

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: P290681

Luminaire Tested: **14GR-LD5-40-F1-UNV-L93050-W2A1-U-3500K**

Issue Date: 3/3/2020

Test Information

Test Method: LM-79-08
Report Number: P290681
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-LD5-40-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: 3477.0 lumens
Efficiency: N/A
Efficacy: 101.3 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

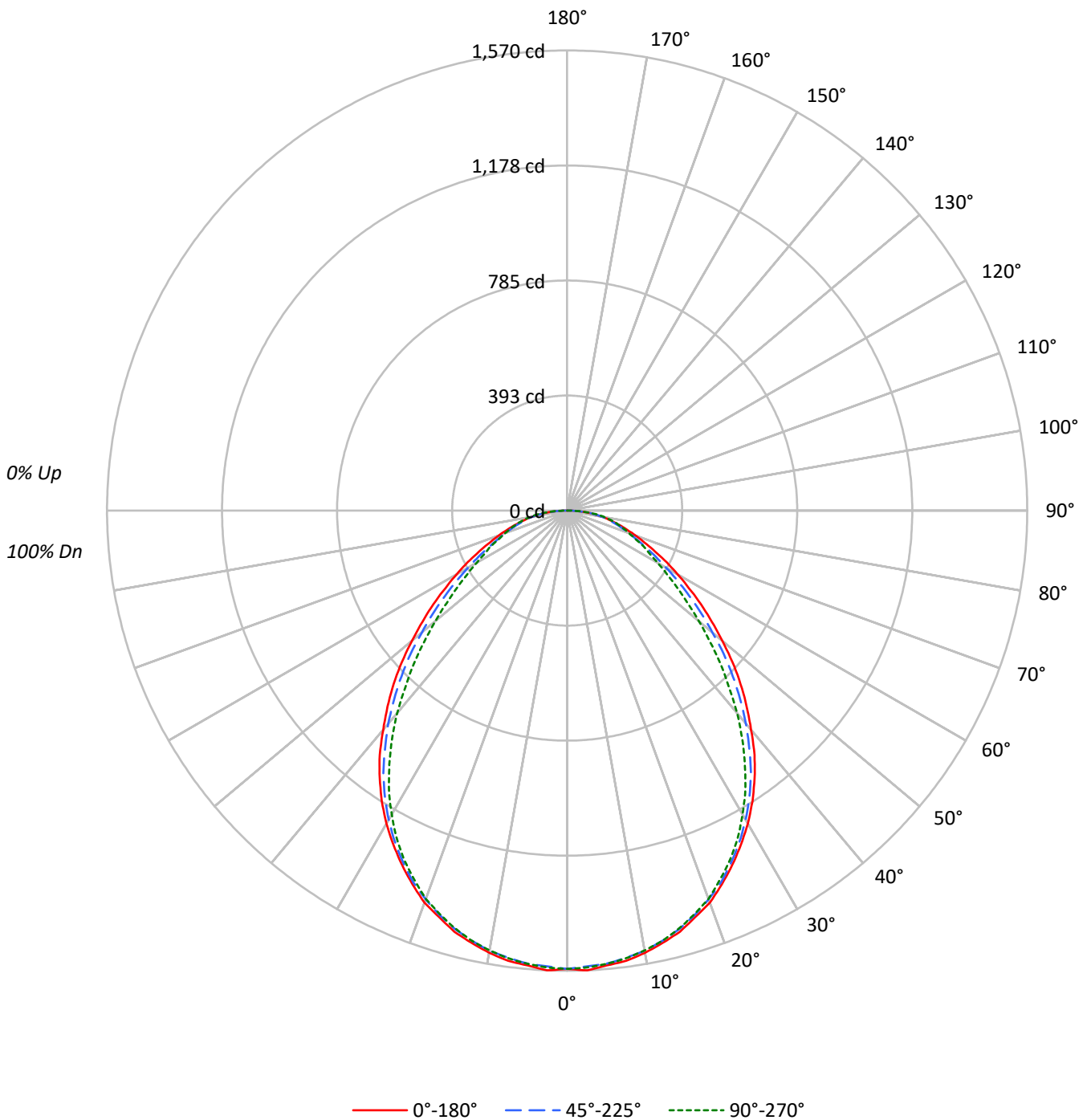
Input Watts (W): 34.317
Input Voltage (V): 120
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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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°	4208	4208	4208
5°	4207	4192	4194
10°	4186	4166	4164
15°	4143	4119	4112
20°	4076	4042	4038
25°	3959	3933	3904
30°	3831	3784	3720
35°	3663	3592	3474
40°	3430	3334	3169
45°	3185	3042	2821
50°	2889	2709	2456
55°	2614	2393	2146
60°	2347	2097	1913
65°	2106	1873	1832
70°	1944	1744	1762
75°	1856	1749	1848
80°	1877	1864	2013
85°	1945	1920	2140



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	147.6	4.2
10°-20°	417.3	12.0
20°-30°	609.5	17.5
30°-40°	679.1	19.5
40°-50°	611.9	17.6
50°-60°	457.4	13.2
60°-70°	301.7	8.7
70°-80°	184.2	5.3
80°-90°	68.3	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°	1174.4	33.8
0°-40°	1853.5	53.3
0°-60°	2922.8	84.1
0°-90°	3477.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	3477.0	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	1564	1564	1564	1564	1564	
5°	1557	1556	1552	1560	1552	148
15°	1487	1482	1478	1487	1476	419
25°	1333	1329	1325	1327	1315	614
35°	1115	1105	1094	1074	1058	695
45°	837	828	799	763	741	644
55°	557	548	510	468	458	499
65°	331	320	294	282	288	332
75°	178	175	168	174	178	191
85°	63	61	62	68	69	67
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	1563.7	1563.7	1563.7	1563.7	1563.7
2.5°	1570.1	1562.9	1556.5	1566.1	1560.5
5°	1557.3	1555.7	1551.7	1559.7	1552.5
7.5°	1549.3	1543.8	1539.0	1548.6	1540.6
10°	1531.8	1528.6	1524.6	1532.6	1523.8
12.5°	1510.3	1507.1	1503.1	1512.7	1503.1
15°	1487.2	1481.6	1478.4	1487.2	1476.0
17.5°	1453.7	1451.3	1446.5	1455.3	1444.1
20°	1423.4	1414.7	1411.5	1417.8	1409.9
22.5°	1379.6	1373.2	1372.4	1376.4	1362.9
25°	1333.4	1328.6	1324.6	1327.0	1315.0
27.5°	1284.7	1278.4	1273.6	1272.8	1260.0
30°	1232.9	1225.0	1217.8	1211.4	1197.1
32.5°	1176.4	1166.8	1157.2	1146.9	1131.7
35°	1115.0	1105.4	1093.5	1074.3	1057.6
37.5°	1050.4	1039.3	1020.1	997.8	981.1
40°	976.3	970.7	949.2	920.5	902.2
42.5°	907.0	900.6	873.5	841.6	816.9
45°	836.8	828.1	799.4	762.7	741.2
47.5°	765.1	756.3	724.5	679.0	659.9
50°	690.2	685.4	647.2	605.7	586.6
52.5°	621.7	616.1	577.0	535.6	518.0
55°	557.1	548.3	510.1	467.8	457.5
57.5°	492.5	483.0	447.1	411.2	404.1
60°	436.0	424.0	389.7	361.8	355.5
62.5°	382.6	369.0	340.3	318.8	315.6
65°	330.8	320.4	294.1	282.1	287.7
67.5°	286.1	275.8	256.6	251.8	250.3
70°	247.1	237.5	221.6	223.2	224.0
72.5°	211.2	205.6	193.7	197.7	200.8
75°	178.5	175.3	168.2	173.7	177.7
77.5°	149.0	146.6	143.5	148.2	154.6
80°	121.1	119.5	120.3	123.5	129.9
82.5°	93.2	90.1	92.5	98.8	102.8
85°	63.0	60.6	62.2	68.5	69.3
87.5°	29.5	29.5	28.7	33.5	33.5
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)