

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: P291465

Luminaire Tested: **14GR-LD5-40-A19/156-UNV-L93050-W2A1-U-3500K**

Issue Date: 3/3/2020

Test Information

Test Method: LM-79-08
Report Number: P291465
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (P33288)
Test Lab: INNOVATION CENTER-P3
Issue Date: 3/3/2020
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: METALUX
Catalog Number: 14GR-LD5-40-A19/156-UNV-L93050-W2A1-U-3500K
Description: GRLED 1x4 TUNABLE WHITE TROFFER
WITH A19/156 LENS
Light Source: (168) 90 CRI LEDS TUNED TO 3500K CCT
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 3381.0 lumens
Efficiency: N/A
Efficacy: 98.5 lumens/watt
Spacing Criteria (0/90/45): 1.22 / 1.23 / 1.18
Luminous Opening: Rectangular (W 1' x L: 4' x H: 0')
CIE Type: Direct

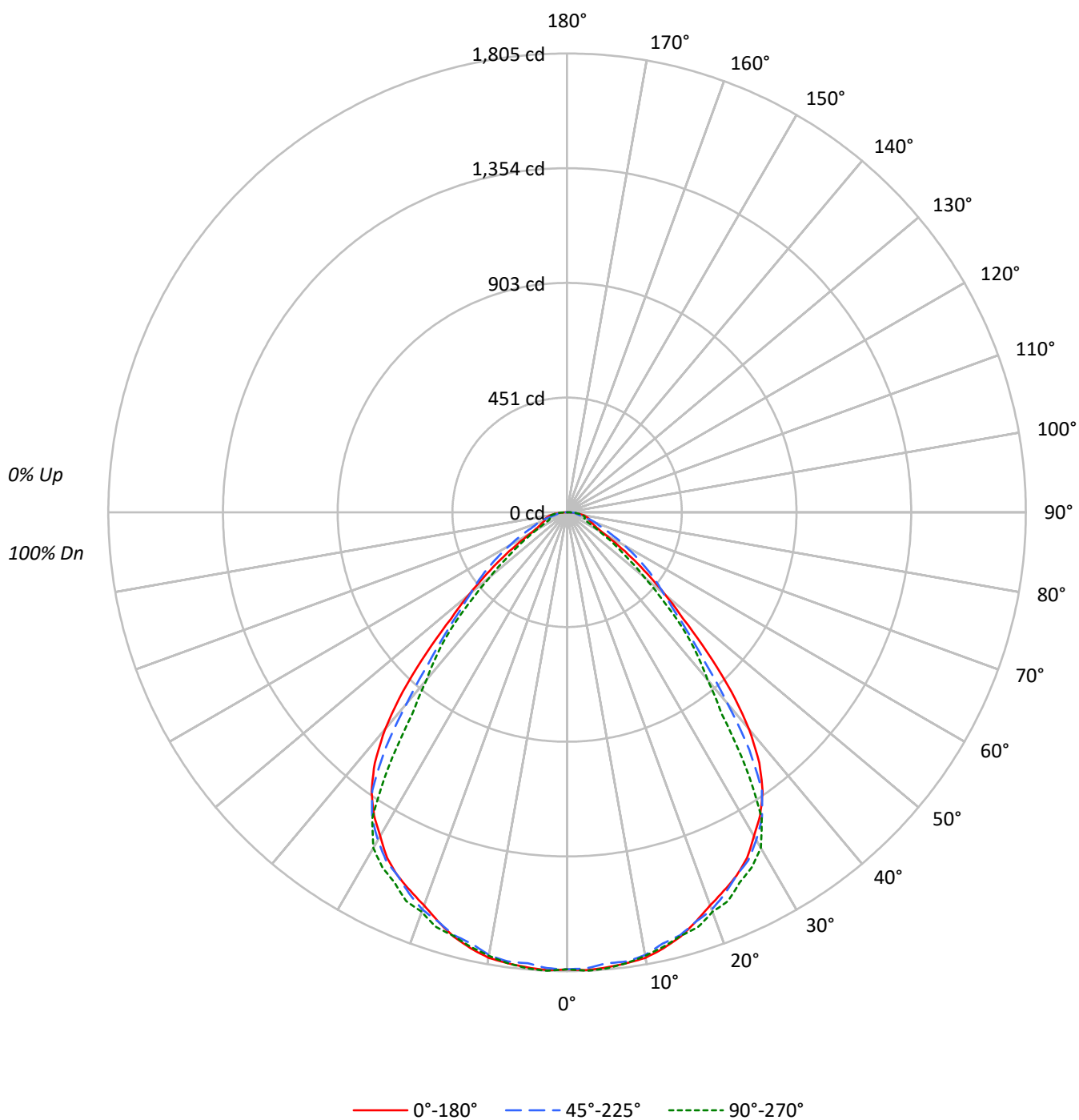
Input Watts (W): 34.317
Input Voltage (V): 120
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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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
RW	70	50	30	10	70	50	30	10		50	30	10			50	30	10			50
RCR																				
0	119	119	119	119	116	116	116	116		111	111	111			106	106	106			102
1	111	107	104	100	108	105	102	99		101	98	96			97	95	93			93
2	103	96	90	86	100	94	89	85		91	87	83			88	84	81			85
3	95	87	80	74	93	85	79	74		82	77	73			80	75	71			77
4	89	79	71	65	87	77	70	65		75	69	64			73	68	63			71
5	83	71	64	58	81	70	63	58		68	62	57			67	61	57			65
6	77	65	58	52	75	64	57	52		63	56	51			61	55	51			60
7	72	60	52	47	70	59	52	47		58	51	46			56	51	46			55
8	67	55	48	43	66	55	47	42		53	47	42			52	46	42			51
9	63	51	44	39	62	51	44	39		50	43	39			49	43	38			48
10	60	48	40	36	58	47	40	36		46	40	35			45	39	35			44

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	4838	4838	4838
5°	4854	4809	4865
10°	4862	4832	4841
15°	4813	4795	4806
20°	4712	4763	4790
25°	4683	4681	4771
30°	4569	4625	4738
35°	4406	4388	4032
40°	3912	3453	3023
45°	2969	2583	2445
50°	2106	2067	1659
55°	1442	1765	1140
60°	891	1408	762
65°	734	1084	552
70°	731	944	566
75°	878	676	757
80°	1007	623	947
85°	957	1099	1074



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	170.6	5.0
10°-20°	486.9	14.4
20°-30°	732.2	21.7
30°-40°	798.2	23.6
40°-50°	558.9	16.5
50°-60°	316.4	9.4
60°-70°	173.1	5.1
70°-80°	104.9	3.1
80°-90°	39.8	1.2
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°	1389.7	41.1
0°-40°	2187.9	64.7
0°-60°	3063.2	90.6
0°-90°	3381.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	3381.0	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	1798	1798	1798	1798	1798	
5°	1797	1794	1780	1801	1801	171
15°	1728	1723	1721	1746	1725	486
25°	1577	1580	1576	1613	1607	724
35°	1341	1335	1336	1268	1228	826
45°	780	814	679	670	642	606
55°	307	368	376	373	243	281
65°	115	190	170	215	87	118
75°	84	122	65	128	73	88
85°	31	50	36	43	35	34
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	1797.9	1797.9	1797.9	1797.9	1797.9
2.5°	1802.5	1800.2	1794.8	1805.6	1804.8
5°	1797.1	1794.0	1780.1	1801.0	1801.0
7.5°	1789.4	1781.6	1782.4	1794.0	1788.6
10°	1779.3	1766.2	1768.5	1771.6	1771.6
12.5°	1756.1	1743.7	1737.5	1747.6	1750.7
15°	1727.5	1722.8	1721.3	1746.0	1725.1
17.5°	1687.2	1697.3	1688.0	1708.1	1711.2
20°	1645.4	1664.8	1663.2	1677.1	1672.5
22.5°	1611.4	1623.7	1623.7	1640.8	1654.7
25°	1577.3	1580.4	1576.5	1612.9	1606.7
27.5°	1533.2	1530.9	1543.3	1561.8	1574.2
30°	1470.5	1471.3	1488.3	1513.1	1524.7
32.5°	1413.2	1406.3	1427.2	1438.0	1425.6
35°	1341.3	1335.1	1335.8	1267.7	1227.5
37.5°	1243.0	1248.4	1177.2	1052.6	999.9
40°	1113.7	1124.5	982.9	890.0	860.6
42.5°	957.4	960.5	805.7	775.5	756.1
45°	780.1	814.2	678.8	670.2	642.4
47.5°	618.4	681.8	568.9	574.3	507.7
50°	503.1	566.5	493.8	496.1	396.3
52.5°	397.8	459.7	435.7	428.8	311.1
55°	307.3	367.6	376.1	373.0	243.0
57.5°	226.0	291.0	315.8	327.4	187.3
60°	165.6	237.6	261.6	284.8	141.6
62.5°	131.6	205.9	214.4	248.4	109.9
65°	115.3	189.6	170.3	215.2	86.7
67.5°	102.9	180.3	138.5	190.4	75.8
70°	92.9	162.5	120.0	170.3	72.0
72.5°	92.9	142.4	94.4	150.9	72.8
75°	84.4	121.5	65.0	127.7	72.8
77.5°	75.1	103.7	48.8	103.7	68.1
80°	65.0	81.3	40.2	79.7	61.1
82.5°	48.0	61.1	34.8	59.6	49.5
85°	31.0	50.3	35.6	43.3	34.8
87.5°	14.7	25.5	22.4	21.7	17.8
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)