

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: P291815

Luminaire Tested: **22GR-LD5-40-F1-UNV-L82765-W2A1-U-3500K**

Issue Date: 3/3/2020

Test Information

Test Method: LM-79-08
Report Number: P291815
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-L82765-W2A1-U-3500K
Description: GRLED 2x2 TUNABLE WHITE TROFFER
WITH F1 LENS
Light Source: (168) 80 CRI LEDS TUNED TO 3500K CCT
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 3983.0 lumens
Efficiency: N/A
Efficacy: 122.4 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

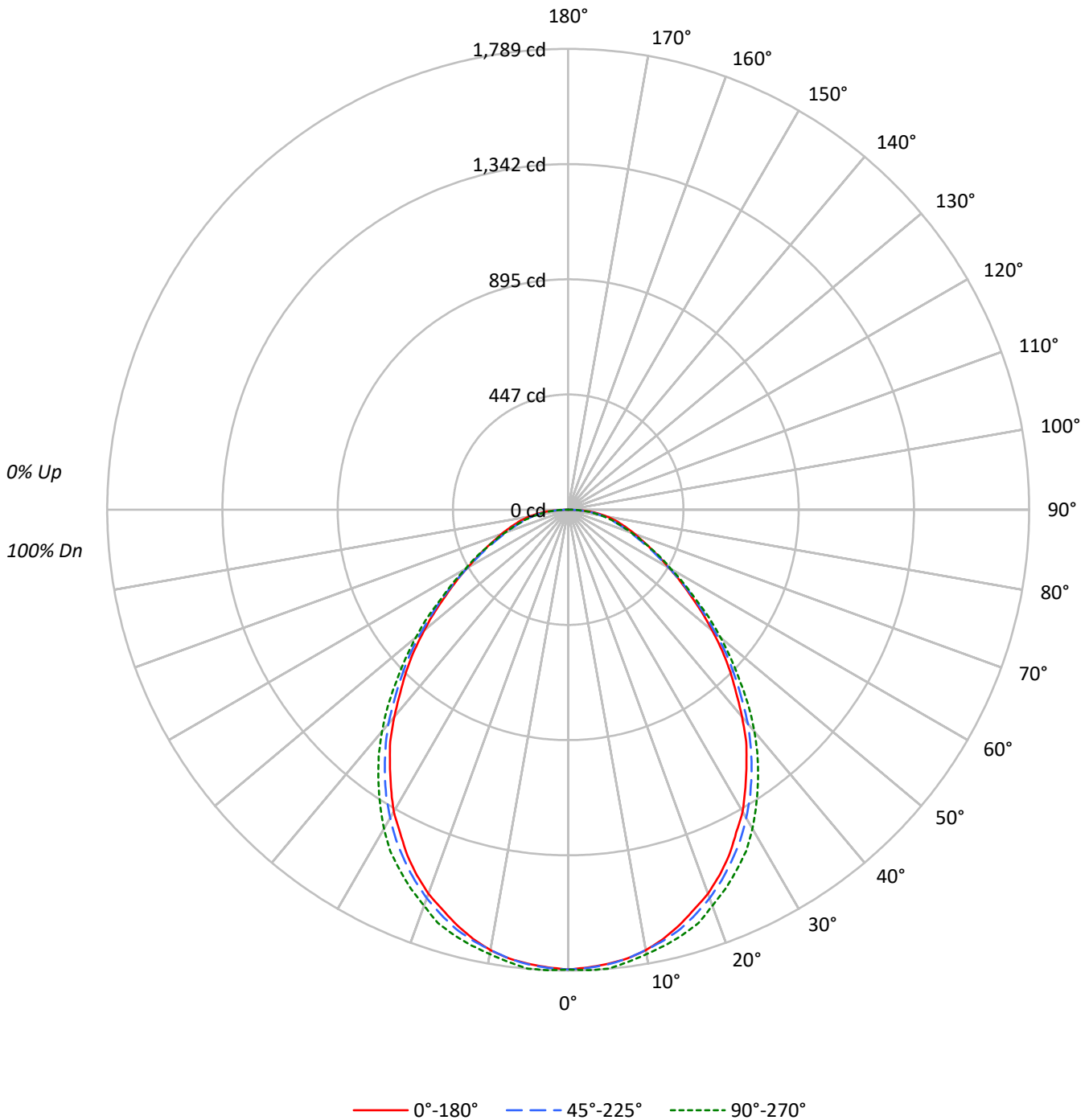
Input Watts (W): 32.55
Input Voltage (V): 120
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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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°	4803	4803	4803
5°	4782	4787	4831
10°	4745	4742	4787
15°	4649	4695	4764
20°	4543	4595	4684
25°	4392	4463	4588
30°	4207	4292	4443
35°	3961	4075	4219
40°	3686	3811	3949
45°	3384	3481	3589
50°	3052	3129	3229
55°	2708	2773	2820
60°	2427	2432	2482
65°	2237	2161	2237
70°	2160	2001	2058
75°	2197	1960	1997
80°	2368	2056	2056
85°	2628	2174	2146



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	168.4	4.2
10°-20°	474.9	11.9
20°-30°	693.1	17.4
30°-40°	776.0	19.5
40°-50°	706.2	17.7
50°-60°	531.5	13.3
60°-70°	346.9	8.7
70°-80°	208.0	5.2
80°-90°	78.0	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°	1336.3	33.6
0°-40°	2112.3	53.0
0°-60°	3350.0	84.1
0°-90°	3983.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	3983.0	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	1785	1785	1785	1785	1785	
5°	1770	1768	1772	1778	1788	168
15°	1669	1670	1685	1699	1710	470
25°	1479	1484	1503	1530	1545	679
35°	1206	1217	1240	1270	1284	754
45°	889	898	915	934	943	685
55°	577	586	591	599	601	522
65°	351	348	339	345	351	351
75°	211	204	188	189	192	224
85°	85	82	70	67	70	88
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	1784.9	1784.9	1784.9	1784.9	1784.9
2.5°	1778.5	1777.5	1780.3	1784.9	1789.4
5°	1770.2	1767.5	1772.1	1778.5	1788.5
7.5°	1757.4	1757.4	1757.4	1769.3	1771.1
10°	1736.4	1738.2	1735.5	1747.4	1751.9
12.5°	1706.2	1707.1	1712.6	1724.5	1732.7
15°	1668.7	1670.5	1685.1	1698.9	1709.9
17.5°	1626.6	1633.0	1646.7	1668.7	1682.4
20°	1586.3	1593.7	1604.6	1628.4	1635.7
22.5°	1535.1	1543.3	1557.1	1578.1	1593.7
25°	1479.3	1483.9	1503.1	1530.5	1545.2
27.5°	1412.5	1422.6	1446.4	1474.7	1494.9
30°	1354.0	1359.5	1381.4	1414.4	1429.9
32.5°	1279.9	1296.3	1314.6	1343.9	1358.5
35°	1205.8	1216.7	1240.5	1269.8	1284.4
37.5°	1134.4	1140.8	1164.6	1189.3	1207.6
40°	1049.3	1061.2	1085.0	1111.5	1124.3
42.5°	964.2	981.6	997.2	1023.7	1037.4
45°	889.2	898.4	914.8	934.1	943.2
47.5°	810.6	815.1	834.3	846.2	856.3
50°	729.1	734.6	747.4	759.3	771.2
52.5°	654.1	658.7	666.9	677.9	689.8
55°	577.3	585.5	591.0	599.2	601.1
57.5°	515.1	514.1	517.8	524.2	530.6
60°	451.0	452.8	451.9	458.3	461.1
62.5°	398.0	397.0	391.6	400.7	408.0
65°	351.3	347.6	339.4	344.9	351.3
67.5°	308.3	306.5	292.8	297.3	302.8
70°	274.5	268.1	254.3	257.1	261.6
72.5°	241.5	234.2	220.5	221.4	224.1
75°	211.3	204.0	188.5	189.4	192.1
77.5°	183.0	173.8	160.1	158.3	160.1
80°	152.8	144.5	132.7	127.2	132.7
82.5°	121.7	117.1	103.4	97.9	99.7
85°	85.1	82.3	70.4	66.8	69.5
87.5°	39.3	42.1	35.7	32.9	33.8
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)