

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: P291407

Luminaire Tested: **14GR-LD5-32-A19/156-UNV-L82765-W2A1-U-4500K**

Issue Date: 3/3/2020

Test Information

Test Method: LM-79-08
Report Number: P291407
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-LD5-32-A19/156-UNV-L82765-W2A1-U-4500K
Description: GRLED 1x4 TUNABLE WHITE TROFFER
WITH A19/156 LENS
Light Source: (168) 80 CRI LEDS TUNED TO 4500K CCT
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 3230.0 lumens
Efficiency: N/A
Efficacy: 123.6 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

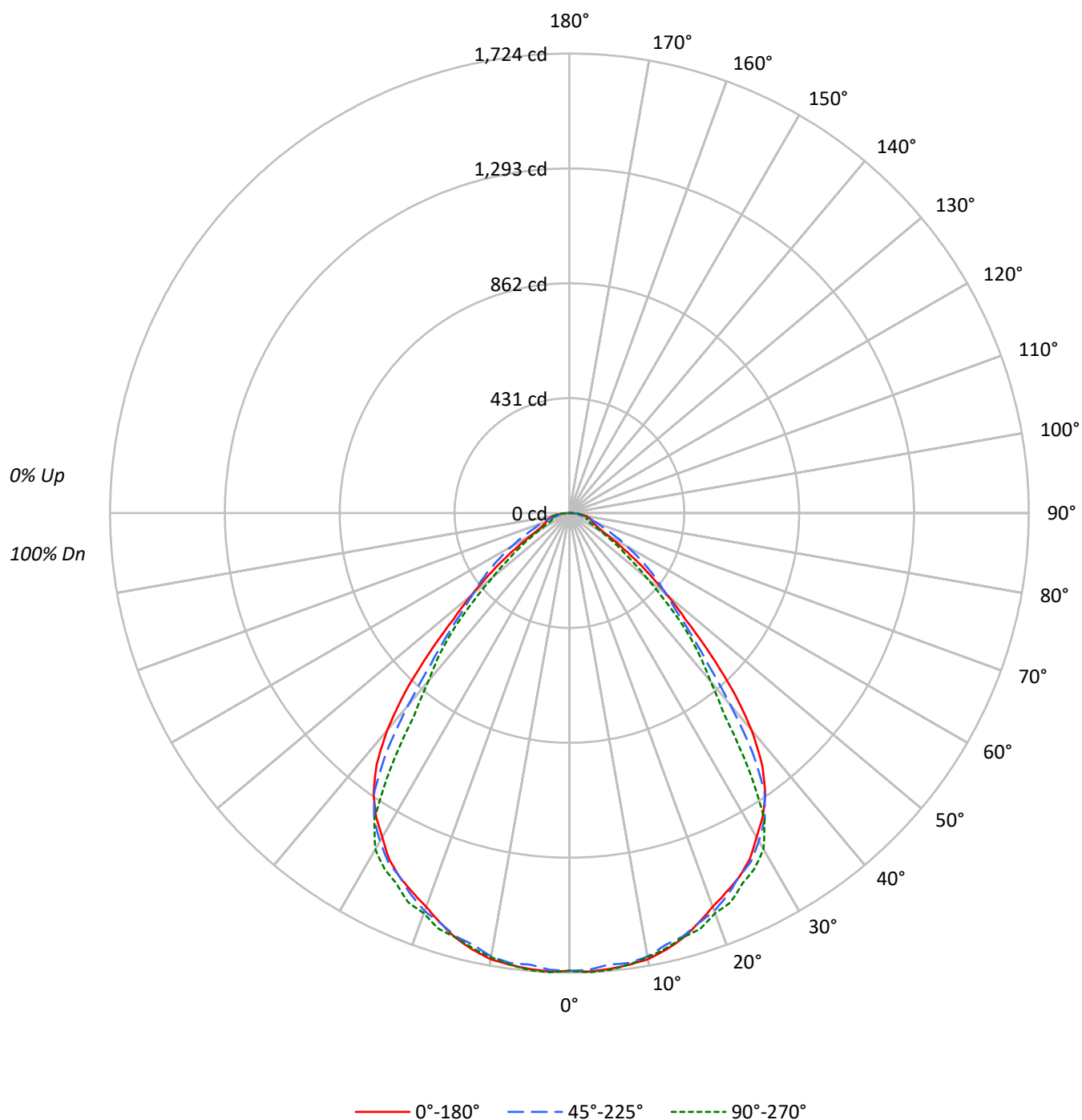
Input Watts (W): 26.133
Input Voltage (V): 120
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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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°	4622	4622	4622
5°	4638	4594	4648
10°	4645	4617	4624
15°	4598	4581	4591
20°	4501	4550	4576
25°	4474	4472	4558
30°	4365	4418	4526
35°	4209	4192	3852
40°	3738	3299	2888
45°	2836	2468	2336
50°	2012	1975	1585
55°	1377	1686	1089
60°	851	1345	728
65°	702	1036	527
70°	698	902	541
75°	838	646	723
80°	962	595	905
85°	914	1050	1028



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	163.0	5.0
10°-20°	465.1	14.4
20°-30°	699.5	21.7
30°-40°	762.6	23.6
40°-50°	534.0	16.5
50°-60°	302.2	9.4
60°-70°	165.4	5.1
70°-80°	100.2	3.1
80°-90°	38.0	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°	1327.6	41.1
0°-40°	2090.2	64.7
0°-60°	2926.4	90.6
0°-90°	3230.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	3230.0	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	1718	1718	1718	1718	1718	
5°	1717	1714	1701	1720	1720	163
15°	1650	1646	1644	1668	1648	464
25°	1507	1510	1506	1541	1535	692
35°	1281	1275	1276	1211	1173	790
45°	745	778	648	640	614	579
55°	294	351	359	356	232	268
65°	110	181	163	206	83	113
75°	81	116	62	122	70	84
85°	30	48	34	41	33	33
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	1717.6	1717.6	1717.6	1717.6	1717.6
2.5°	1722.0	1719.8	1714.6	1725.0	1724.2
5°	1716.8	1713.9	1700.6	1720.5	1720.5
7.5°	1709.5	1702.1	1702.8	1713.9	1708.7
10°	1699.8	1687.3	1689.5	1692.4	1692.4
12.5°	1677.7	1665.8	1659.9	1669.5	1672.5
15°	1650.3	1645.9	1644.4	1668.0	1648.1
17.5°	1611.9	1621.5	1612.6	1631.8	1634.8
20°	1571.9	1590.4	1588.9	1602.2	1597.8
22.5°	1539.4	1551.2	1551.2	1567.5	1580.8
25°	1506.9	1509.8	1506.1	1540.9	1535.0
27.5°	1464.7	1462.5	1474.3	1492.1	1503.9
30°	1404.8	1405.6	1421.8	1445.5	1456.6
32.5°	1350.1	1343.5	1363.4	1373.8	1361.9
35°	1281.4	1275.4	1276.2	1211.1	1172.7
37.5°	1187.5	1192.6	1124.6	1005.6	955.3
40°	1064.0	1074.3	939.0	850.3	822.2
42.5°	914.6	917.6	769.7	740.9	722.4
45°	745.3	777.8	648.4	640.3	613.7
47.5°	590.8	651.4	543.4	548.6	485.0
50°	480.6	541.2	471.7	473.9	378.6
52.5°	380.0	439.2	416.3	409.6	297.2
55°	293.5	351.2	359.3	356.4	232.2
57.5°	215.9	278.0	301.7	312.8	178.9
60°	158.2	227.0	249.9	272.1	135.3
62.5°	125.7	196.7	204.8	237.3	105.0
65°	110.2	181.1	162.7	205.5	82.8
67.5°	98.3	172.3	132.3	181.9	72.5
70°	88.7	155.3	114.6	162.7	68.8
72.5°	88.7	136.0	90.2	144.2	69.5
75°	80.6	116.1	62.1	122.0	69.5
77.5°	71.7	99.1	46.6	99.1	65.1
80°	62.1	77.6	38.4	76.2	58.4
82.5°	45.8	58.4	33.3	56.9	47.3
85°	29.6	48.1	34.0	41.4	33.3
87.5°	14.0	24.4	21.4	20.7	17.0
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)