

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: P290687

Luminaire Tested: **14GR-LD5-43-F1-UNV-L93050-W2A1-U-4000K**

Issue Date: 3/3/2020

Test Information

Test Method: LM-79-08
Report Number: P290687
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-LD5-43-F1-UNV-L93050-W2A1-U-4000K
Description: GRLED 1x4 TUNABLE WHITE TROFFER
WITH F1 LENS
Light Source: (168) 90 CRI LEDS TUNED TO 4000K CCT
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 4005.0 lumens
Efficiency: N/A
Efficacy: 106.9 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

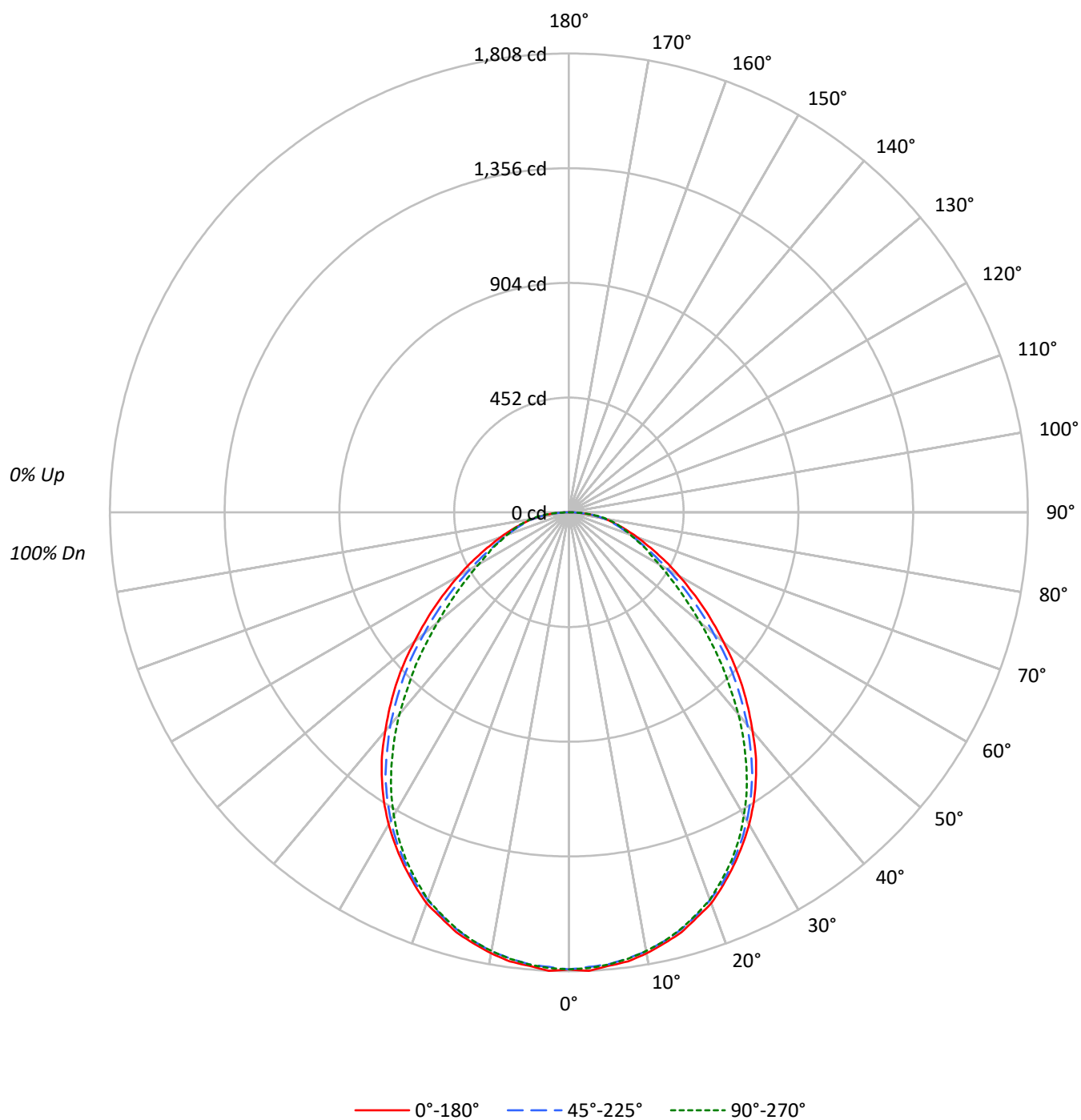
Input Watts (W): 37.479
Input Voltage (V): 120
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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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°	4847	4847	4847
5°	4846	4828	4831
10°	4821	4799	4796
15°	4772	4744	4737
20°	4695	4656	4651
25°	4560	4530	4497
30°	4413	4359	4285
35°	4219	4138	4002
40°	3951	3841	3651
45°	3668	3504	3249
50°	3328	3121	2829
55°	3011	2756	2472
60°	2703	2416	2203
65°	2426	2157	2110
70°	2239	2008	2030
75°	2138	2014	2128
80°	2162	2148	2318
85°	2238	2211	2467



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	170.0	4.2
10°-20°	480.7	12.0
20°-30°	702.0	17.5
30°-40°	782.2	19.5
40°-50°	704.8	17.6
50°-60°	526.8	13.2
60°-70°	347.5	8.7
70°-80°	212.1	5.3
80°-90°	78.7	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°	1352.7	33.8
0°-40°	2135.0	53.3
0°-60°	3366.6	84.1
0°-90°	4005.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	4005.0	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	1801	1801	1801	1801	1801	
5°	1794	1792	1787	1797	1788	170
15°	1713	1707	1703	1713	1700	482
25°	1536	1530	1526	1528	1515	707
35°	1284	1273	1260	1238	1218	801
45°	964	954	921	878	854	742
55°	642	632	588	539	527	575
65°	381	369	339	325	331	382
75°	206	202	194	200	205	220
85°	72	70	72	79	80	77
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	1801.1	1801.1	1801.1	1801.1	1801.1
2.5°	1808.5	1800.2	1792.9	1803.9	1797.5
5°	1793.8	1792.0	1787.4	1796.6	1788.3
7.5°	1784.6	1778.2	1772.7	1783.7	1774.5
10°	1764.4	1760.8	1756.2	1765.3	1755.2
12.5°	1739.6	1736.0	1731.4	1742.4	1731.4
15°	1713.0	1706.6	1702.9	1713.0	1700.2
17.5°	1674.5	1671.7	1666.2	1676.3	1663.4
20°	1639.6	1629.5	1625.8	1633.2	1624.0
22.5°	1589.1	1581.7	1580.8	1585.4	1569.8
25°	1535.8	1530.3	1525.7	1528.5	1514.7
27.5°	1479.8	1472.5	1467.0	1466.1	1451.4
30°	1420.2	1411.0	1402.7	1395.4	1378.9
32.5°	1355.0	1344.0	1333.0	1321.0	1303.6
35°	1284.3	1273.3	1259.5	1237.5	1218.2
37.5°	1209.9	1197.1	1175.1	1149.4	1130.1
40°	1124.6	1118.1	1093.4	1060.3	1039.2
42.5°	1044.7	1037.4	1006.1	969.4	941.0
45°	963.9	953.8	920.8	878.5	853.8
47.5°	881.3	871.2	834.5	782.2	760.1
50°	795.0	789.5	745.4	697.7	675.7
52.5°	716.1	709.6	664.6	616.9	596.7
55°	641.7	631.6	587.5	538.9	526.9
57.5°	567.3	556.3	515.0	473.7	465.4
60°	502.2	488.4	448.9	416.8	409.4
62.5°	440.6	425.0	392.0	367.2	363.5
65°	381.0	369.0	338.7	325.0	331.4
67.5°	329.6	317.6	295.6	290.1	288.3
70°	284.6	273.6	255.2	257.0	258.0
72.5°	243.3	236.8	223.1	227.7	231.3
75°	205.6	202.0	193.7	200.1	204.7
77.5°	171.7	168.9	165.2	170.8	178.1
80°	139.5	137.7	138.6	142.3	149.6
82.5°	107.4	103.7	106.5	113.8	118.4
85°	72.5	69.8	71.6	78.9	79.9
87.5°	34.0	34.0	33.0	38.6	38.6
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)