

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: P292534

Luminaire Tested: **22GR-LD5-32-A19/156-UNV-L83050-W2A1-U-4000K**

Issue Date: 3/3/2020

Test Information

Test Method: LM-79-08
Report Number: P292534
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-LD5-32-A19/156-UNV-L83050-W2A1-U-4000K
Description: GRLED 2x2 TUNABLE WHITE TROFFER
WITH A19/156 LENS
Light Source: (168) 80 CRI LEDS TUNED TO 4000K CCT
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 3332.0 lumens
Efficiency: N/A
Efficacy: 132.7 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

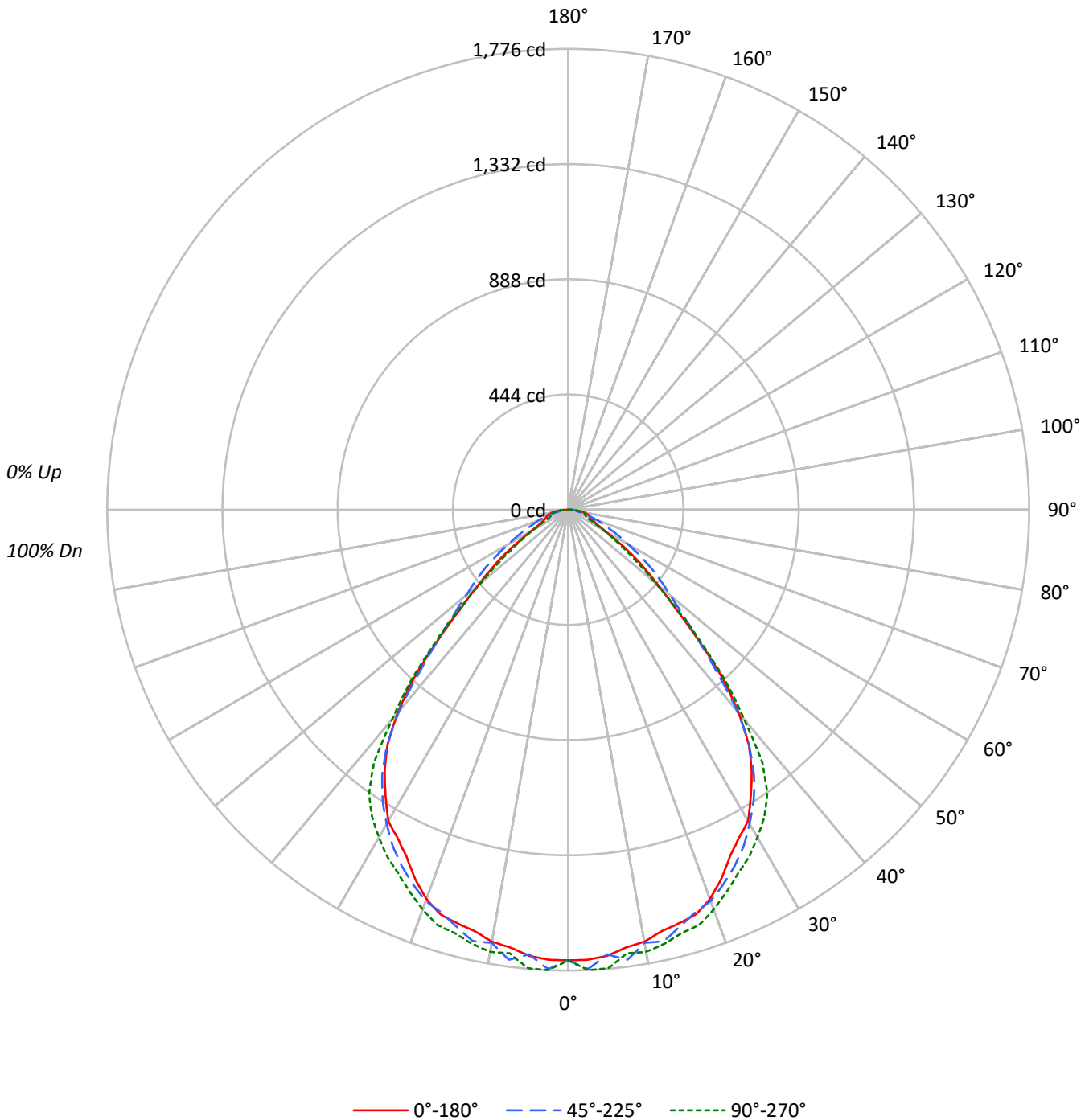
Input Watts (W): 25.11
Input Voltage (V): 120
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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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°	4673	4673	4673
5°	4661	4646	4793
10°	4618	4631	4728
15°	4597	4632	4707
20°	4573	4595	4694
25°	4377	4501	4594
30°	4305	4345	4530
35°	4049	4100	4392
40°	3588	3563	3704
45°	2680	2686	2761
50°	1886	2146	1827
55°	1392	1812	1248
60°	870	1432	815
65°	710	1135	570
70°	704	945	562
75°	873	693	727
80°	973	547	888
85°	969	1019	994



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	165.3	5.0
10°-20°	470.9	14.1
20°-30°	697.4	20.9
30°-40°	781.2	23.4
40°-50°	574.0	17.2
50°-60°	320.8	9.6
60°-70°	178.8	5.4
70°-80°	105.0	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°	1333.5	40.0
0°-40°	2114.7	63.5
0°-60°	3009.5	90.3
0°-90°	3332.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	3332.0	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	1736	1736	1736	1736	1736	
5°	1726	1758	1720	1755	1774	163
15°	1650	1660	1663	1688	1689	466
25°	1474	1486	1516	1537	1547	683
35°	1232	1233	1248	1305	1337	764
45°	704	762	706	756	725	550
55°	297	361	386	386	266	265
65°	112	198	178	228	90	115
75°	84	118	67	134	70	84
85°	31	46	33	42	32	34
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	1736.5	1736.5	1736.5	1736.5	1736.5
2.5°	1735.8	1751.5	1771.9	1774.2	1775.8
5°	1725.6	1757.7	1720.1	1755.4	1774.2
7.5°	1702.0	1721.6	1749.1	1713.8	1724.0
10°	1690.2	1694.9	1694.9	1738.9	1730.3
12.5°	1663.5	1694.9	1702.8	1694.2	1713.0
15°	1650.2	1660.4	1662.8	1687.9	1689.4
17.5°	1635.3	1632.9	1627.4	1645.5	1677.7
20°	1596.8	1588.2	1604.7	1626.6	1639.2
22.5°	1540.3	1542.6	1562.3	1580.3	1594.5
25°	1474.3	1486.1	1515.9	1537.1	1547.3
27.5°	1424.9	1442.1	1462.6	1487.7	1508.1
30°	1385.6	1384.1	1398.2	1434.3	1457.9
32.5°	1309.5	1315.0	1329.9	1373.1	1406.0
35°	1232.5	1233.3	1248.2	1304.8	1337.0
37.5°	1143.8	1137.5	1146.2	1207.4	1228.6
40°	1021.4	1022.9	1014.3	1057.5	1054.3
42.5°	878.5	891.0	846.3	902.8	898.9
45°	704.2	761.5	705.8	756.0	725.4
47.5°	555.8	640.6	594.3	631.2	573.9
50°	450.6	537.8	512.6	529.1	436.5
52.5°	369.8	440.4	448.3	452.2	340.7
55°	296.8	361.1	386.2	385.5	266.1
57.5°	219.0	293.6	322.7	334.4	201.8
60°	161.7	244.2	266.1	292.0	151.5
62.5°	130.3	214.3	219.8	255.9	115.4
65°	111.5	197.8	178.2	228.5	89.5
67.5°	98.9	184.5	145.2	204.1	76.2
70°	89.5	164.1	120.1	182.9	71.4
72.5°	87.1	139.7	92.6	163.3	70.7
75°	84.0	118.5	66.7	134.2	69.9
77.5°	72.2	101.3	47.9	103.6	65.2
80°	62.8	80.9	35.3	77.7	57.3
82.5°	48.7	61.2	31.4	58.9	46.3
85°	31.4	46.3	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)