

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: P292533

Luminaire Tested: **22GR-LD5-32-A19/156-UNV-L83050-W2A1-U-3500K**

Issue Date: 3/3/2020

Test Information

Test Method: LM-79-08
Report Number: P292533
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-3500K
Description: GRLED 2x2 TUNABLE WHITE TROFFER
WITH A19/156 LENS
Light Source: (168) 80 CRI LEDS TUNED TO 3500K CCT
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 3174.0 lumens
Efficiency: N/A
Efficacy: 129.3 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

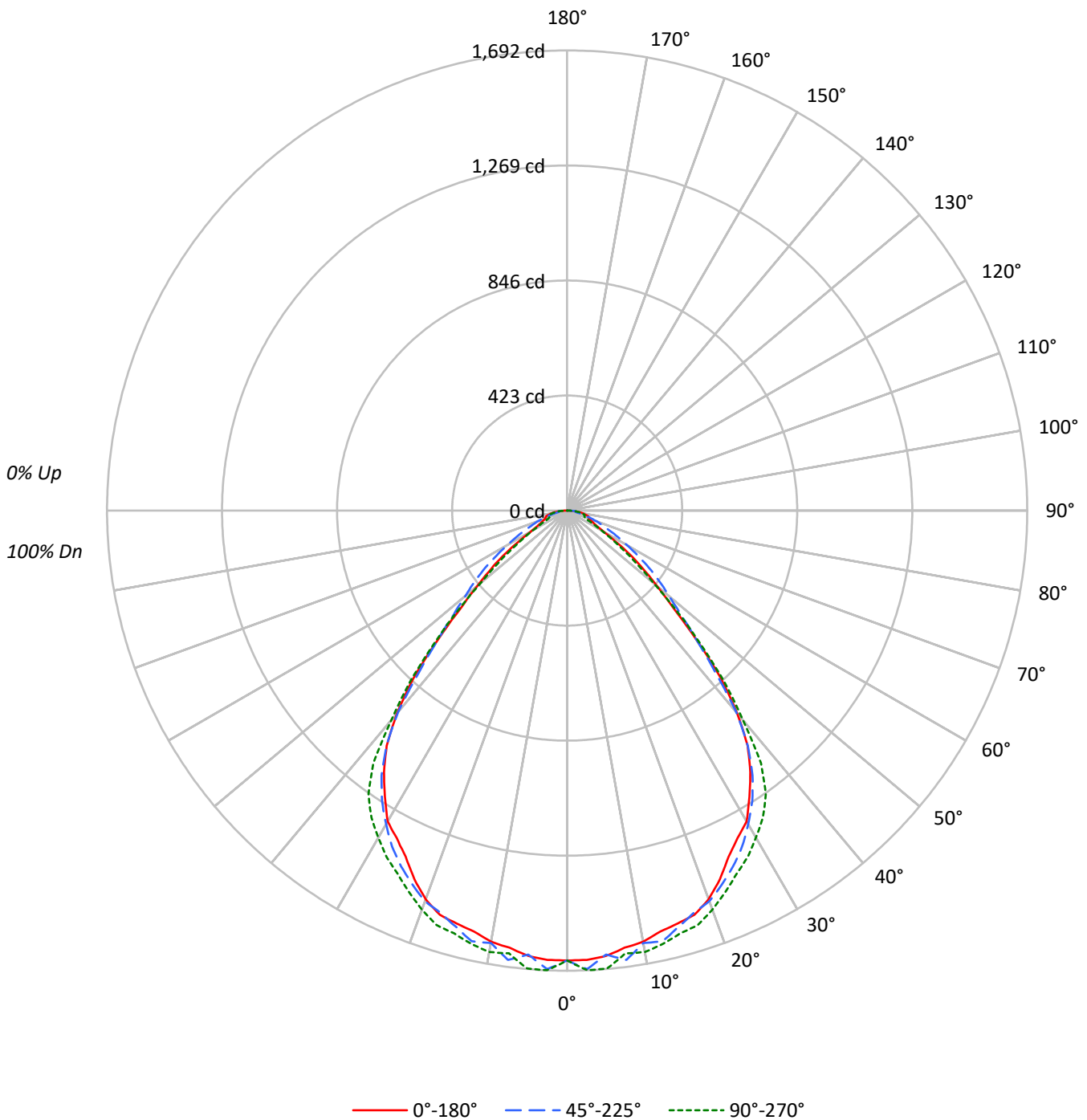
Input Watts (W): 24.552
Input Voltage (V): 120
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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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°	4451	4451	4451
5°	4440	4426	4565
10°	4400	4412	4504
15°	4379	4413	4483
20°	4356	4377	4472
25°	4170	4288	4377
30°	4101	4139	4315
35°	3857	3906	4184
40°	3418	3394	3528
45°	2553	2559	2630
50°	1797	2044	1741
55°	1326	1726	1189
60°	829	1364	777
65°	676	1081	543
70°	671	900	536
75°	832	661	692
80°	927	522	846
85°	923	969	948



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	157.5	5.0
10°-20°	448.5	14.1
20°-30°	664.3	20.9
30°-40°	744.1	23.4
40°-50°	546.8	17.2
50°-60°	305.6	9.6
60°-70°	170.3	5.4
70°-80°	100.1	3.2
80°-90°	36.8	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°	1270.3	40.0
0°-40°	2014.4	63.5
0°-60°	2866.8	90.3
0°-90°	3174.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	3174.0	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	1654	1654	1654	1654	1654	
5°	1644	1674	1638	1672	1690	156
15°	1572	1582	1584	1608	1609	444
25°	1404	1416	1444	1464	1474	651
35°	1174	1175	1189	1243	1274	727
45°	671	725	672	720	691	524
55°	283	344	368	367	254	252
65°	106	188	170	218	85	110
75°	80	113	64	128	67	80
85°	30	44	31	40	31	33
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	1654.2	1654.2	1654.2	1654.2	1654.2
2.5°	1653.5	1668.4	1687.9	1690.1	1691.6
5°	1643.7	1674.4	1638.5	1672.1	1690.1
7.5°	1621.3	1640.0	1666.2	1632.5	1642.2
10°	1610.1	1614.6	1614.6	1656.4	1648.2
12.5°	1584.7	1614.6	1622.0	1613.8	1631.8
15°	1571.9	1581.7	1583.9	1607.8	1609.3
17.5°	1557.7	1555.5	1550.3	1567.5	1598.1
20°	1521.1	1512.9	1528.6	1549.5	1561.5
22.5°	1467.2	1469.5	1488.2	1505.4	1518.8
25°	1404.4	1415.6	1444.1	1464.3	1474.0
27.5°	1357.3	1373.8	1393.2	1417.1	1436.6
30°	1319.9	1318.4	1331.9	1366.3	1388.7
32.5°	1247.4	1252.6	1266.8	1308.0	1339.4
35°	1174.1	1174.8	1189.1	1242.9	1273.6
37.5°	1089.6	1083.6	1091.8	1150.2	1170.4
40°	972.9	974.4	966.2	1007.3	1004.3
42.5°	836.8	848.8	806.2	860.0	856.3
45°	670.8	725.4	672.3	720.2	691.0
47.5°	529.5	610.2	566.1	601.3	546.7
50°	429.3	512.3	488.3	504.0	415.8
52.5°	352.2	419.5	427.0	430.8	324.6
55°	282.7	344.0	367.9	367.2	253.5
57.5°	208.6	279.7	307.4	318.6	192.2
60°	154.1	232.6	253.5	278.2	144.3
62.5°	124.1	204.2	209.4	243.8	109.9
65°	106.2	188.5	169.8	217.6	85.3
67.5°	94.2	175.7	138.3	194.4	72.5
70°	85.3	156.3	114.4	174.2	68.1
72.5°	83.0	133.1	88.2	155.5	67.3
75°	80.0	112.9	63.6	127.9	66.6
77.5°	68.8	96.5	45.6	98.7	62.1
80°	59.8	77.0	33.7	74.0	54.6
82.5°	46.4	58.3	29.9	56.1	44.1
85°	29.9	44.1	31.4	40.4	30.7
87.5°	14.2	24.7	22.4	21.7	15.7
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)