

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: P291414

Luminaire Tested: **14GR-LD5-36-A19/156-UNV-L82765-W2A1-U-3500K**

Issue Date: 3/3/2020

Test Information

Test Method: LM-79-08
Report Number: P291414
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-3500K
Description: GRLED 1x4 TUNABLE WHITE TROFFER
WITH A19/156 LENS
Light Source: (168) 80 CRI LEDS TUNED TO 3500K CCT
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 3471.0 lumens
Efficiency: N/A
Efficacy: 118.1 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

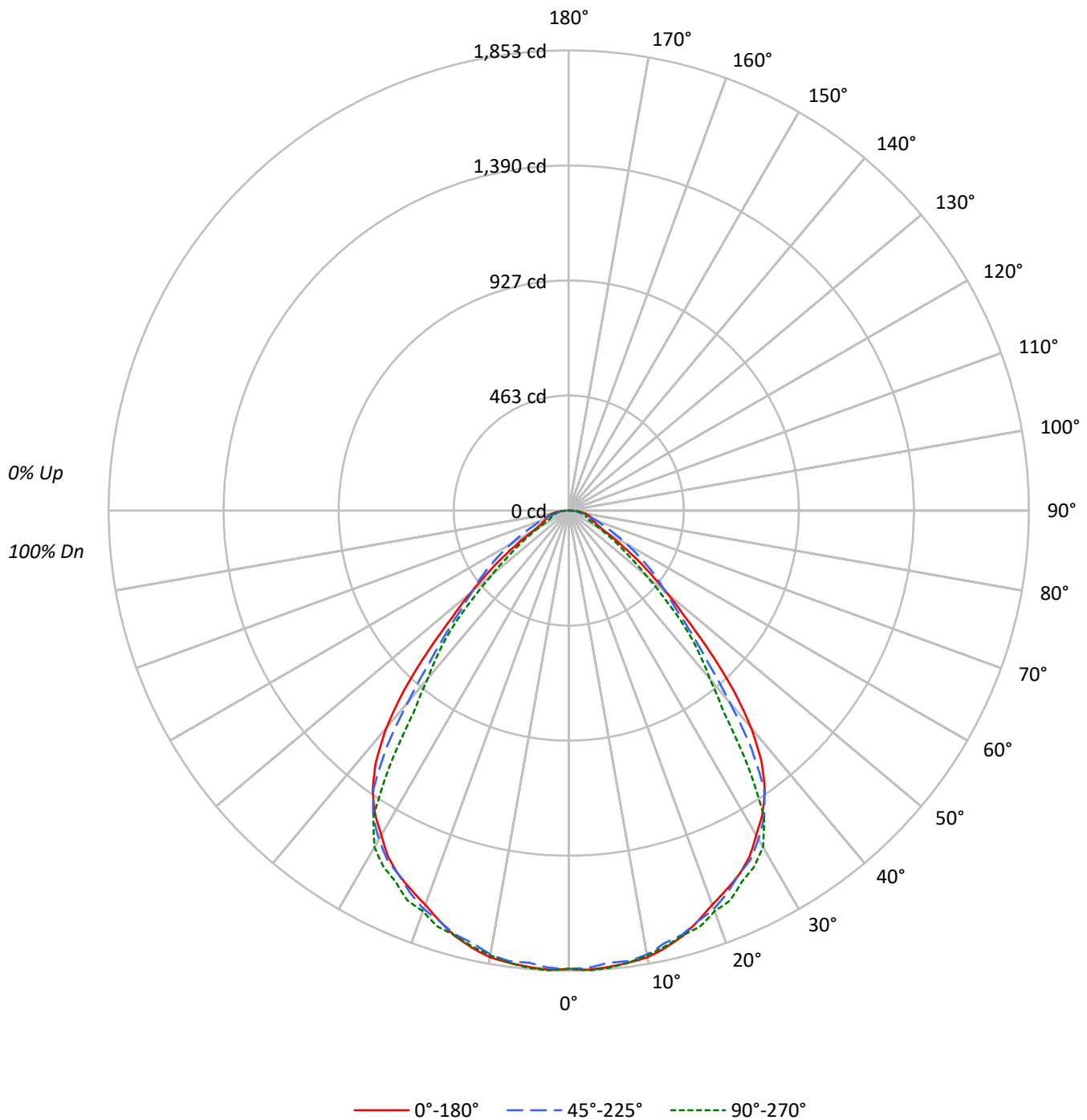
Input Watts (W): 29.388
Input Voltage (V): 120
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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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°	4967	4967	4967
5°	4984	4937	4994
10°	4991	4961	4970
15°	4941	4923	4934
20°	4837	4890	4917
25°	4808	4806	4898
30°	4691	4748	4864
35°	4524	4505	4140
40°	4017	3545	3104
45°	3048	2652	2510
50°	2162	2122	1703
55°	1480	1812	1171
60°	915	1446	783
65°	754	1113	567
70°	750	969	581
75°	900	693	777
80°	1034	640	973
85°	982	1127	1105



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	175.1	5.0
10°-20°	499.9	14.4
20°-30°	751.7	21.7
30°-40°	819.5	23.6
40°-50°	573.8	16.5
50°-60°	324.8	9.4
60°-70°	177.7	5.1
70°-80°	107.7	3.1
80°-90°	40.8	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°	1426.7	41.1
0°-40°	2246.1	64.7
0°-60°	3144.7	90.6
0°-90°	3471.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	3471.0	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	1846	1846	1846	1846	1846	
5°	1845	1842	1828	1849	1849	176
15°	1773	1769	1767	1792	1771	499
25°	1619	1622	1618	1656	1650	744
35°	1377	1371	1371	1302	1260	848
45°	801	836	697	688	660	622
55°	315	377	386	383	250	288
65°	118	195	175	221	89	122
75°	87	125	67	131	75	90
85°	32	52	36	44	36	35
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	1845.7	1845.7	1845.7	1845.7	1845.7
2.5°	1850.5	1848.1	1842.6	1853.7	1852.9
5°	1844.9	1841.8	1827.5	1848.9	1848.9
7.5°	1837.0	1829.1	1829.9	1841.8	1836.2
10°	1826.7	1813.2	1815.5	1818.7	1818.7
12.5°	1802.8	1790.1	1783.8	1794.1	1797.3
15°	1773.4	1768.7	1767.1	1792.5	1771.1
17.5°	1732.1	1742.5	1732.9	1753.6	1756.8
20°	1689.2	1709.1	1707.5	1721.8	1717.0
22.5°	1654.3	1667.0	1667.0	1684.4	1698.8
25°	1619.3	1622.5	1618.5	1655.8	1649.5
27.5°	1574.0	1571.6	1584.3	1603.4	1616.1
30°	1509.6	1510.4	1527.9	1553.3	1565.3
32.5°	1450.9	1443.7	1465.2	1476.3	1463.6
35°	1377.0	1370.6	1371.4	1301.5	1260.2
37.5°	1276.0	1281.6	1208.5	1080.6	1026.6
40°	1143.4	1154.5	1009.1	913.7	883.5
42.5°	982.9	986.0	827.1	796.1	776.3
45°	800.9	835.9	696.8	688.1	659.5
47.5°	634.8	700.0	584.0	589.6	521.2
50°	516.5	581.6	506.9	509.3	406.8
52.5°	408.4	472.0	447.3	440.2	319.4
55°	315.4	377.4	386.2	383.0	249.5
57.5°	232.0	298.8	324.2	336.1	192.3
60°	170.0	243.9	268.6	292.4	145.4
62.5°	135.1	211.4	220.1	255.1	112.8
65°	118.4	194.7	174.8	220.9	89.0
67.5°	105.7	185.1	142.2	195.5	77.9
70°	95.3	166.9	123.2	174.8	73.9
72.5°	95.3	146.2	96.9	154.9	74.7
75°	86.6	124.7	66.7	131.1	74.7
77.5°	77.1	106.5	50.1	106.5	69.9
80°	66.7	83.4	41.3	81.8	62.8
82.5°	49.3	62.8	35.8	61.2	50.9
85°	31.8	51.6	36.5	44.5	35.8
87.5°	15.1	26.2	23.0	22.2	18.3
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)