

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: P291462

Luminaire Tested: **14GR-LD5-36-A19/156-UNV-L93050-W2A1-U-4500K**

Issue Date: 3/3/2020

Test Information

Test Method: LM-79-08
Report Number: P291462
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-LD5-36-A19/156-UNV-L93050-W2A1-U-4500K
Description: GRLED 1x4 TUNABLE WHITE TROFFER
WITH A19/156 LENS
Light Source: (168) 90 CRI LEDS TUNED TO 4500K CCT
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 3319.0 lumens
Efficiency: N/A
Efficacy: 108.8 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

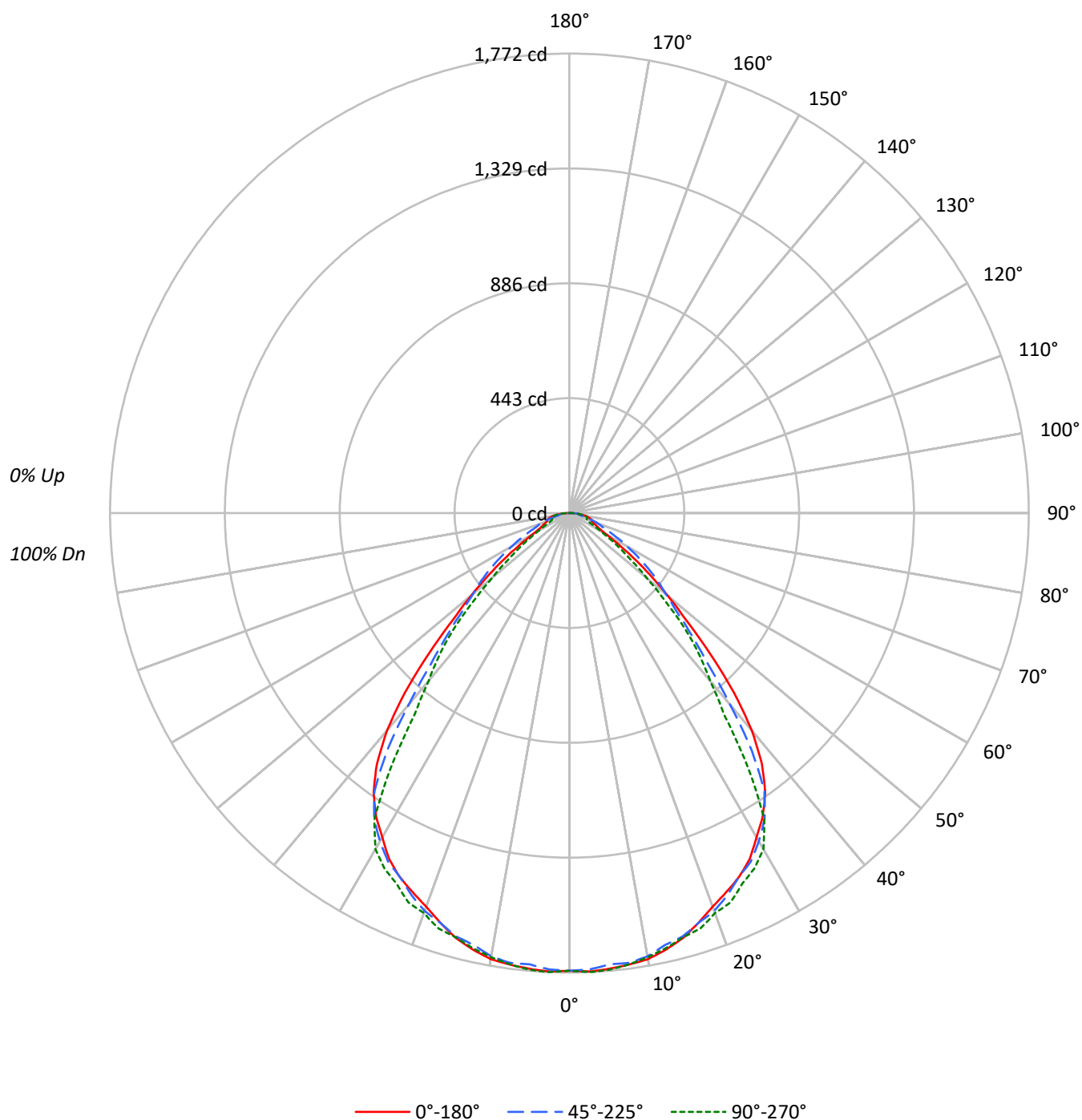
Input Watts (W): 30.504
Input Voltage (V): 120
Input Current (A_{in}): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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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°	4749	4749	4749
5°	4766	4720	4776
10°	4773	4744	4752
15°	4724	4707	4718
20°	4625	4676	4702
25°	4597	4595	4683
30°	4485	4540	4651
35°	4325	4308	3959
40°	3841	3390	2968
45°	2914	2536	2400
50°	2067	2029	1629
55°	1415	1732	1119
60°	875	1382	748
65°	721	1064	542
70°	718	927	556
75°	861	663	742
80°	989	612	930
85°	939	1078	1056



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	167.5	5.0
10°-20°	478.0	14.4
20°-30°	718.8	21.7
30°-40°	783.6	23.6
40°-50°	548.7	16.5
50°-60°	310.6	9.4
60°-70°	169.9	5.1
70°-80°	103.0	3.1
80°-90°	39.0	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°	1364.2	41.1
0°-40°	2147.8	64.7
0°-60°	3007.0	90.6
0°-90°	3319.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	3319.0	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	1765	1765	1765	1765	1765	
5°	1764	1761	1747	1768	1768	168
15°	1696	1691	1690	1714	1694	477
25°	1548	1551	1548	1583	1577	711
35°	1317	1311	1311	1244	1205	811
45°	766	799	666	658	631	595
55°	302	361	369	366	239	276
65°	113	186	167	211	85	116
75°	83	119	64	125	71	86
85°	30	49	35	42	34	34
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	1764.9	1764.9	1764.9	1764.9	1764.9
2.5°	1769.5	1767.2	1761.9	1772.5	1771.8
5°	1764.2	1761.1	1747.4	1768.0	1768.0
7.5°	1756.6	1749.0	1749.7	1761.1	1755.8
10°	1746.7	1733.8	1736.0	1739.1	1739.1
12.5°	1723.9	1711.7	1705.7	1715.5	1718.6
15°	1695.8	1691.2	1689.7	1714.0	1693.5
17.5°	1656.3	1666.1	1657.0	1676.8	1679.8
20°	1615.2	1634.2	1632.7	1646.4	1641.8
22.5°	1581.8	1594.0	1594.0	1610.7	1624.4
25°	1548.4	1551.4	1547.6	1583.3	1577.3
27.5°	1505.1	1502.8	1515.0	1533.2	1545.3
30°	1443.5	1444.3	1461.0	1485.3	1496.7
32.5°	1387.3	1380.5	1401.0	1411.6	1399.5
35°	1316.7	1310.6	1311.3	1244.5	1205.0
37.5°	1220.2	1225.5	1155.6	1033.3	981.6
40°	1093.3	1103.9	964.9	873.7	844.8
42.5°	939.8	942.9	790.9	761.3	742.3
45°	765.8	799.3	666.3	657.9	630.6
47.5°	607.0	669.3	558.4	563.7	498.4
50°	493.8	556.1	484.7	487.0	389.0
52.5°	390.5	451.3	427.7	420.9	305.4
55°	301.6	360.9	369.2	366.2	238.6
57.5°	221.8	285.7	310.0	321.4	183.9
60°	162.6	233.2	256.8	279.6	139.0
62.5°	129.2	202.1	210.5	243.9	107.9
65°	113.2	186.1	167.1	211.2	85.1
67.5°	101.0	177.0	136.0	186.9	74.5
70°	91.2	159.5	117.8	167.1	70.7
72.5°	91.2	139.8	92.7	148.2	71.4
75°	82.8	119.3	63.8	125.4	71.4
77.5°	73.7	101.8	47.9	101.8	66.9
80°	63.8	79.8	39.5	78.3	60.0
82.5°	47.1	60.0	34.2	58.5	48.6
85°	30.4	49.4	34.9	42.5	34.2
87.5°	14.4	25.1	22.0	21.3	17.5
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)