

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: P291525

Luminaire Tested: **14GR-LD5-40-A19/156-UNV-L92765-W2A1-U-5500K**

Issue Date: 3/3/2020

**Test Information**

Test Method: LM-79-08  
Report Number: P291525  
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-5500K  
Description: GRLED 1x4 TUNABLE WHITE TROFFER  
WITH A19/156 LENS  
Light Source: (168) 90 CRI LEDS TUNED TO 5500K CCT  
Ballast/Driver: ELECTRONIC DRIVER

**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 3733.0 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

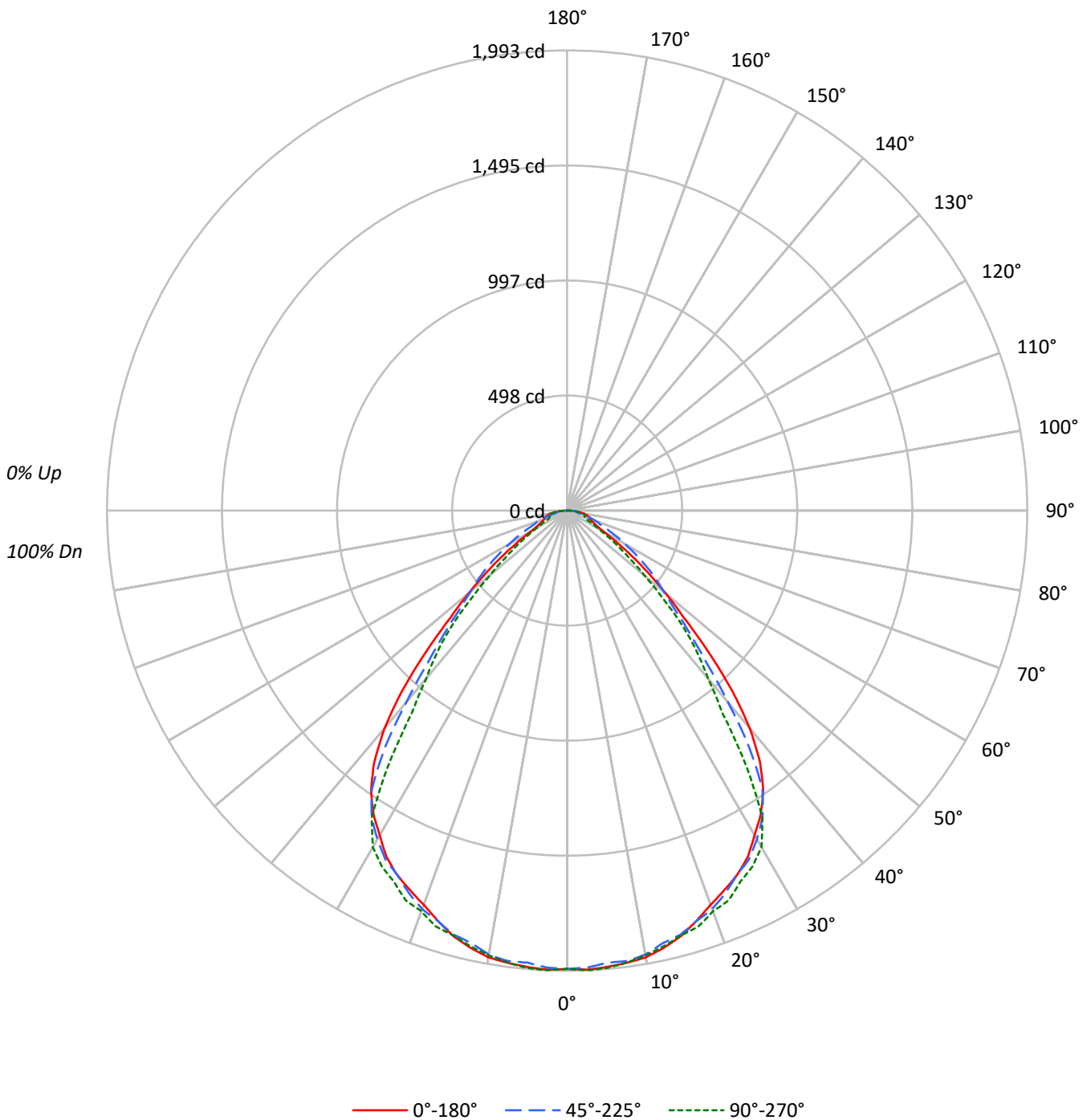
Input Watts (W): 34.596  
Input Voltage (V): 120  
Input Current (Ain): NR  
Voltage Rise (V): NR  
Power Factor: NR  
Total Harmonic Distortion (THDi): NR  
Frequency (hertz): 60  
Stabilization Time: NR  
Operation Time: NR  
Ambient Temperature (°C): NR  
Test Distance: 25 FT



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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	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					100			
1	111	107	104	100	108	105	102	99	101	98	96	97	95	93	93	92	90	88					88			
2	103	96	90	86	100	94	89	85	91	87	83	88	84	81	85	82	79	77					77			
3	95	87	80	74	93	85	79	74	82	77	73	80	75	71	77	73	70	68					68			
4	89	79	71	65	87	77	70	65	75	69	64	73	68	63	71	66	63	61					61			
5	83	71	64	58	81	70	63	58	68	62	57	67	61	57	65	60	56	54					54			
6	77	65	58	52	75	64	57	52	63	56	51	61	55	51	60	55	51	49					49			
7	72	60	52	47	70	59	52	47	58	51	46	56	51	46	55	50	46	44					44			
8	67	55	48	43	66	55	47	42	53	47	42	52	46	42	51	46	42	40					40			
9	63	51	44	39	62	51	44	39	50	43	39	49	43	38	48	42	38	37					37			
10	60	48	40	36	58	47	40	36	46	40	35	45	39	35	44	39	35	34					34			

**AVERAGE LUMINANCE (cd/sqm):**

	0°	45°	90°
0°	5342	5342	5342
5°	5360	5309	5371
10°	5368	5335	5345
15°	5314	5295	5306
20°	5202	5259	5288
25°	5171	5168	5267
30°	5045	5106	5231
35°	4865	4845	4452
40°	4320	3812	3338
45°	3278	2852	2699
50°	2325	2282	1832
55°	1591	1948	1259
60°	984	1554	842
65°	811	1197	609
70°	806	1042	625
75°	968	747	835
80°	1113	688	1046
85°	1056	1213	1189



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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	188.3	5.0
10°-20°	537.6	14.4
20°-30°	808.4	21.7
30°-40°	881.3	23.6
40°-50°	617.1	16.5
50°-60°	349.3	9.4
60°-70°	191.1	5.1
70°-80°	115.8	3.1
80°-90°	43.9	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°	1534.4	41.1
0°-40°	2415.7	64.7
0°-60°	3382.1	90.6
0°-90°	3733.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	3733.0	100.0

**CANDELA DISTRIBUTION:**

	0°	22.5°	45°	67.5°	90°	Flux
0°	1985	1985	1985	1985	1985	
5°	1984	1981	1965	1988	1988	189
15°	1907	1902	1900	1928	1905	536
25°	1742	1745	1741	1781	1774	800
35°	1481	1474	1475	1400	1355	912
45°	861	899	749	740	709	669
55°	339	406	415	412	268	310
65°	127	209	188	238	96	131
75°	93	134	72	141	80	97
85°	34	56	39	48	38	38
90°	0	0	0	0	0	



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**CANDELA DISTRIBUTION (FULL):**

	0°	22.5°	45°	67.5°	90°
0°	1985.1	1985.1	1985.1	1985.1	1985.1
2.5°	1990.2	1987.6	1981.6	1993.6	1992.8
5°	1984.2	1980.8	1965.4	1988.5	1988.5
7.5°	1975.7	1967.1	1968.0	1980.8	1974.8
10°	1964.6	1950.0	1952.6	1956.0	1956.0
12.5°	1938.9	1925.2	1918.4	1929.5	1932.9
15°	1907.3	1902.2	1900.5	1927.8	1904.7
17.5°	1862.9	1874.0	1863.7	1885.9	1889.4
20°	1816.7	1838.1	1836.4	1851.8	1846.6
22.5°	1779.1	1792.8	1792.8	1811.6	1827.0
25°	1741.5	1744.9	1740.7	1780.8	1774.0
27.5°	1692.8	1690.3	1703.9	1724.4	1738.1
30°	1623.6	1624.5	1643.3	1670.6	1683.4
32.5°	1560.4	1552.7	1575.7	1587.7	1574.0
35°	1480.9	1474.1	1474.9	1399.7	1355.3
37.5°	1372.4	1378.4	1299.7	1162.2	1104.0
40°	1229.7	1241.6	1085.2	982.7	950.2
42.5°	1057.0	1060.5	889.6	856.2	834.9
45°	861.4	899.0	749.4	740.0	709.3
47.5°	682.8	752.8	628.1	634.1	560.6
50°	555.4	625.5	545.2	547.8	437.5
52.5°	439.2	507.6	481.1	473.4	343.5
55°	339.2	405.9	415.3	411.9	268.3
57.5°	249.5	321.3	348.6	361.5	206.8
60°	182.9	262.3	288.8	314.5	156.4
62.5°	145.3	227.3	236.7	274.3	121.3
65°	127.3	209.4	188.0	237.6	95.7
67.5°	113.7	199.1	153.0	210.2	83.7
70°	102.5	179.5	132.5	188.0	79.5
72.5°	102.5	157.2	104.3	166.6	80.3
75°	93.1	134.2	71.8	141.0	80.3
77.5°	82.9	114.5	53.8	114.5	75.2
80°	71.8	89.7	44.4	88.0	67.5
82.5°	53.0	67.5	38.5	65.8	54.7
85°	34.2	55.5	39.3	47.9	38.5
87.5°	16.2	28.2	24.8	23.9	19.7
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)