

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: P290977

Luminaire Tested: **14GR-LD5-40-A-UNV-L83050-W2A1-U-4500K**

Issue Date: 3/3/2020

Test Information

Test Method: LM-79-08
Report Number: P290977
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (P33314)
Test Lab: INNOVATION CENTER-P3
Issue Date: 3/3/2020
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: METALUX
Catalog Number: 14GR-LD5-40-A-UNV-L83050-W2A1-U-4500K
Description: GRLED 1x4 TUNABLE WHITE TROFFER
WITH A LENS
Light Source: (168) 80 CRI LEDS TUNED TO 4500K CCT
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 4382.0 lumens
Efficiency: N/A
Efficacy: 124.0 lumens/watt
Spacing Criteria (0/90/45): 1.23 / 1.21 / 1.26
Luminous Opening: Rectangular (W 1' x L: 4' x H: 0')
CIE Type: Direct

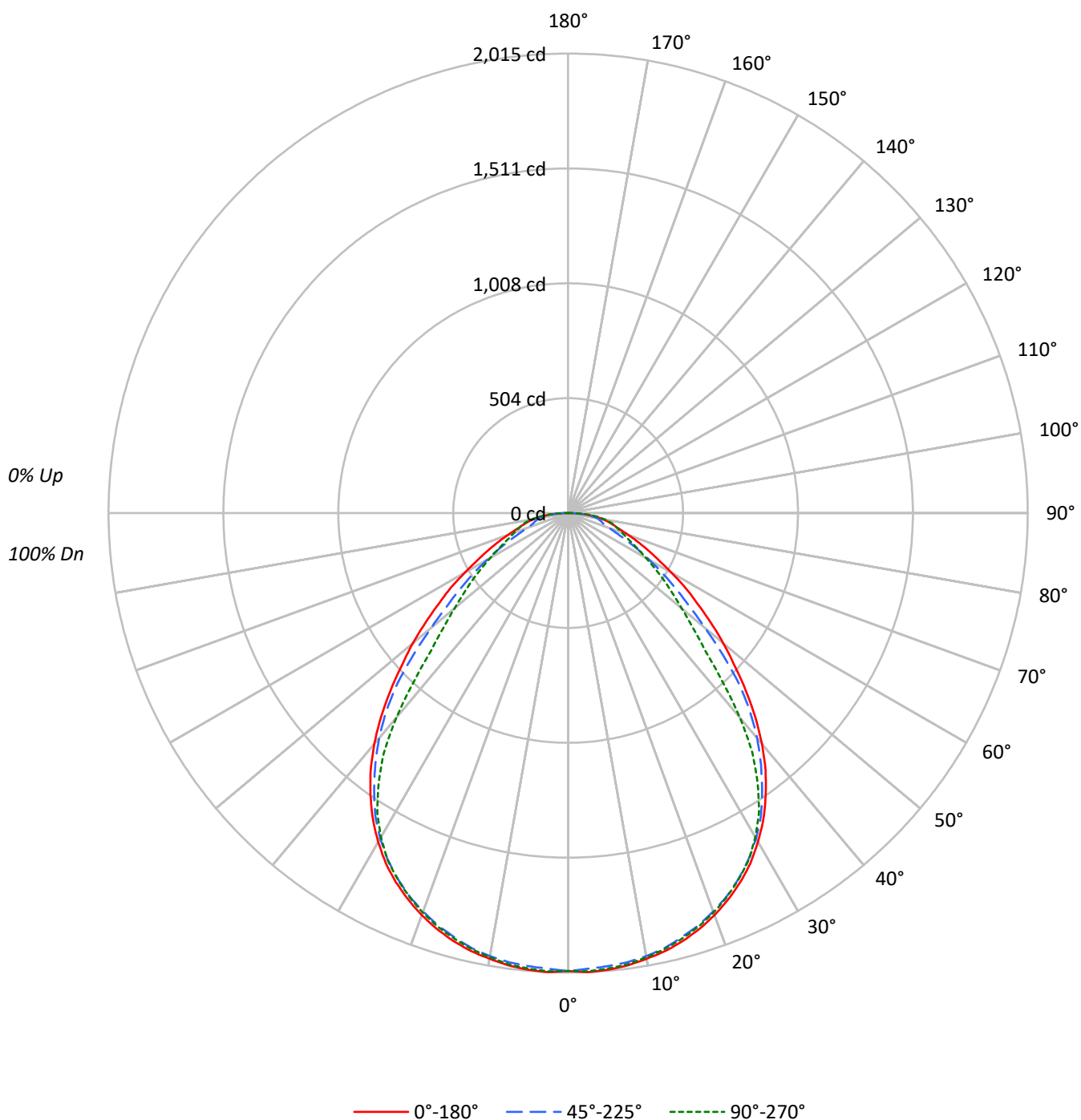
Input Watts (W): 35.34
Input Voltage (V): 120
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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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	30	10	50	30	10	50	30	10		
RCR																									
0	119	119	119	119	116	116	116	116	111	111	111	106	106	106	102	102	102	100							
1	110	106	102	98	107	103	100	97	99	96	94	95	93	91	92	90	88	86							
2	101	94	88	83	99	92	86	82	88	84	80	85	81	78	82	79	76	74							
3	93	84	76	71	91	82	75	70	79	74	69	77	72	68	74	70	66	64							
4	86	75	67	61	84	74	67	61	72	65	60	69	64	59	67	62	58	56							
5	80	68	60	54	78	67	59	53	65	58	53	63	57	52	61	56	52	50							
6	74	62	54	48	72	61	53	47	59	52	47	58	51	47	56	51	46	44							
7	69	57	48	43	67	56	48	43	54	47	42	53	47	42	52	46	42	40							
8	65	52	44	38	63	51	44	38	50	43	38	49	43	38	48	42	38	36							
9	61	48	40	35	59	47	40	35	46	39	35	45	39	35	44	39	34	33							
10	57	44	37	32	56	44	37	32	43	36	32	42	36	32	41	36	31	30							

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	5403	5403	5403
5°	5430	5388	5416
10°	5423	5390	5404
15°	5413	5365	5382
20°	5374	5325	5339
25°	5304	5252	5255
30°	5174	5120	5098
35°	4961	4871	4761
40°	4644	4526	4119
45°	4195	4036	3219
50°	3720	3277	2722
55°	3247	2688	2402
60°	2815	2213	2120
65°	2469	1776	1957
70°	2202	1505	1970
75°	2148	1588	2201
80°	2382	2004	2523
85°	2482	2137	2955



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	190.5	4.3
10°-20°	545.8	12.5
20°-30°	816.4	18.6
30°-40°	921.6	21.0
40°-50°	781.9	17.8
50°-60°	529.0	12.1
60°-70°	315.8	7.2
70°-80°	197.8	4.5
80°-90°	83.2	1.9
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°	1552.8	35.4
0°-40°	2474.4	56.5
0°-60°	3785.3	86.4
0°-90°	4382.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	4382.0	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	2008	2008	2008	2008	2008	
5°	2010	2004	1995	2009	2005	191
15°	1943	1939	1926	1939	1932	548
25°	1786	1780	1769	1777	1770	821
35°	1510	1500	1483	1470	1449	941
45°	1102	1106	1060	909	846	849
55°	692	660	573	513	512	623
65°	388	322	279	297	307	388
75°	207	184	153	202	212	222
85°	80	76	69	90	96	87
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	2008.0	2008.0	2008.0	2008.0	2008.0
2.5°	2015.2	2009.0	1999.9	2012.1	2011.1
5°	2010.1	2004.0	1994.8	2009.0	2005.0
7.5°	2000.9	1995.8	1986.7	1999.9	1995.8
10°	1984.6	1980.5	1972.4	1983.6	1977.5
12.5°	1967.3	1964.3	1954.1	1964.3	1958.2
15°	1942.9	1938.8	1925.6	1938.8	1931.7
17.5°	1912.4	1907.3	1896.1	1907.3	1901.2
20°	1876.7	1870.6	1859.4	1870.6	1864.5
22.5°	1834.0	1828.9	1818.7	1828.9	1820.8
25°	1786.2	1780.0	1768.9	1777.0	1769.9
27.5°	1731.2	1723.1	1712.9	1719.0	1714.9
30°	1665.0	1654.9	1647.7	1647.7	1640.6
32.5°	1592.8	1585.7	1573.4	1566.3	1557.2
35°	1510.3	1500.2	1482.9	1469.6	1449.3
37.5°	1421.8	1409.6	1388.2	1354.6	1327.1
40°	1322.1	1306.8	1288.5	1222.3	1172.5
42.5°	1215.2	1212.1	1180.6	1067.6	998.4
45°	1102.2	1106.3	1060.5	908.9	845.8
47.5°	988.2	1002.5	919.0	770.4	737.9
50°	888.5	893.6	782.7	668.7	650.3
52.5°	785.7	777.6	667.6	588.3	575.0
55°	692.1	659.5	573.0	512.9	511.9
57.5°	609.6	549.6	489.5	444.8	449.8
60°	523.1	456.0	411.2	386.7	393.9
62.5°	446.8	382.7	343.0	335.9	348.1
65°	387.8	321.6	278.9	297.2	307.4
67.5°	331.8	275.8	227.0	270.7	274.8
70°	279.9	239.2	191.3	249.3	250.4
72.5°	237.1	211.7	165.9	225.9	229.0
75°	206.6	184.2	152.7	201.5	211.7
77.5°	181.2	157.8	141.5	174.0	191.3
80°	153.7	127.2	129.3	145.5	162.8
82.5°	118.1	98.7	102.8	120.1	132.3
85°	80.4	76.3	69.2	89.6	95.7
87.5°	42.7	40.7	35.6	50.9	47.8
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)