

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: P292697

Luminaire Tested: **22GR-LD5-40-A19/156-UNV-L92765-W2A1-U-3500K**

Issue Date: 3/3/2020

Test Information

Test Method: LM-79-08
Report Number: P292697
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (P33284)
Test Lab: INNOVATION CENTER-P3
Issue Date: 3/3/2020
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: METALUX
Catalog Number: 22GR-LD5-40-A19/156-UNV-L92765-W2A1-U-3500K
Description: GRLED 2x2 TUNABLE WHITE TROFFER
WITH A19/156 LENS
Light Source: (168) 90 CRI LEDS TUNED TO 3500K CCT
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 3436.0 lumens
Efficiency: N/A
Efficacy: 105.9 lumens/watt
Spacing Criteria (0/90/45): 1.19 / 1.24 / 1.21
Luminous Opening: Rectangular (W 2' x L: 2' x H: 0')
CIE Type: Direct

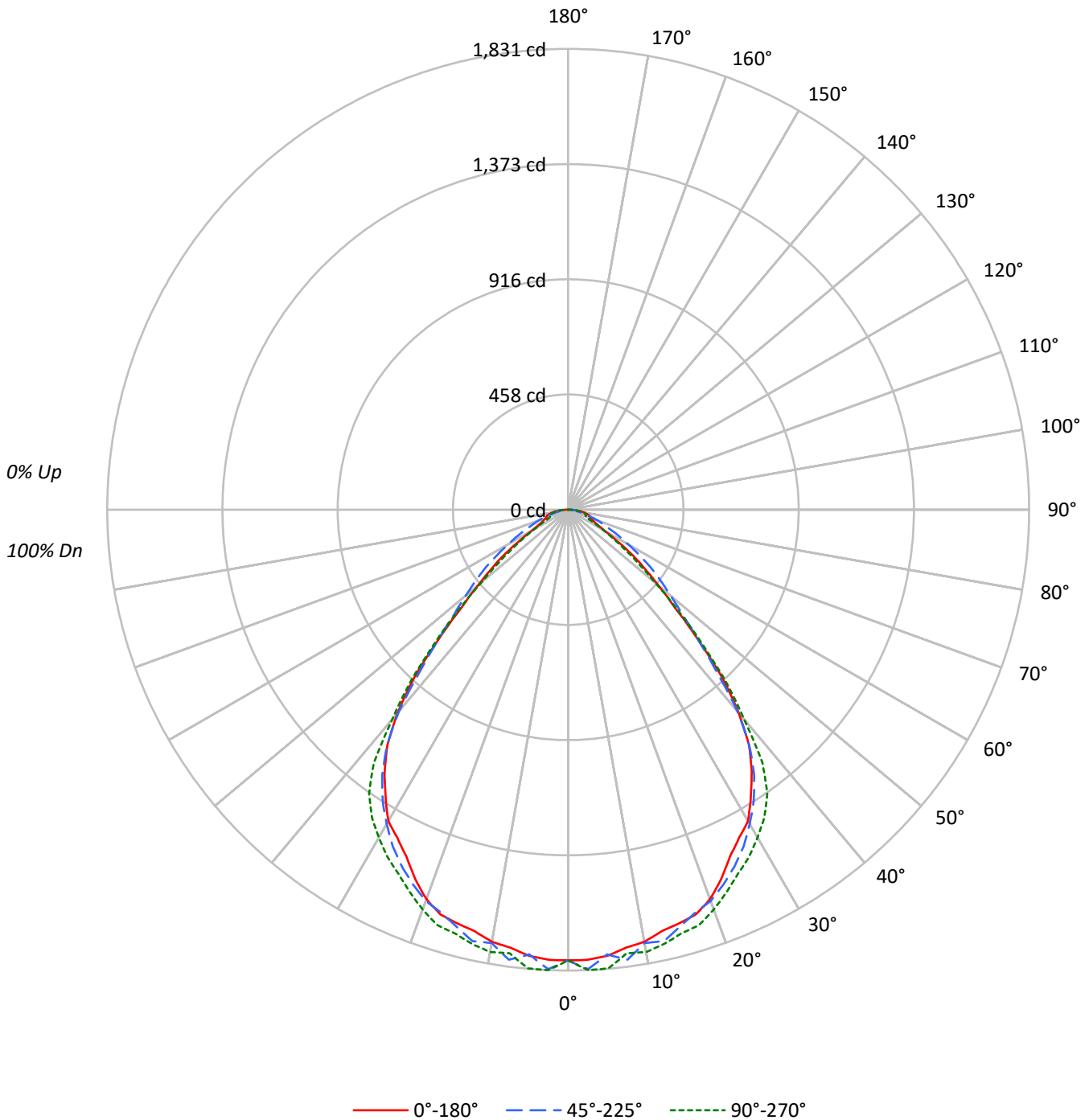
Input Watts (W): 32.457
Input Voltage (V): 120
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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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					0
RW	70	50	30	10	70	50	30	10	50	30	10	50	30	10	50	30	10	50	30	10	50	30	10	0		
RCR																										
0	119	119	119	119	116	116	116	116	111	111	111	106	106	106	102	102	102	100					100			
1	111	107	103	100	108	105	102	99	101	98	96	97	95	93	93	91	90	88					88			
2	103	96	90	85	100	94	89	85	91	86	83	88	84	81	85	82	79	77					77			
3	95	86	79	74	93	85	79	73	82	77	72	79	75	71	77	73	70	68					68			
4	88	78	71	65	86	77	70	64	75	68	64	72	67	63	70	66	62	60					60			
5	82	71	63	58	80	70	63	57	68	62	57	66	61	56	64	59	56	54					54			
6	77	65	57	51	75	64	57	51	62	56	51	61	55	50	59	54	50	48					48			
7	72	60	52	46	70	59	51	46	57	51	46	56	50	46	55	49	45	44					44			
8	67	55	47	42	66	54	47	42	53	46	42	52	46	41	51	45	41	40					40			
9	63	51	43	38	62	50	43	38	49	43	38	48	42	38	47	42	38	36					36			
10	59	47	40	35	58	47	40	35	46	39	35	45	39	35	44	39	35	33					33			

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	4819	4819	4819
5°	4807	4791	4942
10°	4763	4776	4876
15°	4741	4777	4854
20°	4715	4739	4841
25°	4514	4642	4738
30°	4440	4480	4671
35°	4175	4229	4529
40°	3700	3674	3819
45°	2764	2770	2847
50°	1945	2213	1884
55°	1436	1869	1287
60°	898	1477	841
65°	732	1170	588
70°	726	975	580
75°	900	715	750
80°	1004	564	916
85°	1000	1050	1025



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	170.5	5.0
10°-20°	485.5	14.1
20°-30°	719.1	20.9
30°-40°	805.5	23.4
40°-50°	591.9	17.2
50°-60°	330.8	9.6
60°-70°	184.4	5.4
70°-80°	108.3	3.2
80°-90°	39.8	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°	1375.2	40.0
0°-40°	2180.7	63.5
0°-60°	3103.5	90.3
0°-90°	3436.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	3436.0	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	1791	1791	1791	1791	1791	
5°	1779	1813	1774	1810	1830	168
15°	1702	1712	1715	1741	1742	481
25°	1520	1532	1563	1585	1596	705
35°	1271	1272	1287	1346	1379	787
45°	726	785	728	780	748	567
55°	306	372	398	398	274	273
65°	115	204	184	236	92	119
75°	87	122	69	138	72	87
85°	32	48	34	44	33	35
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	1790.7	1790.7	1790.7	1790.7	1790.7
2.5°	1789.9	1806.1	1827.2	1829.6	1831.2
5°	1779.4	1812.6	1773.7	1810.2	1829.6
7.5°	1755.1	1775.4	1803.7	1767.3	1777.8
10°	1743.0	1747.8	1747.8	1793.2	1784.3
12.5°	1715.5	1747.8	1755.9	1747.0	1766.5
15°	1701.7	1712.2	1714.6	1740.6	1742.2
17.5°	1686.3	1683.9	1678.2	1696.8	1730.0
20°	1646.6	1637.7	1654.7	1677.4	1690.4
22.5°	1588.4	1590.8	1611.0	1629.6	1644.2
25°	1520.4	1532.5	1563.3	1585.1	1595.6
27.5°	1469.4	1487.2	1508.2	1534.1	1555.2
30°	1428.9	1427.3	1441.8	1479.1	1503.4
32.5°	1350.3	1356.0	1371.4	1415.9	1449.9
35°	1271.0	1271.8	1287.2	1345.5	1378.7
37.5°	1179.5	1173.1	1182.0	1245.1	1267.0
40°	1053.2	1054.9	1046.0	1090.5	1087.2
42.5°	905.9	918.9	872.7	931.0	926.9
45°	726.2	785.3	727.8	779.6	748.0
47.5°	573.2	660.6	612.8	650.9	591.8
50°	464.7	554.5	528.6	545.6	450.1
52.5°	381.3	454.2	462.3	466.3	351.3
55°	306.0	372.4	398.3	397.5	274.4
57.5°	225.9	302.8	332.7	344.9	208.1
60°	166.8	251.8	274.4	301.2	156.2
62.5°	134.4	221.0	226.7	263.9	119.0
65°	115.0	204.0	183.8	235.6	92.3
67.5°	102.0	190.2	149.8	210.5	78.5
70°	92.3	169.2	123.9	188.6	73.7
72.5°	89.9	144.1	95.5	168.4	72.9
75°	86.6	122.2	68.8	138.4	72.1
77.5°	74.5	104.4	49.4	106.9	67.2
80°	64.8	83.4	36.4	80.1	59.1
82.5°	50.2	63.1	32.4	60.7	47.8
85°	32.4	47.8	34.0	43.7	33.2
87.5°	15.4	26.7	24.3	23.5	17.0
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)