

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: P291814

Luminaire Tested: **22GR-LD5-40-F1-UNV-L82765-W2A1-U-3000K**

Issue Date: 3/3/2020

Test Information

Test Method: LM-79-08
Report Number: P291814
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G3-1901-084-23)
Test Lab: INNOVATION CENTER(G3)
Issue Date: 3/3/2020
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: METALUX
Catalog Number: 22GR-LD5-40-F1-UNV-L82765-W2A1-U-3000K
Description: GRLED 2x2 TUNABLE WHITE TROFFER
WITH F1 LENS
Light Source: (168) 80 CRI LEDS TUNED TO 3000K CCT
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 3850.0 lumens
Efficiency: N/A
Efficacy: 119.6 lumens/watt
Spacing Criteria (0/90/45): 1.14 / 1.19 / 1.24
Luminous Opening: Rectangular (W 2' x L: 2' x H: 0')
CIE Type: Direct

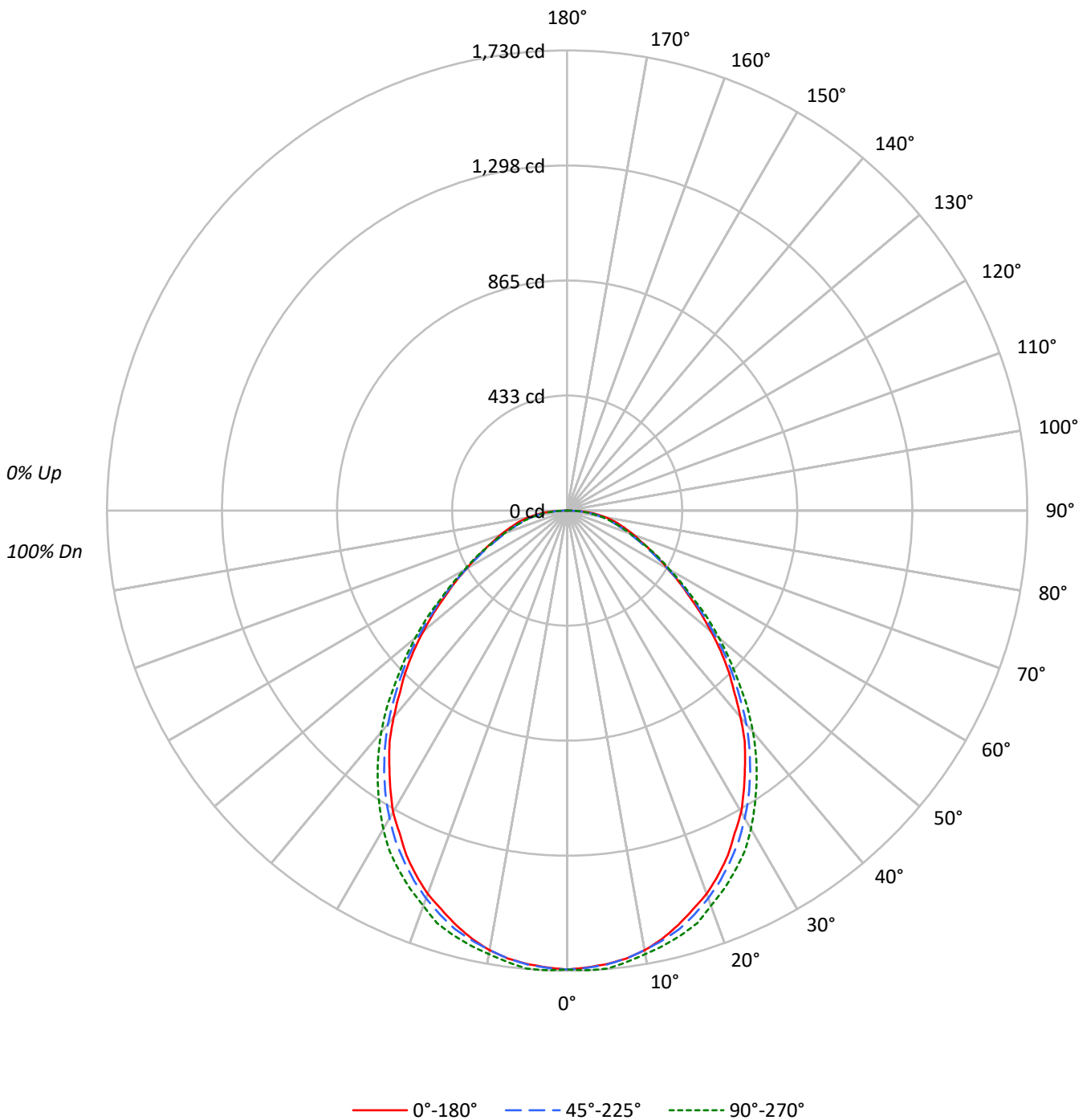
Input Watts (W): 32.178
Input Voltage (V): 120
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



TEST NUMBER: P291814

CATALOG NUMBER: 22GR-LD5-40-F1-UNV-L82765-W2A1-U-3000K

Luminous Intensity Polar Plot





TEST NUMBER: P291814

CATALOG NUMBER: 22GR-LD5-40-F1-UNV-L82765-W2A1-U-3000K

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	105	101	98	107	103	99	96	99	96	93	95	92	90	91	89	87	85					85			
2	101	93	87	81	98	91	85	80	87	83	78	84	80	77	81	78	75	73					73			
3	92	83	75	69	90	81	74	68	78	72	67	75	70	66	73	69	65	63					63			
4	85	74	66	59	83	73	65	59	70	63	58	68	62	57	66	61	57	55					55			
5	79	67	58	52	77	66	58	52	63	56	51	62	55	51	60	54	50	48					48			
6	73	60	52	46	71	59	51	46	58	51	45	56	50	45	55	49	45	43					43			
7	68	55	47	41	66	54	46	41	53	46	41	51	45	40	50	44	40	38					38			
8	63	51	42	37	62	50	42	37	49	42	37	47	41	36	46	40	36	34					34			
9	59	47	39	33	58	46	39	33	45	38	33	44	38	33	43	37	33	31					31			
10	56	43	36	31	55	43	35	30	42	35	30	41	35	30	40	34	30	28					28			

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	4643	4643	4643
5°	4622	4627	4670
10°	4586	4584	4627
15°	4494	4538	4605
20°	4391	4442	4528
25°	4246	4314	4435
30°	4067	4149	4295
35°	3829	3939	4079
40°	3563	3684	3818
45°	3271	3365	3470
50°	2951	3025	3121
55°	2618	2680	2726
60°	2347	2351	2399
65°	2162	2089	2162
70°	2087	1934	1990
75°	2124	1894	1931
80°	2289	1987	1987
85°	2538	2103	2075



TEST NUMBER: P291814

CATALOG NUMBER: 22GR-LD5-40-F1-UNV-L82765-W2A1-U-3000K

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	162.7	4.2
10°-20°	459.0	11.9
20°-30°	669.9	17.4
30°-40°	750.1	19.5
40°-50°	682.6	17.7
50°-60°	513.8	13.3
60°-70°	335.3	8.7
70°-80°	201.1	5.2
80°-90°	75.4	2.0
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°	1291.7	33.6
0°-40°	2041.8	53.0
0°-60°	3238.2	84.1
0°-90°	3850.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	3850.0	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	1725	1725	1725	1725	1725	
5°	1711	1708	1713	1719	1729	162
15°	1613	1615	1629	1642	1653	454
25°	1430	1434	1453	1479	1494	657
35°	1166	1176	1199	1227	1242	728
45°	860	868	884	903	912	662
55°	558	566	571	579	581	504
65°	340	336	328	333	340	340
75°	204	197	182	183	186	217
85°	82	80	68	65	67	85
90°	0	0	0	0	0	



TEST NUMBER: P291814

CATALOG NUMBER: 22GR-LD5-40-F1-UNV-L82765-W2A1-U-3000K

CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	1725.3	1725.3	1725.3	1725.3	1725.3
2.5°	1719.1	1718.2	1720.8	1725.3	1729.7
5°	1711.1	1708.5	1712.9	1719.1	1728.8
7.5°	1698.7	1698.7	1698.7	1710.2	1712.0
10°	1678.4	1680.2	1677.5	1689.0	1693.4
12.5°	1649.2	1650.1	1655.4	1666.9	1674.9
15°	1613.0	1614.7	1628.9	1642.1	1652.8
17.5°	1572.3	1578.5	1591.7	1613.0	1626.2
20°	1533.4	1540.4	1551.1	1574.1	1581.1
22.5°	1483.9	1491.8	1505.1	1525.4	1540.4
25°	1429.9	1434.3	1452.9	1479.4	1493.6
27.5°	1365.4	1375.1	1398.1	1425.5	1444.9
30°	1308.8	1314.1	1335.3	1367.1	1382.2
32.5°	1237.1	1253.1	1270.7	1299.0	1313.2
35°	1165.5	1176.1	1199.1	1227.4	1241.6
37.5°	1096.5	1102.7	1125.7	1149.6	1167.3
40°	1014.3	1025.8	1048.8	1074.4	1086.8
42.5°	932.1	948.9	963.9	989.5	1002.8
45°	859.5	868.4	884.3	902.9	911.7
47.5°	783.5	787.9	806.5	818.0	827.7
50°	704.8	710.1	722.5	734.0	745.5
52.5°	632.3	636.7	644.7	655.3	666.8
55°	558.0	566.0	571.3	579.2	581.0
57.5°	497.9	497.0	500.5	506.7	512.9
60°	436.0	437.7	436.8	443.0	445.7
62.5°	384.7	383.8	378.5	387.3	394.4
65°	339.6	336.0	328.1	333.4	339.6
67.5°	298.0	296.2	283.0	287.4	292.7
70°	265.3	259.1	245.8	248.5	252.9
72.5°	233.5	226.4	213.1	214.0	216.7
75°	204.3	197.2	182.2	183.0	185.7
77.5°	176.9	168.0	154.8	153.0	154.8
80°	147.7	139.7	128.2	122.9	128.2
82.5°	117.6	113.2	99.9	94.6	96.4
85°	82.2	79.6	68.1	64.6	67.2
87.5°	38.0	40.7	34.5	31.8	32.7
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)