

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: P292641

Luminaire Tested: **22GR-LD5-40-A19/156-UNV-L93050-W2A1-U-3500K**

Issue Date: 3/3/2020

Test Information

Test Method: LM-79-08
Report Number: P292641
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-L93050-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: 3413.0 lumens
Efficiency: N/A
Efficacy: 103.4 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

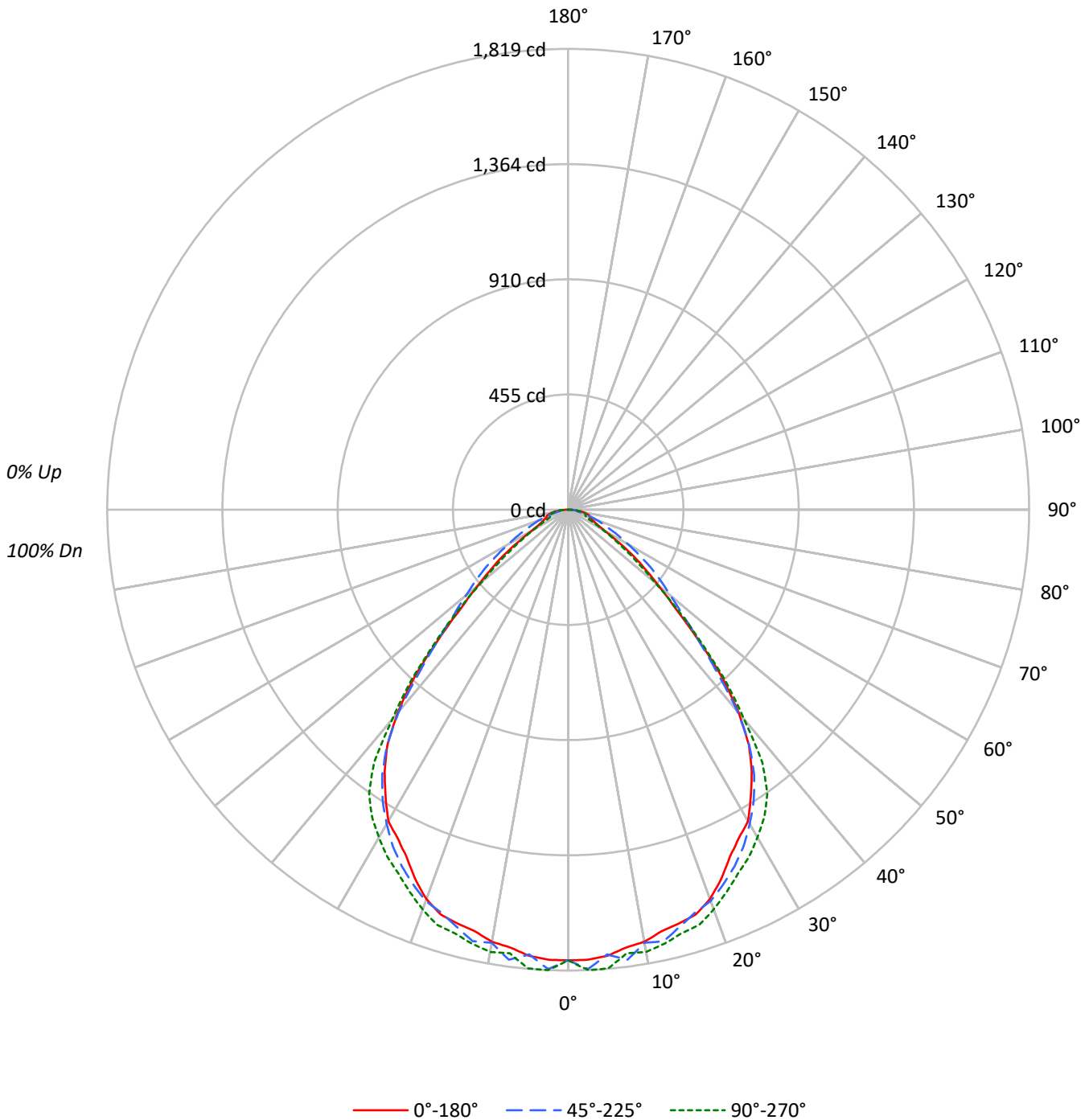
Input Watts (W): 33.015
Input Voltage (V): 120
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



TEST NUMBER: P292641

CATALOG NUMBER: 22GR-LD5-40-A19/156-UNV-L93050-W2A1-U-3500K

Luminous Intensity Polar Plot





TEST NUMBER: P292641

CATALOG NUMBER: 22GR-LD5-40-A19/156-UNV-L93050-W2A1-U-3500K

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°	4787	4787	4787
5°	4774	4759	4909
10°	4731	4744	4843
15°	4709	4745	4821
20°	4684	4707	4808
25°	4484	4611	4706
30°	4410	4450	4640
35°	4147	4200	4499
40°	3675	3650	3794
45°	2745	2751	2828
50°	1932	2198	1872
55°	1426	1856	1279
60°	892	1467	835
65°	727	1162	584
70°	721	968	576
75°	894	711	744
80°	996	561	910
85°	994	1044	1019



TEST NUMBER: P292641

CATALOG NUMBER: 22GR-LD5-40-A19/156-UNV-L93050-W2A1-U-3500K

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	169.3	5.0
10°-20°	482.3	14.1
20°-30°	714.3	20.9
30°-40°	800.1	23.4
40°-50°	587.9	17.2
50°-60°	328.6	9.6
60°-70°	183.2	5.4
70°-80°	107.6	3.2
80°-90°	39.5	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°	1366.0	40.0
0°-40°	2166.1	63.5
0°-60°	3082.7	90.3
0°-90°	3413.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	3413.0	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	1779	1779	1779	1779	1779	
5°	1768	1800	1762	1798	1817	167
15°	1690	1701	1703	1729	1730	477
25°	1510	1522	1553	1574	1585	700
35°	1262	1263	1279	1336	1370	782
45°	721	780	723	774	743	564
55°	304	370	396	395	273	271
65°	114	203	182	234	92	118
75°	86	121	68	138	72	86
85°	32	47	34	43	33	35
90°	0	0	0	0	0	



TEST NUMBER: P292641

CATALOG NUMBER: 22GR-LD5-40-A19/156-UNV-L93050-W2A1-U-3500K

CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	1778.8	1778.8	1778.8	1778.8	1778.8
2.5°	1778.0	1794.0	1814.9	1817.4	1819.0
5°	1767.5	1800.5	1761.9	1798.1	1817.4
7.5°	1743.4	1763.5	1791.6	1755.4	1765.9
10°	1731.3	1736.1	1736.1	1781.2	1772.3
12.5°	1704.0	1736.1	1744.2	1735.3	1754.6
15°	1690.3	1700.8	1703.2	1728.9	1730.5
17.5°	1675.0	1672.6	1667.0	1685.5	1718.5
20°	1635.6	1626.8	1643.7	1666.2	1679.0
22.5°	1577.7	1580.1	1600.2	1618.7	1633.2
25°	1510.2	1522.2	1552.8	1574.5	1585.0
27.5°	1459.5	1477.2	1498.1	1523.8	1544.8
30°	1419.3	1417.7	1432.2	1469.2	1493.3
32.5°	1341.3	1346.9	1362.2	1406.4	1440.2
35°	1262.5	1263.3	1278.6	1336.5	1369.5
37.5°	1171.6	1165.2	1174.0	1236.8	1258.5
40°	1046.2	1047.8	1039.0	1083.2	1080.0
42.5°	899.8	912.7	866.9	924.8	920.7
45°	721.3	780.0	722.9	774.4	743.0
47.5°	569.3	656.2	608.7	646.5	587.8
50°	461.6	550.8	525.1	542.0	447.1
52.5°	378.8	451.1	459.2	463.2	349.0
55°	304.0	369.9	395.6	394.8	272.6
57.5°	224.4	300.7	330.5	342.6	206.7
60°	165.7	250.1	272.6	299.1	155.2
62.5°	133.5	219.5	225.2	262.2	118.2
65°	114.2	202.6	182.5	234.0	91.7
67.5°	101.3	189.0	148.8	209.1	78.0
70°	91.7	168.1	123.0	187.4	73.2
72.5°	89.3	143.1	94.9	167.3	72.4
75°	86.0	121.4	68.4	137.5	71.6
77.5°	74.0	103.7	49.1	106.1	66.7
80°	64.3	82.8	36.2	79.6	58.7
82.5°	49.9	62.7	32.2	60.3	47.4
85°	32.2	47.4	33.8	43.4	33.0
87.5°	15.3	26.5	24.1	23.3	16.9
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)