

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: P292632

Luminaire Tested: **22GR-LD5-32-A19/156-UNV-L93050-W2A1-U-4000K**

Issue Date: 3/3/2020

Test Information

Test Method: LM-79-08
Report Number: P292632
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-L93050-W2A1-U-4000K
Description: GRLED 2x2 TUNABLE WHITE TROFFER
WITH A19/156 LENS
Light Source: (168) 90 CRI LEDS TUNED TO 4000K CCT
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 2914.0 lumens
Efficiency: N/A
Efficacy: 115.6 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

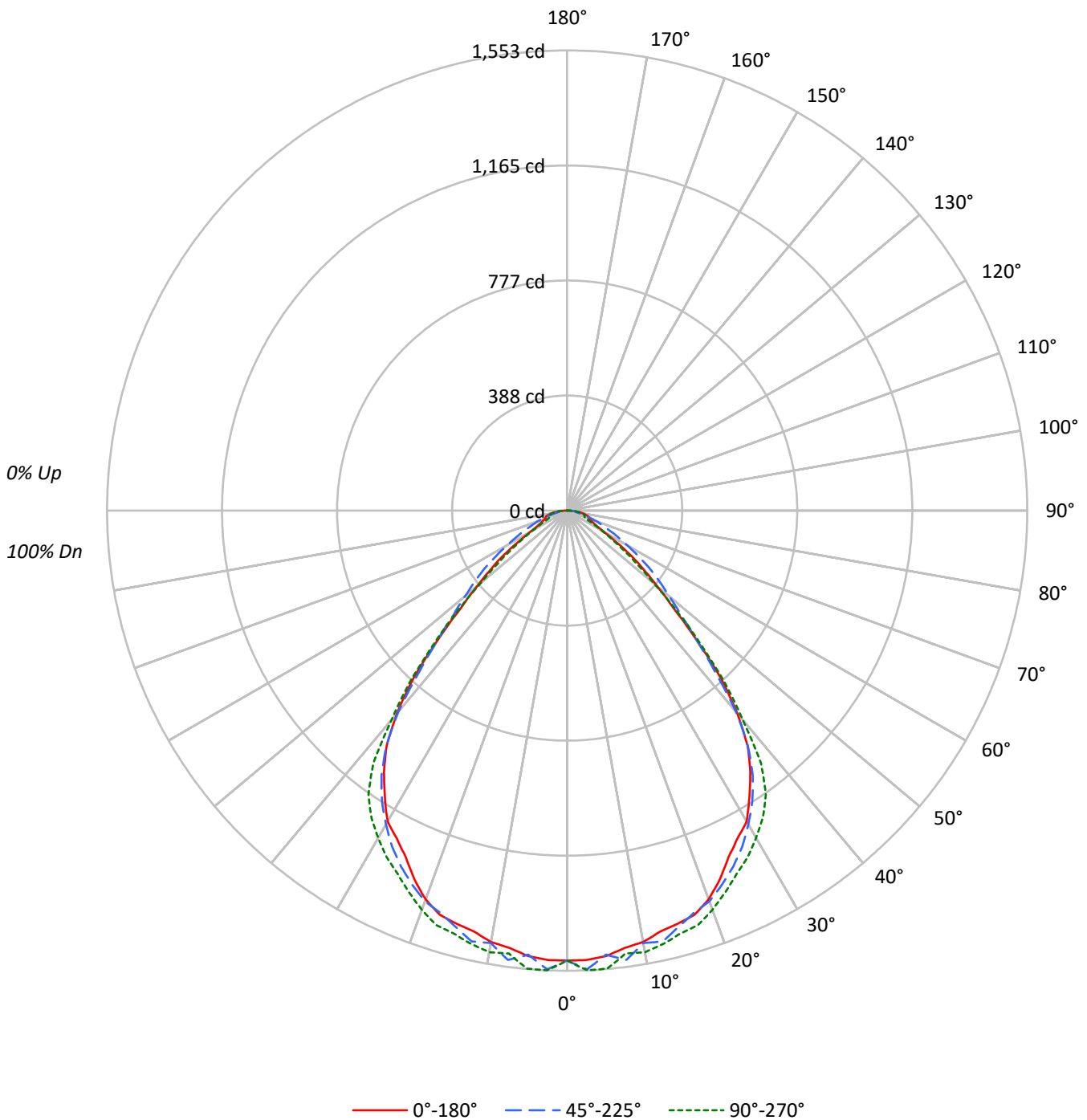
Input Watts (W): 25.203
Input Voltage (V): 120
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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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	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°	4087	4087	4087
5°	4076	4064	4192
10°	4039	4050	4135
15°	4021	4051	4116
20°	3999	4019	4105
25°	3828	3937	4018
30°	3765	3800	3962
35°	3541	3586	3841
40°	3138	3116	3239
45°	2344	2349	2414
50°	1650	1877	1598
55°	1217	1585	1092
60°	761	1252	713
65°	621	993	499
70°	616	826	492
75°	764	607	635
80°	851	479	776
85°	849	889	868



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	144.6	5.0
10°-20°	411.8	14.1
20°-30°	609.9	20.9
30°-40°	683.2	23.4
40°-50°	502.0	17.2
50°-60°	280.6	9.6
60°-70°	156.4	5.4
70°-80°	91.9	3.2
80°-90°	33.8	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°	1166.3	40.0
0°-40°	1849.4	63.5
0°-60°	2632.0	90.3
0°-90°	2914.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	2914.0	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	1519	1519	1519	1519	1519	
5°	1509	1537	1504	1535	1552	143
15°	1443	1452	1454	1476	1478	408
25°	1289	1300	1326	1344	1353	598
35°	1078	1079	1092	1141	1169	668
45°	616	666	617	661	634	481
55°	260	316	338	337	233	232
65°	98	173	156	200	78	101
75°	74	104	58	117	61	74
85°	28	40	29	37	28	30
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	1518.7	1518.7	1518.7	1518.7	1518.7
2.5°	1518.0	1531.7	1549.6	1551.7	1553.0
5°	1509.1	1537.2	1504.3	1535.2	1551.7
7.5°	1488.5	1505.7	1529.7	1498.8	1507.7
10°	1478.2	1482.3	1482.3	1520.8	1513.2
12.5°	1454.8	1482.3	1489.2	1481.6	1498.1
15°	1443.2	1452.1	1454.2	1476.1	1477.5
17.5°	1430.1	1428.1	1423.3	1439.1	1467.2
20°	1396.5	1388.9	1403.4	1422.6	1433.6
22.5°	1347.1	1349.1	1366.3	1382.1	1394.4
25°	1289.4	1299.7	1325.8	1344.3	1353.2
27.5°	1246.1	1261.2	1279.1	1301.1	1318.9
30°	1211.8	1210.4	1222.8	1254.4	1275.0
32.5°	1145.2	1150.0	1163.1	1200.8	1229.6
35°	1077.9	1078.6	1091.6	1141.1	1169.2
37.5°	1000.3	994.8	1002.4	1055.9	1074.5
40°	893.2	894.6	887.1	924.8	922.1
42.5°	768.3	779.3	740.1	789.6	786.1
45°	615.9	666.0	617.2	661.2	634.4
47.5°	486.1	560.2	519.7	552.0	501.9
50°	394.1	470.3	448.3	462.7	381.7
52.5°	323.4	385.2	392.0	395.5	298.0
55°	259.5	315.8	337.8	337.1	232.7
57.5°	191.6	256.8	282.2	292.5	176.4
60°	141.4	213.5	232.7	255.4	132.5
62.5°	114.0	187.4	192.2	223.8	100.9
65°	97.5	173.0	155.9	199.8	78.3
67.5°	86.5	161.3	127.0	178.5	66.6
70°	78.3	143.5	105.0	160.0	62.5
72.5°	76.2	122.2	81.0	142.8	61.8
75°	73.5	103.7	58.4	117.4	61.1
77.5°	63.2	88.6	41.9	90.6	57.0
80°	54.9	70.7	30.9	68.0	50.1
82.5°	42.6	53.6	27.5	51.5	40.5
85°	27.5	40.5	28.8	37.1	28.1
87.5°	13.0	22.7	20.6	19.9	14.4
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)