

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: P292645

Luminaire Tested: **22GR-LD5-43-A19/156-UNV-L93050-W2A1-U-3000K**

Issue Date: 3/3/2020

Test Information

Test Method: LM-79-08
Report Number: P292645
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-LD5-43-A19/156-UNV-L93050-W2A1-U-3000K
Description: GRLED 2x2 TUNABLE WHITE TROFFER
WITH A19/156 LENS
Light Source: (168) 90 CRI LEDS TUNED TO 3000K CCT
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 3335.0 lumens
Efficiency: N/A
Efficacy: 92.7 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

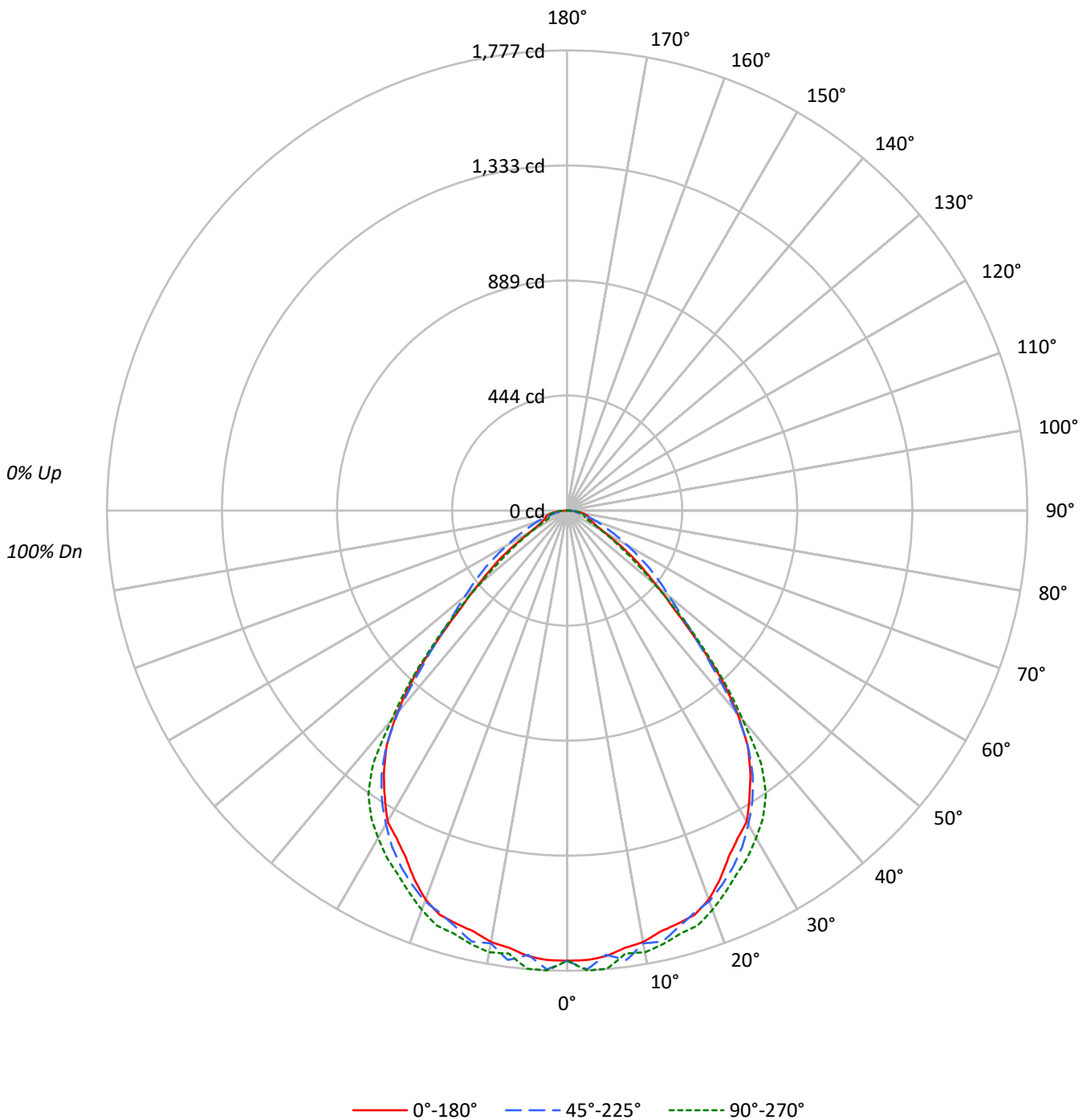
Input Watts (W): 35.991
Input Voltage (V): 120
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



TEST NUMBER: P292645

CATALOG NUMBER: 22GR-LD5-43-A19/156-UNV-L93050-W2A1-U-3000K

Luminous Intensity Polar Plot





TEST NUMBER: P292645

CATALOG NUMBER: 22GR-LD5-43-A19/156-UNV-L93050-W2A1-U-3000K

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°	4677	4677	4677
5°	4665	4650	4797
10°	4623	4636	4732
15°	4601	4636	4711
20°	4577	4599	4698
25°	4382	4505	4598
30°	4309	4348	4534
35°	4052	4104	4396
40°	3591	3566	3707
45°	2682	2688	2763
50°	1888	2148	1829
55°	1393	1814	1250
60°	871	1434	816
65°	711	1136	571
70°	705	946	563
75°	874	695	727
80°	975	549	890
85°	969	1019	994



TEST NUMBER: P292645

CATALOG NUMBER: 22GR-LD5-43-A19/156-UNV-L93050-W2A1-U-3000K

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	165.5	5.0
10°-20°	471.3	14.1
20°-30°	698.0	20.9
30°-40°	781.9	23.4
40°-50°	574.5	17.2
50°-60°	321.1	9.6
60°-70°	179.0	5.4
70°-80°	105.2	3.2
80°-90°	38.6	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°	1334.7	40.0
0°-40°	2116.6	63.5
0°-60°	3012.2	90.3
0°-90°	3335.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	3335.0	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	1738	1738	1738	1738	1738	
5°	1727	1759	1722	1757	1776	163
15°	1652	1662	1664	1689	1691	466
25°	1476	1488	1517	1538	1549	684
35°	1234	1234	1249	1306	1338	764
45°	705	762	706	757	726	551
55°	297	362	387	386	266	265
65°	112	198	178	229	90	115
75°	84	119	67	134	70	84
85°	31	46	33	42	32	34
90°	0	0	0	0	0	



TEST NUMBER: P292645

CATALOG NUMBER: 22GR-LD5-43-A19/156-UNV-L93050-W2A1-U-3000K

CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	1738.1	1738.1	1738.1	1738.1	1738.1
2.5°	1737.3	1753.0	1773.5	1775.8	1777.4
5°	1727.1	1759.3	1721.6	1757.0	1775.8
7.5°	1703.5	1723.2	1750.7	1715.3	1725.5
10°	1691.7	1696.5	1696.5	1740.5	1731.8
12.5°	1665.0	1696.5	1704.3	1695.7	1714.5
15°	1651.7	1661.9	1664.2	1689.4	1691.0
17.5°	1636.7	1634.4	1628.9	1647.0	1679.2
20°	1598.2	1589.6	1606.1	1628.1	1640.7
22.5°	1541.7	1544.0	1563.7	1581.7	1595.9
25°	1475.7	1487.5	1517.3	1538.5	1548.7
27.5°	1426.2	1443.4	1463.9	1489.0	1509.5
30°	1386.9	1385.3	1399.4	1435.6	1459.2
32.5°	1310.7	1316.2	1331.1	1374.3	1407.3
35°	1233.6	1234.4	1249.4	1305.9	1338.2
37.5°	1144.9	1138.6	1147.2	1208.5	1229.7
40°	1022.3	1023.9	1015.2	1058.4	1055.3
42.5°	879.3	891.8	847.1	903.6	899.7
45°	704.8	762.2	706.4	756.7	726.0
47.5°	556.3	641.2	594.8	631.8	574.4
50°	451.0	538.2	513.1	529.6	436.9
52.5°	370.1	440.8	448.7	452.6	341.0
55°	297.0	361.5	386.6	385.8	266.4
57.5°	219.2	293.9	322.9	334.7	201.9
60°	161.9	244.4	266.4	292.3	151.7
62.5°	130.4	214.5	220.0	256.2	115.5
65°	111.6	198.0	178.4	228.7	89.6
67.5°	99.0	184.7	145.4	204.3	76.2
70°	89.6	164.2	120.2	183.1	71.5
72.5°	87.2	139.9	92.7	163.4	70.7
75°	84.1	118.7	66.8	134.4	69.9
77.5°	72.3	101.4	47.9	103.7	65.2
80°	62.9	80.9	35.4	77.8	57.4
82.5°	48.7	61.3	31.4	58.9	46.4
85°	31.4	46.4	33.0	42.4	32.2
87.5°	14.9	25.9	23.6	22.8	16.5
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)