5	25.3	22.1	31.6	29.7
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)