

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: P290568

Luminaire Tested: **14GR-LD5-28-F1-UNV-L83050-W2A1-U-3500K**

Issue Date: 3/3/2020

Test Information

Test Method: LM-79-08
Report Number: P290568
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-L83050-W2A1-U-3500K
Description: GRLED 1x4 TUNABLE WHITE TROFFER
WITH F1 LENS
Light Source: (168) 80 CRI LEDS TUNED TO 3500K CCT
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 2881.0 lumens
Efficiency: N/A
Efficacy: 129.6 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

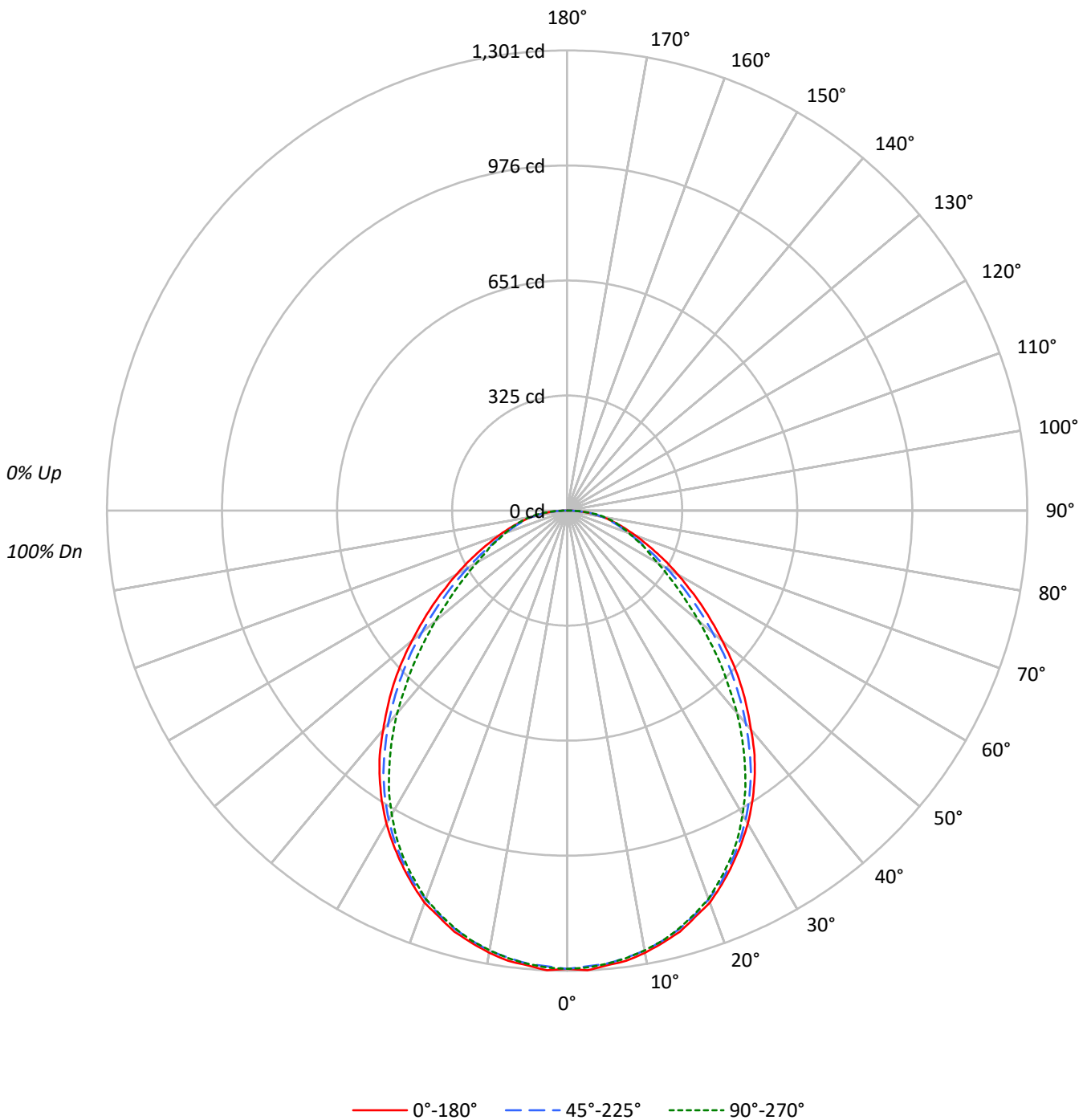
Input Watts (W): 22.227
Input Voltage (V): 120
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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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	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					100			
1	110	105	101	98	107	103	99	96	99	96	93	95	92	90	91	89	87	85					85			
2	101	93	87	81	98	91	85	80	88	83	78	84	80	77	81	78	75	73					73			
3	92	83	75	69	90	81	74	68	78	72	67	75	70	66	73	69	65	63					63			
4	85	74	66	59	83	73	65	59	70	64	58	68	62	57	66	61	57	55					55			
5	79	67	58	52	77	66	58	52	64	57	51	62	55	51	60	54	50	48					48			
6	73	61	52	46	71	60	52	46	58	51	45	56	50	45	55	49	45	43					43			
7	68	55	47	41	66	54	47	41	53	46	41	52	45	40	50	44	40	38					38			
8	64	51	43	37	62	50	42	37	49	42	37	47	41	36	46	41	36	34					34			
9	60	47	39	34	58	46	39	33	45	38	33	44	38	33	43	37	33	31					31			
10	56	43	36	31	55	43	35	31	42	35	30	41	35	30	40	34	30	29					29			

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	3487	3487	3487
5°	3486	3473	3475
10°	3468	3452	3450
15°	3433	3413	3407
20°	3377	3349	3345
25°	3280	3259	3235
30°	3174	3136	3082
35°	3035	2976	2879
40°	2842	2763	2626
45°	2639	2521	2337
50°	2394	2245	2035
55°	2166	1983	1779
60°	1944	1738	1585
65°	1745	1552	1518
70°	1611	1445	1460
75°	1538	1448	1531
80°	1556	1545	1667
85°	1612	1590	1775



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	122.3	4.2
10°-20°	345.8	12.0
20°-30°	505.0	17.5
30°-40°	562.7	19.5
40°-50°	507.0	17.6
50°-60°	379.0	13.2
60°-70°	250.0	8.7
70°-80°	152.6	5.3
80°-90°	56.6	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°	973.1	33.8
0°-40°	1535.8	53.3
0°-60°	2421.8	84.1
0°-90°	2881.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	2881.0	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	1296	1296	1296	1296	1296	
5°	1290	1289	1286	1292	1286	123
15°	1232	1228	1225	1232	1223	347
25°	1105	1101	1098	1100	1090	509
35°	924	916	906	890	876	576
45°	693	686	662	632	614	534
55°	462	454	423	388	379	413
65°	274	266	244	234	238	275
75°	148	145	139	144	147	158
85°	52	50	52	57	58	56
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	1295.7	1295.7	1295.7	1295.7	1295.7
2.5°	1300.9	1295.0	1289.7	1297.6	1293.0
5°	1290.4	1289.1	1285.8	1292.4	1286.4
7.5°	1283.8	1279.1	1275.2	1283.1	1276.5
10°	1269.2	1266.6	1263.3	1269.9	1262.6
12.5°	1251.4	1248.8	1245.5	1253.4	1245.5
15°	1232.3	1227.6	1225.0	1232.3	1223.0
17.5°	1204.5	1202.5	1198.6	1205.8	1196.6
20°	1179.4	1172.2	1169.5	1174.8	1168.2
22.5°	1143.1	1137.8	1137.2	1140.5	1129.2
25°	1104.8	1100.8	1097.5	1099.5	1089.6
27.5°	1064.5	1059.2	1055.3	1054.6	1044.1
30°	1021.6	1015.0	1009.1	1003.8	991.9
32.5°	974.7	966.8	958.9	950.3	937.7
35°	923.9	915.9	906.0	890.2	876.3
37.5°	870.4	861.1	845.3	826.8	812.9
40°	809.0	804.3	786.5	762.7	747.5
42.5°	751.5	746.2	723.8	697.4	676.9
45°	693.4	686.1	662.4	632.0	614.2
47.5°	634.0	626.7	600.3	562.6	546.8
50°	571.9	567.9	536.2	501.9	486.0
52.5°	515.1	510.5	478.1	443.8	429.2
55°	461.6	454.3	422.6	387.6	379.1
57.5°	408.1	400.2	370.5	340.8	334.8
60°	361.2	351.3	322.9	299.8	294.5
62.5°	317.0	305.8	282.0	264.2	261.5
65°	274.1	265.5	243.7	233.8	238.4
67.5°	237.1	228.5	212.6	208.7	207.4
70°	204.7	196.8	183.6	184.9	185.6
72.5°	175.0	170.4	160.5	163.8	166.4
75°	147.9	145.3	139.3	144.0	147.3
77.5°	123.5	121.5	118.9	122.8	128.1
80°	100.4	99.1	99.7	102.4	107.6
82.5°	77.3	74.6	76.6	81.9	85.2
85°	52.2	50.2	51.5	56.8	57.5
87.5°	24.4	24.4	23.8	27.7	27.7
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)