

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: P291523

Luminaire Tested: **14GR-LD5-40-A19/156-UNV-L92765-W2A1-U-4500K**

Issue Date: 3/3/2020

Test Information

Test Method: LM-79-08
Report Number: P291523
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-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: 3603.0 lumens
Efficiency: N/A
Efficacy: 105.0 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

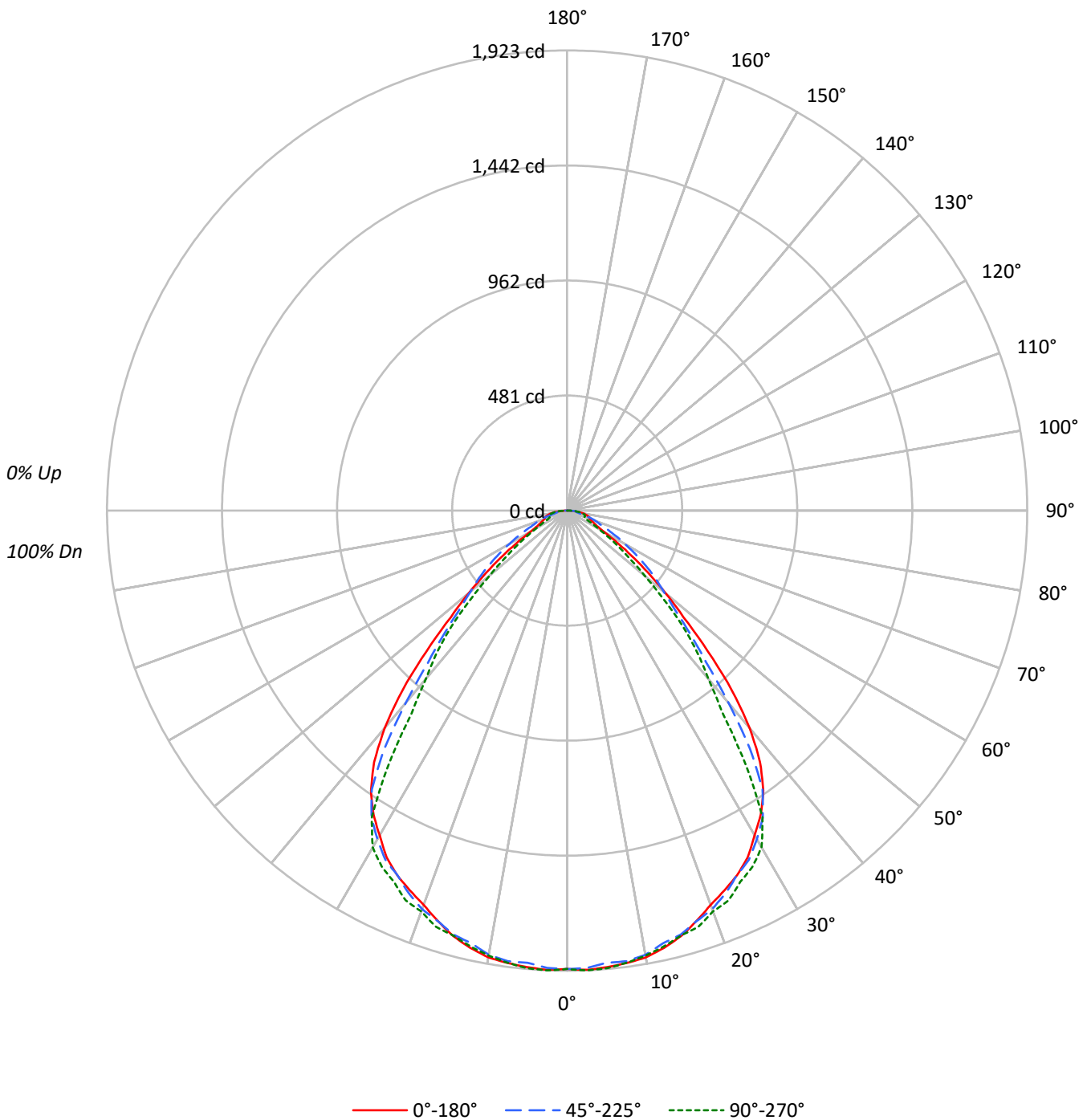
Input Watts (W): 34.317
Input Voltage (V): 120
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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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	0		
RW	70	50	30	10	70	50	30	10	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		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°	5156	5156	5156
5°	5173	5124	5184
10°	5181	5150	5159
15°	5129	5110	5122
20°	5021	5076	5104
25°	4991	4988	5084
30°	4869	4928	5049
35°	4695	4676	4297
40°	4169	3680	3222
45°	3164	2753	2605
50°	2244	2203	1768
55°	1536	1880	1215
60°	950	1500	812
65°	783	1155	588
70°	779	1006	603
75°	935	721	806
80°	1074	665	1010
85°	1019	1170	1145



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	181.8	5.0
10°-20°	518.9	14.4
20°-30°	780.3	21.7
30°-40°	850.6	23.6
40°-50°	595.6	16.5
50°-60°	337.1	9.4
60°-70°	184.5	5.1
70°-80°	111.8	3.1
80°-90°	42.4	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°	1480.9	41.1
0°-40°	2331.6	64.7
0°-60°	3264.3	90.6
0°-90°	3603.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	3603.0	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	1916	1916	1916	1916	1916	
5°	1915	1912	1897	1919	1919	182
15°	1841	1836	1834	1861	1838	518
25°	1681	1684	1680	1719	1712	772
35°	1429	1423	1424	1351	1308	881
45°	831	868	723	714	685	646
55°	327	392	401	398	259	299
65°	123	202	181	229	92	126
75°	90	130	69	136	78	93
85°	33	54	38	46	37	37
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	1915.9	1915.9	1915.9	1915.9	1915.9
2.5°	1920.9	1918.4	1912.6	1924.2	1923.4
5°	1915.1	1911.8	1897.0	1919.2	1919.2
7.5°	1906.9	1898.6	1899.4	1911.8	1906.0
10°	1896.1	1882.1	1884.6	1887.9	1887.9
12.5°	1871.4	1858.2	1851.6	1862.3	1865.6
15°	1840.9	1835.9	1834.3	1860.7	1838.4
17.5°	1798.0	1808.7	1798.8	1820.3	1823.6
20°	1753.5	1774.1	1772.4	1787.3	1782.3
22.5°	1717.2	1730.4	1730.4	1748.5	1763.4
25°	1680.9	1684.2	1680.1	1718.8	1712.2
27.5°	1633.9	1631.4	1644.6	1664.4	1677.6
30°	1567.1	1567.9	1586.0	1612.4	1624.8
32.5°	1506.0	1498.6	1520.9	1532.4	1519.2
35°	1429.3	1422.7	1423.5	1351.0	1308.1
37.5°	1324.6	1330.4	1254.5	1121.7	1065.6
40°	1186.8	1198.4	1047.5	948.5	917.1
42.5°	1020.2	1023.5	858.6	826.4	805.8
45°	831.4	867.7	723.3	714.2	684.6
47.5°	659.0	726.6	606.2	612.0	541.0
50°	536.1	603.7	526.2	528.7	422.3
52.5°	423.9	489.9	464.3	456.9	331.6
55°	327.4	391.8	400.8	397.5	259.0
57.5°	240.8	310.1	336.5	348.9	199.6
60°	176.5	253.2	278.8	303.5	150.9
62.5°	140.2	219.4	228.5	264.8	117.1
65°	122.9	202.1	181.4	229.3	92.4
67.5°	109.7	192.2	147.6	202.9	80.8
70°	99.0	173.2	127.8	181.4	76.7
72.5°	99.0	151.8	100.6	160.8	77.5
75°	89.9	129.5	69.3	136.1	77.5
77.5°	80.0	110.5	52.0	110.5	72.6
80°	69.3	86.6	42.9	85.0	65.2
82.5°	51.1	65.2	37.1	63.5	52.8
85°	33.0	53.6	37.9	46.2	37.1
87.5°	15.7	27.2	23.9	23.1	19.0
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)