

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: P291856

Luminaire Tested: **22GR-LD5-40-F1-UNV-L93050-W2A1-U-3000K**

Issue Date: 3/3/2020

Test Information

Test Method: LM-79-08
Report Number: P291856
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-L93050-W2A1-U-3000K
Description: GRLED 2x2 TUNABLE WHITE TROFFER
WITH F1 LENS
Light Source: (168) 90 CRI LEDS TUNED TO 3000K CCT
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 3173.0 lumens
Efficiency: N/A
Efficacy: 95.8 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

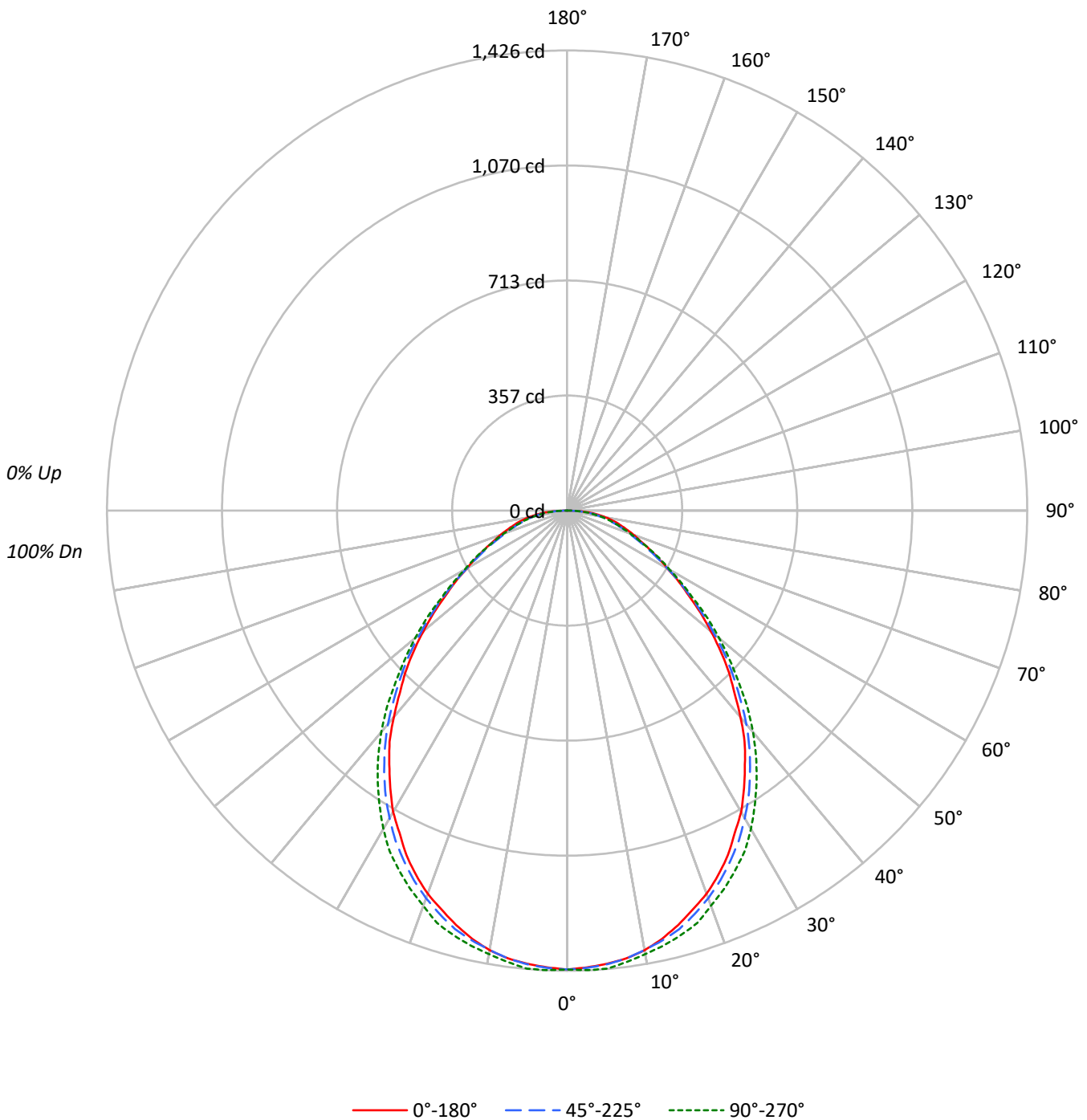
Input Watts (W): 33.108
Input Voltage (V): 120
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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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°	3826	3826	3826
5°	3809	3813	3849
10°	3780	3778	3814
15°	3703	3740	3795
20°	3619	3661	3732
25°	3499	3555	3655
30°	3352	3420	3539
35°	3156	3247	3361
40°	2936	3036	3146
45°	2696	2774	2860
50°	2432	2493	2572
55°	2158	2209	2246
60°	1934	1938	1977
65°	1782	1722	1782
70°	1720	1594	1640
75°	1751	1561	1591
80°	1886	1638	1638
85°	2093	1732	1711



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	134.1	4.2
10°-20°	378.3	11.9
20°-30°	552.1	17.4
30°-40°	618.2	19.5
40°-50°	562.6	17.7
50°-60°	423.4	13.3
60°-70°	276.3	8.7
70°-80°	165.7	5.2
80°-90°	62.2	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°	1064.6	33.6
0°-40°	1682.8	53.0
0°-60°	2668.8	84.1
0°-90°	3173.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	3173.0	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	1422	1422	1422	1422	1422	
5°	1410	1408	1412	1417	1425	134
15°	1329	1331	1342	1353	1362	374
25°	1178	1182	1197	1219	1231	541
35°	961	969	988	1012	1023	600
45°	708	716	729	744	751	545
55°	460	466	471	477	479	416
65°	280	277	270	275	280	280
75°	168	162	150	151	153	179
85°	68	66	56	53	55	70
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	1421.9	1421.9	1421.9	1421.9	1421.9
2.5°	1416.8	1416.1	1418.2	1421.9	1425.5
5°	1410.2	1408.0	1411.7	1416.8	1424.8
7.5°	1400.0	1400.0	1400.0	1409.5	1411.0
10°	1383.3	1384.7	1382.5	1392.0	1395.7
12.5°	1359.2	1359.9	1364.3	1373.8	1380.3
15°	1329.3	1330.8	1342.5	1353.4	1362.1
17.5°	1295.8	1300.9	1311.8	1329.3	1340.3
20°	1263.7	1269.6	1278.3	1297.3	1303.1
22.5°	1222.9	1229.5	1240.4	1257.2	1269.6
25°	1178.5	1182.1	1197.4	1219.3	1230.9
27.5°	1125.3	1133.3	1152.2	1174.8	1190.9
30°	1078.6	1083.0	1100.5	1126.7	1139.1
32.5°	1019.6	1032.7	1047.3	1070.6	1082.3
35°	960.6	969.3	988.3	1011.6	1023.2
37.5°	903.7	908.8	927.8	947.4	962.0
40°	835.9	845.4	864.4	885.5	895.7
42.5°	768.2	782.0	794.4	815.5	826.5
45°	708.4	715.7	728.8	744.1	751.4
47.5°	645.7	649.4	664.7	674.1	682.2
50°	580.9	585.2	595.4	604.9	614.4
52.5°	521.1	524.7	531.3	540.0	549.5
55°	459.9	466.4	470.8	477.4	478.8
57.5°	410.3	409.6	412.5	417.6	422.7
60°	359.3	360.8	360.0	365.1	367.3
62.5°	317.0	316.3	311.9	319.2	325.0
65°	279.9	276.9	270.4	274.8	279.9
67.5°	245.6	244.1	233.2	236.9	241.2
70°	218.6	213.5	202.6	204.8	208.4
72.5°	192.4	186.6	175.6	176.4	178.6
75°	168.4	162.5	150.1	150.9	153.0
77.5°	145.8	138.5	127.5	126.1	127.5
80°	121.7	115.2	105.7	101.3	105.7
82.5°	96.9	93.3	82.4	78.0	79.4
85°	67.8	65.6	56.1	53.2	55.4
87.5°	31.3	33.5	28.4	26.2	27.0
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)