

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: P291464

Luminaire Tested: **14GR-LD5-40-A19/156-UNV-L93050-W2A1-U-3000K**

Issue Date: 3/3/2020

Test Information

Test Method: LM-79-08
Report Number: P291464
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-3000K
Description: GRLED 1x4 TUNABLE WHITE TROFFER
WITH A19/156 LENS
Light Source: (168) 90 CRI LEDS TUNED TO 3000K CCT
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 3094.0 lumens
Efficiency: N/A
Efficacy: 89.9 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

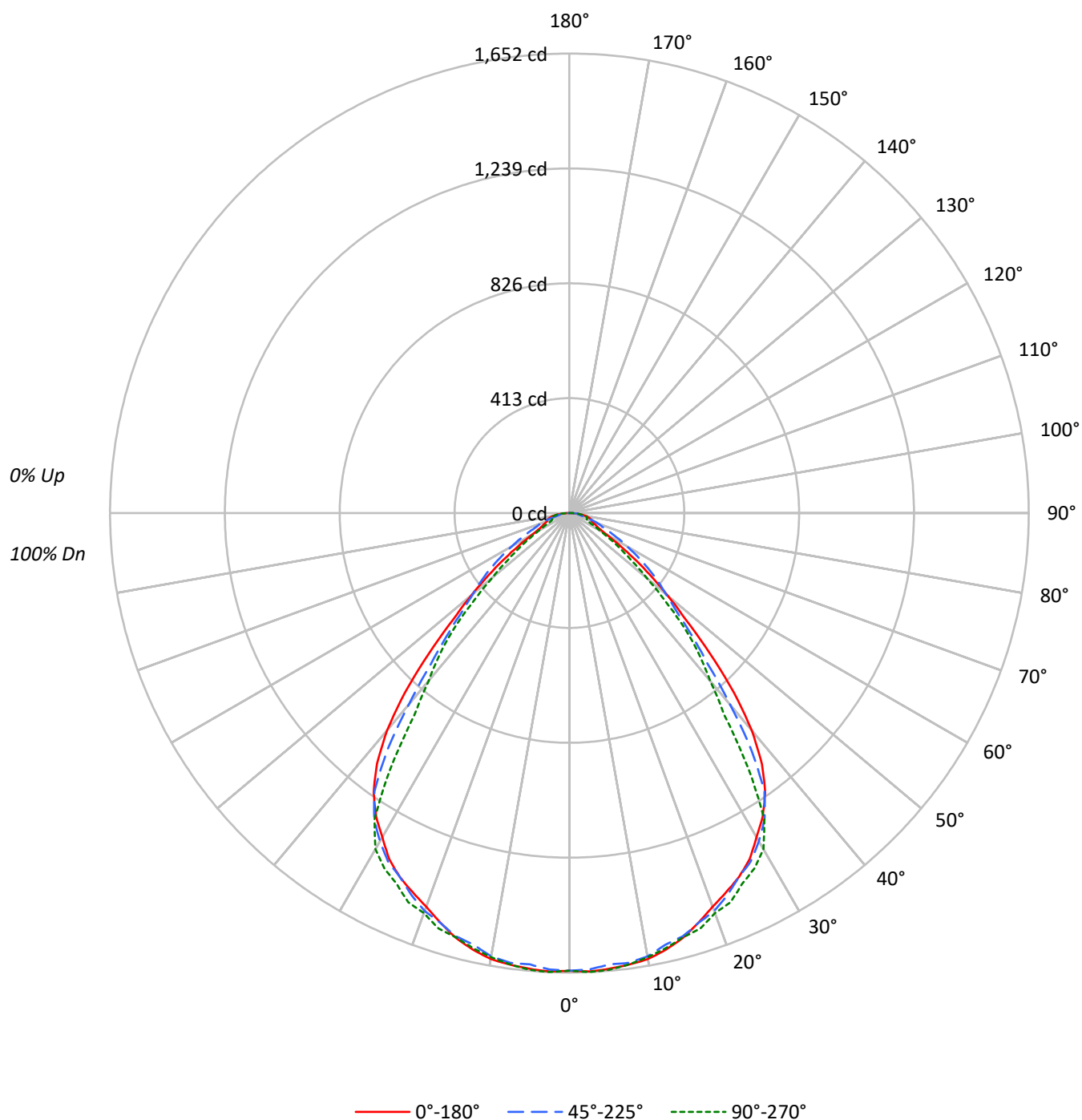
Input Watts (W): 34.41
Input Voltage (V): 120
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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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	30	10	50	30	10
RCR																				
0	119	119	119	119	116	116	116	116	111	111	111	106	106	106	102	102	102	100		
1	111	107	104	100	108	105	102	99	101	98	96	97	95	93	93	92	90	88		
2	103	96	90	86	100	94	89	85	91	87	83	88	84	81	85	82	79	77		
3	95	87	80	74	93	85	79	74	82	77	73	80	75	71	77	73	70	68		
4	89	79	71	65	87	77	70	65	75	69	64	73	68	63	71	66	63	61		
5	83	71	64	58	81	70	63	58	68	62	57	67	61	57	65	60	56	54		
6	77	65	58	52	75	64	57	52	63	56	51	61	55	51	60	55	51	49		
7	72	60	52	47	70	59	52	47	58	51	46	56	51	46	55	50	46	44		
8	67	55	48	43	66	55	47	42	53	47	42	52	46	42	51	46	42	40		
9	63	51	44	39	62	51	44	39	50	43	39	49	43	38	48	42	38	37		
10	60	48	40	36	58	47	40	36	46	40	35	45	39	35	44	39	35	34		

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	4427	4427	4427
5°	4442	4400	4452
10°	4449	4422	4430
15°	4404	4388	4398
20°	4312	4359	4383
25°	4286	4284	4366
30°	4181	4232	4336
35°	4032	4016	3690
40°	3580	3160	2767
45°	2717	2364	2237
50°	1927	1892	1518
55°	1319	1615	1043
60°	816	1288	698
65°	672	992	505
70°	669	864	518
75°	803	619	692
80°	922	570	868
85°	874	1007	985



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	156.1	5.0
10°-20°	445.6	14.4
20°-30°	670.0	21.7
30°-40°	730.5	23.6
40°-50°	511.5	16.5
50°-60°	289.5	9.4
60°-70°	158.4	5.1
70°-80°	96.0	3.1
80°-90°	36.4	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°	1271.7	41.1
0°-40°	2002.2	64.7
0°-60°	2803.2	90.6
0°-90°	3094.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	3094.0	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	1645	1645	1645	1645	1645	
5°	1645	1642	1629	1648	1648	156
15°	1581	1577	1575	1598	1579	445
25°	1443	1446	1443	1476	1470	663
35°	1227	1222	1222	1160	1123	756
45°	714	745	621	613	588	554
55°	281	336	344	341	222	257
65°	106	174	156	197	79	108
75°	77	111	60	117	67	80
85°	28	46	33	40	32	31
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	1645.3	1645.3	1645.3	1645.3	1645.3
2.5°	1649.5	1647.4	1642.4	1652.4	1651.6
5°	1644.6	1641.7	1629.0	1648.1	1648.1
7.5°	1637.5	1630.4	1631.1	1641.7	1636.8
10°	1628.3	1616.2	1618.4	1621.2	1621.2
12.5°	1607.0	1595.7	1590.0	1599.2	1602.1
15°	1580.8	1576.6	1575.2	1597.8	1578.7
17.5°	1544.0	1553.2	1544.7	1563.1	1565.9
20°	1505.7	1523.4	1522.0	1534.8	1530.5
22.5°	1474.6	1485.9	1485.9	1501.5	1514.2
25°	1443.4	1446.3	1442.7	1476.0	1470.3
27.5°	1403.0	1400.9	1412.3	1429.3	1440.6
30°	1345.7	1346.4	1362.0	1384.6	1395.3
32.5°	1293.3	1286.9	1306.0	1315.9	1304.6
35°	1227.4	1221.7	1222.4	1160.1	1123.3
37.5°	1137.5	1142.4	1077.3	963.2	915.1
40°	1019.2	1029.1	899.5	814.5	787.6
42.5°	876.1	878.9	737.3	709.7	692.0
45°	713.9	745.1	621.1	613.3	587.8
47.5°	565.9	624.0	520.6	525.5	464.6
50°	460.4	518.4	451.9	454.0	362.6
52.5°	364.0	420.7	398.7	392.4	284.7
55°	281.2	336.4	344.2	341.4	222.4
57.5°	206.8	266.3	289.0	299.6	171.4
60°	151.6	217.4	239.4	260.6	129.6
62.5°	120.4	188.4	196.2	227.3	100.6
65°	105.5	173.5	155.8	196.9	79.3
67.5°	94.2	165.0	126.8	174.2	69.4
70°	85.0	148.7	109.8	155.8	65.9
72.5°	85.0	130.3	86.4	138.1	66.6
75°	77.2	111.2	59.5	116.9	66.6
77.5°	68.7	94.9	44.6	94.9	62.3
80°	59.5	74.4	36.8	72.9	56.0
82.5°	43.9	56.0	31.9	54.5	45.3
85°	28.3	46.0	32.6	39.7	31.9
87.5°	13.5	23.4	20.5	19.8	16.3
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)