

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: P291467

Luminaire Tested: **14GR-LD5-40-A19/156-UNV-L93050-W2A1-U-4500K**

Issue Date: 3/3/2020

Test Information

Test Method: LM-79-08
Report Number: P291467
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-L93050-W2A1-U-4500K
Description: GRLED 1x4 TUNABLE WHITE TROFFER
WITH A19/156 LENS
Light Source: (168) 90 CRI LEDS TUNED TO 4500K CCT
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 3714.0 lumens
Efficiency: N/A
Efficacy: 105.9 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

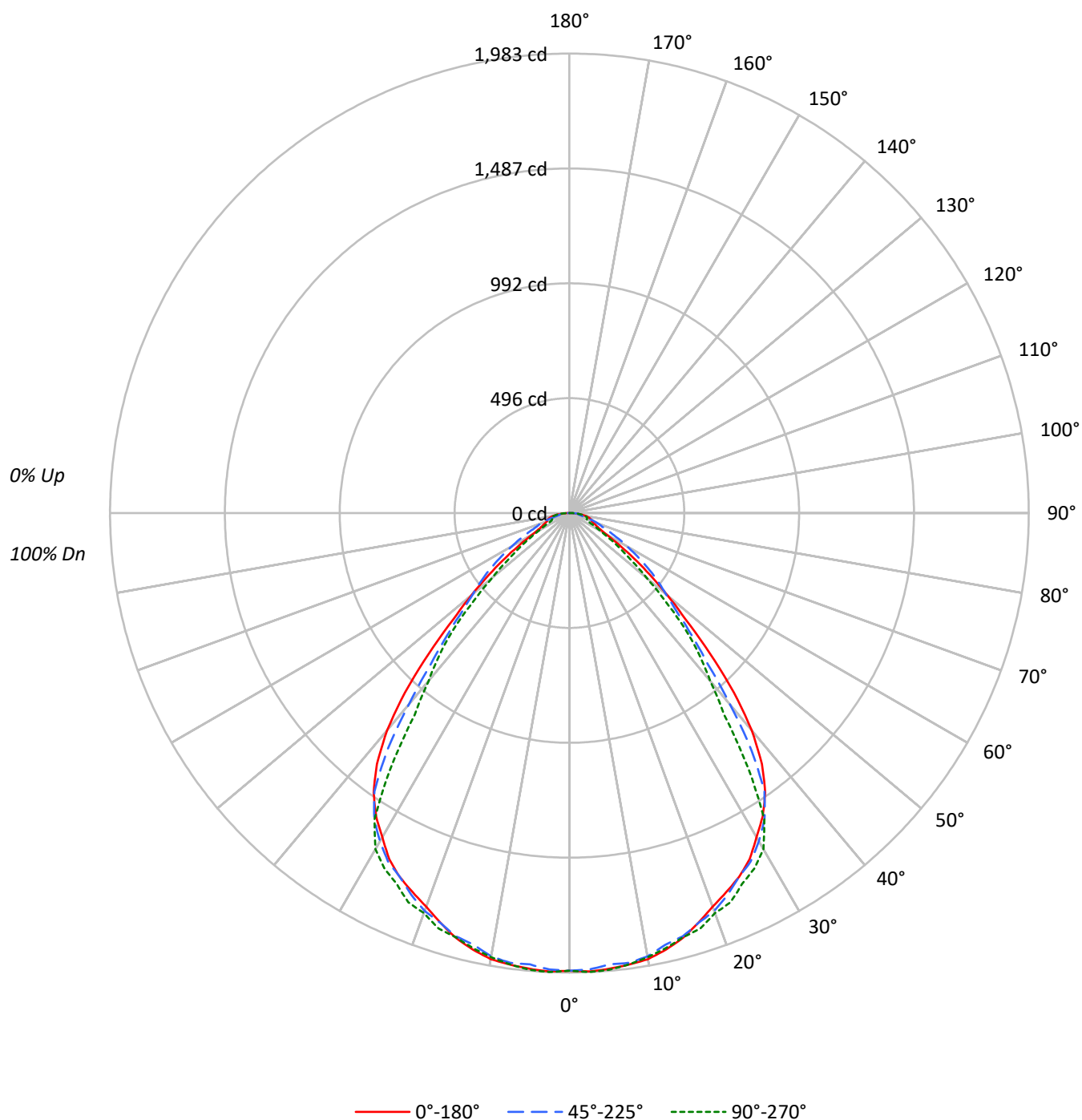
Input Watts (W): 35.061
Input Voltage (V): 120
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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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°	5315	5315	5315
5°	5333	5282	5344
10°	5341	5308	5318
15°	5287	5268	5279
20°	5176	5232	5261
25°	5145	5142	5241
30°	5019	5080	5204
35°	4840	4821	4430
40°	4298	3793	3321
45°	3261	2837	2685
50°	2313	2271	1822
55°	1583	1939	1253
60°	979	1547	837
65°	807	1191	606
70°	803	1037	622
75°	964	742	831
80°	1106	685	1041
85°	1050	1207	1183



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	187.4	5.0
10°-20°	534.8	14.4
20°-30°	804.3	21.7
30°-40°	876.8	23.6
40°-50°	614.0	16.5
50°-60°	347.5	9.4
60°-70°	190.2	5.1
70°-80°	115.3	3.1
80°-90°	43.7	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°	1526.6	41.1
0°-40°	2403.4	64.7
0°-60°	3364.9	90.6
0°-90°	3714.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	3714.0	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	1975	1975	1975	1975	1975	
5°	1974	1971	1955	1978	1978	188
15°	1898	1892	1891	1918	1895	534
25°	1733	1736	1732	1772	1765	796
35°	1473	1467	1467	1393	1348	908
45°	857	894	746	736	706	666
55°	338	404	413	410	267	309
65°	127	208	187	236	95	130
75°	93	134	71	140	80	96
85°	34	55	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°	1975.0	1975.0	1975.0	1975.0	1975.0
2.5°	1980.1	1977.5	1971.6	1983.5	1982.6
5°	1974.1	1970.7	1955.4	1978.4	1978.4
7.5°	1965.6	1957.1	1958.0	1970.7	1964.8
10°	1954.6	1940.1	1942.7	1946.1	1946.1
12.5°	1929.1	1915.4	1908.6	1919.7	1923.1
15°	1897.6	1892.5	1890.8	1918.0	1895.0
17.5°	1853.4	1864.4	1854.2	1876.3	1879.7
20°	1807.5	1828.7	1827.0	1842.3	1837.2
22.5°	1770.1	1783.7	1783.7	1802.4	1817.7
25°	1732.7	1736.1	1731.8	1771.8	1765.0
27.5°	1684.2	1681.6	1695.3	1715.7	1729.3
30°	1615.3	1616.2	1634.9	1662.1	1674.8
32.5°	1552.4	1544.8	1567.7	1579.6	1566.0
35°	1473.4	1466.6	1467.4	1392.6	1348.4
37.5°	1365.4	1371.3	1293.1	1156.2	1098.4
40°	1223.4	1235.3	1079.7	977.7	945.4
42.5°	1051.7	1055.1	885.0	851.9	830.6
45°	857.0	894.4	745.6	736.3	705.6
47.5°	679.3	749.0	624.9	630.8	557.7
50°	552.6	622.3	542.4	545.0	435.3
52.5°	437.0	505.0	478.6	471.0	341.8
55°	337.5	403.8	413.2	409.8	267.0
57.5°	248.3	319.7	346.9	359.6	205.7
60°	181.9	261.0	287.4	312.9	155.6
62.5°	144.5	226.1	235.5	272.9	120.7
65°	126.7	208.3	187.0	236.3	95.2
67.5°	113.1	198.1	152.2	209.1	83.3
70°	102.0	178.5	131.8	187.0	79.1
72.5°	102.0	156.4	103.7	165.8	79.9
75°	92.7	133.5	71.4	140.3	79.9
77.5°	82.5	113.9	53.6	113.9	74.8
80°	71.4	89.3	44.2	87.6	67.2
82.5°	52.7	67.2	38.3	65.5	54.4
85°	34.0	55.3	39.1	47.6	38.3
87.5°	16.2	28.1	24.7	23.8	19.6
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)