

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: P292250

Luminaire Tested: **22GR-LD5-40-A-UNV-L93050-W2A1-U-4000K**

Issue Date: 3/3/2020

**Test Information**

Test Method: LM-79-08  
Report Number: P292250  
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (P33296)  
Test Lab: INNOVATION CENTER-P3  
Issue Date: 3/3/2020  
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)  
Product Line: METALUX  
Catalog Number: 22GR-LD5-40-A-UNV-L93050-W2A1-U-4000K  
Description: GRLED 2x2 TUNABLE WHITE TROFFER  
WITH A LENS  
Light Source: (168) 90 CRI LEDS TUNED TO 4000K CCT  
Ballast/Driver: ELECTRONIC DRIVER

**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 3733.0 lumens  
Efficiency: N/A  
Efficacy: 112.4 lumens/watt  
Spacing Criteria (0/90/45): 1.18 / 1.22 / 1.25  
Luminous Opening: Rectangular (W 2' x L: 2' x H: 0')  
CIE Type: Direct

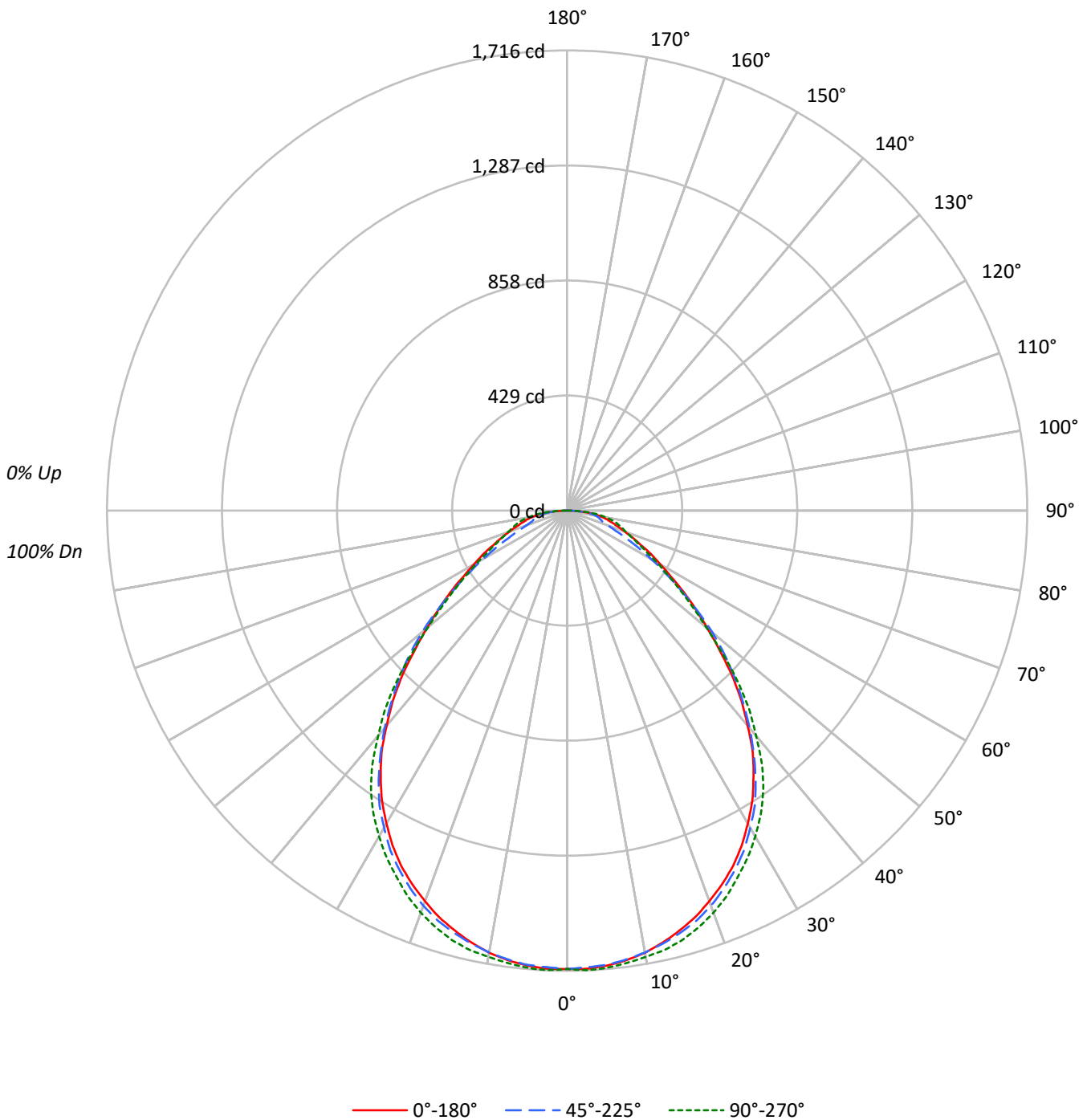
Input Watts (W): 33.201  
Input Voltage (V): 120  
Input Current (Ain): NR  
Voltage Rise (V): NR  
Power Factor: NR  
Total Harmonic Distortion (THDi): NR  
Frequency (hertz): 60  
Stabilization Time: NR  
Operation Time: NR  
Ambient Temperature (°C): NR  
Test Distance: 25 FT



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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	110	106	102	98	107	103	100	97	99	96	94	95	93	91	92	90	88	86					86			
2	101	94	87	82	99	92	86	81	88	84	79	85	81	78	82	79	76	74					74			
3	93	84	76	70	91	82	75	70	79	73	68	76	71	67	74	70	66	64					64			
4	86	75	67	61	84	74	66	60	71	65	60	69	63	59	67	62	58	56					56			
5	80	68	59	53	78	67	59	53	65	58	53	63	57	52	61	56	51	49					49			
6	74	62	53	47	72	61	53	47	59	52	47	57	51	46	56	50	46	44					44			
7	69	56	48	42	67	55	48	42	54	47	42	53	46	42	51	46	41	39					39			
8	64	52	44	38	63	51	43	38	50	43	38	48	42	38	47	42	37	36					36			
9	60	48	40	35	59	47	40	35	46	39	34	45	39	34	44	38	34	32					32			
10	57	44	37	32	55	44	36	32	43	36	31	42	36	31	41	35	31	30					30			

**AVERAGE LUMINANCE (cd/sqm):**

	0°	45°	90°
0°	4600	4600	4600
5°	4602	4595	4623
10°	4574	4572	4617
15°	4516	4540	4620
20°	4438	4490	4570
25°	4344	4393	4472
30°	4186	4243	4359
35°	3981	4027	4189
40°	3680	3720	3851
45°	3306	3365	3418
50°	2858	2960	2829
55°	2494	2429	2396
60°	2160	1945	2076
65°	1931	1527	1864
70°	1791	1264	1839
75°	1788	1337	2041
80°	1979	1683	2301
85°	2066	1825	2603



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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	161.8	4.3
10°-20°	460.8	12.3
20°-30°	681.5	18.3
30°-40°	769.0	20.6
40°-50°	677.9	18.2
50°-60°	465.0	12.5
60°-70°	274.4	7.4
70°-80°	171.2	4.6
80°-90°	71.4	1.9
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°	1304.0	34.9
0°-40°	2073.0	55.5
0°-60°	3215.9	86.1
0°-90°	3733.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	3733.0	100.0

**CANDELA DISTRIBUTION:**

	0°	22.5°	45°	67.5°	90°	Flux
0°	1710	1710	1710	1710	1710	
5°	1704	1700	1701	1707	1711	162
15°	1621	1623	1630	1650	1658	457
25°	1463	1468	1479	1498	1506	672
35°	1212	1222	1226	1255	1275	755
45°	869	873	884	890	898	667
55°	532	519	518	500	511	477
65°	303	267	240	277	293	305
75°	172	155	129	180	196	184
85°	67	62	59	77	84	72
90°	0	0	0	0	0	



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**CANDELA DISTRIBUTION (FULL):**

	0°	22.5°	45°	67.5°	90°
0°	1709.6	1709.6	1709.6	1709.6	1709.6
2.5°	1710.4	1706.1	1704.4	1711.3	1715.7
5°	1703.5	1700.0	1700.9	1707.0	1711.3
7.5°	1691.3	1688.7	1688.7	1697.4	1701.8
10°	1674.0	1673.1	1673.1	1683.5	1689.6
12.5°	1649.6	1650.5	1654.0	1667.9	1678.3
15°	1621.0	1622.7	1629.7	1649.6	1658.3
17.5°	1589.7	1589.7	1603.6	1619.2	1629.7
20°	1549.7	1552.3	1568.0	1585.4	1595.8
22.5°	1508.9	1513.3	1526.3	1546.3	1555.8
25°	1462.9	1468.1	1479.4	1498.5	1506.3
27.5°	1409.0	1416.0	1428.1	1442.0	1458.5
30°	1347.3	1357.8	1365.6	1384.7	1402.9
32.5°	1284.8	1294.3	1303.0	1323.0	1343.9
35°	1211.8	1222.2	1225.7	1255.3	1275.2
37.5°	1137.1	1141.5	1143.2	1172.7	1194.4
40°	1047.6	1056.3	1058.9	1082.4	1096.3
42.5°	961.6	965.1	970.3	987.7	1004.2
45°	868.7	873.0	884.3	889.5	898.2
47.5°	771.4	784.4	797.5	781.0	781.8
50°	682.8	693.2	707.1	675.8	675.8
52.5°	603.7	609.0	609.8	583.8	589.0
55°	531.6	518.6	517.7	500.4	510.8
57.5°	459.5	442.2	436.1	430.9	443.0
60°	401.3	370.1	361.4	369.2	385.7
62.5°	353.6	313.6	297.1	317.1	331.8
65°	303.2	266.7	239.8	277.1	292.7
67.5°	264.1	229.3	194.6	247.6	258.9
70°	227.6	200.7	160.7	225.0	233.7
72.5°	198.1	177.2	139.0	203.3	213.7
75°	172.0	154.6	128.6	179.8	196.3
77.5°	151.2	132.0	119.9	155.5	175.5
80°	127.7	108.6	108.6	130.3	148.5
82.5°	100.8	85.1	87.7	106.0	119.0
85°	66.9	62.5	59.1	77.3	84.3
87.5°	33.9	34.7	31.3	40.0	40.8
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)