

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: P291914

Luminaire Tested: **22GR-LD5-40-F1-UNV-L92765-W2A1-U-4000K**

Issue Date: 3/3/2020

Test Information

Test Method: LM-79-08
Report Number: P291914
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-4000K
Description: GRLED 2x2 TUNABLE WHITE TROFFER
WITH F1 LENS
Light Source: (168) 90 CRI LEDS TUNED TO 4000K CCT
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 3602.0 lumens
Efficiency: N/A
Efficacy: 110.0 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

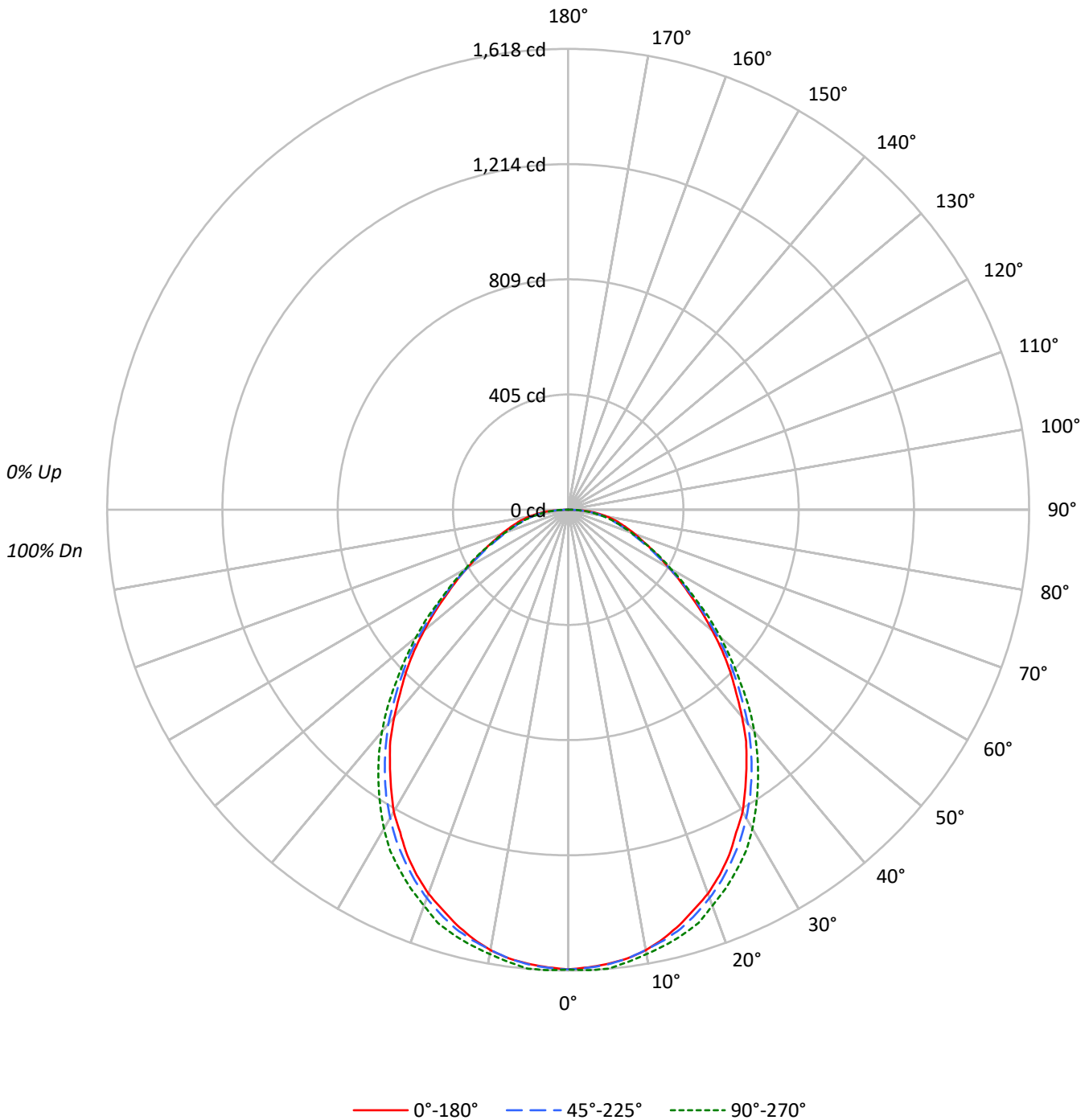
Input Watts (W): 32.736
Input Voltage (V): 120
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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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°	4344	4344	4344
5°	4324	4329	4369
10°	4291	4289	4329
15°	4204	4246	4308
20°	4108	4155	4236
25°	3972	4036	4149
30°	3805	3882	4018
35°	3582	3686	3816
40°	3334	3447	3572
45°	3060	3148	3246
50°	2761	2830	2920
55°	2449	2508	2550
60°	2195	2200	2244
65°	2023	1954	2023
70°	1953	1810	1862
75°	1987	1772	1806
80°	2142	1860	1860
85°	2374	1967	1942



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	152.3	4.2
10°-20°	429.5	11.9
20°-30°	626.8	17.4
30°-40°	701.7	19.5
40°-50°	638.7	17.7
50°-60°	480.7	13.3
60°-70°	313.7	8.7
70°-80°	188.1	5.2
80°-90°	70.6	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°	1208.5	33.6
0°-40°	1910.3	53.0
0°-60°	3029.6	84.1
0°-90°	3602.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	3602.0	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	1614	1614	1614	1614	1614	
5°	1601	1598	1603	1608	1617	152
15°	1509	1511	1524	1536	1546	425
25°	1338	1342	1359	1384	1397	614
35°	1090	1100	1122	1148	1162	681
45°	804	812	827	845	853	619
55°	522	530	534	542	544	472
65°	318	314	307	312	318	318
75°	191	184	170	171	174	203
85°	77	74	64	60	63	79
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	1614.1	1614.1	1614.1	1614.1	1614.1
2.5°	1608.3	1607.5	1610.0	1614.1	1618.3
5°	1600.9	1598.4	1602.6	1608.3	1617.4
7.5°	1589.3	1589.3	1589.3	1600.1	1601.7
10°	1570.3	1571.9	1569.5	1580.2	1584.3
12.5°	1543.0	1543.8	1548.8	1559.5	1567.0
15°	1509.1	1510.7	1524.0	1536.4	1546.3
17.5°	1471.0	1476.8	1489.2	1509.1	1521.5
20°	1434.6	1441.2	1451.1	1472.7	1479.3
22.5°	1388.3	1395.7	1408.1	1427.2	1441.2
25°	1337.8	1341.9	1359.3	1384.1	1397.4
27.5°	1277.4	1286.5	1308.0	1333.7	1351.9
30°	1224.5	1229.4	1249.3	1279.1	1293.1
32.5°	1157.4	1172.3	1188.9	1215.4	1228.6
35°	1090.4	1100.4	1121.9	1148.3	1161.6
37.5°	1025.9	1031.7	1053.2	1075.5	1092.1
40°	949.0	959.7	981.2	1005.2	1016.8
42.5°	872.0	887.7	901.8	925.8	938.2
45°	804.2	812.4	827.3	844.7	853.0
47.5°	733.0	737.2	754.5	765.3	774.4
50°	659.4	664.4	675.9	686.7	697.4
52.5°	591.5	595.7	603.1	613.1	623.8
55°	522.0	529.5	534.5	541.9	543.6
57.5°	465.8	465.0	468.3	474.1	479.9
60°	407.9	409.5	408.7	414.5	417.0
62.5°	359.9	359.1	354.1	362.4	369.0
65°	317.7	314.4	306.9	311.9	317.7
67.5°	278.8	277.2	264.7	268.9	273.8
70°	248.2	242.4	230.0	232.5	236.6
72.5°	218.4	211.8	199.4	200.2	202.7
75°	191.1	184.5	170.4	171.3	173.7
77.5°	165.5	157.2	144.8	143.1	144.8
80°	138.2	130.7	120.0	115.0	120.0
82.5°	110.0	105.9	93.5	88.5	90.2
85°	76.9	74.5	63.7	60.4	62.9
87.5°	35.6	38.1	32.3	29.8	30.6
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)