

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: P290617

Luminaire Tested: **14GR-LD5-28-F1-UNV-L82765-W2A1-U-5700K**

Issue Date: 3/3/2020

Test Information

Test Method: LM-79-08
Report Number: P290617
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-LD5-28-F1-UNV-L82765-W2A1-U-5700K
Description: GRLED 1x4 TUNABLE WHITE TROFFER
WITH F1 LENS
Light Source: (168) 80 CRI LEDS TUNED TO 5700K CCT
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 3004.0 lumens
Efficiency: N/A
Efficacy: 131.3 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

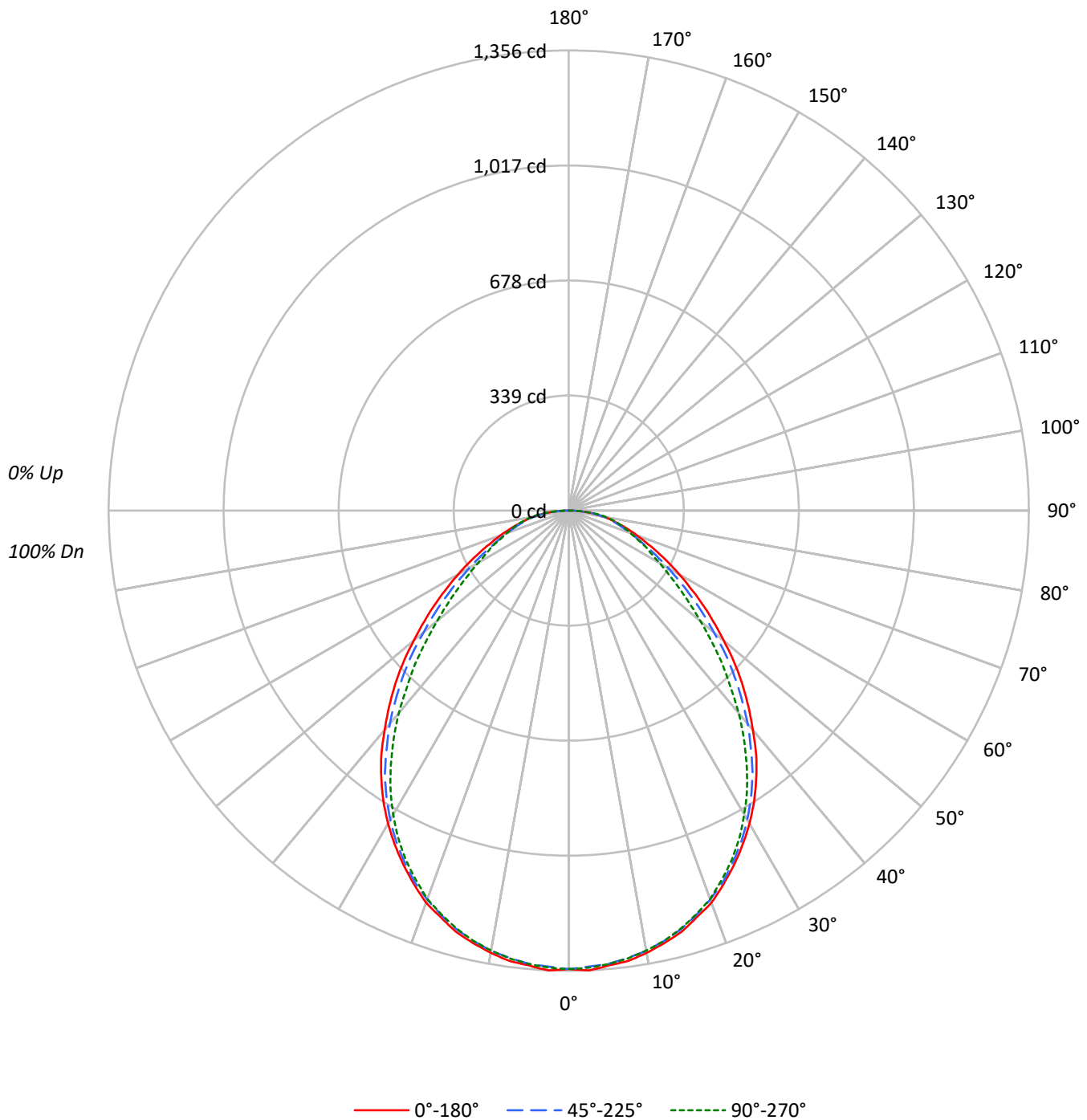
Input Watts (W): 22.878
Input Voltage (V): 120
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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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°	3636	3636	3636
5°	3635	3621	3623
10°	3616	3599	3597
15°	3580	3558	3553
20°	3522	3492	3488
25°	3420	3398	3373
30°	3310	3269	3214
35°	3165	3103	3002
40°	2963	2881	2738
45°	2751	2628	2437
50°	2496	2341	2122
55°	2258	2068	1854
60°	2027	1812	1653
65°	1820	1618	1583
70°	1680	1506	1522
75°	1603	1511	1597
80°	1623	1612	1739
85°	1680	1658	1849



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	127.5	4.2
10°-20°	360.6	12.0
20°-30°	526.5	17.5
30°-40°	586.7	19.5
40°-50°	528.7	17.6
50°-60°	395.2	13.2
60°-70°	260.7	8.7
70°-80°	159.1	5.3
80°-90°	59.0	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°	1014.6	33.8
0°-40°	1601.4	53.3
0°-60°	2525.2	84.1
0°-90°	3004.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	3004.0	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	1351	1351	1351	1351	1351	
5°	1346	1344	1341	1348	1341	128
15°	1285	1280	1277	1285	1275	362
25°	1152	1148	1144	1146	1136	530
35°	963	955	945	928	914	601
45°	723	715	691	659	640	556
55°	481	474	441	404	395	431
65°	286	277	254	244	249	286
75°	154	152	145	150	154	165
85°	54	52	54	59	60	58
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	1351.0	1351.0	1351.0	1351.0	1351.0
2.5°	1356.5	1350.3	1344.8	1353.0	1348.2
5°	1345.5	1344.1	1340.6	1347.5	1341.3
7.5°	1338.6	1333.8	1329.6	1337.9	1331.0
10°	1323.4	1320.7	1317.2	1324.1	1316.5
12.5°	1304.8	1302.1	1298.6	1306.9	1298.6
15°	1284.9	1280.1	1277.3	1284.9	1275.2
17.5°	1256.0	1253.9	1249.8	1257.3	1247.7
20°	1229.8	1222.2	1219.5	1225.0	1218.1
22.5°	1191.9	1186.4	1185.7	1189.2	1177.5
25°	1152.0	1147.8	1144.4	1146.5	1136.1
27.5°	1110.0	1104.5	1100.3	1099.6	1088.6
30°	1065.2	1058.3	1052.1	1046.6	1034.2
32.5°	1016.3	1008.1	999.8	990.9	977.8
35°	963.3	955.0	944.7	928.2	913.7
37.5°	907.5	897.9	881.4	862.1	847.6
40°	843.5	838.7	820.1	795.3	779.5
42.5°	783.6	778.1	754.7	727.1	705.8
45°	723.0	715.4	690.6	659.0	640.4
47.5°	661.0	653.5	625.9	586.7	570.1
50°	596.3	592.2	559.1	523.3	506.8
52.5°	537.1	532.3	498.5	462.7	447.6
55°	481.3	473.7	440.7	404.2	395.2
57.5°	425.5	417.3	386.3	355.3	349.1
60°	376.6	366.3	336.7	312.6	307.1
62.5°	330.5	318.8	294.0	275.4	272.7
65°	285.8	276.8	254.1	243.8	248.6
67.5°	247.2	238.2	221.7	217.6	216.2
70°	213.5	205.2	191.4	192.8	193.5
72.5°	182.5	177.7	167.3	170.8	173.5
75°	154.2	151.5	145.3	150.1	153.6
77.5°	128.8	126.7	123.9	128.1	133.6
80°	104.7	103.3	104.0	106.7	112.2
82.5°	80.6	77.8	79.9	85.4	88.8
85°	54.4	52.3	53.7	59.2	59.9
87.5°	25.5	25.5	24.8	28.9	28.9
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)