

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: P291368

Luminaire Tested: **14GR-LD5-40-A19/156-UNV-L83050-W2A1-U-4000K**

Issue Date: 3/3/2020

Test Information

Test Method: LM-79-08
Report Number: P291368
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-4000K
Description: GRLED 1x4 TUNABLE WHITE TROFFER
WITH A19/156 LENS
Light Source: (168) 80 CRI LEDS TUNED TO 4000K CCT
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 4176.0 lumens
Efficiency: N/A
Efficacy: 121.4 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

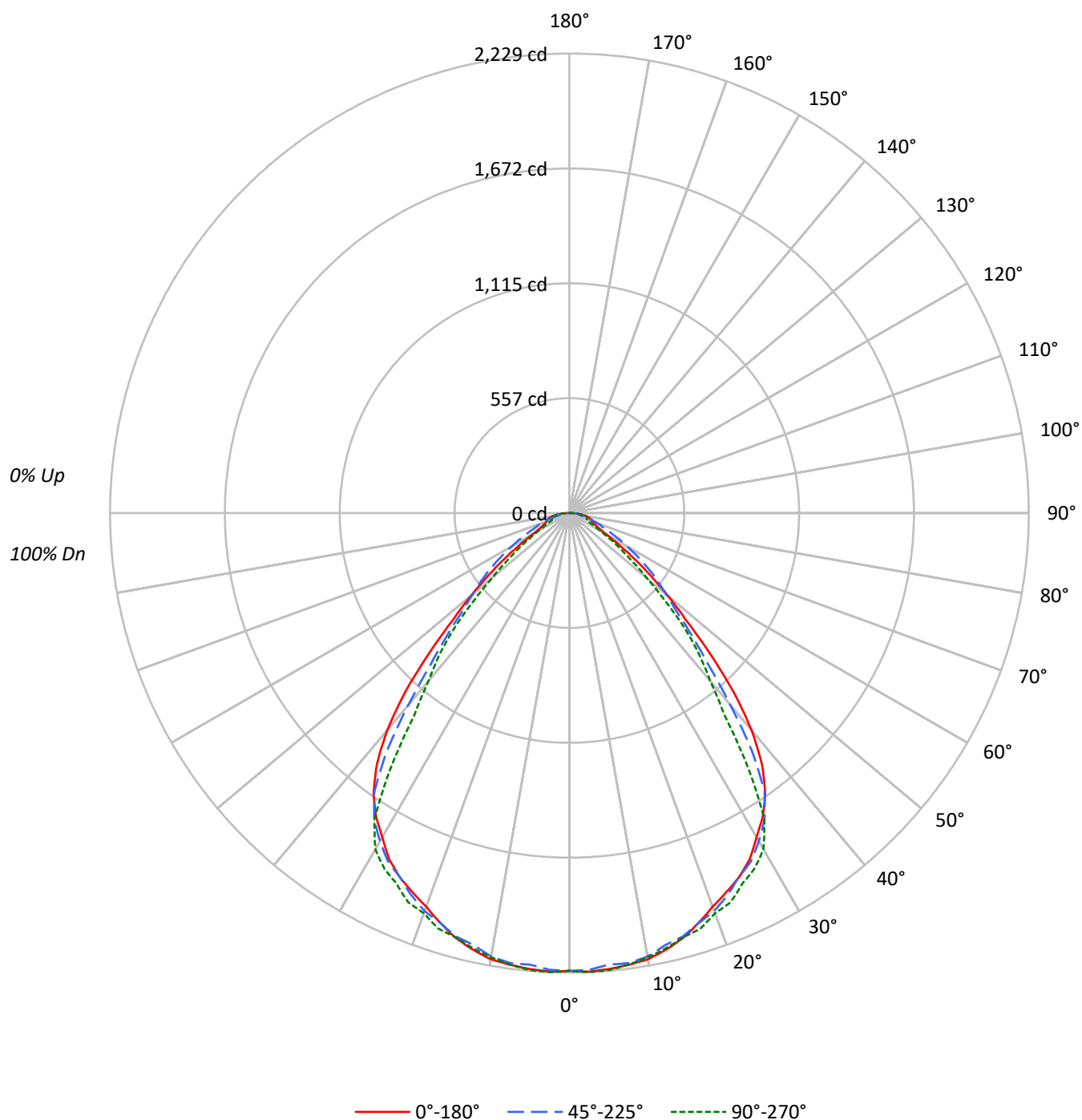
Input Watts (W): 34.41
Input Voltage (V): 120
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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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°	5976	5976	5976
5°	5996	5939	6009
10°	6005	5969	5979
15°	5944	5923	5936
20°	5820	5883	5916
25°	5785	5782	5892
30°	5644	5712	5852
35°	5442	5420	4981
40°	4832	4265	3734
45°	3667	3191	3019
50°	2601	2553	2049
55°	1780	2180	1408
60°	1101	1739	941
65°	907	1339	682
70°	902	1166	699
75°	1083	835	935
80°	1244	770	1170
85°	1179	1359	1328



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	210.7	5.0
10°-20°	601.4	14.4
20°-30°	904.4	21.7
30°-40°	985.9	23.6
40°-50°	690.3	16.5
50°-60°	390.8	9.4
60°-70°	213.8	5.1
70°-80°	129.6	3.1
80°-90°	49.1	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°	1716.4	41.1
0°-40°	2702.3	64.7
0°-60°	3783.4	90.6
0°-90°	4176.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	4176.0	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	2221	2221	2221	2221	2221	
5°	2220	2216	2199	2224	2224	211
15°	2134	2128	2126	2157	2131	600
25°	1948	1952	1947	1992	1984	895
35°	1657	1649	1650	1566	1516	1021
45°	964	1006	838	828	793	748
55°	380	454	465	461	300	347
65°	142	234	210	266	107	146
75°	104	150	80	158	90	108
85°	38	62	44	54	43	42
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	2220.6	2220.6	2220.6	2220.6	2220.6
2.5°	2226.4	2223.5	2216.8	2230.2	2229.2
5°	2219.7	2215.9	2198.6	2224.5	2224.5
7.5°	2210.1	2200.6	2201.5	2215.9	2209.2
10°	2197.7	2181.4	2184.3	2188.1	2188.1
12.5°	2169.0	2153.7	2146.1	2158.5	2162.3
15°	2133.6	2127.9	2126.0	2156.6	2130.8
17.5°	2083.9	2096.4	2084.9	2109.7	2113.6
20°	2032.3	2056.2	2054.3	2071.5	2065.8
22.5°	1990.3	2005.5	2005.5	2026.6	2043.8
25°	1948.2	1952.0	1947.2	1992.2	1984.5
27.5°	1893.7	1890.8	1906.1	1929.1	1944.4
30°	1816.3	1817.2	1838.3	1868.9	1883.2
32.5°	1745.5	1736.9	1762.7	1776.1	1760.8
35°	1656.6	1649.0	1649.9	1565.8	1516.1
37.5°	1535.2	1541.9	1454.0	1300.1	1235.1
40°	1375.6	1389.0	1214.0	1099.3	1063.0
42.5°	1182.5	1186.3	995.1	957.8	933.9
45°	963.6	1005.6	838.4	827.8	793.4
47.5°	763.8	842.2	702.6	709.3	627.1
50°	621.4	699.7	609.9	612.8	489.4
52.5°	491.3	567.8	538.2	529.6	384.3
55°	379.5	454.1	464.6	460.8	300.2
57.5°	279.1	359.4	390.0	404.4	231.3
60°	204.6	293.5	323.1	351.8	174.9
62.5°	162.5	254.3	264.8	306.9	135.7
65°	142.4	234.2	210.3	265.7	107.1
67.5°	127.1	222.7	171.1	235.2	93.7
70°	114.7	200.7	148.2	210.3	88.9
72.5°	114.7	175.9	116.6	186.4	89.9
75°	104.2	150.1	80.3	157.7	89.9
77.5°	92.7	128.1	60.2	128.1	84.1
80°	80.3	100.4	49.7	98.5	75.5
82.5°	59.3	75.5	43.0	73.6	61.2
85°	38.2	62.1	44.0	53.5	43.0
87.5°	18.2	31.5	27.7	26.8	22.0
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)