

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: P290671

Luminaire Tested: **14GR-LD5-32-F1-UNV-L93050-W2A1-U-3500K**

Issue Date: 3/3/2020

Test Information

Test Method: LM-79-08
Report Number: P290671
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-LD5-32-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: 2780.0 lumens
Efficiency: N/A
Efficacy: 106.4 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

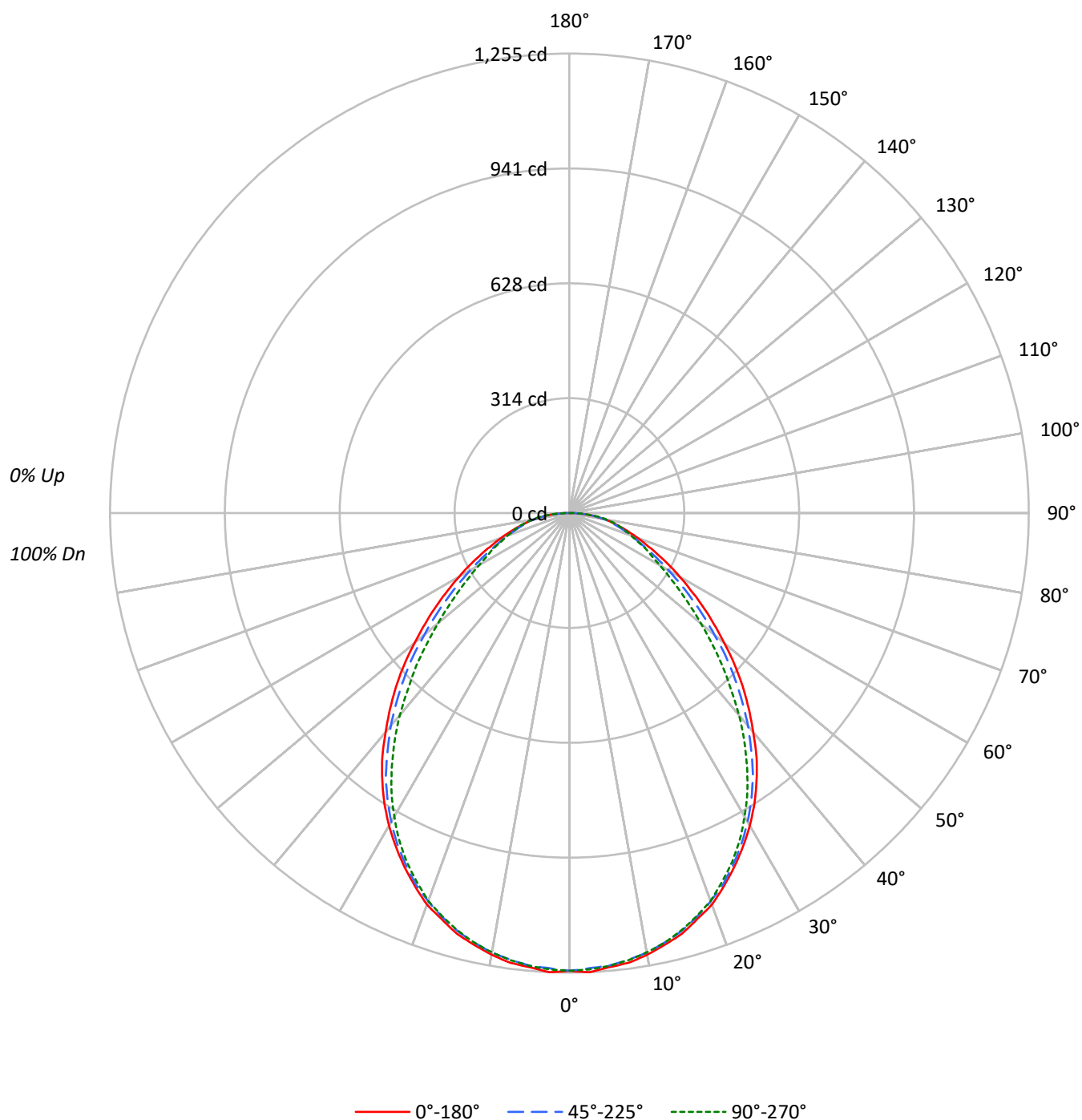
Input Watts (W): 26.133
Input Voltage (V): 120
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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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°	3364	3364	3364
5°	3363	3351	3353
10°	3346	3331	3329
15°	3313	3293	3288
20°	3259	3232	3228
25°	3165	3145	3122
30°	3063	3026	2974
35°	2929	2872	2778
40°	2742	2666	2534
45°	2546	2432	2255
50°	2310	2166	1963
55°	2090	1913	1716
60°	1876	1677	1530
65°	1684	1497	1465
70°	1554	1393	1409
75°	1484	1398	1477
80°	1502	1491	1610
85°	1553	1535	1711



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	118.0	4.2
10°-20°	333.7	12.0
20°-30°	487.3	17.5
30°-40°	543.0	19.5
40°-50°	489.2	17.6
50°-60°	365.7	13.2
60°-70°	241.2	8.7
70°-80°	147.3	5.3
80°-90°	54.6	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°	939.0	33.8
0°-40°	1482.0	53.3
0°-60°	2336.9	84.1
0°-90°	2780.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	2780.0	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	1250	1250	1250	1250	1250	
5°	1245	1244	1241	1247	1241	118
15°	1189	1185	1182	1189	1180	335
25°	1066	1062	1059	1061	1051	491
35°	892	884	874	859	846	556
45°	669	662	639	610	593	515
55°	445	438	408	374	366	399
65°	264	256	235	226	230	265
75°	143	140	134	139	142	152
85°	50	48	50	55	55	54
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	1250.2	1250.2	1250.2	1250.2	1250.2
2.5°	1255.3	1249.6	1244.5	1252.1	1247.7
5°	1245.1	1243.9	1240.7	1247.1	1241.3
7.5°	1238.8	1234.3	1230.5	1238.1	1231.8
10°	1224.7	1222.2	1219.0	1225.4	1218.4
12.5°	1207.5	1205.0	1201.8	1209.5	1201.8
15°	1189.1	1184.6	1182.1	1189.1	1180.1
17.5°	1162.3	1160.4	1156.6	1163.6	1154.7
20°	1138.1	1131.1	1128.5	1133.6	1127.3
22.5°	1103.0	1097.9	1097.3	1100.5	1089.7
25°	1066.1	1062.3	1059.1	1061.0	1051.4
27.5°	1027.2	1022.1	1018.3	1017.6	1007.5
30°	985.8	979.4	973.7	968.6	957.1
32.5°	940.5	932.9	925.3	917.0	904.9
35°	891.5	883.8	874.3	859.0	845.6
37.5°	839.9	830.9	815.6	797.8	784.4
40°	780.6	776.1	758.9	736.0	721.3
42.5°	725.2	720.1	698.4	672.9	653.2
45°	669.1	662.1	639.1	609.8	592.6
47.5°	611.7	604.7	579.2	542.9	527.6
50°	551.8	548.0	517.4	484.3	469.0
52.5°	497.0	492.6	461.4	428.2	414.2
55°	445.4	438.4	407.8	374.1	365.8
57.5°	393.8	386.2	357.5	328.8	323.1
60°	348.6	339.0	311.6	289.3	284.2
62.5°	305.9	295.0	272.1	254.9	252.3
65°	264.4	256.2	235.1	225.6	230.0
67.5°	228.8	220.5	205.2	201.4	200.1
70°	197.5	189.9	177.1	178.4	179.1
72.5°	168.9	164.4	154.8	158.0	160.6
75°	142.7	140.2	134.5	138.9	142.1
77.5°	119.2	117.2	114.7	118.5	123.6
80°	96.9	95.6	96.2	98.8	103.9
82.5°	74.6	72.0	73.9	79.0	82.2
85°	50.3	48.4	49.7	54.8	55.4
87.5°	23.6	23.6	22.9	26.8	26.8
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)