

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: P291366

Luminaire Tested: **14GR-LD5-40-A19/156-UNV-L83050-W2A1-U-3000K**

Issue Date: 3/3/2020

Test Information

Test Method: LM-79-08
Report Number: P291366
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-3000K
Description: GRLED 1x4 TUNABLE WHITE TROFFER
WITH A19/156 LENS
Light Source: (168) 80 CRI LEDS TUNED TO 3000K CCT
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 3758.0 lumens
Efficiency: N/A
Efficacy: 111.9 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

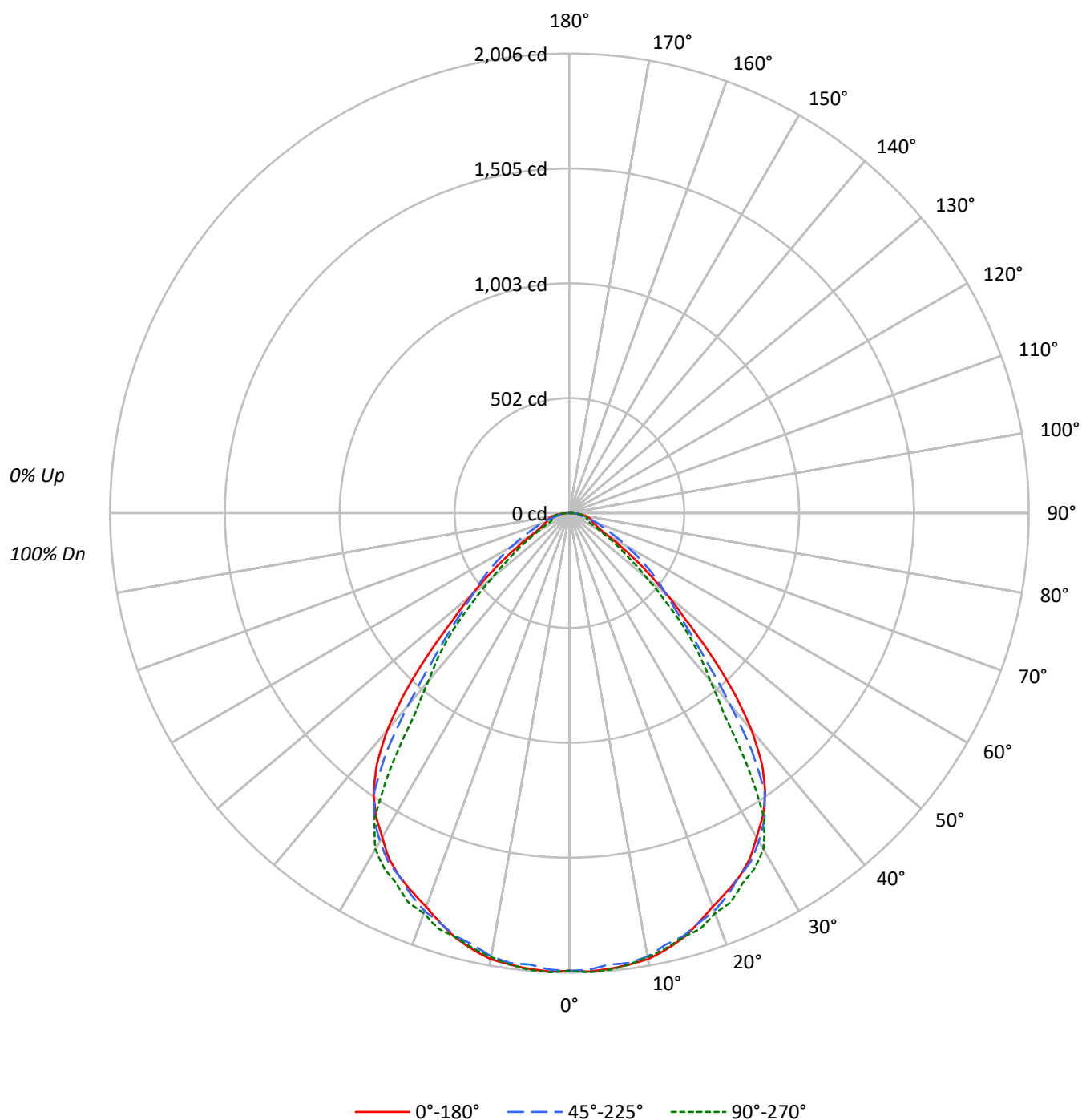
Input Watts (W): 33.573
Input Voltage (V): 120
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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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°	5378	5378	5378
5°	5396	5345	5407
10°	5404	5371	5381
15°	5349	5330	5342
20°	5237	5294	5324
25°	5206	5203	5303
30°	5079	5140	5266
35°	4897	4878	4482
40°	4349	3838	3360
45°	3300	2871	2717
50°	2341	2298	1844
55°	1602	1962	1267
60°	991	1565	847
65°	816	1205	613
70°	812	1049	629
75°	975	752	841
80°	1120	693	1054
85°	1062	1223	1195



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	189.6	5.0
10°-20°	541.2	14.4
20°-30°	813.8	21.7
30°-40°	887.2	23.6
40°-50°	621.2	16.5
50°-60°	351.7	9.4
60°-70°	192.4	5.1
70°-80°	116.6	3.1
80°-90°	44.2	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°	1544.6	41.1
0°-40°	2431.9	64.7
0°-60°	3404.8	90.6
0°-90°	3758.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	3758.0	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	1998	1998	1998	1998	1998	
5°	1998	1994	1979	2002	2002	190
15°	1920	1915	1913	1941	1918	540
25°	1753	1757	1752	1793	1786	805
35°	1491	1484	1485	1409	1364	919
45°	867	905	754	745	714	673
55°	342	409	418	415	270	312
65°	128	211	189	239	96	132
75°	94	135	72	142	81	97
85°	34	56	40	48	39	38
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	1998.4	1998.4	1998.4	1998.4	1998.4
2.5°	2003.5	2000.9	1994.9	2007.0	2006.1
5°	1997.5	1994.1	1978.6	2001.8	2001.8
7.5°	1988.9	1980.3	1981.2	1994.1	1988.0
10°	1977.7	1963.1	1965.7	1969.1	1969.1
12.5°	1951.9	1938.1	1931.3	1942.4	1945.9
15°	1920.1	1914.9	1913.2	1940.7	1917.5
17.5°	1875.3	1886.5	1876.2	1898.6	1902.0
20°	1828.9	1850.4	1848.7	1864.2	1859.0
22.5°	1791.0	1804.8	1804.8	1823.7	1839.2
25°	1753.2	1756.6	1752.3	1792.8	1785.9
27.5°	1704.2	1701.6	1715.3	1736.0	1749.7
30°	1634.5	1635.3	1654.3	1681.8	1694.7
32.5°	1570.8	1563.1	1586.3	1598.3	1584.6
35°	1490.8	1483.9	1484.8	1409.1	1364.4
37.5°	1381.6	1387.6	1308.4	1169.9	1111.4
40°	1237.9	1249.9	1092.5	989.3	956.6
42.5°	1064.1	1067.6	895.5	862.0	840.5
45°	867.1	905.0	754.4	745.0	714.0
47.5°	687.3	757.9	632.3	638.3	564.3
50°	559.2	629.7	548.8	551.4	440.4
52.5°	442.2	511.0	484.3	476.6	345.8
55°	341.5	408.6	418.1	414.6	270.1
57.5°	251.2	323.5	351.0	363.9	208.2
60°	184.1	264.1	290.8	316.6	157.4
62.5°	146.2	228.8	238.3	276.1	122.2
65°	128.2	210.8	189.3	239.1	96.3
67.5°	114.4	200.4	154.0	211.6	84.3
70°	103.2	180.7	133.3	189.3	80.0
72.5°	103.2	158.3	105.0	167.7	80.9
75°	93.8	135.1	72.3	141.9	80.9
77.5°	83.4	115.3	54.2	115.3	75.7
80°	72.3	90.3	44.7	88.6	68.0
82.5°	53.3	68.0	38.7	66.2	55.1
85°	34.4	55.9	39.6	48.2	38.7
87.5°	16.3	28.4	24.9	24.1	19.8
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)