

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: P291514

Luminaire Tested: **14GR-LD5-36-A19/156-UNV-L92765-W2A1-U-4500K**

Issue Date: 3/3/2020

Test Information

Test Method: LM-79-08
Report Number: P291514
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-L92765-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: 3220.0 lumens
Efficiency: N/A
Efficacy: 107.9 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

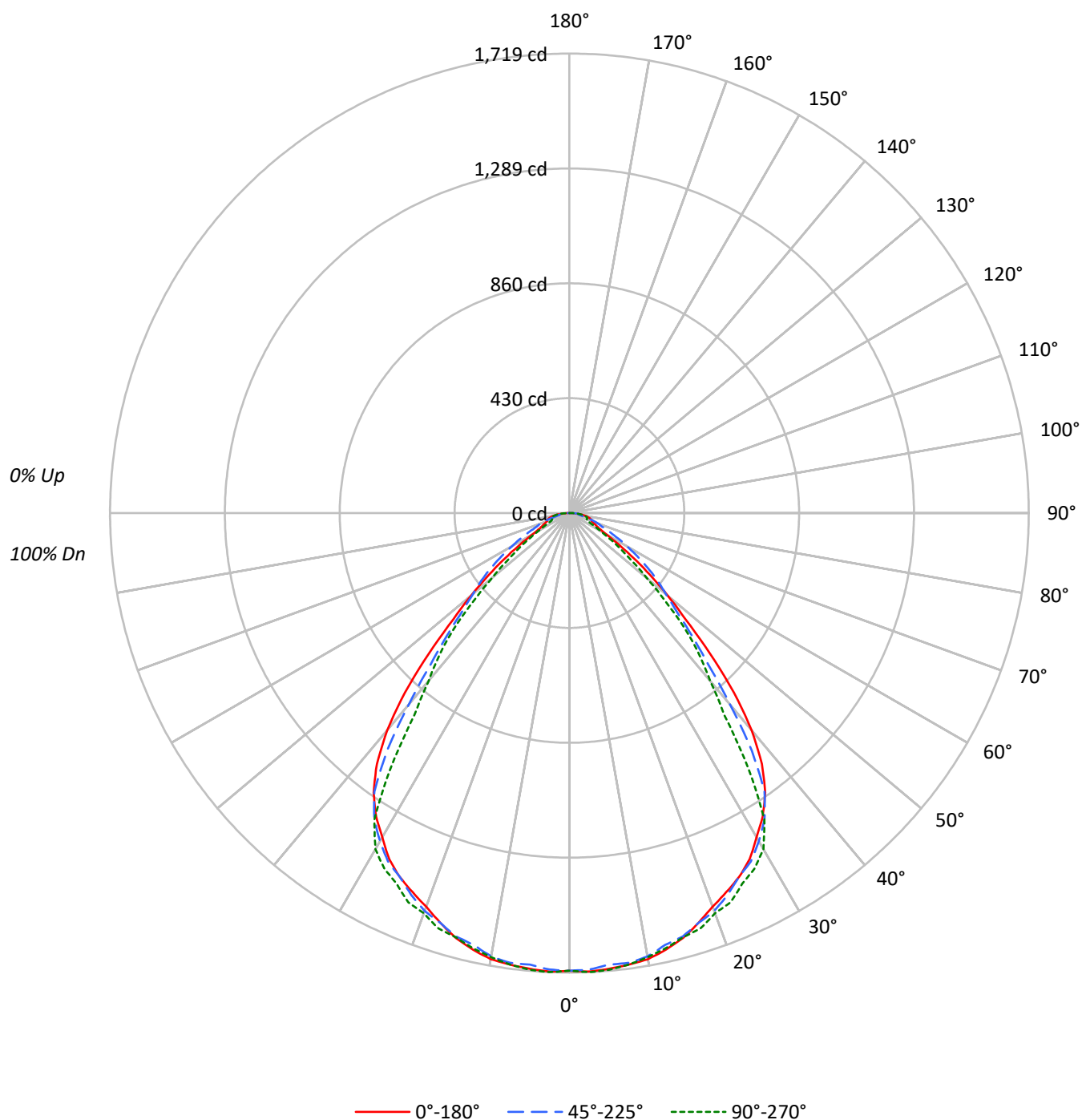
Input Watts (W): 29.853
Input Voltage (V): 120
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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Luminous Intensity Polar Plot





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COEFFICIENT OF UTILIZATION - ZONAL CAVITY METHOD:

RF	20				20					20					20				
RC	80				70					50					30				0
RW	70	50	30	10	70	50	30	10		50	30	10			50	30	10		0
RCR																			
0	119	119	119	119	116	116	116	116		111	111	111			106	106	106		100
1	111	107	104	100	108	105	102	99		101	98	96			97	95	93		88
2	103	96	90	86	100	94	89	85		91	87	83			88	84	81		77
3	95	87	80	74	93	85	79	74		82	77	73			80	75	71		68
4	89	79	71	65	87	77	70	65		75	69	64			73	68	63		61
5	83	71	64	58	81	70	63	58		68	62	57			67	61	57		54
6	77	65	58	52	75	64	57	52		63	56	51			61	55	51		49
7	72	60	52	47	70	59	52	47		58	51	46			56	51	46		44
8	67	55	48	43	66	55	47	42		53	47	42			52	46	42		40
9	63	51	44	39	62	51	44	39		50	43	39			49	43	38		37
10	60	48	40	36	58	47	40	36		46	40	35			45	39	35		34

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	4608	4608	4608
5°	4623	4579	4633
10°	4630	4602	4610
15°	4583	4567	4577
20°	4488	4536	4562
25°	4460	4458	4543
30°	4352	4404	4512
35°	4196	4179	3840
40°	3726	3288	2879
45°	2828	2460	2328
50°	2006	1969	1580
55°	1373	1681	1086
60°	849	1341	726
65°	699	1033	526
70°	696	899	539
75°	835	644	721
80°	959	594	902
85°	911	1047	1025



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	162.5	5.0
10°-20°	463.7	14.4
20°-30°	697.3	21.7
30°-40°	760.2	23.6
40°-50°	532.3	16.5
50°-60°	301.3	9.4
60°-70°	164.9	5.1
70°-80°	99.9	3.1
80°-90°	37.9	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°	1323.5	41.1
0°-40°	2083.7	64.7
0°-60°	2917.3	90.6
0°-90°	3220.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	3220.0	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	1712	1712	1712	1712	1712	
5°	1712	1709	1695	1715	1715	163
15°	1645	1641	1639	1663	1643	463
25°	1502	1505	1502	1536	1530	690
35°	1277	1272	1272	1207	1169	787
45°	743	775	646	638	612	577
55°	293	350	358	355	231	268
65°	110	181	162	205	83	113
75°	80	116	62	122	69	83
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°	1712.3	1712.3	1712.3	1712.3	1712.3
2.5°	1716.7	1714.5	1709.3	1719.6	1718.9
5°	1711.5	1708.6	1695.3	1715.2	1715.2
7.5°	1704.2	1696.8	1697.5	1708.6	1703.4
10°	1694.6	1682.0	1684.3	1687.2	1687.2
12.5°	1672.5	1660.7	1654.8	1664.4	1667.3
15°	1645.2	1640.8	1639.3	1662.9	1643.0
17.5°	1606.9	1616.4	1607.6	1626.8	1629.7
20°	1567.1	1585.5	1584.0	1597.3	1592.9
22.5°	1534.6	1546.4	1546.4	1562.6	1575.9
25°	1502.2	1505.1	1501.5	1536.1	1530.2
27.5°	1460.2	1458.0	1469.8	1487.5	1499.3
30°	1400.5	1401.2	1417.4	1441.0	1452.1
32.5°	1345.9	1339.3	1359.2	1369.5	1357.7
35°	1277.4	1271.5	1272.2	1207.4	1169.0
37.5°	1183.8	1188.9	1121.1	1002.4	952.3
40°	1060.7	1071.0	936.1	847.7	819.6
42.5°	911.8	914.7	767.3	738.6	720.1
45°	743.0	775.4	646.4	638.3	611.8
47.5°	588.9	649.4	541.8	546.9	483.5
50°	479.1	539.6	470.3	472.5	377.4
52.5°	378.9	437.8	415.0	408.4	296.3
55°	292.6	350.1	358.2	355.3	231.4
57.5°	215.2	277.1	300.7	311.8	178.4
60°	157.7	226.3	249.1	271.3	134.9
62.5°	125.3	196.1	204.2	236.6	104.7
65°	109.8	180.6	162.2	204.9	82.6
67.5°	98.0	171.7	131.9	181.3	72.2
70°	88.5	154.8	114.2	162.2	68.5
72.5°	88.5	135.6	89.9	143.7	69.3
75°	80.3	115.7	61.9	121.6	69.3
77.5°	71.5	98.8	46.4	98.8	64.9
80°	61.9	77.4	38.3	75.9	58.2
82.5°	45.7	58.2	33.2	56.8	47.2
85°	29.5	47.9	33.9	41.3	33.2
87.5°	14.0	24.3	21.4	20.6	17.0
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)