

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: P291918

Luminaire Tested: **22GR-LD5-40-F1-UNV-L92765-W2A1-U-5700K**

Issue Date: 3/3/2020

Test Information

Test Method: LM-79-08
Report Number: P291918
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-5700K
Description: GRLED 2x2 TUNABLE WHITE TROFFER
WITH F1 LENS
Light Source: (168) 90 CRI LEDS TUNED TO 5700K CCT
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 3844.0 lumens
Efficiency: N/A
Efficacy: 115.1 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

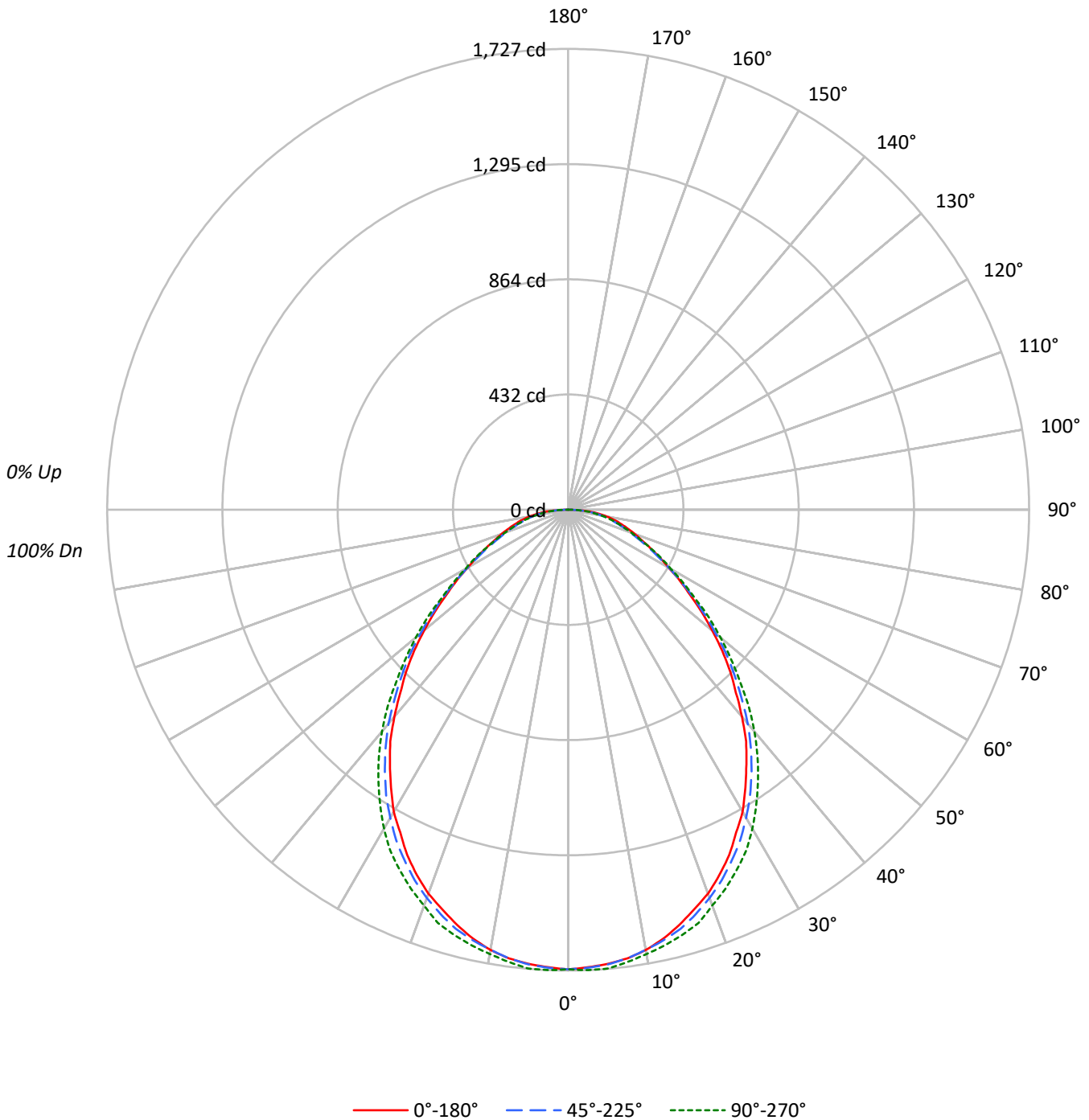
Input Watts (W): 33.387
Input Voltage (V): 120
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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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°	4635	4635	4635
5°	4615	4620	4663
10°	4579	4577	4620
15°	4486	4531	4597
20°	4384	4435	4521
25°	4239	4307	4428
30°	4060	4143	4288
35°	3823	3933	4072
40°	3557	3678	3812
45°	3266	3360	3464
50°	2946	3020	3116
55°	2614	2676	2722
60°	2343	2348	2395
65°	2159	2086	2159
70°	2084	1932	1987
75°	2121	1891	1928
80°	2284	1984	1984
85°	2535	2100	2072



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	162.5	4.2
10°-20°	458.3	11.9
20°-30°	668.9	17.4
30°-40°	748.9	19.5
40°-50°	681.6	17.7
50°-60°	513.0	13.3
60°-70°	334.8	8.7
70°-80°	200.8	5.2
80°-90°	75.3	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°	1289.7	33.6
0°-40°	2038.6	53.0
0°-60°	3233.2	84.1
0°-90°	3844.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	3844.0	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	1723	1723	1723	1723	1723	
5°	1708	1706	1710	1716	1726	162
15°	1610	1612	1626	1640	1650	454
25°	1428	1432	1451	1477	1491	655
35°	1164	1174	1197	1226	1240	727
45°	858	867	883	902	910	661
55°	557	565	570	578	580	503
65°	339	336	328	333	339	339
75°	204	197	182	183	185	216
85°	82	80	68	64	67	85
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	1722.6	1722.6	1722.6	1722.6	1722.6
2.5°	1716.4	1715.5	1718.2	1722.6	1727.0
5°	1708.5	1705.8	1710.2	1716.4	1726.1
7.5°	1696.1	1696.1	1696.1	1707.6	1709.3
10°	1675.8	1677.6	1674.9	1686.4	1690.8
12.5°	1646.6	1647.5	1652.8	1664.3	1672.3
15°	1610.4	1612.2	1626.3	1639.6	1650.2
17.5°	1569.8	1576.0	1589.3	1610.4	1623.7
20°	1531.0	1538.0	1548.6	1571.6	1578.7
22.5°	1481.5	1489.5	1502.7	1523.0	1538.0
25°	1427.7	1432.1	1450.6	1477.1	1491.3
27.5°	1363.2	1372.9	1395.9	1423.3	1442.7
30°	1306.7	1312.0	1333.2	1365.0	1380.0
32.5°	1235.2	1251.1	1268.8	1297.0	1311.1
35°	1163.7	1174.3	1197.2	1225.5	1239.6
37.5°	1094.8	1101.0	1124.0	1147.8	1165.5
40°	1012.7	1024.2	1047.1	1072.7	1085.1
42.5°	930.6	947.4	962.4	988.0	1001.2
45°	858.2	867.0	882.9	901.5	910.3
47.5°	782.3	786.7	805.2	816.7	826.4
50°	703.7	709.0	721.3	732.8	744.3
52.5°	631.3	635.7	643.6	654.2	665.7
55°	557.1	565.1	570.4	578.3	580.1
57.5°	497.1	496.2	499.7	505.9	512.1
60°	435.3	437.0	436.2	442.3	445.0
62.5°	384.1	383.2	377.9	386.7	393.8
65°	339.0	335.5	327.6	332.9	339.0
67.5°	297.5	295.8	282.5	286.9	292.2
70°	264.9	258.7	245.5	248.1	252.5
72.5°	233.1	226.0	212.8	213.7	216.3
75°	204.0	196.9	181.9	182.8	185.4
77.5°	176.6	167.8	154.5	152.7	154.5
80°	147.4	139.5	128.0	122.7	128.0
82.5°	117.4	113.0	99.8	94.5	96.2
85°	82.1	79.5	68.0	64.5	67.1
87.5°	38.0	40.6	34.4	31.8	32.7
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)