

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: P292208

Luminaire Tested: **22GR-LD5-40-A-UNV-L82765-W2A1-U-4000K**

Issue Date: 3/3/2020

**Test Information**

Test Method: LM-79-08  
Report Number: P292208  
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-L82765-W2A1-U-4000K  
Description: GRLED 2x2 TUNABLE WHITE TROFFER  
WITH A LENS  
Light Source: (168) 80 CRI LEDS TUNED TO 4000K CCT  
Ballast/Driver: ELECTRONIC DRIVER

**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 4058.0 lumens  
Efficiency: N/A  
Efficacy: 124.0 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

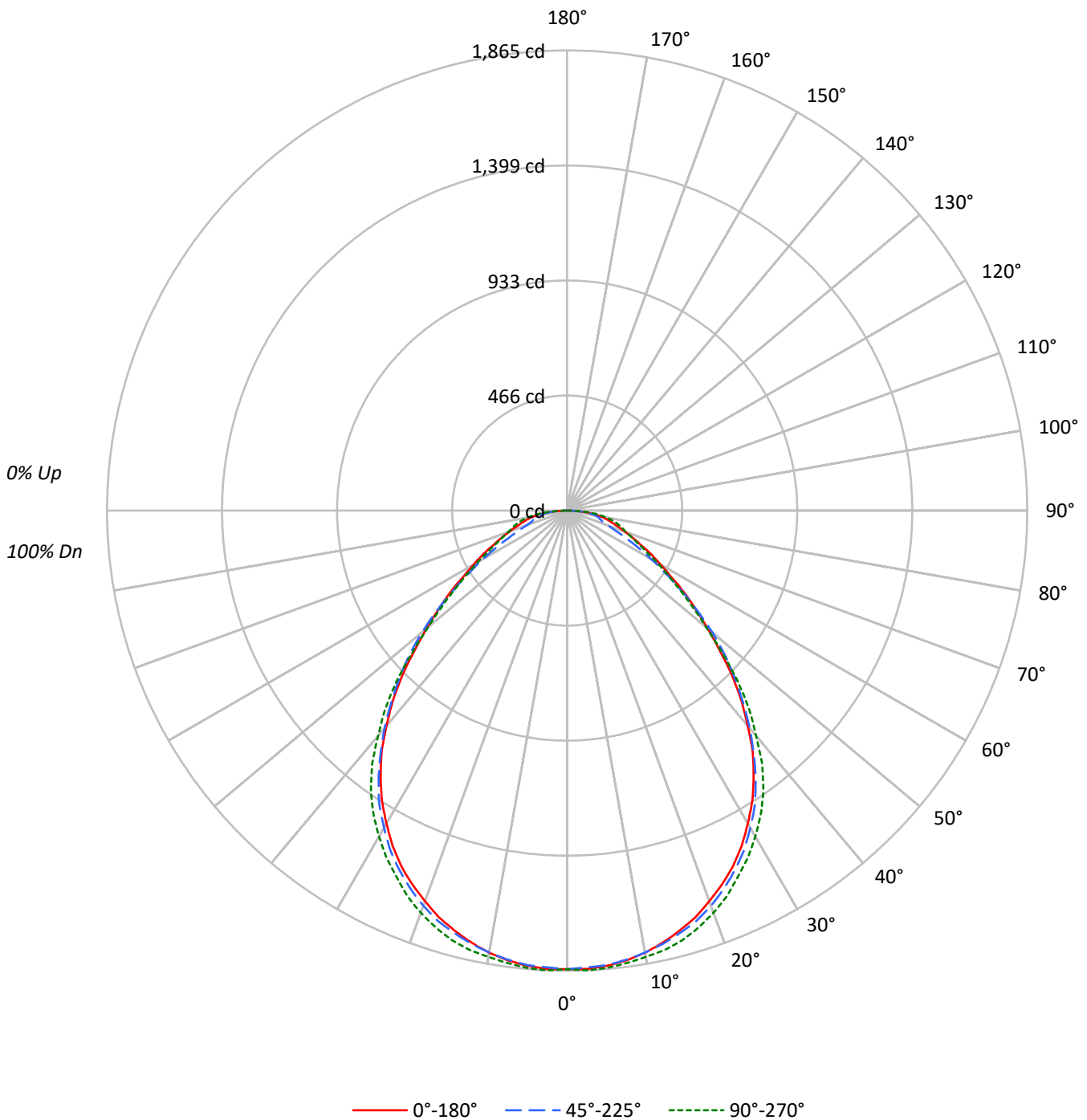
Input Watts (W): 32.736  
Input Voltage (V): 120  
Input Current (Ain): NR  
Voltage Rise (V): NR  
Power Factor: NR  
Total Harmonic Distortion (THDi): NR  
Frequency (hertz): 60  
Stabilization Time: NR  
Operation Time: NR  
Ambient Temperature (°C): NR  
Test Distance: 25 FT



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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	0
RCR																		
0	119	119	119	119	116	116	116	116	111	111	111	106	106	106	102	102	102	100
1	110	106	102	98	107	103	100	97	99	96	94	95	93	91	92	90	88	86
2	101	94	87	82	99	92	86	81	88	84	79	85	81	78	82	79	76	74
3	93	84	76	70	91	82	75	70	79	73	68	76	71	67	74	70	66	64
4	86	75	67	61	84	74	66	60	71	65	60	69	63	59	67	62	58	56
5	80	68	59	53	78	67	59	53	65	58	53	63	57	52	61	56	51	49
6	74	62	53	47	72	61	53	47	59	52	47	57	51	46	56	50	46	44
7	69	56	48	42	67	55	48	42	54	47	42	53	46	42	51	46	41	39
8	64	52	44	38	63	51	43	38	50	43	38	48	42	38	47	42	37	36
9	60	48	40	35	59	47	40	35	46	39	34	45	39	34	44	38	34	32
10	57	44	37	32	55	44	36	32	43	36	31	42	36	31	41	35	31	30

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

	0°	45°	90°
0°	5001	5001	5001
5°	5002	4995	5025
10°	4972	4970	5019
15°	4909	4935	5022
20°	4824	4881	4968
25°	4722	4775	4862
30°	4551	4613	4739
35°	4327	4377	4554
40°	4000	4044	4186
45°	3594	3658	3716
50°	3107	3218	3076
55°	2711	2640	2605
60°	2348	2114	2257
65°	2099	1659	2026
70°	1947	1375	1998
75°	1944	1454	2219
80°	2151	1829	2503
85°	2245	1982	2828



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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	175.9	4.3
10°-20°	500.9	12.3
20°-30°	740.8	18.3
30°-40°	835.9	20.6
40°-50°	736.9	18.2
50°-60°	505.5	12.5
60°-70°	298.3	7.4
70°-80°	186.1	4.6
80°-90°	77.6	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°	1417.5	34.9
0°-40°	2253.5	55.5
0°-60°	3495.9	86.1
0°-90°	4058.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	4058.0	100.0

**CANDELA DISTRIBUTION:**

	0°	22.5°	45°	67.5°	90°	Flux
0°	1858	1858	1858	1858	1858	
5°	1852	1848	1849	1856	1860	176
15°	1762	1764	1772	1793	1803	497
25°	1590	1596	1608	1629	1637	730
35°	1317	1329	1332	1364	1386	821
45°	944	949	961	967	976	725
55°	578	564	563	544	555	518
65°	330	290	261	301	318	332
75°	187	168	140	196	213	201
85°	73	68	64	84	92	78
90°	0	0	0	0	0	



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**CANDELA DISTRIBUTION (FULL):**

	0°	22.5°	45°	67.5°	90°
0°	1858.4	1858.4	1858.4	1858.4	1858.4
2.5°	1859.4	1854.6	1852.8	1860.3	1865.0
5°	1851.8	1848.0	1849.0	1855.6	1860.3
7.5°	1838.6	1835.8	1835.8	1845.2	1849.9
10°	1819.7	1818.8	1818.8	1830.1	1836.7
12.5°	1793.3	1794.2	1798.0	1813.1	1824.4
15°	1762.1	1764.0	1771.5	1793.3	1802.7
17.5°	1728.1	1728.1	1743.2	1760.2	1771.5
20°	1684.7	1687.5	1704.5	1723.4	1734.7
22.5°	1640.3	1645.0	1659.2	1680.9	1691.3
25°	1590.2	1595.9	1608.2	1628.9	1637.4
27.5°	1531.7	1539.2	1552.5	1567.6	1585.5
30°	1464.6	1476.0	1484.5	1505.2	1525.1
32.5°	1396.6	1407.0	1416.5	1438.2	1460.9
35°	1317.3	1328.7	1332.4	1364.5	1386.3
37.5°	1236.1	1240.8	1242.7	1274.8	1298.4
40°	1138.8	1148.3	1151.1	1176.6	1191.7
42.5°	1045.4	1049.1	1054.8	1073.7	1091.6
45°	944.3	949.0	961.3	967.0	976.4
47.5°	838.6	852.7	866.9	848.9	849.9
50°	742.2	753.6	768.7	734.7	734.7
52.5°	656.3	662.0	662.9	634.6	640.2
55°	577.9	563.8	562.8	543.9	555.3
57.5°	499.5	480.7	474.0	468.4	481.6
60°	436.3	402.3	392.8	401.3	419.3
62.5°	384.3	340.9	323.0	344.7	360.7
65°	329.6	289.9	260.6	301.2	318.2
67.5°	287.1	249.3	211.5	269.1	281.4
70°	247.4	218.1	174.7	244.6	254.0
72.5°	215.3	192.6	151.1	221.0	232.3
75°	187.0	168.1	139.8	195.5	213.4
77.5°	164.3	143.5	130.3	169.0	190.8
80°	138.8	118.0	118.0	141.6	161.5
82.5°	109.5	92.5	95.4	115.2	129.4
85°	72.7	68.0	64.2	84.0	91.6
87.5°	36.8	37.8	34.0	43.4	44.4
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)