

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: P291802

Luminaire Tested: **22GR-LD5-32-F1-UNV-L82765-W2A1-U-5700K**

Issue Date: 3/3/2020

Test Information

Test Method: LM-79-08
Report Number: P291802
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-LD5-32-F1-UNV-L82765-W2A1-U-5700K
Description: GRLED 2x2 TUNABLE WHITE TROFFER
WITH F1 LENS
Light Source: (168) 80 CRI LEDS TUNED TO 5700K CCT
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 3360.0 lumens
Efficiency: N/A
Efficacy: 133.3 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

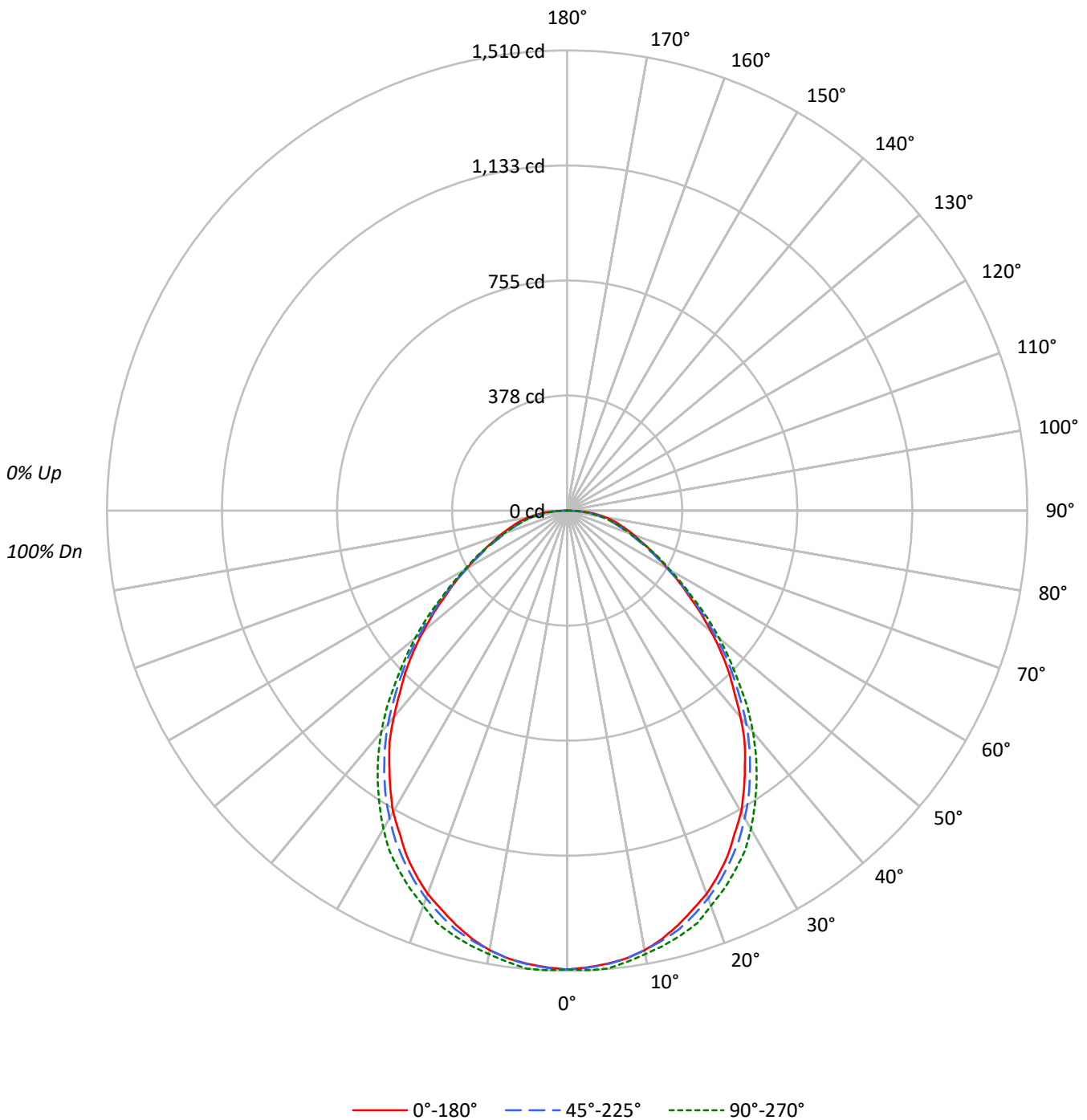
Input Watts (W): 25.203
Input Voltage (V): 120
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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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°	4052	4052	4052
5°	4034	4038	4076
10°	4003	4000	4038
15°	3922	3960	4018
20°	3832	3877	3952
25°	3705	3765	3870
30°	3549	3621	3748
35°	3342	3438	3559
40°	3110	3215	3332
45°	2855	2937	3028
50°	2575	2640	2724
55°	2285	2339	2379
60°	2048	2052	2094
65°	1887	1823	1887
70°	1821	1688	1736
75°	1854	1653	1685
80°	1998	1734	1734
85°	2217	1834	1812



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	142.0	4.2
10°-20°	400.6	11.9
20°-30°	584.7	17.4
30°-40°	654.6	19.5
40°-50°	595.8	17.7
50°-60°	448.4	13.3
60°-70°	292.6	8.7
70°-80°	175.5	5.2
80°-90°	65.8	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°	1127.3	33.6
0°-40°	1781.9	53.0
0°-60°	2826.1	84.1
0°-90°	3360.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	3360.0	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	1506	1506	1506	1506	1506	
5°	1493	1491	1495	1500	1509	142
15°	1408	1409	1422	1433	1442	396
25°	1248	1252	1268	1291	1304	573
35°	1017	1026	1046	1071	1084	636
45°	750	758	772	788	796	578
55°	487	494	499	506	507	440
65°	296	293	286	291	296	296
75°	178	172	159	160	162	189
85°	72	70	59	56	59	74
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	1505.7	1505.7	1505.7	1505.7	1505.7
2.5°	1500.3	1499.5	1501.8	1505.7	1509.5
5°	1493.3	1491.0	1494.9	1500.3	1508.8
7.5°	1482.5	1482.5	1482.5	1492.6	1494.1
10°	1464.8	1466.3	1464.0	1474.0	1477.9
12.5°	1439.3	1440.1	1444.7	1454.8	1461.7
15°	1407.7	1409.2	1421.6	1433.1	1442.4
17.5°	1372.2	1377.6	1389.2	1407.7	1419.3
20°	1338.2	1344.4	1353.7	1373.7	1379.9
22.5°	1295.0	1301.9	1313.5	1331.3	1344.4
25°	1247.9	1251.8	1268.0	1291.1	1303.5
27.5°	1191.6	1200.1	1220.1	1244.1	1261.0
30°	1142.2	1146.8	1165.3	1193.1	1206.2
32.5°	1079.7	1093.6	1109.0	1133.7	1146.1
35°	1017.2	1026.4	1046.5	1071.2	1083.5
37.5°	957.0	962.4	982.4	1003.3	1018.7
40°	885.2	895.2	915.3	937.7	948.5
42.5°	813.4	828.1	841.2	863.6	875.2
45°	750.1	757.9	771.8	788.0	795.7
47.5°	683.8	687.6	703.8	713.9	722.4
50°	615.1	619.7	630.5	640.6	650.6
52.5°	551.8	555.7	562.6	571.9	581.9
55°	487.0	493.9	498.6	505.5	507.0
57.5°	434.5	433.7	436.8	442.2	447.6
60°	380.5	382.0	381.2	386.6	389.0
62.5°	335.7	334.9	330.3	338.0	344.2
65°	296.4	293.3	286.3	291.0	296.4
67.5°	260.1	258.5	247.0	250.8	255.4
70°	231.5	226.1	214.5	216.9	220.7
72.5°	203.7	197.6	186.0	186.8	189.1
75°	178.3	172.1	159.0	159.8	162.1
77.5°	154.4	146.6	135.1	133.5	135.1
80°	128.9	121.9	111.9	107.3	111.9
82.5°	102.6	98.8	87.2	82.6	84.1
85°	71.8	69.5	59.4	56.3	58.7
87.5°	33.2	35.5	30.1	27.8	28.6
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)