

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: P291923

Luminaire Tested: **22GR-LD5-43-F1-UNV-L92765-W2A1-U-4000K**

Issue Date: 3/3/2020

Test Information

Test Method: LM-79-08
Report Number: P291923
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-LD5-43-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: 3845.0 lumens
Efficiency: N/A
Efficacy: 108.2 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

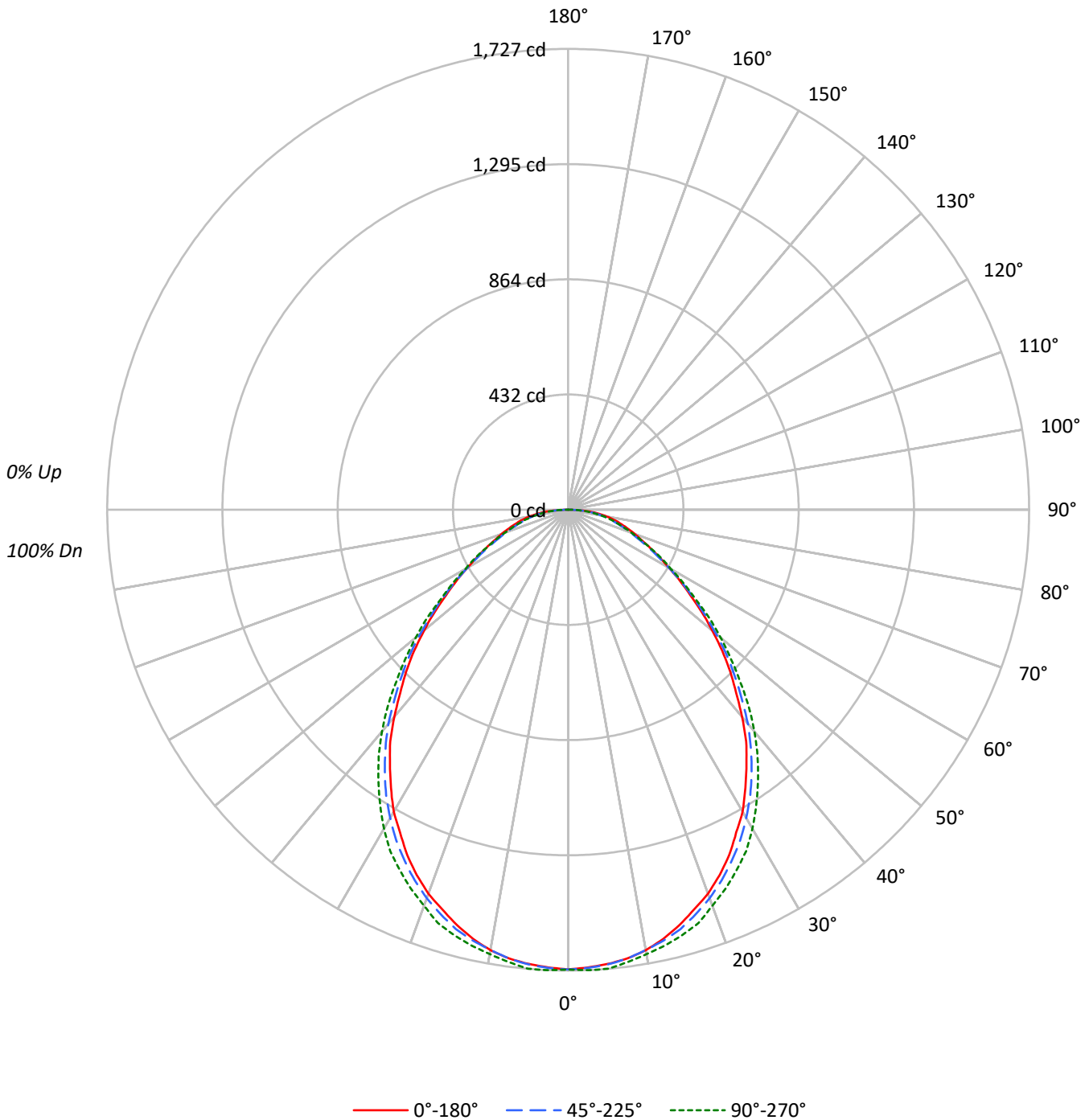
Input Watts (W): 35.526
Input Voltage (V): 120
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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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°	4637	4637	4637
5°	4616	4621	4664
10°	4580	4578	4621
15°	4488	4532	4598
20°	4385	4436	4522
25°	4240	4308	4429
30°	4062	4144	4289
35°	3824	3934	4073
40°	3558	3679	3813
45°	3267	3361	3465
50°	2947	3021	3117
55°	2615	2677	2722
60°	2343	2348	2396
65°	2159	2086	2159
70°	2084	1932	1987
75°	2121	1891	1929
80°	2286	1985	1985
85°	2535	2100	2072



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	162.5	4.2
10°-20°	458.4	11.9
20°-30°	669.1	17.4
30°-40°	749.1	19.5
40°-50°	681.7	17.7
50°-60°	513.1	13.3
60°-70°	334.9	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°	1290.0	33.6
0°-40°	2039.1	53.0
0°-60°	3234.0	84.1
0°-90°	3845.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	3845.0	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	1723	1723	1723	1723	1723	
5°	1709	1706	1711	1717	1727	162
15°	1611	1613	1627	1640	1651	454
25°	1428	1432	1451	1478	1492	656
35°	1164	1175	1198	1226	1240	727
45°	858	867	883	902	910	661
55°	557	565	570	578	580	504
65°	339	336	328	333	339	339
75°	204	197	182	183	186	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°	1723.0	1723.0	1723.0	1723.0	1723.0
2.5°	1716.8	1716.0	1718.6	1723.0	1727.4
5°	1708.9	1706.2	1710.7	1716.8	1726.6
7.5°	1696.5	1696.5	1696.5	1708.0	1709.8
10°	1676.2	1678.0	1675.3	1686.8	1691.2
12.5°	1647.1	1648.0	1653.3	1664.7	1672.7
15°	1610.9	1612.6	1626.8	1640.0	1650.6
17.5°	1570.2	1576.4	1589.7	1610.9	1624.1
20°	1531.4	1538.4	1549.0	1572.0	1579.1
22.5°	1481.9	1489.9	1503.1	1523.4	1538.4
25°	1428.1	1432.5	1451.0	1477.5	1491.6
27.5°	1363.6	1373.3	1396.3	1423.6	1443.1
30°	1307.1	1312.4	1333.6	1365.4	1380.4
32.5°	1235.5	1251.4	1269.1	1297.3	1311.5
35°	1164.0	1174.6	1197.6	1225.8	1239.9
37.5°	1095.1	1101.3	1124.3	1148.1	1165.8
40°	1013.0	1024.5	1047.4	1073.0	1085.4
42.5°	930.8	947.6	962.6	988.2	1001.5
45°	858.4	867.3	883.2	901.7	910.5
47.5°	782.5	786.9	805.4	816.9	826.6
50°	703.9	709.2	721.5	733.0	744.5
52.5°	631.5	635.9	643.8	654.4	665.9
55°	557.3	565.2	570.5	578.5	580.2
57.5°	497.2	496.3	499.9	506.0	512.2
60°	435.4	437.2	436.3	442.5	445.1
62.5°	384.2	383.3	378.0	386.8	393.9
65°	339.1	335.6	327.6	332.9	339.1
67.5°	297.6	295.9	282.6	287.0	292.3
70°	264.9	258.8	245.5	248.2	252.6
72.5°	233.2	226.1	212.8	213.7	216.4
75°	204.0	196.9	181.9	182.8	185.5
77.5°	176.6	167.8	154.6	152.8	154.6
80°	147.5	139.5	128.1	122.8	128.1
82.5°	117.5	113.0	99.8	94.5	96.3
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)