

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: P291425

Luminaire Tested: **14GR-LD5-40-A19/156-UNV-L82765-W2A1-U-4500K**

Issue Date: 3/3/2020

Test Information

Test Method: LM-79-08
Report Number: P291425
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-L82765-W2A1-U-4500K
Description: GRLED 1x4 TUNABLE WHITE TROFFER
WITH A19/156 LENS
Light Source: (168) 80 CRI LEDS TUNED TO 4500K CCT
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 4040.0 lumens
Efficiency: N/A
Efficacy: 117.7 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

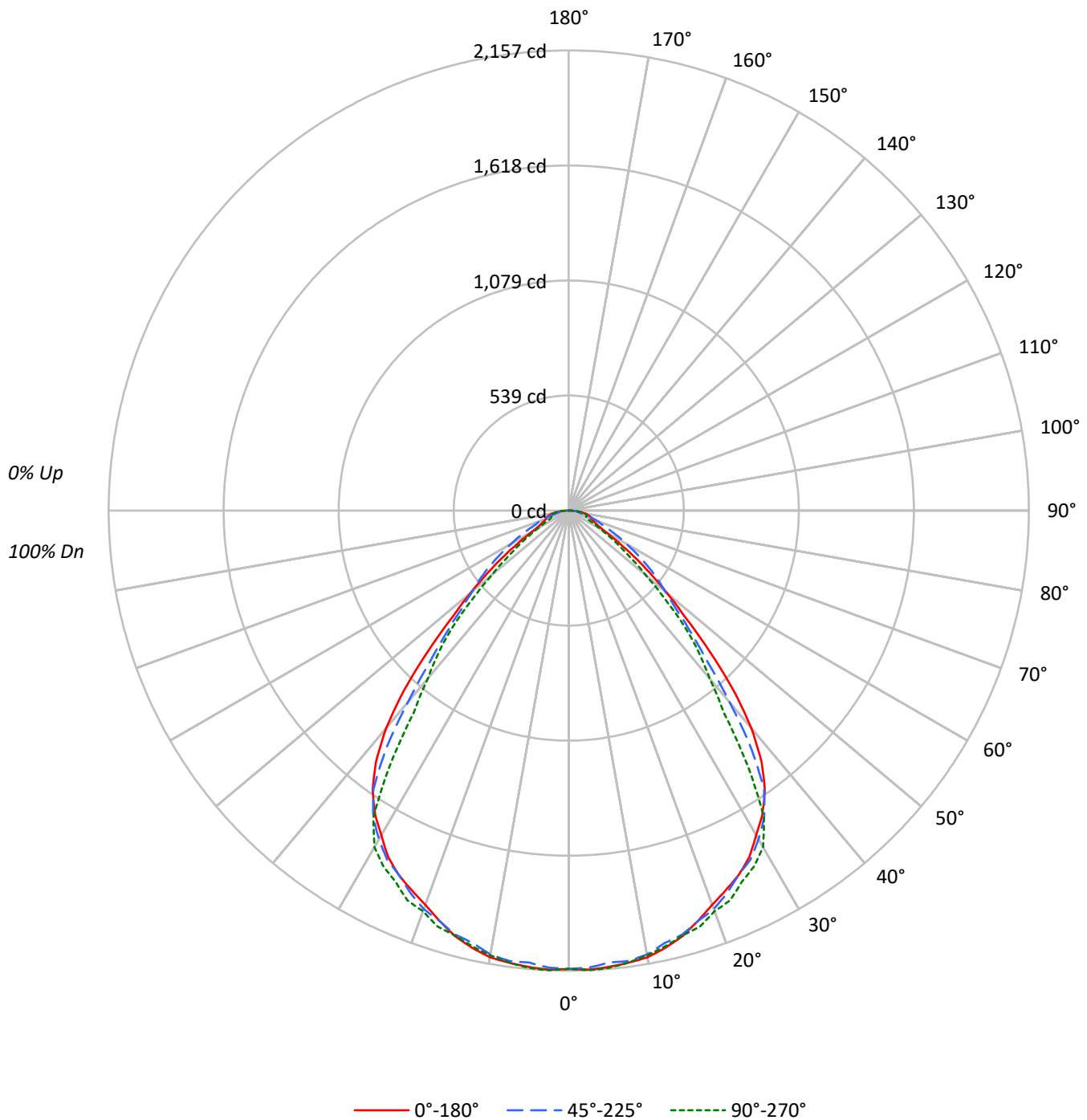
Input Watts (W): 34.317
Input Voltage (V): 120
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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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°	5781	5781	5781
5°	5801	5746	5813
10°	5810	5774	5784
15°	5751	5730	5743
20°	5630	5691	5723
25°	5596	5593	5701
30°	5460	5526	5661
35°	5265	5244	4818
40°	4675	4126	3613
45°	3548	3087	2921
50°	2516	2470	1982
55°	1722	2109	1362
60°	1065	1682	911
65°	877	1296	660
70°	873	1127	677
75°	1048	808	904
80°	1204	745	1133
85°	1142	1312	1284



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	203.8	5.0
10°-20°	581.8	14.4
20°-30°	874.9	21.7
30°-40°	953.8	23.6
40°-50°	667.9	16.5
50°-60°	378.0	9.4
60°-70°	206.9	5.1
70°-80°	125.4	3.1
80°-90°	47.5	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°	1660.5	41.1
0°-40°	2614.3	64.7
0°-60°	3660.2	90.6
0°-90°	4040.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	4040.0	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	2148	2148	2148	2148	2148	
5°	2147	2144	2127	2152	2152	204
15°	2064	2059	2057	2086	2061	581
25°	1885	1888	1884	1927	1920	866
35°	1603	1595	1596	1515	1467	988
45°	932	973	811	801	768	724
55°	367	439	450	446	290	336
65°	138	227	204	257	104	142
75°	101	145	78	153	87	105
85°	37	60	42	52	42	41
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	2148.3	2148.3	2148.3	2148.3	2148.3
2.5°	2153.9	2151.1	2144.6	2157.6	2156.6
5°	2147.4	2143.7	2127.0	2152.0	2152.0
7.5°	2138.1	2128.9	2129.8	2143.7	2137.2
10°	2126.1	2110.4	2113.2	2116.9	2116.9
12.5°	2098.4	2083.6	2076.2	2088.2	2091.9
15°	2064.2	2058.6	2056.8	2086.4	2061.4
17.5°	2016.1	2028.1	2017.0	2041.0	2044.7
20°	1966.1	1989.2	1987.4	2004.0	1998.5
22.5°	1925.4	1940.2	1940.2	1960.6	1977.2
25°	1884.7	1888.4	1883.8	1927.3	1919.9
27.5°	1832.0	1829.3	1844.1	1866.3	1881.0
30°	1757.1	1758.0	1778.4	1808.0	1821.9
32.5°	1688.7	1680.4	1705.3	1718.3	1703.5
35°	1602.7	1595.3	1596.2	1514.8	1466.7
37.5°	1485.2	1491.7	1406.6	1257.7	1194.8
40°	1330.8	1343.7	1174.5	1063.5	1028.4
42.5°	1144.0	1147.7	962.7	926.7	903.5
45°	932.2	972.9	811.1	800.9	767.6
47.5°	738.9	814.8	679.7	686.2	606.7
50°	601.1	677.0	590.0	592.8	473.5
52.5°	475.3	549.3	520.7	512.3	371.8
55°	367.1	439.3	449.5	445.8	290.4
57.5°	270.0	347.7	377.3	391.2	223.8
60°	197.9	283.9	312.6	340.3	169.2
62.5°	157.2	246.0	256.2	296.9	131.3
65°	137.8	226.6	203.5	257.1	103.6
67.5°	123.0	215.5	165.5	227.5	90.6
70°	111.0	194.2	143.3	203.5	86.0
72.5°	111.0	170.2	112.8	180.3	86.9
75°	100.8	145.2	77.7	152.6	86.9
77.5°	89.7	123.9	58.3	123.9	81.4
80°	77.7	97.1	48.1	95.3	73.1
82.5°	57.3	73.1	41.6	71.2	59.2
85°	37.0	60.1	42.5	51.8	41.6
87.5°	17.6	30.5	26.8	25.9	21.3
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)