

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: P291367

Luminaire Tested: **14GR-LD5-40-A19/156-UNV-L83050-W2A1-U-3500K**

Issue Date: 3/3/2020

Test Information

Test Method: LM-79-08
Report Number: P291367
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-L83050-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: 3977.0 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

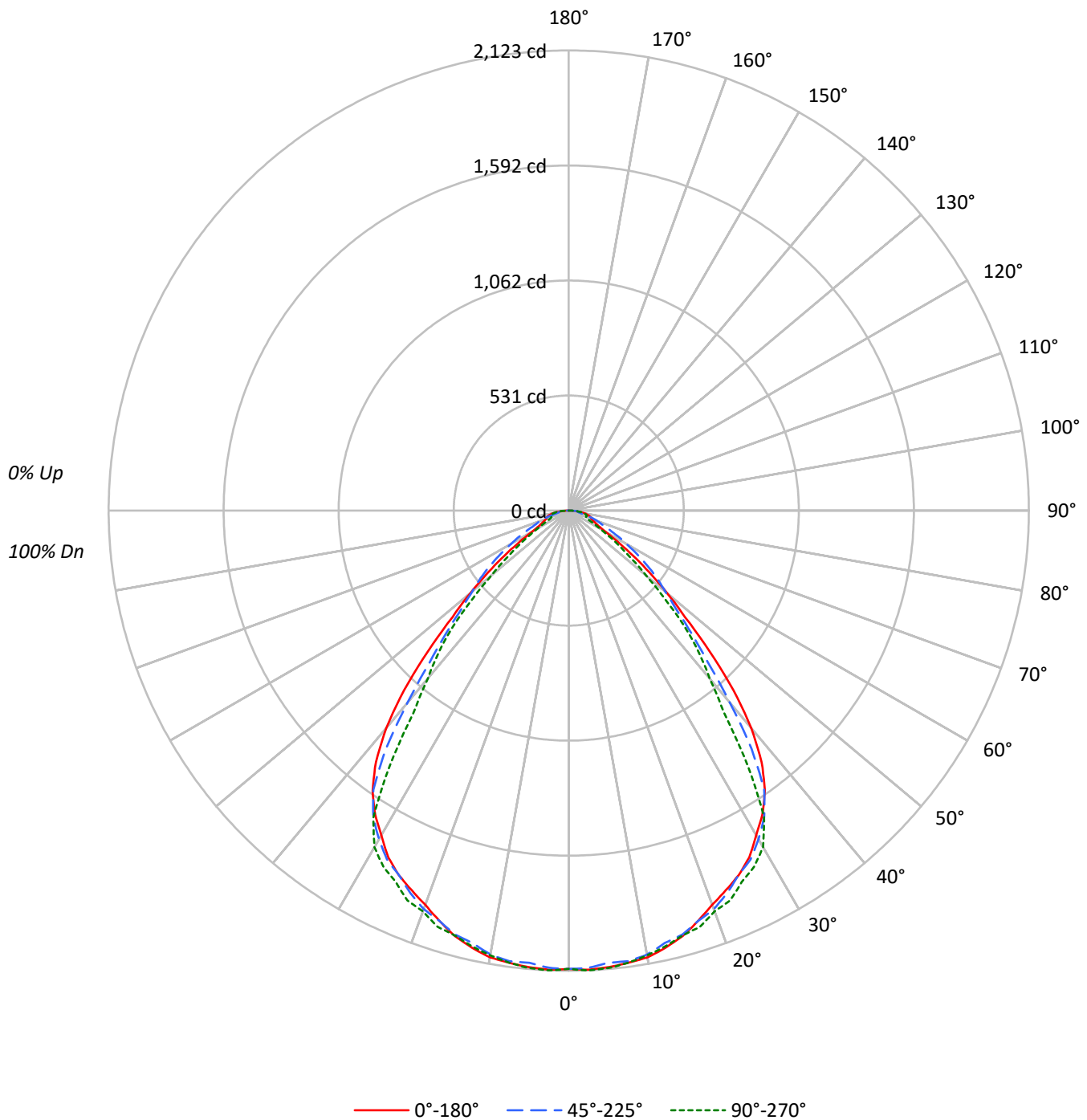
Input Watts (W): 33.666
Input Voltage (V): 120
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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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	50	30	10	50	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°	5691	5691	5691
5°	5710	5656	5723
10°	5719	5684	5694
15°	5661	5641	5653
20°	5543	5603	5634
25°	5509	5506	5611
30°	5375	5440	5573
35°	5183	5162	4743
40°	4602	4062	3556
45°	3492	3038	2876
50°	2477	2431	1951
55°	1696	2076	1341
60°	1048	1656	897
65°	863	1275	649
70°	859	1110	666
75°	1031	795	890
80°	1185	733	1114
85°	1124	1294	1266



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	200.7	5.0
10°-20°	572.7	14.4
20°-30°	861.3	21.7
30°-40°	938.9	23.6
40°-50°	657.4	16.5
50°-60°	372.1	9.4
60°-70°	203.6	5.1
70°-80°	123.4	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°	1634.6	41.1
0°-40°	2573.6	64.7
0°-60°	3603.1	90.6
0°-90°	3977.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	3977.0	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	2115	2115	2115	2115	2115	
5°	2114	2110	2094	2118	2118	201
15°	2032	2026	2025	2054	2029	571
25°	1855	1859	1854	1897	1890	852
35°	1578	1570	1571	1491	1444	972
45°	918	958	798	788	756	713
55°	361	432	442	439	286	330
65°	136	223	200	253	102	139
75°	99	143	76	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°	2114.8	2114.8	2114.8	2114.8	2114.8
2.5°	2120.3	2117.5	2111.2	2123.9	2123.0
5°	2113.9	2110.3	2093.9	2118.5	2118.5
7.5°	2104.8	2095.7	2096.6	2110.3	2103.9
10°	2093.0	2077.5	2080.2	2083.9	2083.9
12.5°	2065.7	2051.1	2043.8	2055.6	2059.3
15°	2032.0	2026.5	2024.7	2053.8	2029.2
17.5°	1984.6	1996.5	1985.5	2009.2	2012.9
20°	1935.5	1958.2	1956.4	1972.8	1967.3
22.5°	1895.4	1910.0	1910.0	1930.0	1946.4
25°	1855.4	1859.0	1854.4	1897.2	1889.9
27.5°	1803.5	1800.7	1815.3	1837.1	1851.7
30°	1729.7	1730.6	1750.7	1779.8	1793.4
32.5°	1662.4	1654.2	1678.7	1691.5	1676.9
35°	1577.7	1570.4	1571.3	1491.2	1443.9
37.5°	1462.1	1468.4	1384.7	1238.1	1176.2
40°	1310.0	1322.8	1156.2	1046.9	1012.3
42.5°	1126.1	1129.8	947.7	912.2	889.4
45°	917.7	957.7	798.4	788.4	755.6
47.5°	727.4	802.0	669.1	675.5	597.2
50°	591.7	666.4	580.8	583.6	466.1
52.5°	467.9	540.8	512.5	504.4	366.0
55°	361.4	432.4	442.4	438.8	285.9
57.5°	265.8	342.3	371.4	385.1	220.3
60°	194.8	279.5	307.7	335.0	166.6
62.5°	154.8	242.2	252.2	292.2	129.3
65°	135.6	223.0	200.3	253.1	102.0
67.5°	121.1	212.1	163.0	224.0	89.2
70°	109.2	191.2	141.1	200.3	84.7
72.5°	109.2	167.5	111.1	177.5	85.6
75°	99.2	142.9	76.5	150.2	85.6
77.5°	88.3	122.0	57.4	122.0	80.1
80°	76.5	95.6	47.3	93.8	71.9
82.5°	56.4	71.9	41.0	70.1	58.3
85°	36.4	59.2	41.9	51.0	41.0
87.5°	17.3	30.0	26.4	25.5	20.9
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)