

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: P291413

Luminaire Tested: **14GR-LD5-36-A19/156-UNV-L82765-W2A1-U-3000K**

Issue Date: 3/3/2020

Test Information

Test Method: LM-79-08
Report Number: P291413
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-L82765-W2A1-U-3000K
Description: GRLED 1x4 TUNABLE WHITE TROFFER
WITH A19/156 LENS
Light Source: (168) 80 CRI LEDS TUNED TO 3000K CCT
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 3355.0 lumens
Efficiency: N/A
Efficacy: 115.3 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

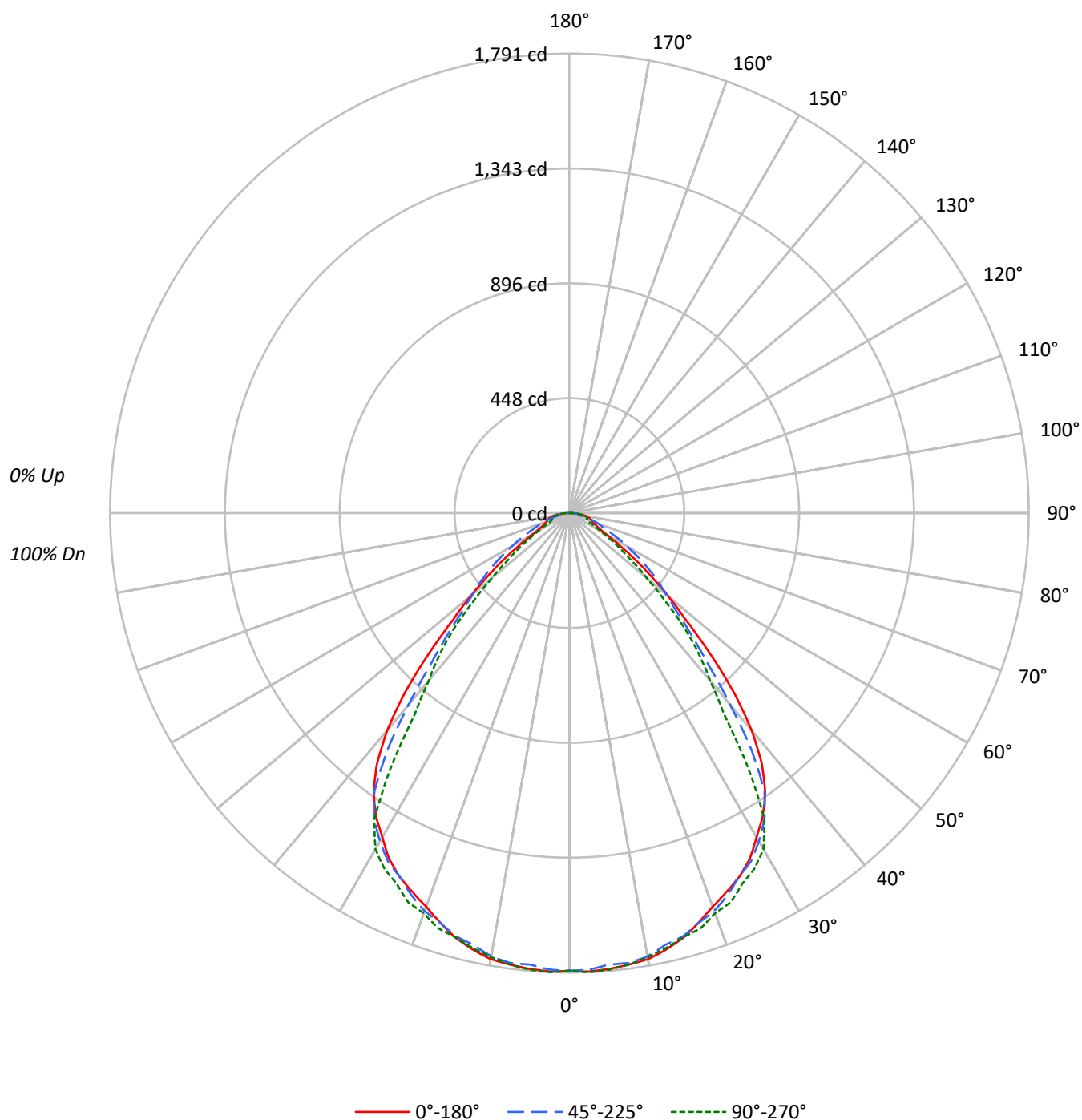
Input Watts (W): 29.109
Input Voltage (V): 120
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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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°	4801	4801	4801
5°	4817	4772	4827
10°	4824	4795	4803
15°	4776	4758	4769
20°	4676	4726	4753
25°	4647	4645	4734
30°	4534	4589	4701
35°	4372	4355	4001
40°	3882	3426	3000
45°	2946	2563	2426
50°	2090	2051	1646
55°	1430	1751	1132
60°	885	1397	756
65°	728	1076	548
70°	725	936	562
75°	870	671	751
80°	1000	618	941
85°	948	1090	1068



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	169.3	5.0
10°-20°	483.1	14.4
20°-30°	726.6	21.7
30°-40°	792.1	23.6
40°-50°	554.6	16.5
50°-60°	314.0	9.4
60°-70°	171.8	5.1
70°-80°	104.1	3.1
80°-90°	39.5	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°	1379.0	41.1
0°-40°	2171.1	64.7
0°-60°	3039.7	90.6
0°-90°	3355.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	3355.0	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	1784	1784	1784	1784	1784	
5°	1783	1780	1766	1787	1787	170
15°	1714	1710	1708	1733	1712	482
25°	1565	1568	1564	1600	1594	719
35°	1331	1325	1326	1258	1218	820
45°	774	808	674	665	637	601
55°	305	365	373	370	241	279
65°	114	188	169	214	86	118
75°	84	121	64	127	72	87
85°	31	50	35	43	35	34
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	1784.1	1784.1	1784.1	1784.1	1784.1
2.5°	1788.7	1786.4	1781.0	1791.7	1791.0
5°	1783.3	1780.2	1766.4	1787.1	1787.1
7.5°	1775.6	1767.9	1768.7	1780.2	1774.8
10°	1765.6	1752.6	1754.9	1757.9	1757.9
12.5°	1742.6	1730.3	1724.2	1734.1	1737.2
15°	1714.2	1709.6	1708.0	1732.6	1711.9
17.5°	1674.2	1684.2	1675.0	1695.0	1698.0
20°	1632.8	1652.0	1650.4	1664.3	1659.6
22.5°	1599.0	1611.3	1611.3	1628.2	1642.0
25°	1565.2	1568.3	1564.4	1600.5	1594.4
27.5°	1521.4	1519.1	1531.4	1549.8	1562.1
30°	1459.2	1460.0	1476.9	1501.4	1513.0
32.5°	1402.4	1395.5	1416.2	1426.9	1414.7
35°	1330.9	1324.8	1325.6	1258.0	1218.0
37.5°	1233.4	1238.8	1168.1	1044.5	992.3
40°	1105.1	1115.9	975.4	883.2	854.0
42.5°	950.0	953.1	799.5	769.5	750.3
45°	774.1	807.9	673.5	665.1	637.4
47.5°	613.6	676.6	564.5	569.9	503.8
50°	499.2	562.2	490.0	492.3	393.2
52.5°	394.8	456.2	432.4	425.5	308.7
55°	304.9	364.8	373.2	370.2	241.2
57.5°	224.3	288.8	313.3	324.9	185.9
60°	164.4	235.8	259.6	282.6	140.5
62.5°	130.6	204.3	212.7	246.5	109.1
65°	114.4	188.2	169.0	213.5	86.0
67.5°	102.1	178.9	137.5	188.9	75.3
70°	92.2	161.3	119.0	169.0	71.4
72.5°	92.2	141.3	93.7	149.8	72.2
75°	83.7	120.6	64.5	126.7	72.2
77.5°	74.5	102.9	48.4	102.9	67.6
80°	64.5	80.6	39.9	79.1	60.7
82.5°	47.6	60.7	34.6	59.1	49.2
85°	30.7	49.9	35.3	43.0	34.6
87.5°	14.6	25.3	22.3	21.5	17.7
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)