

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: P291919

Luminaire Tested: **22GR-LD5-40-F1-UNV-L92765-W2A1-U-6500K**

Issue Date: 3/3/2020

Test Information

Test Method: LM-79-08
Report Number: P291919
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-6500K
Description: GRLED 2x2 TUNABLE WHITE TROFFER
WITH F1 LENS
Light Source: (168) 90 CRI LEDS TUNED TO 6500K CCT
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 3870.0 lumens
Efficiency: N/A
Efficacy: 114.3 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

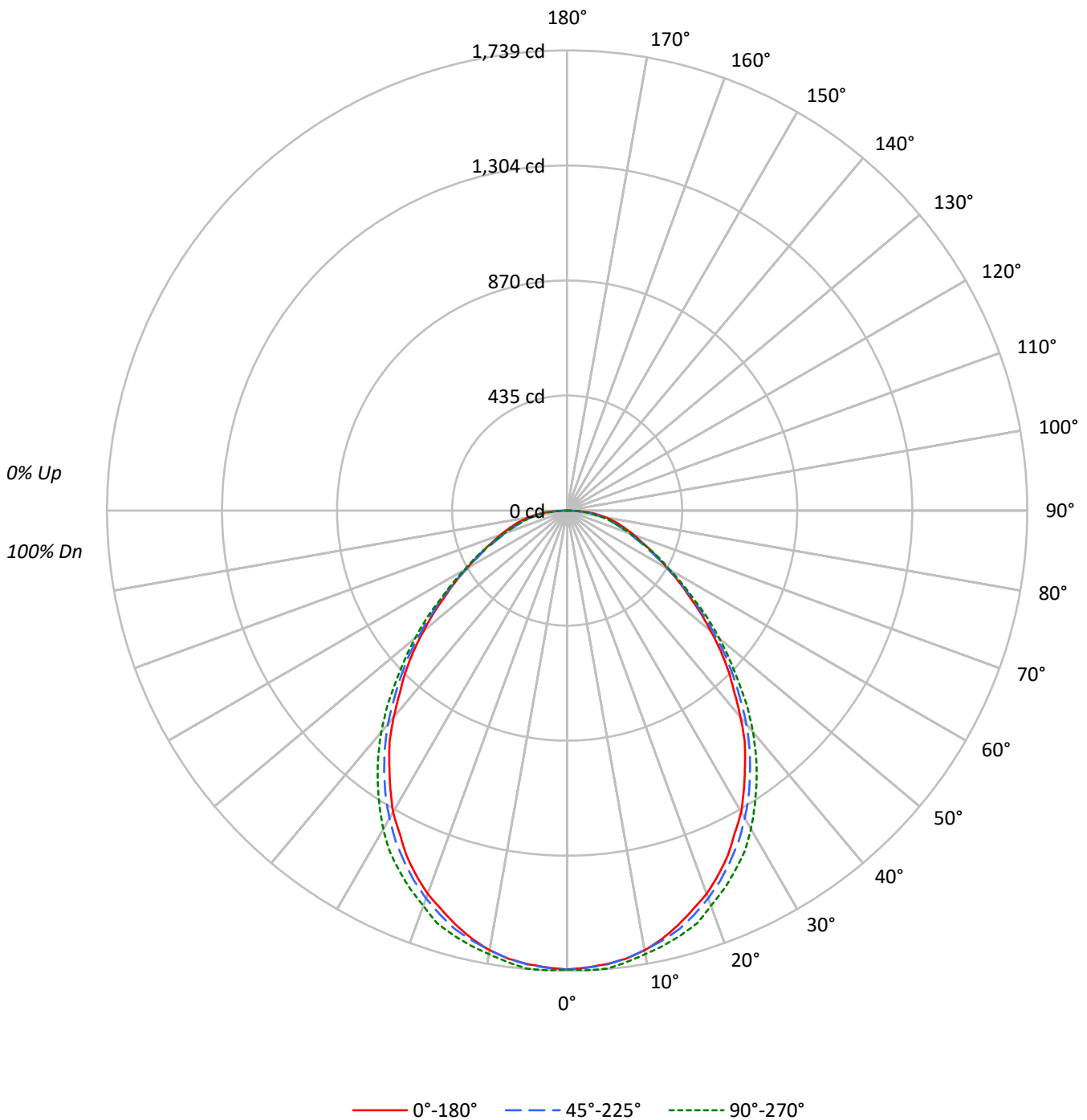
Input Watts (W): 33.852
Input Voltage (V): 120
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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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°	4667	4667	4667
5°	4646	4651	4694
10°	4610	4608	4651
15°	4517	4561	4628
20°	4414	4465	4551
25°	4268	4336	4458
30°	4088	4171	4317
35°	3849	3960	4100
40°	3582	3703	3837
45°	3288	3383	3487
50°	2966	3040	3137
55°	2632	2694	2740
60°	2358	2363	2411
65°	2173	2100	2173
70°	2098	1944	2000
75°	2135	1904	1941
80°	2300	1998	1998
85°	2553	2112	2087



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	163.6	4.2
10°-20°	461.4	11.9
20°-30°	673.4	17.4
30°-40°	754.0	19.5
40°-50°	686.2	17.7
50°-60°	516.5	13.3
60°-70°	337.0	8.7
70°-80°	202.1	5.2
80°-90°	75.8	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°	1298.4	33.6
0°-40°	2052.4	53.0
0°-60°	3255.0	84.1
0°-90°	3870.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	3870.0	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	1734	1734	1734	1734	1734	
5°	1720	1717	1722	1728	1738	163
15°	1621	1623	1637	1651	1661	457
25°	1437	1442	1460	1487	1501	660
35°	1172	1182	1205	1234	1248	732
45°	864	873	889	908	916	665
55°	561	569	574	582	584	507
65°	341	338	330	335	341	341
75°	205	198	183	184	187	218
85°	83	80	68	65	68	85
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	1734.2	1734.2	1734.2	1734.2	1734.2
2.5°	1728.0	1727.1	1729.8	1734.2	1738.7
5°	1720.0	1717.3	1721.8	1728.0	1737.8
7.5°	1707.6	1707.6	1707.6	1719.1	1720.9
10°	1687.1	1688.9	1686.2	1697.8	1702.2
12.5°	1657.8	1658.7	1664.0	1675.6	1683.6
15°	1621.3	1623.1	1637.3	1650.7	1661.3
17.5°	1580.5	1586.7	1600.0	1621.3	1634.7
20°	1541.3	1548.5	1559.1	1582.2	1589.3
22.5°	1491.6	1499.6	1512.9	1533.3	1548.5
25°	1437.3	1441.8	1460.5	1487.1	1501.3
27.5°	1372.5	1382.2	1405.3	1432.9	1452.5
30°	1315.6	1320.9	1342.2	1374.2	1389.3
32.5°	1243.6	1259.6	1277.3	1305.8	1320.0
35°	1171.6	1182.2	1205.3	1233.8	1248.0
37.5°	1102.2	1108.4	1131.6	1155.6	1173.3
40°	1019.6	1031.1	1054.2	1080.0	1092.4
42.5°	936.9	953.8	968.9	994.7	1008.0
45°	864.0	872.9	888.9	907.6	916.4
47.5°	787.6	792.0	810.7	822.2	832.0
50°	708.4	713.8	726.2	737.8	749.3
52.5°	635.6	640.0	648.0	658.7	670.2
55°	560.9	568.9	574.2	582.2	584.0
57.5°	500.4	499.6	503.1	509.3	515.6
60°	438.2	440.0	439.1	445.3	448.0
62.5°	386.7	385.8	380.4	389.3	396.4
65°	341.3	337.8	329.8	335.1	341.3
67.5°	299.6	297.8	284.4	288.9	294.2
70°	266.7	260.4	247.1	249.8	254.2
72.5°	234.7	227.6	214.2	215.1	217.8
75°	205.3	198.2	183.1	184.0	186.7
77.5°	177.8	168.9	155.6	153.8	155.6
80°	148.4	140.4	128.9	123.6	128.9
82.5°	118.2	113.8	100.4	95.1	96.9
85°	82.7	80.0	68.4	64.9	67.6
87.5°	38.2	40.9	34.7	32.0	32.9
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)