

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: P291913

Luminaire Tested: **22GR-LD5-40-F1-UNV-L92765-W2A1-U-3500K**

Issue Date: 3/3/2020

Test Information

Test Method: LM-79-08
Report Number: P291913
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-L92765-W2A1-U-3500K
Description: GRLED 2x2 TUNABLE WHITE TROFFER
WITH F1 LENS
Light Source: (168) 90 CRI LEDS TUNED TO 3500K CCT
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 3489.0 lumens
Efficiency: N/A
Efficacy: 107.5 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

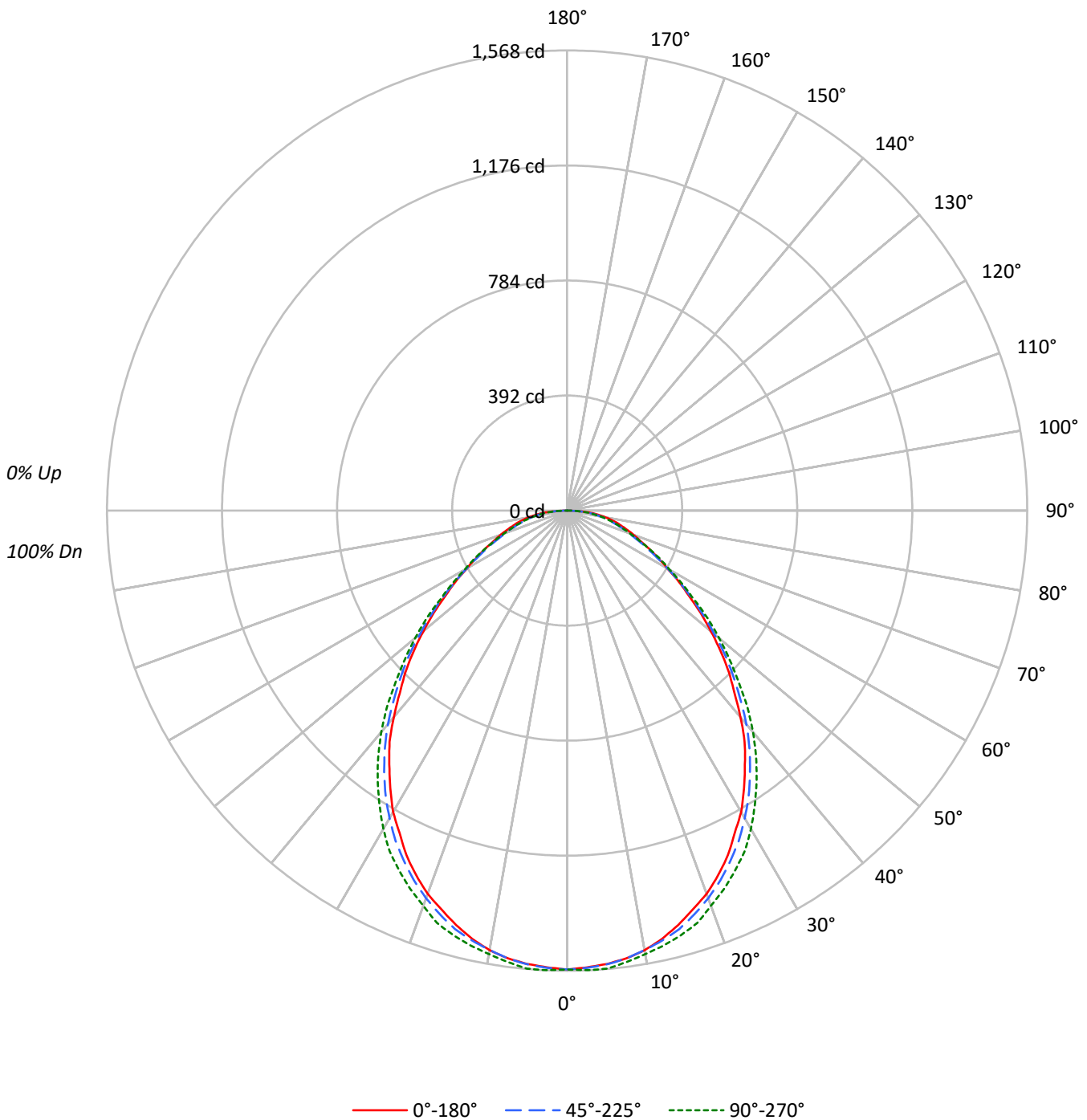
Input Watts (W): 32.457
Input Voltage (V): 120
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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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°	4207	4207	4207
5°	4189	4193	4232
10°	4156	4154	4193
15°	4072	4112	4173
20°	3979	4025	4103
25°	3847	3910	4019
30°	3685	3760	3892
35°	3470	3570	3696
40°	3229	3339	3460
45°	2964	3050	3144
50°	2674	2741	2828
55°	2373	2429	2470
60°	2126	2131	2174
65°	1959	1893	1959
70°	1891	1753	1803
75°	1925	1717	1750
80°	2073	1801	1801
85°	2300	1905	1880



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	147.5	4.2
10°-20°	416.0	11.9
20°-30°	607.1	17.4
30°-40°	679.7	19.5
40°-50°	618.6	17.7
50°-60°	465.6	13.3
60°-70°	303.8	8.7
70°-80°	182.2	5.2
80°-90°	68.3	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°	1170.6	33.6
0°-40°	1850.3	53.0
0°-60°	2934.6	84.1
0°-90°	3489.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	3489.0	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	1564	1564	1564	1564	1564	
5°	1551	1548	1552	1558	1567	147
15°	1462	1463	1476	1488	1498	412
25°	1296	1300	1317	1341	1354	595
35°	1056	1066	1087	1112	1125	660
45°	779	787	801	818	826	600
55°	506	513	518	525	526	457
65°	308	304	297	302	308	308
75°	185	179	165	166	168	196
85°	74	72	62	58	61	77
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	1563.5	1563.5	1563.5	1563.5	1563.5
2.5°	1557.9	1557.1	1559.5	1563.5	1567.5
5°	1550.7	1548.3	1552.3	1557.9	1566.7
7.5°	1539.5	1539.5	1539.5	1549.9	1551.5
10°	1521.0	1522.6	1520.2	1530.6	1534.6
12.5°	1494.6	1495.4	1500.2	1510.6	1517.8
15°	1461.7	1463.3	1476.1	1488.2	1497.8
17.5°	1424.9	1430.5	1442.5	1461.7	1473.7
20°	1389.6	1396.0	1405.6	1426.5	1432.9
22.5°	1344.7	1351.9	1364.0	1382.4	1396.0
25°	1295.8	1299.8	1316.7	1340.7	1353.5
27.5°	1237.3	1246.1	1267.0	1291.8	1309.5
30°	1186.0	1190.9	1210.1	1238.9	1252.6
32.5°	1121.1	1135.6	1151.6	1177.2	1190.1
35°	1056.2	1065.8	1086.7	1112.3	1125.1
37.5°	993.7	999.3	1020.2	1041.8	1057.8
40°	919.2	929.6	950.4	973.7	984.9
42.5°	844.7	859.9	873.5	896.7	908.8
45°	778.9	787.0	801.4	818.2	826.2
47.5°	710.0	714.0	730.9	741.3	750.1
50°	638.7	643.5	654.7	665.1	675.6
52.5°	573.0	577.0	584.2	593.8	604.2
55°	505.7	512.9	517.7	524.9	526.5
57.5°	451.2	450.4	453.6	459.2	464.8
60°	395.1	396.7	395.9	401.5	403.9
62.5°	348.6	347.8	343.0	351.0	357.4
65°	307.7	304.5	297.3	302.1	307.7
67.5°	270.1	268.5	256.4	260.4	265.3
70°	240.4	234.8	222.8	225.2	229.2
72.5°	211.6	205.2	193.1	193.9	196.3
75°	185.1	178.7	165.1	165.9	168.3
77.5°	160.3	152.3	140.2	138.6	140.2
80°	133.8	126.6	116.2	111.4	116.2
82.5°	106.6	102.6	90.6	85.7	87.4
85°	74.5	72.1	61.7	58.5	60.9
87.5°	34.5	36.9	31.3	28.8	29.7
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)