

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: P291793

Luminaire Tested: **22GR-LD5-28-F1-UNV-L82765-W2A1-U-5700K**

Issue Date: 3/3/2020

Test Information

Test Method: LM-79-08
Report Number: P291793
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-LD5-28-F1-UNV-L82765-W2A1-U-5700K
Description: GRLED 2x2 TUNABLE WHITE TROFFER
WITH F1 LENS
Light Source: (168) 80 CRI LEDS TUNED TO 5700K CCT
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 3042.0 lumens
Efficiency: N/A
Efficacy: 134.1 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

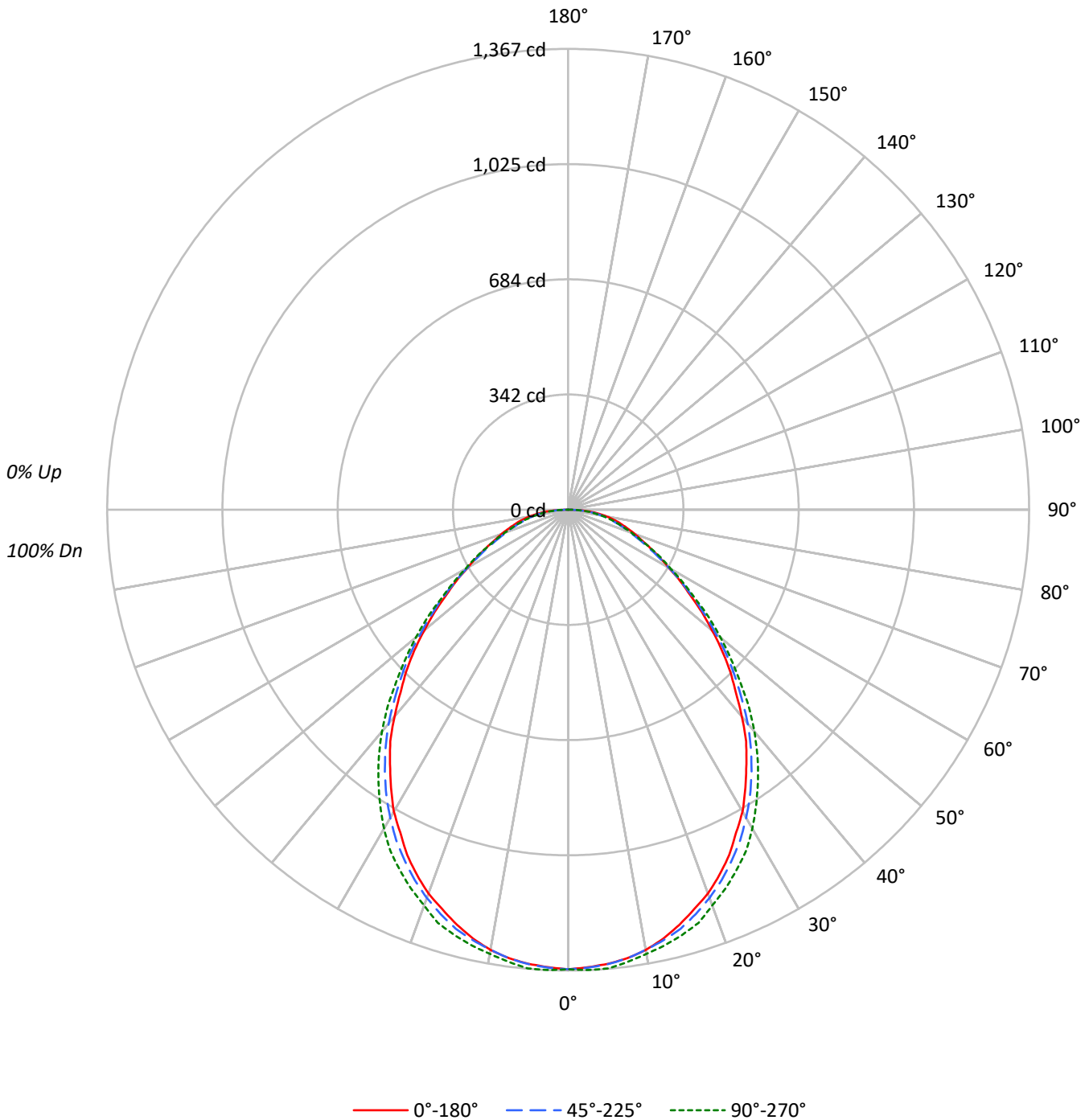
Input Watts (W): 22.692
Input Voltage (V): 120
Input Current (A_{in}): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



TEST NUMBER: P291793

CATALOG NUMBER: 22GR-LD5-28-F1-UNV-L82765-W2A1-U-5700K

Luminous Intensity Polar Plot





TEST NUMBER: P291793

CATALOG NUMBER: 22GR-LD5-28-F1-UNV-L82765-W2A1-U-5700K

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

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	3668	3668	3668
5°	3652	3656	3690
10°	3624	3622	3656
15°	3550	3585	3638
20°	3470	3509	3578
25°	3355	3409	3504
30°	3213	3278	3393
35°	3025	3113	3223
40°	2815	2911	3016
45°	2584	2659	2742
50°	2331	2390	2466
55°	2069	2118	2154
60°	1854	1858	1896
65°	1708	1650	1708
70°	1649	1528	1572
75°	1678	1496	1525
80°	1808	1570	1570
85°	2007	1661	1639



TEST NUMBER: P291793

CATALOG NUMBER: 22GR-LD5-28-F1-UNV-L82765-W2A1-U-5700K

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	128.6	4.2
10°-20°	362.7	11.9
20°-30°	529.3	17.4
30°-40°	592.6	19.5
40°-50°	539.4	17.7
50°-60°	406.0	13.3
60°-70°	264.9	8.7
70°-80°	158.9	5.2
80°-90°	59.6	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°	1020.6	33.6
0°-40°	1613.3	53.0
0°-60°	2558.6	84.1
0°-90°	3042.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	3042.0	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	1363	1363	1363	1363	1363	
5°	1352	1350	1353	1358	1366	128
15°	1274	1276	1287	1298	1306	359
25°	1130	1133	1148	1169	1180	519
35°	921	929	948	970	981	576
45°	679	686	699	713	720	523
55°	441	447	451	458	459	398
65°	268	266	259	263	268	268
75°	161	156	144	145	147	171
85°	65	63	54	51	53	67
90°	0	0	0	0	0	



TEST NUMBER: P291793

CATALOG NUMBER: 22GR-LD5-28-F1-UNV-L82765-W2A1-U-5700K

CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	1363.2	1363.2	1363.2	1363.2	1363.2
2.5°	1358.3	1357.6	1359.7	1363.2	1366.7
5°	1352.0	1349.9	1353.4	1358.3	1366.0
7.5°	1342.2	1342.2	1342.2	1351.3	1352.7
10°	1326.2	1327.6	1325.5	1334.5	1338.0
12.5°	1303.1	1303.8	1308.0	1317.1	1323.4
15°	1274.4	1275.8	1287.0	1297.5	1305.9
17.5°	1242.3	1247.2	1257.7	1274.4	1284.9
20°	1211.6	1217.2	1225.5	1243.7	1249.3
22.5°	1172.4	1178.7	1189.2	1205.3	1217.2
25°	1129.8	1133.3	1148.0	1168.9	1180.1
27.5°	1078.8	1086.5	1104.7	1126.3	1141.7
30°	1034.1	1038.3	1055.1	1080.2	1092.1
32.5°	977.5	990.1	1004.0	1026.4	1037.6
35°	920.9	929.3	947.5	969.8	981.0
37.5°	866.4	871.3	889.5	908.3	922.3
40°	801.4	810.5	828.7	848.9	858.7
42.5°	736.4	749.7	761.6	781.9	792.3
45°	679.1	686.1	698.7	713.4	720.4
47.5°	619.1	622.6	637.2	646.3	654.0
50°	556.9	561.1	570.8	579.9	589.0
52.5°	499.6	503.1	509.4	517.7	526.8
55°	440.9	447.2	451.4	457.7	459.1
57.5°	393.4	392.7	395.5	400.4	405.3
60°	344.5	345.9	345.2	350.1	352.2
62.5°	303.9	303.2	299.0	306.0	311.6
65°	268.3	265.5	259.2	263.4	268.3
67.5°	235.5	234.1	223.6	227.1	231.3
70°	209.6	204.7	194.2	196.3	199.8
72.5°	184.5	178.9	168.4	169.1	171.2
75°	161.4	155.8	143.9	144.6	146.7
77.5°	139.7	132.8	122.3	120.9	122.3
80°	116.7	110.4	101.3	97.1	101.3
82.5°	92.9	89.4	79.0	74.8	76.2
85°	65.0	62.9	53.8	51.0	53.1
87.5°	30.0	32.1	27.2	25.2	25.9
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)