

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: P291534

Luminaire Tested: **14GR-LD5-43-A19/156-UNV-L92765-W2A1-U-5500K**

Issue Date: 3/3/2020

**Test Information**

Test Method: LM-79-08  
Report Number: P291534  
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-LD5-43-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: 3982.0 lumens  
Efficiency: N/A  
Efficacy: 106.0 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

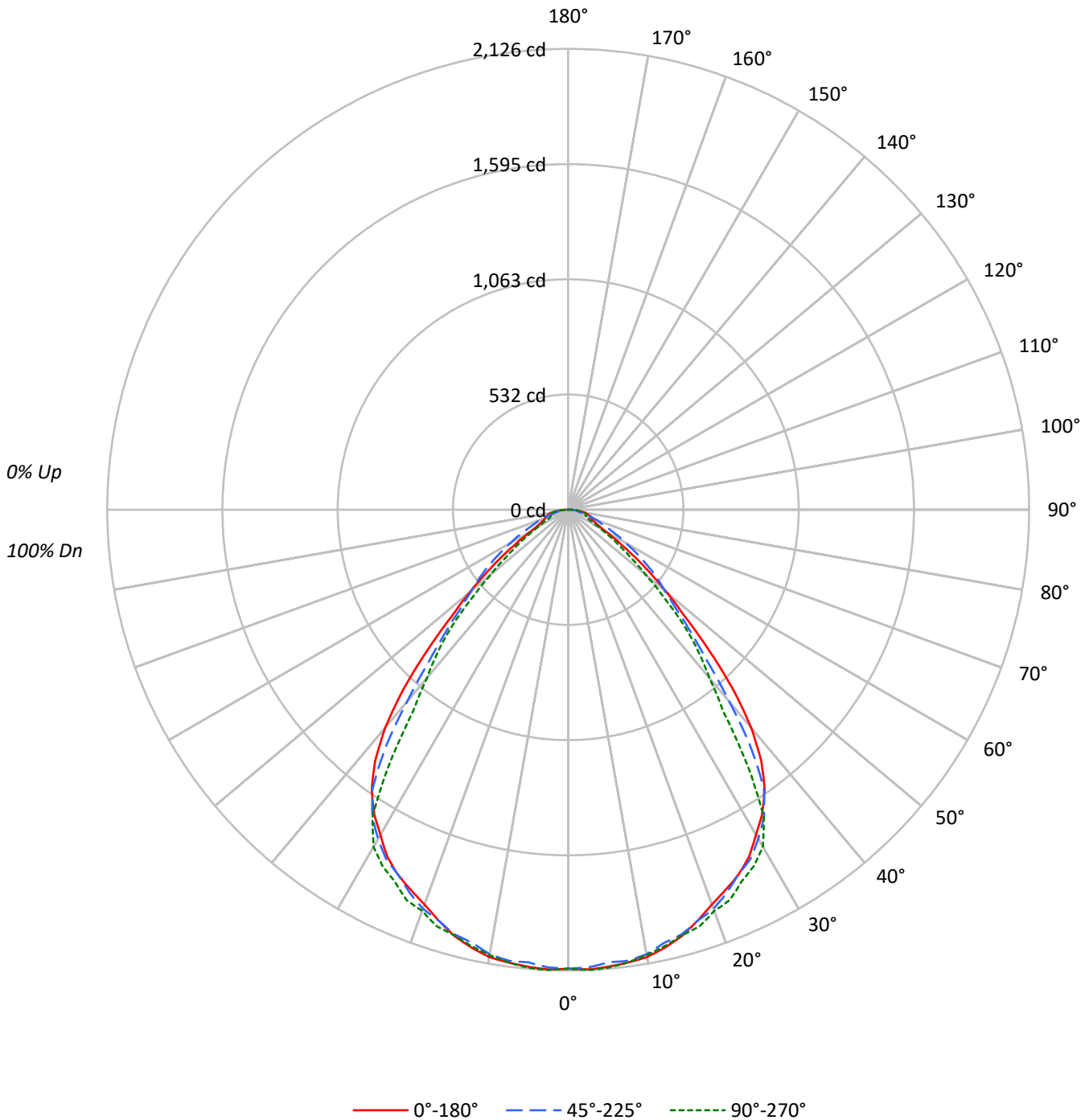
Input Watts (W): 37.572  
Input Voltage (V): 120  
Input Current (Ain): NR  
Voltage Rise (V): NR  
Power Factor: NR  
Total Harmonic Distortion (THDi): NR  
Frequency (hertz): 60  
Stabilization Time: NR  
Operation Time: NR  
Ambient Temperature (°C): NR  
Test Distance: 25 FT



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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	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°	5698	5698	5698
5°	5717	5663	5730
10°	5726	5691	5701
15°	5668	5648	5660
20°	5550	5610	5641
25°	5516	5513	5619
30°	5381	5447	5580
35°	5189	5168	4749
40°	4608	4066	3561
45°	3497	3042	2879
50°	2480	2435	1954
55°	1698	2078	1343
60°	1050	1658	898
65°	865	1277	650
70°	861	1112	667
75°	1033	796	891
80°	1187	735	1116
85°	1127	1294	1266



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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	200.9	5.0
10°-20°	573.4	14.4
20°-30°	862.4	21.7
30°-40°	940.1	23.6
40°-50°	658.3	16.5
50°-60°	372.6	9.4
60°-70°	203.9	5.1
70°-80°	123.6	3.1
80°-90°	46.8	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°	1636.7	41.1
0°-40°	2576.8	64.7
0°-60°	3607.7	90.6
0°-90°	3982.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	3982.0	100.0

**CANDELA DISTRIBUTION:**

	0°	22.5°	45°	67.5°	90°	Flux
0°	2118	2118	2118	2118	2118	
5°	2117	2113	2096	2121	2121	201
15°	2034	2029	2027	2056	2032	572
25°	1858	1861	1857	1900	1892	853
35°	1580	1572	1573	1493	1446	973
45°	919	959	799	789	757	714
55°	362	433	443	439	286	331
65°	136	223	200	253	102	140
75°	99	143	77	150	86	103
85°	36	59	42	51	41	40
90°	0	0	0	0	0	



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**CANDELA DISTRIBUTION (FULL):**

	0°	22.5°	45°	67.5°	90°
0°	2117.5	2117.5	2117.5	2117.5	2117.5
2.5°	2122.9	2120.2	2113.8	2126.6	2125.7
5°	2116.6	2112.9	2096.5	2121.1	2121.1
7.5°	2107.4	2098.3	2099.2	2112.9	2106.5
10°	2095.6	2080.1	2082.8	2086.5	2086.5
12.5°	2068.3	2053.7	2046.4	2058.2	2061.9
15°	2034.5	2029.1	2027.2	2056.4	2031.8
17.5°	1987.1	1999.0	1988.0	2011.7	2015.4
20°	1937.9	1960.7	1958.9	1975.3	1969.8
22.5°	1897.8	1912.4	1912.4	1932.4	1948.8
25°	1857.7	1861.3	1856.8	1899.6	1892.3
27.5°	1805.7	1803.0	1817.6	1839.5	1854.0
30°	1731.9	1732.8	1752.9	1782.0	1795.7
32.5°	1664.4	1656.2	1680.9	1693.6	1679.0
35°	1579.7	1572.4	1573.3	1493.1	1445.7
37.5°	1463.9	1470.3	1386.4	1239.7	1177.7
40°	1311.7	1324.4	1157.6	1048.3	1013.6
42.5°	1127.6	1131.2	948.9	913.3	890.6
45°	918.8	958.9	799.4	789.4	756.6
47.5°	728.3	803.1	670.0	676.4	598.0
50°	592.5	667.2	581.6	584.3	466.7
52.5°	468.5	541.4	513.2	505.0	366.4
55°	361.9	433.0	443.0	439.4	286.2
57.5°	266.2	342.7	371.9	385.6	220.6
60°	195.1	279.8	308.1	335.4	166.8
62.5°	155.0	242.5	252.5	292.6	129.4
65°	135.8	223.3	200.5	253.4	102.1
67.5°	121.2	212.4	163.2	224.2	89.3
70°	109.4	191.4	141.3	200.5	84.8
72.5°	109.4	167.7	111.2	177.7	85.7
75°	99.4	143.1	76.6	150.4	85.7
77.5°	88.4	122.1	57.4	122.1	80.2
80°	76.6	95.7	47.4	93.9	72.0
82.5°	56.5	72.0	41.0	70.2	58.3
85°	36.5	59.2	41.9	51.0	41.0
87.5°	17.3	30.1	26.4	25.5	21.0
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)