

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: P291809

Luminaire Tested: **22GR-LD5-36-F1-UNV-L82765-W2A1-U-5000K**

Issue Date: 3/3/2020

**Test Information**

Test Method: LM-79-08  
Report Number: P291809  
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-LD5-36-F1-UNV-L82765-W2A1-U-5000K  
Description: GRLED 2x2 TUNABLE WHITE TROFFER  
WITH F1 LENS  
Light Source: (168) 80 CRI LEDS TUNED TO 5000K CCT  
Ballast/Driver: ELECTRONIC DRIVER

**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 3725.0 lumens  
Efficiency: N/A  
Efficacy: 129.6 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

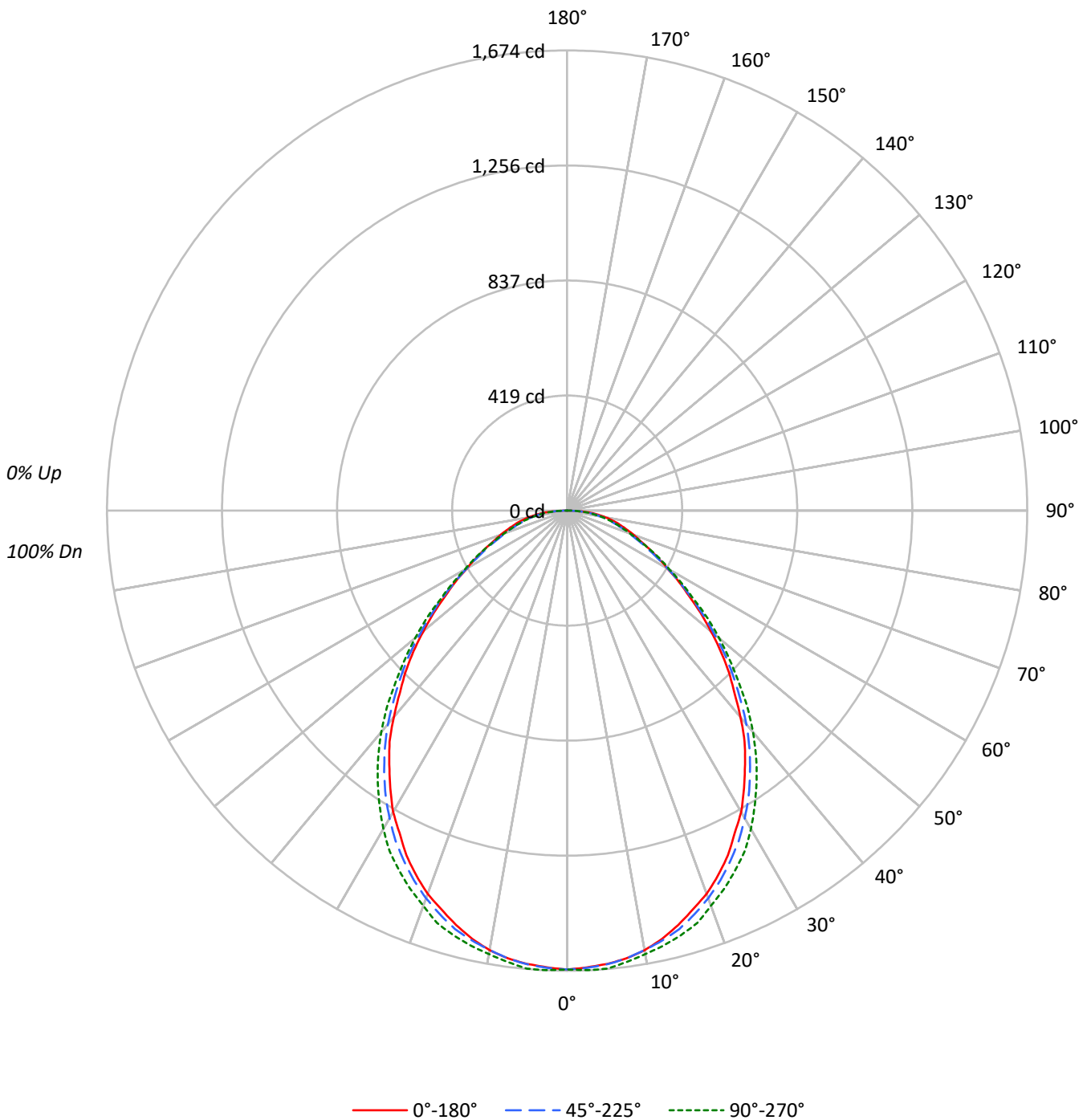
Input Watts (W): 28.737  
Input Voltage (V): 120  
Input Current (Ain): NR  
Voltage Rise (V): NR  
Power Factor: NR  
Total Harmonic Distortion (THDi): NR  
Frequency (hertz): 60  
Stabilization Time: NR  
Operation Time: NR  
Ambient Temperature (°C): NR  
Test Distance: 25 FT



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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	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°	4492	4492	4492
5°	4472	4477	4518
10°	4437	4435	4477
15°	4348	4391	4455
20°	4249	4298	4381
25°	4108	4174	4291
30°	3935	4014	4155
35°	3705	3811	3946
40°	3447	3564	3694
45°	3165	3256	3357
50°	2855	2926	3020
55°	2533	2593	2637
60°	2270	2275	2321
65°	2092	2021	2092
70°	2020	1872	1925
75°	2054	1833	1868
80°	2214	1923	1923
85°	2458	2035	2007



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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	157.5	4.2
10°-20°	444.1	11.9
20°-30°	648.2	17.4
30°-40°	725.7	19.5
40°-50°	660.5	17.7
50°-60°	497.1	13.3
60°-70°	324.4	8.7
70°-80°	194.6	5.2
80°-90°	73.0	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°	1249.8	33.6
0°-40°	1975.5	53.0
0°-60°	3133.1	84.1
0°-90°	3725.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	3725.0	100.0

**CANDELA DISTRIBUTION:**

	0°	22.5°	45°	67.5°	90°	Flux
0°	1669	1669	1669	1669	1669	
5°	1656	1653	1657	1663	1673	157
15°	1561	1562	1576	1589	1599	440
25°	1384	1388	1406	1431	1445	635
35°	1128	1138	1160	1188	1201	705
45°	832	840	856	874	882	640
55°	540	548	553	560	562	488
65°	328	325	317	323	328	329
75°	198	191	176	177	180	210
85°	80	77	66	62	65	82
90°	0	0	0	0	0	



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**CANDELA DISTRIBUTION (FULL):**

	0°	22.5°	45°	67.5°	90°
0°	1669.3	1669.3	1669.3	1669.3	1669.3
2.5°	1663.3	1662.4	1665.0	1669.3	1673.5
5°	1655.6	1653.0	1657.3	1663.3	1672.7
7.5°	1643.6	1643.6	1643.6	1654.7	1656.4
10°	1623.9	1625.6	1623.1	1634.2	1638.5
12.5°	1595.7	1596.5	1601.7	1612.8	1620.5
15°	1560.6	1562.3	1576.0	1588.8	1599.1
17.5°	1521.2	1527.2	1540.1	1560.6	1573.4
20°	1483.6	1490.4	1500.7	1522.9	1529.8
22.5°	1435.7	1443.4	1456.2	1475.9	1490.4
25°	1383.5	1387.8	1405.7	1431.4	1445.1
27.5°	1321.0	1330.4	1352.7	1379.2	1398.0
30°	1266.3	1271.4	1291.9	1322.7	1337.3
32.5°	1197.0	1212.4	1229.5	1256.9	1270.5
35°	1127.7	1137.9	1160.2	1187.6	1201.2
37.5°	1060.9	1066.9	1089.2	1112.3	1129.4
40°	981.4	992.5	1014.7	1039.5	1051.5
42.5°	901.8	918.0	932.6	957.4	970.2
45°	831.6	840.2	855.6	873.6	882.1
47.5°	758.1	762.3	780.3	791.4	800.8
50°	681.9	687.0	699.0	710.1	721.3
52.5°	611.7	616.0	623.7	634.0	645.1
55°	539.9	547.6	552.7	560.4	562.1
57.5°	481.7	480.8	484.3	490.3	496.2
60°	421.8	423.5	422.7	428.6	431.2
62.5°	372.2	371.3	366.2	374.7	381.6
65°	328.5	325.1	317.4	322.6	328.5
67.5°	288.3	286.6	273.8	278.1	283.2
70°	256.7	250.7	237.9	240.4	244.7
72.5°	225.9	219.0	206.2	207.1	209.6
75°	197.6	190.8	176.3	177.1	179.7
77.5°	171.1	162.6	149.7	148.0	149.7
80°	142.9	135.2	124.1	118.9	124.1
82.5°	113.8	109.5	96.7	91.5	93.3
85°	79.6	77.0	65.9	62.5	65.0
87.5°	36.8	39.4	33.4	30.8	31.7
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)